802.11ac _80MHz BW (UNII 3)_ Service Port Ant.0

▣ TEST RESULTS

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

802.11ac(80MHz) Mode		MCS Index	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
Frequency [MHz]	Channel No.					
5775	155	1	6.52	0.27	6.79	29.83
		2	6.38	0.44	6.82	29.83
		3	6.23	0.63	6.87	29.83
		4	6.17	0.75	6.92	29.83
		5	5.96	0.97	6.93	29.83
		6	5.77	1.11	6.88	29.83
		7	5.73	1.20	6.93	29.83
		8	5.58	1.25	6.83	29.83
		9	5.58	1.36	6.94	29.83
		10	5.53	1.43	6.95	29.83

802.11ac _80MHz BW (UNII 3)_ Service Port Ant.1

▣ TEST RESULTS

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

802.11ac(80MHz) Mode		MCS Index	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
Frequency [MHz]	Channel No.					
5775	155	1	5.63	0.27	5.90	30.00
		2	5.40	0.44	5.84	30.00
		3	5.38	0.63	6.01	30.00
		4	5.29	0.75	6.04	30.00
		5	5.06	0.97	6.03	30.00
		6	4.90	1.11	6.01	30.00
		7	4.67	1.20	5.87	30.00
		8	4.74	1.25	5.99	30.00
		9	4.62	1.36	5.98	30.00
		10	4.57	1.43	6.00	30.00

802.11ac _80MHz BW (UNII 3)_ Service Port Ant.2

▣ TEST RESULTS

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

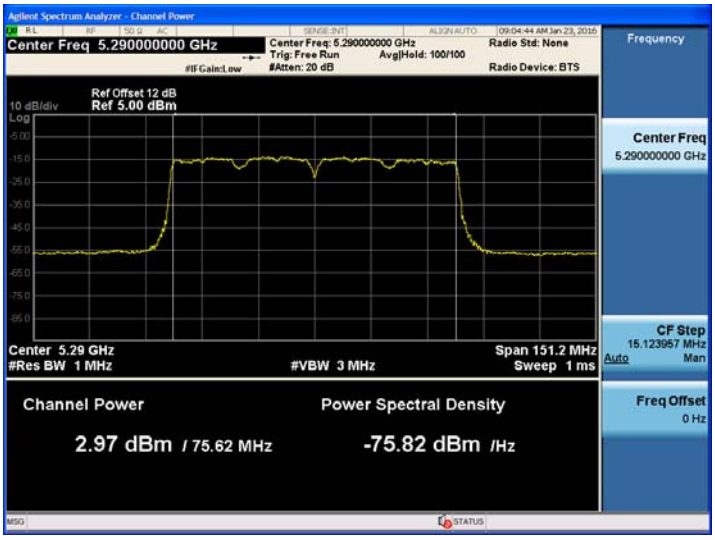
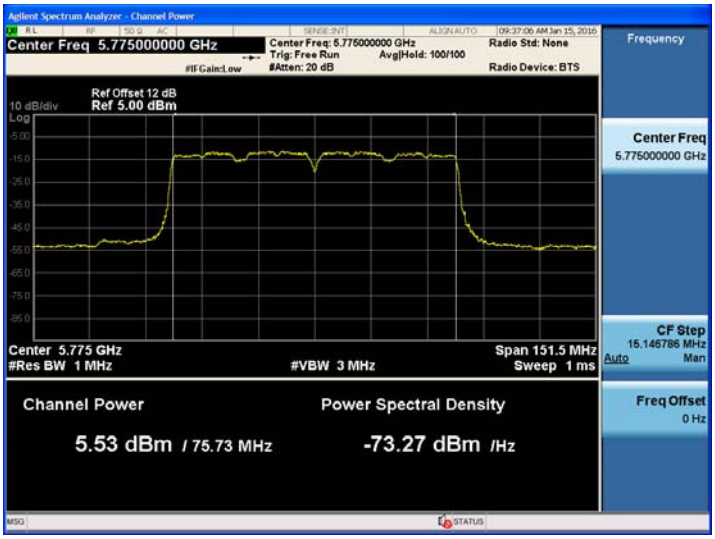
802.11ac(80MHz) Mode		MCS Index	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
Frequency [MHz]	Channel No.					
5775	155	1	6.29	0.27	6.55	30.00
		2	6.10	0.44	6.54	30.00
		3	5.99	0.63	6.62	30.00
		4	5.81	0.75	6.56	30.00
		5	5.54	0.97	6.51	30.00
		6	5.43	1.11	6.54	30.00
		7	5.37	1.20	6.57	30.00
		8	5.28	1.25	6.53	30.00
		9	5.12	1.36	6.48	30.00
		10	5.22	1.43	6.65	30.00

▣ **TEST RESULTS_Sum Data of Ant.0, Ant.1 and Ant.2_Service Port**

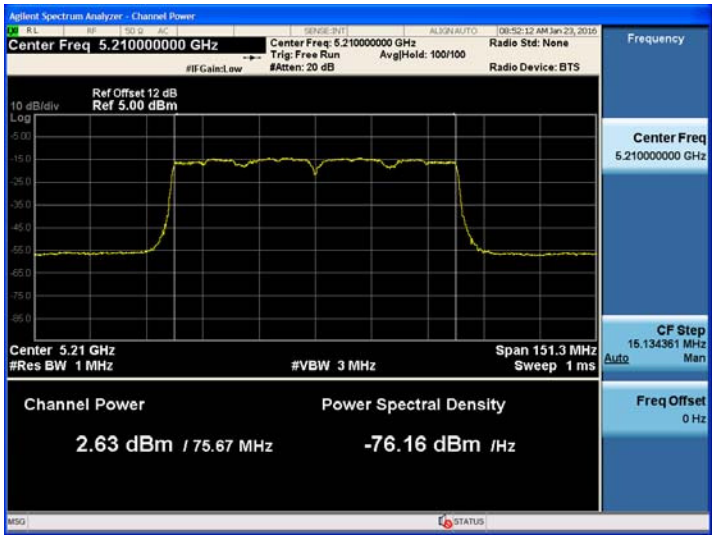
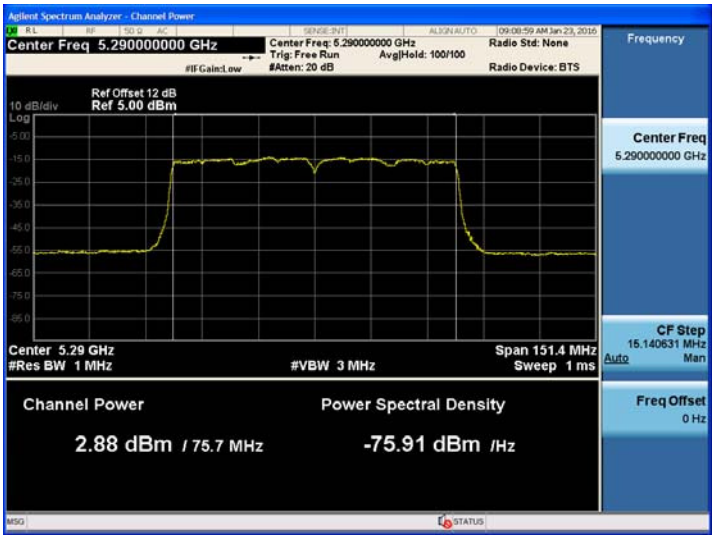
Conducted Output Power Measurements (802.11ac_80MHz Mode: 5775 MHz)

802.11ac(80MHz) Mode		MCS Index	Sum Power of Ant.0 & 1&2	Limit (dBm)
Frequency[MHz]	Channel No.			
5775	155	1	11.20	25.74
		2	11.19	25.74
		3	11.29	25.74
		4	11.29	25.74
		5	11.28	25.74
		6	11.26	25.74
		7	11.25	25.74
		8	11.23	25.74
		9	11.26	25.74
		10	11.32	25.74

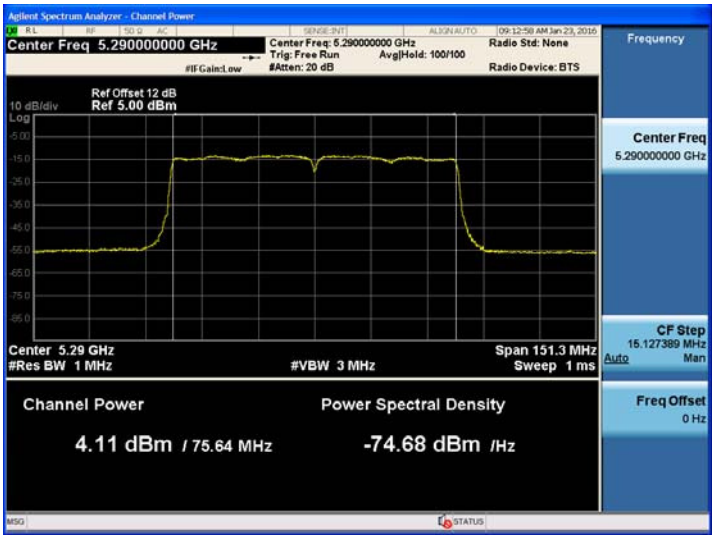
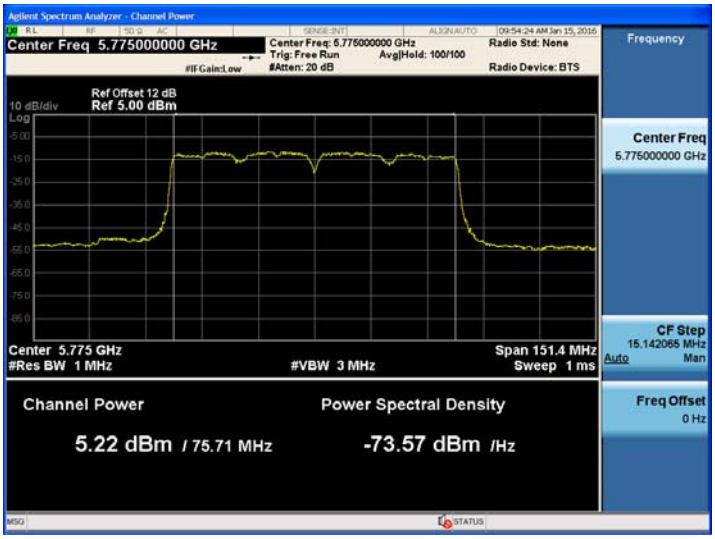
▣ TEST Plot for 802.11ac_80MHz BW_Service port Ant.0

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**
	

▣ TEST Plot for 802.11ac_80MHz BW_Service port Ant.1

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**

▣ TEST Plot for 802.11ac_80MHz BW_Service port Ant.2

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**
	

▣ Straddle channels TEST RESULTS _Monitoring Port _Ant.0

Conducted Output Power Measurements (802.11a _20M Mode: UNII 2C Band 5720MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11a	5720	144	10.22	0.35	10.57	17.80

Conducted Output Power Measurements (802.11a _20M Mode: UNII 3 Band 5720MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11a	5720	144	3.64	0.35	3.99	25.74

▣ Straddle channels TEST Plot for 802.11a _20MHz BW

802.11a UNII 2C Band Average Power CH.144	802.11a UNII 3 Band Average Power CH.144

▣ Straddle channels TEST RESULTS _Monitoring Port _Ant.1

Conducted Output Power Measurements (802.11a _20M Mode: UNII 2C Band 5720MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11a	5720	144	10.35	0.21	10.56	17.80

Conducted Output Power Measurements (802.11a _20M Mode: UNII 3 Band 5720MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11a	5720	144	3.64	0.21	3.85	25.74

▣ Straddle channels TEST Plot for 802.11a _20MHz BW

802.11a UNII 2C Band Average Power CH.144	802.11a UNII 3 Band Average Power CH.144

▣ Straddle channels TEST RESULTS _Monitoring Port _Ant.2

Conducted Output Power Measurements (802.11a _20M Mode: UNII 2C Band 5720MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11a	5720	144	11.00	0.21	11.21	17.80

Conducted Output Power Measurements (802.11a _20M Mode: UNII 3 Band 5720MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11a	5720	144	4.47	0.21	4.68	25.74

▣ Straddle channels TEST Plot for 802.11a _20MHz BW

802.11a UNII 2C Band Average Power CH.144	802.11a UNII 3 Band Average Power CH.144

▣ Straddle channels TEST RESULTS _Service Port _Ant.0

Conducted Output Power Measurements (802.11a/n/ac _20M Mode: UNII 2C Band 5720MHz)

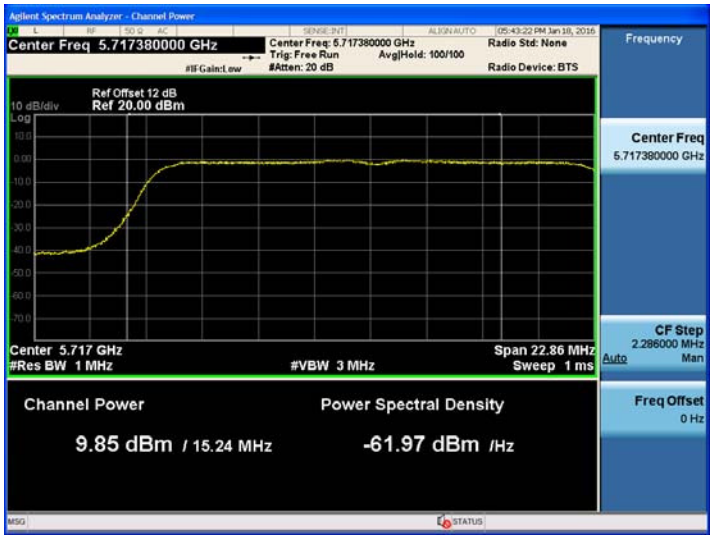
Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11a	5720	144	9.91	0.22	10.13	22.87
802.11n_20MHz			9.50	0.40	9.90	22.87
802.11ac_20MHz			9.85	0.51	10.36	22.87

Conducted Output Power Measurements (802.11a/n/ac _20M Mode: UNII 3 Band 5720MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11a	5720	144	3.30	0.22	3.52	29.83
802.11n_20MHz			3.39	0.40	3.79	29.83
802.11ac_20MHz			3.73	0.51	4.24	29.83

▣ Straddle channels TEST Plot for 802.11a/n/ac _20MHz BW

802.11a UNII 2C Band Average Power CH.144	802.11a UNII 3 Band Average Power CH.144
802.11n UNII 2C Band Average Power CH.144	**802.11n UNII 3 Band Average Power CH.144**

802.11a UNII 2C Band Average Power CH.144	802.11a UNII 3 Band Average Power CH.144
	

▣ Straddle channels TEST RESULTS _Service Port _Ant.1

Conducted Output Power Measurements (802.11a/n/ac _20M Mode: UNII 2C Band 5720MHz)

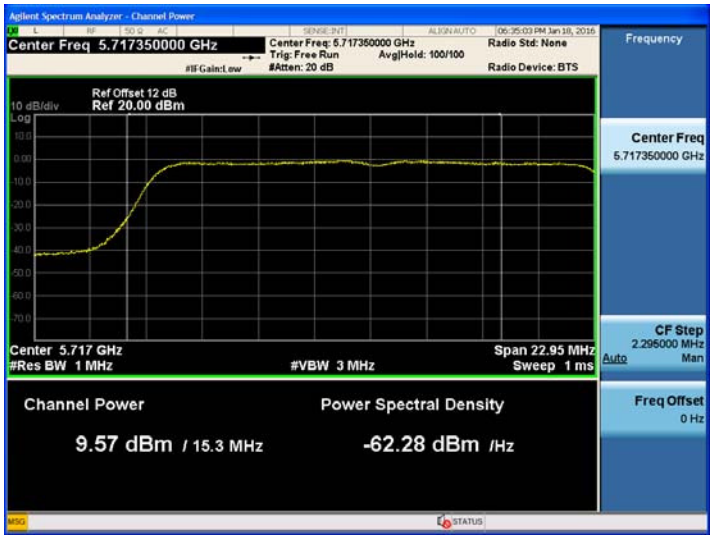
Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11a	5720	144	9.38	0.21	9.59	23.21
802.11n_20MHz			9.16	0.37	9.53	23.21
802.11ac_20MHz			9.57	0.48	10.05	23.21

Conducted Output Power Measurements (802.11a/n/ac _20M Mode: UNII 3 Band 5720MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11a	5720	144	2.83	0.21	3.04	30.00
802.11n_20MHz			3.06	0.37	3.27	30.00
802.11ac_20MHz			3.32	0.48	3.80	30.00

▣ Straddle channels TEST Plot for 802.11a/n/ac _20MHz BW

802.11a UNII 2C Band Average Power CH.144	802.11a UNII 3 Band Average Power CH.144
802.11n UNII 2C Band Average Power CH.144	**802.11n UNII 3 Band Average Power CH.144**

802.11a UNII 2C Band Average Power CH.144	802.11a UNII 3 Band Average Power CH.144
	

▣ Straddle channels TEST RESULTS _Service Port _Ant.2

Conducted Output Power Measurements (802.11a/n/ac _20M Mode: UNII 2C Band 5720MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11a	5720	144	9.71	0.35	10.06	23.21
802.11n_20MHz			9.56	0.40	9.96	23.21
802.11ac_20MHz			10.00	0.48	10.48	23.21

Conducted Output Power Measurements (802.11a/n/ac _20M Mode: UNII 3 Band 5720MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11a	5720	144	3.20	0.35	3.55	30.00
802.11n_20MHz			3.45	0.40	3.85	30.00
802.11ac_20MHz			3.90	0.48	4.38	30.00

▣ Straddle channels TEST Plot for 802.11a/n/ac _20MHz BW

802.11a UNII 2C Band Average Power CH.144	802.11a UNII 3 Band Average Power CH.144
802.11n UNII 2C Band Average Power CH.144	**802.11n UNII 3 Band Average Power CH.144**

802.11ac UNII 2C Band Average Power CH.144	802.11ac UNII 3 Band Average Power CH.144

▣ Straddle channels TEST RESULTS _Service Port Ant.0

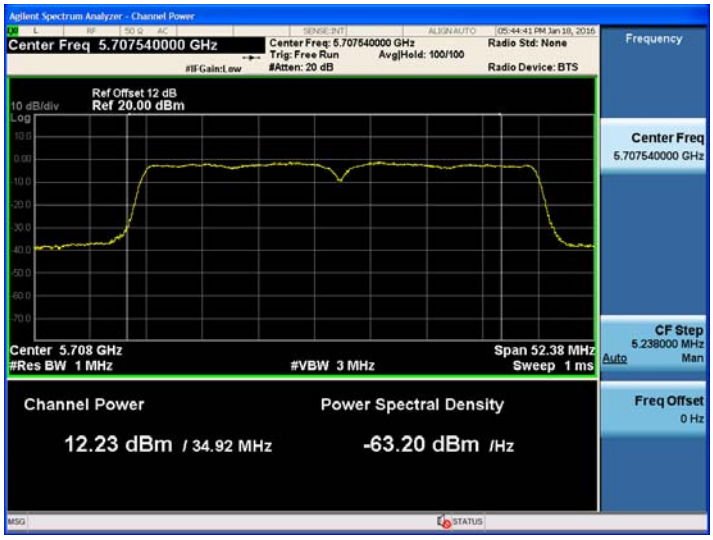
Conducted Output Power Measurements (802.11n/ac _40M Mode: UNII 2C Band 5710MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11n_40MHz	5710	142	12.23	0.72	12.95	23.64
802.11ac_40MHz			12.29	0.61	12.90	23.64

Conducted Output Power Measurements (802.11n/ac_40M Mode: UNII 3 Band 5710MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11n_40MHz	5710	142	1.58	0.72	2.30	29.83
802.11ac_40MHz			1.66	0.61	2.27	29.83

▣ Straddle channels TEST Plot for 802.11n/ac _40MHz BW_Service Port Ant.0

802.11n_40MHz BW UNII 2C Band Average Power CH.142	802.11n_40MHz BW UNII 3 Band Average Power CH.142
	
802.11ac_40MHz BW UNII 2C Band Average Power CH.142	**802.11ac_40MHz BW UNII 3 Band Average Power CH.142**

▣ Straddle channels TEST RESULTS _Service Port Ant.1

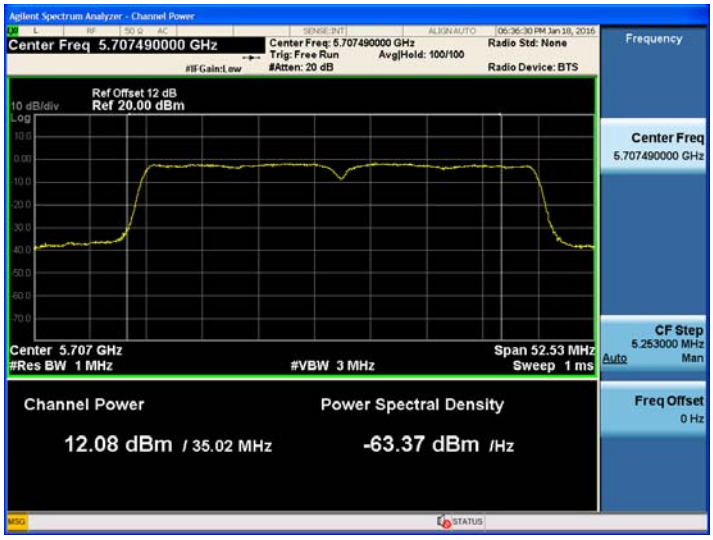
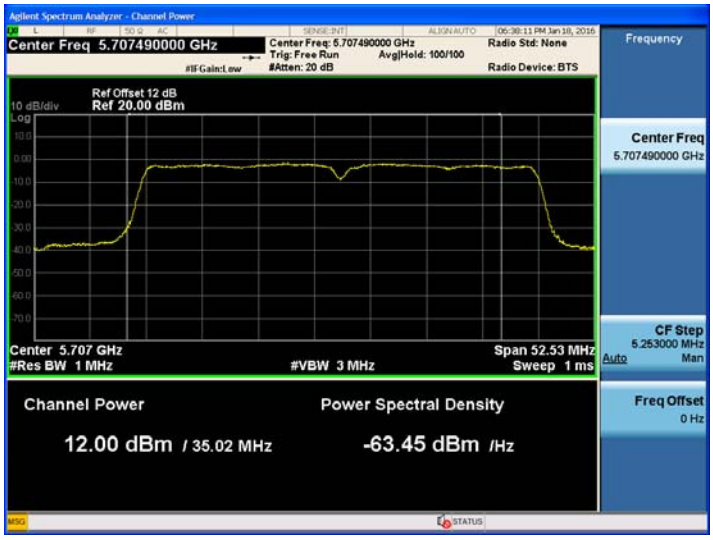
Conducted Output Power Measurements (802.11n/ac _40M Mode: UNII 2C Band 5710MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11n_40MHz	5710	142	12.08	0.44	12.52	23.98
802.11ac_40MHz			12.00	0.77	12.77	23.98

Conducted Output Power Measurements (802.11n/ac_40M Mode: UNII 3 Band 5710MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11n_40MHz	5710	142	1.24	0.44	16.80	30.00
802.11ac_40MHz			1.15	0.77	19.20	30.00

▣ Straddle channels TEST Plot for 802.11n/ac _40MHz BW_Service Port Ant.1

802.11n_40MHz BW UNII 2C Band Average Power CH.142	802.11n_40MHz BW UNII 3 Band Average Power CH.142
	
802.11ac_40MHz BW UNII 2C Band Average Power CH.142	**802.11ac_40MHz BW UNII 3 Band Average Power CH.142**
	

▣ Straddle channels TEST RESULTS _Service Port Ant.2

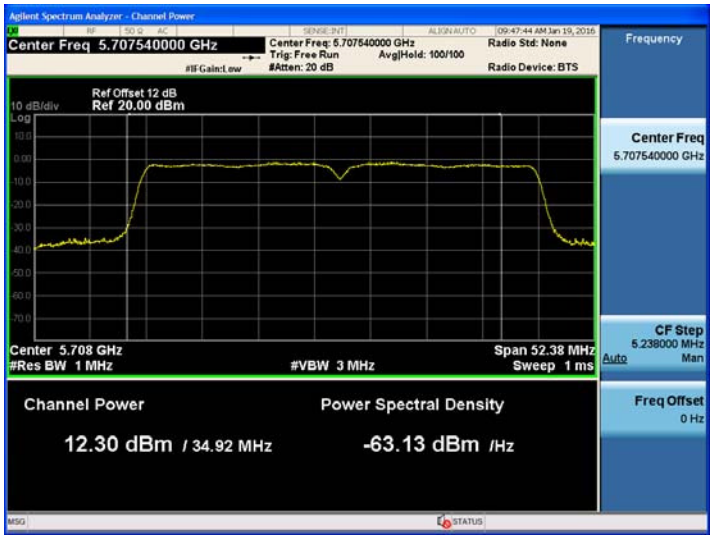
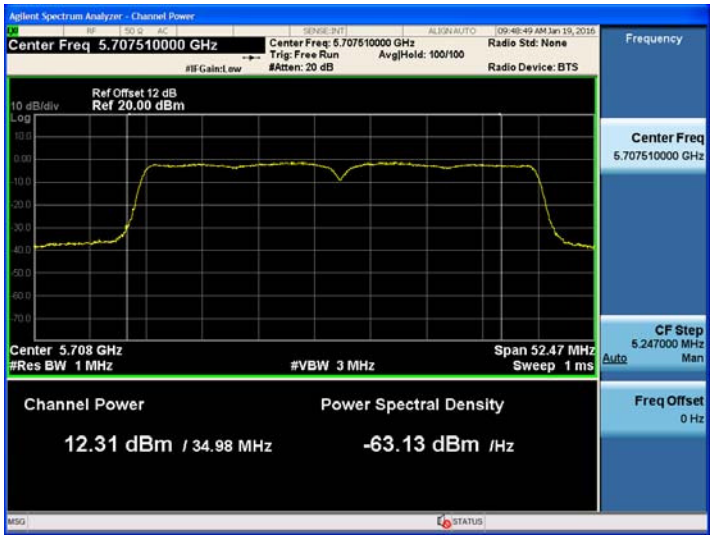
Conducted Output Power Measurements (802.11n/ac _40M Mode: UNII 2C Band 5710MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11n_40MHz	5710	142	12.30	0.50	12.80	23.98
802.11ac_40MHz			12.31	0.77	13.08	23.98

Conducted Output Power Measurements (802.11n/ac_40M Mode: UNII 3 Band 5710MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11n_40MHz	5710	142	1.72	0.50	2.22	30.00
802.11ac_40MHz			1.78	0.77	2.55	30.00

▣ Straddle channels TEST Plot for 802.11n/ac _40MHz BW_Service Port Ant.2

802.11n_40MHz BW UNII 2C Band Average Power CH.142	802.11n_40MHz BW UNII 3 Band Average Power CH.142
	
802.11ac_40MHz BW UNII 2C Band Average Power CH.142	**802.11ac_40MHz BW UNII 3 Band Average Power CH.142**
	

▣ Straddle channels TEST RESULTS _Service Port Ant.0

Conducted Output Power Measurements (802.11ac _80M Mode: UNII 2C Band 5690MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11ac	5690	138	12.34	0.97	13.31	23.64

Conducted Output Power Measurements (802.11ac _80M Mode: UNII 3 Band 5690MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11ac	5690	138	-1.81	0.97	-0.84	29.83

▣ Straddle channels TEST Plot for 802.11ac _80MHz BW

802.11ac_80MHz BW UNII 2C Band Average Power CH.138	802.11ac_80MHz BW UNII 3 Band Average Power CH.138

▣ Straddle channels TEST RESULTS _Service Port Ant.1

Conducted Output Power Measurements (802.11ac _80M Mode: UNII 2C Band 5690MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11ac	5690	138	11.66	1.25	12.91	23.98

Conducted Output Power Measurements (802.11ac _80M Mode: UNII 3 Band 5690MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11ac	5690	138	-2.74	1.25	-1.49	30.00

▣ Straddle channels TEST Plot for 802.11ac _80MHz BW

802.11ac_80MHz BW UNII 2C Band Average Power CH.138	802.11ac_80MHz BW UNII 3 Band Average Power CH.138

▣ Straddle channels TEST RESULTS _Service Port Ant.2

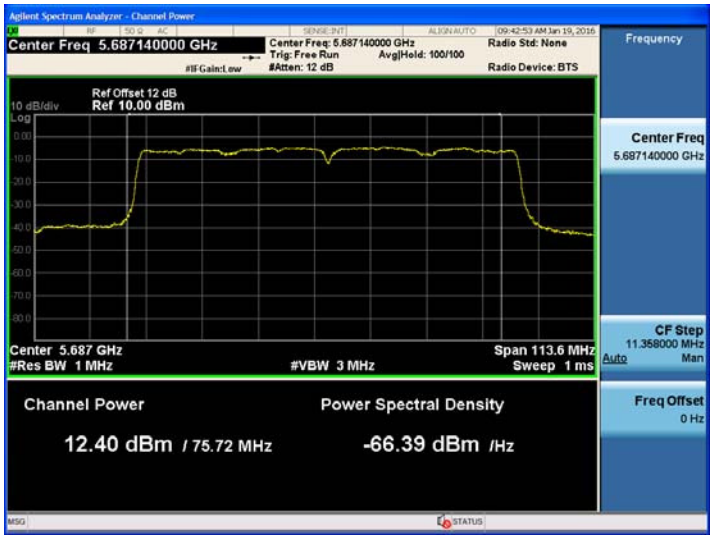
Conducted Output Power Measurements (802.11ac _80M Mode: UNII 2C Band 5690MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11ac	5690	138	12.40	0.97	13.37	23.98

Conducted Output Power Measurements (802.11ac _80M Mode: UNII 3 Band 5690MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11ac	5690	138	-1.76	0.97	-0.79	30.00

▣ Straddle channels TEST Plot for 802.11ac _80MHz BW

802.11ac_80MHz BW UNII 2C Band Average Power CH.138	802.11ac_80MHz BW UNII 3 Band Average Power CH.138
	

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.

Power Spectral Density(for FCC)

Service Port

Operating Mode	Band	Mode	Ant. Port	Ant. Gain (dBi)	Limit
SISO	UNII 1	802.11a,n,ac	0	6.49	10.51 dBm/MHz
			1	6.36	10.64 dBm/MHz
			2	5.95	11 dBm/MHz
	UNII 2A	802.11a,n,ac	0	6.76	10.24dBm/MHz
			1	6.24	10.76 dBm/MHz
			2	5.90	11 dBm/MHz
	UNII 2C	802.11a,n,ac	0	6.34	10.66 dBm/MHz
			1	5.71	11 dBm/MHz
			2	5.69	11 dBm/MHz
	UNII 3	802.11a,n,ac	0	6.17	29.83 dBm/500 kHz
			1	5.46	30 dBm/500 kHz
			2	4.78	30 dBm/500 kHz
MIMO(2 TX)	UNII 1	802.11a,n,ac	0 & 1	9.44	7.56 dBm/MHz
	UNII 2A		0 & 1	9.51	7.49 dBm/MHz
	UNII 2C		0 & 1	9.04	7.96 dBm/MHz
	UNII 3		0 & 1	8.83	27.17 dBm/500 kHz
MIMO(3 TX)	UNII 1	802.11a,n,ac	0 & 1 & 2	11.04	5.96 dBm/MHz
	UNII 2A		0 & 1 & 2	11.08	5.92 dBm/MHz
	UNII 2C		0 & 1 & 2	10.69	6.31 dBm/MHz
	UNII 3		0 & 1 & 2	10.26	25.74 dBm/500 kHz

Monitoring Port

Operating Mode	Band	Mode	Ant. Port	Ant. Gain (dBi)	Limit
SISO	UNII 1	802.11a	0, 1, 2	11.86	5.14 dBm/MHz
	UNII 2A		0, 1, 2	11.81	5.19 dBm/MHz
	UNII 2C		0, 1, 2	12.18	4.82 dBm/MHz
	UNII 3		0, 1, 2	11.23	24.77 dBm/500 kHz

Note :1. If all antenna gains are not equal,

Directional gain = $10*\log[(10^{G1/20} + 10^{G2/20}+\ldots+10^{GN/20})^2/N]$ dBi

(according to KDB662911 D01 v02r01)

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

Power Spectral Density(for IC)

Service Port

Operating Mode	Band	Mode	Ant. Port	Ant. Gain (dBi)	Limit
SISO	UNII 1	802.11a,n,ac	0	6.49	3.51 dBm/MHz
			1	6.36	3.64 dBm/MHz
			2	5.95	4 dBm/MHz
	UNII 2A	802.11a,n,ac	0	6.76	10.24dBm/MHz
			1	6.24	10.76 dBm/MHz
			2	5.90	11 dBm/MHz
	UNII 2C	802.11a,n,ac	0	6.34	10.66 dBm/MHz
			1	5.71	11 dBm/MHz
			2	5.69	11 dBm/MHz
	UNII 3	802.11a,n,ac	0	6.17	29.83 dBm/500 kHz
			1	5.46	30 dBm/500 kHz
			2	4.78	30 dBm/500 kHz
MIMO(2 TX)	UNII 1	802.11a,n,ac	0 & 1	9.44	0.56 dBm/MHz
	UNII 2A		0 & 1	9.51	7.49 dBm/MHz
	UNII 2C		0 & 1	9.04	7.96 dBm/MHz
	UNII 3		0 & 1	8.83	27.17 dBm/500 kHz
MIMO(3 TX)	UNII 1	802.11a,n,ac	0 & 1 & 2	11.04	-1.04 dBm/MHz
	UNII 2A		0 & 1 & 2	11.08	5.92 dBm/MHz
	UNII 2C		0 & 1 & 2	10.69	6.31 dBm/MHz
	UNII 3		0 & 1 & 2	10.26	25.74 dBm/500 kHz

Monitoring Port

Operating Mode	Band	Mode	Ant. Port	Ant. Gain (dBi)	Limit
SISO	UNII 1	802.11a	0, 1, 2	11.86	-1.86 dBm/MHz
	UNII 2A		0, 1, 2	11.81	5.19 dBm/MHz
	UNII 2C		0, 1, 2	12.18	4.82 dBm/MHz
	UNII 3		0, 1, 2	11.23	24.77 dBm/500 kHz

Note :1. If all antenna gains are not equal,

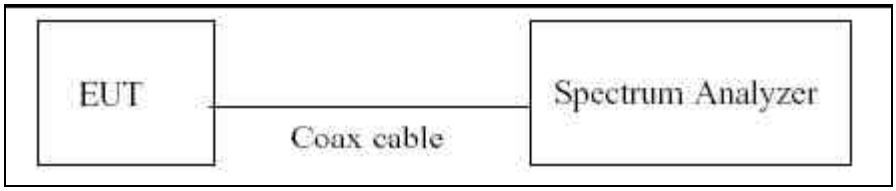
Directional gain = $10*\log[(10^{G1/20} + 10^{G2/20}+\ldots+10^{GN/20})^2/N]$ dBi

(according to KDB662911 D01 v02r01)

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

3. Limit of UNII1 for IC is used the conducted level.
   ■ Limit : e.i.r.p. limit – Antenna Gain
4. The limits of conducted power spectral density were applied the antenna gain. Therefore, if conducted power spectral density is pass, e.i.r.p. is also pass. So, we attached only conducted power spectral density table

▣ TEST CONFIGURATION



▣ TEST PROCEDURE

We tested according to Method in KDB 789033(issued 01/08/2016).

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	12.0

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

▣ **802.11a_20MHz BW_Monitoring Port Ant.0**

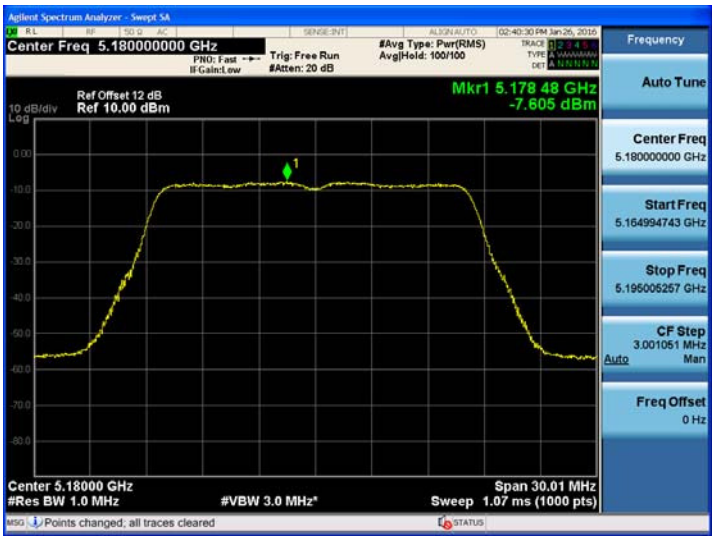
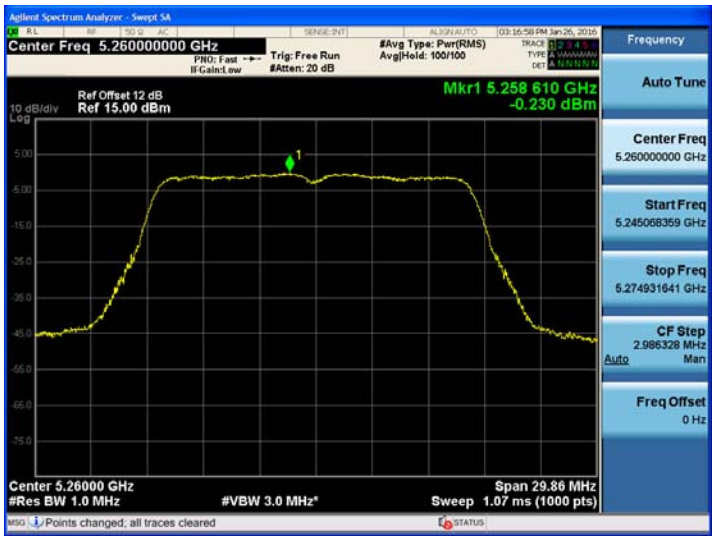
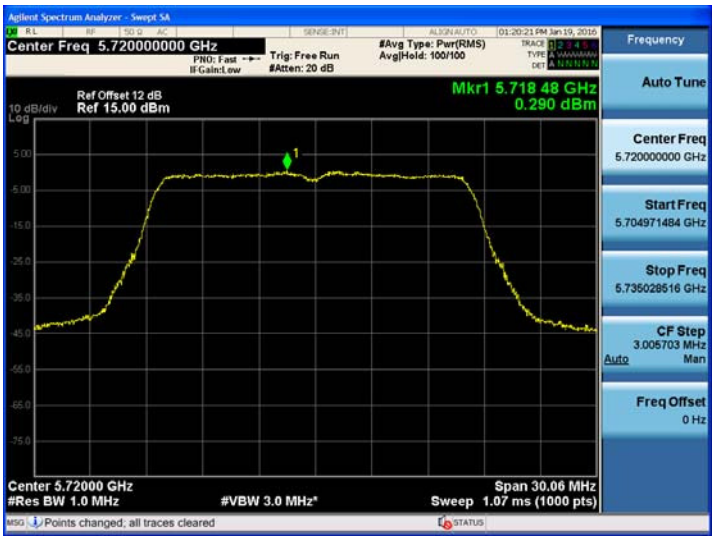
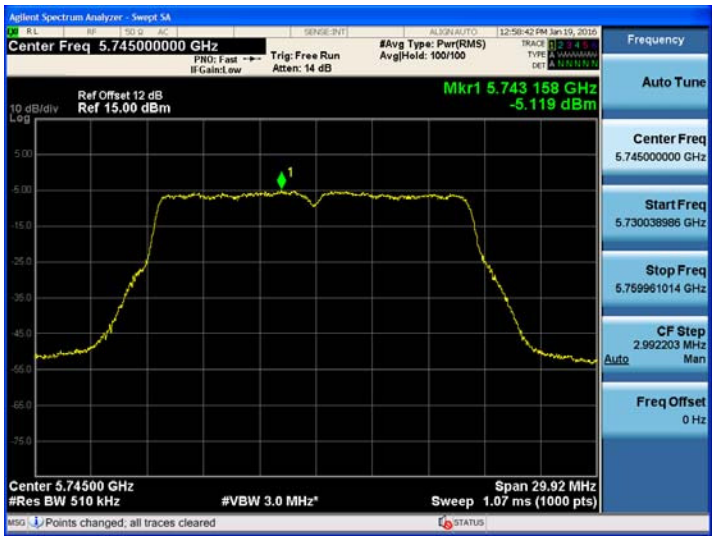
▣ **TEST RESULTS**

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	-7.605	0.348	-7.257	-1.86	Pass
5200	40		-7.865	0.214	-7.651		Pass
5240	48		-7.796	0.210	-7.586		Pass
5260	52		-0.230	0.348	0.118	5.19	Pass
5300	60		-6.542	0.215	-6.327		Pass
5320	64		-7.205	0.214	-6.991		Pass
5500	100		-7.556	0.203	-7.353	4.82	Pass
5580	116		-0.555	0.214	-0.341		Pass
5720	144		0.290	0.348	0.638		Pass
5745	149		-5.119	0.348	-4.771	24.77	Pass
5785	157		-5.628	0.348	-5.280		Pass
5825	165		-5.217	0.215	-5.002		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11a 20MHz BW_Monitoring Port Ant.0

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**
	

Monitoring port

▣ 802.11a_20MHz BW_Monitoring Port Ant.1

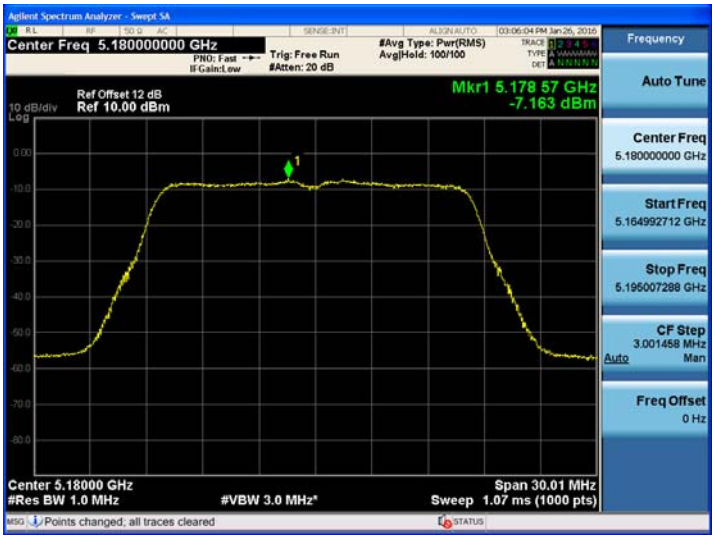
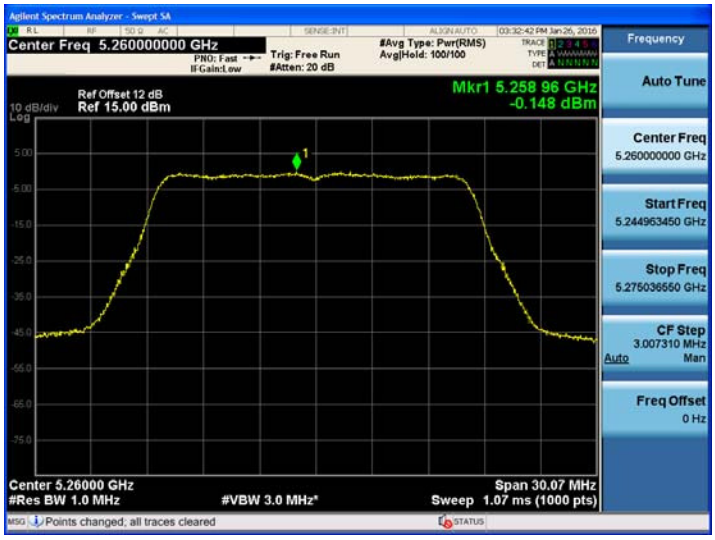
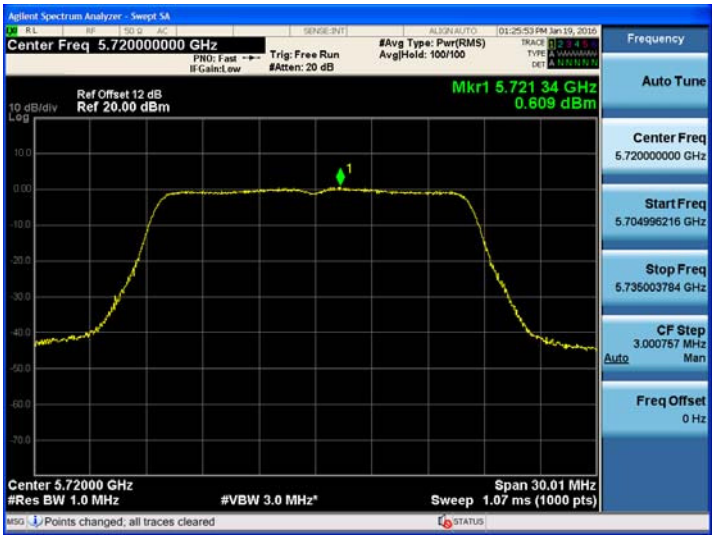
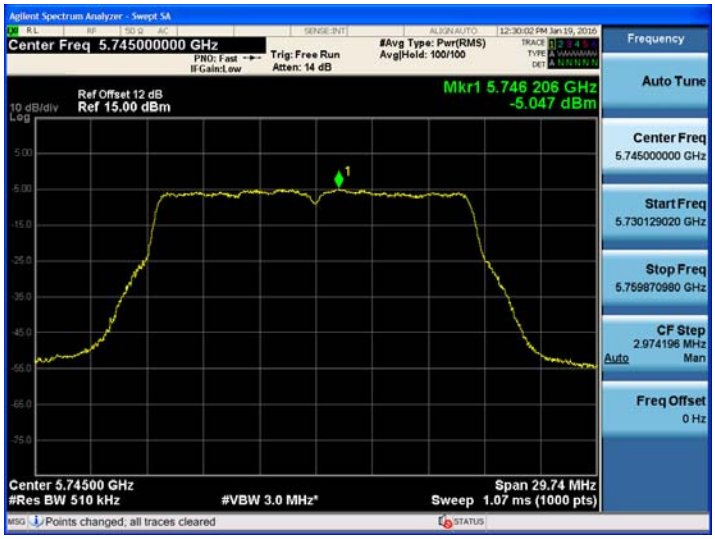
▣ TEST RESULTS

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	-7.163	0.385	-6.778	-1.86	Pass
5200	40		-7.753	0.210	-7.543		Pass
5240	48		-7.650	0.276	-7.374		Pass
5260	52		-0.148	0.385	0.237	5.19	Pass
5300	60		-6.424	0.218	-6.206		Pass
5320	64		-7.157	0.218	-6.939		Pass
5500	100		-7.007	0.218	-6.789	4.82	Pass
5580	116		0.146	0.218	0.364		Pass
5720	144		0.609	0.214	0.823		Pass
5745	149		-5.047	0.348	-4.699	24.77	Pass
5785	157		-5.463	0.218	-5.245		Pass
5825	165		-5.323	0.348	-4.975		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11a 20MHz BW_Monitoring Port Ant.1

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**
	

▣ 802.11a_20MHz BW_Monitoring Port Ant.2

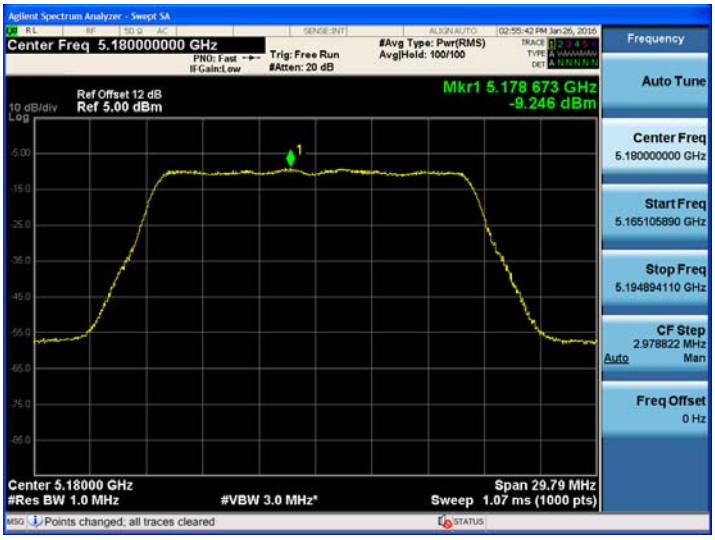
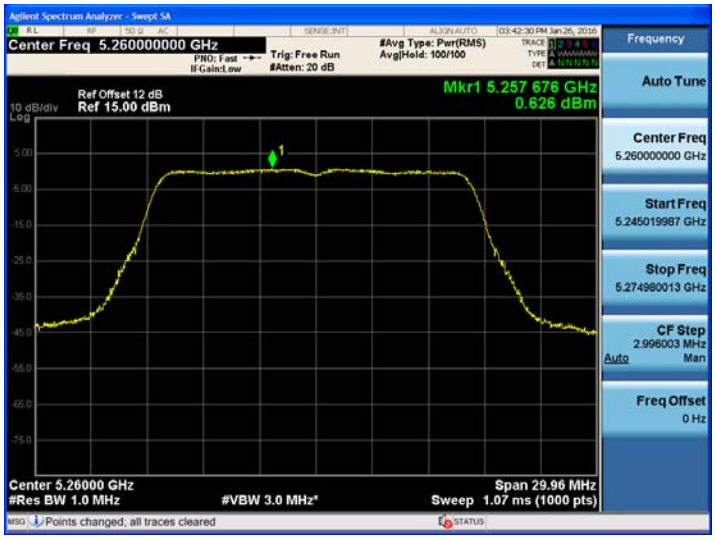
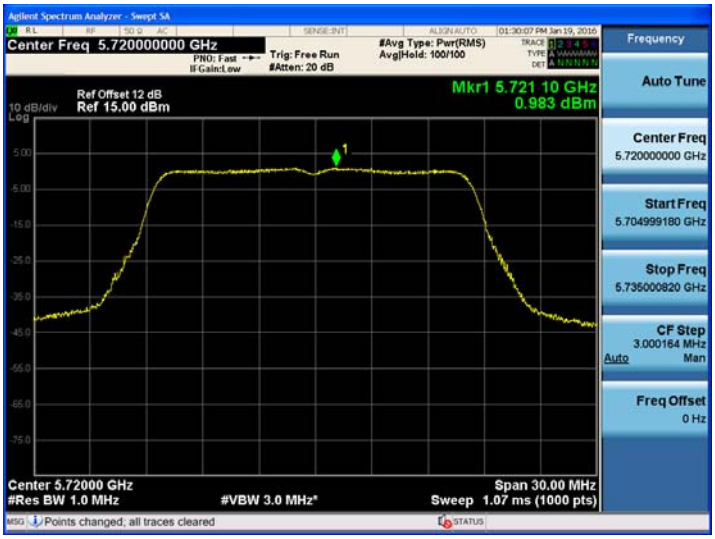
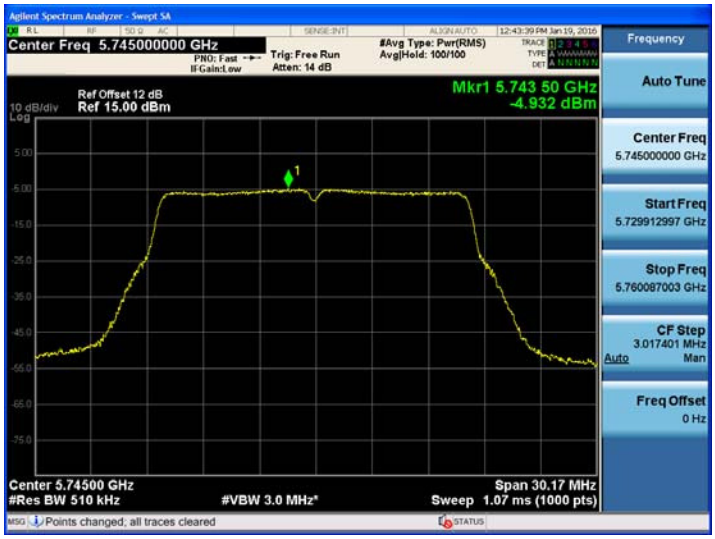
▣ TEST RESULTS

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	-9.246	0.384	-8.862	-1.86	Pass
5200	40		-9.397	0.239	-9.158		Pass
5240	48		-9.250	0.348	-8.902		Pass
5260	52		0.626	0.210	0.836	5.19	Pass
5300	60		-6.024	0.218	-5.806		Pass
5320	64		-6.394	0.348	-6.046		Pass
5500	100		-6.625	0.214	-6.411	4.82	Pass
5580	116		0.625	0.218	0.843		Pass
5720	144		0.983	0.218	1.201		Pass
5745	149		-4.932	0.214	-4.718	24.77	Pass
5785	157		-5.143	0.348	-4.795		Pass
5825	165		-5.007	0.210	-4.797		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11a 20MHz BW_Monitoring Port Ant.2

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**
	

▣ **Sum Data of Ant.0, Ant.1 and Ant.2_Monitoring Port**

▣ **TEST RESULTS**

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result		
			Measured Power Density (dBm)	Limit (dBm)	Pass/Fail
5180	36	802.11a	-2.77	-1.86	Pass
5200	40		-3.29		Pass
5240	48		-3.13		Pass
5260	52		5.18	5.19	Pass
5300	60		-1.34		Pass
5320	64		-1.87		Pass
5500	100		-2.06	4.82	Pass
5580	116		5.09		Pass
5720	144		5.66		Pass
5745	149		0.04	24.77	Pass
5785	157		-0.33		Pass
5825	165		-0.15		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

Service port

▣ 802.11a_20MHz BW_Service Port Ant.0

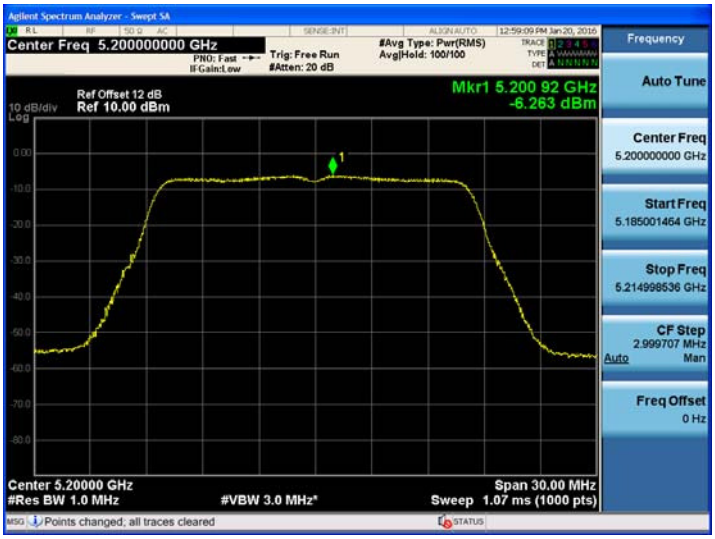
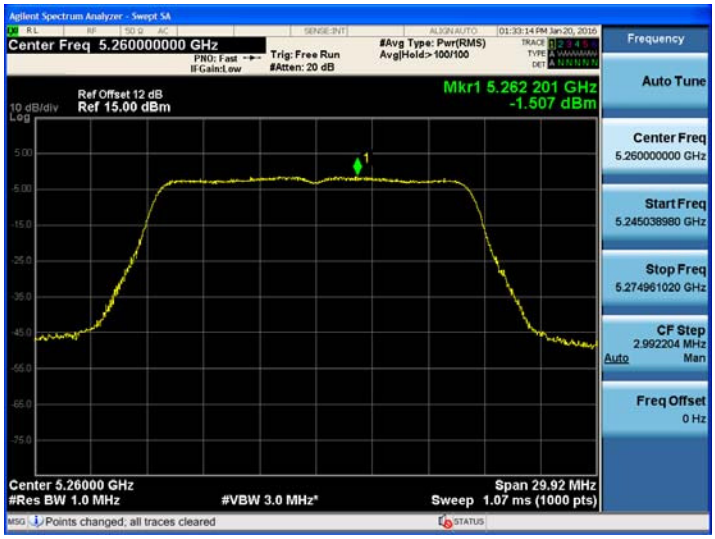
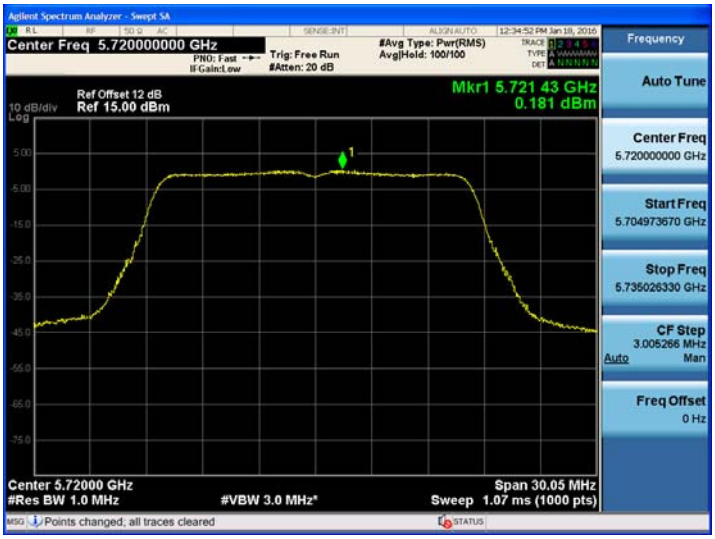
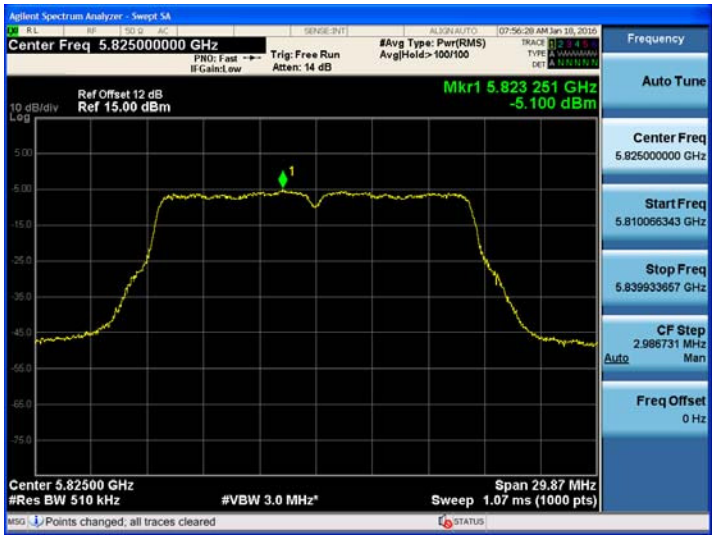
▣ TEST RESULTS

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	-8.152	0.348	-7.804	3.51	Pass
5200	40		-6.263	0.218	-6.045		Pass
5240	48		-7.629	0.214	-7.415		Pass
5260	52		-1.507	0.208	-1.299	10.24	Pass
5300	60		-8.666	0.348	-8.318		Pass
5320	64		-8.877	0.348	-8.529		Pass
5500	100		-7.091	0.348	-6.743	10.66	Pass
5580	116		-1.779	0.218	-1.561		Pass
5720	144		0.181	0.218	0.399		Pass
5745	149		-5.832	0.218	-5.614	29.83	Pass
5785	157		-5.240	0.214	-5.026		Pass
5825	165		-5.100	0.348	-4.752		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11a 20MHz BW_Service Port Ant.0

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**
	

▣ **802.11a_20MHz BW_Service Port Ant.1**

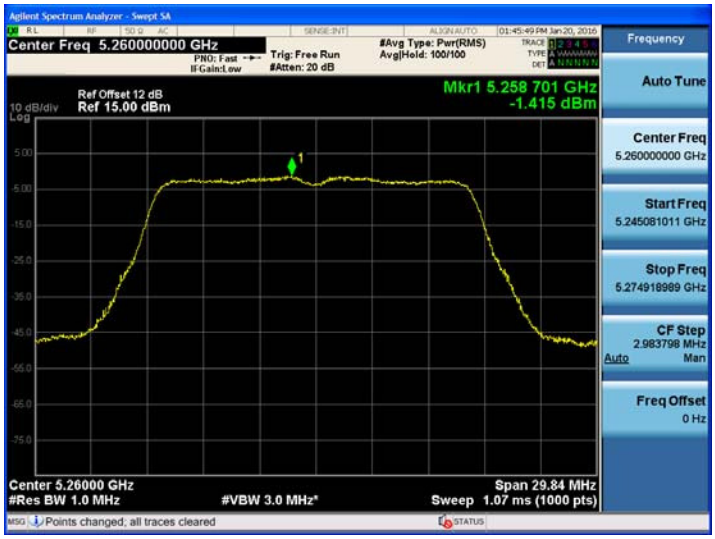
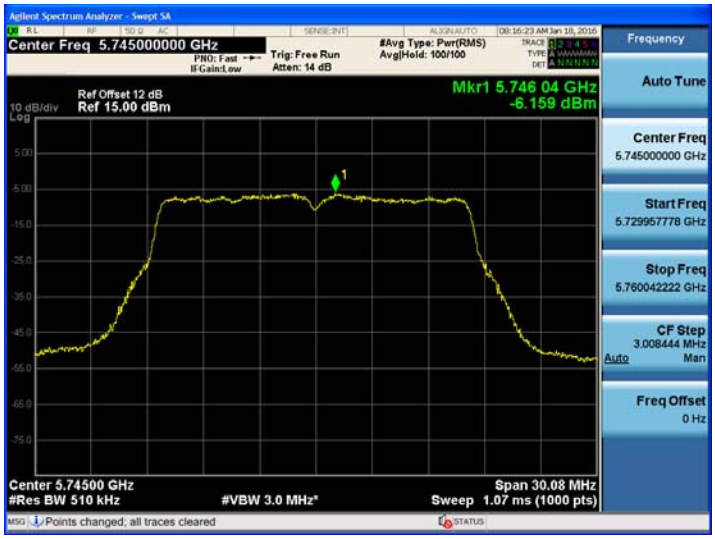
▣ **TEST RESULTS**

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	-8.033	0.348	-7.685	3.64	Pass
5200	40		-6.441	0.214	-6.227		Pass
5240	48		-7.597	0.348	-7.249		Pass
5260	52		-1.415	0.348	-1.067	10.76	Pass
5300	60		-9.764	0.348	-9.416		Pass
5320	64		-9.975	0.385	-9.590		Pass
5500	100		-7.111	0.230	-6.881	11.00	Pass
5580	116		-1.631	0.348	-1.283		Pass
5720	144		-0.604	0.214	-0.390		Pass
5745	149		-6.159	0.348	-5.811	30.00	Pass
5785	157		-6.627	0.208	-6.419		Pass
5825	165		-7.515	0.348	-7.167		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11a 20MHz BW_Service Port Ant.1

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**
	

▣ **802.11a_20MHz BW_Service Port Ant.2**

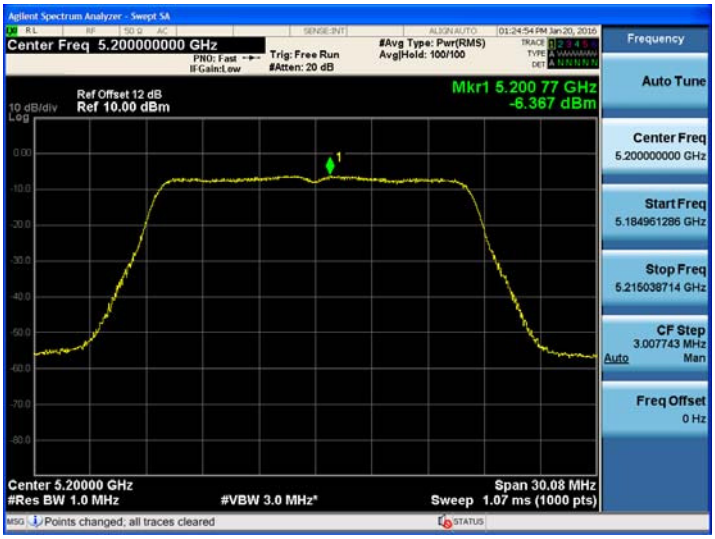
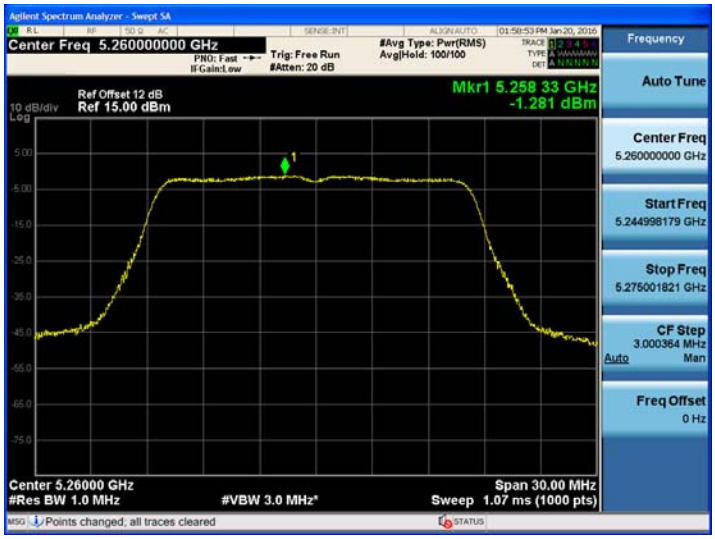
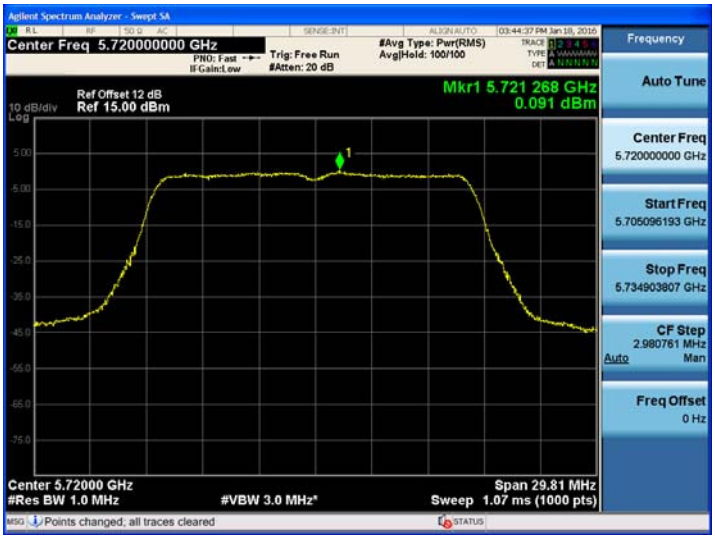
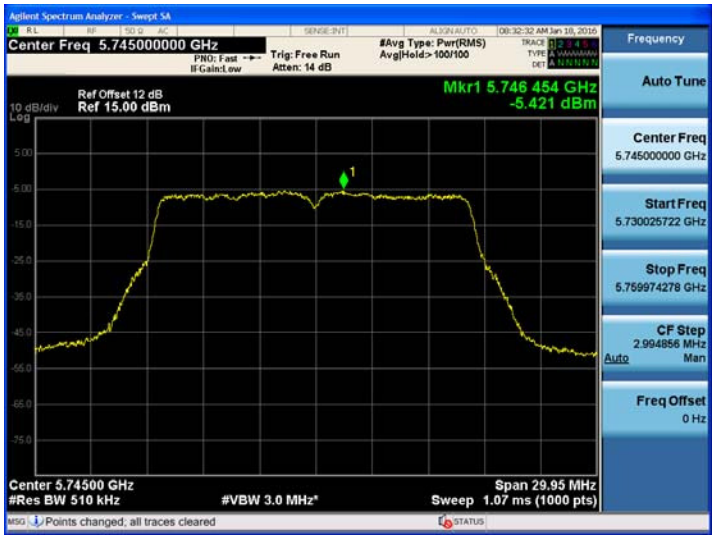
▣ **TEST RESULTS**

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	-7.988	0.348	-7.640	4.00	Pass
5200	40		-6.367	0.230	-6.137		Pass
5240	48		-7.519	0.230	-7.289		Pass
5260	52		-1.281	0.230	-1.051	11.00	Pass
5300	60		-8.958	0.230	-8.728		Pass
5320	64		-8.985	0.348	-8.637		Pass
5500	100		-7.006	0.348	-6.658	11.00	Pass
5580	116		-1.659	0.348	-1.311		Pass
5720	144		0.091	0.348	0.439		Pass
5745	149		-5.421	0.348	-5.073	30.00	Pass
5785	157		-5.452	0.348	-5.104		Pass
5825	165		-5.629	0.348	-5.281		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11a 20MHz BW_Service Port Ant.2

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**
	

▣ **Sum Data of Ant.0, Ant.1 and Ant.2_Service Port**

▣ **TEST RESULTS**

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result		
			Measured Power Density (dBm)	Limit (dBm)	Pass/Fail
5180	36	802.11a	-2.94	-1.04	Pass
5200	40		-1.36		Pass
5240	48		-2.55		Pass
5260	52		3.63	5.92	Pass
5300	60		-4.03		Pass
5320	64		-4.12		Pass
5500	100		-1.99	6.31	Pass
5580	116		3.39		Pass
5720	144		4.94		Pass
5745	149		-0.72	25.74	Pass
5785	157		-0.70		Pass
5825	165		-0.84		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ 802.11n_20MHz BW_Service Port Ant.0

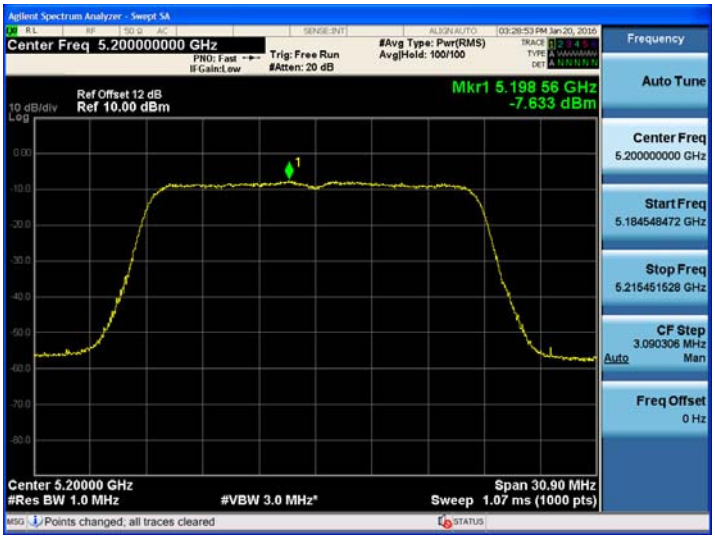
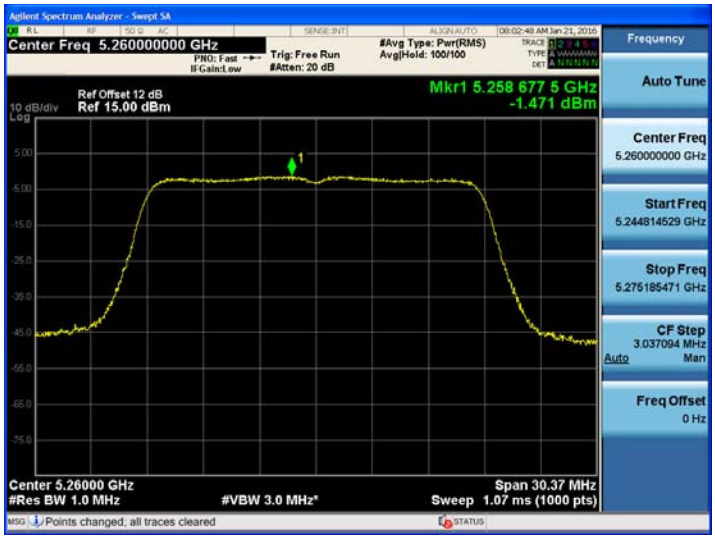
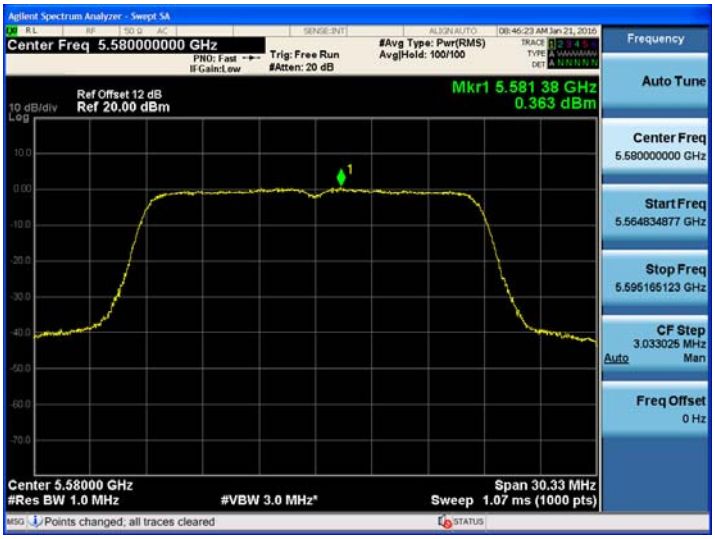
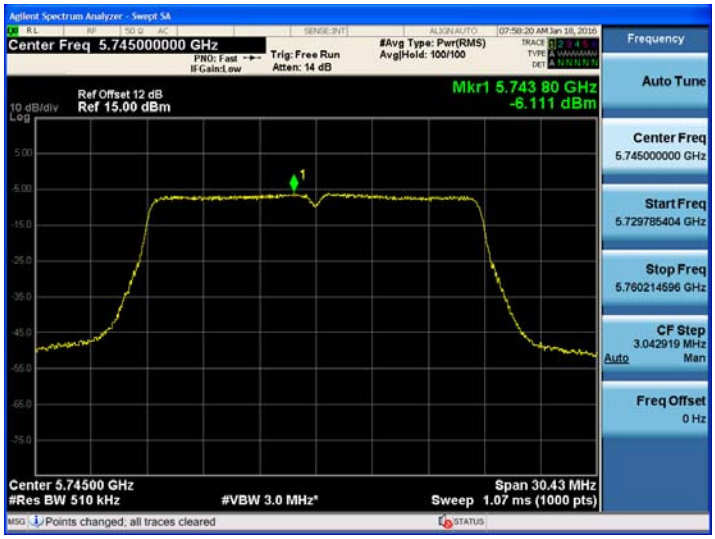
▣ TEST RESULTS

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	-8.131	0.217	-7.914	3.51	Pass
5200	40		-7.633	0.367	-7.266		Pass
5240	48		-7.798	0.217	-7.581		Pass
5260	52		-1.471	0.217	-1.254	10.24	Pass
5300	60		-8.431	0.401	-8.030		Pass
5320	64		-7.562	0.286	-7.276		Pass
5500	100		-6.567	0.217	-6.350	10.66	Pass
5580	116		0.363	0.401	0.764		Pass
5720	144		-0.312	0.401	0.089		Pass
5745	149		-6.111	0.217	-5.894	29.83	Pass
5785	157		-6.501	0.400	-6.101		Pass
5825	165		-5.706	0.400	-5.306		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11n 20MHz BW_Service Port Ant.0

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**
	

▣ 802.11n_20MHz BW_Service Port Ant.1

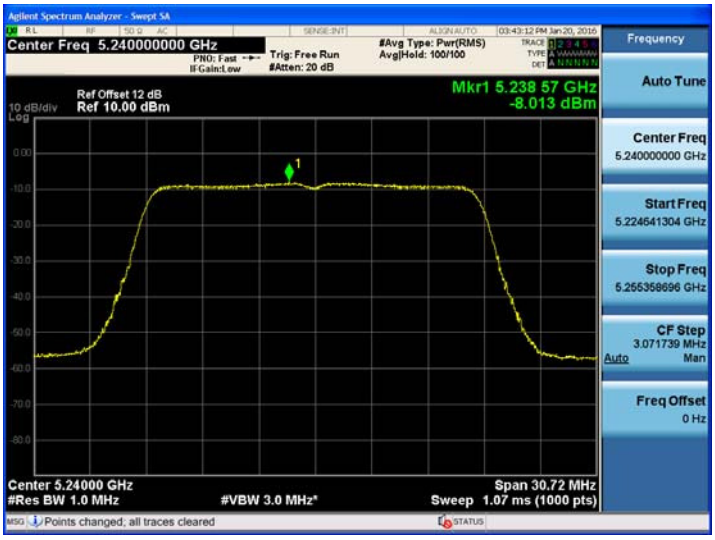
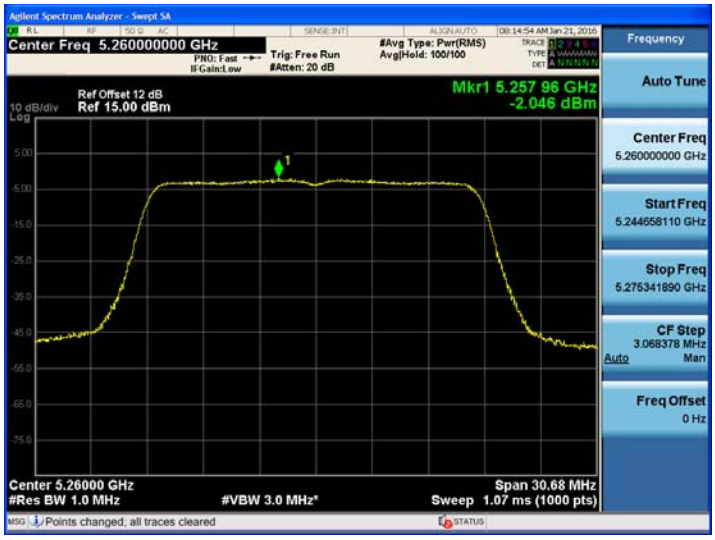
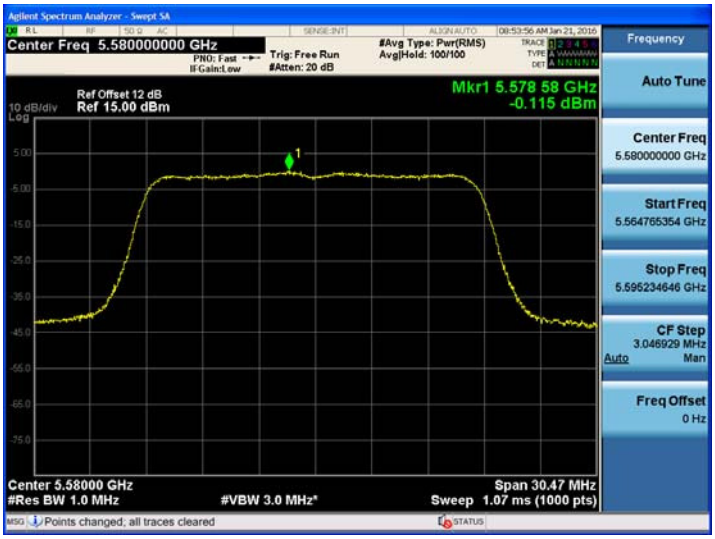
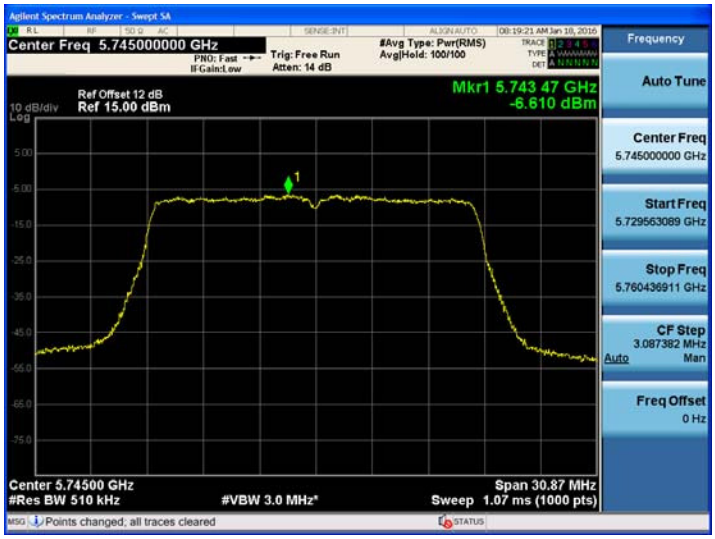
▣ TEST RESULTS

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	-8.507	0.401	-8.106	3.64	Pass
5200	40		-8.057	0.216	-7.841		Pass
5240	48		-8.013	0.216	-7.797		Pass
5260	52		-2.046	0.199	-1.847	10.76	Pass
5300	60		-9.091	0.286	-8.805		Pass
5320	64		-8.067	0.400	-7.667		Pass
5500	100		-6.540	0.367	-6.173	11.00	Pass
5580	116		-0.115	0.401	0.286		Pass
5720	144		-0.886	0.367	-0.519		Pass
5745	149		-6.610	0.367	-6.243	30.00	Pass
5785	157		-7.491	0.286	-7.205		Pass
5825	165		-7.269	0.200	-7.069		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11n 20MHz BW_Service Port Ant.1

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**
	

▣ 802.11n_20MHz BW_Service Port Ant.2

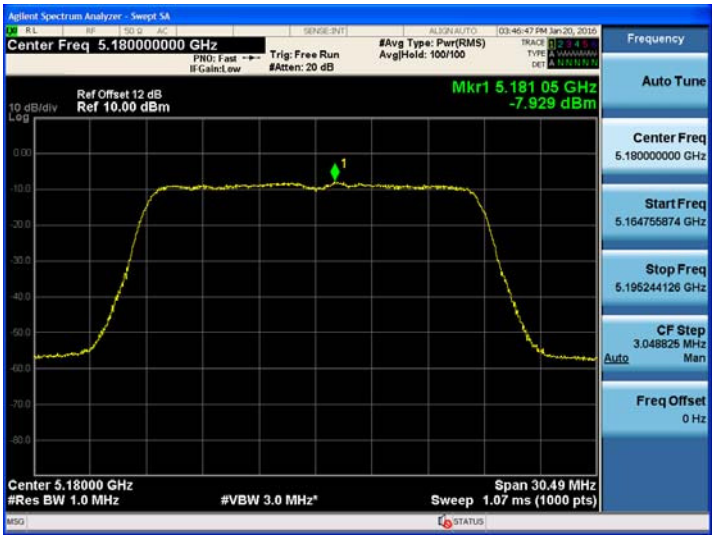
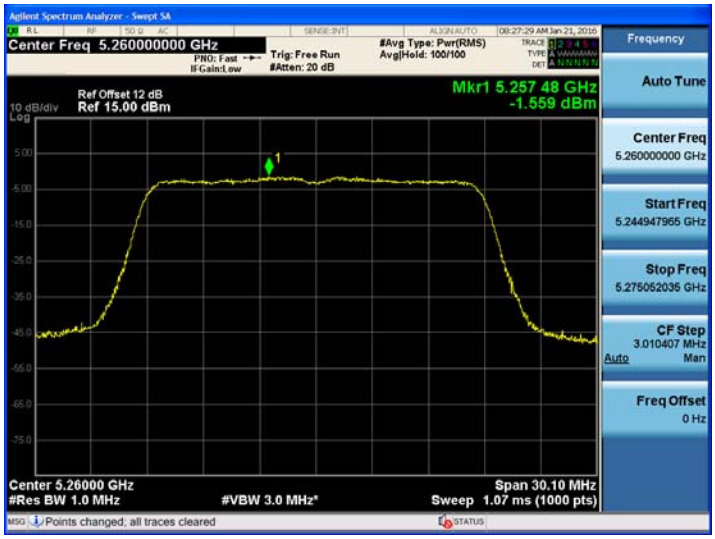
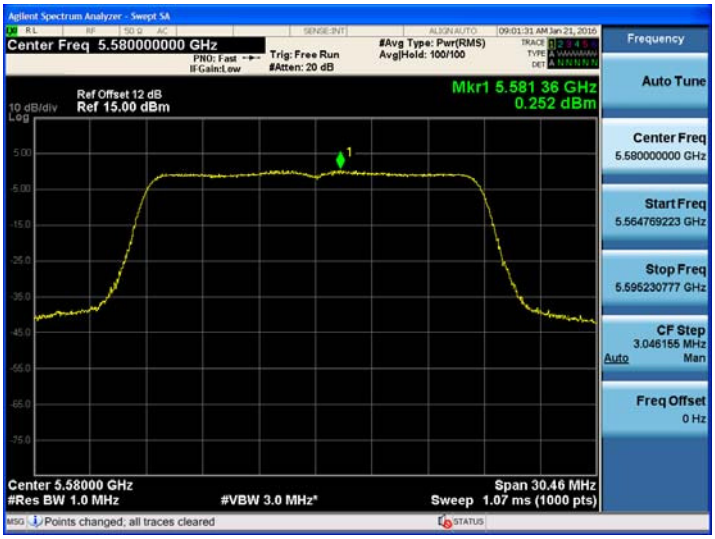
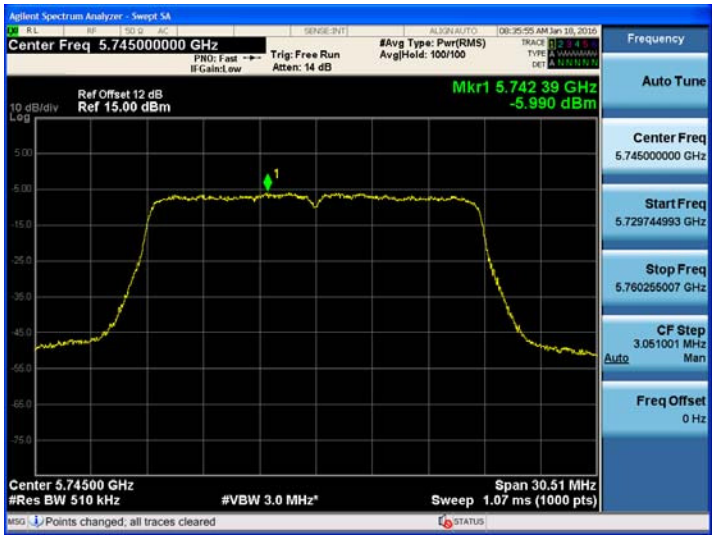
▣ TEST RESULTS

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	-7.929	0.400	-7.529	4.00	Pass
5200	40		-8.113	0.217	-7.896		Pass
5240	48		-8.009	0.367	-7.642		Pass
5260	52		-1.559	0.367	-1.192	11.00	Pass
5300	60		-9.071	0.217	-8.854		Pass
5320	64		-7.681	0.400	-7.281		Pass
5500	100		-6.253	0.401	-5.852	11.00	Pass
5580	116		0.252	0.217	0.469		Pass
5720	144		-0.216	0.401	0.185		Pass
5745	149		-5.990	0.367	-5.623	30.00	Pass
5785	157		-6.760	0.217	-6.543		Pass
5825	165		-6.146	0.367	-5.779		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11n 20MHz BW_Service Port Ant.2

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**
	

▣ **Sum Data of Ant.0, Ant.1 and Ant.2_Service Port**

▣ **TEST RESULTS**

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result		
			Measured Power Density (dBm)	Limit (dBm)	Pass/Fail
5180	36	802.11n _20MHz BW	-3.07	-1.04	Pass
5200	40		-2.89		Pass
5240	48		-2.90		Pass
5260	52		3.35	5.92	Pass
5300	60		-3.78		Pass
5320	64		-2.63		Pass
5500	100		-1.35	6.31	Pass
5580	116		5.28		Pass
5720	144		4.70		Pass
5745	149		-1.14	25.74	Pass
5785	157		-1.82		Pass
5825	165		-1.22		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ **802.11ac_20MHz BW_Service Port Ant.0**

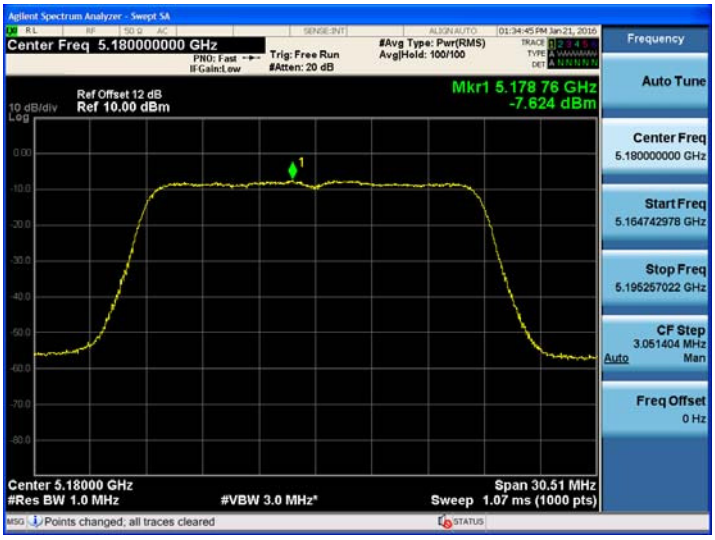
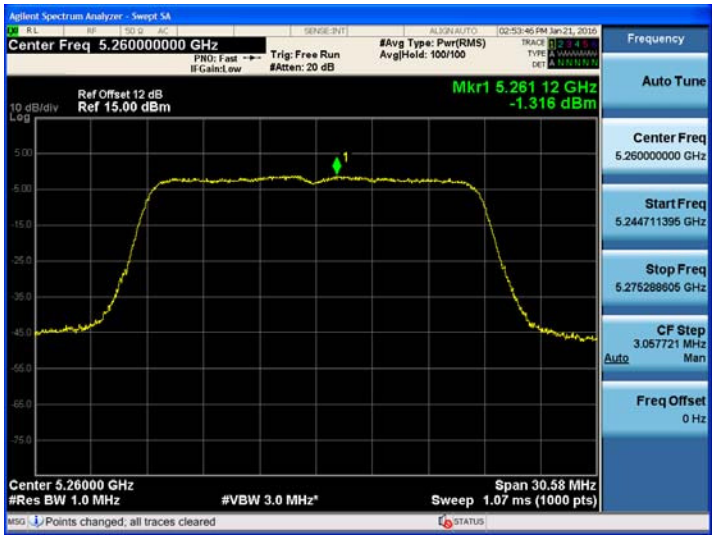
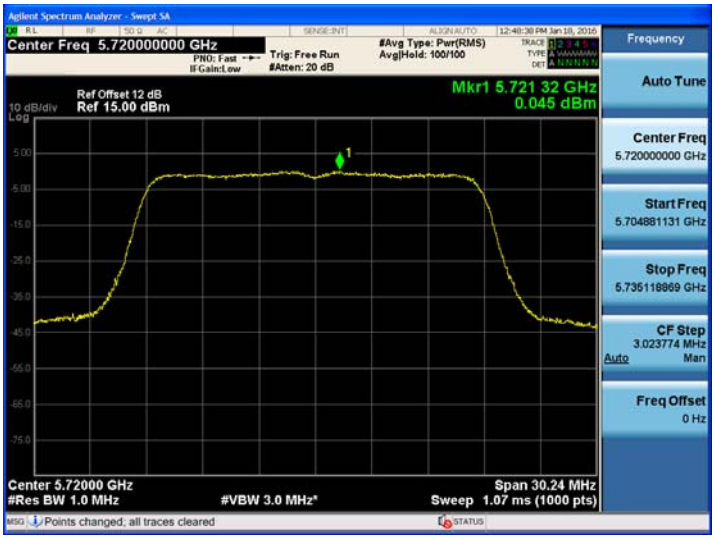
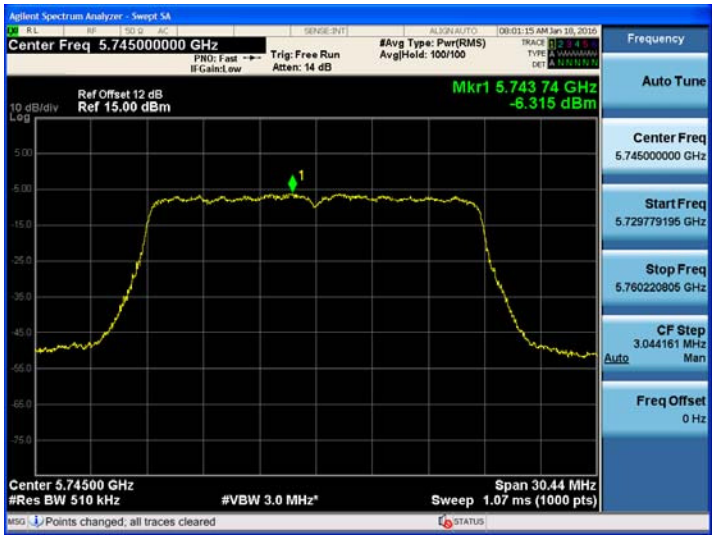
▣ **TEST RESULTS**

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	-7.624	0.514	-7.110	3.51	Pass
5200	40		-7.932	0.591	-7.341		Pass
5240	48		-8.222	0.591	-7.631		Pass
5260	52		-1.316	0.591	-0.725	10.24	Pass
5300	60		-7.607	0.475	-7.132		Pass
5320	64		-7.679	0.330	-7.349		Pass
5500	100		-7.022	0.514	-6.508	10.66	Pass
5580	116		-1.018	0.405	-0.613		Pass
5720	144		0.045	0.514	0.559		Pass
5745	149		-6.315	0.591	-5.724	29.83	Pass
5785	157		-8.607	0.591	-8.016		Pass
5825	165		-8.758	0.591	-8.167		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11ac 20MHz BW_Service Port Ant.0

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**
	

▣ **802.11ac_20MHz BW_Service Port Ant.1**

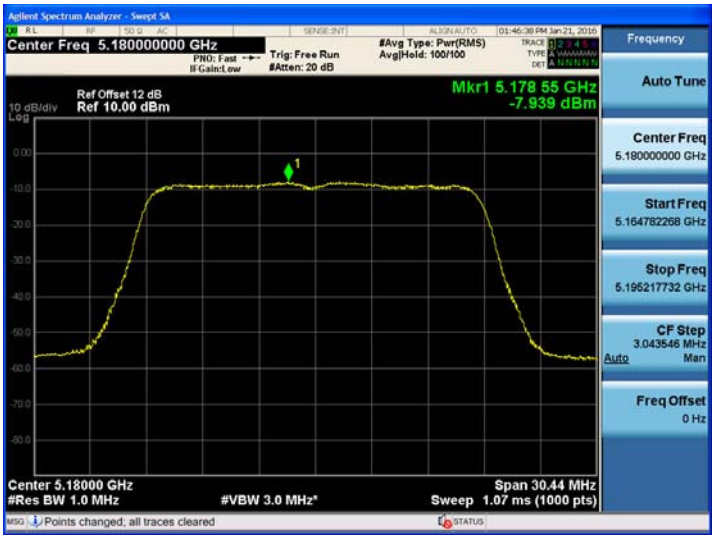
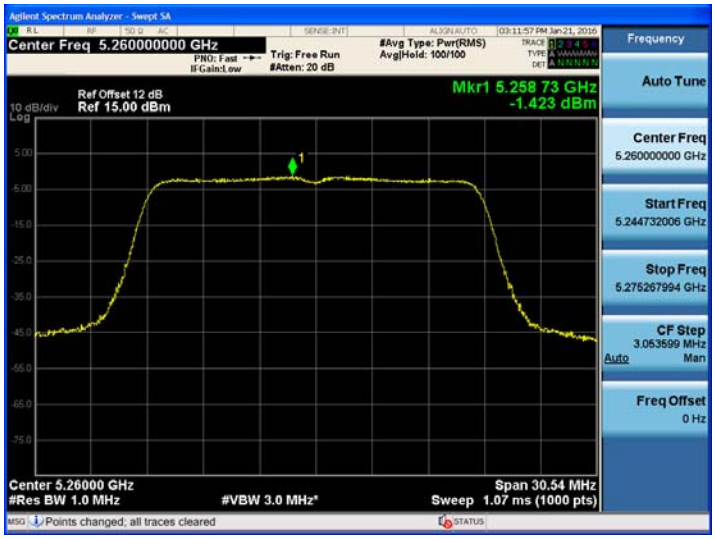
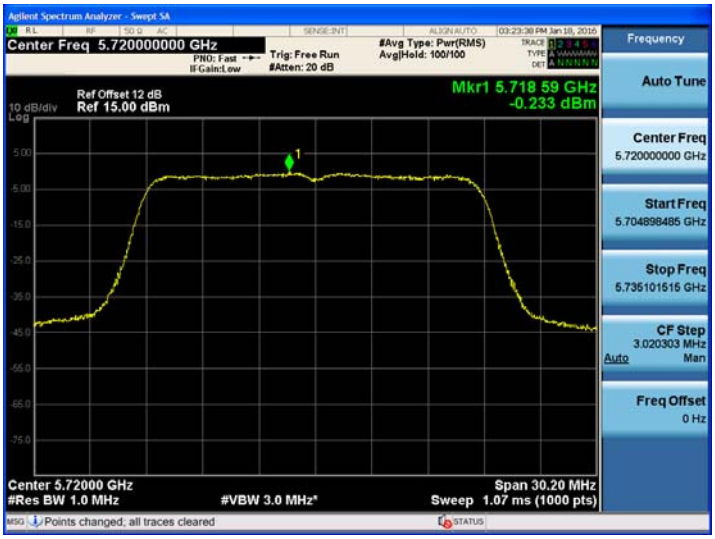
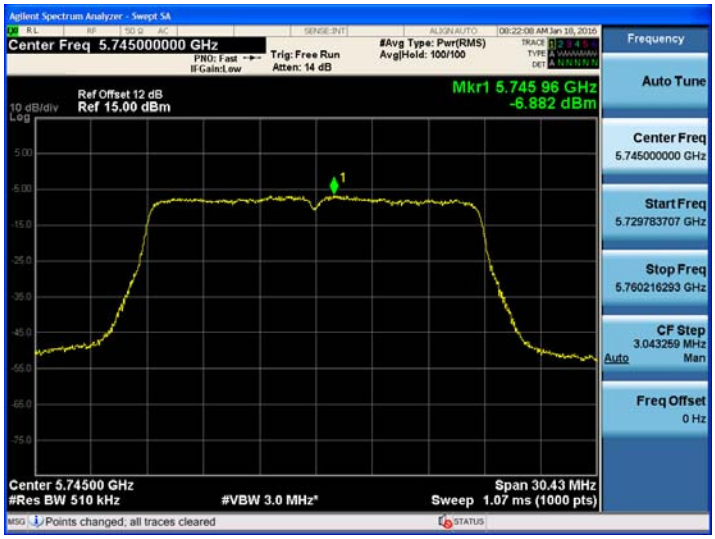
▣ **TEST RESULTS**

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	-7.939	0.514	-7.425	3.64	Pass
5200	40		-8.328	0.475	-7.853		Pass
5240	48		-8.598	0.475	-8.123		Pass
5260	52		-1.423	0.109	-1.314	10.76	Pass
5300	60		-8.170	0.514	-7.656		Pass
5320	64		-8.545	0.591	-7.954		Pass
5500	100		-7.051	0.591	-6.460	11.00	Pass
5580	116		-1.182	0.591	-0.591		Pass
5720	144		-0.233	0.475	0.242		Pass
5745	149		-6.882	0.475	-6.407	30.00	Pass
5785	157		-9.593	0.591	-9.002		Pass
5825	165		-10.284	0.514	-9.770		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11ac 20MHz BW_Service Port Ant.1

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**
	

▣ 802.11ac_20MHz BW_Service Port Ant.2

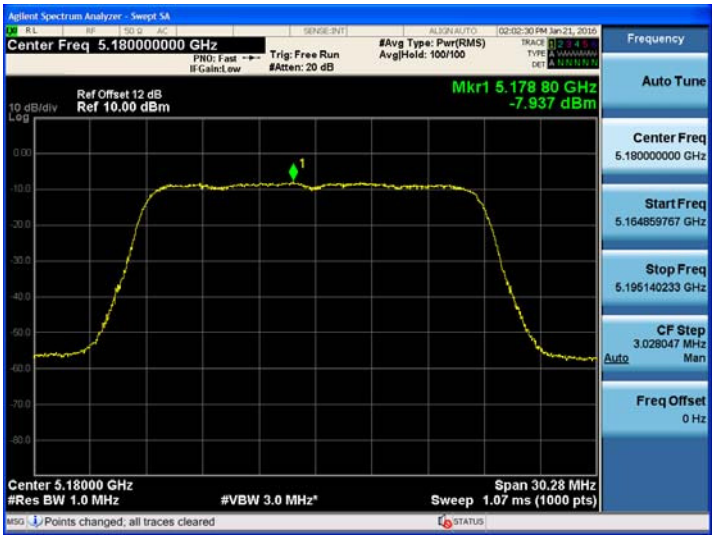
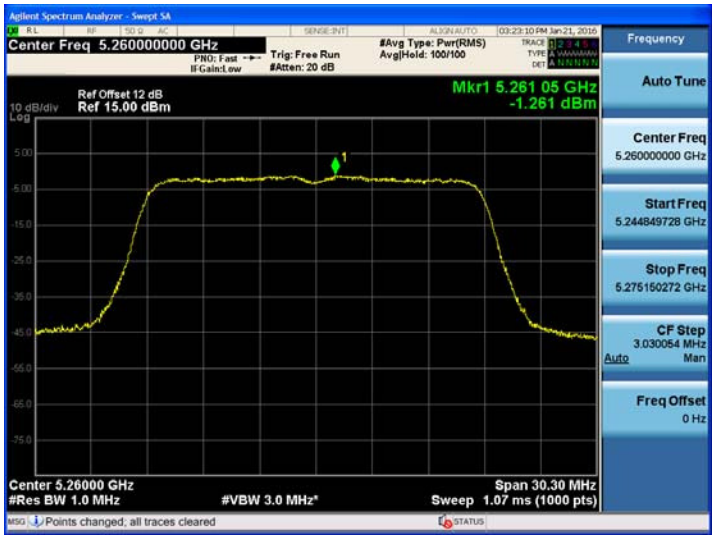
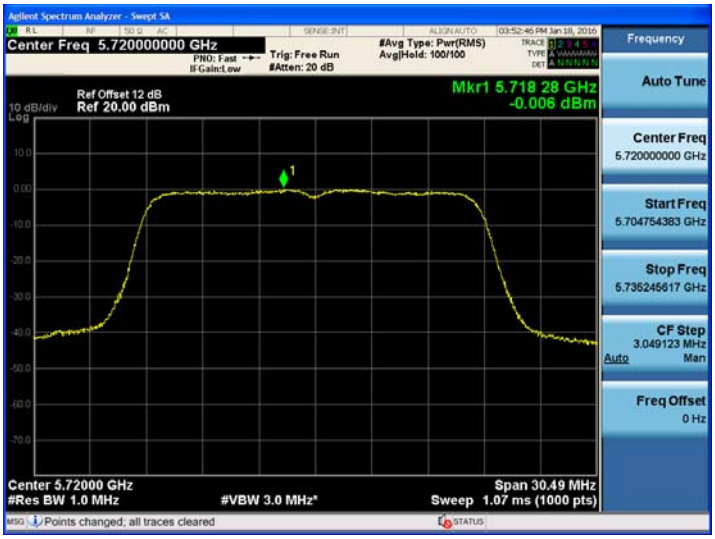
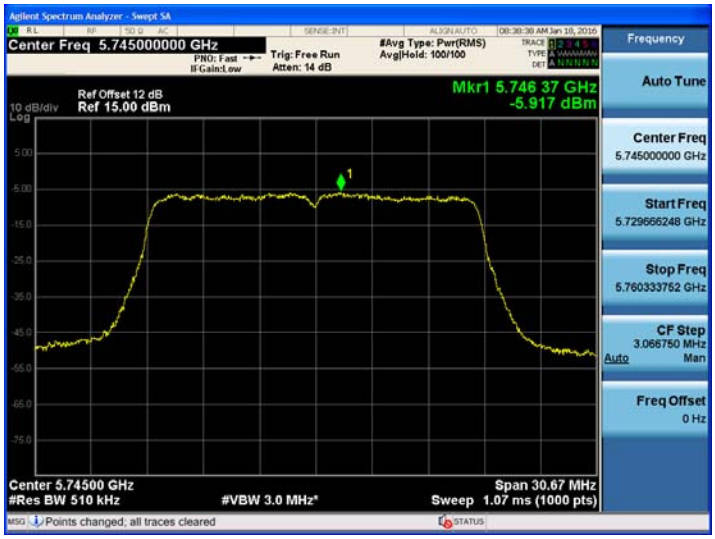
▣ TEST RESULTS

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	-7.937	0.591	-7.346	4.00	Pass
5200	40		-7.831	0.330	-7.501		Pass
5240	48		-8.565	0.223	-8.342		Pass
5260	52		-1.261	0.591	-0.670	11.00	Pass
5300	60		-7.660	0.591	-7.069		Pass
5320	64		-7.793	0.475	-7.318		Pass
5500	100		-6.571	0.591	-5.980	11.00	Pass
5580	116		-1.048	0.514	-0.534		Pass
5720	144		-0.006	0.475	0.469		Pass
5745	149		-5.917	0.475	-5.442	30.00	Pass
5785	157		-8.632	0.514	-8.118		Pass
5825	165		-9.381	0.475	-8.906		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11ac 20MHz BW_Service Port Ant.2

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**
	

▣ **Sum Data of Ant.0, Ant.1 and Ant.2_Service Port**

▣ **TEST RESULTS**

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result		
			Measured Power Density (dBm)	Limit (dBm)	Pass/Fail
5180	36	802.11ac _20MHz BW	-2.52	-1.04	Pass
5200	40		-2.79		Pass
5240	48		-3.25		Pass
5260	52		3.88	5.92	Pass
5300	60		-2.51		Pass
5320	64		-2.76		Pass
5500	100		-1.54	6.31	Pass
5580	116		4.19		Pass
5720	144		5.20		Pass
5745	149		-1.07	25.74	Pass
5785	157		-3.59		Pass
5825	165		-4.13		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ 802.11n_40MHz BW_Service Poart Ant.0

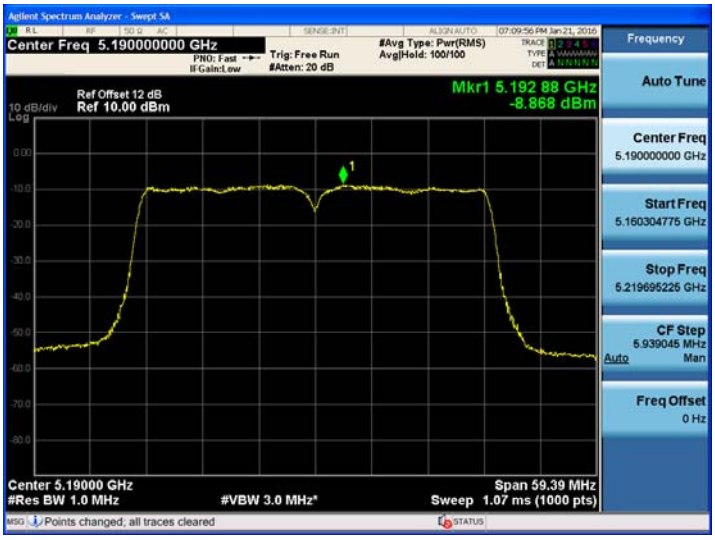
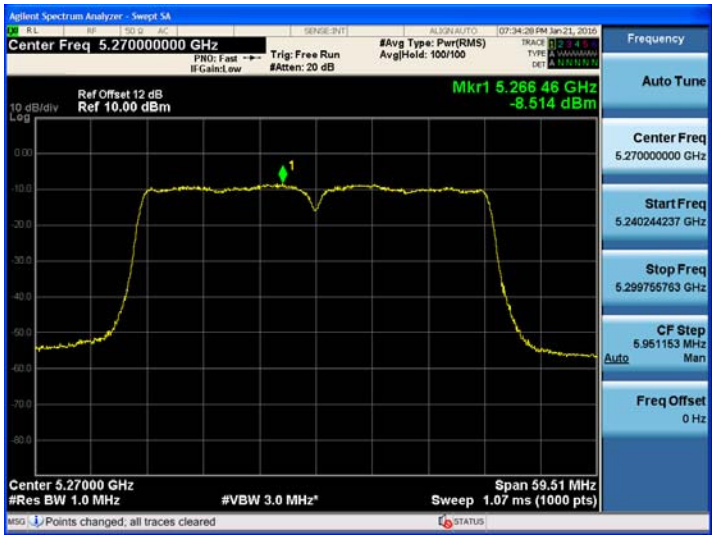
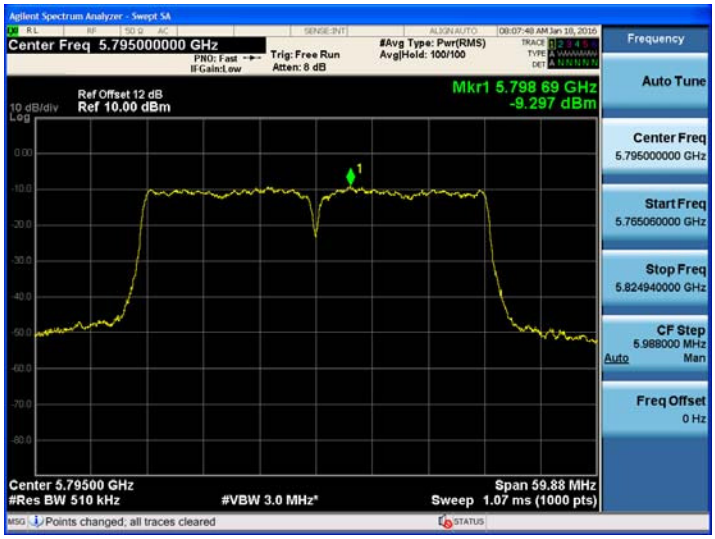
▣ TEST RESULTS

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	-8.868	0.661	-8.207	3.51	Pass
5230	46		-9.284	0.661	-8.623		Pass
5270	54		-8.514	0.612	-7.902	10.24	Pass
5310	62		-8.691	0.429	-8.262		Pass
5510	102		-11.074	0.718	-10.356	10.66	Pass
5550	110		-5.906	0.718	-5.188		Pass
5710	142		-1.157	0.718	-0.439		Pass
5755	151		-9.240	0.348	-8.892	29.83	Pass
5795	159		-9.297	0.661	-8.636		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11n 40MHz BW _Service Port Ant.0

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**
	

▣ 802.11n_40MHz BW_Service Poart Ant.1

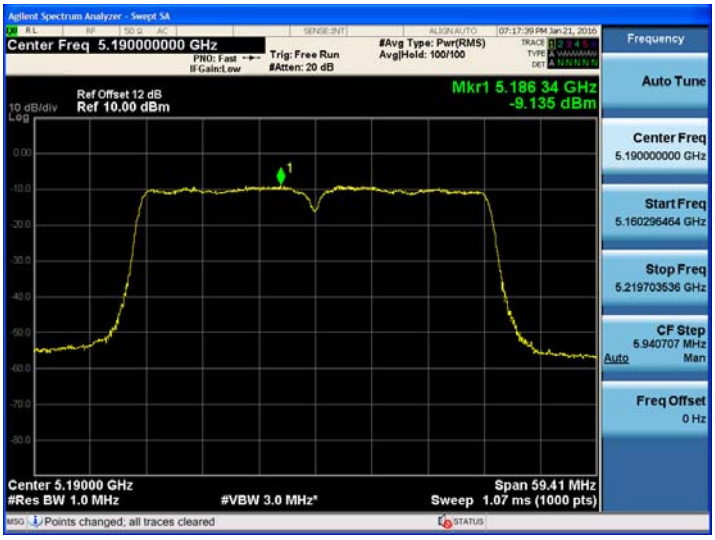
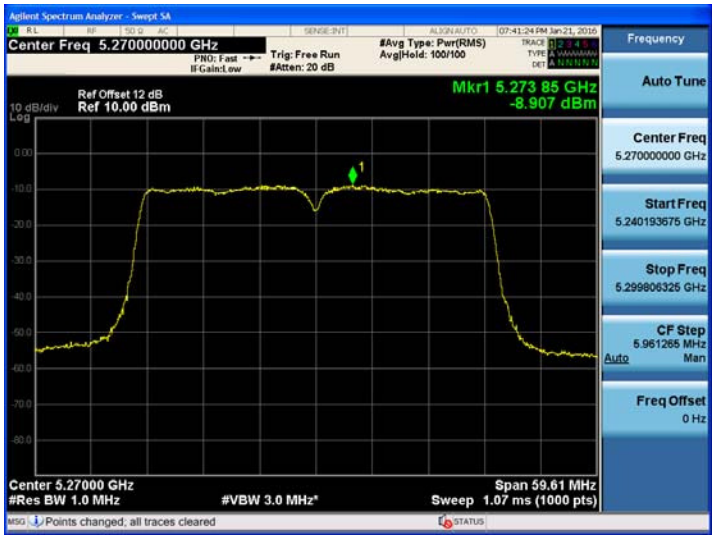
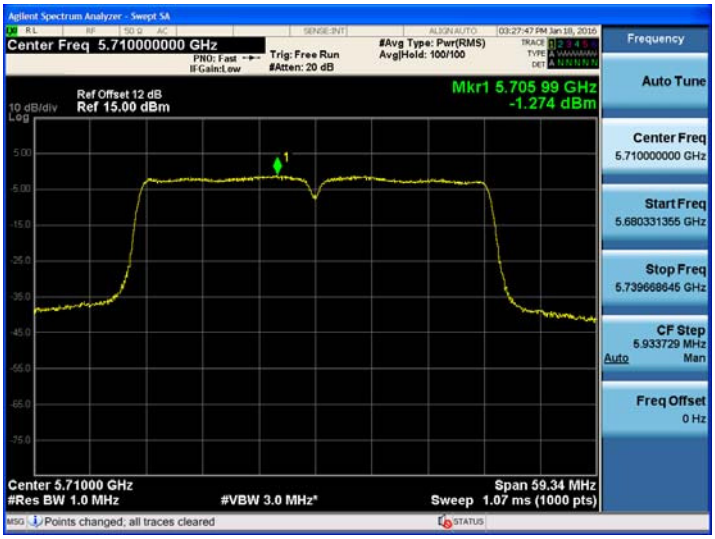
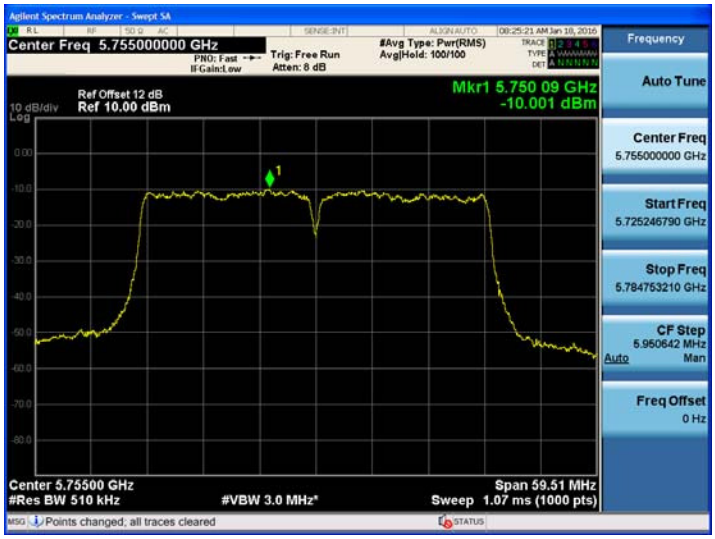
▣ TEST RESULTS

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	-9.135	0.612	-8.523	3.64	Pass
5230	46		-9.676	0.439	-9.237		Pass
5270	54		-8.907	0.661	-8.246	10.76	Pass
5310	62		-8.871	0.501	-8.370		Pass
5510	102		-10.592	0.501	-10.091	11.00	Pass
5550	110		-5.702	0.501	-5.201		Pass
5710	142		-1.274	0.439	-0.835		Pass
5755	151		-10.001	0.612	-9.389	30.00	Pass
5795	159		-10.571	0.718	-9.853		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11n 40MHz BW _Service Port Ant.1

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**
	

▣ 802.11n_40MHz BW_Service Poart Ant.2

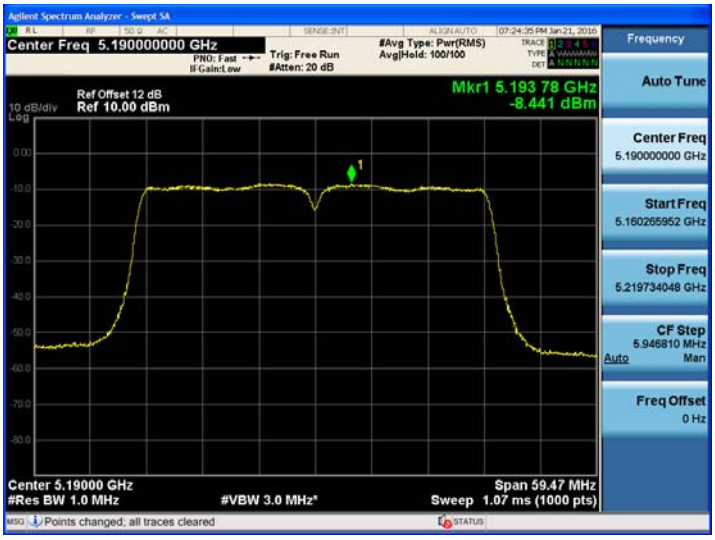
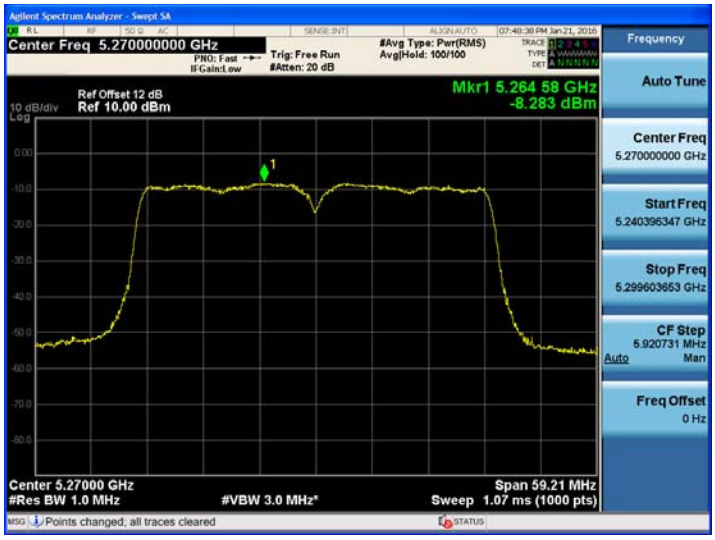
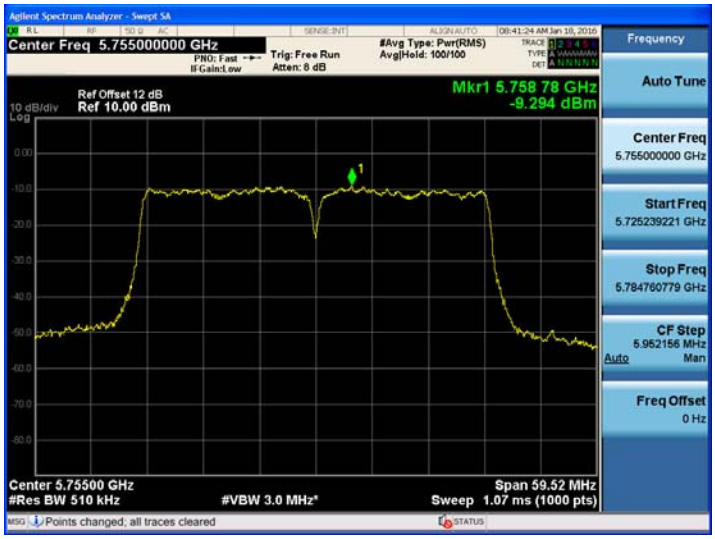
▣ TEST RESULTS

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	-8.441	0.414	-8.027	4.00	Pass
5230	46		-9.095	0.718	-8.377		Pass
5270	54		-8.283	0.718	-7.565	11.00	Pass
5310	62		-8.428	0.661	-7.767		Pass
5510	102		-10.921	0.661	-10.260	11.00	Pass
5550	110		-5.790	0.612	-5.178		Pass
5710	142		-1.014	0.501	-0.513		Pass
5755	151		-9.294	0.718	-8.576	30.00	Pass
5795	159		-9.571	0.429	-9.142		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11n 40MHz BW _Service Port Ant.2

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**
	

▣ **Sum Data of Ant.0, Ant.1 and Ant.2_Service Port**

▣ **TEST RESULTS**

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result		
			Measured Power Density (dBm)	Limit (dBm)	Pass/Fail
5190	38	802.11n 40MHz BW	-3.48	-1.04	Pass
5230	46		-3.96		Pass
5270	54		-3.12	5.92	Pass
5310	62		-3.35		Pass
5510	102		-5.46	6.31	Pass
5550	110		-0.42		Pass
5710	142		4.18		Pass
5755	151		-4.17	25.74	Pass
5795	159		-4.41		Pass

▣ **802.11ac_40MHz BW_Service Port Ant.0**

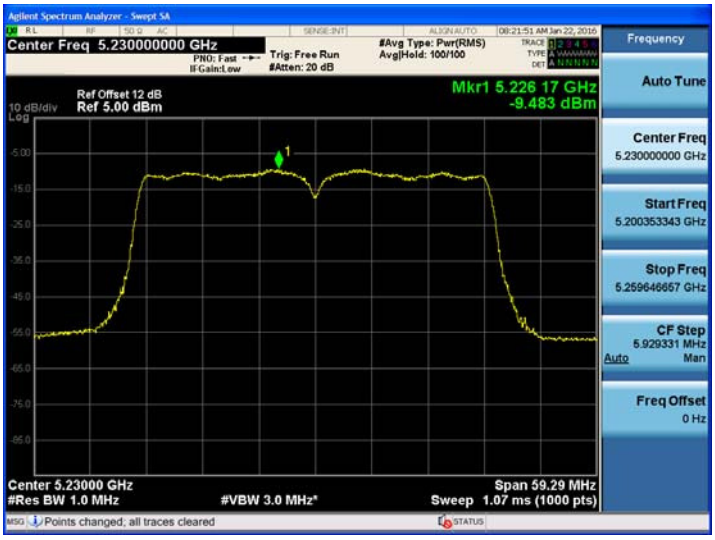
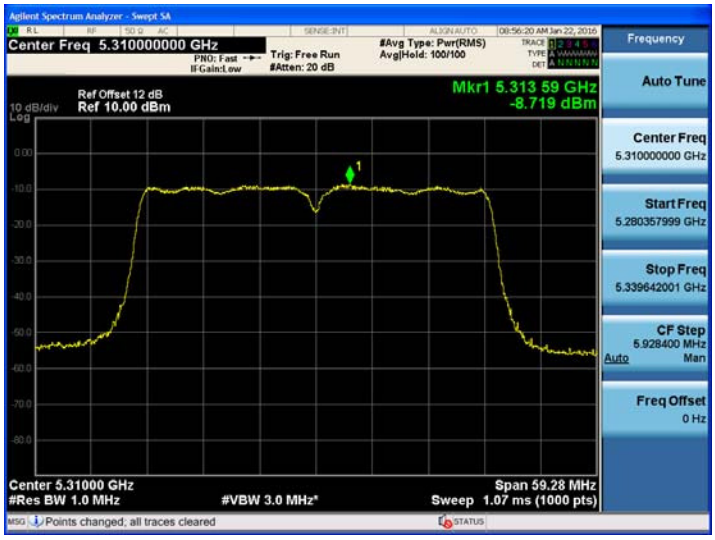
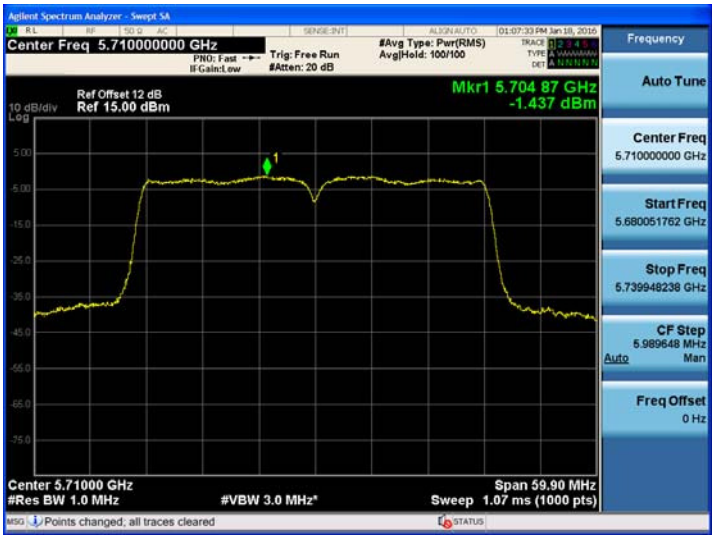
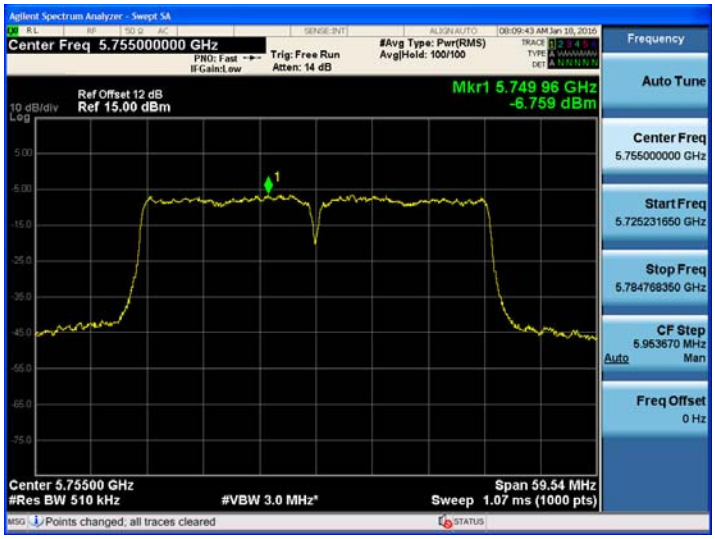
▣ **TEST RESULTS**

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	-9.520	0.773	-8.747	3.51	Pass
5230	46		-9.483	0.835	-8.648		Pass
5270	54		-8.925	0.229	-8.696	10.24	Pass
5310	62		-8.719	0.773	-7.946		Pass
5510	102		-11.314	0.772	-10.542	10.66	Pass
5550	110		-5.943	0.614	-5.329		Pass
5710	142		-1.437	0.614	-0.823		Pass
5755	151		-6.759	0.773	-5.986	29.83	Pass
5795	159		-8.665	0.835	-7.830		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11ac_ 40MHz BW _Service Port Ant.0

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_40MHz BW_Service Port Ant.1**

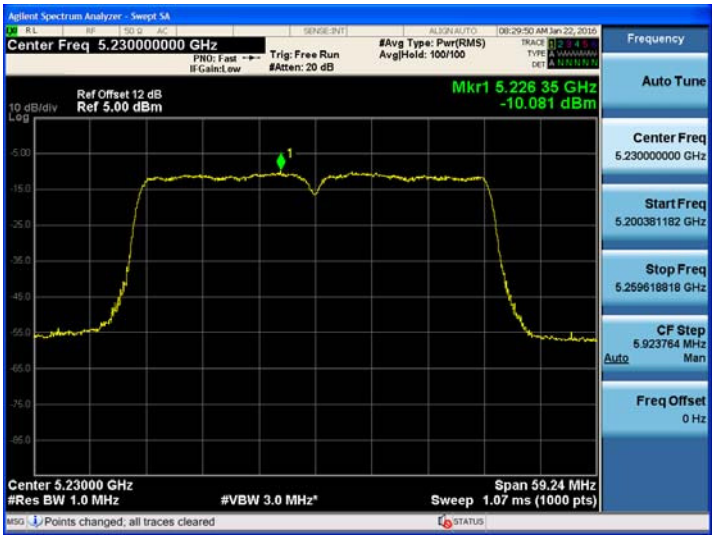
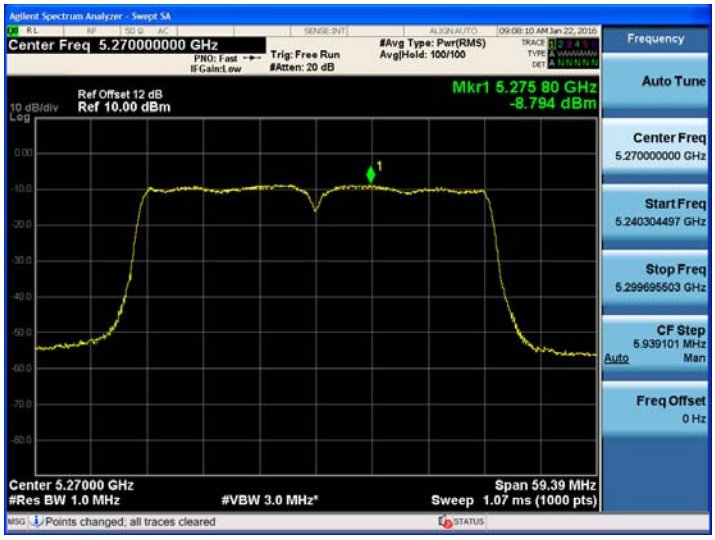
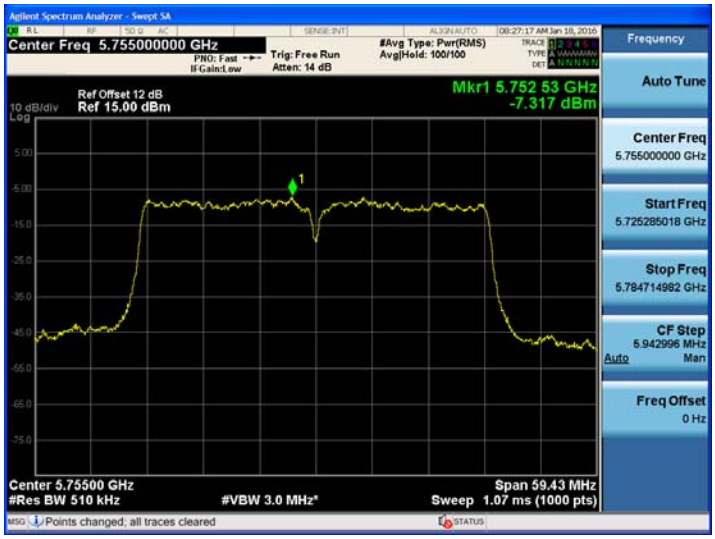
▣ **TEST RESULTS**

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	-10.739	0.939	-9.800	3.64	Pass
5230	46		-10.081	0.773	-9.308		Pass
5270	54		-8.794	0.773	-8.021	10.76	Pass
5310	62		-8.756	0.614	-8.142		Pass
5510	102		-10.899	0.939	-9.960	11.00	Pass
5550	110		-5.730	0.773	-4.957		Pass
5710	142		-0.940	0.773	-0.167		Pass
5755	151		-7.317	0.969	-6.348	30.00	Pass
5795	159		-9.614	0.969	-8.645		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11ac_ 40MHz BW _Service Port Ant.1

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_40MHz BW_Service Port Ant.2**

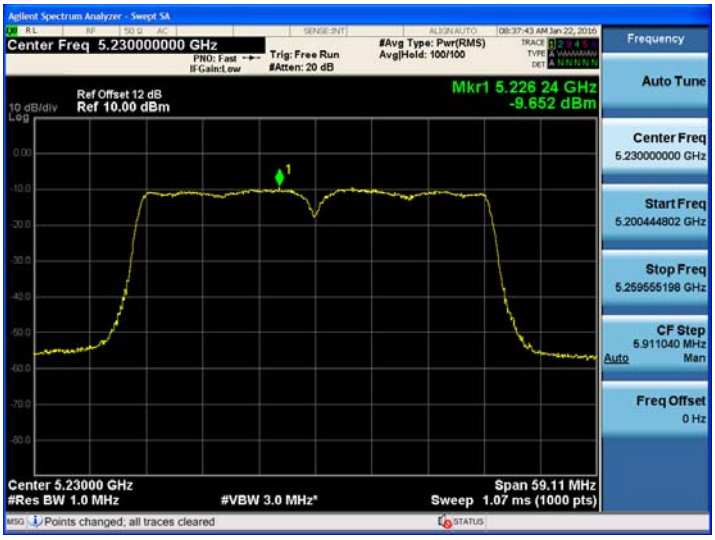
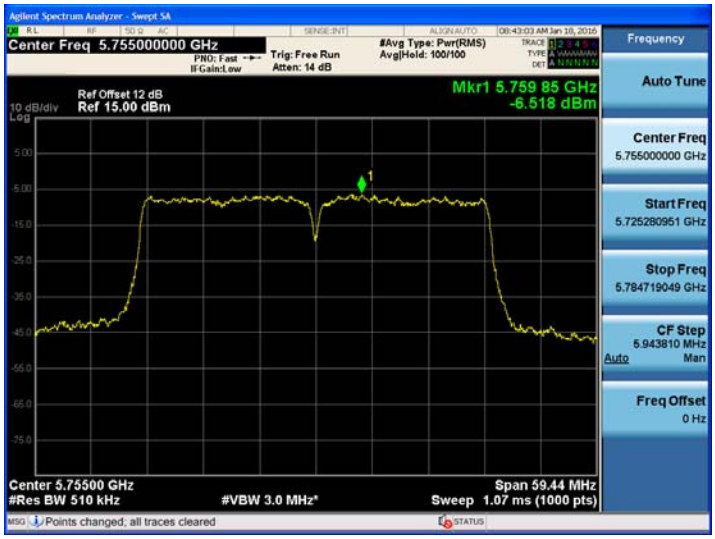
▣ **TEST RESULTS**

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	-9.937	0.969	-8.968	4.00	Pass
5230	46		-9.652	0.773	-8.879		Pass
5270	54		-8.478	0.772	-7.706	11.00	Pass
5310	62		-8.787	0.772	-8.015		Pass
5510	102		-10.876	0.773	-10.103	11.00	Pass
5550	110		-6.349	0.969	-5.380		Pass
5710	142		-1.414	0.773	-0.641		Pass
5755	151		-6.518	0.773	-5.745	30.00	Pass
5795	159		-8.275	0.773	-7.502		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ TEST Plot for 802.11ac_ 40MHz BW _Service Port Ant.2

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**
	

▣ **Sum Data of Ant.0, Ant.1 and Ant.2_Service Port**

▣ **TEST RESULTS**

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result		
			Measured Power Density (dBm)	Limit (dBm)	Pass/Fail
5190	38	802.11ac 40MHz BW	-4.38	-1.04	Pass
5230	46		-4.17		Pass
5270	54		-3.35	5.92	Pass
5310	62		-3.26		Pass
5510	102		-5.42	6.31	Pass
5550	110		-0.45		Pass
5710	142		4.24		Pass
5755	151		-1.25	25.74	Pass
5795	159		-3.20		Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.

▣ **802.11ac_80MHz BW_Service Port Ant.0**

▣ **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	-13.525	0.631	-12.894	3.51	Pass
5290	58		-13.865	1.200	-12.665	10.24	Pass
5530	106		-17.746	1.112	-16.634	10.66	Pass
5690	138		-4.268	0.969	-3.299	10.66	Pass
5775	155		-15.432	1.427	-14.005	29.83	Pass

Note : In case of UNII 1 band, we applied IC limit instead of FCC limit because IC limit is worst case.