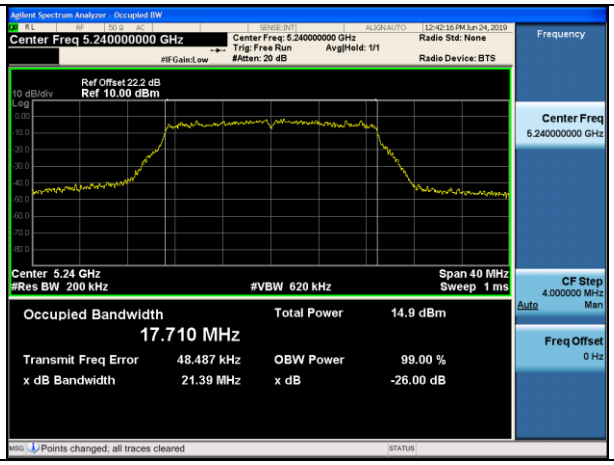
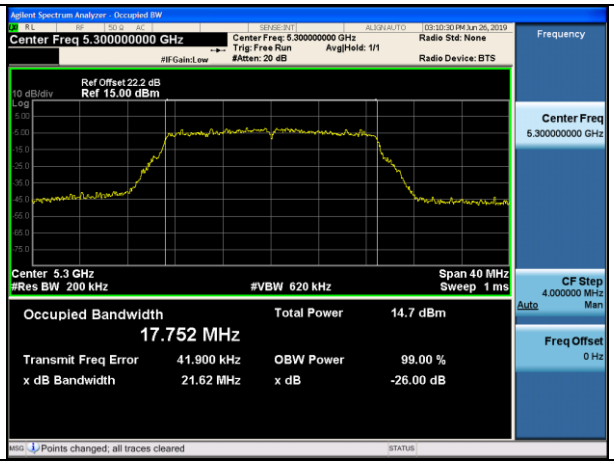
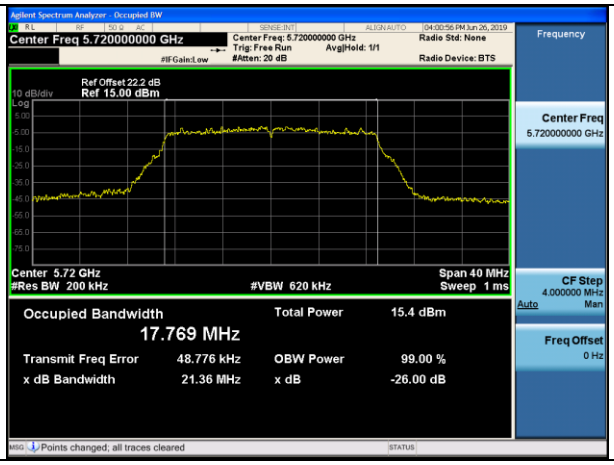
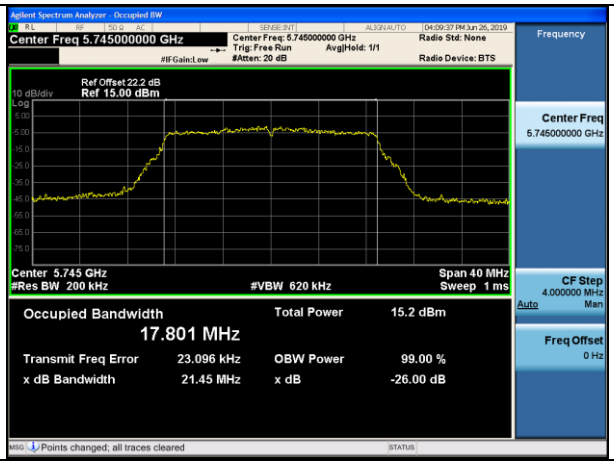
▣ Test Plots(802.11ac(VHT20))

Note:

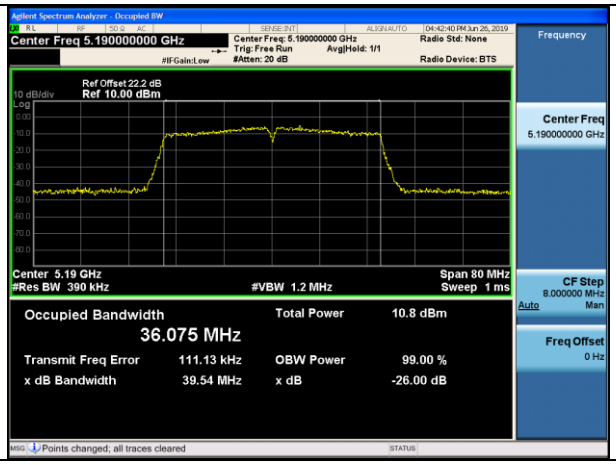
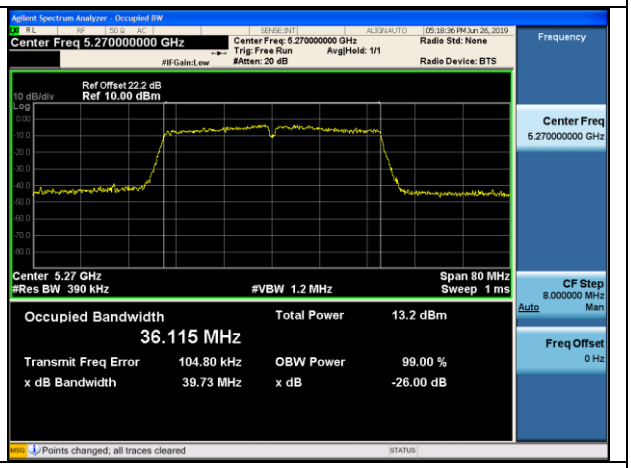
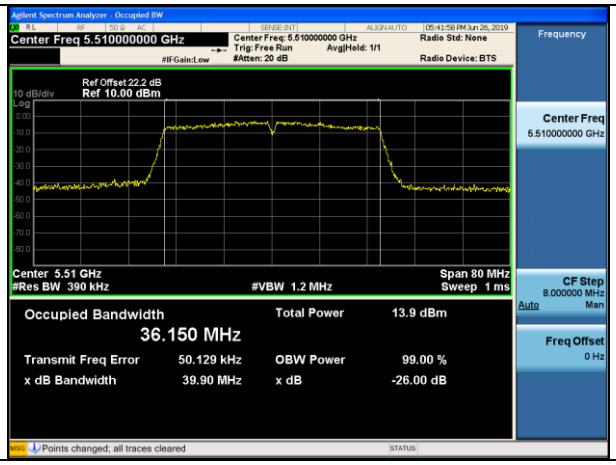
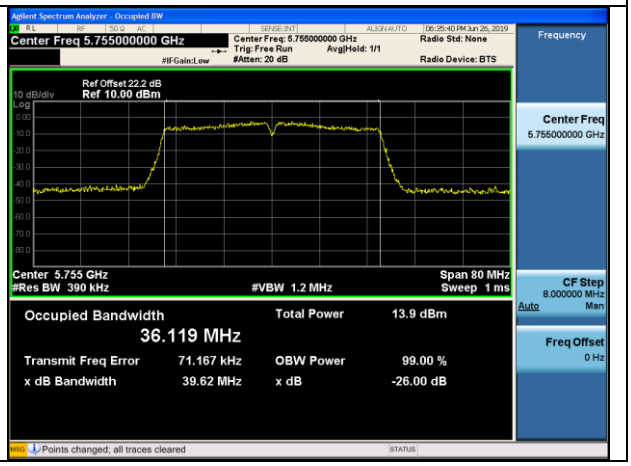
In order to simplify the report, attached plots were only the most wide channel.

802.11ac_VHT20 UNII 1 BAND 26dB Bandwidth(CH 48)	802.11ac_VHT20 UNII 2A BAND 26dB Bandwidth(CH 60)
	
802.11ac_VHT20 UNII 2C BAND 26dB Bandwidth(CH 144)	802.11ac_VHT20 UNII 3 BAND 26dB Bandwidth(CH 149)
	

▣ Test Plots(802.11ac(VHT40))

Note:

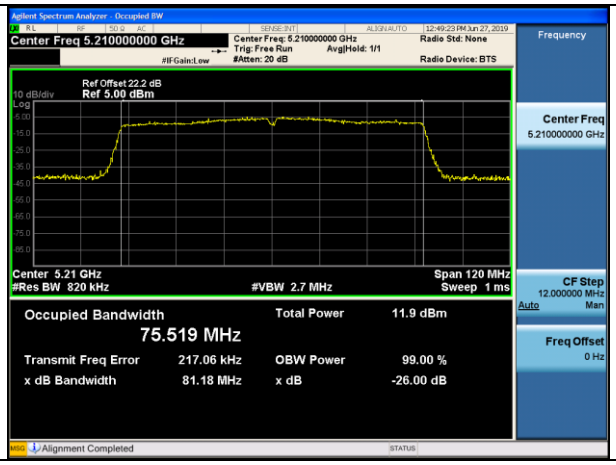
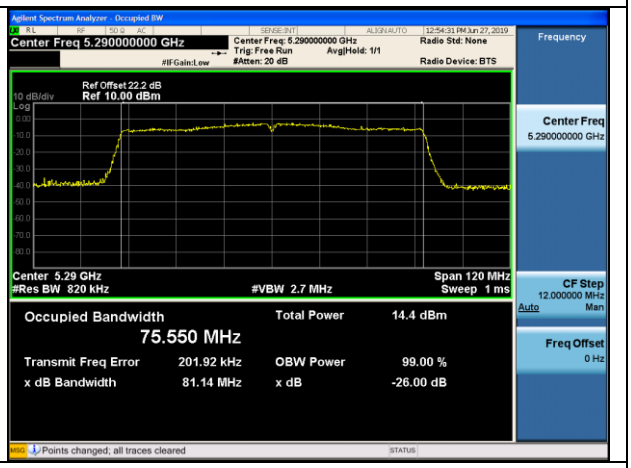
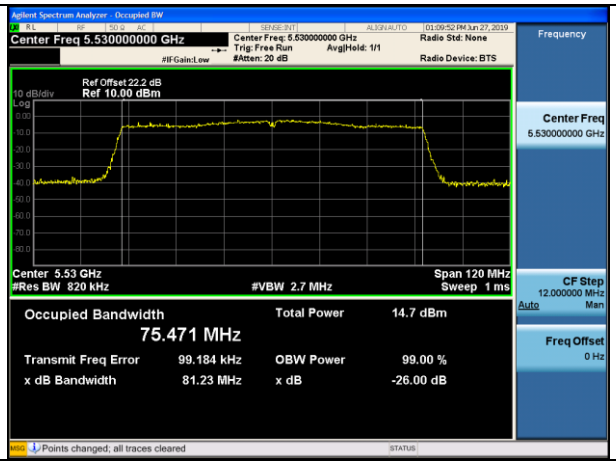
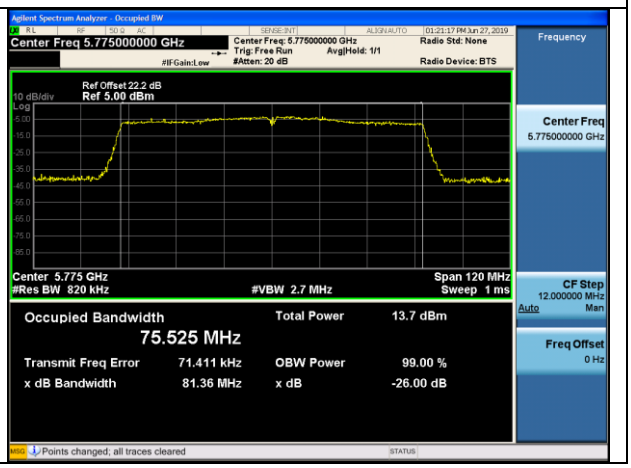
In order to simplify the report, attached plots were only the most wide channel.

802.11ac_VHT40 UNII 1 BAND 26dB Bandwidth(CH 38)	802.11ac_VHT40 UNII 2A BAND 26dB Bandwidth (CH 54)
	
802.11ac_VHT40 UNII 2C BAND 26dB Bandwidth(CH 102)	802.11ac_VHT40 UNII 3 BAND 26dB Bandwidth (CH 151)
	

▣ Test Plots(802.11ac(VHT80))

Note:

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

802.11ac_VHT80 UNII 1 BAND 26dB Bandwidth(CH 42)	802.11ac_VHT80 UNII 2A BAND 26dB Bandwidth (CH 58)
	
802.11ac_VHT80 UNII 2C BAND 26dB Bandwidth(CH 106)	802.11ac_VHT80 UNII 3 BAND 26dB Bandwidth (CH 155)
	

10.3 6DB BANDWIDTH

802.11a Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5745	149	16.33	> 0.5	Pass
5785	157	16.34	> 0.5	Pass
5825	165	16.35	> 0.5	Pass

802.11n(HT20) Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5745	149	17.59	> 0.5	Pass
5785	157	17.60	> 0.5	Pass
5825	165	17.33	> 0.5	Pass

802.11n(HT40) Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5755	151	35.76	> 0.5	Pass
5795	159	35.41	> 0.5	Pass

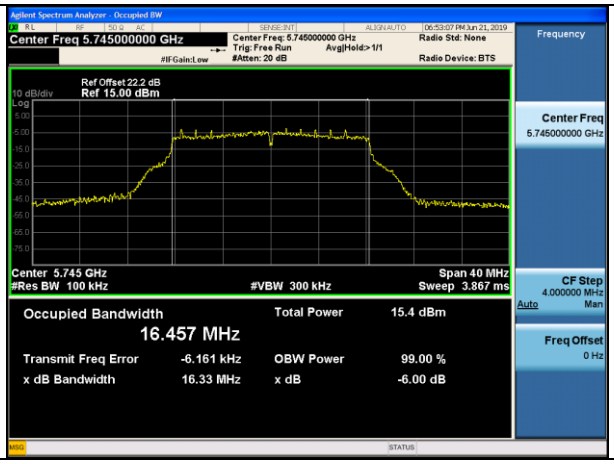
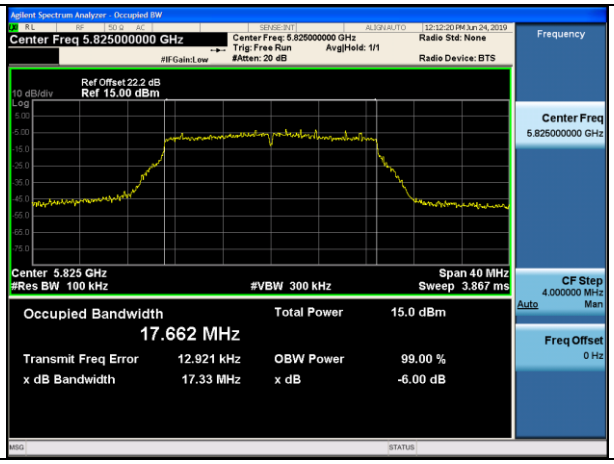
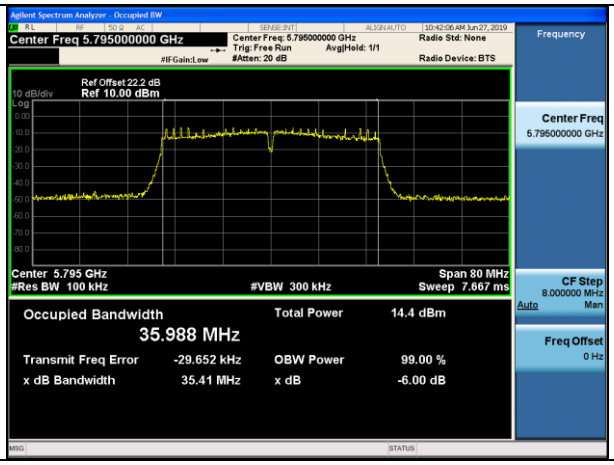
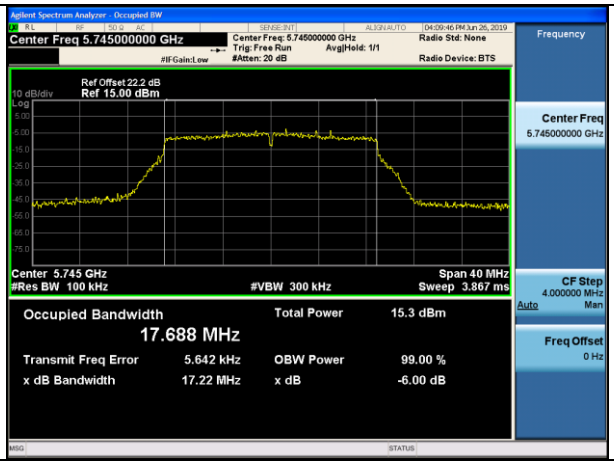
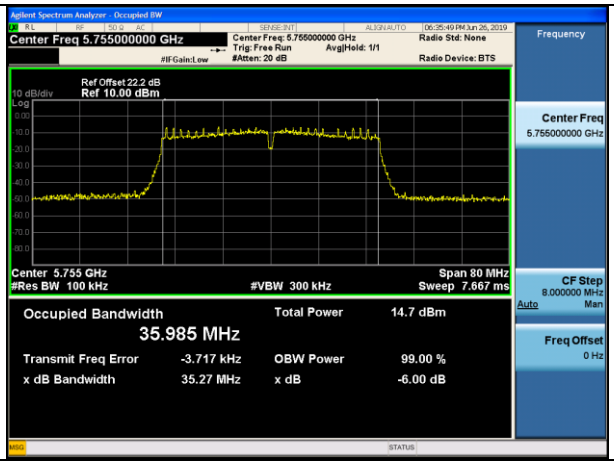
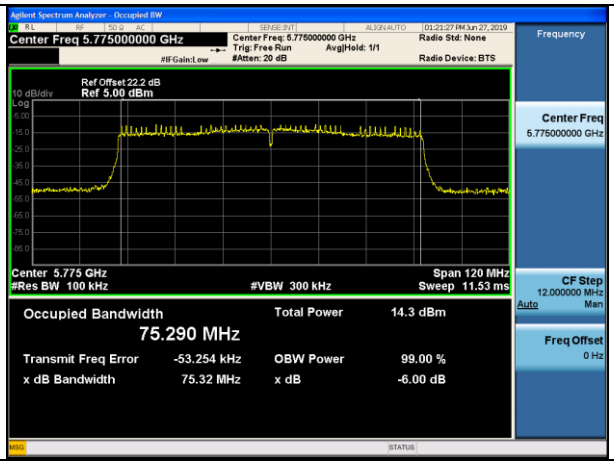
802.11ac(VHT20) Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5745	149	17.22	> 0.5	Pass
5785	157	17.34	> 0.5	Pass
5825	165	17.36	> 0.5	Pass

802.11ac(VHT40) Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5755	151	35.27	> 0.5	Pass
5795	159	35.46	> 0.5	Pass

802.11ac(VHT80) Mode		Measured Bandwidth [MHz]	Limit [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5775	155	75.32	> 0.5	Pass

▣ Test Plots

Note: In order to simplify the report, attached plots were only the most narrow channel.

802.11a (CH.149)	802.11n(HT20) (CH.165)
	
802.11n(HT40) (CH.159)	**802.11ac(VHT20) (CH.149)**
	
802.11ac(VHT40) (CH.151)	**802.11ac(VHT80) (CH.155)**
	

10.4 OUTPUT POWER MEASUREMENT

802.11a Mode		Measured Power [dBm]	Duty Cycle Factor (dB)	Total Power [dBm]	Limit (dBm)
Frequency [MHz]	Channel No.				
5180	36	8.21	0.30	8.52	23.98
5200	40	8.19	0.30	8.50	23.98
5240	48	8.31	0.20	8.51	23.98
5260	52	8.19	0.41	8.59	23.98
5300	60	7.89	0.30	8.19	23.98
5320	64	6.76	1.34	8.10	23.98
5500	100	8.74	0.41	9.14	23.98
5600	120	8.27	0.30	8.57	23.98
5720	144	8.67	0.20	8.87	23.98
5745	149	8.62	0.30	8.92	30.00
5785	157	8.07	0.41	8.48	30.00
5825	165	8.25	0.30	8.55	30.00

802.11n(20MHz) Mode		Measured Power [dBm]	Duty Cycle Factor (dB)	Total Power [dBm]	Limit (dBm)
Frequency [MHz]	Channel No.				
5180	36	7.55	0.61	8.16	23.98
5200	40	7.28	0.61	7.89	23.98
5240	48	7.52	0.61	8.13	23.98
5260	52	7.63	0.61	8.23	23.98
5300	60	7.88	0.42	8.30	23.98
5320	64	7.75	0.42	8.17	23.98
5500	100	8.42	0.61	9.03	23.98
5600	120	8.20	0.42	8.62	23.98
5720	144	8.48	0.22	8.70	23.98
5745	149	8.71	0.22	8.94	30.00
5785	157	8.11	0.61	8.71	30.00
5825	165	7.69	0.61	8.29	30.00

802.11n(40MHz) Mode		Measured Power [dBm]	Duty Cycle Factor (dB)	Total Power [dBm]	Limit (dBm)
Frequency [MHz]	Channel No.				
5190	38	3.58	1.13	4.71	23.98
5230	46	2.40	2.23	4.63	23.98
5270	54	6.50	0.80	7.30	23.98
5310	62	4.71	2.23	6.94	23.98
5510	102	5.46	2.36	7.82	23.98
5550	110	6.87	1.13	8.00	23.98
5710	142	7.13	0.80	7.93	23.98
5755	151	5.68	1.87	7.55	30.00
5795	159	5.19	2.36	7.55	30.00

802.11ac(20MHz) Mode		Measured Power [dBm]	Duty Cycle Factor (dB)	Total Power [dBm]	Limit (dBm)
Frequency [MHz]	Channel No.				
5180	36	6.57	1.91	8.49	23.98
5200	40	6.61	1.91	8.53	23.98
5240	48	6.47	1.91	8.38	23.98
5260	52	6.44	1.91	8.35	23.98
5300	60	8.06	0.42	8.48	23.98
5320	64	6.26	1.91	8.17	23.98
5500	100	7.32	1.91	9.24	23.98
5600	120	8.43	0.42	8.86	23.98
5720	144	8.73	0.43	9.16	23.98
5745	149	8.32	0.61	8.93	30.00
5785	157	8.57	0.42	9.00	30.00
5825	165	8.32	0.43	8.75	30.00

802.11ac(40MHz) Mode		Measured Power [dBm]	Duty Cycle Factor (dB)	Total Power [dBm]	Limit (dBm)
Frequency [MHz]	Channel No.				
5190	38	2.27	2.32	4.59	23.98
5230	46	1.40	2.80	4.20	23.98
5270	54	4.76	2.32	7.07	23.98
5310	62	4.65	2.32	6.97	23.98
5510	102	6.34	1.39	7.73	23.98
5550	110	5.14	2.73	7.87	23.98
5710	142	6.72	1.11	7.83	23.98
5755	151	5.66	1.84	7.50	30.00
5795	159	5.14	2.17	7.31	30.00

802.11ac(80MHz) Mode		Measured Power [dBm]	Duty Cycle Factor (dB)	Total Power [dBm]	Limit (dBm)
Frequency [MHz]	Channel No.				
5210	42	4.17	0.85	5.02	23.98
5290	58	3.94	3.44	7.38	23.98
5530	106	6.03	1.47	7.50	23.98
5690	138	5.71	1.47	7.18	23.98
5775	155	3.33	3.32	6.65	30.00

10.5 POWER SPECTRAL DENSITY

802.11a Mode		Measured PSD [dBm]	Duty Cycle Factor (dB)	Total PSD [dBm]	Limit (dBm)
Frequency [MHz]	Channel No.				
5180	36	-1.981	0.304	-1.677	11
5200	40	-2.008	0.407	-1.601	11
5240	48	-1.536	0.205	-1.331	11
5260	52	-2.086	0.407	-1.679	11
5300	60	-2.089	0.304	-1.785	11
5320	64	-3.989	1.343	-2.646	11
5500	100	-1.263	0.407	-0.856	11
5600	120	-2.059	0.304	-1.755	11
5720	144	-1.462	0.205	-1.257	11
5745	149	-4.147	0.304	-3.843	30
5785	157	-4.707	0.407	-4.300	30
5825	165	-4.397	0.304	-4.093	30

802.11n(20MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor (dB)	Total PSD [dBm]	Limit (dBm)
Frequency [MHz]	Channel No.				
5180	36	-2.745	0.606	-2.139	11
5200	40	-3.352	0.606	-2.746	11
5240	48	-2.382	0.606	-1.776	11
5260	52	-2.384	0.606	-1.778	11
5300	60	-2.176	0.423	-1.753	11
5320	64	-2.447	0.423	-2.024	11
5500	100	-2.343	0.606	-1.737	11
5600	120	-2.612	0.606	-2.006	11
5720	144	-2.057	0.224	-1.833	11
5745	149	-4.926	0.224	-4.702	30
5785	157	-4.912	0.606	-4.306	30
5825	165	-5.287	0.606	-4.681	30

802.11n(40MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor (dB)	Total PSD [dBm]	Limit (dBm)
Frequency [MHz]	Channel No.				
5190	38	-9.796	1.128	-8.668	11
5230	46	-11.168	2.359	-8.809	11
5270	54	-7.049	0.799	-6.250	11
5310	62	-8.598	2.230	-6.368	11
5510	102	-7.687	2.545	-5.142	11
5590	118	-6.701	1.128	-5.573	11
5710	142	-6.597	0.799	-5.798	11
5755	151	-9.907	1.871	-8.036	30
5795	159	-10.513	2.359	-8.154	30

802.11ac(20MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor (dB)	Total PSD [dBm]	Limit (dBm)
Frequency [MHz]	Channel No.				
5180	36	-2.042	1.912	-0.130	11
5200	40	-4.441	1.912	-2.529	11
5240	48	-4.447	1.912	-2.535	11
5260	52	-4.672	1.912	-2.760	11
5300	60	-2.476	0.424	-2.052	11
5320	64	-4.703	1.912	-2.791	11
5500	100	-3.609	1.912	-1.697	11
5600	120	-1.967	0.424	-1.543	11
5720	144	-1.647	0.430	-1.217	11
5745	149	-4.886	0.610	-4.276	30
5785	157	-4.489	0.424	-4.065	30
5825	165	-4.478	0.430	-4.048	30

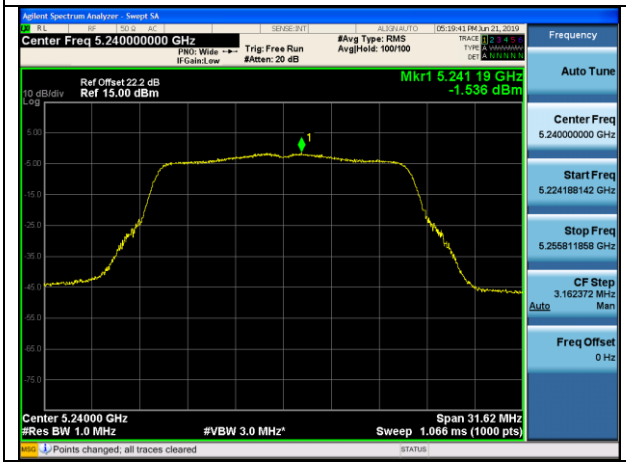
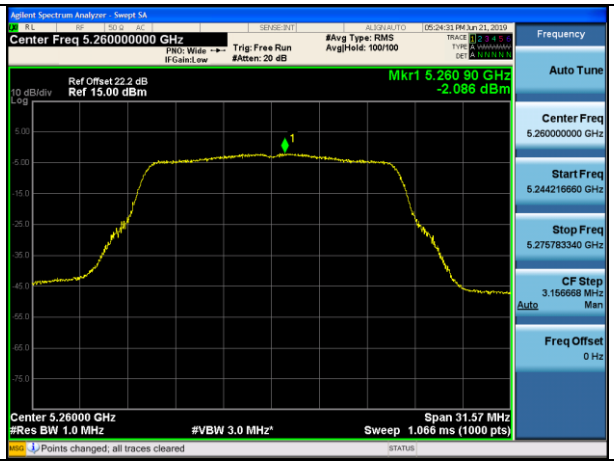
802.11ac(40MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor (dB)	Total PSD [dBm]	Limit (dBm)
Frequency [MHz]	Channel No.				
5190	38	-10.712	2.317	-8.395	11
5230	46	-11.456	2.798	-8.658	11
5270	54	-8.602	2.317	-6.285	11
5310	62	-8.674	2.317	-6.357	11
5510	102	-7.575	1.839	-5.736	11
5590	118	-7.958	2.728	-5.230	11
5710	142	-6.606	1.107	-5.499	11
5755	151	-10.248	1.839	-8.409	30
5795	159	-10.760	2.171	-8.589	30

802.11ac(80MHz) Mode		Measured PSD [dBm]	Duty Cycle Factor (dB)	Total PSD [dBm]	Limit (dBm)
Frequency [MHz]	Channel No.				
5210	42	-12.442	0.850	-11.592	11
5290	58	-13.059	3.439	-9.620	11
5530	106	-10.267	1.470	-8.797	11
5690	138	-10.378	1.470	-8.908	11
5775	155	-15.716	3.324	-12.392	30

▣ Test Plots(802.11a)

Note:

In order to simplify the report, attached plots were only channel of highest power.

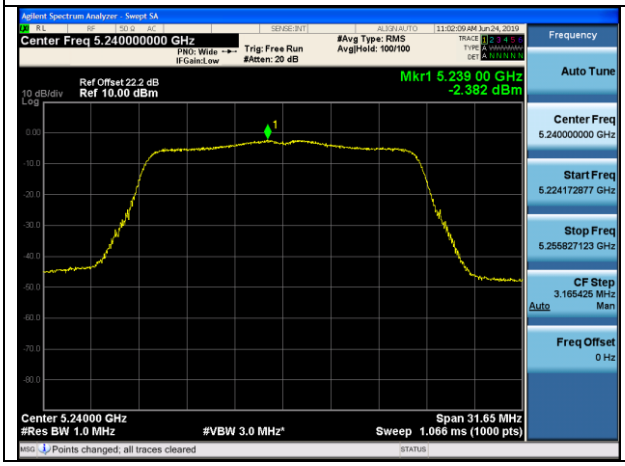
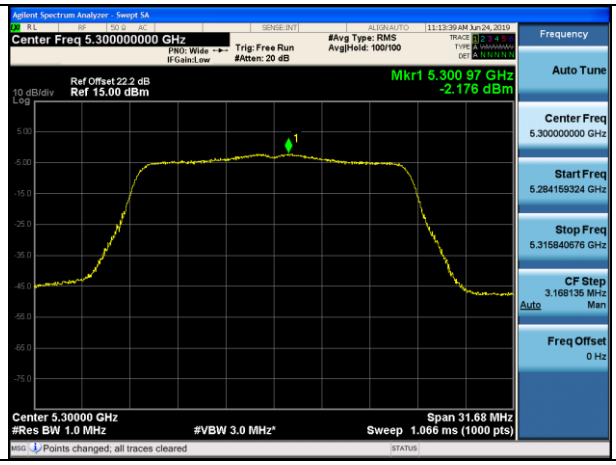
UNII 1 (Ch. 48)	UNII 2A (Ch. 52)
	

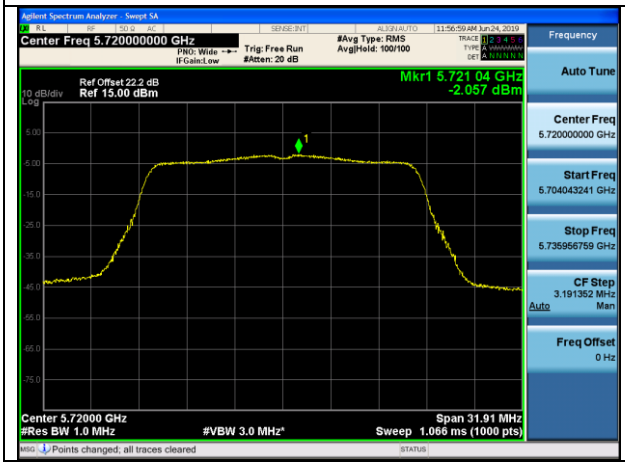
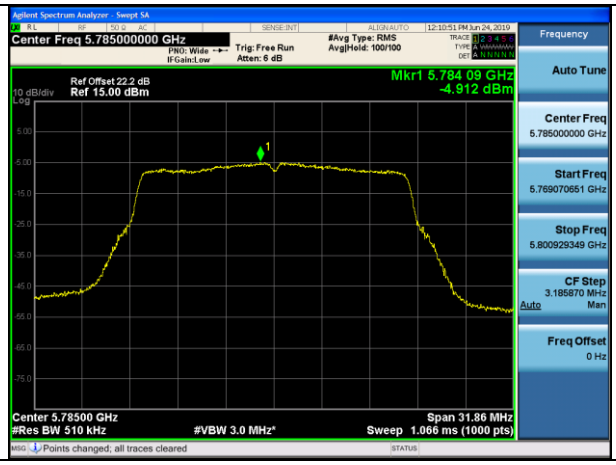
UNII 2C (Ch. 100)	UNII 3 (Ch. 149)
	

▣ Test Plots(802.11n(HT20))

Note:

In order to simplify the report, attached plots were only channel of highest power.

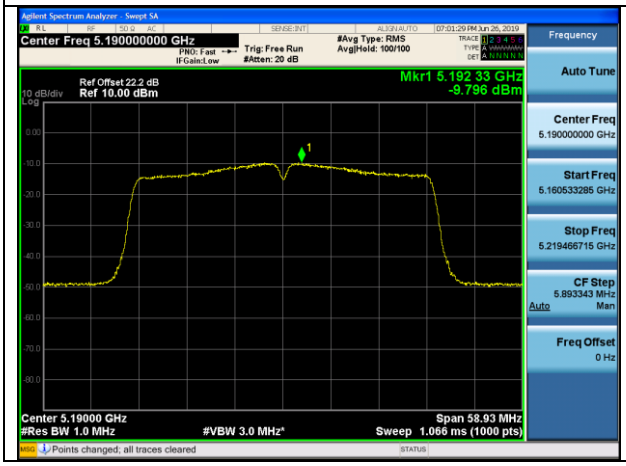
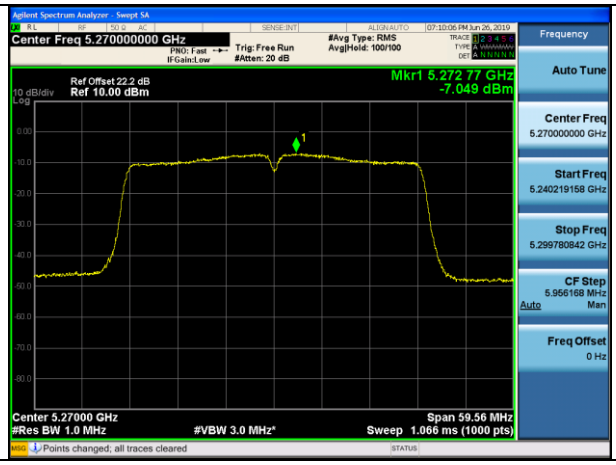
UNII 1 (Ch. 48)	UNII 2A (Ch. 60)
	

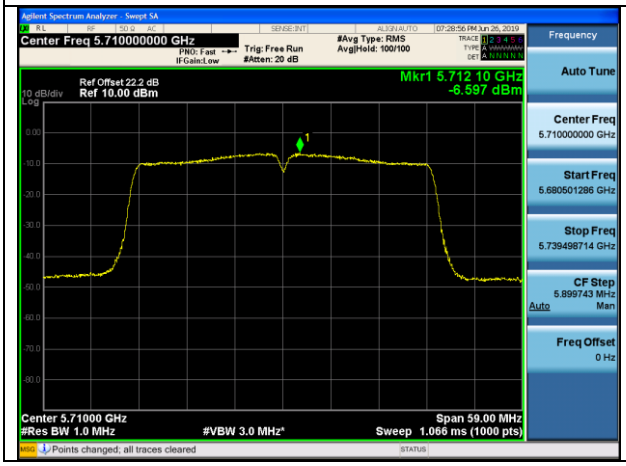
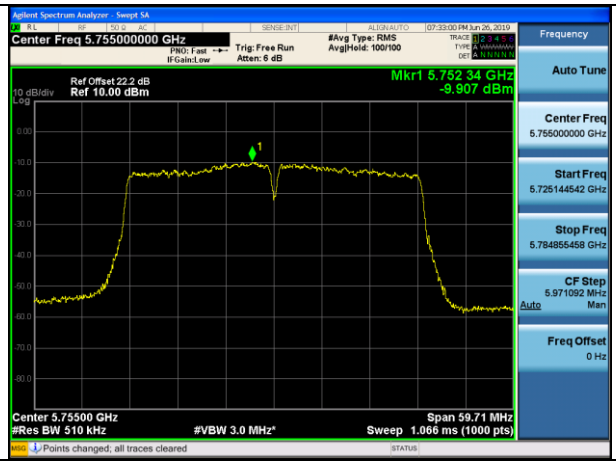
UNII 2C (Ch. 144)	UNII 3 (Ch. 157)
	

▣ Test Plots(802.11n(HT40))

Note:

In order to simplify the report, attached plots were only channel of highest power.

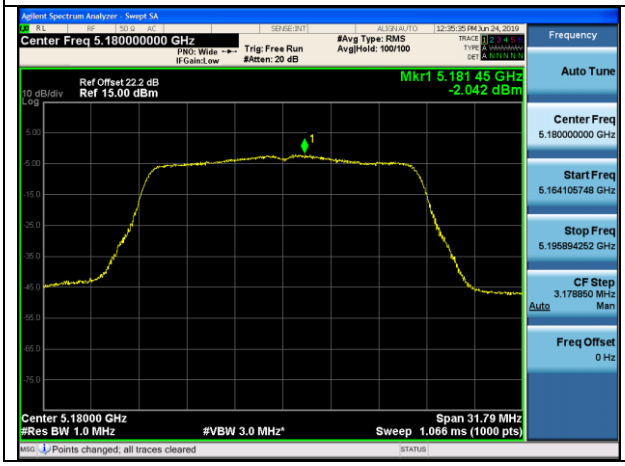
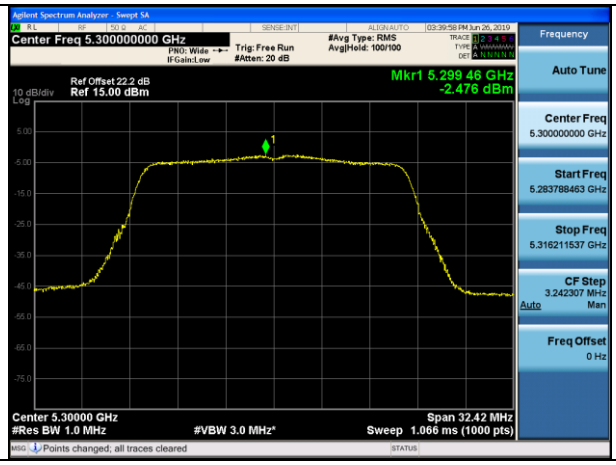
UNII 1 (Ch. 38)	UNII 2A (Ch. 54)
	

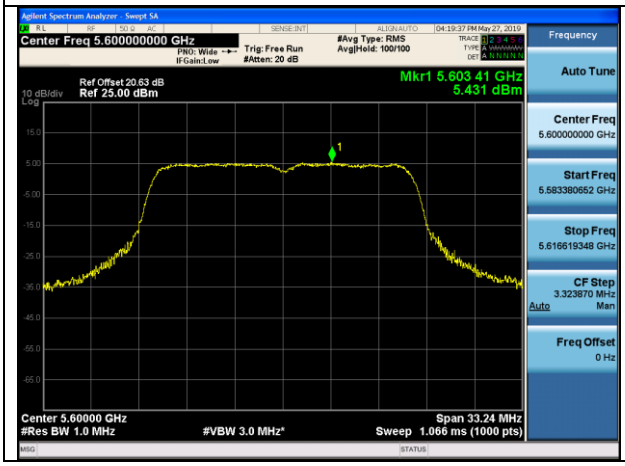
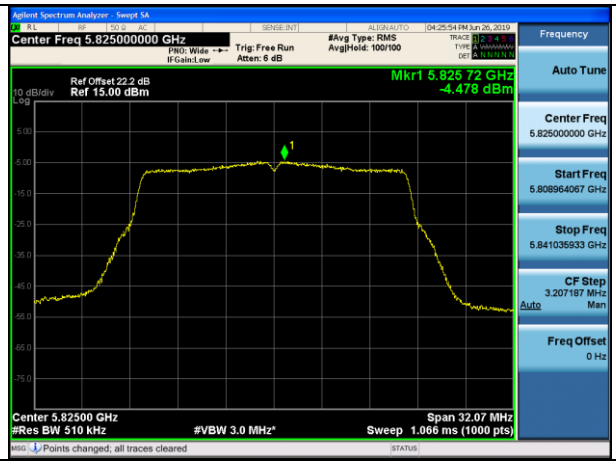
UNII 2C (Ch. 142)	UNII 3 (Ch. 151)
	

▣ Test Plots(802.11ac(VHT20))

Note:

In order to simplify the report, attached plots were only channel of highest power.

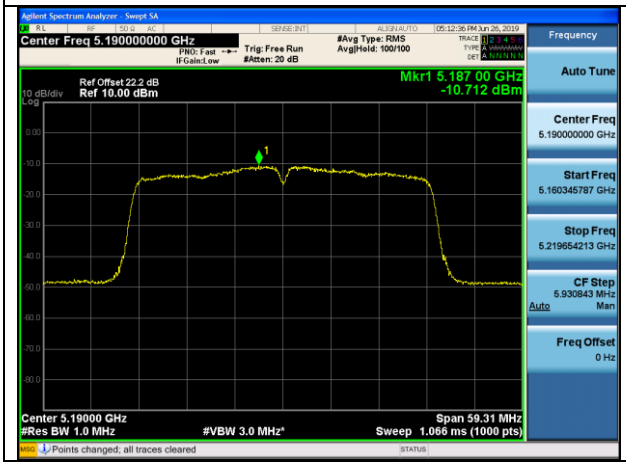
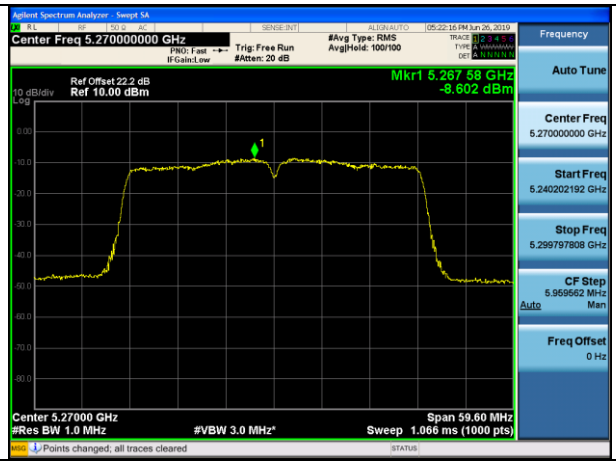
UNII 1 (Ch. 36)	UNII 2A (Ch. 60)
	

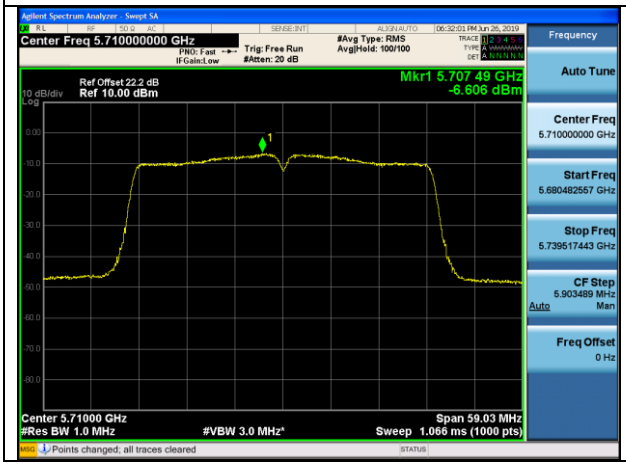
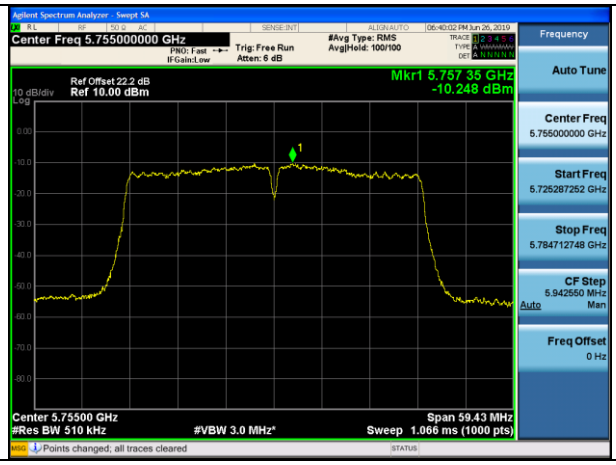
UNII 2C (Ch. 144)	UNII 3 (Ch. 165)
	

▣ Test Plots(802.11ac(VHT40))

Note:

In order to simplify the report, attached plots were only channel of highest power.

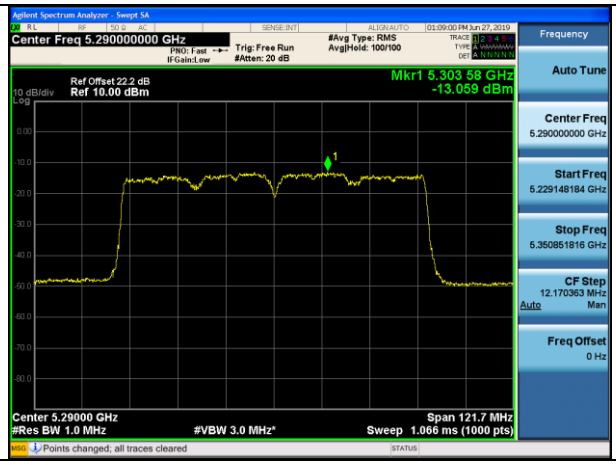
UNII 1 (Ch. 38)	UNII 2A (Ch. 54)
	

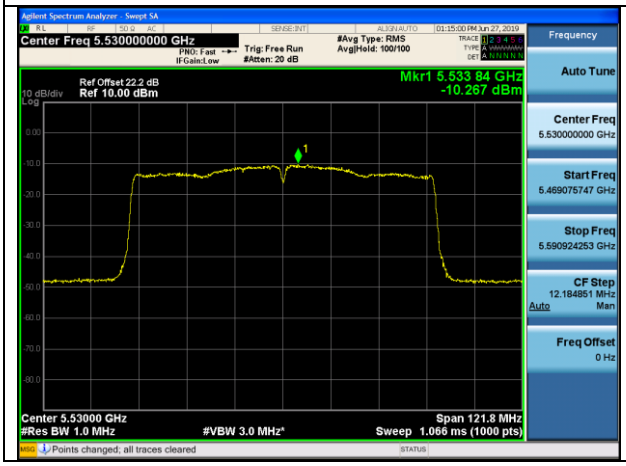
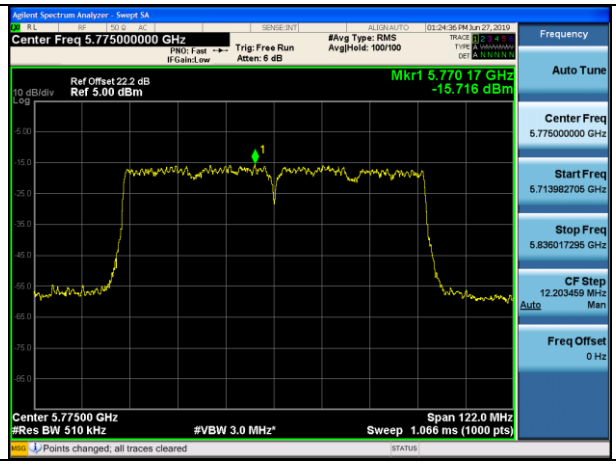
UNII 2C (Ch. 142)	UNII 3 (Ch. 151)
	

▣ Test Plots(802.11ac(VHT80))

Note:

In order to simplify the report, attached plots were only channel of highest power.

UNII 1 (Ch. 42)	UNII 2A (Ch. 58)
	

UNII 2C (Ch. 106)	UNII 3 (Ch. 155)
	

10.6 FREQUENCY STABILITY.

10.6.1 80MHz BW

Startup after the EUT is energized

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,210,000,000 Hz
CHANNEL:	42
REFERENCE VOLTAGE:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5210068.60	68.60
100%		-30	5210093.88	93.88
100%		-20	5210066.41	66.41
100%		-10	5210025.96	25.96
100%		0	5210076.62	76.62
100%		+10	5210095.23	95.23
100%		+30	5210099.47	99.47
100%		+40	5210014.27	14.27
100%		+50	5210094.34	94.34
115%	16.00	+20	5210005.57	5.57
End. Point	9.00	+20	5210009.80	9.80

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:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5290017.86	17.86
100%		-30	5290065.11	65.11
100%		-20	5290021.43	21.43
100%		-10	5290047.08	47.08
100%		0	5290016.21	16.21
100%		+10	5290062.62	62.62
100%		+30	5290056.69	56.69
100%		+40	5290012.49	12.49
100%		+50	5290092.27	92.27
115%	16.00	+20	5290093.32	93.32
End. Point	9.00	+20	5290012.95	12.95

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:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5530087.59	87.59
100%		-30	5530039.81	39.81
100%		-20	5530025.24	25.24
100%		-10	5530086.91	86.91
100%		0	5530027.70	27.7
100%		+10	5530076.96	76.96
100%		+30	5530045.20	45.2
100%		+40	5530092.36	92.36
100%		+50	5530010.99	10.99
115%	16.00	+20	5530066.55	66.55
End. Point	9.00	+20	5530089.46	89.46

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:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5775099.64	99.64
100%		-30	5775076.16	76.16
100%		-20	5775092.80	92.8
100%		-10	5775059.80	59.8
100%		0	5775033.13	33.13
100%		+10	5775004.71	4.71
100%		+30	5775072.30	72.3
100%		+40	5775046.99	46.99
100%		+50	5775040.23	40.23
115%	16.00	+20	5775046.99	46.99
End. Point	9.00	+20	5775044.93	44.93

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.

2 minutes after the EUT is energized

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,210,000,000 Hz
CHANNEL:	42
REFERENCE VOLTAGE:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5210041.51	41.51
100%		-30	5210086.56	86.56
100%		-20	5210083.92	83.92
100%		-10	5210091.61	91.61
100%		0	5210073.74	73.74
100%		+10	5210065.57	65.57
100%		+30	5210095.35	95.35
100%		+40	5210094.45	94.45
100%		+50	5210013.22	13.22
115%	16.00	+20	5210069.23	69.23
End. Point	9.00	+20	5210081.95	81.95

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:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5290034.03	34.03
100%		-30	5290079.02	79.02
100%		-20	5290071.99	71.99
100%		-10	5290009.45	9.45
100%		0	5290030.90	30.9
100%		+10	5290027.24	27.24
100%		+30	5290088.29	88.29
100%		+40	5290082.10	82.1
100%		+50	5290096.05	96.05
115%	16.00	+20	5290070.57	70.57
End. Point	9.00	+20	5290041.17	41.17

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:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5530013.72	13.72
100%		-30	5530080.63	80.63
100%		-20	5530086.84	86.84
100%		-10	5530010.17	10.17
100%		0	5530018.43	18.43
100%		+10	5530049.90	49.9
100%		+30	5530002.48	2.48
100%		+40	5530046.53	46.53
100%		+50	5530030.33	30.33
115%	16.00	+20	5530078.16	78.16
End. Point	9.00	+20	5530004.17	4.17

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:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5775059.51	59.51
100%		-30	5775007.38	7.38
100%		-20	5775084.18	84.18
100%		-10	5775014.11	14.11
100%		0	5775098.96	98.96
100%		+10	5775078.89	78.89
100%		+30	5775004.46	4.46
100%		+40	5775029.08	29.08
100%		+50	5775041.17	41.17
115%	16.00	+20	5775088.21	88.21
End. Point	9.00	+20	5775006.52	6.52

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.

5 minutes after the EUT is energized

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,210,000,000 Hz
CHANNEL:	42
REFERENCE VOLTAGE:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5210069.14	69.14
100%		-30	5210056.14	56.14
100%		-20	5210018.78	18.78
100%		-10	5210075.14	75.14
100%		0	5210058.83	58.83
100%		+10	5210036.85	36.85
100%		+30	5210098.38	98.38
100%		+40	5210068.46	68.46
100%		+50	5210029.97	29.97
115%	16.00	+20	5210096.59	96.59
End. Point	9.00	+20	5210072.36	72.36

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:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5290059.39	59.39
100%		-30	5290086.87	86.87
100%		-20	5290037.69	37.69
100%		-10	5290088.13	88.13
100%		0	5290071.31	71.31
100%		+10	5290072.99	72.99
100%		+30	5290078.31	78.31
100%		+40	5290049.50	49.5
100%		+50	5290034.56	34.56
115%	16.00	+20	5290071.66	71.66
End. Point	9.00	+20	5290028.87	28.87

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:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5530078.61	78.61
100%		-30	5530048.89	48.89
100%		-20	5530095.44	95.44
100%		-10	5530049.05	49.05
100%		0	5530086.79	86.79
100%		+10	5530055.67	55.67
100%		+30	5530049.43	49.43
100%		+40	5530060.83	60.83
100%		+50	5530084.97	84.97
115%	16.00	+20	5530048.79	48.79
End. Point	9.00	+20	5530004.72	4.72

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:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5775075.97	75.97
100%		-30	5775027.89	27.89
100%		-20	5775090.34	90.34
100%		-10	5775082.50	82.5
100%		0	5775056.85	56.85
100%		+10	5775086.50	86.5
100%		+30	5775019.24	19.24
100%		+40	5775029.88	29.88
100%		+50	5775087.40	87.40
115%	16.00	+20	5775012.37	12.37
End. Point	9.00	+20	5775061.97	61.97

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.

10 minutes after the EUT is energized

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,210,000,000 Hz
CHANNEL:	42
REFERENCE VOLTAGE:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5210072.22	72.22
100%		-30	5210012.58	12.58
100%		-20	5210085.97	85.97
100%		-10	5210020.15	20.15
100%		0	5210015.48	15.48
100%		+10	5210022.07	22.07
100%		+30	5210058.38	58.38
100%		+40	5210012.15	12.15
100%		+50	5210006.27	6.27
115%	16.00	+20	5210095.46	95.46
End. Point	9.00	+20	5210090.21	90.21

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:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5290001.77	1.77
100%		-30	5290086.67	86.67
100%		-20	5290098.54	98.54
100%		-10	5290049.49	49.49
100%		0	5290067.24	67.24
100%		+10	5290085.36	85.36
100%		+30	5290073.99	73.99
100%		+40	5290084.40	84.4
100%		+50	5290071.90	71.90
115%	16.00	+20	5290026.97	26.97
End. Point	9.00	+20	5290050.93	50.93

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:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5530065.85	65.85
100%		-30	5530032.35	32.35
100%		-20	5530048.05	48.05
100%		-10	5530066.45	66.45
100%		0	5530030.77	30.77
100%		+10	5530002.60	2.6
100%		+30	5530073.43	73.43
100%		+40	5530061.19	61.19
100%		+50	5530021.24	21.24
115%	16.00	+20	5530032.83	32.83
End. Point	9.00	+20	5530059.59	59.59

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:	14.4 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	14.40	+20(Ref)	5775022.70	22.70
100%		-30	5775002.96	2.96
100%		-20	5775062.91	62.91
100%		-10	5775016.62	16.62
100%		0	5775052.57	52.57
100%		+10	5775046.21	46.21
100%		+30	5775069.61	69.61
100%		+40	5775016.78	16.78
100%		+50	5775015.18	15.18
115%	16.00	+20	5775092.94	92.94
End. Point	9.00	+20	5775057.03	57.03

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.

10.7 STRADDLE CHANNEL

10.7.1 26dB Bandwidth

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11a	UNII 2C	5720	144	5710.08	15.52
802.11n(HT20)				5709.40	15.48
802.11ac(VHT20)				5709.84	15.48
802.11a	UNII 3	5720	144	5730.24	5.52
802.11n(HT20)				5731.12	5.44
802.11ac(VHT20)				5731.00	5.44

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11n(HT40)	UNII 2C	5710	142	5689.76	34.52
802.11ac(VHT40)				5689.60	34.60
802.11n(HT40)	UNII 3	5710	142	5730.80	5.00
802.11ac(VHT40)				5730.72	4.92

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11ac(VHT80)	UNII 2C	5690	138	5648.48	75.56
	UNII 3	5690	138	5731.40	5.80

Note:

[UNII 2C] 26dB Bandwidth = 5725MHz - Measured Frequency[MHz]

[UNII 3C] 26dB Bandwidth = Measured Frequency[MHz] -5725MHz

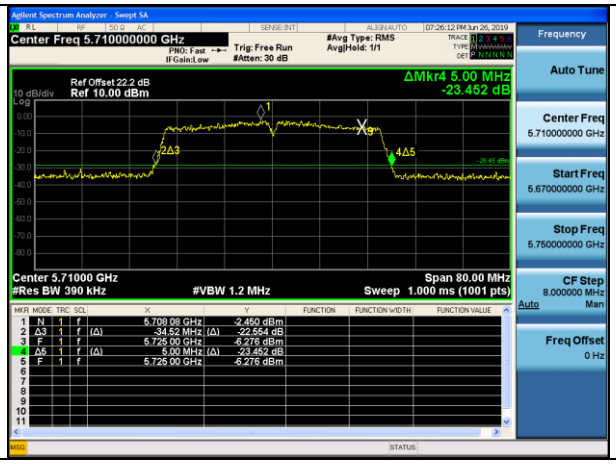
▣ Test Plots (26dB Bandwidth)

802.11a UNII Band

802.11n(HT20) UNII Band

802.11ac(VHT20) UNII Band

▣ Test Plots (26dB Bandwidth)

802.11n(HT40) UNII Band	802.11ac(VHT40) UNII Band
	

802.11ac(VHT80) UNII Band