TEST REPORT

Reference No.	:	WTS15S0831904-2E
FCC ID.....	:	2AFOYLBA-048-CH
Applicant	:	Le Shi Zhi Xin Electronic Technology（Tian jin） Limited
Address	:	201-427 2F B1 District, Anime building,No.126 Anime Middle Road, Eco-city Tianjin, China
Manufacturer	:	Panodic Electric(ShenZhen) Limited
Address	:	C/D Block, Zhengchangda ind.Park, Jian'an Road, Tangwei, FuYong, Baoan Dist., ShenZhen, China
Product Name	:	Letv Box
Model No.	:	LBA-048-CH
Brand	:	Letv
Standards.....	:	FCC CFR47 Part 15 C Section 15.407:2014
Date of Receipt sample.....	:	Jul. 22, 2015
Date of Test.....	:	Jul. 22, 2015 – Aug. 12, 2015
Date of Issue	:	Aug. 17, 2015
Test Result	:	**Pass**

Remarks:
The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company.
The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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2 Test Summary

Test Items	Test Requirement	Result
Conducted Emissions	15.207(a)	PASS
Radiated Emissions	15.407(a) 15.205(a) 15.209(a)	PASS
Duty Cycle	KDB 789033	--
6dB Bandwidth	15.407(a)	PASS
26 dB Emission Bandwidth & 99% Occupied Bandwidth	15.407(a)	PASS
Maximum Conducted Output Power	15.407(a)	PASS
Power Spectral Density	15.407(a)	PASS
Restricted bands around fundamental frequency	15.407(a)	PASS
Antenna Requirement	15.203	PASS
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	1.1307(b)(1)	PASS

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4 General Information

4.1 General Description of E.U.T.

Product Name:	Letv Box
Model No.:	LBA-048-CH
Model Description:	N/A
Operation Frequency:	802.11b/g/n(HT20): 2412MHz ~ 2462MHz, 802.11a/ n(HT20/40): 5150MHz to 5250MHz 802.11a/ n(HT20/40): 5725MHz to 5850MHz
The Lowest Oscillator:	32.768kHz
Antenna Gain:	For 2.4G :2.0dBi For 5G: 2.0dBi
Type of modulation:	802.11b (CCK/QPSK/BPSK) 802.11g (BPSK/QPSK/16QAM/64QAM) 802.11n (BPSK/QPSK/16QAM/64QAM) 802.11a: OFDM(BPSK/QPSK/16QAM/64QAM) 802.11n : OFDM(BPSK/QPSK/16QAM/64QAM)
Number of transmitter chains	2*2 (MIMO)

4.2 Details of E.U.T.

Technical Data:	DC 12V, 3.0A
Adapter	AC100-240V 50-60Hz 1.5A

4.3 Channel List

Band I (5.15-5.25GHz)		Band IV (5.725-5.85GHz)	
channel	Frequency(MHz)	channel	Frequency(MHz)
36	5180	149	5745
38	5190	151	5755
40	5200	153	5765
42	5210	155	5775
44	5220	157	5785
46	5230	159	5795
48	5240	161	5805
		165	5825

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

For 802.11a/n(HT20):

channel	Frequency(MHz)	channel	Frequency(MHz)
36	5180	149	5745
40	5200	157	5785
48	5240	165	5825

For 802.11 n(HT40):

channel	Frequency(MHz)	channel	Frequency(MHz)
38	5190	151	5755
46	5230	159	5795

4.4 Test Facility

The test facility has a test site registered with the following organizations:

- **IC – Registration No.: 7760A-1**

  Waltek Services(Shenzhen) Co., Ltd. Has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files. Registration number 7760A-1,July 12, 2012.

- **FCC Test Site 1 – Registration No.: 880581**

  Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory `has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 880581, April 29, 2014.

- **FCC Test Site 2 – Registration No.: 328995**

  Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory `has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 328995, December 3, 2014.

5 Equipment Used during Test

5.1 Equipments List

Conducted Emissions Test Site 1						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Last Calibration Date**	**Calibration Due Date**
1.	EMI Test Receiver	R&S	ESCI	100947	Sep.15,2014	Sep.14,2015
2.	LISN	R&S	ENV216	101215	Sep.15,2014	Sep.14,2015
3.	Cable	Top	TYPE16(3.5M)	-	Sep.15,2014	Sep.14,2015
Conducted Emissions Test Site 2						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Last Calibration Date**	**Calibration Due Date**
1.	EMI Test Receiver	R&S	ESCI	101155	Sep.15,2014	Sep.14,2015
2.	LISN	SCHWARZBECK	NSLK 8128	8128-289	Sep.15,2014	Sep.14,2015
3.	Limiter	York	MTS-IMP-136	261115-001-0024	Sep.15,2014	Sep.14,2015
4.	Cable	LARGE	RF300	-	Sep.15,2014	Sep.14,2015
3m Semi-anechoic Chamber for Radiation Emissions Test site 1						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Last Calibration Date**	**Calibration Due Date**
1	EMC Analyzer	Agilent	E7405A	MY45114943	Sep.15,2014	Sep.14,2015
2	Active Loop Antenna	Beijing Dazhi	ZN30900A	-	Sep.15,2014	Sep.14,2015
3	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	336	Apr.19,2015	Apr.18,2016
4	Coaxial Cable (below 1GHz)	Top	TYPE16(13M)	-	Sep.15,2014	Sep.14,2015
5	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	Apr.19,2015	Apr.18,2016
6	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9170	335	Apr.19,2015	Apr.18,2016
7	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	Mar.17,2015	Mar.16,2016
8	Coaxial Cable (above 1GHz)	Top	1GHz-25GHz	EW02014-7	Apr.10,2015	Apr.09,2016
3m Semi-anechoic Chamber for Radiation Emissions Test site 2						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No**	**Last Calibration Date**	**Calibration Due Date**
1	Test Receiver	R&S	ESCI	101296	Sep.15,2014	Sep.14,2015
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	Sep.15,2014	Sep.14,2015
3	Amplifier	Compliance pirection systems inc	PAP-0203	22024	Sep.15,2014	Sep.14,2015
4	Cable	HUBER+SUHNER	CBL2	525178	Sep.15,2014	Sep.14,2015
RF Conducted Testing						

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1.	EMC Analyzer (9k~26.5GHz)	Agilent	E7405A	MY45114943	Sep.15,2014	Sep.14,2015
2.	Spectrum Analyzer (9k-6GHz)	R&S	FSL6	100959	Sep.15,2014	Sep.14,2015
3.	Signal Analyzer (9k~26.5GHz)	Agilent	N9010A	MY50520207	Sep.15,2014	Sep.14,2015

5.2 Description of Support Units

Equipment	Manufacturer	Model No.	Series No.
/	/	/	/

5.3 Measurement Uncertainty

Parameter	Uncertainty
Radio Frequency	± 1 x 10^{-6}
RF Power	± 1.0 dB
RF Power Density	± 2.2 dB
Radiated Spurious Emissions test	± 5.03 dB (30M~1000MHz)
	± 5.47 dB (1000M~25000MHz)
Conducted Spurious Emissions test	± 3.64 dB (AC mains 150KHz~30MHz)

5.4 Test Equipment Calibration

All the test equipments used are valid and calibrated by CEPREI Certification Body that address is No.110 Dongguan Zhuang RD. Guangzhou, P.R.China.

6 Conducted Emission

Test Requirement:	FCC CFR 47 Part 15 Section 15.207
Test Method:	ANSI C63.4:2003
Test Result:	PASS
Frequency Range:	150kHz to 30MHz
Class/Severity:	Class B
Limit:	66-56 dBμV between 0.15MHz & 0.5MHz
	56 dBμV between 0.5MHz & 5MHz
	60 dBμV between 5MHz & 30MHz
Detector:	Peak for pre-scan (9kHz Resolution Bandwidth)

6.1 E.U.T. Operation

Operating Environment **:**

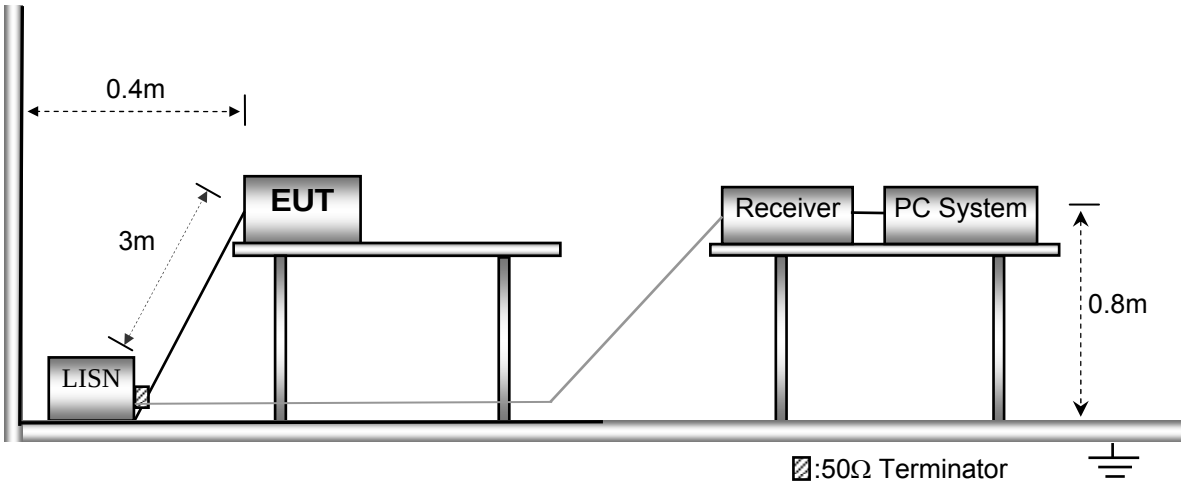
Temperature:	21.5 °C
Humidity:	51.9 % RH
Atmospheric Pressure:	101.2kPa

EUT Operation **:**

The test was performed in transmitting mode, the test data were shown in the report.

6.2 EUT Setup

The conducted emission tests were performed using the setup accordance with the ANSI C63.4.



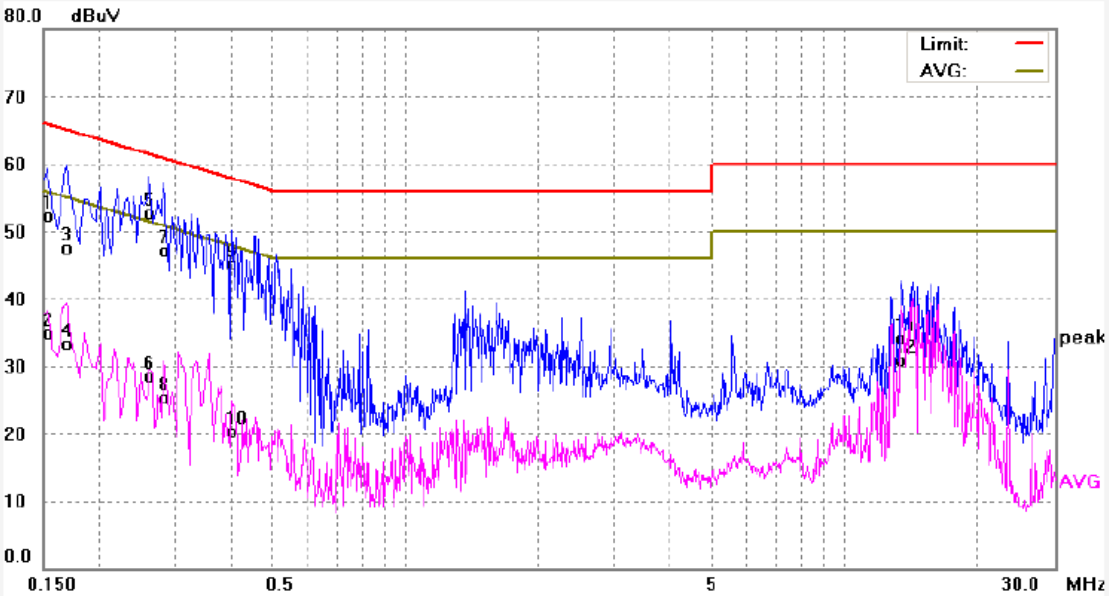
6.3 Measurement Description

The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

6.4 Conducted Emission Test Result

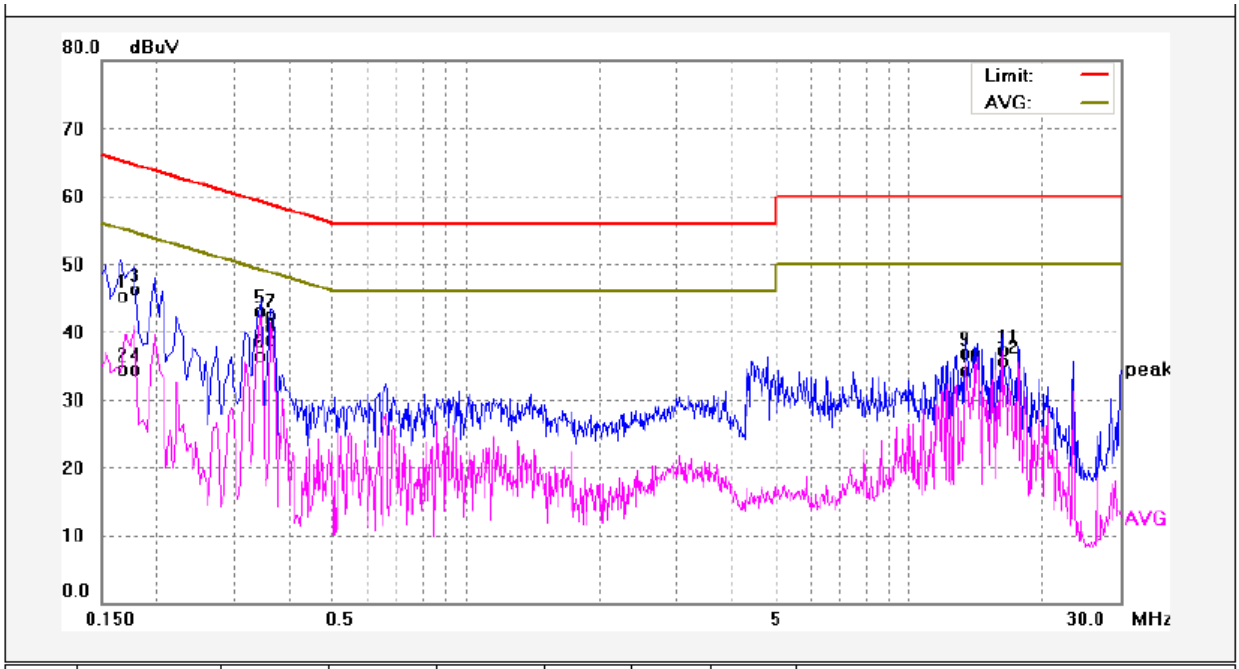
An initial pre-scan was performed on the live and neutral lines.

Live line:



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1539	42.08	10.13	52.21	65.78	-13.57	QP	
2	0.1539	24.73	10.13	34.86	55.78	-20.92	AVG	
3	0.1700	37.40	10.14	47.54	64.96	-17.42	QP	
4	0.1700	23.22	10.14	33.36	54.96	-21.60	AVG	
5	0.2620	42.49	10.16	52.65	61.36	-8.71	QP	
6	0.2620	18.35	10.16	28.51	51.36	-22.85	AVG	
7	0.2819	36.99	10.16	47.15	60.76	-13.61	QP	
8	0.2819	15.10	10.16	25.26	50.76	-25.50	AVG	
9	0.4020	34.87	10.18	45.05	57.81	-12.76	QP	
10	0.4020	10.20	10.18	20.38	47.81	-27.43	AVG	
11	13.3580	23.50	10.64	34.14	60.00	-25.86	QP	
12	13.3580	20.20	10.64	30.84	50.00	-19.16	AVG	

Neutral line:



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1660	35.21	10.14	45.35	65.15	-19.80	QP	
2	0.1660	24.29	10.14	34.43	55.15	-20.72	AVG	
3	0.1780	36.07	10.14	46.21	64.57	-18.36	QP	
4	0.1780	24.31	10.14	34.45	54.57	-20.12	AVG	
5	0.3460	32.87	10.17	43.04	59.06	-16.02	QP	
6	0.3460	26.27	10.17	36.44	49.06	-12.62	AVG	
7	0.3620	32.33	10.17	42.50	58.68	-16.18	QP	
8	0.3620	28.80	10.17	38.97	48.68	-9.71	AVG	
9	13.3580	26.17	10.64	36.81	60.00	-23.19	QP	
10	13.3580	23.76	10.64	34.40	50.00	-15.60	AVG	
11	16.2300	26.65	10.70	37.35	60.00	-22.65	QP	
12	16.2300	24.98	10.70	35.68	50.00	-14.32	AVG	

7 Radiated Emissions

Test Requirement: FCC CFR47 Part 15 Section 15.209 & 15.407

Test Method: ANSI C63.4:2003

Test Result: PASS

Measurement Distance: 3m

Limit:

Frequency (MHz)	Field Strength		Field Strength Limit at 3m Measurement Dist	
	uV/m	Distance (m)	uV/m	dBuV/m
0.009 ~ 0.490	2400/F(kHz)	300	10000 * 2400/F(kHz)	$20\log^{(2400/F(kHz))} + 80$
0.490 ~ 1.705	24000/F(kHz)	30	100 * 24000/F(kHz)	$20\log^{(24000/F(kHz))} + 40$
1.705 ~ 30	30	30	100 * 30	$20\log^{(30)} + 40$
30 ~ 88	100	3	100	$20\log^{(100)}$
88 ~ 216	150	3	150	$20\log^{(150)}$
216 ~ 960	200	3	200	$20\log^{(200)}$
Above 960	500	3	500	$20\log^{(500)}$

7.1 EUT Operation

Operating Environment **:**

Temperature: 23.5 °C

Humidity: 52.1 % RH

Atmospheric Pressure: 101.2kPa

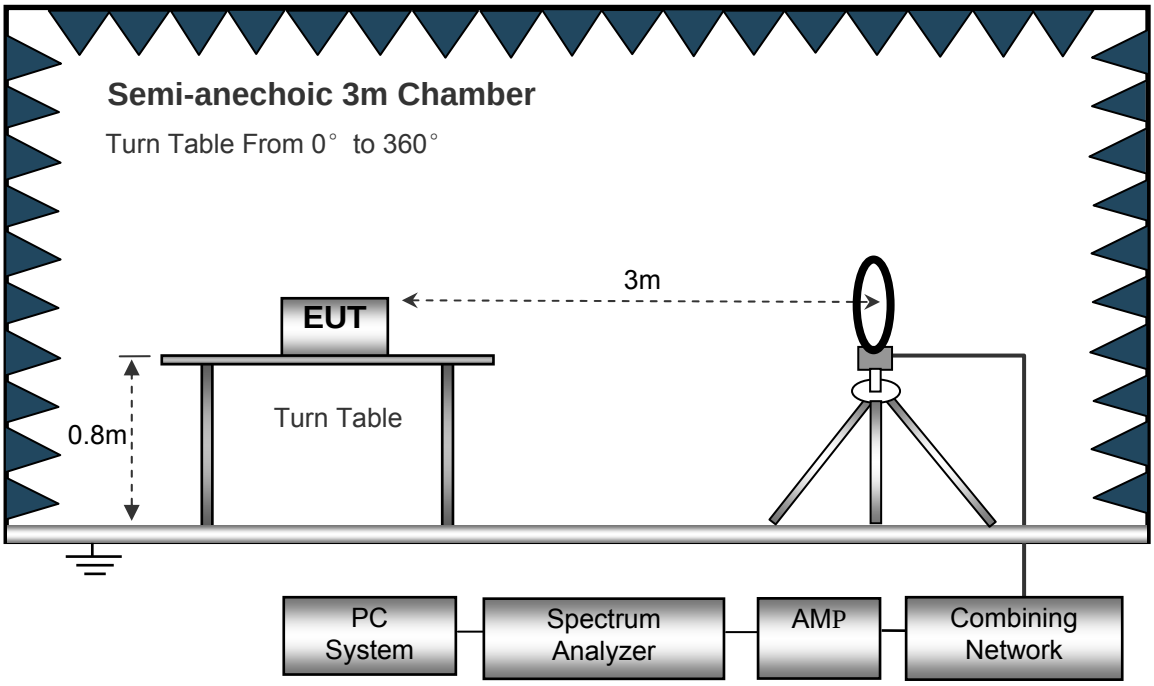
EUT Operation **:**

The test was performed in transmitting mode, the test data were shown in the report.

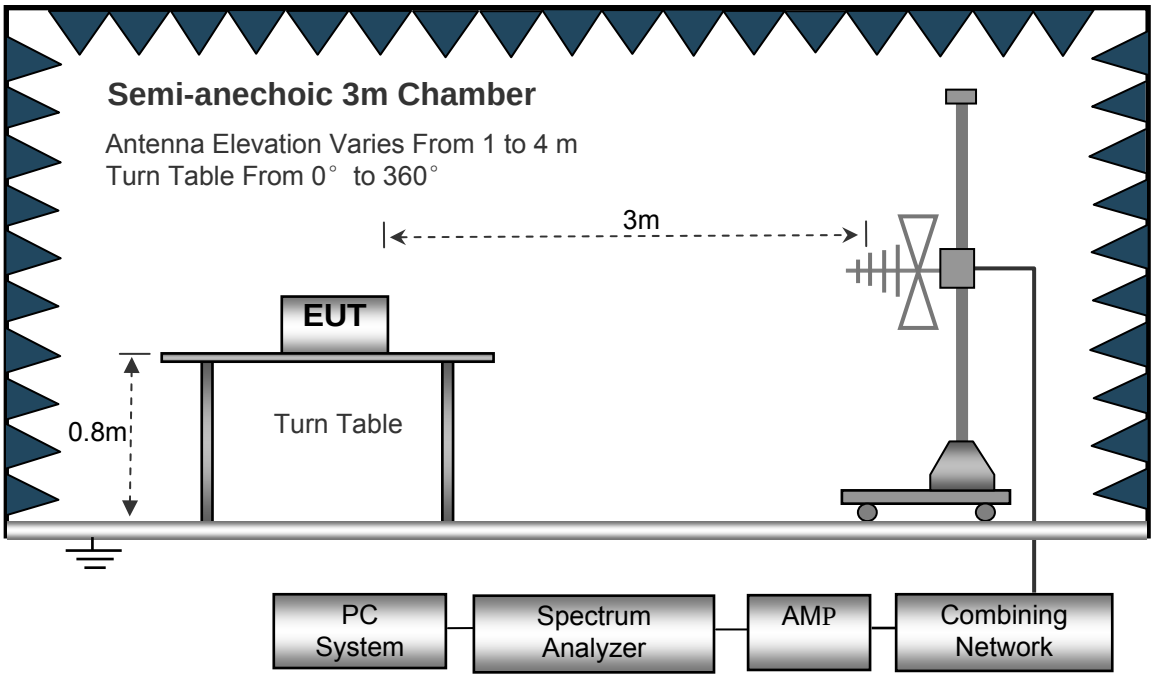
7.2 Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4.

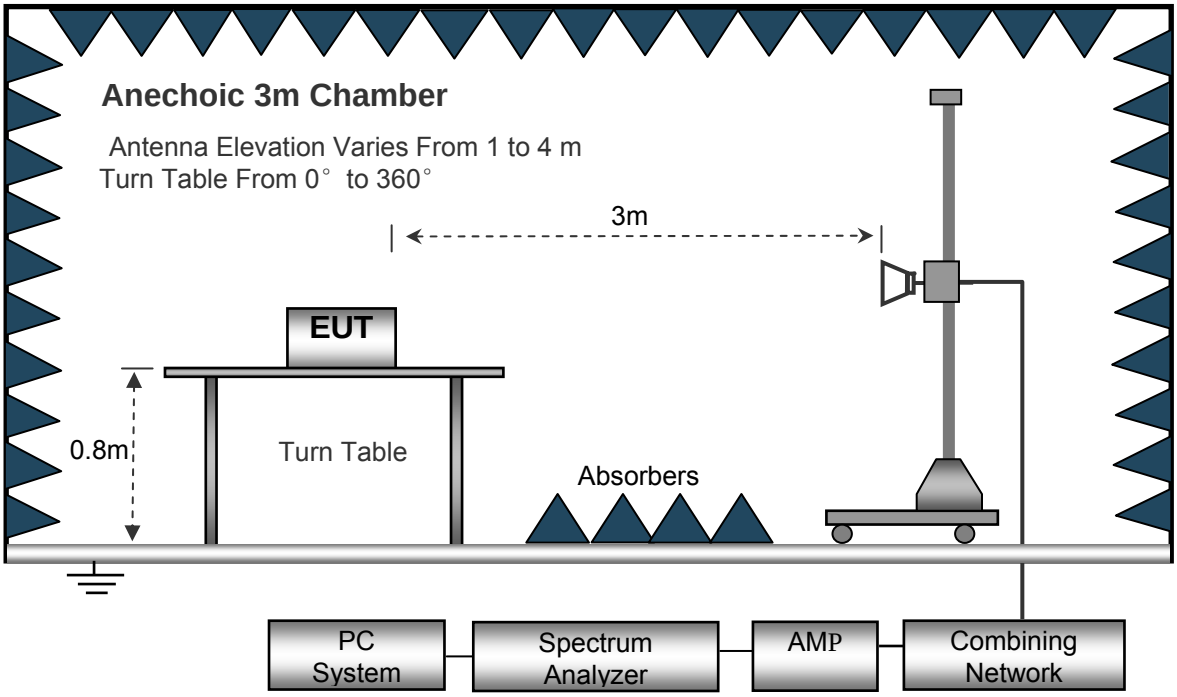
The test setup for emission measurement below 30MHz.



The test setup for emission measurement from 30 MHz to 1 GHz.



The test setup for emission measurement above 1 GHz.



7.3 Spectrum Analyzer Setup

Below 30MHz

Sweep Speed ..... Auto
IF Bandwidth..... 10kHz
Video Bandwidth..... 10kHz
Resolution Bandwidth..... 10kHz

30MHz ~ 1GHz

Sweep Speed ..... Auto
Detector ..... PK
Resolution Bandwidth..... 100kHz
Video Bandwidth..... 300kHz

Above 1GHz

Sweep Speed ..... Auto
Detector ..... PK
Resolution Bandwidth..... 1MHz
Video Bandwidth..... 3MHz
Detector ..... Ave.
Resolution Bandwidth..... 1MHz
Video Bandwidth..... 10Hz

7.4 Test Procedure

1. The EUT is placed on a turntable, which is 0.8m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is moved from 1m to 4m to find out the maximum emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. The radiation measurements are performed in X,Y and Z axis positioning(X denotes lying on the table, Y denotes side stand and Z denotes vertical stand),the worst condition was tested putting the eut in X axis,so the worst data were shown as follow.
8. A 2.4GHz high –pass filter is used druing radiated emissions above 1GHz measurement.

7.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Antenna Factor + Cable Factor - Amplifier Gain

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the maximum limit for Class B. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – Limit

7.6 Summary of Test Results

Test Frequency: Below 30MHz

The measurements were more than 20 dB below the limit and not reported.

Test Frequency : 30MHz ~ 18GHz

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
ANT0 802.11a band I Low Channel 5180MHz									
744.86	44.92	QP	232	1.5	H	-6.32	38.60	46.00	-7.40
744.86	46.75	QP	148	1.2	V	-6.32	40.43	46.00	-5.57
5086.44	49.33	PK	329	1.6	V	0.09	49.42	74.00	-24.58
5086.44	42.15	Ave	329	1.6	V	0.09	42.24	54.00	-11.76
10360.00	45.14	PK	306	1.2	H	4.13	49.27	74.00	-24.73
10360.00	44.83	Ave	306	1.2	H	4.13	48.96	54.00	-5.04
2330.80	45.54	PK	182	1.9	V	-13.19	32.35	74.00	-41.65
2330.80	37.70	Ave	182	1.9	V	-13.19	24.51	54.00	-29.49
2357.00	44.89	PK	131	1.9	H	-13.14	31.75	74.00	-42.25
2357.00	37.92	Ave	131	1.9	H	-13.14	24.78	54.00	-29.22
3373.87	43.67	PK	123	1.6	V	-9.08	34.59	74.00	-39.41
3373.87	37.36	Ave	123	1.6	V	-9.08	28.28	54.00	-25.72

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
ANT0 802.11a band I middle channel 5200MHz									
744.86	44.72	QP	232	1.5	H	-6.32	38.40	46.00	-7.60
744.86	47.01	QP	148	1.2	V	-6.32	40.69	46.00	-5.31
5103.33	48.64	PK	12	1.9	V	-0.62	48.02	74.00	-25.98
5103.33	43.29	Ave	12	1.9	V	-0.62	42.67	54.00	-11.33
10400.00	45.41	PK	231	1.8	H	4.26	49.67	74.00	-24.33
10400.00	44.58	Ave	231	1.8	H	4.26	48.84	54.00	-5.16
2314.98	46.55	PK	12	1.4	V	-13.19	33.36	74.00	-40.64
2314.98	38.76	Ave	12	1.4	V	-13.19	25.57	54.00	-28.43
2372.67	42.18	PK	203	1.9	H	-13.14	29.04	74.00	-44.96
2372.67	36.01	Ave	203	1.9	H	-13.14	22.87	54.00	-31.13
3348.53	43.85	PK	300	1.7	V	-9.08	34.77	74.00	-39.23
3348.53	36.28	Ave	300	1.7	V	-9.08	27.20	54.00	-26.80

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
ANT0 802.11a band I High channel 5240MHz									
744.86	46.06	QP	232	1.5	H	-6.32	39.74	46.00	-6.26
744.86	46.69	QP	148	1.2	V	-6.32	40.37	46.00	-5.63
5096.93	49.88	PK	26	1.6	V	-0.24	49.64	74.00	-24.36
5096.93	43.00	Ave	26	1.6	V	-0.24	42.76	54.00	-11.24
10480.00	46.40	PK	273	1.6	H	4.38	50.78	74.00	-23.22
10480.00	44.96	Ave	273	1.6	H	4.38	49.34	54.00	-4.66
2340.82	45.81	PK	109	1.3	V	-13.19	32.62	74.00	-41.38
2340.82	38.58	Ave	109	1.3	V	-13.19	25.39	54.00	-28.61
2383.49	44.68	PK	237	1.8	H	-13.14	31.54	74.00	-42.46
2383.49	37.21	Ave	237	1.8	H	-13.14	24.07	54.00	-29.93
3367.76	43.12	PK	147	1.4	V	-9.08	34.04	74.00	-39.96
3367.76	37.61	Ave	147	1.4	V	-9.08	28.53	54.00	-25.47

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
ANT0 802.11a band IV low Channel 5745MHz									
744.86	44.90	QP	232	1.5	H	-6.32	38.58	46.00	-7.42
744.86	46.11	QP	148	1.2	V	-6.32	39.79	46.00	-6.21
5085.86	49.33	PK	354	1.9	V	0.09	49.42	74.00	-24.58
5085.86	42.15	Ave	354	1.9	V	0.09	42.24	54.00	-11.76
11490.00	42.17	PK	308	1.4	H	6.02	48.19	74.00	-25.81
11490.00	41.79	Ave	308	1.4	H	6.02	47.81	54.00	-6.19
2329.64	46.90	PK	316	1.4	V	-13.19	33.71	74.00	-40.29
2329.64	37.13	Ave	316	1.4	V	-13.19	23.94	54.00	-30.06
2352.49	44.54	PK	25	1.3	H	-13.14	31.40	74.00	-42.60
2352.49	38.40	Ave	25	1.3	H	-13.14	25.26	54.00	-28.74
3358.65	43.93	PK	35	1.6	V	-9.08	34.85	74.00	-39.15
3358.65	37.73	Ave	35	1.6	V	-9.08	28.65	54.00	-25.35

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
ANT0 802.11a band IV middle channel 5785MHz									
744.86	45.27	QP	232	1.5	H	-6.32	38.95	46.00	-7.05
744.86	46.60	QP	148	1.2	V	-6.32	40.28	46.00	-5.72
5082.80	50.16	PK	32	1.1	V	-0.62	49.54	74.00	-24.46
5082.80	42.60	Ave	32	1.1	V	-0.62	41.98	54.00	-12.02
11570.00	43.62	PK	3	1.3	H	6.11	49.73	74.00	-24.27
11570.00	42.58	Ave	3	1.3	H	6.11	48.69	54.00	-5.31
2333.33	45.13	PK	164	1.9	V	-13.19	31.94	74.00	-42.06
2333.33	39.96	Ave	164	1.9	V	-13.19	26.77	54.00	-27.23
2373.77	42.71	PK	244	1.3	H	-13.14	29.57	74.00	-44.43
2373.77	37.77	Ave	244	1.3	H	-13.14	24.63	54.00	-29.37
3373.57	43.01	PK	211	1.3	V	-9.08	33.93	74.00	-40.07
3373.57	37.62	Ave	211	1.3	V	-9.08	28.54	54.00	-25.46

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
ANT0 802.11a band IV High channel 5825MHz									
744.86	44.61	QP	232	1.5	H	-6.32	38.29	46.00	-7.71
744.86	46.91	QP	148	1.2	V	-6.32	40.59	46.00	-5.41
5089.32	48.72	PK	81	1.5	V	-0.24	48.48	74.00	-25.52
5089.32	42.46	Ave	81	1.5	V	-0.24	42.22	54.00	-11.78
11650.00	40.90	PK	84	1.2	H	6.13	47.03	74.00	-26.97
11650.00	39.67	Ave	84	1.2	H	6.13	45.80	54.00	-8.20
2317.58	45.84	PK	237	1.5	V	-13.19	32.65	74.00	-41.35
2317.58	39.77	Ave	237	1.5	V	-13.19	26.58	54.00	-27.42
2386.13	44.89	PK	325	1.1	H	-13.14	31.75	74.00	-42.25
2386.13	36.30	Ave	325	1.1	H	-13.14	23.16	54.00	-30.84
3355.41	43.25	PK	337	1.5	V	-9.08	34.17	74.00	-39.83
3355.41	36.47	Ave	337	1.5	V	-9.08	27.39	54.00	-26.61

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
ANT1 802.11a band I Low Channel 5180MHz									
744.86	45.02	QP	232	1.5	H	-6.32	38.70	46.00	-7.30
744.86	45.90	QP	148	1.2	V	-6.32	39.58	46.00	-6.42
5086.44	49.33	PK	329	1.6	V	0.09	49.42	74.00	-24.58
5086.44	42.15	Ave	329	1.6	V	0.09	42.24	54.00	-11.76
10360.00	45.14	PK	306	1.2	H	4.13	49.27	74.00	-24.73
10360.00	44.83	Ave	306	1.2	H	4.13	48.96	54.00	-5.04
2330.80	45.54	PK	182	1.9	V	-13.19	32.35	74.00	-41.65
2330.80	37.70	Ave	182	1.9	V	-13.19	24.51	54.00	-29.49
2357.00	44.89	PK	131	1.9	H	-13.14	31.75	74.00	-42.25
2357.00	37.92	Ave	131	1.9	H	-13.14	24.78	54.00	-29.22
3373.87	43.67	PK	123	1.6	V	-9.08	34.59	74.00	-39.41
3373.87	37.36	Ave	123	1.6	V	-9.08	28.28	54.00	-25.72

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
ANT1 802.11a band I middle channel 5200MHz									
744.86	44.47	QP	232	1.5	H	-6.32	38.15	46.00	-7.85
744.86	46.99	QP	148	1.2	V	-6.32	40.67	46.00	-5.33
5103.33	48.64	PK	12	1.9	V	-0.62	48.02	74.00	-25.98
5103.33	43.29	Ave	12	1.9	V	-0.62	42.67	54.00	-11.33
10400.00	45.41	PK	231	1.8	H	4.26	49.67	74.00	-24.33
10400.00	44.58	Ave	231	1.8	H	4.26	48.84	54.00	-5.16
2314.98	46.55	PK	12	1.4	V	-13.19	33.36	74.00	-40.64
2314.98	38.76	Ave	12	1.4	V	-13.19	25.57	54.00	-28.43
2372.67	42.18	PK	203	1.9	H	-13.14	29.04	74.00	-44.96
2372.67	36.01	Ave	203	1.9	H	-13.14	22.87	54.00	-31.13
3348.53	43.85	PK	300	1.7	V	-9.08	34.77	74.00	-39.23
3348.53	36.28	Ave	300	1.7	V	-9.08	27.20	54.00	-26.80

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
ANT1 802.11a band I High channel 5240MHz									
744.86	45.17	QP	232	1.5	H	-6.32	38.85	46.00	-7.15
744.86	46.65	QP	148	1.2	V	-6.32	40.33	46.00	-5.67
5096.93	49.88	PK	26	1.6	V	-0.24	49.64	74.00	-24.36
5096.93	43.00	Ave	26	1.6	V	-0.24	42.76	54.00	-11.24
10480.00	46.40	PK	273	1.6	H	4.38	50.78	74.00	-23.22
10480.00	44.96	Ave	273	1.6	H	4.38	49.34	54.00	-4.66
2340.82	45.81	PK	109	1.3	V	-13.19	32.62	74.00	-41.38
2340.82	38.58	Ave	109	1.3	V	-13.19	25.39	54.00	-28.61
2383.49	44.68	PK	237	1.8	H	-13.14	31.54	74.00	-42.46
2383.49	37.21	Ave	237	1.8	H	-13.14	24.07	54.00	-29.93
3367.76	43.12	PK	147	1.4	V	-9.08	34.04	74.00	-39.96
3367.76	37.61	Ave	147	1.4	V	-9.08	28.53	54.00	-25.47

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
ANT1 802.11a band IV low Channel 5745MHz									
744.86	45.95	QP	232	1.5	H	-6.32	39.63	46.00	-6.37
744.86	46.45	QP	148	1.2	V	-6.32	40.13	46.00	-5.87
5085.86	49.33	PK	354	1.9	V	0.09	49.42	74.00	-24.58
5085.86	42.15	Ave	354	1.9	V	0.09	42.24	54.00	-11.76
11490.00	42.17	PK	308	1.4	H	6.02	48.19	74.00	-25.81
11490.00	41.79	Ave	308	1.4	H	6.02	47.81	54.00	-6.19
2329.64	46.90	PK	316	1.4	V	-13.19	33.71	74.00	-40.29
2329.64	37.13	Ave	316	1.4	V	-13.19	23.94	54.00	-30.06
2352.49	44.54	PK	25	1.3	H	-13.14	31.40	74.00	-42.60
2352.49	38.40	Ave	25	1.3	H	-13.14	25.26	54.00	-28.74
3358.65	43.93	PK	35	1.6	V	-9.08	34.85	74.00	-39.15
3358.65	37.73	Ave	35	1.6	V	-9.08	28.65	54.00	-25.35

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
ANT1 802.11a band IV middle channel 5785MHz									
744.86	45.13	QP	232	1.5	H	-6.32	38.81	46.00	-7.19
744.86	46.46	QP	148	1.2	V	-6.32	40.14	46.00	-5.86
5082.80	50.16	PK	32	1.1	V	-0.62	49.54	74.00	-24.46
5082.80	42.60	Ave	32	1.1	V	-0.62	41.98	54.00	-12.02
11570.00	43.62	PK	3	1.3	H	6.11	49.73	74.00	-24.27
11570.00	42.58	Ave	3	1.3	H	6.11	48.69	54.00	-5.31
2333.33	45.13	PK	164	1.9	V	-13.19	31.94	74.00	-42.06
2333.33	39.96	Ave	164	1.9	V	-13.19	26.77	54.00	-27.23
2373.77	42.71	PK	244	1.3	H	-13.14	29.57	74.00	-44.43
2373.77	37.77	Ave	244	1.3	H	-13.14	24.63	54.00	-29.37
3373.57	43.01	PK	211	1.3	V	-9.08	33.93	74.00	-40.07
3373.57	37.62	Ave	211	1.3	V	-9.08	28.54	54.00	-25.46

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
ANT1 802.11a band IV High channel 5825MHz									
744.86	44.80	QP	232	1.5	H	-6.32	38.48	46.00	-7.52
744.86	46.50	QP	148	1.2	V	-6.32	40.18	46.00	-5.82
5089.32	48.72	PK	81	1.5	V	-0.24	48.48	74.00	-25.52
5089.32	42.46	Ave	81	1.5	V	-0.24	42.22	54.00	-11.78
11650.00	40.90	PK	84	1.2	H	6.13	47.03	74.00	-26.97
11650.00	39.67	Ave	84	1.2	H	6.13	45.80	54.00	-8.20
2317.58	45.84	PK	237	1.5	V	-13.19	32.65	74.00	-41.35
2317.58	39.77	Ave	237	1.5	V	-13.19	26.58	54.00	-27.42
2386.13	44.89	PK	325	1.1	H	-13.14	31.75	74.00	-42.25
2386.13	36.30	Ave	325	1.1	H	-13.14	23.16	54.00	-30.84
3355.41	43.25	PK	337	1.5	V	-9.08	34.17	74.00	-39.83
3355.41	36.47	Ave	337	1.5	V	-9.08	27.39	54.00	-26.61

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) band I low Channel 5180MHz									
744.86	44.14	QP	232	1.5	H	-6.32	37.82	46.00	-8.18
744.86	46.47	QP	148	1.2	V	-6.32	40.15	46.00	-5.85
5101.06	49.33	PK	271	1.1	V	0.09	49.42	74.00	-24.58
5101.06	42.15	Ave	271	1.1	V	0.09	42.24	54.00	-11.76
10360.00	44.18	PK	313	1.5	H	4.13	48.31	74.00	-25.69
10360.00	43.57	Ave	313	1.5	H	4.13	47.70	54.00	-6.30
2336.21	46.45	PK	182	1.7	V	-13.19	33.26	74.00	-40.74
2336.21	38.83	Ave	182	1.7	V	-13.19	25.64	54.00	-28.36
2360.69	43.41	PK	255	2.0	H	-13.14	30.27	74.00	-43.73
2360.69	36.55	Ave	255	2.0	H	-13.14	23.41	54.00	-30.59
3347.69	42.52	PK	304	1.5	V	-9.08	33.44	74.00	-40.56
3347.69	37.55	Ave	304	1.5	V	-9.08	28.47	54.00	-25.53

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) band I middle channel 5200MHz									
744.86	44.66	QP	232	1.5	H	-6.32	38.34	46.00	-7.66
744.86	46.24	QP	148	1.2	V	-6.32	39.92	46.00	-6.08
5106.65	48.38	PK	341	1.5	V	-0.62	47.76	74.00	-26.24
5106.65	42.75	Ave	341	1.5	V	-0.62	42.13	54.00	-11.87
10400.00	45.06	PK	62	1.2	H	4.26	49.32	74.00	-24.68
10400.00	44.34	Ave	62	1.2	H	4.26	48.60	54.00	-5.40
2348.81	46.69	PK	40	1.9	V	-13.19	33.50	74.00	-40.50
2348.81	39.46	Ave	40	1.9	V	-13.19	26.27	54.00	-27.73
2381.32	42.08	PK	327	1.1	H	-13.14	28.94	74.00	-45.06
2381.32	38.84	Ave	327	1.1	H	-13.14	25.70	54.00	-28.30
3360.64	44.63	PK	200	2.0	V	-9.08	35.55	74.00	-38.45
3360.64	37.55	Ave	200	2.0	V	-9.08	28.47	54.00	-25.53

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) band I High channel 5240MHz									
744.86	44.31	QP	232	1.5	H	-6.32	37.99	46.00	-8.01
744.86	47.44	QP	148	1.2	V	-6.32	41.12	46.00	-4.88
5081.37	47.84	PK	306	1.8	V	-0.24	47.60	74.00	-26.40
5081.37	42.85	Ave	306	1.8	V	-0.24	42.61	54.00	-11.39
10480.00	45.28	PK	36	2.0	H	4.38	49.66	74.00	-24.34
10480.00	44.65	Ave	36	2.0	H	4.38	49.03	54.00	-4.97
2347.67	46.20	PK	16	1.4	V	-13.19	33.01	74.00	-40.99
2347.67	38.96	Ave	16	1.4	V	-13.19	25.77	54.00	-28.23
2389.28	43.71	PK	46	1.5	H	-13.14	30.57	74.00	-43.43
2389.28	37.78	Ave	46	1.5	H	-13.14	24.64	54.00	-29.36
3344.28	42.97	PK	253	1.5	V	-9.08	33.89	74.00	-40.11
3344.28	38.73	Ave	253	1.5	V	-9.08	29.65	54.00	-24.35

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) band IV low Channel 5745MHz									
744.86	44.90	QP	232	1.5	H	-6.32	38.58	46.00	-7.42
744.86	46.39	QP	148	1.2	V	-6.32	40.07	46.00	-5.93
5102.30	49.33	PK	2	1.3	V	0.09	49.42	74.00	-24.58
5102.30	42.15	Ave	2	1.3	V	0.09	42.24	54.00	-11.76
11490.00	42.17	PK	150	1.1	H	6.02	48.19	74.00	-25.81
11490.00	41.79	Ave	150	1.1	H	6.02	47.81	54.00	-6.19
2316.62	46.17	PK	267	1.8	V	-13.19	32.98	74.00	-41.02
2316.62	37.71	Ave	267	1.8	V	-13.19	24.52	54.00	-29.48
2385.82	43.54	PK	291	1.7	H	-13.14	30.40	74.00	-43.60
2385.82	36.01	Ave	291	1.7	H	-13.14	22.87	54.00	-31.13
3334.58	44.53	PK	179	1.6	V	-9.08	35.45	74.00	-38.55
3334.58	38.16	Ave	179	1.6	V	-9.08	29.08	54.00	-24.92

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) band IV middle channel 5785MHz									
744.86	46.40	QP	232	1.5	H	-6.32	40.08	46.00	-5.92
744.86	46.88	QP	148	1.2	V	-6.32	40.56	46.00	-5.44
5100.26	49.29	PK	52	1.5	V	-0.62	48.67	74.00	-25.33
5100.26	41.65	Ave	52	1.5	V	-0.62	41.03	54.00	-12.97
11570.00	42.27	PK	337	1.3	H	6.11	48.38	74.00	-25.62
11570.00	41.07	Ave	337	1.3	H	6.11	47.18	54.00	-6.82
2320.50	46.36	PK	188	1.9	V	-13.19	33.17	74.00	-40.83
2320.50	39.24	Ave	188	1.9	V	-13.19	26.05	54.00	-27.95
2376.42	43.83	PK	282	1.2	H	-13.14	30.69	74.00	-43.31
2376.42	37.22	Ave	282	1.2	H	-13.14	24.08	54.00	-29.92
3347.33	44.77	PK	270	1.8	V	-9.08	35.69	74.00	-38.31
3347.33	36.59	Ave	270	1.8	V	-9.08	27.51	54.00	-26.49

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT20) band IV High channel 5825MHz									
744.86	45.43	QP	232	1.5	H	-6.32	39.11	46.00	-6.89
744.86	46.70	QP	148	1.2	V	-6.32	40.38	46.00	-5.62
5081.60	49.17	PK	172	1.9	V	-0.24	48.93	74.00	-25.07
5081.60	43.87	Ave	172	1.9	V	-0.24	43.63	54.00	-10.37
11650.00	43.71	PK	49	1.6	H	6.13	49.84	74.00	-24.16
11650.00	42.30	Ave	49	1.6	H	6.13	48.43	54.00	-5.57
2320.43	45.69	PK	283	1.3	V	-13.19	32.50	74.00	-41.50
2320.43	37.16	Ave	283	1.3	V	-13.19	23.97	54.00	-30.03
2358.43	44.06	PK	33	2.0	H	-13.14	30.92	74.00	-43.08
2358.43	37.79	Ave	33	2.0	H	-13.14	24.65	54.00	-29.35
3344.26	42.75	PK	255	1.9	V	-9.08	33.67	74.00	-40.33
3344.26	36.35	Ave	255	1.9	V	-9.08	27.27	54.00	-26.73

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT40) band I low Channel 5190MHz									
744.86	44.49	QP	232	1.5	H	-6.32	38.17	46.00	-7.83
744.86	46.44	QP	148	1.2	V	-6.32	40.12	46.00	-5.88
5093.50	45.69	PK	340	1.7	V	0.09	45.78	74.00	-28.22
5093.50	41.15	Ave	340	1.7	V	0.09	41.24	54.00	-12.76
10380.00	44.59	PK	216	1.1	H	4.13	48.72	74.00	-25.28
10380.00	44.07	Ave	216	1.1	H	4.13	48.20	54.00	-5.80
2312.75	45.63	PK	197	1.5	V	-13.19	32.44	74.00	-41.56
2312.75	38.54	Ave	197	1.5	V	-13.19	25.35	54.00	-28.65
2350.22	44.87	PK	83	1.3	H	-13.14	31.73	74.00	-42.27
2350.22	37.68	Ave	83	1.3	H	-13.14	24.54	54.00	-29.46
3359.44	44.90	PK	1	1.3	V	-9.08	35.82	74.00	-38.18
3359.44	36.91	Ave	1	1.3	V	-9.08	27.83	54.00	-26.17

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT40) band I High channel 5230MHz									
744.86	44.21	QP	232	1.5	H	-6.32	37.89	46.00	-8.11
744.86	46.46	QP	148	1.2	V	-6.32	40.14	46.00	-5.86
5081.26	45.62	PK	118	1.2	V	-0.24	45.38	74.00	-28.62
5081.26	44.21	Ave	118	1.2	V	-0.24	43.97	54.00	-10.03
10460.00	44.52	PK	218	1.4	H	4.38	48.90	74.00	-25.10
10480.00	43.86	Ave	218	1.4	H	4.38	48.24	54.00	-5.76
2340.99	45.58	PK	9	2.0	V	-13.19	32.39	74.00	-41.61
2340.99	39.19	Ave	9	2.0	V	-13.19	26.00	54.00	-28.00
2381.54	44.44	PK	111	1.1	H	-13.14	31.30	74.00	-42.70
2381.54	38.05	Ave	111	1.1	H	-13.14	24.91	54.00	-29.09
3370.45	43.07	PK	158	1.8	V	-9.08	33.99	74.00	-40.01
3370.45	37.34	Ave	158	1.8	V	-9.08	28.26	54.00	-25.74

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT40) band IV low Channel 5755MHz									
744.86	44.33	QP	232	1.5	H	-6.32	38.01	46.00	-7.99
744.86	46.52	QP	148	1.2	V	-6.32	40.20	46.00	-5.80
5101.76	45.33	PK	61	1.7	V	0.09	45.42	74.00	-28.58
5101.76	41.43	Ave	61	1.7	V	0.09	41.52	54.00	-12.48
11510.00	44.97	PK	29	1.3	H	6.05	51.02	74.00	-22.98
11510.00	44.12	Ave	29	1.3	H	6.05	50.17	54.00	-3.83
2339.33	45.52	PK	141	1.5	V	-13.19	32.33	74.00	-41.67
2339.33	37.74	Ave	141	1.5	V	-13.19	24.55	54.00	-29.45
2382.66	44.95	PK	157	1.3	H	-13.14	31.81	74.00	-42.19
2382.66	36.20	Ave	157	1.3	H	-13.14	23.06	54.00	-30.94
3336.60	43.87	PK	92	1.3	V	-9.08	34.79	74.00	-39.21
3336.60	36.44	Ave	92	1.3	V	-9.08	27.36	54.00	-26.64

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.407/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
802.11n(HT40) band IV High channel 5795MHz									
744.86	45.34	QP	232	1.5	H	-6.32	39.02	46.00	-6.98
744.86	47.18	QP	148	1.2	V	-6.32	40.86	46.00	-5.14
5093.01	48.22	PK	142	1.2	V	-0.24	47.98	74.00	-26.02
5093.01	43.17	Ave	142	1.2	V	-0.24	42.93	54.00	-11.07
11590.00	43.63	PK	117	1.1	H	6.15	49.78	74.00	-24.22
11590.00	42.37	Ave	117	1.1	H	6.15	48.52	54.00	-5.48
2341.44	45.45	PK	229	1.5	V	-13.19	32.26	74.00	-41.74
2341.44	38.23	Ave	229	1.5	V	-13.19	25.04	54.00	-28.96
2389.33	44.94	PK	248	1.2	H	-13.14	31.80	74.00	-42.20
2389.33	38.49	Ave	248	1.2	H	-13.14	25.35	54.00	-28.65
3346.83	44.58	PK	152	1.5	V	-9.08	35.50	74.00	-38.50
3346.83	36.77	Ave	152	1.5	V	-9.08	27.69	54.00	-26.31

Test Frequency: 18GHz~40GHz

The measurements were more than 20 dB below the limit and not reported.

8 Duty cycle

Test Requirement:	47 CFR Part 15C 15.407 and 789033 D02 General UNII Test Procedures New Rules v01, Section (B)
Test Method:	ANSI C63.10: 2009
Test Limit:	N/A
Test Result:	PASS
Remark:	Through Pre-scan, and found 802.11a at lowest channel is the worst case. Only the worst case is recorded in the report.

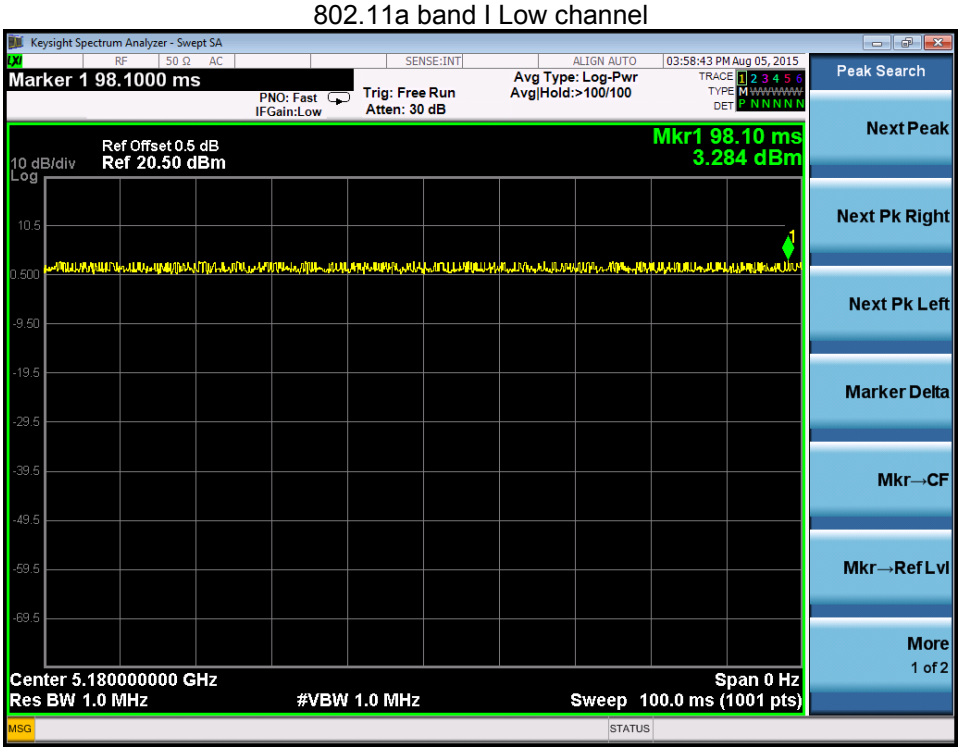
8.1 Summary of Test Results

802.11a mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
36	100	100	100
149	100	100	100
802.11n(HT20) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
36	100	100	100
149	100	100	100
802.11n(HT40) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
38	100	100	100
151	100	100	100

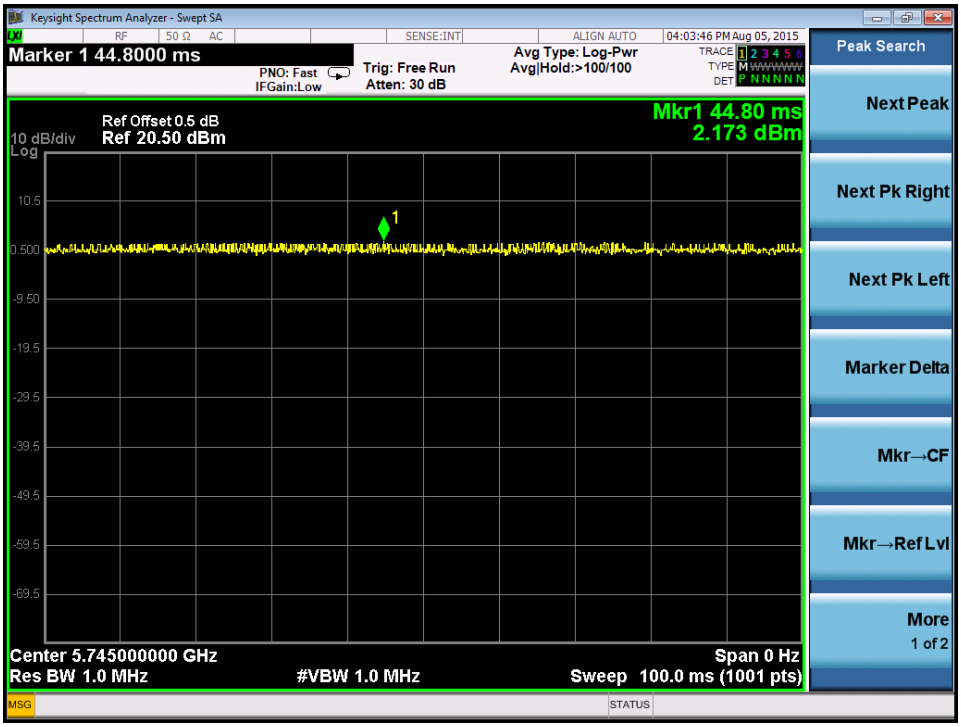
Test result plots shown as follows:

ANT0:

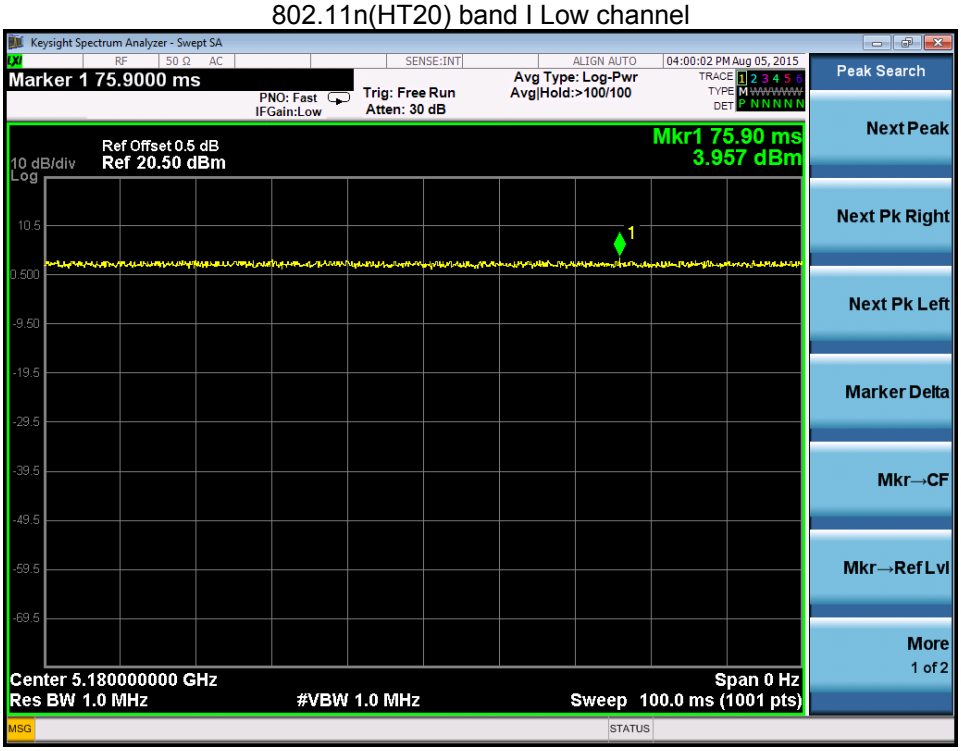
802.11a band I Low channel



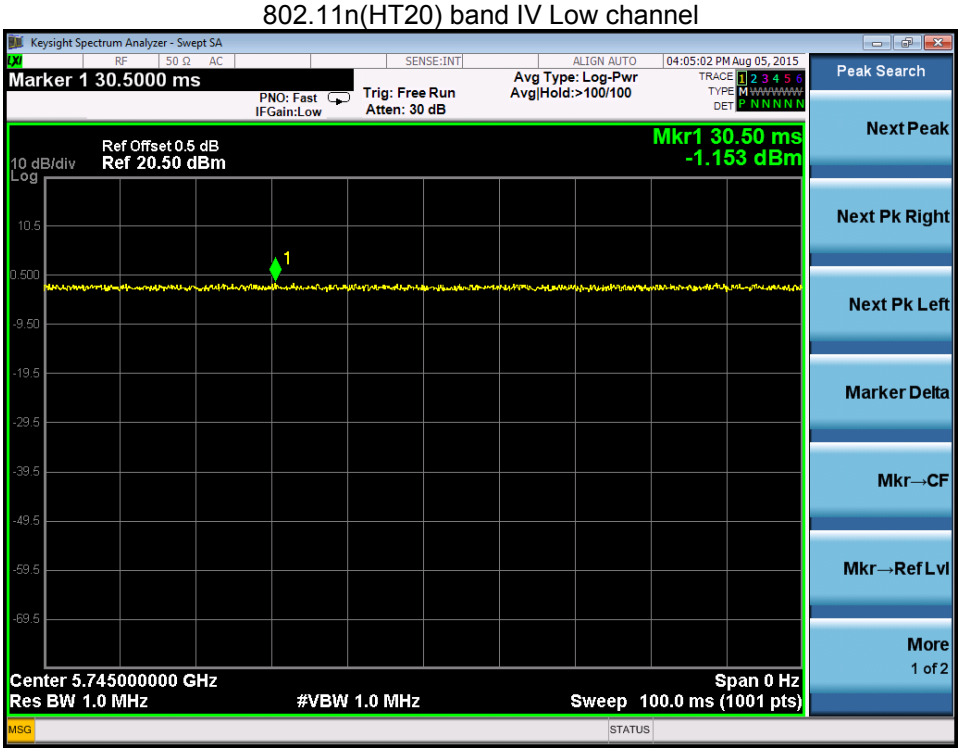
802.11a band IV Low channel



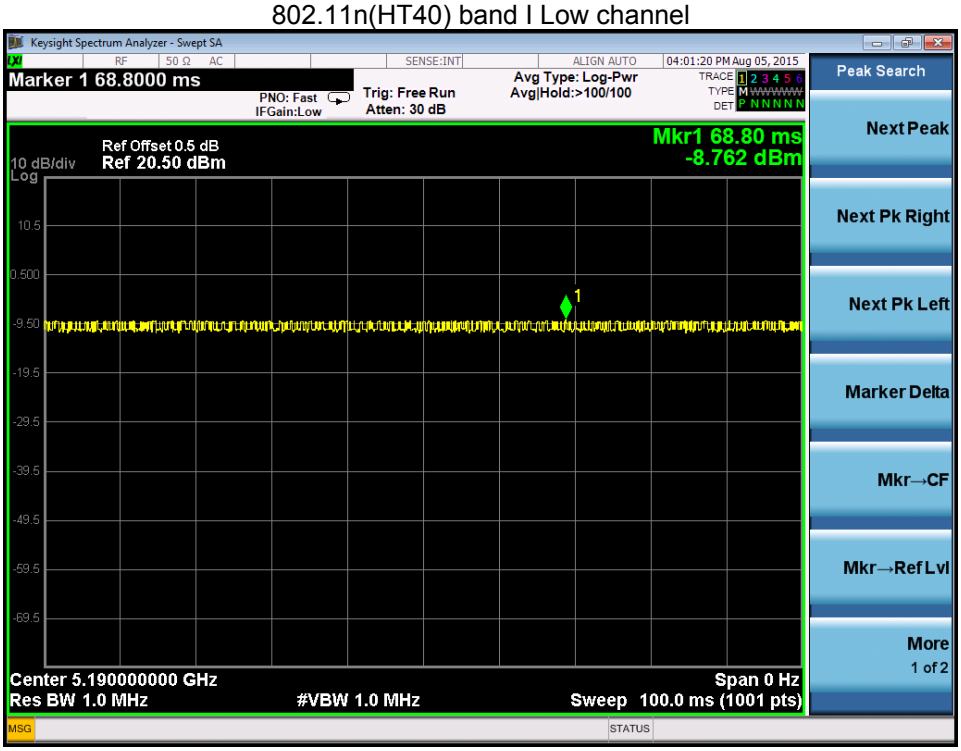
802.11n(HT20) band I Low channel



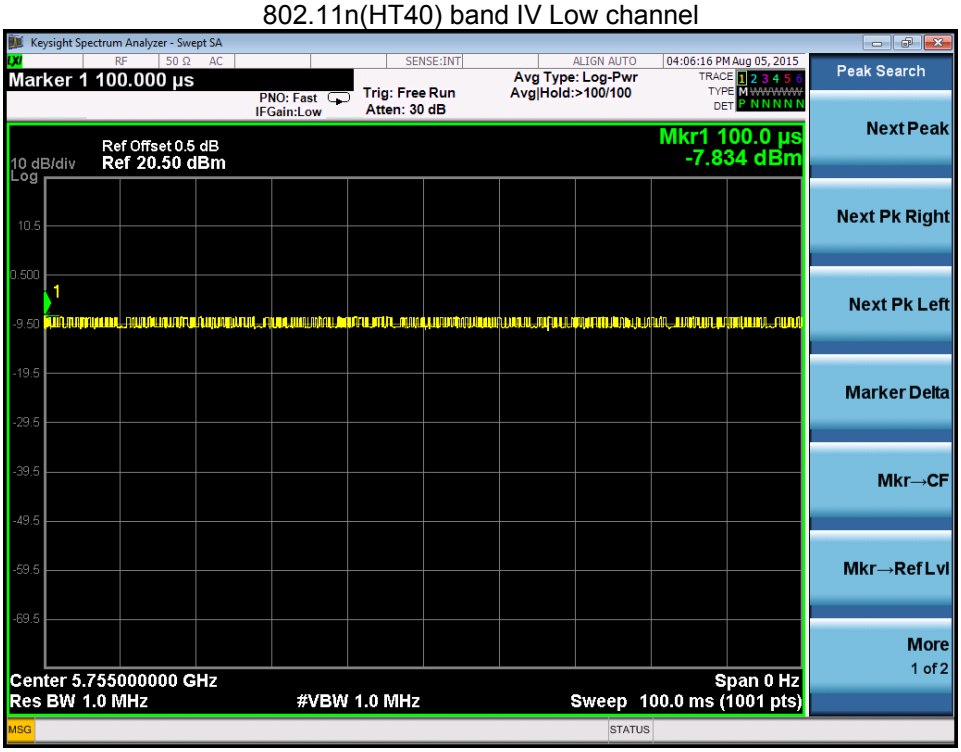
802.11n(HT20) band IV Low channel



802.11n(HT40) band I Low channel

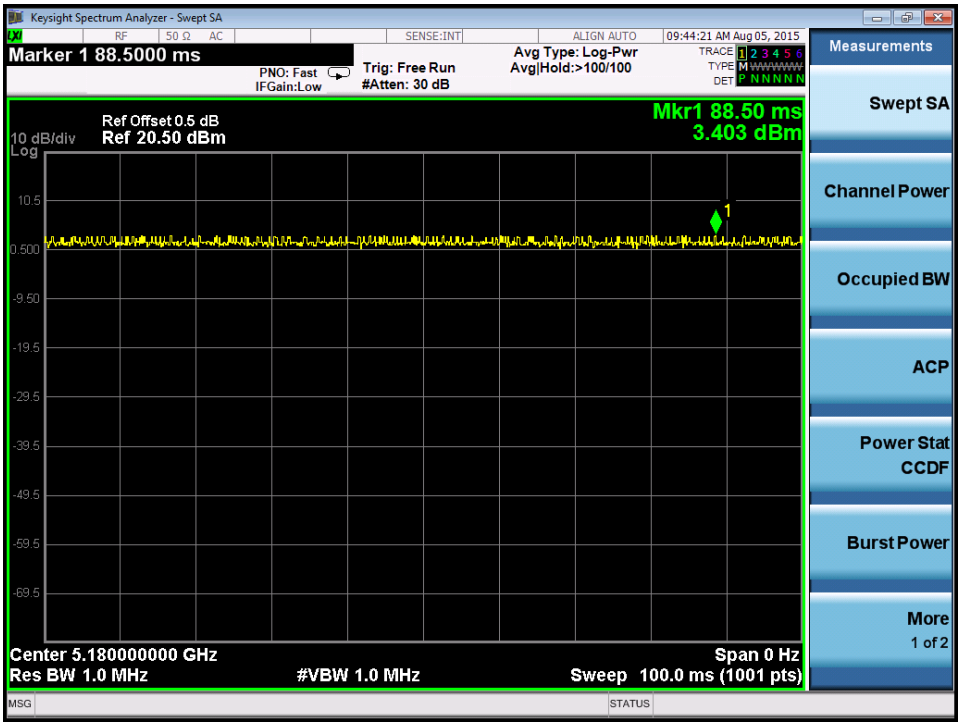


802.11n(HT40) band IV Low channel

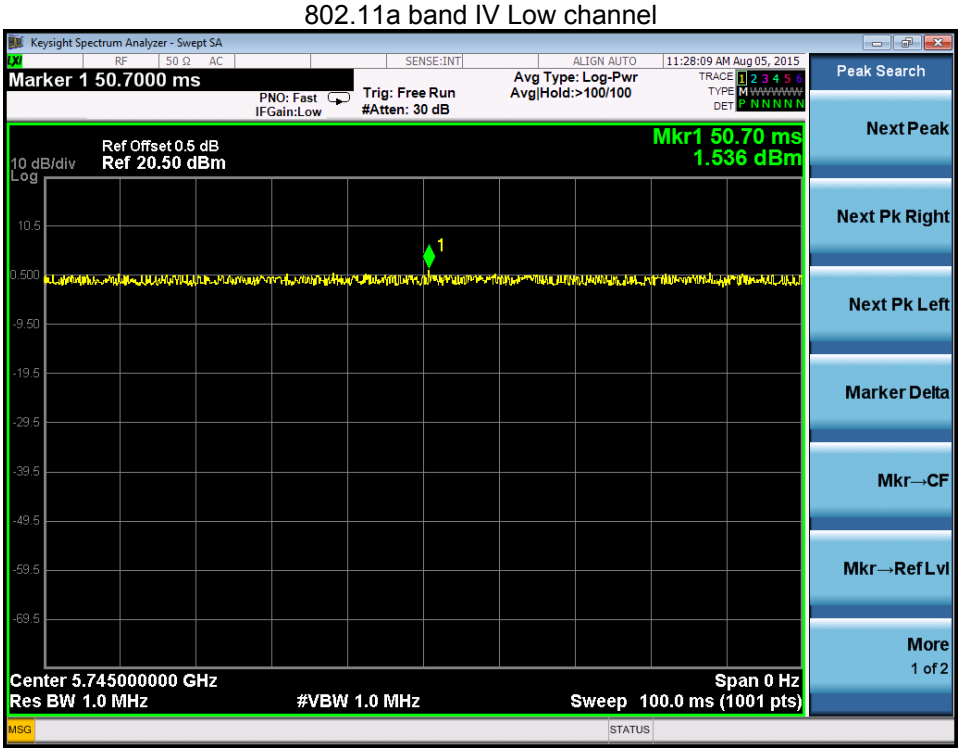


ANT1:

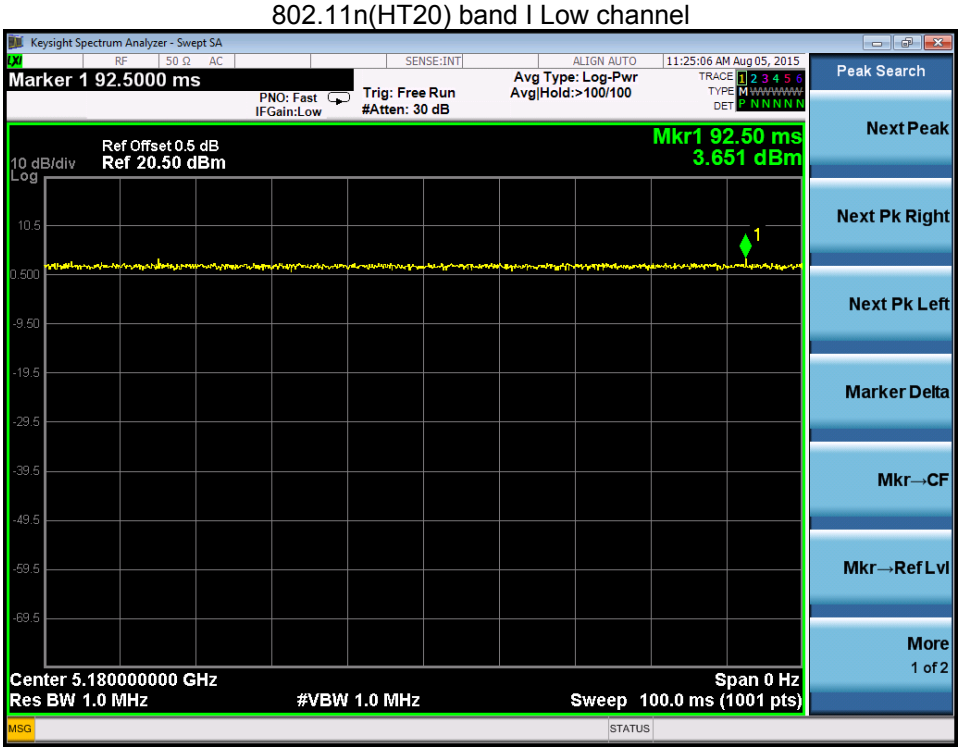
802.11a band I Low channel



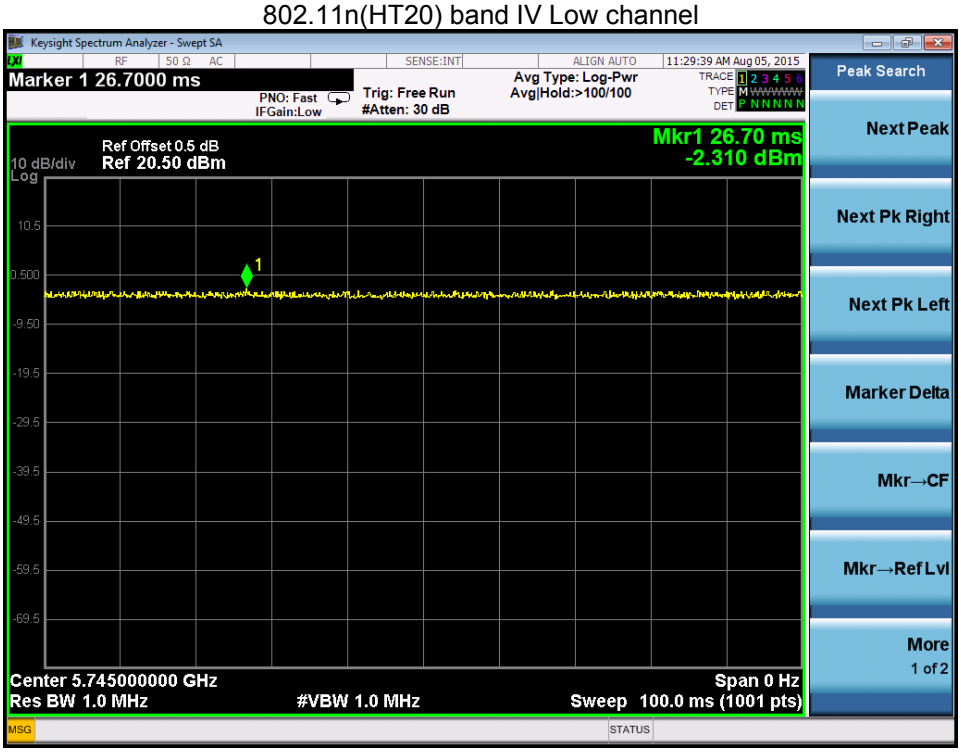
802.11a band IV Low channel



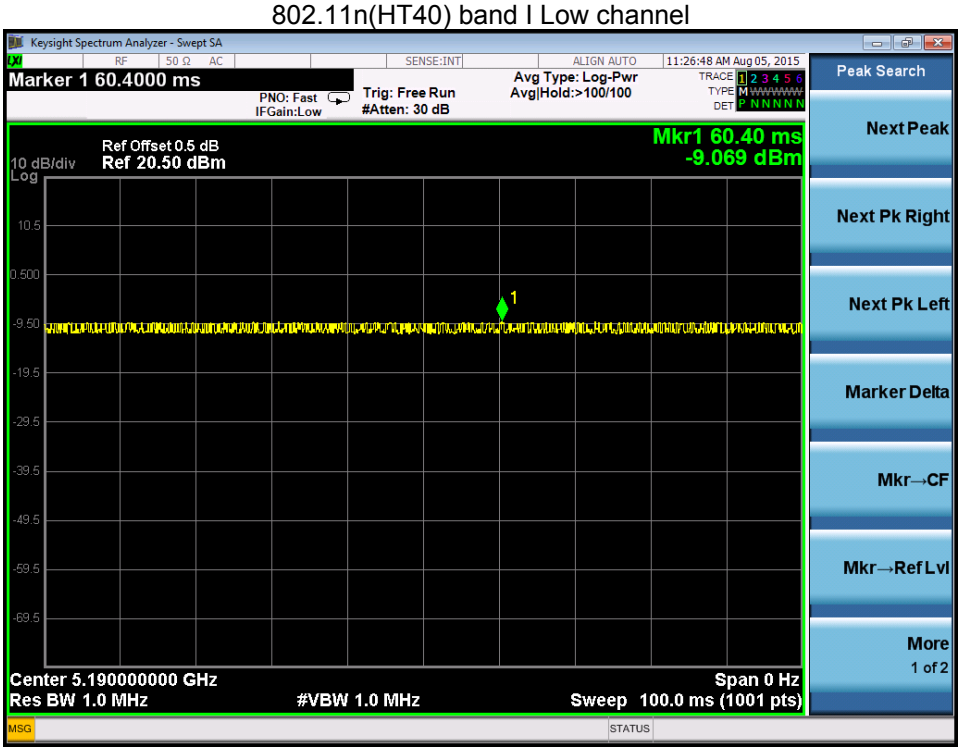
802.11n(HT20) band I Low channel



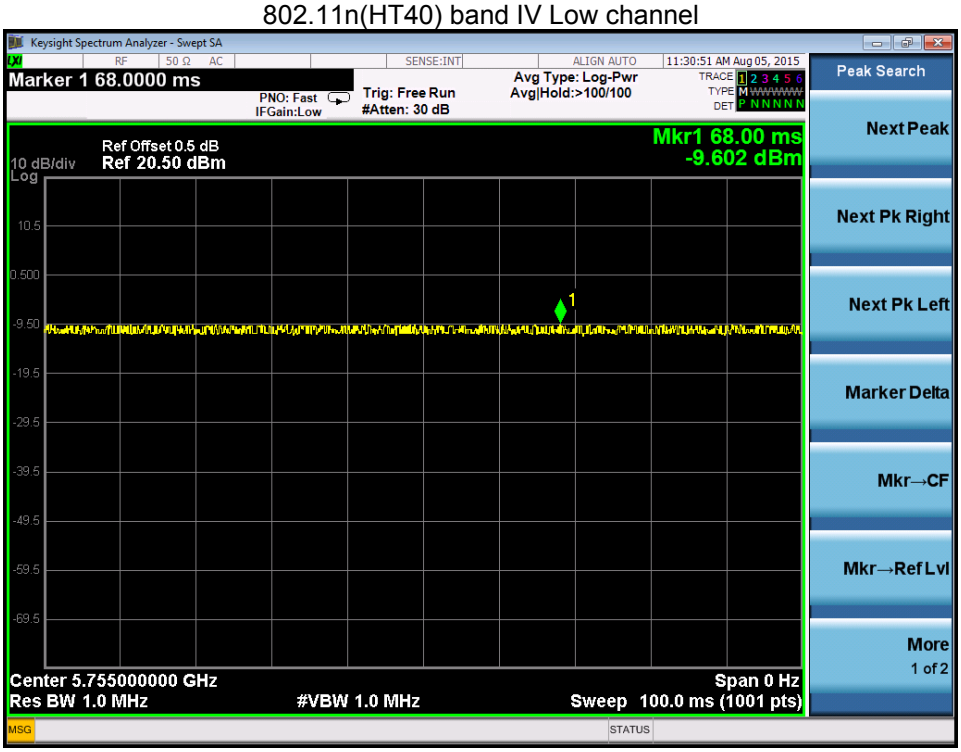
802.11n(HT20) band IV Low channel



802.11n(HT40) band I Low channel



802.11n(HT40) band IV Low channel



9 Band Edge

Test Requirement:	FCC CFR47 Part 15 Section 15.407
Test Method:	ANSI C63.10 2009
Test Limit:	(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27dBm/MHz. (2) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of −17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of −27 dBm/MHz.
Test Result:	PASS

9.1 Test Produce

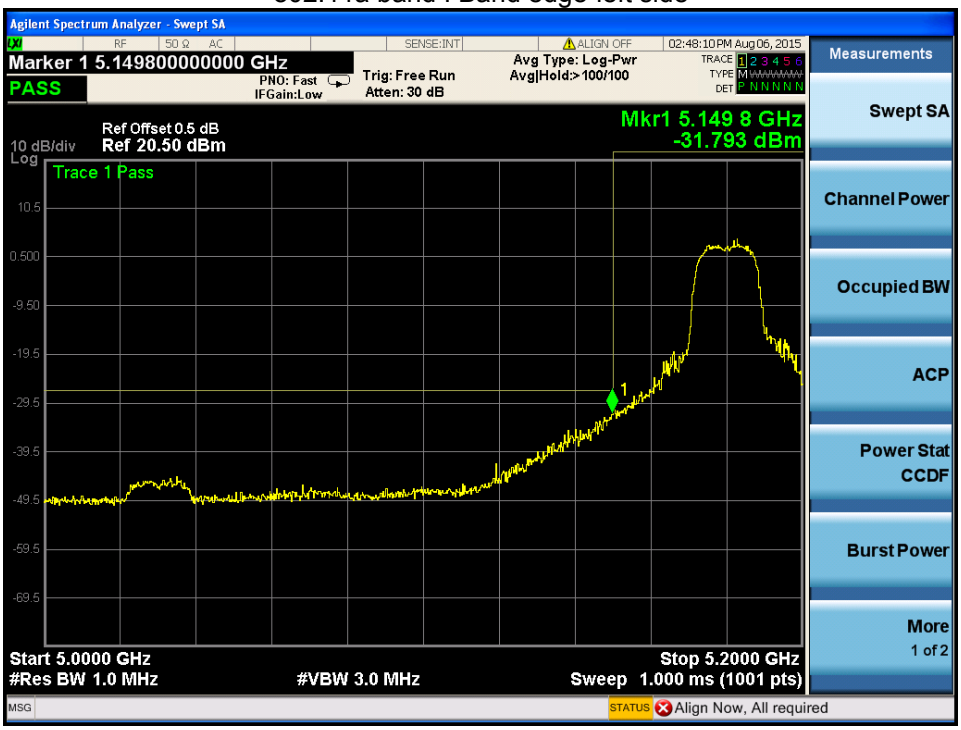
1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

9.2 Test Result

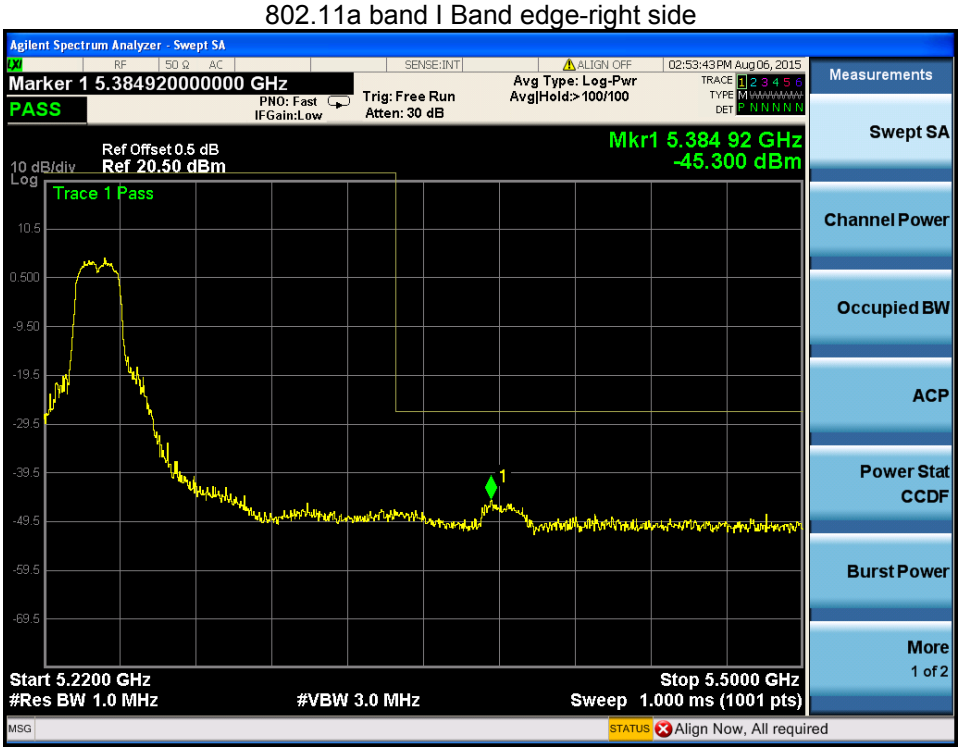
Test result plots shown as follows:

ANT0:

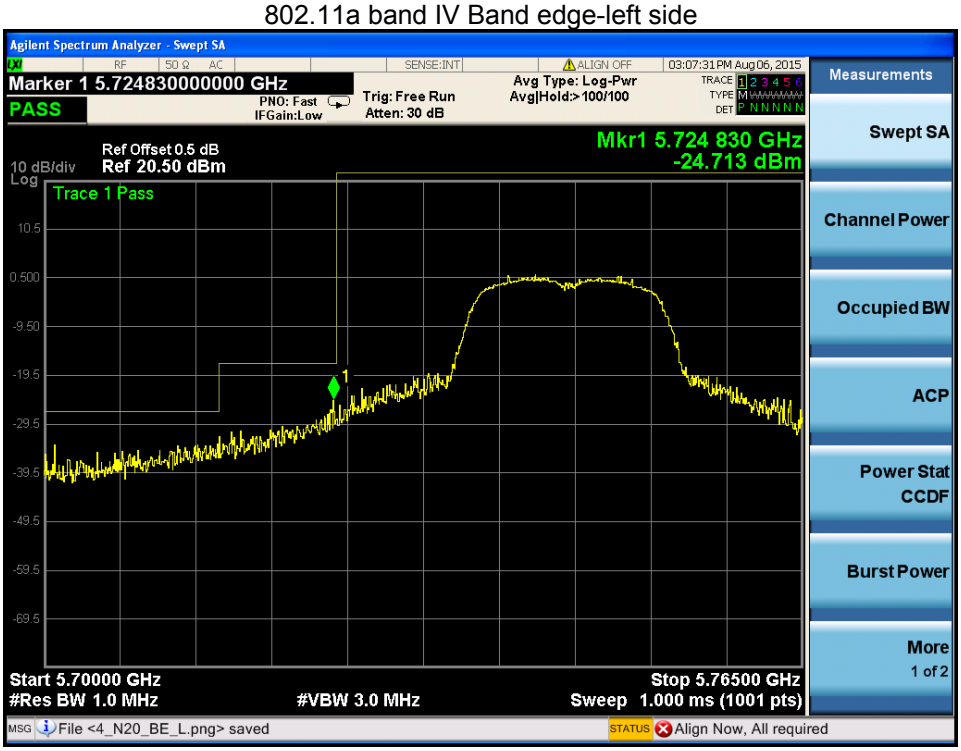
802.11a band I Band edge-left side



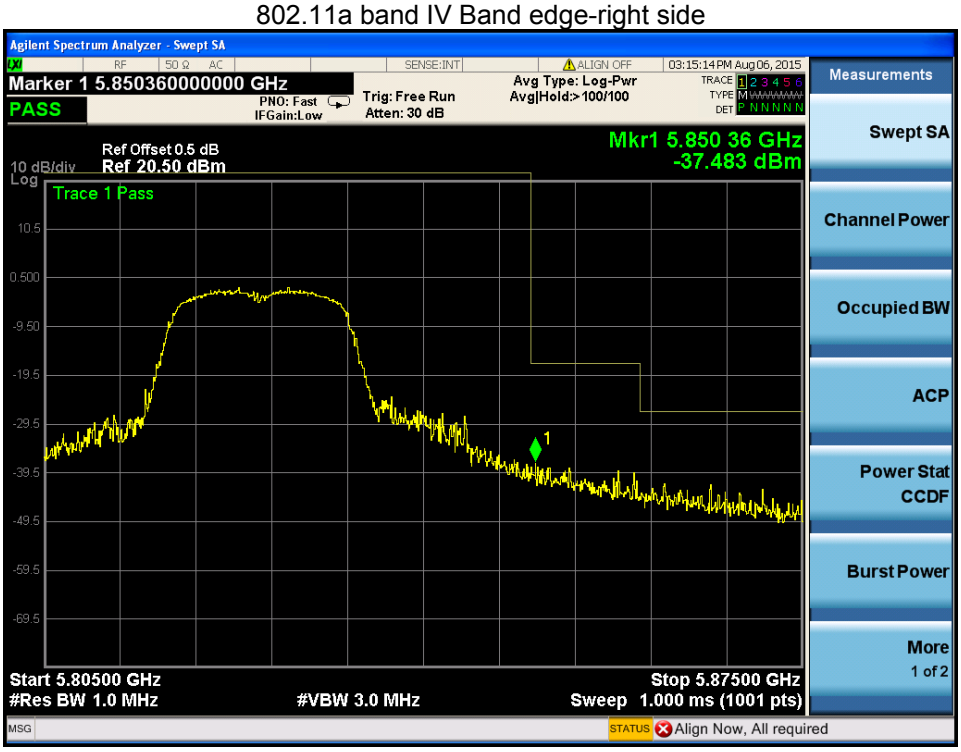
802.11a band I Band edge-right side



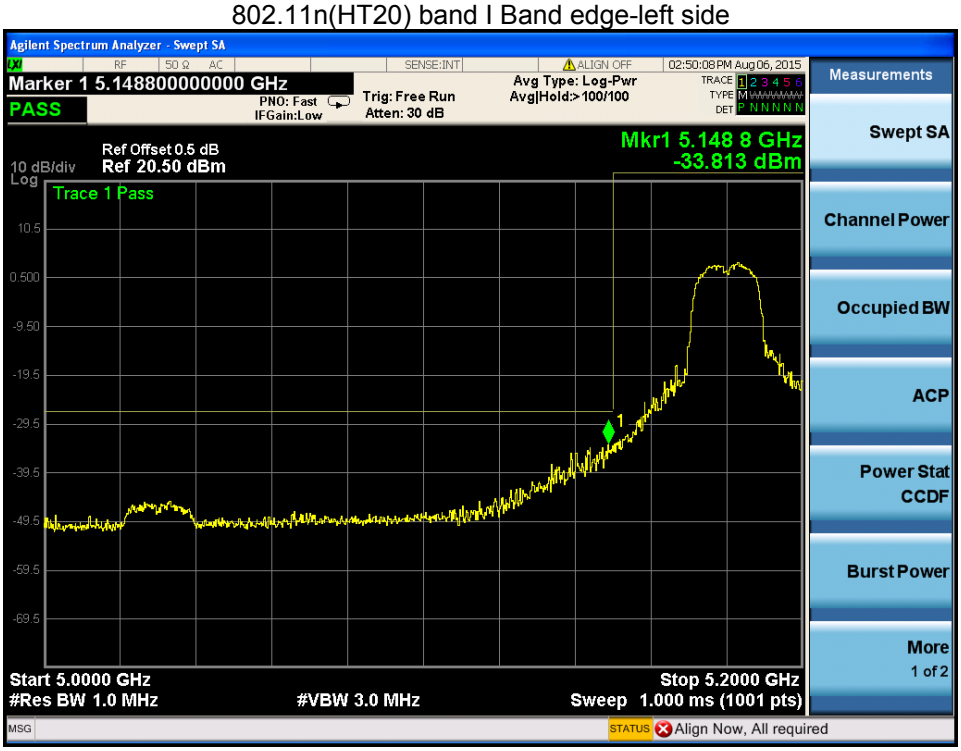
802.11a band IV Band edge-left side



802.11a band IV Band edge-right side

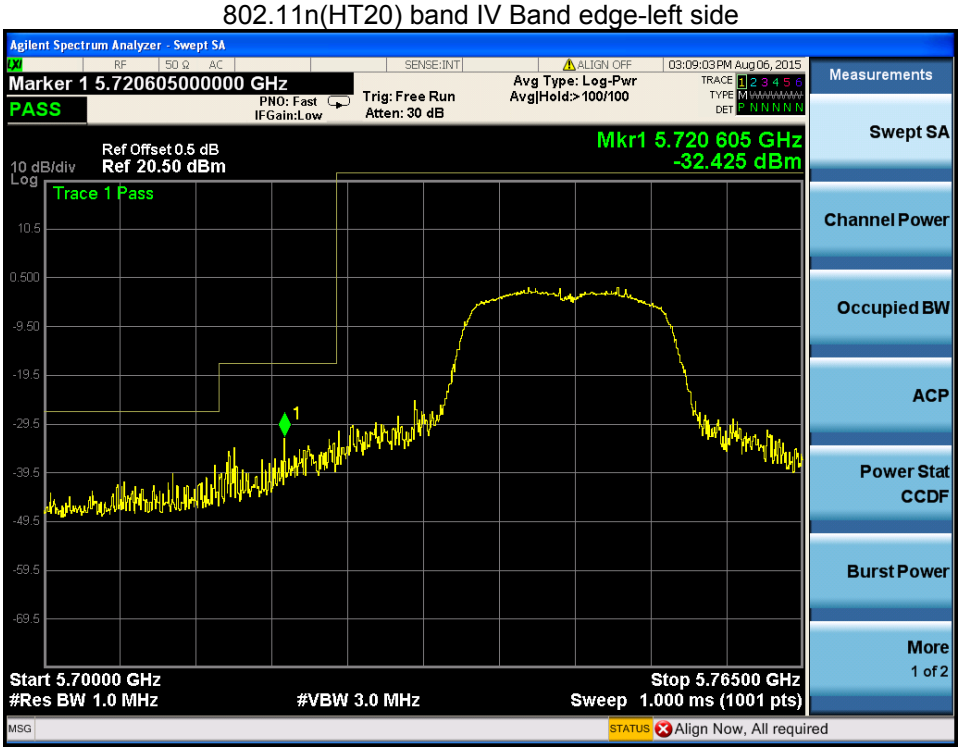


802.11n(HT20) band I Band edge-left side

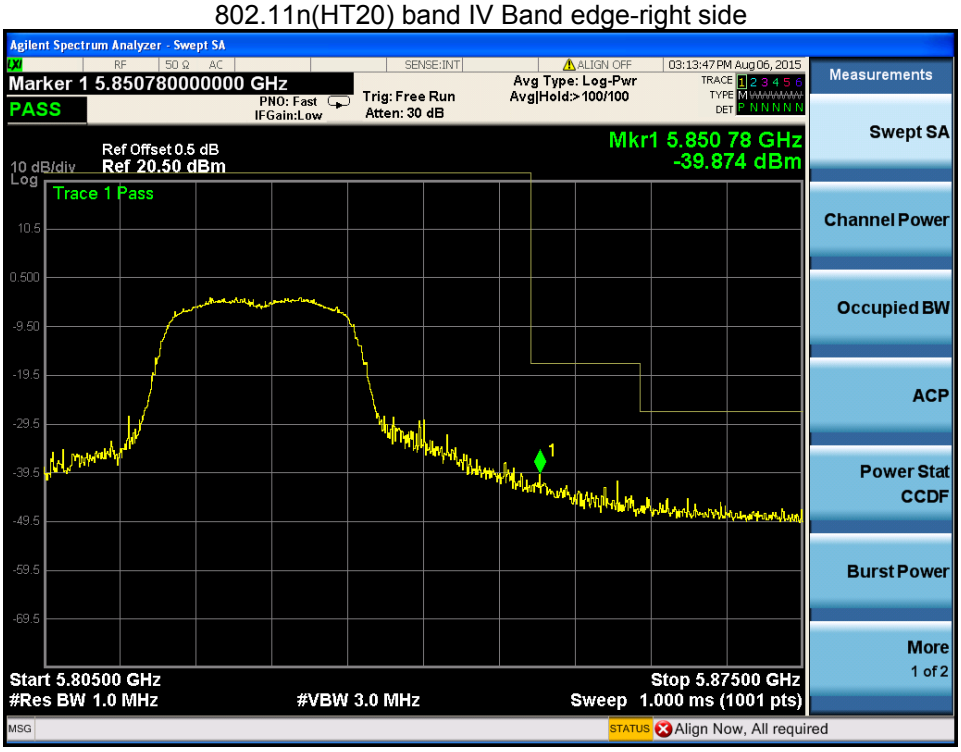


802.11n(HT20) band I Band edge-right side

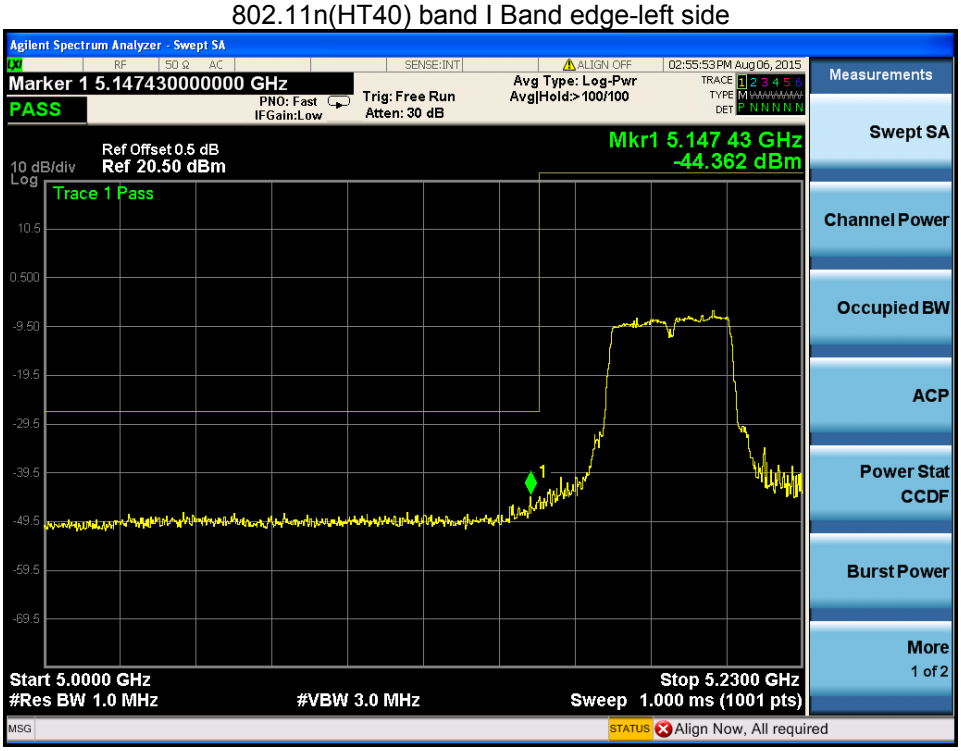
802.11n(HT20) band IV Band edge-left side



802.11n(HT20) band IV Band edge-right side

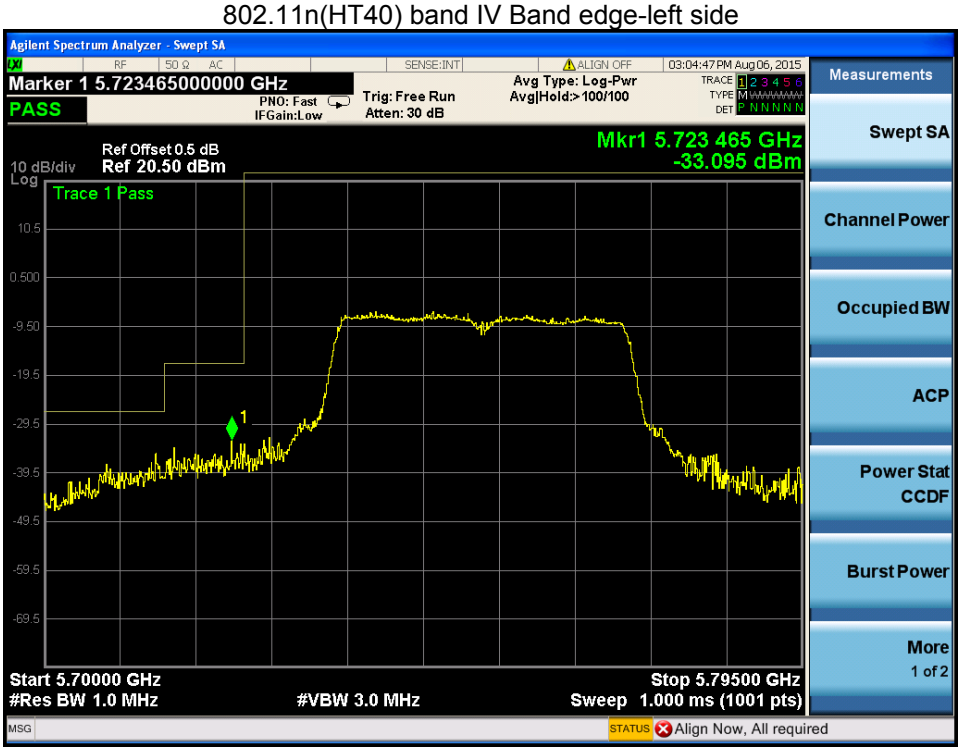


802.11n(HT40) band I Band edge-left side

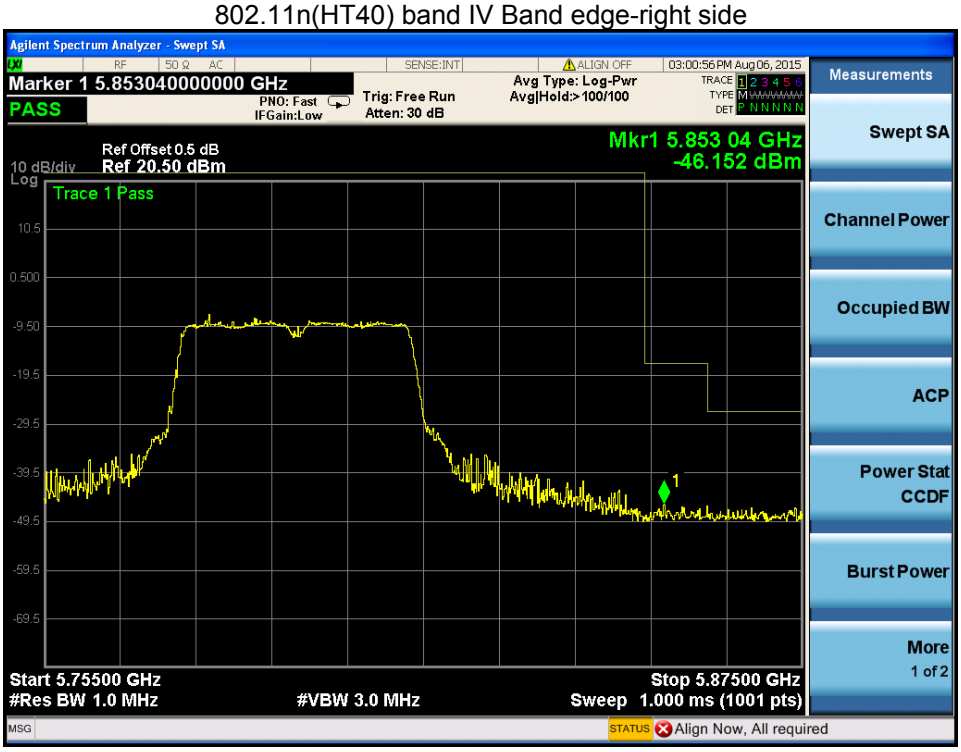


802.11n(HT40) band I Band edge-right side

802.11n(HT40) band IV Band edge-left side



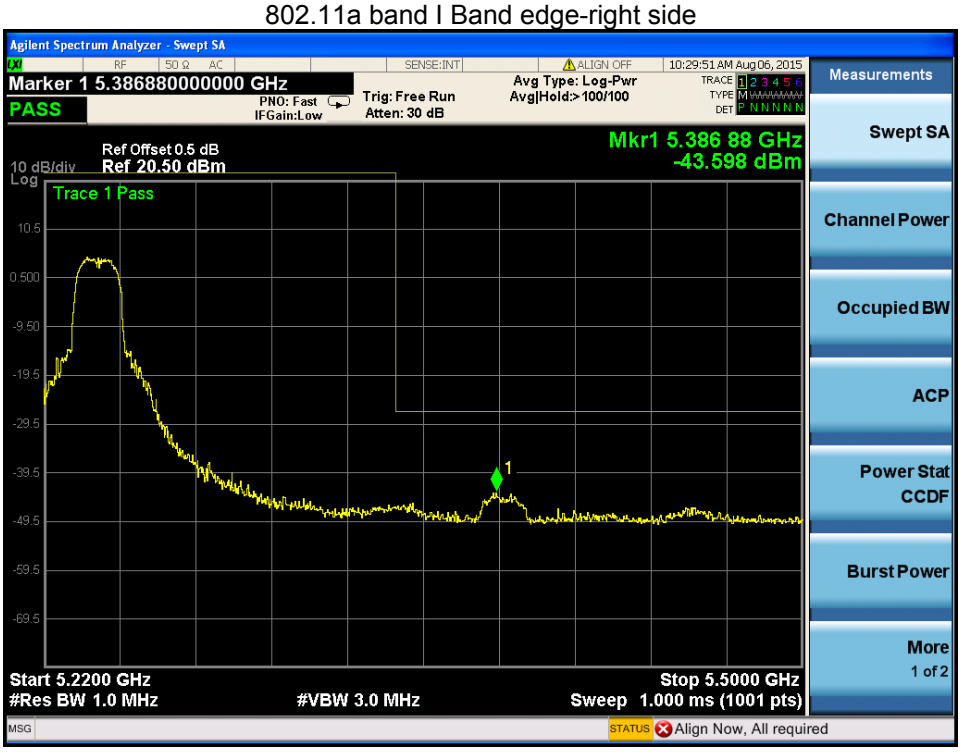
802.11n(HT40) band IV Band edge-right side



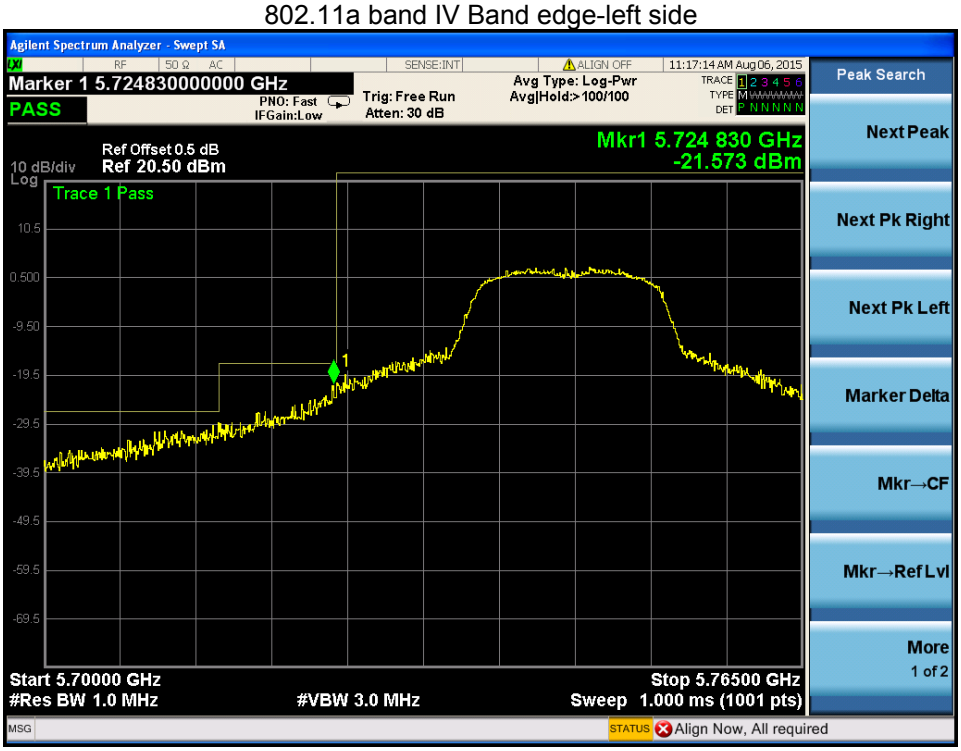
ANT1:

802.11a band I Band edge-left side

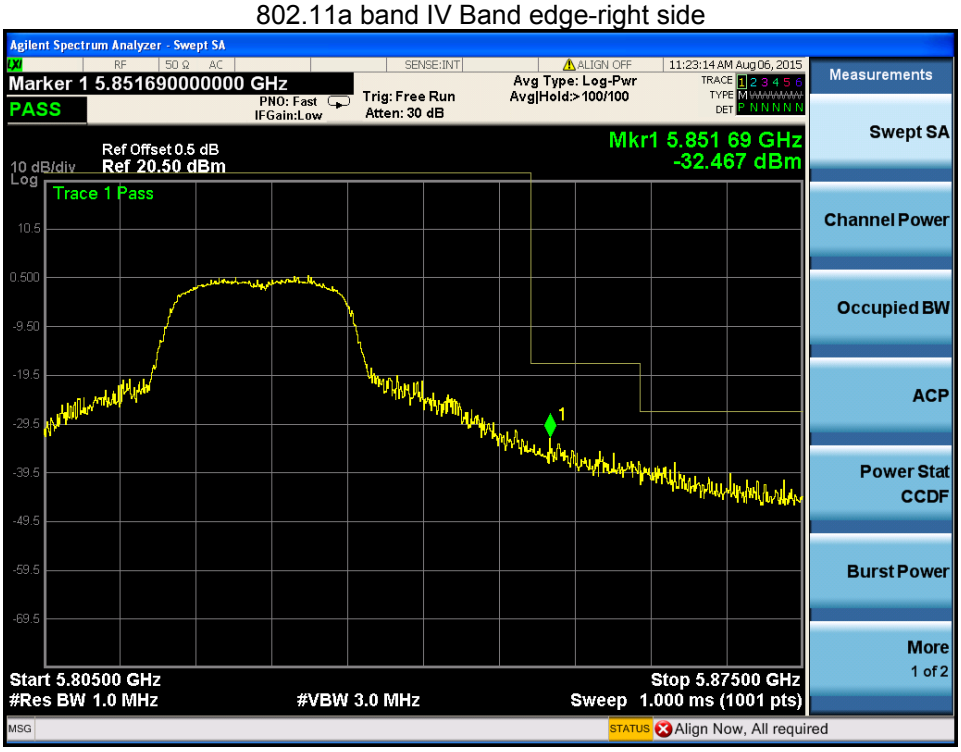
802.11a band I Band edge-right side



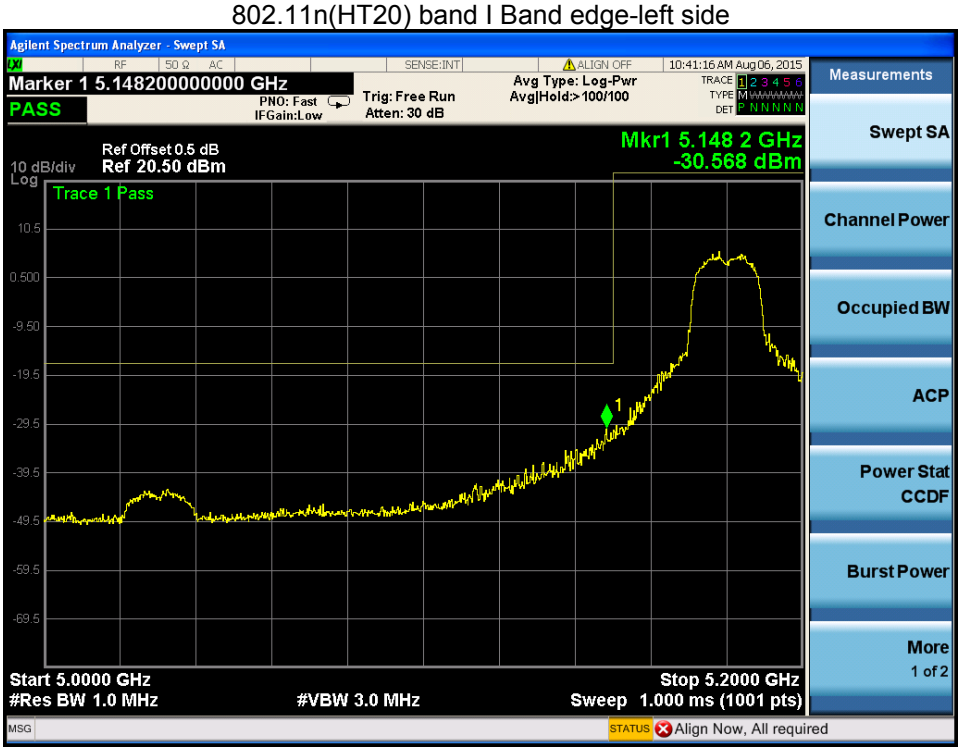
802.11a band IV Band edge-left side



802.11a band IV Band edge-right side

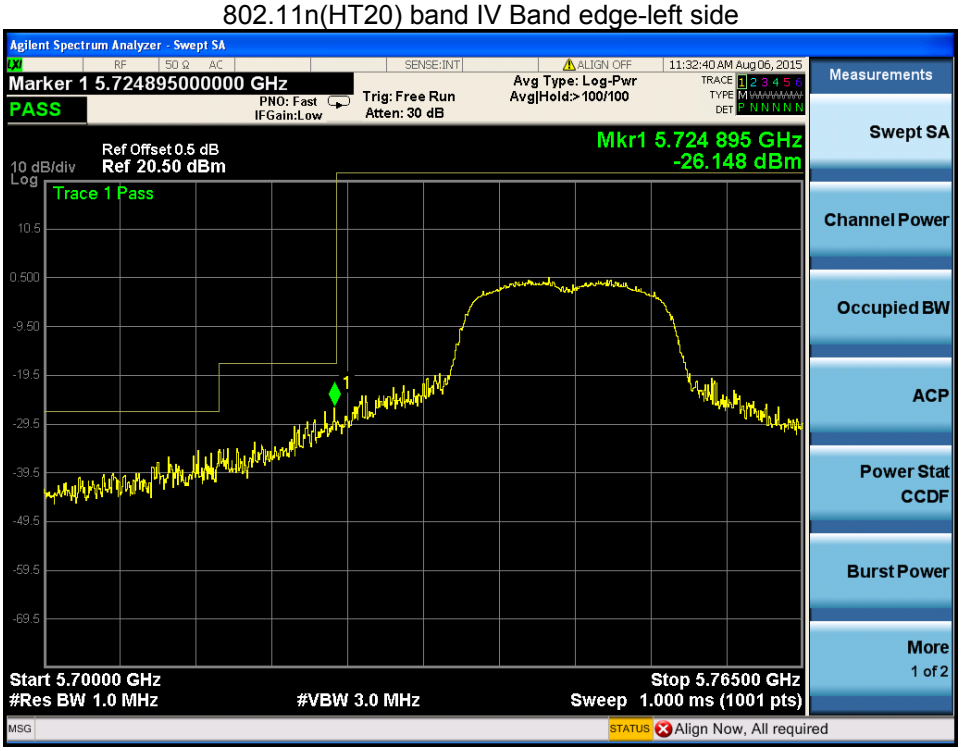


802.11n(HT20) band I Band edge-left side

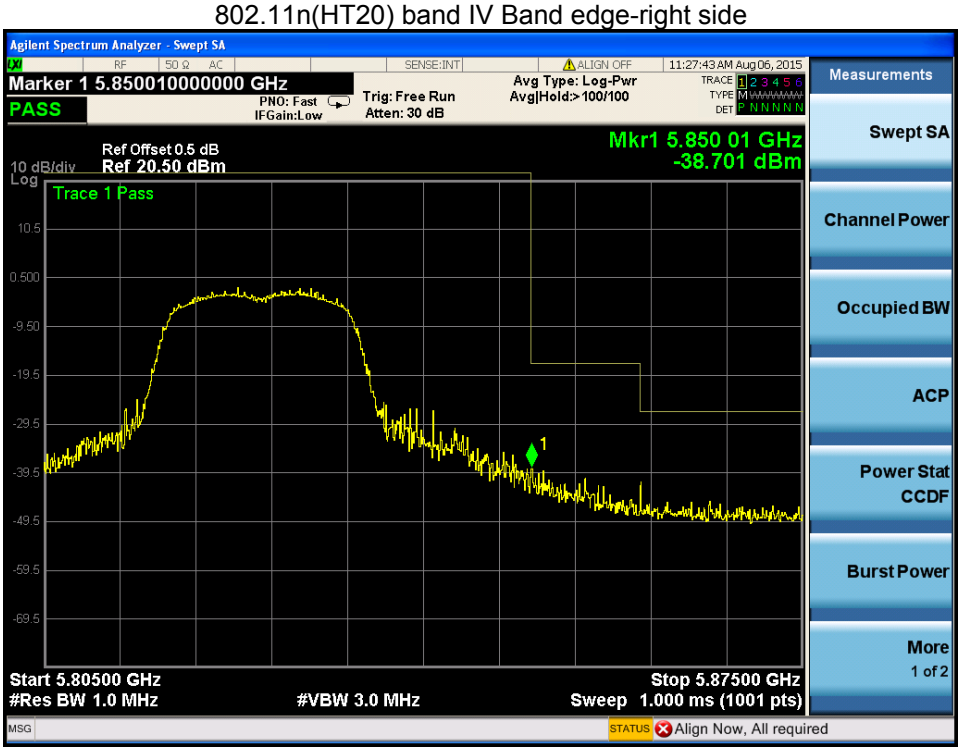


802.11n(HT20) band I Band edge-right side

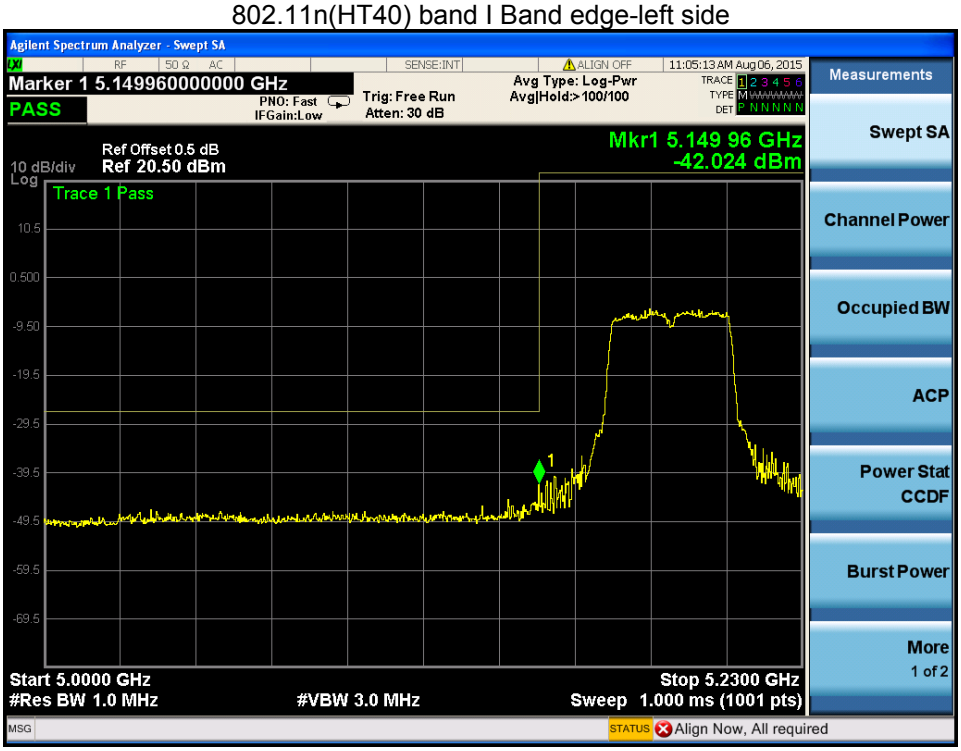
802.11n(HT20) band IV Band edge-left side



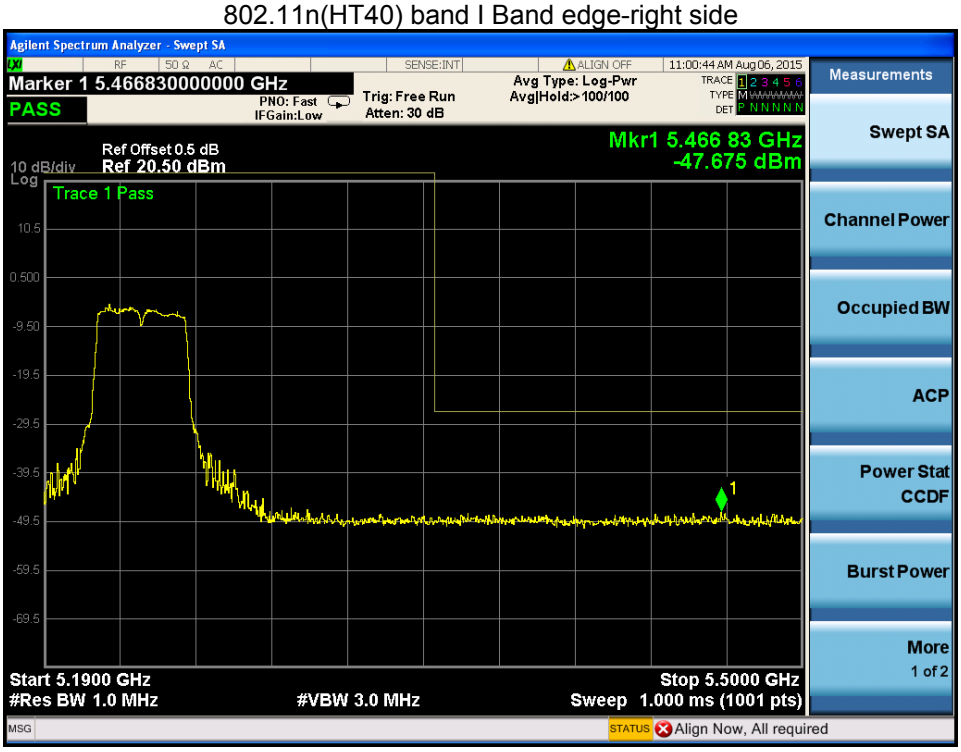
802.11n(HT20) band IV Band edge-right side



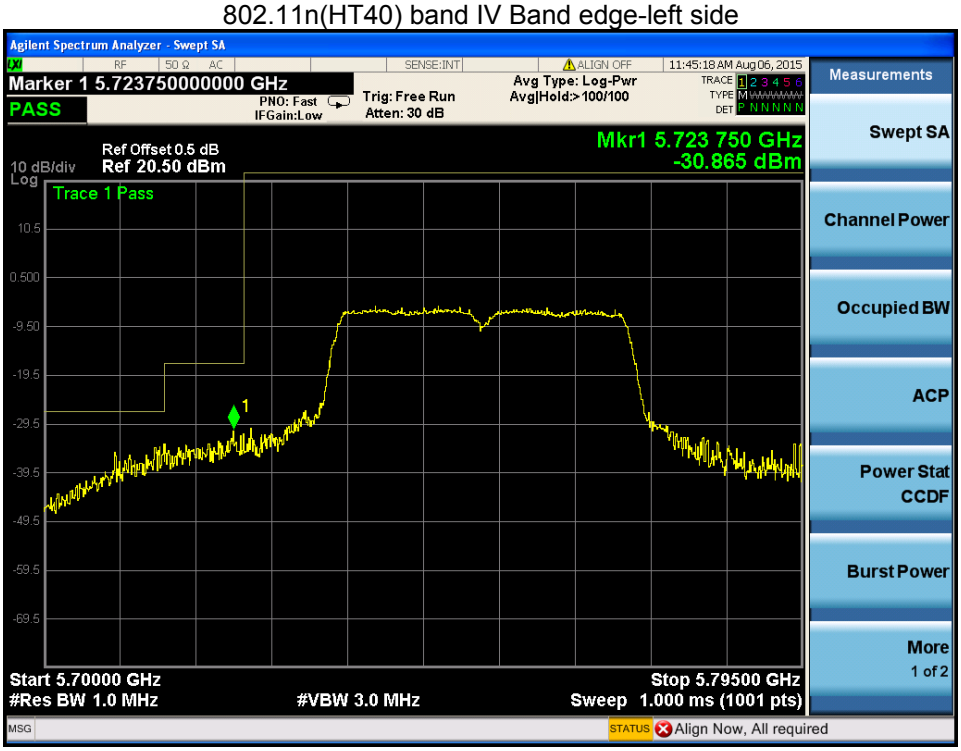
802.11n(HT40) band I Band edge-left side



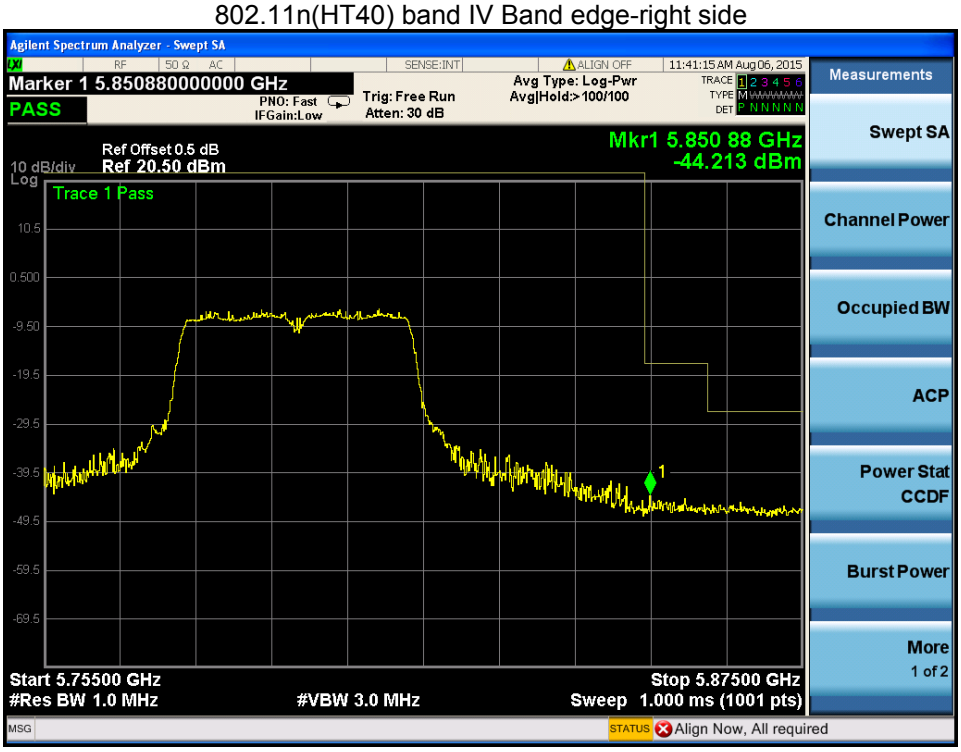
802.11n(HT40) band I Band edge-right side



802.11n(HT40) band IV Band edge-left side



802.11n(HT40) band IV Band edge-right side



10 6 dB Bandwidth

Test Requirement:	FCC CFR47 Part 15 Section 15.407(e)
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v01 Section C
Test Limit:	≥ 500 kHz
Test Result:	PASS

10.1 Test Procedure:

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer: RBW = 100kHz, VBW = 300kHz

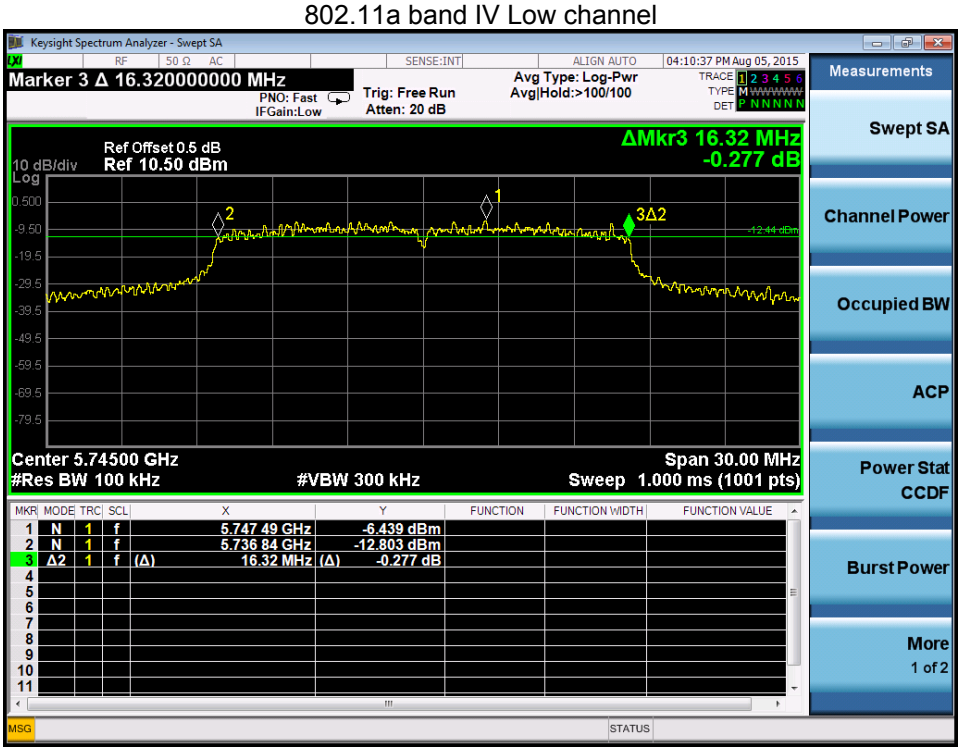
10.2 Test Result:

Band	Operation mode	6 dB Bandwidth (MHz)		
		Low	Middle	High
ANT0 Band IV	802.11a	16.32	16.05	15.66
	802.11n(HT20)	15.72	15.72	15.51
	802.11n(HT40)	36.12	/	36.34
ANT1 Band IV	802.11a	16.08	16.35	15.66
	802.11n(HT20)	16.92	15.81	15.54
	802.11n(HT40)	36.38	/	36.25

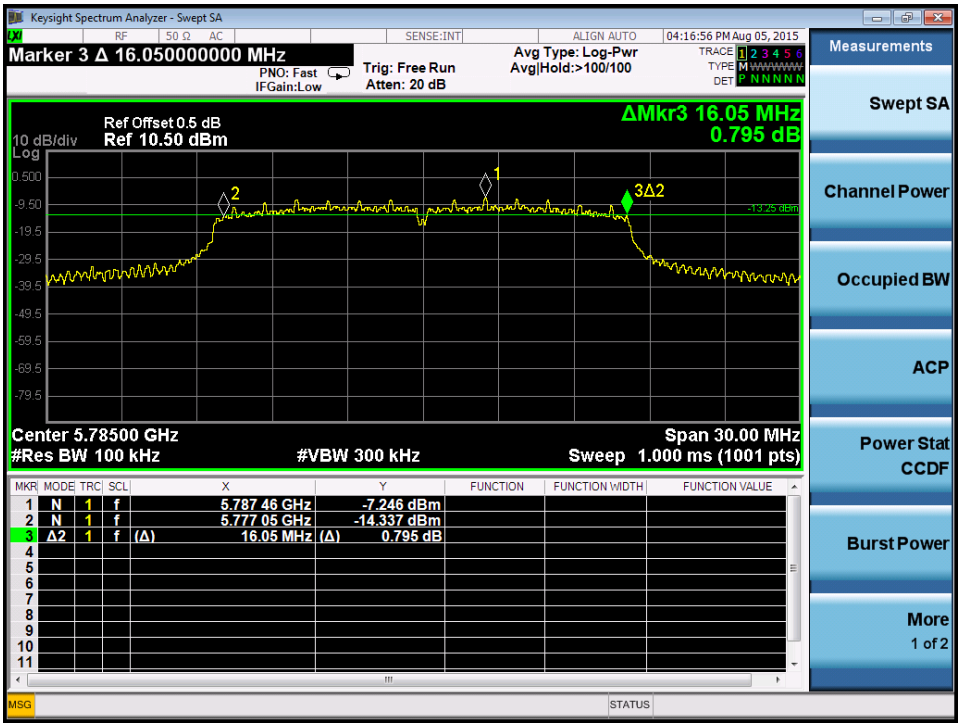
Test result plots shown as follows:

ANT0:

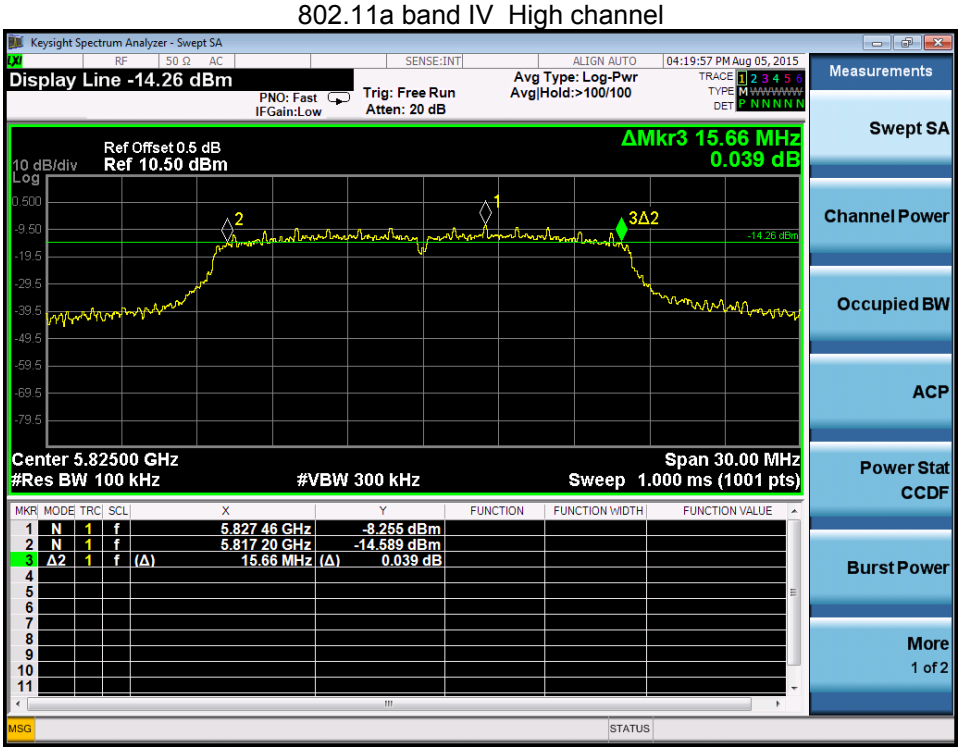
802.11a band IV Low channel



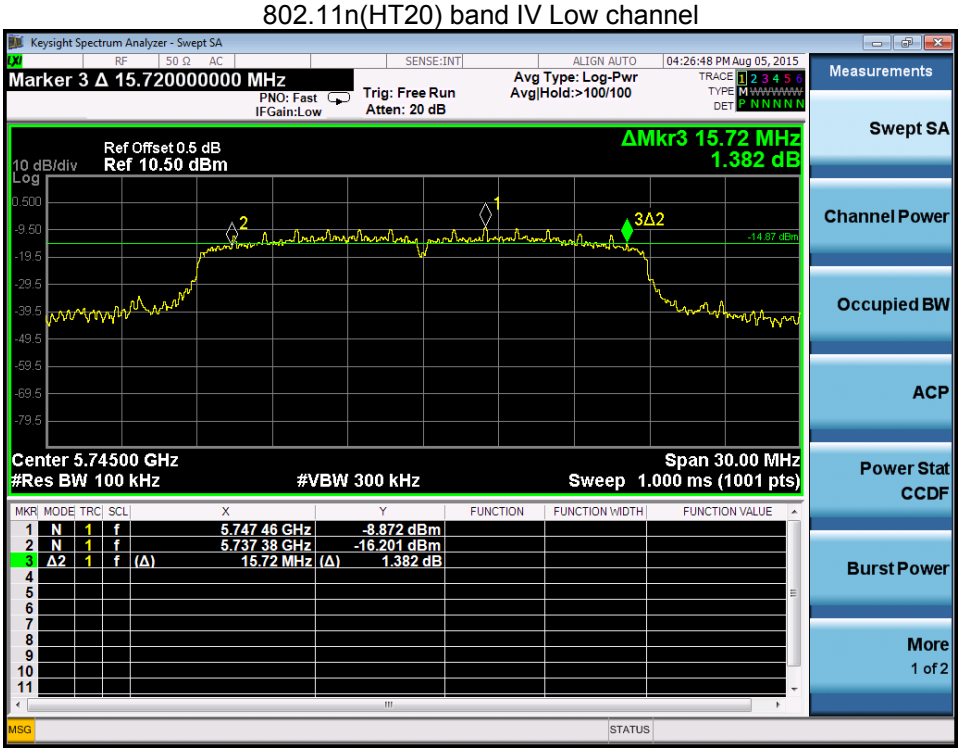
802.11a band IV Middle channel



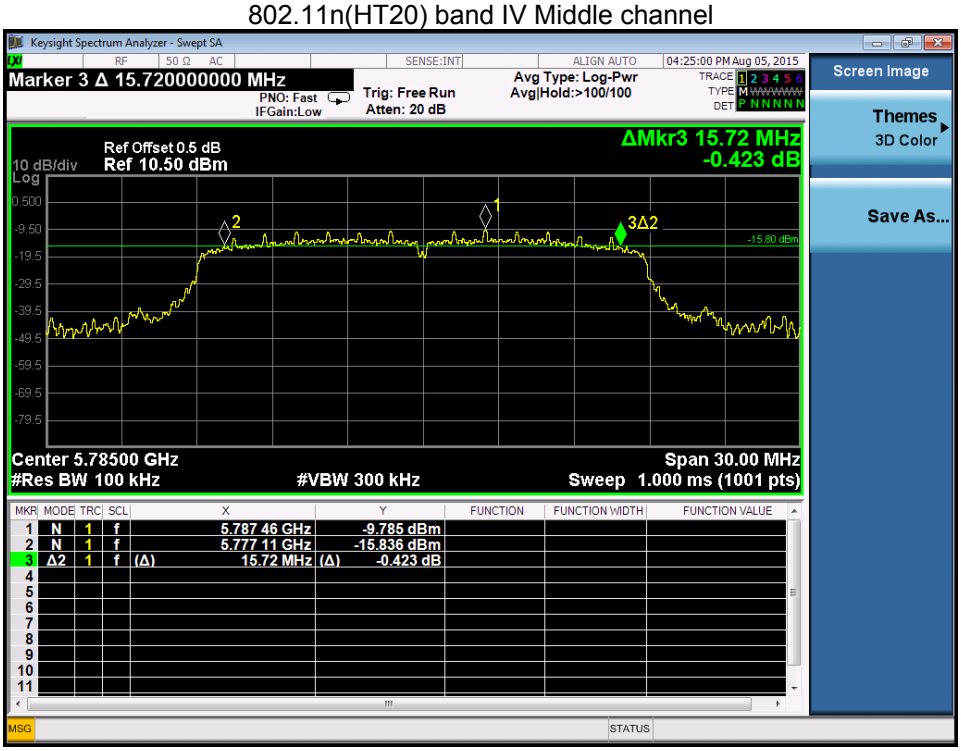
802.11a band IV High channel



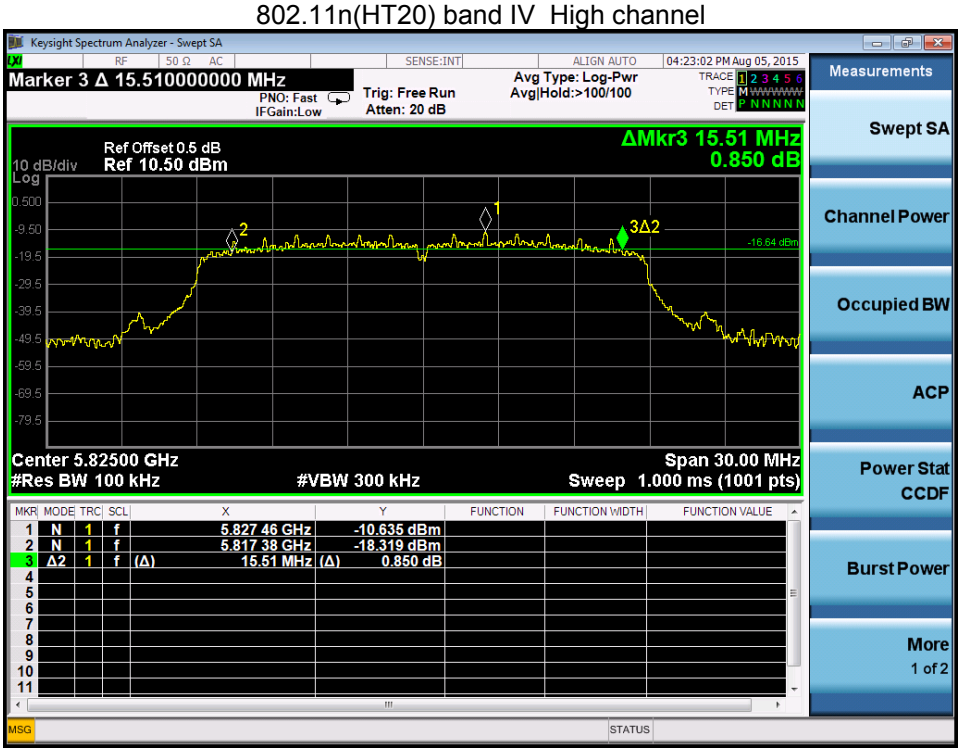
802.11n(HT20) band IV Low channel



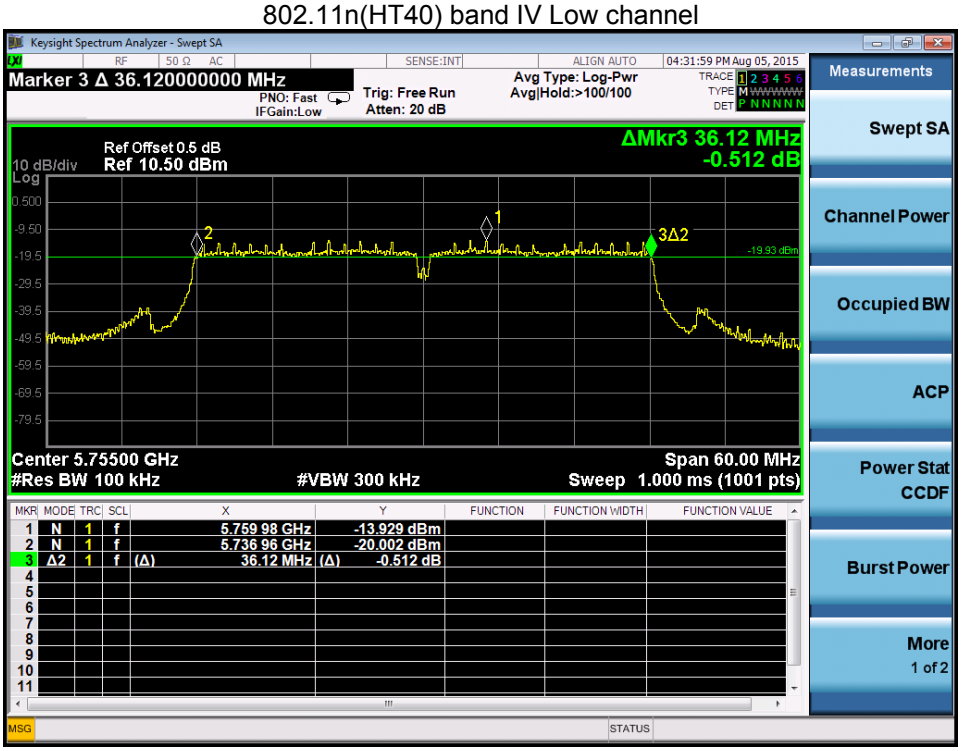
802.11n(HT20) band IV Middle channel



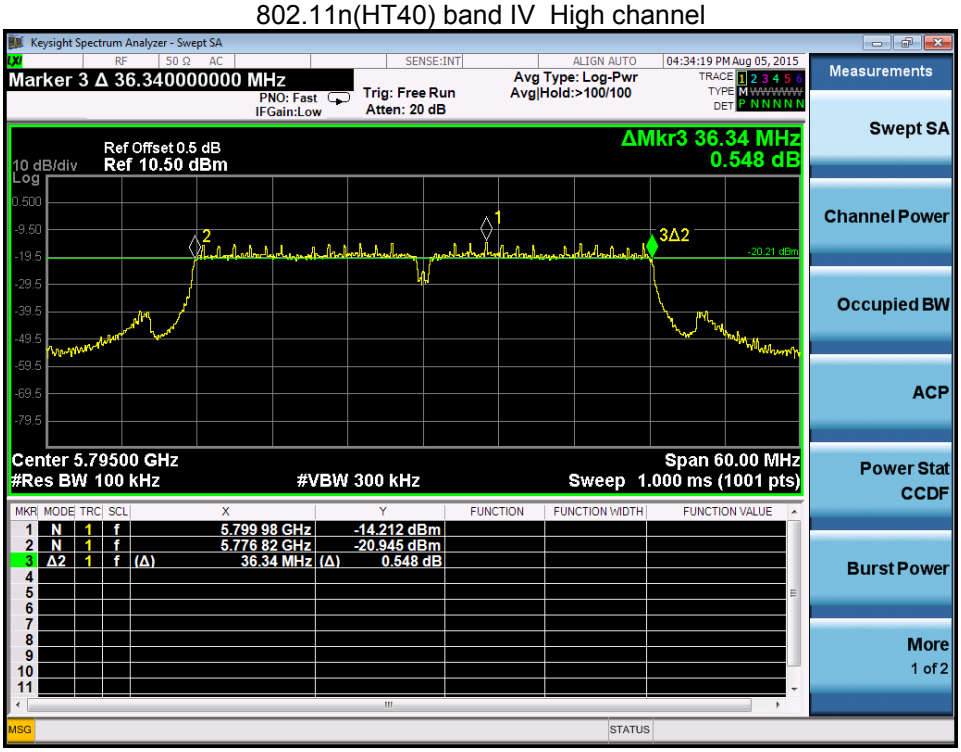
802.11n(HT20) band IV High channel



802.11n(HT40) band IV Low channel

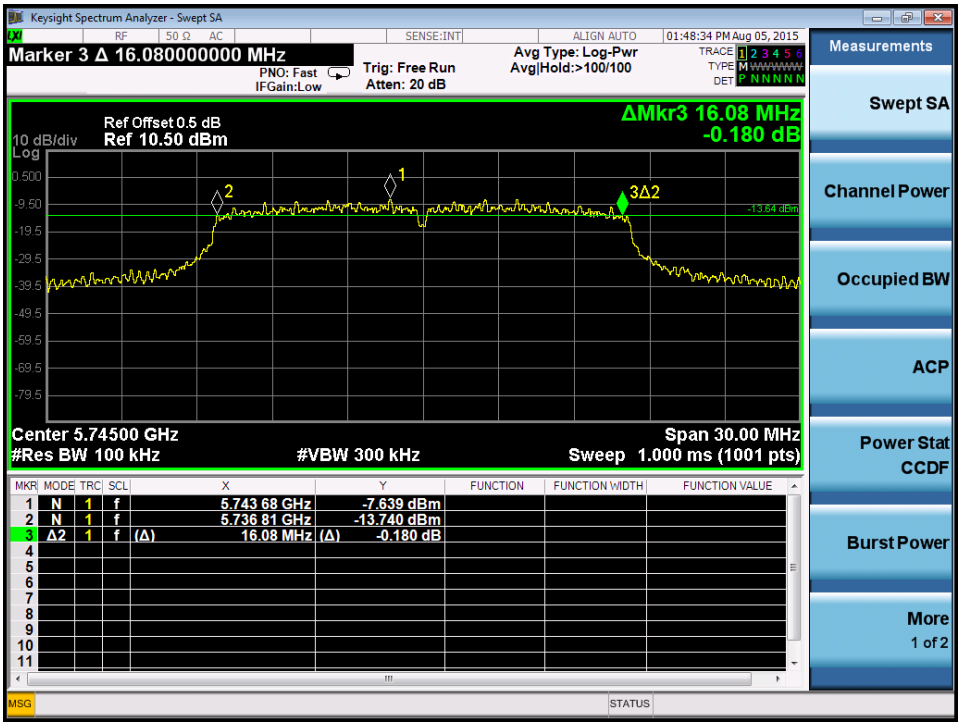


802.11n(HT40) band IV High channel

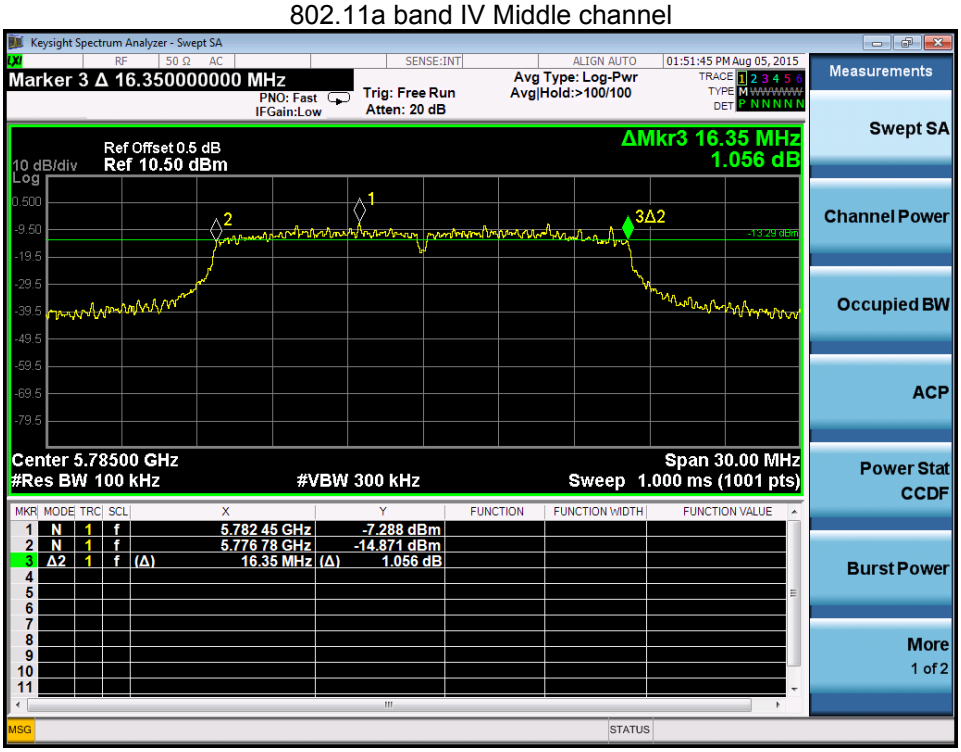


ANT1:

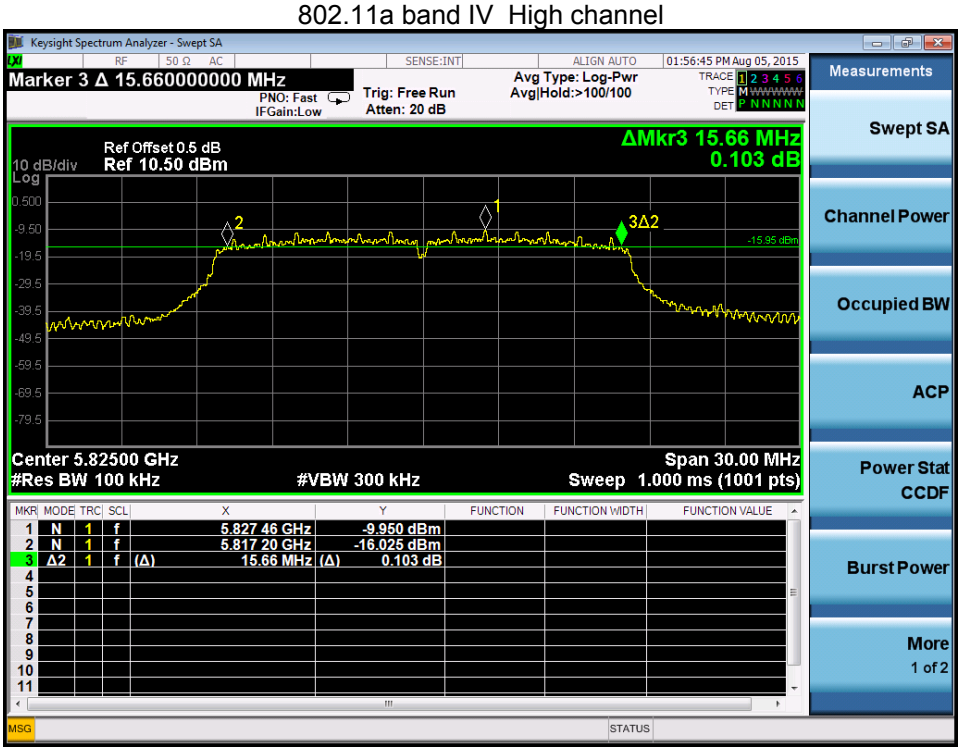
802.11a band IV Low channel



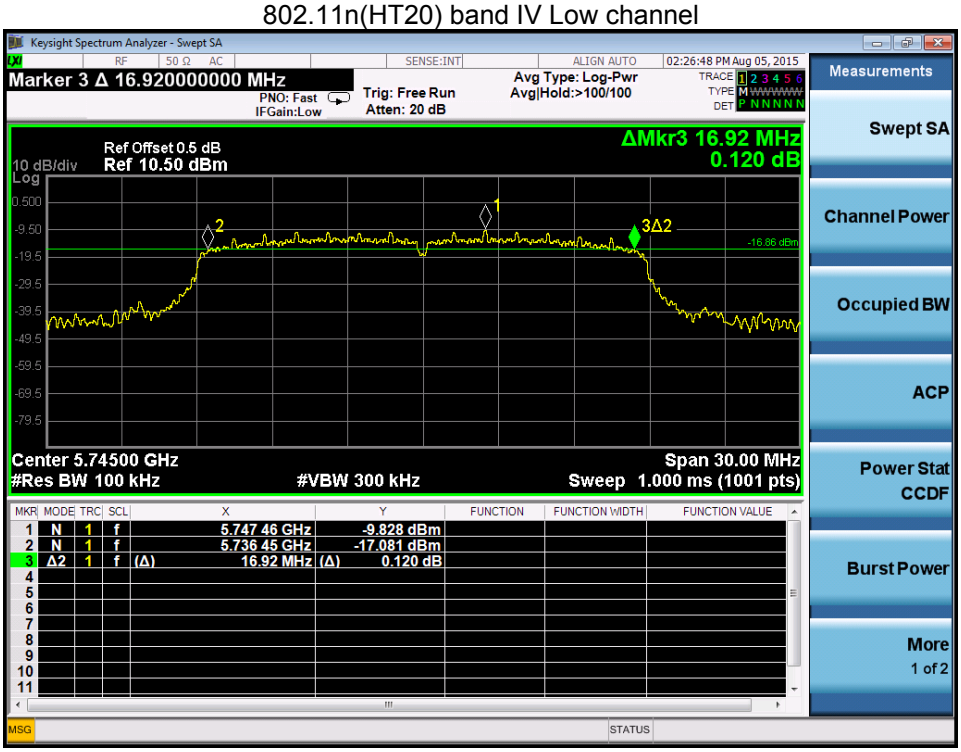
802.11a band IV Middle channel



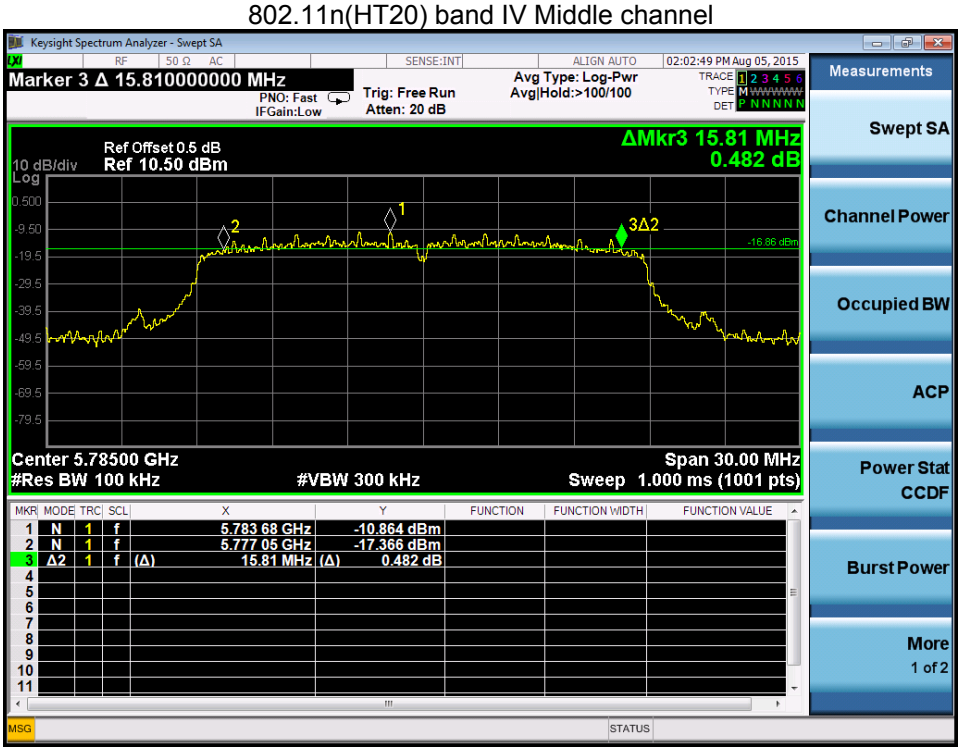
802.11a band IV High channel



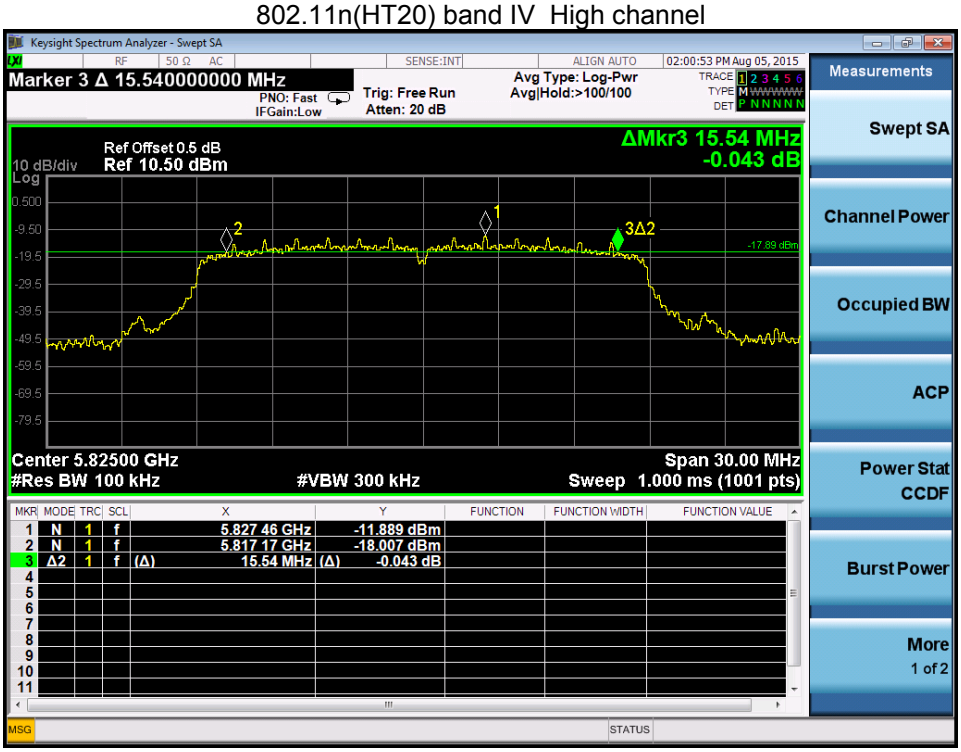
802.11n(HT20) band IV Low channel



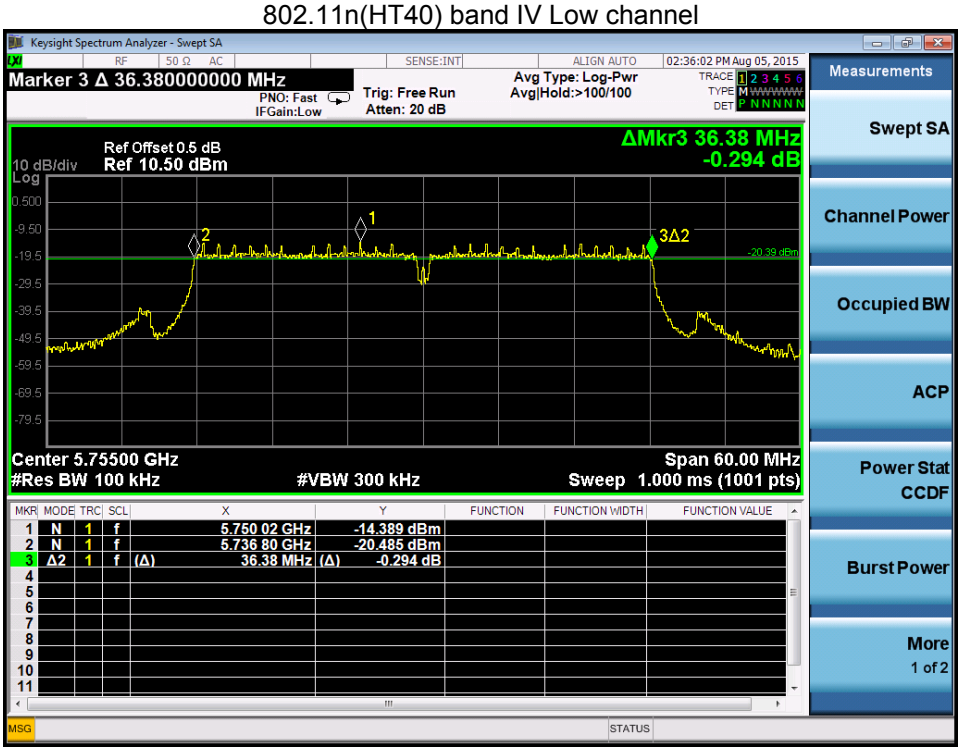
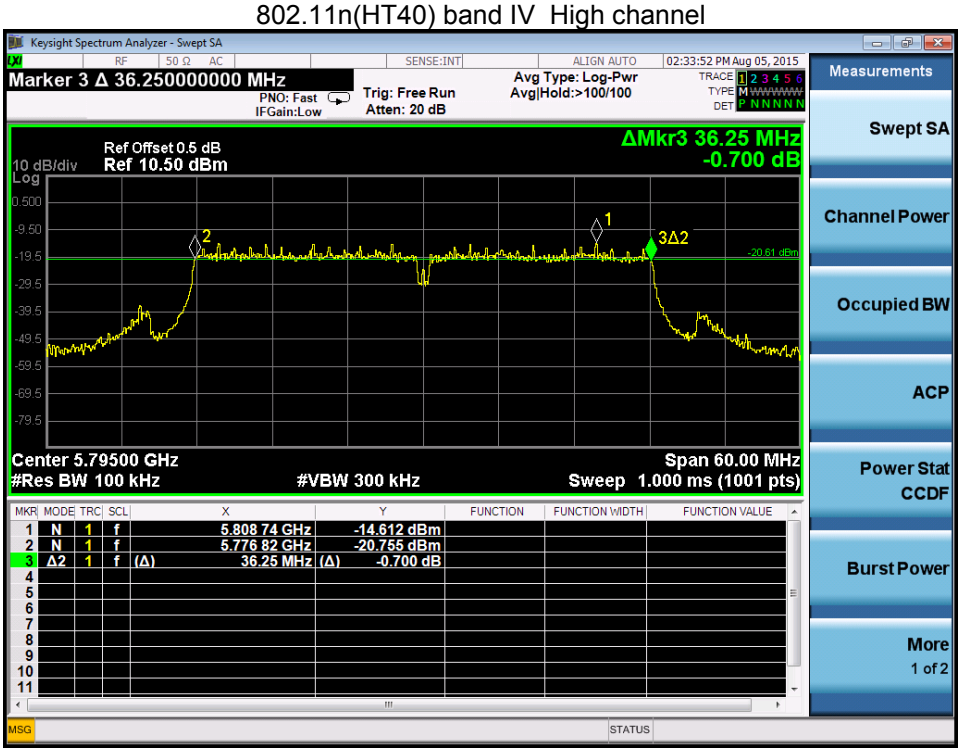
802.11n(HT20) band IV Middle channel



802.11n(HT20) band IV High channel



802.11n(HT40) band IV Low channel



802.11n(HT40) band IV High channel