

FCC 47 CFR PART 15 SUBPART E

Product Type : Medical Station
Applicant : ONYX Healthcare Inc.
Address : 2F, No. 135, Lane 235, Pao chiao Rd., HSIN-Tien City, Taipei, Taiwan 231
Trade Name : ONYX Healthcare
Model Number : ONYX-1521DTy-xxxxxxx (Where "y" T or blank, "x" in 0~9, A~Z or blank)
Test Specification : FCC 47 CFR PART 15 SUBPART E: Oct., 2014
ANSI C63.10:2009
Application Purpose : Original
Receive Date : Dec. 30, 2014
Test Period : Jan. 31 ~ Feb. 04, 2015
Issue Date : Mar. 19, 2015

Issue by

A Test Lab Techno Corp.
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Taiwan Accreditation Foundation accreditation number: 1330

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Revision History

Rev.	Issue Date	Revisions	Revised By
00	Mar. 19, 2015	Initial Issue	

Verification of Compliance

Issued Date: 03/19/2015

Product Type : Medical Station
Applicant : ONYX Healthcare Inc.
Address : 2F, No. 135, Lane 235, Pao chiao Rd., HSIN-Tien City, Taipei, Taiwan 231
Trade Name : ONYX Healthcare
Model Number : ONYX-1521DTy-xxxxxxx (Where "y" T or blank, "x" in 0~9, A~Z or blank)
FCC ID : RZ51521DTT-C1
EUT Rated Voltage : DC 24V, 2.91A
Test Voltage : 120 Vac / 60 Hz
Applicable Standard : FCC 47 CFR PART 15 SUBPART E: Oct., 2014
ANSI C63.10:2009
Test Result : Complied
Application Purpose : Original
Performing Lab. : A Test Lab Techno Corp.

No. 140-1, Changan Street, Bade City,
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<http://www.atl-lab.com.tw/e-index.htm>



A Test Lab Techno Corp. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by A Test Lab Techno Corp. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Approved By :



(Manager)

(Fly Lu)

Reviewed By :



(Testing Engineer)

(Eric Ou Yang)

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1 General Information

1.1. Summary of Test Result

Standard	Item	Result	Remark
FCC			
15.407(b)(6) 15.207	AC Power Conducted Emission	PASS	---
15.407(b) 15.205 / 15.209	Transmitter Radiated Emissions	PASS	---
15.407(a)	Maximum Conducted Output Power	PASS	---
15.407(a)	26dB RF Bandwidth	Reference	---
15.407(a)	6dB RF Bandwidth	PASS	----
15.407(a)	Peak Power Spectral Density	PASS	---
15.407(g)	Frequency Stability	PASS	---
15.407(a) 15.203	Antenna Requirement	PASS	---

The test results of this report relate only to the tested sample(s) identified in this report. Manufacturer or whom it may concern should recognize the pass or fail of the test result.

1.2. Measurement Uncertainty

Measurement Item	Frequency Range		Uncertainty (dB)
Conducted Emission	9kHz ~ 30MHz		± 2.020
Radiated Emission	30MHz ~ 1000MHz	Horizontal	± 3.960
		Vertical	± 3.570
	1000MHz ~ 18000MHz	Horizontal	± 3.072
		Vertical	± 3.028
	18000MHz ~ 40000MHz	Horizontal	± 3.622
		Vertical	± 3.506

2 EUT Description

Product Type	Medical Station			
Trade Name	ONYX Healthcare			
Model No.	ONYX-1521DTy-xxxxxxx (Where “y” T or blank, “x” in 0~9,A~Z or blank)			
Applicant	ONYX Healthcare Inc. 2F,No.135,Lane235,Pao chiao Rd., HSIN-Tien City, Taipei, Taiwan 231			
Manufacturer	ONYX Healthcare Inc. 2F,No.135,Lane235,Pao chiao Rd., HSIN-Tien City, Taipei, Taiwan 231			
FCC ID	RZ51521DTT-C1			
Frequency Range	Band	Mode	Frequency Range (MHz)	Number of Channels
	U-NII Band I	IEEE 802.11a	5180 – 5240	4 Channels
		IEEE 802.11n 20 MHz	5180 – 5240	4 Channels
		IEEE 802.11n 40 MHz	5190 – 5230	2 Channels
	U-NII Band II-A	IEEE 802.11a	5260 – 5320	4 Channels
		IEEE 802.11n 20 MHz	5260 – 5320	4 Channels
		IEEE 802.11n 40 MHz	5270 – 5310	2 Channels
	U-NII Band II-C	IEEE 802.11a	5500 – 5700	11 Channels
		IEEE 802.11n 20 MHz	5500 – 5700	11 Channels
		IEEE 802.11n 40 MHz	5510 – 5670	5 Channels
	U-NII Band III	IEEE 802.11a	5745 – 5825	5 Channels
		IEEE 802.11n 20 MHz	5745 – 5825	5 Channels
		IEEE 802.11n 40 MHz	5755 – 5795	2 Channels
Modulation Type	OFDM			
Antenna Used	Type		Max. Gain (dBi)	
			ANT-0	ANT-1
	Internal Antenna	3.28	3.81	
Antenna Delivery	2TX + 2RX			
RF Output Power	IEEE 802.11a U-NII Band I : 0.023 W / 13.61 dBm IEEE 802.11a U-NII Band II-A : 0.023 W / 13.60 dBm IEEE 802.11a U-NII Band II-C : 0.017 W / 12.22 dBm IEEE 802.11a U-NII Band III : 0.018 W / 12.49 dBm IEEE 802.11n 20MHz U-NII Band I: 0.015 W / 11.76 dBm IEEE 802.11n 20MHz U-NII Band II-A: 0.014 W / 11.42 dBm IEEE 802.11n 20MHz U-NII Band II-C: 0.011 W / 10.52 dBm IEEE 802.11n 20MHz U-NII Band III: 0.011 W / 10.35 dBm IEEE 802.11n 40MHz U-NII Band I: 0.014 W / 11.47 dBm IEEE 802.11n 40MHz U-NII Band II-A: 0.014W / 11.39 dBm IEEE 802.11n 40MHz U-NII Band II-C: 0.014 W / 11.41 dBm IEEE 802.11n 40MHz U-NII Band III: 0.011 W / 10.35 dBm			

3 Test Methodology

3.1. Mode of Operation

Decision of Test ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: Normal Operation Mode
Mode 2: IEEE 802.11a Link Mode
Mode 3: IEEE 802.11n 20MHz Link Mode
Mode 4: IEEE 802.11n 40MHz Link Mode

Software used to control the EUT for staying in continuous transmitting mode was programmed.

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in normal link mode only.

Test Mode	ANT-0	ANT-1	ANT-0+1
Mode 2: IEEE 802.11a Link Mode	V	V	V
Mode 3: IEEE 802.11n 20MHz Link Mode	V	V	V
Mode 4: IEEE 802.11n 40MHz Link Mode	V	V	V

Test Mode	Band	Data Rate	Test Channel
Mode 2: IEEE 802.11a Link Mode	U-NII Band I	6M	36,40,44,48
	U-NII Band II-A		52,56,60,64
	U-NII Band II-C		100,104,108,112,116,120,124,128,132,136,140
	U-NII Band III		149,153,157,161,165
Mode 3: IEEE 802.11n 20MHz Link Mode	U-NII Band I	13M	36,40,44,48
	U-NII Band II-A		52,56,60,64
	U-NII Band II-C		100,104,108,112,116,120,124,128,132,136,140
	U-NII Band III		149,153,157,161,165
Mode 4: IEEE 802.11n 40MHz Link Mode	U-NII Band I	27M	38,46
	U-NII Band II-A		54,62
	U-NII Band II-C		102,,110,118,126,134
	U-NII Band III		151, 159

3.2. EUT Exercise Software

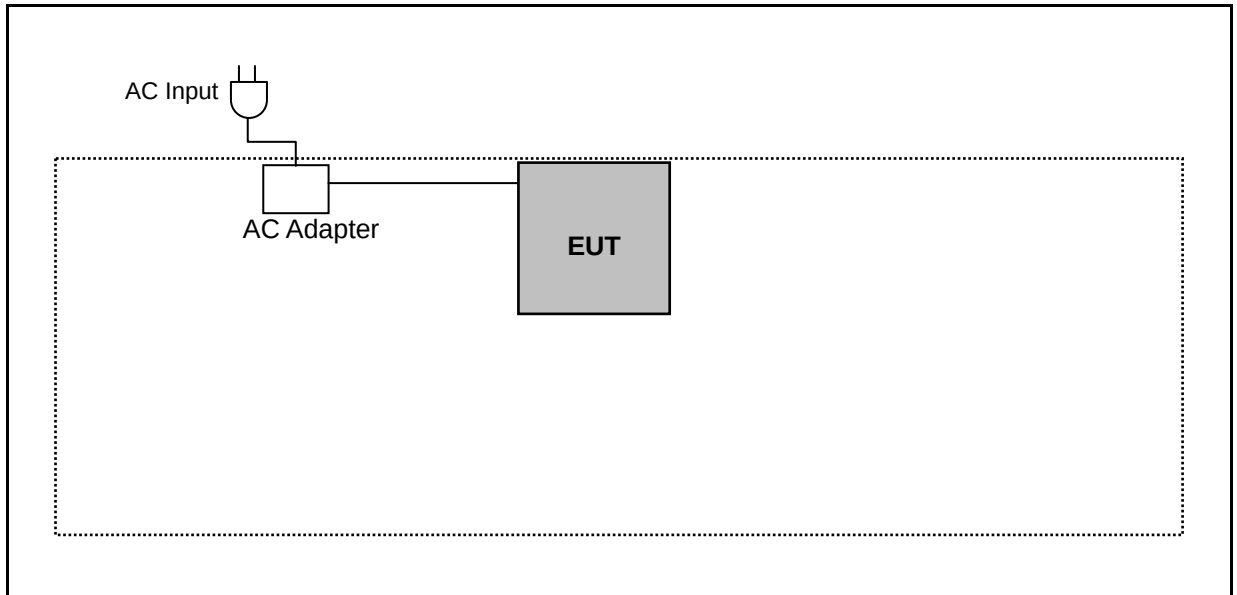
The EUT is operated in the engineering mode to fix the TX frequency for the purposes of measurement.

According to its specifications, the EUT must comply with the requirements of Section 15.407 under the FCC Rules Part 15 Subpart E.

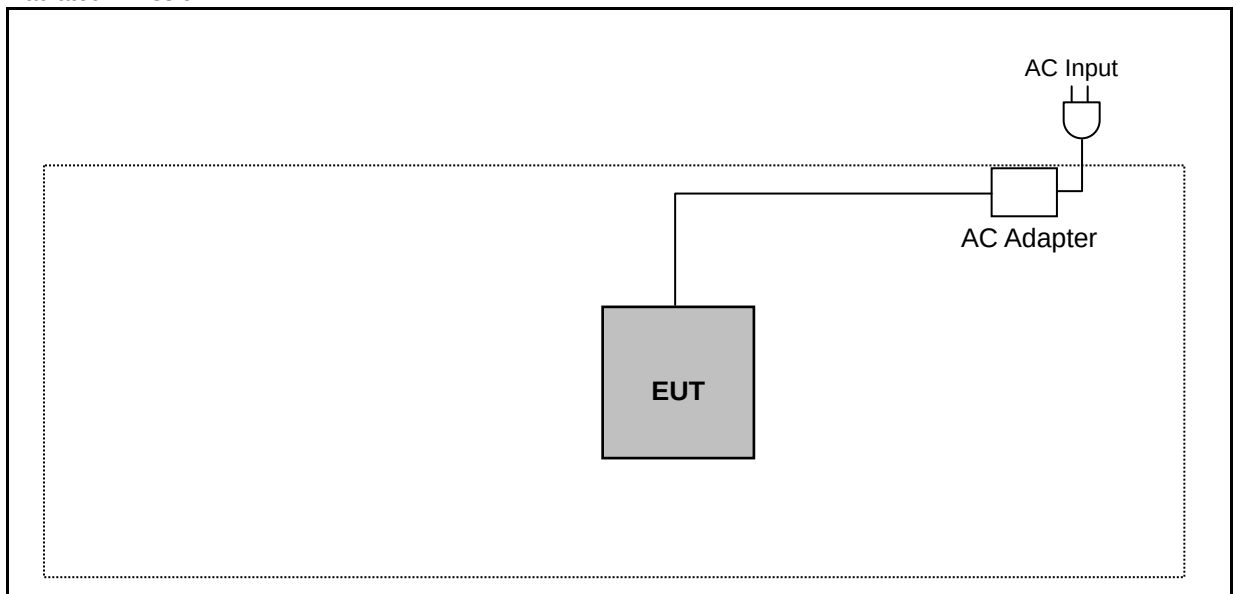
1.	Setup the EUT shown on 3.3.
2.	Turn on the power of all equipment.
3.	Turn on Wi-Fi function link to Notebook.
4.	EUT run test program.

3.3. Configuration of Test System Details

Conducted Emission



Radiated Emission



3.4. Test Site Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	26
Humidity (%RH)	25-75	60
Barometric pressure (mbar)	860-1060	950

4 AC Power Conducted Emission Measurement

4.1. Limit

Frequency (MHz)	Quasi-peak	Average
0.15 - 0.5	66 to 56	56 to 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

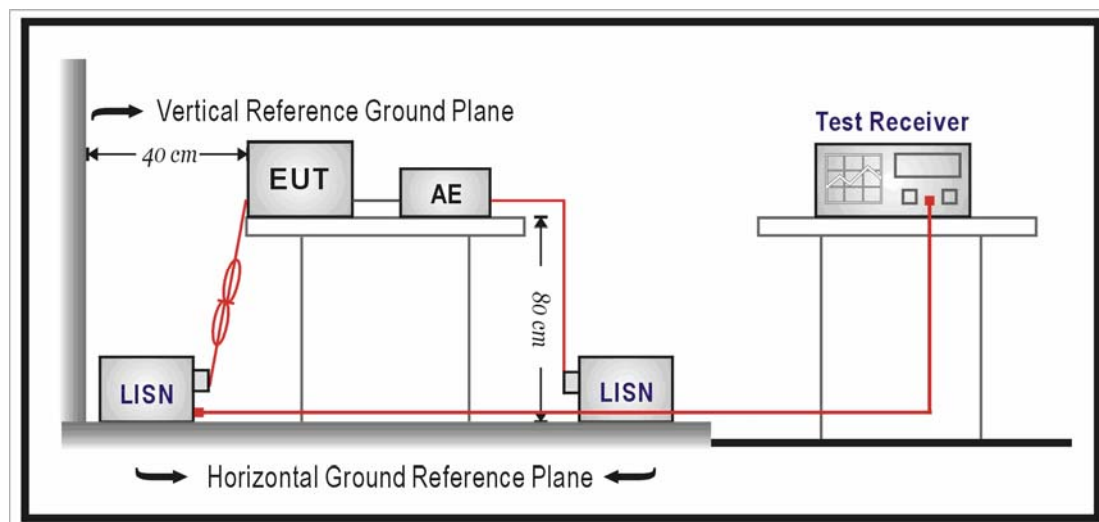
4.2. Test Instruments

Describe	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Test Receiver	R&S	ESCI	100367	06/12/2014	(1)
LISN	R&S	ENV216	101040	03/07/2014	(1)
LISN	R&S	ENV216	101041	03/07/2014	(1)
Test Site	ATL	TE05	TE05	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

4.3. Test Setup



4.4. Test Procedure

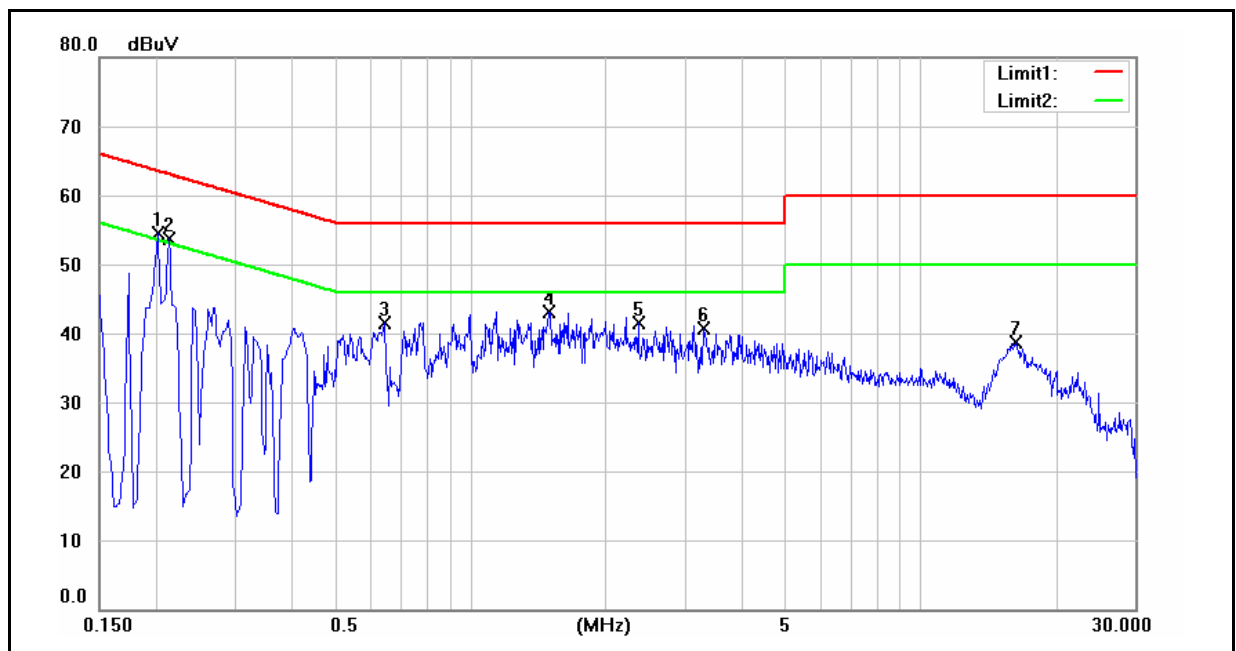
The power line conducted emission measurements were performed in a shielded enclosure. The EUT was assembled on a wooden table which is 80 centimeters high, was placed 40 centimeters from the back wall and at least 1 meter from the sidewall.

Power was fed to the EUT from the public utility power grid through a line filter and EMCO Model 3162/2 SH Line Impedance Stabilization Networks (LISN). The LISN housing, measuring instrumentation case, ground plane, etc., were electrically bonded together at the same RF potential. The Spectrum analyzer was connected to the AC line through an isolation transformer. The 50-ohm output of the LISN was connected to the spectrum analyzer directly. Conducted emission levels were in the CISPR quasi-peak detection mode. The analyzer's 6 dB bandwidth was set to 9 KHz. No post-detector video filter was used.

The spectrum was scanned from 150 KHz to 30 MHz. The physical arrangement of the test system and associated cabling was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude and frequency. All spurious emission frequencies were observed. The highest emission amplitudes relative to the appropriate limit were measured and have been recorded in paragraph 4.1.

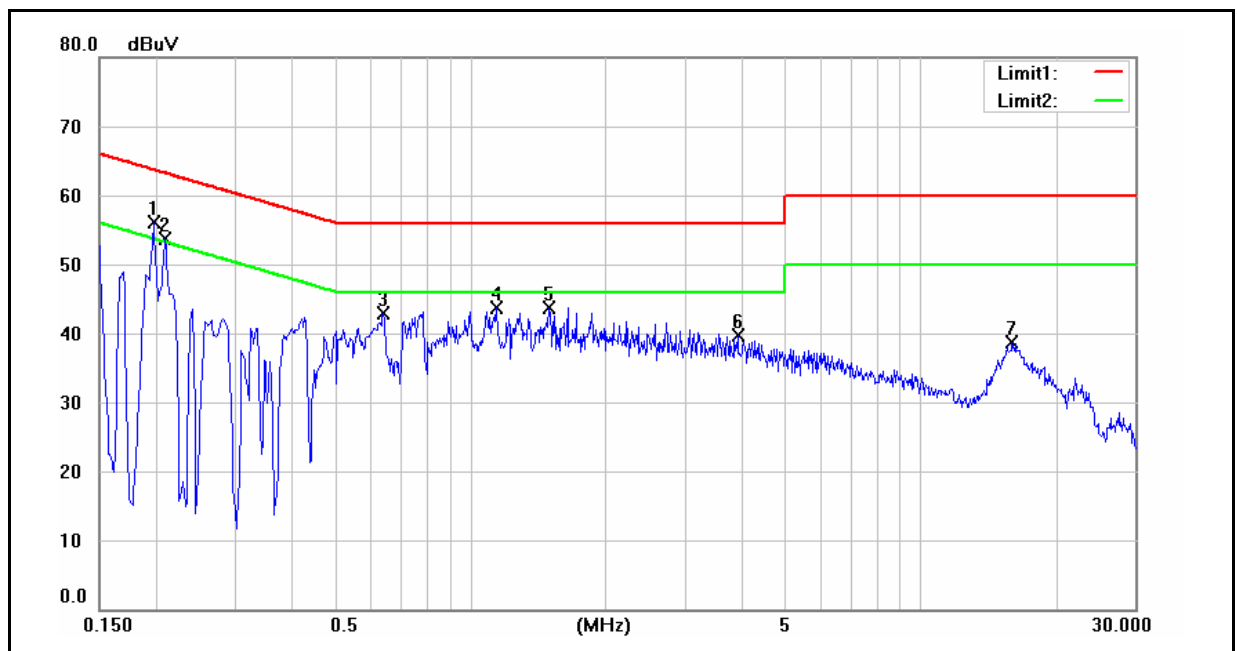
4.5. Test Result

Standard:	FCC Part 15E	Line:	L1
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Model Number:	ONYX-1521DTT-C1-1010	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Test Mode:	Mode 1	Date:	02/04/2015
		Test By:	Eric Ou Yang
Description:			



No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.2020	42.44	29.90	9.60	52.04	39.50	63.53	53.53	-11.49	-14.03	Pass
2	0.2140	40.51	24.08	9.60	50.11	33.68	63.05	53.05	-12.94	-19.37	Pass
3	0.6460	28.88	14.89	9.62	38.50	24.51	56.00	46.00	-17.50	-21.49	Pass
4	1.5020	31.44	18.71	9.67	41.11	28.38	56.00	46.00	-14.89	-17.62	Pass
5	2.3620	28.38	17.98	9.70	38.08	27.68	56.00	46.00	-17.92	-18.32	Pass
6	3.2940	26.25	19.05	9.75	36.00	28.80	56.00	46.00	-20.00	-17.20	Pass
7	16.2980	24.19	19.08	10.14	34.33	29.22	60.00	50.00	-25.67	-20.78	Pass

Standard:	FCC Part 15E	Line:	N
Test item:	Conducted Emission	Power:	AC 120V/60Hz
Model Number:	ONYX-1521DTT-C1-1010	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Test Mode:	Mode 1	Date:	02/04/2015
		Test By:	Eric Ou Yang
Description:			



No.	Frequency (MHz)	QP reading (dBuV)	AVG reading (dBuV)	Correction factor (dB)	QP result (dBuV)	AVG result (dBuV)	QP limit (dBuV)	AVG limit (dBuV)	QP margin (dB)	AVG margin (dB)	Remark
1	0.1980	42.52	29.37	9.60	52.12	38.97	63.69	53.69	-11.57	-14.72	Pass
2	0.2100	40.99	26.84	9.60	50.59	36.44	63.21	53.21	-12.62	-16.77	Pass
3	0.6420	31.99	18.26	9.62	41.61	27.88	56.00	46.00	-14.39	-18.12	Pass
4	1.1460	31.88	17.66	9.66	41.54	27.32	56.00	46.00	-14.46	-18.68	Pass
5	1.5020	31.69	19.09	9.68	41.37	28.77	56.00	46.00	-14.63	-17.23	Pass
6	3.9380	24.43	18.77	9.80	34.23	28.57	56.00	46.00	-21.77	-17.43	Pass
7	16.0500	24.42	19.25	10.13	34.55	29.38	60.00	50.00	-25.45	-20.62	Pass

5 Radiated Emission Measurement

5.1. Limit

Limits of Radiated Emission Measurement

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequency Range (MHz)	Field Strength (microvolts/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	10	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Note: 1. The lower limit shall apply at the transition frequencies.

2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

5.2. Test Instruments

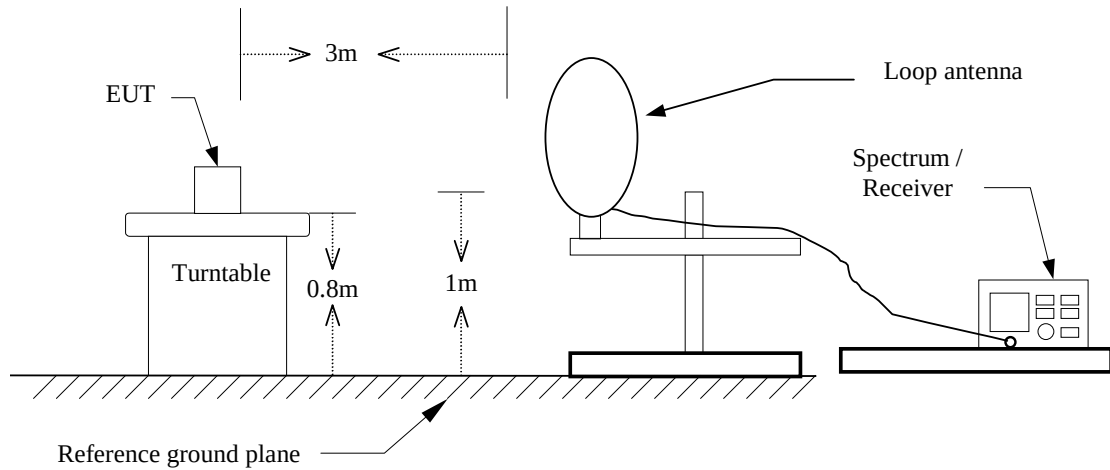
3 Meter Chamber					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
RF Pre-selector	Agilent	N9039A	MY46520256	01/06/2015	(1)
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/06/2015	(1)
Pre Amplifier	Agilent	8449B	3008A02237	02/21/2014	(1)
Pre Amplifier	Agilent	8447D	2944A10961	02/21/2014	(1)
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	07/18/2014	(1)
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/11/2014	(1)
Horn Antenna (18~40GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	06/13/2014	(1)
Test Site	ATL	TE01	888001	08/28/2014	(1)

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

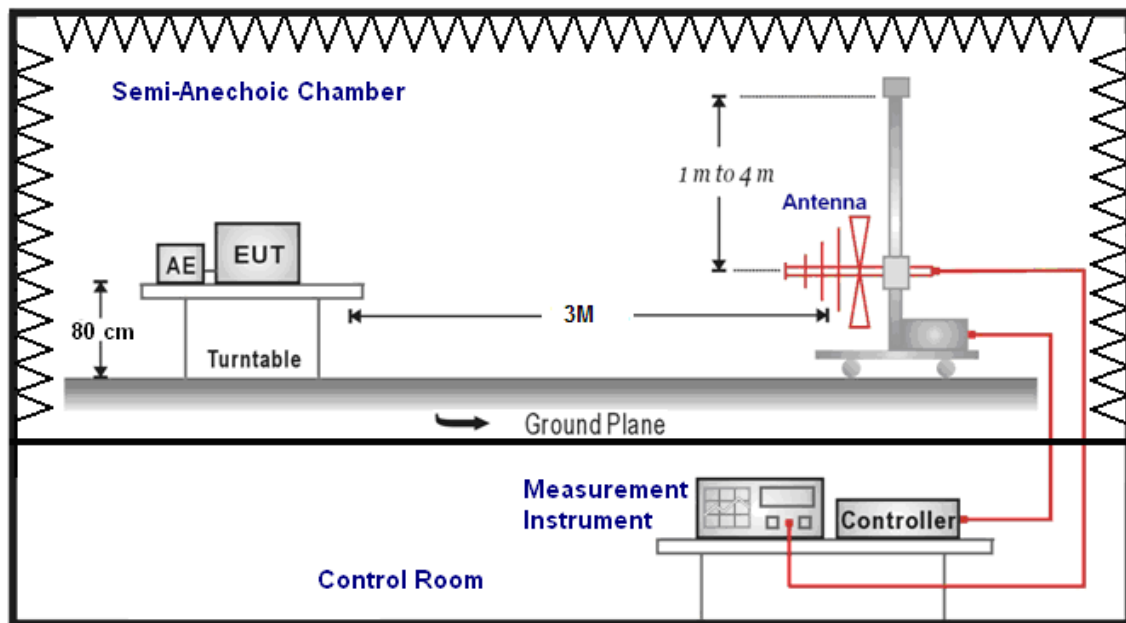
Note: N.C.R. = No Calibration Request.

5.3. Setup

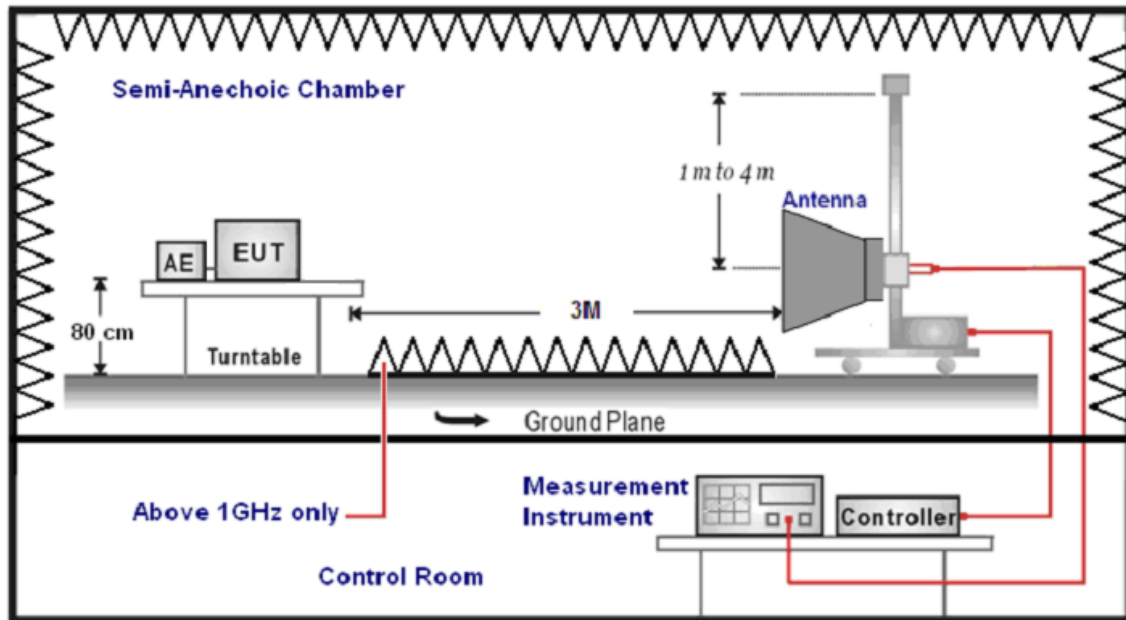
9kHz ~ 30MHz



30MHz ~ 1GHz



Above 1GHz



5.4. Test Procedure

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 9 kHz to 40 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 3 MHz for peak measurements and 3 MHz for average measurements.

A nonconductive material surrounded the EUT to supporting the EUT for standing on three orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Trilog-Broadband Antenna (mode SB AC VULB) at 3 Meter and the ETS-Lindgren Double-Ridged Waveguide Horn antenna (model 3117) Schwarzbeck Mess-Elektronik Broadband Horn Antenna (BBHA 9170) was used in frequencies 1 – 40 GHz at a distance of 1 meter. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade). For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts per meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro volts per meter (dBuV/m).

The actual field intensity in decibels referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

(1) $\text{Amplitude (dBuV/m)} = \text{FI (dBuV)} + \text{AF (dBuV)} + \text{CL (dBuV)} - \text{Gain (dB)}$

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

(2) $\text{Actual Amplitude (dBuV/m)} = \text{Amplitude (dBuV)} - \text{Dis(dB)}$

The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

(a) For fundamental frequency : Transmitter Output < +30dBm

(b) For spurious frequency : Spurious emission limits = fundamental emission limit /10

5.5. Test Result

Below 1GHz

Standard:		FCC Part 15E		Test Distance:		3m	
Test item:		Radiated Emission		Power:		AC 120V/60Hz	
Model Number:		ONYX-1521DTT-C1-1010		Temp.(°C)/Hum.(%RH):		26(°C)/60%RH	
Test Mode:		Mode 1		Date:		01/31/2015	
				Test By:		Eric Ou Yang	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
111.0000	45.57	-15.42	30.15	43.50	-13.35	QP	H
247.5000	47.28	-12.46	34.82	46.00	-11.18	QP	H
346.0000	41.91	-9.67	32.24	46.00	-13.76	QP	H
499.5000	29.23	-6.56	22.67	46.00	-23.33	QP	H
630.0000	32.96	-3.80	29.16	46.00	-16.84	QP	H
877.5000	26.38	0.91	27.29	46.00	-18.71	QP	H
144.0000	41.45	-12.21	29.24	43.50	-14.26	QP	V
299.5000	44.87	-10.50	34.37	46.00	-11.63	QP	V
431.5000	34.27	-7.85	26.42	46.00	-19.58	QP	V
665.0000	41.17	-3.25	37.92	46.00	-8.08	QP	V
816.0000	29.99	-0.20	29.79	46.00	-16.21	QP	V
944.5000	29.72	2.46	32.18	46.00	-13.82	QP	V

Note: No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).

Above 1GHz

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 2			Date:	01/31/2015		
Frequency:	5180MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2827.000	36.65	-0.94	35.71	74.00	-38.29	peak	H
4577.000	33.77	3.98	37.75	74.00	-36.25	peak	H
5150.000	32.99	5.28	38.27	68.20	-29.93	peak	H
7685.000	33.16	11.78	44.94	74.00	-29.06	peak	H
2813.000	37.91	-0.98	36.93	74.00	-37.07	peak	V
4577.000	35.27	3.98	39.25	74.00	-34.75	peak	V
5150.000	35.09	5.28	40.37	68.20	-27.83	peak	V
7657.000	35.06	11.74	46.80	74.00	-27.20	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 2			Date:	01/31/2015		
Frequency:	5220MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2806.000	36.24	-0.99	35.25	74.00	-38.75	peak	H
4591.000	34.53	4.01	38.54	74.00	-35.46	peak	H
7657.000	34.55	11.74	46.29	74.00	-27.71	peak	H
2806.000	38.27	-0.99	37.28	74.00	-36.72	peak	V
4577.000	35.15	3.98	39.13	74.00	-34.87	peak	V
7685.000	34.57	11.78	46.35	74.00	-27.65	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 2			Date:	01/31/2015		
Frequency:	5240MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2827.000	36.15	-0.94	35.21	74.00	-38.79	peak	H
4570.000	34.41	3.97	38.38	74.00	-35.62	peak	H
5250.000	33.04	5.43	38.47	68.20	-29.73	peak	H
7678.000	33.05	11.77	44.82	74.00	-29.18	peak	H
2834.000	37.61	-0.93	36.68	74.00	-37.32	peak	V
4563.000	34.00	3.95	37.95	74.00	-36.05	peak	V
5250.000	33.85	5.43	39.28	68.20	-28.92	peak	V
7657.000	33.99	11.74	45.73	74.00	-28.27	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 2			Date:	01/31/2015		
Frequency:	5260MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2806.000	35.96	-0.99	34.97	74.00	-39.03	peak	H
4598.000	34.08	4.04	38.12	74.00	-35.88	peak	H
5250.000	34.87	5.43	40.30	68.20	-27.90	peak	H
7685.000	34.17	11.78	45.95	74.00	-28.05	peak	H
2806.000	37.57	-0.99	36.58	74.00	-37.42	peak	V
4570.000	34.54	3.97	38.51	74.00	-35.49	peak	V
5250.000	33.61	5.43	39.04	68.20	-29.16	peak	V
7678.000	33.72	11.77	45.49	74.00	-28.51	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(℃)/Hum.(%RH):	26(℃)/60%RH		
Test Mode:	Mode 2			Date:	01/31/2015		
Frequency:	5280MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2813.000	35.48	-0.98	34.50	74.00	-39.50	peak	H
4570.000	34.43	3.97	38.40	74.00	-35.60	peak	H
7671.000	33.20	11.76	44.96	74.00	-29.04	peak	H
2806.000	36.54	-0.99	35.55	74.00	-38.45	peak	V
4598.000	34.09	4.04	38.13	74.00	-35.87	peak	V
7643.000	33.18	11.72	44.90	74.00	-29.10	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(℃)/Hum.(%RH):	26(℃)/60%RH		
Test Mode:	Mode 2			Date:	01/31/2015		
Frequency:	5320MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2806.000	37.90	-0.99	36.91	74.00	-37.09	peak	H
4619.000	35.56	4.10	39.66	74.00	-34.34	peak	H
5350.000	33.70	5.57	39.27	68.20	-28.93	peak	H
7650.000	34.64	11.74	46.38	74.00	-27.62	peak	H
2827.000	37.94	-0.94	37.00	74.00	-37.00	peak	V
4563.000	34.46	3.95	38.41	74.00	-35.59	peak	V
5350.000	32.47	5.57	38.04	68.20	-30.16	peak	V
7678.000	33.51	11.77	45.28	74.00	-28.72	peak	V

Standard:		FCC Part 15E		Test Distance:		3m	
Test item:		Radiated Emission		Power:		AC 120V/60Hz	
Model Number:		ONYX-1521DTT-C1-1010		Temp.(℃)/Hum.(%RH):		26(℃)/60%RH	
Test Mode:		Mode 2		Date:		01/31/2015	
Frequency:		5500MHz		Test By:		Eric Ou Yang	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2834.000	37.70	-0.93	36.77	74.00	-37.23	peak	H
4591.000	34.46	4.01	38.47	74.00	-35.53	peak	H
5470.000	34.11	5.75	39.86	68.20	-28.34	peak	H
7685.000	32.94	11.78	44.72	74.00	-29.28	peak	H
2799.000	38.62	-1.01	37.61	74.00	-36.39	peak	V
4570.000	33.87	3.97	37.84	74.00	-36.16	peak	V
5470.000	33.97	5.75	39.72	68.20	-28.48	peak	V
7678.000	33.89	11.77	45.66	74.00	-28.34	peak	V

Standard:		FCC Part 15E		Test Distance:		3m	
Test item:		Radiated Emission		Power:		AC 120V/60Hz	
Model Number:		ONYX-1521DTT-C1-1010		Temp.(℃)/Hum.(%RH):		26(℃)/60%RH	
Test Mode:		Mode 2		Date:		01/31/2015	
Frequency:		5580MHz		Test By:		Eric Ou Yang	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2827.000	36.82	-0.94	35.88	74.00	-38.12	peak	H
4570.000	33.68	3.97	37.65	74.00	-36.35	peak	H
7685.000	33.75	11.78	45.53	74.00	-28.47	peak	H
2813.000	37.75	-0.98	36.77	74.00	-37.23	peak	V
4570.000	35.59	3.97	39.56	74.00	-34.44	peak	V
7629.000	35.54	11.70	47.24	74.00	-26.76	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 2			Date:	01/31/2015		
Frequency:	5700MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2813.000	36.89	-0.98	35.91	74.00	-38.09	peak	H
4570.000	35.13	3.97	39.10	74.00	-34.90	peak	H
5725.000	33.85	6.27	40.12	68.20	-28.08	peak	H
7657.000	33.24	11.74	44.98	74.00	-29.02	peak	H
2799.000	36.78	-1.01	35.77	74.00	-38.23	peak	V
4570.000	35.29	3.97	39.26	74.00	-34.74	peak	V
5725.000	33.56	6.27	39.83	68.20	-28.37	peak	V
7650.000	33.24	11.74	44.98	74.00	-29.02	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 2			Date:	01/31/2015		
Frequency:	5745MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2806.000	35.77	-0.99	34.78	74.00	-39.22	peak	H
4577.000	34.04	3.98	38.02	74.00	-35.98	peak	H
5715.000	34.03	6.25	40.28	68.20	-27.92	peak	H
5725.000	32.47	6.27	38.74	78.20	-39.46	peak	H
7657.000	31.38	11.74	43.12	74.00	-30.88	peak	H
2827.000	36.49	-0.94	35.55	74.00	-38.45	peak	V
4591.000	35.67	4.01	39.68	74.00	-34.32	peak	V
5715.000	33.88	6.25	40.13	68.20	-28.07	peak	V
5725.000	33.55	6.27	39.82	78.20	-38.38	peak	V
7685.000	33.19	11.78	44.97	74.00	-29.03	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 2			Date:	01/31/2015		
Frequency:	5785MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2834.000	36.32	-0.93	35.39	74.00	-38.61	peak	H
4549.000	34.76	3.92	38.68	74.00	-35.32	peak	H
7650.000	33.81	11.74	45.55	74.00	-28.45	peak	H
2834.000	37.34	-0.93	36.41	74.00	-37.59	peak	V
4591.000	34.32	4.01	38.33	74.00	-35.67	peak	V
7643.000	34.14	11.72	45.86	74.00	-28.14	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 2			Date:	01/31/2015		
Frequency:	5825MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2799.000	39.59	-1.01	38.58	74.00	-35.42	peak	H
4563.000	35.15	3.95	39.10	74.00	-34.90	peak	H
5850.000	33.21	6.53	39.74	78.20	-38.46	peak	H
5860.000	33.36	6.55	39.91	68.20	-28.29	peak	H
7685.000	34.25	11.78	46.03	74.00	-27.97	peak	H
2813.000	36.50	-0.98	35.52	74.00	-38.48	peak	V
4577.000	34.14	3.98	38.12	74.00	-35.88	peak	V
5850.000	32.81	6.53	39.34	78.20	-38.86	peak	V
5860.000	33.50	6.55	40.05	68.20	-28.15	peak	V
7671.000	33.60	11.76	45.36	74.00	-28.64	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 3			Date:	01/31/2015		
Frequency:	5180MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2813.000	37.54	-0.98	36.56	74.00	-37.44	peak	H
4577.000	34.06	3.98	38.04	74.00	-35.96	peak	H
5150.000	33.18	5.28	38.46	68.20	-29.74	peak	H
7671.000	33.91	11.76	45.67	74.00	-28.33	peak	H
2813.000	36.24	-0.98	35.26	74.00	-38.74	peak	V
4549.000	34.68	3.92	38.60	74.00	-35.40	peak	V
5150.000	33.85	5.28	39.13	68.20	-29.07	peak	V
7671.000	34.41	11.76	46.17	74.00	-27.83	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 3			Date:	01/31/2015		
Frequency:	5220MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2827.000	37.29	-0.94	36.35	74.00	-37.65	peak	H
4542.000	35.02	3.89	38.91	74.00	-35.09	peak	H
7671.000	33.91	11.76	45.67	74.00	-28.33	peak	H
2806.000	36.94	-0.99	35.95	74.00	-38.05	peak	V
4549.000	33.64	3.92	37.56	74.00	-36.44	peak	V
7678.000	32.82	11.77	44.59	74.00	-29.41	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 3			Date:	01/31/2015		
Frequency:	5240MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2806.000	38.03	-0.99	37.04	74.00	-36.96	peak	H
4570.000	34.08	3.97	38.05	74.00	-35.95	peak	H
5250.000	34.11	5.43	39.54	68.20	-28.66	peak	H
7671.000	34.35	11.76	46.11	74.00	-27.89	peak	H
2785.000	38.30	-1.05	37.25	74.00	-36.75	peak	V
4570.000	33.93	3.97	37.90	74.00	-36.10	peak	V
5250.000	33.48	5.43	38.91	68.20	-29.29	peak	V
7643.000	33.59	11.72	45.31	74.00	-28.69	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 3			Date:	01/31/2015		
Frequency:	5260MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2827.000	37.81	-0.94	36.87	74.00	-37.13	peak	H
4563.000	34.23	3.95	38.18	74.00	-35.82	peak	H
5250.000	34.48	5.43	39.91	68.20	-28.29	peak	H
7650.000	33.23	11.74	44.97	74.00	-29.03	peak	H
2799.000	37.95	-1.01	36.94	74.00	-37.06	peak	V
4591.000	34.49	4.01	38.50	74.00	-35.50	peak	V
5250.000	33.45	5.43	38.88	68.20	-29.32	peak	V
7671.000	34.38	11.76	46.14	74.00	-27.86	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 3			Date:	01/31/2015		
Frequency:	5280MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2806.000	36.24	-0.99	35.25	74.00	-38.75	peak	H
4577.000	34.04	3.98	38.02	74.00	-35.98	peak	H
7650.000	31.64	11.74	43.38	74.00	-30.62	peak	H
2813.000	36.49	-0.98	35.51	74.00	-38.49	peak	V
4591.000	35.27	4.01	39.28	74.00	-34.72	peak	V
7678.000	33.02	11.77	44.79	74.00	-29.21	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 3			Date:	01/31/2015		
Frequency:	5320MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2785.000	39.43	-1.05	38.38	74.00	-35.62	peak	H
4577.000	34.31	3.98	38.29	74.00	-35.71	peak	H
5350.000	32.93	5.57	38.50	68.20	-29.70	peak	H
7685.000	31.38	11.78	43.16	74.00	-30.84	peak	H
2841.000	37.38	-0.91	36.47	74.00	-37.53	peak	V
4570.000	36.06	3.97	40.03	74.00	-33.97	peak	V
5350.000	32.42	5.57	37.99	68.20	-30.21	peak	V
7671.000	34.51	11.76	46.27	74.00	-27.73	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 3			Date:	01/31/2015		
Frequency:	5500MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2813.000	36.48	-0.98	35.50	74.00	-38.50	peak	H
4605.000	34.52	4.05	38.57	74.00	-35.43	peak	H
5470.000	33.82	5.75	39.57	68.20	-28.63	peak	H
7657.000	34.28	11.74	46.02	74.00	-27.98	peak	H
2827.000	36.73	-0.94	35.79	74.00	-38.21	peak	V
4577.000	34.00	3.98	37.98	74.00	-36.02	peak	V
5470.000	32.27	5.75	38.02	68.20	-30.18	peak	V
7657.000	34.77	11.74	46.51	74.00	-27.49	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 3			Date:	01/31/2015		
Frequency:	5580MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2813.000	35.85	-0.98	34.87	74.00	-39.13	peak	H
4542.000	34.46	3.89	38.35	74.00	-35.65	peak	H
7657.000	34.22	11.74	45.96	74.00	-28.04	peak	H
2806.000	37.71	-0.99	36.72	74.00	-37.28	peak	V
4577.000	35.29	3.98	39.27	74.00	-34.73	peak	V
7657.000	35.80	11.74	47.54	74.00	-26.46	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 3			Date:	01/31/2015		
Frequency:	5700MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2813.000	36.22	-0.98	35.24	74.00	-38.76	peak	H
4591.000	33.76	4.01	37.77	74.00	-36.23	peak	H
5725.000	33.47	6.27	39.74	68.20	-28.46	peak	H
7643.000	33.66	11.72	45.38	74.00	-28.62	peak	H
2834.000	35.63	-0.93	34.70	74.00	-39.30	peak	V
4577.000	34.78	3.98	38.76	74.00	-35.24	peak	V
5725.000	33.50	6.27	39.77	68.20	-28.43	peak	V
7678.000	34.31	11.77	46.08	74.00	-27.92	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 3			Date:	01/31/2015		
Frequency:	5745MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2834.000	37.71	-0.93	36.78	74.00	-37.22	peak	H
4563.000	34.22	3.95	38.17	74.00	-35.83	peak	H
5715.000	34.56	6.25	40.81	68.20	-27.39	peak	H
5725.000	33.39	6.27	39.66	78.20	-38.54	peak	H
7671.000	34.66	11.76	46.42	74.00	-27.58	peak	H
2827.000	36.35	-0.94	35.41	74.00	-38.59	peak	V
4542.000	34.48	3.89	38.37	74.00	-35.63	peak	V
5715.000	33.81	6.25	40.06	68.20	-28.14	peak	V
5725.000	33.28	6.27	39.55	78.20	-38.65	peak	V
7678.000	33.80	11.77	45.57	74.00	-28.43	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 3			Date:	01/31/2015		
Frequency:	5785MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2813.000	36.70	-0.98	35.72	74.00	-38.28	peak	H
4570.000	36.05	3.97	40.02	74.00	-33.98	peak	H
7629.000	33.40	11.70	45.10	74.00	-28.90	peak	H
2813.000	36.85	-0.98	35.87	74.00	-38.13	peak	V
4563.000	33.20	3.95	37.15	74.00	-36.85	peak	V
7699.000	33.83	11.80	45.63	74.00	-28.37	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 3			Date:	01/31/2015		
Frequency:	5825MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2813.000	37.22	-0.98	36.24	74.00	-37.76	peak	H
4563.000	34.81	3.95	38.76	74.00	-35.24	peak	H
5850.000	33.24	6.53	39.77	78.20	-38.43	peak	H
5860.000	33.71	6.55	40.26	68.20	-27.94	peak	H
7671.000	33.87	11.76	45.63	74.00	-28.37	peak	H
2806.000	36.65	-0.99	35.66	74.00	-38.34	peak	V
4570.000	34.25	3.97	38.22	74.00	-35.78	peak	V
5850.000	33.37	6.53	39.90	78.20	-38.30	peak	V
5860.000	32.71	6.55	39.26	68.20	-28.94	peak	V
7657.000	34.24	11.74	45.98	74.00	-28.02	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 4			Date:	01/31/2015		
Frequency:	5190MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2799.000	39.38	-1.01	38.37	74.00	-35.63	peak	H
4605.000	35.03	4.05	39.08	74.00	-34.92	peak	H
5150.000	34.58	5.28	39.86	68.20	-28.34	peak	H
7671.000	33.30	11.76	45.06	74.00	-28.94	peak	H
2827.000	36.62	-0.94	35.68	74.00	-38.32	peak	V
4577.000	33.97	3.98	37.95	74.00	-36.05	peak	V
5150.000	33.35	5.28	38.63	68.20	-29.57	peak	V
7671.000	33.75	11.76	45.51	74.00	-28.49	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 4			Date:	01/31/2015		
Frequency:	5230MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2799.000	40.19	-1.01	39.18	74.00	-34.82	peak	H
4549.000	34.16	3.92	38.08	74.00	-35.92	peak	H
5250.000	33.76	5.43	39.19	68.20	-29.01	peak	H
7671.000	33.42	11.76	45.18	74.00	-28.82	peak	H
2827.000	36.37	-0.94	35.43	74.00	-38.57	peak	V
4535.000	34.38	3.88	38.26	74.00	-35.74	peak	V
5250.000	34.45	5.43	39.88	68.20	-28.32	peak	V
7650.000	34.39	11.74	46.13	74.00	-27.87	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 4			Date:	01/31/2015		
Frequency:	5270MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2827.000	37.47	-0.94	36.53	74.00	-37.47	peak	H
4570.000	35.04	3.97	39.01	74.00	-34.99	peak	H
5250.000	33.30	5.43	38.73	68.20	-29.47	peak	H
7643.000	34.47	11.72	46.19	74.00	-27.81	peak	H
2813.000	37.40	-0.98	36.42	74.00	-37.58	peak	V
4591.000	34.85	4.01	38.86	74.00	-35.14	peak	V
5250.000	33.37	5.43	38.80	68.20	-29.40	peak	V
7657.000	34.42	11.74	46.16	74.00	-27.84	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 4			Date:	01/31/2015		
Frequency:	5310MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2806.000	36.22	-0.99	35.23	74.00	-38.77	peak	H
4598.000	34.88	4.04	38.92	74.00	-35.08	peak	H
5350.000	32.29	5.57	37.86	68.20	-30.34	peak	H
7657.000	33.21	11.74	44.95	74.00	-29.05	peak	H
2827.000	37.36	-0.94	36.42	74.00	-37.58	peak	V
4570.000	33.44	3.97	37.41	74.00	-36.59	peak	V
5350.000	31.54	5.57	37.11	68.20	-31.09	peak	V
7671.000	34.22	11.76	45.98	74.00	-28.02	peak	V

Standard:		FCC Part 15E		Test Distance:		3m	
Test item:		Radiated Emission		Power:		AC 120V/60Hz	
Model Number:		ONYX-1521DTT-C1-1010		Temp.(°C)/Hum.(%RH):		26(°C)/60%RH	
Test Mode:		Mode 4		Date:		01/31/2015	
Frequency:		5510MHz		Test By:		Eric Ou Yang	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2806.000	37.27	-0.99	36.28	74.00	-37.72	peak	H
4563.000	35.03	3.95	38.98	74.00	-35.02	peak	H
5470.000	33.10	5.75	38.85	68.20	-29.35	peak	H
7671.000	34.23	11.76	45.99	74.00	-28.01	peak	H
2813.000	36.35	-0.98	35.37	74.00	-38.63	peak	V
4577.000	33.94	3.98	37.92	74.00	-36.08	peak	V
5470.000	32.12	5.75	37.87	68.20	-30.33	peak	V
7678.000	34.64	11.77	46.41	74.00	-27.59	peak	V

Standard:		FCC Part 15E		Test Distance:		3m	
Test item:		Radiated Emission		Power:		AC 120V/60Hz	
Model Number:		ONYX-1521DTT-C1-1010		Temp.(°C)/Hum.(%RH):		26(°C)/60%RH	
Test Mode:		Mode 4		Date:		01/31/2015	
Frequency:		5550MHz		Test By:		Eric Ou Yang	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2841.000	37.57	-0.91	36.66	74.00	-37.34	peak	H
4598.000	34.06	4.04	38.10	74.00	-35.90	peak	H
7678.000	33.47	11.77	45.24	74.00	-28.76	peak	H
2799.000	37.68	-1.01	36.67	74.00	-37.33	peak	V
4563.000	35.84	3.95	39.79	74.00	-34.21	peak	V
7699.000	34.64	11.80	46.44	74.00	-27.56	peak	V

Standard:		FCC Part 15E		Test Distance:		3m	
Test item:		Radiated Emission		Power:		AC 120V/60Hz	
Model Number:		ONYX-1521DTT-C1-1010		Temp.(°C)/Hum.(%RH):		26(°C)/60%RH	
Test Mode:		Mode 4		Date:		01/31/2015	
Frequency:		5670MHz		Test By:		Eric Ou Yang	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2834.000	38.23	-0.93	37.30	74.00	-36.70	peak	H
4591.000	35.56	4.01	39.57	74.00	-34.43	peak	H
5725.000	34.17	6.27	40.44	68.20	-27.76	peak	H
7678.000	33.31	11.77	45.08	74.00	-28.92	peak	H
2834.000	36.65	-0.93	35.72	74.00	-38.28	peak	V
4570.000	35.09	3.97	39.06	74.00	-34.94	peak	V
5725.000	33.41	6.27	39.68	68.20	-28.52	peak	V
7657.000	32.84	11.74	44.58	74.00	-29.42	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 4			Date:	01/31/2015		
Frequency:	5755MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2806.000	36.38	-0.99	35.39	74.00	-38.61	peak	H
4549.000	35.08	3.92	39.00	74.00	-35.00	peak	H
5715.000	33.19	6.25	39.44	68.20	-28.76	peak	H
5725.000	33.81	6.27	40.08	78.20	-38.12	peak	H
7678.000	34.31	11.77	46.08	74.00	-27.92	peak	H
2834.000	37.65	-0.93	36.72	74.00	-37.28	peak	V
4563.000	33.66	3.95	37.61	74.00	-36.39	peak	V
5715.000	33.22	6.25	39.47	68.20	-28.73	peak	V
5725.000	33.07	6.27	39.34	78.20	-38.86	peak	V
7657.000	34.32	11.74	46.06	74.00	-27.94	peak	V

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(℃)/Hum.(%RH):	26(℃)/60%RH		
Test Mode:	Mode 4			Date:	01/31/2015		
Frequency:	5795MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
2834.000	36.20	-0.93	35.27	74.00	-38.73	peak	H
4591.000	34.07	4.01	38.08	74.00	-35.92	peak	H
5850.000	33.43	6.53	39.96	78.20	-38.24	peak	H
5860.000	33.79	6.55	40.34	68.20	-27.86	peak	H
7685.000	33.54	11.78	45.32	74.00	-28.68	peak	H
2806.000	38.16	-0.99	37.17	74.00	-36.83	peak	V
4563.000	33.60	3.95	37.55	74.00	-36.45	peak	V
5850.000	33.59	6.53	40.12	78.20	-38.08	peak	V
5860.000	32.78	6.55	39.33	68.20	-28.87	peak	V
7671.000	34.18	11.76	45.94	74.00	-28.06	peak	V

Band Edge

Standard:		FCC Part 15E			Test Distance:		3m	
Test item:		Radiated Emission			Power:		AC 120V/60Hz	
Model Number:		ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):		26(°C)/60%RH	
Test Mode:		Mode 2			Date:		01/31/2015	
Frequency:		5180 MHz			Test By:		Eric Ou Yang	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V	
5146.800	52.19	5.28	57.47	74.00	-16.53	peak	H	
5146.800	40.38	5.28	45.66	54.00	-8.34	AVG	H	
5150.000	54.76	5.28	60.04	74.00	-13.96	peak	H	
5150.000	42.06	5.28	47.34	54.00	-6.66	AVG	H	
5145.400	60.86	5.28	66.14	74.00	-7.86	peak	V	
5145.400	43.09	5.28	48.37	54.00	-5.63	AVG	V	
5150.000	63.26	5.28	68.54	74.00	-5.46	peak	V	
5150.000	45.13	5.28	50.41	54.00	-3.59	AVG	V	

Standard:		FCC Part 15E			Test Distance:		3m	
Test item:		Radiated Emission			Power:		AC 120V/60Hz	
Model Number:		ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):		26(°C)/60%RH	
Test Mode:		Mode 2			Date:		01/31/2015	
Frequency:		5320 MHz			Test By:		Eric Ou Yang	
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.	
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H / V	
5350.000	45.76	5.57	51.33	74.00	-22.67	peak	H	
5381.040	45.90	5.62	51.52	74.00	-22.48	peak	H	
5350.000	46.67	5.57	52.24	74.00	-21.76	peak	V	
5350.000	39.57	5.57	45.14	54.00	-8.86	AVG	V	
5350.940	48.09	5.57	53.66	74.00	-20.34	peak	V	
5350.940	39.45	5.57	45.02	54.00	-8.98	AVG	V	

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 2			Date:	01/31/2015		
Frequency:	5500 MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
5417.200	45.53	5.67	51.20	74.00	-22.80	peak	H
5460.000	42.34	5.74	48.08	74.00	-25.92	peak	H
5452.150	46.13	5.72	51.85	74.00	-22.15	peak	V
5460.000	43.57	5.74	49.31	74.00	-24.69	peak	H

Standard:	FCC Part 15E			Test Distance:	3m		
Test item:	Radiated Emission			Power:	AC 120V/60Hz		
Model Number:	ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):	26(°C)/60%RH		
Test Mode:	Mode 3			Date:	01/31/2015		
Frequency:	5180 MHz			Test By:	Eric Ou Yang		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
5148.200	52.75	5.28	58.03	74.00	-15.97	peak	H
5148.200	40.88	5.28	46.16	54.00	-7.84	AVG	H
5150.000	52.86	5.28	58.14	74.00	-15.86	peak	H
5150.000	42.97	5.28	48.25	54.00	-5.75	AVG	H
5148.200	50.89	5.28	56.17	74.00	-17.83	peak	V
5148.200	43.18	5.28	48.46	54.00	-5.54	AVG	V
5150.000	54.39	5.28	59.67	74.00	-14.33	peak	V
5150.000	45.80	5.28	51.08	54.00	-2.92	AVG	V

Standard:		FCC Part 15E			Test Distance:		3m	
Test item:		Radiated Emission			Power:		AC 120V/60Hz	
Model Number:		ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):		26(°C)/60%RH	
Test Mode:		Mode 3			Date:		01/31/2015	
Frequency:		5320 MHz			Test By:		Eric Ou Yang	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V	
5350.000	43.80	5.57	49.37	74.00	-24.63	peak	H	
5360.740	45.80	5.59	51.39	74.00	-22.61	peak	H	
5350.000	44.35	5.57	49.92	74.00	-24.08	peak	V	
5350.660	50.99	5.57	56.56	74.00	-17.44	peak	V	
5350.660	39.64	5.57	45.21	54.00	-8.79	AVG	V	

Standard:		FCC Part 15E			Test Distance:		3m	
Test item:		Radiated Emission			Power:		AC 120V/60Hz	
Model Number:		ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):		26(°C)/60%RH	
Test Mode:		Mode 3			Date:		01/31/2015	
Frequency:		5500 MHz			Test By:		Eric Ou Yang	
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.	
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H / V	
5431.450	45.64	5.69	51.33	74.00	-22.67	peak	H	
5460.000	43.52	5.74	49.26	74.00	-24.74	peak	H	
5413.000	45.51	5.67	51.18	74.00	-22.82	peak	V	
5460.000	42.36	5.74	48.10	74.00	-25.90	peak	V	

Standard:		FCC Part 15E		Test Distance:		3m	
Test item:		Radiated Emission		Power:		AC 120V/60Hz	
Model Number:		ONYX-1521DTT-C1-1010		Temp.(℃)/Hum.(%RH):		26(℃)/60%RH	
Test Mode:		Mode 4		Date:		01/31/2015	
Frequency:		5190 MHz		Test By:		Eric Ou Yang	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
5141.900	49.81	5.27	55.08	74.00	-18.92	peak	H
5141.900	40.62	5.27	45.89	54.00	-8.11	AVG	H
5150.000	51.14	5.28	56.42	74.00	-17.58	peak	H
5150.000	42.44	5.28	47.72	54.00	-6.28	AVG	H
5141.900	49.81	5.27	55.08	74.00	-18.92	peak	V
5141.900	40.62	5.27	45.89	54.00	-8.11	AVG	V
5150.000	51.14	5.28	56.42	74.00	-17.58	peak	V
5150.000	42.44	5.28	47.72	54.00	-6.28	AVG	V

Standard:		FCC Part 15E		Test Distance:		3m	
Test item:		Radiated Emission		Power:		AC 120V/60Hz	
Model Number:		ONYX-1521DTT-C1-1010		Temp.(℃)/Hum.(%RH):		26(℃)/60%RH	
Test Mode:		Mode 4		Date:		01/31/2015	
Frequency:		5310 MHz		Test By:		Eric Ou Yang	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
5147.500	65.79	5.28	71.07	74.00	-2.93	peak	H
5147.500	41.96	5.28	47.24	54.00	-6.76	AVG	H
5150.000	64.87	5.28	70.15	74.00	-3.85	peak	H
5150.000	45.43	5.28	50.71	54.00	-3.29	AVG	H
5350.000	45.32	5.57	50.89	74.00	-23.11	peak	V
5350.940	50.48	5.57	56.05	74.00	-17.95	peak	V
5350.940	39.76	5.57	45.33	54.00	-8.67	AVG	V

Standard:		FCC Part 15E			Test Distance:		3m	
Test item:		Radiated Emission			Power:		AC 120V/60Hz	
Model Number:		ONYX-1521DTT-C1-1010			Temp.(°C)/Hum.(%RH):		26(°C)/60%RH	
Test Mode:		Mode 4			Date:		01/31/2015	
Frequency:		5510 MHz			Test By:		Eric Ou Yang	
Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.	
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		H / V	
5439.250	45.43	5.70	51.13	74.00	-22.87	peak	H	
5460.000	42.83	5.74	48.57	74.00	-25.43	peak	H	
5355.400	46.26	5.57	51.83	74.00	-22.17	peak	V	
5460.000	43.99	5.74	49.73	74.00	-24.27	peak	V	

6 Maximum Conducted Output Power and EIRP Measurement

6.1. Limit

Conducted Output Power

Frequency Range (MHz)	FCC Limit
5.150 ~ 5.250 GHz	The lesser of 250mW (24dBm)
5.250 ~ 5.350 GHz	The lesser of 250mW (24dBm) or 11dBm + 10log (B)
5.470 ~ 5.725 GHz	The lesser of 250mW (24dBm) or 11dBm + 10log (B)
5.725 ~ 5.850 GHz	The lesser of 1000mW (30dBm)

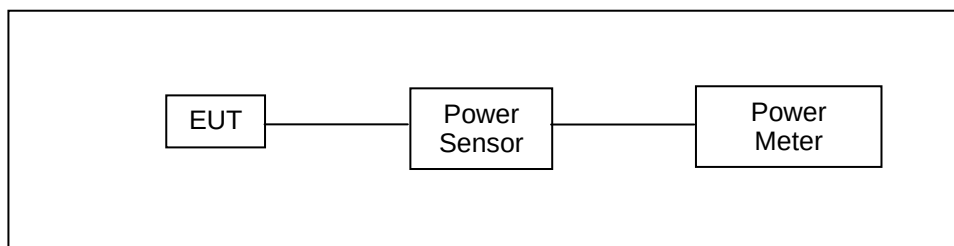
Note: Where B is the 26dB emission bandwidth in MHz.

EIRP

Frequency Range (MHz)	FCC Limit
5.150 ~ 5.250 GHz	The lesser of 4W (36dBm)
5.250 ~ 5.350 GHz	The lesser of 1W (30dBm)
5.470 ~ 5.725 GHz	The lesser of 1W (30dBm)
5.725 ~ 5.850 GHz	The lesser of 4W (36dBm)

Note: Where B is the 26dB emission bandwidth in MHz.

6.2. Test Setup



6.3. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Power Sensor	Anritsu	MA2411B	1126022	08/19/2013	(1)
Power Meter	Anritsu	ML2495A	1135009	08/19/2013	(1)
Test Site	ATL	TE02	TE02	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

6.4. Test Procedure

The test is performed in accordance with KDB789033: D02 General UNII Test Procedures New Rules v01, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E.

6.5. Test Result

Model Number		ONYX-1521DTT-C1-1010							
Test Item		Maximum Conducted Output Power							
Test Mode		Mode 2: IEEE 802.11a Link Mode							
Date of Test		01/31/2015				Test Site		TE02	
Frequency (MHz)	Data Rate	Antenna 0		Antenna 1		Antenna 0+1		FCC Limit (dBm)	
		Average Power		Average Power		Average Power			
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)		
5180.0	6M	11.23	0.013	11.12	0.013	14.19	0.026	< 24	
5200.0		11.18	0.013	11.19	0.013	14.20	0.026		
5220.0		11.52	0.014	11.52	0.014	14.53	0.028		
5240.0		11.40	0.014	11.42	0.014	14.42	0.028		
5260.0		11.51	0.014	11.46	0.014	14.50	0.028	< 24	
5280.0		11.90	0.015	11.79	0.015	14.86	0.031		
5300.0		11.76	0.015	11.78	0.015	14.78	0.030		
5320.0		11.61	0.014	11.56	0.014	14.60	0.029		
5500.0		12.64	0.018	12.67	0.018	15.67	0.037	< 24	
5520.0		12.88	0.019	12.86	0.019	15.88	0.039		
5540.0		12.35	0.017	12.31	0.017	15.34	0.034		
5560.0		12.00	0.016	11.88	0.015	14.95	0.031		
5580.0		11.63	0.015	11.49	0.014	14.57	0.029		
5600.0		11.46	0.014	11.38	0.014	14.43	0.028		
5620.0		11.40	0.014	11.27	0.013	14.35	0.027		
5640.0		11.28	0.013	11.29	0.013	14.30	0.027		
5660.0		11.79	0.015	11.67	0.015	14.74	0.030		
5680.0		11.89	0.015	11.89	0.015	14.90	0.031		
5700.0		12.05	0.016	12.05	0.016	15.06	0.032		
5745.0		11.90	0.015	11.90	0.015	14.91	0.031	< 30	
5765.0		11.74	0.015	11.70	0.015	14.73	0.030		
5785.0		12.44	0.018	12.33	0.017	15.40	0.035		
5805.0		12.60	0.018	12.53	0.018	15.58	0.036		
5825.0		12.71	0.019	12.61	0.018	15.67	0.037		

Model Number		ONYX-1521DTT-C1-1010							
Test Item		Maximum Conducted Output Power							
Test Mode		Mode 2: IEEE 802.11a Link Mode							
Date of Test		01/31/2015				Test Site		TE02	
Frequency (MHz)	Data Rate	Antenna 0		Antenna 1		Antenna 0+1		FCC Limit (dBm)	
		Average Power		Average Power		Average Power			
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)		
5180.0	54M	11.10	0.013	10.99	0.013	14.06	0.025	< 24	
5200.0		11.02	0.013	11.03	0.013	14.04	0.025		
5220.0		11.39	0.014	11.39	0.014	14.40	0.028		
5240.0		11.27	0.013	11.29	0.013	14.29	0.027		
5260.0		11.38	0.014	11.33	0.014	14.37	0.027	< 24	
5280.0		11.73	0.015	11.62	0.015	14.69	0.029		
5300.0		11.62	0.015	11.64	0.015	14.64	0.029		
5320.0		11.46	0.014	11.41	0.014	14.45	0.028		
5500.0		12.46	0.018	12.49	0.018	15.49	0.035	< 24	
5520.0		12.76	0.019	12.74	0.019	15.76	0.038		
5540.0		12.21	0.017	12.17	0.016	15.20	0.033		
5560.0		11.83	0.015	11.71	0.015	14.78	0.030		
5580.0		11.45	0.014	11.31	0.014	14.39	0.027		
5600.0		11.33	0.014	11.25	0.013	14.30	0.027		
5620.0		11.25	0.013	11.12	0.013	14.20	0.026		
5640.0		11.12	0.013	11.13	0.013	14.14	0.026		
5660.0		11.68	0.015	11.56	0.014	14.63	0.029	< 30	
5680.0		11.77	0.015	11.77	0.015	14.78	0.030		
5700.0		11.93	0.016	11.93	0.016	14.94	0.031		
5745.0		11.76	0.015	11.76	0.015	14.77	0.030		
5765.0		11.59	0.014	11.55	0.014	14.58	0.029		
5785.0		12.27	0.017	12.16	0.016	15.23	0.033		
5805.0		12.42	0.017	12.35	0.017	15.40	0.035		
5825.0		12.60	0.018	12.50	0.018	15.56	0.036		

Model Number		ONYX-1521DTT-C1-1010							
Test Item		Maximum Conducted Output Power							
Test Mode		Mode 3: IEEE 802.11n 20MHz Link Mode							
Date of Test		01/31/2015				Test Site		TE02	
Frequency (MHz)	Data Rate	Antenna 0		Antenna 1		Antenna 0+1		FCC Limit (dBm)	
		Average Power		Average Power		Average Power			
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)		
5180.0	13M	11.46	0.014	11.40	0.014	14.44	0.028	< 24	
5200.0		11.66	0.015	11.57	0.014	14.63	0.029		
5220.0		11.24	0.013	11.21	0.013	14.24	0.027		
5240.0		11.40	0.014	11.29	0.013	14.36	0.027		
5260.0		11.77	0.015	11.76	0.015	14.78	0.030	< 24	
5280.0		11.77	0.015	11.77	0.015	14.78	0.030		
5300.0		11.27	0.013	11.22	0.013	14.26	0.027		
5320.0		11.71	0.015	11.52	0.014	14.63	0.029		
5500.0		13.08	0.020	12.43	0.017	15.78	0.038	< 24	
5520.0		13.10	0.020	12.93	0.020	16.03	0.040		
5540.0		13.04	0.020	12.42	0.017	15.75	0.038		
5560.0		11.71	0.015	11.17	0.013	14.46	0.028		
5580.0		12.03	0.016	11.97	0.016	15.01	0.032		
5600.0		12.06	0.016	11.97	0.016	15.03	0.032		
5620.0		12.11	0.016	12.08	0.016	15.11	0.032		
5640.0		12.39	0.017	12.28	0.017	15.35	0.034		
5660.0		12.58	0.018	12.57	0.018	15.59	0.036		
5680.0		12.43	0.017	12.43	0.017	15.44	0.035		
5700.0		12.41	0.017	12.36	0.017	15.40	0.035		
5745.0		11.74	0.015	11.55	0.014	14.66	0.029	< 30	
5765.0		12.85	0.019	12.70	0.019	15.79	0.038		
5785.0		12.93	0.020	13.06	0.020	16.01	0.040		
5805.0		12.75	0.019	13.00	0.020	15.89	0.039		
5825.0		11.56	0.014	11.52	0.014	14.55	0.029		

Model Number		ONYX-1521DTT-C1-1010							
Test Item		Maximum Conducted Output Power							
Test Mode		Mode 3: IEEE 802.11n 20MHz Link Mode							
Date of Test		01/31/2015				Test Site		TE02	
Frequency (MHz)	Data Rate	Antenna 0		Antenna 1		Antenna 0+1		FCC Limit (dBm)	
		Average Power		Average Power		Average Power			
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)		
5180.0	130M	11.27	0.013	11.21	0.013	14.25	0.027	< 24	
5200.0		11.51	0.014	11.42	0.014	14.48	0.028		
5220.0		11.14	0.013	11.11	0.013	14.14	0.026		
5240.0		11.30	0.013	11.19	0.013	14.26	0.027		
5260.0		11.66	0.015	11.65	0.015	14.67	0.029	< 24	
5280.0		11.60	0.014	11.60	0.014	14.61	0.029		
5300.0		11.11	0.013	11.56	0.014	14.35	0.027		
5320.0		11.52	0.014	11.33	0.014	14.44	0.028		
5500.0		12.97	0.020	12.32	0.017	15.67	0.037	< 24	
5520.0		12.96	0.020	12.79	0.019	15.89	0.039		
5540.0		12.89	0.019	12.27	0.017	15.60	0.036		
5560.0		11.53	0.014	11.99	0.016	14.78	0.030		
5580.0		11.92	0.016	11.86	0.015	14.90	0.031		
5600.0		11.93	0.016	11.84	0.015	14.90	0.031		
5620.0		11.91	0.016	11.88	0.015	14.91	0.031		
5640.0		12.21	0.017	12.10	0.016	15.17	0.033		
5660.0		12.46	0.018	12.45	0.018	15.47	0.035		
5680.0		12.27	0.017	12.27	0.017	15.28	0.034		
5700.0		12.29	0.017	12.24	0.017	15.28	0.034		
5745.0		11.62	0.015	11.43	0.014	14.54	0.028	< 30	
5765.0		12.75	0.019	12.60	0.018	15.69	0.037		
5785.0		12.76	0.019	12.89	0.019	15.84	0.038		
5805.0		12.65	0.018	12.90	0.019	15.79	0.038		
5825.0		11.38	0.014	11.34	0.014	14.37	0.027		

Model Number		ONYX-1521DTT-C1-1010							
Test Item		Maximum Conducted Output Power							
Test Mode		Mode 4: IEEE 802.11n 40MHz Link Mode							
Date of Test		01/31/2015				Test Site		TE02	
Frequency (MHz)	Data Rate	Antenna 0		Antenna 1		Antenna 0+1		FCC Limit (dBm)	
		Average Power		Average Power		Average Power			
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)		
5190.0	27M	7.27	0.005	6.60	0.005	9.96	0.010	< 24	
5230.0		6.79	0.005	6.29	0.004	9.56	0.009		
5270.0		6.60	0.005	6.02	0.004	9.33	0.009		
5310.0		6.20	0.004	5.58	0.004	8.91	0.008	< 24	
5510.0		7.09	0.005	7.09	0.005	10.10	0.010		
5550.0		7.27	0.005	7.10	0.005	10.20	0.010		
5590.0		6.47	0.004	6.41	0.004	9.45	0.009	< 24	
5630.0		6.54	0.005	6.44	0.004	9.50	0.009		
5670.0		7.05	0.005	7.02	0.005	10.05	0.010		
5755.0		7.20	0.005	7.08	0.005	10.15	0.010	< 30	
5795.0		7.29	0.005	7.11	0.005	10.21	0.010		
5190.0	270M	7.16	0.005	6.49	0.004	9.85	0.010	< 24	
5230.0		6.65	0.005	6.15	0.004	9.42	0.009		
5270.0		6.45	0.004	5.87	0.004	9.18	0.008		
5310.0		6.01	0.004	5.39	0.003	8.72	0.007	< 24	
5510.0		6.94	0.005	6.94	0.005	9.95	0.010		
5550.0		7.11	0.005	6.94	0.005	10.04	0.010		
5590.0		6.28	0.004	6.22	0.004	9.26	0.008	< 24	
5630.0		6.35	0.004	6.25	0.004	9.31	0.009		
5670.0		6.91	0.005	6.88	0.005	9.91	0.010		
5755.0		7.07	0.005	6.95	0.005	10.02	0.010	< 30	
5795.0		7.10	0.005	6.92	0.005	10.02	0.010		

Model Number		ONYX-1521DTT-C1-1010								
Test Item		EIRP								
Test Mode		Mode 2: IEEE 802.11a Link Mode								
Date of Test		01/31/2015				Test Site		TE02		
Frequency (MHz)	Data Rate	Antenna 0				Antenna 1				FCC Limit (dBm)
		Average Power	Antenna Gain	EIRP		Average Power	Antenna Gain	EIRP		
		(dBm)	(dBi)	(dBm)	(W)	(dBm)	(dBi)	(dBm)	(W)	
5180.0	6M	11.23	3.28	14.51	0.028	11.12	3.81	14.93	0.031	< 36
5200.0		11.18	3.28	14.46	0.028	11.19	3.81	15.00	0.032	
5220.0		11.52	3.28	14.80	0.030	11.52	3.81	15.33	0.034	
5240.0		11.40	3.28	14.68	0.029	11.42	3.81	15.23	0.033	
5260.0		11.51	3.28	14.79	0.030	11.46	3.81	15.27	0.034	< 30
5280.0		11.90	3.28	15.18	0.033	11.79	3.81	15.60	0.036	
5300.0		11.76	3.28	15.04	0.032	11.78	3.81	15.59	0.036	
5320.0		11.61	3.28	14.89	0.031	11.56	3.81	15.37	0.034	
5500.0		12.64	3.28	15.92	0.039	12.67	3.81	16.48	0.044	< 30
5520.0		12.88	3.28	16.16	0.041	12.86	3.81	16.67	0.046	
5540.0		12.35	3.28	15.63	0.037	12.31	3.81	16.12	0.041	
5560.0		12.00	3.28	15.28	0.034	11.88	3.81	15.69	0.037	
5580.0		11.63	3.28	14.91	0.031	11.49	3.81	15.30	0.034	
5600.0		11.46	3.28	14.74	0.030	11.38	3.81	15.19	0.033	
5620.0		11.40	3.28	14.68	0.029	11.27	3.81	15.08	0.032	
5640.0		11.28	3.28	14.56	0.029	11.29	3.81	15.10	0.032	
5660.0		11.79	3.28	15.07	0.032	11.67	3.81	15.48	0.035	
5680.0		11.89	3.28	15.17	0.033	11.89	3.81	15.70	0.037	
5700.0		12.05	3.28	15.33	0.034	12.05	3.81	15.86	0.039	
5745.0		11.90	3.28	15.18	0.033	11.90	3.81	15.71	0.037	< 36
5765.0		11.74	3.28	15.02	0.032	11.70	3.81	15.51	0.036	
5785.0		12.44	3.28	15.72	0.037	12.33	3.81	16.14	0.041	
5805.0		12.60	3.28	15.88	0.039	12.53	3.81	16.34	0.043	
5825.0		12.71	3.28	15.99	0.040	12.61	3.81	16.42	0.044	

Model Number		ONYX-1521DTT-C1-1010				
Test Item		EIRP				
Test Mode		Mode 2: IEEE 802.11a Link Mode				
Date of Test		01/31/2015		Test Site	TE02	
Frequency (MHz)	Data Rate	Antenna 0+1				FCC Limit (dBm)
		Average Power	Antenna Gain	EIRP		
		(dBm)	(dBi)	(dBm)	(W)	
5180.0	6M	14.19	6.56	20.75	0.119	< 36
5200.0		14.20	6.56	20.76	0.119	
5220.0		14.53	6.56	21.09	0.129	
5240.0		14.42	6.56	20.98	0.125	
5260.0		14.50	6.56	21.06	0.128	< 30
5280.0		14.86	6.56	21.42	0.139	
5300.0		14.78	6.56	21.34	0.136	
5320.0		14.60	6.56	21.16	0.131	
5500.0		15.67	6.56	22.23	0.167	< 30
5520.0		15.88	6.56	22.44	0.176	
5540.0		15.34	6.56	21.90	0.155	
5560.0		14.95	6.56	21.51	0.142	
5580.0		14.57	6.56	21.13	0.130	
5600.0		14.43	6.56	20.99	0.126	
5620.0		14.35	6.56	20.91	0.123	
5640.0		14.30	6.56	20.86	0.122	
5660.0		14.74	6.56	21.30	0.135	
5680.0		14.90	6.56	21.46	0.140	
5700.0		15.06	6.56	21.62	0.145	
5745.0		14.91	6.56	21.47	0.140	< 36
5765.0		14.73	6.56	21.29	0.135	
5785.0		15.40	6.56	21.96	0.157	
5805.0		15.58	6.56	22.14	0.164	
5825.0		15.67	6.56	22.23	0.167	

Model Number		ONYX-1521DTT-C1-1010								
Test Item		EIRP								
Test Mode		Mode 2: IEEE 802.11a Link Mode								
Date of Test		01/31/2015				Test Site		TE02		
Frequency (MHz)	Data Rate	Antenna 0				Antenna 1				FCC Limit (dBm)
		Average Power	Antenna Gain	EIRP		Average Power	Antenna Gain	EIRP		
		(dBm)	(dBi)	(dBm)	(W)	(dBm)	(dBi)	(dBm)	(W)	
5180.0	54M	11.10	3.28	14.38	0.027	10.99	3.81	14.80	0.030	< 36
5200.0		11.02	3.28	14.30	0.027	11.03	3.81	14.84	0.030	
5220.0		11.39	3.28	14.67	0.029	11.39	3.81	15.20	0.033	
5240.0		11.27	3.28	14.55	0.029	11.29	3.81	15.10	0.032	
5260.0		11.38	3.28	14.66	0.029	11.33	3.81	15.14	0.033	< 30
5280.0		11.73	3.28	15.01	0.032	11.62	3.81	15.43	0.035	
5300.0		11.62	3.28	14.90	0.031	11.64	3.81	15.45	0.035	
5320.0		11.46	3.28	14.74	0.030	11.41	3.81	15.22	0.033	
5500.0		12.46	3.28	15.74	0.037	12.49	3.81	16.30	0.043	< 30
5520.0		12.76	3.28	16.04	0.040	12.74	3.81	16.55	0.045	
5540.0		12.21	3.28	15.49	0.035	12.17	3.81	15.98	0.040	
5560.0		11.83	3.28	15.11	0.032	11.71	3.81	15.52	0.036	
5580.0		11.45	3.28	14.73	0.030	11.31	3.81	15.12	0.033	
5600.0		11.33	3.28	14.61	0.029	11.25	3.81	15.06	0.032	
5620.0		11.25	3.28	14.53	0.028	11.12	3.81	14.93	0.031	
5640.0		11.12	3.28	14.40	0.028	11.13	3.81	14.94	0.031	
5660.0		11.68	3.28	14.96	0.031	11.56	3.81	15.37	0.034	
5680.0		11.77	3.28	15.05	0.032	11.77	3.81	15.58	0.036	
5700.0		11.93	3.28	15.21	0.033	11.93	3.81	15.74	0.037	
5745.0		11.76	3.28	15.04	0.032	11.76	3.81	15.57	0.036	< 36
5765.0		11.59	3.28	14.87	0.031	11.55	3.81	15.36	0.034	
5785.0		12.27	3.28	15.55	0.036	12.16	3.81	15.97	0.040	
5805.0		12.42	3.28	15.70	0.037	12.35	3.81	16.16	0.041	
5825.0		12.60	3.28	15.88	0.039	12.50	3.81	16.31	0.043	

Model Number		ONYX-1521DTT-C1-1010				
Test Item		EIRP				
Test Mode		Mode 2: IEEE 802.11a Link Mode				
Date of Test		01/31/2015		Test Site	TE02	
Frequency (MHz)	Data Rate	Antenna 0+1				FCC Limit (dBm)
		Average Power	Antenna Gain	EIRP		
		(dBm)	(dBi)	(dBm)	(W)	
5180.0	54M	14.06	6.56	20.62	0.115	< 36
5200.0		14.04	6.56	20.60	0.115	
5220.0		14.40	6.56	20.96	0.125	
5240.0		14.29	6.56	20.85	0.122	
5260.0		14.37	6.56	20.93	0.124	< 30
5280.0		14.69	6.56	21.25	0.133	
5300.0		14.64	6.56	21.20	0.132	
5320.0		14.45	6.56	21.01	0.126	
5500.0		15.49	6.56	22.05	0.160	< 30
5520.0		15.76	6.56	22.32	0.171	
5540.0		15.20	6.56	21.76	0.150	
5560.0		14.78	6.56	21.34	0.136	
5580.0		14.39	6.56	20.95	0.125	
5600.0		14.30	6.56	20.86	0.122	
5620.0		14.20	6.56	20.76	0.119	
5640.0		14.14	6.56	20.70	0.117	
5660.0		14.63	6.56	21.19	0.132	
5680.0		14.78	6.56	21.34	0.136	
5700.0		14.94	6.56	21.50	0.141	
5745.0		14.77	6.56	21.33	0.136	< 36
5765.0		14.58	6.56	21.14	0.130	
5785.0		15.23	6.56	21.79	0.151	
5805.0		15.40	6.56	21.96	0.157	
5825.0		15.56	6.56	22.12	0.163	

Model Number		ONYX-1521DTT-C1-1010								
Test Item		EIRP								
Test Mode		Mode 3: IEEE 802.11n 20MHz Link Mode								
Date of Test		01/31/2015				Test Site		TE02		
Frequency (MHz)	Data Rate	Antenna 0				Antenna 1				FCC Limit (dBm)
		Average Power	Antenna Gain	EIRP		Average Power	Antenna Gain	EIRP		
		(dBm)	(dBi)	(dBm)	(W)	(dBm)	(dBi)	(dBm)	(W)	
5180.0	13M	11.46	3.28	14.74	0.030	11.40	3.81	15.21	0.033	< 36
5200.0		11.66	3.28	14.94	0.031	11.57	3.81	15.38	0.035	
5220.0		11.24	3.28	14.52	0.028	11.21	3.81	15.02	0.032	
5240.0		11.40	3.28	14.68	0.029	11.29	3.81	15.10	0.032	
5260.0		11.77	3.28	15.05	0.032	11.76	3.81	15.57	0.036	< 30
5280.0		11.77	3.28	15.05	0.032	11.77	3.81	15.58	0.036	
5300.0		11.27	3.28	14.55	0.029	11.22	3.81	15.03	0.032	
5320.0		11.71	3.28	14.99	0.032	11.52	3.81	15.33	0.034	
5500.0		13.08	3.28	16.36	0.043	12.43	3.81	16.24	0.042	< 30
5520.0		13.10	3.28	16.38	0.043	12.93	3.81	16.74	0.047	
5540.0		13.04	3.28	16.32	0.043	12.42	3.81	16.23	0.042	
5560.0		11.71	3.28	14.99	0.032	11.17	3.81	14.98	0.031	
5580.0		12.03	3.28	15.31	0.034	11.97	3.81	15.78	0.038	
5600.0		12.06	3.28	15.34	0.034	11.97	3.81	15.78	0.038	
5620.0		12.11	3.28	15.39	0.035	12.08	3.81	15.89	0.039	
5640.0		12.39	3.28	15.67	0.037	12.28	3.81	16.09	0.041	
5660.0		12.58	3.28	15.86	0.039	12.57	3.81	16.38	0.043	
5680.0		12.43	3.28	15.71	0.037	12.43	3.81	16.24	0.042	
5700.0		12.41	3.28	15.69	0.037	12.36	3.81	16.17	0.041	
5745.0		11.74	3.28	15.02	0.032	11.55	3.81	15.36	0.034	< 36
5765.0		12.85	3.28	16.13	0.041	12.70	3.81	16.51	0.045	
5785.0		12.93	3.28	16.21	0.042	13.06	3.81	16.87	0.049	
5805.0		12.75	3.28	16.03	0.040	13.00	3.81	16.81	0.048	
5825.0		11.56	3.28	14.84	0.030	11.52	3.81	15.33	0.034	

Model Number		ONYX-1521DTT-C1-1010				
Test Item		EIRP				
Test Mode		Mode 3: IEEE 802.11n 20MHz Link Mode				
Date of Test		01/31/2015		Test Site	TE02	
Frequency (MHz)	Data Rate	Antenna 0+1				FCC Limit (dBm)
		Average Power	Antenna Gain	EIRP		
		(dBm)	(dBi)	(dBm)	(W)	
5180.0	13M	14.44	6.56	21.00	0.126	< 36
5200.0		14.63	6.56	21.19	0.131	
5220.0		14.24	6.56	20.80	0.120	
5240.0		14.36	6.56	20.92	0.124	
5260.0		14.78	6.56	21.34	0.136	< 30
5280.0		14.78	6.56	21.34	0.136	
5300.0		14.26	6.56	20.82	0.121	
5320.0		14.63	6.56	21.19	0.132	
5500.0		15.78	6.56	22.34	0.171	< 30
5520.0		16.03	6.56	22.59	0.182	
5540.0		15.75	6.56	22.31	0.170	
5560.0		14.46	6.56	21.02	0.127	
5580.0		15.01	6.56	21.57	0.144	
5600.0		15.03	6.56	21.59	0.144	
5620.0		15.11	6.56	21.67	0.147	
5640.0		15.35	6.56	21.91	0.155	
5660.0		15.59	6.56	22.15	0.164	
5680.0		15.44	6.56	22.00	0.159	
5700.0		15.40	6.56	21.96	0.157	
5745.0		14.66	6.56	21.22	0.132	< 36
5765.0		15.79	6.56	22.35	0.172	
5785.0		16.01	6.56	22.57	0.181	
5805.0		15.89	6.56	22.45	0.176	
5825.0		14.55	6.56	21.11	0.129	

Model Number		ONYX-1521DTT-C1-1010								
Test Item		EIRP								
Test Mode		Mode 3: IEEE 802.11n 20MHz Link Mode								
Date of Test		01/31/2015				Test Site		TE02		
Frequency (MHz)	Data Rate	Antenna 0				Antenna 1				FCC Limit (dBm)
		Average Power	Antenna Gain	EIRP		Average Power	Antenna Gain	EIRP		
		(dBm)	(dBi)	(dBm)	(W)	(dBm)	(dBi)	(dBm)	(W)	
5180.0	130M	11.27	3.28	14.55	0.029	11.21	3.81	15.02	0.032	< 36
5200.0		11.51	3.28	14.79	0.030	11.42	3.81	15.23	0.033	
5220.0		11.14	3.28	14.42	0.028	11.11	3.81	14.92	0.031	
5240.0		11.30	3.28	14.58	0.029	11.19	3.81	15.00	0.032	
5260.0		11.66	3.28	14.94	0.031	11.65	3.81	15.46	0.035	< 30
5280.0		11.60	3.28	14.88	0.031	11.60	3.81	15.41	0.035	
5300.0		11.11	3.28	14.39	0.027	11.56	3.81	15.37	0.034	
5320.0		11.52	3.28	14.80	0.030	11.33	3.81	15.14	0.033	
5500.0		12.97	3.28	16.25	0.042	12.32	3.81	16.13	0.041	< 30
5520.0		12.96	3.28	16.24	0.042	12.79	3.81	16.60	0.046	
5540.0		12.89	3.28	16.17	0.041	12.27	3.81	16.08	0.041	
5560.0		11.53	3.28	14.81	0.030	11.99	3.81	15.80	0.038	
5580.0		11.92	3.28	15.20	0.033	11.86	3.81	15.67	0.037	
5600.0		11.93	3.28	15.21	0.033	11.84	3.81	15.65	0.037	
5620.0		11.91	3.28	15.19	0.033	11.88	3.81	15.69	0.037	
5640.0		12.21	3.28	15.49	0.035	12.10	3.81	15.91	0.039	
5660.0		12.46	3.28	15.74	0.037	12.45	3.81	16.26	0.042	
5680.0		12.27	3.28	15.55	0.036	12.27	3.81	16.08	0.041	
5700.0		12.29	3.28	15.57	0.036	12.24	3.81	16.05	0.040	
5745.0		11.62	3.28	14.90	0.031	11.43	3.81	15.24	0.033	< 36
5765.0		12.75	3.28	16.03	0.040	12.60	3.81	16.41	0.044	
5785.0		12.76	3.28	16.04	0.040	12.89	3.81	16.70	0.047	
5805.0		12.65	3.28	15.93	0.039	12.90	3.81	16.71	0.047	
5825.0		11.38	3.28	14.66	0.029	11.34	3.81	15.15	0.033	

Model Number		ONYX-1521DTT-C1-1010				
Test Item		EIRP				
Test Mode		Mode 3: IEEE 802.11n 20MHz Link Mode				
Date of Test		01/31/2015		Test Site	TE02	
Frequency (MHz)	Data Rate	Antenna 0+1				FCC Limit (dBm)
		Average Power	Antenna Gain	EIRP		
		(dBm)	(dBi)	(dBm)	(W)	
5180.0	130M	14.25	6.56	20.81	0.121	< 36
5200.0		14.48	6.56	21.04	0.127	
5220.0		14.14	6.56	20.70	0.117	
5240.0		14.26	6.56	20.82	0.121	
5260.0		14.67	6.56	21.23	0.133	< 30
5280.0		14.61	6.56	21.17	0.131	
5300.0		14.35	6.56	20.91	0.123	
5320.0		14.44	6.56	21.00	0.126	
5500.0		15.67	6.56	22.23	0.167	< 30
5520.0		15.89	6.56	22.45	0.176	
5540.0		15.60	6.56	22.16	0.165	
5560.0		14.78	6.56	21.34	0.136	
5580.0		14.90	6.56	21.46	0.140	
5600.0		14.90	6.56	21.46	0.140	
5620.0		14.91	6.56	21.47	0.140	
5640.0		15.17	6.56	21.73	0.149	
5660.0		15.47	6.56	22.03	0.160	
5680.0		15.28	6.56	21.84	0.153	
5700.0		15.28	6.56	21.84	0.153	
5745.0		14.54	6.56	21.10	0.129	< 36
5765.0		15.69	6.56	22.25	0.168	
5785.0		15.84	6.56	22.40	0.174	
5805.0		15.79	6.56	22.35	0.172	
5825.0		14.37	6.56	20.93	0.124	

Model Number		ONYX-1521DTT-C1-1010								
Test Item		EIRP								
Test Mode		Mode 4: IEEE 802.11n 40MHz Link Mode								
Date of Test		01/31/2015					Test Site		TE02	
Frequency (MHz)	Data Rate	Antenna 0				Antenna 1				FCC Limit (dBm)
		Average Power	Antenna Gain	EIRP		Average Power	Antenna Gain	EIRP		
		(dBm)	(dBi)	(dBm)	(W)	(dBm)	(dBi)	(dBm)	(W)	
5190.0	27M	7.27	3.28	10.55	0.011	6.60	3.81	10.41	0.011	< 36
5230.0		6.79	3.28	10.07	0.010	6.29	3.81	10.10	0.010	
5270.0		6.60	3.28	9.88	0.010	6.02	3.81	9.83	0.010	< 30
5310.0		6.20	3.28	9.48	0.009	5.58	3.81	9.39	0.009	
5510.0		7.09	3.28	10.37	0.011	7.09	3.81	10.90	0.012	< 30
5550.0		7.27	3.28	10.55	0.011	7.10	3.81	10.91	0.012	
5590.0		6.47	3.28	9.75	0.009	6.41	3.81	10.22	0.011	
5630.0		6.54	3.28	9.82	0.010	6.44	3.81	10.25	0.011	
5670.0		7.05	3.28	10.33	0.011	7.02	3.81	10.83	0.012	< 36
5755.0		7.20	3.28	10.48	0.011	7.08	3.81	10.89	0.012	
5795.0		7.29	3.28	10.57	0.011	7.11	3.81	10.92	0.012	
5190.0	270M	7.16	3.28	10.44	0.011	6.49	3.81	10.30	0.011	< 36
5230.0		6.65	3.28	9.93	0.010	6.15	3.81	9.96	0.010	
5270.0		6.45	3.28	9.73	0.009	5.87	3.81	9.68	0.009	< 30
5310.0		6.01	3.28	9.29	0.008	5.39	3.81	9.20	0.008	
5510.0		6.94	3.28	10.22	0.011	6.94	3.81	10.75	0.012	< 30
5550.0		7.11	3.28	10.39	0.011	6.94	3.81	10.75	0.012	
5590.0		6.28	3.28	9.56	0.009	6.22	3.81	10.03	0.010	
5630.0		6.35	3.28	9.63	0.009	6.25	3.81	10.06	0.010	
5670.0		6.91	3.28	10.19	0.010	6.88	3.81	10.69	0.012	< 36
5755.0		7.07	3.28	10.35	0.011	6.95	3.81	10.76	0.012	
5795.0		7.10	3.28	10.38	0.011	6.92	3.81	10.73	0.012	

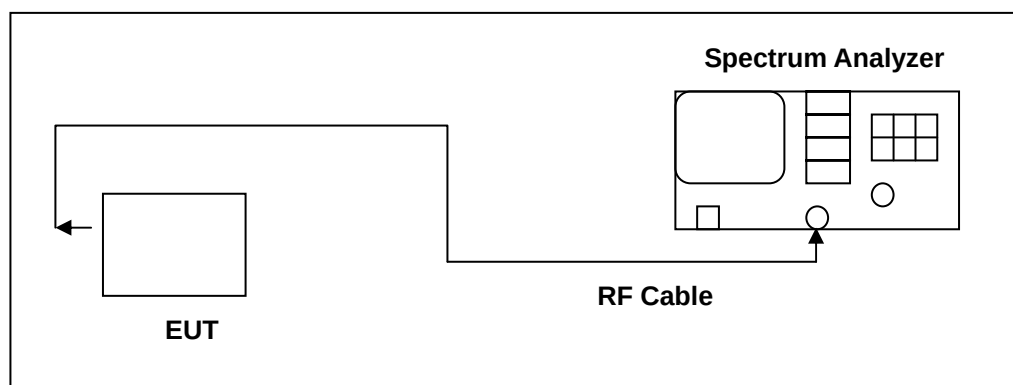
Model Number		ONYX-1521DTT-C1-1010				
Test Item		EIRP				
Test Mode		Mode 4: IEEE 802.11n 40MHz Link Mode				
Date of Test		01/31/2015		Test Site		TE02
Frequency (MHz)	Data Rate	Antenna 0+1				FCC Limit (dBm)
		Average Power	Antenna Gain	EIRP		
		(dBm)	(dBi)	(dBm)	(W)	
5190.0	27M	9.96	6.56	16.52	0.045	< 36
5230.0		9.56	6.56	16.12	0.041	
5270.0		9.33	6.56	15.89	0.039	< 30
5310.0		8.91	6.56	15.47	0.035	
5510.0		10.10	6.56	16.66	0.046	< 30
5550.0		10.20	6.56	16.76	0.047	
5590.0		9.45	6.56	16.01	0.040	
5630.0		9.50	6.56	16.06	0.040	
5670.0		10.05	6.56	16.61	0.046	
5755.0		10.15	6.56	16.71	0.047	< 36
5795.0		10.21	6.56	16.77	0.048	
5190.0	270M	9.85	6.56	16.41	0.044	< 36
5230.0		9.42	6.56	15.98	0.040	
5270.0		9.18	6.56	15.74	0.038	< 30
5310.0		8.72	6.56	15.28	0.034	
5510.0		9.95	6.56	16.51	0.045	< 30
5550.0		10.04	6.56	16.60	0.046	
5590.0		9.26	6.56	15.82	0.038	
5630.0		9.31	6.56	15.87	0.039	
5670.0		9.91	6.56	16.47	0.044	
5755.0		10.02	6.56	16.58	0.046	< 36
5795.0		10.02	6.56	16.58	0.046	

7 26dB RF Bandwidth

7.1. Limit

N/A

7.2. Test Setup



7.3. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY45300744	12/16/2014	(1)
Test Site	ATL	TE02	TE02	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

7.4. Test Procedure

The test is performed in accordance with KDB789033: D02 General UNII Test Procedures New Rules v01, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E.

7.5. Test Result

Model Number	ONYX-1521DTT-C1-1010		
Test Item	26dB RF Bandwidth & 99 % Occupied Bandwidth Measurement		
Test Mode	Mode 2: IEEE 802.11a Link Mode		
Date of Test	01/31/2015	Test Site	TE02
Frequency (MHz)	26dB Bandwidth (MHz)		
	ANT-0	ANT-1	
5180	41.407	42.295	
5220	39.620	36.669	
5240	39.995	40.684	
5260	38.418	35.435	
5280	40.001	38.144	
5320	38.110	30.952	
5500	42.856	30.874	
5580	44.115	42.881	
5700	44.029	43.870	

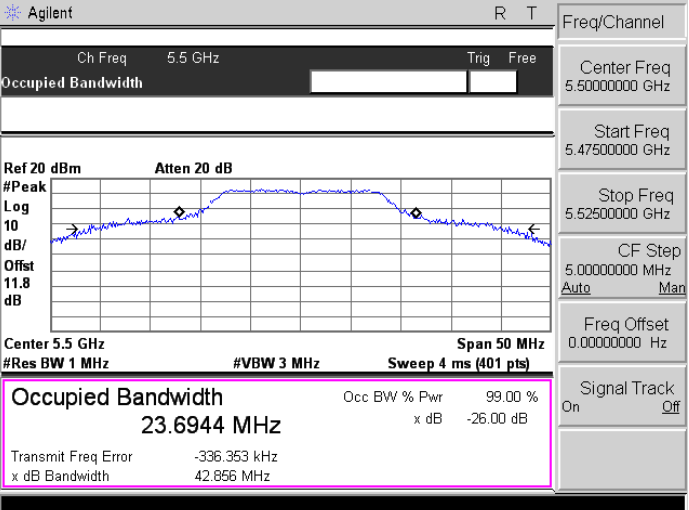
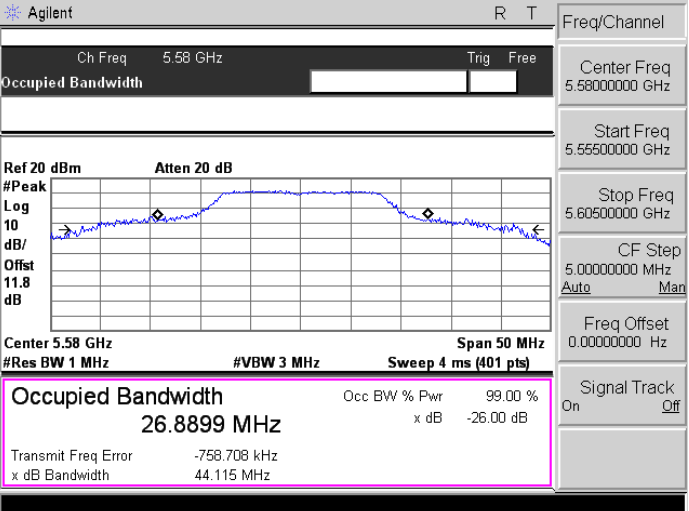
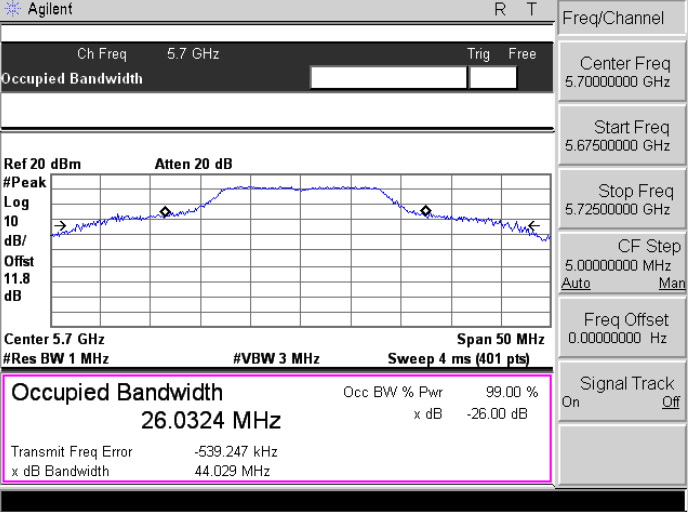
Model Number	ONYX-1521DTT-C1-1010		
Test Item	26dB RF Bandwidth & 99 % Occupied Bandwidth Measurement		
Test Mode	Mode 3: IEEE 802.11n 20MHz Link Mode		
Date of Test	01/31/2015	Test Site	TE02
Frequency (MHz)	26dB Bandwidth (MHz)		
	ANT-0	ANT-1	
5180	44.933	46.925	
5220	40.894	35.738	
5240	37.206	30.927	
5260	37.788	30.643	
5280	37.359	30.957	
5320	40.914	30.549	
5500	44.280	28.056	
5580	48.201	44.213	
5700	43.618	43.265	

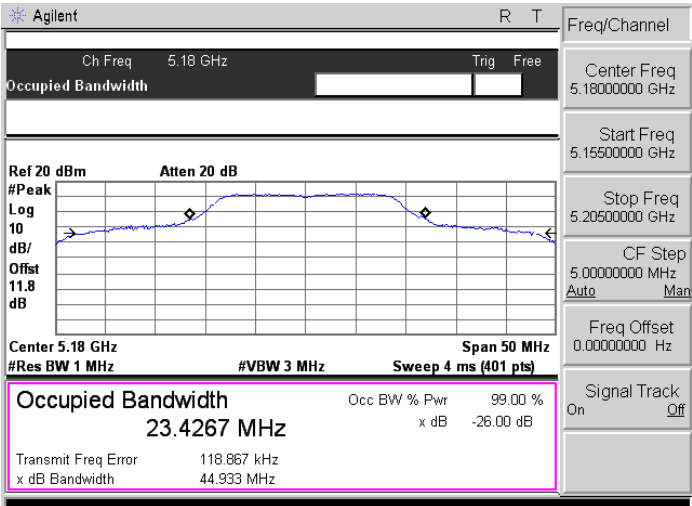
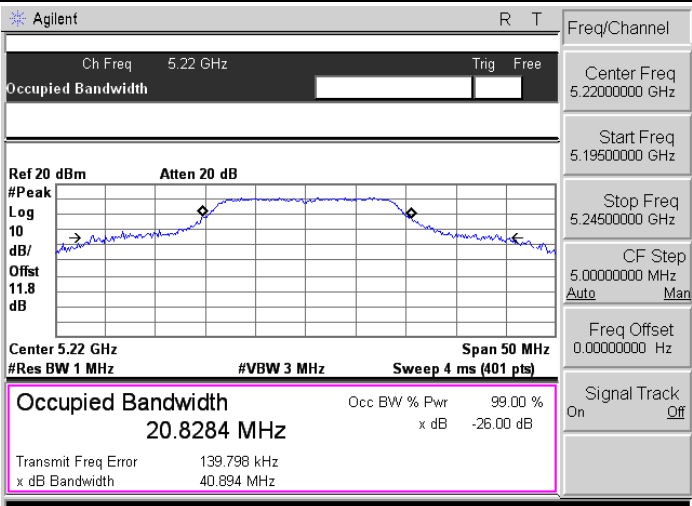
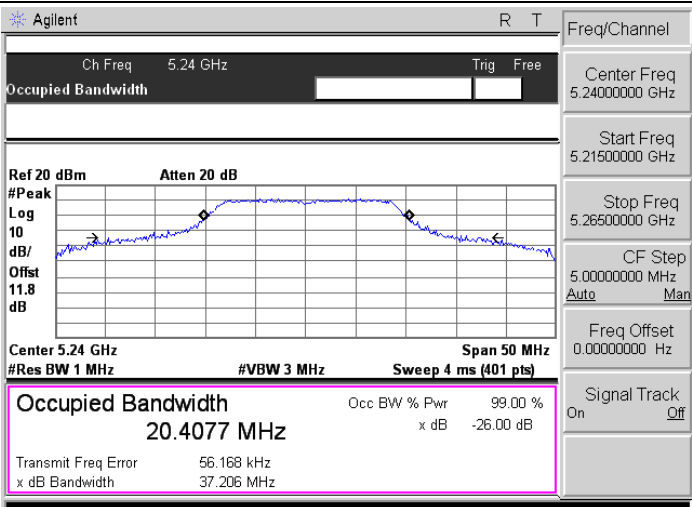
Model Number	ONYX-1521DTT-C1-1010		
Test Item	26dB RF Bandwidth & 99 % Occupied Bandwidth Measurement		
Test Mode	Mode 4: IEEE 802.11n 40MHz Link Mode		
Date of Test	01/31/2015	Test Site	TE02
Frequency (MHz)	26dB Bandwidth (MHz)		
	ANT-0	ANT-1	
5190	44.037	43.340	
5230	43.676	43.065	
5270	42.684	43.490	
5310	43.417	42.396	
5510	42.958	42.420	
5550	44.670	41.874	
5670	44.393	42.733	

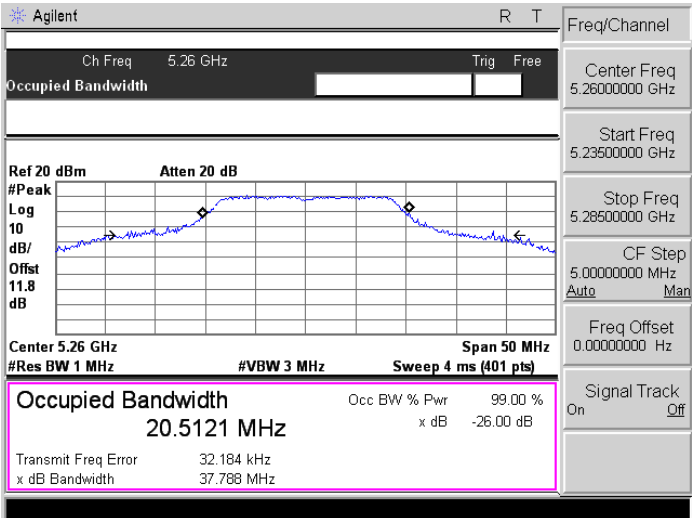
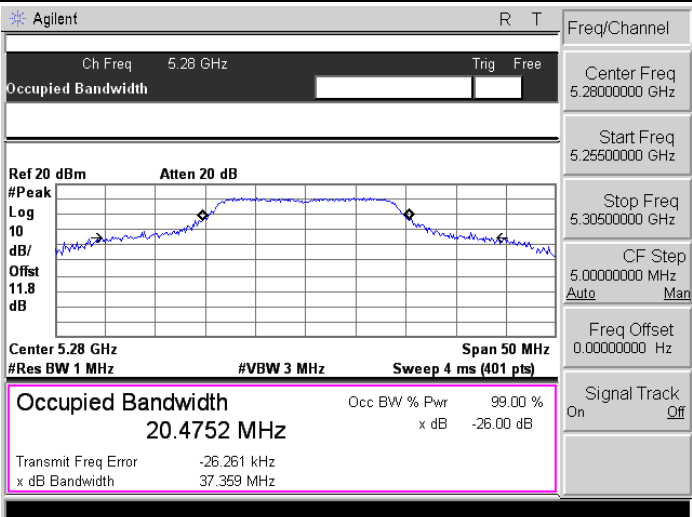
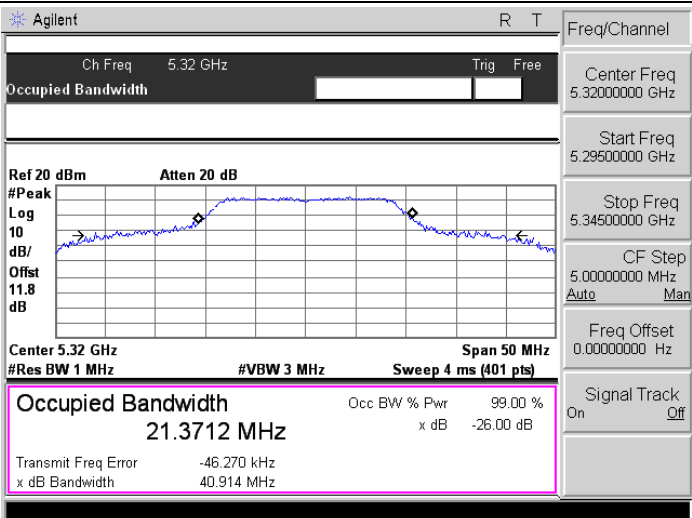
7.6. Test Graphs

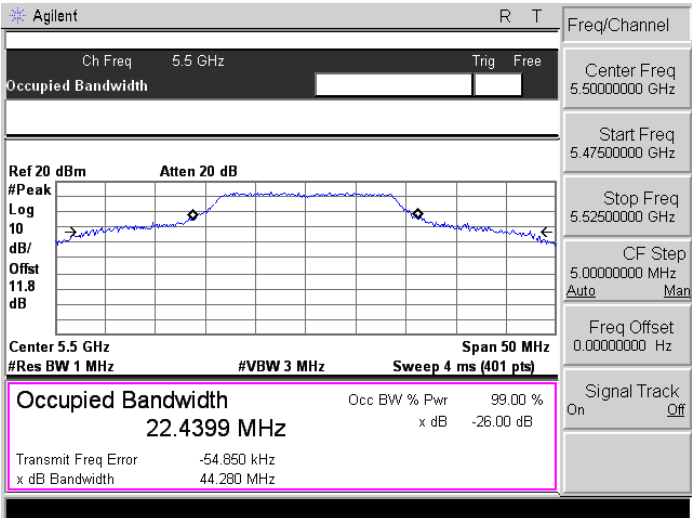
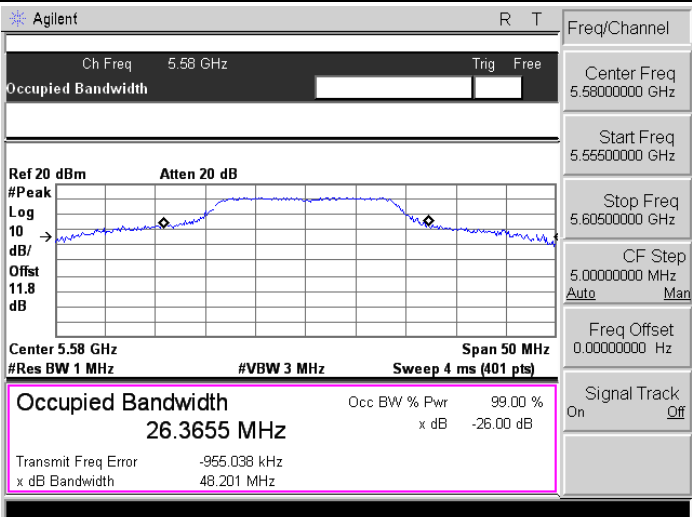
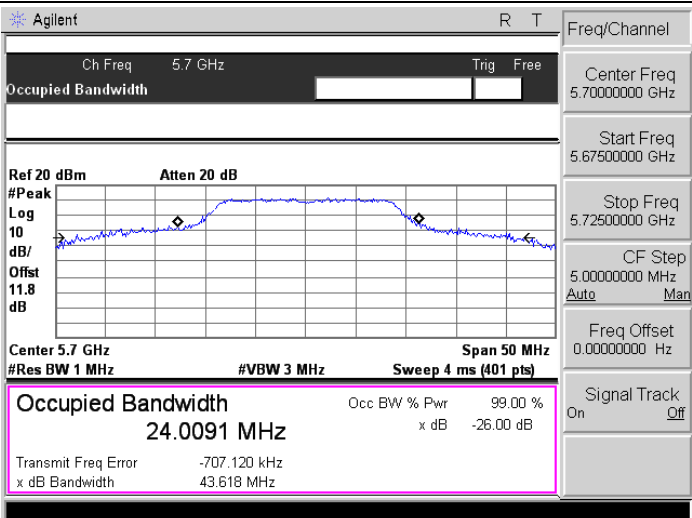
5180	Mode 2: IEEE 802.11a Link Mode_ANT-0 Agilent R T Ch Freq 5.18 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.18 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 22.5911 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 190.089 kHz x dB Bandwidth 41.407 MHz Freq/Channel Center Freq 5.18000000 GHz Start Freq 5.15000000 GHz Stop Freq 5.20500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5220	Agilent R T Ch Freq 5.22 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.22 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 20.9673 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -39.106 kHz x dB Bandwidth 39.620 MHz Freq/Channel Center Freq 5.22000000 GHz Start Freq 5.19500000 GHz Stop Freq 5.24500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5240	Agilent R T Ch Freq 5.24 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.24 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 21.0351 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 38.553 kHz x dB Bandwidth 39.995 MHz Freq/Channel Center Freq 5.24000000 GHz Start Freq 5.21500000 GHz Stop Freq 5.26500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

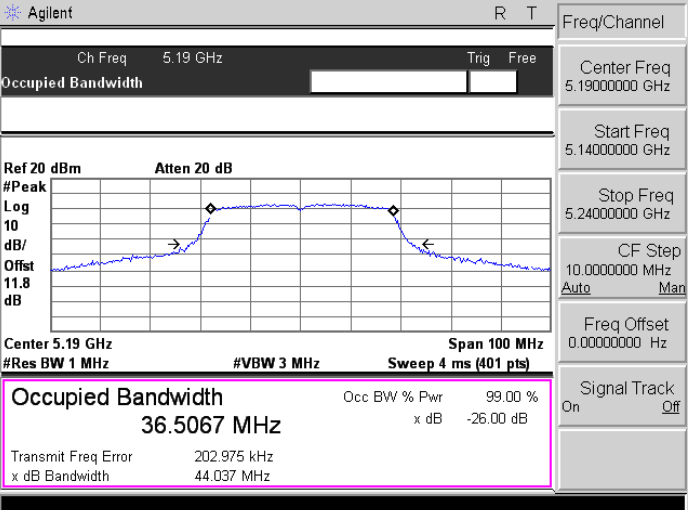
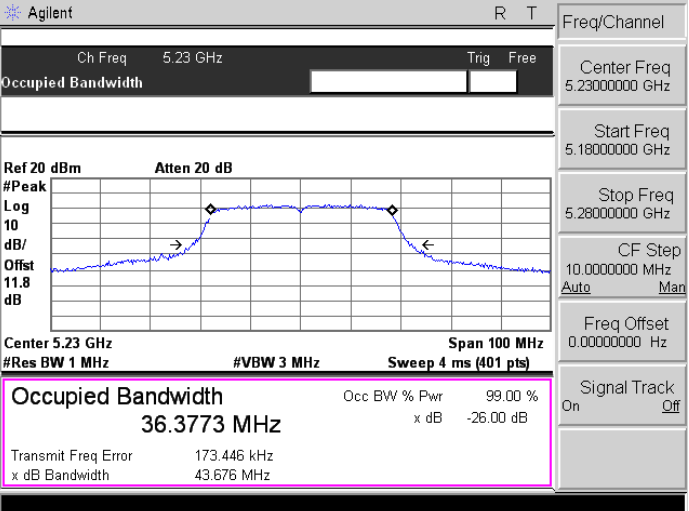
Mode 2: IEEE 802.11a Link Mode_ANT-0	
5260	Agilent R T Ch Freq 5.26 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log dB/ Offset 11.8 dB Center 5.26 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 20.1555 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -39.389 kHz x dB Bandwidth 38.418 MHz Freq/Channel Center Freq 5.26000000 GHz Start Freq 5.23500000 GHz Stop Freq 5.28500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5280	Agilent R T Ch Freq 5.28 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log dB/ Offset 11.8 dB Center 5.28 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 20.5719 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 30.002 kHz x dB Bandwidth 40.001 MHz Freq/Channel Center Freq 5.28000000 GHz Start Freq 5.25500000 GHz Stop Freq 5.30500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5320	Agilent R T Ch Freq 5.32 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log dB/ Offset 11.8 dB Center 5.32 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 20.5435 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -60.097 kHz x dB Bandwidth 38.110 MHz Freq/Channel Center Freq 5.32000000 GHz Start Freq 5.29500000 GHz Stop Freq 5.34500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

Mode 2: IEEE 802.11a Link Mode_ANT-0		
5500	 Agilent R T Ch Freq 5.5 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.5 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 23.6944 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -336.353 kHz x dB Bandwidth 42.856 MHz Freq/Channel Center Freq 5.5000000 GHz Start Freq 5.4750000 GHz Stop Freq 5.5250000 GHz CF Step 5.0000000 MHz Auto Man Freq Offset 0.0000000 Hz Signal Track On Off	
5580	 Agilent R T Ch Freq 5.58 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.58 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 26.8899 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -758.708 kHz x dB Bandwidth 44.115 MHz Freq/Channel Center Freq 5.5800000 GHz Start Freq 5.5550000 GHz Stop Freq 5.6050000 GHz CF Step 5.0000000 MHz Auto Man Freq Offset 0.0000000 Hz Signal Track On Off	
5700	 Agilent R T Ch Freq 5.7 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.7 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 26.0324 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -539.247 kHz x dB Bandwidth 44.029 MHz Freq/Channel Center Freq 5.7000000 GHz Start Freq 5.6750000 GHz Stop Freq 5.7250000 GHz CF Step 5.0000000 MHz Auto Man Freq Offset 0.0000000 Hz Signal Track On Off	

Mode 3: IEEE 802.11n 20MHz Link Mode_ANT-0	
5180	 Agilent R T Ch Freq 5.18 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.18 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 23.4267 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 118.867 kHz x dB Bandwidth 44.933 MHz Freq/Channel Center Freq 5.18000000 GHz Start Freq 5.15500000 GHz Stop Freq 5.20500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5220	 Agilent R T Ch Freq 5.22 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.22 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 20.8284 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 139.798 kHz x dB Bandwidth 40.894 MHz Freq/Channel Center Freq 5.22000000 GHz Start Freq 5.19500000 GHz Stop Freq 5.24500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5240	 Agilent R T Ch Freq 5.24 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.24 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 20.4077 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 56.168 kHz x dB Bandwidth 37.206 MHz Freq/Channel Center Freq 5.24000000 GHz Start Freq 5.21500000 GHz Stop Freq 5.26500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

Mode 3: IEEE 802.11n 20MHz Link Mode_ANT-0	
5260	 Agilent R T Ch Freq 5.26 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.26 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 20.5121 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 32.184 kHz x dB Bandwidth 37.788 MHz Freq/Channel Center Freq 5.26000000 GHz Start Freq 5.23500000 GHz Stop Freq 5.28500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5280	 Agilent R T Ch Freq 5.28 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.28 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 20.4752 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -26.261 kHz x dB Bandwidth 37.359 MHz Freq/Channel Center Freq 5.28000000 GHz Start Freq 5.25500000 GHz Stop Freq 5.30500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5320	 Agilent R T Ch Freq 5.32 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.32 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 21.3712 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -46.270 kHz x dB Bandwidth 40.914 MHz Freq/Channel Center Freq 5.32000000 GHz Start Freq 5.29500000 GHz Stop Freq 5.34500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

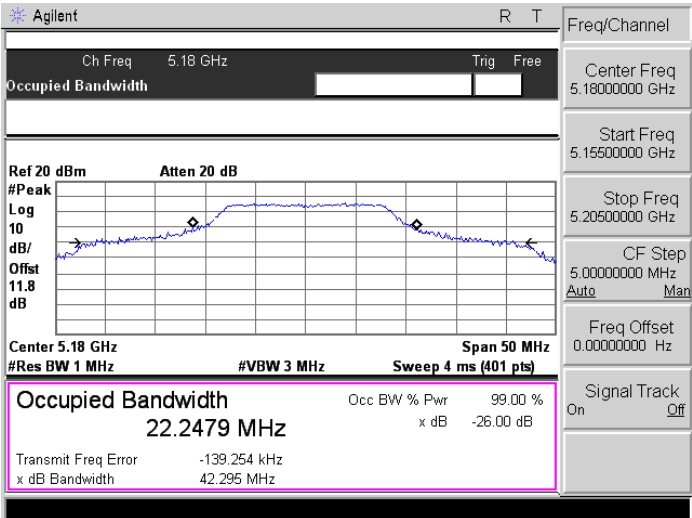
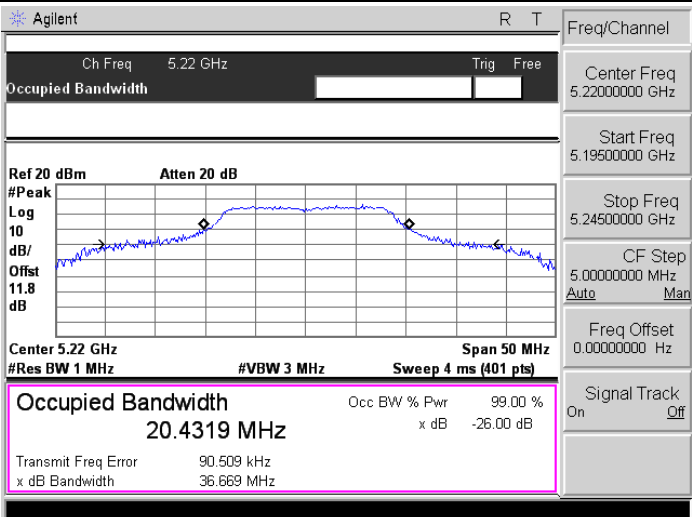
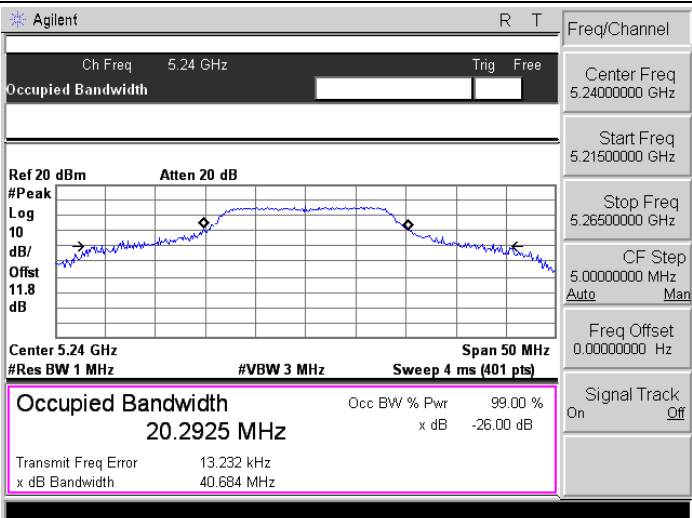
Mode 3: IEEE 802.11n 20MHz Link Mode_ANT-0		
5500	 Agilent R T Ch Freq 5.5 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.5 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 22.4399 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -54.850 kHz x dB Bandwidth 44.280 MHz Freq/Channel Center Freq 5.5000000 GHz Start Freq 5.4750000 GHz Stop Freq 5.5250000 GHz CF Step 5.0000000 MHz Auto Man Freq Offset 0.0000000 Hz Signal Track On Off	
5580	 Agilent R T Ch Freq 5.58 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.58 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 26.3655 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -955.038 kHz x dB Bandwidth 48.201 MHz Freq/Channel Center Freq 5.5800000 GHz Start Freq 5.5550000 GHz Stop Freq 5.6050000 GHz CF Step 5.0000000 MHz Auto Man Freq Offset 0.0000000 Hz Signal Track On Off	
5700	 Agilent R T Ch Freq 5.7 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.7 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 24.0091 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -707.120 kHz x dB Bandwidth 43.618 MHz Freq/Channel Center Freq 5.7000000 GHz Start Freq 5.6750000 GHz Stop Freq 5.7250000 GHz CF Step 5.0000000 MHz Auto Man Freq Offset 0.0000000 Hz Signal Track On Off	

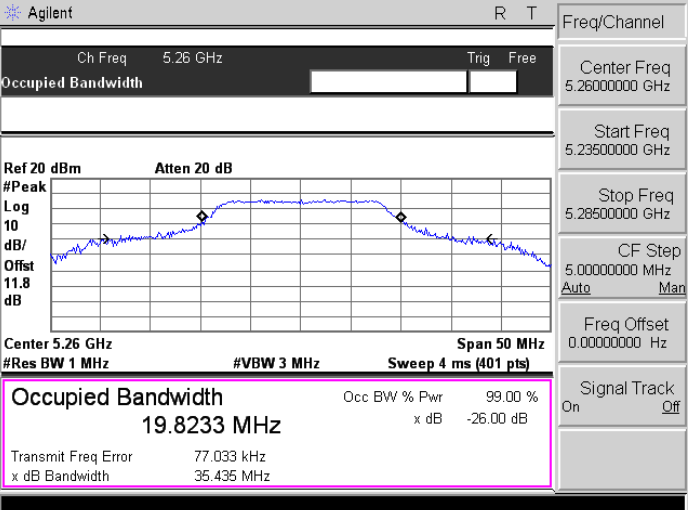
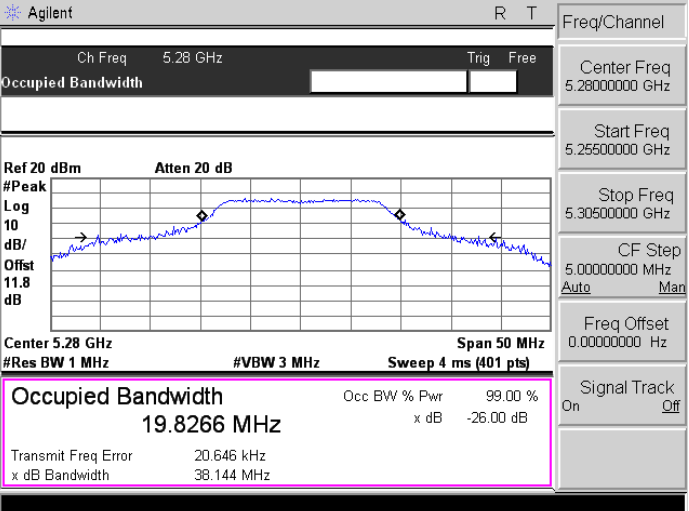
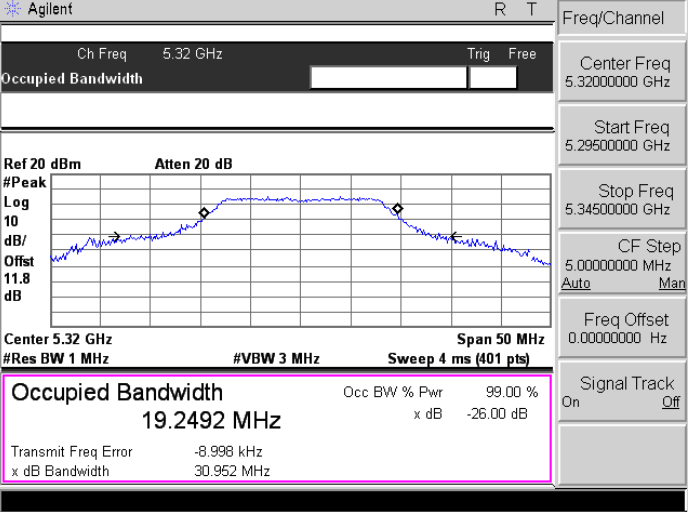
Mode 4: IEEE 802.11n 40MHz Link Mode_ANT-0		
5190		Agilent R T Ch Freq 5.19 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/Offset 11.8 dB Center 5.19 GHz Span 100 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 36.5067 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 202.975 kHz x dB Bandwidth 44.037 MHz Freq/Channel Center Freq 5.19000000 GHz Start Freq 5.14000000 GHz Stop Freq 5.24000000 GHz CF Step 10.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5230		Agilent R T Ch Freq 5.23 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/Offset 11.8 dB Center 5.23 GHz Span 100 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 36.3773 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 173.446 kHz x dB Bandwidth 43.676 MHz Freq/Channel Center Freq 5.23000000 GHz Start Freq 5.18000000 GHz Stop Freq 5.28000000 GHz CF Step 10.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

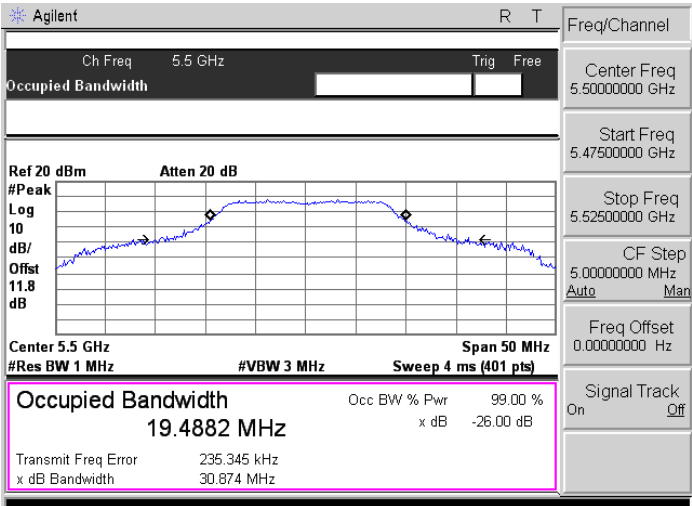
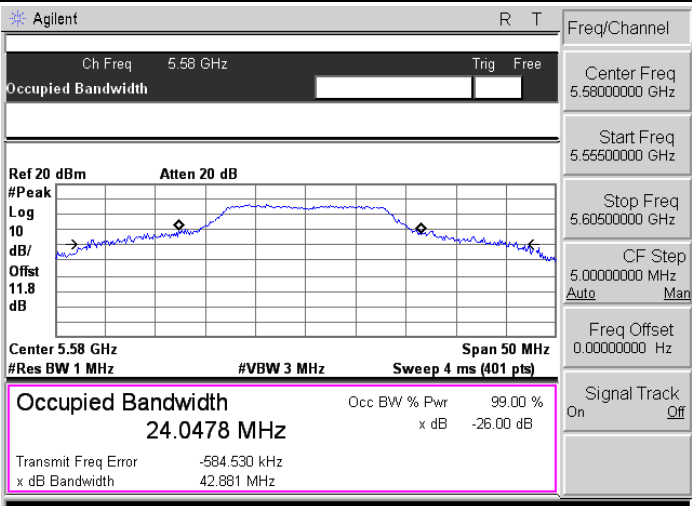
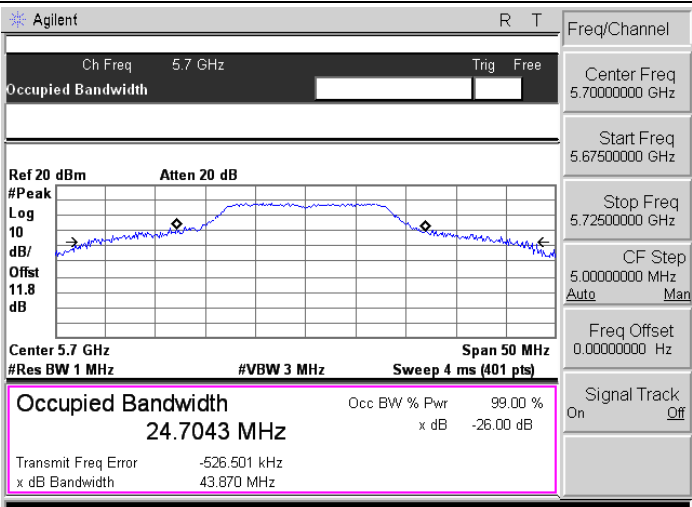
Mode 4: IEEE 802.11n 40MHz Link Mode_ANT-0	
5270	Agilent Ch Freq 5.27 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offset 11.8 dB Center 5.27 GHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Span 100 MHz Occupied Bandwidth 36.3660 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 131.565 kHz x dB Bandwidth 42.684 MHz Freq/Channel Center Freq 5.27000000 GHz Start Freq 5.22000000 GHz Stop Freq 5.32000000 GHz CF Step 10.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5310	Agilent Ch Freq 5.31 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offset 11.8 dB Center 5.31 GHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Span 100 MHz Occupied Bandwidth 36.3531 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 171.794 kHz x dB Bandwidth 43.417 MHz Freq/Channel Center Freq 5.31000000 GHz Start Freq 5.26000000 GHz Stop Freq 5.36000000 GHz CF Step 10.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

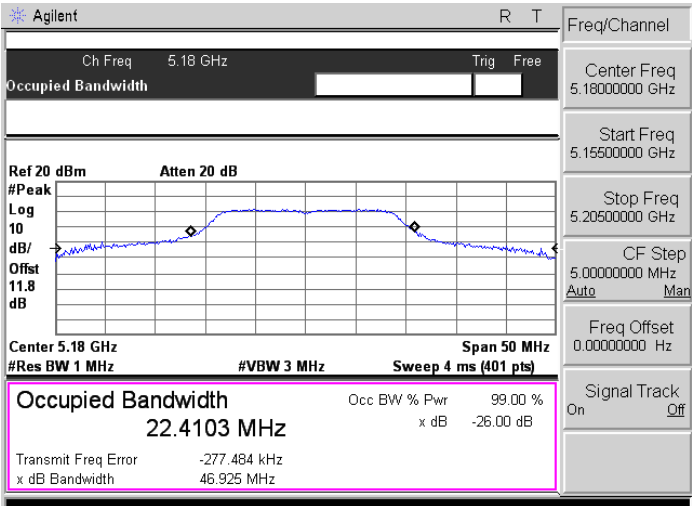
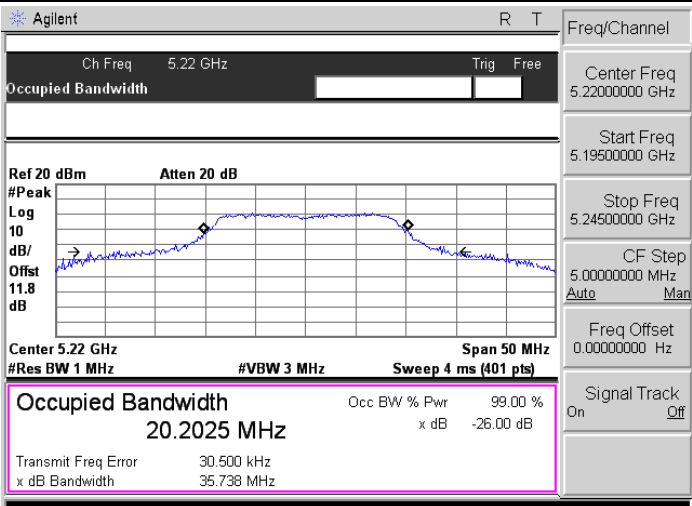
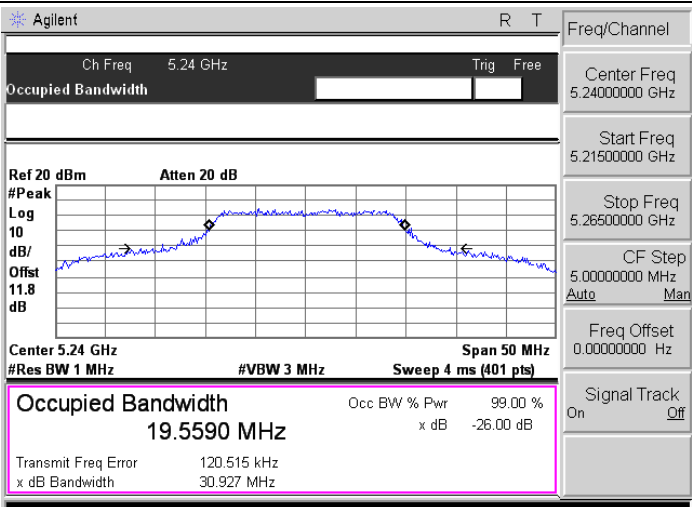


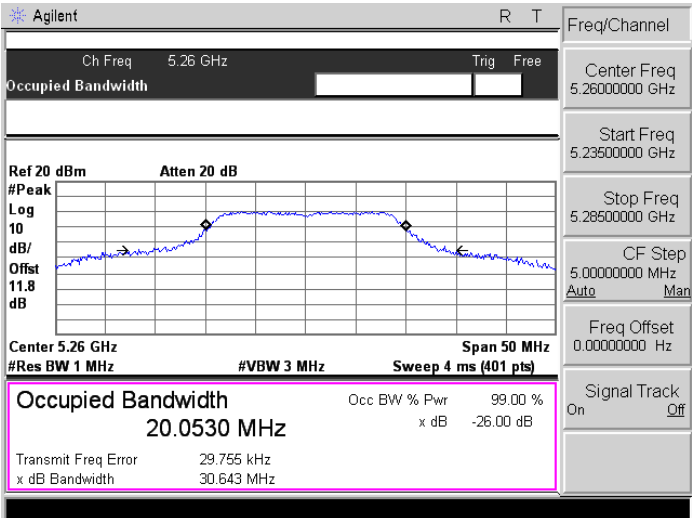
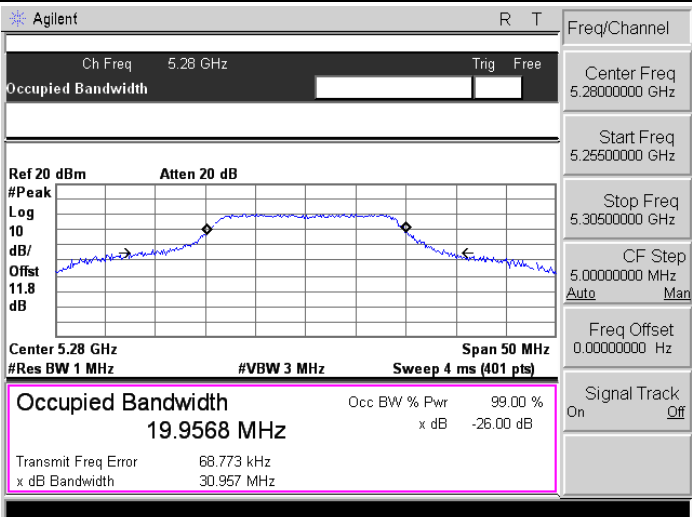
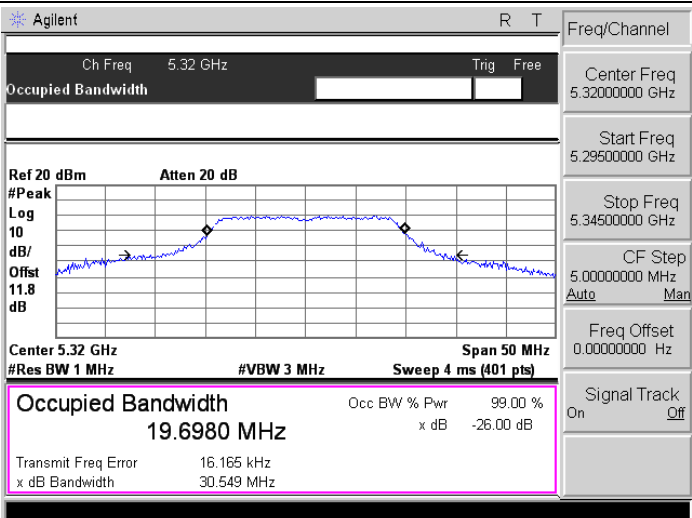
Mode 4: IEEE 802.11n 40MHz Link Mode_ANT-0	
5510	Agilent Ch Freq 5.51 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log dB/ Offset 11.8 dB Center 5.51 GHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Span 100 MHz Occupied Bandwidth 36.4413 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -29.574 kHz x dB Bandwidth 42.958 MHz Freq/Channel Center Freq 5.51000000 GHz Start Freq 5.46000000 GHz Stop Freq 5.56000000 GHz CF Step 10.0000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5550	Agilent Ch Freq 5.55 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log dB/ Offset 11.8 dB Center 5.55 GHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Span 100 MHz Occupied Bandwidth 36.5291 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 57.330 kHz x dB Bandwidth 44.670 MHz Freq/Channel Center Freq 5.55000000 GHz Start Freq 5.50000000 GHz Stop Freq 5.60000000 GHz CF Step 10.0000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5670	Agilent Ch Freq 5.67 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log dB/ Offset 11.8 dB Center 5.67 GHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Span 100 MHz Occupied Bandwidth 36.4069 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 95.768 kHz x dB Bandwidth 44.393 MHz Freq/Channel Center Freq 5.67000000 GHz Start Freq 5.62000000 GHz Stop Freq 5.72000000 GHz CF Step 10.0000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

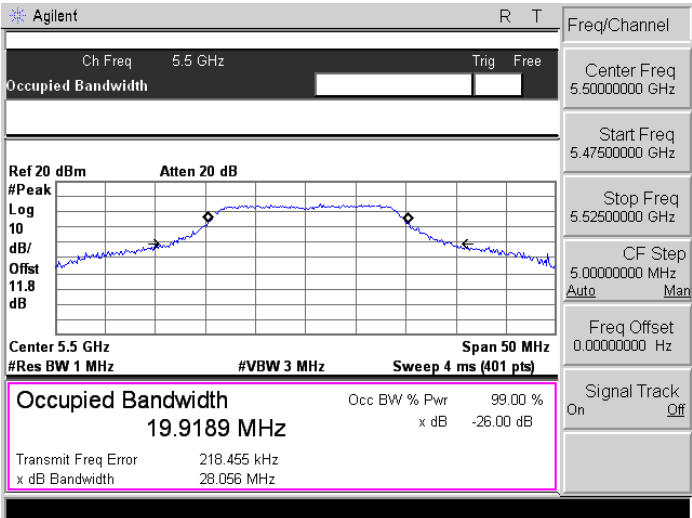
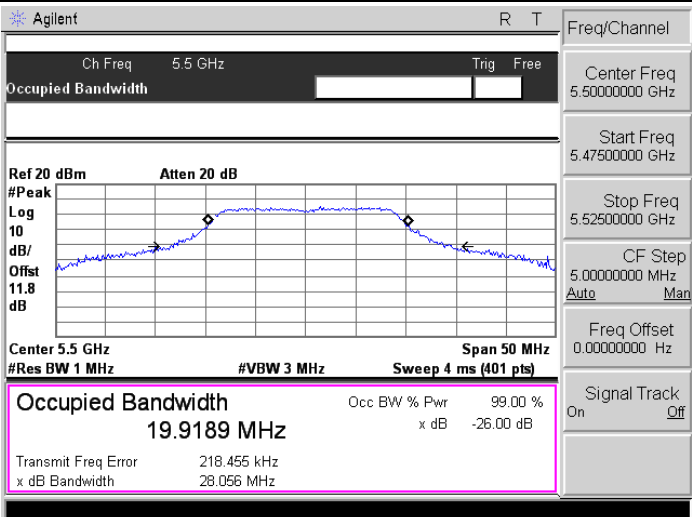
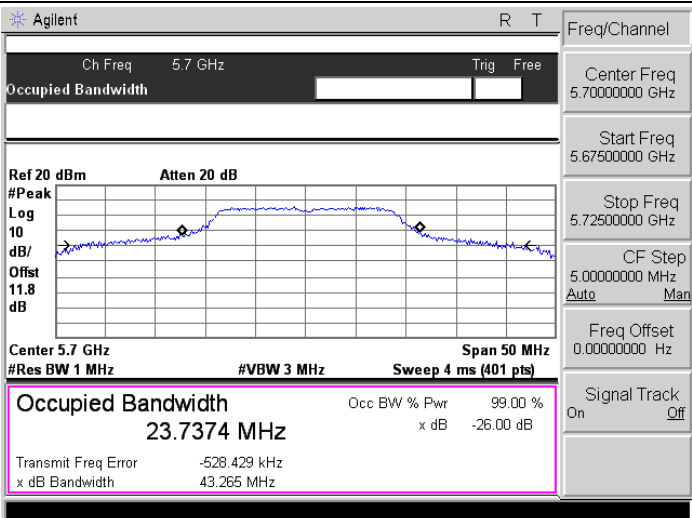
Mode 2: IEEE 802.11a Link Mode_ANT-1		
5180	 Agilent R T Ch Freq 5.18 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.18 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 22.2479 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -139.254 kHz x dB Bandwidth 42.295 MHz Freq/Channel Center Freq 5.18000000 GHz Start Freq 5.15500000 GHz Stop Freq 5.20500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off	
5220	 Agilent R T Ch Freq 5.22 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.22 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 20.4319 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 90.509 kHz x dB Bandwidth 36.669 MHz Freq/Channel Center Freq 5.22000000 GHz Start Freq 5.19500000 GHz Stop Freq 5.24500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off	
5240	 Agilent R T Ch Freq 5.24 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.24 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 20.2925 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 13.232 kHz x dB Bandwidth 40.684 MHz Freq/Channel Center Freq 5.24000000 GHz Start Freq 5.21500000 GHz Stop Freq 5.26500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off	

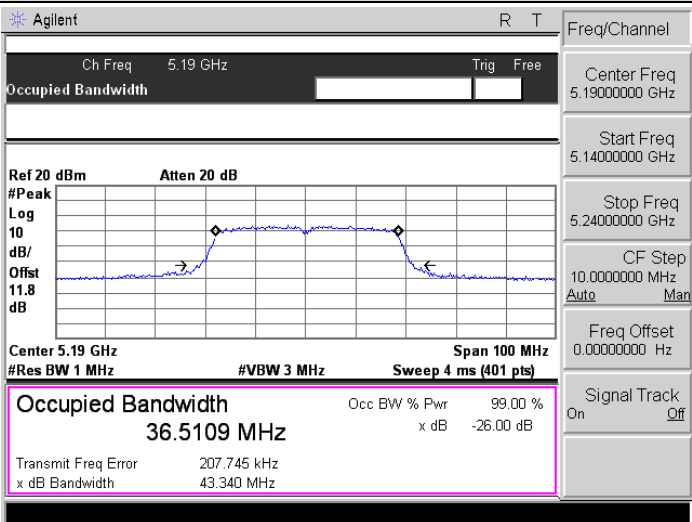
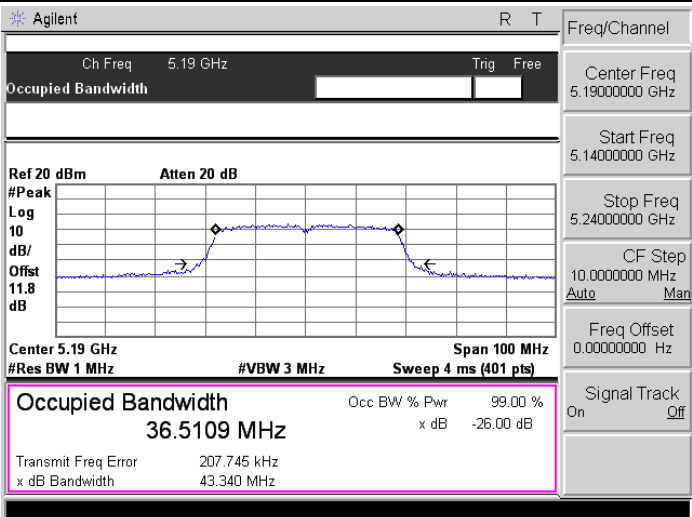
Mode 2: IEEE 802.11a Link Mode_ANT-1	
5260	 Agilent R T Ch Freq 5.26 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/Offst 11.8 dB Center 5.26 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 19.8233 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 77.033 kHz x dB Bandwidth 35.435 MHz Freq/Channel Center Freq 5.26000000 GHz Start Freq 5.23500000 GHz Stop Freq 5.28500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5280	 Agilent R T Ch Freq 5.28 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/Offst 11.8 dB Center 5.28 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 19.8266 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 20.646 kHz x dB Bandwidth 38.144 MHz Freq/Channel Center Freq 5.28000000 GHz Start Freq 5.25500000 GHz Stop Freq 5.30500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5320	 Agilent R T Ch Freq 5.32 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/Offst 11.8 dB Center 5.32 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 19.2492 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -8.998 kHz x dB Bandwidth 30.952 MHz Freq/Channel Center Freq 5.32000000 GHz Start Freq 5.29500000 GHz Stop Freq 5.34500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

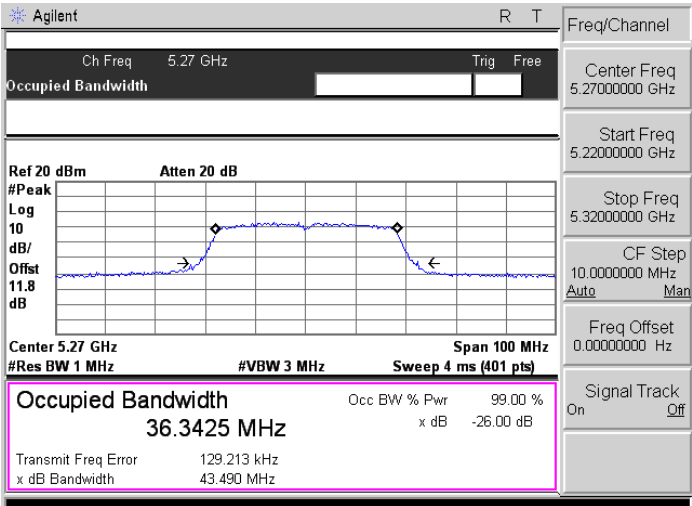
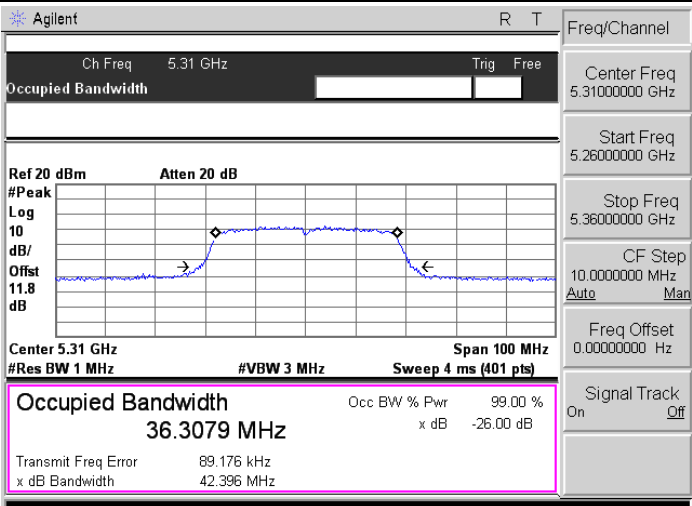
Mode 2: IEEE 802.11a Link Mode_ANT-1	
5500	 Agilent R T Ch Freq 5.5 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.5 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 19.4882 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 235.345 kHz x dB Bandwidth 30.874 MHz Freq/Channel Center Freq 5.5000000 GHz Start Freq 5.4750000 GHz Stop Freq 5.5250000 GHz CF Step 5.0000000 MHz Auto Man Freq Offset 0.0000000 Hz Signal Track On Off
5580	 Agilent R T Ch Freq 5.58 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.58 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 24.0478 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -584.530 kHz x dB Bandwidth 42.881 MHz Freq/Channel Center Freq 5.5800000 GHz Start Freq 5.5550000 GHz Stop Freq 5.6050000 GHz CF Step 5.0000000 MHz Auto Man Freq Offset 0.0000000 Hz Signal Track On Off
5700	 Agilent R T Ch Freq 5.7 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.7 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 24.7043 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -526.501 kHz x dB Bandwidth 43.870 MHz Freq/Channel Center Freq 5.7000000 GHz Start Freq 5.6750000 GHz Stop Freq 5.7250000 GHz CF Step 5.0000000 MHz Auto Man Freq Offset 0.0000000 Hz Signal Track On Off

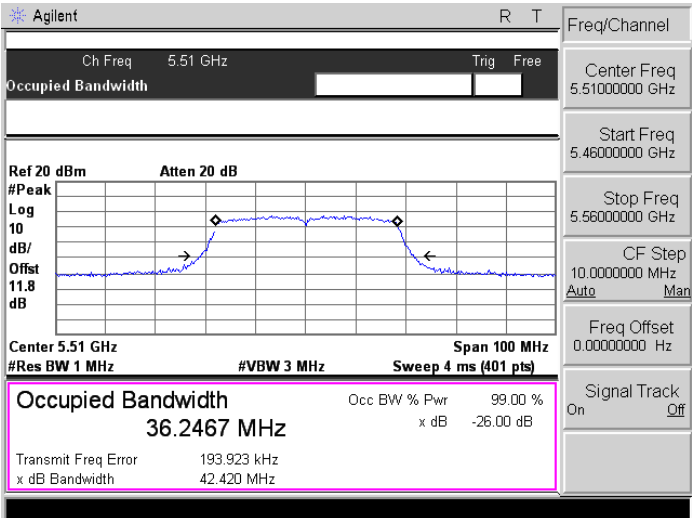
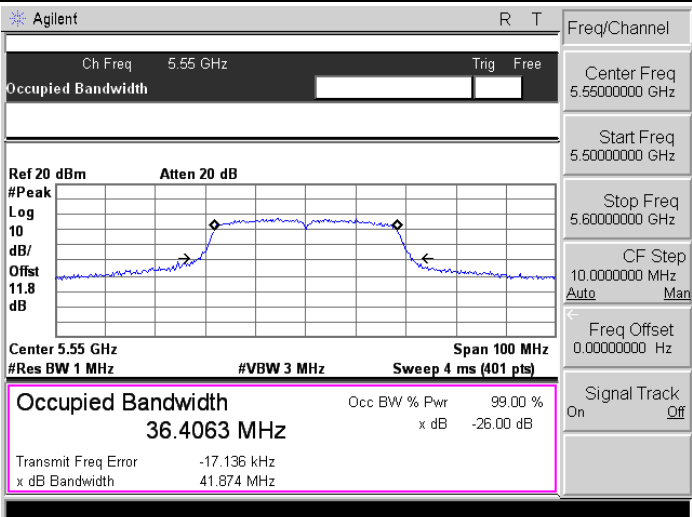
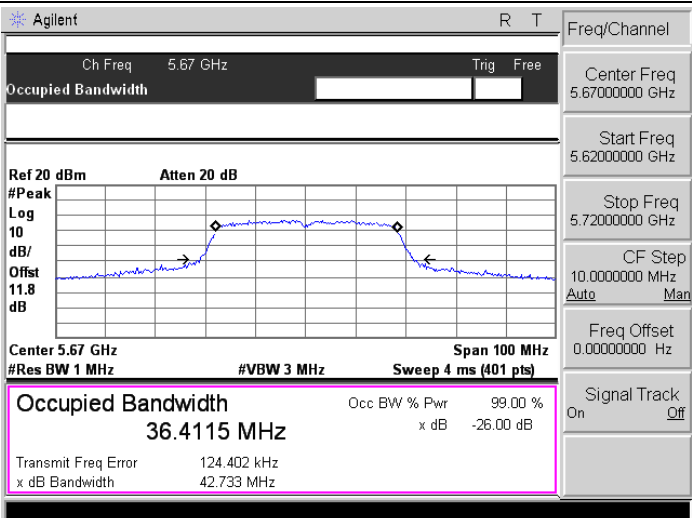
Mode 3: IEEE 802.11n 20MHz Link Mode_ANT-1	
5180	 Agilent R T Ch Freq 5.18 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.18 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 22.4103 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -277.484 kHz x dB Bandwidth 46.925 MHz Freq/Channel Center Freq 5.18000000 GHz Start Freq 5.15500000 GHz Stop Freq 5.20500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5220	 Agilent R T Ch Freq 5.22 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.22 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 20.2025 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 30.500 kHz x dB Bandwidth 35.738 MHz Freq/Channel Center Freq 5.22000000 GHz Start Freq 5.19500000 GHz Stop Freq 5.24500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5240	 Agilent R T Ch Freq 5.24 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.24 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 19.5590 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 120.515 kHz x dB Bandwidth 30.927 MHz Freq/Channel Center Freq 5.24000000 GHz Start Freq 5.21500000 GHz Stop Freq 5.26500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

Mode 3: IEEE 802.11n 20MHz Link Mode_ANT-1		
5260	 Agilent R T Ch Freq 5.26 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.26 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 20.0530 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 29.755 kHz x dB Bandwidth 30.643 MHz Freq/Channel Center Freq 5.26000000 GHz Start Freq 5.23500000 GHz Stop Freq 5.28500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off	
5280	 Agilent R T Ch Freq 5.28 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.28 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 19.9568 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 68.773 kHz x dB Bandwidth 30.957 MHz Freq/Channel Center Freq 5.28000000 GHz Start Freq 5.25500000 GHz Stop Freq 5.30500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off	
5320	 Agilent R T Ch Freq 5.32 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.32 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 19.6980 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 16.165 kHz x dB Bandwidth 30.549 MHz Freq/Channel Center Freq 5.32000000 GHz Start Freq 5.29500000 GHz Stop Freq 5.34500000 GHz CF Step 5.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off	

Mode 3: IEEE 802.11n 20MHz Link Mode_ANT-1	
5500	 Agilent R T Ch Freq 5.5 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/Offset 11.8 dB Center 5.5 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 19.9189 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 218.455 kHz x dB Bandwidth 28.056 MHz Freq/Channel Center Freq 5.5000000 GHz Start Freq 5.4750000 GHz Stop Freq 5.5250000 GHz CF Step 5.0000000 MHz Auto Man Freq Offset 0.0000000 Hz Signal Track On Off
5580	 Agilent R T Ch Freq 5.5 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/Offset 11.8 dB Center 5.5 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 19.9189 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 218.455 kHz x dB Bandwidth 28.056 MHz Freq/Channel Center Freq 5.5000000 GHz Start Freq 5.4750000 GHz Stop Freq 5.5250000 GHz CF Step 5.0000000 MHz Auto Man Freq Offset 0.0000000 Hz Signal Track On Off
5700	 Agilent R T Ch Freq 5.7 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/Offset 11.8 dB Center 5.7 GHz Span 50 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 23.7374 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -528.429 kHz x dB Bandwidth 43.265 MHz Freq/Channel Center Freq 5.7000000 GHz Start Freq 5.6750000 GHz Stop Freq 5.7250000 GHz CF Step 5.0000000 MHz Auto Man Freq Offset 0.0000000 Hz Signal Track On Off

Mode 4: IEEE 802.11n 40MHz Link Mode_ANT-1	
5190	 The screenshot shows the Agilent Spectrum Analyzer interface. The main display shows a signal spectrum with a peak at 5.19 GHz. The 'Occupied Bandwidth' is highlighted in a pink box, showing a value of 36.5109 MHz. The 'Transmit Freq Error' is 207.745 kHz and the 'x dB Bandwidth' is 43.340 MHz. The 'Occ BW % Pwr' is 99.00 % and the 'x dB' is -26.00 dB. The 'Signal Track' is set to 'Off'.
5230	 The screenshot shows the Agilent Spectrum Analyzer interface. The main display shows a signal spectrum with a peak at 5.19 GHz. The 'Occupied Bandwidth' is highlighted in a pink box, showing a value of 36.5109 MHz. The 'Transmit Freq Error' is 207.745 kHz and the 'x dB Bandwidth' is 43.340 MHz. The 'Occ BW % Pwr' is 99.00 % and the 'x dB' is -26.00 dB. The 'Signal Track' is set to 'Off'.

Mode 4: IEEE 802.11n 40MHz Link Mode_ANT-1		
5270	 Agilent R T Ch Freq 5.27 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/Offst 11.8 dB Center 5.27 GHz Span 100 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 36.3425 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 129.213 kHz x dB Bandwidth 43.490 MHz Freq/Channel Center Freq 5.27000000 GHz Start Freq 5.22000000 GHz Stop Freq 5.32000000 GHz CF Step 10.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off	
5310	 Agilent R T Ch Freq 5.31 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/Offst 11.8 dB Center 5.31 GHz Span 100 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 36.3079 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 89.176 kHz x dB Bandwidth 42.396 MHz Freq/Channel Center Freq 5.31000000 GHz Start Freq 5.26000000 GHz Stop Freq 5.36000000 GHz CF Step 10.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off	

Mode 4: IEEE 802.11n 40MHz Link Mode_ANT-1	
5510	 Agilent R T Ch Freq 5.51 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.51 GHz Span 100 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 36.2467 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 193.923 kHz x dB Bandwidth 42.420 MHz Freq/Channel Center Freq 5.51000000 GHz Start Freq 5.46000000 GHz Stop Freq 5.56000000 GHz CF Step 10.0000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5550	 Agilent R T Ch Freq 5.55 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.55 GHz Span 100 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 36.4063 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -17.136 kHz x dB Bandwidth 41.874 MHz Freq/Channel Center Freq 5.55000000 GHz Start Freq 5.50000000 GHz Stop Freq 5.60000000 GHz CF Step 10.0000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5670	 Agilent R T Ch Freq 5.67 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.67 GHz Span 100 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts) Occupied Bandwidth 36.4115 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 124.402 kHz x dB Bandwidth 42.733 MHz Freq/Channel Center Freq 5.67000000 GHz Start Freq 5.62000000 GHz Stop Freq 5.72000000 GHz CF Step 10.0000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

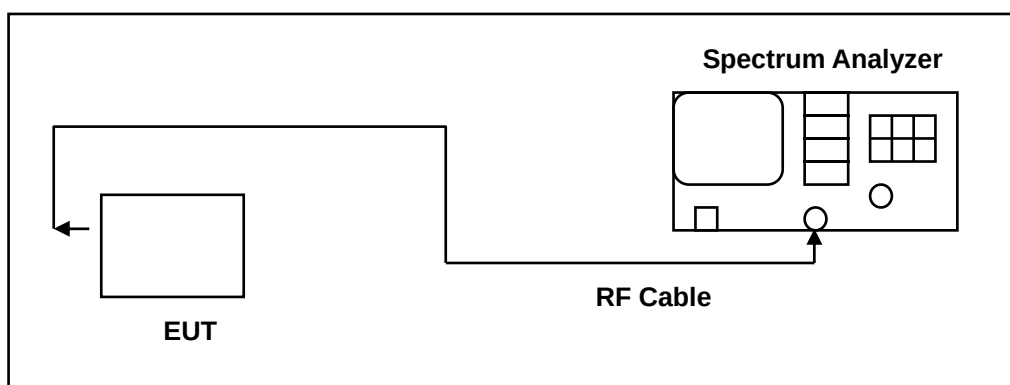
8 6dB RF Bandwidth

8.1. Limit

6dB RF Bandwidth

Systems using digital modulation techniques may operate in the 5725~5850MHz bands. The minimum 6 dB band-width shall be at least 500 kHz.

8.2. Test Setup



8.3. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY45300744	12/16/2014	(1)
Test Site	ATL	TE05	TE05	N.C.R.	-----

dRemark: (1) Calibration period 1 year. (2) Calibration period 2 years. (3) Calibration period 3 years.

Note: N.C.R. = No Calibration Request.

8.4. Test Procedure

6dB RF Bandwidth

The EUT tested to UNII test procedure of KDB789033 D02 for compliance to FCC 47CFR 15.247 requirements.

The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer RES BW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A peak output reading was taken, a DISPLAY line was drawn 6 dB lower than peak level. The 6 dB bandwidth was determined from where the channel output spectrum intersected the display line.

The test was performed at 3 channels.

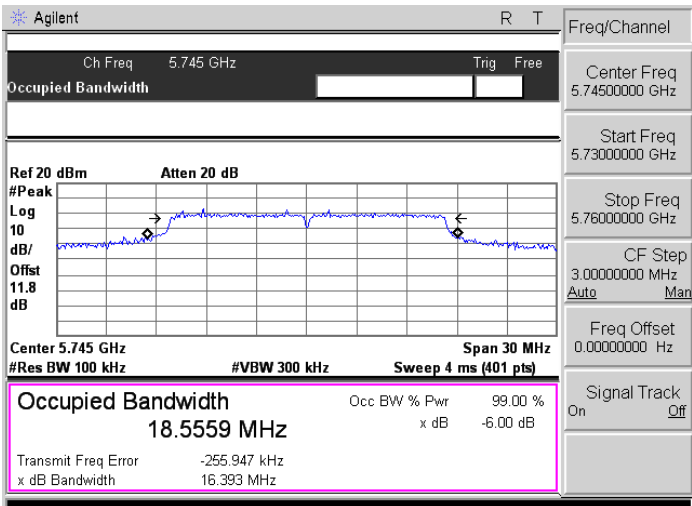
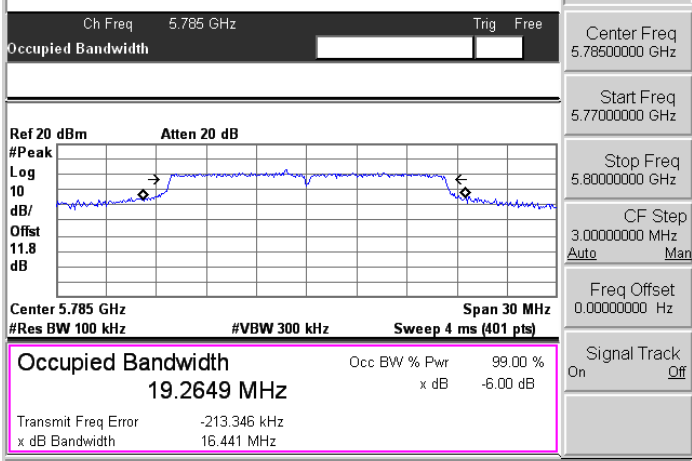
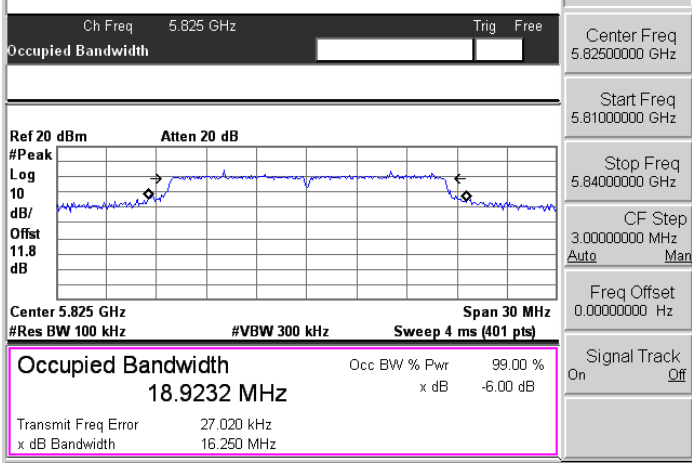
8.5. Test Result

Model Number	ONYX-1521DTT-C1-1010		
Test Item	6dB RF Bandwidth & 99 % Occupied Bandwidth		
Test Mode	Mode 2: IEEE 802.11a Link Mode		
Date of Test	07/17/2014	Test Site	TE05
Frequency (MHz)	6dB Bandwidth (MHz)		6dB Bandwidth Limit (kHz)
	ANT-0	ANT-1	
5745	16.393	16.469	> 500
5785	16.441	16.372	> 500
5825	16.250	16.060	> 500

Model Number	ONYX-1521DTT-C1-1010		
Test Item	6dB RF Bandwidth & 99 % Occupied Bandwidth		
Test Mode	Mode 3: IEEE 802.11n 20MHz Link Mode		
Date of Test	07/17/2014	Test Site	TE05
Frequency (MHz)	6dB Bandwidth (MHz)		6dB Bandwidth Limit (kHz)
	ANT-0	ANT-1	
5745	17.681	17.703	> 500
5785	17.664	17.675	> 500
5825	17.679	17.715	> 500

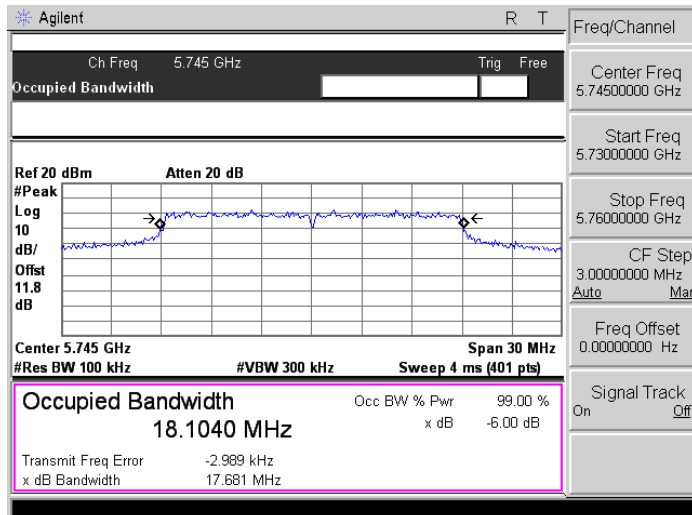
Model Number	ONYX-1521DTT-C1-1010		
Test Item	6dB RF Bandwidth & 99 % Occupied Bandwidth		
Test Mode	Mode 4: IEEE 802.11n 40MHz Link Mode		
Date of Test	07/17/2014	Test Site	TE05
Frequency (MHz)	6dB Bandwidth (MHz)		6dB Bandwidth Limit (kHz)
	ANT-0	ANT-1	
5755	35.281	35.361	> 500
5795	35.266	34.063	> 500

8.6. Test Graphs

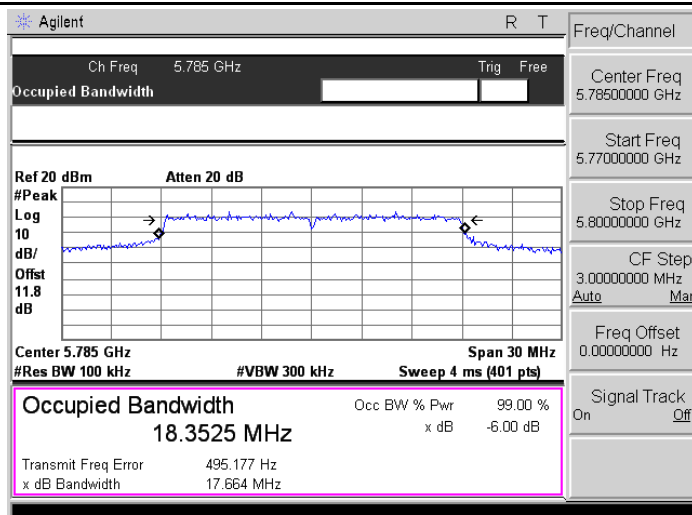
Mode 2: IEEE 802.11a Link Mode_ANT-0 5745	 Agilent R T Ch Freq 5.745 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.745 GHz Span 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts) Occupied Bandwidth 18.5559 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB Transmit Freq Error -255.947 kHz x dB Bandwidth 16.393 MHz Freq/Channel Center Freq 5.74500000 GHz Start Freq 5.73000000 GHz Stop Freq 5.76000000 GHz CF Step 3.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5785	 Agilent R T Ch Freq 5.785 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.785 GHz Span 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts) Occupied Bandwidth 19.2649 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB Transmit Freq Error -213.346 kHz x dB Bandwidth 16.441 MHz Freq/Channel Center Freq 5.78500000 GHz Start Freq 5.77000000 GHz Stop Freq 5.80000000 GHz CF Step 3.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5825	 Agilent R T Ch Freq 5.825 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.825 GHz Span 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts) Occupied Bandwidth 18.9232 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB Transmit Freq Error 27.020 kHz x dB Bandwidth 16.250 MHz Freq/Channel Center Freq 5.82500000 GHz Start Freq 5.81000000 GHz Stop Freq 5.84000000 GHz CF Step 3.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

Mode 3: IEEE 802.11n 20MHz Link Mode_ANT-0

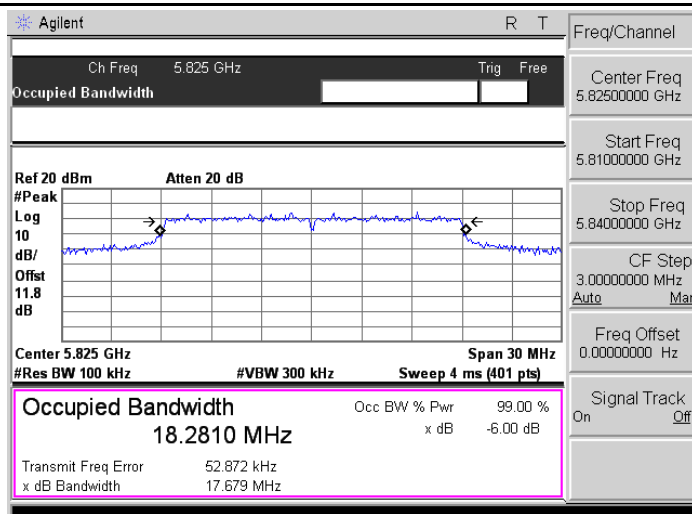
5745



5785

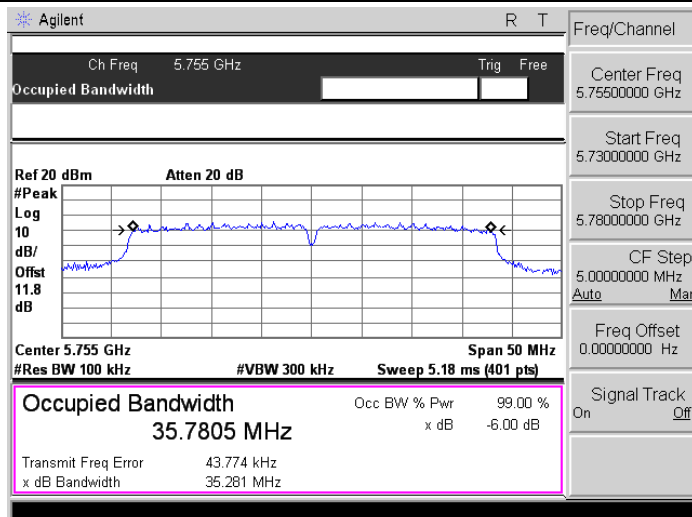


5825

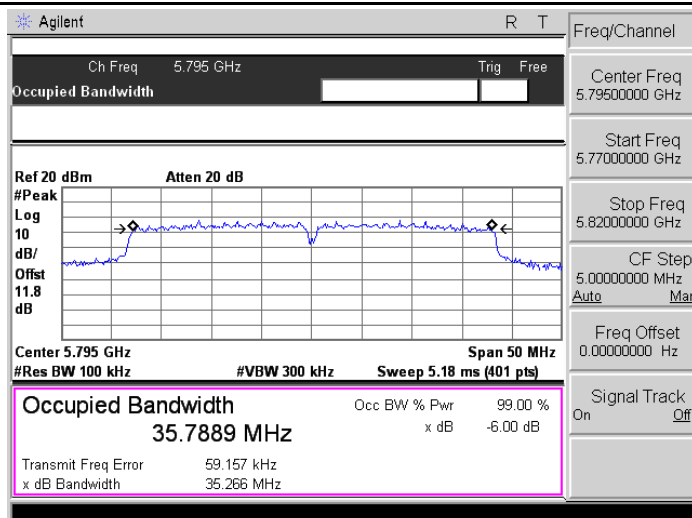


Mode 4: IEEE 802.11n 40MHz Link Mode_ANT-0

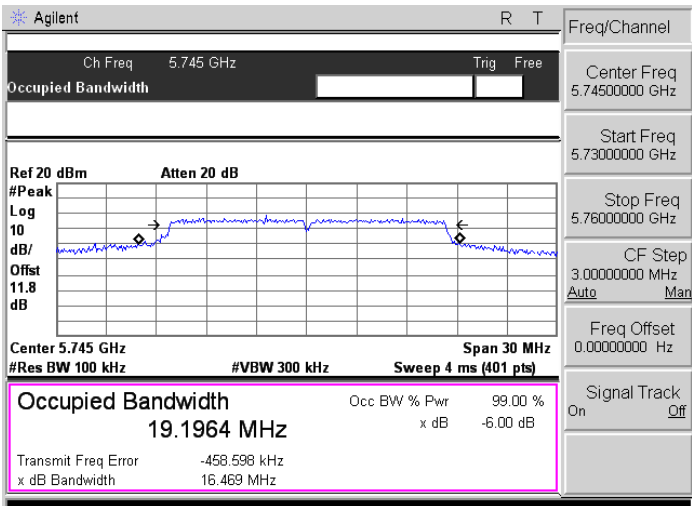
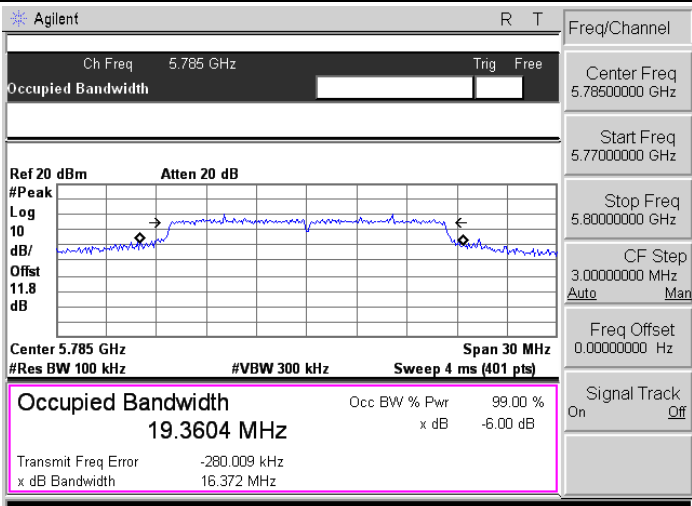
5755



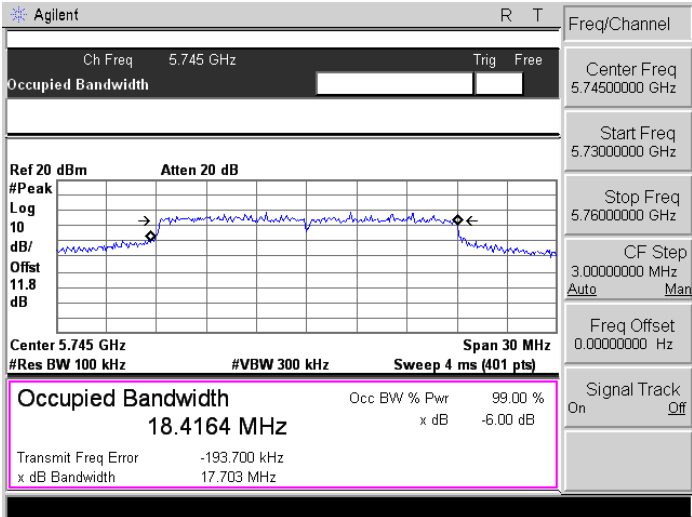
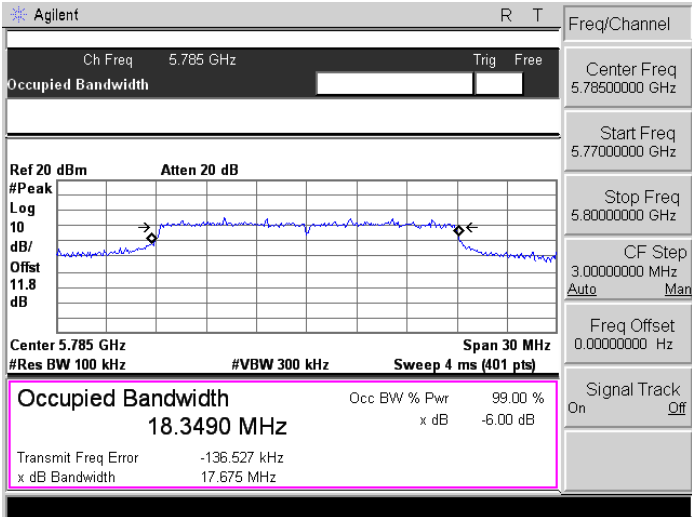
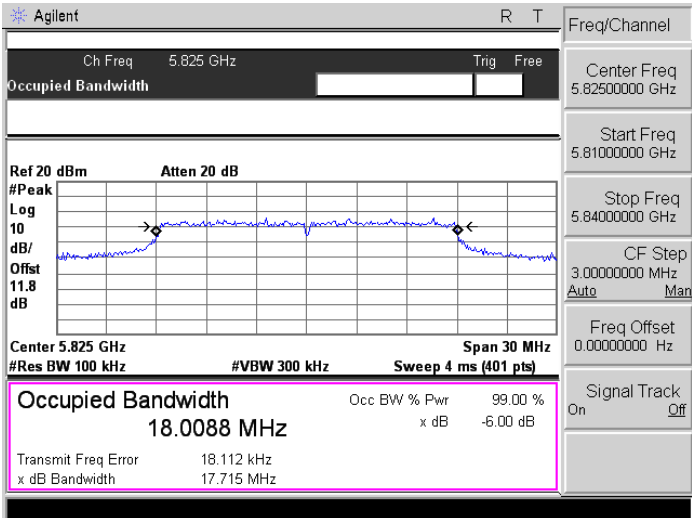
5795



Mode 2: IEEE 802.11a Link Mode_ANT-1

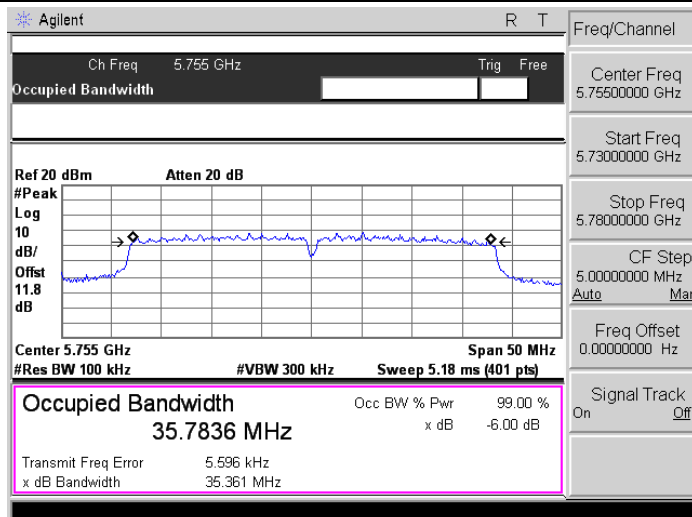
5745	 Agilent R T Ch Freq 5.745 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.745 GHz Span 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts) Occupied Bandwidth 19.1964 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB Transmit Freq Error -458.598 kHz x dB Bandwidth 16.469 MHz Freq/Channel Center Freq 5.74500000 GHz Start Freq 5.73000000 GHz Stop Freq 5.76000000 GHz CF Step 3.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5785	 Agilent R T Ch Freq 5.785 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.785 GHz Span 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts) Occupied Bandwidth 19.3604 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB Transmit Freq Error -280.009 kHz x dB Bandwidth 16.372 MHz Freq/Channel Center Freq 5.78500000 GHz Start Freq 5.77000000 GHz Stop Freq 5.80000000 GHz CF Step 3.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5825	 Agilent R T Ch Freq 5.825 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.825 GHz Span 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts) Occupied Bandwidth 17.5080 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB Transmit Freq Error 54.953 kHz x dB Bandwidth 16.060 MHz Freq/Channel Center Freq 5.82500000 GHz Start Freq 5.81000000 GHz Stop Freq 5.84000000 GHz CF Step 3.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

Mode 3: IEEE 802.11n 20MHz Link Mode_ANT-1

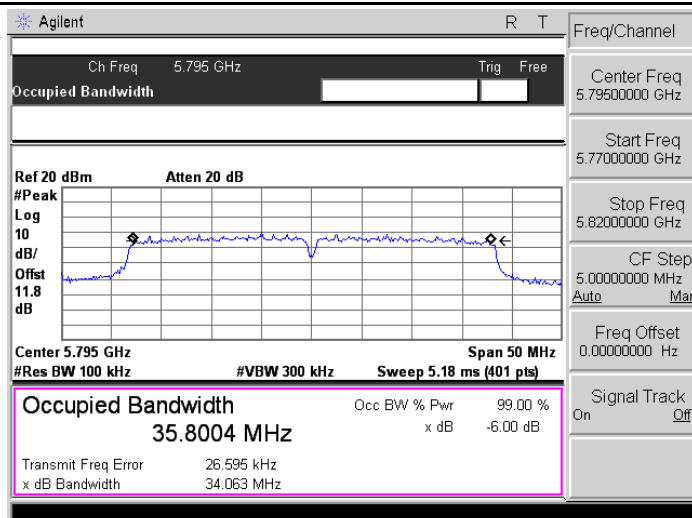
5745	 Agilent R T Ch Freq 5.745 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.745 GHz Span 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts) Occupied Bandwidth 18.4164 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB Transmit Freq Error -193.700 kHz x dB Bandwidth 17.703 MHz Freq/Channel Center Freq 5.74500000 GHz Start Freq 5.73000000 GHz Stop Freq 5.76000000 GHz CF Step 3.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5785	 Agilent R T Ch Freq 5.785 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.785 GHz Span 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts) Occupied Bandwidth 18.3490 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB Transmit Freq Error -136.527 kHz x dB Bandwidth 17.675 MHz Freq/Channel Center Freq 5.78500000 GHz Start Freq 5.77000000 GHz Stop Freq 5.80000000 GHz CF Step 3.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
5825	 Agilent R T Ch Freq 5.825 GHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 20 dB #Peak Log 10 dB/ Offst 11.8 dB Center 5.825 GHz Span 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4 ms (401 pts) Occupied Bandwidth 18.0088 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB Transmit Freq Error 18.112 kHz x dB Bandwidth 17.715 MHz Freq/Channel Center Freq 5.82500000 GHz Start Freq 5.81000000 GHz Stop Freq 5.84000000 GHz CF Step 3.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

Mode 4: IEEE 802.11n 40MHz Link Mode_ANT-1

5755



5795



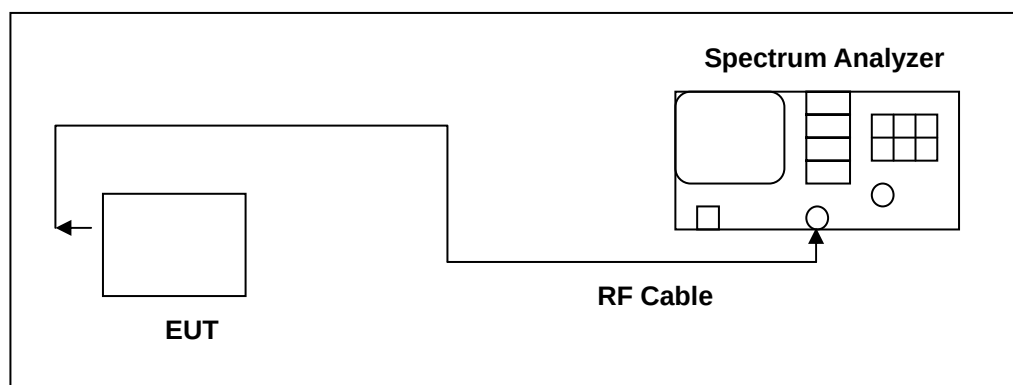
9 Peak Power Spectral Density Measurement

9.1. Limit

Conducted power spectral density

Frequency Range (MHz)	FCC Limit
5.150 ~ 5.250 GHz	11 dBm/MHz
5.250 ~ 5.350 GHz	11 dBm/MHz
5.470 ~ 5.725 GHz	11 dBm/MHz
5.725 ~ 5.850 GHz	30 dBm/500KHz

9.2. Test Setup



9.3. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY45300744	12/16/2014	(1)
Test Site	ATL	TE02	TE02	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

9.4. Test Procedure

The test is performed in accordance with KDB789033: D02 General UNII Test Procedures New Rules v01, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E.

**9.5. Test Result**

Model Number	ONYX-1521DTT-C1-1010			
Test Item	Conducted power spectral density			
Test Mode	Mode 2: IEEE 802.11a Link Mode			
Date of Test	01/31/2015		Test Site	TE02
ANT-0				
Frequency (MHz)	Measurement (dBm/MHz)			FCC Limit (dBm/MHz)
5180	2.202			< 11
5220	2.557			
5240	2.831			
5260	2.314			< 11
5280	2.729			
5320	2.155			
5500	3.719			< 11
5580	2.380			
5700	3.011			
Frequency (MHz)	Measurement (dBm/100KHz)	Measurement (dBm/500KHz)	Measurement (dBm/MHz)	FCC Limit (dBm/500KHz)
5745	-6.36	0.63	3.64	< 30
5785	-4.83	2.16	5.17	
5825	-4.92	2.07	5.08	
ANT-1				
Frequency (MHz)	Measurement (dBm/MHz)			FCC Limit (dBm/MHz)
5180	2.415			< 11
5220	2.538			
5240	2.417			
5260	2.929			< 11
5280	2.752			
5320	2.427			
5500	-3.947			< 11
5580	-3.969			
5700	-3.023			
Frequency (MHz)	Measurement (dBm/100KHz)	Measurement (dBm/500KHz)	Measurement (dBm/MHz)	FCC Limit (dBm/500KHz)
5745	-9.63	-2.64	0.37	< 30
5785	-7.17	-0.18	2.83	
5825	-6.56	0.43	3.44	

Model Number	ONYX-1521DTT-C1-1010		
Test Item	Conducted power spectral density		
Test Mode	Mode 2: IEEE 802.11a Link Mode		
Date of Test	01/31/2015	Test Site	TE02
ANT-0+1			
Frequency (MHz)	Measurement (dBm/MHz)		FCC Limit (dBm/MHz)
5180	5.320		< 11
5220	5.558		
5240	5.639		
5260	5.643		< 11
5280	5.751		
5320	5.303		
5500	4.405		< 11
5580	3.285		
5700	3.977		
Frequency (MHz)	Measurement (dBm/500KHz)	Measurement (dBm/MHz)	FCC Limit (dBm/500KHz)
5745	2.31	5.32	< 30
5785	4.16	7.17	
5825	4.34	7.35	

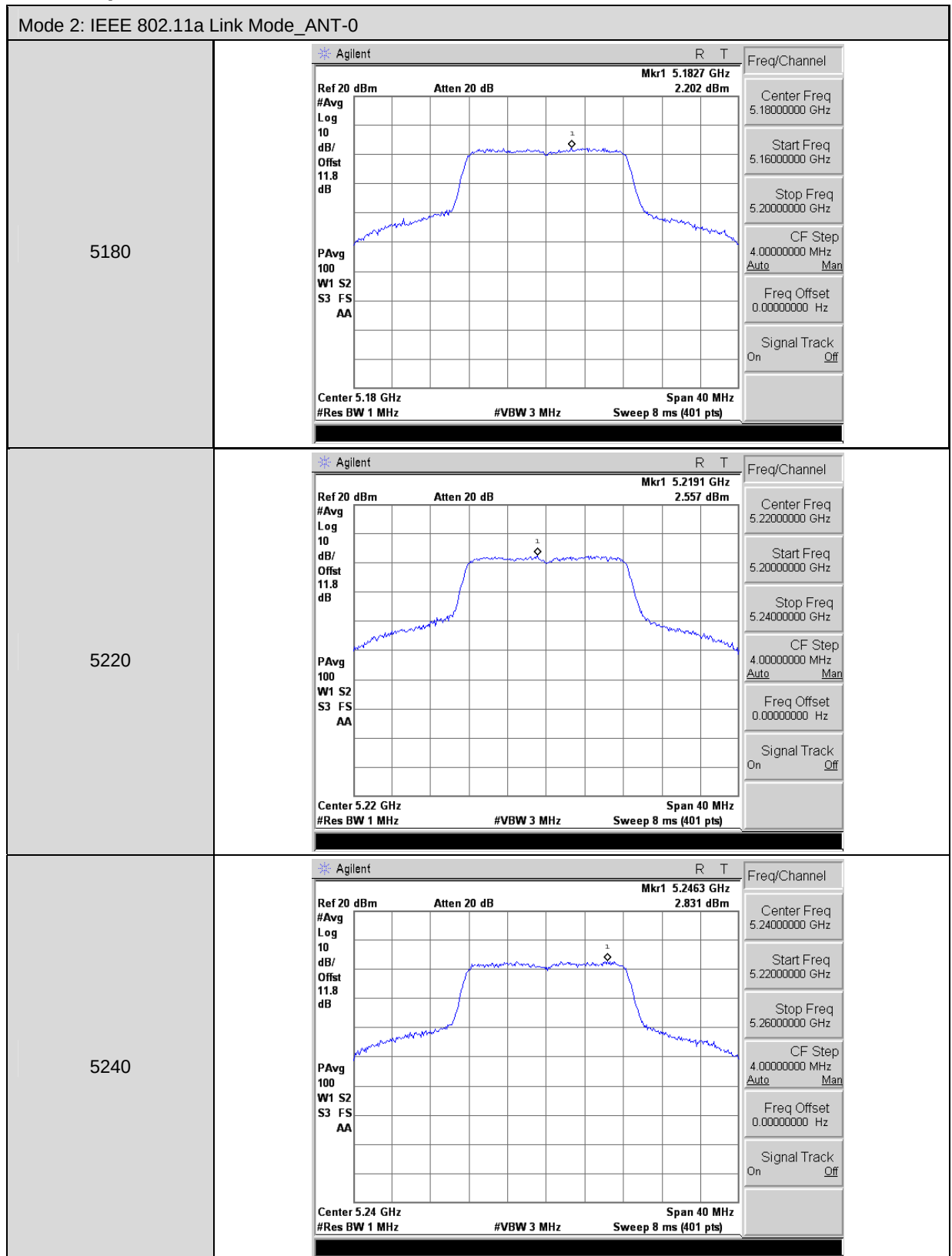
Model Number	ONYX-1521DTT-C1-1010			
Test Item	Conducted power spectral density			
Test Mode	Mode 3: IEEE 802.11n 20MHz Link Mode			
Date of Test	01/31/2015		Test Site	TE02
ANT-0				
Frequency (MHz)	Measurement (dBm/MHz)			FCC Limit (dBm/MHz)
5180	1.656			< 11
5220	0.814			
5240	1.897			
5260	0.781			< 11
5280	1.848			
5320	1.266			
5500	3.215			< 11
5580	2.219			
5700	1.971			
Frequency (MHz)	Measurement (dBm/100KHz)	Measurement (dBm/500KHz)	Measurement (dBm/MHz)	FCC Limit (dBm/500KHz)
5745	-6.59	0.40	3.41	< 30
5785	-5.72	1.27	4.28	
5825	-5.60	1.39	4.40	
ANT-1				
Frequency (MHz)	Measurement (dBm/MHz)			FCC Limit (dBm/MHz)
5180	2.098			< 11
5220	2.019			
5240	2.528			
5260	2.266			< 11
5280	2.785			
5320	1.228			
5500	-4.882			< 11
5580	-4.802			
5700	-3.879			
Frequency (MHz)	Measurement (dBm/100KHz)	Measurement (dBm/500KHz)	Measurement (dBm/MHz)	FCC Limit (dBm/500KHz)
5745	-11.88	-4.89	-1.88	< 30
5785	-10.42	-3.43	-0.42	
5825	-12.40	-5.41	-2.40	

Model Number	ONYX-1521DTT-C1-1010		
Test Item	Conducted power spectral density		
Test Mode	Mode 3: IEEE 802.11n 20MHz Link Mode		
Date of Test	01/31/2015	Test Site	TE02
ANT-0+1			
Frequency (MHz)	Measurement (dBm/MHz)		FCC Limit (dBm/MHz)
5180	4.893		< 11
5220	4.468		
5240	5.234		
5260	4.597		< 11
5280	5.352		
5320	4.257		
5500	3.841		< 11
5580	3.006		
5700	2.975		
Frequency (MHz)	Measurement (dBm/500KHz)	Measurement (dBm/MHz)	FCC Limit (dBm/500KHz)
5745	1.52	4.53	< 30
5785	2.54	5.55	
5825	2.22	5.23	

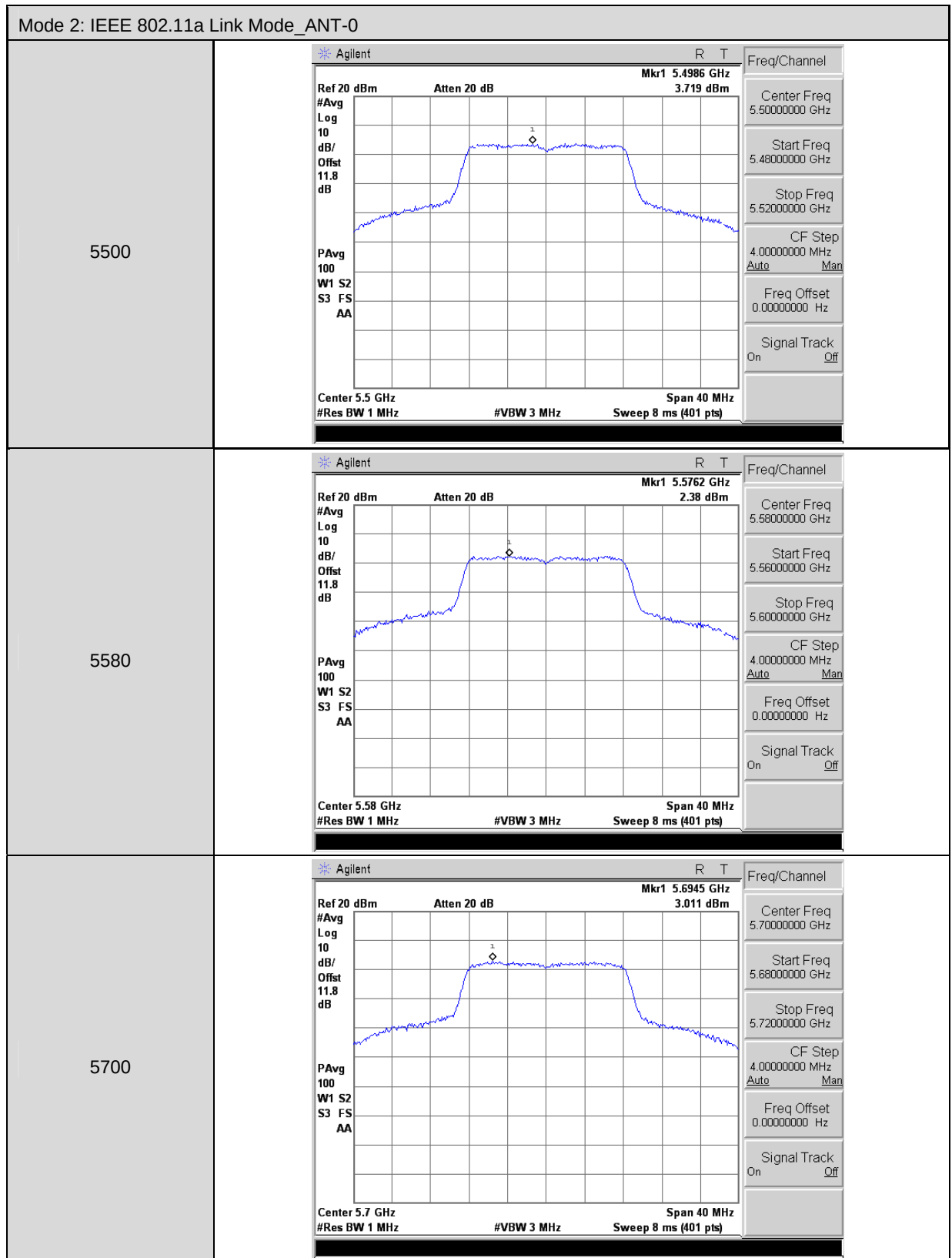
Model Number	ONYX-1521DTT-C1-1010			
Test Item	Conducted power spectral density			
Test Mode	Mode 4: IEEE 802.11n 40MHz Link Mode			
Date of Test	01/31/2015		Test Site	TE02
ANT-0				
Frequency (MHz)	Measurement (dBm/MHz)			FCC Limit (dBm/MHz)
5190	-7.236			< 11
5230	-7.336			
5270	-7.394			< 11
5310	-7.009			
5510	-5.484			< 11
5550	-5.565			
5670	-5.361			
Frequency (MHz)	Measurement (dBm/100KHz)	Measurement (dBm/500KHz)	Measurement (dBm/MHz)	FCC Limit (dBm/500KHz)
5755	-12.03	-5.04	-2.03	< 30
5795	-11.47	-4.48	-1.47	
ANT-1				
Frequency (MHz)	Measurement (dBm/MHz)			FCC Limit (dBm/MHz)
5190	-8.220			< 11
5230	-8.440			
5270	-8.230			< 11
5310	-8.240			
5510	-5.150			< 11
5550	-5.520			
5670	-8.950			
Frequency (MHz)	Measurement (dBm/100KHz)	Measurement (dBm/500KHz)	Measurement (dBm/MHz)	FCC Limit (dBm/500KHz)
5755	-12.03	-5.04	-2.03	< 30
5795	-11.47	-4.48	-1.47	

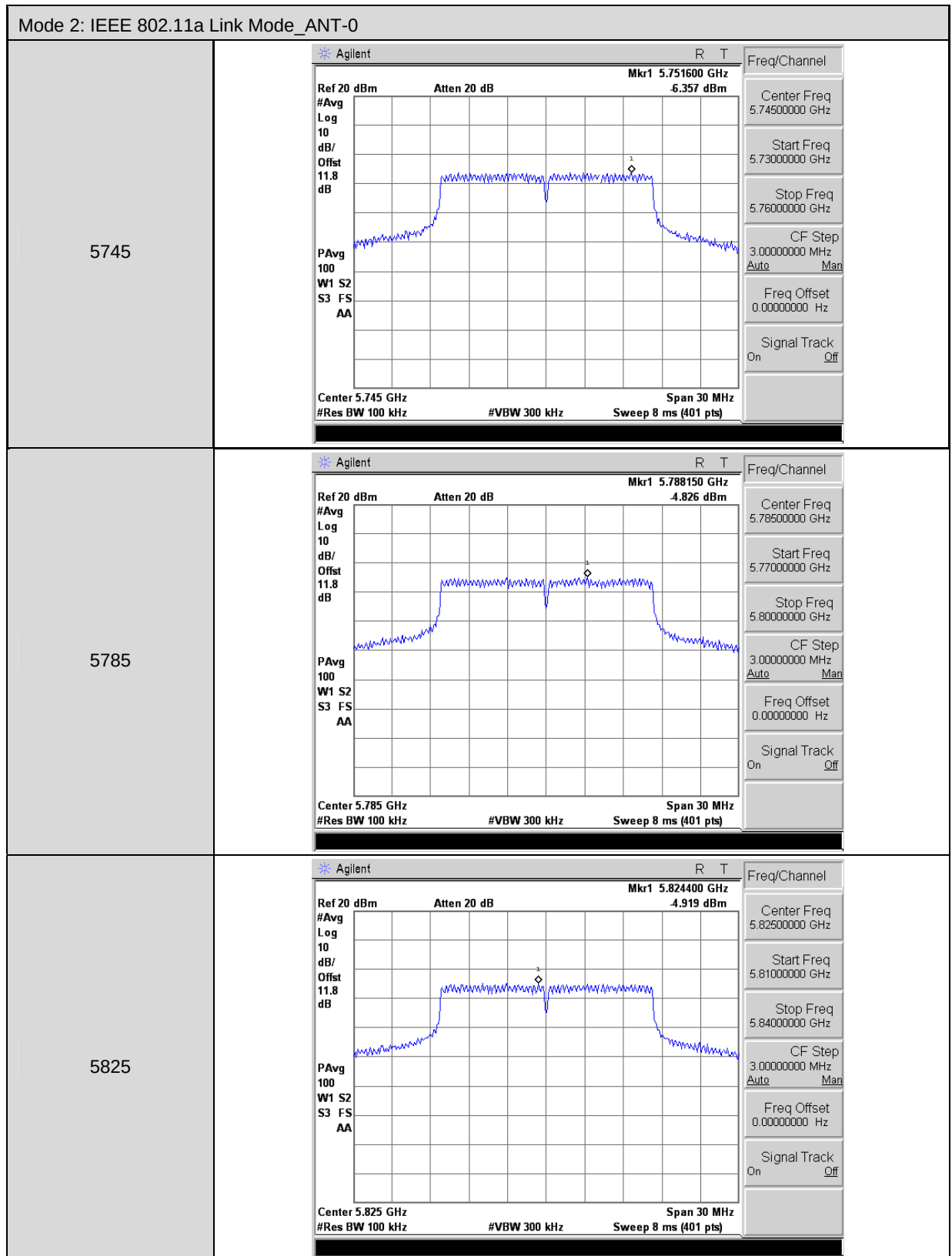
Model Number	ONYX-1521DTT-C1-1010		
Test Item	Conducted power spectral density		
Test Mode	Mode 4: IEEE 802.11n 40MHz Link Mode		
Date of Test	01/31/2015	Test Site	TE02
ANT-0+1			
Frequency (MHz)	Measurement (dBm/MHz)		FCC Limit (dBm/MHz)
5190	-4.690		< 11
5230	-4.843		
5270	-4.782		< 11
5310	-4.571		
5510	-2.303		< 11
5550	-2.532		
5670	-3.785		
Frequency (MHz)	Measurement (dBm/500KHz)	Measurement (dBm/MHz)	FCC Limit (dBm/500KHz)
5755	-2.40	0.61	< 30
5795	-0.13	2.89	

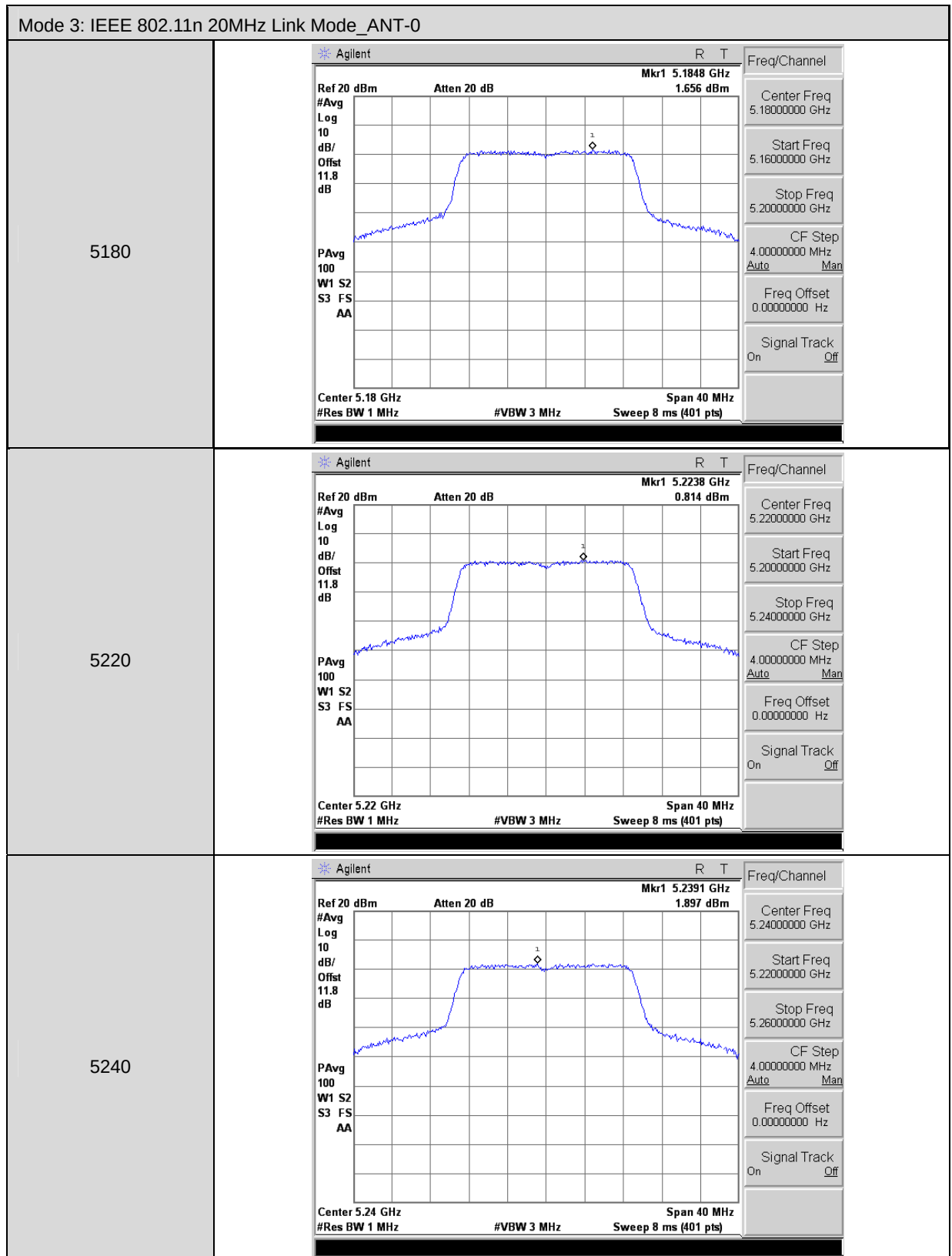
9.6. Test Graphs

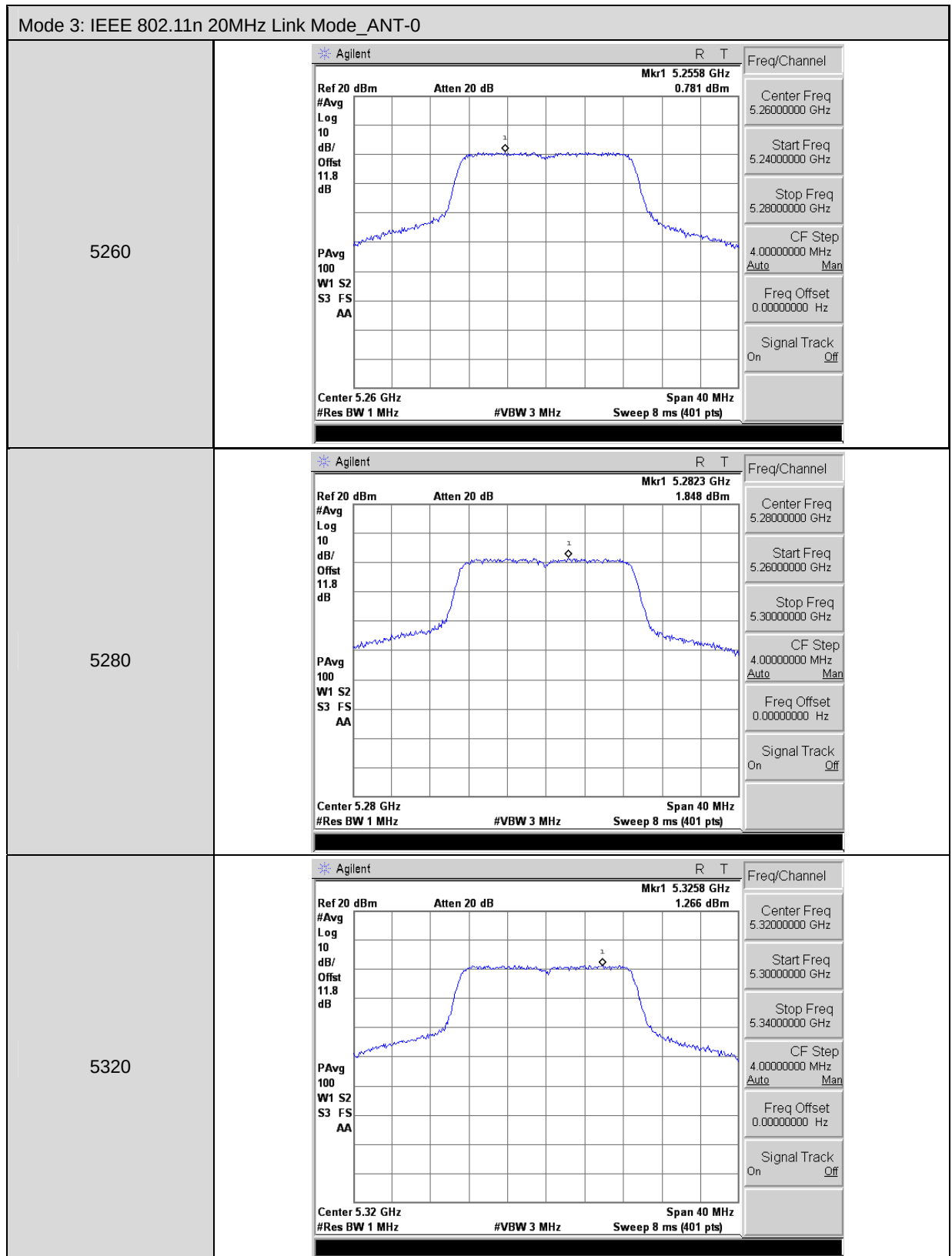


Mode 2: IEEE 802.11a Link Mode_ANT-0		
5260		
5280		
5320		

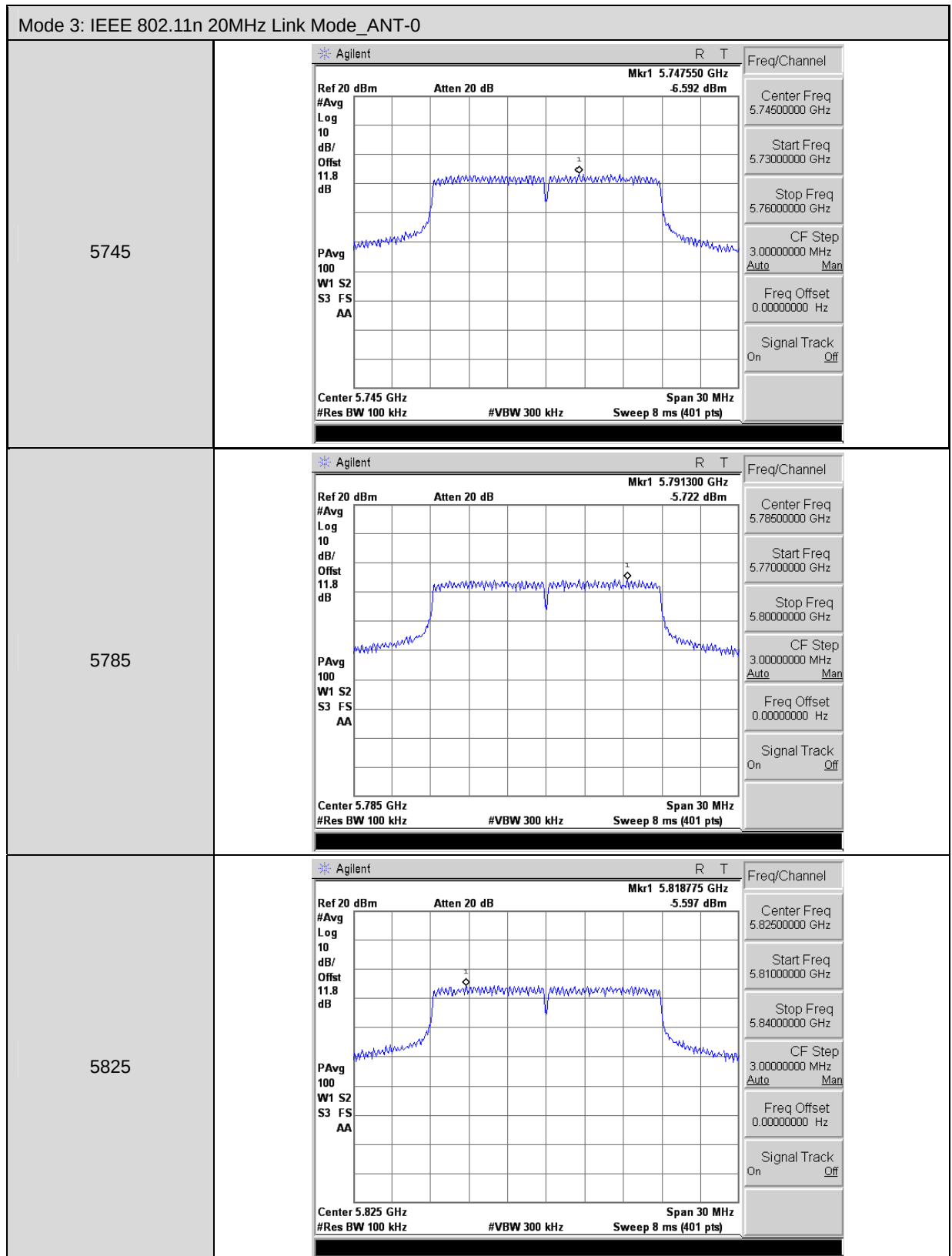


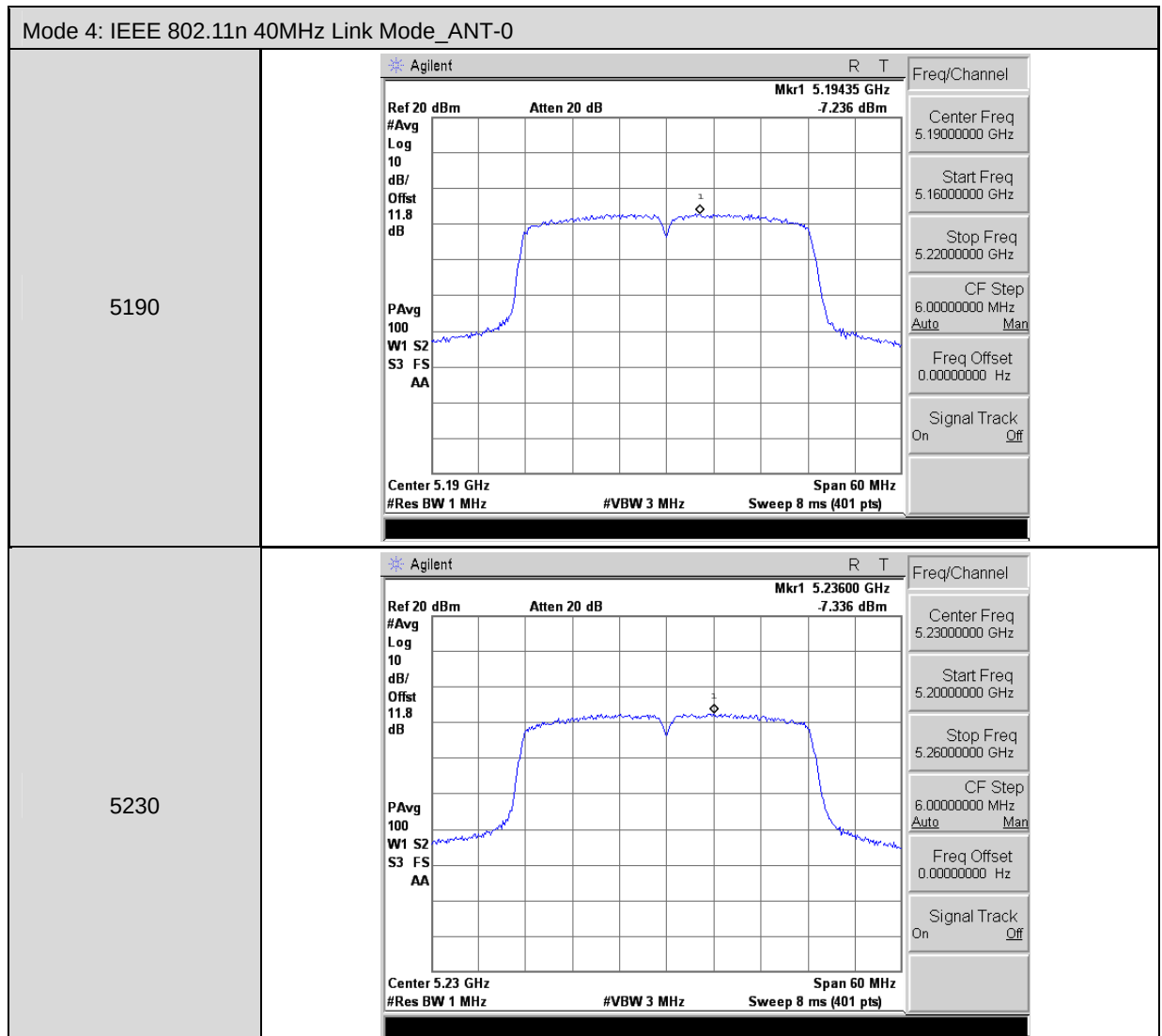


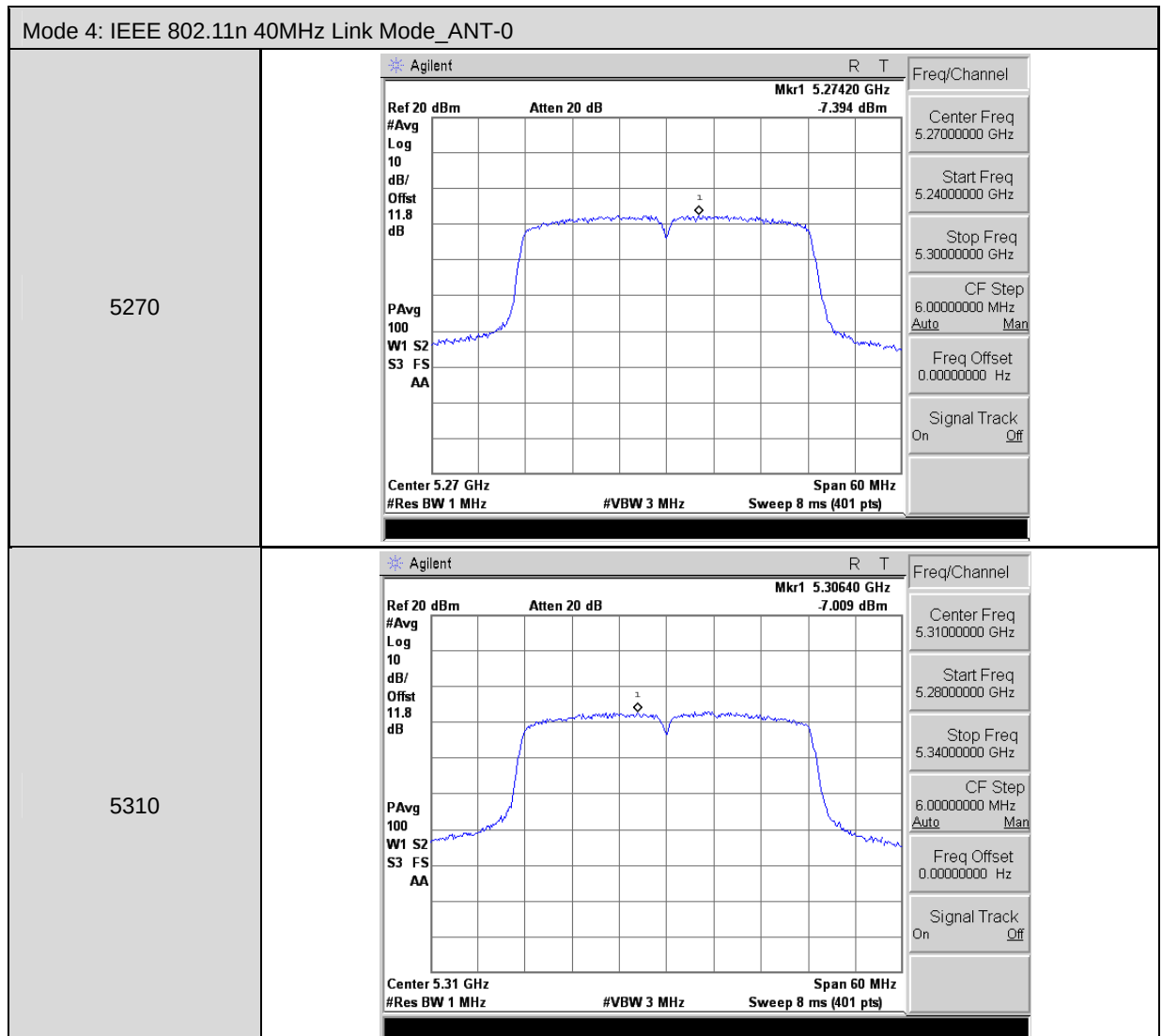


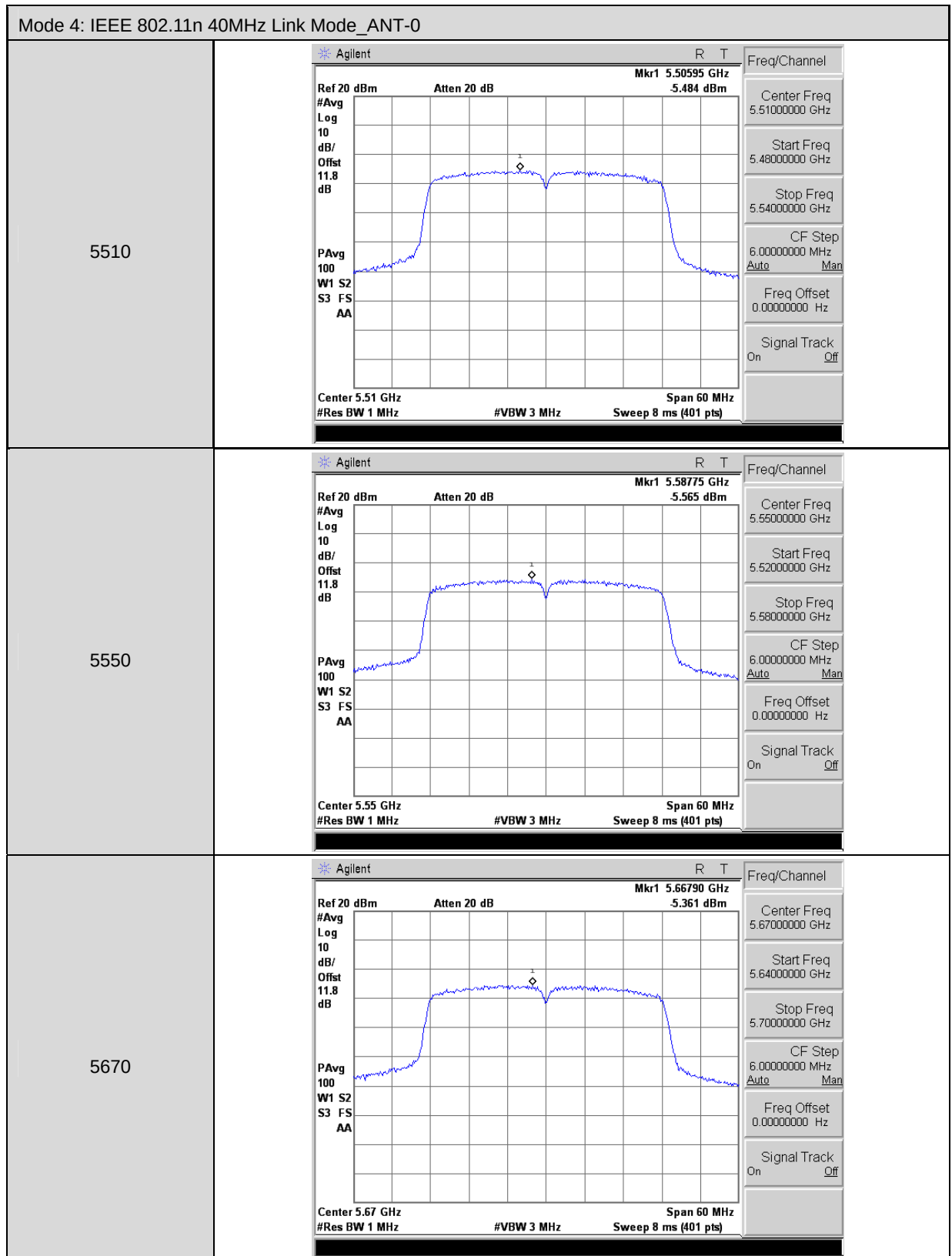


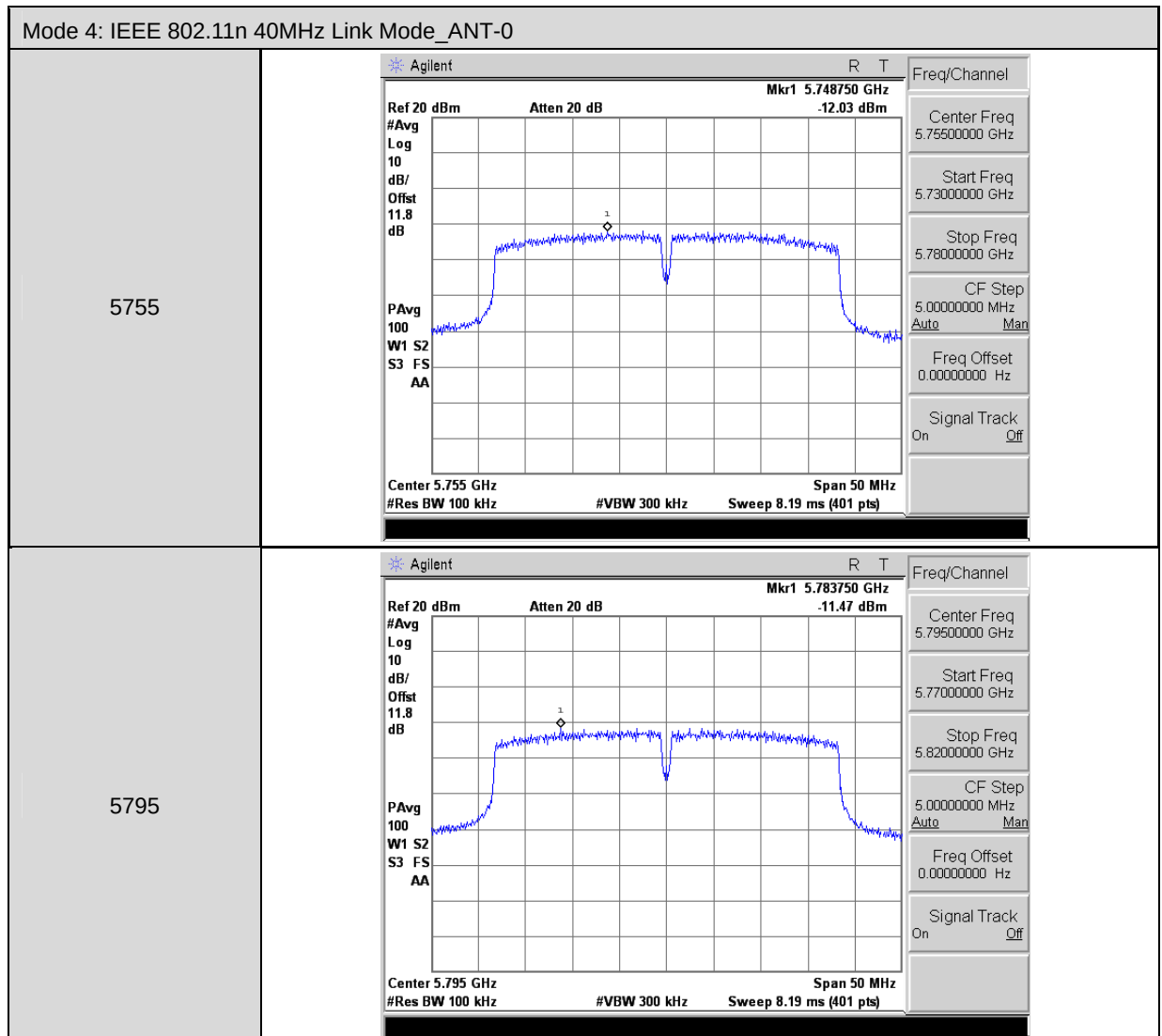
Mode 3: IEEE 802.11n 20MHz Link Mode_ANT-0	
5500	Agilent R T Ref 20 dBm Atten 20 dB Mkr1 5.5040 GHz 3.215 dBm #Ave 10 Log dB/Offset 11.8 dB PAvg 100 W1 S2 S3 FS AA Center 5.5 GHz Span 40 MHz Sweep 8 ms (401 pts) #Res BW 1 MHz #VBW 3 MHz Freq/Channel Center Freq 5.5000000 GHz Start Freq 5.4800000 GHz Stop Freq 5.5200000 GHz CF Step 4.0000000 MHz Auto Man Freq Offset 0.0000000 Hz Signal Track On Off
5580	Agilent R T Ref 20 dBm Atten 20 dB Mkr1 5.5847 GHz 2.219 dBm #Ave 10 Log dB/Offset 11.8 dB PAvg 100 W1 S2 S3 FS AA Center 5.58 GHz Span 40 MHz Sweep 8 ms (401 pts) #Res BW 1 MHz #VBW 3 MHz Freq/Channel Center Freq 5.5800000 GHz Start Freq 5.5600000 GHz Stop Freq 5.6000000 GHz CF Step 4.0000000 MHz Auto Man Freq Offset 0.0000000 Hz Signal Track On Off
5700	Agilent R T Ref 20 dBm Atten 20 dB Mkr1 5.7040 GHz 1.971 dBm #Ave 10 Log dB/Offset 11.8 dB PAvg 100 W1 S2 S3 FS AA Center 5.7 GHz Span 40 MHz Sweep 8 ms (401 pts) #Res BW 1 MHz #VBW 3 MHz Freq/Channel Center Freq 5.7000000 GHz Start Freq 5.6800000 GHz Stop Freq 5.7200000 GHz CF Step 4.0000000 MHz Auto Man Freq Offset 0.0000000 Hz Signal Track On Off

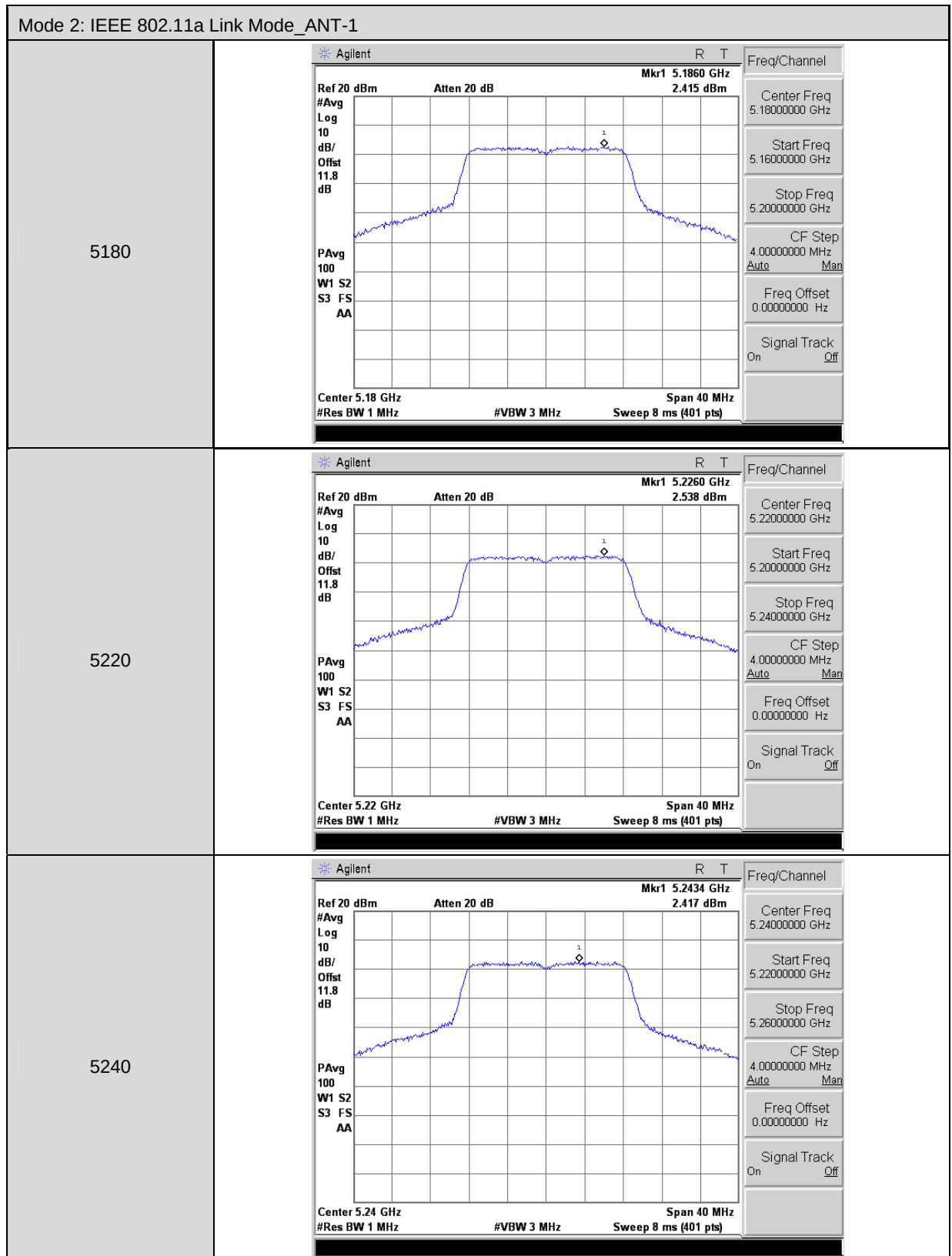


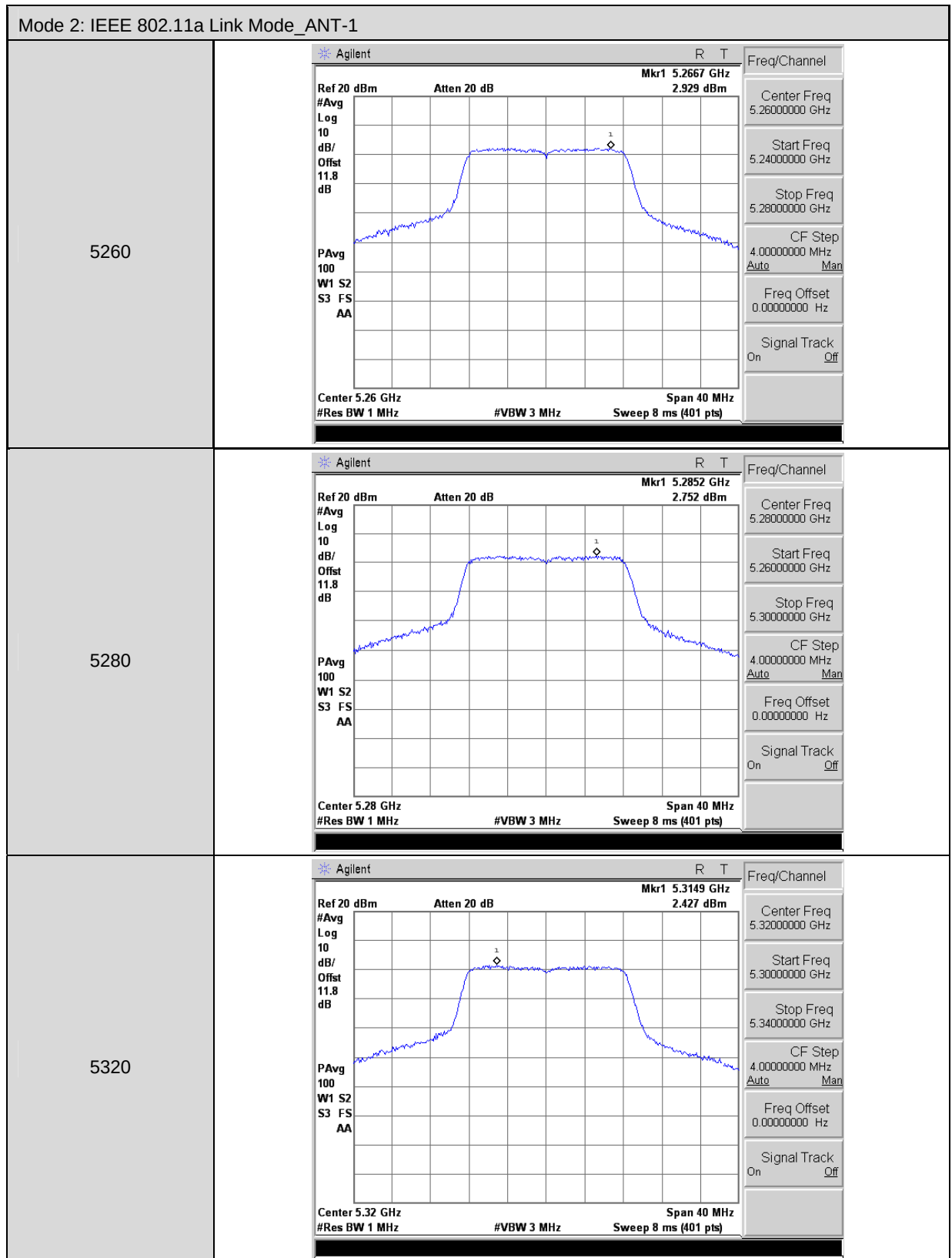


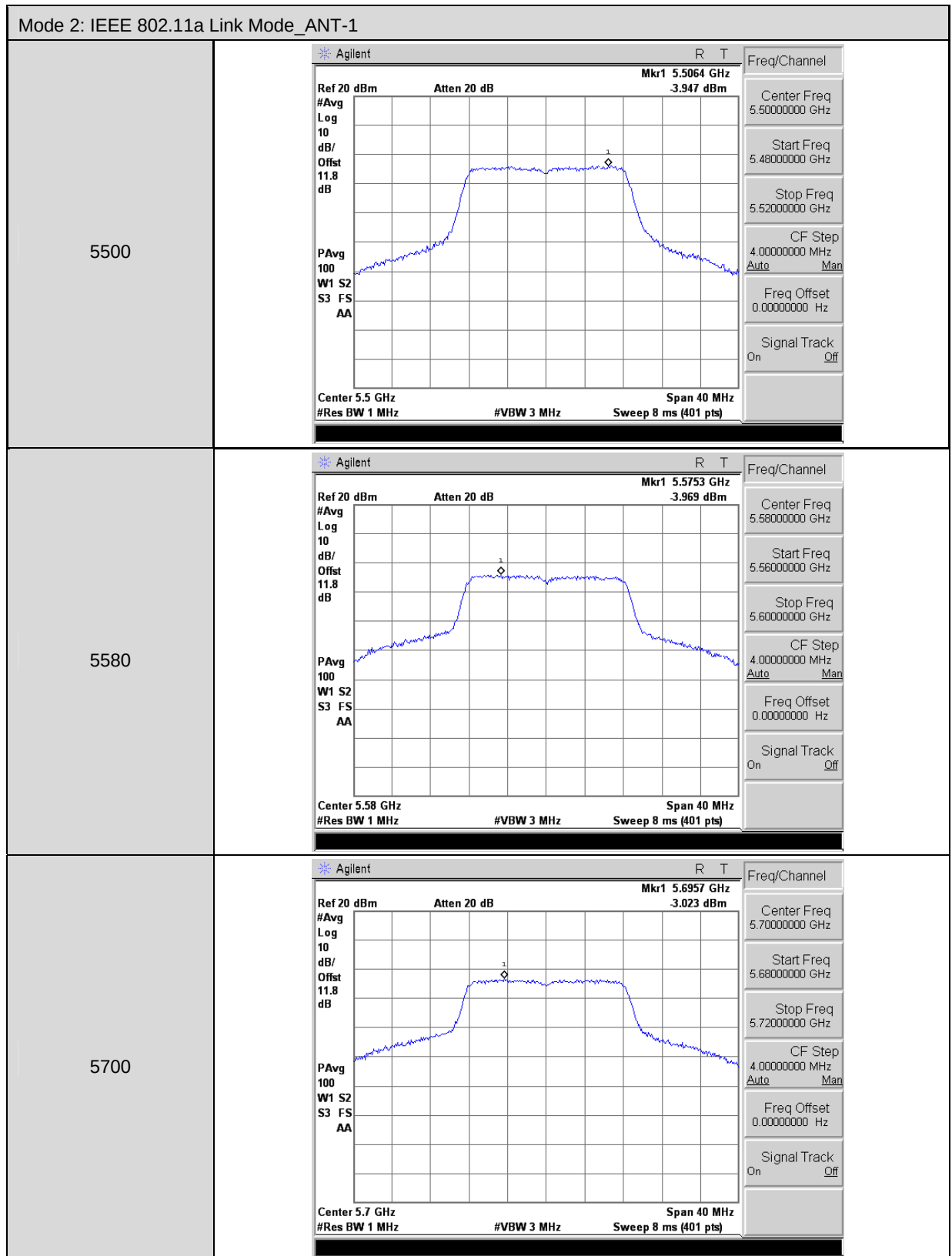


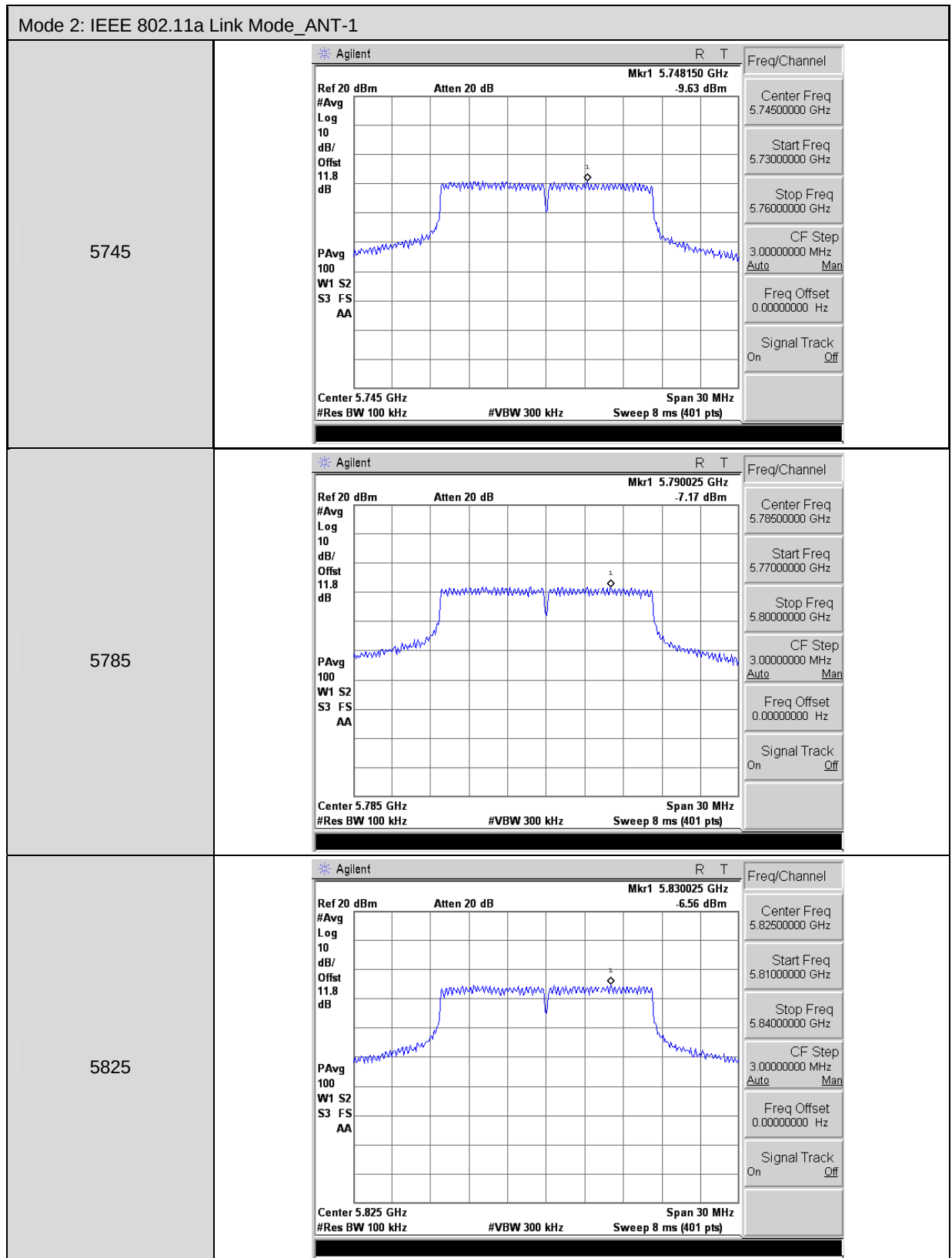


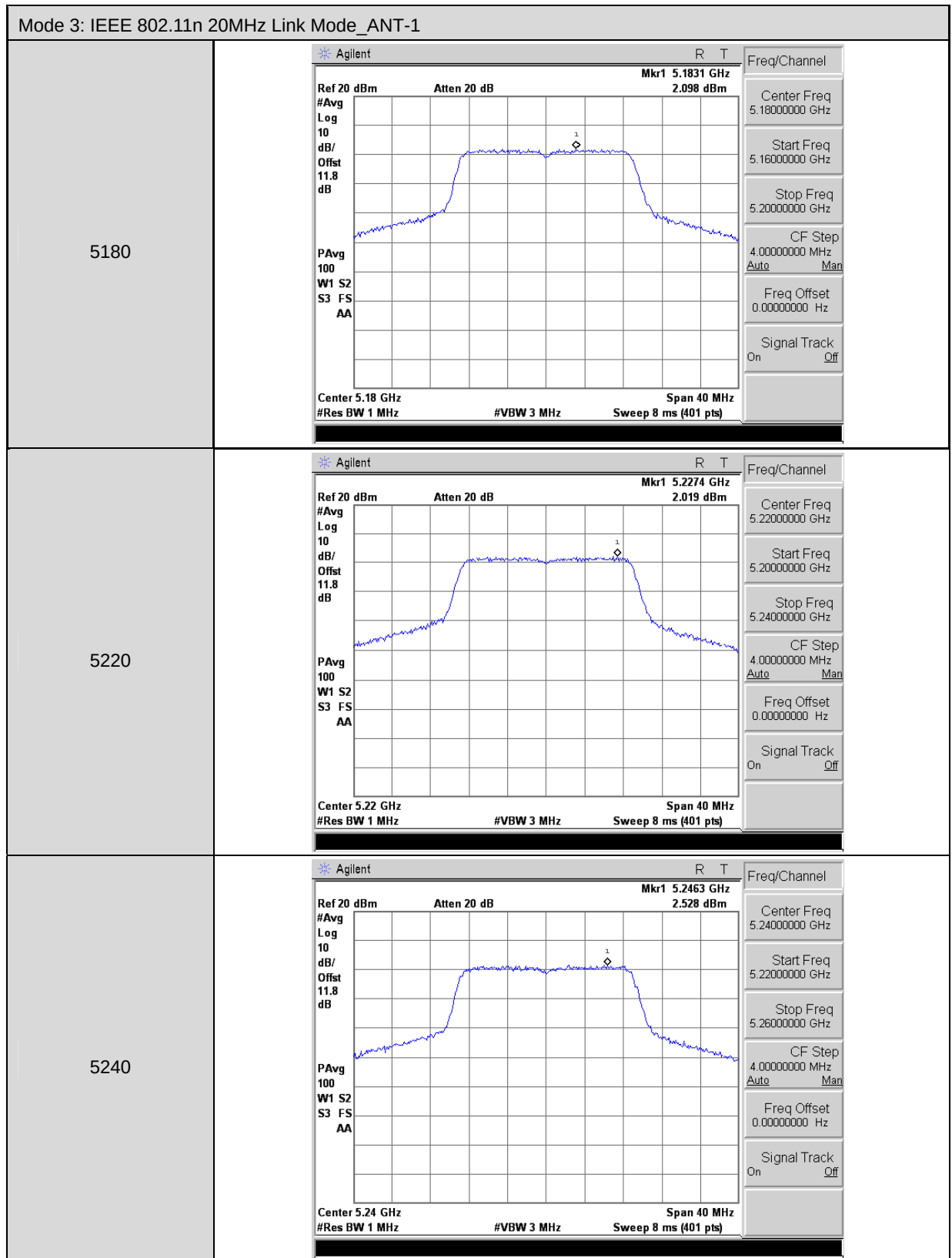


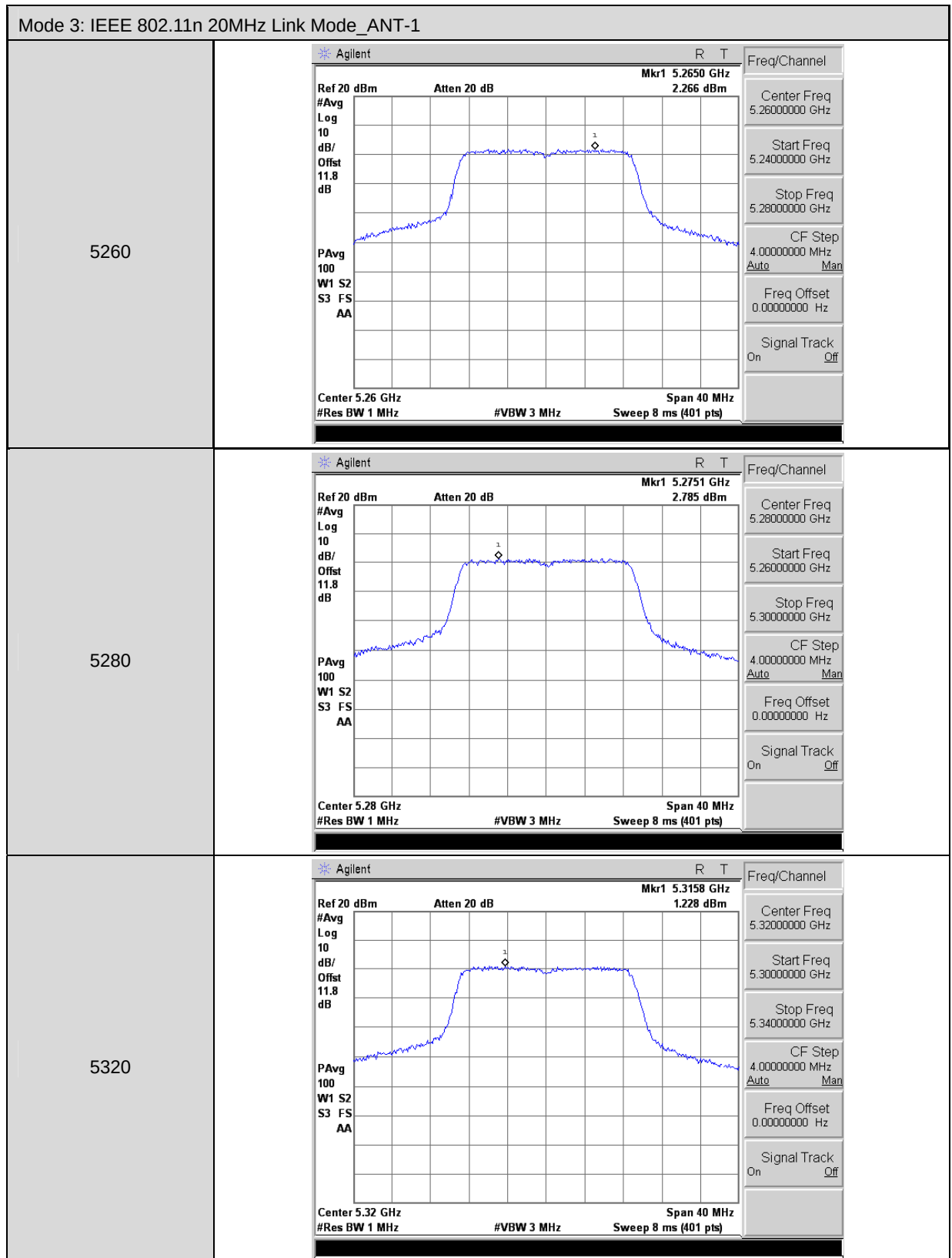


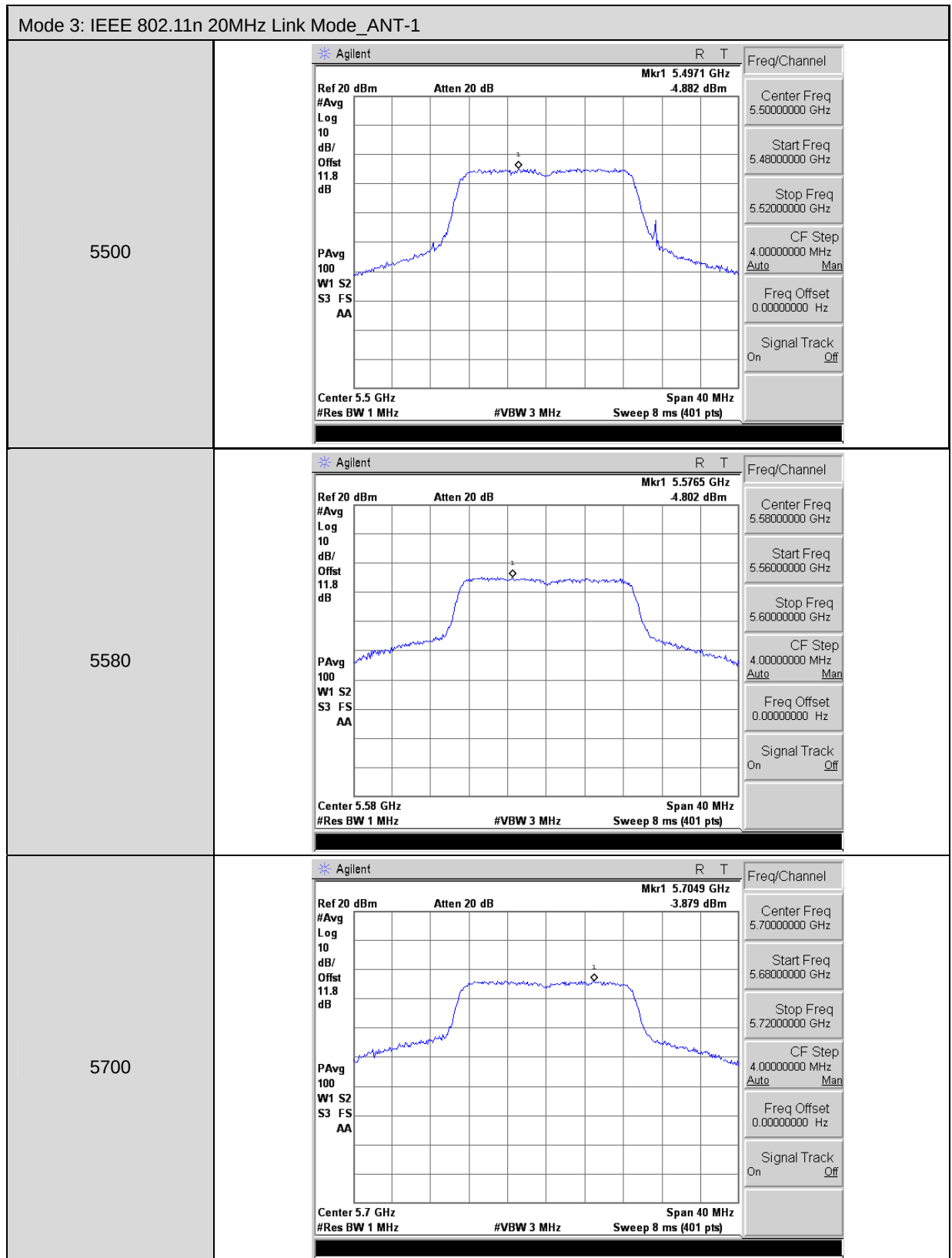


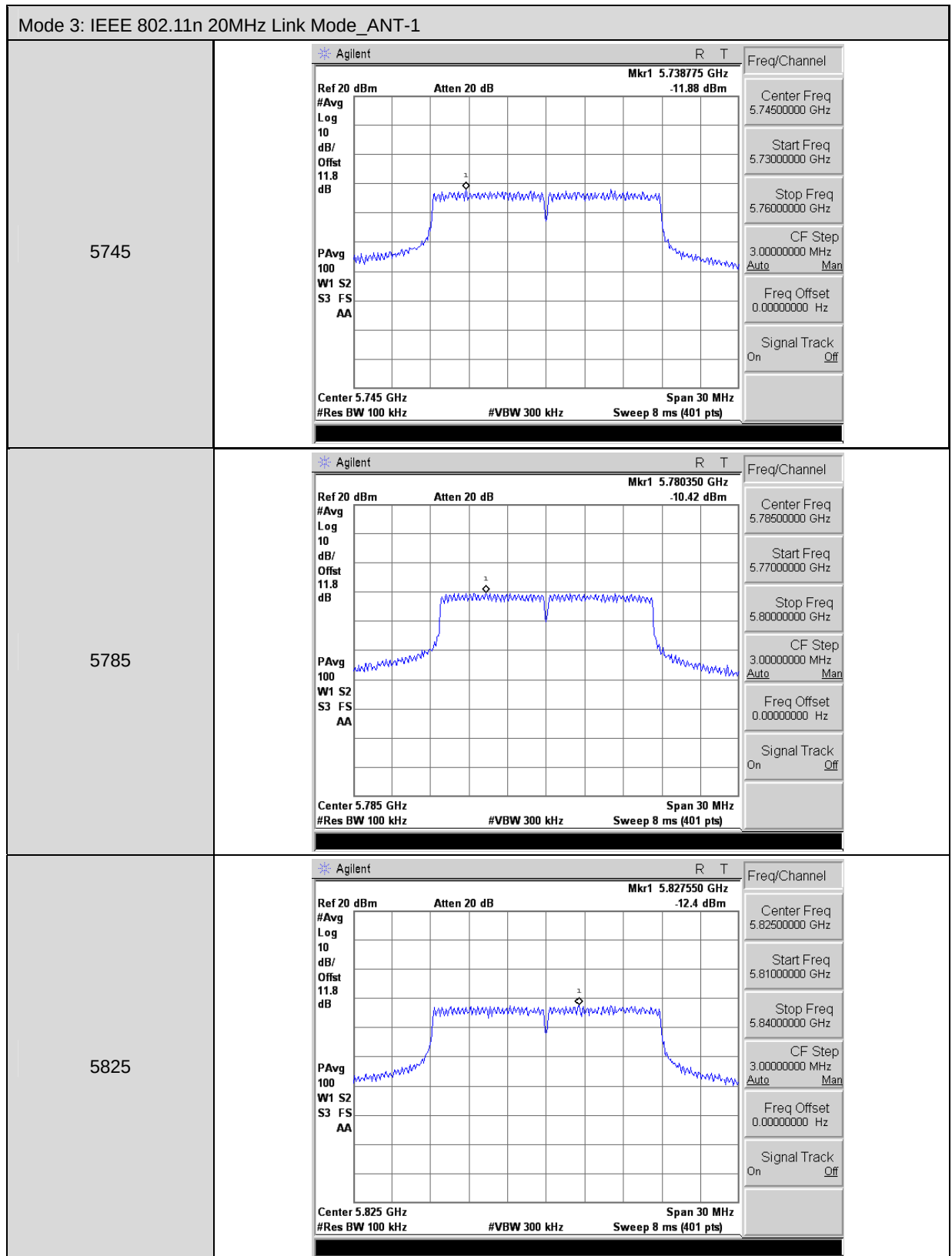


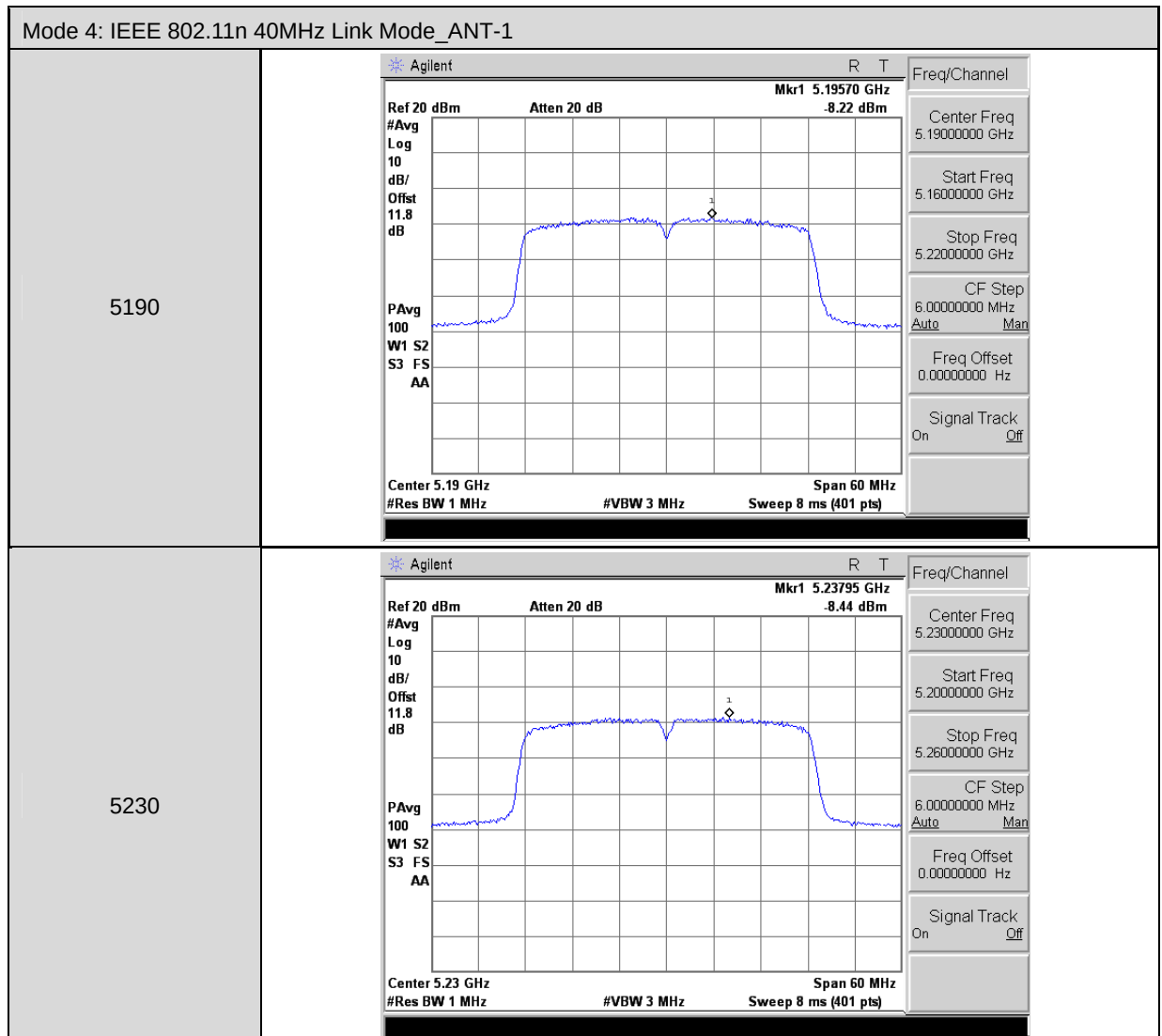


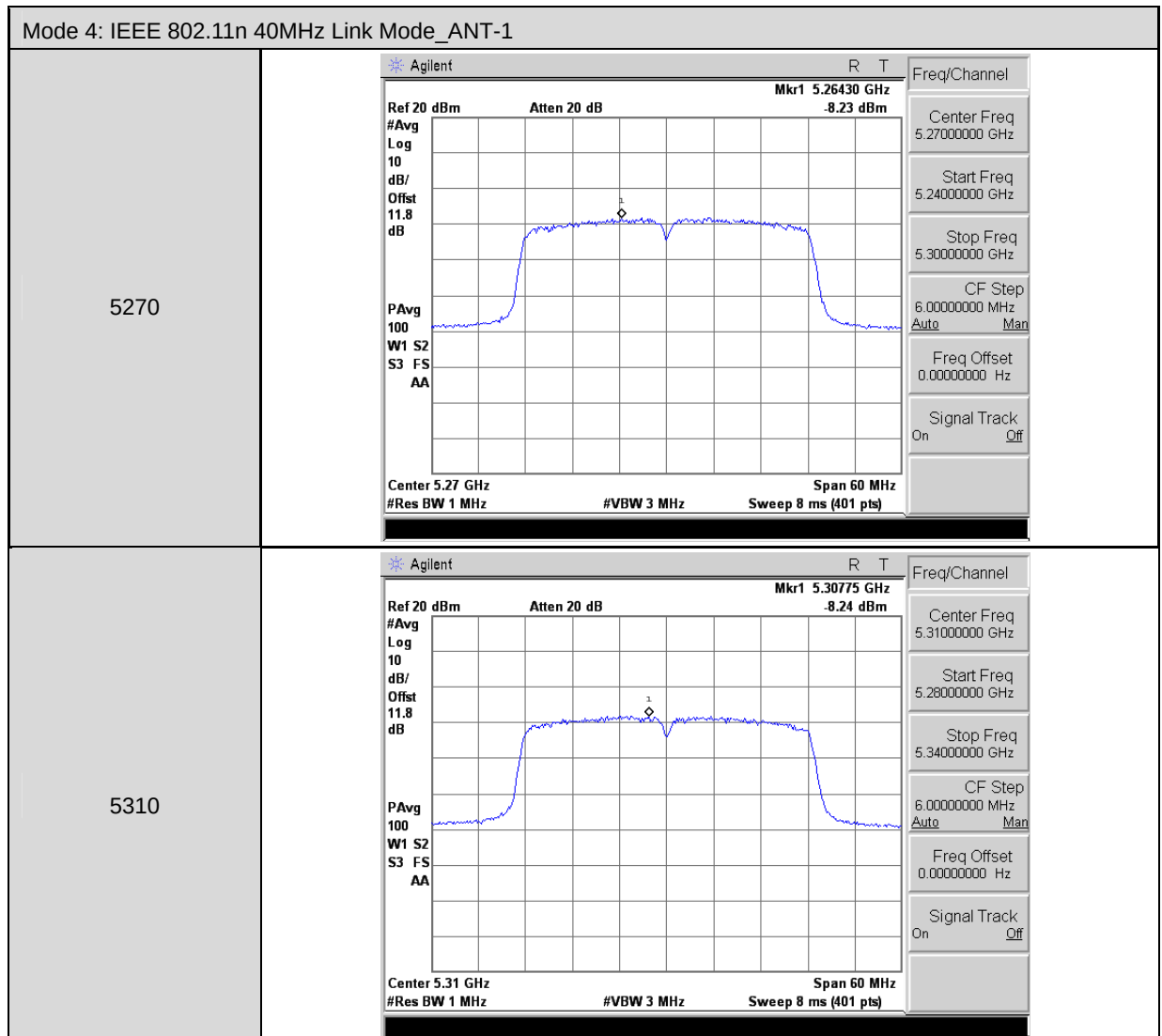


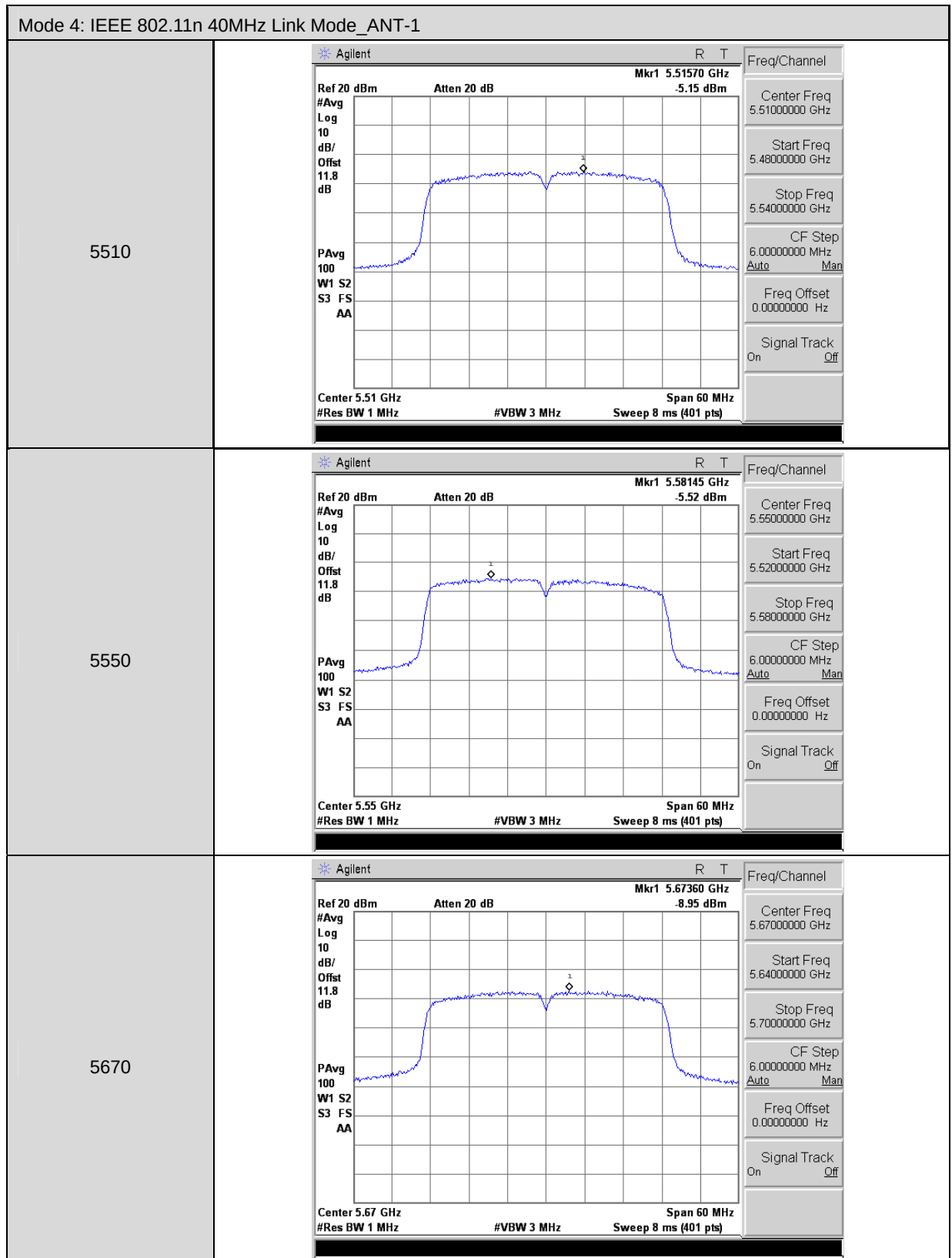


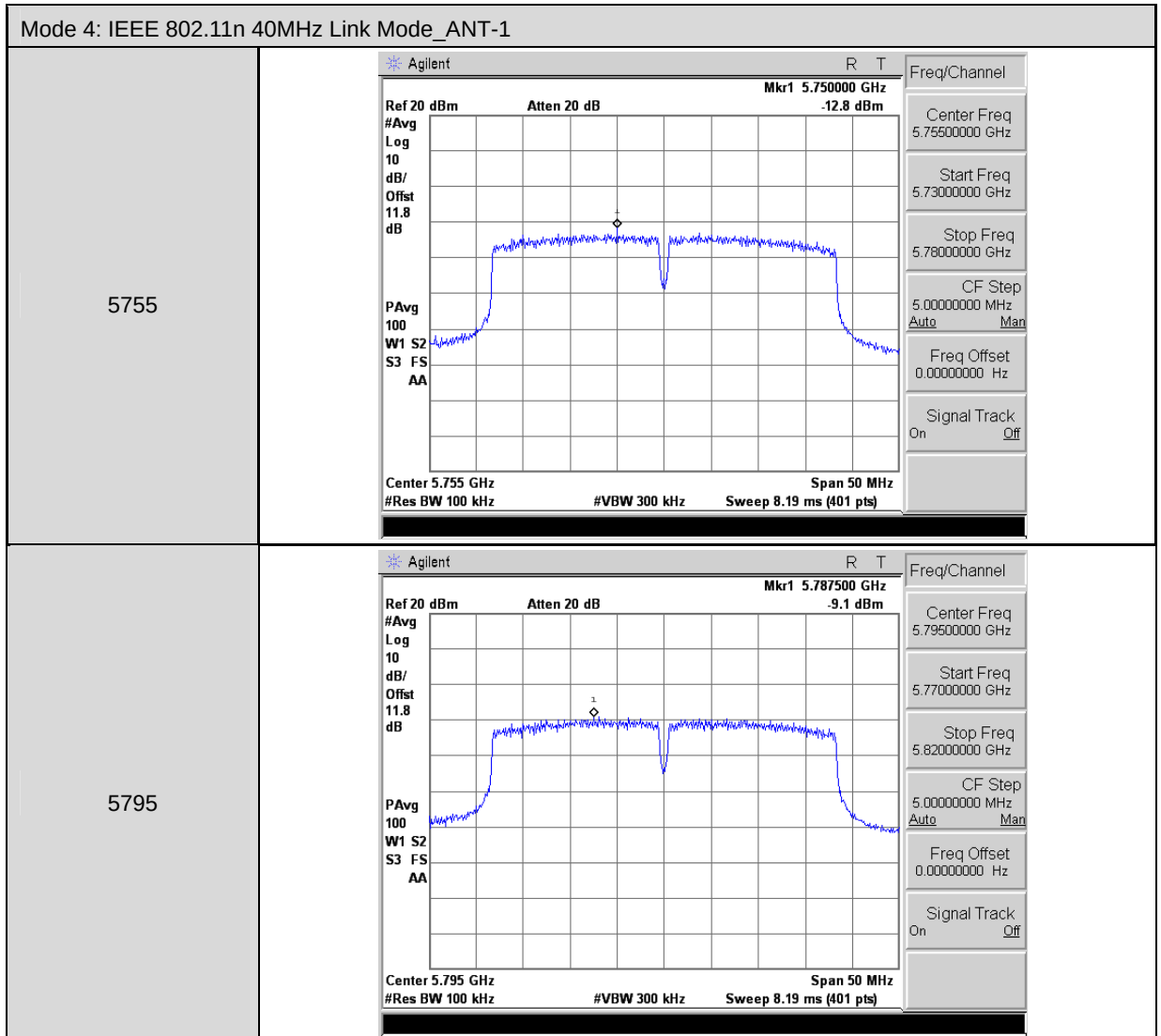










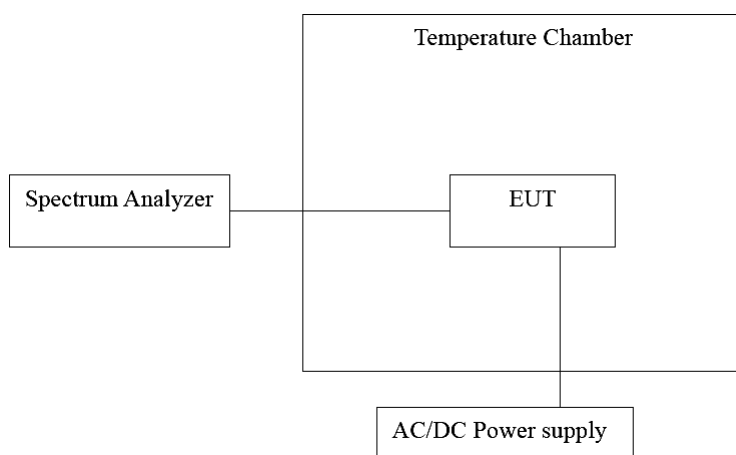


10 Frequency Stability Measurement

10.1. Limit

The frequency tolerance of the carrier signal shall be maintained within the band of operation frequency over a temperature variation of -30 degrees to 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

10.2. Test Setup



10.3. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4408B	MY45107753	07/24/2014	(1)
Temperature & Humidity Chamber	TAICHY	MHU-225LA	980729	08/14/2014	(1)
Test Site	ATL	TE02	TE02	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

10.4. Test Procedure

1. The EUT was placed inside the environmental test chamber and powered by nominal AC/DC voltage.
2. Turn the EUT on and couple its output to a spectrum analyzer.
3. Turn the EUT off and set the chamber to the highest temperature specified.
4. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize.
5. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
6. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

10.5. Test Result

Temperature Variations

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 2				
Frequency	5220 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
-30	120	5220.0018	1800	0.345	Pass
-20		5220.0020	2000	0.383	Pass
-10		5220.0010	1000	0.192	Pass
0		5219.9990	-1000	-0.192	Pass
10		5220.0010	1000	0.192	Pass
20		5219.9990	-1000	-0.192	Pass
30		5220.0010	1000	0.192	Pass
40		5220.0028	2800	0.536	Pass
50		5219.9990	-1000	-0.192	Pass

Note: The manufacturer's frequency stability specification is better then 20ppm.

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 2				
Frequency	5280 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
-30	120	5280.0015	1500	0.284	Pass
-20		5280.0010	1000	0.189	Pass
-10		5280.0010	1000	0.189	Pass
0		5280.0017	1700	0.322	Pass
10		5280.0028	2800	0.530	Pass
20		5280.0036	3600	0.682	Pass
30		5279.9980	-2000	-0.379	Pass
40		5280.0016	1600	0.303	Pass
50		5279.9990	-1000	-0.189	Pass

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 2				
Frequency	5580 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
-30	120	5580.0021	2100	0.376	Pass
-20		5580.0010	1000	0.179	Pass
-10		5580.0010	1000	0.179	Pass
0		5580.0051	5100	0.914	Pass
10		5580.0023	2300	0.412	Pass
20		5579.9990	-1000	-0.179	Pass
30		5580.0010	1000	0.179	Pass
40		5580.0010	1000	0.179	Pass
50		5579.9990	-1000	-0.179	Pass

Note: The manufacturer's frequency stability specification is better than 20ppm.

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 2				
Frequency	5785 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
-30	120	5785.0060	6000	1.037	Pass
-20		5784.9980	-2000	-0.346	Pass
-10		5784.9980	-2000	-0.346	Pass
0		5784.9920	-8000	-1.383	Pass
10		5785.0040	4000	0.691	Pass
20		5784.9990	-1000	-0.173	Pass
30		5784.9980	-2000	-0.346	Pass
40		5785.0013	1300	0.225	Pass
50		5784.9900	-10000	-1.729	Pass

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 3				
Frequency	5220 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
-30	120	5220.0034	3400	0.651	Pass
-20		5219.9980	-2000	-0.383	Pass
-10		5220.0010	1000	0.192	Pass
0		5219.9990	-1000	-0.192	Pass
10		5219.9990	-1000	-0.192	Pass
20		5219.9990	-1000	-0.192	Pass
30		5220.0020	2000	0.383	Pass
40		5220.0010	1000	0.192	Pass
50		5220.0018	1800	0.345	Pass

Note: The manufacturer's frequency stability specification is better than 20ppm.

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 3				
Frequency	5280 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
-30	120	5280.0038	3800	0.720	Pass
-20		5280.0010	1000	0.189	Pass
-10		5279.9990	-1000	-0.189	Pass
0		5280.0017	1700	0.322	Pass
10		5280.0020	2000	0.379	Pass
20		5280.0042	4200	0.795	Pass
30		5280.0010	1000	0.189	Pass
40		5280.0010	1000	0.189	Pass
50		5279.9990	-1000	-0.189	Pass

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 3				
Frequency	5580 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
-30	120	5579.9930	-7000	-1.254	Pass
-20		5580.0160	16000	2.867	Pass
-10		5579.9920	-8000	-1.434	Pass
0		5580.0330	33000	5.914	Pass
10		5579.9630	-37000	-6.631	Pass
20		5579.9990	-1000	-0.179	Pass
30		5579.9240	-76000	-13.620	Pass
40		5580.0090	9000	1.613	Pass
50		5579.9810	-19000	-3.405	Pass

Note: The manufacturer's frequency stability specification is better than 20ppm.

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 3				
Frequency	5785 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
-30	120	5784.9960	-4000	-0.691	Pass
-20		5785.0010	1000	0.173	Pass
-10		5784.9900	-10000	-1.729	Pass
0		5785.0070	7000	1.210	Pass
10		5785.0070	7000	1.210	Pass
20		5784.9990	-1000	-0.173	Pass
30		5785.0100	10000	1.729	Pass
40		5785.0080	8000	1.383	Pass
50		5785.0050	5000	0.864	Pass

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 4				
Frequency	5190 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
-30	120	5190.002	2000	0.385	Pass
-20		5189.992	-8000	-1.541	Pass
-10		5189.99	-10000	-1.927	Pass
0		5189.994	-6000	-1.156	Pass
10		5190.007	7000	1.349	Pass
20		5190.009	9000	1.734	Pass
30		5190.0029	2900	0.559	Pass
40		5189.996	-4000	-0.771	Pass
50		5189.998	-2000	-0.385	Pass

Note: The manufacturer's frequency stability specification is better than 20ppm.

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 4				
Frequency	5270 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
-30	120	5269.994	-6000	-1.139	Pass
-20		5269.991	-9000	-1.708	Pass
-10		5270.004	4000	0.759	Pass
0		5269.996	-4000	-0.759	Pass
10		5270.0028	2800	0.531	Pass
20		5269.997	-3000	-0.569	Pass
30		5269.991	-9000	-1.708	Pass
40		5270.003	3000	0.569	Pass
50		5269.997	-3000	-0.569	Pass

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 4				
Frequency	5550 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
-30	120	5549.99	-10000	-1.802	Pass
-20		5549.999	-1000	-0.180	Pass
-10		5549.992	-8000	-1.441	Pass
0		5549.991	-9000	-1.622	Pass
10		5549.992	-8000	-1.441	Pass
20		5549.994	-6000	-1.081	Pass
30		5550.003	3000	0.541	Pass
40		5549.995	-5000	-0.901	Pass
50		5549.99	-10000	-1.802	Pass

Note: The manufacturer's frequency stability specification is better then 20ppm.

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 4				
Frequency	5755 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
-30	120	5755.009	9000	1.564	Pass
-20		5755.007	7000	1.216	Pass
-10		5754.991	-9000	-1.564	Pass
0		5755.007	7000	1.216	Pass
10		5754.997	-3000	-0.521	Pass
20		5755.004	4000	0.695	Pass
30		5755.001	1000	0.174	Pass
40		5755.006	6000	1.043	Pass
50		5754.997	-3000	-0.521	Pass

Note: The manufacturer's frequency stability specification is better then 20ppm.

Voltage Variations

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 2				
Frequency	5220 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
20	138.00	5220.0020	2000	0.383	Pass
	120.00	5219.9990	-1000	-0.192	Pass
	102.00	5219.9910	-9000	-1.724	Pass

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 2				
Frequency	5280 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
20	138.00	5280.0050	5000	0.947	Pass
	120.00	5280.0028	2800	0.530	Pass
	102.00	5280.0030	3000	0.568	Pass

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 2				
Frequency	5580 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
20	138.00	5579.9930	-7000	-1.254	Pass
	120.00	5579.9990	-1000	-0.179	Pass
	102.00	5580.0050	5000	0.896	Pass

Note: The manufacturer's frequency stability specification is better than 20ppm.

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 2				
Frequency	5785 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
20	138.00	5784.9910	-9000	-1.556	Pass
	120.00	5784.9990	-1000	-0.173	Pass
	102.00	5785.0030	3000	0.519	Pass

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 3				
Frequency	5220 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
20	138.00	5219.9970	-3000	-0.575	Pass
	120.00	5219.9990	-1000	-0.192	Pass
	102.00	5219.9920	-8000	-1.533	Pass

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 3				
Frequency	5280 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
20	138.00	5280.0030	3000	0.568	Pass
	120.00	5280.0017	1700	0.322	Pass
	102.00	5279.9930	-7000	-1.326	Pass

Note: The manufacturer's frequency stability specification is better than 20ppm.

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 3				
Frequency	5580 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
20	138.00	5579.9910	-9000	-1.613	Pass
	120.00	5579.9990	-1000	-0.179	Pass
	102.00	5580.0060	6000	1.075	Pass

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 3				
Frequency	5785 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
20	138.00	5785.0060	6000	1.037	Pass
	120.00	5784.9990	-1000	-0.173	Pass
	102.00	5785.0060	6000	1.037	Pass

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 4				
Frequency	5190 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
20	138.00	5190.004	4000	0.771	Pass
	120.00	5190.009	9000	1.734	Pass
	102.00	5190.001	1000	0.193	Pass

Note: The manufacturer's frequency stability specification is better than 20ppm.

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 4				
Frequency	5270 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
20	138.00	5270.003	3000	0.569	Pass
	120.00	5269.997	-3000	-0.569	Pass
	102.00	5270.009	9000	1.708	Pass

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 4				
Frequency	5550 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
20	138.00	5550.005	5000	0.901	Pass
	120.00	5549.994	-6000	-1.081	Pass
	102.00	5550.002	2000	0.360	Pass

Model Number	ONYX-1521DTT-C1-1010				
Test Mode	Mode 4				
Frequency	5755 MHz				
Date of Test	01/31/2015			Test Site	TE02
Temp. (°C)	Voltage (VAC)	Measured Frequency (MHz)	Delta Frequency (Hz)	Tolerance (ppm)	Result (Pass/Fail)
20	138.00	5755.005	5000	0.869	Pass
	120.00	5755.004	4000	0.695	Pass
	102.00	5755.002	2000	0.348	Pass

Note: The manufacturer's frequency stability specification is better than 20ppm.

11 Antenna Requirement

11.1. Limit

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.

And According to 15.407 (a), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

11.2. Antenna Connector Construction

The antenna used in this product is listed below.

Type	Max. Gain (dBi)	
	ANT-0	ANT-1
Internal Antenna	3.28	3.81