

FCC Radio Test Report

FCC ID: 2ABEPTW1066

Original Grant

Report No. : TB-FCC145569
Applicant : Shenzhen Tianzheng Hongye Technology Co.Ltd.
Equipment Under Test (EUT)
EUT Name : 10.1 inch MID
Model No. : TM101A550L
Serial No. : TM101A530L, TM101A520L, TW1066G
Brand Name : NuVision
Receipt Date : 2015-09-29
Test Date : 2015-09-30 to 2015-11-18
Issue Date : 2015-11-18
Standards : FCC Part 15, Subpart C (15.247:2014)
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

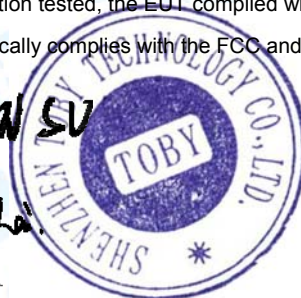
Test/Witness Engineer :

IVAN SU

**Approved&
Authorized**

:

Long Ha



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.

Contents

CONTENTS.....	2
1. GENERAL INFORMATION ABOUT EUT	4
1.1 Client Information.....	4
1.2 General Description of EUT (Equipment Under Test)	4
1.3 Block Diagram Showing the Configuration of System Tested.....	5
1.4 Description of Support Units	5
1.5 Description of Test Mode.....	6
1.6 Description of Test Software Setting	7
1.7 Measurement Uncertainty	7
1.7 Test Facility.....	8
2. TEST SUMMARY.....	9
3. TEST EQUIPMENT.....	10
4. CONDUCTED EMISSION TEST	11
4.1 Test Standard and Limit.....	11
4.2 Test Setup.....	11
4.3 Test Procedure.....	11
4.4 EUT Operating Mode	12
4.5 Test Data.....	12
5. RADIATED EMISSION TEST	21
5.1 Test Standard and Limit.....	21
5.2 Test Setup.....	22
5.3 Test Procedure.....	23
5.4 EUT Operating Condition	24
5.5 Test Data.....	24
6. RESTRICTED BANDS REQUIREMENT	53
6.1 Test Standard and Limit.....	53
6.2 Test Setup.....	53
6.3 Test Procedure.....	53
6.4 EUT Operating Condition	54
6.5 Test Data.....	54
7. BANDWIDTH TEST.....	75
7.1 Test Standard and Limit.....	75
7.2 Test Setup.....	75
7.3 Test Procedure.....	75
7.4 EUT Operating Condition	75
7.5 Test Data.....	76
8. PEAK OUTPUT POWER TEST.....	84
8.1 Test Standard and Limit.....	84
8.2 Test Setup.....	84

8.3 Test Procedure.....	84
8.4 EUT Operating Condition	84
8.5 Test Data.....	85
9. POWER SPECTRAL DENSITY TEST	86
9.1 Test Standard and Limit.....	86
9.2 Test Setup.....	86
9.3 Test Procedure.....	86
9.4 EUT Operating Condition	86
9.5 Test Data.....	87
10. ANTENNA REQUIREMENT.....	95
10.1 Standard Requirement.....	95
10.2 Antenna Connected Construction.....	95
10.3 Result.....	95

1. General Information about EUT

1.1 Client Information

Applicant	: Shenzhen Tianzheng Hongye Technology Co.Ltd.
Address	: Building C, Guancheng High-tech Science and Technology Park, Zhenxing Road, Carp River Industrial Zone, Lou Village, Gongming Town, Guangming New District, Shenzhen City, Guangdong Province, China
Manufacturer	: Shenzhen Tianzheng Hongye Technology Co.Ltd.
Address	: Building C, Guancheng High-tech Science and Technology Park, Zhenxing Road, Carp River Industrial Zone, Lou Village, Gongming Town, Guangming New District, Shenzhen City, Guangdong Province, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	: 10.1 inch MID
Models No.	: TM101A550L, TM101A530L, TM101A520L, TW1066G
Model Difference	: All models are identical in the same PCB layout, interior structure and electrical circuits, The only difference is model name for commercial purpose.
Product Description	Operation Frequency: 802.11b/g/n(HT20): 2412MHz~2462MHz BT: 2402MHz~2480MHz ₍₂₎ BLE: 2402MHz~2480MHz ₍₂₎
	Number of Channel: 802.11b/g/n(HT20):11 channels see note(3)
	RF Output Power: 802.11b: 9.28 dBm 802.11g: 9.28 dBm 802.11n (HT20): 9.20 dBm 802.11n (HT40): 9.26 dBm
	Antenna Gain: 2.09 dBi FPC Antenna
	Modulation Type: 802.11b: DSSS(CCK/DQPSK/DBPSK) 802.11g: OFDM(BPSK/QPSK/16-QAM/64-QAM) 802.11n: OFDM(BPSK/QPSK/16-QAM/64-QAM)
	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 AC/DC adapter DC power by Li-ion Battery
Power Rating	: Adapter 1#(TEKA018-0502500UK 1509):

		Input: AC 100~240V 50/60Hz 0.5A Output: 5V/2.5A Adapter 2#(TEKA018-0502500UK 1510): Input: AC 100~240V 50/60Hz 0.5A Output: 5V/2.5A DC 3.7V from 45.6Wh Li-ion battery
Connecting I/O Port(S)	:	Please refer to the User's Manual

Note:

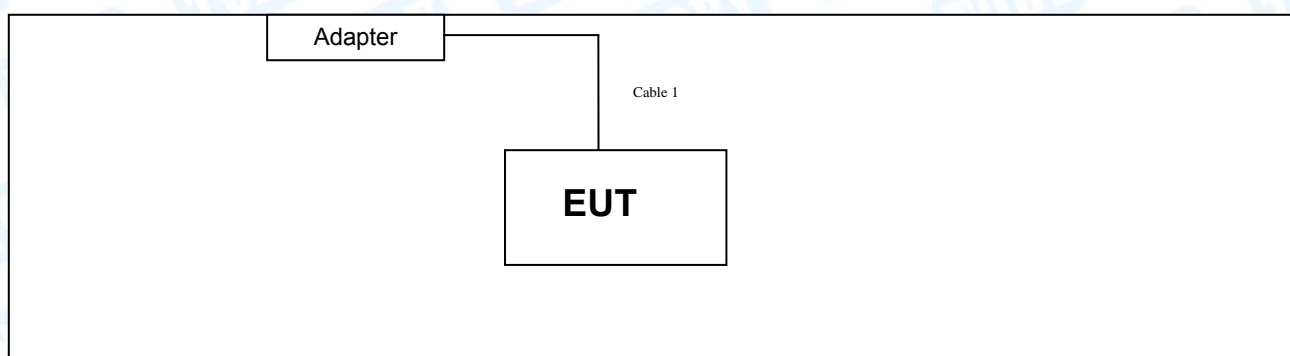
- (1) This Test Report is FCC Part 15.247 for 802.11b/g/n, the test procedure follows the FCC KDB 558074 D01 DTS Meas Guidance v03r02.
- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual. The EUT has also been tested and complied the FCC 15C for BLE and WIFI function, and recorded in the separate test report.
- (3) 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		
Note: CH 01~CH 11 for 802.11b/g/n(HT20) CH 03~CH 09 for 802.11b/g/n(HT40)					

- (4) The Antenna information about the equipment is provided by the applicant.

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 “√”
Cable Information				
Number	Shielded Type	Ferrite Core	Length	Note
Cable 1	YES	NO	1.0M	Accessory

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
Mode 6	TX Mode N(HT40) Mode Channel 03/06/09

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, middle, 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)
- 802.11n (HT40) 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 portable unit; it was pre-tested on the positioned of each 3 axis, X-plane, Y-plane and Z-plane. The worst case was found positioned on Z-plane as the normal use. Therefore only the test data of this Z-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	WLAN Test Tool		
Channel	CH 01	CH 06	CH 11
IEEE 802.11b DSSS	30	30	30
IEEE 802.11g OFDM	38	37	37
IEEE 802.11n (HT20)	37	37	37
Channel	CH 03	CH 06	CH 09
IEEE 802.11n (HT40)	40	40	40

1.7 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended 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 150kHz to 30MHz	± 3.42 dB ± 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

1.7 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

AC Main Conducted Emission					
Description	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	ROHDE& SCHWARZ	ESCI	100321	Aug. 07, 2015	Aug. 06, 2016
50ΩCoaxial Switch	Anritsu	MP59B	X10321	Aug. 07, 2015	Aug. 06, 2016
L.I.S.N	Rohde & Schwarz	ENV216	101131	Aug. 07, 2015	Aug. 06, 2016
L.I.S.N	SCHWARZBECK	NNBL 8226-2	8226-2/164	Aug. 07, 2015	Aug. 06, 2016
Radiation Spurious Emission					
Description	Manufacturer	Model No.	Serial No.	Cal. Date	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
Horn Antenna	ETS-LINDGREN	3117	00143207	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
Antenna Conducted Emission					
Description	Manufacturer	Model No.	Serial No.	Cal. Date	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
Power Meter	Anritsu	ML2495A	25406005	Aug. 07, 2015	Aug. 06, 2016
Power Sensor	Anritsu	ML2411B	25406005	Aug. 07, 2015	Aug. 06, 2016

4. Conducted Emission Test

4.1 Test Standard and Limit

4.1.1 Test Standard
FCC Part 15.207

4.1.2 Test Limit

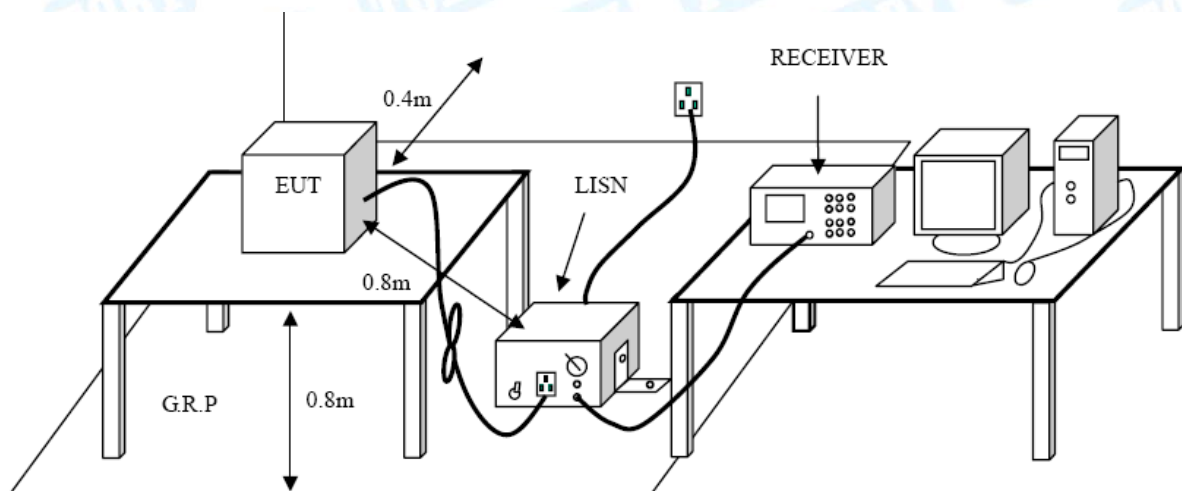
Conducted Emission Test Limit

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.

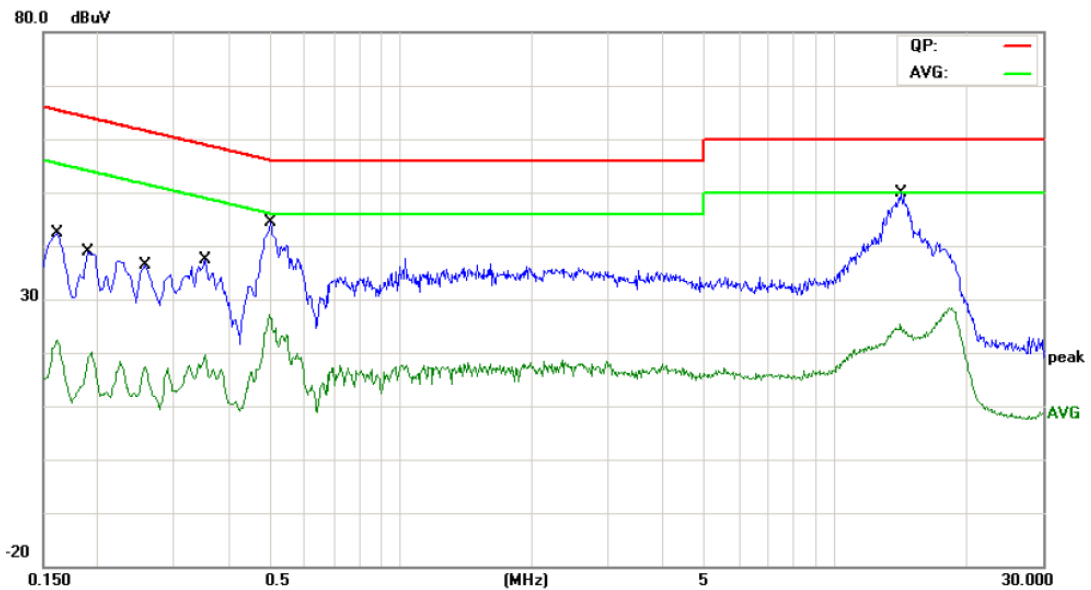
4.4 EUT Operating Mode

Please refer to the description of test mode.

4.5 Test Data

Please see the next page.

EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Terminal:	Line		
Test Mode:	AC Charging with TX B Mode (Adapter 1#)		
Remark:	Only worse case is reported		

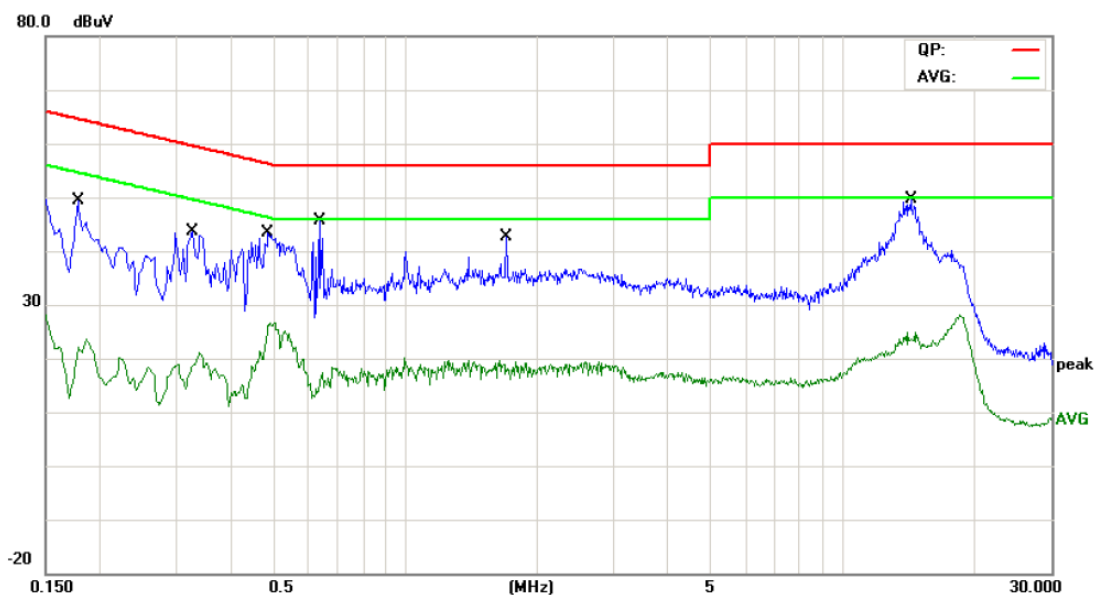


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1620	28.78	9.94	38.72	65.36	-26.64	QP
2		0.1620	10.76	9.94	20.70	55.36	-34.66	AVG
3		0.1900	24.35	10.00	34.35	64.03	-29.68	QP
4		0.1900	7.51	10.00	17.51	54.03	-36.52	AVG
5		0.2580	22.54	10.02	32.56	61.49	-28.93	QP
6		0.2580	6.08	10.02	16.10	51.49	-35.39	AVG
7		0.3540	23.10	10.02	33.12	58.87	-25.75	QP
8		0.3540	8.89	10.02	18.91	48.87	-29.96	AVG
9	*	0.5020	29.79	10.02	39.81	56.00	-16.19	QP
10		0.5020	15.67	10.02	25.69	46.00	-20.31	AVG
11		14.1540	31.91	10.24	42.15	60.00	-17.85	QP
12		14.1540	12.68	10.24	22.92	50.00	-27.08	AVG

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

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Terminal:	Neutral		
Test Mode:	AC Charging with TX B Mode (Adapter 1#)		
Remark:	Only worse case is reported		

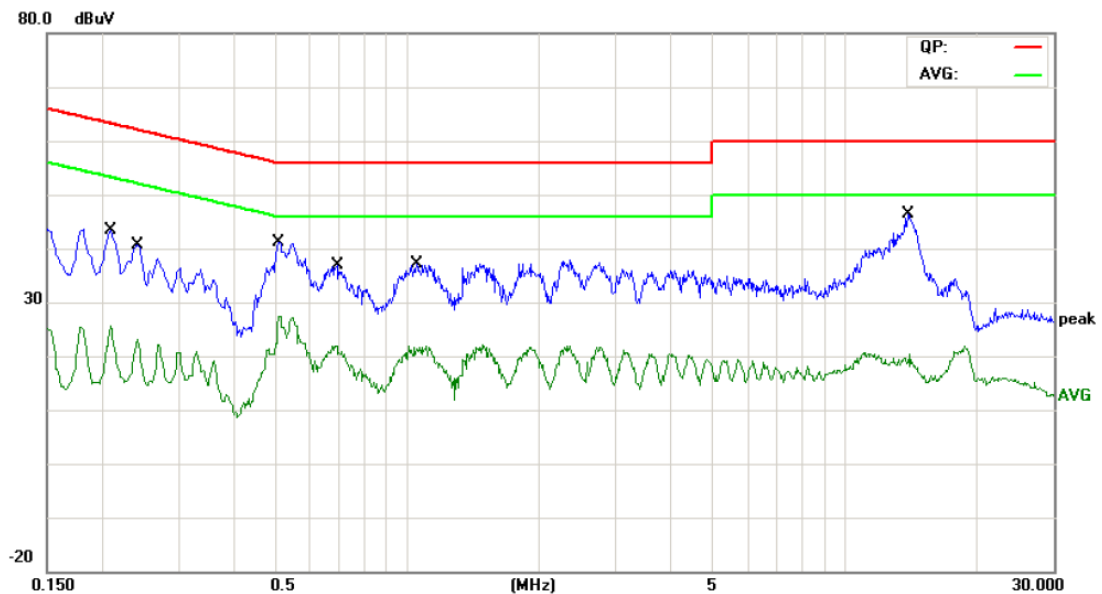


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1780	18.01	10.12	28.13	64.57	-36.44	QP
2		0.1780	1.54	10.12	11.66	54.57	-42.91	AVG
3		0.3260	19.06	10.08	29.14	59.55	-30.41	QP
4		0.3260	6.07	10.08	16.15	49.55	-33.40	AVG
5	*	0.4860	26.65	10.02	36.67	56.24	-19.57	QP
6		0.4860	13.01	10.02	23.03	46.24	-23.21	AVG
7		0.6340	12.09	10.02	22.11	56.00	-33.89	QP
8		0.6340	-0.02	10.02	10.00	46.00	-36.00	AVG
9		1.7060	20.10	10.09	30.19	56.00	-25.81	QP
10		1.7060	6.15	10.09	16.24	46.00	-29.76	AVG
11		14.3340	30.20	10.07	40.27	60.00	-19.73	QP
12		14.3340	12.05	10.07	22.12	50.00	-27.88	AVG

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

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 240V/60Hz		
Terminal:	Line		
Test Mode:	AC Charging with TX B Mode (Adapter 1#)		
Remark:	Only worse case is reported		

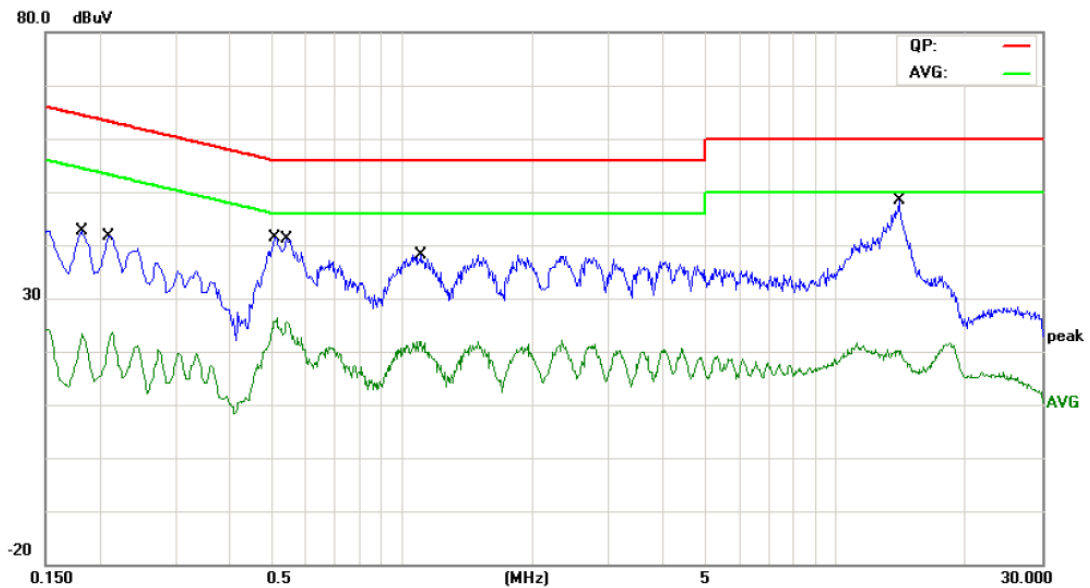


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.2100	28.65	10.02	38.67	63.20	-24.53	QP
2		0.2100	12.25	10.02	22.27	53.20	-30.93	AVG
3		0.2420	27.01	10.02	37.03	62.02	-24.99	QP
4		0.2420	11.61	10.02	21.63	52.02	-30.39	AVG
5	*	0.5100	27.62	10.02	37.64	56.00	-18.36	QP
6		0.5100	15.71	10.02	25.73	46.00	-20.27	AVG
7		0.6900	22.46	10.11	32.57	56.00	-23.43	QP
8		0.6900	10.17	10.11	20.28	46.00	-25.72	AVG
9		1.0500	22.03	10.06	32.09	56.00	-23.91	QP
10		1.0500	9.80	10.06	19.86	46.00	-26.14	AVG
11		13.9220	27.79	10.24	38.03	60.00	-21.97	QP
12		13.9220	6.35	10.24	16.59	50.00	-33.41	AVG

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

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 240V/60Hz		
Terminal:	Neutral		
Test Mode:	AC Charging with TX B Mode (Adapter 1#)		
Remark:	Only worse case is reported		

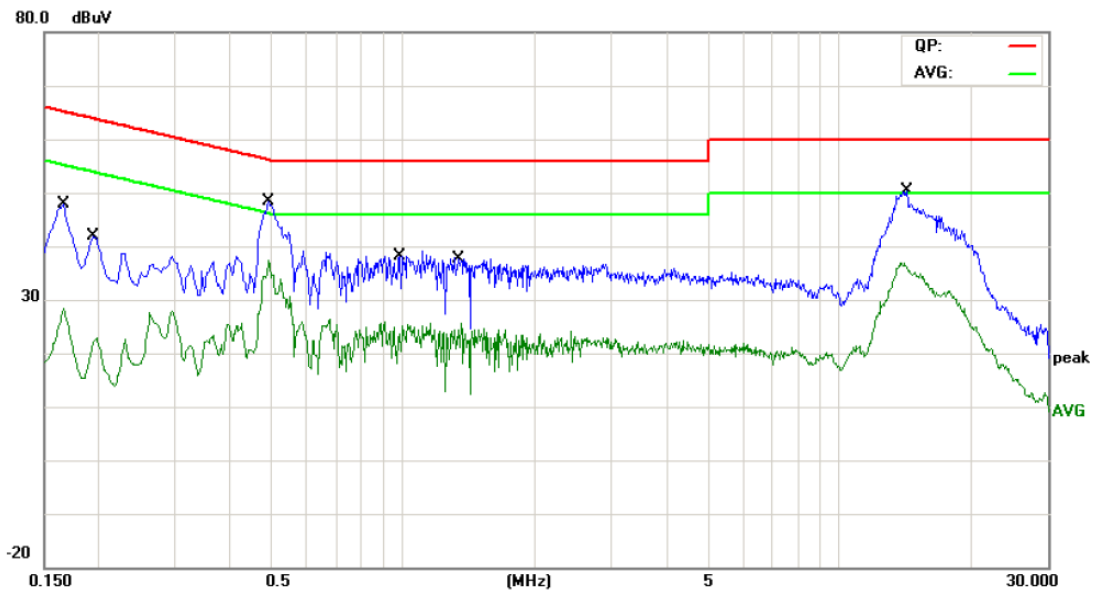


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1819	29.05	10.12	39.17	64.39	-25.22	QP
2		0.1819	11.60	10.12	21.72	54.39	-32.67	AVG
3		0.2100	26.25	10.12	36.37	63.20	-26.83	QP
4		0.2100	9.93	10.12	20.05	53.20	-33.15	AVG
5	*	0.5100	28.20	10.02	38.22	56.00	-17.78	QP
6		0.5100	15.15	10.02	25.17	46.00	-20.83	AVG
7		0.5420	27.60	10.02	37.62	56.00	-18.38	QP
8		0.5420	15.00	10.02	25.02	46.00	-20.98	AVG
9		1.1060	22.86	10.15	33.01	56.00	-22.99	QP
10		1.1060	9.82	10.15	19.97	46.00	-26.03	AVG
11		13.9940	27.80	10.08	37.88	60.00	-22.12	QP
12		13.9940	7.35	10.08	17.43	50.00	-32.57	AVG

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

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Terminal:	Line		
Test Mode:	AC Charging with TX B Mode (Adapter 2#)		
Remark:	Only worse case is reported		

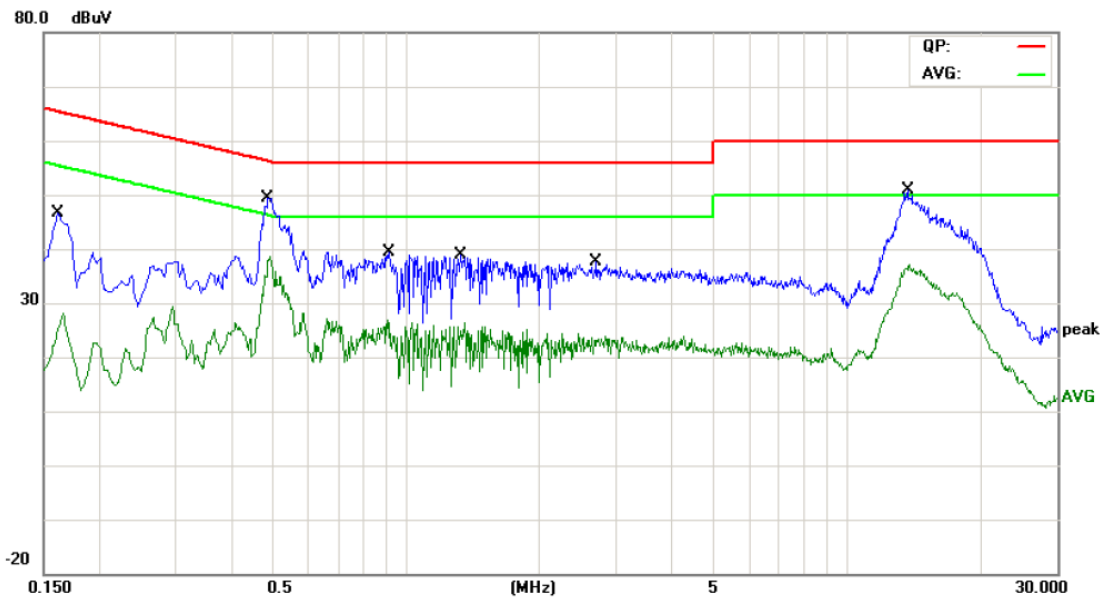


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1660	32.16	9.95	42.11	65.15	-23.04	QP
2		0.1660	17.29	9.95	27.24	55.15	-27.91	AVG
3		0.1940	25.16	10.01	35.17	63.86	-28.69	QP
4		0.1940	10.75	10.01	20.76	53.86	-33.10	AVG
5	*	0.4900	35.74	10.02	45.76	56.17	-10.41	QP
6		0.4900	25.71	10.02	35.73	46.17	-10.44	AVG
7		0.9820	22.51	10.06	32.57	56.00	-23.43	QP
8		0.9820	11.45	10.06	21.51	46.00	-24.49	AVG
9		1.3380	23.23	10.06	33.29	56.00	-22.71	QP
10		1.3380	12.24	10.06	22.30	46.00	-23.70	AVG
11		14.2700	32.72	10.25	42.97	60.00	-17.03	QP
12		14.2700	23.00	10.25	33.25	50.00	-16.75	AVG

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

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Terminal:	Neutral		
Test Mode:	AC Charging with TX B Mode (Adapter 2#)		
Remark:	Only worse case is reported		

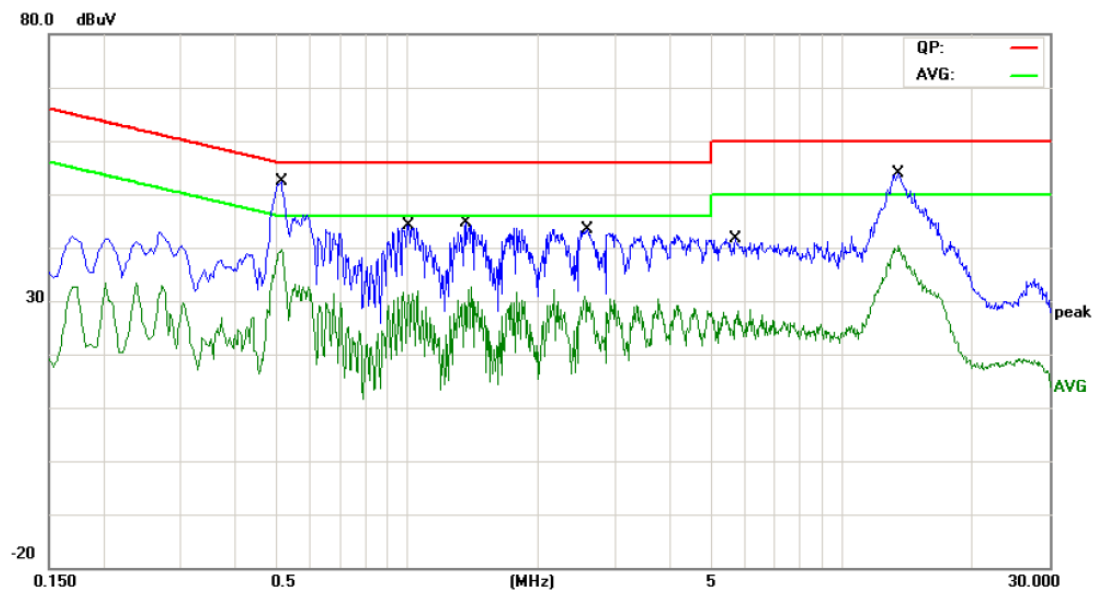


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1620	29.25	9.94	39.19	65.36	-26.17	QP
2		0.1620	14.86	9.94	24.80	55.36	-30.56	AVG
3		0.4860	35.61	10.02	45.63	56.24	-10.61	QP
4	*	0.4860	25.82	10.02	35.84	46.24	-10.40	AVG
5		0.9100	24.11	10.08	34.19	56.00	-21.81	QP
6		0.9100	12.98	10.08	23.06	46.00	-22.94	AVG
7		1.3260	23.50	10.06	33.56	56.00	-22.44	QP
8		1.3260	12.86	10.06	22.92	46.00	-23.08	AVG
9		2.7020	22.02	10.04	32.06	56.00	-23.94	QP
10		2.7020	10.78	10.04	20.82	46.00	-25.18	AVG
11		13.7540	34.20	10.24	44.44	60.00	-15.56	QP
12		13.7540	24.00	10.24	34.24	50.00	-15.76	AVG

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

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 240V/60Hz		
Terminal:	Line		
Test Mode:	AC Charging with TX B Mode (Adapter 2#)		
Remark:	Only worse case is reported		

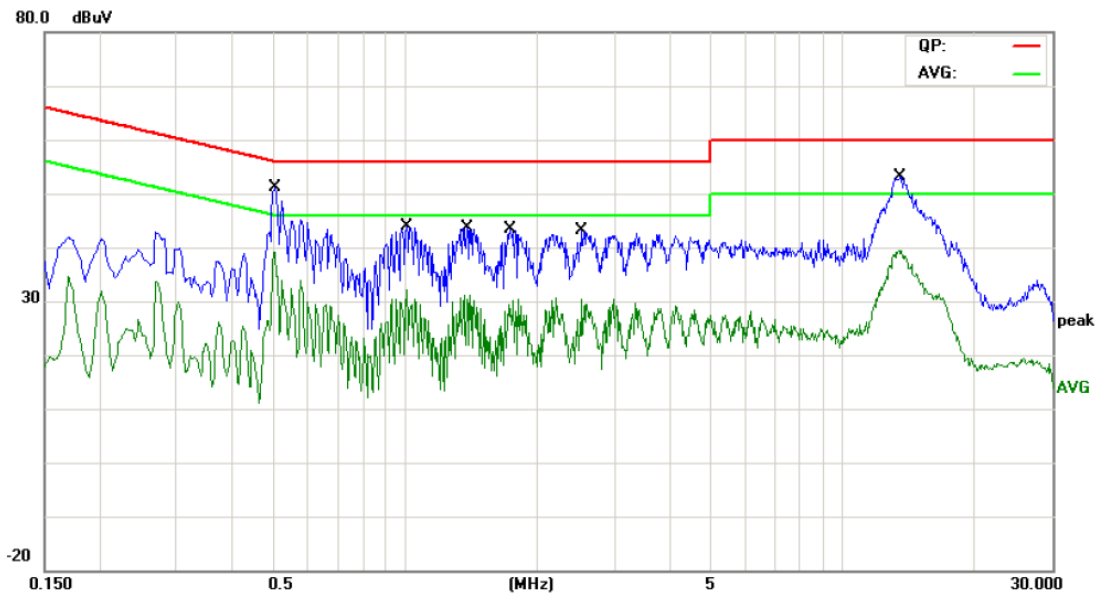


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.5140	38.02	10.03	48.05	56.00	-7.95	QP
2		0.5140	25.94	10.03	35.97	46.00	-10.03	AVG
3		1.0100	30.15	10.06	40.21	56.00	-15.79	QP
4		1.0100	17.99	10.06	28.05	46.00	-17.95	AVG
5		1.3619	29.56	10.06	39.62	56.00	-16.38	QP
6		1.3619	17.41	10.06	27.47	46.00	-18.53	AVG
7		2.6060	28.65	10.04	38.69	56.00	-17.31	QP
8		2.6060	16.41	10.04	26.45	46.00	-19.55	AVG
9		5.7100	25.74	10.00	35.74	60.00	-24.26	QP
10		5.7100	12.43	10.00	22.43	50.00	-27.57	AVG
11		13.5340	37.36	10.23	47.59	60.00	-12.41	QP
12		13.5340	25.29	10.23	35.52	50.00	-14.48	AVG

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

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch MID	Model Name :	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 240V/60Hz		
Terminal:	Neutral		
Test Mode:	AC Charging with TX B Mode (Adapter 2#)		
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	*	0.5060	38.49	10.02	48.51	56.00	-7.49	QP
2		0.5060	26.39	10.02	36.41	46.00	-9.59	AVG
3		1.0060	29.43	10.06	39.49	56.00	-16.51	QP
4		1.0060	17.39	10.06	27.45	46.00	-18.55	AVG
5		1.3820	29.68	10.06	39.74	56.00	-16.26	QP
6		1.3820	17.38	10.06	27.44	46.00	-18.56	AVG
7		1.7380	28.15	10.06	38.21	56.00	-17.79	QP
8		1.7380	15.84	10.06	25.90	46.00	-20.10	AVG
9		2.5300	27.91	10.04	37.95	56.00	-18.05	QP
10		2.5300	14.91	10.04	24.95	46.00	-21.05	AVG
11		13.5060	37.26	10.23	47.49	60.00	-12.51	QP
12		13.5060	25.18	10.23	35.41	50.00	-14.59	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

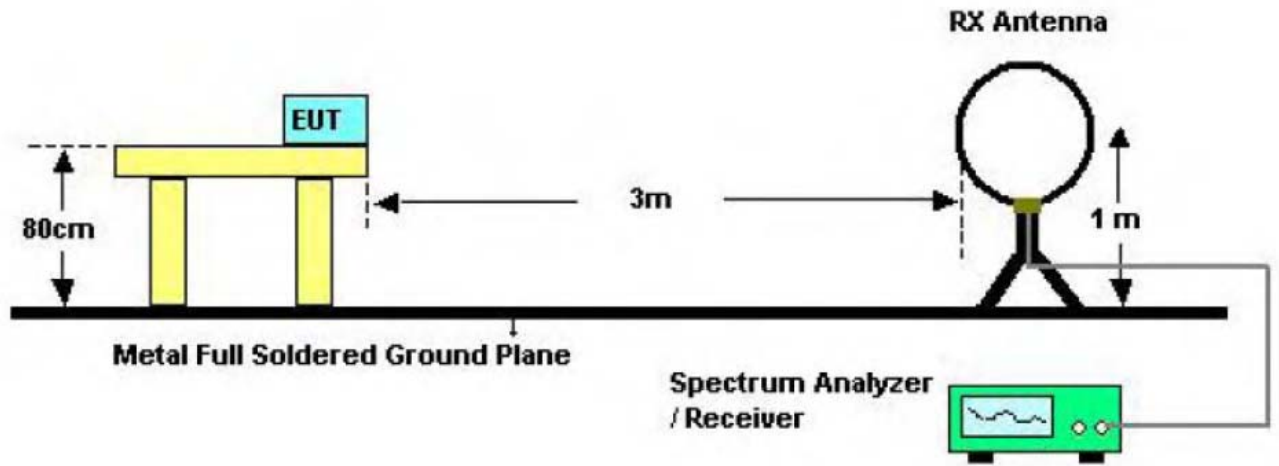
Radiated Emission Limit (Above 1000MHz)

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

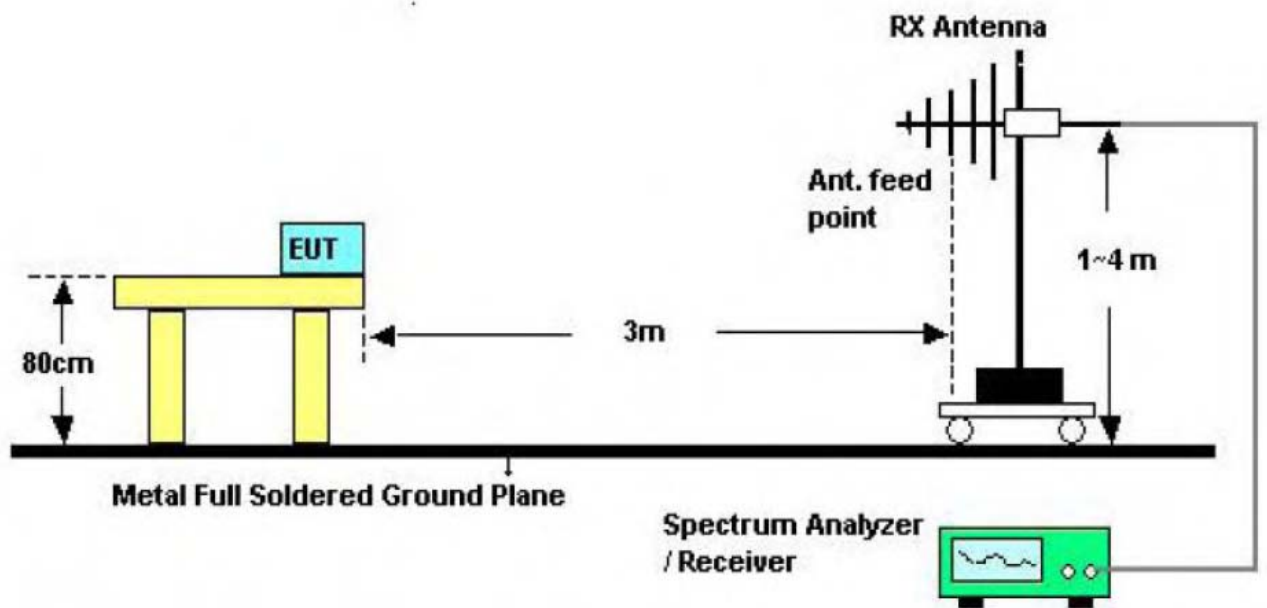
Note:

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

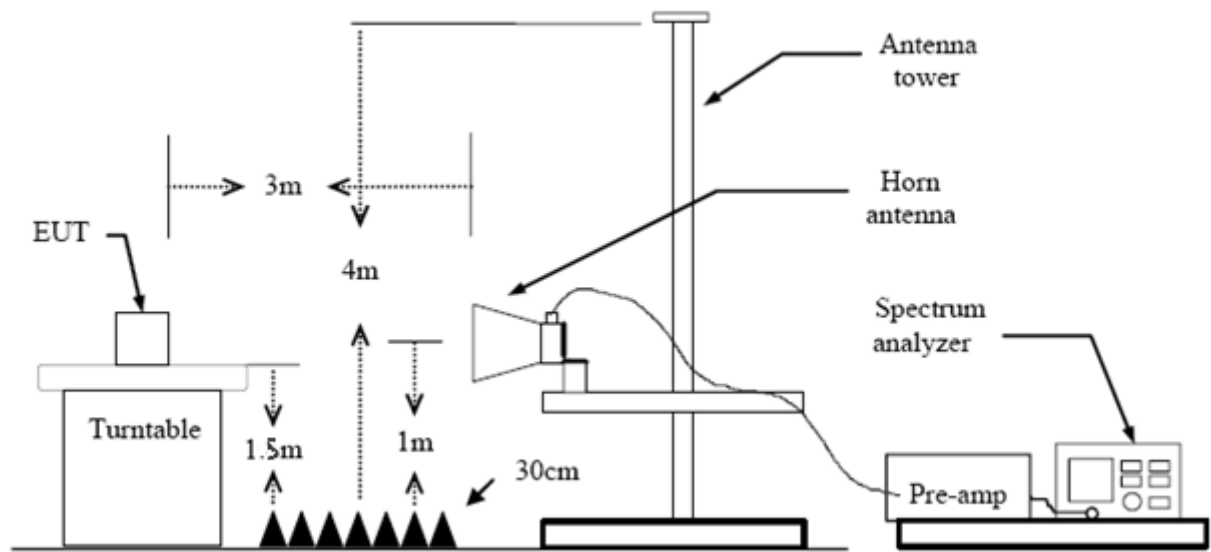
5.2 Test Setup



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 and above 1 GHz. The EUT was placed on a rotating 0.8m high above 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

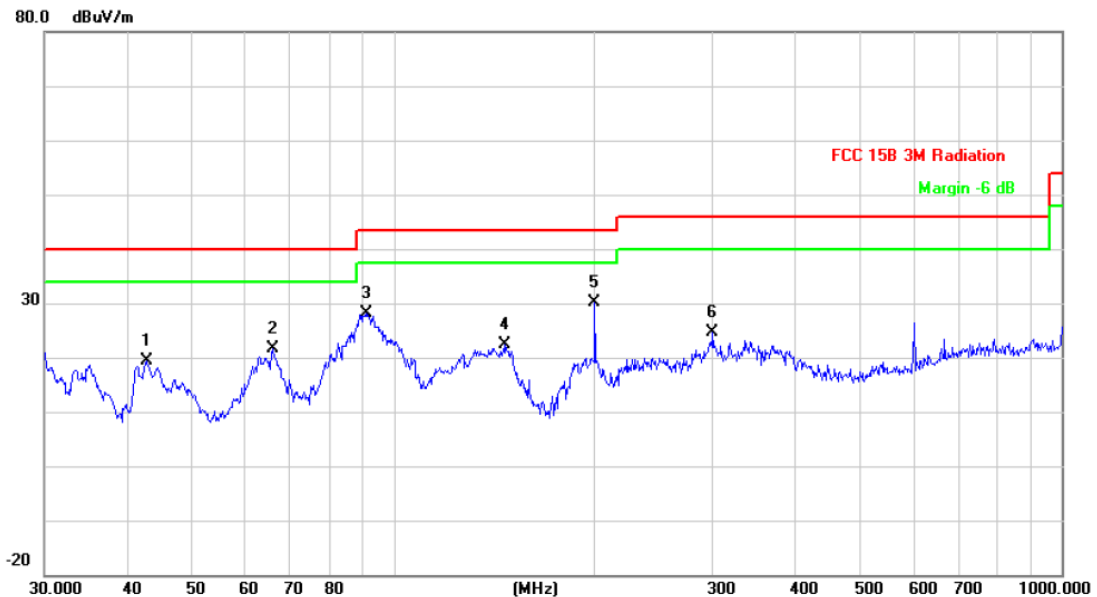
The Equipment Under Test was set to Continual Transmitting in maximum power.

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 MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz (Adapter 1#)		
Remark:	Only worse case is reported		

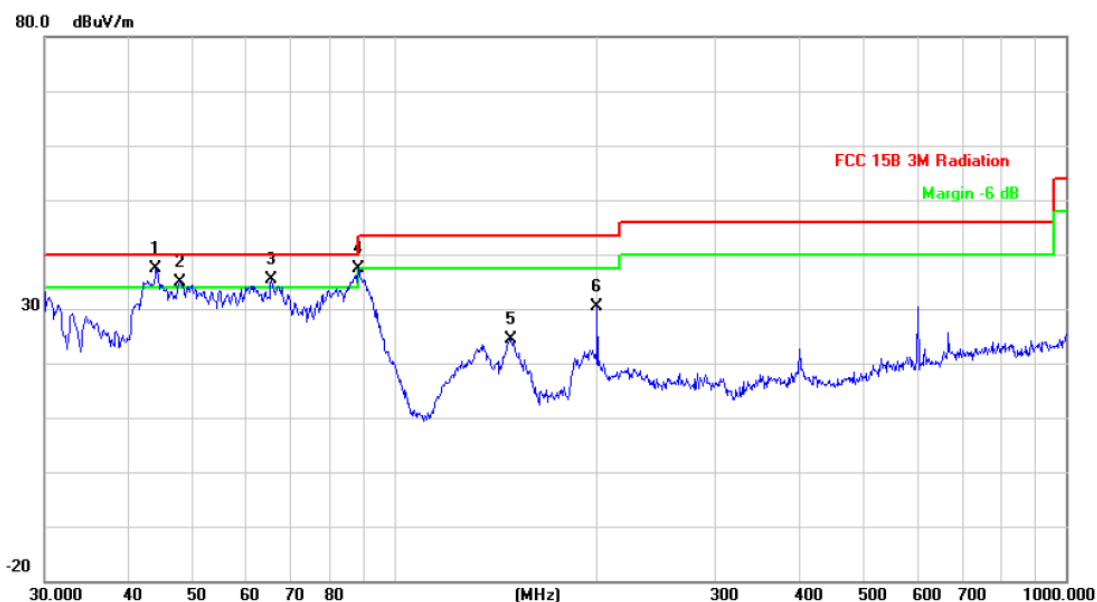


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		42.6000	40.67	-21.26	19.41	40.00	-20.59	peak
2		65.8031	45.56	-23.99	21.57	40.00	-18.43	peak
3		90.8554	50.78	-22.61	28.17	43.50	-15.33	peak
4		146.8877	43.83	-21.42	22.41	43.50	-21.09	peak
5	*	199.9856	50.53	-20.39	30.14	43.50	-13.36	peak
6		300.3672	41.78	-17.07	24.71	46.00	-21.29	peak

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

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz (Adapter 1#)		
Remark:	Only worse case is reported		

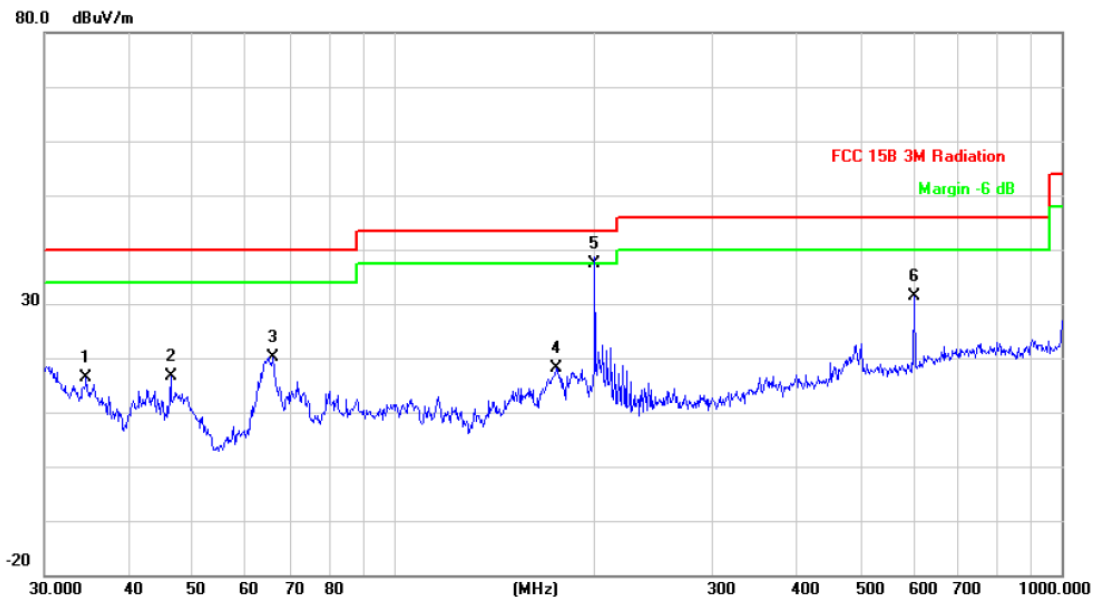


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	43.9658	59.12	-21.84	37.28	40.00	-2.72	peak
2	!	47.8260	58.43	-23.48	34.95	40.00	-5.05	peak
3	!	65.3432	59.41	-24.04	35.37	40.00	-4.63	peak
4		88.0329	60.11	-22.81	37.30	43.50	-6.20	peak
5		148.9625	45.64	-21.26	24.38	43.50	-19.12	peak
6		199.9856	50.69	-20.39	30.30	43.50	-13.20	peak

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

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz (Adapter 2#)		
Remark:	Only worse case is reported		

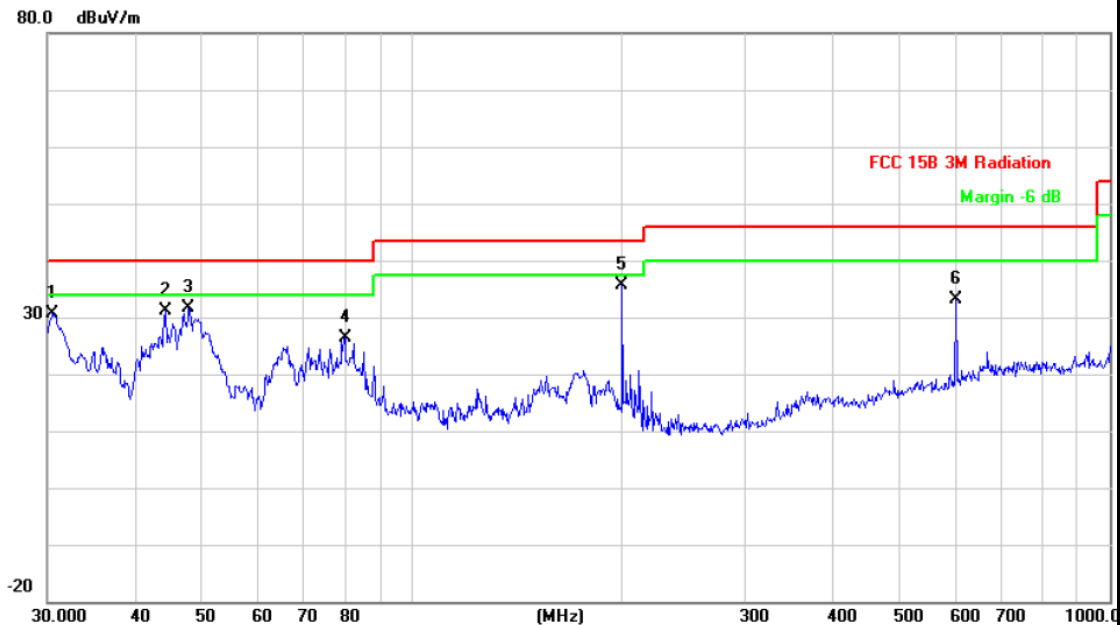


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		34.6385	33.20	-16.84	16.36	40.00	-23.64	peak
2		46.3402	39.51	-22.85	16.66	40.00	-23.34	peak
3		66.0342	44.11	-23.98	20.13	40.00	-19.87	peak
4		175.0368	38.98	-20.88	18.10	43.50	-25.40	peak
5	*	199.9856	57.69	-20.39	37.30	43.50	-6.20	QP
6		601.4265	40.83	-9.41	31.42	46.00	-14.58	peak

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

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz (Adapter 2#)		
Remark:	Only worse case is reported		

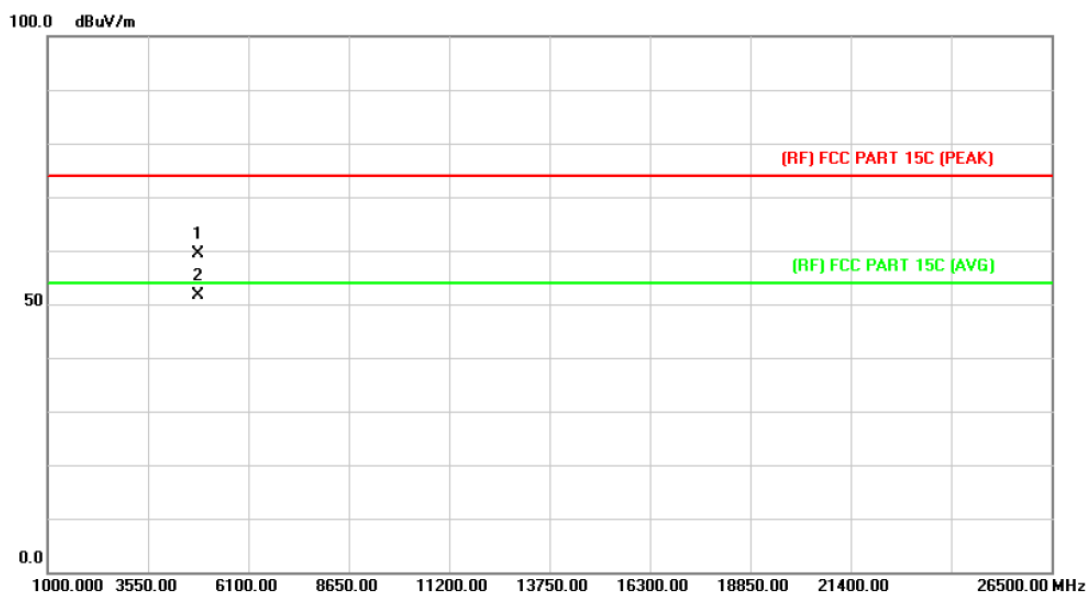


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		30.5306	45.03	-14.28	30.75	40.00	-9.25	peak
2		44.2752	53.02	-21.97	31.05	40.00	-8.95	peak
3		47.8260	55.03	-23.48	31.55	40.00	-8.45	peak
4		80.0806	49.78	-23.28	26.50	40.00	-13.50	peak
5	*	199.9856	56.03	-20.39	35.64	43.50	-7.86	peak
6		601.4265	42.55	-9.41	33.14	46.00	-12.86	peak

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

Emission Level= Read Level+ Correct Factor

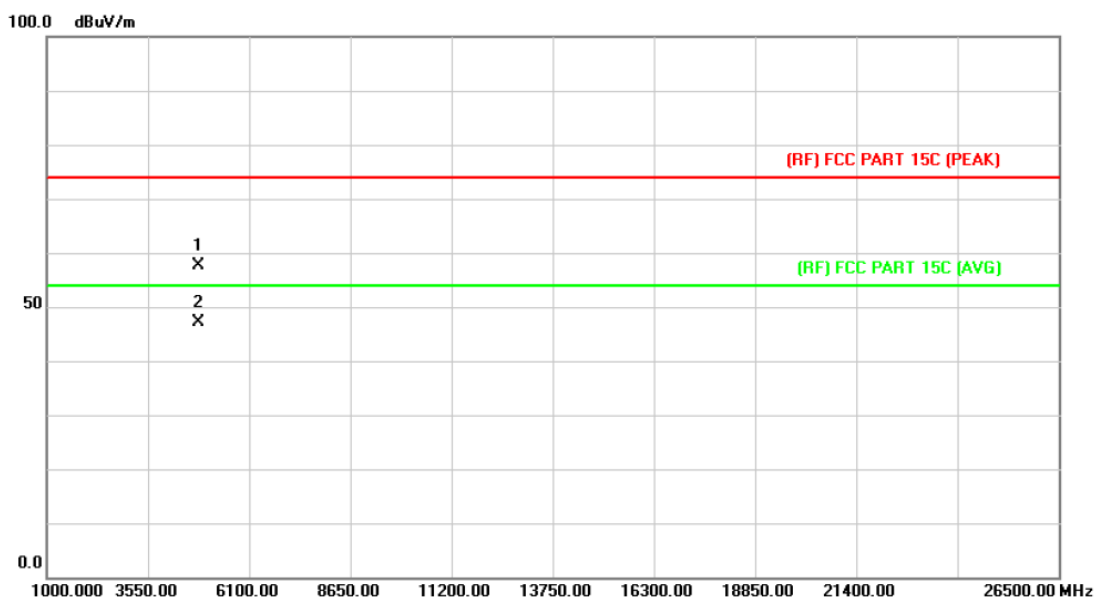
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.978	45.79	13.56	59.35	74.00	-14.65	peak
2	*	4824.009	38.00	13.56	51.56	54.00	-2.44	AVG

Emission Level= Read Level+ Correct Factor

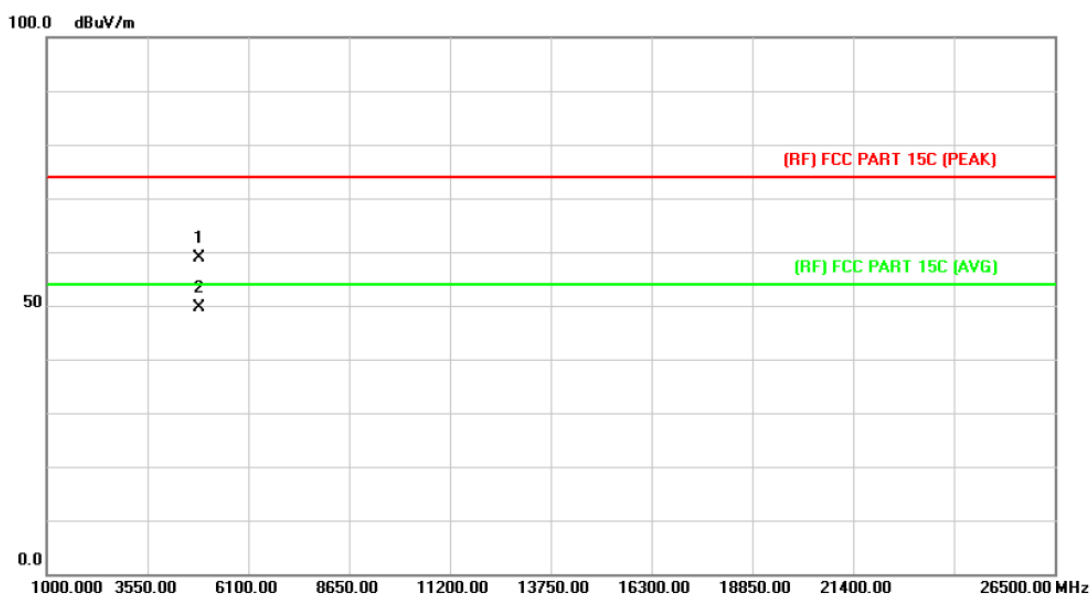
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4824.039	44.12	13.56	57.68	74.00	-16.32	peak
2	*	4824.048	33.56	13.56	47.12	54.00	-6.88	AVG

Emission Level= Read Level+ Correct Factor

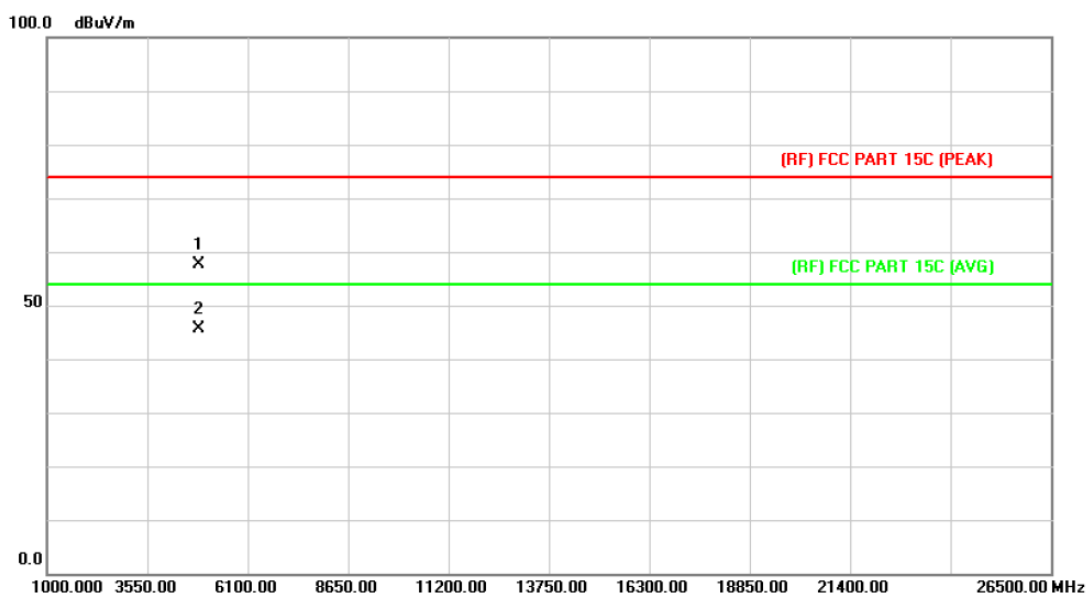
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2437MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		4873.892	44.92	13.86	58.78	74.00	-15.22	peak
2	*	4873.991	35.82	13.86	49.68	54.00	-4.32	AVG

Emission Level= Read Level+ Correct Factor

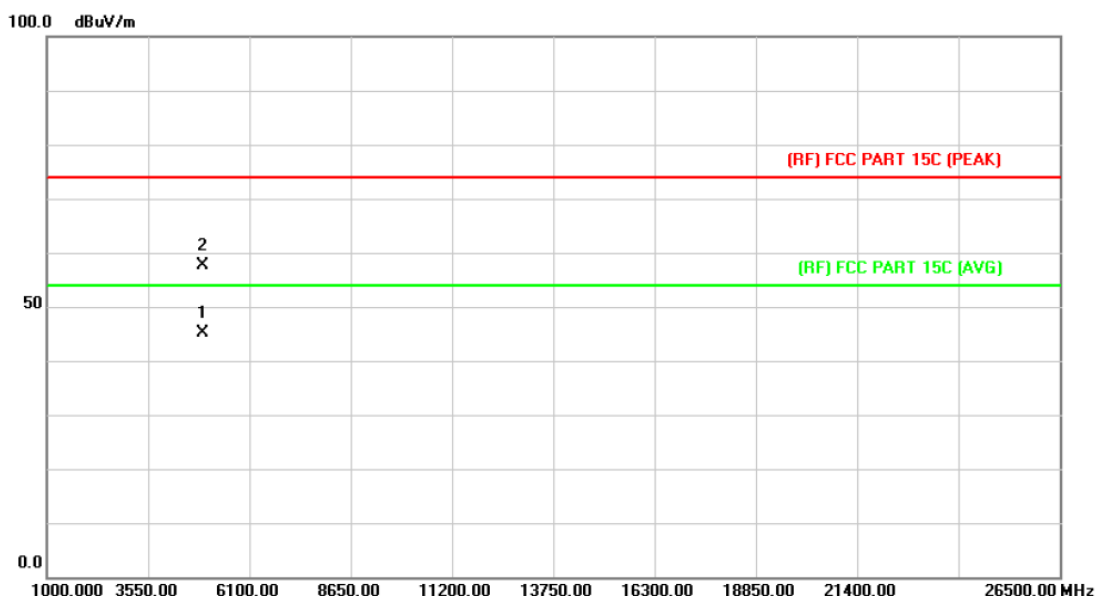
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2437MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.922	43.74	13.86	57.60	74.00	-16.40	peak
2	*	4873.991	31.81	13.86	45.67	54.00	-8.33	AVG

Emission Level= Read Level+ Correct Factor

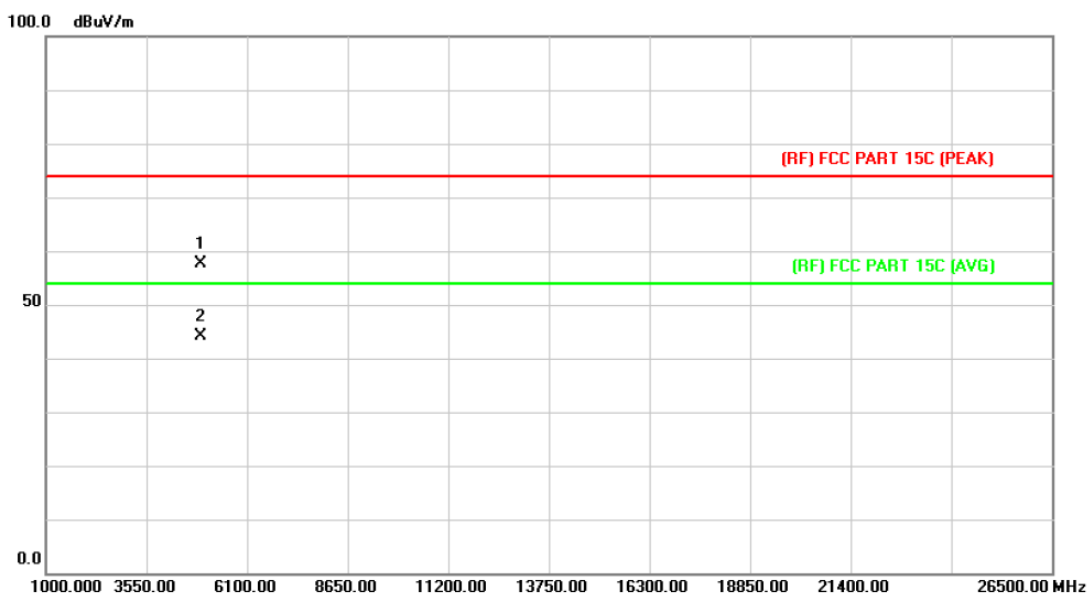
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2462MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4924.009	30.96	14.15	45.11	54.00	-8.89	AVG
2		4924.030	43.55	14.15	57.70	74.00	-16.30	peak

Emission Level= Read Level+ Correct Factor

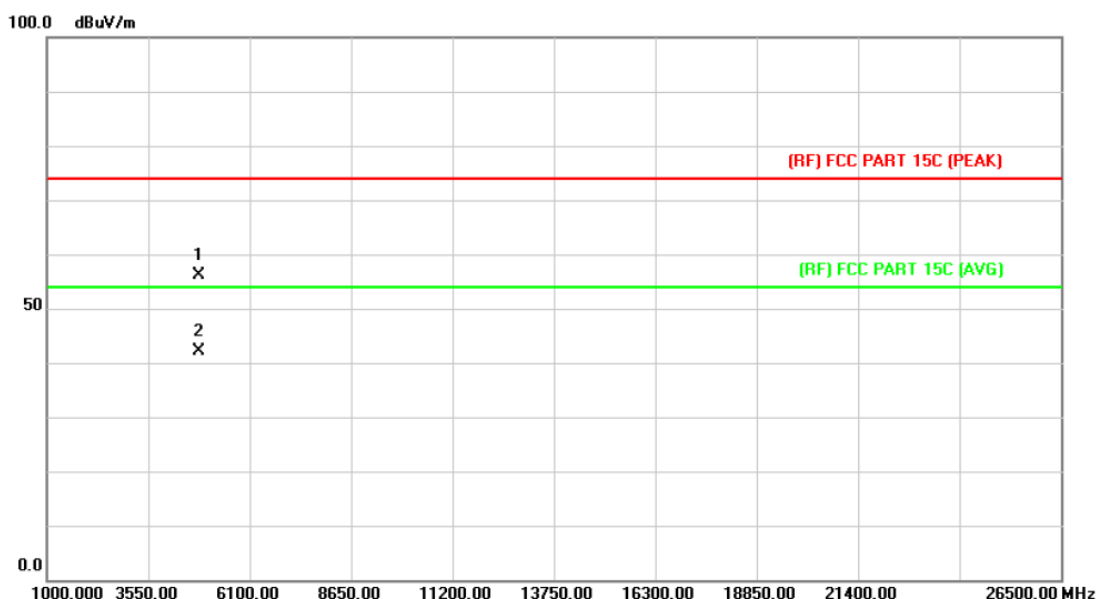
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.922	43.44	14.15	57.59	74.00	-16.41	peak
2	*	4923.952	30.07	14.15	44.22	54.00	-9.78	AVG

Emission Level= Read Level+ Correct Factor

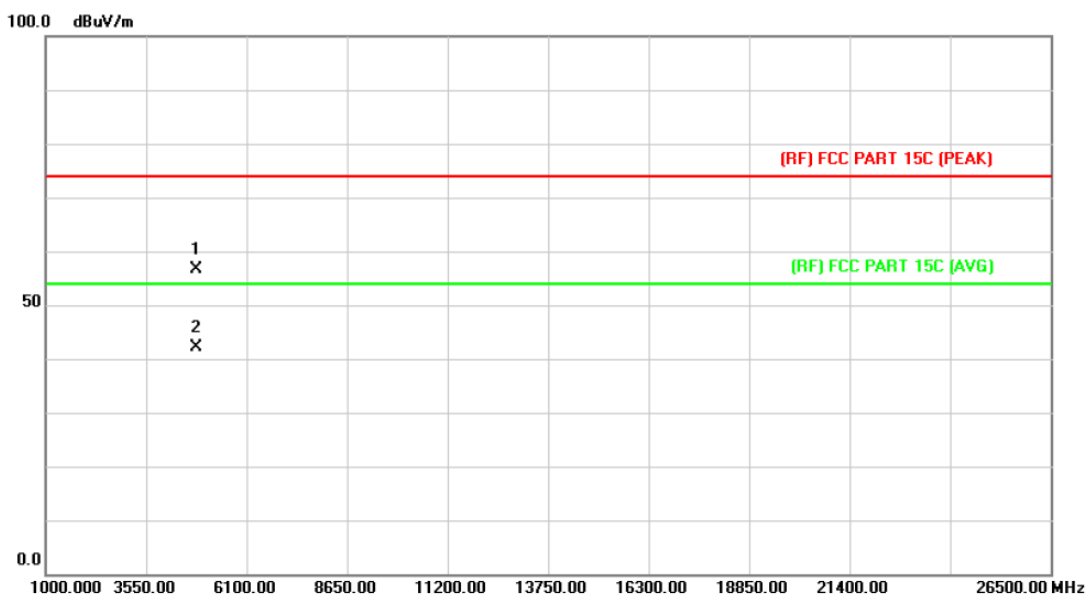
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2412MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.709	42.55	13.56	56.11	74.00	-17.89	peak
2	*	4824.072	28.67	13.56	42.23	54.00	-11.77	AVG

Emission Level= Read Level+ Correct Factor

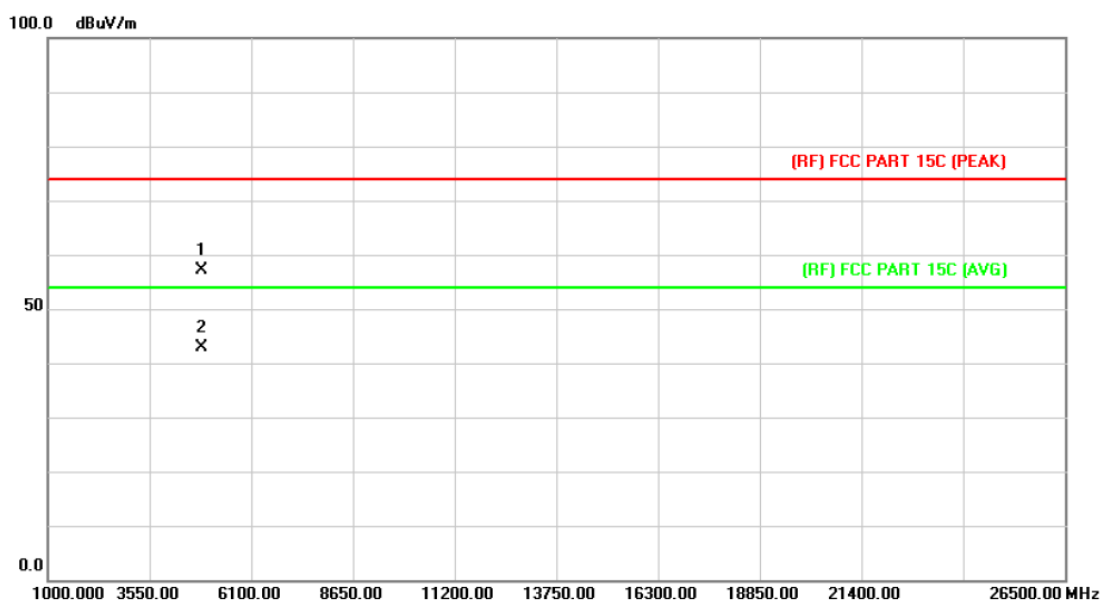
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2412MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.916	43.02	13.56	56.58	74.00	-17.42	peak
2	*	4824.054	28.62	13.56	42.18	54.00	-11.82	AVG

Emission Level= Read Level+ Correct Factor

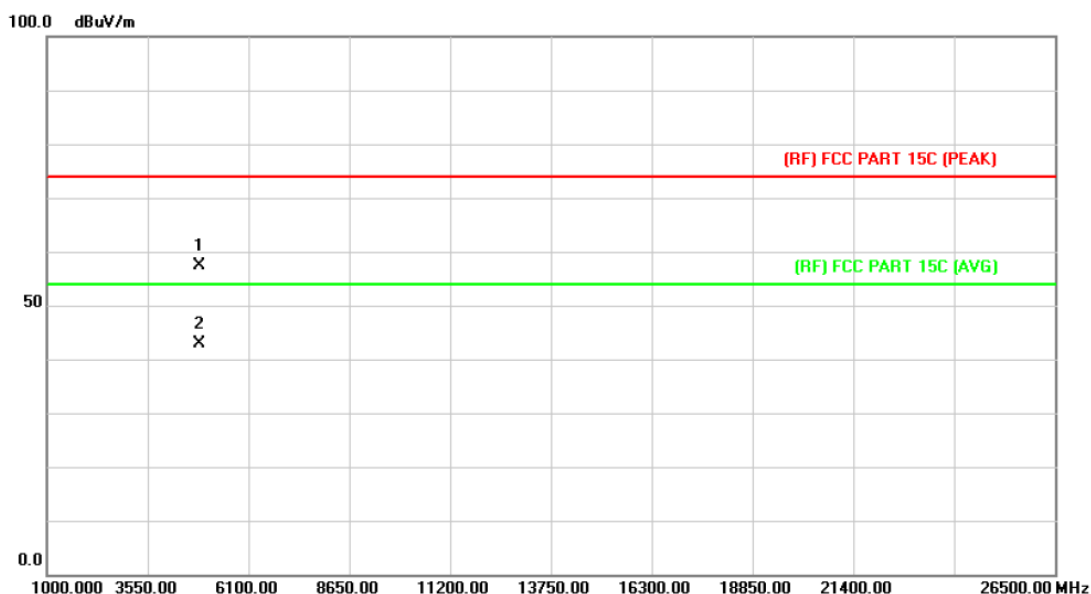
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2437MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB Detector
1		4874.036	43.20	13.86	57.06	74.00	-16.94 peak
2	*	4874.357	29.01	13.86	42.87	54.00	-11.13 AVG

Emission Level= Read Level+ Correct Factor

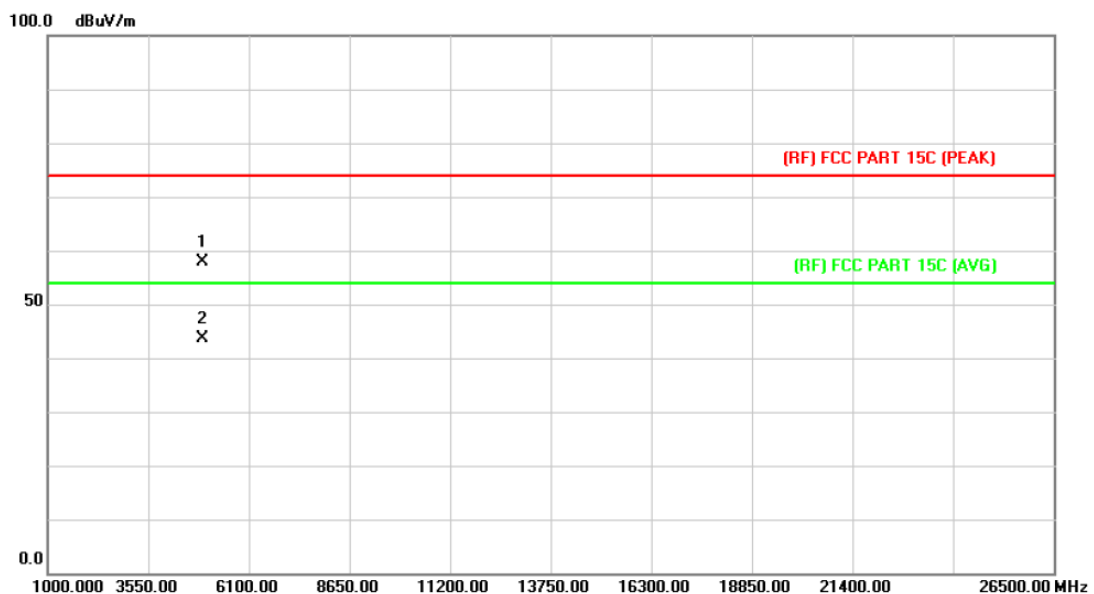
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2437MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.570	43.55	13.86	57.41	74.00	-16.59	peak
2	*	4874.288	29.00	13.86	42.86	54.00	-11.14	AVG

Emission Level= Read Level+ Correct Factor

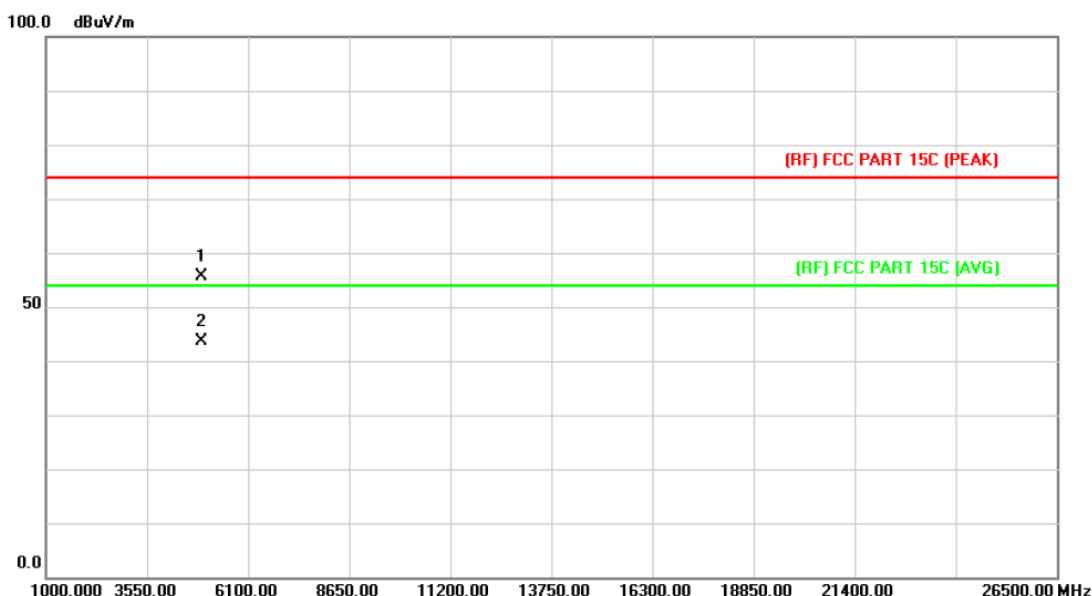
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4924.102	43.63	14.15	57.78	74.00	-16.22	peak
2	*	4924.350	29.41	14.15	43.56	54.00	-10.44	AVG

Emission Level= Read Level+ Correct Factor

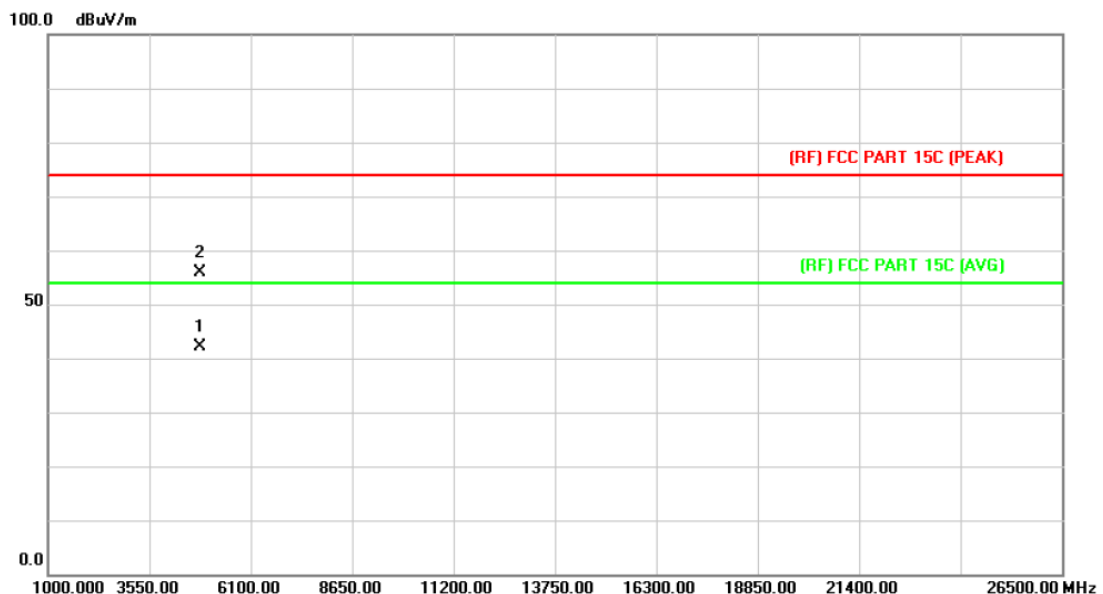
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2462MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.598	41.48	14.15	55.63	74.00	-18.37	peak
2	*	4924.194	29.43	14.15	43.58	54.00	-10.42	AVG

Emission Level= Read Level+ Correct Factor

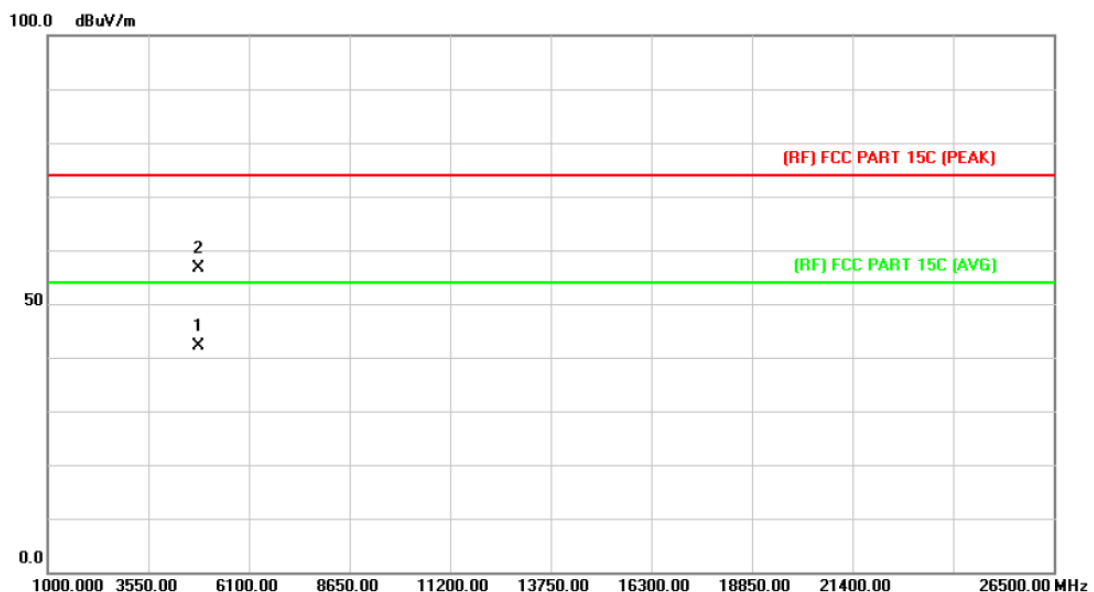
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2412MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4823.582	28.46	13.56	42.02	54.00	-11.98	AVG
2		4823.596	42.38	13.56	55.94	74.00	-18.06	peak

Emission Level= Read Level+ Correct Factor

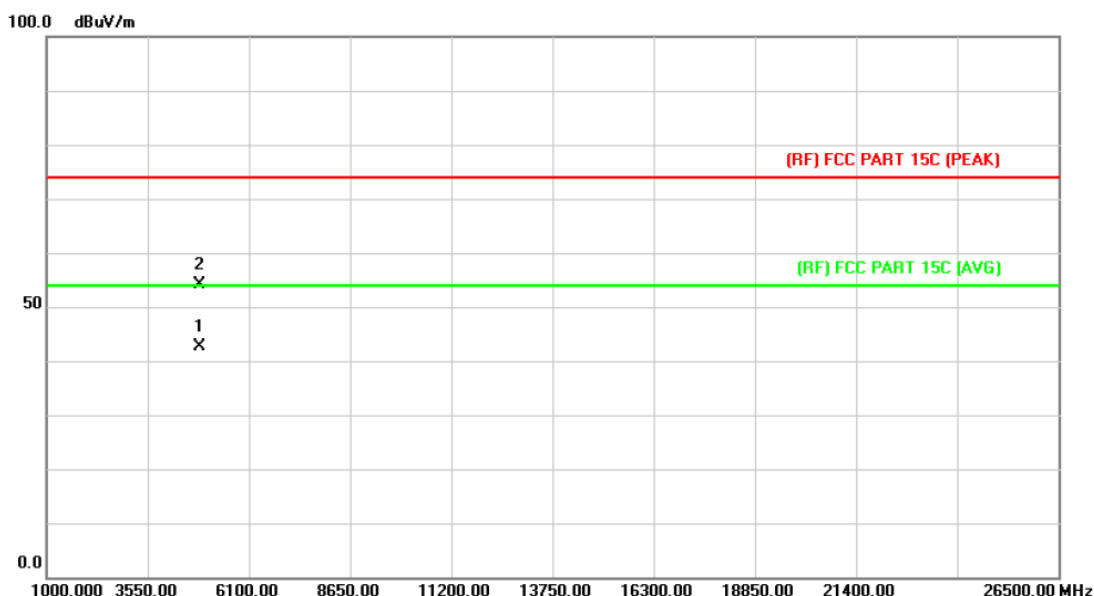
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2412MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4823.668	28.47	13.56	42.03	54.00	-11.97	AVG
2		4824.133	43.04	13.56	56.60	74.00	-17.40	peak

Emission Level= Read Level+ Correct Factor

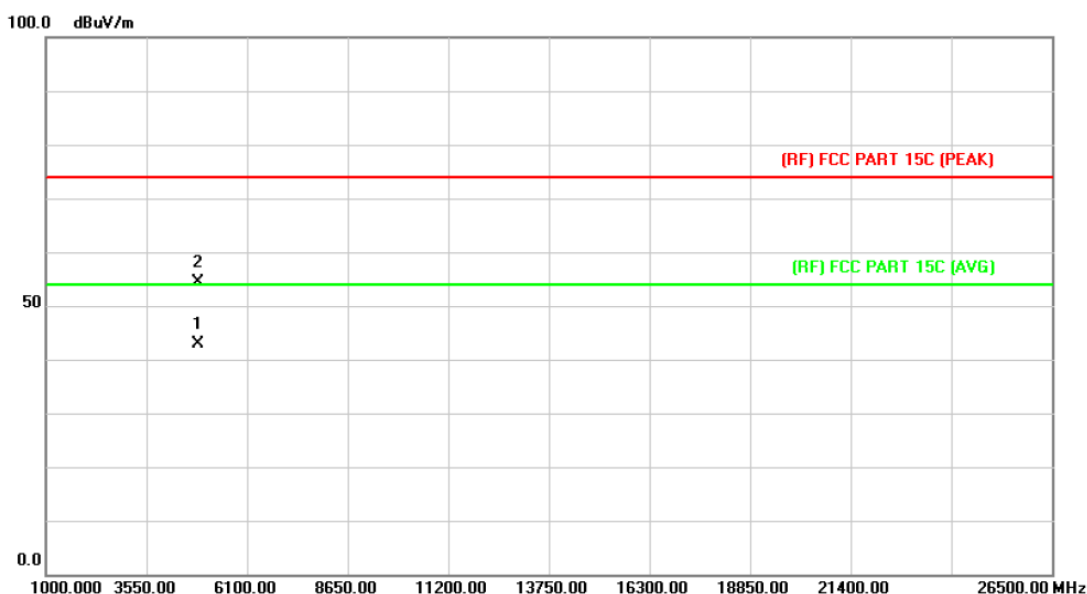
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2437MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4874.112	28.88	13.86	42.74	54.00	-11.26	AVG
2		4874.124	40.30	13.86	54.16	74.00	-19.84	peak

Emission Level= Read Level+ Correct Factor

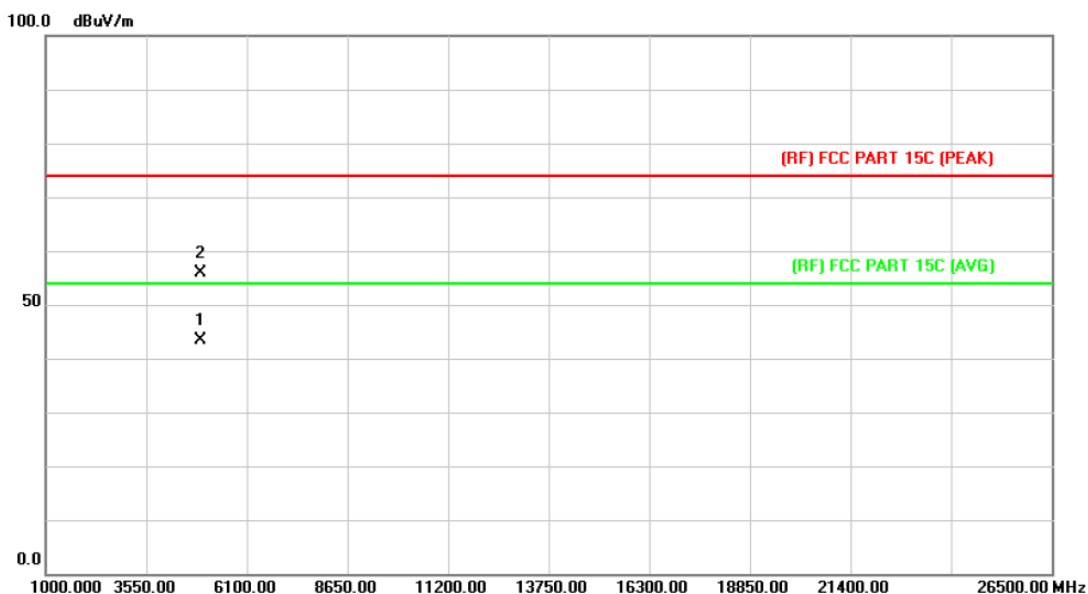
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2437MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4874.010	28.90	13.86	42.76	54.00	-11.24	AVG
2		4874.092	40.54	13.86	54.40	74.00	-19.60	peak

Emission Level= Read Level+ Correct Factor

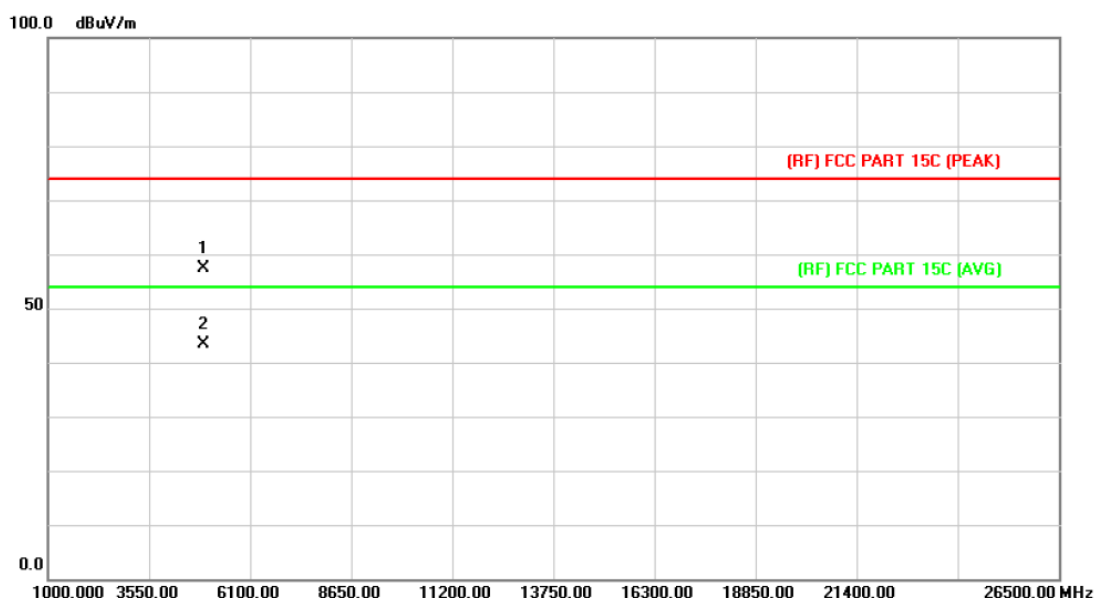
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2462MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4923.582	29.29	14.15	43.44	54.00	-10.56	AVG
2		4923.825	41.81	14.15	55.96	74.00	-18.04	peak

Emission Level= Read Level+ Correct Factor

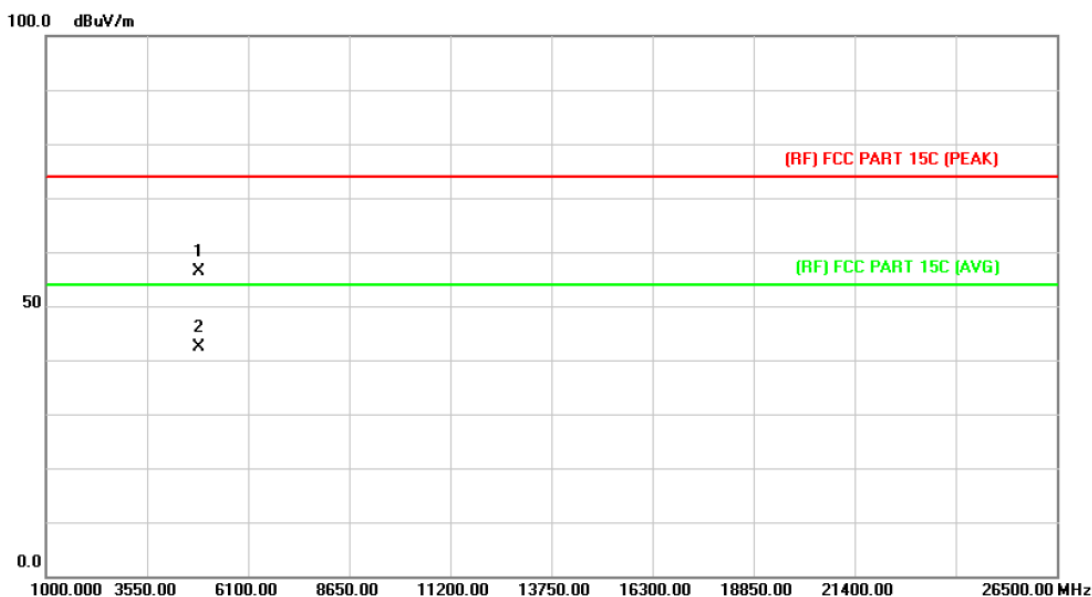
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2462MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.625	43.25	14.15	57.40	74.00	-16.60	peak
2	*	4923.929	29.31	14.15	43.46	54.00	-10.54	AVG

Emission Level= Read Level+ Correct Factor

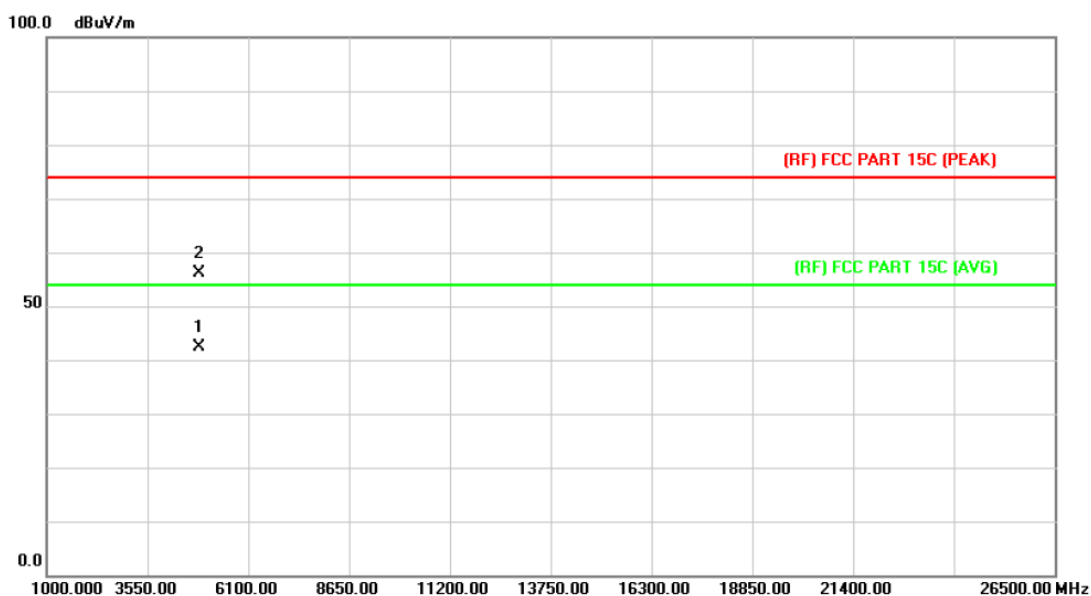
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2422MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		4843.752	42.69	13.68	56.37	74.00	-17.63	peak
2	*	4844.121	28.63	13.68	42.31	54.00	-11.69	AVG

Emission Level= Read Level+ Correct Factor

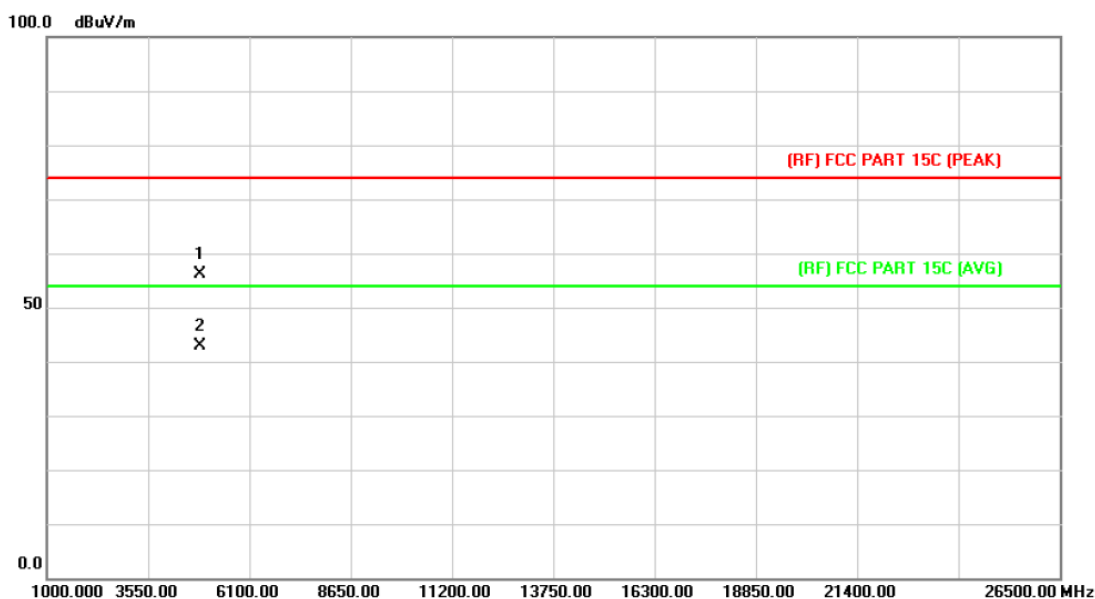
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT40) Mode 2422MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4844.153	28.66	13.68	42.34	54.00	-11.66	AVG
2		4844.410	42.45	13.68	56.13	74.00	-17.87	peak

Emission Level= Read Level+ Correct Factor

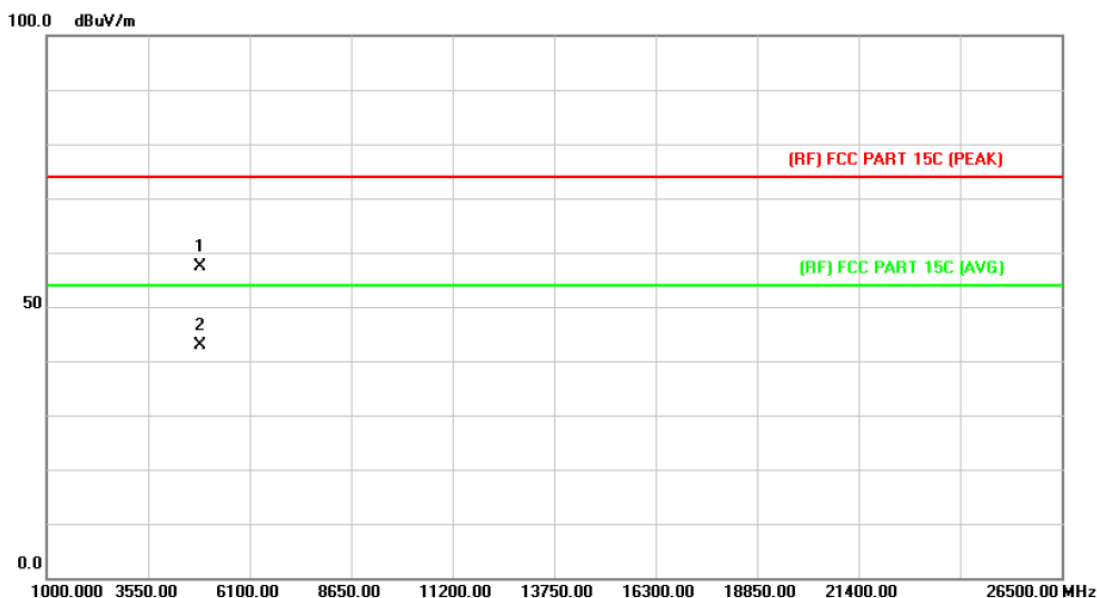
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2437MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.863	42.16	13.86	56.02	74.00	-17.98	peak
2	*	4874.227	28.92	13.86	42.78	54.00	-11.22	AVG

Emission Level= Read Level+ Correct Factor

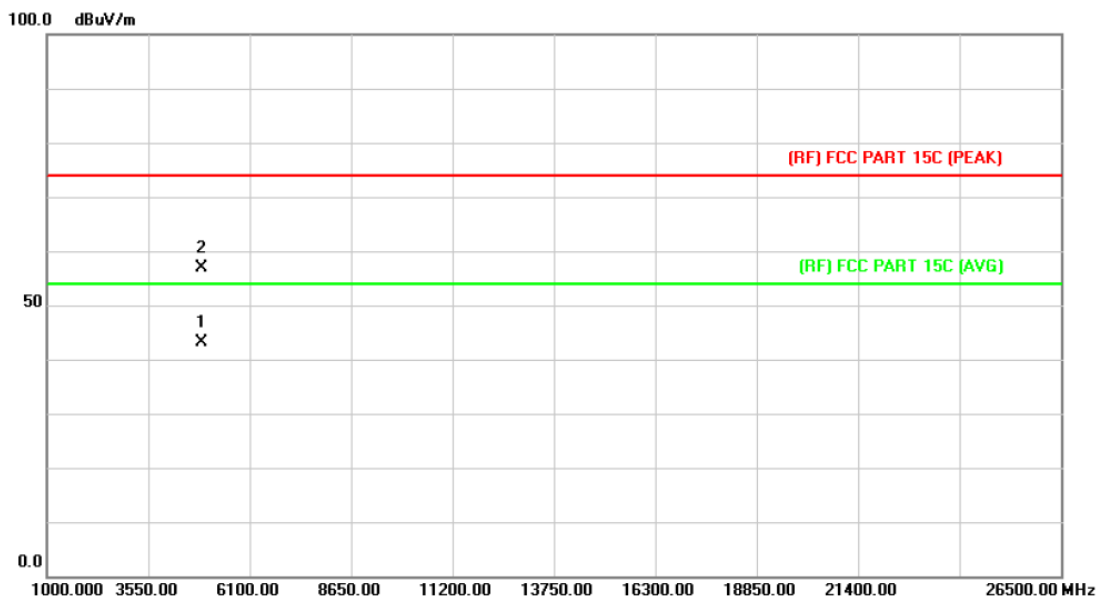
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT40) Mode 2437MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.620	43.53	13.86	57.39	74.00	-16.61	peak
2	*	4874.055	28.91	13.86	42.77	54.00	-11.23	AVG

Emission Level= Read Level+ Correct Factor

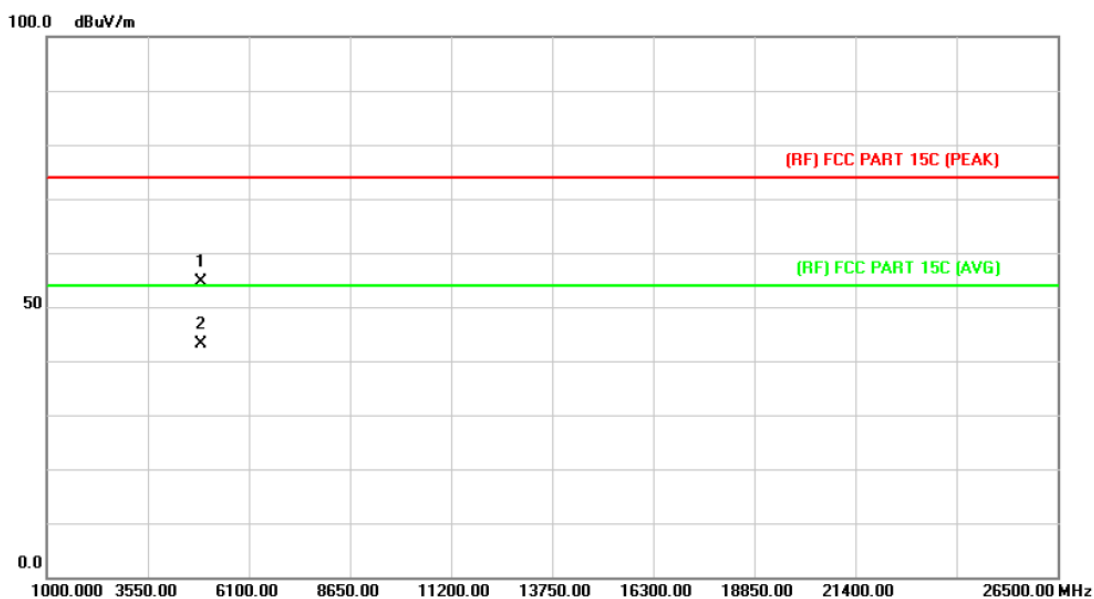
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2452MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4903.839	29.15	14.03	43.18	54.00	-10.82	AVG
2		4904.382	42.86	14.03	56.89	74.00	-17.11	peak

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT40) Mode 2452MHz (Adapter 1#)		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4904.250	40.68	14.03	54.71	74.00	-19.29	peak
2	*	4904.253	29.15	14.03	43.18	54.00	-10.82	AVG

Emission Level= Read Level+ Correct Factor

6. Restricted Bands Requirement

6.1 Test Standard and Limit

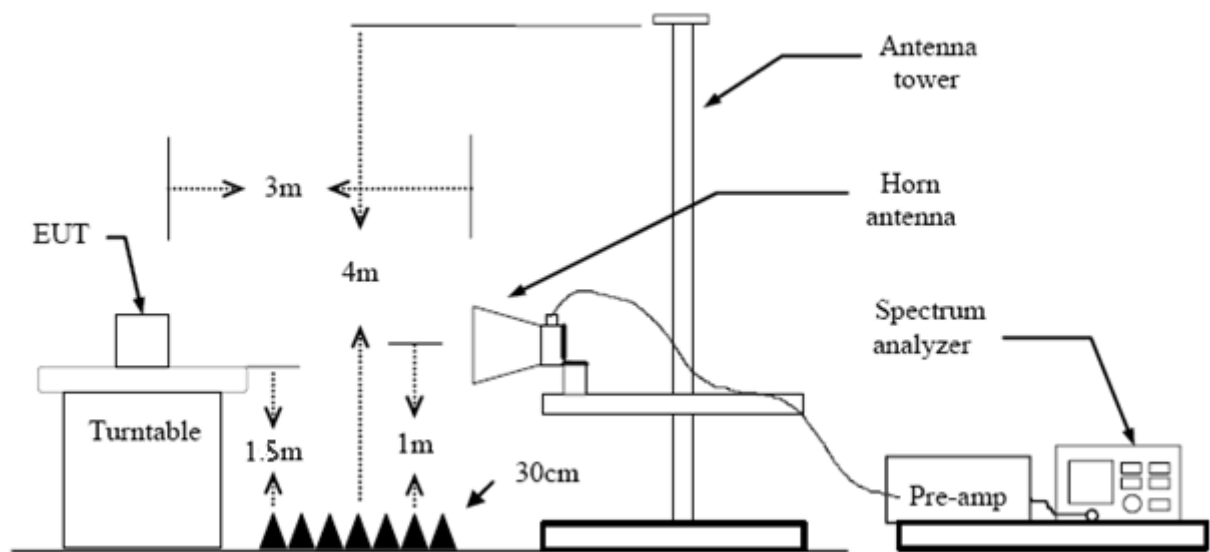
6.1.1 Test Standard

FCC Part 15.209 FCC Part 15.205

6.1.2 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 and above 1 GHz. The EUT was placed on a rotating 0.8m high above 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

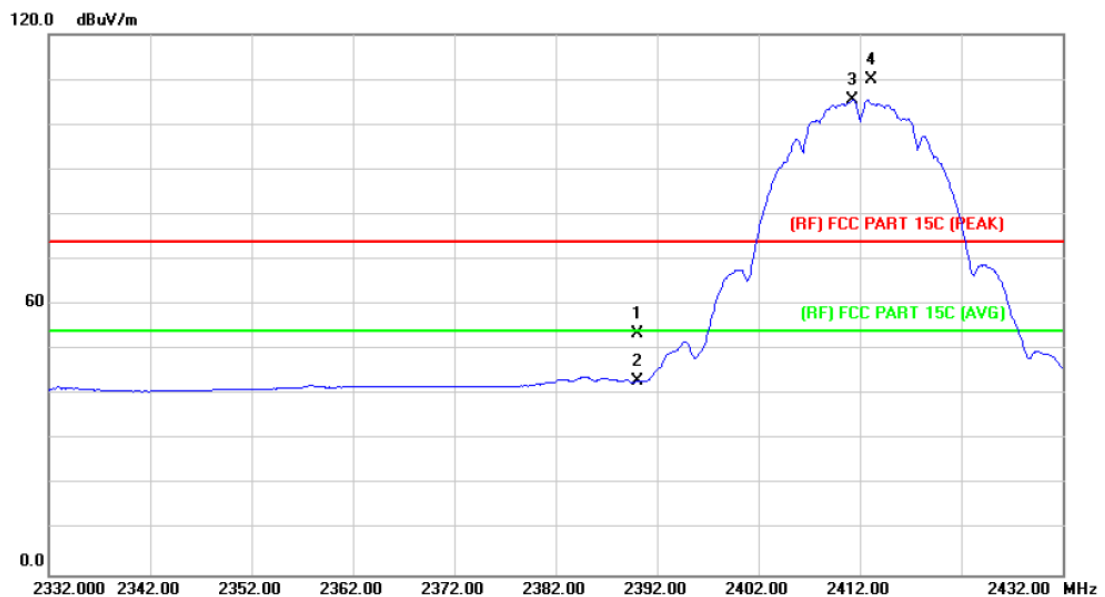
The Equipment Under Test was set to Continual Transmitting in maximum power.

6.5 Test Data

Please see the next page.

(1) Radiation Test

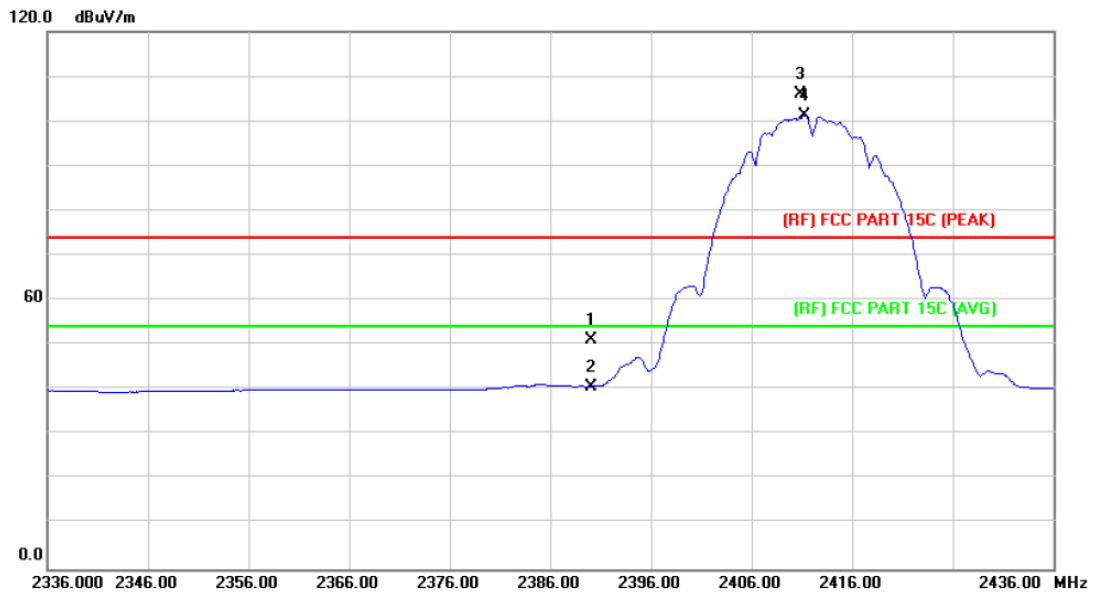
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz (Adapter 1#)		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		2390.000	52.72	0.77	53.49	74.00	-20.51	peak
2		2390.000	42.23	0.77	43.00	54.00	-11.00	AVG
3	*	2411.300	104.49	0.86	105.35	Fundamental Frequency		AVG
4	X	2413.100	109.20	0.86	110.06	Fundamental Frequency		peak

Emission Level= Read Level+ Correct Factor

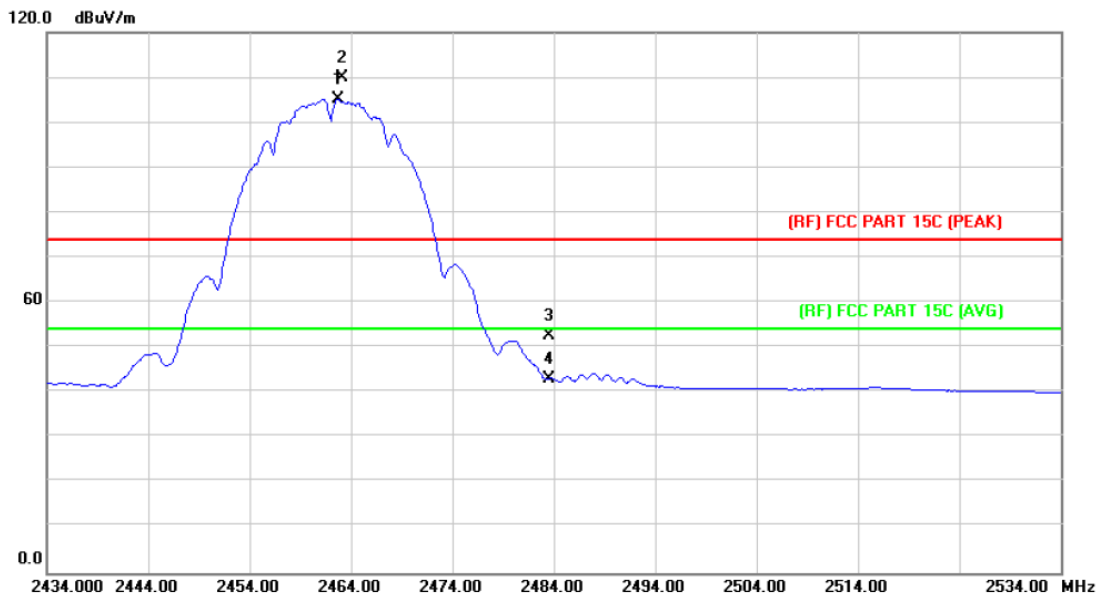
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz (Adapter 1#)		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		2390.000	50.32	0.77	51.09	74.00	-22.91	peak
2		2390.000	39.95	0.77	40.72	54.00	-13.28	AVG
3	X	2410.900	105.13	0.86	105.99	Fundamental Frequency		peak
4	*	2411.300	100.51	0.86	101.37	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

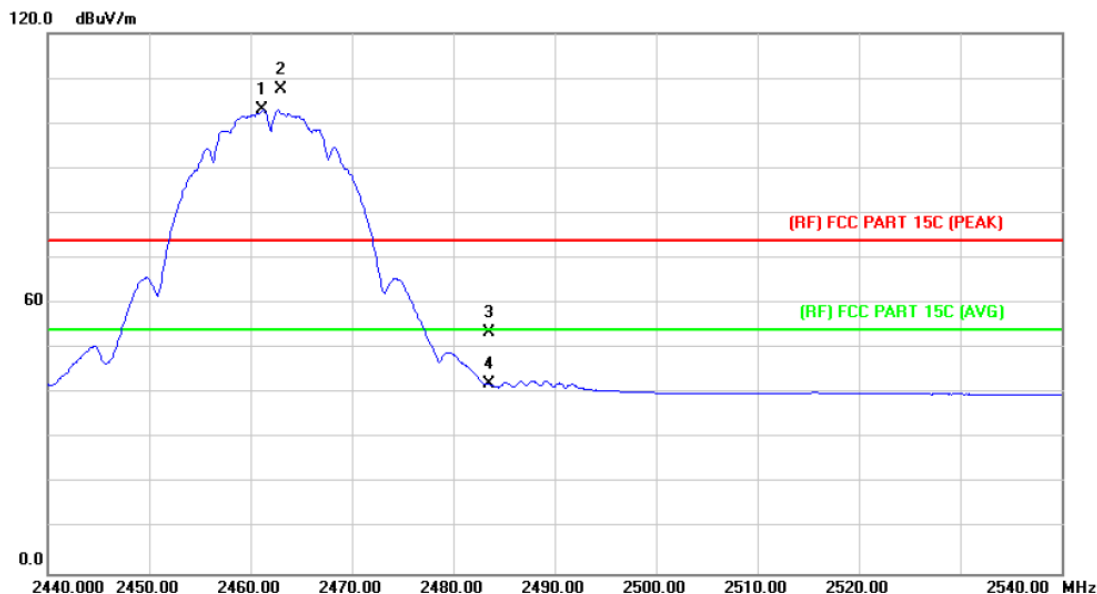
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2462MHz (Adapter 1#)		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	2462.700	104.20	1.08	105.28	Fundamental Frequency		AVG
2	X	2463.100	108.96	1.08	110.04	Fundamental Frequency		peak
3		2483.500	51.43	1.17	52.60	74.00	-21.40	peak
4		2483.500	42.01	1.17	43.18	54.00	-10.82	AVG

Emission Level= Read Level+ Correct Factor

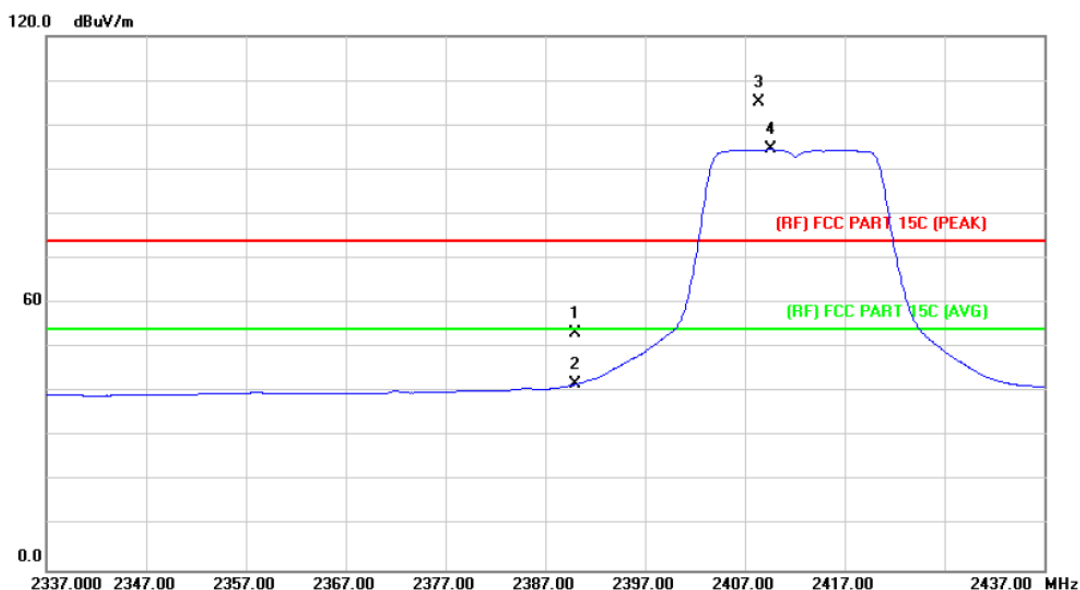
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz (Adapter 1#)		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	2461.200	101.85	1.07	102.92	Fundamental Frequency		AVG
2	X	2463.000	106.45	1.08	107.53	Fundamental Frequency		peak
3		2483.500	52.24	1.17	53.41	74.00	-20.59	peak
4		2483.500	40.89	1.17	42.06	54.00	-11.94	AVG

Emission Level= Read Level+ Correct Factor

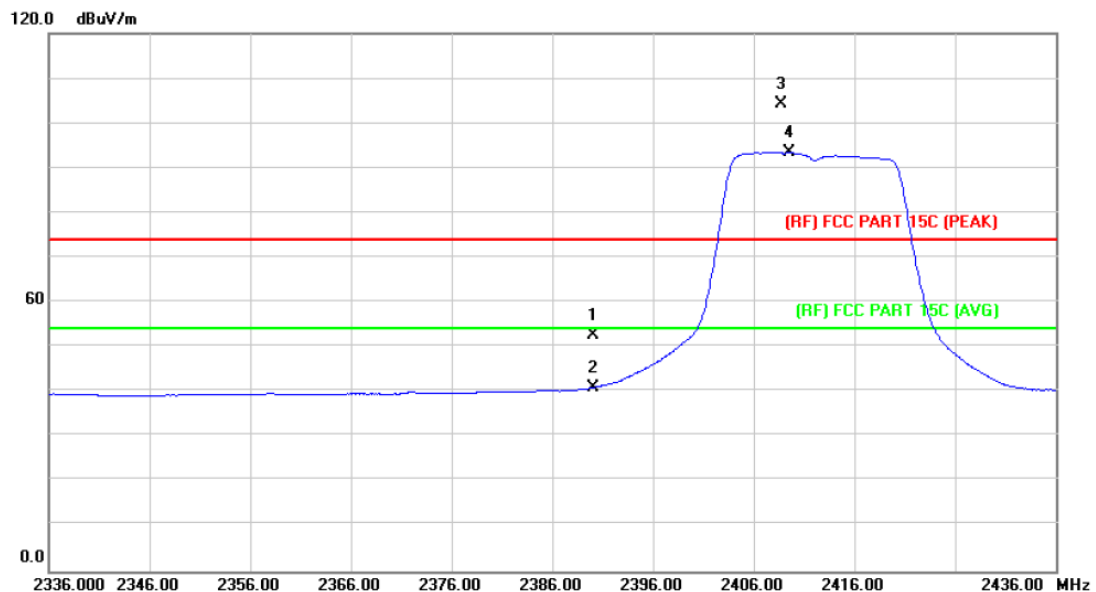
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2412MHz (Adapter 1#)		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		2390.000	52.50	0.77	53.27	74.00	-20.73	peak
2		2390.000	41.02	0.77	41.79	54.00	-12.21	AVG
3	X	2408.400	104.45	0.85	105.30	Fundamental Frequency		peak
4	*	2409.600	93.74	0.85	94.59	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

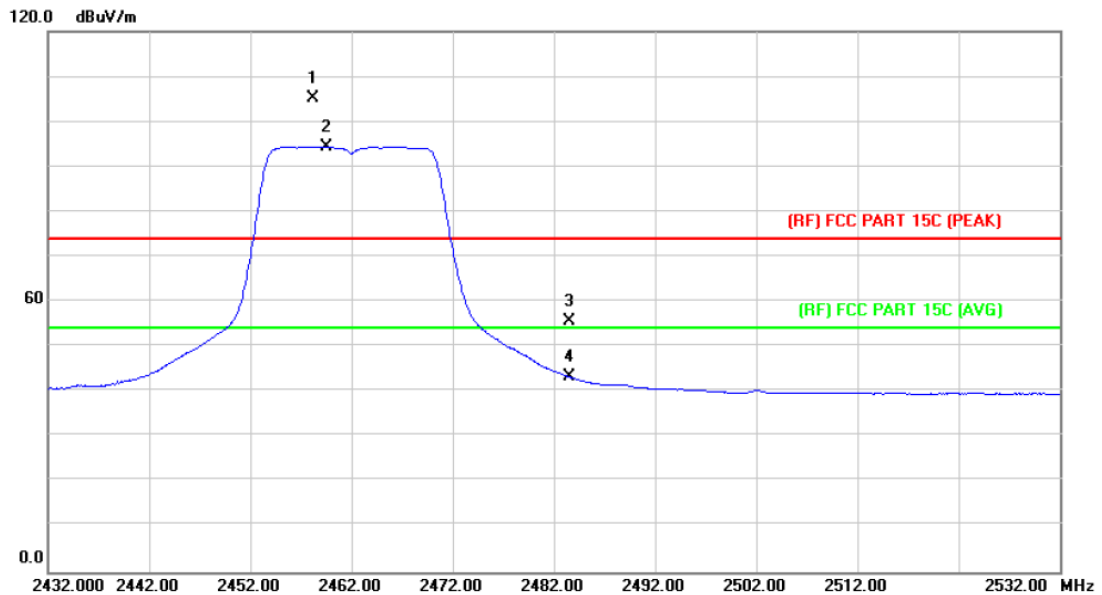
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2412MHz (Adapter 1#)		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	51.99	0.77	52.76	74.00	-21.24	peak
2		2390.000	40.18	0.77	40.95	54.00	-13.05	AVG
3	X	2408.700	103.40	0.85	104.25	Fundamental Frequency		peak
4	*	2409.600	92.62	0.85	93.47	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

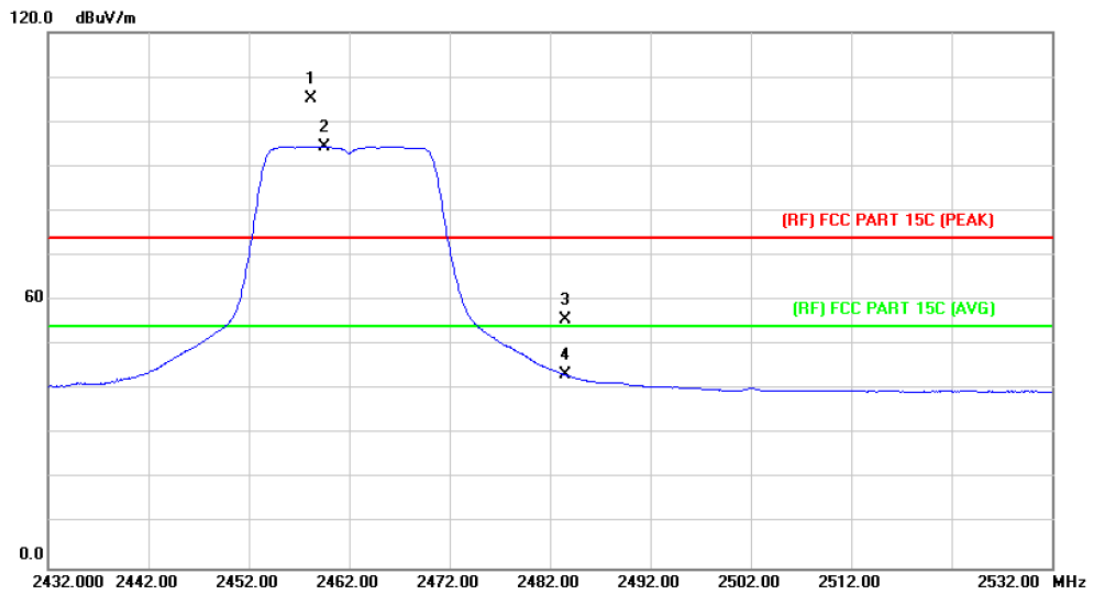
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz (Adapter 1#)		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	X	2458.200	104.01	1.06	105.07	Fundamental Frequency		peak
2	*	2459.500	93.41	1.06	94.47	Fundamental Frequency		AVG
3		2483.500	54.37	1.17	55.54	74.00	-18.46	peak
4		2483.500	42.14	1.17	43.31	54.00	-10.69	AVG

Emission Level= Read Level+ Correct Factor

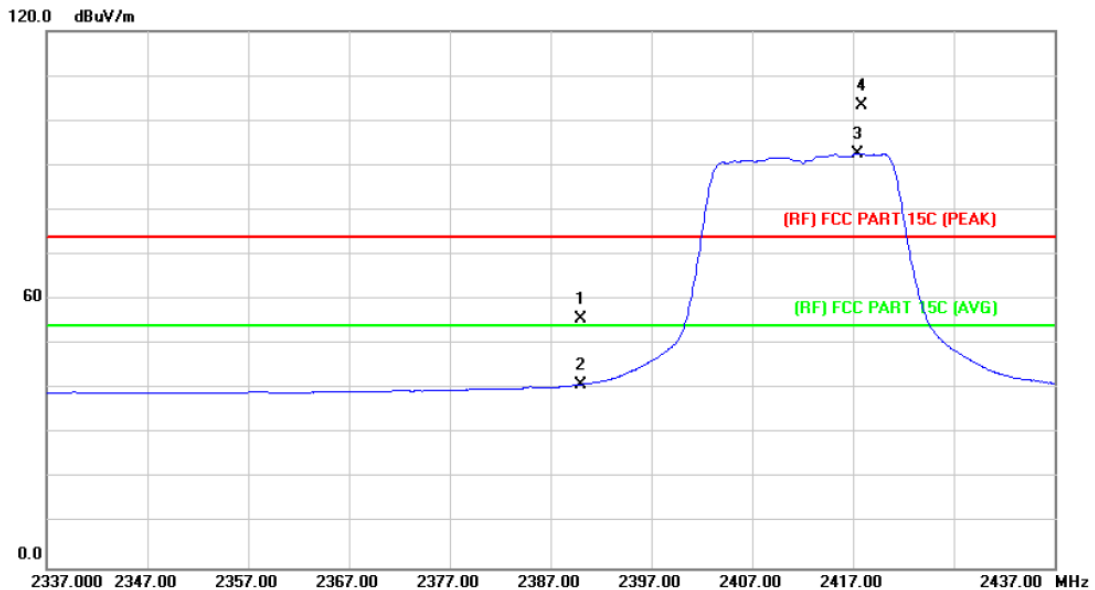
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2462MHz (Adapter 1#)		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	X	2458.200	104.01	1.06	105.07	Fundamental Frequency		peak
2	*	2459.500	93.41	1.06	94.47	Fundamental Frequency		AVG
3		2483.500	54.37	1.17	55.54	74.00	-18.46	peak
4		2483.500	42.14	1.17	43.31	54.00	-10.69	AVG

Emission Level= Read Level+ Correct Factor

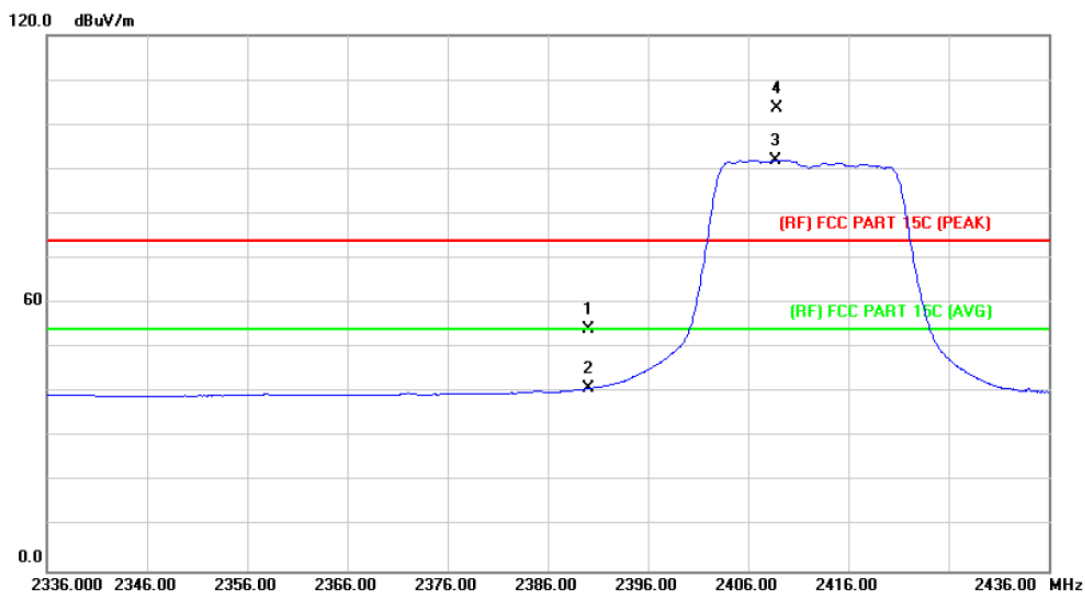
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2412MHz (Adapter 1#)		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		2390.000	54.76	0.77	55.53	74.00	-18.47	peak
2		2390.000	40.25	0.77	41.02	54.00	-12.98	AVG
3	*	2417.400	91.61	0.89	92.50	Fundamental Frequency		AVG
4	X	2417.900	102.49	0.89	103.38	Fundamental Frequency		peak

Emission Level= Read Level+ Correct Factor

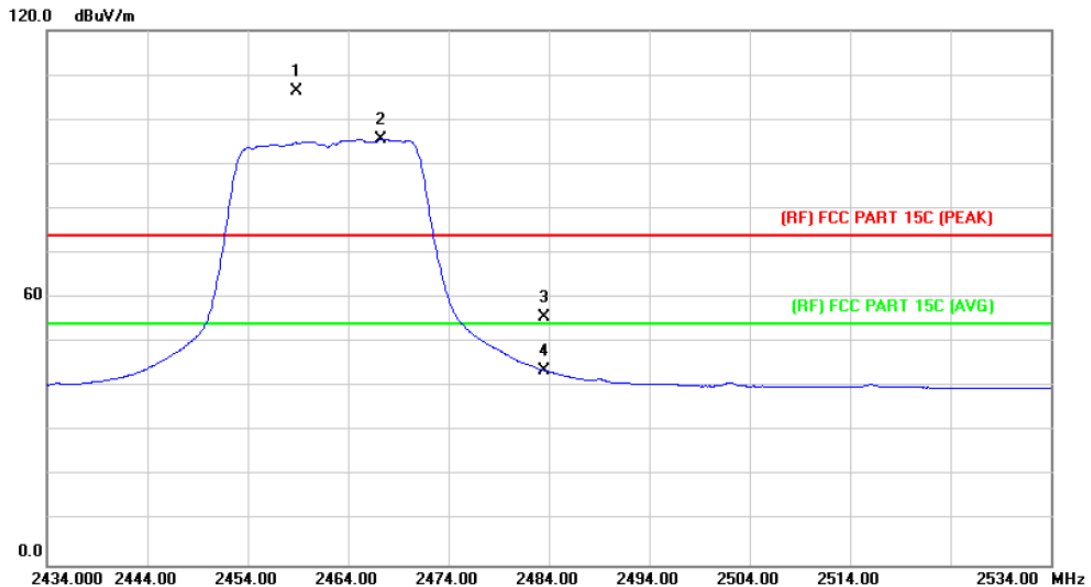
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2412MHz (Adapter 1#)		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		2390.000	53.47	0.77	54.24	74.00	-19.76	peak
2		2390.000	40.16	0.77	40.93	54.00	-13.07	AVG
3	*	2408.700	91.19	0.85	92.04	Fundamental Frequency		AVG
4	X	2408.900	102.75	0.85	103.60	Fundamental Frequency		peak

Emission Level= Read Level+ Correct Factor

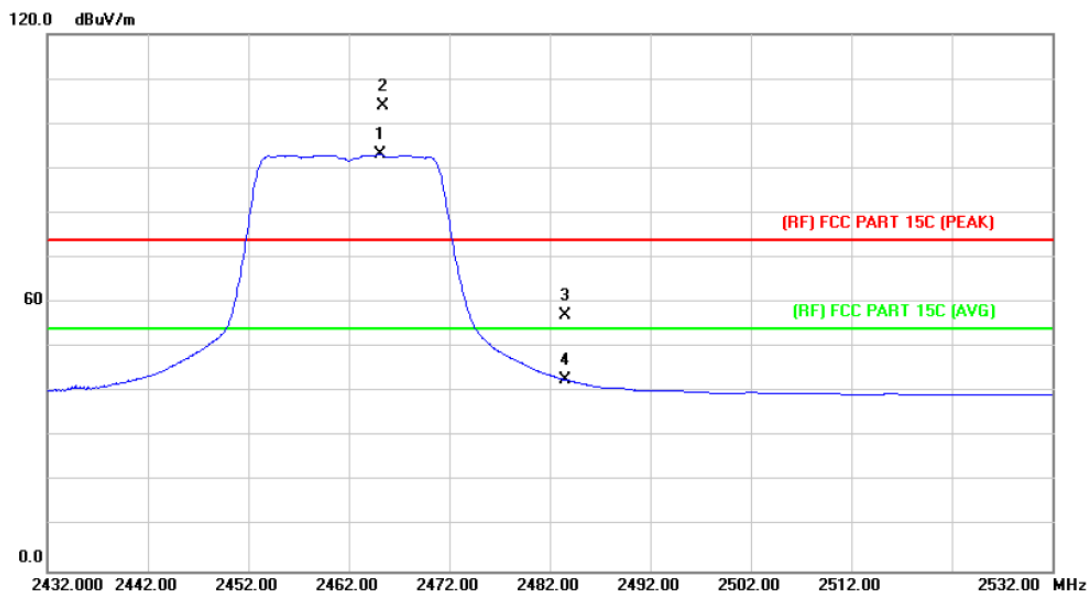
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2462MHz (Adapter 1#)		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	2458.800	105.34	1.06	106.40	Fundamental Frequency		peak
2	*	2467.300	94.43	1.10	95.53	Fundamental Frequency		AVG
3		2483.500	54.59	1.17	55.76	74.00	-18.24	peak
4		2483.500	42.61	1.17	43.78	54.00	-10.22	AVG

Emission Level= Read Level+ Correct Factor

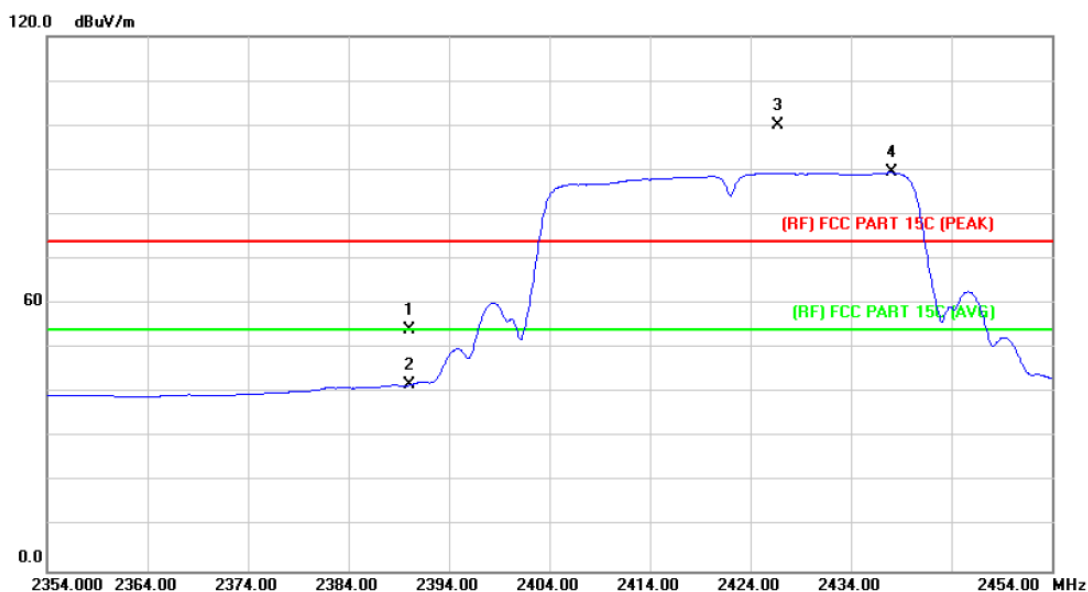
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2462MHz (Adapter 1#)		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	2465.200	91.99	1.09	93.08	Fundamental Frequency		AVG
2	X	2465.400	102.73	1.09	103.82	Fundamental Frequency		peak
3		2483.500	56.03	1.17	57.20	74.00	-16.80	peak
4		2483.500	41.61	1.17	42.78	54.00	-11.22	AVG

Emission Level= Read Level+ Correct Factor

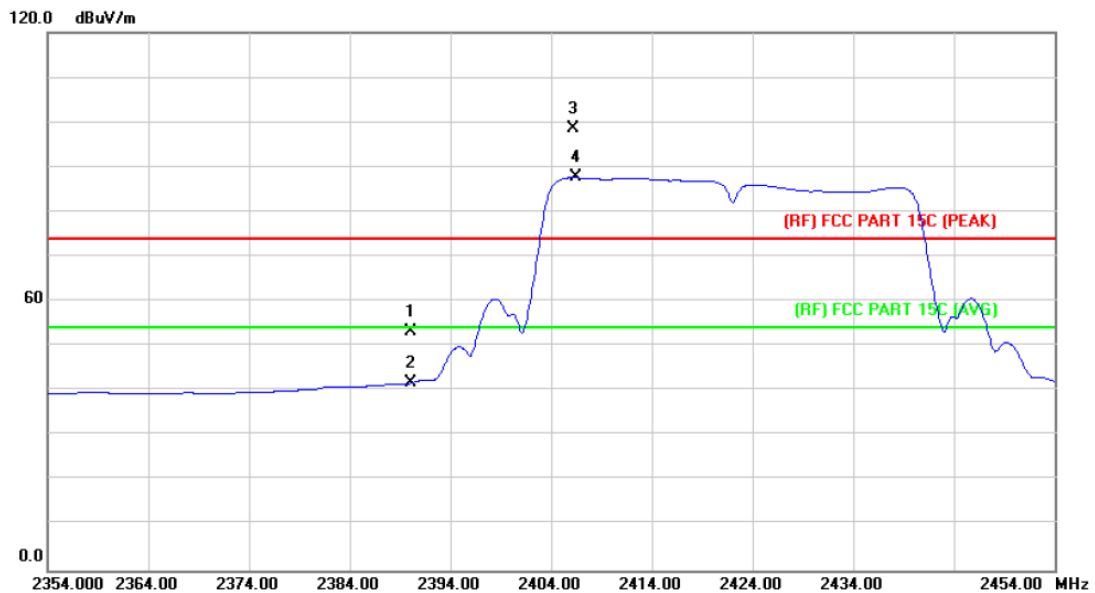
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2422MHz (Adapter 1#)		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		2390.000	53.24	0.77	54.01	74.00	-19.99	peak
2		2390.000	40.96	0.77	41.73	54.00	-12.27	AVG
3	X	2426.700	99.04	0.93	99.97	Fundamental Frequency		peak
4	*	2438.000	88.44	0.98	89.42	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

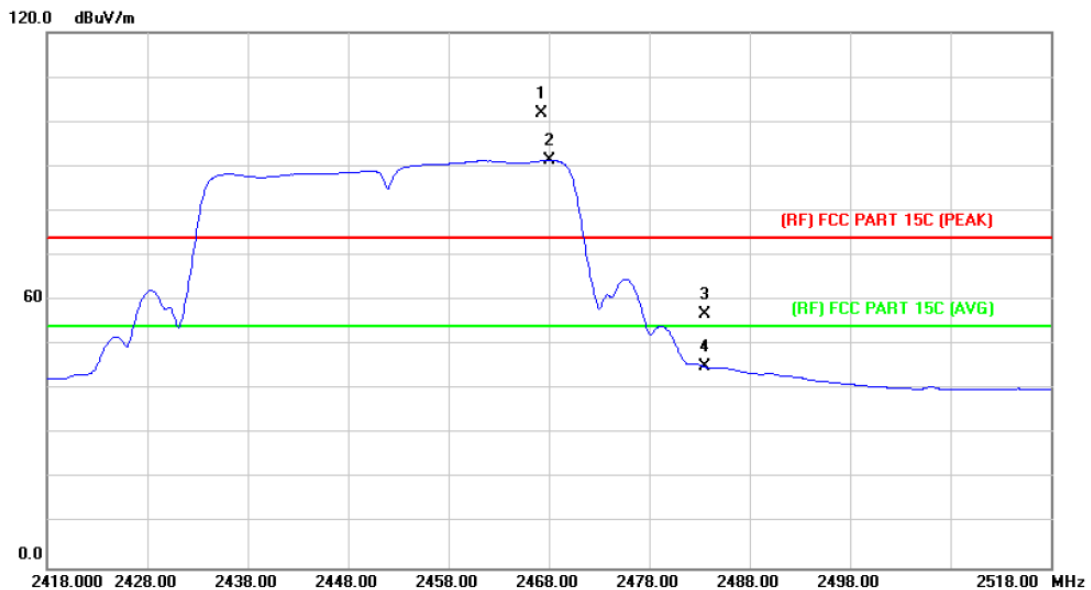
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT40) Mode 2422MHz (Adapter 1#)		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		2390.000	52.51	0.77	53.28	74.00	-20.72	peak
2		2390.000	40.95	0.77	41.72	54.00	-12.28	AVG
3	X	2406.200	97.60	0.84	98.44	Fundamental Frequency		peak
4	*	2406.400	86.89	0.84	87.73	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

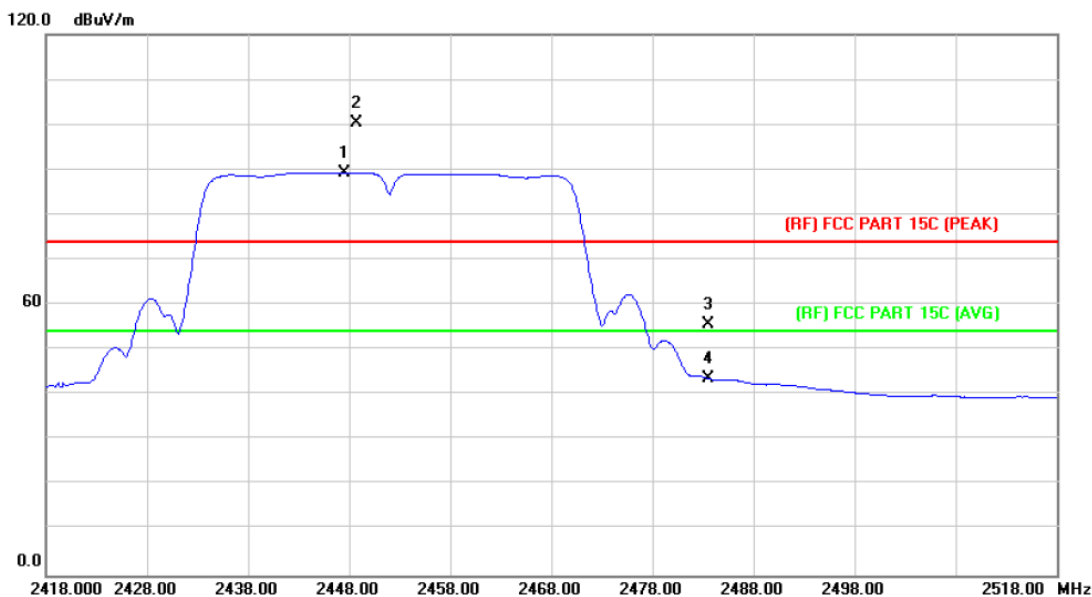
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2452MHz (Adapter 1#)		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	X	2467.300	100.70	1.10	101.80	Fundamental Frequency		peak
2	*	2468.000	90.25	1.11	91.36	Fundamental Frequency		AVG
3		2483.500	55.74	1.17	56.91	74.00	-17.09	peak
4		2483.500	43.92	1.17	45.09	54.00	-8.91	AVG

Emission Level= Read Level+ Correct Factor

EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT40) Mode 2452MHz (Adapter 1#)		
Remark:	N/A		

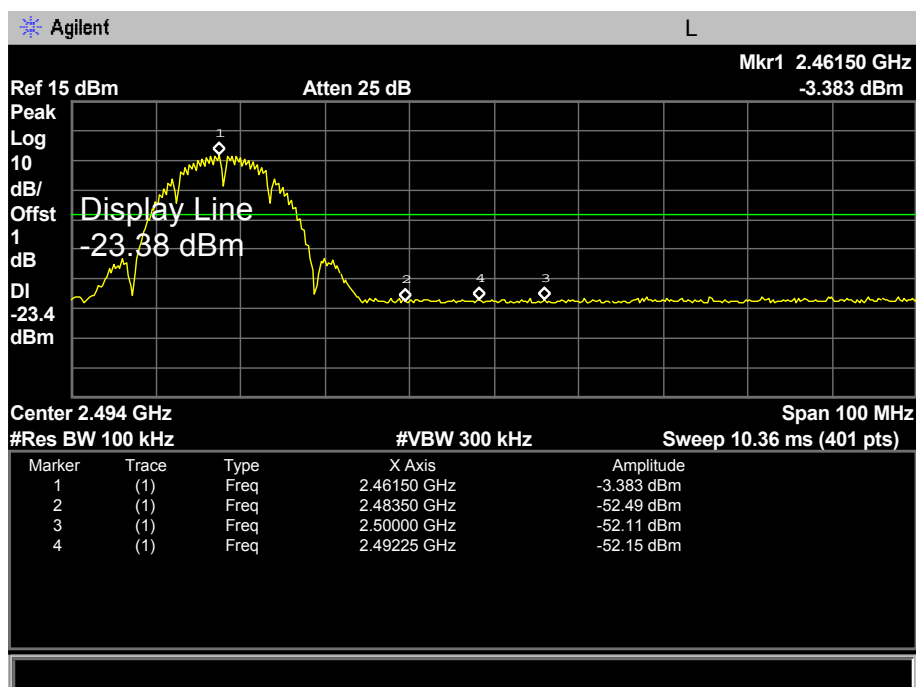
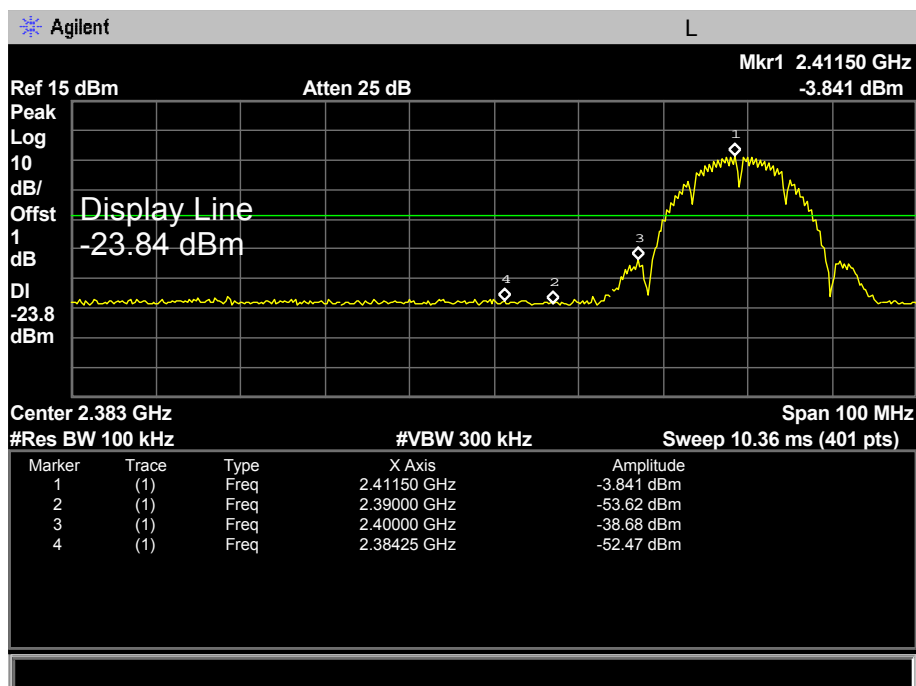


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	2447.600	88.27	1.01	89.28	Fundamental Frequency		AVG
2	X	2448.700	99.22	1.02	100.24	Fundamental Frequency		peak
3		2483.500	54.47	1.17	55.64	74.00	-18.36	peak
4		2483.500	42.52	1.17	43.69	54.00	-10.31	AVG

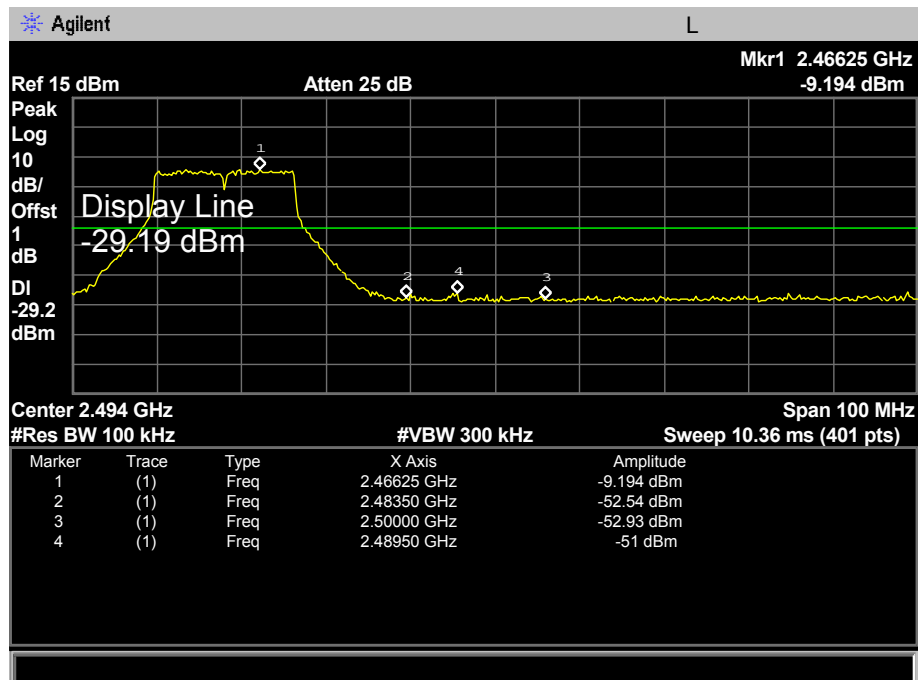
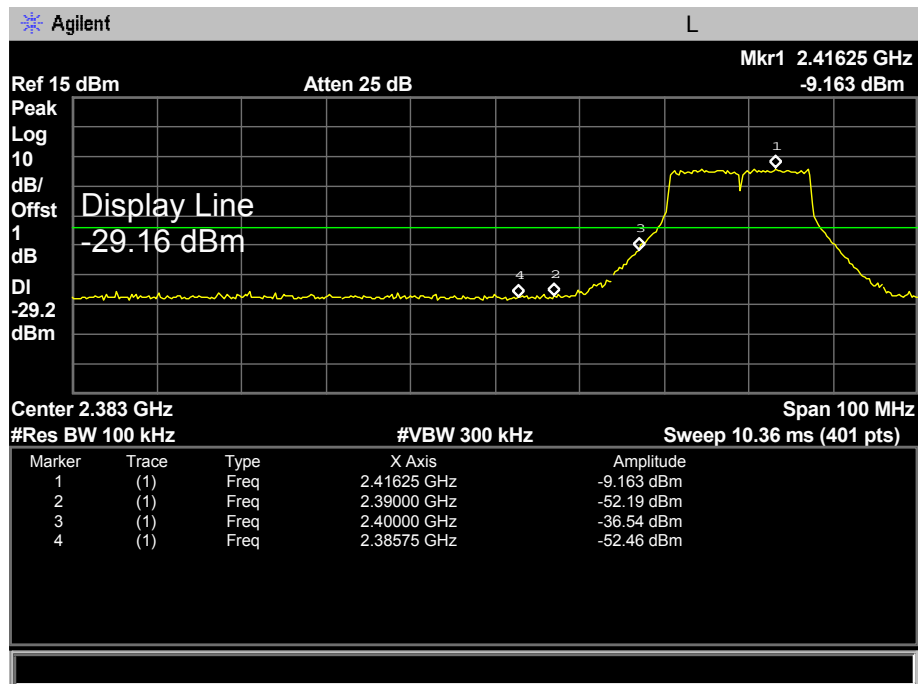
Emission Level= Read Level+ Correct Factor

(2) Conducted Test

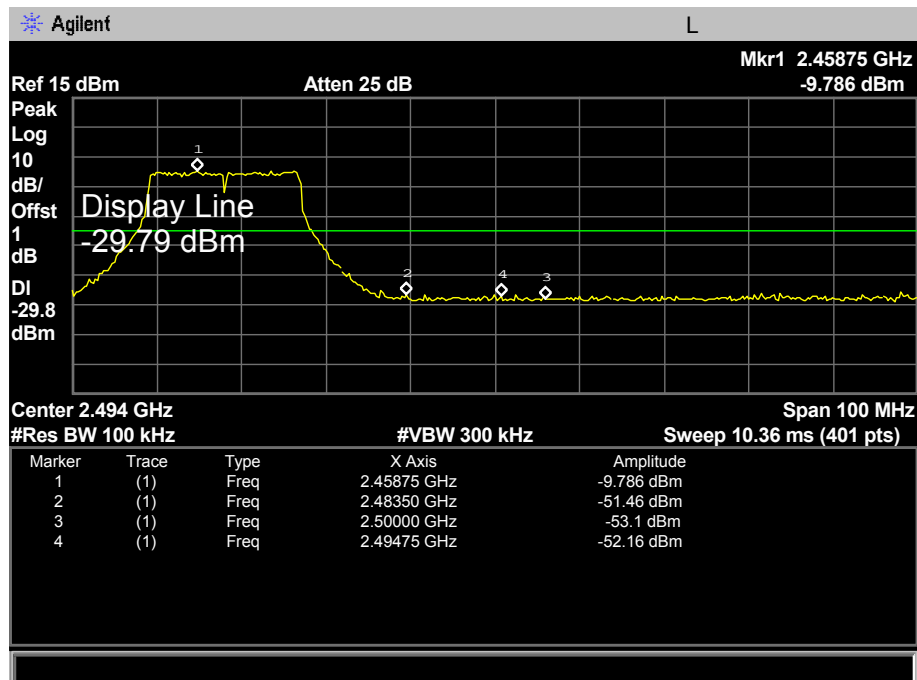
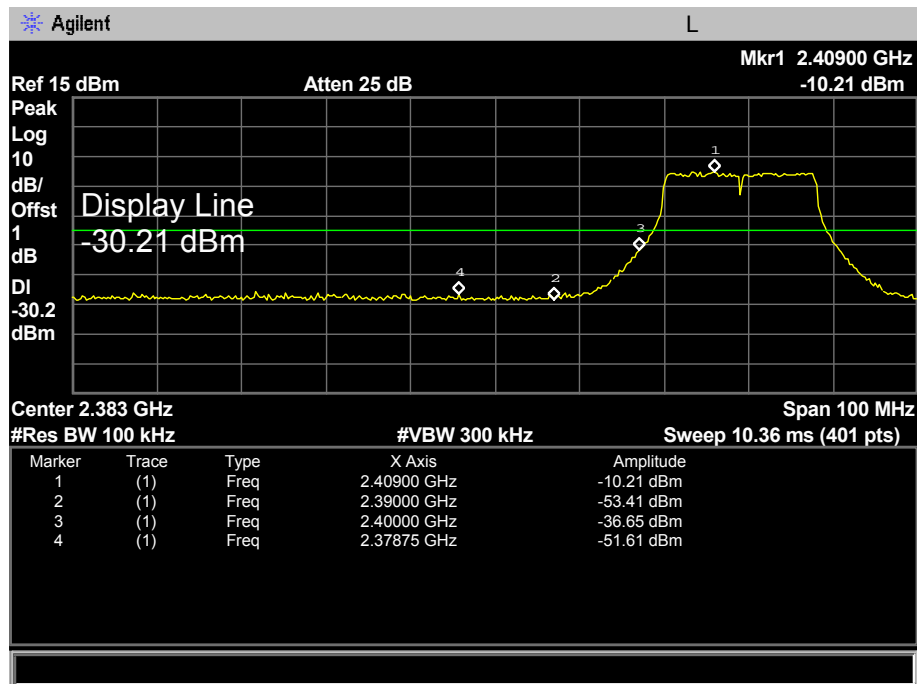
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 HZ		
Test Mode:	TX B Mode 2412MHz / TX B Mode 2462MHz		
Remark:	The EUT is programed in continuously transmitting mode		



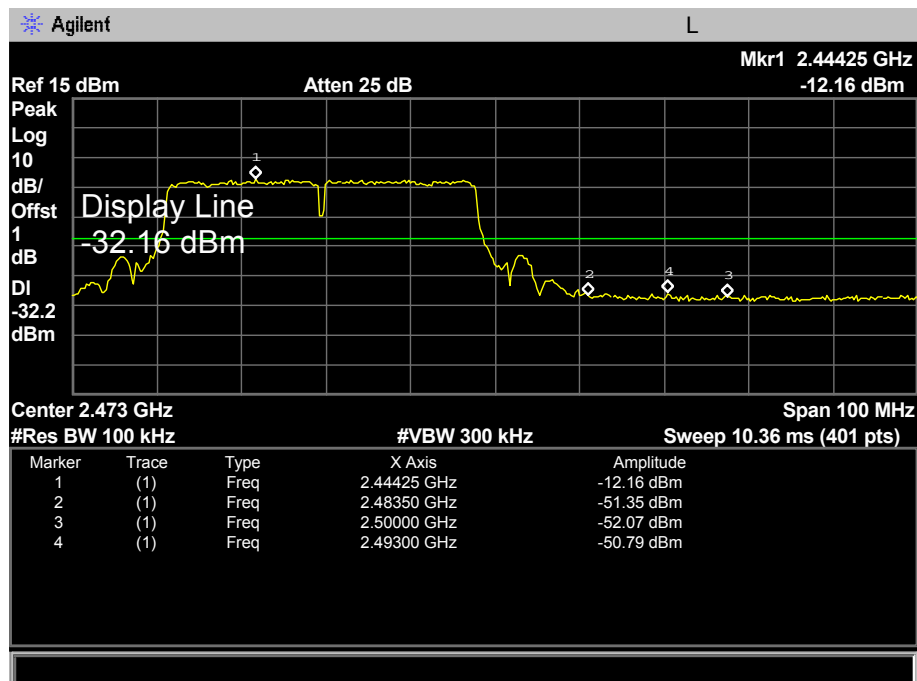
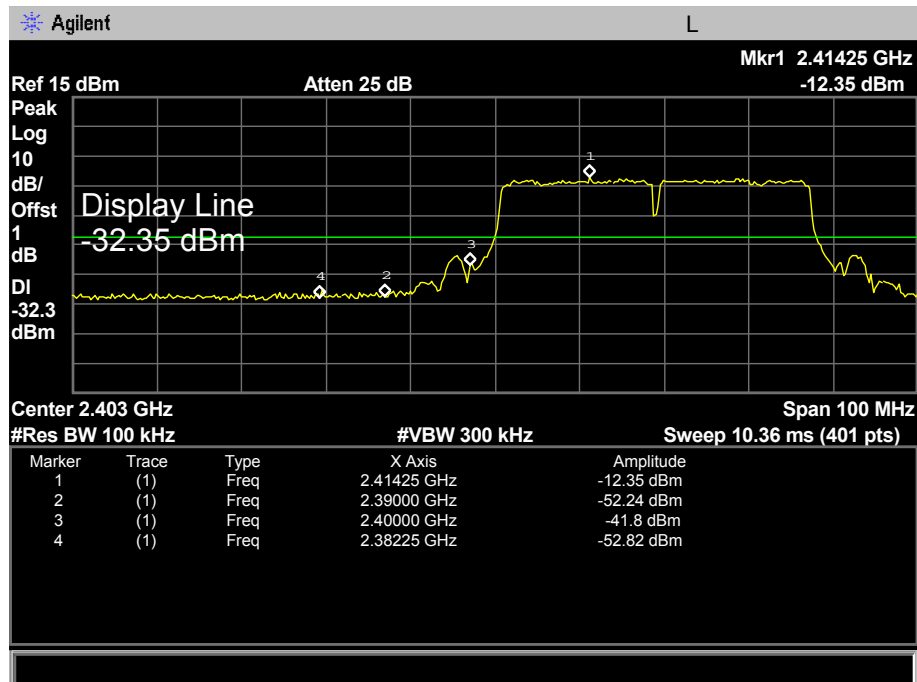
EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 HZ		
Test Mode:	TX G Mode 2412MHz / TX G Mode 2462MHz		
Remark:	The EUT is programed in continuously transmitting mode		



EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 HZ		
Test Mode:	TX N(HT20) Mode 2412MHz / TX N(HT20) Mode 2462MHz		
Remark:	The EUT is programmed in continuously transmitting mode		



EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 HZ		
Test Mode:	TX N(HT40) Mode 2422MHz / TX N(HT40) Mode 2452MHz		
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-210		
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, middle and high channel for the test.

7.5 Test Data

EUT:	10.1 inch MID	Model:	TM101A550L
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	10.026	15.0258	>=0.5
2437	10.085	15.0052	
2462	10.101	14.9975	

802.11B Mode

2412 MHz

Agilent

L

Ref 15 dBm

Atten 25 dB

#Peak

Log

10

dB/

Offst

1

dB

Center

2.412000000 GHz

→

←

Center 2.412 GHz

#Res BW 100 kHz

#VBW 300 kHz

Span 20 MHz

Sweep 4 ms (401 pts)

Occupied Bandwidth

15.0258 MHz

Occ BW % Pwr

99.00 %

x dB

-6.00 dB

Transmit Freq Error

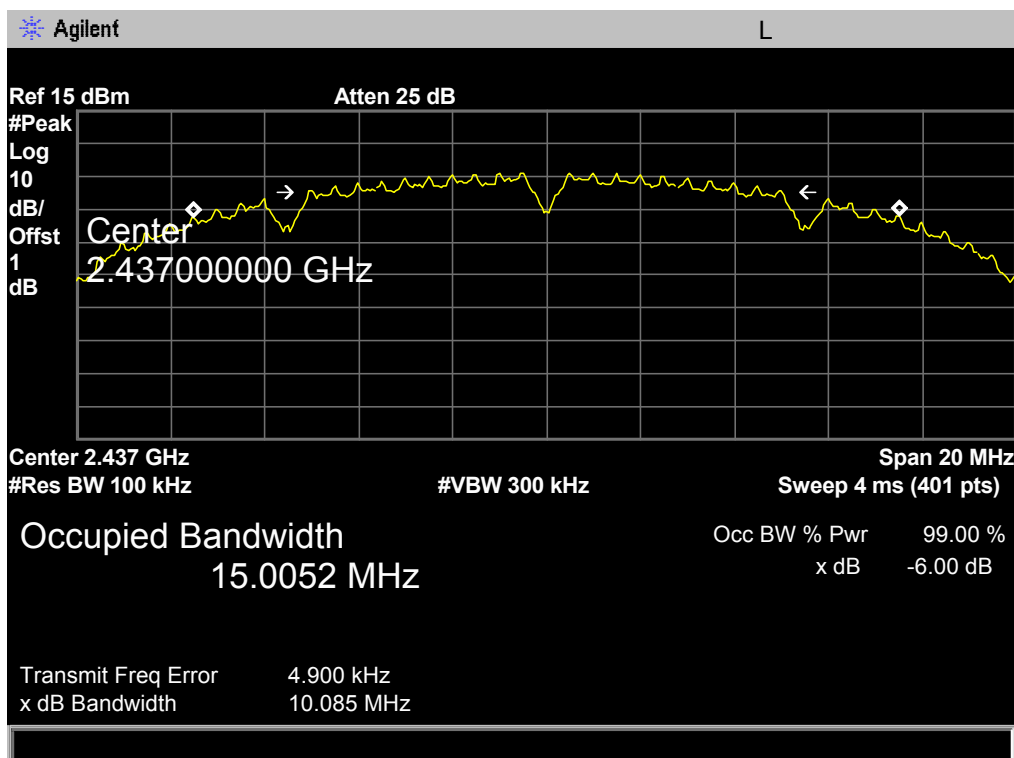
8.857 kHz

x dB Bandwidth

10.026 MHz

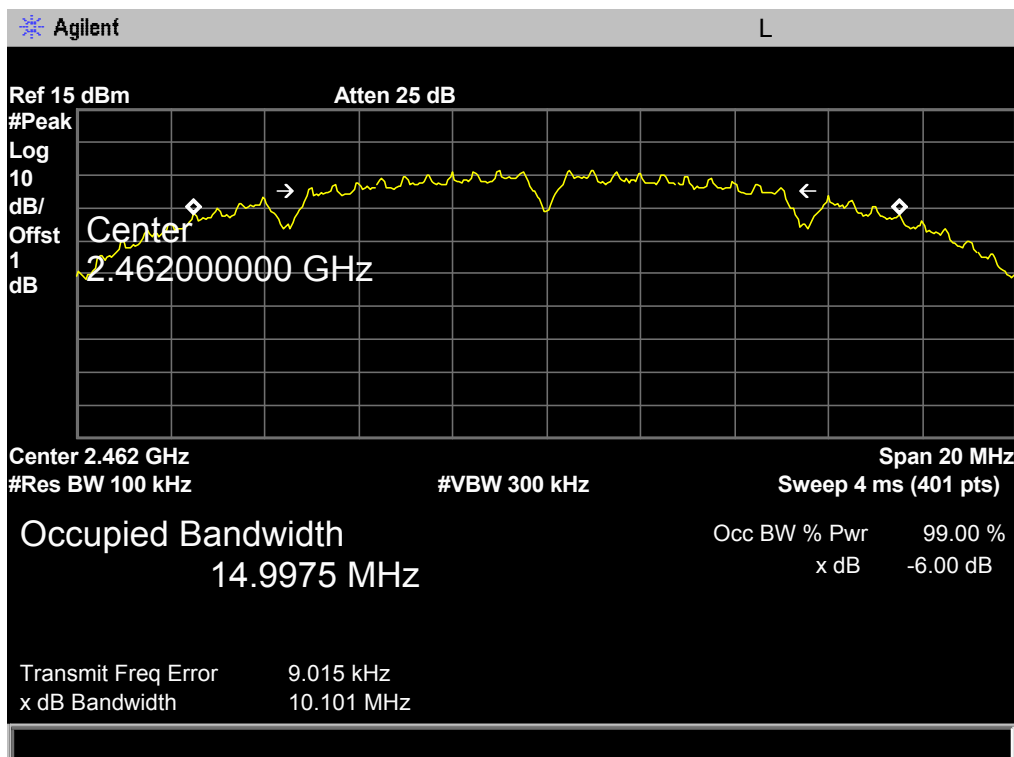
802.11B Mode

2437 MHz



802.11B Mode

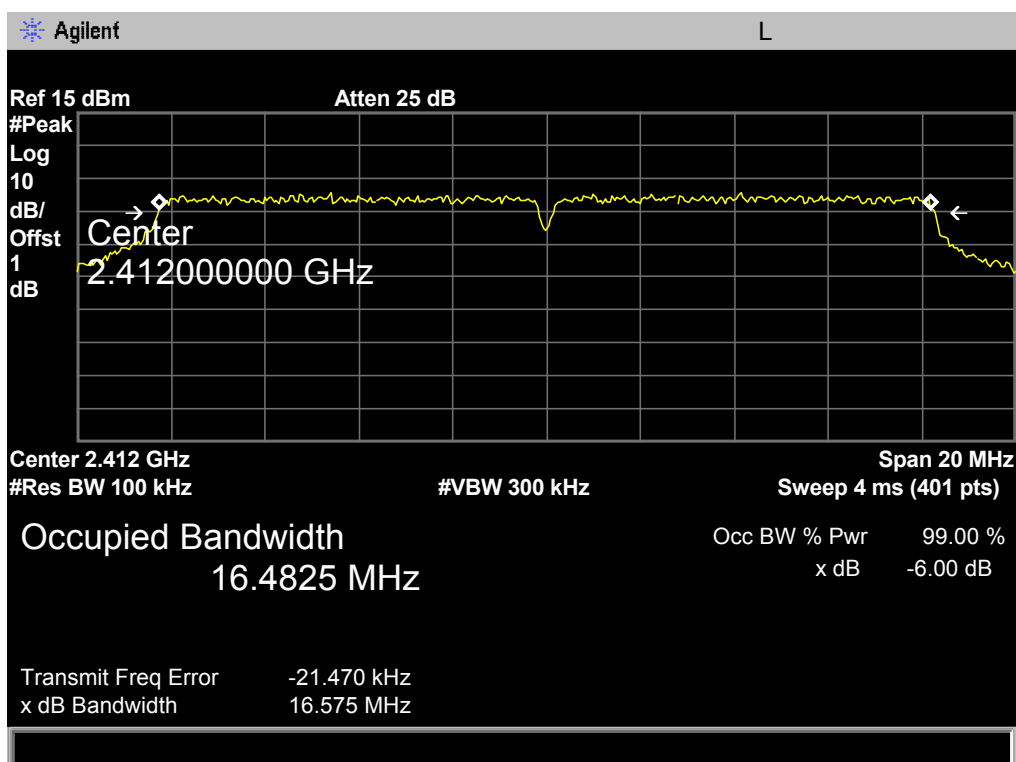
2462 MHz



EUT:	10.1 inch MID	Model:	TM101A550L
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	16.575	16.4825	>=0.5
2437	16.561	16.4882	
2462	16.600	16.4950	

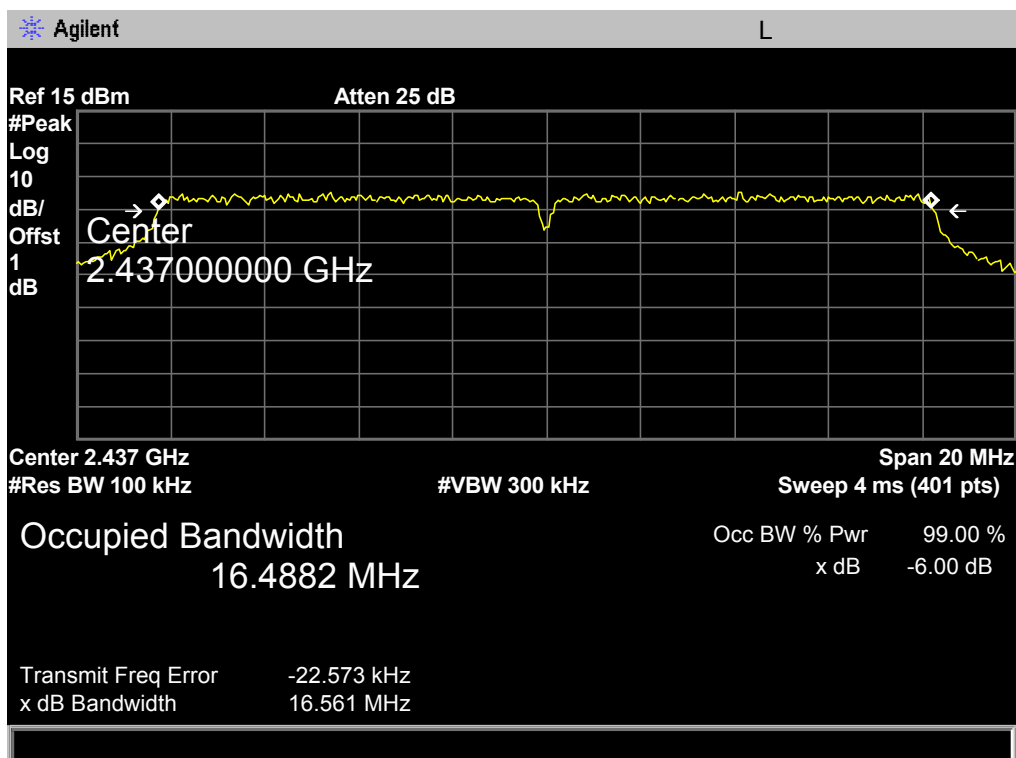
802.11G Mode

2412 MHz



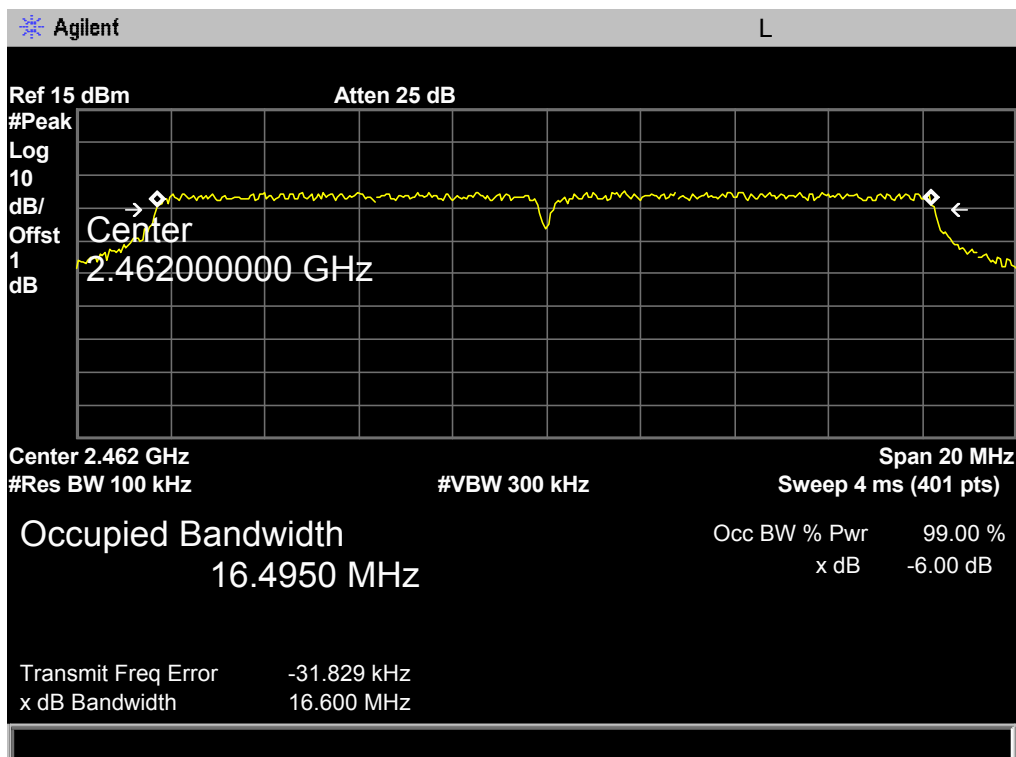
802.11G Mode

2437 MHz



802.11G Mode

2462 MHz



EUT:	10.1 inch MID	Model:	TM101A550L
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	17.856	17.7098	≥0.5
2437	17.847	17.6977	
2462	17.862	17.7075	

802.11N(HT20) Mode

2412 MHz

Agilent

L

Ref 15 dBm

Atten 25 dB

#Peak

Log

10

dB/

Offst

1

dB

Center

2.412000000 GHz

Center 2.412 GHz

#Res BW 100 kHz

#VBW 300 kHz

Span 20 MHz

Sweep 4 ms (401 pts)

Occupied Bandwidth

17.7098 MHz

Occ BW % Pwr

99.00 %

x dB

-6.00 dB

Transmit Freq Error

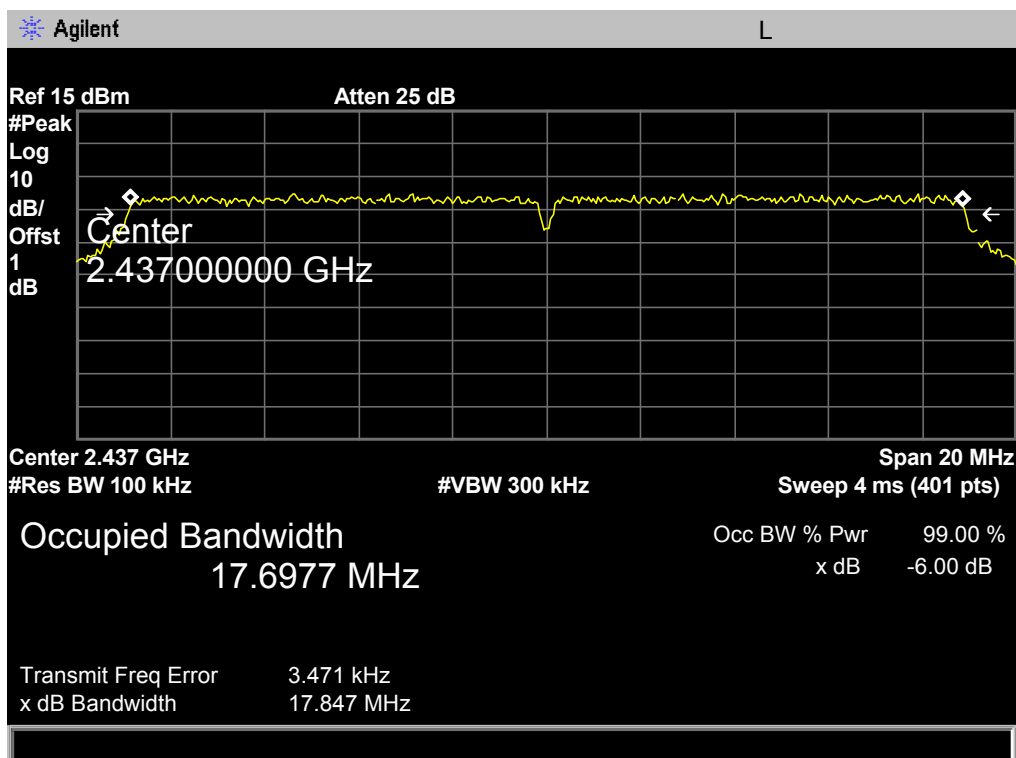
-9.608 kHz

x dB Bandwidth

17.856 MHz

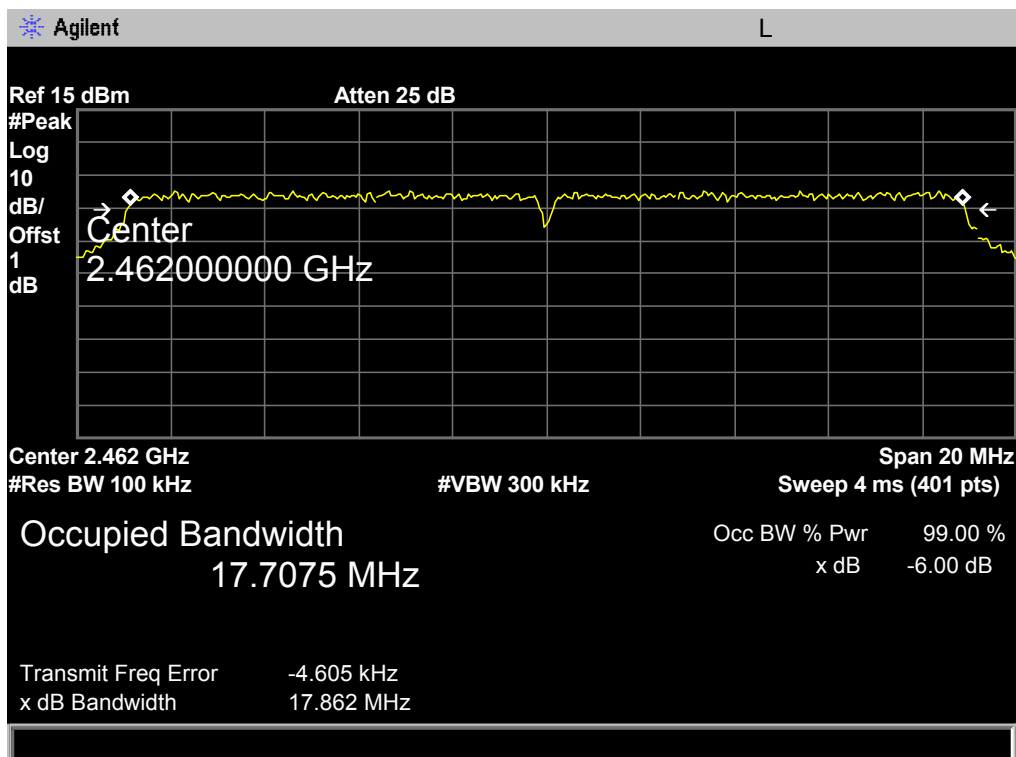
802.11N(HT20) Mode

2437 MHz



802.11N(HT20) Mode

2462 MHz



EUT:	10.1 inch MID	Model:	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 HZ		
Test Mode:	TX 802.11N(HT40) Mode		
Channel frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)
2422	36.492	35.9966	>=0.5
2437	35.506	35.9800	
2452	36.510	36.0084	

802.11N(HT40) Mode

2422 MHz

Agilent

L

Ref 15 dBm

Atten 25 dB

#Peak

Log

10

dB/

Offst

1

dB

Center

2.422000000 GHz

Center 2.422 GHz

#Res BW 100 kHz

#VBW 300 kHz

Span 40 MHz

Sweep 4.144 ms (401 pts)

Occupied Bandwidth

35.9966 MHz

Occ BW % Pwr

99.00 %

x dB

-6.00 dB

Transmit Freq Error

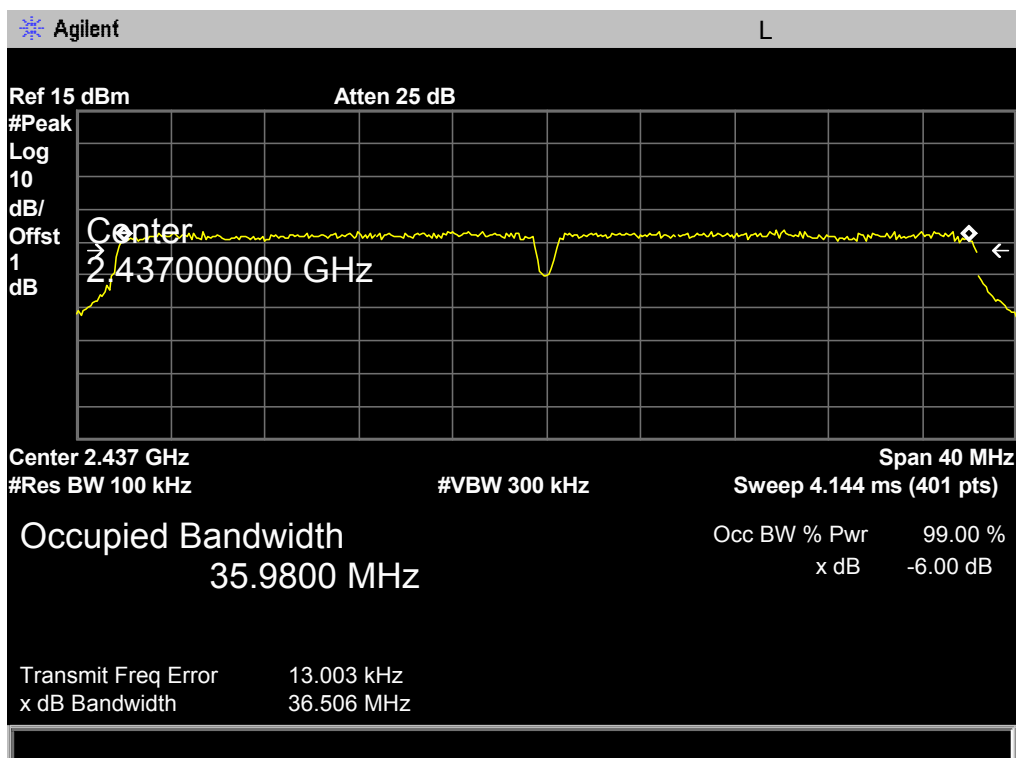
5.182 kHz

x dB Bandwidth

36.492 MHz

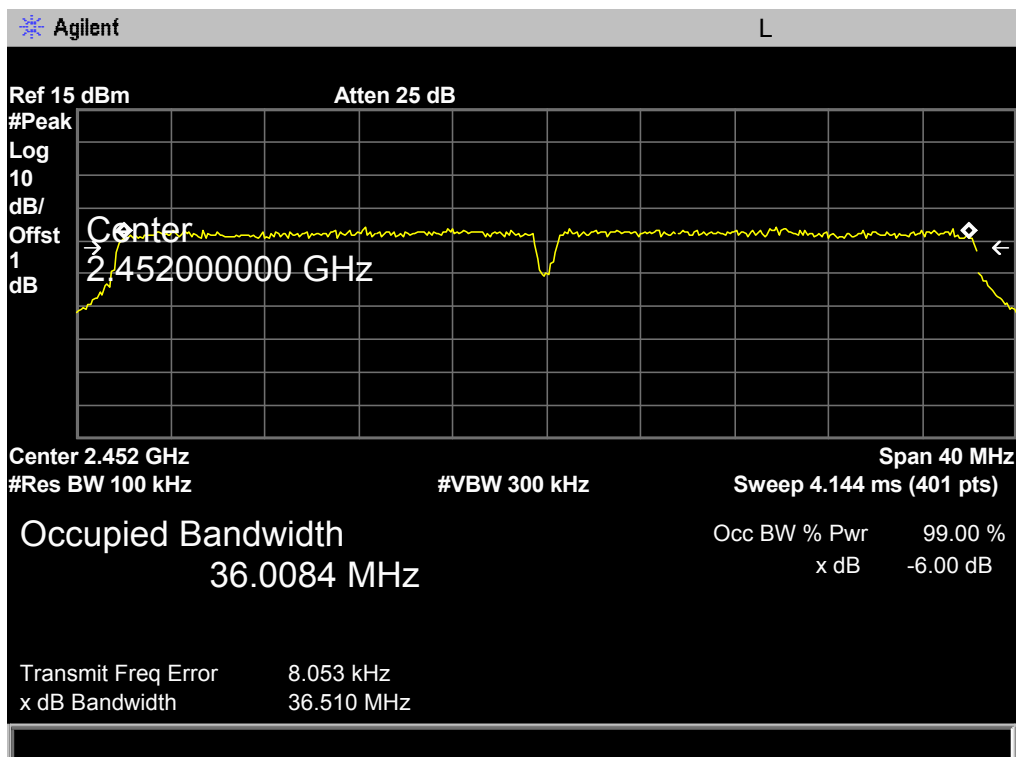
802.11N(HT40) Mode

2437 MHz



802.11N(HT40) Mode

2452 MHz



8. Peak Output Power Test

8.1 Test Standard and Limit

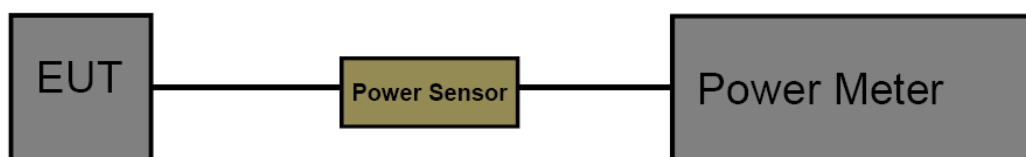
8.1.1 Test Standard

FCC Part 15.247 (b)

8.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-210		
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 v03r02.

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 MID	Model Name :	TM101A550L
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60 HZ		
Mode	Channel frequency (MHz)	Test Result (dBm)	Limit (dBm)
802.11b	2412	9.23	30
	2437	9.32	
	2462	9.48	
802.11g	2412	9.38	
	2437	9.21	
	2462	9.48	
802.11n (HT20)	2412	9.12	
	2437	9.42	
	2462	9.50	
802.11n (HT40)	2422	9.34	
	2437	9.34	
	2452	9.46	
Result: PASS			

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

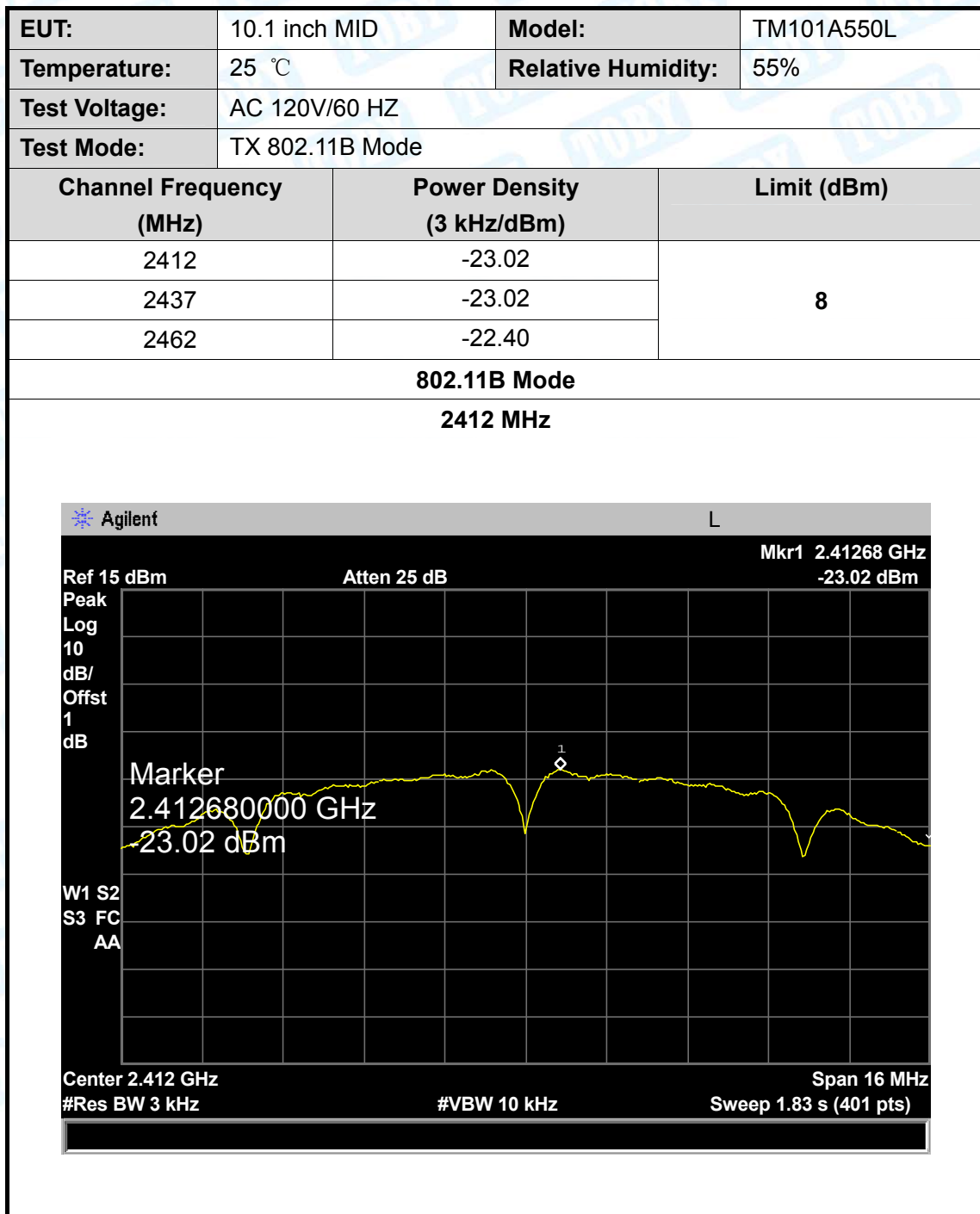
The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v03r02.

- (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

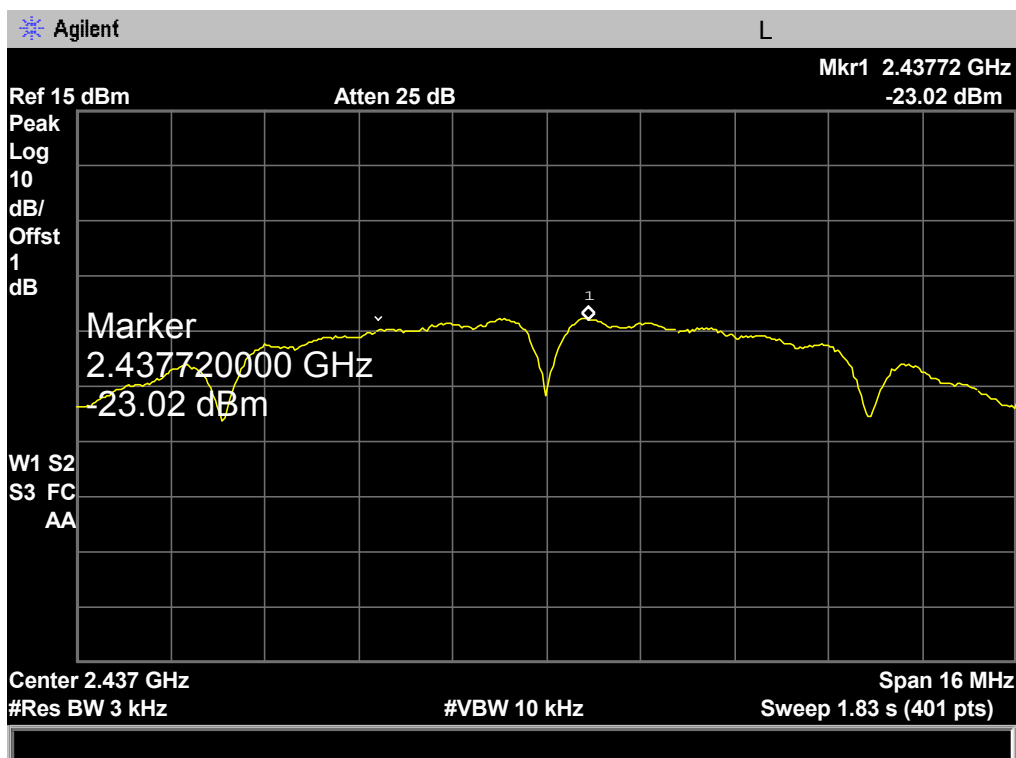
The EUT was set to continuously transmitting in each mode and low, middle and high channel for the test.

9.5 Test Data



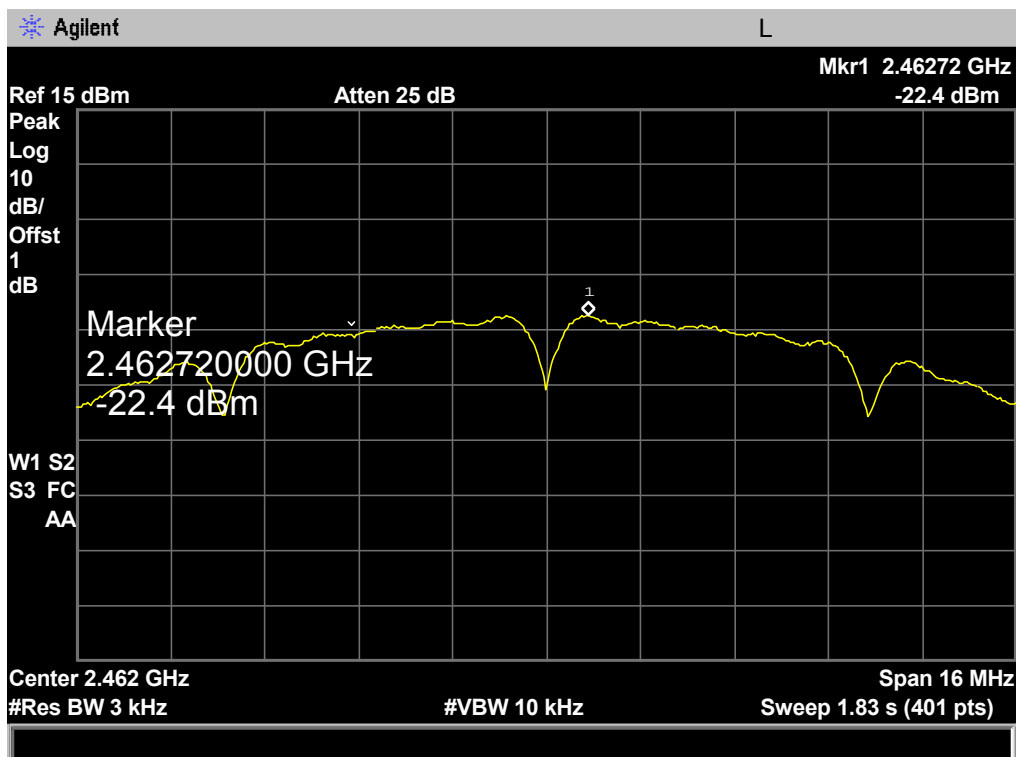
802.11B Mode

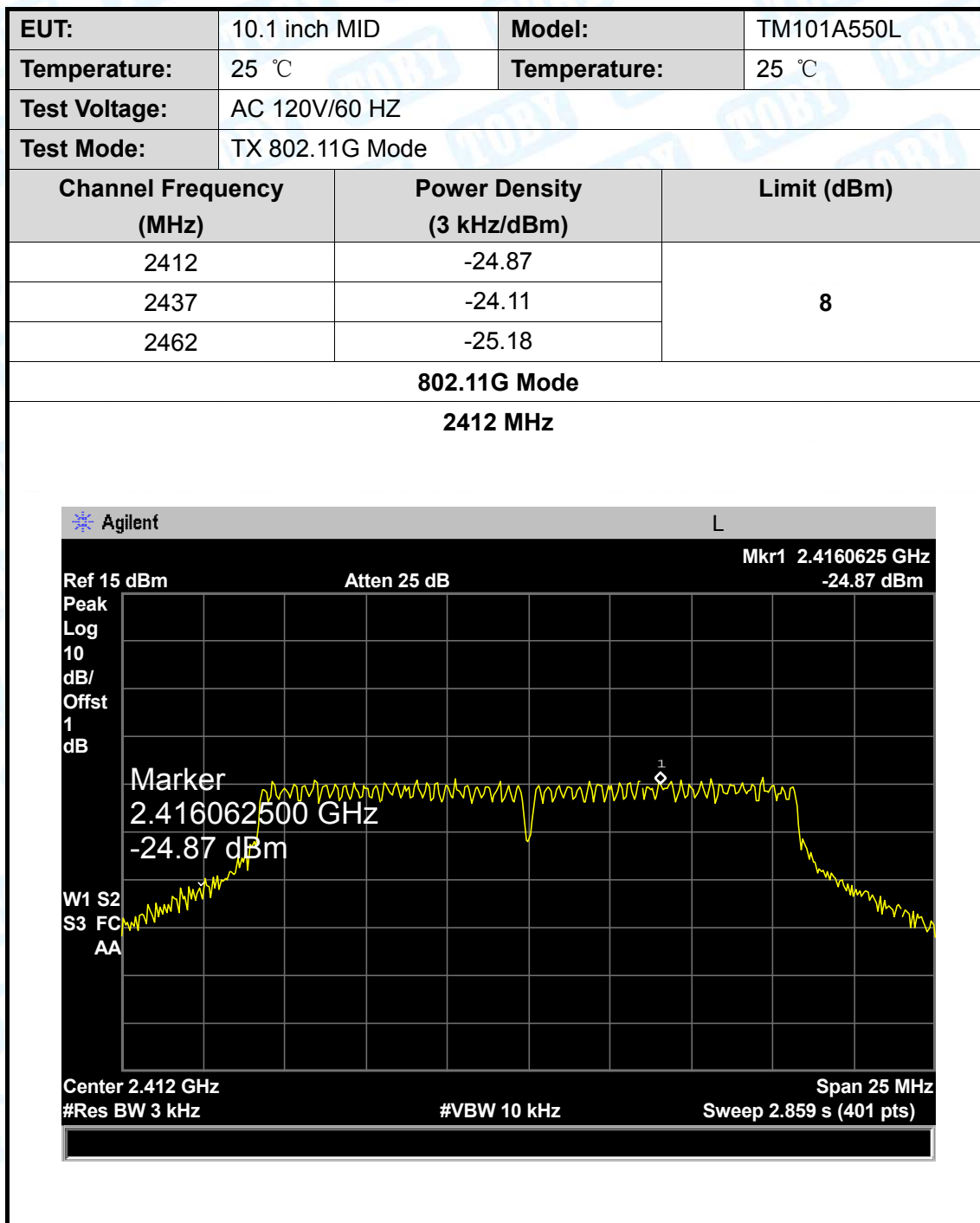
2437 MHz



802.11B Mode

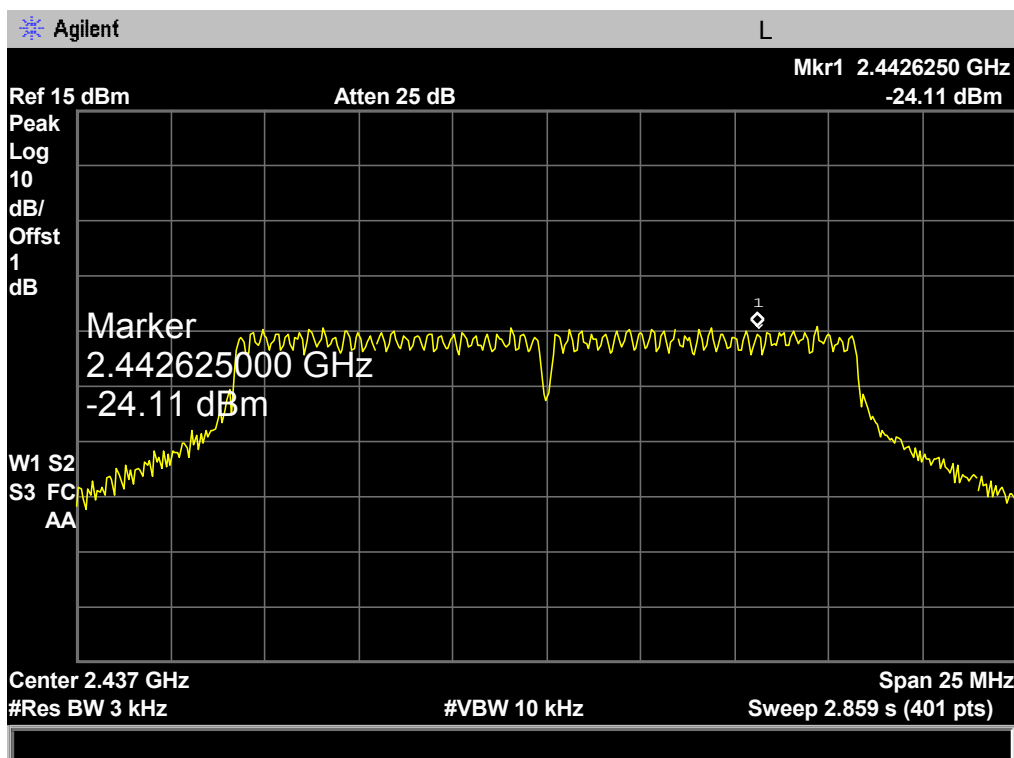
2462 MHz





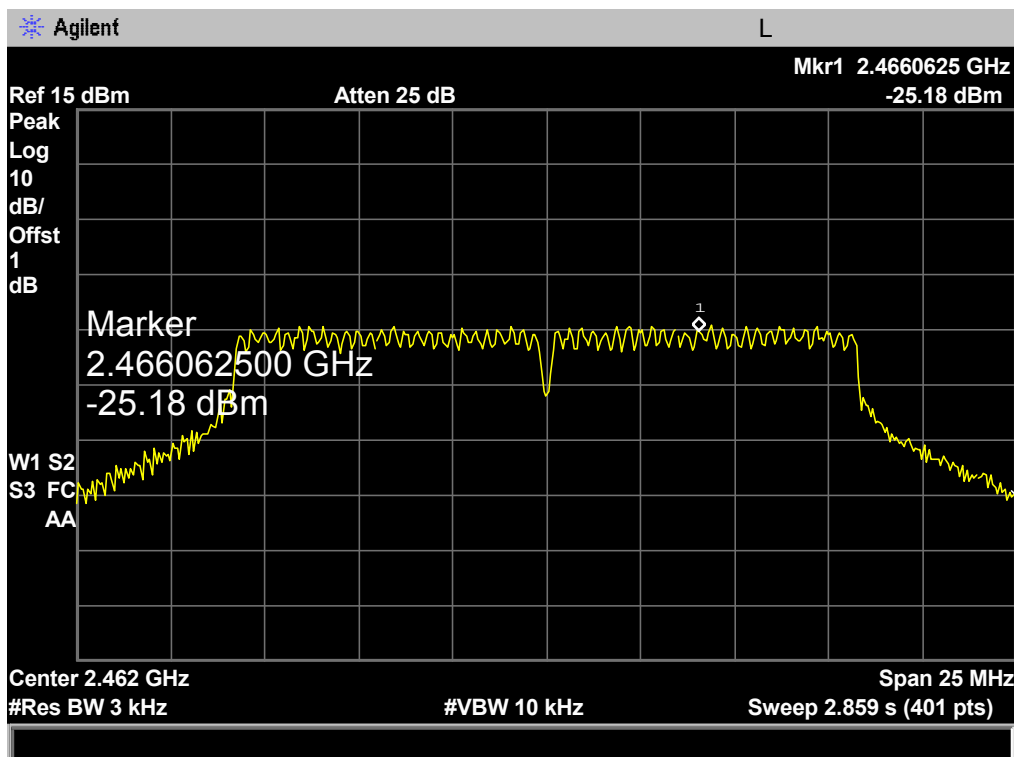
802.11G Mode

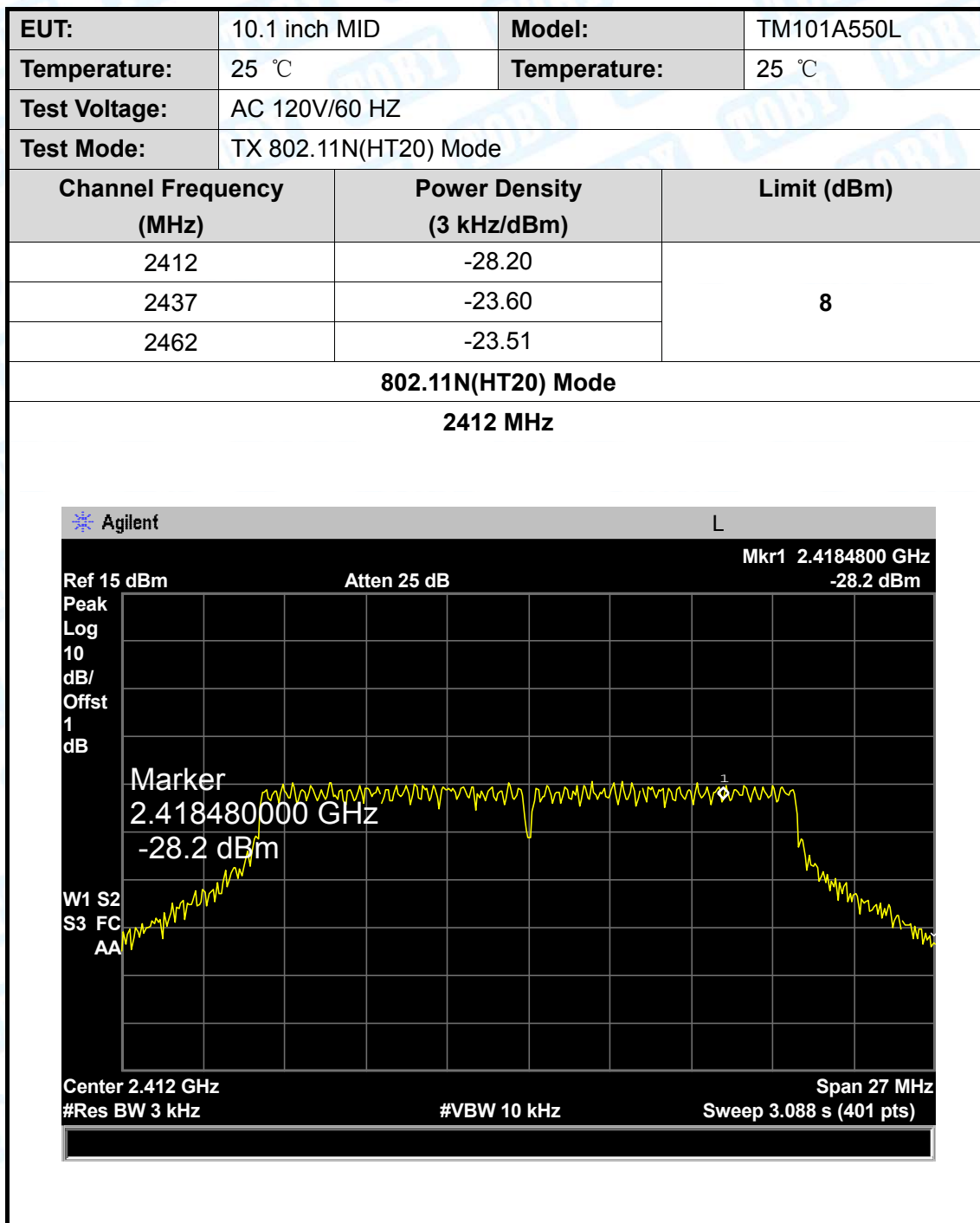
2437 MHz



802.11G Mode

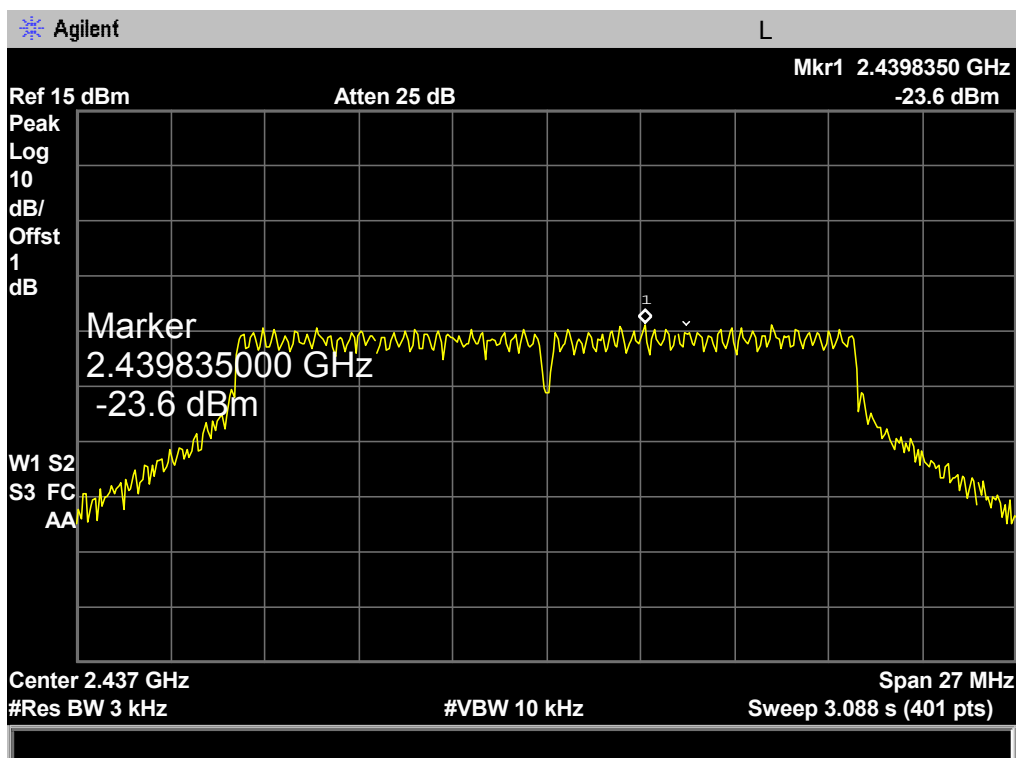
2462 MHz





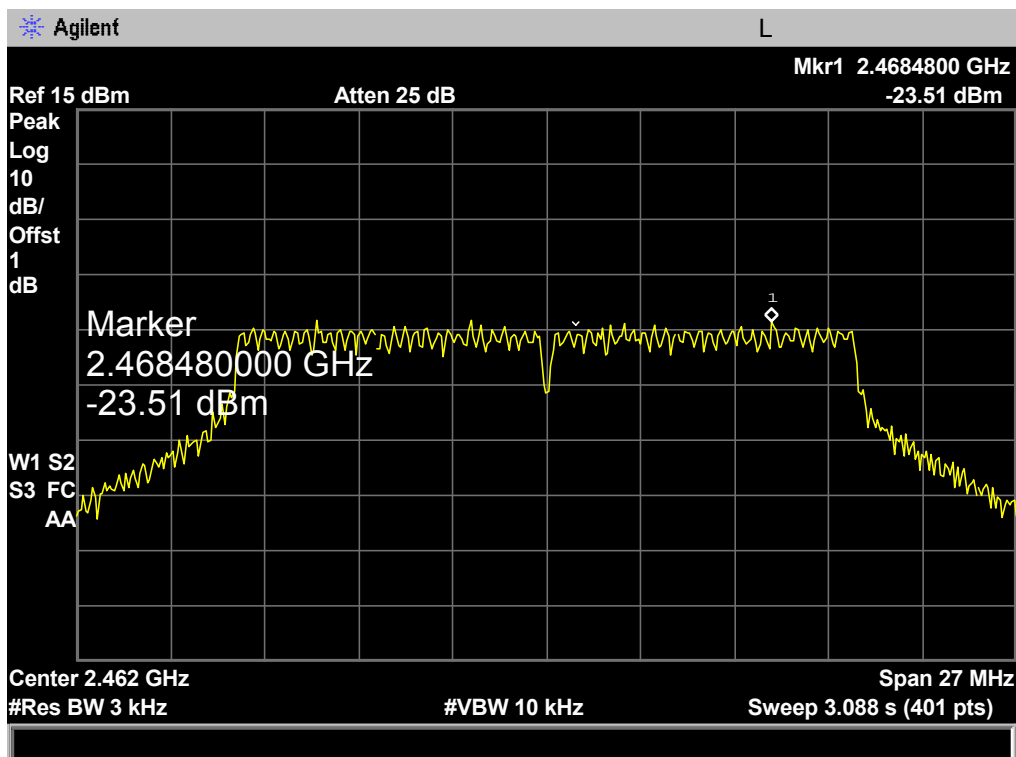
802.11N(HT20) Mode

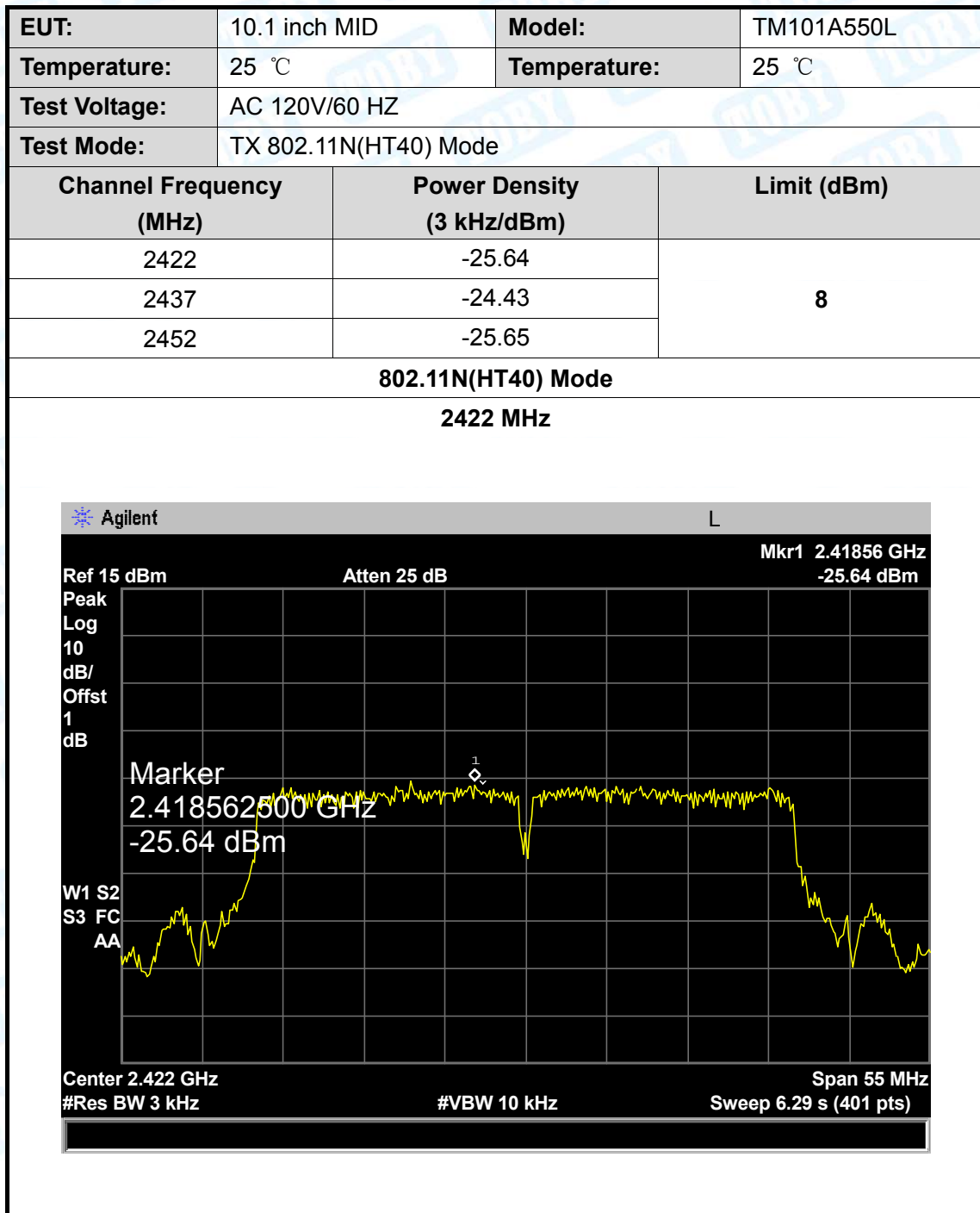
2437 MHz



802.11N(HT20) Mode

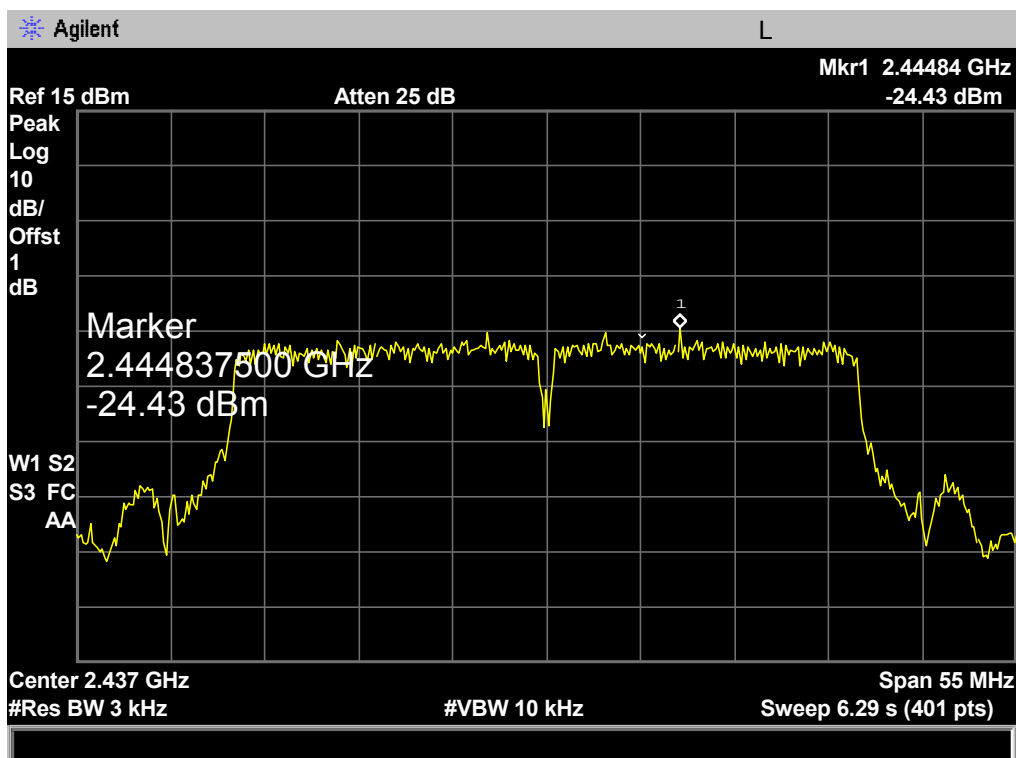
2462 MHz





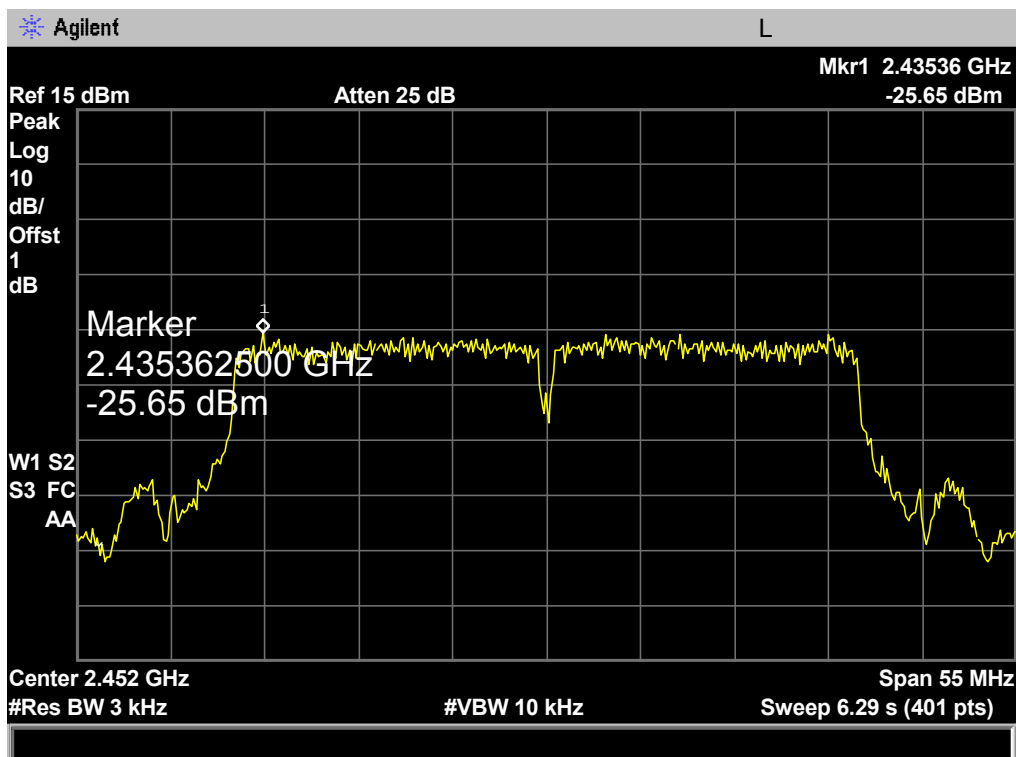
802.11N(HT40) Mode

2437 MHz



802.11N(HT40) Mode

2452 MHz



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 2.09 dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

10.3 Result

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

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