Microtest
微测检测

Test Report

FCC ID: 2AMPJ-TM141WT

Date of issue: Jul. 07, 2017

Report Number:	MTi170628E171
Sample Description:	Laptop
Model(s):	TM141WT720C, W1731A, W1641, W1637, W1840A, W1549, W1645A, W1645C, W1639, W1635
Applicant:	TMAX Digital Inc.
Address:	4401 Eucalyptus Ave., Sulte 120 Chino, CA91710
Date of Test:	Jun. 20, 2017 – Jun. 26, 2017

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TEST RESULT CERTIFICATION	
Applicant's name ..... :	**TMAX Digital Inc.**
Address ..... :	4401 Eucalyptus Ave., Sulte 120 Chino, CA91710
Manufacture's Name ..... :	**TMAX Digital Inc.**
Address ..... :	4401 Eucalyptus Ave., Sulte 120 Chino, CA91710
Product description	
Product name ..... :	Laptop
Trademark:	**Nuvision, TMAX**
Model and/or type reference :	TM141WT720C
Serial Model ..... :	W1731A, W1641, W1637, W1840A, W1549, W1645A, W1645C, W1639, W1635
Standards ..... :	FCC Part15.407
Test procedure	ANSI C63.4-2014

This device described above has been tested by Shenzhen Toby Technology Co., Ltd. and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

Tested by: Ace Chai

Ace Chai Jul. 07, 2017

Reviewed by: Smith Chen

Smith Chen Jul. 07, 2017

Approved by: Tom Xue

Tom Xue Jul. 07, 2017

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.247) , Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.407(a)	Conducted Peak Output Power	PASS	
15.407(a)	Emission Bandwidth	PASS	
15.407(a)	Power Spectral Density	PASS	
15.407(b)&15.209	Spurious Emission	PASS	
15.407(b)	Undesirable emission	PASS	
15.407	Frequency stability	PASS	
15.203/15.407	Antenna Requirement	PASS	

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

1.1 TEST FACILITY

Shenzhen Toby Technology Co., Ltd.
Add.: 10/F.,A Block, Jiada R&D Bldg.,No.5 Songpingshan, Road, Science& Technology Park, Shenzhen, 518057
FCC Registration No.:811562

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y ± 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** %。

No.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	RF power, conducted	±0.16dB
3	Spurious emissions, conducted	±0.21dB
4	All emissions, radiated(<1G)	±4.68dB
5	All emissions, radiated(>1G)	±4.89dB
6	Temperature	±0.5°C
7	Humidity	±2%

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Laptop
Trade Name	**Nuvision, TMAX**
Model Name	TM141WT720C
Serial Model	W1731A, W1641, W1637, W1840A, W1549, W1645A, W1645C, W1639, W1635
Model Difference	Only Differ in model name
Product Description	The EUT is a Laptop Operation Frequency: 85180MHz~5240MHz，5745MHz-5825MHz (802.11a/802.11n(H20) Modulation Type: 11n: BPSK, QPSK, 16QAM, 64QAM with OFDM 11a: BPSK, QPSK, 16QAM, 64QAM, OFDM Bit Rate of Transmitter: 802.11a: 6Mbps 802.11n(20): 6.5Mbps Number Of Channel: 4 for 802.11a/802.11n(H20) Antenna Designation: Please see Note 3. Antenna Gain (dBi): ANT1:3.0dbi,ANT2:2.9 dbi Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.
Channel List	Please refer to the Note 2.
Adapter	Model: PS30D120K2000UD AC Power Input: 100-240V~50/60Hz 0.8A Output: 12.0VDC, 2.0V
Battery	DC 8.7V by rechargeable Li-polymer battery
Connecting I/O Port(s)	Please refer to the User's Manual

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2.

For IEEE 802.11 a with 5.2G			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH36	5180	CH44	5220
CH40	5200	CH48	5240

For IEEE 802.11 a with 5.8G					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH149	5745	CH157	5785	CH165	5825
CH153	5765	CH161	5805		

For IEEE 802.11 n/HT20 with 5.2G			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH36	5180	CH44	5220
CH40	5200	CH48	5240

For IEEE 802.11n/HT20 with 5.8G					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH149	5745	CH157	5785	CH165	5825
CH153	5765	CH161	5805		

3.

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
A	N/A	N/A	Integrated antenna	/	ANT1:3.0dbi, ANT2:2.9 dbi	Wifi Antenna

2.2 DESCRIPTION OF TEST MODES

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 above was evaluated respectively.

Pretest Mode	Description
Mode 1	802.11a CH36/ CH40/ CH48
Mode 2	802.11n CH36/ CH40/ CH48
Mode 3	802.11a CH149/ CH157/ CH165
Mode 4	802.11a CH149/ CH157/ CH165
Mode 5	Link Mode

For Conducted Emission	
Final Test Mode	Description
Mode 5	Link Mode

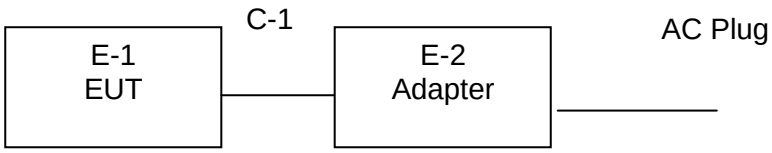
For Radiated Emission	
Final Test Mode	Description
Mode 1	802.11a CH36/ CH40/ CH48
Mode 2	802.11n CH36/ CH40/ CH48
Mode 3	802.11a CH149/ CH157/ CH165
Mode 4	802.11a CH149/ CH157/ CH165
Mode 5	Link Mode

Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

(2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Brand	Model/Type No.	Series No.	Note
E-1	Laptop	Nuvision, TMAX	TM141WT720C	N/A	EUT
E-2	Adapter	N/A	PS30D120K2000UD	N/A	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	1.0m	
C-2	NO	NO	0.8m	

Note:

(1) The support equipment was authorized by Declaration of Confirmation.
(2) For detachable type I/O cable should be specified the length in cm in『Length』column.

2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

For RF conducted test:

Equipment	Manufacturer	Model	Serial No.	Calibration Due
Signal Analyzer	Agilent	N9010A	MY48030494	2017/11/4
4 Ch. Simultaneous Sampling 14 Bits 2 MS/s	Agilent	U2531A	TW54063513	2017/11/4
X-series USB Peak and Average Power Sensor	Agilent	U2021XA	MY54080019	2017/11/4
vector Signal Generator	Agilent	E4438C	US44271917	2017/11/4
vector Signal Generator	Agilent	E4438C	MY49070163	2017/11/4
Dc Power Supply	GW	GPR-6030D	/	2017/11/4
Temperature & Humitidy Chamber	GIANT FORCE	GTH-056P	GF-94454-1	2017/11/4
Wideband Radio Communication Tester	ROHDE&SCHWARZ	CMW500	120909	2017/11/4

For Radiated test:

Equipment	Manufacturer	Model	Serial No.	Calibration Due
Broadband TRILOG Antenna	Schwarabeck	VULB9163	9163-872	2017/11/14
Horn Antenna	Schwarzbeck	BBHA 9120 D	9120D-1145	2017/11/14
Amplifier	HP	8447D	3113A06150	2017/11/4
Amplifier	Agilent	8449B	3008A02400	2017/11/4
Test Receiver	Schwarabeck	ESPI	100314	2017/11/4
Spectrum analyzer	Agilent	E4407B	MY41441082	2017/11/4
Signal Generator	R&S	SMT 06	832080/007	2017/11/4

Note: the calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)		Standard
	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	73.00	60.00	56.00	46.00	CISPR
5.0 -30.0	73.00	60.00	60.00	50.00	CISPR

0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

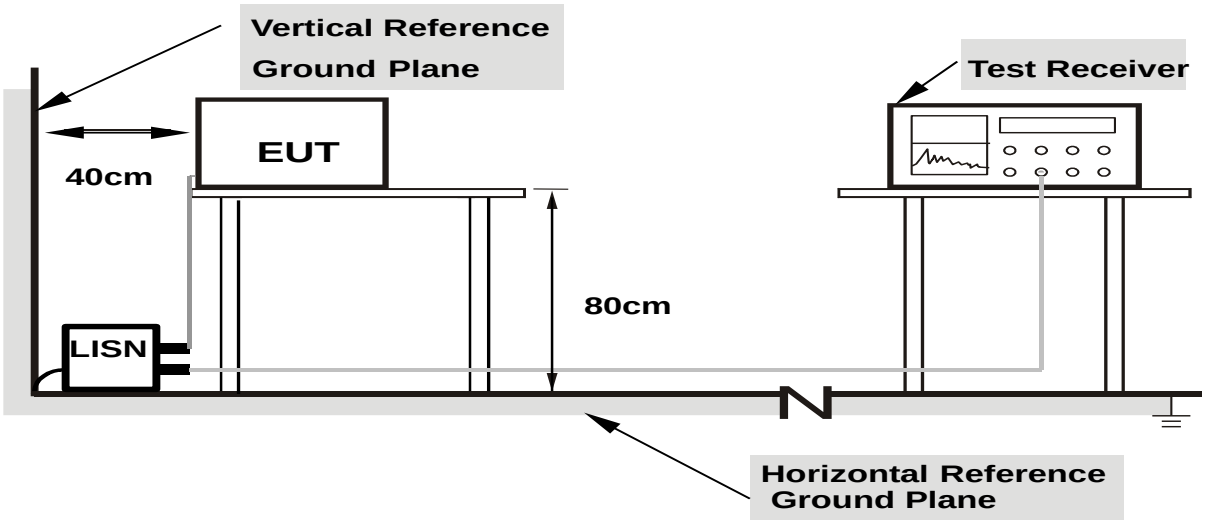
3.1.2 TEST PROCEDURE

a. 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.
b. 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.
c. 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.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



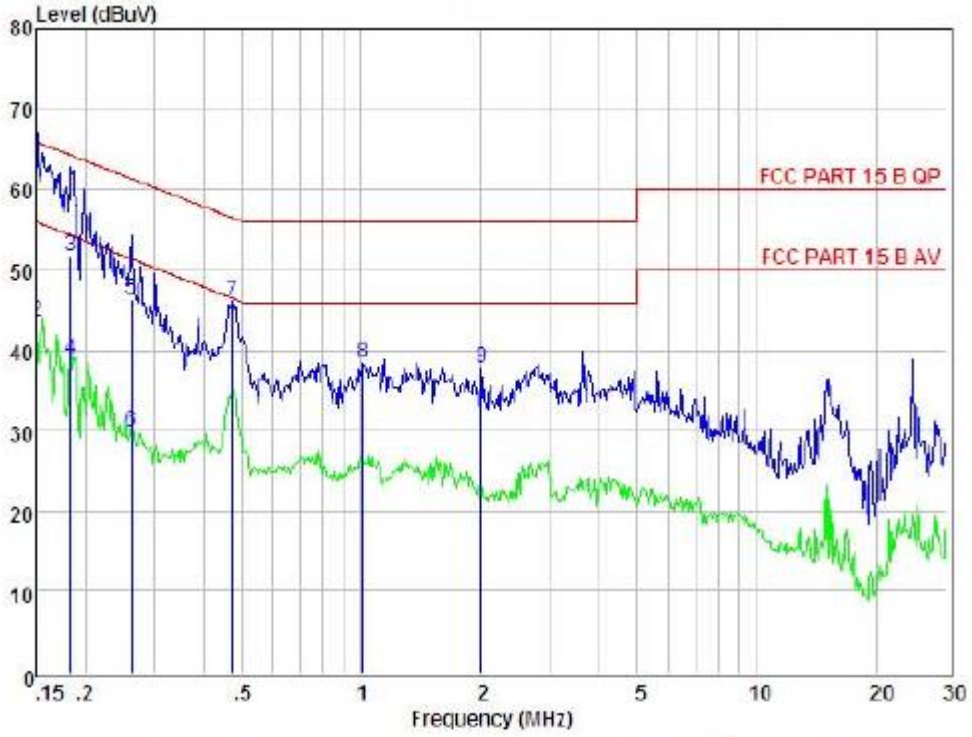
Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data. All transmitter chains has been tested, and only worst data was listed in this report.

3.1.6 TEST RESULTS

EUT：	Laptop	Model Name. ：	TM141WT720C
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	L
Test Voltage ：	DC 12Vfrom adapter AC 120V/60Hz	Test Mode：	Mode 5

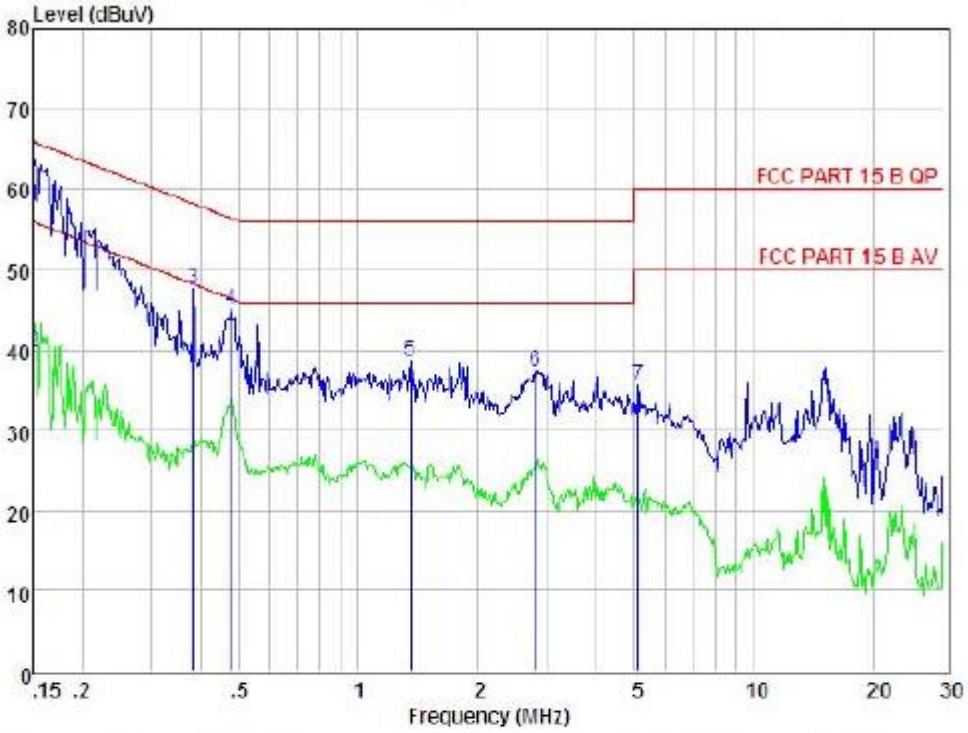


Condition : FCC PART 15 B QP POL: LINE Temp: 25℃ Hum: 51 %

Item	Freq	Read Level	LISN Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	0.150	52.30	0.03	-9.49	0.10	61.92	66.00	-4.08	QP
2	0.150	33.90	0.03	-9.49	0.10	43.52	56.00	-12.48	Average
3	0.183	42.00	0.03	-9.52	0.10	51.65	64.33	-12.68	QP
4	0.183	29.11	0.03	-9.52	0.10	38.76	54.33	-15.57	Average
5	0.262	36.68	0.03	-9.56	0.10	46.37	61.38	-15.01	QP
6	0.262	20.22	0.03	-9.56	0.10	29.91	51.38	-21.47	Average
7	0.471	36.50	0.03	-9.88	0.10	46.21	56.49	-10.28	Peak
8	1.010	28.70	0.04	-9.63	0.10	38.47	56.00	-17.53	Peak
9	2.012	27.83	0.06	-9.72	0.10	37.71	56.00	-18.29	Peak

Remark: Level = Read Level + LISN Factor - Preamp Factor + Cable Loss

EUT：	Laptop	Model Name. ：	TM141WT720C
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	N
Test Voltage ：	DC 12Vfrom adapter AC 120V/60Hz	Test Mode：	Mode 5



Condition : FCC PART 15 B QP POL: NEUTRAL Temp: 25℃ Hum: 51 %

Item	Freq	Read Level	LISN Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	0.150	48.33	0.03	-9.49	0.10	57.95	66.00	-8.05	QP
2	0.150	30.00	0.03	-9.49	0.10	39.62	56.00	-16.38	Average
3	0.381	37.83	0.03	-9.57	0.10	47.53	58.25	-10.72	Peak
4	0.476	35.37	0.03	-9.58	0.10	45.08	56.41	-11.33	Peak
5	1.352	28.77	0.05	-9.66	0.10	38.58	56.00	-17.42	Peak
6	2.794	27.42	0.07	-9.78	0.12	37.39	56.00	-18.61	Peak
7	5.112	25.51	0.10	-9.93	0.12	35.66	60.00	-24.34	Peak

Remark: Level = Read Level + LISN Factor - Preamp Factor + Cable Loss

3.2 RADIATED EMISSION MEASUREMENT(UNDESIRABLE EMISSION)

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/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

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / *10Hz* for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. 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.

e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

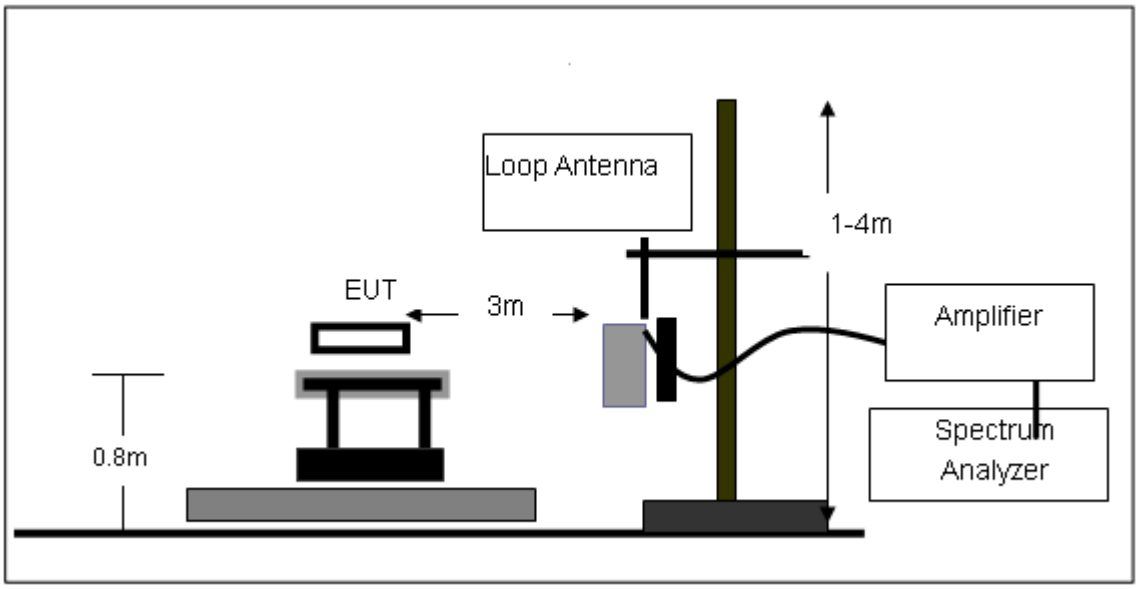
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

3.2.3 DEVIATION FROM TEST STANDARD

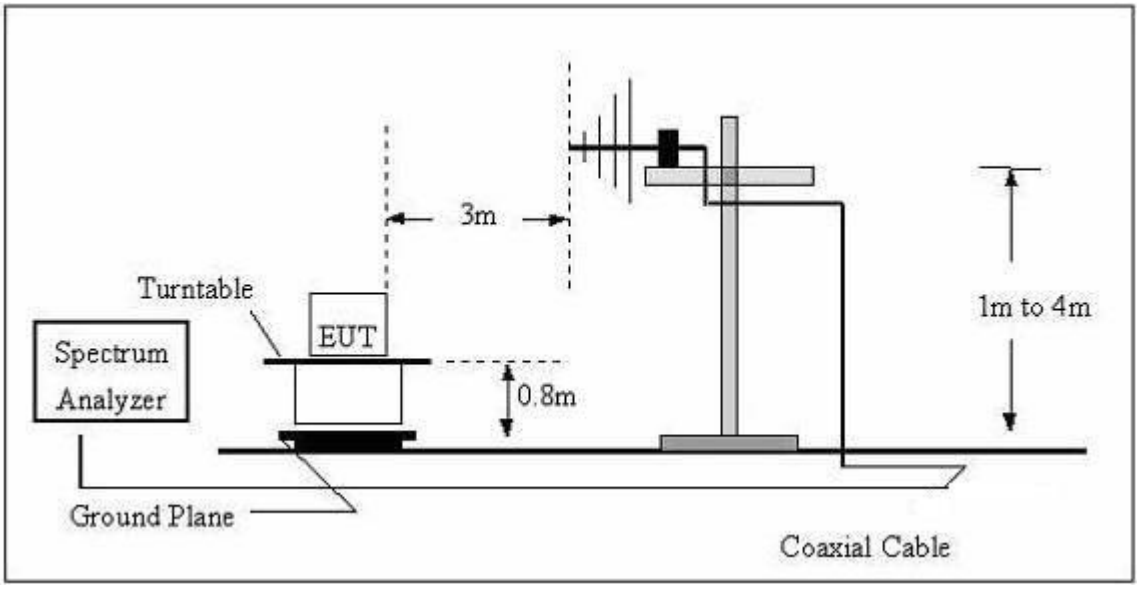
No deviation

3.2.4 TEST SETUP

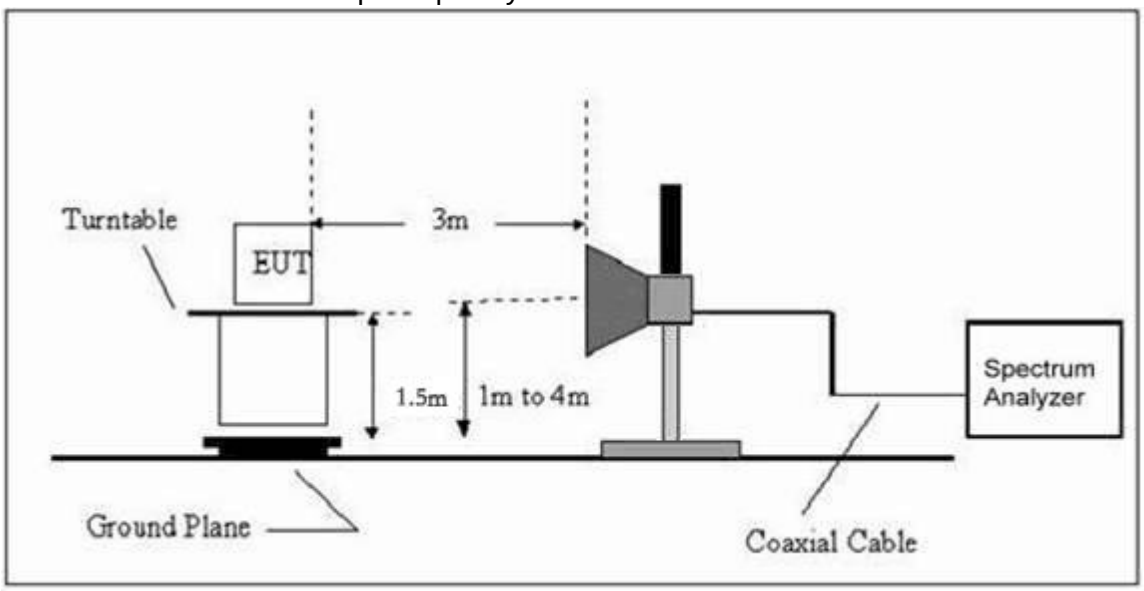
（A）Radiated Emission Test-Up Frequency Below 30MHz



（B）Radiated Emission Test-Up Frequency 30MHz~1GHz



（C）Radiated Emission Test-Up Frequency Above 1GHz



3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing. All transmitter chains has been tested, and only worst data was listed in this report.

3.2.6 TEST RESULTS (BETWEEN 9KHZ – 30 MHZ)

EUT：	Laptop	Model Name. ：	TM141WT720C
Temperature：	20 ℃	Relative Humidtity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 12Vfrom adapter AC 120V/60Hz
Test Mode ：	TX	Polarization :	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
Distance extrapolation factor =40 log (specific distance/test distance)(dB);
Limit line = specific limits(dBuv) + distance extrapolation factor.

3.2.7 TEST RESULTS (BETWEEN 30MHZ – 1GHZ)

EUT：	Laptop	Model Name ：	TM141WT720C
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 12Vfrom adapter
Test Mode ：	TX		

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
V	119.4360	15.24	12.08	27.32	43.5	16.18	QP
V	128.1129	15.53	12.2	27.73	43.5	15.77	QP
V	170.7926	20.08	10.35	30.43	43.5	13.07	QP
V	341.9786	12.42	16.19	28.61	46	17.39	QP
V	468.8761	17.5	19.69	37.19	46	8.81	QP
V	935.5462	9.31	29.42	38.73	46	7.27	QP
H	170.7923	27.08	10.35	37.43	43.5	6.07	QP
H	341.9786	24.52	16.19	40.71	46	5.29	QP
H	468.8761	20.08	19.69	39.77	46	6.23	QP
H	726.8052	14.05	26	40.05	46	5.95	QP
H	813.1114	16.18	26.35	42.53	46	3.47	QP
H	854.0247	12.12	27.51	39.63	46	6.37	QP

Remark:

Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level- Limit

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

Factor added by measurement software automatically

3.2.8 TEST RESULTS (1G-25GHZ)

802.11a ant1

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5180 MHz)							
Vertical	2491.777	59.54	-11.65	47.89	74	26.11	Pk
Horizontal	2498.247	56.44	-12.73	43.71	74	30.29	Pk
Vertical	10360.112	56.54	2.6	49.61	74	24.39	Pk
Horizontal	10360.112	56.54	5.23	51.87	74	22.13	Pk
Vertical	1485.838	60.24	-17.1	43.14	74	30.86	Pk
Vertical	1636.784	59.93	-16.06	43.87	74	30.13	Pk
Vertical	2095.928	58.74	-11.88	46.86	74	27.14	Pk
Horizontal	1074.301	60.47	-19.69	40.78	74	33.22	Pk
Horizontal	1483.178	59.46	-17.09	42.37	74	31.63	Pk
Horizontal	1895.832	56.48	-14.25	42.23	74	31.77	Pk
Mid Channel (5200 MHz)							
Vertical	2474.777	56.16	-11.65	44.51	74	29.49	Pk
Horizontal	2474.144	56.85	-9.37	47.48	74	26.52	Pk
Vertical	10400.425	56.23	2.65	50.46	74	23.54	Pk
Horizontal	10400.425	56.23	5.33	52.60	74	21.4	Pk
Vertical	1433.535	63.22	-17.12	46.1	74	27.9	Pk
Vertical	1636.784	60.55	-16.06	44.49	74	29.51	Pk
Vertical	2284.166	54.29	-12.83	41.46	74	32.54	Pk
Horizontal	1280.515	59.95	-17.82	42.13	74	31.87	Pk
Horizontal	1636.784	58.78	-16.06	42.72	74	31.28	Pk
Horizontal	1892.438	58.9	-14.28	44.62	74	29.38	Pk
High Channel (5240 MHz)							
Vertical	2453.883	56.82	-12.91	43.91	74	30.09	Pk
Horizontal	2453.839	56.82	-11.59	45.23	74	28.77	Pk
Vertical	10480.325	53.33	2.69	50.39	74	23.61	Pk
Horizontal	10480.325	53.33	5.44	53.16	74	20.84	Pk
Vertical	1187.688	57.85	-18.27	39.58	74	34.42	Pk
Vertical	1636.784	56.66	-16.06	40.6	74	33.4	Pk
Vertical	2084.693	54.25	-11.99	42.26	74	31.74	Pk
Horizontal	1534.540	56.91	-16.94	39.97	74	34.03	Pk
Horizontal	1786.985	56.62	-15.04	41.58	74	32.42	Pk
Horizontal	1892.438	56.69	-14.28	42.41	74	31.59	Pk

802.11a ant2

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5180 MHz)							
Vertical	2491.777	59.63	-11.65	47.98	74	26.02	Pk
Horizontal	2498.247	56.15	-12.73	43.42	74	30.58	Pk
Vertical	10360.112	56.32	2.6	58.92	74	15.08	Pk
Horizontal	10360.112	56.19	5.23	61.42	74	12.58	Pk
Vertical	1485.838	60.67	-17.1	43.57	74	30.43	Pk
Vertical	1636.784	59.73	-16.06	43.67	74	30.33	Pk
Vertical	2095.928	58.55	-11.88	46.67	74	27.33	Pk
Horizontal	1074.301	60.35	-19.69	40.66	74	33.34	Pk
Horizontal	1483.178	59.71	-17.09	42.62	74	31.38	Pk
Horizontal	1895.832	56.83	-14.25	42.58	74	31.42	Pk
Mid Channel (5200 MHz)							
Vertical	2474.777	56.09	-11.65	44.44	74	29.56	Pk
Horizontal	2474.144	56.51	-9.37	47.14	74	26.86	Pk
Vertical	10400.425	55.89	2.65	58.54	74	15.46	Pk
Horizontal	10400.425	55.89	5.33	61.22	74	12.78	Pk
Vertical	1433.535	63.22	-17.12	46.1	74	27.9	Pk
Vertical	1636.784	60.21	-16.06	44.15	74	29.85	Pk
Vertical	2284.166	53.95	-12.83	41.12	74	32.88	Pk
Horizontal	1280.515	59.44	-17.82	41.62	74	32.38	Pk
Horizontal	1636.784	58.2	-16.06	42.14	74	31.86	Pk
Horizontal	1892.438	58.56	-14.28	44.28	74	29.72	Pk
High Channel (5240 MHz)							
Vertical	2453.883	55.91	-12.91	43	74	31	Pk
Horizontal	2453.839	56.34	-11.59	44.75	74	29.25	Pk
Vertical	10480.325	52.99	2.69	55.68	74	18.32	Pk
Horizontal	10480.325	53.12	5.44	58.56	74	15.44	Pk
Vertical	1187.688	57.51	-18.27	39.24	74	34.76	Pk
Vertical	1636.784	55.84	-16.06	39.78	74	34.22	Pk
Vertical	2084.693	53.91	-11.99	41.92	74	32.08	Pk
Horizontal	1534.540	56.57	-16.94	39.63	74	34.37	Pk
Horizontal	1786.985	55.93	-15.04	40.89	74	33.11	Pk
Horizontal	1892.438	56.35	-14.28	42.07	74	31.93	Pk

802.11n

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5180							
V	10360.428	51.89	2.6	54.49	74	19.51	Pk
V	10360.428	31.98	5.23	37.21	74	36.79	AV
H	10360.529	53.8	2.6	56.4	74	17.6	Pk
H	10360.529	32.07	5.23	37.3	74	36.7	AV
operation frequency:5200							
V	10400.548	52.08	2.6	54.68	74	19.32	Pk
V	10400.548	33.28	5.23	38.51	74	35.49	AV
H	10400.279	53.28	2.6	55.88	74	18.12	Pk
H	10400.279	32.83	5.23	38.06	74	35.94	AV
operation frequency:5240							
V	10480.358	54.3	2.6	56.9	74	17.1	pk
V	10480.358	33.97	5.23	39.2	74	34.8	AV
H	10480.591	50.48	2.6	53.08	74	20.92	pk
H	10480.591	34.12	5.23	39.35	74	34.65	pk

Remark:

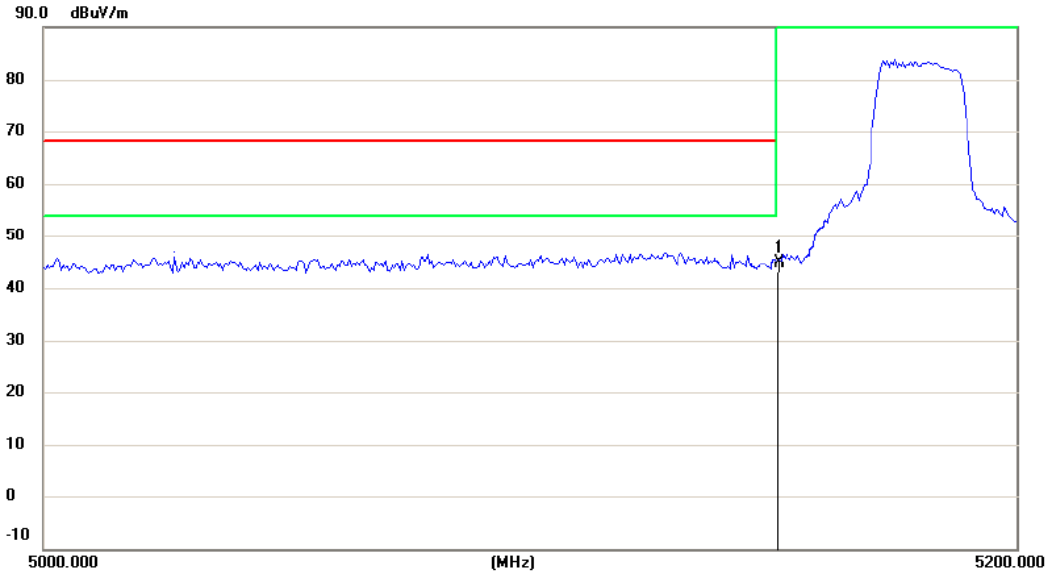
Absolute Level= Reading Level+ Factor, Margin= Absolute Level - Limit

BAND EDGE(Radiated)

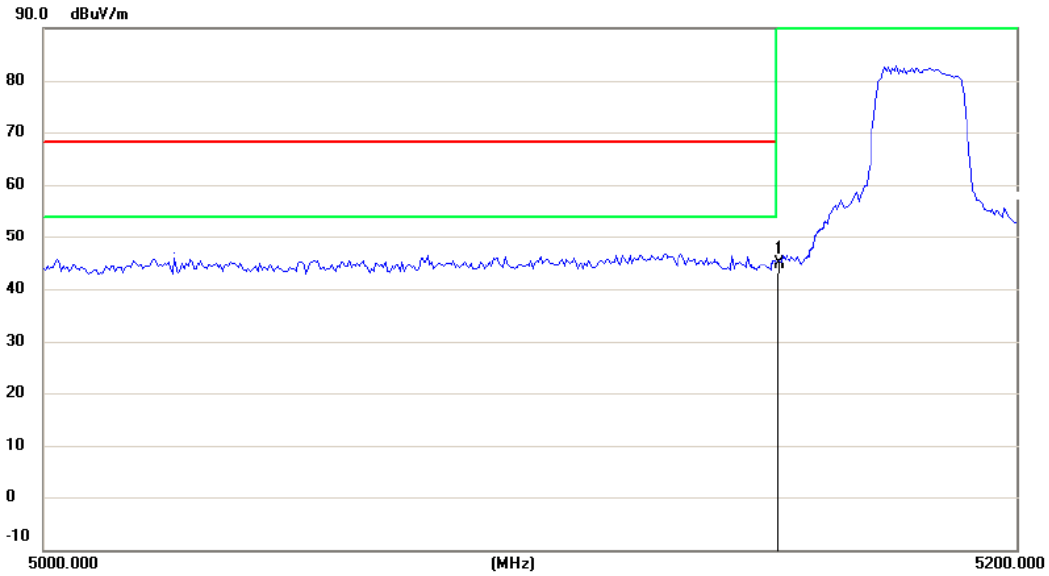
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type	Comment
802.11a							
5150	55.2	-9.06	46.14	68.2	22.06	peak	Vertical
5150	55.91	-9.06	46.85	68.2	21.35	peak	Horizontal
--	--	--	--	--	--	peak	Vertical
--	--	--	--	--	--	peak	Horizontal
802.11n							
5350	55.18	-8.96	46.22	68.2	21.98	peak	Vertical
5350	56.27	-8.96	47.31	68.2	20.89	peak	Horizontal
--	--	--	--	--	--	peak	Vertical
--	--	--	--	--	--	peak	Horizontal

NOTE1:The PK value is less than the AV value, AV value is not required.
NOTE2: All transmitter chains has been tested, only worst data listed.

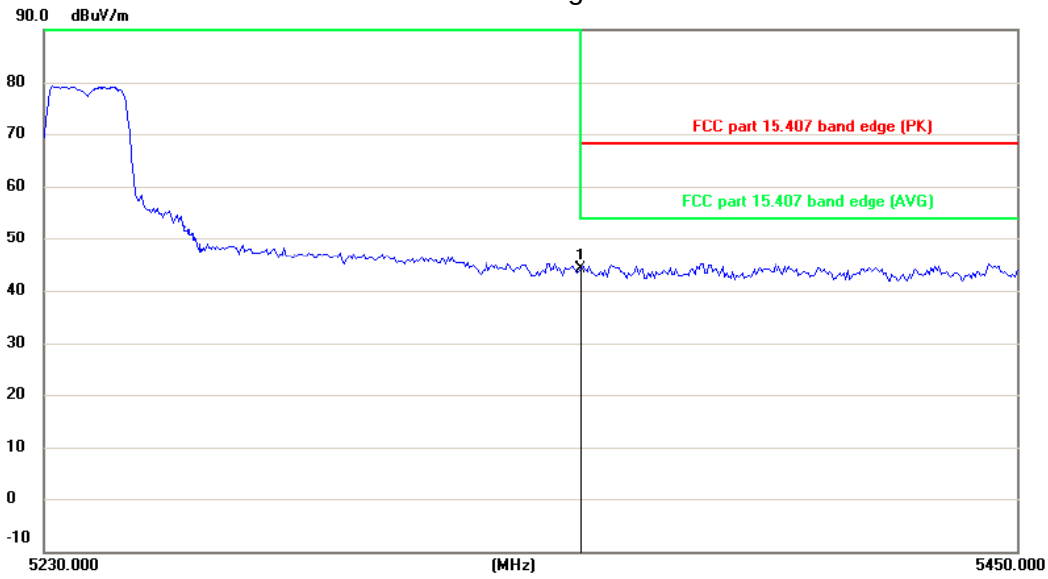
802.11a Low H



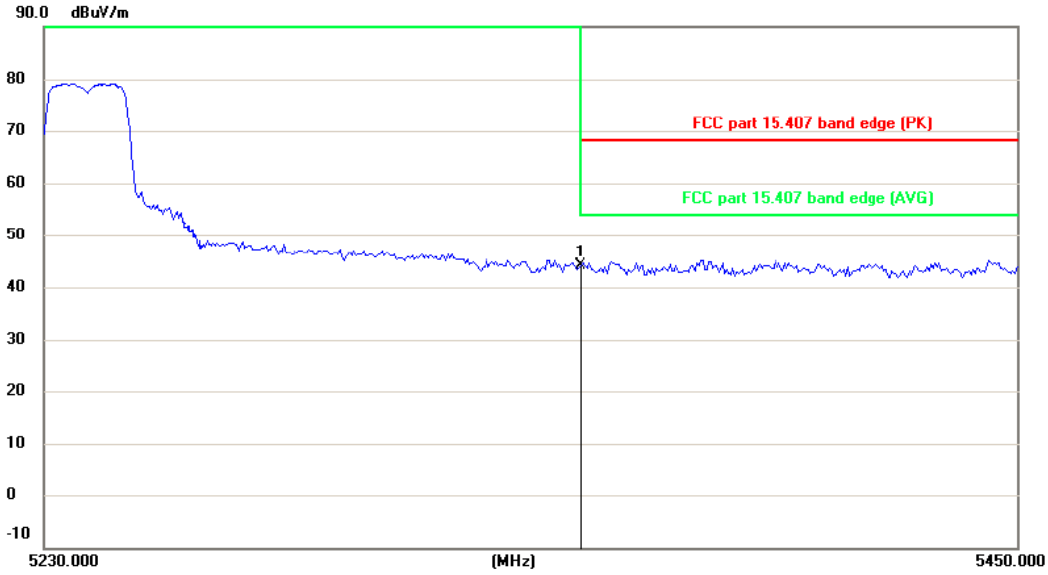
802.11a Low V



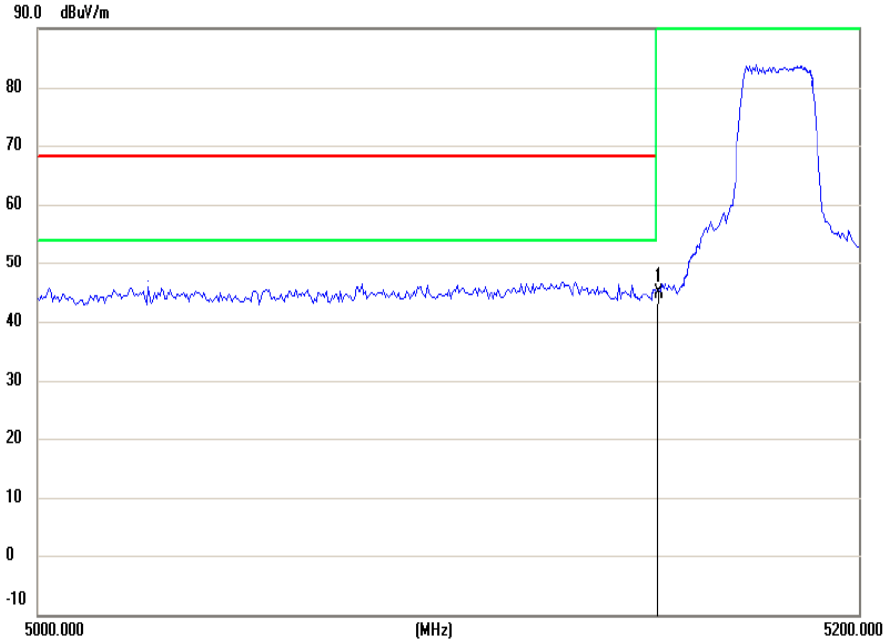
802.11a High H



802.11a High V



802.11n Low H



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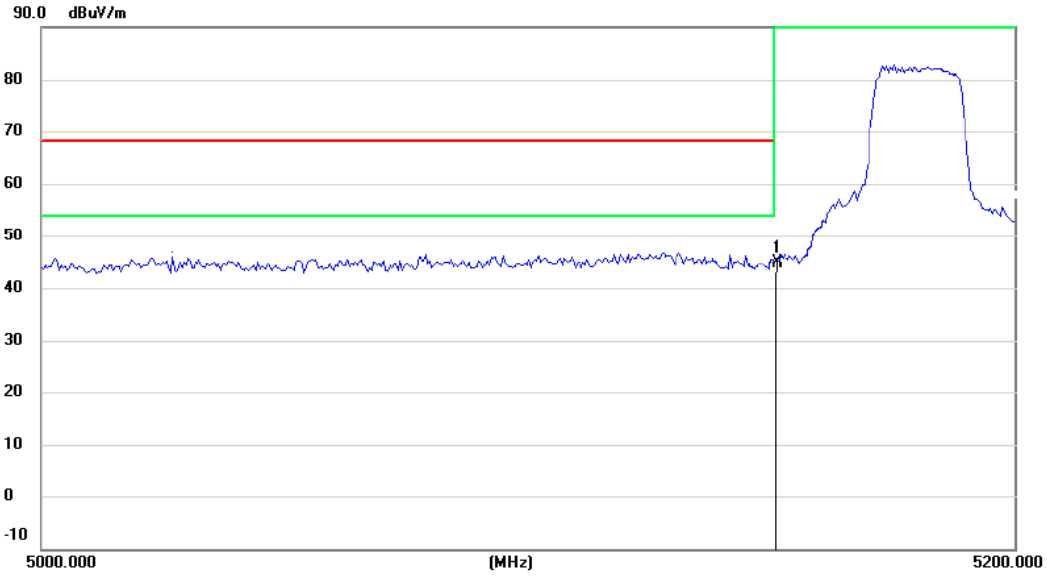
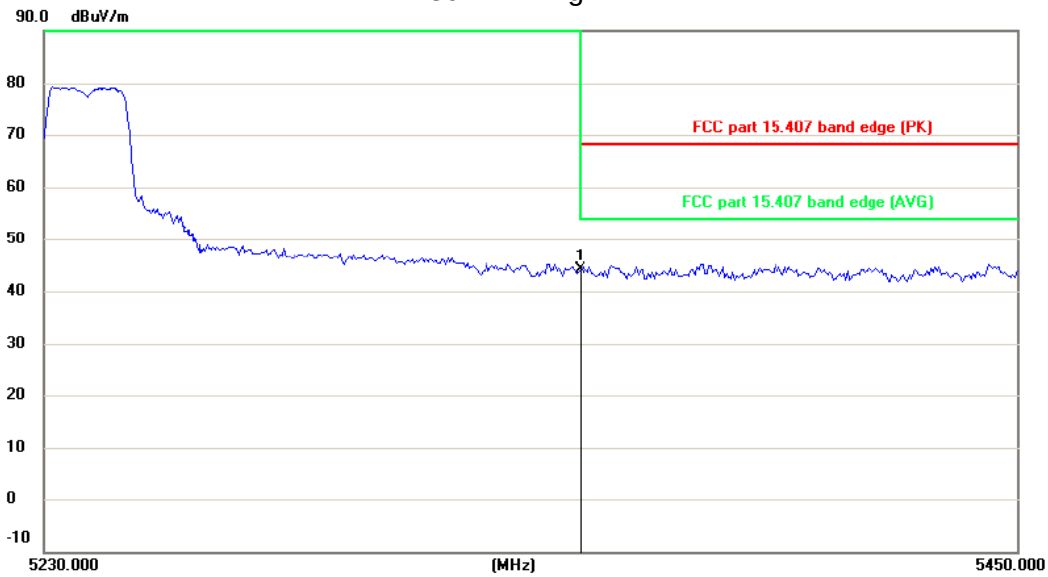
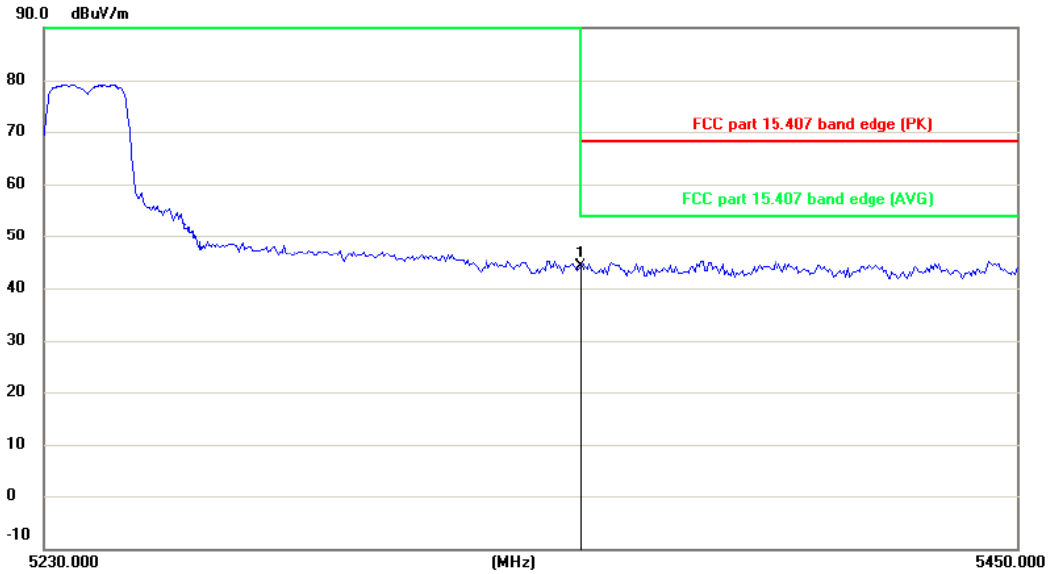


802.11n High H



802.11n High V



802.11a ant1

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5745 MHz)							
Vertical	2491.777	59.48	-11.65	47.83	74	26.17	Pk
Horizontal	2498.247	56.57	-12.73	43.84	74	30.16	Pk
Vertical	11450.146	56.38	3.87	60.25	74	13.75	Pk
Horizontal	11450.146	57.31	5.79	63.1	74	10.9	Pk
Vertical	1485.838	58.54	-17.1	41.44	74	32.56	Pk
Vertical	1636.784	60.12	-16.06	44.06	74	29.94	Pk
Vertical	2095.928	58.46	-11.88	46.58	74	27.42	Pk
Horizontal	1074.301	60.11	-19.69	40.42	74	33.58	Pk
Horizontal	1483.178	58.76	-17.09	41.67	74	32.33	Pk
Horizontal	1895.832	56.83	-14.25	42.58	74	31.42	Pk
Mid Channel (5785 MHz)							
Vertical	2474.777	56.43	-11.65	44.78	74	29.22	Pk
Horizontal	2474.144	56.86	-9.37	47.49	74	26.51	Pk
Vertical	11570.109	56.28	3.89	60.17	74	13.83	Pk
Horizontal	11570.109	56.92	5.83	62.75	74	11.25	Pk
Vertical	1433.535	61.38	-17.12	44.26	74	29.74	Pk
Vertical	1636.784	60.48	-16.06	44.42	74	29.58	Pk
Vertical	2284.166	53.44	-12.83	40.61	74	33.39	Pk
Horizontal	1280.515	59.97	-17.82	42.15	74	31.85	Pk
Horizontal	1636.784	59.47	-16.06	43.41	74	30.59	Pk
Horizontal	1892.438	58.95	-14.28	44.67	74	29.33	Pk
High Channel (5825MHz)							
Vertical	2453.883	57.11	-12.91	44.2	74	29.8	Pk
Horizontal	2453.839	57.03	-11.59	45.44	74	28.56	Pk
Vertical	11650.231	54.36	3.9	58.26	74	15.74	Pk
Horizontal	11650.231	53.45	5.83	59.28	74	14.72	Pk
Vertical	1187.688	57.17	-18.27	38.9	74	35.1	Pk
Vertical	1636.784	57.33	-16.06	41.27	74	32.73	Pk
Vertical	2084.693	53.88	-11.99	41.89	74	32.11	Pk
Horizontal	1534.540	56.42	-16.94	39.48	74	34.52	Pk
Horizontal	1786.985	55.98	-15.04	40.94	74	33.06	Pk
Horizontal	1892.438	56.47	-14.28	42.19	74	31.81	Pk

802.11a ant2

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5745 MHz)							
Vertical	2491.777	59.14	-11.65	47.49	74	26.51	Pk
Horizontal	2498.247	56.23	-12.73	43.5	74	30.5	Pk
Vertical	11450.146	56.04	3.87	59.91	74	14.09	Pk
Horizontal	11450.146	56.97	5.79	62.76	74	11.24	Pk
Vertical	1485.838	58.2	-17.1	41.1	74	32.9	Pk
Vertical	1636.784	59.78	-16.06	43.72	74	30.28	Pk
Vertical	2095.928	58.12	-11.88	46.24	74	27.76	Pk
Horizontal	1074.301	59.77	-19.69	40.08	74	33.92	Pk
Horizontal	1483.178	58.42	-17.09	41.33	74	32.67	Pk
Horizontal	1895.832	56.49	-14.25	42.24	74	31.76	Pk
Mid Channel (5785 MHz)							
Vertical	2474.777	56.09	-11.65	44.44	74	29.56	Pk
Horizontal	2474.144	56.52	-9.37	47.15	74	26.85	Pk
Vertical	11570.109	55.94	3.89	59.83	74	14.17	Pk
Horizontal	11570.109	56.58	5.83	62.41	74	11.59	Pk
Vertical	1433.535	61.04	-17.12	43.92	74	30.08	Pk
Vertical	1636.784	60.14	-16.06	44.08	74	29.92	Pk
Vertical	2284.166	53.1	-12.83	40.27	74	33.73	Pk
Horizontal	1280.515	59.63	-17.82	41.81	74	32.19	Pk
Horizontal	1636.784	59.13	-16.06	43.07	74	30.93	Pk
Horizontal	1892.438	58.61	-14.28	44.33	74	29.67	Pk
High Channel (5825MHz)							
Vertical	2453.883	56.77	-12.91	43.86	74	30.14	Pk
Horizontal	2453.839	56.69	-11.59	45.1	74	28.9	Pk
Vertical	11650.231	54.02	3.9	57.92	74	16.08	Pk
Horizontal	11650.231	53.11	5.83	58.94	74	15.06	Pk
Vertical	1187.688	56.83	-18.27	38.56	74	35.44	Pk
Vertical	1636.784	56.99	-16.06	40.93	74	33.07	Pk
Vertical	2084.693	53.54	-11.99	41.55	74	32.45	Pk
Horizontal	1534.540	56.08	-16.94	39.14	74	34.86	Pk
Horizontal	1786.985	55.64	-15.04	40.6	74	33.4	Pk
Horizontal	1892.438	56.13	-14.28	41.85	74	32.15	Pk

802.11n

Normal Voltage

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5745							
V	11450.146	53.08	3.87	56.95	74	17.05	Pk
V	11450.146	32.33	5.79	38.12	74	35.88	AV
H	11450.146	53.98	3.87	57.85	74	16.15	Pk
H	11450.146	33.35	5.79	39.14	74	34.86	AV
operation frequency:5785							
V	11570.109	52.98	3.89	56.87	74	17.13	Pk
V	11570.109	32.97	5.83	38.8	74	35.2	AV
H	11570.109	53.65	3.89	57.54	74	16.46	Pk
H	11570.109	33.08	5.83	38.91	74	35.09	AV
operation frequency:5825							
V	11650.231	54.06	3.9	57.96	74	16.04	pk
V	11650.231	33.47	5.83	39.3	74	34.7	AV
H	11650.231	52.67	3.9	56.57	74	17.43	pk
H	11650.231	34.17	5.83	40	74	34	pk

Remark:

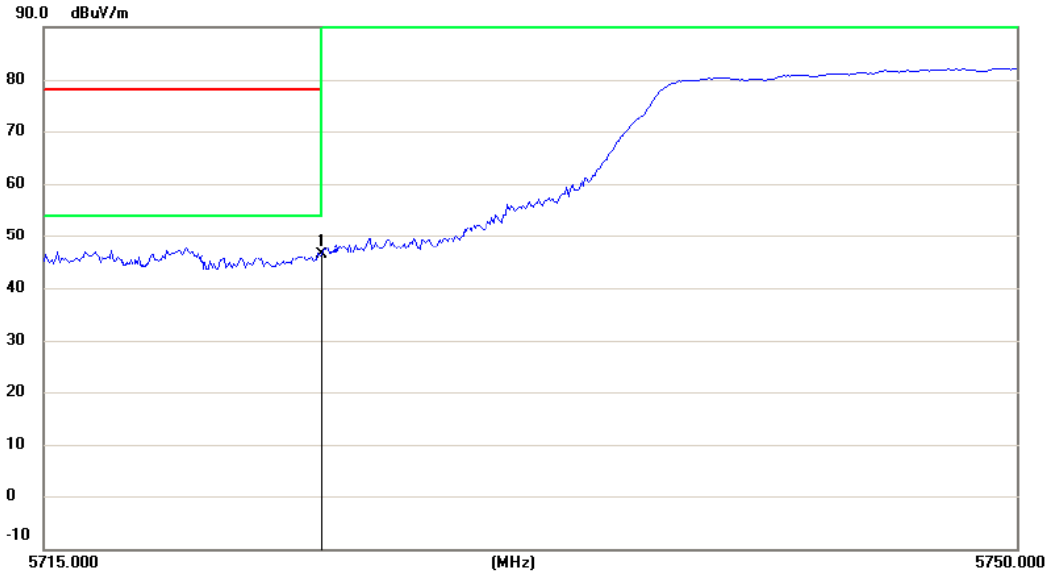
Absolute Level= Reading Level+ Factor, Margin= Absolute Level - Limit

BAND EDGE(Radiated)

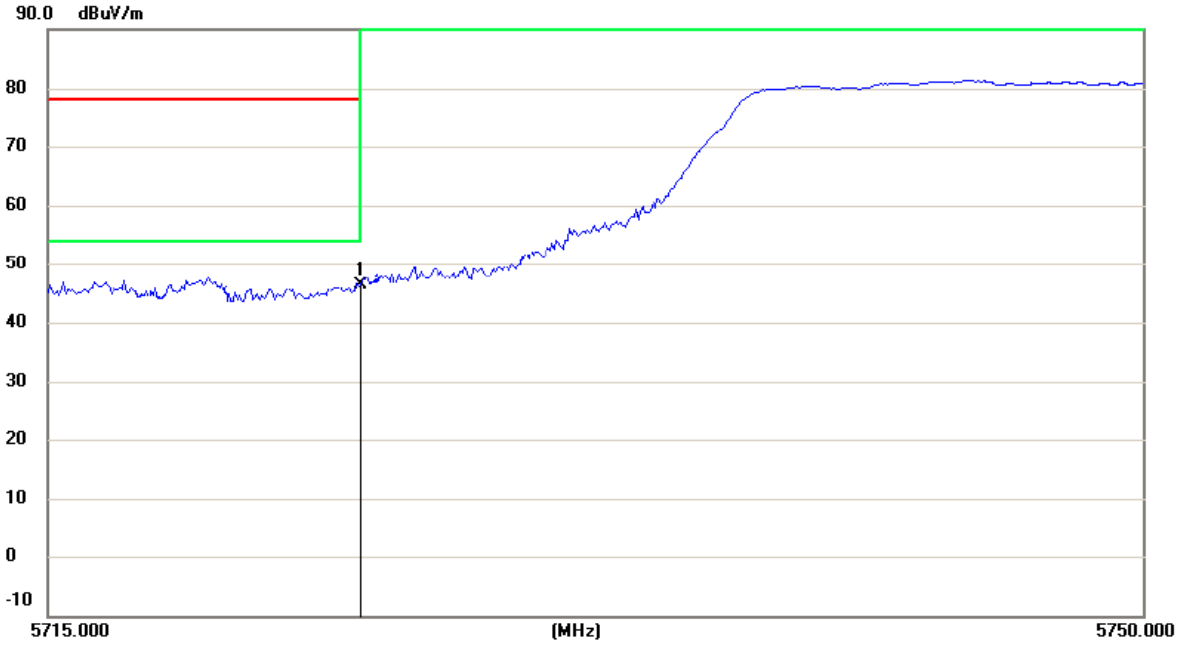
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type	Comment
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		
802.11a							
5460	55.2	-8.85	46.14	68.2	22.06	peak	Vertical
5460	55.91	-8.85	46.85	68.2	21.35	peak	Horizontal
5725	--	-8.64	--	78.2	--	peak	Vertical
5725	--	-8.64	--	78.2	--	peak	Horizontal
5850		-8.56		78.2		peak	Vertical
5850		-8.56		78.2		peak	Horizontal
--	--	--	--	--	--	--	--
802.11n							
5460	55.18	-8.85	46.22	68.2	21.98	peak	Vertical
5460	56.27	-8.85	47.31	68.2	20.89	peak	Horizontal
5725	--	-8.64	--	78.2	--	peak	Vertical
5725	--	-8.64	--	78.2	--	peak	Horizontal
5850		-8.56		78.2		peak	Vertical
5850		-8.56		78.2		peak	Horizontal
--	--	--	--	--	--	--	--

NOTE:The PK value is less than the AV value, AV value is not required.
NOTE2: All transmitter chains has been tested, only worst data listed.

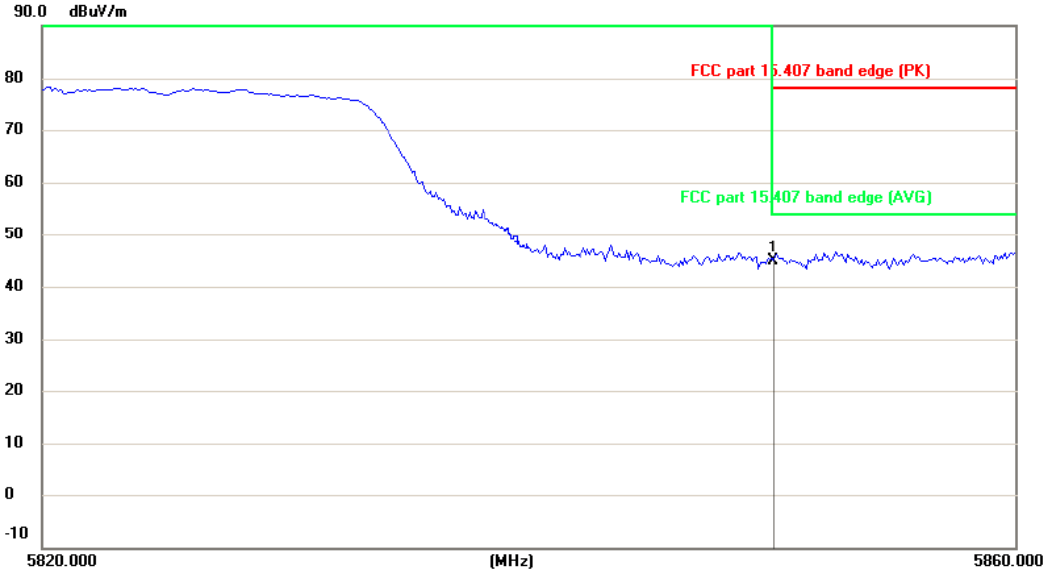
802.11a Low H



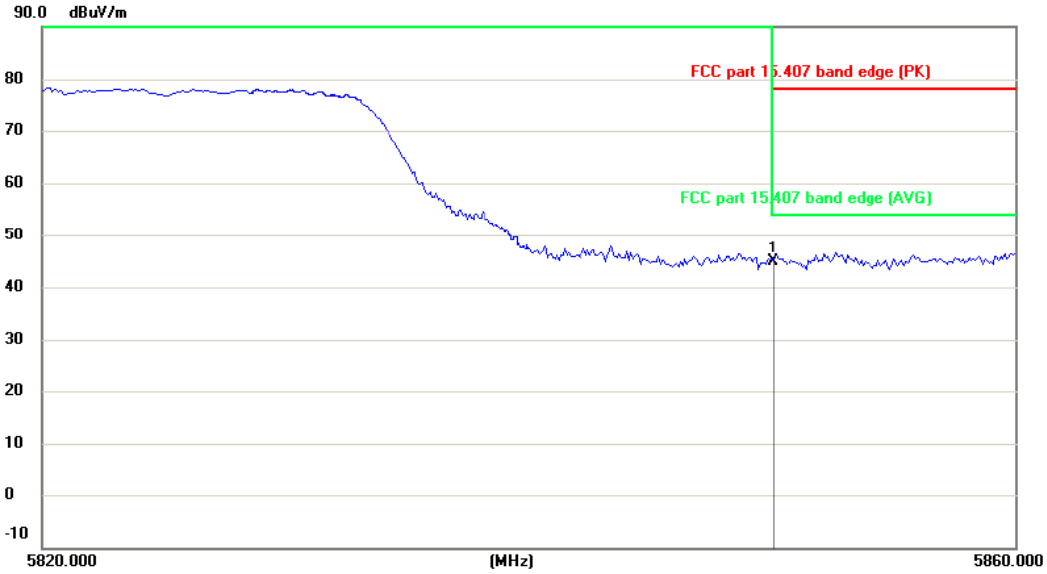
802.11a Low V



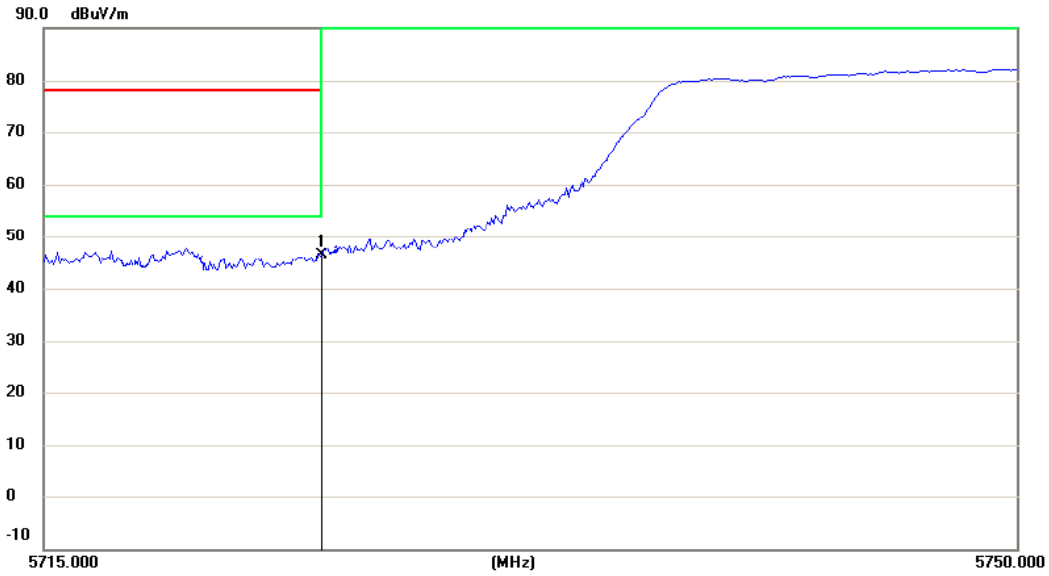
802.11a High H



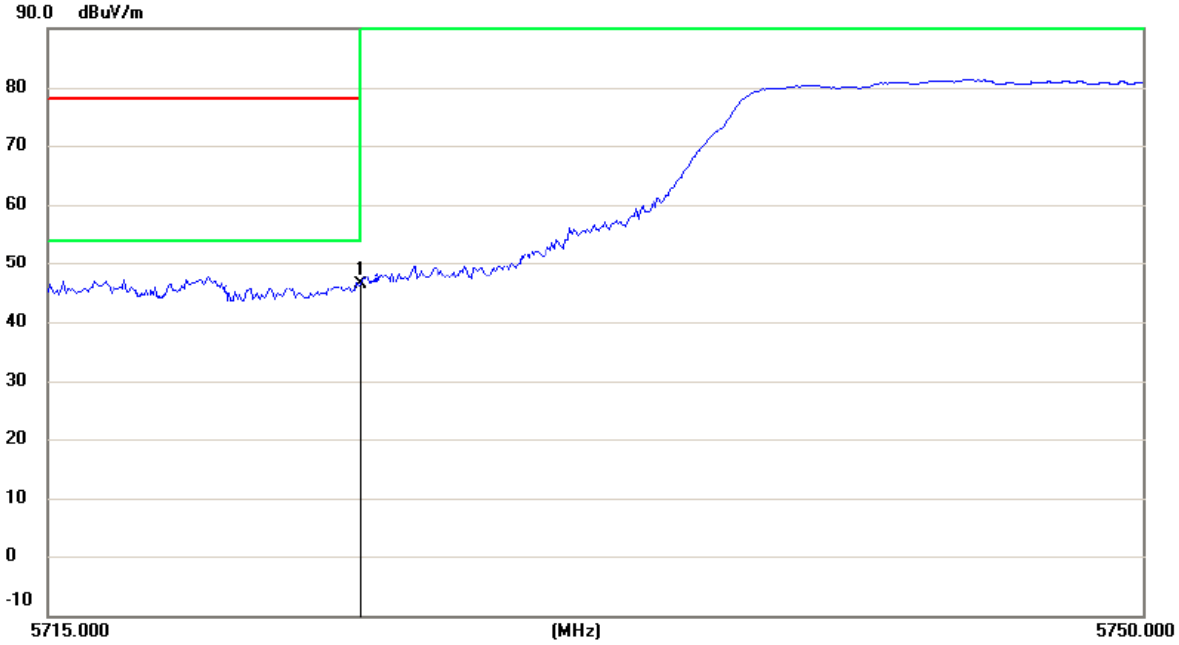
802.11a High V



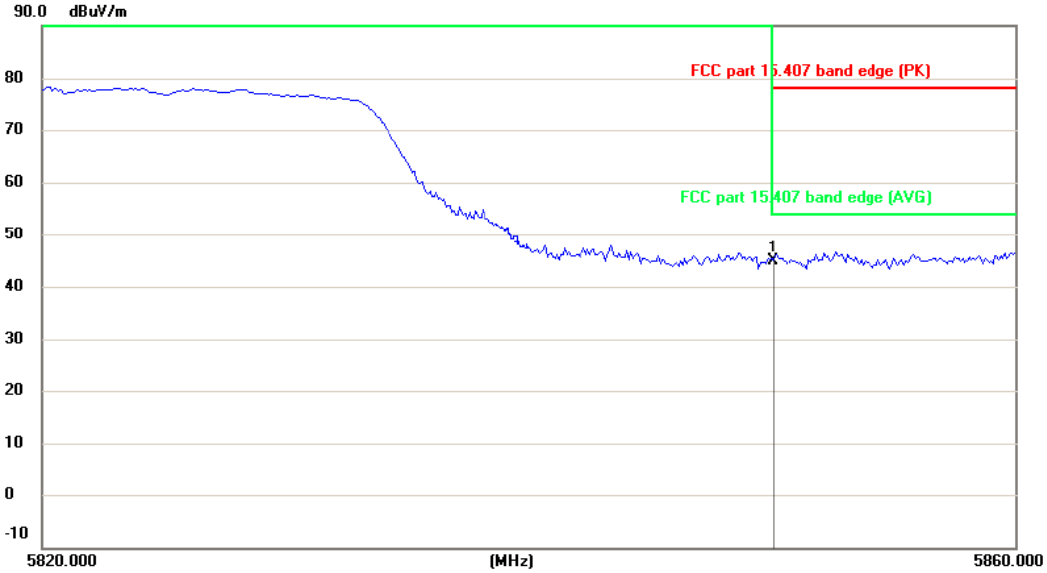
802.11n Low H



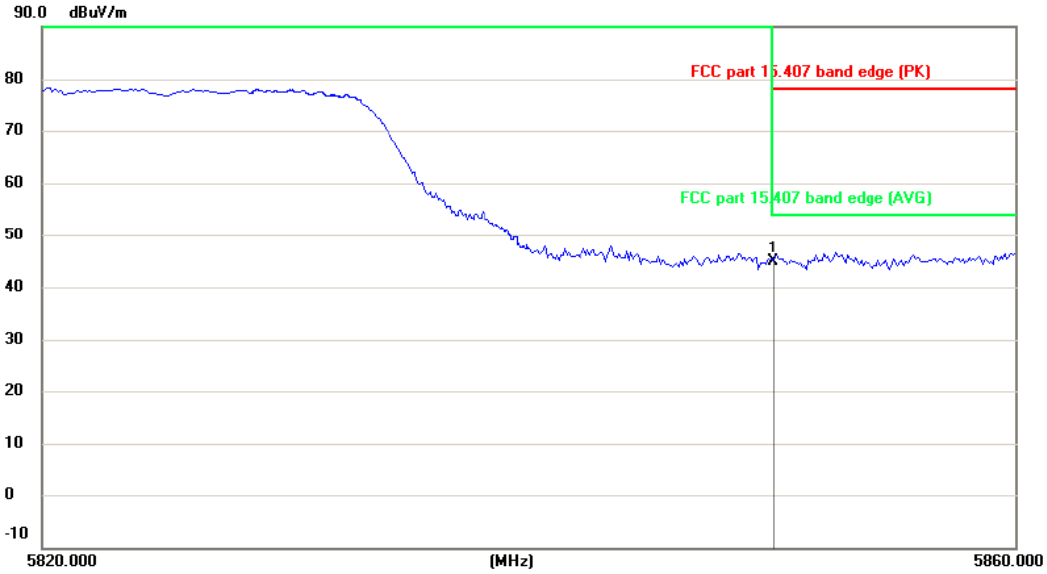
802.11n Low V



802.11n High H



802.11n High V



4. POWER SPECTRAL DENSITY TEST

4.1 APPLIED PROCEDURES / LIMIT

FCC Part 15 Subpart C(15.407)		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	11dBm(in any 1 megahertz)	5150-5250
Power Spectral Density	30dBm(in any 500KHz)	5725-5850

4.1.1 TEST PROCEDURE

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the RBW ≥ 3 kHz.
4. Set the VBW ≥ 3 x RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

4.1.2 DEVIATION FROM STANDARD

No deviation.

4.1.3 TEST SETUP

4.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

4.1.5 TEST RESULTS

EUT：	Laptop	Model Name ：	TM141WT720C
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1015 hPa	Test Voltage ：	DC 12Vfrom adapter
Test Mode ：	TX a Mode /CH36, CH40, CH48		

5.2G

Mode	Frequency (MHz)	Ant Port	PK Output power(dBm)		Limit (dBm)	Result
IEEE 802.11 a	CH36:5180	1	5.773	5.773	11	PASS
		2	5.761	5.761		
	CH40:5200	1	5.304	5.304	11	PASS
		2	5.353	5.353		
	CH48:5240	1	4.442	4.442	11	PASS
		2	4.575	4.575		
IEEE 802.11 n	CH36:5180	1	5.518	8.48	11	PASS
		2	5.418			
	CH40:5200	1	5.319	8.25	11	PASS
		2	5.167			
	CH48:5240	1	4.136	7.17	11	PASS
		2	4.186			
Conclusion: PASS						

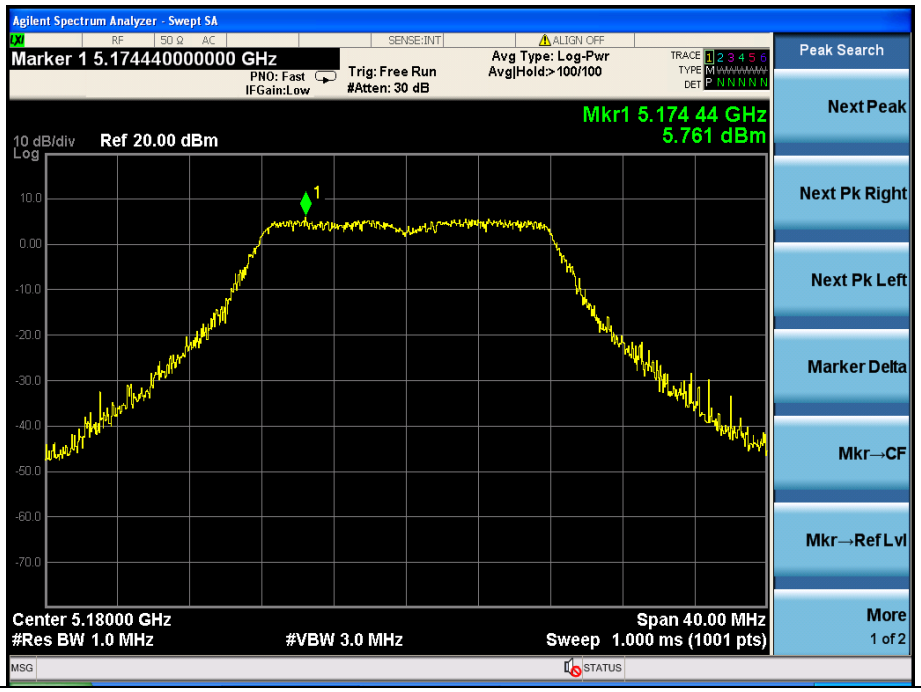
5.8G

Mode	Frequency (MHz)	Ant Port	PK Output power(dBm)		Limit (dBm)	Result
IEEE 802.11a	CH149:5745	1	6.646	6.646	30	PASS
		2	6.142	6.142		
	CH157:5785	1	12.132	12.132	30	PASS
		2	12.578	12.578		
	CH165:5825	1	5.081	5.081	30	PASS
		2	5.358	5.358		
IEEE 802.11 n	CH149:5745	1	7.232	9.91	30	PASS
		2	6.543			
	CH157:5785	1	11.643	14.64	30	PASS
		2	12.170			
	CH165:5825	1	5.252	8.32	30	PASS
		2	5.362			
Conclusion: PASS						

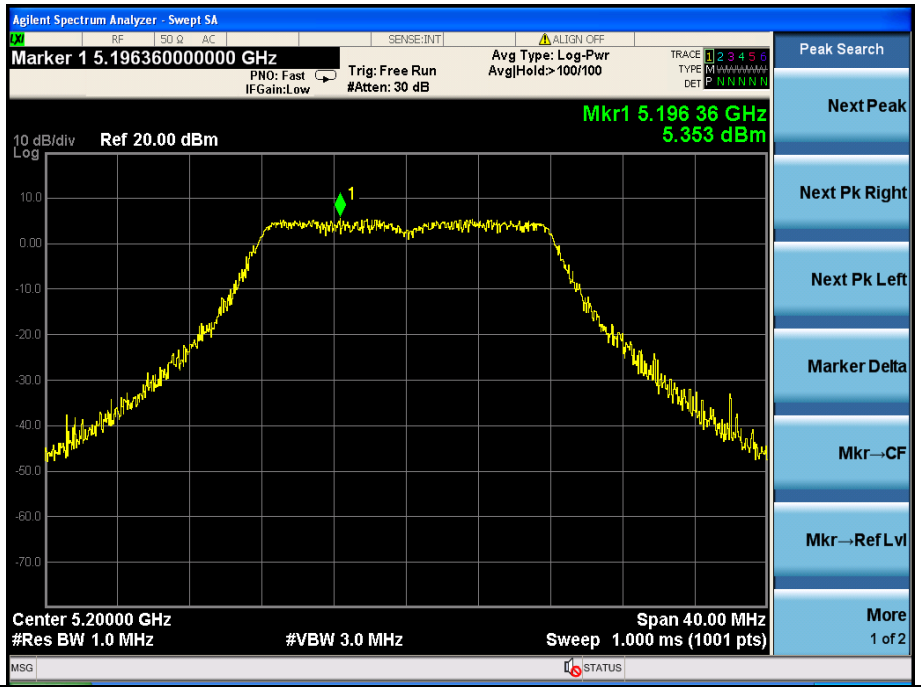
Ant2

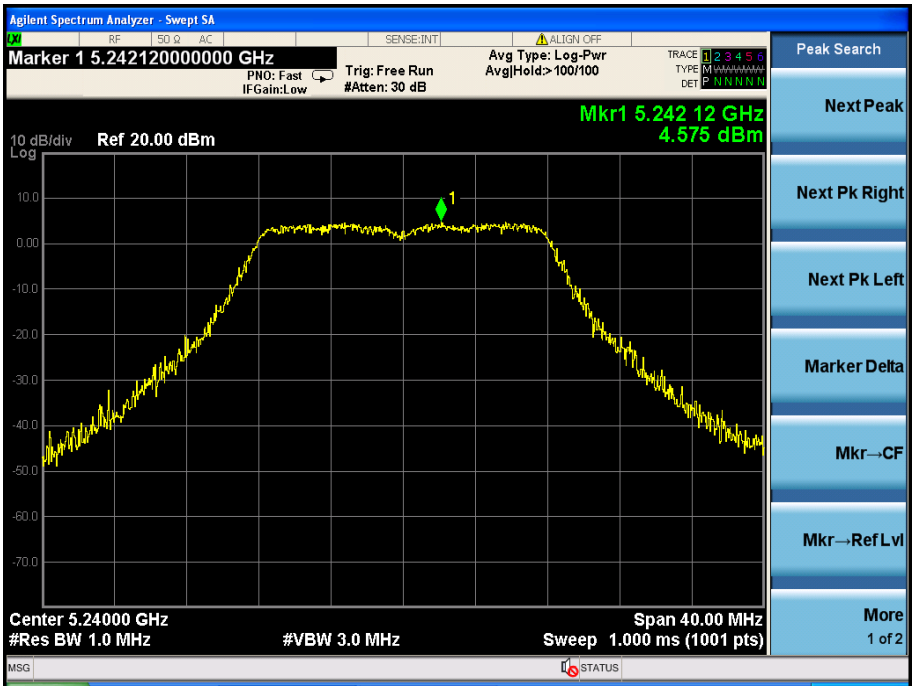
5.2G 802.11a

TX CH36

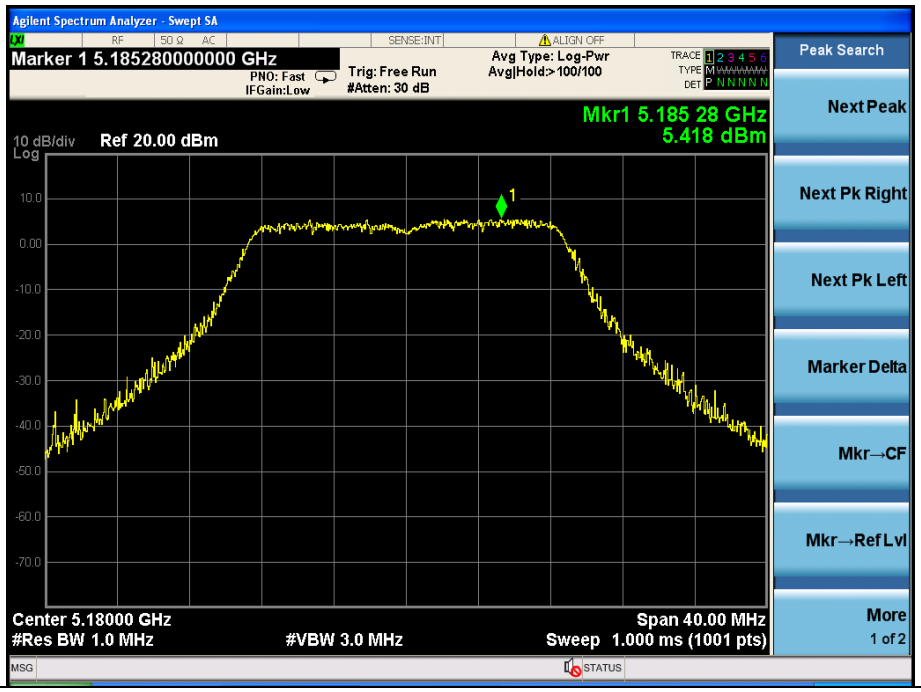


TX CH40

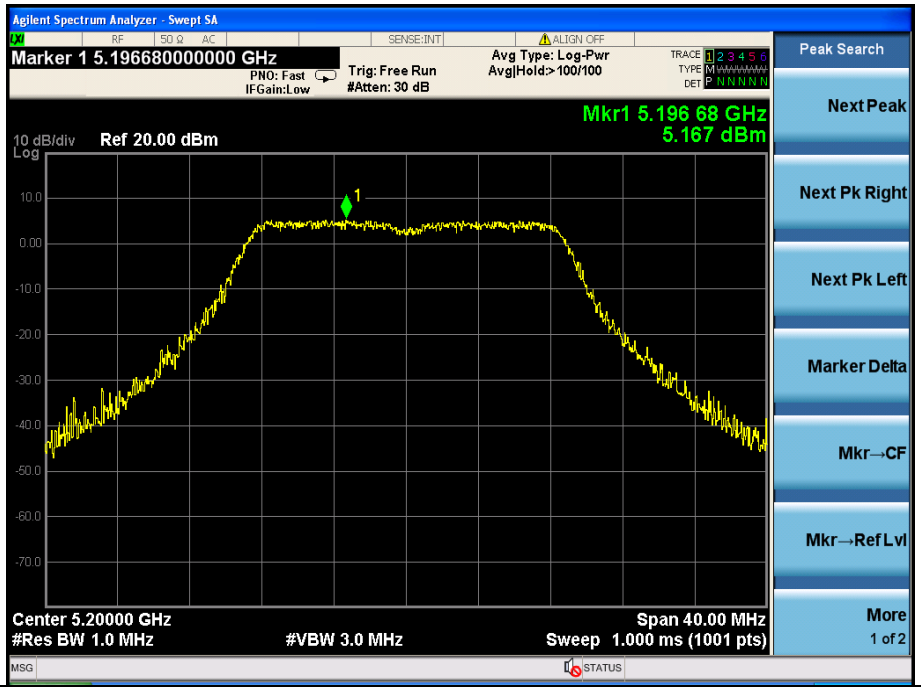


TX CH48


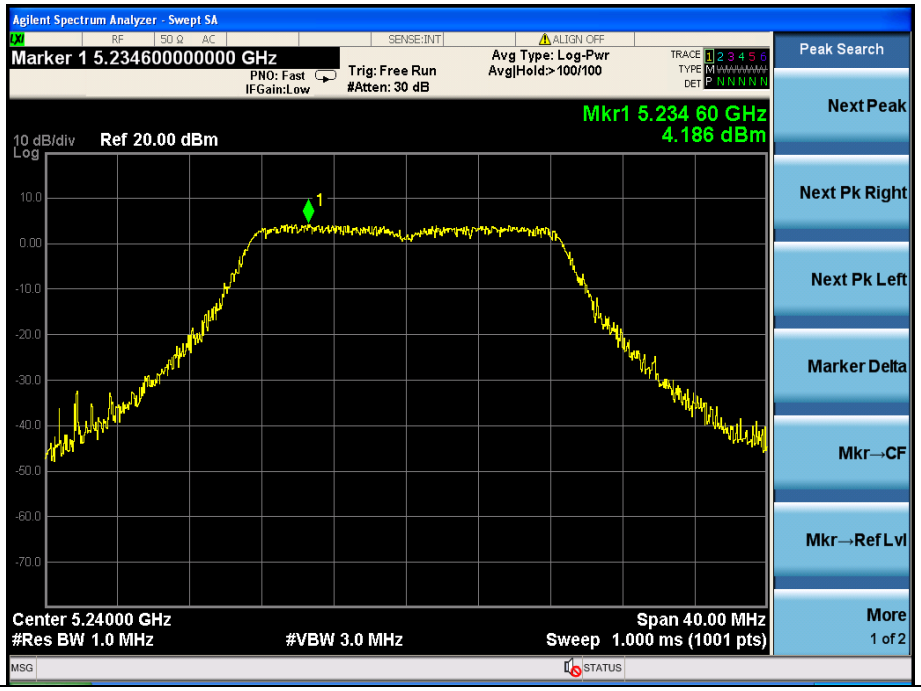
802.11n

TX CH36


TX CH40

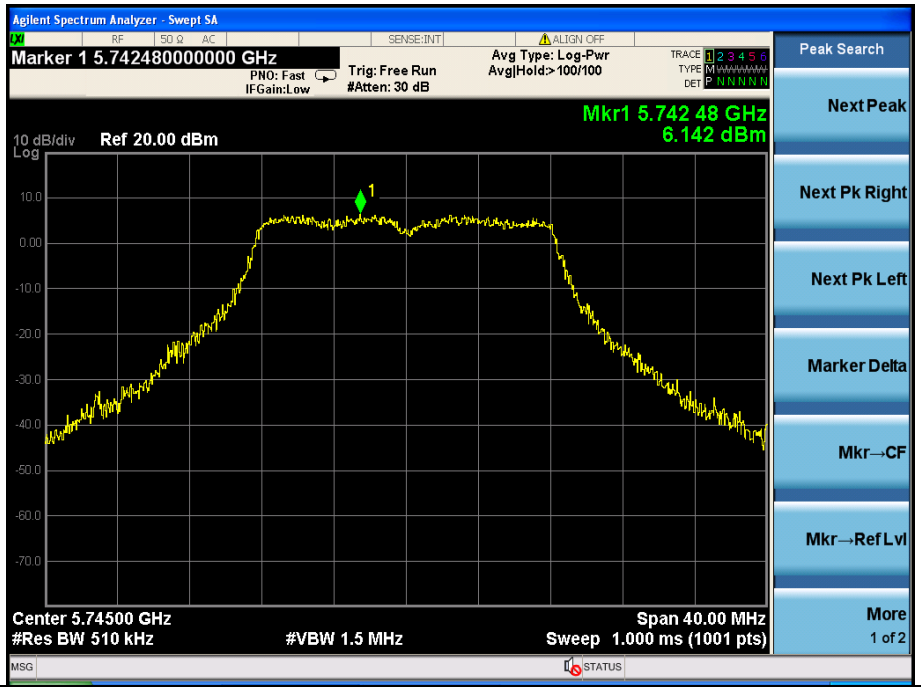


TX CH48

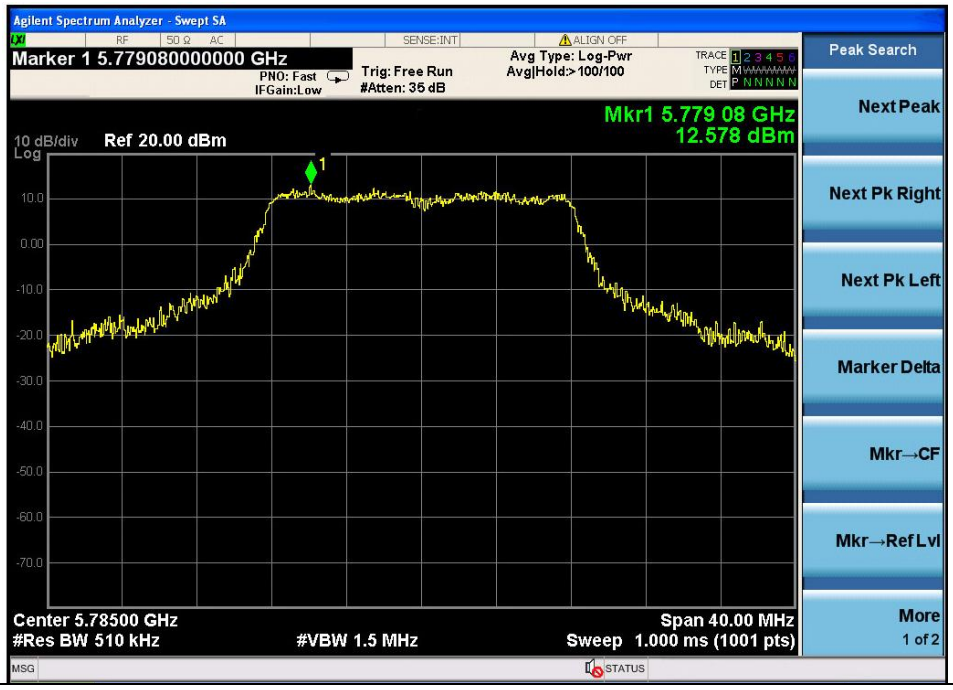


5.8G 802.11a

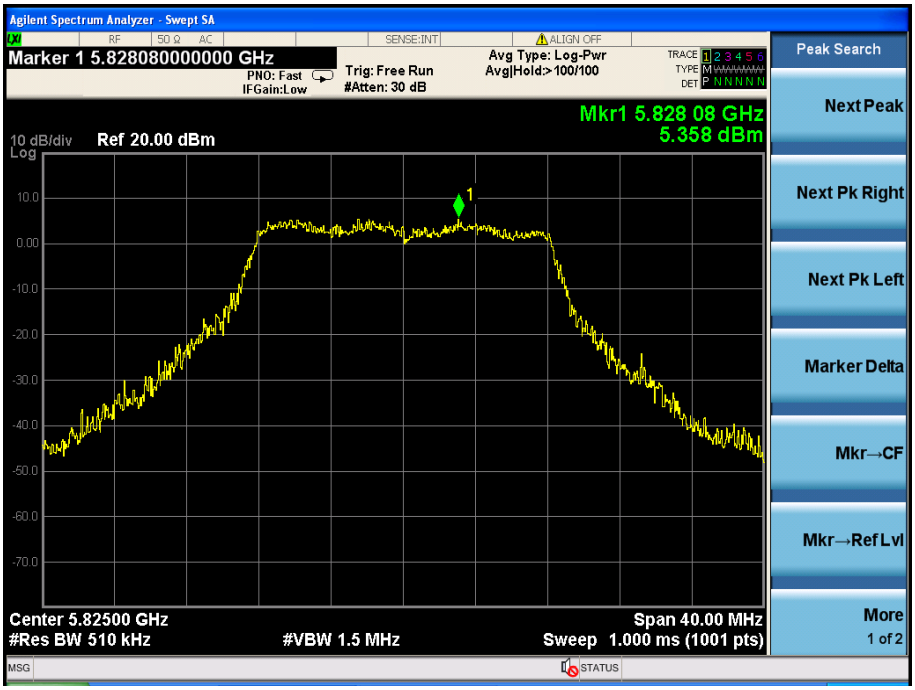
TX CH149



TX CH157

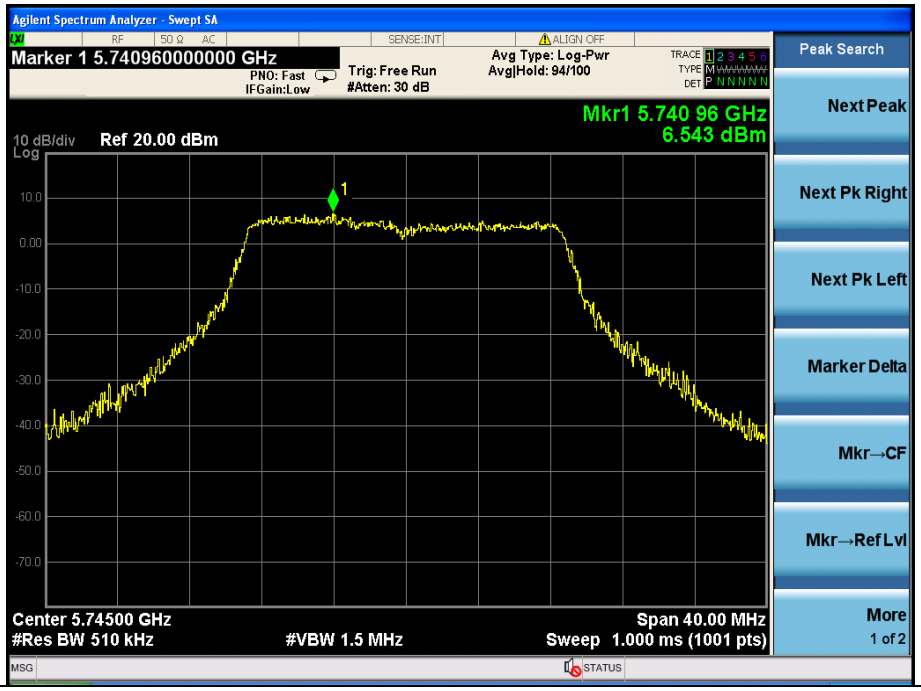


TX CH165

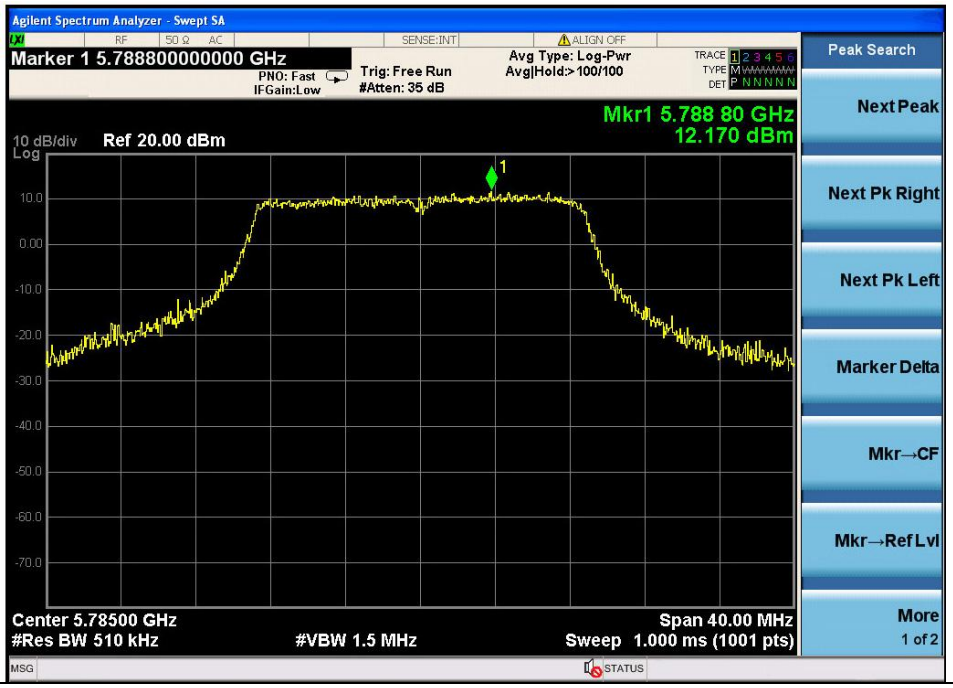


802.11n

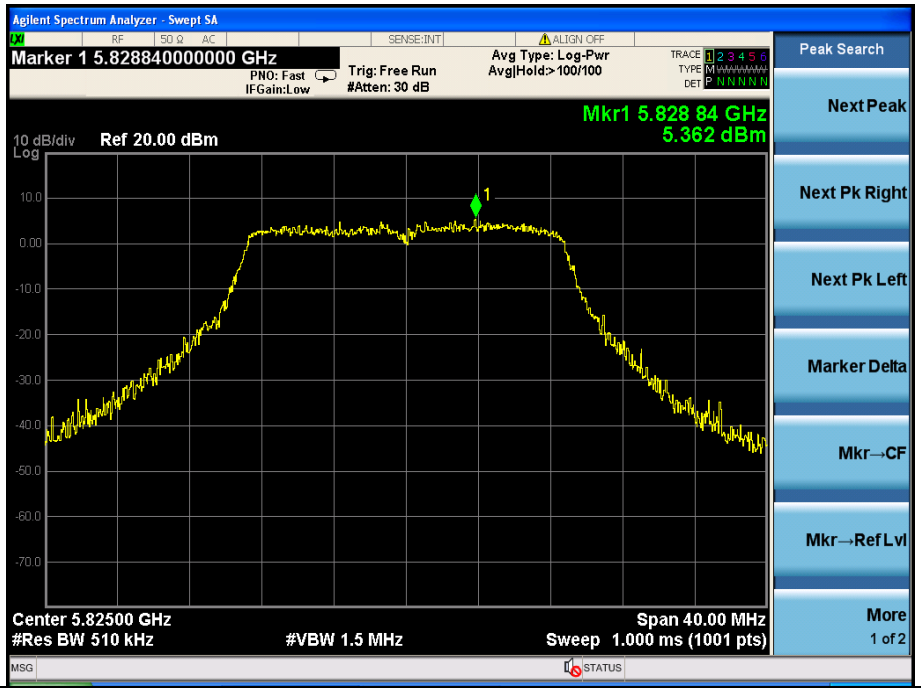
TX CH149



TX CH157



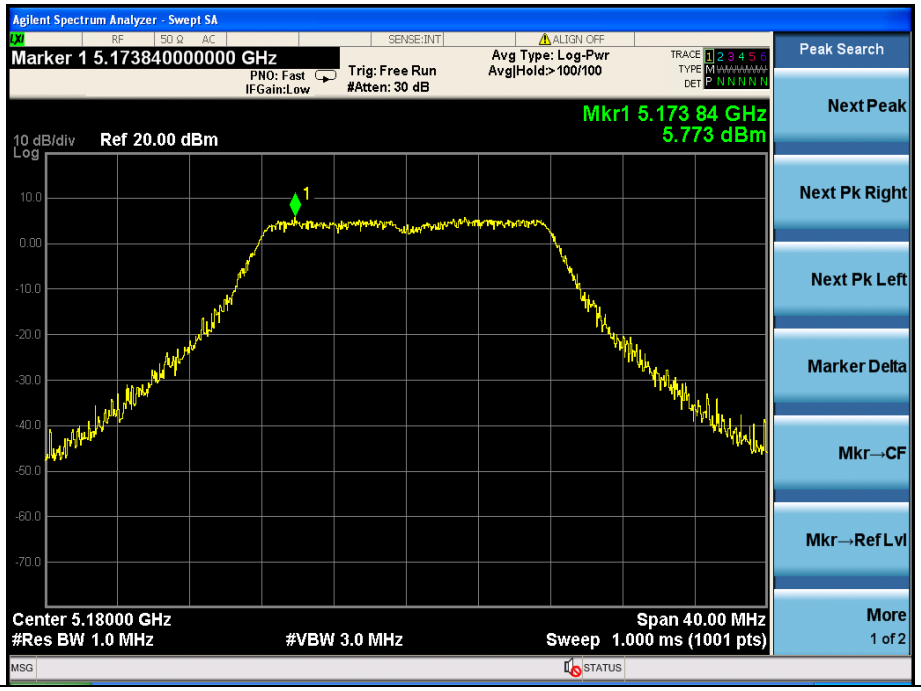
TX CH165



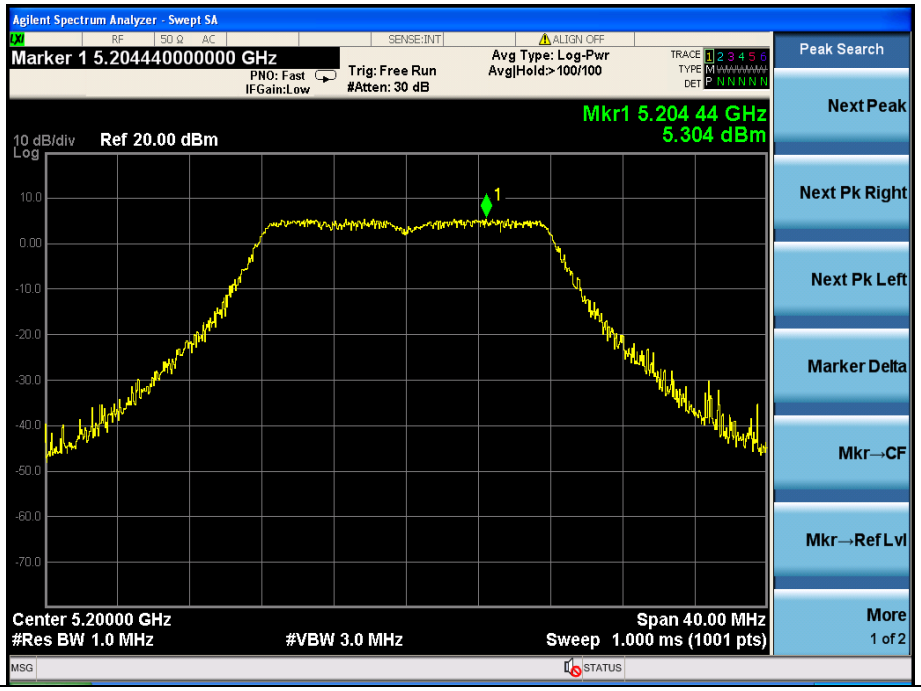
Ant1

5.2G 802.11a

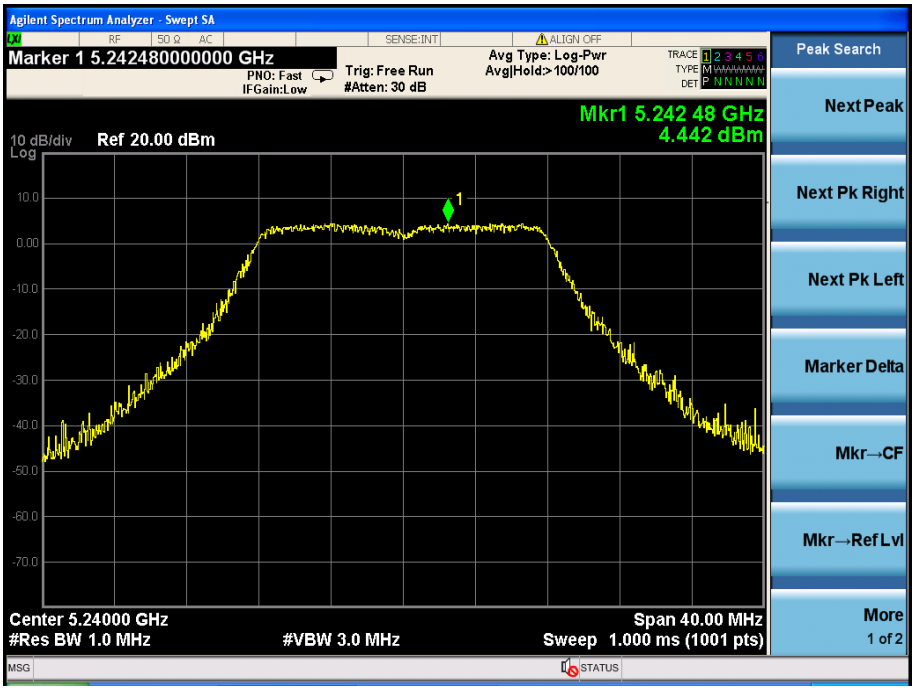
TX CH36



TX CH40

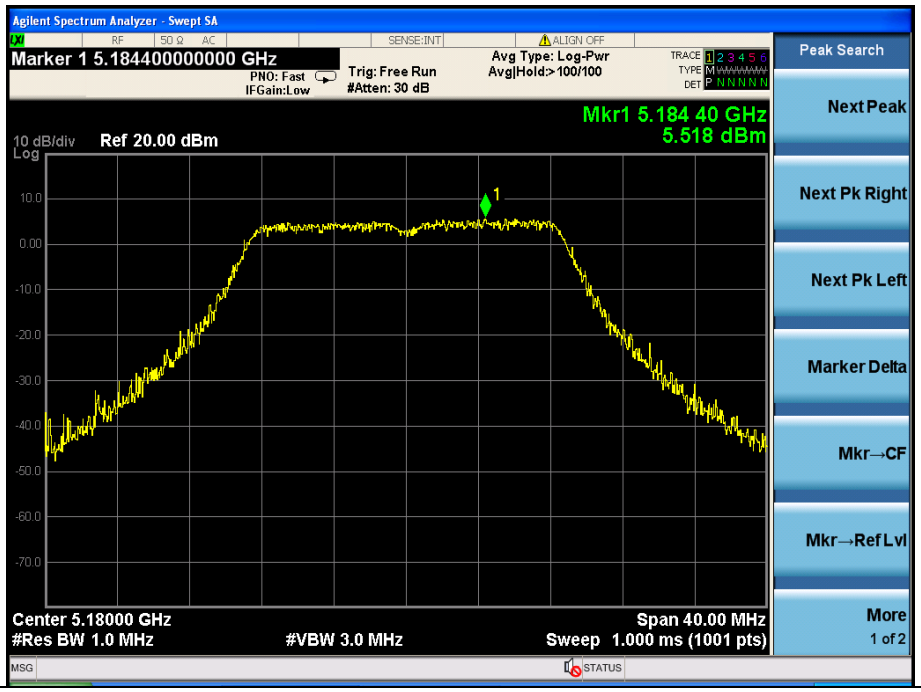


TX CH48

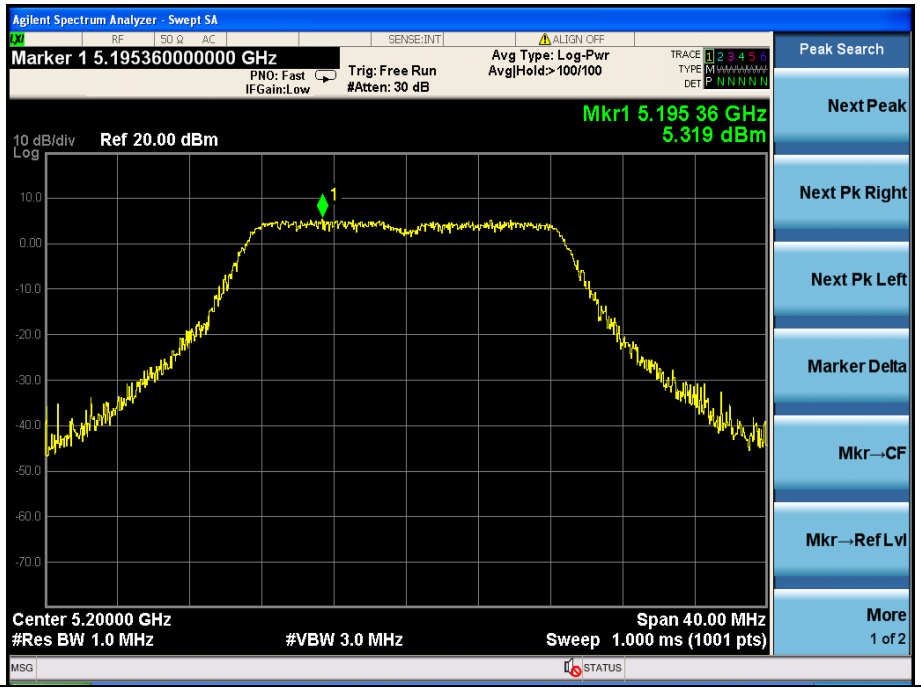


802.11n

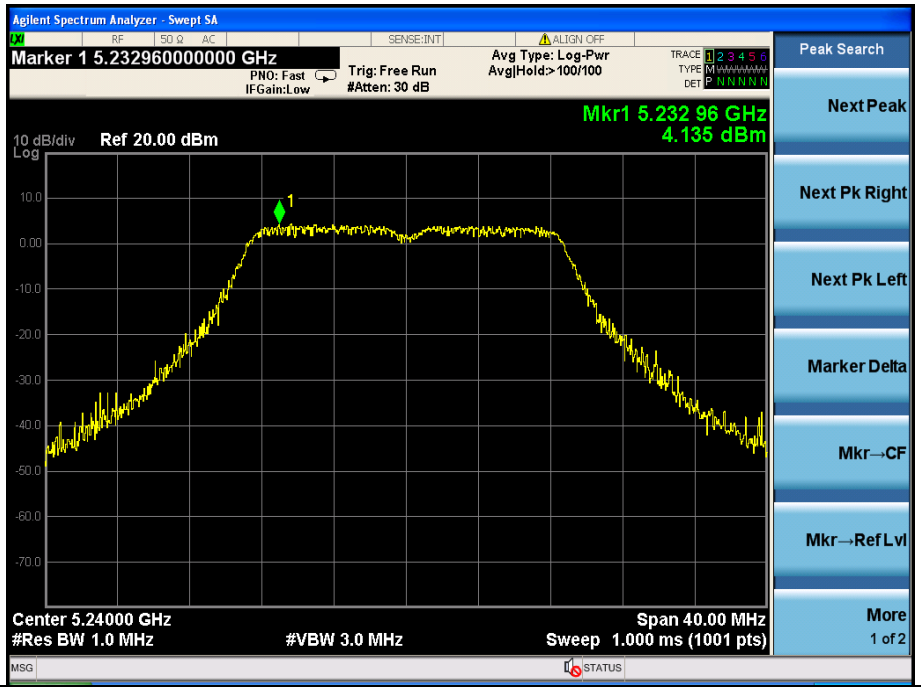
TX CH36



TX CH40

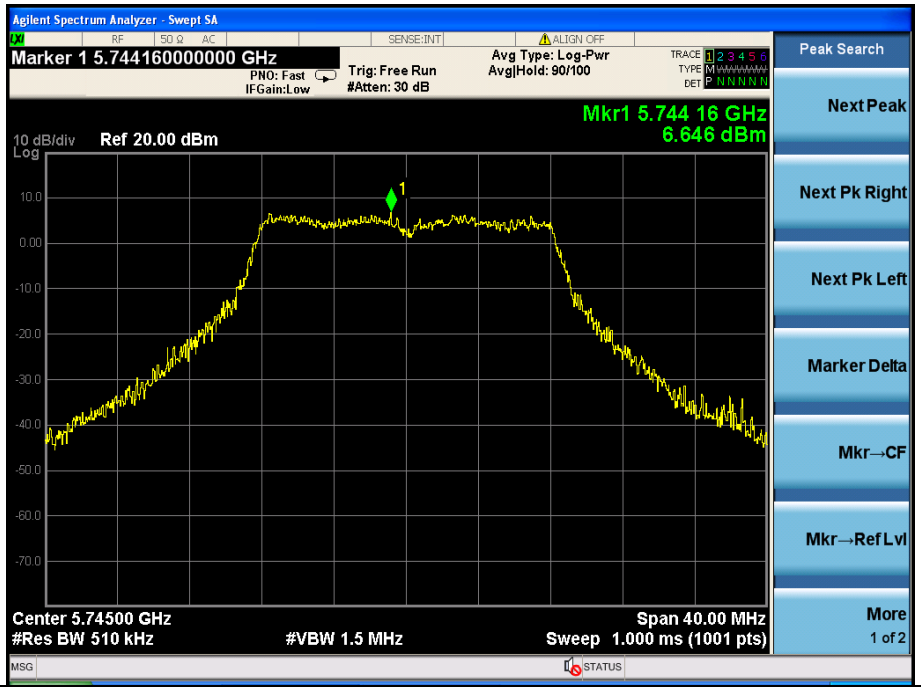


TX CH48

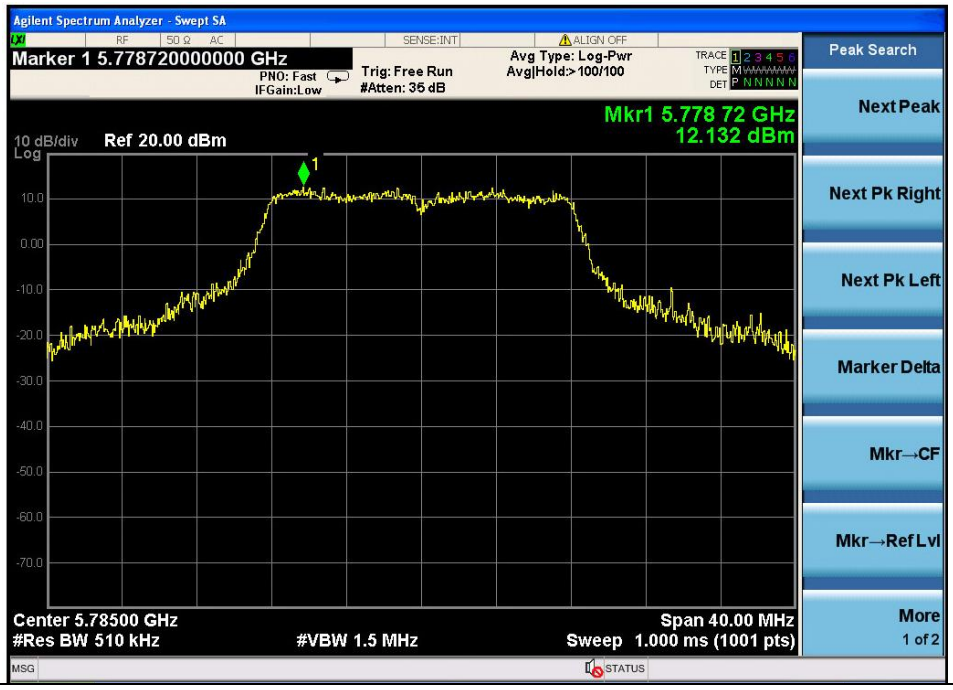


5.8G 802.11a

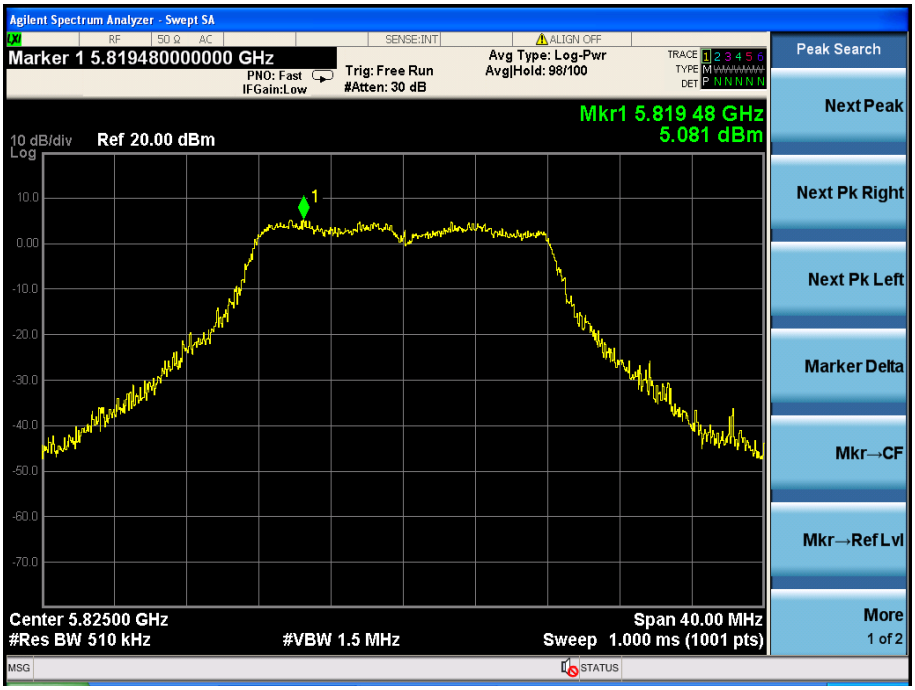
TX CH149



TX CH157

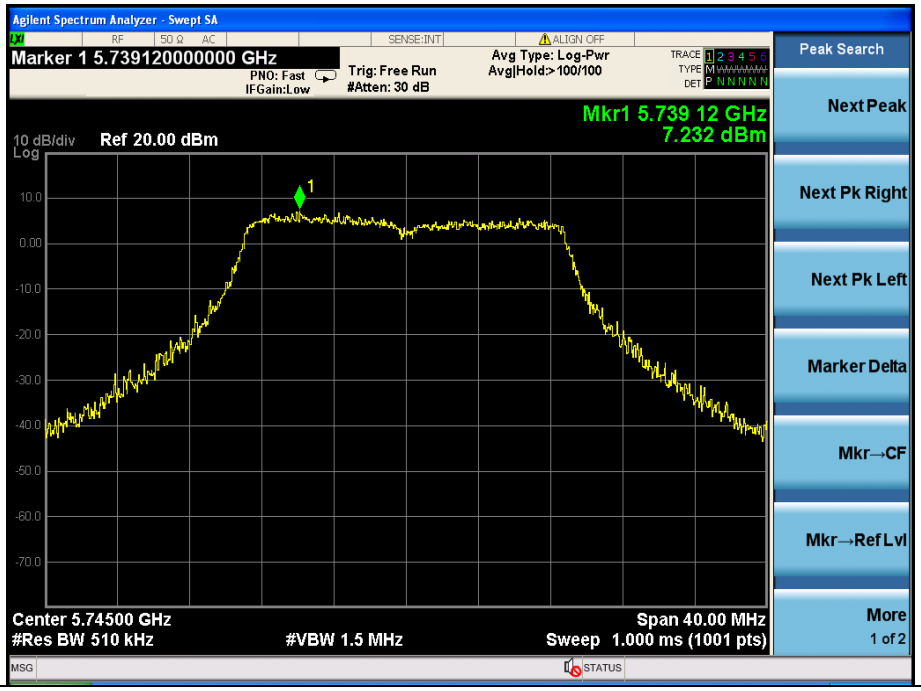


TX CH165

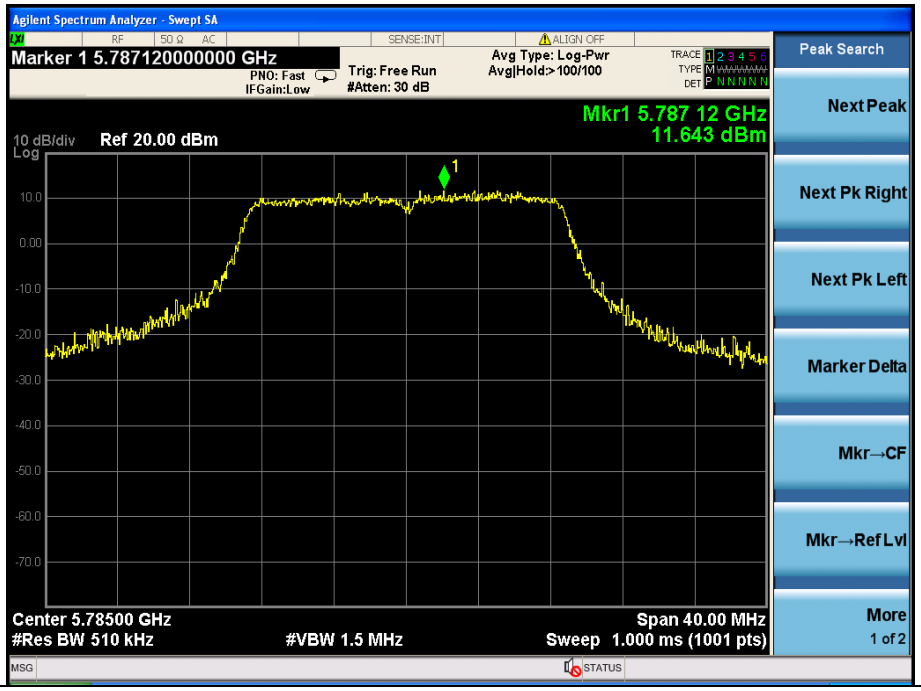


802.11n

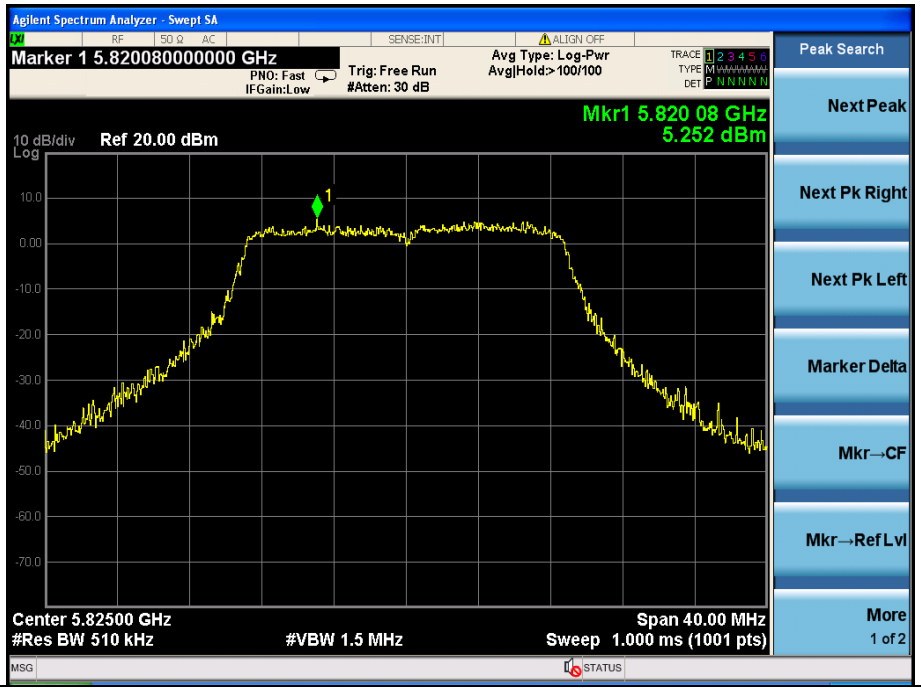
TX CH149



TX CH157



TX CH165



5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES / LIMIT

For purposes of this subpart the emission bandwidth shall be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 26 dB down relative to the maximum level of the modulated carrier

5.1.1 TEST PROCEDURE

1. Set RBW= 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 x RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP

5.1.4 EUT OPERATION CONDITIONS

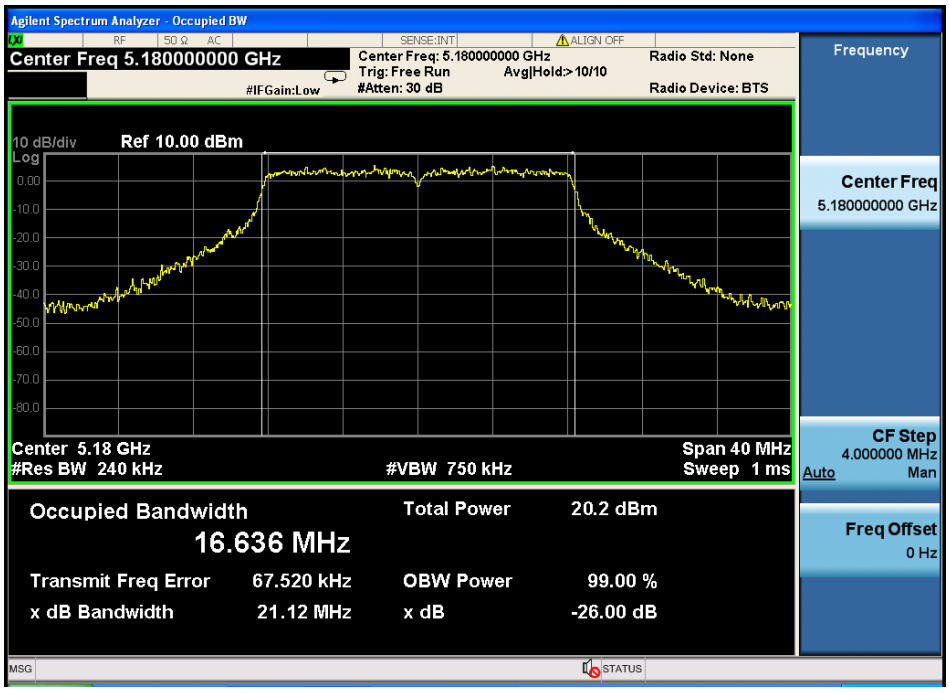
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing. All transmitter chains has been tested, only worst data listed.

5.1.5 TEST RESULTS

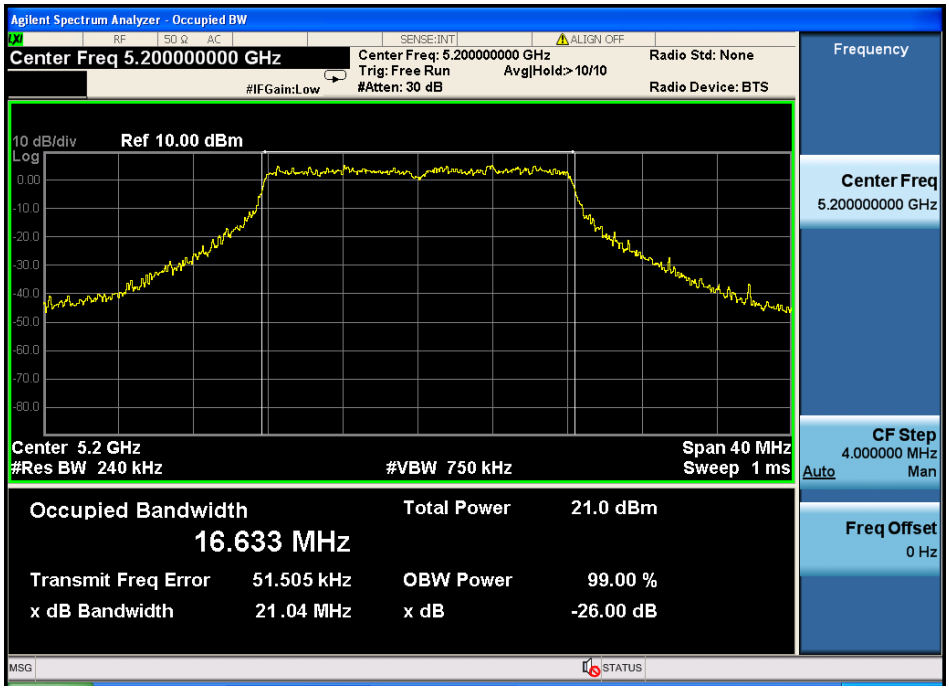
EUT：	Laptop	Model Name ：	TM141WT720C
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 12Vfrom adapter
Test Mode ：	TX a Mode / CH36 CH40, CH48		

Channel	26dB bandwidth (MHz)	Limit (kHz)	Result
Low	21.12	/	Pass
Middle	21.04	/	Pass
High	22.87	/	Pass

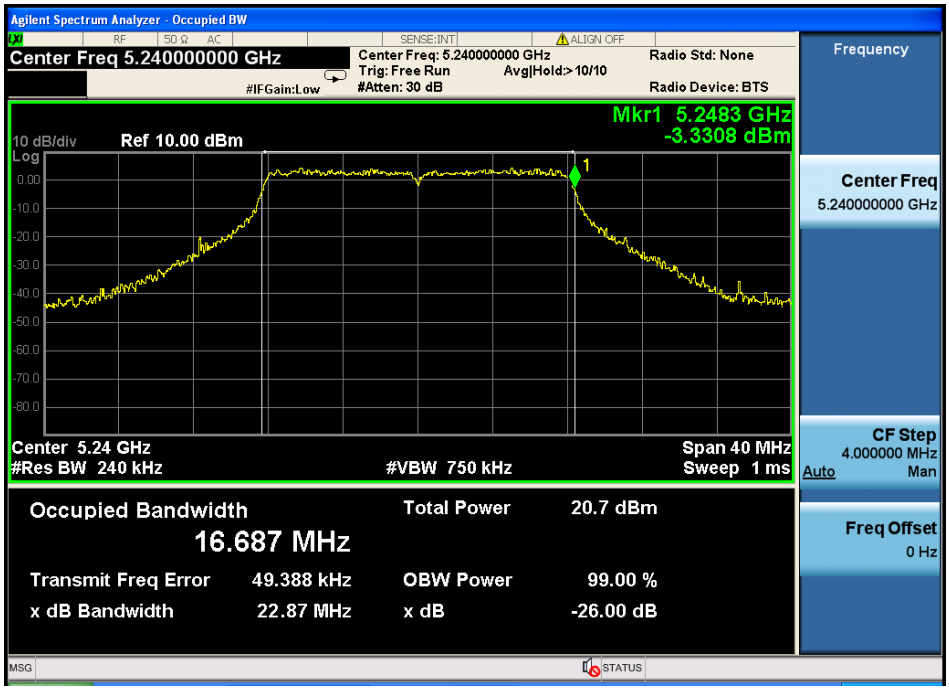
TX CH 36



TX CH 40



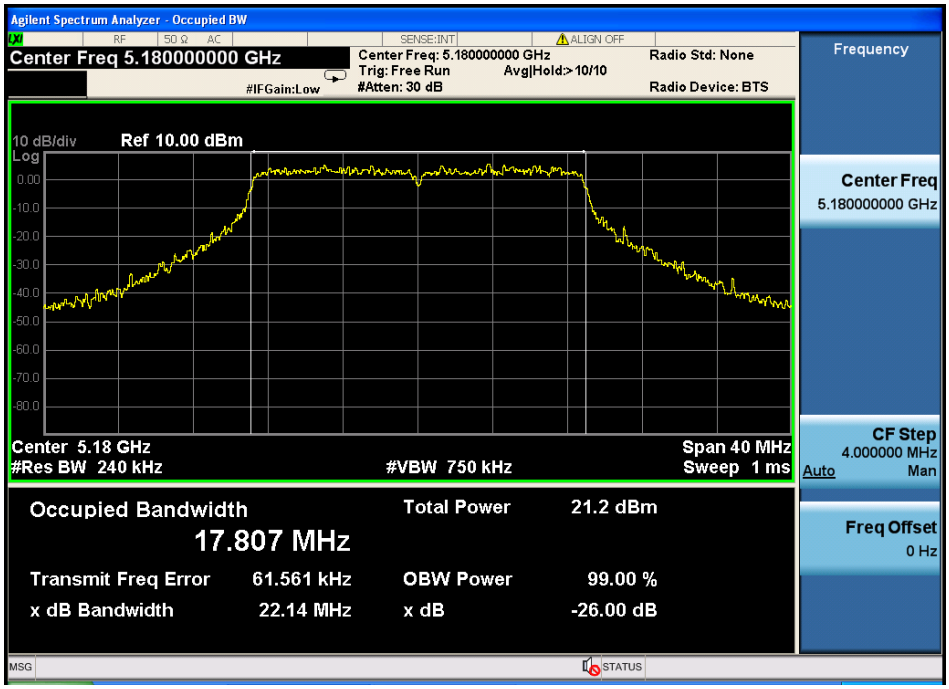
TX CH 48



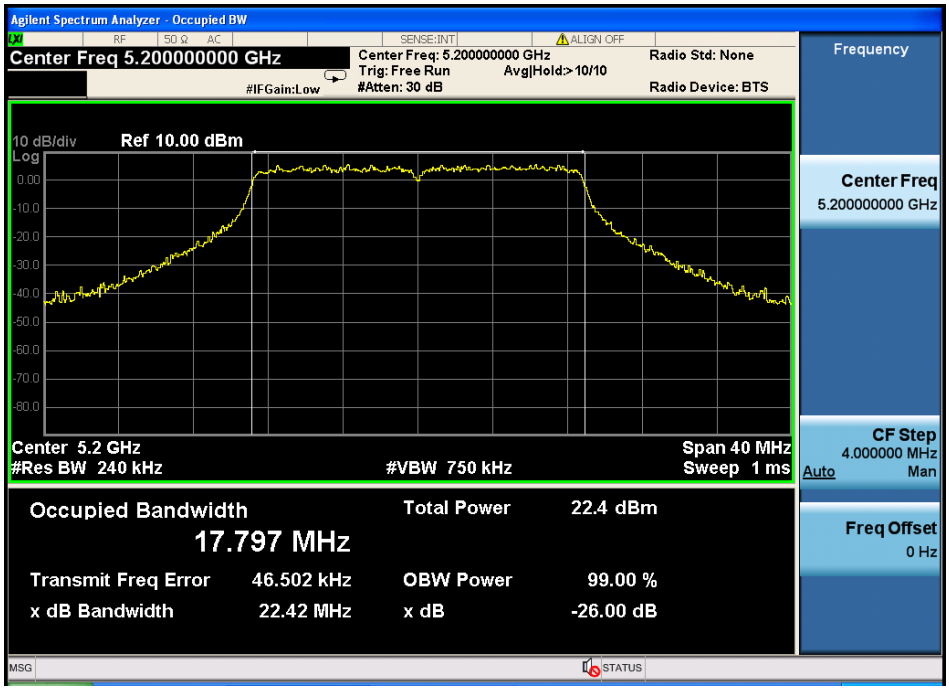
EUT：	Laptop	Model Name ：	TM141WT720C
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 12Vfrom adapter
Test Mode ：	TX n Mode / CH36 CH40, CH48		

Channel	26dB bandwidth (MHz)	Limit (kHz)	Result
Low	22.14	/	Pass
Middle	22.42	/	Pass
High	22.72	/	Pass

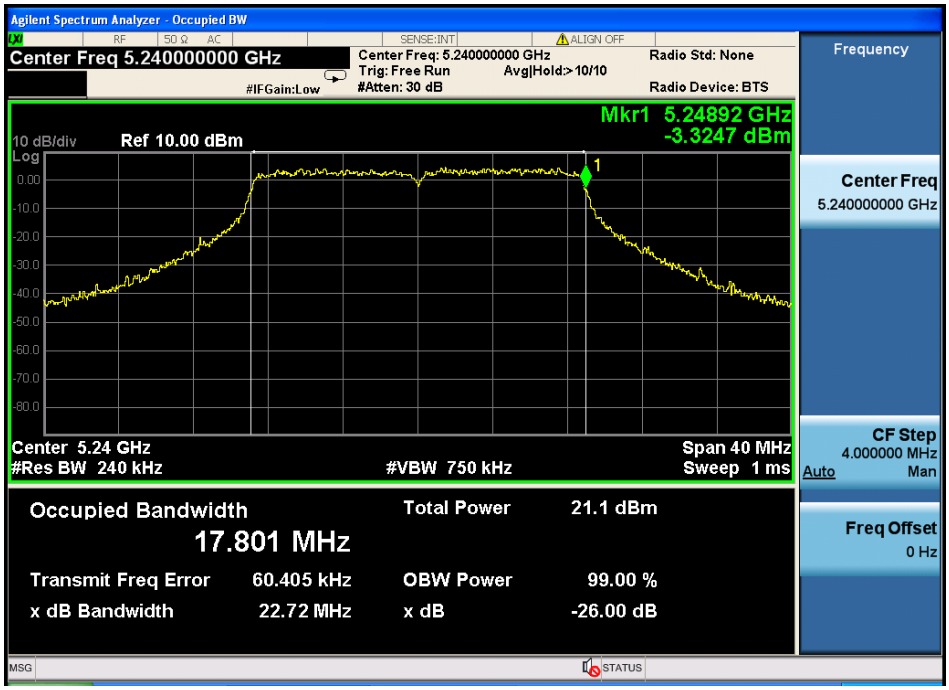
TX CH 36



TX CH 40



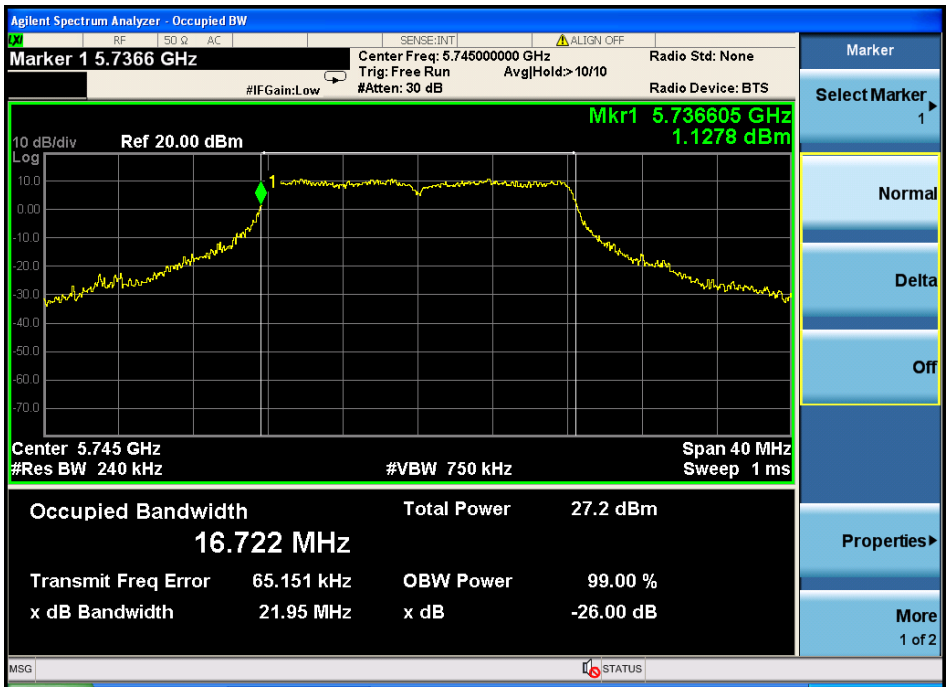
TX CH 48

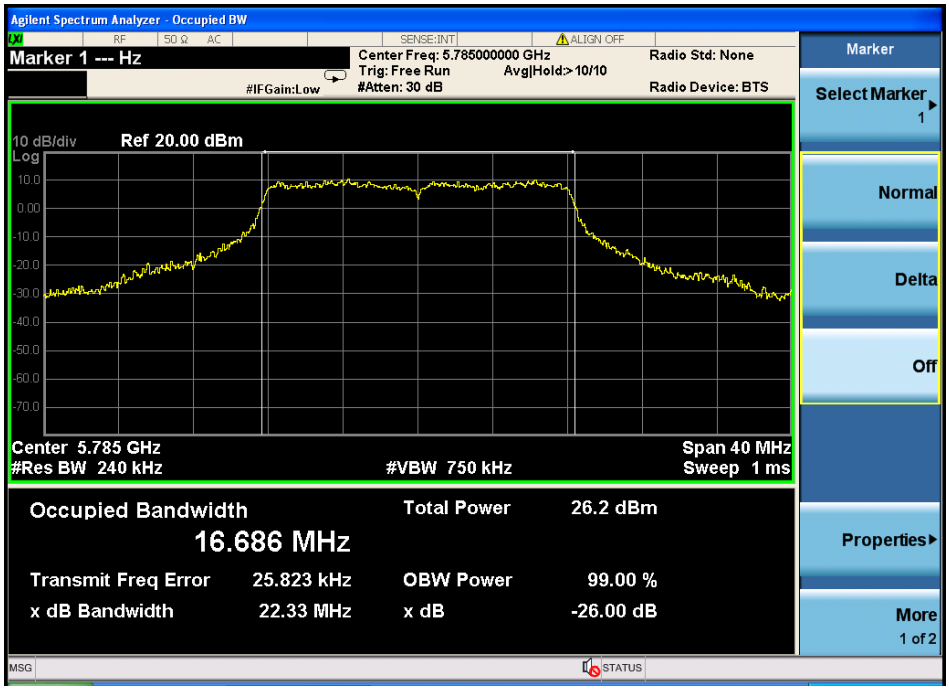


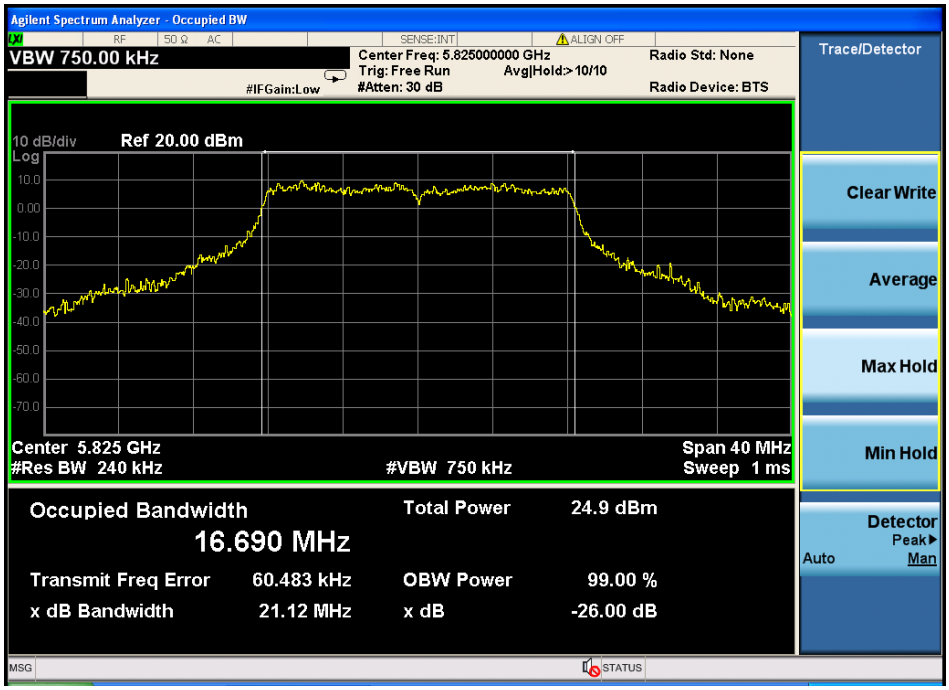
EUT：	Laptop	Model Name ：	TM141WT720C
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 12Vfrom adapter
Test Mode ：	TX a Mode / CH149, CH157, CH165		

Channel	26dB bandwidth (MHz)	Limit (kHz)	Result
Low	21.95	/	Pass
Middle	22.93	/	Pass
High	21.12	/	Pass

TX CH 149



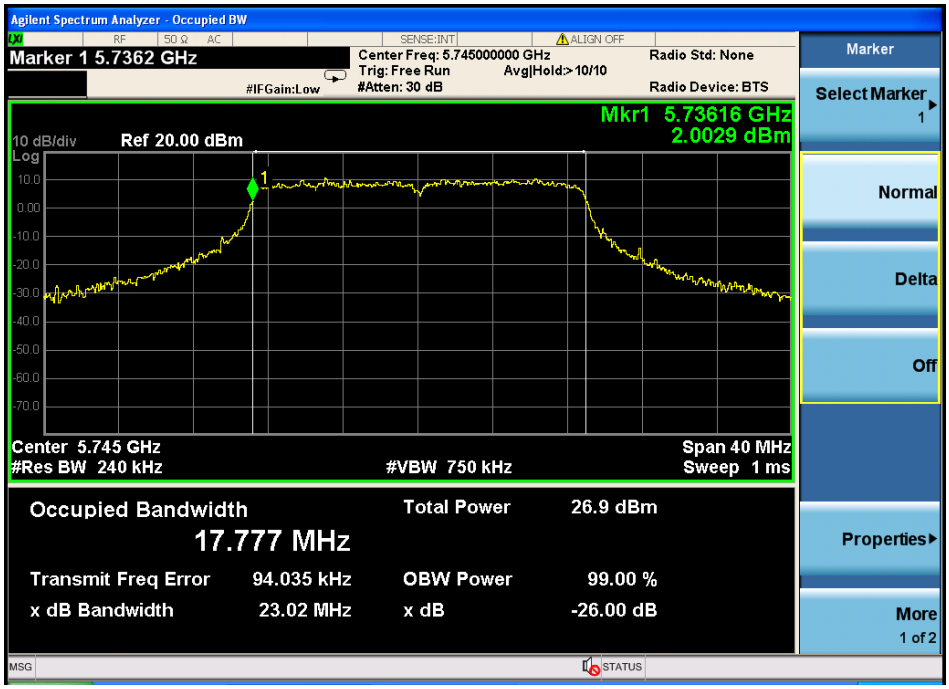
TX CH 157


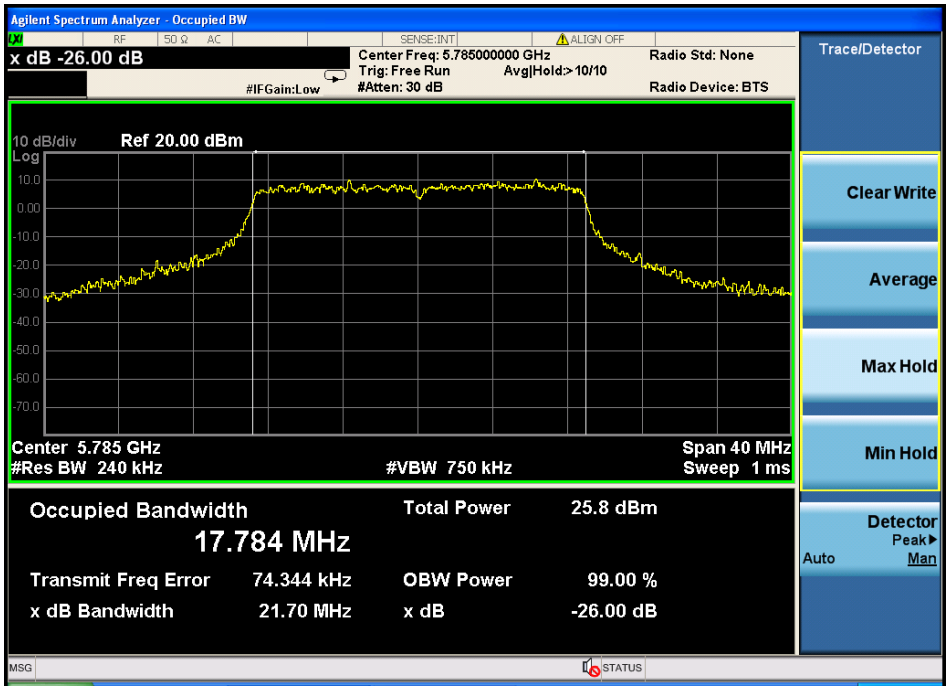
TX CH165


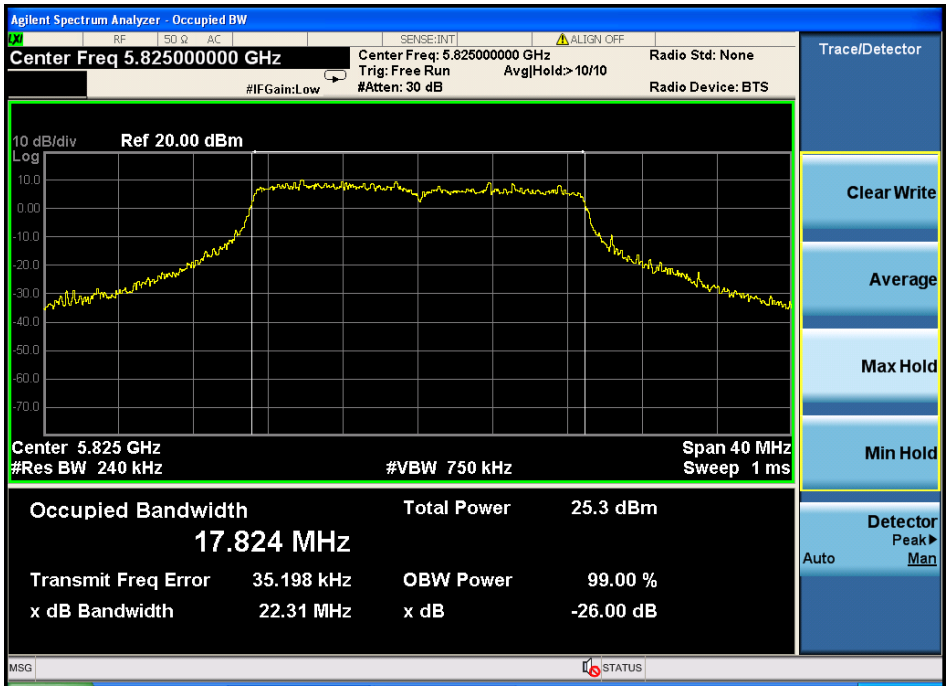
EUT：	Laptop	Model Name ：	TM141WT720C
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 12Vfrom adapter
Test Mode ：	TX n Mode / CH149, CH157, CH165		

Channel	26dB bandwidth (MHz)	Limit (kHz)	Result
Low	23.02	/	Pass
Middle	21.70	/	Pass
High	22.31	/	Pass

TX CH 149



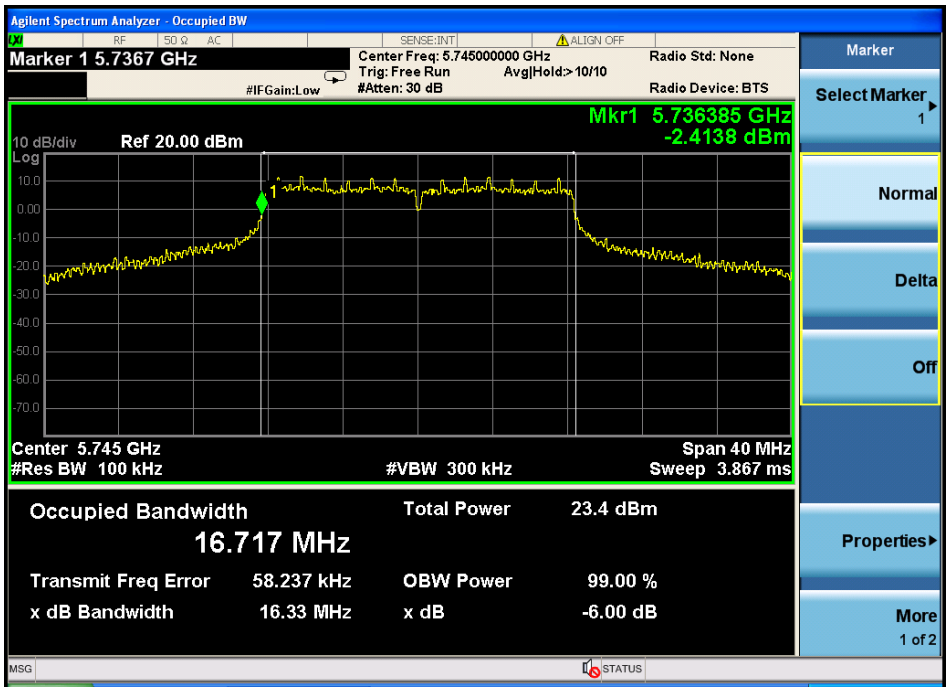
TX CH 157


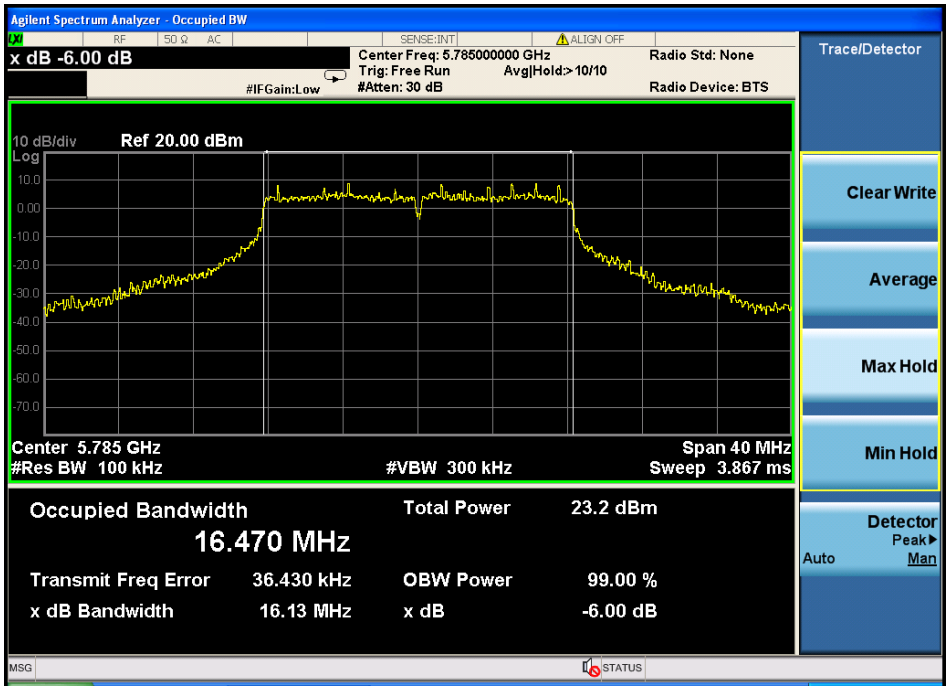
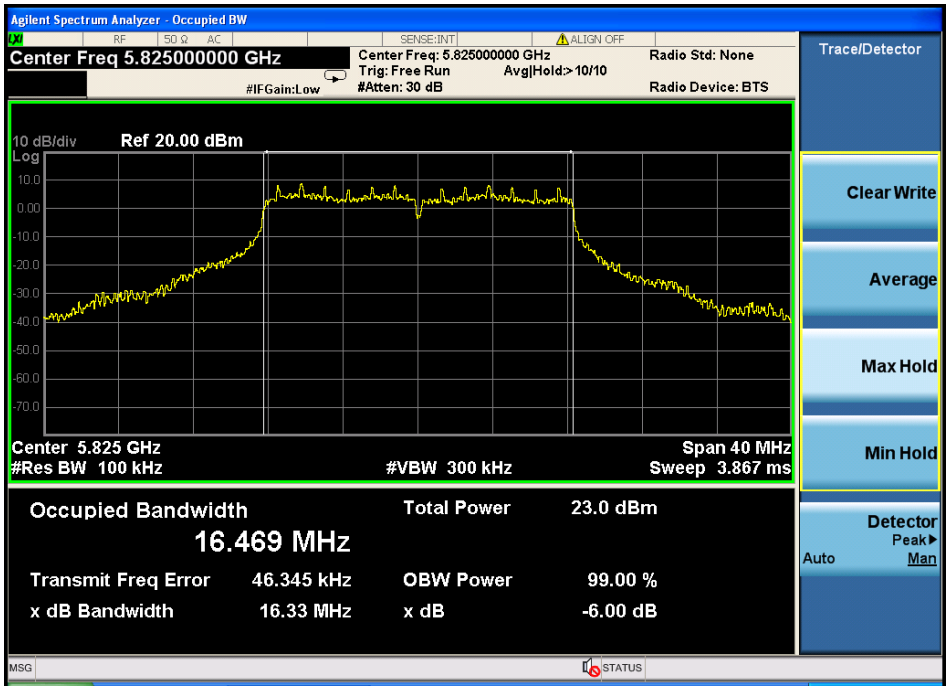
TX CH165


EUT：	Laptop	Model Name ：	TM141WT720C
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 12Vfrom adapter
Test Mode ：	TX a Mode / CH149, CH157, CH165		

Channel	6dB bandwidth (MHz)	Limit (kHz)	Result
Low	16.63	/	Pass
Middle	16.13	/	Pass
High	16.33	/	Pass

TX CH 149

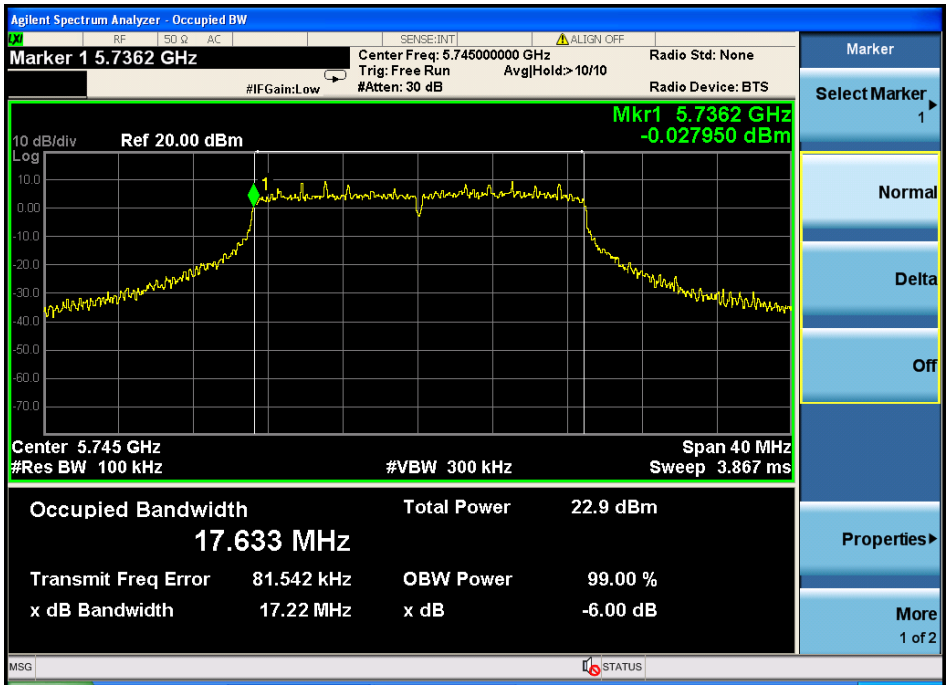


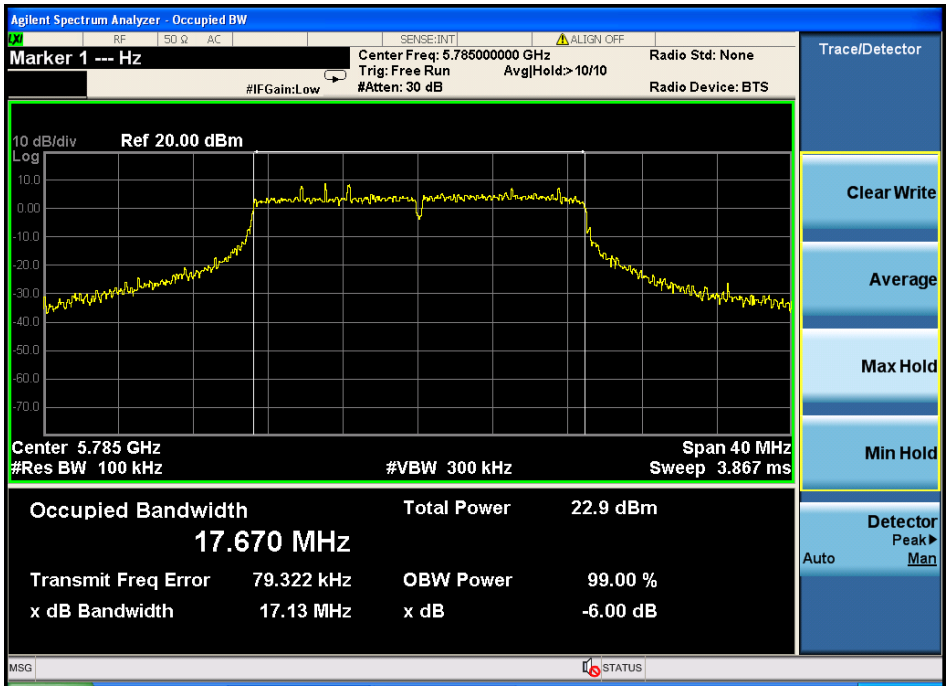
TX CH 157

TX CH165


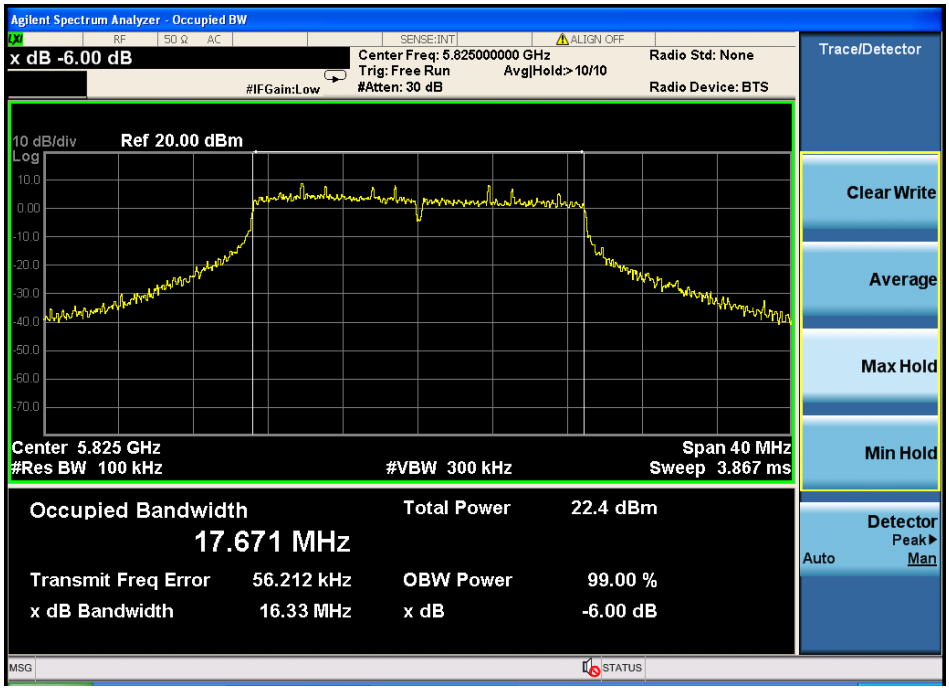
EUT：	Laptop	Model Name ：	TM141WT720C
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 12Vfrom adapter
Test Mode ：	TX n Mode / CH149, CH157, CH165		

Channel	6dB bandwidth (MHz)	Limit (kHz)	Result
Low	17.22	/	Pass
Middle	17.13	/	Pass
High	16.33	/	Pass

TX CH 149



TX CH 157


TX CH165


6. PEAK OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.
For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

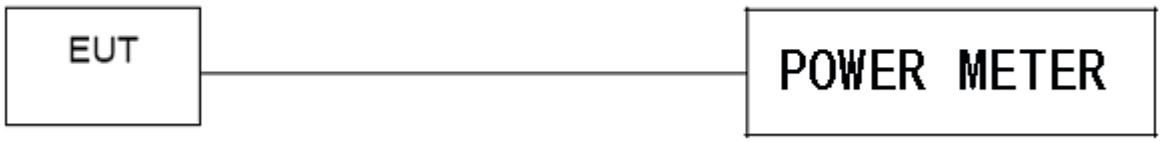
6.1.1 TEST PROCEDURE

a. The EUT was directly connected to the Power meter

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

6.1.5 TEST RESULTS

EUT：	Laptop	Model Name ：	TM141WT720C
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 12Vfrom adapter

TX 802.11a Mode ant1					
Test Channe	Frequency	Maximum Conducted Output Power(PK)			LIMIT
	(MHz)	(dBm)			dBm
CH36	5180	19.45			30
CH40	5200	19.38			30
CH48	5240	19.19			30
TX 802.11a Mode ant2					
CH36	5180	19.42			30
CH40	5200	19.28			30
CH48	5240	19.22			30
TX 802.11n Mode					
		Ant Port	Power	Total Power	
CH36	5180	1	15.42	18.39	30
		2	15.34		
CH40	5200	1	15.27	18.31	30
		2	15.33		
CH48	5240	1	15.10	18.13	30
		2	15.14		

\\\\

TX 802.11a Mode ant1					
Test Channe	Frequency	Maximum Conducted Output Power(PK)			LIMIT
	(MHz)	(dBm)			dBm
CH149	5745	15.42			30
CH157	5785	22.34			30
CH165	5825	15.58			30
TX 802.11a Mode ant2					
CH149	5745	15.31			30
CH157	5785	22.37			30
CH165	5825	15.42			30
TX 802.11n Mode					
		Ant Port	Power	Total Power	
CH149	5745	1	12.32	15.31	30
		2	12.27		
CH157	5785	1	17.02	20.05	30
		2	17.05		
CH165	5825	1	13.01	15.99	30
		2	12.94		

7. FREQUENCY STABILITY

7.1 APPLIED PROCEDURES / LIMIT

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

7.1.1 TEST PROCEDURE

a. The EUT was directly connected to the Spectrum Analyzer

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP

7.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing. All transmitter chains has been tested, only worst data listed.

7.1.5 TEST RESULTS

EUT：	Laptop	Model Name ：	TM141WT720C
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 12Vfrom adapter

Mode	Voltage (V)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
5.2G Band	132 V	5179.973	27	5239.976	24
	120 V	5179.973	27	5239.976	24
	108 V	5179.973	27	5239.976	24

Mode	Temperature (℃)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
5.2G Band	-30	5179.937	63	5239.946	44
	-20	5179.955	45	5239.955	45
	-10	5179.963	37	5239.951	49
	0	5179.955	45	5239.964	36
	10	5179.973	27	5239.968	32
	20	5179.971	29	5239.962	38
	30	5179.965	35	5239.973	27
	40	5179.972	28	5239.970	30
	50	5179.983	17	5239.971	29

Mode	Voltage (V)	FHL (5745MHz)	Deviation (KHz)	FHH (5825MHz)	Deviation (KHz)
5.8G Band	132 V	5744.935	25	5824.970	30
	120 V	5744.935	25	5824.970	30
	108 V	5744.935	25	5824.970	30

Mode	Temperature (℃)	FHL (5745MHz)	Deviation (KHz)	FHH (5825MHz)	Deviation (KHz)
5.8G Band	-30	5744.925	75	5824.939	61
	-20	5744.931	69	5824.928	72
	-10	5744.934	66	5824.951	49
	0	5744.947	53	5824.925	75
	10	5744.951	49	5824.953	47
	20	5744.953	47	5824.979	21
	30	5744.956	44	5824.965	35
	40	5744.968	32	5824.957	43
	50	5744.979	21	5824.983	17

8. ANTENNA REQUIREMENT

8.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: 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.

8.2 EUT ANTENNA

The EUT antenna is integrated antenna,0dbi. It comply with the standard requirement. In case of replacement of broken antenna the same antenna type must be used.

----END OF REPORT----