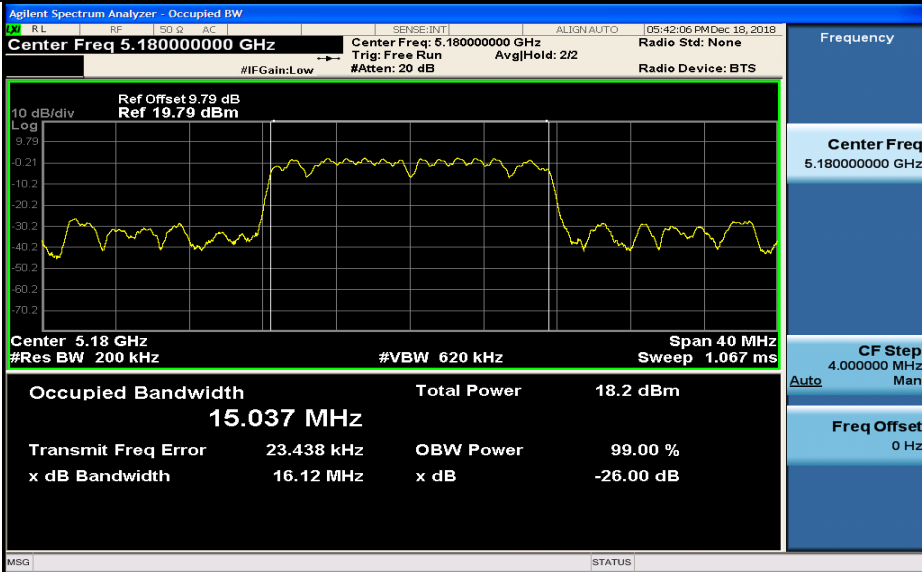


Appendix F for SHEM180900831606

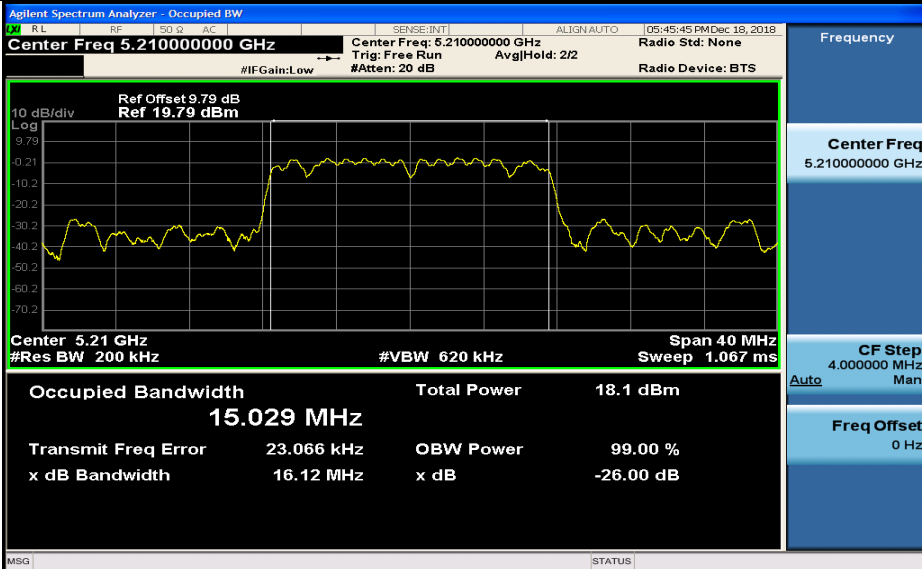
1.Emission Bandwidth Measurement

Test Channel	EBW[MHz]		Limit[MHz]	Verdict
	Ant1	Ant2		
5180	16.12	16.14	---	PASS
5210	16.12	16.14	---	PASS
5240	16.12	16.15	---	PASS
5736	16.53	16.56	---	PASS
5762	16.53	16.53	---	PASS
5814	16.54	16.49	---	PASS

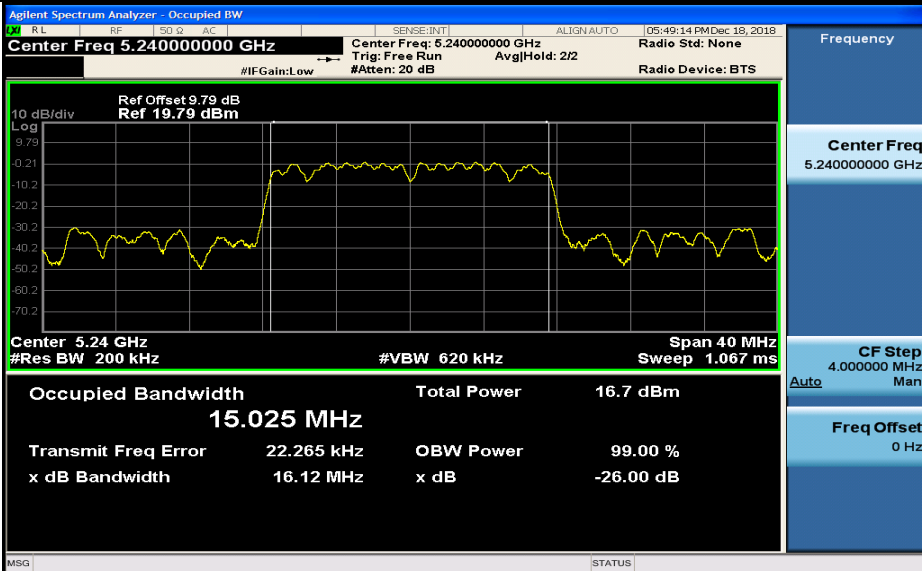
(26dB)Emission Bandwidth Measurement_5180_Ant1



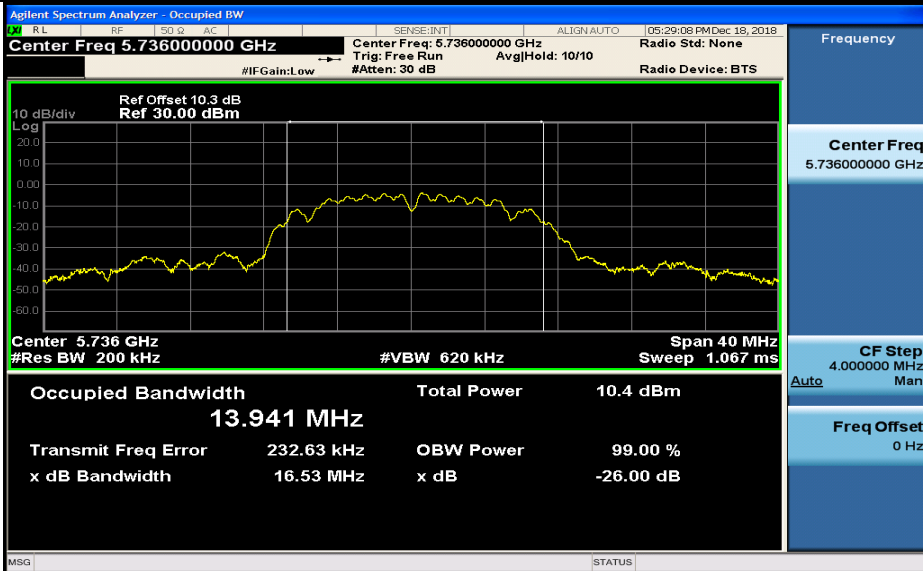
(26dB)Emission Bandwidth Measurement_5210_Ant1



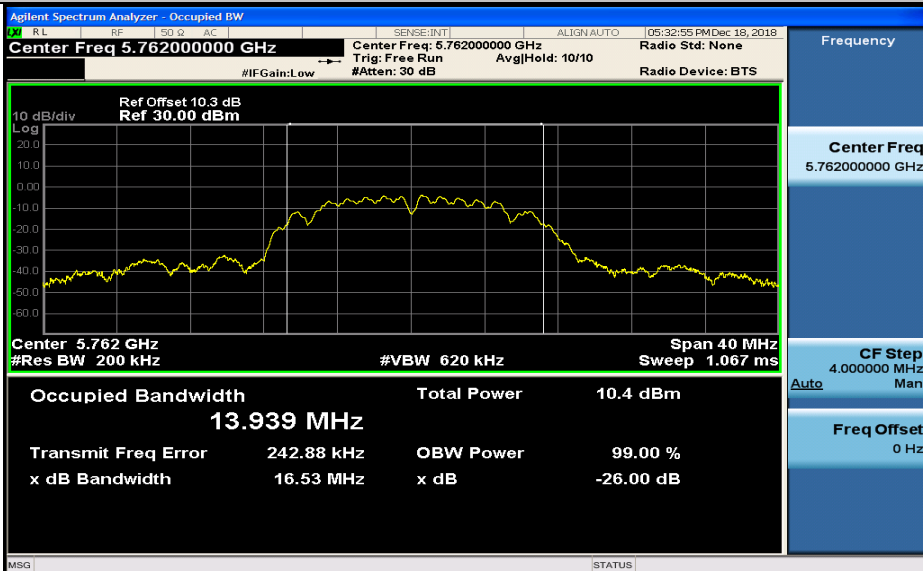
(26dB)Emission Bandwidth Measurement_5240_Ant1



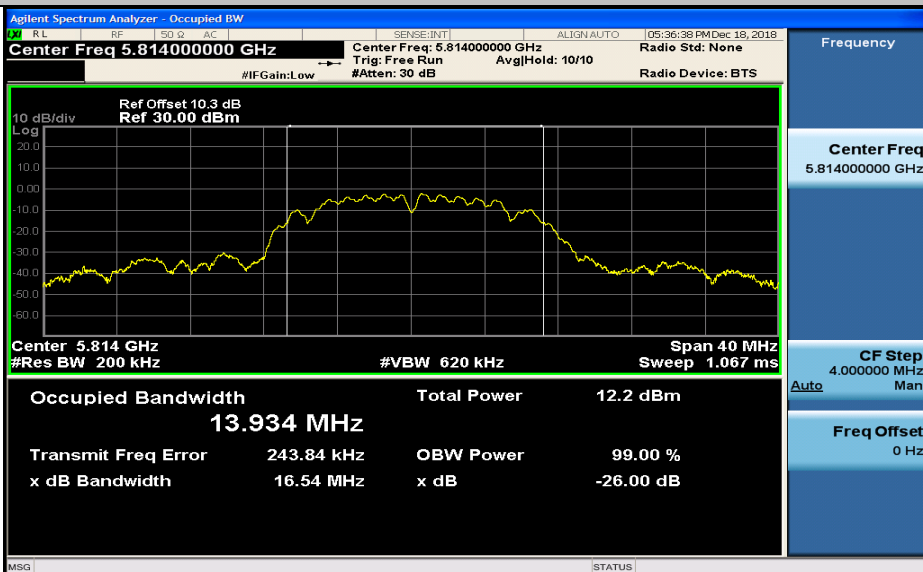
(26dB)Emission Bandwidth Measurement_5736_Ant1



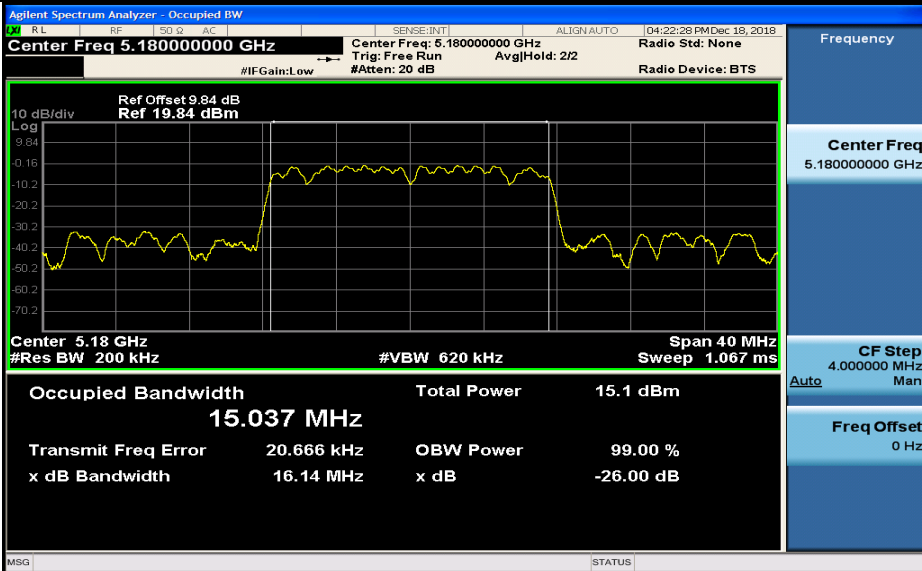
(26dB)Emission Bandwidth Measurement_5762_Ant1



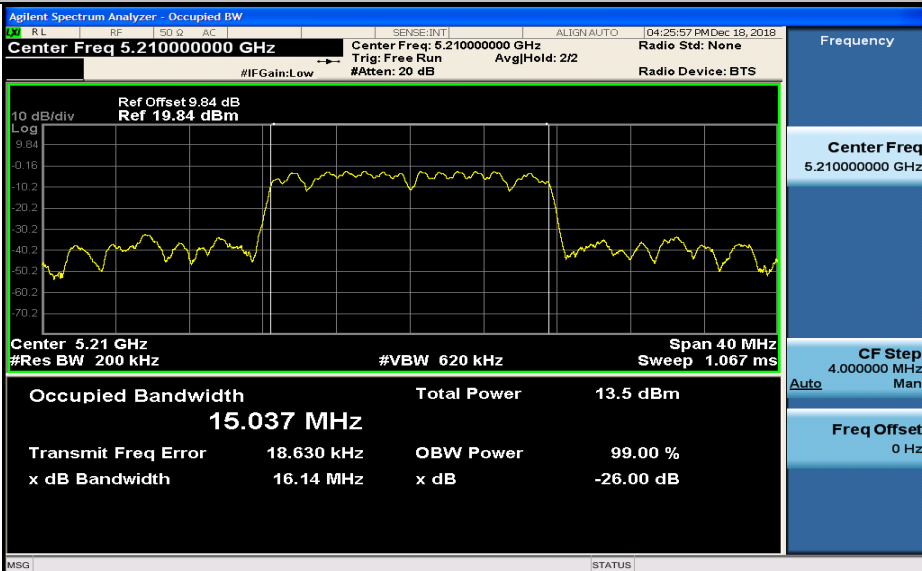
(26dB)Emission Bandwidth Measurement_5814_Ant1



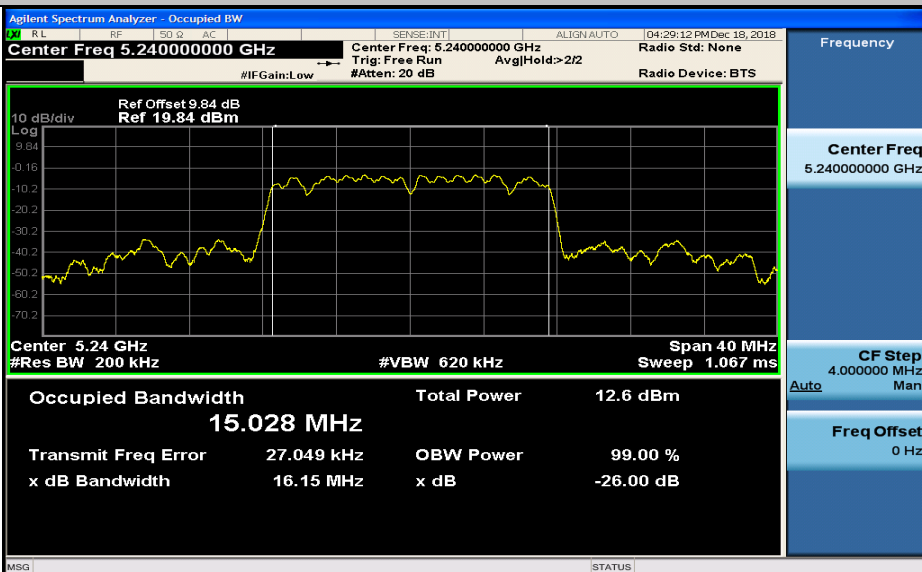
(26dB)Emission Bandwidth Measurement_5180_Ant2



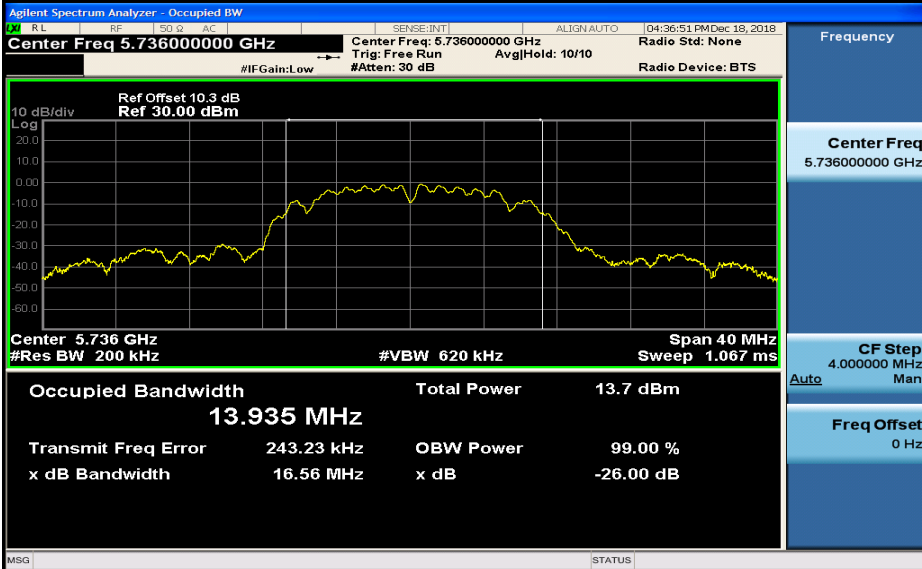
(26dB)Emission Bandwidth Measurement_5210_Ant2



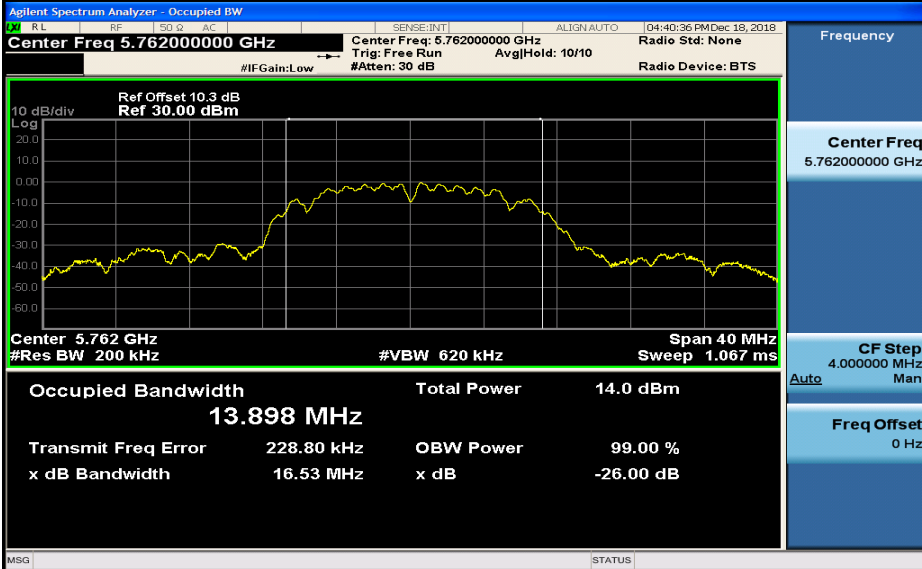
(26dB)Emission Bandwidth Measurement_5240_Ant2



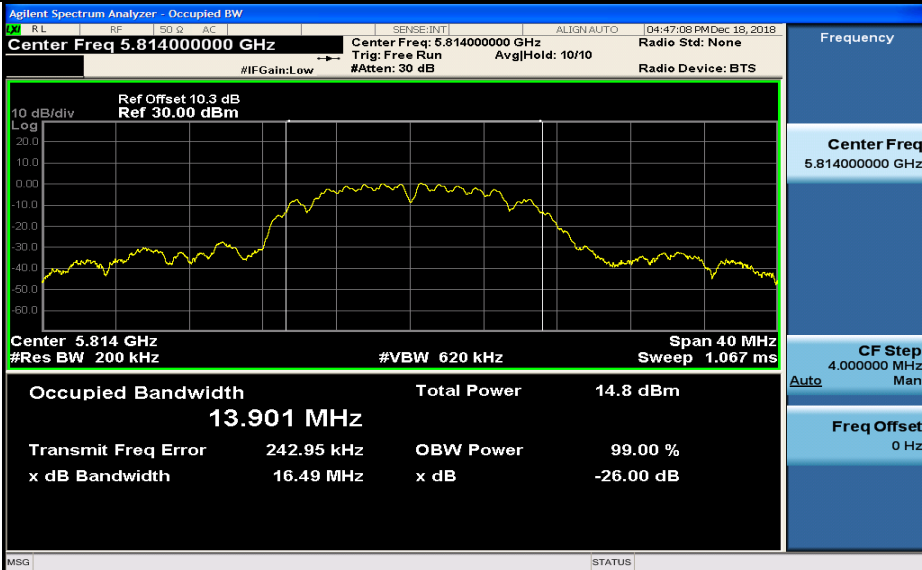
(26dB)Emission Bandwidth Measurement_5736_Ant2



(26dB)Emission Bandwidth Measurement_5762_Ant2



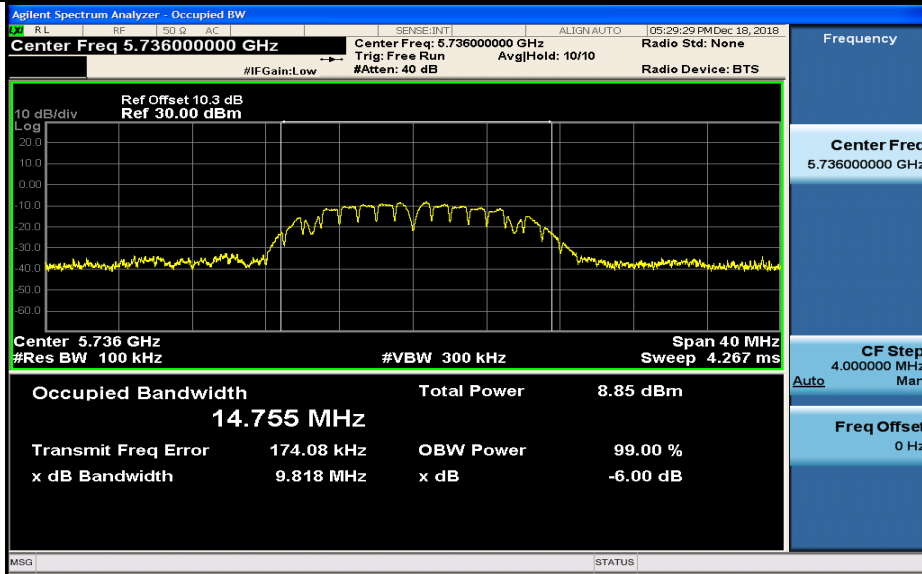
(26dB)Emission Bandwidth Measurement_5814_Ant2



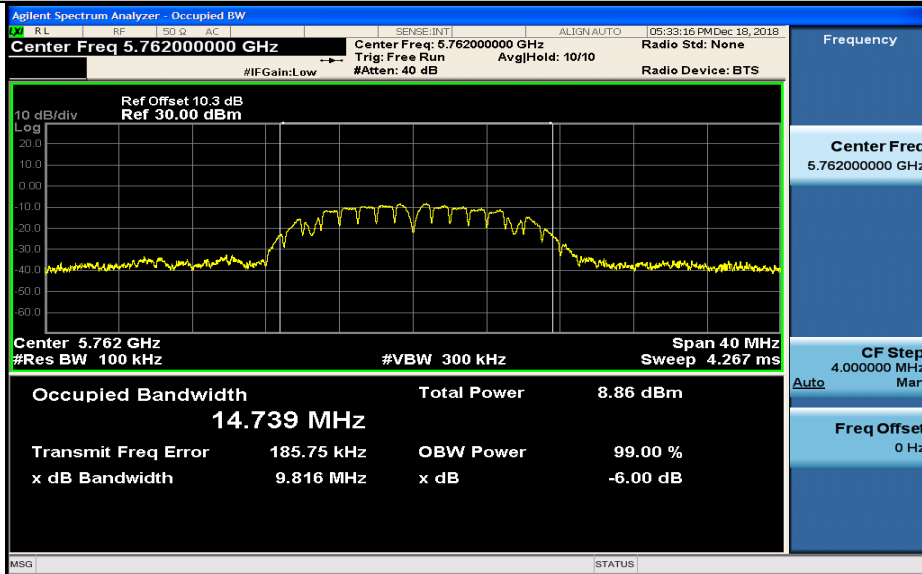
2. Minimum Emission Bandwidth Measurement

Test Channel	EBW[MHz]		Limit[MHz]	Verdict
	Ant1	Ant2		
5736	9.82	9.82	0.5	PASS
5762	9.82	9.82	0.5	PASS
5814	9.82	9.82	0.5	PASS

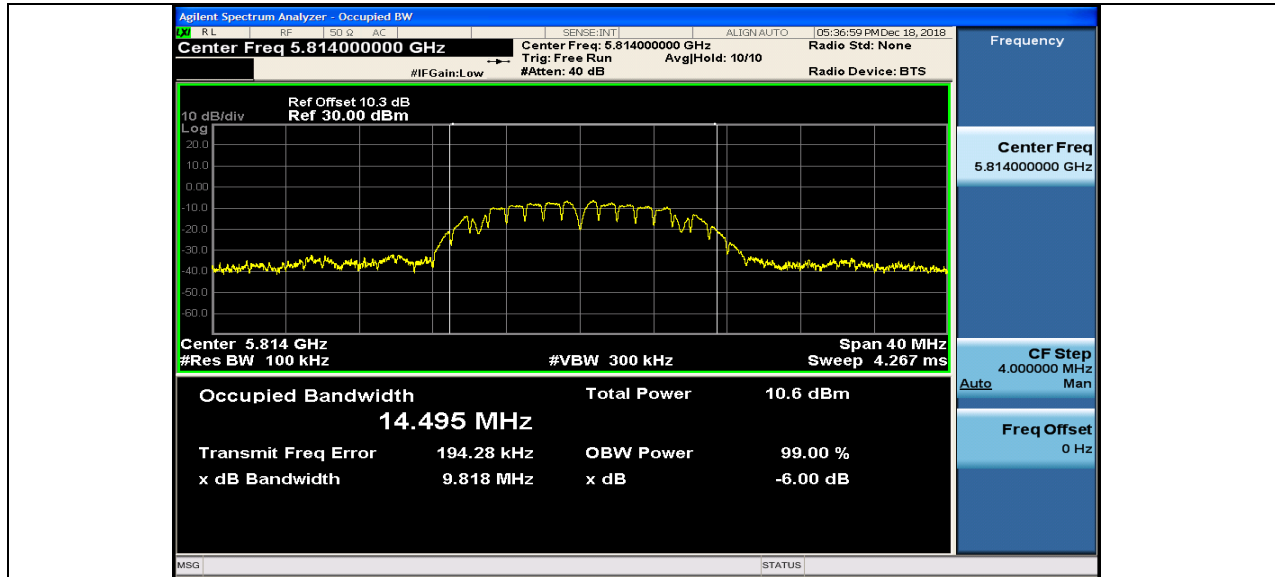
(6dB)Minimum Emission Bandwidth Measurement_5736_Ant1



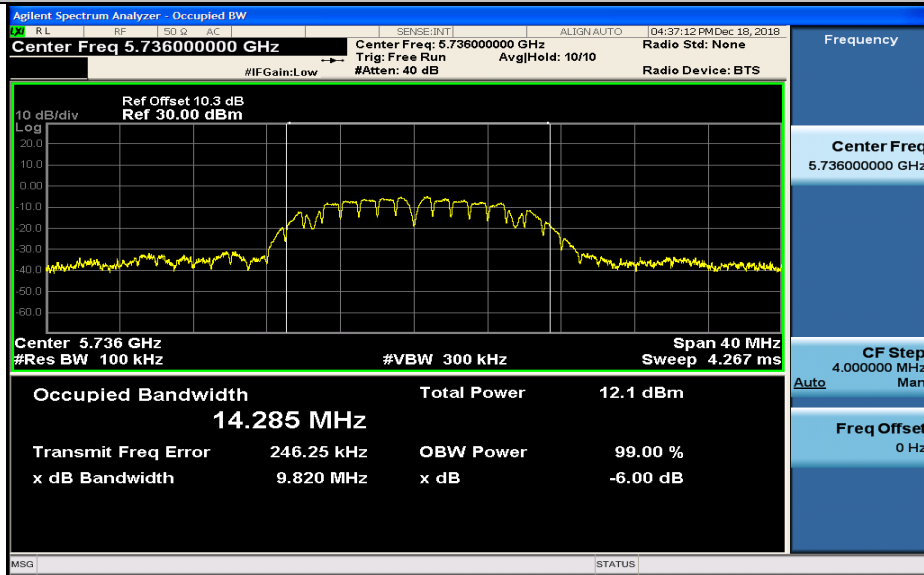
(6dB)Minimum Emission Bandwidth Measurement_5762_Ant1



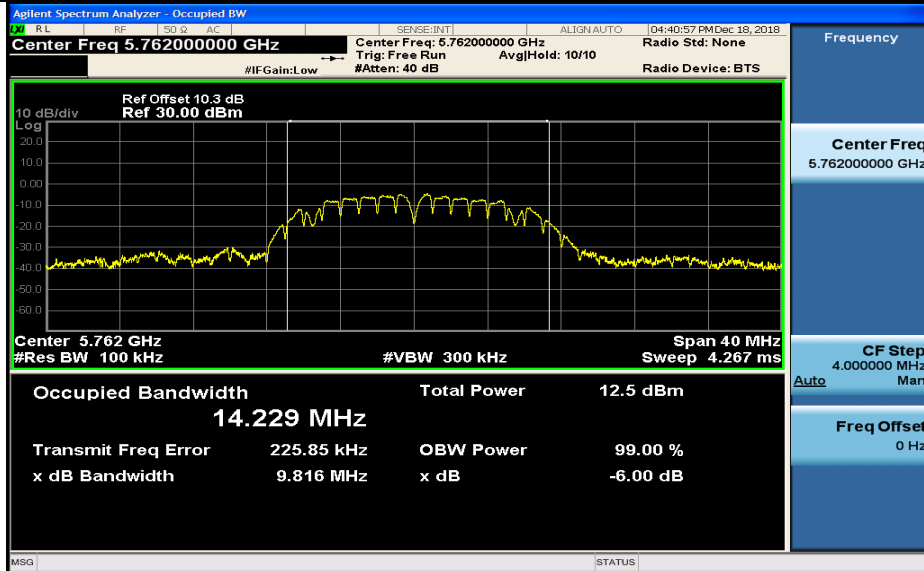
(6dB)Minimum Emission Bandwidth Measurement_5814_Ant1



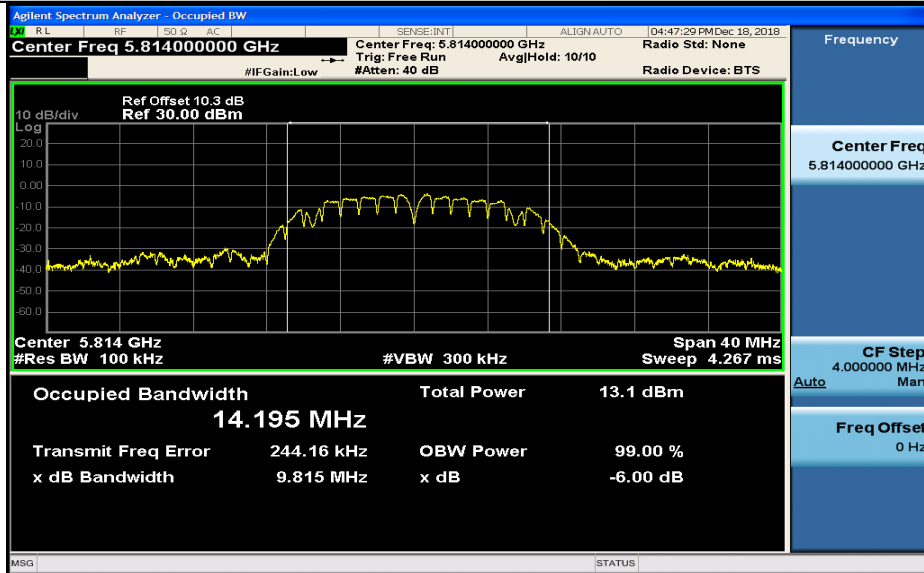
(6dB)Minimum Emission Bandwidth Measurement_5736_Ant2



(6dB)Minimum Emission Bandwidth Measurement_5762_Ant2



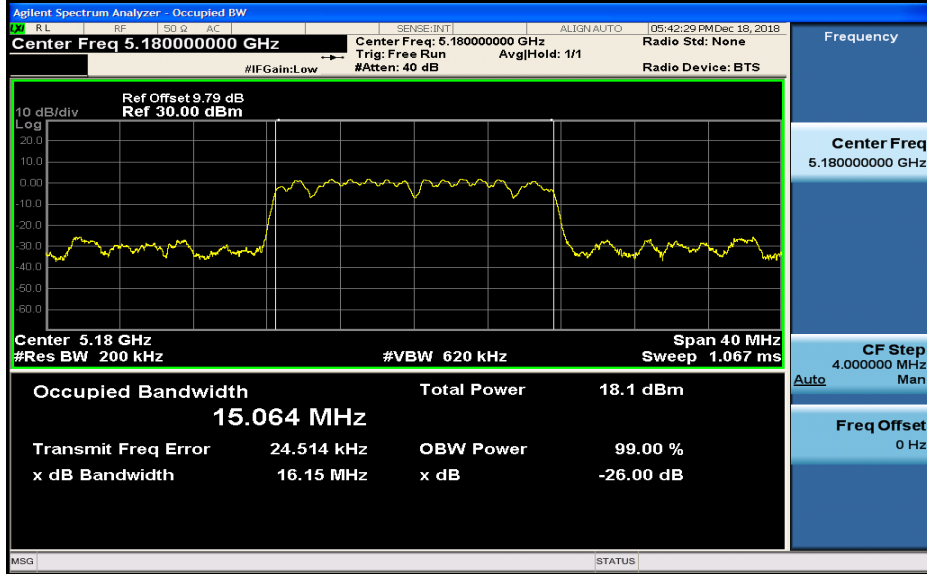
(6dB)Minimum Emission Bandwidth Measurement_5814_Ant2



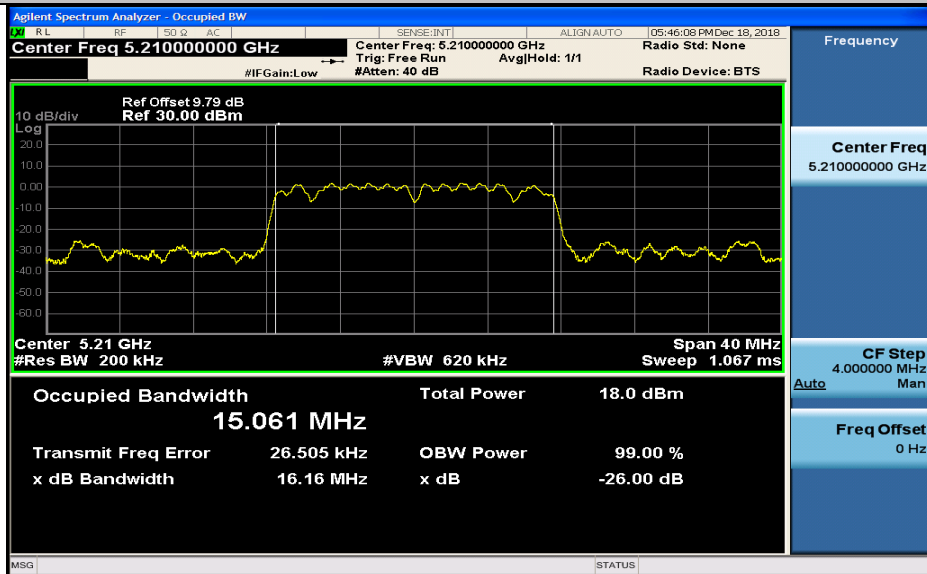
3.Occupied Bandwidth Measurement

Test Chanr	OBW[MHz]		Limit[MHz]	Verdict
	Ant1	Ant2		
5180	15.06	15.08	---	PASS
5210	15.06	15.10	---	PASS
5240	15.06	15.10	---	PASS
5736	14.49	14.26	---	PASS
5762	14.50	14.21	---	PASS
5814	14.36	14.20	---	PASS

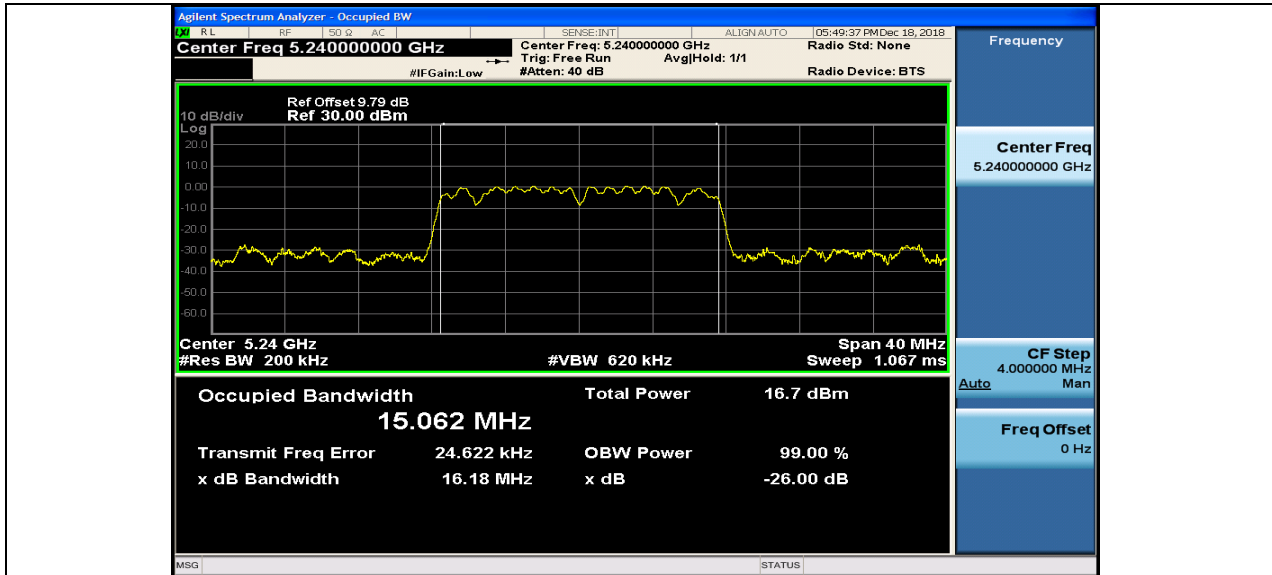
Occupied Bandwidth Measurement_5180_Ant1



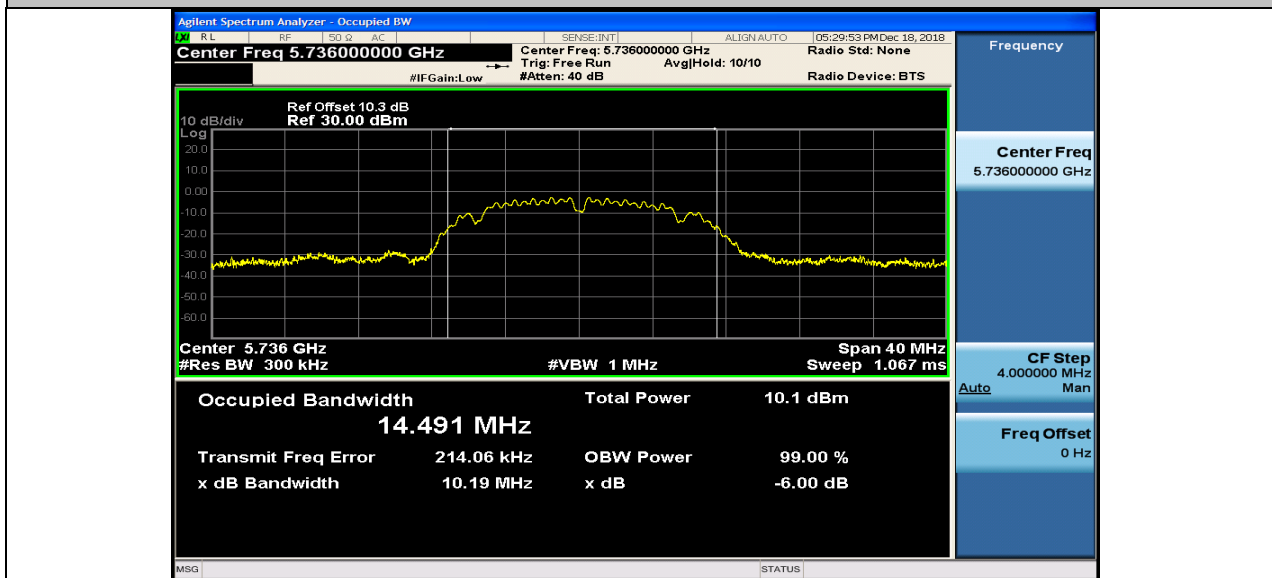
Occupied Bandwidth Measurement_5210_Ant1



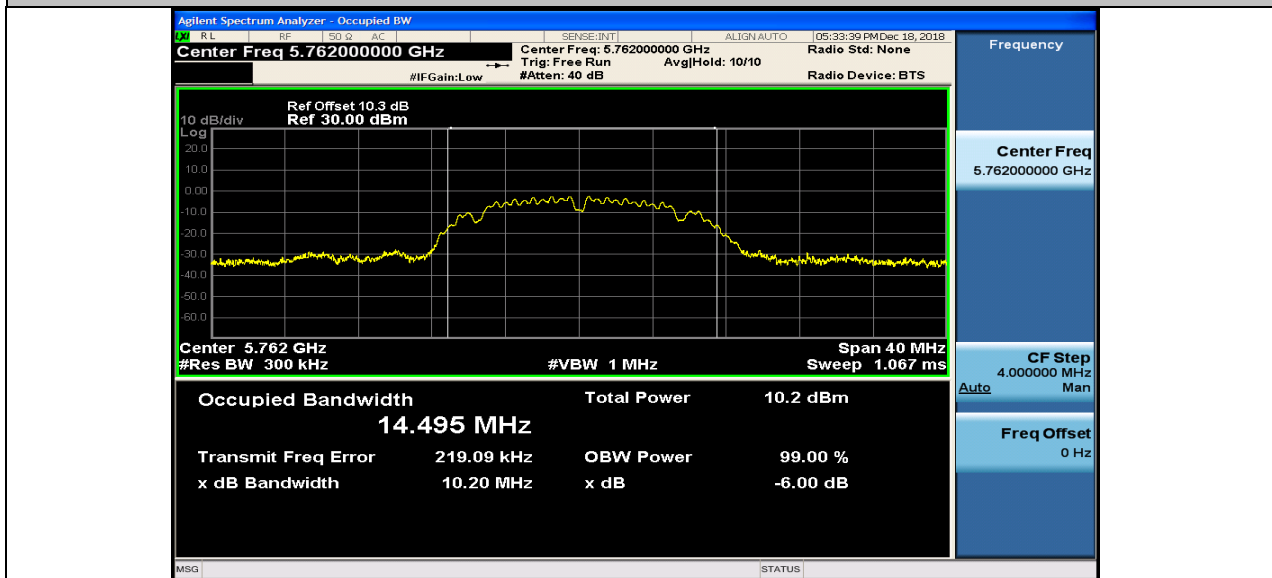
Occupied Bandwidth Measurement_5240_Ant1



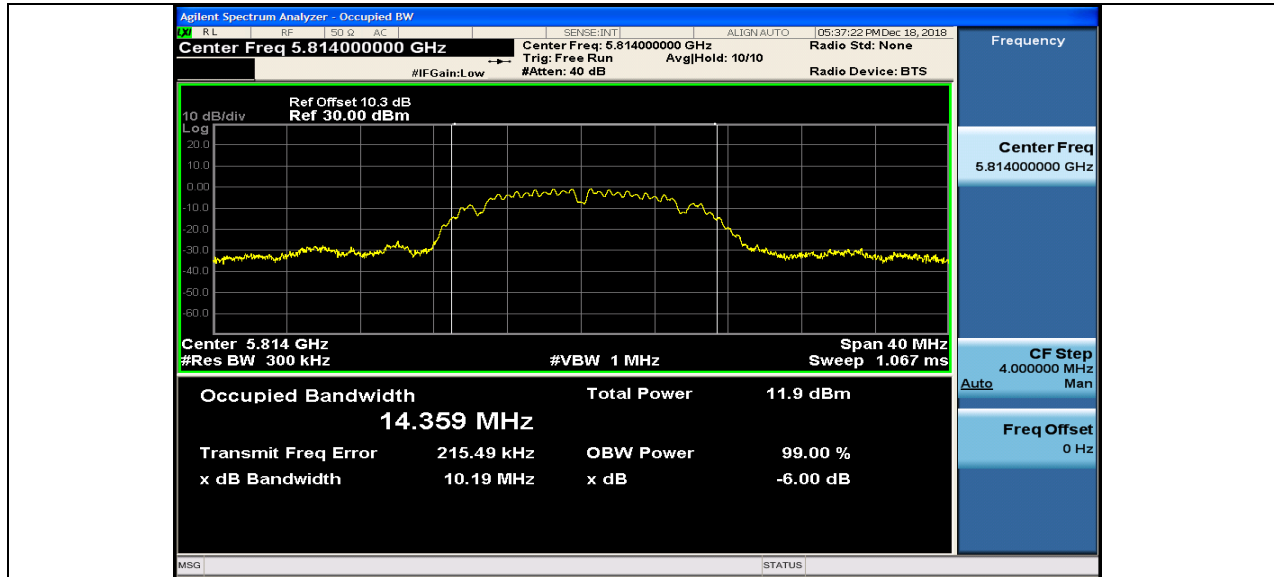
Occupied Bandwidth Measurement_5736_Ant1



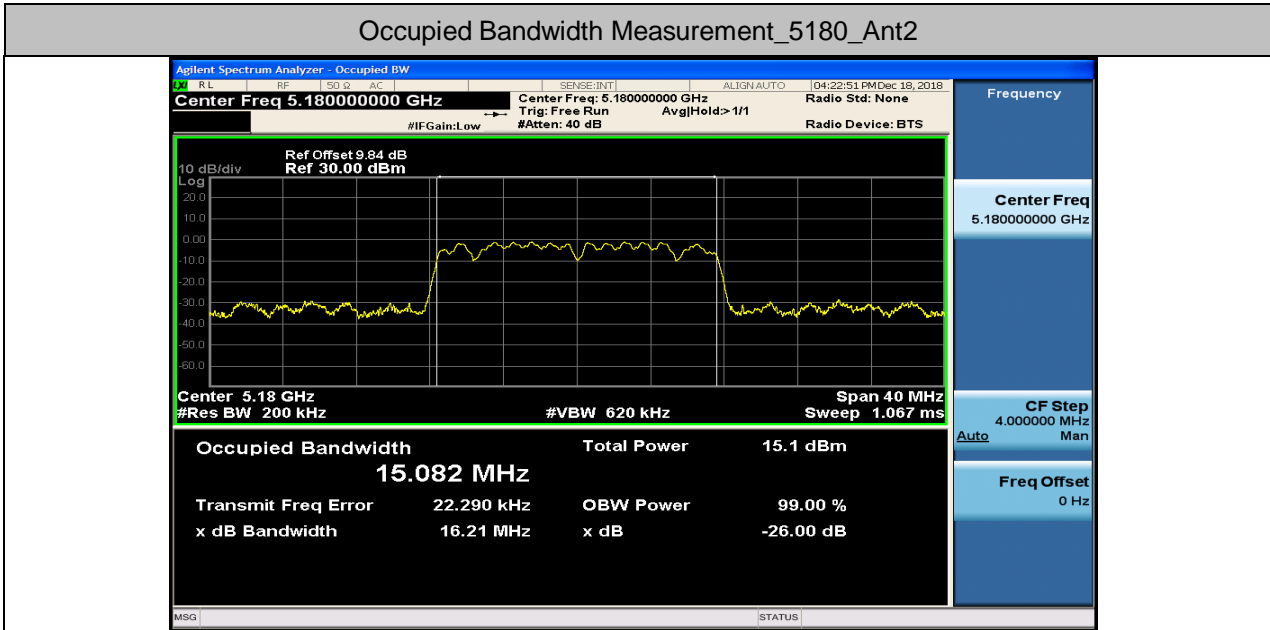
Occupied Bandwidth Measurement_5762_Ant1



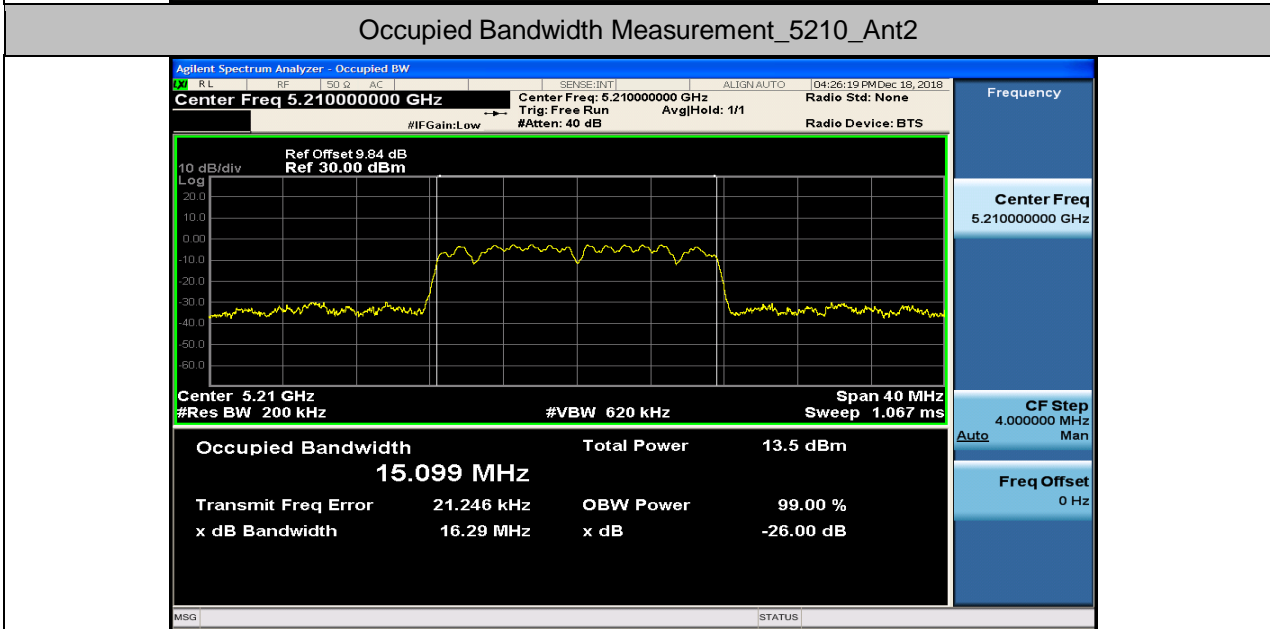
Occupied Bandwidth Measurement_5814_Ant1



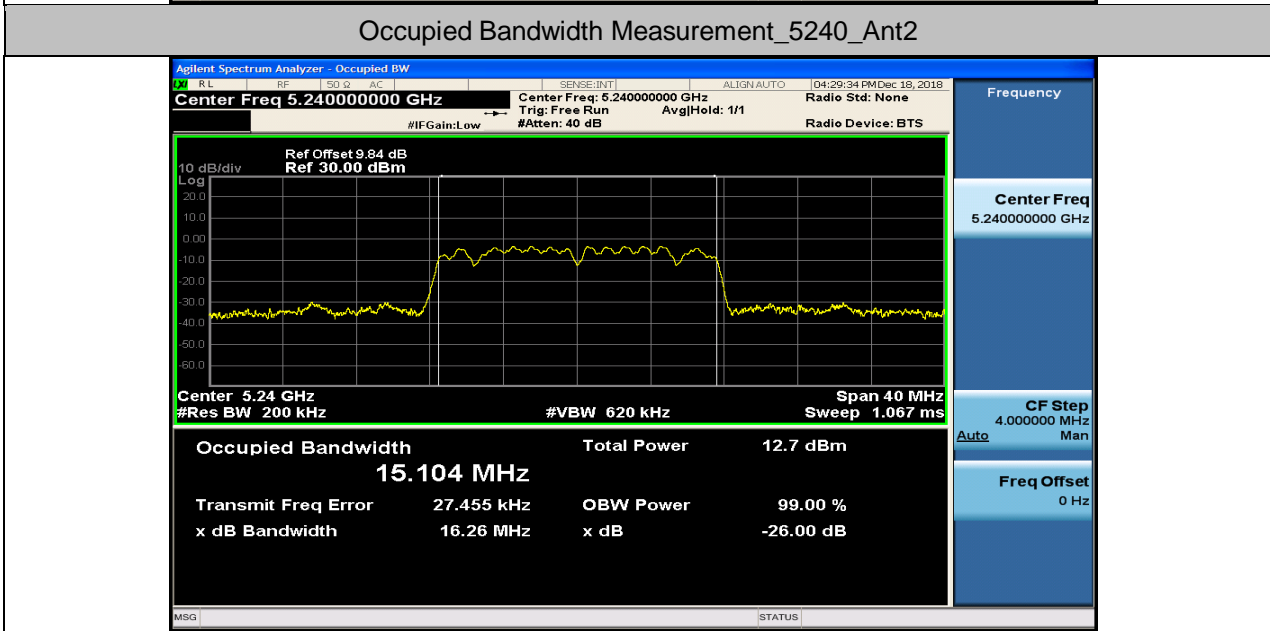
Occupied Bandwidth Measurement_5180_Ant2



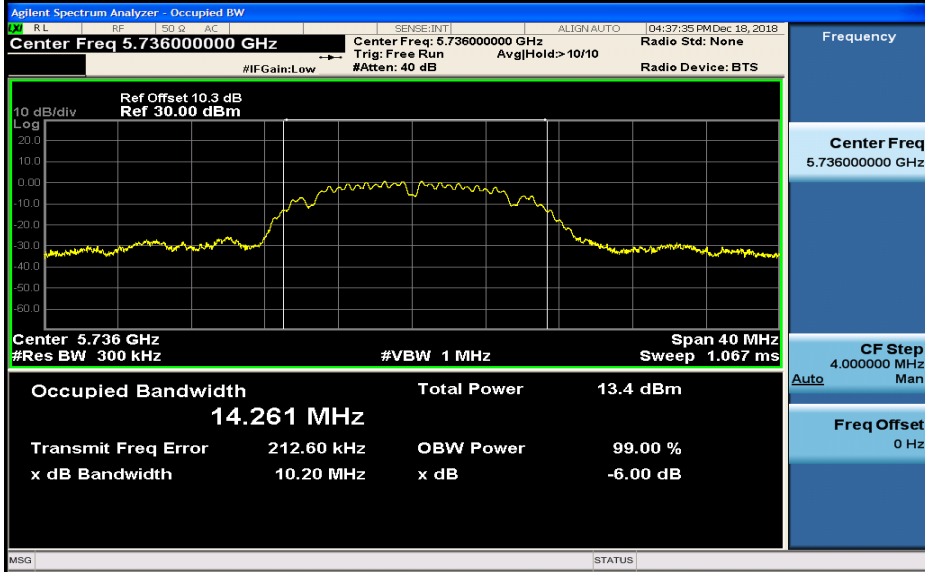
Occupied Bandwidth Measurement_5210_Ant2



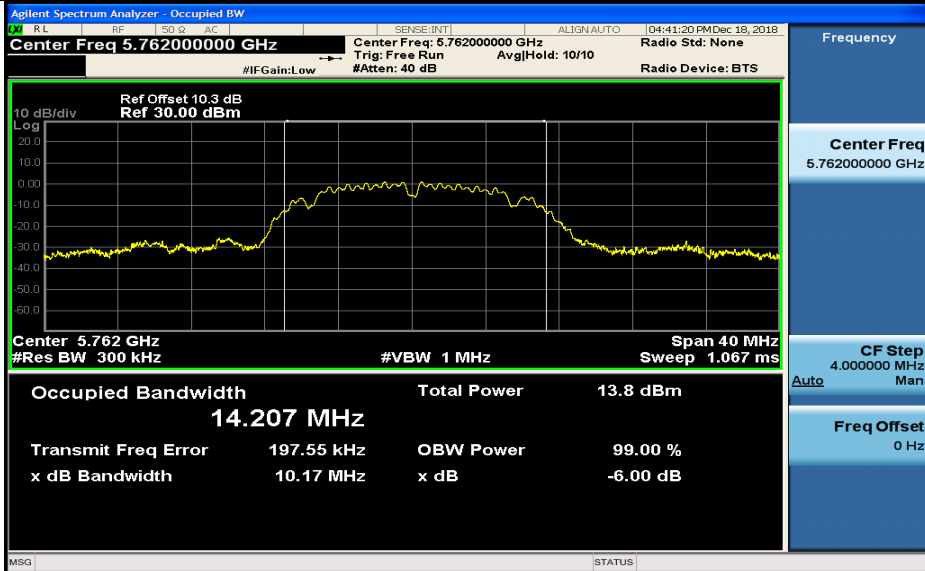
Occupied Bandwidth Measurement_5240_Ant2



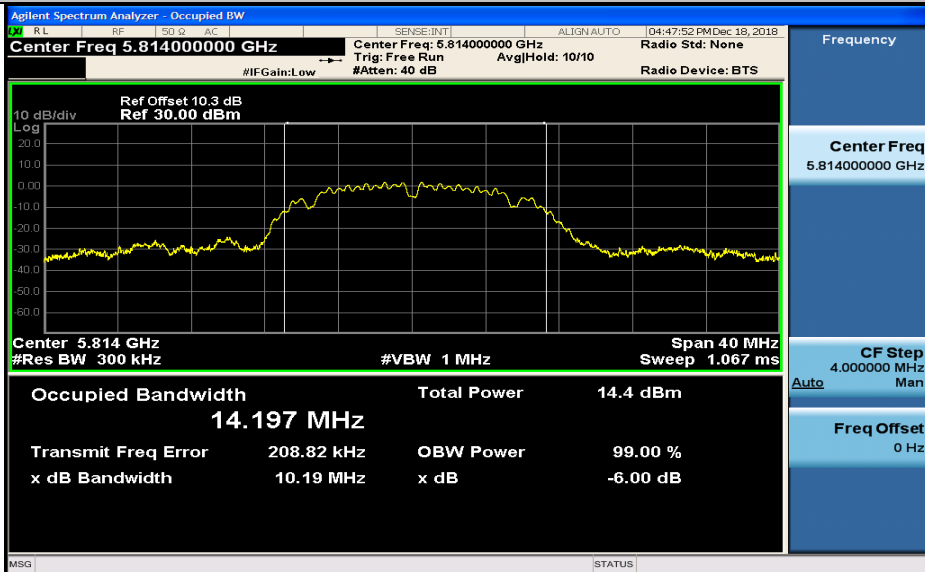
Occupied Bandwidth Measurement_5736_Ant2



Occupied Bandwidth Measurement_5762_Ant2



Occupied Bandwidth Measurement_5814_Ant2



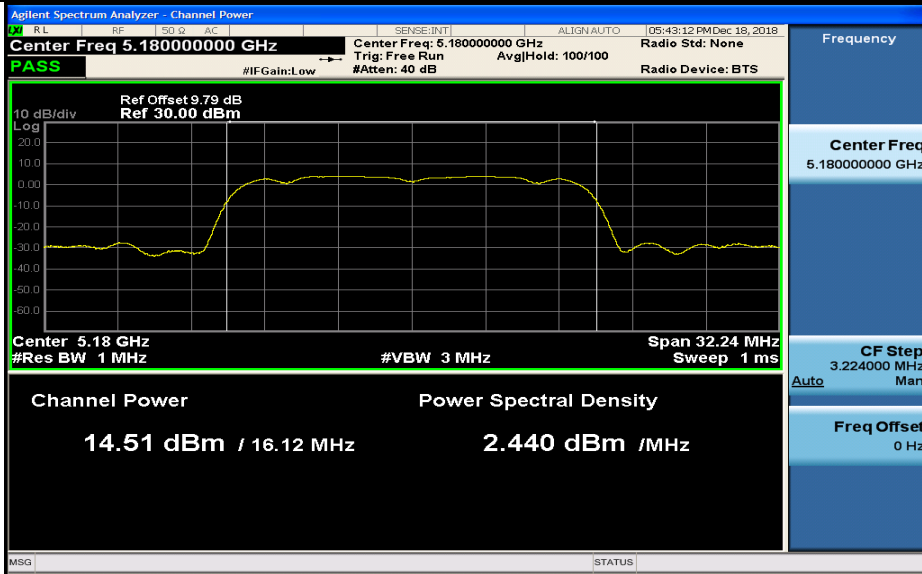
4. Maximum Conduct Output Power For FCC

Test Channel	Level [dBm]		10log(1/x) Factor [dB]		Power [dBm]		Limit [dBm]	Verdict
	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2		
5180	14.51	11.45	0.00	0.00	14.51	11.45	23.98	PASS
5210	14.36	9.81	0.00	0.00	14.36	9.81	23.98	PASS
5240	13.06	9.01	0.00	0.00	13.06	9.01	23.98	PASS
5736	6.53	9.97	0.00	0.00	6.53	9.97	30.00	PASS
5762	6.75	10.34	0.00	0.00	6.75	10.34	30.00	PASS
5814	8.44	10.99	0.00	0.00	8.44	10.99	30.00	PASS

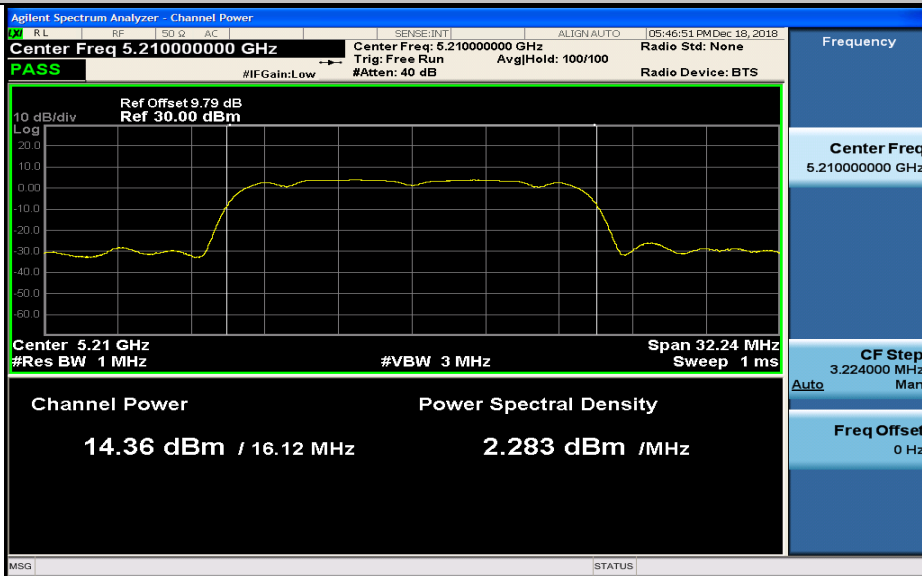
4.1. Maximum Conduct Output Power For ISED

Test Channel	10log(1/x) Factor [dB]		Power [dBm]		EIRP Power [dBm]		Limit [dBm]	Verdict
	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2		
5180	0.00	0.00	14.51	11.45	16.51	13.45	23.00	PASS
5210	0.00	0.00	14.36	9.81	16.36	11.81	23.00	PASS
5240	0.00	0.00	13.06	9.01	15.06	11.01	23.00	PASS
5736	0.00	0.00	6.53	9.97	N/A	N/A	30.00	PASS
5762	0.00	0.00	6.75	10.34	N/A	N/A	30.00	PASS
5814	0.00	0.00	8.44	10.99	N/A	N/A	30.00	PASS

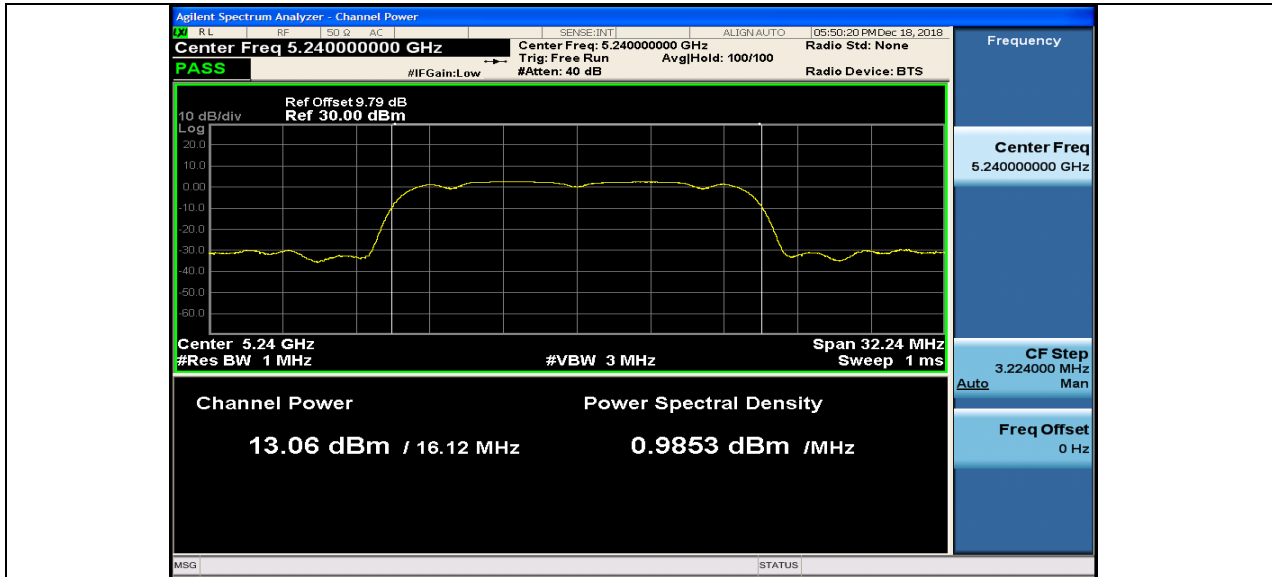
Maximum Conduct Output Power_5180_Ant1



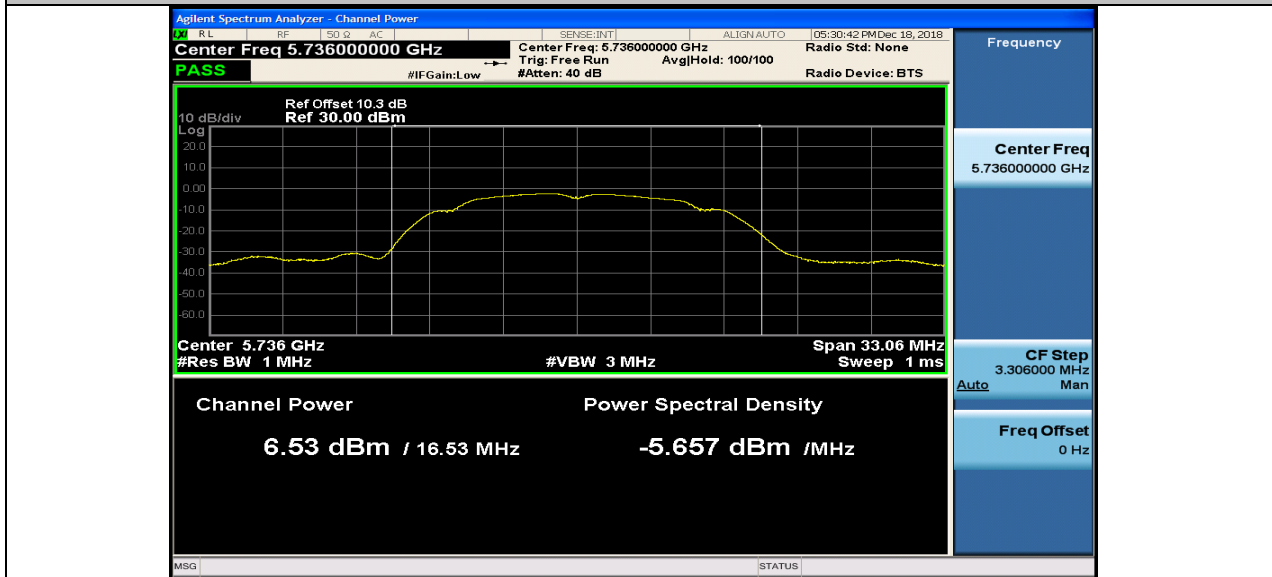
Maximum Conduct Output Power_5210_Ant1



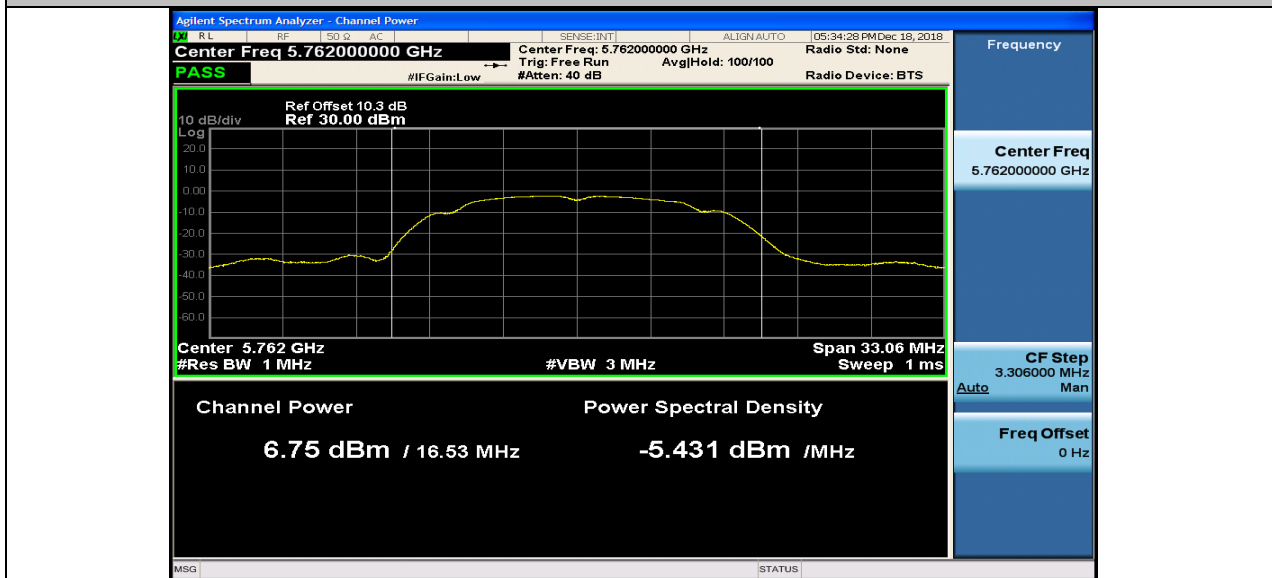
Maximum Conduct Output Power_5240_Ant1



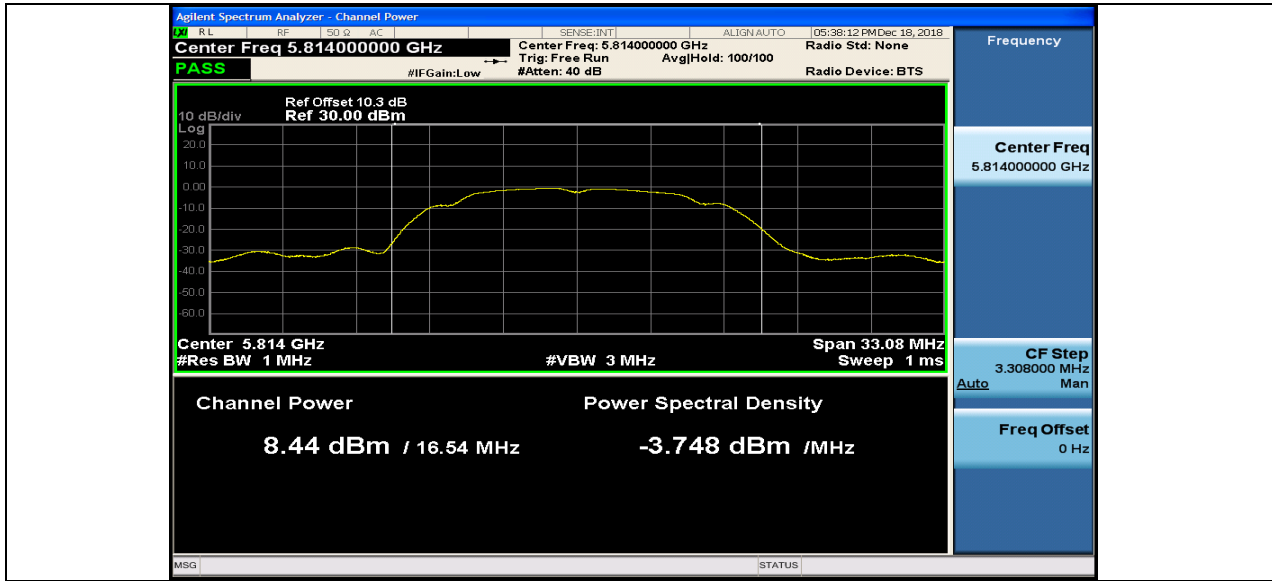
Maximum Conduct Output Power_5736_Ant1



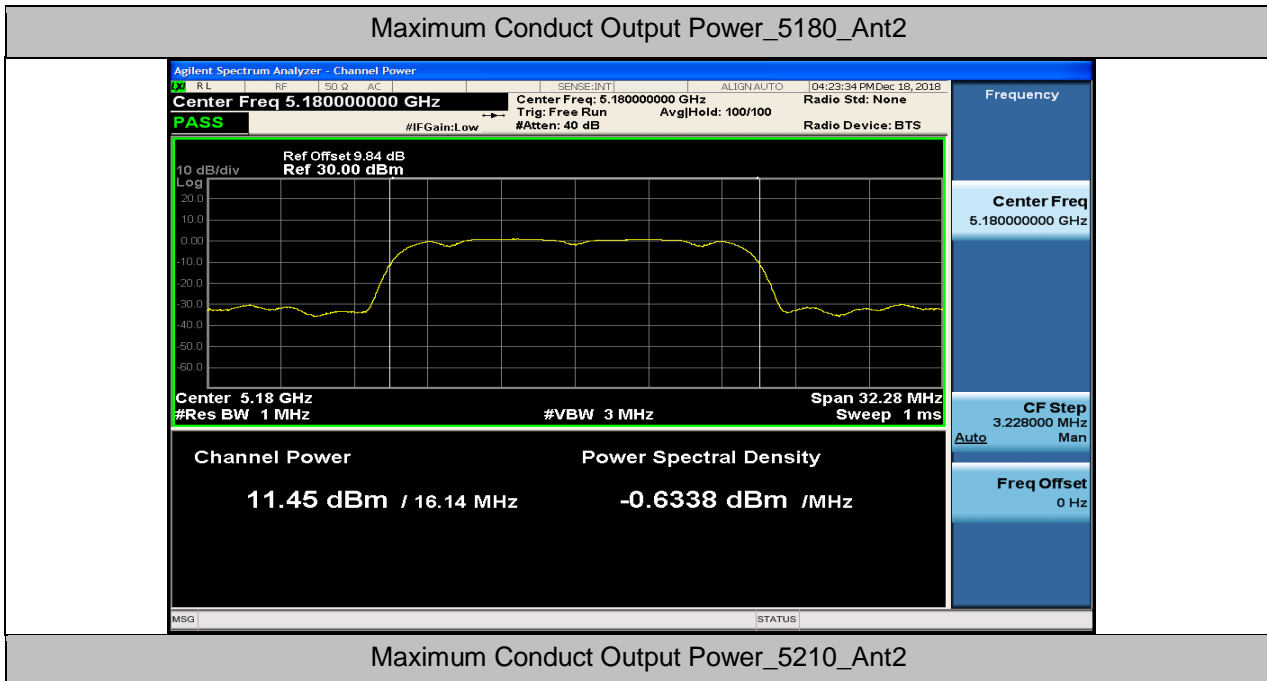
Maximum Conduct Output Power_5762_Ant1



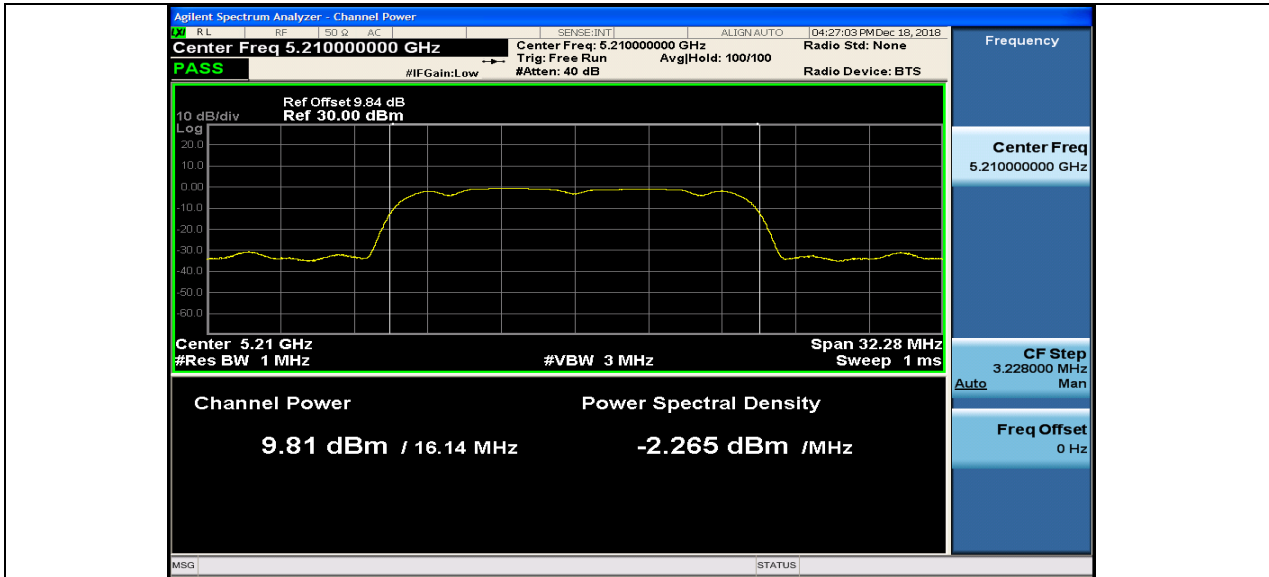
Maximum Conduct Output Power_5814_Ant1



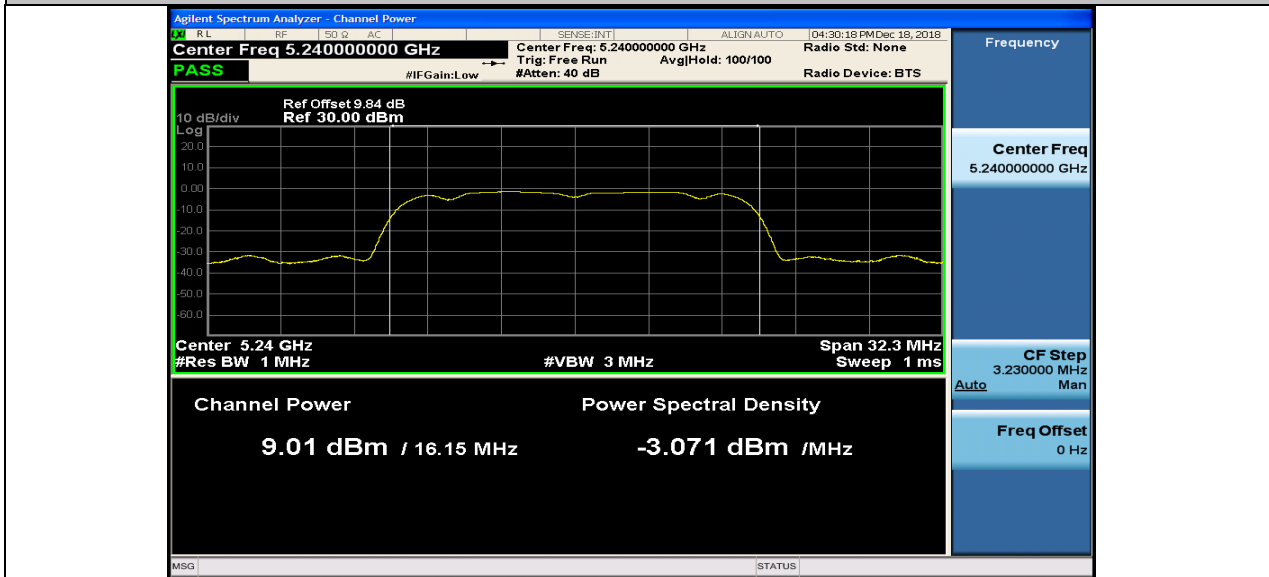
Maximum Conduct Output Power_5180_Ant2



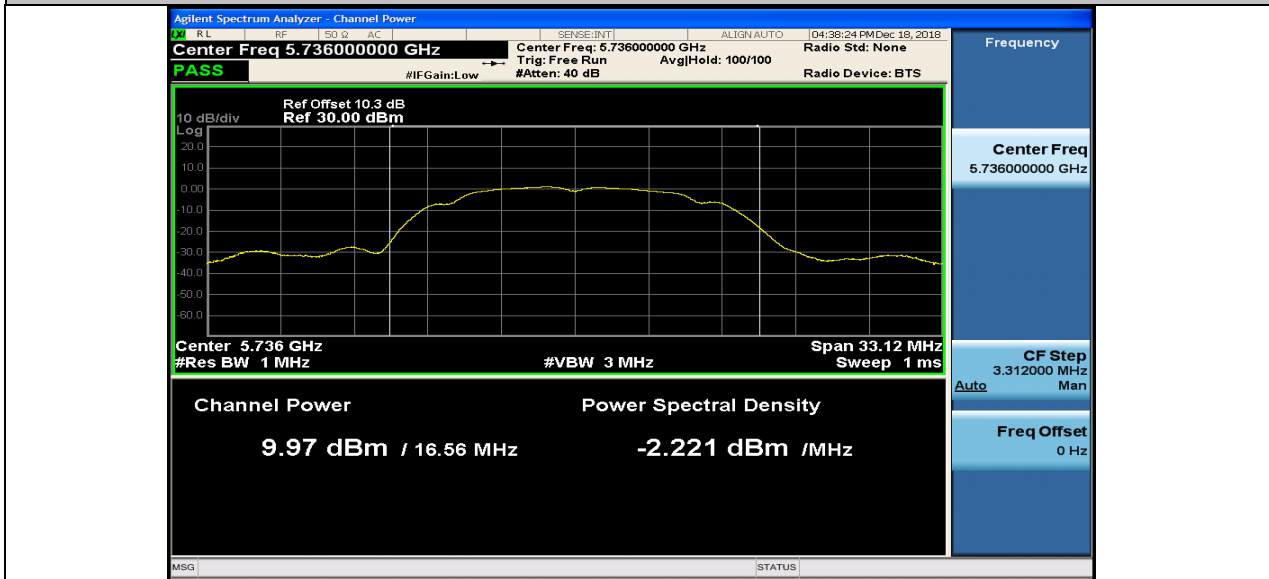
Maximum Conduct Output Power_5210_Ant2



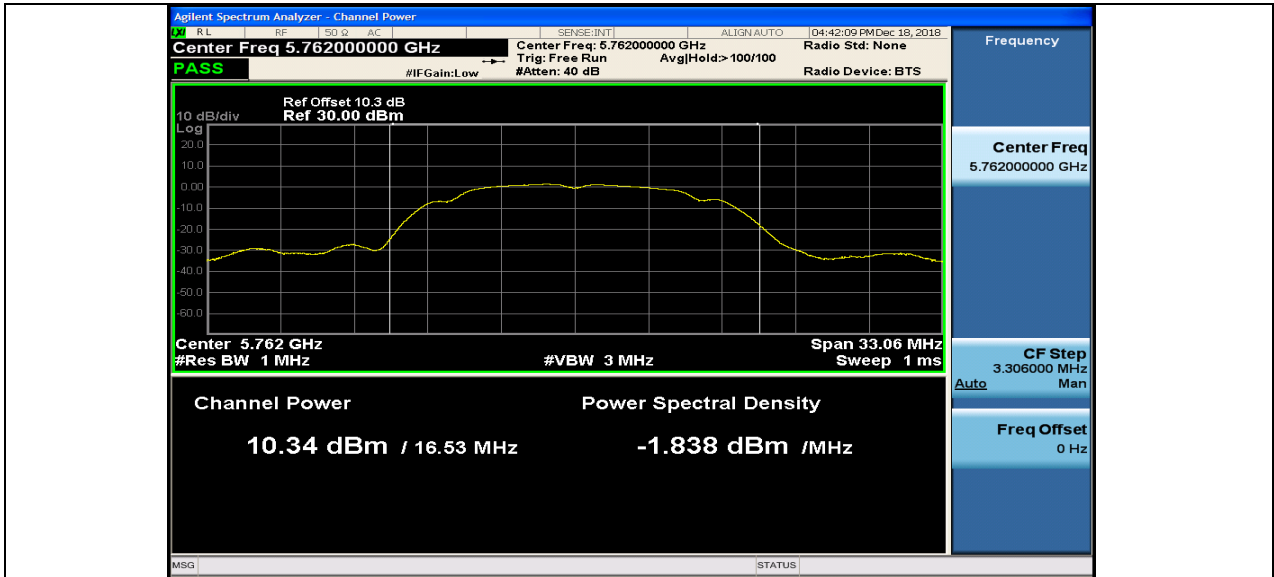
Maximum Conduct Output Power_5240_Ant2



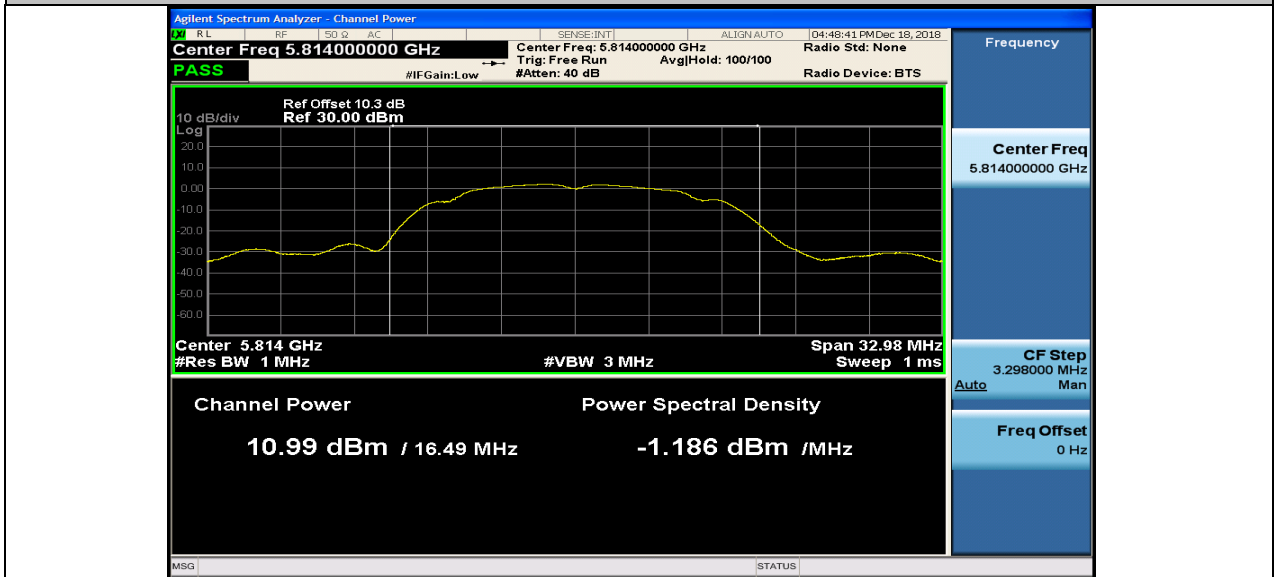
Maximum Conduct Output Power_5736_Ant2



Maximum Conduct Output Power_5762_Ant2



Maximum Conduct Output Power_5814_Ant2



5. Maximum Power Spectral Density For FCC

Test Channel	Level [dBm/MHz]		10log(1/x) Factor [dB]		PSD [dBm/MHz]		Limit [dBm/MHz]	Verdict
	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2		
5180	4.09	1.33	0.00	0.00	4.09	1.33	11.00	PASS
5210	3.92	-0.36	0.00	0.00	3.92	-0.36	11.00	PASS
5240	2.75	-1.27	0.00	0.00	2.75	-1.27	11.00	PASS

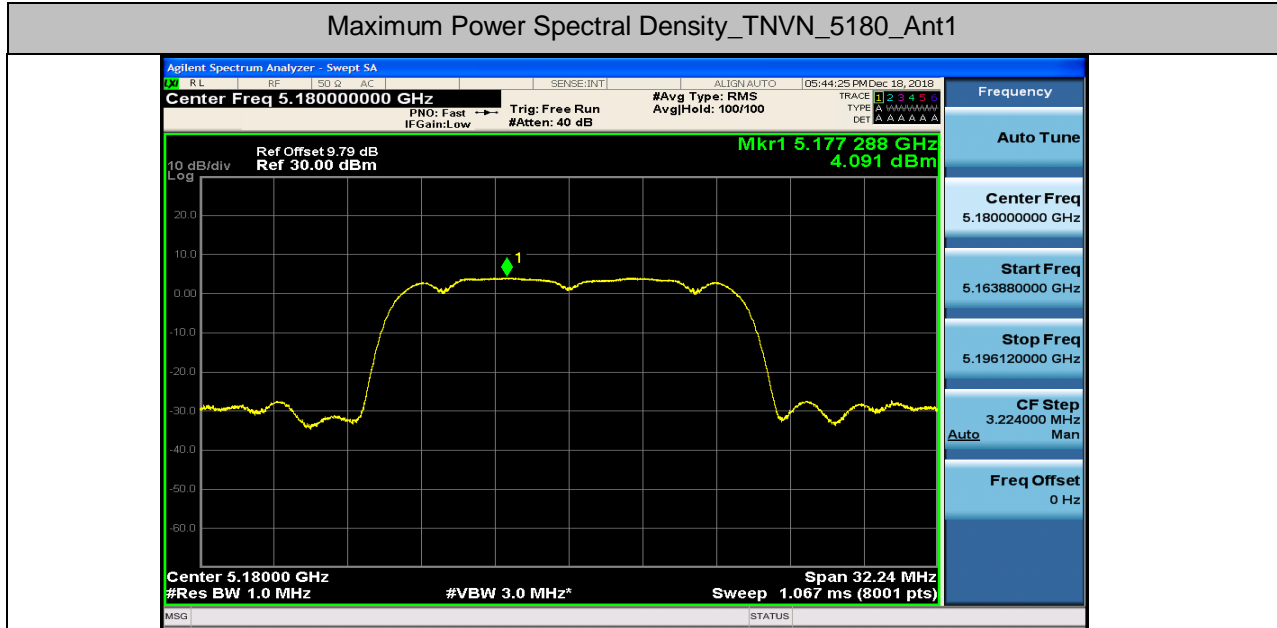
Test Channel	Level [dBm/300kHz]		10log(1/x) Factor [dB]		10log(500kHz/RBW) Factor [dB]		PSD [dBm/500kHz]		Limit [dBm/500kHz]	Verdict
	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2		
5736	-6.56	-3.02	0.00	0.00	2.22	2.22	-4.34	-0.8	17.00	PASS
5762	-6.19	-2.6	0.00	0.00	2.22	2.22	-3.97	-0.38	17.00	PASS
5814	-4.53	-2.15	0.00	0.00	2.22	2.22	-2.31	0.07	17.00	PASS

5.1. Maximum Power Spectral Density For ISED

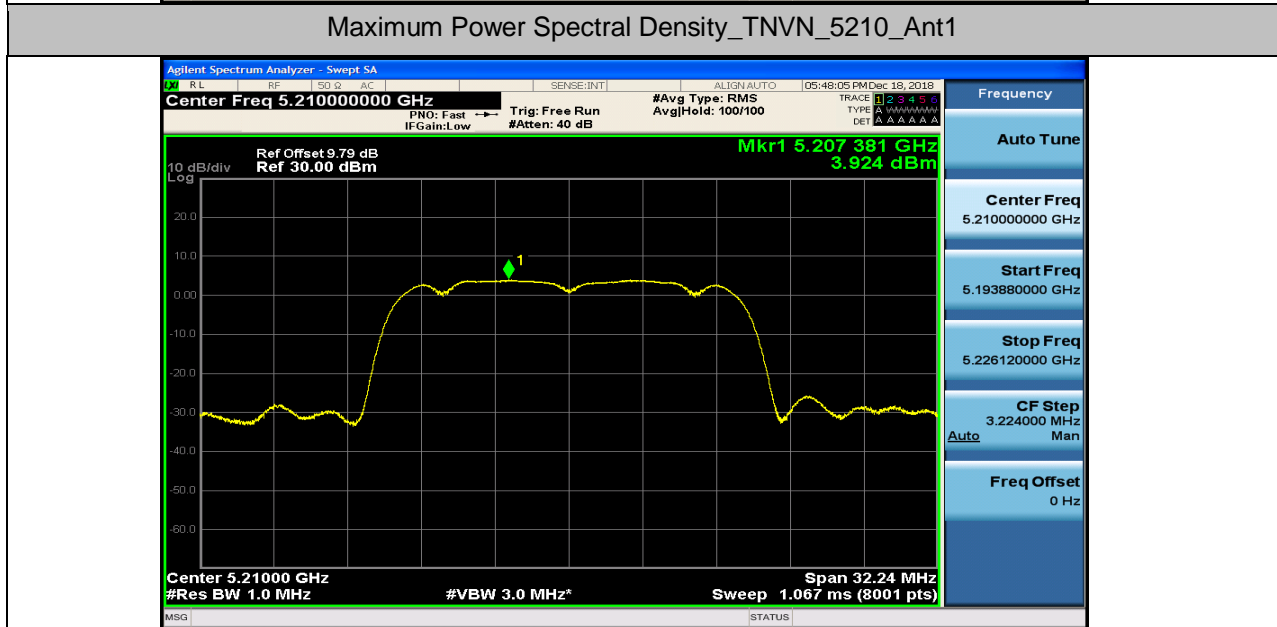
Test Channel	10log(1/x) Factor [dB]		PSD [dBm/MHz]		EIRP PSD [dBm/MHz]		Limit [dBm/MHz]	Verdict
	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2		
5180	0.00	0.00	4.09	1.33	6.09	3.33	10.00	PASS
5210	0.00	0.00	3.92	-0.36	5.92	1.64	10.00	PASS
5240	0.00	0.00	2.75	-1.27	4.75	0.73	10.00	PASS

Test Channel	Level [dBm/300kHz]		10log(1/x) Factor [dB]		10log(500kHz/RBW) Factor [dB]		PSD [dBm/500kHz]		Limit [dBm/500kHz]	Verdict
	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2		
5736	-6.56	-3.02	0.00	0.00	2.22	2.22	-4.34	-0.8	17.00	PASS
5762	-6.19	-2.6	0.00	0.00	2.22	2.22	-3.97	-0.38	17.00	PASS
5814	-4.53	-2.15	0.00	0.00	2.22	2.22	-2.31	0.07	17.00	PASS

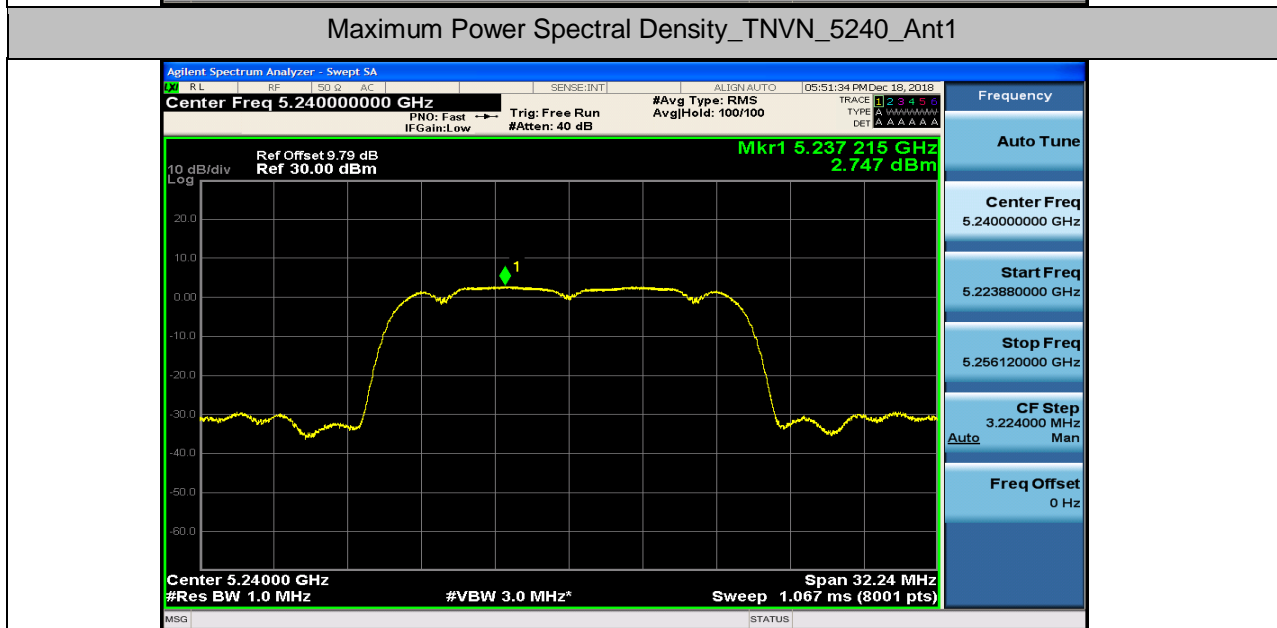
Maximum Power Spectral Density_TNVN_5180_Ant1



Maximum Power Spectral Density_TNVN_5210_Ant1



Maximum Power Spectral Density_TNVN_5240_Ant1



Maximum Power Spectral Density_TNVN_5736_Ant1



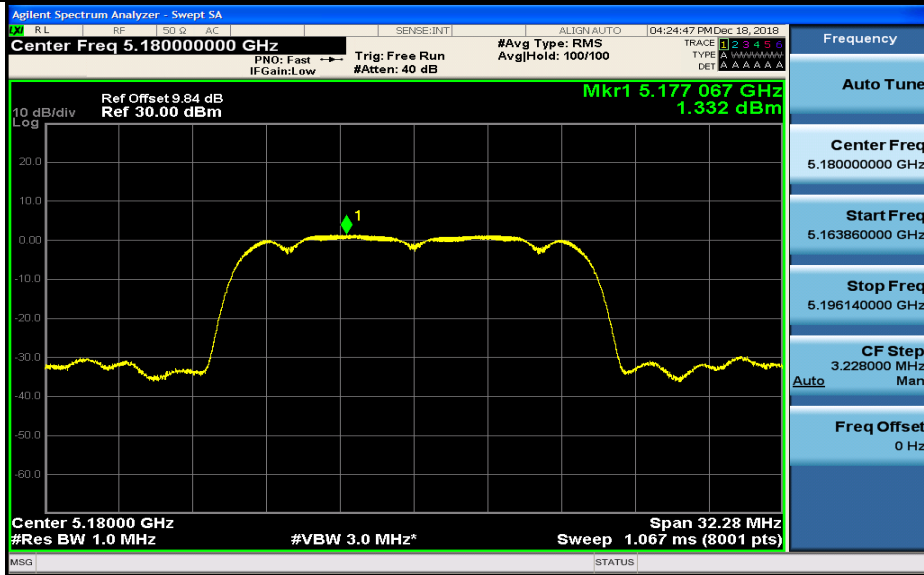
Maximum Power Spectral Density_TNVN_5762_Ant1



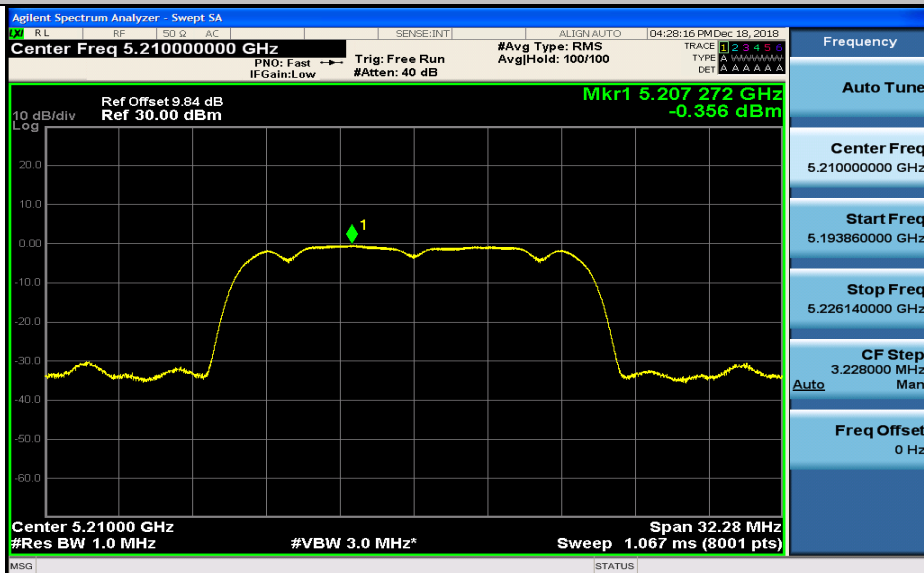
Maximum Power Spectral Density_TNVN_5814_Ant1



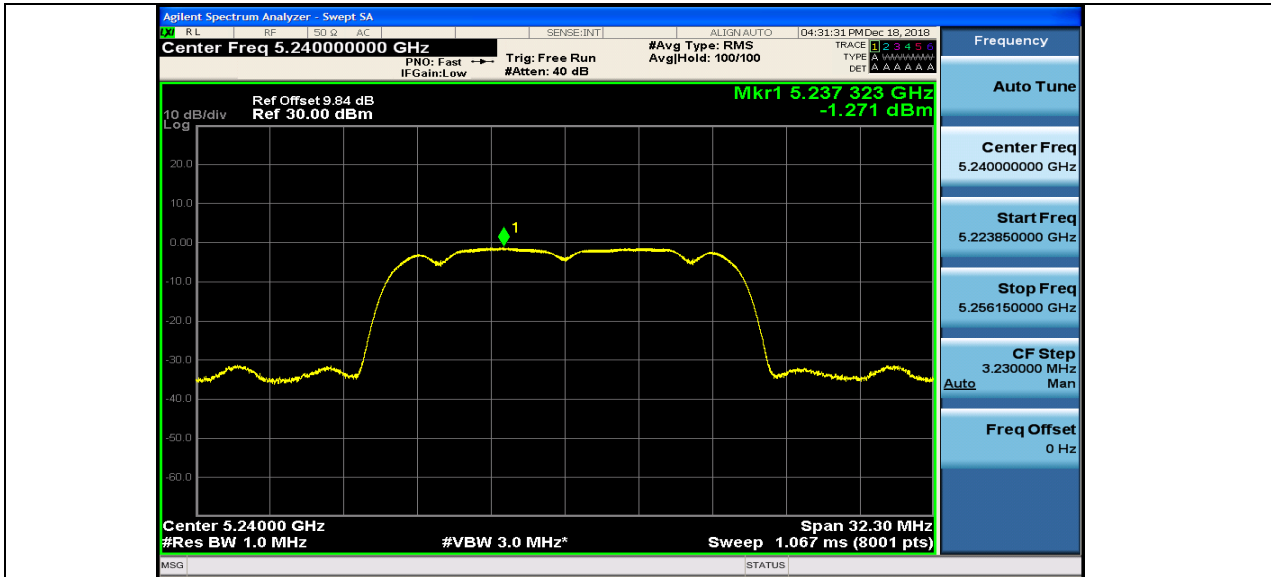
Maximum Power Spectral Density_TNVN_5180_Ant2



Maximum Power Spectral Density_TNVN_5210_Ant2



Maximum Power Spectral Density_TNVN_5240_Ant2



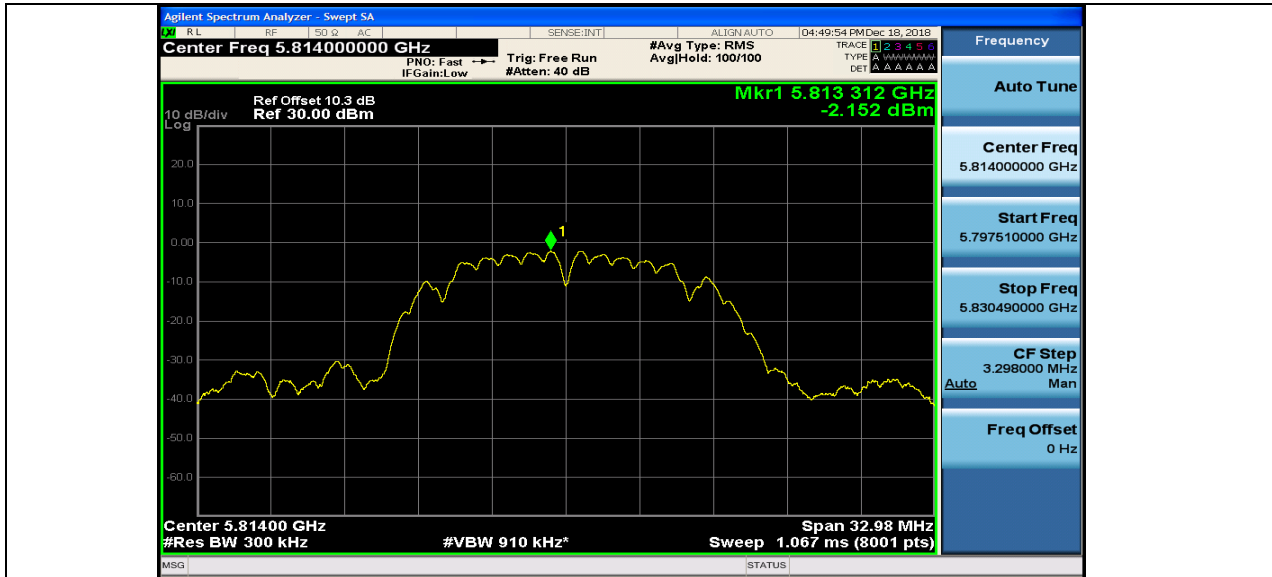
Maximum Power Spectral Density_TNVN_5736_Ant2



Maximum Power Spectral Density_TNVN_5762_Ant2



Maximum Power Spectral Density_TNVN_5814_Ant2



6. Frequency stability

Test Conditions		Operation Frequency (MHz)	Test Frequency (MHz)		Freq. Dev. (MHz)		Limit (GHz)	Result
Volt (V AC)	Temp (C°)		ANT1	ANT2	ANT1	ANT2		
Normal(120)	Extreme(-20)	5180	5180.0325	5180.0362	0.0325	0.0362	5.15-5.25	Pass
	Extreme(-10)		5180.0314	5180.0332	0.0314	0.0332		Pass
	Extreme(0)		5180.0353	5180.0217	0.0353	0.0217		Pass
	Extreme(+10)		5180.0331	5180.0229	0.0331	0.0229		Pass
	Extreme(+20)		5180.032	5180.0246	0.032	0.0246		Pass
	Extreme(+30)		5180.0316	5180.0187	0.0316	0.0187		Pass
	Extreme(+40)		5180.0241	5180.0245	0.0241	0.0245		Pass
	Extreme(+55)		5180.0429	5180.0198	0.0429	0.0198		Pass
Extreme(108)	Norma(+20)	5180.0113	5180.0453	0.0113	0.0453	Pass		
Extreme(132)		5180.0357	5180.0172	0.0357	0.0172	Pass		
Normal(120)	Extreme(-20)	5240	5240.0225	5240.0386	0.0225	0.0386	5.15-5.25	Pass
	Extreme(-10)		5240.0247	5240.0257	0.0247	0.0257		Pass
	Extreme(0)		5240.0358	5240.0396	0.0358	0.0396		Pass
	Extreme(+10)		5240.0359	5240.0446	0.0359	0.0446		Pass
	Extreme(+20)		5240.0446	5240.0472	0.0446	0.0472		Pass
	Extreme(+30)		5240.0228	5240.0363	0.0228	0.0363		Pass
	Extreme(+40)		5240.0111	5240.0459	0.0111	0.0459		Pass
	Extreme(+55)		5240.0483	5240.0475	0.0483	0.0475		Pass
Extreme(108)	Norma(20)	5240.0464	5240.0335	0.0464	0.0335	Pass		
Extreme(132)		5240.0392	5240.0252	0.0392	0.0252	Pass		

Test Conditions		Operation Frequency (MHz)	Test Frequency (MHz)		Freq. Dev. (MHz)		Limit (GHz)	Result
Volt (V AC))	Temp (C°)		ANT1	ANT2	ANT1	ANT2		
Normal(120)	Extreme(-20)	5736	5736.0459	5736.0369	0.0459	0.0369	5.725-5.85	Pass
	Extreme(-10)		5736.0442	5736.0272	0.0442	0.0272		Pass
	Extreme(0)		5736.0279	5736.0238	0.0279	0.0238		Pass
	Extreme(+10)		5736.0125	5736.0142	0.0125	0.0142		Pass
	Extreme(+20)		5736.0331	5736.0249	0.0331	0.0249		Pass
	Extreme(+30)		5736.0468	5736.0392	0.0468	0.0392		Pass
	Extreme(+40)		5736.0325	5736.0296	0.0325	0.0296		Pass
	Extreme(+55)		5736.0292	5736.0128	0.0292	0.0128		Pass
Extreme(108)	Norma(+20)	5736.0436	5736.0342	0.0436	0.0342	Pass		
Extreme(132)		5736.0499	5736.0157	0.0499	0.0157	Pass		
Normal(120)	Extreme(-20)	5814	5814.0431	5814.0387	0.0431	0.0387	5.725-5.85	Pass
	Extreme(-10)		5814.0455	5814.0231	0.0455	0.0231		Pass
	Extreme(0)		5814.0262	5814.0336	0.0262	0.0336		Pass
	Extreme(+10)		5814.0243	5814.0135	0.0243	0.0135		Pass
	Extreme(+20)		5814.0198	5814.0147	0.0198	0.0147		Pass
	Extreme(+30)		5814.0363	5814.0396	0.0363	0.0396		Pass
	Extreme(+40)		5814.0175	5814.0129	0.0175	0.0129		Pass
	Extreme(+55)		5814.0279	5814.0335	0.0279	0.0335		Pass
Extreme(108)	Norma(20)	5814.0483	5814.0462	0.0483	0.0462	Pass		
Extreme(132)		5814.0124	5814.0139	0.0124	0.0139	Pass		

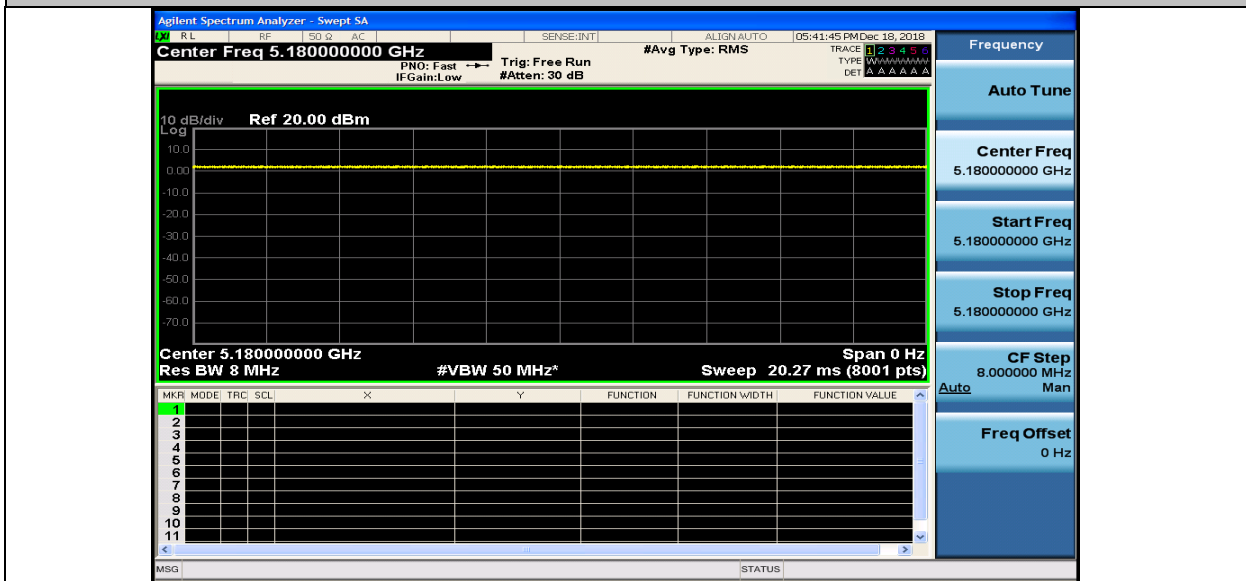


Remark: Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

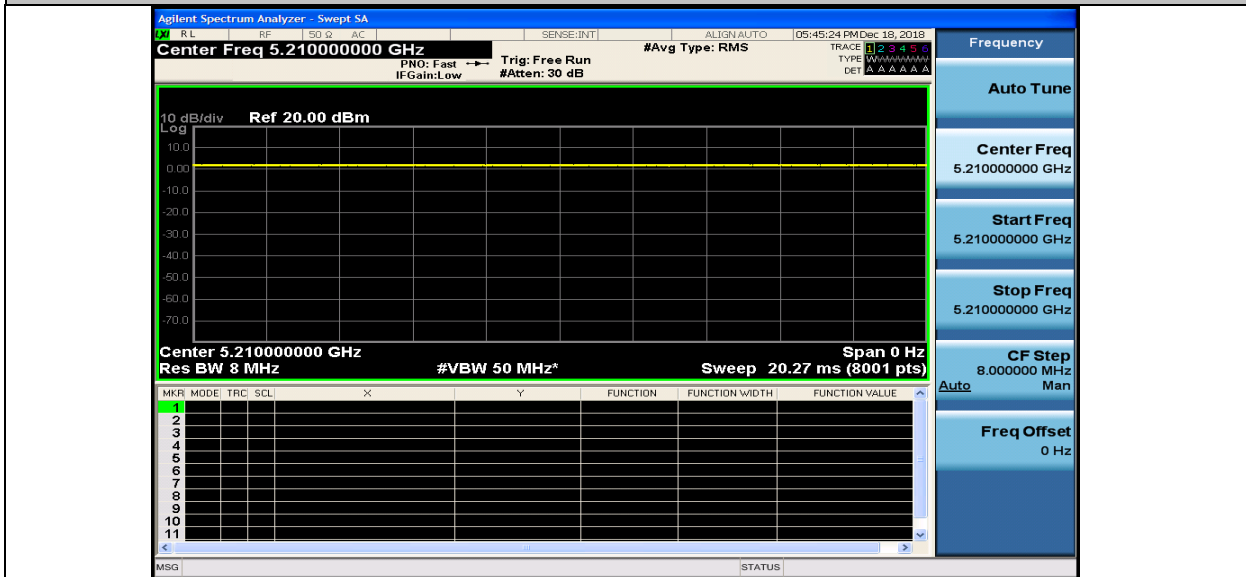
7.Duty Cycle

Test Channel	Duty Cycle[%]		10log(1/x) Factor[dB]	
	Ant1	Ant2	Ant1	Ant2
5180	100.00	100.00	0.00	0.00
5210	100.00	100.00	0.00	0.00
5240	100.00	100.00	0.00	0.00
5736	100.00	100.00	0.00	0.00
5762	100.00	100.00	0.00	0.00
5814	100.00	100.00	0.00	0.00

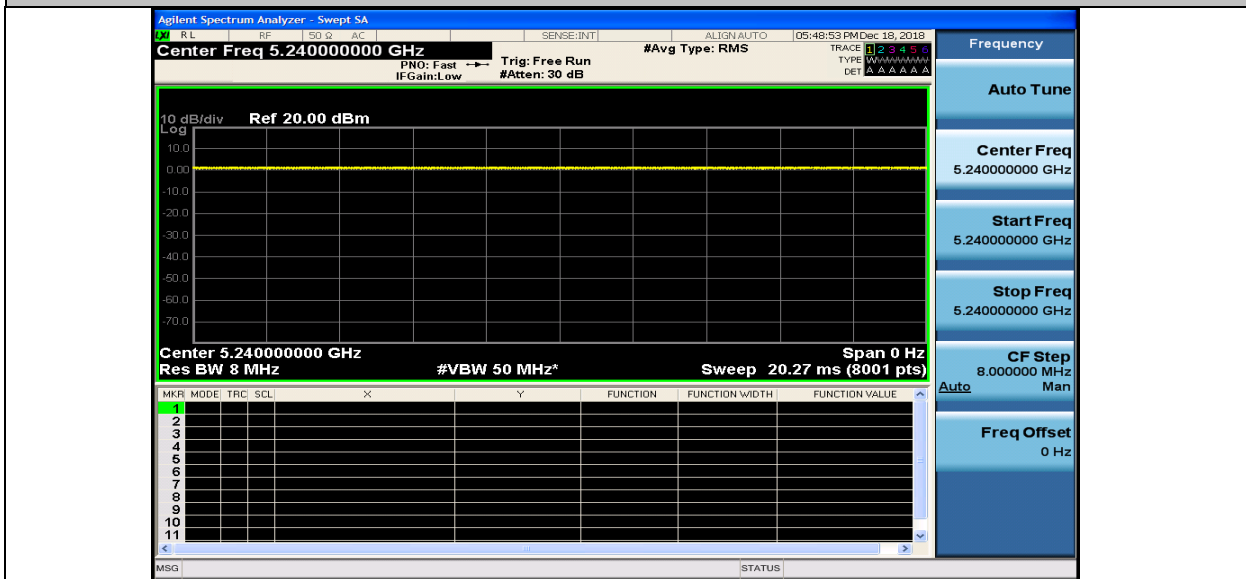
Duty Cycle_5180_Ant1



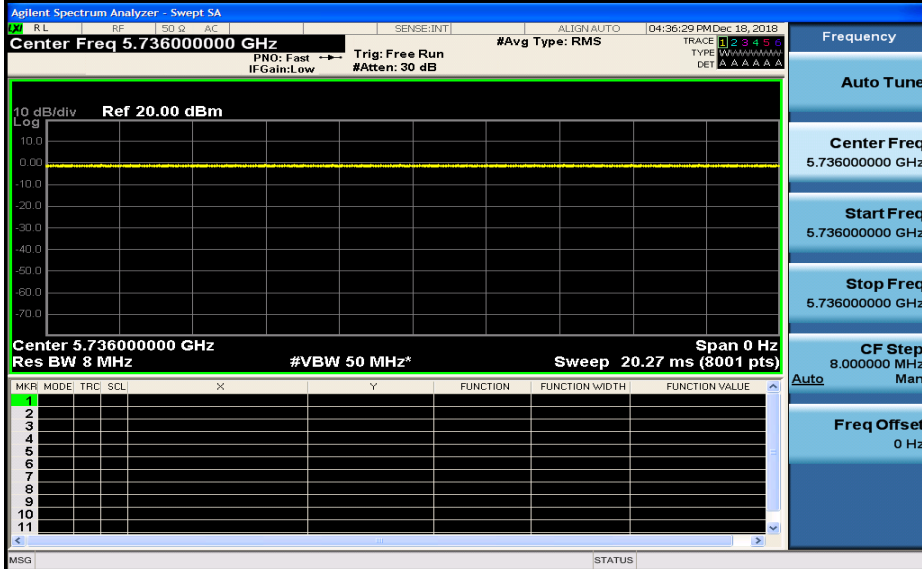
Duty Cycle_5210_Ant1



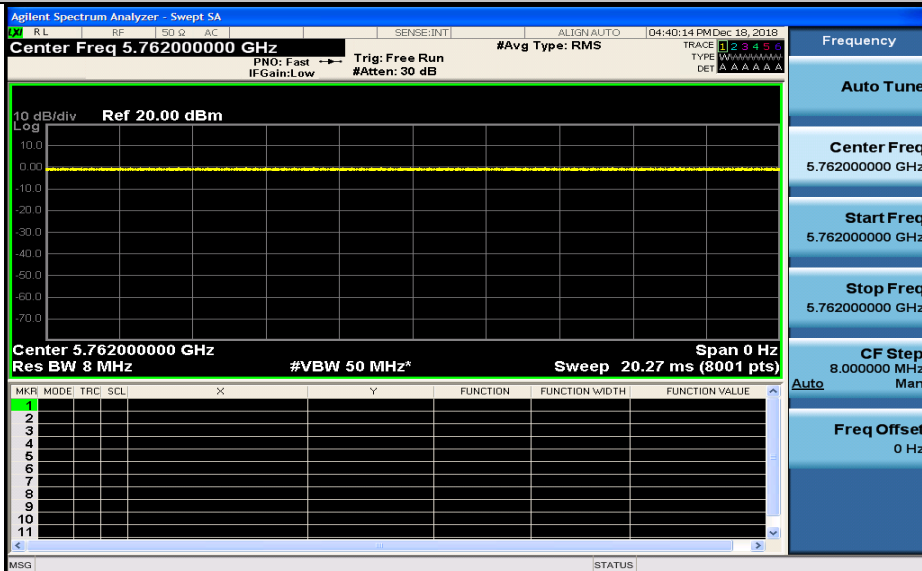
Duty Cycle_5240_Ant1



Duty Cycle_5736_Ant2



Duty Cycle_5762_Ant2



Duty Cycle_5814_Ant2

