



<b>Prüfbericht-Nr.:</b> <i>Test report no.:</i>	<b>CN21NB1D 002</b>	<b>Auftrags-Nr.:</b> <i>Order no.:</i>	168316290	Seite 1 von 92 <i>Page 1 of 92</i>
<b>Kunden-Referenz-Nr.:</b> <i>Client reference no.:</i>	N/A	<b>Auftragsdatum:</b> <i>Order date:</i>	2021-05-08	
<b>Auftraggeber:</b> <i>Client:</i>	Felion Technologies Company Limited 304, 3/F, Fuxing Office Building, No.6 Binglang Road, Fubao Community, Futian District, Shenzhen, Guangdong province, China			
<b>Prüfgegenstand:</b> <i>Test item:</i>	ColorFlux Light Bulb			
<b>Bezeichnung / Typ-Nr.:</b> <i>Identification / Type no.:</i>	L4, L5 (Trademark: VOCOLinc)			
<b>Auftrags-Inhalt:</b> <i>Order content:</i>	FCC and IC approval			
<b>Prüfgrundlage:</b> <i>Test specification:</i>	CFR47 FCC Part 15: Subpart C Section 15.247 RSS-247 Issue 2 February 2017 CFR47 FCC Part 15: Subpart C Section 15.207 RSS-Gen Issue 5 March 2019 CFR47 FCC Part 15: Subpart C Section 15.209 RSS-102 Issue 5 March 2015			
<b>Wareneingangdatum:</b> <i>Date of sample receipt:</i>	2021-05-08	Please refer to photo documents		
<b>Prüfmuster-Nr.:</b> <i>Test sample no.:</i>	A003048740-002, 003			
<b>Prüfzeitraum:</b> <i>Testing period:</i>	2021-05-08 – 2021-06-02			
<b>Ort der Prüfung:</b> <i>Place of testing:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
<b>Prüflaboratorium:</b> <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
<b>Prüfergebnis*:</b> <i>Test result*:</i>	Pass			
<b>geprüft von:</b> <i>tested by:</i>		<b>genehmigt von:</b> <i>authorized by:</i>		
<b>Datum:</b> <i>Date:</i>	2021-07-09	<b>Ausstellungsdatum:</b> <i>Issue date:</i>	2021-07-09	
	<small>Signed by: Chris Chen</small>		<small>Signed by: Lin Lin</small>	
<b>Stellung / Position</b>	Senior Project Manager	<b>Stellung / Position</b>	Reviewer	
<b>Sonstiges / Other:</b>				
FCC ID: 2AXT8-L4 IC: 26783-L4      HVIN: L4, L5				
<b>Zustand des Prüfgegenstandes bei Anlieferung:</b> <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged:</i>		
* Legende:    1 = sehr gut                      2 = gut                      3 = befriedigend                      4 = ausreichend                      5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n)    F(ail) = entspricht nicht o.g. Prüfgrundlage(n)    N/A = nicht anwendbar    N/T = nicht getestet Legend:    1 = very good                      2 = good                      3 = satisfactory                      4 = sufficient                      5 = poor P(ass) = passed a.m. test specifications(s)    F(ail) = failed a.m. test specifications(s)    N/A = not applicable    N/T = not tested				
<b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b>				
<i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

## Test Summary

**5.1.1 ANTENNA REQUIREMENT***RESULT: Pass***5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER***RESULT: Pass***5.1.3 CONDUCTED POWER SPECTRAL DENSITY***RESULT: Pass***5.1.4 99%dB BANDWIDTH***RESULT: Pass***5.1.5 6dB BANDWIDTH***RESULT: Pass***5.1.6 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHz BANDWIDTH***RESULT: Pass***5.1.7 RADIATED SPURIOUS EMISSION***RESULT: Pass***5.1.8 CONDUCTED EMISSION ON AC MAINS***RESULT: Pass*

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# 1 General Remarks

## 1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Photographs of the Test Set-up

# 2 Test Sites

## 2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

No. 362 Huanguan Road Middle, Longhua District, Shenzhen 518110, People's Republic of China

FCC Registration No.: 694916

IC Registration No.: 25069

## 2.2 List of Test and Measurement Instruments

**Table 1: List of Test and Measurement Equipment**

<b>Radiated Emission</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Cal. Until</b>
EMI Test Receiver	R&S	ESR7	102022	2021-08-19
Bilog Antenna	TESEQ	CBL6112D	51321	2021-08-29
<b>Conducted Emissions</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Cal. Until</b>
EMI Test Receiver	R&S	ESR3	102428	2021-08-19
Artificial Mains Network	R&S	ENV216	102333	2021-08-19
<b>Radio Spectrum Testing</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Cal. Until</b>
Wireless Connectivity Tester	Rohde & Schwarz	CMW270	101375	2021-08-30
Signal Analyzer	Rohde & Schwarz	FSV 40	101441	2021-08-30
Vector Signal Generator	Rohde & Schwarz	SMBV100A	263301	2021-08-30
Signal Generator	Rohde & Schwarz	SMB100A	115186	2021-08-30
OSP	Rohde & Schwarz	OSP 150	101017	2021-12-20
Control PC	DELL	OptiPlex 7050	FTJZ9P2	N/A
Test Software	Rohde & Schwarz	WMS32 (V10.40.10)	N/A	N/A
Power Meter	Rohde & Schwarz	NRP2	107105	2021-12-20
Wideband Power Sensor	Rohde & Schwarz	NRP-Z81	105350	2021-12-20
<b>Unwanted Emission Testing</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Cal. Until</b>
Signal Generator	Rohde & Schwarz	SMB100A	180840	2021-08-30
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	165339	2021-08-30
Signal Analyzer	Rohde & Schwarz	FSV 40	101440	2021-08-30
System Controller Interface	Rohde & Schwarz	SCI-100	S10010036	N/A
Filterbank	Rohde & Schwarz	CDMA	100751	2021-08-30
Filterbank	Rohde & Schwarz	GSM	100811	2021-08-30
OSP	Rohde & Schwarz	OSP 120	102041	N/A
OSP	Rohde & Schwarz	OSP 150	101385	N/A
Pre-amplifier	Rohde & Schwarz	SCU08F1	08320030	2021-08-30
Amplifier	Rohde & Schwarz	SCU-18F	180079	2021-08-30
Amplifier	Rohde & Schwarz	SCU40A	100450	2021-09-03
Trilog Broadband Antenna (30 MHz - 1 GHz)	Schwarzbeck	VULB9162	192	2021-09-02

Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218719	2021-09-02
Wideband Ridged Horn Antenna (12-18 GHz)	Steatite	QMS-00208	18312	2021-09-02
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19066	2021-09-02
Biconical Broadband Antenna (30 MHz - 1 GHz)	Schwarzbeck	VUBA 9117	357	2021-09-02
Double Ridged Broadband Horn Antenna (1 – 18 GHz)	Schwarzbeck	BBHA 9120 D	01760	2021-09-02
Broadband Horn Antenna (15 – 40 GHz)	Schwarzbeck	BBHA 9170	00862	2021-09-02
Test software	Rohde & Schwarz	EMC32 (V10.40.00)	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NW9P2	N/A
<b>Conducted Emissions</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Cal. Until</b>
EMI Test Receiver	R&S	ESR3	102428	2021-08-19
Artificial Mains Network	R&S	ENV216	102333	2021-08-19

## 2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

## 2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

## 2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

Item	Extended Uncertainty
Conducted Emission	± 3.70 dB
Radiated Emission (30-1000MHz)	Field strength (dB $\mu$ V/m) 4.27dB
Radiated Emission (above 1000MHz)	Field strength (dB $\mu$ V/m) 4.46dB
Radio Spectrum	± 1.5 dB

## 2.6 Location of Original Data

The original copies of all test data taken during actual testing were at this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

## 2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at No. 362 Huanguan Road Middle, Longhua District, Shenzhen 518110, People's Republic of China. is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

### 3 General Product Information

#### 3.1 Product Function and Intended Use

The EUT is **ColorFlux Light Bulb** and it supports 2.4GHz Wi-Fi wireless technologies. According to the declaration of the applicant, the electrical circuit design, PCB layout and construction Design are identical for all models, only the model No. is different. Test Model is L4. For details refer to the User Manual, Technical Description and Circuit Diagram.

#### 3.2 Ratings and System Details

**Table 2: Technical Specification of EUT**

General Information of EUT	Value
Kind of Equipment	ColorFlux Light Bulb
Type Designation	L4, L5
Trade Mark	VOCOLinc
FCC ID	2AXT8-L4
IC	26783-L4
HVIN	L4, L5
Operating Voltage	AC 120V, 60Hz

Technical Specification of Wi-Fi 802.11 b/g/n	
Operating Frequency	2412 - 2462 MHz for 802.11b/g/n(HT20)
Type of Modulation	DSSS(DBPSK/DQPSK/CCK) OFDM(BPSK/QPSK/16QAM/64QAM)
Data Rate	1/2/5.5/11 Mbps for 802.11b 6/9/12/18/24/36/48/54 Mbps for 802.11g MCS0 ~ MCS7 for 802.11n
Channel Number	11 channels for 802.11b/g/n(HT20)
Channel Separation	5 MHz
Antenna Type	PCB Antenna
Max. Antenna Gain	0.00 dBi



**Table 3: RF Channel and Frequency of Wi-Fi 802.11 b/g/n**

RF Channel	802.11 b/g/n(HT20)
	Frequency (MHz)
<b>01</b>	<b>2412</b>
02	2417
<b>03</b>	<b>2422</b>
04	2427
05	2432
<b>06</b>	<b>2437</b>
07	2442
08	2447
<b>09</b>	<b>2452</b>
10	2457
<b>11</b>	<b>2462</b>

### 3.3 Independent Operation Modes

The basic operation modes are:

- A. On
  - 1. Wi-Fi transmitting mode
    - 1) Low Channel
    - 2) Middle Channel
    - 3) High Channel
- B. On, Wi-Fi connecting mode
- C. Off

### 3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

### 3.5 Submitted Documents

- Application Form
- Block Diagram
- FCC/IC Label and Location Info
- Operation Description
- Photo Document
- Schematics
- User Manual

## 4 Test Set-up and Operation Modes

### 4.1 Principle of Configuration Selection

**Radio Spectrum:** The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

### 4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.10: 2013.

### 4.3 Special Accessories and Auxiliary Equipment

Table 4: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N
iPad	Apple	iPad 3	N/A
Notebook	Lenovo	ThinkPad X260	N/A

### 4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

## 4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

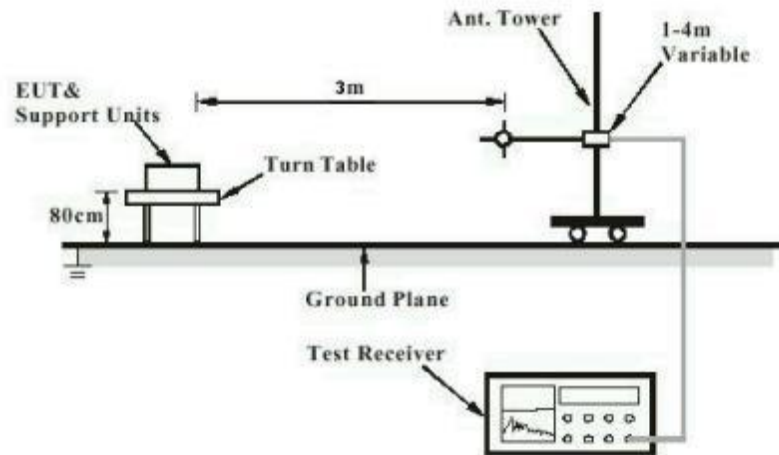
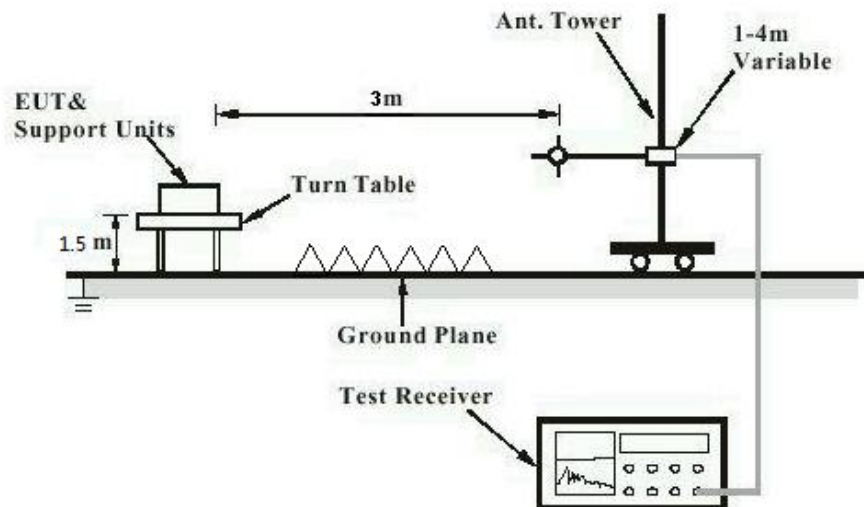
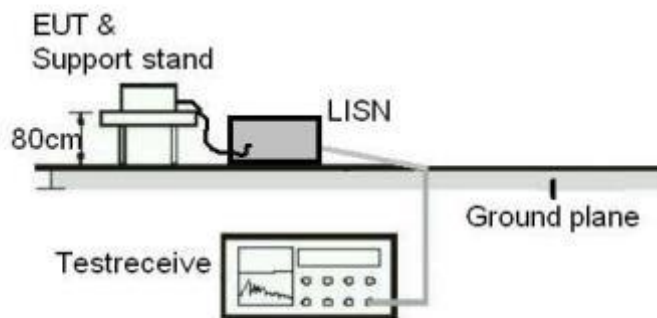
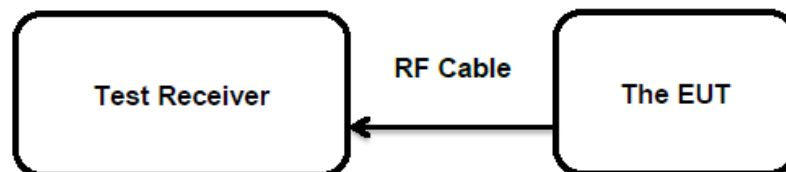


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)



**Diagram of Measurement Configuration for Mains Conduction Measurement**

**Diagram of Measurement Configuration for Conducted Transmitter Measurement**


## 5 Test Results

### 5.1 Transmitter Requirement & Test Suites

#### 5.1.1 Antenna Requirement

RESULT:

Pass

**Test Specification**

Test standard	:	FCC Part 15.247(b)(4) and Part 15.203
Limit	:	the use of antennas with directional gains that do not exceed 6 dBi

According to the manufacturer declared, the EUT has an PCB antenna, the directional gain of antenna is 0 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

### 5.1.2 Maximum Peak Conducted Output Power

**RESULT:**
**Pass**
**Test Specification**

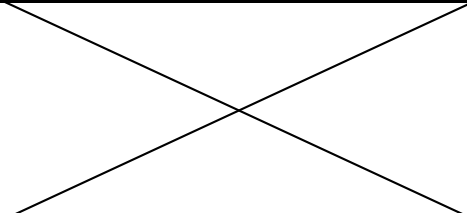
Test standard	:	FCC Part 15.247(b)(3) RSS-247 Clause 5.4(2)&(4)
Basic standard	:	ANSI C63.10: 2013
Limits	:	< 1 Watt (Maximum Conducted Peak Power) e.i.r.p. <4W
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	02.06.2021
Input voltage	:	DC 5V
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 °C
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

**Table 5: Test Result of Maximum Peak Conducted Output Power, Wi-Fi 802.11 b/g/n**

Mode	802.11b			802.11g		
Data Rate	1Mbps			6Mbps		
Channel	1	6	11	1	6	11
Frequency (MHz)	2412	2437	2462	2412	2437	2462
Peak. Power (dBm)	20.1	19.6	18.9	24.1	23.6	24.0
Mode	802.11n HT20					
Data Rate	MCS0 6.5Mbps					
Channel	1	6	11			
Frequency(MHz)	2412	2437	2462			
Peak. Power (dBm)	23.4	23.4	23.1			

Note: The cable loss is taken into account in results and the e.i.r.p. is 24.1 dBm less than 4W (36 dBm).

### 5.1.3 Conducted Power Spectral Density

**RESULT:**
**Pass**
**Test Specification**

Test standard	:	FCC Part 15.247(e) RSS-247 Clause 5.2(2)
Basic standard	:	ANSI C63.10: 2013
Limits	:	8 dBm / 3kHz
Kind of test site	:	Shielded Room

**Test Setup**

Date of testing	:	31.05.2021
Input voltage	:	DC 5V
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 °C
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

**Table 6: Test Result of Power Spectral Density**

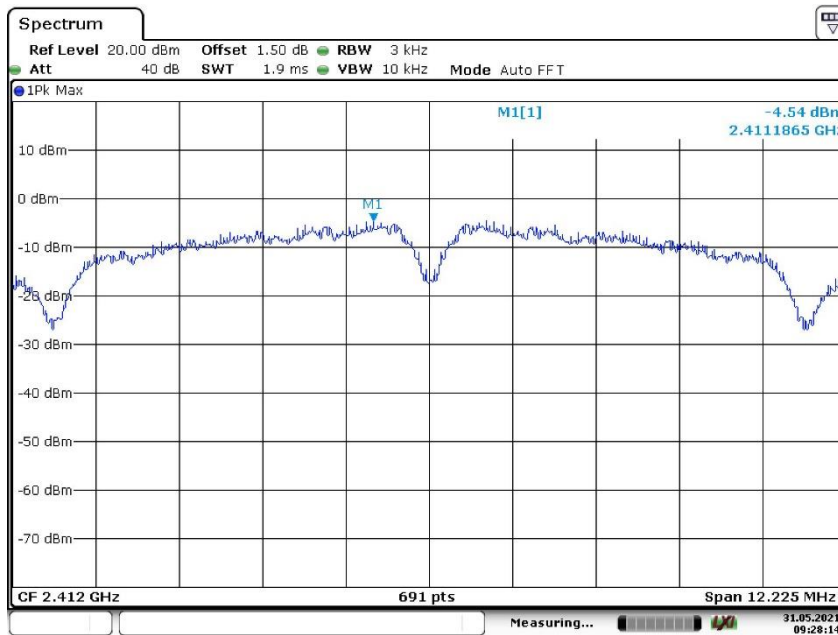
Test Mode	Data Rate	Frequency (MHz)	Measured Peak Power Spectral Density (dBm/3KHz)
802.11b	1 Mbps	2412	-4.54
		2437	-4.91
		2462	-4.98
802.11g	6 Mbps	2412	-9.27
		2437	-9.67
		2462	-9.20
802.11n (HT20)	MCS0	2412	-10.19
		2437	-10.02
		2462	-9.49
<b>Maximum Measured Value</b>			<b>-4.54</b>

Note: The cable loss is taken into account in results.

The Maximum Value as below showed:

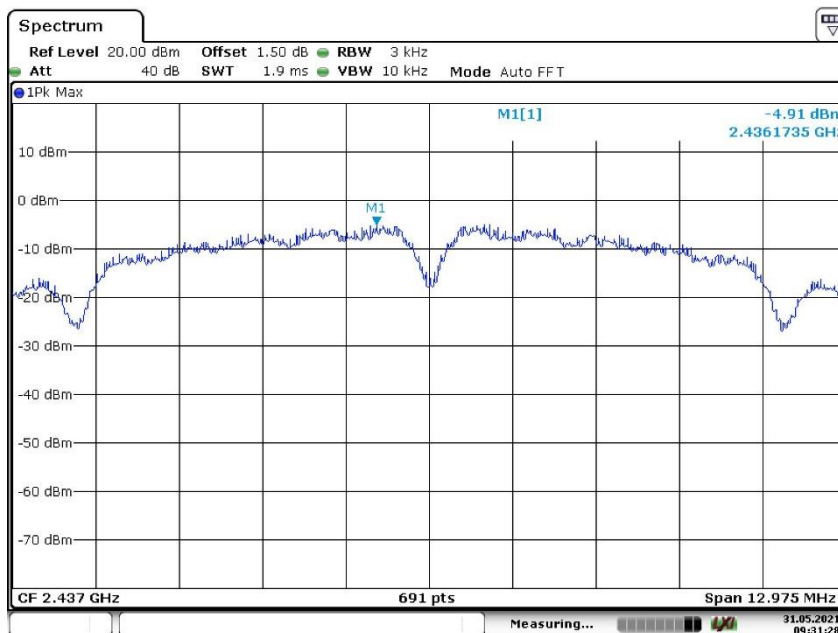
### Wi-Fi 802.11 b mode, 1 Mbps

Low Channel



Date: 31.MAY.2021 09:28:14

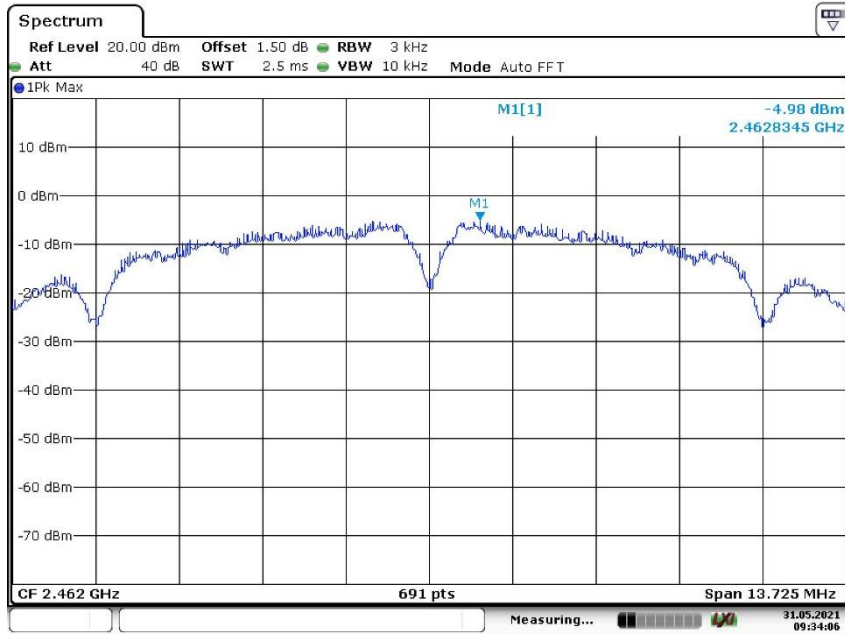
Middle Channel



Date: 31.MAY.2021 09:31:28



## High Channel



Date: 31.MAY.2021 09:34:06

### 5.1.4 99%dB Bandwidth

**RESULT:**
**Pass**
**Test Specification**

Test standard : RSS-Gen clause 6.7  
 Basic standard : ANSI C63.10: 2013  
 Kind of test site : Shielded Room

**Test Setup**

Date of testing : 02.06.2021  
 Input voltage : DC 5V  
 Operation mode : A  
 Test channel : Low / Middle / High  
 Ambient temperature : 25 °C  
 Relative humidity : 56 %  
 Atmospheric pressure : 101 kPa

**Table 7: Test Result of 99% Bandwidth**

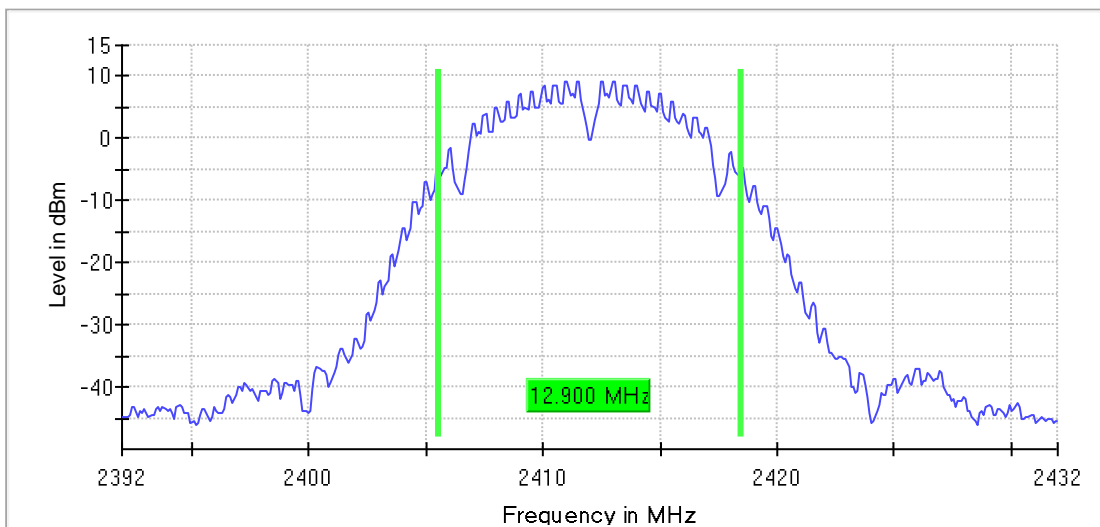
Test Mode	Data Rate	Frequency (MHz)	99% Bandwidth (MHz)	Limit (MHz)
802.11b	1 Mbps	2412	12.90	/
		2437	12.90	
		2462	12.90	
802.11g	6 Mbps	2412	16.50	
		2437	16.60	
		2462	16.70	
802.11n (HT20)	MCS0	2412	17.70	
		2437	17.70	
		2462	17.70	
<b>Minimum Measured Value</b>			12.90	

The Minimum Value as below showed:

**Wi-Fi 802.11 b mode, 1 Mbps**

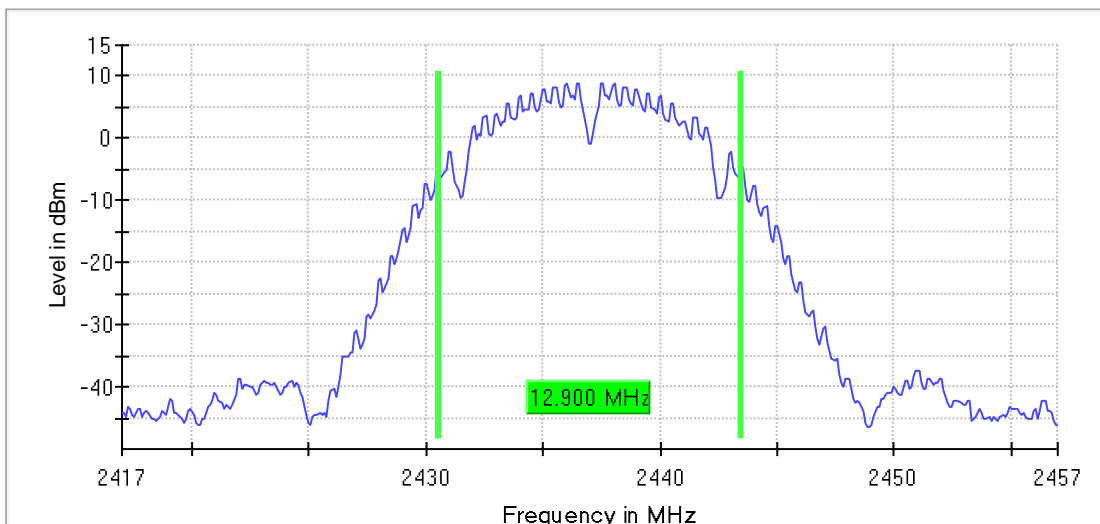
Low Channel  
 RBW=300KHz, VBW=1MHz

99 % Bandwidth

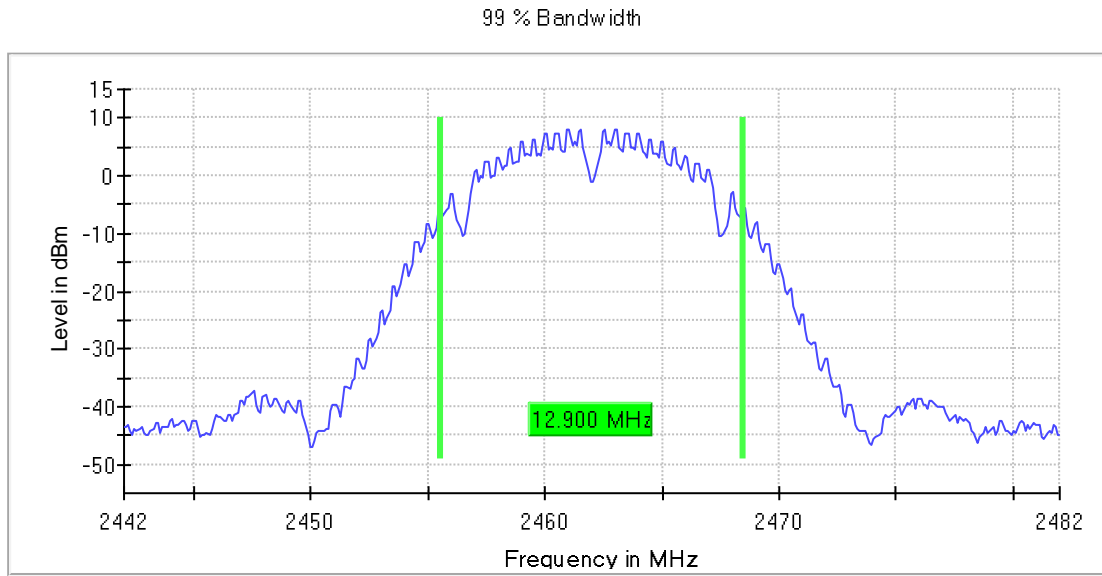


Middle Channel  
 RBW=300KHz, VBW=1MHz

99 % Bandwidth



High Channel  
RBW=300KHz, VBW=1MHz



### 5.1.5 6dB Bandwidth

**RESULT:**
**Pass**
**Test Specification**

Test standard : FCC Part 15.247(a)(2)  
                   : RSS-247 Clause 5.2(a)  
 Basic standard : ANSI C63.10: 2013  
 Limits : > 500 KHz  
 Kind of test site : Shielded Room

**Test Setup**

Date of testing : 02.06.2021  
 Input voltage : DC 5V  
 Operation mode : A  
 Test channel : Low / Middle / High  
 Ambient temperature : 25 °C  
 Relative humidity : 56 %  
 Atmospheric pressure : 101 kPa

For details refer to following test result.

**Table 8: Test Result of 6dB Bandwidth**

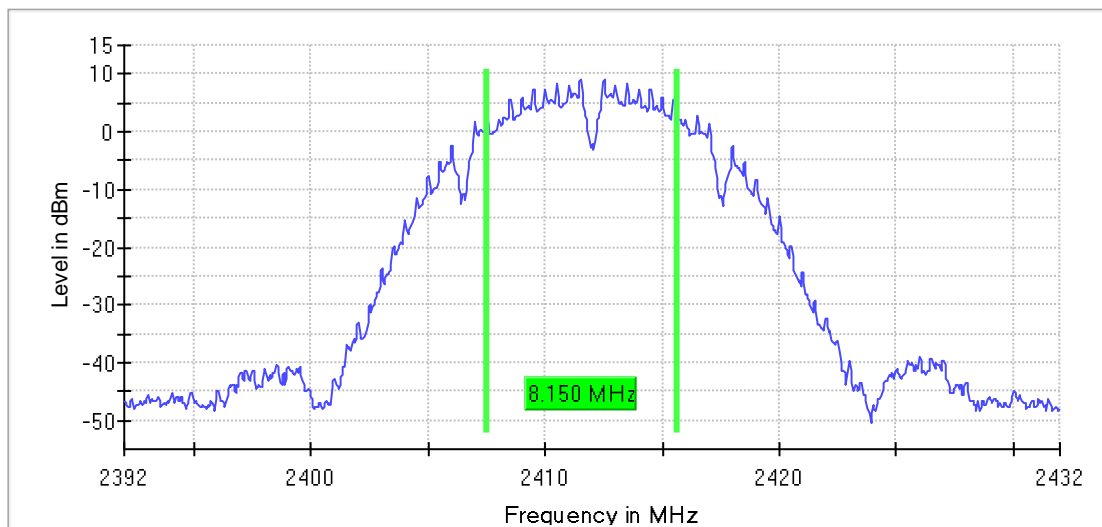
Test Mode	Data Rate	Frequency (MHz)	-6dB Bandwidth (MHz)	Limit (kHz)
802.11b	1 Mbps	2412	8.15	> 500
		2437	8.65	
		2462	9.15	
802.11g	6 Mbps	2412	16.40	
		2437	16.45	
		2462	16.45	
802.11n (HT20)	MCS0	2412	17.65	
		2437	17.65	
		2462	17.50	
<b>Minimum Measured Value</b>			8.15	

The Minimum Value as below showed:

**Wi-Fi 802.11 b mode, 1 Mbps**

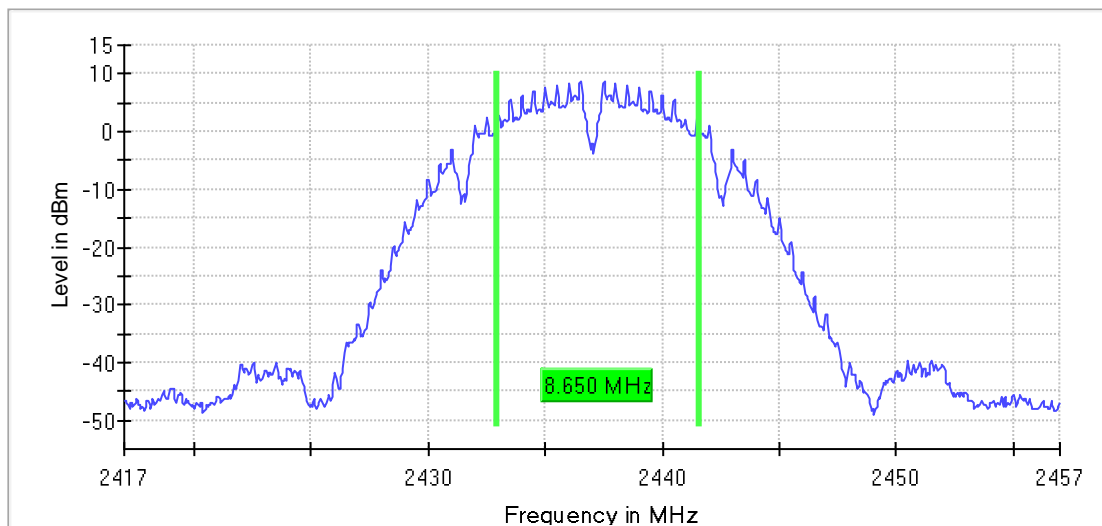
Low Channel  
 RBW=100KHz, VBW=300KHz

6 dB Bandwidth



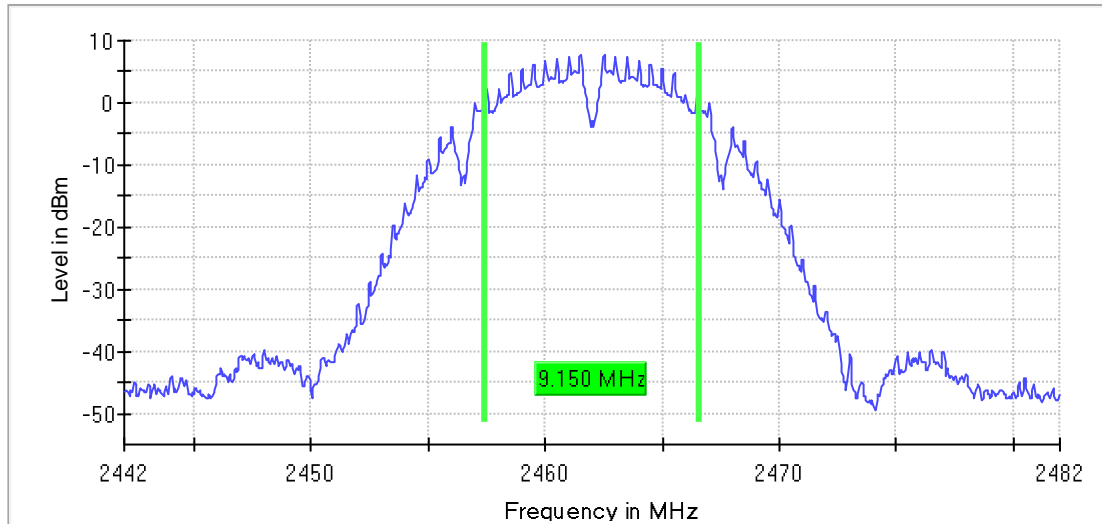
Middle Channel  
 RBW=100KHz, VBW=300KHz

6 dB Bandwidth



High Channel  
RBW=100KHz, VBW=300KHz

6 dB Bandwidth



### 5.1.6 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

**RESULT:****Pass****Test Specification**

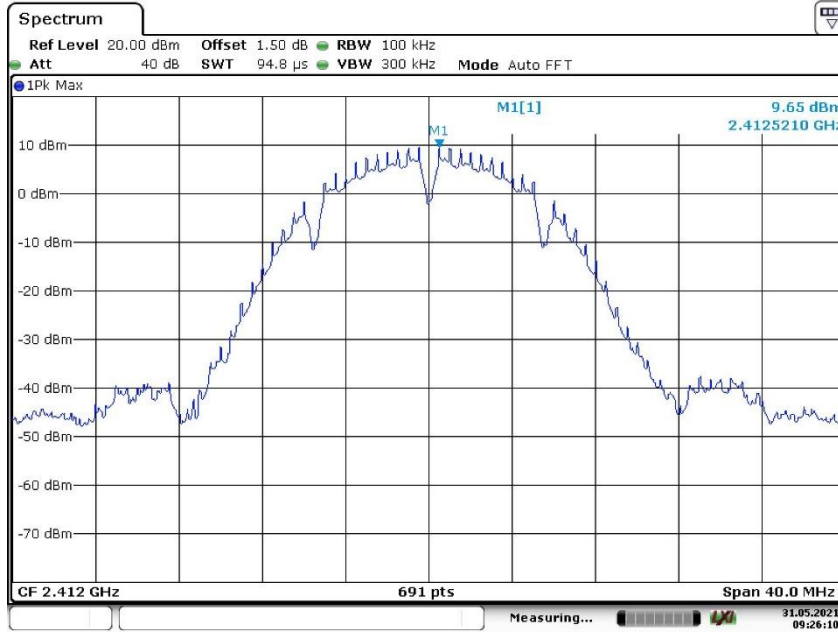
Test standard	: FCC Part 15.247(d) : RSS-247 Clause 5.5
Basic standard	: ANSI C63.10: 2013
Limits	: 20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power); In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site	: Shielded Room

**Test Setup**

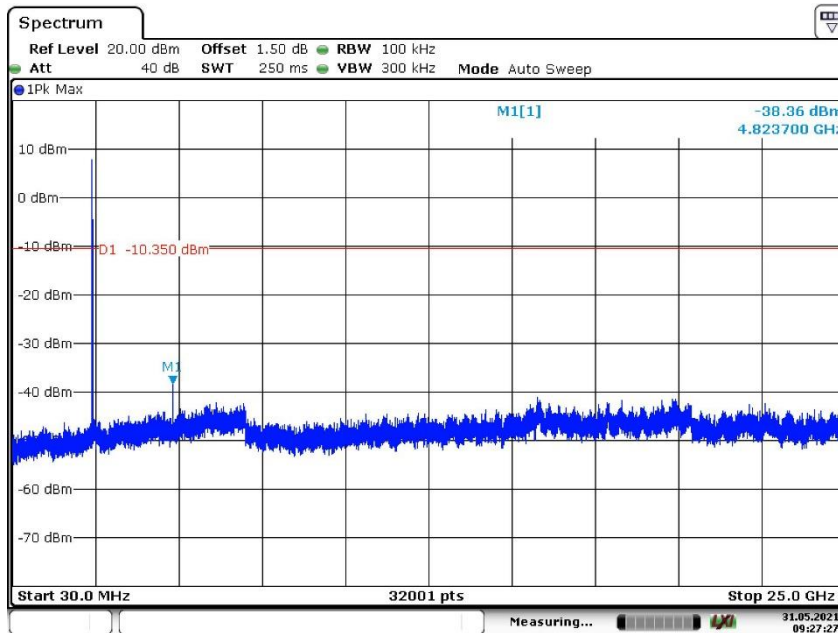
Date of testing	: 31.05.2021
Input voltage	: DC 5V
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 25 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101 kPa

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to test plots, and compliance is achieved as well.

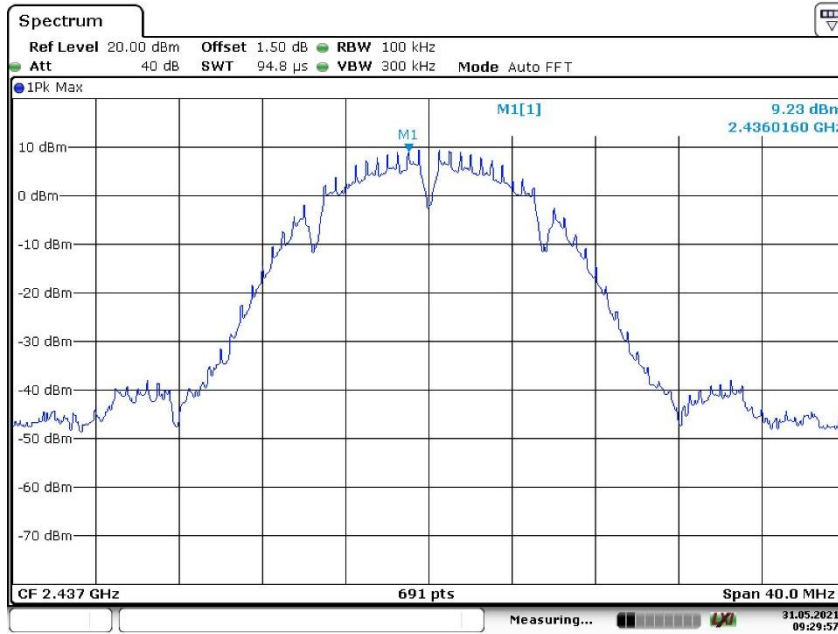


**Wi-Fi 802.11 b mode, 1 Mbps**  
*Low Channel*


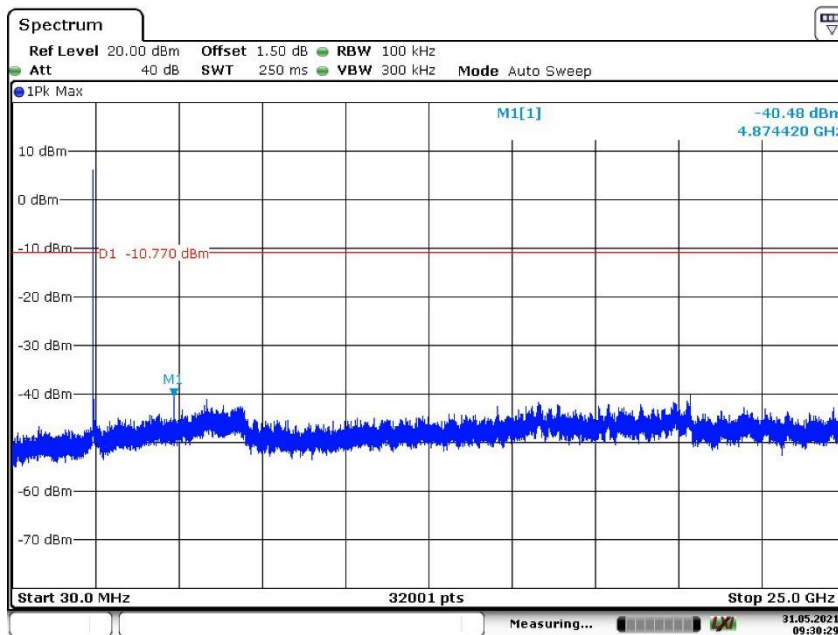
Date: 31.MAY.2021 09:26:10



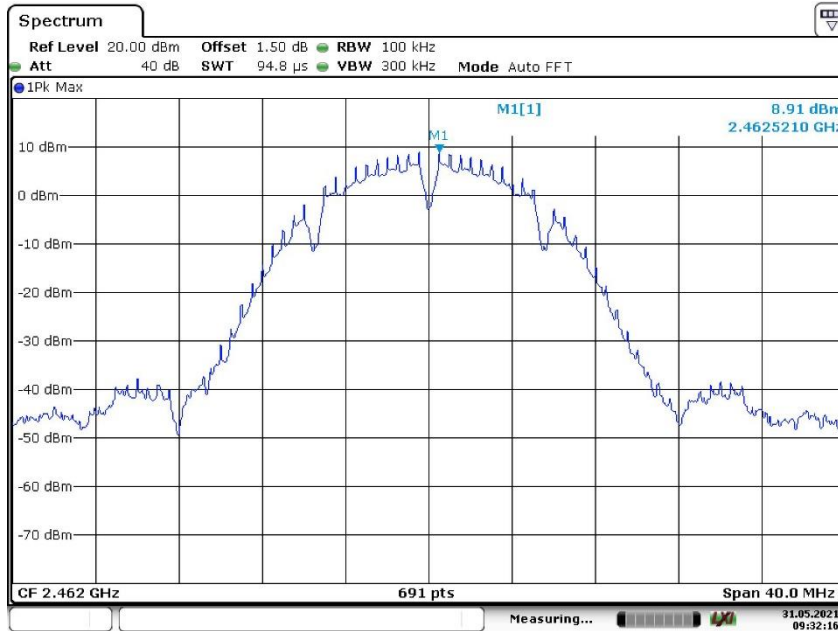
Date: 31.MAY.2021 09:27:27

*Middle Channel*


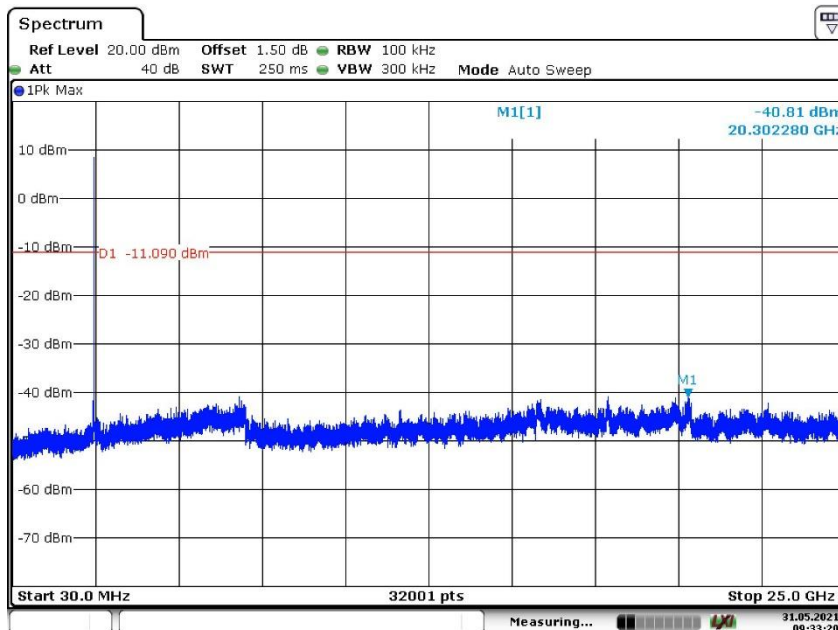
Date: 31.MAY.2021 09:29:57



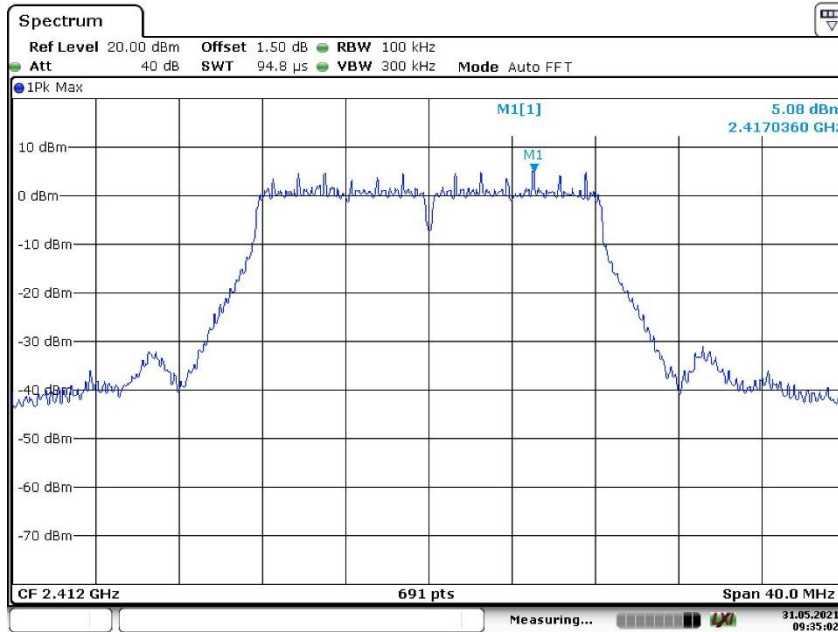
Date: 31.MAY.2021 09:30:29

*High Channel*


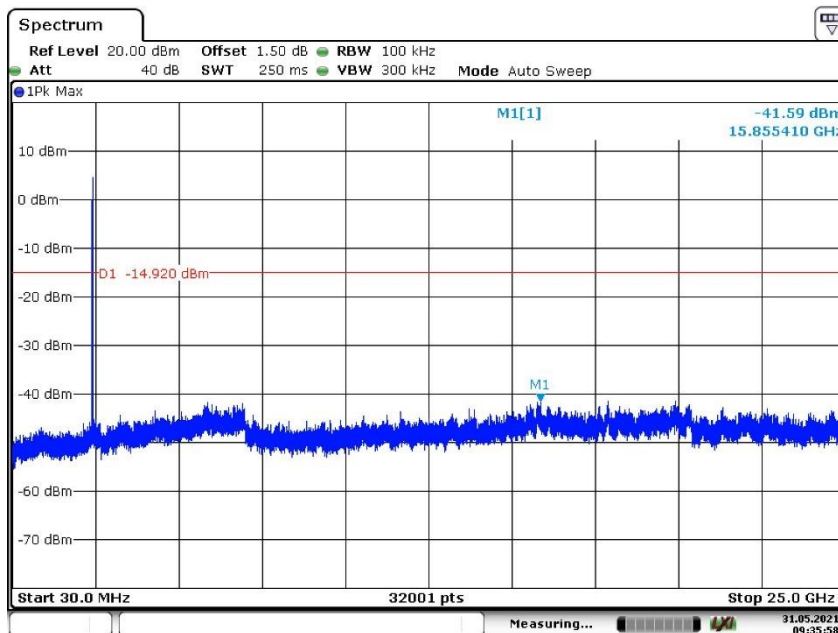
Date: 31.MAY.2021 09:32:15



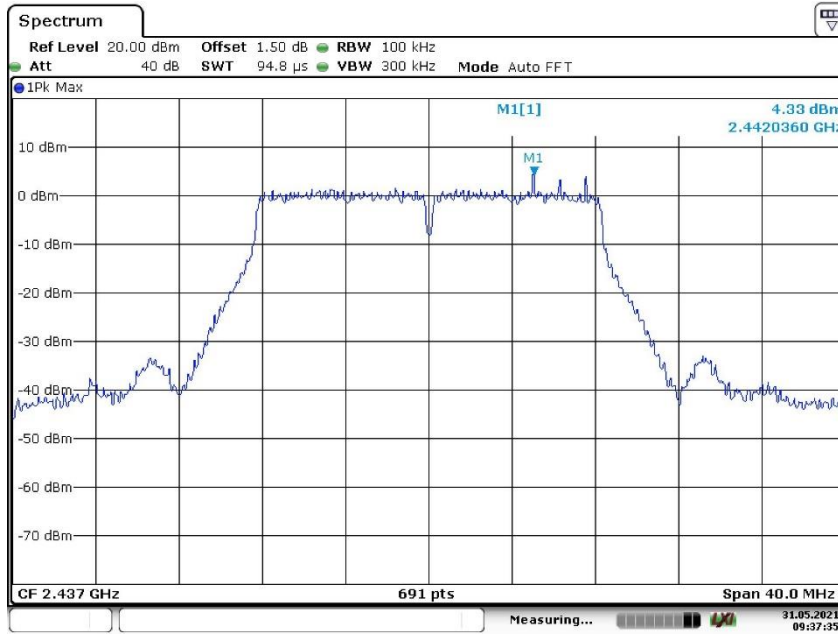
Date: 31.MAY.2021 09:33:20

**Wi-Fi 802.11 g mode, 6 Mbps**  
*Low Channel*


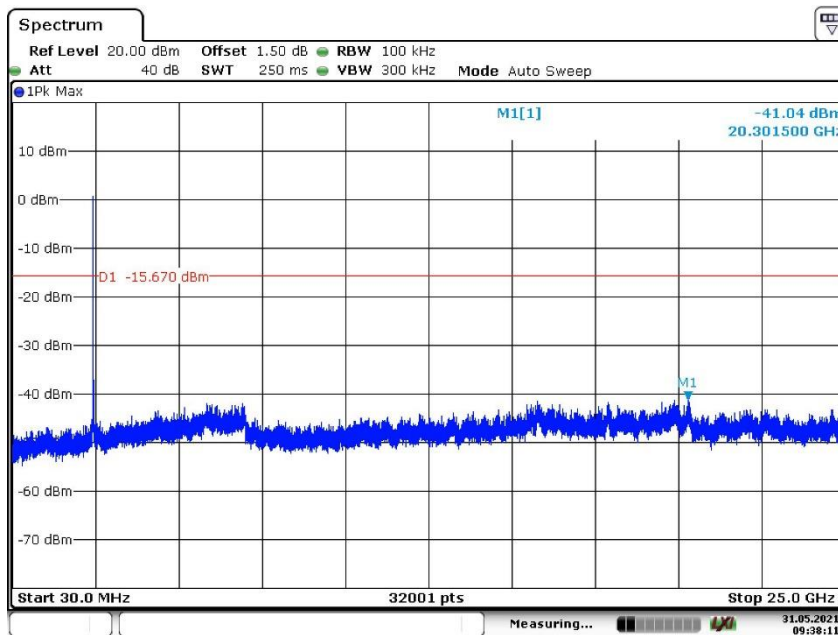
Date: 31.MAY.2021 09:35:02



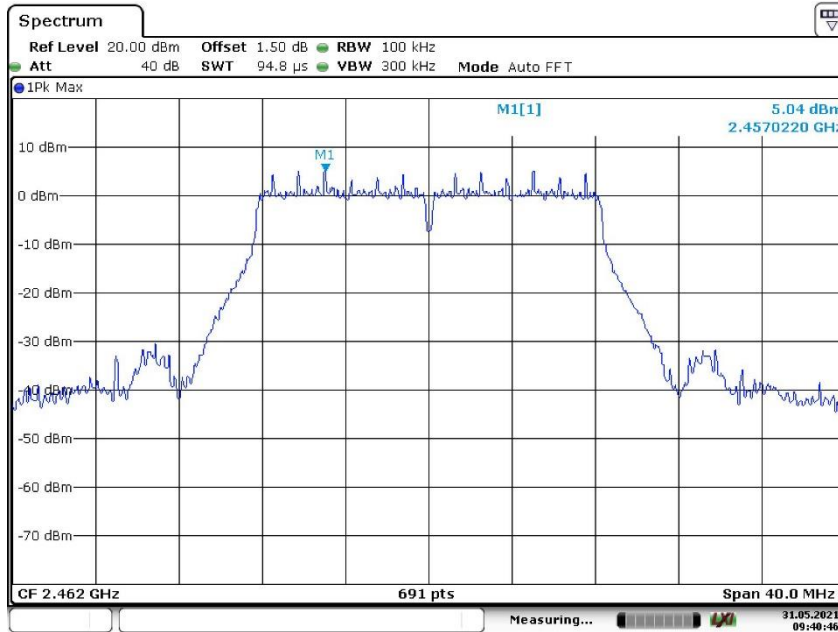
Date: 31.MAY.2021 09:35:58

*Middle Channel*


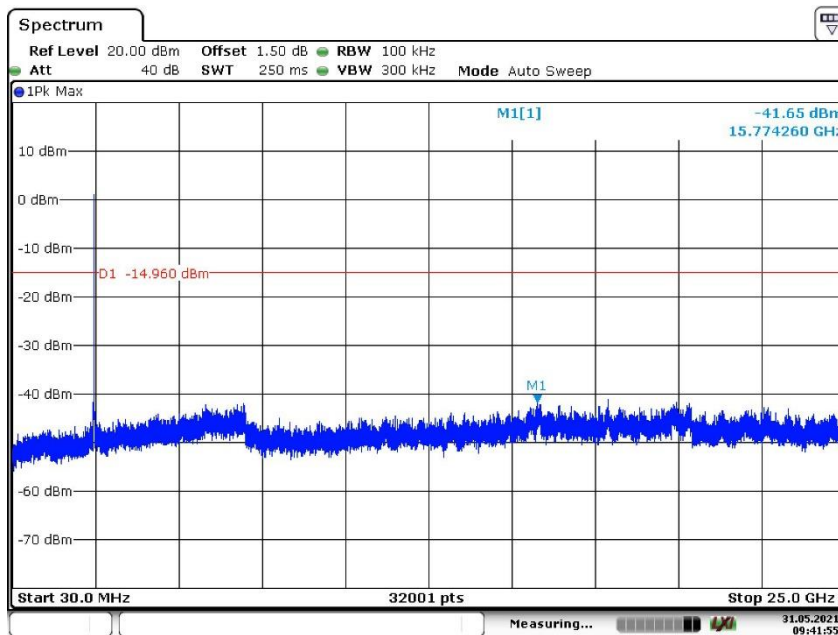
Date: 31.MAY.2021 09:37:35



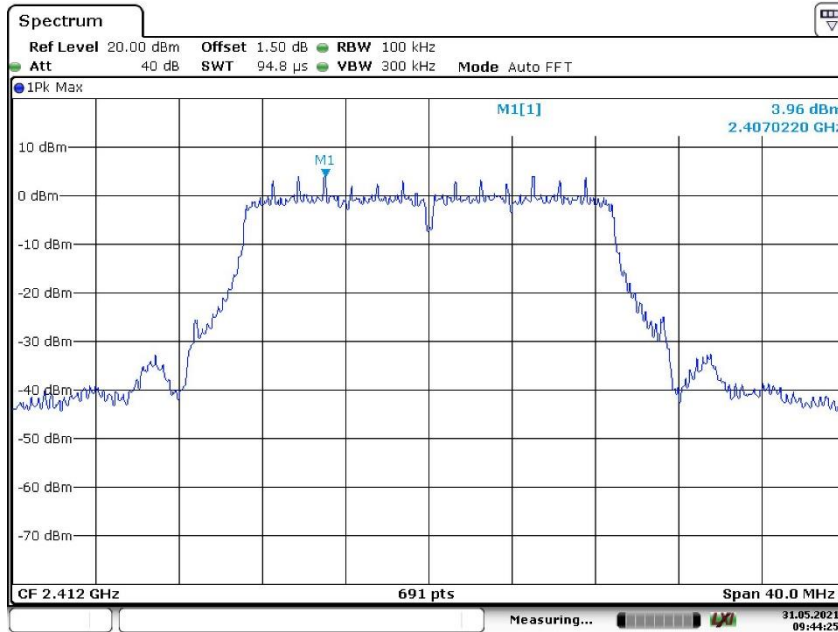
Date: 31.MAY.2021 09:38:11

*High Channel*


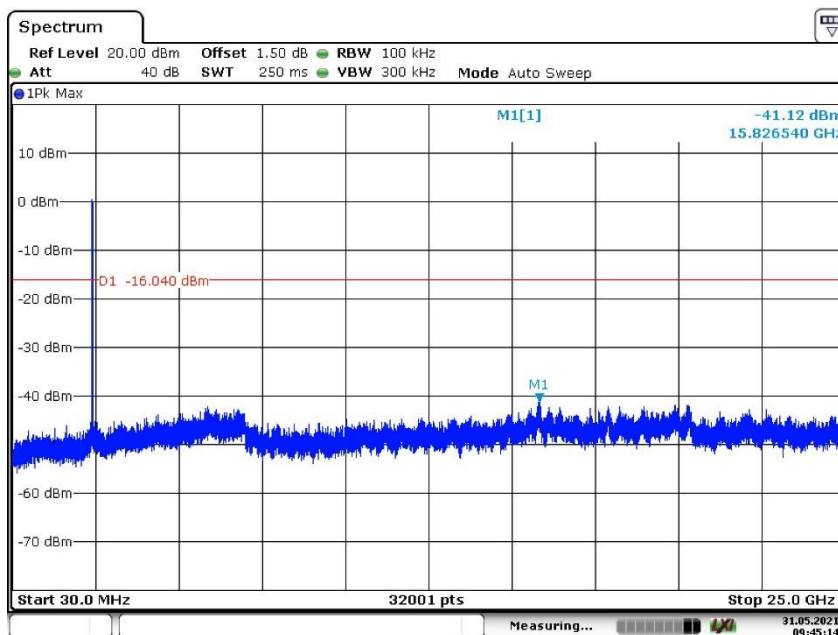
Date: 31.MAY.2021 09:40:46



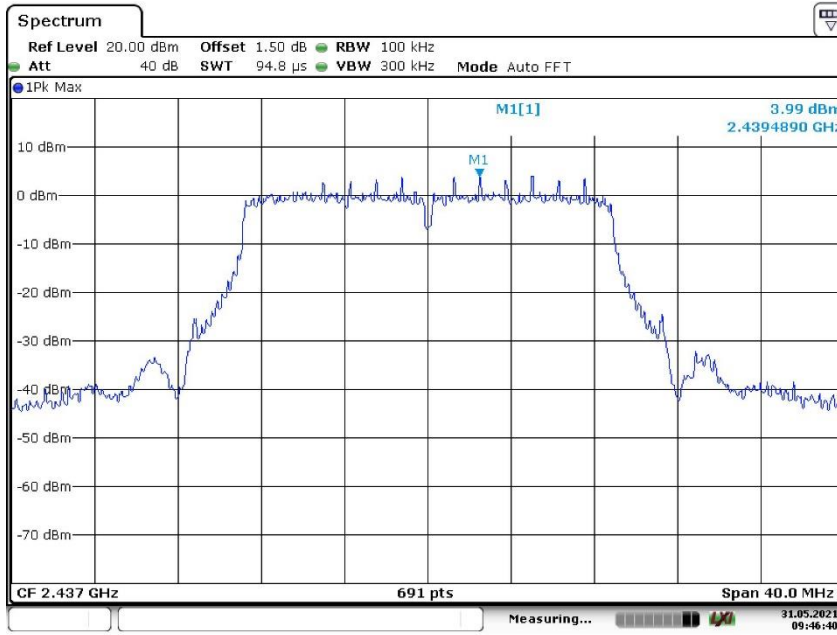
Date: 31.MAY.2021 09:41:55

**Wi-Fi 802.11 n(HT20) mode, MCS0**  
*Low Channel*


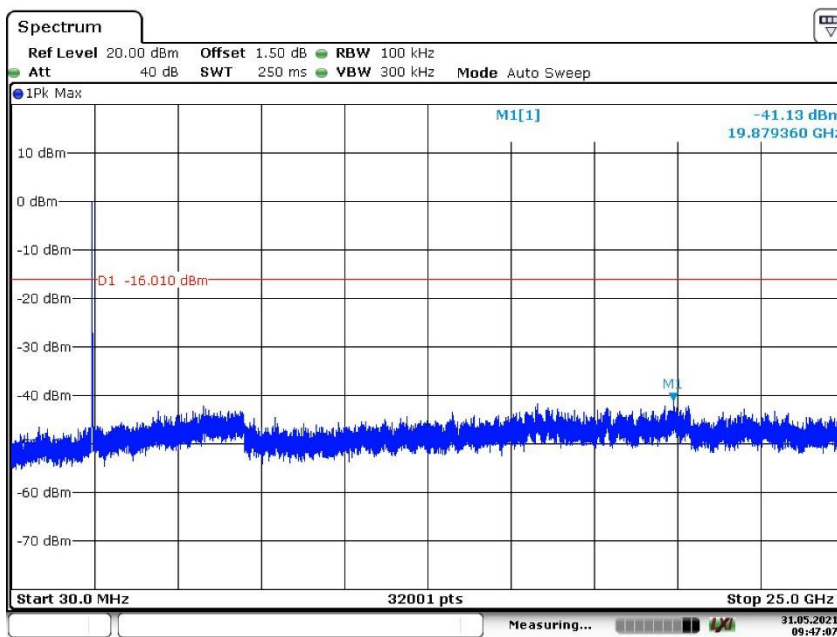
Date: 31.MAY.2021 09:44:25



Date: 31.MAY.2021 09:45:14

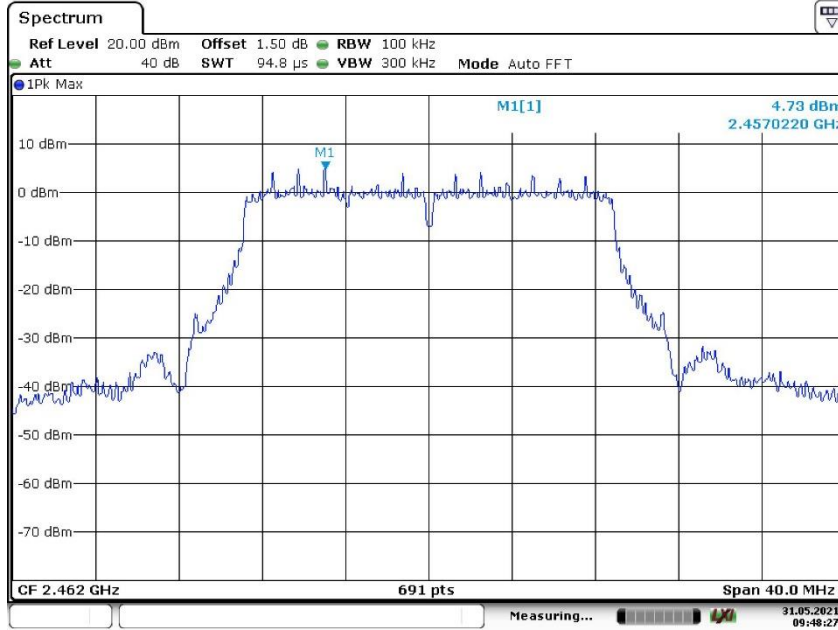
*Middle Channel*


Date: 31.MAY.2021 09:46:40

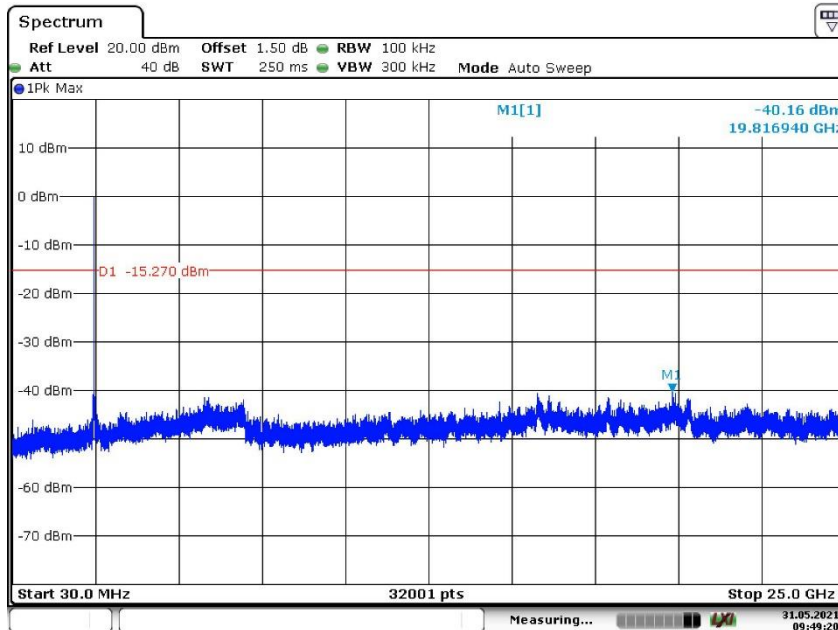


Date: 31.MAY.2021 09:47:07

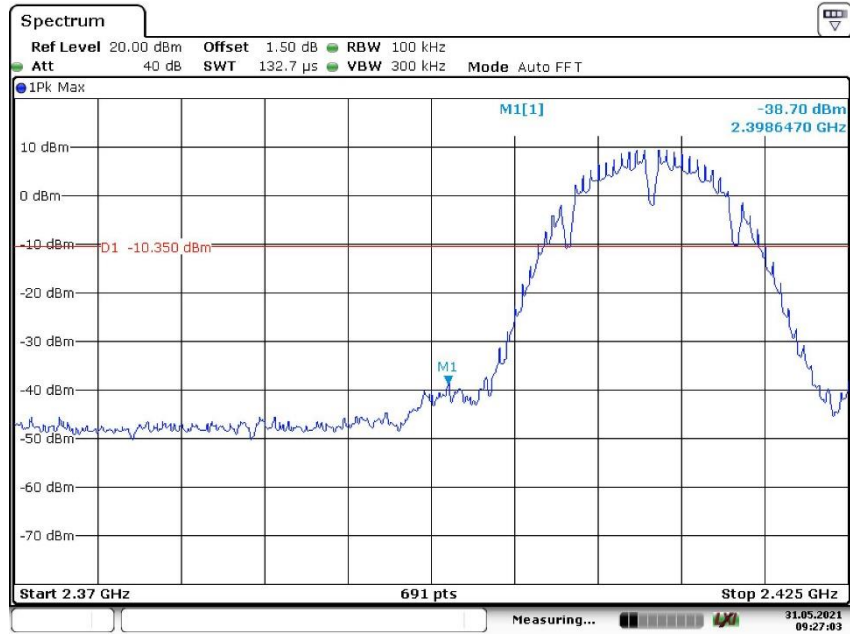


*High Channel*


Date: 31.MAY.2021 09:48:27



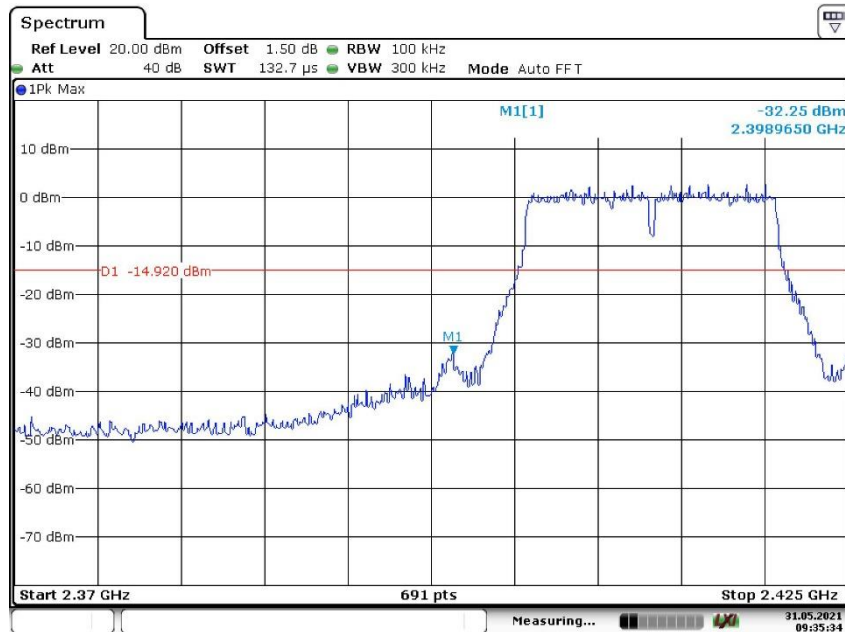
Date: 31.MAY.2021 09:49:20

**Wi-Fi 802.11 b mode, Band Edge**  
*Low Channel*


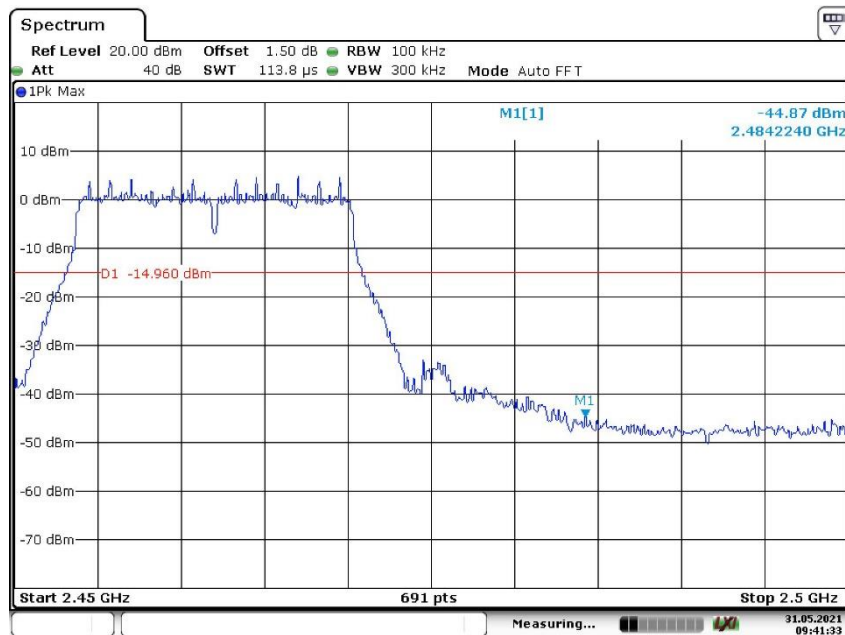
Date: 31.MAY.2021 09:27:03

*High Channel*

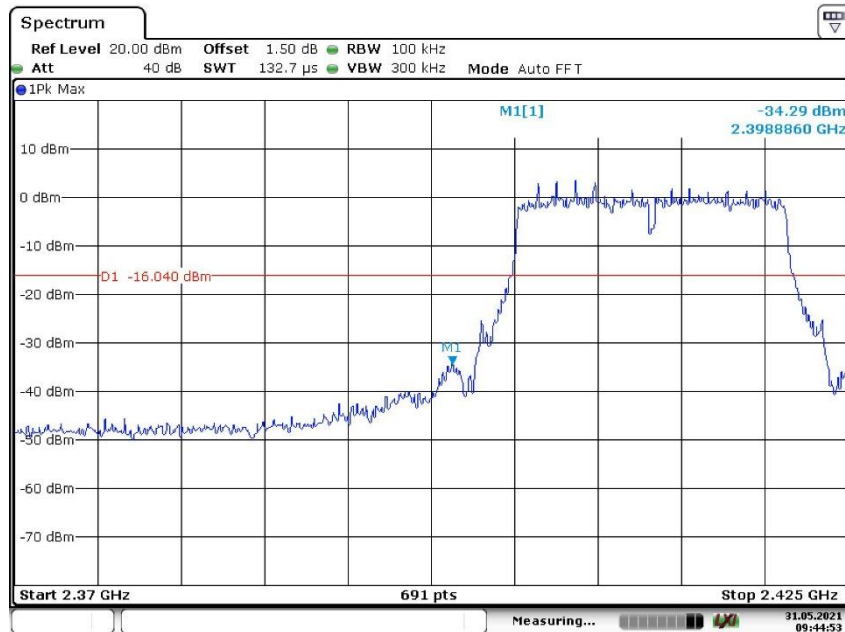

Date: 31.MAY.2021 09:32:52

**Wi-Fi 802.11 g mode, Band Edge**  
*Low Channel*


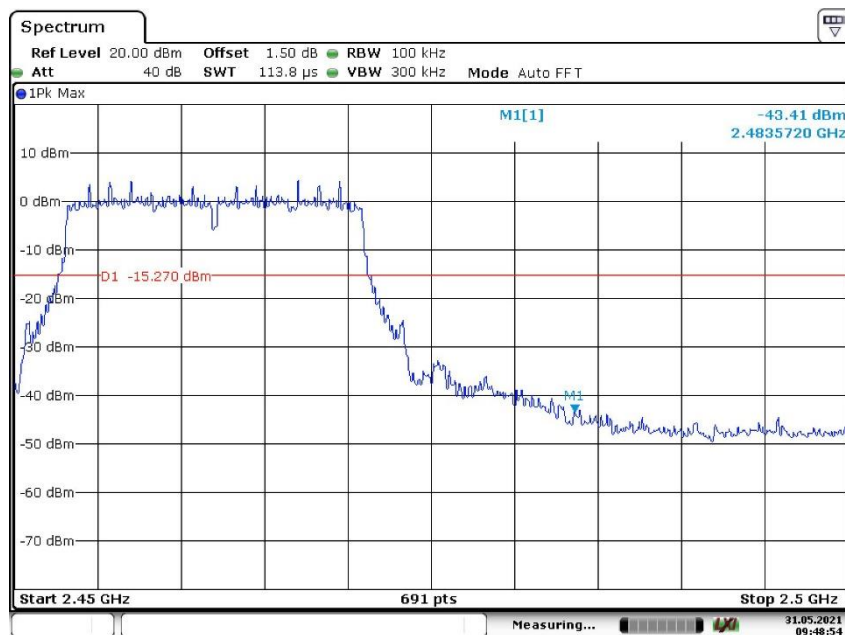
Date: 31.MAY.2021 09:35:34

*High Channel*


Date: 31.MAY.2021 09:41:33

**Wi-Fi 802.11 n(HT20) mode, Band Edge**  
*Low Channel*


Date: 31.MAY.2021 09:44:53

*High Channel*


Date: 31.MAY.2021 09:48:55

## 5.1.7 Radiated Spurious Emission

**RESULT:****Pass****Test Specification**

Test standard	:	FCC Part 15.247(d) & FCC Part 15.205 RSS-247 Clause 3.3 & 5.5
Basic standard	:	ANSI C63.10: 2013
Limits	:	Refer to 15.209(a) of FCC part 15.247(d) RSS-Gen Table 4 & Table 5
Kind of test site	:	3m Semi-anechoic Chamber

**Test Setup**

Date of testing	:	28.05.2021 ~ 31.05.2021
Input voltage	:	DC 5V
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	22°C
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

**Remark:**

Testing was carried out within frequency range 9 kHz to the tenth harmonics. The measurement results below 30MHz and above 18GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported. Only the worst case spurious emissions configuration of the each mode were reported.





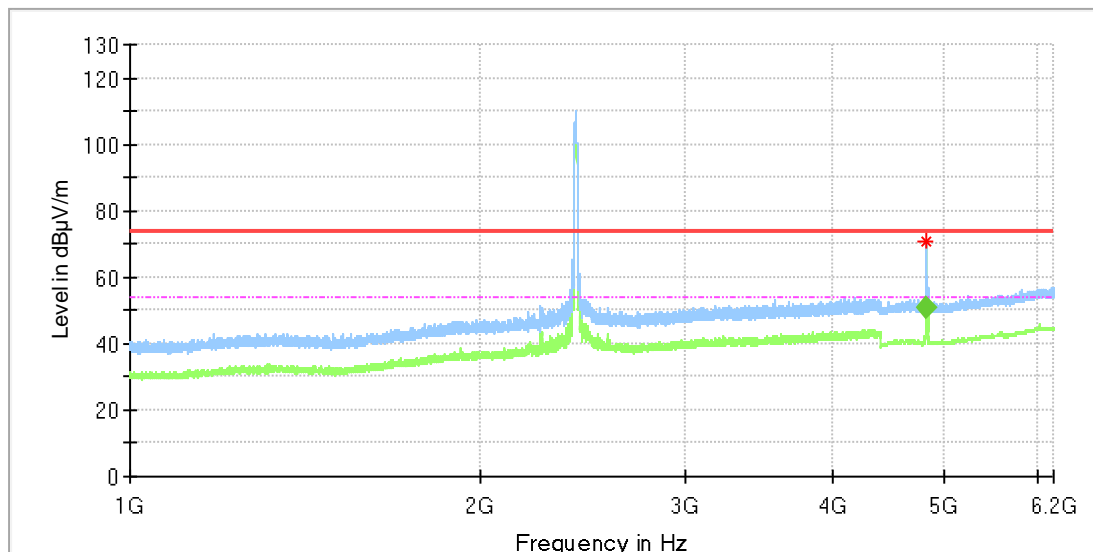






**1GHz - 18GHz**
**EUT Information**

EUT Name:	ColorFluxLightBulb
Model:	L4
Test Mode:	WIFI 2.4G_11b_Ch1
Test Voltage::	DC 5V from USB
Remark:	Temp 24 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin


**Critical Freqs**

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4824.000000	70.71	---	74.00	3.29	100.0	H	252.0	11.8

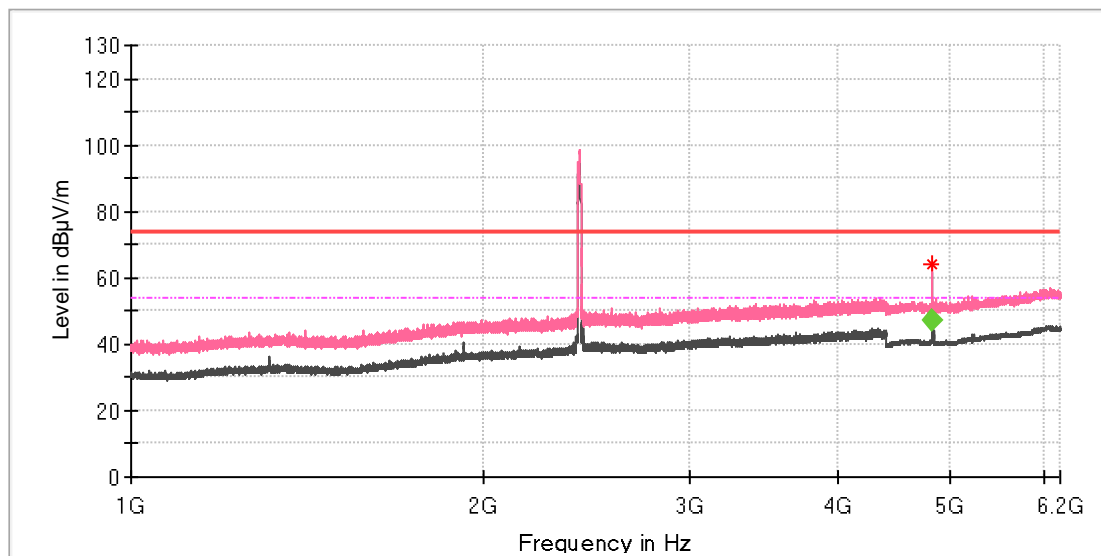
**Final Result**

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4824.186111	51.03	54.00	2.97	100.0	H	250.0	11.8



### EUT Information

EUT Name:	ColorFluxLightBulb
Model:	L4
Test Mode:	WIFI 2.4G_11b_Ch1
Test Voltage::	DC 5V from USB
Remark:	Temp 24 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



### Critical\_Freqs

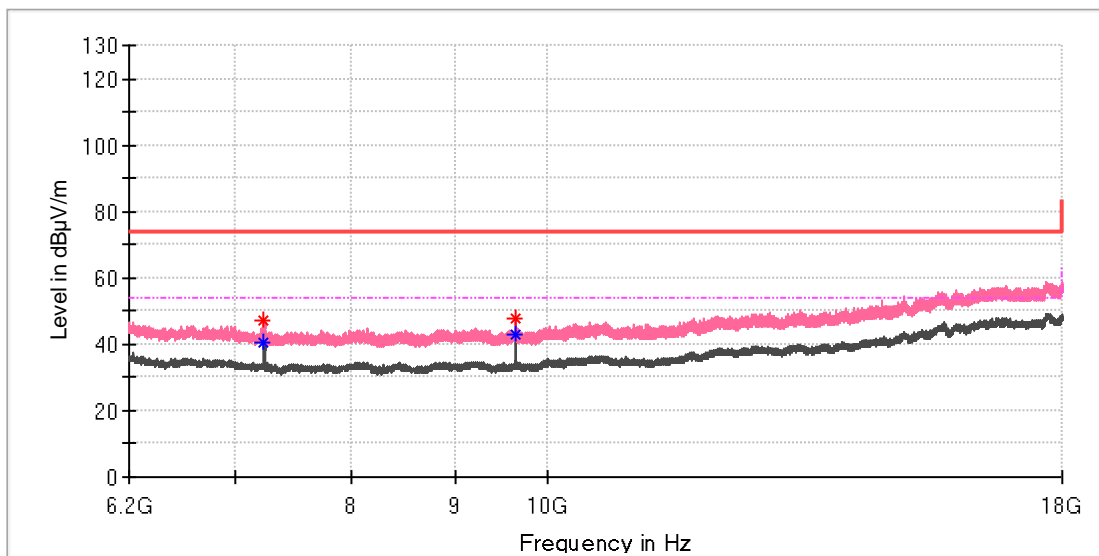
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4824.000000	64.27	---	74.00	9.73	100.0	V	130.0	11.8

### Final\_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4823.763889	47.00	54.00	7.00	105.0	V	128.0	11.8

## EUT Information

EUT Name:	ColorFluxLightBulb
Model:	L4
Test Mode:	WIFI 2.4G_11b_Ch1
Test Voltage::	DC 5V from USB
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



## Critical\_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7234.958333	---	40.53	54.00	13.47	100.0	V	278.0	8.6
7234.958333	46.99	---	74.00	27.01	100.0	V	278.0	8.6
9647.566667	47.54	---	74.00	26.46	100.0	V	12.0	10.4
9648.058333	---	43.22	54.00	10.78	100.0	V	12.0	10.4

## Final\_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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