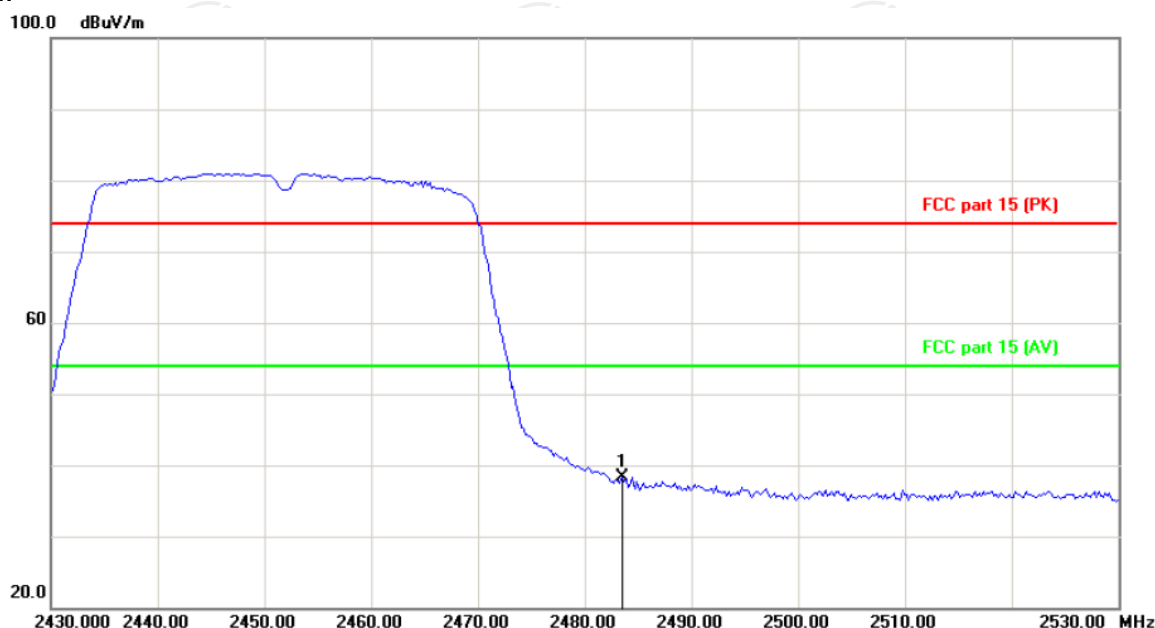


Vertical:



Site: Polarization: **Vertical** Temperature: 25
Limit: FCC part 15 (PK) Power: Humidity: 55 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1	*	2483.500	51.04	-12.74	38.30	74.00	-35.70	peak

Note:

1. Peak Final Emission Level=Peak Reading + Correction Factor;
2. Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
3. Measurements were conducted in all modulation(802.11b, 802.11g, 802.11n(HT20), 802.11n(HT40)), and the worst case Mode (802.11n(HT40)) was submitted only.
4. 802.11n(HT40) is MIMO mode.

Above 1GHz

Modulation Type: 802.11b

Low channel: 2412 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4824	H	47.23	---	0.75	47.98	---	74	54	-6.02
7236	H	36.54	---	9.87	46.41	---	74	54	-7.59
---	H	---	---	---	---	---	---	---	---
4824	V	44.98	---	0.75	45.73	---	74	54	-8.27
7236	V	35.75	---	9.87	45.62	---	74	54	-8.38
---	V	---	---	---	---	---	---	---	---

Middle channel: 2437MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4874	H	46.14	---	0.97	47.11	---	74	54	-6.89
7311	H	34.62	---	9.83	44.45	---	74	54	-9.55
---	H	---	---	---	---	---	---	---	---
4874	V	48.02	---	0.97	48.99	---	74	54	-5.01
7311	V	37.45	---	9.83	47.28	---	74	54	-6.72
---	V	---	---	---	---	---	---	---	---

High channel: 2462 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4924	H	45.79	---	1.18	46.97	---	74	54	-7.03
7386	H	37.52	---	10.07	47.59	---	74	54	-6.41
---	H	---	---	---	---	---	---	---	---
4924	V	47.34	---	1.18	48.52	---	74	54	-5.48
7386	V	38.15	---	10.07	48.22	---	74	54	-5.78
---	V	---	---	---	---	---	---	---	---

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dBμV/m)-Average limit (dBμV/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.
5. Data of measurement shown “---“in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.
6. 802.11b is SISO mode and the worst case Antenna (ANT0) was submitted only.

Modulation Type: 802.11g

Low channel: 2412 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4824	H	45.63	---	0.75	46.38	---	74	54	-7.62
7236	H	34.27	---	9.87	44.14	---	74	54	-9.86
---	H	---	---	---	---	---	---	---	---
4824	V	46.03	---	0.75	46.78	---	74	54	-7.22
7236	V	35.58	---	9.87	45.45	---	74	54	-8.55
---	V	---	---	---	---	---	---	---	---

Middle channel: 2437MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4874	H	44.74	---	0.97	45.71	---	74	54	-8.29
7311	H	35.91	---	9.83	45.74	---	74	54	-8.26
---	H	---	---	---	---	---	---	---	---
4874	V	47.68	---	0.97	48.65	---	74	54	-5.35
7311	V	38.12	---	9.83	47.95	---	74	54	-6.05
---	V	---	---	---	---	---	---	---	---

High channel: 2462 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4924	H	43.59	---	1.18	44.77	---	74	54	-9.23
7386	H	34.37	---	10.07	44.44	---	74	54	-9.56
---	H	---	---	---	---	---	---	---	---
4924	V	42.89	---	1.18	44.07	---	74	54	-9.93
7386	V	36.14	---	10.07	46.21	---	74	54	-7.79
---	V	---	---	---	---	---	---	---	---

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dBμV/m)-Average limit (dBμV/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.
5. Data of measurement shown “---“in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.
6. 802.11g is SISO mode and the worst case Antenna (ANT0) was submitted only.

Modulation Type: 802.11n (HT20)

Low channel: 2412 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4824	H	44.87	---	0.75	45.62	---	74	54	-8.38
7236	H	35.52	---	9.87	45.39	---	74	54	-8.61
---	H	---	---	---	---	---	---	---	---
4824	V	44.69	---	0.75	45.44	---	74	54	-8.56
7236	V	34.85	---	9.87	44.72	---	74	54	-9.28
---	V	---	---	---	---	---	---	---	---

Middle channel: 2437MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4874	H	46.24	---	0.97	47.21	---	74	54	-6.79
7311	H	35.72	---	9.83	45.55	---	74	54	-8.45
---	H	---	---	---	---	---	---	---	---
4874	V	45.34	---	0.97	46.31	---	74	54	-7.69
7311	V	36.28	---	9.83	46.11	---	74	54	-7.89
---	V	---	---	---	---	---	---	---	---

High channel: 2462 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4924	H	43.97	---	1.18	45.15	---	74	54	-8.85
7386	H	34.45	---	10.07	44.52	---	74	54	-9.48
---	H	---	---	---	---	---	---	---	---
4924	V	45.15	---	1.18	46.33	---	74	54	-7.67
7386	V	36.02	---	10.07	46.09	---	74	54	-7.91
---	V	---	---	---	---	---	---	---	---

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor=Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dBμV/m)-Average limit (dBμV/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.
5. Data of measurement shown “---“in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.
6. 802.11n(HT20) is MIMO mode.

Modulation Type: 802.11n (HT40)

Low channel: 2422 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4844	H	42.56	---	0.75	43.31	---	74	54	-10.69
7266	H	33.71	---	9.87	43.58	---	74	54	-10.42
---	H	---	---	---	---	---	---	---	---
4824	V	43.98	---	0.75	44.73	---	74	54	-9.27
7236	V	34.67	---	9.87	44.54	---	74	54	-9.46
---	V	---	---	---	---	---	---	---	---

Middle channel: 2437MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4874	H	43.85	---	0.97	44.82	---	74	54	-9.18
7311	H	33.49	---	9.83	43.32	---	74	54	-10.68
---	H	---	---	---	---	---	---	---	---
4874	V	44.35	---	0.97	45.32	---	74	54	-8.68
7311	V	35.18	---	9.83	45.01	---	74	54	-8.99
---	V	---	---	---	---	---	---	---	---

High channel: 2452 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4904	H	43.74	---	1.18	44.92	---	74	54	-9.08
7356	H	33.46	---	10.07	43.53	---	74	54	-10.47
---	H	---	---	---	---	---	---	---	---
4904	V	45.06	---	1.18	46.24	---	74	54	-7.76
7356	V	36.28	---	10.07	46.35	---	74	54	-7.65
---	V	---	---	---	---	---	---	---	---

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dBμV/m)-Average limit (dBμV/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.
5. Data of measurement shown “---“in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.
6. 802.11n(HT40) is MIMO mode.

Appendix A: Test Result of Conducted Test

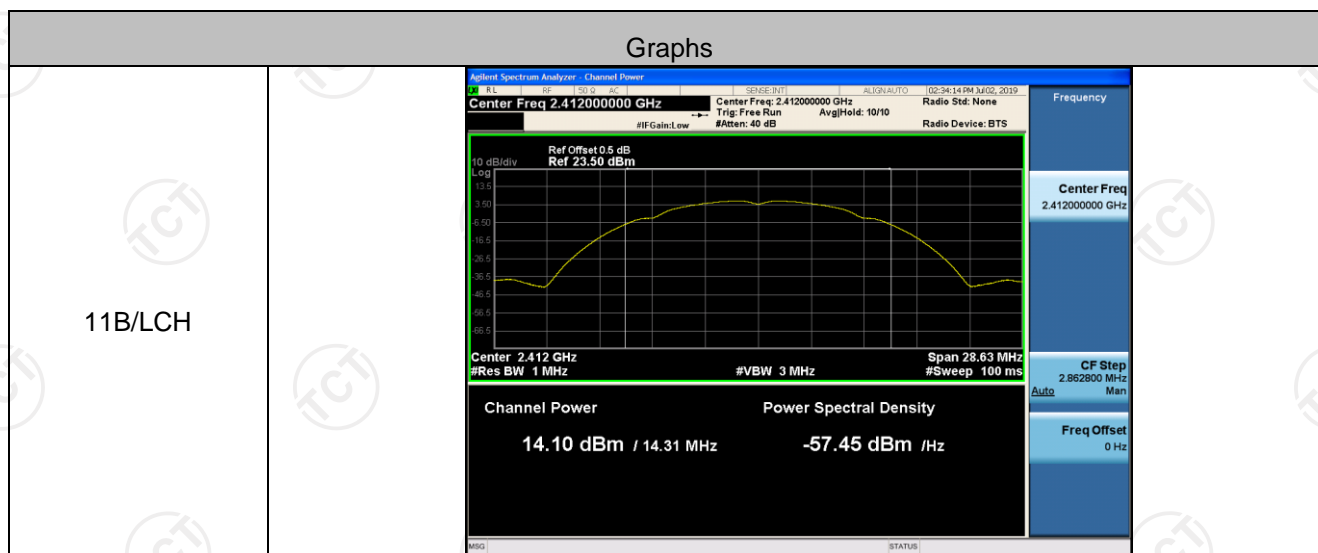
Antenna 0

Conducted Average Output Power

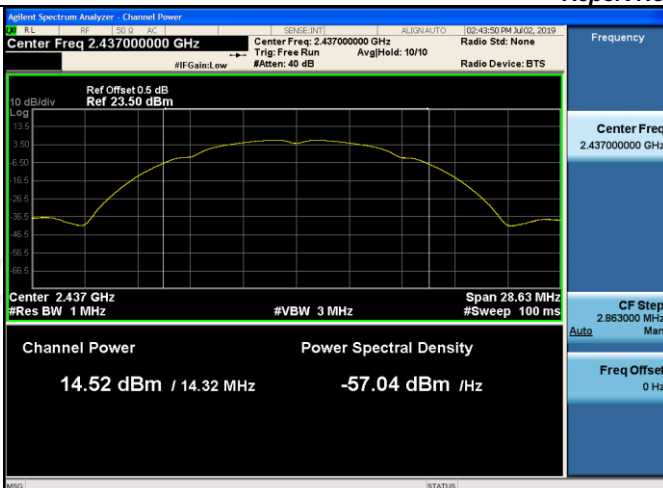
Result Table

Mode	Channel	Meas.Level [dBm]	Verdict
11B	LCH	14.10	PASS
11B	MCH	14.52	PASS
11B	HCH	14.29	PASS
11G	LCH	13.61	PASS
11G	MCH	13.74	PASS
11G	HCH	13.73	PASS
11N20SISO	LCH	11.44	PASS
11N20SISO	MCH	11.76	PASS
11N20SISO	HCH	11.72	PASS
11N40SISO	LCH	11.36	PASS
11N40SISO	MCH	11.53	PASS
11N40SISO	HCH	11.51	PASS

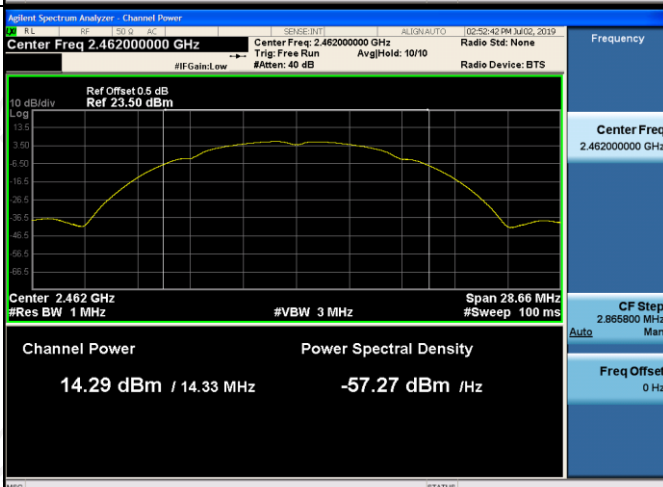
Test Graph



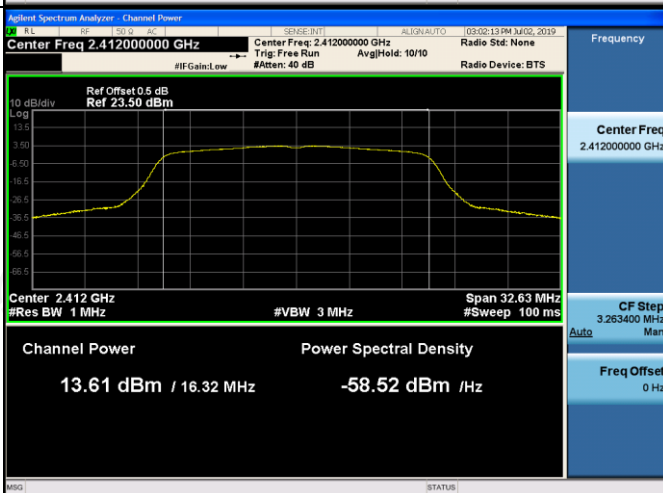
11B/MCH



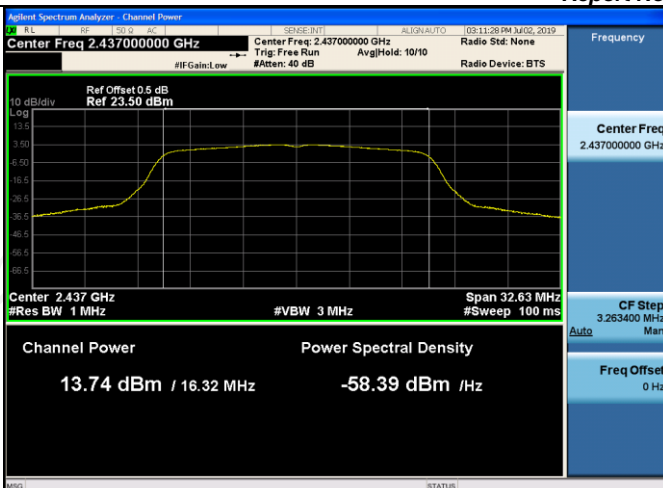
11B/HCH



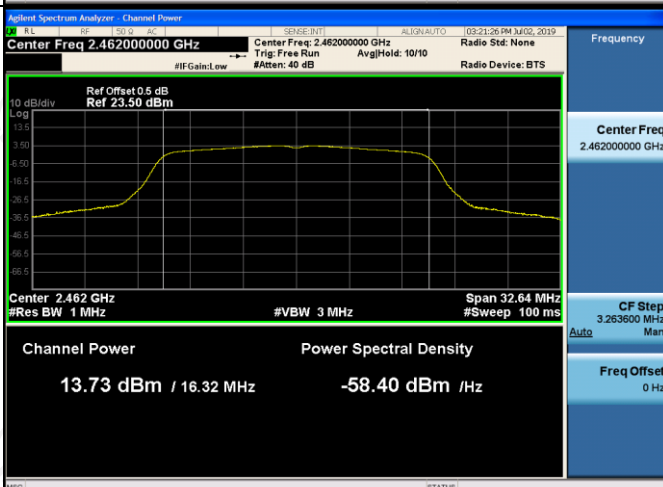
11G/LCH



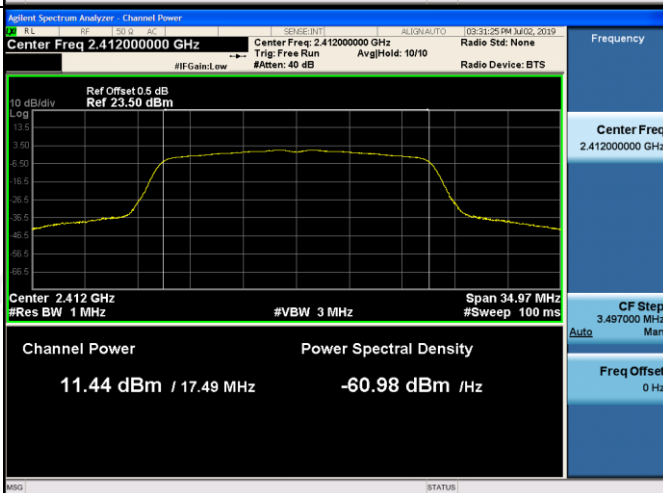
11G/MCH

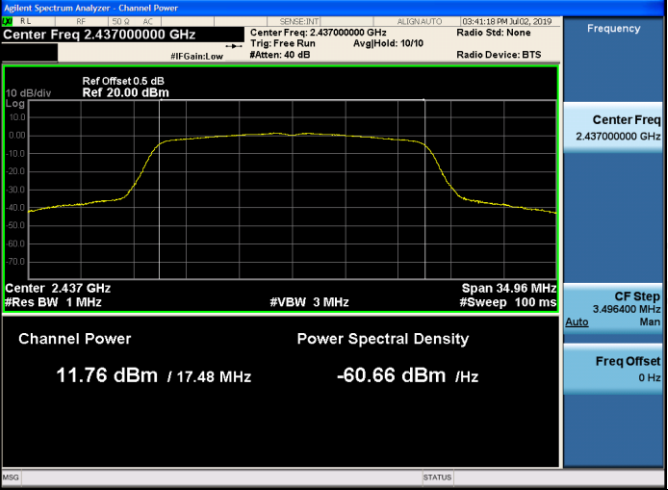
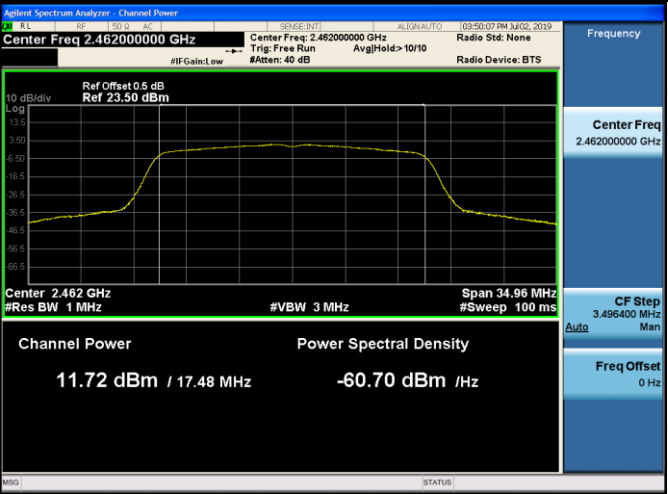
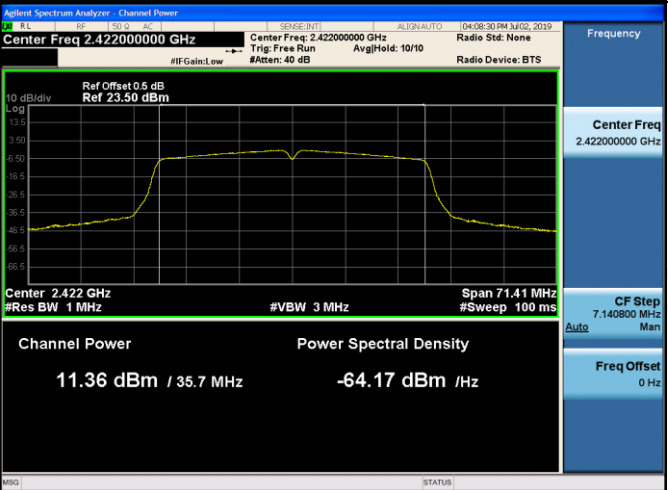


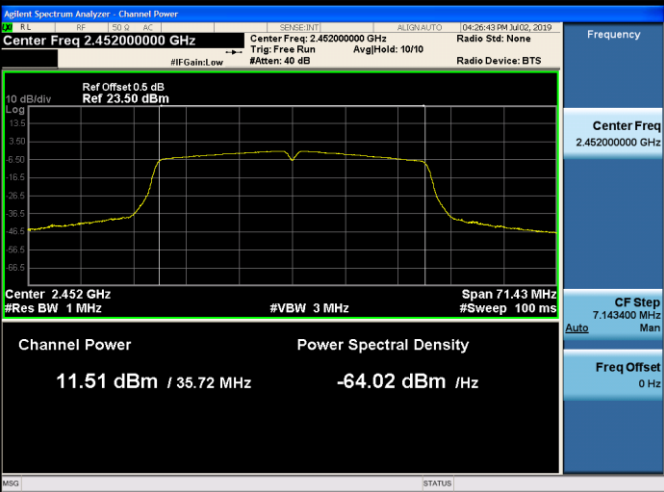
11G/HCH



11N20SISO/LCH



11N20SISO/MCH	 <p>Agilent Spectrum Analyzer - Channel Power</p> <p>Center Freq 2.437000000 GHz</p> <p>Ref Offset 0.5 dB Ref 20.00 dBm</p> <p>Channel Power: 11.76 dBm / 17.48 MHz</p> <p>Power Spectral Density: -60.66 dBm / Hz</p> <p>Center Freq: 2.437 GHz</p> <p>Span: 34.96 MHz</p> <p>Res BW: 1 MHz</p> <p>VBW: 3 MHz</p> <p>Sweep: 100 ms</p>
11N20SISO/HCH	 <p>Agilent Spectrum Analyzer - Channel Power</p> <p>Center Freq 2.462000000 GHz</p> <p>Ref Offset 0.5 dB Ref 23.50 dBm</p> <p>Channel Power: 11.72 dBm / 17.48 MHz</p> <p>Power Spectral Density: -60.70 dBm / Hz</p> <p>Center Freq: 2.462 GHz</p> <p>Span: 34.96 MHz</p> <p>Res BW: 1 MHz</p> <p>VBW: 3 MHz</p> <p>Sweep: 100 ms</p>
11N40SISO/LCH	 <p>Agilent Spectrum Analyzer - Channel Power</p> <p>Center Freq 2.422000000 GHz</p> <p>Ref Offset 0.5 dB Ref 23.50 dBm</p> <p>Channel Power: 11.36 dBm / 35.7 MHz</p> <p>Power Spectral Density: -64.17 dBm / Hz</p> <p>Center Freq: 2.422 GHz</p> <p>Span: 71.41 MHz</p> <p>Res BW: 1 MHz</p> <p>VBW: 3 MHz</p> <p>Sweep: 100 ms</p>

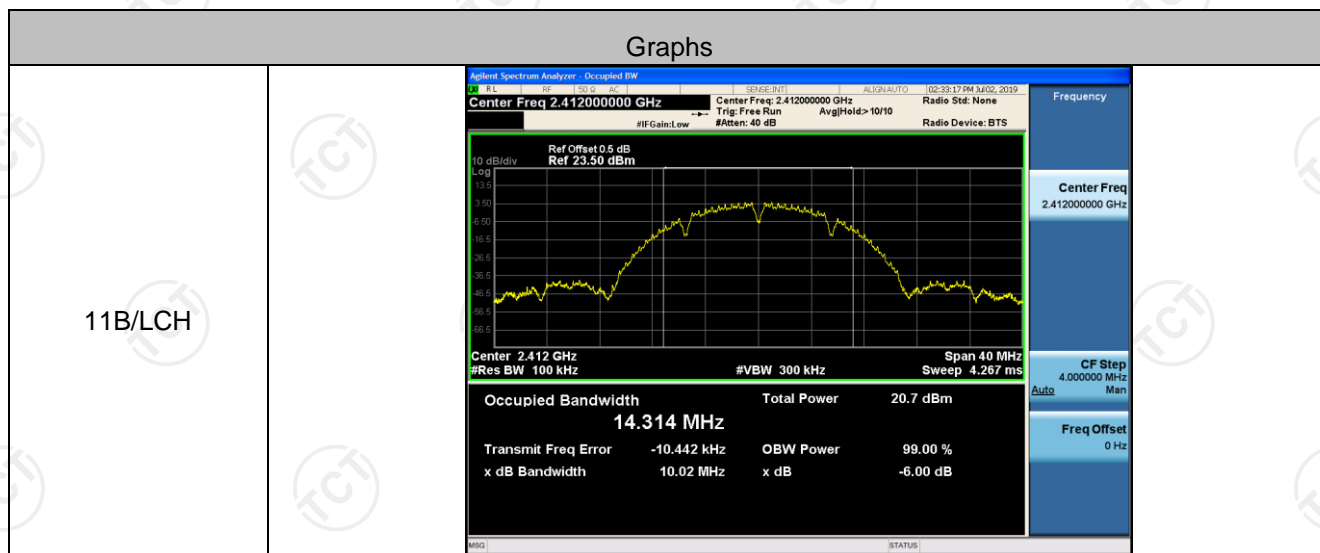
11N40SISO/MCH	
11N40SISO/HCH	

6dB Occupied Bandwidth

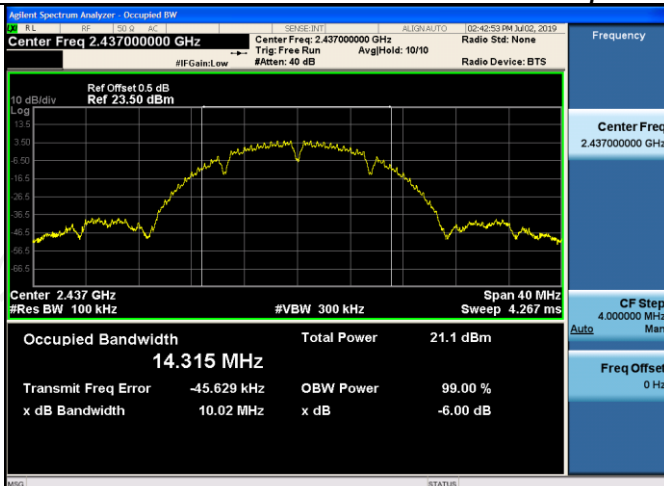
Result Table

Mode	Channel	6dB Bandwidth [MHz]	99% OBW [MHz]	Verdict
11B	LCH	10.02	14.314	PASS
11B	MCH	10.02	14.315	PASS
11B	HCH	9.565	14.329	PASS
11G	LCH	15.08	16.317	PASS
11G	MCH	15.11	16.317	PASS
11G	HCH	15.12	16.318	PASS
11N20SISO	LCH	15.10	17.485	PASS
11N20SISO	MCH	15.09	17.482	PASS
11N20SISO	HCH	15.10	17.482	PASS
11N40SISO	LCH	35.07	35.704	PASS
11N40SISO	MCH	35.06	35.708	PASS
11N40SISO	HCH	33.85	35.717	PASS

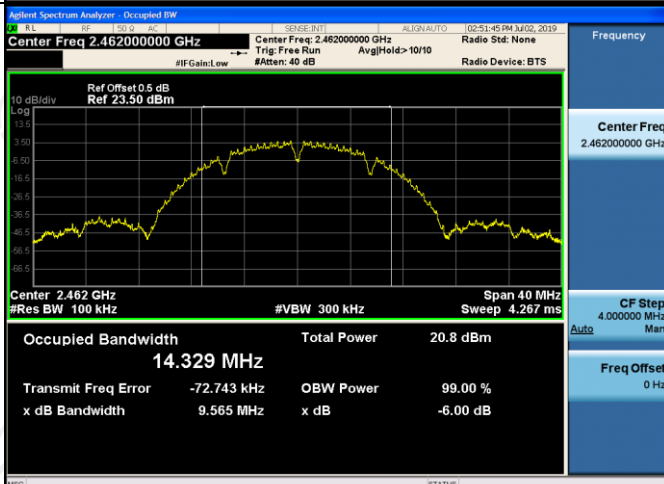
Test Graph



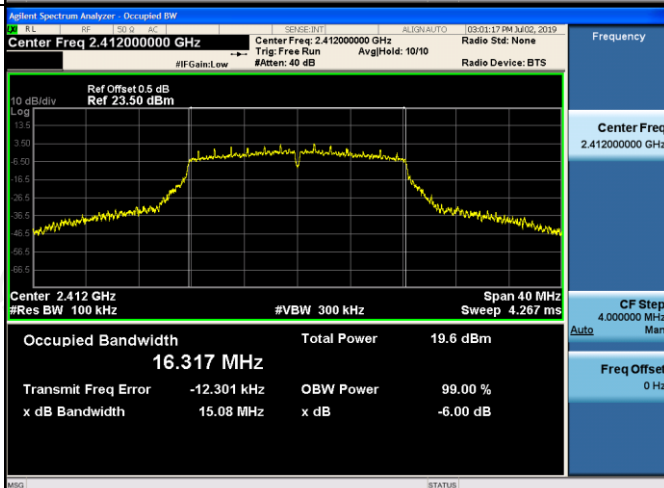
11B/MCH



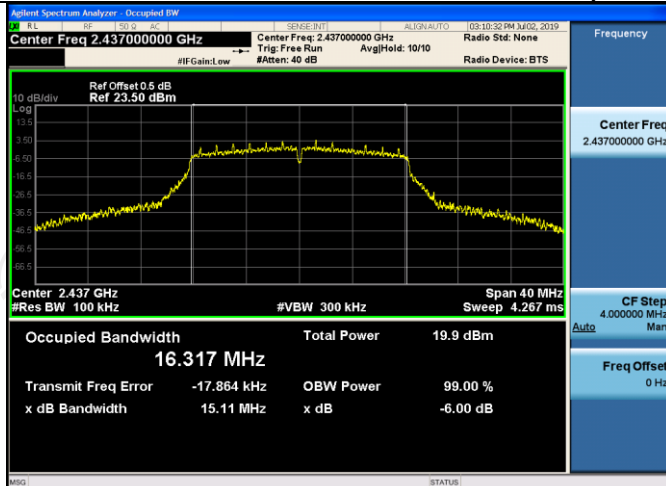
11B/HCH



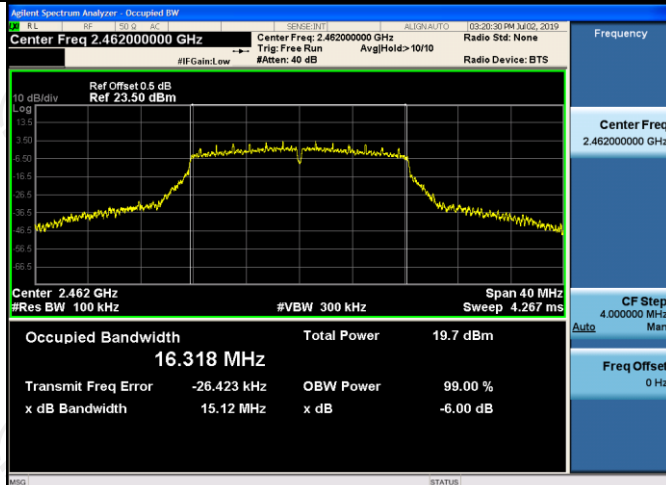
11G/LCH



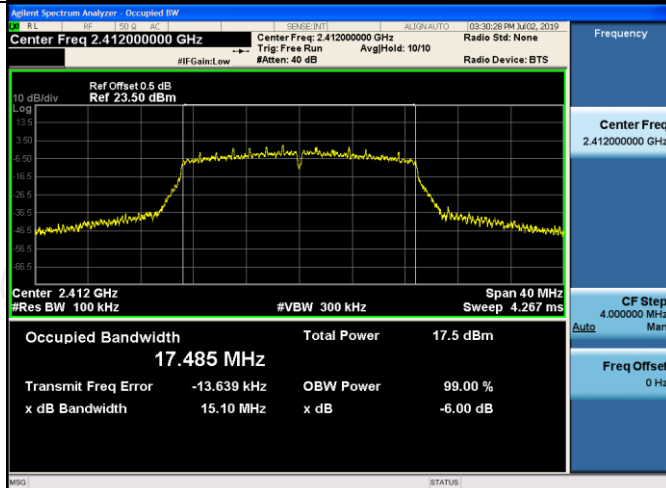
11G/MCH



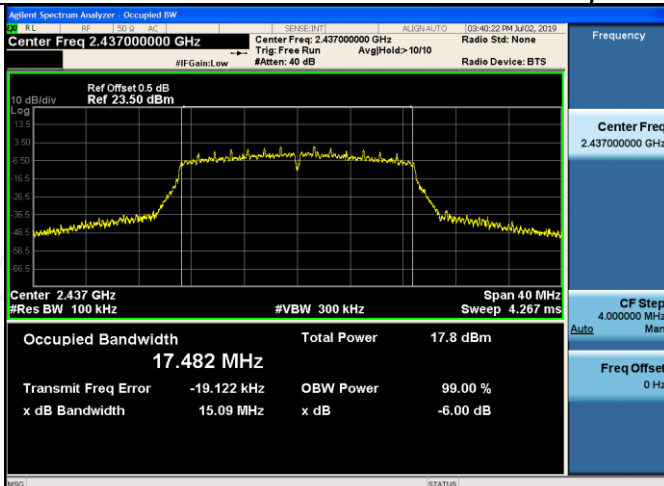
11G/HCH



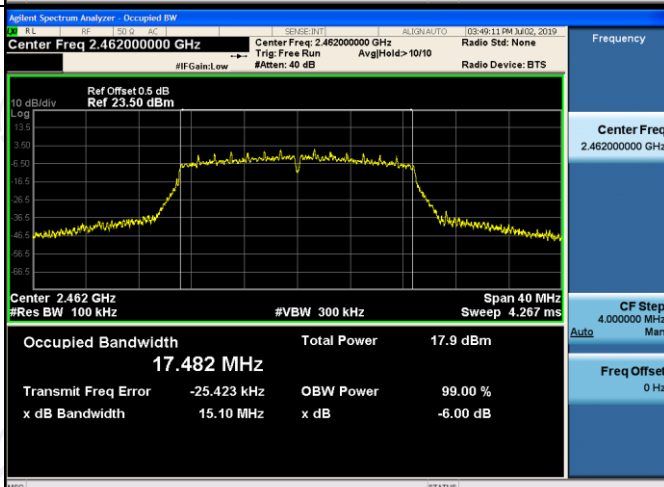
11N20SISO/LCH



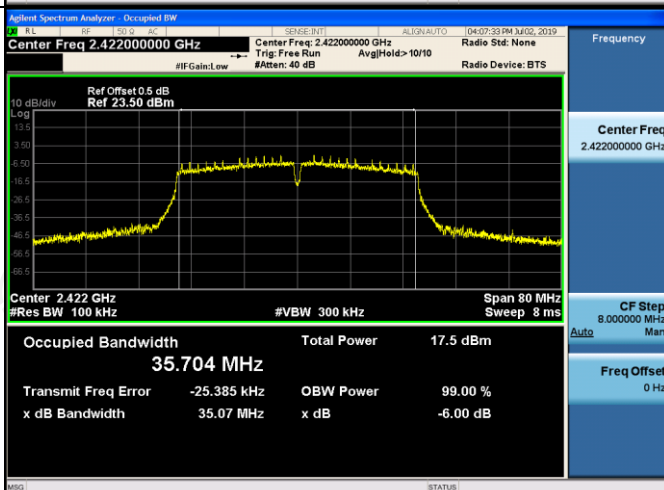
11N20SISO/MCH



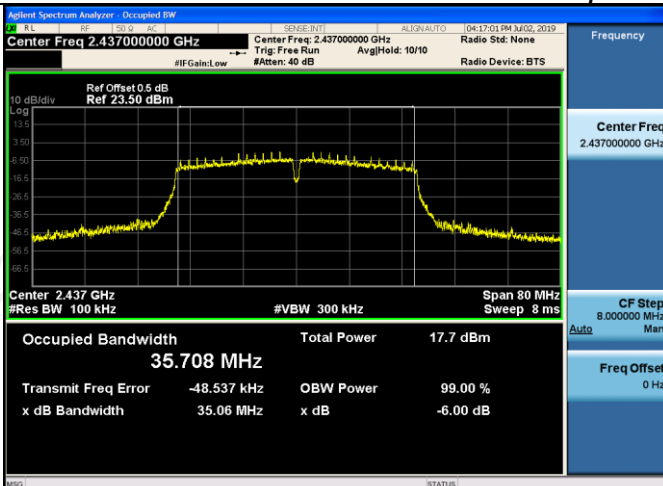
11N20SISO/HCH



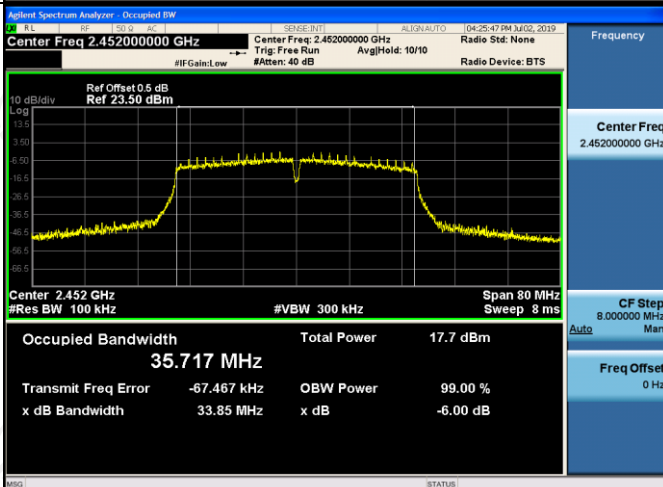
11N40SISO/LCH



11N40SISO/MCH



11N40SISO/HCH



Band-edge for RF Conducted Emissions

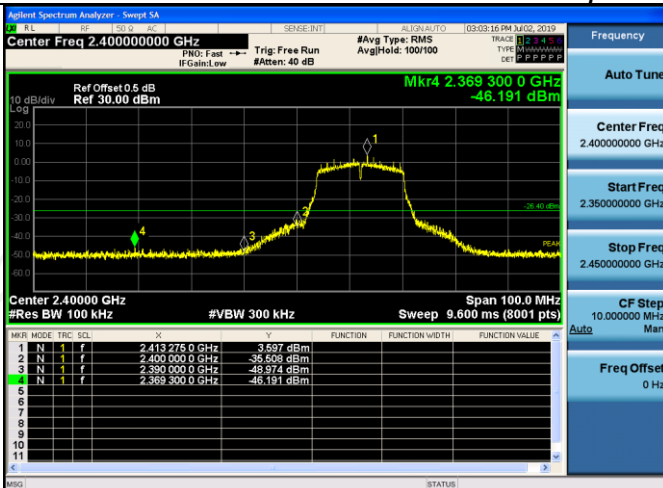
Result Table

Mode	Channel	Carrier Power [dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	4.260	-47.657	-25.74	PASS
11B	HCH	4.520	-47.680	-25.48	PASS
11G	LCH	3.597	-46.191	-26.40	PASS
11G	HCH	2.405	-46.470	-27.60	PASS
11N20SISO	LCH	1.151	-46.608	-28.85	PASS
11N20SISO	HCH	1.872	-46.801	-28.13	PASS
11N40SISO	LCH	-1.943	-43.587	-31.94	PASS
11N40SISO	HCH	-1.887	-45.319	-31.89	PASS

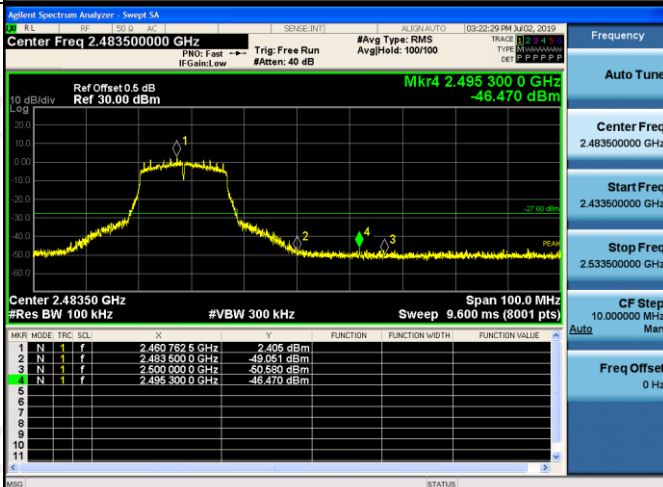
Test Graph



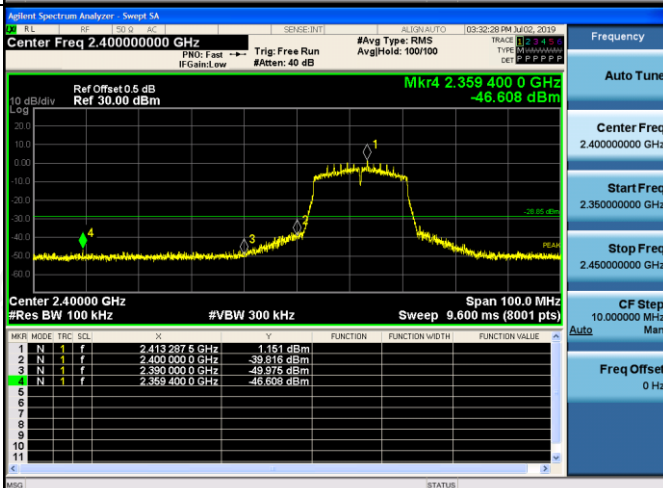
11G/LCH



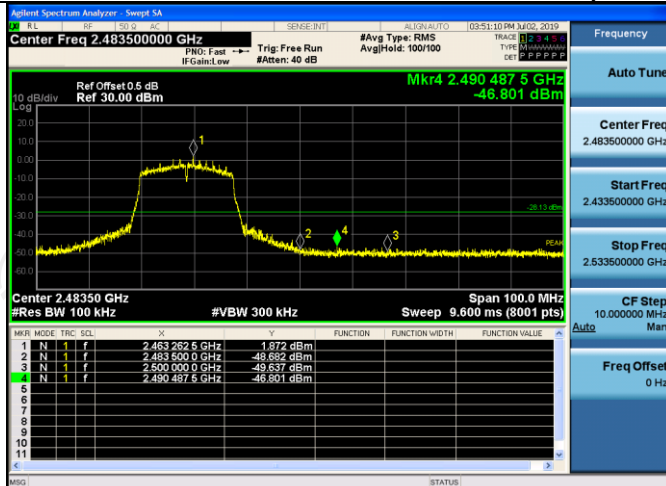
11G/HCH



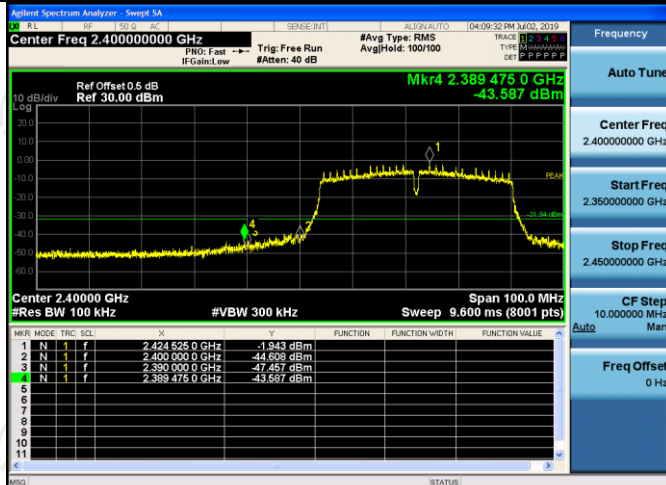
11N20SISO/LCH



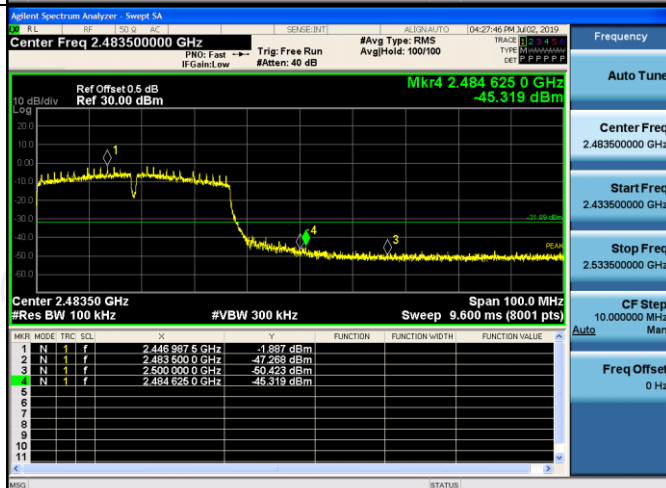
11N20SISO/HCH



11N40SISO/LCH



11N40SISO/HCH

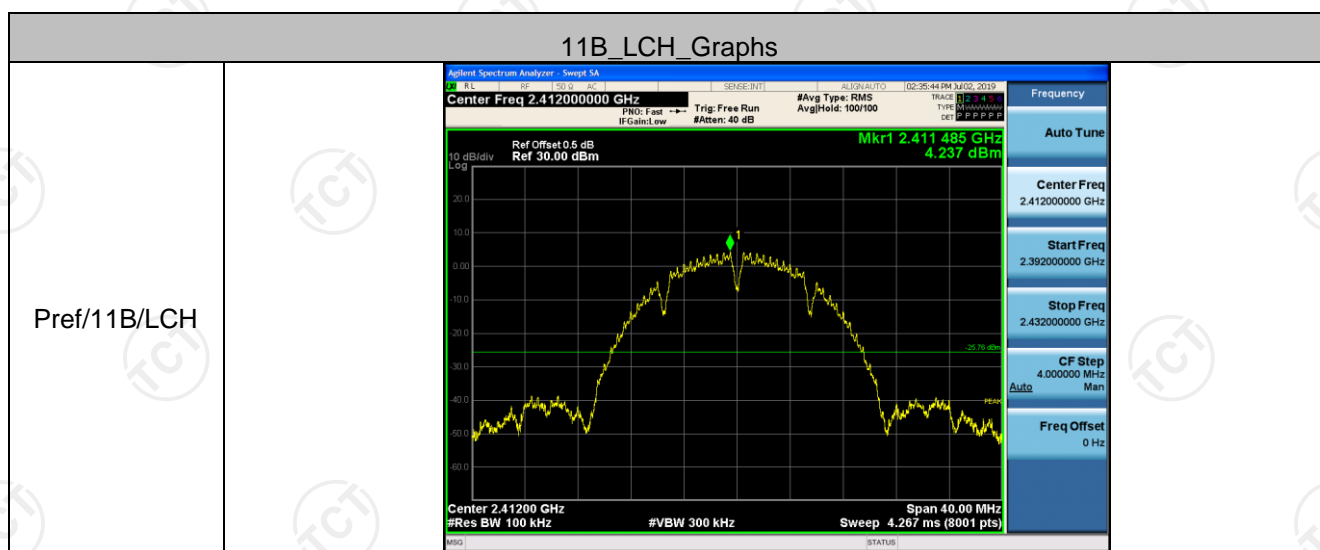


RF Conducted Spurious Emissions

Result Table

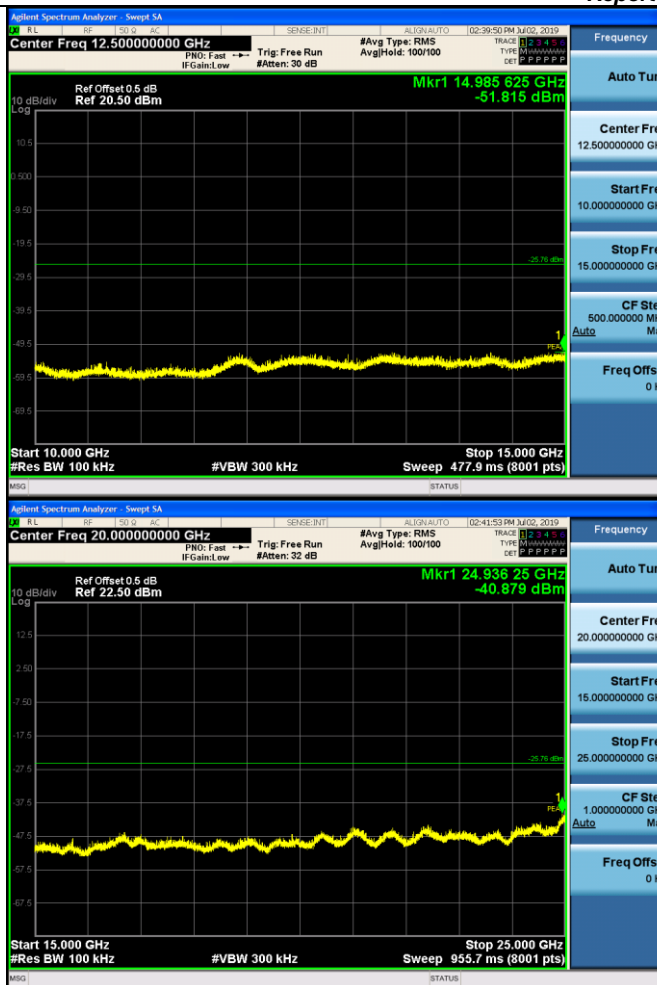
Mode	Channel	Pref [dBm]	Puw [dBm]	Verdict
11B	LCH	4.237	<Limit	PASS
11B	MCH	4.744	<Limit	PASS
11B	HCH	4.517	<Limit	PASS
11G	LCH	2.322	<Limit	PASS
11G	MCH	3.598	<Limit	PASS
11G	HCH	3.616	<Limit	PASS
11N20SISO	LCH	0.461	<Limit	PASS
11N20SISO	MCH	1.661	<Limit	PASS
11N20SISO	HCH	1.758	<Limit	PASS
11N40SISO	LCH	-1.672	<Limit	PASS
11N40SISO	MCH	-1.444	<Limit	PASS
11N40SISO	HCH	-1.486	<Limit	PASS

Test Graph



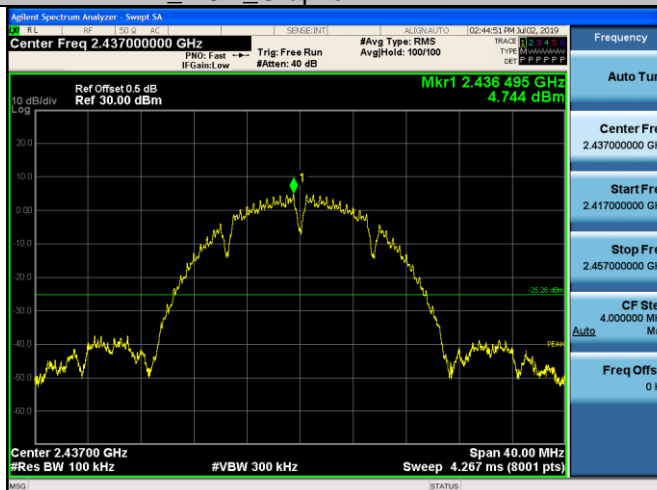
Puw/11B/LCH





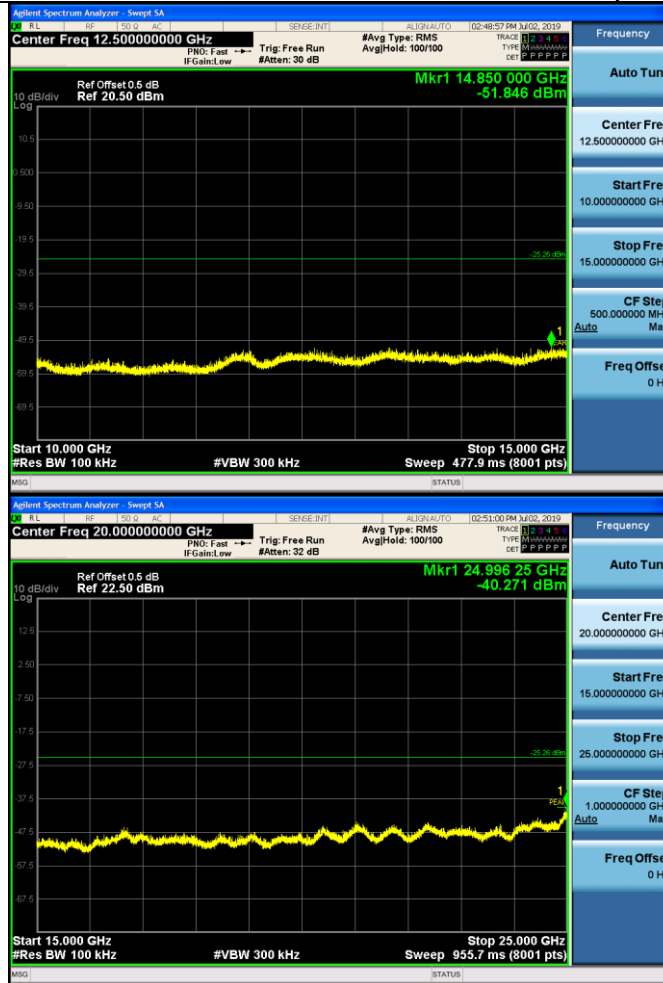
11B_MCH_Graphs

Pref/11B/MCH



Puw/11B/MCH





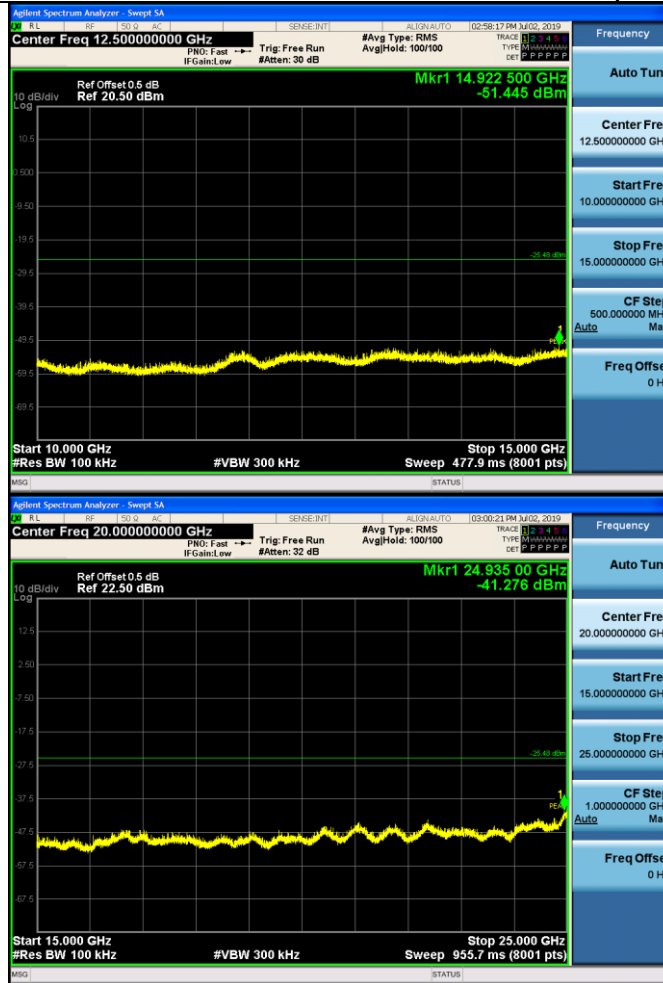
11B_HCH_Graphs

Pref/11B/HCH



Puw/11B/HCH





11G_LCH_Graphs

Pref/11G/LCH

