

8.6 FREQUENCY STABILITY.

The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between -30 °C and 50 °C. The temperature was incremented by 10 °C intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.

Service Port

OPERATING BAND:	UNII Band 2
OPERATING FREQUENCY:	5,260,000,000 Hz
CHANNEL:	52
REFERENCE VOLTAGE:	220 VAC

Voltage (%)	Power (VAC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100	220	+20(Ref)	5 260 018	18.4
100		-30	5 260 009	9.2
100		-20	5 260 007	7.0
100		-10	5 260 007	7.1
100		0	5 260 006	5.9
100		+10	5 260 014	13.8
100		+30	5 260 016	16.3
100		+40	5 260 015	15.0
100		+50	5 260 010	10.4
115	253	+20	5 260 017	16.8
85	187	+20	5 260 017	17.3

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND:	<u>UNII Band 2e</u>
OPERATING FREQUENCY:	<u>5,500,000,000 Hz</u>
CHANNEL:	<u>100</u>
REFERENCE VOLTAGE:	<u>220 VAC</u>

Voltage (%)	Power (VAC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100	220	+20(Ref)	5 500 020	20.1
100		-30	5 500 009	8.8
100		-20	5 500 008	7.7
100		-10	5 500 008	8.1
100		0	5 500 004	4.4
100		+10	5 500 019	18.9
100		+30	5 500 013	13.1
100		+40	5 500 014	13.6
100		+50	5 500 016	16.0
115	253	+20	5 500 019	18.7
85	187	+20	5 500 019	19.2

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

Monitoring Port

OPERATING BAND: UNII Band 2

OPERATING FREQUENCY: 5,260,000,000 Hz

CHANNEL: 52

REFERENCE VOLTAGE: AC 220 V

Voltage (%)	Power (VAC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100	220	+20(Ref)	5 259 973	-26.6
100		-30	5 259 983	-16.8
100		-20	5 259 982	-18.4
100		-10	5 259 981	-19.3
100		0	5 259 977	-22.7
100		+10	5 259 975	-24.6
100		+30	5 259 974	-26.1
100		+40	5 259 978	-22.8
100		+50	5 259 978	-21.6
115	253	+20	5 259 975	-25.2
85	187	+20	5 259 976	-24.2

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND:	UNII Band 2e
OPERATING FREQUENCY:	5,500,000,000 Hz
CHANNEL:	100
REFERENCE VOLTAGE:	AC 220 V

Voltage (%)	Power (VAC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100	220	+20(Ref)	5 499 974	-25.9
100		-30	5 499 985	-15.0
100		-20	5 499 984	-16.3
100		-10	5 499 983	-17.1
100		0	5 499 979	-20.9
100		+10	5 499 977	-23.2
100		+30	5 499 977	-23.0
100		+40	5 499 975	-25.4
100		+50	5 499 978	-22.1
115	253	+20	5 499 976	-23.6
85	187	+20	5 499 975	-25.4

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

8.7 RADIATED MEASUREMENT.

8.7.1 RADIATED SPURIOUS EMISSIONS.

Test Requirements and limit, §15.205, §15.209, §15.407

Frequency (MHz)	Field Strength (uV/m)	Measurement Distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

■ §15.407, KDB 789033

All harmonics that do not lie in a restricted band are subject to a peak limit of -27 dBm/MHz. At a distance of 3 meters the field strength limit in dBµV/m can be determined by adding a “conversion” factor of 95.2 dB to the EIRP limit of -27 dBm/MHz to obtain the limit for out of band spurious emissions of 68.2 dBµV/m.

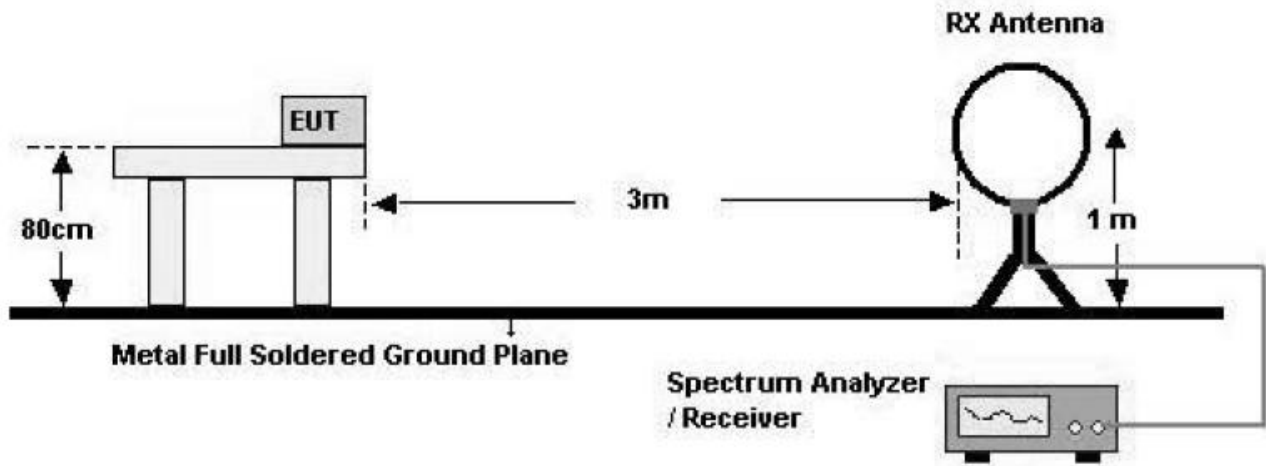
■ Test case

Monitoring	SISO	Ant 1
		Ant 2
	MIMO	Ant 1 & 2
Service	SISO	Ant 1
		Ant 2
		Ant 3
	MIMO	Ant 1 & 2
		Ant 1 & 2 & 3

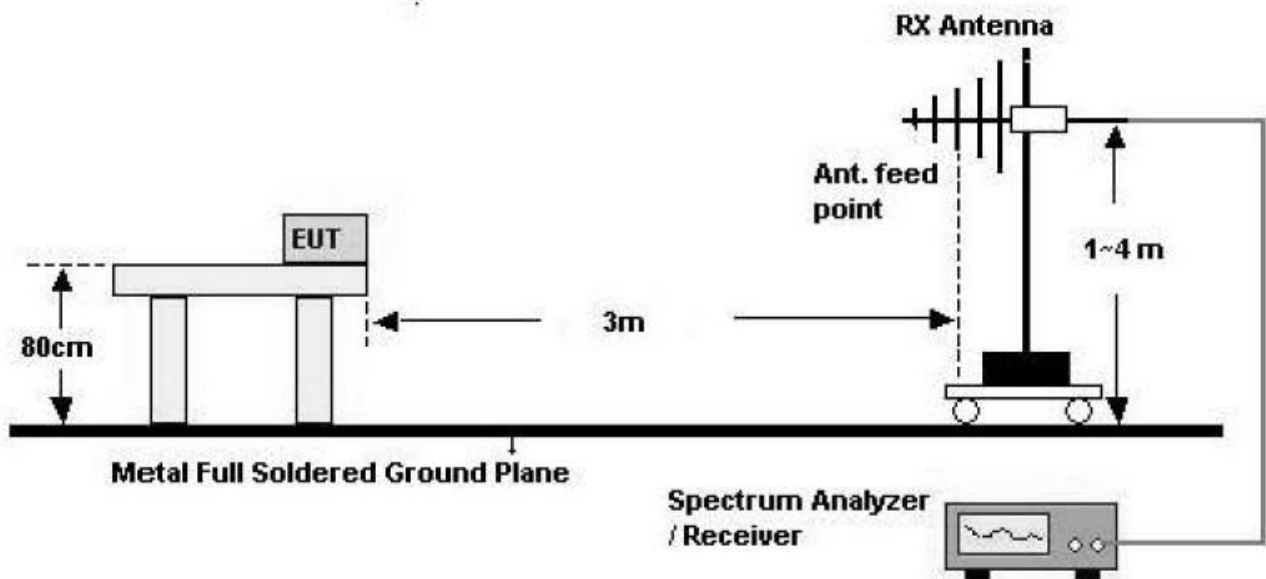
Note : We have done all test case. Worst case is Ant 1 & 2 for monitoring and Ant 1 & 2 & 3 for service. So, we attached the results of only worst case.

Test Configuration

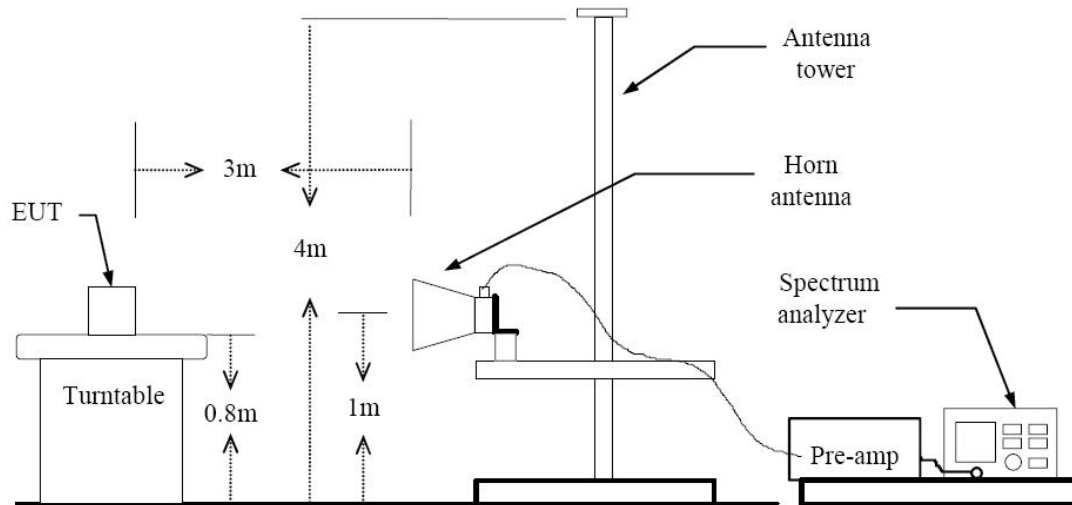
Below 30 MHz



30 MHz - 1 GHz



Above 1 GHz



TEST PROCEDURE USED

ANSI C63.4(2003)

Method H)5) in KDB 789033, issued 04/08/2013 (Peak)

Method H)6)d) in KDB 789033, issued 04/08/2013 (Average)

. Spectrum setting:

- Peak.

1. RBW = 1 MHz

2. VBW $\geq$ 3 MHz

3. Detector = Peak

4. Sweep Time = auto

5. Trace mode = max hold

6. Allow sweeps to continue until the trace stabilizes.

7. Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately $1/x$, where x is the duty cycle.

- Average (Method VB :Averaging using reduced video bandwidth)

1. RBW = 1 MHz

2. VBW

2.1. If the EUT is configured to transmit with duty cycle $\geq$ 98 percent, set $VBW \leq RBW/100$ (i.e., 10 kHz) but not less than 10 Hz.

2.2. If the EUT duty cycle is $<$ 98 percent, set $VBW \geq 1/T$, where T is the minimum transmission duration.

3. The analyzer is set to linear detector mode.

4. Detector = Peak.

FCC PT.15.407 TEST REPORT	FCC CERTIFICATION REPORT		www.hct.co.kr
Test Report No. HCTR1311FR03	Date of Issue: November 06, 2013	EUT Type: WLAN Access Point	FCC ID: A3LWEA303I

5. Sweep time = auto.
6. Trace mode = max hold.
7. Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98 percent duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of 1/x, where x is the duty cycle.

Note :

1. We used the case 2 for 802.11a/n_20/n_40 to perform the average field strength measurements for RSE and radiated band edge test.
2. The actual setting value of VBW for 802.11a/n_20/n_40.

Monitoring

Mode	Worst Data rate (Mbps)	T _{on} (ms)	T _{total} (ms)	Duty Cycle (%)	VBW(1/T) (Hz)	The actual setting value of VBW (Hz)
a	6	2.020	2.070	97.6	495.0	1000
n_20	6.5	1.885	1.930	97.7	530.5	1000
n_40	13.5	0.926	0.960	96.5	1079.9	3000

Service

Mode	Worst Data rate (Mbps)	T _{on} (ms)	T _{total} (ms)	Duty Cycle (%)	VBW(1/T) (Hz)	The actual setting value of VBW (Hz)
a	6	1.335	1.405	95.0	749.1	1000
n_20	6.5	1.269	1.317	96.4	788.0	1000
n_40	13.5	0.630	0.664	94.9	1587.3	3000

TEST RESULTS

9 kHz – 30MHz

Operation Mode: Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dB μ V	dB /m	dB	(H/V)	dB μ V/m	dB μ V/m	dB
No Critical peaks found							

Notes:

1. Measuring frequencies from 9 kHz to the 30MHz.
2. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
3. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
4. Limit line = specific Limits (dBuV) + Distance extrapolation factor
5. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

TEST RESULTS

Below 1 GHz

Operation Mode: Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dB μ V	dB /m	dB	(H/V)	dB μ V/m	dB μ V/m	dB
No Critical peaks found							

Notes:

1. Measuring frequencies from 30 MHz to the 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode.
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Above 1 GHz

Monitoring MIMO(Ant 1 & 2)

Band :	UNII 2
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5260 MHz
Channel No.	52 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10520	62.26	-6.52	V	55.74	68.20	12.46	PK
15780	64.43	-6.67	V	57.76	73.98	16.22	PK
15780	50.43	-6.67	V	43.76	53.98	10.22	AV
10520	61.98	-6.52	H	55.46	68.20	12.74	PK
15780	64.30	-6.67	H	57.63	73.98	16.35	PK
15780	50.74	-6.67	H	44.07	53.98	9.91	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5300 MHz
Channel No.	60 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10600	62.65	-6.72	V	55.93	73.98	18.05	PK
10600	48.80	-6.72	V	42.08	53.98	11.90	AV
15900	64.69	-7.00	V	57.69	73.98	16.29	PK
15900	50.07	-7.00	V	43.07	53.98	10.91	AV
10600	62.74	-6.72	H	56.02	73.98	17.96	PK
10600	48.70	-6.72	H	41.98	53.98	12.00	AV
15900	63.34	-7.00	H	56.34	73.98	17.64	PK
15900	49.92	-7.00	H	42.92	53.98	11.06	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10640	63.11	-6.43	V	56.68	73.98	17.30	PK
10640	49.05	-6.43	V	42.62	53.98	11.36	AV
15960	64.49	-6.93	V	57.56	73.98	16.42	PK
15960	50.33	-6.93	V	43.40	53.98	10.58	AV
10640	62.43	-6.43	H	56.00	73.98	17.98	PK
10640	49.02	-6.43	H	42.59	53.98	11.39	AV
15960	63.81	-6.93	H	56.88	73.98	17.10	PK
15960	50.24	-6.93	H	43.31	53.98	10.67	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5260 MHz
Channel No.	52 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10520	62.93	-6.52	V	56.41	68.20	11.79	PK
15780	64.18	-6.67	V	57.51	73.98	16.47	PK
15780	50.41	-6.67	V	43.74	53.98	10.24	AV
10520	62.32	-6.52	H	55.80	68.20	12.40	PK
15780	64.55	-6.67	H	57.88	73.98	16.10	PK
15780	50.30	-6.67	H	43.63	53.98	10.35	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is 6.5 Mbps in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5300 MHz
Channel No.	60 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10600	62.31	-6.72	V	55.59	73.98	18.39	PK
10600	48.78	-6.72	V	42.06	53.98	11.92	AV
15900	63.37	-7.00	V	56.37	73.98	17.61	PK
15900	49.73	-7.00	V	42.73	53.98	11.25	AV
10600	63.09	-6.72	H	56.37	73.98	17.61	PK
10600	48.73	-6.72	H	42.01	53.98	11.97	AV
15900	63.00	-7.00	H	56.00	73.98	17.98	PK
15900	49.76	-7.00	H	42.76	53.98	11.22	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is 6.5 Mbps in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10640	62.98	-6.43	V	56.55	73.98	17.43	PK
10640	48.89	-6.43	V	42.46	53.98	11.52	AV
15960	63.53	-6.93	V	56.60	73.98	17.38	PK
15960	50.09	-6.93	V	43.16	53.98	10.82	AV
10640	62.70	-6.43	H	56.27	73.98	17.71	PK
10640	48.96	-6.43	H	42.53	53.98	11.45	AV
15960	64.30	-6.93	H	57.37	73.98	16.61	PK
15960	50.13	-6.93	H	43.20	53.98	10.78	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is 6.5 Mbps in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2
Operation Mode:	802.11n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5270 MHz
Channel No.	54 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10540	62.16	-5.77	V	56.39	68.20	11.81	PK
15810	63.76	-7.47	V	56.29	73.98	17.69	PK
15810	50.26	-7.47	V	42.79	53.98	11.19	AV
10540	61.88	-5.77	H	56.11	68.20	12.09	PK
15810	63.37	-7.47	H	55.90	73.98	18.08	PK
15810	50.24	-7.47	H	42.77	53.98	11.21	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is 13.5 Mbps in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2
Operation Mode:	802.11n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5310 MHz
Channel No.	62 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10620	62.75	-6.36	V	56.39	73.98	17.59	PK
10620	48.74	-6.36	V	42.38	53.98	11.60	AV
15930	63.69	-6.77	V	56.92	73.98	17.06	PK
15930	49.77	-6.77	V	43.00	53.98	10.98	AV
10620	62.23	-6.36	H	55.87	73.98	18.11	PK
10620	48.80	-6.36	H	42.44	53.98	11.54	AV
15930	63.26	-6.77	H	56.49	73.98	17.49	PK
15930	49.91	-6.77	H	43.14	53.98	10.84	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is 13.5 Mbps in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11000	62.95	-5.06	V	57.89	73.98	16.09	PK
11000	49.07	-5.06	V	44.01	53.98	9.97	AV
16500	64.34	-4.35	V	59.99	68.20	8.21	PK
11000	61.87	-5.06	H	56.81	73.98	17.17	PK
11000	48.71	-5.06	H	43.65	53.98	10.33	AV
16500	63.47	-4.35	H	59.12	68.20	9.08	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5600 MHz
Channel No.	120 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11200	63.17	-6.05	V	57.12	73.98	16.86	PK
11200	49.63	-6.05	V	43.58	53.98	10.40	AV
16800	63.53	-2.56	V	60.97	68.20	7.23	PK
11200	62.82	-6.05	H	56.77	73.98	17.21	PK
11200	49.41	-6.05	H	43.36	53.98	10.62	AV
16800	63.90	-2.56	H	61.34	68.20	6.86	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5700 MHz
Channel No.	140 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11400	62.28	-6.08	V	56.20	73.98	17.78	PK
11400	48.90	-6.08	V	42.82	53.98	11.16	AV
17100	63.15	-0.85	V	62.30	68.20	5.90	PK
11400	62.68	-6.08	H	56.60	73.98	17.38	PK
11400	48.84	-6.08	H	42.76	53.98	11.22	AV
17100	63.09	-0.85	H	62.24	68.20	5.96	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11000	62.36	-5.06	V	57.30	73.98	16.68	PK
11000	48.84	-5.06	V	43.78	53.98	10.20	AV
16500	62.85	-4.35	V	58.50	68.20	9.70	PK
11000	62.80	-5.06	H	57.74	73.98	16.24	PK
11000	48.95	-5.06	H	43.89	53.98	10.09	AV
16500	62.78	-4.35	H	58.43	68.20	9.77	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is 6.5 Mbps in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5600 MHz
Channel No.	120 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11200	62.80	-6.05	V	56.75	73.98	17.23	PK
11200	49.29	-6.05	V	43.24	53.98	10.74	AV
16800	63.89	-2.56	V	61.33	68.20	6.87	PK
11200	63.34	-6.05	H	57.29	73.98	16.69	PK
11200	49.31	-6.05	H	43.26	53.98	10.72	AV
16800	63.38	-2.56	H	60.82	68.20	7.38	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is 6.5 Mbps in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5700 MHz
Channel No.	140 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11400	62.68	-6.08	V	56.60	73.98	17.38	PK
11400	48.97	-6.08	V	42.89	53.98	11.09	AV
17100	62.90	-0.85	V	62.05	68.20	6.15	PK
11400	62.20	-6.08	H	56.12	73.98	17.86	PK
11400	48.87	-6.08	H	42.79	53.98	11.19	AV
17100	62.87	-0.85	H	62.02	68.20	6.18	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is 6.5 Mbps in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5510 MHz
Channel No.	102 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11020	61.77	-5.86	V	55.91	73.98	18.07	PK
11020	48.67	-5.86	V	42.81	53.98	11.17	AV
16530	62.89	-3.75	V	59.14	68.20	9.06	PK
11020	61.84	-5.86	H	55.98	73.98	18.00	PK
11020	48.55	-5.86	H	42.69	53.98	11.29	AV
16530	62.41	-3.75	H	58.66	68.20	9.54	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is 13.5 Mbps in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5590 MHz
Channel No.	118 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11180	62.46	-6.14	V	56.32	73.98	17.66	PK
11180	49.01	-6.14	V	42.87	53.98	11.11	AV
16770	63.55	-3.11	V	60.44	68.20	7.76	PK
11180	62.73	-6.14	H	56.59	73.98	17.39	PK
11180	48.95	-6.14	H	42.81	53.98	11.17	AV
16770	63.22	-3.11	H	60.11	68.20	8.09	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is 13.5 Mbps in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5670 MHz
Channel No.	134 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11340	61.56	-5.10	V	56.46	73.98	17.52	PK
11340	48.32	-5.10	V	43.22	53.98	10.76	AV
17010	62.78	-1.27	V	61.51	68.20	6.69	PK
11340	62.22	-5.10	H	57.12	73.98	16.86	PK
11340	48.38	-5.10	H	43.28	53.98	10.70	AV
17010	62.91	-1.27	H	61.64	68.20	6.56	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is 13.5 Mbps in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Service MIMO(Ant 1 & 2 & 3)

Band :	UNII 2
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5260 MHz
Channel No.	52 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10520	62.76	-6.52	V	56.24	68.20	11.96	PK
15780	63.85	-6.67	V	57.18	73.98	16.80	PK
15780	50.83	-6.67	V	44.16	53.98	9.82	AV
10520	62.62	-6.52	H	56.10	68.20	12.10	PK
15780	64.18	-6.67	H	57.51	73.98	16.47	PK
15780	50.81	-6.67	H	44.14	53.98	9.84	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5300 MHz
Channel No.	60 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10600	62.13	-6.72	V	55.41	73.98	18.57	PK
10600	48.88	-6.72	V	42.16	53.98	11.82	AV
15900	63.95	-7.00	V	56.95	73.98	17.03	PK
15900	50.07	-7.00	V	43.07	53.98	10.91	AV
10600	62.08	-6.72	H	55.36	73.98	18.62	PK
10600	48.91	-6.72	H	42.19	53.98	11.79	AV
15900	63.52	-7.00	H	56.52	73.98	17.46	PK
15900	50.18	-7.00	H	43.18	53.98	10.80	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10640	62.55	-6.43	V	56.12	73.98	17.86	PK
10640	49.02	-6.43	V	42.59	53.98	11.39	AV
15960	63.67	-6.93	V	56.74	73.98	17.24	PK
15960	50.32	-6.93	V	43.39	53.98	10.59	AV
10640	62.41	-6.43	H	55.98	73.98	18.00	PK
10640	49.06	-6.43	H	42.63	53.98	11.35	AV
15960	64.11	-6.93	H	57.18	73.98	16.80	PK
15960	50.54	-6.93	H	43.61	53.98	10.37	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5260 MHz
Channel No.	52 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10520	62.57	-6.52	V	56.05	68.20	12.15	PK
15780	64.31	-6.67	V	57.64	73.98	16.34	PK
15780	50.29	-6.67	V	43.62	53.98	10.36	AV
10520	63.13	-6.52	H	56.61	68.20	11.59	PK
15780	64.36	-6.67	H	57.69	73.98	16.29	PK
15780	50.39	-6.67	H	43.72	53.98	10.26	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is 6.5 Mbps in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5300 MHz
Channel No.	60 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10600	62.87	-6.72	V	56.15	73.98	17.83	PK
10600	48.79	-6.72	V	42.07	53.98	11.91	AV
15900	64.26	-7.00	V	57.26	73.98	16.72	PK
15900	49.91	-7.00	V	42.91	53.98	11.07	AV
10600	62.69	-6.72	H	55.97	73.98	18.01	PK
10600	48.66	-6.72	H	41.94	53.98	12.04	AV
15900	63.66	-7.00	H	56.66	73.98	17.32	PK
15900	49.77	-7.00	H	42.77	53.98	11.21	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is 6.5 Mbps in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10640	62.91	-6.43	V	56.48	73.98	17.50	PK
10640	49.04	-6.43	V	42.61	53.98	11.37	AV
15960	63.59	-6.93	V	56.66	73.98	17.32	PK
15960	50.47	-6.93	V	43.54	53.98	10.44	AV
10640	62.29	-6.43	H	55.86	73.98	18.12	PK
10640	48.90	-6.43	H	42.47	53.98	11.51	AV
15960	64.20	-6.93	H	57.27	73.98	16.71	PK
15960	50.36	-6.93	H	43.43	53.98	10.55	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is 6.5 Mbps in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2
Operation Mode:	802.11n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5270 MHz
Channel No.	54 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10540	62.20	-5.77	V	56.43	68.20	11.77	PK
15810	63.70	-7.47	V	56.23	73.98	17.75	PK
15810	50.62	-7.47	V	43.15	53.98	10.83	AV
10540	61.77	-5.77	H	56.00	68.20	12.20	PK
15810	63.59	-7.47	H	56.12	73.98	17.86	PK
15810	50.47	-7.47	H	43.00	53.98	10.98	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is 13.5 Mbps in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2
Operation Mode:	802.11n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5310 MHz
Channel No.	62 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10620	62.41	-6.36	V	56.05	73.98	17.93	PK
10620	48.78	-6.36	V	42.42	53.98	11.56	AV
15930	64.64	-6.77	V	57.87	73.98	16.11	PK
15930	50.12	-6.77	V	43.35	53.98	10.63	AV
10620	62.52	-6.36	H	56.16	73.98	17.82	PK
10620	48.63	-6.36	H	42.27	53.98	11.71	AV
15930	63.74	-6.77	H	56.97	73.98	17.01	PK
15930	50.16	-6.77	H	43.39	53.98	10.59	AV

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is 13.5 Mbps in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11000	63.90	-5.06	V	58.84	73.98	15.14	PK
11000	48.97	-5.06	V	43.91	53.98	10.07	AV
16500	63.79	-4.35	V	59.44	68.20	8.76	PK
11000	62.54	-5.06	H	57.48	73.98	16.50	PK
11000	48.87	-5.06	H	43.81	53.98	10.17	AV
16500	63.54	-4.35	H	59.19	68.20	9.01	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5600 MHz
Channel No.	120 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11200	64.16	-6.05	V	58.11	73.98	15.87	PK
11200	49.75	-6.05	V	43.70	53.98	10.28	AV
16800	63.57	-2.56	V	61.01	68.20	7.19	PK
11200	63.49	-6.05	H	57.44	73.98	16.54	PK
11200	49.59	-6.05	H	43.54	53.98	10.44	AV
16800	62.93	-2.56	H	60.37	68.20	7.83	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5700 MHz
Channel No.	140 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11400	63.24	-6.08	V	57.16	73.98	16.82	PK
11400	49.14	-6.08	V	43.06	53.98	10.92	AV
17100	63.29	-0.85	V	62.44	68.20	5.76	PK
11400	62.83	-6.08	H	56.75	73.98	17.23	PK
11400	49.03	-6.08	H	42.95	53.98	11.03	AV
17100	63.79	-0.85	H	62.94	68.20	5.26	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11000	63.57	-5.06	V	58.51	73.98	15.47	PK
11000	48.88	-5.06	V	43.82	53.98	10.16	AV
16500	63.59	-4.35	V	59.24	68.20	8.96	PK
11000	62.17	-5.06	H	57.11	73.98	16.87	PK
11000	48.79	-5.06	H	43.73	53.98	10.25	AV
16500	63.33	-4.35	H	58.98	68.20	9.22	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is 6.5 Mbps in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5600 MHz
Channel No.	120 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11200	62.92	-6.05	V	56.87	73.98	17.11	PK
11200	49.39	-6.05	V	43.34	53.98	10.64	AV
16800	63.72	-2.56	V	61.16	68.20	7.04	PK
11200	63.13	-6.05	H	57.08	73.98	16.90	PK
11200	49.28	-6.05	H	43.23	53.98	10.75	AV
16800	63.30	-2.56	H	60.74	68.20	7.46	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is 6.5 Mbps in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5700 MHz
Channel No.	140 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11400	63.11	-6.08	V	57.03	73.98	16.95	PK
11400	49.10	-6.08	V	43.02	53.98	10.96	AV
17100	63.54	-0.85	V	62.69	68.20	5.51	PK
11400	62.77	-6.08	H	56.69	73.98	17.29	PK
11400	49.05	-6.08	H	42.97	53.98	11.01	AV
17100	63.87	-0.85	H	63.02	68.20	5.18	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is 6.5 Mbps in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5510 MHz
Channel No.	102 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11020	62.39	-5.86	V	56.53	73.98	17.45	PK
11020	48.50	-5.86	V	42.64	53.98	11.34	AV
16530	63.41	-3.75	V	59.66	68.20	8.54	PK
11020	62.02	-5.86	H	56.16	73.98	17.82	PK
11020	48.32	-5.86	H	42.46	53.98	11.52	AV
16530	63.23	-3.75	H	59.48	68.20	8.72	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is 13.5 Mbps in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5590 MHz
Channel No.	118 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11180	63.02	-6.14	V	56.88	73.98	17.10	PK
11180	49.09	-6.14	V	42.95	53.98	11.03	AV
16770	63.53	-3.11	V	60.42	68.20	7.78	PK
11180	62.52	-6.14	H	56.38	73.98	17.60	PK
11180	49.11	-6.14	H	42.97	53.98	11.01	AV
16770	64.32	-3.11	H	61.21	68.20	6.99	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is 13.5 Mbps in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2e
Operation Mode:	802.11n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5670 MHz
Channel No.	134 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11340	61.88	-5.10	V	56.78	73.98	17.20	PK
11340	48.44	-5.10	V	43.34	53.98	10.64	AV
17010	62.19	-1.27	V	60.92	68.20	7.28	PK
11340	62.50	-5.10	H	57.40	73.98	16.58	PK
11340	48.36	-5.10	H	43.26	53.98	10.72	AV
17010	62.53	-1.27	H	61.26	68.20	6.94	PK

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is 13.5 Mbps in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

8.7.2 RADIATED RESTRICTED BAND EDGE MEASUREMENTS

Test Requirements and limit, §15.247(d) §15.205, §15.209

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in section 15.209(a) (See section 15.205(c)).

Monitoring MIMO(Ant 1 & 2)

Band :	UNII 2
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5350	49.42	9.28	H	58.70	73.98	15.28	PK
5350	36.32	9.28	H	45.60	53.98	8.38	AV
5350	49.64	9.28	V	58.92	73.98	15.06	PK
5350	36.18	9.28	V	45.46	53.98	8.52	AV

Band :	UNII 2
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6 Mbps
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5350	49.12	9.28	H	58.40	73.98	15.58	PK
5350	36.15	9.28	H	45.43	53.98	8.55	AV
5350	49.55	9.28	V	58.83	73.98	15.15	PK
5350	36.17	9.28	V	45.45	53.98	8.53	AV

Band :	UNII 2
Operation Mode:	802.11n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5310 MHz
Channel No.	62 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5350	49.33	9.28	H	58.61	73.98	15.37	PK
5350	36.20	9.28	H	45.48	53.98	8.50	AV
5350	49.44	9.28	V	58.72	73.98	15.26	PK
5350	36.51	9.28	V	45.79	53.98	8.19	AV

Notes:

1. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + ATT
2. We have done all data rate in 802.11a/n mode test. . Worst case of EUT is lowest data rate in 802.11a/n
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band : UNII 2e
Operation Mode: 802.11 a
Transfer Rate: 6 Mbps
Operating Frequency 5500 MHz
Channel No. 100 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5460	48.46	10.08	H	58.54	73.98	15.44	PK
5460	35.14	10.08	H	45.22	53.98	8.76	AV
*5470	49.07	9.95	H	59.02	68.20	9.18	PK
5460	48.72	10.08	V	58.8	73.98	15.18	PK
5460	35.10	10.08	V	45.18	53.98	8.80	AV
*5470	49.86	9.95	V	59.81	68.20	8.39	PK

Band : UNII 2e
Operation Mode: 802.11 a
Transfer Rate: 6 Mbps
Operating Frequency 5700 MHz
Channel No. 140 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
*5725	48.64	11.37	H	60.01	68.20	8.19	PK
*5725	47.69	11.37	V	59.06	68.20	9.14	PK

Band : UNII 2e

Operation Mode: 802.11 n_20 MHz BW

Transfer Rate: 6 Mbps

Operating Frequency 5500 MHz

Channel No. 100 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5460	48.58	10.08	H	58.66	73.98	15.32	PK
5460	35.19	10.08	H	45.27	53.98	8.71	AV
*5470	49.09	9.95	H	59.04	68.20	9.16	PK
5460	48.77	10.08	V	58.85	73.98	15.13	PK
5460	35.21	10.08	V	45.29	53.98	8.69	AV
*5470	49.56	9.95	V	59.51	68.20	8.69	PK

Band : UNII 2e

Operation Mode: 802.11 n_20 MHz BW

Transfer Rate: 6.5 Mbps

Operating Frequency 5700 MHz

Channel No. 140 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
*5725	48.32	11.37	H	59.69	68.20	8.51	PK
*5725	48.02	11.37	V	59.39	68.20	8.81	AV

Band :	UNII 2e
Operation Mode:	802.11n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5510 MHz
Channel No.	102 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5460	48.69	10.08	H	58.77	73.98	15.21	PK
5460	35.11	10.08	H	45.19	53.98	8.79	AV
*5470	49.25	9.95	H	59.2	68.20	9.00	PK
5460	48.96	10.08	V	59.04	73.98	14.94	PK
5460	35.23	10.08	V	45.31	53.98	8.67	AV
*5470	49.78	9.95	V	59.73	68.20	8.47	PK

Band :	UNII 2e
Operation Mode:	802.11 n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5670 MHz
Channel No.	134 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
*5725	48.78	11.37	H	60.15	68.20	8.05	PK
*5725	48.52	11.37	V	59.89	68.20	8.31	AV

Notes:

1. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + ATT
2. We have done all data rate in 802.11a/n mode test. . Worst case of EUT is lowest data rate in 802.11a/n
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
4. “*” is radiated band edge test frequency.(not restricted band emissions)

Service MIMO(Ant 1 & 2 & 3)

Band :	UNII 2
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5000	51.36	8.62	H	59.98	73.98	14.00	PK
5000	42.36	8.62	H	50.98	53.98	3.00	AV
5350	51.66	9.28	H	60.94	73.98	13.04	PK
5350	37.52	9.28	H	46.8	53.98	7.18	AV
5000	48.99	8.62	V	57.61	73.98	16.37	PK
5000	35.86	8.62	V	44.48	53.98	9.50	AV
5350	49.43	9.28	V	58.71	73.98	15.27	PK
5350	36.21	9.28	V	45.49	53.98	8.49	AV

Band :	UNII 2
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6 Mbps
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5000	52.03	8.62	H	60.65	73.98	13.33	PK
5000	42.13	8.62	H	50.75	53.98	3.23	AV
5350	50.24	9.28	H	59.52	73.98	14.46	PK
5350	37.24	9.28	H	46.52	53.98	7.46	AV
5000	49.69	8.62	V	58.31	73.98	15.67	PK
5000	36.12	8.62	V	44.74	53.98	9.24	AV
5350	49.55	9.28	V	58.83	73.98	15.15	PK
5350	36.25	9.28	V	45.53	53.98	8.45	AV

Band :	UNII 2
Operation Mode:	802.11n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5310 MHz
Channel No.	62 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5000	51.65	8.62	H	60.27	73.98	13.71	PK
5000	42.35	8.62	H	50.97	53.98	3.01	AV
5350	53.25	9.28	H	62.53	73.98	11.45	PK
5350	38.43	9.28	H	47.71	53.98	6.27	AV
5000	49.23	8.62	V	57.85	73.98	16.13	PK
5000	35.99	8.62	V	44.61	53.98	9.37	AV
5350	49.55	9.28	V	58.83	73.98	15.15	PK
5350	36.50	9.28	V	45.78	53.98	8.20	AV

Notes:

1. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + ATT
2. We have done all data rate in 802.11a/n mode test. . Worst case of EUT is lowest data rate in 802.11a/n
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band : UNII 2e
Operation Mode: 802.11 a
Transfer Rate: 6 Mbps
Operating Frequency 5500 MHz
Channel No. 100 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5000	51.08	8.62	H	59.7	73.98	14.28	PK
5000	42.19	8.62	H	50.81	53.98	3.17	AV
5460	50.59	10.08	H	60.67	73.98	13.31	PK
5460	36.62	10.08	H	46.7	53.98	7.28	AV
*5470	50.31	9.95	H	60.26	68.20	7.94	PK
5000	48.77	8.62	V	57.39	73.98	16.59	PK
5000	35.79	8.62	V	44.41	53.98	9.57	AV
5460	49.55	10.08	V	59.63	73.98	14.35	PK
5460	36.44	10.08	V	46.52	53.98	7.46	AV
*5470	50.15	9.95	V	60.10	68.20	8.10	PK

Band : UNII 2e
Operation Mode: 802.11 a
Transfer Rate: 6 Mbps
Operating Frequency 5700 MHz
Channel No. 140 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5000	51.05	8.62	H	59.67	73.98	14.31	PK
5000	41.98	8.62	H	50.6	53.98	3.38	AV
*5725	53.73	11.37	H	65.10	68.20	3.10	PK
5000	49.63	8.62	V	58.25	73.98	15.73	PK
5000	35.77	8.62	V	44.39	53.98	9.59	AV
*5725	49.38	11.37	V	60.75	68.20	7.45	PK

Band : UNII 2e

Operation Mode: 802.11 n_20 MHz BW

Transfer Rate: 6 Mbps

Operating Frequency 5500 MHz

Channel No. 100 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5000	51.3	8.62	H	59.92	73.98	14.06	PK
5000	42.33	8.62	H	50.95	53.98	3.03	AV
5460	49.23	10.08	H	59.31	73.98	14.67	PK
5460	36.55	10.08	H	46.63	53.98	7.35	AV
*5470	50.23	9.95	H	60.18	68.20	8.02	PK
5000	48.69	8.62	V	57.31	73.98	16.67	PK
5000	35.85	8.62	V	44.47	53.98	9.51	AV
5460	49.99	10.08	V	60.07	73.98	13.91	PK
5460	36.29	10.08	V	46.37	53.98	7.61	AV
*5470	50.66	9.95	V	60.61	68.20	7.59	PK

Band : UNII 2e

Operation Mode: 802.11 n_20 MHz BW

Transfer Rate: 6.5 Mbps

Operating Frequency 5700 MHz

Channel No. 140 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5000	51.23	8.62	H	59.85	73.98	14.13	PK
5000	42.19	8.62	H	50.81	53.98	3.17	AV
*5725	46.35	11.37	H	57.72	68.20	10.48	PK
5000	49.67	8.62	V	58.29	73.98	15.69	PK
5000	36.05	8.62	V	44.67	53.98	9.31	AV
*5725	46.13	11.37	V	57.50	68.20	10.70	PK

Band : UNII 2e

Operation Mode: 802.11n_40 MHz BW

Transfer Rate: 13.5 Mbps

Operating Frequency 5510 MHz

Channel No. 102 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5000	51.22	8.62	H	59.84	73.98	14.14	PK
5000	41.7	8.62	H	50.32	53.98	3.66	AV
5460	50.11	10.08	H	60.19	73.98	13.79	PK
5460	35.46	10.08	H	45.54	53.98	8.44	AV
*5470	51.23	9.95	H	61.18	68.20	7.02	PK
5000	48.65	8.62	V	57.27	73.98	16.71	PK
5000	35.69	8.62	V	44.31	53.98	9.67	AV
5460	50.23	10.08	V	60.31	73.98	13.67	PK
5460	35.77	10.08	V	45.85	53.98	8.13	AV
*5470	54.30	9.95	V	64.25	68.20	3.95	PK

Band : UNII 2e

Operation Mode: 802.11 n_40 MHz BW

Transfer Rate: 13.5 Mbps

Operating Frequency 5670 MHz

Channel No. 134 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5000	50.88	8.62	H	59.5	73.98	14.48	PK
5000	41.83	8.62	H	50.45	53.98	3.53	AV
*5725	48.08	11.37	H	59.45	68.20	8.75	PK
5000	48.56	8.62	V	57.18	73.98	16.8	PK
5000	35.81	8.62	V	44.43	53.98	9.55	AV
*5725	48.59	11.37	V	59.96	68.20	8.24	PK

Notes:

1. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + ATT
2. We have done all data rate in 802.11a/n mode test. . Worst case of EUT is lowest data rate in 802.11a/n
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
4. “*” is radiated band edge test frequency.(not restricted band emissions)

8.8 POWERLINE CONDUCTED EMISSIONS

Test Requirements and limit, §15.207

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

Frequency Range (MHz)	Limits (dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

Test Configuration

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

TEST PROCEDURE

1. The EUT is placed on a wooden table 80 cm above the reference groundplane.
2. The EUT is connected via LISN to a test power supply.
3. The measurement results are obtained as described below:
4. Detectors – Quasi Peak and Average Detector.
5. We are performed the AC Power Line **Conducted Emission test for 135 Mbps, Ch.54 and 802.11n_40 MHz BW mode in UNII 2_3 TX MIMO. Because the mode in UNII 2 is worst case.**

■ RESULT PLOTS

Conducted Emissions (Line 1)

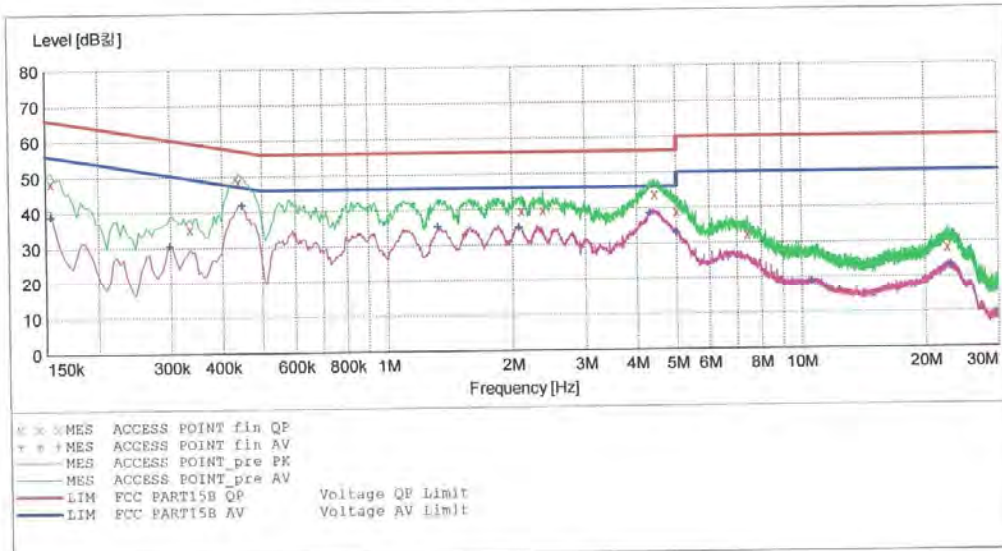
HCT

EMC

EUT: WEA303e
Manufacturer: SAMSUNG
Operating Condition: 5GHz WLAN MODE
Test Site: SHIELD ROOM
Operator: JS LEE
Test Specification: FCC PART15 C
Comment: H

SCAN TABLE: "FCC CLASS B(H)"

Short Description:			KN22 CLASS B	Meas. Time	IF Bandw.	Transducer
Start Frequency	Stop Frequency	Step Width	Detector			
150.0 kHz	500.0 kHz	4.0 kHz	MaxPeak	10.0 ms	9 kHz	None
			Average			
500.0 kHz	5.0 MHz	4.0 kHz	MaxPeak	10.0 ms	9 kHz	None
			Average			
5.0 MHz	30.0 MHz	4.0 kHz	MaxPeak	10.0 ms	9 kHz	None
			Average			



MEASUREMENT RESULT: "ACCESS POINT_fin QP"

2013-11-03 8:15오후

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.154001	48.40	9.8	66	17.4	---	---
0.334001	35.20	9.8	59	24.2	---	---
0.438001	48.50	9.8	57	8.6	---	---
2.112000	39.40	10.0	56	16.6	---	---
2.380000	39.50	10.0	56	16.5	---	---
4.436000	43.80	10.2	56	12.2	---	---
5.000000	38.80	10.2	56	17.2	---	---
7.404000	32.30	10.3	60	27.7	---	---
22.528000	28.20	11.0	60	31.8	---	---

MEASUREMENT RESULT: "ACCESS POINT_fin AV"

2013-11-03 8:15 오후

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.154001	38.90	9.8	56	16.9	---	---
0.298001	30.50	9.8	50	19.8	---	---
0.446001	41.70	9.8	47	5.2	---	---
1.324000	35.10	9.9	46	10.9	---	---
2.080000	34.80	9.9	46	11.2	---	---
4.316000	38.50	10.1	46	7.5	---	---
5.000000	33.00	10.2	46	13.0	---	---
10.584000	18.80	10.5	50	31.2	---	---
22.960000	22.90	11.1	50	27.1	---	---

Conducted Emissions (Line 2)

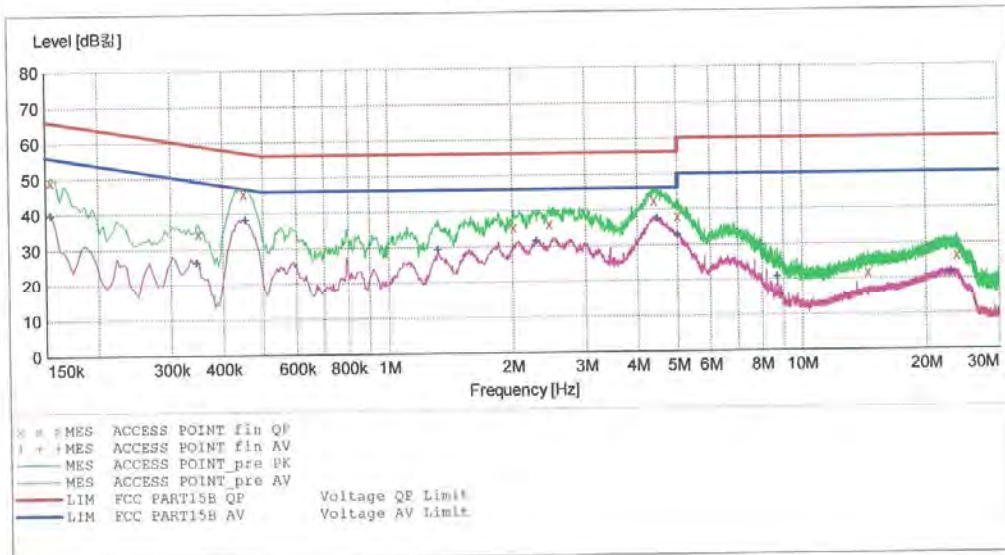
HCT

EMC

EUT: WEA303e
Manufacturer: SAMSUNG
Operating Condition: 5GHz WLAN MODE
Test Site: SHIELD ROOM
Operator: JS LEE
Test Specification: FCC PART15 B
Comment: N

SCAN TABLE: "FCC CLASS B(N)"

Short Description:				KN22 CLASS B	Meas. Time	IF Bandw.	Transducer
Start Frequency	Stop Frequency	Step Width	Detector				
150.0 kHz	500.0 kHz	4.0 kHz	MaxPeak	10.0 ms	9 kHz	None	
			Average				
500.0 kHz	5.0 MHz	4.0 kHz	MaxPeak	10.0 ms	9 kHz	None	
			Average				
5.0 MHz	30.0 MHz	4.0 kHz	MaxPeak	10.0 ms	9 kHz	None	
			Average				



MEASUREMENT RESULT: "ACCESS POINT_fin QP"

2013-11-03 8:19오후

Frequency MHz	Level dB	Transd dB	Limit dB	Margin dB	Line	PE
0.154001	49.10	10.0	66	16.7	---	---
0.350001	34.40	10.0	59	24.5	---	---
0.450001	45.50	10.0	57	11.4	---	---
2.016000	35.40	10.1	56	20.6	---	---
2.460000	36.30	10.2	56	19.7	---	---
4.404000	42.40	10.3	56	13.6	---	---
5.000000	38.00	10.4	56	18.0	---	---
14.444000	21.80	11.0	60	38.2	---	---
23.736000	26.50	11.5	60	33.5	---	---

MEASUREMENT RESULT: "ACCESS POINT_fin AV"

2013-11-03 8:19 오후

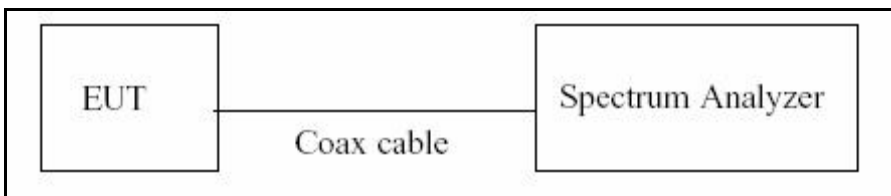
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.154001	39.60	10.0	56	16.2	---	---
0.346001	26.20	10.0	49	22.9	---	---
0.454001	38.10	10.0	47	8.7	---	---
1.320000	29.30	10.1	46	16.7	---	---
2.288000	31.50	10.2	46	14.5	---	---
4.480000	37.30	10.3	46	8.7	---	---
5.000000	32.70	10.4	46	13.3	---	---
8.728000	20.90	10.6	50	29.1	---	---
22.964000	21.50	11.4	50	28.5	---	---

9. TEST RESULT(POE)

9.1 DUTY CYCLE

The zero-span mode on a spectrum analyzer or EMI receiver, if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal. Set the center frequency of the instrument to the center frequency of the transmission. Set RBW $\geq$ EBW if possible; otherwise, set RBW to the largest available value. Set VBW $\geq$ RBW. Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$, where T is defined in section B)1)a), and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if $T \leq 16.7$ microseconds.)

■ TEST CONFIGURATION



■ TEST PROCEDURE

The transmitter output is connected to the Spectrum Analyzer. We tested according to the zero-span measurement method, B)2) in KDB 789033(issued 04/08/2013)

The largest available value of RBW is 8 MHz and VBW is 50 MHz. The zero-span method of measuring duty cycle shall not be used if $T \leq 6.25$ microseconds. ($50/6.25 = 8$)

The zero-span method was used because all measured T data are > 6.25 microseconds and both RBW and VBW are $> 50/T$.

1. RBW = 8 MHz (the largest available value)
2. VBW = 8 MHz ($\geq$ RBW)
3. SPAN = 0 Hz
4. Detector = Peak
5. Number of points in sweep > 100
6. Trace mode = Clear write
7. Measure T_{total} and T_{on}
8. Calculate Duty Cycle = T_{on} / T_{total} and Duty Cycle Factor = $10 \cdot \log(1/\text{Duty Cycle})$

FCC PT.15.407 TEST REPORT	FCC CERTIFICATION REPORT		www.hct.co.kr
Test Report No. HCTR1311FR03	Date of Issue: November 06, 2013	EUT Type: WLAN Access Point	FCC ID: A3LWEA303I

Duty Cycle Factor

Monitoring Port

Mode	Data Rate	T _{on} (ms)	T _{total} (ms)	Duty Cycle	Duty Cycle Factor
802.11a	6	2.020	2.070	0.97584541	0.106
	9	1.353	1.401	0.96573876	0.151
	12	1.020	1.068	0.95505618	0.200
	18	0.686	0.732	0.93715847	0.282
	24	0.523	0.569	0.91915641	0.366
	36	0.354	0.400	0.88500000	0.531
	48	0.271	0.316	0.85759494	0.667
	54	0.243	0.288	0.84375000	0.738
802.11n_20 MHz BW	6.5	1.885	1.930	0.97668394	0.102
	13	0.962	1.008	0.95436508	0.203
	19.5	0.654	0.700	0.93428571	0.295
	26	0.498	0.544	0.91544118	0.384
	39	0.347	0.392	0.88520408	0.530
	52	0.267	0.312	0.85576923	0.676
	58.5	0.243	0.289	0.84083045	0.753
	65	0.224	0.268	0.83582090	0.779
802.11n_40 MHz BW	13.5	0.926	0.960	0.96458333	0.157
	27	0.482	0.516	0.93410853	0.296
	40.5	0.335	0.368	0.91032609	0.408
	54	0.260	0.292	0.89041096	0.504
	81	0.187	0.220	0.85000000	0.706
	108	0.147	0.180	0.81666667	0.880
	121.5	0.136	0.168	0.80952381	0.918
	135	0.128	0.160	0.80000000	0.969

Service Port

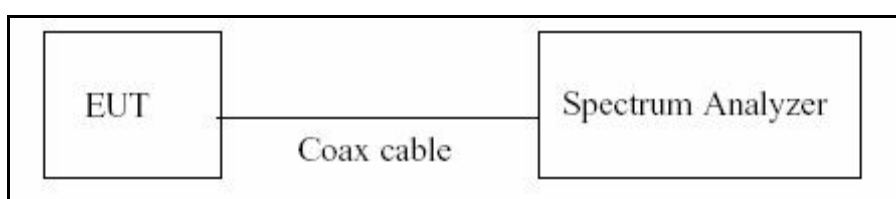
Mode	Data Rate	T _{on} (ms)	T _{total} (ms)	Duty Cycle	Duty Cycle Factor
802.11a	6	1.335	1.405	0.95017794	0.222
	9	0.909	0.957	0.94984326	0.223
	12	0.690	0.735	0.93877551	0.274
	18	0.466	0.512	0.91015625	0.409
	24	0.354	0.400	0.88500000	0.531
	36	0.243	0.288	0.84375000	0.738
	48	0.187	0.232	0.80603448	0.936
	54	0.171	0.216	0.79166667	1.015
802.11n_20 MHz BW	6.5	1.269	1.317	0.96355353	0.161
	13	0.655	0.701	0.93437946	0.295
	19.5	0.446	0.492	0.90650407	0.426
	26	0.348	0.393	0.88549618	0.528
	39	0.244	0.289	0.84429066	0.735
	52	0.192	0.236	0.81355932	0.896
	58.5	0.176	0.220	0.80000000	0.969
	65	0.159	0.204	0.77941176	1.082
802.11n_40 MHz BW	13.5	0.630	0.664	0.94879518	0.228
	27	0.334	0.368	0.90760870	0.421
	40.5	0.236	0.268	0.88059701	0.552
	54	0.188	0.220	0.85454545	0.683
	81	0.135	0.168	0.80357143	0.950
	108	0.112	0.144	0.77777778	1.091
	121.5	0.104	0.136	0.76470588	1.165
	135	0.096	0.128	0.75000000	1.249

9.2 26 dB BANDWIDTH MEASUREMENT

The bandwidth at 26 dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating at its maximum power control level, as defined in KDB 789033(issued 04/08/2013), at the appropriate frequencies. The spectrum analyzer's bandwidth measurement function is configured to measure the 26 dB bandwidth.

The 26 dB bandwidth is used to determine the conducted power limits.

■ TEST CONFIGURATION



■ TEST PROCEDURE

The transmitter output is connected to the Spectrum Analyzer.

The Spectrum Analyzer is set to(Page 3 in KDB 789033, issued 04/08/2013)

1. RBW = approximately 1 % of the emission bandwidth
2. VBW > RBW
3. Detector = Peak
4. Trace mode = max hold
5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1 %.

Monitoring Port Ant.1
■ TEST RESULTS
20 MHz BW
Conducted 26 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	22.29	N/A	Pass
5300	60	23.06	N/A	Pass
5320	64	22.82	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5500	100	23.41	N/A	Pass
5600	120	23.02	N/A	Pass
5700	140	22.50	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	23.76	N/A	Pass
5300	60	24.48	N/A	Pass
5320	64	24.08	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5500	100	23.42	N/A	Pass
5600	120	24.02	N/A	Pass
5700	140	23.64	N/A	Pass

40 MHz BW

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5270	54	48.78	N/A	Pass
5310	62	48.10	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5510	102	49.05	N/A	Pass
5590	118	47.99	N/A	Pass
5670	134	48.77	N/A	Pass

Monitoring Port Ant.2

■ TEST RESULTS

20 MHz BW

Conducted 26 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	23.58	N/A	Pass
5300	60	23.32	N/A	Pass
5320	64	22.65	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5500	100	22.74	N/A	Pass
5600	120	21.95	N/A	Pass
5700	140	22.03	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	23.61	N/A	Pass
5300	60	23.44	N/A	Pass
5320	64	23.75	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5500	100	22.96	N/A	Pass
5600	120	22.90	N/A	Pass
5700	140	23.34	N/A	Pass

40 MHz BW

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5270	54	50.12	N/A	Pass
5310	62	47.13	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5510	102	47.30	N/A	Pass
5590	118	48.81	N/A	Pass
5670	134	47.24	N/A	Pass

Service Port Ant.1
■ TEST RESULTS
20 MHz BW
Conducted 26 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	22.14	N/A	Pass
5300	60	22.66	N/A	Pass
5320	64	21.80	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5500	100	21.97	N/A	Pass
5600	120	22.55	N/A	Pass
5700	140	22.55	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	23.13	N/A	Pass
5300	60	22.78	N/A	Pass
5320	64	23.13	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5500	100	23.27	N/A	Pass
5600	120	23.41	N/A	Pass
5700	140	23.21	N/A	Pass

40 MHz BW

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5270	54	46.01	N/A	Pass
5310	62	47.23	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5510	102	46.37	N/A	Pass
5590	118	45.51	N/A	Pass
5670	134	45.60	N/A	Pass

Service Port Ant.2
■ TEST RESULTS
20 MHz BW
Conducted 26 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	21.46	N/A	Pass
5300	60	21.14	N/A	Pass
5320	64	21.64	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5500	100	21.28	N/A	Pass
5600	120	21.72	N/A	Pass
5700	140	21.46	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	22.68	N/A	Pass
5300	60	22.94	N/A	Pass
5320	64	22.19	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5500	100	22.58	N/A	Pass
5600	120	22.52	N/A	Pass
5700	140	23.02	N/A	Pass

40 MHz BW

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5270	54	44.62	N/A	Pass
5310	62	45.72	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5510	102	46.20	N/A	Pass
5590	118	45.06	N/A	Pass
5670	134	45.12	N/A	Pass

Service Port Ant.3
■ TEST RESULTS
20 MHz BW
Conducted 26 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	21.09	N/A	Pass
5300	60	21.36	N/A	Pass
5320	64	21.70	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5500	100	21.63	N/A	Pass
5600	120	21.40	N/A	Pass
5700	140	21.66	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	23.37	N/A	Pass
5300	60	22.35	N/A	Pass
5320	64	22.41	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5500	100	22.36	N/A	Pass
5600	120	22.49	N/A	Pass
5700	140	22.62	N/A	Pass

40 MHz BW
Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5270	54	45.32	N/A	Pass
5310	62	45.50	N/A	Pass

Conducted 26 dB Bandwidth Measurements for 802.11n

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5510	102	45.36	N/A	Pass
5590	118	44.94	N/A	Pass
5670	134	45.77	N/A	Pass

Note :

- In order to simplify the report, attached plots were only the most wide channel.

Monitoring Port Ant.1
■ 20 dB BW TEST RESULTS(Additional Test)
Conducted 20 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	19.48	N/A	Pass

Conducted 20 dB Bandwidth Measurements for 802.11n_20 MHz BW

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	19.84	N/A	Pass

Conducted 20 dB Bandwidth Measurements for 802.11n_40 MHz BW

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5270	54	39.88	N/A	Pass

Note : We performed the 20 dB BW test to prove that no part of the fundamental emissions of any UNII2 band signal lies within the UNII band 1.

Monitoring Port Ant.2

■ 20 dB BW TEST RESULTS(Additional Test)

Conducted 20 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	19.36	N/A	Pass

Conducted 20 dB Bandwidth Measurements for 802.11n_20 MHz BW

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	19.98	N/A	Pass

Conducted 20 dB Bandwidth Measurements for 802.11n_40 MHz BW

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5270	54	39.81	N/A	Pass

Note : We performed the 20 dB BW test to prove that no part of the fundamental emissions of any UNII2 band signal lies within the UNII band 1.

Service Port Ant.1
■ 20 dB BW TEST RESULTS(Additional Test)
Conducted 20 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	19.08	N/A	Pass

Conducted 20 dB Bandwidth Measurements for 802.11n_20 MHz BW

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	19.90	N/A	Pass

Conducted 20 dB Bandwidth Measurements for 802.11n_40 MHz BW

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5270	54	39.98	N/A	Pass

Note : We performed the 20 dB BW test to prove that no part of the fundamental emissions of any UNII2 band signal lies within the UNII band 1.

Service Port Ant.2
■ 20 dB BW TEST RESULTS(Additional Test)
Conducted 20 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	18.18	N/A	Pass

Conducted 20 dB Bandwidth Measurements for 802.11n_20 MHz BW

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	19.32	N/A	Pass

Conducted 20 dB Bandwidth Measurements for 802.11n_40 MHz BW

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5270	54	39.66	N/A	Pass

Note : We performed the 20 dB BW test to prove that no part of the fundamental emissions of any UNII2 band signal lies within the UNII band 1.

Service Port Ant.3

20 dB BW TEST RESULTS(Additional Test)

Conducted 20 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	18.78	N/A	Pass

Conducted 20 dB Bandwidth Measurements for 802.11n_20 MHz BW

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5260	52	19.65	N/A	Pass

Conducted 20 dB Bandwidth Measurements for 802.11n_40 MHz BW

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5270	54	39.76	N/A	Pass

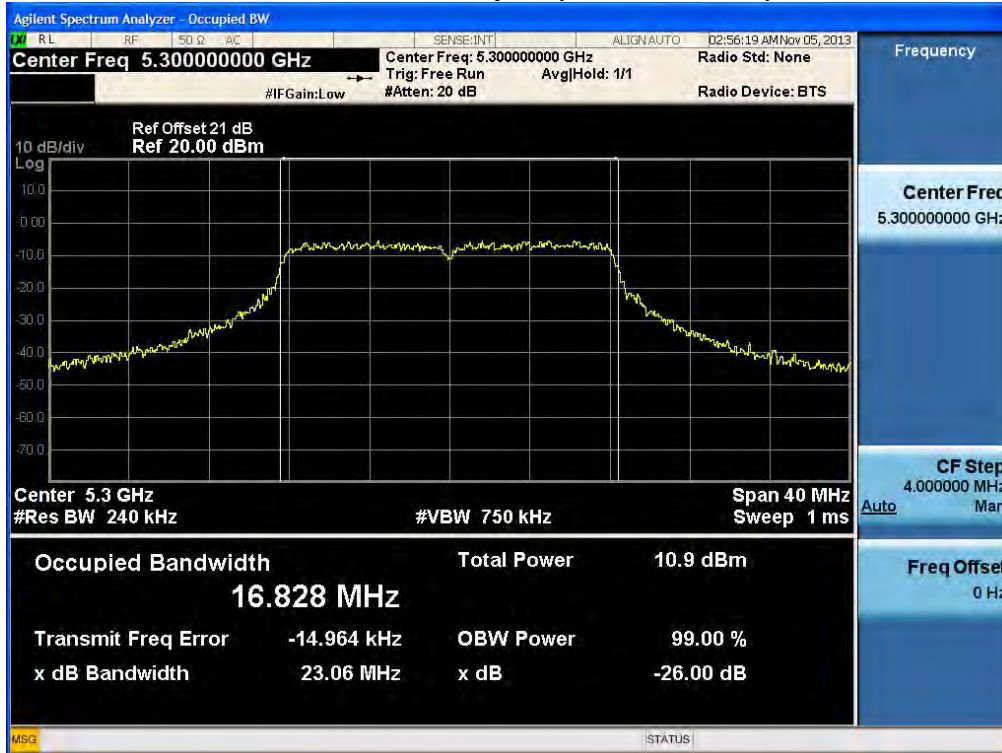
Note : We performed the 20 dB BW test to prove that no part of the fundamental emissions of any UNII2 band signal lies within the UNII band 1.

Monitoring Port Ant.1

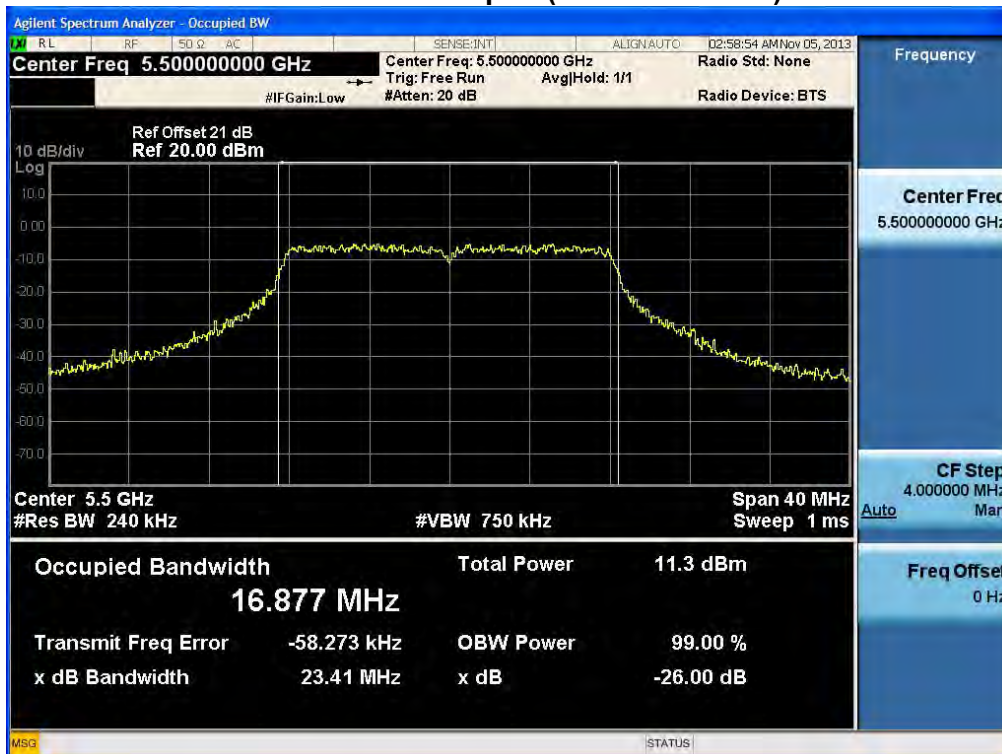
RESULT PLOTS

20 MHz BW

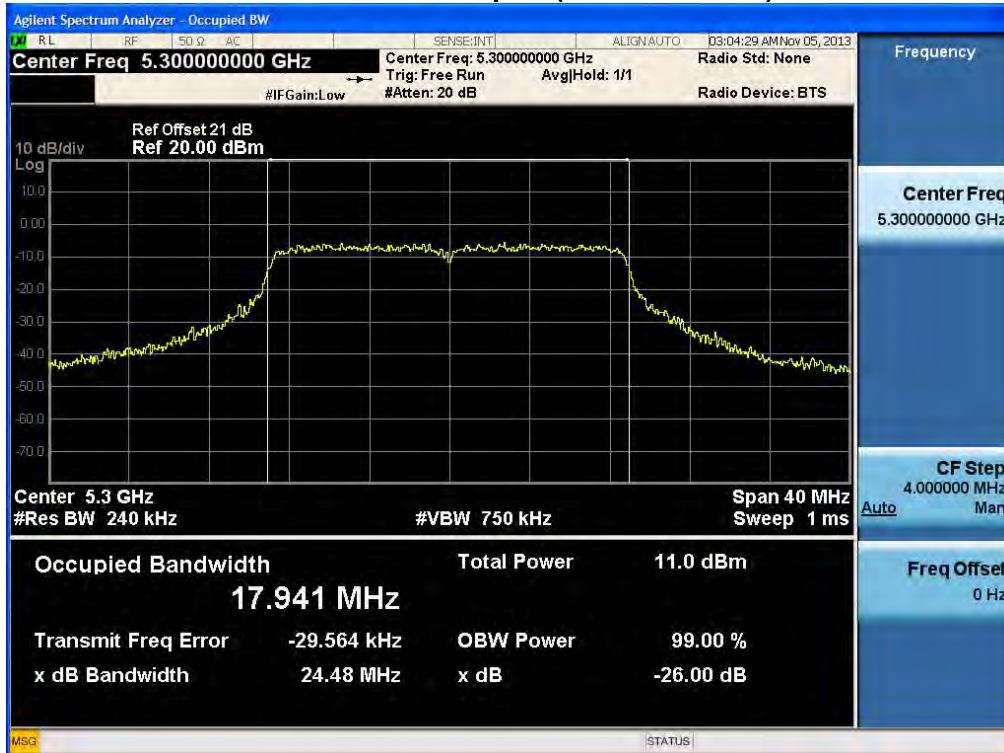
26 dB Bandwidth plot (802.11a-CH 60)



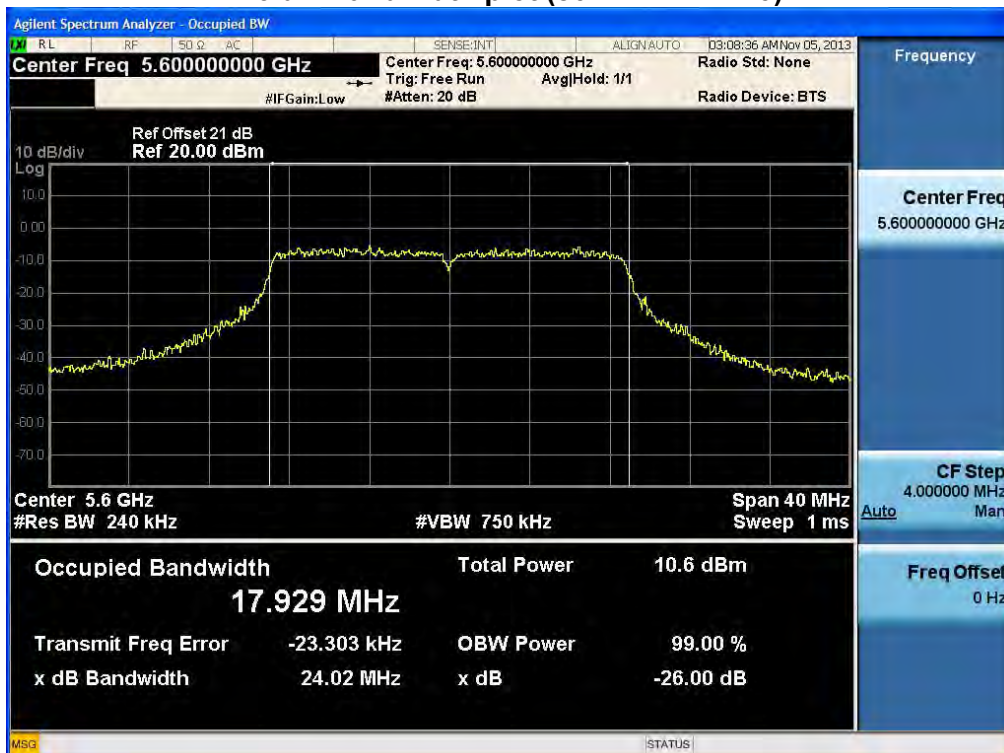
26 dB Bandwidth plot (802.11a-CH 100)



26 dB Bandwidth plot (802.11n-CH 60)



26 dB Bandwidth plot (802.11n-CH 120)



26 dB Bandwidth plot (802.11n-CH 54)



26 dB Bandwidth plot (802.11n-CH 134)

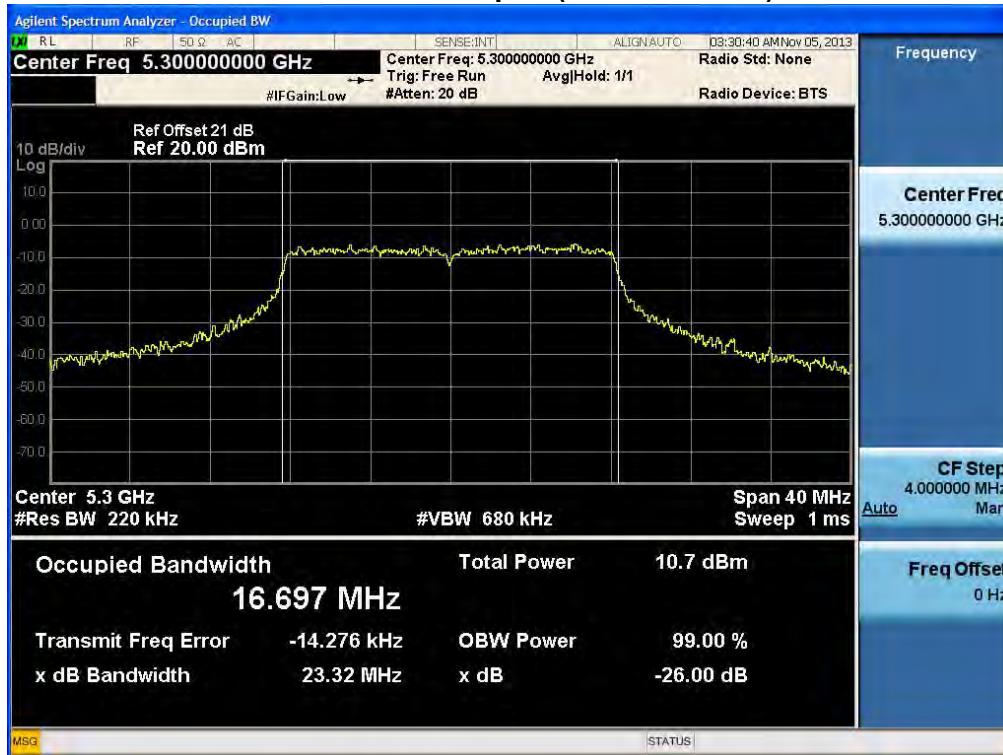


Monitoring Port Ant.2

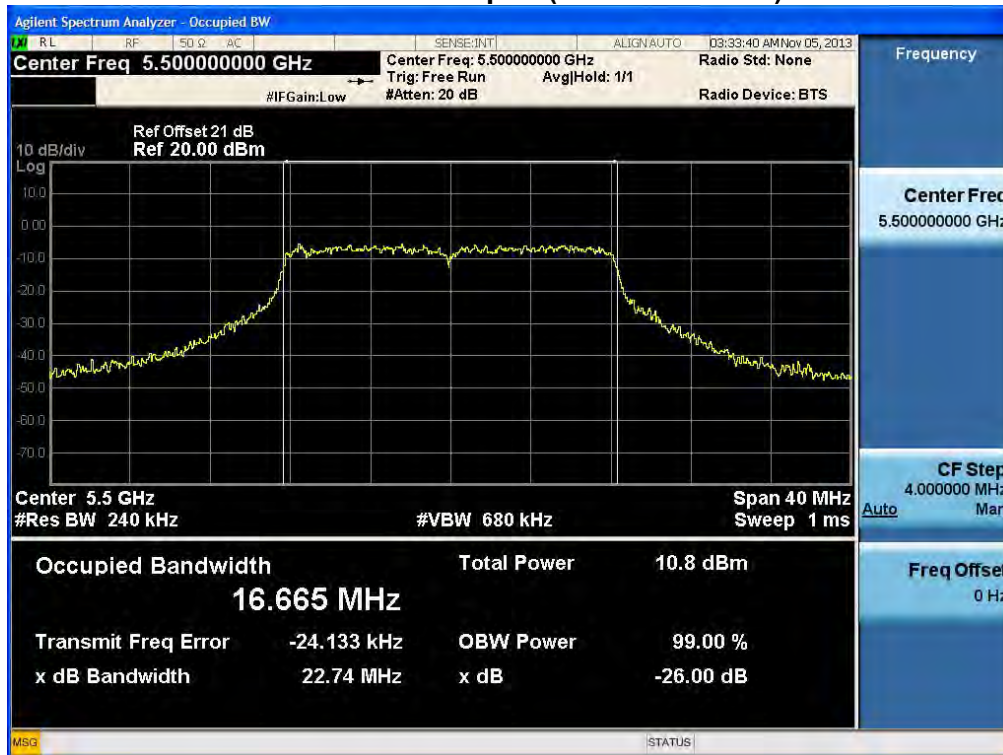
RESULT PLOTS

20 MHz BW

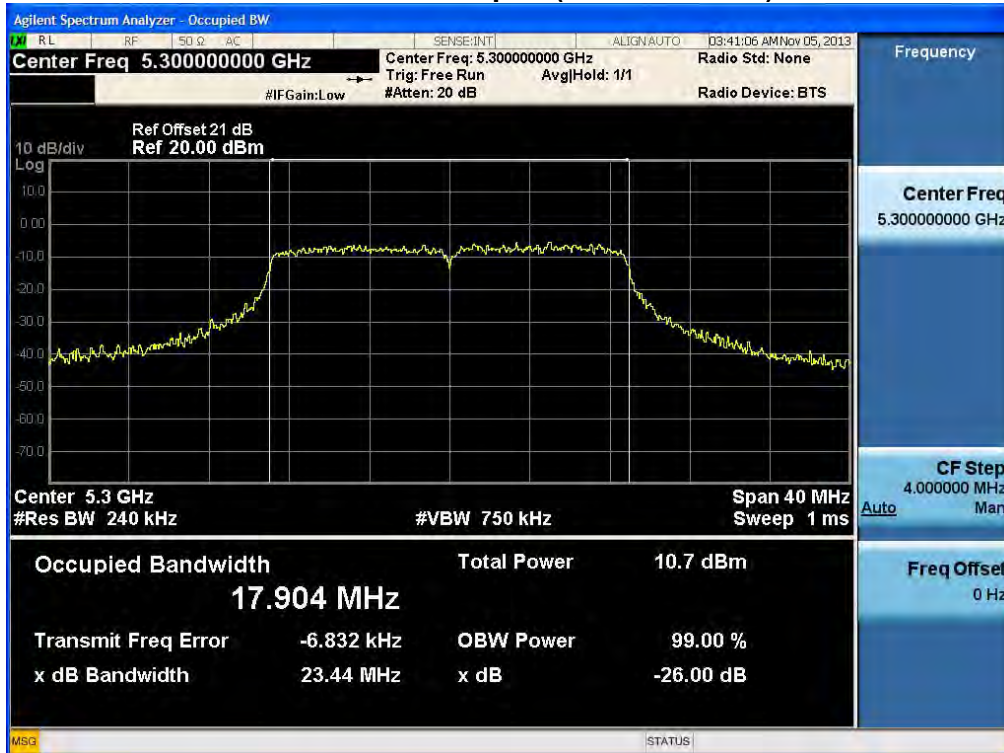
26 dB Bandwidth plot (802.11a-CH 60)



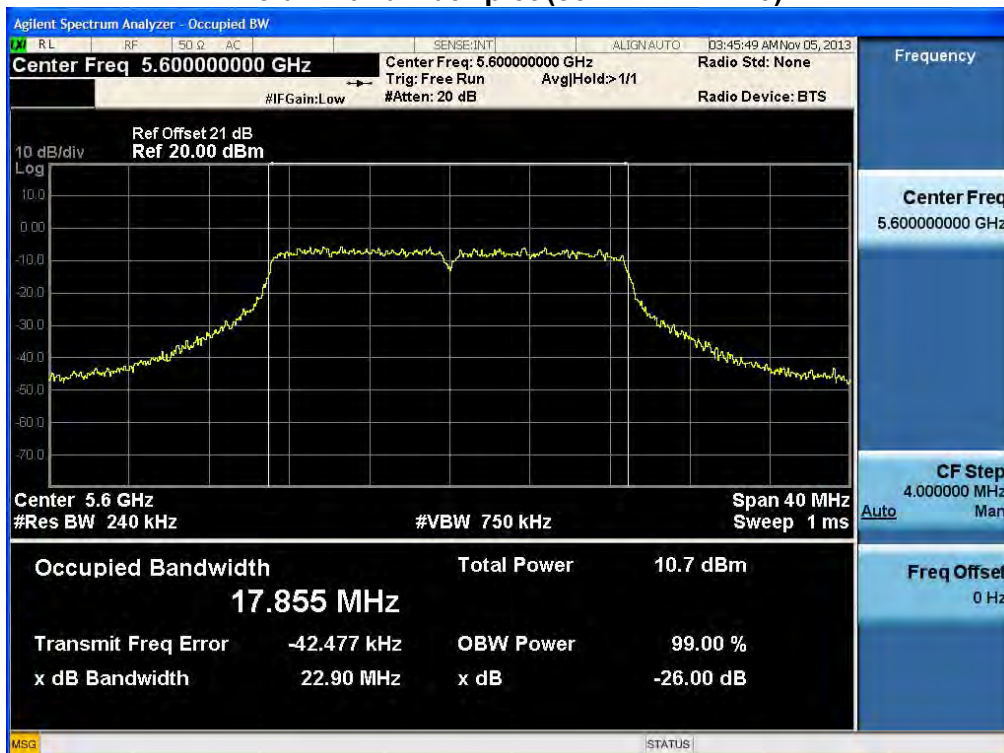
26 dB Bandwidth plot (802.11a-CH 100)



26 dB Bandwidth plot (802.11n-CH 60)



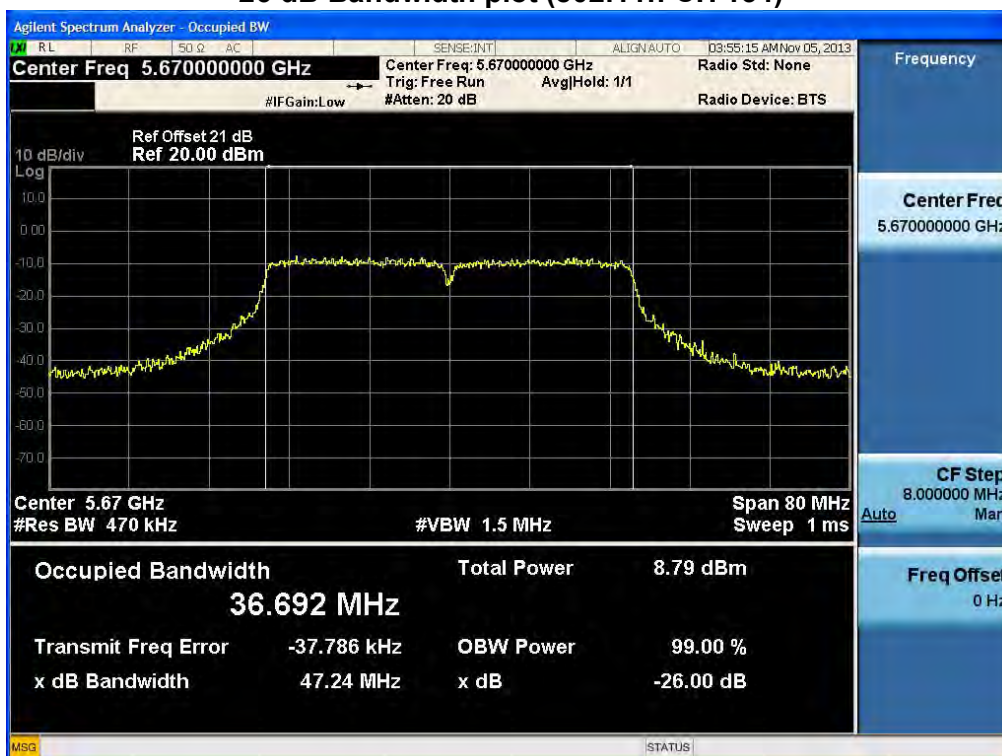
26 dB Bandwidth plot (802.11n-CH 120)



26 dB Bandwidth plot (802.11n-CH 54)



26 dB Bandwidth plot (802.11n-CH 134)

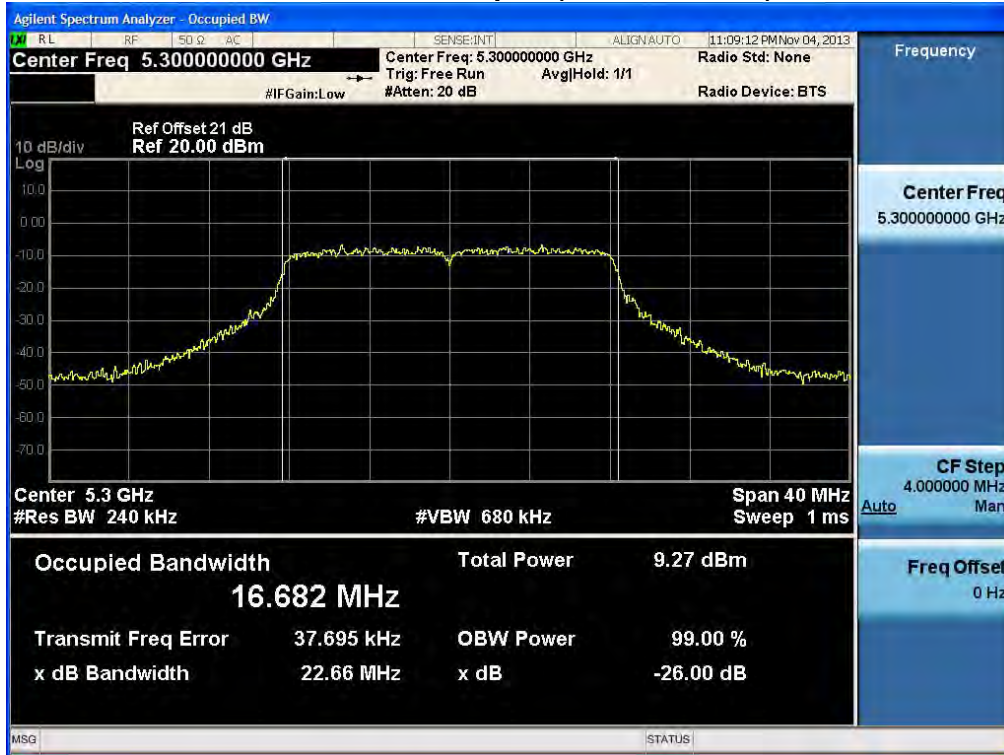


Service Port Ant.1

RESULT PLOTS

20 MHz BW

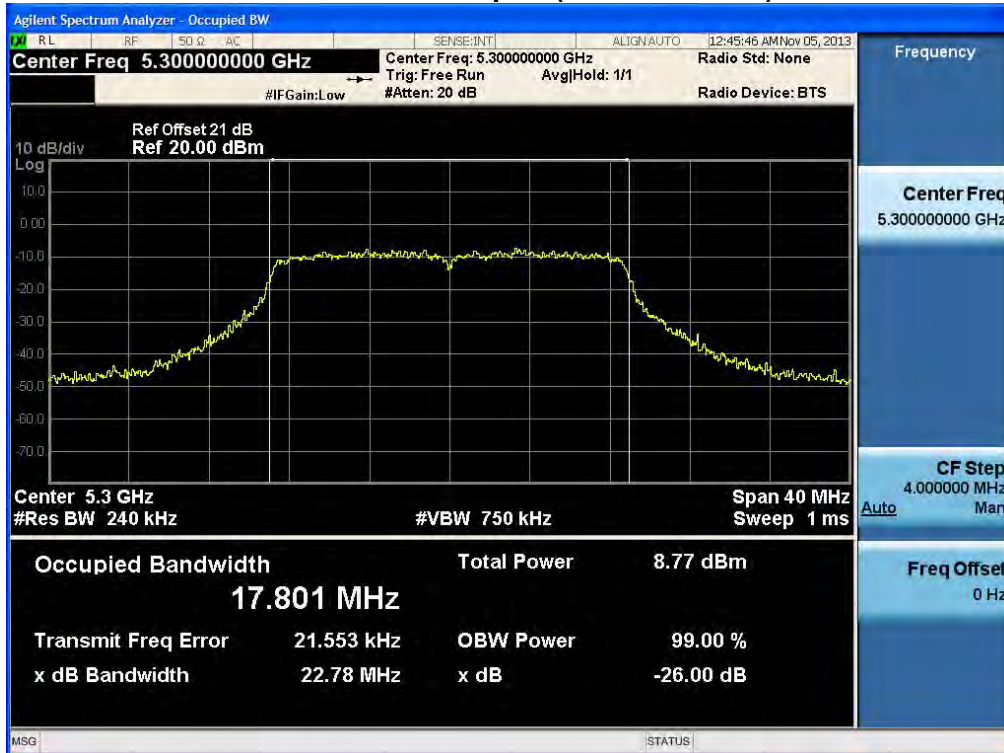
26 dB Bandwidth plot (802.11a-CH 60)



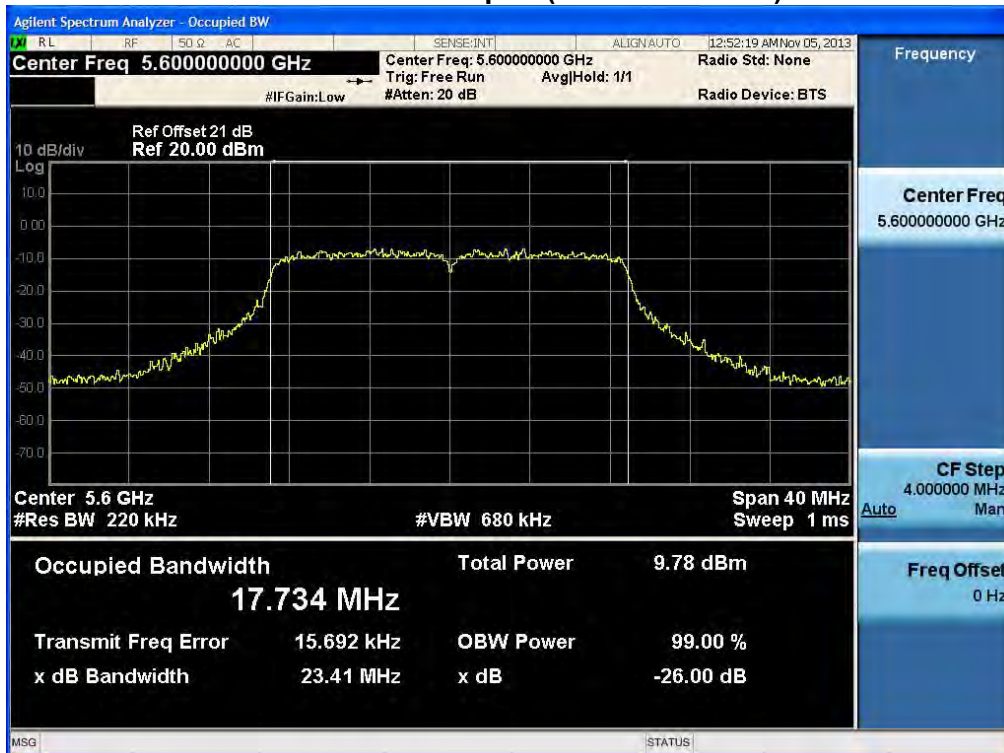
26 dB Bandwidth plot (802.11a-CH 100)



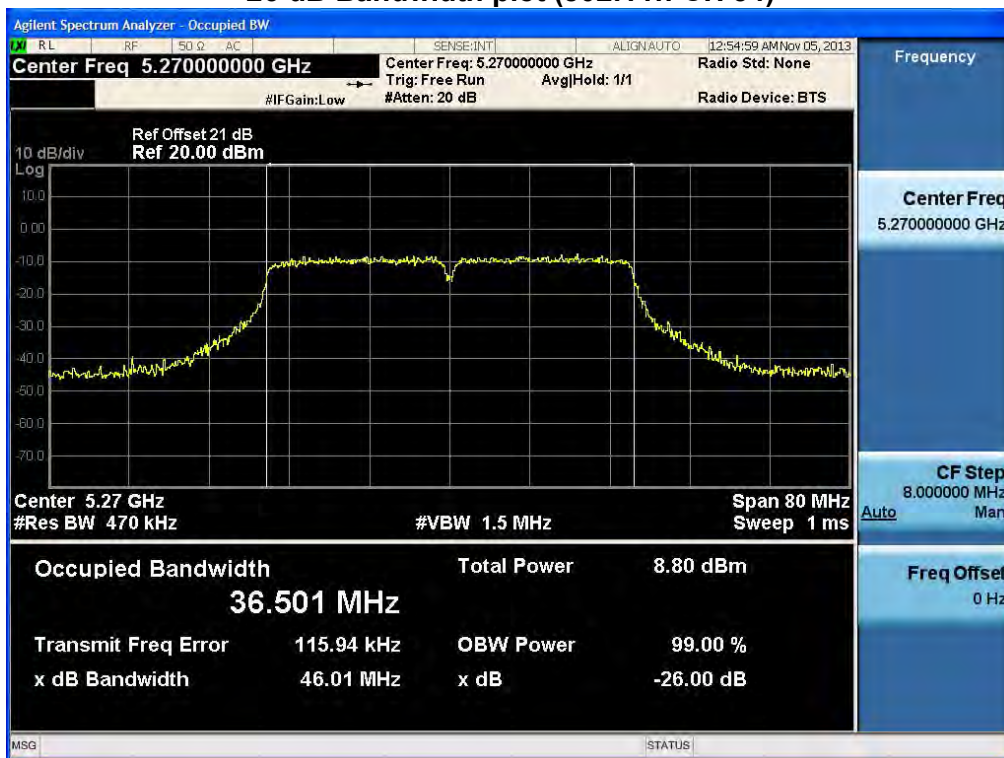
26 dB Bandwidth plot (802.11n-CH 60)



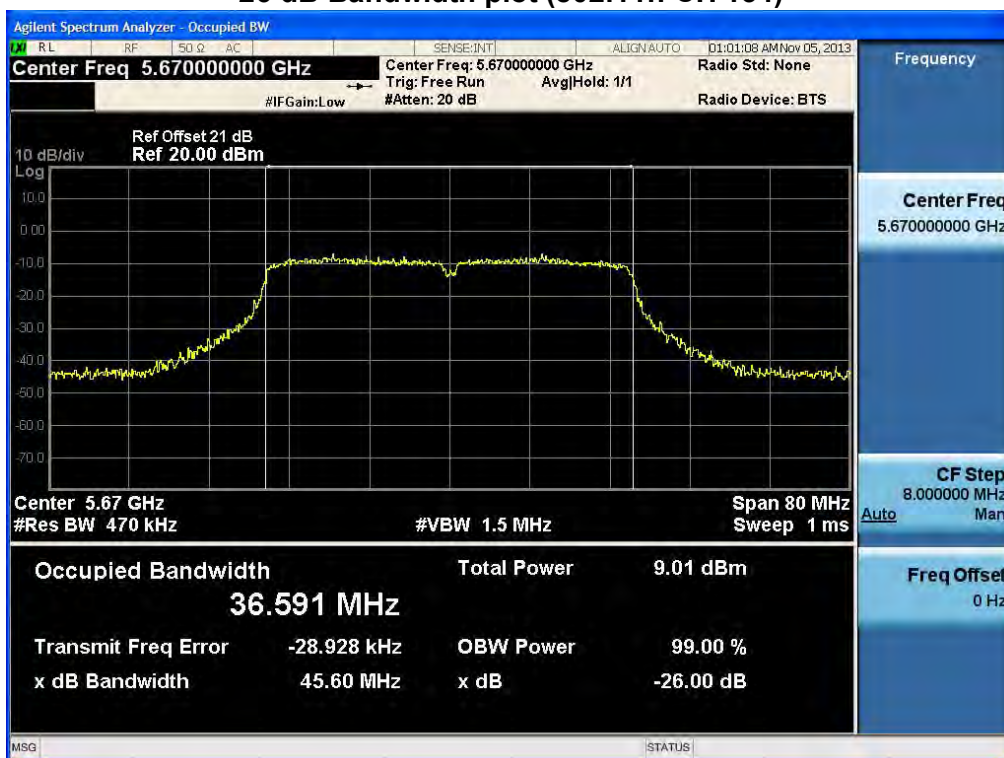
26 dB Bandwidth plot (802.11n-CH 120)



26 dB Bandwidth plot (802.11n-CH 54)



26 dB Bandwidth plot (802.11n-CH 134)

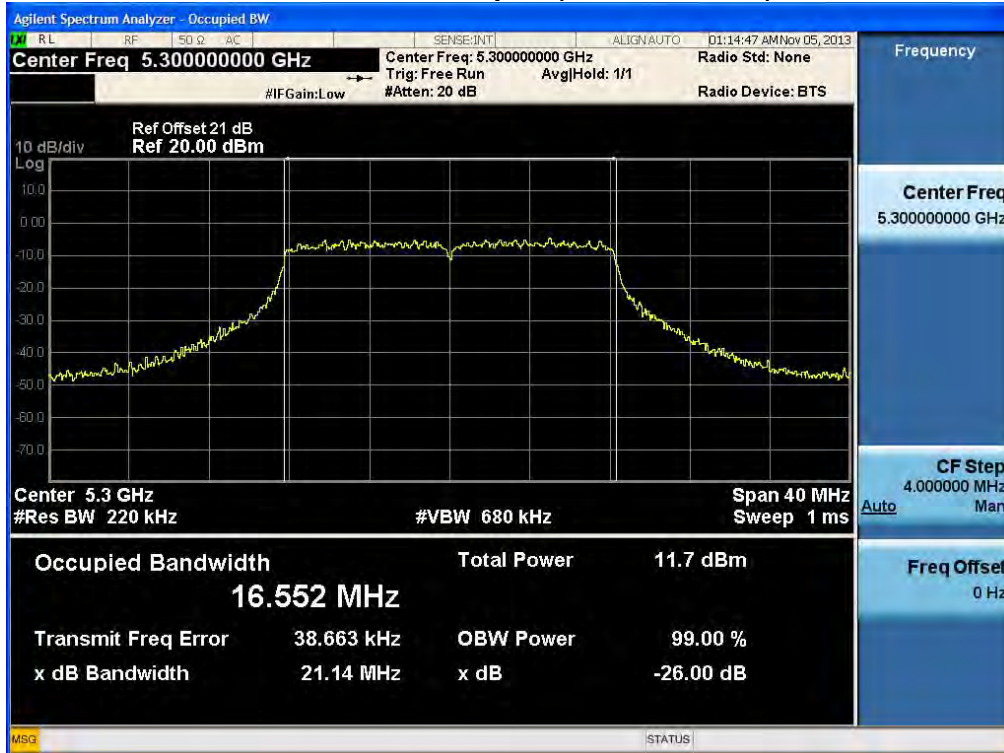


Service Port Ant.2

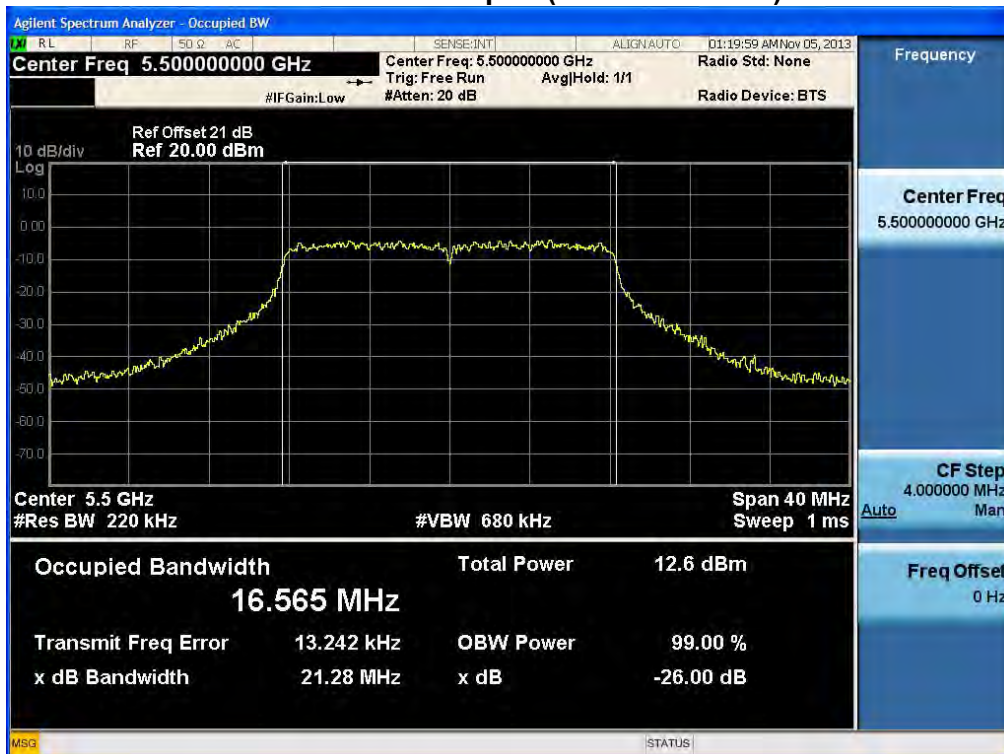
RESULT PLOTS

20 MHz BW

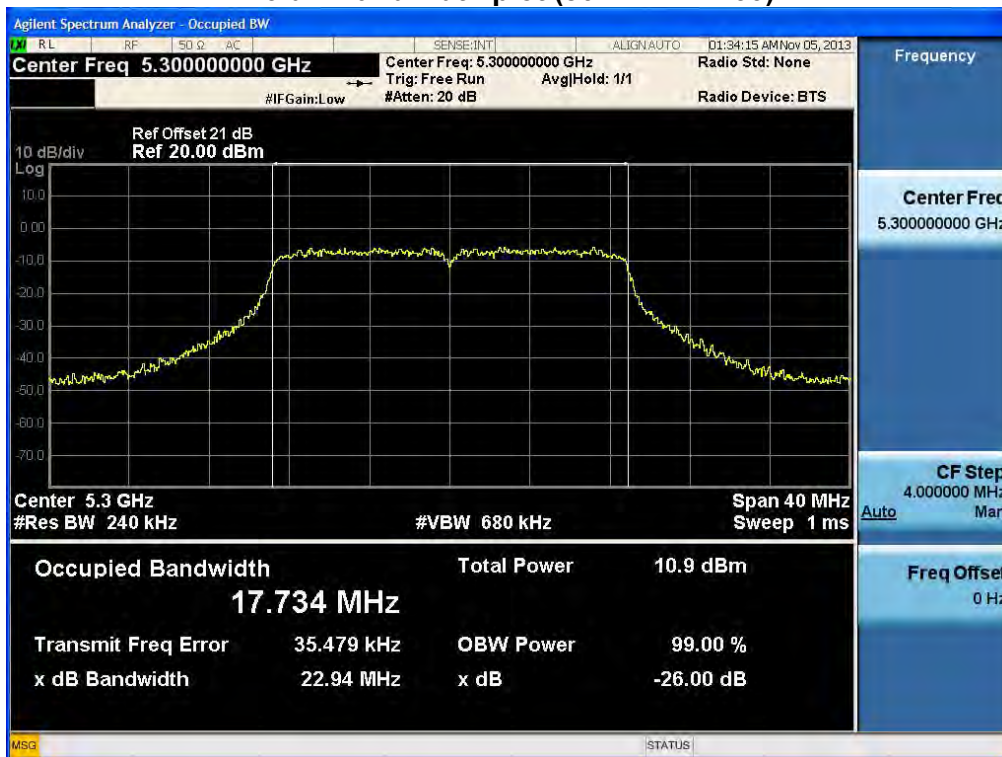
26 dB Bandwidth plot (802.11a-CH 60)



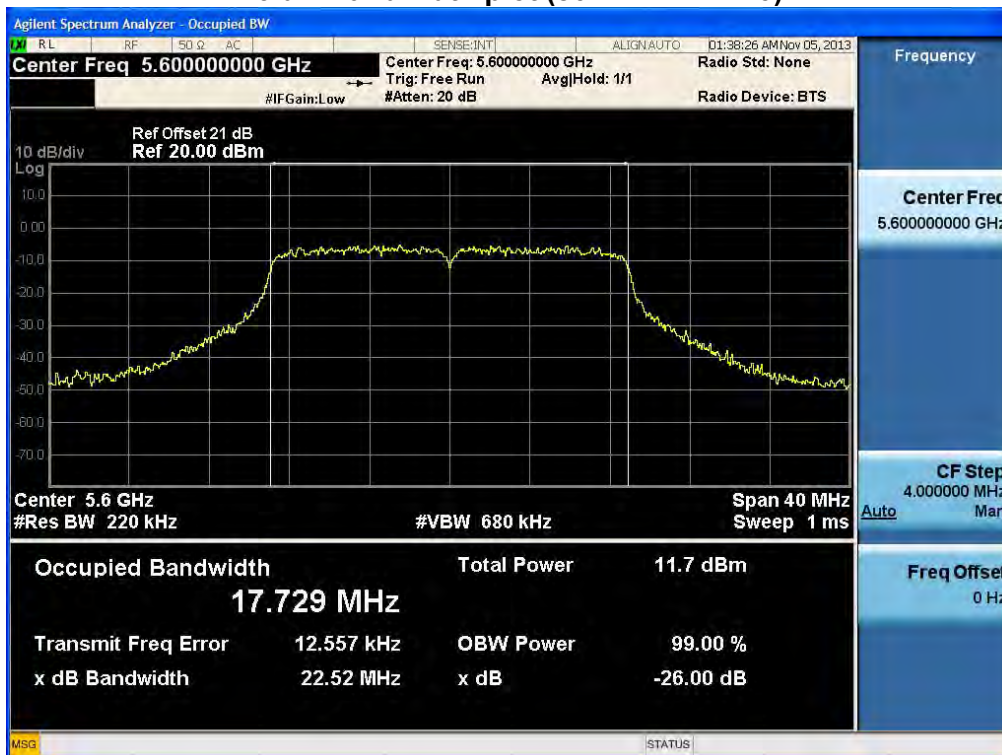
26 dB Bandwidth plot (802.11a-CH 100)



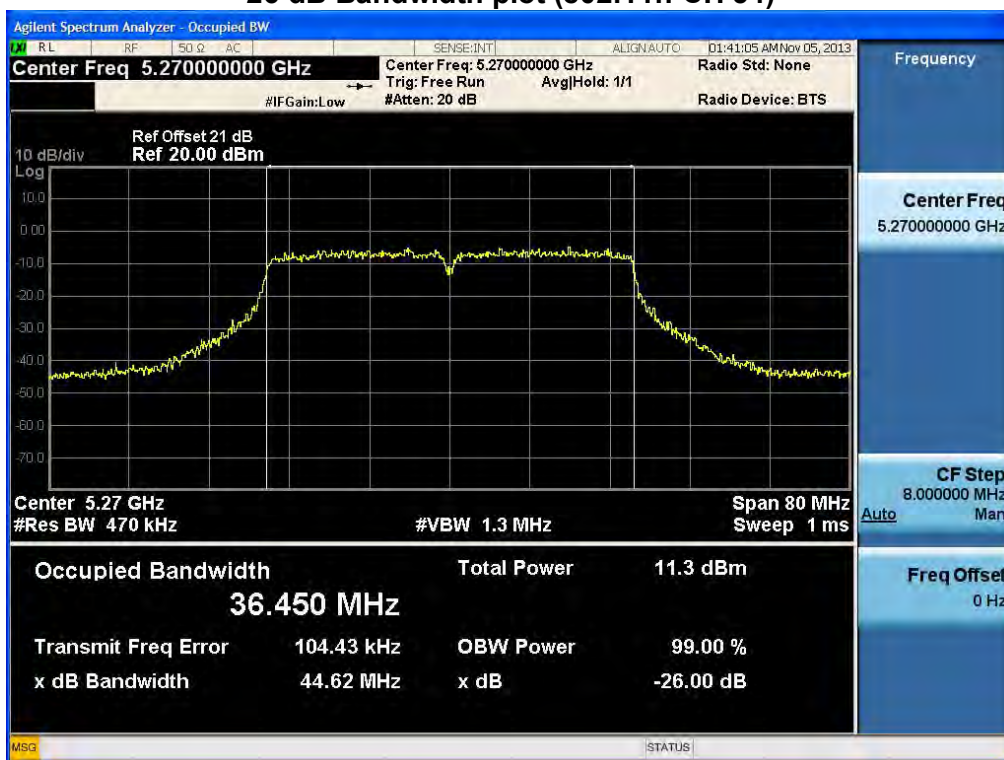
26 dB Bandwidth plot (802.11n-CH 60)



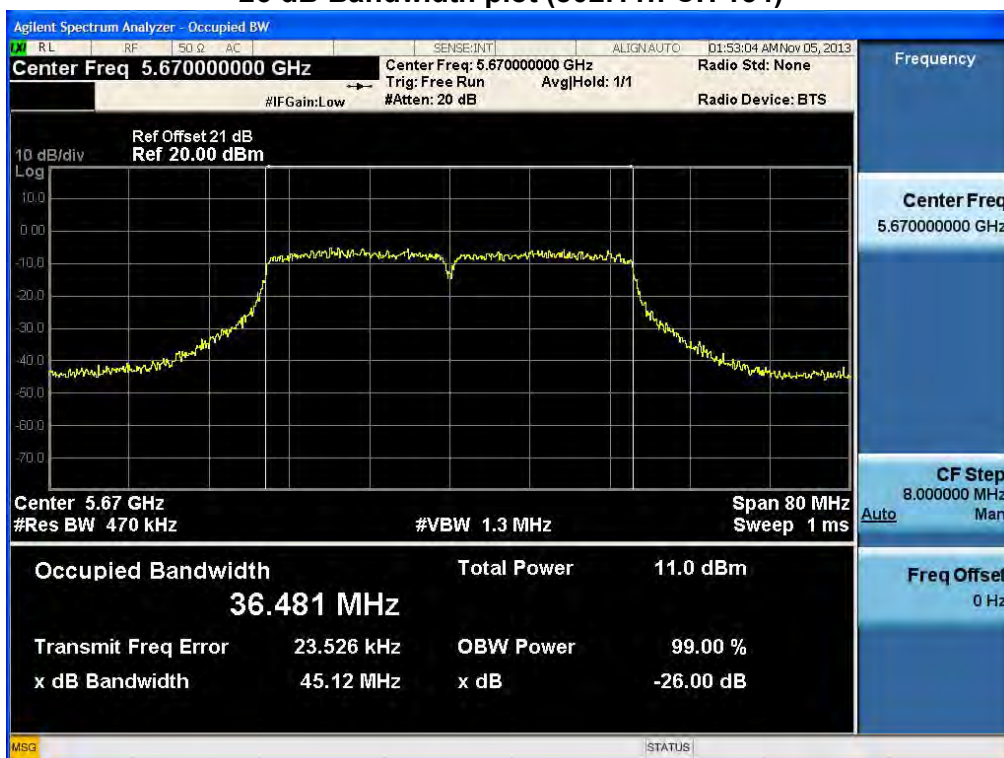
26 dB Bandwidth plot (802.11n-CH 120)



26 dB Bandwidth plot (802.11n-CH 54)



26 dB Bandwidth plot (802.11n-CH 134)

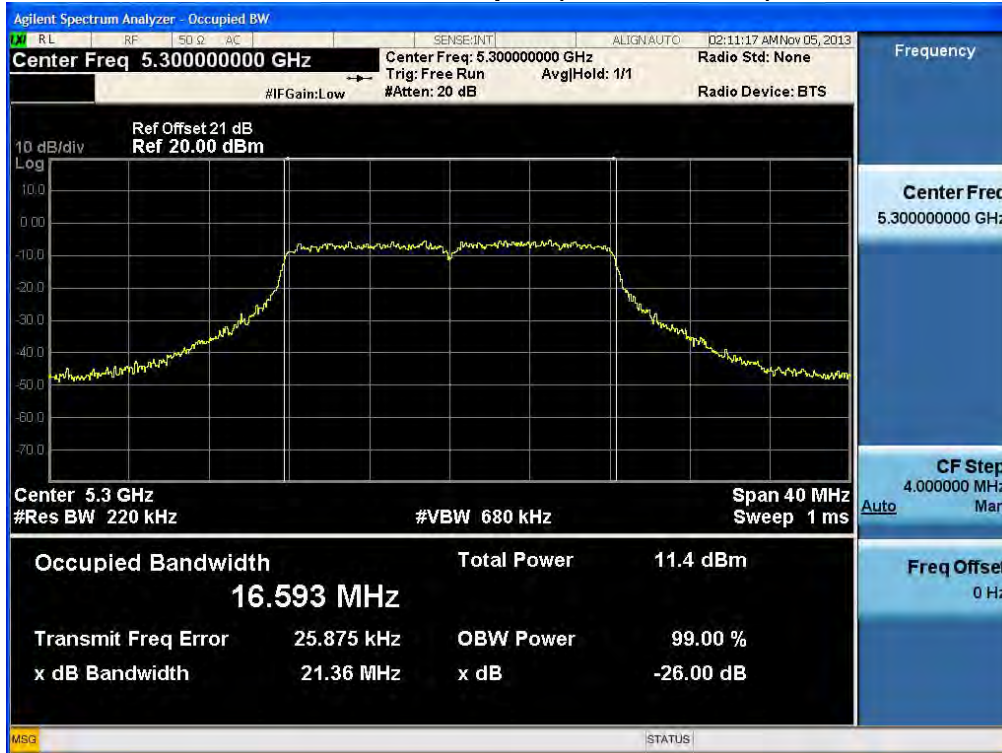


Service Port Ant.3

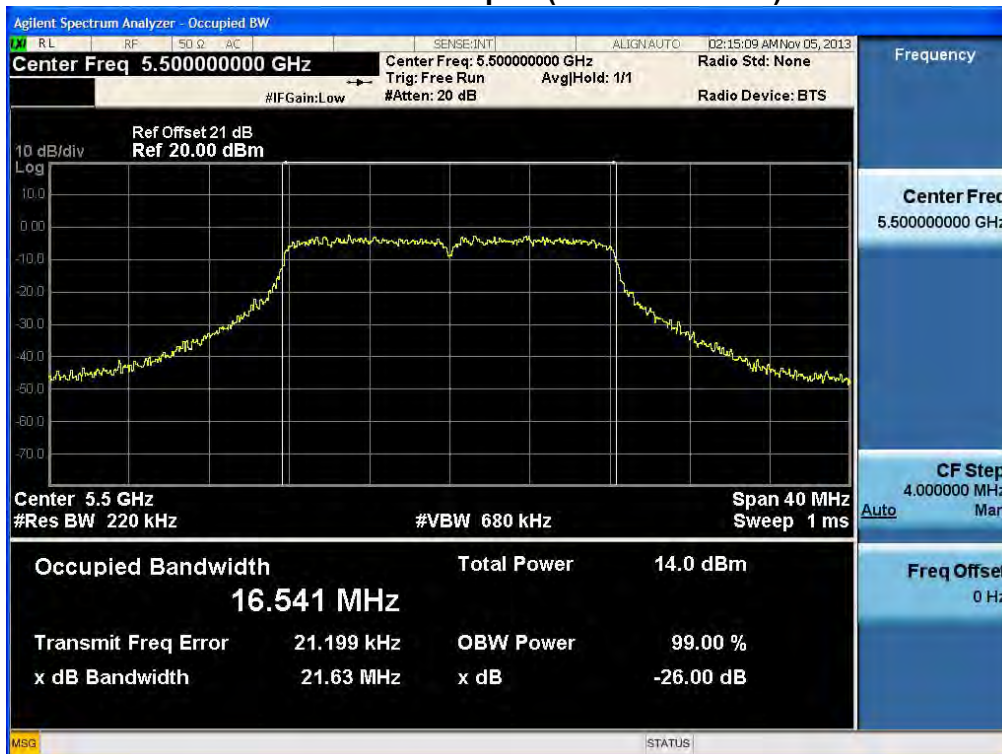
RESULT PLOTS

20 MHz BW

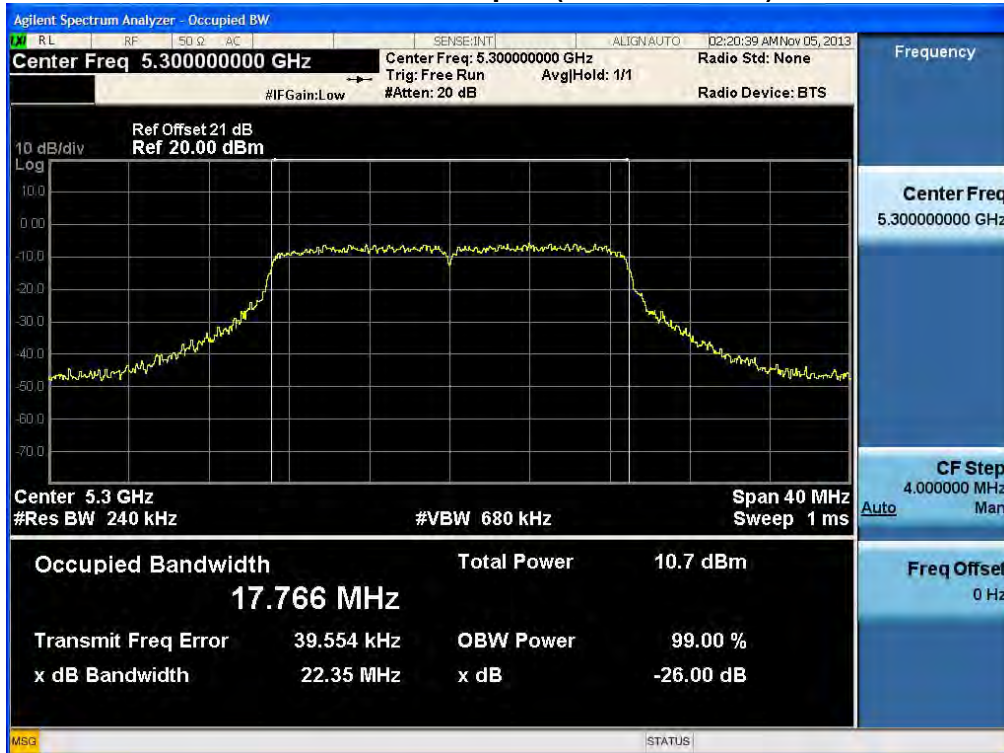
26 dB Bandwidth plot (802.11a-CH 60)



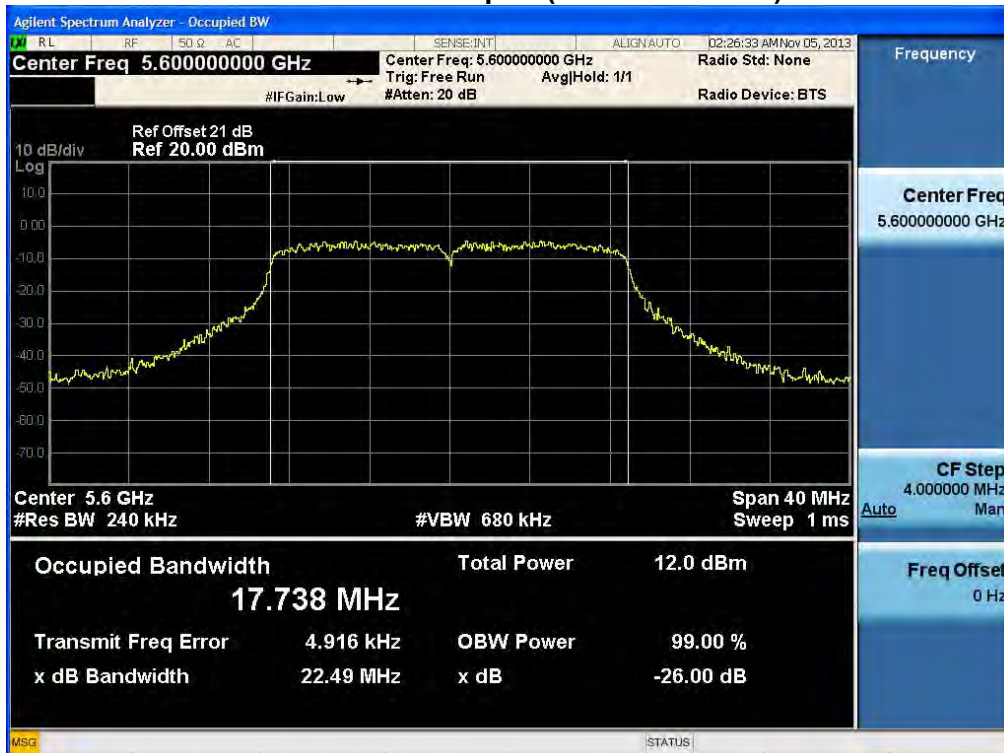
26 dB Bandwidth plot (802.11a-CH 100)



26 dB Bandwidth plot (802.11n-CH 60)



26 dB Bandwidth plot (802.11n-CH 120)



26 dB Bandwidth plot (802.11n-CH 54)



26 dB Bandwidth plot (802.11n-CH 134)



Monitoring Port Ant.1

RESULT PLOTS(20 dB Bandwidth)

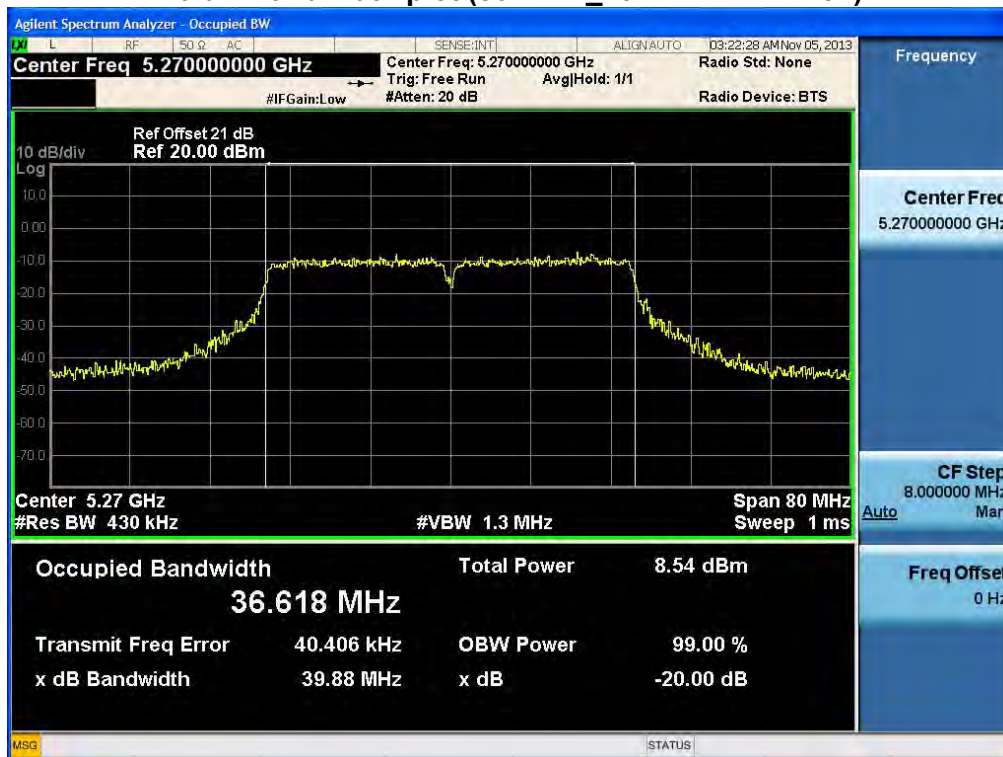
20 dB Bandwidth plot (802.11a-CH 52)



20 dB Bandwidth plot (802.11n-CH 52)



20 dB Bandwidth plot (802.11n_40 MHz BW-CH 54)



FCC PT.15.407 TEST REPORT	FCC CERTIFICATION REPORT		www.hct.co.kr
Test Report No. HCTR1311FR03	Date of Issue: November 06, 2013	EUT Type: WLAN Access Point	FCC ID: A3LWEA303I

Monitoring Port Ant.2

RESULT PLOTS(20 dB Bandwidth)

20 dB Bandwidth plot (802.11a-CH 52)



20 dB Bandwidth plot (802.11n-CH 52)



20 dB Bandwidth plot (802.11n_40 MHz BW-CH 54)



FCC PT.15.407 TEST REPORT	FCC CERTIFICATION REPORT		www.hct.co.kr
Test Report No. HCTR1311FR03	Date of Issue: November 06, 2013	EUT Type: WLAN Access Point	FCC ID: A3LWEA303I

Service Port Ant.1

RESULT PLOTS(20 dB Bandwidth)

20 dB Bandwidth plot (802.11a-CH 52)



20 dB Bandwidth plot (802.11n-CH 52)



20 dB Bandwidth plot (802.11n_40 MHz BW-CH 54)

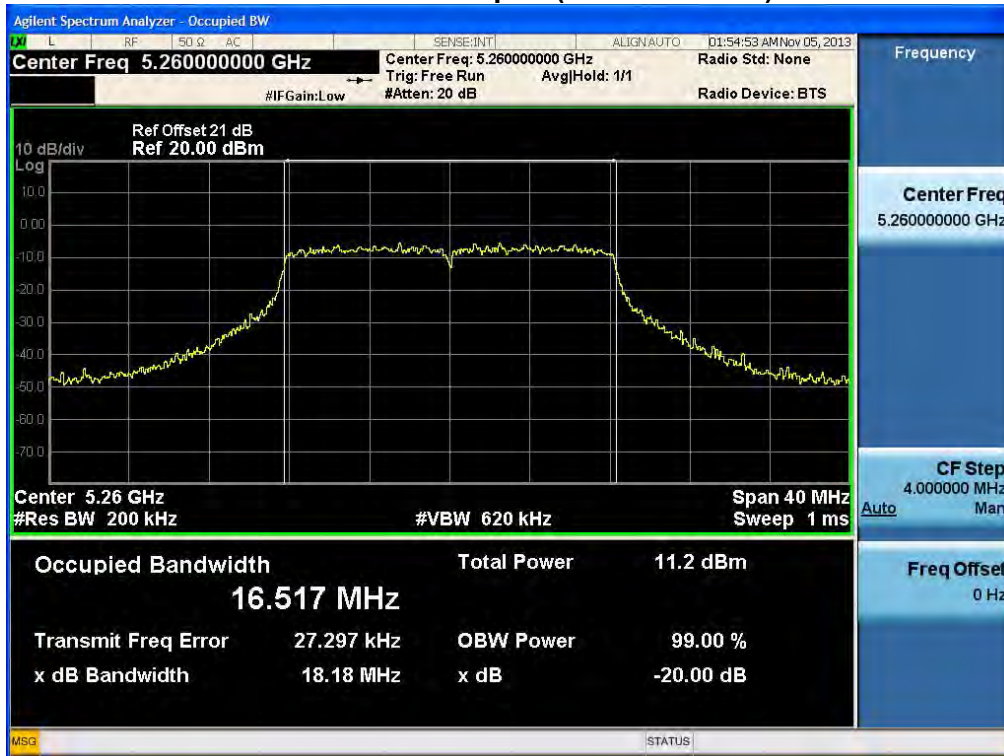


FCC PT.15.407 TEST REPORT	FCC CERTIFICATION REPORT		www.hct.co.kr
Test Report No. HCTR1311FR03	Date of Issue: November 06, 2013	EUT Type: WLAN Access Point	FCC ID: A3LWEA303I

Service Port Ant.2

RESULT PLOTS(20 dB Bandwidth)

20 dB Bandwidth plot (802.11a-CH 52)



20 dB Bandwidth plot (802.11n-CH 52)



20 dB Bandwidth plot (802.11n_40 MHz BW-CH 54)

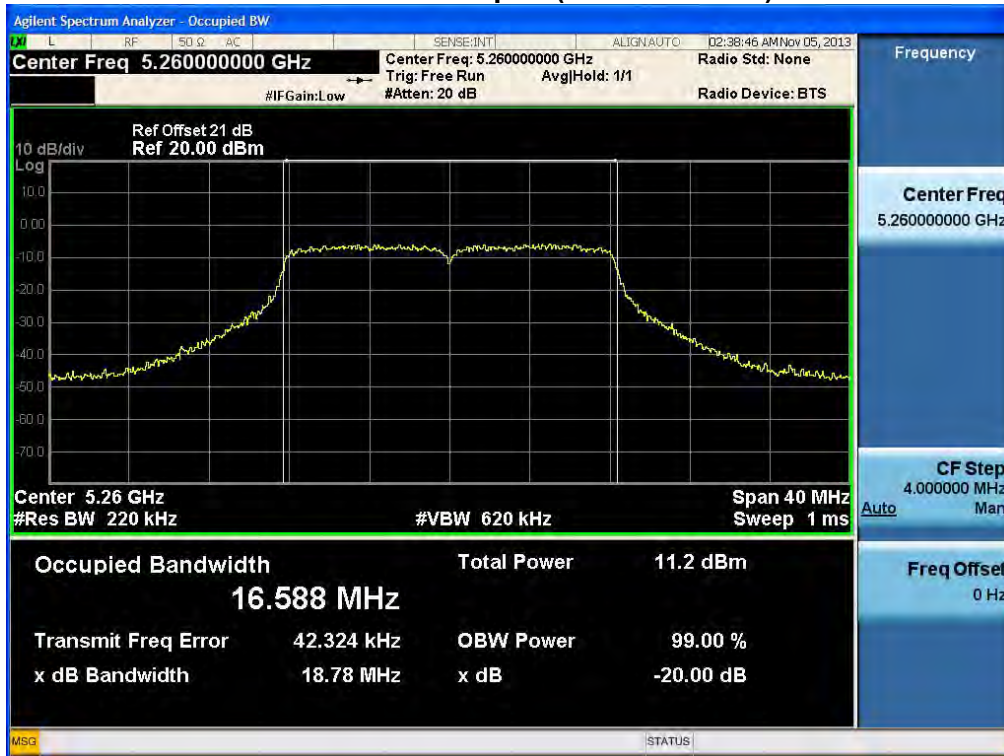


FCC PT.15.407 TEST REPORT	FCC CERTIFICATION REPORT		www.hct.co.kr
Test Report No. HCTR1311FR03	Date of Issue: November 06, 2013	EUT Type: WLAN Access Point	FCC ID: A3LWEA303I

Service Port Ant.3

RESULT PLOTS(20 dB Bandwidth)

20 dB Bandwidth plot (802.11a-CH 52)



20 dB Bandwidth plot (802.11n-CH 52)



20 dB Bandwidth plot (802.11n_40 MHz BW-CH 54)



FCC PT.15.407 TEST REPORT	FCC CERTIFICATION REPORT		www.hct.co.kr
Test Report No. HCTR1311FR03	Date of Issue: November 06, 2013	EUT Type: WLAN Access Point	FCC ID: A3LWEA303I

9.3 OUTPUT POWER MEASUREMENT

Test Requirements and limit, §15.247(b)(3)

The transmitter output is connected to the input of a RF power sensor. Measurement is made using a broadband power meter capable of making peak and average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

In the 5.25 – 5.35 GHz band, the maximum permissible conducted output power is the lesser of 250 mW (23.98 dBm) and $11 \text{ dBm} + 10 \log_{10} (26 \text{ dB BW})$.

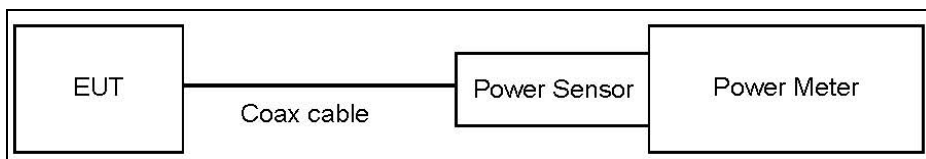
In the 5.47 – 5.725 GHz band, the maximum permissible conducted output power is the lesser of 250 mW (23.98 dBm) and $11 \text{ dBm} + 10 \log_{10} (26 \text{ dB BW})$.

Limit :

Operating Mode	Band	Mode	Ant. Gain	Limit(dBm)
SISO : Service and Monitoring	UNII 2	802.11a	8 dBi	21.98
		802.11n_20 MHz BW		21.98
		802.11n_40 MHz BW		21.98
	UNII 2e	802.11a		21.98
		802.11n_20 MHz BW		21.98
		802.11n_40 MHz BW		21.98
MIMO(2 TX) : Service and Monitoring	UNII 2	802.11a	11.01 dBi	18.97
		802.11n_20 MHz BW	8 dBi	21.98
		802.11n_40 MHz BW	8 dBi	21.98
	UNII 2e	802.11a	11.01 dBi	18.97
		802.11n_20 MHz BW	8 dBi	21.98
		802.11n_40 MHz BW	8 dBi	21.98
MIMO(3 TX) : Service	UNII 2	802.11a	12.77 dBi	17.21
		802.11n_20 MHz BW	8 dBi	21.98
		802.11n_40 MHz BW	8 dBi	21.98
	UNII 2e	802.11a	12.77 dBi	17.21
		802.11n_20 MHz BW	8 dBi	21.98
		802.11n_40 MHz BW	8 dBi	21.98

Note : Above the limits is calculated according to antenna gain. Because antenna gain is higher than 6 dBi.

■ TEST CONFIGURATION



■ TEST PROCEDURE

We tested according to Method E)3)a) in KDB 789033(issued 04/08/2013).

▪ Average Power

1. Measure the duty cycle.
2. Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
3. Add $10 \log (1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times.

Note :

1. We apply to the offset in the UNII 2/2e band that was rounded off to the closest tenth dB. Actual value of loss for the attenuator and cable combination is below table. We used the particular cable type that is supported by manufacture.

Band	Loss(dB)
UNII 2	21.0
UNII 2e	21.0

(Actual value of loss for the attenuator and cable combination)

Monitoring Port

■ TEST RESULTS_Ant.1

Conducted Output Power Measurements (802.11a Mode: 5260~5320)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5260	52	6	4.95	0.106	5.06	21.98
		9	4.85	0.151	5.00	21.98
		12	4.77	0.200	4.97	21.98
		18	4.77	0.282	5.05	21.98
		24	4.56	0.366	4.93	21.98
		36	3.60	0.531	4.13	21.98
		48	3.48	0.667	4.15	21.98
		54	2.51	0.738	3.25	21.98
5300	60	6	4.79	0.106	4.90	21.98
		9	4.70	0.151	4.85	21.98
		12	4.68	0.200	4.88	21.98
		18	4.67	0.282	4.95	21.98
		24	4.55	0.366	4.91	21.98
		36	3.50	0.531	4.03	21.98
		48	3.12	0.667	3.78	21.98
		54	1.98	0.738	2.72	21.98
5320	64	6	5.03	0.106	5.13	21.98
		9	4.92	0.151	5.07	21.98
		12	4.95	0.200	5.15	21.98
		18	4.82	0.282	5.10	21.98
		24	4.83	0.366	5.20	21.98
		36	3.91	0.531	4.44	21.98
		48	3.72	0.667	4.39	21.98
		54	2.65	0.738	3.39	21.98

■ TEST RESULTS_Ant.2
Conducted Output Power Measurements (802.11a Mode: 5260~5320)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5260	52	6	5.14	0.106	5.25	21.98
		9	4.93	0.151	5.08	21.98
		12	4.90	0.200	5.10	21.98
		18	4.79	0.282	5.07	21.98
		24	4.71	0.366	5.08	21.98
		36	3.73	0.531	4.26	21.98
		48	3.67	0.667	4.34	21.98
		54	3.13	0.738	3.87	21.98
5300	60	6	4.67	0.106	4.78	21.98
		9	4.58	0.151	4.73	21.98
		12	4.55	0.200	4.75	21.98
		18	4.53	0.282	4.81	21.98
		24	4.51	0.366	4.87	21.98
		36	3.48	0.531	4.01	21.98
		48	3.40	0.667	4.06	21.98
		54	2.37	0.738	3.11	21.98
5320	64	6	4.94	0.106	5.05	21.98
		9	4.85	0.151	5.00	21.98
		12	4.85	0.200	5.05	21.98
		18	4.82	0.282	5.10	21.98
		24	4.78	0.366	5.15	21.98
		36	3.72	0.531	4.25	21.98
		48	3.60	0.667	4.27	21.98
		54	2.77	0.738	3.51	21.98

■ TEST RESULTS_Sum Data of Ant.1 and Ant.2

Conducted Output Power Measurements (802.11a Mode: 5260~5320)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5260	52	6	8.16	18.97
		9	8.05	18.97
		12	8.05	18.97
		18	8.07	18.97
		24	8.01	18.97
		36	7.20	18.97
		48	7.26	18.97
		54	6.58	18.97
5300	60	6	7.85	18.97
		9	7.80	18.97
		12	7.83	18.97
		18	7.89	18.97
		24	7.90	18.97
		36	7.03	18.97
		48	6.94	18.97
		54	5.93	18.97
5320	64	6	8.10	18.97
		9	8.05	18.97
		12	8.11	18.97
		18	8.11	18.97
		24	8.18	18.97
		36	7.36	18.97
		48	7.34	18.97
		54	6.46	18.97

■ TEST RESULTS_Ant.1
Conducted Output Power Measurements (802.11a Mode: 5500~5700)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5500	100	6	5.66	0.106	5.77	21.98
		9	5.62	0.151	5.77	21.98
		12	5.54	0.200	5.74	21.98
		18	5.52	0.282	5.80	21.98
		24	5.49	0.366	5.85	21.98
		36	4.51	0.531	5.04	21.98
		48	4.45	0.667	5.12	21.98
		54	3.42	0.738	4.16	21.98
5600	120	6	4.30	0.106	4.41	21.98
		9	4.25	0.151	4.40	21.98
		12	4.25	0.200	4.45	21.98
		18	4.15	0.282	4.43	21.98
		24	4.04	0.366	4.41	21.98
		36	3.19	0.531	3.72	21.98
		48	2.95	0.667	3.62	21.98
		54	1.88	0.738	2.62	21.98
5700	140	6	2.60	0.106	2.71	21.98
		9	2.62	0.151	2.77	21.98
		12	2.55	0.200	2.75	21.98
		18	2.50	0.282	2.78	21.98
		24	2.43	0.366	2.80	21.98
		36	1.39	0.531	1.92	21.98
		48	1.26	0.667	1.93	21.98
		54	0.34	0.738	1.08	21.98

■ TEST RESULTS_Ant.2
Conducted Output Power Measurements (802.11a Mode: 5500~5700)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5500	100	6	4.69	0.106	4.79	21.98
		9	4.59	0.151	4.74	21.98
		12	4.52	0.200	4.72	21.98
		18	4.49	0.282	4.77	21.98
		24	4.37	0.366	4.74	21.98
		36	3.41	0.531	3.94	21.98
		48	3.31	0.667	3.98	21.98
		54	2.62	0.738	3.36	21.98
5600	120	6	4.54	0.106	4.64	21.98
		9	4.47	0.151	4.62	21.98
		12	4.45	0.200	4.65	21.98
		18	4.48	0.282	4.76	21.98
		24	4.34	0.366	4.71	21.98
		36	3.17	0.531	3.70	21.98
		48	3.06	0.667	3.73	21.98
		54	1.89	0.738	2.63	21.98
5700	140	6	4.61	0.106	4.71	21.98
		9	4.60	0.151	4.75	21.98
		12	4.57	0.200	4.77	21.98
		18	4.53	0.282	4.81	21.98
		24	4.49	0.366	4.85	21.98
		36	3.53	0.531	4.06	21.98
		48	3.34	0.667	4.01	21.98
		54	2.38	0.738	3.11	21.98

■ TEST RESULTS_Sum Data of Ant.1 and Ant.2

Conducted Output Power Measurements (802.11a Mode: 5500~5700)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5500	100	6	8.32	18.97
		9	8.30	18.97
		12	8.27	18.97
		18	8.32	18.97
		24	8.34	18.97
		36	7.53	18.97
		48	7.60	18.97
		54	6.79	18.97
5600	120	6	7.54	18.97
		9	7.52	18.97
		12	7.56	18.97
		18	7.61	18.97
		24	7.57	18.97
		36	6.72	18.97
		48	6.68	18.97
		54	5.63	18.97
5700	140	6	6.83	18.97
		9	6.88	18.97
		12	6.89	18.97
		18	6.92	18.97
		24	6.96	18.97
		36	6.13	18.97
		48	6.10	18.97
		54	5.22	18.97

■ TEST RESULTS_Ant.1
Conducted Output Power Measurements (802.11n_20 MHz BW Mode: 5260~5320)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5260	52	6.5	4.65	0.102	4.75	21.98
		13	4.62	0.203	4.83	21.98
		19.5	4.55	0.295	4.84	21.98
		26	4.53	0.384	4.92	21.98
		39	4.35	0.530	4.88	21.98
		52	3.04	0.676	3.72	21.98
		58.5	2.05	0.753	2.80	21.98
		65	2.04	0.779	2.82	21.98
5300	60	6.5	4.47	0.102	4.57	21.98
		13	4.40	0.203	4.60	21.98
		19.5	4.36	0.295	4.66	21.98
		26	4.33	0.384	4.72	21.98
		39	4.26	0.530	4.78	21.98
		52	3.13	0.676	3.81	21.98
		58.5	2.21	0.753	2.97	21.98
		65	2.15	0.779	2.93	21.98
5320	64	6.5	5.15	0.102	5.25	21.98
		13	5.07	0.203	5.27	21.98
		19.5	4.97	0.295	5.26	21.98
		26	4.92	0.384	5.30	21.98
		39	4.58	0.530	5.11	21.98
		52	3.56	0.676	4.24	21.98
		58.5	2.60	0.753	3.35	21.98
		65	2.55	0.779	3.33	21.98

■ TEST RESULTS_Ant.2
Conducted Output Power Measurements (802.11n_20 MHz BW Mode: 5260~5320)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5260	52	6.5	4.95	0.102	5.05	21.98
		13	4.87	0.203	5.07	21.98
		19.5	4.84	0.295	5.14	21.98
		26	4.73	0.384	5.11	21.98
		39	4.71	0.530	5.24	21.98
		52	3.65	0.676	4.32	21.98
		58.5	2.92	0.753	3.68	21.98
		65	2.92	0.779	3.70	21.98
5300	60	6.5	4.70	0.102	4.80	21.98
		13	4.64	0.203	4.84	21.98
		19.5	4.58	0.295	4.88	21.98
		26	4.51	0.384	4.89	21.98
		39	4.44	0.530	4.97	21.98
		52	3.20	0.676	3.87	21.98
		58.5	2.30	0.753	3.05	21.98
		65	2.17	0.779	2.95	21.98
5320	64	6.5	4.83	0.102	4.94	21.98
		13	4.62	0.203	4.82	21.98
		19.5	4.53	0.295	4.82	21.98
		26	4.55	0.384	4.93	21.98
		39	4.45	0.530	4.98	21.98
		52	3.43	0.676	4.10	21.98
		58.5	2.52	0.753	3.27	21.98
		65	2.42	0.779	3.20	21.98

■ TEST RESULTS_Sum Data of Ant.1 and Ant.2

Conducted Output Power Measurements (802.11n _20 MHz BW Mode: 5260~5320)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5260	52	6.5	7.91	21.98
		13	7.96	21.98
		19.5	8.00	21.98
		26	8.03	21.98
		39	8.07	21.98
		52	7.04	21.98
		58.5	6.27	21.98
		65	6.29	21.98
5300	60	6.5	7.70	21.98
		13	7.73	21.98
		19.5	7.78	21.98
		26	7.82	21.98
		39	7.89	21.98
		52	6.85	21.98
		58.5	6.02	21.98
		65	5.95	21.98
5320	64	6.5	8.11	21.98
		13	8.06	21.98
		19.5	8.06	21.98
		26	8.13	21.98
		39	8.06	21.98
		52	7.18	21.98
		58.5	6.32	21.98
		65	6.28	21.98

■ TEST RESULTS_Ant.1
Conducted Output Power Measurements (802.11n_20 MHz BW Mode: 5500~5700)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5500	100	6.5	5.33	0.102	5.43	21.98
		13	5.22	0.203	5.42	21.98
		19.5	5.23	0.295	5.53	21.98
		26	5.20	0.384	5.58	21.98
		39	5.13	0.530	5.66	21.98
		52	4.06	0.676	4.73	21.98
		58.5	3.00	0.753	3.75	21.98
		65	2.99	0.779	3.77	21.98
5600	120	6.5	4.20	0.102	4.31	21.98
		13	4.13	0.203	4.34	21.98
		19.5	4.06	0.295	4.35	21.98
		26	4.05	0.384	4.43	21.98
		39	3.92	0.530	4.45	21.98
		52	2.89	0.676	3.57	21.98
		58.5	1.76	0.753	2.51	21.98
		65	1.61	0.779	2.39	21.98
5700	140	6.5	2.57	0.102	2.67	21.98
		13	2.44	0.203	2.64	21.98
		19.5	2.38	0.295	2.68	21.98
		26	2.34	0.384	2.72	21.98
		39	2.18	0.530	2.71	21.98
		52	1.27	0.676	1.94	21.98
		58.5	0.32	0.753	1.07	21.98
		65	0.24	0.779	1.02	21.98

■ TEST RESULTS_Ant.2

Conducted Output Power Measurements (802.11n_20 MHz BW Mode: 5500~5700)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5500	100	6.5	4.53	0.102	4.63	21.98
		13	4.41	0.203	4.62	21.98
		19.5	4.30	0.295	4.59	21.98
		26	4.15	0.384	4.54	21.98
		39	4.03	0.530	4.56	21.98
		52	3.12	0.676	3.79	21.98
		58.5	2.32	0.753	3.08	21.98
		65	2.37	0.779	3.15	21.98
5600	120	6.5	4.44	0.102	4.54	21.98
		13	4.36	0.203	4.57	21.98
		19.5	4.29	0.295	4.58	21.98
		26	4.24	0.384	4.62	21.98
		39	4.26	0.530	4.79	21.98
		52	3.10	0.676	3.78	21.98
		58.5	2.55	0.753	3.30	21.98
		65	1.99	0.779	2.77	21.98
5700	140	6.5	4.54	0.102	4.64	21.98
		13	4.46	0.203	4.67	21.98
		19.5	4.44	0.295	4.74	21.98
		26	4.44	0.384	4.82	21.98
		39	4.32	0.530	4.85	21.98
		52	3.39	0.676	4.07	21.98
		58.5	2.34	0.753	3.09	21.98
		65	2.23	0.779	3.01	21.98

■ TEST RESULTS_Sum Data of Ant.1 and Ant.2

Conducted Output Power Measurements (802.11n _20 MHz BW Mode: 5500~5700)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5500	100	6.5	8.06	21.98
		13	8.05	21.98
		19.5	8.09	21.98
		26	8.10	21.98
		39	8.16	21.98
		52	7.30	21.98
		58.5	6.44	21.98
		65	6.48	21.98
5600	120	6.5	7.43	21.98
		13	7.46	21.98
		19.5	7.48	21.98
		26	7.54	21.98
		39	7.63	21.98
		52	6.68	21.98
		58.5	5.94	21.98
		65	5.59	21.98
5700	140	6.5	6.78	21.98
		13	6.78	21.98
		19.5	6.84	21.98
		26	6.91	21.98
		39	6.92	21.98
		52	6.14	21.98
		58.5	5.21	21.98
		65	5.14	21.98

■ TEST RESULTS_Ant.1
Conducted Output Power Measurements (802.11n_40 MHz BW Mode:5270~5310)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5270	54	13.5	2.77	0.157	2.92	21.98
		27	2.63	0.296	2.93	21.98
		40.5	2.52	0.408	2.93	21.98
		54	2.50	0.504	3.01	21.98
		81	2.37	0.706	3.08	21.98
		108	2.28	0.880	3.16	21.98
		121.5	1.31	0.918	2.23	21.98
		135	0.13	0.969	1.10	21.98
5310	62	13.5	2.85	0.157	3.01	21.98
		27	2.75	0.296	3.04	21.98
		40.5	2.71	0.408	3.12	21.98
		54	2.63	0.504	3.14	21.98
		81	2.57	0.706	3.27	21.98
		108	2.50	0.880	3.38	21.98
		121.5	1.21	0.918	2.13	21.98
		135	0.02	0.969	0.98	21.98

■ TEST RESULTS_Ant.2
Conducted Output Power Measurements (802.11n_40 MHz BW Mode:5270~5310)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5270	54	13.5	3.46	0.157	3.62	21.98
		27	3.35	0.296	3.65	21.98
		40.5	3.26	0.408	3.67	21.98
		54	3.20	0.504	3.70	21.98
		81	3.12	0.706	3.83	21.98
		108	3.00	0.880	3.88	21.98
		121.5	2.00	0.918	2.92	21.98
		135	1.31	0.969	2.28	21.98
5310	62	13.5	3.09	0.157	3.24	21.98
		27	3.00	0.296	3.30	21.98
		40.5	2.91	0.408	3.32	21.98
		54	2.93	0.504	3.44	21.98
		81	2.78	0.706	3.48	21.98
		108	2.53	0.880	3.41	21.98
		121.5	1.41	0.918	2.33	21.98
		135	0.58	0.969	1.55	21.98

■ TEST RESULTS_Sum Data of Ant.1 and Ant.2

Conducted Output Power Measurements (802.11n_40 MHz BW Mode:5270~5310)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5270	54	13.5	6.30	21.98
		27	6.31	21.98
		40.5	6.32	21.98
		54	6.38	21.98
		81	6.48	21.98
		108	6.55	21.98
		121.5	5.60	21.98
		135	4.74	21.98
5310	62	13.5	6.14	21.98
		27	6.19	21.98
		40.5	6.23	21.98
		54	6.30	21.98
		81	6.39	21.98
		108	6.40	21.98
		121.5	5.24	21.98
		135	4.29	21.98

■ TEST RESULTS_Ant.1
Conducted Output Power Measurements (802.11n_40 MHz BW Mode:5510~5670)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5510	102	13.5	3.31	0.157	3.47	21.98
		27	3.21	0.296	3.50	21.98
		40.5	3.16	0.408	3.57	21.98
		54	3.06	0.504	3.56	21.98
		81	2.93	0.706	3.63	21.98
		108	2.68	0.880	3.56	21.98
		121.5	1.61	0.918	2.52	21.98
		135	0.52	0.969	1.48	21.98
5590	118	13.5	2.00	0.157	2.15	21.98
		27	1.84	0.296	2.14	21.98
		40.5	1.76	0.408	2.16	21.98
		54	1.73	0.504	2.23	21.98
		81	1.62	0.706	2.33	21.98
		108	1.48	0.880	2.36	21.98
		121.5	0.64	0.918	1.55	21.98
		135	-0.42	0.969	0.55	21.98
5670	134	13.5	0.87	0.157	1.03	21.98
		27	0.75	0.296	1.04	21.98
		40.5	0.69	0.408	1.10	21.98
		54	0.61	0.504	1.11	21.98
		81	0.55	0.706	1.25	21.98
		108	0.48	0.880	1.36	21.98
		121.5	-0.55	0.918	0.37	21.98
		135	-1.46	0.969	-0.49	21.98

■ TEST RESULTS_Ant.2
Conducted Output Power Measurements (802.11n_40 MHz BW Mode:5510~5670)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5510	102	13.5	2.23	0.157	2.39	21.98
		27	2.17	0.296	2.47	21.98
		40.5	2.07	0.408	2.48	21.98
		54	2.04	0.504	2.54	21.98
		81	1.88	0.706	2.58	21.98
		108	1.88	0.880	2.76	21.98
		121.5	0.82	0.918	1.74	21.98
		135	0.35	0.969	1.32	21.98
5590	118	13.5	2.47	0.157	2.63	21.98
		27	2.39	0.296	2.68	21.98
		40.5	2.24	0.408	2.65	21.98
		54	2.23	0.504	2.74	21.98
		81	1.91	0.706	2.61	21.98
		108	1.62	0.880	2.50	21.98
		121.5	0.73	0.918	1.65	21.98
		135	-0.50	0.969	0.47	21.98
5670	134	13.5	2.65	0.157	2.80	21.98
		27	2.57	0.296	2.87	21.98
		40.5	2.34	0.408	2.74	21.98
		54	2.20	0.504	2.70	21.98
		81	1.83	0.706	2.54	21.98
		108	1.76	0.880	2.64	21.98
		121.5	1.06	0.918	1.97	21.98
		135	-0.14	0.969	0.83	21.98

■ TEST RESULTS_Sum Data of Ant.1 and Ant.2

Conducted Output Power Measurements (802.11n_40 MHz BW Mode:5510~5670)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5510	102	13.5	5.97	21.98
		27	6.03	21.98
		40.5	6.07	21.98
		54	6.09	21.98
		81	6.15	21.98
		108	6.19	21.98
		121.5	5.16	21.98
		135	4.41	21.98
5590	118	13.5	5.41	21.98
		27	5.43	21.98
		40.5	5.42	21.98
		54	5.50	21.98
		81	5.48	21.98
		108	5.44	21.98
		121.5	4.61	21.98
		135	3.52	21.98
5670	134	13.5	5.02	21.98
		27	5.06	21.98
		40.5	5.01	21.98
		54	4.99	21.98
		81	4.95	21.98
		108	5.06	21.98
		121.5	4.26	21.98
		135	3.23	21.98

Service Port

■ TEST RESULTS_Ant.1

Conducted Output Power Measurements (802.11a Mode: 5260~5320)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5260	52	6	2.74	0.222	2.96	21.98
		9	2.73	0.223	2.95	21.98
		12	2.66	0.274	2.93	21.98
		18	2.56	0.409	2.97	21.98
		24	2.42	0.531	2.95	21.98
		36	2.27	0.738	3.01	21.98
		48	2.11	0.936	3.05	21.98
		54	2.08	1.015	3.10	21.98
5300	60	6	2.74	0.222	2.96	21.98
		9	2.71	0.223	2.94	21.98
		12	2.60	0.274	2.87	21.98
		18	2.53	0.409	2.93	21.98
		24	2.48	0.531	3.01	21.98
		36	2.22	0.738	2.96	21.98
		48	2.05	0.936	2.99	21.98
		54	2.04	1.015	3.05	21.98
5320	64	6	3.19	0.222	3.42	21.98
		9	3.13	0.223	3.35	21.98
		12	3.11	0.274	3.39	21.98
		18	3.06	0.409	3.47	21.98
		24	2.85	0.531	3.38	21.98
		36	2.61	0.738	3.35	21.98
		48	2.40	0.936	3.34	21.98
		54	2.40	1.015	3.42	21.98

■ TEST RESULTS_Ant.2
Conducted Output Power Measurements (802.11a Mode: 5260~5320)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5260	52	6	4.94	0.222	5.16	21.98
		9	4.97	0.223	5.20	21.98
		12	4.84	0.274	5.11	21.98
		18	4.72	0.409	5.13	21.98
		24	4.65	0.531	5.18	21.98
		36	4.41	0.738	5.14	21.98
		48	4.24	0.936	5.17	21.98
		54	4.14	1.015	5.16	21.98
5300	60	6	5.36	0.222	5.58	21.98
		9	5.30	0.223	5.52	21.98
		12	5.32	0.274	5.59	21.98
		18	5.18	0.409	5.59	21.98
		24	5.08	0.531	5.61	21.98
		36	4.86	0.738	5.60	21.98
		48	4.66	0.936	5.60	21.98
		54	4.63	1.015	5.65	21.98
5320	64	6	6.15	0.222	6.37	21.98
		9	5.99	0.223	6.22	21.98
		12	6.08	0.274	6.35	21.98
		18	5.80	0.409	6.21	21.98
		24	5.75	0.531	6.28	21.98
		36	5.41	0.738	6.14	21.98
		48	5.11	0.936	6.04	21.98
		54	5.27	1.015	6.29	21.98

■ TEST RESULTS_Ant.3
Conducted Output Power Measurements (802.11a Mode: 5260~5320)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5260	52	6	4.80	0.222	5.02	21.98
		9	4.72	0.223	4.94	21.98
		12	4.62	0.274	4.89	21.98
		18	4.55	0.409	4.96	21.98
		24	4.45	0.531	4.98	21.98
		36	4.20	0.738	4.94	21.98
		48	3.98	0.936	4.92	21.98
		54	3.93	1.015	4.95	21.98
5300	60	6	5.28	0.222	5.51	21.98
		9	5.22	0.223	5.44	21.98
		12	5.21	0.274	5.48	21.98
		18	5.09	0.409	5.49	21.98
		24	4.99	0.531	5.52	21.98
		36	4.76	0.738	5.50	21.98
		48	4.59	0.936	5.52	21.98
		54	4.51	1.015	5.53	21.98
5320	64	6	6.22	0.222	6.44	21.98
		9	6.21	0.223	6.44	21.98
		12	6.20	0.274	6.47	21.98
		18	6.06	0.409	6.47	21.98
		24	6.00	0.531	6.54	21.98
		36	5.80	0.738	6.53	21.98
		48	5.62	0.936	6.56	21.98
		54	5.56	1.015	6.57	21.98

■ TEST RESULTS_Sum Data of Ant.1 and Ant.2

Conducted Output Power Measurements (802.11a Mode: 5260~5320)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5260	52	6	7.21	18.97
		9	7.23	18.97
		12	7.17	18.97
		18	7.19	18.97
		24	7.21	18.97
		36	7.22	18.97
		48	7.25	18.97
		54	7.26	18.97
5300	60	6	7.47	18.97
		9	7.43	18.97
		12	7.45	18.97
		18	7.47	18.97
		24	7.51	18.97
		36	7.49	18.97
		48	7.50	18.97
		54	7.55	18.97
5320	64	6	8.15	18.97
		9	8.03	18.97
		12	8.13	18.97
		18	8.06	18.97
		24	8.08	18.97
		36	7.98	18.97
		48	7.91	18.97
		54	8.10	18.97

■ TEST RESULTS_Sum Data of Ant.1, Ant.2 and Ant.3

Conducted Output Power Measurements (802.11a Mode: 5260~5320)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5260	52	6	9.26	17.21
		9	9.24	17.21
		12	9.19	17.21
		18	9.23	17.21
		24	9.25	17.21
		36	9.23	17.21
		48	9.25	17.21
		54	9.26	17.21
5300	60	6	9.61	17.21
		9	9.56	17.21
		12	9.59	17.21
		18	9.60	17.21
		24	9.64	17.21
		36	9.61	17.21
		48	9.63	17.21
		54	9.66	17.21
5320	64	6	10.39	17.21
		9	10.31	17.21
		12	10.39	17.21
		18	10.35	17.21
		24	10.38	17.21
		36	10.33	17.21
		48	10.30	17.21
		54	10.41	17.21

■ TEST RESULTS_Ant.1
Conducted Output Power Measurements (802.11a Mode: 5500~5700)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5500	100	6	5.74	0.222	5.96	21.98
		9	5.64	0.223	5.87	21.98
		12	5.57	0.274	5.84	21.98
		18	5.51	0.409	5.92	21.98
		24	5.38	0.531	5.91	21.98
		36	5.23	0.738	5.97	21.98
		48	5.05	0.936	5.99	21.98
		54	4.98	1.015	5.99	21.98
5600	120	6	4.03	0.222	4.26	21.98
		9	3.91	0.223	4.14	21.98
		12	3.84	0.274	4.12	21.98
		18	3.67	0.409	4.07	21.98
		24	3.55	0.531	4.08	21.98
		36	3.33	0.738	4.07	21.98
		48	3.13	0.936	4.07	21.98
		54	2.94	1.015	3.95	21.98
5700	140	6	3.04	0.222	3.26	21.98
		9	2.93	0.223	3.15	21.98
		12	2.86	0.274	3.13	21.98
		18	2.78	0.409	3.18	21.98
		24	2.69	0.531	3.22	21.98
		36	2.50	0.738	3.24	21.98
		48	2.38	0.936	3.32	21.98
		54	2.28	1.015	3.30	21.98

■ TEST RESULTS_Ant.2
Conducted Output Power Measurements (802.11a Mode: 5500~5700)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5500	100	6	7.38	0.222	7.60	21.98
		9	7.24	0.223	7.47	21.98
		12	7.24	0.274	7.52	21.98
		18	7.05	0.409	7.46	21.98
		24	6.95	0.531	7.48	21.98
		36	6.74	0.738	7.48	21.98
		48	6.61	0.936	7.55	21.98
		54	6.57	1.015	7.59	21.98
5600	120	6	6.08	0.222	6.31	21.98
		9	6.01	0.223	6.23	21.98
		12	5.98	0.274	6.25	21.98
		18	5.88	0.409	6.29	21.98
		24	5.81	0.531	6.34	21.98
		36	5.57	0.738	6.31	21.98
		48	5.39	0.936	6.33	21.98
		54	5.25	1.015	6.27	21.98
5700	140	6	4.47	0.222	4.70	21.98
		9	4.45	0.223	4.68	21.98
		12	4.38	0.274	4.66	21.98
		18	4.30	0.409	4.70	21.98
		24	4.21	0.531	4.74	21.98
		36	4.08	0.738	4.82	21.98
		48	3.82	0.936	4.76	21.98
		54	3.82	1.015	4.83	21.98

■ TEST RESULTS_Ant.3
Conducted Output Power Measurements (802.11a Mode: 5500~5700)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5500	100	6	8.05	0.222	8.28	21.98
		9	8.01	0.223	8.23	21.98
		12	7.86	0.274	8.13	21.98
		18	7.61	0.409	8.02	21.98
		24	7.62	0.531	8.15	21.98
		36	7.31	0.738	8.05	21.98
		48	7.15	0.936	8.09	21.98
		54	7.04	1.015	8.05	21.98
5600	120	6	6.14	0.222	6.36	21.98
		9	6.03	0.223	6.25	21.98
		12	6.01	0.274	6.29	21.98
		18	5.89	0.409	6.30	21.98
		24	5.82	0.531	6.35	21.98
		36	5.64	0.738	6.38	21.98
		48	5.52	0.936	6.46	21.98
		54	5.45	1.015	6.47	21.98
5700	140	6	7.65	0.222	7.88	21.98
		9	7.65	0.223	7.87	21.98
		12	7.57	0.274	7.84	21.98
		18	7.40	0.409	7.81	21.98
		24	7.19	0.531	7.72	21.98
		36	6.90	0.738	7.64	21.98
		48	6.70	0.936	7.64	21.98
		54	6.61	1.015	7.63	21.98

■ TEST RESULTS_Sum Data of Ant.1 and Ant.2

Conducted Output Power Measurements (802.11a Mode: 5500~5700)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5500	100	6	9.87	18.97
		9	9.75	18.97
		12	9.77	18.97
		18	9.77	18.97
		24	9.78	18.97
		36	9.80	18.97
		48	9.85	18.97
		54	9.87	18.97
5600	120	6	8.41	18.97
		9	8.32	18.97
		12	8.32	18.97
		18	8.33	18.97
		24	8.36	18.97
		36	8.34	18.97
		48	8.35	18.97
		54	8.27	18.97
5700	140	6	7.05	18.97
		9	6.99	18.97
		12	6.97	18.97
		18	7.02	18.97
		24	7.05	18.97
		36	7.11	18.97
		48	7.11	18.97
		54	7.14	18.97

■ TEST RESULTS_Sum Data of Ant.1, Ant.2 and Ant.3

Conducted Output Power Measurements (802.11a Mode: 5500~5700)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5500	100	6	12.16	17.21
		9	12.07	17.21
		12	12.04	17.21
		18	11.99	17.21
		24	12.05	17.21
		36	12.02	17.21
		48	12.07	17.21
		54	12.07	17.21
5600	120	6	10.51	17.21
		9	10.42	17.21
		12	10.43	17.21
		18	10.44	17.21
		24	10.48	17.21
		36	10.48	17.21
		48	10.52	17.21
		54	10.47	17.21
5700	140	6	10.49	17.21
		9	10.46	17.21
		12	10.44	17.21
		18	10.44	17.21
		24	10.41	17.21
		36	10.39	17.21
		48	10.39	17.21
		54	10.40	17.21

TEST RESULTS_Ant.1

Conducted Output Power Measurements (802.11n_20 MHz BW Mode: 5260~5320)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5260	52	6.5	1.76	0.161	1.92	21.98
		13	1.65	0.295	1.95	21.98
		19.5	1.53	0.426	1.95	21.98
		26	1.43	0.528	1.96	21.98
		39	1.23	0.735	1.96	21.98
		52	1.04	0.896	1.94	21.98
		58.5	0.99	0.969	1.95	21.98
		65	0.93	1.082	2.01	21.98
5300	60	6.5	2.43	0.161	2.59	21.98
		13	2.26	0.295	2.56	21.98
		19.5	2.21	0.426	2.63	21.98
		26	2.10	0.528	2.63	21.98
		39	1.83	0.735	2.56	21.98
		52	1.67	0.896	2.56	21.98
		58.5	1.58	0.969	2.55	21.98
		65	1.56	1.082	2.65	21.98
5320	64	6.5	2.96	0.161	3.12	21.98
		13	2.75	0.295	3.05	21.98
		19.5	2.66	0.426	3.09	21.98
		26	2.57	0.528	3.10	21.98
		39	2.41	0.735	3.15	21.98
		52	2.16	0.896	3.06	21.98
		58.5	2.08	0.969	3.05	21.98
		65	2.07	1.082	3.15	21.98

■ TEST RESULTS_Ant.2
Conducted Output Power Measurements (802.11n_20 MHz BW Mode: 5260~5320)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5260	52	6.5	3.80	0.161	3.96	21.98
		13	3.65	0.295	3.94	21.98
		19.5	3.50	0.426	3.93	21.98
		26	3.41	0.528	3.94	21.98
		39	3.24	0.735	3.98	21.98
		52	2.90	0.896	3.79	21.98
		58.5	2.88	0.969	3.85	21.98
		65	2.74	1.082	3.83	21.98
5300	60	6.5	4.98	0.161	5.14	21.98
		13	4.91	0.295	5.20	21.98
		19.5	4.82	0.426	5.25	21.98
		26	4.69	0.528	5.22	21.98
		39	4.58	0.735	5.31	21.98
		52	4.34	0.896	5.24	21.98
		58.5	4.33	0.969	5.30	21.98
		65	4.22	1.082	5.30	21.98
5320	64	6.5	5.43	0.161	5.59	21.98
		13	5.38	0.295	5.68	21.98
		19.5	5.29	0.426	5.71	21.98
		26	5.20	0.528	5.73	21.98
		39	4.99	0.735	5.72	21.98
		52	4.79	0.896	5.68	21.98
		58.5	4.80	0.969	5.77	21.98
		65	4.72	1.082	5.80	21.98

■ TEST RESULTS_Ant.3
Conducted Output Power Measurements (802.11n_20 MHz BW Mode: 5260~5320)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5260	52	6.5	3.49	0.161	3.65	21.98
		13	3.34	0.295	3.64	21.98
		19.5	3.35	0.426	3.77	21.98
		26	3.20	0.528	3.73	21.98
		39	3.10	0.735	3.83	21.98
		52	2.89	0.896	3.79	21.98
		58.5	2.82	0.969	3.79	21.98
		65	2.86	1.082	3.94	21.98
5300	60	6.5	4.66	0.161	4.83	21.98
		13	4.49	0.295	4.79	21.98
		19.5	4.40	0.426	4.83	21.98
		26	4.27	0.528	4.79	21.98
		39	4.16	0.735	4.89	21.98
		52	4.00	0.896	4.90	21.98
		58.5	3.95	0.969	4.92	21.98
		65	3.83	1.082	4.91	21.98
5320	64	6.5	5.78	0.161	5.94	21.98
		13	5.49	0.295	5.79	21.98
		19.5	5.41	0.426	5.84	21.98
		26	5.33	0.528	5.86	21.98
		39	5.11	0.735	5.84	21.98
		52	5.07	0.896	5.97	21.98
		58.5	4.98	0.969	5.95	21.98
		65	4.90	1.082	5.99	21.98

■ TEST RESULTS_Sum Data of Ant.1 and Ant.2
Conducted Output Power Measurements (802.11n _20 MHz BW Mode: 5260~5320)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5260	52	6.5	6.07	21.98
		13	6.07	21.98
		19.5	6.06	21.98
		26	6.07	21.98
		39	6.10	21.98
		52	5.97	21.98
		58.5	6.02	21.98
		65	6.02	21.98
5300	60	6.5	7.06	21.98
		13	7.09	21.98
		19.5	7.15	21.98
		26	7.12	21.98
		39	7.16	21.98
		52	7.11	21.98
		58.5	7.15	21.98
		65	7.18	21.98
5320	64	6.5	7.54	21.98
		13	7.57	21.98
		19.5	7.61	21.98
		26	7.62	21.98
		39	7.63	21.98
		52	7.58	21.98
		58.5	7.63	21.98
		65	7.69	21.98

■ TEST RESULTS_Sum Data of Ant.1, Ant.2 and Ant.3

Conducted Output Power Measurements (802.11n _20 MHz BW Mode: 5260~5320)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5260	52	6.5	8.03	21.98
		13	8.03	21.98
		19.5	8.08	21.98
		26	8.07	21.98
		39	8.12	21.98
		52	8.03	21.98
		58.5	8.05	21.98
		65	8.11	21.98
5300	60	6.5	9.09	21.98
		13	9.10	21.98
		19.5	9.15	21.98
		26	9.12	21.98
		39	9.18	21.98
		52	9.16	21.98
		58.5	9.18	21.98
		65	9.20	21.98
5320	64	6.5	9.82	21.98
		13	9.78	21.98
		19.5	9.82	21.98
		26	9.84	21.98
		39	9.84	21.98
		52	9.86	21.98
		58.5	9.88	21.98
		65	9.93	21.98

■ TEST RESULTS_Ant.1
Conducted Output Power Measurements (802.11n_20 MHz BW Mode: 5500~5700)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5500	100	6.5	5.46	0.161	5.62	21.98
		13	5.21	0.295	5.50	21.98
		19.5	5.12	0.426	5.55	21.98
		26	5.06	0.528	5.58	21.98
		39	4.85	0.735	5.58	21.98
		52	4.72	0.896	5.62	21.98
		58.5	4.71	0.969	5.68	21.98
		65	4.58	1.082	5.66	21.98
5600	120	6.5	3.24	0.161	3.40	21.98
		13	3.12	0.295	3.41	21.98
		19.5	3.01	0.426	3.43	21.98
		26	2.92	0.528	3.44	21.98
		39	2.78	0.735	3.51	21.98
		52	2.63	0.896	3.52	21.98
		58.5	2.53	0.969	3.50	21.98
		65	2.49	1.082	3.57	21.98
5700	140	6.5	2.82	0.161	2.98	21.98
		13	2.74	0.295	3.03	21.98
		19.5	2.67	0.426	3.10	21.98
		26	2.49	0.528	3.02	21.98
		39	2.30	0.735	3.03	21.98
		52	2.16	0.896	3.06	21.98
		58.5	2.02	0.969	2.99	21.98
		65	1.98	1.082	3.06	21.98

■ TEST RESULTS_Ant.2
Conducted Output Power Measurements (802.11n_20 MHz BW Mode: 5500~5700)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5500	100	6.5	7.00	0.161	7.16	21.98
		13	6.94	0.295	7.24	21.98
		19.5	6.76	0.426	7.19	21.98
		26	6.65	0.528	7.18	21.98
		39	6.56	0.735	7.29	21.98
		52	6.39	0.896	7.28	21.98
		58.5	6.38	0.969	7.35	21.98
		65	6.28	1.082	7.37	21.98
5600	120	6.5	5.41	0.161	5.57	21.98
		13	5.32	0.295	5.61	21.98
		19.5	5.14	0.426	5.56	21.98
		26	5.06	0.528	5.59	21.98
		39	4.91	0.735	5.64	21.98
		52	4.71	0.896	5.61	21.98
		58.5	4.79	0.969	5.76	21.98
		65	4.71	1.082	5.79	21.98
5700	140	6.5	4.32	0.161	4.48	21.98
		13	4.18	0.295	4.48	21.98
		19.5	4.03	0.426	4.46	21.98
		26	4.01	0.528	4.53	21.98
		39	3.79	0.735	4.53	21.98
		52	3.63	0.896	4.53	21.98
		58.5	3.64	0.969	4.61	21.98
		65	3.56	1.082	4.64	21.98

■ TEST RESULTS_Ant.3
Conducted Output Power Measurements (802.11n_20 MHz BW Mode: 5500~5700)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5500	100	6.5	7.95	0.161	8.11	21.98
		13	7.80	0.295	8.09	21.98
		19.5	7.68	0.426	8.11	21.98
		26	7.64	0.528	8.17	21.98
		39	7.37	0.735	8.10	21.98
		52	7.15	0.896	8.05	21.98
		58.5	7.07	0.969	8.04	21.98
		65	6.95	1.082	8.03	21.98
5600	120	6.5	5.53	0.161	5.69	21.98
		13	5.39	0.295	5.68	21.98
		19.5	5.29	0.426	5.71	21.98
		26	5.13	0.528	5.65	21.98
		39	5.07	0.735	5.81	21.98
		52	4.89	0.896	5.79	21.98
		58.5	4.85	0.969	5.81	21.98
		65	4.78	1.082	5.87	21.98
5700	140	6.5	7.64	0.161	7.80	21.98
		13	7.45	0.295	7.74	21.98
		19.5	7.28	0.426	7.70	21.98
		26	7.23	0.528	7.76	21.98
		39	6.97	0.735	7.70	21.98
		52	6.82	0.896	7.71	21.98
		58.5	6.69	0.969	7.66	21.98
		65	6.48	1.082	7.56	21.98

■ TEST RESULTS_Sum Data of Ant.1 and Ant.2

Conducted Output Power Measurements (802.11n _20 MHz BW Mode: 5500~5700)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5500	100	6.5	9.47	21.98
		13	9.47	21.98
		19.5	9.46	21.98
		26	9.46	21.98
		39	9.53	21.98
		52	9.54	21.98
		58.5	9.60	21.98
		65	9.61	21.98
5600	120	6.5	7.63	21.98
		13	7.66	21.98
		19.5	7.64	21.98
		26	7.66	21.98
		39	7.72	21.98
		52	7.70	21.98
		58.5	7.78	21.98
		65	7.83	21.98
5700	140	6.5	6.81	21.98
		13	6.83	21.98
		19.5	6.84	21.98
		26	6.85	21.98
		39	6.85	21.98
		52	6.87	21.98
		58.5	6.89	21.98
		65	6.93	21.98

■ TEST RESULTS_Sum Data of Ant.1, Ant.2 and Ant.3

Conducted Output Power Measurements (802.11n _20 MHz BW Mode: 5500~5700)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5500	100	6.5	11.85	21.98
		13	11.84	21.98
		19.5	11.85	21.98
		26	11.88	21.98
		39	11.89	21.98
		52	11.87	21.98
		58.5	11.90	21.98
		65	11.90	21.98
5600	120	6.5	9.78	21.98
		13	9.79	21.98
		19.5	9.79	21.98
		26	9.78	21.98
		39	9.88	21.98
		52	9.86	21.98
		58.5	9.92	21.98
		65	9.97	21.98
5700	140	6.5	10.34	21.98
		13	10.32	21.98
		19.5	10.30	21.98
		26	10.34	21.98
		39	10.31	21.98
		52	10.32	21.98
		58.5	10.30	21.98
		65	10.27	21.98

■ TEST RESULTS_Ant.1
Conducted Output Power Measurements (802.11n_40 MHz BW Mode:5270~5310)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5270	54	13.5	2.55	0.228	2.78	21.98
		27	2.38	0.421	2.80	21.98
		40.5	2.34	0.552	2.89	21.98
		54	2.08	0.683	2.76	21.98
		81	1.82	0.950	2.77	21.98
		108	1.67	1.091	2.76	21.98
		121.5	1.67	1.165	2.83	21.98
		135	1.55	1.249	2.80	21.98
5310	62	13.5	3.05	0.228	3.28	21.98
		27	2.95	0.421	3.37	21.98
		40.5	2.79	0.552	3.35	21.98
		54	2.54	0.683	3.22	21.98
		81	2.36	0.950	3.31	21.98
		108	2.13	1.091	3.22	21.98
		121.5	2.09	1.165	3.25	21.98
		135	1.95	1.249	3.20	21.98

TEST RESULTS_Ant.2

Conducted Output Power Measurements (802.11n_40 MHz BW Mode:5270~5310)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5270	54	13.5	4.49	0.228	4.71	21.98
		27	4.52	0.421	4.94	21.98
		40.5	4.37	0.552	4.92	21.98
		54	4.29	0.683	4.97	21.98
		81	4.10	0.950	5.05	21.98
		108	3.83	1.091	4.92	21.98
		121.5	3.80	1.165	4.97	21.98
		135	3.64	1.249	4.89	21.98
5310	62	13.5	5.78	0.228	6.01	21.98
		27	5.62	0.421	6.04	21.98
		40.5	5.38	0.552	5.94	21.98
		54	5.40	0.683	6.08	21.98
		81	5.15	0.950	6.10	21.98
		108	4.97	1.091	6.07	21.98
		121.5	5.00	1.165	6.16	21.98
		135	4.87	1.249	6.12	21.98

TEST RESULTS_Ant.3

Conducted Output Power Measurements (802.11n_40 MHz BW Mode:5270~5310)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5270	54	13.5	4.37	0.228	4.60	21.98
		27	4.25	0.421	4.67	21.98
		40.5	4.15	0.552	4.70	21.98
		54	4.03	0.683	4.71	21.98
		81	3.76	0.950	4.71	21.98
		108	3.54	1.091	4.63	21.98
		121.5	3.47	1.165	4.63	21.98
		135	3.46	1.249	4.71	21.98
5310	62	13.5	5.34	0.228	5.57	21.98
		27	5.19	0.421	5.61	21.98
		40.5	5.02	0.552	5.57	21.98
		54	4.99	0.683	5.68	21.98
		81	4.74	0.950	5.69	21.98
		108	4.62	1.091	5.71	21.98
		121.5	4.52	1.165	5.69	21.98
		135	4.46	1.249	5.71	21.98

■ TEST RESULTS_Sum Data of Ant.1 and Ant.2

Conducted Output Power Measurements (802.11n_40 MHz BW Mode:5270~5310)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5270	54	13.5	6.86	21.98
		27	7.01	21.98
		40.5	7.03	21.98
		54	7.01	21.98
		81	7.07	21.98
		108	6.99	21.98
		121.5	7.04	21.98
		135	6.98	21.98
5310	62	13.5	7.87	21.98
		27	7.92	21.98
		40.5	7.84	21.98
		54	7.90	21.98
		81	7.93	21.98
		108	7.88	21.98
		121.5	7.96	21.98
		135	7.91	21.98

■ TEST RESULTS_Sum Data of Ant.1, Ant.2 and Ant.3

Conducted Output Power Measurements (802.11n_40 MHz BW Mode:5270~5310)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5270	54	13.5	8.89	21.98
		27	9.01	21.98
		40.5	9.03	21.98
		54	9.02	21.98
		81	9.06	21.98
		108	8.98	21.98
		121.5	9.01	21.98
		135	9.00	21.98
5310	62	13.5	9.88	21.98
		27	9.93	21.98
		40.5	9.86	21.98
		54	9.94	21.98
		81	9.97	21.98
		108	9.94	21.98
		121.5	9.98	21.98
		135	9.96	21.98

■ TEST RESULTS_Ant.1
Conducted Output Power Measurements (802.11n_40 MHz BW Mode:5510~5670)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5510	102	13.5	5.62	0.228	5.84	21.98
		27	5.40	0.421	5.82	21.98
		40.5	5.32	0.552	5.87	21.98
		54	5.17	0.683	5.85	21.98
		81	4.97	0.950	5.92	21.98
		108	4.80	1.091	5.89	21.98
		121.5	4.71	1.165	5.88	21.98
		135	4.66	1.249	5.91	21.98
5590	118	13.5	4.47	0.228	4.70	21.98
		27	4.38	0.421	4.80	21.98
		40.5	4.13	0.552	4.68	21.98
		54	4.10	0.683	4.78	21.98
		81	3.74	0.950	4.69	21.98
		108	3.59	1.091	4.68	21.98
		121.5	3.54	1.165	4.71	21.98
		135	3.30	1.249	4.55	21.98
5670	134	13.5	3.02	0.228	3.25	21.98
		27	2.90	0.421	3.32	21.98
		40.5	2.75	0.552	3.31	21.98
		54	2.68	0.683	3.36	21.98
		81	2.41	0.950	3.36	21.98
		108	2.27	1.091	3.36	21.98
		121.5	2.29	1.165	3.46	21.98
		135	2.10	1.249	3.35	21.98

TEST RESULTS_Ant.2

Conducted Output Power Measurements (802.11n_40 MHz BW Mode:5510~5670)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5510	102	13.5	7.02	0.228	7.24	21.98
		27	6.83	0.421	7.25	21.98
		40.5	6.70	0.552	7.25	21.98
		54	6.64	0.683	7.33	21.98
		81	6.47	0.950	7.42	21.98
		108	6.26	1.091	7.35	21.98
		121.5	6.21	1.165	7.37	21.98
		135	6.19	1.249	7.44	21.98
5590	118	13.5	6.40	0.228	6.63	21.98
		27	6.23	0.421	6.65	21.98
		40.5	6.12	0.552	6.67	21.98
		54	6.00	0.683	6.68	21.98
		81	5.85	0.950	6.80	21.98
		108	5.64	1.091	6.73	21.98
		121.5	5.56	1.165	6.73	21.98
		135	5.55	1.249	6.80	21.98
5670	134	13.5	4.68	0.228	4.91	21.98
		27	4.47	0.421	4.89	21.98
		40.5	4.29	0.552	4.85	21.98
		54	4.05	0.683	4.73	21.98
		81	3.81	0.950	4.76	21.98
		108	3.64	1.091	4.73	21.98
		121.5	3.55	1.165	4.71	21.98
		135	3.54	1.249	4.78	21.98

TEST RESULTS_Ant.3

Conducted Output Power Measurements (802.11n_40 MHz BW Mode:5510~5670)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5510	102	13.5	7.85	0.228	8.08	21.98
		27	7.72	0.421	8.14	21.98
		40.5	7.55	0.552	8.10	21.98
		54	7.40	0.683	8.08	21.98
		81	7.08	0.950	8.03	21.98
		108	6.76	1.091	7.86	21.98
		121.5	6.71	1.165	7.87	21.98
		135	6.64	1.249	7.89	21.98
5590	118	13.5	6.13	0.228	6.36	21.98
		27	6.01	0.421	6.43	21.98
		40.5	5.84	0.552	6.39	21.98
		54	5.75	0.683	6.43	21.98
		81	5.59	0.950	6.54	21.98
		108	5.45	1.091	6.54	21.98
		121.5	5.36	1.165	6.53	21.98
		135	5.24	1.249	6.49	21.98
5670	134	13.5	6.30	0.228	6.53	21.98
		27	6.03	0.421	6.45	21.98
		40.5	5.82	0.552	6.37	21.98
		54	5.72	0.683	6.41	21.98
		81	5.38	0.950	6.33	21.98
		108	5.32	1.091	6.41	21.98
		121.5	5.11	1.165	6.28	21.98
		135	5.00	1.249	6.25	21.98

■ TEST RESULTS_Sum Data of Ant.1 and Ant.2

Conducted Output Power Measurements (802.11n_40 MHz BW Mode:5510~5670)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5510	102	13.5	9.61	21.98
		27	9.61	21.98
		40.5	9.62	21.98
		54	9.66	21.98
		81	9.74	21.98
		108	9.69	21.98
		121.5	9.70	21.98
		135	9.75	21.98
5590	118	13.5	8.78	21.98
		27	8.83	21.98
		40.5	8.80	21.98
		54	8.84	21.98
		81	8.88	21.98
		108	8.84	21.98
		121.5	8.84	21.98
		135	8.83	21.98
5670	134	13.5	7.17	21.98
		27	7.18	21.98
		40.5	7.15	21.98
		54	7.11	21.98
		81	7.13	21.98
		108	7.11	21.98
		121.5	7.14	21.98
		135	7.13	21.98

■ TEST RESULTS_Sum Data of Ant.1, Ant.2 and Ant.3

Conducted Output Power Measurements (802.11n_40 MHz Mode:5510~5670)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
5510	102	13.5	11.92	21.98
		27	11.94	21.98
		40.5	11.94	21.98
		54	11.95	21.98
		81	11.98	21.98
		108	11.88	21.98
		121.5	11.89	21.98
		135	11.93	21.98
5590	118	13.5	10.75	21.98
		27	10.81	21.98
		40.5	10.77	21.98
		54	10.81	21.98
		81	10.88	21.98
		108	10.85	21.98
		121.5	10.85	21.98
		135	10.82	21.98
5670	134	13.5	9.87	21.98
		27	9.84	21.98
		40.5	9.79	21.98
		54	9.78	21.98
		81	9.76	21.98
		108	9.79	21.98
		121.5	9.74	21.98
		135	9.73	21.98

9.4 POWER SPECTRAL DENSITY

The peak power density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating in transmission mode at the appropriate frequencies. The maximum permissible peak power spectral density is 11 dBm/ MHz in the 5.25 GHz – 5.35 GHz and 5.47 GHz – 5.725 GHz bands

Limit :

Operating Mode	Band	Mode	Ant. Gain	Limt(dBm)
SISO : Service and Monitoring	UNII 2	802.11a	8 dBi	9
		802.11n_20 MHz BW		9
		802.11n_40 MHz BW		9
	UNII 2e	802.11a		9
		802.11n_20 MHz BW		9
		802.11n_40 MHz BW		9
MIMO(2 TX) : Service and Monitoring	UNII 2	802.11a	11.01 dBi	5.99
		802.11n_20 MHz BW	8 dBi	9
		802.11n_40 MHz BW	8 dBi	9
	UNII 2e	802.11a	11.01 dBi	5.99
		802.11n_20 MHz BW	8 dBi	9
		802.11n_40 MHz BW	8 dBi	9
MIMO(3 TX) : Service	UNII 2	802.11a	12.77 dBi	4.23
		802.11n_20 MHz BW	8 dBi	9
		802.11n_40 MHz BW	8 dBi	9
	UNII 2e	802.11a	12.77 dBi	4.23
		802.11n_20 MHz BW	8 dBi	9
		802.11n_40 MHz BW	8 dBi	9

Note : Above the limits is calculated according to antenna gain. Because antenna gain is higher than 6 dBi.