TEST REPORT

Applicant:	Shenzhen Golden Vision Technology Development Co., Ltd
Address of Applicant:	No.6 Bao Fu Road, Bao Lai industrial Park, Shang Mu Gu Villiage, Pinghu Street, Longgang District, Shenzhen City, Guangdong Province, 518000, China
Manufacturer:	Shenzhen Golden Vision Technology Development Co., Ltd
Address of Manufacturer:	No.6 Bao Fu Road, Bao Lai industrial Park, Shang Mu Gu Villiage, Pinghu Street, Longgang District, Shenzhen City, Guangdong Province, 518000, China

Equipment Under Test (EUT)

Product Name:	Smart Camera
Model No.:	S5
Add. Model No.:	S1, S2, S3, S4, S6, S7, S8, S9, S10, X1, X2, X3, X4, R5, R6, R7, R8, R9, K7, K8, K9, K10, Z1, Z2, Z3, Z4, Z5, Z6, XC100, IPC007A, IPC007D, GC1, GC1Pro, IPC200
Trade Mark:	N/A
FCC ID:	2APD7-S5
Applicable standards:	FCC CFR Title 47 Part 15 Subpart C Section 15.247
Date of sample receipt:	2022-04-13
Date of Test:	2022-04-14 to 2022-04-20
Date of report issued:	2022-04-26
Test Result :	PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Robinson Luo
Laboratory Manager

2 Version

Version No.	Date	Description
00	*2022-04-26*	*Original*

Prepared By: ***Date:*** *2022-04-26*

Project Engineer

Check By: ***Date:*** *2022-04-26*

Reviewer

3 Contents

4 Test Summary

Test Item	Section	Result
Antenna requirement	FCC part 15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	FCC part 15.207	Pass
Conducted Peak Output Power	FCC part 15.247 (b)(3)	Pass
Channel Bandwidth & 99% OCB	FCC part 15.247 (a)(2)	Pass
Power Spectral Density	FCC part 15.247 (e)	Pass
Band Edge	FCC part 15.247(d)	Pass
Spurious Emission	FCC part 15.205/15.209	Pass

Remark: Test according to ANSI C63.10:2013 and RSS-Gen

Pass: The EUT complies with the essential requirements in the standard.

Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radio Frequency	/	1×10^{-7}	(1)
Duty Cycle	/	0.37%	(1)
Occupied Bandwidth	/	2.8dB	(1)
RF Conducted Power	/	0.75dB	(1)
RF Power Density	/	3dB	(1)
Conducted Spurious Emissions	/	2.58dB	(1)
Radiated Emission	9kHz-30MHz	3.1dB	(1)
	30MHz-200MHz	3.8039dB	(1)
	200MHz-1GHz	3.9679dB	(1)
	1GHz-18GHz	4.29dB	(1)
	18GHz-40GHz	3.30dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	3.44dB	(1)
Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.			

5 General Information

5.1 General Description of EUT

	Product Name:	Smart Camera
	Model No.:	S5
	Add. Model No.:	S1, S2, S3, S4, S6, S7, S8, S9, S10, X1, X2, X3, X4, R5, R6, R7, R8, R9, K7, K8, K9, K10, Z1, Z2, Z3, Z4, Z5, Z6, XC100, IPC007A, IPC007D, GC1, GC1Pro, IPC200
	Serial No.:	N/A
	Hardware Version:	1.0
	Software Version:	1.0
	Test sample(s) ID:	GTSL202204000231-1
	Sample(s) Status:	Engineer sample
	Sample(s) Status	Engineer sample
	Channel numbers:	802.11b/802.11g /802.11n(HT20): 11
	Channel separation:	5MHz
	Modulation technology:	802.11b: Direct Sequence Spread Spectrum (DSSS) 802.11g/802.11n(H20): 11 Orthogonal Frequency Division Multiplexing (OFDM)
	Antenna Type:	PCB Antenna
	Antenna gain:	3.0dBi
	Power supply:	5Vdc 1A
Note: Models S5 and models S1, S2, S3, S4, S6, S7, S8, S9, S10, X1, X2, X3, X4, R5, R6, R7, R8, R9, K7, K8, K9, K10, Z1, Z2, Z3, Z4, Z5, Z6, XC100, IPC007A, IPC007D, GC1, GC1Pro, IPC200 the difference is only to distinguish different sales areas of different customers, the model name is different, and the products are exactly the same.		

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Test channel	Frequency (MHz)
	802.11b/802.11g/802.11n(HT20)
Lowest channel	2412MHz
Middle channel	2437MHz
Highest channel	2462MHz

5.2 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode

Remark: During the test, the dutycycle >98%, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Pre-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	802.11b	802.11g	802.11n(HT20)
Data rate	1Mbps	6Mbps	6.5Mbps

5.3 Description of Support Units

None.

5.4 Deviation from Standards

None.

5.5 Abnormalities from Standard Conditions

None.

5.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC—Registration No.: 381383**

Designation Number: CN5029

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files.

● **IC —Registration No.: 9079A**

CAB identifier: CN0091

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing

● **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

5.7 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.
Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102
Tel: 0755-27798480
Fax: 0755-27798960

5.8 Additional Instructions

Test Software	Special test command provided by manufacturer
Power level setup	Default

6 Test Instruments list

Radiated Emission:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July. 02 2020	July. 01 2025
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June. 24 2021	June. 23 2022
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June. 24 2021	June. 23 2022
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	June. 24 2021	June. 23 2022
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June. 24 2021	June. 23 2022
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	June. 24 2021	June. 23 2022
9	Coaxial Cable	GTS	N/A	GTS211	June. 24 2021	June. 23 2022
10	Coaxial cable	GTS	N/A	GTS210	June. 24 2021	June. 23 2022
11	Coaxial Cable	GTS	N/A	GTS212	June. 24 2021	June. 23 2022
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June. 24 2021	June. 23 2022
13	Amplifier(2GHz-20GHz)	HP	84722A	GTS206	June. 24 2021	June. 23 2022
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June. 24 2021	June. 23 2022
15	Band filter	Amindeon	82346	GTS219	June. 24 2021	June. 23 2022
16	Power Meter	Anritsu	ML2495A	GTS540	June. 24 2021	June. 23 2022
17	Power Sensor	Anritsu	MA2411B	GTS541	June. 24 2021	June. 23 2022
18	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	June. 24 2021	June. 23 2022
19	Splitter	Agilent	11636B	GTS237	June. 24 2021	June. 23 2022
20	Loop Antenna	ZHINAN	ZN30900A	GTS534	June. 24 2021	June. 23 2022
21	Breitband hornantenne	SCHWARZBECK	BBHA 9170	GTS579	Oct. 17 2021	Oct. 16 2022
22	Amplifier	TDK	PA-02-02	GTS574	Oct. 17 2021	Oct. 16 2022
23	Amplifier	TDK	PA-02-03	GTS576	Oct. 17 2021	Oct. 16 2022
24	PSA Series Spectrum Analyzer	Rohde & Schwarz	FSP	GTS578	June. 24 2021	June. 23 2022

RF Conducted Test:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	June. 24 2021	June. 23 2022
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 24 2021	June. 23 2022
3	Spectrum Analyzer	Agilent	E4440A	GTS533	June. 24 2021	June. 23 2022
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	June. 24 2021	June. 23 2022
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	June. 24 2021	June. 23 2022
6	USB RF Power Sensor	DARE	RPR3006W	GTS569	June. 24 2021	June. 23 2022
7	RF Switch Box	Shongyi	RFSW3003328	GTS571	June. 24 2021	June. 23 2022
8	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	June. 24 2021	June. 23 2022

General used equipment:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	Humidity/ Temperature Indicator	KTJ	TA328	GTS243	June. 24 2021	June. 23 2022
2	Barometer	ChangChun	DYM3	GTS255	June. 24 2021	June. 23 2022

7 Test results and Measurement Data

7.1 Antenna requirement

Standard requirement:	FCC Part15 C Section 15.203 /247(c)

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

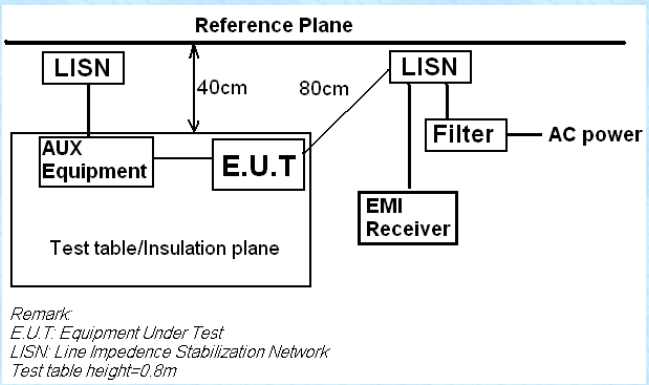
15.247(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

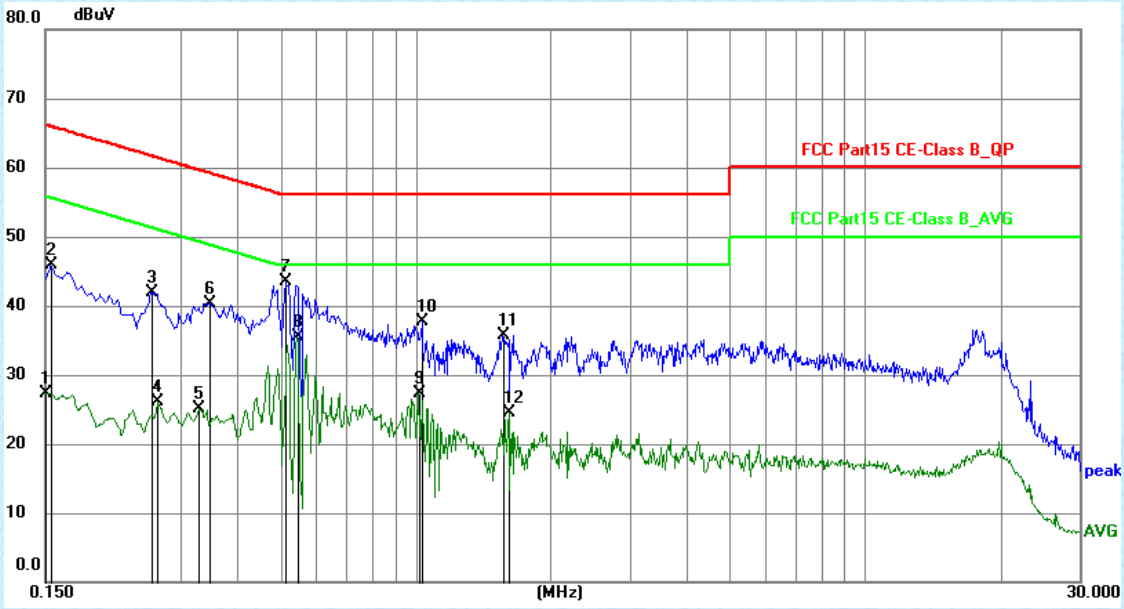
EUT Antenna:

The antennas are PCB antenna, the best case gain of the antennas are 3.0dBi, reference to the appendix III for details

7.2 Conducted Emissions

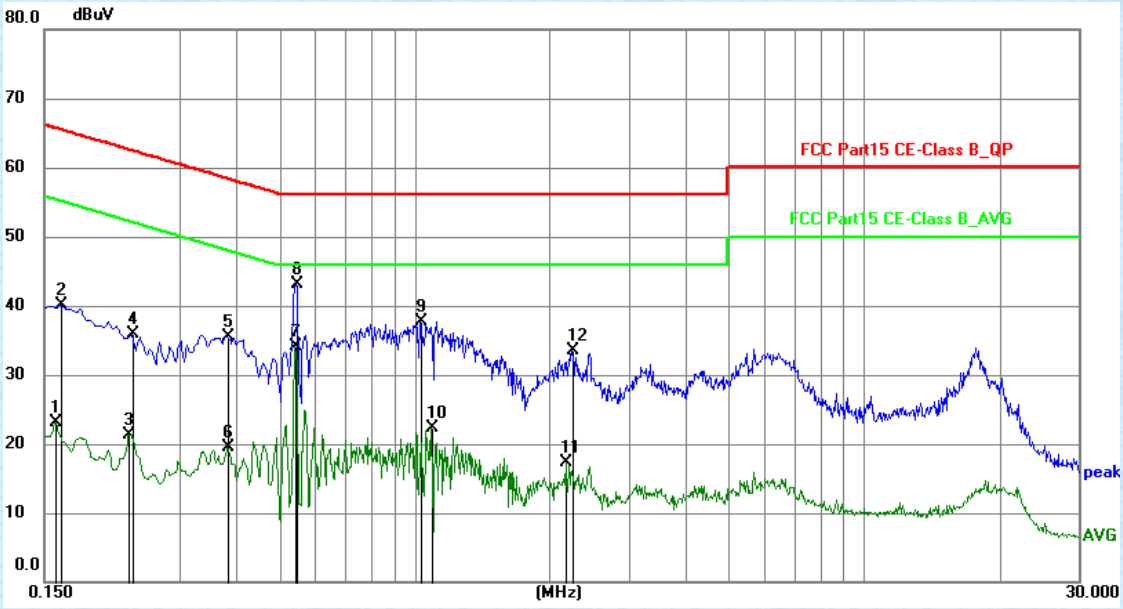
Test Requirement:	FCC Part15 C Section 15.207
Test Method:	ANSI C63.10:2013
Test Frequency Range:	150KHz to 30MHz
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto
Limit:	Frequency range (MHz) / Limit (dBuV): Quasi-peak / Average 0.15-0.5: 66 to 56* / 56 to 46* 0.5-5: 56 / 46 5-30: 60 / 50 * Decreases with the logarithm of the frequency.
Test setup:	 *Remark:* *E.U.T: Equipment Under Test* *LISN: Line Impedence Stabilization Network* *Test table height=0.8m*
Test procedure:	1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test environment:	Temp.: 25 °C / Humid.: 52% / Press.: 1012mbar
Test voltage:	AC 120V, 60Hz
Test results:	Pass

Measurement data
Line:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1500	17.50	9.81	27.31	56.00	-28.69	AVG	P
2	0.1545	36.06	9.80	45.86	65.75	-19.89	QP	P
3	0.2580	32.21	9.74	41.95	61.50	-19.55	QP	P
4	0.2670	16.45	9.74	26.19	51.21	-25.02	AVG	P
5	0.3300	15.30	9.73	25.03	49.45	-24.42	AVG	P
6	0.3483	30.60	9.73	40.33	59.00	-18.67	QP	P
7	0.5144	33.74	9.71	43.45	56.00	-12.55	QP	P
8	0.5460	25.76	9.71	35.47	46.00	-10.53	AVG	P
9	1.0184	17.65	9.64	27.29	46.00	-18.71	AVG	P
10	1.0320	28.16	9.64	37.80	56.00	-18.20	QP	P
11	1.5630	26.05	9.68	35.73	56.00	-20.27	QP	P
12	1.6125	14.82	9.68	24.50	46.00	-21.50	AVG	P

Neutral:

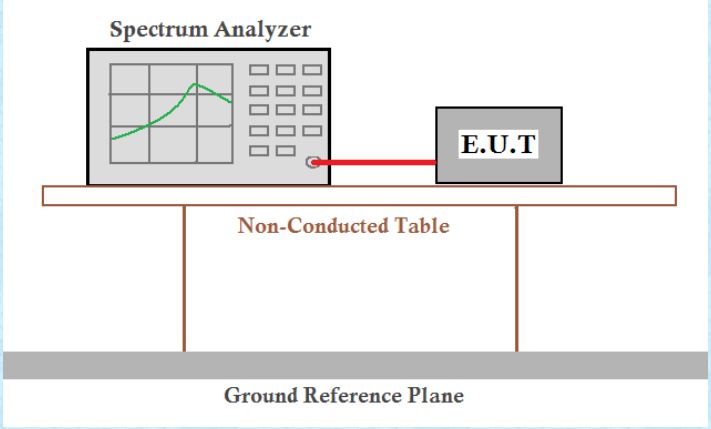


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1590	13.19	9.82	23.01	55.52	-32.51	AVG	P
2	0.1635	30.31	9.81	40.12	65.28	-25.16	QP	P
3	0.2310	11.61	9.76	21.37	52.41	-31.04	AVG	P
4	0.2355	26.22	9.76	35.98	62.25	-26.27	QP	P
5	0.3840	25.87	9.73	35.60	58.19	-22.59	QP	P
6	0.3840	9.82	9.73	19.55	48.19	-28.64	AVG	P
7	0.5415	24.32	9.71	34.03	46.00	-11.97	AVG	P
8	0.5460	33.39	9.71	43.10	56.00	-12.90	QP	P
9	1.0275	28.06	9.64	37.70	56.00	-18.30	QP	P
10	1.0905	12.58	9.65	22.23	46.00	-23.77	AVG	P
11	2.1750	7.64	9.72	17.36	46.00	-28.64	AVG	P
12	2.2425	23.77	9.72	33.49	56.00	-22.51	QP	P

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level =Receiver Read level + LISN Factor + Cable Loss
4. *If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.*

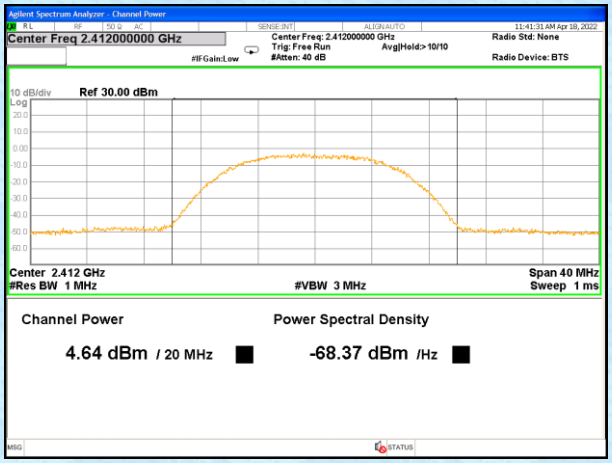
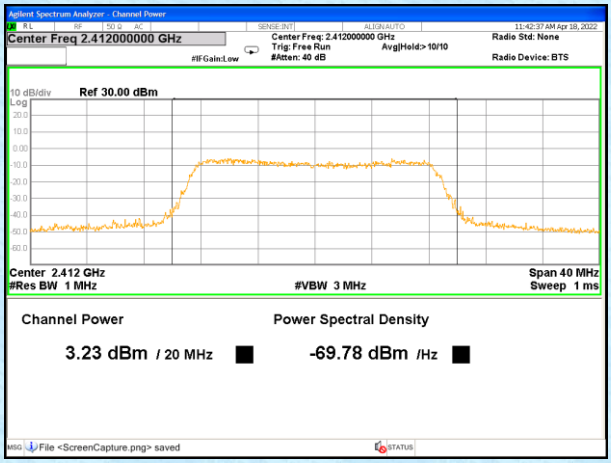
7.3 Conducted Peak Output Power

Test Requirement :	FCC Part15 C Section 15.247 (b)(3)
Test Method :	KDB558074 D01 15.247 Meas Guidance v05r02
Limit:	30dBm
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

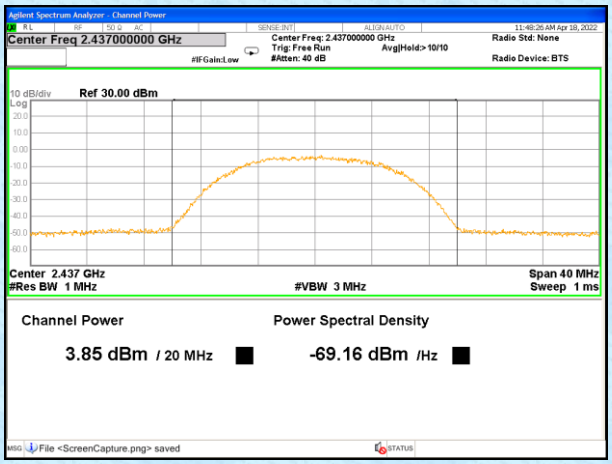
Measurement Data

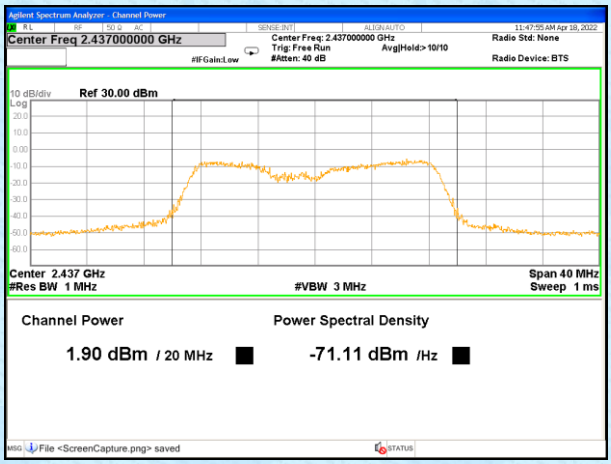
Test CH	Peak Output Power (dBm)			Limit(dBm)	Result
	802.11b	802.11g	802.11n(HT20)		
Lowest	4.64	3.23	2.29	30.00	Pass
Middle	3.85	1.90	0.91		
Highest	2.43	1.90	1.54		

Test plot as follows:

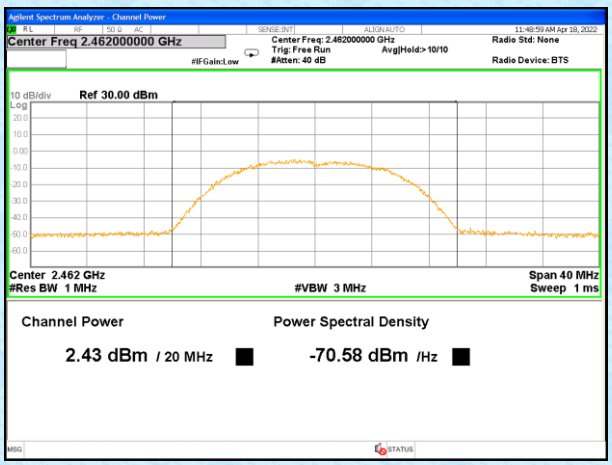
802.11b	802.11g
	

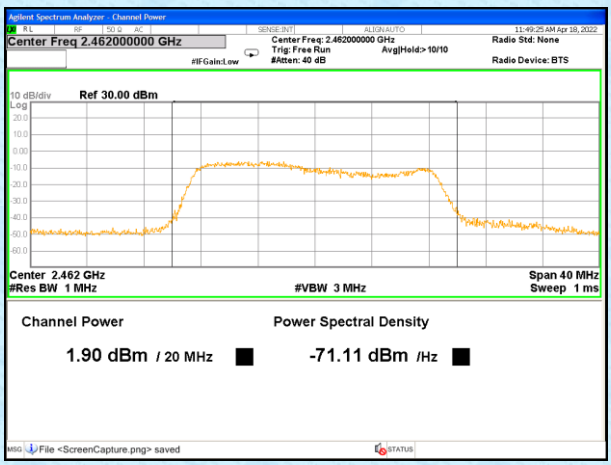
Lowest channel





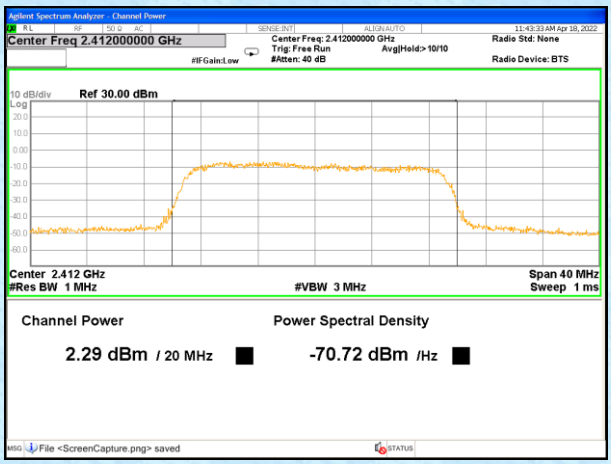
Middle channel



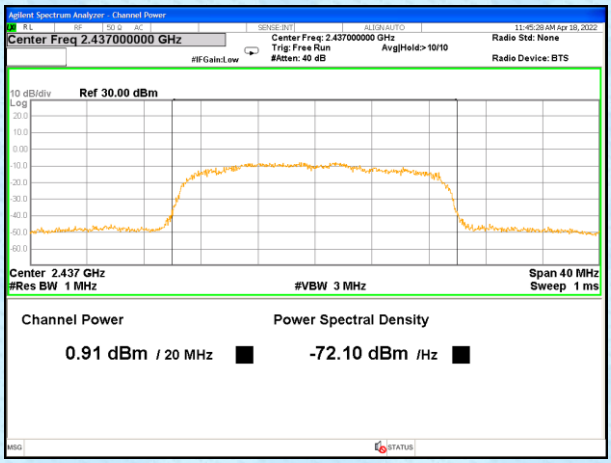


Highest channel

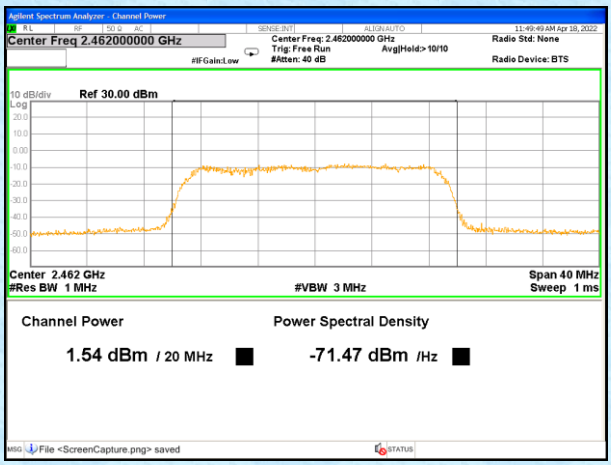
802.11n(HT20)



Lowest channel

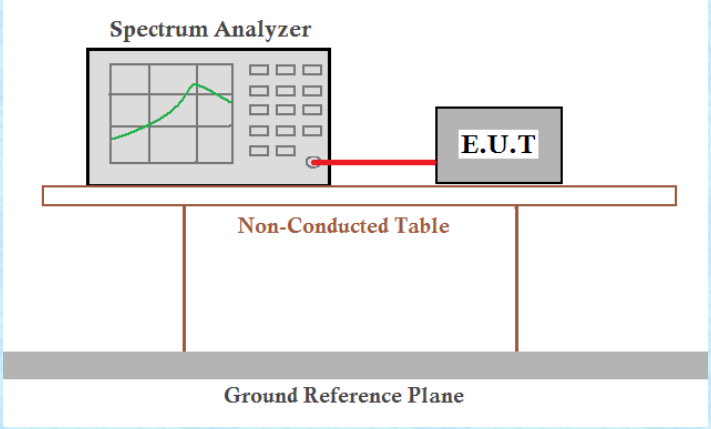


Middle channel



Highest channel

7.4 Channel Bandwidth & 99% Occupy Bandwidth

Test Requirement :	FCC Part15 C Section 15.247 (a)(2)
Test Method :	KDB558074 D01 15.247 Meas Guidance v05r02
Limit:	>500KHz
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

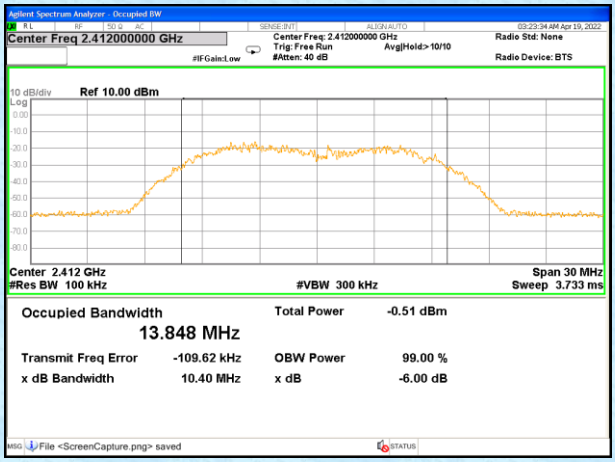
Measurement Data

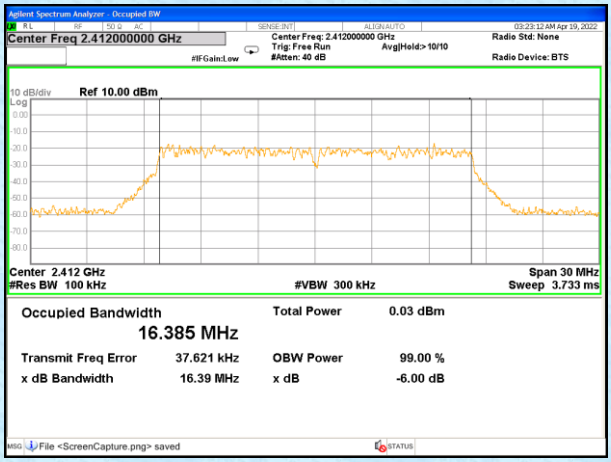
Test CH	Channel Bandwidth (MHz)			Limit(KHz)	Result
	802.11b	802.11g	802.11n(HT20)		
Lowest	10.40	16.39	17.13	>500	Pass
Middle	9.498	16.45	17.11		
Highest	10.21	16.46	17.42		

Test CH	99% Occupy Bandwidth (MHz)			Result
	802.11b	802.11g	802.11n(HT20)	
Lowest	13.848	16.385	17.488	Pass
Middle	13.182	16.358	17.483	
Highest	13.135	16.398	17.544	

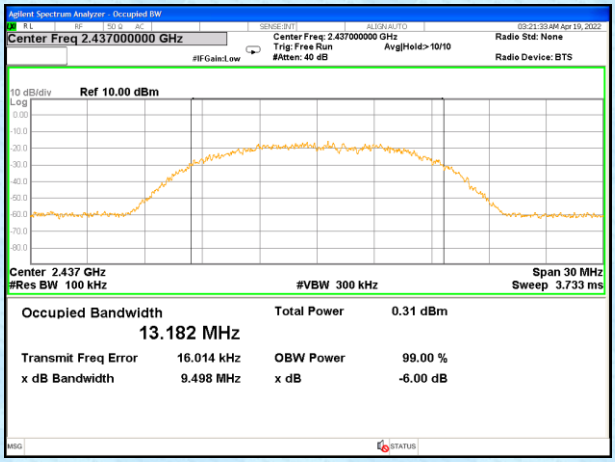
Test plot as follows:

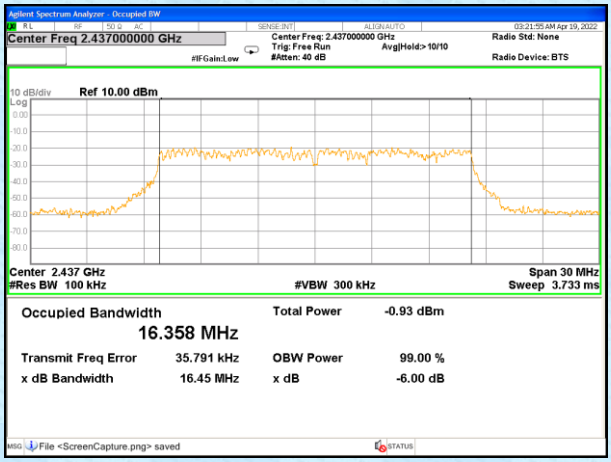
802.11b	802.11g



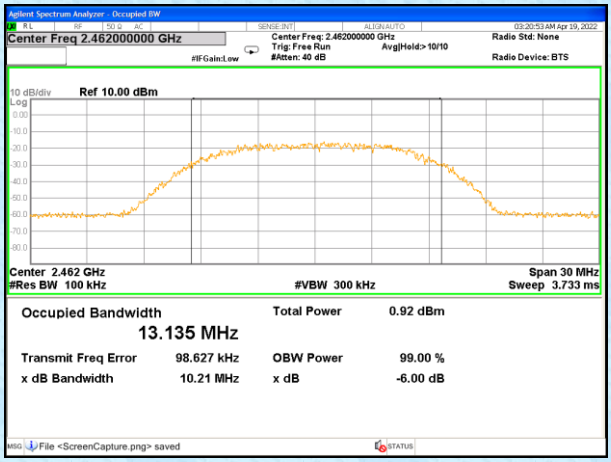


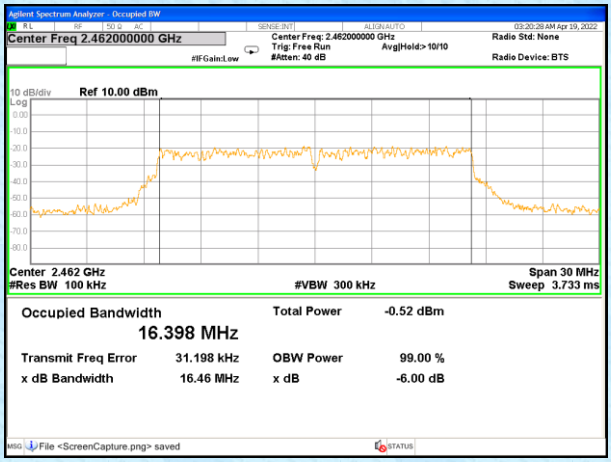
Lowest channel





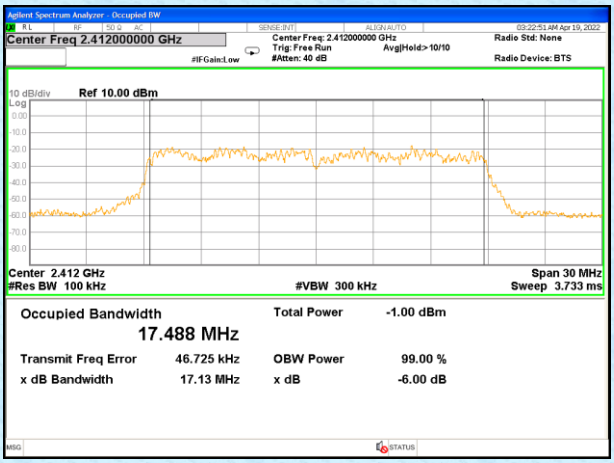
Middle channel



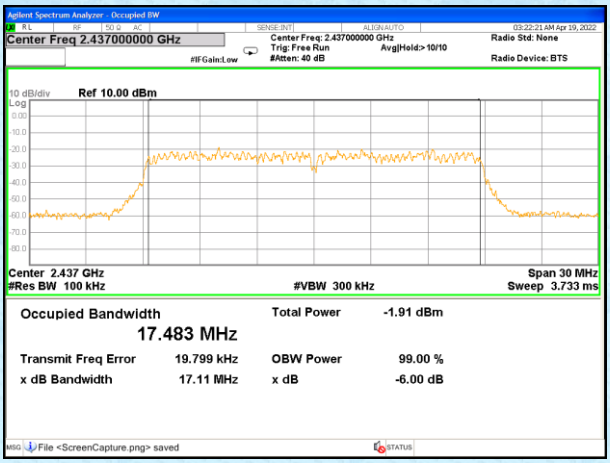


Highest channel

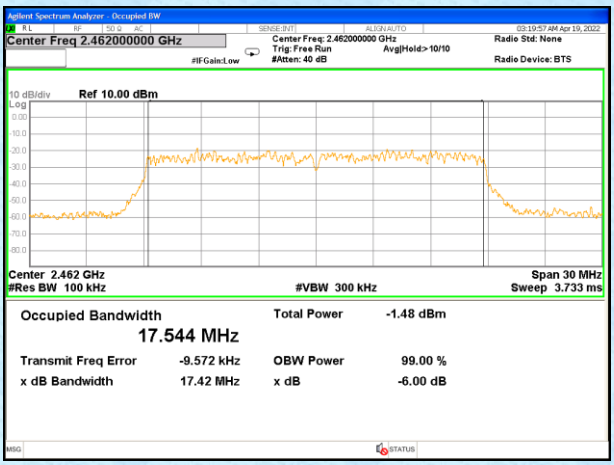
802.11n(HT20)



Lowest channel

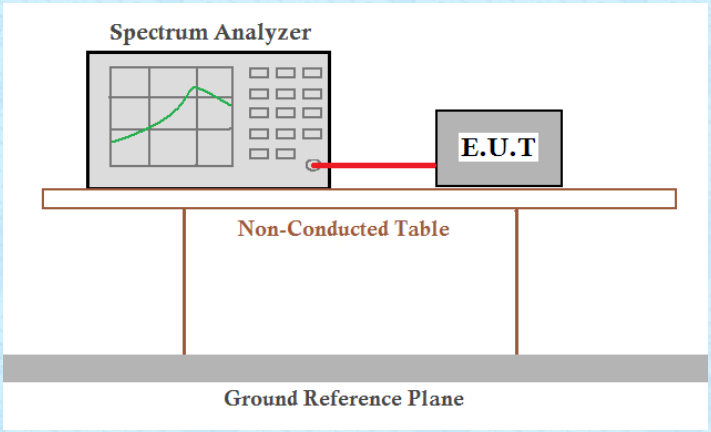


Middle channel



Highest channel

7.5 Power Spectral Density

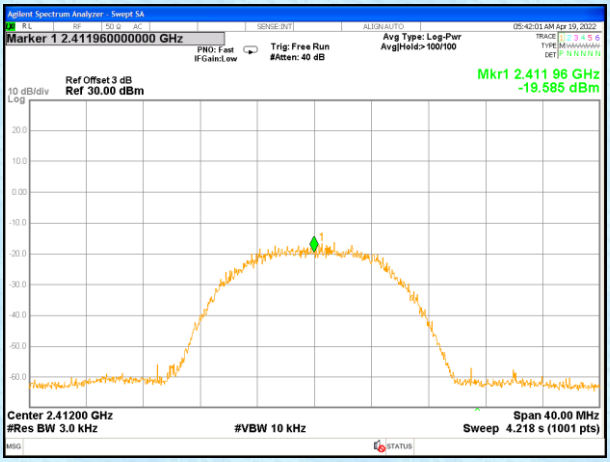
Test Requirement:	FCC Part15 C Section 15.247 (e)
Test Method:	KDB558074 D01 15.247 Meas Guidance v05r02
Limit:	8dBm/3kHz
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

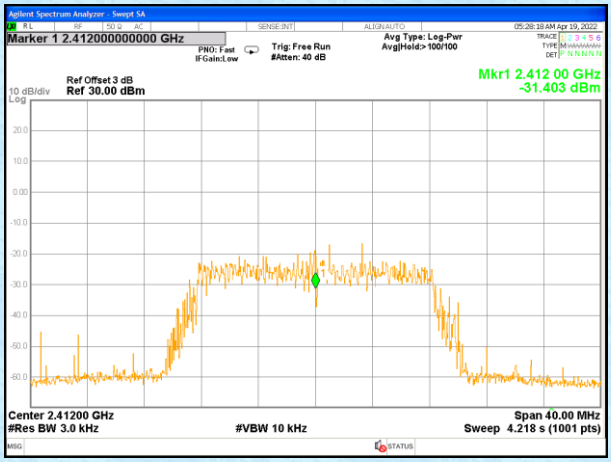
Measurement Data

Test CH	Power Spectral Density (dBm/3kHz)			Limit (dBm/3kHz)	Result
	802.11b	802.11g	802.11n(HT20)		
Lowest	-19.585	-31.403	-26.798	8.00	Pass
Middle	-18.314	-31.889	-30.391		
Highest	-17.463	-31.332	-28.782		

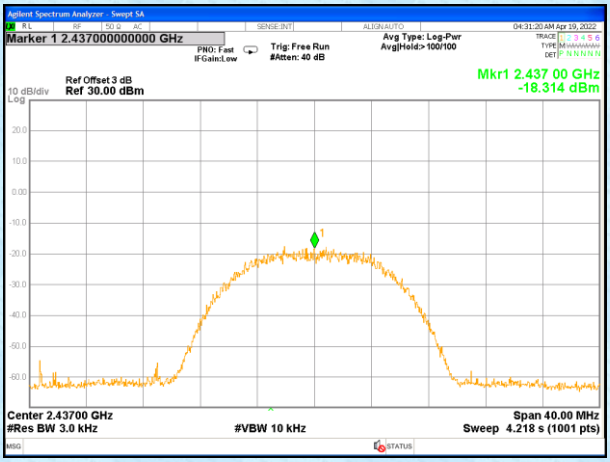
Test plot as follows:

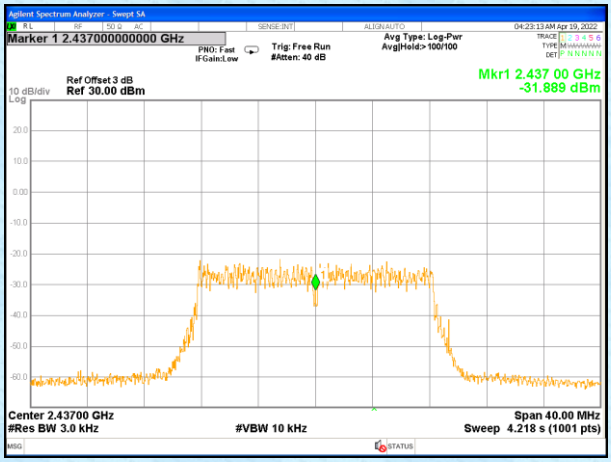
802.11b	802.11g



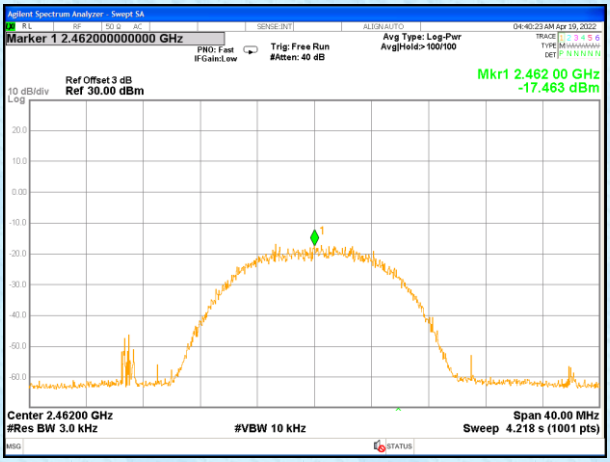


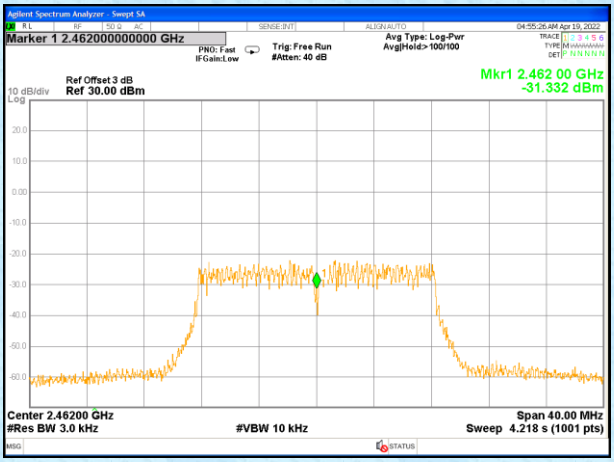
Lowest channel





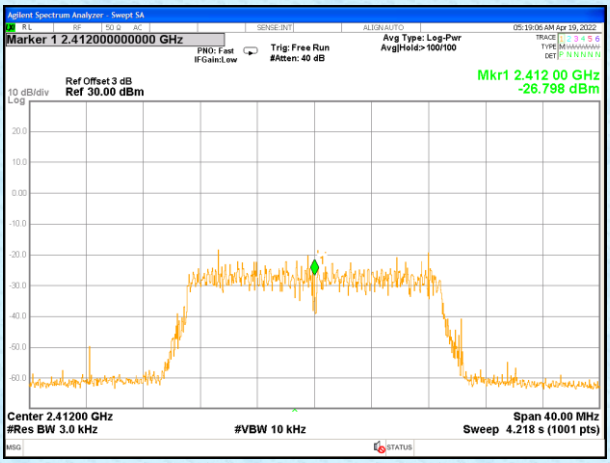
Middle channel



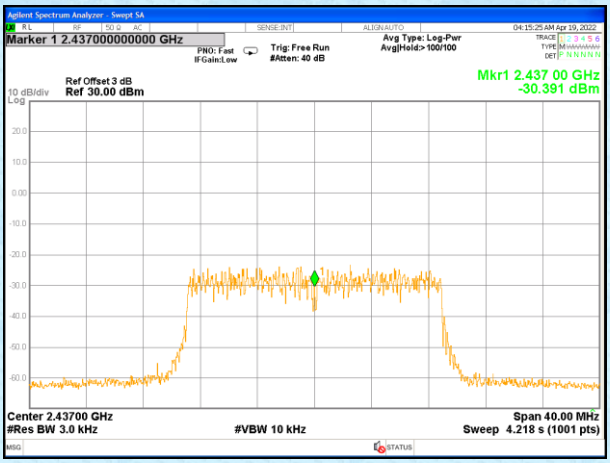


Highest channel

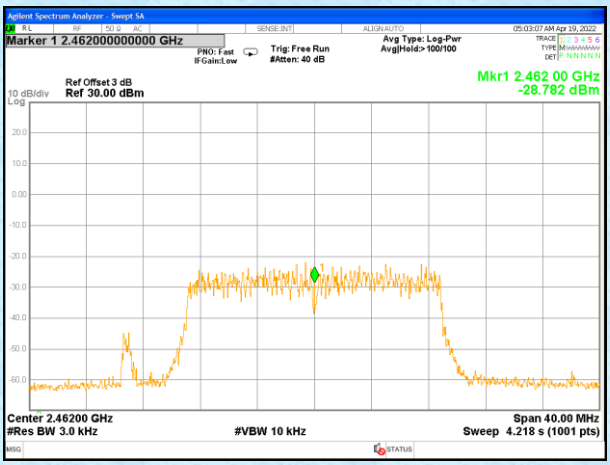
802.11n(HT20)



Lowest channel



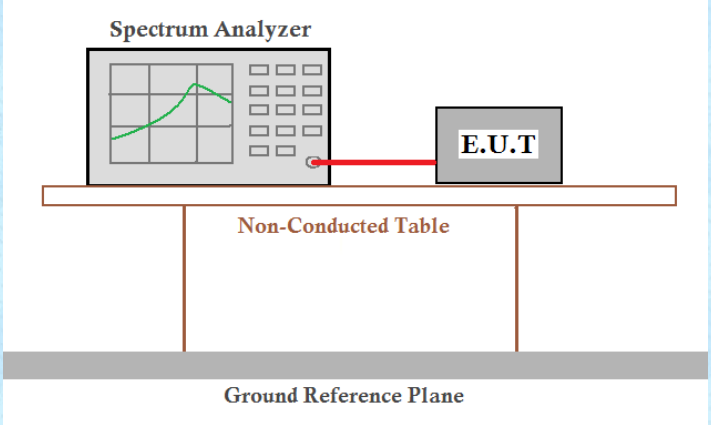
Middle channel



Highest channel

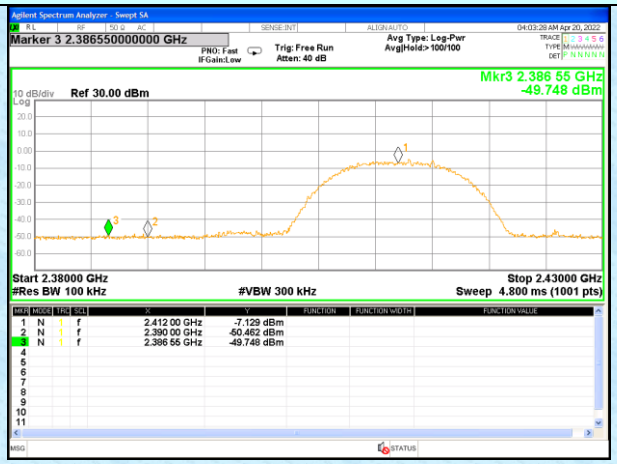
7.6 Band edges

7.6.1 Conducted Emission Method

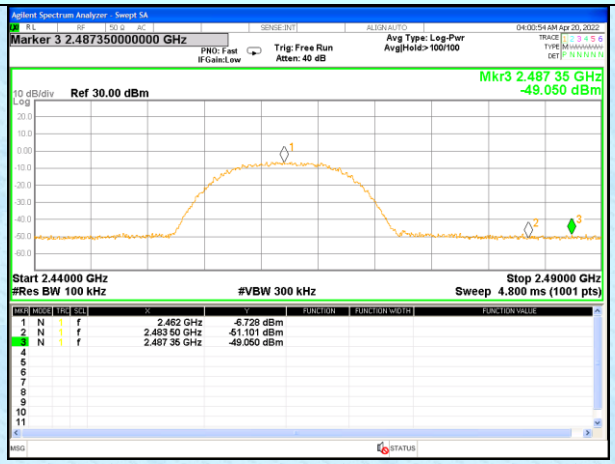
Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	KDB558074 D01 15.247 Meas Guidance v05r02
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall 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.
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Test plot as follows:

Test mode:	802.11b

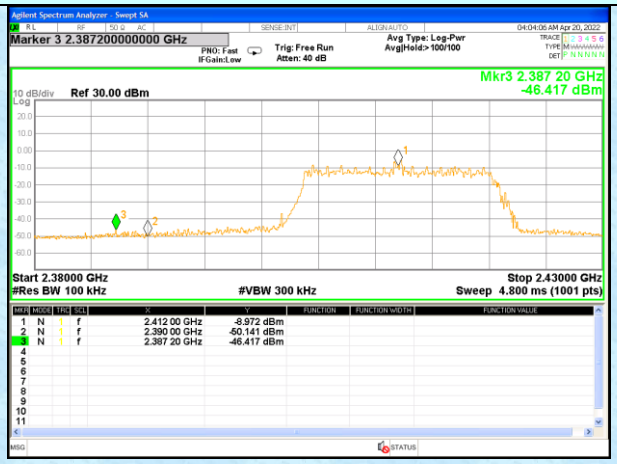


Lowest channel

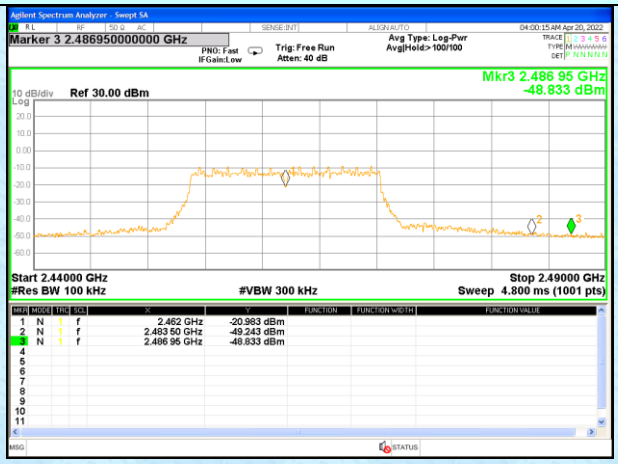


Highest channel

Test mode:	802.11g

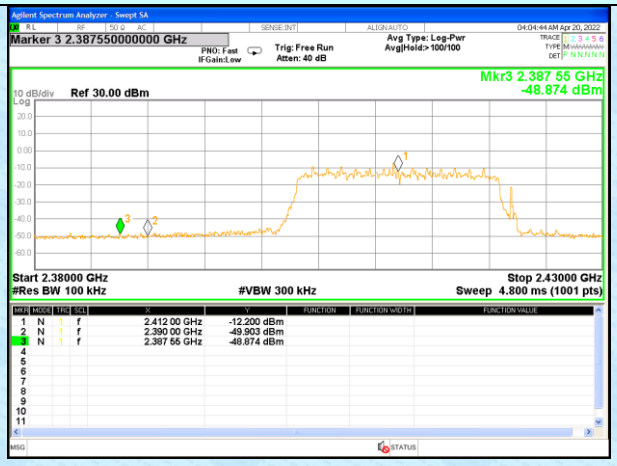


Lowest channel

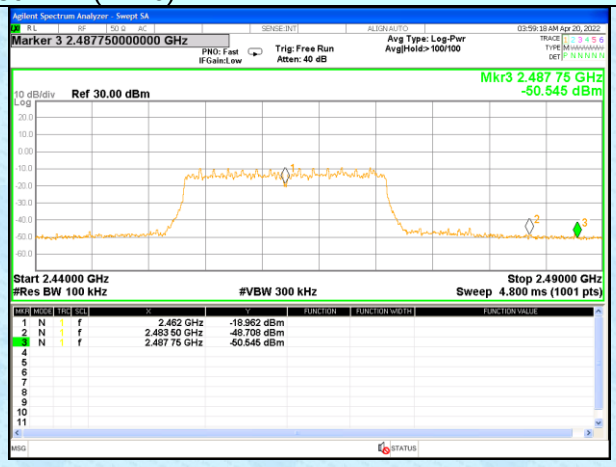


Highest channel

Test mode:	802.11n(HT20)

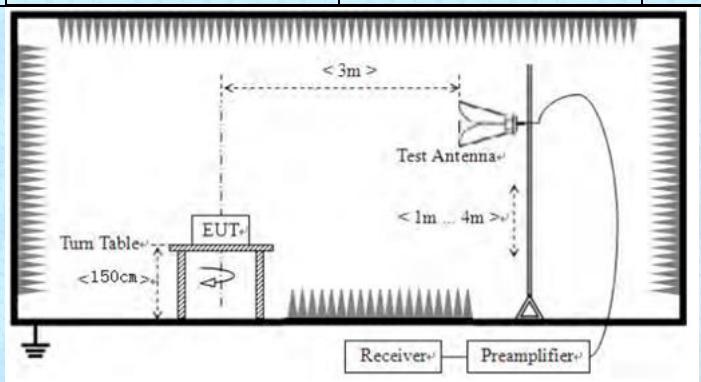


Lowest channel



Highest channel

7.6.2 Radiated Emission Method

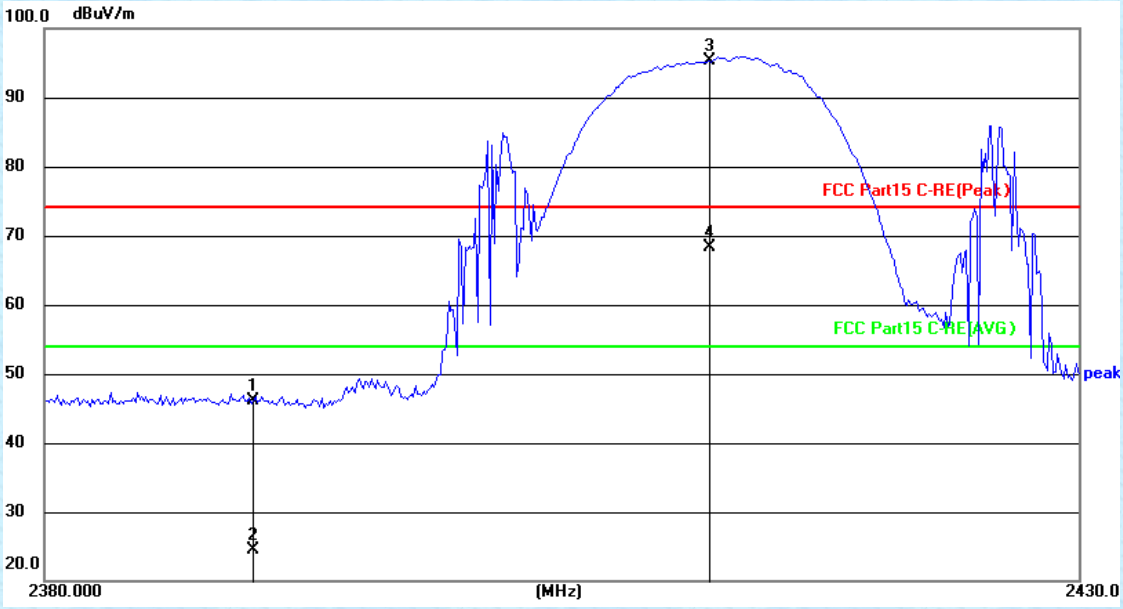
Test Requirement:	FCC Part15 C Section 15.209 and 15.205
Test Method:	ANSI C63.10: 2013
Test Frequency Range:	All of the restrict bands were tested, only the worst band's (2310MHz to 2500MHz) data was showed.
Test site:	Measurement Distance: 3m
Receiver setup:	Frequency / Detector / RBW / VBW / Value Above 1GHz / Peak / 1MHz / 3MHz / Peak Above 1GHz / Average / 1MHz / 3MHz / Average
Limit:	Frequency / Limit (dBuV/m @3m) / Value Above 1GHz / 54.00 / Average Above 1GHz / 74.00 / Peak
Test setup:	
Test Procedure:	1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. 7. The radiation measurements are performed in X, Y, Z axis positioning. And found the Y axis positioning which it is worse case, only the test worst case mode is recorded in the report.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement data:

All antennas have test, only the worst case ANT 1 report.

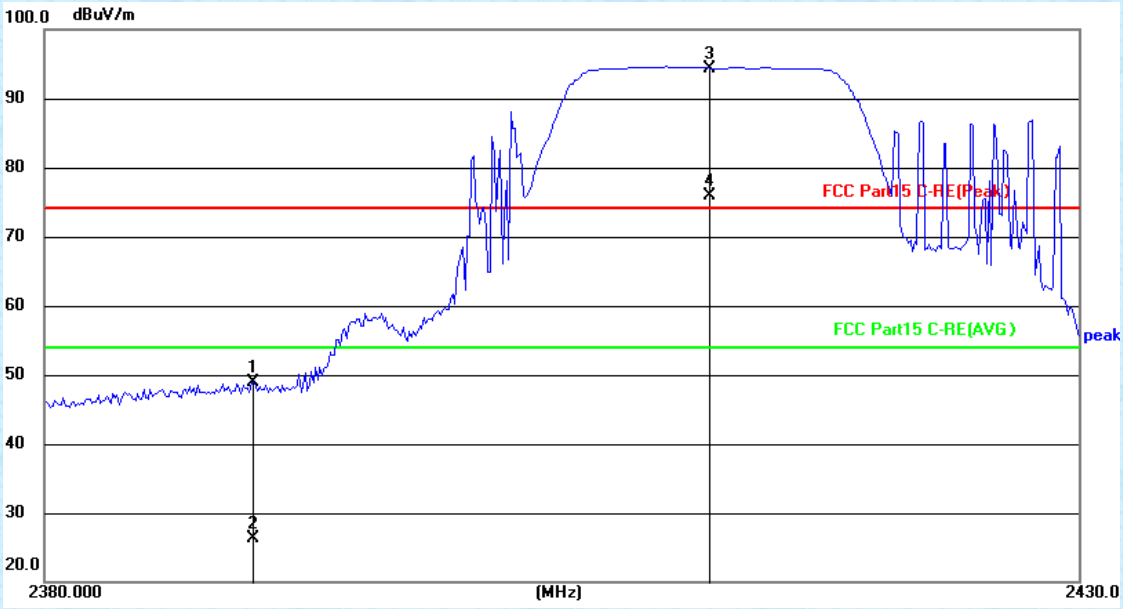
Test mode:	802.11b	Test channel:	Lowest

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	19.88	26.32	46.20	74.00	-27.80	peak
2	2390.000	-1.80	26.32	24.52	54.00	-29.48	AVG
3	2412.000	68.91	26.36	95.27	74.00	21.27	peak
4	2412.000	42.01	26.36	68.37	54.00	14.37	AVG

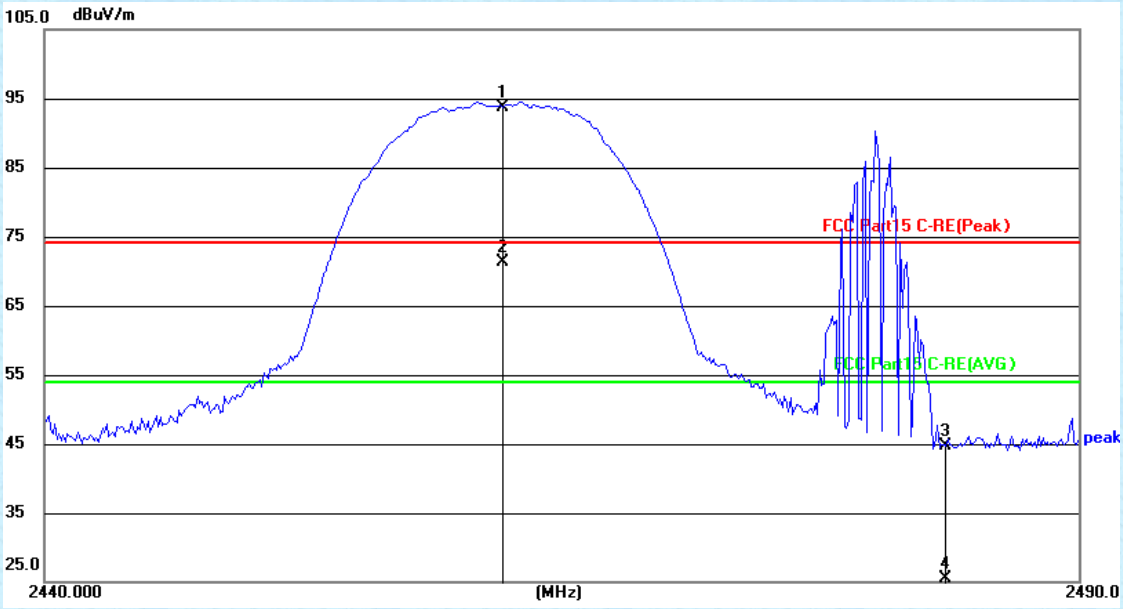
Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	22.57	26.32	48.89	74.00	-25.11	peak
2	2390.000	0.05	26.32	26.37	54.00	-27.63	AVG
3	2412.000	68.04	26.36	94.40	74.00	20.40	peak
4	2412.000	49.61	26.36	75.97	54.00	21.97	AVG

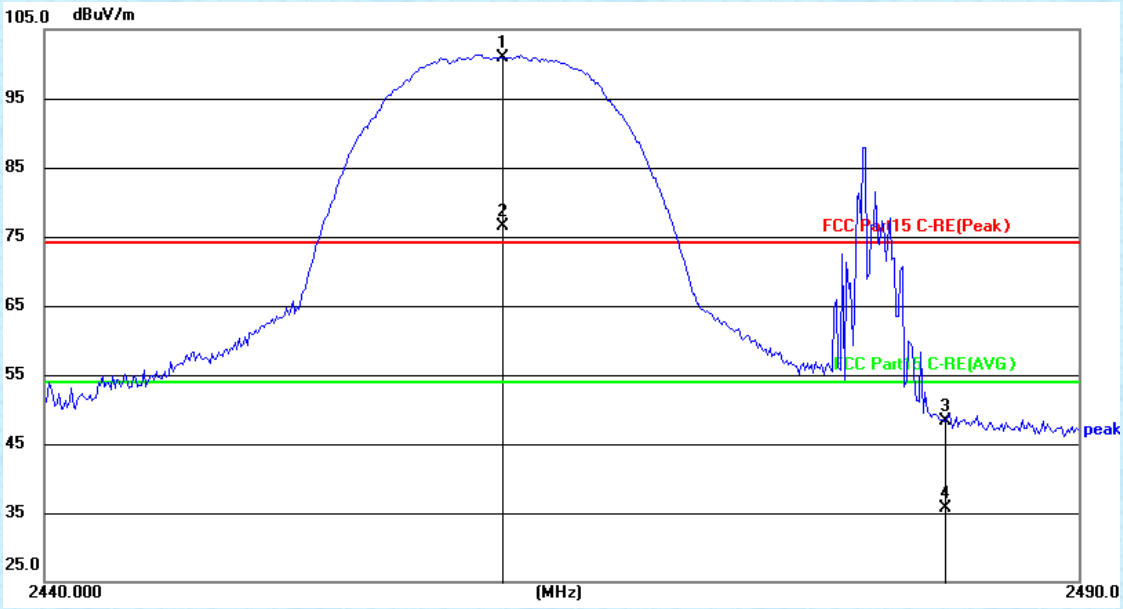
Test mode:	802.11b	Test channel:	Highest

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2462.000	67.32	26.44	93.76	74.00	19.76	peak
2	2462.000	44.84	26.44	71.28	54.00	17.28	AVG
3	2483.500	18.31	26.47	44.78	74.00	-29.22	peak
4	2483.500	-1.05	26.47	25.42	54.00	-28.58	AVG

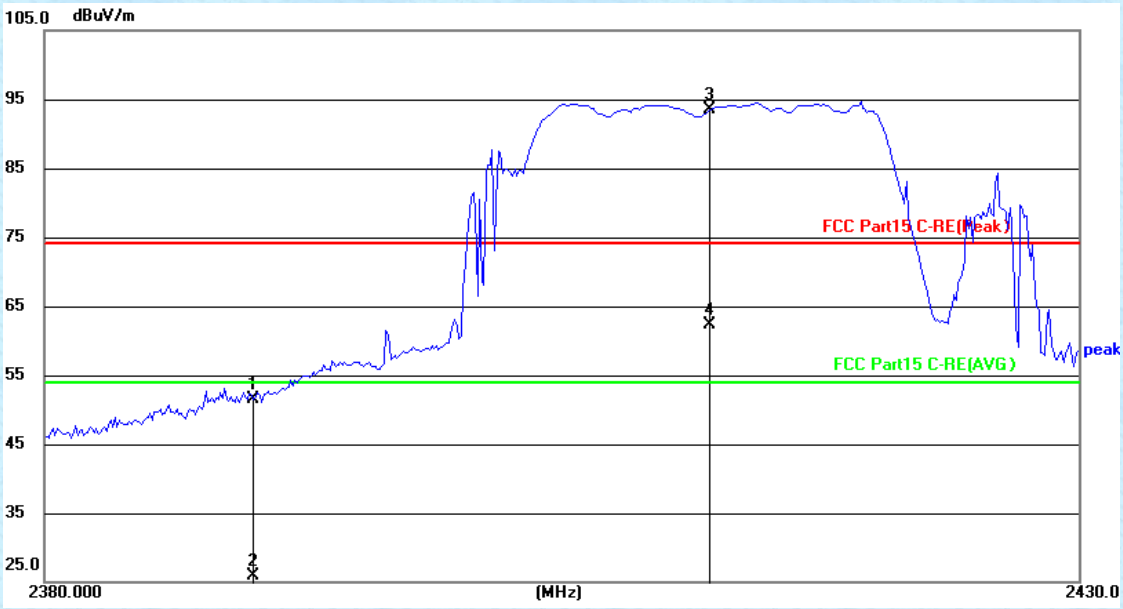
Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2462.000	74.40	26.44	100.84	74.00	26.84	peak
2	2462.000	50.03	26.44	76.47	54.00	22.47	AVG
3	2483.500	21.76	26.47	48.23	74.00	-25.77	peak
4	2483.500	9.26	26.47	35.73	54.00	-18.27	AVG

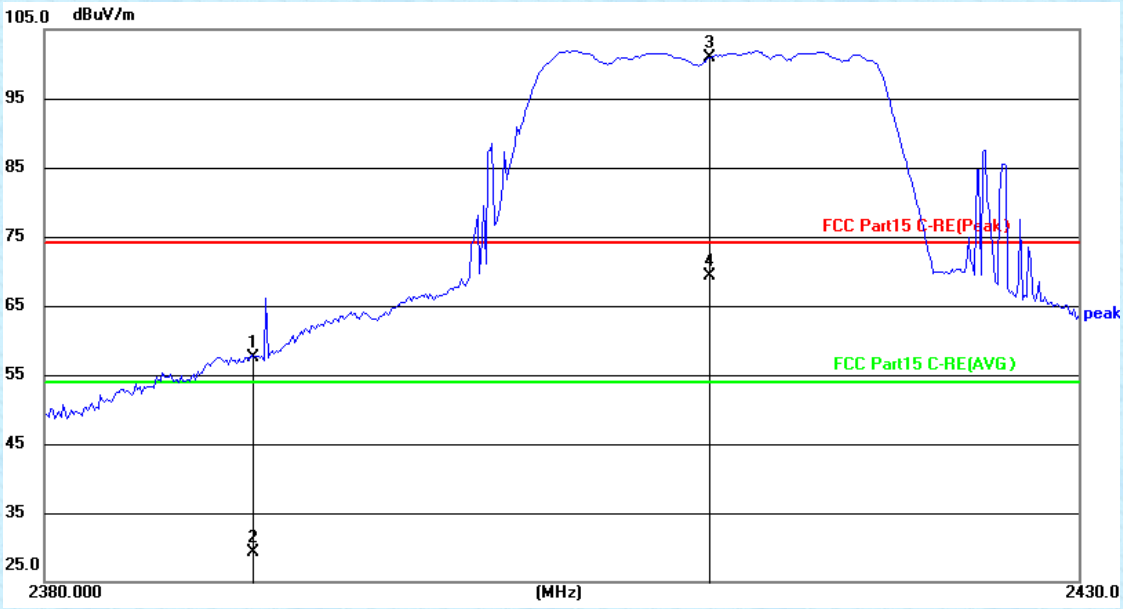
Test mode:	802.11g	Test channel:	Lowest

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	25.22	26.32	51.54	74.00	-22.46	peak
2	2390.000	-0.46	26.32	25.86	54.00	-28.14	AVG
3	2412.000	67.05	26.36	93.41	74.00	19.41	peak
4	2412.000	35.94	26.36	62.30	54.00	8.30	AVG

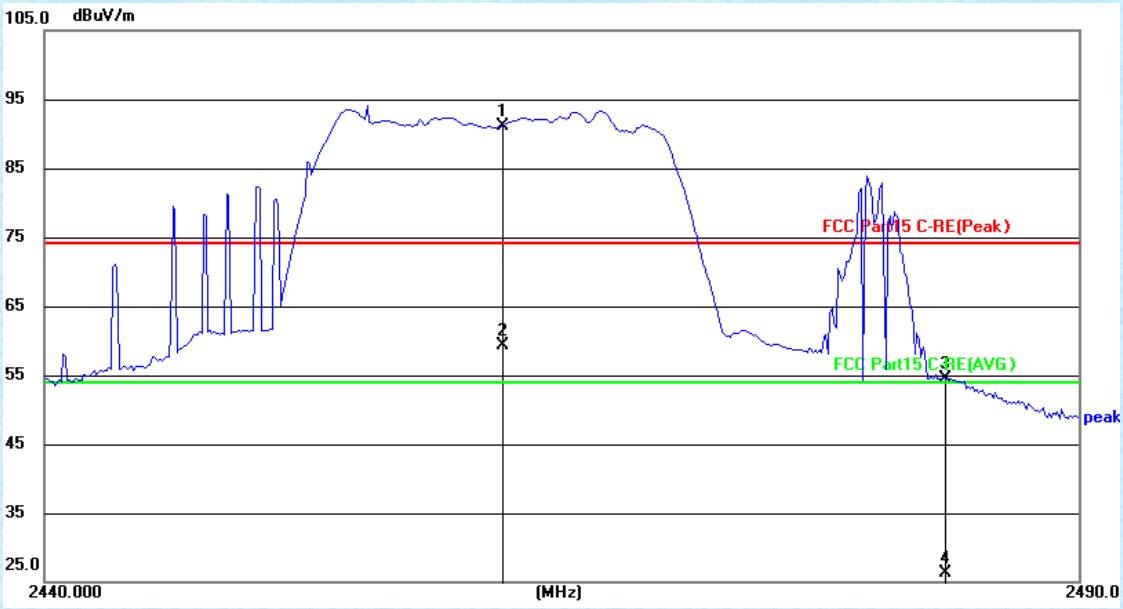
Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	31.14	26.32	57.46	74.00	-16.54	peak
2	2390.000	3.03	26.32	29.35	54.00	-24.65	AVG
3	2412.000	74.51	26.36	100.87	74.00	26.87	peak
4	2412.000	42.96	26.36	69.32	54.00	15.32	AVG

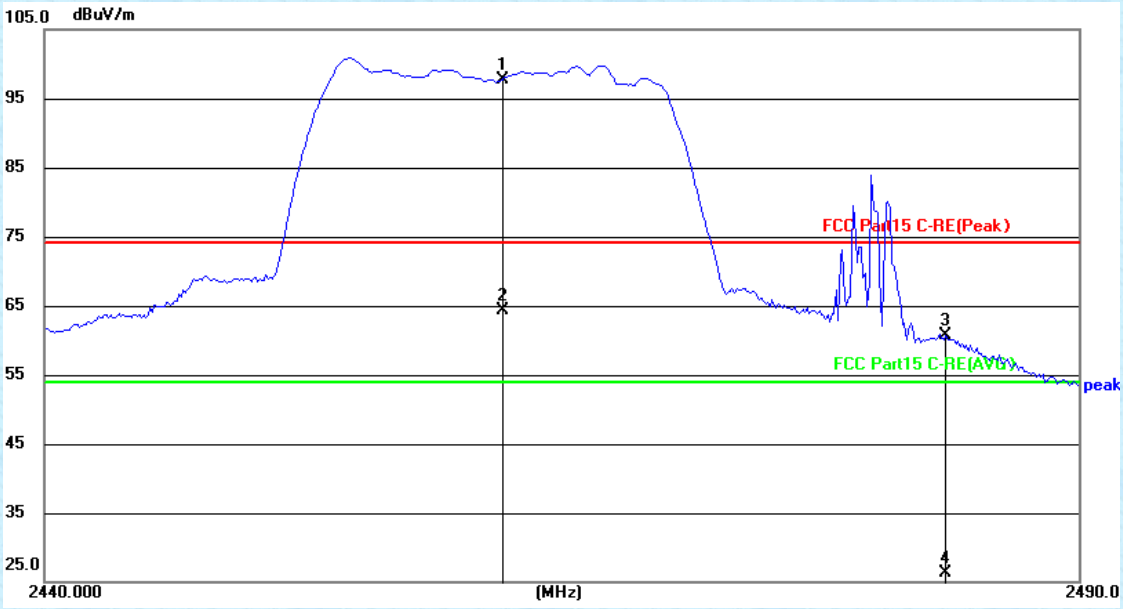
Test mode:	802.11g	Test channel:	Highest

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2462.000	64.67	26.44	91.11	74.00	17.11	peak
2	2462.000	32.80	26.44	59.24	54.00	5.24	AVG
3	2483.500	28.00	26.47	54.47	74.00	-19.53	peak
4	2483.500	-0.10	26.47	26.37	54.00	-27.63	AVG

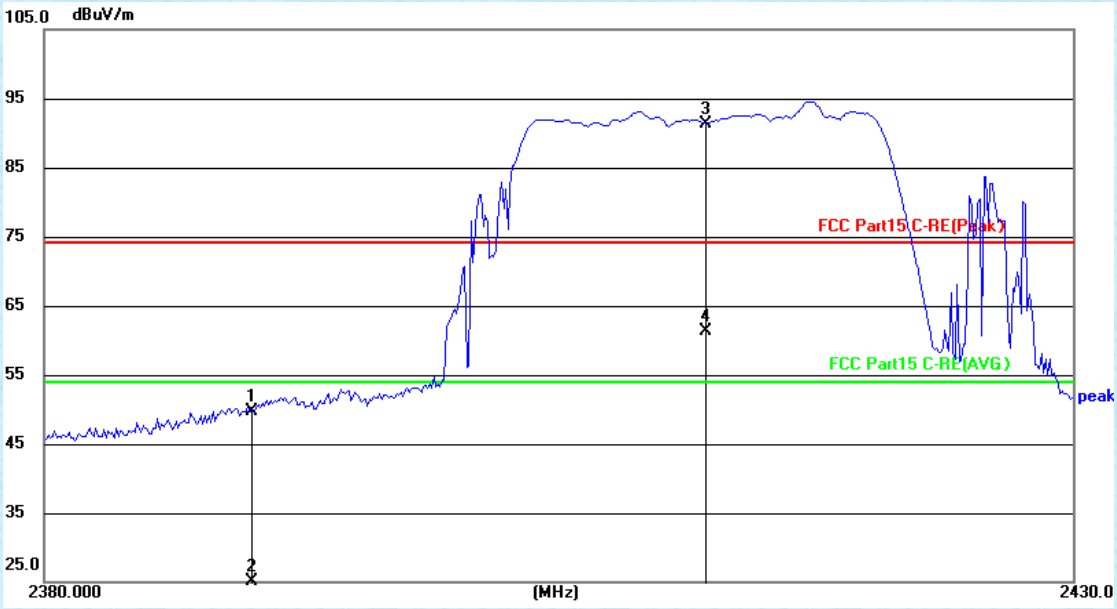
Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2462.000	71.32	26.44	97.76	74.00	23.76	peak
2	2462.000	37.94	26.44	64.38	54.00	10.38	AVG
3	2483.500	34.30	26.47	60.77	74.00	-13.23	peak
4	2483.500	-0.09	26.47	26.38	54.00	-27.62	AVG

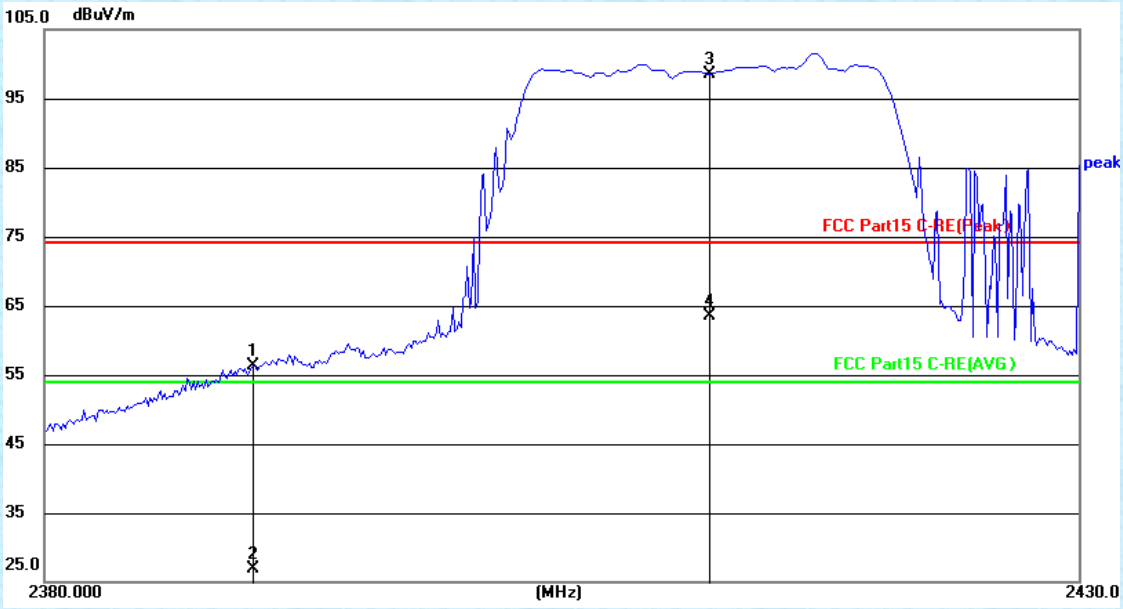
Test mode:	802.11n(HT20)	Test channel:	Lowest

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	23.48	26.32	49.80	74.00	-24.20	peak
2	2390.000	-1.20	26.32	25.12	54.00	-28.88	AVG
3	2412.000	65.04	26.36	91.40	74.00	17.40	peak
4	2412.000	34.96	26.36	61.32	54.00	7.32	AVG

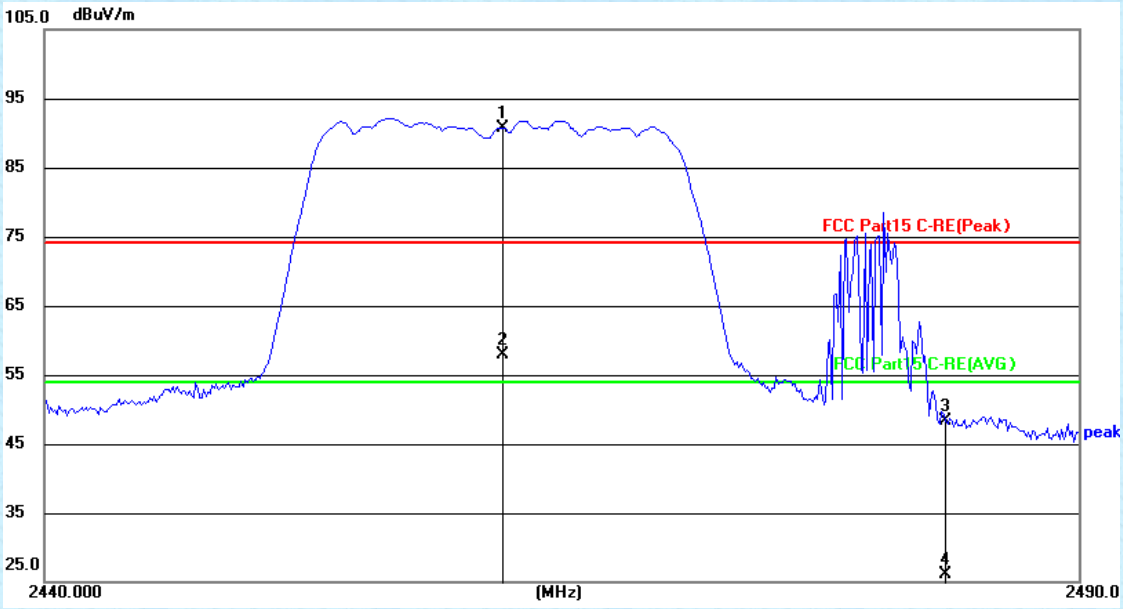
Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	29.95	26.32	56.27	74.00	-17.73	peak
2	2390.000	0.53	26.32	26.85	54.00	-27.15	AVG
3	2412.000	72.11	26.36	98.47	74.00	24.47	peak
4	2412.000	37.09	26.36	63.45	54.00	9.45	AVG

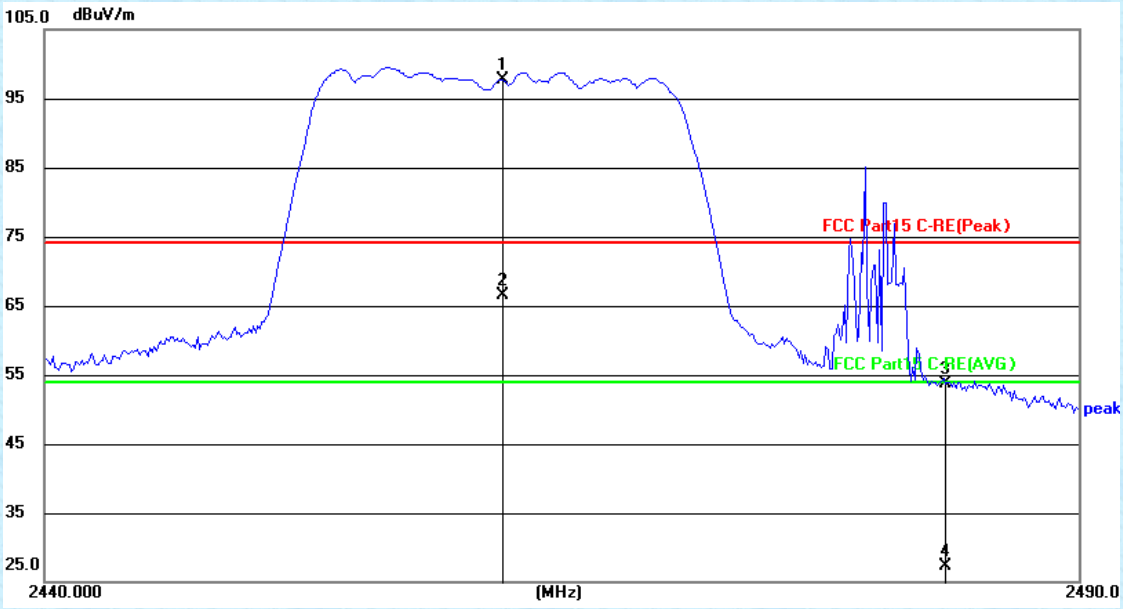
Test mode:	802.11n(HT20)	Test channel:	Highest

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2462.000	64.34	26.44	90.78	74.00	16.78	peak
2	2462.000	31.49	26.44	57.93	54.00	3.93	AVG
3	2483.500	21.78	26.47	48.25	74.00	-25.75	peak
4	2483.500	-0.33	26.47	26.14	54.00	-27.86	AVG

Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2462.000	71.24	26.44	97.68	74.00	23.68	peak
2	2462.000	40.08	26.44	66.52	54.00	12.52	AVG
3	2483.500	27.16	26.47	53.63	74.00	-20.37	peak
4	2483.500	0.79	26.47	27.26	54.00	-26.74	AVG

Remarks:

1. *Only the worst case Main Antenna test data.*
2. *The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (lowest and highest frequencies) data was showed.*
3. *Final Level =Receiver Read level + Antenna Factor*
4. *The emission levels of other frequencies are very lower than the limit and not show in test report.*