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Kenxen Electronic（SZ）Limited

TEST REPORT

SCOPE OF WORK
FCC TESTING–IRIScan™ Anywhere 6 WIFI

REPORT NUMBER
201009041SZN-001

ISSUE DATE	**[REVISED DATE]**
3 November 2020	[----------]

PAGES
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TEST REPORT

Intertek Report No.: 201009041SZN-001

Kenxen Electronic（SZ）Limited

Application
For
Certification

FCC ID: 2AEBD-ANYWHERE

Scanner

Model: IRIScan™ Anywhere 6 WIFI

2.4GHz Wi-Fi Transceiver

Report No.: 201009041SZN-001

We hereby certify that the sample of the above item is considered to comply with the requirements of FCC Part 15, Subpart C for Intentional Radiator, mention 47 CFR [10-1-19]

Prepared and Checked by:

Allen Qin
Engineer

Approved by:

Kidd Yang
Technical Supervisor
Date: 3 November 2020

MEASUREMENT/TECHNICAL REPORT

This report concerns (check one) Original Grant ___X___ Class II Change _____

Equipment Type: DTS - Part 15 Digital Transmission Systems (Wi-Fi transmitter portion)

Deferred grant requested per 47 CFR 0.457(d)(1)(ii)? Yes _____ No ___X___

If yes, defer until : _____
date

Company Name agrees to notify the Commission by: _____
date

of the intended date of announcement of the product so that the grant can be issued on that date.

Transition Rules Request per 15.37? Yes _____ No ___X___

If no, assumed Part 15, Subpart C for intentional radiator - the new 47 CFR [10-01-19] Edition] provision.

Report prepared by:

Allen Qin
Intertek Testing Services Shenzhen Ltd. Longhua Branch
101, 201, Building B, No. 308 Wuhe Avenue,
Zhangkengjing Community, GuanHu Subdistrict, LongHua District, Shenzhen, P.R. China.
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Table of Contents

1.0 Summary of Test results

Applicant: Kenxen Electronic（SZ）Limited
Applicant Address: Building A13,Zone D, Minzhu Western Industrial Area. Shajing Town, Baoan District. Shenzhen,Guangdong Province.China.

Model: IRIScan™ Anywhere 6 WIFI
FCC ID: 2AEBD-ANYWHERE

TEST ITEM	REFERENCE	RESULTS
Max. Output power	15.247(b)(3)	Pass
6 dB Bandwidth	15.247(a)(2)	Pass
Max. Power Density	15.247(e)	Pass
Out of Band Antenna Conducted Emission	15.247(d)	Pass
Radiated Emission in Restricted Bands	15.247(d)	Pass
AC Conducted Emission	15.207	Pass
Antenna Requirement	15.203	Pass (See Notes)

Notes: The EUT uses an Integral Antenna which in accordance to Section 15.203 is considered sufficient to comply with the provisions of this section.

2.0 General Description

2.1 Product Description

The Equipment Under Test (EUT) is a Scanner with Wi-Fi function operating at 2412-2462MHz. 11 channels with 5MHz channel spacing for 802.11b/g/n-HT20, 7 channels with 5MHz channel spacing for 802.11n-HT40. The EUT is powered by DC 3.7V by lithium battery which can be charged by DC 5V though micro USB port. For more detailed features description, please refer to the user's manual.

Type of Modulation: CCK, BPSK, QPSK, 16QAM, 64QAM, DQPSK, DBPSK
Antenna Type: Integral Antenna
Antenna Gain: 2.2dBi

The product has two colors and they are identical in hardware and electrical aspect.

For electronic filing, the brief circuit description is saved with filename: descri.pdf.

2.2 Related Submittal(s) Grants

This is an application for certification of:
DTS- Part 15 Digital Transmission Systems (2.4GHz Wi-Fi transmitter portion).

Remaining portions are subject to the following procedures:
1. Receiver portion of WiFi: exempt from technical requirement of this Part.
2. Other Digital Function: Subject to FCC Part 15B SDOC.

2.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.10 (2013) and KDB 558074 D01 v05r02. Radiated emission measurement was performed in semi-anechoic chamber and conducted emission measurement was performed in shielded room. For radiated emission measurement, preliminary scans were performed in the semi-anechoic chamber only to determine the worst-case modes. All radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "**Justification Section**" of this Application.

2.4 Test Facility

The Semi-anechoic chamber and shielded room used to collect the radiated data and conducted data are **Intertek Testing Services Shenzhen Ltd. Longhua Branch** and located at 101, 201, Building B, No. 308 Wuhe Avenue, Zhangkengjing Community, GuanHu Subdistrict, LongHua District, Shenzhen, P.R. China. This test facility and site measurement data have been fully placed on file with File Number: CN1188.

3.0 System Test Configuration

3.1 Justification

For emissions testing, the equipment under test (EUT) setup to transmit continuously to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing. During testing, all cables were manipulated to produce worst case emissions. The EUT is powered by DC 3.7V by lithium battery which was charged by DC 5V though micro USB port during the test, only the worst data was reported in this report.

On 802.11b/g/n-HT20/n-HT40 mode, only one antenna is used, and all data rate were tested and only the worst-case data is shown in the report.

For maximizing emissions, the EUT was rotated through 360°, the EUT was placed on the styrene turntable with 0.8m up to 1GHz and 1.5 m above 1GHz. The antenna height and polarization are varied during the search for maximum signal level. The antenna height is varied from 1 to 4 meters. Radiated emissions are taken at three meters unless the signal level is too low for measurement at that distance. If necessary, a pre-amplifier is used and/or the test is conducted at a closer distance.

All readings are extrapolated back to the equivalent three meters reading using inverse scaling with distance. Analyzer resolution is 100 kHz or greater for frequencies below 1000 MHz. The resolution is 1 MHz or greater for frequencies above 1000 MHz. The spurious emissions more than 20 dB below the permissible value are not reported.

The EUT and transmitting antenna was centered on the turntable.

Radiated emission measurement was performed the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

3.2 EUT Exercising Software

The EUT exercise program (provided by client) used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use. The worst-case configuration is used in all specified testing.

The parameters of test software setting:
During the test, Channel and power controlling software provided by the applicant was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the application and is going to be fixed on the firmware of the end product.

3.3 Special Accessories

USB cable (Shielded, length 1m)

3.4 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty of test has been considered.

3.5 Equipment Modification

Any modifications installed previous to testing by Kenxen Electronic（SZ）Limited will be incorporated in each production model sold / leased in the United States.

No modifications were installed by Intertek Testing Services Shenzhen Ltd. Longhua Branch.

3.6 Support Equipment List and Description

Description	Manufacturer	Model No.
USB cable	Provided by applicant	/
Laptop	DELL	Latitude 3480
Micro SD Card	Sandisk	A1
Adapter	XIAOMI	MDY-09-EW

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 17, 2020 Model: IRIScan™ Anywhere 6 WIFI

4.0 Measurement Results

4.1 Maximum Conducted Output Power at Antenna Terminals, FCC Rules 15.247(b)(3):

The antenna power of the EUT was connected to the input of a broadband peak RF power meter. The power meter has a video bandwidth that is greater than DTS bandwidth and utilize a fast-responding diode detector. Power was read directly at the EUT antenna terminals with cable loss added.

For antennas with gains of 6 dBi or less, maximum allowed Transmitter output is 1 watt (+30 dBm).

IEEE 802.11b (Antenna Gain = 2.2dBi) (CCK, 1Mbps)		
Frequency (MHz)	Output in dBm (Peak Reading)	Output in mWatt
Low Channel: 2412	10.5	11.22
Middle Channel: 2437	11.7	14.79
High Channel: 2462	11.8	15.14

IEEE 802.11g (Antenna Gain = 2.2dBi) (16QAM, 6Mbps)		
Frequency (MHz)	Output in dBm (Peak Reading)	Output in mWatt
Low Channel: 2412	17.53	56.62
Middle Channel: 2437	18.35	68.39
High Channel: 2462	18.55	71.61

IEEE 802.11n-HT20 (Antenna Gain = 2.2dBi) (64QAM, MCS0)		
Frequency (MHz)	Output in dBm (Peak Reading)	Output in mWatt
Low Channel: 2412	17.02	50.35
Middle Channel: 2437	17.67	58.48
High Channel: 2462	18.26	66.99

IEEE 802.11n-HT40 (Antenna Gain = 2.2dBi) (64QAM, MCS0)		
Frequency (MHz)	Output in dBm (Peak Reading)	Output in mWatt
Low Channel: 2422	16.98	49.89
Middle Channel: 2437	17.47	55.85
High Channel: 2452	18.02	63.39

Cable loss: 0.5 dB External Attenuation: 0 dB

Cable loss, external attenuation has been included in OFFSET function

EUT max. output level = 18.55dBm
EUT max. E.I.R.P = 18.55dBm + 2.2dBi = 20.75dBm = 118.85mW

For RF Exposure, the information is saved with filename: RF exposure.pdf.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 17, 2020 Model: IRIScan™ Anywhere 6 WIFI

4.2 Minimum 6 dB RF Bandwidth, FCC Rule 15.247(a) (2):

The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer RES BW was set to 100 KHz according to FCC KDB 558074 D01 v05r02. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK output reading was taken, a DISPLAY line was drawn 6 dB lower than PEAK level. The 6dB bandwidth was determined from where the channel output spectrum intersected the display line.

Limit: The 6 dB Bandwidth is at least 500 kHz.

IEEE 802.11b (CCK, 1Mbps)	
Frequency (MHz)	6 dB Bandwidth (MHz)
2412	10.072
2437	10.072
2462	10.072

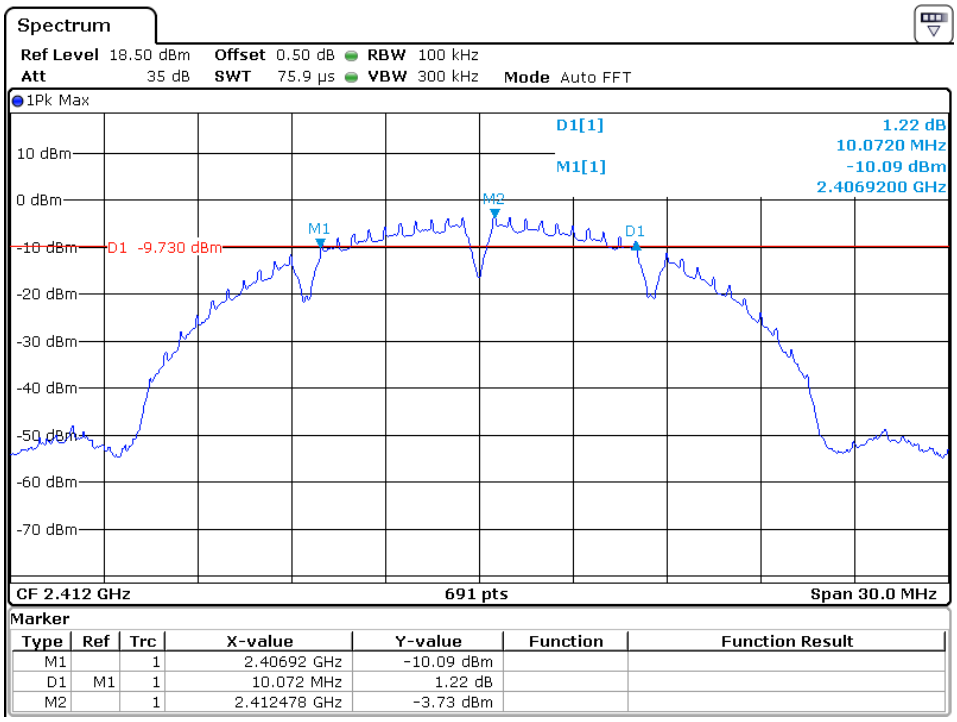
IEEE 802.11g (16QAM, 6Mbps)	
Frequency (MHz)	6 dB Bandwidth (MHz)
2412	16.541
2437	16.541
2462	16.585

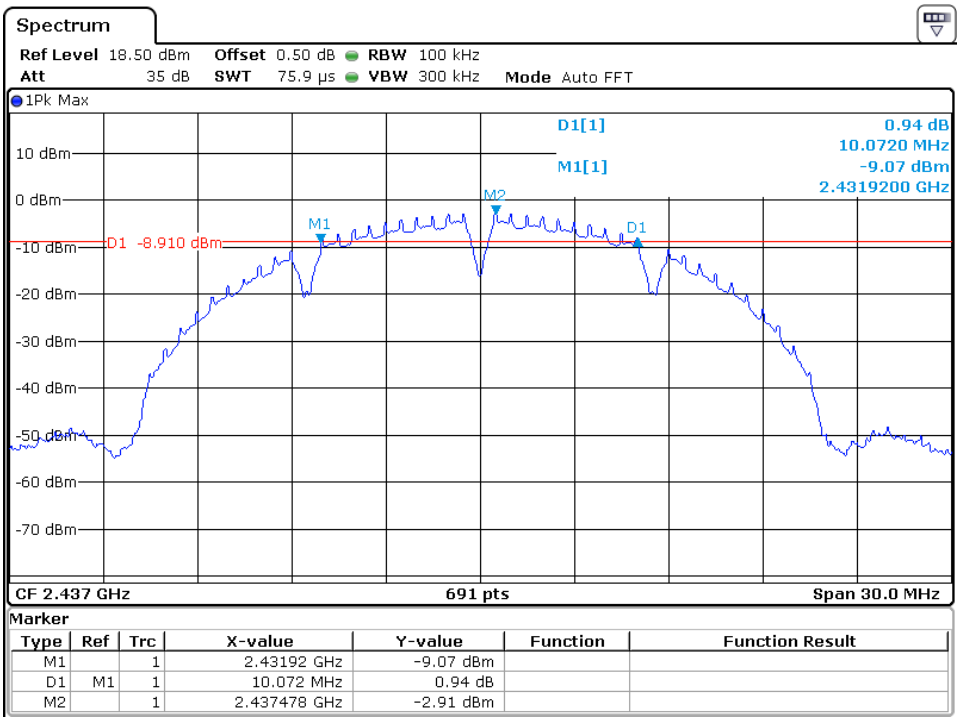
IEEE 802.11n-HT20 (64QAM, MSC0)	
Frequency (MHz)	6 dB Bandwidth (MHz)
2412	17.800
2437	17.800
2462	17.800

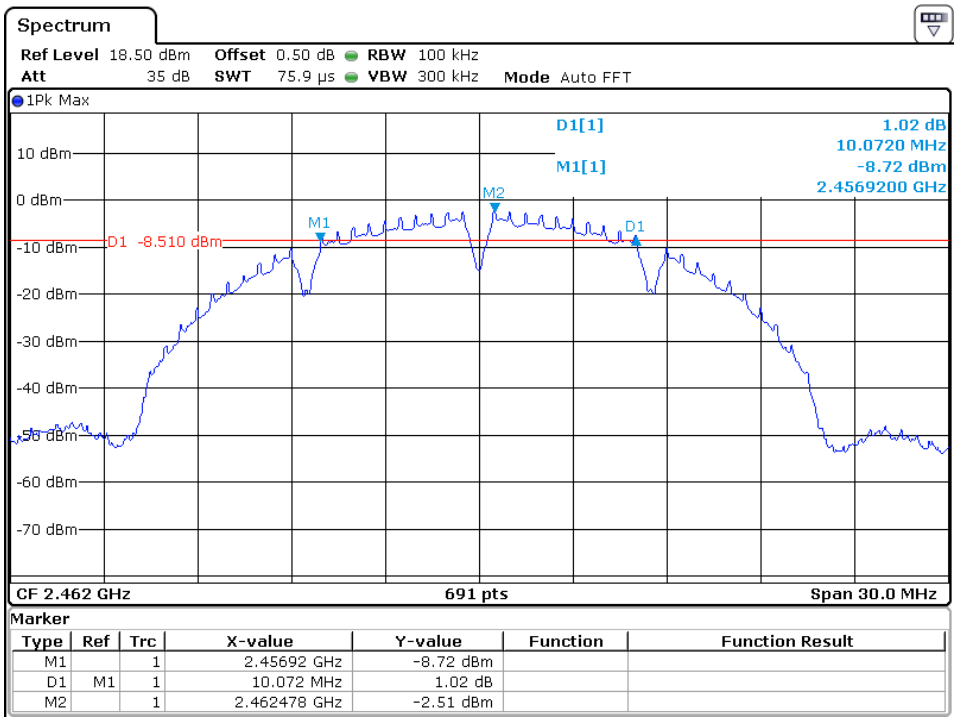
IEEE 802.11n-HT40 (64QAM, MSC0)	
Frequency (MHz)	6 dB Bandwidth (MHz)
2422	36.252
2437	36.252
2452	36.252

The test plots are attached as below.

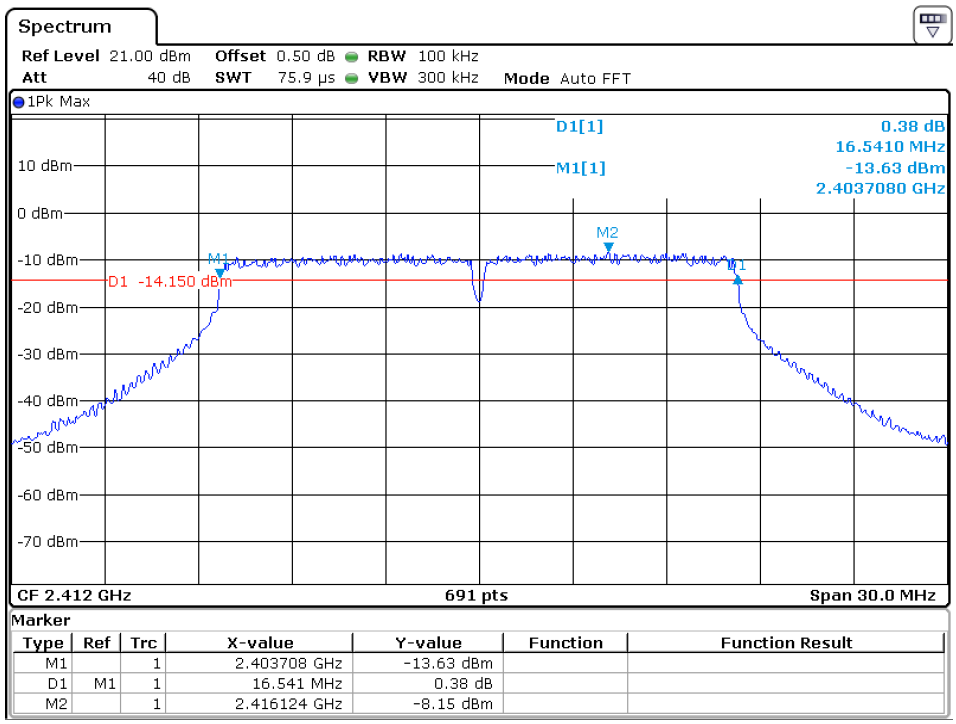
802.11b

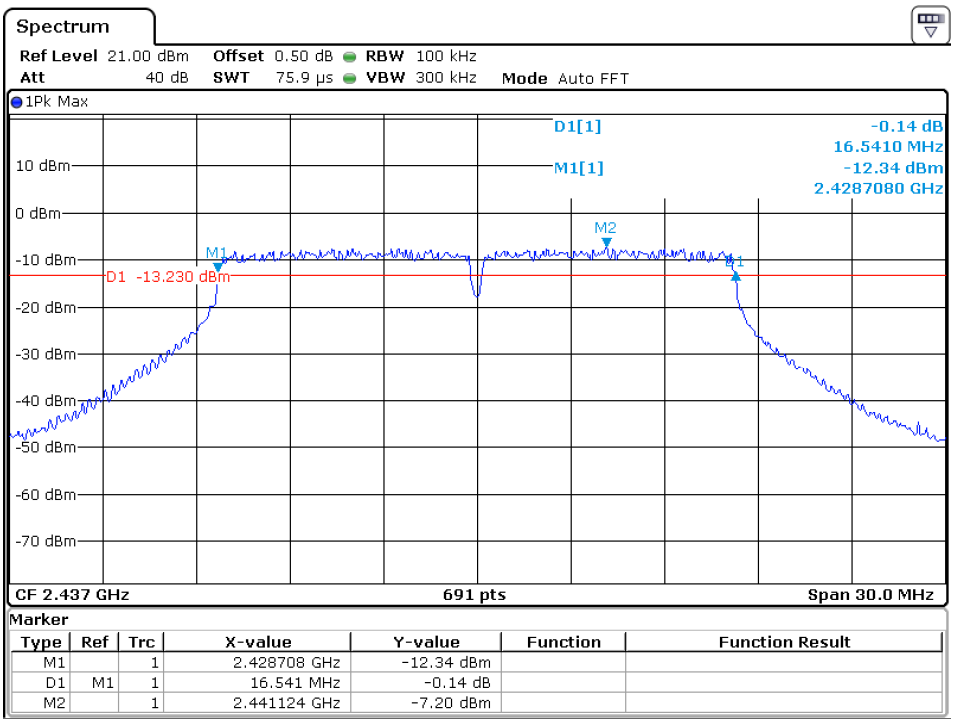

Spectrum
Ref Level 18.50 dBm Offset 0.50 dB RBW 100 kHz
Att 35 dB SWT 75.9 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] 1.22 dB
10.0720 MHz
M1[1] -10.09 dBm
2.4069200 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
D1 -9.730 dBm
M1
M2
D1
CF 2.412 GHz
691 pts
Span 30.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.40692 GHz -10.09 dBm
D1 M1 1 10.072 MHz 1.22 dB
M2 1 2.412478 GHz -3.73 dBm

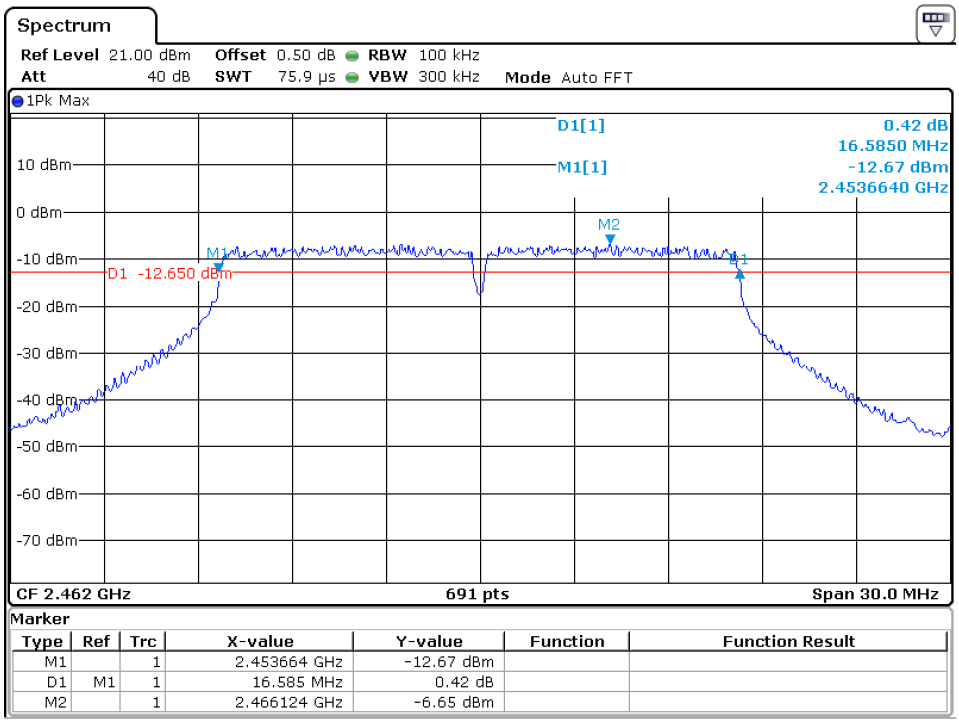

Spectrum
Ref Level 18.50 dBm Offset 0.50 dB RBW 100 kHz
Att 35 dB SWT 75.9 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] 0.94 dB
10.0720 MHz
M1[1] -9.07 dBm
2.4319200 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
D1 -8.910 dBm
M1
M2
D1
CF 2.437 GHz
691 pts
Span 30.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.43192 GHz -9.07 dBm
D1 M1 1 10.072 MHz 0.94 dB
M2 1 2.437478 GHz -2.91 dBm


Spectrum
Ref Level 18.50 dBm Offset 0.50 dB RBW 100 kHz
Att 35 dB SWT 75.9 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] 1.02 dB
10.0720 MHz
M1[1] -8.72 dBm
2.4569200 GHz
D1 -8.510 dBm
CF 2.462 GHz
691 pts
Span 30.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.45692 GHz -8.72 dBm
D1 M1 1 10.072 MHz 1.02 dB
M2 1 2.462478 GHz -2.51 dBm

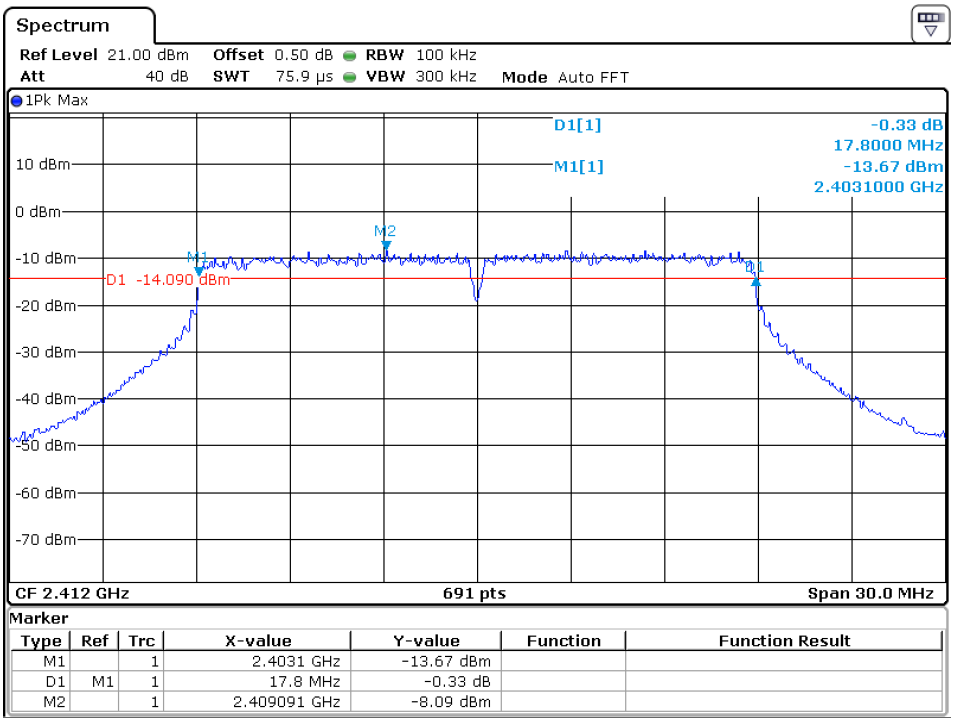
802.11g

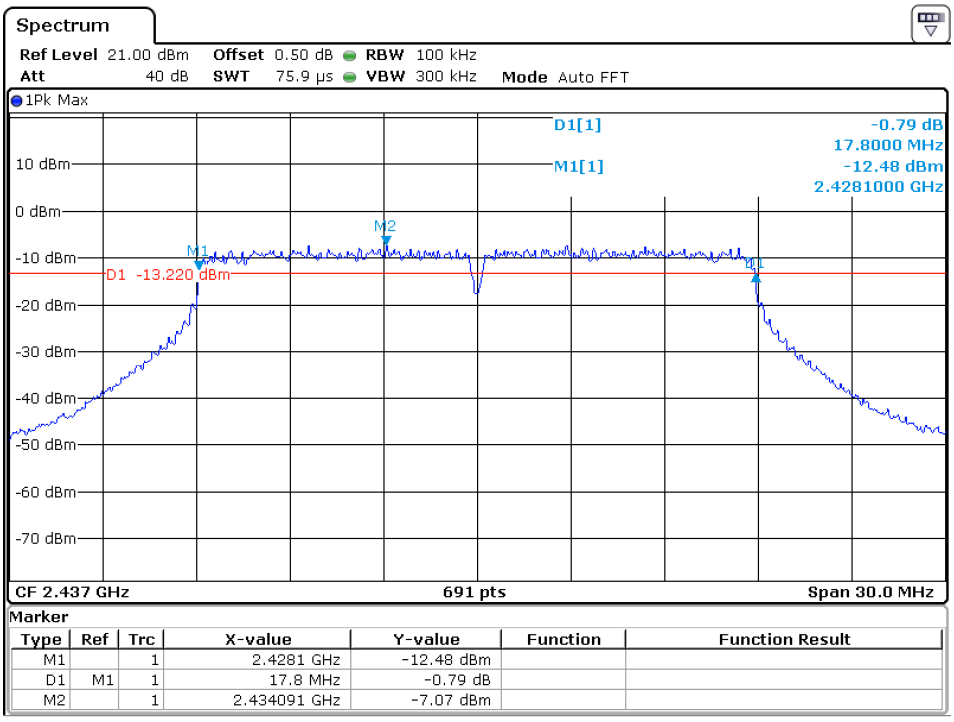

Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 75.9 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] 0.38 dB
16.5410 MHz
M1[1] -13.63 dBm
2.4037080 GHz
D1 -14.150 dBm
CF 2.412 GHz
691 pts
Span 30.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.403708 GHz -13.63 dBm
D1 M1 1 16.541 MHz 0.38 dB
M2 1 2.416124 GHz -8.15 dBm

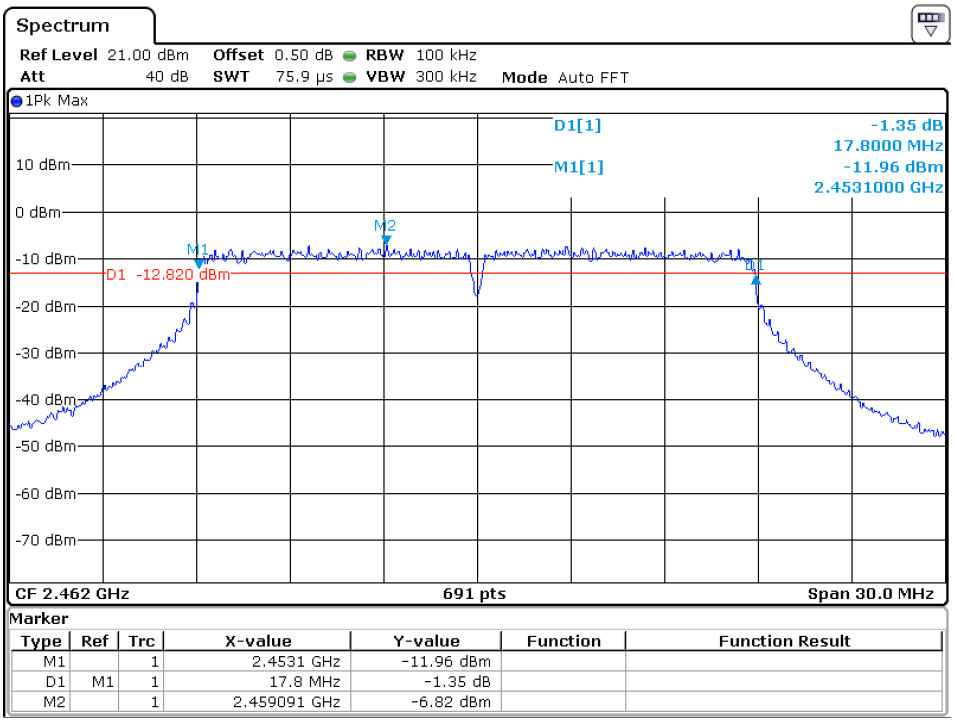

Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 75.9 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] -0.14 dB
16.5410 MHz
M1[1] -12.34 dBm
2.4287080 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
D1 -13.230 dBm
M2
CF 2.437 GHz
691 pts
Span 30.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.428708 GHz -12.34 dBm
D1 M1 1 16.541 MHz -0.14 dB
M2 1 2.441124 GHz -7.20 dBm


Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 75.9 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] 0.42 dB
16.5850 MHz
M1[1] -12.67 dBm
2.4536640 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
D1 -12.650 dBm
M2
CF 2.462 GHz
691 pts
Span 30.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.453664 GHz -12.67 dBm
D1 M1 1 16.585 MHz 0.42 dB
M2 1 2.466124 GHz -6.65 dBm

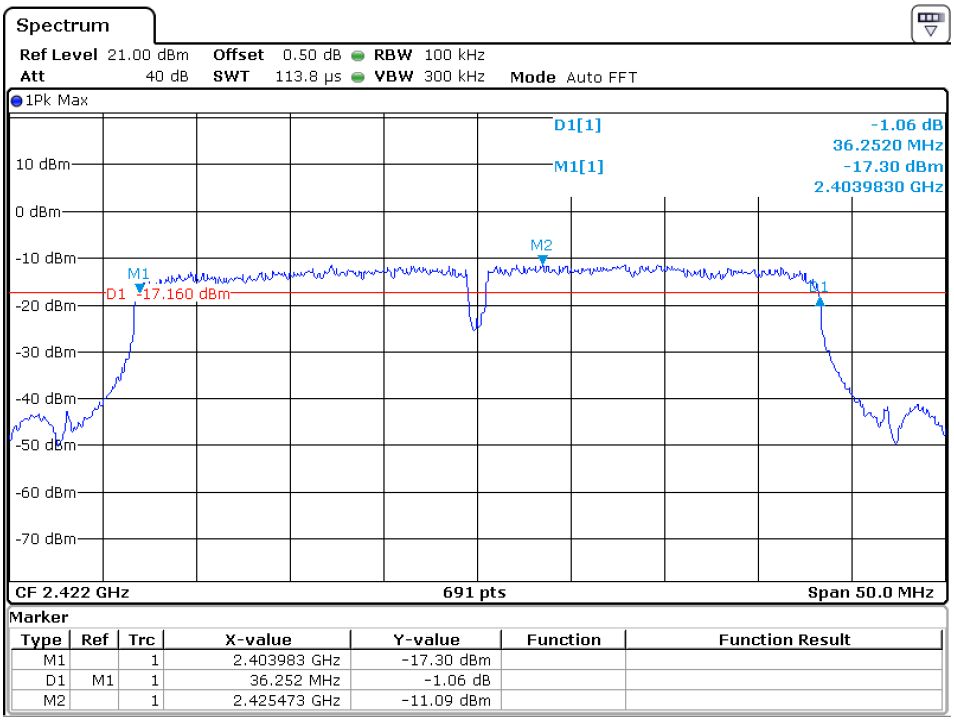
802.11n-HT20

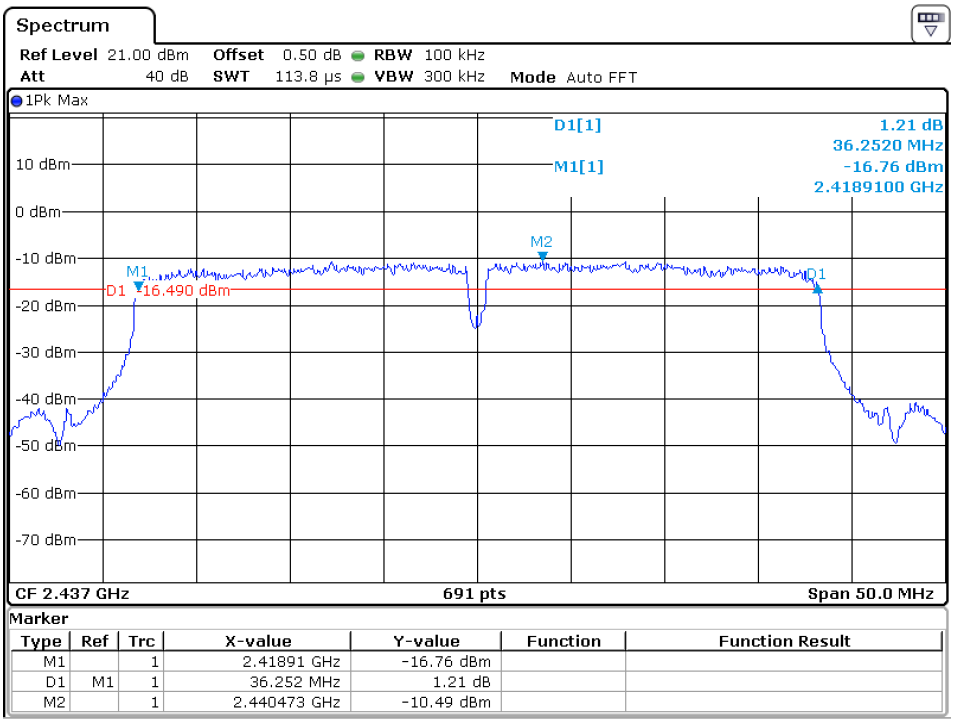

Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 75.9 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] -0.33 dB
17.8000 MHz
M1[1] -13.67 dBm
2.4031000 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
M2
D1 -14.090 dBm
CF 2.412 GHz
691 pts
Span 30.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.4031 GHz -13.67 dBm
D1 M1 1 17.8 MHz -0.33 dB
M2 1 2.409091 GHz -8.09 dBm

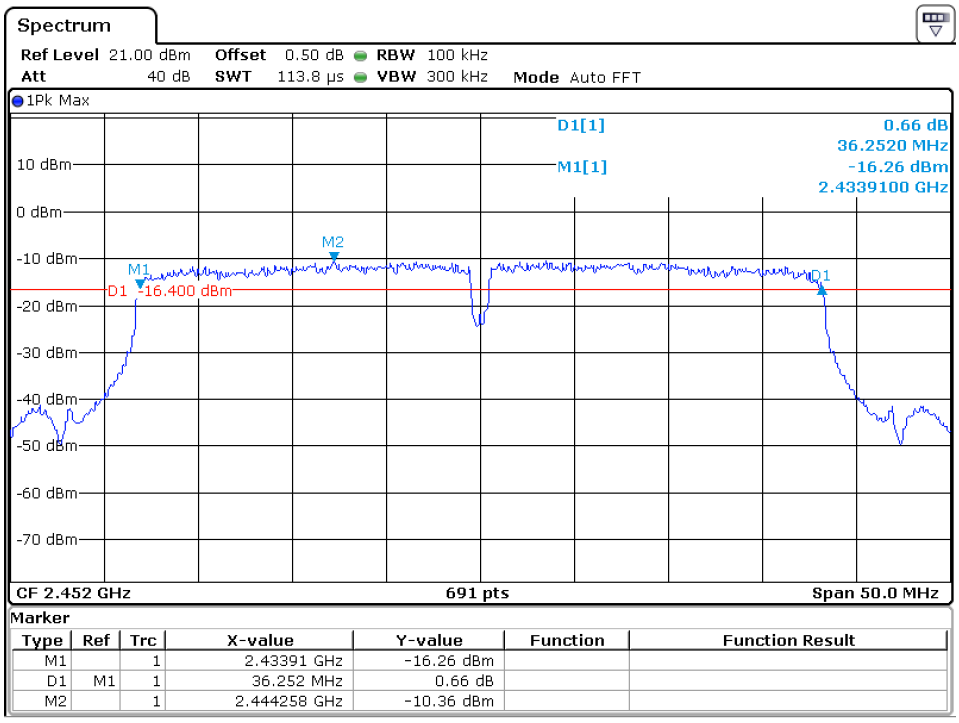

Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 75.9 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] -0.79 dB
17.8000 MHz
M1[1] -12.48 dBm
2.4281000 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
M2
D1 -13.220 dBm
CF 2.437 GHz
691 pts
Span 30.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.4281 GHz -12.48 dBm
D1 M1 1 17.8 MHz -0.79 dB
M2 1 2.434091 GHz -7.07 dBm


Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 75.9 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] -1.35 dB
17.8000 MHz
M1[1] -11.96 dBm
2.4531000 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
M2
D1 -12.820 dBm
CF 2.462 GHz
691 pts
Span 30.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.4531 GHz -11.96 dBm
D1 M1 1 17.8 MHz -1.35 dB
M2 1 2.459091 GHz -6.82 dBm

802.11n-HT40


Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 113.8 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] -1.06 dB
36.2520 MHz
M1[1] -17.30 dBm
2.4039830 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
M2
D1 -17.160 dBm
CF 2.422 GHz
691 pts
Span 50.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.403983 GHz -17.30 dBm
D1 M1 1 36.252 MHz -1.06 dB
M2 1 2.425473 GHz -11.09 dBm


Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 113.8 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] 1.21 dB
36.2520 MHz
M1[1] -16.76 dBm
2.4189100 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
D1 -16.490 dBm
M2
D1
CF 2.437 GHz
691 pts
Span 50.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.41891 GHz -16.76 dBm
D1 M1 1 36.252 MHz 1.21 dB
M2 1 2.440473 GHz -10.49 dBm


Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 113.8 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] 0.66 dB
36.2520 MHz
M1[1] -16.26 dBm
2.4339100 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
D1 -16.400 dBm
M2
D1
CF 2.452 GHz
691 pts
Span 50.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 2.43391 GHz -16.26 dBm
D1 M1 1 36.252 MHz 0.66 dB
M2 1 2.444258 GHz -10.36 dBm

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 17, 2020 Model: IRIScan™ Anywhere 6 WIFI

4.3 Maximum Power Density Reading, FCC Rule 15.247(e):

The Measurement Procedure PKPSD was set according to the FCC KDB 558074 D01 v05r02.

Antenna output of the EUT was coupled directly to spectrum analyzer; if an external attenuator and/or cable was used, these losses are compensated for with the analyzer OFFSET function.

Limit: The Power Density does not exceed 8dBm/3 kHz.

IEEE 802.11b (CCK, 1Mbps)	
Frequency (MHz)	Power Density with RBW 100KHz
2412	-3.71
2437	-3.03
2462	-2.61

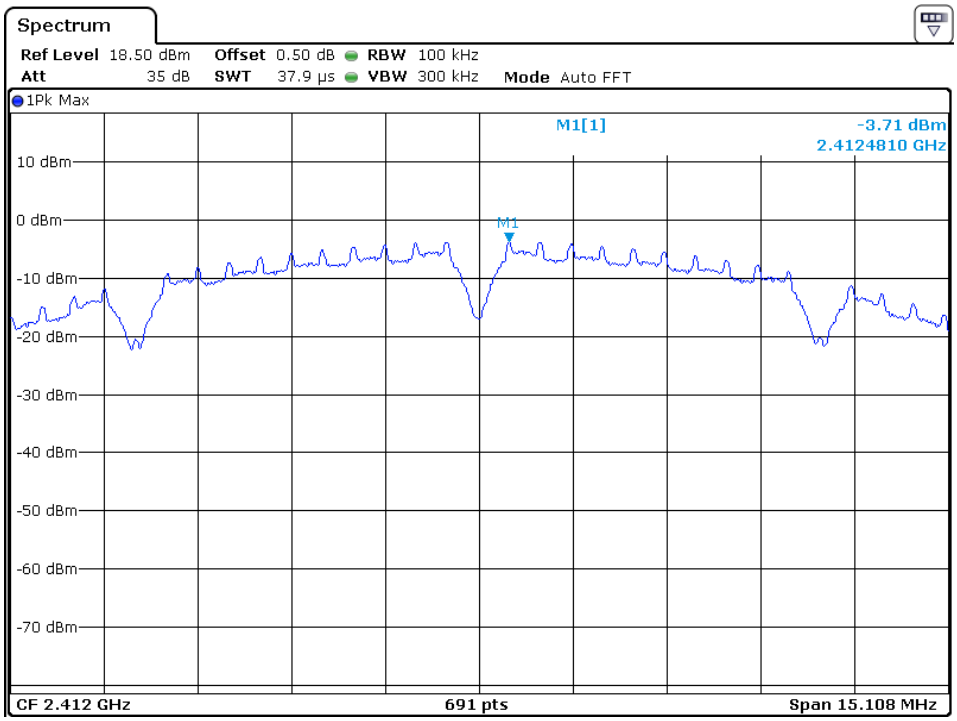
IEEE 802.11g (16QAM, 6Mbps)	
Frequency (MHz)	Power Density with RBW 100KHz
2412	-8.59
2437	-7.36
2462	-7.07

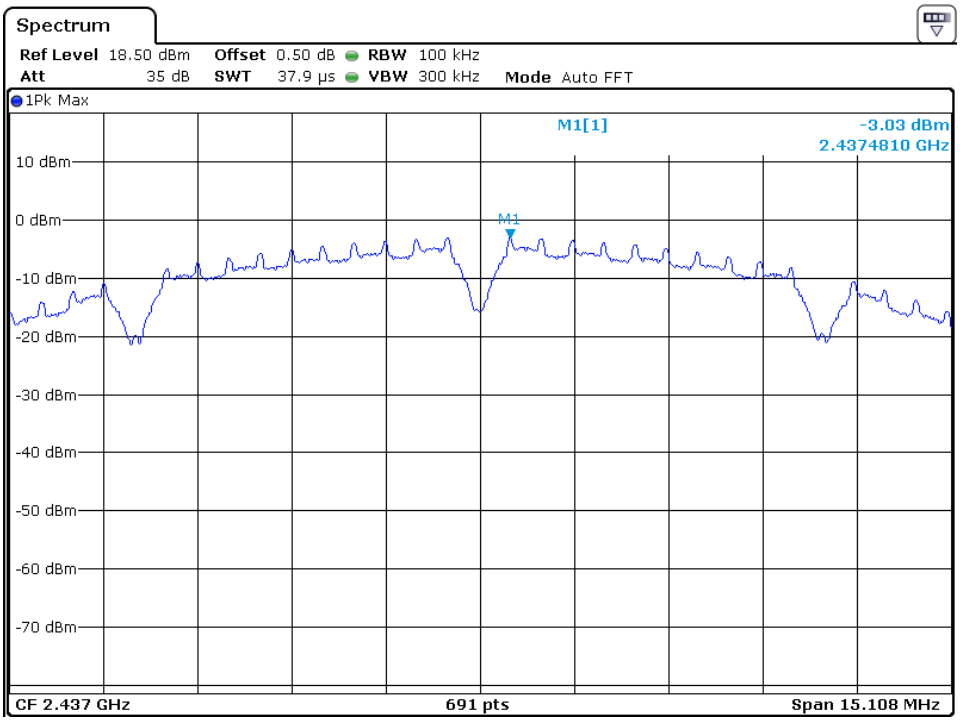
IEEE 802.11n-HT20 (64QAM, MCS0)	
Frequency (MHz)	Power Density with RBW 100KHz
2412	-8.13
2437	-7.07
2462	-6.92

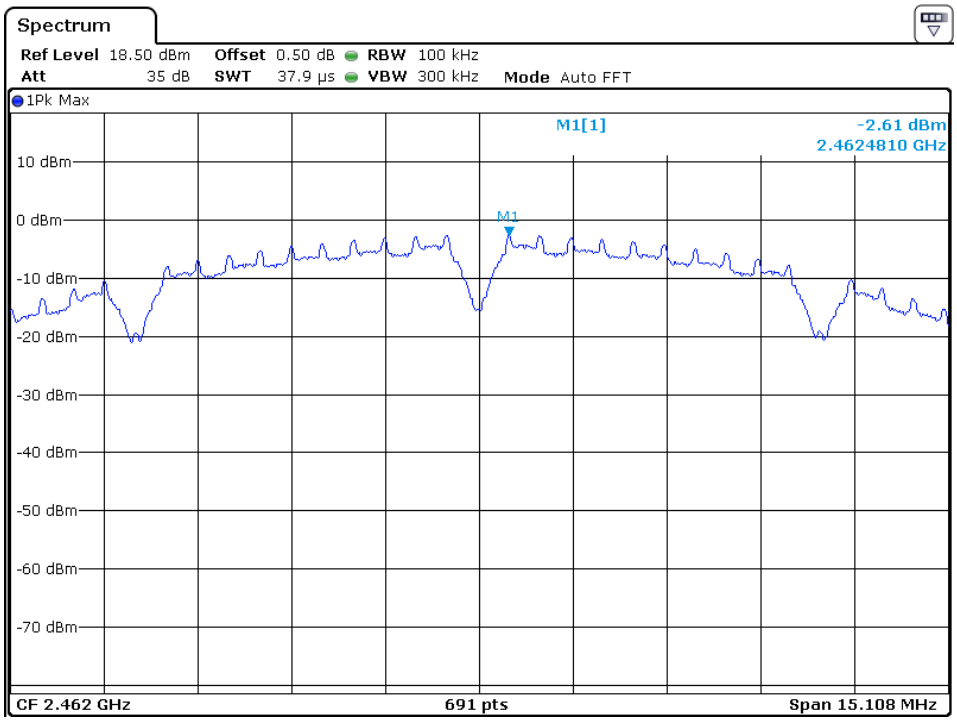
IEEE 802.11n-HT40 (64QAM, MCS0)	
Frequency (MHz)	Power Density with RBW 100KHz
2422	-11.46
2437	-10.52
2452	-10.16

The test plots are attached as below.

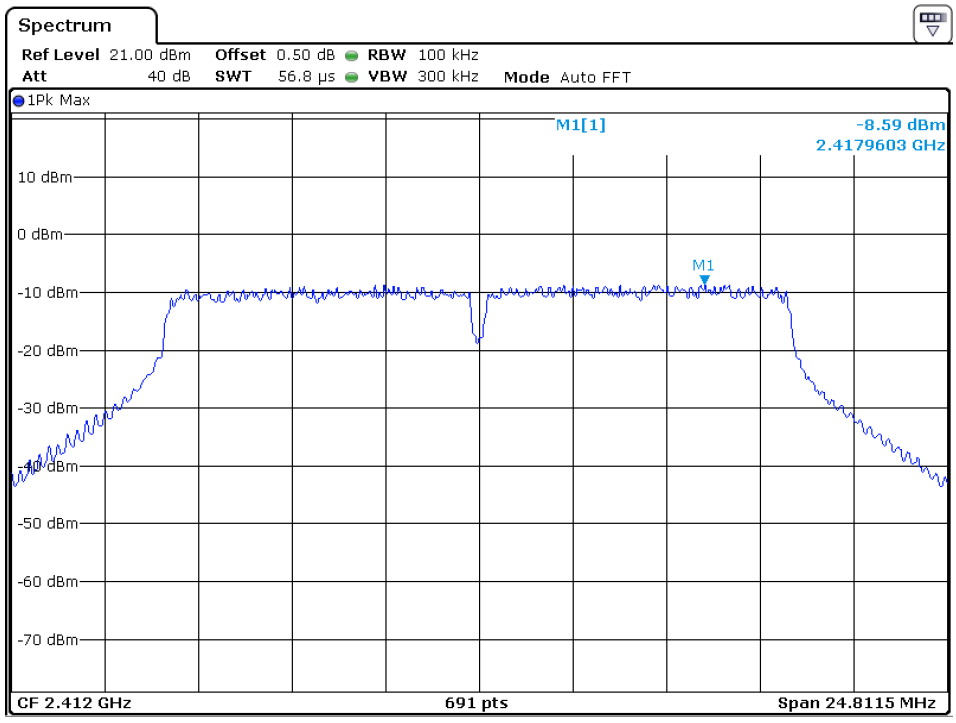
802.11b

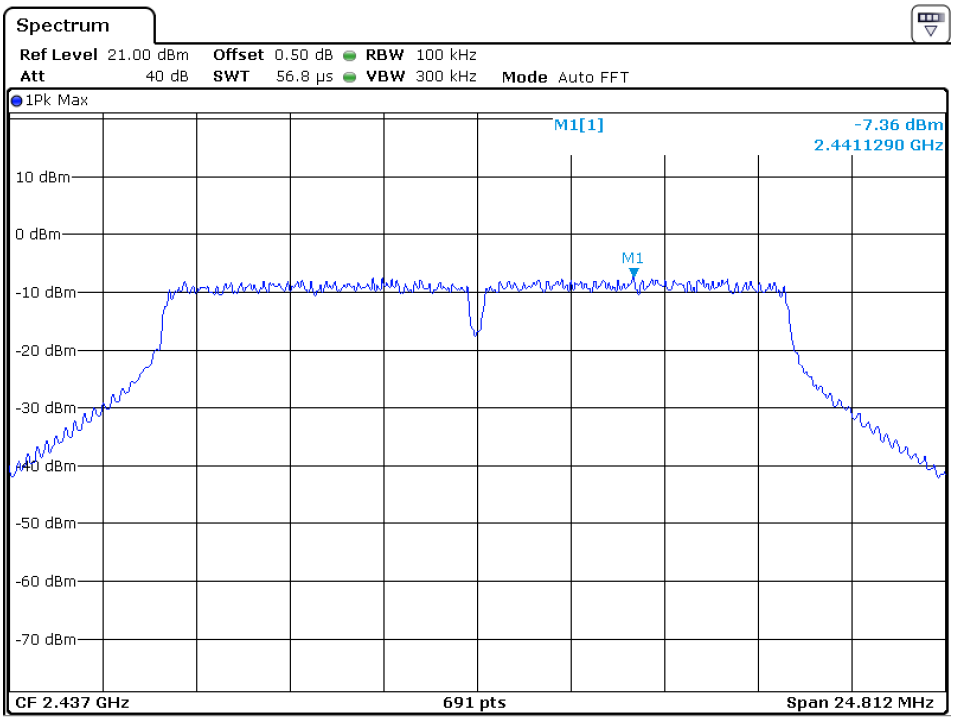

Spectrum
Ref Level 18.50 dBm Offset 0.50 dB RBW 100 kHz
Att 35 dB SWT 37.9 µs VBW 300 kHz Mode Auto FFT
1Pk Max
M1[1] -3.71 dBm
2.4124810 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
CF 2.412 GHz
691 pts
Span 15.108 MHz

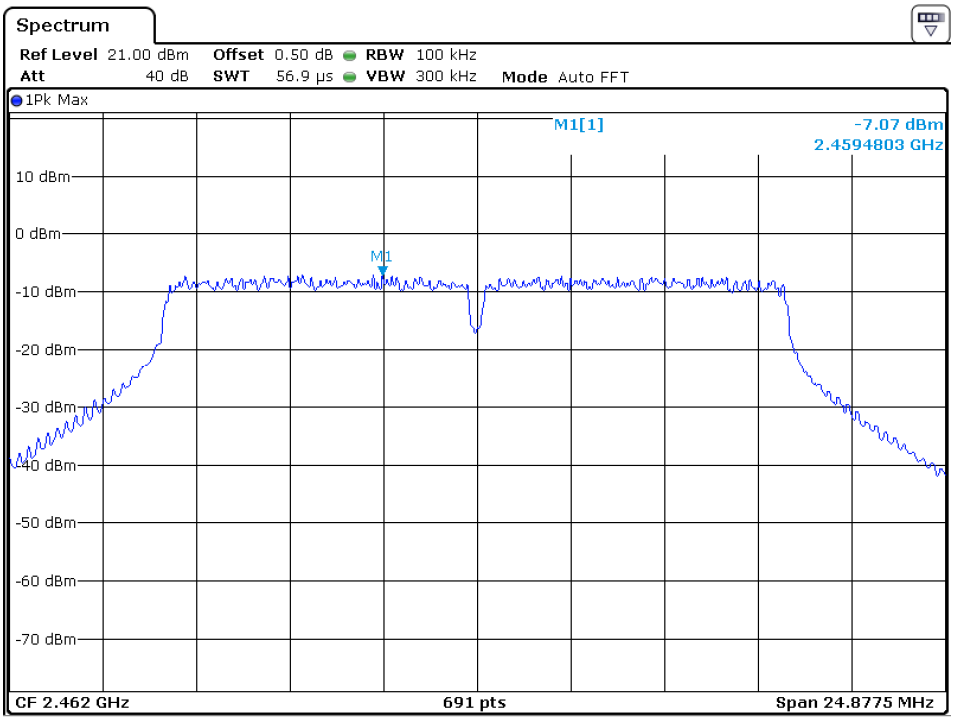

Spectrum
Ref Level 18.50 dBm Offset 0.50 dB RBW 100 kHz
Att 35 dB SWT 37.9 µs VBW 300 kHz Mode Auto FFT
1Pk Max
M1[1] -3.03 dBm
2.4374810 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
CF 2.437 GHz
691 pts
Span 15.108 MHz


Spectrum
Ref Level 18.50 dBm Offset 0.50 dB RBW 100 kHz
Att 35 dB SWT 37.9 µs VBW 300 kHz Mode Auto FFT
1Pk Max
M1[1] -2.61 dBm
2.4624810 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
CF 2.462 GHz
691 pts
Span 15.108 MHz

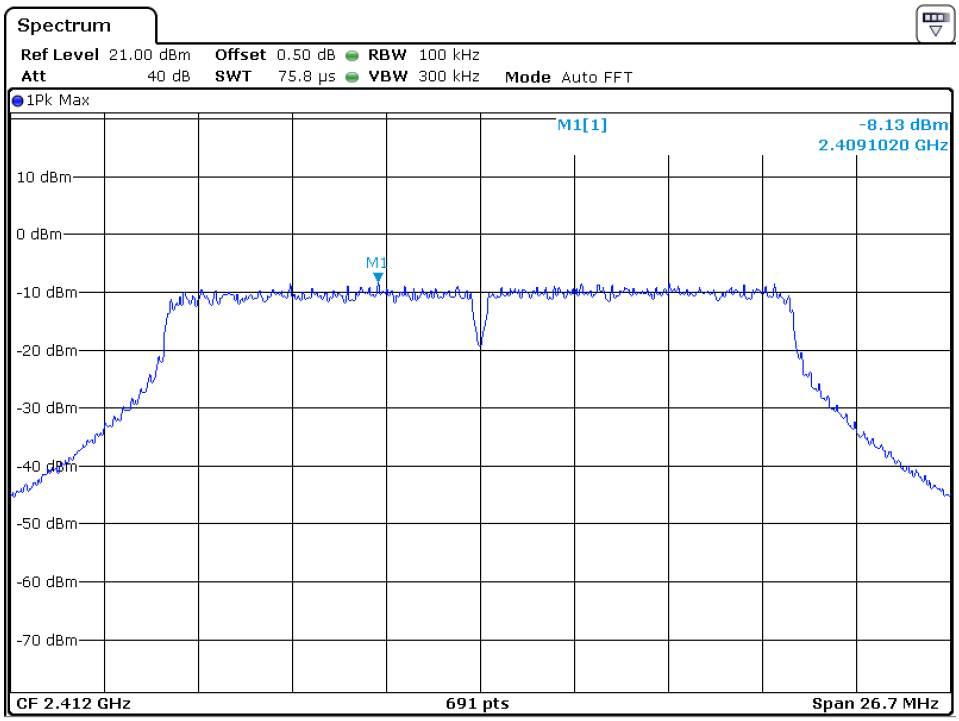
802.11g

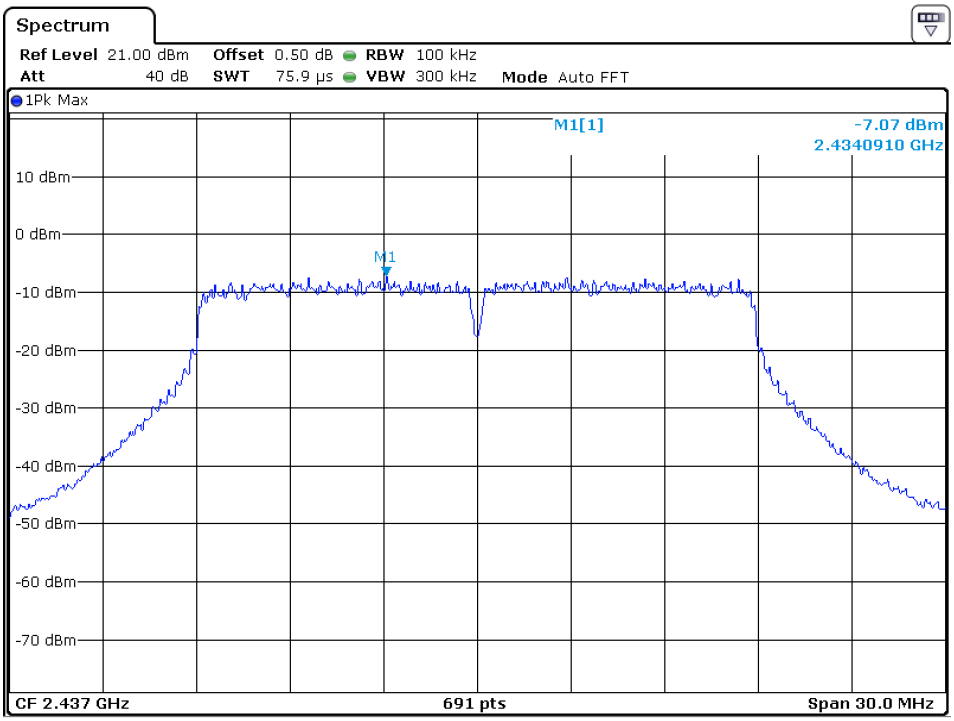

Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 56.8 µs VBW 300 kHz Mode Auto FFT
1Pk Max
M1[1] -8.59 dBm
2.4179603 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
CF 2.412 GHz
691 pts
Span 24.8115 MHz

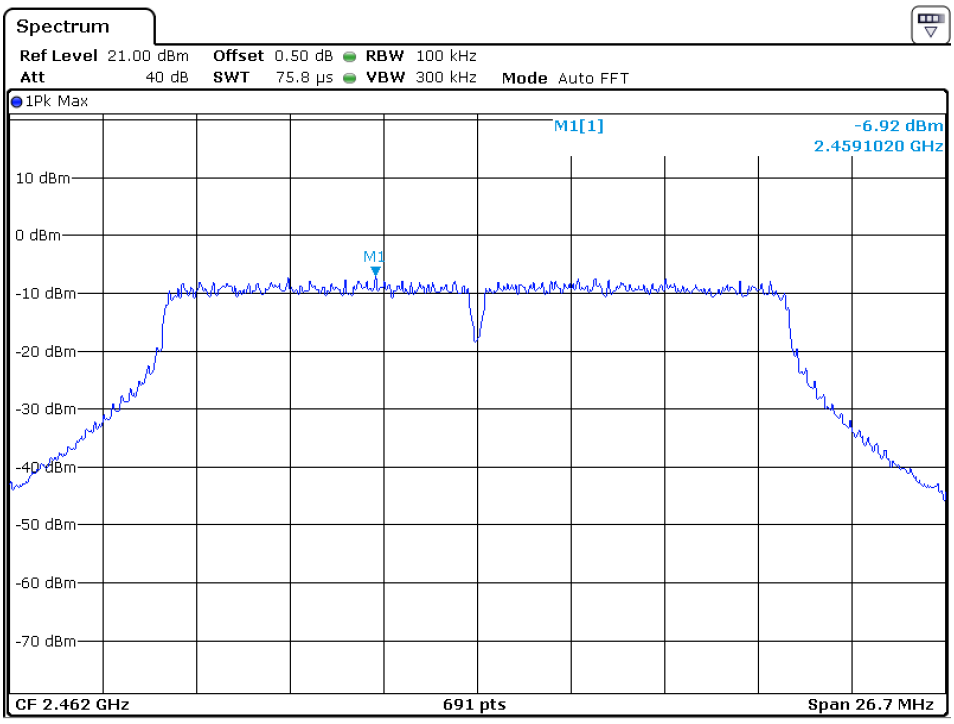

Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 56.8 µs VBW 300 kHz Mode Auto FFT
1Pk Max
M1[1] -7.36 dBm
2.4411290 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
CF 2.437 GHz
691 pts
Span 24.812 MHz


Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 56.9 µs VBW 300 kHz Mode Auto FFT
1Pk Max
M1[1] -7.07 dBm
2.4594803 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
CF 2.462 GHz
691 pts
Span 24.8775 MHz

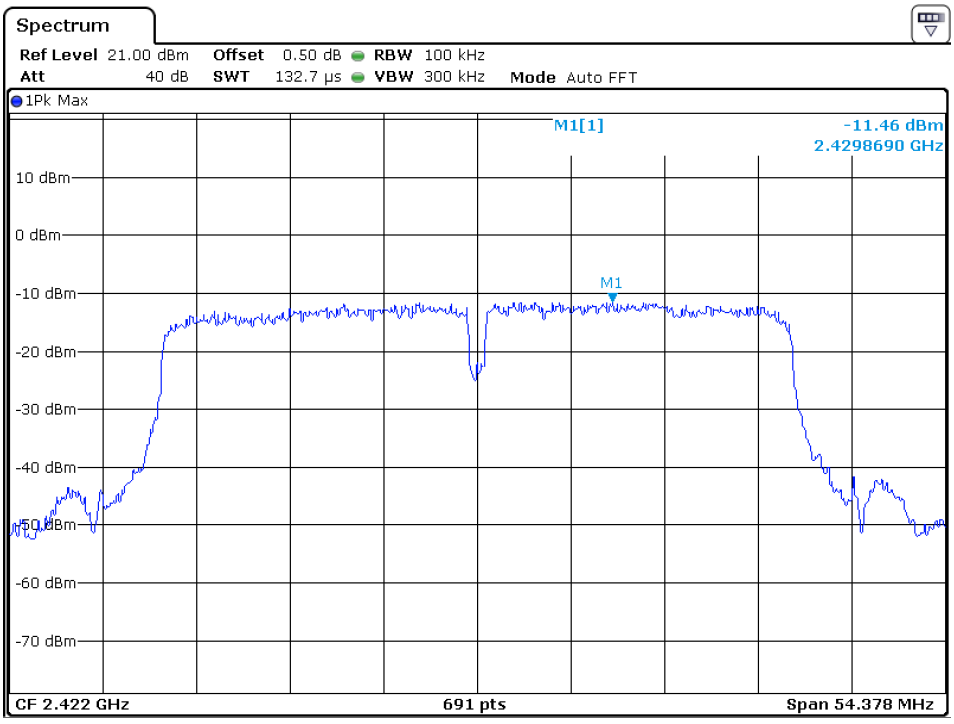
802.11n-HT20

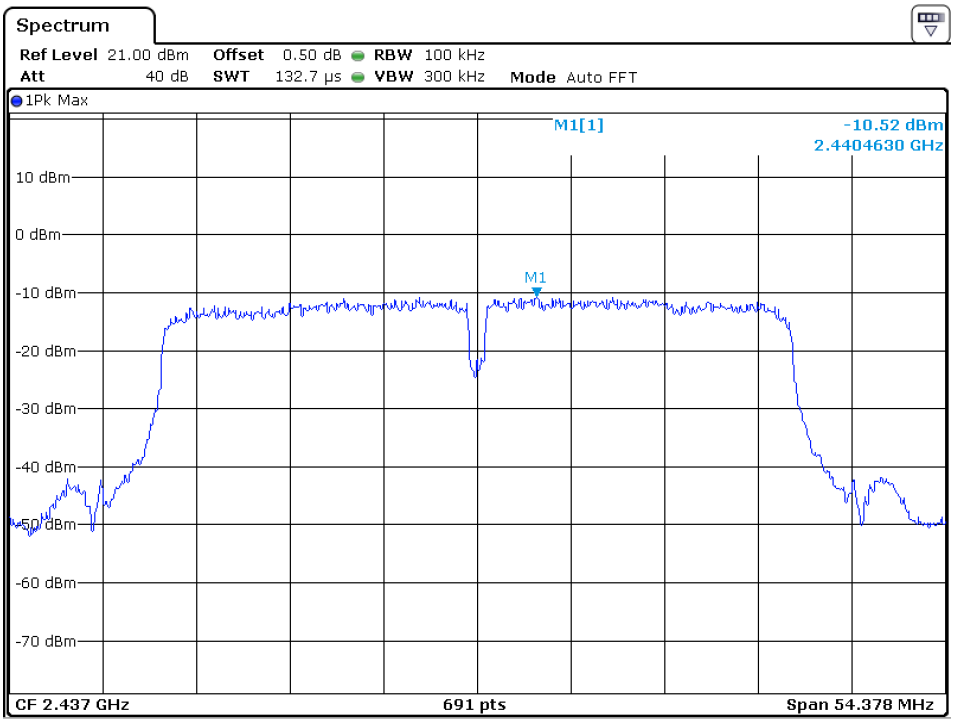

Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 75.8 µs VBW 300 kHz Mode Auto FFT
1Pk Max
M1[1] -8.13 dBm
2.4091020 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
CF 2.412 GHz
691 pts
Span 26.7 MHz

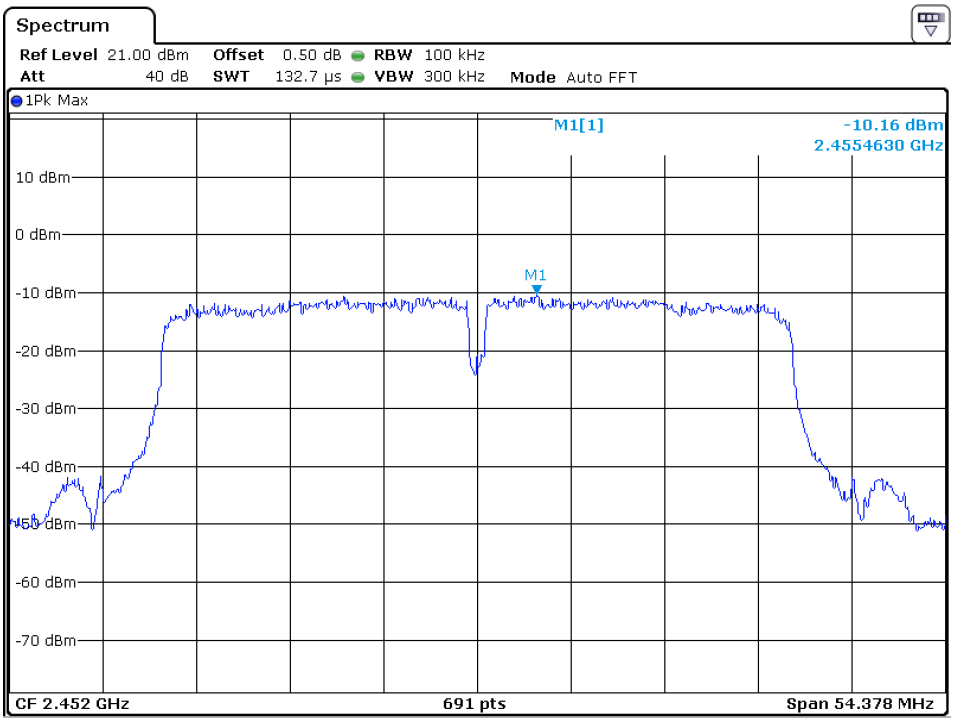

Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 75.9 µs VBW 300 kHz Mode Auto FFT
1Pk Max
M1[1] -7.07 dBm
2.4340910 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
CF 2.437 GHz
691 pts
Span 30.0 MHz


Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 75.8 µs VBW 300 kHz Mode Auto FFT
1Pk Max
M1[1] -6.92 dBm
2.4591020 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
CF 2.462 GHz
691 pts
Span 26.7 MHz

802.11n-HT40


Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 132.7 µs VBW 300 kHz Mode Auto FFT
1Pk Max
M1[1] -11.46 dBm
2.4298690 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
CF 2.422 GHz
691 pts
Span 54.378 MHz


Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 132.7 µs VBW 300 kHz Mode Auto FFT
1Pk Max
M1[1] -10.52 dBm
2.4404630 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
CF 2.437 GHz
691 pts
Span 54.378 MHz


Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 132.7 µs VBW 300 kHz Mode Auto FFT
1Pk Max
M1[1] -10.16 dBm
2.4554630 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
CF 2.452 GHz
691 pts
Span 54.378 MHz

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 17, 2020 Model: IRIScan™ Anywhere 6 WIFI

4.4 Out of Band Conducted Emissions, FCC Rule 15.247(d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. The Measurement Procedure was set according to the FCC KDB 558074 D01 v05r02.

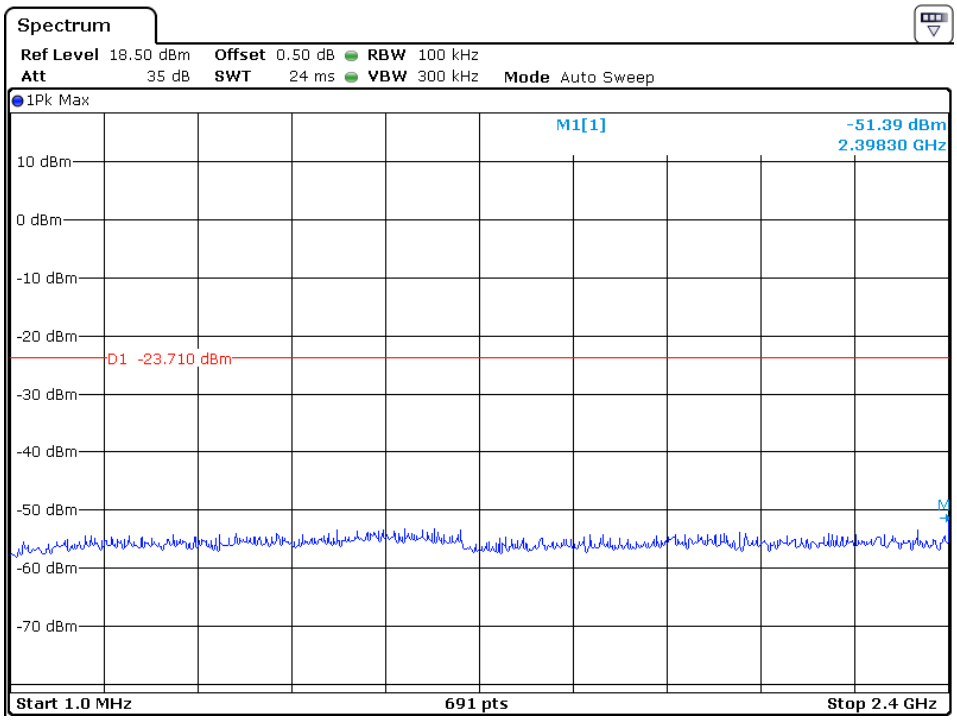
All other types of emissions from the EUT shall meet the general limits for radiated frequencies outside the passband.

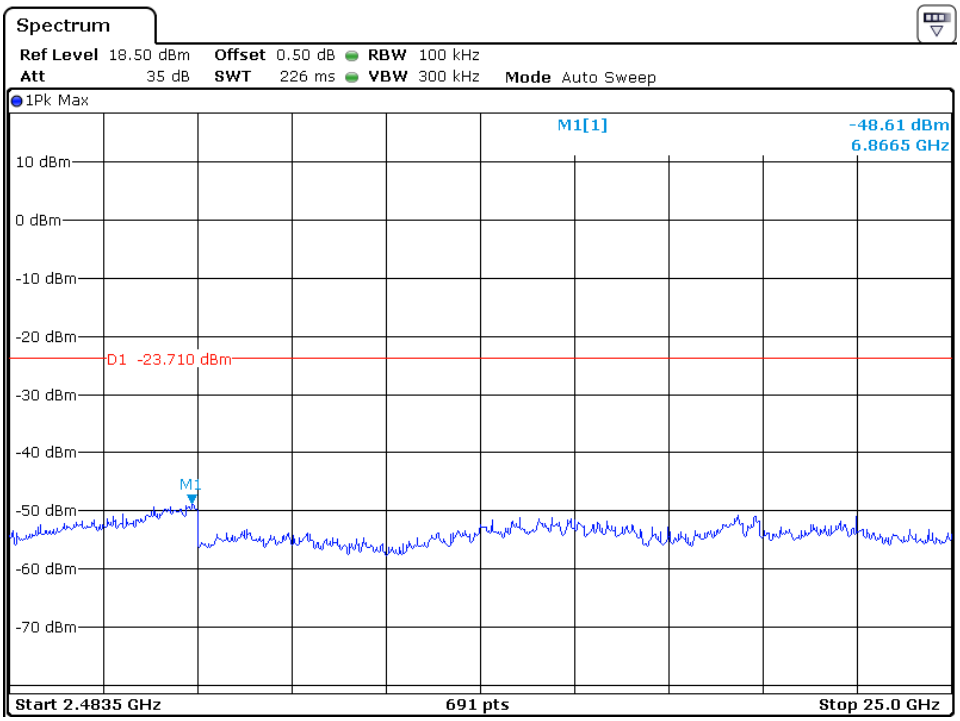
Refer to the attached test plots for out of band conducted emissions data with rate of 1Mbps for 802.11b and 6Mbps for 802.11g and MCS0 for 802.11n-HT20 and MCS0 for 802.11n-HT40.

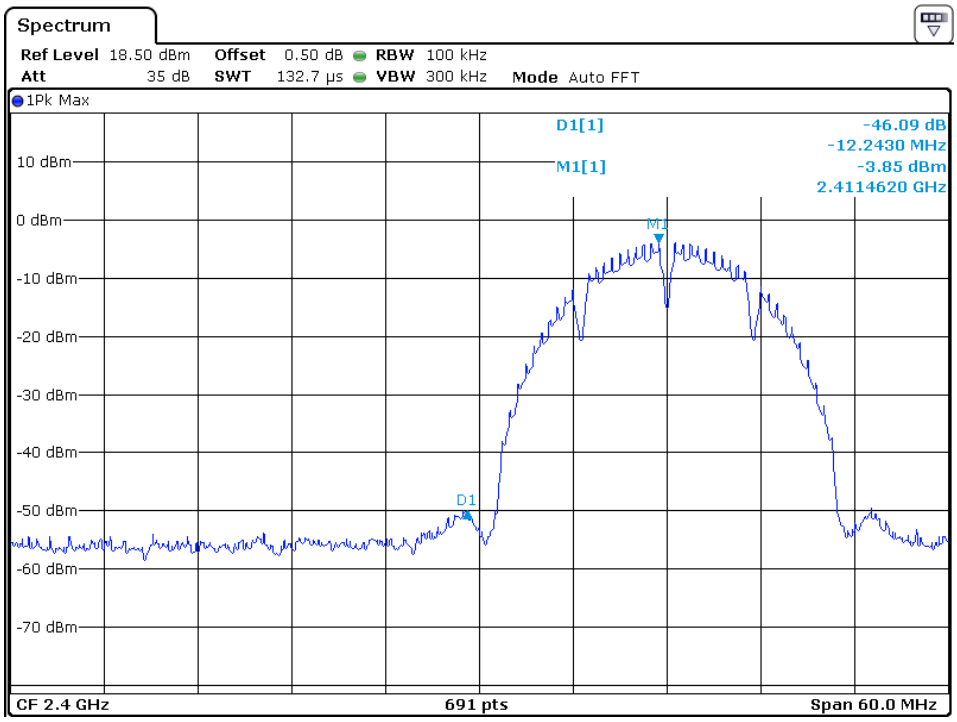
The test plots showed all spurious emission up to the tenth harmonic were measured and they were found to be at least 20 dB below the highest level of the desired power in the passband.

The test plots are attached as below.

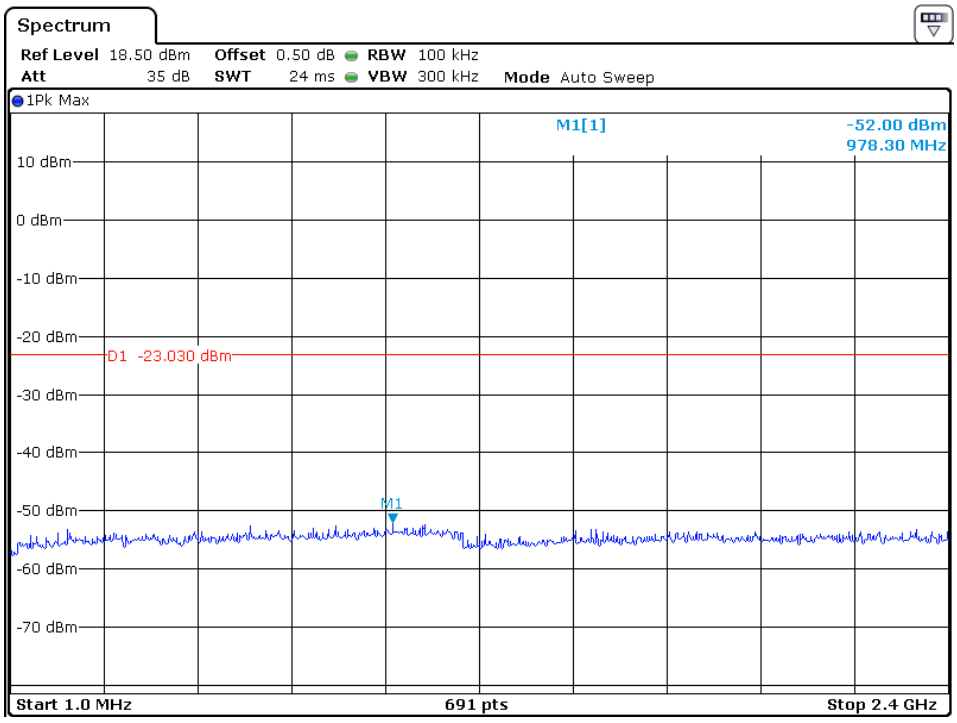
802.11b
Channel 01 (2412MHz) Reference Level: -3.71dBm

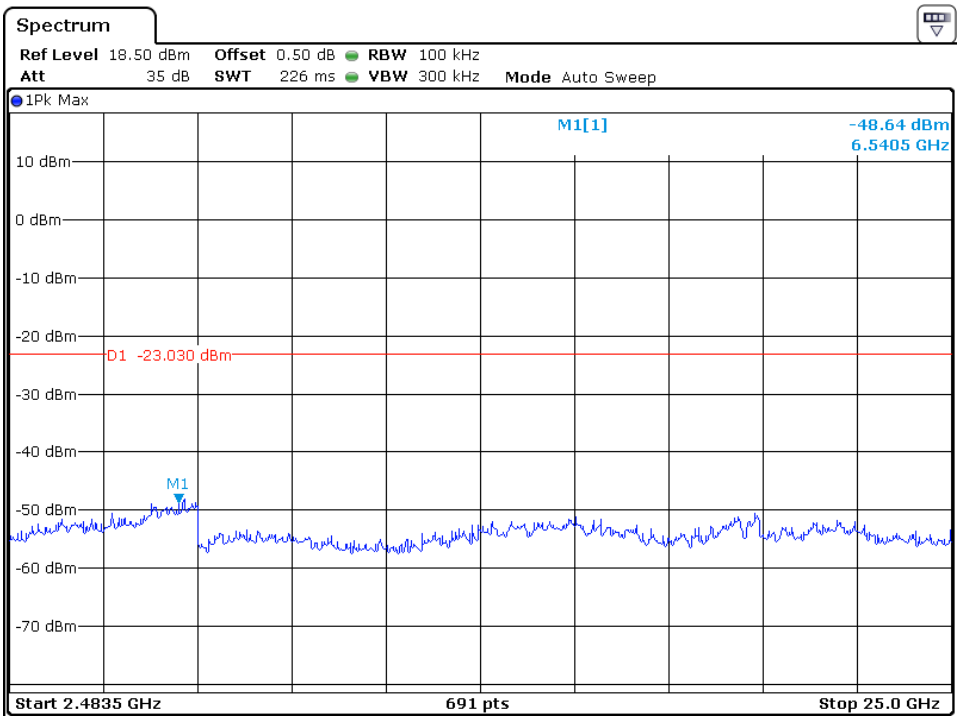




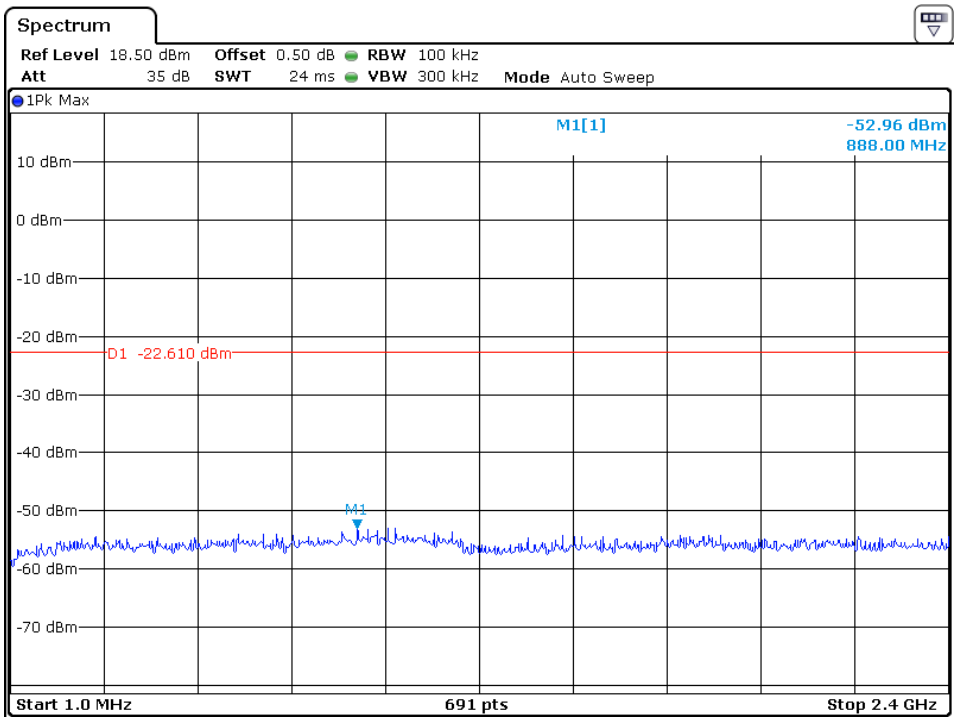

Spectrum
Ref Level 18.50 dBm Offset 0.50 dB RBW 100 kHz
Att 35 dB SWT 132.7 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] -46.09 dB
-12.2430 MHz
M1[1] -3.85 dBm
2.4114620 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
D1
CF 2.4 GHz
691 pts
Span 60.0 MHz

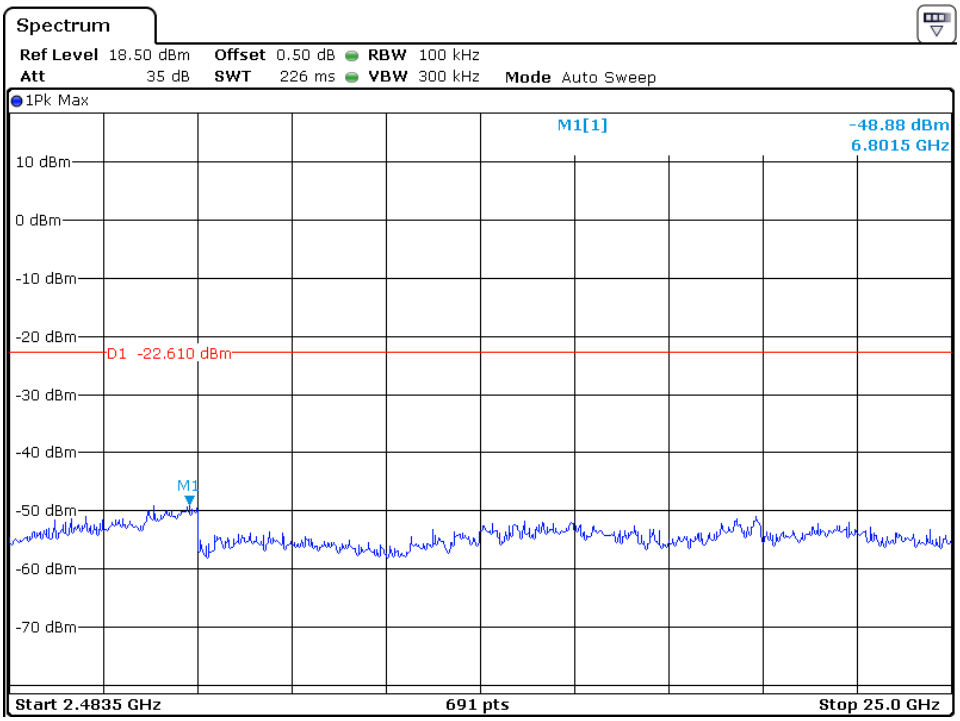
Channel 06 (2437MHz) Reference Level: -3.03dBm

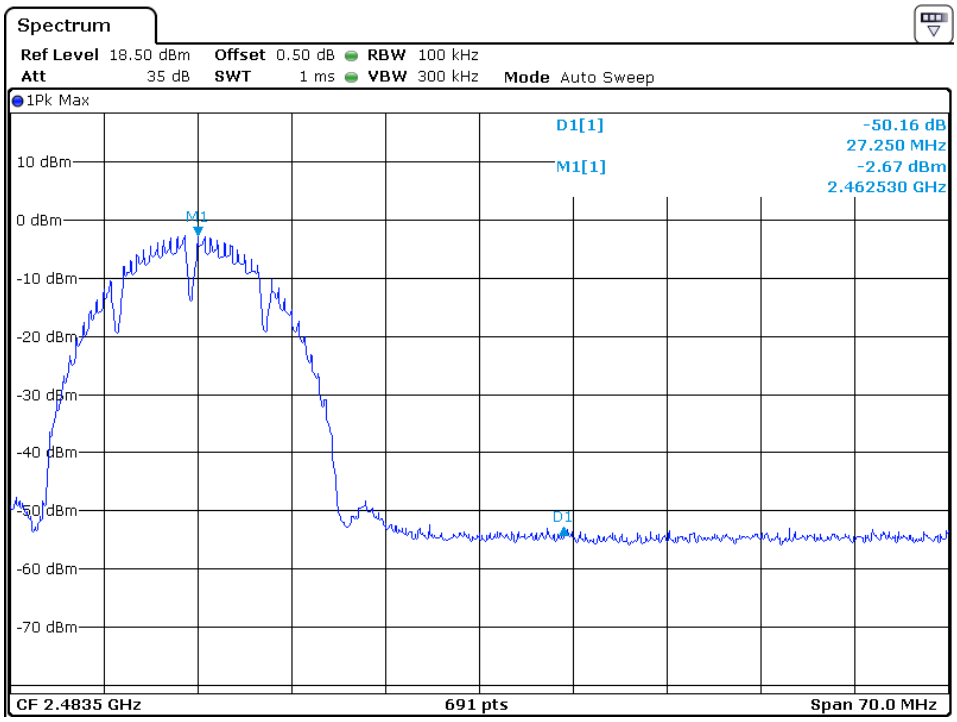




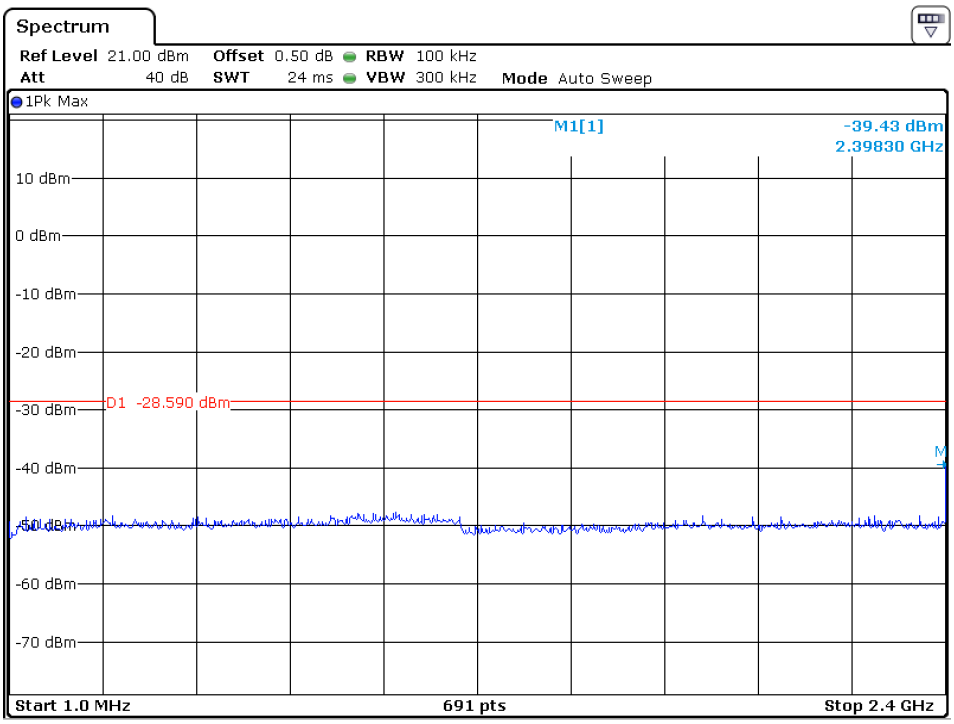
Channel 11 (2462MHz) Reference Level: -2.61dBm

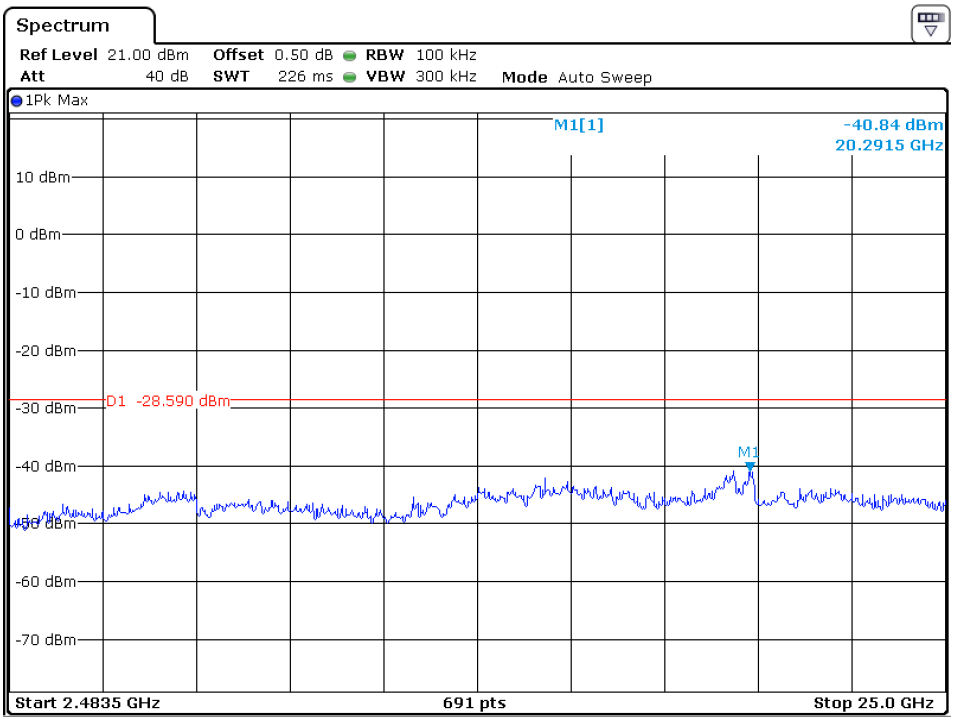


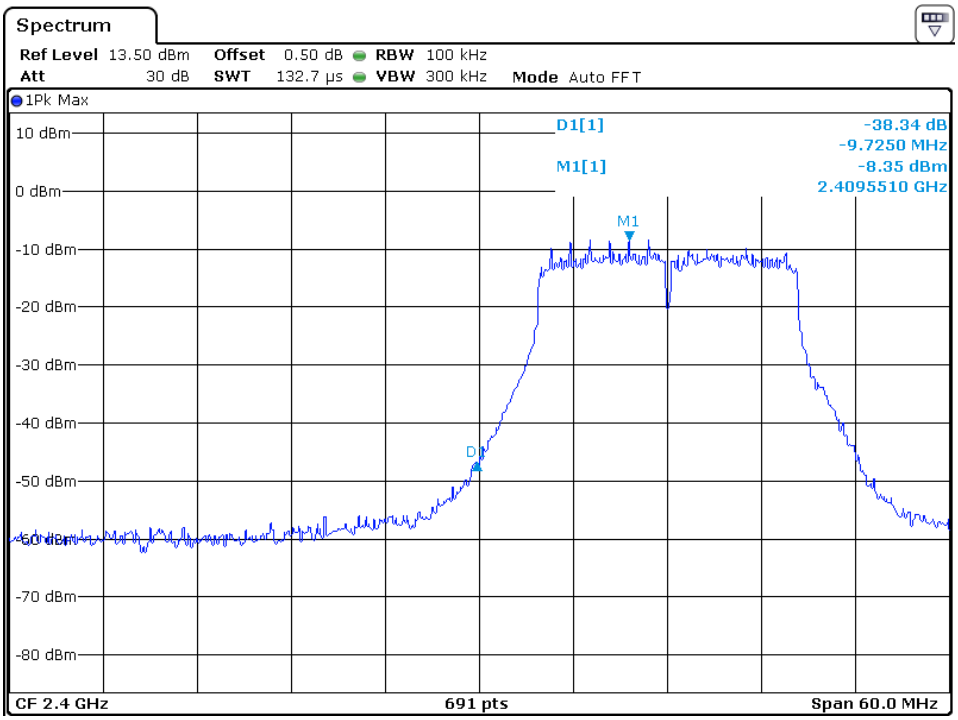



Spectrum
Ref Level 18.50 dBm Offset 0.50 dB RBW 100 kHz
Att 35 dB SWT 1 ms VBW 300 kHz Mode Auto Sweep
1Pk Max
D1[1] -50.16 dB
27.250 MHz
M1[1] -2.67 dBm
2.462530 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
D1
CF 2.4835 GHz
691 pts
Span 70.0 MHz

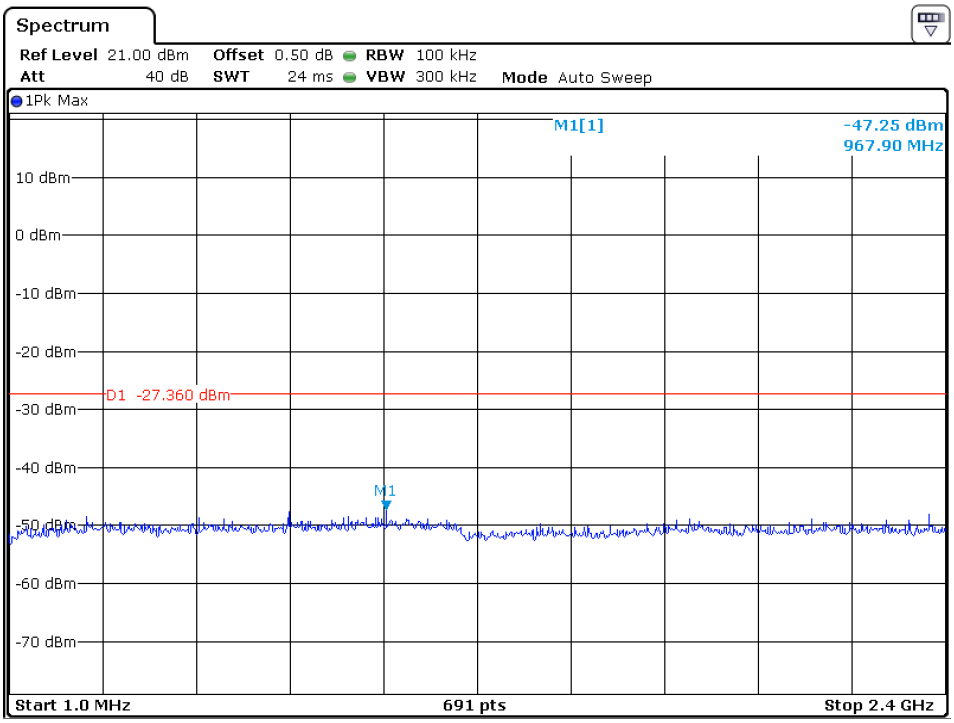
802.11g
Channel 01 (2412MHz) Reference Level: -8.59dBm

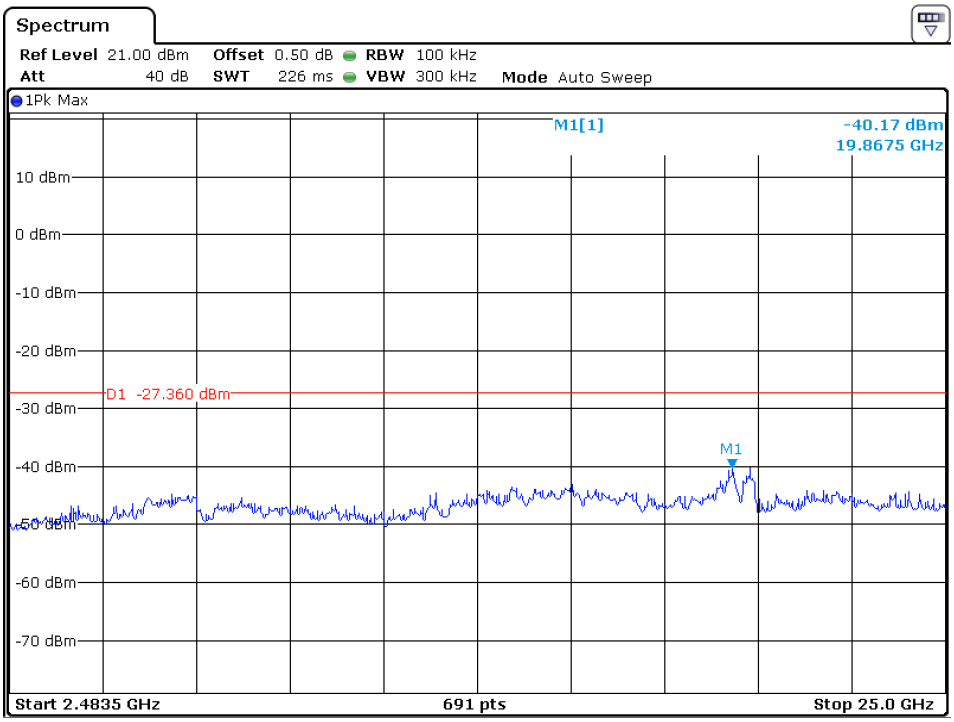




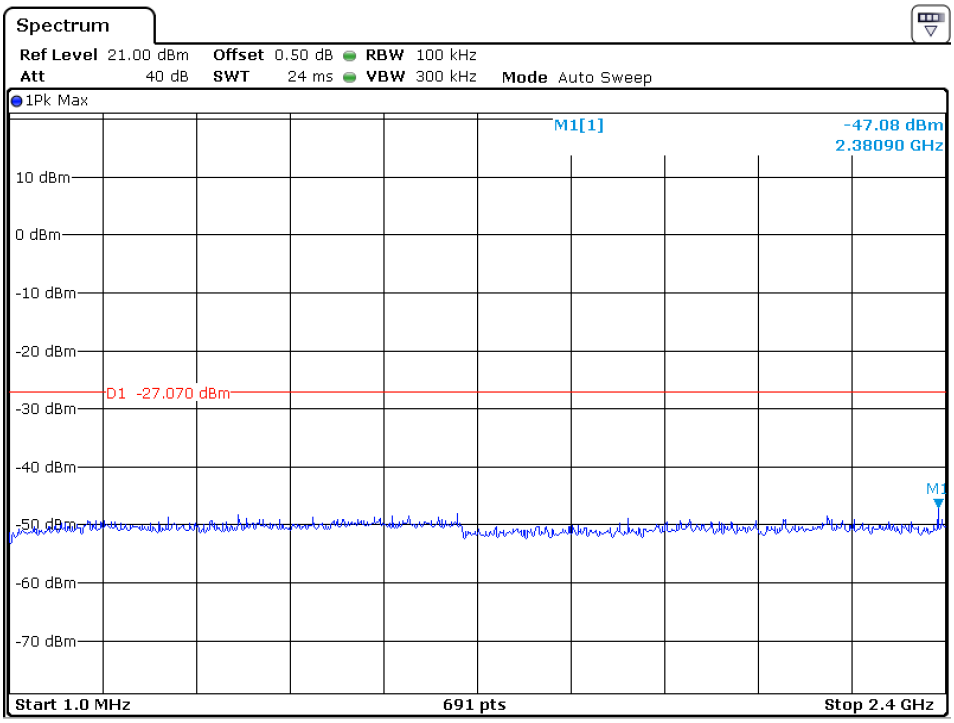

Spectrum
Ref Level 13.50 dBm Offset 0.50 dB RBW 100 kHz
Att 30 dB SWT 132.7 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] -38.34 dB
-9.7250 MHz
M1[1] -8.35 dBm
2.4095510 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
M1
D1
CF 2.4 GHz
691 pts
Span 60.0 MHz

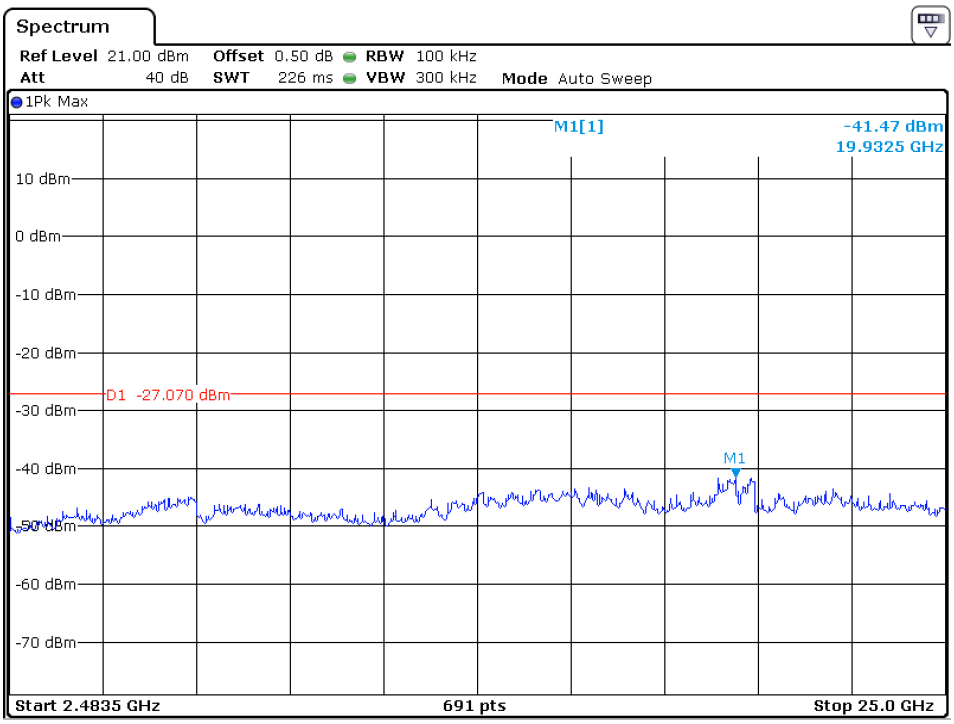
Channel 06 (2437MHz) Reference Level: -7.36dBm

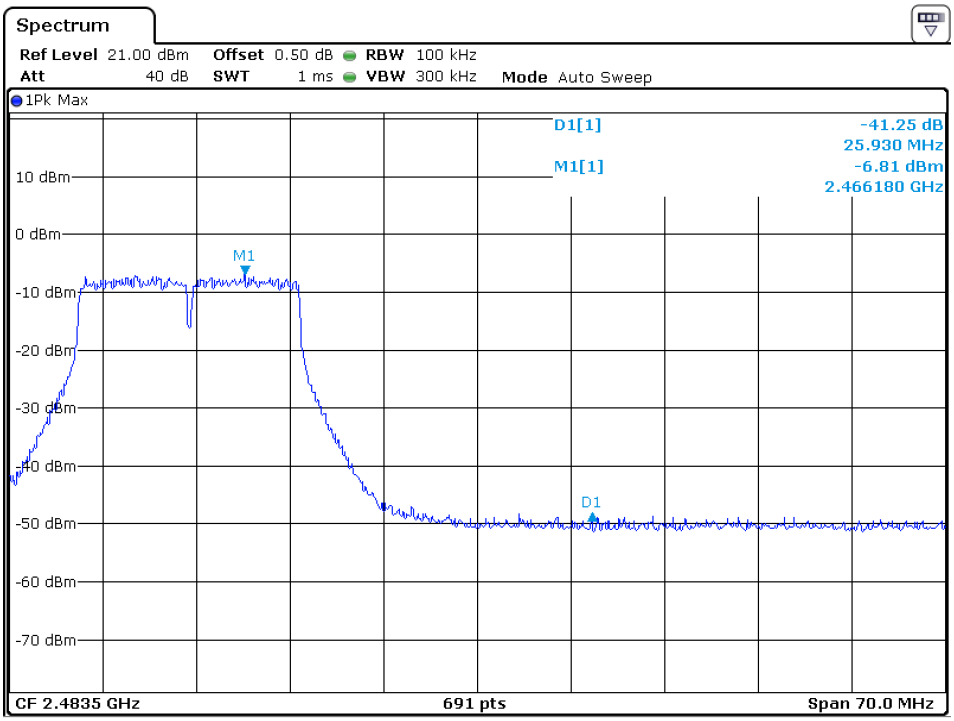




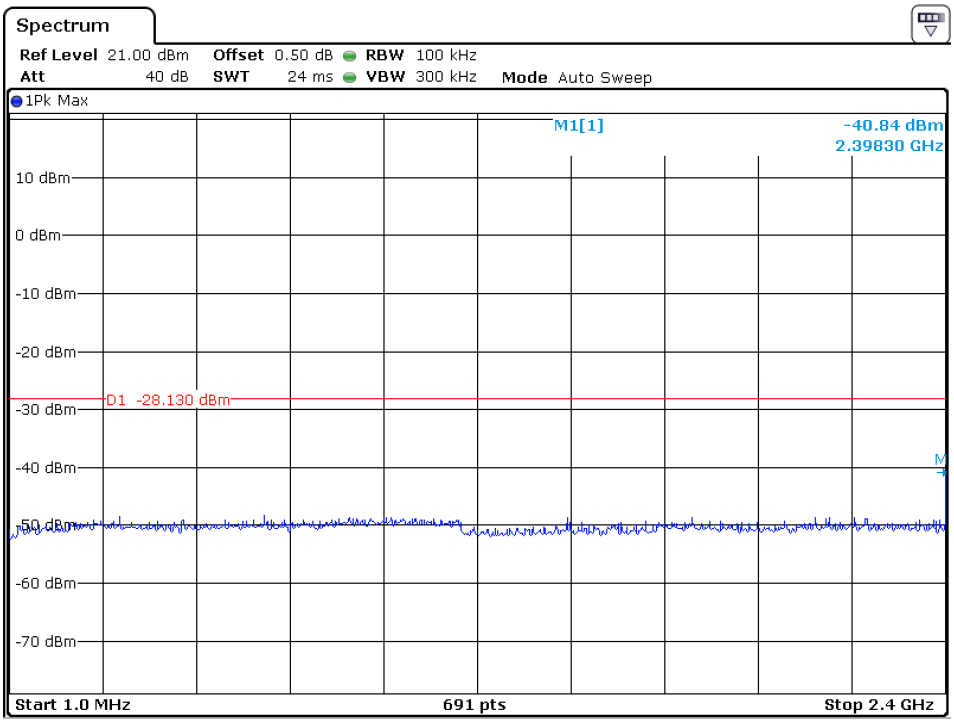
Channel 11 (2462MHz) Reference Level: -7.07dBm

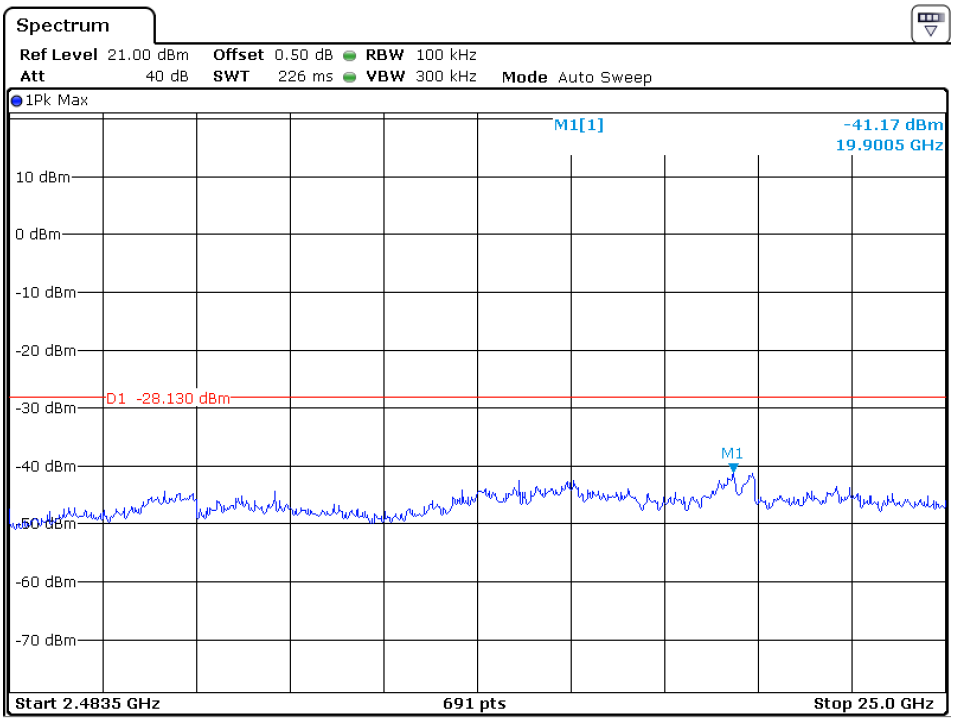


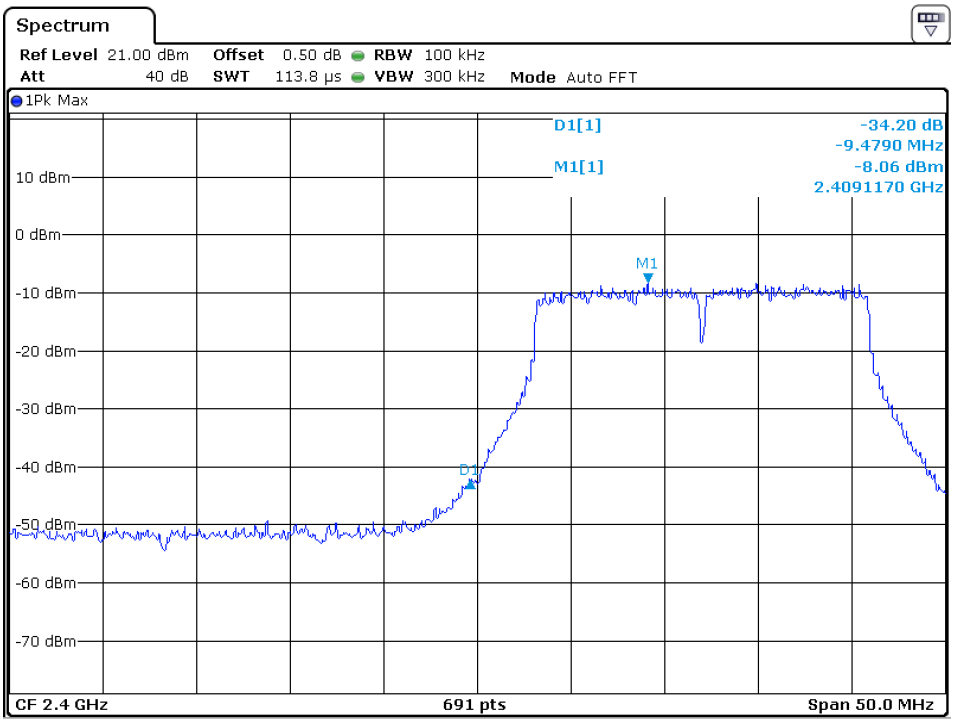



Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 1 ms VBW 300 kHz Mode Auto Sweep
1Pk Max
D1[1] -41.25 dB
25.930 MHz
M1[1] -6.81 dBm
2.466180 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
D1
CF 2.4835 GHz
691 pts
Span 70.0 MHz

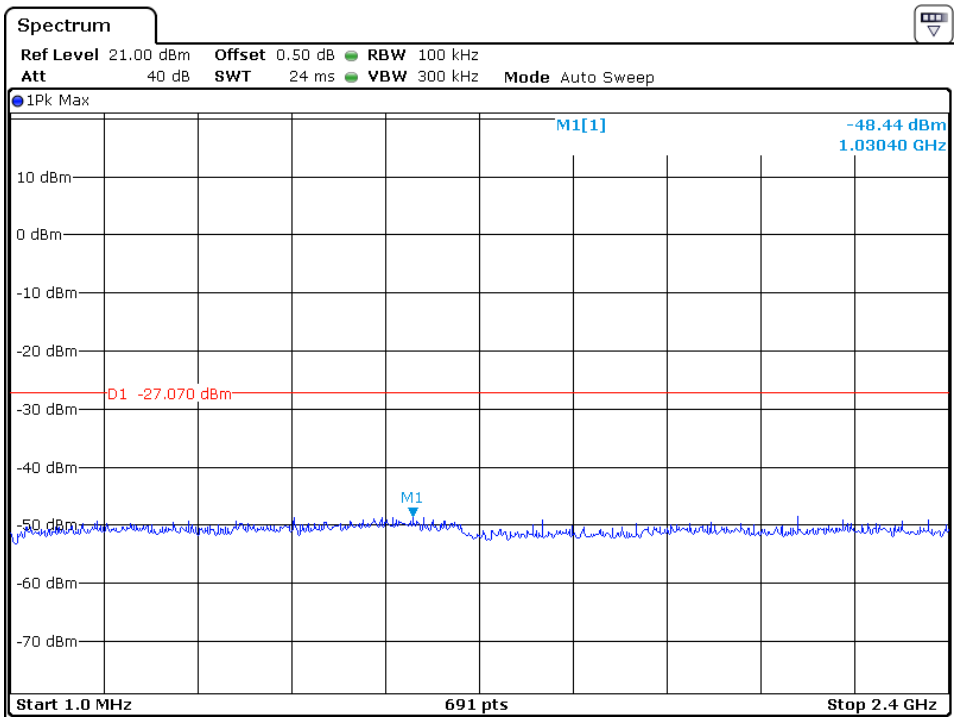
802.11n-HT20
Channel 01 (2412MHz) Reference Level: -8.13dBm

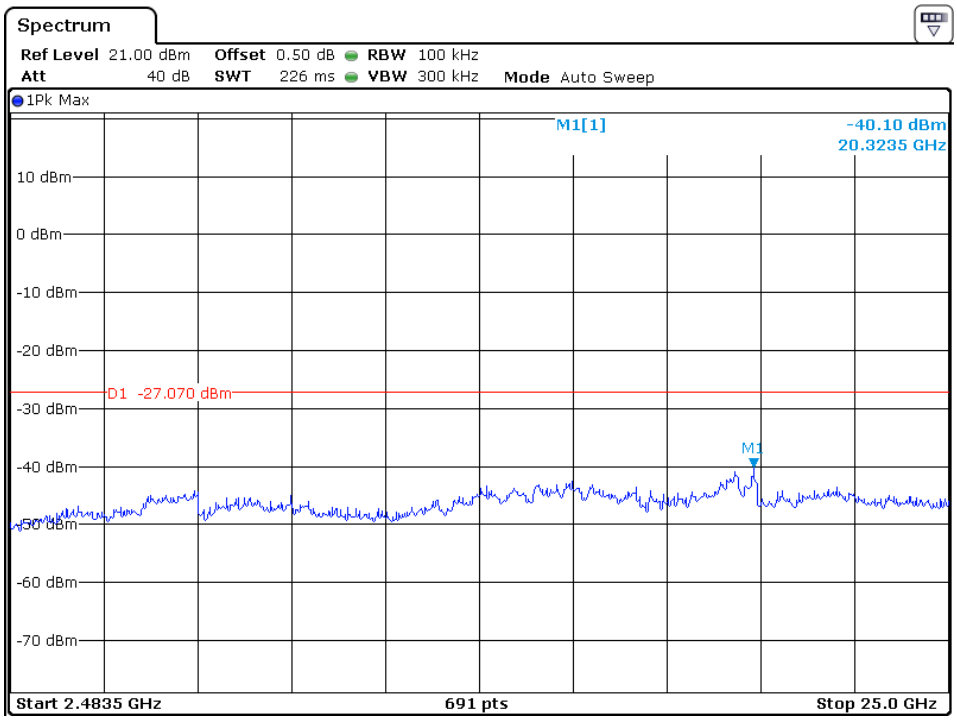




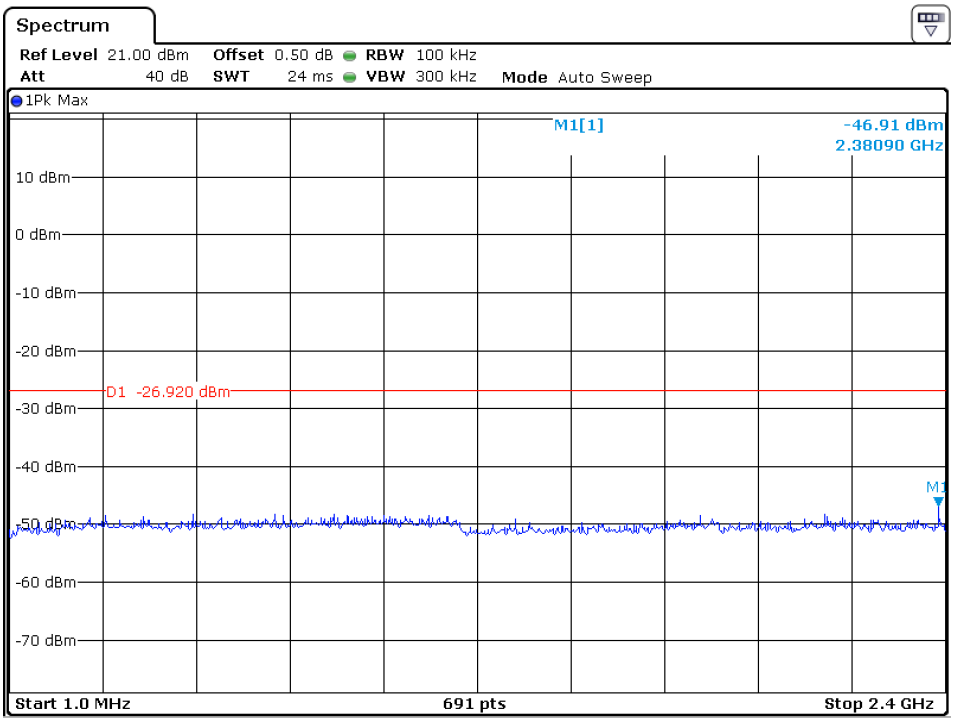

Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 113.8 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] -34.20 dB
-9.4790 MHz
M1[1] -8.06 dBm
2.4091170 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
D1
CF 2.4 GHz
691 pts
Span 50.0 MHz

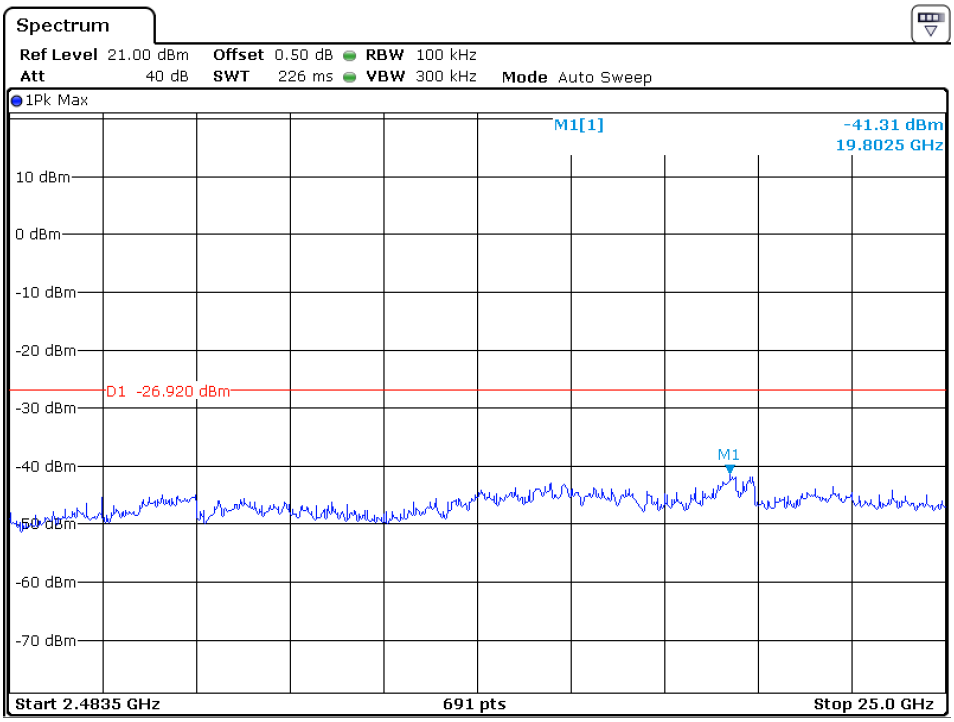
Channel 06 (2437MHz) Reference Level: -7.07dBm

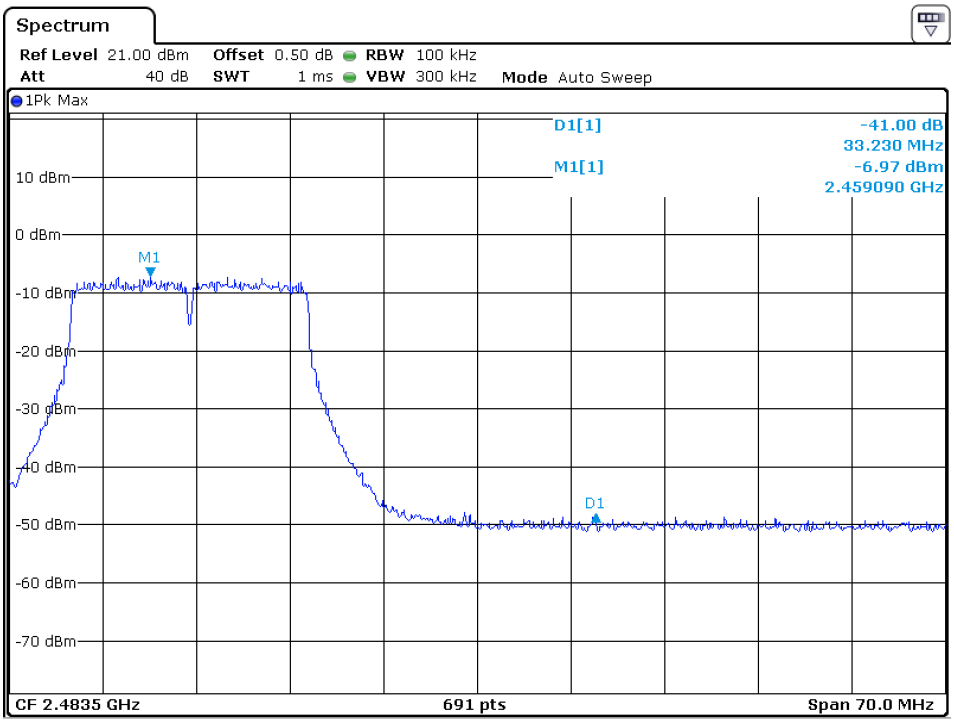




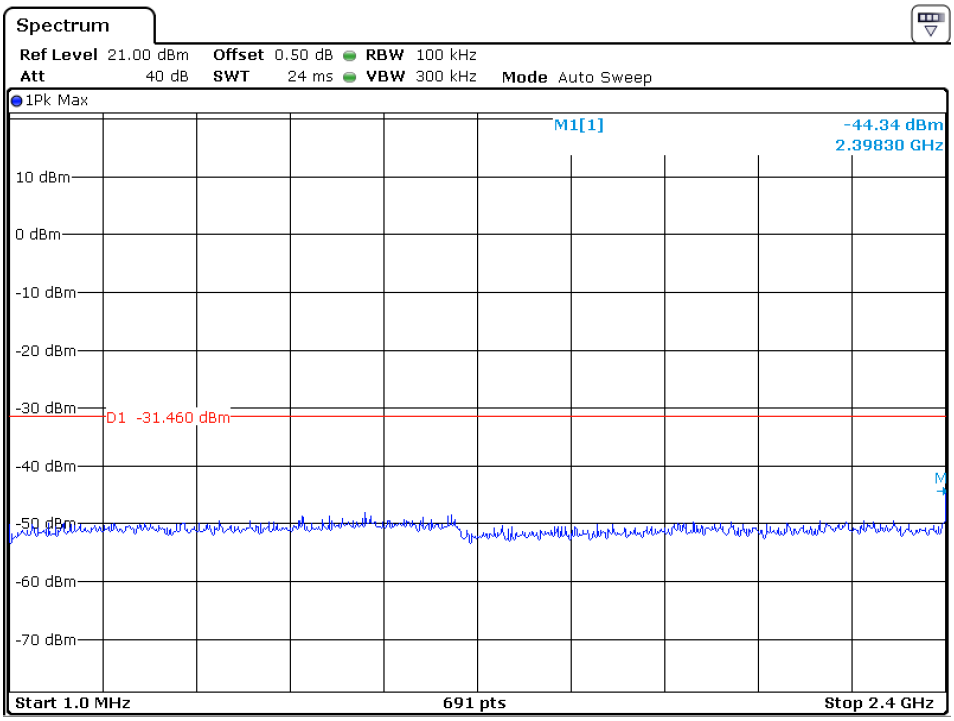
Channel 11 (2462MHz) Reference Level: -6.92dBm

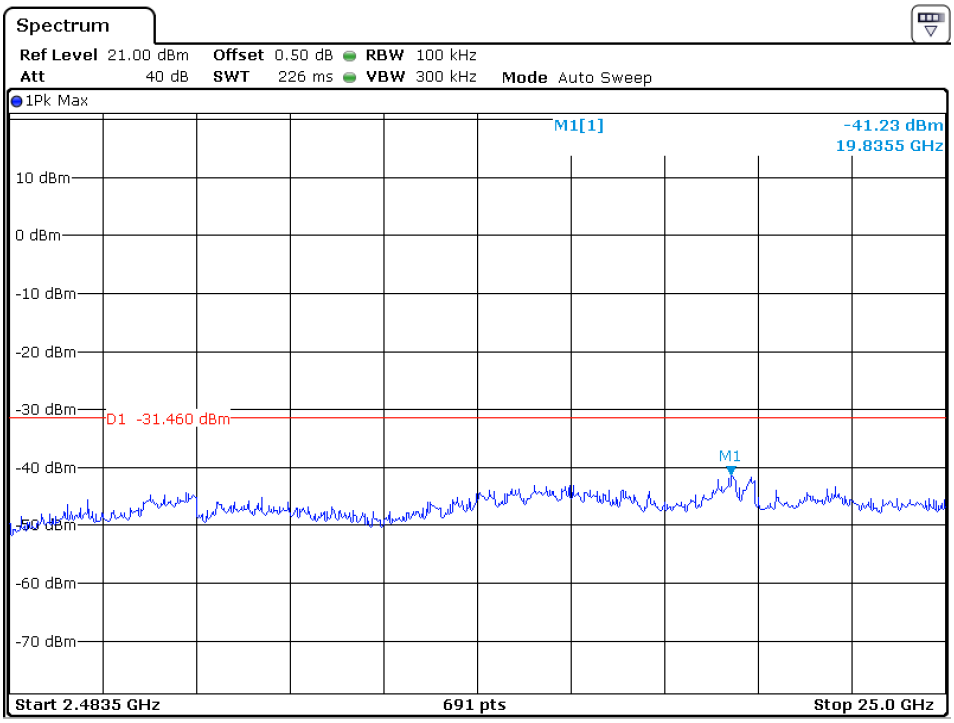


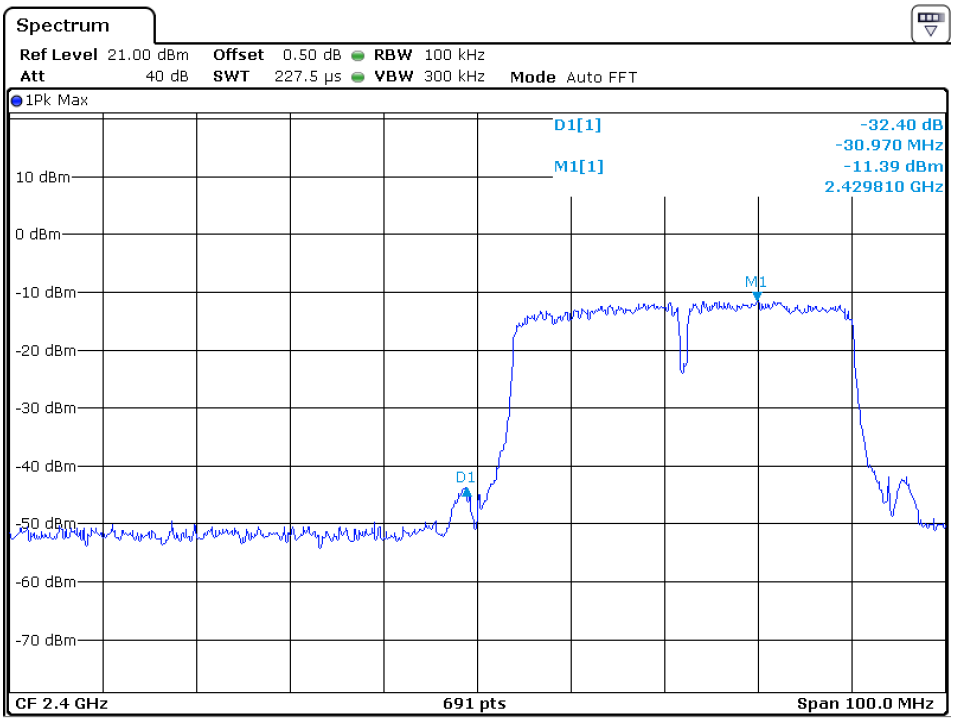



Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 1 ms VBW 300 kHz Mode Auto Sweep
1Pk Max
D1[1] -41.00 dB
33.230 MHz
M1[1] -6.97 dBm
2.459090 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
D1
CF 2.4835 GHz
691 pts
Span 70.0 MHz

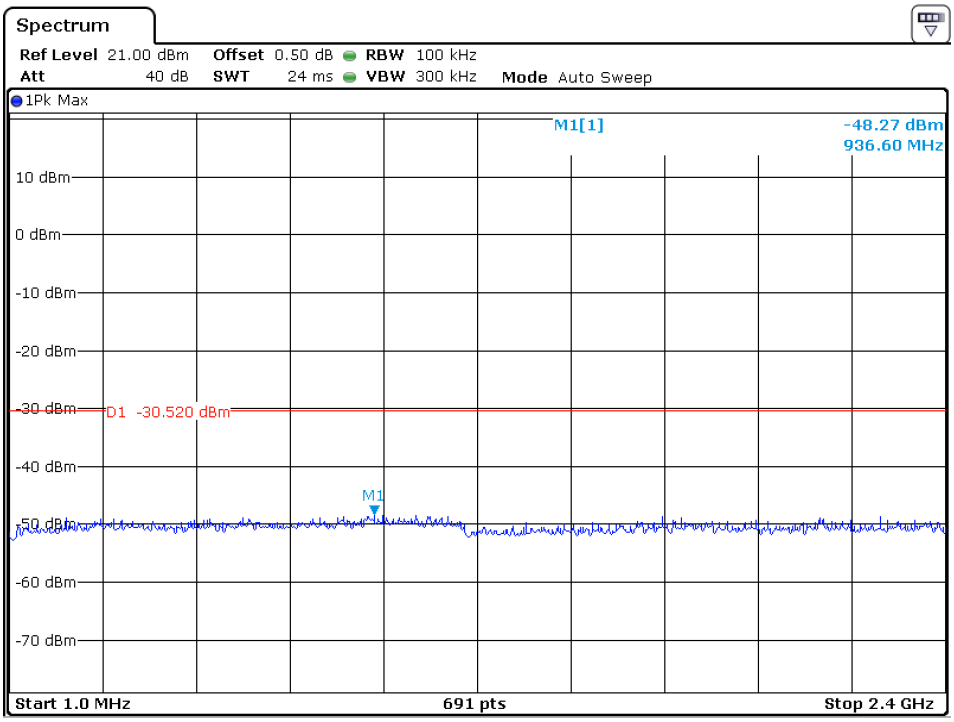
802.11n-HT40
Channel 01 (2422MHz) Reference Level: -11.46dBm

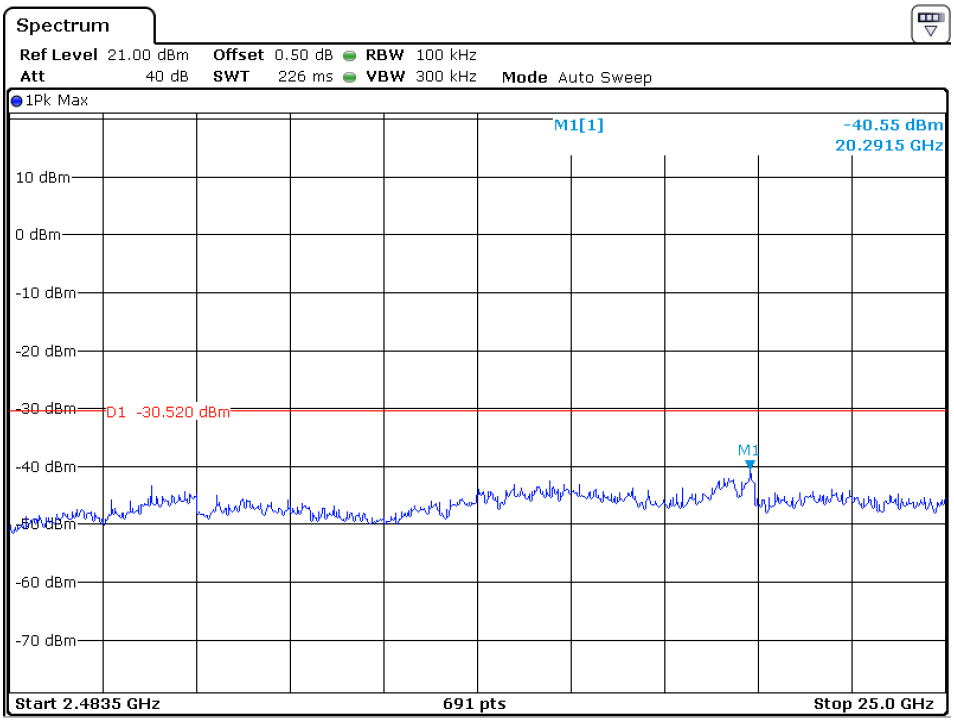




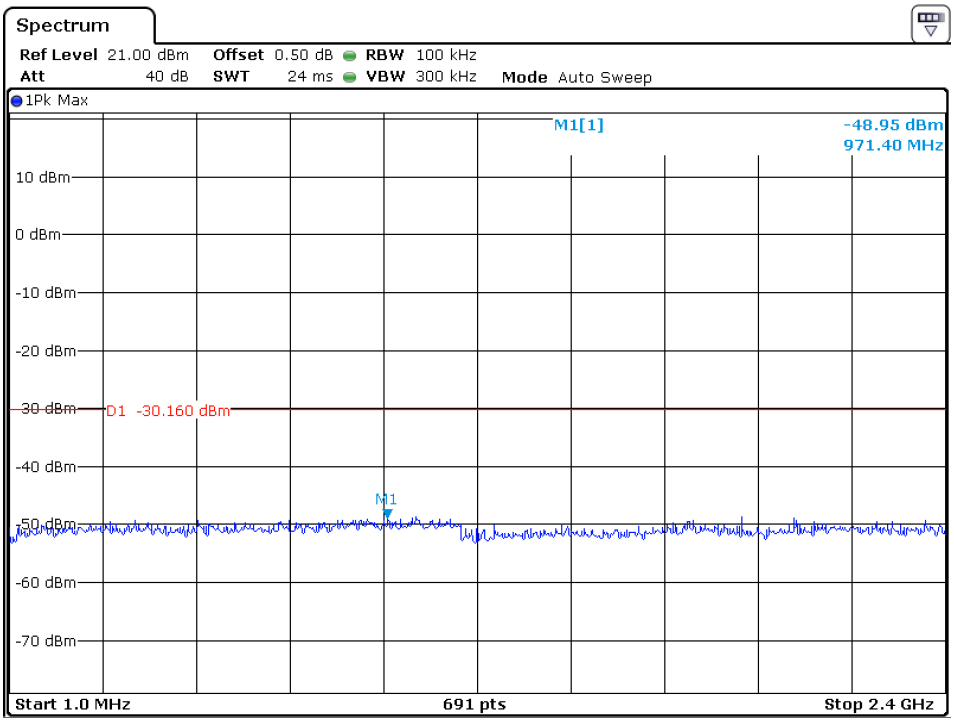

Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 227.5 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] -32.40 dB
-30.970 MHz
M1[1] -11.39 dBm
2.429810 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
D1
CF 2.4 GHz
691 pts
Span 100.0 MHz

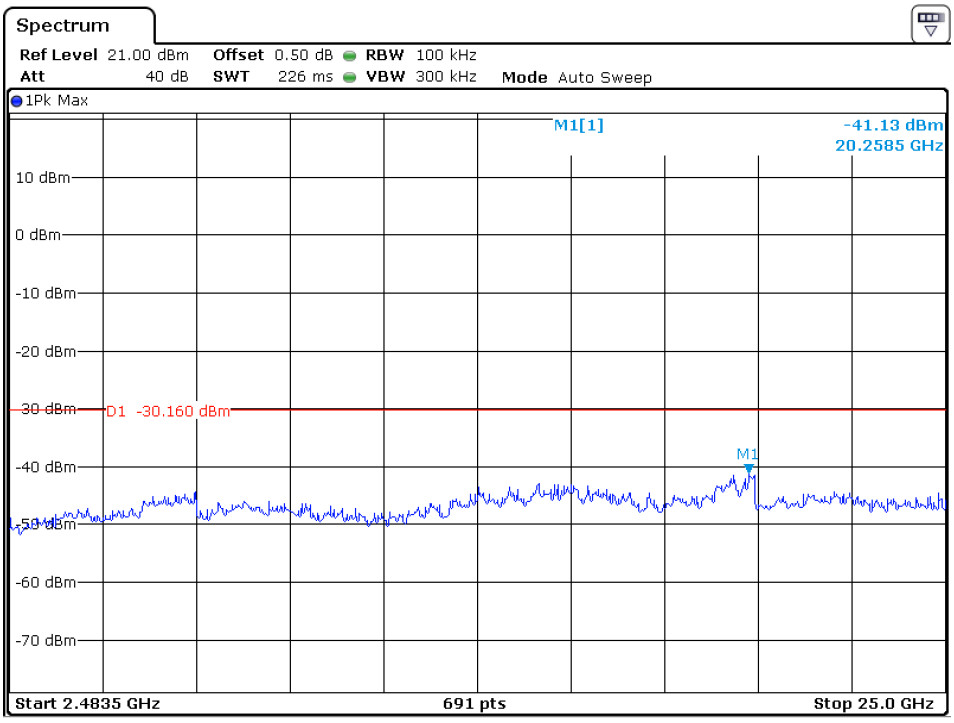
Channel 06 (2437MHz) Reference Level: -10.52dBm

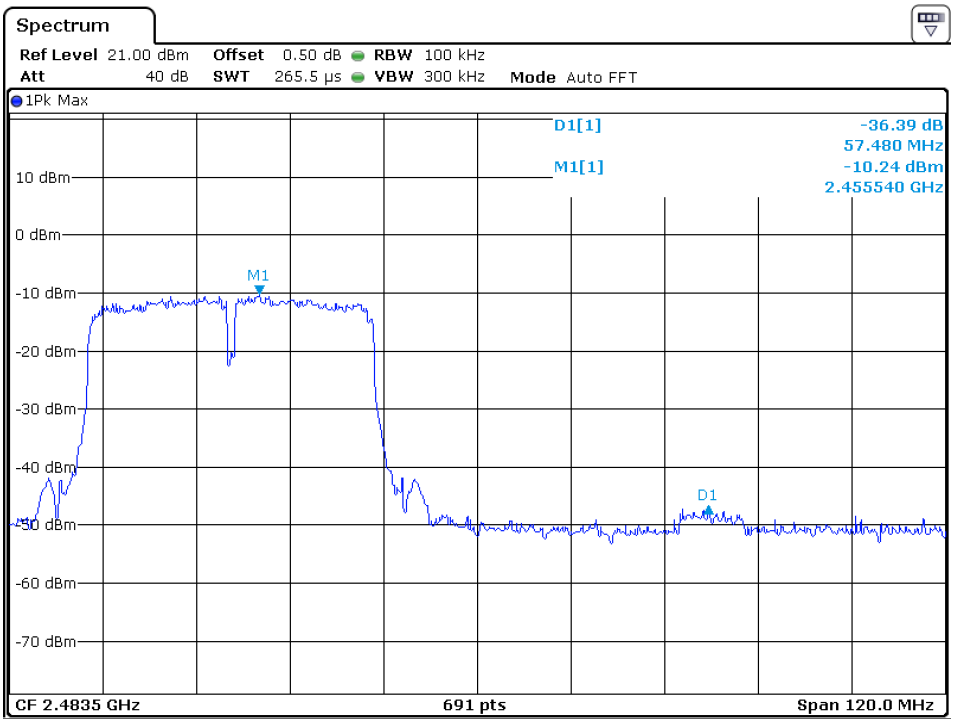




Channel 11 (2462MHz) Reference Level: -10.16dBm






Spectrum
Ref Level 21.00 dBm Offset 0.50 dB RBW 100 kHz
Att 40 dB SWT 265.5 µs VBW 300 kHz Mode Auto FFT
1Pk Max
D1[1] -36.39 dB
57.480 MHz
M1[1] -10.24 dBm
2.455540 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
D1
CF 2.4835 GHz
691 pts
Span 120.0 MHz

4.5 Out of Band Radiated Emissions (for emissions in 4.4 above that are less than 20dB below carrier), FCC Rule 15.247(d):

For out of band emissions that are close to or that exceed the 20dB attenuation requirement described in the specification, radiated measurements were performed at a 3m separation distance to determine whether these emissions complied with the general radiated emission requirement.

[×] Not required, since all emissions are more than 20dB below fundamental
[ ] See attached data sheet

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI

4.6 Transmitter Radiated Emissions in Restricted Bands, FCC Rule 15.35(b) (c):

Data is included of the worst-case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included. All measurements were performed with peak detection unless otherwise specified.

The data on the following pages list the significant emission frequencies, the limit and the margin of compliance.

4.7 Field Strength Calculation

The field strength is calculated by adding the reading on the Spectrum Analyzer to the factors associated with preamplifiers (if any), antennas, cables, pulse desensitization and average factors (when specified limit is in average and measurements are made with peak detectors). A sample calculation is included below.

FS = RA + AF + CF - AG + PD

Where FS = Field Strength in dBμV/m
RA = Receiver Amplitude (including preamplifier) in dBμV
CF = Cable Attenuation Factor in dB
AF = Antenna Factor in dB
AG = Amplifier Gain in dB
PD = Pulse Desensitization in dB

In the radiated emission table which follows, the reading shown on the data table may reflect the preamplifier gain. An example of the calculations, where the reading does not reflect the preamplifier gain, follows:

FS = RA + AF + CF - AG + PD

Example
Assume a receiver reading of 62.0 dBμV is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted. The pulse desensitization factor of the spectrum analyzer was 0 dB. The net field strength for comparison to the appropriate emission limit is 42 dBμV/m. This value in dBμV/m was converted to its corresponding level in μV/m.

RA = 62.0 dBμV
AF = 7.4 dB
CF = 1.6 dB
AG = 29.0 dB
PD = 0 dB
FS = 62 + 7.4 + 1.6 - 29 + 0 = 42 dBμV/m

Level in mV/m = Common Antilogarithm [(42 dBμV/m)/20] = 125.9 μV/m

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI

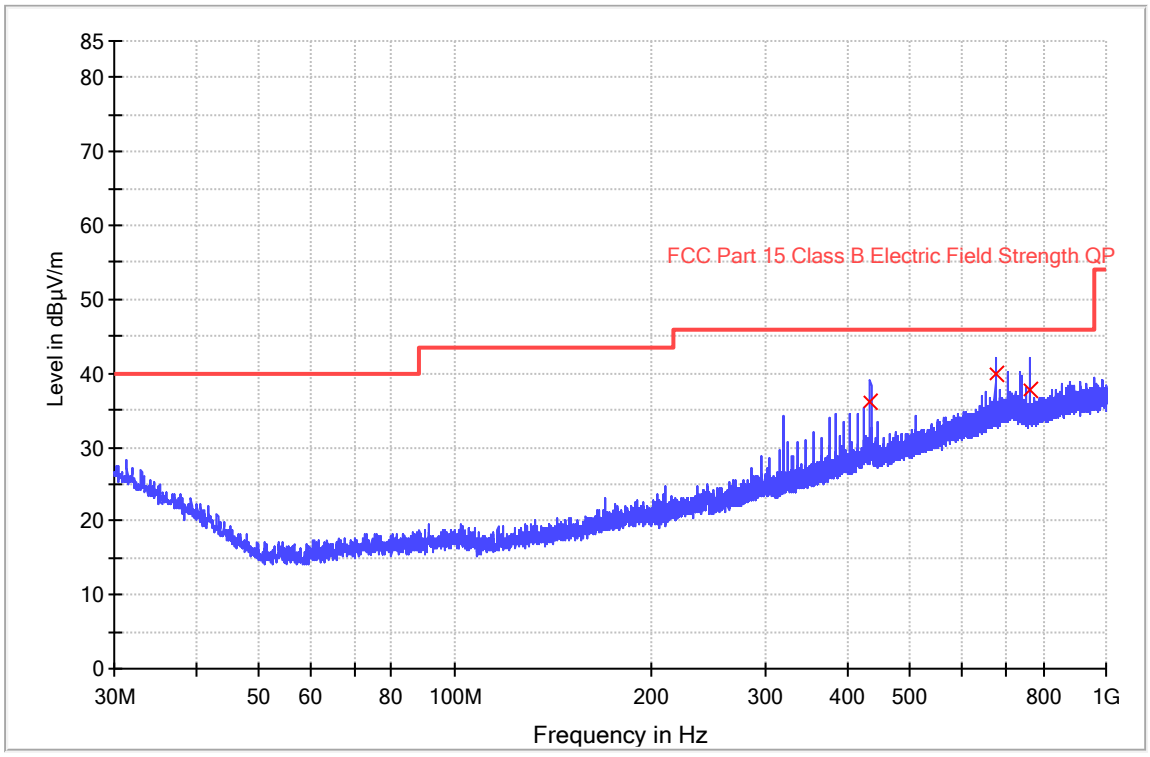
4.8 Radiated Spurious Emission

Worst Case Radiated Spurious Emission
at 675.017667MHz
is passed by 6.0dB margin.

For the electronic filing, the worst case radiated emission configuration photographs are saved with filename: radiated photos.pdf.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11b-Channel 01)

ANT Polarity: Horizontal

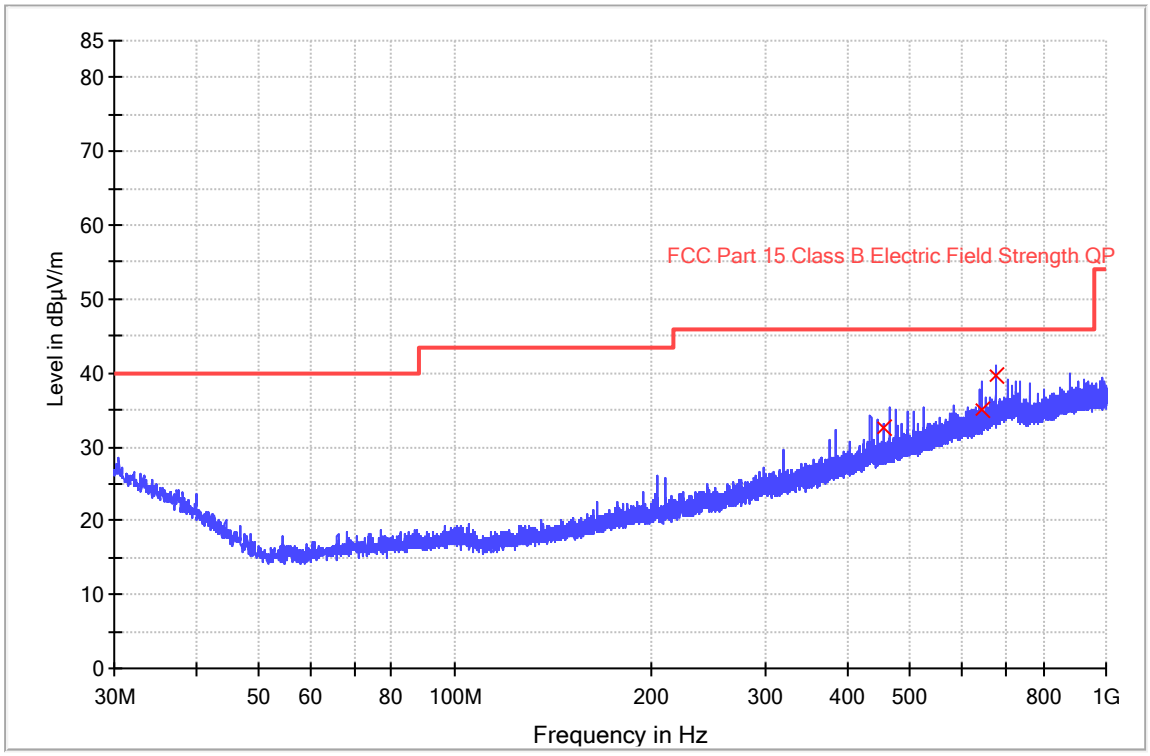


Frequency (MHz)	QuasiPeak (dBuV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBuV/m)
435.007333	36.0	1000.0	120.000	H	19.9	10.0	46.0
675.017667	40.0	1000.0	120.000	H	25.1	6.0	46.0
765.033667	37.7	1000.0	120.000	H	25.9	8.3	46.0

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
3. Margin (dB) = Limit Line(dBµV/m) – Level (dBµV/m)

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11b-Channel 01)

ANT Polarity: Vertical



Frequency (MHz)	QuasiPeak (dB¦ìV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBuV/m)
455.021667	32.6	1000.0	120.000	V	20.4	13.4	46.0
645.012333	34.9	1000.0	120.000	V	24.4	11.1	46.0
675.017667	39.7	1000.0	120.000	V	25.1	6.3	46.0

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
3. Margin (dB) = Limit Line(dBµV/m) – Level (dBµV/m)

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11b-Channel 01)

Radiated Emissions (above 1GHz)

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4824.000	36.3	36.8	33.5	33.0	74.0	-41.0
Horizontal	*2390.000	50.5	36.4	29.1	43.2	74.0	-30.8

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4824.000	31.4	36.8	33.5	28.1	54.0	-25.9
Horizontal	*2390.000	42.9	36.4	29.1	35.6	54.0	-18.4

NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz/VBW=10Hz for average value.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11b-Channel 06)

Radiated Emissions (above 1GHz)

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4874.000	35.0	36.7	33.4	31.7	74.0	-42.3
Horizontal	*7311.000	37.8	36.6	35.8	37.0	74.0	-37.0

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4874.000	30.5	36.7	33.4	27.2	54.0	-26.8
Horizontal	*7311.000	34.3	36.6	35.8	33.5	54.0	-20.5

NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11b-Channel 11)

Radiated Emissions (above 1GHz)

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4924.000	37.8	36.8	33.3	34.3	74.0	-39.7
Horizontal	*7386.000	47.1	36.5	29.3	39.9	74.0	-34.1
Horizontal	*2484.320	49.9	36.5	29.3	42.7	74.0	-31.3

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4924.000	32.6	36.8	33.3	29.1	54.0	-24.9
Horizontal	*7386.000	41.8	36.5	29.3	34.6	54.0	-19.4
Horizontal	*2484.320	43.0	36.5	29.3	35.8	54.0	-18.2

NOTES:

1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11g-Channel 01)

Radiated Emissions (above 1GHz)

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4824.000	35.8	36.8	33.5	32.5	74.0	-41.5
Horizontal	*2390.000	51.1	36.4	29.1	43.8	74.0	-30.2

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4824.000	26.7	36.8	33.5	23.4	54.0	-30.6
Horizontal	*2390.000	43.4	36.4	29.1	36.1	54.0	-17.9

NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz/VBW=10Hz for average value.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11g-Channel 06)

Radiated Emissions (above 1GHz)

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4874.000	35.0	36.7	33.4	31.7	74.0	-42.3
Horizontal	*7311.000	39.7	36.6	35.8	38.9	74.0	-35.1

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4874.000	29.8	36.7	33.4	26.5	54.0	-27.5
Horizontal	*7311.000	30.8	36.6	35.8	30.0	54.0	-24.0

NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11g-Channel 11)

Radiated Emissions (above 1GHz)

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4924.000	36.3	36.8	33.3	32.8	74.0	-41.2
Horizontal	*7386.000	44.7	36.5	29.3	37.5	74.0	-36.5
Horizontal	*2484.550	50.8	36.5	29.3	43.6	74.0	-30.4

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4924.000	29.6	36.8	33.3	26.1	54.0	-27.9
Horizontal	*7386.000	39.4	36.5	29.3	32.2	54.0	-21.8
Horizontal	*2484.550	43.0	36.5	29.3	35.8	54.0	-18.2

NOTES:

1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11n20-Channel 01)

Radiated Emissions (above 1GHz)

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4824.000	37.5	36.8	33.5	34.2	74.0	-39.8
Horizontal	*2390.000	49.4	36.4	29.1	42.1	74.0	-31.9

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4824.000	31.7	36.8	33.5	28.4	54.0	-25.6
Horizontal	*2390.000	43.0	36.4	29.1	35.7	54.0	-18.3

NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz/VBW=10Hz for average value.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11n20-Channel 06)

Radiated Emissions (above 1GHz)

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4874.000	36.2	36.7	33.4	32.9	74.0	-41.1
Horizontal	*7311.000	39.2	36.6	35.8	38.4	74.0	-35.6

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4874.000	30.8	36.7	33.4	27.5	54.0	-26.5
Horizontal	*7311.000	32.9	36.6	35.8	32.1	54.0	-21.9

NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11n20-Channel 11)

Radiated Emissions (above 1GHz)

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4924.000	37.4	36.8	33.3	33.9	74.0	-40.1
Horizontal	*7386.000	45.9	36.5	29.3	38.7	74.0	-35.3
Horizontal	*2484.720	49.8	36.5	29.3	42.6	74.0	-31.4

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4924.000	31.3	36.8	33.3	27.8	54.0	-26.2
Horizontal	*7386.000	41.1	36.5	29.3	33.9	54.0	-20.1
Horizontal	*2484.720	43.6	36.5	29.3	36.4	54.0	-17.6

NOTES:

1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11n40-Channel 03)

Radiated Emissions (above 1GHz)

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4844.000	37.6	36.8	33.5	34.3	74.0	-39.7
Horizontal	*2390.000	48.8	36.4	29.1	41.5	74.0	-32.5

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4844.000	32.2	36.8	33.5	28.9	54.0	-25.1
Horizontal	*2390.000	42.2	36.4	29.1	34.9	54.0	-19.1

NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz/VBW=10Hz for average value.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11n40-Channel 06)

Radiated Emissions (above 1GHz)

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4874.000	36.8	36.7	33.4	33.5	74.0	-40.5
Horizontal	*7311.000	38.1	36.6	35.8	37.3	74.0	-36.7

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4874.000	32.2	36.7	33.4	28.9	54.0	-25.1
Horizontal	*7311.000	33.6	36.6	35.8	32.8	54.0	-21.2

NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020 Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11n40-Channel 9)

Radiated Emissions (above 1GHz)

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4904.000	36.6	36.8	33.3	33.1	74.0	-40.9
Horizontal	*7356.000	47.8	36.5	29.3	40.6	74.0	-33.4
Horizontal	*2484.520	49.8	36.5	29.3	42.6	74.0	-31.4

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	*4904.000	31.8	36.8	33.3	28.3	54.0	-25.7
Horizontal	*7356.000	40.8	36.5	29.3	33.6	54.0	-20.4
Horizontal	*2484.520	44.4	36.5	29.3	37.2	54.0	-16.8

NOTES:

1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 13, 2020
Model: IRIScan™ Anywhere 6 WIFI

4.9 Conducted Emission

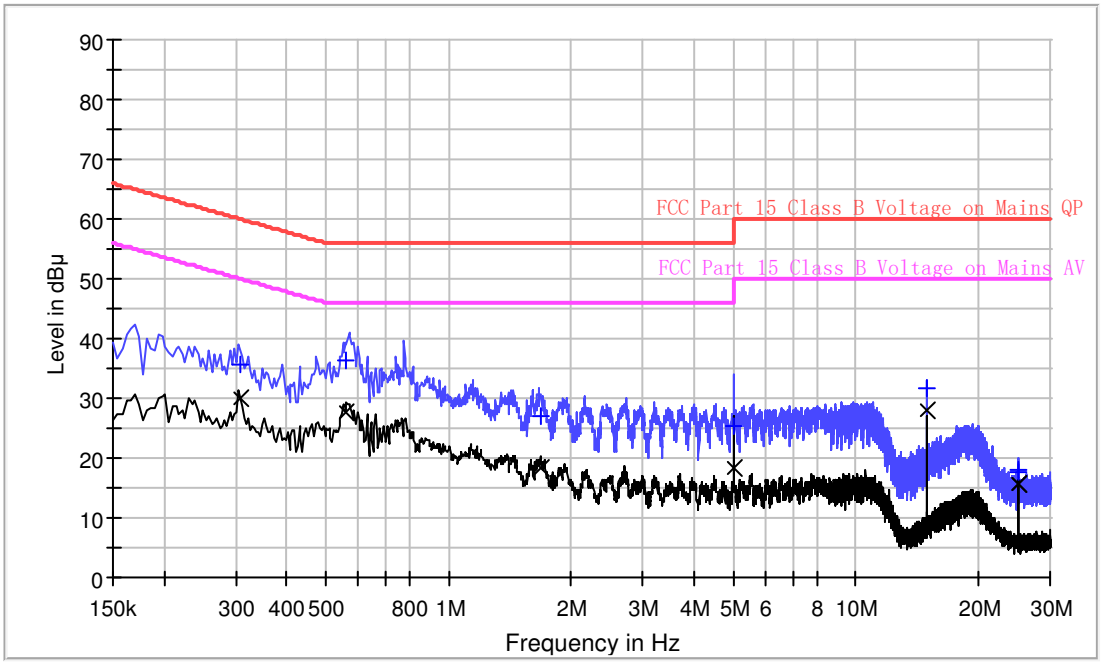
Worst Case Conducted Emission
at 0.5685MHz
is passed by 16.6dB margin.

For the electronic filing, the worst case radiated emission configuration photographs are saved with filename: conducted photos.pdf.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 13, 2020
Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11b-Channel 01)
Phase: Live

Graphic / Data Table

Conducted Emissions
Pursuant to FCC 15.207: Emissions Requirement



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.307500	35.6	9.000	L1	9.7	24.4	60.0
0.562000	36.3	9.000	L1	9.7	19.7	56.0
1.678000	27.0	9.000	L1	9.7	29.0	56.0
5.006000	25.4	9.000	L1	9.7	34.6	60.0
15.002000	31.7	9.000	L1	10.1	28.3	60.0
25.002000	17.8	9.000	L1	10.7	42.2	60.0

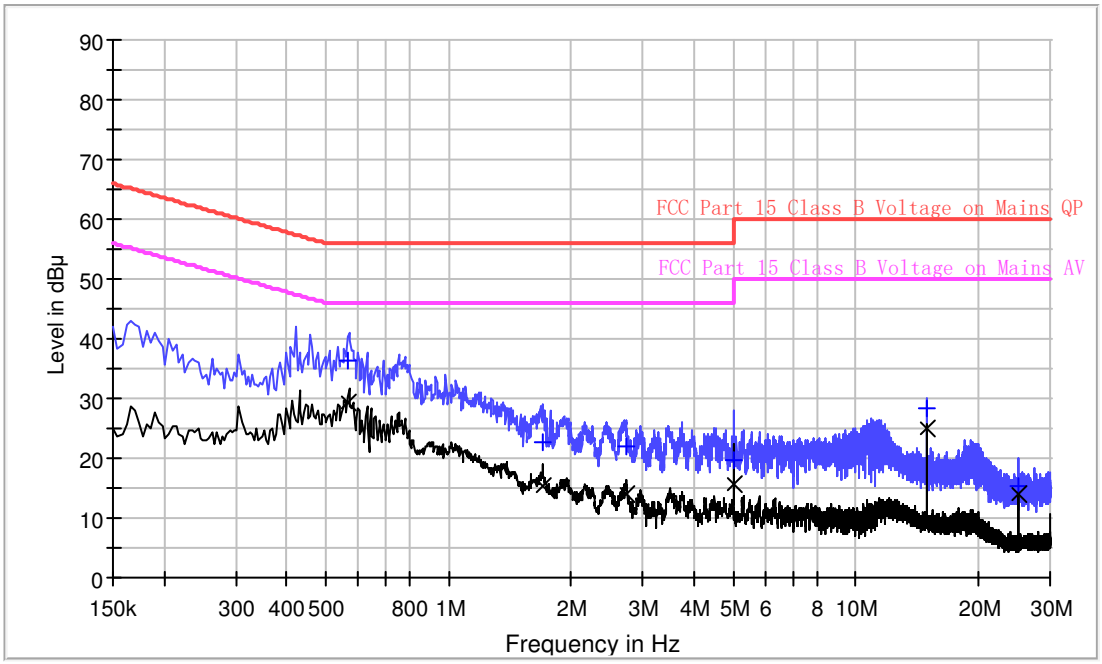
Limit and Margin AV

Frequency (MHz)	Average (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.307500	30.0	9.000	L1	9.7	20.0	50.0
0.562000	27.7	9.000	L1	9.7	18.3	46.0
1.678000	18.3	9.000	L1	9.7	27.7	46.0
5.006000	18.2	9.000	L1	9.7	31.8	50.0
15.002000	27.9	9.000	L1	10.1	22.1	50.0
25.002000	15.6	9.000	L1	10.7	34.4	50.0

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 13, 2020
Model: IRIScan™ Anywhere 6 WIFI
Worst Case Operating Mode: Transmitting (802.11b-Channel 01)
Phase: Neutral

Graphic / Data Table

Conducted Emissions
Pursuant to FCC 15.207: Emissions Requirement



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.568500	36.2	9.000	N	9.5	19.8	56.0
1.706000	22.7	9.000	N	9.5	33.3	56.0
2.730000	21.9	9.000	N	9.5	34.1	56.0
5.006000	19.7	9.000	N	9.6	40.3	60.0
15.002000	28.4	9.000	N	10.1	31.6	60.0
25.002000	15.2	9.000	N	10.7	44.8	60.0

Limit and Margin AV

Frequency (MHz)	Average (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.568500	29.4	9.000	N	9.5	16.6	46.0
1.706000	15.4	9.000	N	9.5	30.6	46.0
2.730000	13.9	9.000	N	9.5	32.1	46.0
5.006000	15.6	9.000	N	9.6	34.4	50.0
15.002000	25.2	9.000	N	10.1	24.8	50.0
25.002000	14.1	9.000	N	10.7	35.9	50.0

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 27, 2020
Model: IRIScan™ Anywhere 6 WIFI

4.10 Radiated Emissions from Digital Section of Transceiver, FCC Ref: 15.109

[ ] Not required - No digital part

[ ] Test results are attached

[x] Included in the separated report.

Applicant: Kenxen Electronic（SZ）Limited
Date of Test: October 17, 2020
Model: IRIScan™ Anywhere 6 WIFI

4.11 Transmitter Duty Cycle Calculation and Measurements, FCC Rule 15.35(b), (c)

The EUT antenna output port was connected to the input of the spectrum analyzer. The analyzer center frequency was set to EUT RF channel carrier. The SWEP function on the analyzer was set to ZERO SPAN. The Transmitter ON time was determined from the resultant time-amplitude display:

	See attached spectrum analyzer chart (s) for Transmitter timing
	See Transmitter timing diagram provided by manufacturer
x	Not applicable, duty cycle was not used.

5.0 Equipment Photographs

For electronic filing, the photographs are saved with filename: external photos.pdf & internal photos.pdf.

6.0 Product Labeling

For electronic filing, the FCC ID label artwork and location is saved with filename: label.pdf.

7.0 Technical Specifications

For electronic filing, the block diagram and circuit diagram are saved with filename: block.pdf and circuit.pdf respectively.

8.0 Instruction Manual

For electronic filing, a preliminary copy of the Instruction Manual is saved with filename: manual.pdf.

This manual will be provided to the end-user with each unit sold/leased in the United States.

9.0 Confidentiality Request

For electronic filing, the confidentiality request of the tested EUT is saved with filename: request.pdf.

10.0 Discussion of Pulse Desensitization

The determination of pulse desensitivity was made in accordance with Hewlett Packard Application Note 150-2, *Spectrum Analysis ... Pulsed RF.*

Pulse desensitivity is not applicable for this device since the transmitter transmits the RF signal continuously.

11.0 Test Equipment List

Equipment No.	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
SZ182-02	RF Power Meter	Anritsu	ML2496A	1302005	2020-05-27	2021-05-27
SZ182-02-01	Power Sensor	Anritsu	MA2411B	1207429	2020-05-27	2021-05-27
SZ061-13	Biconilog Antenna	ETS	3142E	00217919	2019-06-10	2021-06-10
SZ061-06	Active Loop Antenna	Electro-Metrics	EM-6876	217	2019-05-24	2021-05-24
SZ061-08	Horn Antenna	ETS	3115	00092346	2019-09-07	2021-09-07
SZ061-07	Pyramidal Horn Antenna	ETS	3160-09	00083067	2019-08-13	2021-08-13
SZ056-03	Spectrum Analyzer	R&S	FSP30	101148	2020-05-27	2021-05-27
SZ185-01	EMI Receiver	R & S	ESCI	100547	2019-12-24	2020-12-24
SZ181-04	Preamplifier	Agilent	8449B	3008A02474	2020-05-27	2021-05-27
SZ188-01	Anechoic Chamber	ETS	RFD-F/A-100	4102	2018-12-15	2021-12-15
SZ062-02	RF Cable	RADIALL	RG 213U	--	2020-06-12	2020-12-12
SZ062-05	RF Cable	RADIALL	0.04-26.5GHz	--	2020-08-10	2021-02-10
SZ062-12	RF Cable	RADIALL	0.04-26.5GHz	--	2020-08-10	2021-02-10
SZ067-04	Notch Filter	Micro-Tronics	BRM50702-02	--	2020-05-27	2021-05-27
SZ185-02	EMI Test Receiver	R&S	ESCI	100692	2019-11-29	2020-11-29
SZ187-02	Two-Line V-Network	R&S	ENV216	100073	2020-05-27	2021-05-27
SZ188-03	Shielding Room	ETS	RFD-100	4100	2020-01-07	2023-01-07
SZ062-16	RF Cable	HUBER+SUHNER	CBL2-BN-1m	110127-2231000	2019-11-30	2020-11-30

********** End of Report**********