▣ 802.11ac_80 MHz BW

80MHz BW(UNII 1)

▣ TEST RESULTS

Conducted Output Power Measurements (802.11ac_80MHz Mode: 5210)

802.11ac(80MHz) Mode		Rate (Mbps)	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
Frequency [MHz]	Channel No.					
5210	42	29.3	9.26	0.881	10.14	23.98
		58.5	8.98	1.481	10.46	23.98
		87.8	8.72	1.959	10.68	23.98
		117	8.93	2.318	11.25	23.98
		175.5	8.31	2.831	11.14	23.98
		234	8.15	3.167	11.32	23.98
		263.3	8.08	3.369	11.45	23.98
		292.5	7.83	3.457	11.29	23.98
		351	7.67	3.729	11.40	23.98
		390	7.59	3.868	11.46	23.98

802.11ac_80MHz BW (UNII 2A)

▣ TEST RESULTS

Conducted Output Power Measurements (802.11ac_80MHz Mode: 5290)

802.11ac(80MHz) Mode		Rate (Mbps)	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
Frequency [MHz]	Channel No.					
5290	58	29.3	9.96	0.881	10.84	23.98
		58.5	9.61	1.481	11.09	23.98
		87.8	9.21	1.959	11.17	23.98
		117	9.46	2.318	11.78	23.98
		175.5	9.17	2.831	12.00	23.98
		234	8.70	3.167	11.87	23.98
		263.3	8.41	3.369	11.78	23.98
		292.5	8.43	3.457	11.89	23.98
		351	8.03	3.729	11.76	23.98
		390	7.98	3.868	11.85	23.98

802.11ac _80MHz BW (UNII 2C)

▣ TEST RESULTS

Conducted Output Power Measurements (802.11ac_80MHz Mode: 5530 ~ 5690 MHz)

802.11ac(80MHz) Mode		Rate (Mbps)	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
Frequency [MHz]	Channel No.					
5530	106	29.3	9.12	0.881	10.00	23.98
		58.5	8.83	1.481	10.31	23.98
		87.8	8.50	1.959	10.46	23.98
		117	8.75	2.318	11.07	23.98
		175.5	8.29	2.831	11.12	23.98
		234	7.84	3.167	11.01	23.98
		263.3	7.88	3.369	11.25	23.98
		292.5	7.80	3.457	11.26	23.98
		351	7.32	3.729	11.05	23.98
		390	7.21	3.868	11.08	23.98
5690	138	29.3	9.89	0.881	10.77	23.98
		58.5	9.48	1.481	10.96	23.98
		87.8	9.26	1.959	11.22	23.98
		117	9.51	2.318	11.83	23.98
		175.5	9.17	2.831	12.00	23.98
		234	8.66	3.167	11.83	23.98
		263.3	8.50	3.369	11.87	23.98
		292.5	8.37	3.457	11.82	23.98
		351	8.14	3.729	11.87	23.98
		390	7.98	3.868	11.85	23.98

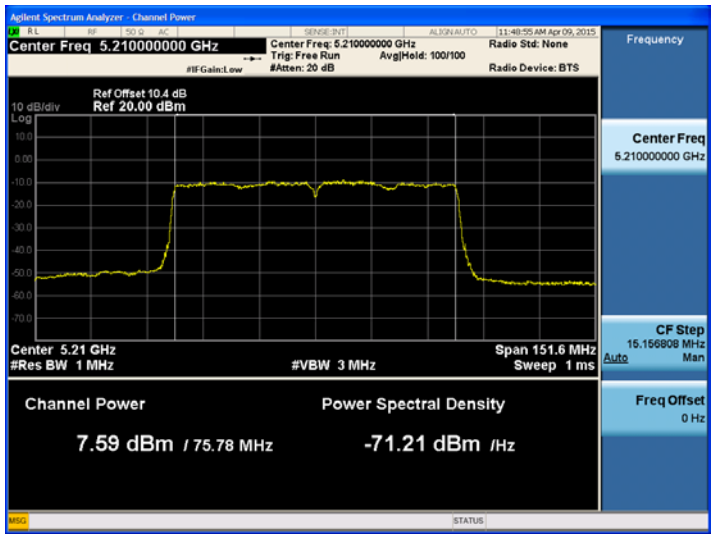
802.11ac _80MHz BW (UNII 3)

▣ TEST RESULTS

Conducted Output Power Measurements (802.11ac_80MHz Mode: 5775 MHz)

802.11ac(80MHz) Mode		Rate (Mbps)	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
Frequency [MHz]	Channel No.					
5775	155	29.3	9.94	0.881	10.83	30
		58.5	9.67	1.481	11.15	30
		87.8	9.44	1.959	11.40	30
		117	9.39	2.318	11.70	30
		175.5	9.06	2.831	11.89	30
		234	8.74	3.167	11.91	30
		263.3	8.62	3.369	11.99	30
		292.5	8.54	3.457	12.00	30
		351	8.15	3.729	11.88	30
		390	8.12	3.868	11.99	30

▣ TEST Plot for 802.11ac_80MHz BW

802.11ac_80 MHz BW UNII 1 BAND Average Power	802.11ac_80 MHz BW UNII 2A BAND Average Power
	
802.11ac_80 MHz BW UNII 2C BAND Average Power	**802.11ac_80 MHz BW UNII 3 BAND Average Power**
	

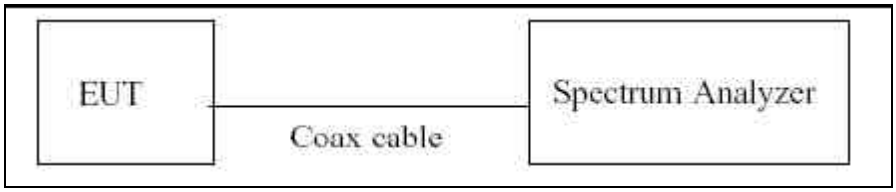
8.5 POWER SPECTRAL DENSITY

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.

▣ Limit

Band	Mode	Limit
UNII 1	802.11a,n,ac	11 dBm/MHz
UNII 2A	802.11a,n,ac	11 dBm/MHz
UNII 2C	802.11a,n,ac	11 dBm/MHz
UNII 3	802.11a,n,ac	30 dBm/500 kHz

▣ TEST CONFIGURATION



▣ TEST PROCEDURE

We tested according to Method in KDB 789033(issued 06/06/2014).

The spectrum analyzer is set to :

1. Set span to encompass the entire emission bandwidth(EBW) of the signal.
2. RBW = 1 MHz(510 kHz for UNII 3)
3. VBW ≥ 3 MHz
4. Number of points in sweep ≥ 2*span/RBW.
5. Sweep time = auto.
6. Detector = RMS(i.e., power averaging), if available. Otherwise, use sample detector mode.
7. Do not use sweep triggering. Allow the sweep to “free run”.
8. Trace average at least 100 traces in power averaging(RMS) mode
9. Use the peak search function on the spectrum analyzer to find the peak of the spectrum.
10. If Method SA-2 was used, add 10 log(1/x), where x is the duty cycle, to the peak of the spectrum.

▣ Sample Calculation

PSD = Reading Value + ATT loss + Cable loss(1 ea) + Duty Cycle Factor

Output Power = -5 dBm + 10 dB + 0.8 dB + 0.21 dB = 16.01 dBm

Note :

1. Spectrum reading values are not plot data. The PSD results in plot is already including the actual values of loss for the attenuator and cable combination.
2. Spectrum offset = Attenuator loss + Cable loss
3. We apply to the offset in the 5.2 GHz, 5.3 GHz and 5.6 GHz range that was rounded off to the closest tenth dB. Actual value of loss for the attenuator and cable combination is below table.

Band	Loss(dB)
UNII 1, 2A , 2C, 3	10.4

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

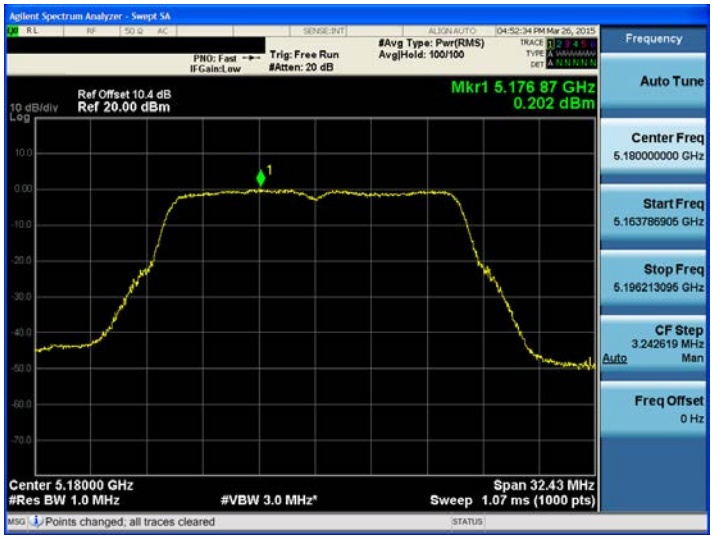
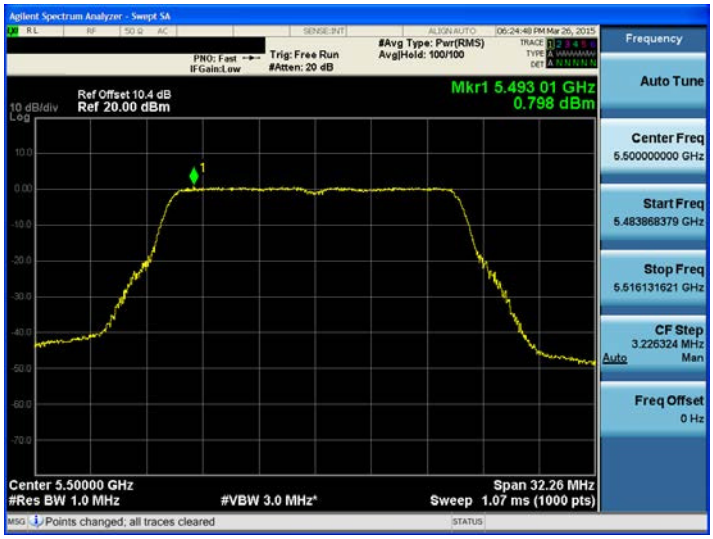
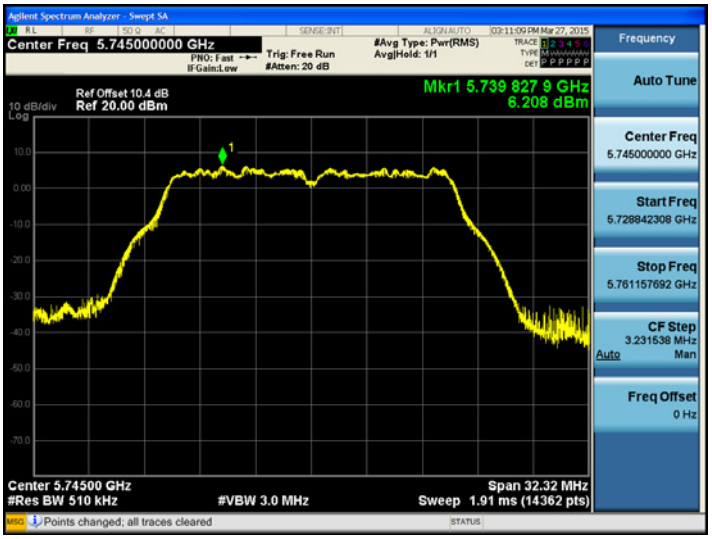
▣ **802.11a_20MHz BW**

▣ **TEST RESULTS**

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5180	36	802.11a	0.202	1.382	1.584	11	Pass
5200	40		0.074	1.382	1.456		Pass
5240	48		-0.001	1.526	1.525		Pass
5260	52		-0.161	0.788	0.627	11	Pass
5300	60		-0.227	1.526	1.299		Pass
5320	64		0.214	1.382	1.596		Pass
5500	100		0.798	1.382	2.180	11	Pass
5580	116		0.424	1.382	1.806		Pass
5720	144		-1.584	0.30123	-1.283		Pass
5745	149		6.208	1.382	7.590	30	Pass
5785	157		5.930	1.082	7.012		Pass
5825	165		6.101	1.382	7.483		Pass

▣ TEST Plot for 802.11a 20MHz BW

802.11a_20MHz BW UNII 1 BAND PSD	802.11a_20MHz BW UNII 2A BAND PSD
	
802.11a_20MHz BW UNII 2C BAND PSD	**802.11a_20MHz BW UNII 3 BAND PSD**
	

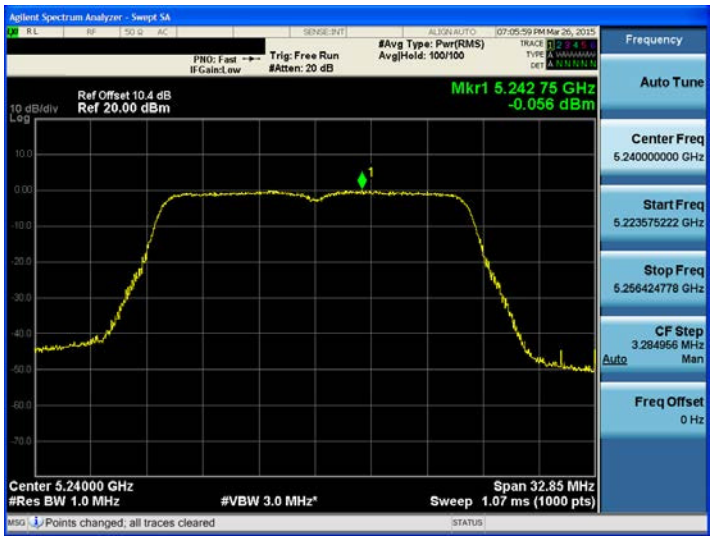
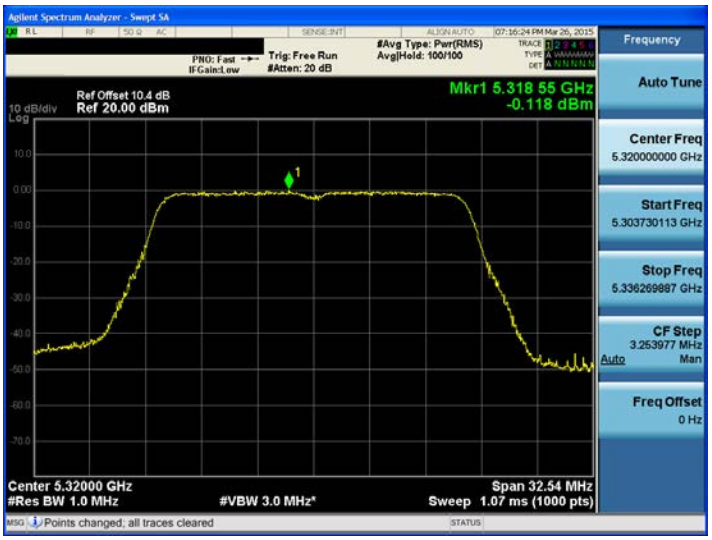
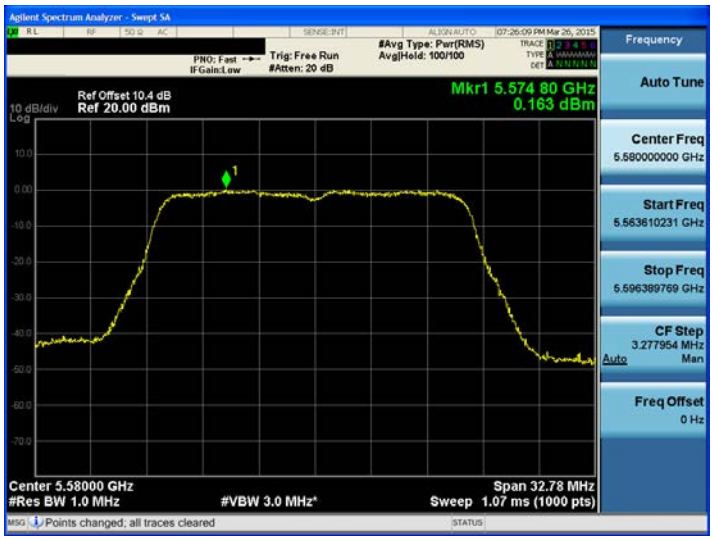
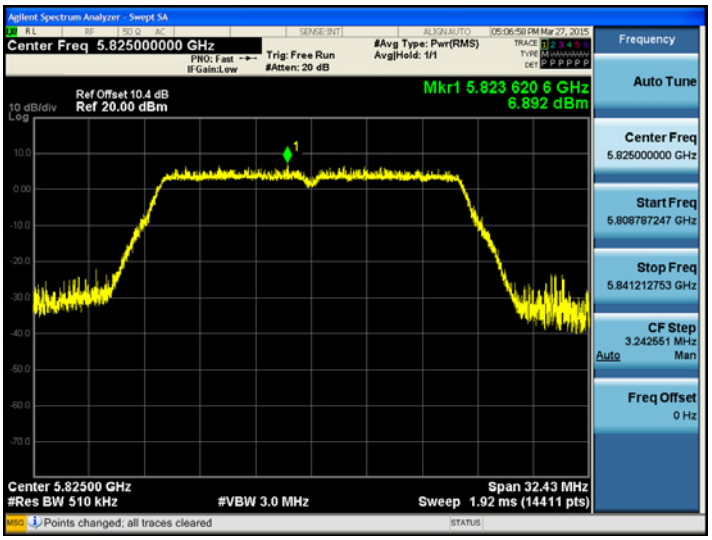
▣ 802.11n_20MHz BW

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5180	36	802.11n _20MHz BW	-1.906	0.829	-1.077	11	Pass
5200	40		-0.394	0.829	0.435		Pass
5240	48		-0.056	1.136	1.080		Pass
5260	52		-0.697	1.447	0.750	11	Pass
5300	60		-0.406	1.567	1.161		Pass
5320	64		-0.118	1.447	1.329		Pass
5500	100		-1.254	1.447	0.193	11	Pass
5580	116		0.163	1.644	1.807		Pass
5720	144		-0.072	1.567	1.495		Pass
5745	149		7.093	0.829	7.922	30	Pass
5785	157		6.777	1.136	7.913		Pass
5825	165		6.892	1.136	8.028		Pass

▣ TEST Plot for 802.11n 20MHz BW

802.11n_20MHz BW UNII 1 BAND PSD	802.11n_20MHz BW UNII 2A BAND PSD
	
802.11n_20MHz BW UNII 2C BAND PSD	**802.11n_20MHz BW UNII 3 BAND PSD**
	

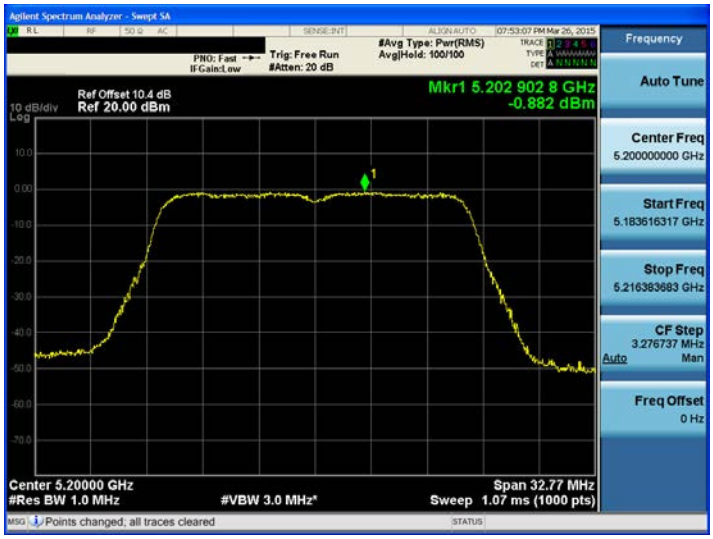
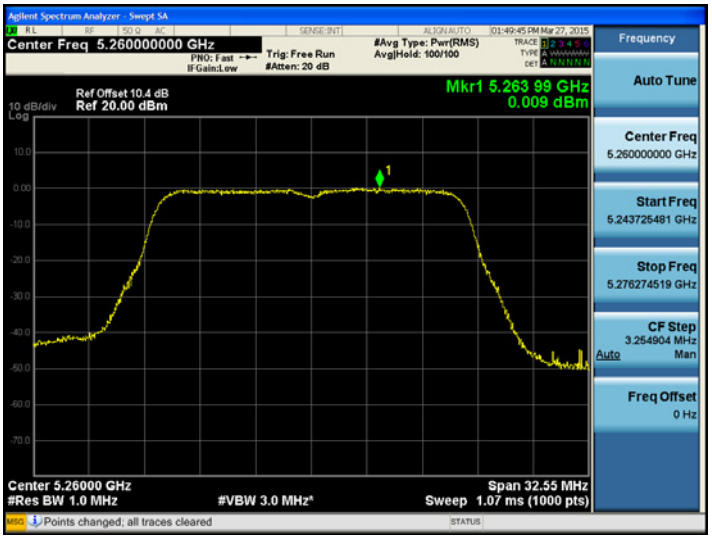
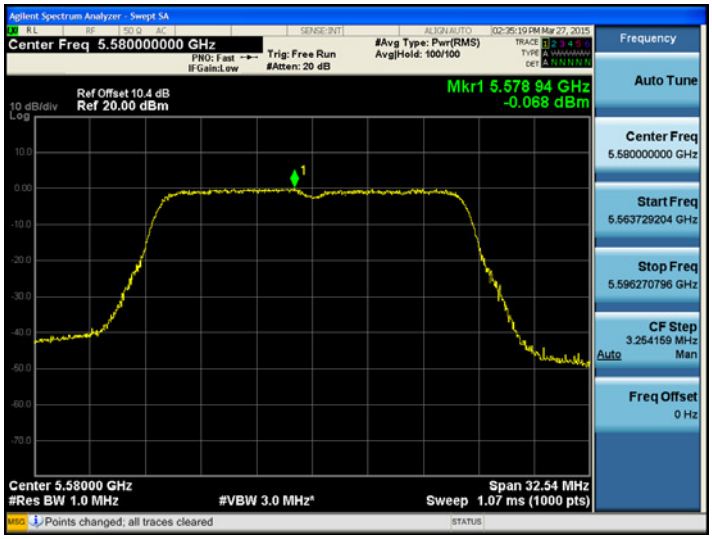
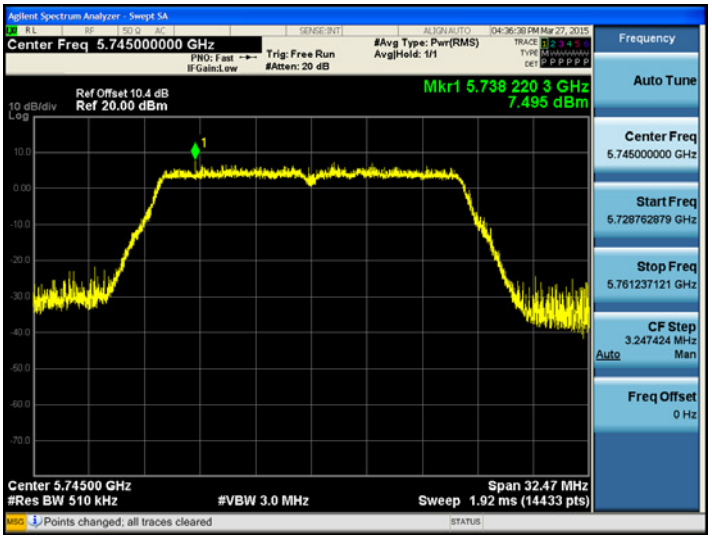
▣ 802.11ac_20MHz BW

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5180	36	802.11ac _20MHz BW	-2.096	1.119	-0.977	11	Pass
5200	40		-0.882	1.833	0.951		Pass
5240	48		-1.179	1.833	0.654		Pass
5260	52		0.009	1.38	1.389	11	Pass
5300	60		-1.075	1.38	0.305		Pass
5320	64		-0.821	1.511	0.690		Pass
5500	100		-0.942	1.833	0.891	11	Pass
5580	116		-0.068	1.833	1.765		Pass
5720	144		-0.405	1.511	1.106		Pass
5745	149		7.495	1.511	9.006	30	Pass
5785	157		6.751	1.658	8.409		Pass
5825	165		6.393	1.658	8.051		Pass

▣ TEST Plot for 802.11ac 20MHz BW

802.11ac_20MHz BW UNII 1 BAND PSD	802.11ac _20MHz BW UNII 2A BAND PSD
	
802.11ac _20MHz BW UNII 2C BAND PSD	**802.11ac _20MHz BW UNII 3 BAND PSD**
	

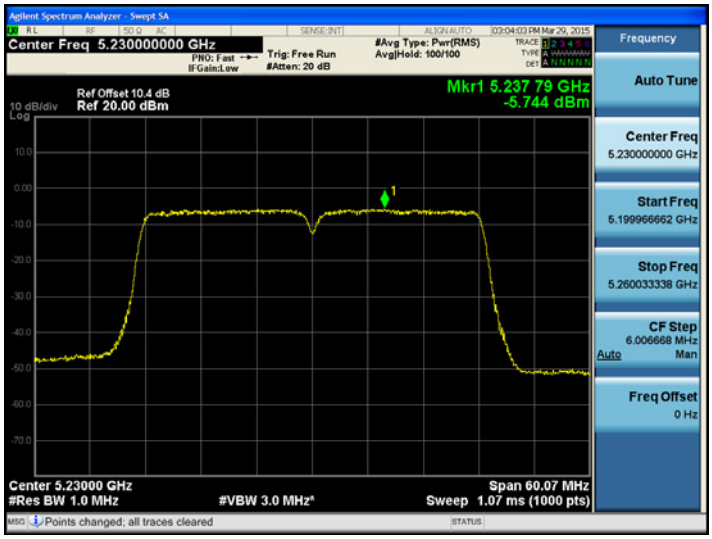
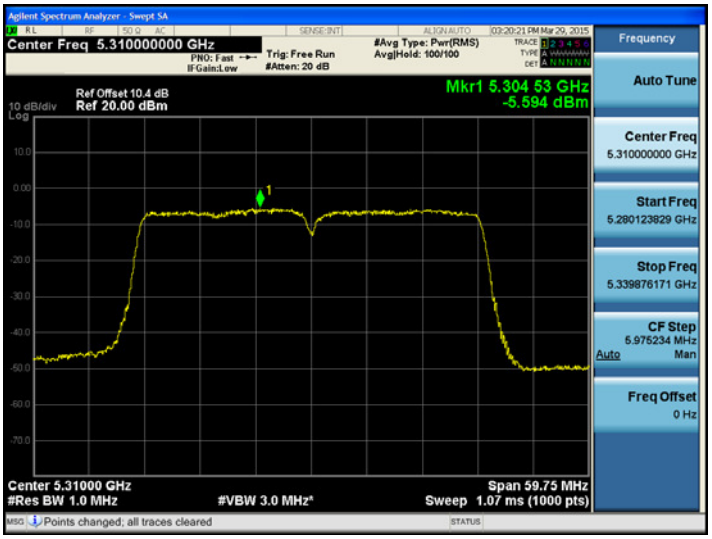
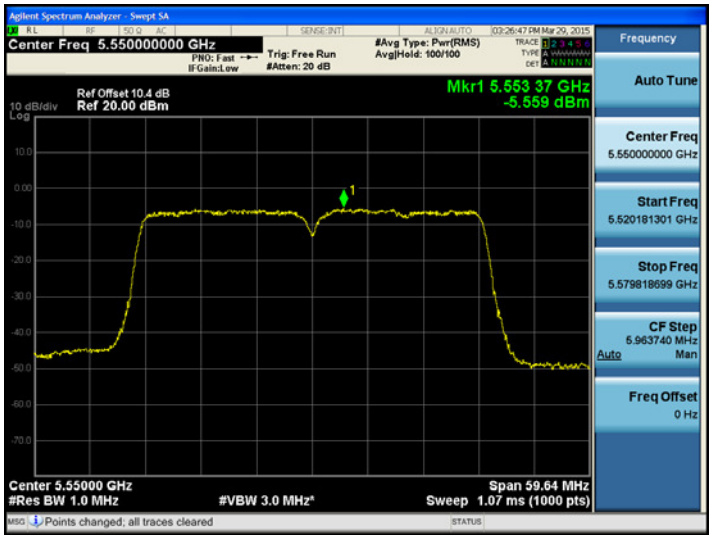
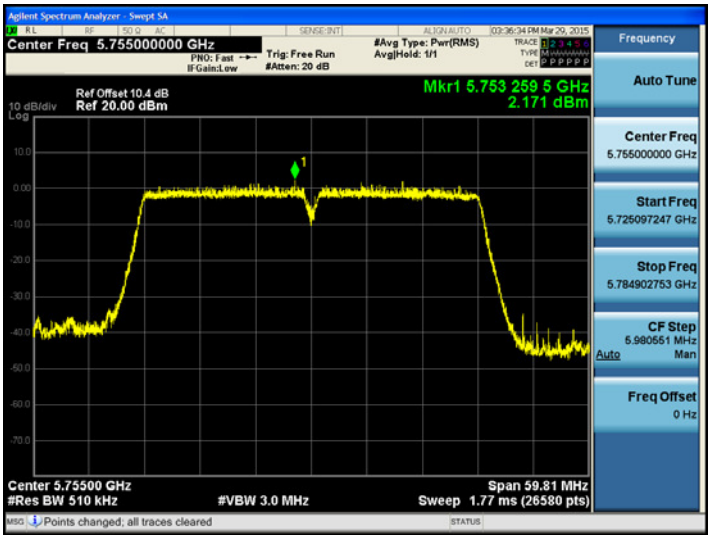
▣ 802.11n_40MHz BW

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5190	38	802.11n 40MHz BW	-7.262	2.241	-5.021	11	
5230	46		-5.744	2.241	-3.503		
5270	54		-6.084	1.452	-4.632	11	Pass
5310	62		-5.594	1.929	-3.665		Pass
5510	102		-7.345	2.541	-4.804	11	Pass
5550	110		-5.559	2.541	-3.018		Pass
5710	142		-5.728	1.929	-3.799		Pass
5755	151		2.171	1.452	3.623	30	Pass
5795	159		0.704	2.372	3.076		Pass

▣ TEST Plot for 802.11n 40MHz BW (FCC)

802.11n_40MHz BW UNII 1 BAND PSD	802.11n_40MHz BW UNII 2A BAND PSD
	
802.11n_40MHz BW UNII 2C BAND PSD	**802.11n_40MHz BW UNII 3 BAND PSD**
	

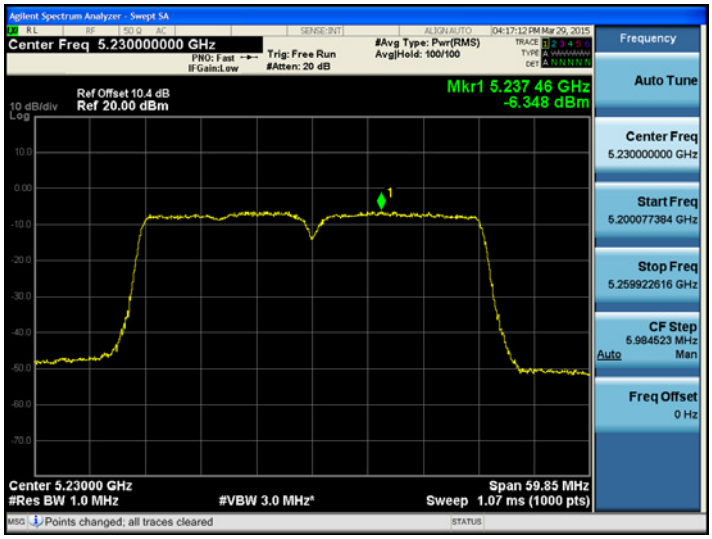
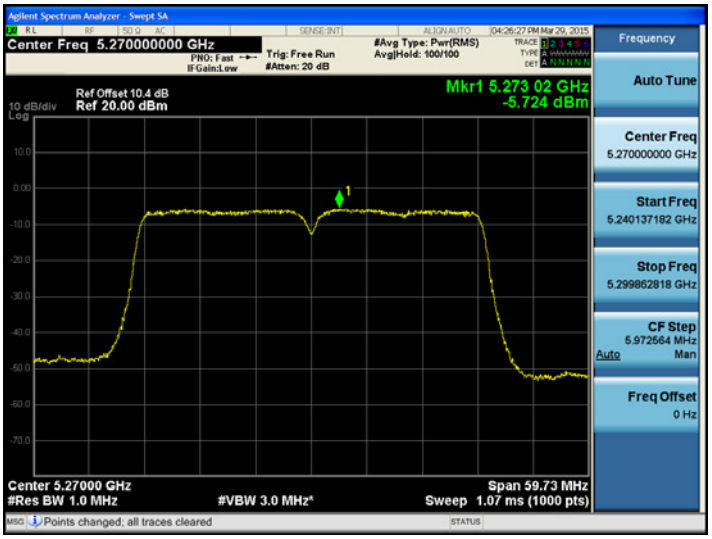
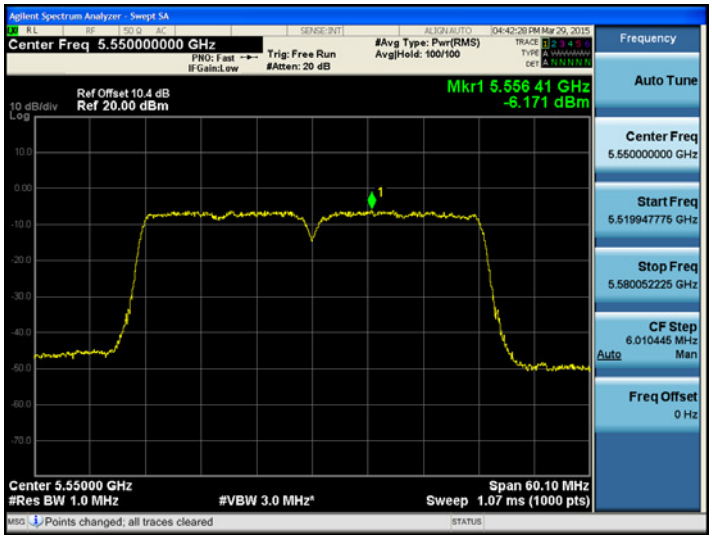
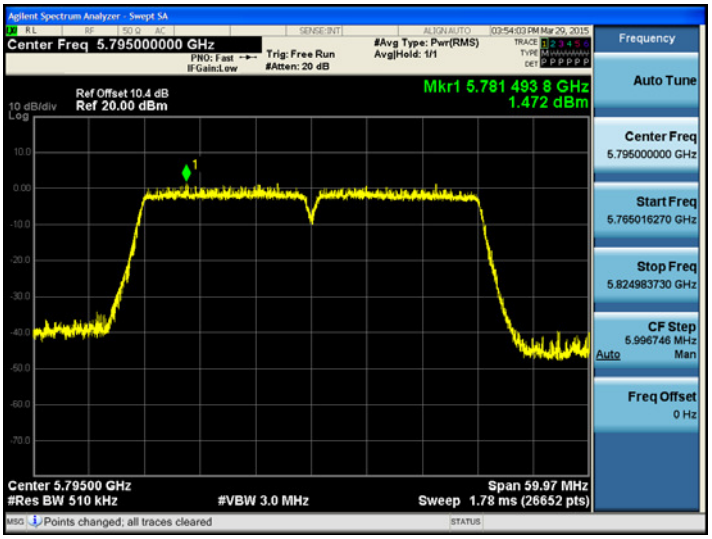
▣ 802.11ac_40MHz BW

▣ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5190	38	802.11ac 40MHz BW	-7.616	2.831	-4.785	11	Pass
5230	46		-6.348	2.758	-3.590		Pass
5270	54		-5.724	2.369	-3.355	11	Pass
5310	62		-5.339	1.433	-3.906		Pass
5510	102		-7.948	2.501	-5.447	11	Pass
5550	110		-6.171	1.433	-4.738		Pass
5710	142		-6.188	1.433	-4.755		Pass
5755	151		1.855	1.881	3.736	30	Pass
5795	159		1.472	2.831	4.303		Pass

▣ TEST Plot for 802.11ac_ 40MHz BW (FCC)

802.11ac_40MHz BW UNII 1 BAND PSD	802.11ac_40MHz BW UNII 2A BAND PSD
	
802.11ac_40MHz BW UNII 2C BAND PSD	**802.11ac_40MHz BW UNII 3 BAND PSD**
	

▣ **802.11ac_80MHz BW**

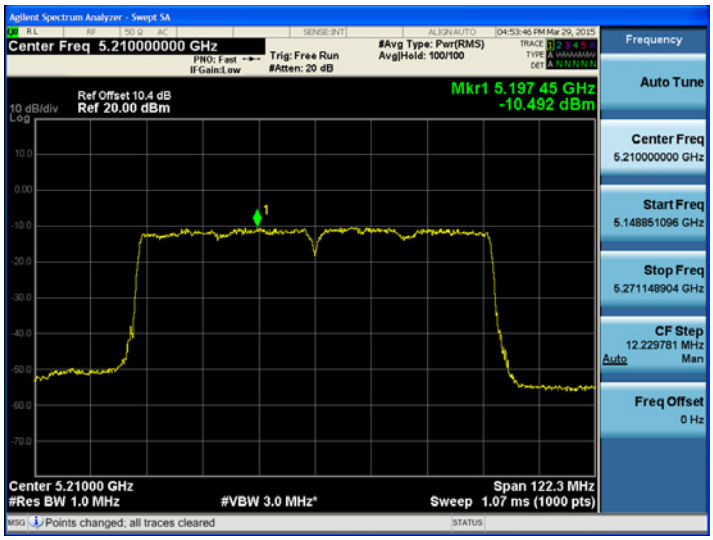
▣ **TEST RESULTS**

Conducted Power Density Measurements

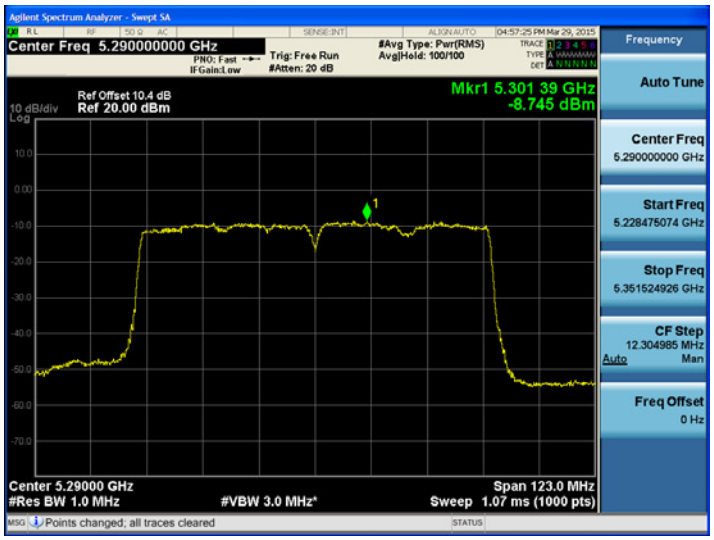
Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5210	42	802.11ac 80MHz BW	-10.492	3.868	-6.624	11	Pass
5290	58		-8.745	2.831	-5.914	11	Pass
5530	106		-9.410	3.457	-5.953	11	Pass
5690	138		-8.442	2.831	-5.611	11	Pass
5775	155		-0.068	3.457	3.389	11	Pass

▣ TEST Plot for 802.11ac_80MHz BW(FCC)

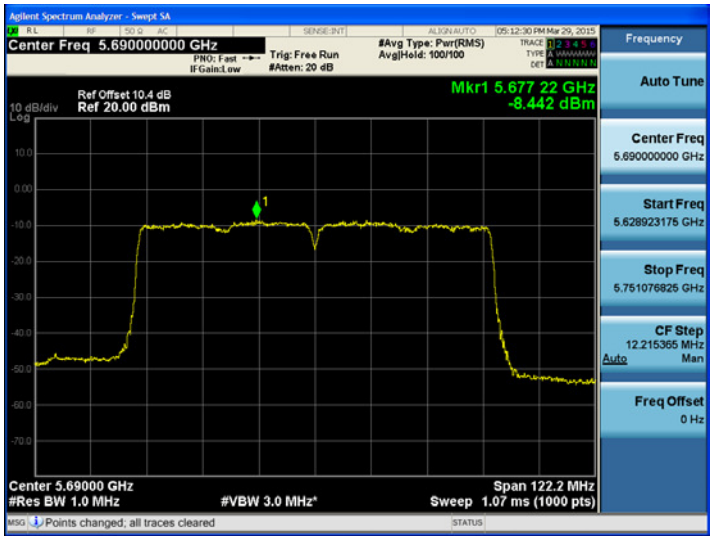
802.11ac_80MHz BW UNII 1 BAND PSD	802.11ac_80MHz BW UNII 2A BAND PSD

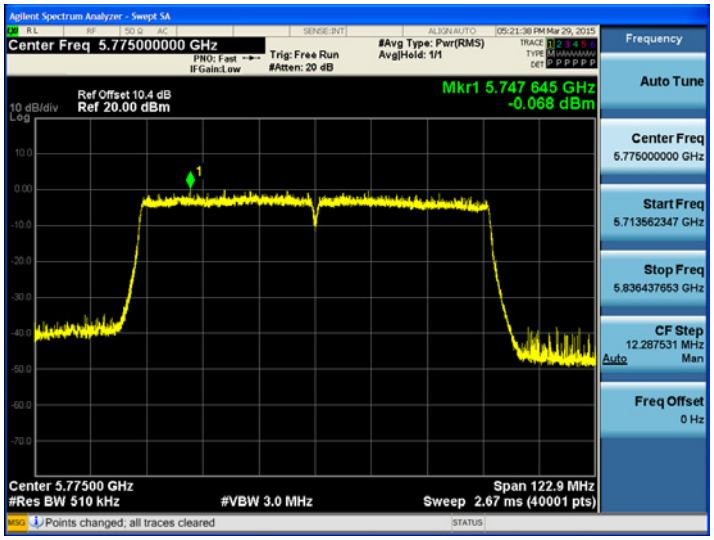


802.11ac_80MHz BW UNII 2C BAND PSD



802.11ac_80MHz BW UNII 3 BAND PSD





8.6 FREQUENCY STABILITY.

The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between -30 ℃ and 50 ℃. The temperature was incremented by 10 ℃ 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.

20 MHz BW

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,180,000,000 Hz

CHANNEL: 36

REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5179986.50	-13.50
100%		-30	5179968.50	-31.50
100%		-20	5179972.60	-27.40
100%		-10	5179976.00	-24.00
100%		0	5179979.90	-20.10
100%		+10	5179983.30	-16.70
100%		+30	5179990.20	-9.80
100%		+40	5179994.70	-5.30
100%		+50	5179998.80	-1.20
Batt. Endpoint	3.27	+20	5179982.50	-17.50

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 2A

OPERATING FREQUENCY: 5,260,000,000 Hz

CHANNEL: 52

REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5259982.30	-17.70
100%		-30	5259965.50	-34.50
100%		-20	5259969.00	-31
100%		-10	5259972.40	-27.6
100%		0	5259975.90	-24.1
100%		+10	5259979.50	-20.5
100%		+30	5259986.70	-13.3
100%		+40	5259990.30	-9.7
100%		+50	5259994.40	-5.60
Batt. Endpoint	3.27	+20	5259978.50	-21.5

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 2C

OPERATING FREQUENCY: 5,500,000,000 Hz

CHANNEL: 100

REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5499981.50	-18.50
100%		-30	5499964.60	-35.40
100%		-20	5499968.80	-31.2
100%		-10	5499971.10	-28.9
100%		0	5499974.40	-25.6
100%		+10	5499977.90	-22.1
100%		+30	5499985.60	-14.4
100%		+40	5499989.40	-10.6
100%		+50	5499993.20	-6.80
Batt. Endpoint	3.27	+20	5499977.90	-22.1

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 3

OPERATING FREQUENCY: 5,745,000,000 Hz

CHANNEL: 149

REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5499980.30	-19.70
100%		-30	5499961.80	-38.20
100%		-20	5499964.40	-35.6
100%		-10	5499968.90	-31.1
100%		0	5499972.50	-27.5
100%		+10	5499976.90	-23.1
100%		+30	5499984.50	-15.5
100%		+40	5499988.80	-11.2
100%		+50	5499991.60	-8.40
Batt. Endpoint	3.27	+20	5499975.90	-24.1

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.

40 MHz BW

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,190,000,000 Hz

CHANNEL: 38

REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5189982.50	-17.50
100%		-30	5189964.70	-35.30
100%		-20	5189968.10	-31.90
100%		-10	5189971.80	-28.20
100%		0	5189975.40	-24.60
100%		+10	5189978.90	-21.10
100%		+30	5189985.90	-14.10
100%		+40	5189989.20	-10.80
100%		+50	5189993.50	-6.50
Batt. Endpoint	3.27	+20	5189977.90	-22.10

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 2A

OPERATING FREQUENCY: 5,270,000,000 Hz

CHANNEL: 54

REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5269982.30	-17.70
100%		-30	5269965.60	-34.40
100%		-20	5269968.80	-31.2
100%		-10	5269972.10	-27.9
100%		0	5269975.70	-24.3
100%		+10	5269979.00	-21
100%		+30	5269985.50	-14.5
100%		+40	5269989.20	-10.8
100%		+50	5269994.90	-5.10
Batt. Endpoint	3.27	+20	5269979.90	-20.1

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 2C

OPERATING FREQUENCY: 5,510,000,000 Hz

CHANNEL: 100

REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5509980.80	-19.20
100%		-30	5509962.80	-37.20
100%		-20	5509965.70	-34.3
100%		-10	5509969.90	-30.1
100%		0	5509972.60	-27.4
100%		+10	5509976.50	-23.5
100%		+30	5509984.60	-15.4
100%		+40	5509988.40	-11.6
100%		+50	5509991.50	-8.50
Batt. Endpoint	3.27	+20	5509976.50	-23.5

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 3

OPERATING FREQUENCY: 5,755,000,000 Hz

CHANNEL: 151

REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5509979.70	-20.30
100%		-30	5509962.10	-37.90
100%		-20	5509964.50	-35.5
100%		-10	5509968.70	-31.3
100%		0	5509972.20	-27.8
100%		+10	5509975.90	-24.1
100%		+30	5509983.30	-16.7
100%		+40	5509986.20	-13.8
100%		+50	5509989.50	-10.50
Batt. Endpoint	3.27	+20	5509975.50	-24.5

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.

80 MHz BW

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,210,000,000 Hz

CHANNEL: 42

REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5209981.70	-18.30
100%		-30	5209964.90	-35.10
100%		-20	5209967.40	-32.60
100%		-10	5209971.60	-28.40
100%		0	5209975.70	-24.30
100%		+10	5209978.50	-21.50
100%		+30	5209985.10	-14.90
100%		+40	5209989.30	-10.70
100%		+50	5209993.70	-6.30
Batt. Endpoint	3.27	+20	5209977.40	-22.60

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 2A

OPERATING FREQUENCY: 5,290,000,000 Hz

CHANNEL: 58

REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5289981.20	-18.80
100%		-30	5289964.30	-35.70
100%		-20	5289968.40	-31.6
100%		-10	5289971.90	-28.1
100%		0	5289975.10	-24.9
100%		+10	5289977.60	-22.4
100%		+30	5289985.80	-14.2
100%		+40	5289990.00	-10
100%		+50	5289994.10	-5.90
Batt. Endpoint	3.27	+20	5289977.70	-22.3

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: UNII Band 2C

OPERATING FREQUENCY: 5,530,000,000 Hz

CHANNEL: 106

REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5529979.30	-20.70
100%		-30	5529962.50	-37.50
100%		-20	5529965.30	-34.7
100%		-10	5529969.70	-30.3
100%		0	5529972.40	-27.6
100%		+10	5529975.90	-24.1
100%		+30	5529985.40	-14.6
100%		+40	5529989.20	-10.8
100%		+50	5529993.30	-6.70
Batt. Endpoint	3.27	+20	5529974.30	-25.7

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 3

OPERATING FREQUENCY: 5,775,000,000 Hz

CHANNEL: 155

REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5529978.50	-21.50
100%		-30	5529962.20	-37.80
100%		-20	5529965.30	-34.7
100%		-10	5529969.80	-30.2
100%		0	5529972.40	-27.6
100%		+10	5529974.90	-25.1
100%		+30	5529982.10	-17.9
100%		+40	5529986.50	-13.5
100%		+50	5529989.70	-10.30
Batt. Endpoint	3.27	+20	5529975.70	-24.3

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.

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 D02

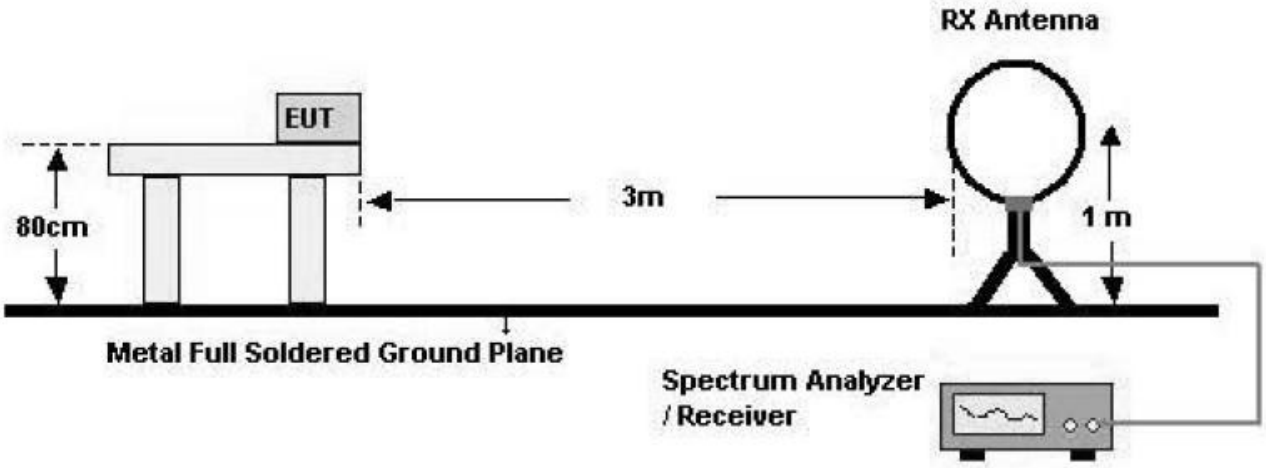
All harmonics that do not lie in a restricted band are subject to a peak limit of -27 dBm/MHz. At a distance of 3 meters the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2 dB to the EIRP limit of -27 dBm/MHz to obtain the limit for out of band spurious emissions of 68.2 dBμV/m. Espectally, for transmitter operating in the 5725 Mhz – 5850 MHz : all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequency 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

Test Mode

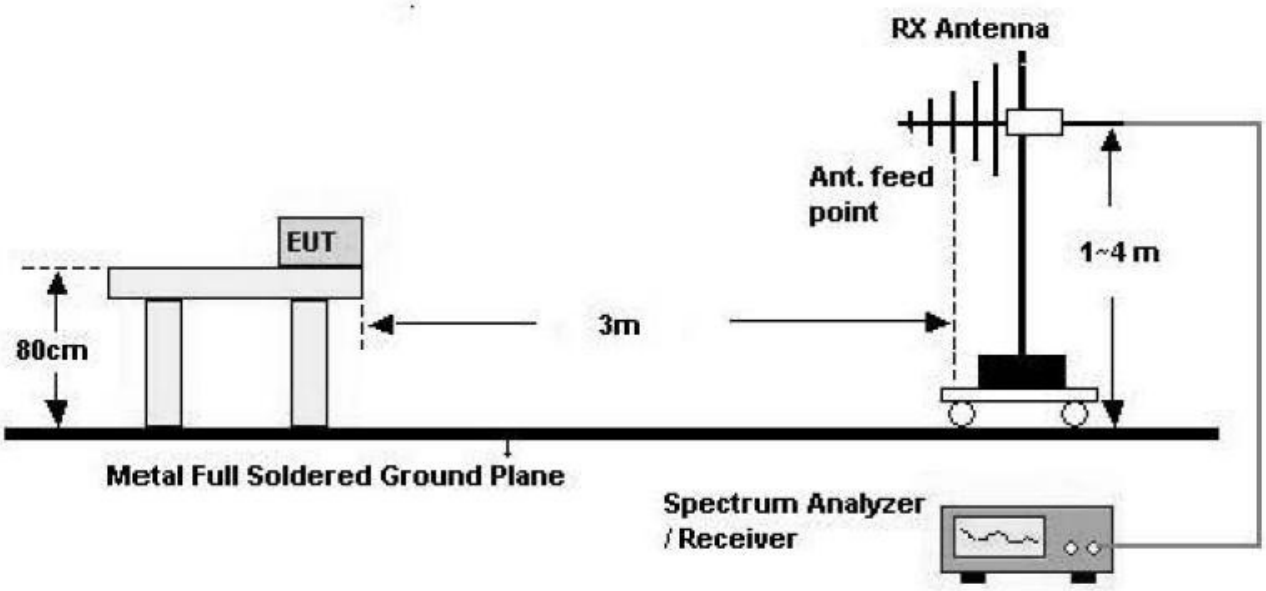
- Standalone with normal cover
- Standalone with wireless charging cover (open)
- Standalone with wireless charging cover (close)
- With wireless charging pad

Test Configuration

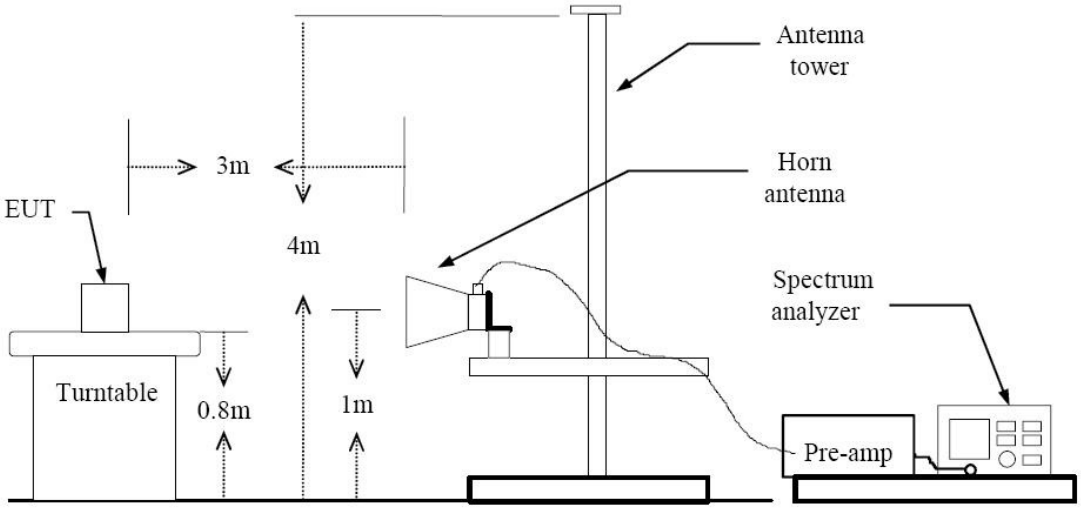
Below 30 MHz



30 MHz - 1 GHz



Above 1 GHz



TEST PROCEDURE USED

ANSI C63.4(2003)

Method H)5) in KDB 789033, issued 06/06/2014 (Peak)

Method H)6)d) in KDB 789033, issued 06/06/2014 (Average)

. Spectrum setting:

- Peak.

1. RBW = 1 MHz
2. VBW ≥ 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 ≥ 98 percent, set VBW ≤ RBW/100(i.e., 10 kHz) but not less than 10 Hz.
   2.2. If the EUT duty cycle is < 98 percent, set VBW ≥ 1/T, where T is the minimum transmission duration.
3. The analyzer is set to linear detector mode.

4. Detector = Peak.
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 minimym 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/ac_20/ac_40/ac_80 to perform the average filed strength measurements for RSE and radiated band edge test.
2. The actual setting value of VBW for 802.11a/n_20/n_40/ac_20/ac_40/ac_80.

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	2.058	2.167	94.97	486	1000
n_20	6.5	1.910	2.020	94.55	524	3000
n_40	13.5	0.942	1.046	90.06	1062	3000
ac_20	6.5	1.921	2.034	94.44	521	1000
ac_40	13.5	0.950	1.054	90.13	1053	3000
ac_80	29.3	0.458	0.561	81.64	2183	3000

TEST RESULTS

9 kHz – 30MHz

Operation Mode: Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
㎒	dB㎶	dB /m	dB	(H/V)	dB㎶/m	dB㎶/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
㎒	dB㎶	dB /m	dB	(H/V)	dB㎶/m	dB㎶/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

Standalone with normal cover

Band :	UNII 1
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10360	63.01	-6.51	V	56.50	68.20	11.70	PK
15540	64.81	-6.42	V	58.39	73.98	15.59	PK
15540	51.36	-6.42	V	44.94	53.98	9.04	AV
10360	62.85	-6.51	H	56.34	68.20	11.86	PK
15540	63.12	-6.42	H	56.70	73.98	17.28	PK
15540	49.23	-6.42	H	42.81	53.98	11.17	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 1
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5200 MHz
Channel No.	40 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10400	62.87	-6.49	V	56.38	68.20	11.82	PK
15600	64.53	-7.15	V	57.38	73.98	16.60	PK
15600	51.18	-7.15	V	44.03	53.98	9.95	AV
10400	62.76	-6.49	H	56.27	68.20	11.93	PK
15600	63.09	-7.15	H	55.94	73.98	18.04	PK
15600	48.76	-7.15	H	41.61	53.98	12.37	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 1
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5240 MHz
Channel No.	48 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10480	62.75	-6.96	V	55.79	68.20	12.41	PK
15720	64.28	-6.62	V	57.66	73.98	16.32	PK
15720	50.82	-6.62	V	44.20	53.98	9.78	AV
10480	62.83	-6.96	H	55.87	68.20	12.33	PK
15720	63.19	-6.96	H	56.23	73.98	17.75	PK
15720	48.63	-6.62	H	42.01	53.98	11.97	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 1
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10360	63.14	-6.51	V	56.63	68.20	11.57	PK
15540	64.58	-6.42	V	58.16	73.98	15.82	PK
15540	51.36	-6.42	V	44.94	53.98	9.04	AV
10360	62.85	-6.51	H	56.34	68.20	11.86	PK
15540	63.12	-6.42	H	56.70	73.98	17.28	PK
15540	49.23	-6.42	H	42.81	53.98	11.17	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 1
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5200 MHz
Channel No.	40 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10400	62.87	-6.49	V	56.38	68.20	11.82	PK
15600	64.38	-7.15	V	57.23	73.98	16.75	PK
15600	51.28	-7.15	V	44.13	53.98	9.85	AV
10400	62.59	-6.49	H	56.10	68.20	12.10	PK
15600	63.05	-7.15	H	55.90	73.98	18.08	PK
15600	49.16	-7.15	H	42.01	53.98	11.97	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 1
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5240 MHz
Channel No.	48 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10480	63.28	-6.96	V	56.32	68.20	11.88	PK
15720	64.13	-6.62	V	57.51	73.98	16.47	PK
15720	51.10	-6.62	V	44.48	53.98	9.50	AV
10480	63.02	-6.96	H	56.06	68.20	12.14	PK
15720	62.87	-6.96	H	55.91	73.98	18.07	PK
15720	49.53	-6.62	H	42.91	53.98	11.07	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 1
Operation Mode:	802.11 ac_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10360	63.25	-6.51	V	56.74	68.20	11.46	PK
15540	64.63	-6.42	V	58.21	73.98	15.77	PK
15540	51.05	-6.42	V	44.63	53.98	9.35	AV
10360	62.37	-6.51	H	55.86	68.20	12.34	PK
15540	63.64	-6.42	H	57.22	73.98	16.76	PK
15540	49.32	-6.42	H	42.90	53.98	11.08	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 802.11ac_20 MHz BW. Worst case is 6.5 Mbps in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 1
Operation Mode:	802.11 ac_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5200 MHz
Channel No.	40 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10400	62.91	-6.49	V	56.42	68.20	11.78	PK
15600	64.57	-7.15	V	57.42	73.98	16.56	PK
15600	50.83	-7.15	V	43.68	53.98	10.30	AV
10400	62.58	-6.49	H	56.09	68.20	12.11	PK
15600	63.13	-7.15	H	55.98	73.98	18.00	PK
15600	49.16	-7.15	H	42.01	53.98	11.97	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 802.11ac_20 MHz BW. Worst case is 6.5 Mbps in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 1
Operation Mode:	802.11 ac_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5240 MHz
Channel No.	48 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10480	63.03	-6.96	V	56.07	68.20	12.13	PK
15720	64.19	-6.62	V	57.57	73.98	16.41	PK
15720	50.58	-6.62	V	43.96	53.98	10.02	AV
10480	62.71	-6.96	H	55.75	68.20	12.45	PK
15720	63.38	-6.96	H	56.42	73.98	17.56	PK
15720	49.53	-6.62	H	42.91	53.98	11.07	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 802.11ac_20 MHz BW. Worst case is 6.5 Mbps in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 1
Operation Mode:	802.11n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5190 MHz
Channel No.	38 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10380	62.59	-5.38	V	57.21	68.20	10.99	PK
15570	63.11	-6.41	V	56.70	73.98	17.28	PK
15570	49.25	-6.41	V	42.84	53.98	11.14	AV
10380	62.34	-5.38	H	56.96	68.20	11.24	PK
15570	62.67	-6.41	H	56.26	73.98	17.72	PK
15570	49.13	-6.41	H	42.72	53.98	11.26	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_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 1
Operation Mode:	802.11n_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5230 MHz
Channel No.	46 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10460	63.37	-6.88	V	56.49	68.20	11.71	PK
15690	63.08	-6.64	V	56.44	73.98	17.54	PK
15690	49.92	-6.64	V	43.28	53.98	10.70	AV
10460	63.19	-6.88	H	56.31	68.20	11.89	PK
15690	62.83	-6.64	H	56.19	73.98	17.79	PK
15690	49.61	-6.64	H	42.97	53.98	11.01	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 1
Operation Mode:	802.11ac_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5190 MHz
Channel No.	38 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10380	62.58	-5.38	V	57.20	68.20	11.00	PK
15570	62.94	-6.41	V	56.53	73.98	17.45	PK
15570	49.25	-6.41	V	42.84	53.98	11.14	AV
10380	62.76	-5.38	H	57.38	68.20	10.82	PK
15570	63.13	-6.41	H	56.72	73.98	17.26	PK
15570	49.62	-6.41	H	43.21	53.98	10.77	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 802.11ac_40 MHz BW. Worst case is 13.5 Mbps in 802.11ac_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 1
Operation Mode:	802.11ac_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5230 MHz
Channel No.	46 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10460	63.28	-6.88	V	56.40	68.20	11.80	PK
15690	63.34	-6.64	V	56.70	73.98	17.28	PK
15690	49.51	-6.64	V	42.87	53.98	11.11	AV
10460	62.96	-6.88	H	56.08	68.20	12.12	PK
15690	63.15	-6.64	H	56.51	73.98	17.47	PK
15690	49.74	-6.64	H	43.10	53.98	10.88	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 802.11ac_40 MHz BW. Worst case is 13.5 Mbps in 802.11ac_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna

Band :	UNII 1
Operation Mode:	802.11ac_80 MHz BW
Transfer Rate:	29.3 Mbps
Operating Frequency	5210 MHz
Channel No.	42 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10420	64.28	-6.32	V	57.96	68.20	10.24	PK
15630	63.57	-7.14	V	56.43	73.98	17.55	PK
15630	49.38	-7.14	V	42.24	53.98	11.74	AV
10420	63.71	-6.32	H	57.39	68.20	10.81	PK
15630	63.24	-7.14	H	56.10	73.98	17.88	PK
15630	49.25	-7.14	H	42.11	53.98	11.87	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 802.11ac_80 MHz BW. Worst case is 29.3 Mbps in 802.11ac_80 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2A
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]	Measurement Type
10520	62.74	-6.52	V	56.22	68.20	11.98	PK
15780	63.22	-6.67	V	56.55	73.98	17.43	PK
15780	49.88	-6.67	V	43.21	53.98	10.77	AV
10520	62.59	-6.52	H	56.07	68.20	12.13	PK
15780	63.08	-6.67	H	56.41	73.98	17.57	PK
15780	49.37	-6.67	H	42.70	53.98	11.28	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 2A
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]	Measurement Type
10600	62.91	-6.72	V	56.19	73.98	17.79	PK
10600	49.44	-6.72	V	42.72	53.98	11.26	AV
15900	63.12	-7.00	V	56.12	73.98	17.86	PK
15900	49.85	-7.00	V	42.85	53.98	11.13	AV
10600	62.78	-6.72	H	56.06	73.98	17.92	PK
10600	49.18	-6.72	H	42.46	53.98	11.52	AV
15900	63.19	-7.00	H	56.19	73.98	17.79	PK
15900	49.56	-7.00	H	42.56	53.98	11.42	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 2A
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]	Measurement Type
10640	63.08	-6.43	V	56.65	73.98	17.33	PK
10640	49.25	-6.43	V	42.82	53.98	11.16	AV
15960	63.21	-6.93	V	56.28	73.98	17.70	PK
15960	49.76	-6.93	V	42.83	53.98	11.15	AV
10640	62.98	-6.43	H	56.55	73.98	17.43	PK
10640	49.35	-6.43	H	42.92	53.98	11.06	AV
15960	63.14	-6.93	H	56.21	73.98	17.77	PK
15960	49.83	-6.93	H	42.90	53.98	11.08	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 2A
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]	Measurement Type
10520	62.85	-6.52	V	56.33	68.20	11.87	PK
15780	63.52	-6.67	V	56.85	73.98	17.13	PK
15780	49.70	-6.67	V	43.03	53.98	10.95	AV
10520	62.77	-6.52	H	56.25	68.20	11.95	PK
15780	63.69	-6.67	H	57.02	73.98	16.96	PK
15780	49.62	-6.67	H	42.95	53.98	11.03	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 2A
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]	Measurement Type
10600	62.59	-6.72	V	55.87	73.98	18.11	PK
10600	49.45	-6.72	V	42.73	53.98	11.25	AV
15900	63.28	-7.00	V	56.28	73.98	17.70	PK
15900	49.66	-7.00	V	42.66	53.98	11.32	AV
10600	62.31	-6.72	H	55.59	73.98	18.39	PK
10600	49.30	-6.72	H	42.58	53.98	11.40	AV
15900	63.13	-7.00	H	56.13	73.98	17.85	PK
15900	49.57	-7.00	H	42.57	53.98	11.41	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 2A
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]	Measurement Type
10640	62.59	-6.43	V	56.16	73.98	17.82	PK
10640	49.29	-6.43	V	42.86	53.98	11.12	AV
15960	63.11	-6.93	V	56.18	73.98	17.80	PK
15960	49.73	-6.93	V	42.80	53.98	11.18	AV
10640	62.75	-6.43	H	56.32	73.98	17.66	PK
10640	49.16	-6.43	H	42.73	53.98	11.25	AV
15960	63.20	-6.93	H	56.27	73.98	17.71	PK
15960	49.31	-6.93	H	42.38	53.98	11.60	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 2A
Operation Mode:	802.11 ac_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5260MHz
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]	Measurement Type
10520	63.05	-6.52	V	56.53	68.20	11.67	PK
15780	63.08	-6.67	V	56.41	73.98	17.57	PK
15780	49.15	-6.67	V	42.48	53.98	11.50	AV
10520	63.03	-6.52	H	56.51	68.20	11.69	PK
15780	62.85	-6.67	H	56.18	73.98	17.80	PK
15780	49.52	-6.67	H	42.85	53.98	11.13	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 802.11ac_20 MHz BW. Worst case is 6.5 Mbps in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2A
Operation Mode:	802.11 ac_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]	Measurement Type
10600	63.11	-6.72	V	56.39	73.98	17.59	PK
10600	49.08	-6.72	V	42.36	53.98	11.62	AV
15900	62.95	-7.00	V	55.95	73.98	18.03	PK
15900	49.34	-7.00	V	42.34	53.98	11.64	AV
10600	63.39	-6.72	H	56.67	73.98	17.31	PK
10600	49.19	-6.72	H	42.47	53.98	11.51	AV
15900	63.05	-7.00	H	56.05	73.98	17.93	PK
15900	49.27	-7.00	H	42.27	53.98	11.71	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 802.11ac_20 MHz BW. Worst case is 6.5 Mbps in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2A
Operation Mode:	802.11 ac_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]	Measurement Type
10640	62.92	-6.43	V	56.49	73.98	17.49	PK
10640	49.18	-6.43	V	42.75	53.98	11.23	AV
15960	62.58	-6.93	V	55.65	73.98	18.33	PK
15960	49.59	-6.93	V	42.66	53.98	11.32	AV
10640	62.17	-6.43	H	55.74	73.98	18.24	PK
10640	49.52	-6.43	H	43.09	53.98	10.89	AV
15960	63.08	-6.93	H	56.15	73.98	17.83	PK
15960	49.25	-6.93	H	42.32	53.98	11.66	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 802.11ac_20 MHz BW. Worst case is 6.5 Mbps in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2A
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]	Measurement Type
10540	63.10	-5.77	V	57.33	68.20	10.87	PK
15810	63.24	-7.47	V	55.77	73.98	18.21	PK
15810	49.73	-7.47	V	42.26	53.98	11.72	AV
10540	62.59	-5.77	H	56.82	68.20	11.38	PK
15810	63.19	-7.47	H	55.72	73.98	18.26	PK
15810	49.54	-7.47	H	42.07	53.98	11.91	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 802.11n_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 2A
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]	Measurement Type
10620	63.15	-6.36	V	56.79	73.98	17.19	PK
10620	49.13	-6.36	V	42.77	53.98	11.21	AV
15930	63.57	-6.77	V	56.80	73.98	17.18	PK
15930	49.21	-6.77	V	42.44	53.98	11.54	AV
10620	63.02	-6.36	H	56.66	73.98	17.32	PK
10620	49.20	-6.36	H	42.84	53.98	11.14	AV
15930	63.28	-6.77	H	56.51	73.98	17.47	PK
15930	49.52	-6.77	H	42.75	53.98	11.23	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 2A
Operation Mode:	802.11ac_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]	Measurement Type
10540	62.81	-5.77	V	57.04	68.20	11.16	PK
15810	63.12	-7.47	V	55.65	73.98	18.33	PK
15810	49.58	-7.47	V	42.11	53.98	11.87	AV
10540	63.08	-5.77	H	57.31	68.20	10.89	PK
15810	63.47	-7.47	H	56.00	73.98	17.98	PK
15810	49.42	-7.47	H	41.95	53.98	12.03	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 802.11ac_40 MHz BW. Worst case is 13.5 Mbps in 802.11ac_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2A
Operation Mode:	802.11ac_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]	Measurement Type
10620	63.06	-6.36	V	56.70	73.98	17.28	PK
10620	49.16	-6.36	V	42.80	53.98	11.18	AV
15930	63.34	-6.77	V	56.57	73.98	17.41	PK
15930	49.73	-6.77	V	42.96	53.98	11.02	AV
10620	62.84	-6.36	H	56.48	73.98	17.50	PK
10620	49.18	-6.36	H	42.82	53.98	11.16	AV
15930	63.17	-6.77	H	56.40	73.98	17.58	PK
15930	49.40	-6.77	H	42.63	53.98	11.35	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 802.11ac_40 MHz BW. Worst case is 13.5 Mbps in 802.11ac_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna

Band :	UNII 2A
Operation Mode:	802.11ac_80 MHz BW
Transfer Rate:	29.3 Mbps
Operating Frequency	5290 MHz
Channel No.	58 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10580	63.32	-5.70	V	57.62	68.20	10.58	PK
15870	63.08	-7.27	V	55.81	73.98	18.17	PK
15870	49.87	-7.27	V	42.60	53.98	11.38	AV
10580	63.06	-5.70	H	57.36	68.20	10.84	PK
15870	63.13	-7.27	H	55.86	73.98	18.12	PK
15870	49.71	-7.27	H	42.44	53.98	11.54	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 802.11ac_80 MHz BW. Worst case is 29.3 Mbps in 802.11ac_80 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2C
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]	Measurement Type
11000	62.72	-5.06	V	57.66	73.98	16.32	PK
11000	49.24	-5.06	V	44.18	53.98	9.80	AV
16500	63.55	-4.35	V	59.20	68.20	9.00	PK
11000	62.52	-5.06	H	57.46	73.98	16.52	PK
11000	49.12	-5.06	H	44.06	53.98	9.92	AV
16500	63.27	-4.35	H	58.92	68.20	9.28	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 2C
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5580 MHz
Channel No.	116 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11160	62.54	-5.55	V	56.99	73.98	16.99	PK
11160	49.31	-5.55	V	43.76	53.98	10.22	AV
16740	63.28	-3.73	V	59.55	68.20	8.65	PK
11160	62.90	-5.55	H	57.35	73.98	16.63	PK
11160	49.51	-5.55	H	43.96	53.98	10.02	AV
16740	63.14	-3.73	H	59.41	68.20	8.79	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 2C
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]	Measurement Type
11200	62.87	-6.05	V	56.82	73.98	17.16	PK
11200	49.15	-6.05	V	43.10	53.98	10.88	AV
16800	63.11	-2.56	V	60.55	68.20	7.65	PK
11200	62.62	-6.05	H	56.57	73.98	17.41	PK
11200	48.87	-6.05	H	42.82	53.98	11.16	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 802.11a. 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 2C
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]	Measurement Type
11000	62.27	-5.06	V	57.21	73.98	16.77	PK
11000	49.05	-5.06	V	43.99	53.98	9.99	AV
16500	63.03	-4.35	V	58.68	68.20	9.52	PK
11000	62.69	-5.06	H	57.63	73.98	16.35	PK
11000	48.96	-5.06	H	43.90	53.98	10.08	AV
16500	62.16	-4.35	H	57.81	68.20	10.39	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 2C
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5580 MHz
Channel No.	116 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11160	62.84	-5.55	V	57.29	73.98	16.69	PK
11160	48.96	-5.55	V	43.41	53.98	10.57	AV
16740	63.10	-3.73	V	59.37	68.20	8.83	PK
11160	62.58	-5.55	H	57.03	73.98	16.95	PK
11160	49.11	-5.55	H	43.56	53.98	10.42	AV
16740	62.76	-3.73	H	59.03	68.20	9.17	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 2C
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]	Measurement Type
11400	62.87	-6.08	V	56.79	73.98	17.19	PK
11400	48.59	-6.08	V	42.51	53.98	11.47	AV
17100	62.52	-0.85	V	61.67	68.20	6.53	PK
11400	63.16	-6.08	H	57.08	73.98	16.90	PK
11400	48.24	-6.08	H	42.16	53.98	11.82	AV
17100	62.28	-0.85	H	61.43	68.20	6.77	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 2C
Operation Mode:	802.11 ac_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5500MHz
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]	Measurement Type
11000	63.05	-5.06	V	57.99	73.98	15.99	PK
11000	49.18	-5.06	V	44.12	53.98	9.86	AV
16500	63.39	-4.35	V	59.04	68.20	9.16	PK
11000	63.29	-5.06	H	58.23	73.98	15.75	PK
11000	49.23	-5.06	H	44.17	53.98	9.81	AV
16500	63.43	-4.35	H	59.08	68.20	9.12	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 802.11ac_20 MHz BW. Worst case is 6.5 Mbps in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2C
Operation Mode:	802.11 ac_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5580 MHz
Channel No.	116 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11160	62.88	-5.55	V	57.33	73.98	16.65	PK
11160	49.34	-5.55	V	43.79	53.98	10.19	AV
16740	63.10	-3.73	V	59.37	68.20	8.83	PK
11160	62.57	-5.55	H	57.02	73.98	16.96	PK
11160	49.12	-5.55	H	43.57	53.98	10.41	AV
16740	62.73	-3.73	H	59.00	68.20	9.20	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 802.11ac_20 MHz BW. Worst case is 6.5 Mbps in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2C
Operation Mode:	802.11 ac_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]	Measurement Type
11400	62.58	-6.08	V	56.50	73.98	17.48	PK
11400	48.72	-6.08	V	42.64	53.98	11.34	AV
17100	62.53	-0.85	V	61.68	68.20	6.52	PK
11400	63.19	-6.08	H	57.11	73.98	16.87	PK
11400	48.95	-6.08	H	42.87	53.98	11.11	AV
17100	62.10	-0.85	H	61.25	68.20	6.95	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 802.11ac_20 MHz BW. Worst case is 6.5 Mbps in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2C
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]	Measurement Type
11020	63.14	-5.86	V	57.28	73.98	16.70	PK
11020	48.73	-5.86	V	42.87	53.98	11.11	AV
16530	62.92	-3.75	V	59.17	68.20	9.03	PK
11020	62.87	-5.86	H	57.01	73.98	16.97	PK
11020	48.65	-5.86	H	42.79	53.98	11.19	AV
16530	62.83	-3.75	H	59.08	68.20	9.12	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 2C
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]	Measurement Type
11340	63.17	-5.10	V	58.07	73.98	15.91	PK
11340	48.86	-5.10	V	43.76	53.98	10.22	AV
17010	62.82	-1.27	V	61.55	68.20	6.65	PK
11340	63.34	-5.10	H	58.24	73.98	15.74	PK
11340	49.11	-5.10	H	44.01	53.98	9.97	AV
17010	62.57	-1.27	H	61.30	68.20	6.90	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 2C
Operation Mode:	802.11ac_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]	Measurement Type
11020	63.03	-5.86	V	57.17	73.98	16.81	PK
11020	48.59	-5.86	V	42.73	53.98	11.25	AV
16530	63.37	-3.75	V	59.62	68.20	8.58	PK
11020	62.82	-5.86	H	56.96	73.98	17.02	PK
11020	48.37	-5.86	H	42.51	53.98	11.47	AV
16530	63.18	-3.75	H	59.43	68.20	8.77	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 802.11ac_40 MHz BW. Worst case is 13.5 Mbps in 802.11ac_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2C
Operation Mode:	802.11ac_40 MHz BW
Transfer Rate:	13.5 Mbps
Operating Frequency	5710 MHz
Channel No.	142 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11420	63.13	-6.07	V	57.06	73.98	16.92	PK
11420	48.82	-6.07	V	42.75	53.98	11.23	AV
17130	62.30	-0.81	V	61.49	68.20	6.71	PK
11420	62.70	-6.07	H	56.63	73.98	17.35	PK
11420	48.64	-6.07	H	42.57	53.98	11.41	AV
17130	62.24	-0.81	H	61.43	68.20	6.77	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 802.11ac_40 MHz BW. Worst case is 13.5 Mbps in 802.11ac_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna

Band :	UNII 2C
Operation Mode:	802.11ac_80 MHz BW
Transfer Rate:	29.3 Mbps
Operating Frequency	5530 MHz
Channel No.	106 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11060	62.14	-6.21	V	55.93	73.98	18.05	PK
11060	48.58	-6.21	V	42.37	53.98	11.61	AV
16590	62.72	-3.20	V	59.52	68.20	8.68	PK
11060	62.52	-6.21	H	56.31	73.98	17.67	PK
11060	48.27	-6.21	H	42.06	53.98	11.92	AV
16590	62.38	-3.20	H	59.18	68.20	9.02	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 802.11ac_80 MHz BW. Worst case is 29.3 Mbps in 802.11ac_80 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 2C
Operation Mode:	802.11ac_80 MHz BW
Transfer Rate:	29.3 Mbps
Operating Frequency	5690 MHz
Channel No.	138 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11380	62.65	-5.59	V	57.06	73.98	16.92	PK
11380	48.62	-5.59	V	43.03	53.98	10.95	AV
17070	63.38	-1.32	V	62.06	68.20	6.14	PK
11380	62.31	-5.59	H	56.72	73.98	17.26	PK
11380	48.34	-5.59	H	42.75	53.98	11.23	AV
17070	62.85	-1.32	H	61.53	68.20	6.67	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 802.11ac_80 MHz BW. Worst case is 29.3 Mbps in 802.11ac_80 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

Band :	UNII 3
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5745MHz
Channel No.	149 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11490	63.20	-6.10	V	57.10	73.98	16.88	PK
11490	49.44	-6.10	V	43.34	53.98	10.64	AV
17235	62.76	-1.35	V	61.41	68.20	6.79	PK
11490	63.08	-6.10	H	56.98	73.98	17.00	PK
11490	49.25	-6.10	H	43.15	53.98	10.83	AV
17235	62.54	-1.35	H	61.19	68.20	7.01	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 3
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5785 MHz
Channel No.	157 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11570	63.10	-5.57	V	57.53	73.98	16.45	PK
11570	49.38	-5.57	V	43.81	53.98	10.17	AV
17355	63.13	-0.39	V	62.74	68.20	5.46	PK
11570	63.37	-5.57	H	57.80	73.98	16.18	PK
11570	49.15	-5.57	H	43.58	53.98	10.40	AV
17355	62.82	-0.39	H	62.43	68.20	5.77	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 802.11a. 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 3
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5825 MHz
Channel No.	165 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	62.68	-6.63	V	56.05	73.98	17.93	PK
11650	49.13	-6.63	V	42.50	53.98	11.48	AV
17475	63.05	0.29	V	63.34	68.20	4.86	PK
11650	63.14	-6.63	H	56.51	73.98	17.47	PK
11650	49.06	-6.63	H	42.43	53.98	11.55	AV
17475	63.27	0.29	H	63.56	68.20	4.64	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 3
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5745 MHz
Channel No.	149 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11490	63.08	-6.10	V	56.98	73.98	17.00	PK
11490	49.29	-6.10	V	43.19	53.98	10.79	AV
17235	62.74	-1.35	V	61.39	68.20	6.81	PK
11490	63.15	-6.10	H	57.05	73.98	16.93	PK
11490	49.12	-6.10	H	43.02	53.98	10.96	AV
17235	62.58	-1.35	H	61.23	68.20	6.97	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 3
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5785 MHz
Channel No.	157 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11570	63.12	-5.57	V	57.55	73.98	16.43	PK
11570	49.52	-5.57	V	43.95	53.98	10.03	AV
17355	63.29	-0.39	V	62.90	68.20	5.30	PK
11570	63.18	-5.57	H	57.61	73.98	16.37	PK
11570	49.34	-5.57	H	43.77	53.98	10.21	AV
17355	62.94	-0.39	H	62.55	68.20	5.65	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 3
Operation Mode:	802.11 n_20 MHz BW
Transfer Rate:	6.5 Mbps
Operating Frequency	5825 MHz
Channel No.	165 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	62.92	-6.63	V	56.29	73.98	17.69	PK
11650	49.08	-6.63	V	42.45	53.98	11.53	AV
17475	62.94	0.29	V	63.23	68.20	4.97	PK
11650	63.03	-6.63	H	56.40	73.98	17.58	PK
11650	49.27	-6.63	H	42.64	53.98	11.34	AV
17475	62.81	0.29	H	63.10	68.20	5.10	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.