

## Appendix A

### RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Bebird Smart Visusl Ear-Clean Rod

Trade Mark: bebird

Test Model: X17 Pro

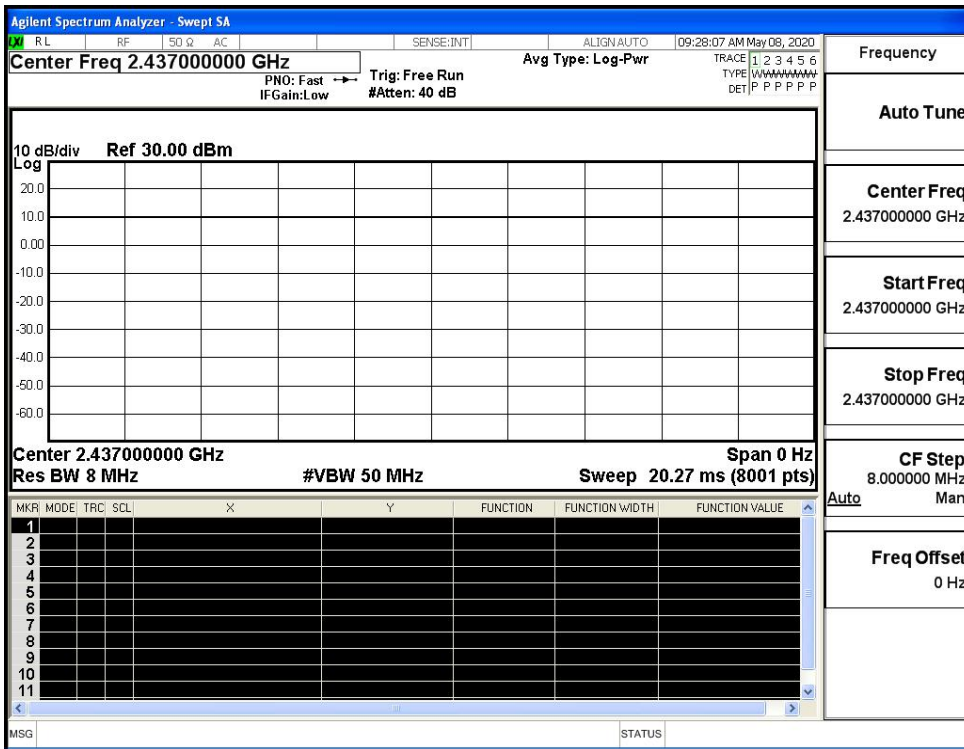
#### Environmental Conditions

Temperature:	24.1° C
Relative Humidity:	53.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Alisa Huang
Supervised by:	Li Huan

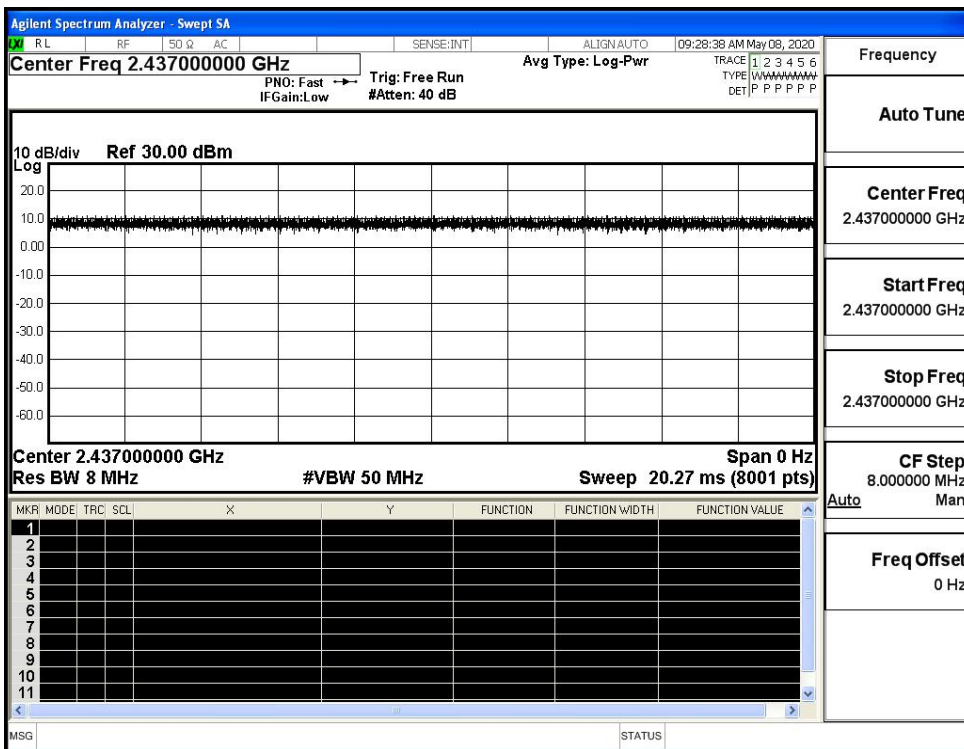
Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
11B	2437	Ant_1	100	PASS
11G	2437	Ant_1	100	PASS
11N20	2437	Ant_1	100	PASS

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
11B	2437	Ant_2	100	PASS
11G	2437	Ant_2	100	PASS
11N20	2437	Ant_2	100	PASS

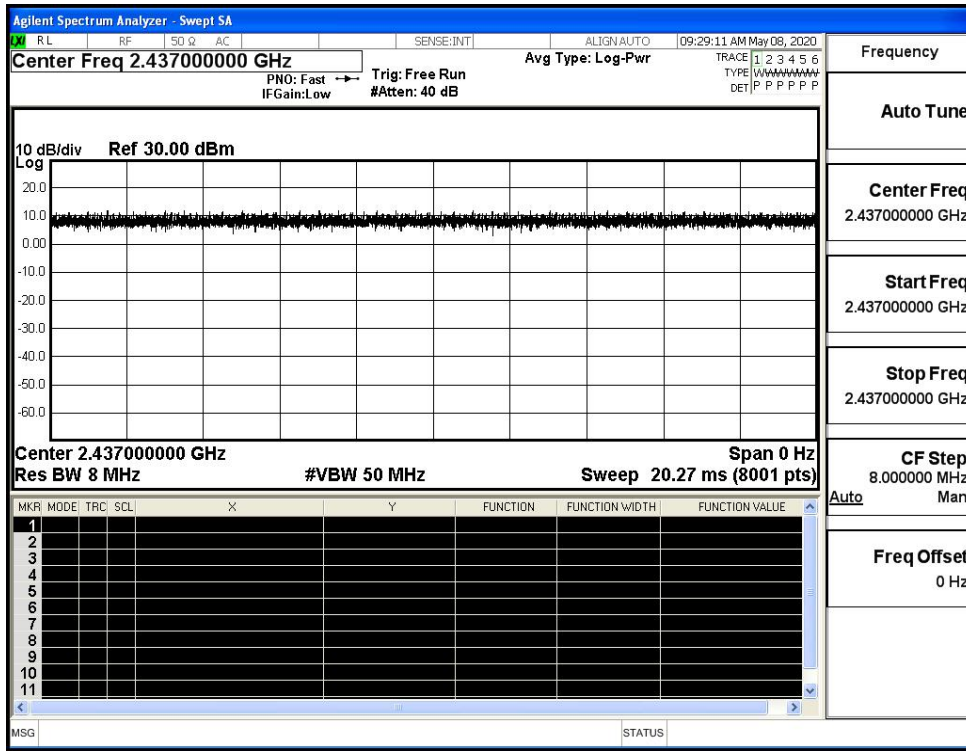
Duty Cycle\_11B\_2437\_Ant\_1



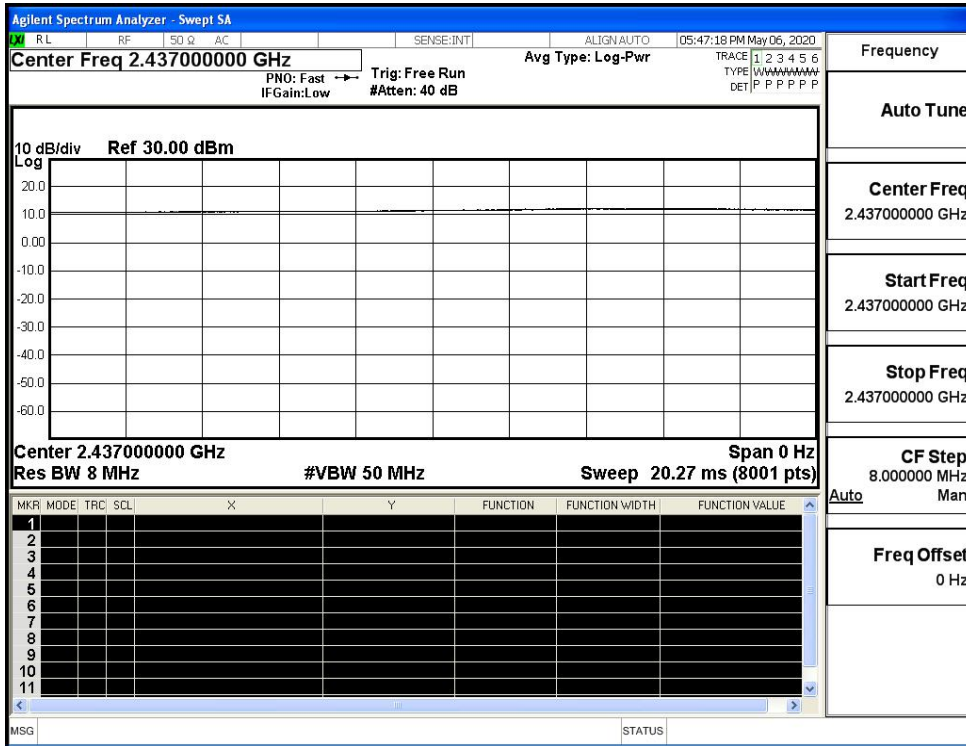
Duty Cycle\_11G\_2437\_Ant\_1



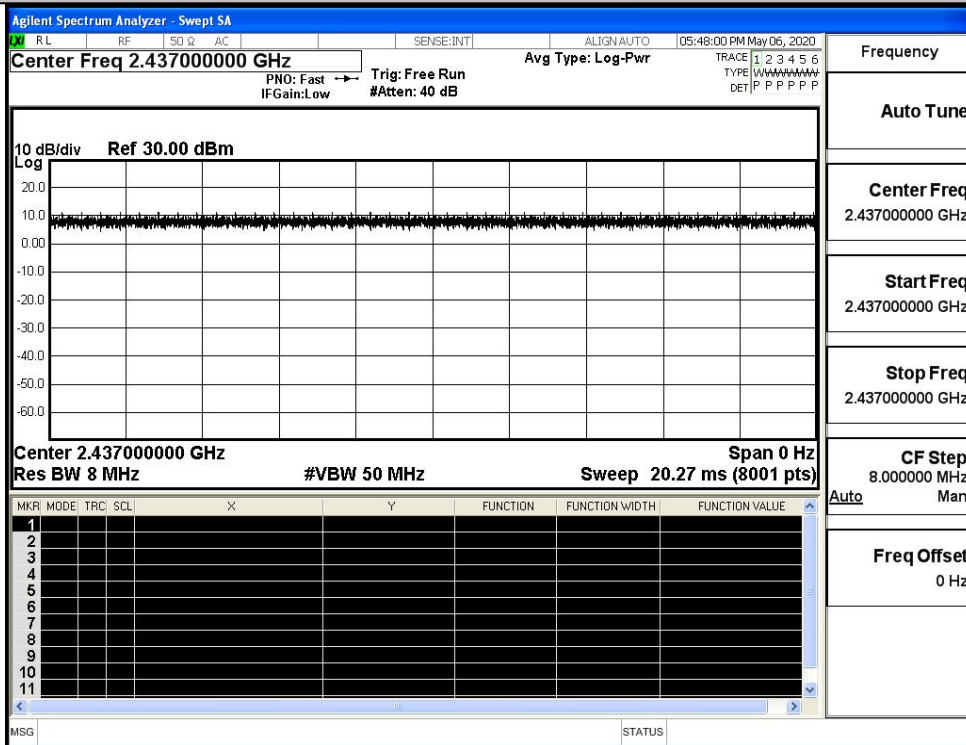
Duty Cycle\_11N20SISO\_2437\_Ant\_1



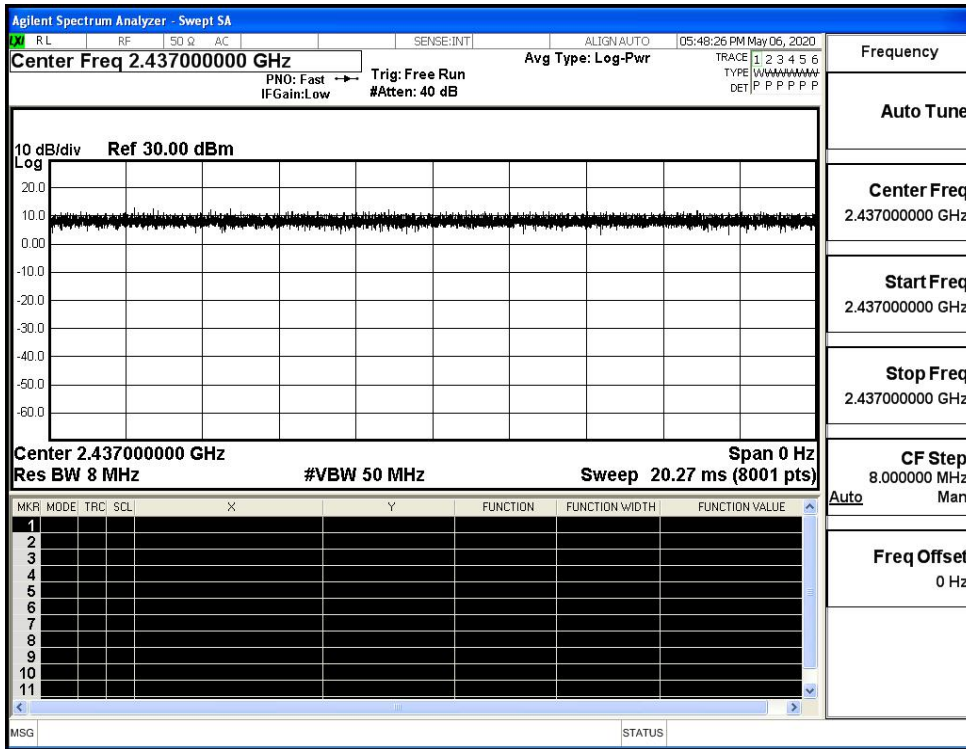
Duty Cycle\_11B\_2437\_Ant\_2



Duty Cycle\_11G\_2437\_Ant\_2



Duty Cycle\_11N20SISO\_2437\_Ant\_2



**A.2 Maximum Conducted Output Power**

Mode	Channel	Meas.Level [dBm]			Limit [dBm]	Verdict
		Ant_1	Ant_2	Sum		
11B	LCH	7.23	7.14	/	30	PASS
	MCH	7.15	7.10	/	30	PASS
	HCH	7.05	6.87	/	30	PASS
11G	LCH	6.82	6.67	/	30	PASS
	MCH	6.74	6.62	/	30	PASS
	HCH	6.42	6.20	/	30	PASS
11N20SISO	LCH	5.98	5.86	8.93	30	PASS
	MCH	5.76	5.64	8.71	30	PASS
	HCH	5.54	5.42	8.49	30	PASS

### A.3 Maximum Power Spectral Density

#### Ant\_1

Mode	Channel	Meas.Level [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-14.975	8	PASS
	MCH	-14.329	8	PASS
	HCH	-13.898	8	PASS
11G	LCH	-21.465	8	PASS
	MCH	-20.432	8	PASS
	HCH	-20.171	8	PASS
11N20SISO	LCH	-20.442	8	PASS
	MCH	-20.478	8	PASS
	HCH	-20.050	8	PASS

#### Ant\_2

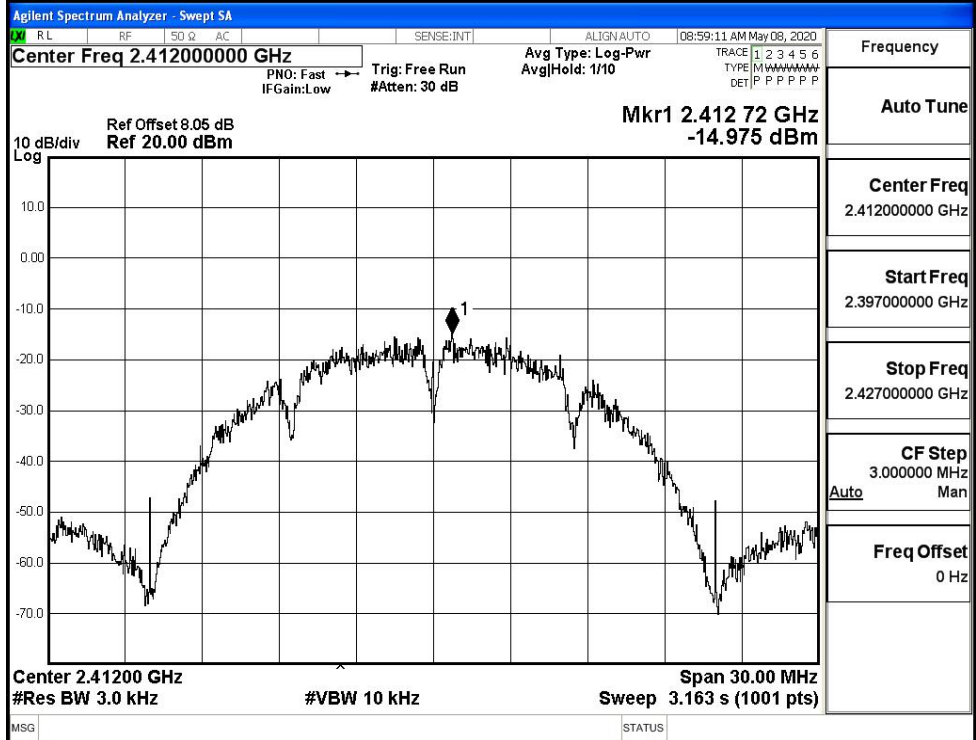
Mode	Channel	Meas.Level [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-15.191	8	PASS
	MCH	-13.371	8	PASS
	HCH	-14.808	8	PASS
11G	LCH	-19.527	8	PASS
	MCH	-20.165	8	PASS
	HCH	-19.172	8	PASS
11N20SISO	LCH	-23.001	8	PASS
	MCH	-21.148	8	PASS
	HCH	-19.201	8	PASS

#### Combined Ant\_1 and Ant\_2

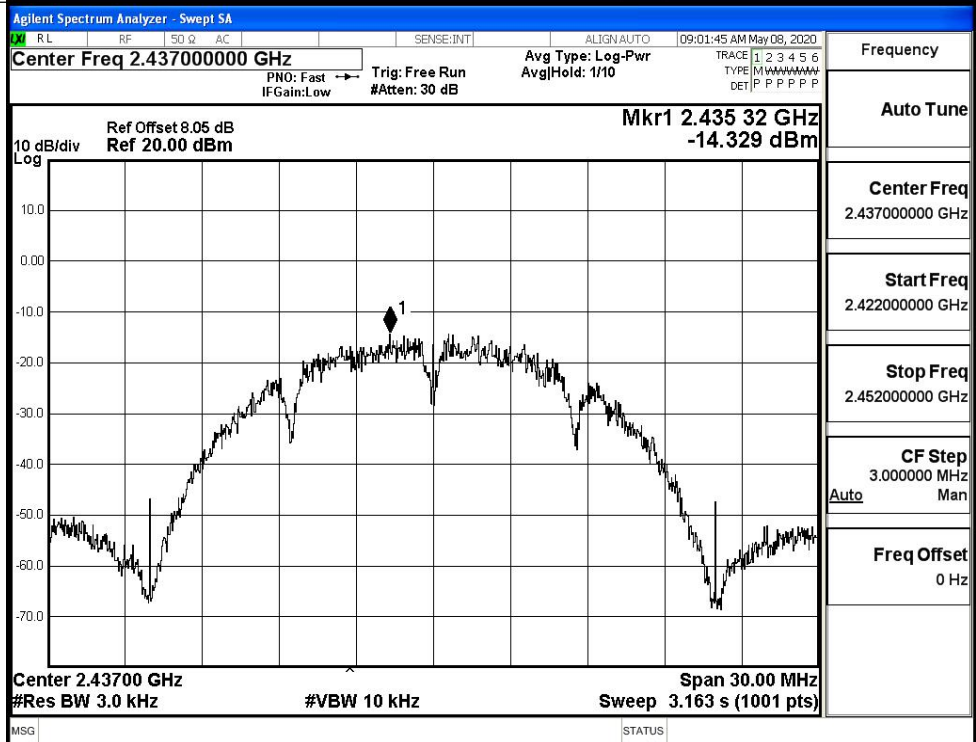
Mode	Channel	Result [dBm/3KHz]			Limit [dBm/3KHz]	Verdict
		Ant_1	Ant_2	Sum		
11N20	LCH	-20.442	-23.001	-18.53	8	PASS
	MCH	-20.478	-21.148	-17.79	8	PASS
	HCH	-20.050	-19.201	-16.59	8	PASS

Test Graphs Ant\_1

11B/LCH

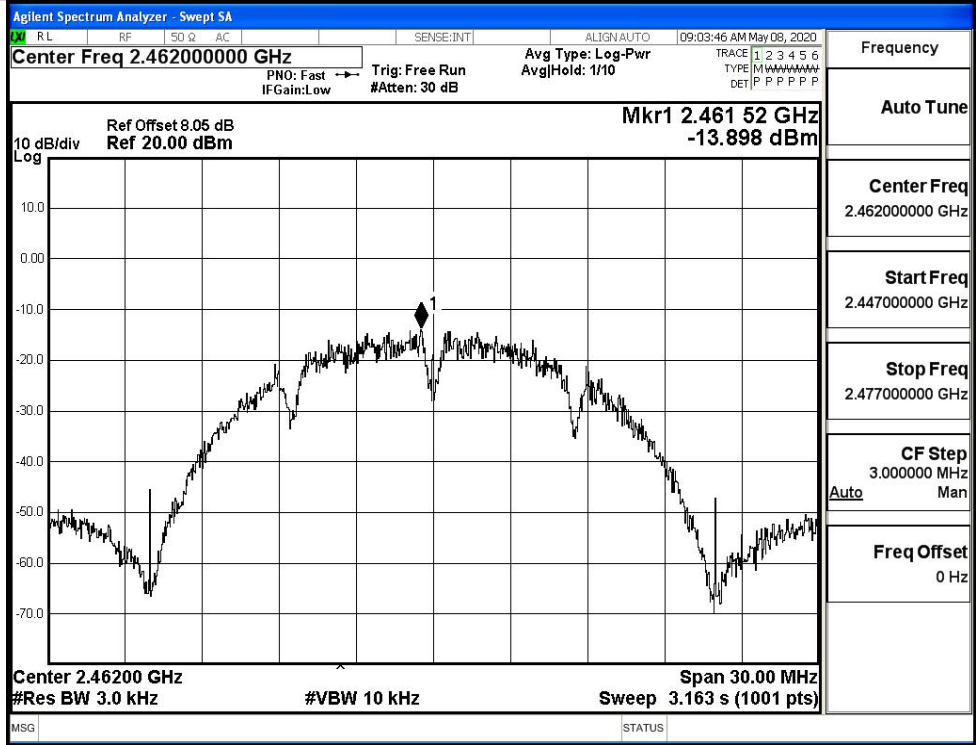


11B/MCH



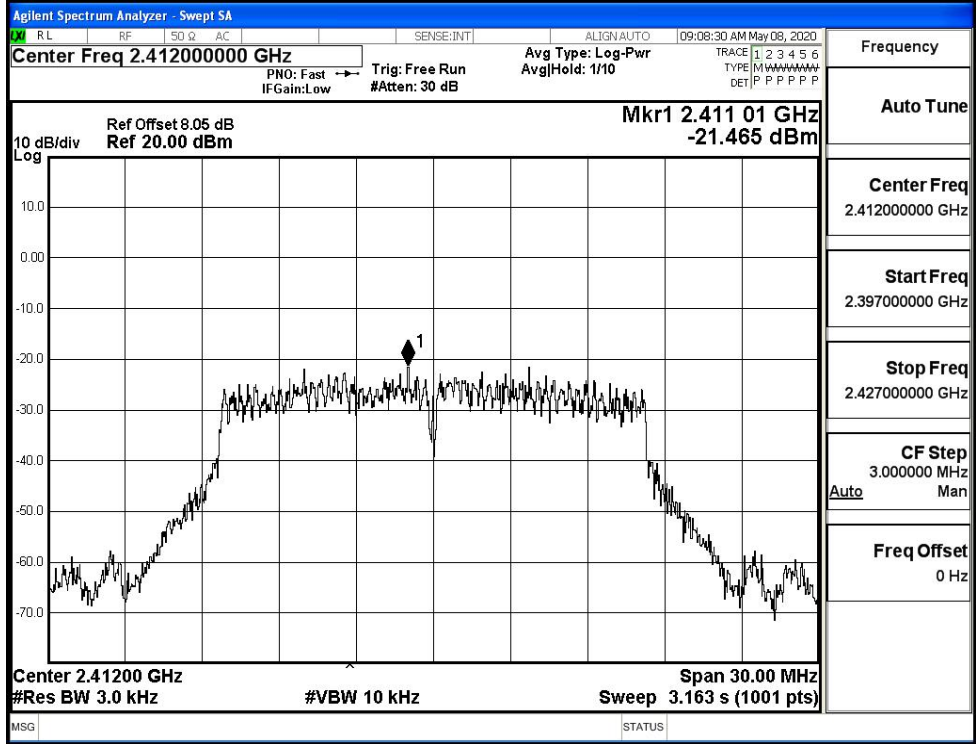


11B/HCH



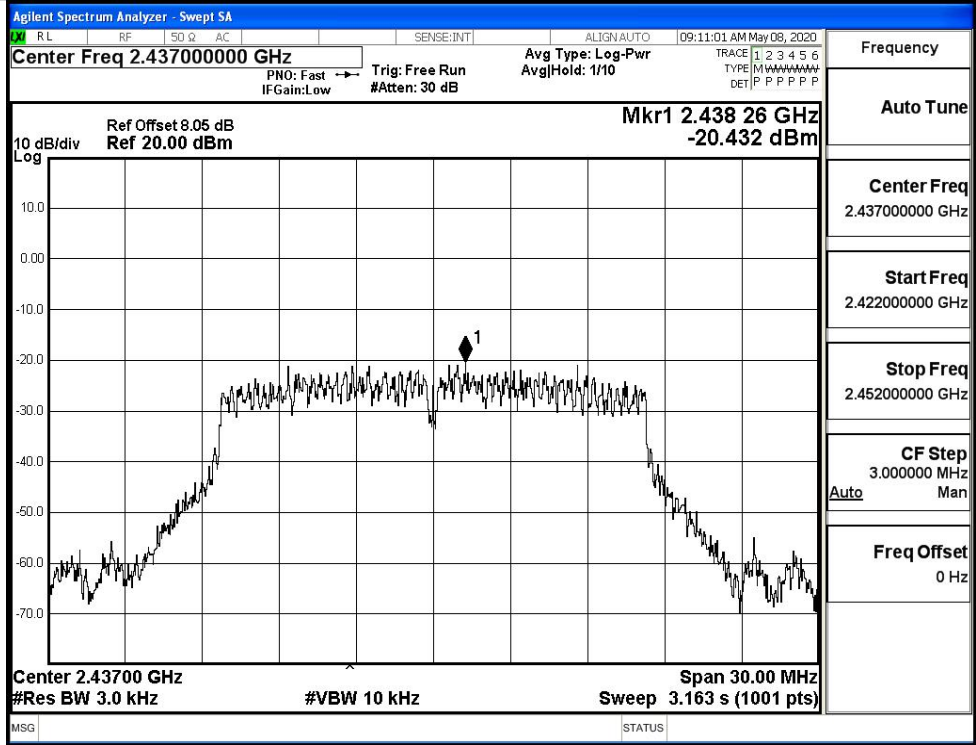
Frequency
Auto Tune
Center Freq 2.46200000 GHz
Start Freq 2.447000000 GHz
Stop Freq 2.477000000 GHz
CF Step 3.000000 MHz Auto Man
Freq Offset 0 Hz

11G/LCH



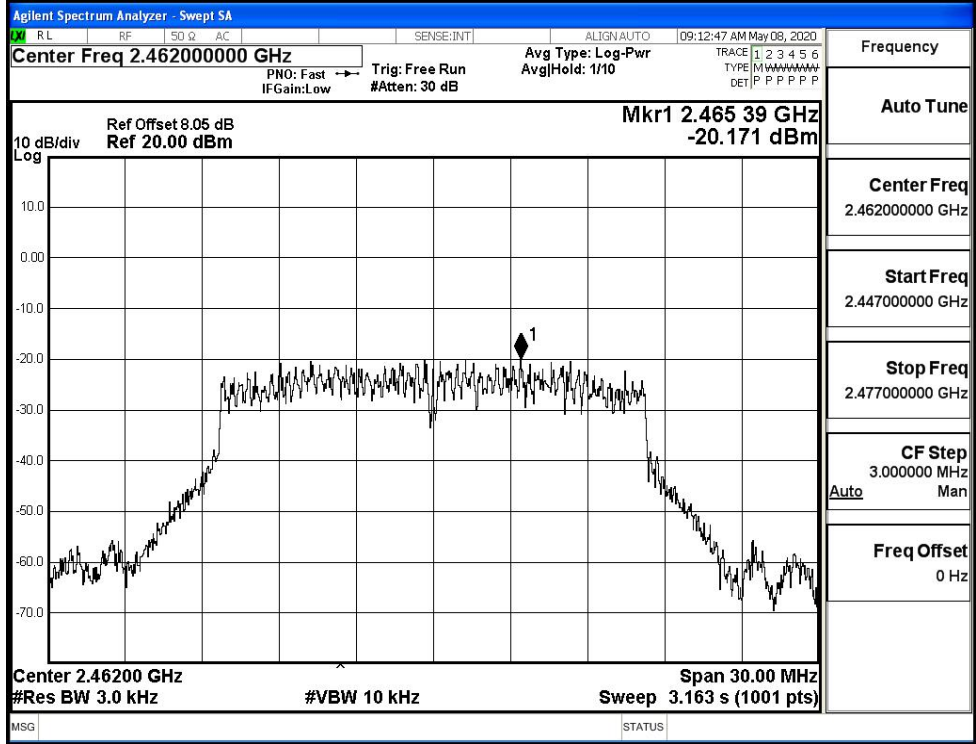
Frequency
Auto Tune
Center Freq 2.412000000 GHz
Start Freq 2.397000000 GHz
Stop Freq 2.427000000 GHz
CF Step 3.000000 MHz Auto Man
Freq Offset 0 Hz

11G/MCH



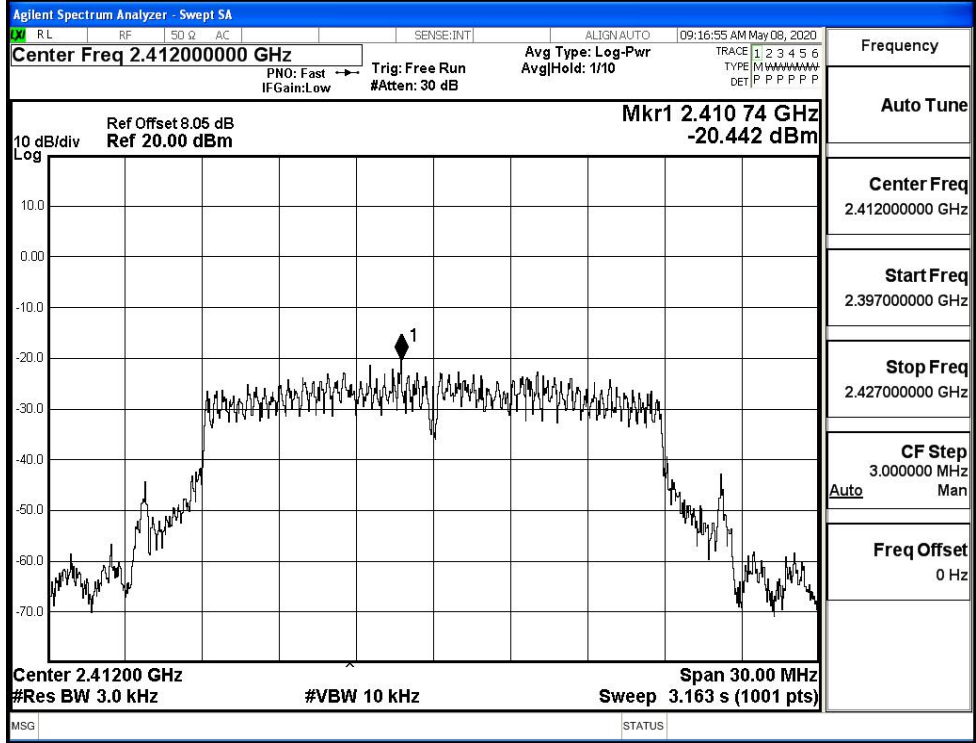
Frequency
Auto Tune
Center Freq 2.437000000 GHz
Start Freq 2.422000000 GHz
Stop Freq 2.452000000 GHz
CF Step 3.000000 MHz Auto Man
Freq Offset 0 Hz

11G/HCH

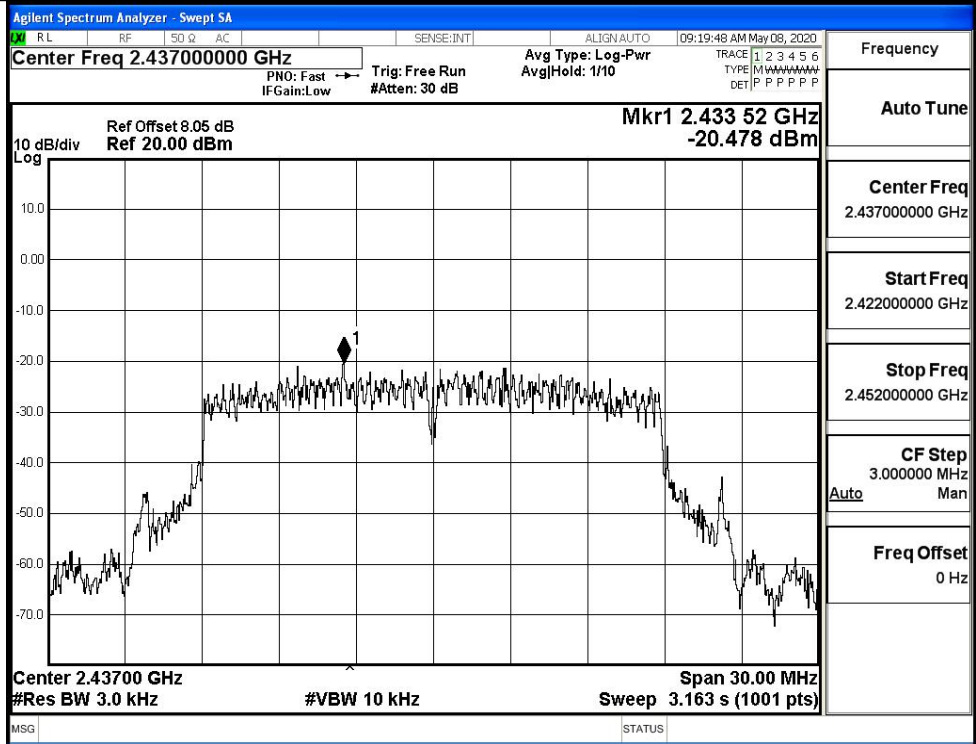


Frequency
Auto Tune
Center Freq 2.462000000 GHz
Start Freq 2.447000000 GHz
Stop Freq 2.477000000 GHz
CF Step 3.000000 MHz Auto Man
Freq Offset 0 Hz

11N20SISO/LCH



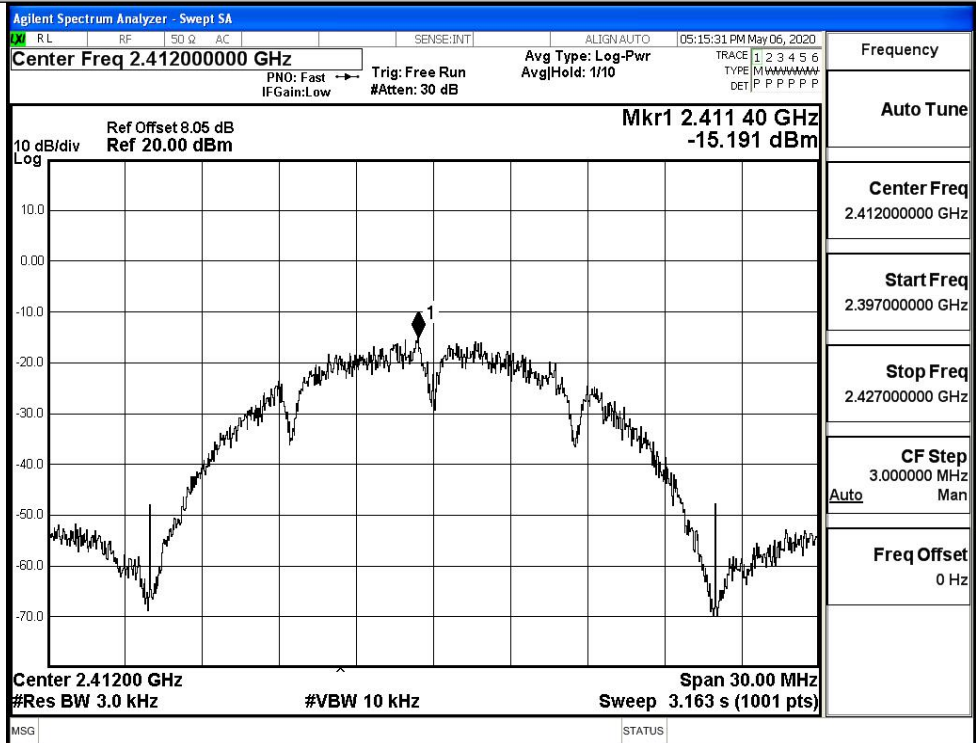
11N20SISO/MCH



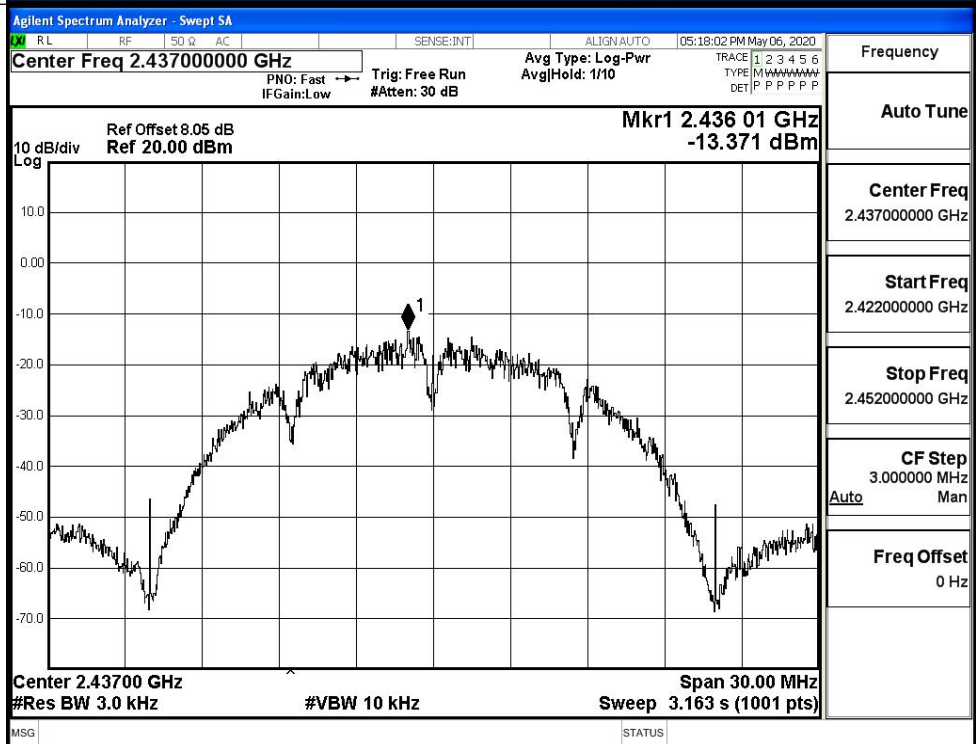


Test Graphs Ant\_2

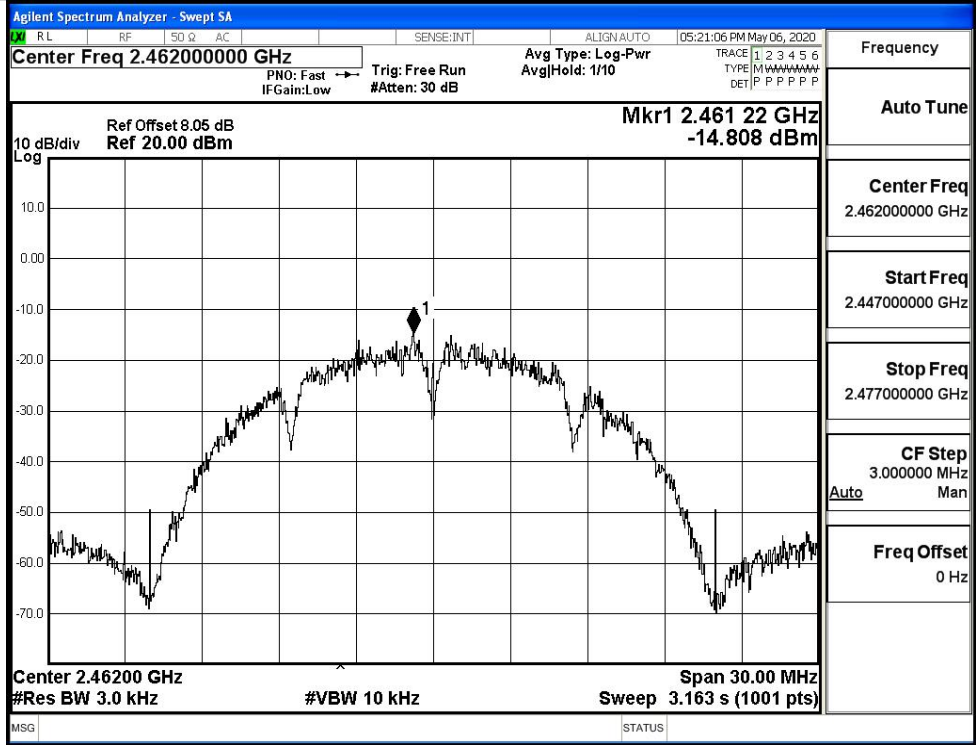
11B/LCH



11B/MCH

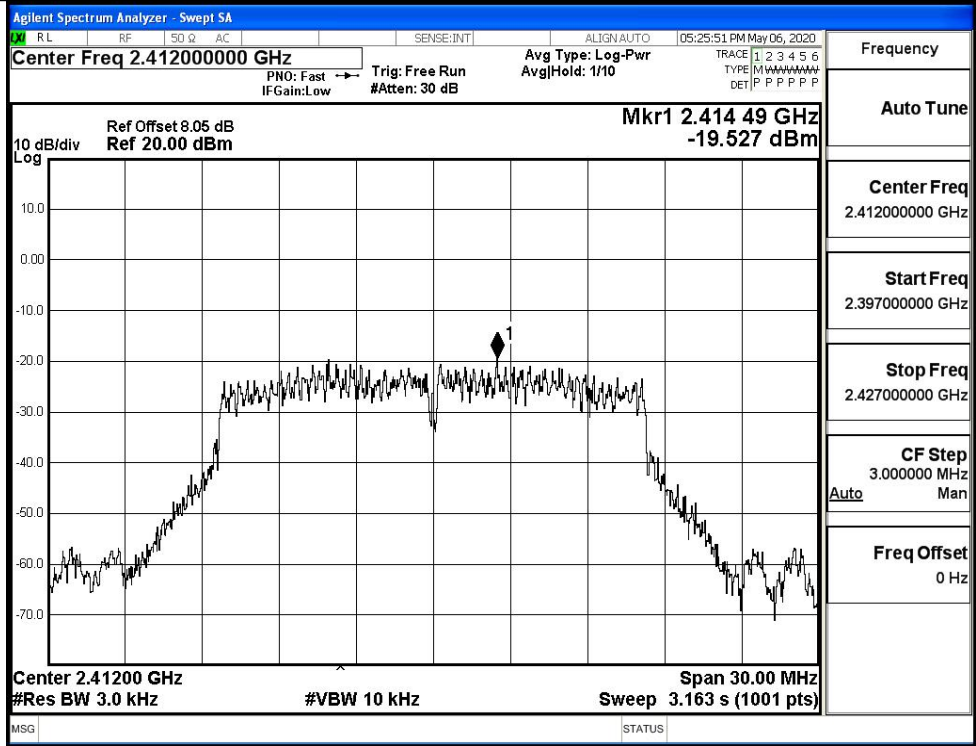


11B/HCH



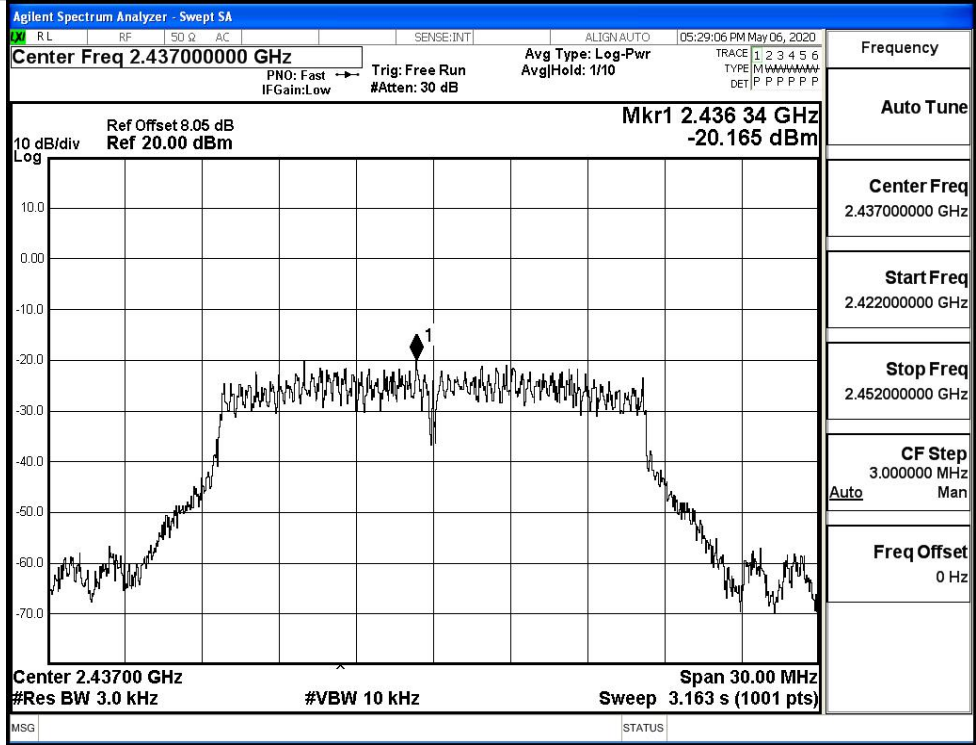
Frequency
Auto Tune
Center Freq 2.46200000 GHz
Start Freq 2.447000000 GHz
Stop Freq 2.477000000 GHz
CF Step 3.000000 MHz Auto Man
Freq Offset 0 Hz

11G/LCH

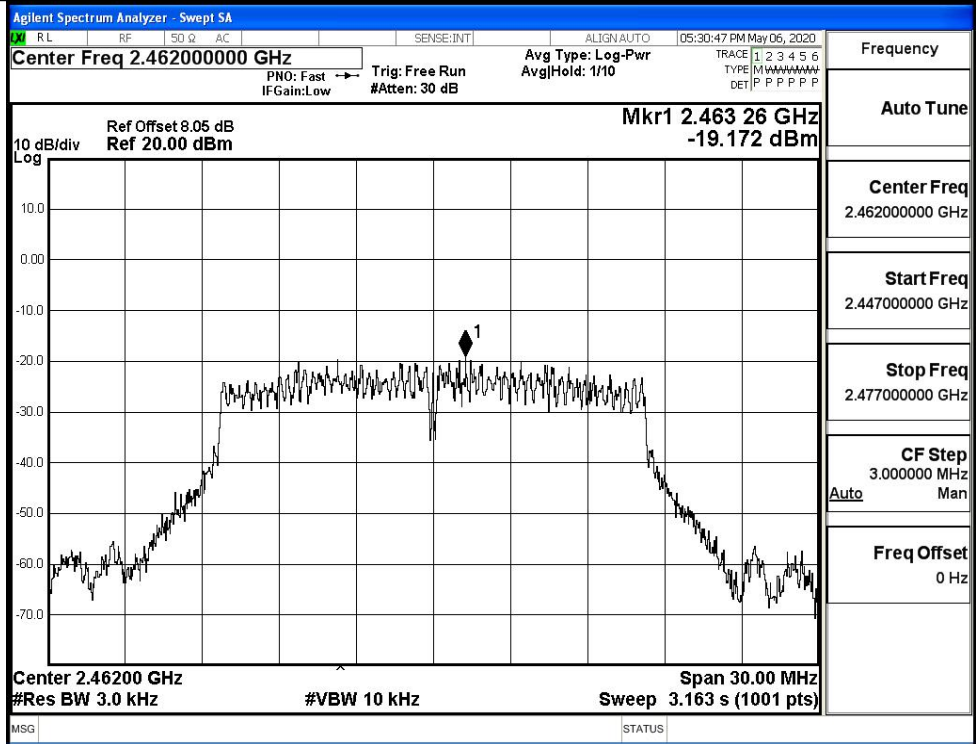


Frequency
Auto Tune
Center Freq 2.412000000 GHz
Start Freq 2.397000000 GHz
Stop Freq 2.427000000 GHz
CF Step 3.000000 MHz Auto Man
Freq Offset 0 Hz

11G/MCH

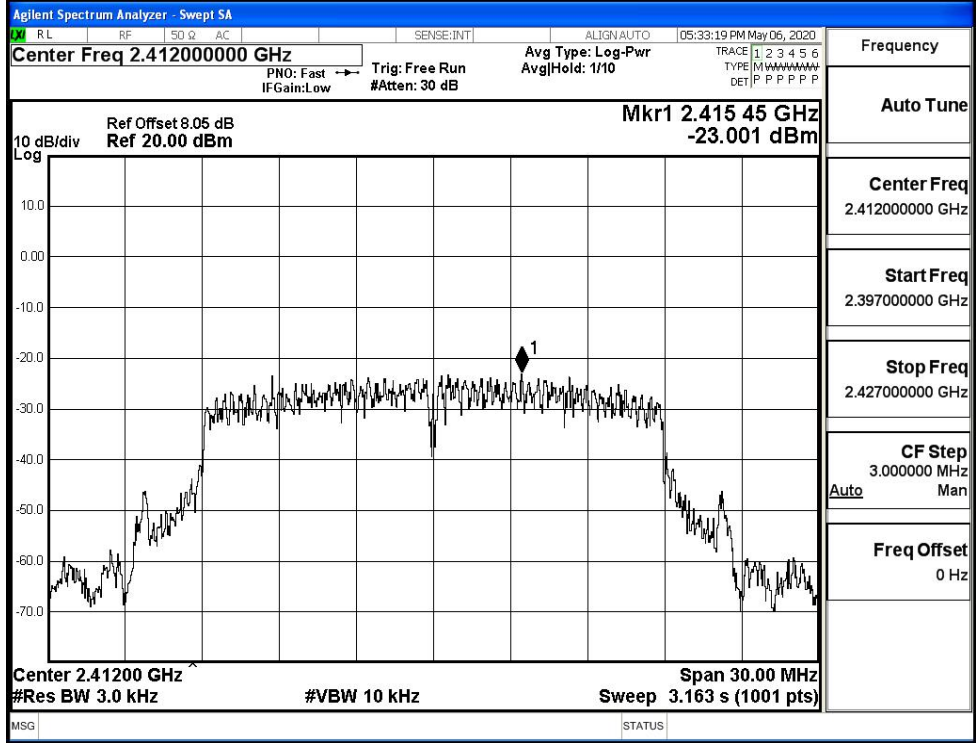


11G/HCH

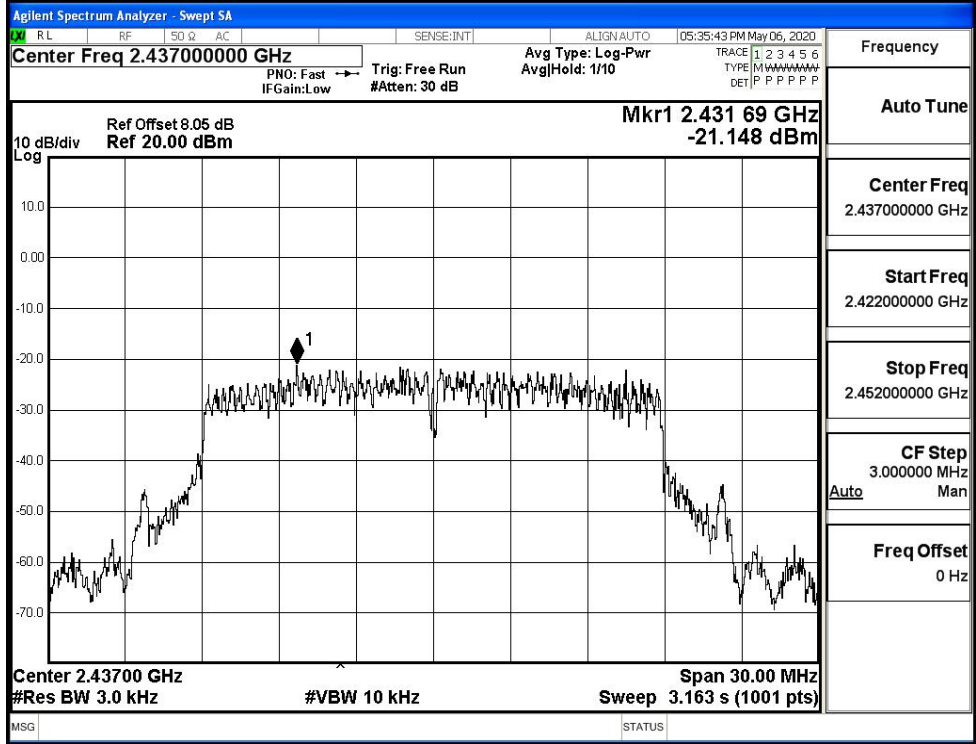




11N20SISO/LCH



11N20SISO/MCH



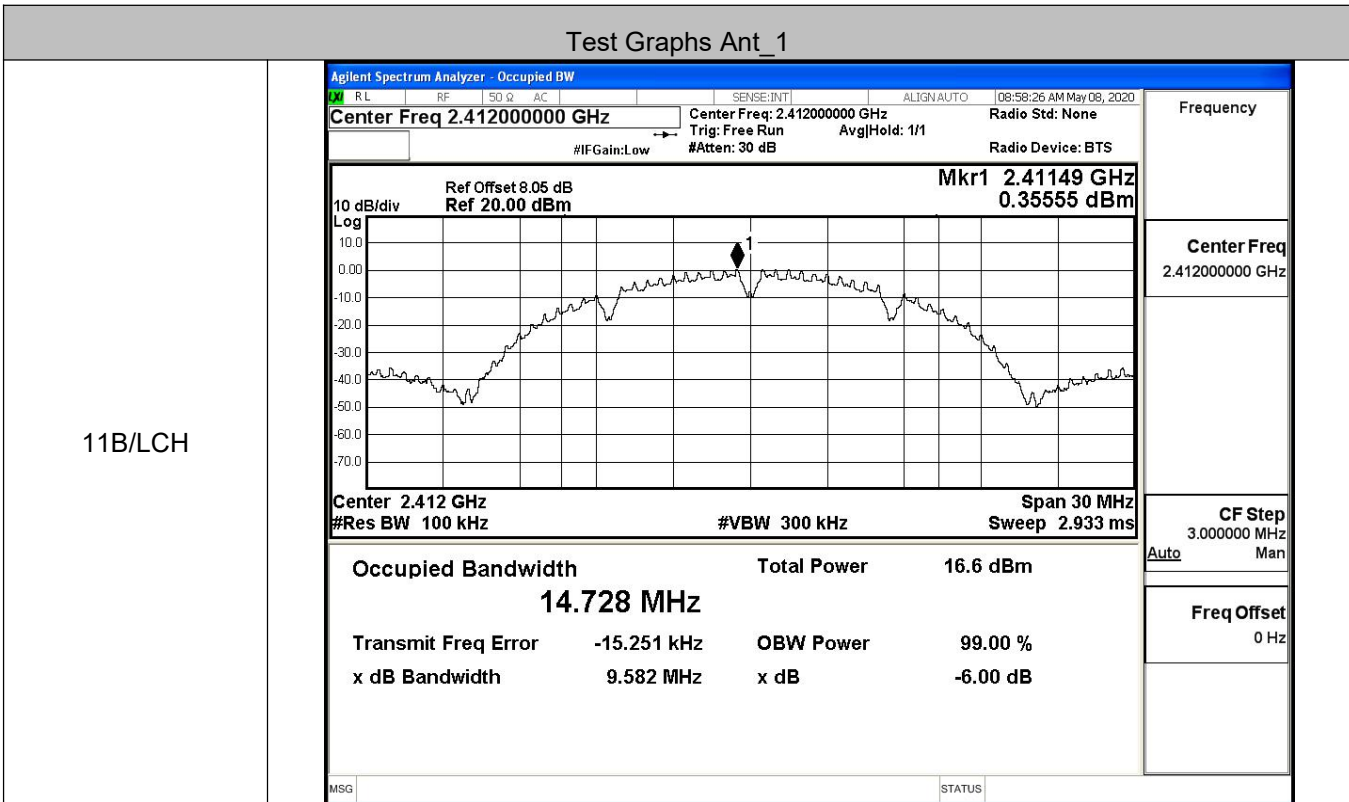




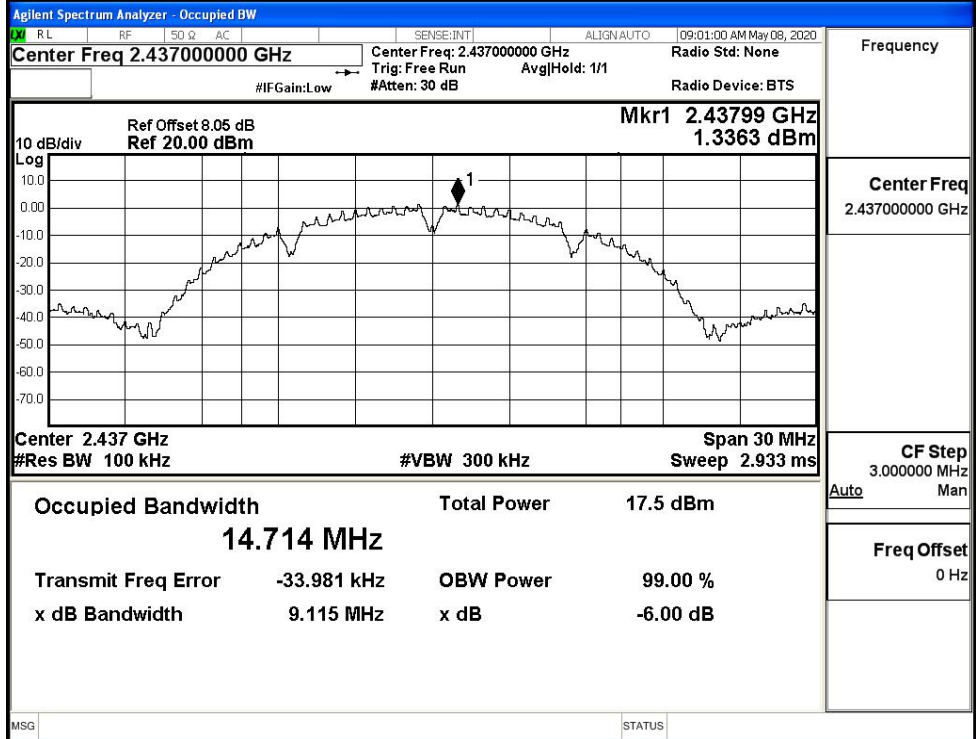
**A.4 6dB Bandwidth**

Mode	Channel	6dB Bandwidth [MHz]		Limit [MHz]	Verdict
		Ant_1	Ant_2		
11B	LCH	9.582	9.107	≥0.5	PASS
	MCH	9.115	9.086	≥0.5	PASS
	HCH	9.096	9.105	≥0.5	PASS
11G	LCH	15.92	15.39	≥0.5	PASS
	MCH	15.54	15.69	≥0.5	PASS
	HCH	15.69	15.82	≥0.5	PASS
11N20SISO	LCH	16.55	16.29	≥0.5	PASS
	MCH	16.17	16.29	≥0.5	PASS
	HCH	15.69	15.27	≥0.5	PASS

Test Graphs Ant\_1

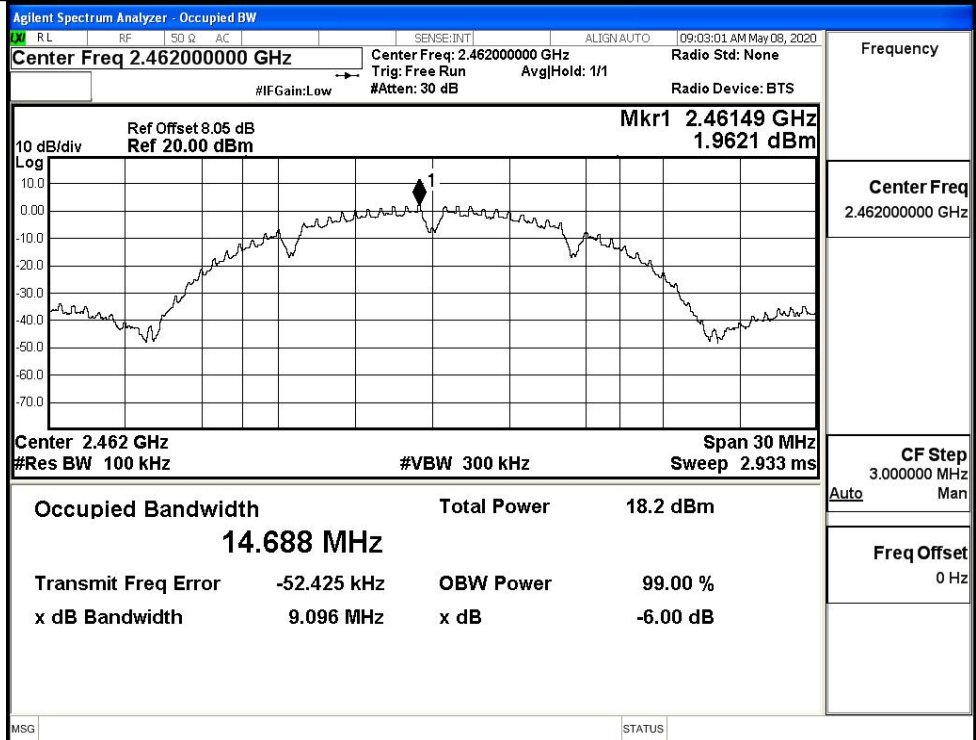


11B/MCH



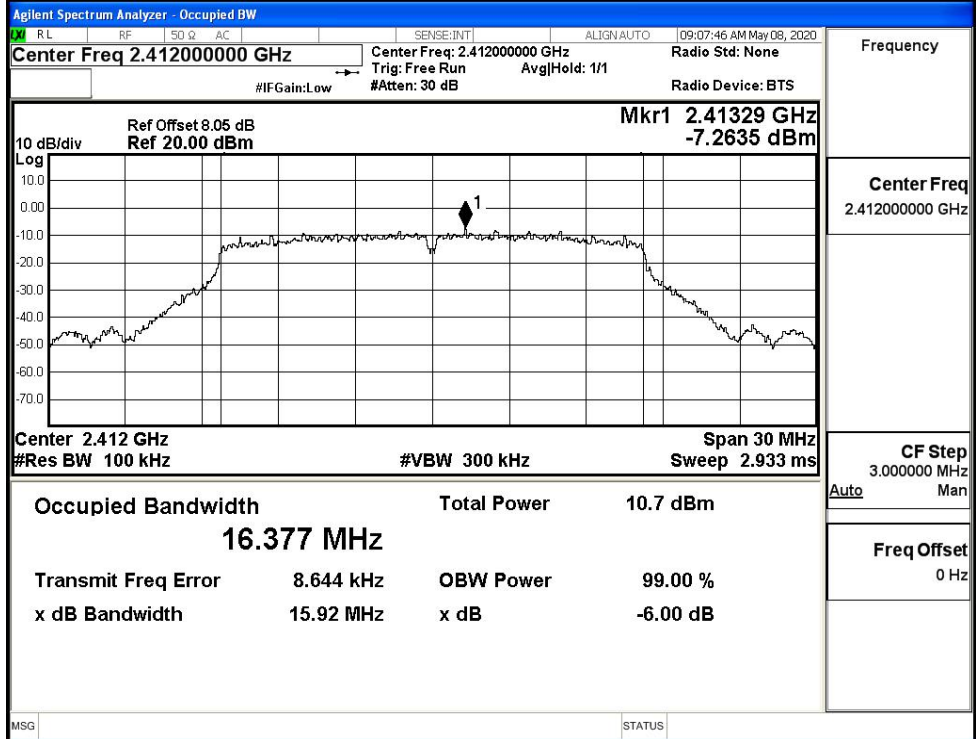
Frequency	2.43700000 GHz
Center Freq	2.43700000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

11B/HCH



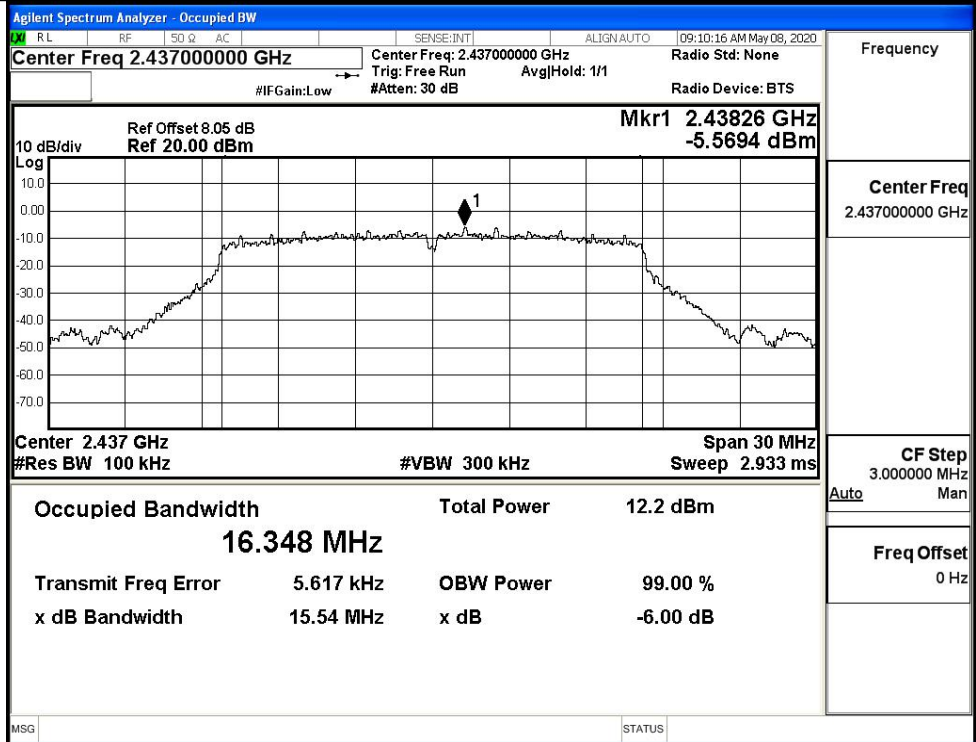
Frequency	2.46200000 GHz
Center Freq	2.46200000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

11G/LCH



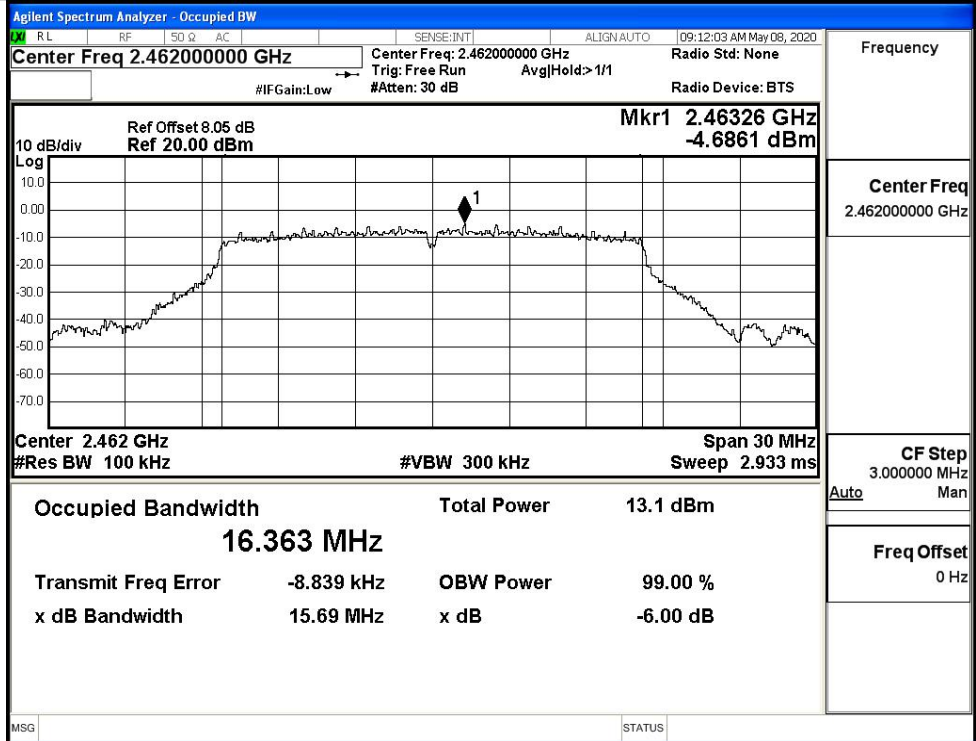
Frequency	2.41200000 GHz
Center Freq	2.41200000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

11G/MCH



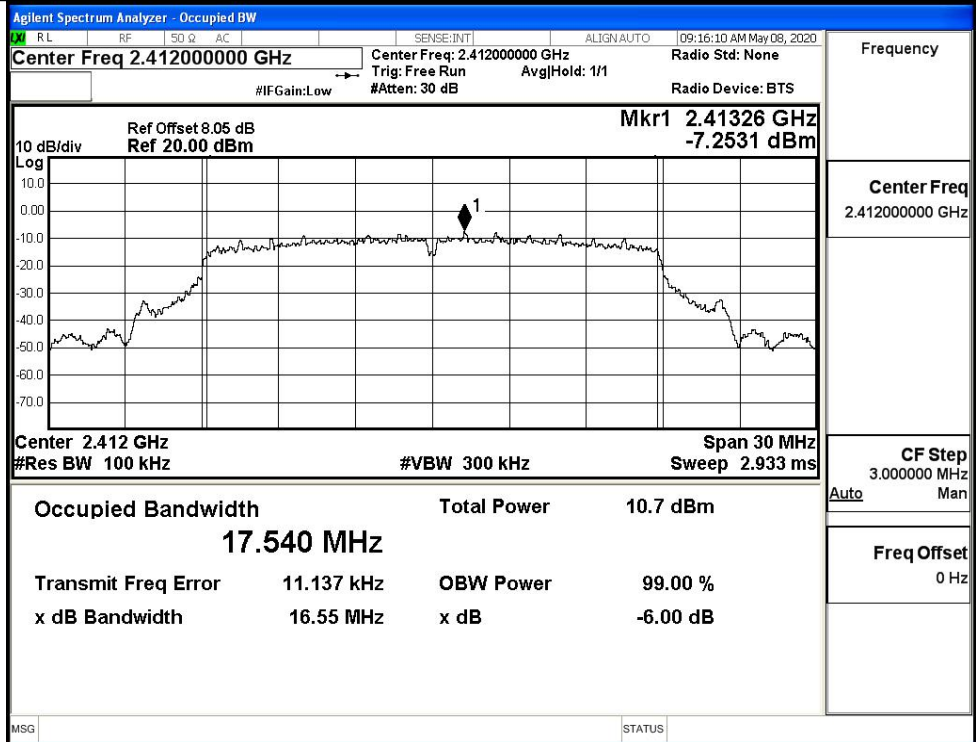
Frequency	2.43700000 GHz
Center Freq	2.43700000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

11G/HCH



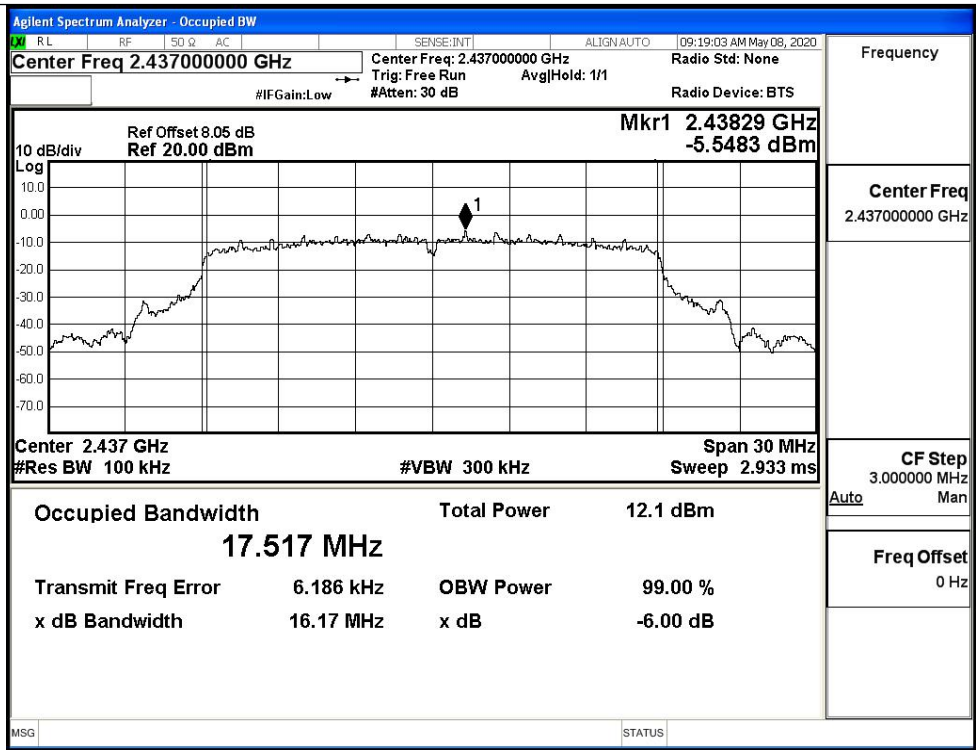
Frequency	2.46200000 GHz
Center Freq	2.46200000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

11N20SISO/LCH

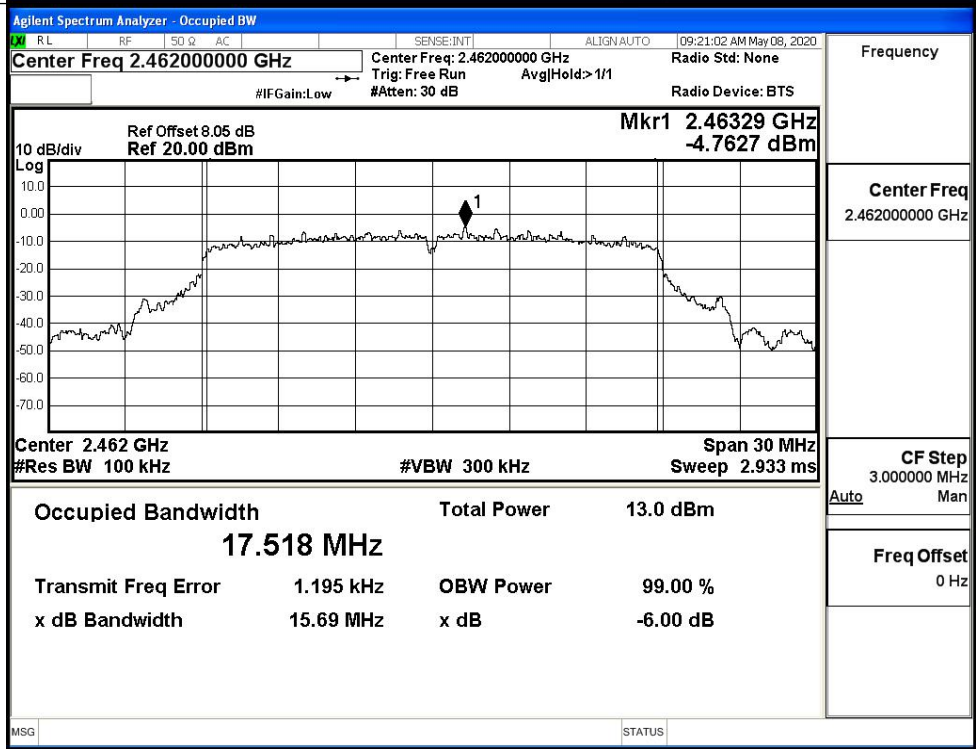


Frequency	2.41200000 GHz
Center Freq	2.41200000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

11N20SISO/MCH

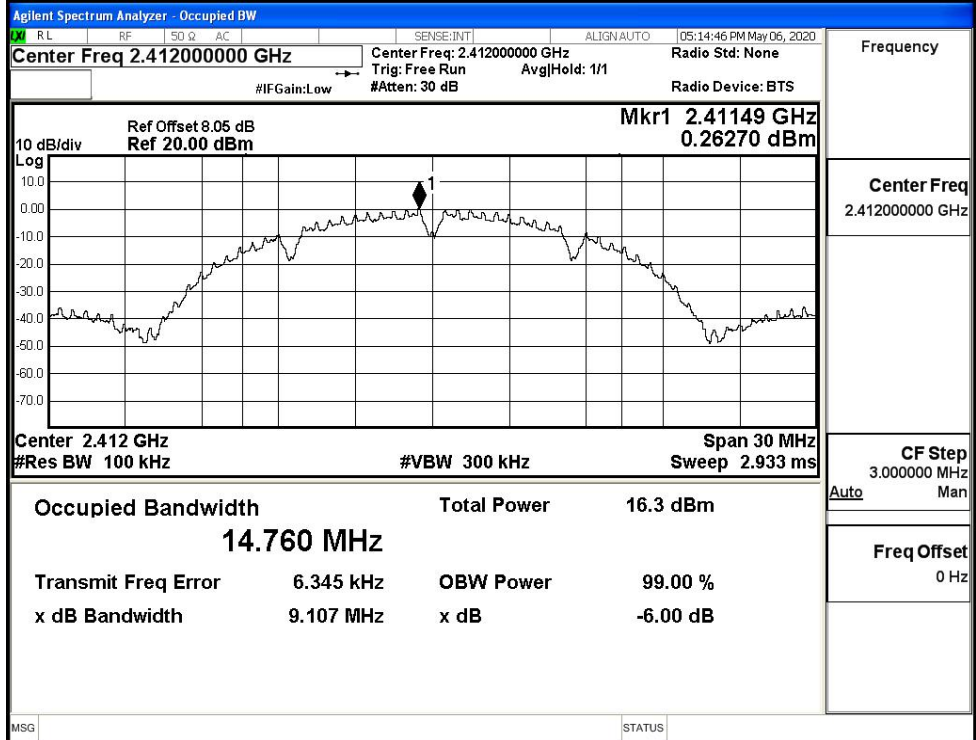


11N20SISO/HCH



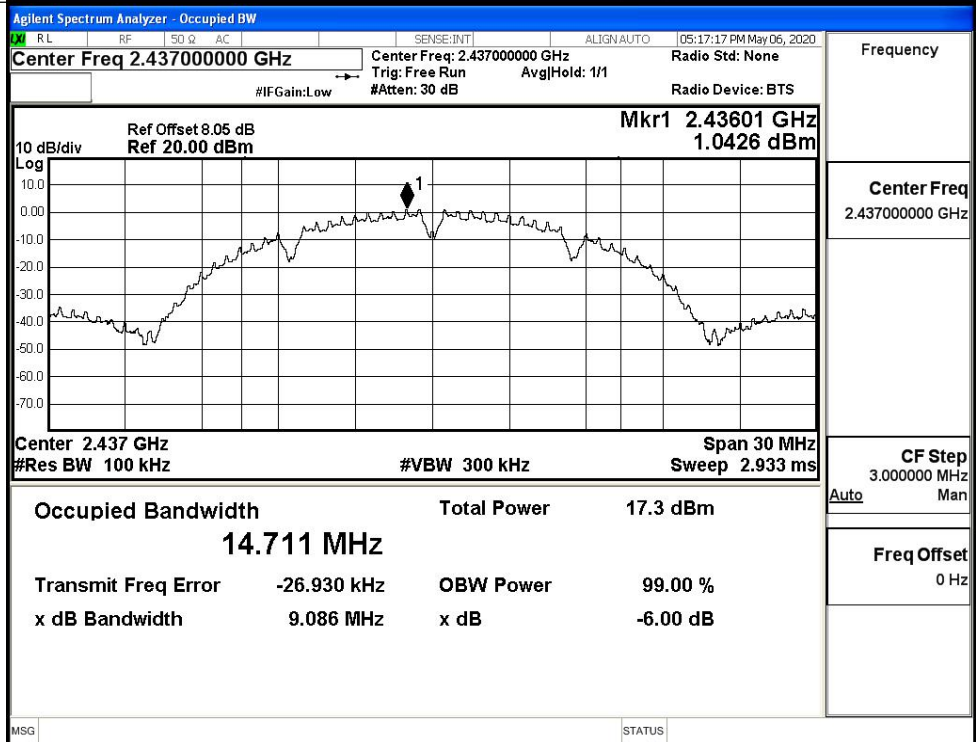
Test Graphs Ant\_2

11B/LCH



Frequency	2.41200000 GHz
Center Freq	2.41200000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

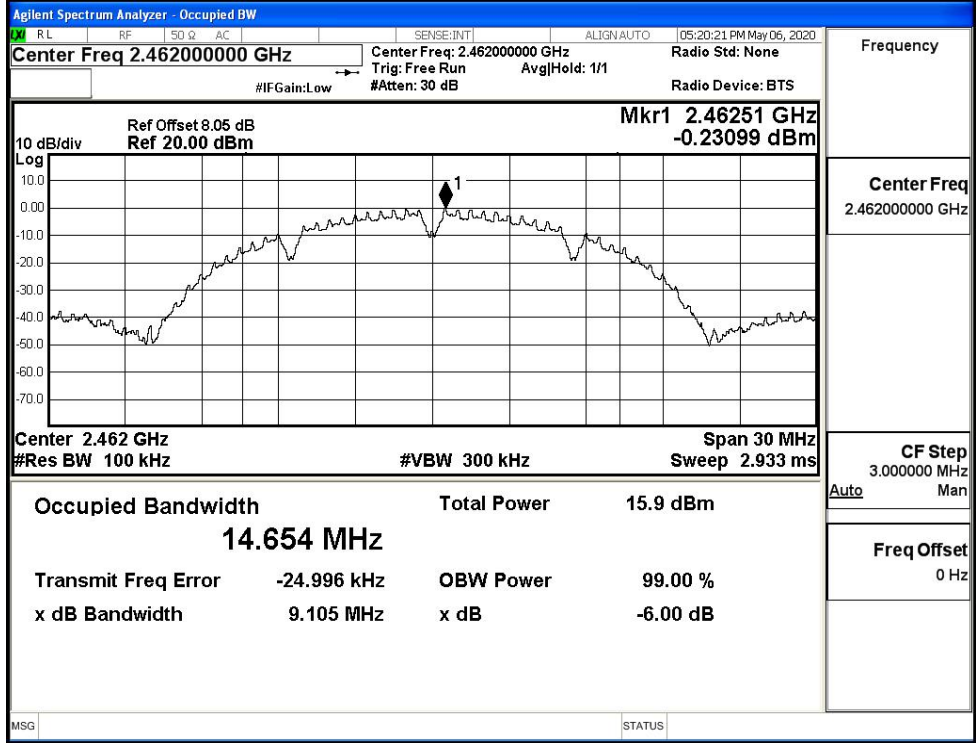
11B/MCH



Frequency	2.43700000 GHz
Center Freq	2.43700000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

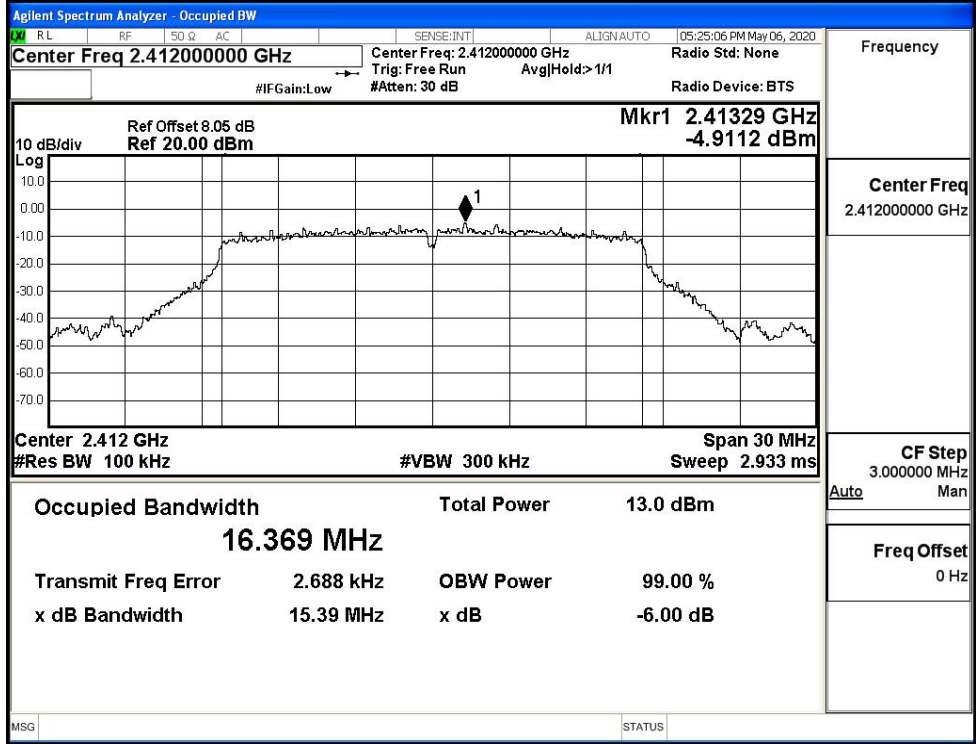


11B/HCH



Frequency	2.46200000 GHz
Center Freq	2.46200000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

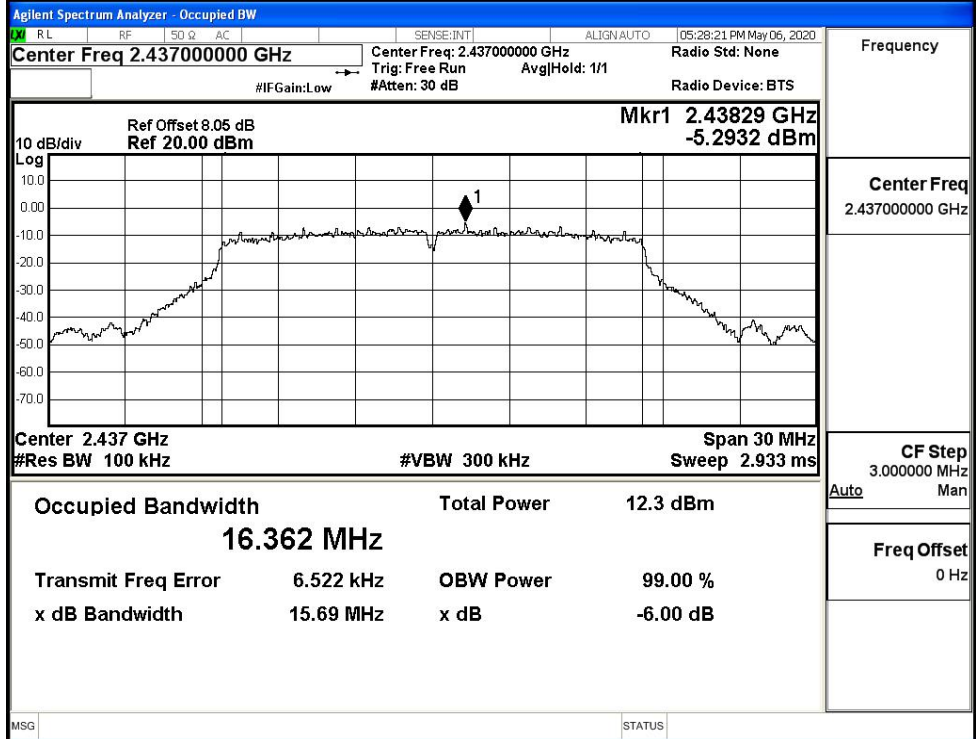
11G/LCH



Frequency	2.41200000 GHz
Center Freq	2.41200000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

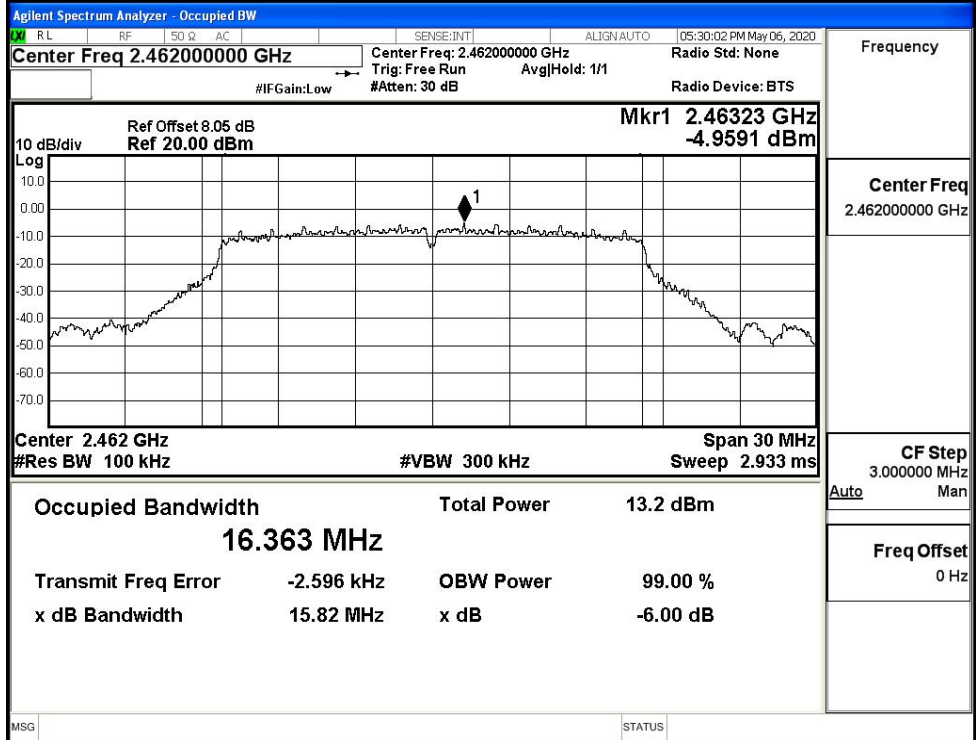


11G/MCH



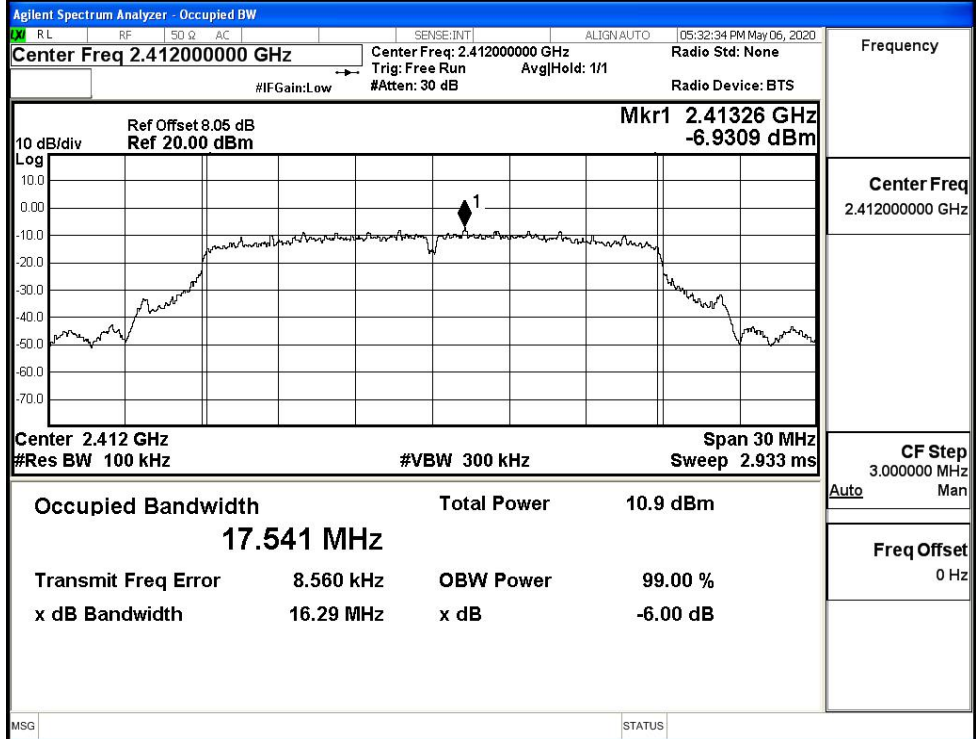
Frequency	2.43700000 GHz
Center Freq	2.43700000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

11G/HCH

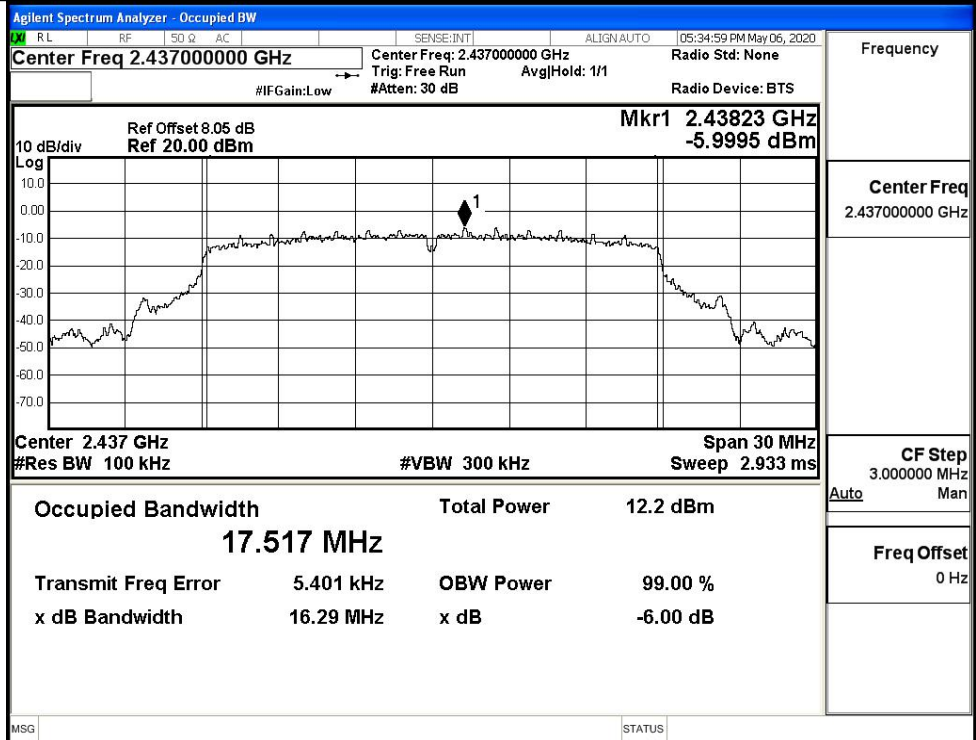


Frequency	2.46200000 GHz
Center Freq	2.46200000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

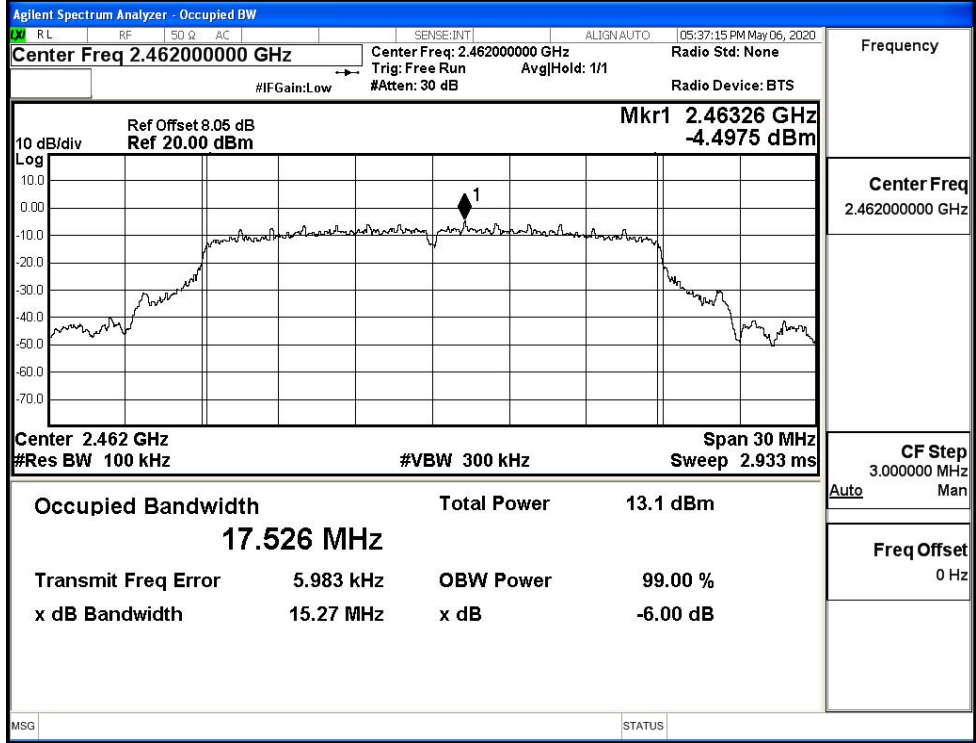
11N20SISO/LCH



11N20SISO/MCH



11N20SISO/HCH



**A.5 RF Conducted Spurious Emissions****Ant\_1**

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	0.329	-35.604	-19.671	PASS
	MCH	1.33	-35.404	-18.670	PASS
	HCH	1.911	-34.414	-18.089	PASS
11G	LCH	-7.374	-38.232	-27.374	PASS
	MCH	-5.525	-38.054	-25.525	PASS
	HCH	-4.725	-37.464	-24.725	PASS
11N20 SISO	LCH	-7.499	-38.141	-27.499	PASS
	MCH	-5.877	-38.189	-25.877	PASS
	HCH	-5.204	-38.553	-25.204	PASS