

FCC Radio Test Report

FCC ID: 2AF2V-MGT101

Original Grant

Report No. : TB-FCC145361
Applicant : Motic China Group Co., LTD
Equipment Under Test (EUT)
EUT Name : 10.1 inch Quad core capacitive touch tablet
Model No. : MGT101
Series Model No. : N/A
Brand Name : Motic
Receipt Date : 2015-09-08
Test Date : 2015-09-08 to 2015-09-29
Issue Date : 2015-09-30
Standards : FCC Part 15, Subpart C (15.247:2015)
Test Method : ANSI C63.10:2013
Conclusions : **PASS**

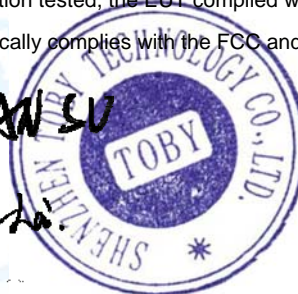
In the configuration tested, the EUT complied with the standards specified above,
The EUT technically complies with the FCC and IC requirements

Test/Witness Engineer :

IWAN SU

Approved & Authorized :

Raymond



This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

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1. General Information about EUT

1.1 Client Information

Applicant : Motic China Group Co., LTD
Address : Motic Building, Torch Hi-Tech Industrial Development Zone, Xiamen, P.R.C
Manufacturer : Shenzhen Huaruian Technology Co., Ltd
Address : HuaRuiAn Building, The Third Industrial Park, Gushu, Xixiang, Bao'an District, Shenzhen, Guangdong, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	10.1 inch Quad core capacitive touch tablet	
Models No.	:	MGT101	
Model Difference	:	N/A	
Product Description	:	Operation Frequency: 802.11b/g/n(HT20): 2412MHz~2462MHz	
		Number of Channel:	802.11b/g/n(HT20):11 channels see note(3)
		RF Output Power:	802.11b: 16.74dBm 802.11g: 17.83dBm 802.11n (HT20): 16.72dBm
		Antenna Gain:	0.75 dBi FPC Antenna
		Modulation Type:	802.11b:DSSS(CCK, DQPSK, DBPSK) 802.11g/n:OFDM(BPSK,QPSK,16QAM,64QAM)
		Bit Rate of Transmitter:	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6 Mbps 802.11n:up to 150Mbps
Power Supply	:	DC Voltage supplied from Host System by USB cable. DC power supplied by AC/DC Adapter. DC power by Li-ion Battery.	
Power Rating	:	DC 5.0V by USB cable. DC 3.7V 6000mAh Li-ion Battery. AC/DC Adapter: Input:100~240V, 50/60Hz 0.4A Output:5V, 2000mA	
Connecting I/O Port(S)	:	Please refer to the User's Manual	

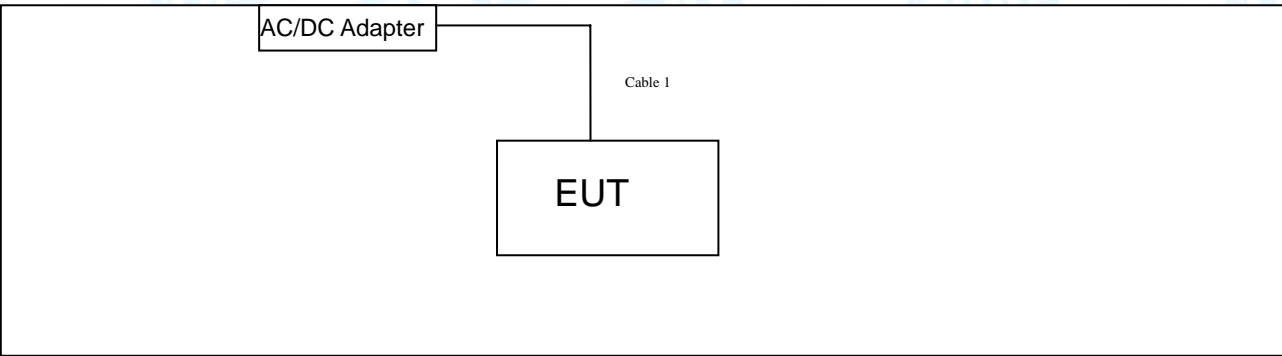
Note:

- (1) This Test Report is FCC Part 15.247 for 802.11b/g/n, the test procedure follows the FCC KDB 558074 D01 DTS Meas Guidance v03r03.
- (2) For a more detailed features description, please refer to the manufacturer’s specifications or the User’s Manual.
- (3) Antenna information provided by the applicant.
- (4) Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	05	2432	09	2452
02	2417	06	2437	10	2457
03	2422	07	2442	11	2462
04	2427	08	2447		

1.3 Block Diagram Showing the Configuration of System Tested

TX Mode



1.4 Description of Support Units

Equipment Information				
Name	Model	S/N	Manufacturer	Used “√”
N/A	N/A	N/A	N/A	N/A
Cable Information				
Number	Shielded Type	Ferrite Core	Length	Note
Cable 1	NO	NO	1.2M	Accessories

1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

For Conducted Test	
Final Test Mode	Description
Mode 1	AC Charging with TX B Mode

For Radiated Test	
Final Test Mode	Description
Mode 3	TX Mode B Mode Channel 01/06/11
Mode 4	TX Mode G Mode Channel 01/06/11
Mode 5	TX Mode N(HT20) Mode Channel 01/06/11

Note:

- (1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.
According to ANSI C63.10 standards, the measurements are performed at the highest, Midle, lowest available channels, and the worst case data rate as follows:
 - 802.11b Mode: CCK (1 Mbps)
 - 802.11g Mode: OFDM (6 Mbps)
 - 802.11n (HT20) Mode: MCS 0 (6.5 Mbps)
- (2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.
- (3) The EUT is considered a mobile unit; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.

1.6 Description of Test Software Setting

During testing channel & Power controlling software provided by the customer 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 customer and is going to be fixed on the firmware of the final end product power parameters of WLAN.

Test Software Version	Ampak TestTool, VER :5.3		
Channel	CH 01	CH 06	CH 11
IEEE 802.11b DSSS	DEF	DEF	DEF
IEEE 802.11g OFDM	DEF	DEF	DEF
IEEE 802.11n (HT20)	DEF	DEF	DEF

1.7 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty (U_{Lab})
Conducted Emission	Level Accuracy: 9kHz~150kHz	± 3.42 dB
	150kHz to 30MHz	± 3.42 dB
Radiated Emission	Level Accuracy: 9kHz to 30 MHz	± 4.60 dB
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	± 4.40 dB
Radiated Emission	Level Accuracy: Above 1000MHz	± 4.20 dB

1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

FCC List No.: (811562)

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 811562.

IC Registration No.: (11950A-1)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A-1.

May 22, 2014 certificated by TUV Rheinland(China) Co., Ltd. with TUV certificate No.: UA 50282953 0001 and report No.: 17026822 002. The certificate is valid until the next scheduled audit or up to 18 months, at the discretion of TUV Rhineland.

2. Test Summary

FCC Part 15 Subpart C(15.247)/ RSS 247 Issue 1				
Standard Section		Test Item	Judgment	Remark
FCC	IC			
15.203	/	Antenna Requirement	PASS	N/A
15.207	RSS-GEN 7.2.4	Conducted Emission	PASS	N/A
15.205	RSS-GEN 7.2.2	Restricted Bands	PASS	N/A
15.247(a)(2)	RSS 247 5.2 (1)	6dB Bandwidth	PASS	N/A
15.247(b)	RSS 247 5.4 (4)	Peak Output Power	PASS	N/A
15.247(e)	RSS 247 5.2 (2)	Power Spectral Density	PASS	N/A
15.247(d)	RSS 247 5.5	Transmitter Radiated Spurious Emission	PASS	N/A

Note: “/” for no requirement for this test item.
N/A is an abbreviation for Not Applicable.

3. Test Equipment

Conducted Emission Test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Aug. 07, 2015	Aug. 06, 2016
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Aug. 07, 2015	Aug. 06, 2016
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Aug. 07, 2015	Aug. 06, 2016
LISN	Rohde & Schwarz	ENV216	101131	Aug. 07, 2015	Aug. 06, 2016
Radiation Emission Test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Aug. 29, 2015	Aug. 28, 2016
EMI Test Receiver	Rohde & Schwarz	ESCI	100010/007	Aug. 07, 2015	Aug. 06, 2016
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar. 28, 2015	Mar. 27, 2016
Bilog Antenna	ETS-LINDGREN	3142E	00117542	Mar. 28, 2015	Mar. 27, 2016
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar. 28, 2015	Mar. 27, 2016
Horn Antenna	ETS-LINDGREN	3117	00143209	Mar. 28, 2015	Mar. 27, 2016
Pre-amplifier	Sonoma	310N	185903	Mar. 28, 2015	Mar. 27, 2016
Pre-amplifier	HP	8447B	3008A00849	Mar. 28, 2015	Mar. 27, 2016
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar. 28, 2015	Mar. 27, 2016
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A

4. Conducted Emission Test

4.1 Test Standard and Limit

4.1.1 Test Standard

FCC Part 15.207

4.1.2 Test Limit

Conducted Emission Test Limit

Frequency	Maximum RF Line Voltage (dB μ V)	
	Quasi-peak Level	Average Level
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
500kHz~5MHz	56	46
5MHz~30MHz	60	50

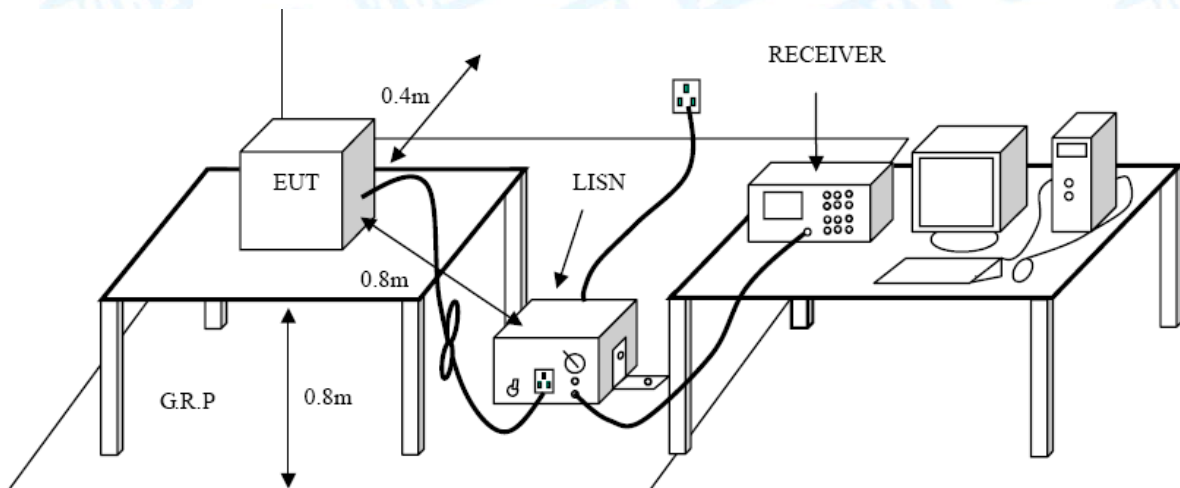
Notes:

(1) *Decreasing linearly with logarithm of the frequency.

(2) The lower limit shall apply at the transition frequencies.

(3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2 Test Setup



4.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

LISN at least 80 cm from nearest part of EUT chassis.

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

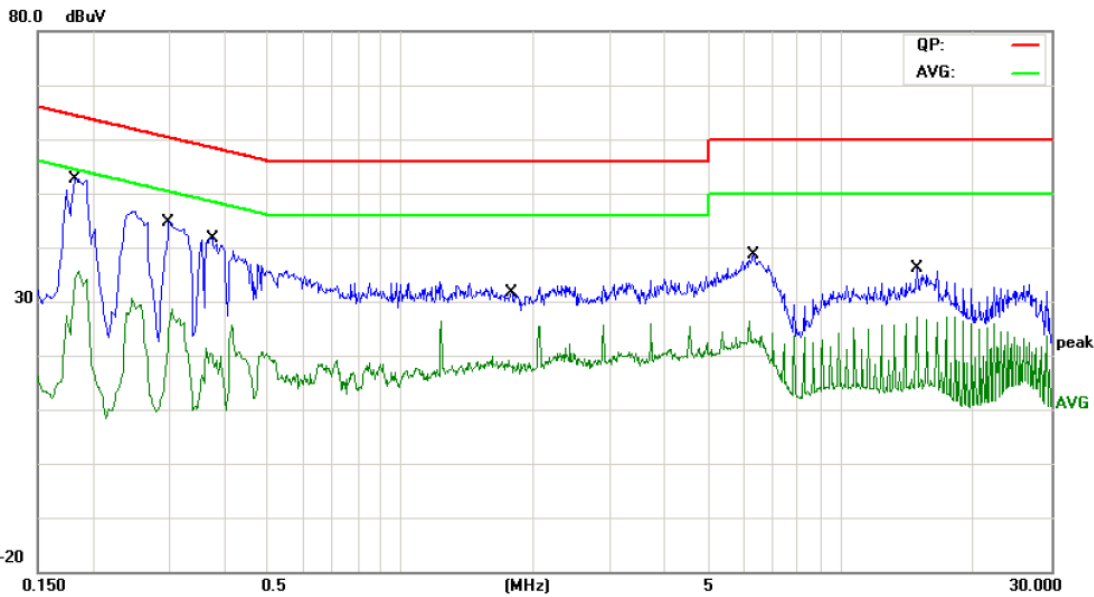
4.4 EUT Operating Mode

Please refer to the description of test mode.

4.5 Test Data

Please see the next page

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Terminal:	Line		
Test Mode:	AC Charging with TX B Mode		
Remark:	Only worse case is reported		

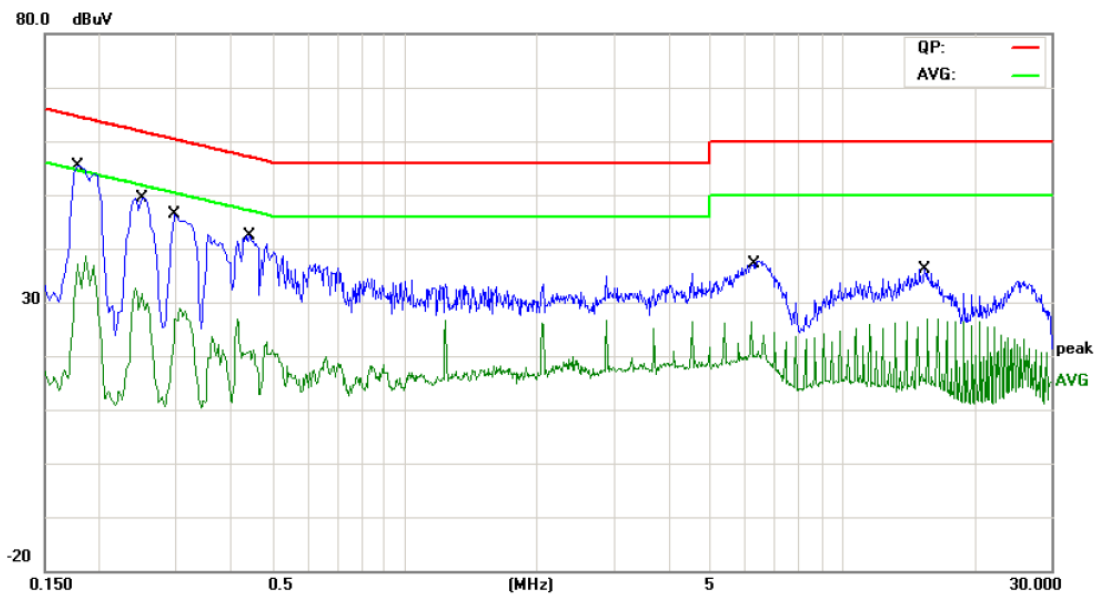


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1	*	0.1819	39.61	9.98	49.59	64.39	-14.80	QP
2		0.1819	22.94	9.98	32.92	54.39	-21.47	AVG
3		0.2980	29.64	10.02	39.66	60.30	-20.64	QP
4		0.2980	14.03	10.02	24.05	50.30	-26.25	AVG
5		0.3740	27.07	10.02	37.09	58.41	-21.32	QP
6		0.3740	8.80	10.02	18.82	48.41	-29.59	AVG
7		1.7820	16.32	10.06	26.38	56.00	-29.62	QP
8		1.7820	7.42	10.06	17.48	46.00	-28.52	AVG
9		6.3340	22.04	10.03	32.07	60.00	-27.93	QP
10		6.3340	11.90	10.03	21.93	50.00	-28.07	AVG
11		14.8580	20.93	10.26	31.19	60.00	-28.81	QP
12		14.8580	16.42	10.26	26.68	50.00	-23.32	AVG

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Terminal:	Neutral		
Test Mode:	AC Charging with TX B Mode		
Remark:	Only worse case is reported		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1	*	0.1780	40.76	10.12	50.88	64.57	-13.69	QP
2		0.1780	21.31	10.12	31.43	54.57	-23.14	AVG
3		0.2500	35.54	10.10	45.64	61.75	-16.11	QP
4		0.2500	19.60	10.10	29.70	51.75	-22.05	AVG
5		0.2980	31.80	10.09	41.89	60.30	-18.41	QP
6		0.2980	15.10	10.09	25.19	50.30	-25.11	AVG
7		0.4420	26.22	10.04	36.26	57.02	-20.76	QP
8		0.4420	8.73	10.04	18.77	47.02	-28.25	AVG
9		6.2819	21.71	10.06	31.77	60.00	-28.23	QP
10		6.2819	8.17	10.06	18.23	50.00	-31.77	AVG
11		15.4660	18.01	10.06	28.07	60.00	-31.93	QP
12		15.4660	3.34	10.06	13.40	50.00	-36.60	AVG

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 240V/60 Hz		
Terminal:	Line		
Test Mode:	AC Charging with TX B Mode		
Remark:	Only worse case is reported		

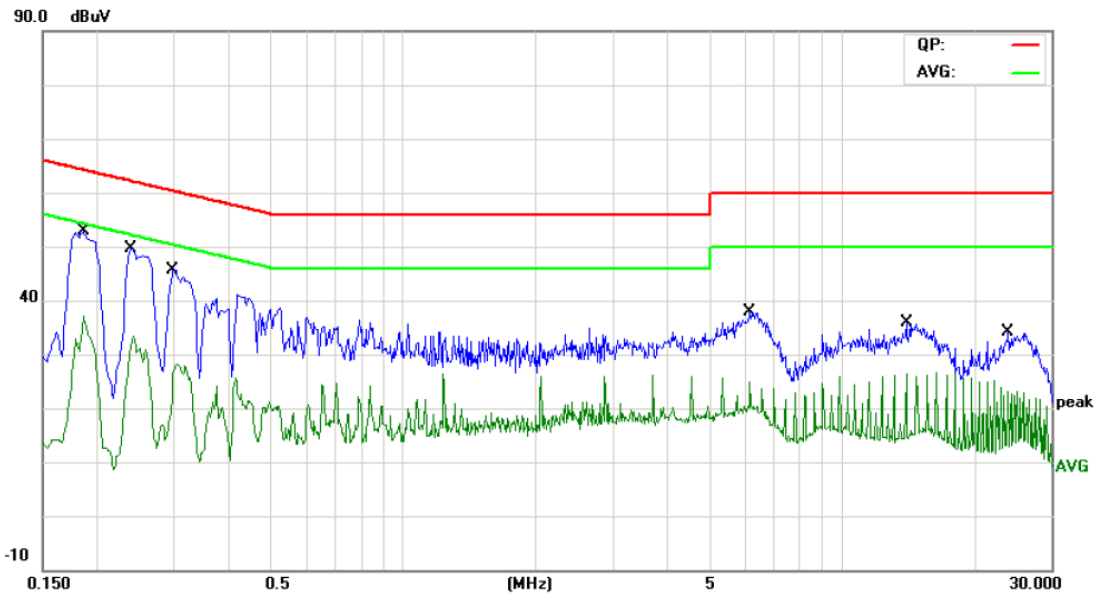


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1	*	0.1860	41.58	9.99	51.57	64.21	-12.64	QP
2		0.1860	25.87	9.99	35.86	54.21	-18.35	AVG
3		0.2380	35.29	10.02	45.31	62.16	-16.85	QP
4		0.2380	19.29	10.02	29.31	52.16	-22.85	AVG
5		0.3740	29.32	10.02	39.34	58.41	-19.07	QP
6		0.3740	16.30	10.02	26.32	48.41	-22.09	AVG
7		6.3940	21.68	10.03	31.71	60.00	-28.29	QP
8		6.3940	11.78	10.03	21.81	50.00	-28.19	AVG
9		15.6380	16.93	10.25	27.18	60.00	-32.82	QP
10		15.6380	7.80	10.25	18.05	50.00	-31.95	AVG
11		25.9340	19.37	10.18	29.55	60.00	-30.45	QP
12		25.9340	12.38	10.18	22.56	50.00	-27.44	AVG

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 240V/60 Hz		
Terminal:	Neutral		
Test Mode:	AC Charging with TX B Mode		
Remark:	Only worse case is reported		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1	*	0.1860	39.37	9.99	49.36	64.21	-14.85	QP
2		0.1860	23.59	9.99	33.58	54.21	-20.63	AVG
3		0.2380	34.54	10.02	44.56	62.16	-17.60	QP
4		0.2380	17.03	10.02	27.05	52.16	-25.11	AVG
5		0.2980	31.16	10.02	41.18	60.30	-19.12	QP
6		0.2980	15.06	10.02	25.08	50.30	-25.22	AVG
7		6.1779	22.45	10.02	32.47	60.00	-27.53	QP
8		6.1779	15.21	10.02	25.23	50.00	-24.77	AVG
9		14.0020	18.40	10.24	28.64	60.00	-31.36	QP
10		14.0020	12.31	10.24	22.55	50.00	-27.45	AVG
11		23.8900	16.85	10.16	27.01	60.00	-32.99	QP
12		23.8900	11.32	10.16	21.48	50.00	-28.52	AVG

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

5. Radiated Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard

FCC Part 15.209

5.1.2 Test Limit

Radiated Emission Limits (9kHz~1000MHz)

Frequency (MHz)	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

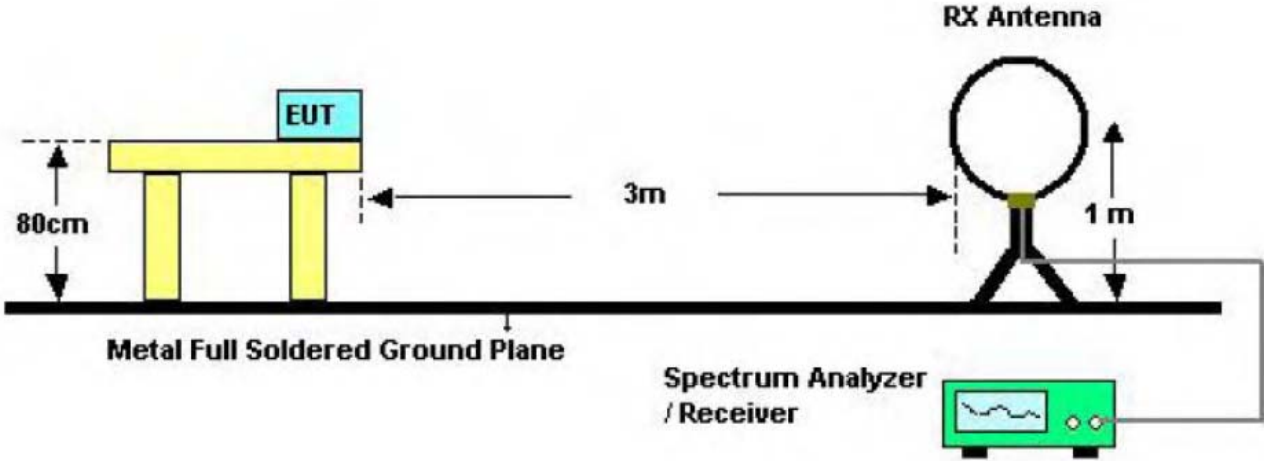
Radiated Emission Limit (Above 1000MHz)

Frequency (MHz)	Class A (dBuV/m)(at 3 M)		Class B (dBuV/m)(at 3 M)	
	Peak	Average	Peak	Average
Above 1000	80	60	74	54

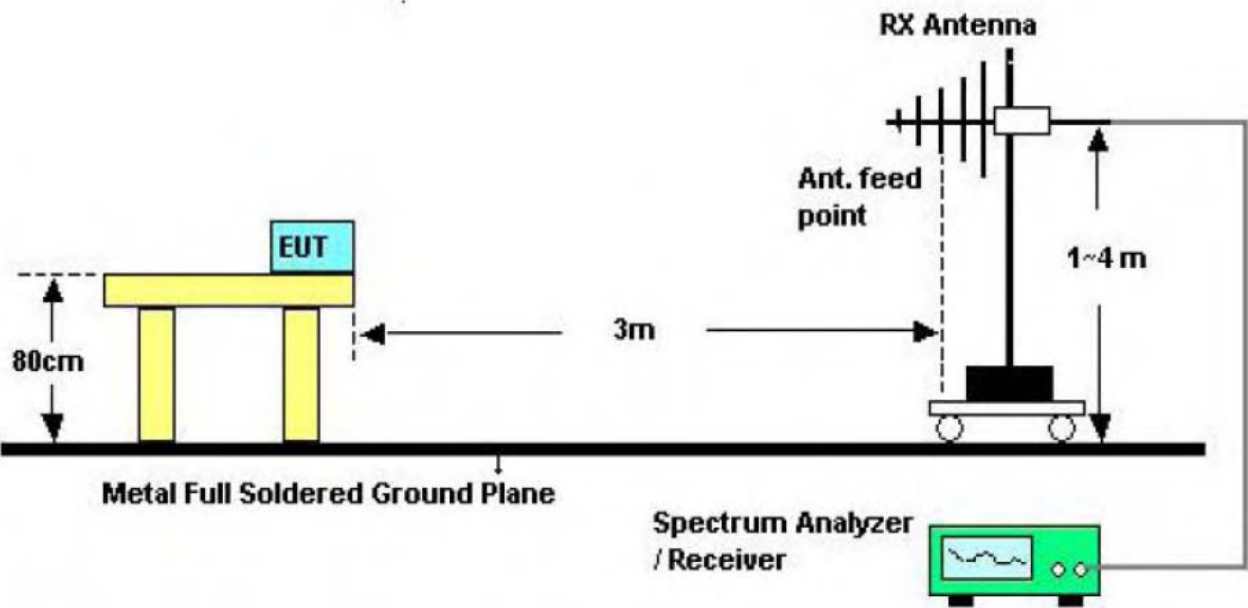
Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level(dBuV/m)=20log Emission Level(uV/m)

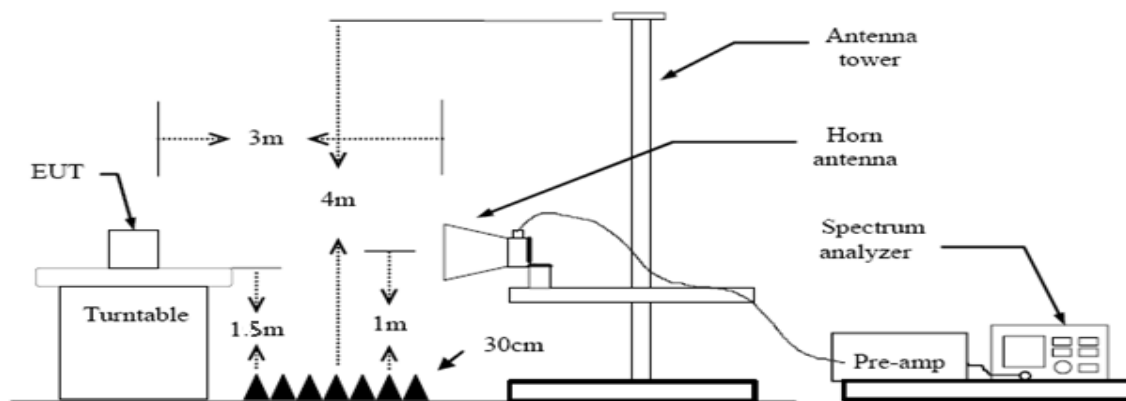
5.2 Test Setup



Below 30MHz Test Setup



Below 1000MHz Test Setup



Above 1GHz Test Setup

5.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz. The EUT was placed on a rotating 0.8m high above the ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.

5.4 EUT Operating Condition

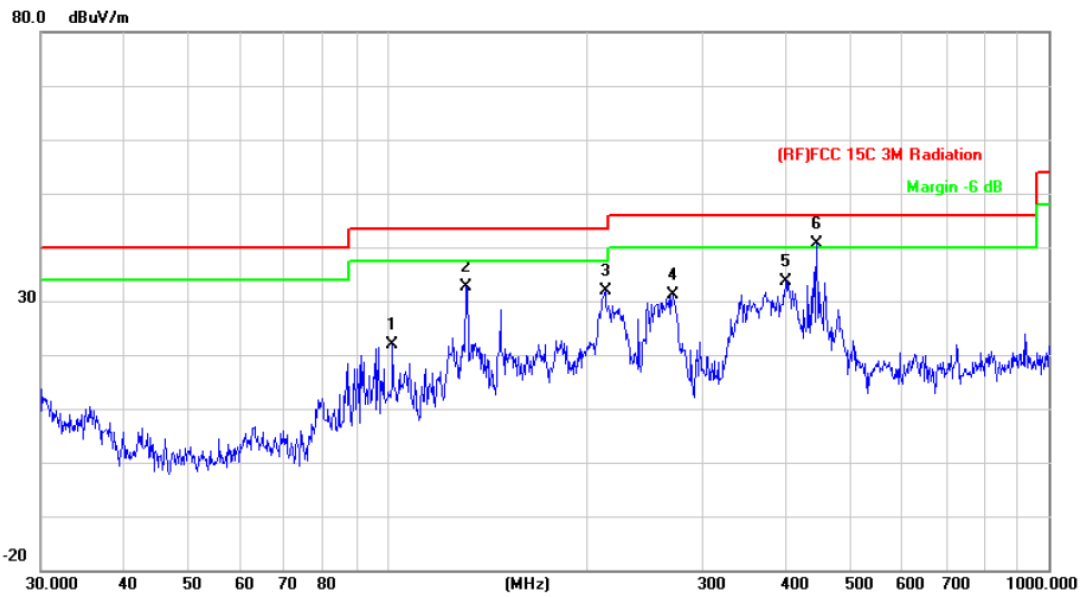
The Equipment Under Test was set to Continual Transmitting in maximum power.

5.5 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

Test data please refer the following pages.

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz		
Remark:	Only worse case is reported		

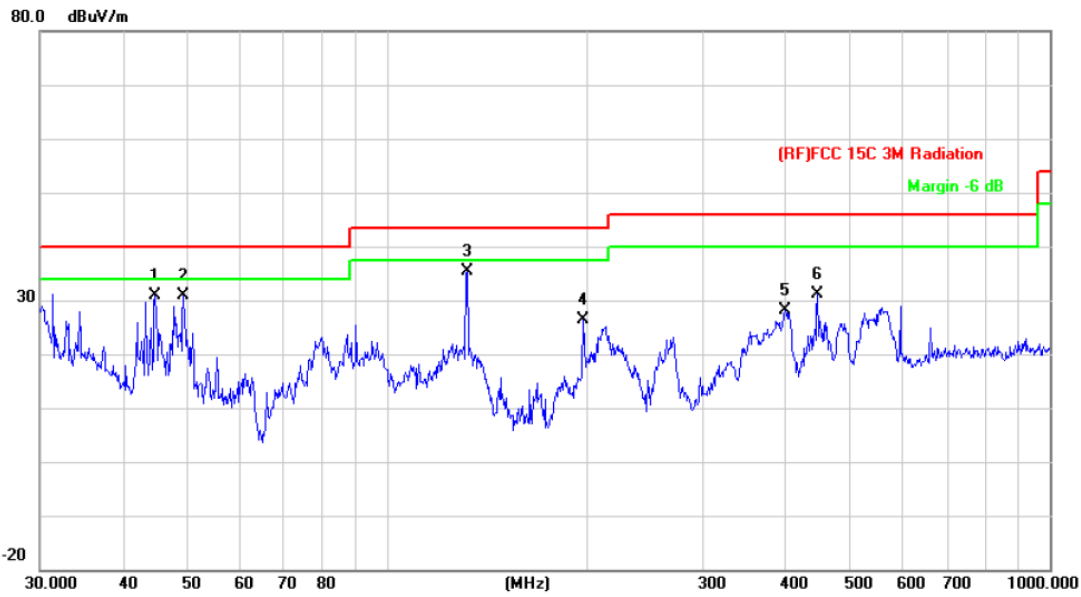


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		102.0014	43.63	-21.83	21.80	43.50	-21.70	peak
2		131.7577	54.76	-22.14	32.62	43.50	-10.88	peak
3		213.7634	51.60	-19.79	31.81	43.50	-11.69	peak
4		270.3748	48.92	-17.68	31.24	46.00	-14.76	peak
5		400.4319	46.50	-12.80	33.70	46.00	-12.30	peak
6	*	446.4141	53.20	-12.53	40.67	46.00	-5.33	peak

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz		
Remark:	Only worse case is reported		

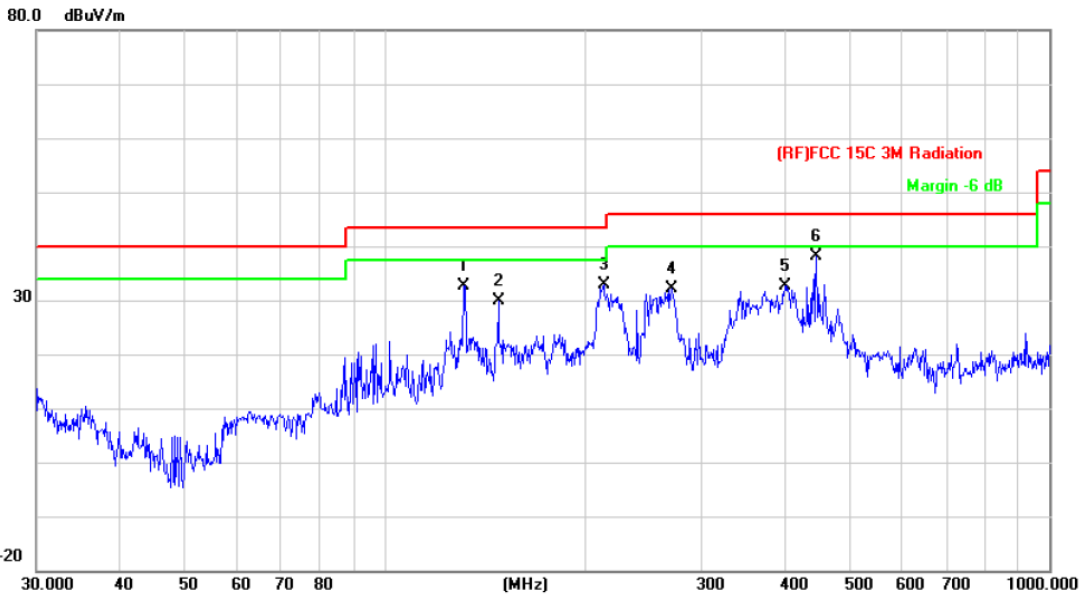


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1		44.7433	52.94	-22.16	30.78	40.00	-9.22	peak
2		49.3594	55.00	-24.12	30.88	40.00	-9.12	peak
3	*	132.2206	57.42	-22.13	35.29	43.50	-8.21	peak
4		197.8928	46.82	-20.49	26.33	43.50	-17.17	peak
5		399.0302	41.05	-12.87	28.18	46.00	-17.82	peak
6		446.4141	43.64	-12.53	31.11	46.00	-14.89	peak

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2437MHz		
Remark:	Only worse case is reported		

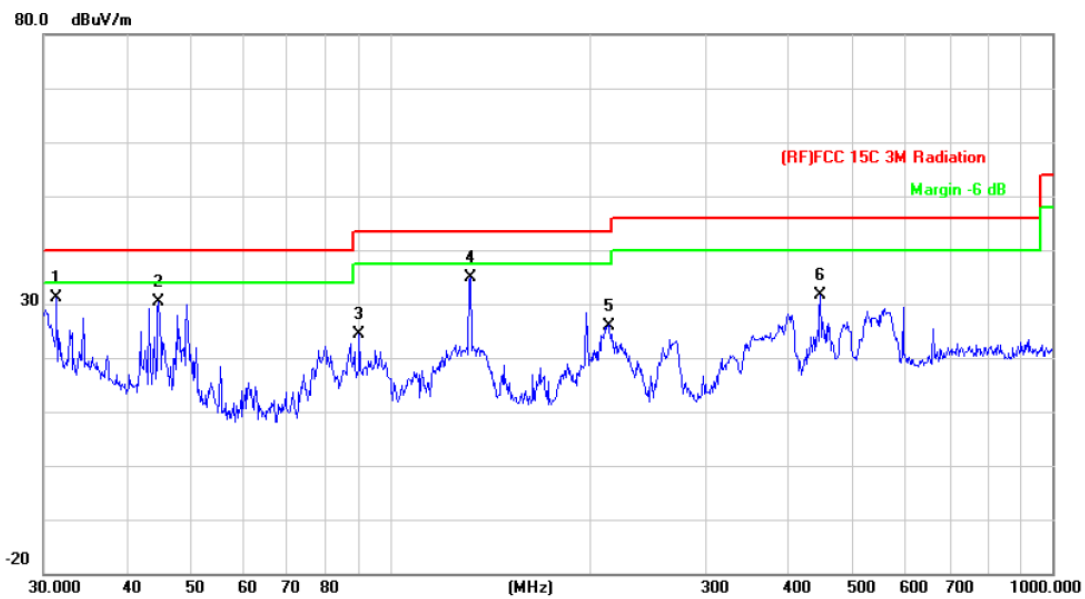


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		131.7574	54.76	-22.14	32.62	43.50	-10.88	peak
2		148.4410	51.30	-21.30	30.00	43.50	-13.50	peak
3		213.7632	52.60	-19.79	32.81	43.50	-10.69	peak
4		270.3747	49.92	-17.68	32.24	46.00	-13.76	peak
5		400.4318	45.50	-12.80	32.70	46.00	-13.30	peak
6	*	446.4141	50.70	-12.53	38.17	46.00	-7.83	peak

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2437MHz		
Remark:	Only worse case is reported		

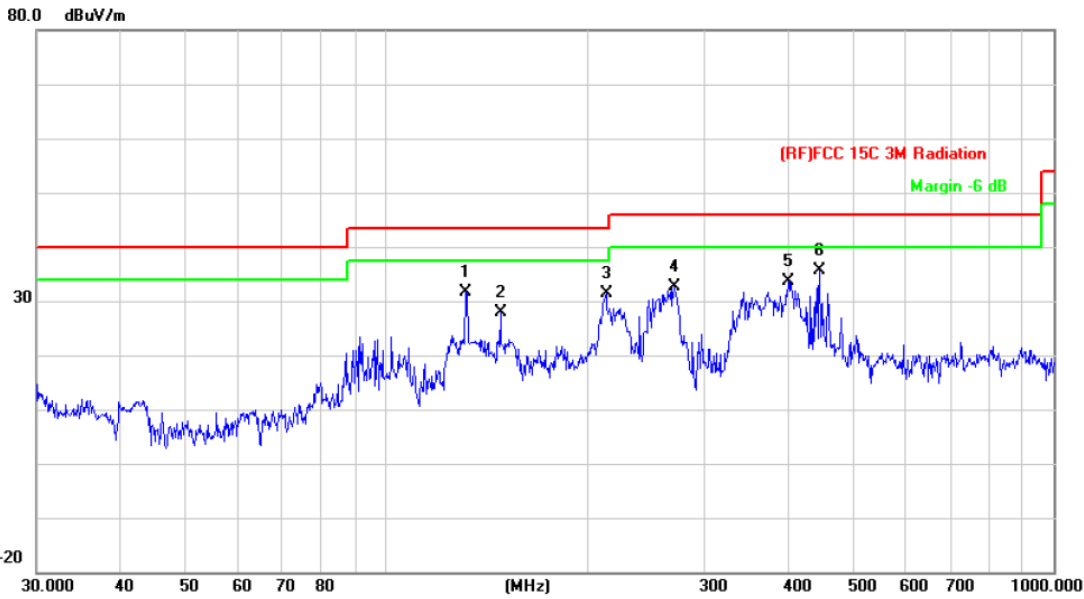


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	31.3992	46.05	-14.83	31.22	40.00	-8.78	peak
2	44.7433	52.44	-22.16	30.28	40.00	-9.72	peak
3	89.9047	47.07	-22.69	24.38	43.50	-19.12	peak
4 *	132.2204	56.92	-22.13	34.79	43.50	-8.71	peak
5	213.7632	45.79	-19.79	26.00	43.50	-17.50	peak
6	446.4141	44.14	-12.53	31.61	46.00	-14.39	peak

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2462MHz		
Remark:	Only worse case is reported		

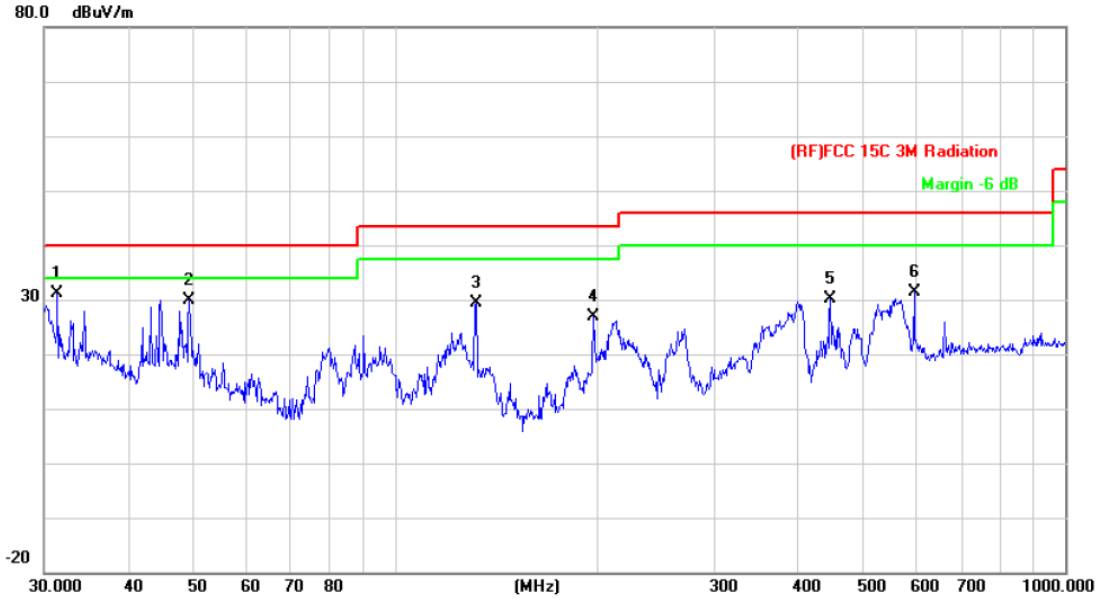


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		131.7574	53.76	-22.14	31.62	43.50	-11.88	peak
2		148.4410	49.30	-21.30	28.00	43.50	-15.50	peak
3		213.7632	51.10	-19.79	31.31	43.50	-12.19	peak
4		270.3747	50.42	-17.68	32.74	46.00	-13.26	peak
5		400.4318	46.50	-12.80	33.70	46.00	-12.30	peak
6	*	446.4141	48.20	-12.53	35.67	46.00	-10.33	peak

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz		
Remark:	Only worse case is reported		

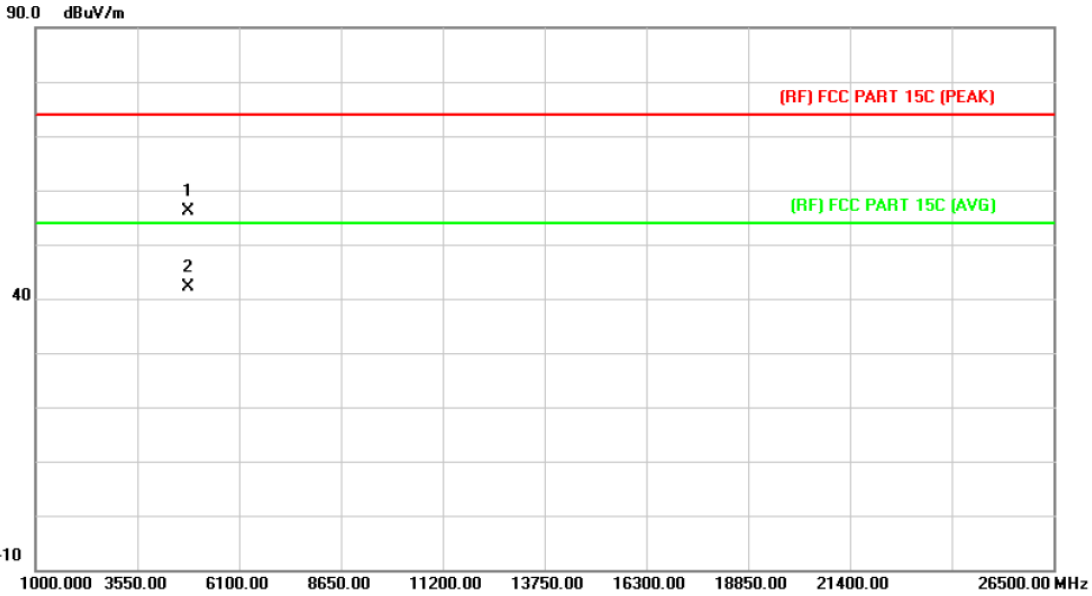


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	31.3992	46.05	-14.83	31.22	40.00	-8.78	peak
2		49.3594	54.00	-24.12	29.88	40.00	-10.12	peak
3		132.2204	51.42	-22.13	29.29	43.50	-14.21	peak
4		197.8926	47.32	-20.49	26.83	43.50	-16.67	peak
5		446.4141	42.64	-12.53	30.11	46.00	-15.89	peak
6		595.1327	41.08	-9.59	31.49	46.00	-14.51	peak

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

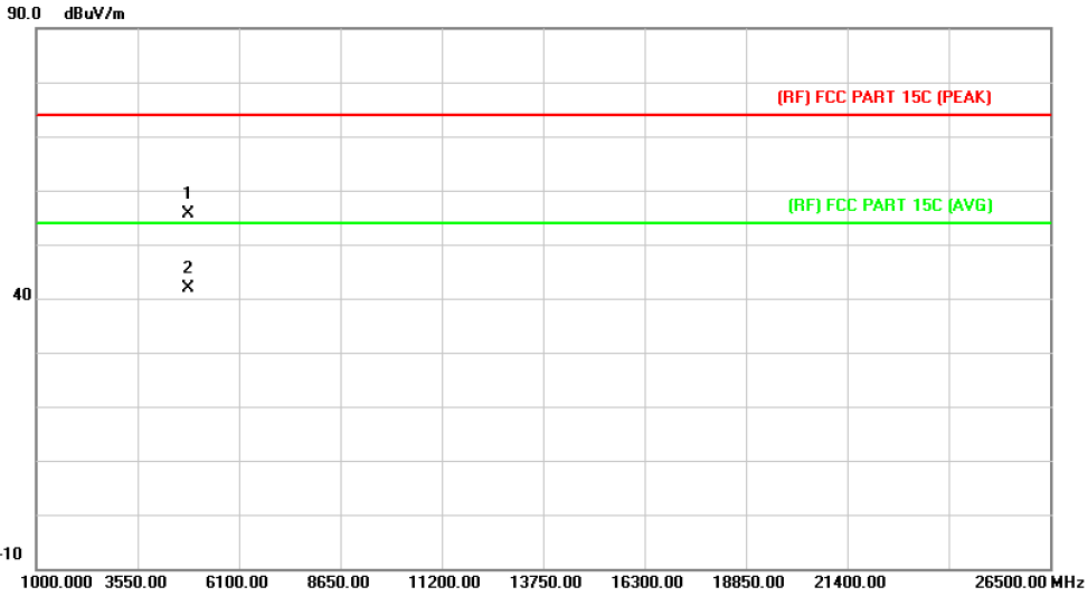
EUT:	10.1 inch Quad core capacitive touch tablet	Model:	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1		4824.173	42.56	13.56	56.12	74.00	-17.88	peak
2	*	4824.173	28.45	13.56	42.01	54.00	-11.99	AVG

Emission Level= Read Level+ Correct Factor

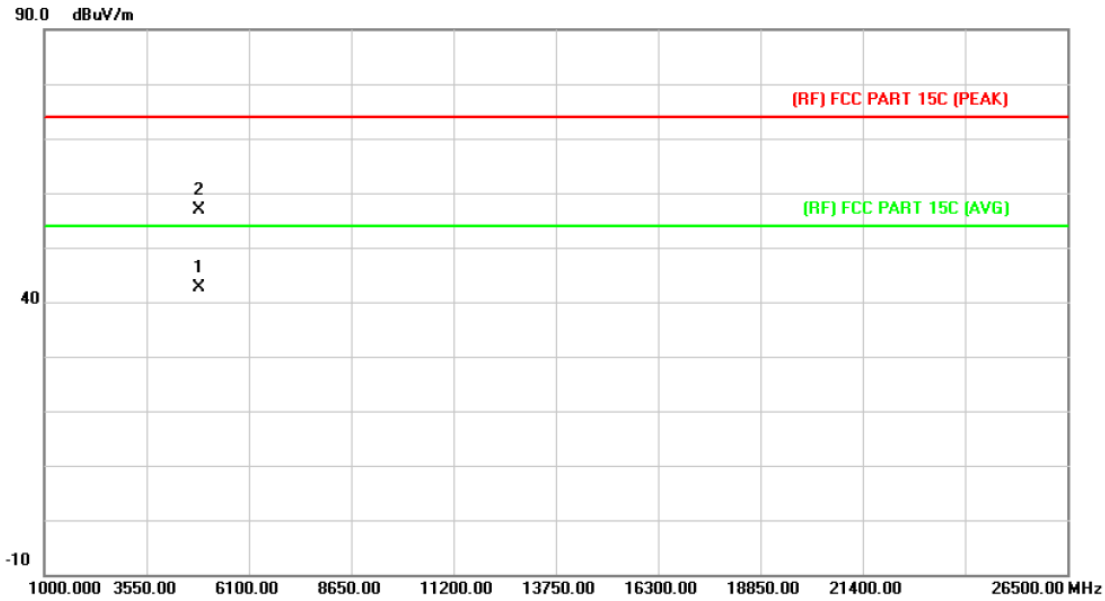
EUT:	10.1 inch Quad core capacitive touch tablet	Model:	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	4823.516	41.97	13.56	55.53	74.00	-18.47	peak
2 *	4824.398	28.42	13.56	41.98	54.00	-12.02	AVG

Emission Level= Read Level+ Correct Factor

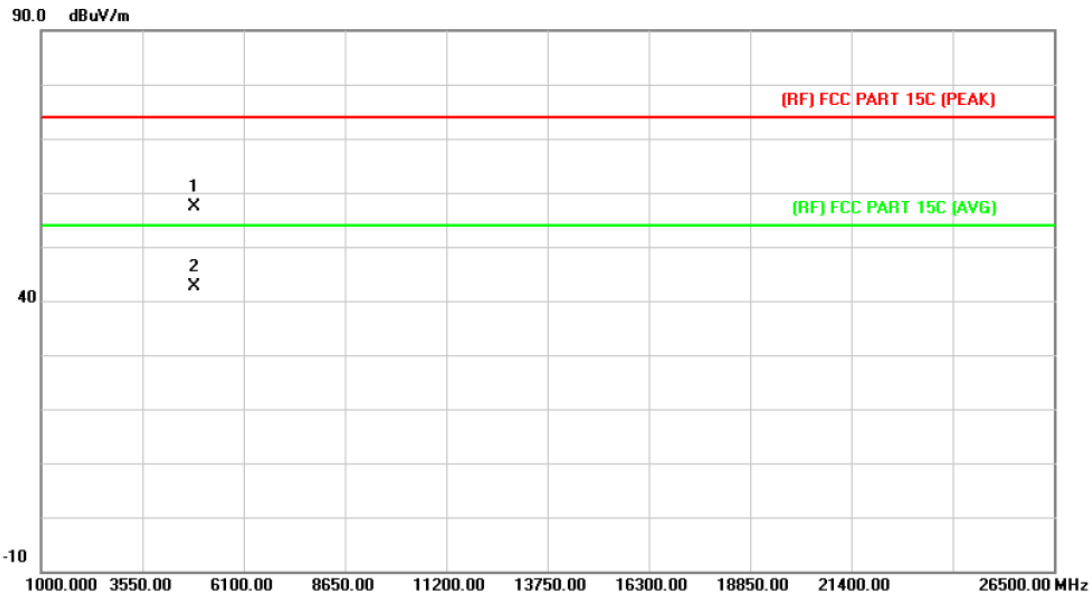
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2437MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	*	4873.581	28.73	13.86	42.59	54.00	-11.41	AVG
2		4874.371	43.08	13.86	56.94	74.00	-17.06	peak

Emission Level= Read Level+ Correct Factor

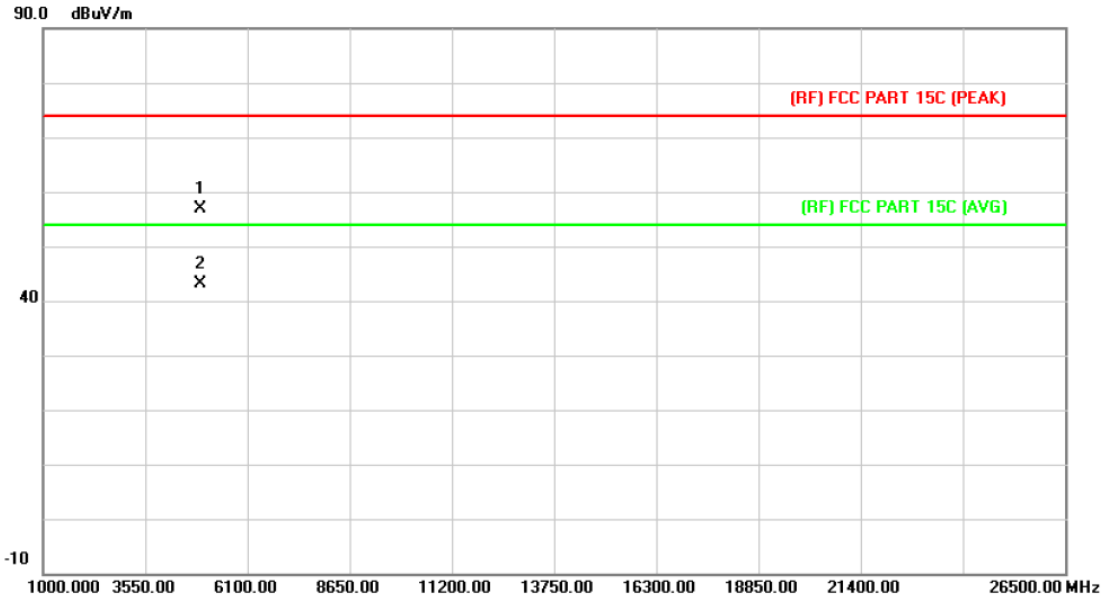
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2437MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	4874.174	43.58	13.86	57.44	74.00	-16.56	peak
2		4874.215	28.75	13.86	42.61	74.00	-31.39	peak

Emission Level= Read Level+ Correct Factor

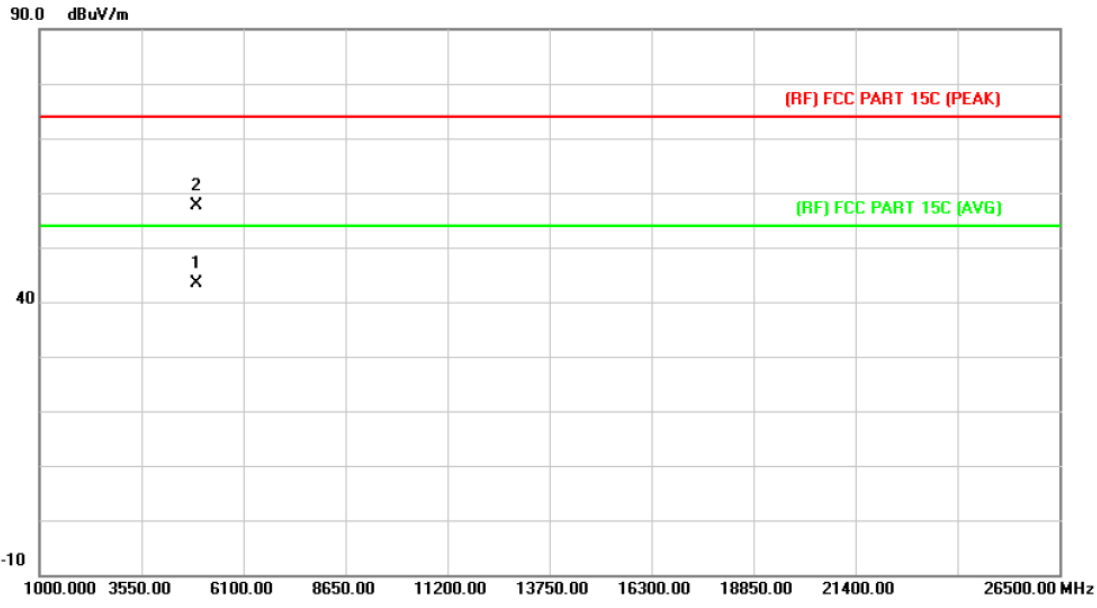
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2462MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1		4923.519	42.81	14.15	56.96	74.00	-17.04	peak
2	*	4923.888	29.10	14.15	43.25	54.00	-10.75	AVG

Emission Level= Read Level+ Correct Factor

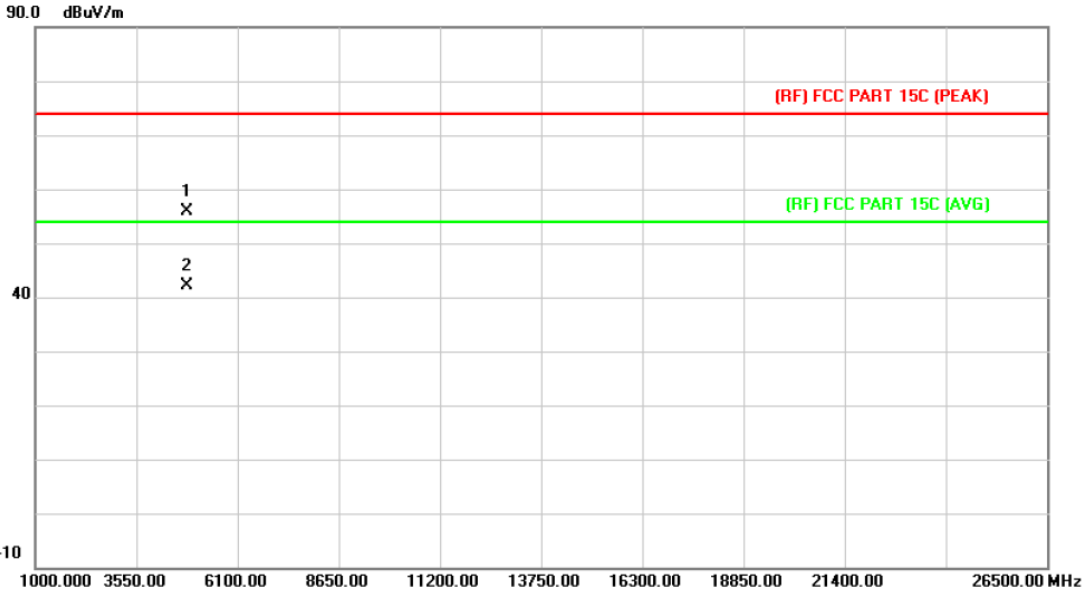
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	*	4923.622	29.12	14.15	43.27	54.00	-10.73	AVG
2		4924.384	43.45	14.15	57.60	74.00	-16.40	peak

Emission Level= Read Level+ Correct Factor

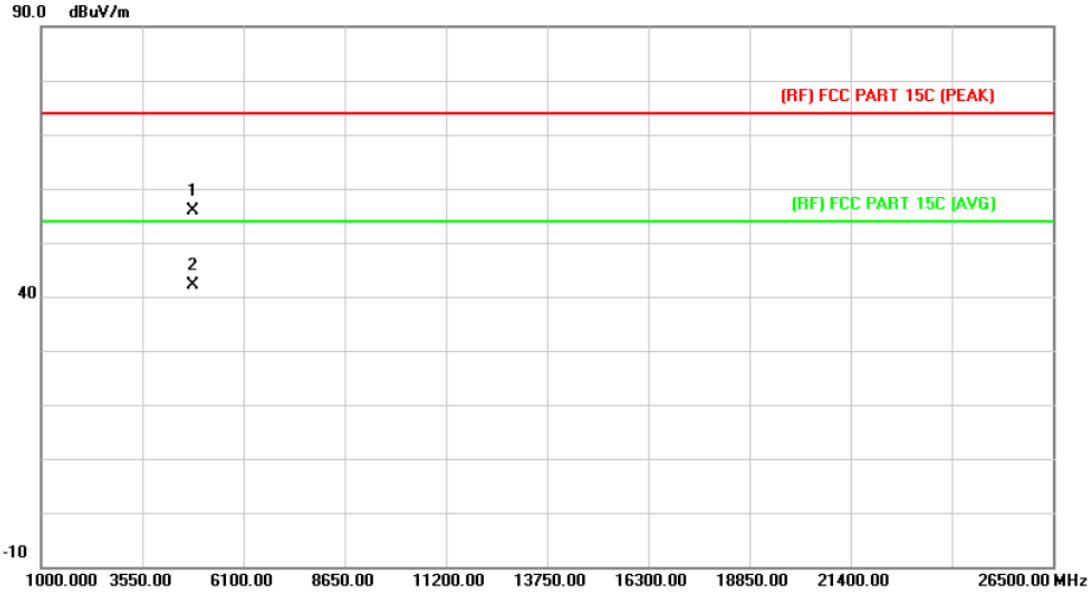
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2412MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1		4823.637	42.20	13.56	55.76	74.00	-18.24	peak
2	*	4824.439	28.48	13.56	42.04	54.00	-11.96	AVG

Emission Level= Read Level+ Correct Factor

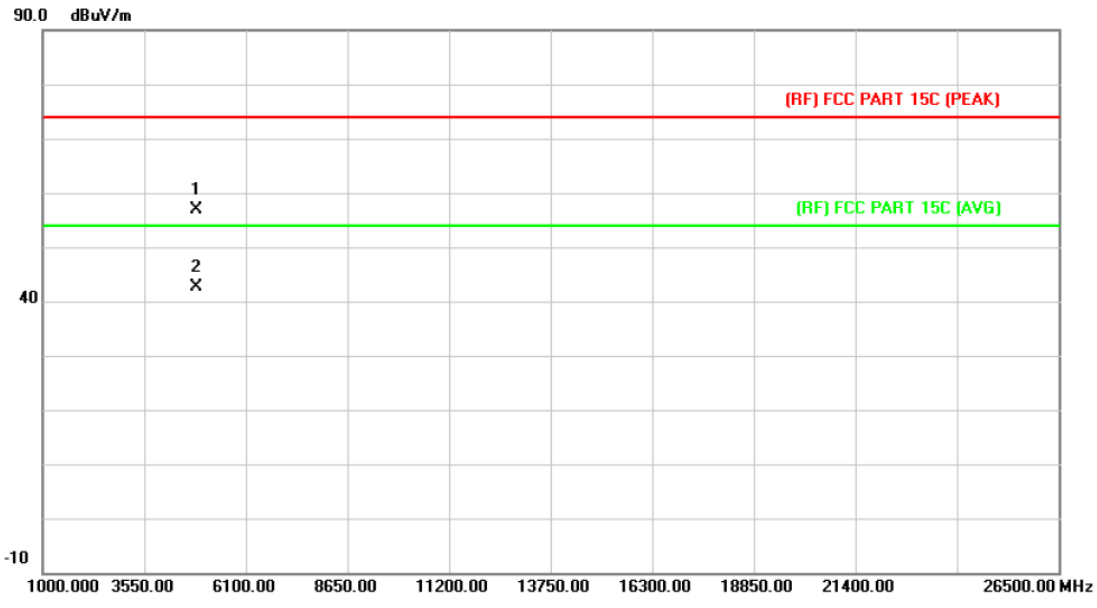
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2412MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	*	4824.433	42.26	13.56	55.82	54.00	1.82	AVG
2		4824.439	28.48	13.56	42.04	74.00	-31.96	peak

Emission Level= Read Level+ Correct Factor

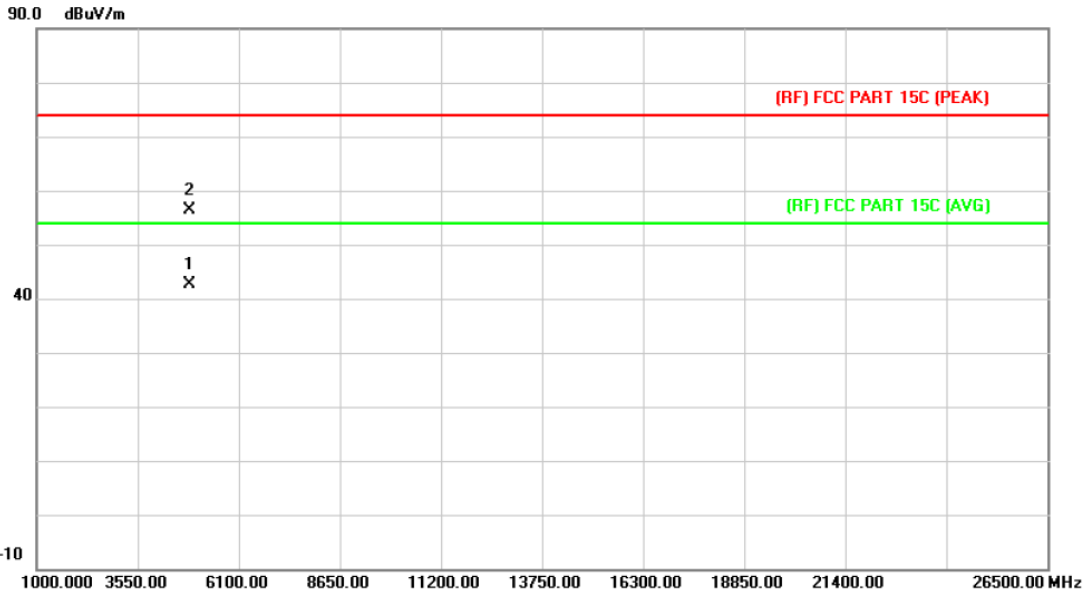
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2437MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1		4874.430	43.08	13.86	56.94	74.00	-17.06	peak
2	*	4874.825	28.86	13.86	42.72	54.00	-11.28	AVG

Emission Level= Read Level+ Correct Factor

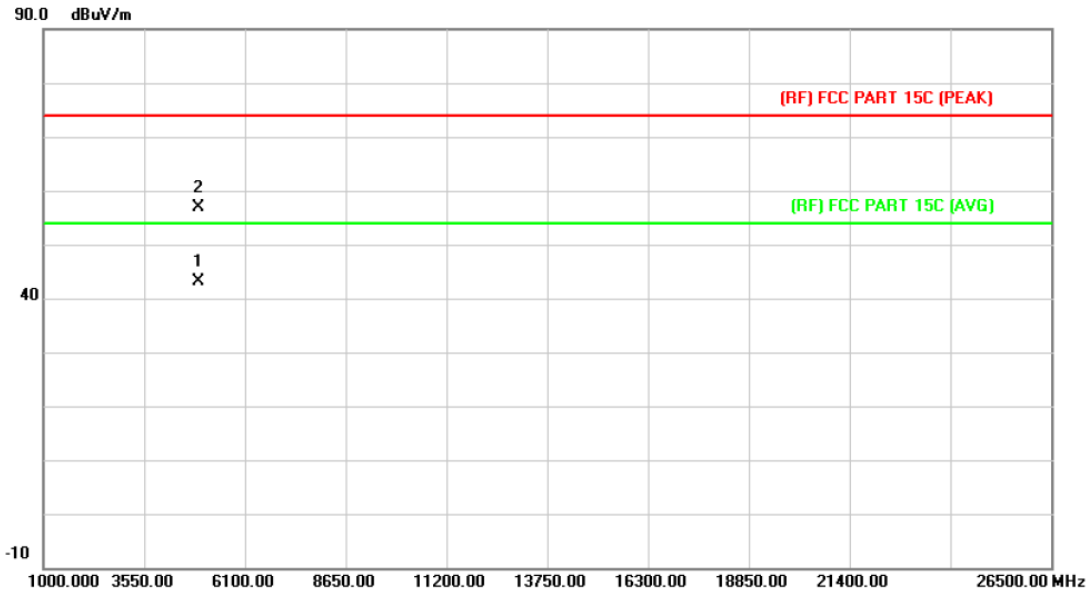
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2437MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	*	4874.072	28.78	13.86	42.64	54.00	-11.36	AVG
2		4874.338	42.56	13.86	56.42	74.00	-17.58	peak

Emission Level= Read Level+ Correct Factor

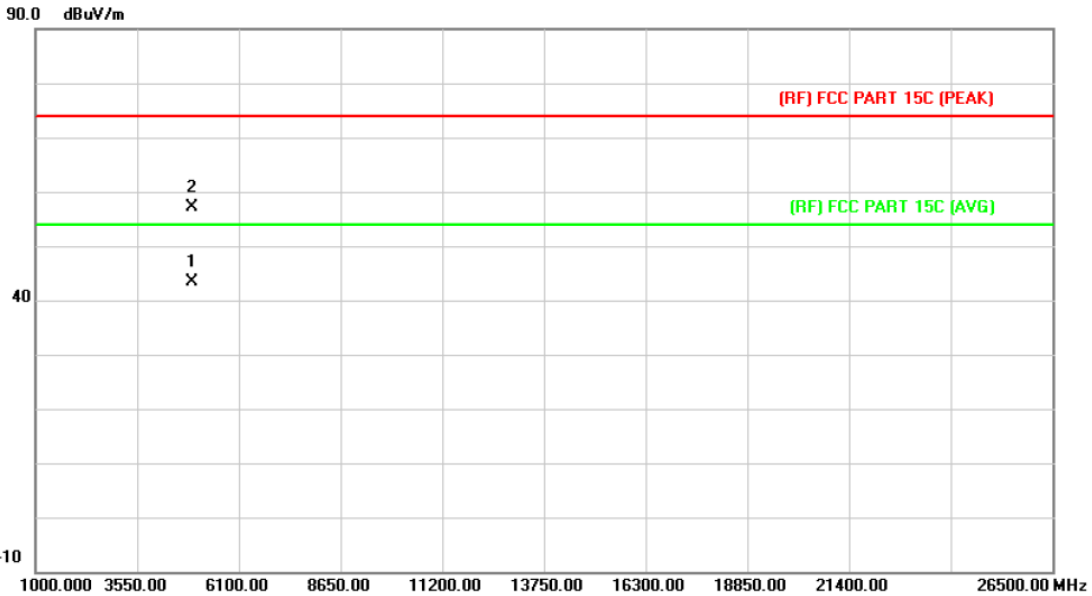
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	*	4924.010	29.10	14.15	43.25	54.00	-10.75	AVG
2		4924.312	42.81	14.15	56.96	74.00	-17.04	peak

Emission Level= Read Level+ Correct Factor

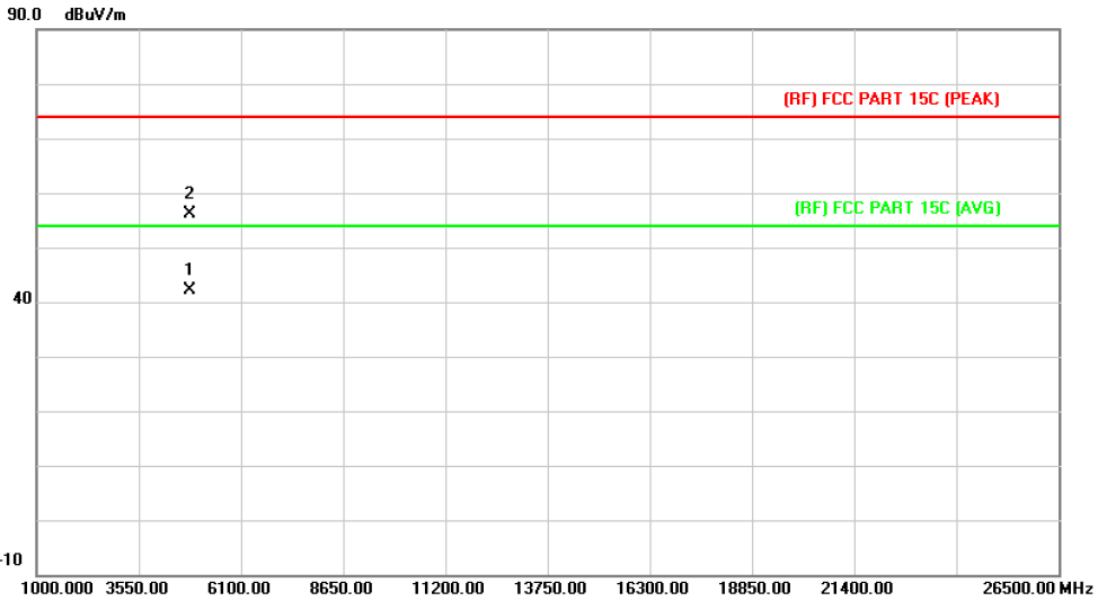
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2462MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	*	4923.786	29.11	14.15	43.26	54.00	-10.74	AVG
2		4924.331	43.03	14.15	57.18	74.00	-16.82	peak

Emission Level= Read Level+ Correct Factor

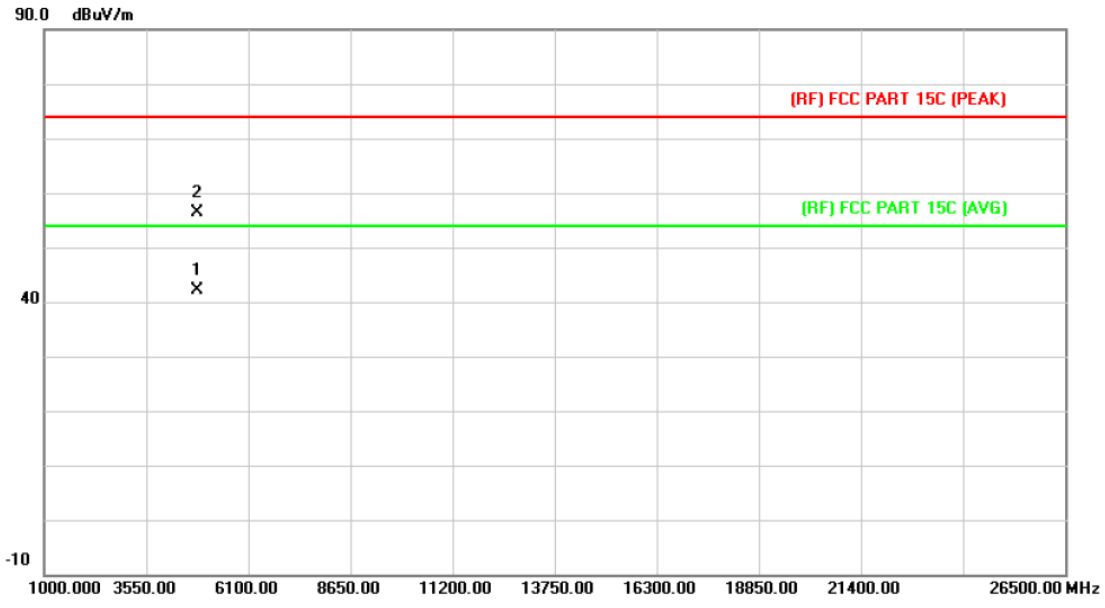
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2412MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	*	4824.051	28.48	13.56	42.04	54.00	-11.96	AVG
2		4824.489	42.61	13.56	56.17	74.00	-17.83	peak

Emission Level= Read Level+ Correct Factor

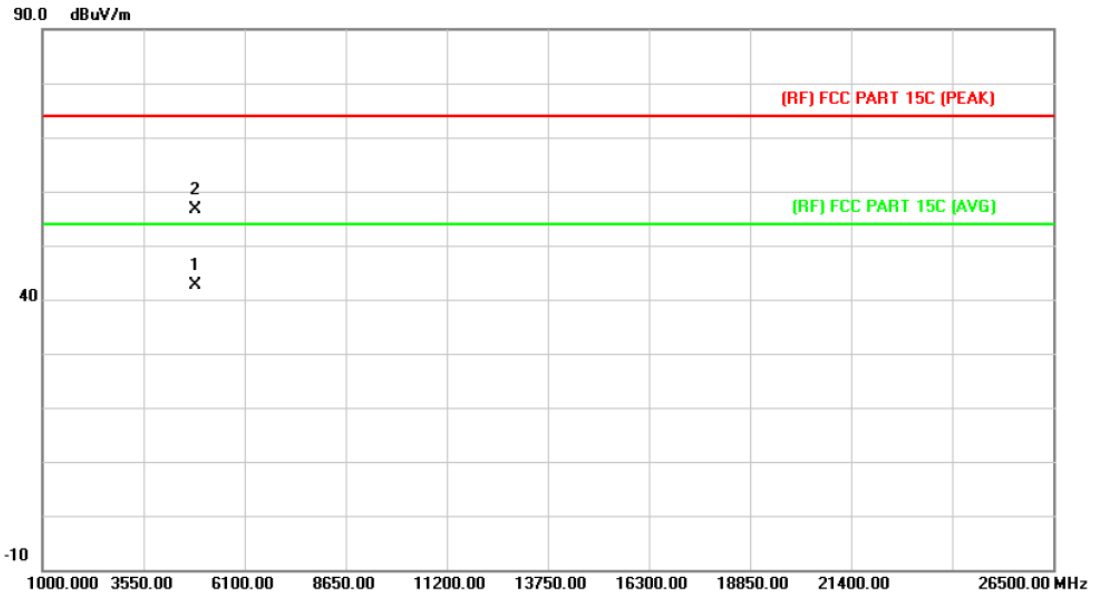
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2412MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	*	4824.174	28.46	13.56	42.02	54.00	-11.98	AVG
2		4824.241	42.77	13.56	56.33	74.00	-17.67	peak

Emission Level= Read Level+ Correct Factor

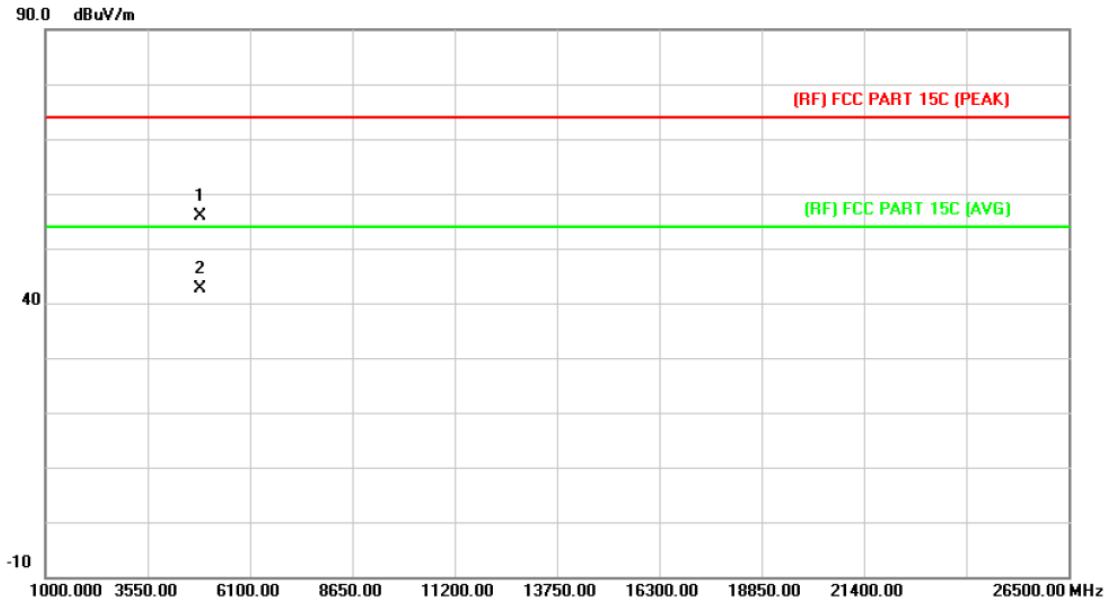
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2437MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	*	4873.561	28.79	13.86	42.65	54.00	-11.35	AVG
2		4873.563	42.87	13.86	56.73	74.00	-17.27	peak

Emission Level= Read Level+ Correct Factor

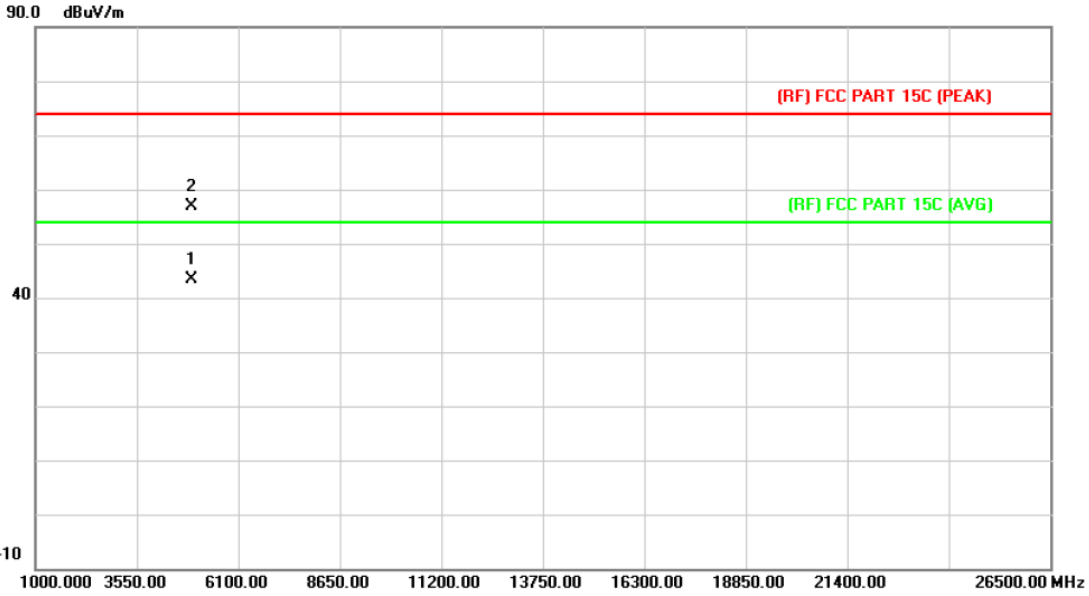
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2437MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1		4873.608	41.96	13.86	55.82	74.00	-18.18	peak
2	*	4874.316	28.79	13.86	42.65	54.00	-11.35	AVG

Emission Level= Read Level+ Correct Factor

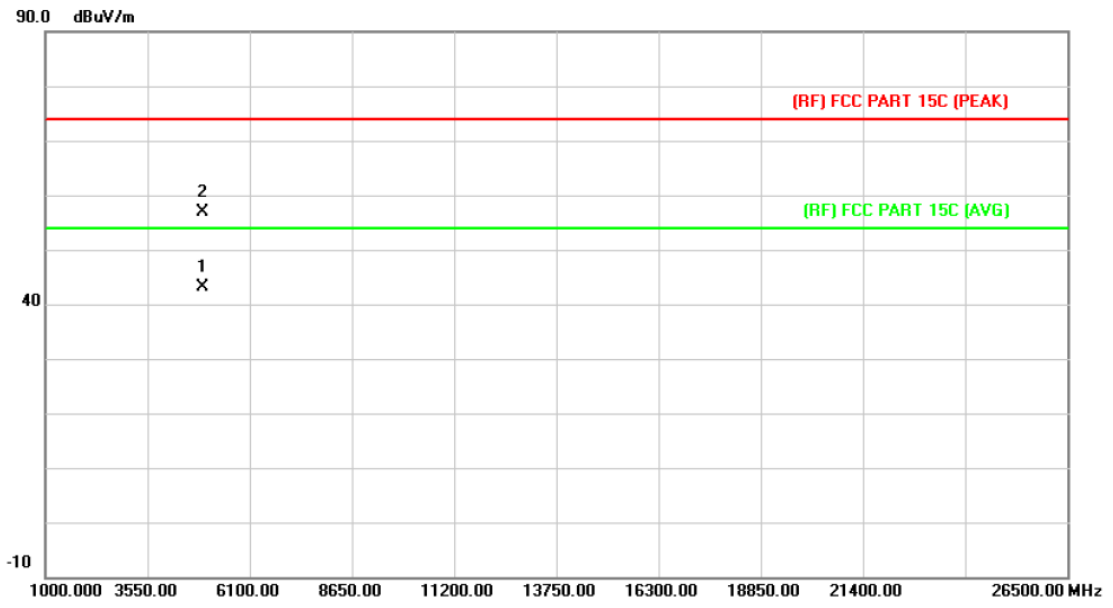
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2462MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4923.704	29.12	14.15	43.27	54.00	-10.73	AVG
2		4924.334	42.78	14.15	56.93	74.00	-17.07	peak

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2462MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	*	4923.847	29.10	14.15	43.25	54.00	-10.75	AVG
2		4924.409	42.83	14.15	56.98	74.00	-17.02	peak

Emission Level= Read Level+ Correct Factor

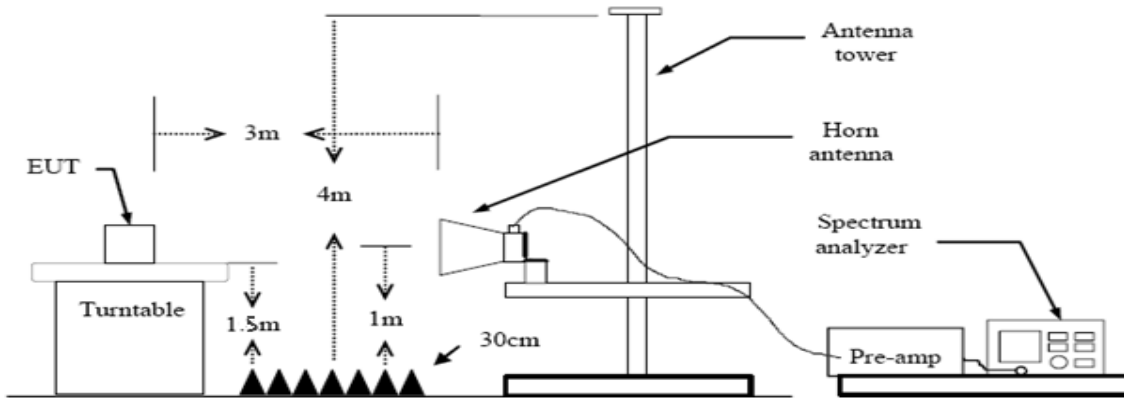
6. Restricted Bands Requirement

6.1 Test Standard and Limit

- 5.1.1 Test Standard
FCC Part 15.209 FCC Part 15.205
- 5.1.2 Test Limit

Restricted Frequency Band (MHz)	Class B (dBuV/m)(at 3 M)	
	Peak	Average
2310 ~2390	74	54
2483.5 ~2500	74	54

6.2 Test Setup



6.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz. The EUT was placed on a rotating 0.8m high above the ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit

Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.

- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.

6.4 EUT Operating Condition

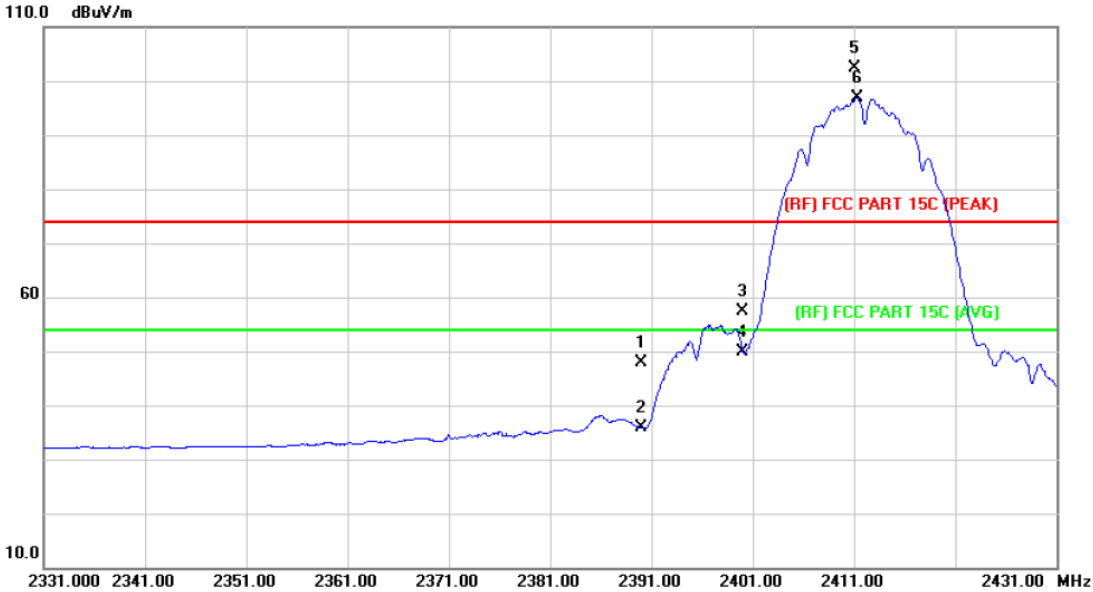
The Equipment Under Test was set to Continual Transmitting in maximum power.

6.5 Test Data

Please see the next page.

(1) Radiation Test

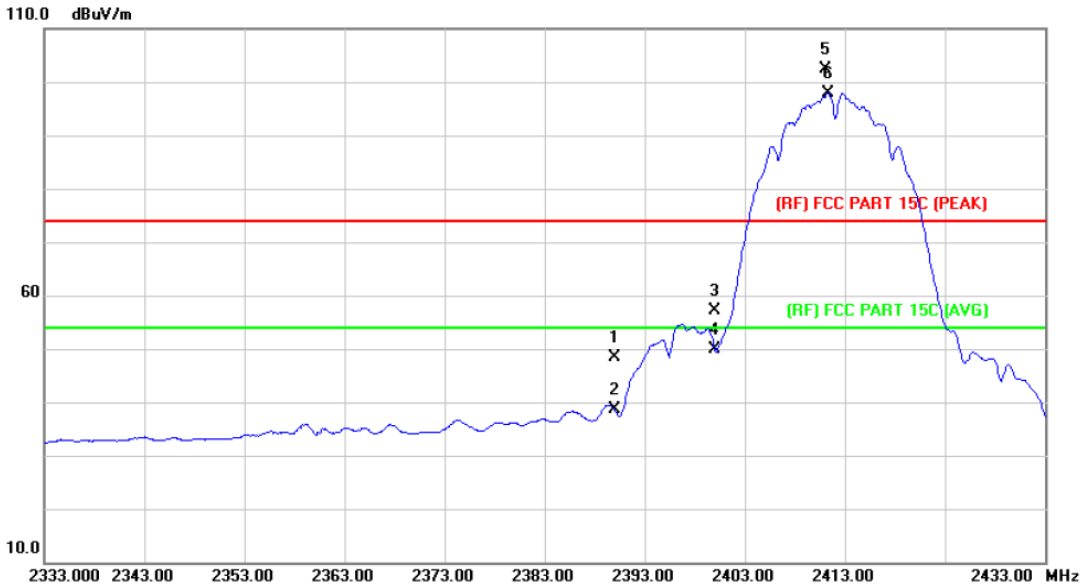
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1		2390.000	47.15	0.77	47.92	74.00	-26.08	peak
2		2390.000	35.13	0.77	35.90	54.00	-18.10	AVG
3		2400.000	56.45	0.81	57.26	74.00	-16.74	peak
4		2400.000	49.16	0.81	49.97	54.00	-4.03	AVG
5	X	2411.100	101.64	0.86	102.50	Fundamental Frequency		peak
6	*	2411.300	96.12	0.86	96.98	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

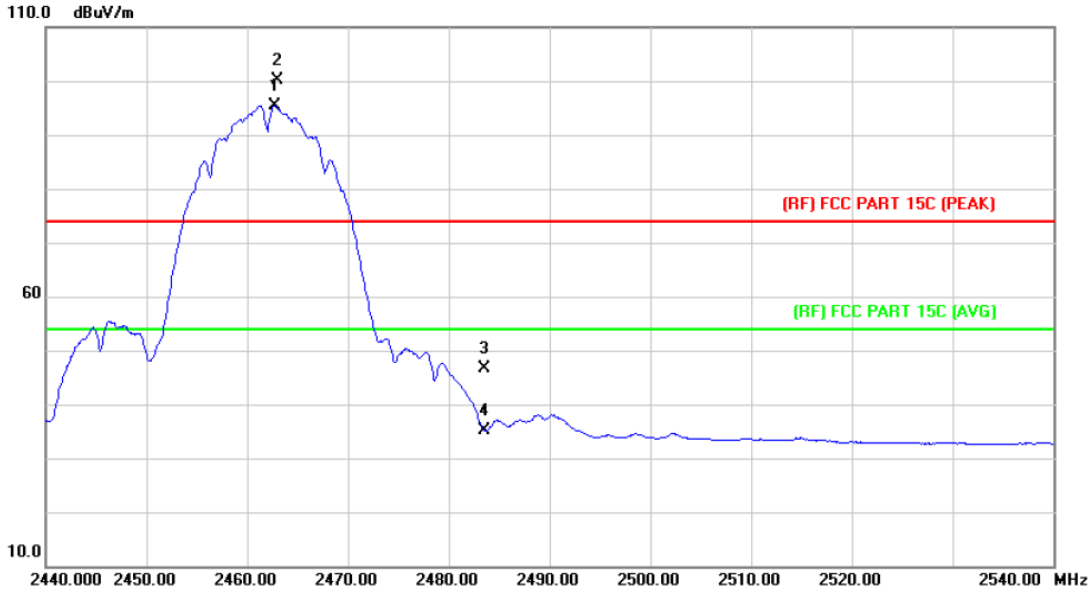
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1		2390.000	47.56	0.77	48.33	74.00	-25.67	peak
2		2390.000	37.74	0.77	38.51	54.00	-15.49	AVG
3		2400.000	56.22	0.81	57.03	74.00	-16.97	peak
4		2400.000	48.95	0.81	49.76	54.00	-4.24	AVG
5	X	2411.100	101.49	0.86	102.35	Fundamental Frequency		peak
6	*	2411.300	97.08	0.86	97.94	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

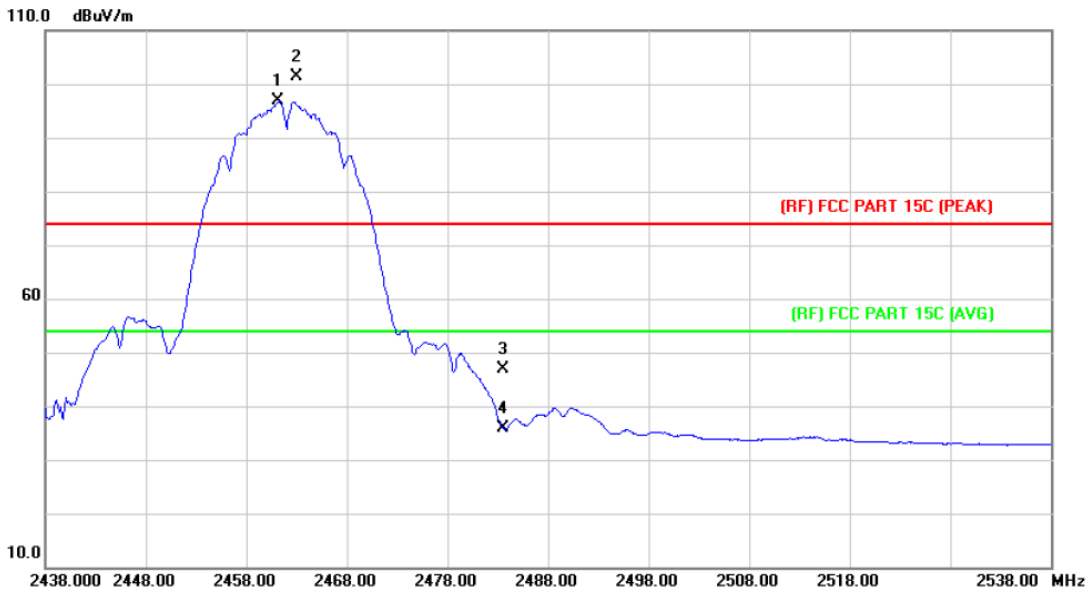
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2462MHz		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	2462.700	94.42	1.08	95.50	Fundamental Frequency		AVG
2	X	2463.000	99.14	1.08	100.22	Fundamental Frequency		peak
3		2483.500	45.43	1.17	46.60	74.00	-27.40	peak
4		2483.500	34.03	1.17	35.20	54.00	-18.80	AVG

Emission Level= Read Level+ Correct Factor

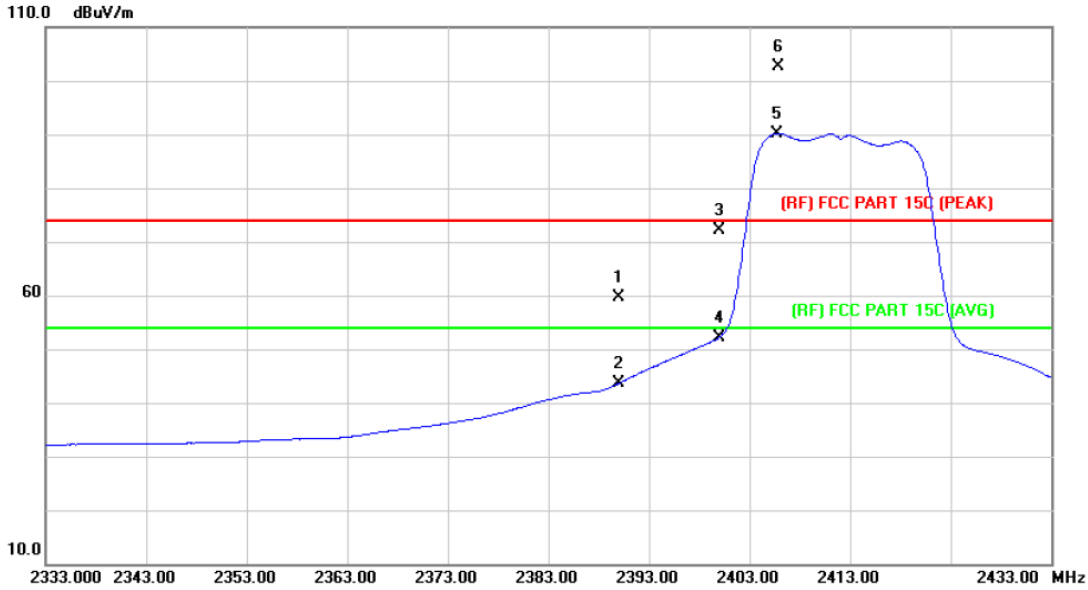
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	2461.200	95.75	1.07	96.82	Fundamental Frequency		AVG
2	X	2463.000	100.36	1.08	101.44	Fundamental Frequency		peak
3		2483.500	45.78	1.17	46.95	74.00	-27.05	peak
4		2483.500	34.82	1.17	35.99	54.00	-18.01	AVG

Emission Level= Read Level+ Correct Factor

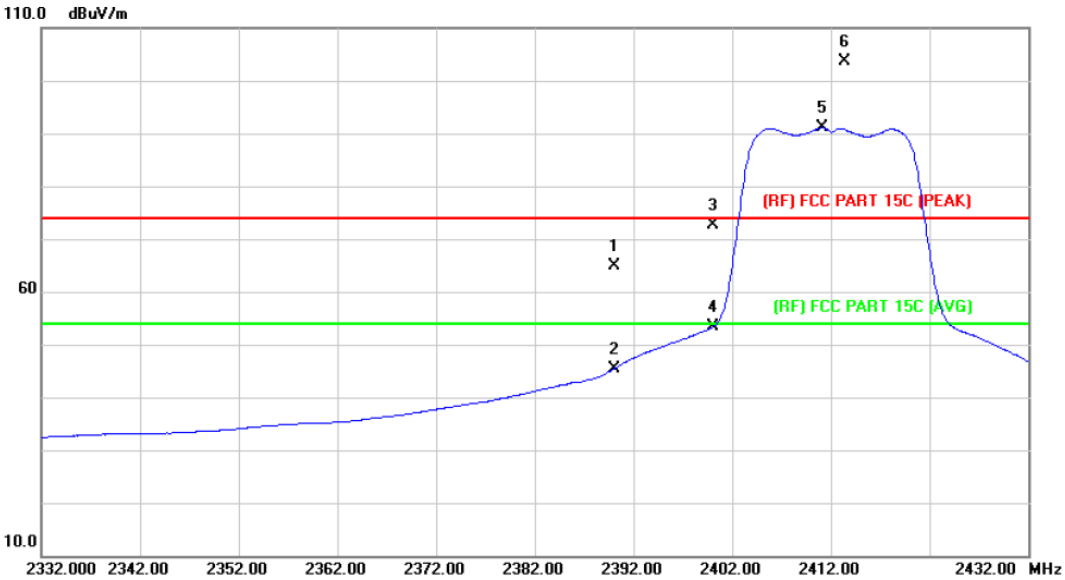
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2412MHz		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		2390.000	58.92	0.77	59.69	74.00	-14.31	peak
2		2390.000	42.89	0.77	43.66	54.00	-10.34	AVG
3		2400.000	71.31	0.81	72.12	74.00	-1.88	peak
4		2400.000	51.44	0.81	52.25	54.00	-1.75	AVG
5	*	2405.700	89.40	0.84	90.24	Fundamental Frequency		AVG
6	X	2405.800	101.79	0.84	102.63	Fundamental Frequency		peak

Emission Level= Read Level+ Correct Factor

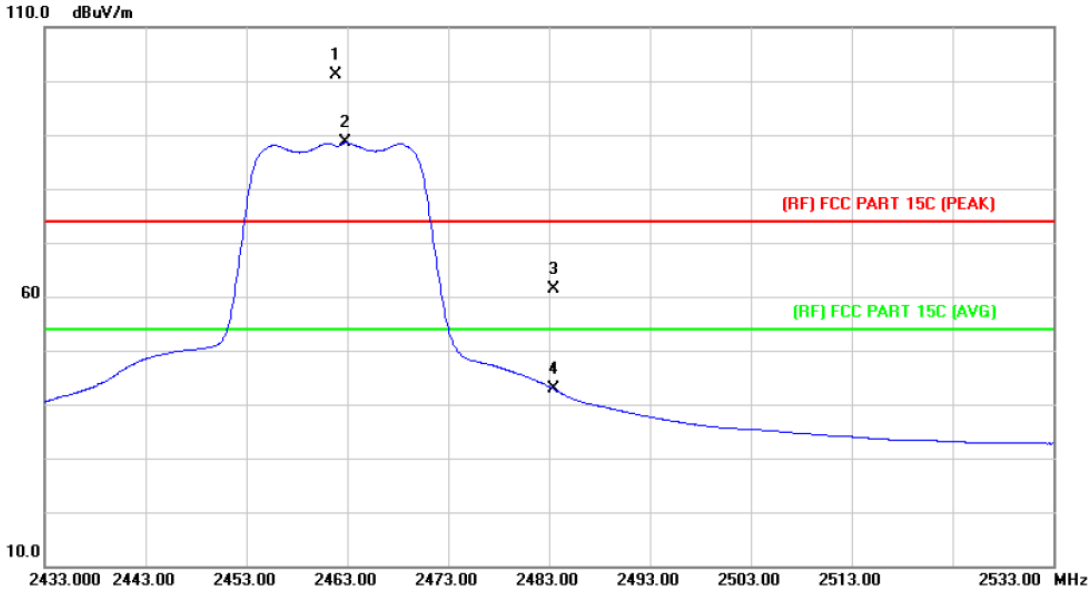
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2412MHz		
Remark:	N/A		



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector
1	2390.000	64.06	0.77	64.83	74.00	-9.17	peak
2	2390.000	44.59	0.77	45.36	54.00	-8.64	AVG
3	2400.000	71.75	0.81	72.56	74.00	-1.44	peak
4	2400.000	52.47	0.81	53.28	54.00	-0.72	AVG
5	* 2411.200	90.20	0.86	91.06	Fundamental Frequency		AVG
6	X 2413.400	102.74	0.86	103.60	Fundamental Frequency		peak

Emission Level= Read Level+ Correct Factor

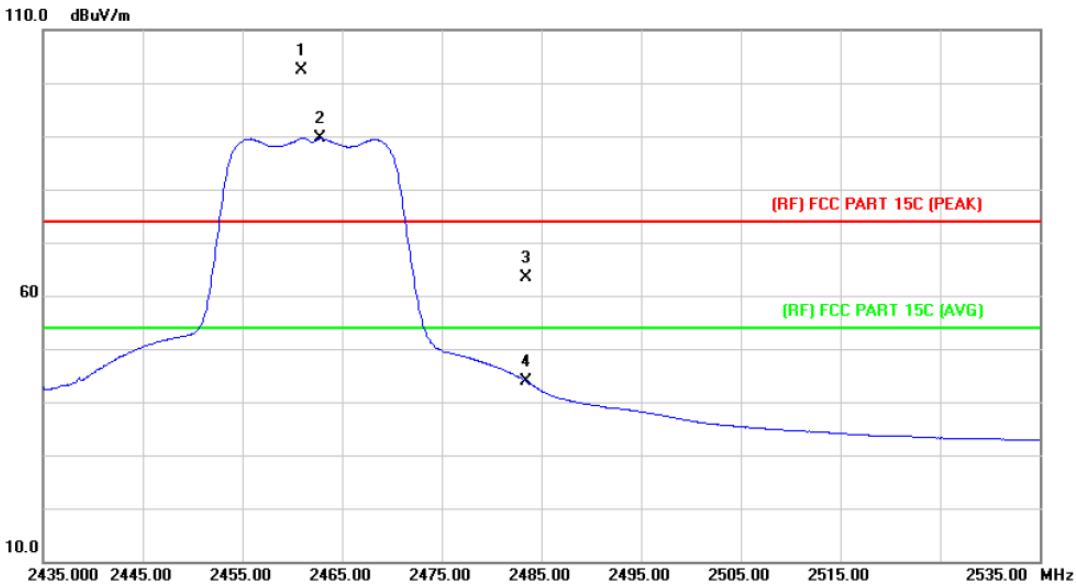
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	X	2461.900	100.12	1.07	101.19	Fundamental Frequency		peak
2	*	2462.800	87.49	1.08	88.57	Fundamental Frequency		AVG
3		2483.500	60.27	1.17	61.44	74.00	-12.56	peak
4		2483.500	41.67	1.17	42.84	54.00	-11.16	AVG

Emission Level= Read Level+ Correct Factor

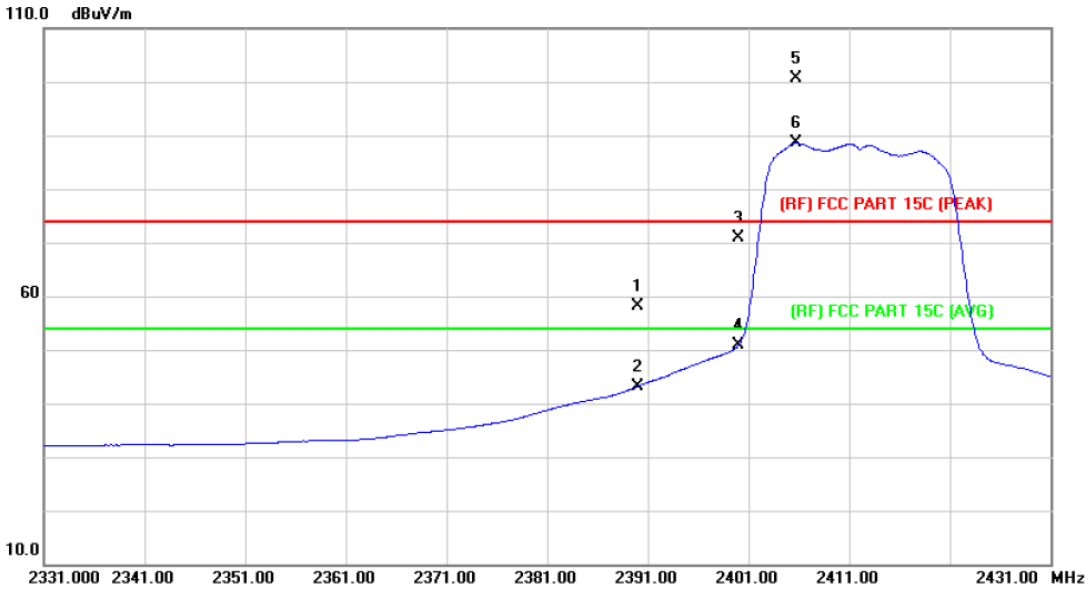
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2462MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	X	2460.900	101.31	1.06	102.37	Fundamental Frequency		peak
2	*	2462.800	88.49	1.08	89.57	Fundamental Frequency		AVG
3		2483.500	62.28	1.17	63.45	74.00	-10.55	peak
4		2483.500	42.71	1.17	43.88	54.00	-10.12	AVG

Emission Level= Read Level+ Correct Factor

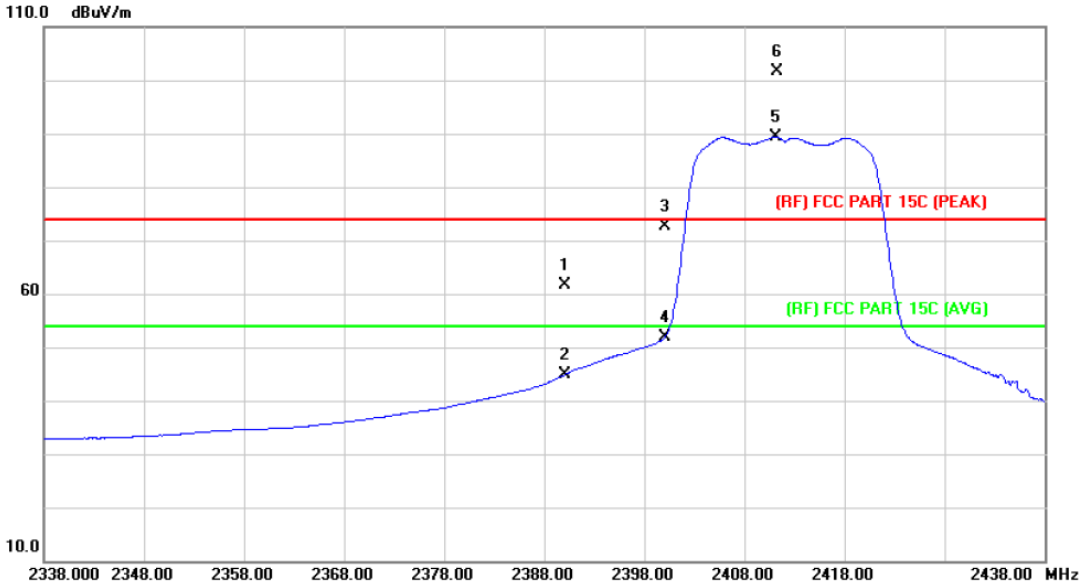
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2412MHz		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		2390.000	57.44	0.77	58.21	74.00	-15.79	peak
2		2390.000	42.43	0.77	43.20	54.00	-10.80	AVG
3		2400.000	70.03	0.81	70.84	74.00	-3.16	peak
4		2400.000	50.06	0.81	50.87	54.00	-3.13	AVG
5	X	2405.700	99.75	0.84	100.59	Fundamental Frequency		peak
6	*	2405.700	87.75	0.84	88.59	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

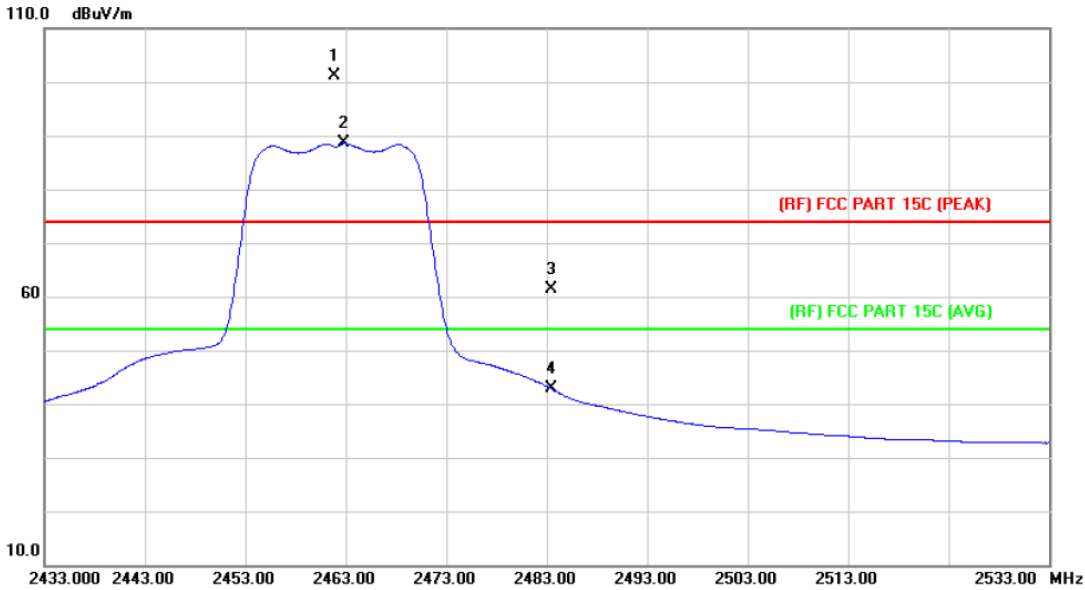
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2412MHz		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		2390.000	60.79	0.77	61.56	74.00	-12.44	peak
2		2390.000	44.13	0.77	44.90	54.00	-9.10	AVG
3		2400.000	71.90	0.81	72.71	74.00	-1.29	peak
4		2400.000	51.01	0.81	51.82	54.00	-2.18	AVG
5	*	2411.100	88.51	0.86	89.37	Fundamental Frequency		AVG
6	X	2411.300	100.84	0.86	101.70	Fundamental Frequency		peak

Emission Level= Read Level+ Correct Factor

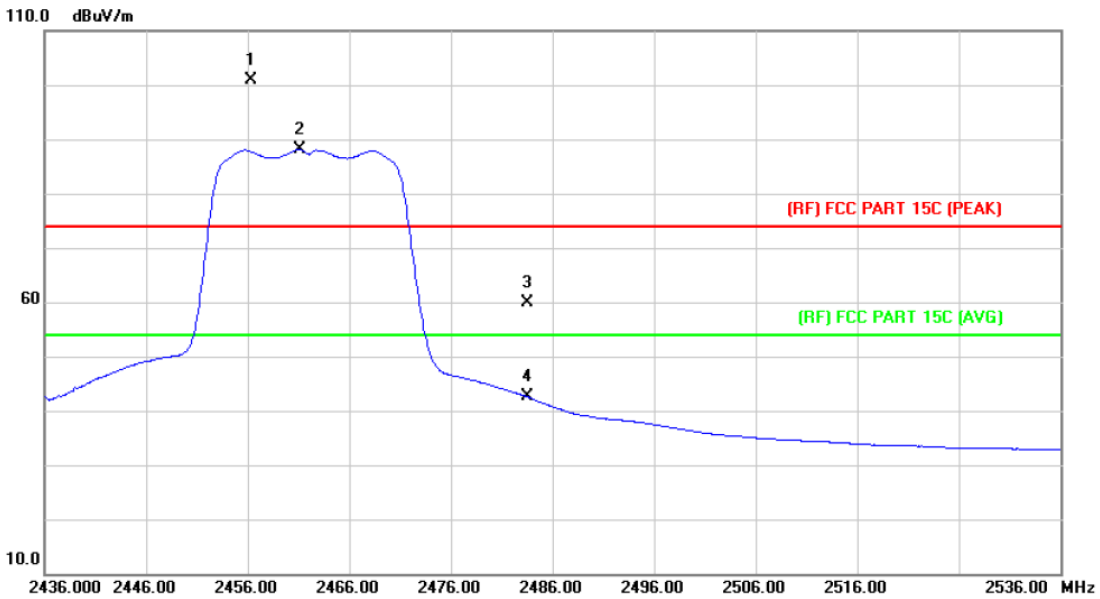
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2462MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	X	2461.900	100.12	1.07	101.19	Fundamental Frequency		peak
2	*	2462.800	87.49	1.08	88.57	Fundamental Frequency		AVG
3		2483.500	60.27	1.17	61.44	74.00	-12.56	peak
4		2483.500	41.67	1.17	42.84	54.00	-11.16	AVG

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2462MHz		
Remark:	N/A		

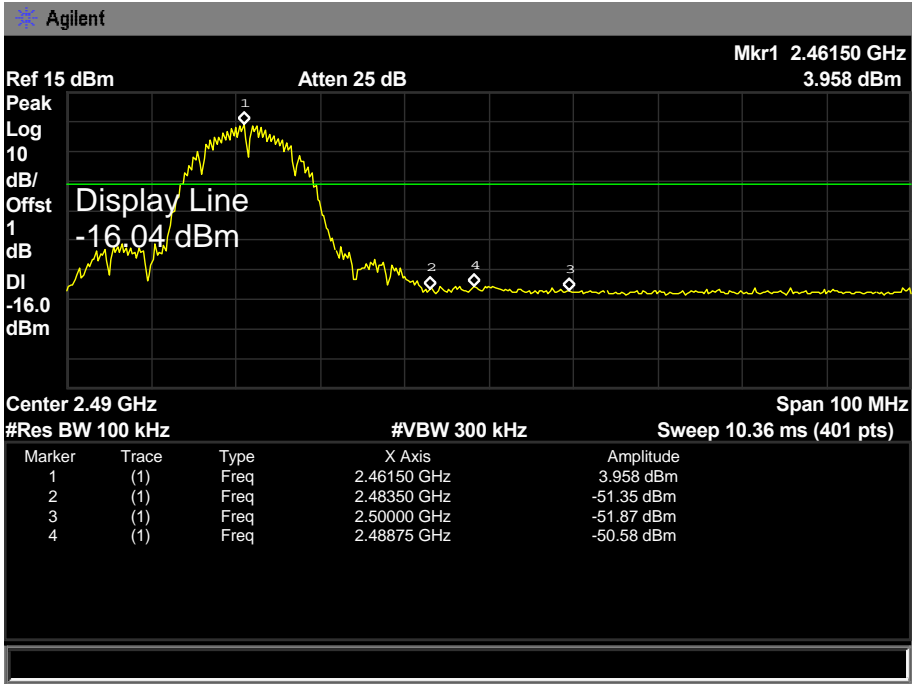
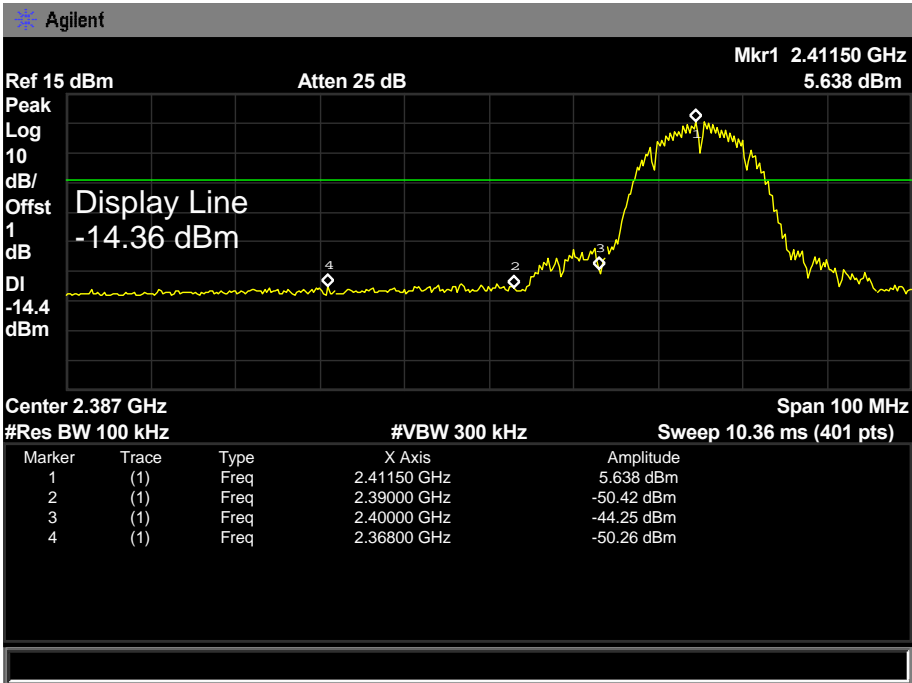


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	X	2456.300	99.83	1.05	100.88	Fundamental Frequency		peak
2	*	2461.100	87.00	1.06	88.06	Fundamental Frequency		AVG
3		2483.500	58.60	1.17	59.77	74.00	-14.23	peak
4		2483.500	41.43	1.17	42.60	54.00	-11.40	AVG

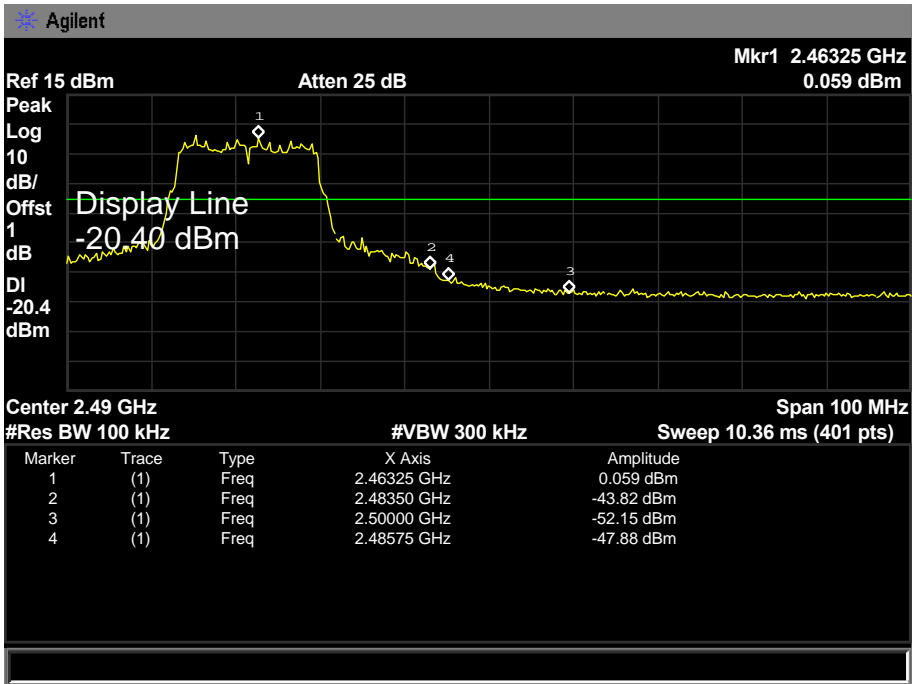
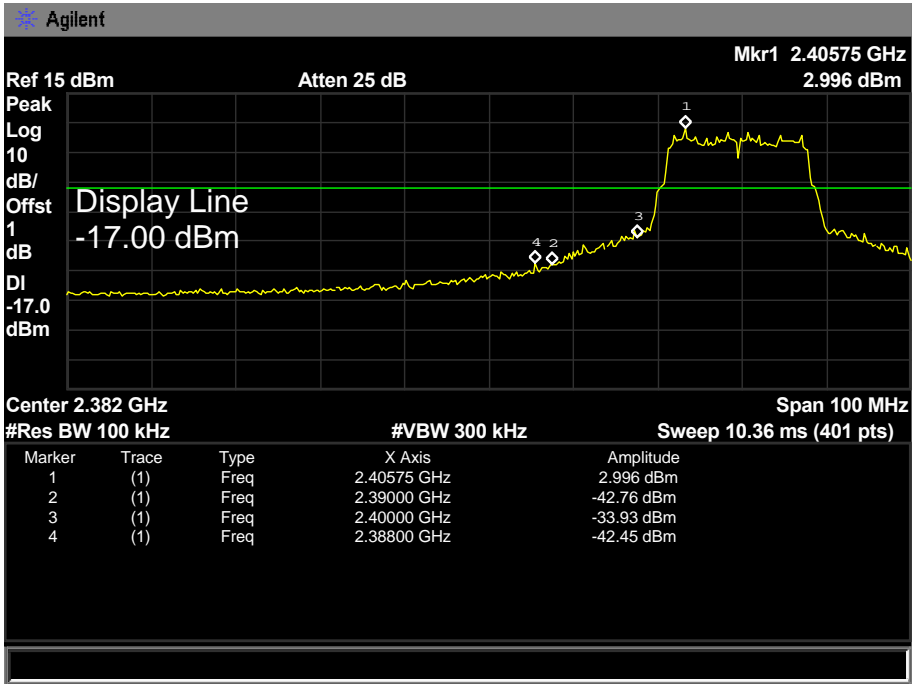
Emission Level= Read Level+ Correct Factor

(2) Conducted Test

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Test Mode:	TX B Mode 2412MHz / TX B Mode 2462MHz		
Remark:	The EUT is programed in continuously transmitting mode		



EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Test Mode:	TX G Mode 2412MHz / TX G Mode 2462MHz		
Remark:	The EUT is programed in continuously transmitting mode		



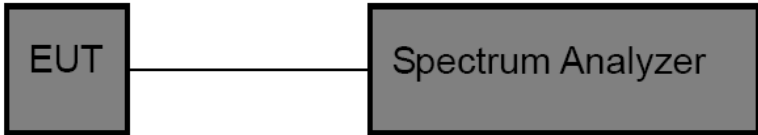
7. Bandwidth Test

7.1 Test Standard and Limit

- 7.1.1 Test Standard
FCC Part 15.247 (a)(2)
- 7.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/ RSS 247 Issue 1		
Test Item	Limit	Frequency Range(MHz)
Bandwidth	≥ 500 KHz (6dB bandwidth)	2400~2483.5

7.2 Test Setup



7.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) The bandwidth is measured at an amplitude level reduced 6dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst -case (i.e the widest) bandwidth.
- (3) Measure the channel separation the spectrum analyzer was set to Resolution Bandwidth:100 kHz, and Video Bandwidth:300 kHz, Detector: Peak, Sweep Time set auto.

7.4 EUT Operating Condition

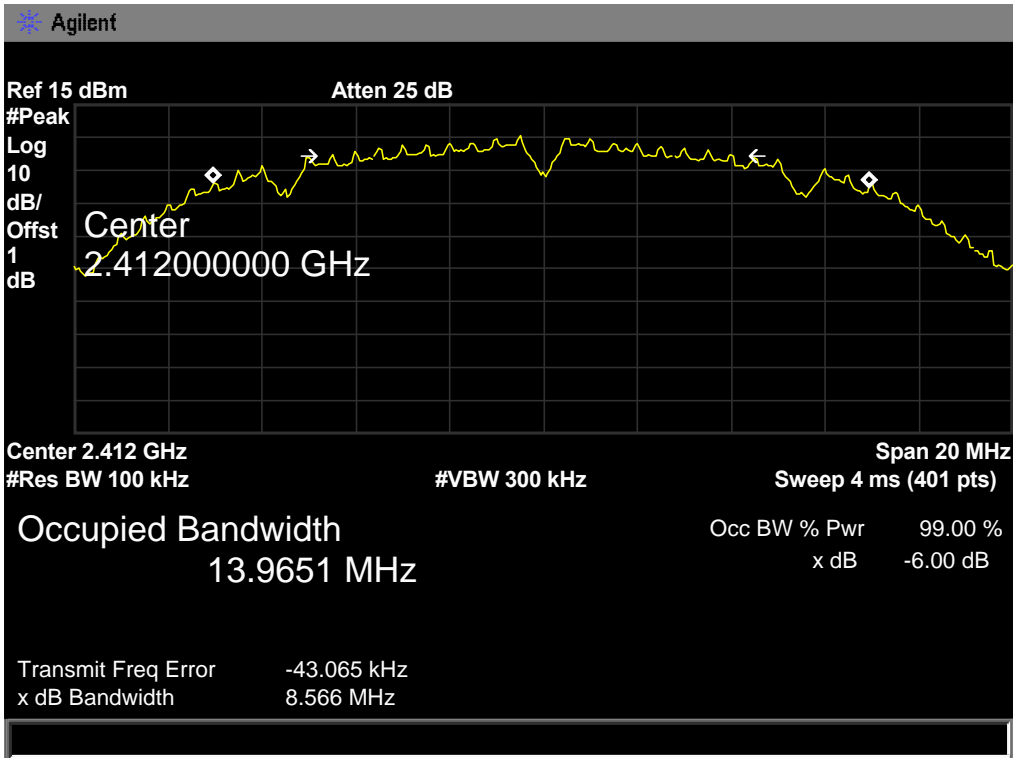
The EUT was set to continuously transmitting in each mode and low, Midle and high channel for the test.

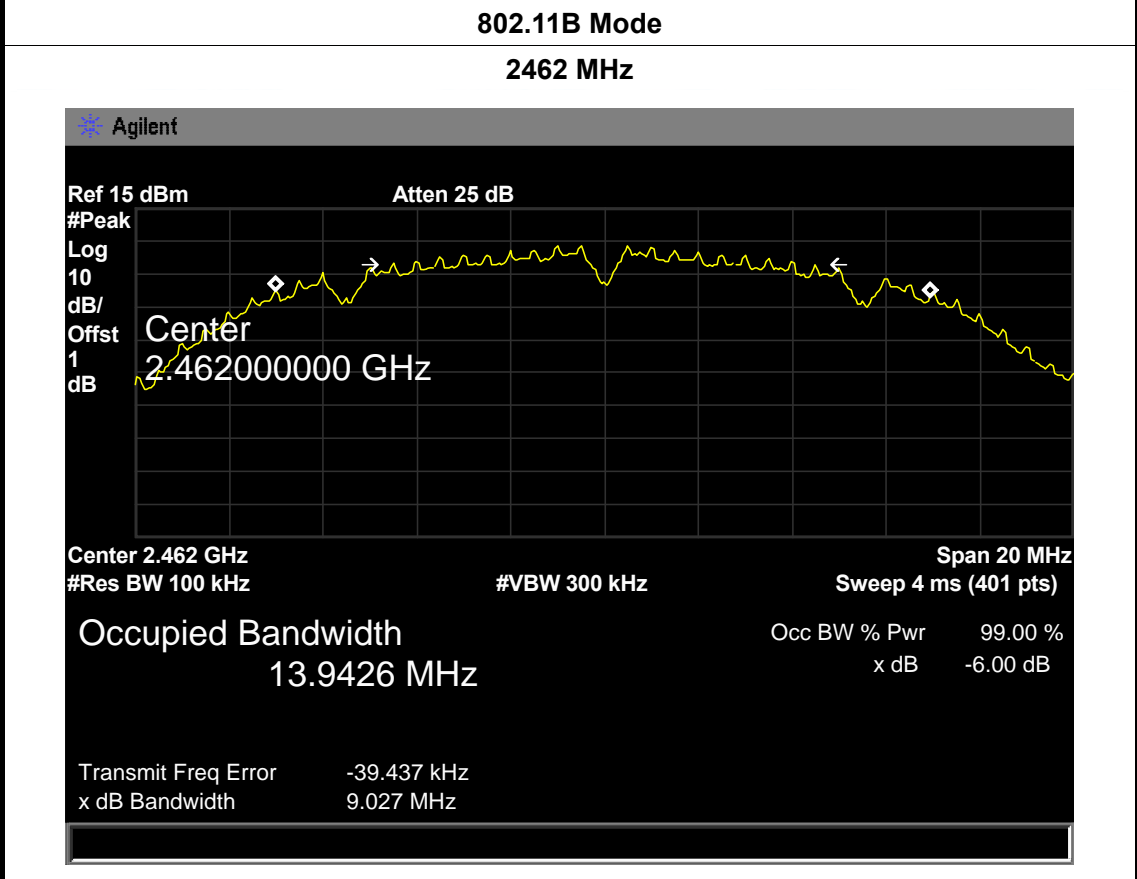
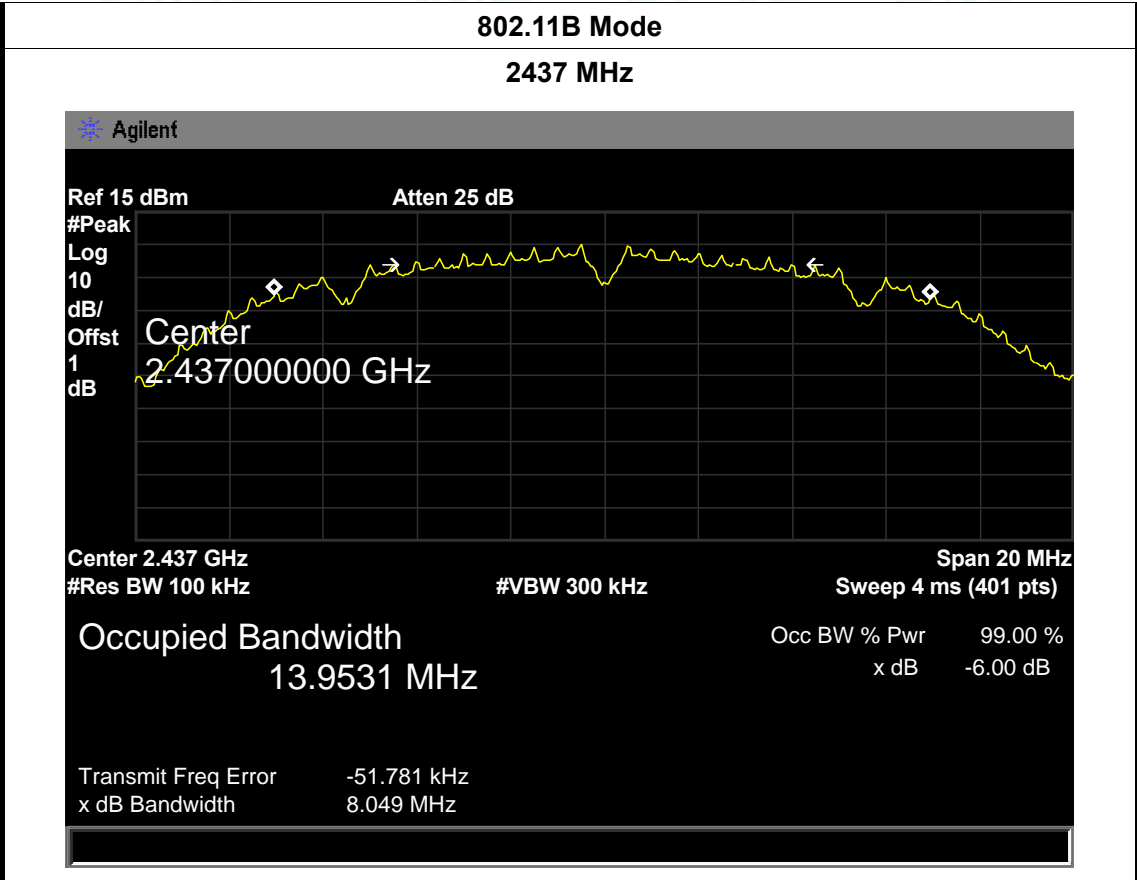
7.5 Test Data

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Test Mode:	TX 802.11B Mode		
Channel frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)
2412	8.566	13.9651	>=0.5
2437	8.049	13.9531	
2462	9.027	13.9426	

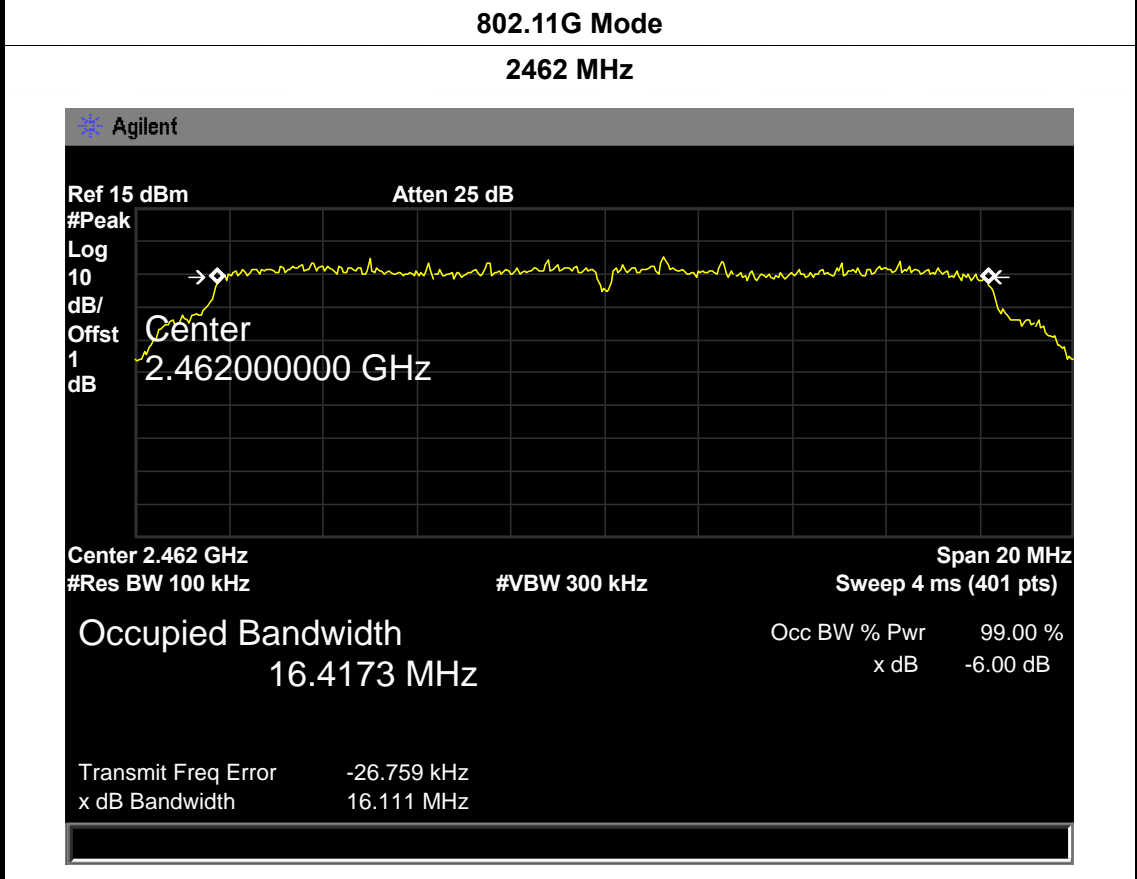
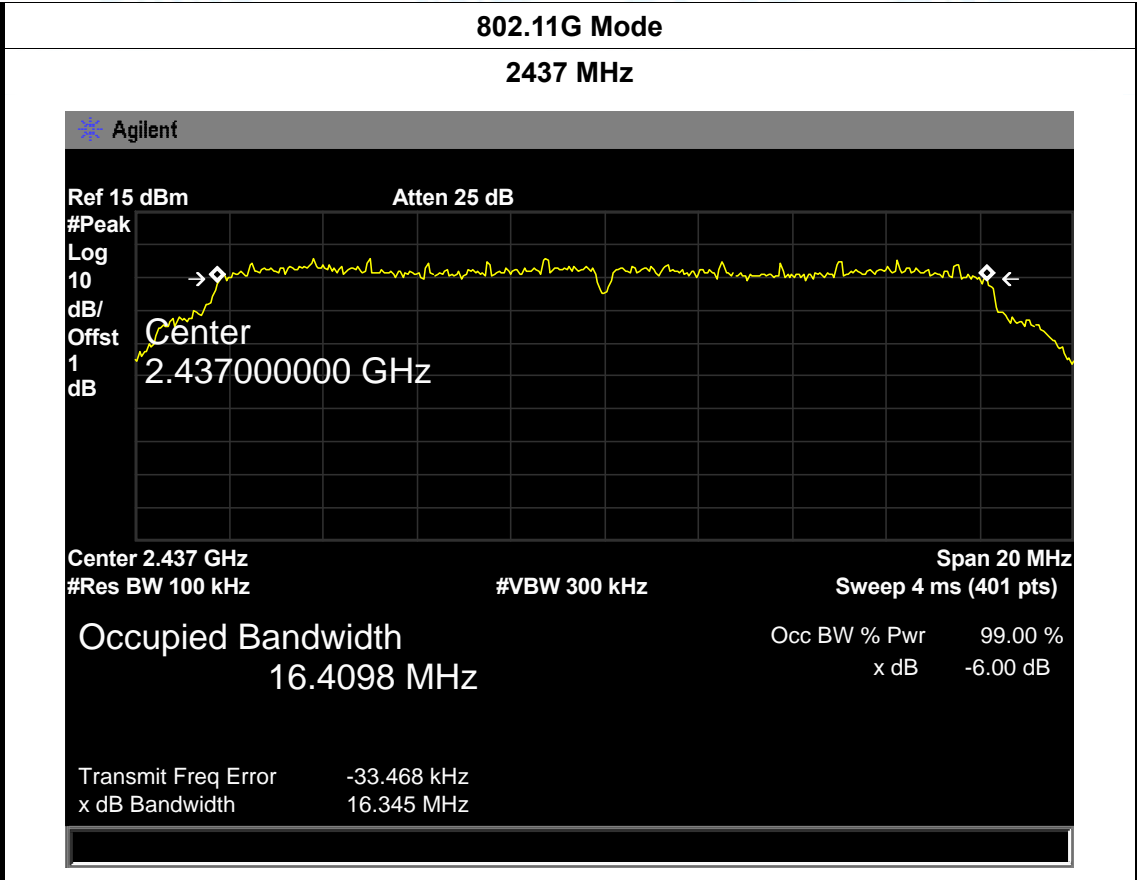
802.11B Mode

2412 MHz





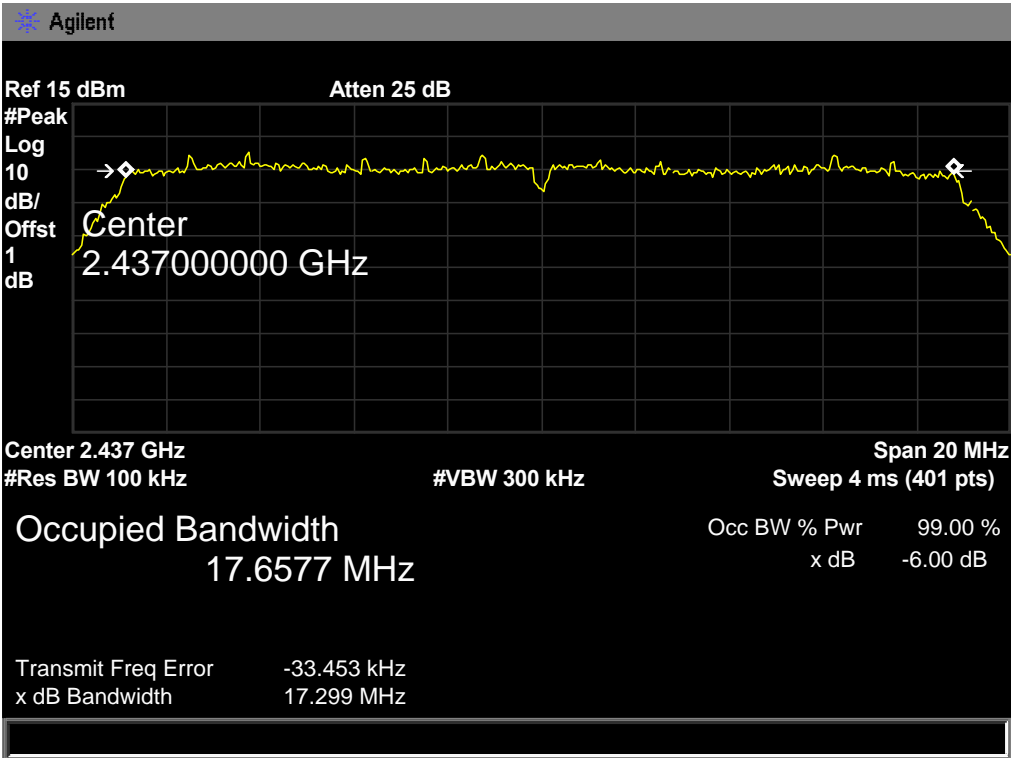
EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Test Mode:	TX 802.11G Mode		
Channel frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)
2412	15.711	16.4102	>=0.5
2437	16.345	16.4098	
2462	16.111	16.4173	
802.11G Mode			
2412 MHz			
<p>Agilent</p> <p>Ref 15 dBm Atten 25 dB</p> <p>#Peak</p> <p>Log</p> <p>10</p> <p>dB/</p> <p>Offst</p> <p>1</p> <p>dB</p> <p>Center 2.41200000 GHz</p> <p>Center 2.412 GHz Span 20 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 %</p> <p>16.4102 MHz x dB -6.00 dB</p> <p>Transmit Freq Error -25.947 kHz</p> <p>x dB Bandwidth 15.771 MHz</p>			



EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Test Mode:	TX 802.11N(HT20) Mode		
Channel frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)
2412	17.586	17.6470	≥0.5
2437	17.299	17.6577	
2462	17.583	17.6580	
802.11N(HT20) Mode			
2412 MHz			
<p>Agilent</p> <p>Ref 15 dBm Atten 25 dB</p> <p>#Peak</p> <p>Log</p> <p>10</p> <p>dB/</p> <p>Offst</p> <p>1</p> <p>dB</p> <p>Center 2.41200000 GHz</p> <p>Center 2.412 GHz Span 20 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 %</p> <p>17.6470 MHz x dB -6.00 dB</p> <p>Transmit Freq Error -18.011 kHz</p> <p>x dB Bandwidth 17.586 MHz</p>			

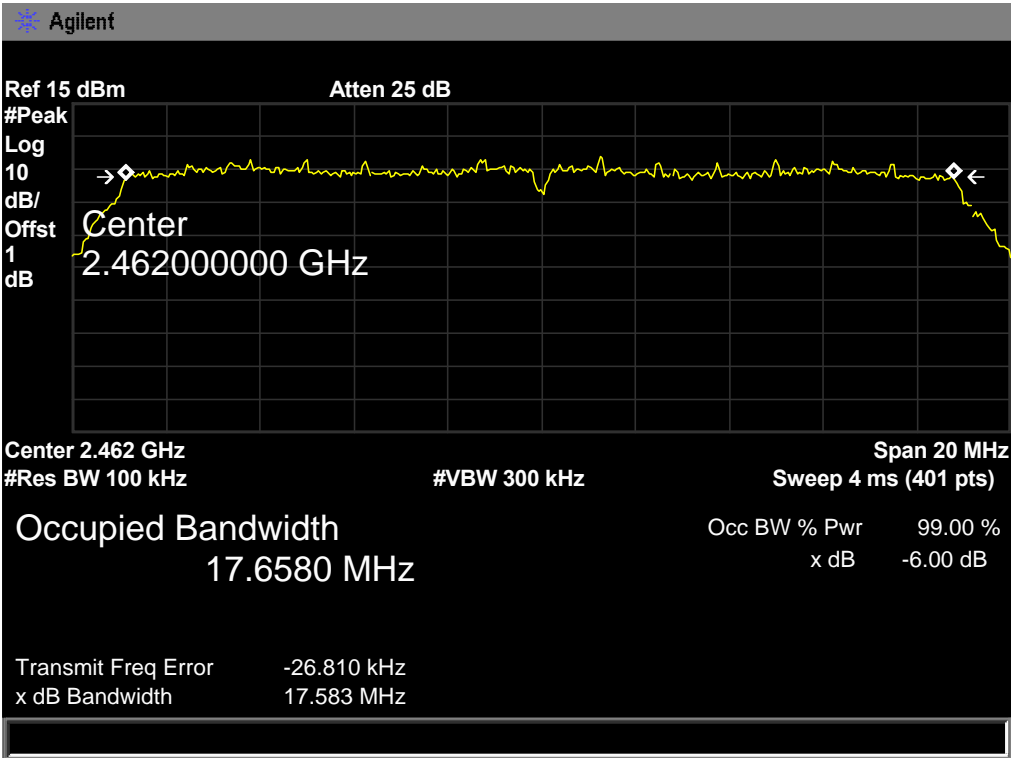
802.11N(HT20) Mode

2437 MHz



802.11N(HT20) Mode

2462 MHz



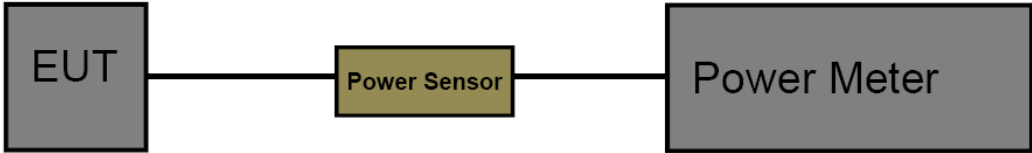
8. Peak Output Power Test

8.1 Test Standard and Limit

- 8.1.1 Test Standard
FCC Part 15.247 (b)
- 8.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/ RSS 247 Issue 1		
Test Item	Limit	Frequency Range(MHz)
Peak Output Power	1 Watt or 30 dBm	2400~2483.5

8.2 Test Setup



8.3 Test Procedure

The measurement is according to section 9.1.2 of KDB 558074 D01 DTS Meas Guidance v03r03.

The EUT was connected to RF power meter via a broadband power sensor as show the block above. The power sensor video bandwidth is greater than or equal to the DTS bandwidth of the equipment.

8.4 EUT Operating Condition

The EUT was set to continuously transmitting in the max power during the test.

8.5 Test Data

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Mode	Channel frequency (MHz)	Test Result (dBm)	Limit (dBm)
802.11b	2412	16.74	30
	2437	16.09	
	2462	15.31	
802.11g	2412	17.83	
	2437	17.63	
	2462	16.28	
802.11n (HT20)	2412	16.72	
	2437	16.06	
	2462	15.18	

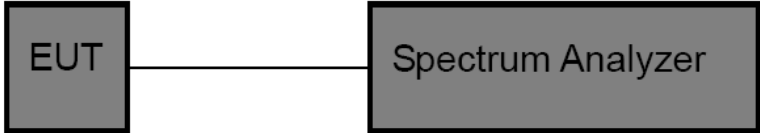
9. Power Spectral Density Test

9.1 Test Standard and Limit

- 9.1.1 Test Standard
FCC Part 15.247 (e)
- 9.1.2 Test Limit

FCC Part 15 Subpart C(15.247)		
Test Item	Limit	Frequency Range(MHz)
Power Spectral Density	8dBm(in any 3 kHz)	2400~2483.5

9.2 Test Setup



9.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v03r03.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyser center frequency to DTS channel center frequency.
- (3) Set the span to 1.5 times the DTS bandwidth.
- (4) Set the RBW to: 3 kHz
- (5) Set the VBW to: 10 kHz
- (6) Detector: peak
- (7) Sweep time: auto
- (8) Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

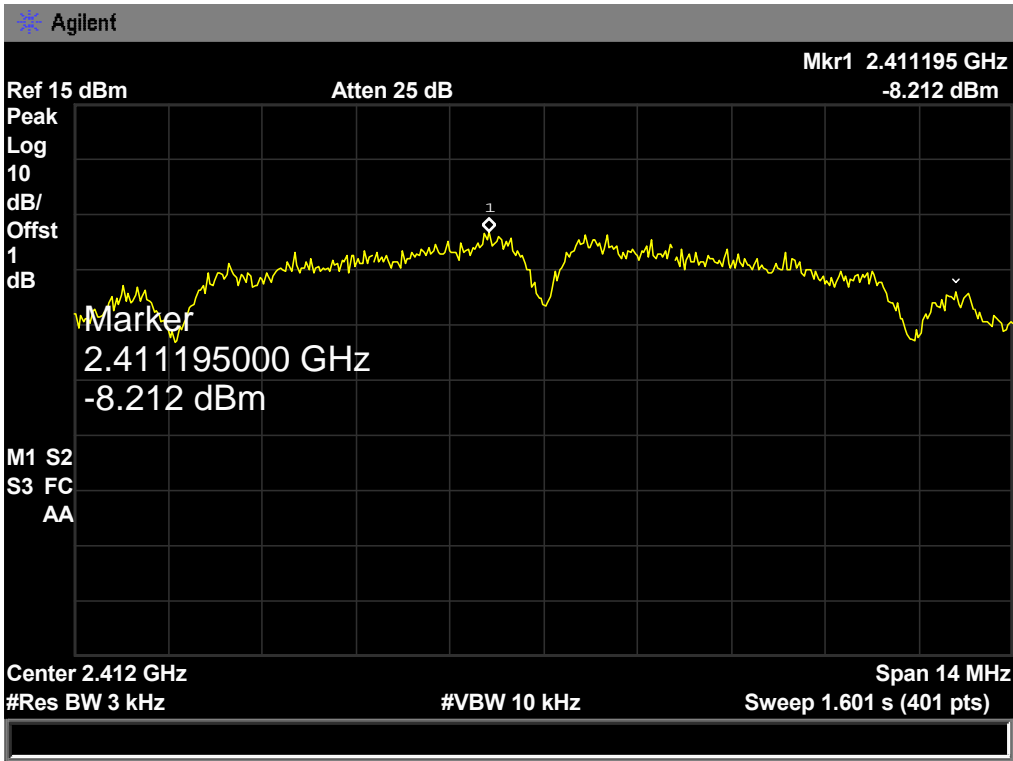
9.4 EUT Operating Condition

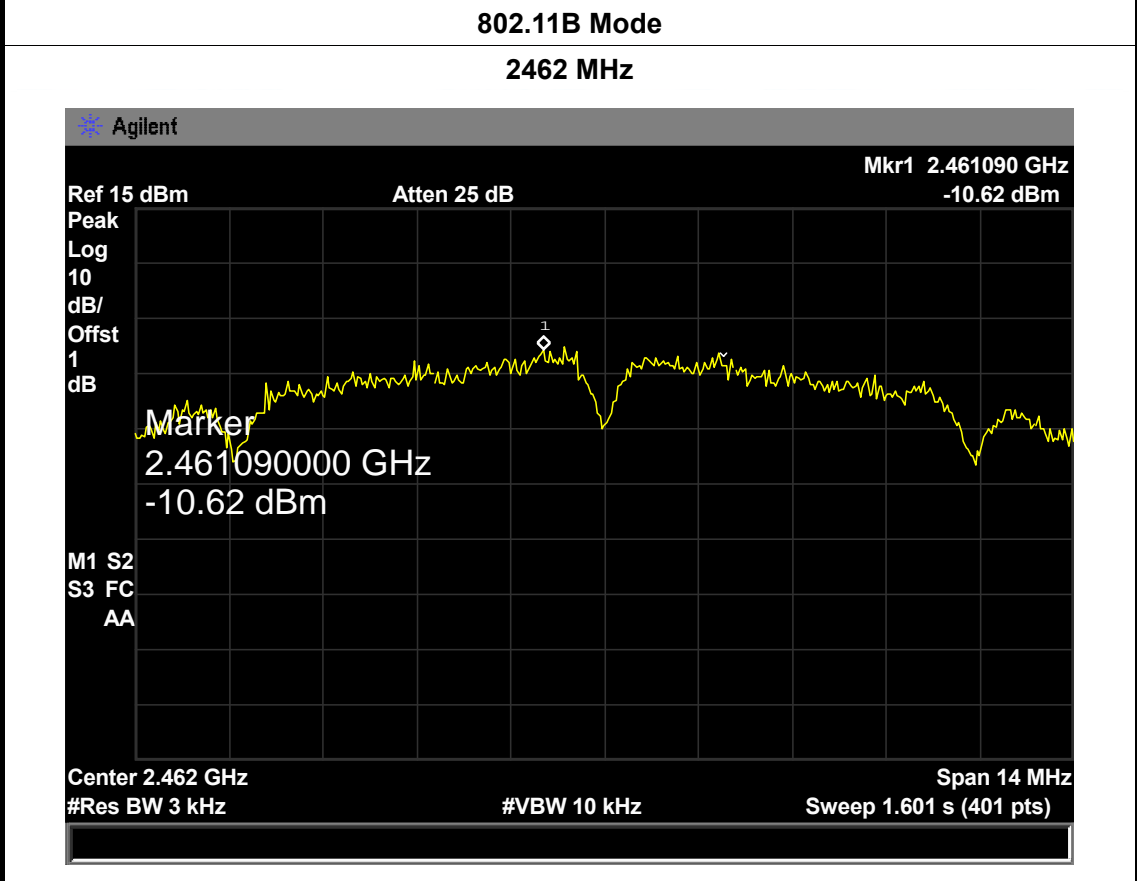
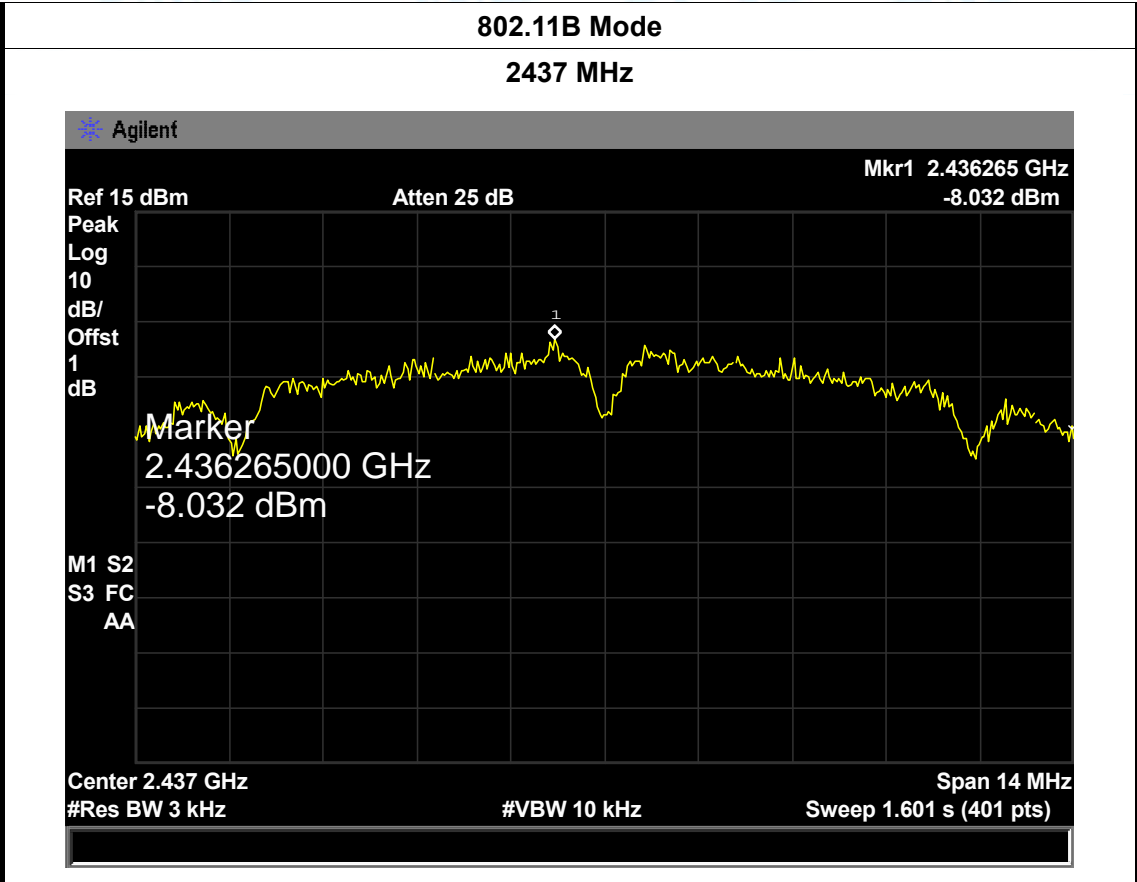
The EUT was set to continuously transmitting in each mode and low, Midle and high channel for the test.

9.5 Test Data

EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Test Mode:	TX 802.11B Mode		
Channel Frequency (MHz)	Power Density (3 kHz/dBm)	Limit (dBm)	
2412	-8.212	8	
2437	-8.032		
2462	-10.62		

802.11B Mode
2412 MHz

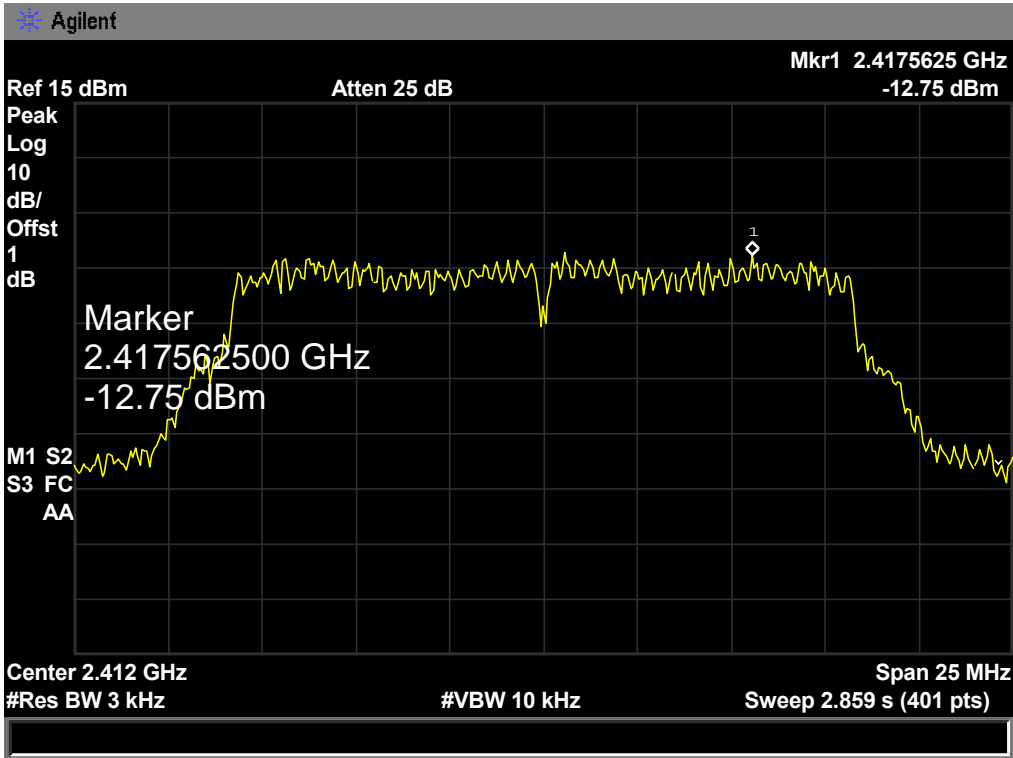


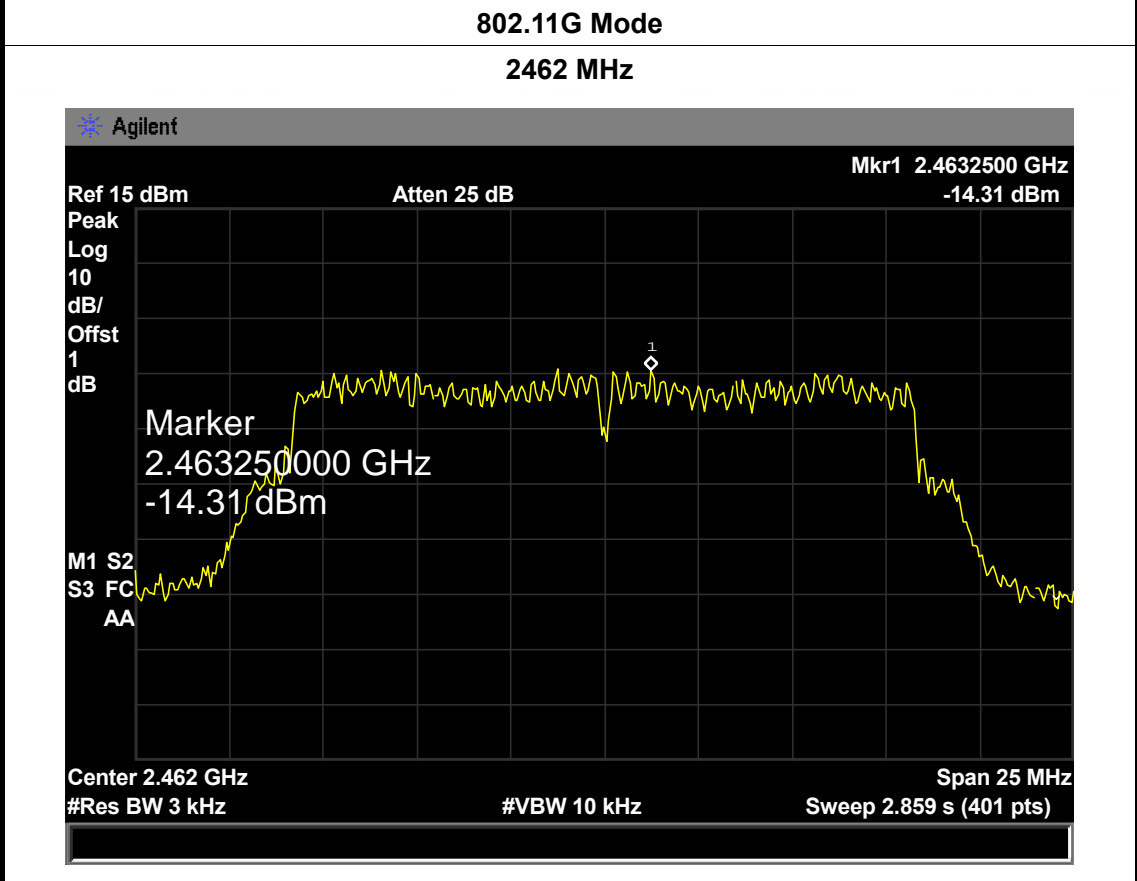
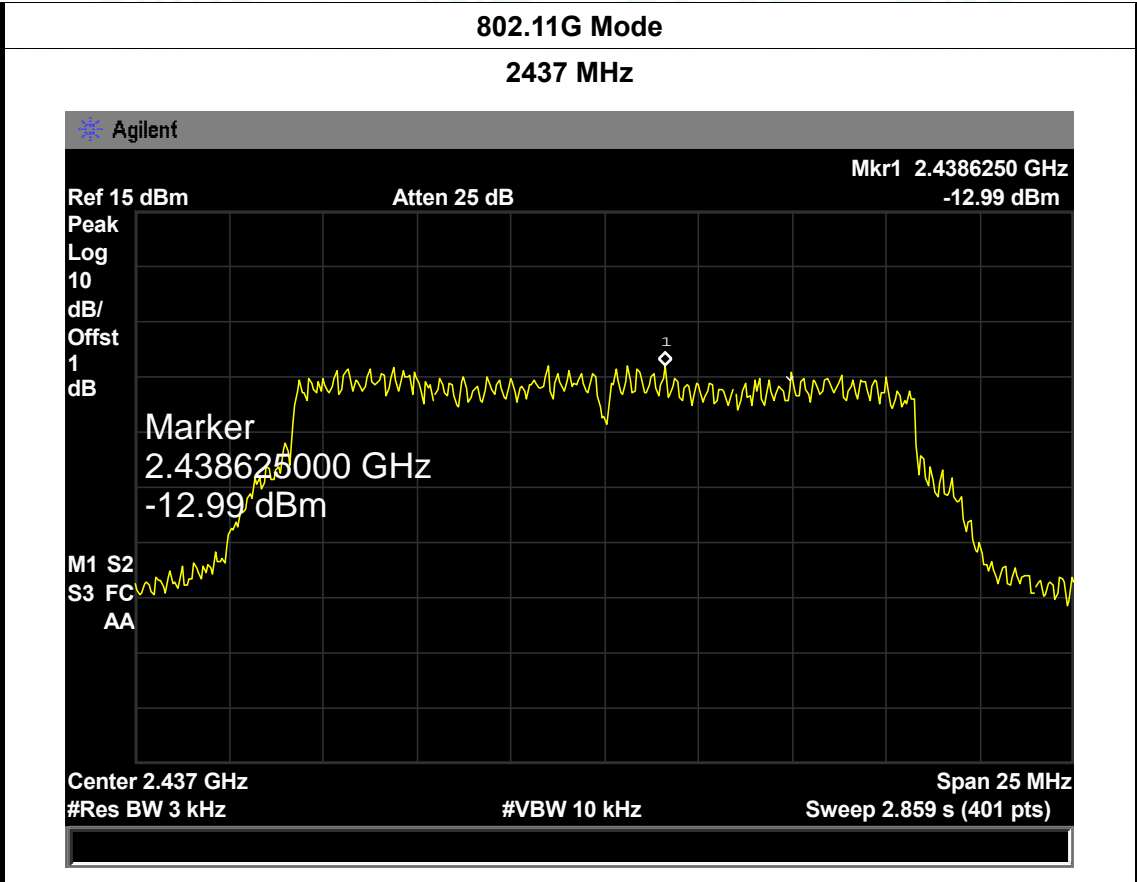


EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Test Mode:	TX 802.11G Mode		
Channel Frequency (MHz)	Power Density (3 kHz/dBm)	Limit (dBm)	
2412	-12.75	8	
2437	-12.99		
2462	-14.31		

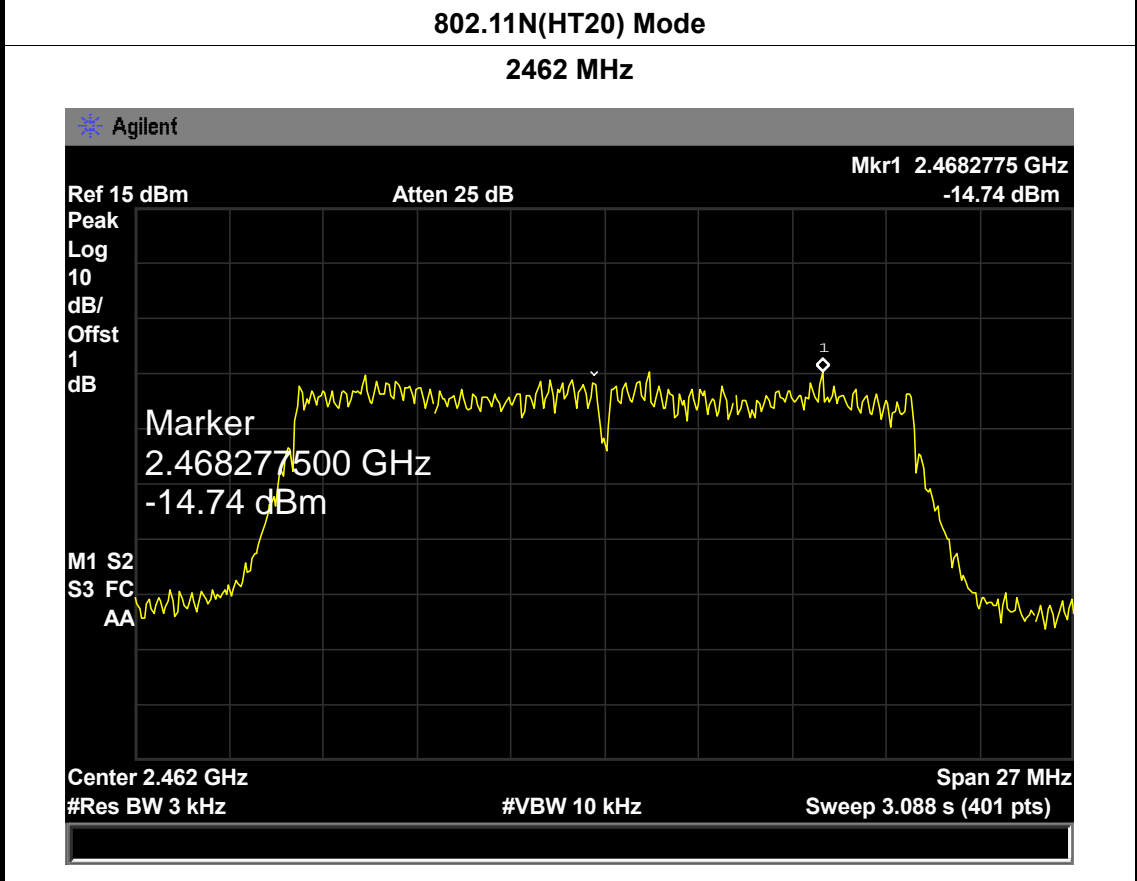
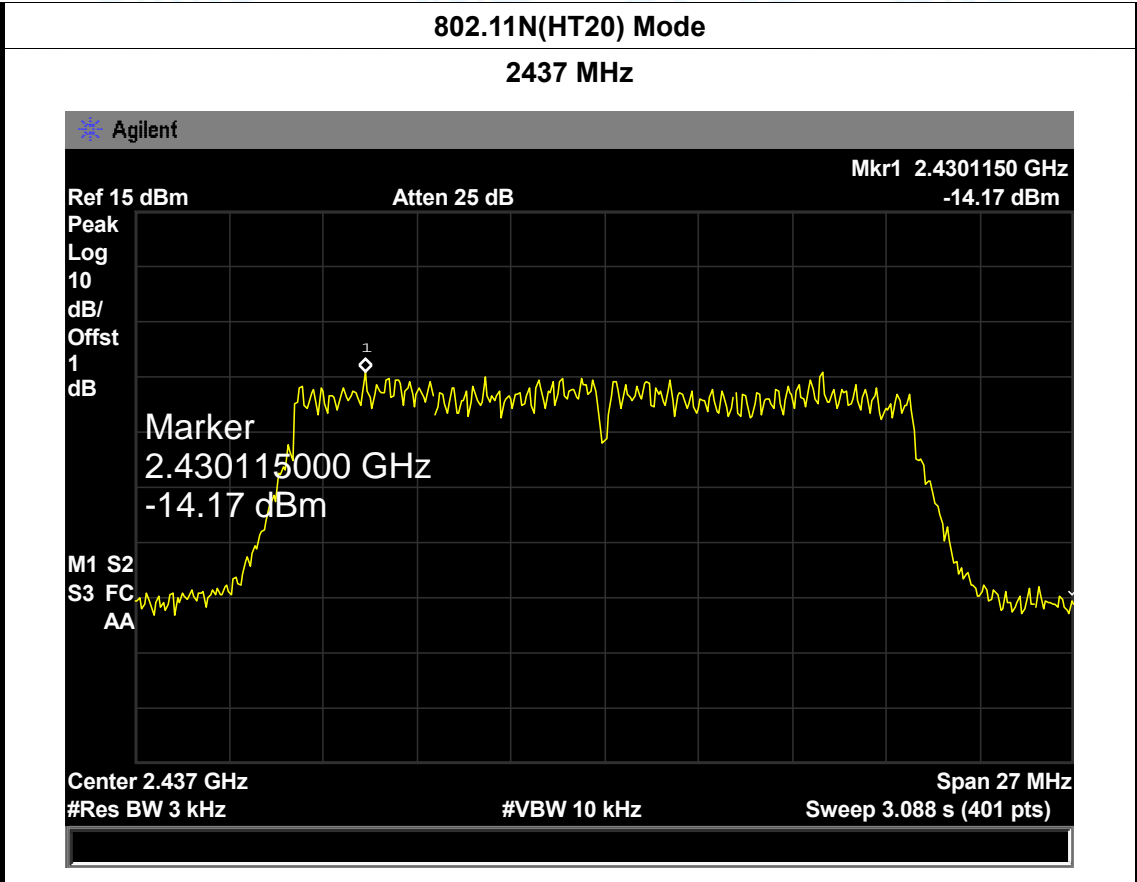
802.11G Mode

2412 MHz





EUT:	10.1 inch Quad core capacitive touch tablet	Model Name :	MGT101
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 Hz		
Test Mode:	TX 802.11N(HT20) Mode		
Channel Frequency (MHz)	Power Density (3 kHz/dBm)	Limit (dBm)	
2412	-13.36	8	
2437	-14.17		
2462	-14.74		
802.11N(HT20) Mode			
2412 MHz			
<p>The screenshot shows a spectrum analyzer interface with a grid. A yellow signal trace is visible, peaking at a marker labeled '1' with a value of 2.405722500 GHz and -13.36 dBm. The interface includes labels for 'Agilent', 'Ref 15 dBm', 'Atten 25 dB', 'Mkr1 2.4057225 GHz -13.36 dBm', 'Marker 2.405722500 GHz -13.36 dBm', 'M1 S2 S3 FC AA', 'Center 2.412 GHz', '#Res BW 3 kHz', '#VBW 10 kHz', 'Span 27 MHz', and 'Sweep 3.088 s (401 pts)'.</p>			



10. Antenna Requirement

10.1 Standard Requirement

10.1.1 Standard

FCC Part 15.203

10.1.2 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 shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

10.2 Antenna Connected Construction

The directional gains of the antenna used for transmitting is 0.75 dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

Result

The EUT antenna is an FPC Antenna. It complies with the standard requirement.

Antenna Type
<input checked="" type="checkbox"/> Permanent attached antenna
<input type="checkbox"/> Unique connector antenna
<input type="checkbox"/> Professional installation antenna