



Compliance Certification Services (Kunshan) Inc.

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

Report No.: KSCR240700123605

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TEST REPORT

Application No.: KSCR2407001236AT
FCC ID: 2AH25K2A13
IC: 22621-K2A13
Applicant: Shanghai Sunmi Technology Co.,Ltd.
Address of Applicant: Room 505, No.388 Song Hu Road, Yang Pu District, Shanghai, China
Manufacturer: Shanghai Sunmi Technology Co.,Ltd.
Address of Manufacturer: Room 505, No.388 Song Hu Road, Yang Pu District, Shanghai, China
Equipment Under Test (EUT):
EUT Name: Self-Checkout Kiosk
Model No.: F4E02
HVIN: F4E02, F4E02(B)
Trade Mark: SUNMI
Standards: 47 CFR Part 15, Subpart E 15.407
RSS-248 Issue 2, December 20, 2022
RSS-Gen Issue 5 Amendment 2 (February 2021)
Date of Receipt: 2024-07-03
Date of Test: 2024-08-08 to 2024-08-19
Date of Issue: 2024-08-19

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	2024-08-19	/

Authorized for issue by:				
Tested By		Damon Zhou		
		Damon Zhou /Project Engineer		
Approved By		Terry Hou		
		Terry Hou /Reviewer		

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1 Test Summary

Radio Spectrum Technical Requirement				
Item	FCC Requirement	IC Requirement	Method	Result
Antenna Requirement	47 CFR Part 15, Subpart C 15.203	RSS-Gen Clause 6.8	N/A	Customer Declaration

Radio Spectrum Matter Part				
Item	FCC Requirement	IC Requirement	Method	Result
AC Power Line Conducted Emissions	15.407(b)(8)	RSS-Gen Section 8.8	ANSI C63.10 (2013) Section 6.2	Pass
Duty Cycle	--	No limit.	ANSI C63.10 :2013 Section 12.2	For Report Purpose
Maximum e.i.r.p.	15.407(a)(8)	RSS-248 Section 4.5.3	ANSI C63.10 :2013 Section 11.9.2.3	Pass
26dB Emission Bandwidth	15.407(a)(10)	RSS-248 Section 4.4	ANSI C63.10: 2013 Section 11.8 Option 2	Pass
99% Occupied Bandwidth	-	RSS-248 Section 4.4	ANSI C63.10 Section 6.9.3	Pass
Maximum Power Spectral Density	15.407(a)(8)	RSS-248 Section 4.5.3	ANSI C63.10: 2013 Section 11.10.2.	Pass
In-Band Emissions	15.407(b)(5)	RSS-248 Section 4.6	KDB 987594 D02 U-NII 6GHz EMC Measurement v01	Pass
Contention Based Protocol	15.407(d)(6)	RSS-248 Section 4.7	KDB 987594 D02 U-NII 6GHz EMC Measurement v01	Pass
Unwanted Emissions that fall Out of the Restricted Bands (Radiated)	15.407(b)(6) 15.205, 15.209	RSS-248 Section 4.6	ANSI C63.10: 2013 Section 6.4 / 6.5 / 6.6	Pass
Unwanted Emissions in the Restricted Bands (Radiated)	15.407(b)(6) 15.205, 15.209	RSS-248 Section 4.6	ANSI C63.10: 2013 Section 11.12	Pass



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Remark:

The product is divided into two different configurations (SKU1, SKU2).

SKU1: Large scan code window, the HVIN is F4E02(B)

SKU2: Small scan code window, the HVIN is F4E02

Except for the above differences, everything else is the same.

After Pre-scan test, only SKU2(HVIN: F4E02) was tested since their differences.

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2 General Description of EUT

Power supply:	AC 120V/60Hz		
Test Voltage:	AC 120V/60Hz		
IEEE 802.11 WLAN Mode Supported:	☒ 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 ax(HE20/40/80/160): 5925 MHz ~ 6425 MHz IEEE 802.11 ax(HE20/40/80/160): 6425 MHz ~ 6525 MHz IEEE 802.11 ax(HE20/40/80/160): 6525 MHz ~ 6875 MHz IEEE 802.11 ax(HE20/40/80/160): 6875 MHz ~ 7125 MHz		
Type of Modulation:	OFDMA		
Antenna Type:	☐ External, ☒ Integrated		
Antenna Ports:	☒ Ant 1, ☒ Ant 2		
Smart System:	☒ MIMO	802.11ax: 2Tx & 2Rx	
Antenna Gain:	UNII-5:Ant1: 4.4dBi, Ant2: 4.4dBi(Provided by the manufacturer) UNII-6:Ant1: 2.3dBi, Ant2: 2.3dBi(Provided by the manufacturer) UNII-7:Ant1: 1dBi, Ant2: 1dBi(Provided by the manufacturer) UNII-8:Ant1: 1dBi, Ant2: 1dBi(Provided by the manufacturer) Directional Gain: UNII-5:4.4dBi (The transmitted signal is irrelevant) UNII-6:2.3dBi (The transmitted signal is irrelevant) UNII-7:1dBi (The transmitted signal is irrelevant) UNII-8:1dBi (The transmitted signal is irrelevant)		
SN:	K288D45N00072		
Firmware Version:	V 2.0		
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

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



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IEEE 802.11ax160MHz	Straddle	6505
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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

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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3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Notebook	Lenovo	/	/

4 Worst-case configuration and mode

Pre-scan / Final test	Mode Code	Description
Final test	10	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 @ 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	11	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 @ 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	12	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 @ 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-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 @ MCS0 is the worst case of IEEE 802.11ax 20/40/80/160, Only the data of worst case is recorded in the report.

5 Power level setting using in test

Channel	802.11ax(HEW20)		Channel	802.11ax(HEW80)	
	Ant 1	Ant 2		Ant 1	Ant 2
1	2	2	7	9	9
45	3	3	39	9.5	9.5
93	3	3	87	10	10
97	3.5	3.5	103	12	12
105	3.5	3.5	135	12	12
113	4	4	151	14	14
117	6	6	167	11	11
149	6	6	199	10.5	10.5
181	6	6	215	11.5	11.5
189	5	5	Channel	802.11ax(HEW160)	
209	6.5	6.5		Ant 1	Ant 2
233	-7	-7	15	11.5	11.5
Channel	802.11ax(HEW40)		47	12.5	12.5
	Ant 1	Ant 2	79	12.5	12.5
3	5	5	143	11	11
43	6.5	6.5	207	11.5	11.5
91	6.5	6.5			
99	7	7			
107	7	7			
123	9.5	9.5			
147	9.5	9.5			
179	10	10			
195	9	9			
211	10	10			
227	10	10			

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6 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.		

7 General Information

7.1 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.

7.2 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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8 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



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12	RE Test Cable	REBES MICROWAVE	/	CZ301097	08/24/2023	08/23/2024
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

9 Test results and Measurement Data

9.1 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:Ant1: 4.4dBi, Ant2: 4.4dBi

UNII-6:Ant1: 2.3dBi, Ant2: 2.3dBi

UNII-7:Ant1: 1dBi, Ant2: 1dBi

UNII-8:Ant1: 1dBi, Ant2: 1dBi

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 = $GANT + 10 \log(NANT)$ dBi
- If all transmit signals are completely uncorrelated with each other,
Directional gain = GANT

Unequal antenna gains, with equal transmit powers. For antenna gains given by G1, G2, ..., GN dBi

- If transmit signals are correlated, then
Directional gain = $10 \log[(10G1/20 + 10G2/20 + \dots + 10GN/20)^2 / NANT]$ 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 = $10 \log[(10G1/10 + 10G2/10 + \dots + 10GN/10)/NANT]$ dBi

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

All antennas have the same gain:

Operation Frequency	Ant 1 (dBi)	Ant 2 (dBi)	Directional gain For Power(dBi)	Directional gain For PSD(dBi)
5925 MHz to 6425 MHz	4.4	4.4	4.4	4.4
6425 MHz to 6525 MHz	2.3	2.3	2.3	2.3
6525 MHz to 6875 MHz	1	1	1	1
6875 MHz to 7115 MHz	1	1	1	1

9.2 AC Power Line Conducted Emissions

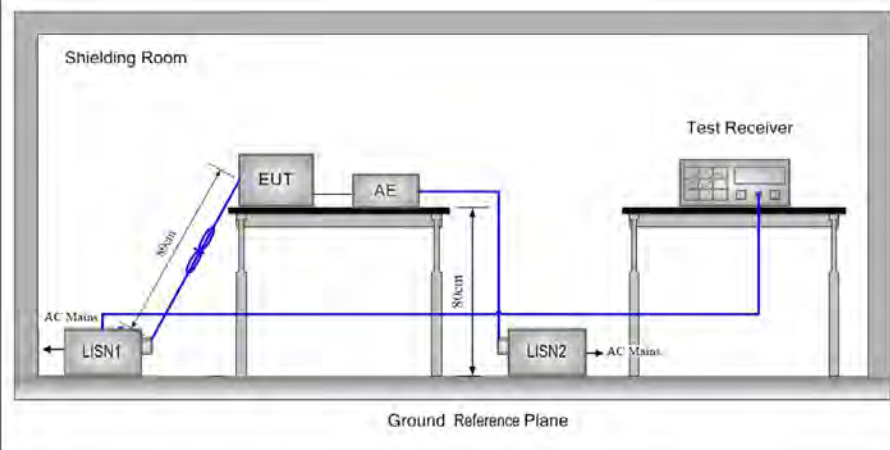
Test Requirement:	47 CFR Part 15 Section 15.407(b)		
Test Method:	ANSI C63.10: 2013 Section 6.2		
Test Frequency Range:	150kHz to 30MHz		
Receiver Setup:	RBW = 9kHz, VBW = 30kHz		
Limit:	Frequency range (MHz)	Limit (dBuV)	
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50
* 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.		

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Test Setup:	
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

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.

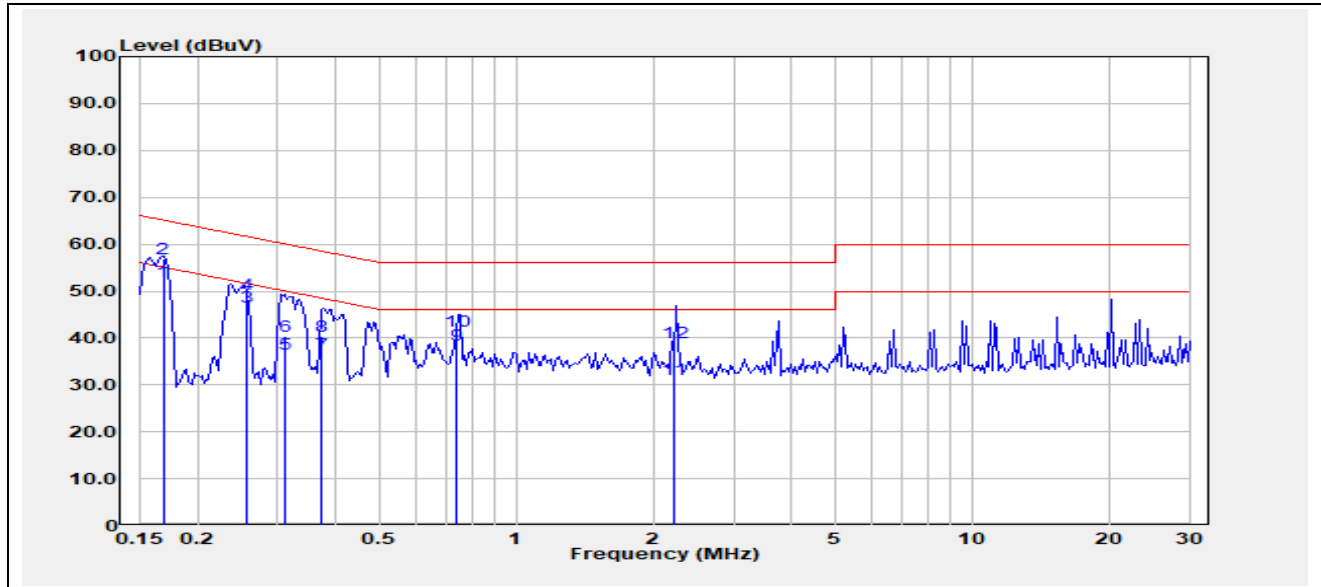
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Test Mode: 10; Line: Live line



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1680	31.81	20.18	51.99	55.06	-3.07	Average
2	0.1680	36.81	20.18	56.99	65.06	-8.07	QP
3	0.2560	26.47	20.07	46.54	51.56	-5.02	Average
4	0.2560	29.38	20.07	49.45	61.56	-12.11	QP
5	0.3097	16.47	20.08	36.54	49.98	-13.43	Average
6	0.3097	20.36	20.08	40.43	59.98	-19.54	QP
7	0.3743	16.47	20.07	36.54	48.41	-11.87	Average
8	0.3743	20.44	20.07	40.51	58.41	-17.90	QP
9	0.7395	18.72	19.77	38.50	46.00	-7.50	Average
10	0.7395	21.69	19.77	41.47	56.00	-14.53	QP
11	2.2220	11.26	20.02	31.27	46.00	-14.73	Average
12	2.2220	19.12	20.02	39.14	56.00	-16.86	QP

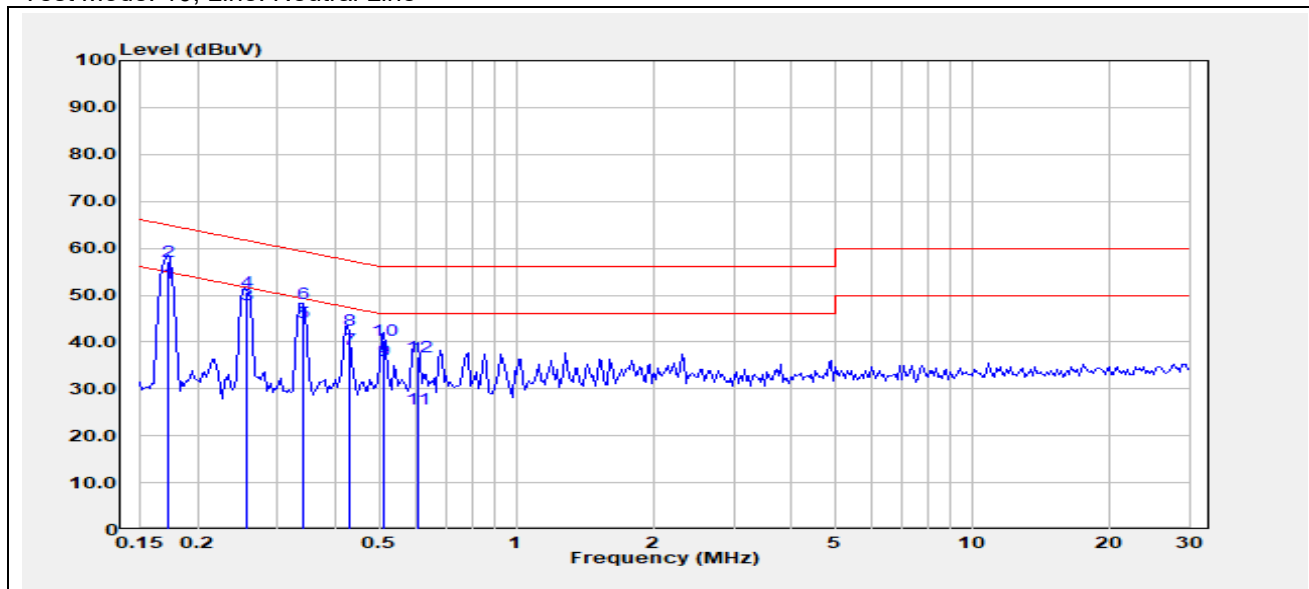
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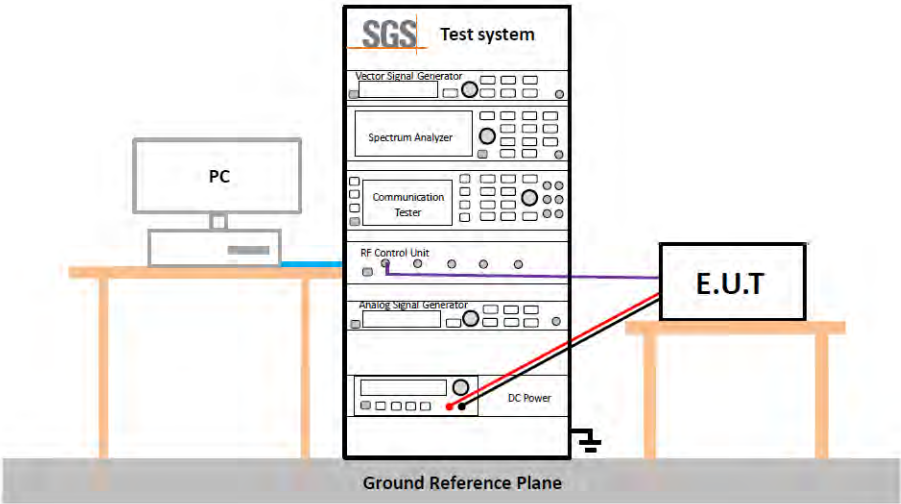
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Test Mode: 10; Line: Neutral Line

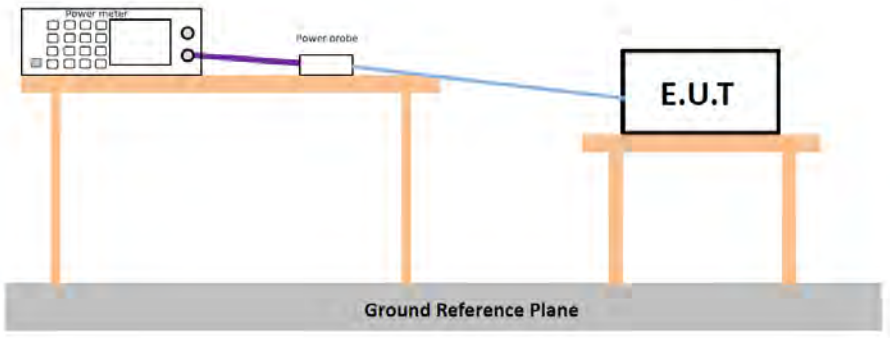


No.	Frequency (MHz)	Reading (dBUV)	Correct Factor(dB)	Result (dBUV)	Limit (dBUV)	Margin (dB)	Remark
1	0.1723	32.31	20.15	52.46	54.85	-2.39	Average
2	0.1723	37.11	20.15	57.26	64.85	-7.59	QP
3	0.2559	28.01	20.09	48.10	51.56	-3.46	Average
4	0.2559	30.70	20.09	50.79	61.56	-10.77	QP
5	0.3419	24.03	20.10	44.13	49.16	-5.03	Average
6	0.3419	28.13	20.10	48.23	59.16	-10.93	QP
7	0.4310	18.48	20.05	38.53	47.23	-8.70	Average
8	0.4310	22.62	20.05	42.67	57.23	-14.56	QP
9	0.5130	16.05	19.92	35.97	46.00	-10.03	Average
10	0.5130	20.53	19.92	40.45	56.00	-15.55	QP
11	0.6067	5.79	19.87	25.66	46.00	-20.34	Average
12	0.6067	17.04	19.87	36.91	56.00	-19.09	QP

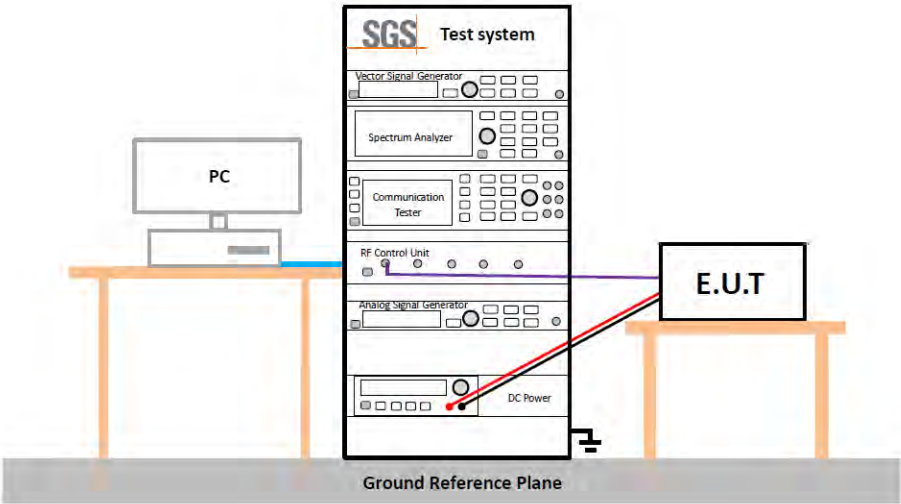
9.3 Duty Cycle

Test Requirement:	ANSI C63.10 :2013 Section 12.2
Test Method:	ANSI C63.10 :2013 Section 12.2
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:	No restriction limits
Test Results:	For report purpose
The detailed test data see: Appendix	

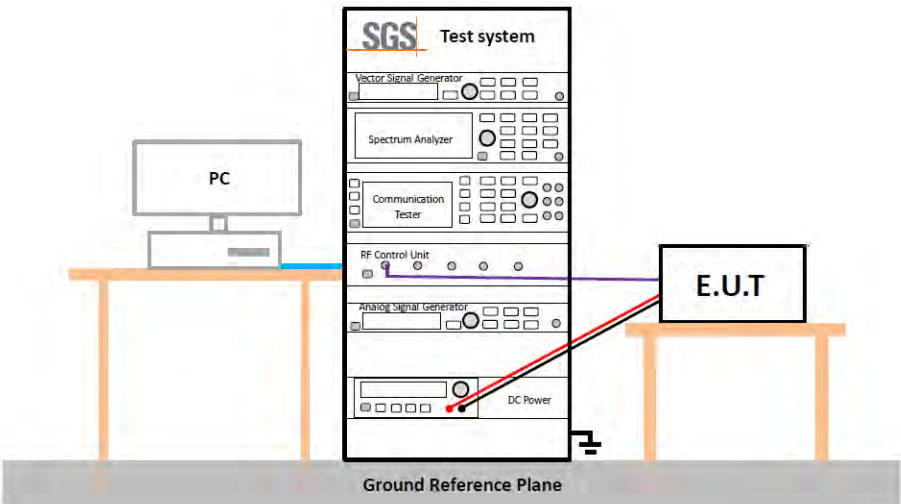
9.4 Maximum e.i.r.p.

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	

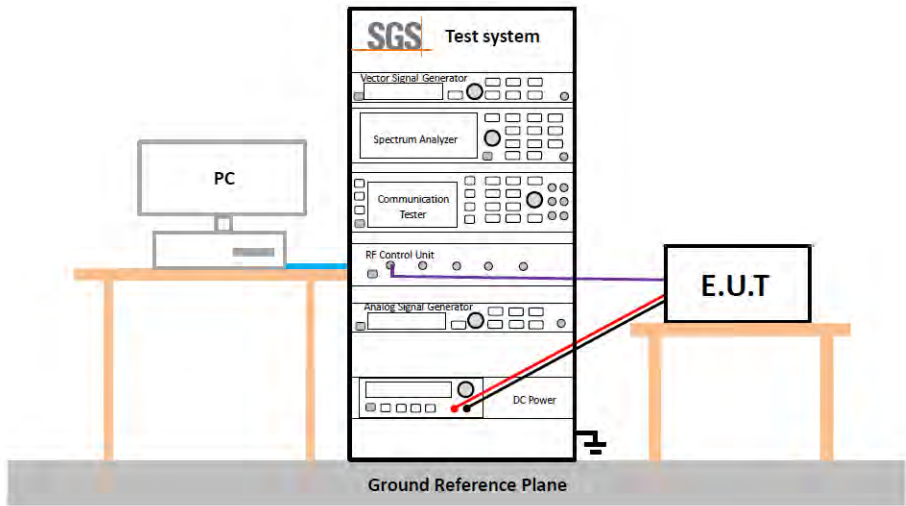
9.5 26dB Emission Bandwidth

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:	
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	

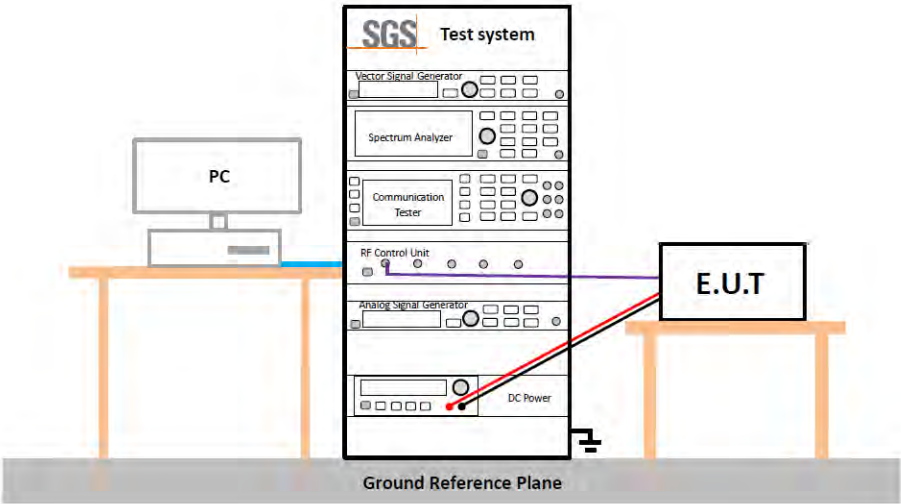
9.6 99% Occupied Bandwidth

Test Requirement:	KDB 789033 D02§ D
Test Method:	ANSI C63.10: 2013 Section 6.9.3
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:	No restriction limits
Test Results:	For report purpose
The detailed test data see: Appendix	

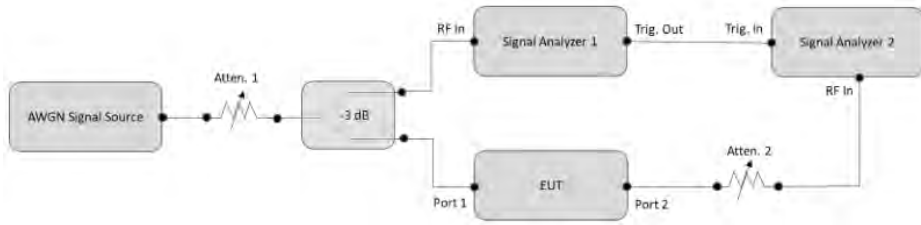
9.7 Power Spectral Density

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	

9.8 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	

9.9 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 PD20240028RF10 for test data.	

9.10 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:

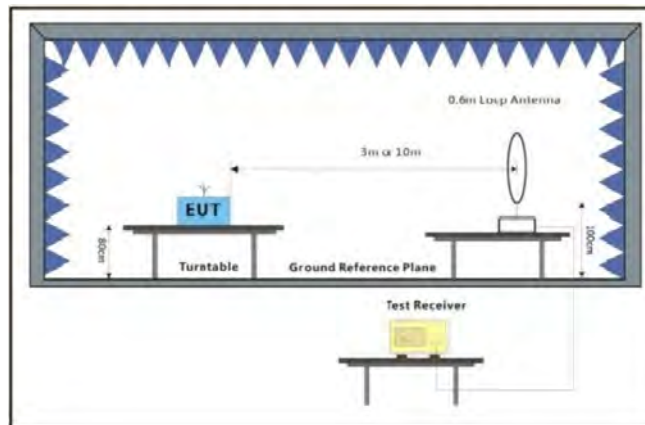


Figure 1. 9kHz to 30MHz

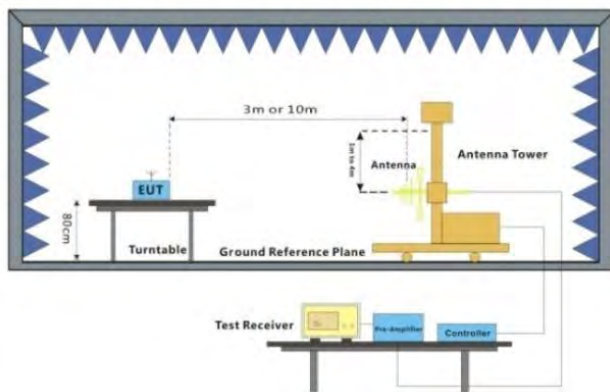


Figure 1. 30MHz to 1GHz

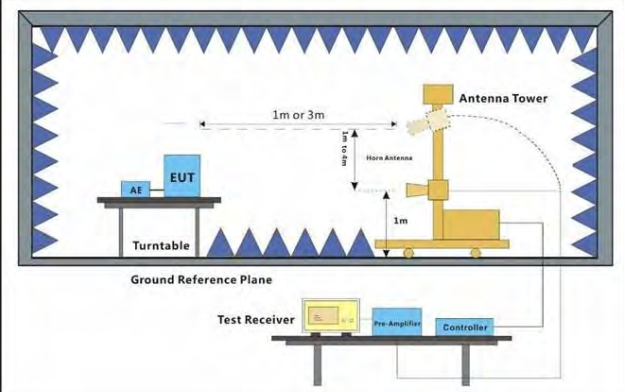


Figure 2. Above 1 GHz

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 $20 \cdot \text{LOG}(3/1) = 9.54 \text{ dB}$. 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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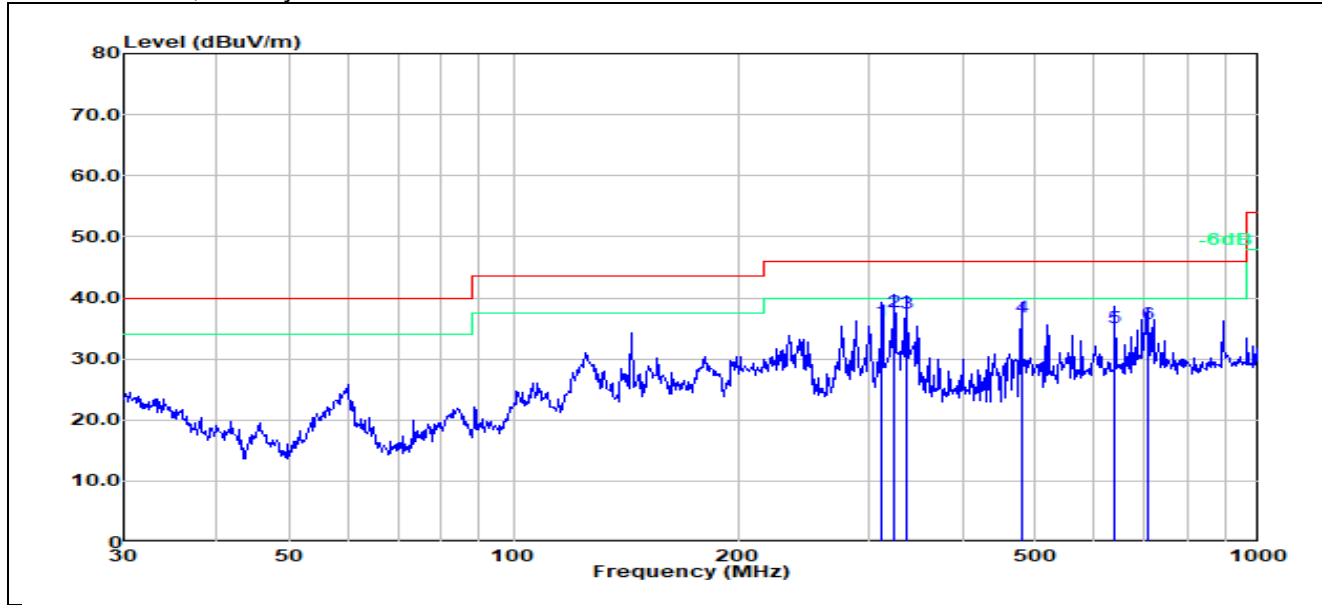
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Radiated emission below 1GHz

Test Mode: 10; Polarity: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	312.1794	20.28	15.92	36.20	46.00	-9.80	100	213	QP
2	324.4561	21.42	16.21	37.63	46.00	-8.37	200	52	QP
3	336.0352	21.32	16.22	37.54	46.00	-8.46	100	38	QP
4	480.5276	16.76	20.18	36.94	46.00	-9.06	100	234	QP
5	640.6110	11.73	23.29	35.02	46.00	-10.98	100	52	QP
6	709.1823	11.89	23.93	35.82	46.00	-10.18	100	24	QP

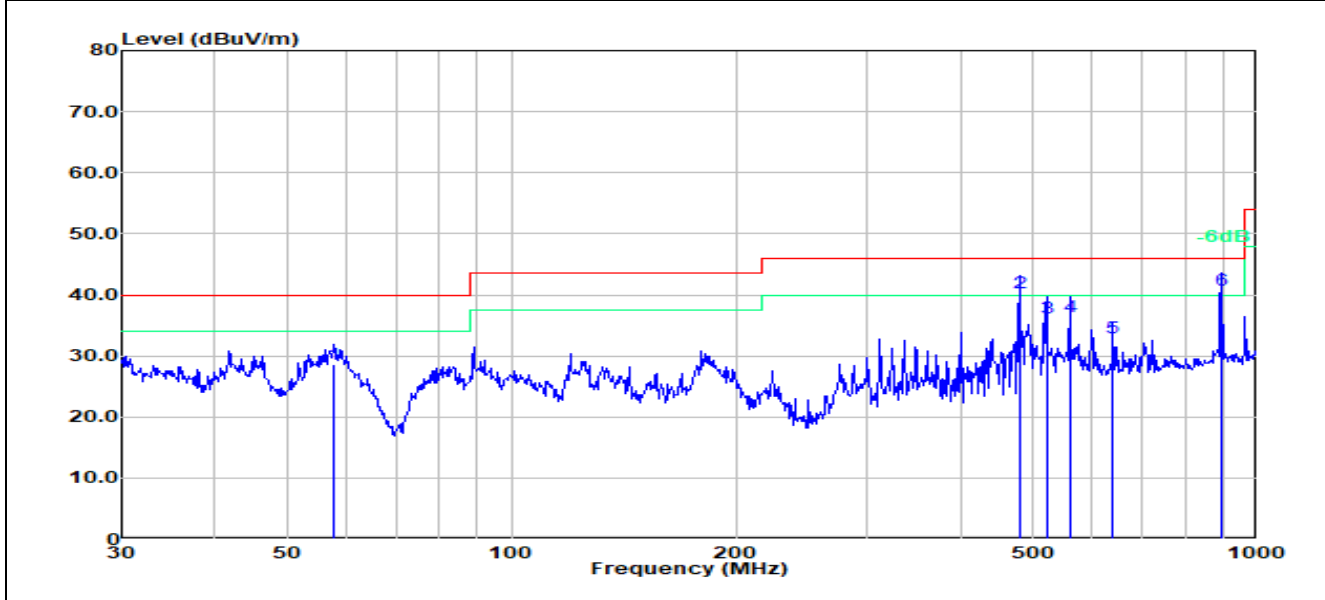
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Test Mode: 10; Polarity: Vertical;



No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBUV)	Factor(dB/m)	(dBUV/m)	(dBUV/m)	(dB)	(cm)	(deg.)	
1	57.7962	22.46	6.15	28.61	40.00	-11.39	100	187	QP
2	480.5276	20.12	20.18	40.30	46.00	-5.70	100	302	QP
3	522.7180	14.70	21.46	36.16	46.00	-9.84	100	316	QP
4	560.6928	13.92	22.40	36.32	46.00	-9.68	200	288	QP
5	640.6110	9.57	23.29	32.86	46.00	-13.14	100	282	QP
6	893.8567	15.07	25.67	40.74	46.00	-5.26	100	282	QP

Remark:

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

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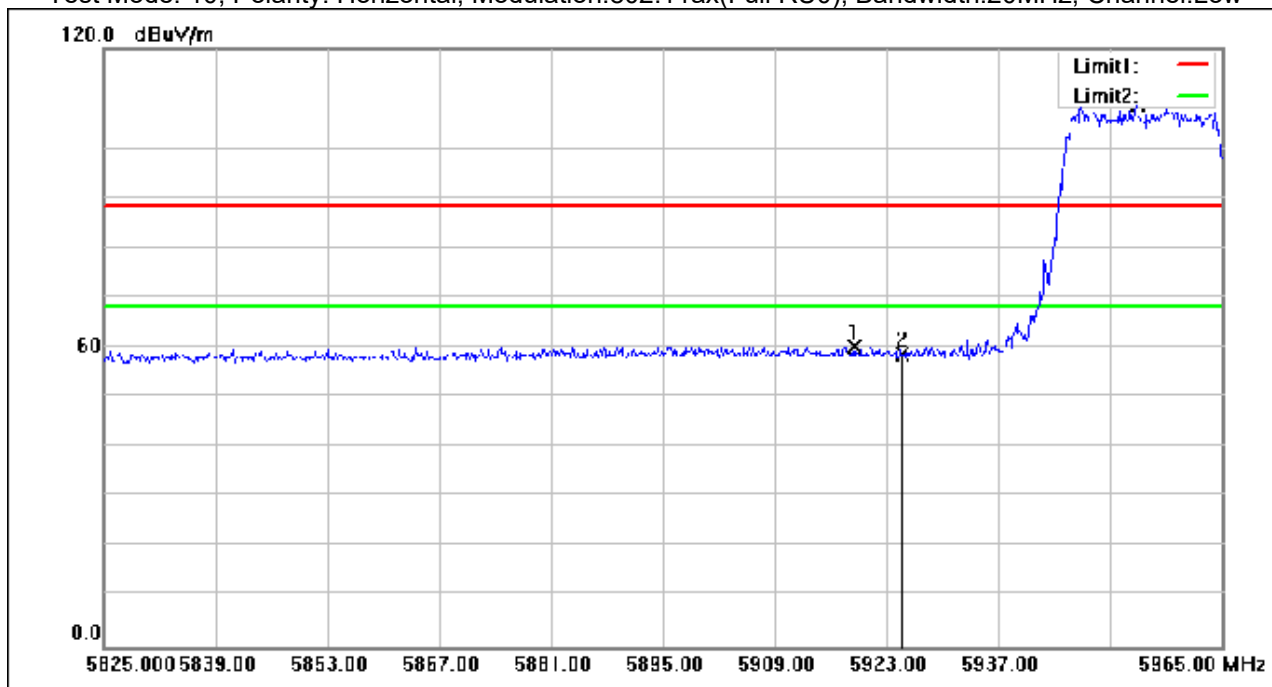
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Transmitter emission Above 1GHz

Band5

Test Mode: 10; 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	5918.940	76.28	-16.12	60.16	88.30	-28.14	peak
2	5925.000	74.72	-16.09	58.63	88.30	-29.67	peak
3	5954.360	124.64	-15.97	108.67	88.30	20.37	peak

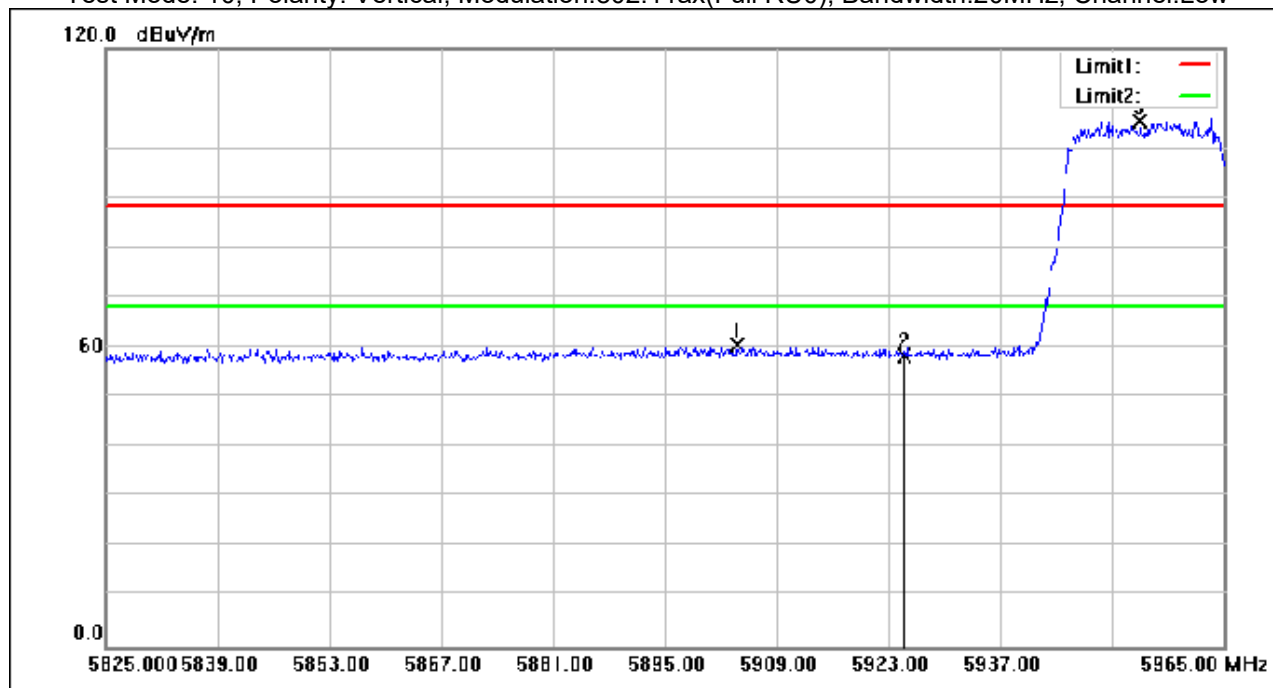
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Test Mode: 10; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5903.960	76.49	-16.18	60.31	88.30	-27.99	peak
2	5925.000	74.45	-16.09	58.36	88.30	-29.94	peak
3	5954.500	121.57	-15.97	105.60	88.30	17.30	peak

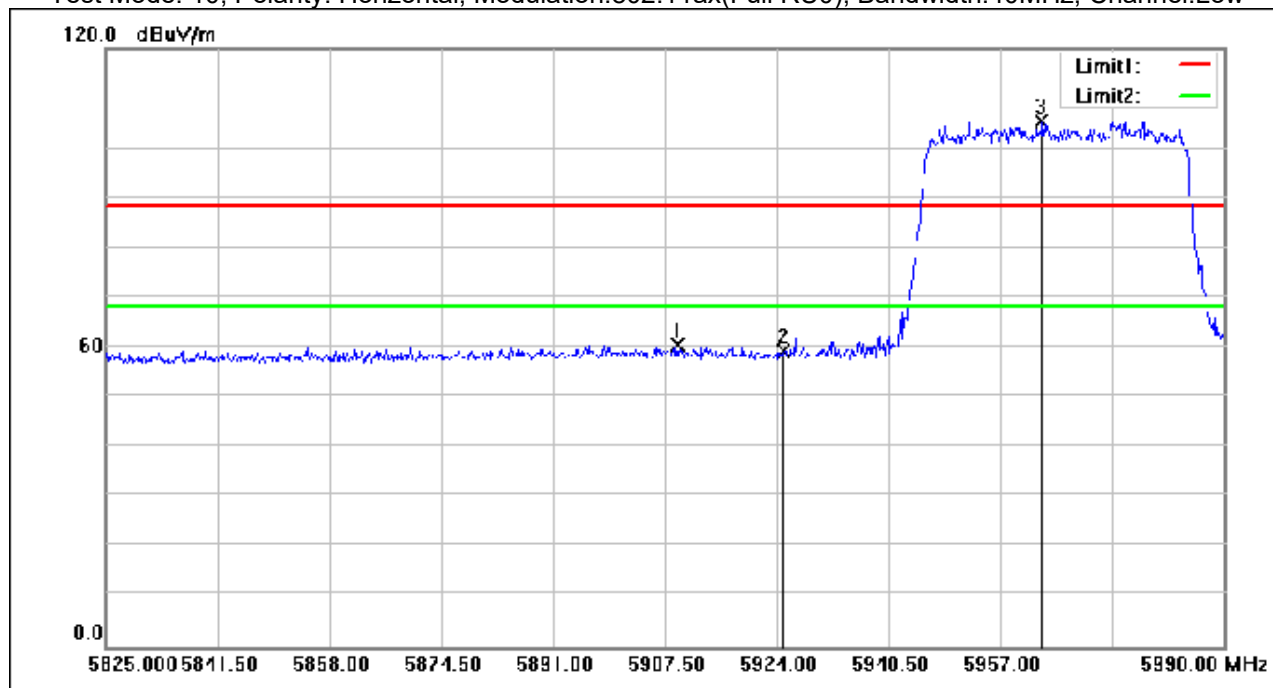
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Test Mode: 10; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5909.315	76.70	-16.16	60.54	88.30	-27.76	peak
2	5925.000	75.44	-16.09	59.35	88.30	-28.95	peak
3	5963.105	121.38	-15.93	105.45	88.30	17.15	peak

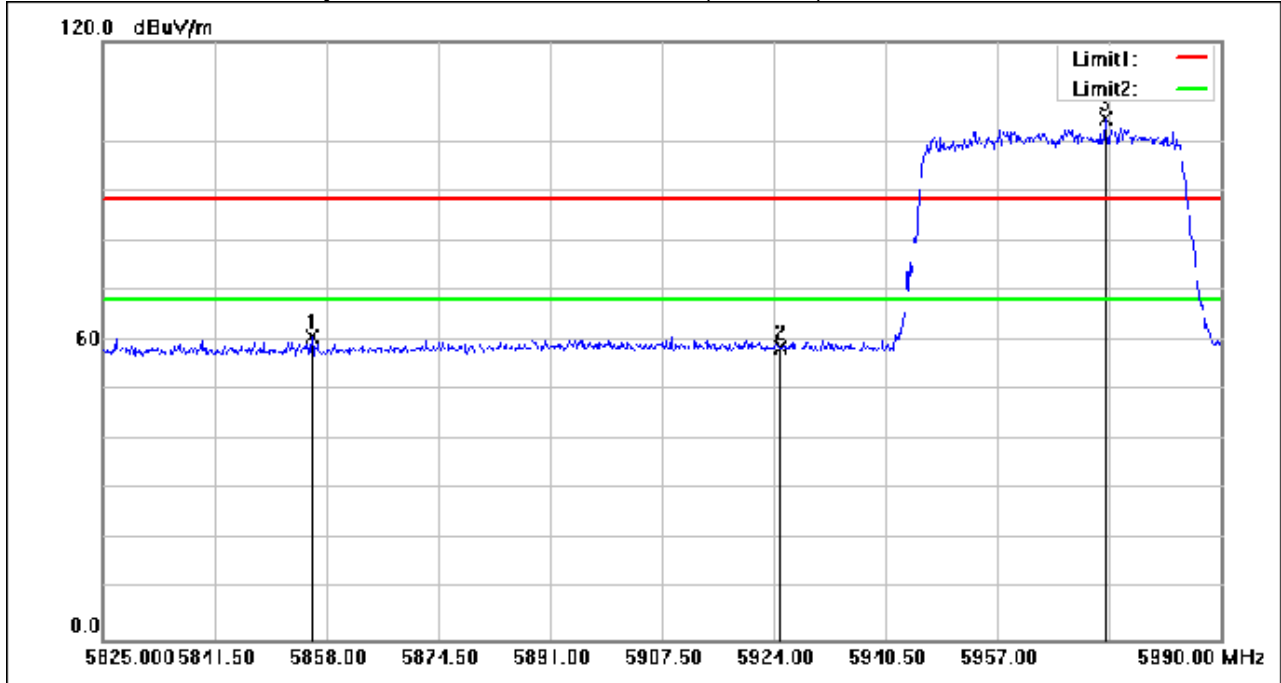
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Test Mode: 10; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5855.855	77.26	-16.38	60.88	88.30	-27.42	peak
2	5925.000	74.65	-16.09	58.56	88.30	-29.74	peak
3	5973.005	120.37	-15.89	104.48	88.30	16.18	peak

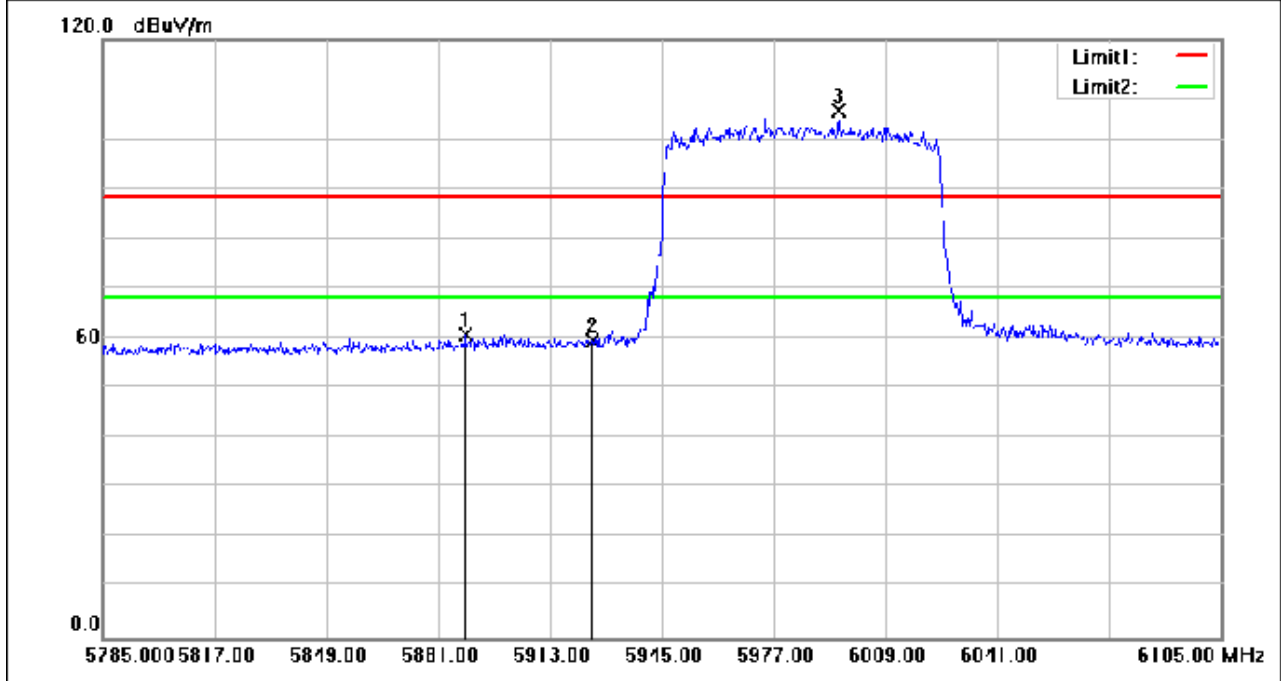
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Test Mode: 10; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5888.680	77.11	-16.25	60.86	88.30	-27.44	peak
2	5925.000	75.51	-16.09	59.42	88.30	-28.88	peak
3	5995.560	121.53	-15.80	105.73	88.30	17.43	peak

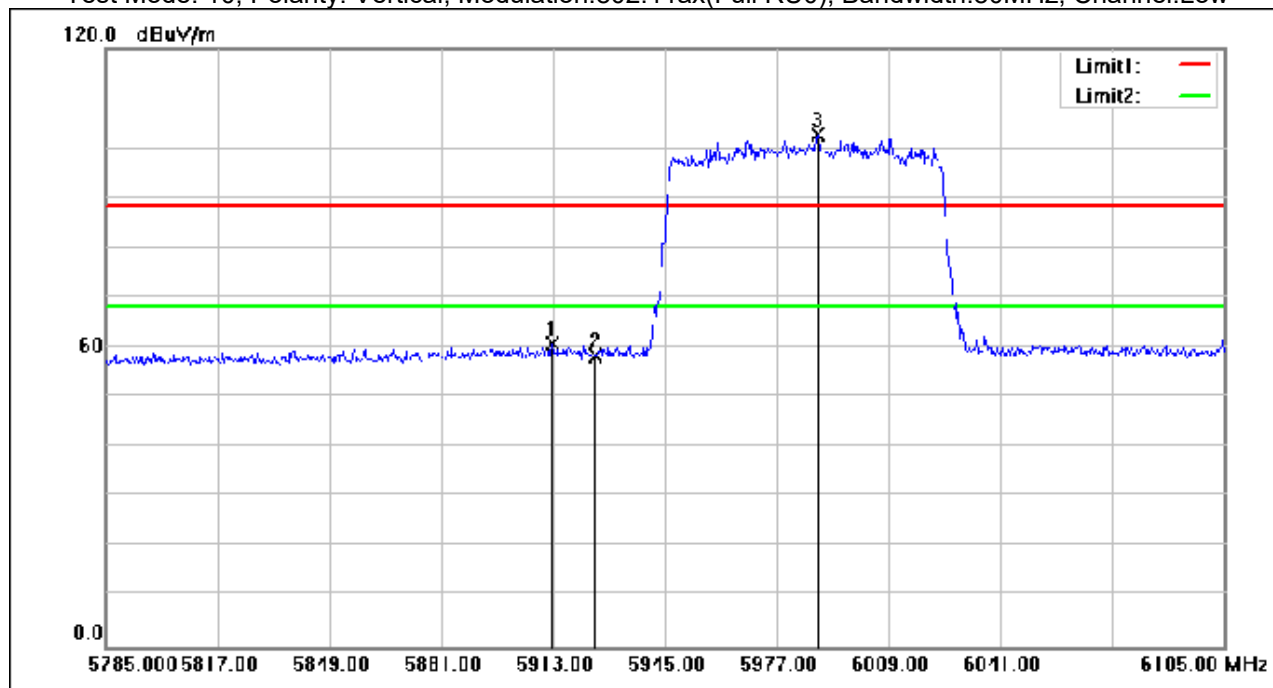
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Test Mode: 10; Polarity: Vertical; Modulation: 802.11ax(Full RU0); Bandwidth: 80MHz; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5912.680	76.97	-16.14	60.83	88.30	-27.47	peak
2	5925.000	74.59	-16.09	58.50	88.30	-29.80	peak
3	5988.520	118.55	-15.83	102.72	88.30	14.42	peak

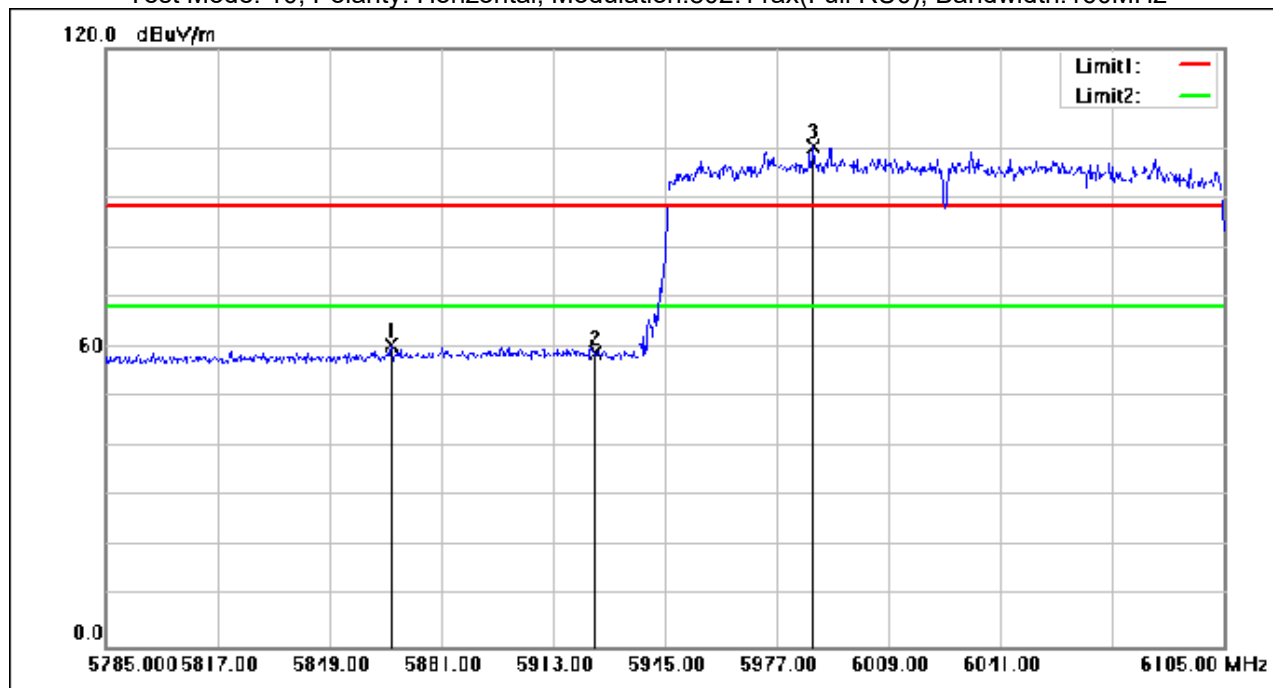
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Test Mode: 10; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 160MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5866.600	76.67	-16.34	60.33	88.30	-27.97	peak
2	5925.000	75.05	-16.09	58.96	88.30	-29.34	peak
3	5987.560	116.06	-15.84	100.22	88.30	11.92	peak

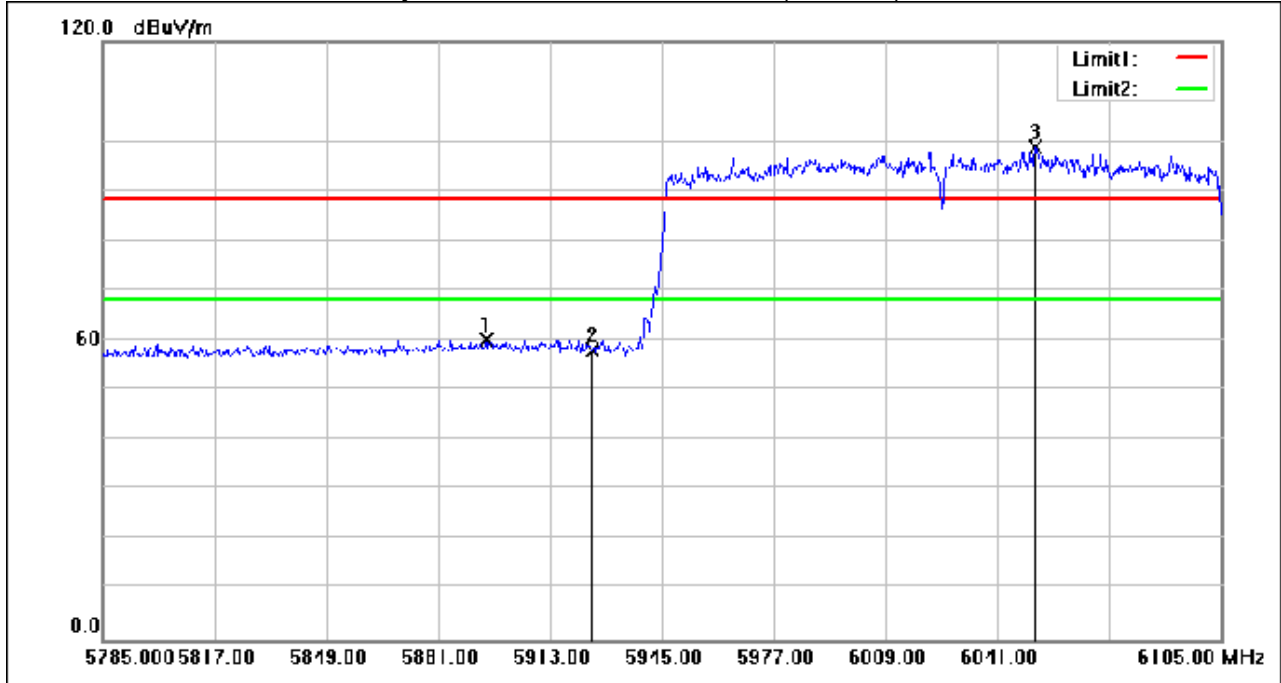
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Test Mode: 10; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:160MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5894.760	76.44	-16.21	60.23	88.30	-28.07	peak
2	5925.000	74.20	-16.09	58.11	88.30	-30.19	peak
3	6051.880	114.46	-15.53	98.93	88.30	10.63	peak

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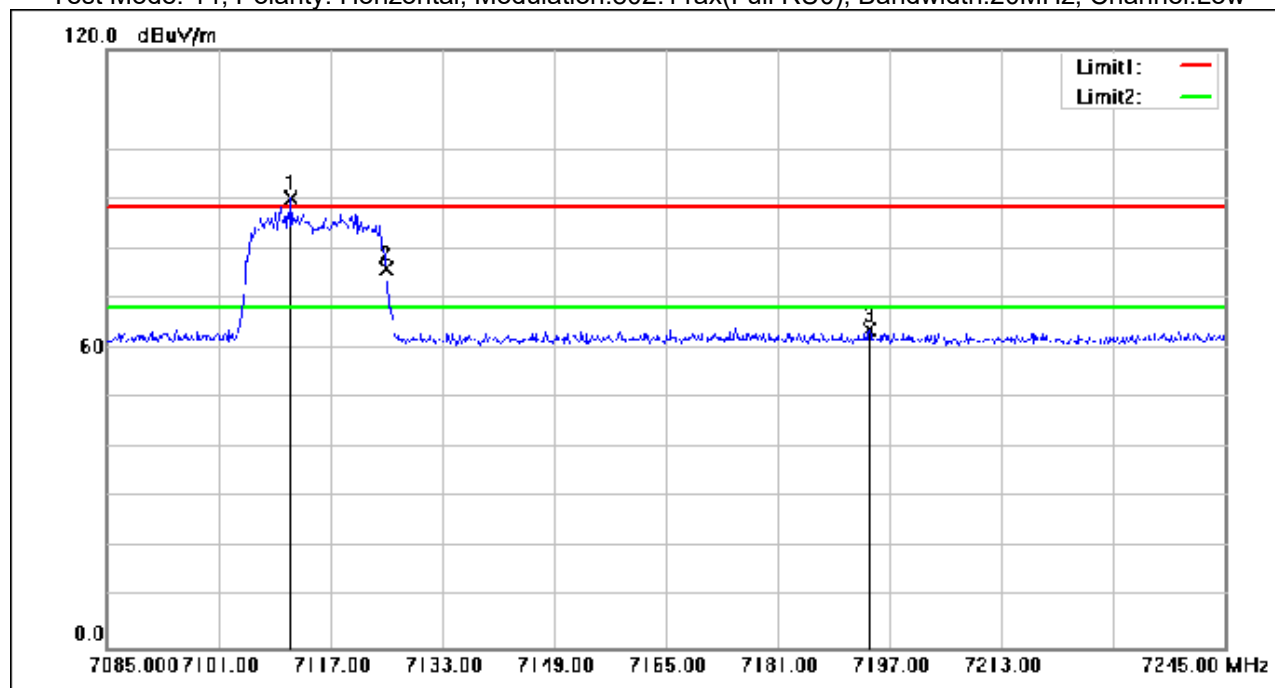
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Band8

Test Mode: 14; 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	7111.400	101.71	-11.51	90.20	88.30	1.90	peak
2	7125.000	87.70	-11.51	76.19	88.30	-12.11	peak
3	7194.120	75.19	-11.48	63.71	88.30	-24.59	peak

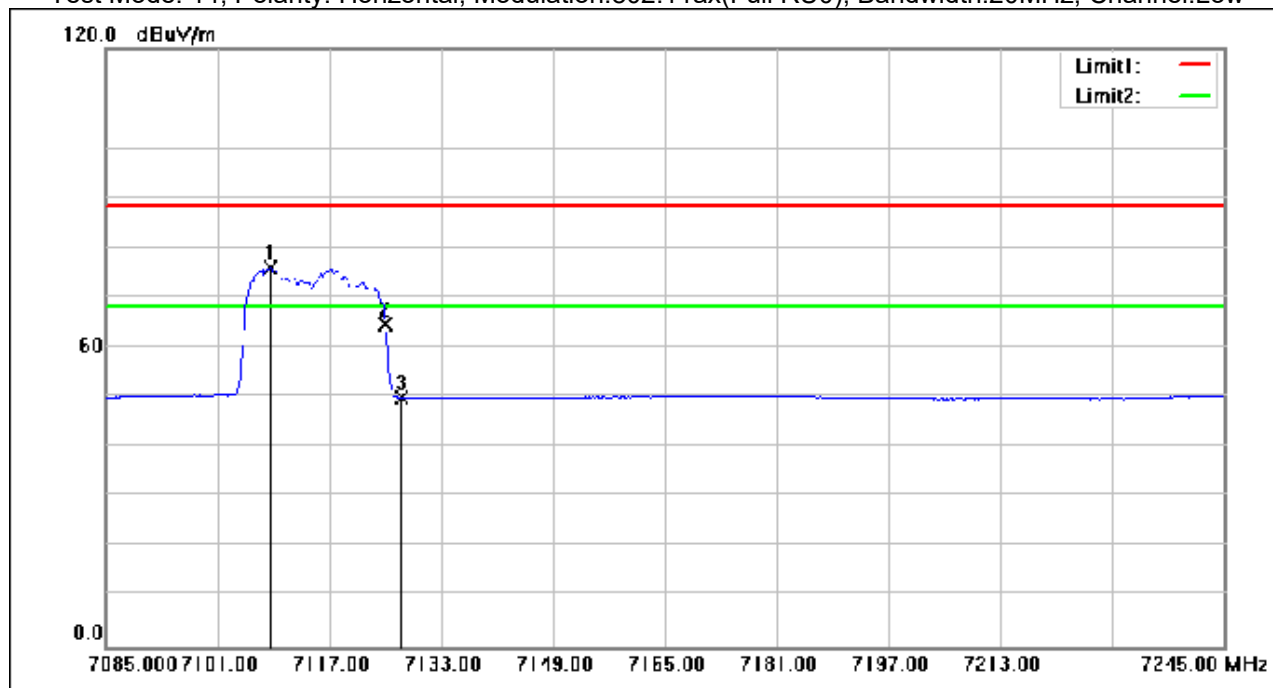
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Test Mode: 14; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 20MHz; Channel: Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7108.520	87.42	-11.52	75.90	68.30	7.60	AVG
2	7125.000	76.11	-11.51	64.60	68.30	-3.70	AVG
3	7127.240	61.56	-11.51	50.05	68.30	-18.25	AVG

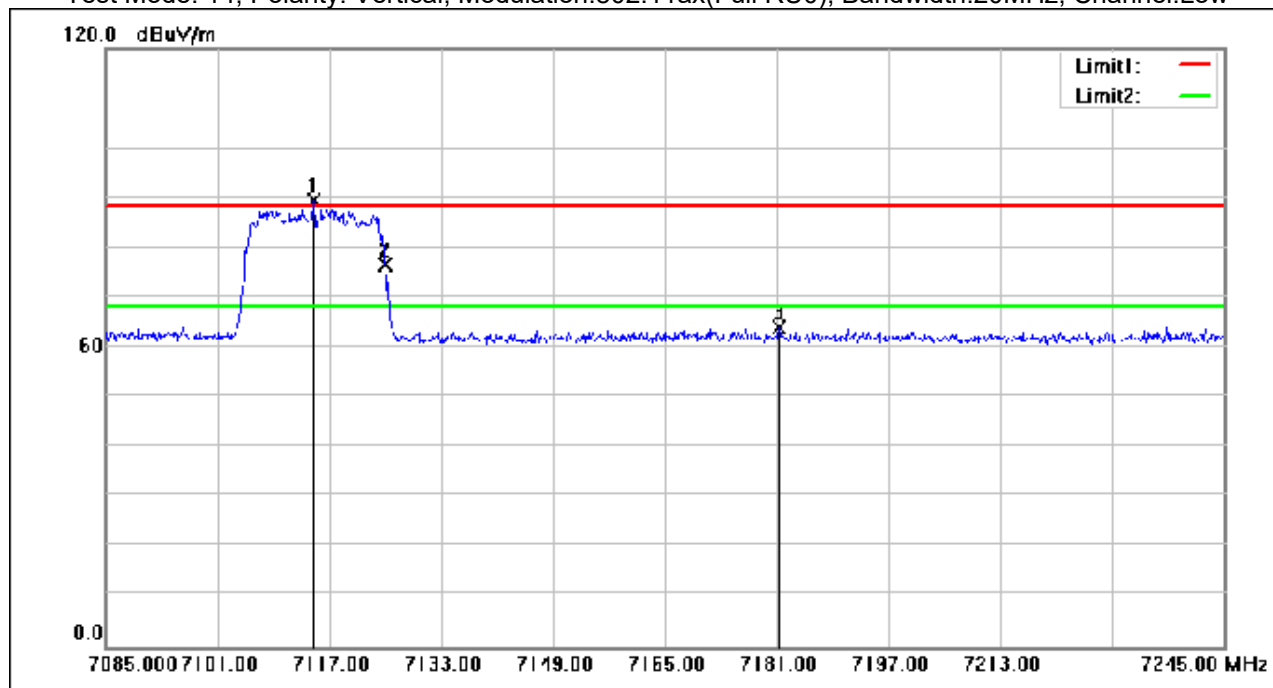
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Test Mode: 14; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7114.760	100.99	-11.51	89.48	88.30	1.18	peak
2	7125.000	88.09	-11.51	76.58	88.30	-11.72	peak
3	7181.320	75.59	-11.49	64.10	88.30	-24.20	peak

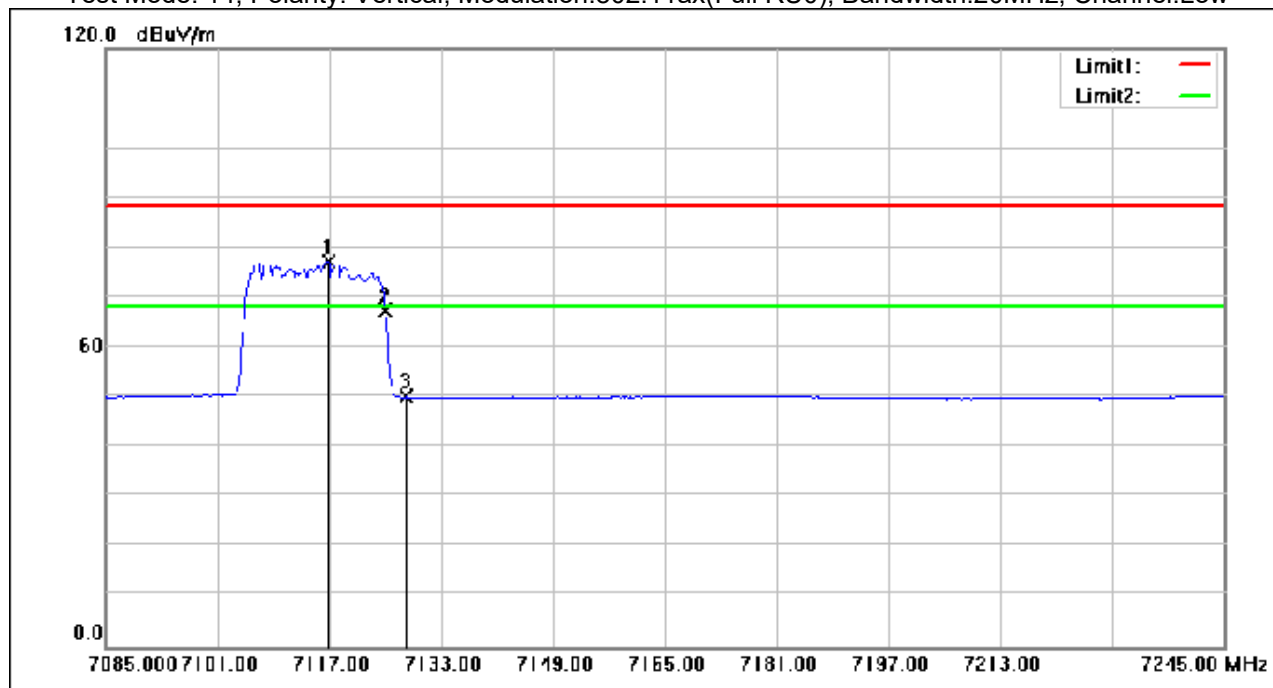
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 14; 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	7116.840	88.83	-11.51	77.32	68.30	9.02	AVG
2	7125.000	78.88	-11.51	67.37	68.30	-0.93	AVG
3	7128.040	61.63	-11.51	50.12	68.30	-18.18	AVG

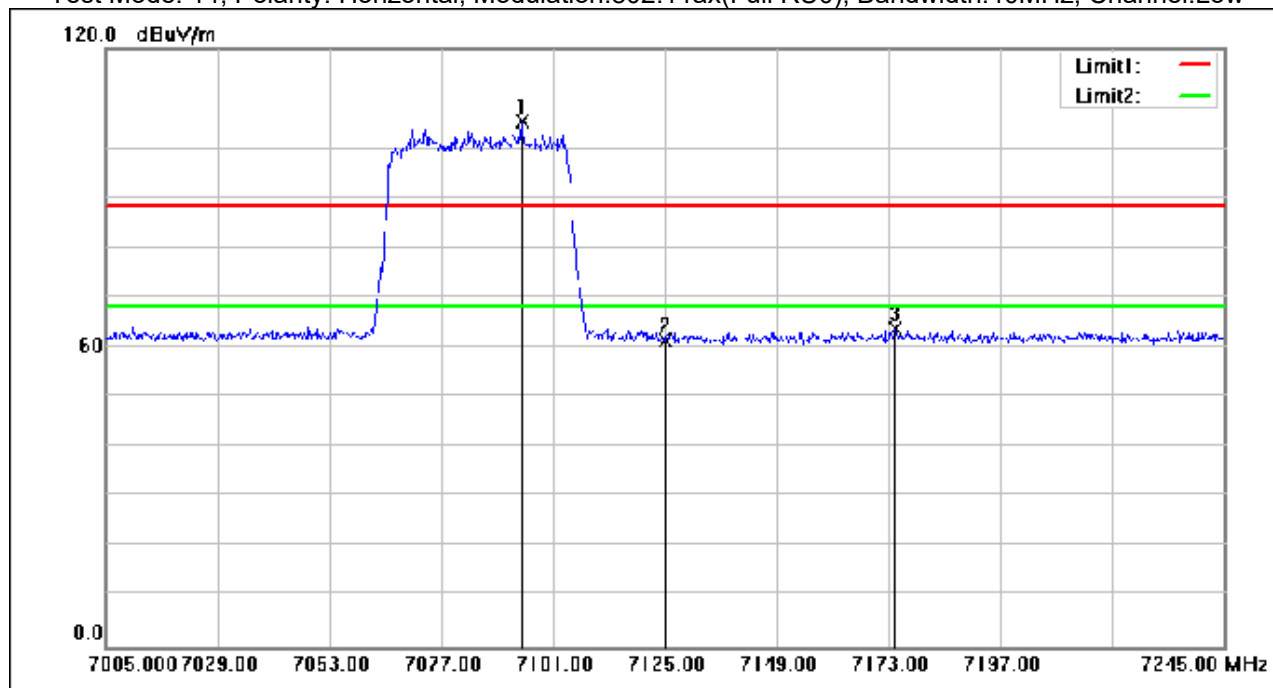
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Test Mode: 14; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7094.280	116.87	-11.53	105.34	88.30	17.04	peak
2	7125.000	72.84	-11.51	61.33	88.30	-26.97	peak
3	7174.440	75.23	-11.48	63.75	88.30	-24.55	peak

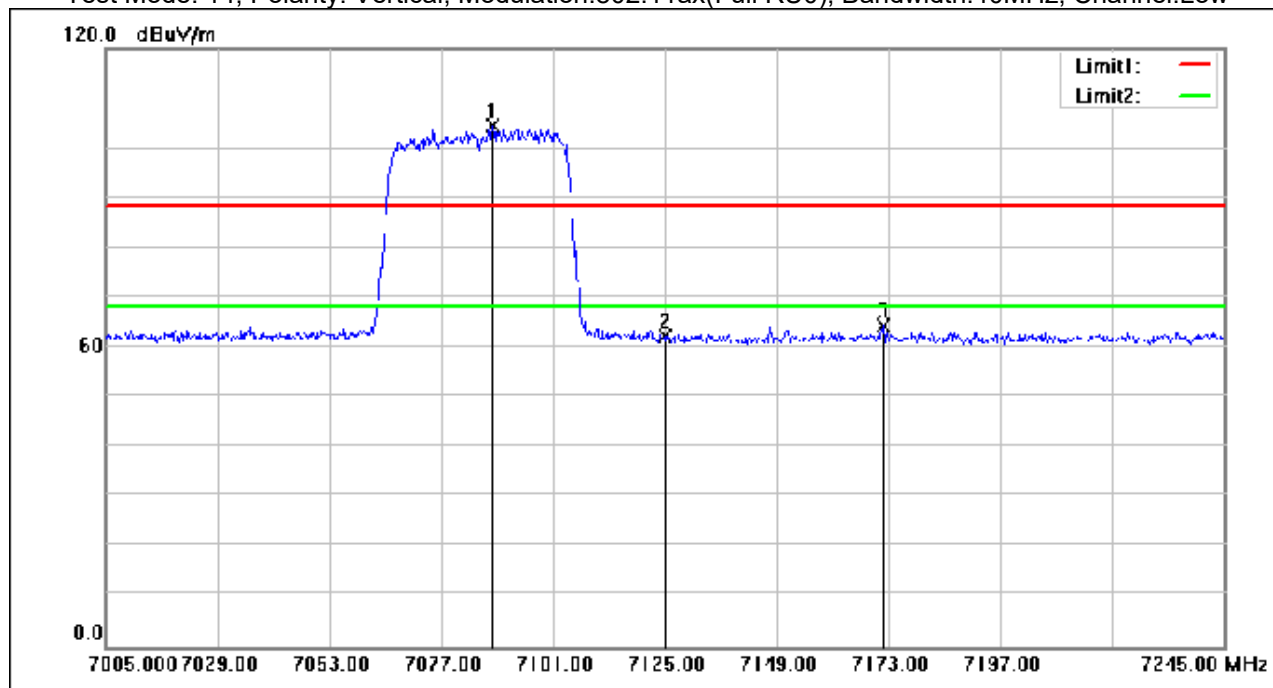
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Test Mode: 14; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7088.040	116.19	-11.53	104.66	88.30	16.36	peak
2	7125.000	73.88	-11.51	62.37	88.30	-25.93	peak
3	7171.800	75.85	-11.49	64.36	88.30	-23.94	peak

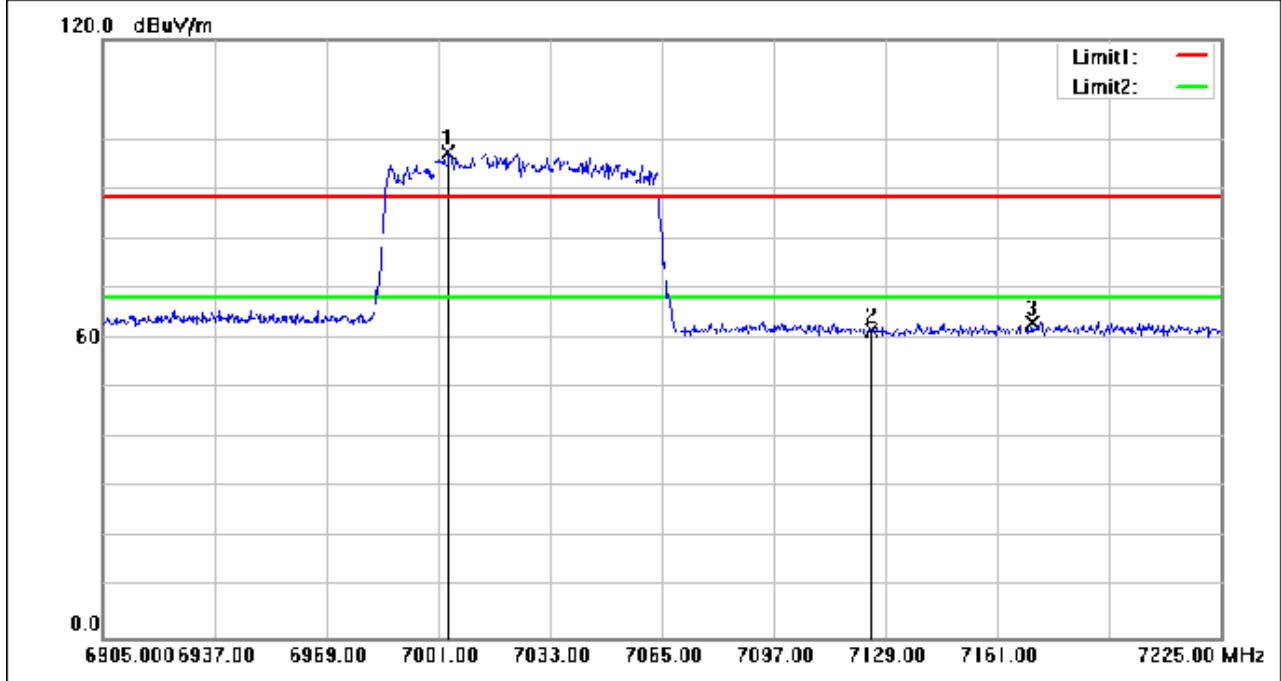
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Test Mode: 14; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7003.880	108.99	-11.56	97.43	88.30	9.13	peak
2	7125.000	73.31	-11.51	61.80	88.30	-26.50	peak
3	7170.920	74.55	-11.49	63.06	88.30	-25.24	peak

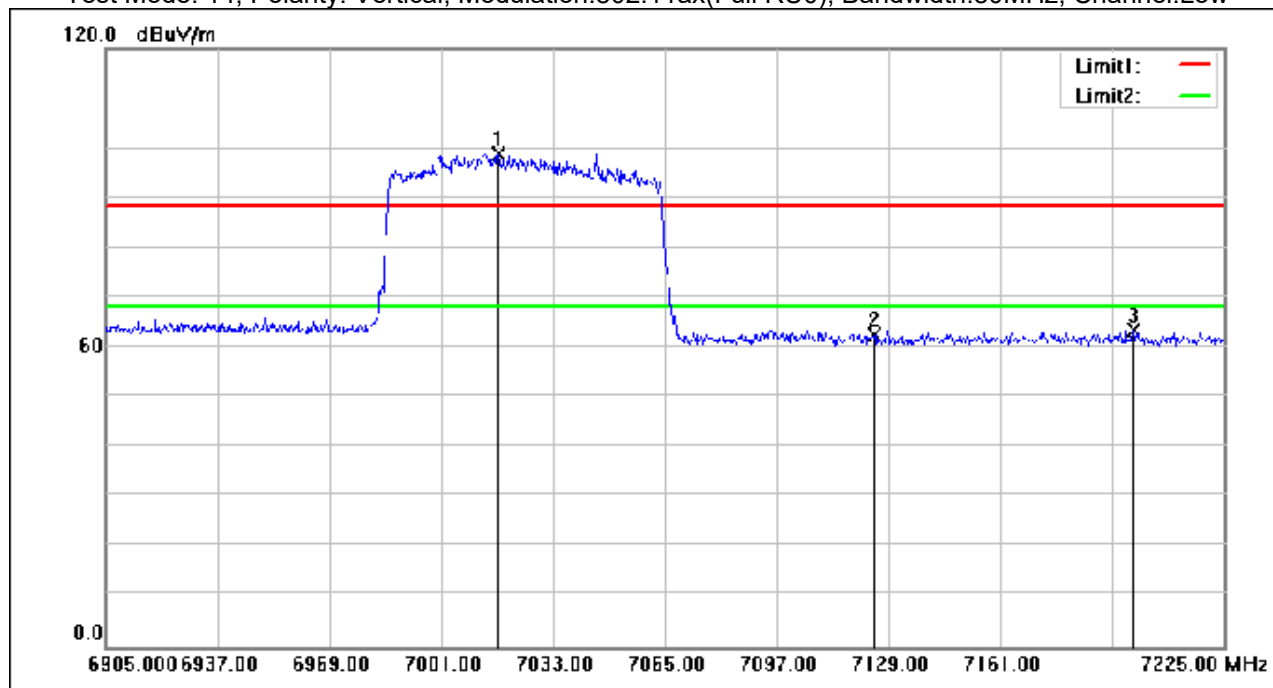
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Test Mode: 14; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7017.320	110.46	-11.55	98.91	88.30	10.61	peak
2	7125.000	74.10	-11.51	62.59	88.30	-25.71	peak
3	7199.080	74.92	-11.48	63.44	88.30	-24.86	peak

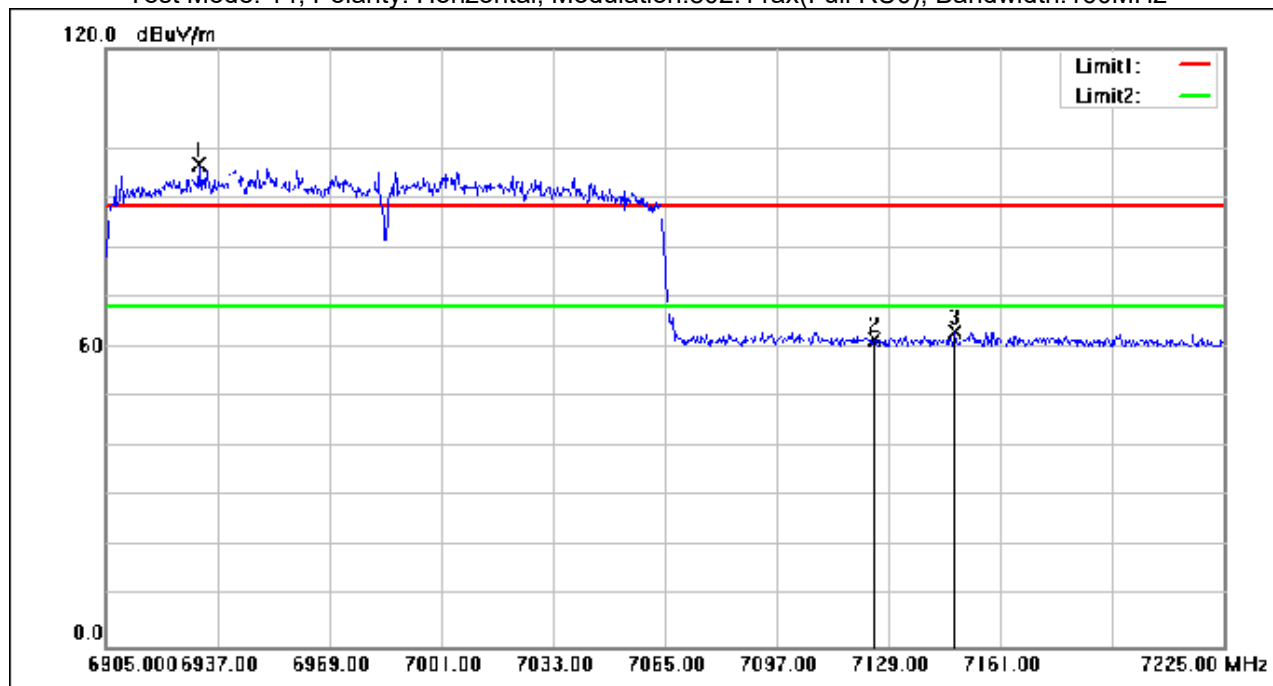
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Test Mode: 14; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:160MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6931.560	108.32	-11.69	96.63	88.30	8.33	peak
2	7125.000	73.31	-11.51	61.80	88.30	-26.50	peak
3	7147.880	74.74	-11.50	63.24	88.30	-25.06	peak

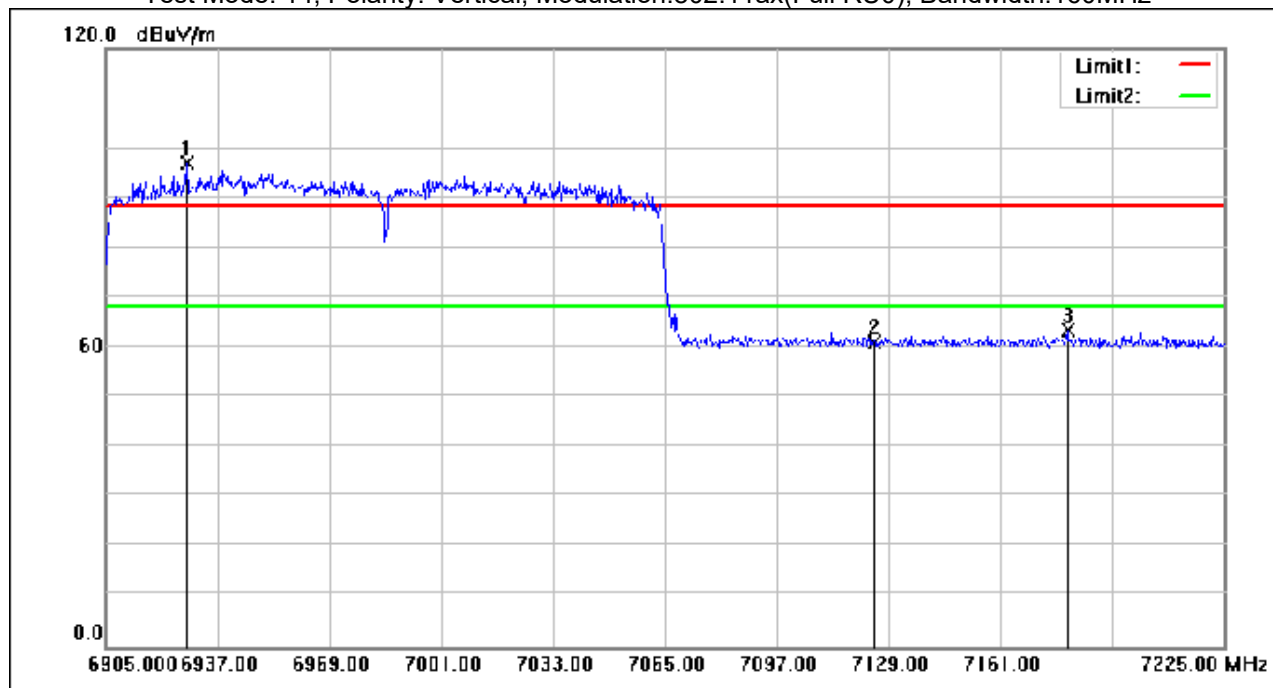
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Test Mode: 14; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:160MHz

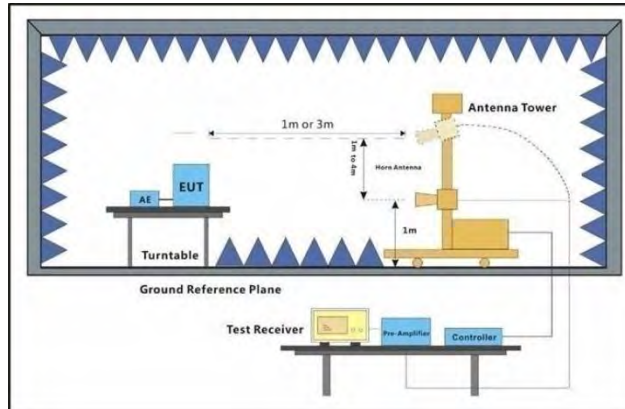


No.	Frequency (MHz)	Reading (dBuV/m)	Correction factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6928.360	108.66	-11.69	96.97	88.30	8.67	peak
2	7125.000	72.69	-11.51	61.18	88.30	-27.12	peak
3	7180.200	74.95	-11.49	63.46	88.30	-24.84	peak

9.11 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

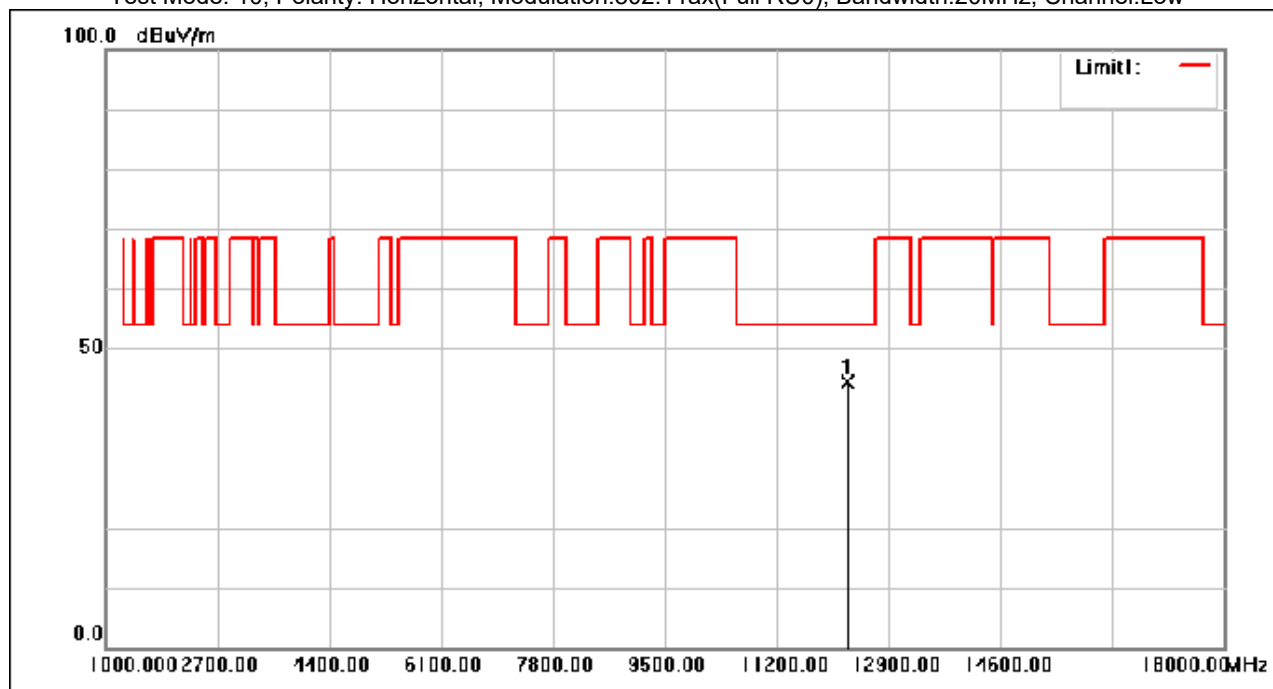
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Test Mode: 10; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 20MHz; Channel: Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12274.130	41.97	2.30	44.27	54.00	-9.73	peak

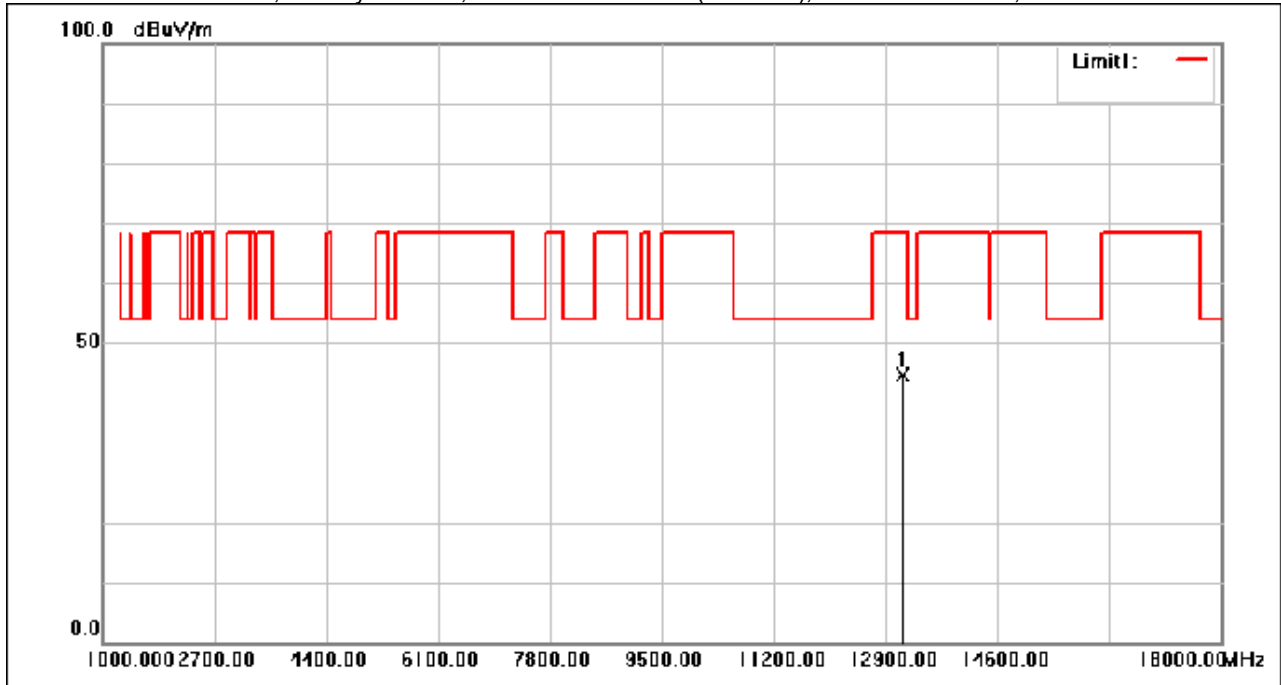
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Test Mode: 10; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13170.240	41.32	3.34	44.66	68.30	-23.64	peak

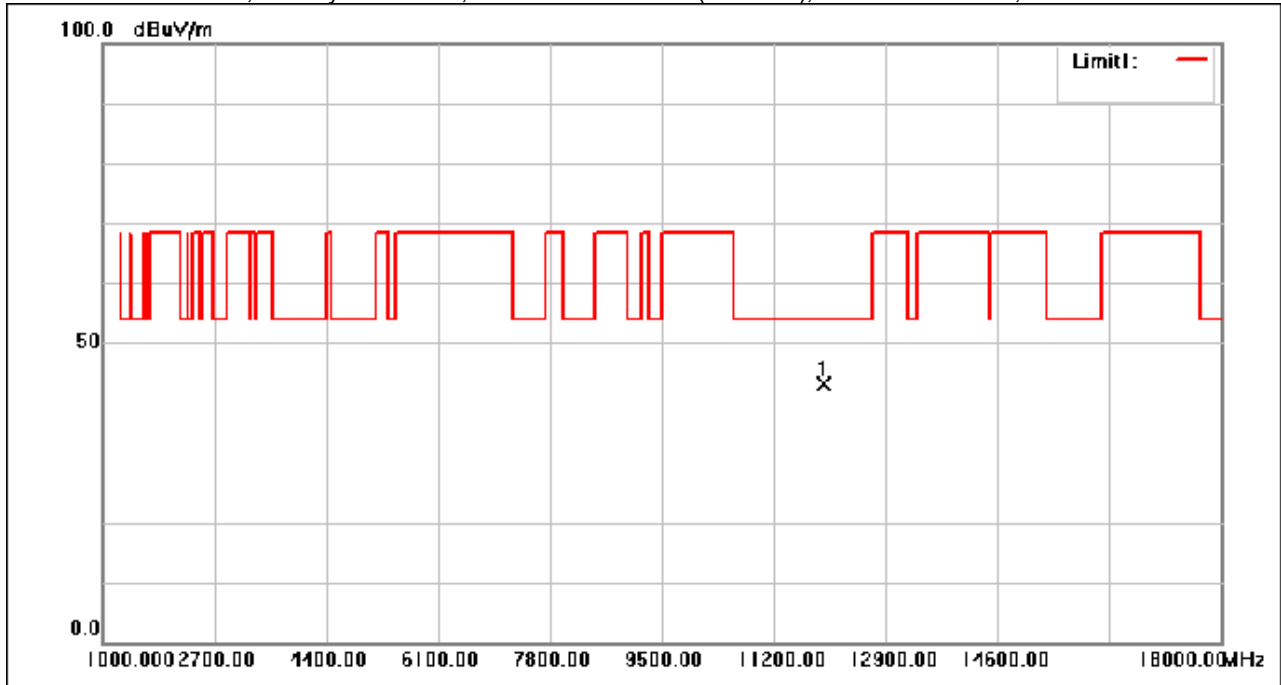
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Test Mode: 10; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11962.120	40.65	2.48	43.13	54.00	-10.87	peak

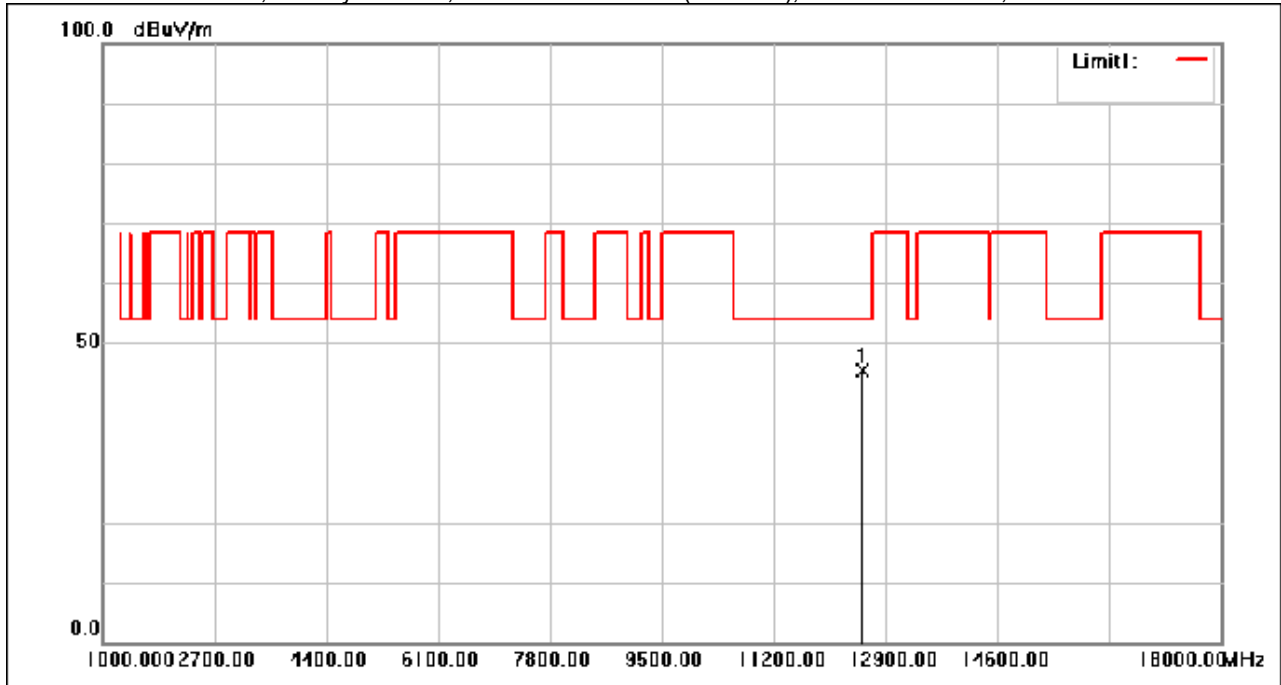
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Test Mode: 10; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12549.240	43.13	2.23	45.36	54.00	-8.64	peak

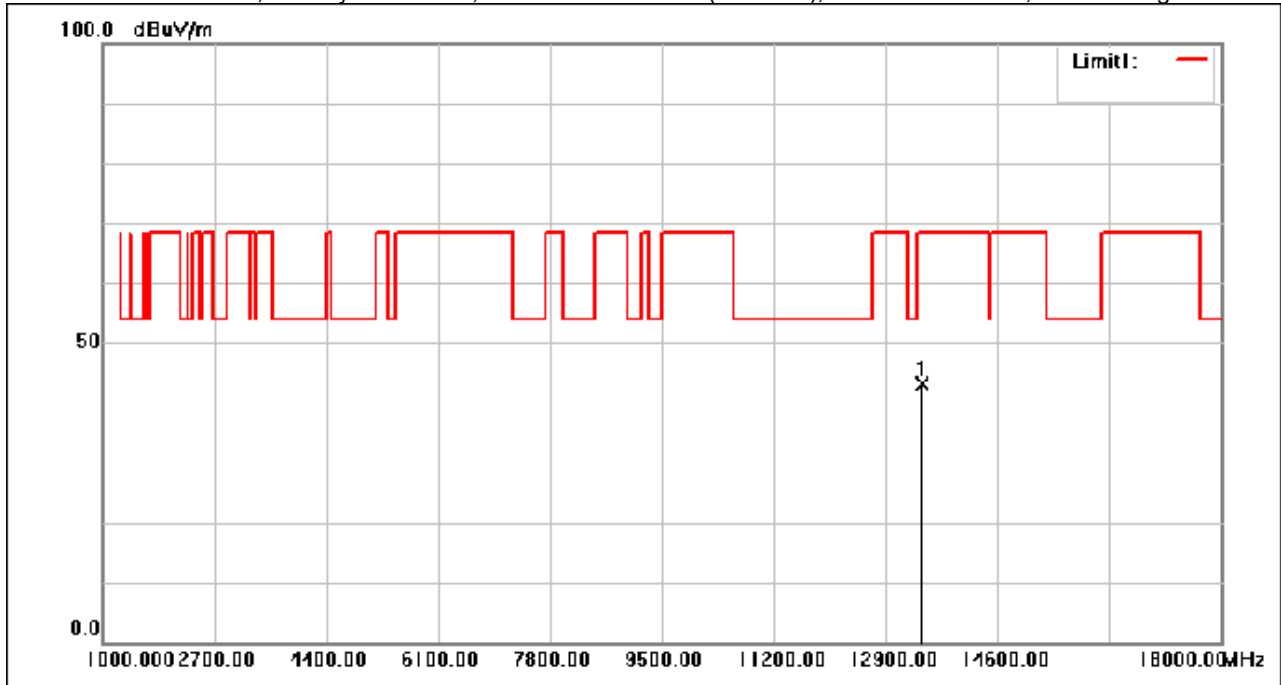
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Test Mode: 10; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13466.260	40.63	2.59	43.22	68.30	-25.08	peak

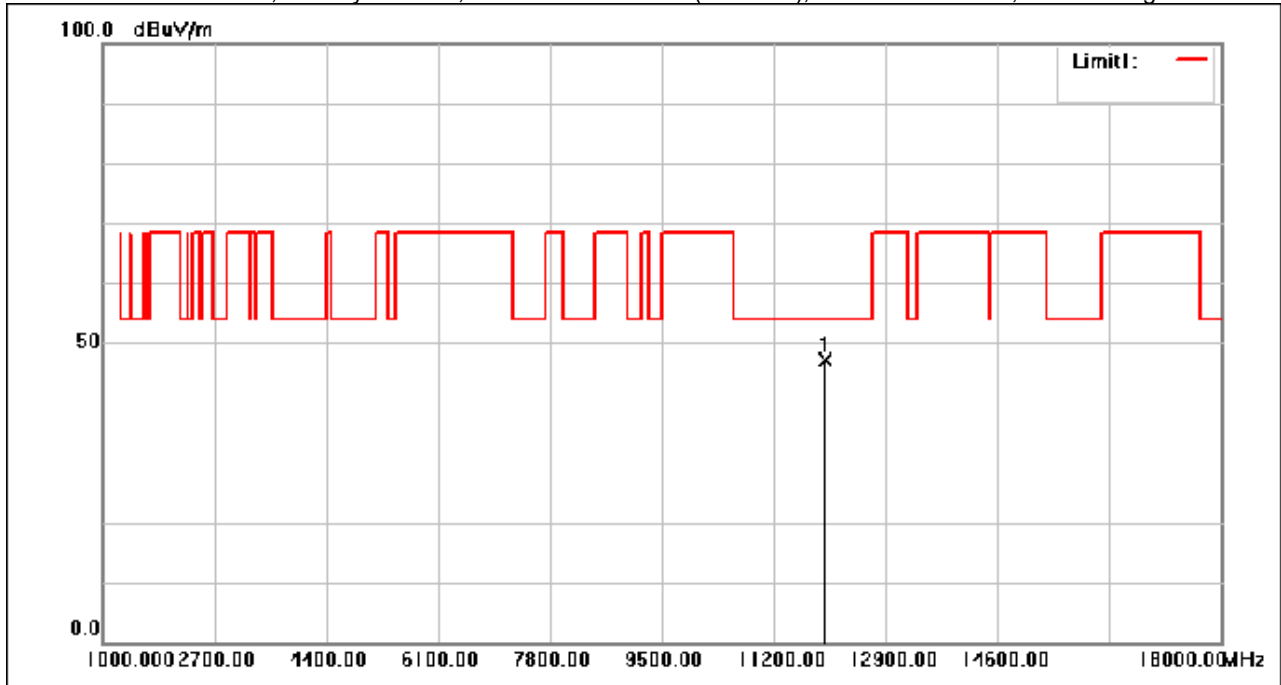
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Test Mode: 10; Polarity: Vertical; Modulation: 802.11ax(Full RU0); Bandwidth: 20MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11985.110	44.46	2.56	47.02	54.00	-6.98	peak

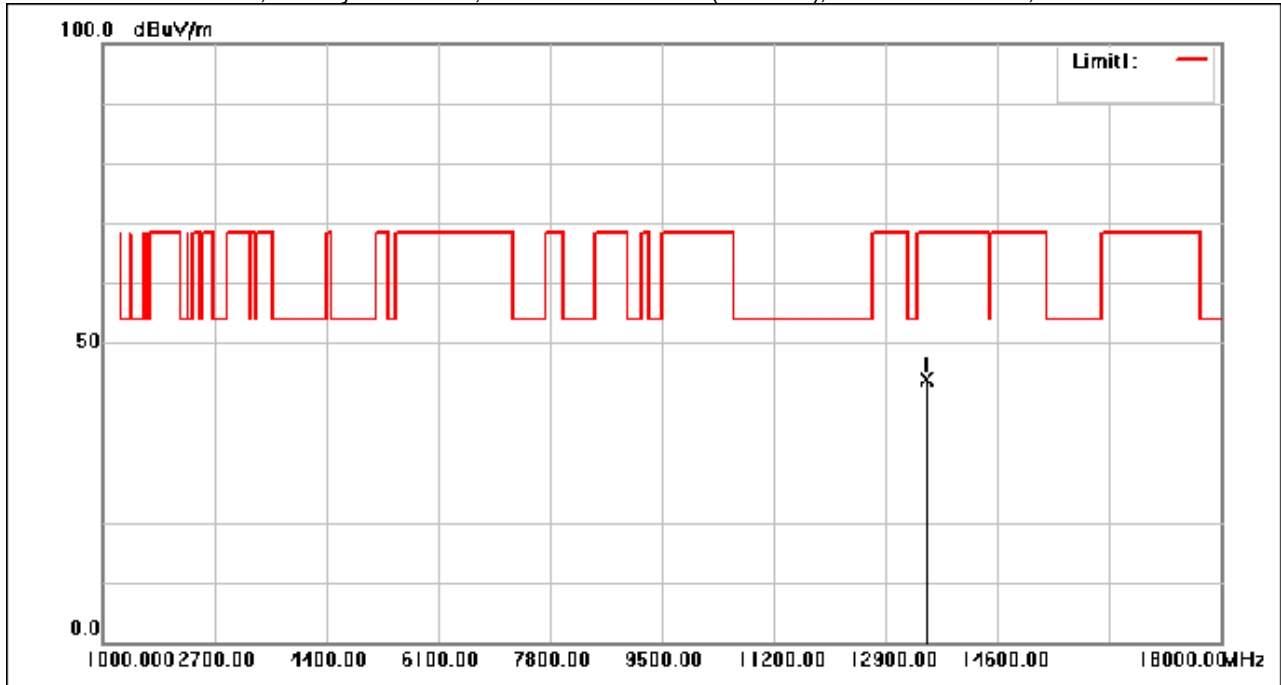
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Test Mode: 10; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 40MHz; Channel: Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13526.480	41.35	2.58	43.93	68.30	-24.37	peak

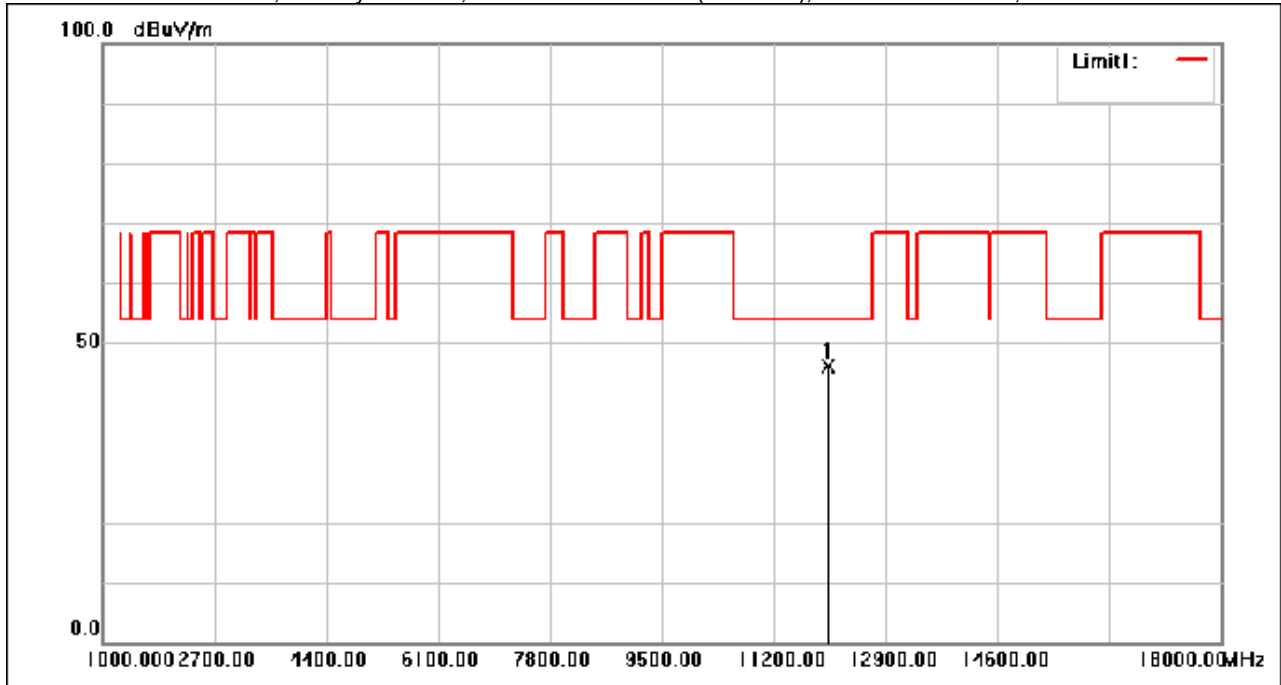
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Test Mode: 10; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12035.320	43.63	2.58	46.21	54.00	-7.79	peak

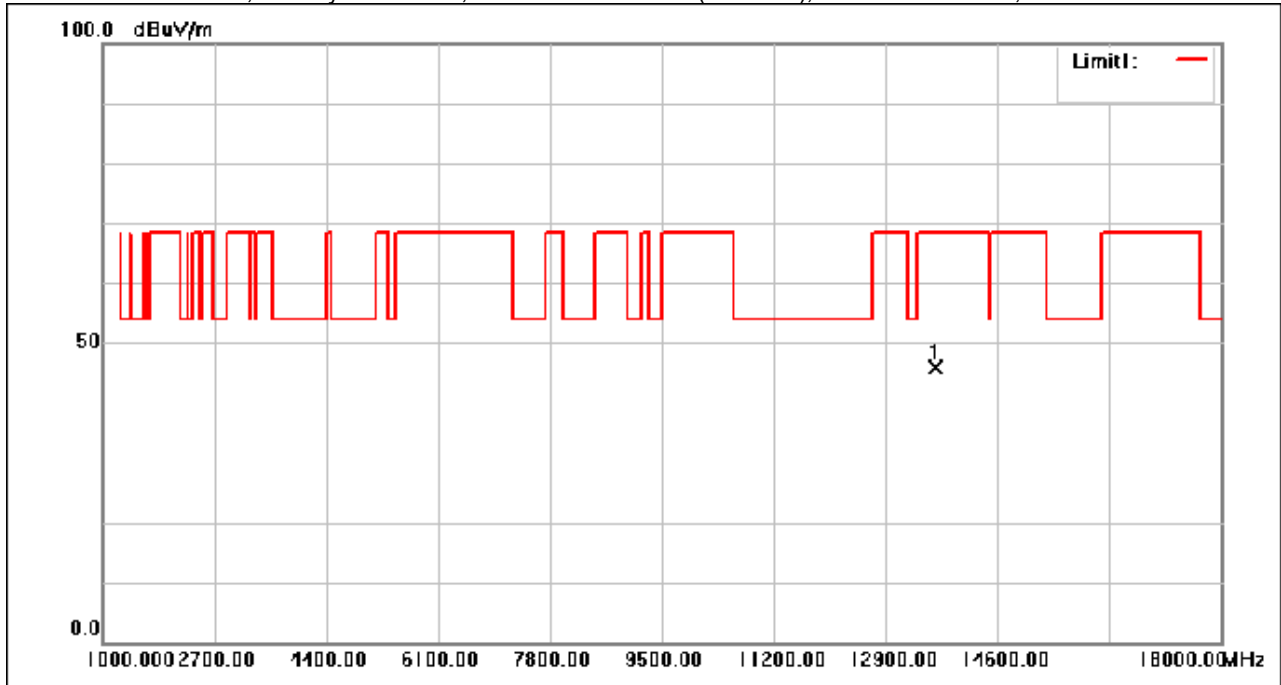
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Test Mode: 10; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13652.730	42.86	2.93	45.79	68.30	-22.51	peak

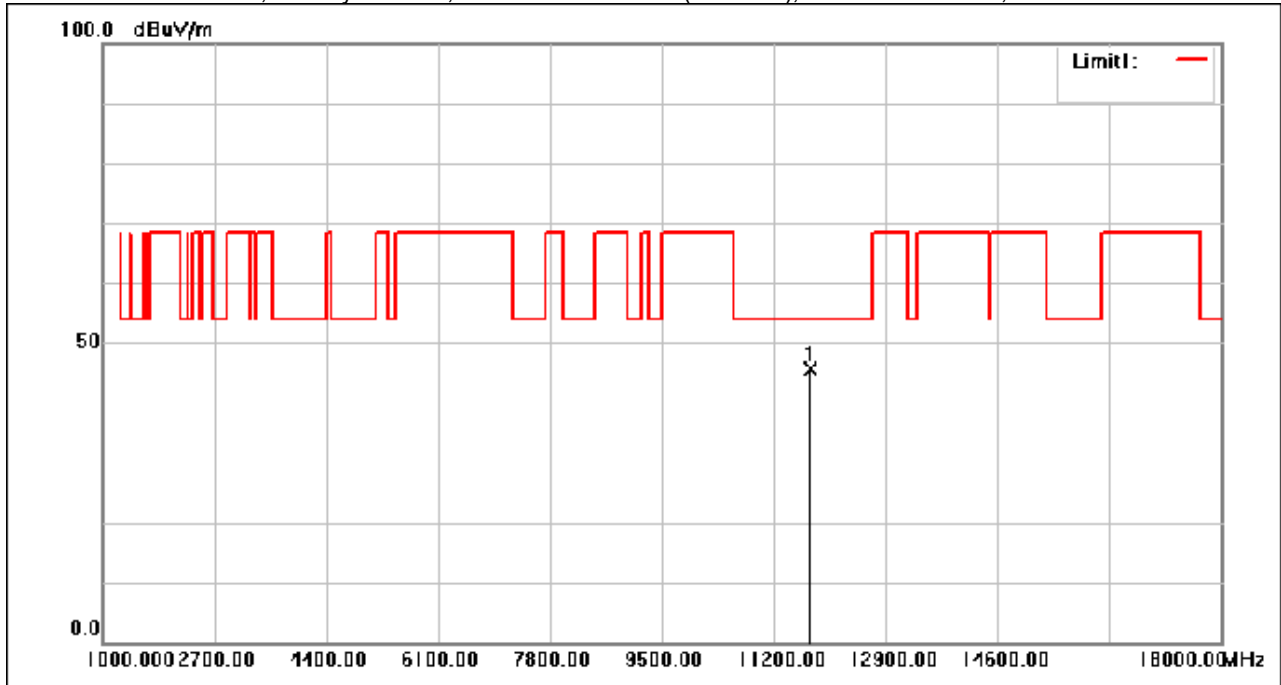
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Test Mode: 10; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11755.750	43.78	1.80	45.58	54.00	-8.42	peak

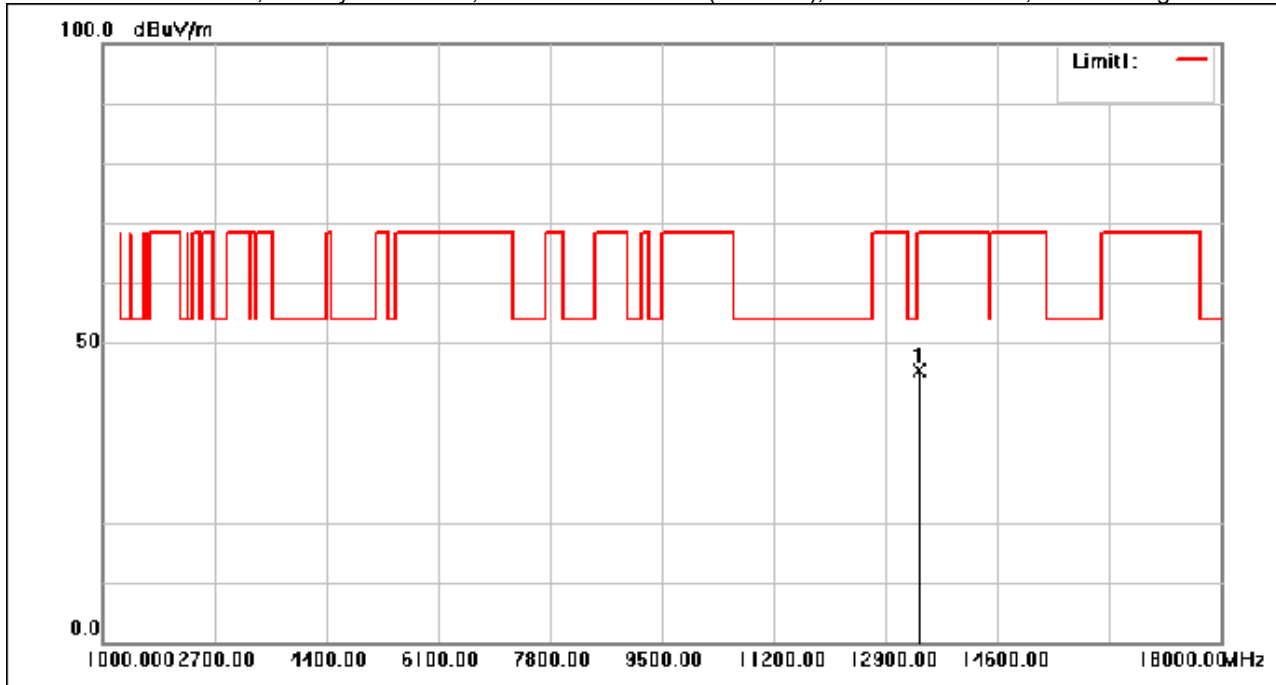
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Test Mode: 10; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 40MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13418.390	42.66	2.71	45.37	68.30	-22.93	peak

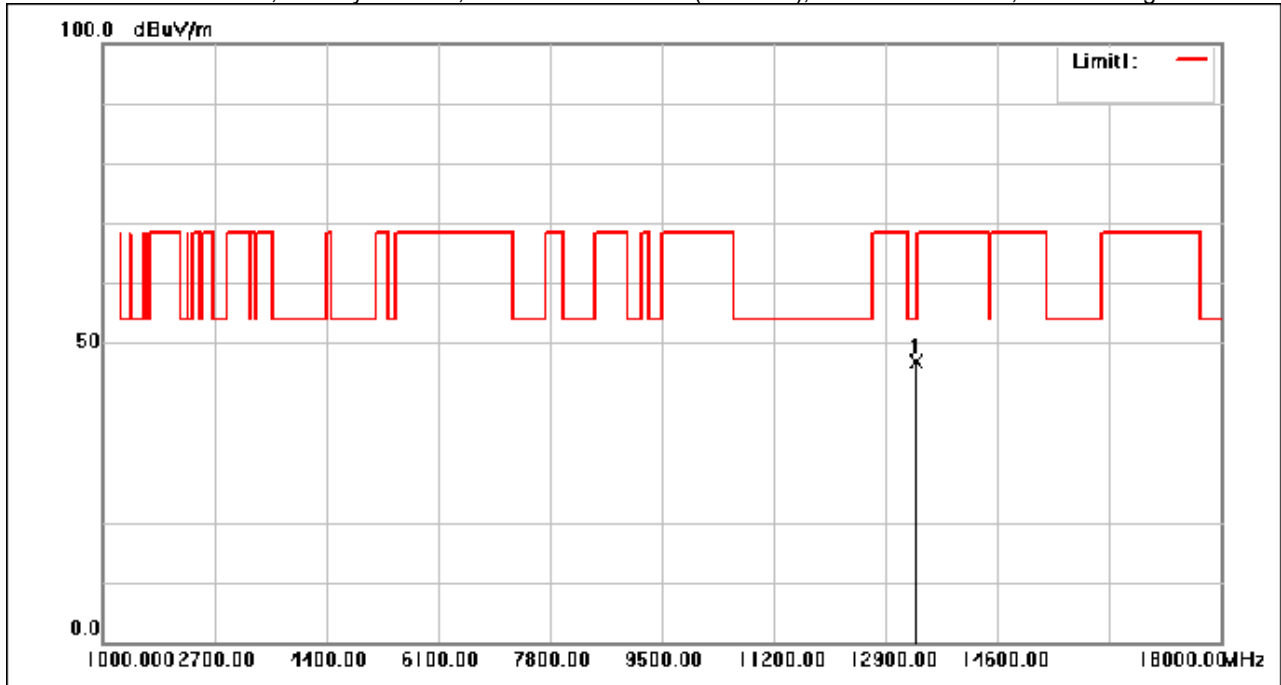
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Test Mode: 10; Polarity: Vertical; Modulation: 802.11ax(Full RU0); Bandwidth: 40MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13374.620	43.94	2.83	46.77	54.00	-7.23	peak

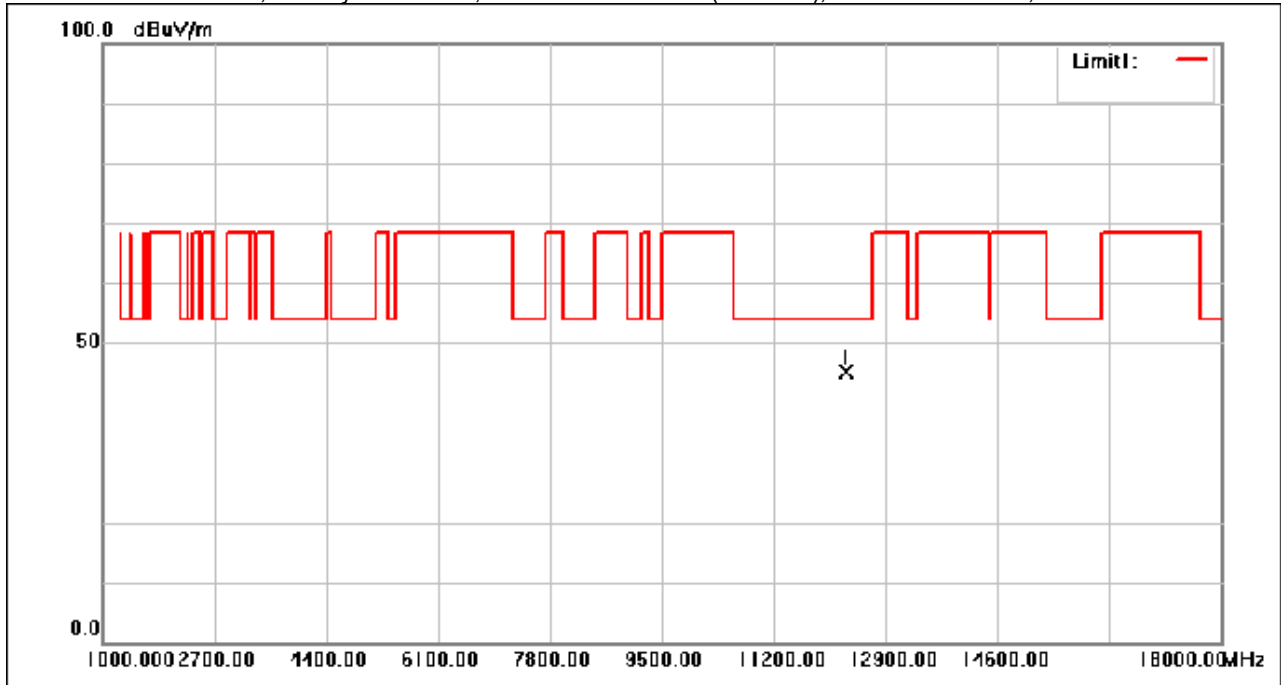
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Test Mode: 10; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12310.170	42.86	2.27	45.13	54.00	-8.87	peak

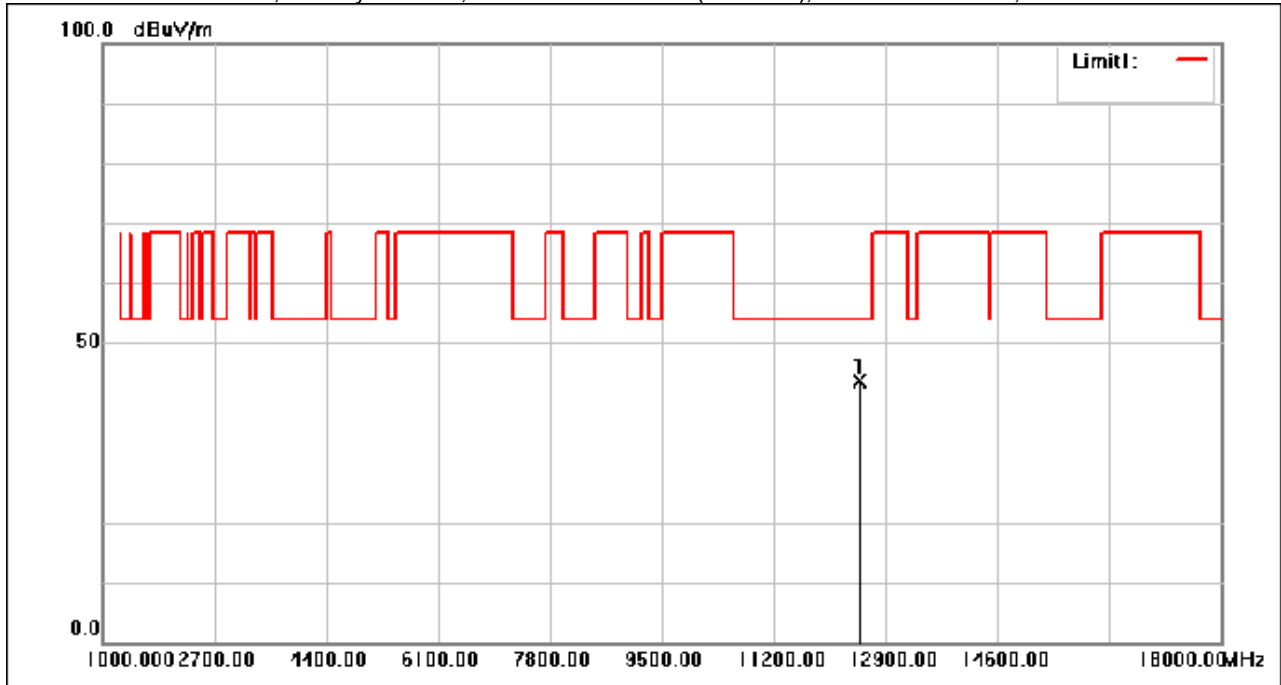
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Test Mode: 10; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12510.870	41.51	2.10	43.61	54.00	-10.39	peak

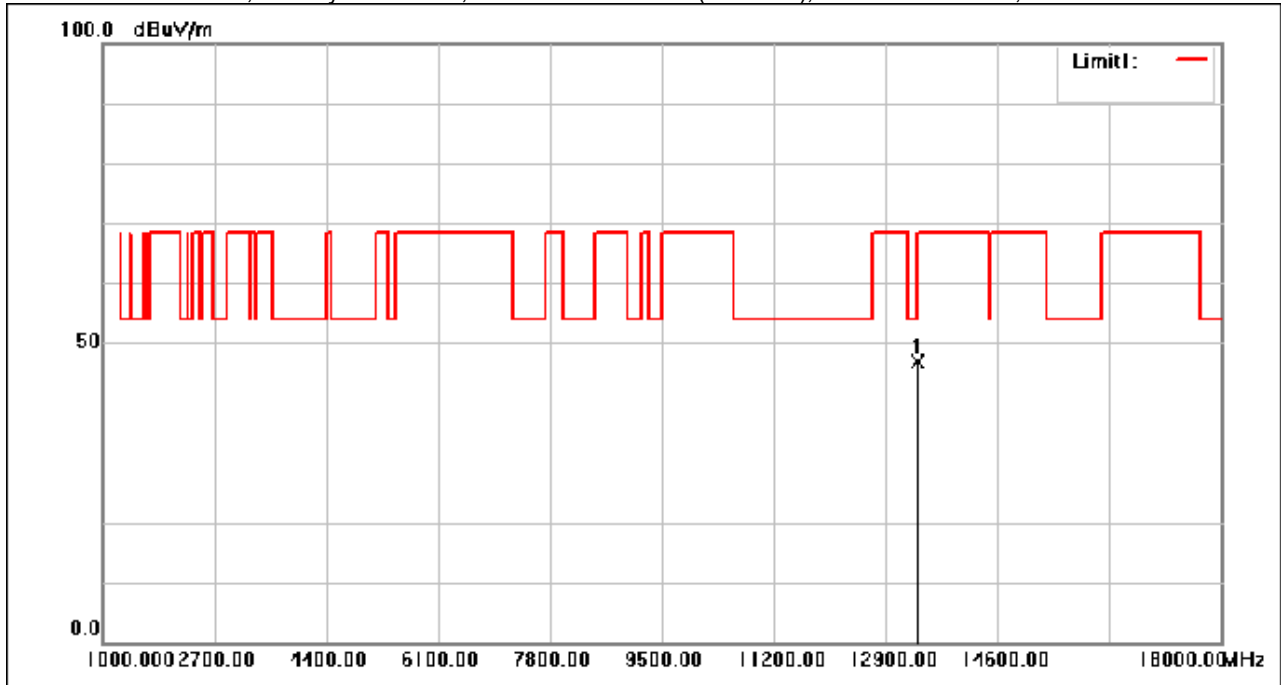
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Test Mode: 10; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13385.490	44.14	2.79	46.93	54.00	-7.07	peak

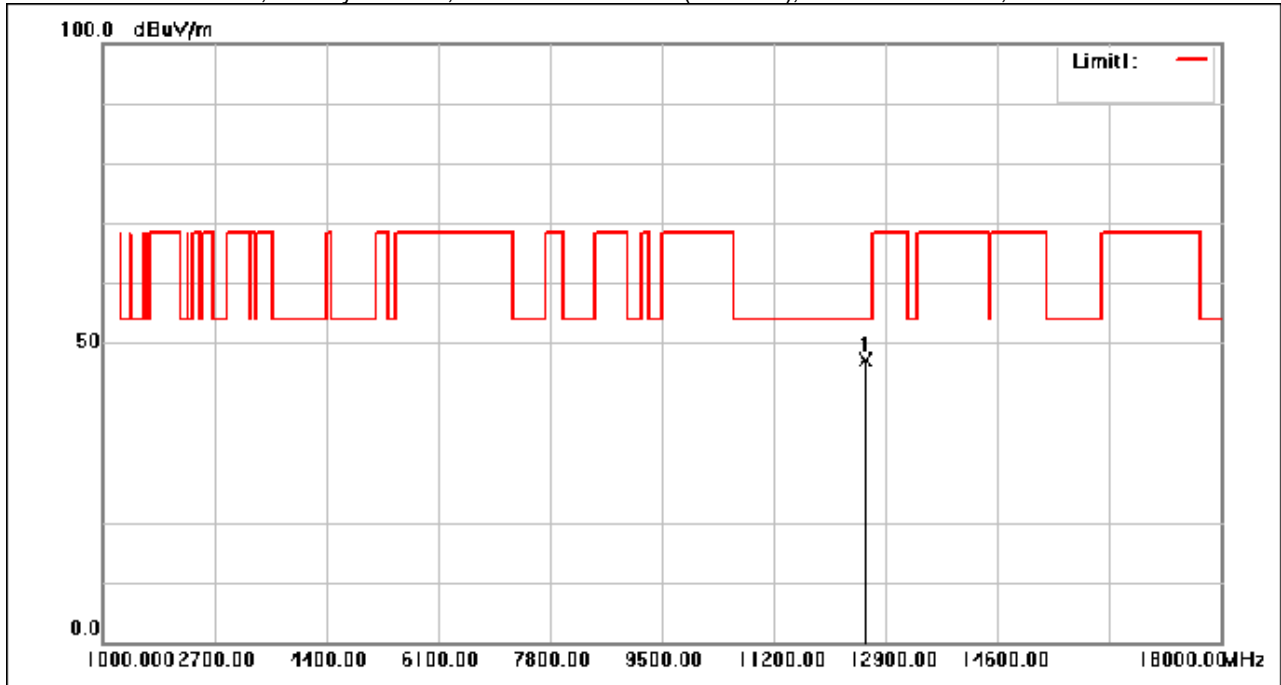
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Test Mode: 10; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12588.150	44.71	2.36	47.07	54.00	-6.93	peak

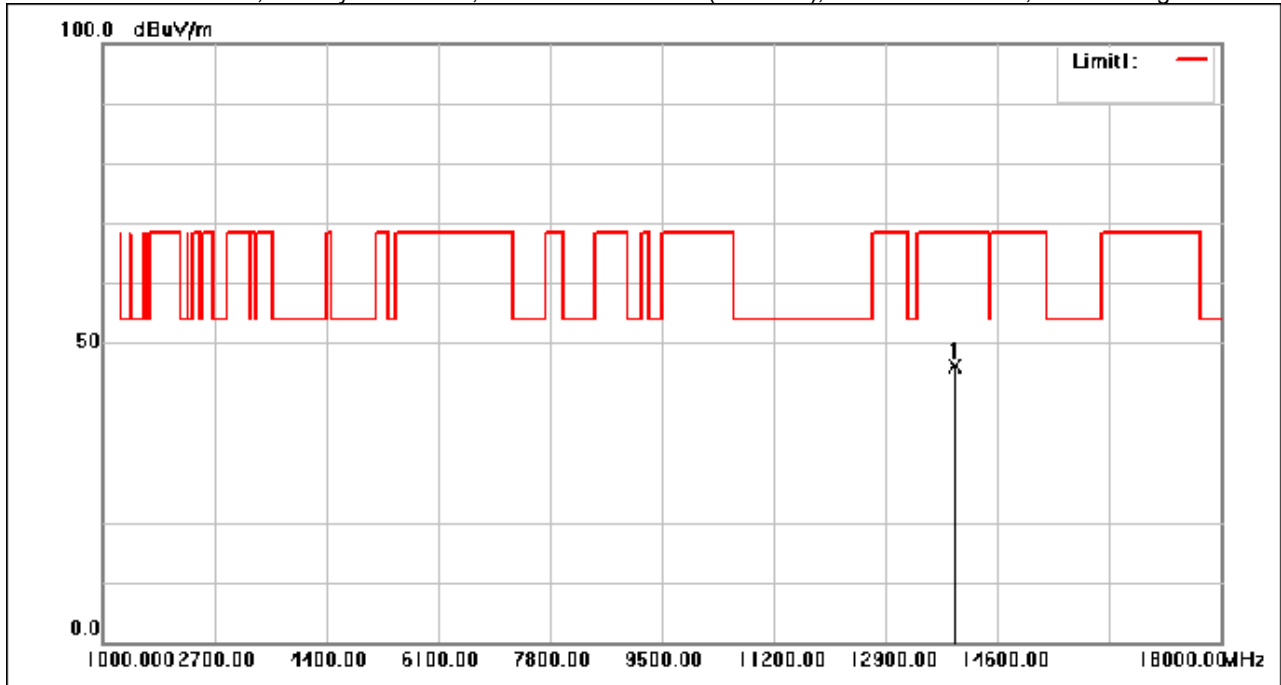
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Test Mode: 10; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13950.050	42.30	3.75	46.05	68.30	-22.25	peak

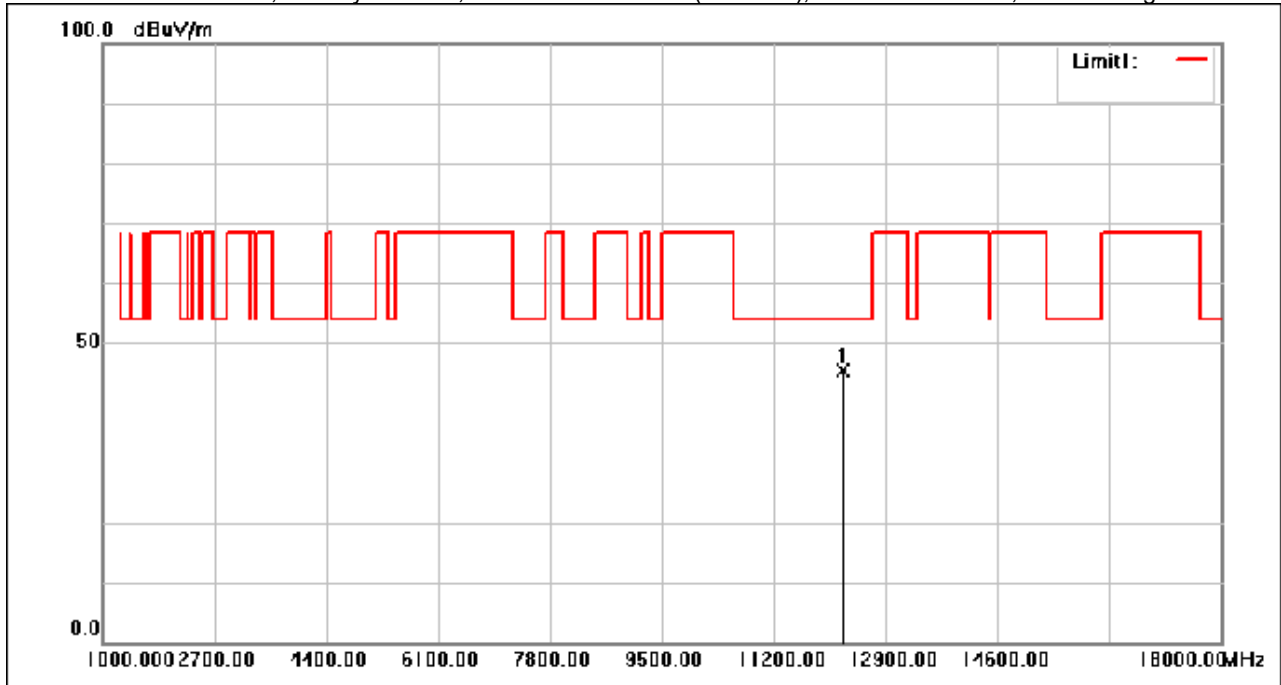
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Test Mode: 10; Polarity: Vertical; Modulation: 802.11ax(Full RU0); Bandwidth: 80MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12263.690	43.00	2.32	45.32	54.00	-8.68	peak

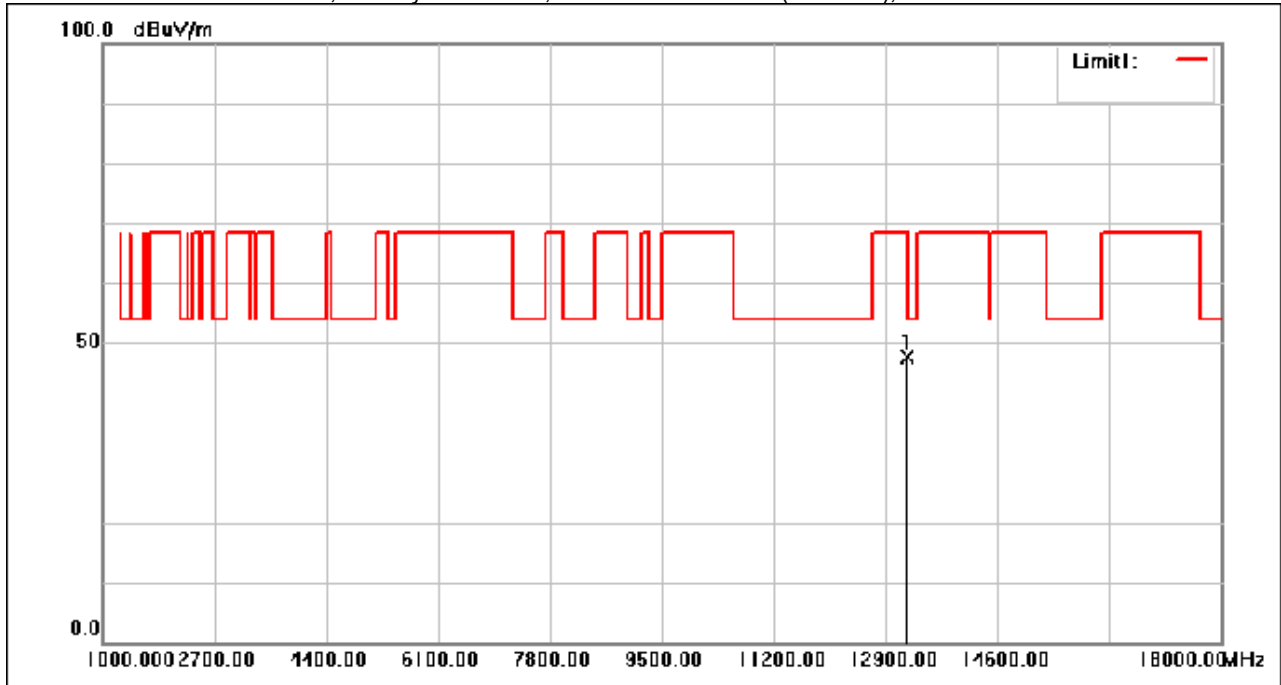
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Test Mode: 10; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 160MHz



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13226.340	44.33	3.19	47.52	68.30	-20.78	peak

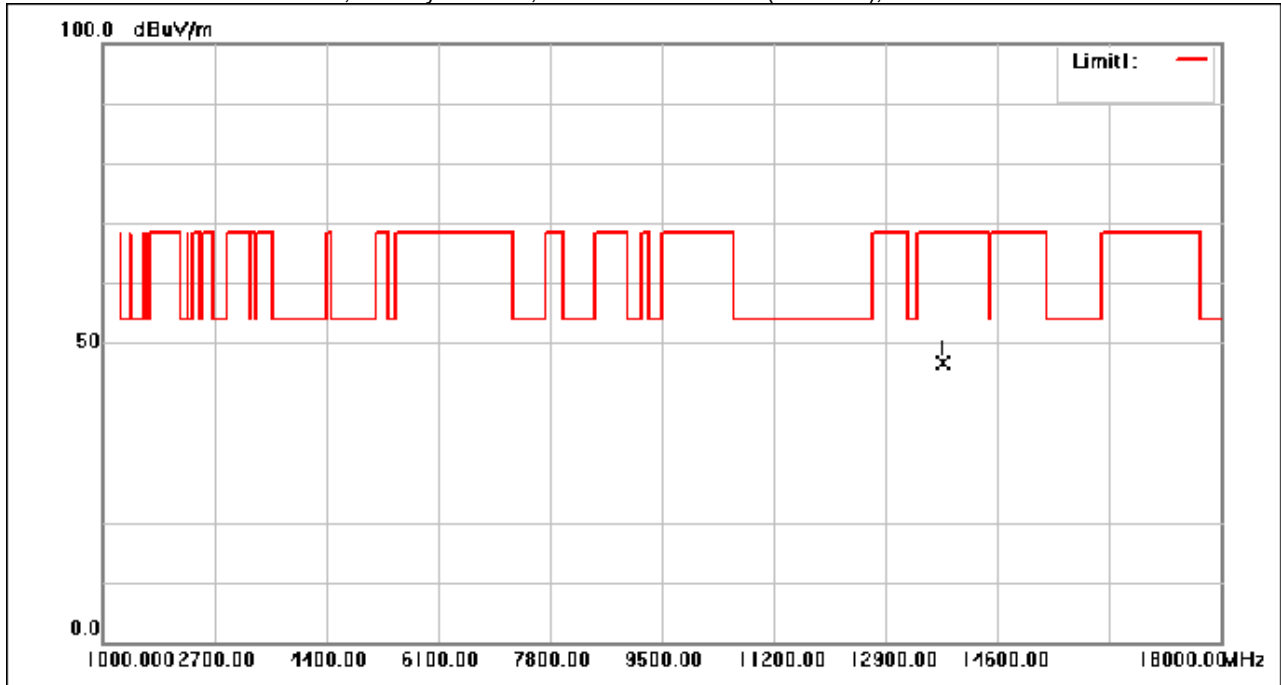
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Test Mode: 10; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:160MHz



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13763.490	43.42	3.24	46.66	68.30	-21.64	peak

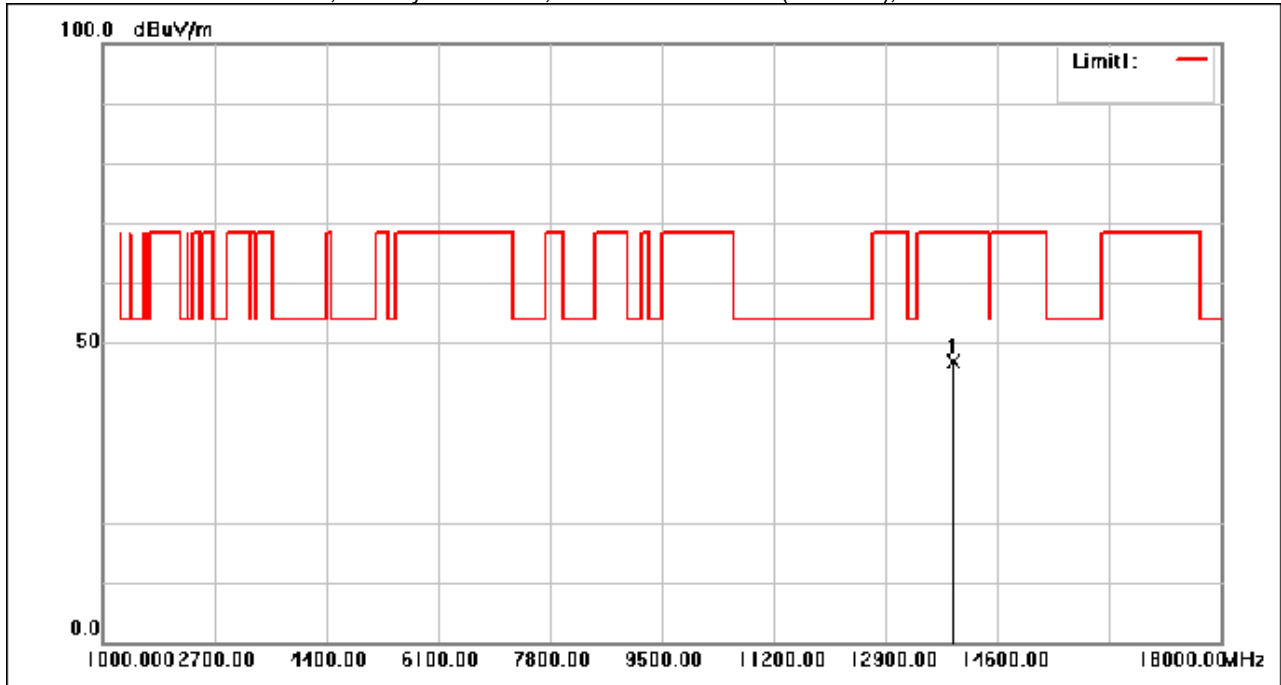
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Test Mode: 10; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 160MHz



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13931.450	43.05	3.71	46.76	68.30	-21.54	peak

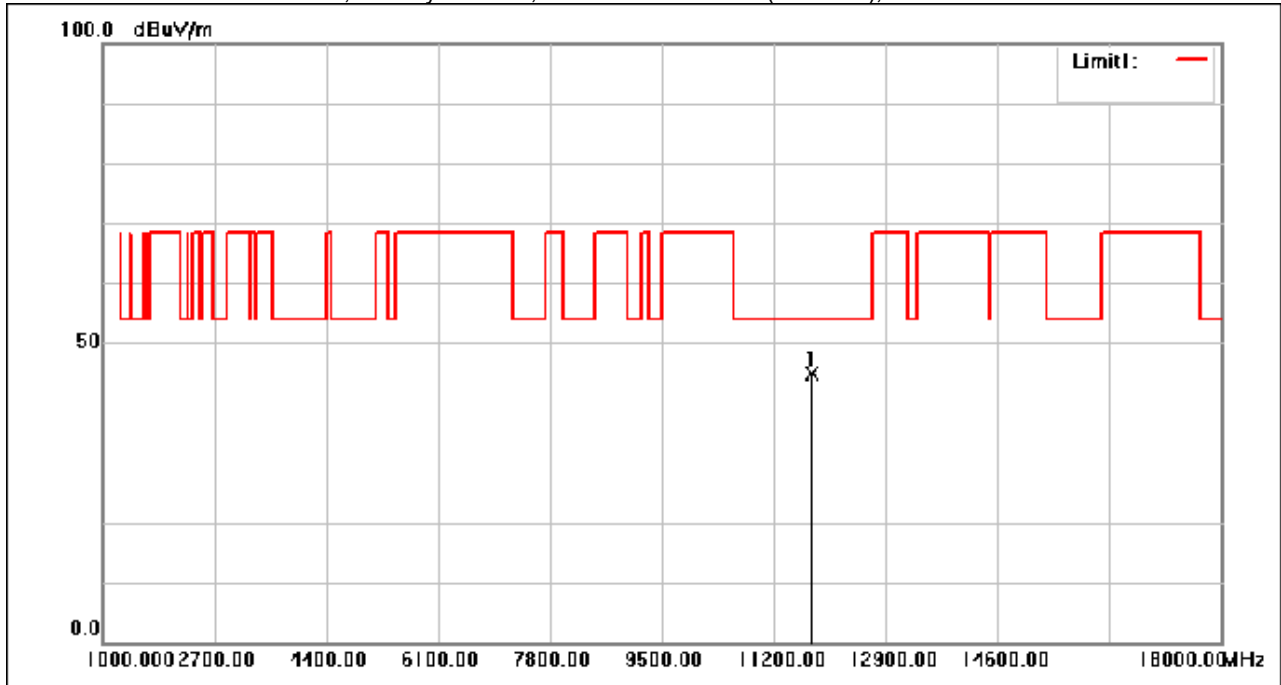
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Test Mode: 10; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:160MHz



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11772.020	43.00	1.86	44.86	54.00	-9.14	peak

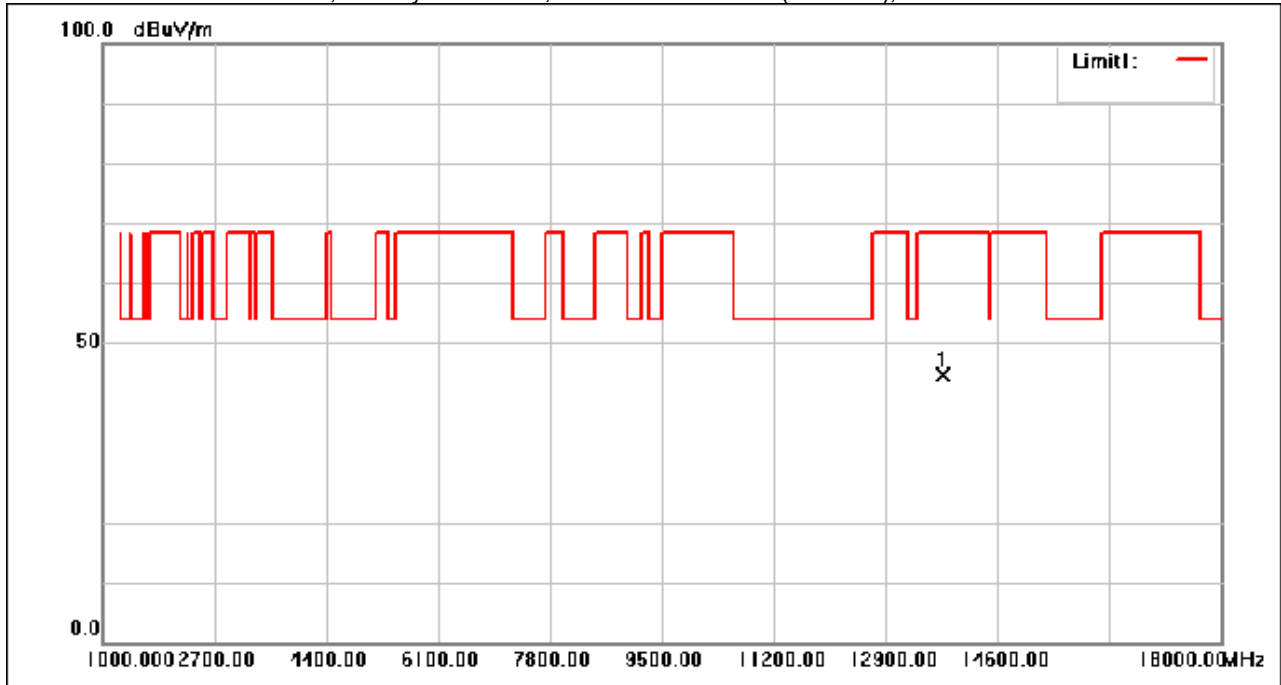
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Test Mode: 10; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 160MHz



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13766.410	41.32	3.24	44.56	68.30	-23.74	peak

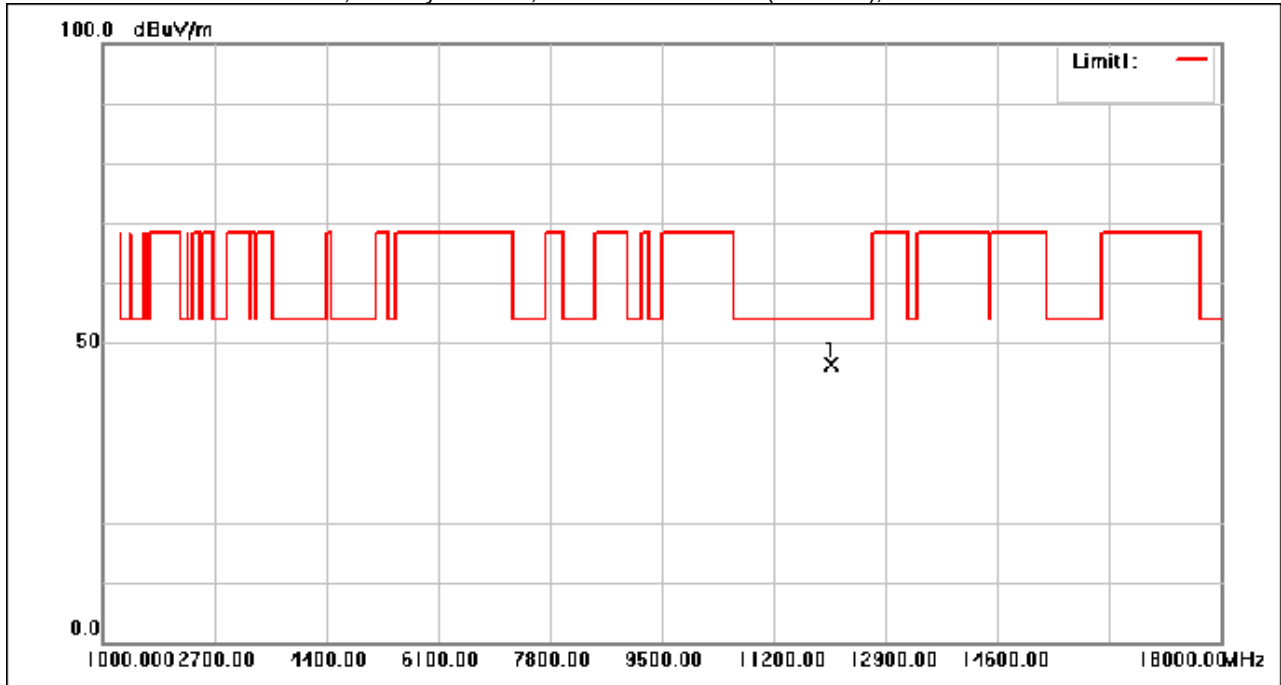
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Test Mode: 10; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:160MHz



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12081.670	43.86	2.52	46.38	54.00	-7.62	peak

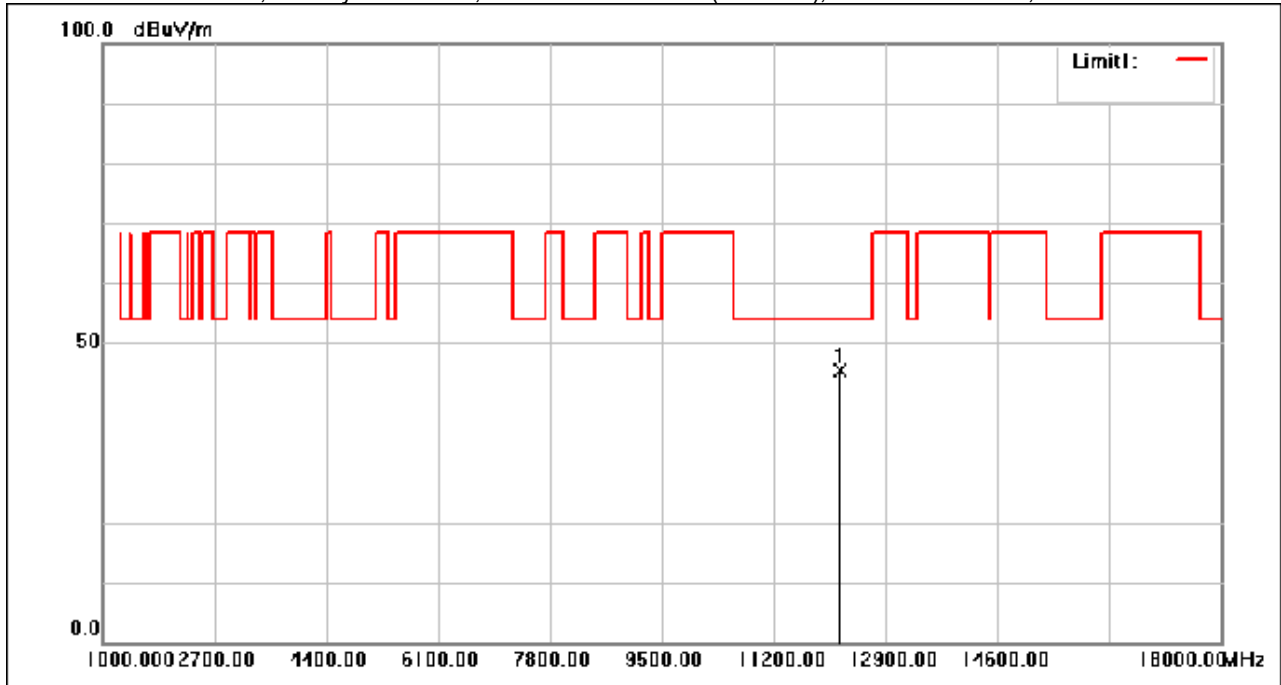
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Test Mode: 11; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 20MHz; Channel: Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12215.160	43.06	2.38	45.44	54.00	-8.56	peak

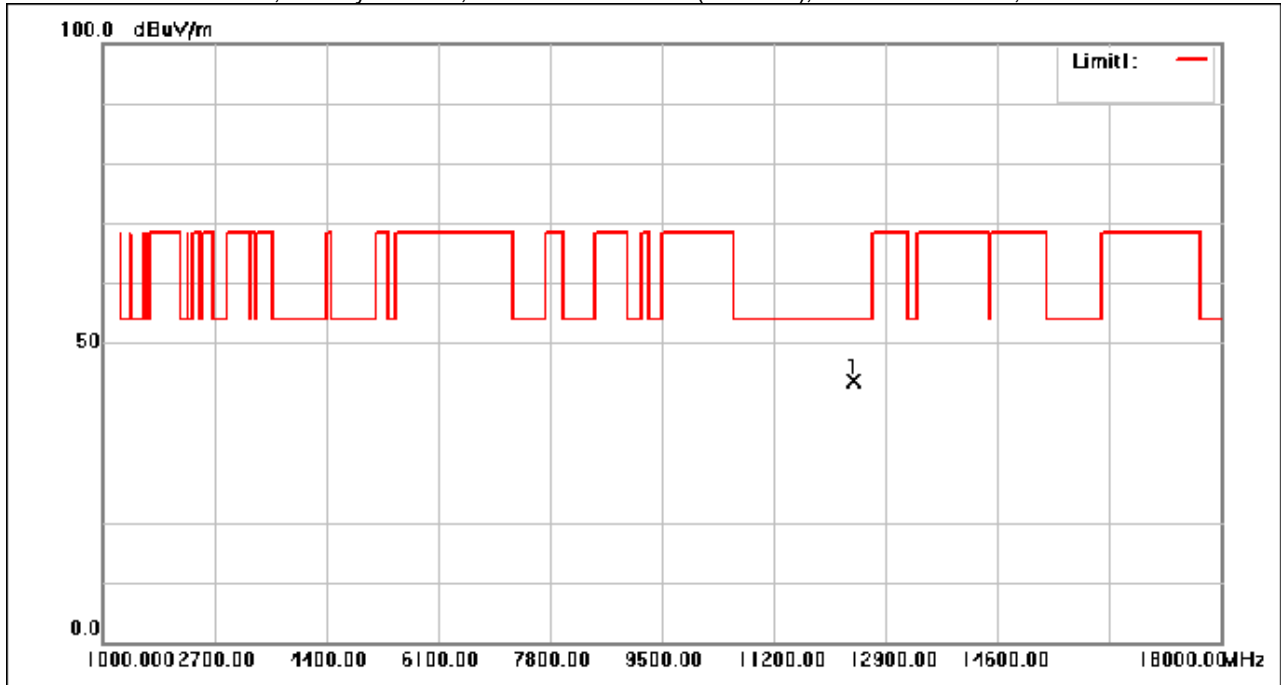
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Test Mode: 11; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12411.250	41.39	2.16	43.55	54.00	-10.45	peak

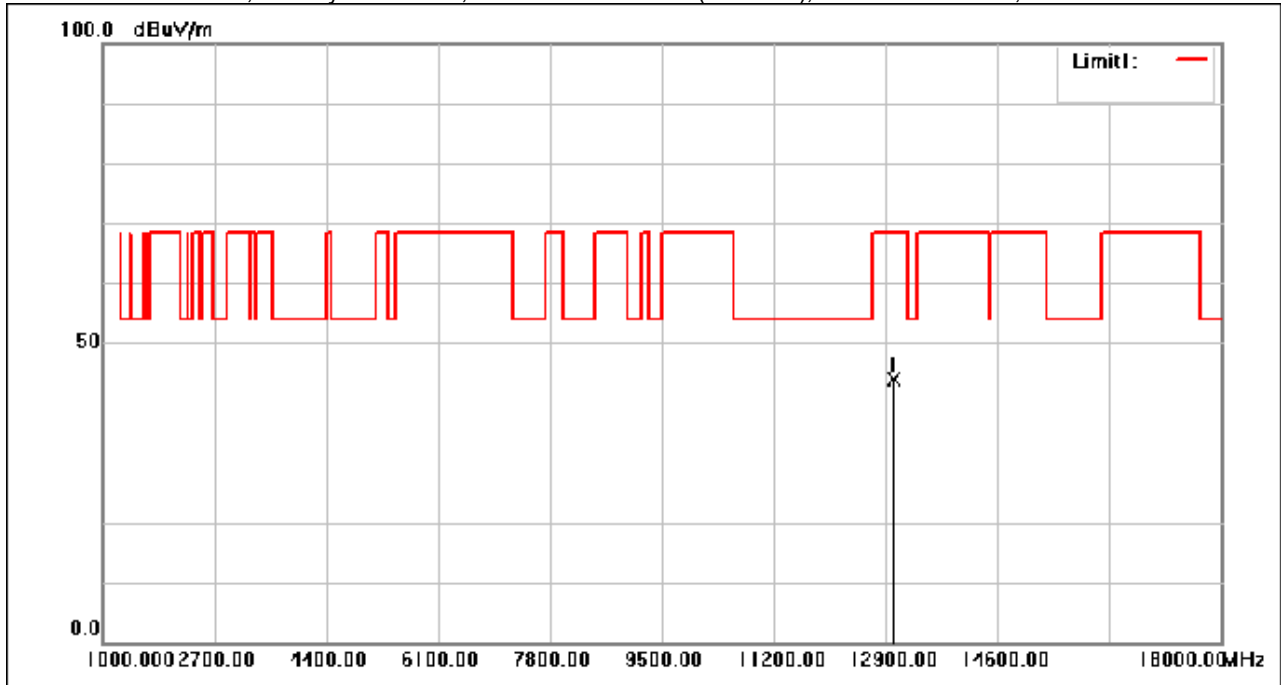
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Test Mode: 11; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13017.200	40.10	3.71	43.81	68.30	-24.49	peak

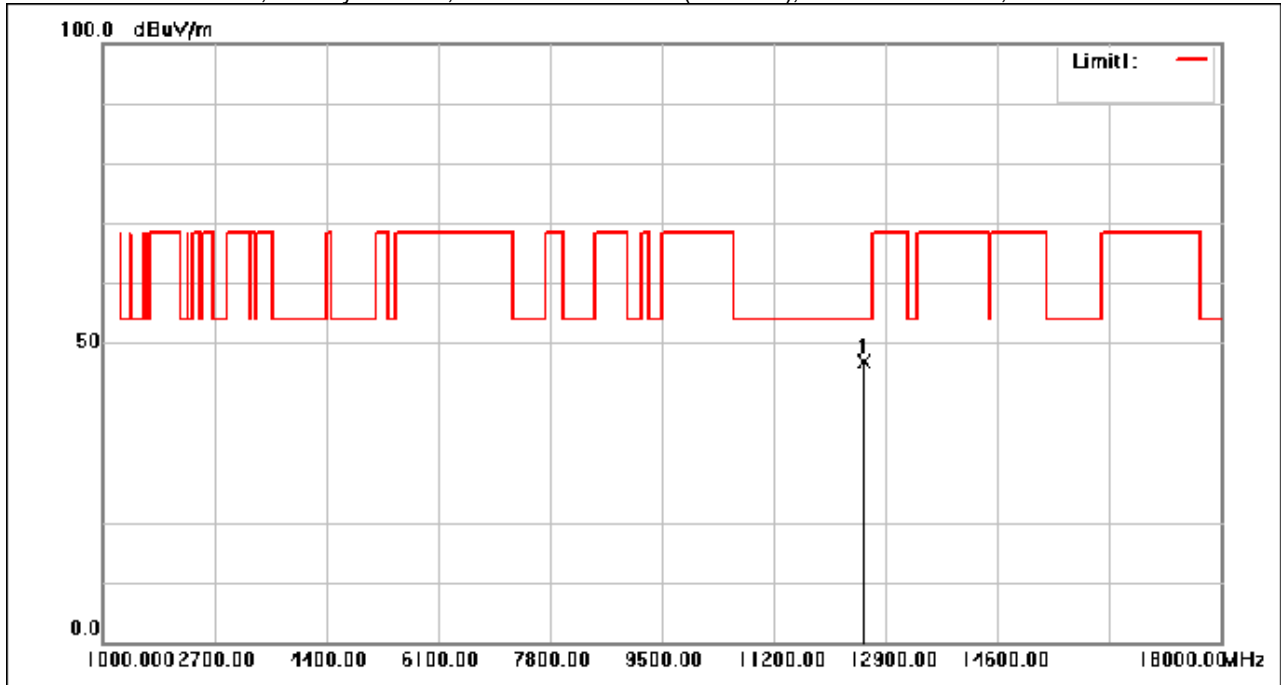
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Test Mode: 11; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12569.490	44.62	2.29	46.91	54.00	-7.09	peak

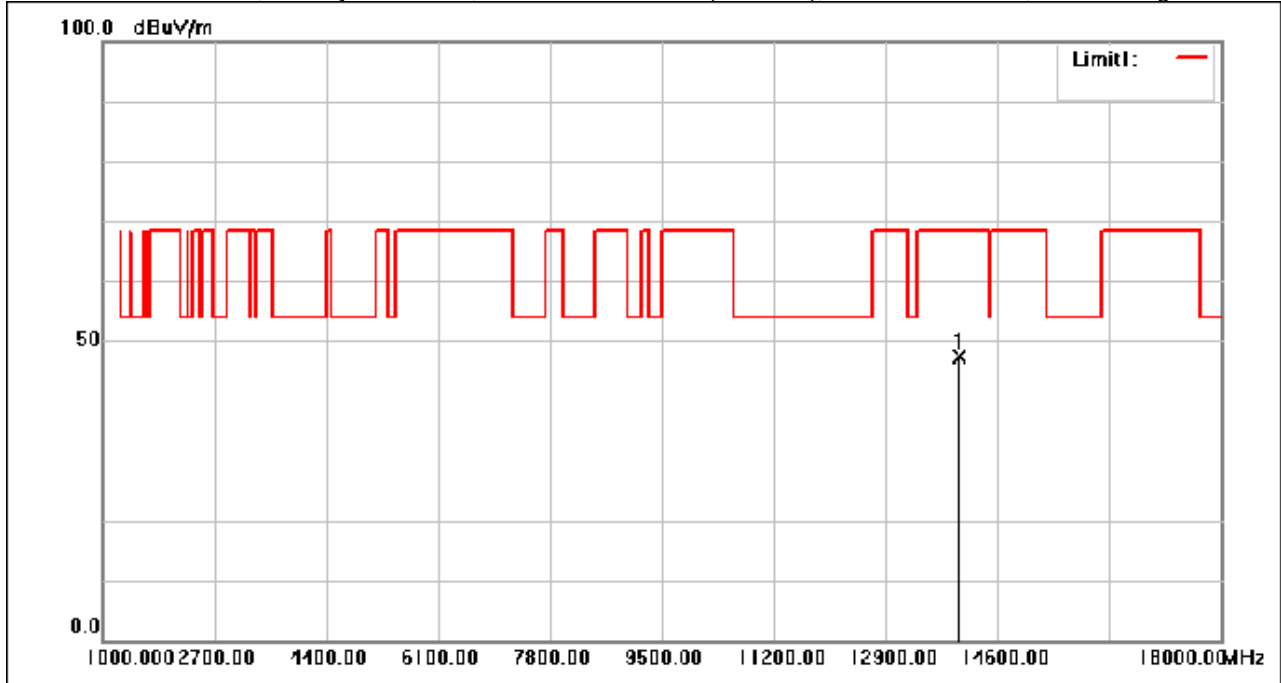
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Test Mode: 11; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	14017.760	43.44	3.94	47.38	68.30	-20.92	peak

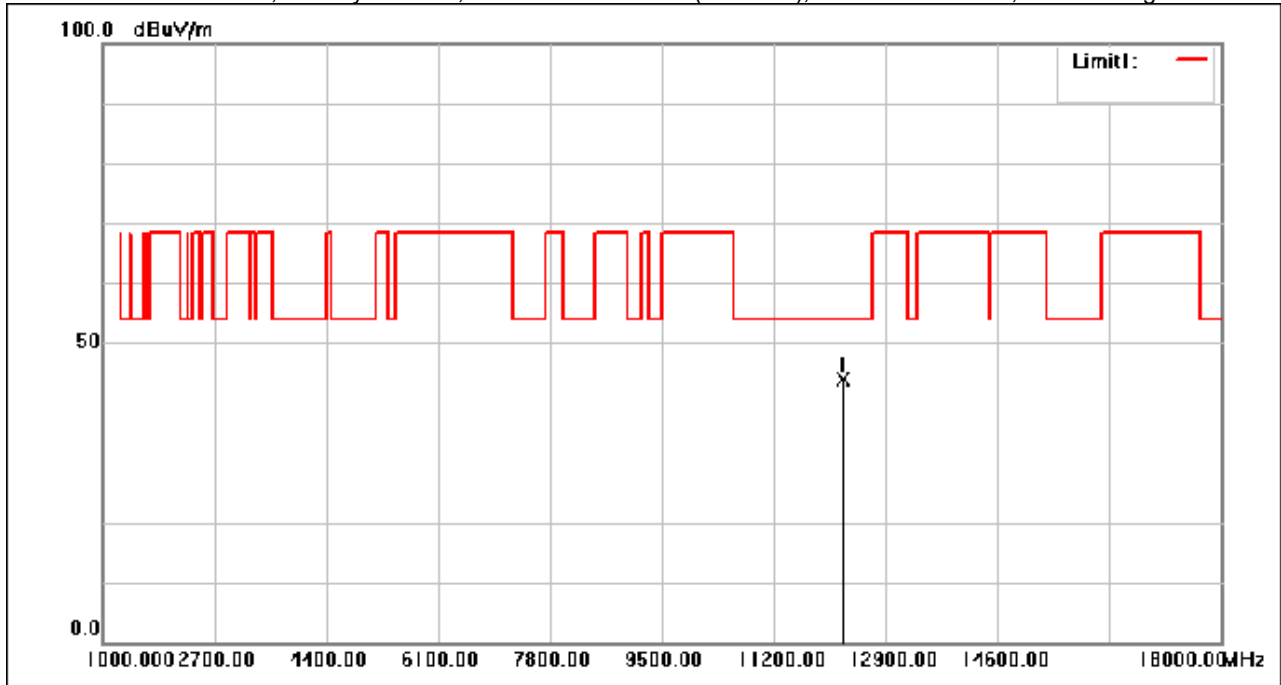
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Test Mode: 11; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12257.160	41.64	2.33	43.97	54.00	-10.03	peak

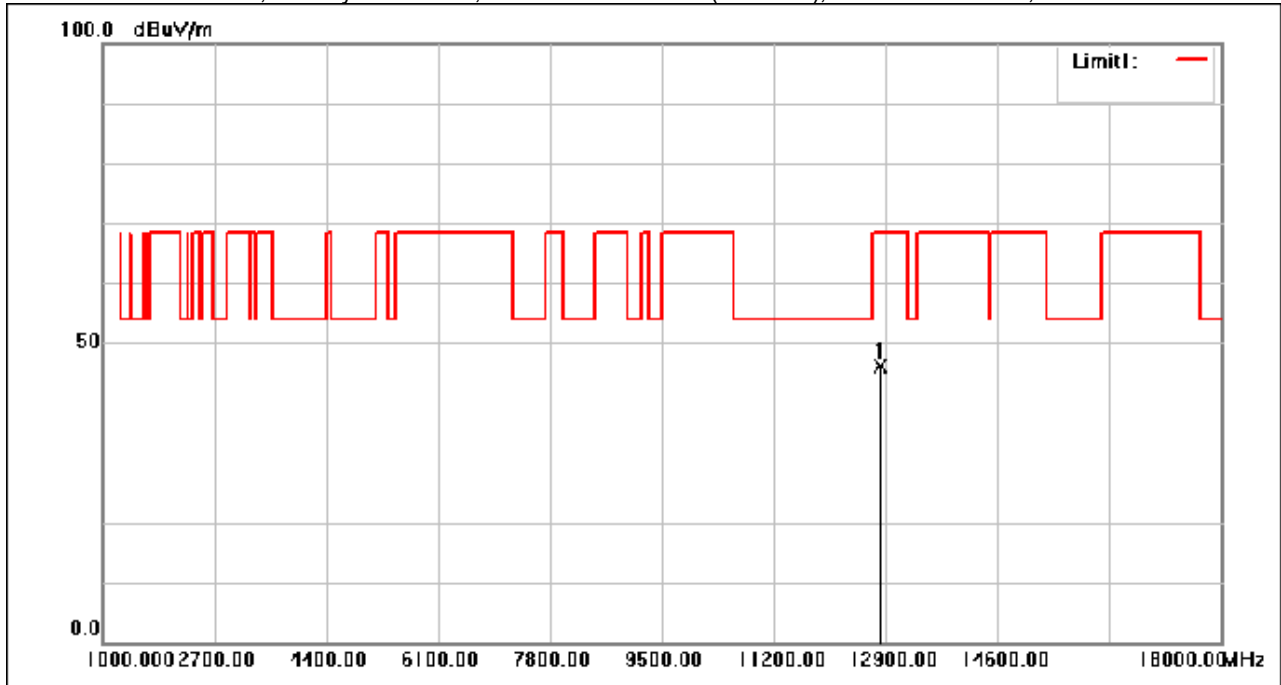
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Test Mode: 11; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12809.660	43.02	3.11	46.13	68.30	-22.17	peak

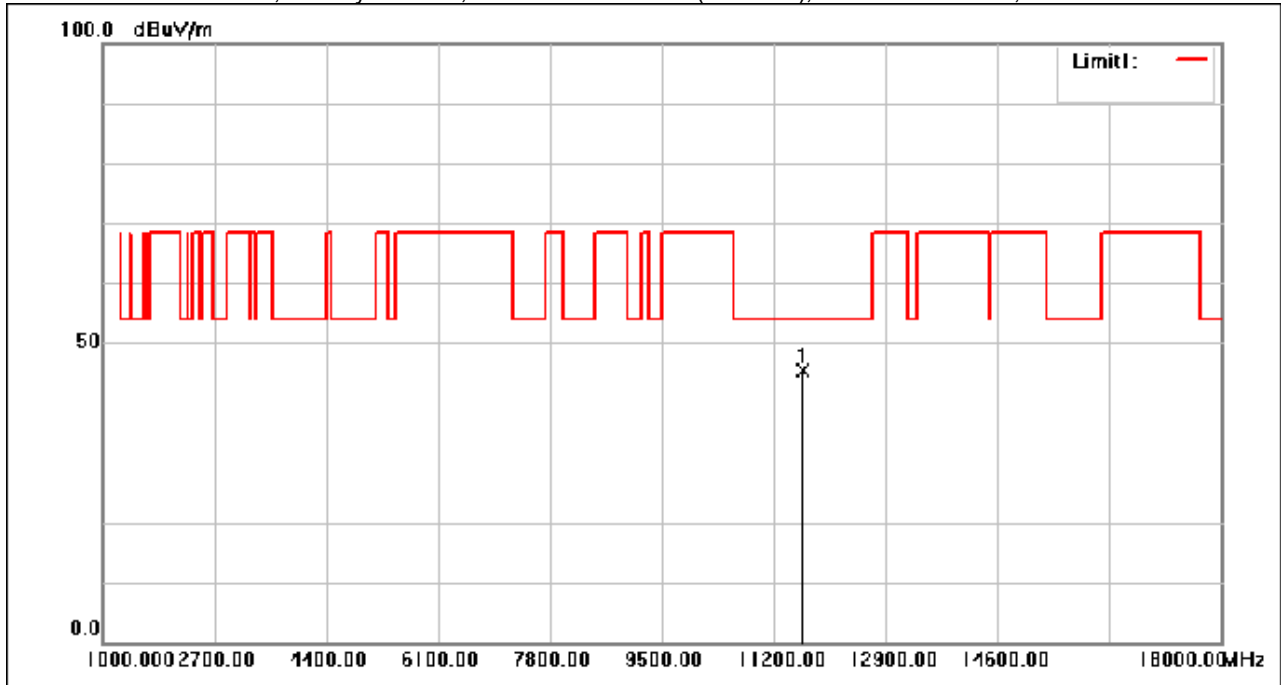
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 11; 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	11650.660	43.93	1.45	45.38	54.00	-8.62	peak

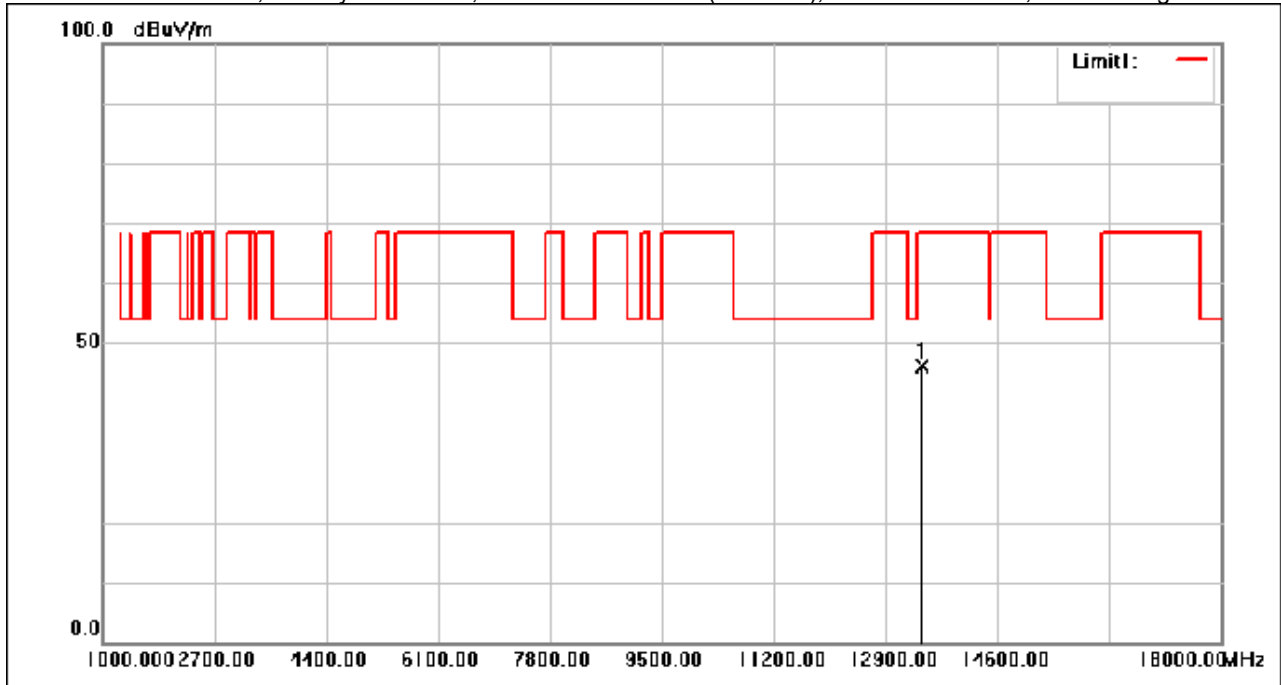
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Test Mode: 11; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13462.460	43.65	2.60	46.25	68.30	-22.05	peak

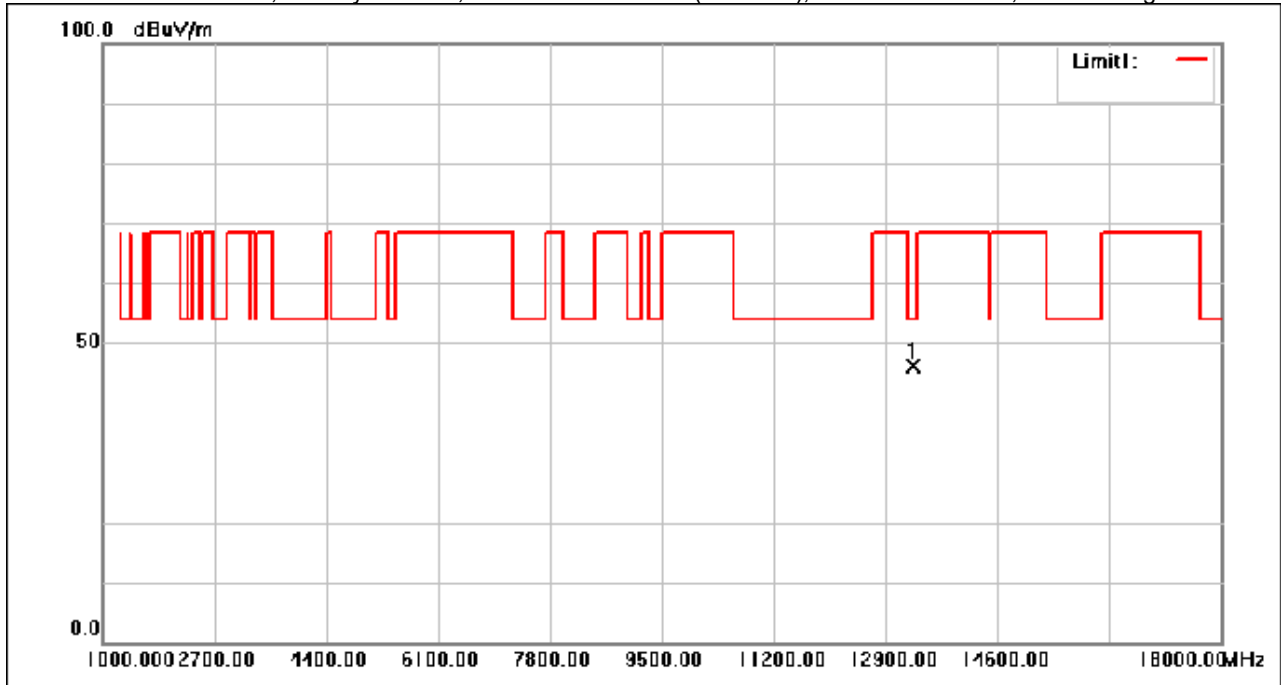
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Test Mode: 11; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13313.280	43.19	2.98	46.17	54.00	-7.83	peak

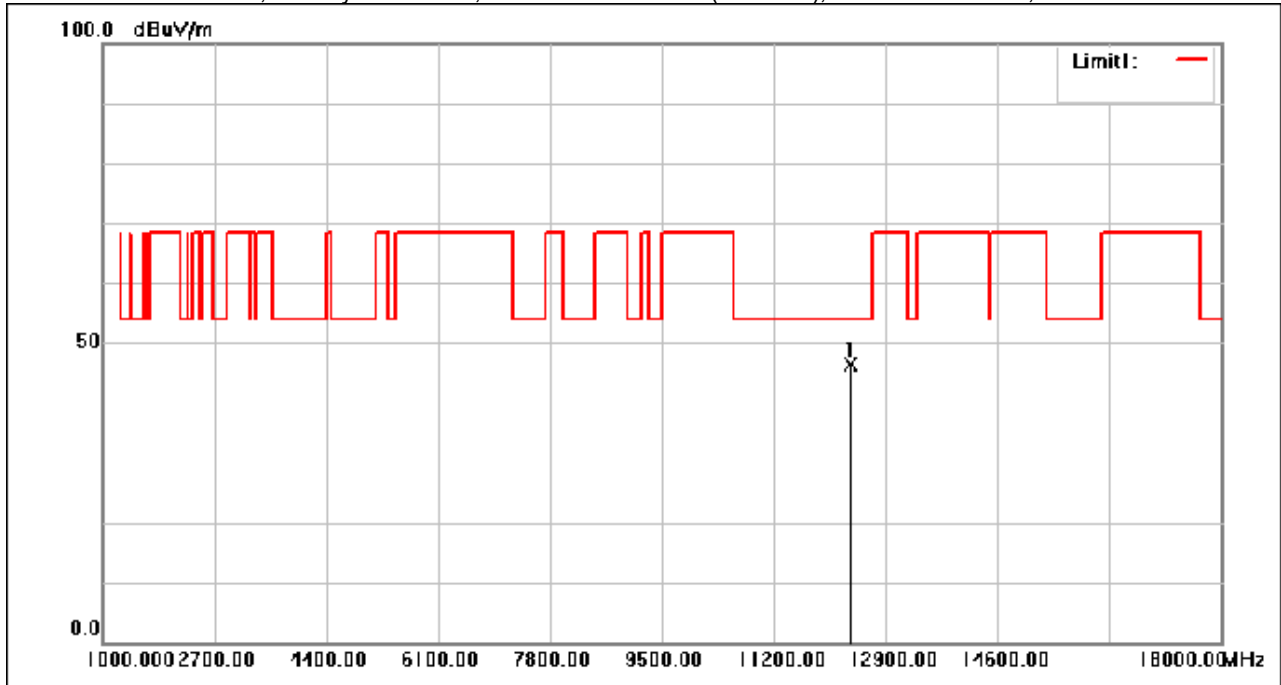
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Test Mode: 11; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12373.470	44.12	2.20	46.32	54.00	-7.68	peak

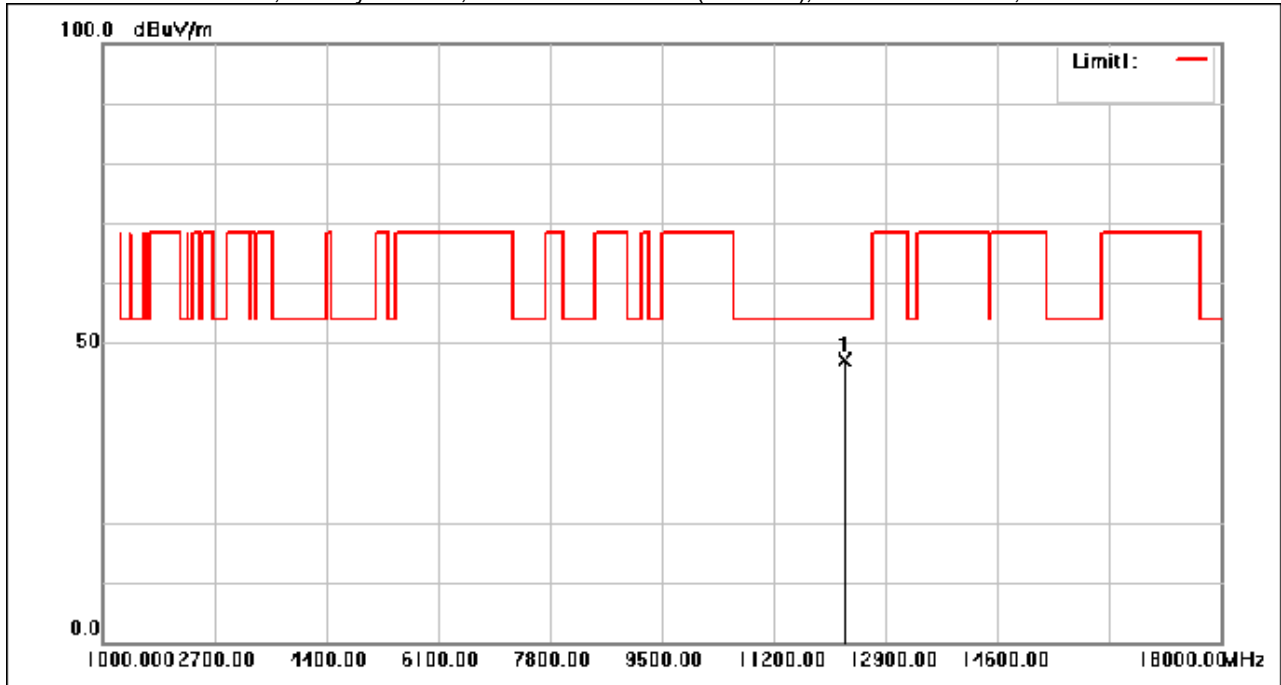
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Test Mode: 11; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12281.450	44.95	2.30	47.25	54.00	-6.75	peak

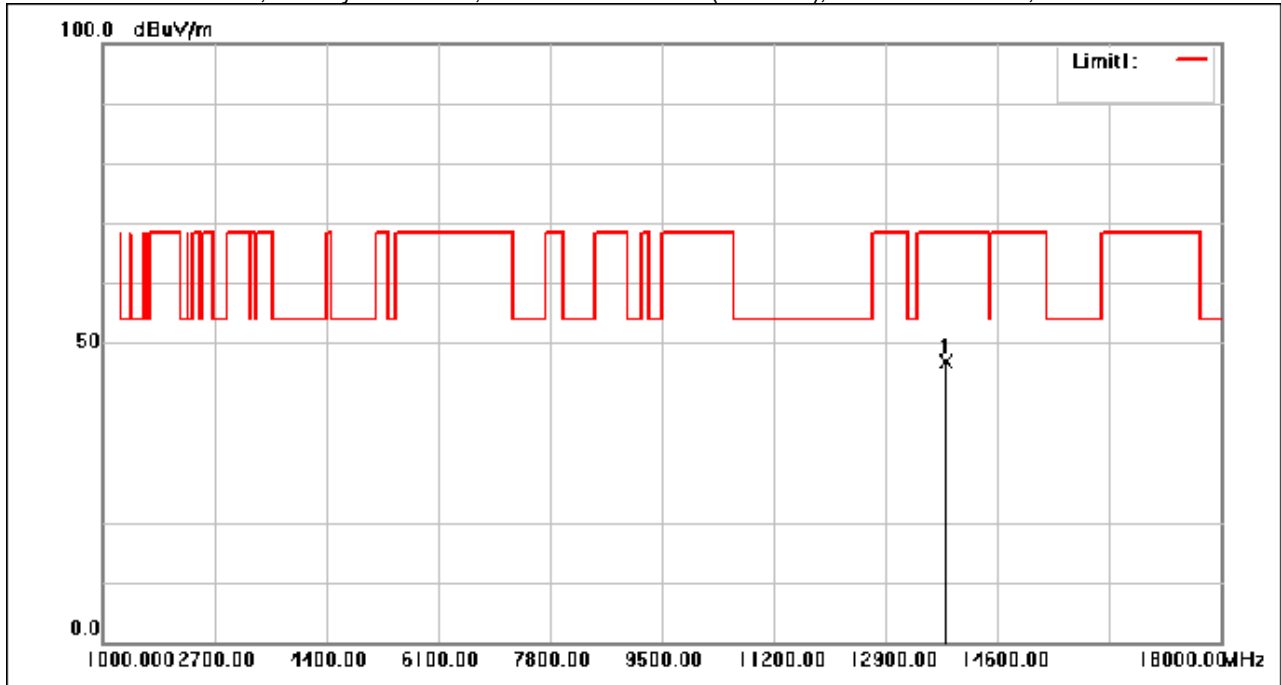
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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13811.540	43.57	3.37	46.94	68.30	-21.36	peak

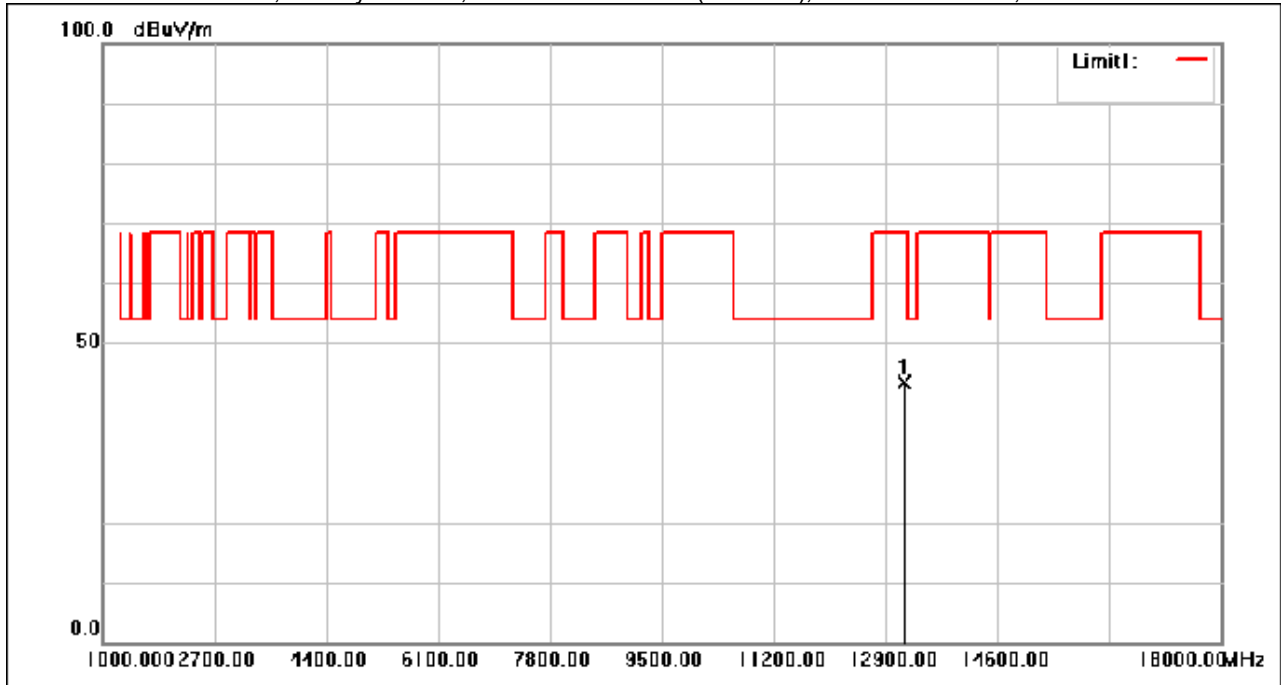
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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13181.160	40.08	3.31	43.39	68.30	-24.91	peak

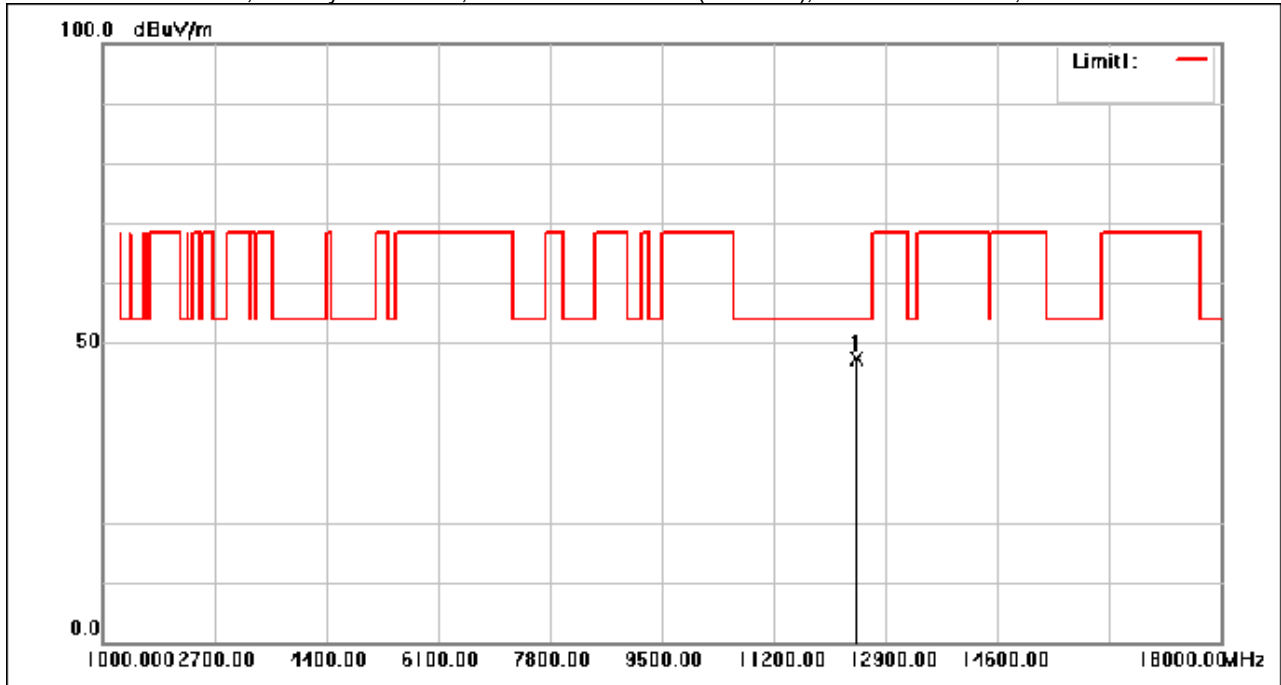
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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12464.740	45.27	2.09	47.36	54.00	-6.64	peak

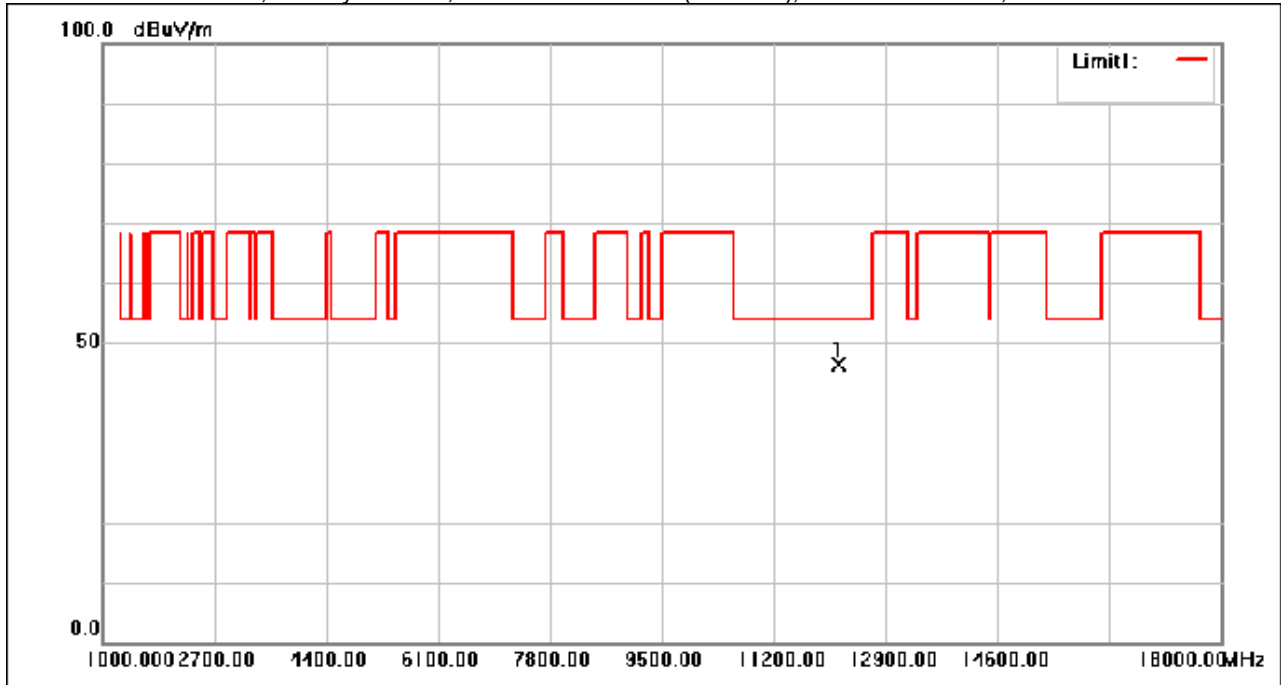
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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12176.060	44.05	2.42	46.47	54.00	-7.53	peak

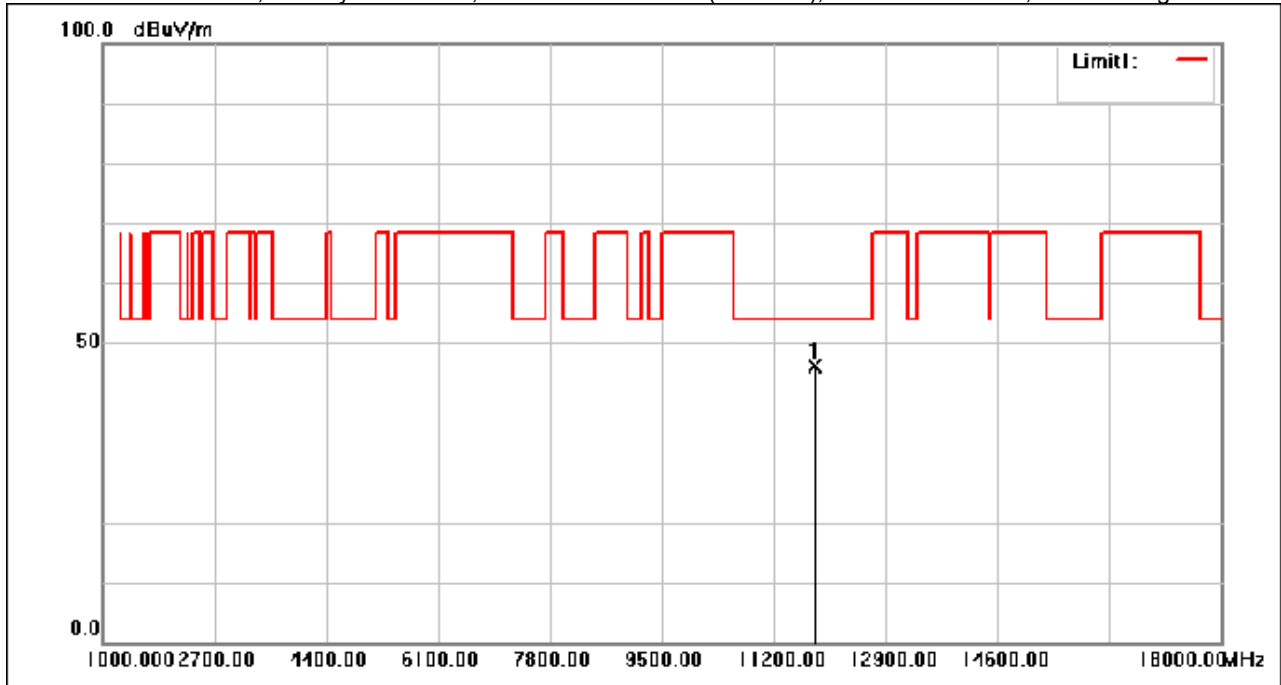
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Test Mode: 12; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 20MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11821.310	44.09	2.02	46.11	54.00	-7.89	peak

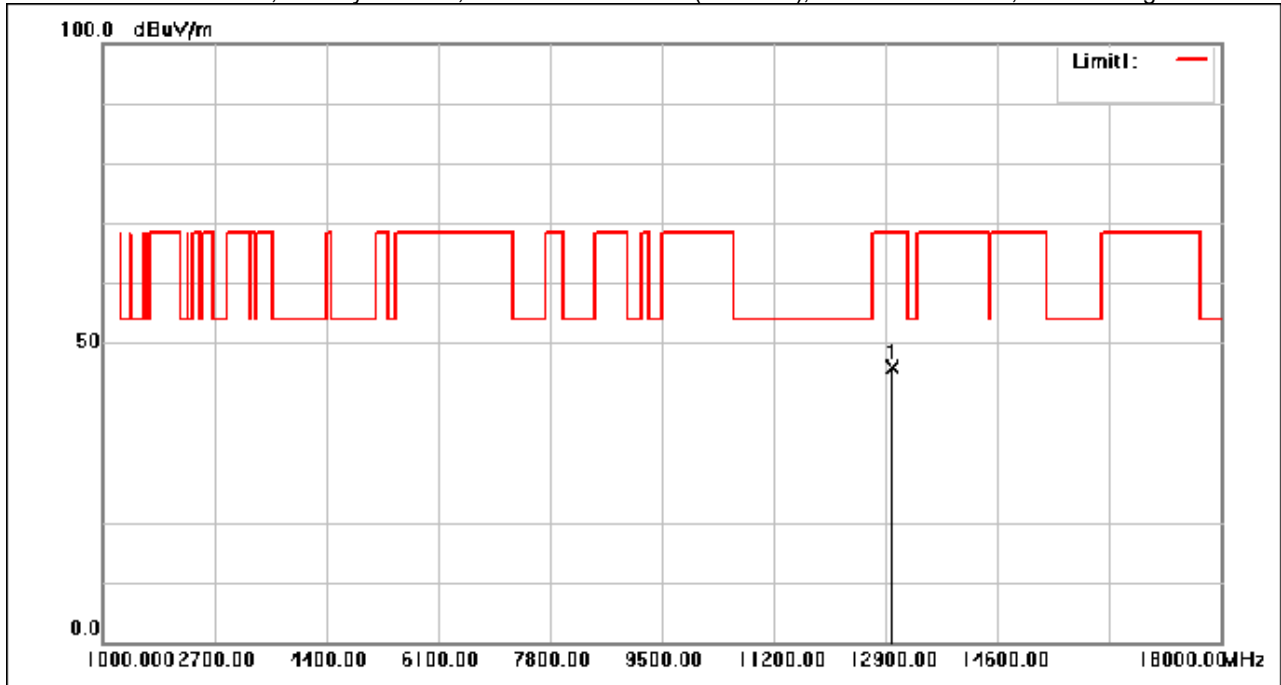
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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12992.730	42.15	3.74	45.89	68.30	-22.41	peak

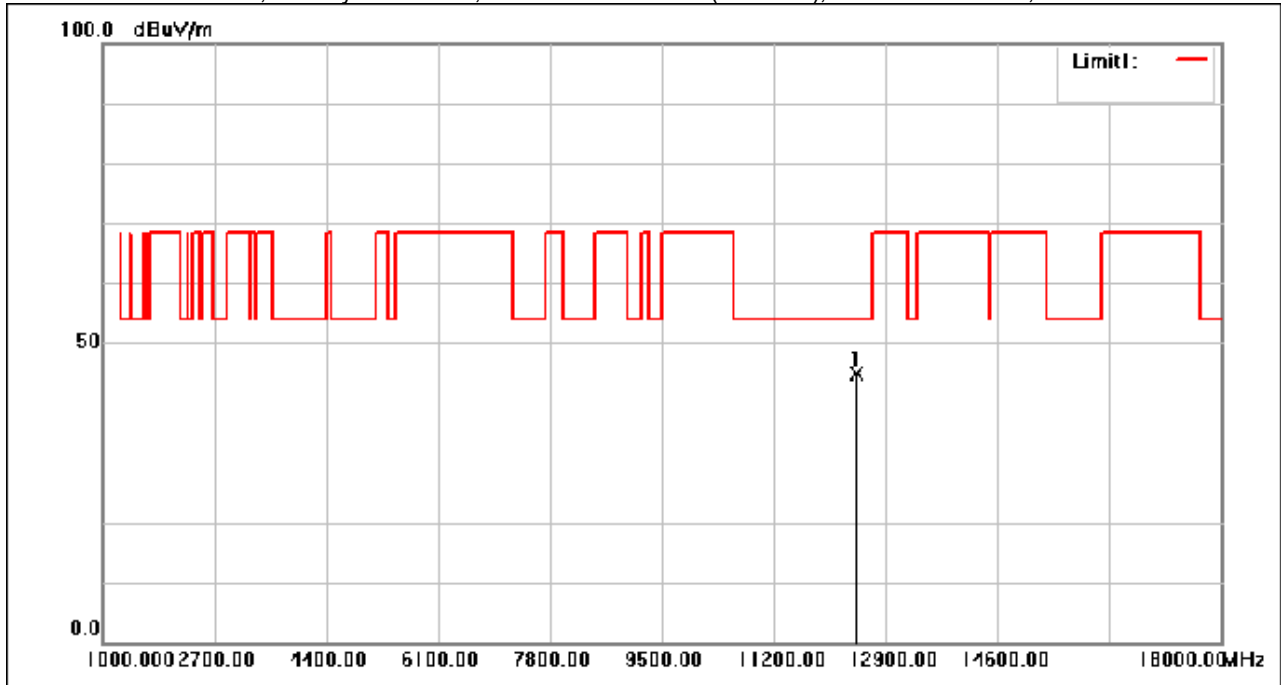
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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12457.360	42.87	2.11	44.98	54.00	-9.02	peak

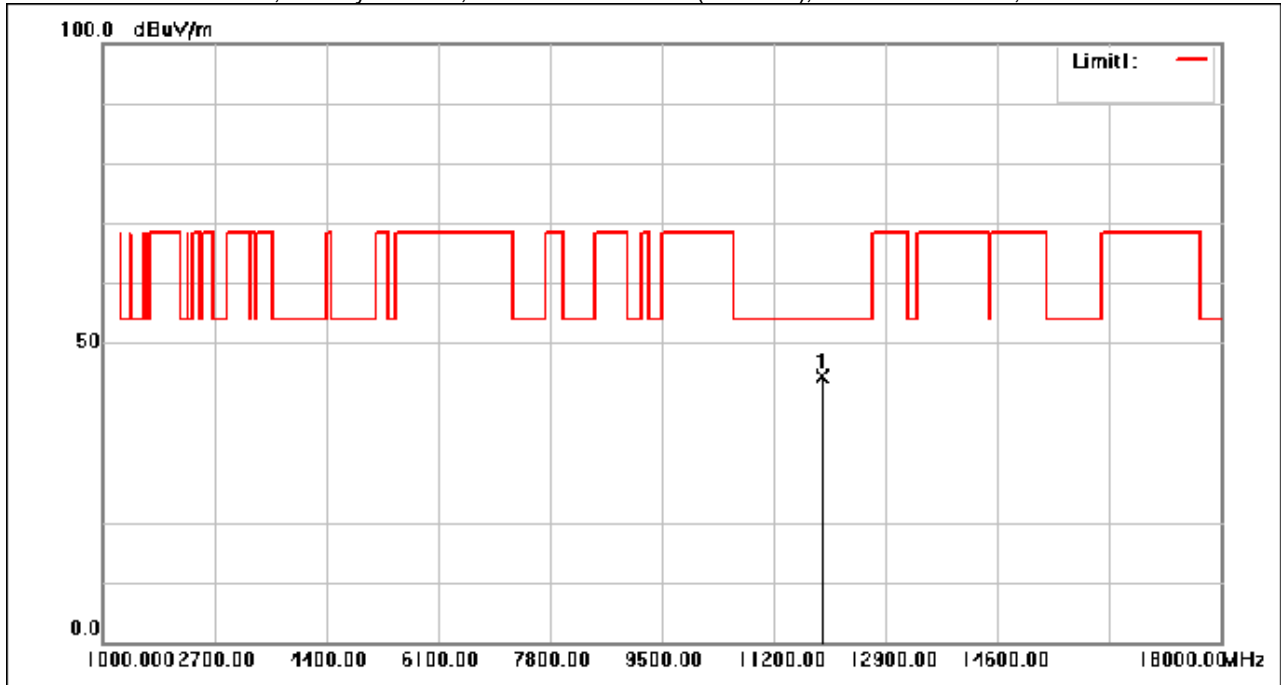
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Test Mode: 12; Polarity: Vertical; Modulation: 802.11ax(Full RU0); Bandwidth: 40MHz; Channel: Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11936.310	42.03	2.40	44.43	54.00	-9.57	peak

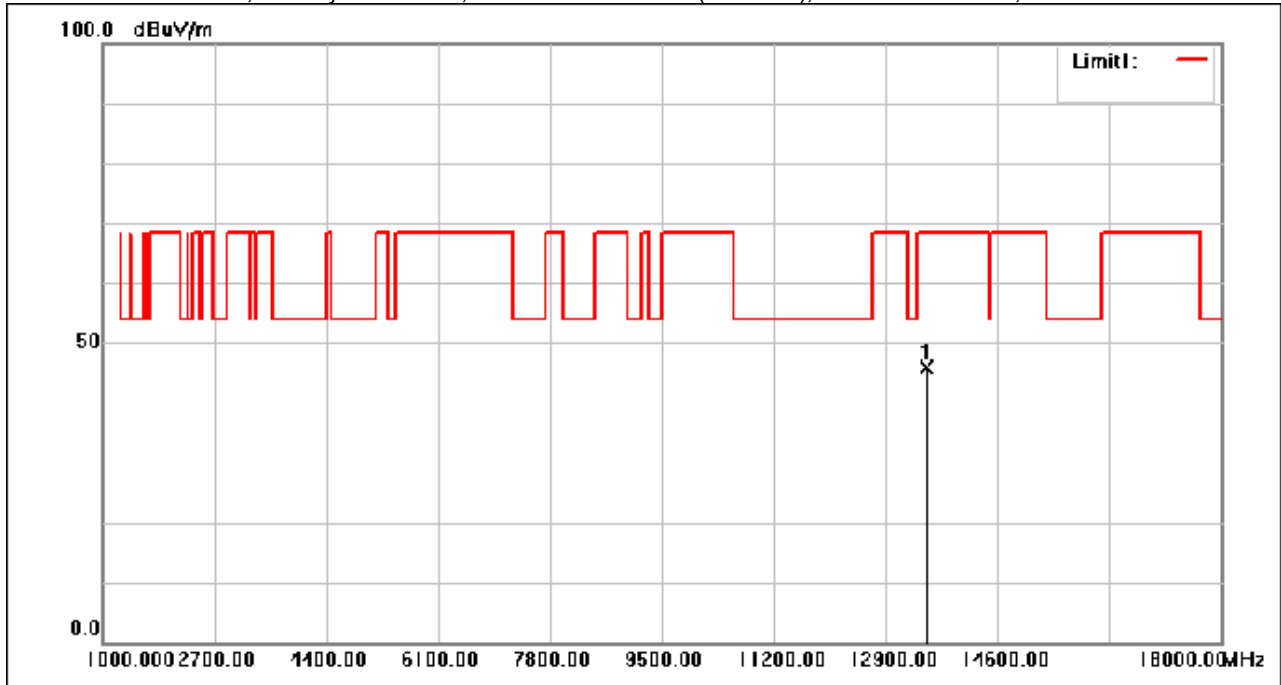
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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13525.670	43.34	2.58	45.92	68.30	-22.38	peak

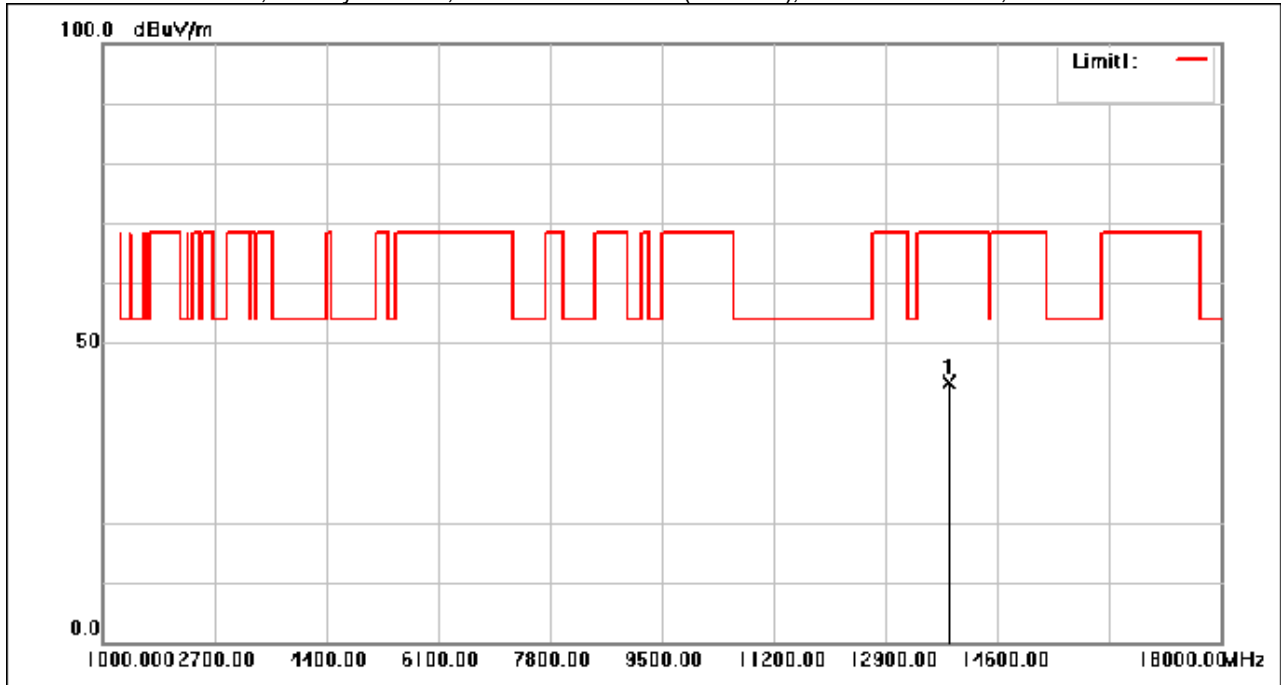
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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13855.690	39.85	3.49	43.34	68.30	-24.96	peak

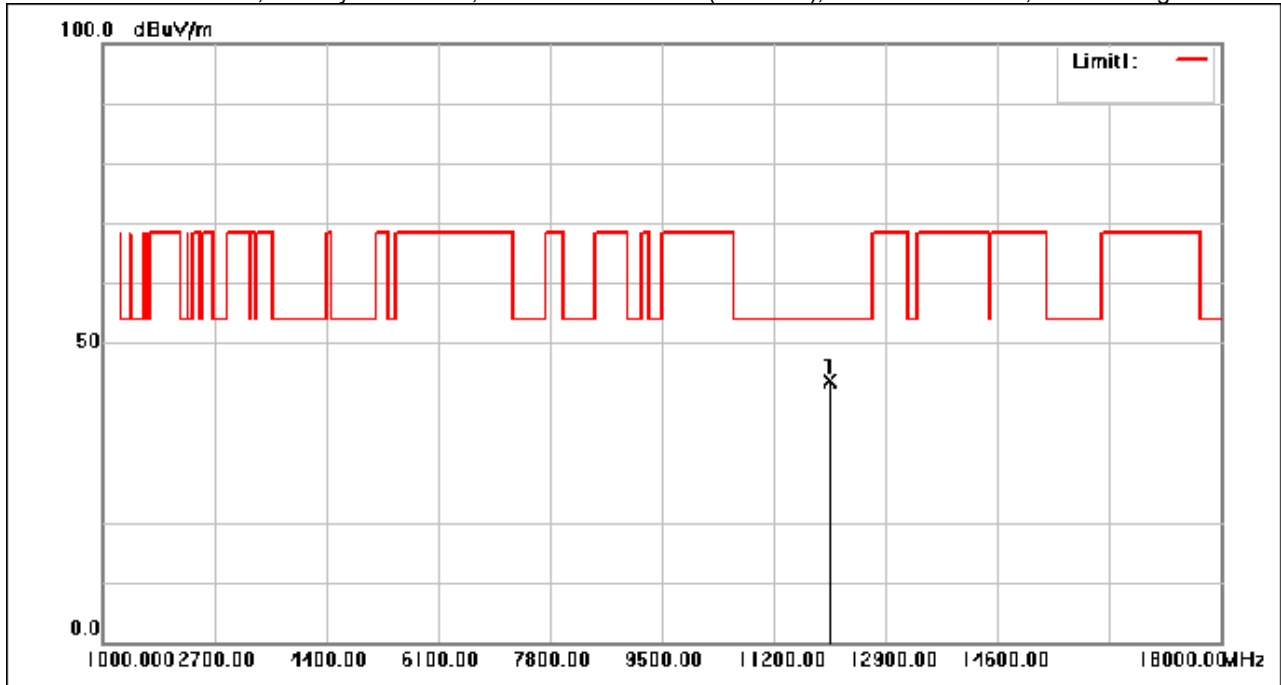
Compliance Certification Services (Kunshan) Inc.

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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	12045.960	41.00	2.56	43.56	54.00	-10.44	peak

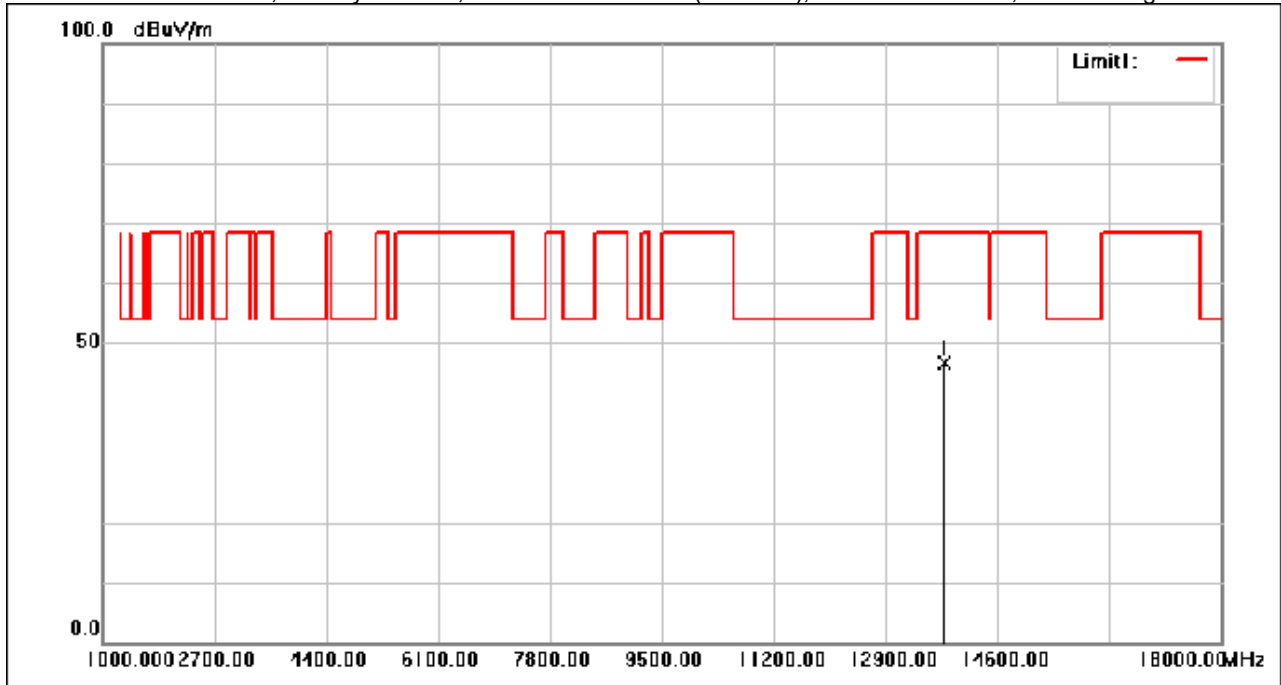
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Test Mode: 12; Polarity: Vertical; Modulation: 802.11ax(Full RU0); Bandwidth: 40MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13791.430	43.26	3.31	46.57	68.30	-21.73	peak

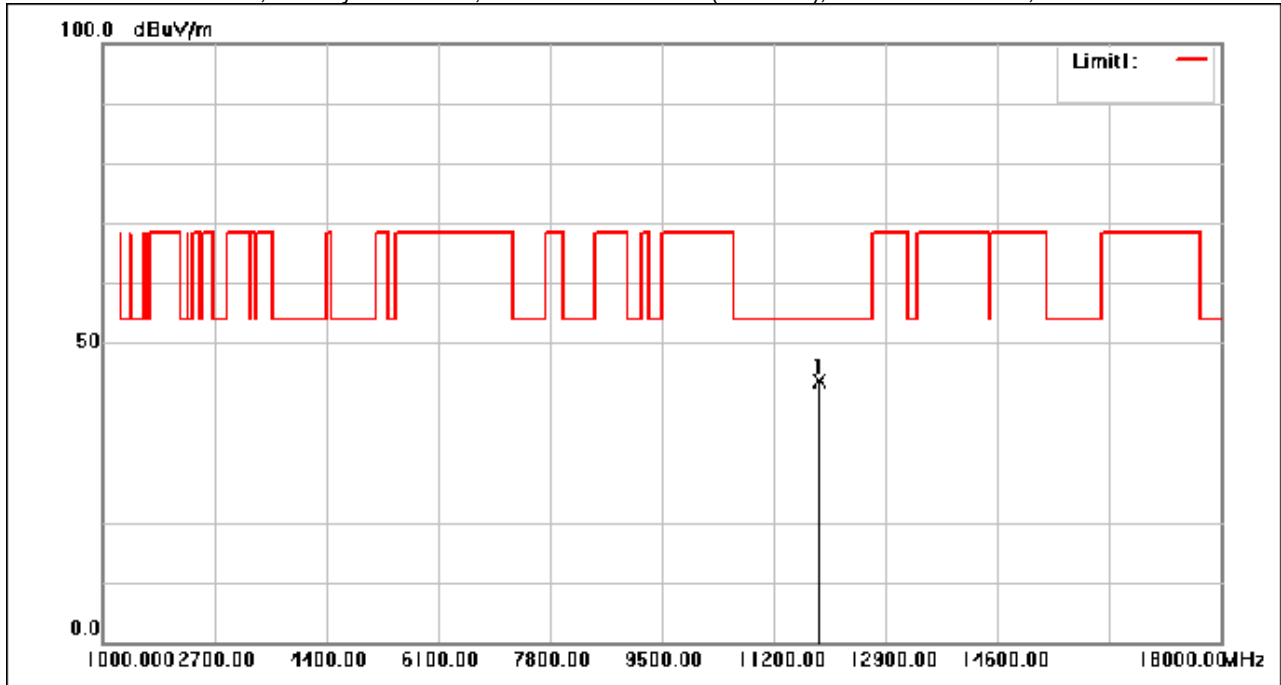
Compliance Certification Services (Kunshan) Inc.

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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	11890.830	41.28	2.25	43.53	54.00	-10.47	peak

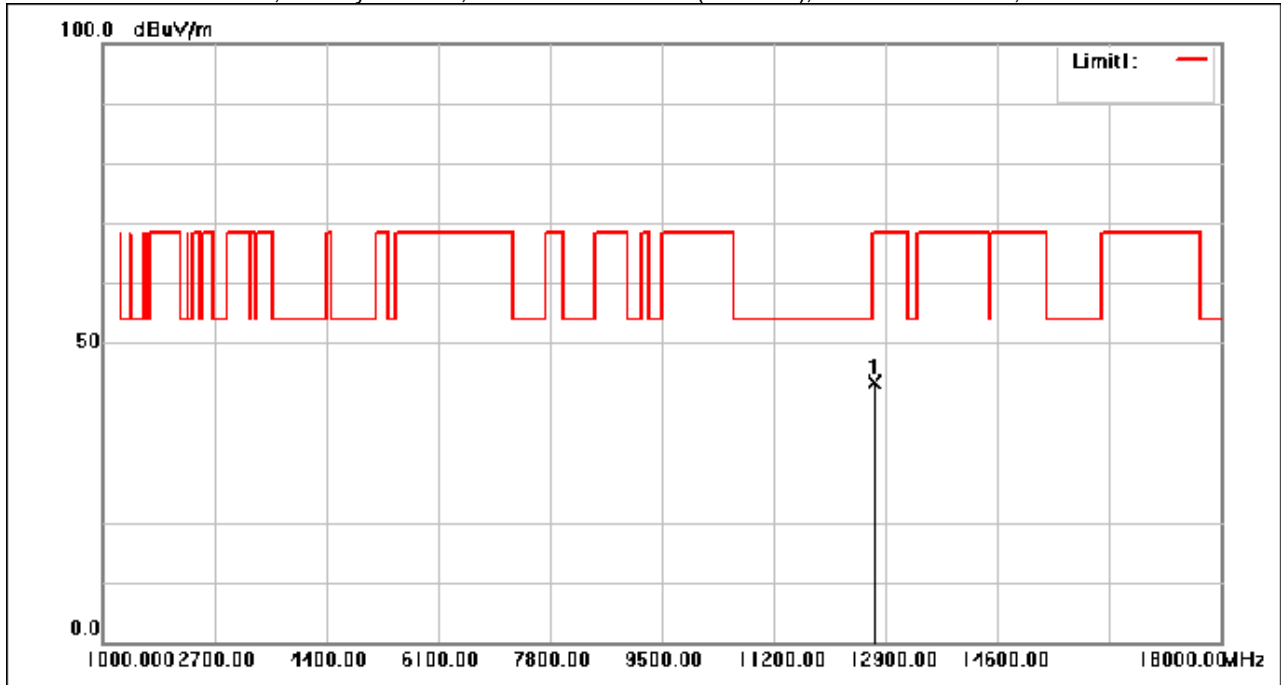
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Test Mode: 12; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12720.430	40.56	2.81	43.37	68.30	-24.93	peak

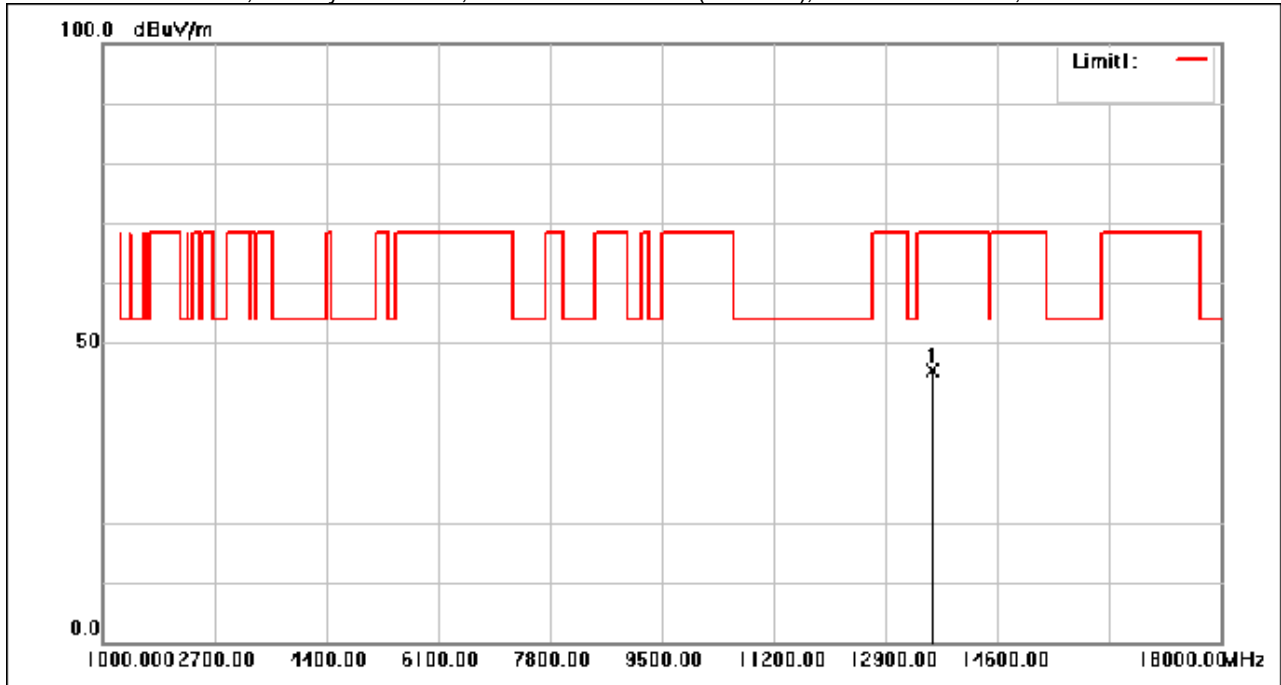
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Test Mode: 12; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13611.280	42.67	2.82	45.49	68.30	-22.81	peak

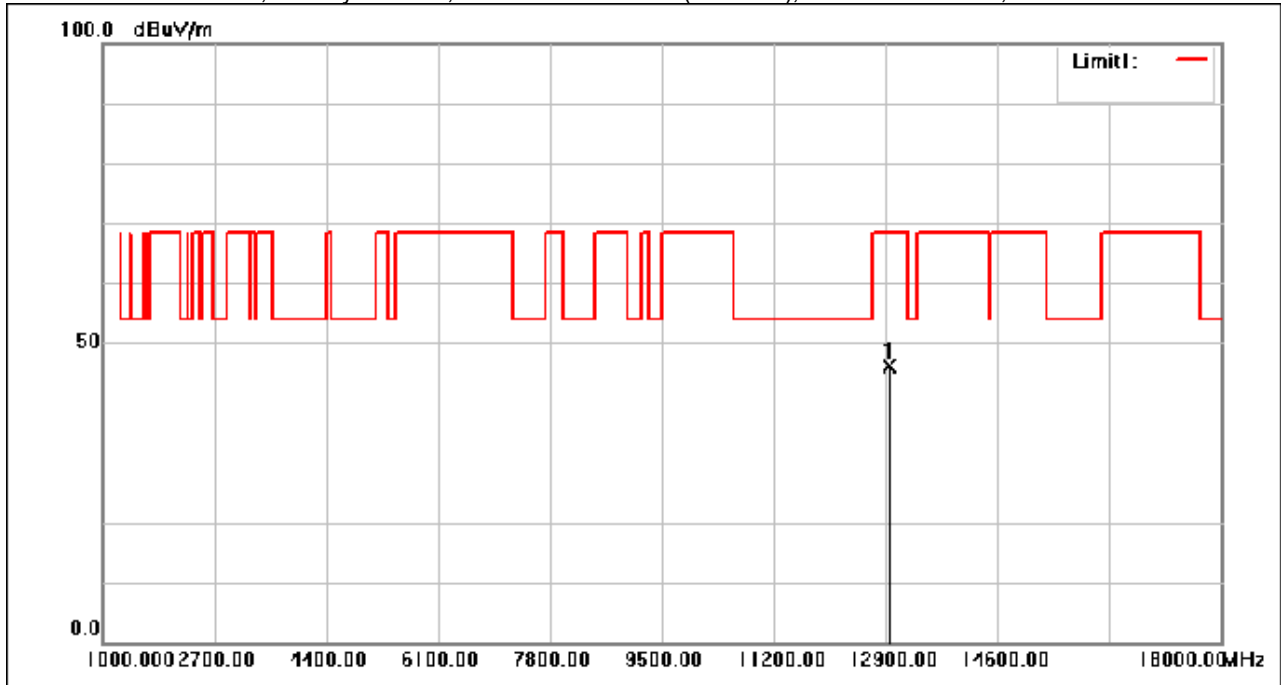
Compliance Certification Services (Kunshan) Inc.

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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	12951.460	42.61	3.60	46.21	68.30	-22.09	peak

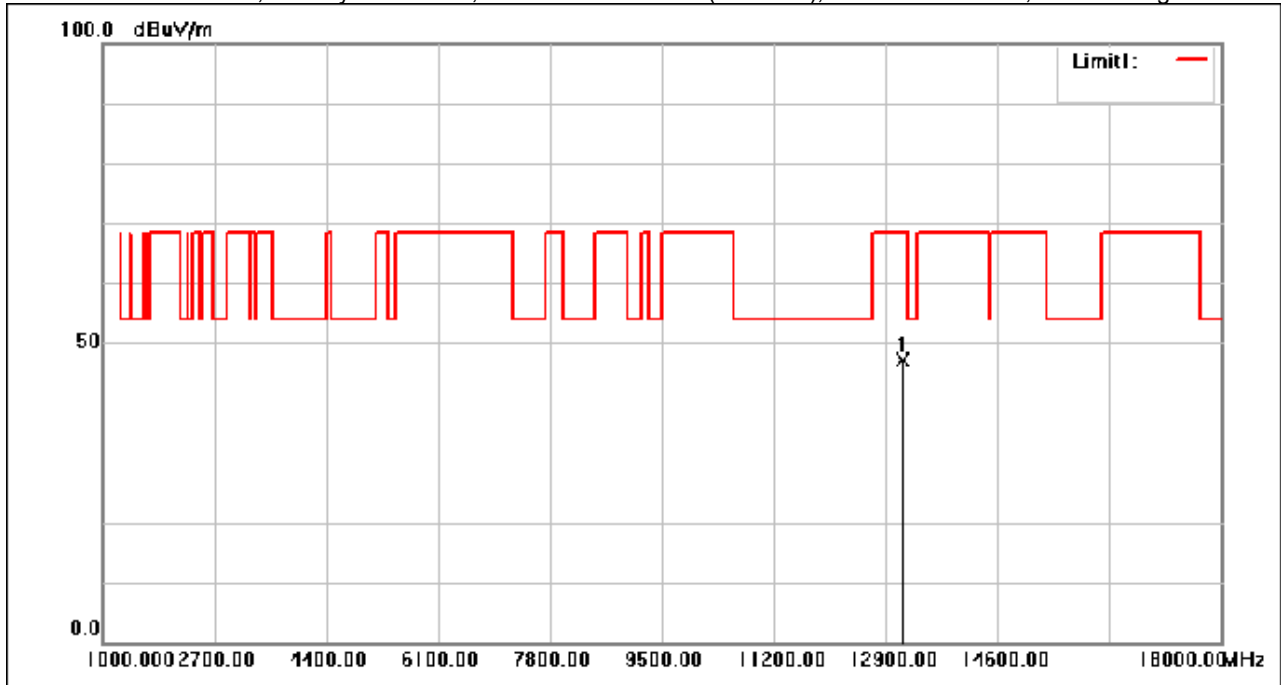
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Test Mode: 12; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 80MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13162.310	43.80	3.36	47.16	68.30	-21.14	peak

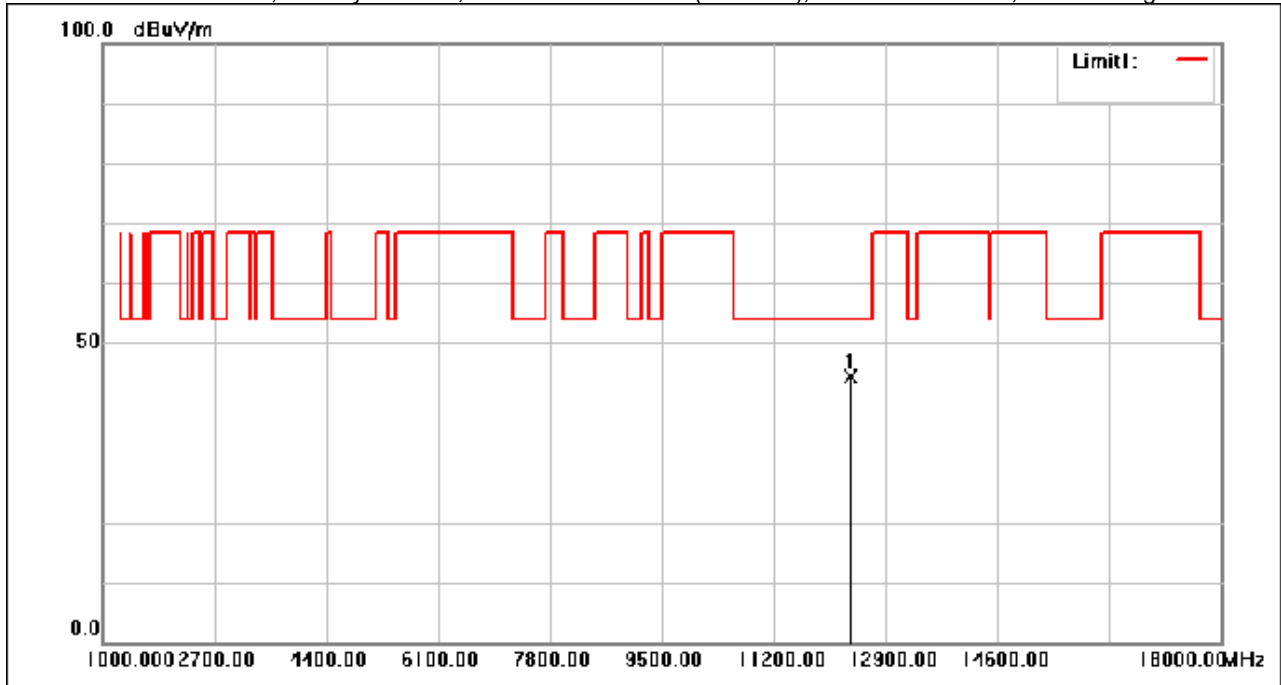
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Test Mode: 12; Polarity: Vertical; Modulation: 802.11ax(Full RU0); Bandwidth: 80MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12371.560	42.18	2.20	44.38	54.00	-9.62	peak

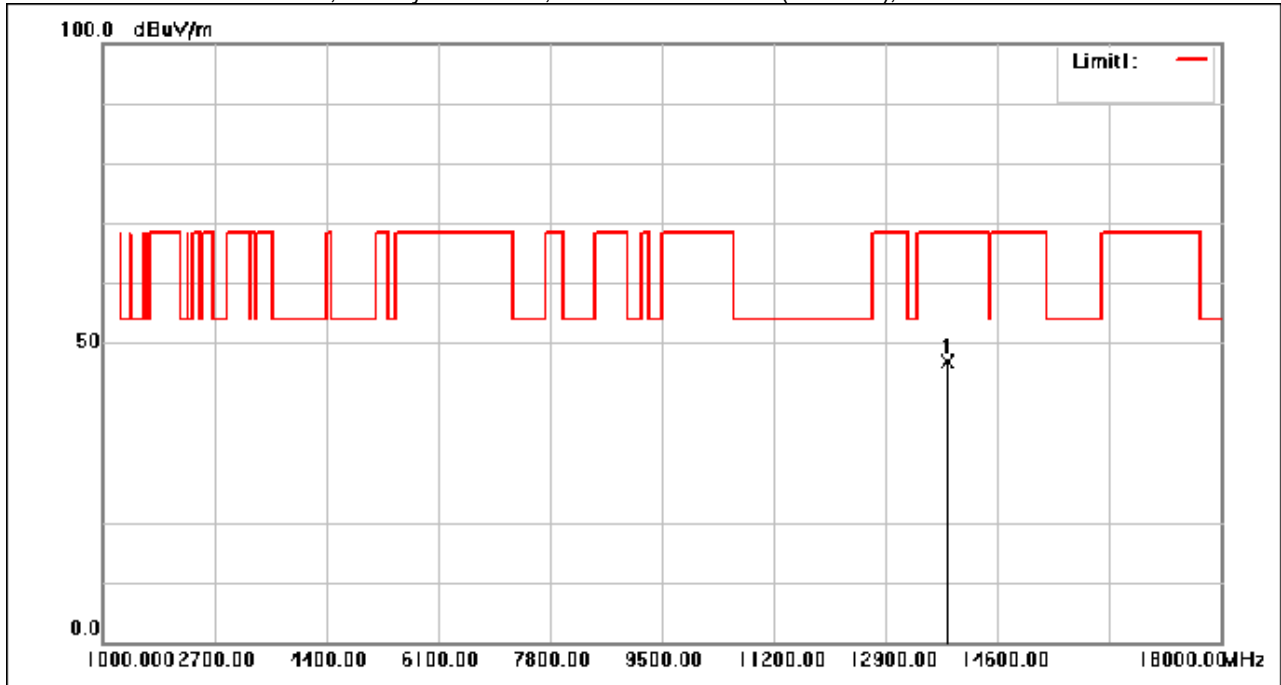
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Test Mode: 12; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 160MHz



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13835.320	43.54	3.44	46.98	68.30	-21.32	peak

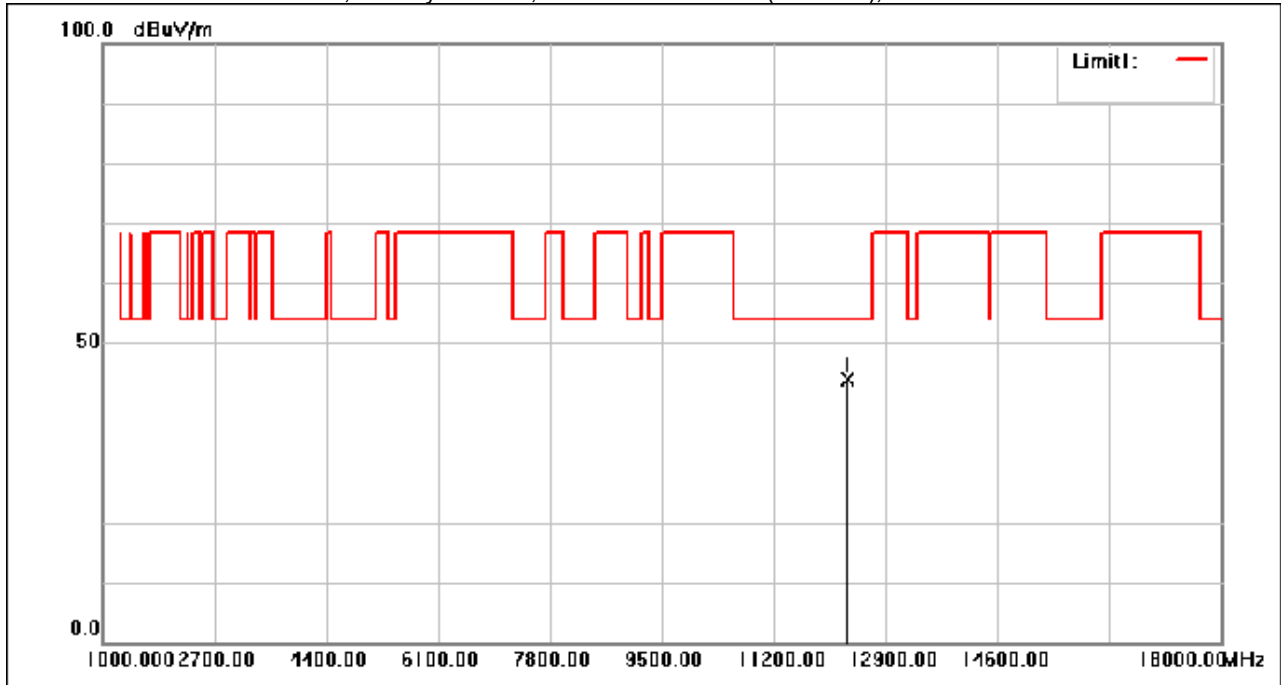
Compliance Certification Services (Kunshan) Inc.

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



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12321.990	41.71	2.25	43.96	54.00	-10.04	peak

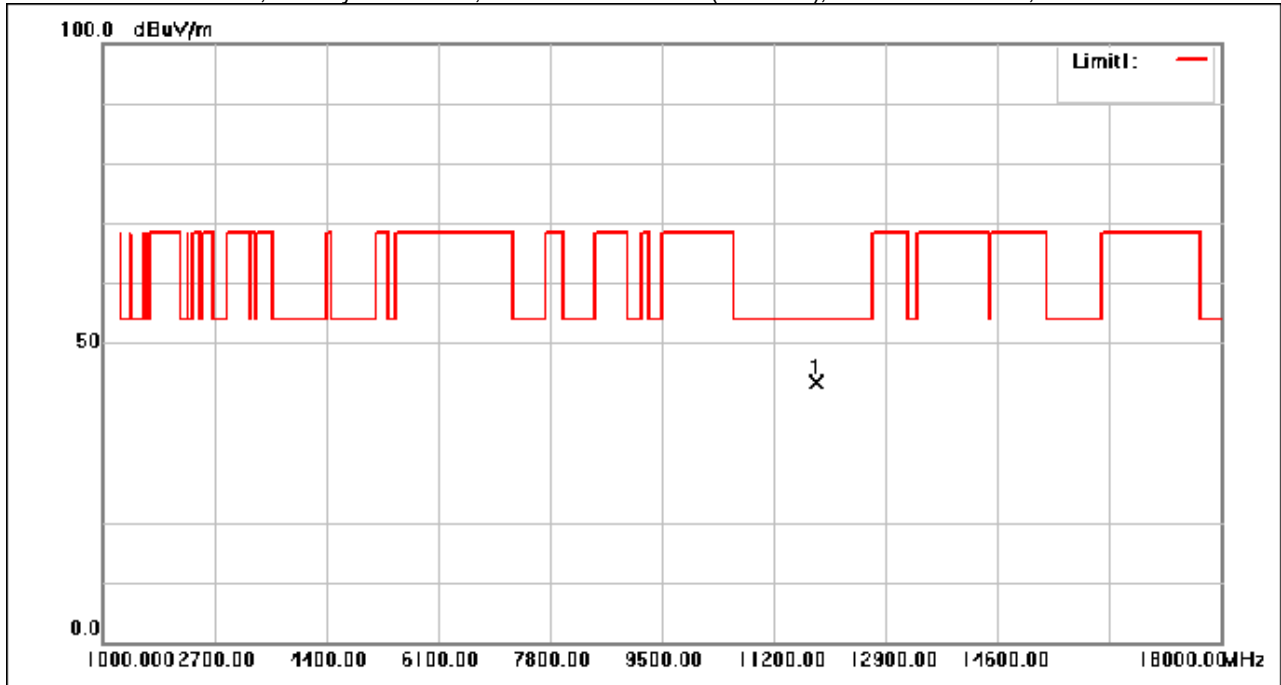
Compliance Certification Services (Kunshan) Inc.

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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	11853.360	41.14	2.13	43.27	54.00	-10.73	peak

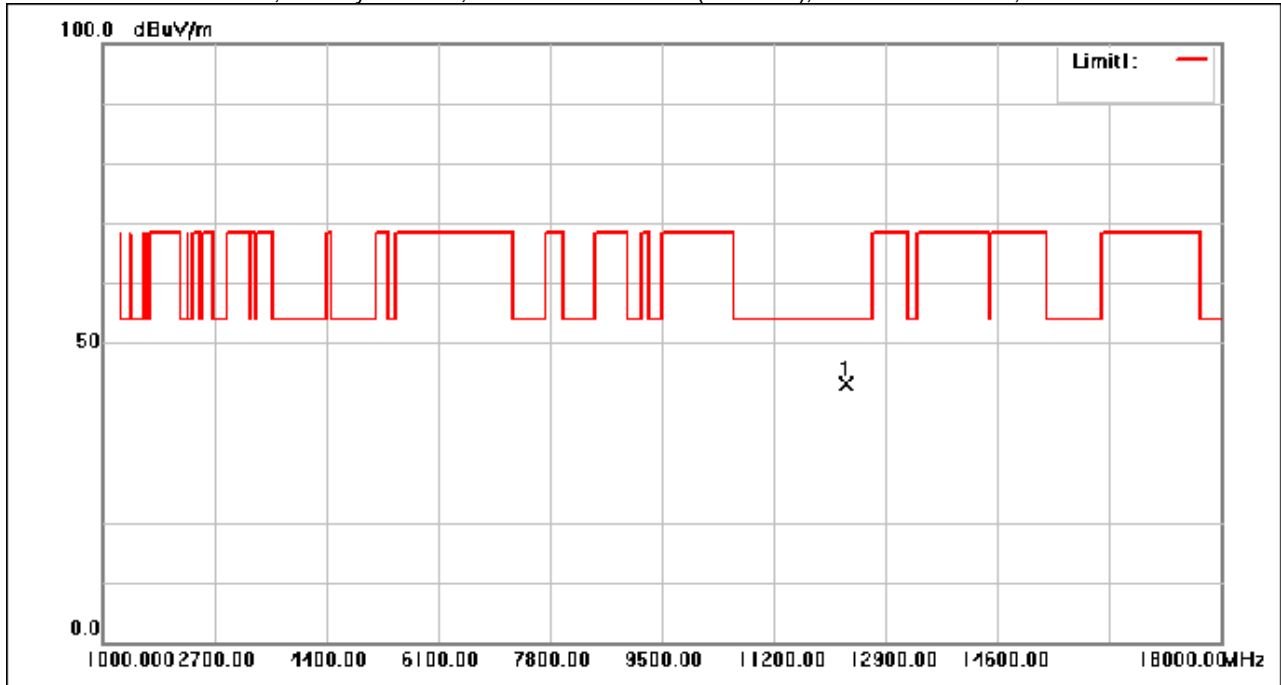
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Test Mode: 13; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12299.830	40.95	2.28	43.23	54.00	-10.77	peak

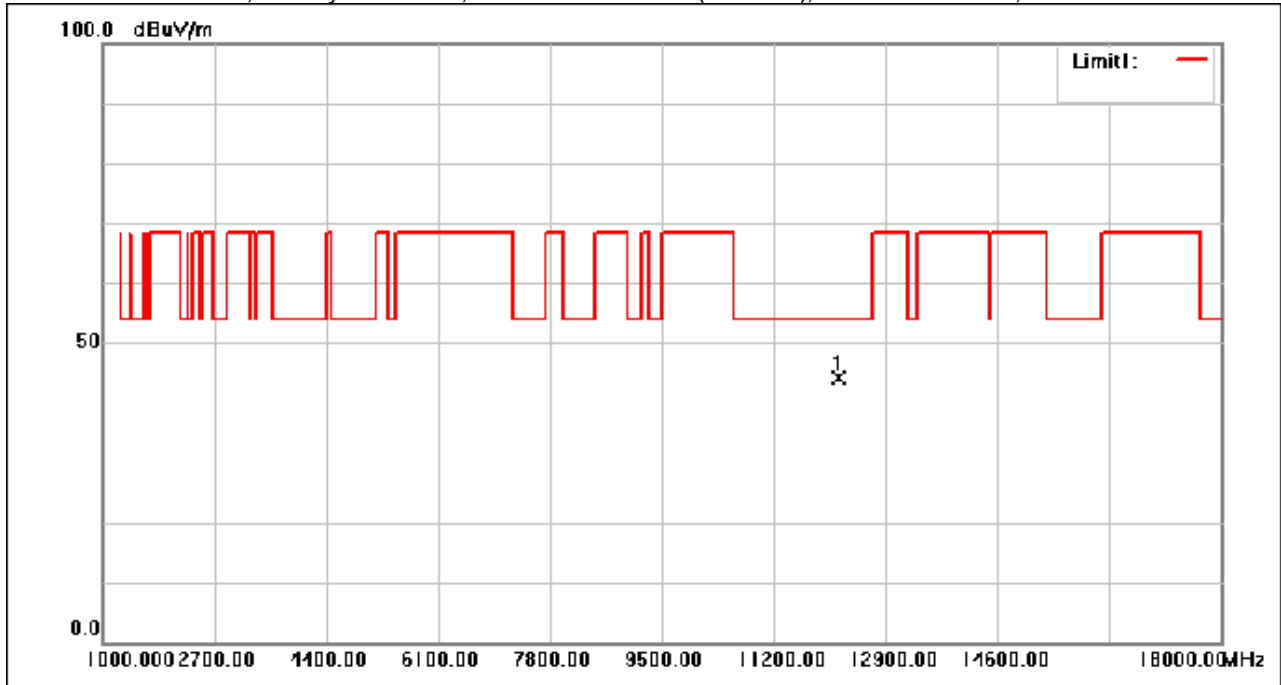
Compliance Certification Services (Kunshan) Inc.

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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	12196.940	41.71	2.40	44.11	54.00	-9.89	peak

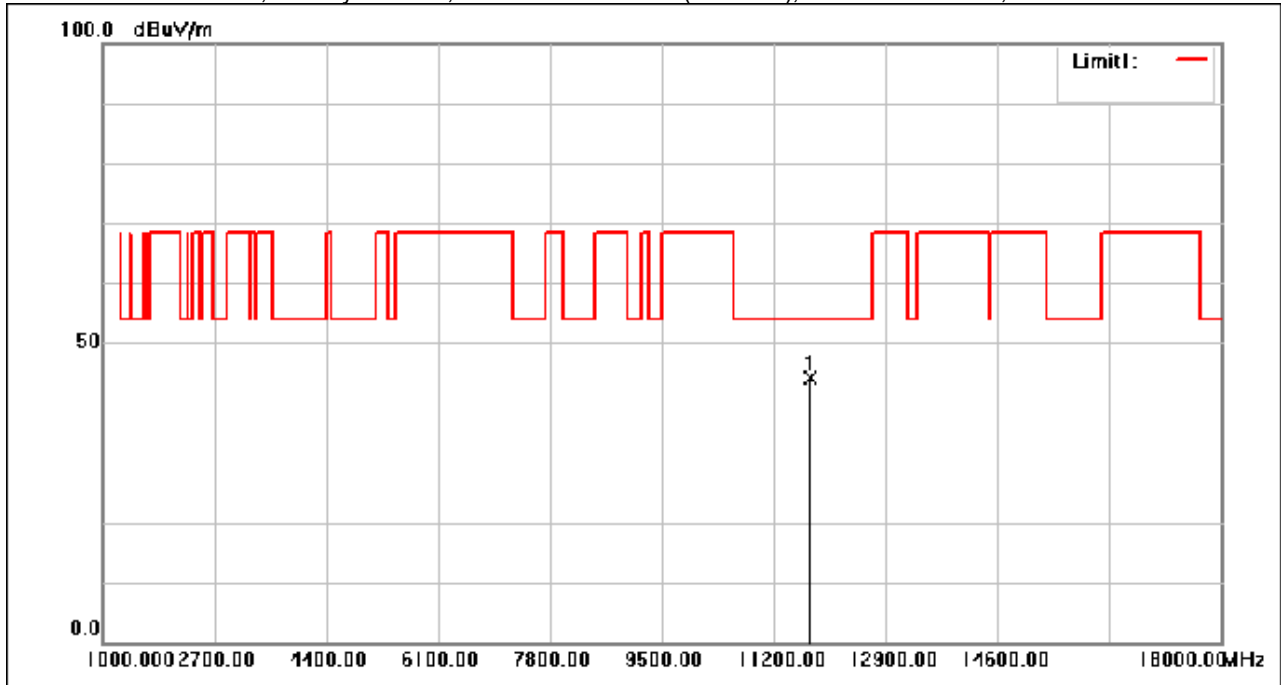
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Test Mode: 13; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:middle



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11756.890	42.35	1.80	44.15	54.00	-9.85	peak

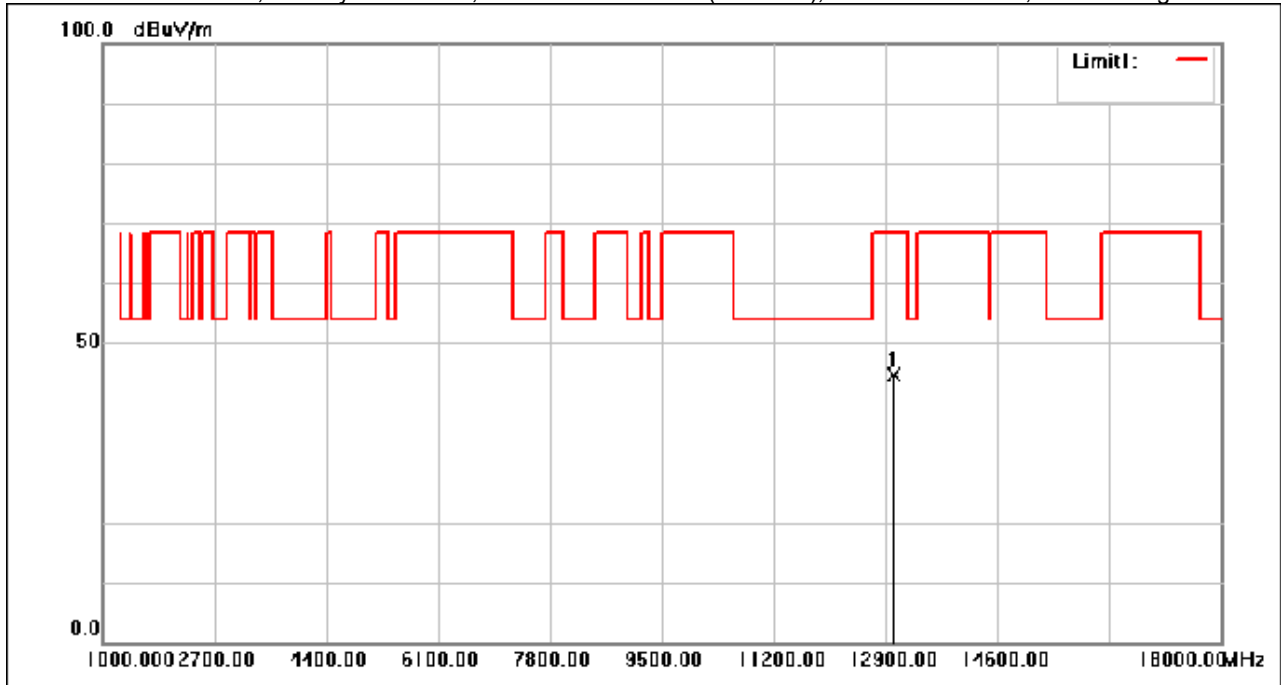
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Test Mode: 13; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:20MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13033.740	41.05	3.68	44.73	68.30	-23.57	peak

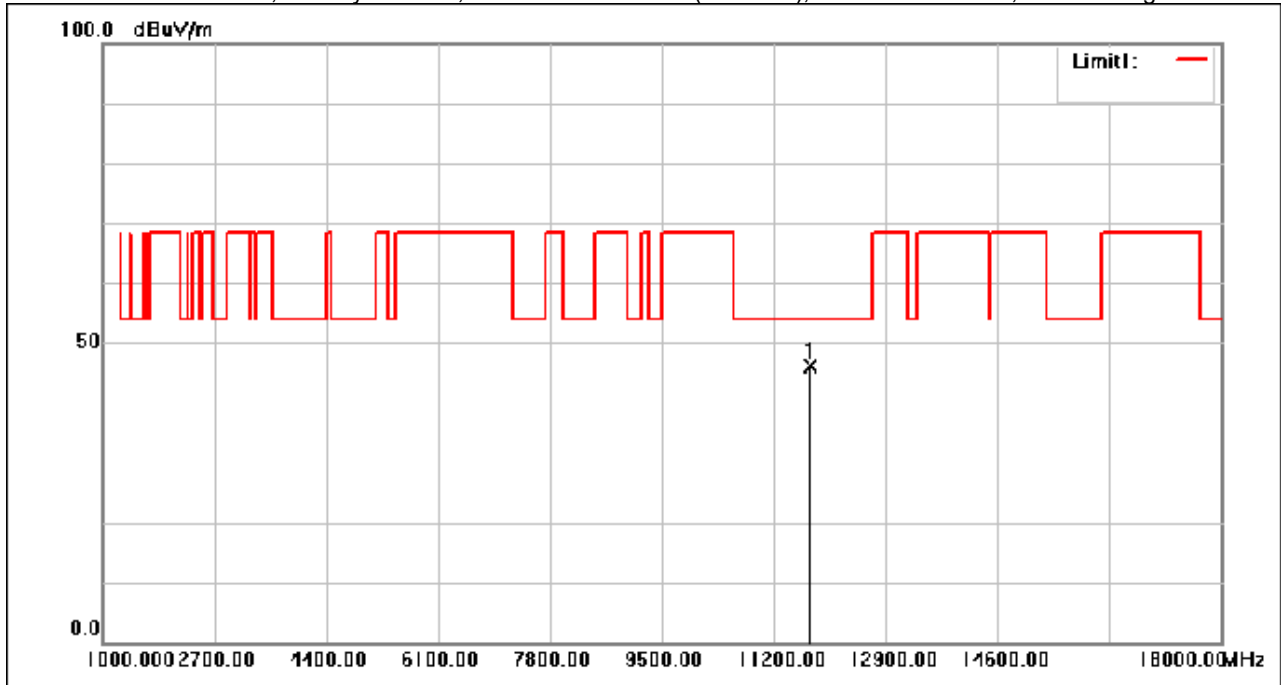
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Test Mode: 13; Polarity: Vertical; Modulation: 802.11ax(Full RU0); Bandwidth: 20MHz; Channel: High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11757.140	44.42	1.81	46.23	54.00	-7.77	peak

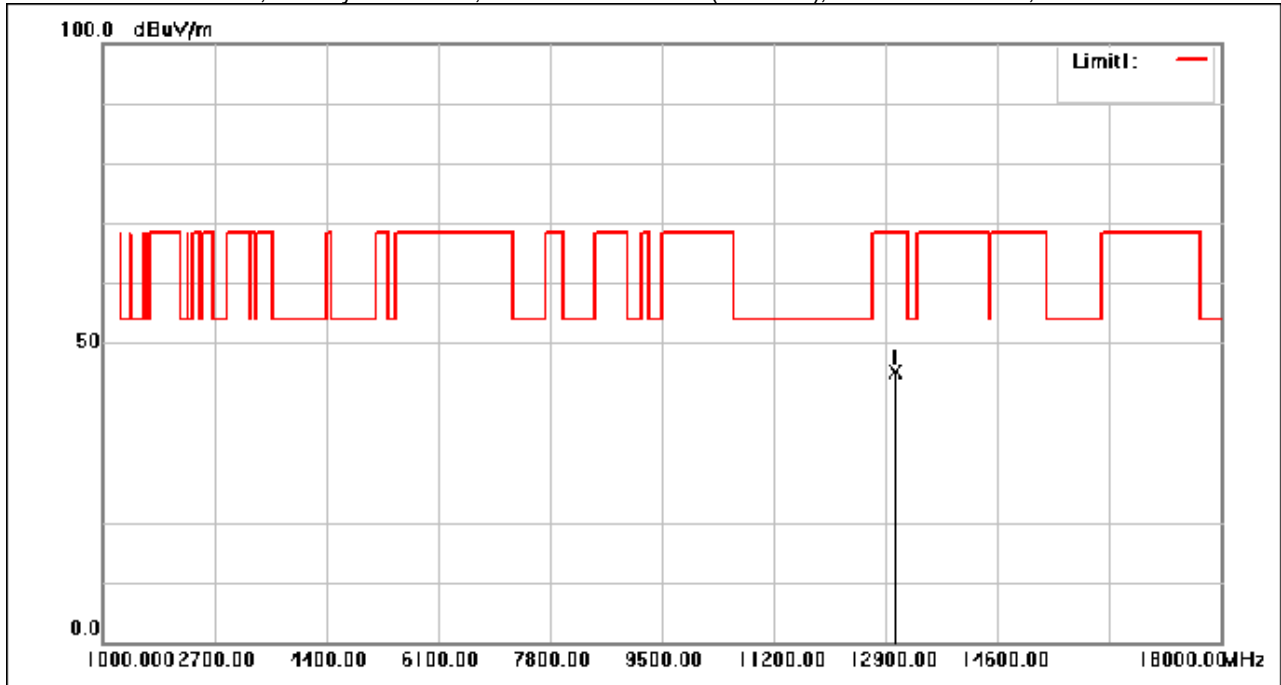
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Test Mode: 13; Polarity: Horizontal; Modulation: 802.11ax(Full RU0); Bandwidth: 40MHz; Channel: Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13054.580	41.59	3.62	45.21	68.30	-23.09	peak

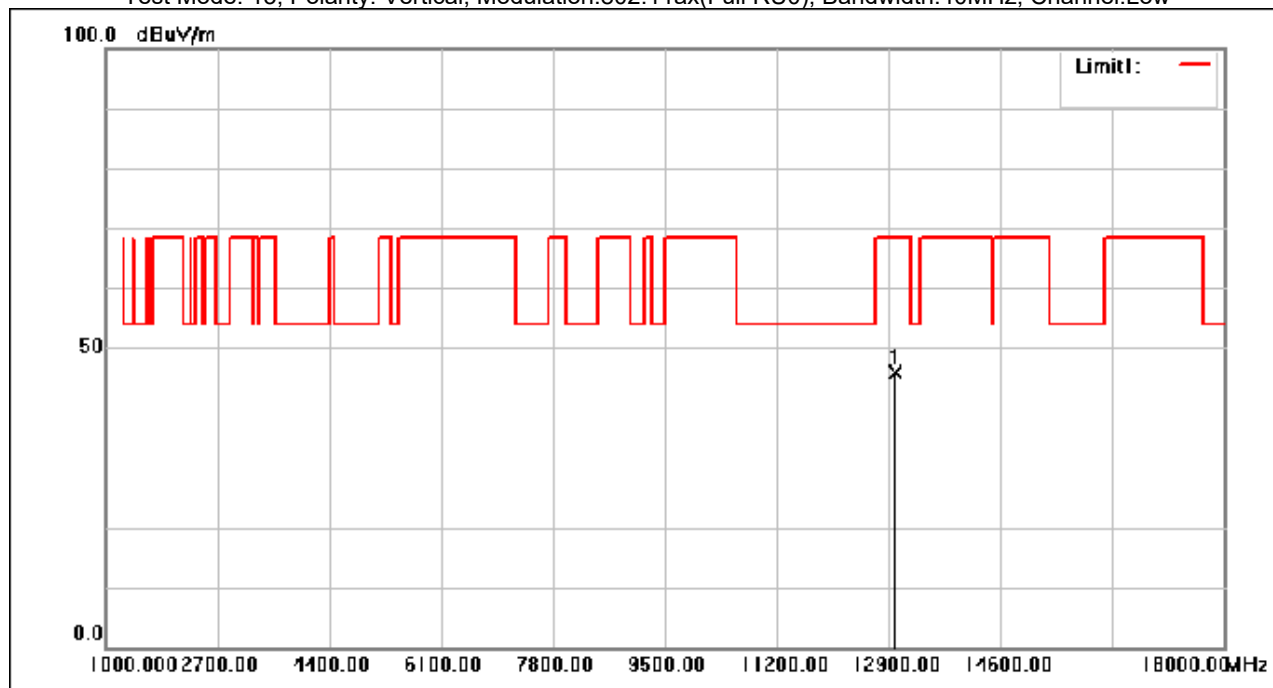
Compliance Certification Services (Kunshan) Inc.

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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	12998.060	42.08	3.75	45.83	68.30	-22.47	peak

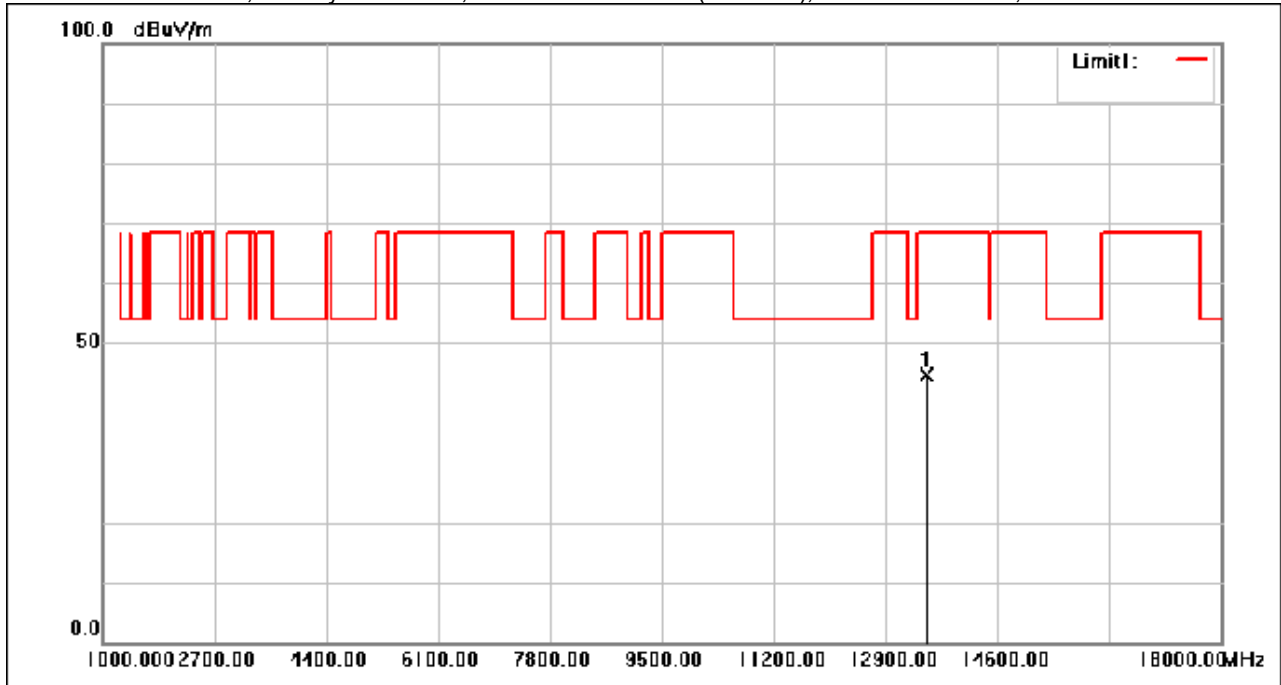
Compliance Certification Services (Kunshan) Inc.

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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	13512.610	42.04	2.54	44.58	68.30	-23.72	peak

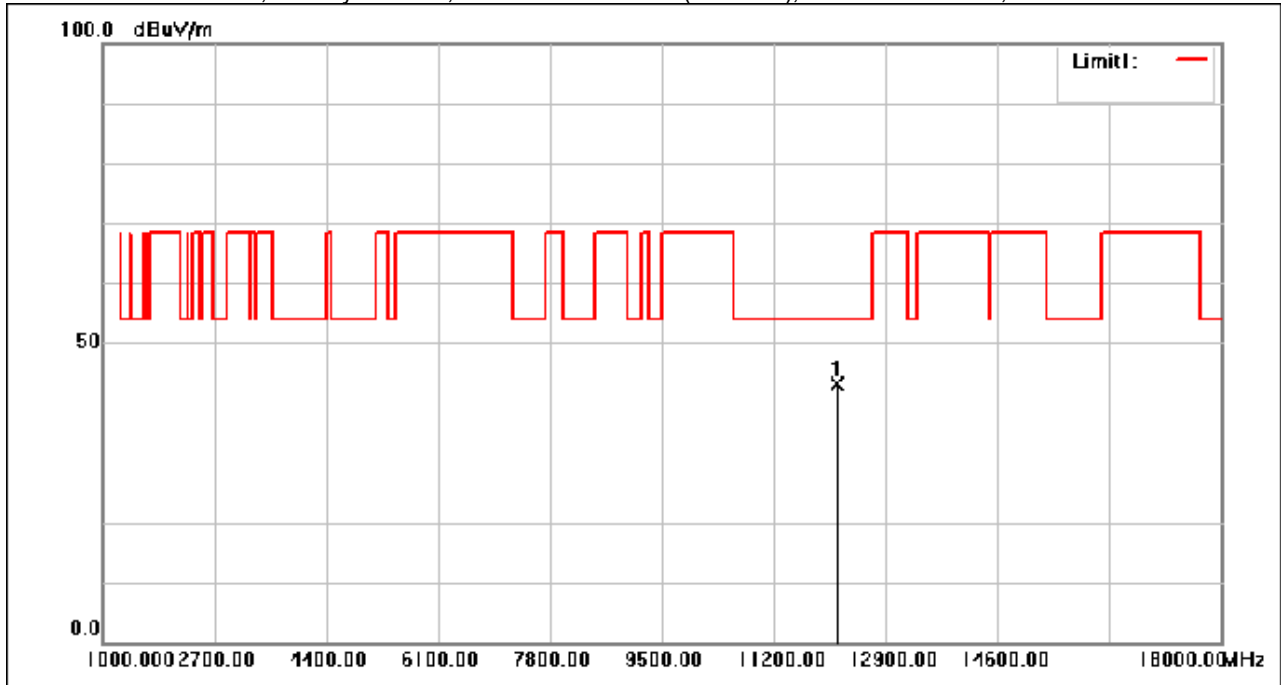
Compliance Certification Services (Kunshan) Inc.

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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	12167.630	40.72	2.43	43.15	54.00	-10.85	peak

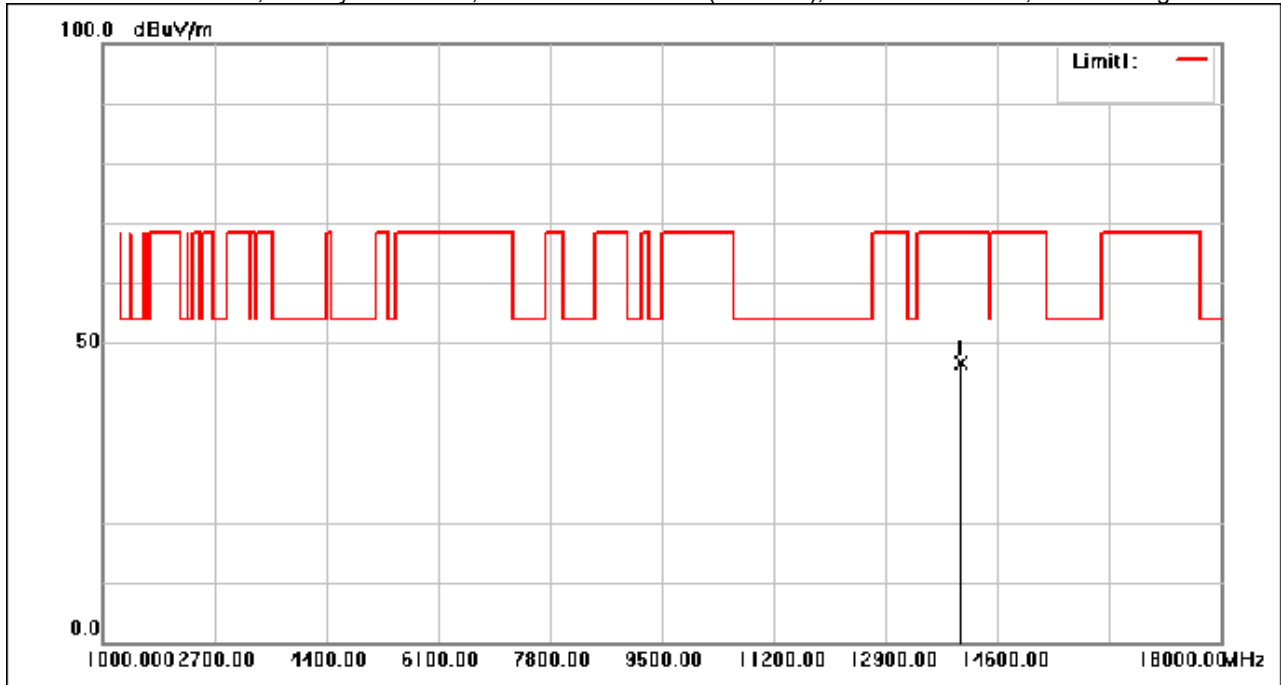
Compliance Certification Services (Kunshan) Inc.

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Test Mode: 13; 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	14042.290	42.63	4.02	46.65	68.30	-21.65	peak

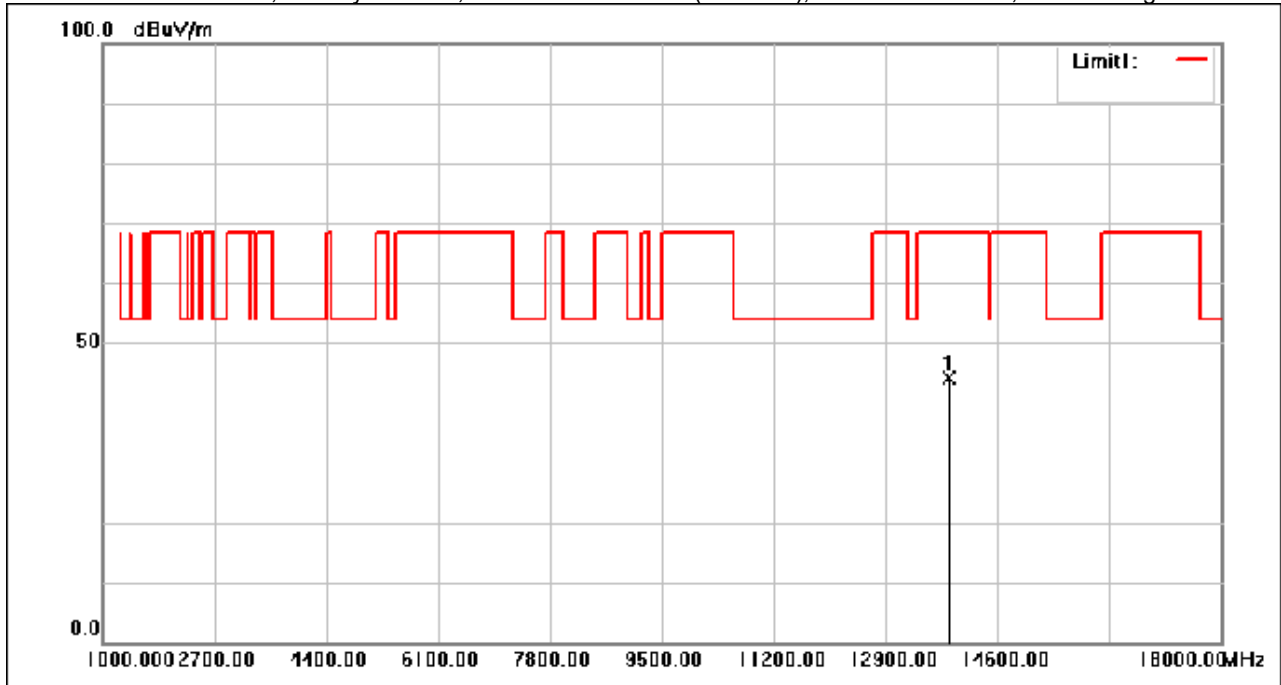
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Test Mode: 13; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:40MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13871.440	40.50	3.54	44.04	68.30	-24.26	peak

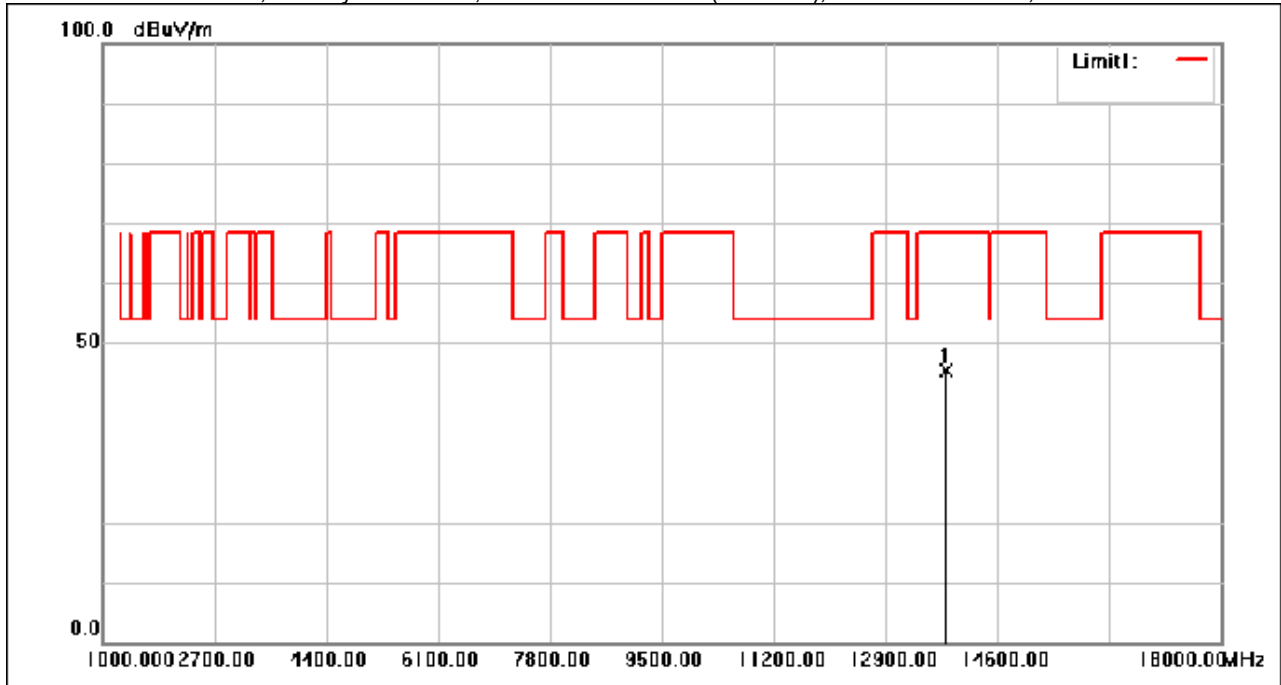
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Test Mode: 13; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13811.680	42.06	3.37	45.43	68.30	-22.87	peak

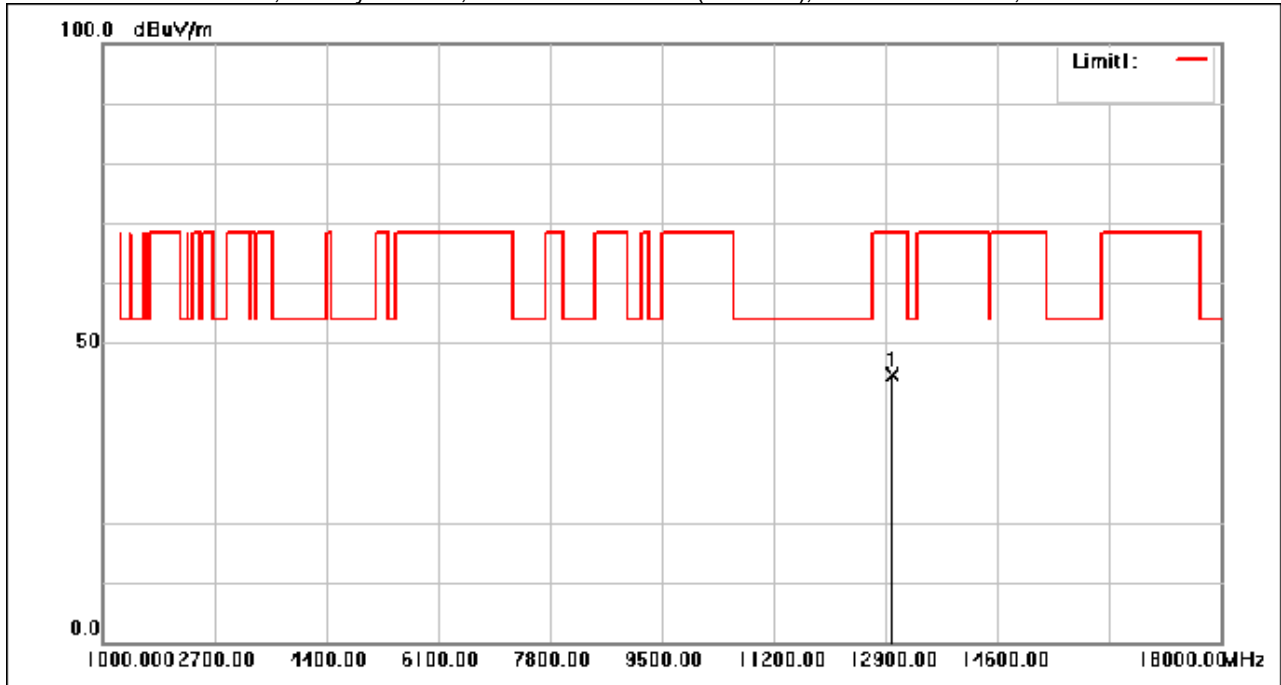
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Test Mode: 13; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:Low



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12996.440	40.88	3.75	44.63	68.30	-23.67	peak

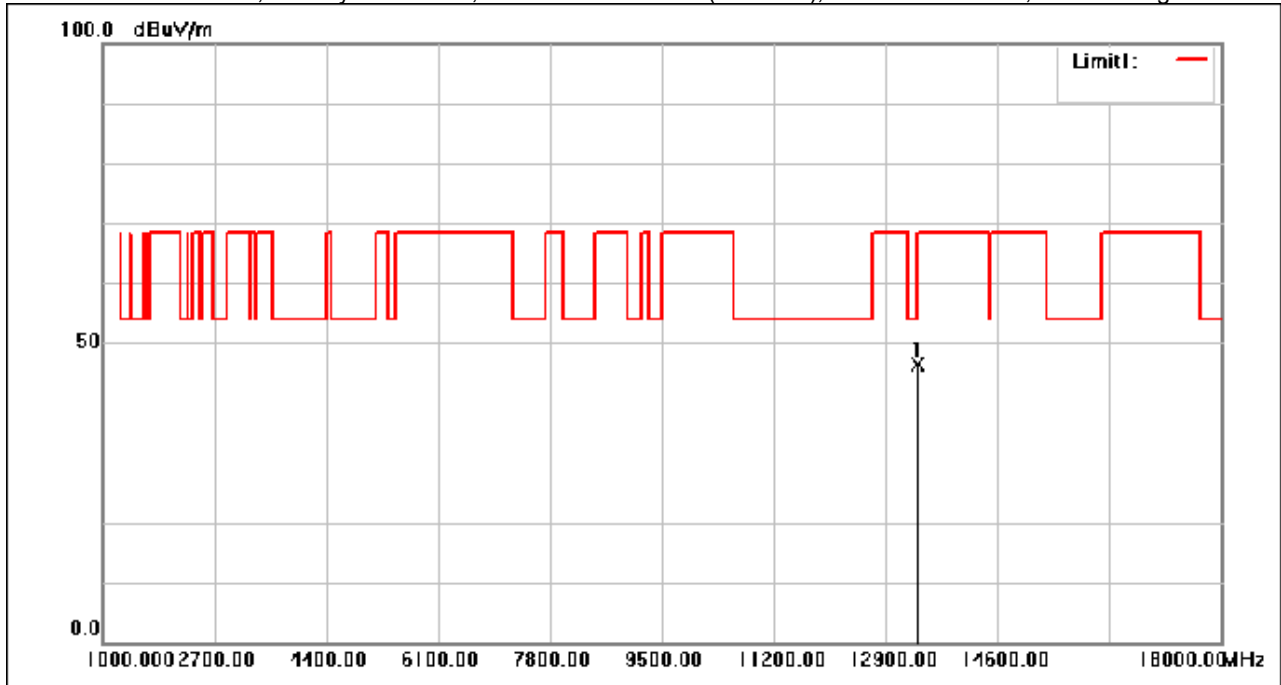
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Test Mode: 13; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13377.520	43.44	2.82	46.26	54.00	-7.74	peak

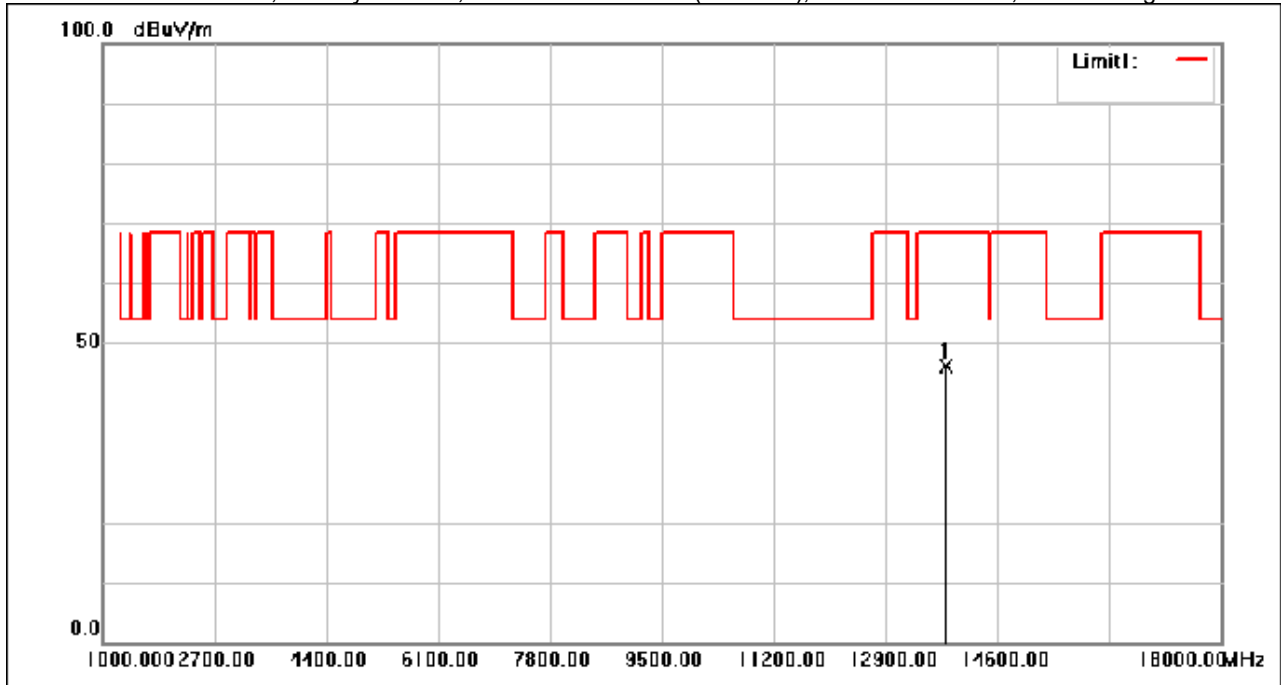
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Test Mode: 13; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:80MHz; Channel:High



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	13824.180	42.82	3.41	46.23	68.30	-22.07	peak

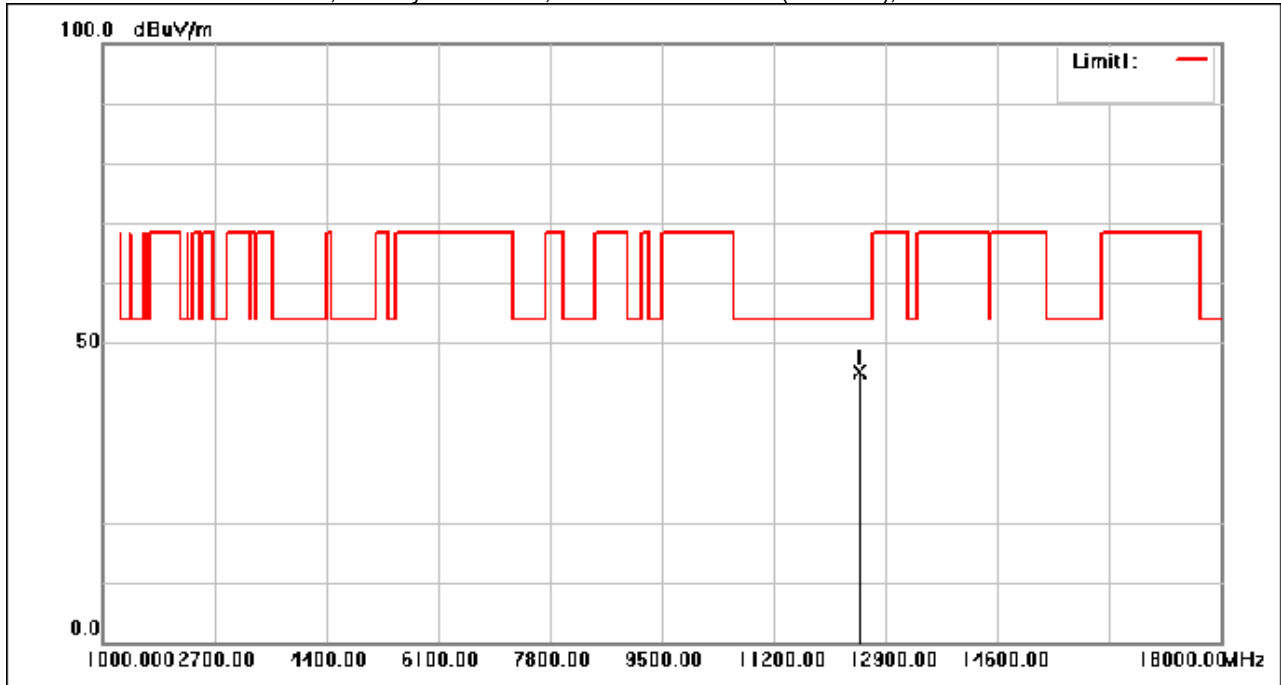
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Test Mode: 13; Polarity: Horizontal; Modulation:802.11ax(Full RU0); Bandwidth:160MHz



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12508.630	42.92	2.09	45.01	54.00	-8.99	peak

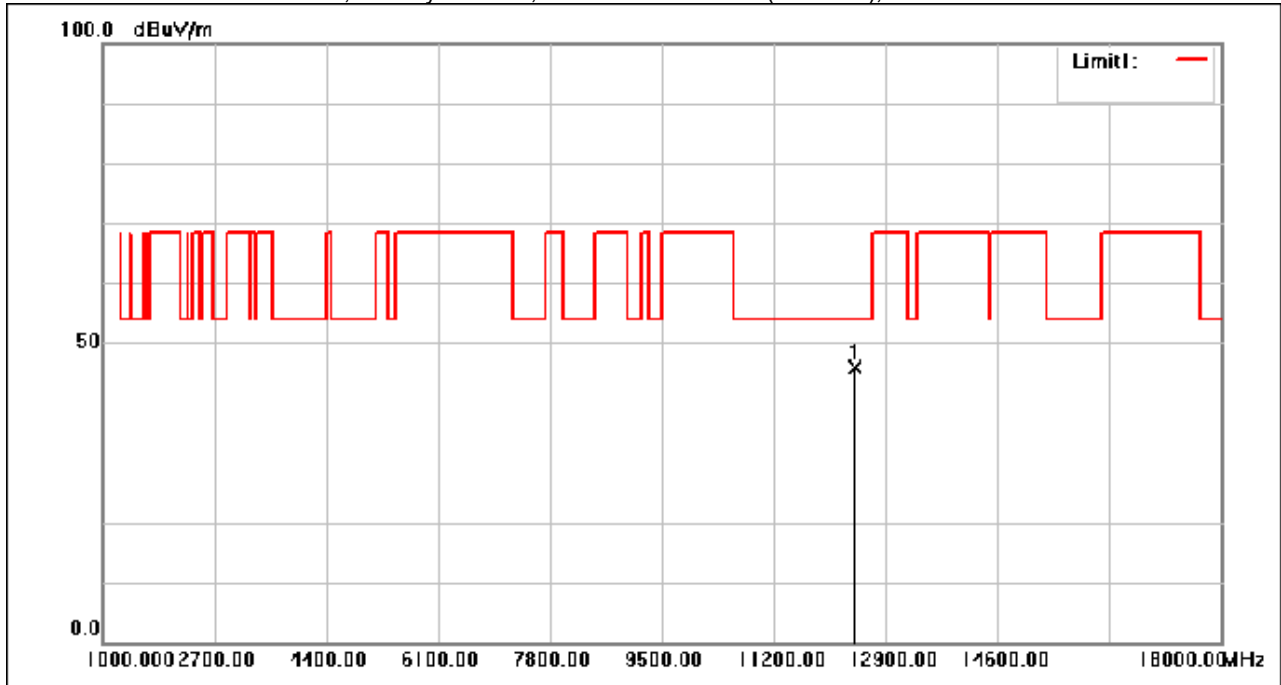
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Test Mode: 13; Polarity: Vertical; Modulation:802.11ax(Full RU0); Bandwidth:160MHz



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	12428.860	43.70	2.14	45.84	54.00	-8.16	peak



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10 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2407001236AT

11 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for KSCR2407001236AT

12 Appendix

1. Duty Cycle

1.1 Test Result

1.1.1 Ant1

Ant1										
ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
NTNV	802.11ax (HEW20)	MIMO	5955	RU242	Left	5.359	5.779	92.73	0.33	1.01
			6175	RU242	Left	5.360	5.782	92.70	0.33	0.91
			6415	RU242	Left	5.359	5.781	92.70	0.33	1.04
	802.11ax (HEW40)	MIMO	5965	RU484	Left	4.820	5.258	91.67	0.38	1.16
			6165	RU484	Left	4.820	5.240	91.98	0.36	0.79
			6405	RU484	Left	4.820	5.257	91.69	0.38	1.25
	802.11ax (HEW80)	MIMO	5985	RU996	Left	2.558	2.996	85.38	0.69	1.57
			6145	RU996	Left	2.559	3.005	85.16	0.70	1.82
			6385	RU996	Left	2.558	3.005	85.12	0.70	1.82
	802.11ax (HEW160)	MIMO	6025	2xRU996	Left	2.210	2.621	84.32	0.74	2.09
			6185	2xRU996	Left	2.210	2.567	86.09	0.65	0.33
			6345	2xRU996	Left	2.210	2.621	84.32	0.74	1.77

1.1.2 Ant1

Ant1										
ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
NTNV	802.11ax (HEW20)	MIMO	6435	RU242	Left	5.360	5.790	92.57	0.34	1.17
			6475	RU242	Left	5.360	5.790	92.57	0.34	1.04
			6515	RU242	Left	5.360	5.780	92.73	0.33	1.01
	802.11ax (HEW40)	MIMO	6445	RU484	Left	4.820	5.240	91.98	0.36	0.79
			6485	RU484	Left	4.820	5.249	91.83	0.37	1.13
	802.11ax (HEW80)	MIMO	6465	RU996	Left	2.558	3.014	84.87	0.71	2.08

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1.1.3 Ant1

Ant1										
ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
NTNV	802.11ax (HEW20)	MIMO	6535	RU242	Left	5.361	5.781	92.73	0.33	1.04
			6695	RU242	Left	5.360	5.772	92.86	0.32	0.88
			6855	RU242	Left	5.360	5.790	92.57	0.34	1.17
	802.11ax (HEW40)	MIMO	6565	RU484	Left	4.820	5.257	91.69	0.38	1.12
			6685	RU484	Left	4.819	5.249	91.81	0.37	0.99
			6845	RU484	Left	4.820	5.266	91.53	0.38	1.42
	802.11ax (HEW80)	MIMO	6625	RU996	Left	2.558	3.005	85.12	0.70	1.82
			6705	RU996	Left	2.559	3.005	85.16	0.70	1.82
			6785	RU996	Left	2.559	2.996	85.41	0.68	1.57
	802.11ax (HEW160)	MIMO	6665	2xRU996	Left	2.211	2.621	84.36	0.74	1.79

1.1.4 Ant1

Ant1										
ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
NTNV	802.11ax (HEW20)	MIMO	6895	RU242	Left	5.359	5.790	92.56	0.34	1.21
			6995	RU242	Left	5.360	5.790	92.57	0.34	1.17
			7115	RU242	Left	5.361	5.782	92.72	0.33	1.04
	802.11ax (HEW40)	MIMO	6925	RU484	Left	4.819	5.258	91.65	0.38	1.25
			7005	RU484	Left	4.820	5.204	92.62	0.33	0.20
			7085	RU484	Left	4.819	5.258	91.65	0.38	1.12
	802.11ax (HEW80)	MIMO	6945	RU996	Left	2.558	2.996	85.38	0.69	1.62
			7025	RU996	Left	2.558	3.005	85.12	0.70	1.82
	802.11ax (HEW160)	MIMO	6985	2xRU996	Left	2.210	2.612	84.61	0.73	1.81

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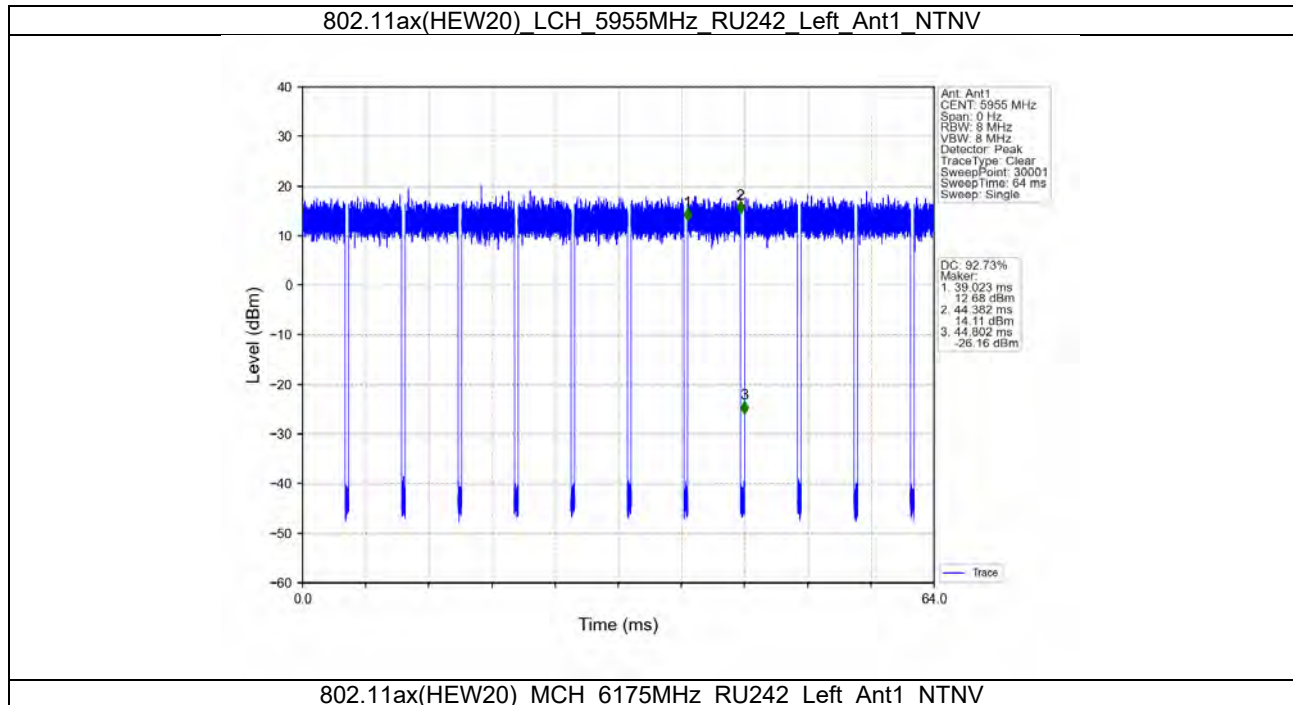
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1.2 Test Graph

1.2.1 Ant1

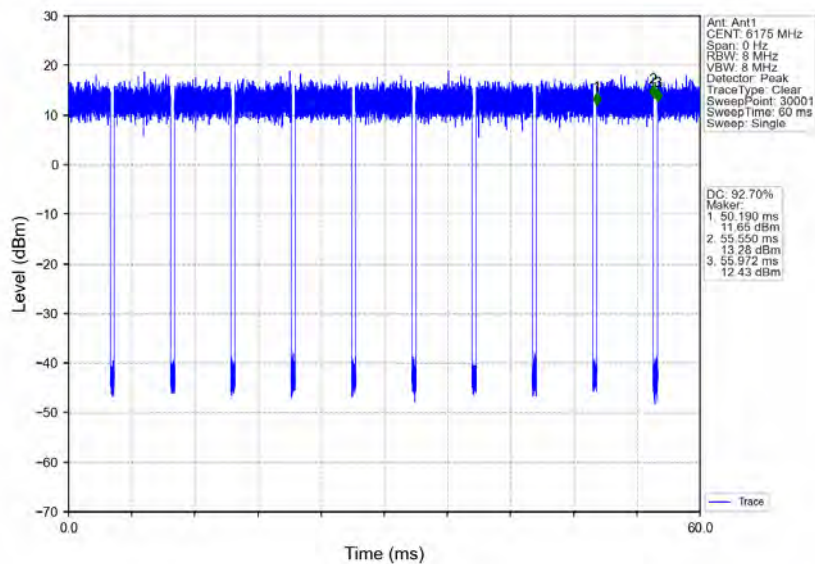


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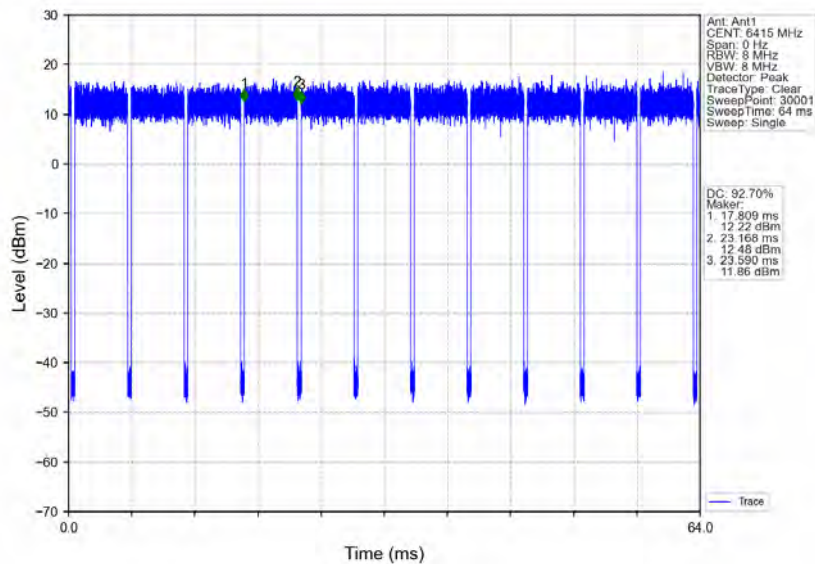
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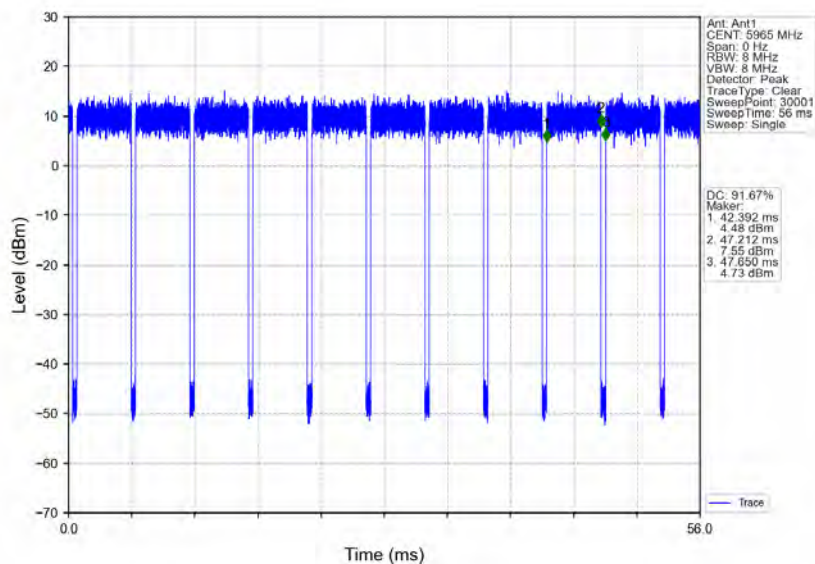
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802.11ax(HEW20)_HCH_6415MHz_RU242_Left_Ant1_NTNV



802.11ax(HEW40)_LCH_5965MHz_RU484_Left_Ant1_NTNV



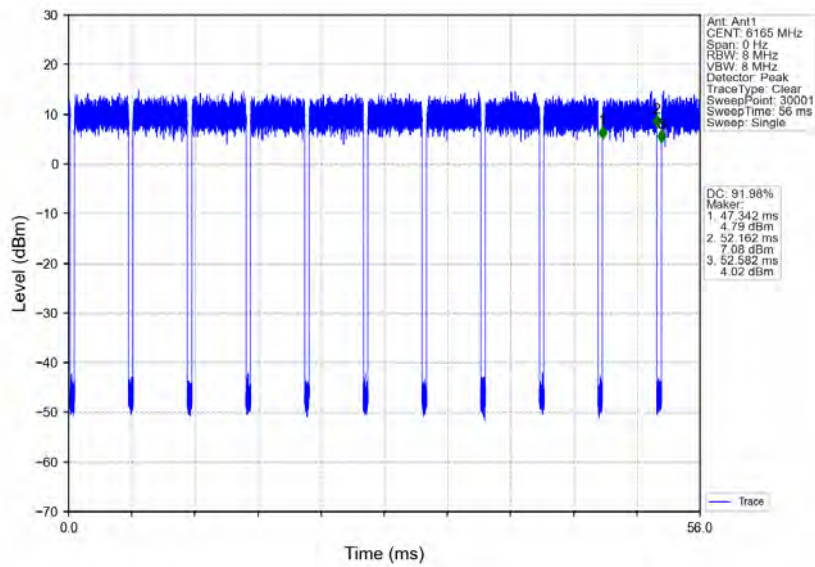
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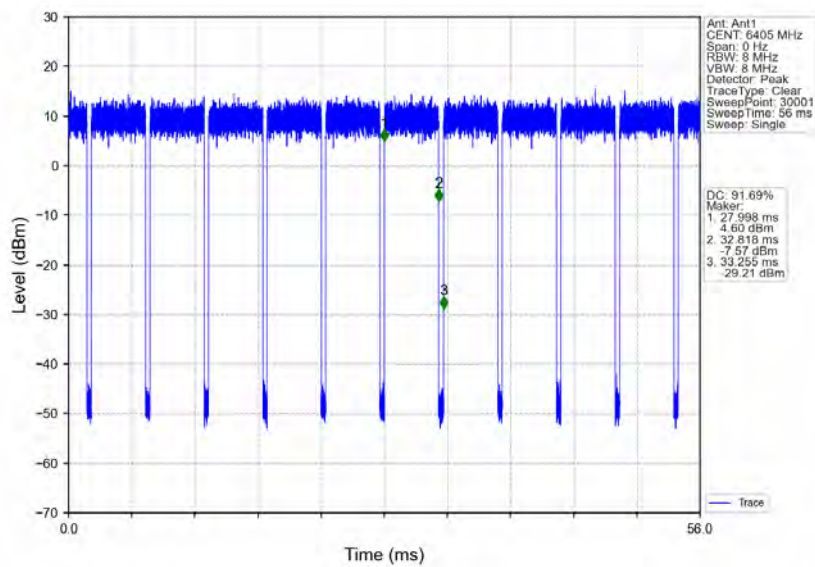
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802.11ax(HEW40)_MCH_6165MHz_RU484_Left_Ant1_NTNV



802.11ax(HEW40)_HCH_6405MHz_RU484_Left_Ant1_NTNV



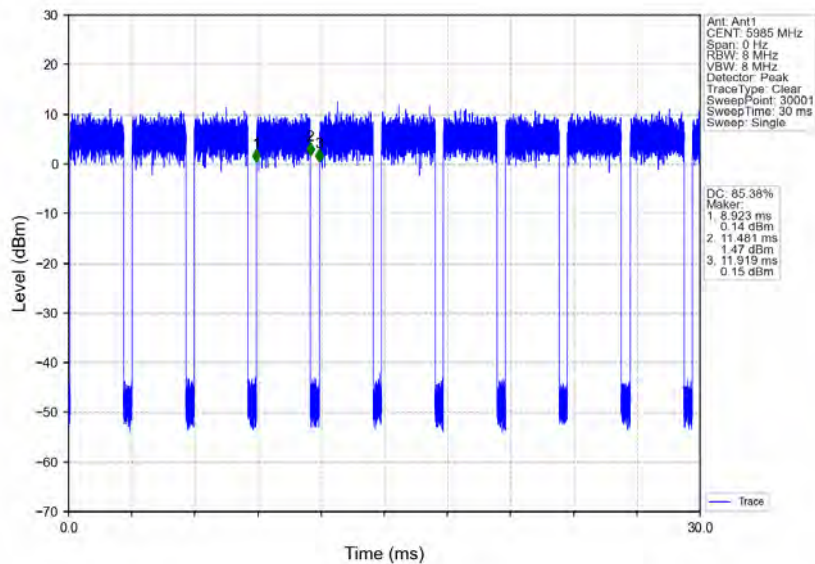
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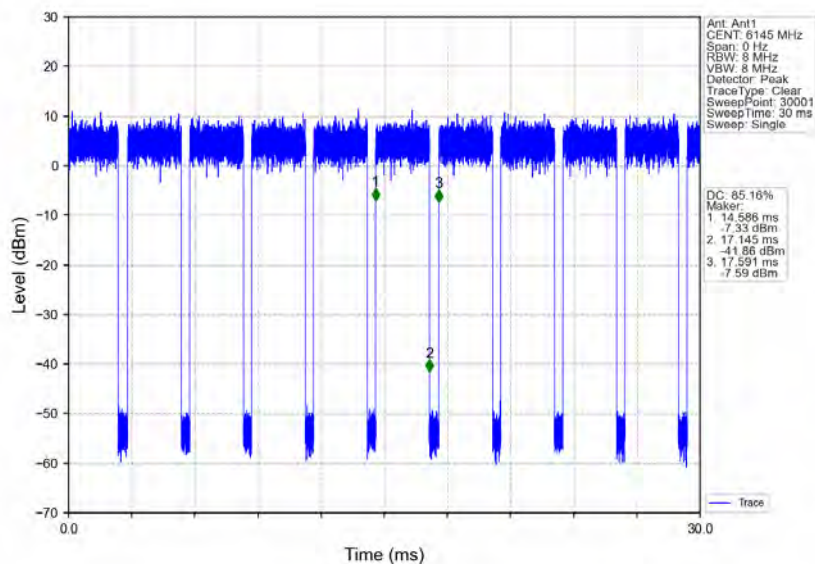
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802.11ax(HEW80)_LCH_5985MHz_RU996_Left_Ant1_NTNV



802.11ax(HEW80)_MCH_6145MHz_RU996_Left_Ant1_NTNV



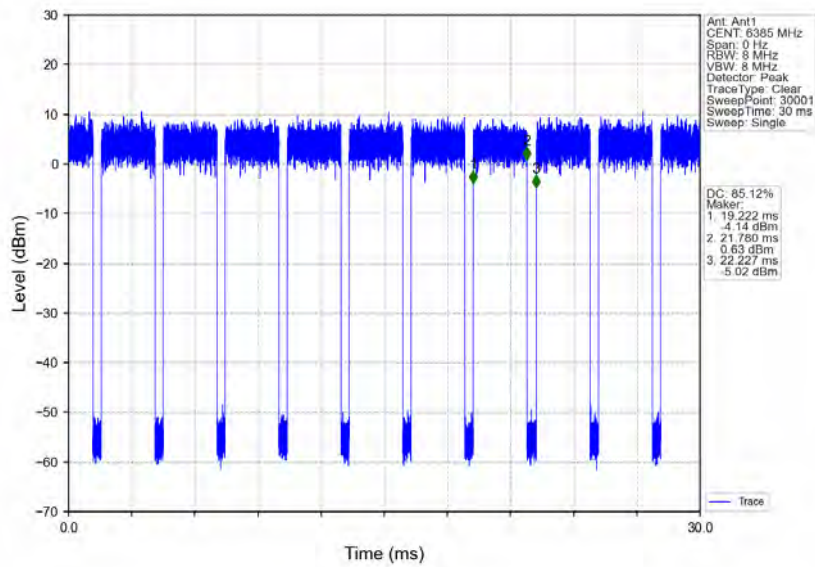
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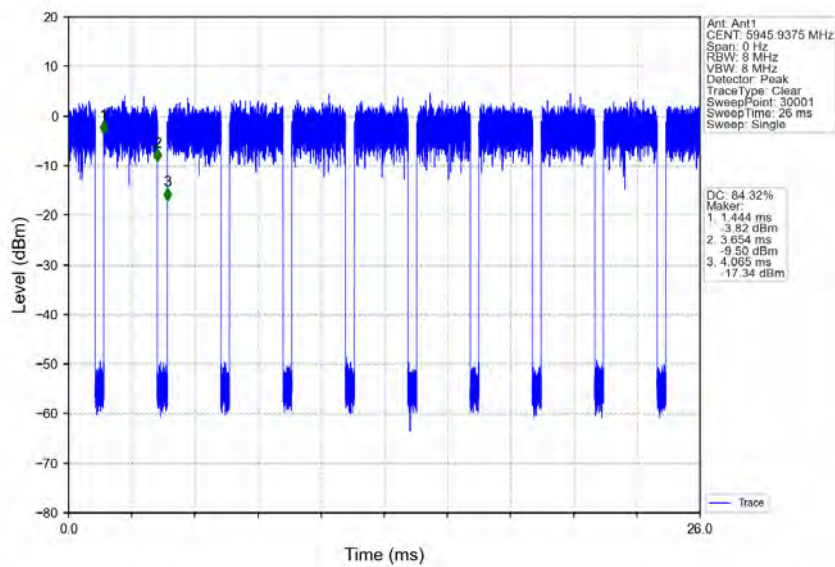
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802.11ax(HEW80)_HCH_6385MHz_RU996_Left_Ant1_NTNV



802.11ax(HEW160)_LCH_6025MHz_2xRU996_Left_Ant1_NTNV



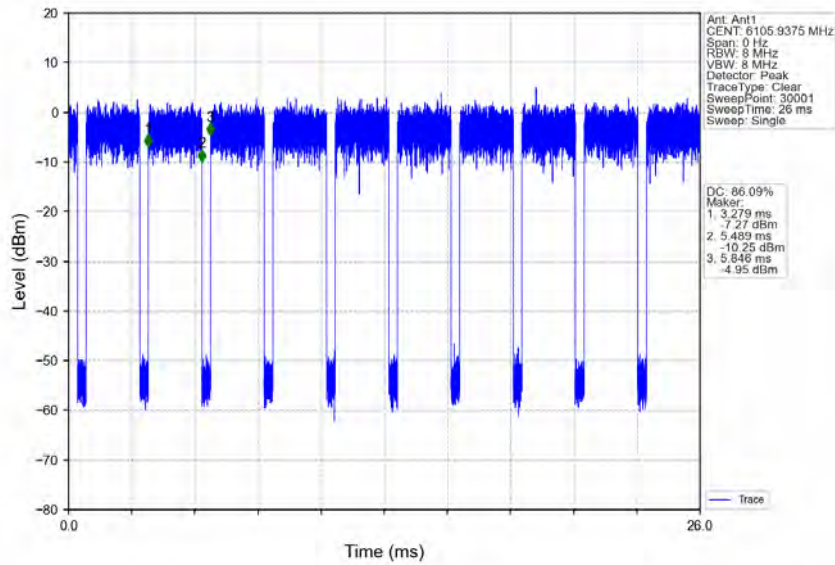
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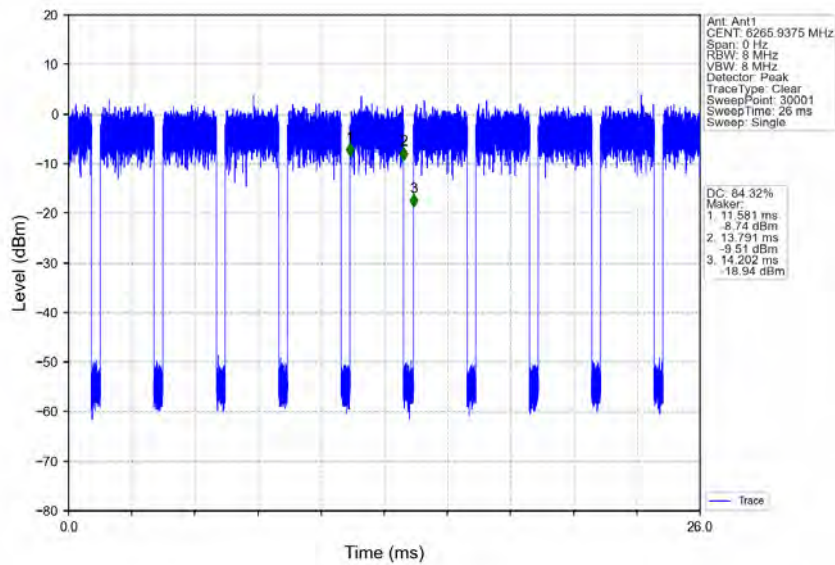
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802.11ax(HEW160) MCH_6185MHz_2xRU996_Left_Ant1_NTNV



802.11ax(HEW160) HCH_6345MHz_2xRU996_Left_Ant1_NTNV



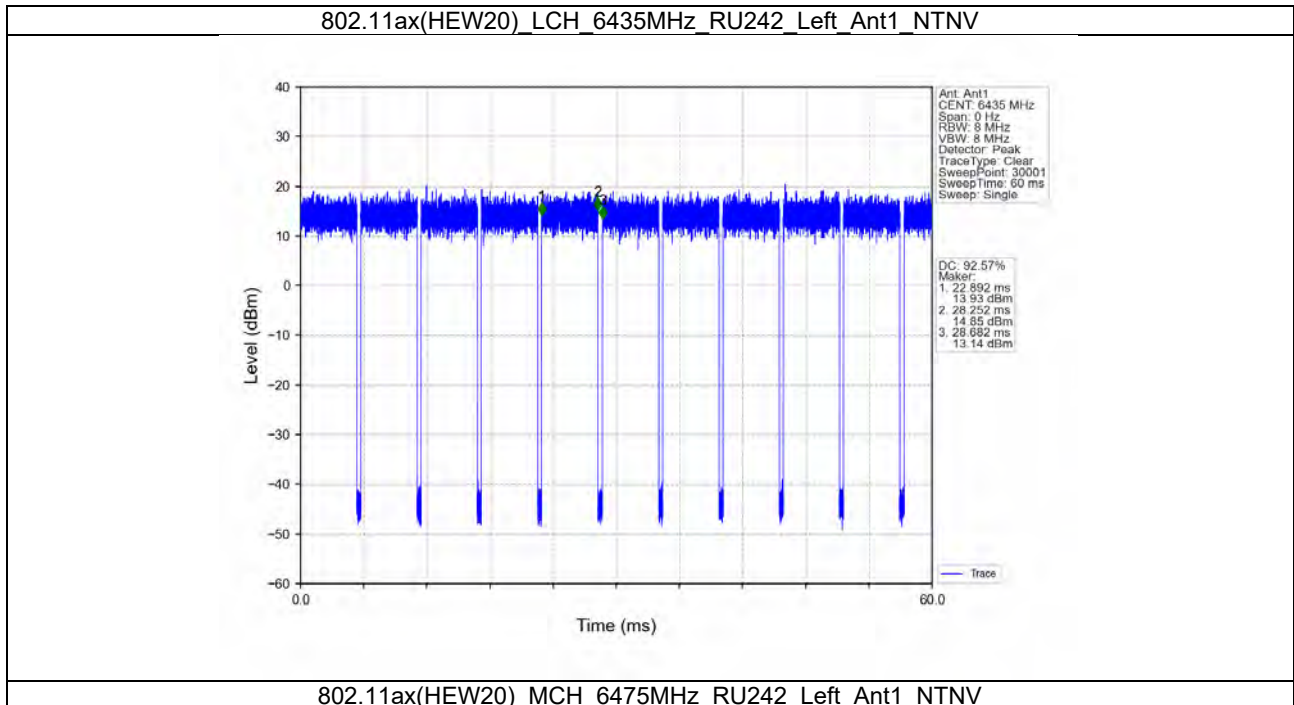
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1.2.2 Ant1

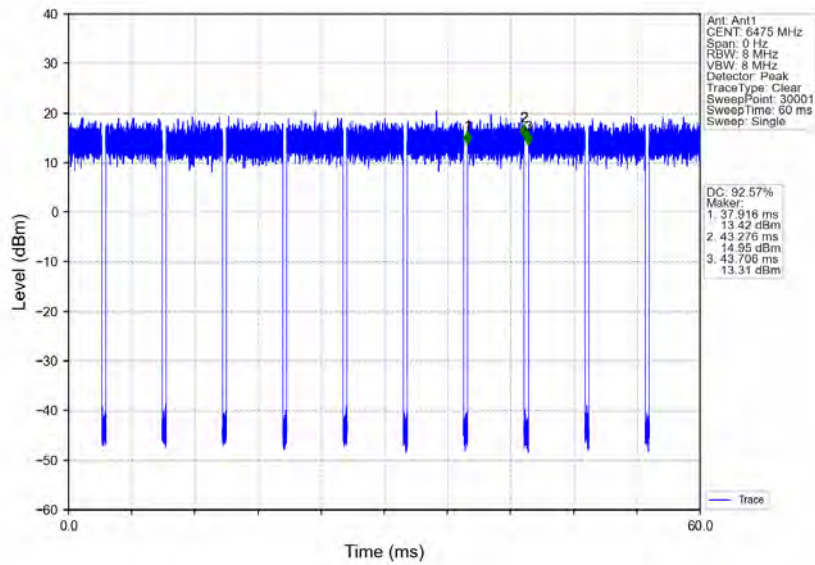


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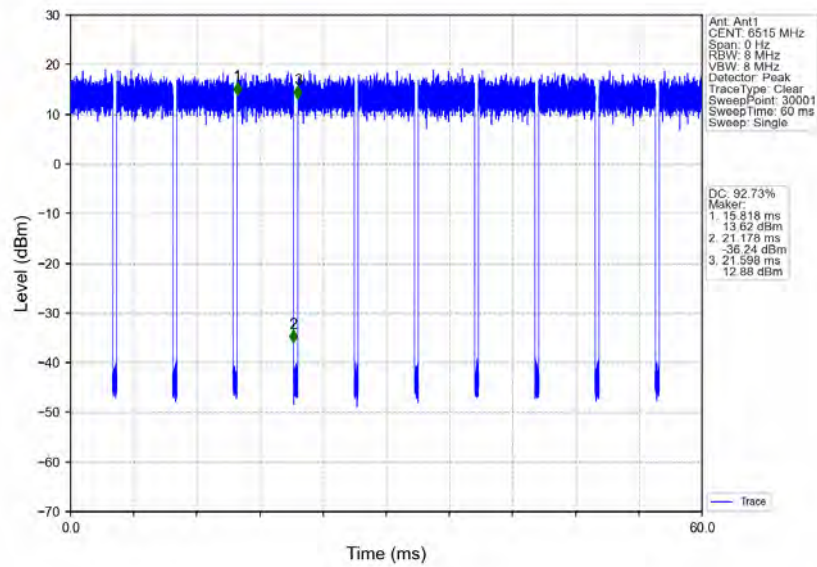
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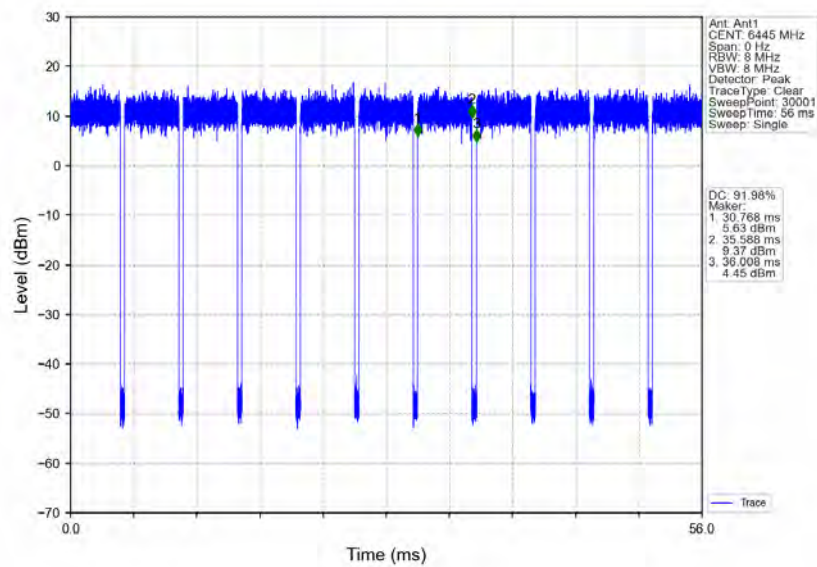
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802.11ax(HEW20)_HCH_6515MHz_RU242_Left_Ant1_NTNV



802.11ax(HEW40)_LCH_6445MHz_RU484_Left_Ant1_NTNV



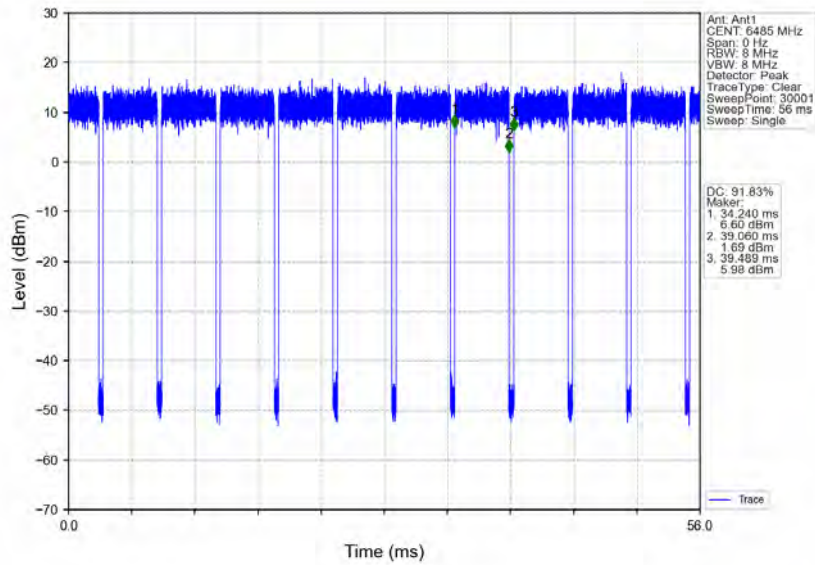
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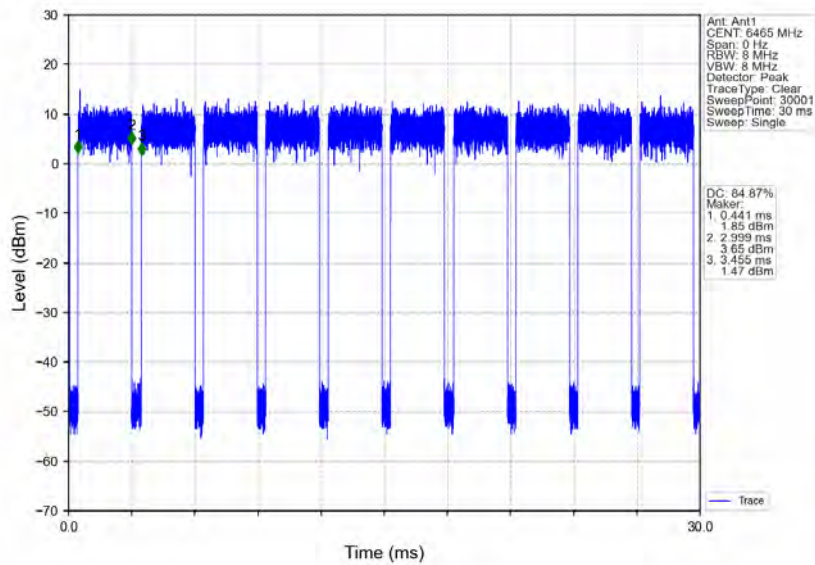
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802.11ax(HEW40)_MCH_6485MHz_RU484_Left_Ant1_NTNV



802.11ax(HEW80)_LCH_6465MHz_RU996_Left_Ant1_NTNV



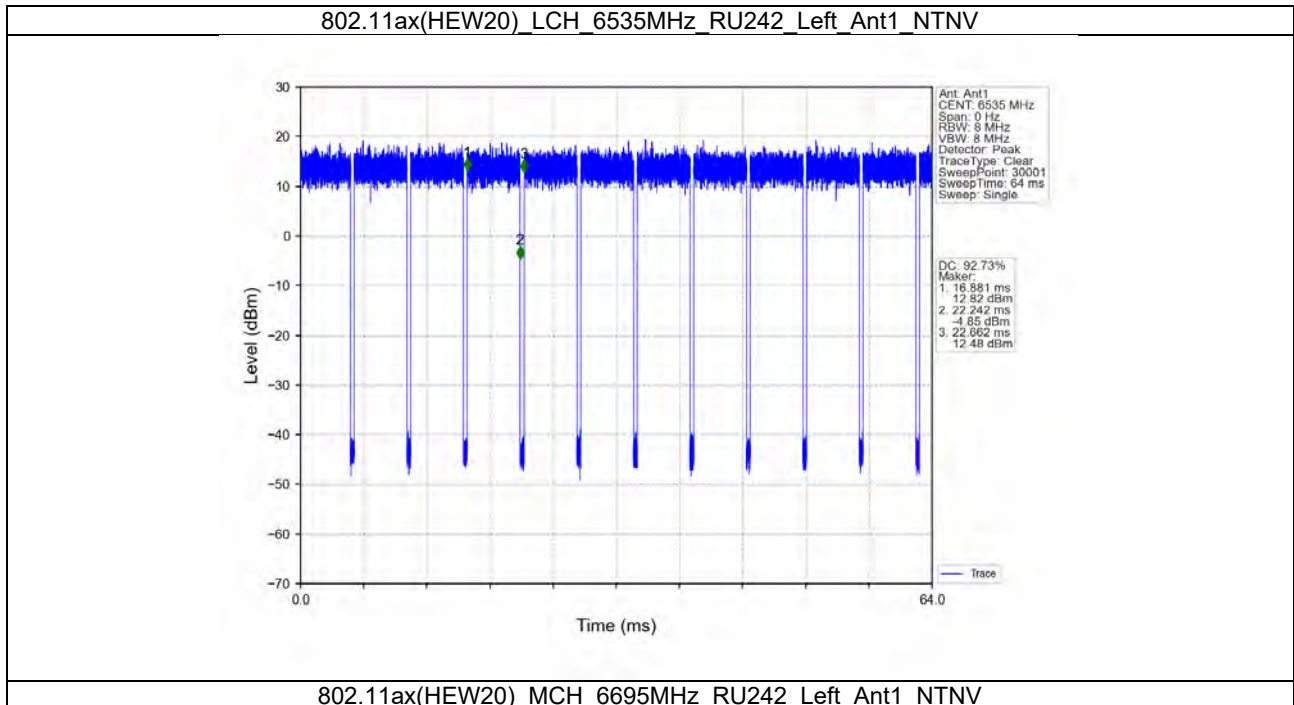
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1.2.3 Ant1

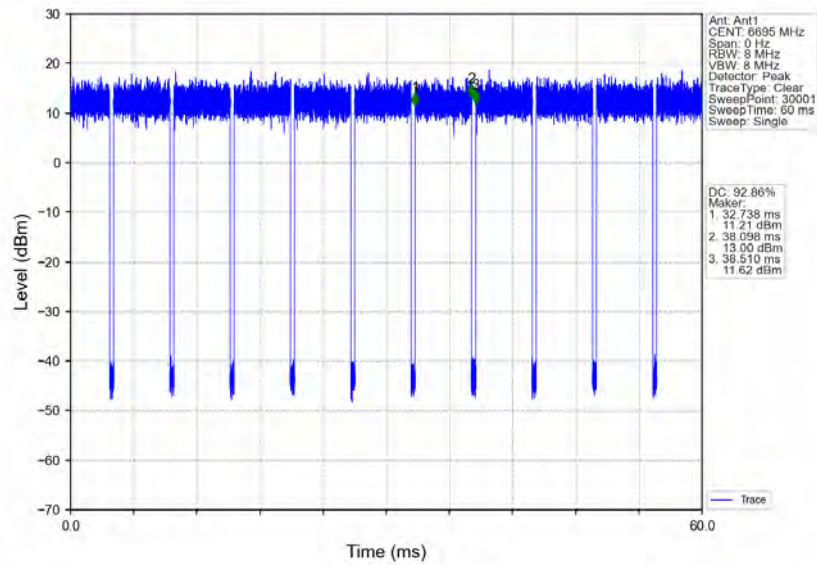


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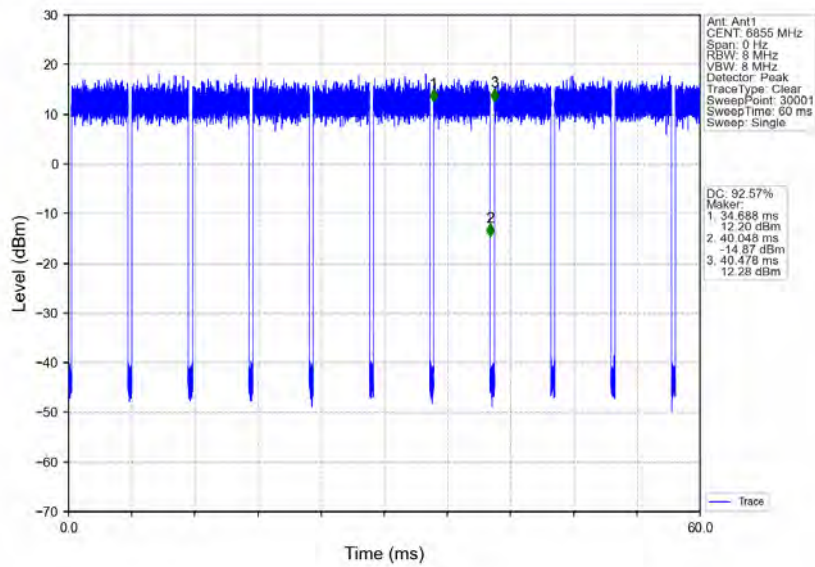
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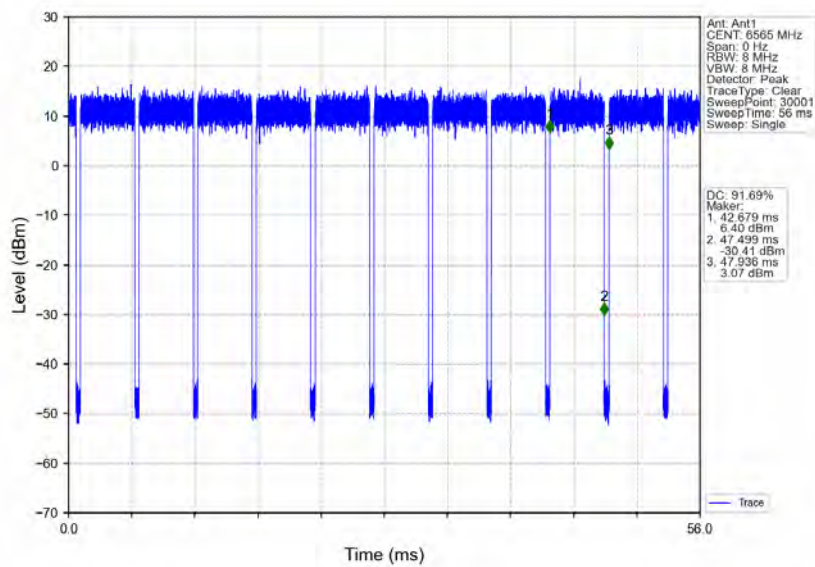
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802.11ax(HEW20)_HCH_6855MHz_RU242_Left_Ant1_NTNV



802.11ax(HEW40)_LCH_6565MHz_RU484_Left_Ant1_NTNV



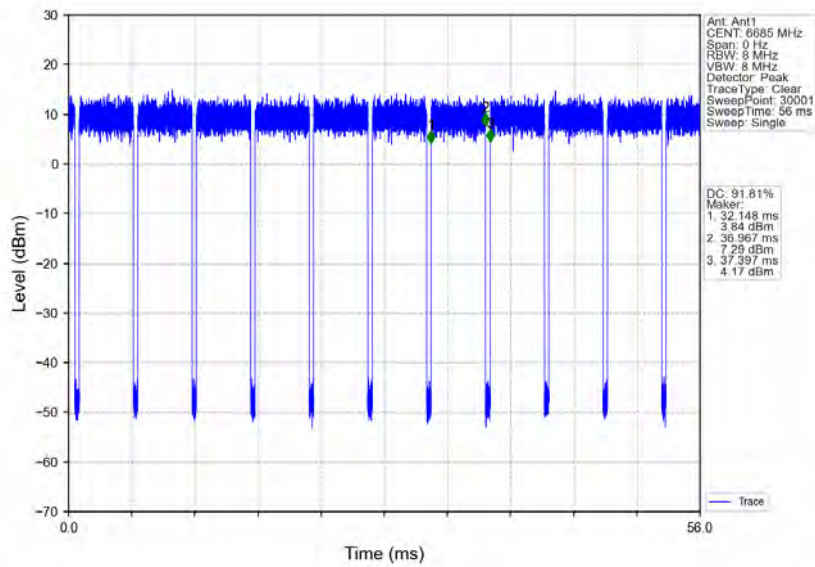
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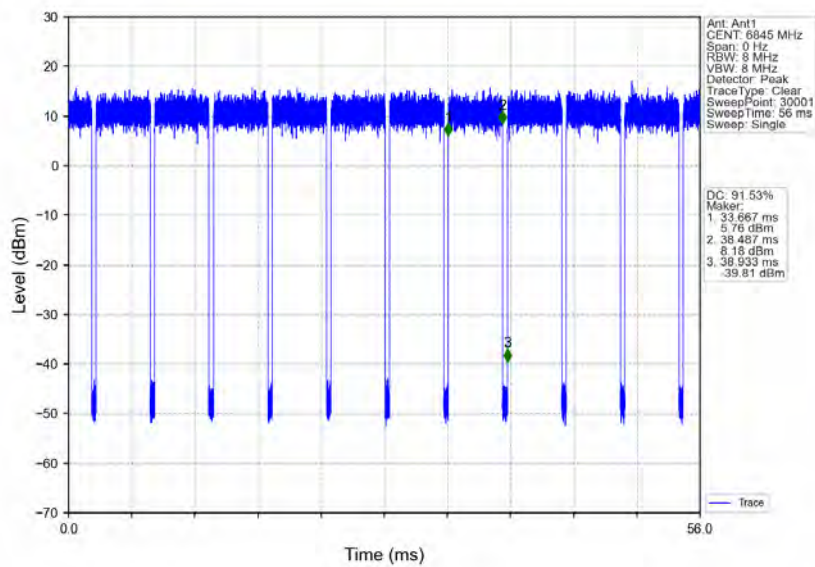
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802.11ax(HEW40)_MCH_6685MHz_RU484_Left_Ant1_NTNV



802.11ax(HEW40)_HCH_6845MHz_RU484_Left_Ant1_NTNV



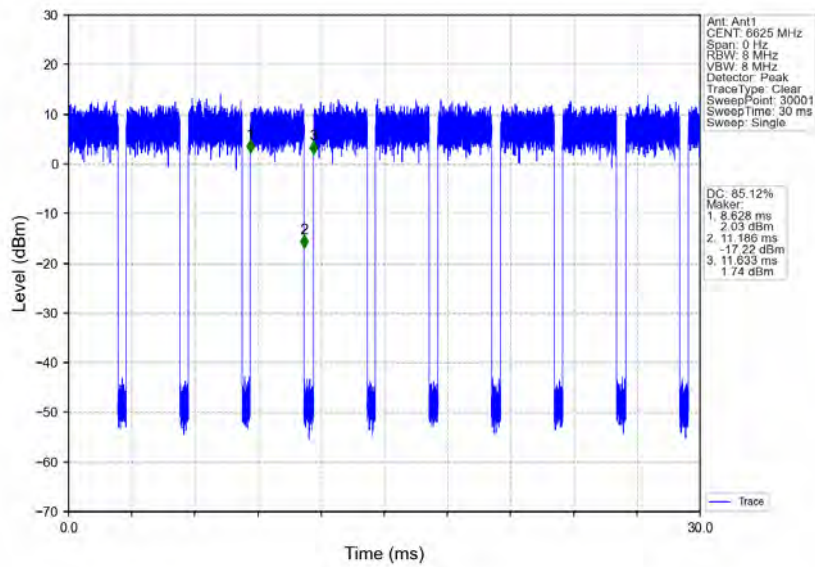
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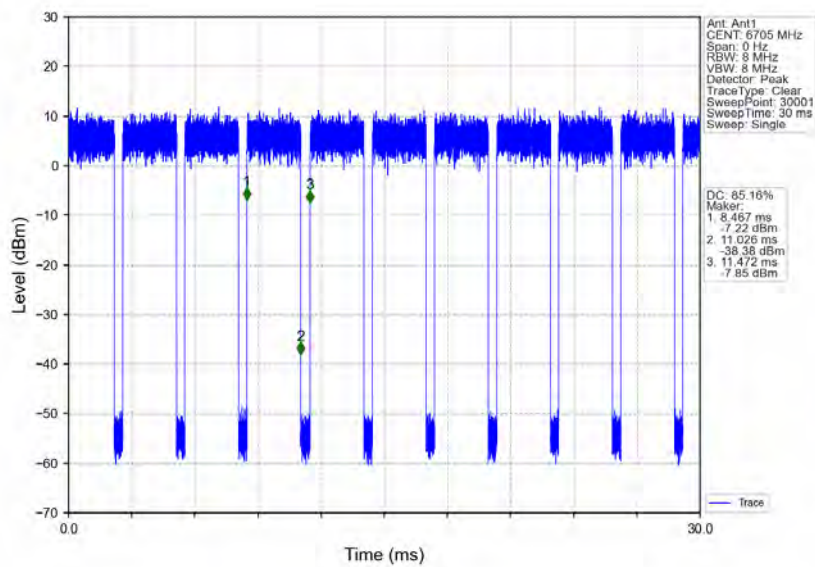
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802.11ax(HEW80)_LCH_6625MHz_RU996_Left_Ant1_NTNV



802.11ax(HEW80)_MCH_6705MHz_RU996_Left_Ant1_NTNV



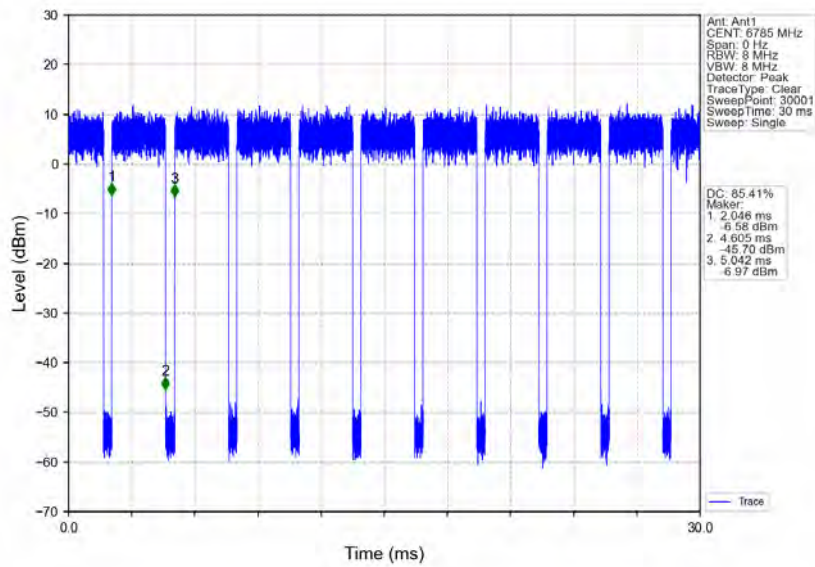
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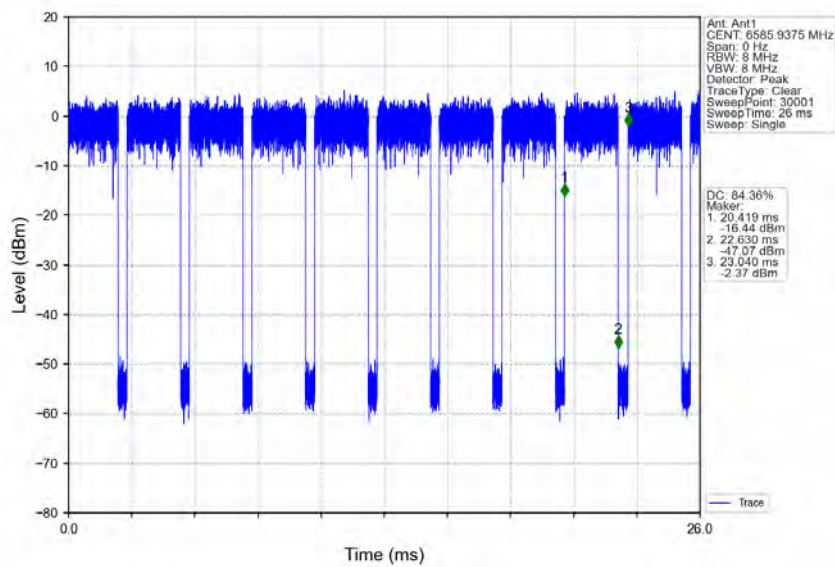
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802.11ax(HEW80)_HCH_6785MHz_RU996_Left_Ant1_NTNV



802.11ax(HEW160)_MCH_6665MHz_2xRU996_Left_Ant1_NTNV



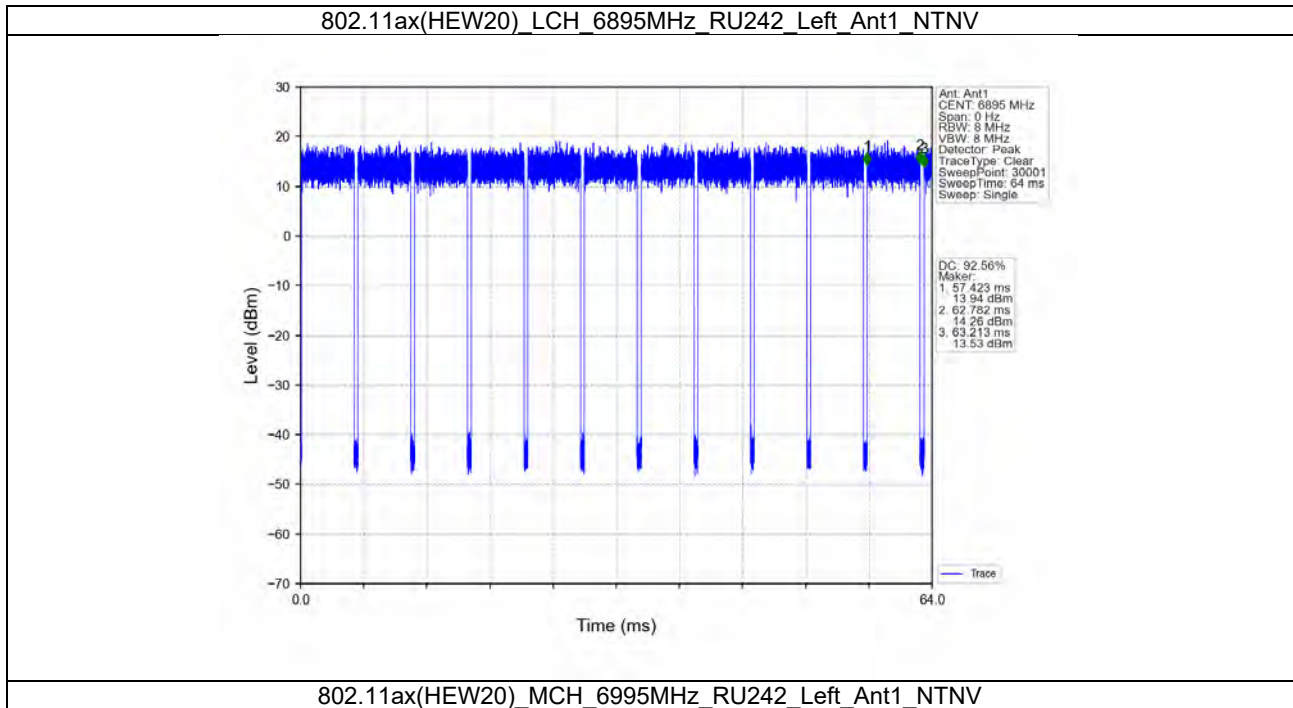
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1.2.4 Ant1

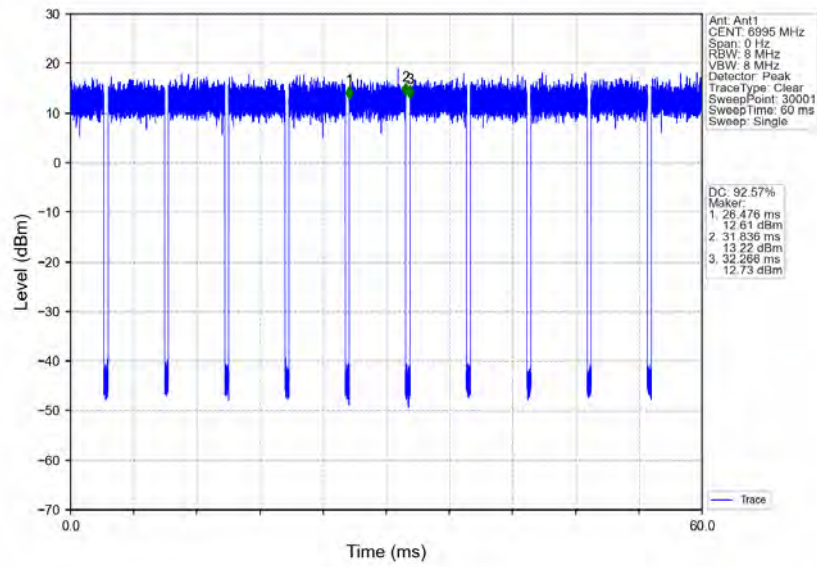


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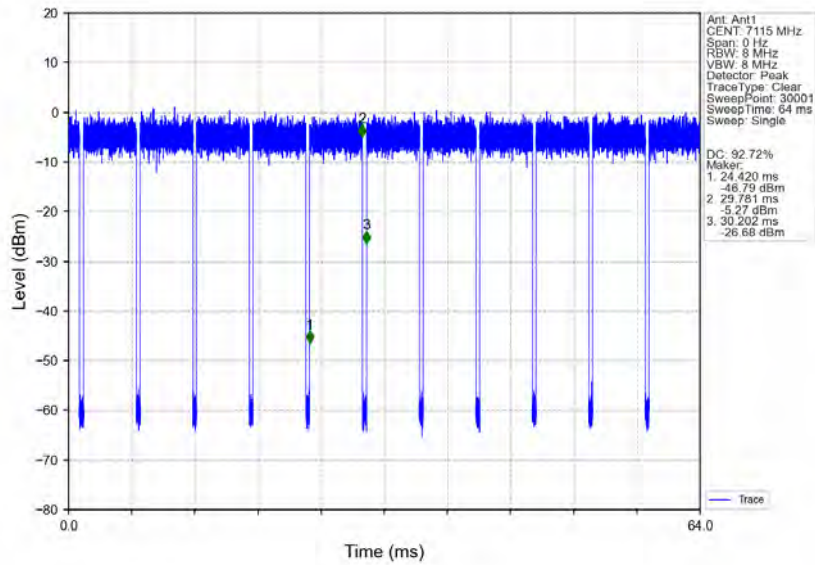
Compliance Certification Services (Kunshan) Inc.

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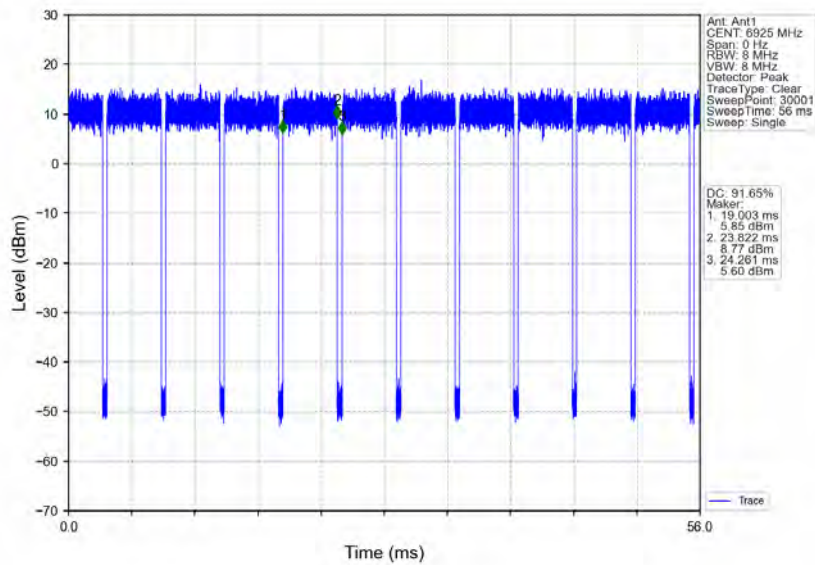
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802.11ax(HEW20)_HCH_7115MHz_RU242_Left_Ant1_NTNV



802.11ax(HEW40)_LCH_6925MHz_RU484_Left_Ant1_NTNV



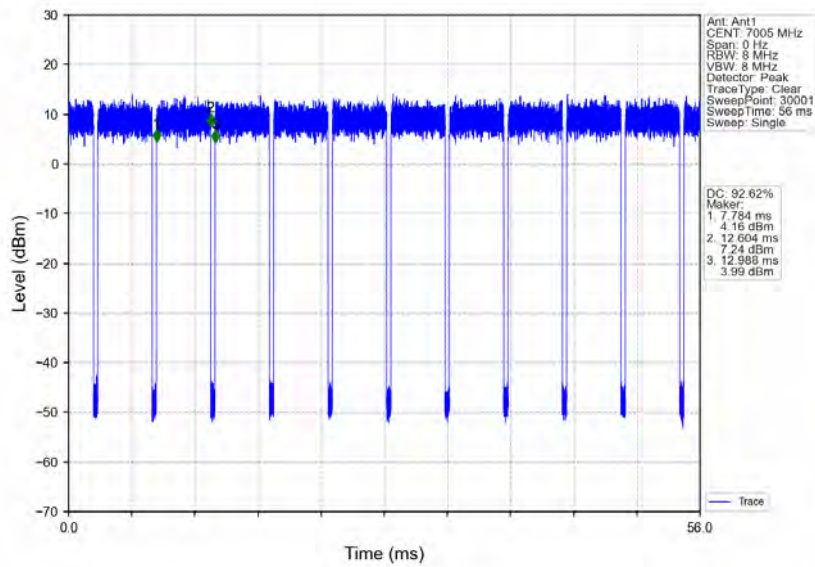
Compliance Certification Services (Kunshan) Inc.

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

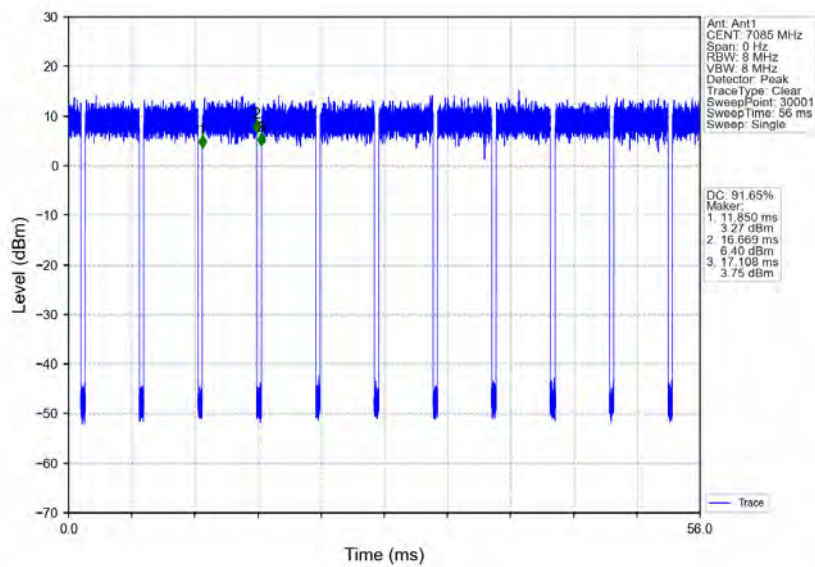
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802.11ax(HEW40)_MCH_7005MHz_RU484_Left_Ant1_NTNV



802.11ax(HEW40)_HCH_7085MHz_RU484_Left_Ant1_NTNV



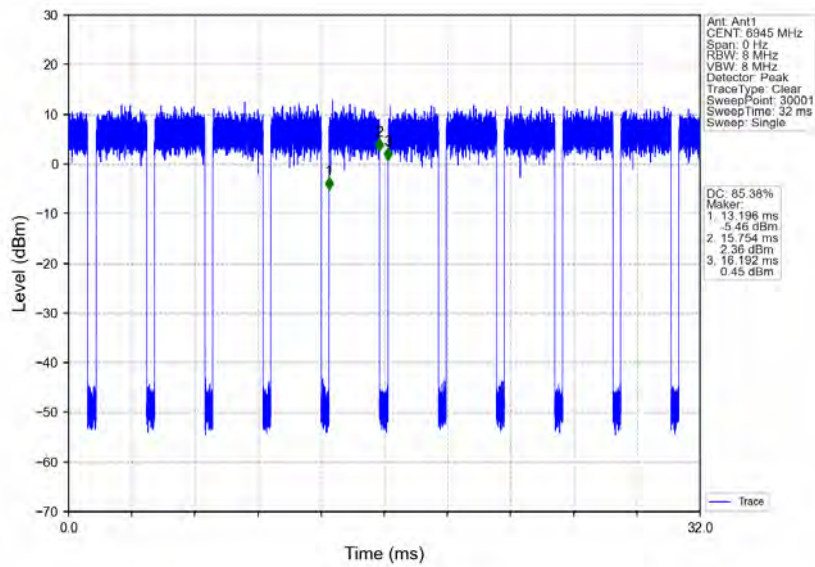
Compliance Certification Services (Kunshan) Inc.

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

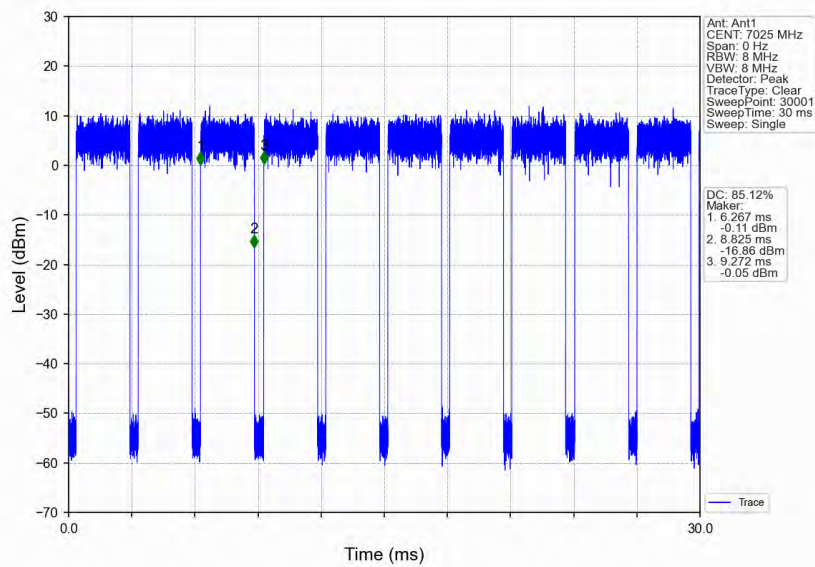
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802.11ax(HEW80)_LCH_6945MHz_RU996_Left_Ant1_NTNV



802.11ax(HEW80)_HCH_7025MHz_RU996_Left_Ant1_NTNV



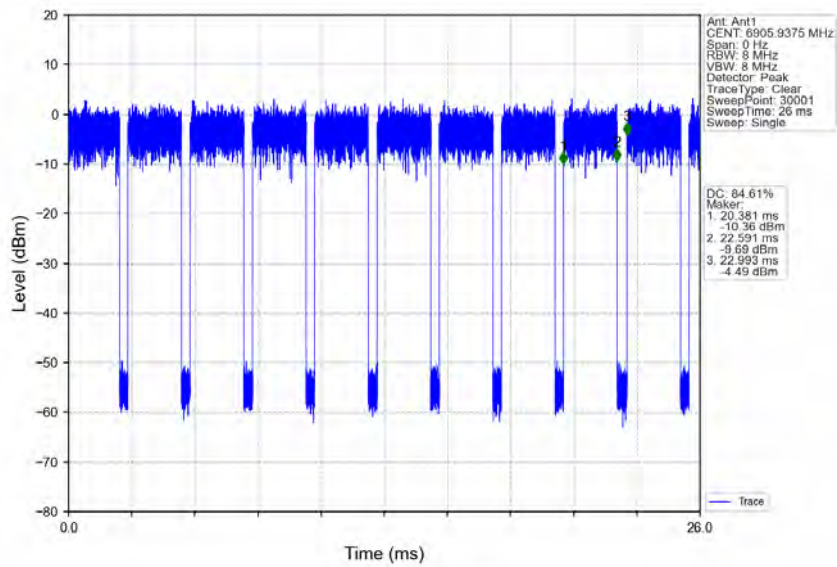
Compliance Certification Services (Kunshan) Inc.

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802.11ax(HEW160) MCH_6985MHz_2xRU996_Left_Ant1_NTNV



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2. Bandwidth

2.1 Test Result

2.1.1 OBW

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
							Result	Limit	
NTNV	802.11ax (HEW20)	MIMO	5955	RU242	Left	1	19.073	<=320	Pass
						2	19.108	<=320	Pass
			6175	RU242	Left	1	19.064	<=320	Pass
						2	19.147	<=320	Pass
			6415	RU242	Left	1	19.056	<=320	Pass
						2	19.143	<=320	Pass
	802.11ax (HEW40)	MIMO	5965	RU484	Left	1	38.032	<=320	Pass
						2	38.031	<=320	Pass
			6165	RU484	Left	1	37.867	<=320	Pass
						2	38.068	<=320	Pass
			6405	RU484	Left	1	38.031	<=320	Pass
						2	38.001	<=320	Pass
	802.11ax (HEW80)	MIMO	5985	RU996	Left	1	77.518	<=320	Pass
						2	77.661	<=320	Pass
			6145	RU996	Left	1	77.644	<=320	Pass
						2	77.786	<=320	Pass
			6385	RU996	Left	1	77.832	<=320	Pass
						2	77.862	<=320	Pass
	802.11ax (HEW160)	MIMO	6025	2xRU996	Left	1	156.743	<=320	Pass
						2	156.645	<=320	Pass
			6185	2xRU996	Left	1	156.807	<=320	Pass
						2	156.478	<=320	Pass
			6345	2xRU996	Left	1	156.697	<=320	Pass
						2	157.147	<=320	Pass

2.1.2 26dB BW

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	26dB Bandwidth (MHz)		Verdict
							Result	Limit	
NTNV	802.11ax (HEW20)	MIMO	5955	RU242	Left	1	20.749	<=320	Pass
						2	20.931	<=320	Pass
			6175	RU242	Left	1	21.045	<=320	Pass
						2	21.135	<=320	Pass
			6415	RU242	Left	1	20.777	<=320	Pass
						2	20.403	<=320	Pass
	802.11ax (HEW40)	MIMO	5965	RU484	Left	1	40.382	<=320	Pass
						2	40.564	<=320	Pass

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			6165	RU484	Left	1	40.339	<=320	Pass		
			6405	RU484	Left	2	40.342	<=320	Pass		
						1	40.207	<=320	Pass		
			2	40.422	<=320	Pass					
	802.11ax (HEW80)	MIMO	5985	RU996	Left	1	82.486	<=320	Pass		
			6145	RU996	Left	2	82.077	<=320	Pass		
						1	82.176	<=320	Pass		
			6385	RU996	Left	2	82.803	<=320	Pass		
						1	81.932	<=320	Pass		
			802.11ax (HEW160)	MIMO	6025	2xRU996	Left	2	82.301	<=320	Pass
								1	165.917	<=320	Pass
					6185	2xRU996	Left	2	163.786	<=320	Pass
	1	165.017						<=320	Pass		
	6345	2xRU996			Left	2	164.939	<=320	Pass		
						1	164.429	<=320	Pass		
						2	166.907	<=320	Pass		

2.1.3 OBW

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
							Result	Limit	
NTNV	802.11ax (HEW20)	MIMO	6435	RU242	Left	1	19.050	<=320	Pass
						2	19.142	<=320	Pass
			6475	RU242	Left	1	19.122	<=320	Pass
						2	19.218	<=320	Pass
			6515	RU242	Left	1	19.095	<=320	Pass
						2	19.168	<=320	Pass
	802.11ax (HEW40)	MIMO	6445	RU484	Left	1	38.030	<=320	Pass
						2	38.064	<=320	Pass
			6485	RU484	Left	1	37.897	<=320	Pass
						2	37.971	<=320	Pass
	802.11ax (HEW80)	MIMO	6465	RU996	Left	1	77.667	<=320	Pass
						2	77.654	<=320	Pass

2.1.4 26dB BW

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	26dB Bandwidth (MHz)		Verdict
							Result	Limit	
NTNV	802.11ax (HEW20)	MIMO	6435	RU242	Left	1	21.006	<=320	Pass
						2	20.914	<=320	Pass
			6475	RU242	Left	1	21.042	<=320	Pass
						2	20.959	<=320	Pass
			6515	RU242	Left	1	21.294	<=320	Pass
						2	20.568	<=320	Pass
	802.11ax (HEW40)	MIMO	6445	RU484	Left	1	40.614	<=320	Pass
						2	40.396	<=320	Pass
			6485	RU484	Left	1	40.106	<=320	Pass

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						2	40.298	<=320	Pass
	802.11ax (HEW80)	MIMO	6465	RU996	Left	1	81.680	<=320	Pass
						2	81.876	<=320	Pass

2.1.5 OBW

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
							Result	Limit	
NTNV	802.11ax (HEW20)	MIMO	6535	RU242	Left	1	19.079	<=320	Pass
						2	19.085	<=320	Pass
			6695	RU242	Left	1	19.086	<=320	Pass
						2	19.159	<=320	Pass
			6855	RU242	Left	1	19.130	<=320	Pass
						2	19.149	<=320	Pass
	802.11ax (HEW40)	MIMO	6565	RU484	Left	1	37.968	<=320	Pass
						2	38.028	<=320	Pass
			6685	RU484	Left	1	79.468	<=320	Pass
						2	38.143	<=320	Pass
			6845	RU484	Left	1	37.934	<=320	Pass
						2	37.953	<=320	Pass
	802.11ax (HEW80)	MIMO	6625	RU996	Left	1	77.549	<=320	Pass
						2	77.703	<=320	Pass
			6705	RU996	Left	1	77.677	<=320	Pass
						2	77.741	<=320	Pass
			6785	RU996	Left	1	77.514	<=320	Pass
						2	77.604	<=320	Pass
	802.11ax (HEW160)	MIMO	6665	2xRU996	Left	1	156.059	<=320	Pass
						2	157.027	<=320	Pass

2.1.6 26dB BW

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	26dB Bandwidth (MHz)		Verdict
							Result	Limit	
NTNV	802.11ax (HEW20)	MIMO	6535	RU242	Left	1	21.083	<=320	Pass
						2	21.128	<=320	Pass
			6695	RU242	Left	1	20.899	<=320	Pass
						2	21.013	<=320	Pass
			6855	RU242	Left	1	20.676	<=320	Pass
						2	21.325	<=320	Pass
	802.11ax (HEW40)	MIMO	6565	RU484	Left	1	40.550	<=320	Pass
						2	40.538	<=320	Pass
			6685	RU484	Left	1	40.315	<=320	Pass
						2	40.714	<=320	Pass
			6845	RU484	Left	1	40.175	<=320	Pass
						2	40.173	<=320	Pass
	802.11ax (HEW80)	MIMO	6625	RU996	Left	1	81.818	<=320	Pass
						2	82.018	<=320	Pass

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	802.11ax (HEW160)	MIMO	6705	RU996	Left	1	82.002	<=320	Pass
						2	81.919	<=320	Pass
			6785	RU996	Left	1	82.039	<=320	Pass
						2	82.233	<=320	Pass
			6665	2xRU996	Left	1	165.054	<=320	Pass
						2	164.798	<=320	Pass

2.1.7 OBW

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
							Result	Limit	
NTNV	802.11ax (HEW20)	MIMO	6895	RU242	Left	1	19.107	<=320	Pass
						2	19.097	<=320	Pass
			6995	RU242	Left	1	19.106	<=320	Pass
						2	19.105	<=320	Pass
			7115	RU242	Left	1	19.046	<=320	Pass
						2	19.102	<=320	Pass
	802.11ax (HEW40)	MIMO	6925	RU484	Left	1	38.000	<=320	Pass
						2	37.924	<=320	Pass
			7005	RU484	Left	1	38.083	<=320	Pass
						2	38.074	<=320	Pass
			7085	RU484	Left	1	38.036	<=320	Pass
						2	38.002	<=320	Pass
	802.11ax (HEW80)	MIMO	6945	RU996	Left	1	77.525	<=320	Pass
						2	77.687	<=320	Pass
			7025	RU996	Left	1	77.773	<=320	Pass
						2	77.696	<=320	Pass
	802.11ax (HEW160)	MIMO	6985	2xRU996	Left	1	157.112	<=320	Pass
						2	156.851	<=320	Pass

2.1.8 26dB BW

ENV	Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	26dB Bandwidth (MHz)		Verdict
							Result	Limit	
NTNV	802.11ax (HEW20)	MIMO	6895	RU242	Left	1	20.852	<=320	Pass
						2	20.676	<=320	Pass
			6995	RU242	Left	1	20.840	<=320	Pass
						2	20.898	<=320	Pass
			7115	RU242	Left	1	20.970	<=320	Pass
						2	20.683	<=320	Pass
	802.11ax (HEW40)	MIMO	6925	RU484	Left	1	40.825	<=320	Pass
						2	40.438	<=320	Pass
			7005	RU484	Left	1	40.848	<=320	Pass
						2	40.518	<=320	Pass
			7085	RU484	Left	1	40.499	<=320	Pass
						2	40.359	<=320	Pass
	802.11ax	MIMO	6945	RU996	Left	1	82.493	<=320	Pass



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	(HEW80)					2	82.165	<=320	Pass
			7025	RU996	Left	1	82.381	<=320	Pass
						2	82.379	<=320	Pass
	802.11ax (HEW160)	MIMO	6985	2xRU996	Left	1	165.063	<=320	Pass
						2	166.233	<=320	Pass

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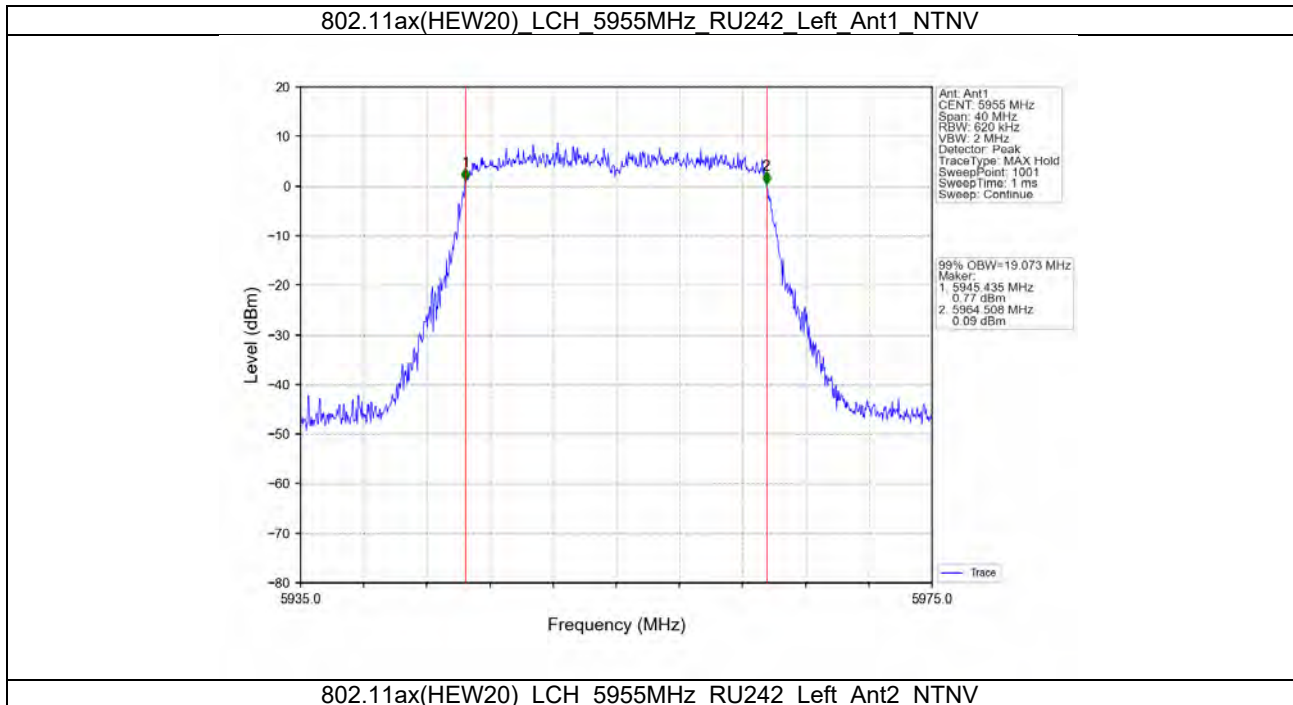
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2.2 Test Graph

2.2.1 OBW

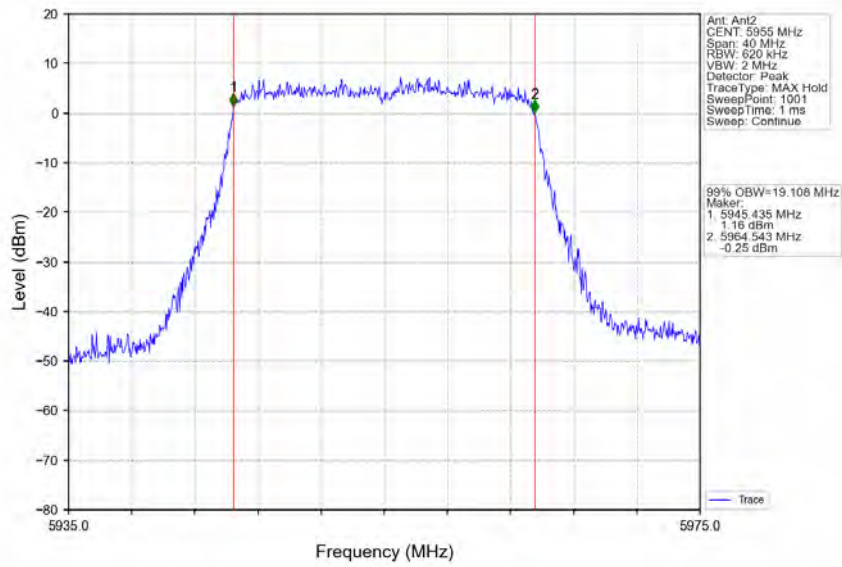


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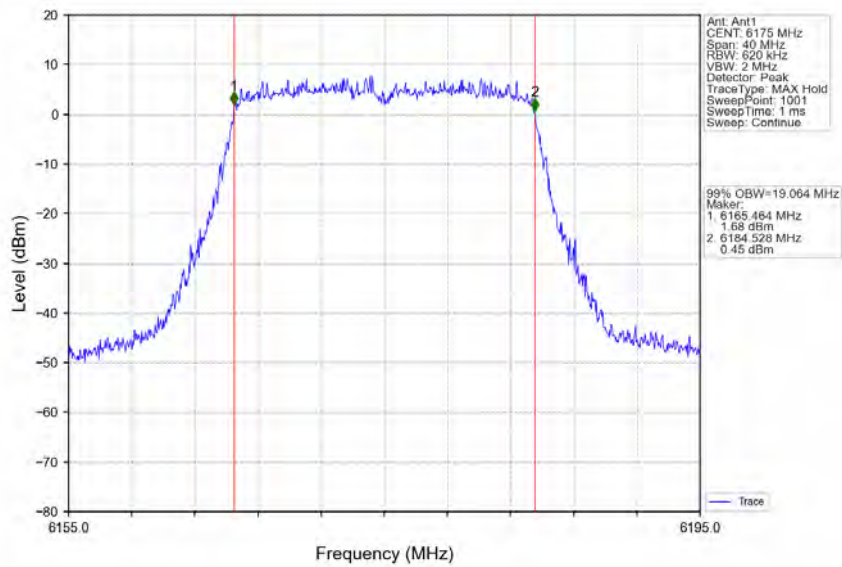
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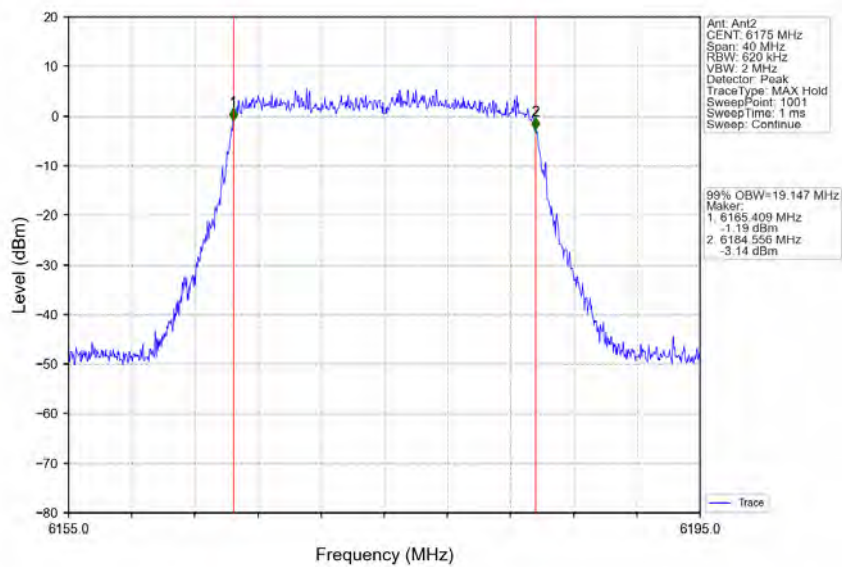
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802.11ax(HEW20)_MCH_6175MHz_RU242_Left_Ant1_NTNV



802.11ax(HEW20)_MCH_6175MHz_RU242_Left_Ant2_NTNV



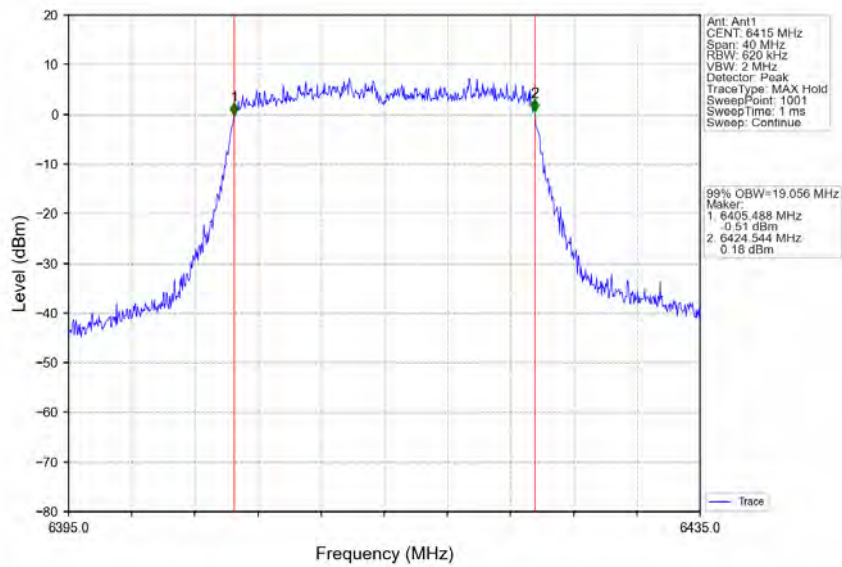
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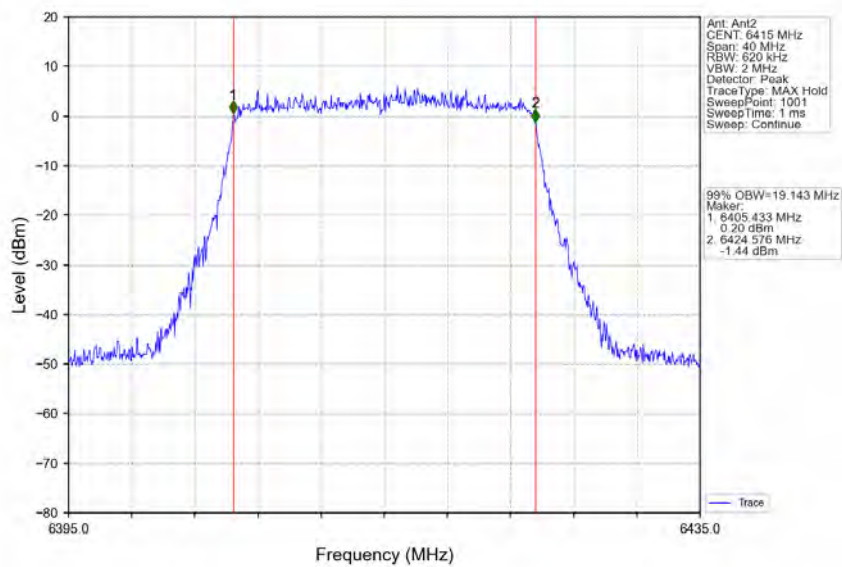
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802.11ax(HEW20)_HCH_6415MHz_RU242_Left_Ant1_NTNV



802.11ax(HEW20)_HCH_6415MHz_RU242_Left_Ant2_NTNV



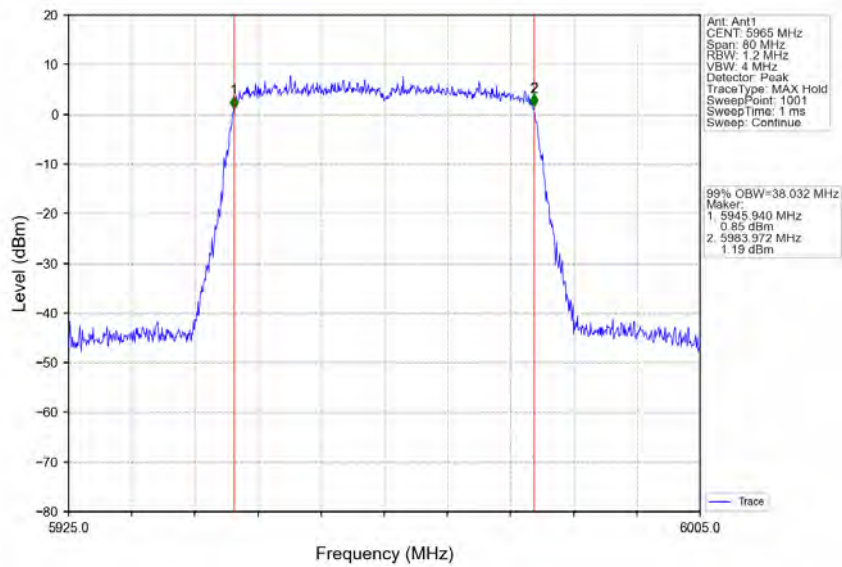
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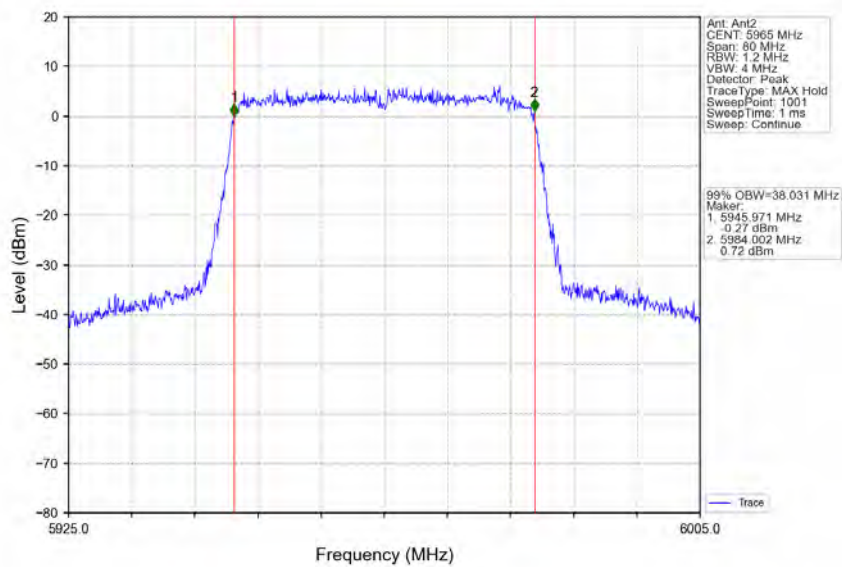
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802.11ax(HEW40)_LCH_5965MHz_RU484_Left_Ant1_NTNV



802.11ax(HEW40)_LCH_5965MHz_RU484_Left_Ant2_NTNV



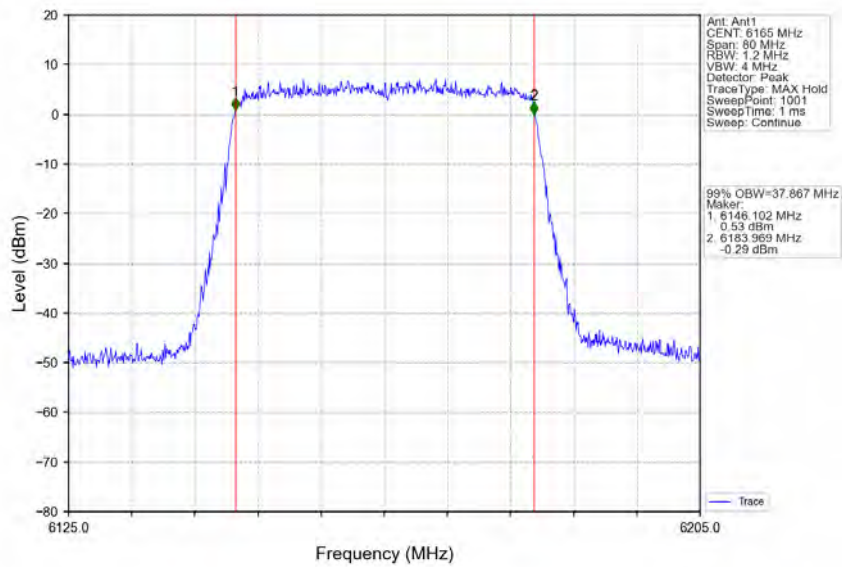
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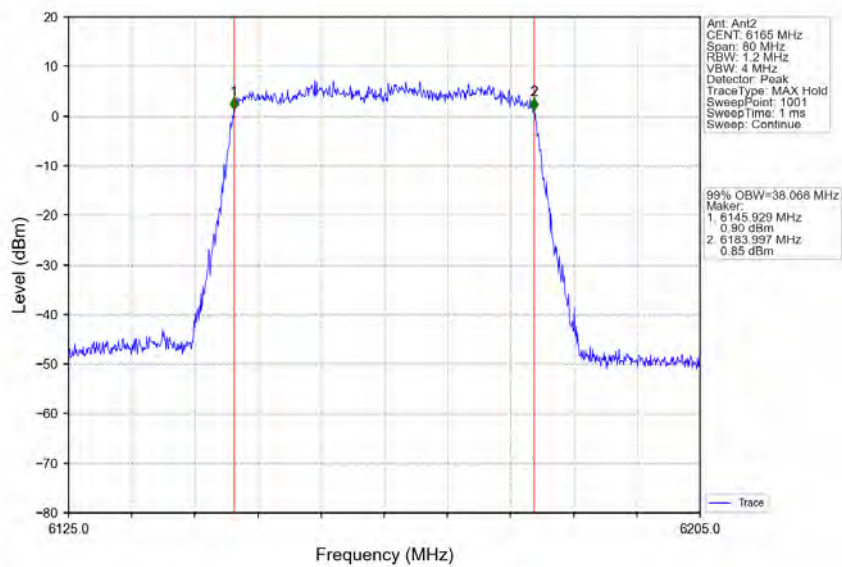
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802.11ax(HEW40)_MCH_6165MHz_RU484_Left_Ant1_NTNV



802.11ax(HEW40)_MCH_6165MHz_RU484_Left_Ant2_NTNV



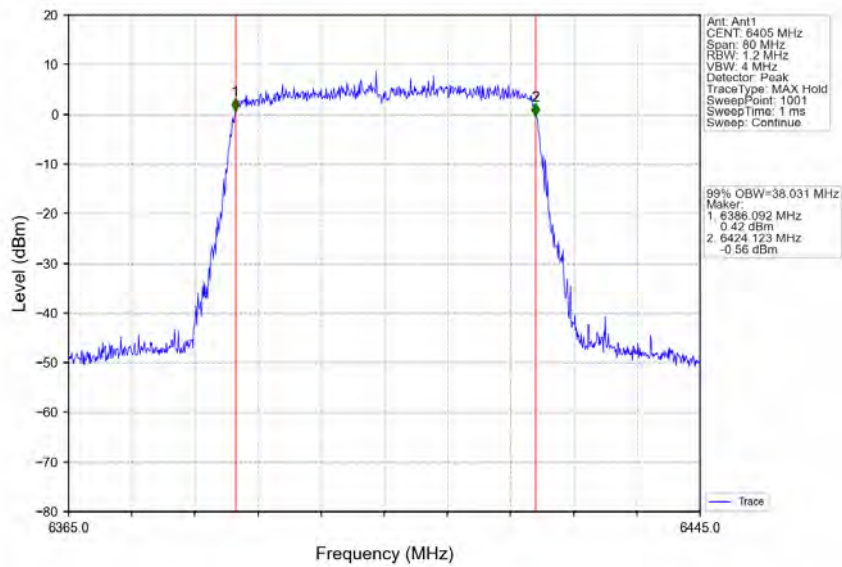
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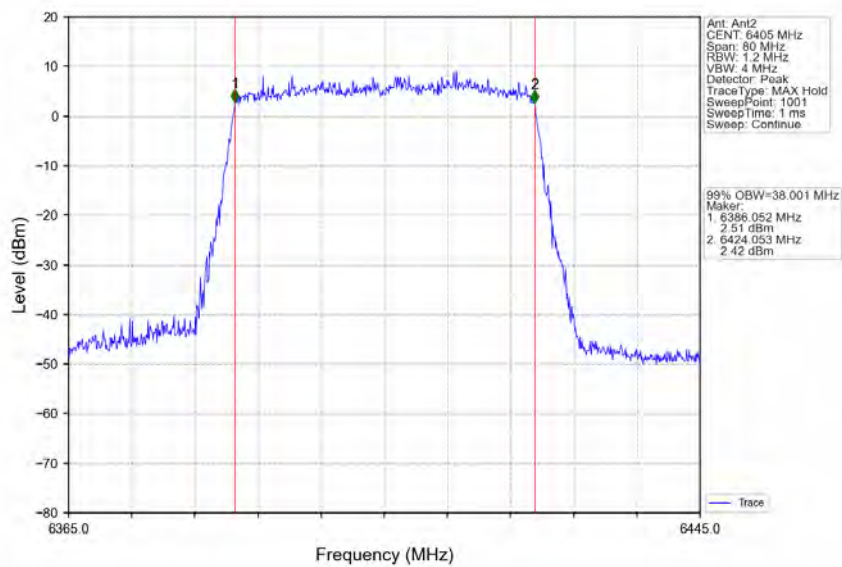
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802.11ax(HEW40)_HCH_6405MHz_RU484_Left_Ant1_NTNV



802.11ax(HEW40)_HCH_6405MHz_RU484_Left_Ant2_NTNV



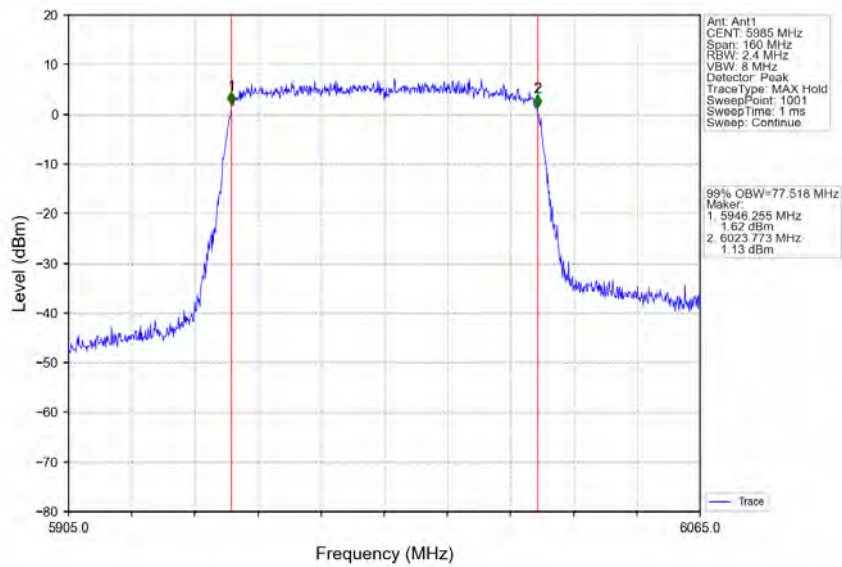
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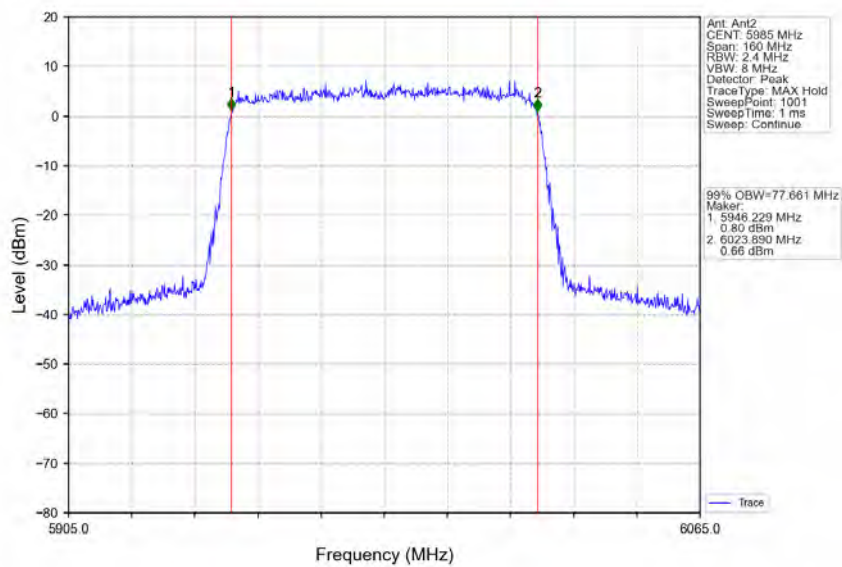
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802.11ax(HEW80)_LCH_5985MHz_RU996_Left_Ant1_NTNV



802.11ax(HEW80)_LCH_5985MHz_RU996_Left_Ant2_NTNV



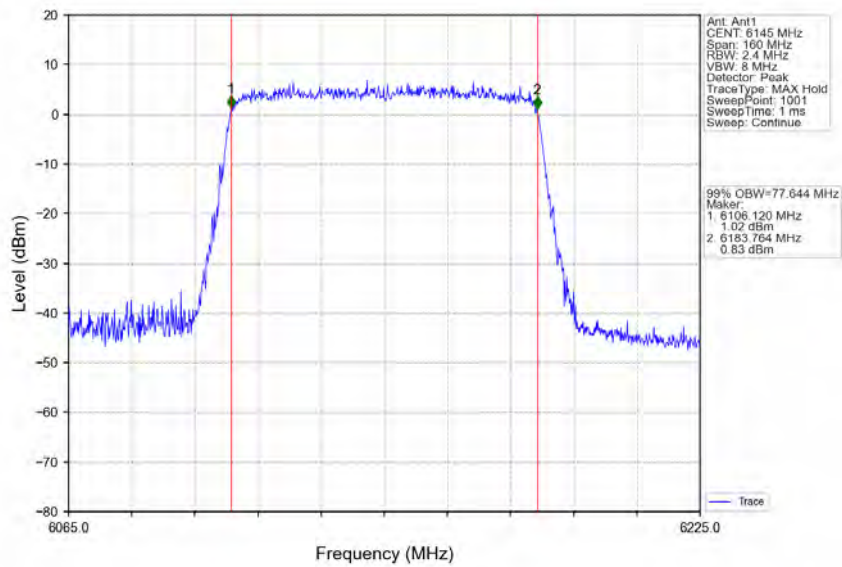
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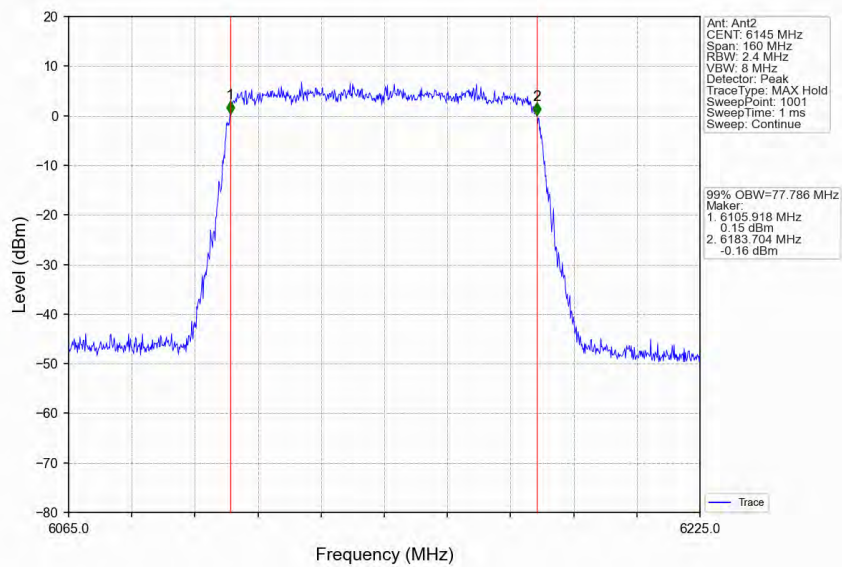
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802.11ax(HEW80)_MCH_6145MHz_RU996_Left_Ant1_NTNV



802.11ax(HEW80)_MCH_6145MHz_RU996_Left_Ant2_NTNV



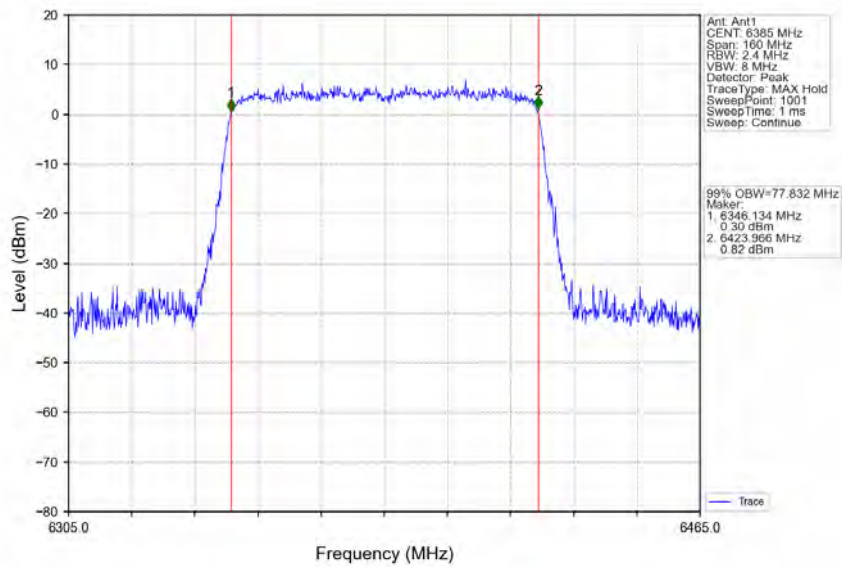
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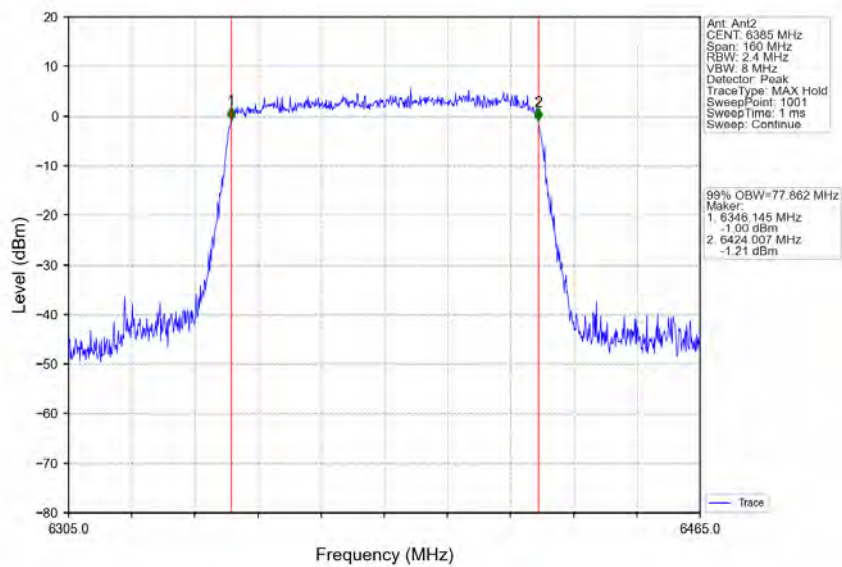
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802.11ax(HEW80)_HCH_6385MHz_RU996_Left_Ant1_NTNV



802.11ax(HEW80)_HCH_6385MHz_RU996_Left_Ant2_NTNV



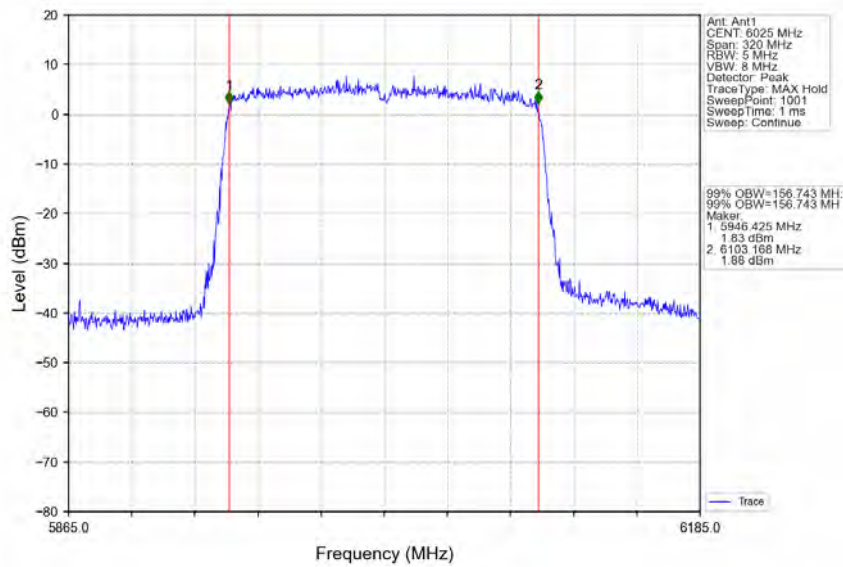
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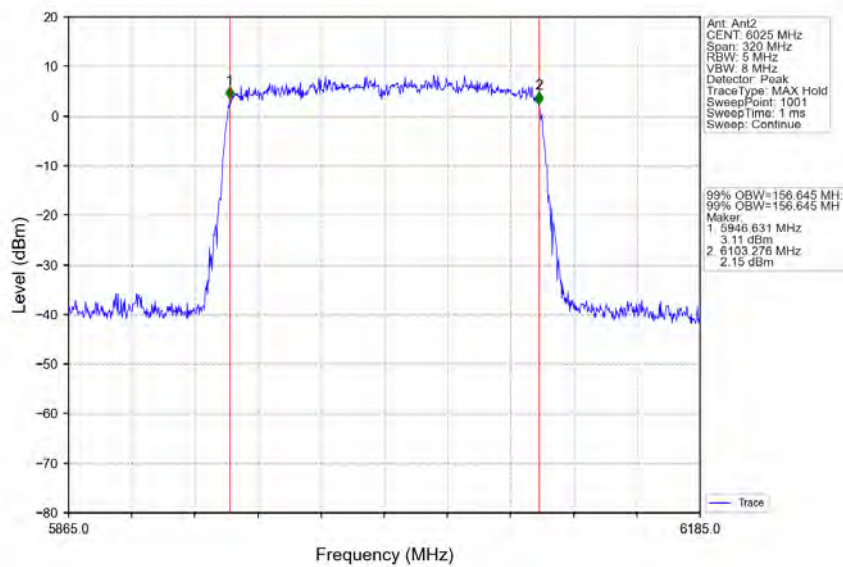
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802.11ax(HEW160)_LCH_6025MHz_2xRU996_Left_Ant1_NTNV



802.11ax(HEW160)_LCH_6025MHz_2xRU996_Left_Ant2_NTNV



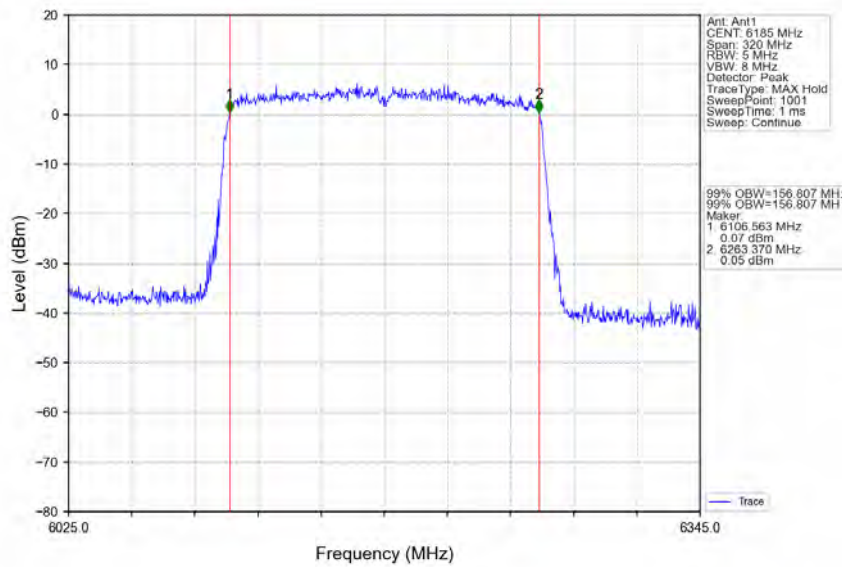
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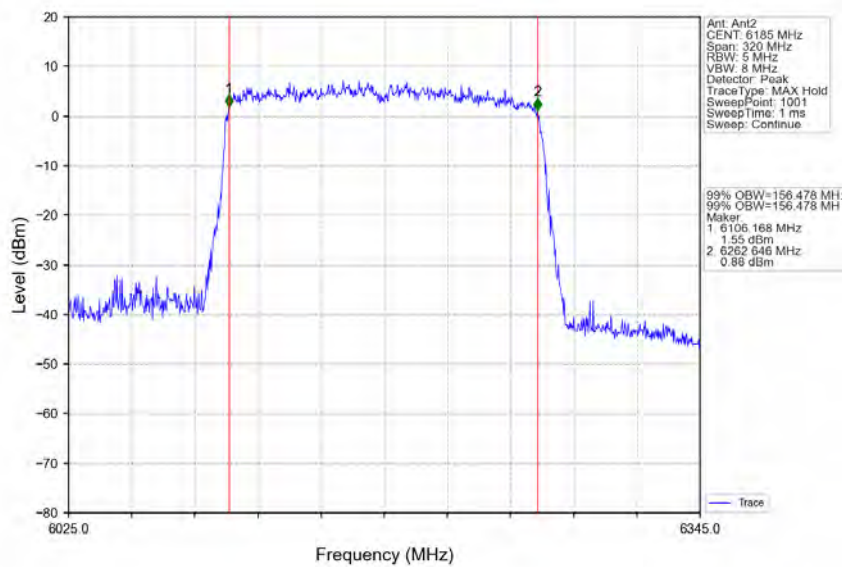
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802.11ax(HEW160) MCH_6185MHz_2xRU996_Left_Ant1_NTNV



802.11ax(HEW160) MCH_6185MHz_2xRU996_Left_Ant2_NTNV



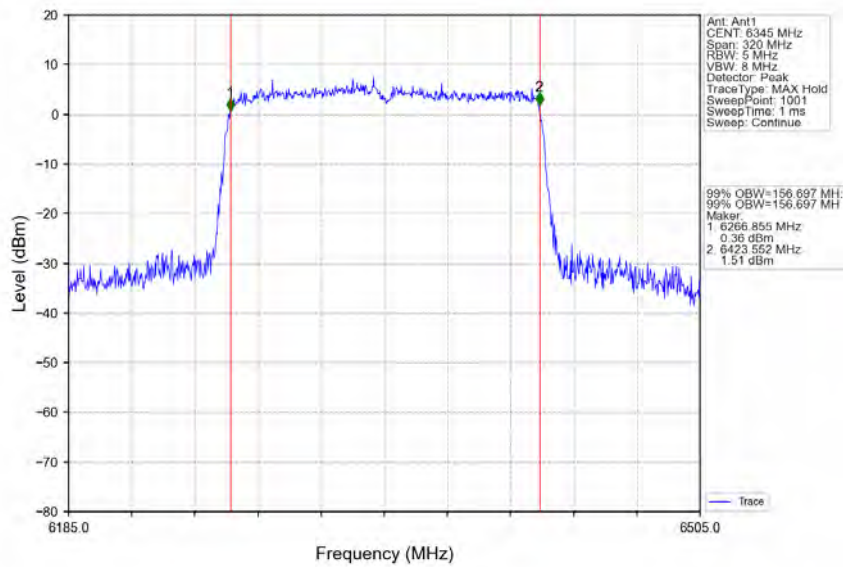
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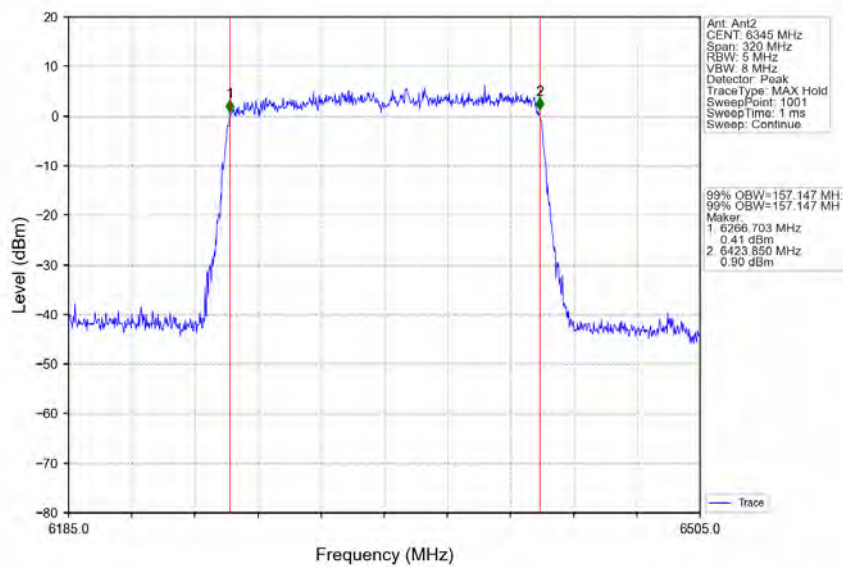
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802.11ax(HEW160) HCH_6345MHz_2xRU996_Left_Ant1_NTNV



802.11ax(HEW160) HCH_6345MHz_2xRU996_Left_Ant2_NTNV



Compliance Certification Services (Kunshan) Inc.

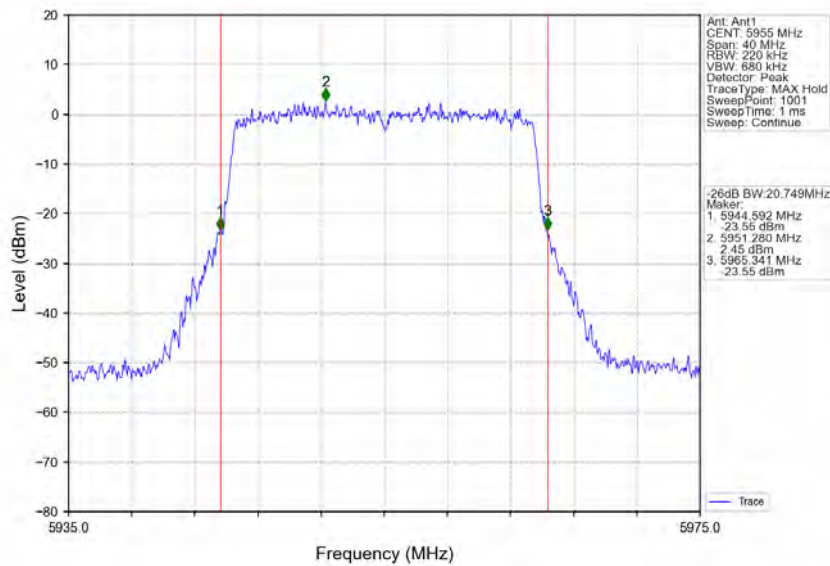
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2.2.2 26dB BW

802.11ax(HEW20)_LCH_5955MHz_RU242_Left_Ant1_NTNV



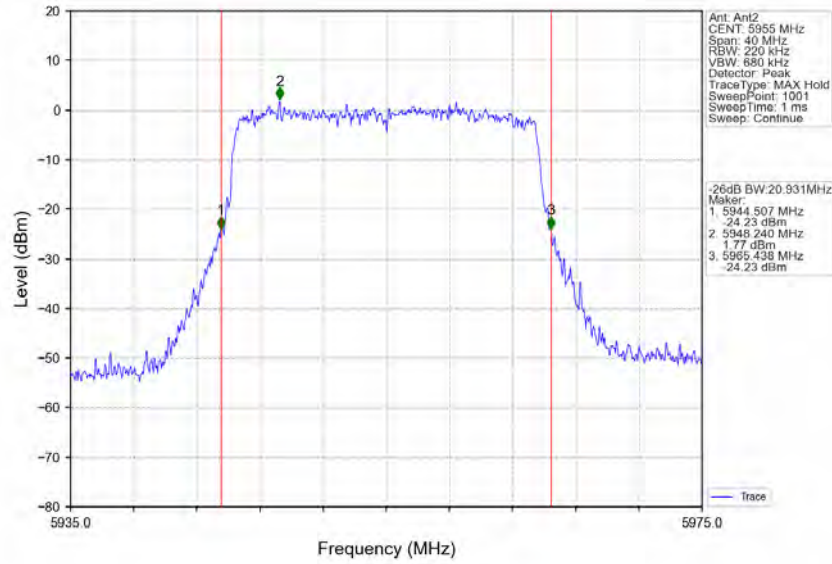
802.11ax(HEW20)_LCH_5955MHz_RU242_Left_Ant2_NTNV

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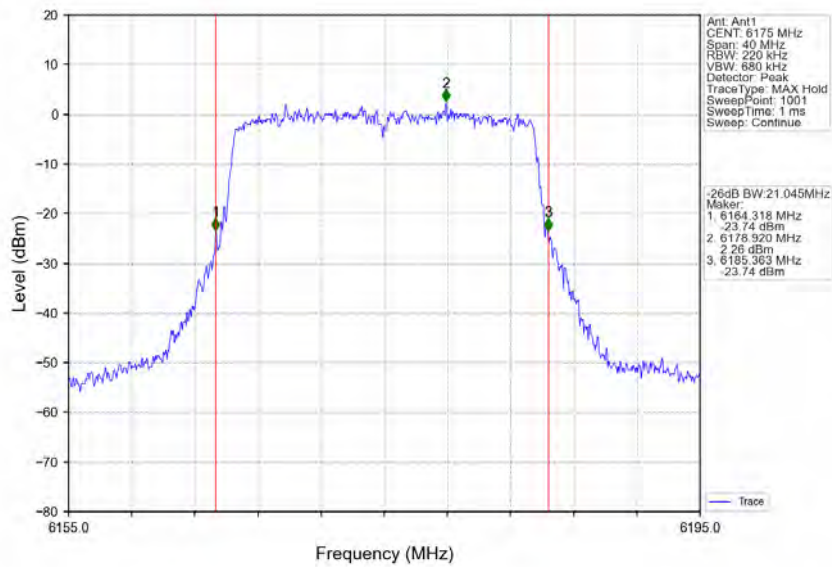
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CCSEM-TRF-001 Rev. 02 Sep 01, 2023

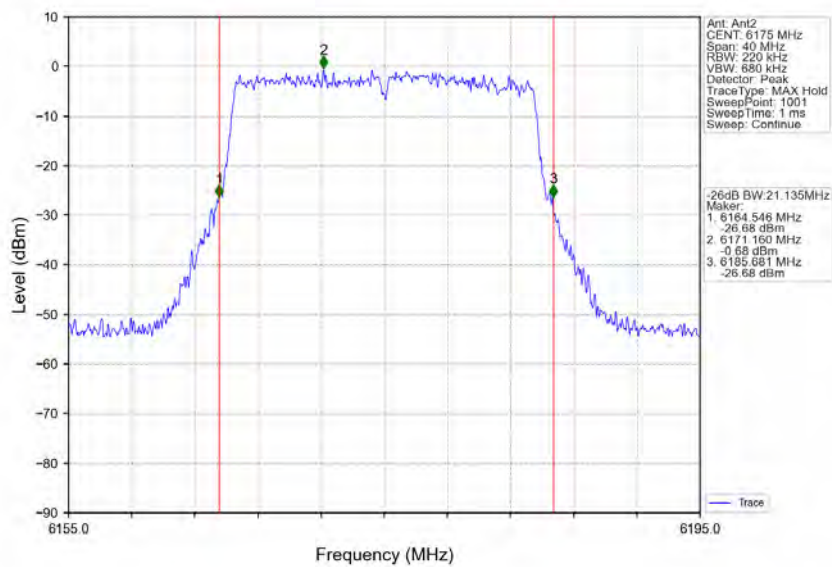
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802.11ax(HEW20)_MCH_6175MHz_RU242_Left_Ant1_NTNV



802.11ax(HEW20)_MCH_6175MHz_RU242_Left_Ant2_NTNV



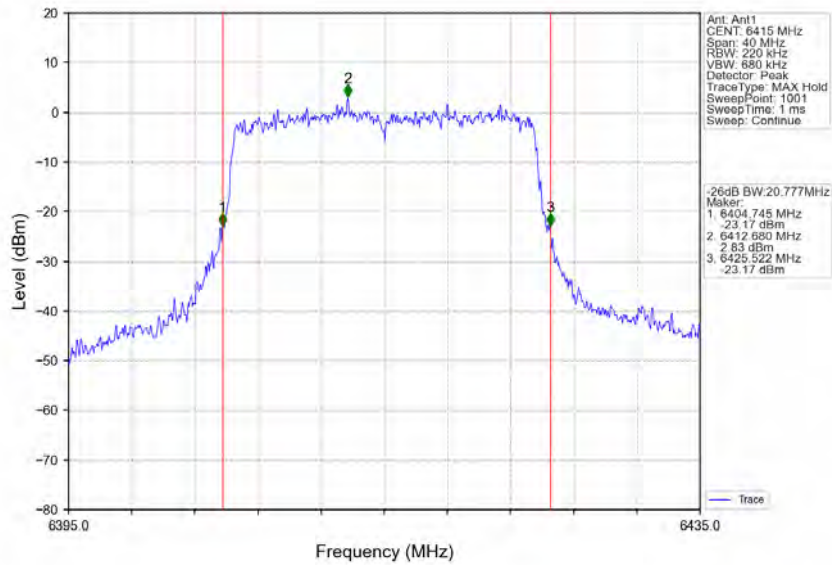
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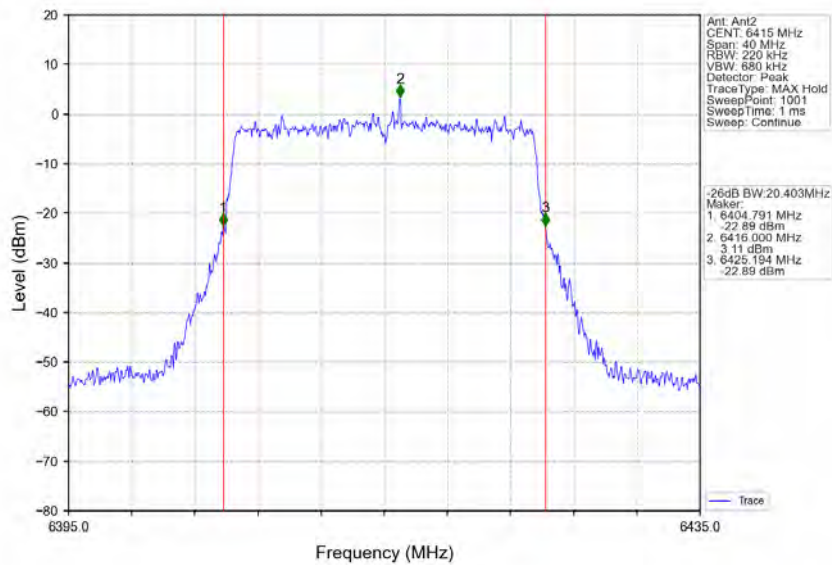
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802.11ax(HEW20)_HCH_6415MHz_RU242_Left_Ant1_NTNV



802.11ax(HEW20)_HCH_6415MHz_RU242_Left_Ant2_NTNV



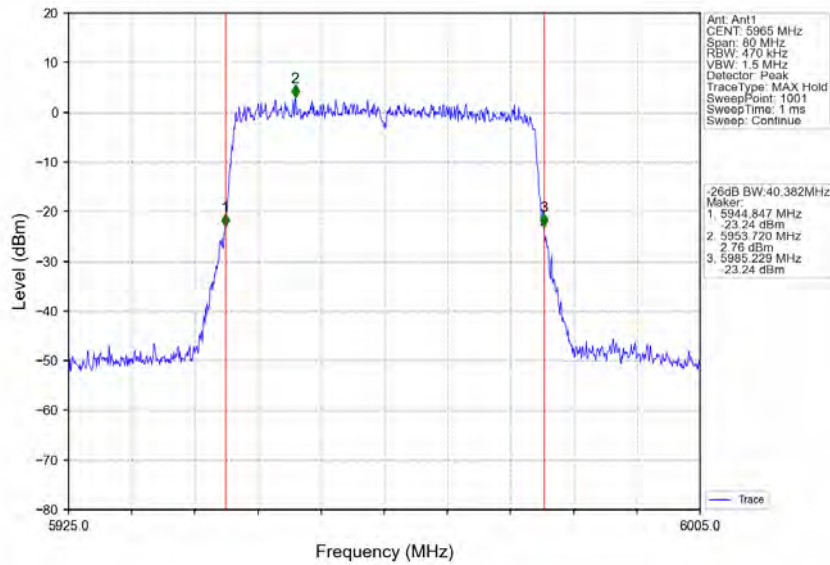
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CCSEM-TRF-001 Rev. 02 Sep 01, 2023

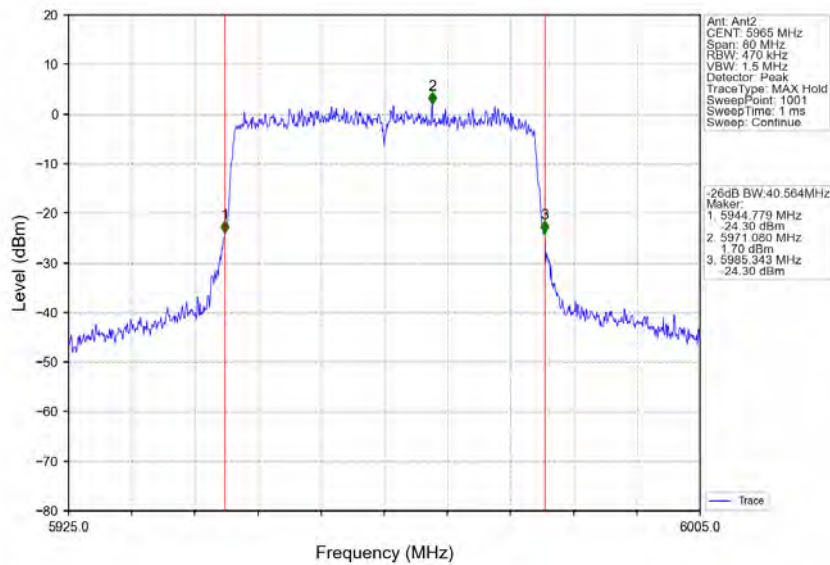
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802.11ax(HEW40)_LCH_5965MHz_RU484_Left_Ant1_NTNV



802.11ax(HEW40)_LCH_5965MHz_RU484_Left_Ant2_NTNV



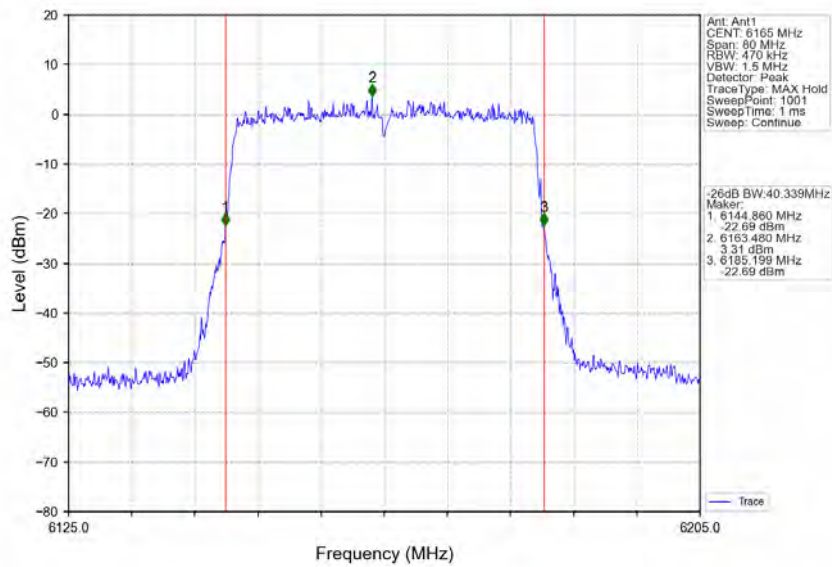
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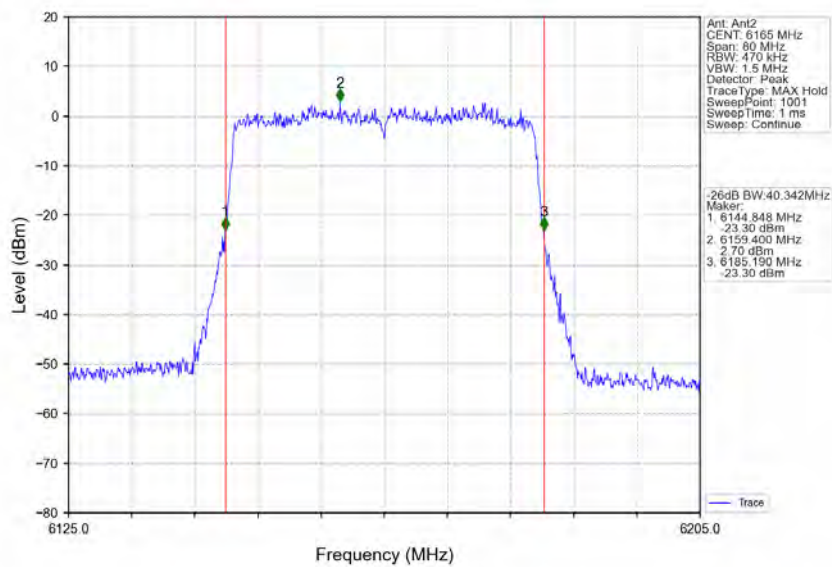
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802.11ax(HEW40)_MCH_6165MHz_RU484_Left_Ant1_NTNV



802.11ax(HEW40)_MCH_6165MHz_RU484_Left_Ant2_NTNV



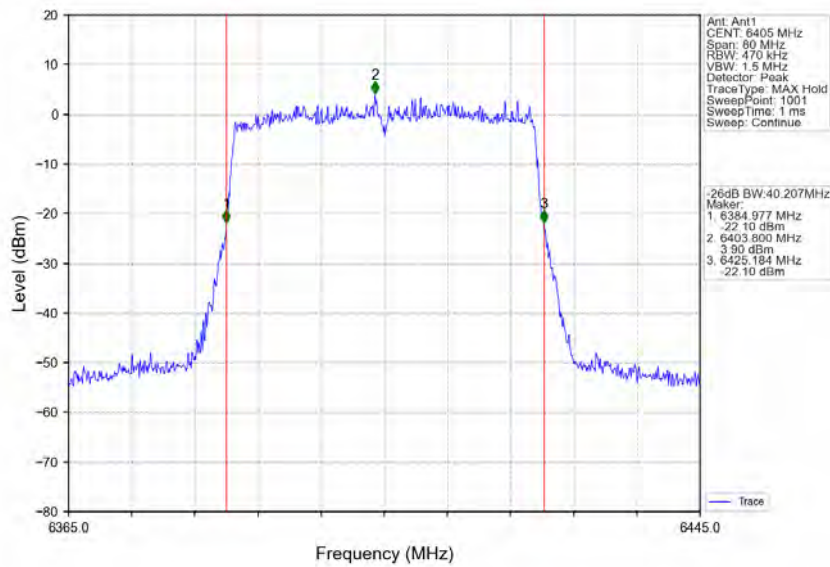
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CCSEM-TRF-001 Rev. 02 Sep 01, 2023

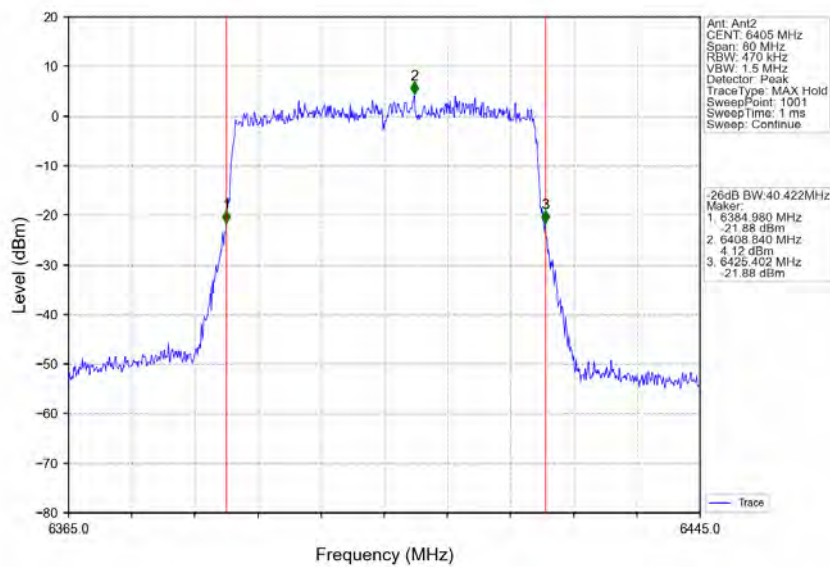
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802.11ax(HEW40)_HCH_6405MHz_RU484_Left_Ant1_NTNV



802.11ax(HEW40)_HCH_6405MHz_RU484_Left_Ant2_NTNV



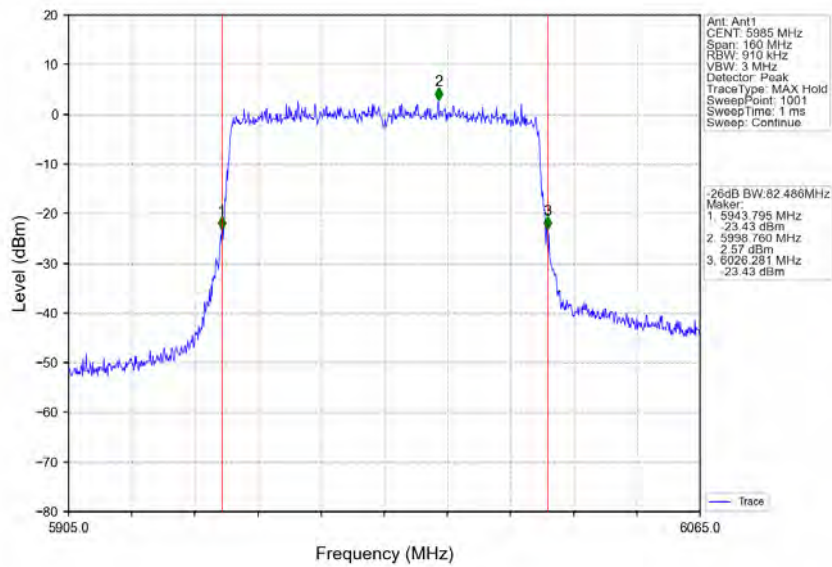
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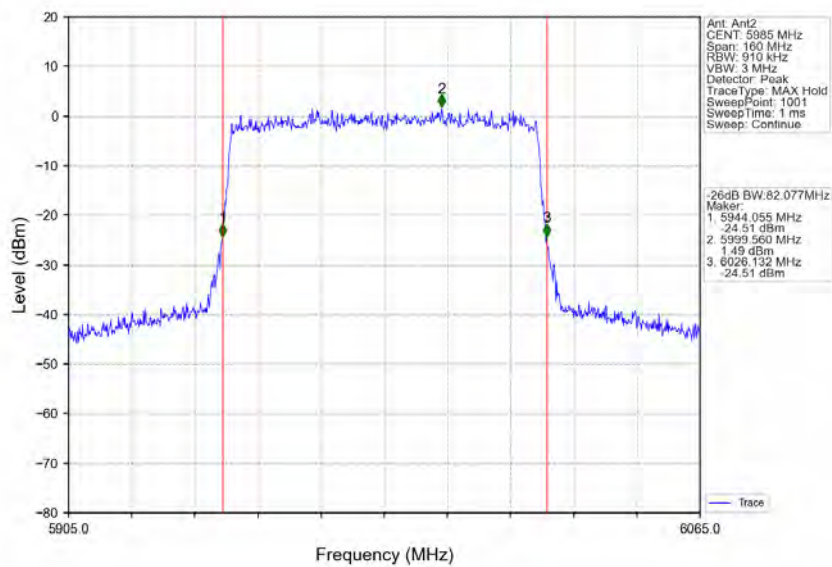
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802.11ax(HEW80)_LCH_5985MHz_RU996_Left_Ant1_NTNV



802.11ax(HEW80)_LCH_5985MHz_RU996_Left_Ant2_NTNV



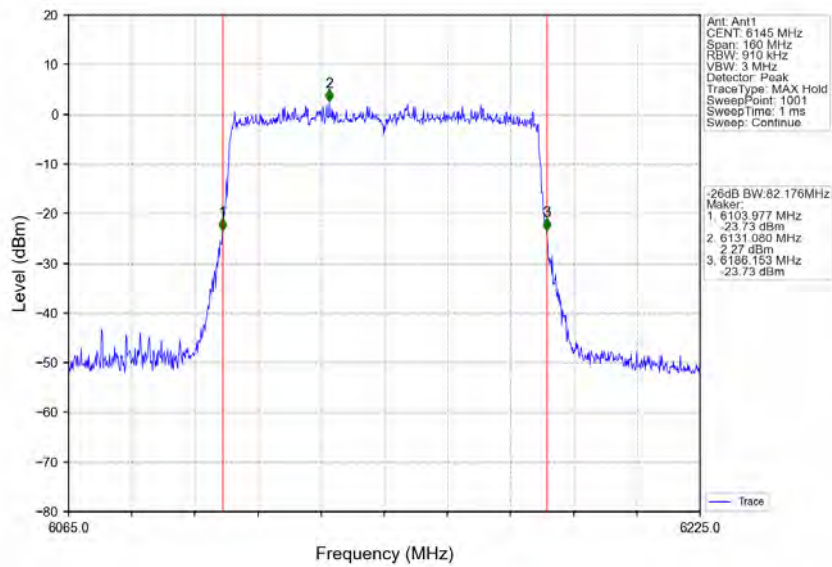
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CCSEM-TRF-001 Rev. 02 Sep 01, 2023

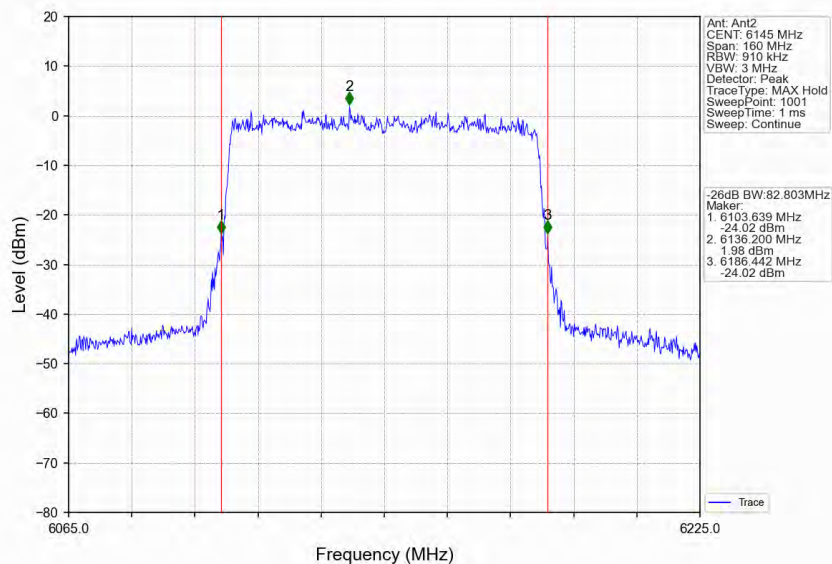
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802.11ax(HEW80)_MCH_6145MHz_RU996_Left_Ant1_NTNV



802.11ax(HEW80)_MCH_6145MHz_RU996_Left_Ant2_NTNV



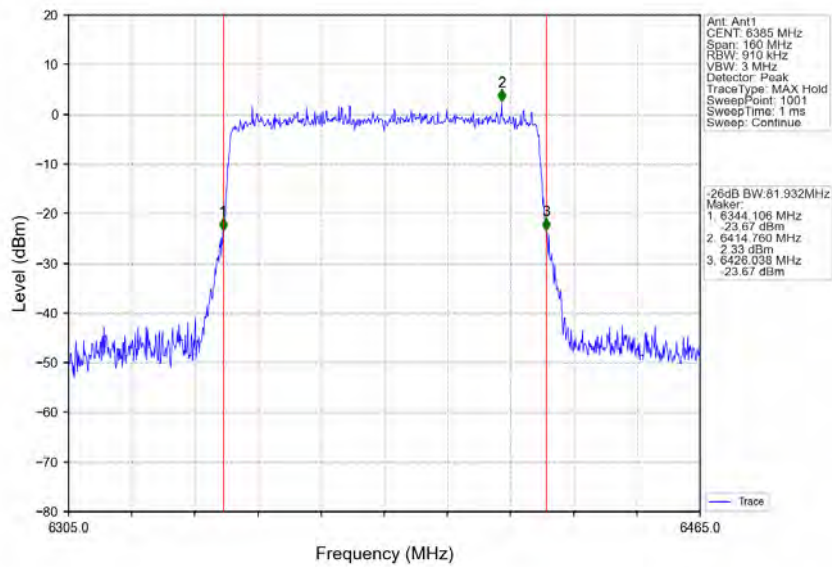
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CCSEM-TRF-001 Rev. 02 Sep 01, 2023

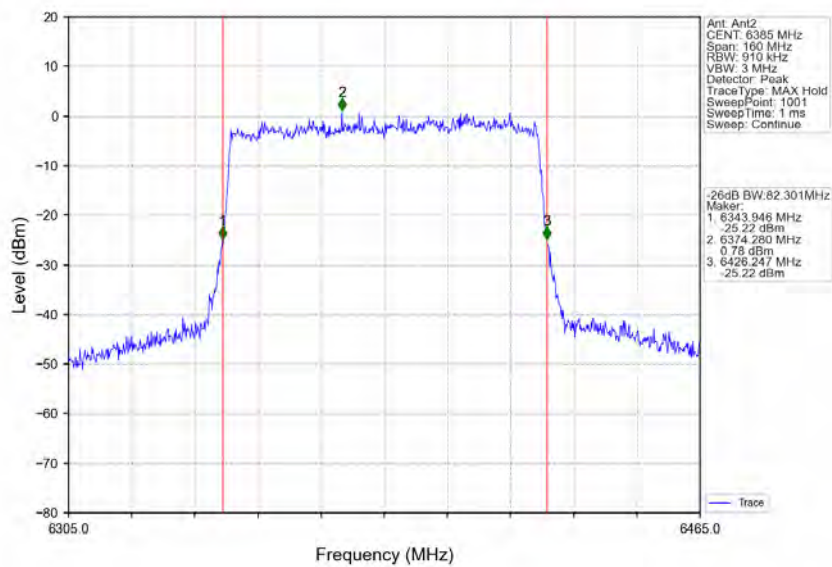
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802.11ax(HEW80)_HCH_6385MHz_RU996_Left_Ant1_NTNV



802.11ax(HEW80)_HCH_6385MHz_RU996_Left_Ant2_NTNV



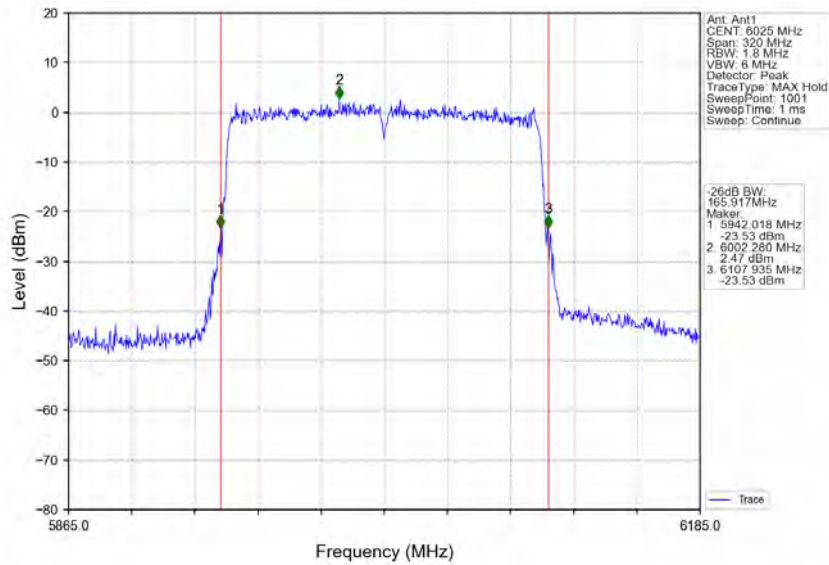
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CCSEM-TRF-001 Rev. 02 Sep 01, 2023

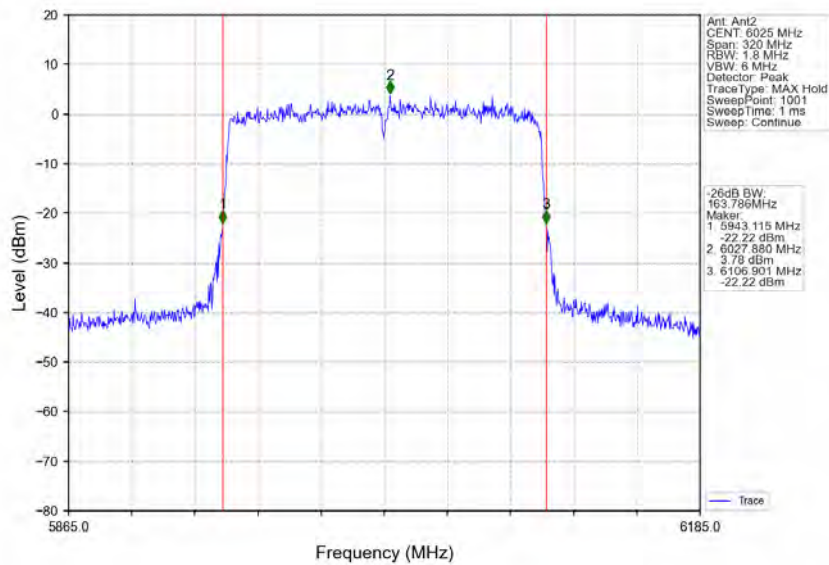
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802.11ax(HEW160)_LCH_6025MHz_2xRU996_Left_Ant1_NTNV



802.11ax(HEW160)_LCH_6025MHz_2xRU996_Left_Ant2_NTNV



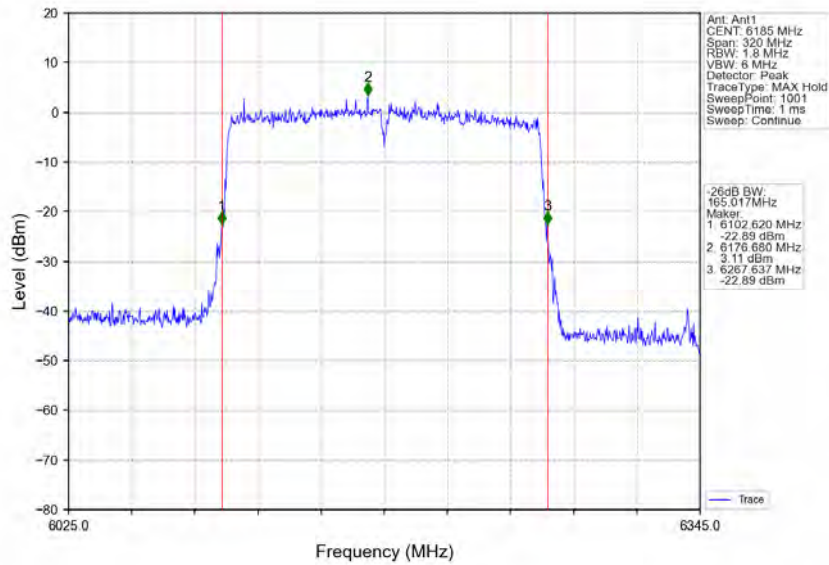
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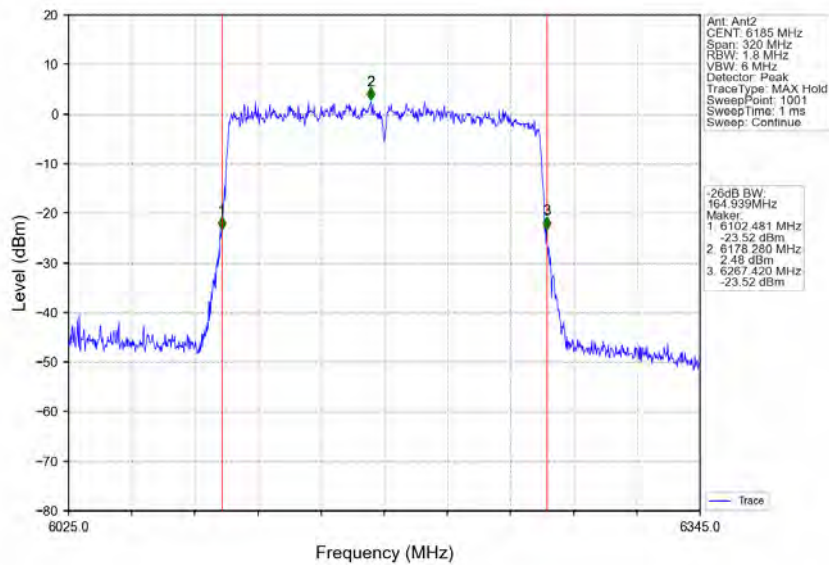
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802.11ax(HEW160) MCH_6185MHz_2xRU996_Left_Ant1_NTNV



802.11ax(HEW160) MCH_6185MHz_2xRU996_Left_Ant2_NTNV



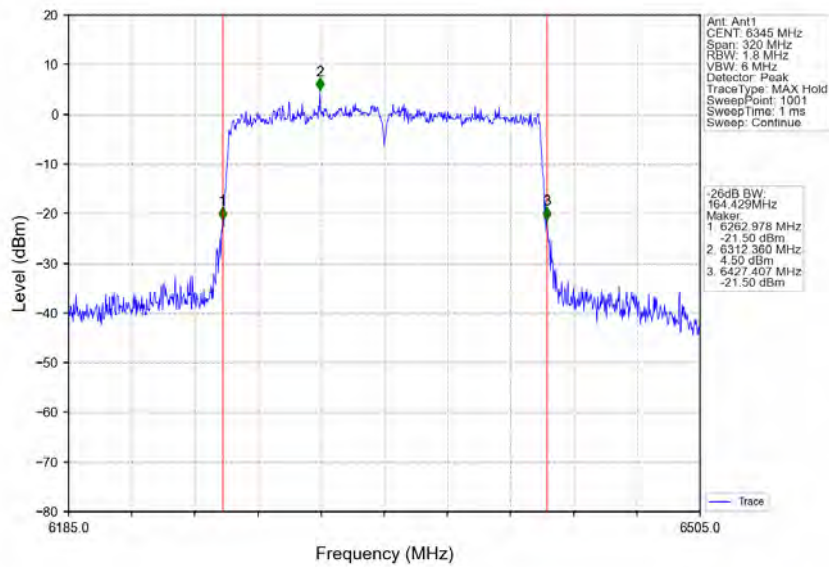
Compliance Certification Services (Kunshan) Inc.

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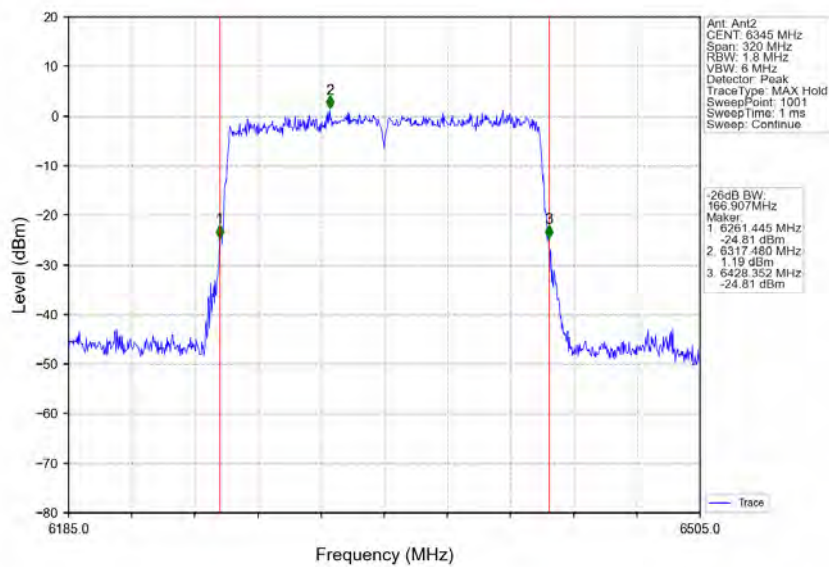
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802.11ax(HEW160) HCH_6345MHz_2xRU996_Left_Ant1_NTNV



802.11ax(HEW160) HCH_6345MHz_2xRU996_Left_Ant2_NTNV



Compliance Certification Services (Kunshan) Inc.

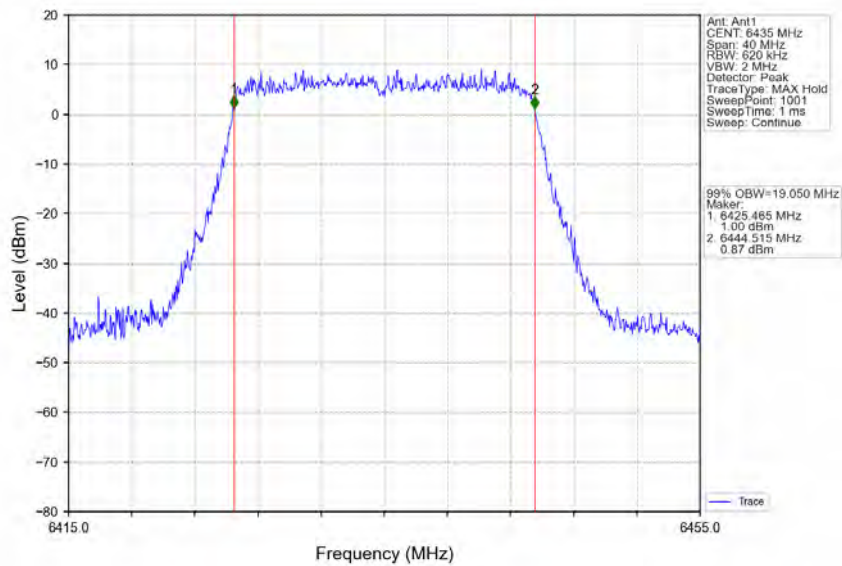
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2.2.3 OBW

802.11ax(HEW20)_LCH_6435MHz_RU242_Left_Ant1_NTNV



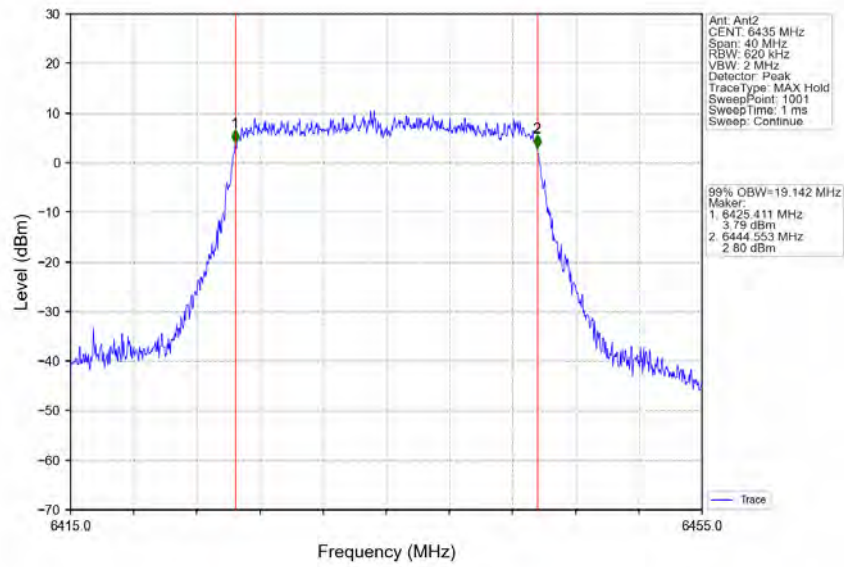
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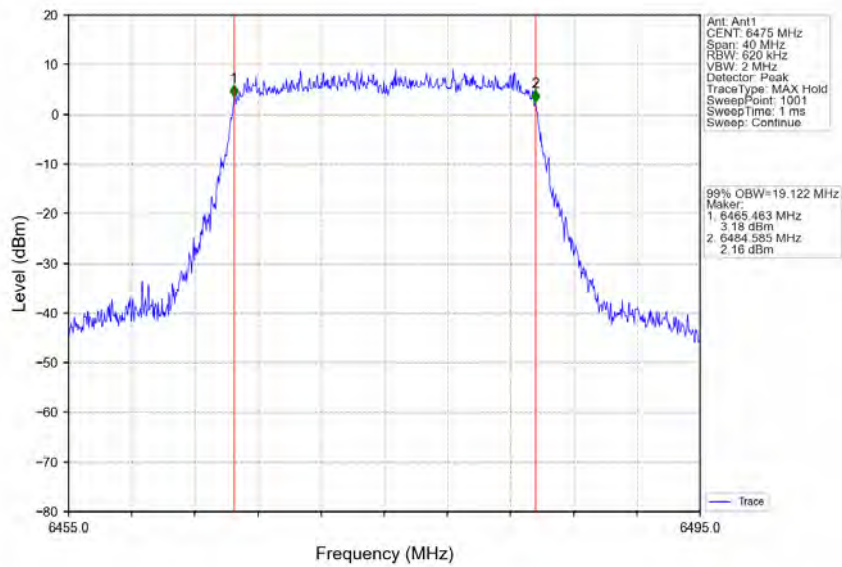
Compliance Certification Services (Kunshan) Inc.

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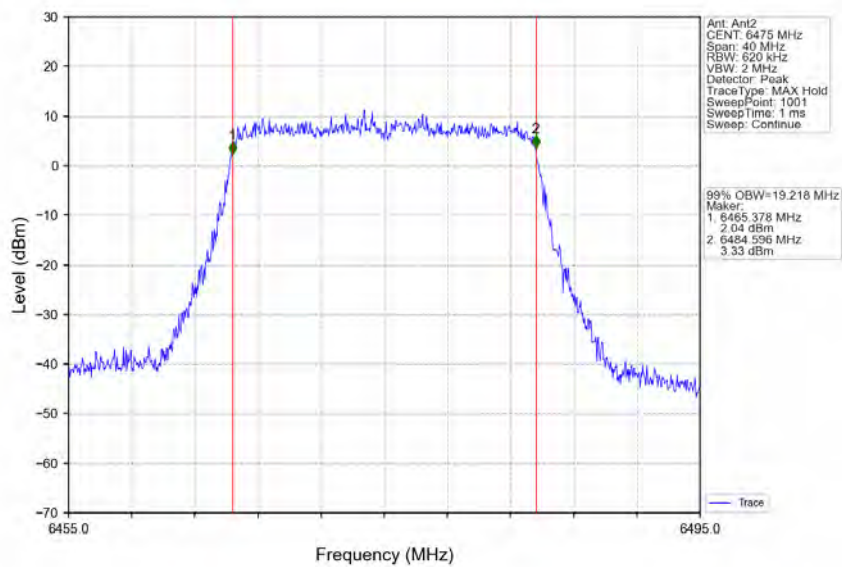
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802.11ax(HEW20)_MCH_6475MHz_RU242_Left_Ant1_NTNV



802.11ax(HEW20)_MCH_6475MHz_RU242_Left_Ant2_NTNV



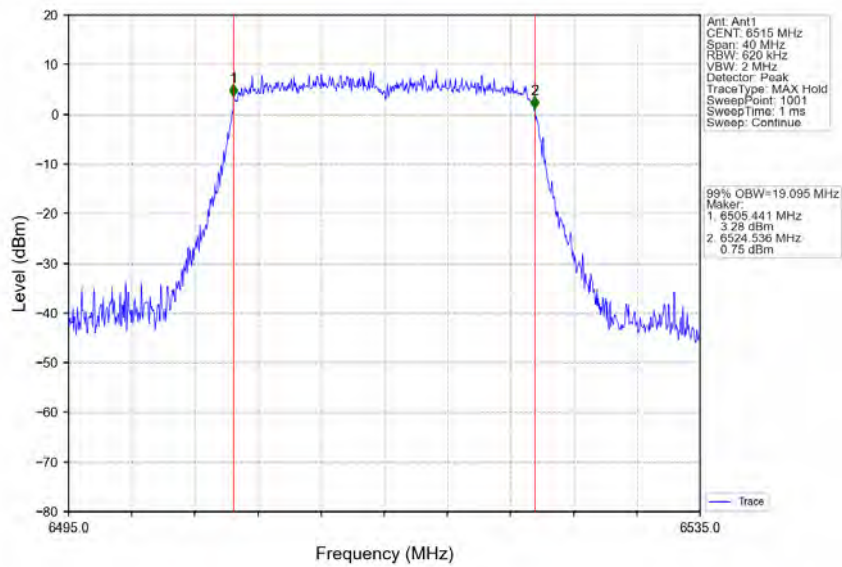
Compliance Certification Services (Kunshan) Inc.

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

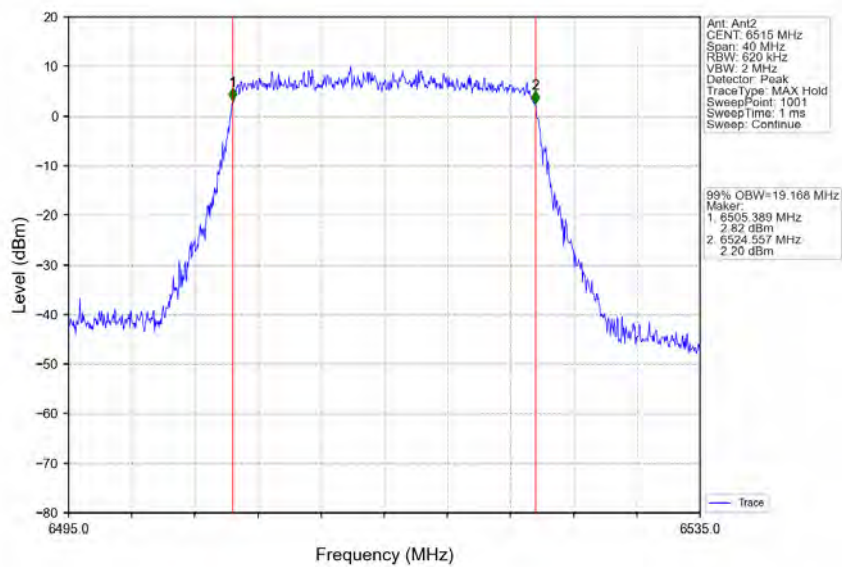
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802.11ax(HEW20)_HCH_6515MHz_RU242_Left_Ant1_NTNV



802.11ax(HEW20)_HCH_6515MHz_RU242_Left_Ant2_NTNV



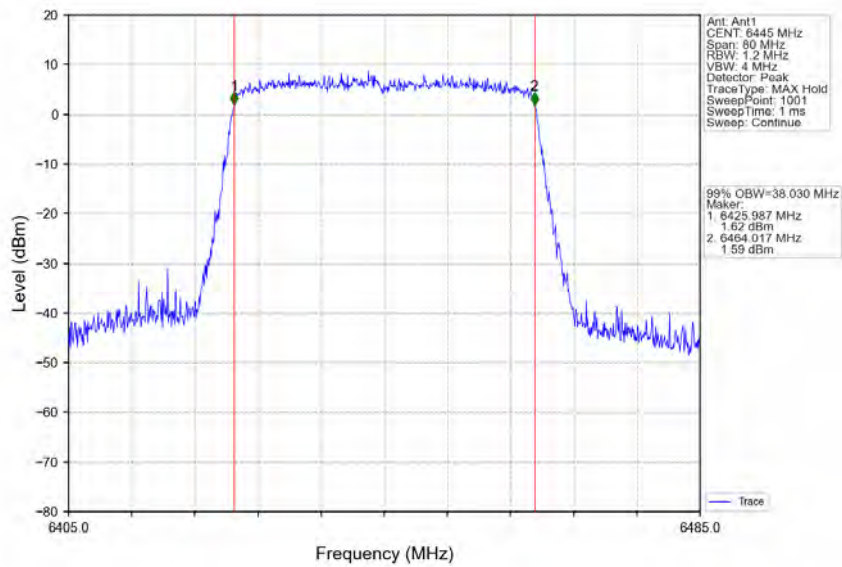
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CCSEM-TRF-001 Rev. 02 Sep 01, 2023

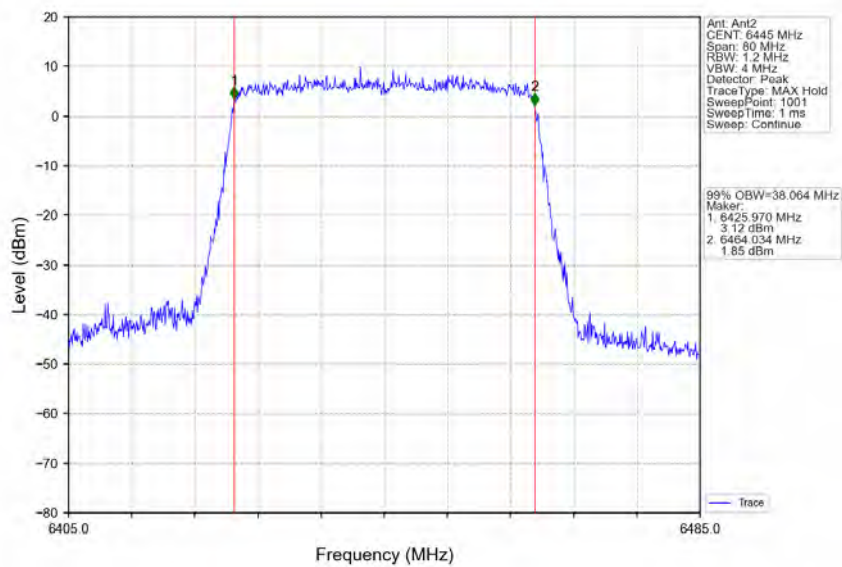
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802.11ax(HEW40)_LCH_6445MHz_RU484_Left_Ant1_NTNV



802.11ax(HEW40)_LCH_6445MHz_RU484_Left_Ant2_NTNV



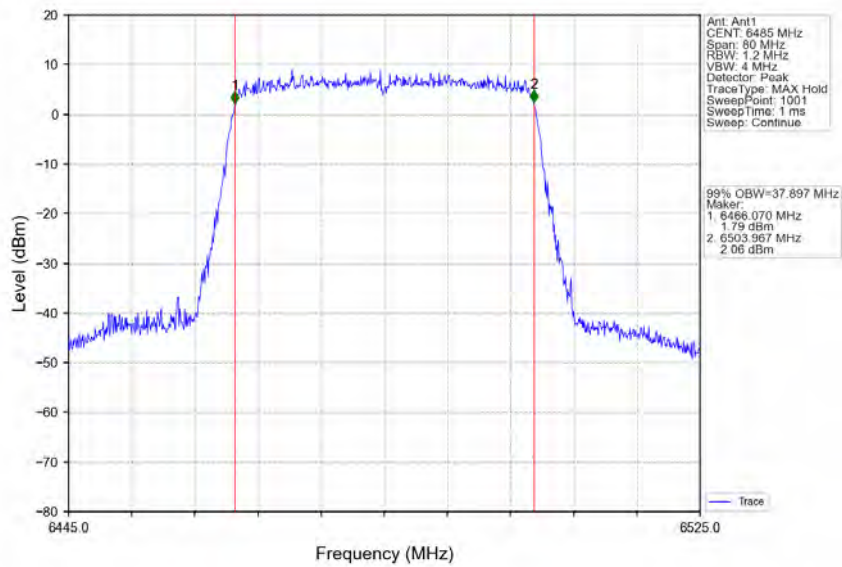
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CCSEM-TRF-001 Rev. 02 Sep 01, 2023

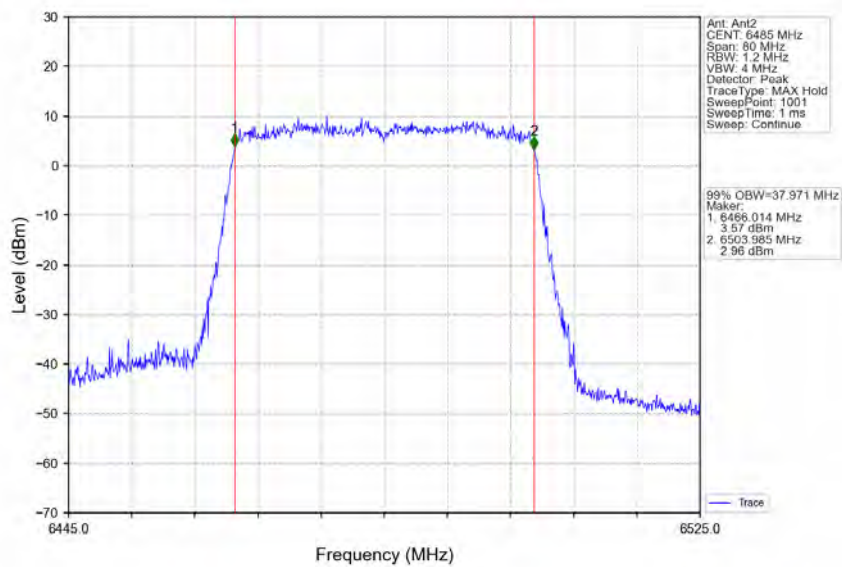
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802.11ax(HEW40)_MCH_6485MHz_RU484_Left_Ant1_NTNV



802.11ax(HEW40)_MCH_6485MHz_RU484_Left_Ant2_NTNV



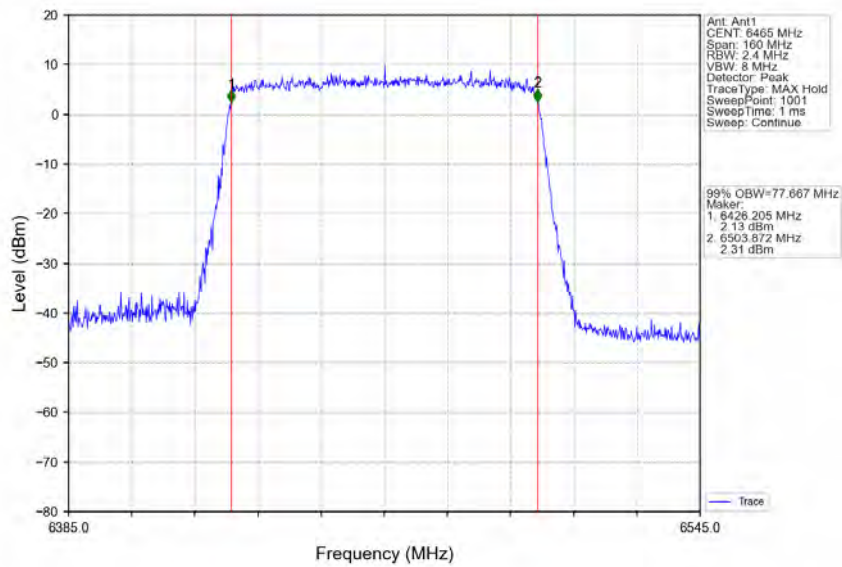
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CCSEM-TRF-001 Rev. 02 Sep 01, 2023

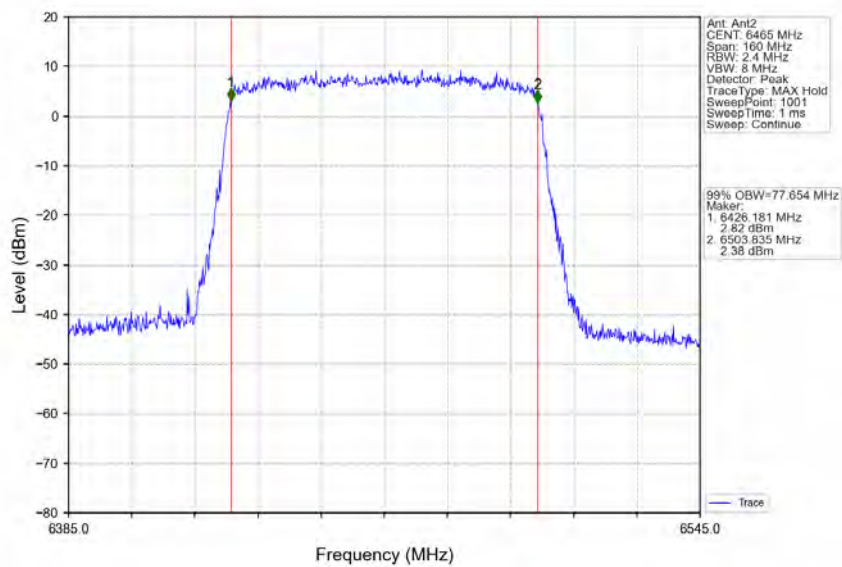
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802.11ax(HEW80)_LCH_6465MHz_RU996_Left_Ant1_NTNV



802.11ax(HEW80)_LCH_6465MHz_RU996_Left_Ant2_NTNV



Compliance Certification Services (Kunshan) Inc.

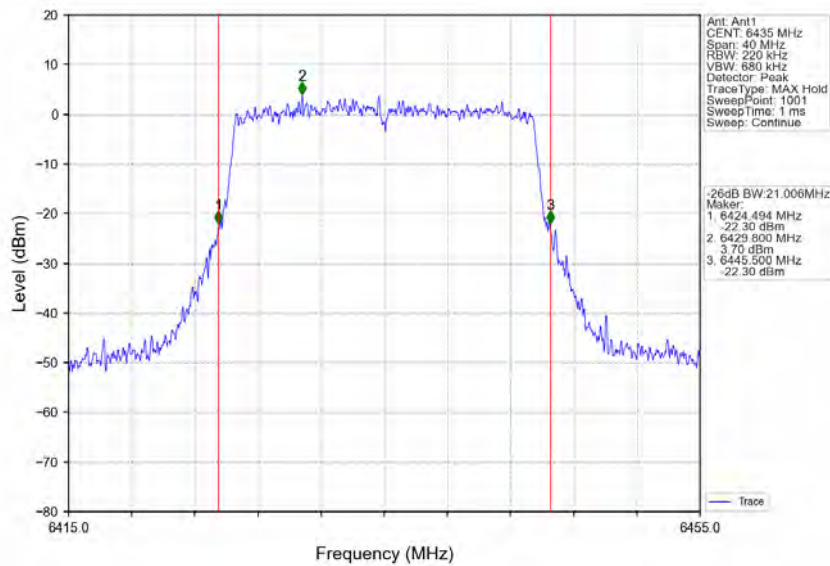
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2.2.4 26dB BW

802.11ax(HEW20)_LCH_6435MHz_RU242_Left_Ant1_NTNV



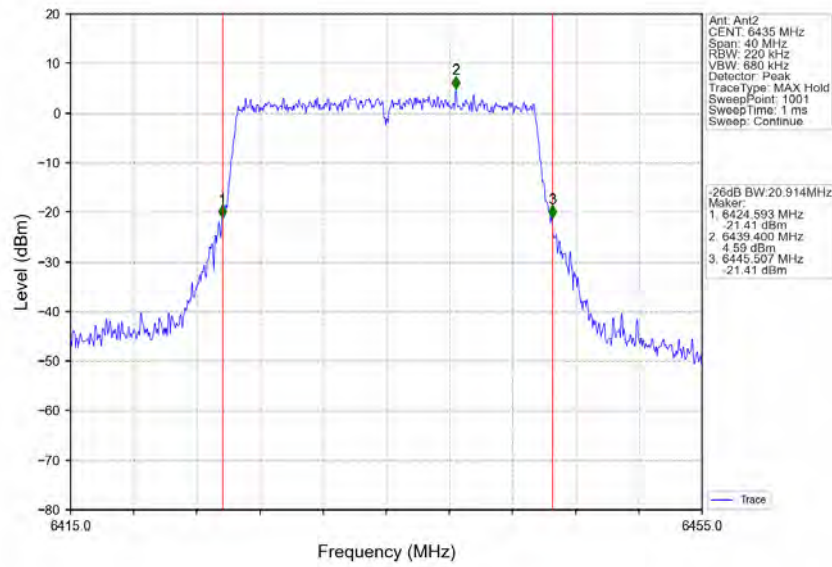
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Compliance Certification Services (Kunshan) Inc.

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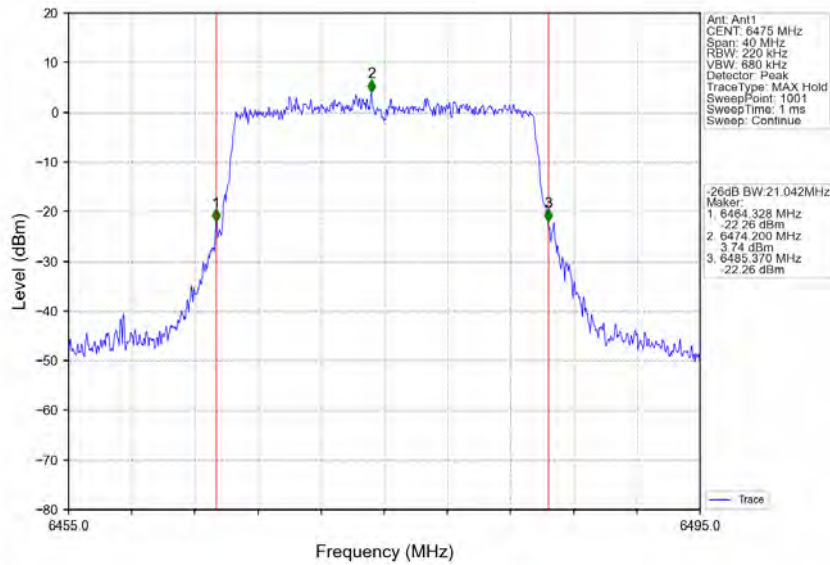
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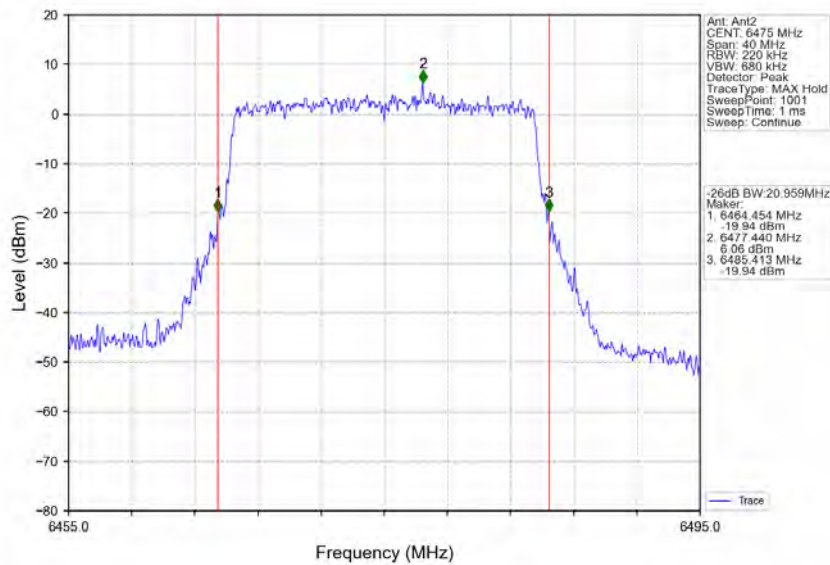
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802.11ax(HEW20)_MCH_6475MHz_RU242_Left_Ant1_NTNV



802.11ax(HEW20)_MCH_6475MHz_RU242_Left_Ant2_NTNV



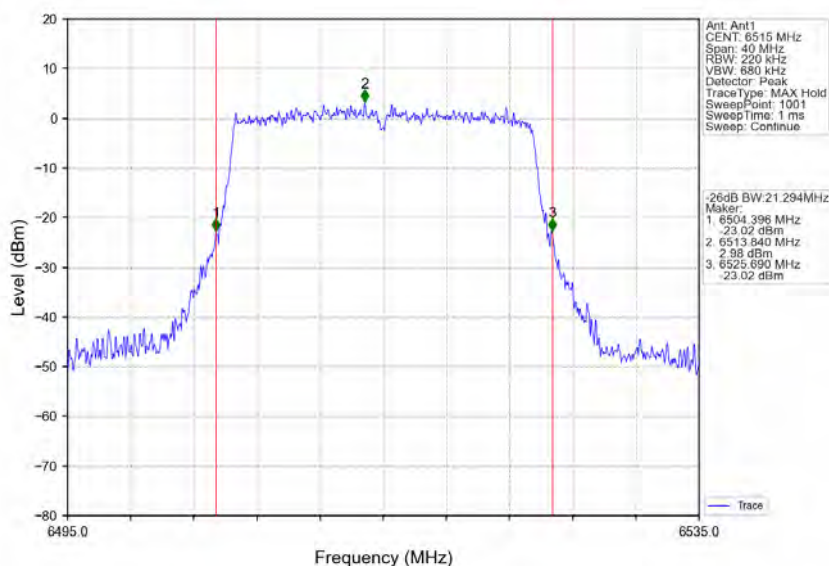
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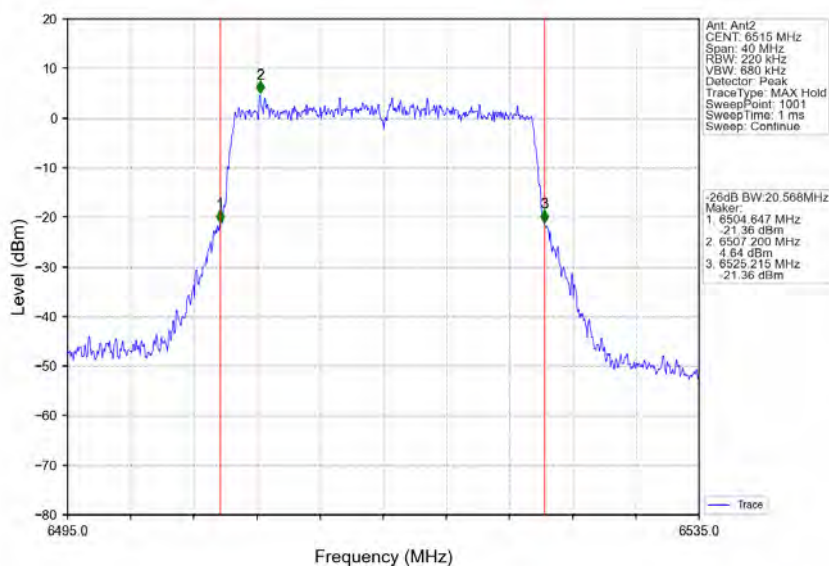
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802.11ax(HEW20)_HCH_6515MHz_RU242_Left_Ant1_NTNV



802.11ax(HEW20)_HCH_6515MHz_RU242_Left_Ant2_NTNV



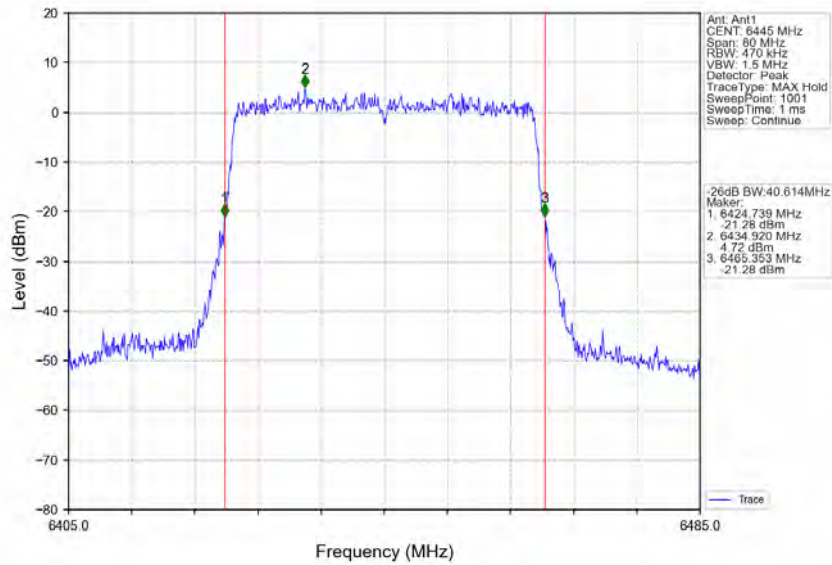
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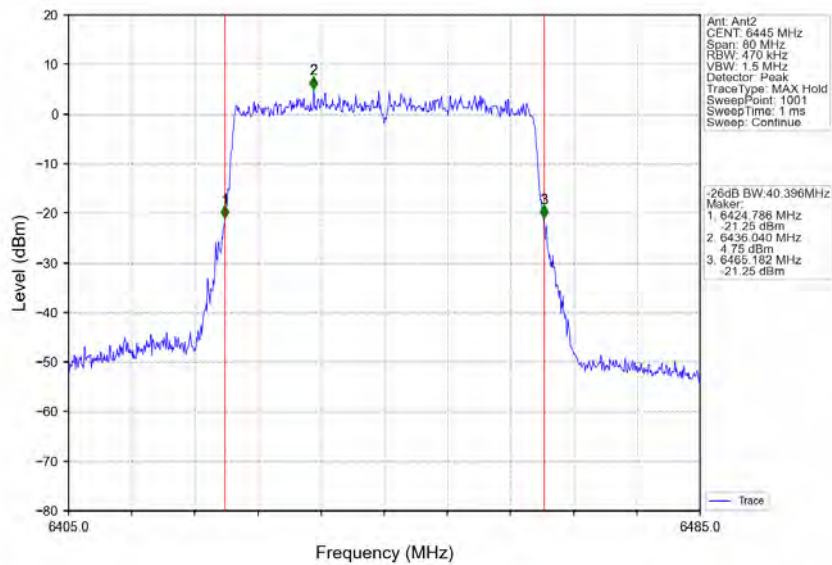
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802.11ax(HEW40)_LCH_6445MHz_RU484_Left_Ant1_NTNV



802.11ax(HEW40)_LCH_6445MHz_RU484_Left_Ant2_NTNV



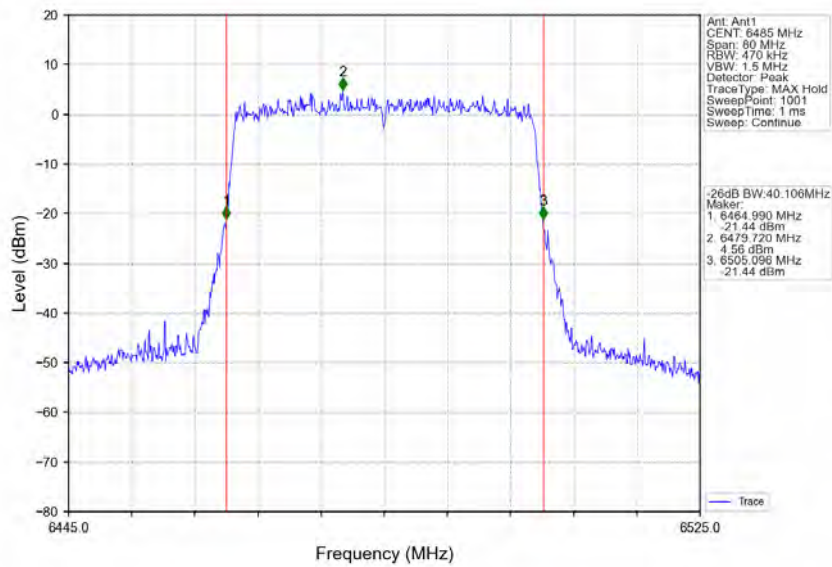
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CCSEM-TRF-001 Rev. 02 Sep 01, 2023

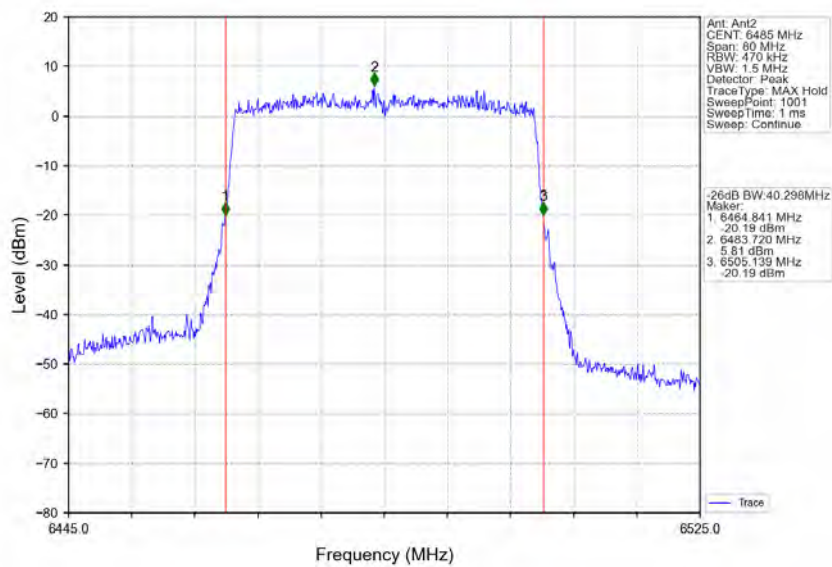
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802.11ax(HEW40)_MCH_6485MHz_RU484_Left_Ant1_NTNV



802.11ax(HEW40)_MCH_6485MHz_RU484_Left_Ant2_NTNV



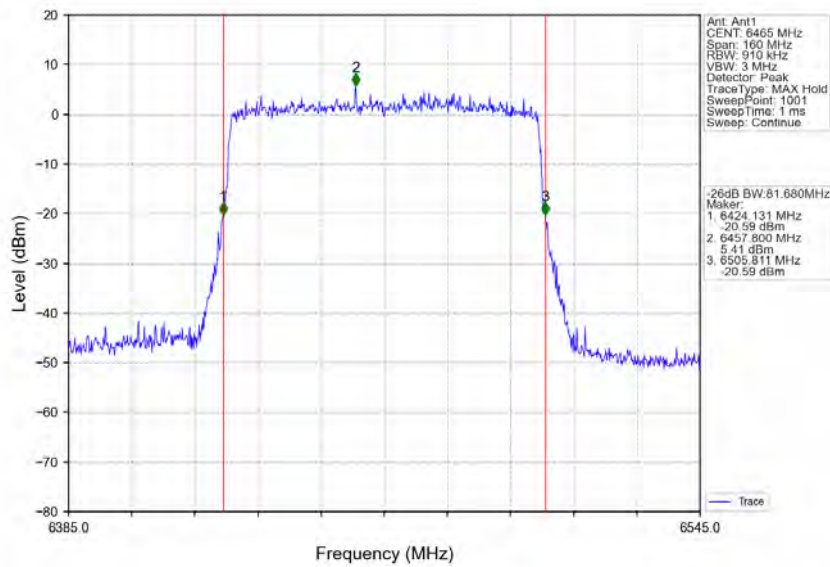
Compliance Certification Services (Kunshan) Inc.

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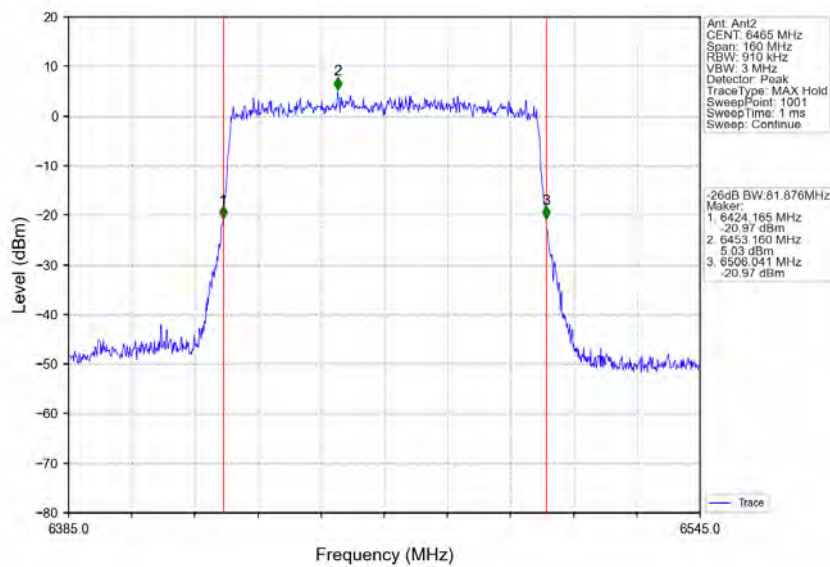
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802.11ax(HEW80)_LCH_6465MHz_RU996_Left_Ant1_NTNV



802.11ax(HEW80)_LCH_6465MHz_RU996_Left_Ant2_NTNV



Compliance Certification Services (Kunshan) Inc.

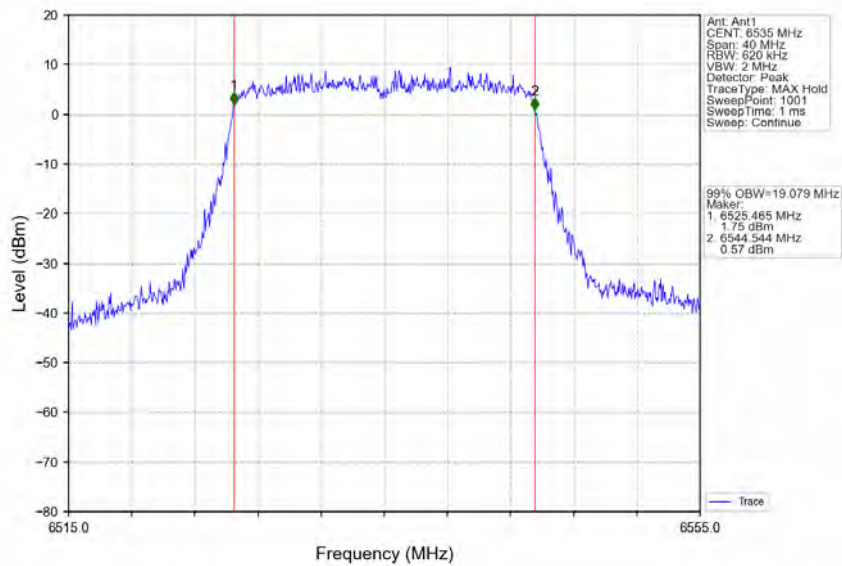
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2.2.5 OBW

802.11ax(HEW20)_LCH_6535MHz_RU242_Left_Ant1_NTNV



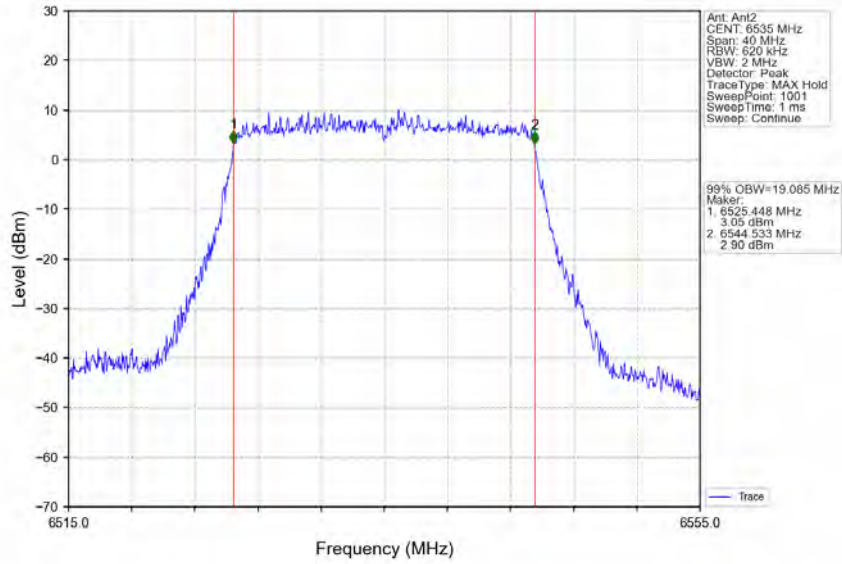
802.11ax(HEW20)_LCH_6535MHz_RU242_Left_Ant2_NTNV

Compliance Certification Services (Kunshan) Inc.

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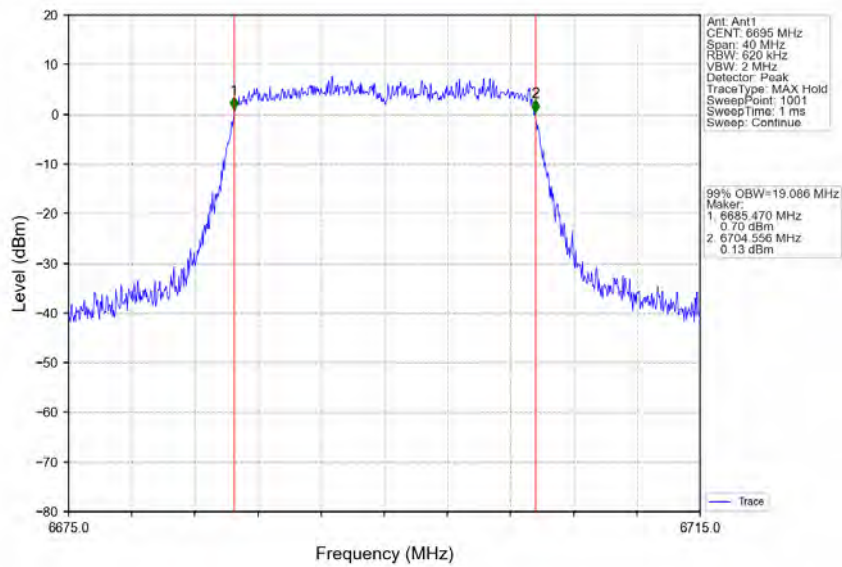
Compliance Certification Services (Kunshan) Inc.

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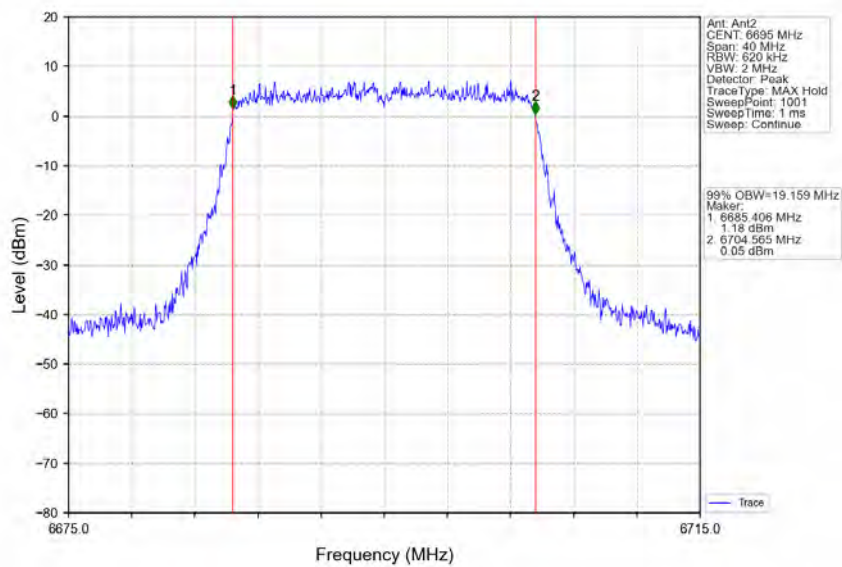
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802.11ax(HEW20)_MCH_6695MHz_RU242_Left_Ant1_NTNV



802.11ax(HEW20)_MCH_6695MHz_RU242_Left_Ant2_NTNV



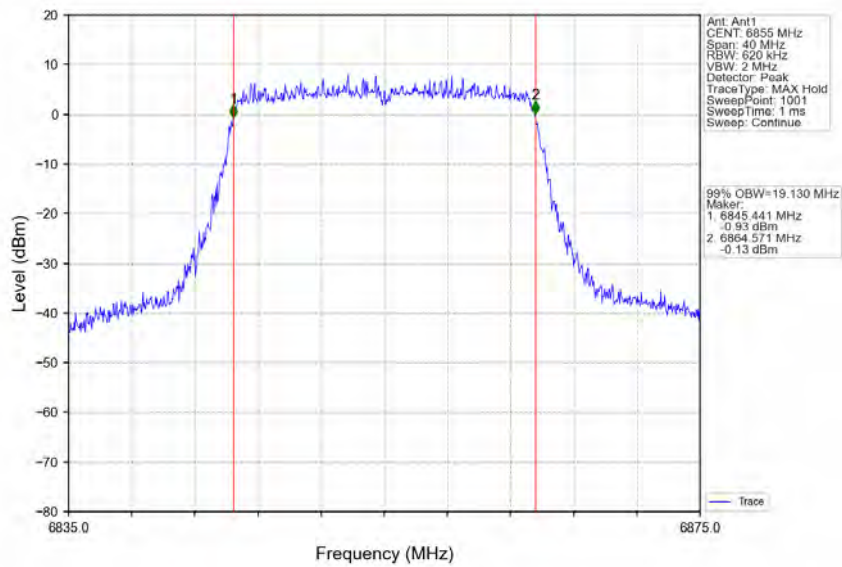
Compliance Certification Services (Kunshan) Inc.

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802.11ax(HEW20)_HCH_6855MHz_RU242_Left_Ant1_NTNV



802.11ax(HEW20)_HCH_6855MHz_RU242_Left_Ant2_NTNV

