CFR 47 FCC PART 15 SUBPART E
ISED RSS-247 Issue 3

TEST REPORT

For

Osmo Nano

MODEL NUMBER: ON001

REPORT NUMBER: 4791622042-3-RF-2

ISSUE DATE: February 21, 2025

FCC ID: 2ANDR-ON00125
IC: 23060-ON00125

Prepared for

SZ DJI Osmo Technology Co., Ltd.
Room S11, Floor 23, Tower 1, DJI Sky City, No. 55 Xianyuan Road, Xili Community, Xili Street, Nanshan District, Shenzhen, 518055, China.

Prepared by

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China

Tel: +86 769 22038881
Fax: +86 769 33244054
Website: www.ul.com

The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report apply to the test sample(s) mentioned above at the time of the testing period only and are not to be used to indicate applicability to other similar products.

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	February 21, 2025	Initial Issue	

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Summary of Test Results

Test Item	Clause	Limit/Requirement	Result
ON TIME AND DUTY CYCLE	ANSI C63.10-2013, Clause 12.2	None; for reporting purposes only.	Pass
6dB AND 26dB EMISSION BANDWIDTH AND 99% OCCUPIED BANDWIDTH	KDB 789033 D02 v02r01 Section C.1	FCC Part 15.407 (a)/(e), RSS-247 Issue 3, Clause 6.2.1.2 RSS-Gen Clause 6.7	Pass
CONDUCTED OUTPUT POWER	KDB 789033 D02 v02r01 Section E.3.a (Method PM)	FCC 15.407 (a) RSS-247 Clause 6.2	Pass
POWER SPECTRAL DENSITY	KDB 789033 D02 v02r01 Section F	FCC 15.407 (a) RSS-247 Clause 6.2	Pass
AC Power Line Conducted Emission	ANSI C63.10-2013, Clause 6.2.	FCC 15.207 RSS-GEN Clause 8.8	Pass
Radiated Emissions and Band Edge Measurement	KDB 789033 D02 v02r01 Section G.3, G.4, G.5, and G.6	FCC 15.407 (b) FCC 15.209 FCC 15.205 RSS-247 Clause 6.2 RSS-GEN Clause 8.9	Pass
FREQUENCY STABILITY	ANSI C63.10-2013,Clause 6.8	FCC 15.407 (g)	Pass
Dynamic Frequency Selection (Slave)	KDB 905462 D03 Client Without DFS New Rules v01r02	FCC Part 15.407 (h), RSS-247 Issue 3 Clause6.3	Pass
Dynamic Frequency Selection (Master)	KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02	FCC Part 15.407 (h), RSS-247 Issue 3 Clause6.3	N/A
Antenna Requirement	N/A	FCC 47 CFR Part 15.203/ 15.407(a)(1) (2), RSS-Gen Issue 5, Clause 6.8	Pass

Note:
1. N/A: In this whole report not applicable.

*This test report is only published to and used by the applicant, and it is not for evidence purpose in China.
*The measurement result for the sample received is <Pass> according to <CFR 47 FCC PART 15 SUBPART E, ISED RSS-247 Issue 3> when <Simple Acceptance> decision rule is applied.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

CONTENTS

1. ATTESTATION OF TEST RESULTS 6

2. TEST METHODOLOGY 7

3. FACILITIES AND ACCREDITATION 7

4. CALIBRATION AND UNCERTAINTY 8

4.1. MEASURING INSTRUMENT CALIBRATION 8

4.2. MEASUREMENT UNCERTAINTY 8

5. EQUIPMENT UNDER TEST 9

5.1. DESCRIPTION OF EUT 9

5.2. CHANNEL LIST 9

5.3. MAXIMUM POWER 9

5.4. TEST CHANNEL CONFIGURATION 9

5.5. THE WORSE CASE POWER SETTING PARAMETER 10

5.6. WORSE CASE CONFIGURATIONS 11

5.7. DESCRIPTION OF AVAILABLE ANTENNAS 12

5.8. SUPPORT UNITS FOR SYSTEM TEST 13

5.9. SETUP DIAGRAM 13

6. MEASURING EQUIPMENT AND SOFTWARE USED 14

7. ANTENNA PORT TEST RESULTS 17

7.1. ON TIME AND DUTY CYCLE 17

7.2. 6DB AND 26DB EMISSION BANDWIDTH AND 99% OCCUPIED BANDWIDTH 18

7.3. CONDUCTED OUTPUT POWER 20

7.4. POWER SPECTRAL DENSITY 22

7.5. FREQUENCY STABILITY 24

8. RADIATED TEST RESULTS 26

8.1. RESTRICTED BANDEDGE 36

8.2. SPURIOUS EMISSIONS(1 GHZ~7 GHZ) 49

8.3. SPURIOUS EMISSIONS(7 GHZ~18 GHZ) 55

8.4. SPURIOUS EMISSIONS(9 KHZ~30 MHZ) 85

8.5. SPURIOUS EMISSIONS(18 GHZ~26 GHZ) 88

8.6. SPURIOUS EMISSIONS(26 GHZ~40 GHZ) 90

8.7. SPURIOUS EMISSIONS(30 MHZ~1 GHZ) 92

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

9. AC POWER LINE CONDUCTED EMISSION 94

10. ANTENNA REQUIREMENT 98

11. TEST DATA.....99

11.1. APPENDIX A: EMISSION BANDWIDTH.....99
11.1.1. Test Result.....99
11.1.2. Test Graphs 100

11.2. APPENDIX B: OCCUPIED CHANNEL BANDWIDTH.....110
11.2.1. Test Result.....110
11.2.2. Test Graphs 111

11.3. APPENDIX C: MIN EMISSION BANDWIDTH 121
11.3.1. Test Result.....121
11.3.2. Test Graphs 122

11.4. APPENDIX D: MAXIMUM CONDUCTED OUTPUT POWER.....132
11.4.1. Test Result.....132

11.5. APPENDIX E: MAXIMUM POWER SPECTRAL DENSITY 133
11.5.1. Test Result.....133
11.5.2. Test Graphs 134

11.6. APPENDIX F: FREQUENCY STABILITY.....144
11.6.1. Test Result.....144

11.7. APPENDIX G: DUTY CYCLE.....145
11.7.1. Test Result.....145
11.7.2. Test Graphs 146

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	SZ DJI Osmo Technology Co., Ltd.
Address:	Room S11, Floor 23, Tower 1, DJI Sky City, No. 55 Xianyuan Road, Xili Community, Xili Street, Nanshan District, Shenzhen, 518055, China.

Manufacturer Information

Company Name:	SZ DJI Osmo Technology Co., Ltd.
Address:	Room S11, Floor 23, Tower 1, DJI Sky City, No. 55 Xianyuan Road, Xili Community, Xili Street, Nanshan District, Shenzhen, 518055, China.

EUT Information

EUT Name:	Osmo Nano
Model:	ON001
Sample Received Date:	December 24, 2024
Sample Status:	Normal
Sample ID:	8123336
Date of Tested:	December 25, 2024 to February 21, 2025

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 FCC PART 15 SUBPART E **ISED RSS-247 Issue 3**	**Pass**

Prepared By:

James Qin

Project Engineer

Checked By:

Kebo Zhang

Senior Project Engineer

Approved By:

Stephen Guo

Operations Manager

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

2. TEST METHODOLOGY

All tests were performed in accordance with the standard CFR 47 FCC PART 15 SUBPART E ISED RSS-247 Issue 3, ANSI C63.10-2013, CFR 47 FCC Part 2, KDB 789033 D02 v02r01, RSS-GEN Issue 5, KDB414788 D01 Radiated Test Site v01, KDB 662911 D01 Multiple Transmitter Output v02r01, KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02, KDB 905462 D03 UNII clients without radar detection New Rules v01r02, KDB 905462 D04 Operational Modes for DFS Testing New Rules v01 and KDB 905462 D06 802 11 Channel Plans New Rules v02.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	**A2LA (Certificate No.: 4102.01)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA. **FCC (FCC Designation No.: CN1187)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules **ISED (Company No.: 21320)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046. **VCCI (Registration No.: G-20192, C-20153, T-20155 and R-20202)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20192 and R-20202 Shielding Room B, the VCCI registration No. is C-20153 and T-20155

Note 1:
All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China.

Note 2:
The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd.
Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3:
For below 30 MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30 MHz had been correlated to measurements performed on an OFS.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Conduction emission	3.62 dB
Radiated Emission (Included Fundamental Emission) (9 kHz ~ 30 MHz)	2.2 dB
Radiated Emission (Included Fundamental Emission) (30 MHz ~ 1 GHz)	4.00 dB
Radiated Emission (Included Fundamental Emission) (1 GHz to 40 GHz)	5.78 dB (1 GHz ~ 18 GHz)
	5.23 dB (18 GHz ~ 26 GHz)
	5.37 dB (26 GHz ~ 40 GHz)
Duty Cycle	±0.028%
Emission Bandwidth and 99% Occupied Bandwidth	±0.0196%
Maximum Conducted Output Power	±0.766 dB
Maximum Power Spectral Density Level	±1.22 dB
Frequency Stability	±2.76%
Dynamic Frequency Selection	±1.01 dB
Conducted Band-edge Compliance	±1.328 dB
Conducted Unwanted Emissions In Non-restricted Frequency Bands	±0.746 dB (9 kHz ~ 1 GHz)
	±1.328dB (1 GHz ~ 26 GHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name	Osmo Nano
Model	ON001

5.2. CHANNEL LIST

UNII-3 (For Bandwidth=20MHz)		UNII-3 (For Bandwidth=40MHz)		UNII-3 (For Bandwidth=80MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

5.3. MAXIMUM POWER

UNII-3 BAND(FCC&ISED)

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)
a	5725 ~ 5850	19.66
n HT20		20.01
n HT40		19.34
ac VHT80		19.09
ax HE20		19.95
ax HE40		19.37
ax HE80		19.30

5.4. TEST CHANNEL CONFIGURATION

UNII-3 Test Channel Configuration		
IEEE Std.	Test Channel Number	Frequency
802.11a	CH 149(Low Channel), CH 157(MID Channel), CH 165(High Channel)	5745 MHz, 5785 MHz, 5825 MHz
802.11n HT20	CH 149(Low Channel), CH 157(MID Channel), CH 165(High Channel)	5745 MHz, 5785 MHz, 5825 MHz
802.11n HT40	CH 151(Low Channel), CH 159(High Channel)	5755MHz, 5795MHz
802.11ac VHT80	CH 155(Low Channel)	5775 MHz
802.11ax HE20	CH 149(Low Channel), CH 157(MID Channel), CH 165(High Channel)	5745 MHz, 5785 MHz, 5825 MHz
802.11ax HE40	CH 151(Low Channel), CH 159(High Channel)	5755MHz, 5795MHz
802.11ax HE80	CH 155(Low Channel)	5775 MHz

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter	
Test Software	DjiSdrConsole

UNII-3

Mode	Rate	Channel	Soft set value	
			ANT1	ANT 2
11a	6M	149	17	17
		157	17	17
		165	17	17
11n HT20	MCS0	149	17	17
		157	17	17
		165	17	17
11n HT40	MCS0	151	17	17
		159	16	16
11ac VHT20	MCS0	149	Cover by 11n HT20	
		157		
		165		
11ac VHT40	MCS0	151	Cover by 11n HT40	
		159		
11ac VHT80	MCS0	155	16	16
11ax HE20	MCS0	149	17	17
		157	17	17
		165	16	16
11ax HE40	MCS0	151	16	16
		159	16	16
11ax HE80	MCS0	155	16	16

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

5.6. WORSE CASE CONFIGURATIONS

The EUT was tested in the following configuration(s):

Controlled in test mode using a software application on the EUT supplied by customer. The application was used to enable a continuous transmission and to select the mode, test channels, bandwidth, data rates as required.

Test channels referring to section 5.4.

Maximum power setting referring to section 5.5.

Worst case Data Rates declared by the customer:

802.11a 20 mode: 6 Mbps
802.11n HT20 mode: MCS0
802.11n HT40 mode: MCS0
802.11ac VHT20 mode: MCS0
802.11ac VHT40 mode: MCS0
802.11ac VHT80 mode: MCS0
802.11ax HE20 mode: MCS0
802.11ax HE40 mode: MCS0
802.11ax HE80 mode: MCS0

802.11a, 802.11n HT20/HT40/ac VHT20/VHT40/VHT80/ax HE20/HE40/HE80 support SISO and MIMO mode, only the worst case power mode(MIMO) will be record in the report.

802.11ac VHT20 and VHT40 mode are different from 802.11nHT20 and HT40 only in control messages, so for these 4 modes, only 802.11n HT20 and 802.11n HT40 worst case power modes radiated emission test data are recorded in the report .

The EUT has 2 separate antennas which correspond to 2 separate antenna ports. Core 1 and Core 2 correspond to antenna 1 and antenna 2 respectively.

The measured additional path loss was included in any path loss calculations for all RF cable used during tested.

Conducted output power, power spectral density tests separately on each port with all supported SISO & MIMO port combinations.

Radiated emissions tests were performed with the MIMO modes. These were found to be the worst modulation scheme with regards to emissions after preliminary investigations and, as this mode emits the highest conducted output power level, it was deemed to be the worst case.

ax mode only supports full RU

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

5.7. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna No.	Frequency Band	Antenna Type	Max Antenna Gain (dBi)
1	5150-5850	FPC antenna	0.5
2	5150-5850	FPC antenna	0

The EUT support Cyclic Shift Diversity(CDD) mode.

MIMO output power port and MIMO PSD port summing were performed in accordance with KDB 662911 D01. For the CDD results the Directional Gain was calculated in accordance with the following mothed.

For output power measurements:
Directional gain= G_{ANT} + Array Gain = 0.5 dBi
G_{ANT} : equal to the gain of the antenna having the highest gain
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$

For power spectral density (PSD) measurements:
Directional gain= G_{ANT} + Array Gain = 3.51 dBi
Array Gain = 10 log(N_{ANT}/N_{SS}) dB.
N_{ANT} : number of transmit antennas
N_{SS} : number of spatial streams, The worst case directional gain will occur when N_{SS} = 1

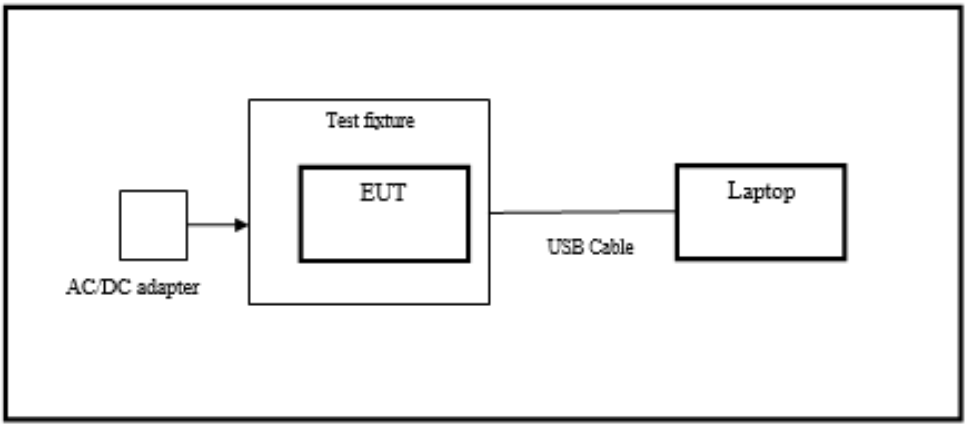
IEE Std. 802.11	Transmit and Receive Mode	Description
802.11a	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11n HT20	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11n HT40	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11ac VHT20	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11ac VHT40	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11ac VHT80	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11ax HE20	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11ax HE40	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11ax HE80	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
Note: 1.Only BT & WLAN 2.4G, BT & WLAN 5G can transmit simultaneously. (declared by client)		

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

5.8. SUPPORT UNITS FOR SYSTEM TEST

The EUT has been tested as an independent unit.

5.9. SETUP DIAGRAM



This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

6. MEASURING EQUIPMENT AND SOFTWARE USED

R&S TS 8997 Test System					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Power sensor, Power Meter	R&S	OSP120	100921	Mar.25,2024	Mar.24,2025
Vector Signal Generator	R&S	SMBV100A	261637	Sep.28, 2024	Sep.27, 2025
Signal Generator	R&S	SMB100A	178553	Sep.28, 2024	Sep.27, 2025
Signal Analyzer	R&S	FSV40	101118	Sep.28, 2024	Sep.27, 2025

Software			
Description	Manufacturer	Name	Version
For R&S TS 8997 Test System	Rohde & Schwarz	EMC 32	10.60.10

Tonsend RF Test System					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Wireless Connectivity Tester	R&S	CMW270	1201.0002N75-102	Sep.13, 2024	Sep.12, 2025
PXA Signal Analyzer	Keysight	N9030A	MY55410512	Sep.28, 2024	Sep.27, 2025
MXG Vector Signal Generator	Keysight	N5182B	MY56200284	Sep.28, 2024	Sep.27, 2025
MXG Vector Signal Generator	Keysight	N5172B	MY56200301	Sep.28, 2024	Sep.27, 2025
DC power supply	Keysight	E3642A	MY55159130	Sep.28, 2024	Sep.27, 2025
Temperature & Humidity Chamber	SANMOOD	SG-80-CC-2	2088	Sep.28, 2024	Sep.27, 2025
Attenuator	Aglient	8495B	2814a12853	Sep.28, 2024	Sep.27, 2025
RF Control Unit	Tonscend	JS0806-2	23B80620666	Mar.25,2024	Mar.24,2025

Software			
Description	Manufacturer	Name	Version
Tonsend SRD Test System	Tonsend	JS1120-3 RF Test System	V3.2.22

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Conducted Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
EMI Test Receiver	R&S	ESR3	101961	Sep.28, 2024	Sep.27, 2025
Two-Line V-Network	R&S	ENV216	101983	Sep.28, 2024	Sep.27, 2025
Artificial Mains Networks	Schwarzbeck	NSLK 8126	8126465	Sep.28, 2024	Sep.27, 2025
Software					
Description			Manufacturer	Name	Version
Test Software for Conducted Emissions			Farad	EZ-EMC	Ver. UL-3A1

Radiated Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Sep.28, 2024	Sep.27, 2025
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	June 28, 2024	June.27 2027
Preamplifier	HP	8447D	2944A09099	Sep.28, 2024	Sep.27, 2025
EMI Measurement Receiver	R&S	ESR26	101377	Sep.28, 2024	Sep.27, 2025
Horn Antenna	TDK	HRN-0118	130939	Apr.29, 2022	Apr.28, 2025
Preamplifier	TDK	PA-02-0118	TRS-305-00067	Sep.28, 2024	Sep.27, 2025
Horn Antenna	Schwarzbeck	BBHA9170	697	Jun 30, 2024	Jun 29, 2027
Preamplifier	TDK	PA-02-2	TRS-307-00003	Sep.28, 2024	Sep.27, 2025
Preamplifier	TDK	PA-02-3	TRS-308-00002	Sep.28, 2024	Sep.27, 2025
Loop antenna	Schwarzbeck	1519B	00008	Dec.14, 2021	Dec.13, 2024
Highpass Filter	Wainwright	WHKX10-5850-6500-1800-40SS	4	Sep.28, 2024	Sep.27, 2025
Band Reject Filter	Wainwright	WRCJV12-5695-5725-5850-5880-40SS	4	Sep.28, 2024	Sep.27, 2025
Software					
Description			Manufacturer	Name	Version
Test Software for Radiated Emissions			Farad	EZ-EMC	Ver. UL-3A1

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Other Instrument					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Temperature humidity probe	OMEGA	ITHX-SD-5	18470007	Oct.8, 2024	Oct.7, 2025
Barometer	Yiyi	Baro	N/A	Oct.10, 2024	Oct.9, 2025
Attenuator	Agilent	8495B	2814a12853	Sep.28, 2024	Sep.27, 2025

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

7. ANTENNA PORT TEST RESULTS

7.1. ON TIME AND DUTY CYCLE

LIMITS

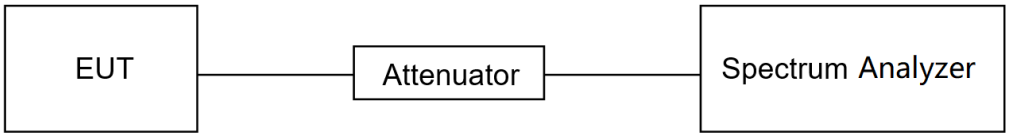
None; for reporting purposes only.

TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.B.

The zero-span mode on a spectrum analyzer or EMI receiver, if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal. Set the center frequency of the instrument to the center frequency of the transmission. Set RBW ≥ EBW if possible; otherwise, set RBW to the largest available value. Set VBW ≥ RBW. Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T, where T is defined in II.B.1.a), and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if T ≤ 16.7 microseconds.)

TEST SETUP



TEST ENVIRONMENT

Temperature	24.2℃	Relative Humidity	59%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.85V

TEST DATE / ENGINEER

Test Date	December 28, 2024	Test By	Walker

TEST RESULTS

Please refer to section "Test Data" - Appendix G

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

7.2. 6DB AND 26DB EMISSION BANDWIDTH AND 99% OCCUPIED BANDWIDTH

LIMITS

CFR 47 FCC Part15, Subpart E ISED RSS-247 ISSUE 3		
Test Item	Limit	Frequency Range (MHz)
26 dB Emission Bandwidth	For reporting purposes only.	5150 ~ 5250
26 dB Emission Bandwidth	For reporting purposes only.	5250 ~ 5350
26 dB Emission Bandwidth	For reporting purposes only.	5470 ~ 5725 (For FCC) 5470 ~ 5600 (For ISED) 5650 ~ 5725 (For ISED)
6 dB Emission Bandwidth	The minimum 6 dB emission bandwidth shall be 500 kHz.	5725 ~ 5850
99 % Occupied Bandwidth	For reporting purposes only.	5150 ~ 5825 (For ISED)

TEST PROCEDURE

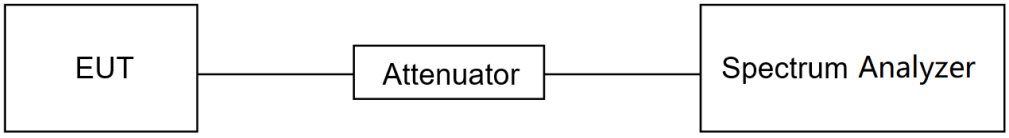
Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.C1. for 26 dB Emission Bandwidth; section II.C2. for 6 dB Emission Bandwidth; section II.D. for 99 % Occupied Bandwidth.
Connect the EUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	For 6 dB Emission Bandwidth: RBW=100 kHz For 26 dB Emission bandwidth: approximately 1 % of the EBW. For 99 % Occupied Bandwidth: approximately 1 % ~ 5 % of the OBW.
VBW	For 6 dB Bandwidth: ≥ 3*RBW For 26 dB Bandwidth: >3*RBW For 99 % Bandwidth: >3*RBW
Trace	Max hold
Sweep	Auto couple

a) Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.
b) Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6/26 dB relative to the maximum level measured in the fundamental emission.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TEST SETUP



TEST ENVIRONMENT

Temperature	24.2℃	Relative Humidity	59%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.85V

TEST DATE / ENGINEER

Test Date	December 28, 2024	Test By	Walker

TEST RESULTS

Please refer to section "Test Data" - Appendix A&B&C

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

7.3. CONDUCTED OUTPUT POWER

LIMITS

CFR 47 FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Conducted Output Power	☐ Outdoor Access Point: 1 W (30 dBm) ☐ Indoor Access Point: 1 W (30 dBm) ☐ Fixed Point-To-Point Access Points: 1 W (30 dBm) ☒ Client Devices: 250 mW (24 dBm)	5150 ~ 5250
	Shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.	5250 ~ 5350 5470 ~ 5725
	Shall not exceed 1 Watt (30 dBm).	5725 ~ 5850

ISED RSS-247 ISSUE 3		
Test Item	Limit	Frequency Range (MHz)
Conducted Output Power or e.i.r.p.	The maximum e.i.r.p. shall not exceed 200 mW (23 dBm) or 10 + 10 $\log_{10}$B, dBm, whichever power is less. B is the 99 % emission bandwidth in megahertz.	5150 ~ 5250
	a. The maximum conducted output power shall not exceed 250 mW (24 dBm) or 11 + 10 $\log_{10}$B dBm, whichever is less. b. The maximum e.i.r.p. shall not exceed 1.0 W (30 dBm) or 17 + 10 $\log_{10}$B dBm, whichever is less. B is the 99 % emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.	5250 ~ 5350 5470 ~ 5600 5650 ~ 5725
	Shall not exceed 1 Watt (30 dBm). The e.i.r.p. shall not exceed 4 W	5725 ~ 5850

Note:
The above limits are based upon the maximum antenna gain does not exceed 6 dBi.
If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

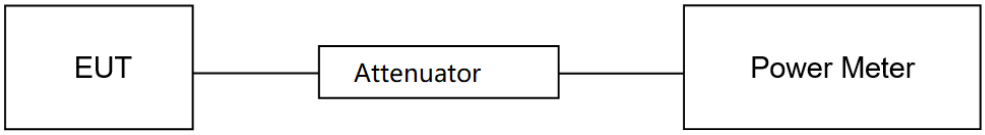
Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.E.

Method PM (Measurement using an RF average power meter):
(i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:
a. The EUT is configured to transmit continuously or to transmit with a constant duty cycle.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

b. At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.
c. The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
(ii) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in II.B.
(iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
(iv) Adjust the measurement in dBm by adding 10 log (1/x) where x is the duty cycle (e.g., 10 log (1/0.25) if the duty cycle is 25 %).

TEST SETUP



TEST ENVIRONMENT

Temperature	24.2℃	Relative Humidity	59%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.85V

TEST DATE / ENGINEER

Test Date	December 28, 2024	Test By	Walker

TEST RESULTS

Please refer to section "Test Data" - Appendix D

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

7.4. POWER SPECTRAL DENSITY

LIMITS

CFR 47 FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	☐ Outdoor Access Point: 17 dBm/MHz ☐ Indoor Access Point: 17 dBm/MHz ☐ Fixed Point-To-Point Access Points: 17 dBm/MHz ☒ Client Devices: 11 dBm/MHz	5150 ~ 5250
	11 dBm/MHz	5250 ~ 5350 5470 ~ 5725
	30 dBm/500kHz	5725 ~ 5850

ISED RSS-247 ISSUE 3		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.	5150 ~ 5250
	The power spectral density shall not exceed 11 dBm inany 1.0 MHz band.	5250 ~ 5350 5470 ~ 5600 5650 ~ 5725
	30 dBm / 500 kHz	5725 ~ 5850

Note:
The above limits are based upon the maximum antenna gain does not exceed 6 dBi.
If transmitting antennas of directional gain greater than 6 dBi are used, maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.F.

Connect the EUT to the spectrum analyzer and use the following settings:

For U-NII-1, U-NII-2A and U-NII-2C band:

Center Frequency	The center frequency of the channel under test
Detector	RMS
RBW	1 MHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Average
Sweep time	Auto

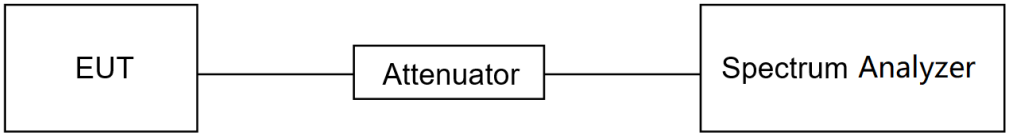
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

For U-NII-3:

Center Frequency	The center frequency of the channel under test
Detector	RMS
RBW	500 kHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Average
Sweep time	Auto

Allow trace to fully stabilize and use the peak search function on the instrument to find the peak of the spectrum and record its value.
Add 10 log (1/x), where x is the duty cycle, to the peak of the spectrum, the result is the Maximum PSD over 1 MHz / 500 kHz reference bandwidth.

TEST SETUP



TEST ENVIRONMENT

Temperature	24.2℃	Relative Humidity	59%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.85V

TEST DATE / ENGINEER

Test Date	December 28, 2024	Test By	Walker

TEST RESULTS

Please refer to section "Test Data" - Appendix E

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

7.5. FREQUENCY STABILITY

LIMITS

The frequency of the carrier signal shall be maintained within band of operation.

TEST PROCEDURE

1. The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between -20 °C ~ 45 °C (declared by customer).

2. The temperature was incremented by 10 °C intervals and the unit allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.

3. The primary supply voltage is varied from 85 % to 115 % of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

Connect the EUT to the spectrum analyzer and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	10 kHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

4. While maintaining a constant temperature inside the environmental chamber, turn the EUT on and record the operating frequency at startup, and at 2 minutes, 5minutes, and 10 minutes after the EUT is energized.

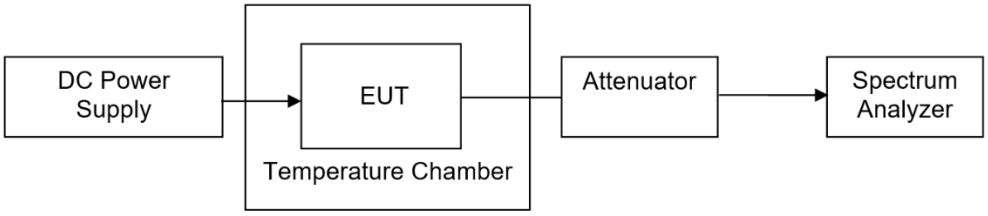
5. Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

TEST ENVIRONMENT

	Normal Test Conditions	Extreme Test Conditions
Relative Humidity	20 % ~ 75 %	/
Atmospheric Pressure	100 kPa ~ 102 kPa	/
Temperature	T_N (Normal Temperature): 25.1 °C	T_L (Low Temperature): -20 °C
		T_H (High Temperature): 45 °C
Supply Voltage	V_N (Normal Voltage): DC 3.85 V	V_L (Low Voltage): DC 3.27 V
		V_H (High Voltage): DC 4.42 V

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TEST SETUP



TEST ENVIRONMENT

Temperature	24.2℃	Relative Humidity	59%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.85V

TEST DATE / ENGINEER

Test Date	December 28, 2024	Test By	Walker

TEST RESULTS

Please refer to section "Test Data" - Appendix F

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8. RADIATED TEST RESULTS

LIMITS

Refer to CFR 47 FCC §15.205, §15.209 and §15.407 (b).

Refer to ISED RSS-GEN Clause 8.9, Clause 8.10 and ISED RSS-247 6.2.

Radiation Disturbance Test Limit for FCC (Class B) (9 kHz ~ 1 GHz)

Emissions radiated outside of the specified frequency bands above 30 MHz			
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m	
		Quasi-Peak	
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	
Above 1000	500	Peak	Average
		74	54

FCC Emissions radiated outside of the specified frequency bands below 30 MHz		
Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30

ISED General field strength limits at frequencies below 30 MHz

Table 6 – General field strength limits at frequencies below 30 MHz		
Frequency	**Magnetic field strength (H-Field) (µA/m)**	**Measurement distance (m)**
9 - 490 kHz[Note 1]	6.37/F (F in kHz)	300
490 - 1705 kHz	63.7/F (F in kHz)	30
1.705 - 30 MHz	0.08	30

Note 1: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

ISED Restricted bands refer to ISED RSS-GEN Clause 8.10

Table 7 – Restricted frequency bands[Note 1]		
MHz	MHz	GHz
0.090 - 0.110	149.9 - 150.05	9.0 - 9.2
0.495 - 0.505	156.52475 - 156.52525	9.3 - 9.5
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7
3.020 - 3.026	162.0125 - 167.17	13.25 - 13.4
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5
4.17725 - 4.17775	240 – 285	15.35 - 16.2
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4
5.677 - 5.683	399.9 - 410	22.01 - 23.12
6.215 - 6.218	608 - 614	23.6 - 24.0
6.26775 - 6.26825	960 - 1427	31.2 - 31.8
6.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5
8.291 - 8.294	1645.5 - 1646.5	Above 38.6
8.362 - 8.366	1660 - 1710	
8.37625 - 8.38675	1718.8 - 1722.2	
8.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 - 2390	
12.51975 - 12.52025	2483.5 - 2500	
12.57675 - 12.57725	2655 - 2900	
13.36 - 13.41	3260 – 3267	
16.42 - 16.423	3332 - 3339	
16.69475 - 16.69525	3345.8 - 3358	
16.80425 - 16.80475	3500 - 4400	
25.5 - 25.67	4500 - 5150	
37.5 - 38.25	5350 - 5460	
73 - 74.6	7250 - 7750	
74.8 - 75.2	8025 – 8500	
108 – 138		

Note 1: Certain frequency bands listed in table 7 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

FCC Restricted bands of operation refer to FCC §15.205 (a):

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

Note: [1]Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
[2]Above 38.6c

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Limits of unwanted/undesirable emission out of the restricted bands refer to CFR 47 FCC §15.407 (b) and ISED RSS-247 6.2.

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1GHz)		
Frequency Range (MHz)	EIRP Limit	Field Strength Limit (dBuV/m) at 3 m
5150~5250 MHz	PK: -27 (dBm/MHz)	PK:68.2(dBμV/m)
5250~5350 MHz		
5470~5725 MHz		
5725~5850 MHz	PK: -27 (dBm/MHz) *1 PK: 10 (dBm/MHz) *2 PK: 15.6 (dBm/MHz) *3 PK: 27 (dBm/MHz) *4	PK: 68.2(dBμV/m) *1 PK: 105.2 (dBμV/m) *2 PK: 110.8(dBμV/m) *3 PK: 122.2 (dBμV/m) *4
Note: *1 beyond 75 MHz or more above of the band edge. *2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above. *3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above. *4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.		

TEST PROCEDURE

Below 30 MHz

The setting of the spectrum analyzer

RBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
VBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
Sweep	Auto

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.4.

2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.

5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz Radiated emission limits in these three bands are based on measurements employing an average detector.

6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak and average detector and reported.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377Ω. For example, the measurement frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to Y-51.5 = Z dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Below 1 GHz and above 30 MHz

The setting of the spectrum analyzer

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.5.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm above ground.

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

5. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Above 1 GHz

The setting of the spectrum analyzer

RBW	1 MHz
VBW	PEAK: 3 MHz AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.G.3 ~ II.G.6.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

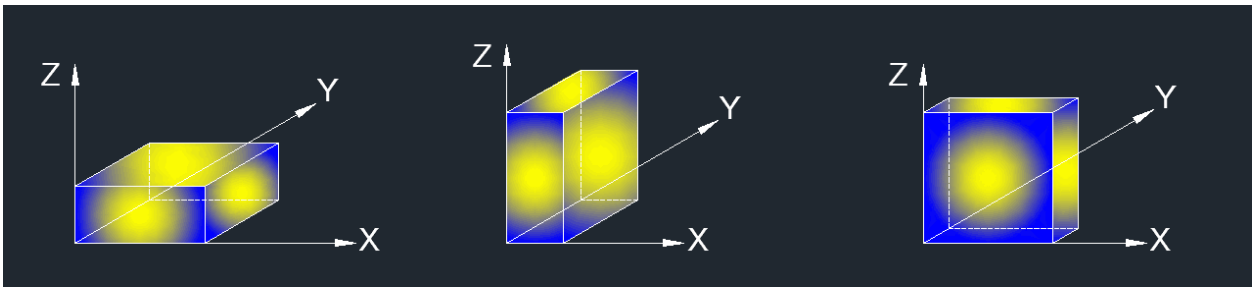
3. The EUT was placed on a turntable with 1.5 m above ground.

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

5. For measurement above 1 GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 7.1. ON TIME AND DUTY CYCLE.

X axis, Y axis, Z axis positions:



Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

Note 2: The EUT was fully exercised with external accessories during the test. In the case of multiple accessory external ports, an external accessory shall be connected to one of each type of port.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

For Restricted Bandedge:
Note:
1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. PK=Peak: Peak detector.
4. AV=Average: VBW=1/Ton, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
7. Both horizontal and vertical have been tested, only the worst data was recorded in the report.
8. All modes have been tested, but only the worst data was recorded in the report.

For Radiate Spurious emission (9 kHz ~ 30 MHz):
Note:
1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the QP limit, the QP result is deemed to comply with QP limit.
3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.
4. All modes have been tested, but only the worst data was recorded in the report.
5. dBuA/m= dBuV/m- 20Log10[120π] = dBuV/m- 51.5

For Radiate Spurious Emission (30 MHz ~ 1 GHz):
Note:
1. Result Level = Read Level + Correct Factor.
2. If the peak values are less than the QP limit, the QP result is deemed to comply with QP limit.
3. All modes have been tested, but only the worst data was recorded in the report.

For Radiate Spurious Emission (1 GHz ~ 7 GHz):
1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27 dBm/MHz (68.2 dBuV/m) limit.
9. All modes have been tested, but only the worst data was recorded in the report.

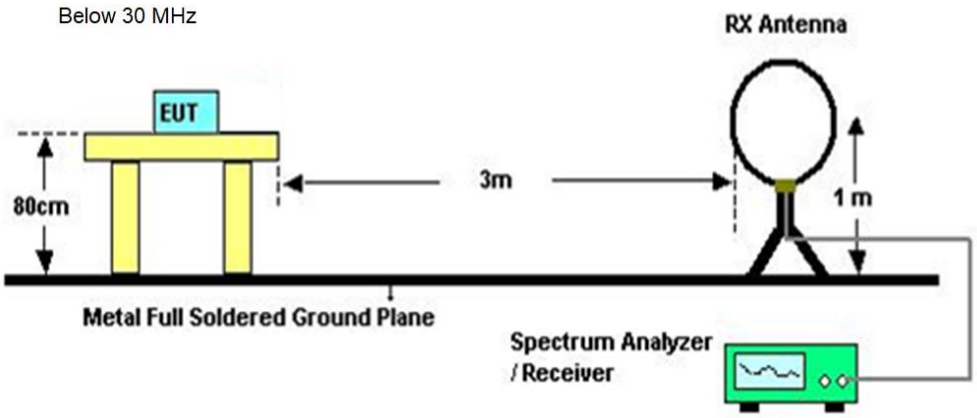
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

For Radiate Spurious Emission (7 GHz ~ 18 GHz):
Note:
1. Peak Result = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27 dBm/MHz (68.2 dBuV/m) limit.
9. All modes have been tested, but only the worst data was recorded in the report.

For Radiate Spurious emission (18 GHz ~ 26 GHz):
Note:
1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. All modes have been tested, but only the worst data was recorded in the report.

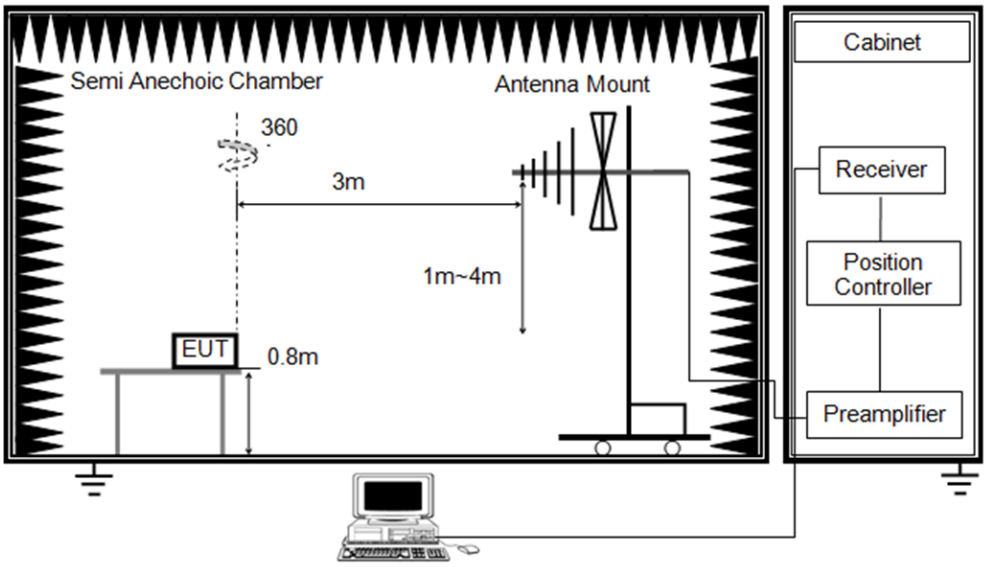
For Radiate Spurious emission (26 GHz ~ 40 GHz):
Note:
1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. All modes have been tested, but only the worst data was recorded in the report.

TEST SETUP

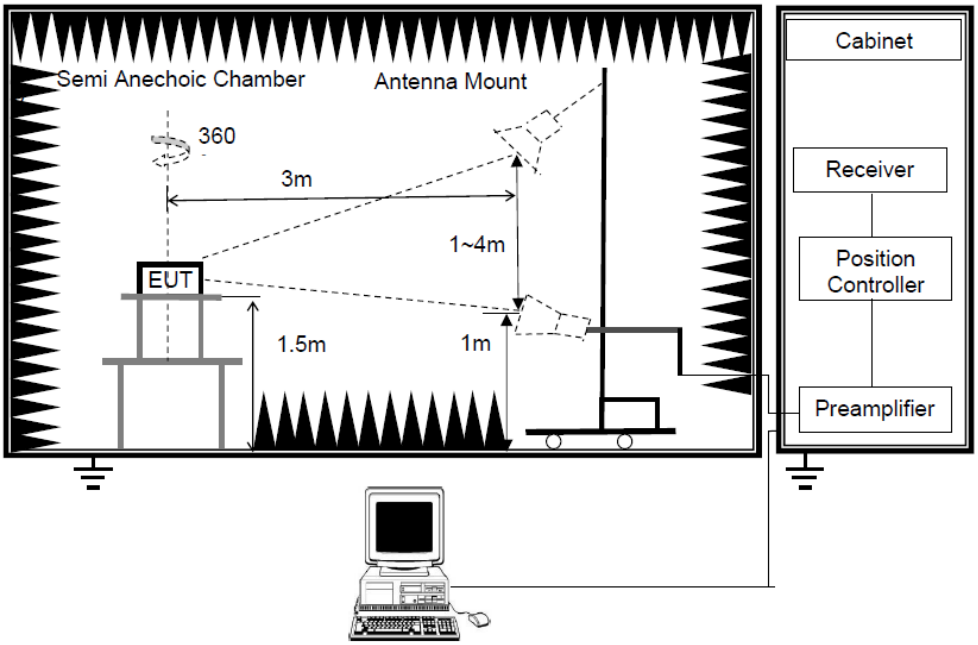


This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Below 1 GHz and above 30 MHz



Above 1GHz



This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TEST ENVIRONMENT

Temperature	21.5℃	Relative Humidity	57.6%
Atmosphere Pressure	101kPa	Test Voltage	

TEST DATE / ENGINEER

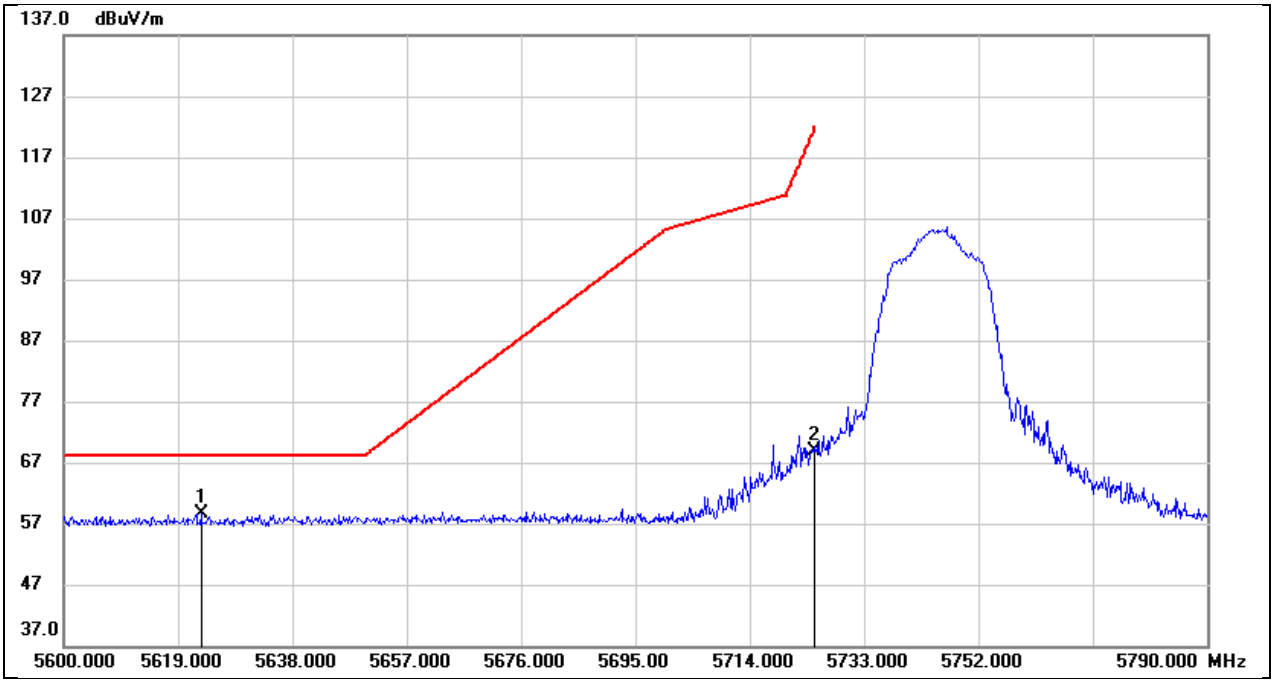
Test Date	February 15, 2025	Test By	Mason Wang

TEST RESULTS

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.1. RESTRICTED BANDEDGE

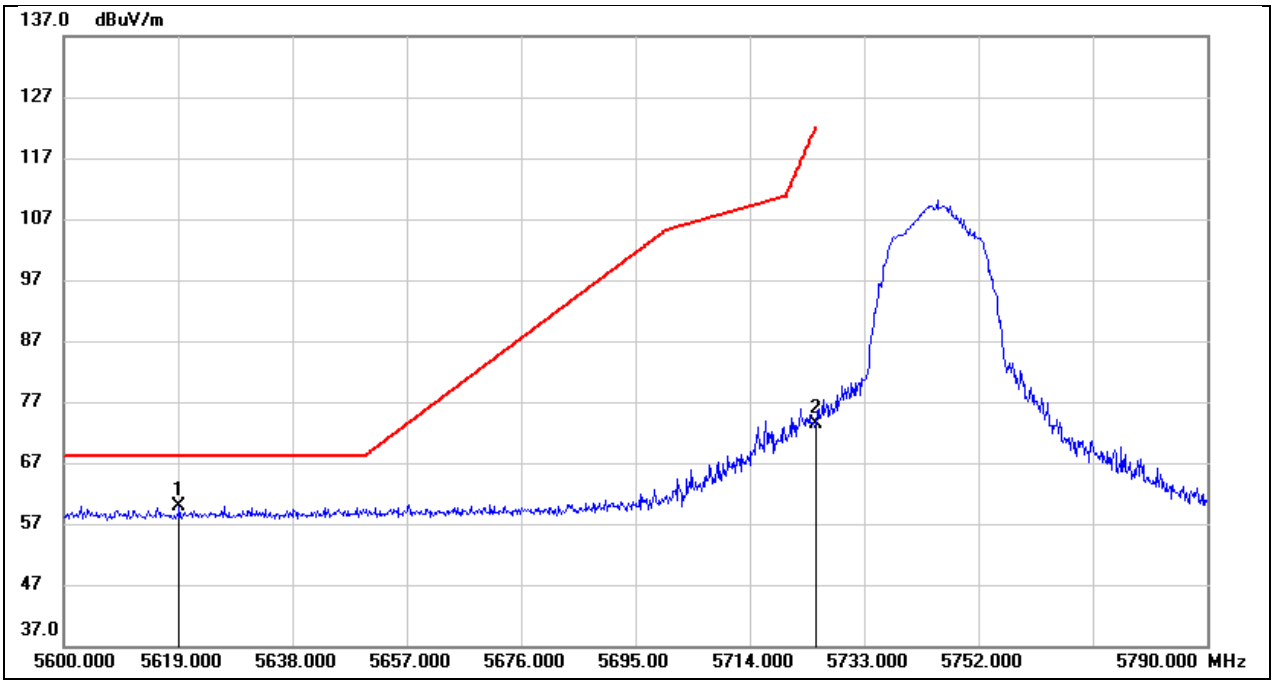
Test Mode:	802.11a 20 PK	Frequency(MHz):	5745
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5622.800	18.59	39.96	58.55	68.20	-9.65	peak
2	5725.000	28.76	40.09	68.85	122.20	-53.35	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

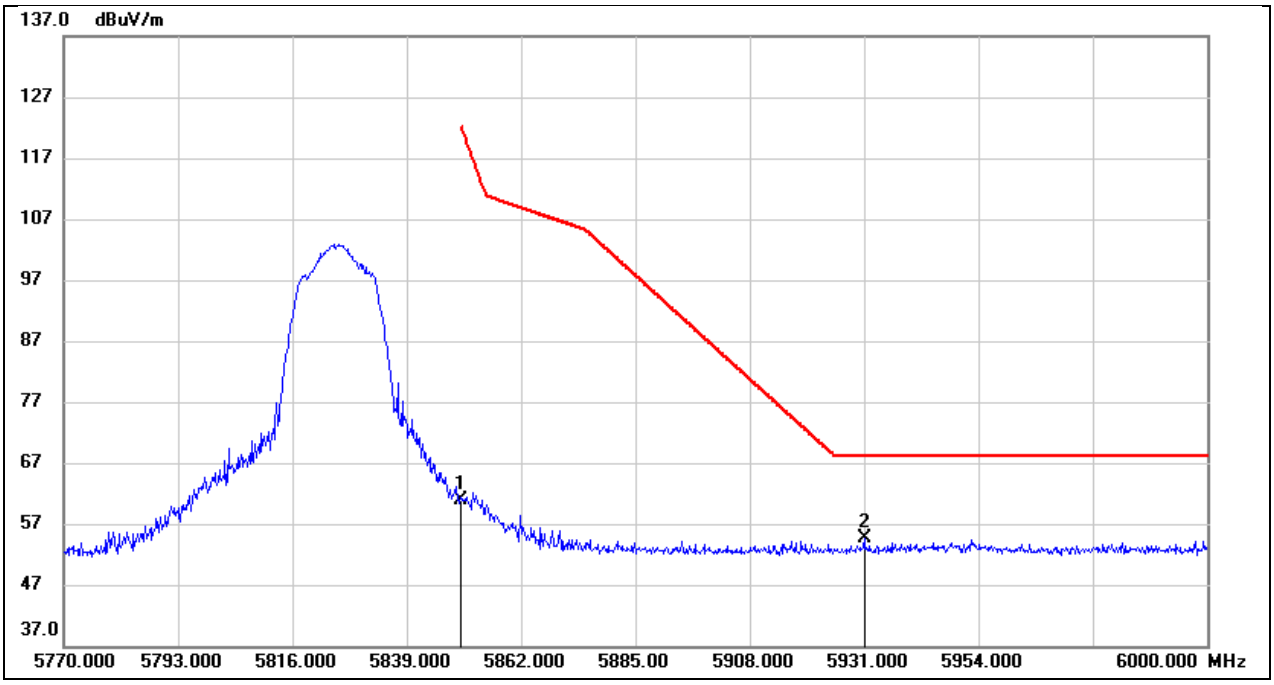
Test Mode:	802.11a 20 PK	Frequency(MHz):	5745
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5619.190	18.76	41.10	59.86	68.20	-8.34	peak
2	5725.000	32.20	41.20	73.40	122.20	-48.80	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

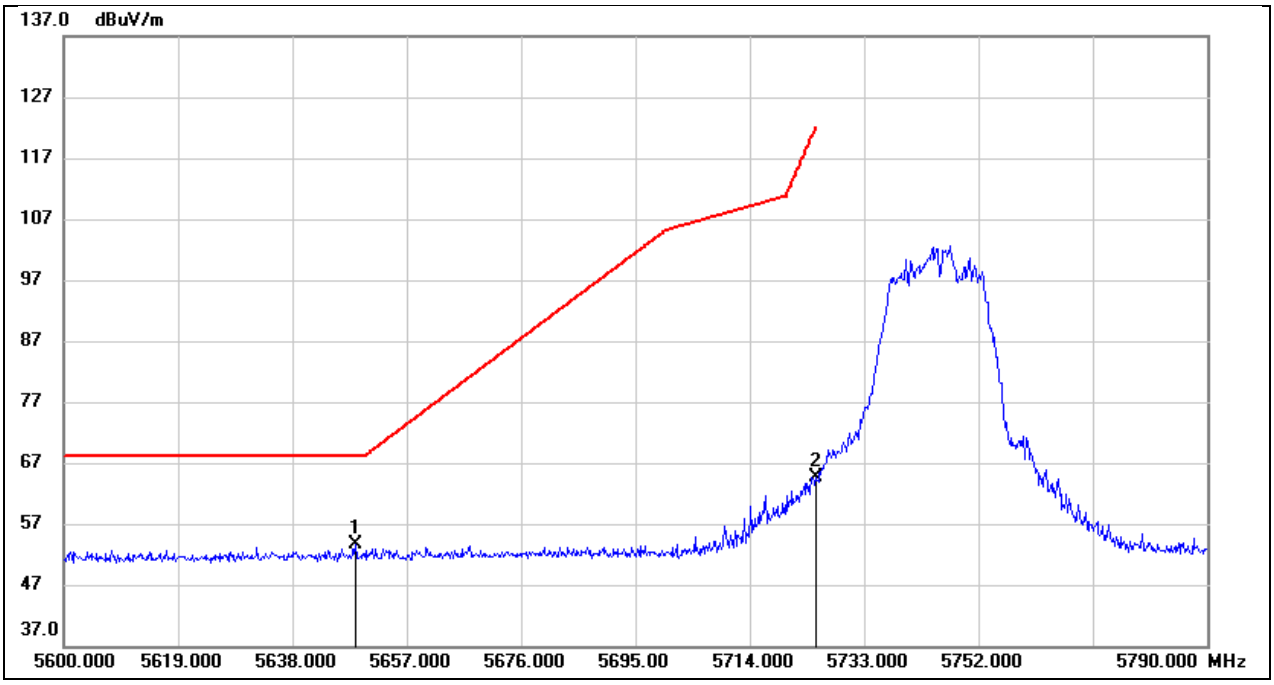
Test Mode:	802.11a 20 PK	Frequency(MHz):	5825
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	26.27	34.62	60.89	122.20	-61.31	peak
2	5931.000	19.84	34.72	54.56	68.20	-13.64	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

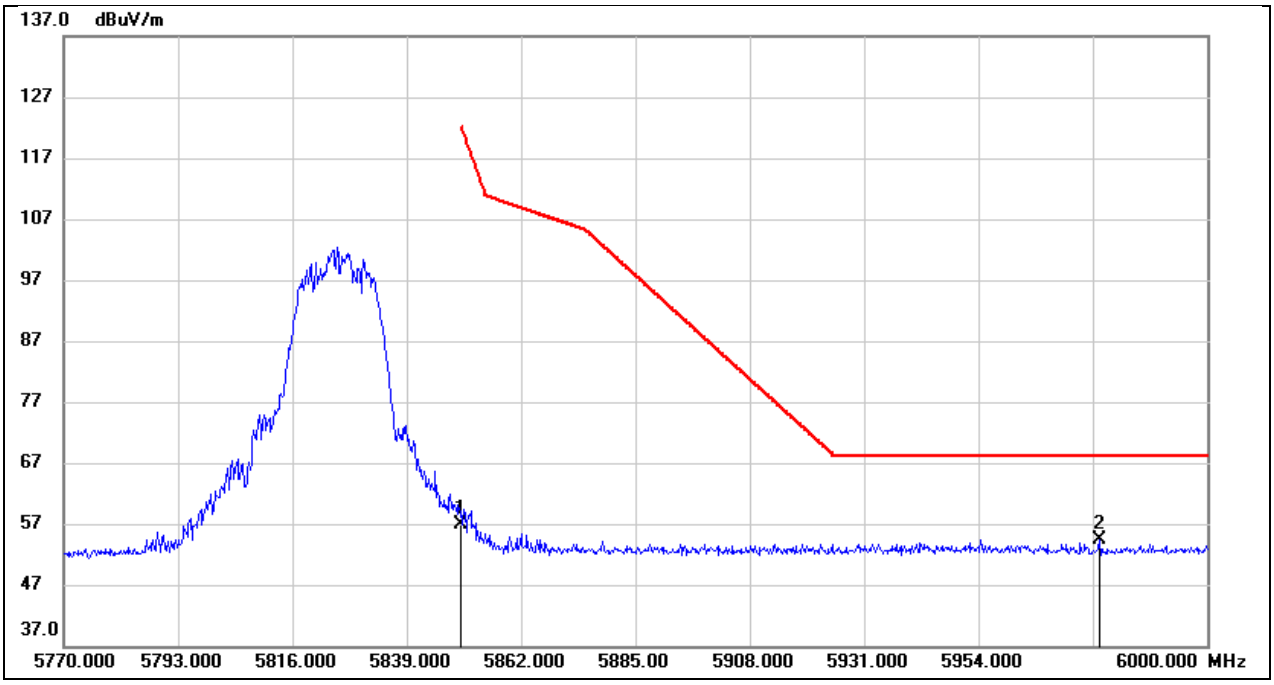
Test Mode:	802.11n HT20 PK	Frequency(MHz):	5745
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5648.450	19.31	34.38	53.69	68.20	-14.51	peak
2	5725.000	30.21	34.47	64.68	122.20	-57.52	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

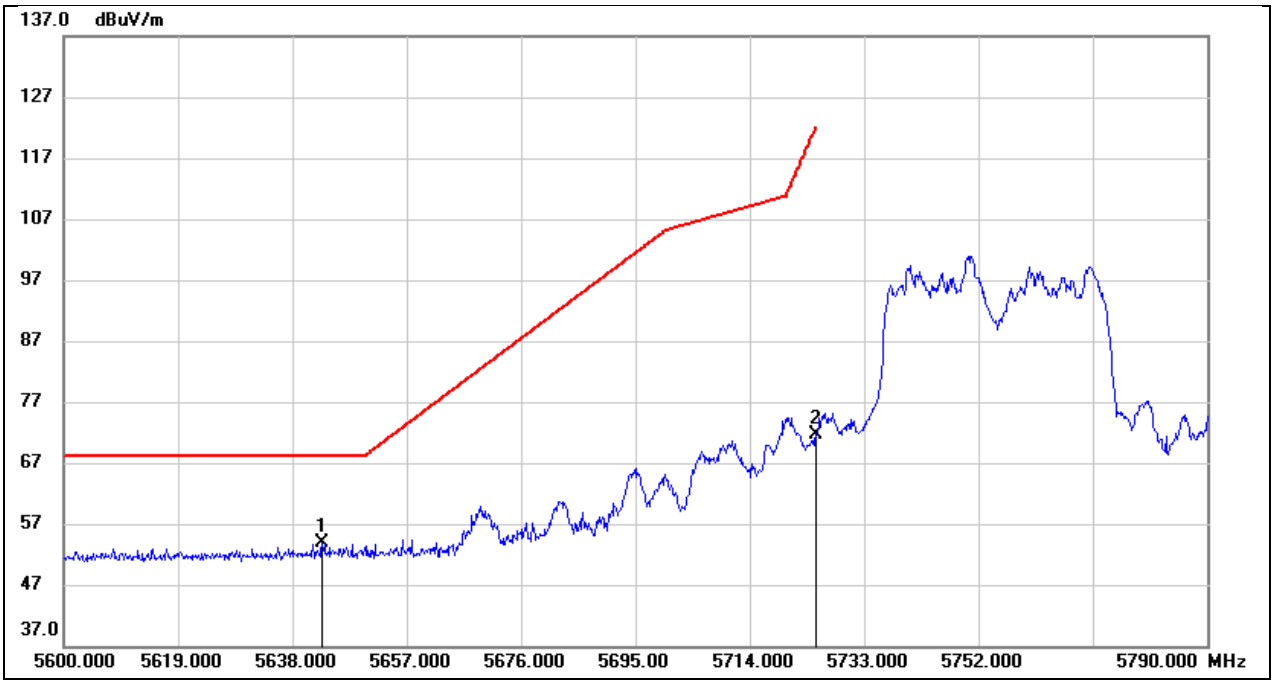
Test Mode:	802.11n HT20 PK	Frequency(MHz):	5825
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	22.29	34.62	56.91	122.20	-65.29	peak
2	5978.380	19.72	34.77	54.49	68.20	-13.71	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

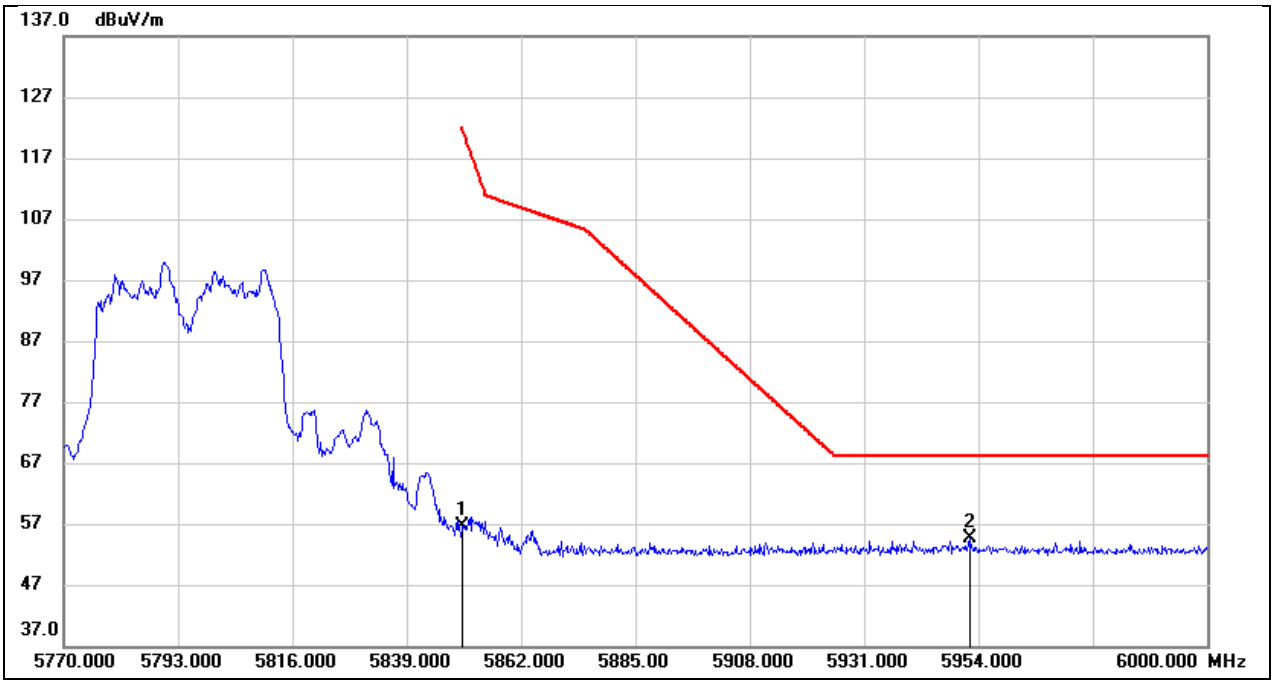
Test Mode:	802.11n HT40 PK	Frequency(MHz):	5755
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5642.940	19.61	34.37	53.98	68.20	-14.22	peak
2	5725.000	37.26	34.47	71.73	122.20	-50.47	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

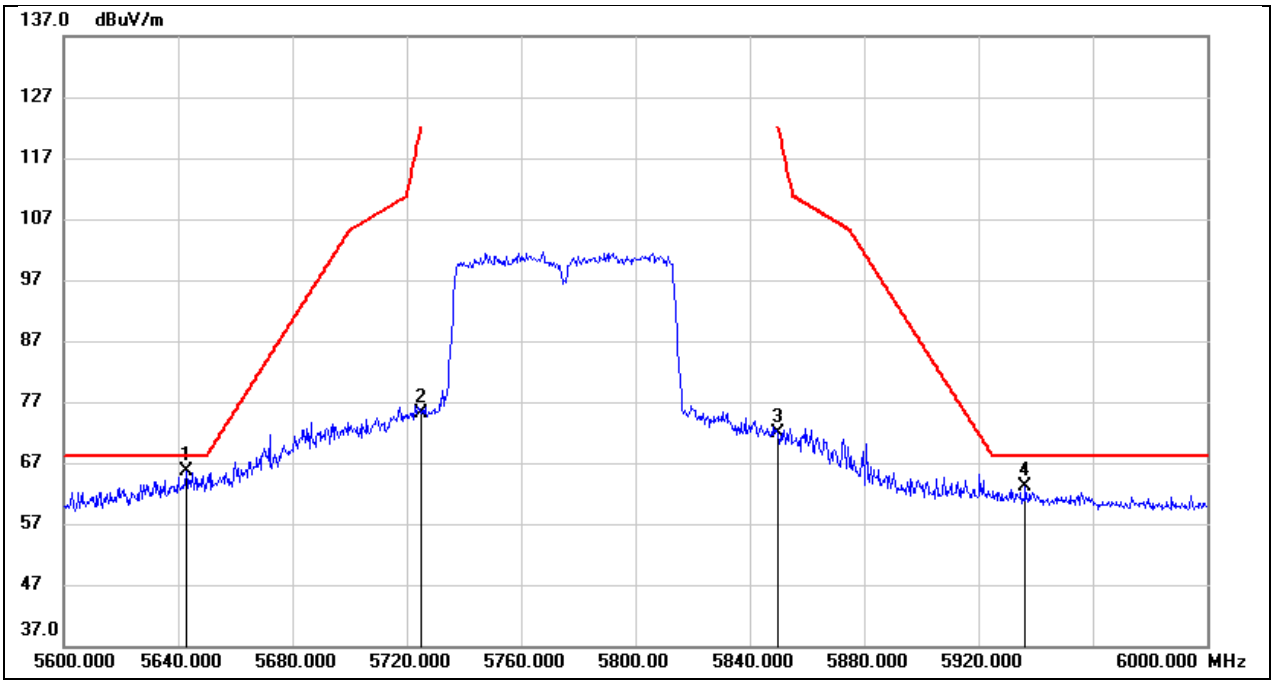
Test Mode:	802.11n HT40 PK	Frequency(MHz):	5795
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	21.99	34.62	56.61	122.20	-65.59	peak
2	5952.160	19.79	34.74	54.53	68.20	-13.67	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

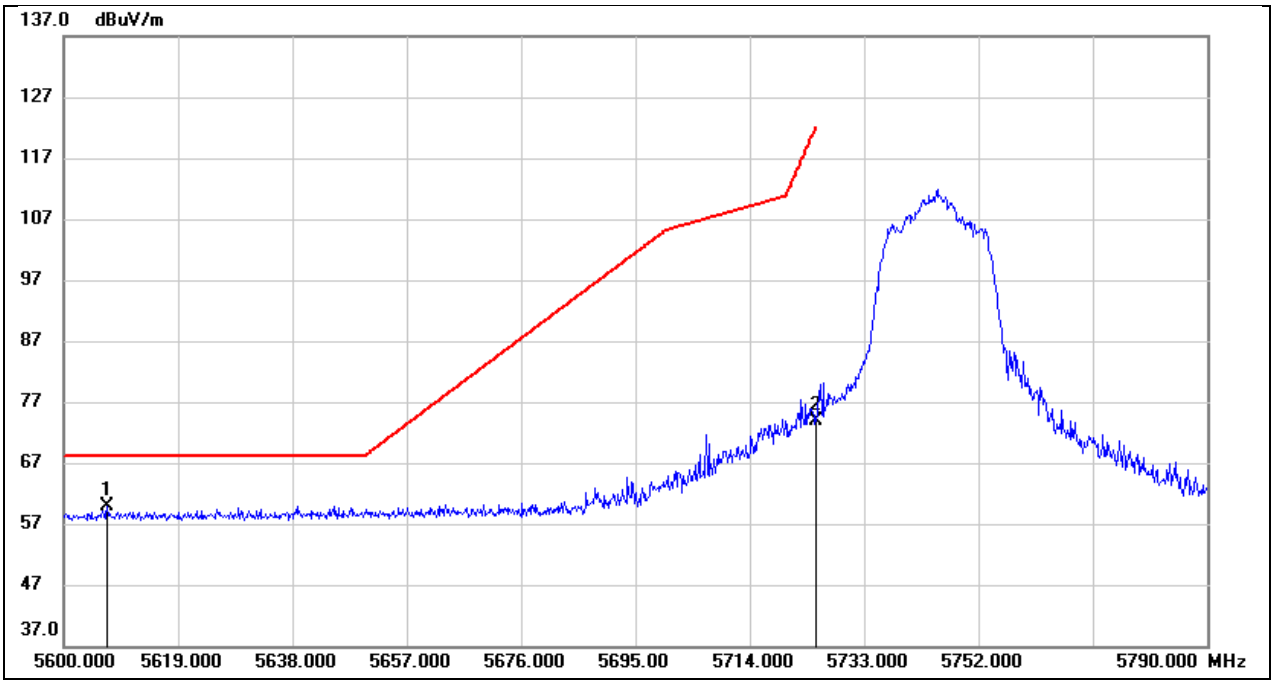
Test Mode:	802.11ac VHT80 PK	Frequency(MHz):	5775
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5642.800	24.58	41.12	65.70	68.20	-2.50	peak
2	5725.000	33.85	41.20	75.05	122.20	-47.15	peak
3	5850.000	30.43	41.36	71.79	122.20	-50.41	peak
4	5936.400	21.57	41.52	63.09	68.20	-5.11	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

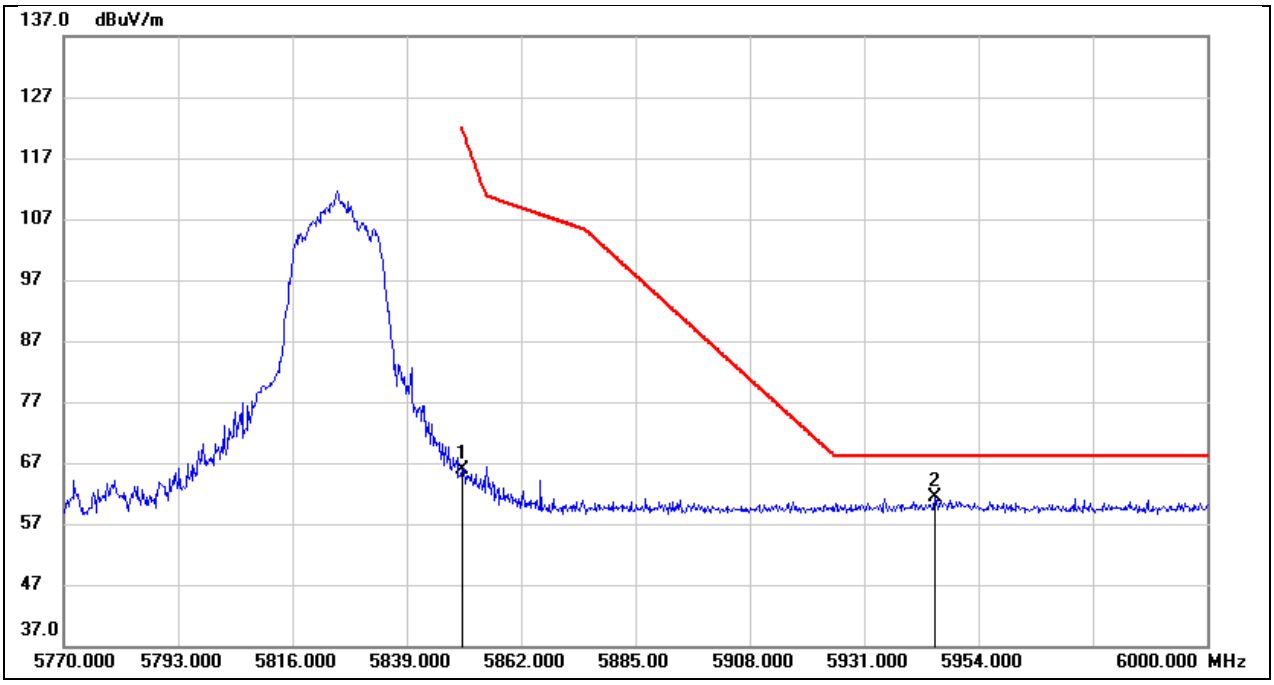
Test Mode:	802.11ax HE20 PK	Frequency(MHz):	5745
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5607.220	18.83	41.10	59.93	68.20	-8.27	peak
2	5725.000	32.76	41.20	73.96	122.20	-48.24	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

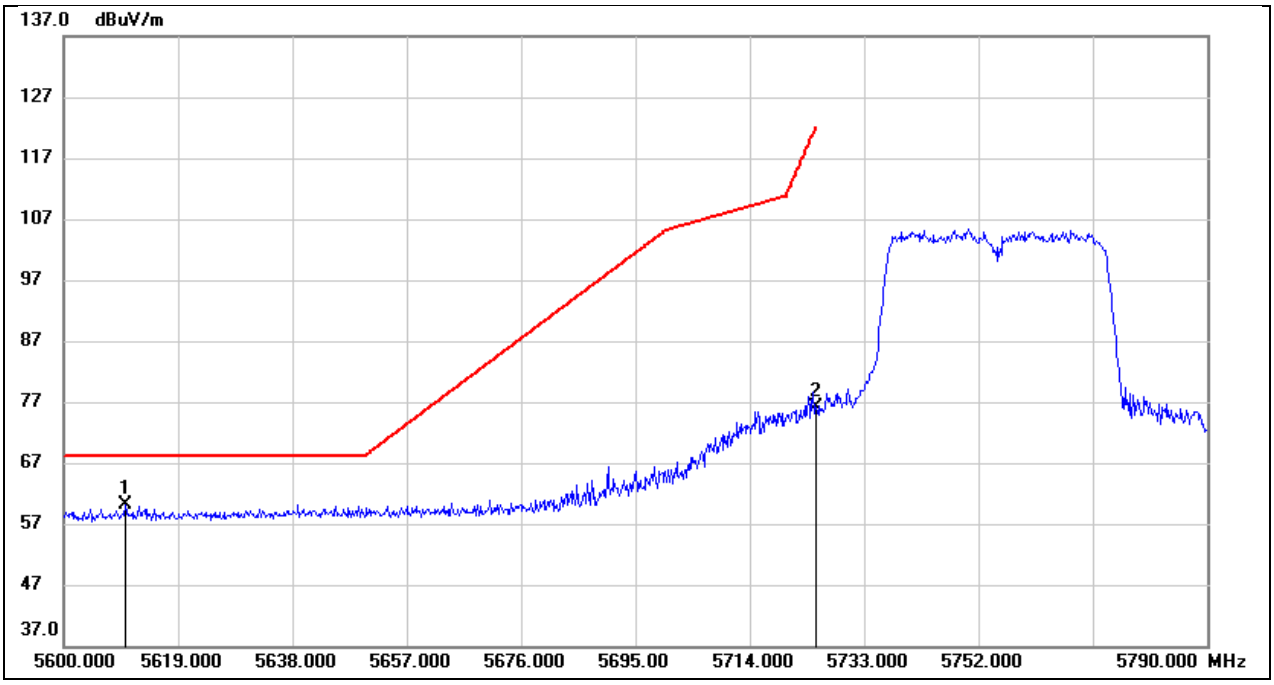
Test Mode:	802.11ax HE20 PK	Frequency(MHz):	5825
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	24.52	41.36	65.88	122.20	-56.32	peak
2	5945.260	19.80	41.54	61.34	68.20	-6.86	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

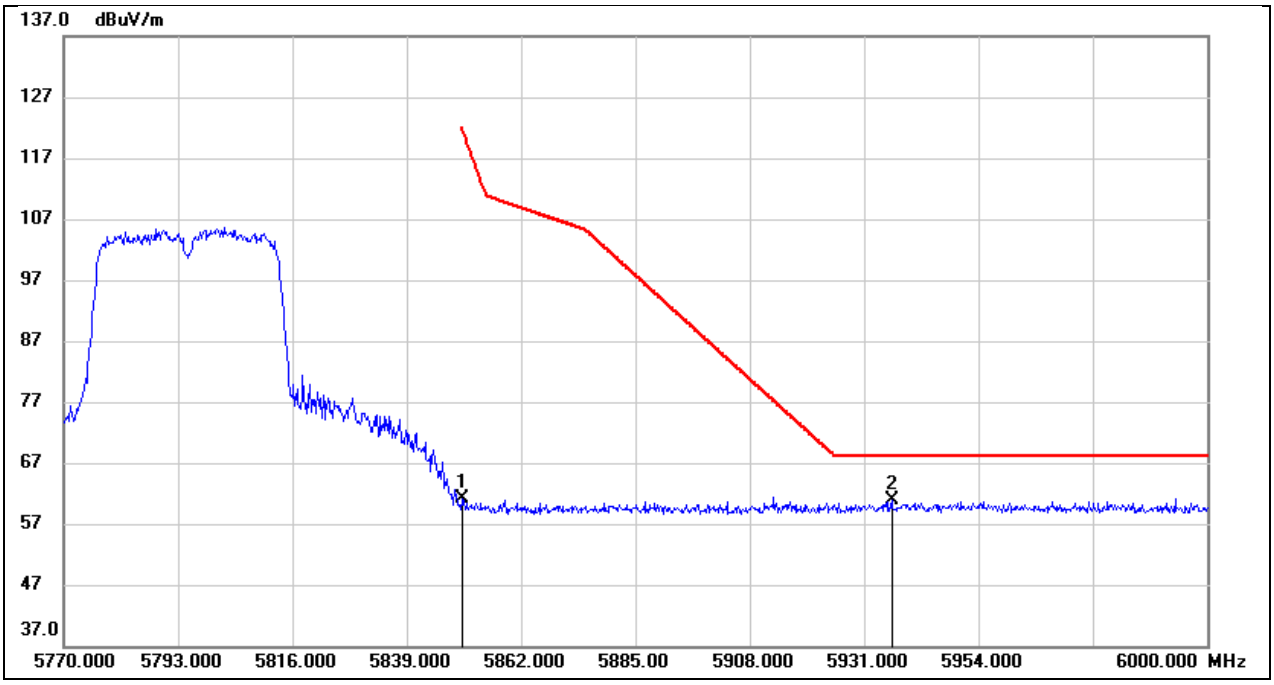
Test Mode:	802.11ax HE40 PK	Frequency(MHz):	5755
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5610.260	19.07	41.10	60.17	68.20	-8.03	peak
2	5725.000	34.83	41.20	76.03	122.20	-46.17	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

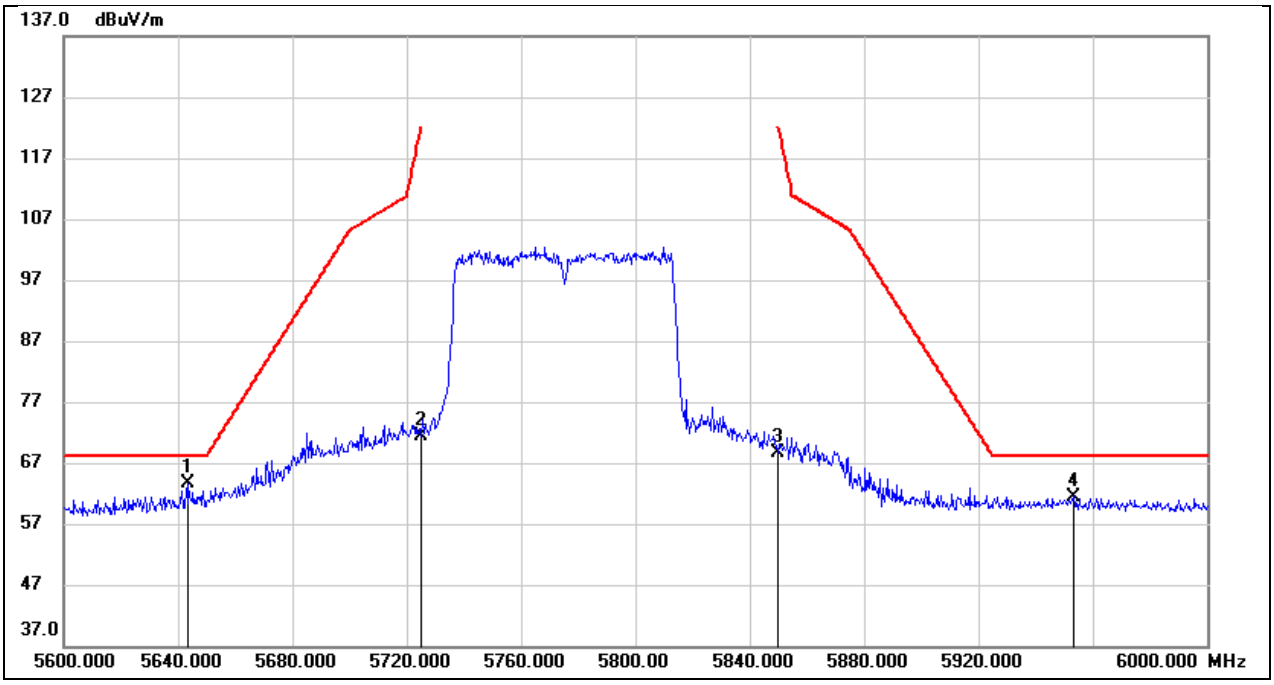
Test Mode:	802.11ax HE40 PK	Frequency(MHz):	5795
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	19.86	41.36	61.22	122.20	-60.98	peak
2	5936.520	19.34	41.52	60.86	68.20	-7.34	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11ax HE80 PK	Frequency(MHz):	5775
Polarity:	Vertical	Test Voltage:	DC 3.85V

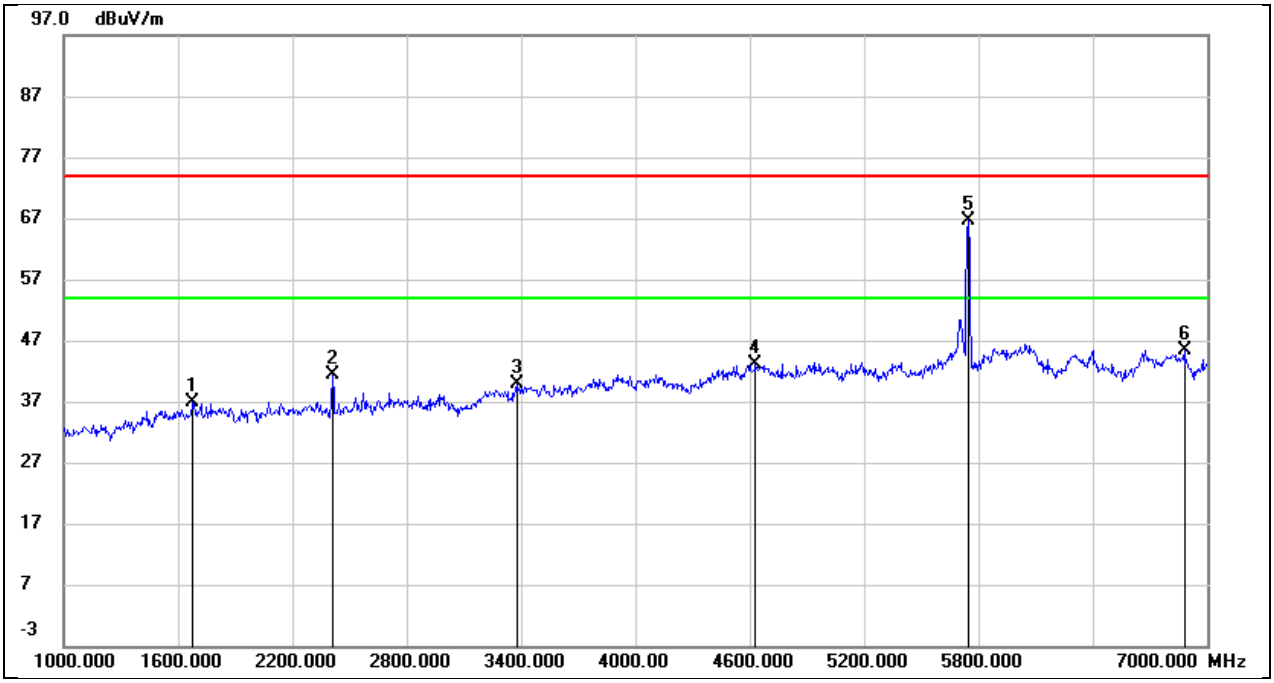


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5643.600	22.63	41.12	63.75	68.20	-4.45	peak
2	5725.000	30.24	41.20	71.44	122.20	-50.76	peak
3	5850.000	27.17	41.36	68.53	122.20	-53.67	peak
4	5953.200	19.95	41.55	61.50	68.20	-6.70	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.2. SPURIOUS EMISSIONS(1 GHZ~7 GHZ)

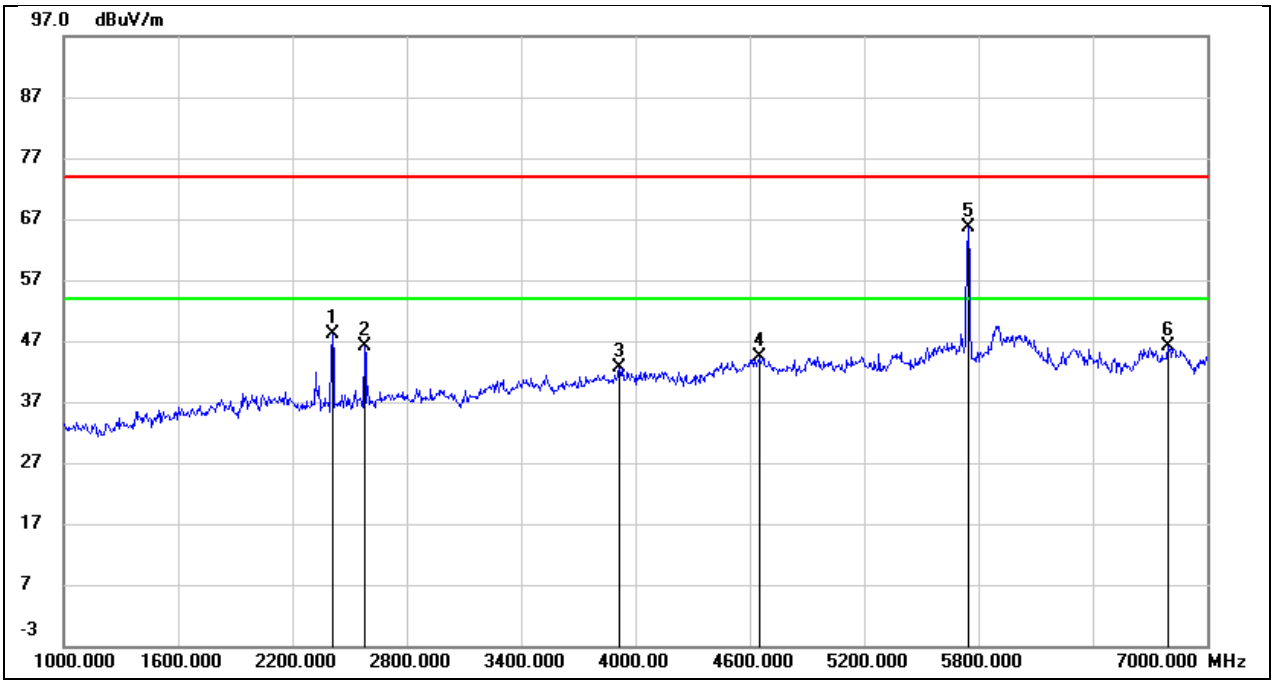
Test Mode:	802.11a 20	Frequency(MHz):	5745
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1678.000	47.75	-10.82	36.93	74.00	-37.07	peak
2	2410.000	50.01	-8.55	41.46	74.00	-32.54	peak
3	3376.000	44.16	-4.31	39.85	74.00	-34.15	peak
4	4630.000	43.03	0.20	43.23	74.00	-30.77	peak
5	5746.000	62.39	4.26	66.65	74.00	-7.35	peak
6	6880.000	38.87	6.55	45.42	74.00	-28.58	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

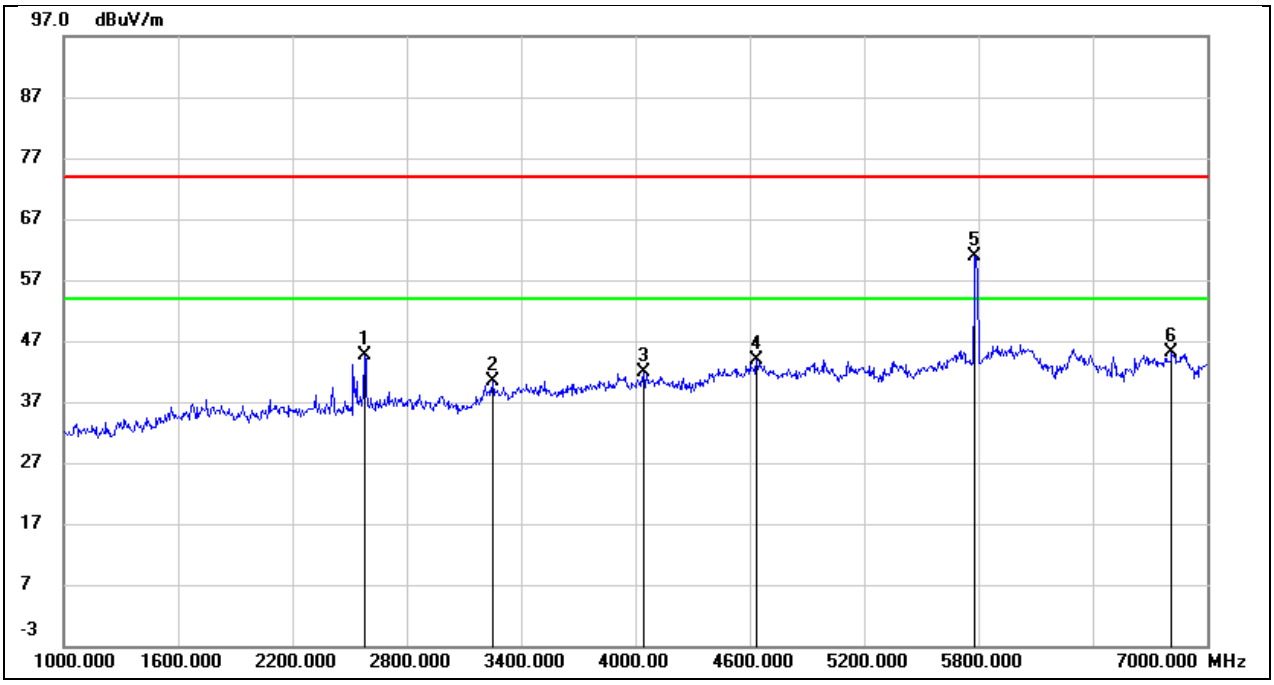
Test Mode:	802.11a 20	Frequency(MHz):	5745
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2410.000	55.79	-7.73	48.06	74.00	-25.94	peak
2	2578.000	53.10	-6.98	46.12	74.00	-27.88	peak
3	3916.000	44.21	-1.49	42.72	74.00	-31.28	peak
4	4654.000	42.97	1.29	44.26	74.00	-29.74	peak
5	5745.000	60.31	5.37	65.68	\	\	fundamental
6	6796.000	38.65	7.46	46.11	74.00	-27.89	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

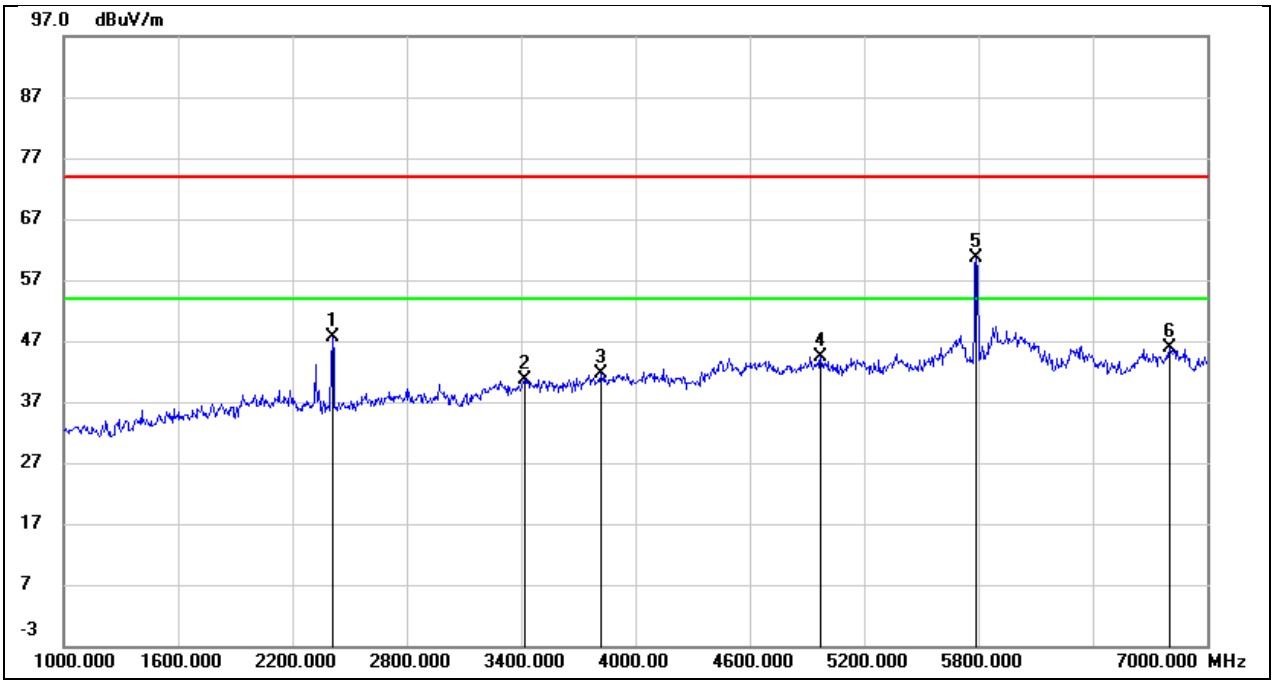
Test Mode:	802.11a 20	Frequency(MHz):	5785
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2578.000	52.44	-7.86	44.58	74.00	-29.42	peak
2	3250.000	45.23	-4.86	40.37	74.00	-33.63	peak
3	4042.000	44.07	-2.25	41.82	74.00	-32.18	peak
4	4636.000	43.60	0.22	43.82	74.00	-30.18	peak
5	5785.000	56.51	4.43	60.94	\	\	fundamental
6	6814.000	38.44	6.60	45.04	74.00	-28.96	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

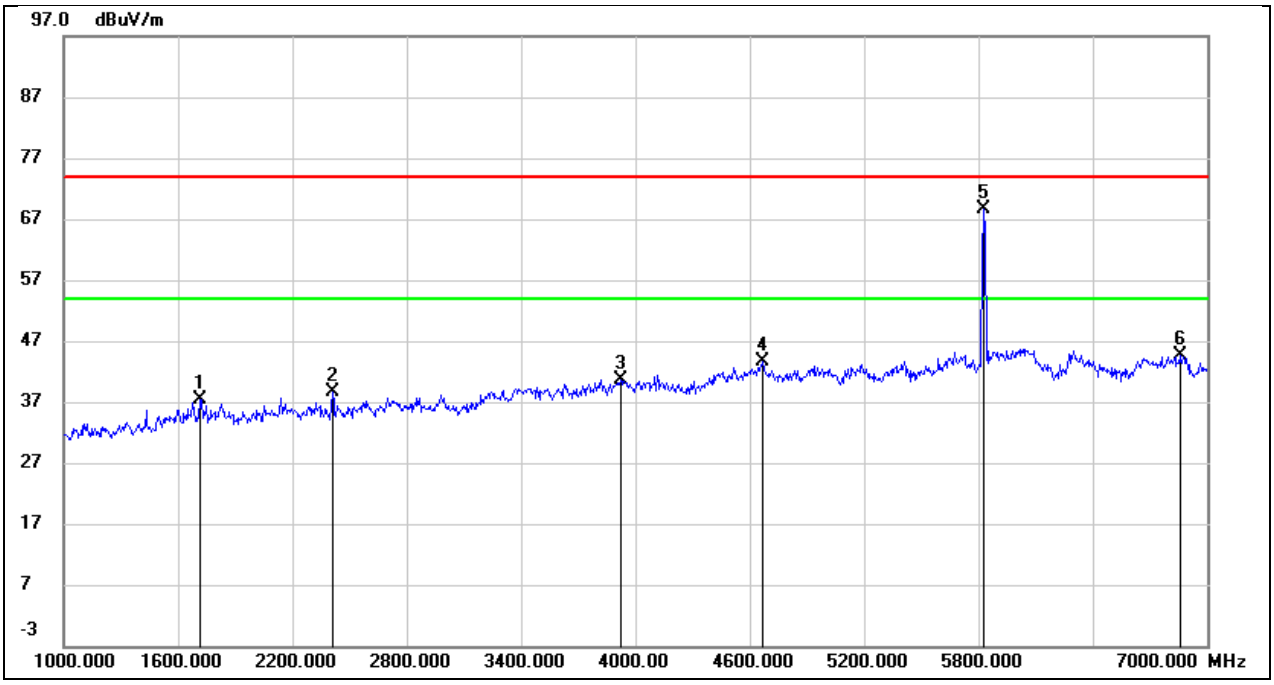
Test Mode:	802.11a 20	Frequency(MHz):	5785
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2410.000	55.44	-7.73	47.71	74.00	-26.29	peak
2	3418.000	43.79	-3.08	40.71	74.00	-33.29	peak
3	3820.000	43.39	-1.70	41.69	74.00	-32.31	peak
4	4972.000	41.57	2.85	44.42	74.00	-29.58	peak
5	5785.000	55.07	5.55	60.62	\	\	fundamental
6	6802.000	38.51	7.46	45.97	74.00	-28.03	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

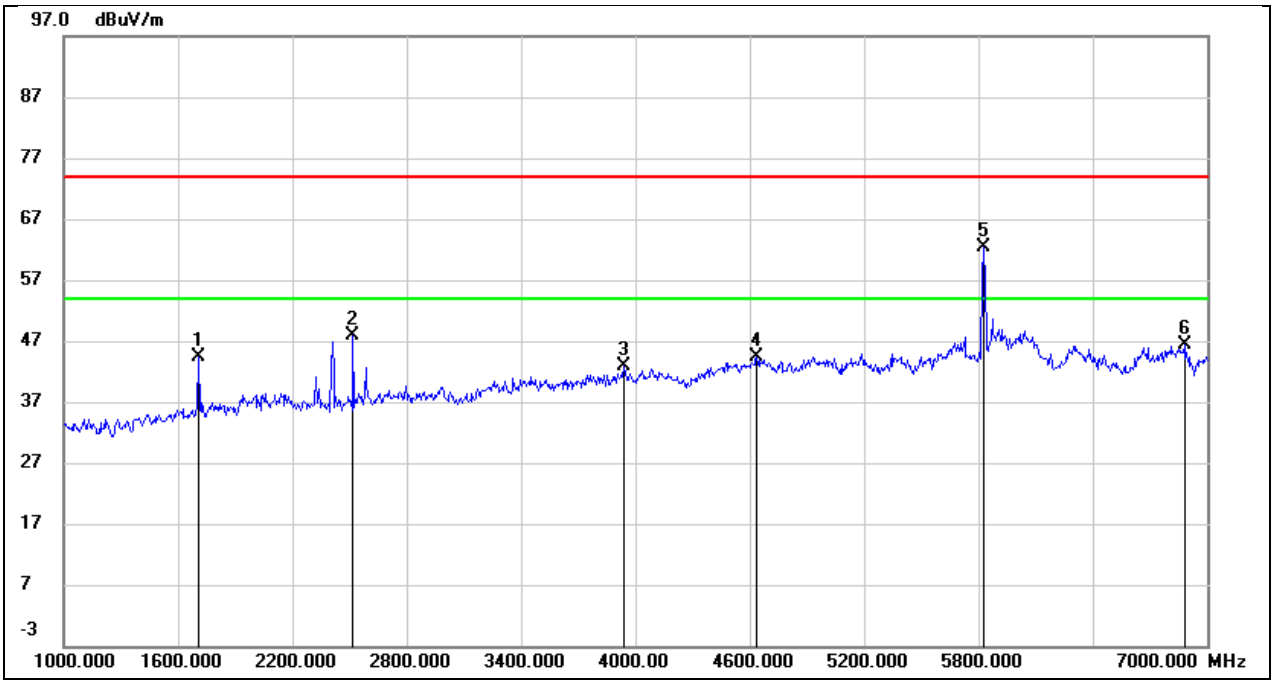
Test Mode:	802.11a 20	Frequency(MHz):	5825
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1714.000	48.06	-10.57	37.49	74.00	-36.51	peak
2	2410.000	47.10	-8.55	38.55	74.00	-35.45	peak
3	3922.000	43.21	-2.56	40.65	74.00	-33.35	peak
4	4666.000	43.21	0.35	43.56	74.00	-30.44	peak
5	5825.000	64.03	4.68	68.71	\	\	fundamental
6	6856.000	37.99	6.56	44.55	74.00	-29.45	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11a 20	Frequency(MHz):	5825
Polarity:	Vertical	Test Voltage:	DC 3.85V

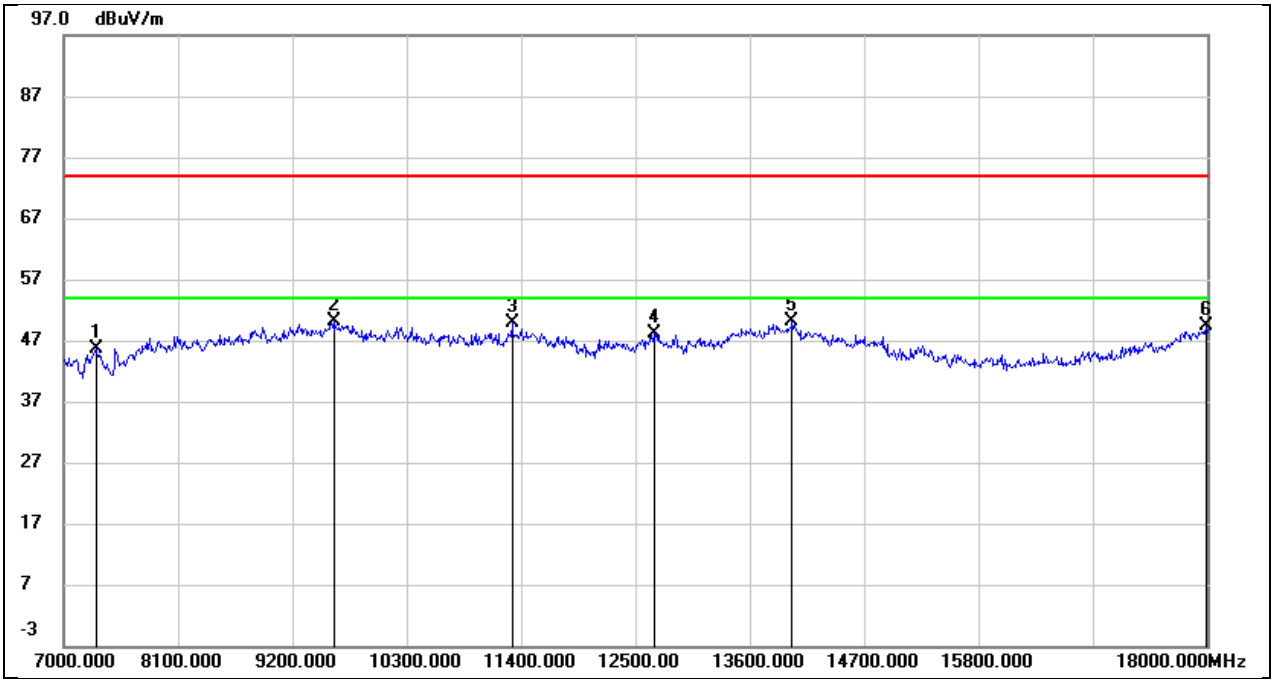


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1708.000	54.66	-10.18	44.48	74.00	-29.52	peak
2	2518.000	55.30	-7.31	47.99	74.00	-26.01	peak
3	3940.000	44.24	-1.44	42.80	74.00	-31.20	peak
4	4636.000	43.26	1.20	44.46	74.00	-29.54	peak
5	5825.000	56.59	5.71	62.30	\	\	fundamental
6	6880.000	38.96	7.42	46.38	74.00	-27.62	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.3. SPURIOUS EMISSIONS(7 GHZ~18 GHZ)

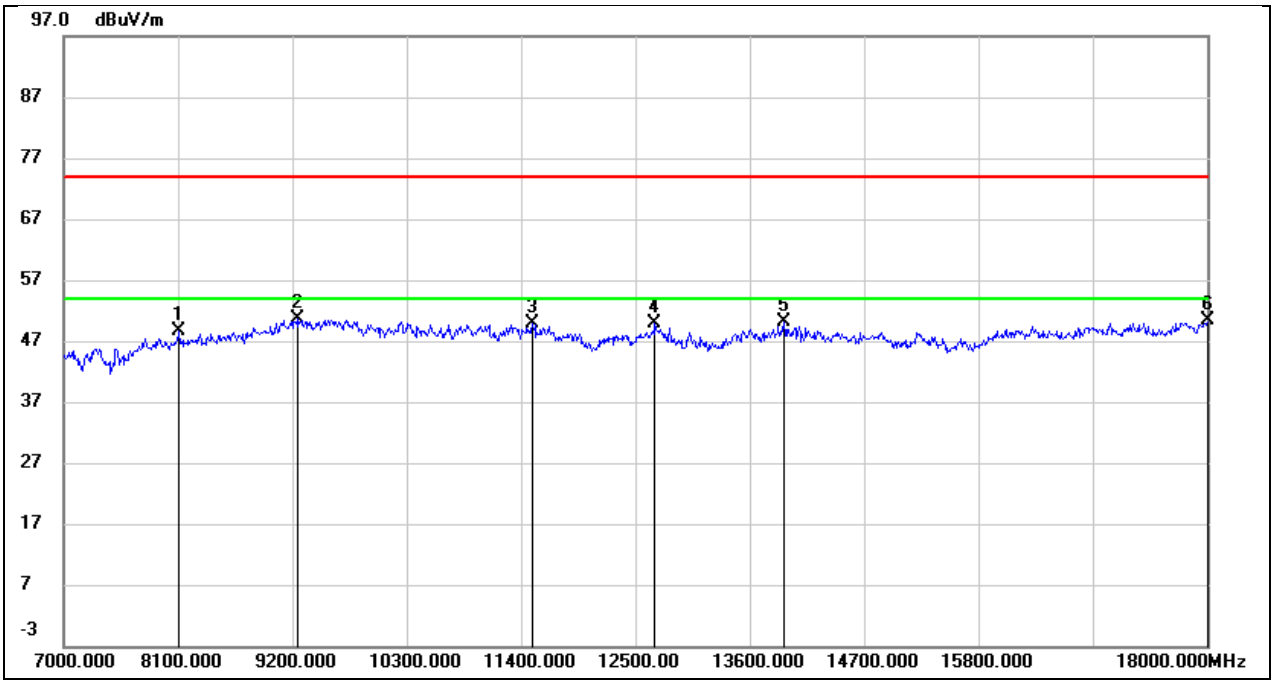
Test Mode:	802.11a 20	Frequency(MHz):	5745
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7308.000	38.11	7.64	45.75	74.00	-28.25	peak
2	9596.000	36.59	13.44	50.03	74.00	-23.97	peak
3	11312.000	32.98	16.83	49.81	74.00	-24.19	peak
4	12676.000	28.64	19.48	48.12	74.00	-25.88	peak
5	14007.000	26.47	23.59	50.06	74.00	-23.94	peak
6	17989.000	19.81	29.49	49.30	74.00	-24.70	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

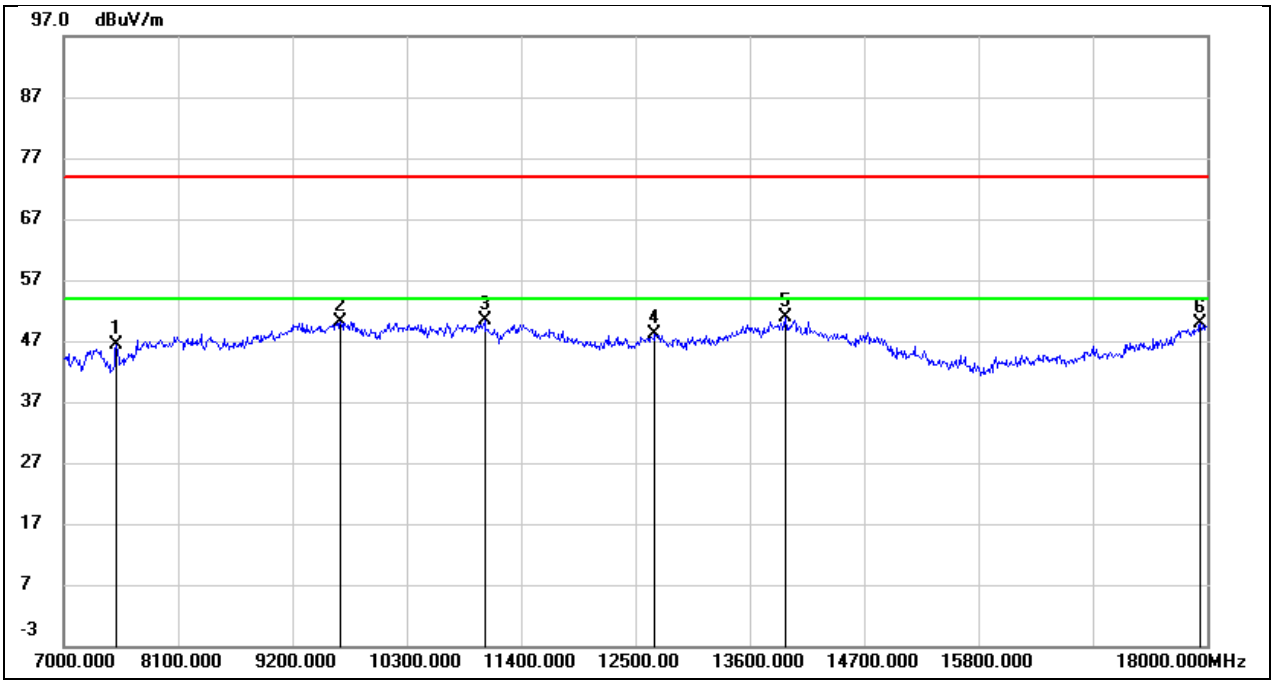
Test Mode:	802.11a 20	Frequency(MHz):	5745
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8111.000	39.81	8.75	48.56	74.00	-25.44	peak
2	9255.000	38.78	11.93	50.71	74.00	-23.29	peak
3	11510.000	33.47	16.37	49.84	74.00	-24.16	peak
4	12687.000	31.48	18.51	49.99	74.00	-24.01	peak
5	13930.000	28.41	21.71	50.12	74.00	-23.88	peak
6	18000.000	22.93	27.41	50.34	74.00	-23.66	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

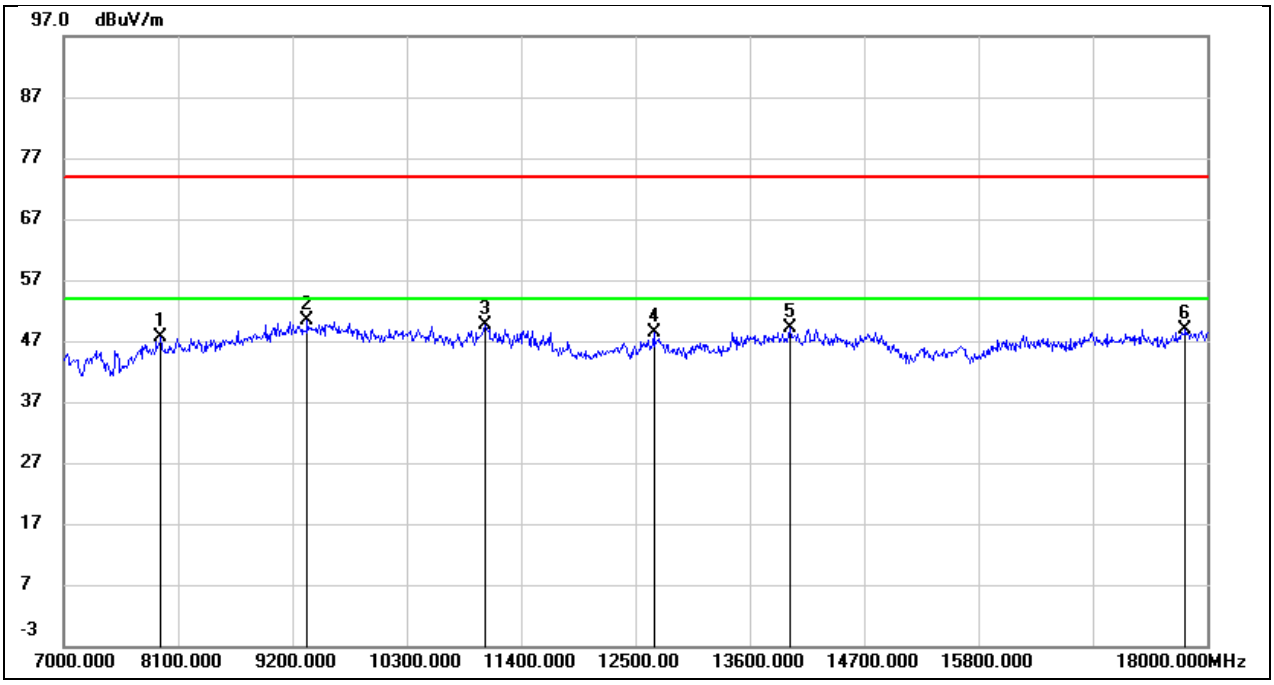
Test Mode:	802.11a 20	Frequency(MHz):	5785
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7506.000	38.46	7.84	46.30	74.00	-27.70	peak
2	9662.000	36.53	13.56	50.09	74.00	-23.91	peak
3	11048.000	35.16	15.33	50.49	74.00	-23.51	peak
4	12687.000	28.68	19.52	48.20	74.00	-25.80	peak
5	13941.000	27.60	23.37	50.97	74.00	-23.03	peak
6	17934.000	20.88	28.91	49.79	74.00	-24.21	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

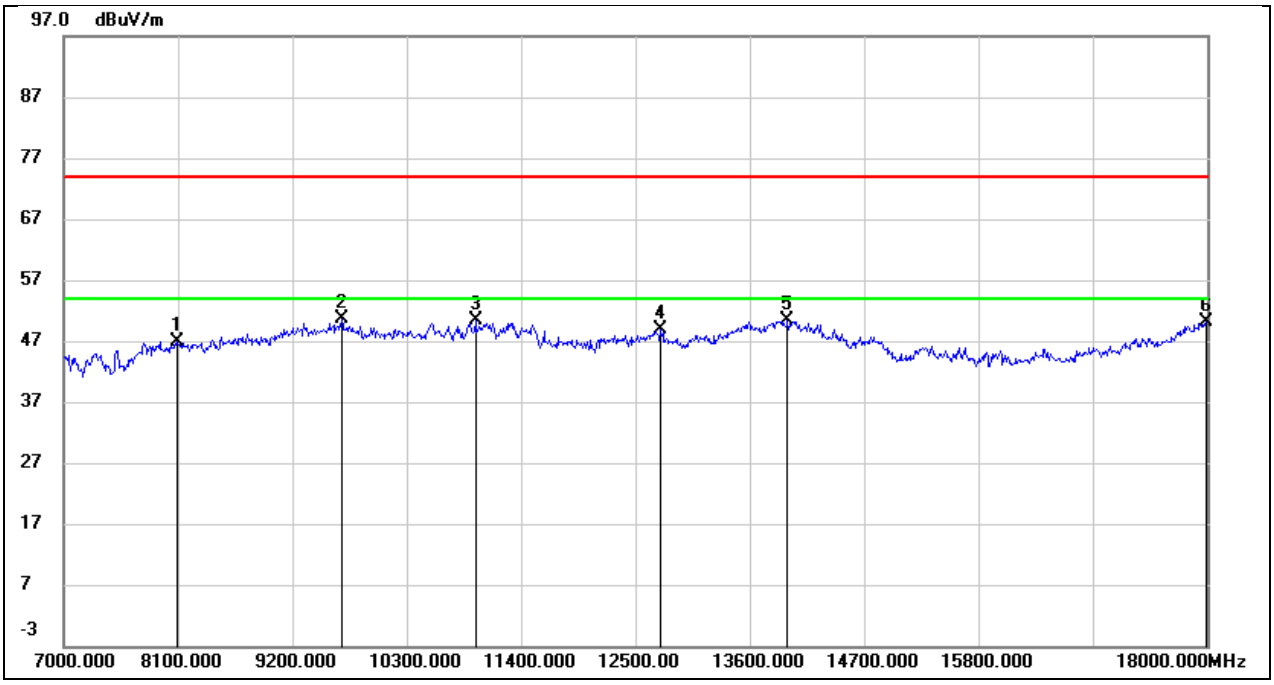
Test Mode:	802.11a 20	Frequency(MHz):	5785
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7935.000	39.00	8.55	47.55	74.00	-26.45	peak
2	9343.000	38.24	12.15	50.39	74.00	-23.61	peak
3	11048.000	35.05	14.46	49.51	74.00	-24.49	peak
4	12676.000	29.97	18.47	48.44	74.00	-25.56	peak
5	13985.000	27.18	21.95	49.13	74.00	-24.87	peak
6	17791.000	22.80	26.11	48.91	74.00	-25.09	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

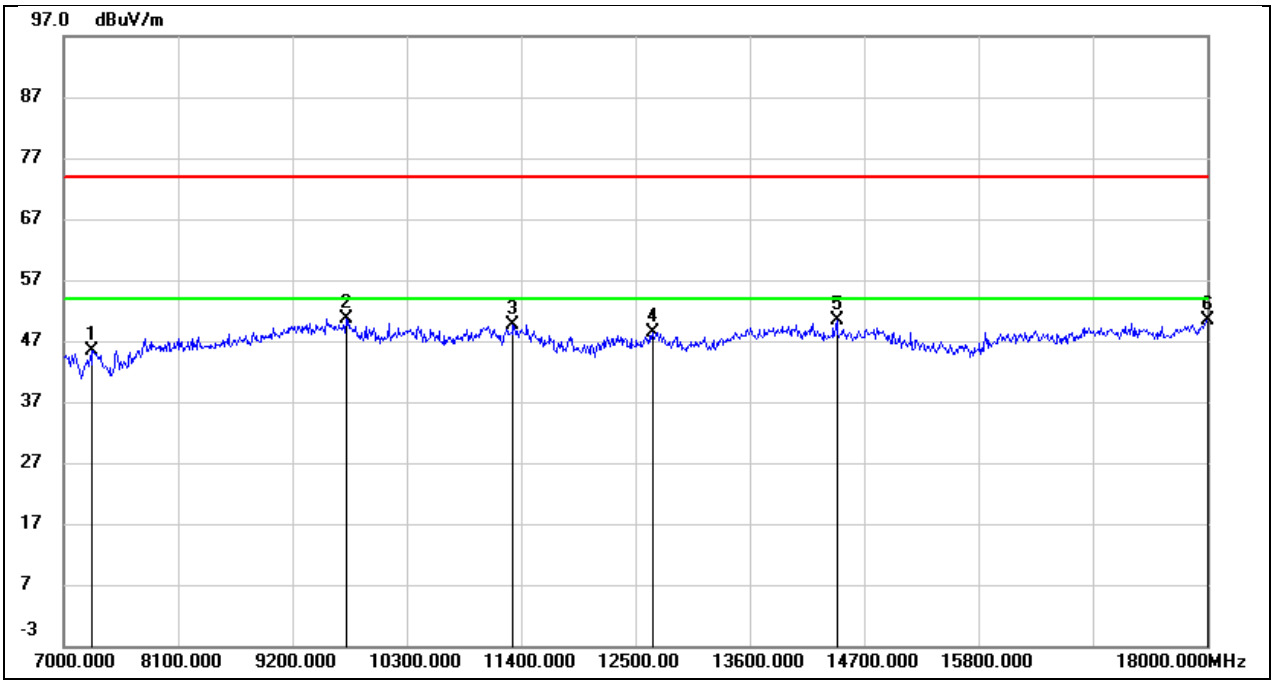
Test Mode:	802.11a 20	Frequency(MHz):	5825
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8089.000	38.72	8.19	46.91	74.00	-27.09	peak
2	9673.000	37.04	13.58	50.62	74.00	-23.38	peak
3	10960.000	35.36	14.93	50.29	74.00	-23.71	peak
4	12742.000	29.05	19.75	48.80	74.00	-25.20	peak
5	13963.000	26.93	23.46	50.39	74.00	-23.61	peak
6	17989.000	20.70	29.49	50.19	74.00	-23.81	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

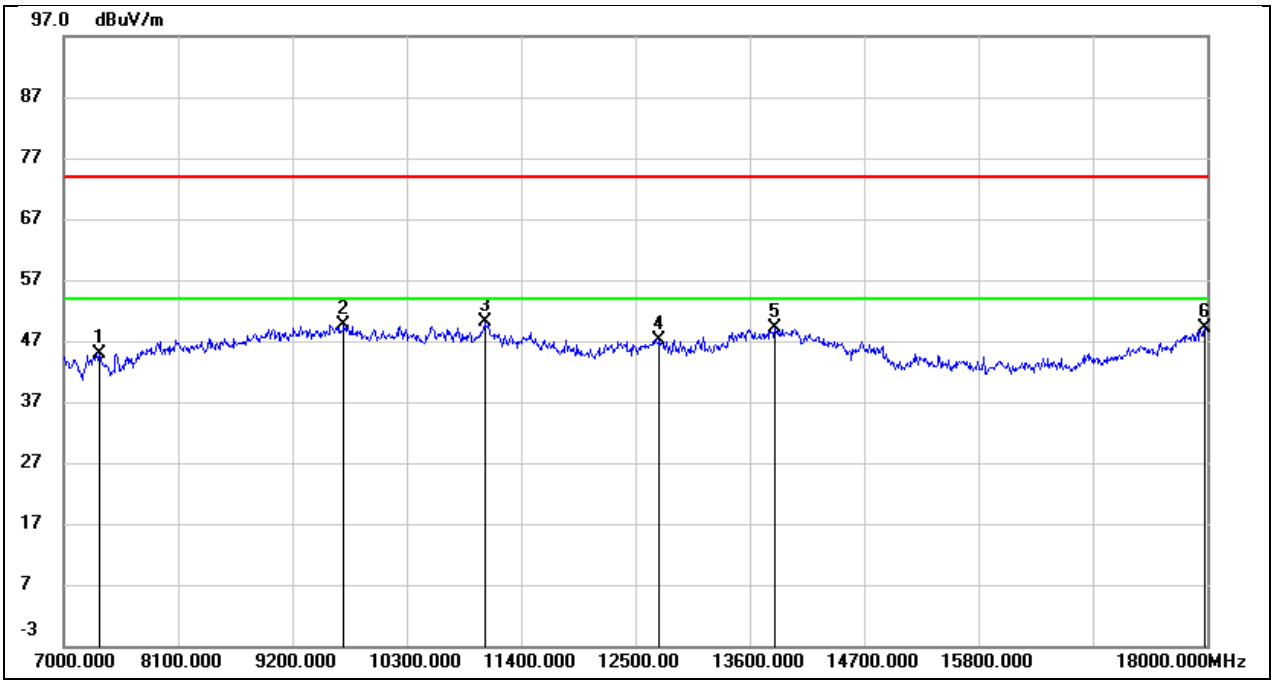
Test Mode:	802.11a 20	Frequency(MHz):	5825
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7275.000	37.04	8.28	45.32	74.00	-28.68	peak
2	9717.000	37.30	13.35	50.65	74.00	-23.35	peak
3	11323.000	34.08	15.64	49.72	74.00	-24.28	peak
4	12665.000	29.91	18.42	48.33	74.00	-25.67	peak
5	14436.000	29.47	20.98	50.45	74.00	-23.55	peak
6	18000.000	22.90	27.41	50.31	74.00	-23.69	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

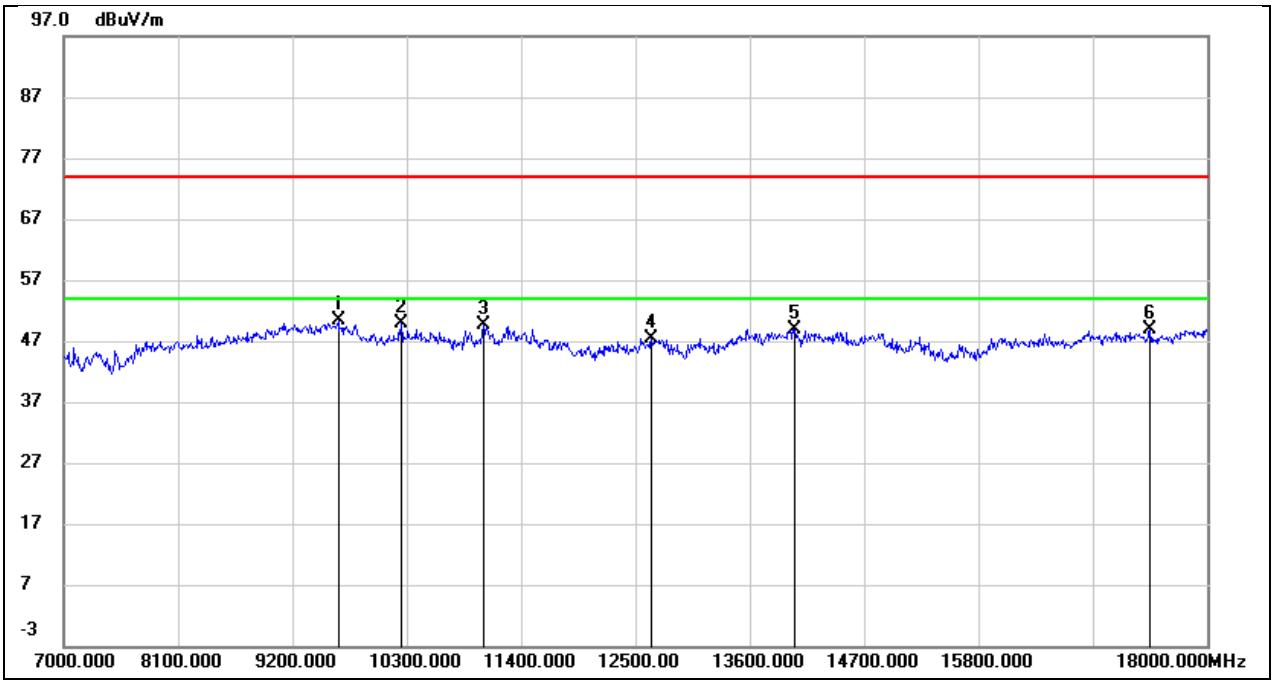
Test Mode:	802.11n HT20	Frequency(MHz):	5745
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7341.000	37.30	7.68	44.98	74.00	-29.02	peak
2	9695.000	36.12	13.62	49.74	74.00	-24.26	peak
3	11048.000	34.68	15.33	50.01	74.00	-23.99	peak
4	12731.000	27.40	19.70	47.10	74.00	-26.90	peak
5	13842.000	26.06	22.96	49.02	74.00	-24.98	peak
6	17978.000	19.65	29.38	49.03	74.00	-24.97	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

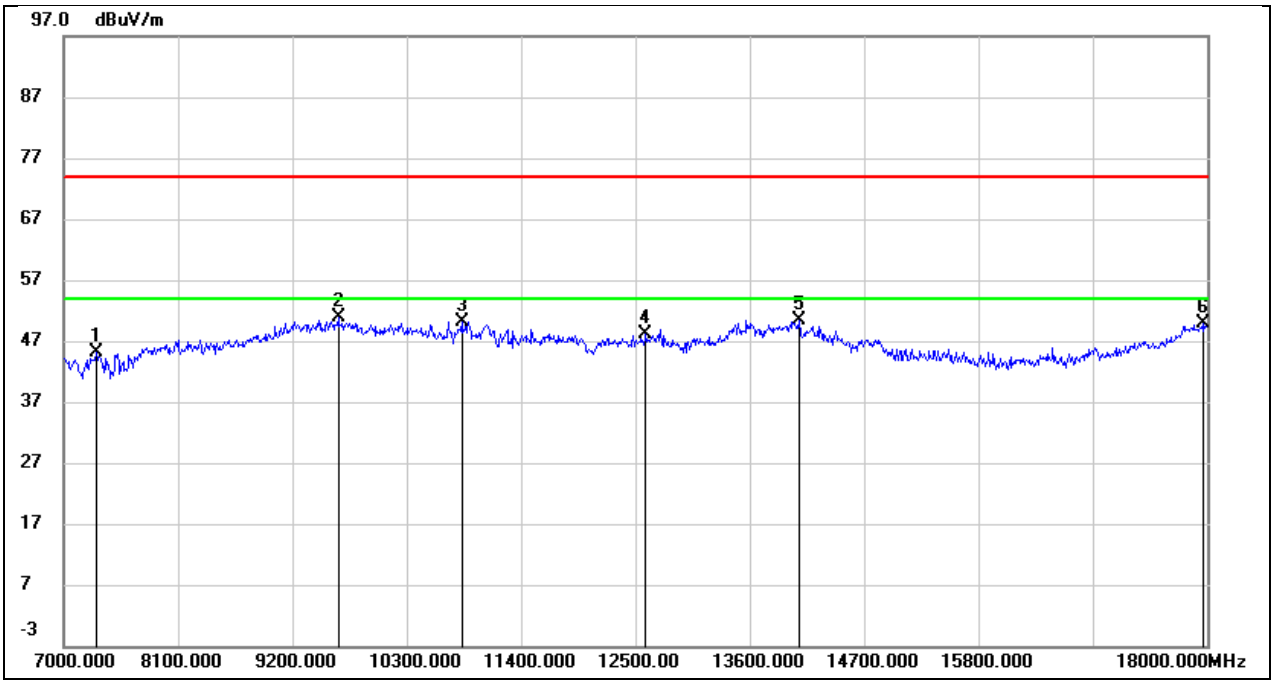
Test Mode:	802.11n HT20	Frequency(MHz):	5745
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9640.000	37.16	13.33	50.49	74.00	-23.51	peak
2	10245.000	37.12	12.76	49.88	74.00	-24.12	peak
3	11037.000	35.13	14.42	49.55	74.00	-24.45	peak
4	12654.000	29.05	18.39	47.44	74.00	-26.56	peak
5	14029.000	26.89	21.96	48.85	74.00	-25.15	peak
6	17450.000	23.79	25.02	48.81	74.00	-25.19	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

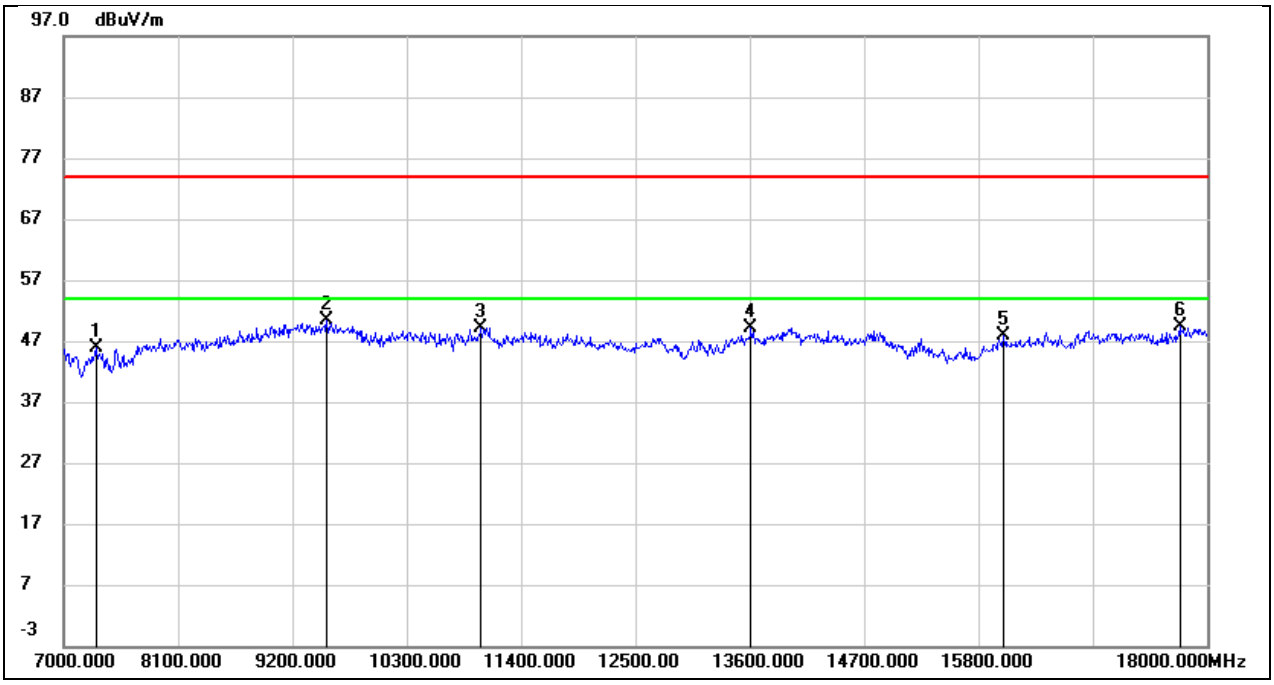
Test Mode:	802.11n HT20	Frequency(MHz):	5785
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7319.000	37.50	7.66	45.16	74.00	-28.84	peak
2	9640.000	37.33	13.53	50.86	74.00	-23.14	peak
3	10828.000	35.71	14.51	50.22	74.00	-23.78	peak
4	12599.000	28.85	19.16	48.01	74.00	-25.99	peak
5	14073.000	27.13	23.31	50.44	74.00	-23.56	peak
6	17967.000	20.53	29.26	49.79	74.00	-24.21	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

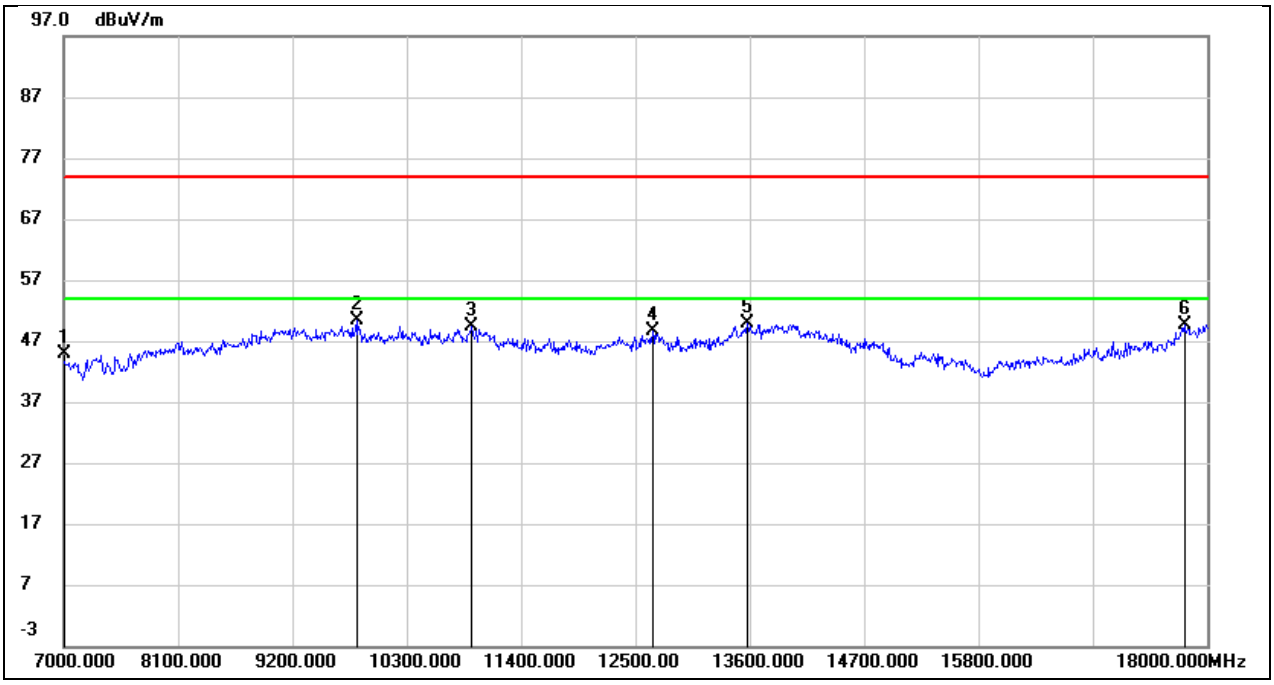
Test Mode:	802.11n HT20	Frequency(MHz):	5785
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7308.000	37.48	8.29	45.77	74.00	-28.23	peak
2	9530.000	37.36	13.00	50.36	74.00	-23.64	peak
3	11015.000	34.85	14.32	49.17	74.00	-24.83	peak
4	13611.000	28.63	20.57	49.20	74.00	-24.80	peak
5	16042.000	24.68	23.15	47.83	74.00	-26.17	peak
6	17736.000	23.50	25.83	49.33	74.00	-24.67	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

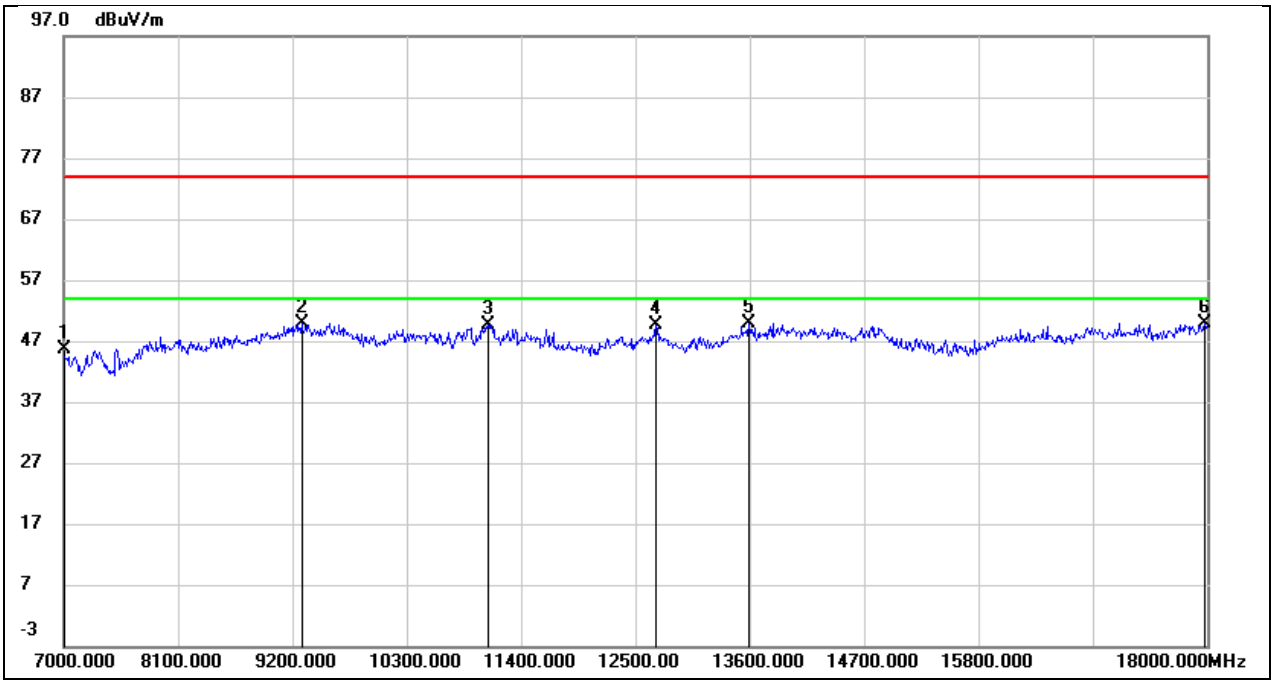
Test Mode:	802.11n HT20	Frequency(MHz):	5825
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7000.000	37.74	7.12	44.86	74.00	-29.14	peak
2	9816.000	36.65	13.77	50.42	74.00	-23.58	peak
3	10927.000	34.57	14.82	49.39	74.00	-24.61	peak
4	12665.000	29.10	19.42	48.52	74.00	-25.48	peak
5	13578.000	27.68	22.18	49.86	74.00	-24.14	peak
6	17780.000	22.42	27.29	49.71	74.00	-24.29	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

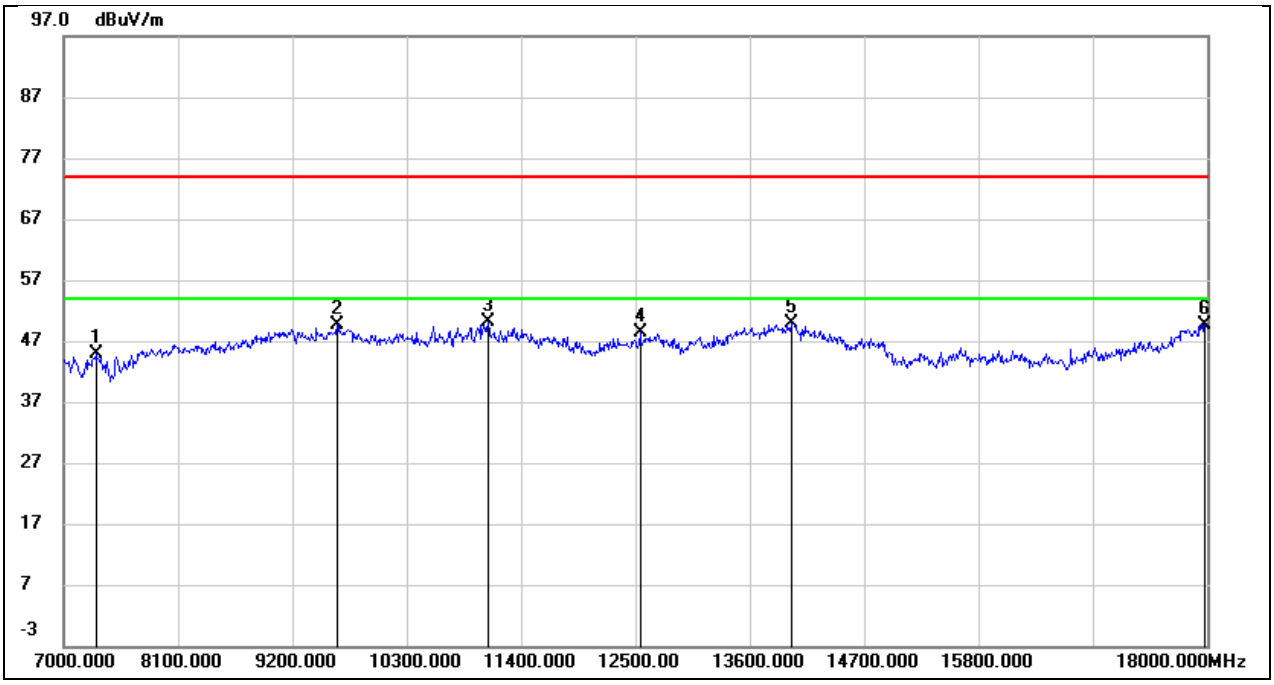
Test Mode:	802.11n HT20	Frequency(MHz):	5825
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7000.000	37.56	8.02	45.58	74.00	-28.42	peak
2	9288.000	37.92	12.01	49.93	74.00	-24.07	peak
3	11081.000	35.14	14.59	49.73	74.00	-24.27	peak
4	12698.000	31.07	18.54	49.61	74.00	-24.39	peak
5	13589.000	29.42	20.52	49.94	74.00	-24.06	peak
6	17978.000	22.56	27.28	49.84	74.00	-24.16	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

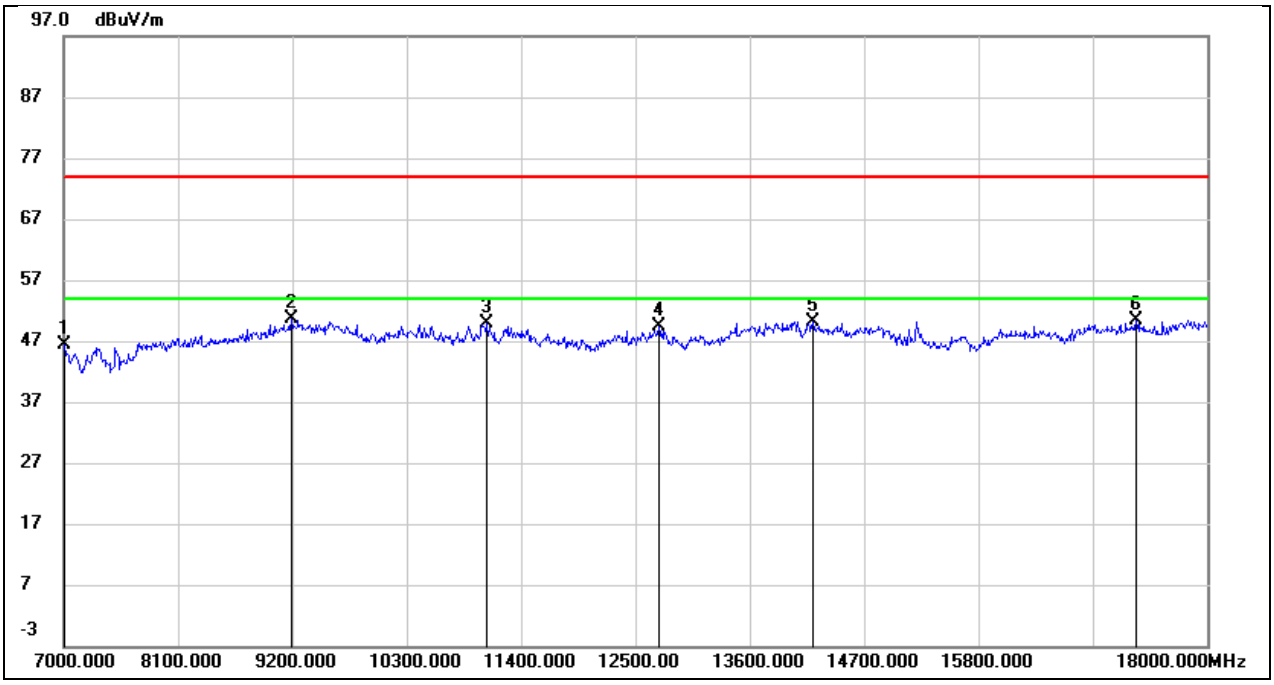
Test Mode:	802.11n HT40	Frequency(MHz):	5755
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7308.000	37.28	7.64	44.92	74.00	-29.08	peak
2	9629.000	36.15	13.51	49.66	74.00	-24.34	peak
3	11081.000	34.57	15.51	50.08	74.00	-23.92	peak
4	12544.000	29.27	19.06	48.33	74.00	-25.67	peak
5	13996.000	26.30	23.59	49.89	74.00	-24.11	peak
6	17978.000	20.37	29.38	49.75	74.00	-24.25	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

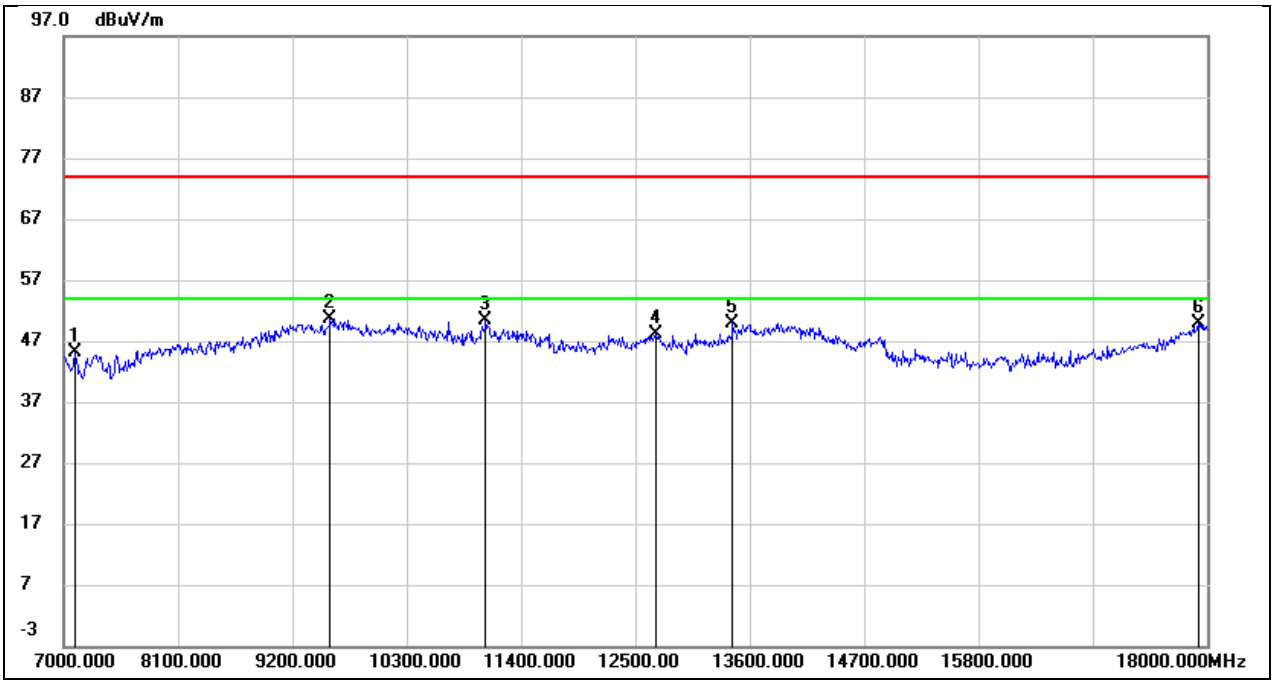
Test Mode:	802.11n HT40	Frequency(MHz):	5755
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7011.000	38.23	8.04	46.27	74.00	-27.73	peak
2	9189.000	38.91	11.76	50.67	74.00	-23.33	peak
3	11070.000	35.38	14.55	49.93	74.00	-24.07	peak
4	12731.000	30.83	18.66	49.49	74.00	-24.51	peak
5	14205.000	28.55	21.69	50.24	74.00	-23.76	peak
6	17318.000	25.46	24.99	50.45	74.00	-23.55	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

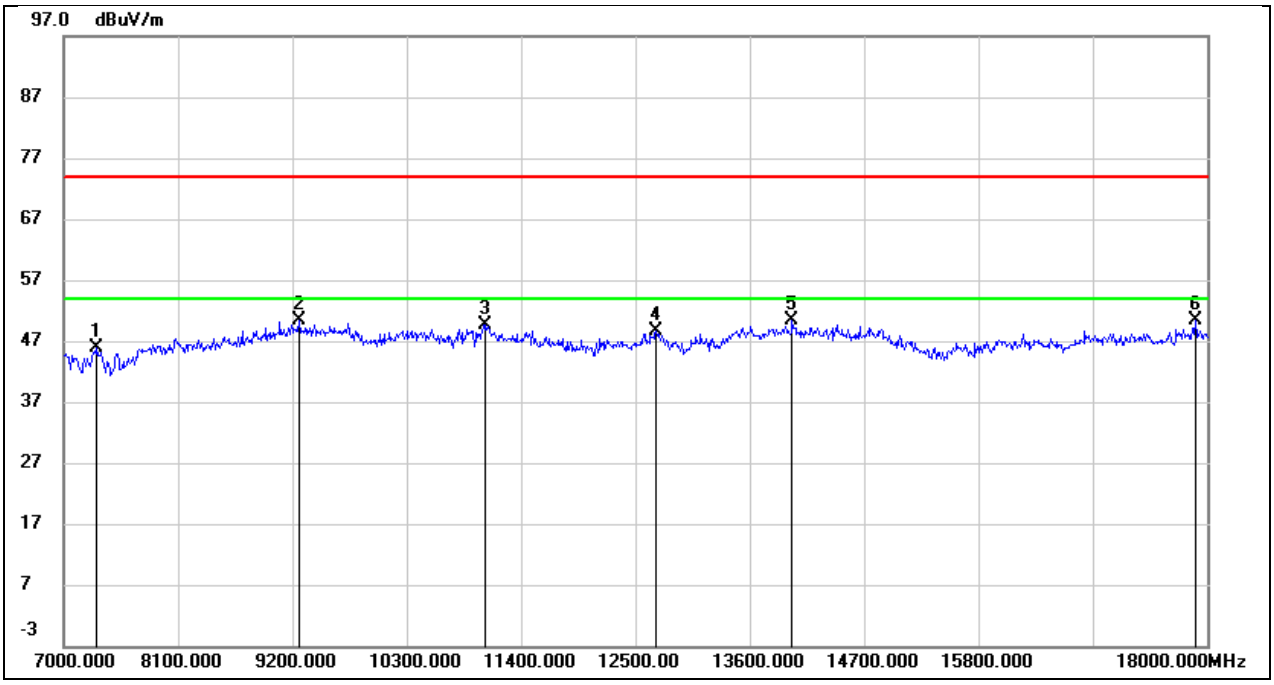
Test Mode:	802.11n HT40	Frequency(MHz):	5795
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7110.000	37.75	7.34	45.09	74.00	-28.91	peak
2	9563.000	37.48	13.23	50.71	74.00	-23.29	peak
3	11059.000	35.00	15.39	50.39	74.00	-23.61	peak
4	12698.000	28.59	19.56	48.15	74.00	-25.85	peak
5	13435.000	28.21	21.79	50.00	74.00	-24.00	peak
6	17912.000	21.16	28.68	49.84	74.00	-24.16	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

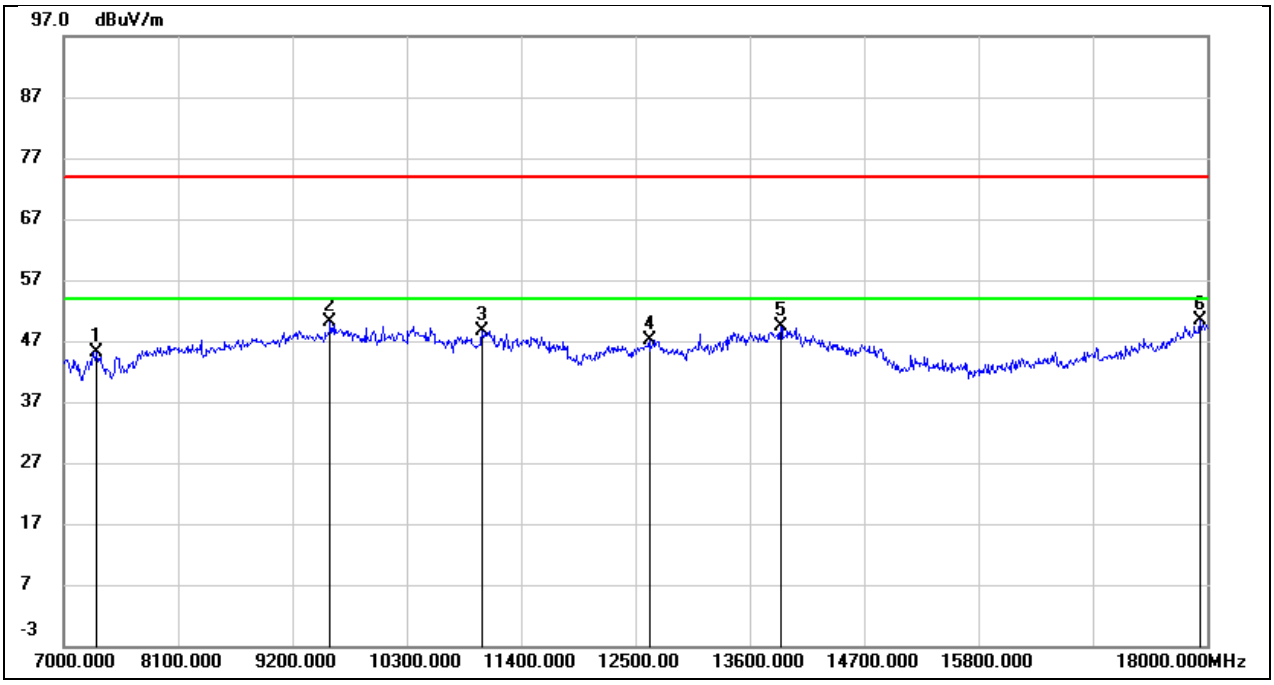
Test Mode:	802.11n HT40	Frequency(MHz):	5795
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7319.000	37.50	8.30	45.80	74.00	-28.20	peak
2	9266.000	38.53	11.96	50.49	74.00	-23.51	peak
3	11059.000	35.08	14.51	49.59	74.00	-24.41	peak
4	12698.000	30.12	18.54	48.66	74.00	-25.34	peak
5	14007.000	28.35	22.01	50.36	74.00	-23.64	peak
6	17890.000	23.56	26.72	50.28	74.00	-23.72	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

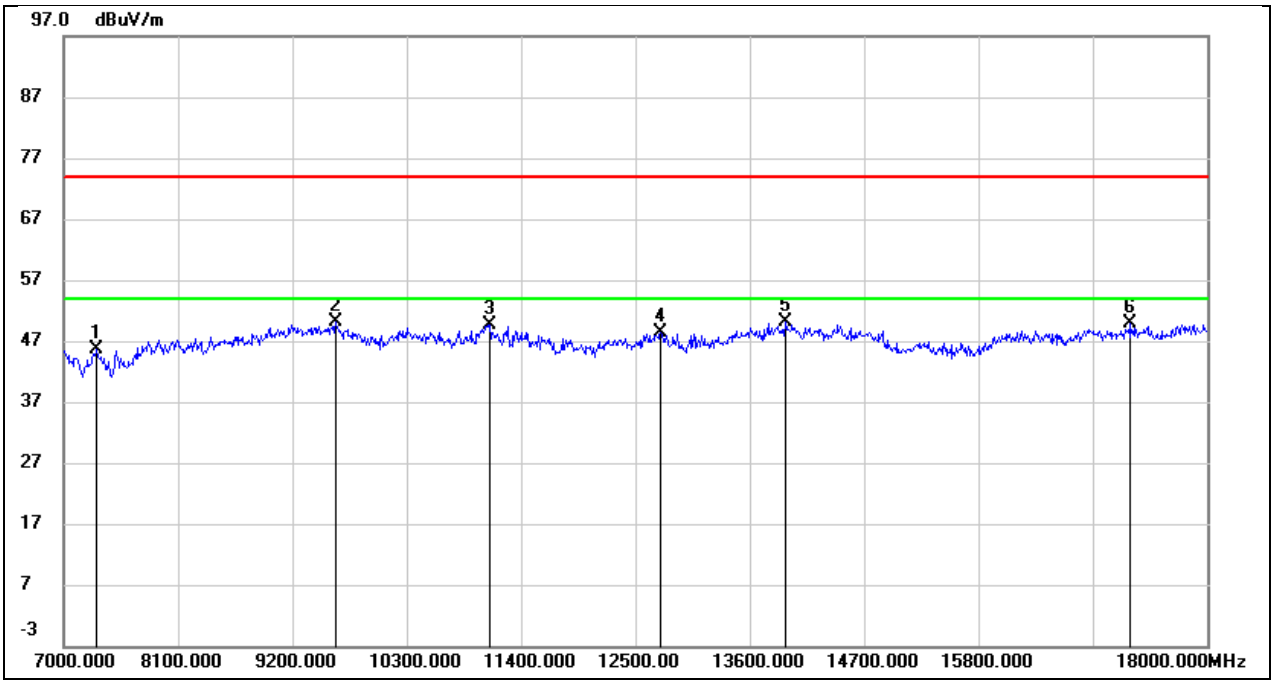
Test Mode:	802.11ac VHT80	Frequency(MHz):	5775
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7319.000	37.58	7.66	45.24	74.00	-28.76	peak
2	9563.000	36.87	13.23	50.10	74.00	-23.90	peak
3	11026.000	33.43	15.21	48.64	74.00	-25.36	peak
4	12632.000	27.85	19.29	47.14	74.00	-26.86	peak
5	13897.000	26.23	23.19	49.42	74.00	-24.58	peak
6	17934.000	21.54	28.91	50.45	74.00	-23.55	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

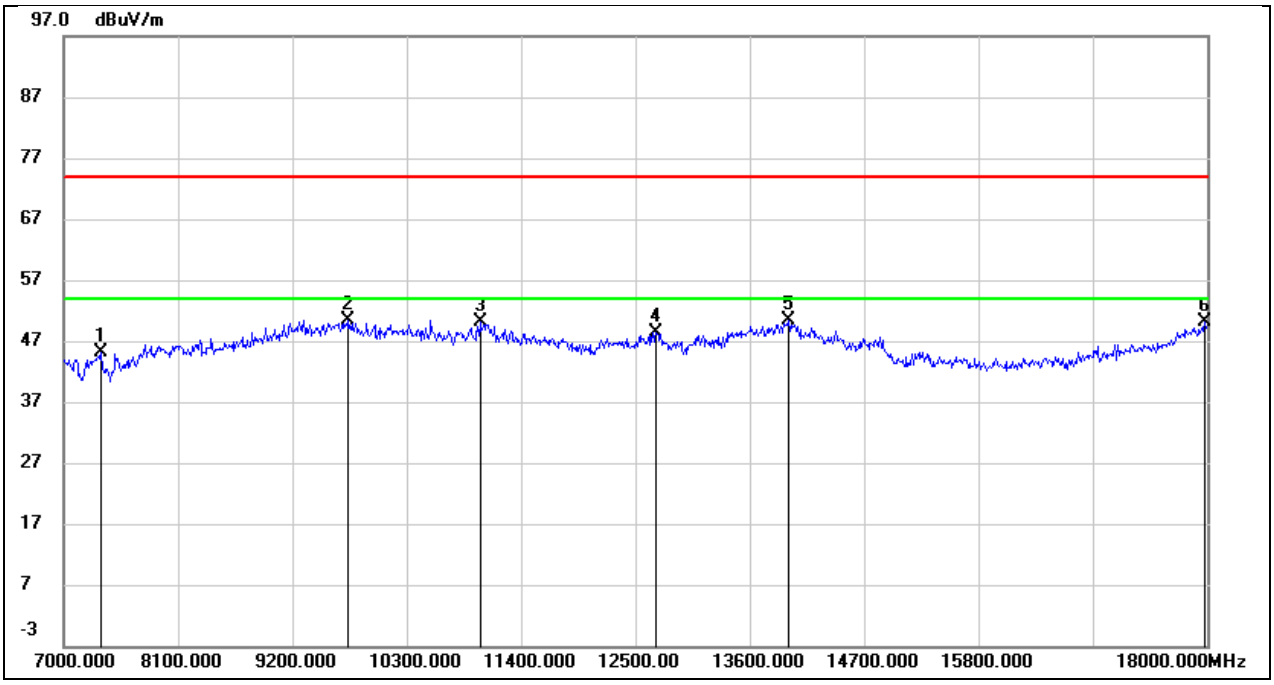
Test Mode:	802.11ac VHT80	Frequency(MHz):	5775
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7319.000	37.41	8.30	45.71	74.00	-28.29	peak
2	9618.000	36.82	13.32	50.14	74.00	-23.86	peak
3	11103.000	34.96	14.68	49.64	74.00	-24.36	peak
4	12742.000	29.60	18.70	48.30	74.00	-25.70	peak
5	13941.000	28.45	21.76	50.21	74.00	-23.79	peak
6	17263.000	24.82	24.96	49.78	74.00	-24.22	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

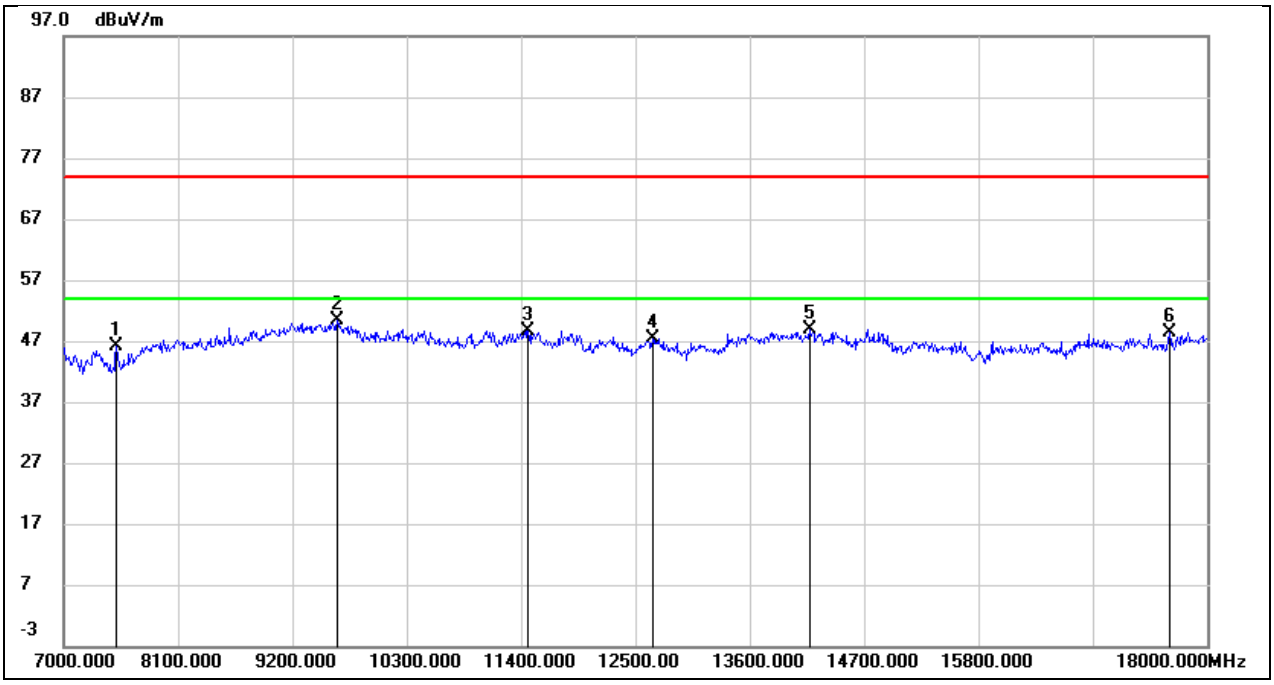
Test Mode:	802.11ax HE20	Frequency(MHz):	5745
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7352.000	37.47	7.69	45.16	74.00	-28.84	peak
2	9739.000	36.70	13.70	50.40	74.00	-23.60	peak
3	11004.000	34.94	15.08	50.02	74.00	-23.98	peak
4	12698.000	28.90	19.56	48.46	74.00	-25.54	peak
5	13974.000	26.86	23.50	50.36	74.00	-23.64	peak
6	17978.000	20.68	29.38	50.06	74.00	-23.94	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

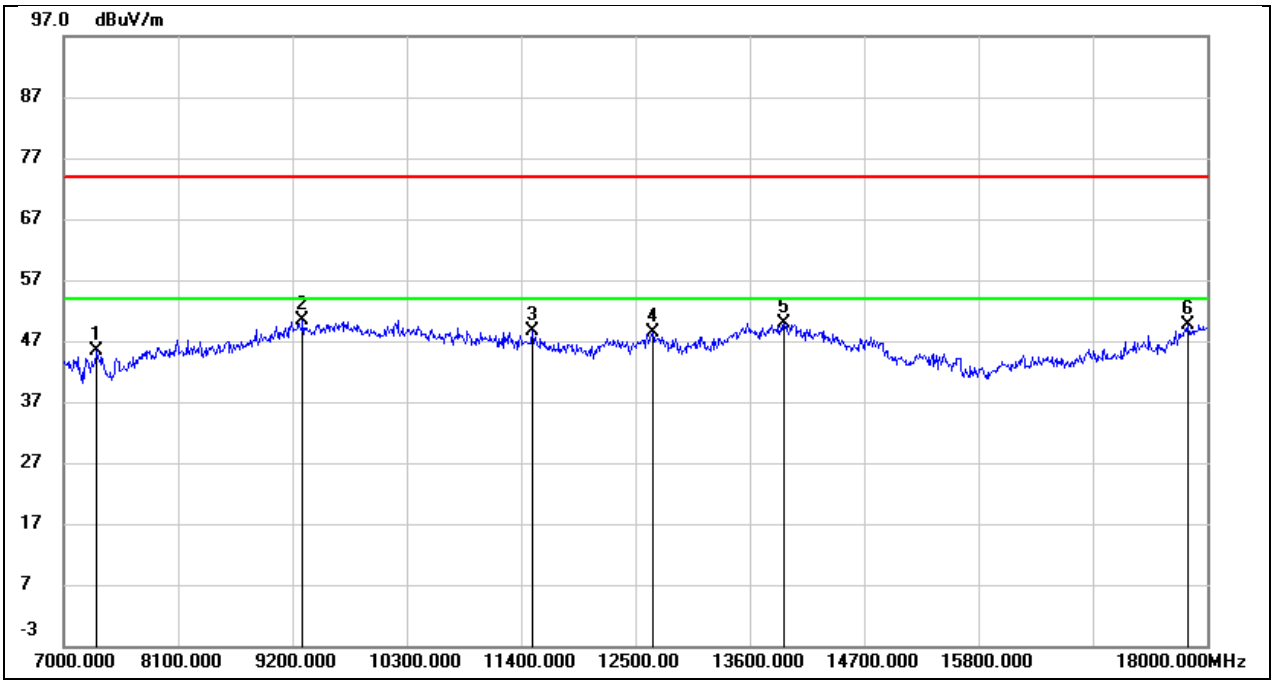
Test Mode:	802.11ax HE20	Frequency(MHz):	5745
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7506.000	37.86	8.34	46.20	74.00	-27.80	peak
2	9629.000	37.08	13.33	50.41	74.00	-23.59	peak
3	11466.000	32.52	16.22	48.74	74.00	-25.26	peak
4	12665.000	28.94	18.42	47.36	74.00	-26.64	peak
5	14172.000	27.11	21.75	48.86	74.00	-25.14	peak
6	17637.000	23.08	25.31	48.39	74.00	-25.61	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

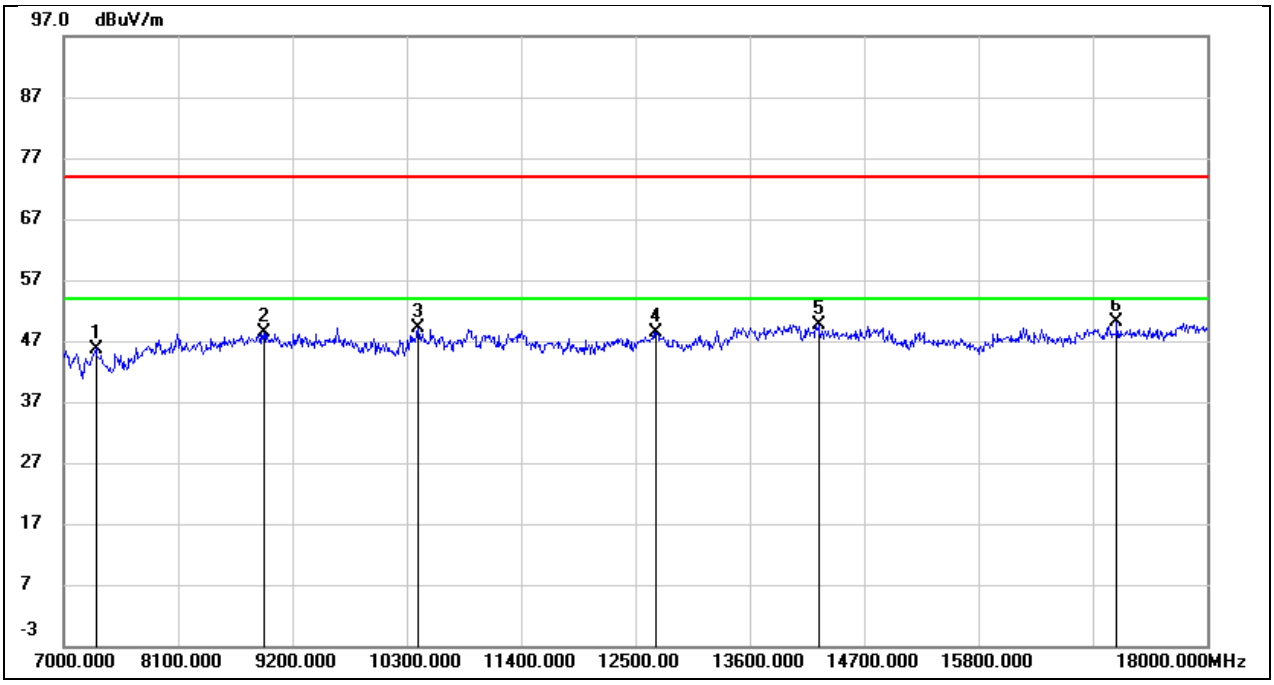
Test Mode:	802.11ax HE20	Frequency(MHz):	5785
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7319.000	37.61	7.66	45.27	74.00	-28.73	peak
2	9299.000	38.51	11.88	50.39	74.00	-23.61	peak
3	11510.000	30.65	17.86	48.51	74.00	-25.49	peak
4	12665.000	28.93	19.42	48.35	74.00	-25.65	peak
5	13930.000	26.60	23.32	49.92	74.00	-24.08	peak
6	17813.000	22.00	27.62	49.62	74.00	-24.38	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

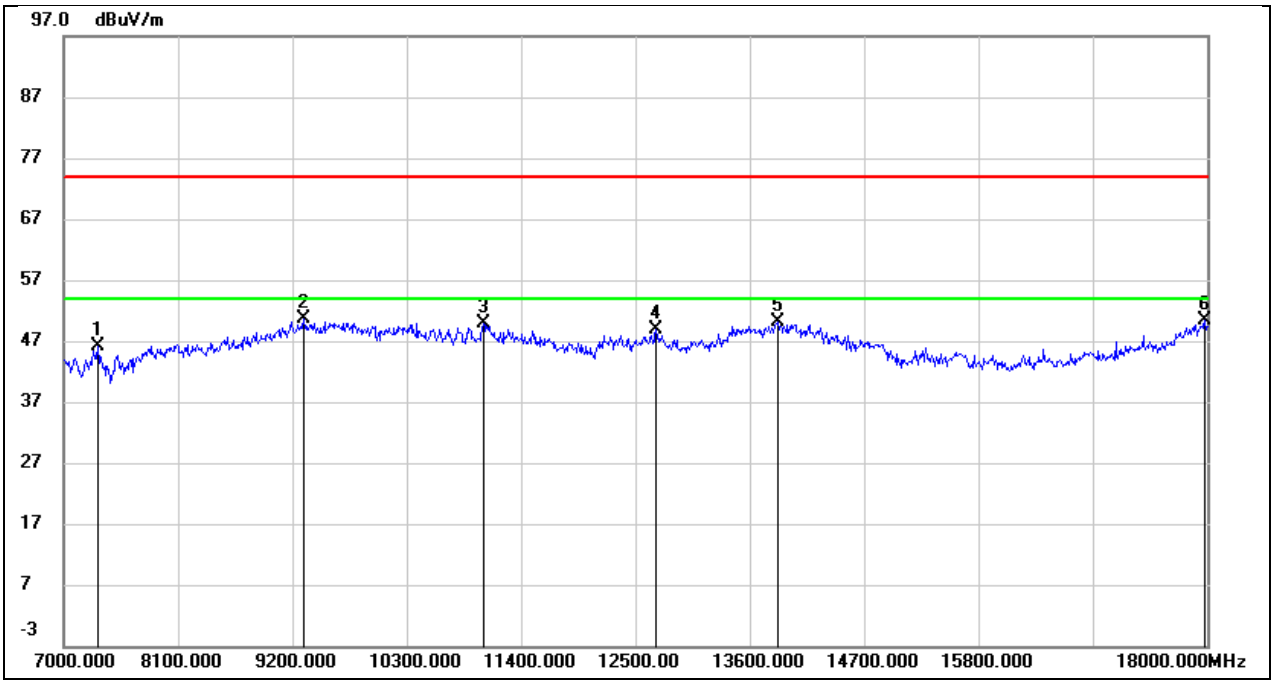
Test Mode:	802.11ax HE20	Frequency(MHz):	5785
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7308.000	37.46	8.29	45.75	74.00	-28.25	peak
2	8925.000	37.71	10.72	48.43	74.00	-25.57	peak
3	10410.000	35.97	13.09	49.06	74.00	-24.94	peak
4	12698.000	29.89	18.54	48.43	74.00	-25.57	peak
5	14260.000	28.21	21.50	49.71	74.00	-24.29	peak
6	17131.000	25.46	24.74	50.20	74.00	-23.80	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

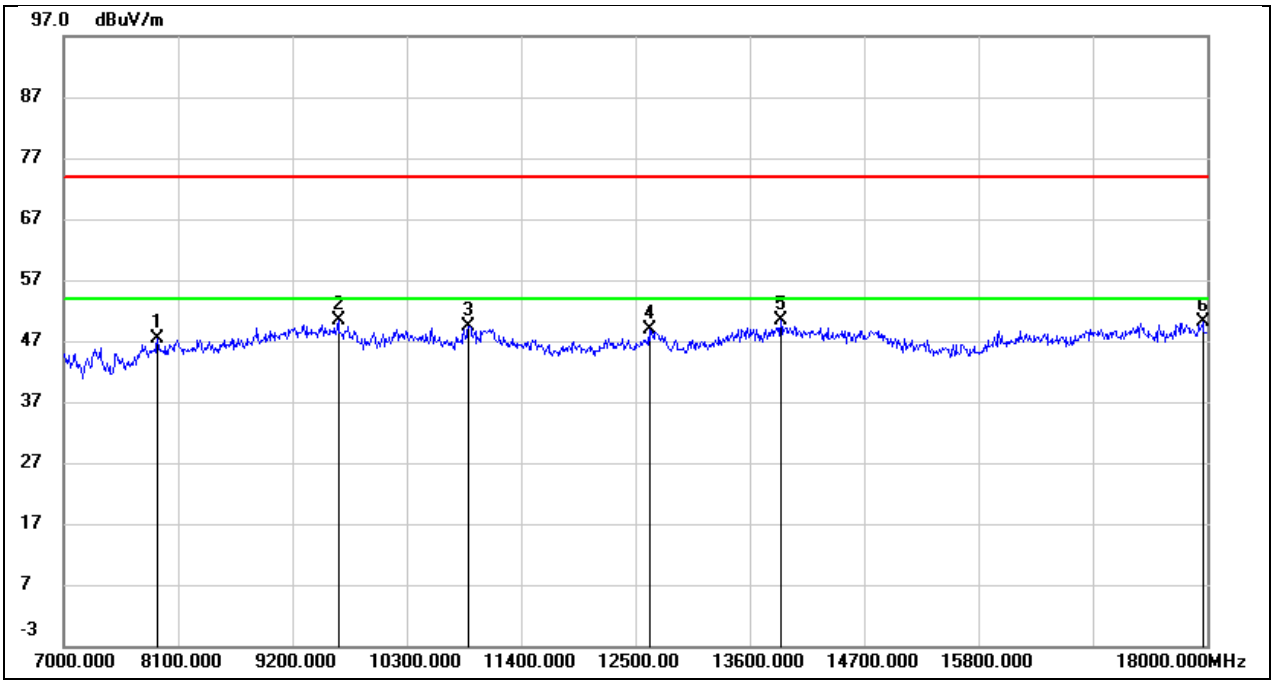
Test Mode:	802.11ax HE20	Frequency(MHz):	5825
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7330.000	38.46	7.66	46.12	74.00	-27.88	peak
2	9310.000	38.64	11.92	50.56	74.00	-23.44	peak
3	11037.000	34.68	15.27	49.95	74.00	-24.05	peak
4	12698.000	29.20	19.56	48.76	74.00	-25.24	peak
5	13875.000	27.06	23.11	50.17	74.00	-23.83	peak
6	17978.000	20.89	29.38	50.27	74.00	-23.73	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

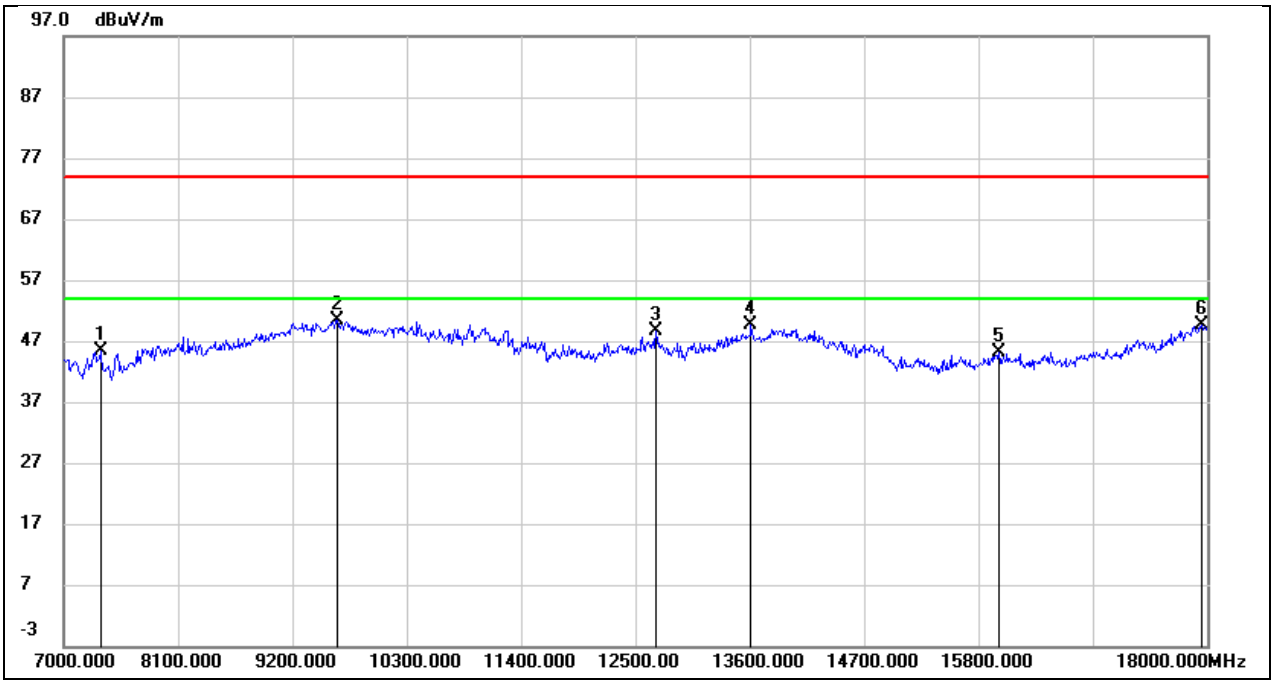
Test Mode:	802.11ax HE20	Frequency(MHz):	5825
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7902.000	38.95	8.54	47.49	74.00	-26.51	peak
2	9640.000	36.97	13.33	50.30	74.00	-23.70	peak
3	10894.000	35.33	14.05	49.38	74.00	-24.62	peak
4	12632.000	30.58	18.32	48.90	74.00	-25.10	peak
5	13897.000	28.88	21.57	50.45	74.00	-23.55	peak
6	17956.000	22.96	27.13	50.09	74.00	-23.91	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

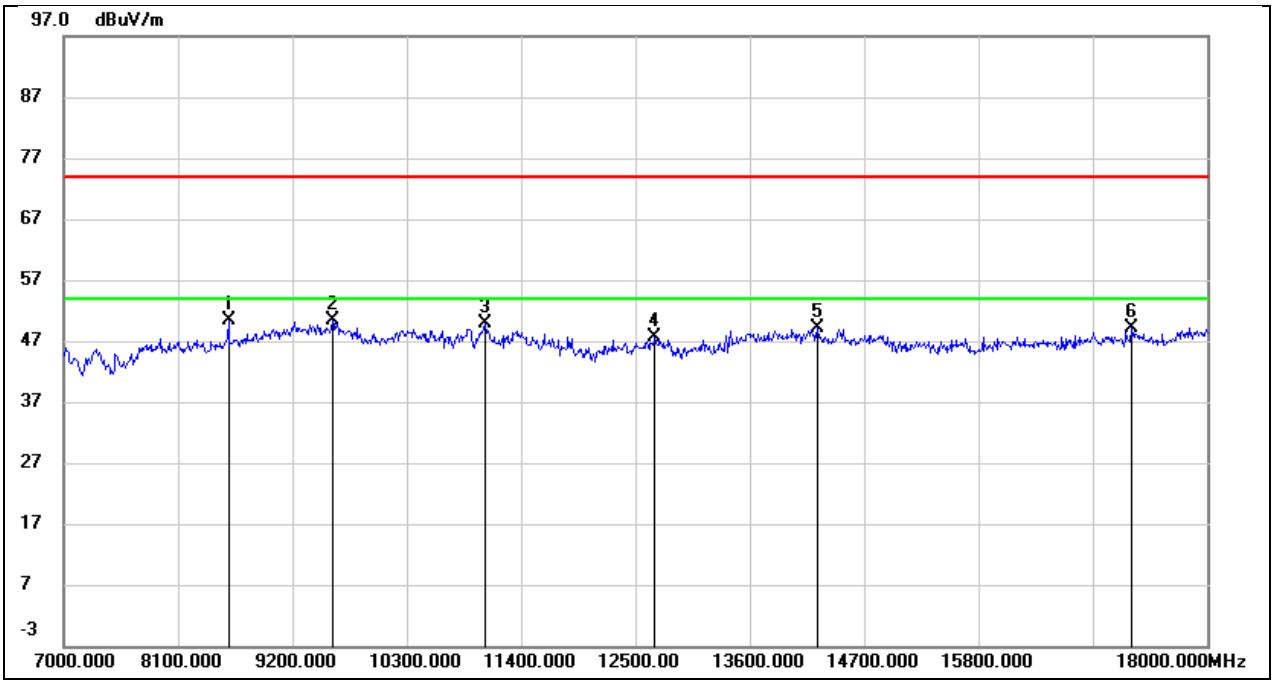
Test Mode:	802.11ax HE40	Frequency(MHz):	5745
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7352.000	37.61	7.69	45.30	74.00	-28.70	peak
2	9629.000	36.85	13.51	50.36	74.00	-23.64	peak
3	12698.000	28.95	19.56	48.51	74.00	-25.49	peak
4	13611.000	27.27	22.25	49.52	74.00	-24.48	peak
5	15998.000	24.74	20.46	45.20	74.00	-28.80	peak
6	17945.000	20.51	29.03	49.54	74.00	-24.46	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

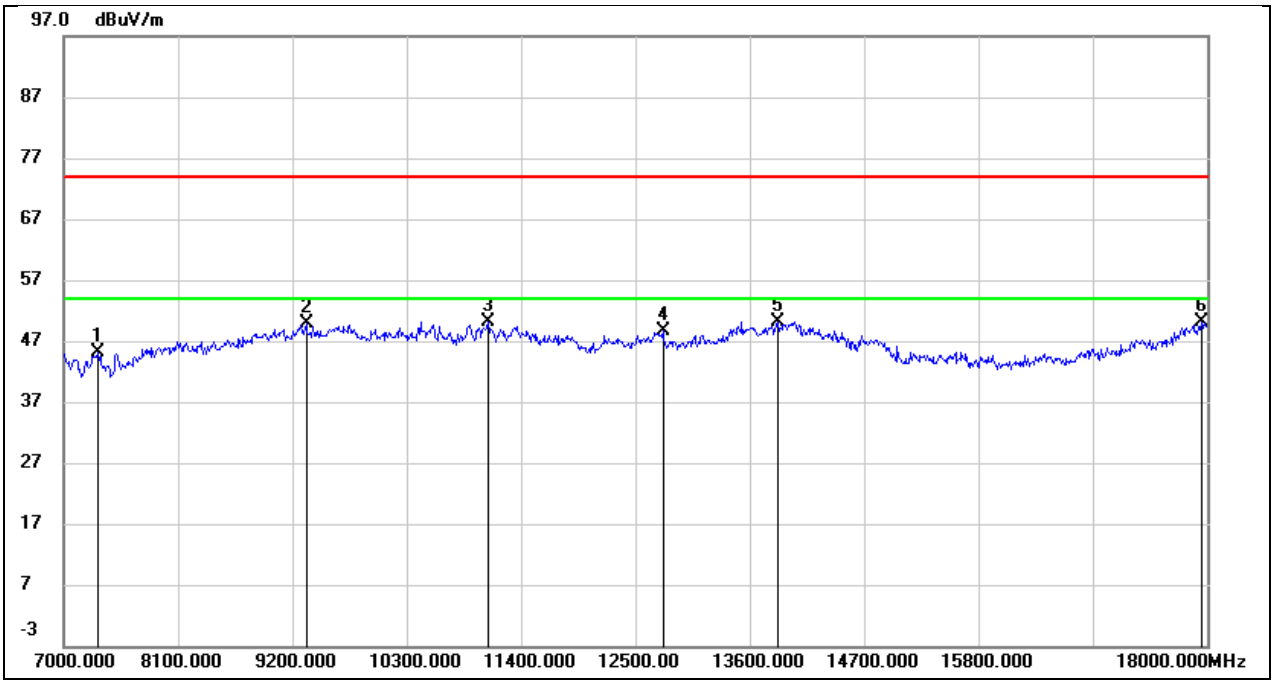
Test Mode:	802.11ax HE40	Frequency(MHz):	5745
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8584.000	40.84	9.44	50.28	74.00	-23.72	peak
2	9585.000	37.06	13.26	50.32	74.00	-23.68	peak
3	11059.000	35.27	14.51	49.78	74.00	-24.22	peak
4	12687.000	29.18	18.51	47.69	74.00	-26.31	peak
5	14249.000	27.47	21.54	49.01	74.00	-24.99	peak
6	17274.000	24.17	24.97	49.14	74.00	-24.86	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

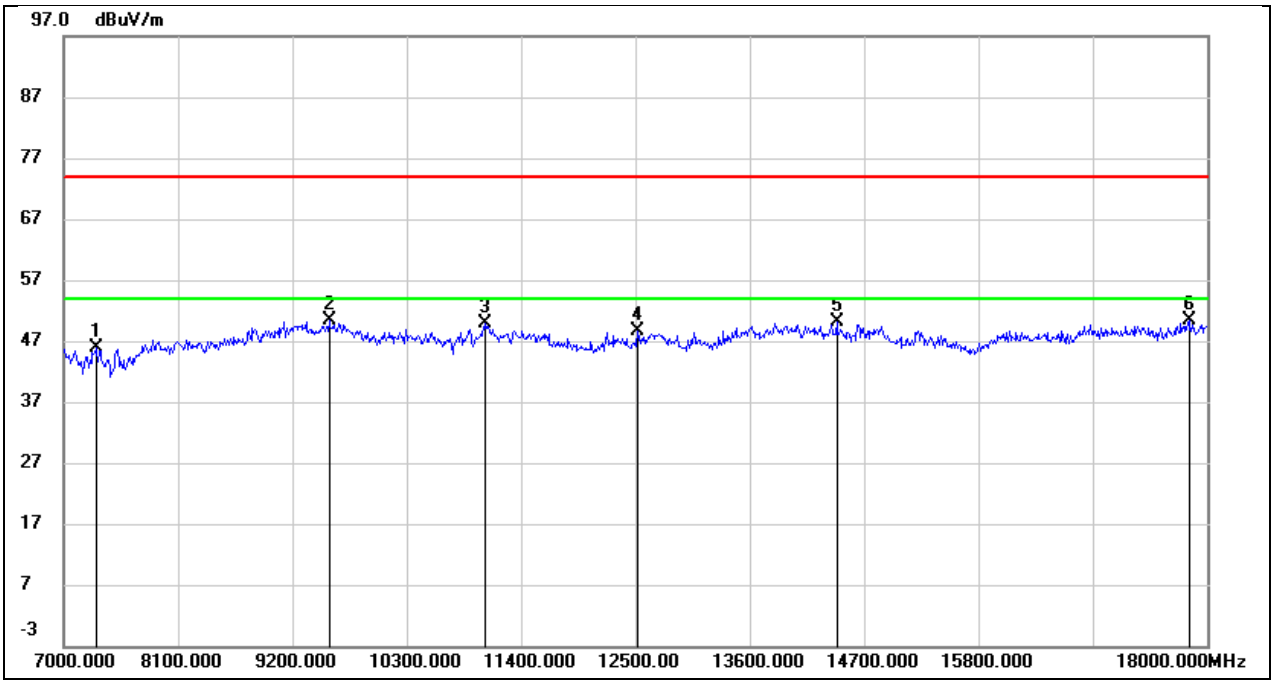
Test Mode:	802.11ax HE40	Frequency(MHz):	5795
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7330.000	37.39	7.66	45.05	74.00	-28.95	peak
2	9332.000	37.79	11.99	49.78	74.00	-24.22	peak
3	11081.000	34.73	15.51	50.24	74.00	-23.76	peak
4	12764.000	28.90	19.83	48.73	74.00	-25.27	peak
5	13864.000	27.04	23.06	50.10	74.00	-23.90	peak
6	17945.000	21.15	29.03	50.18	74.00	-23.82	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

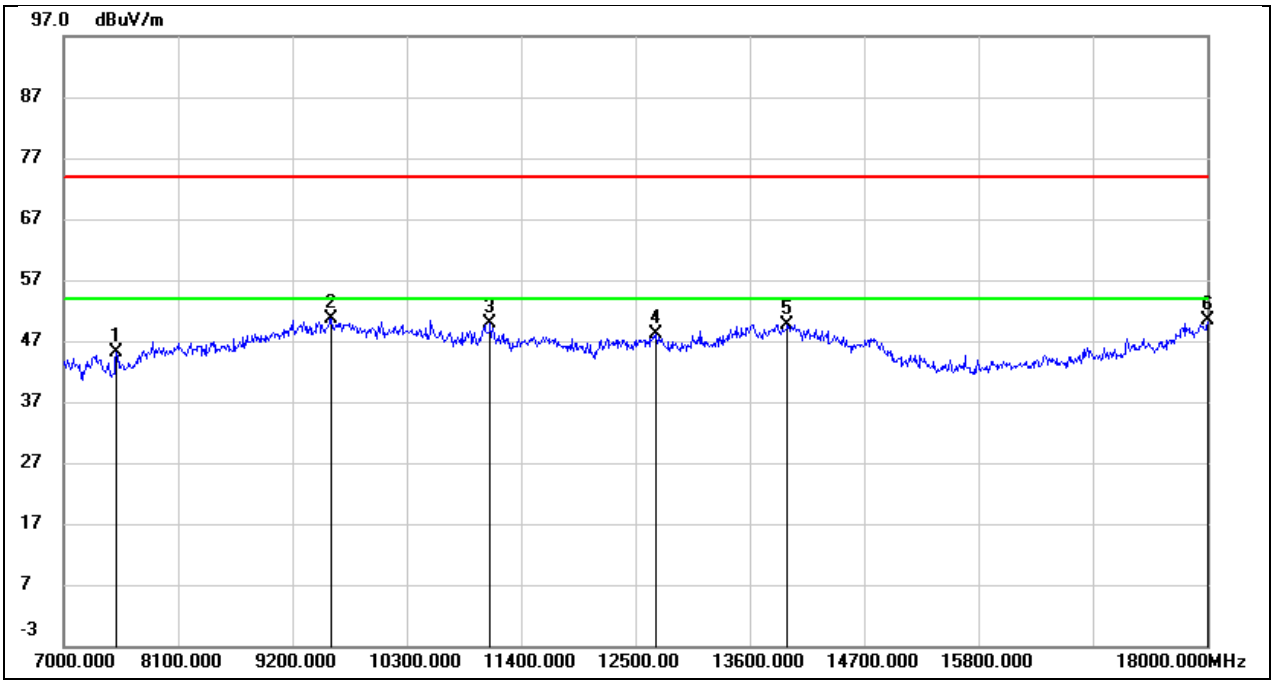
Test Mode:	802.11ax HE40	Frequency(MHz):	5795
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7308.000	37.68	8.29	45.97	74.00	-28.03	peak
2	9552.000	37.22	13.10	50.32	74.00	-23.68	peak
3	11059.000	35.28	14.51	49.79	74.00	-24.21	peak
4	12522.000	30.44	18.11	48.55	74.00	-25.45	peak
5	14436.000	29.17	20.98	50.15	74.00	-23.85	peak
6	17824.000	24.12	26.31	50.43	74.00	-23.57	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

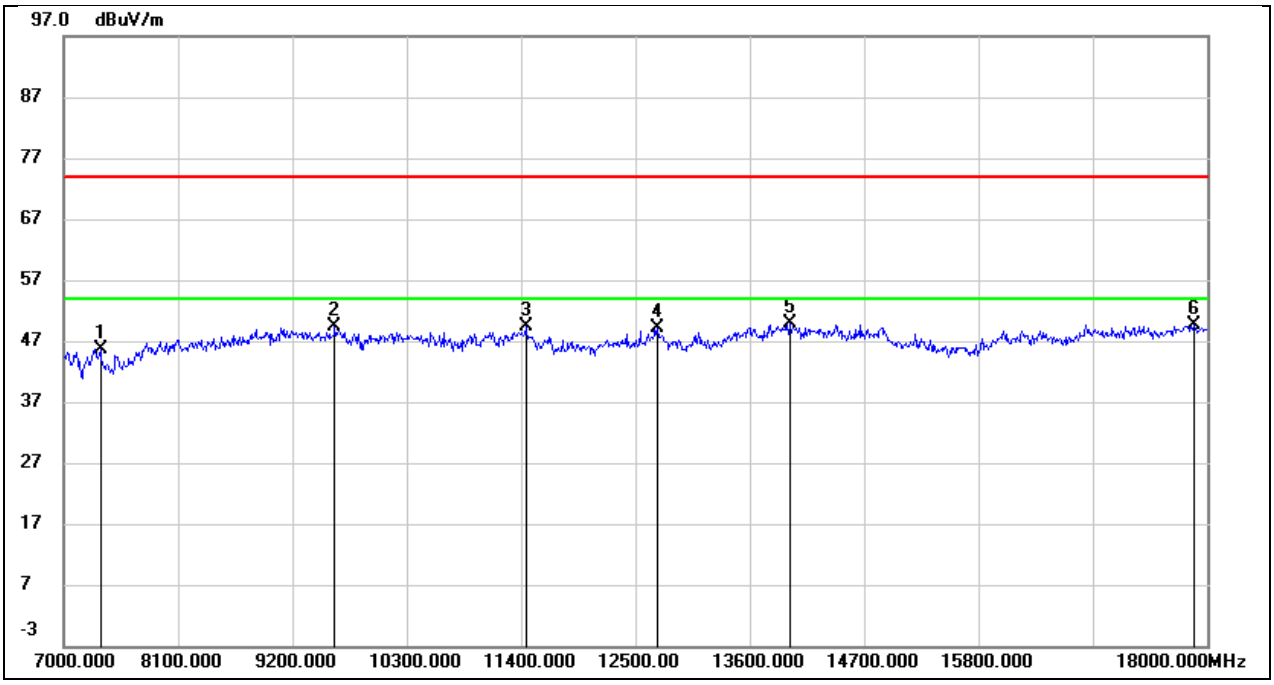
Test Mode:	802.11ax HE80	Frequency(MHz):	5775
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7506.000	37.23	7.84	45.07	74.00	-28.93	peak
2	9574.000	37.36	13.31	50.67	74.00	-23.33	peak
3	11103.000	34.30	15.63	49.93	74.00	-24.07	peak
4	12698.000	28.54	19.56	48.10	74.00	-25.90	peak
5	13963.000	26.29	23.46	49.75	74.00	-24.25	peak
6	18000.000	20.69	29.61	50.30	74.00	-23.70	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11ax HE80	Frequency(MHz):	5775
Polarity:	Vertical	Test Voltage:	DC 3.85V

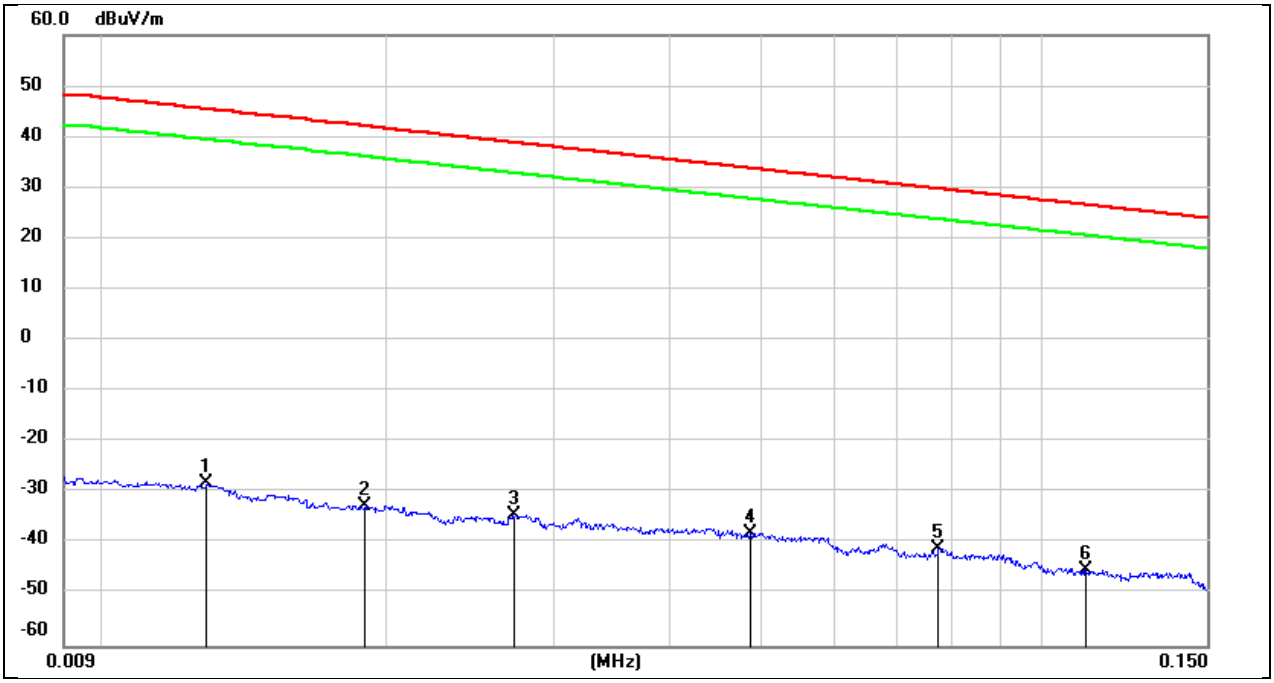


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7352.000	37.35	8.31	45.66	74.00	-28.34	peak
2	9607.000	36.03	13.33	49.36	74.00	-24.64	peak
3	11444.000	33.31	16.15	49.46	74.00	-24.54	peak
4	12709.000	30.53	18.58	49.11	74.00	-24.89	peak
5	13985.000	27.86	21.95	49.81	74.00	-24.19	peak
6	17868.000	22.99	26.59	49.58	74.00	-24.42	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.4. SPURIOUS EMISSIONS(9 KHZ~30 MHZ)

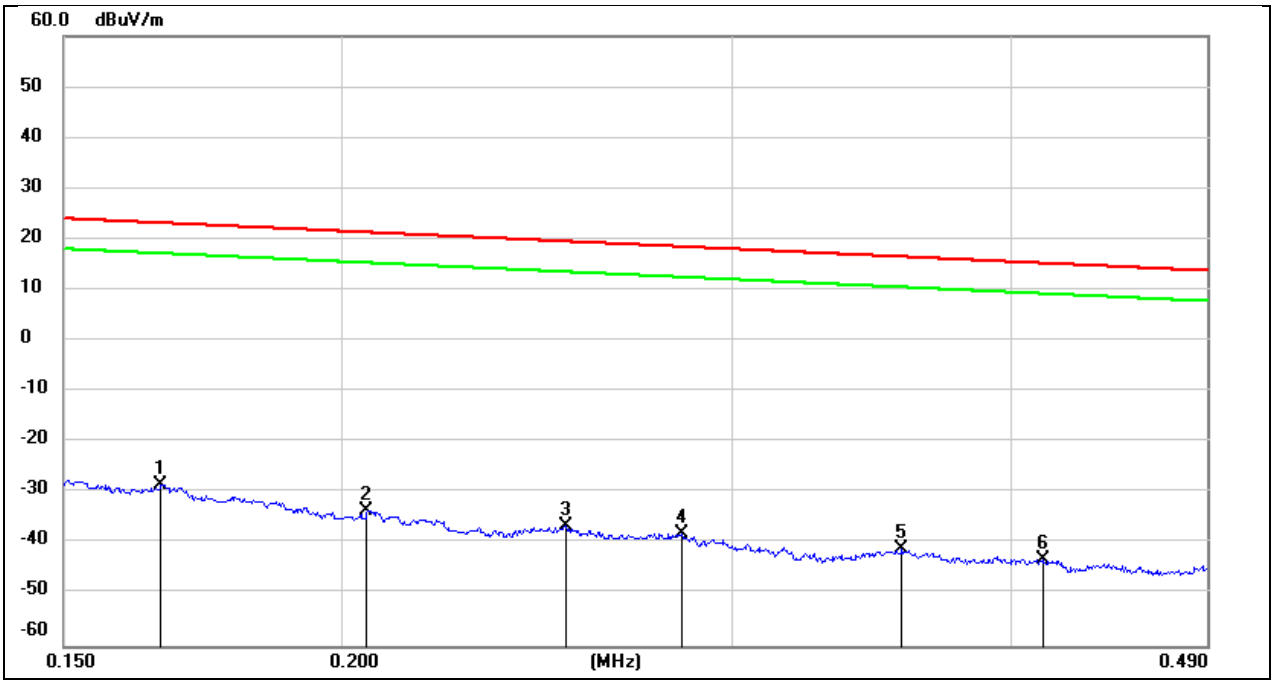
Test Mode:	802.11a20	Frequency(MHz):	5180
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency	Reading	Correct	FCC Result	FCC Limit	ISED Result	ISED Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.0128	73.37	-101.38	-28.01	45.46	-79.51	-6.04	-73.47	peak
2	0.0189	68.87	-101.35	-32.48	42.07	-83.98	-9.43	-74.55	peak
3	0.0273	66.99	-101.38	-34.39	38.88	-85.89	-12.62	-73.27	peak
4	0.0487	63.5	-101.47	-37.97	33.85	-89.47	-17.65	-71.82	peak
5	0.0772	60.8	-101.61	-40.81	29.85	-92.31	-21.65	-70.66	peak
6	0.1115	56.61	-101.76	-45.15	26.66	-96.65	-24.84	-71.81	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

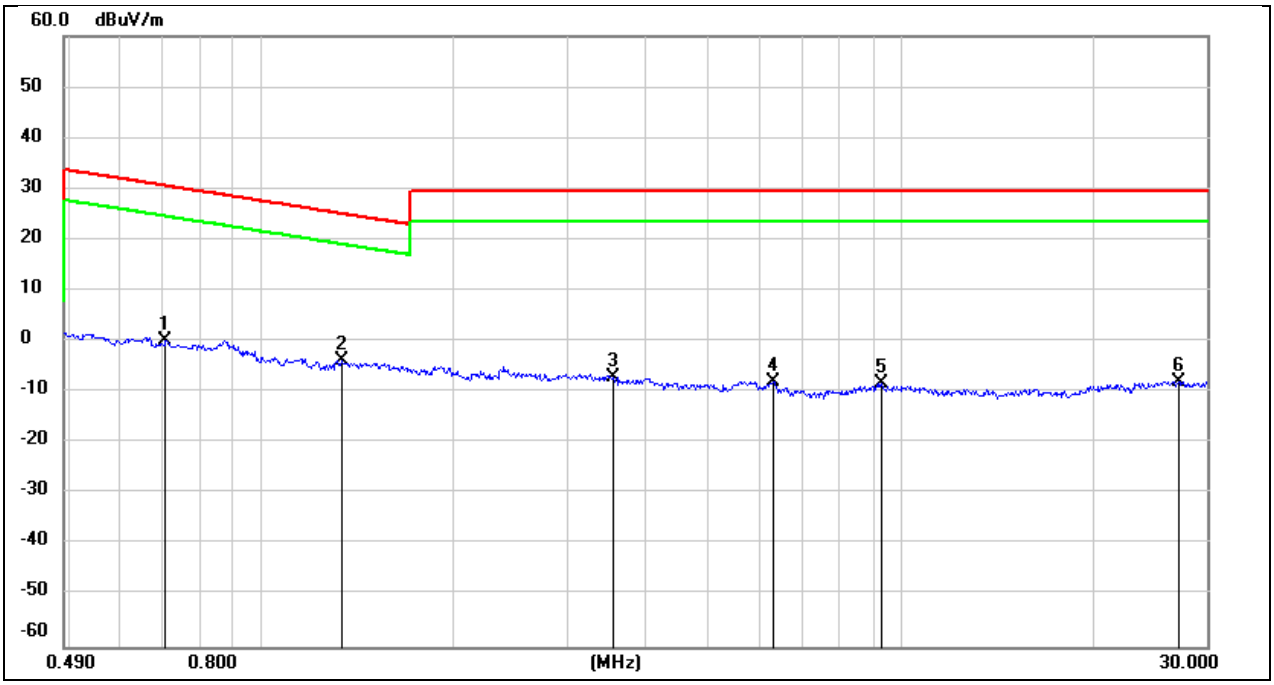
Test Mode:	802.11a20	Frequency(MHz):	5180
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency	Reading	Correct	FCC Result	FCC Limit	ISED Result	ISED Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.166	73.31	-101.66	-28.35	23.2	-79.85	-28.30	-51.55	peak
2	0.2053	68.29	-101.73	-33.44	21.35	-84.94	-30.15	-54.79	peak
3	0.2522	65.39	-101.8	-36.41	19.57	-87.91	-31.93	-55.98	peak
4	0.2846	63.79	-101.83	-38.04	18.52	-89.54	-32.98	-56.56	peak
5	0.3573	61.08	-101.91	-40.83	16.54	-92.33	-34.96	-57.37	peak
6	0.4132	59.05	-101.98	-42.93	15.28	-94.43	-36.22	-58.21	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11a20	Frequency(MHz):	5180
Polarity:	Horizontal	Test Voltage:	DC 3.85V

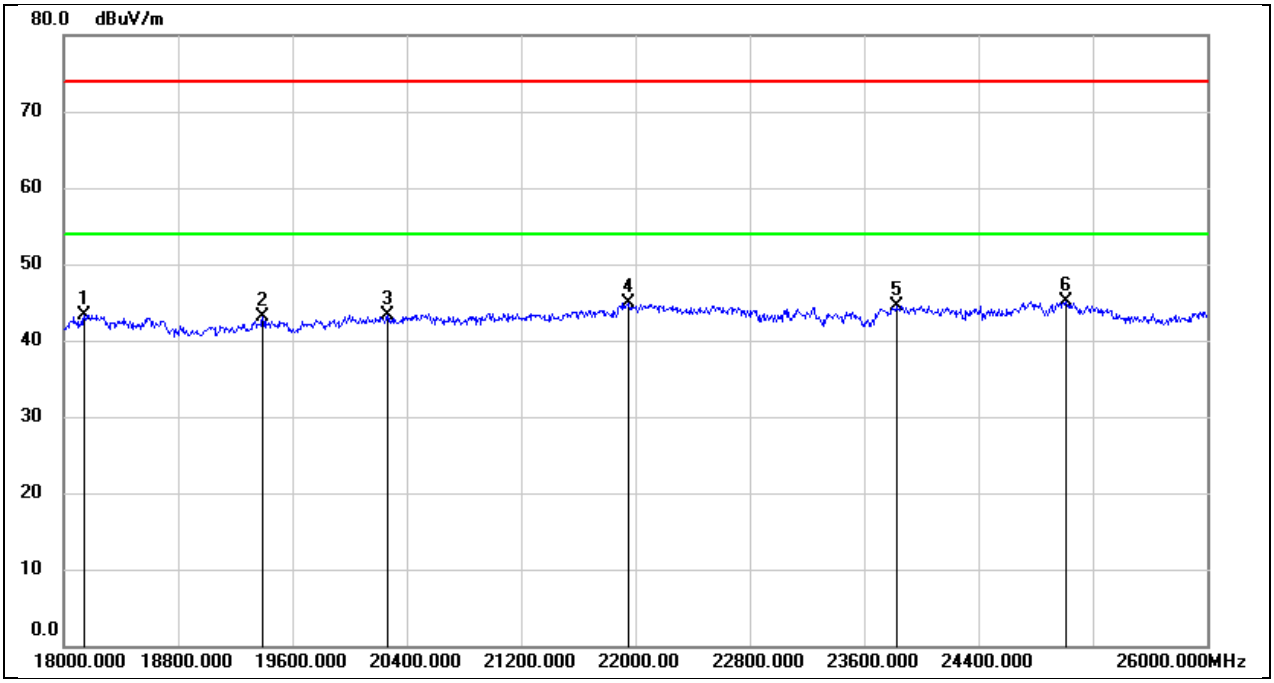


No.	Frequency	Reading	Correct	FCC Result	FCC Limit	ISED Result	ISED Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.7066	62.4	-62.11	0.29	30.62	-51.21	-20.88	-30.33	peak
2	1.3317	58.38	-62.11	-3.73	25.12	-55.23	-26.38	-28.85	peak
3	3.559	54.42	-61.44	-7.02	29.54	-58.52	-21.96	-36.56	peak
4	6.3033	53.45	-61.31	-7.86	29.54	-59.36	-21.96	-37.40	peak
5	9.3132	52.66	-60.89	-8.23	29.54	-59.73	-21.96	-37.77	peak
6	27.167	52.45	-60.25	-7.8	29.54	-59.30	-21.96	-37.34	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.5. SPURIOUS EMISSIONS(18 GHZ~26 GHZ)

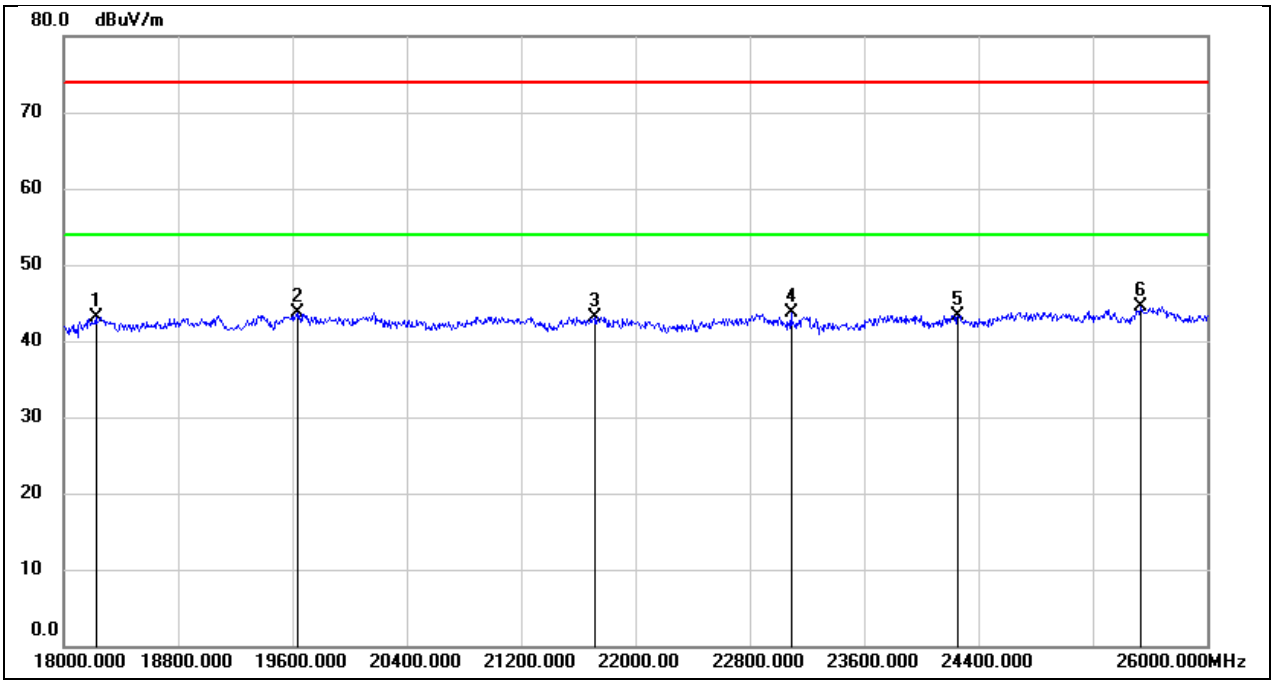
Test Mode:	802.11a 20	Frequency(MHz):	5180
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18144.000	48.77	-5.48	43.29	74.00	-30.71	peak
2	19392.000	48.62	-5.57	43.05	74.00	-30.95	peak
3	20264.000	48.97	-5.60	43.37	74.00	-30.63	peak
4	21952.000	49.30	-4.45	44.85	74.00	-29.15	peak
5	23824.000	47.57	-3.06	44.51	74.00	-29.49	peak
6	25016.000	47.15	-2.07	45.08	74.00	-28.92	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11a 20	Frequency(MHz):	5180
Polarity:	Vertical	Test Voltage:	DC 3.85V

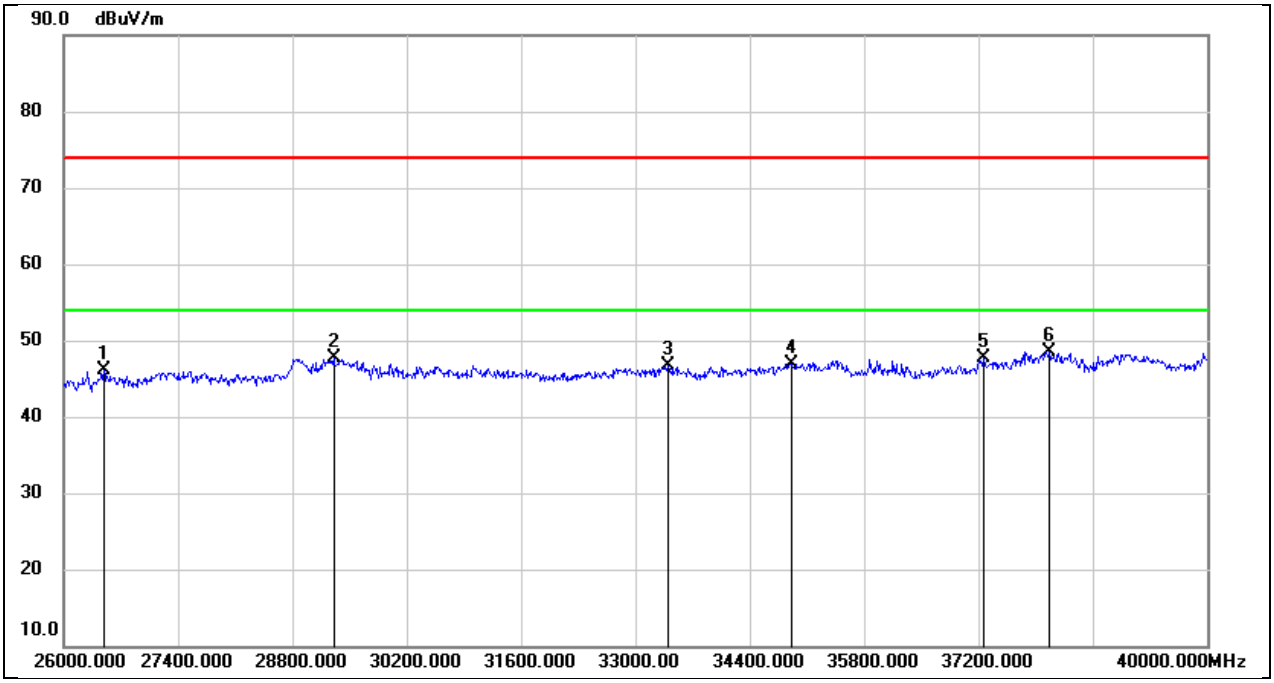


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18224.000	48.58	-5.53	43.05	74.00	-30.95	peak
2	19640.000	49.03	-5.38	43.65	74.00	-30.35	peak
3	21712.000	47.48	-4.38	43.10	74.00	-30.90	peak
4	23088.000	47.02	-3.41	43.61	74.00	-30.39	peak
5	24256.000	46.12	-2.82	43.30	74.00	-30.70	peak
6	25536.000	46.07	-1.61	44.46	74.00	-29.54	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.6. SPURIOUS EMISSIONS(26 GHZ~40 GHZ)

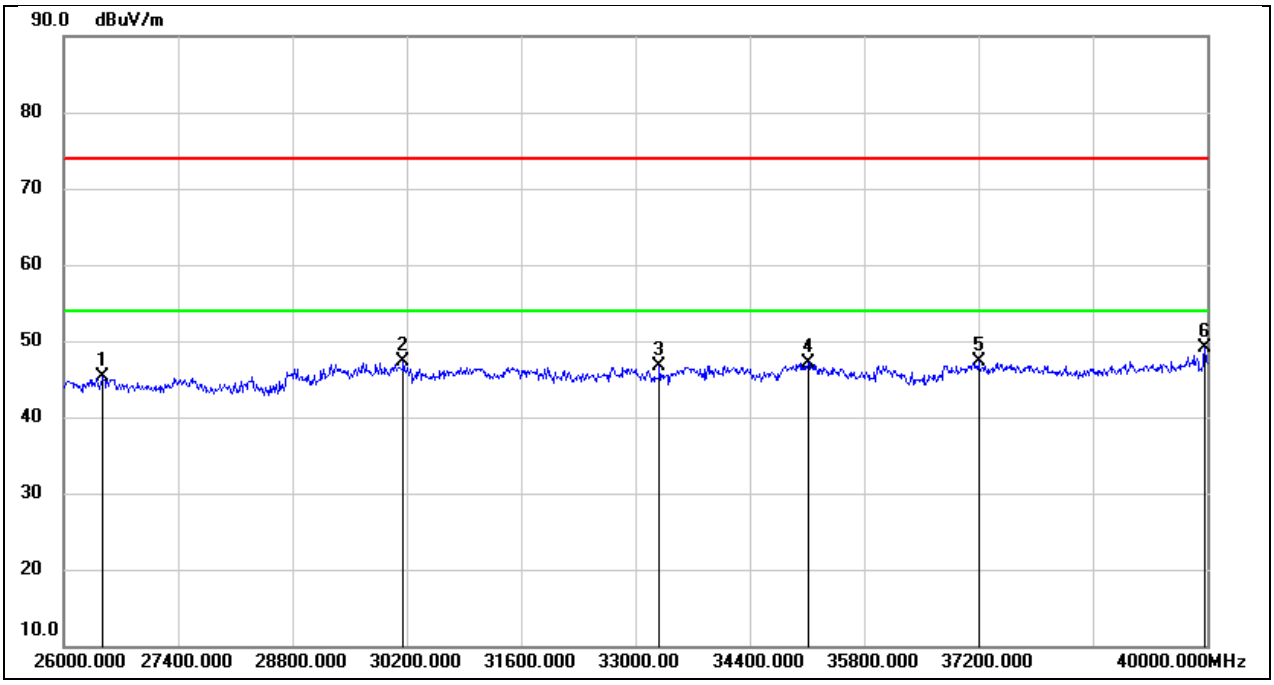
Test Mode:	802.11a 20	Frequency(MHz):	5180
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26490.000	50.79	-4.74	46.05	74.00	-27.95	peak
2	29304.000	48.62	-0.97	47.65	74.00	-26.35	peak
3	33406.000	46.45	0.18	46.63	74.00	-27.37	peak
4	34904.000	45.58	1.40	46.98	74.00	-27.02	peak
5	37256.000	44.51	3.14	47.65	74.00	-26.35	peak
6	38068.000	45.06	3.42	48.48	74.00	-25.52	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11a 20	Frequency(MHz):	5180
Polarity:	Vertical	Test Voltage:	DC 3.85V

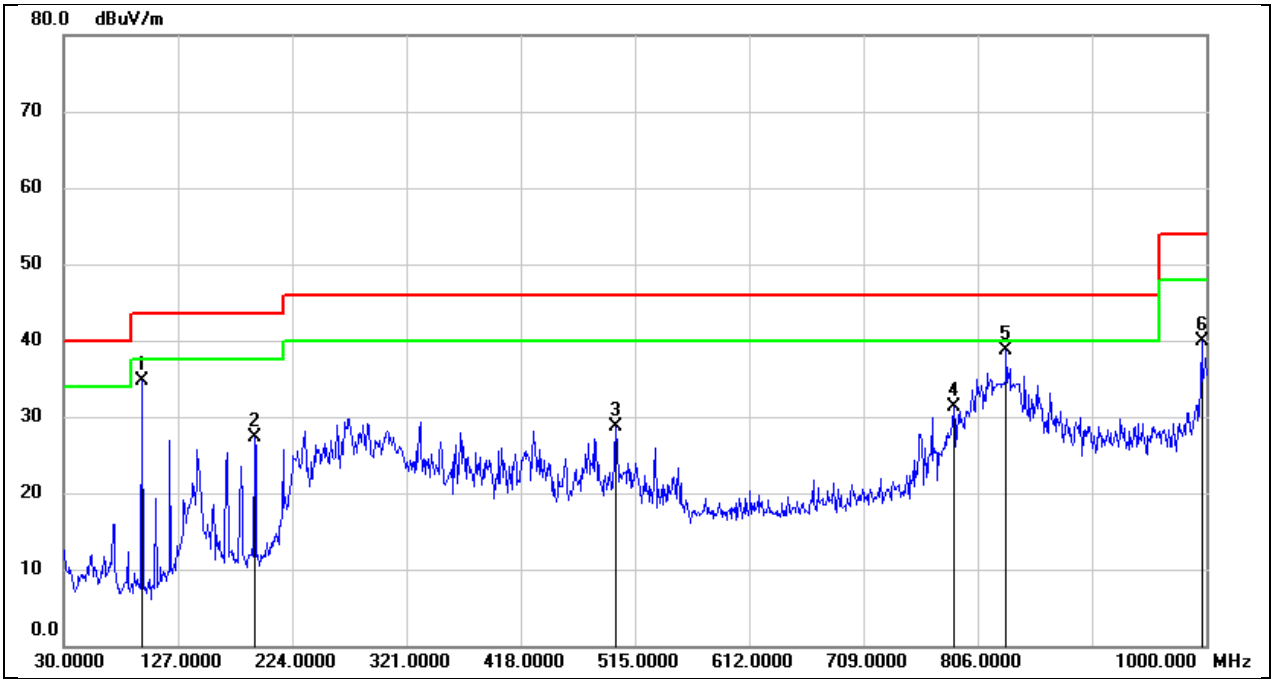


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26476.000	50.03	-4.78	45.25	74.00	-28.75	peak
2	30158.000	48.51	-1.30	47.21	74.00	-26.79	peak
3	33294.000	47.07	-0.29	46.78	74.00	-27.22	peak
4	35114.000	45.12	1.92	47.04	74.00	-26.96	peak
5	37200.000	44.11	3.16	47.27	74.00	-26.73	peak
6	39972.000	43.95	5.13	49.08	74.00	-24.92	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.7. SPURIOUS EMISSIONS(30 MHZ~1 GHZ)

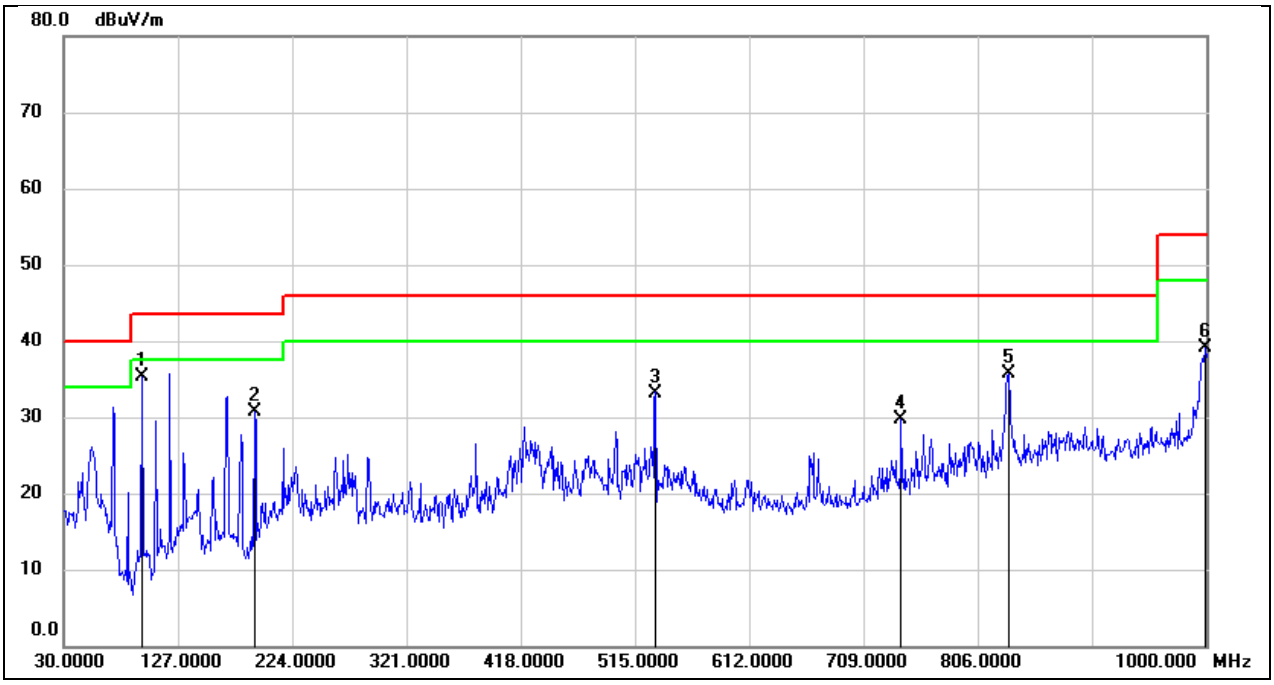
Test Mode:	802.11a 20	Frequency(MHz):	5180
Polarity:	Horizontal	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	95.9600	50.97	-16.36	34.61	43.50	-8.89	QP
2	191.9900	39.29	-12.00	27.29	43.50	-16.21	QP
3	498.5100	36.41	-7.71	28.70	46.00	-17.30	QP
4	785.6300	34.16	-2.86	31.30	46.00	-14.70	QP
5	830.2500	40.66	-1.89	38.77	46.00	-7.23	QP
6	996.1200	40.17	-0.17	40.00	54.00	-14.00	QP

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11a 20	Frequency(MHz):	5180
Polarity:	Vertical	Test Voltage:	DC 3.85V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	95.9600	51.68	-16.36	35.32	43.50	-8.18	QP
2	191.9900	42.72	-12.00	30.72	43.50	-12.78	QP
3	532.4600	40.45	-7.25	33.20	46.00	-12.80	QP
4	741.0100	33.38	-3.63	29.75	46.00	-16.25	QP
5	832.1900	37.62	-1.82	35.80	46.00	-10.20	QP
6	999.0300	39.18	-0.15	39.03	54.00	-14.97	QP

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

9. AC POWER LINE CONDUCTED EMISSION

LIMITS

Please refer to CFR 47 FCC §15.207 (a) and ISED RSS-Gen Clause 8.8

FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

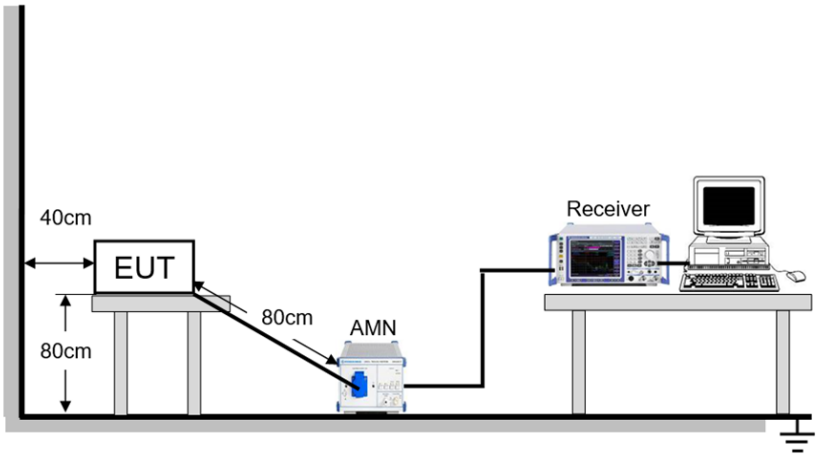
TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 6.2.

The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST SETUP



This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

TEST ENVIRONMENT

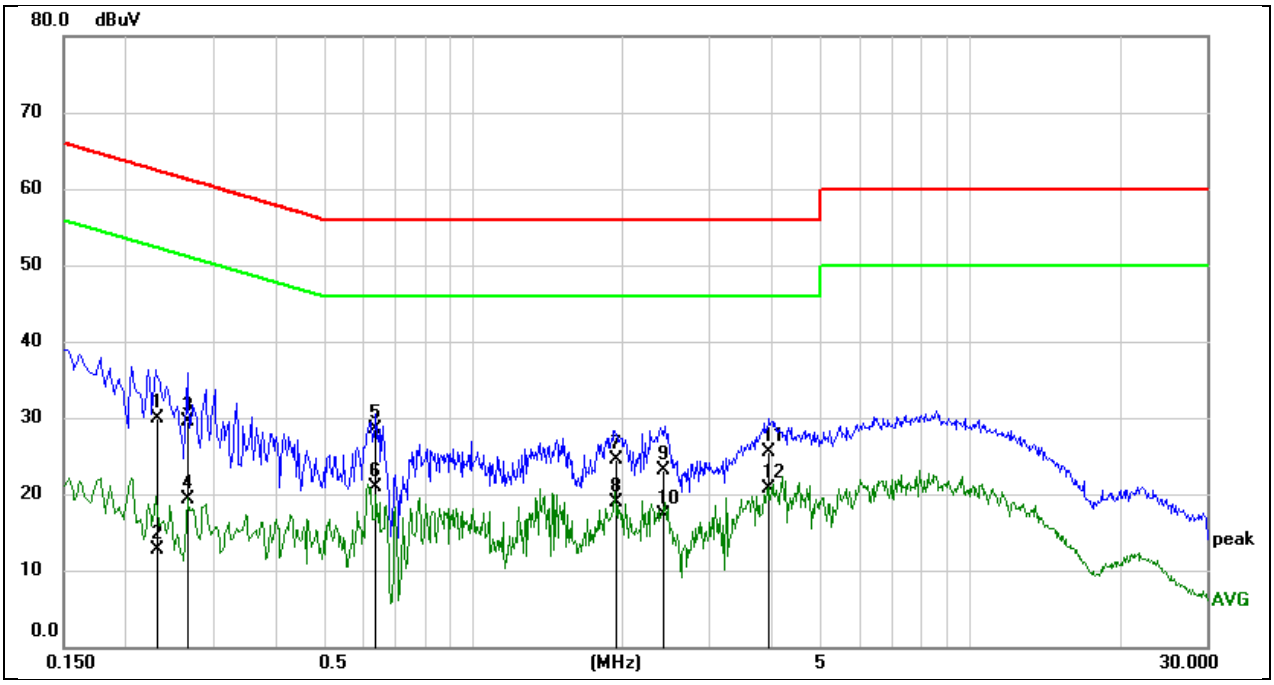
Temperature	22.5℃	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	120V~ 60Hz

TEST DATE / ENGINEER

Test Date	February 18, 2025	Test By	James Qin

TEST RESULTS

Test Mode:	802.11 a	Line:	Line



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.2319	20.34	9.64	29.98	62.38	-32.40	QP
2	0.2319	3.06	9.64	12.70	52.38	-39.68	AVG
3	0.2694	19.88	9.64	29.52	61.14	-31.62	QP
4	0.2694	9.68	9.64	19.32	51.14	-31.82	AVG
5	0.6355	18.85	9.63	28.48	56.00	-27.52	QP
6	0.6355	11.32	9.63	20.95	46.00	-25.05	AVG
7	1.9572	14.74	9.74	24.48	56.00	-31.52	QP
8	1.9572	9.25	9.74	18.99	46.00	-27.01	AVG
9	2.4219	13.31	9.74	23.05	56.00	-32.95	QP
10	2.4219	7.48	9.74	17.22	46.00	-28.78	AVG
11	3.9144	15.71	9.73	25.44	56.00	-30.56	QP
12	3.9144	10.98	9.73	20.71	46.00	-25.29	AVG

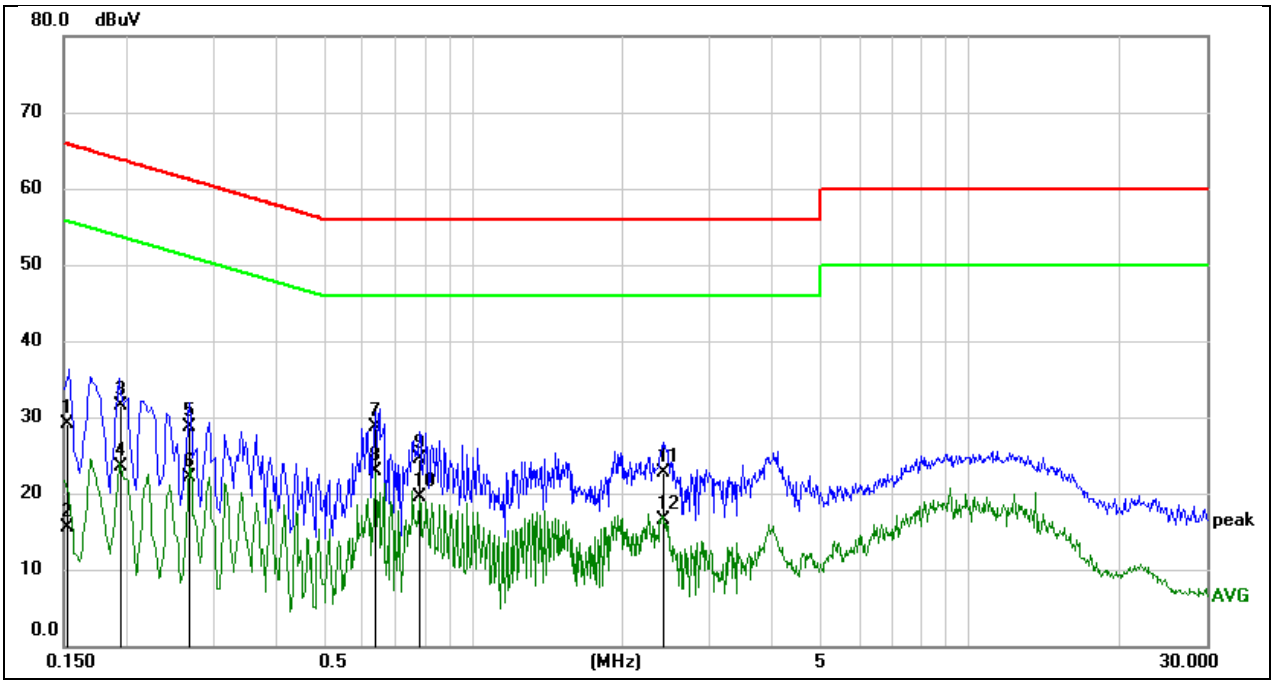
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Note:
1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes have been tested, only the worst data was recorded in the report.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11 a	Line:	Neutral



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1522	19.51	9.64	29.15	65.88	-36.73	QP
2	0.1522	5.83	9.64	15.47	55.88	-40.41	AVG
3	0.1959	21.82	9.64	31.46	63.78	-32.32	QP
4	0.1959	13.94	9.64	23.58	53.78	-30.20	AVG
5	0.2683	19.13	9.64	28.77	61.17	-32.40	QP
6	0.2683	12.48	9.64	22.12	51.17	-29.05	AVG
7	0.6366	19.13	9.63	28.76	56.00	-27.24	QP
8	0.6366	13.23	9.63	22.86	46.00	-23.14	AVG
9	0.7827	14.95	9.63	24.58	56.00	-31.42	QP
10	0.7827	9.93	9.63	19.56	46.00	-26.44	AVG
11	2.4218	13.02	9.64	22.66	56.00	-33.34	QP
12	2.4218	6.83	9.64	16.47	46.00	-29.53	AVG

Note:
1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes have been tested, only the worst data was recorded in the report.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

10. ANTENNA REQUIREMENT

REQUIREMENT

Please refer to FCC part 15.203
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 permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC part 15.407(a)
For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DESCRIPTION

Pass

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11. TEST DATA

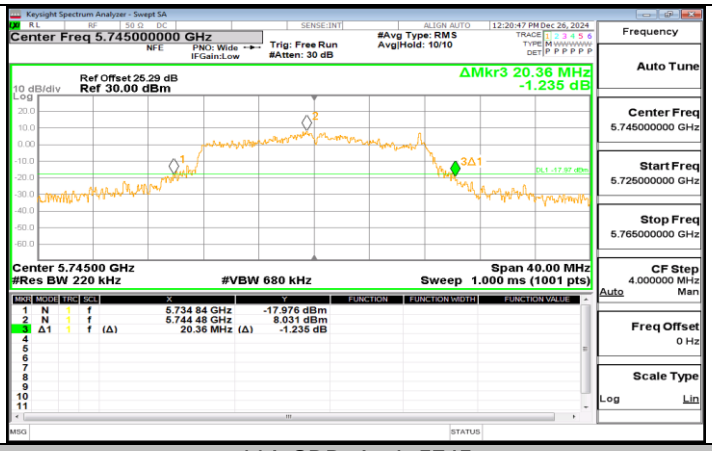
11.1. APPENDIX A: EMISSION BANDWIDTH

11.1.1. Test Result

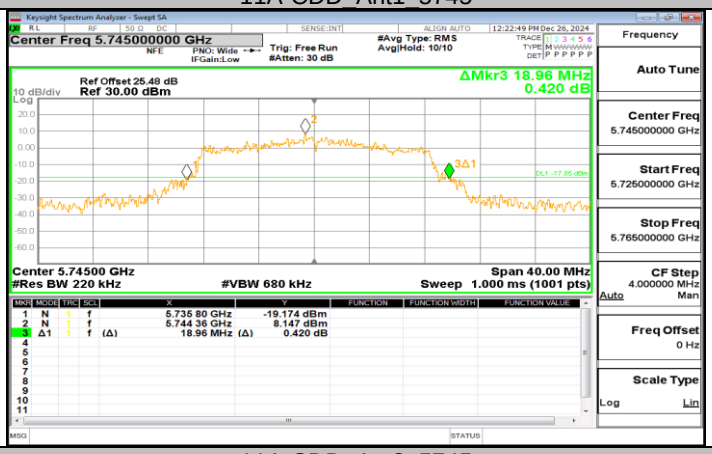
Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Verdict
11A-CDD	Ant1	5745	20.360	5734.840	5755.200	PASS
	Ant2	5745	18.960	5735.800	5754.760	PASS
	Ant1	5785	20.560	5774.800	5795.360	PASS
	Ant2	5785	20.600	5775.000	5795.600	PASS
	Ant1	5825	20.160	5815.280	5835.440	PASS
	Ant2	5825	20.640	5814.720	5835.360	PASS
11N20MIMO	Ant1	5745	20.680	5734.600	5755.280	PASS
	Ant2	5745	20.680	5734.480	5755.160	PASS
	Ant1	5785	20.320	5774.920	5795.240	PASS
	Ant2	5785	20.680	5774.520	5795.200	PASS
	Ant1	5825	20.520	5814.800	5835.320	PASS
	Ant2	5825	20.040	5814.920	5834.960	PASS
11N40MIMO	Ant1	5755	39.680	5735.240	5774.920	PASS
	Ant2	5755	38.960	5735.640	5774.600	PASS
	Ant1	5795	39.440	5775.400	5814.840	PASS
	Ant2	5795	38.960	5775.720	5814.680	PASS
11AC80MIMO	Ant1	5775	81.600	5734.200	5815.800	PASS
	Ant2	5775	81.600	5734.680	5816.280	PASS
11AX20MIMO	Ant1	5745	20.400	5734.800	5755.200	PASS
	Ant2	5745	20.880	5734.680	5755.560	PASS
	Ant1	5785	20.480	5775.040	5795.520	PASS
	Ant2	5785	20.320	5774.840	5795.160	PASS
	Ant1	5825	20.160	5814.720	5834.880	PASS
	Ant2	5825	20.560	5814.520	5835.080	PASS
11AX40MIMO	Ant1	5755	40.320	5734.760	5775.080	PASS
	Ant2	5755	39.600	5735.640	5775.240	PASS
	Ant1	5795	39.440	5775.240	5814.680	PASS
	Ant2	5795	39.280	5775.400	5814.680	PASS
11AX80MIMO	Ant1	5775	82.720	5733.240	5815.960	PASS
	Ant2	5775	81.440	5733.720	5815.160	PASS

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

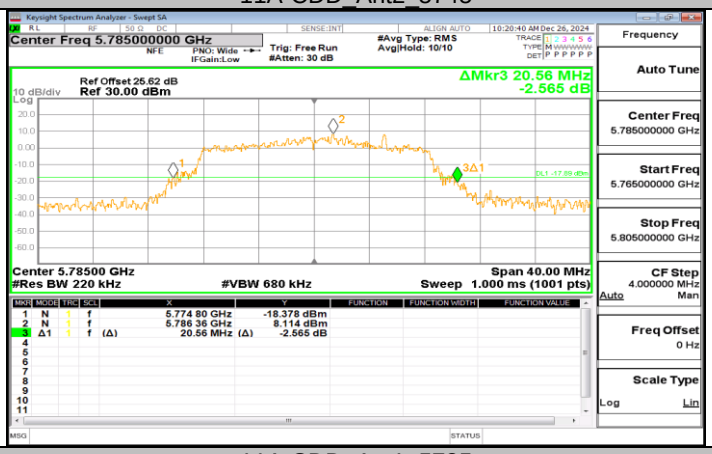
11.1.2. Test Graphs



11A-CDD_Ant1_5745

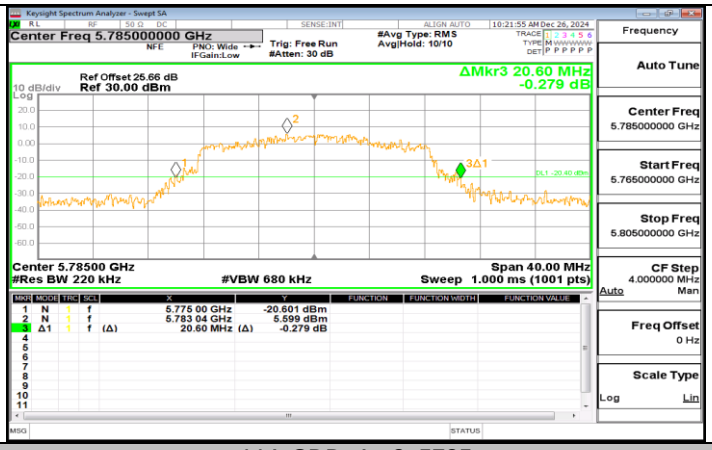


11A-CDD_Ant2_5745

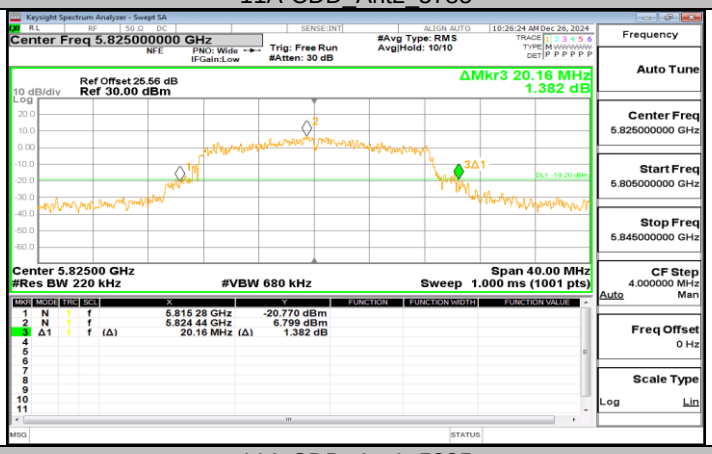


11A-CDD_Ant1_5785

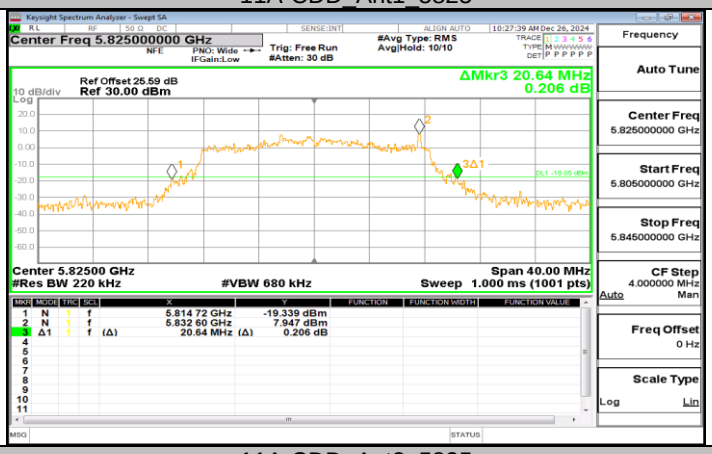
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11A-CDD_Ant2_5785



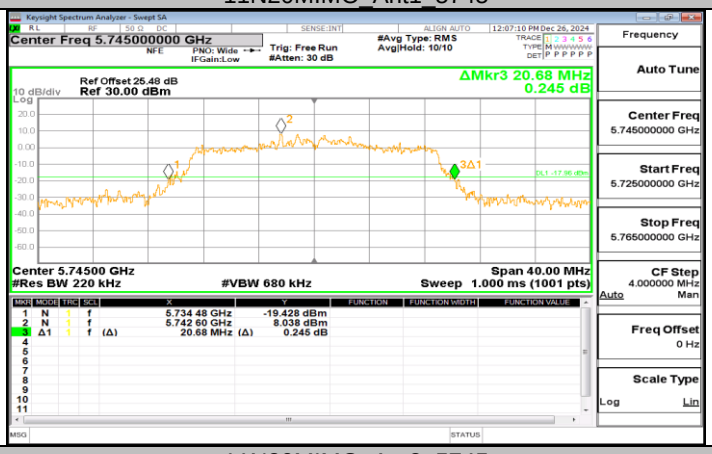
11A-CDD_Ant1_5825



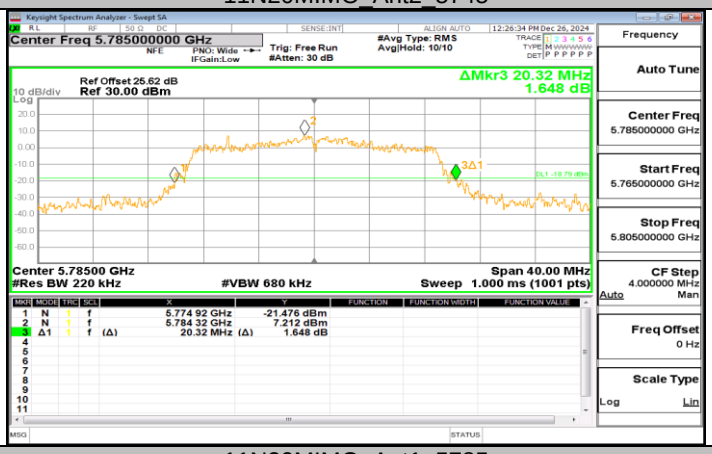
11A-CDD_Ant2_5825

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11N20MIMO_Ant1_5745



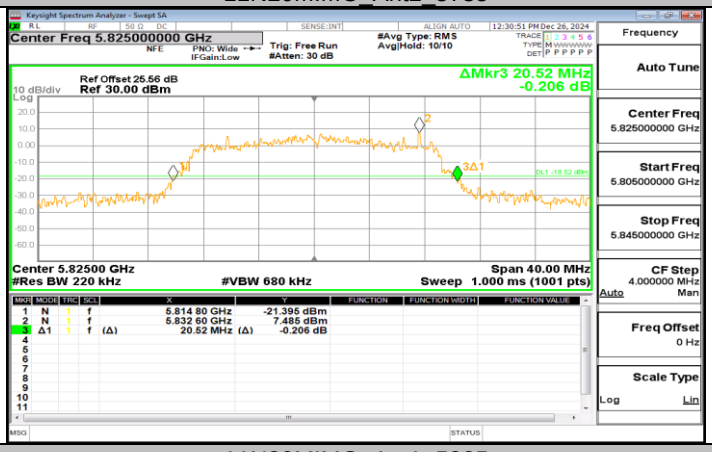
11N20MIMO_Ant2_5745



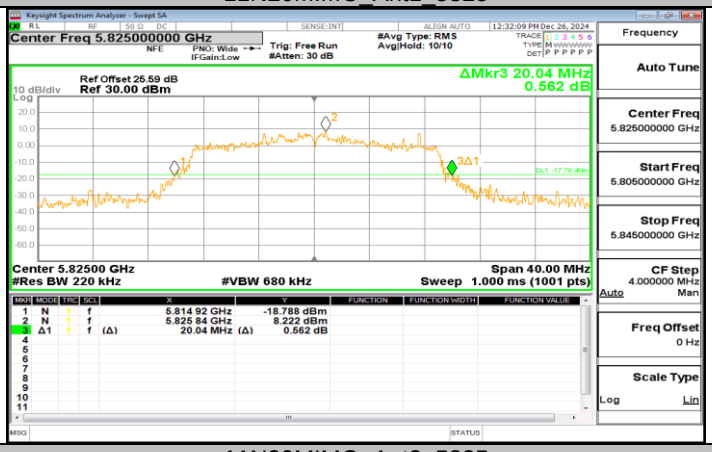
11N20MIMO_Ant1_5785

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11N20MIMO_Ant2_5785



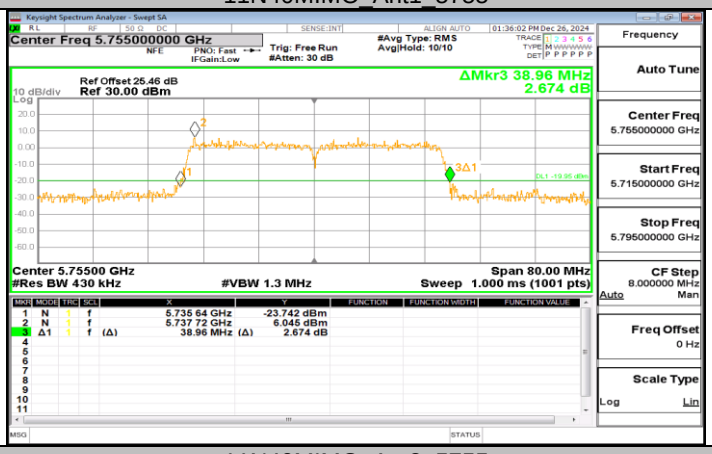
11N20MIMO_Ant1_5825



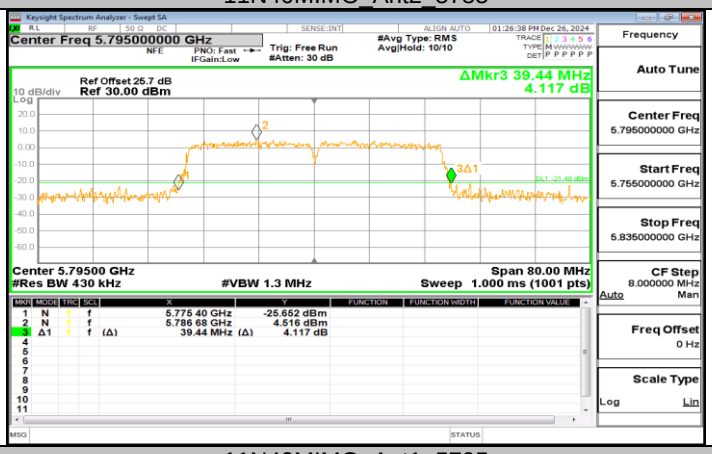
11N20MIMO_Ant2_5825

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11N40MIMO_Ant1_5755

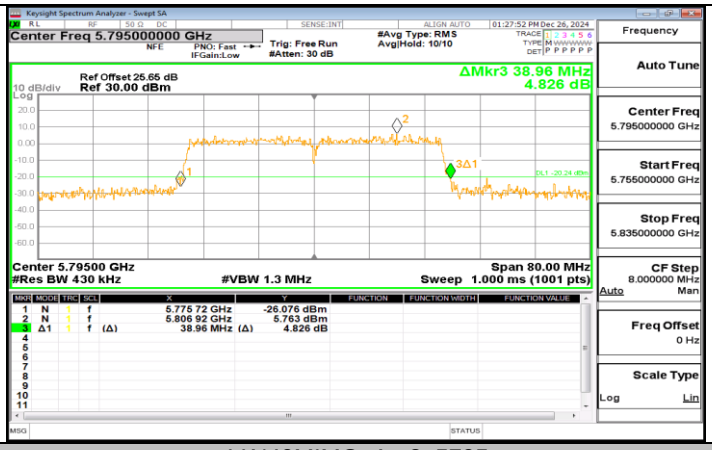


11N40MIMO_Ant2_5755

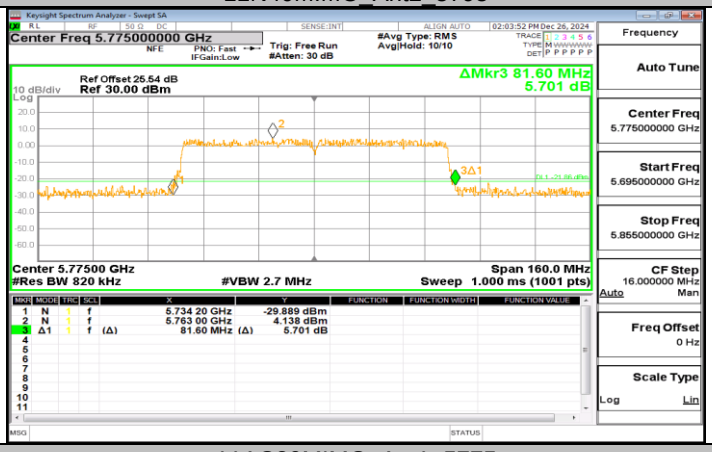


11N40MIMO_Ant1_5795

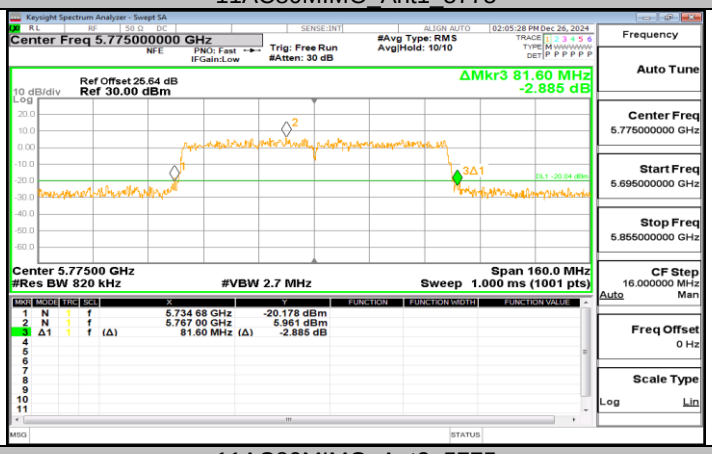
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N40MIMO_Ant2_5795

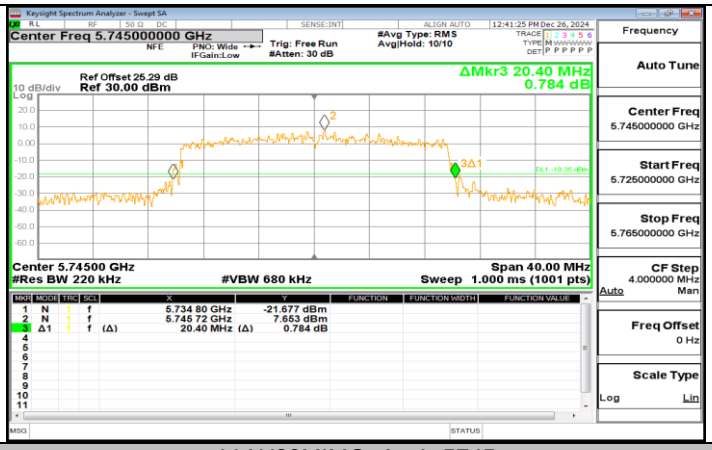


11AC80MIMO_Ant1_5775

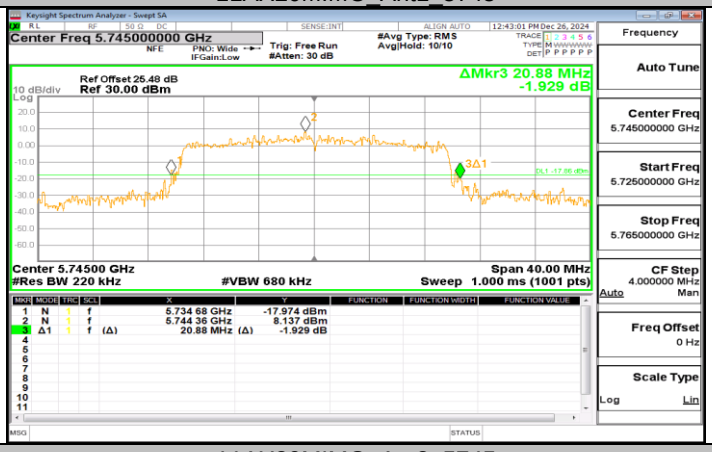


11AC80MIMO_Ant2_5775

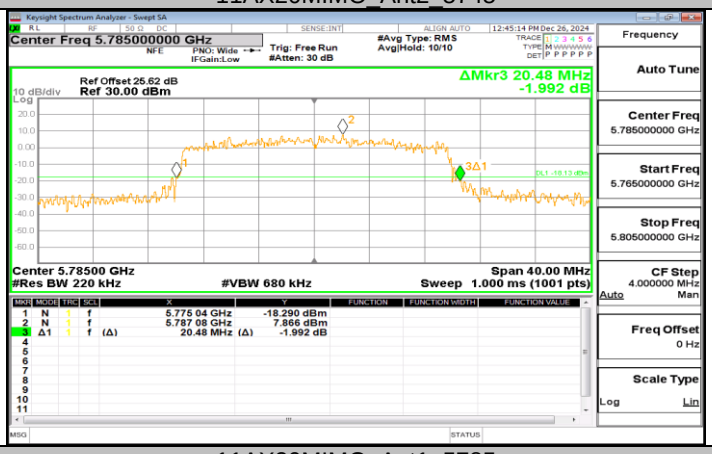
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11AX20MIMO_Ant1_5745

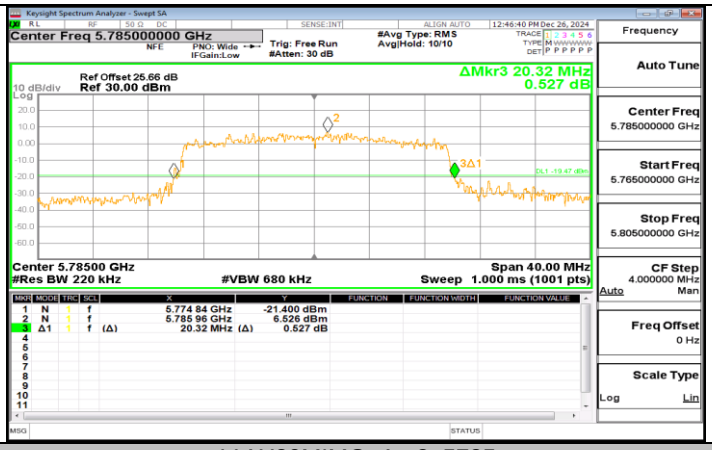


11AX20MIMO_Ant2_5745

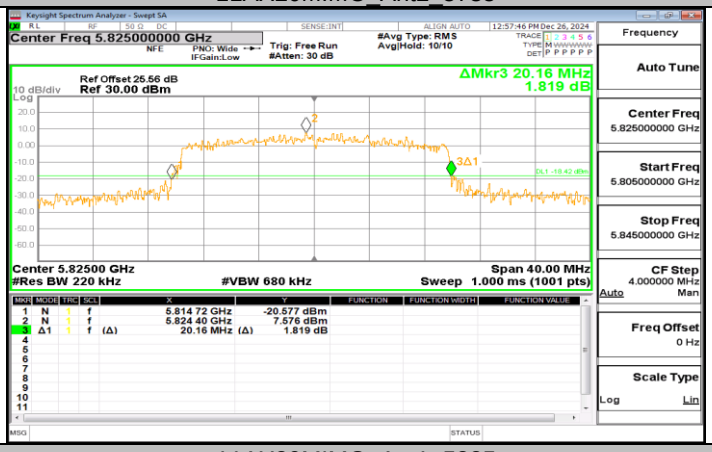


11AX20MIMO_Ant1_5785

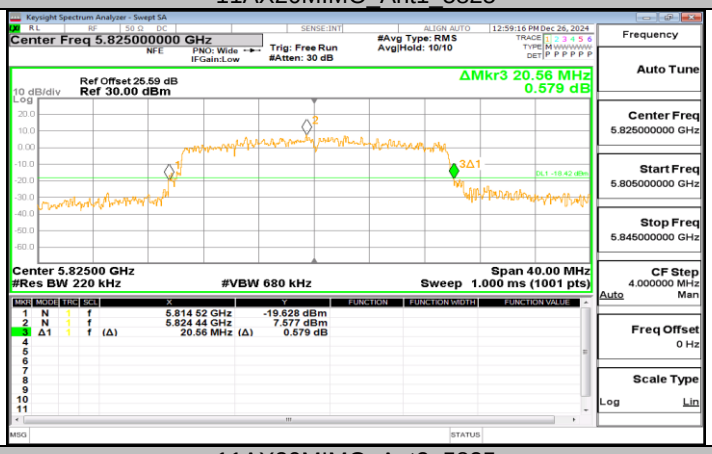
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11AX20MIMO_Ant2_5785



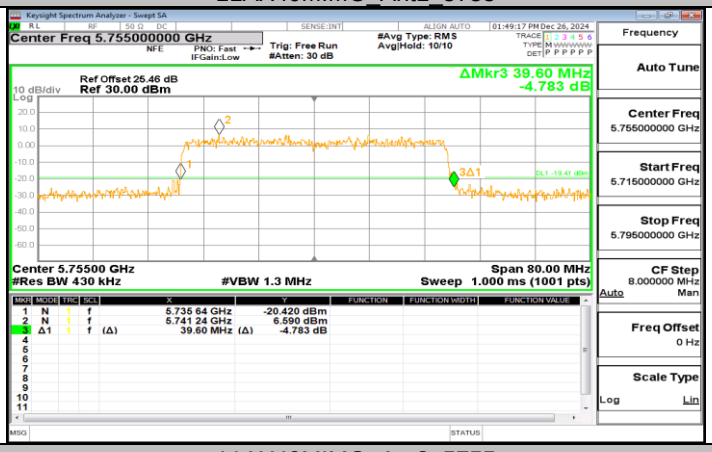
11AX20MIMO_Ant1_5825



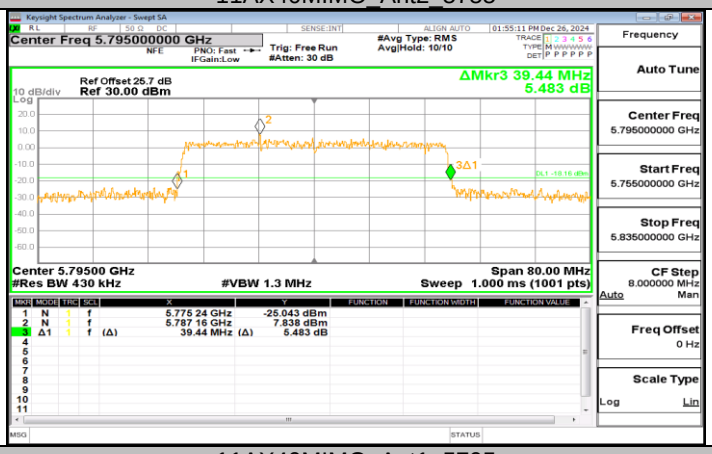
11AX20MIMO_Ant2_5825

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11AX40MIMO_Ant1_5755



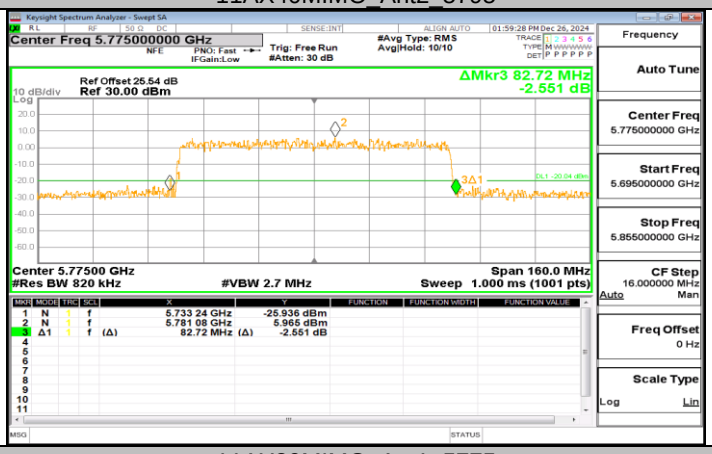
11AX40MIMO_Ant2_5755



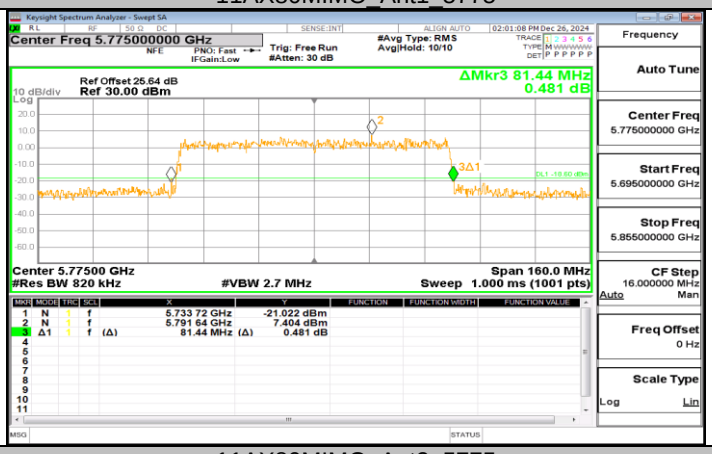
11AX40MIMO_Ant1_5795

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11AX40MIMO_Ant2_5795



11AX80MIMO_Ant1_5775



11AX80MIMO_Ant2_5775

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

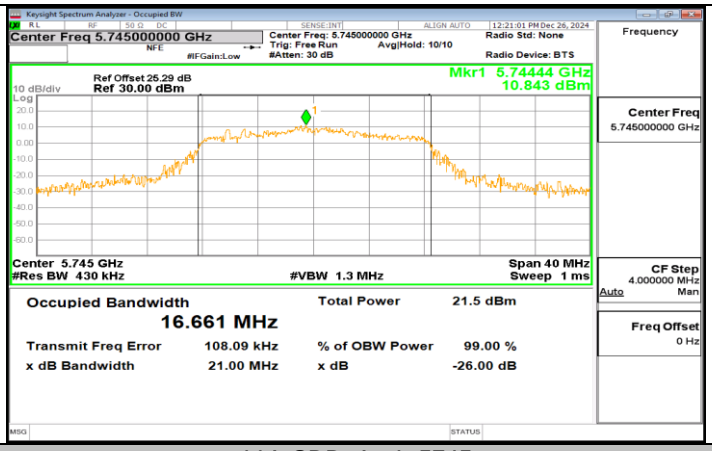
11.2. APPENDIX B: OCCUPIED CHANNEL BANDWIDTH

11.2.1. Test Result

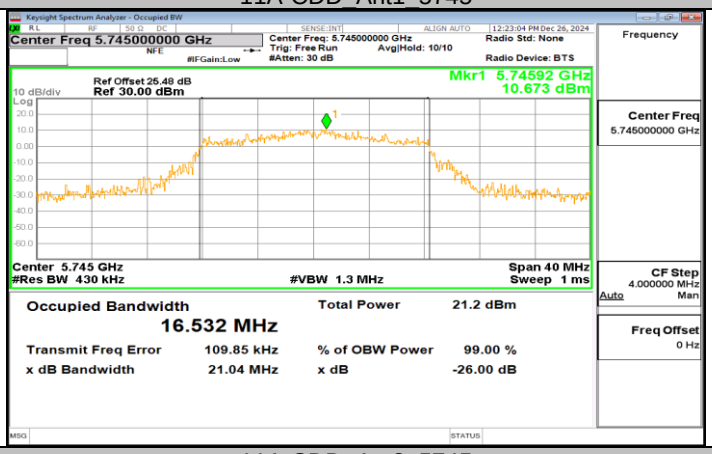
Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
11A-CDD	Ant1	5745	16.661	5736.7776	5753.4386	PASS
	Ant2	5745	16.532	5736.8439	5753.3759	PASS
	Ant1	5785	16.544	5776.7624	5793.3064	PASS
	Ant2	5785	16.591	5776.8514	5793.4424	PASS
	Ant1	5825	16.412	5816.8743	5833.2863	PASS
	Ant2	5825	16.577	5816.8017	5833.3787	PASS
11N20MIMO	Ant1	5745	17.850	5736.0957	5753.9457	PASS
	Ant2	5745	17.873	5736.0963	5753.9693	PASS
	Ant1	5785	17.766	5776.2110	5793.9770	PASS
	Ant2	5785	17.674	5776.2971	5793.9711	PASS
	Ant1	5825	17.617	5816.2924	5833.9094	PASS
	Ant2	5825	17.732	5816.2078	5833.9398	PASS
11N40MIMO	Ant1	5755	36.458	5736.8776	5773.3356	PASS
	Ant2	5755	36.469	5736.9400	5773.4090	PASS
	Ant1	5795	36.622	5776.8261	5813.4481	PASS
	Ant2	5795	36.452	5777.0136	5813.4656	PASS
11AC80MIMO	Ant1	5775	76.267	5737.1124	5813.3794	PASS
	Ant2	5775	76.020	5737.2584	5813.2784	PASS
11AX20MIMO	Ant1	5745	18.876	5735.6585	5754.5345	PASS
	Ant2	5745	18.837	5735.6688	5754.5058	PASS
	Ant1	5785	18.824	5775.6719	5794.4959	PASS
	Ant2	5785	18.921	5775.6443	5794.5653	PASS
	Ant1	5825	18.829	5815.6831	5834.5121	PASS
	Ant2	5825	18.923	5815.6479	5834.5709	PASS
11AX40MIMO	Ant1	5755	37.850	5736.1988	5774.0488	PASS
	Ant2	5755	37.671	5736.2826	5773.9536	PASS
	Ant1	5795	37.715	5776.2544	5813.9694	PASS
	Ant2	5795	37.768	5776.2365	5814.0045	PASS
11AX80MIMO	Ant1	5775	77.144	5736.7345	5813.8785	PASS
	Ant2	5775	77.383	5736.5606	5813.9436	PASS

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

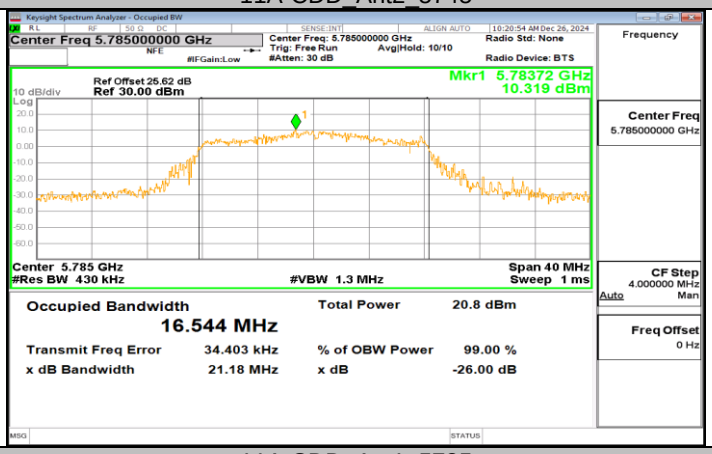
11.2.2. Test Graphs



11A-CDD_Ant1_5745

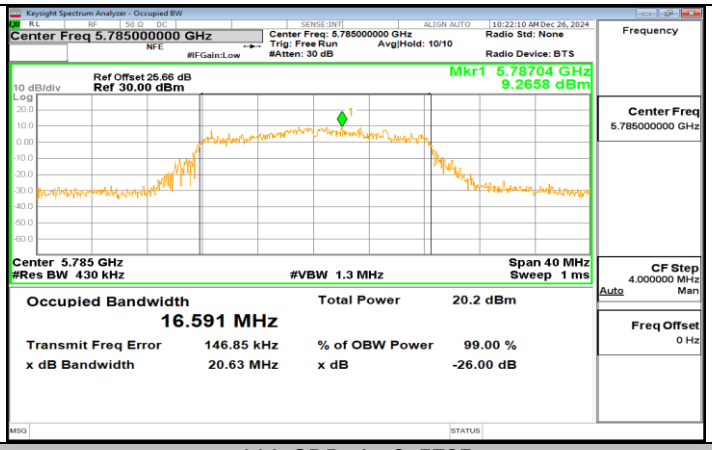


11A-CDD_Ant2_5745

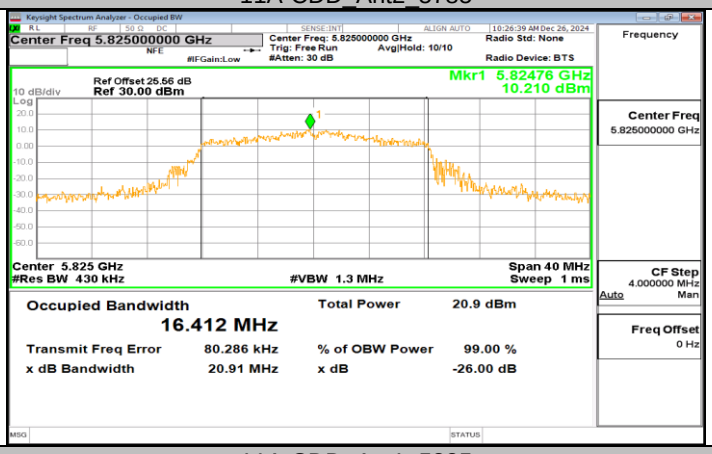


11A-CDD_Ant1_5785

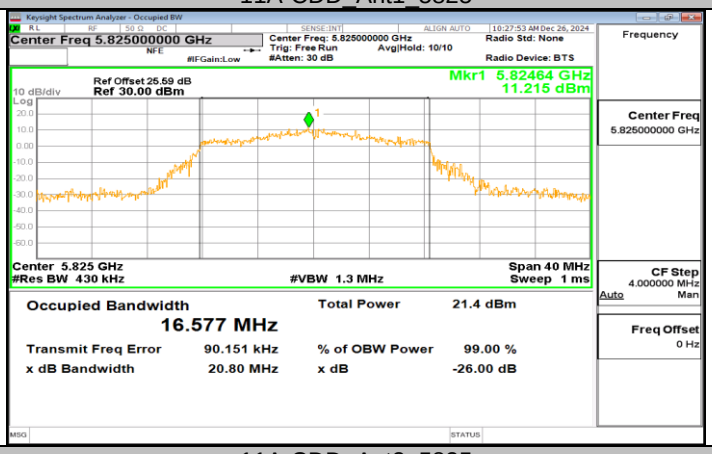
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11A-CDD_Ant2_5785

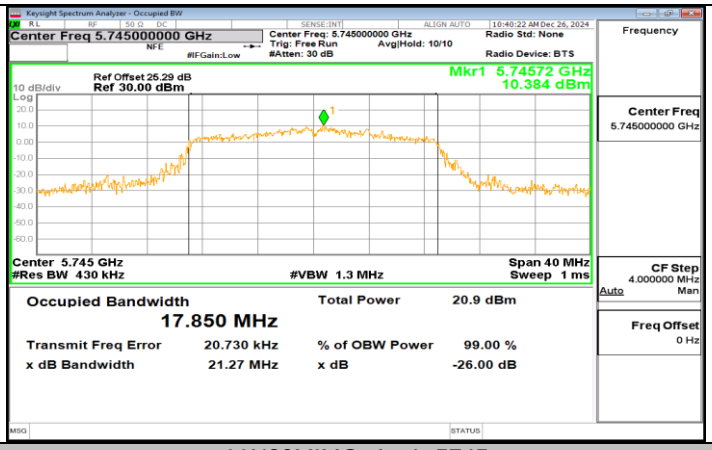


11A-CDD_Ant1_5825

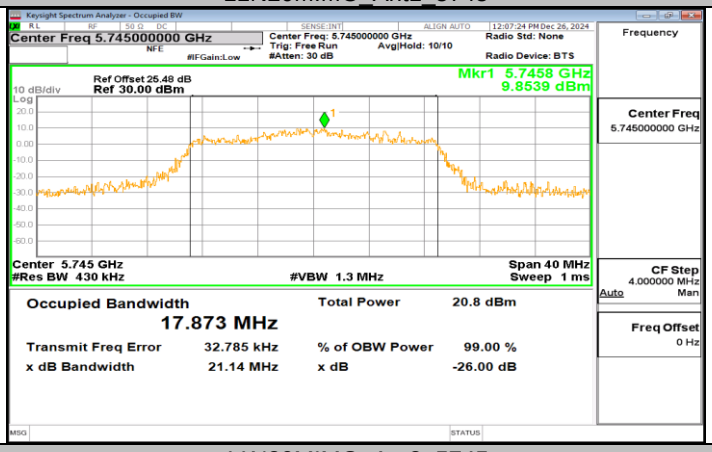


11A-CDD_Ant2_5825

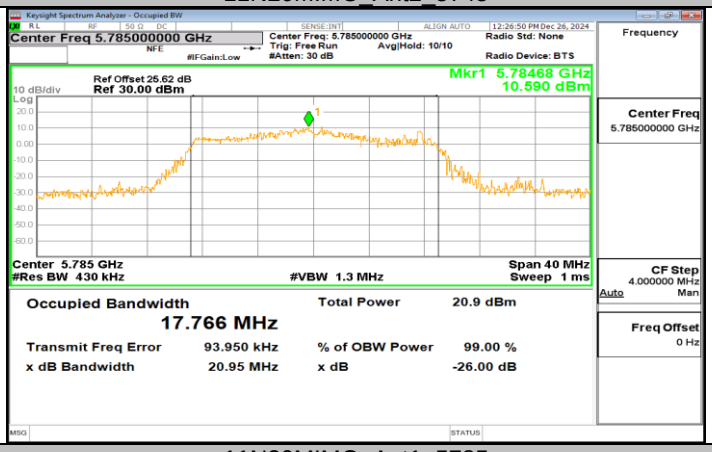
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N20MIMO_Ant1_5745



11N20MIMO_Ant2_5745



11N20MIMO_Ant1_5785

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.