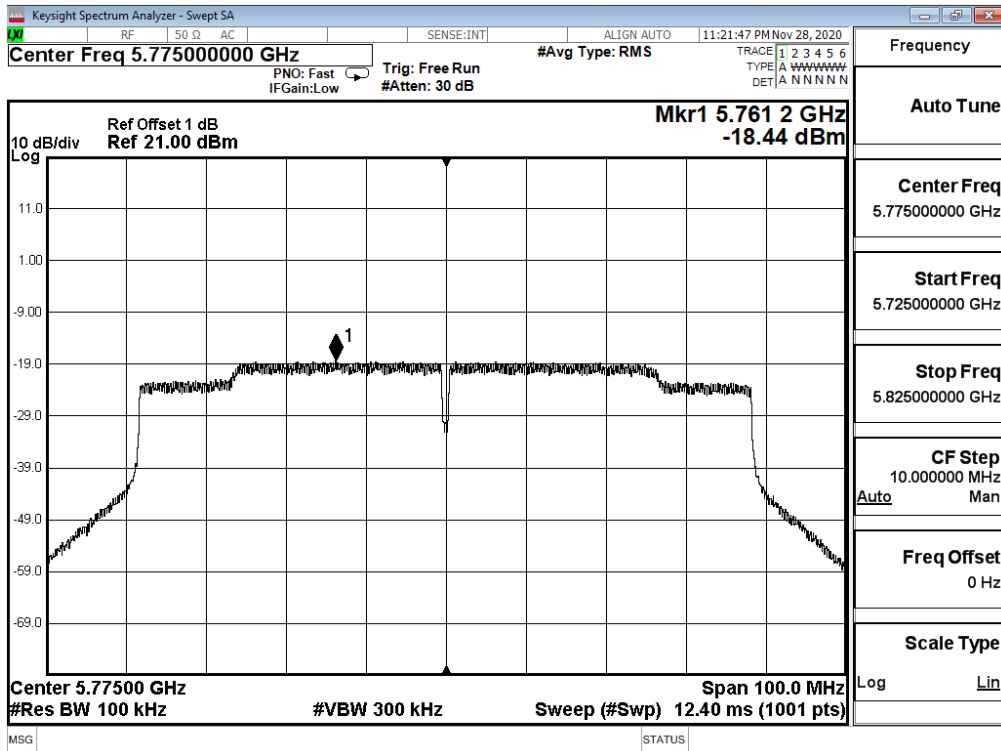
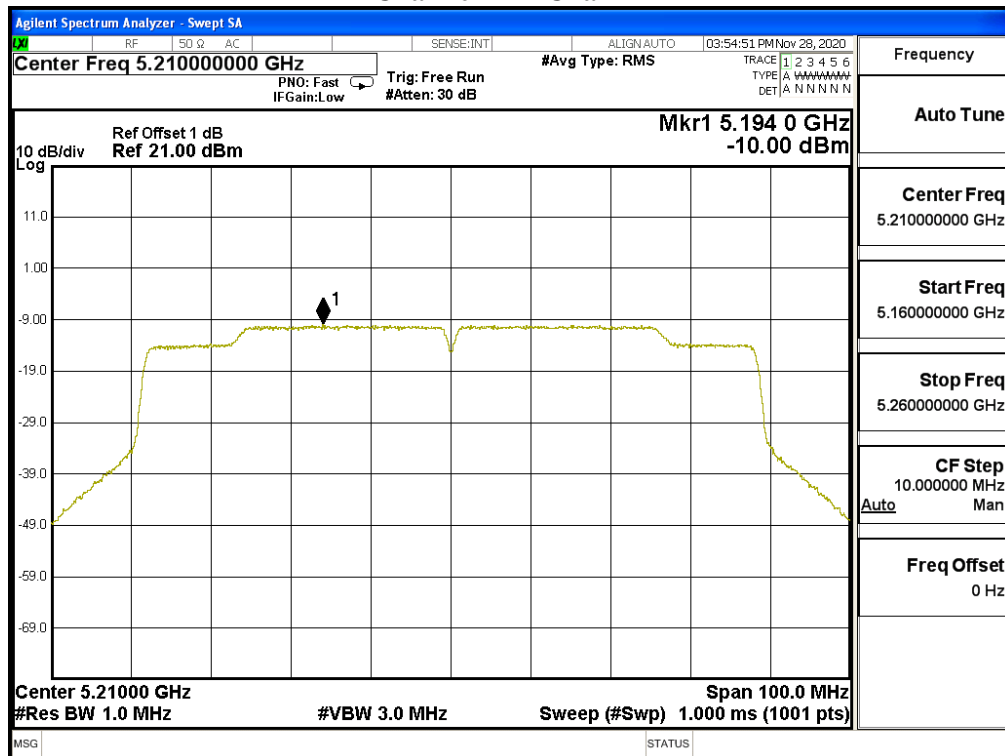


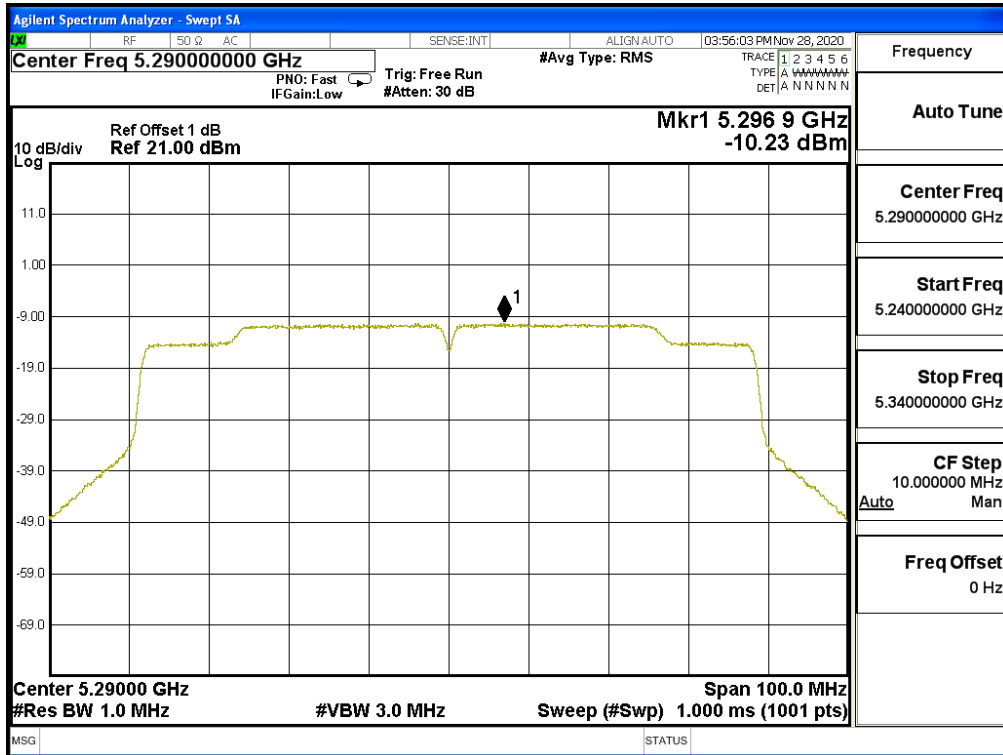
Channel 155 – Chain A



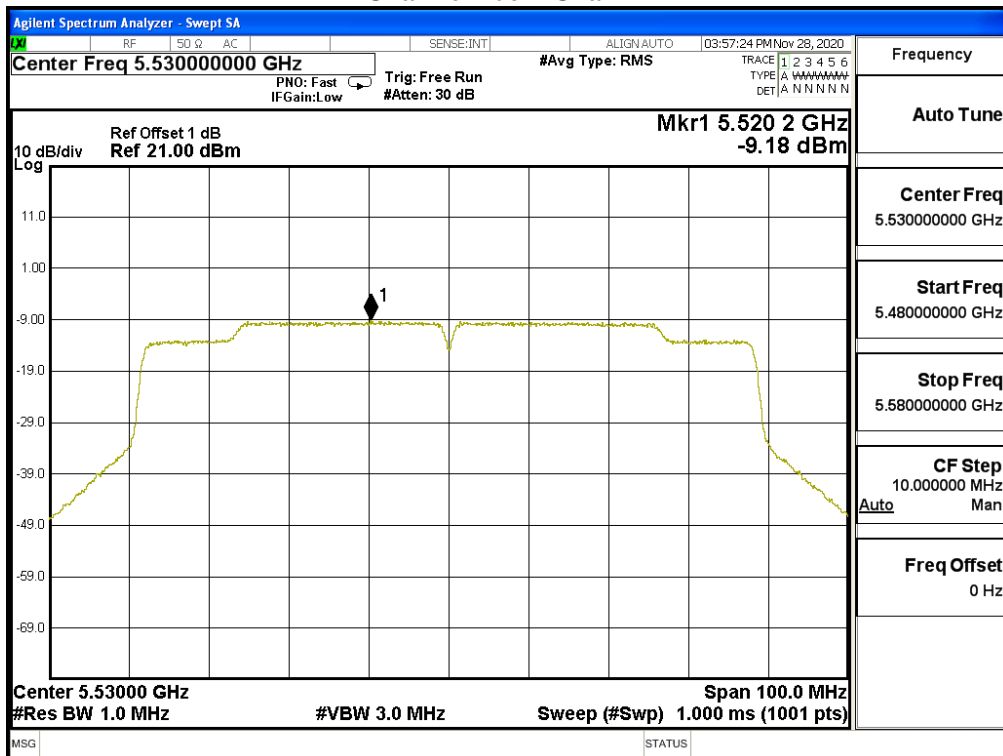
Channel 42 – Chain B



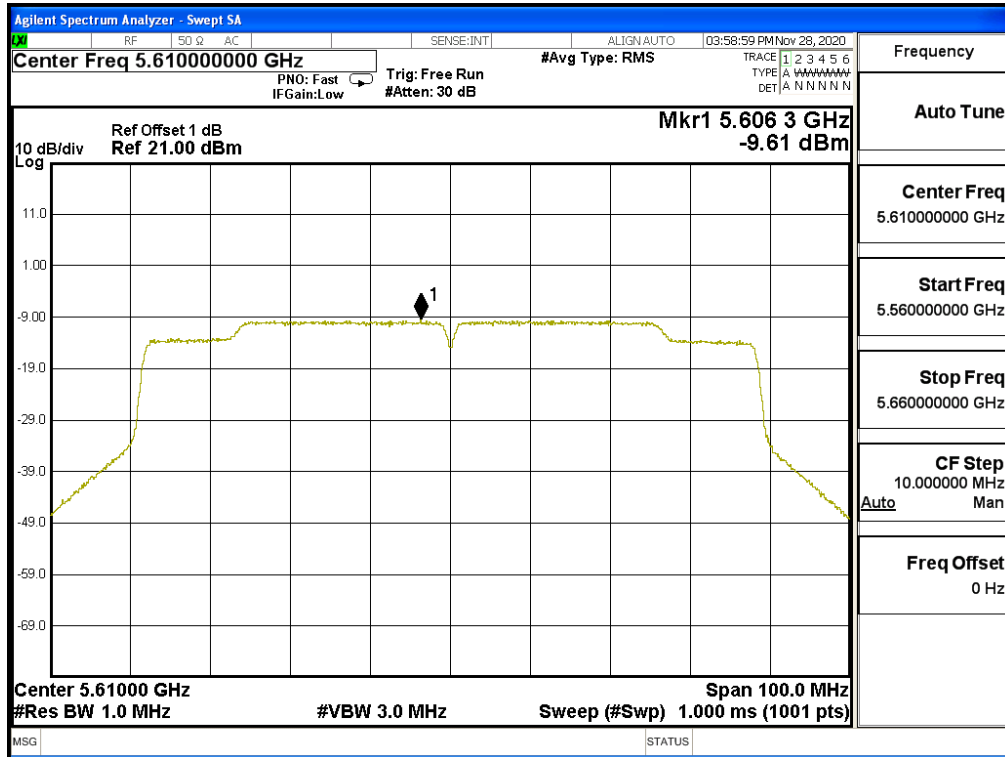
Channel 58 – Chain B



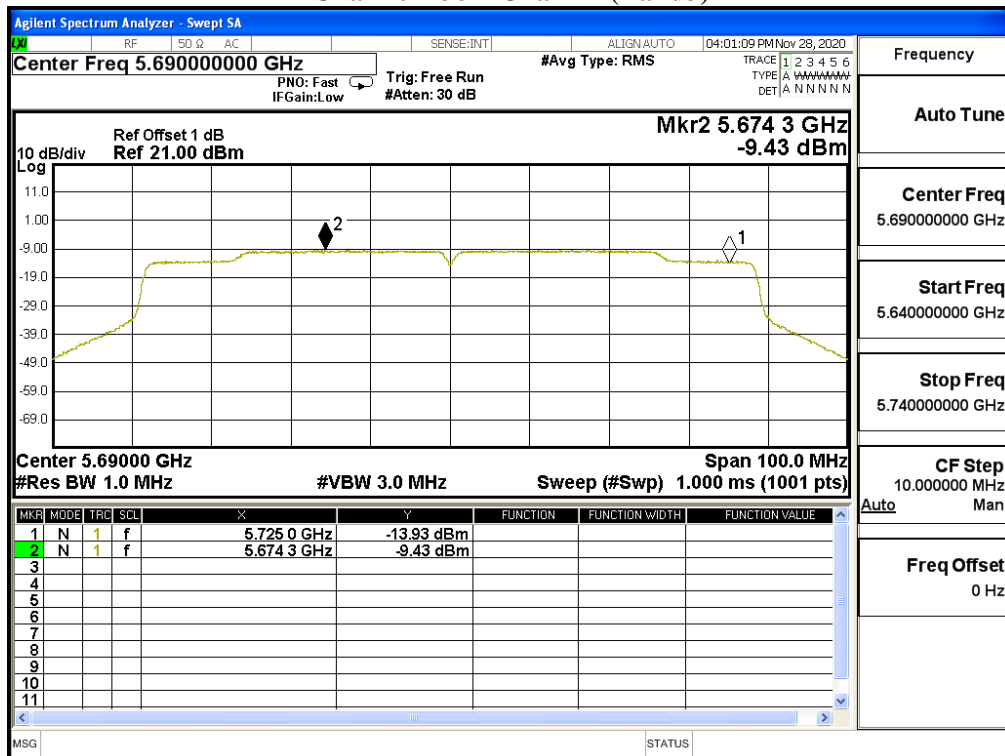
Channel 106 – Chain B



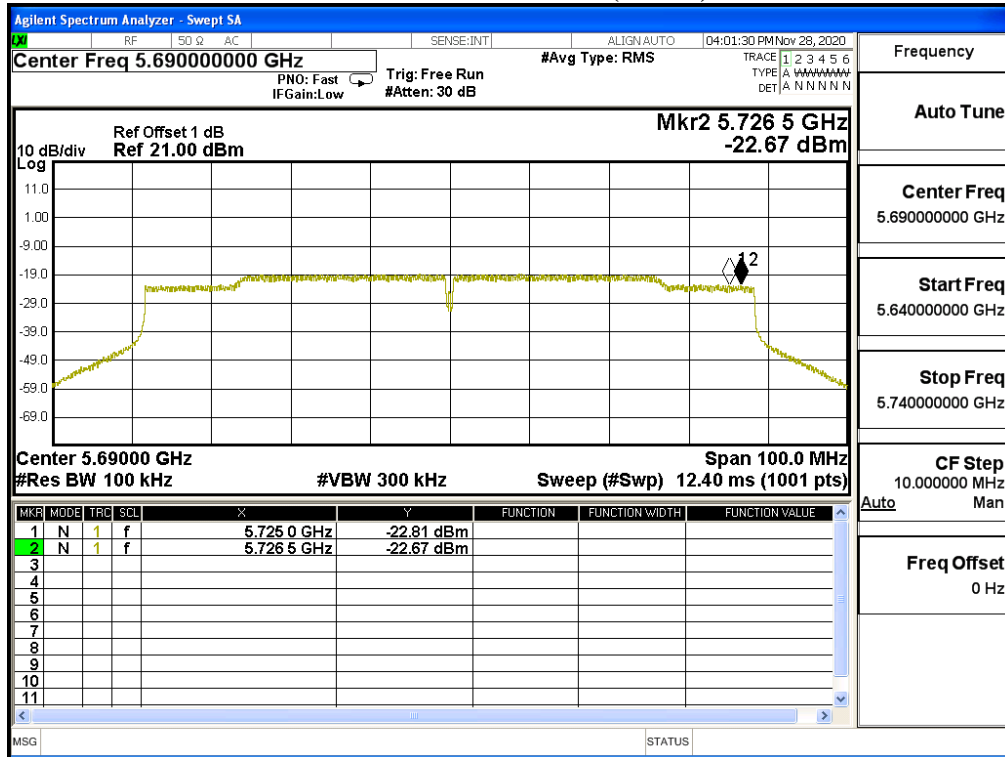
Channel 122 – Chain B



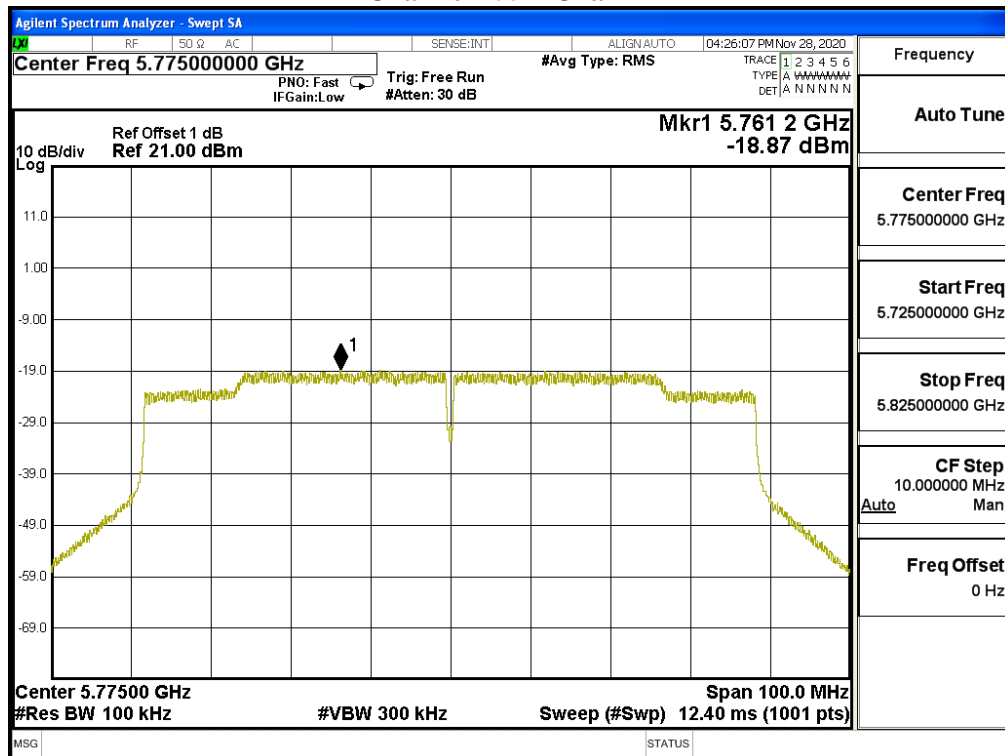
Channel 138 – Chain B (Band3)



Channel 138 – Chain B (Band4)



Channel 155 – Chain B

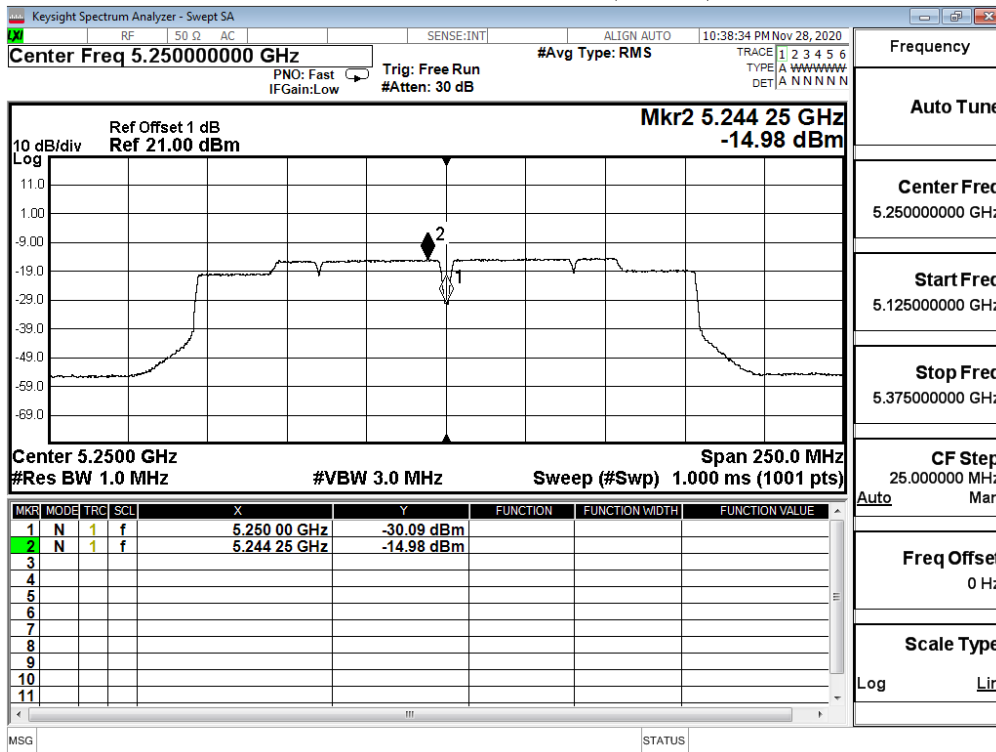


Product : Notebook Computers
 Test Item : Peak Power Spectral Density
 Test Mode : Mode 22: MIMO Transmit (802.11ac-160BW_130Mbps)

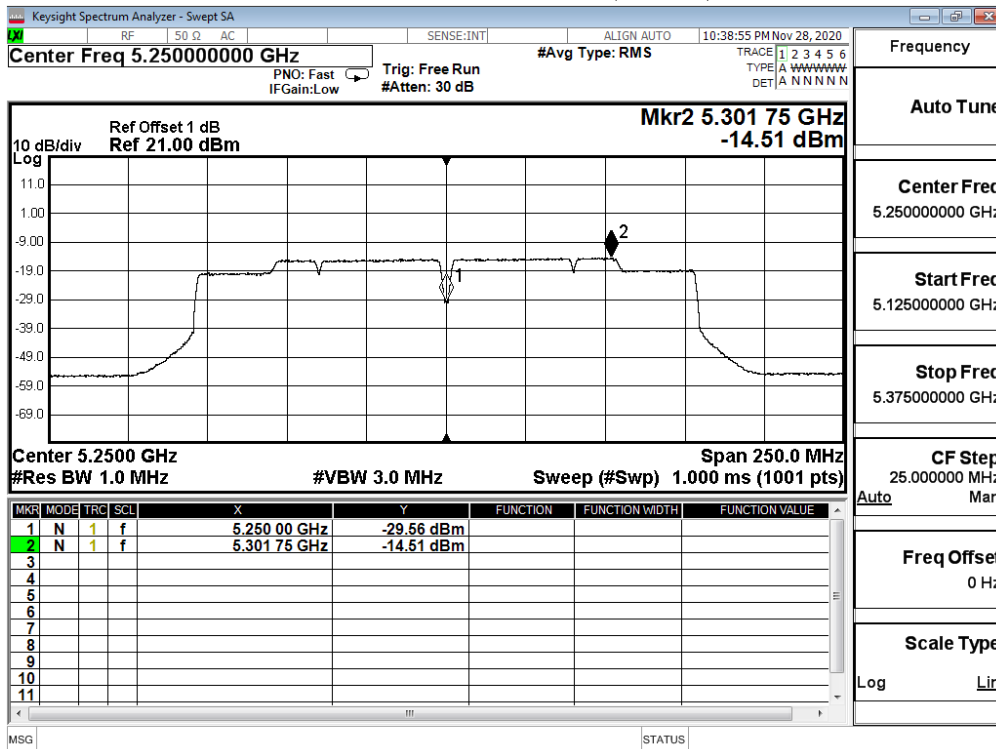
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	10*log(2) (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
50	5250(Band1)	A	-15.000	3.01	0.47	-11.520	<11	Pass
		B	-13.630	3.01	0.47	-10.150	<11	Pass
50	5250(Band2)	A	-14.250	3.01	0.47	-10.770	<11	Pass
		B	-13.210	3.01	0.47	-9.730	<11	Pass
114	5570	A	-13.090	3.01	0.47	-9.610	<11	Pass
		B	-12.570	3.01	0.47	-9.090	<11	Pass

Note 1: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

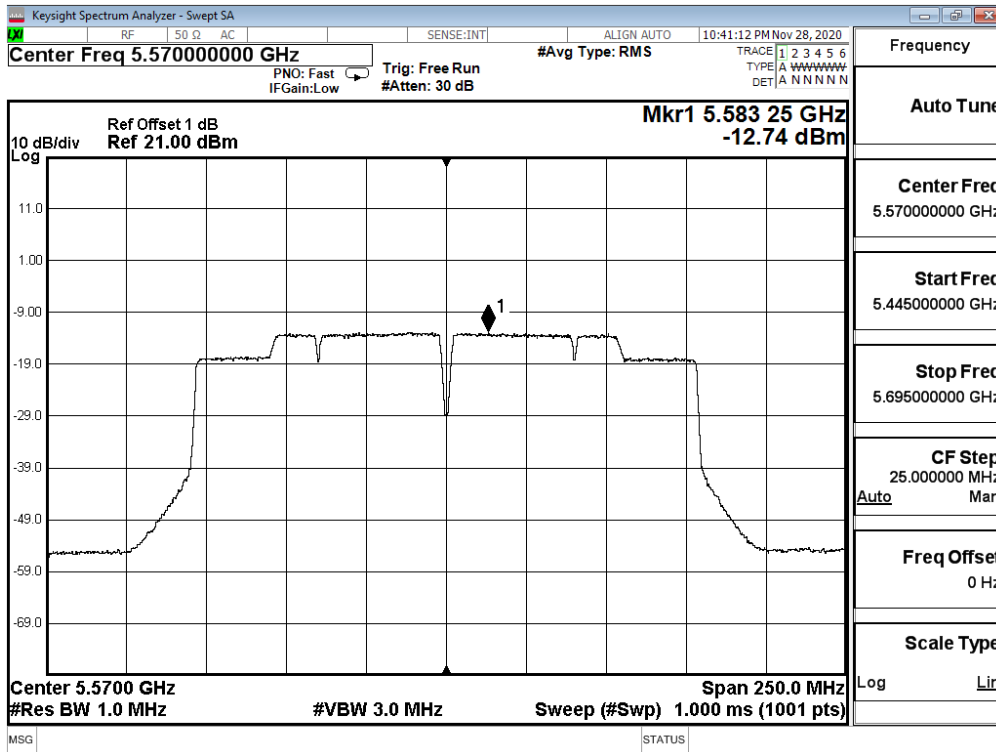
Channel 50 – Chain A (Band 1)



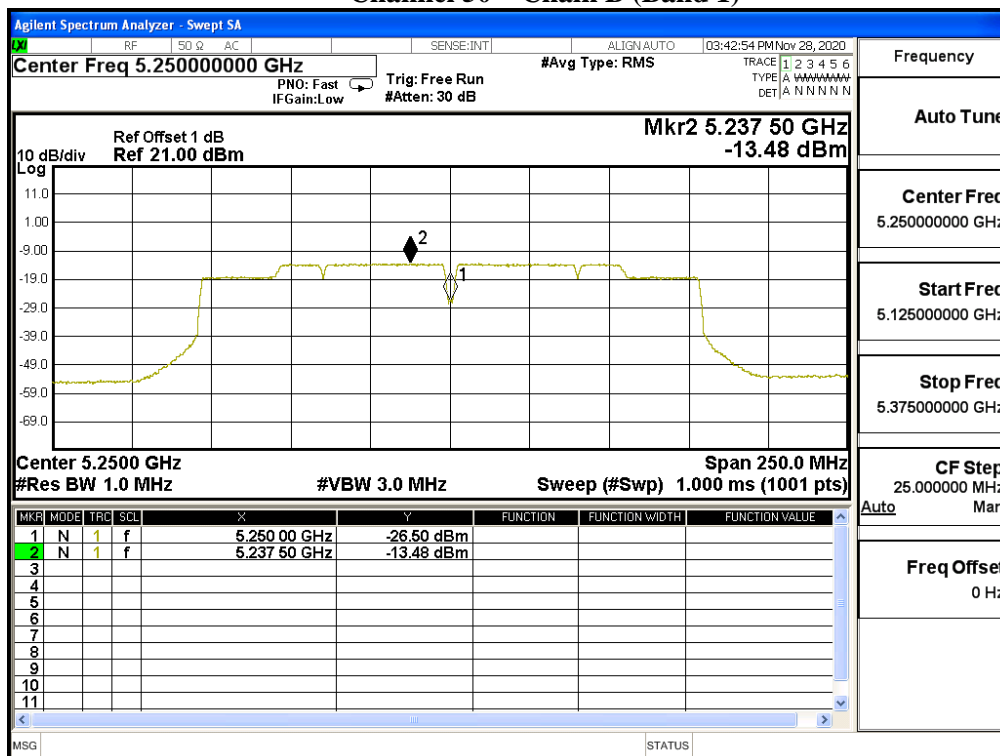
Channel 50 – Chain A (Band 2)



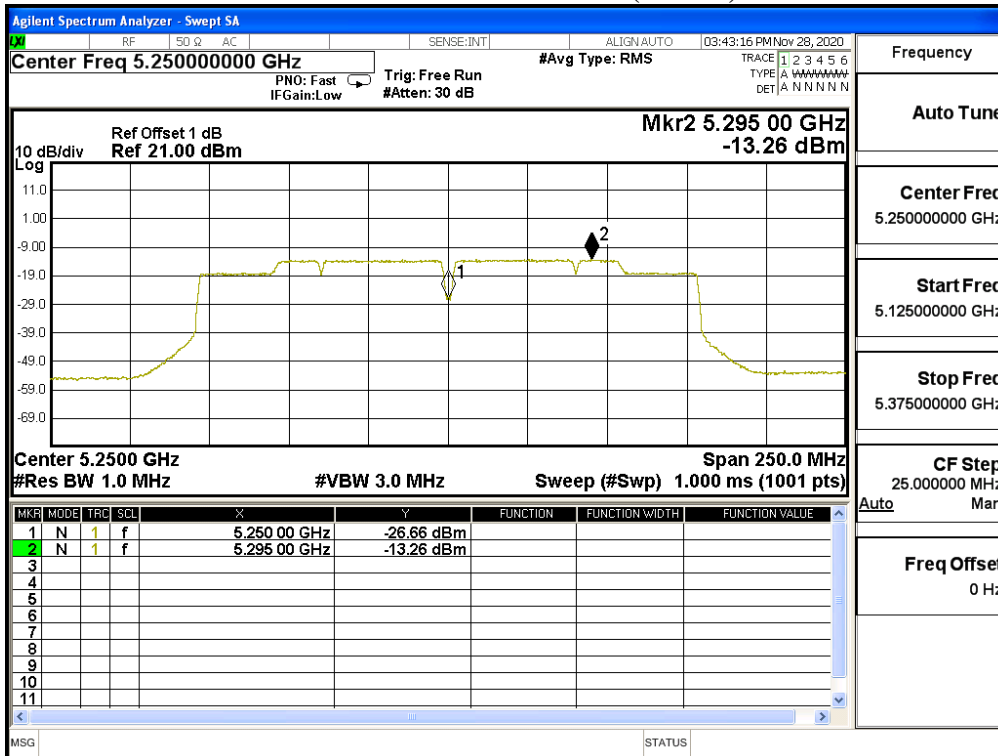
Channel 114 – Chain A



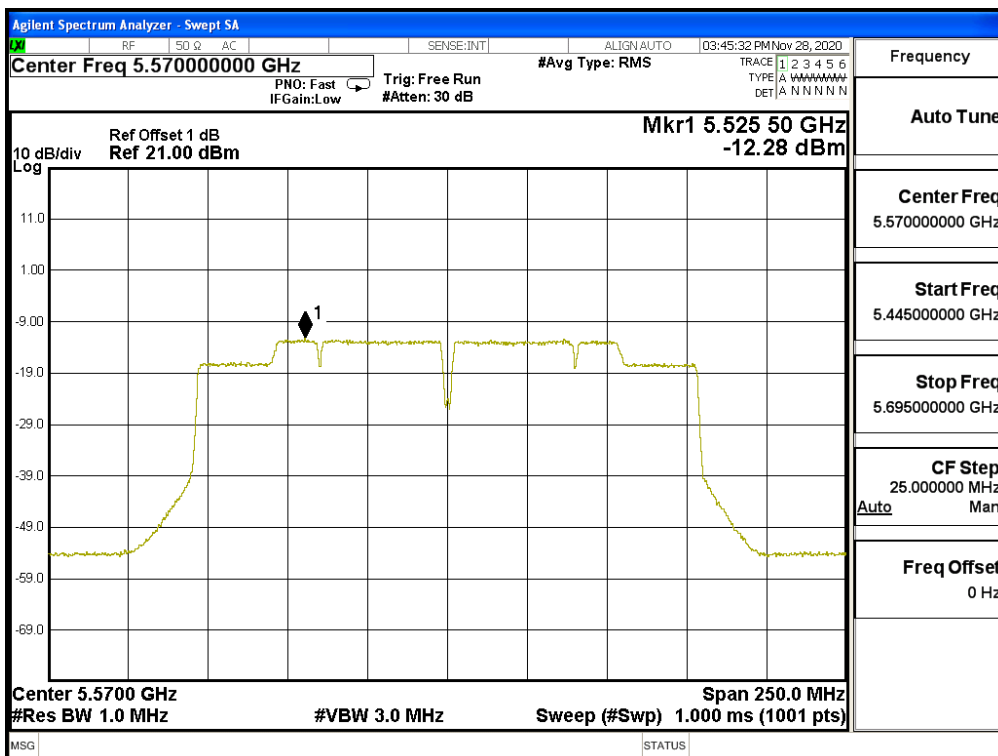
Channel 50 – Chain B (Band 1)



Channel 50 – Chain B (Band 2)



Channel 114 – Chain B



Product : Notebook Computers
 Test Item : Peak Power Spectral Density
 Test Mode : Mode 23: MIMO Transmit (802.11ax-20BW_17.2Mbps)

RU config: Full

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	10*log(2) (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
36	5180	A	-5.40	3.01	0.07	-2.32	<11	Pass
		B	-4.67	3.01	0.07	-1.59	<11	Pass
44	5220	A	-5.98	3.01	0.07	-2.90	<11	Pass
		B	-4.38	3.01	0.07	-1.30	<11	Pass
48	5240	A	-5.89	3.01	0.07	-2.81	<11	Pass
		B	-4.64	3.01	0.07	-1.56	<11	Pass
52	5260	A	-5.80	3.01	0.07	-2.72	<11	Pass
		B	-4.72	3.01	0.07	-1.64	<11	Pass
60	5300	A	-5.76	3.01	0.07	-2.68	<11	Pass
		B	-4.72	3.01	0.07	-1.64	<11	Pass
64	5320	A	-5.87	3.01	0.07	-2.79	<11	Pass
		B	-4.78	3.01	0.07	-1.70	<11	Pass
100	5500	A	-4.42	3.01	0.07	-1.34	<11	Pass
		B	-3.96	3.01	0.07	-0.88	<11	Pass
116	5580	A	-4.46	3.01	0.07	-1.38	<11	Pass
		B	-4.15	3.01	0.07	-1.07	<11	Pass
140	5700	A	-4.22	3.01	0.07	-1.14	<11	Pass
		B	-4.20	3.01	0.07	-1.12	<11	Pass

Note 1: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PSD (dBm)	Required Limit (dBm)	Result
144	5720(Band3)	A	-4.22	--	0.07	-1.14	<11	Pass
		B	-4.48	--	0.07	-1.40	<11	Pass
144	5720(Band4)	A	-14.36	6.98	0.07	-4.37	<30	Pass
		B	-14.52	6.98	0.07	-4.53	<30	Pass
149	5745	A	-14.03	6.98	0.07	-4.04	<30	Pass
		B	-14.48	6.98	0.07	-4.49	<30	Pass
157	5785	A	-13.82	6.98	0.07	-3.83	<30	Pass
		B	-14.56	6.98	0.07	-4.57	<30	Pass
165	5825	A	-13.83	6.98	0.07	-3.84	<30	Pass
		B	-14.56	6.98	0.07	-4.57	<30	Pass

Note 1: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

RU config: Other

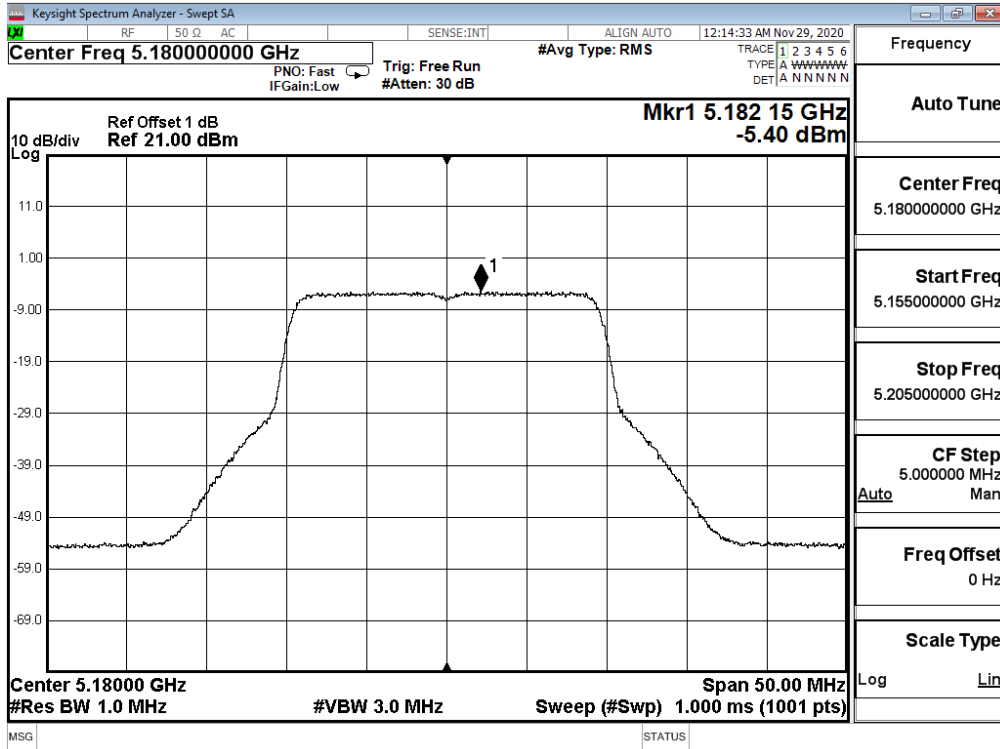
Channel / Frequenc	RU setting	Chain	PPSD (dBm)	10*log(2) (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
36/5180	26/0	A	3.06	3.01	0.24	6.31	<11	Pass
		B	4.38	3.01	0.24	7.63	<11	Pass
	52/37	A	0.50	3.01	0.24	3.75	<11	Pass
		B	1.68	3.01	0.24	4.93	<11	Pass
	106/53	A	-2.75	3.01	0.24	0.50	<11	Pass
		B	-1.16	3.01	0.24	2.09	<11	Pass
64/5320	26/8	A	3.13	3.01	0.24	6.38	<11	Pass
		B	4.75	3.01	0.24	8.00	<11	Pass
	52/40	A	-2.11	3.01	0.24	1.14	<11	Pass
		B	-1.48	3.01	0.24	1.77	<11	Pass
	106/54	A	1.07	3.01	0.24	4.32	<11	Pass
		B	1.49	3.01	0.24	4.74	<11	Pass
100/5500	26/0	A	4.70	3.01	0.24	7.95	<11	Pass
		B	4.90	3.01	0.24	8.15	<11	Pass
	52/37	A	-0.79	3.01	0.24	2.46	<11	Pass
		B	-0.94	3.01	0.24	2.31	<11	Pass
	106/53	A	2.05	3.01	0.24	5.30	<11	Pass
		B	2.24	3.01	0.24	5.49	<11	Pass
140/5700	26/8	A	4.70	3.01	0.24	7.95	<11	Pass
		B	4.52	3.01	0.24	7.77	<11	Pass
	52/40	A	-0.64	3.01	0.24	2.61	<11	Pass
		B	-0.79	3.01	0.24	2.46	<11	Pass
	106/54	A	2.29	3.01	0.24	5.54	<11	Pass
		B	2.29	3.01	0.24	5.54	<11	Pass

Note 1: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

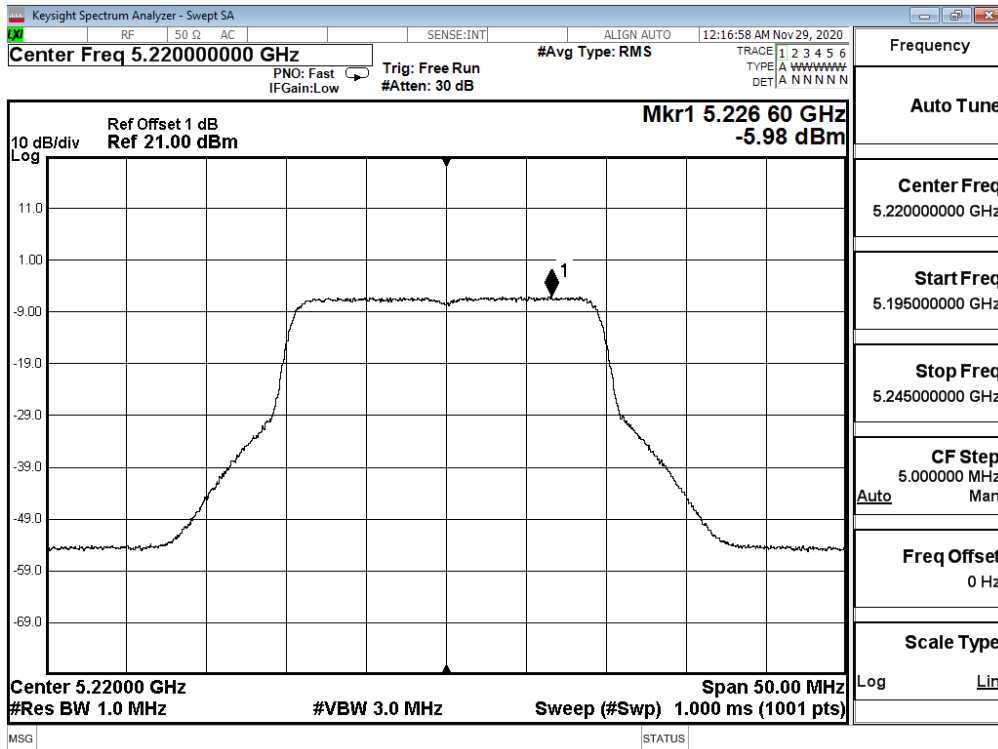
Channel / Frequenc	RU setting	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
144/5745	26-0	A	-4.44	6.98	0.24	5.79	<30	Pass
		B	-4.86	6.98	0.24	5.37	<30	Pass
	52-37	A	-7.26	6.98	0.24	2.97	<30	Pass
		B	-7.67	6.98	0.24	2.56	<30	Pass
	106-53	A	-10.38	6.98	0.24	-0.15	<30	Pass
		B	-10.79	6.98	0.24	-0.56	<30	Pass

Note 1: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

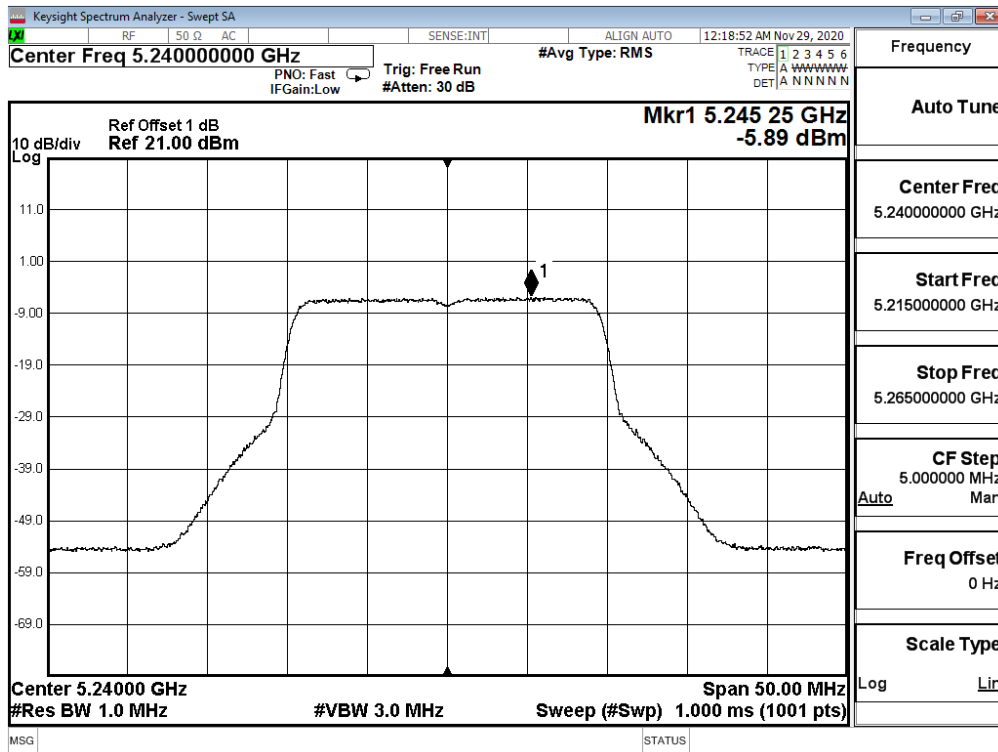
RU config: Full
Channel 36 – Chain A



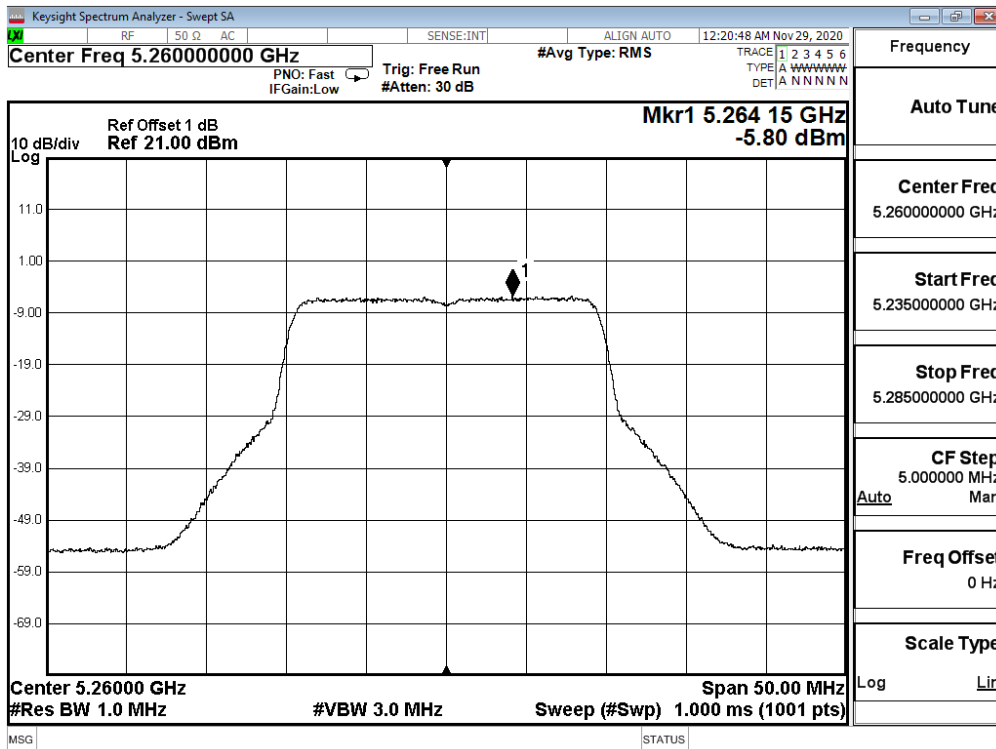
Channel 44 – Chain A



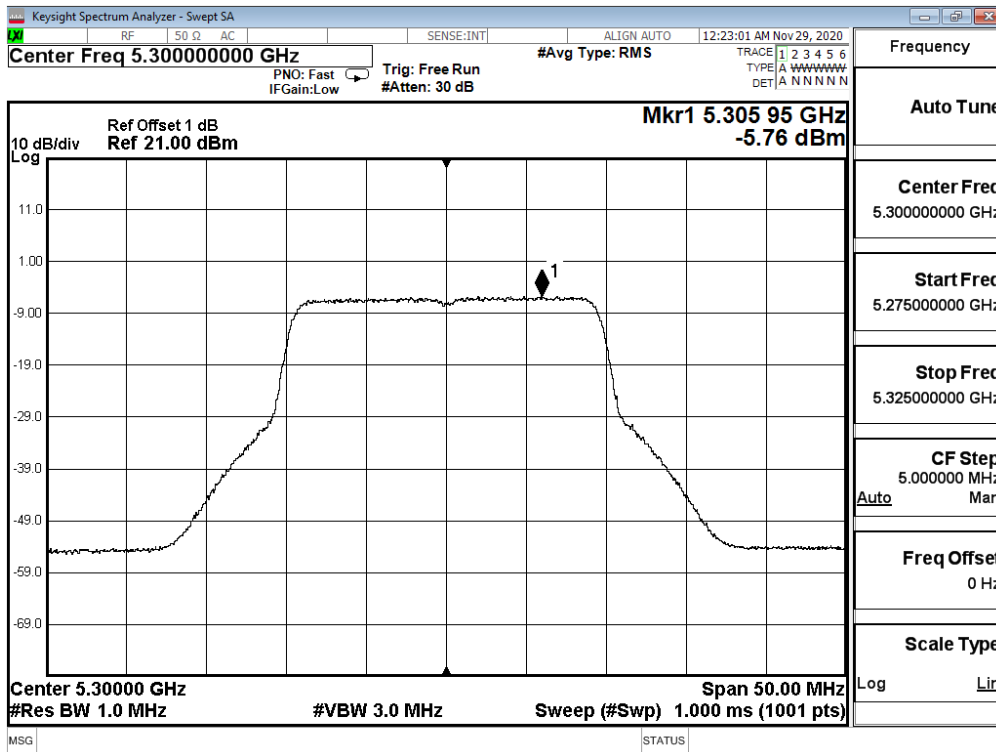
Channel 48 – Chain A



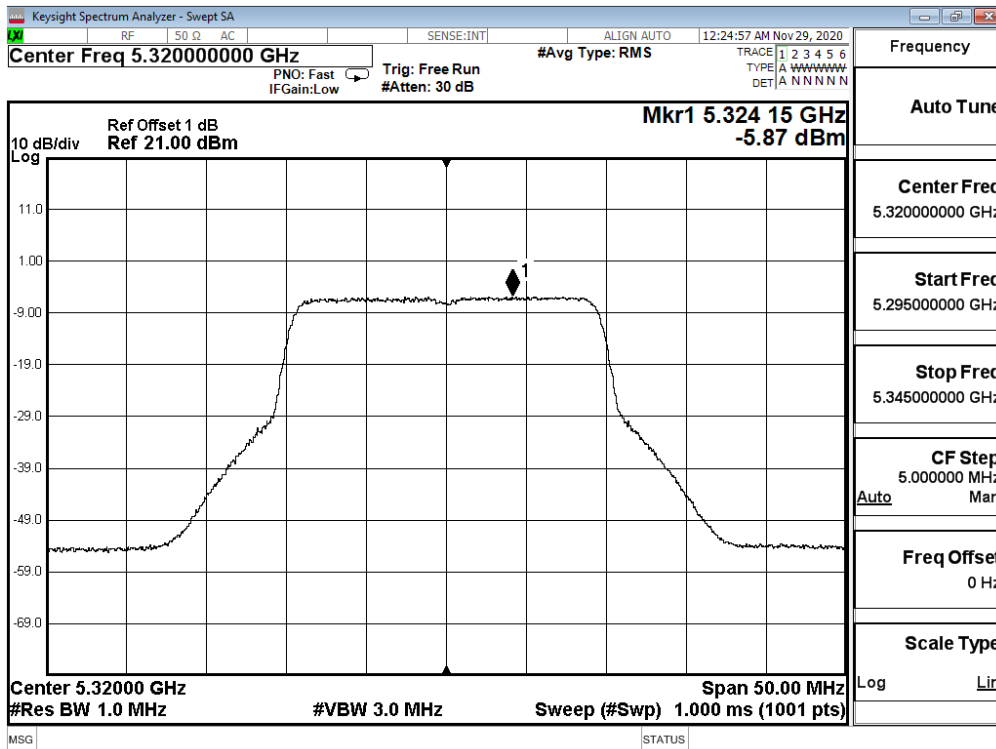
Channel 52 – Chain A



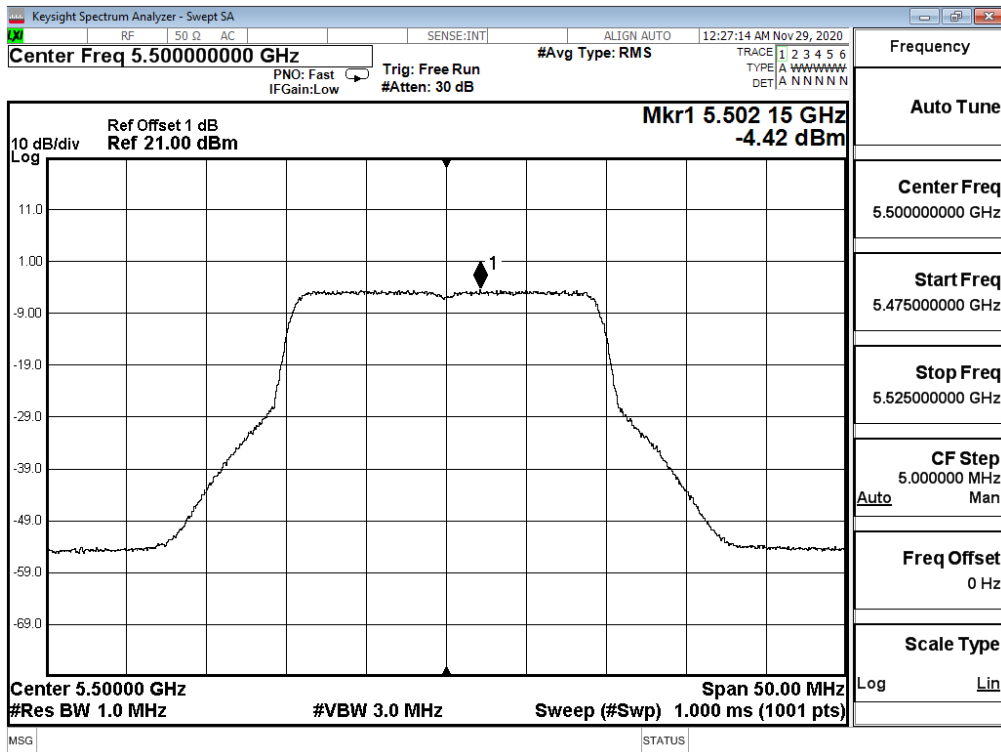
Channel 60 – Chain A



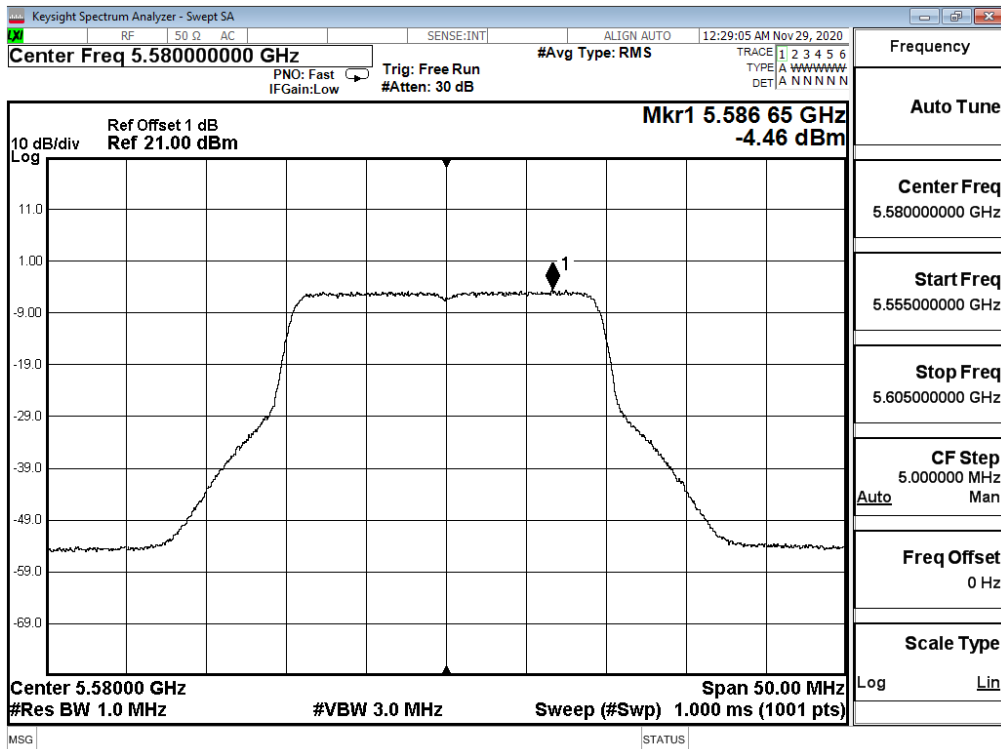
Channel 64 – Chain A



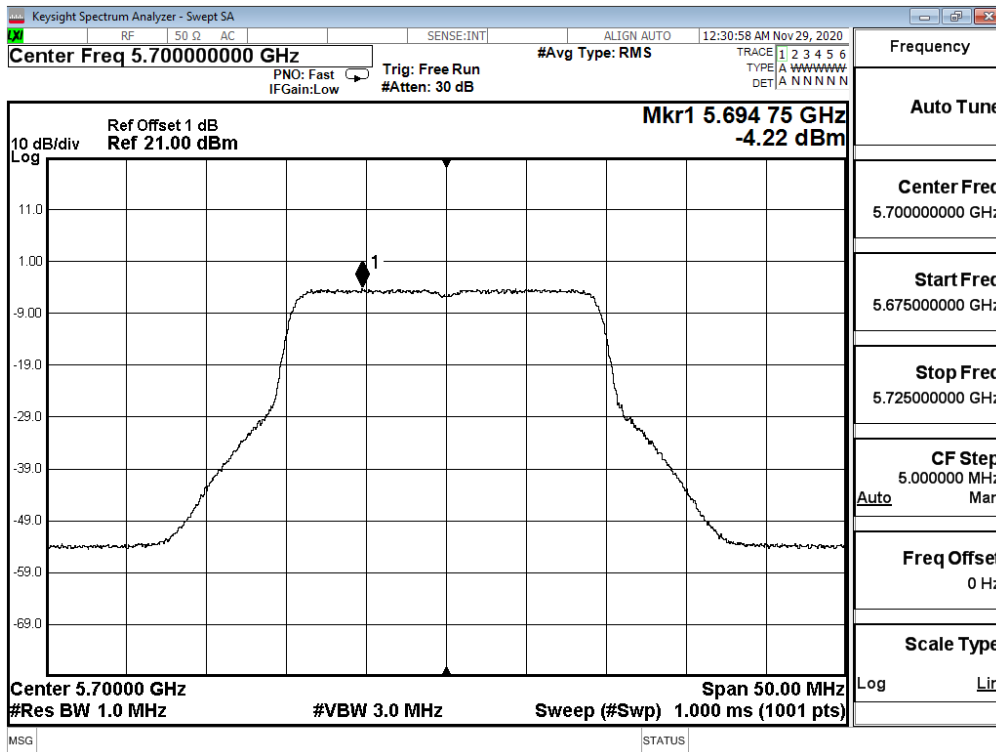
Channel 100 – Chain A



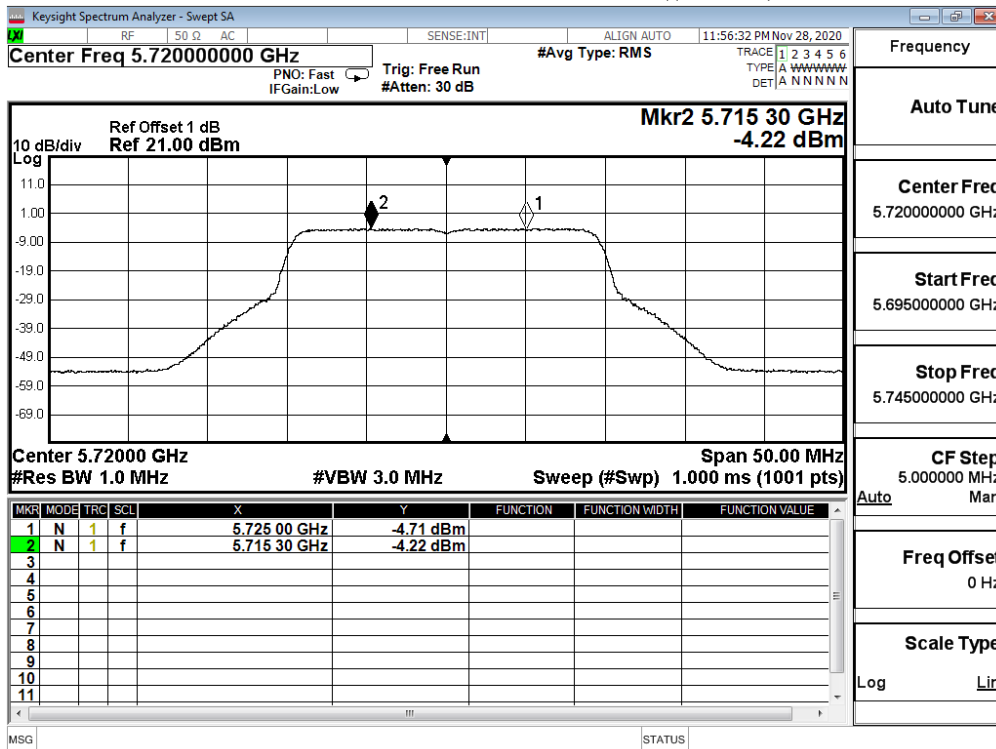
Channel 116 – Chain A



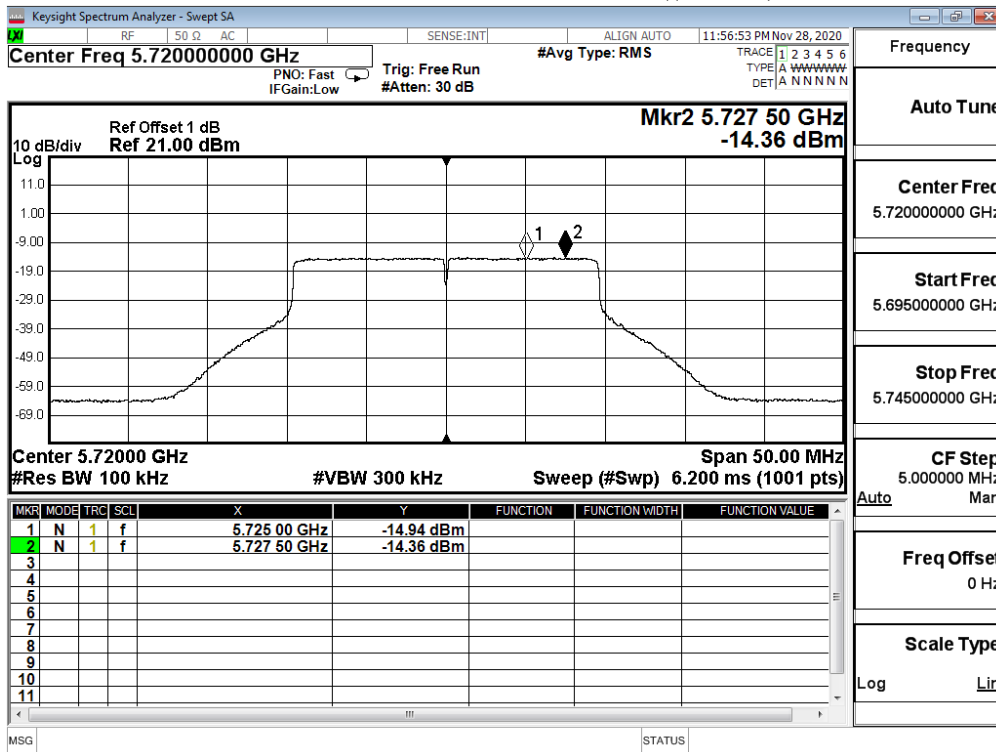
Channel 140 – Chain A



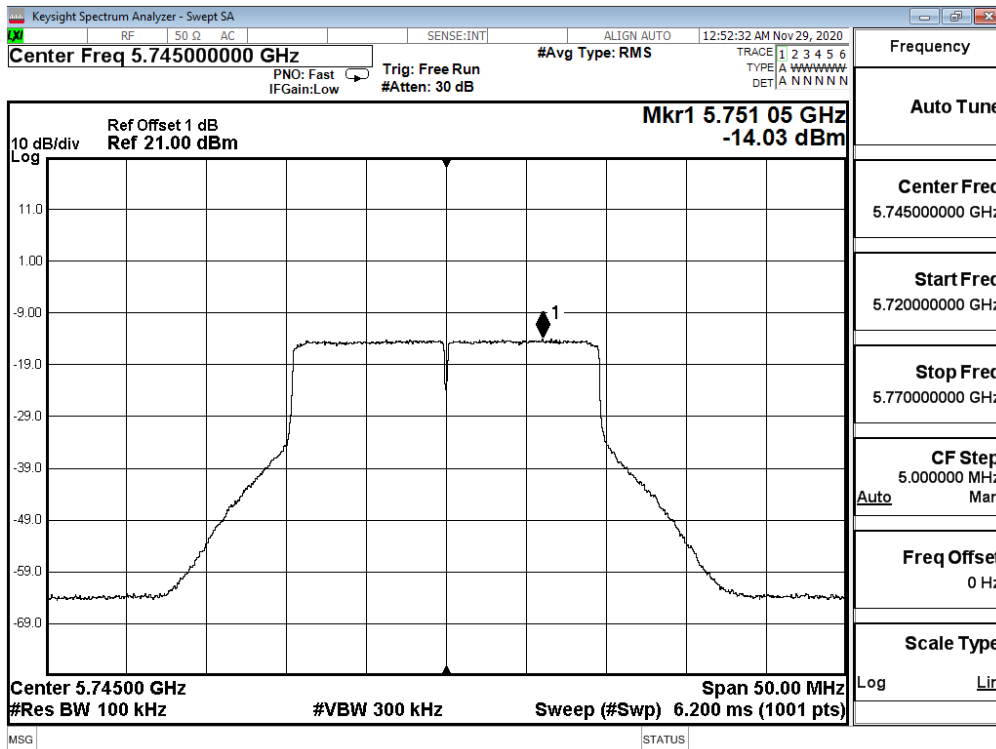
Channel 144 – Chain A ((Band 3))



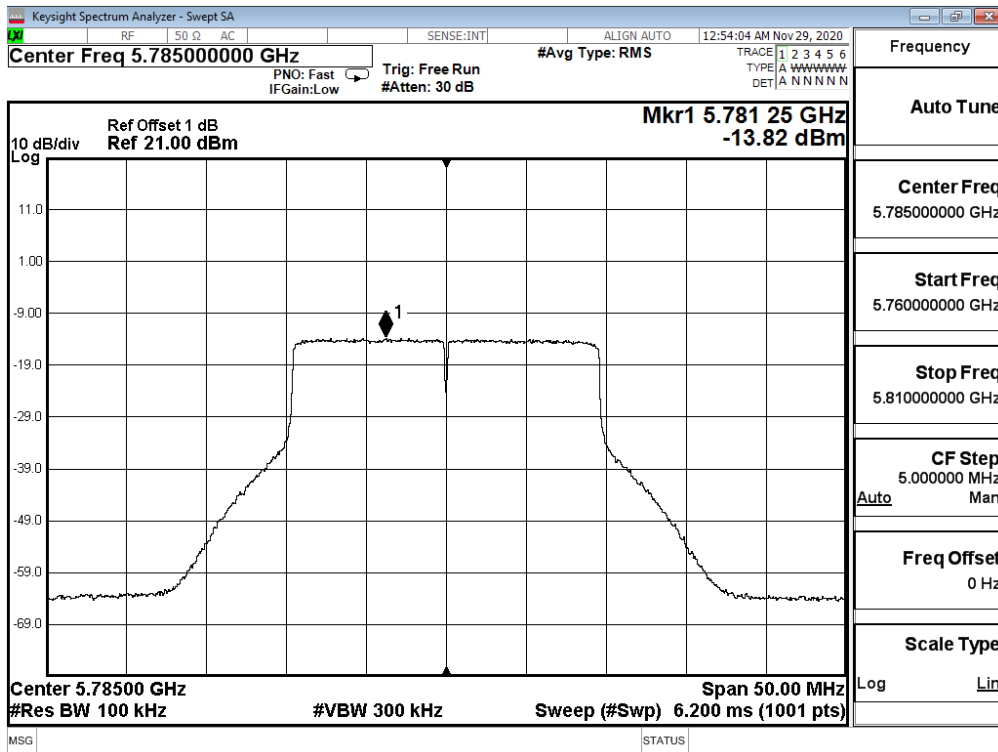
Channel 144 – Chain A ((Band 4))



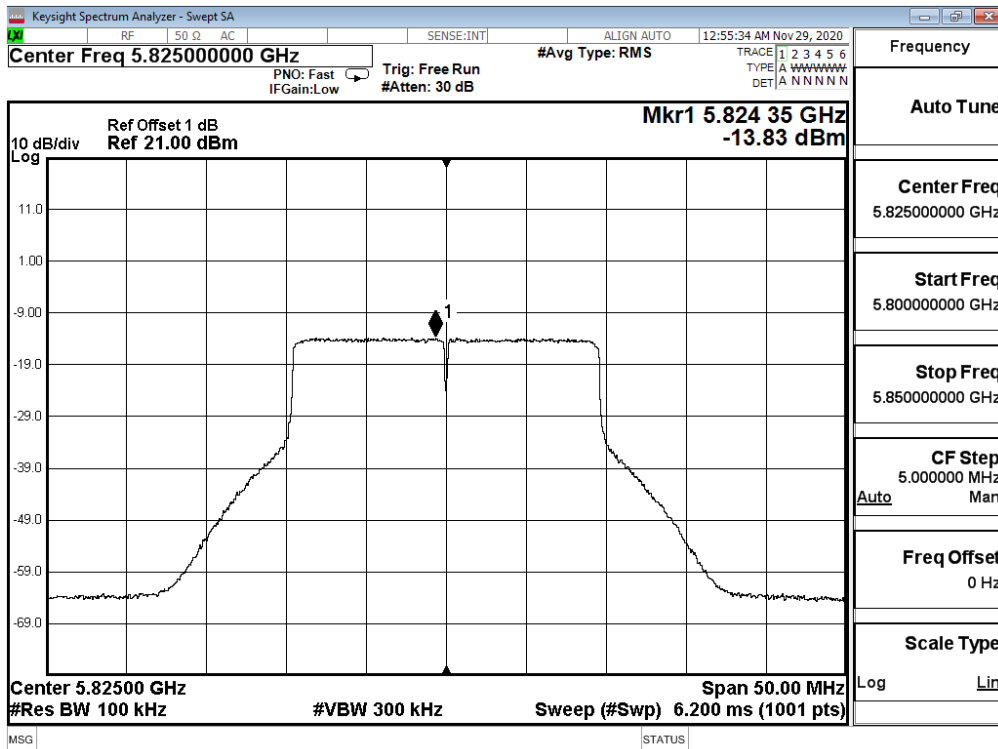
Channel 149 – Chain A



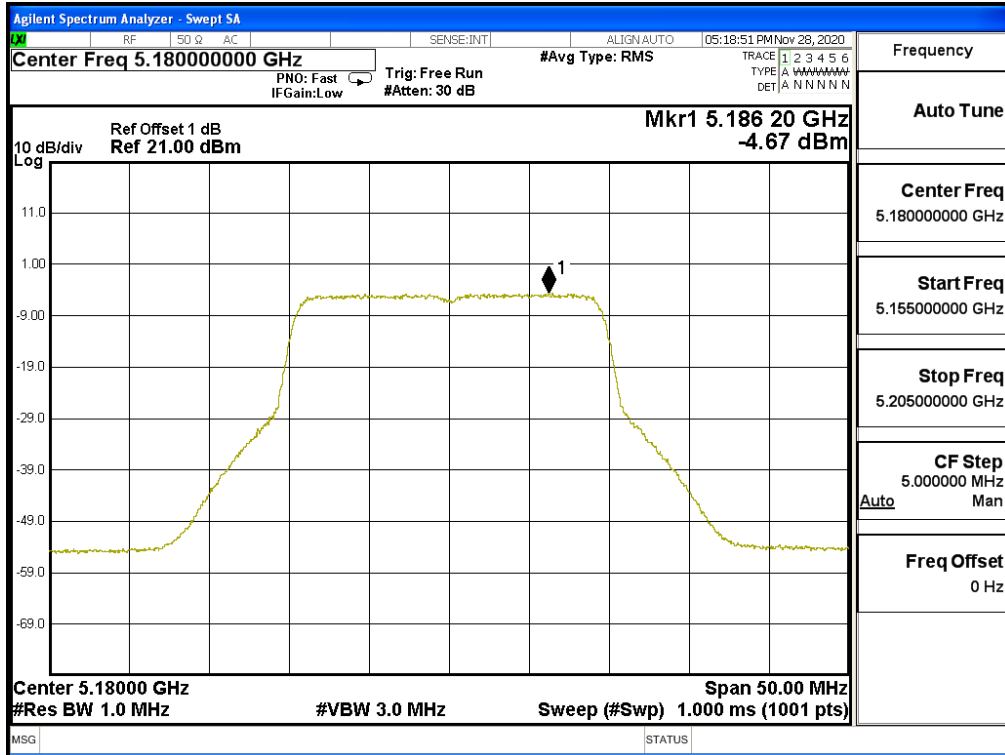
Channel 157 – Chain A



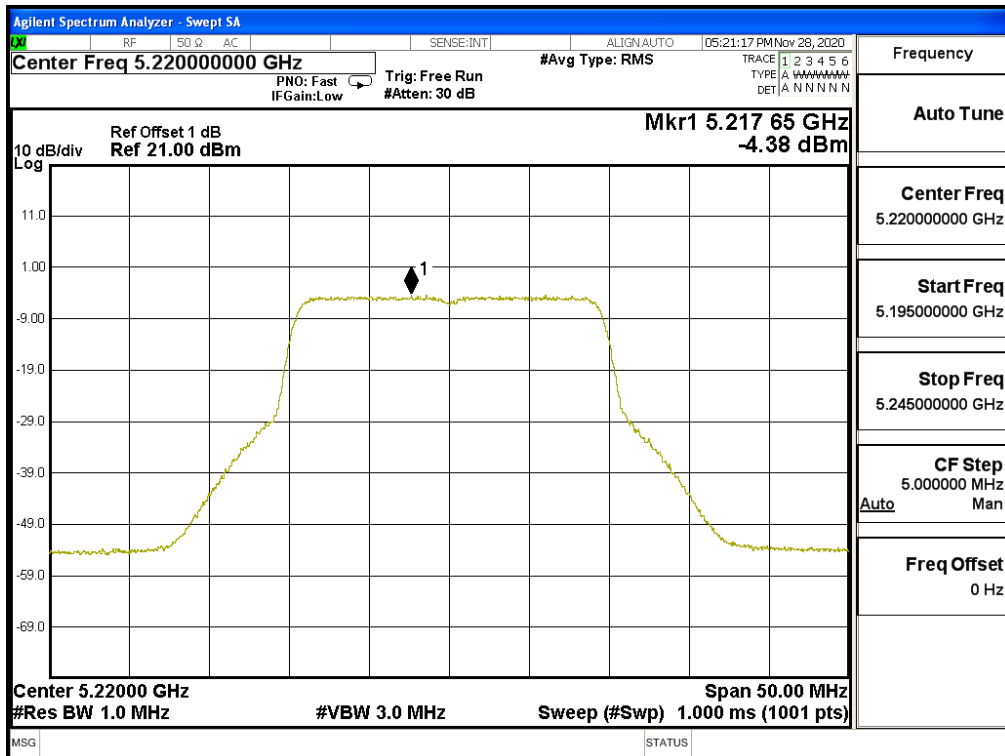
Channel 165 – Chain A



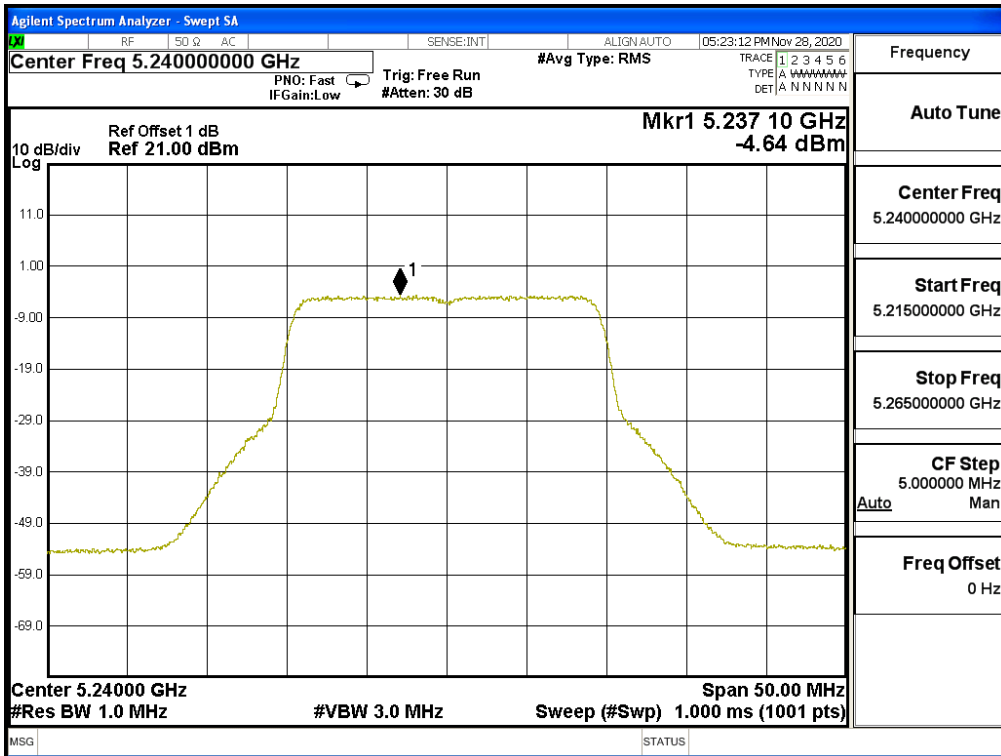
Channel 36 – Chain B



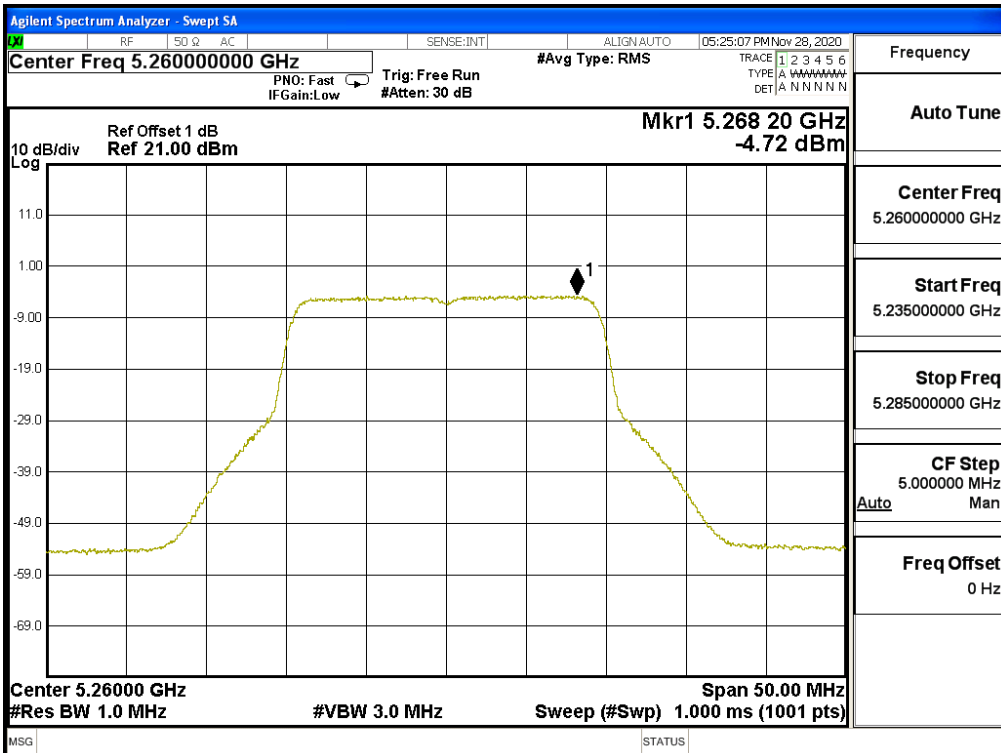
Channel 44 – Chain B



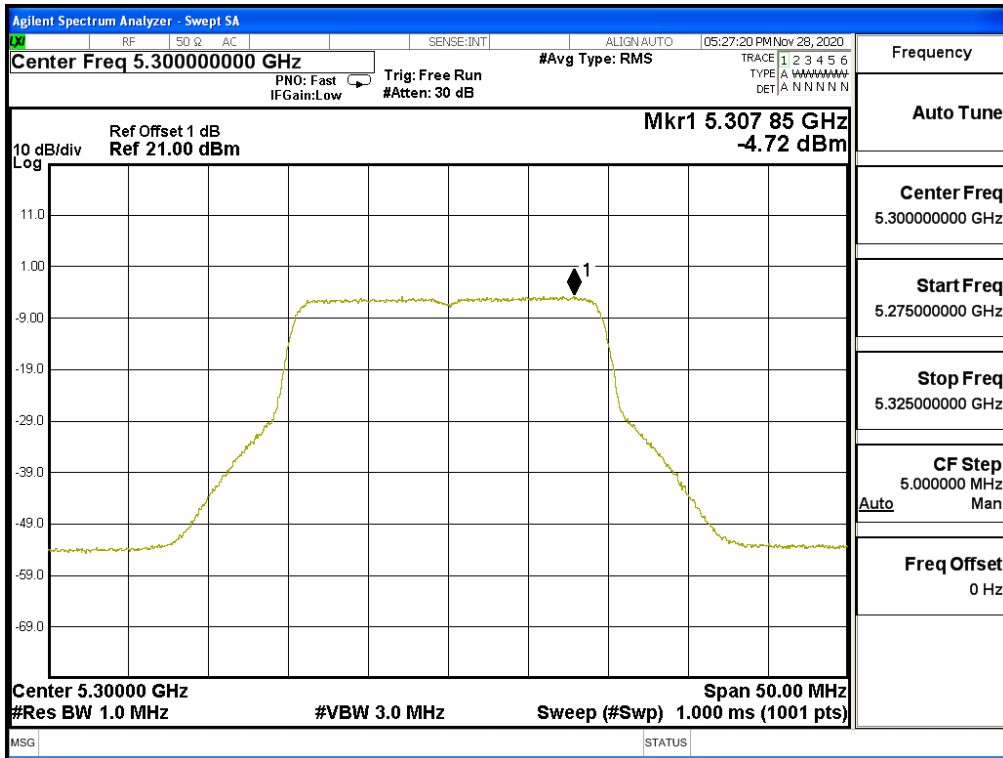
Channel 48 – Chain B



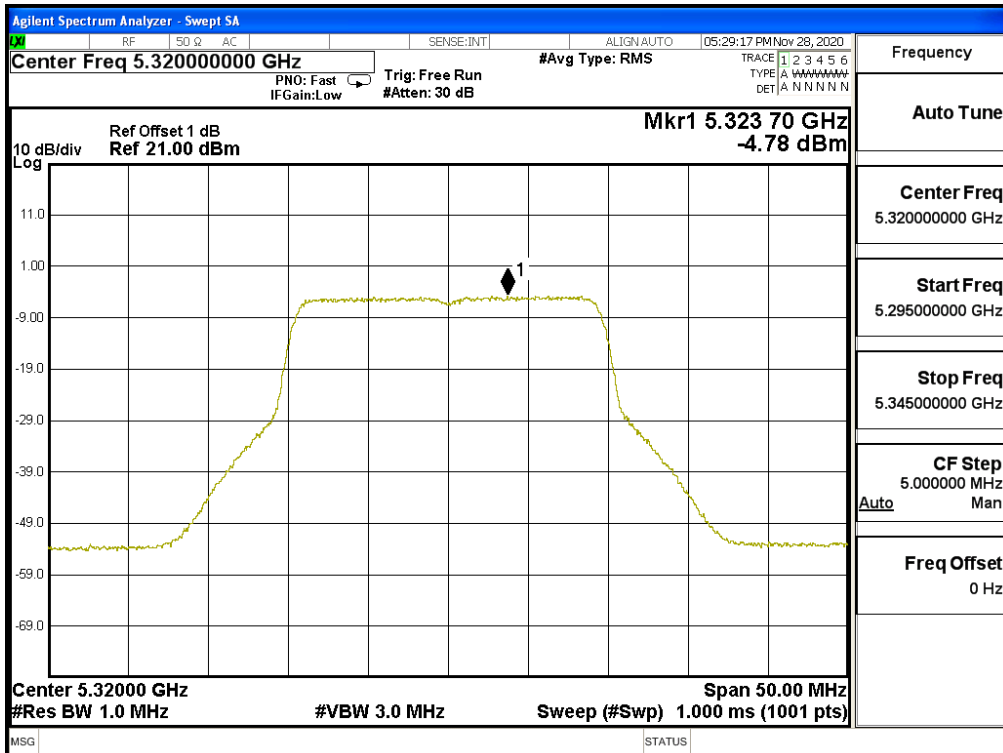
Channel 52 – Chain B



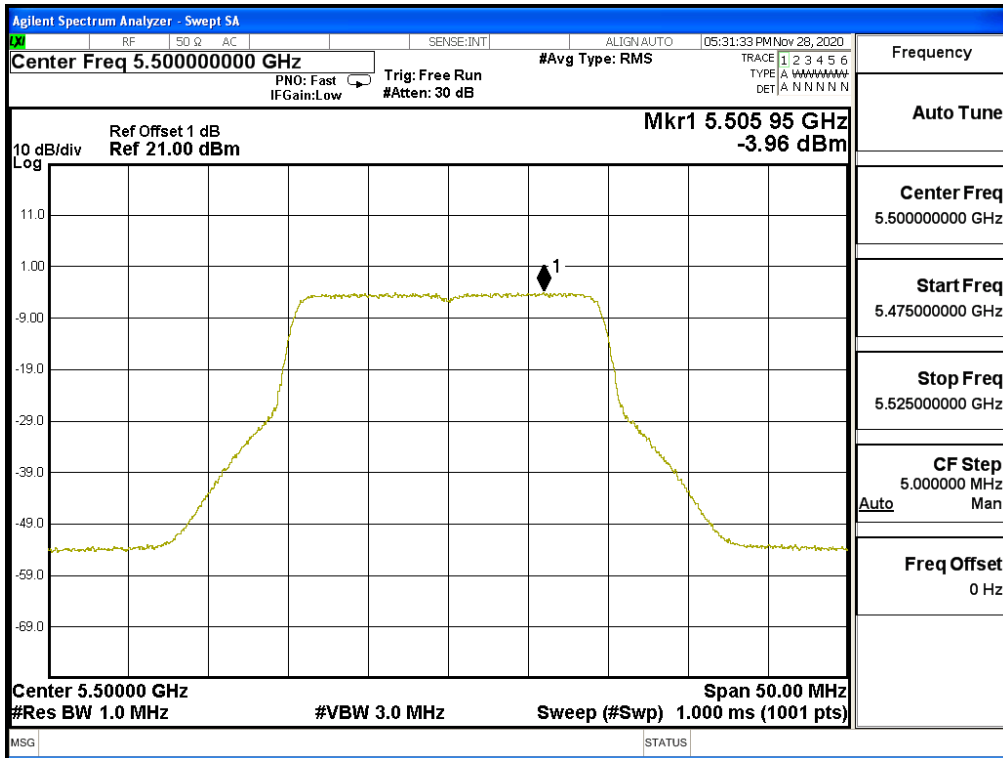
Channel 60 – Chain B



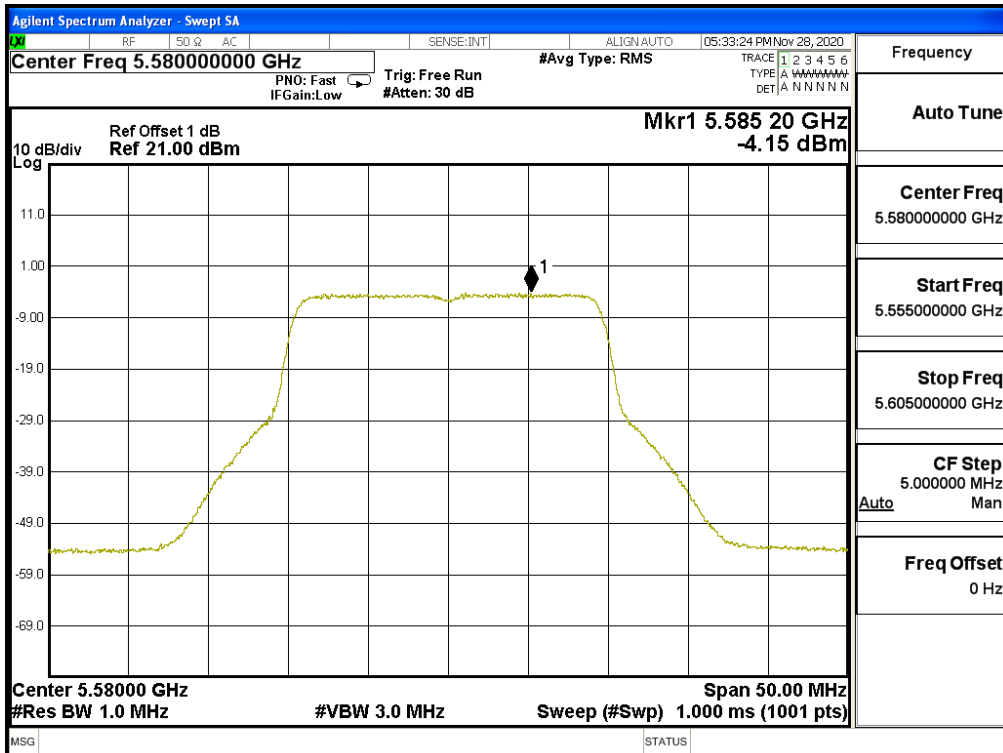
Channel 64 – Chain B



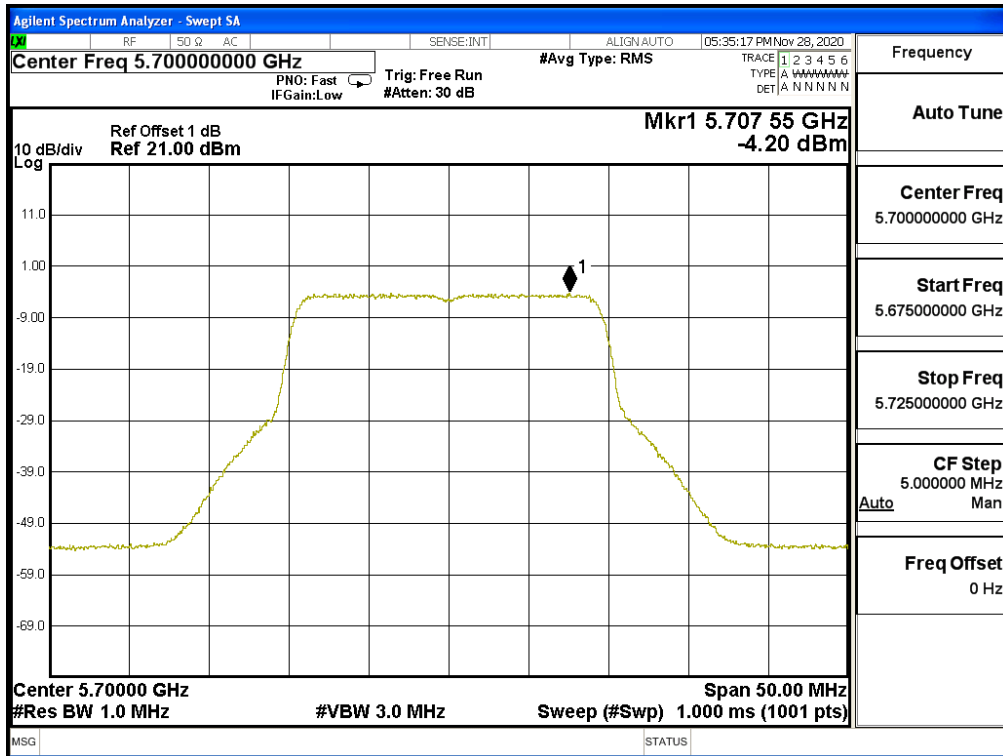
Channel 100 – Chain B



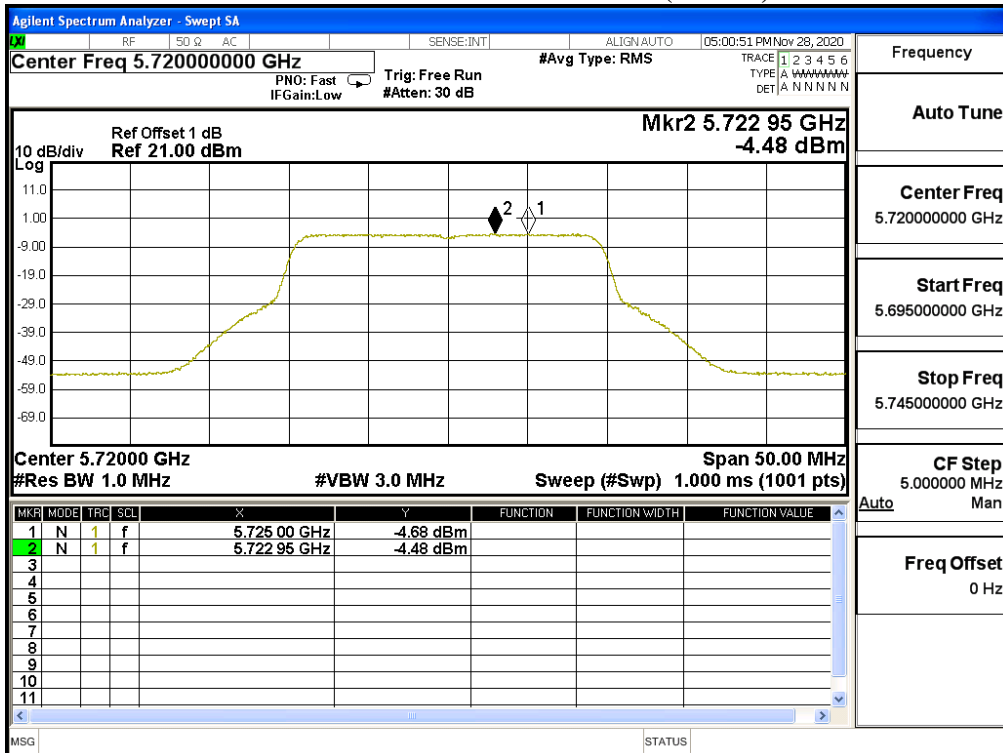
Channel 116 – Chain B



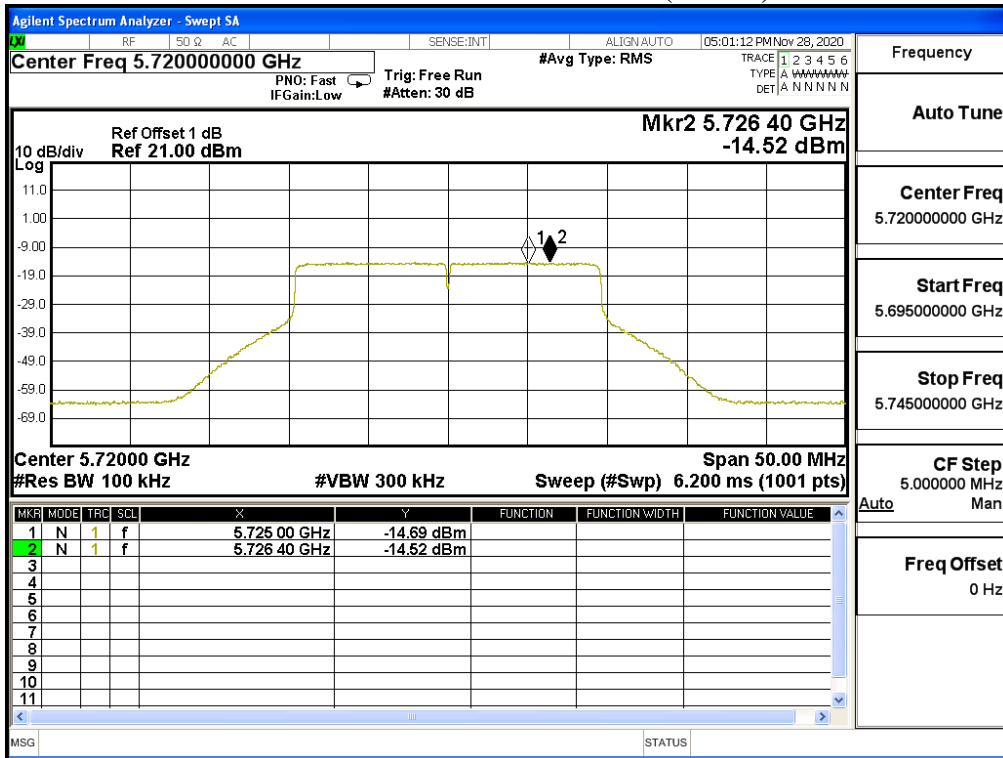
Channel 140 – Chain B



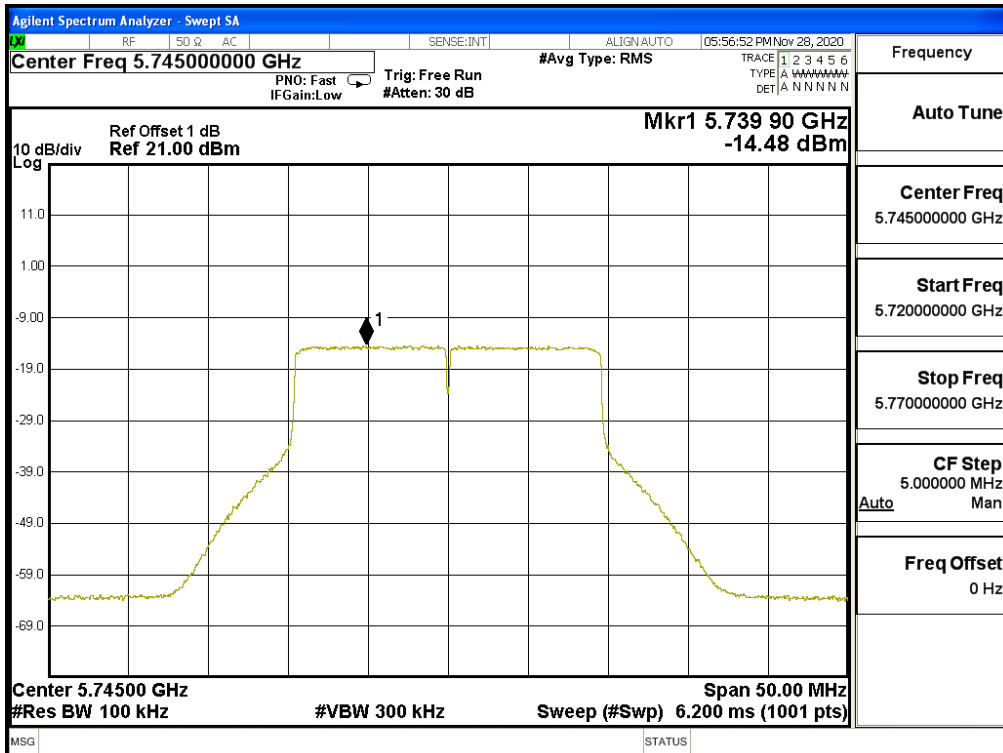
Channel 144 – Chain B (Band 3)



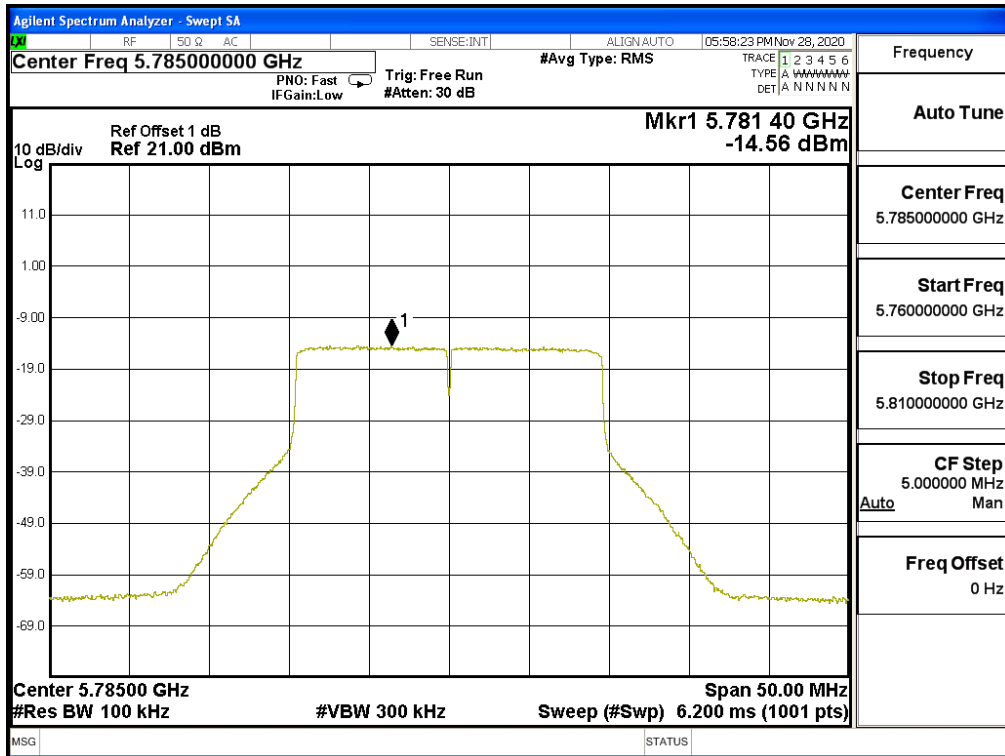
Channel 144 – Chain B (Band 4)



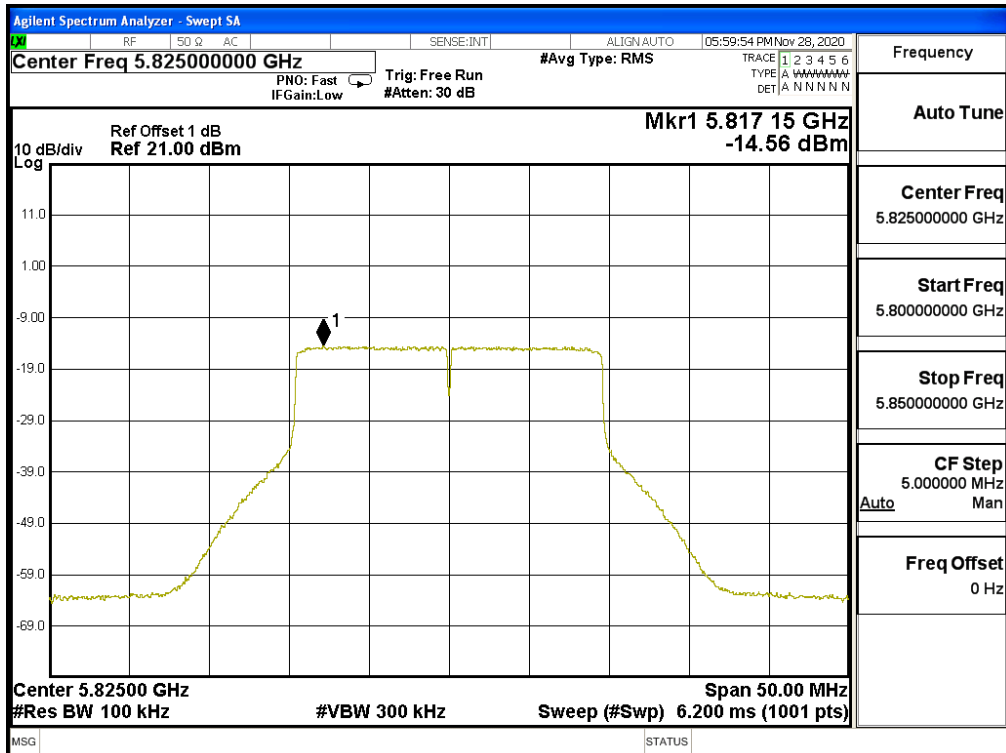
Channel 149 – Chain B



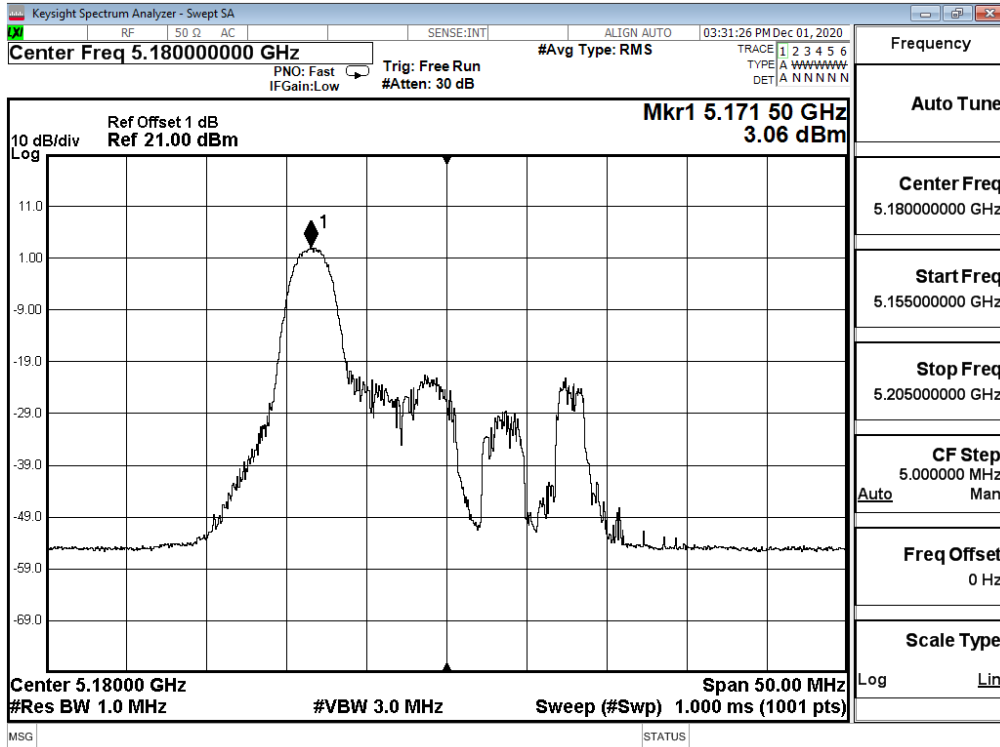
Channel 157 – Chain B



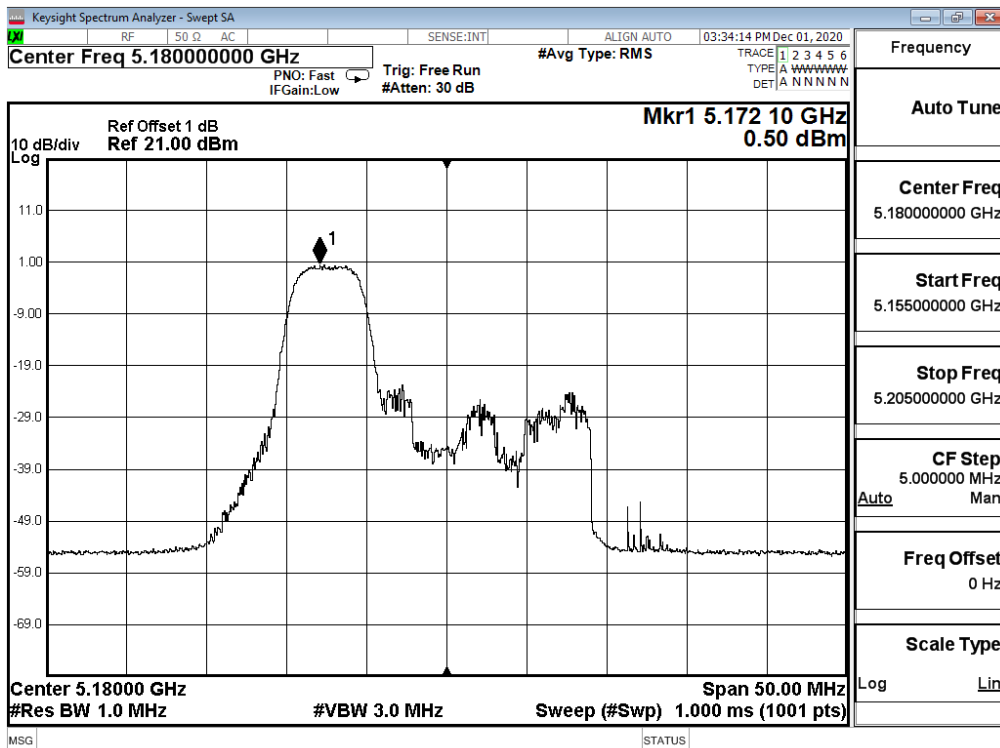
Channel 165 – Chain B



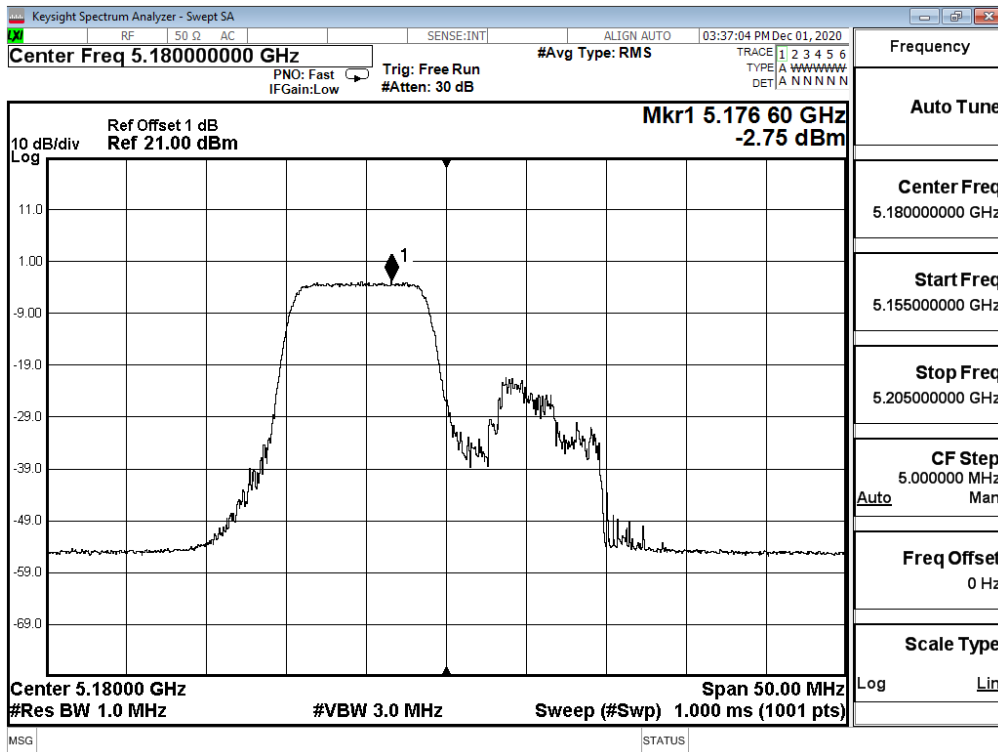
RU config: Other
Channel 36 –26/0 Chain A



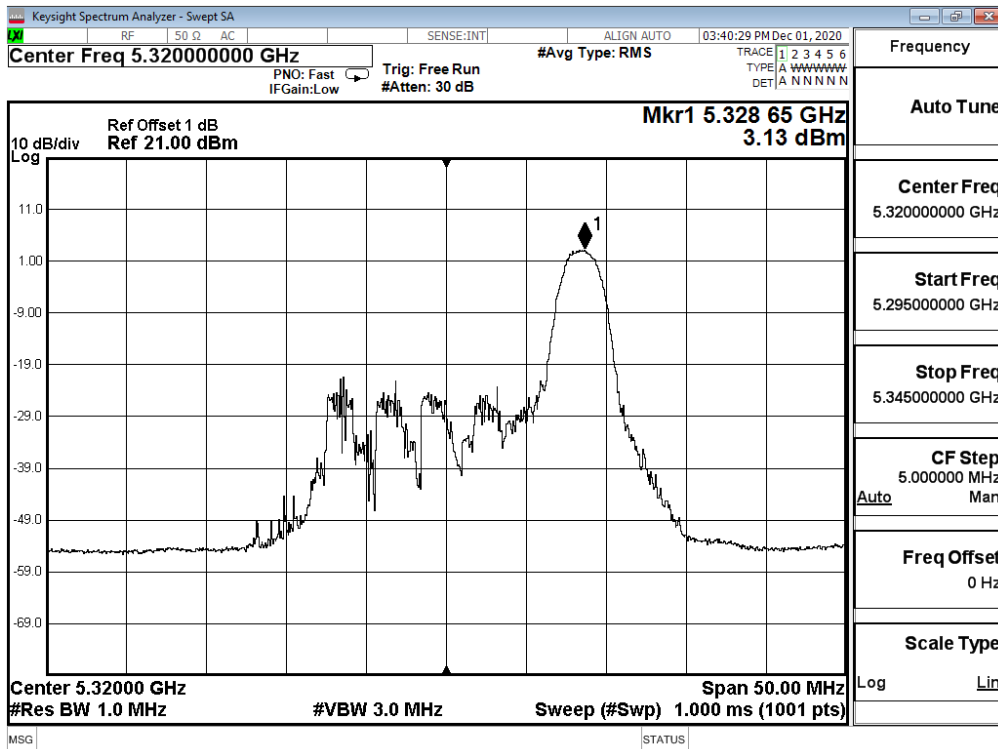
Channel 36 –52/37 Chain A



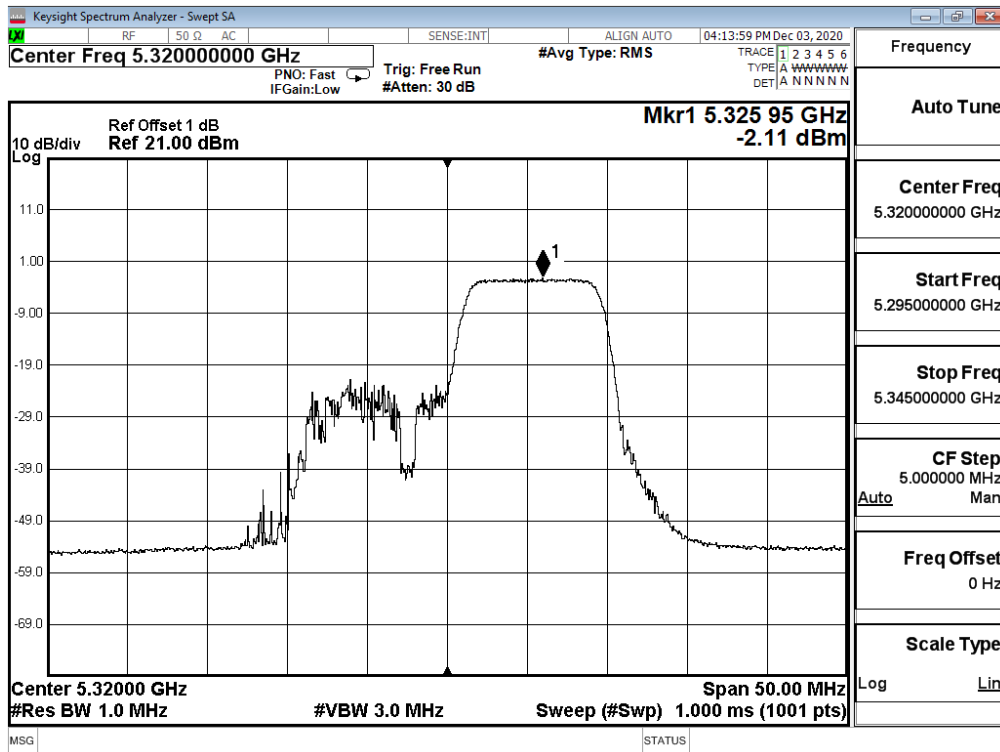
Channel 36 –106/53 Chain A



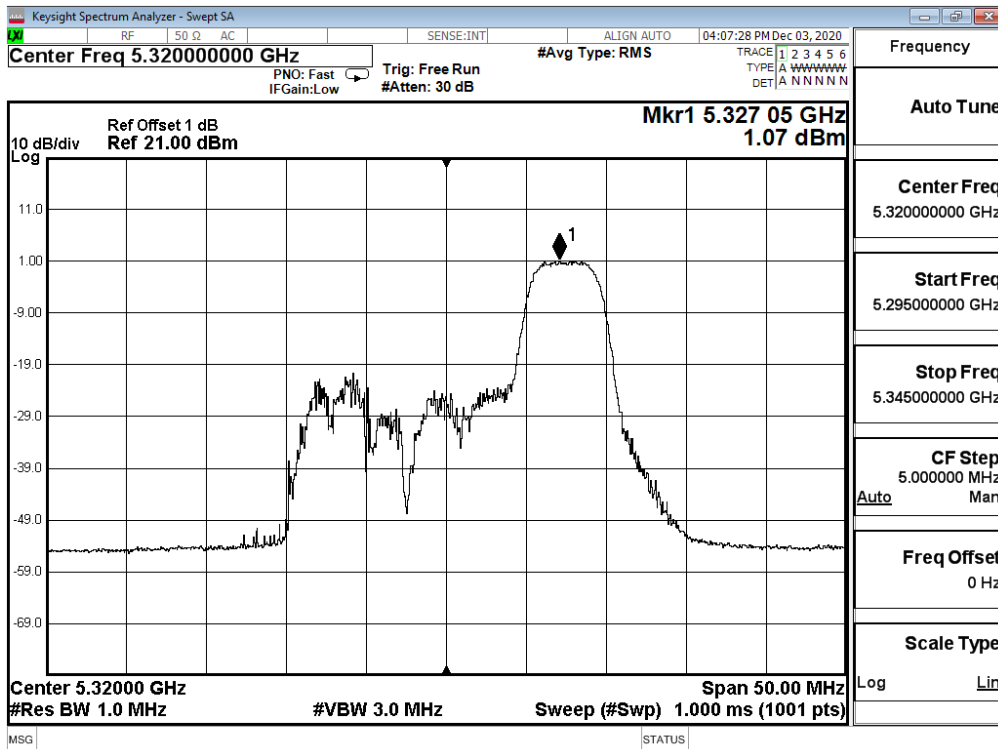
Channel 64 –26/8 Chain A



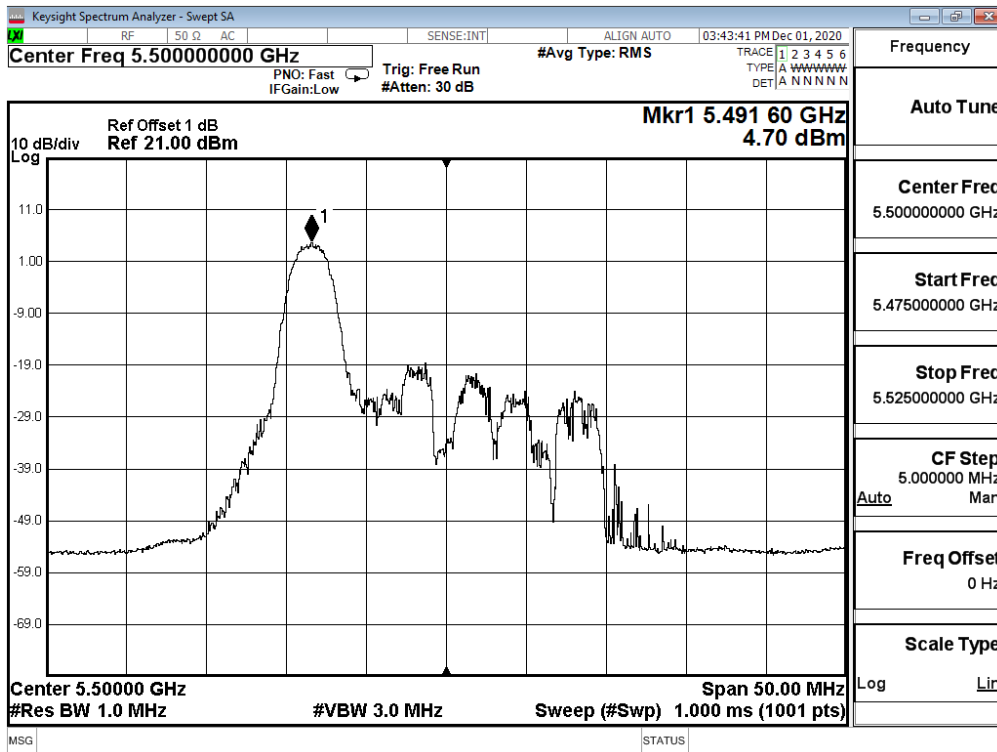
Channel 64 -52/40 Chain A



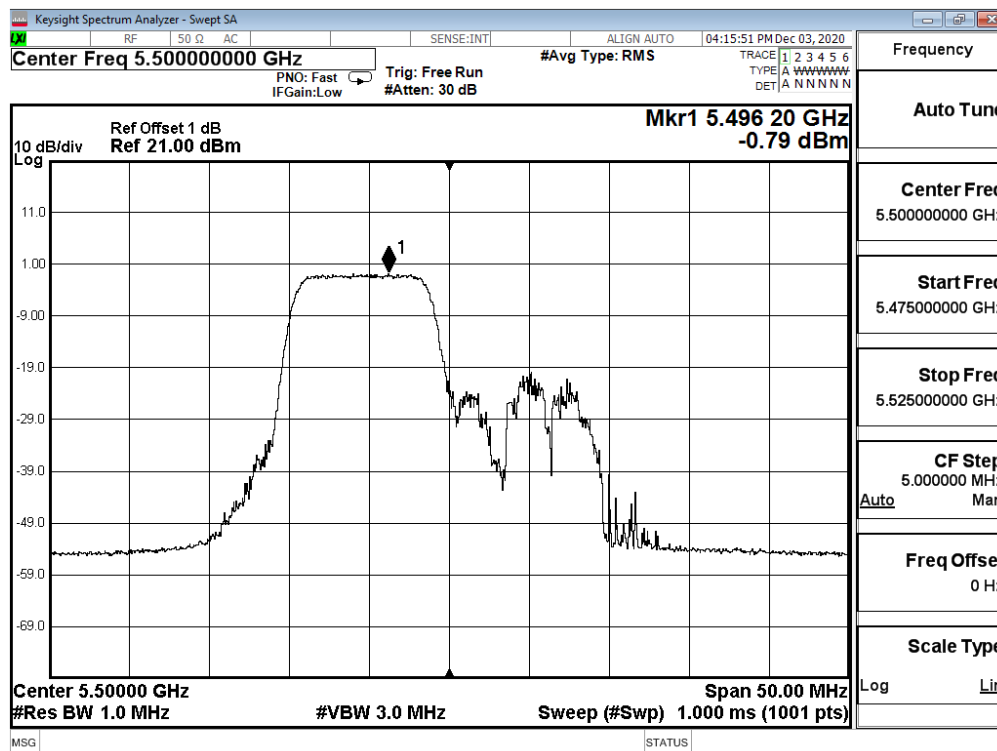
Channel 64 -106/54 Chain A



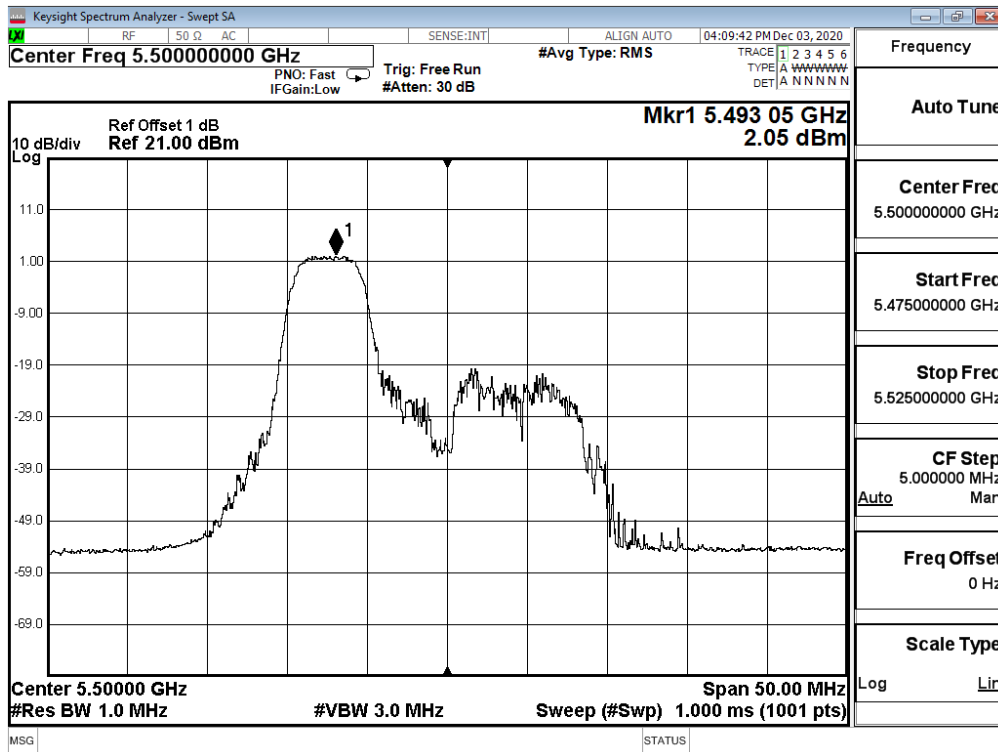
Channel 100 -26/0 Chain A



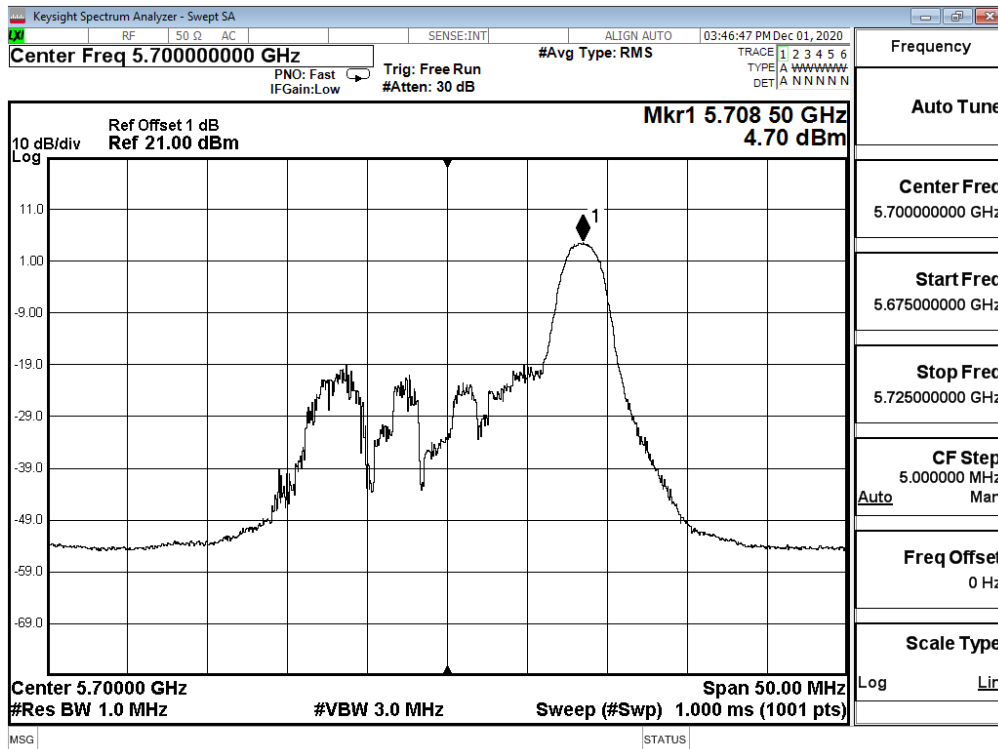
Channel 100 -52/37 Chain A



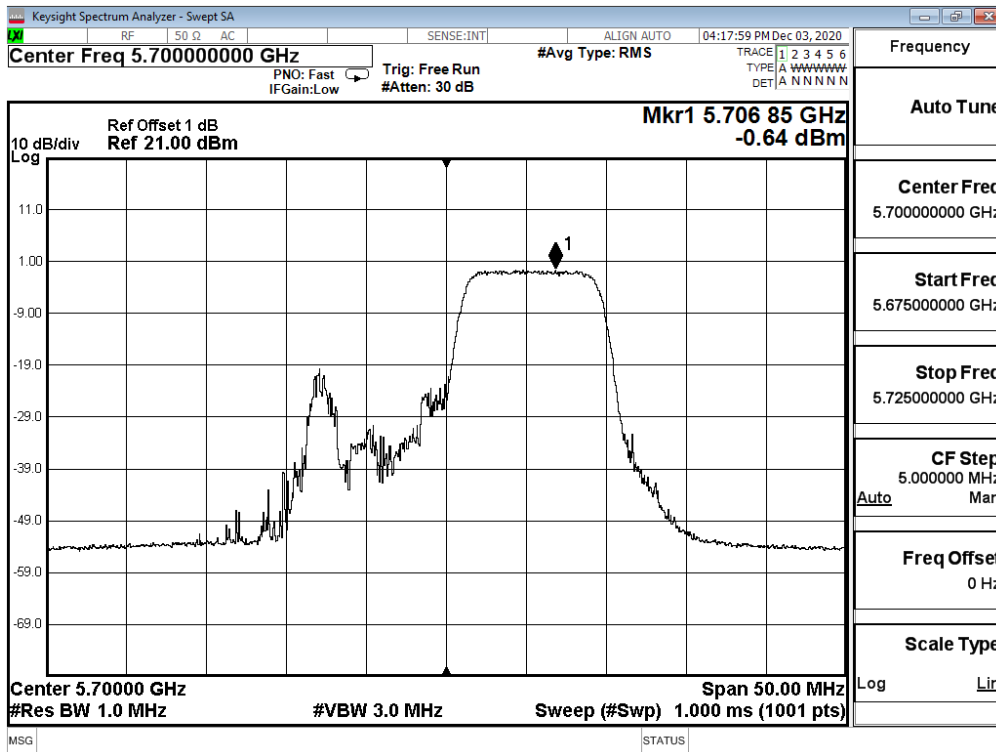
Channel 100 –106/53 Chain A



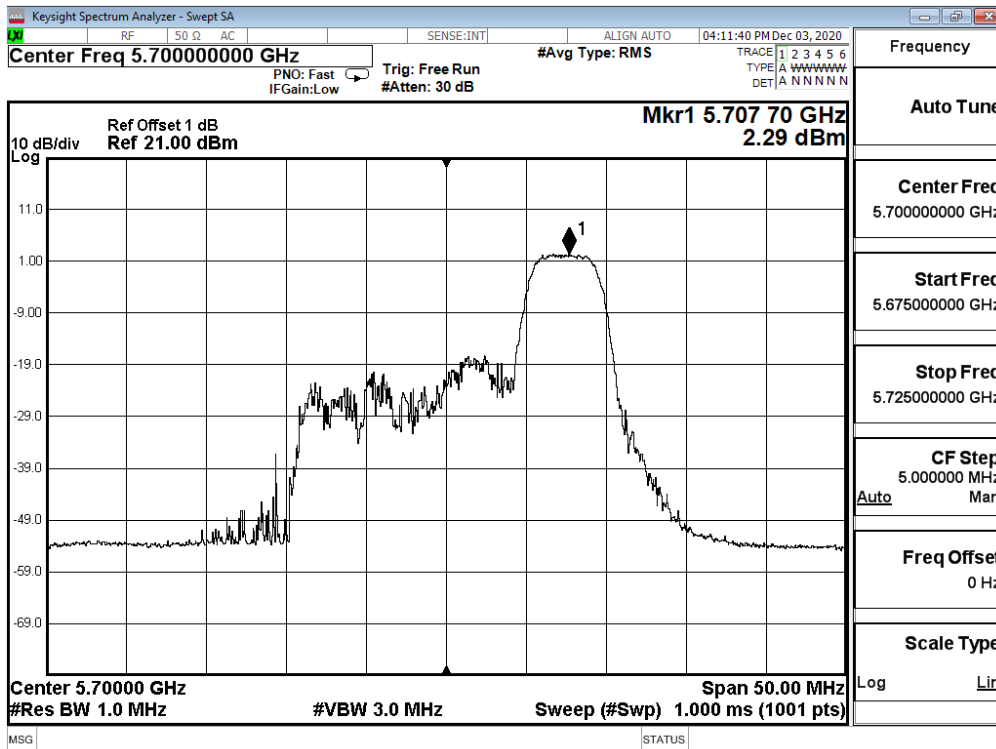
Channel 140 –26/8 Chain A



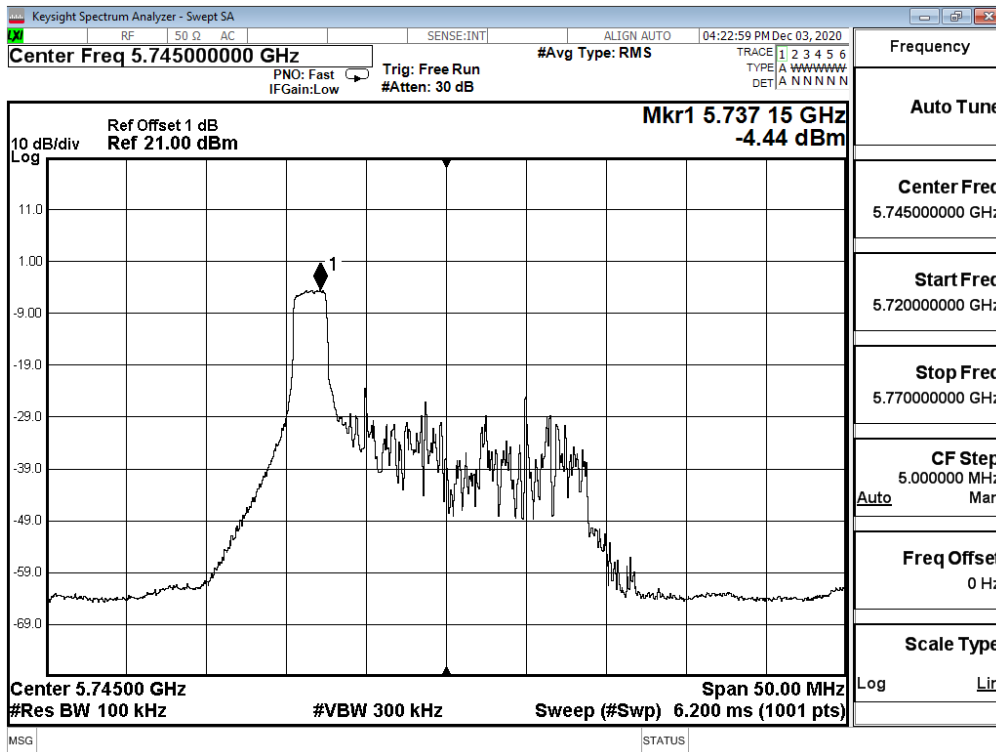
Channel 140 –52/40 Chain A



Channel 140 –106/54 Chain A



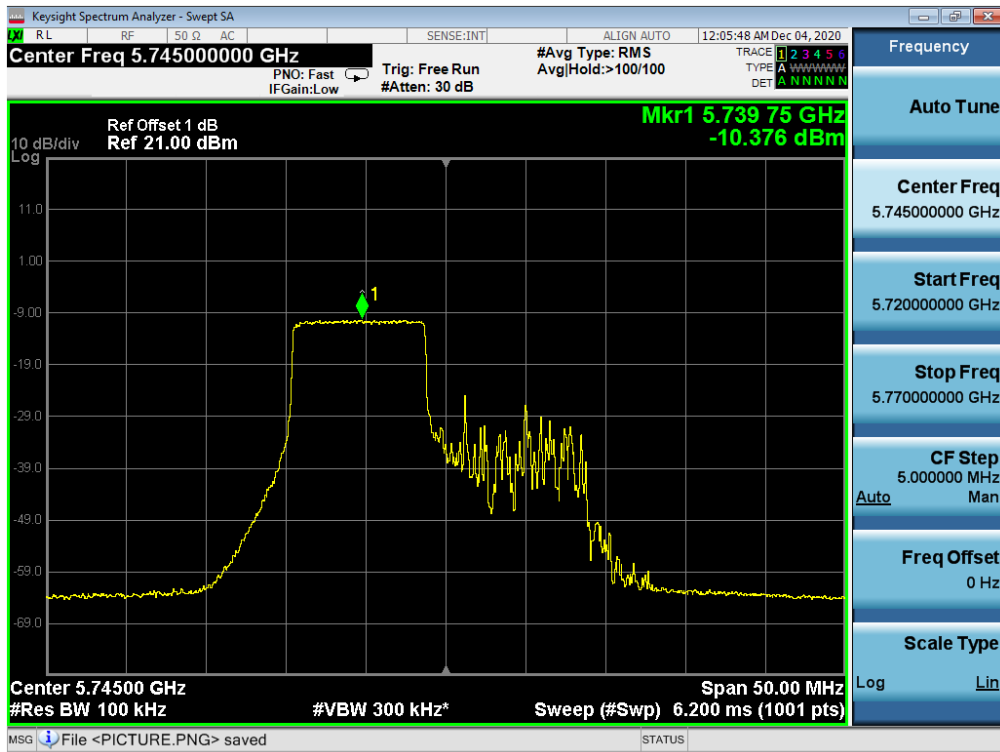
Channel 149 –26/0 Chain A



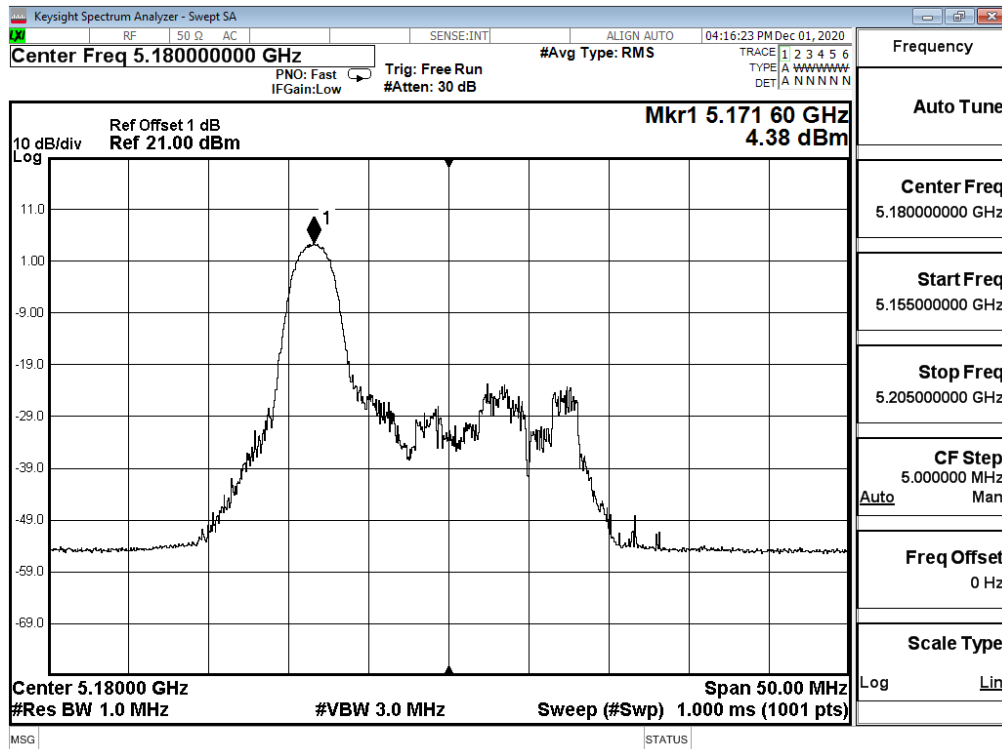
Channel 149 –52/37 Chain A



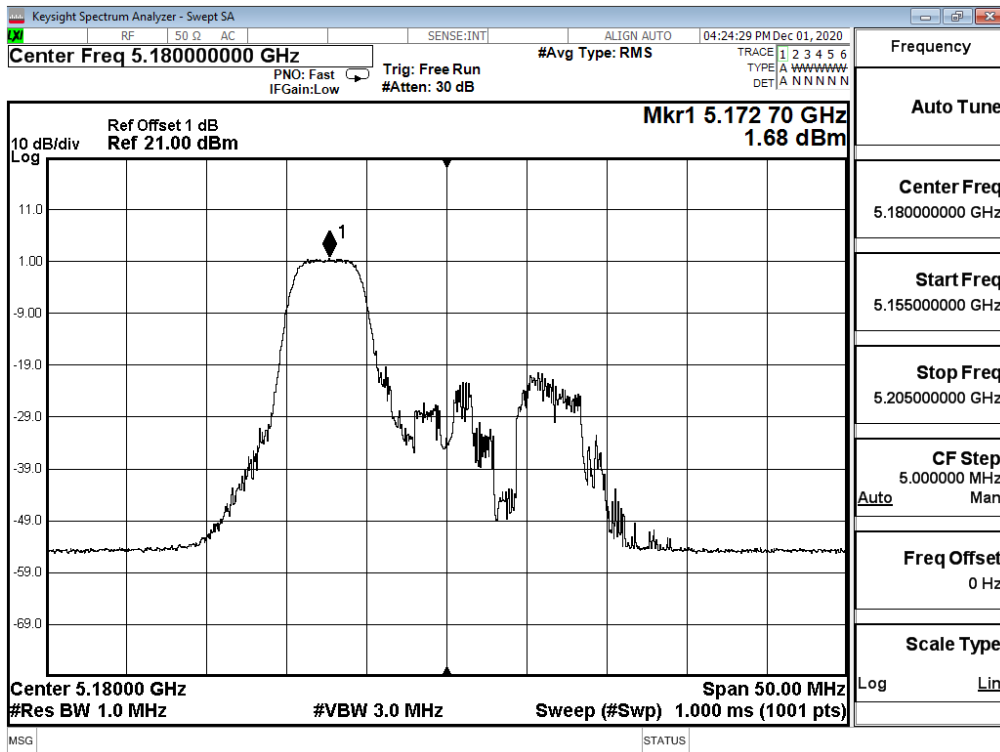
Channel 149 –106/53 Chain A



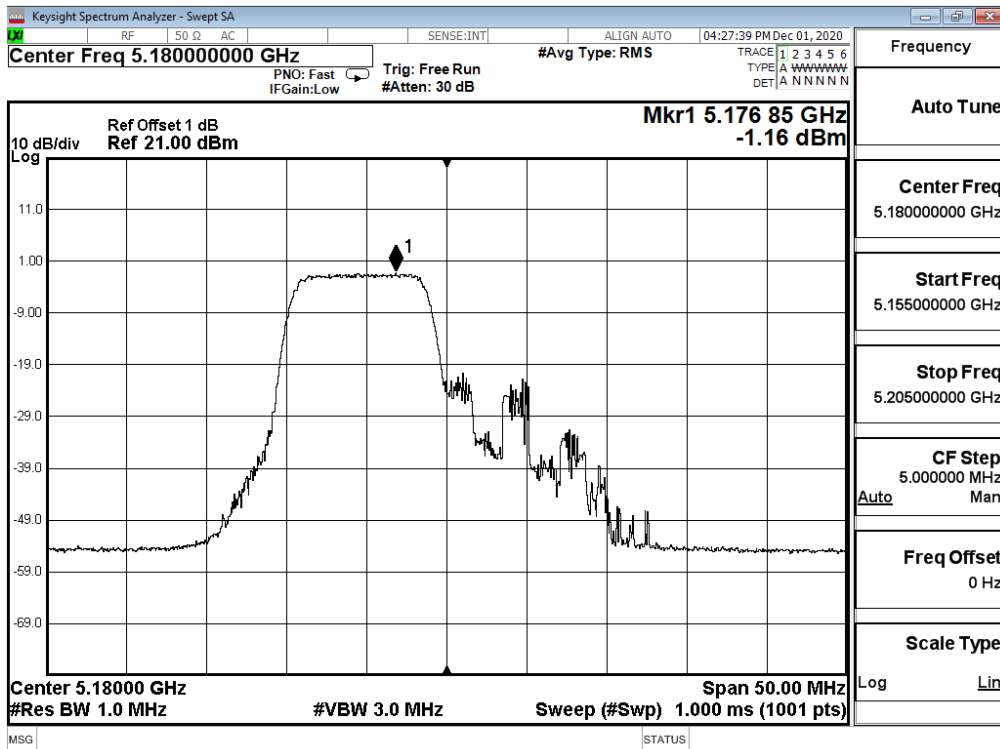
Channel 36 –26/0 Chain B



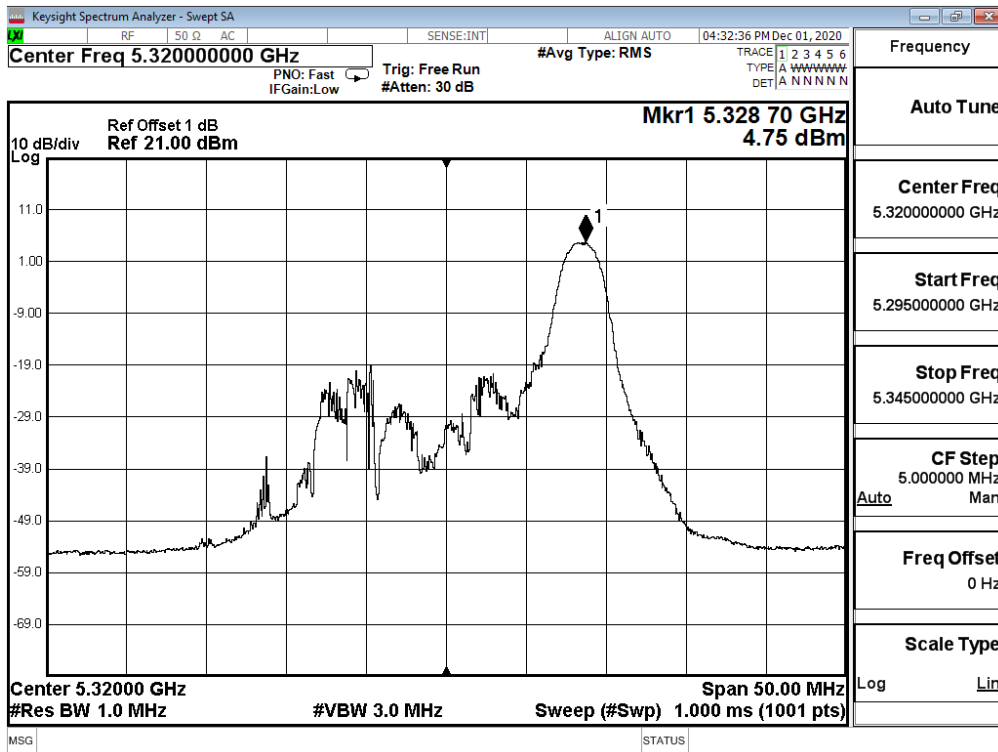
Channel 36 -52/37 Chain B



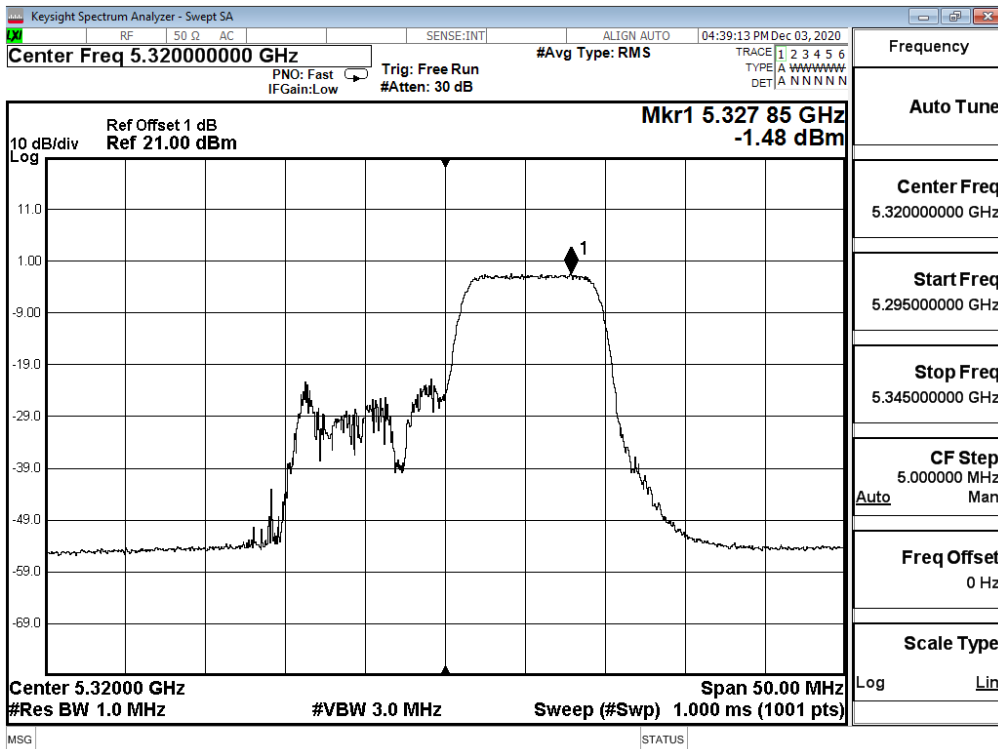
Channel 36 -106/53 Chain B



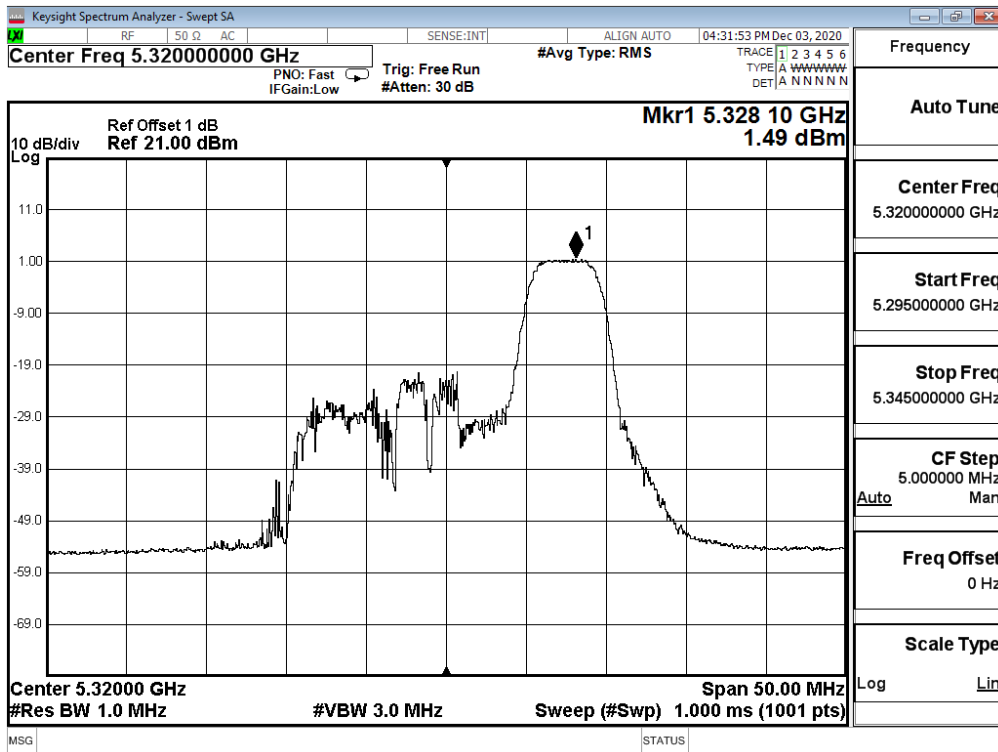
Channel 64 -26/8 Chain B



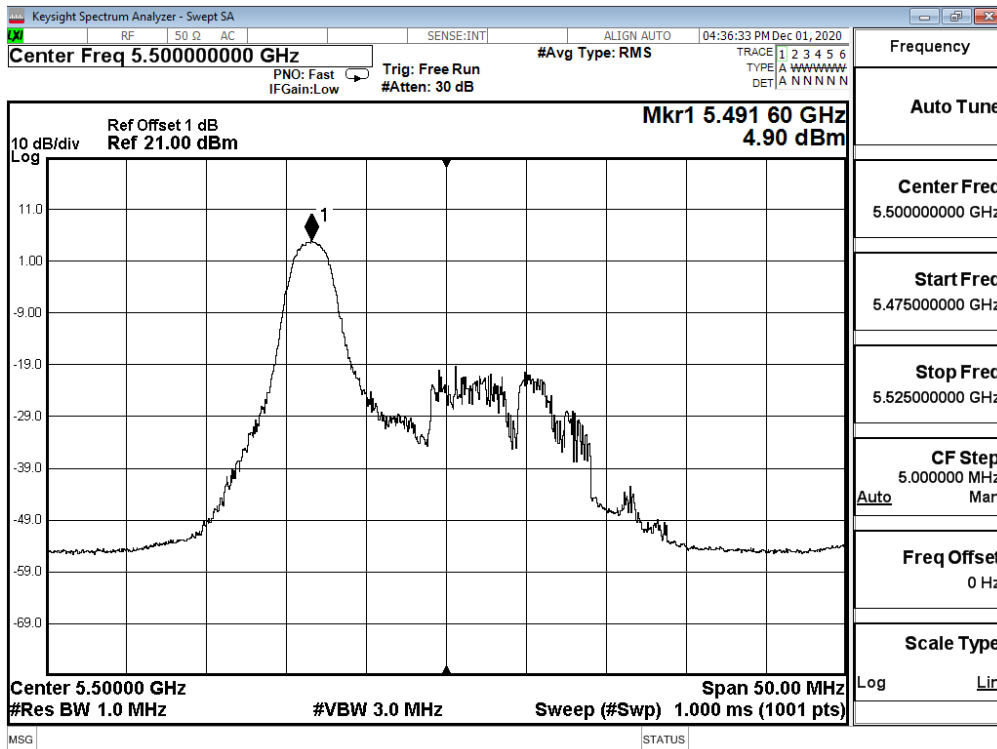
Channel 64 -52/40 Chain B



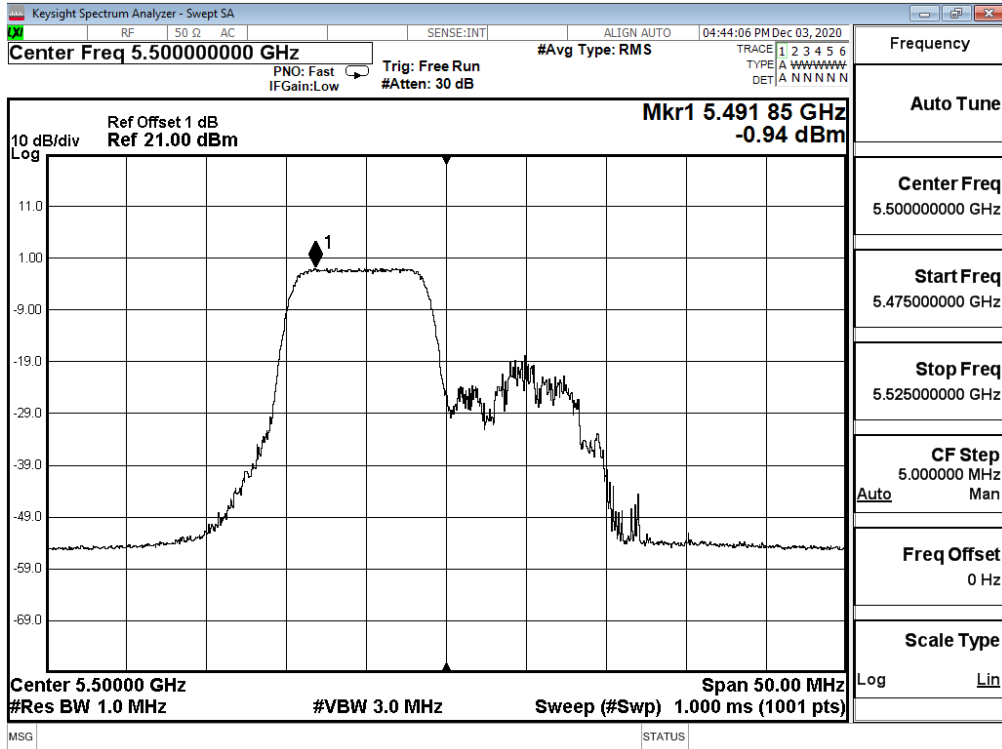
Channel 64 –106/54 Chain B



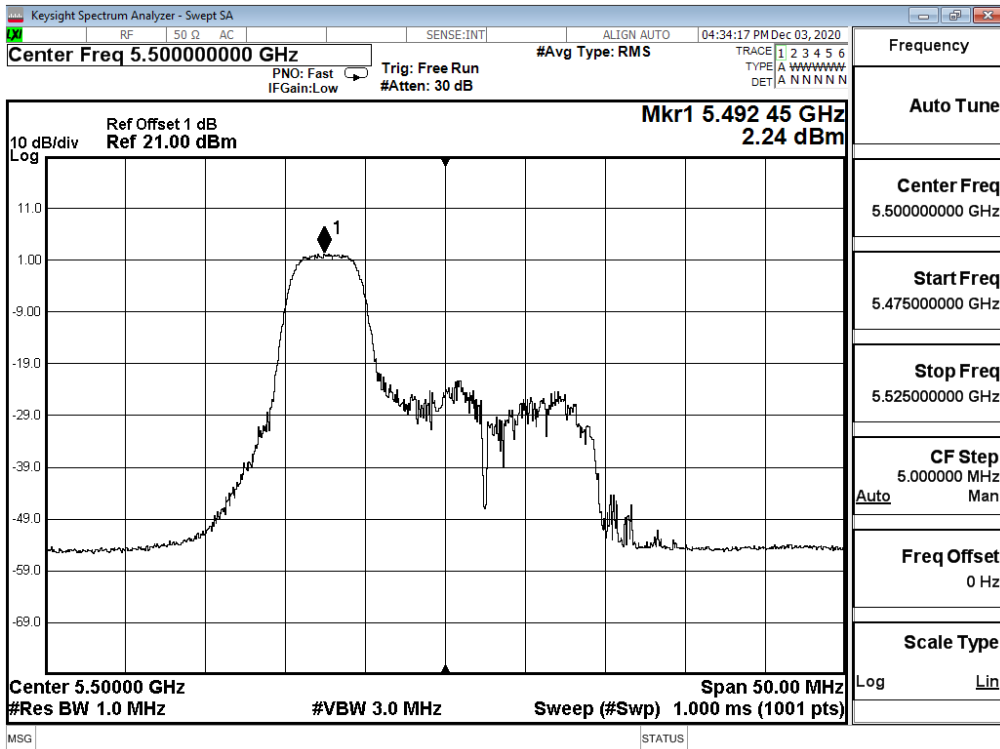
Channel 100 –26/0 Chain B



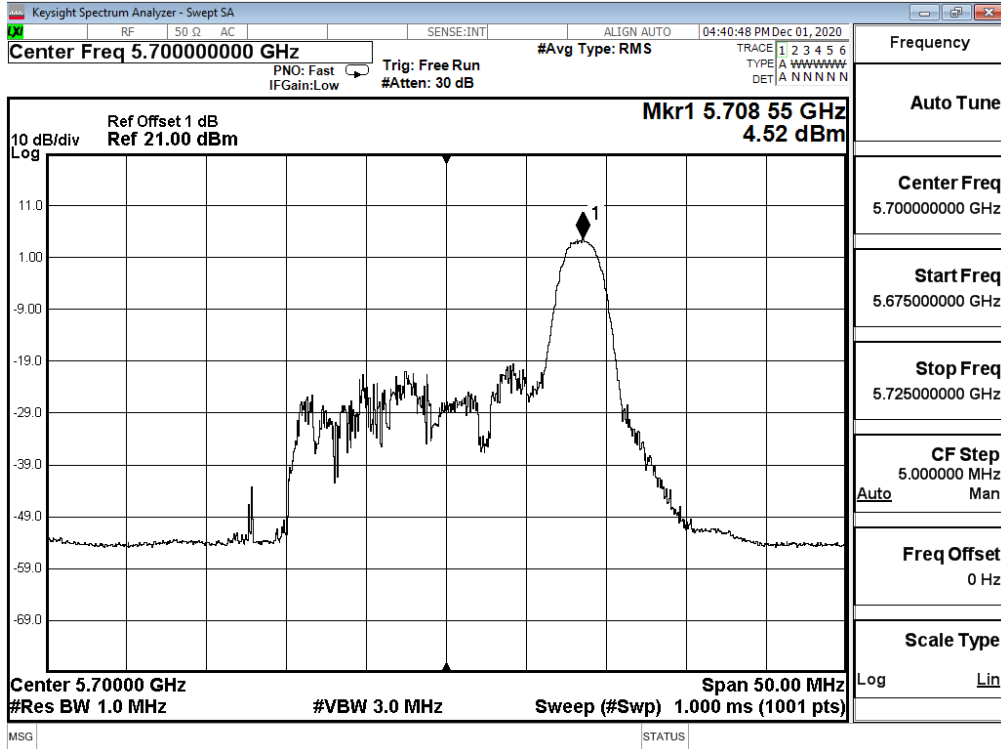
Channel 100 -52/37 Chain B



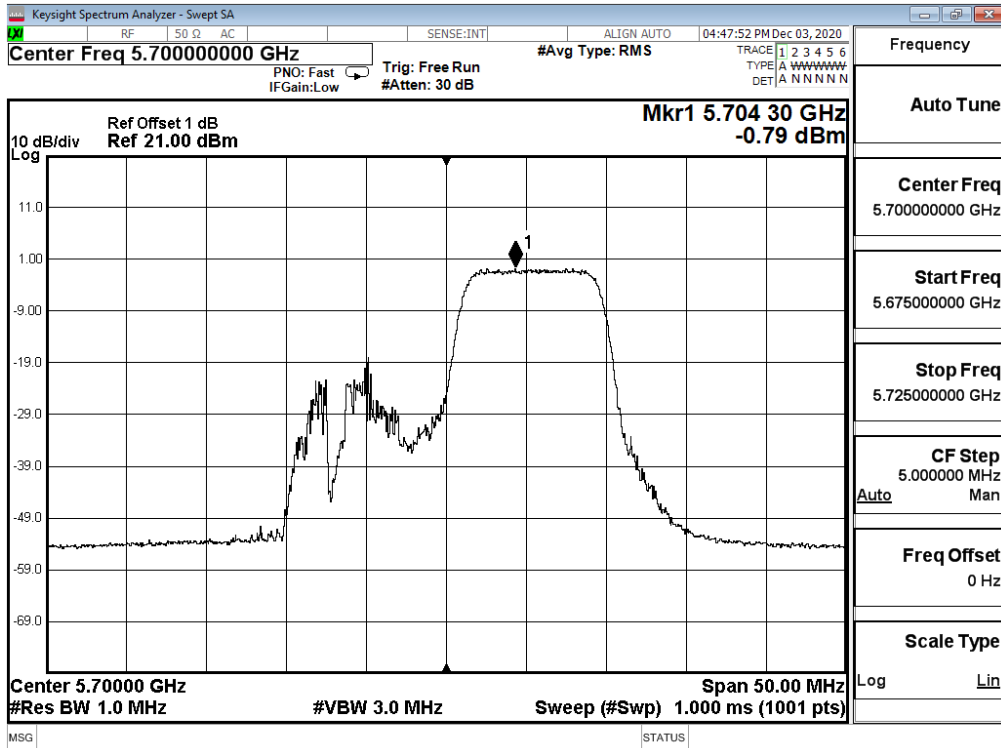
Channel 100 -106/53 Chain B



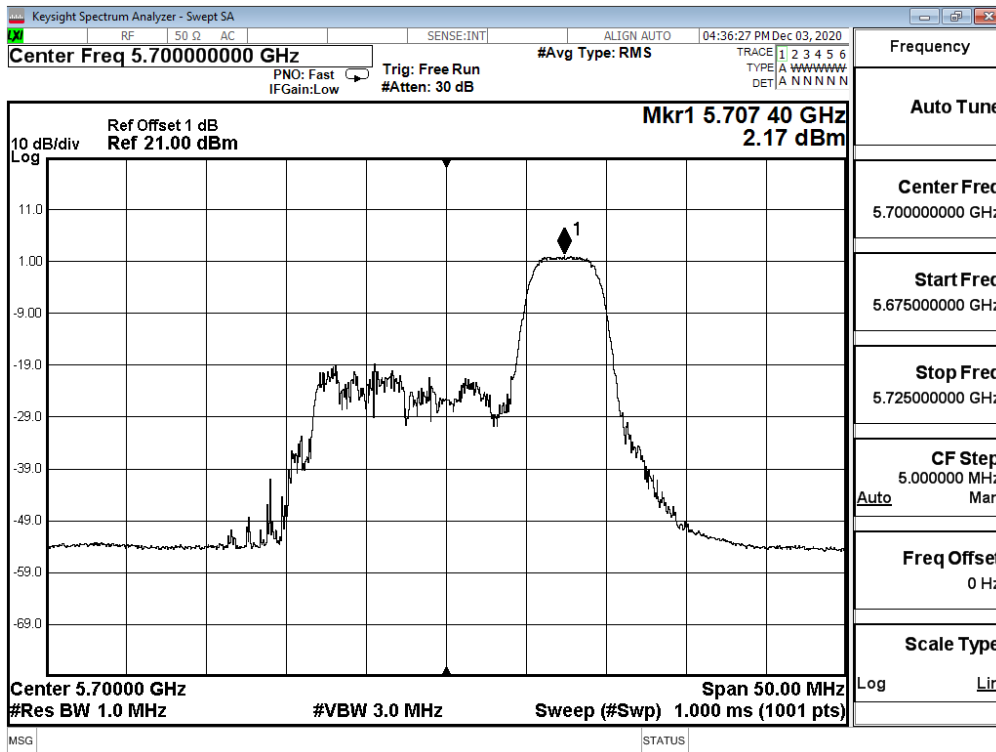
Channel 140 -26/8 Chain B



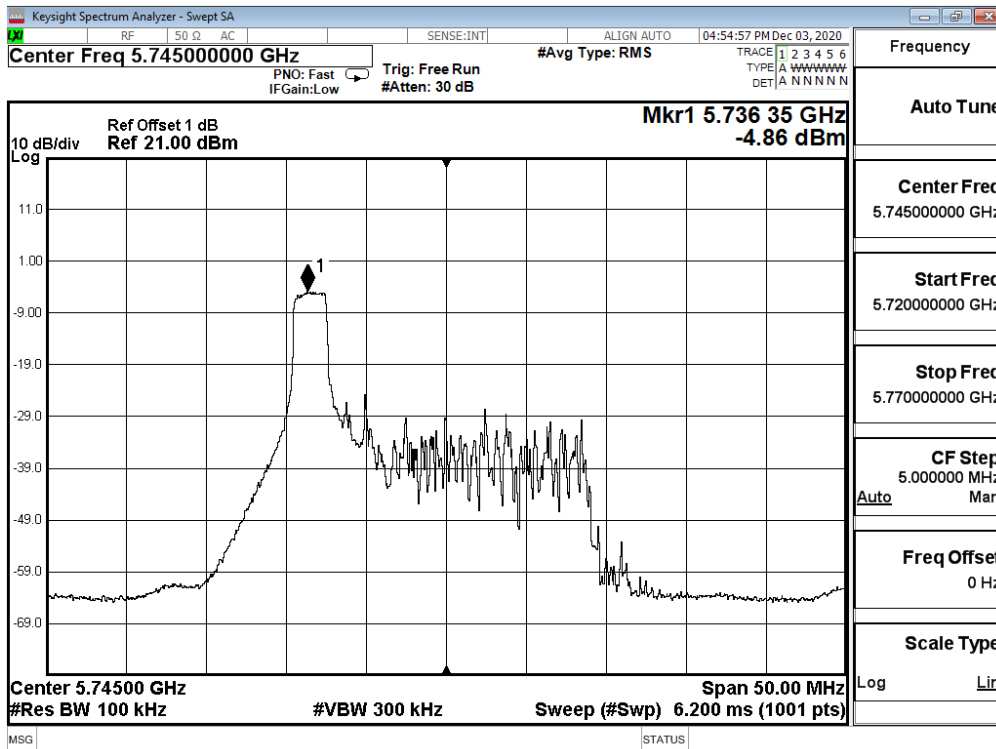
Channel 140 -52/40 Chain B



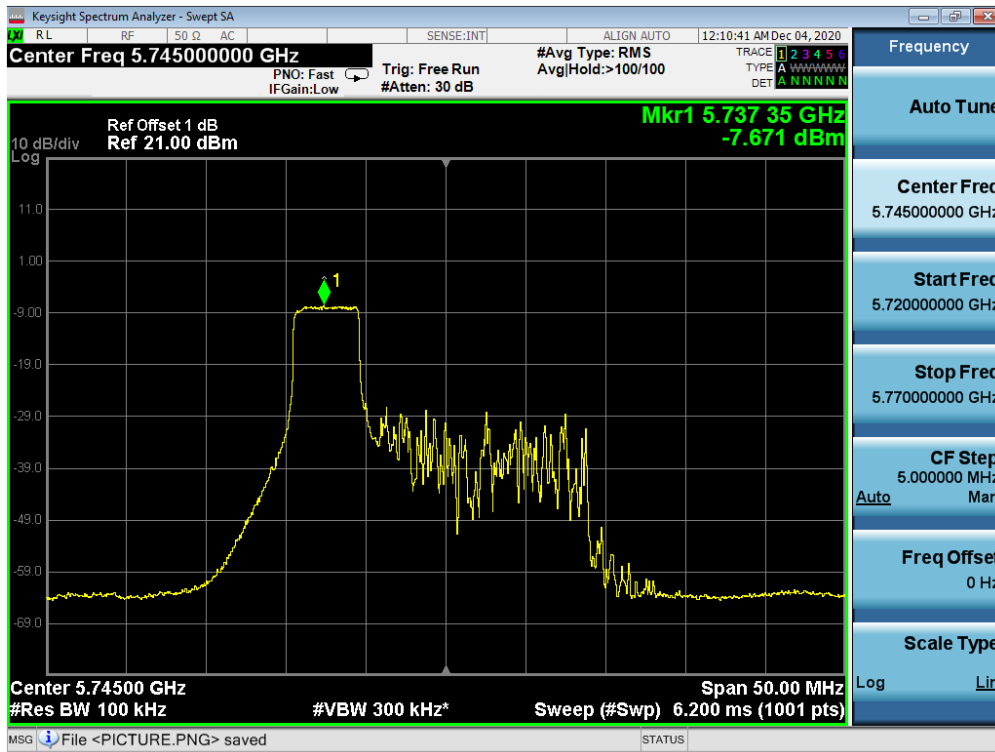
Channel 140 –106/54 Chain B



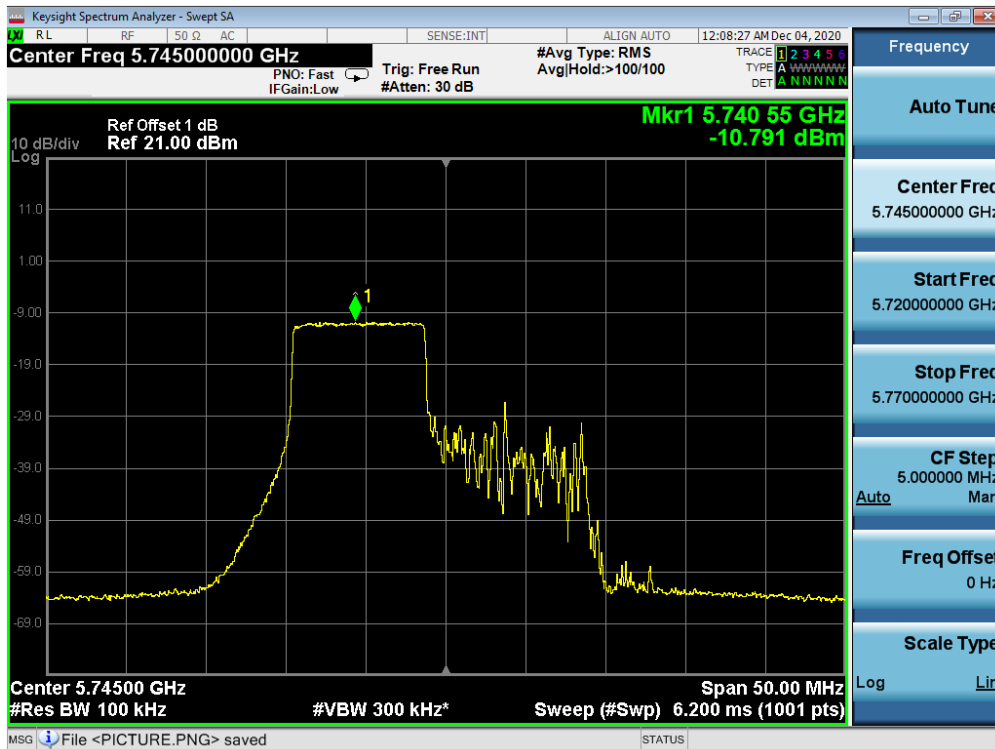
Channel 149 –26/0 Chain B



Channel 149 -52/37 Chain B



Channel 149 -106/53 Chain B



Product : Notebook Computers
 Test Item : Peak Power Spectral Density
 Test Mode : Mode 24: MIMO Transmit (802.11ax-40BW_34.4Mbps)

RU config: Full

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	10*log(2) (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
38	5190	A	-6.55	-8.97	3.01	0.15	<11	Pass
		B	-5.98	-7.92	3.01	0.15	<11	Pass
46	5230	A	-6.54	-8.82	3.01	0.15	<11	Pass
		B	-5.11	-7.87	3.01	0.15	<11	Pass
54	5270	A	-6.52	-8.90	3.01	0.15	<11	Pass
		B	-4.95	-8.09	3.01	0.15	<11	Pass
62	5310	A	-6.81	-8.74	3.01	0.15	<11	Pass
		B	-5.23	-8.14	3.01	0.15	<11	Pass
102	5510	A	-0.61	-7.30	3.01	0.15	<11	Pass
		B	-1.84	-6.68	3.01	0.15	<11	Pass
110	5550	A	-6.04	-7.73	3.01	0.15	<11	Pass
		B	-5.99	-7.97	3.01	0.15	<11	Pass
134	5670	A	-6.34	-7.87	3.01	0.15	<11	Pass
		B	-6.86	-7.53	3.01	0.15	<11	Pass

Note 1: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
142	5710(Band3)	A	-7.36	--	0.15	-4.20	<11	Pass
		B	-7.29	--	0.15	-4.13	<11	Pass
142	5710(Band4)	A	-17.47	6.98	0.15	-7.33	<30	Pass
		B	-17.64	6.98	0.15	-7.50	<30	Pass
151	5755	A	-17.24	6.98	0.15	-7.10	<30	Pass
		B	-17.70	6.98	0.15	-7.56	<30	Pass
159	5795	A	-16.94	6.98	0.15	-6.80	<30	Pass
		B	-17.70	6.98	0.15	-7.56	<30	Pass

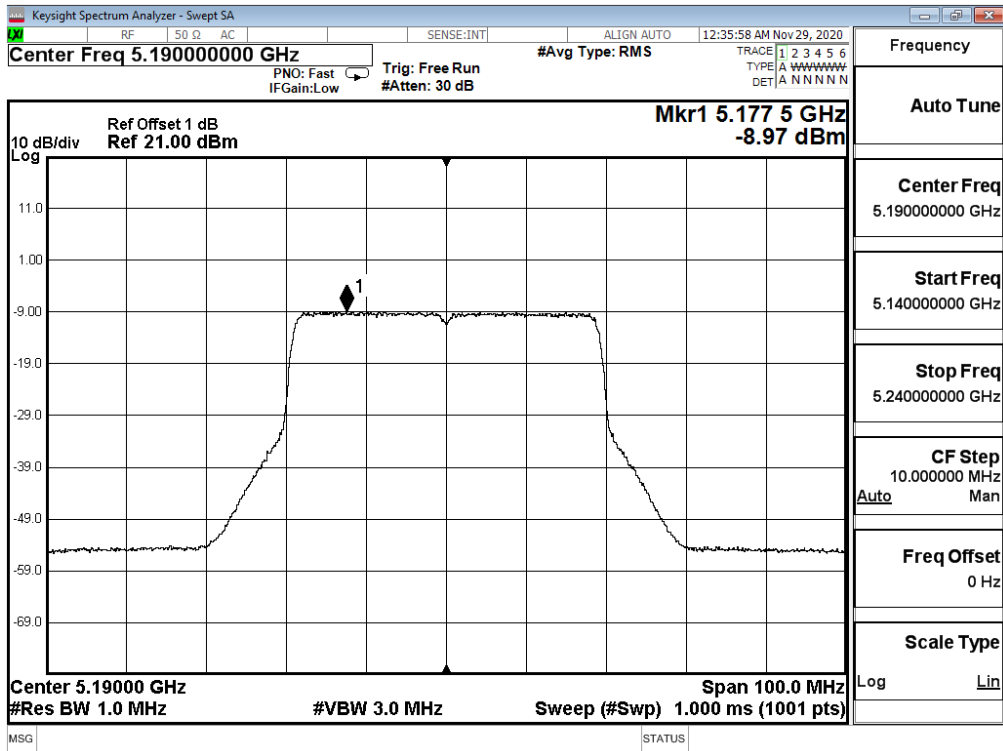
Note 1: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

RU config: Other

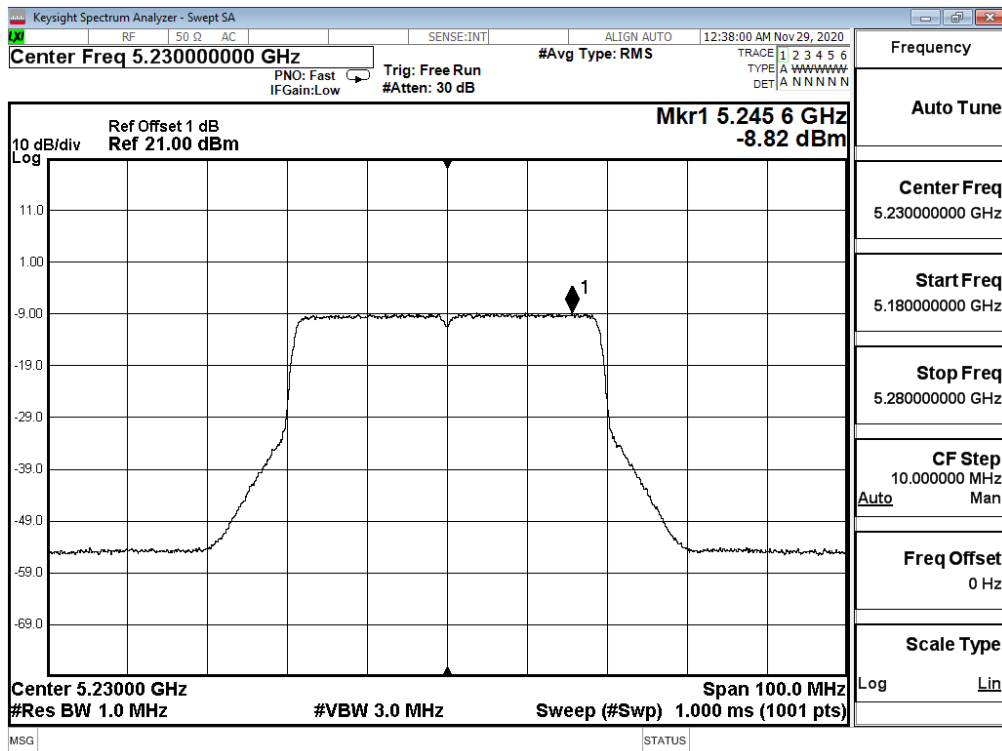
Channel / Frequenc	RU setting	Chain	PPSD (dBm)	10*log(2) (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
38/5190	242/61	A	-5.65	3.01	0.24	-2.40	11	Pass
		B	-5.51	3.01	0.24	-2.26	11	Pass
62/5310	242/62	A	-6.23	3.01	0.24	-2.98	11	Pass
		B	-5.20	3.01	0.24	-1.95	11	Pass
102/5510	242/61	A	-4.87	3.01	0.24	-1.62	11	Pass
		B	1.49	3.01	0.24	4.74	11	Pass
134/5670	242/62	A	-5.09	3.01	0.24	-1.84	11	Pass
		B	-5.11	3.01	0.24	-1.86	11	Pass

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
151/5755	242/61	A	-6.57	6.98	0.24	3.66	<30	Pass
		B	-14.73	6.98	0.24	-4.50	<30	Pass

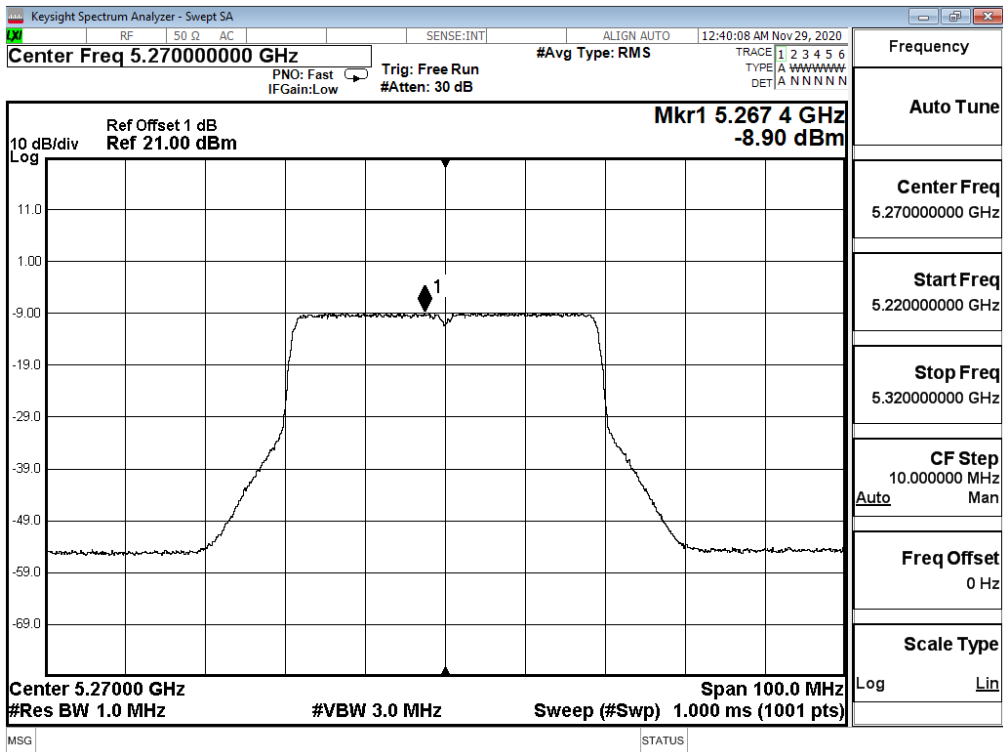
RU config: Full
Channel 38 – Chain A



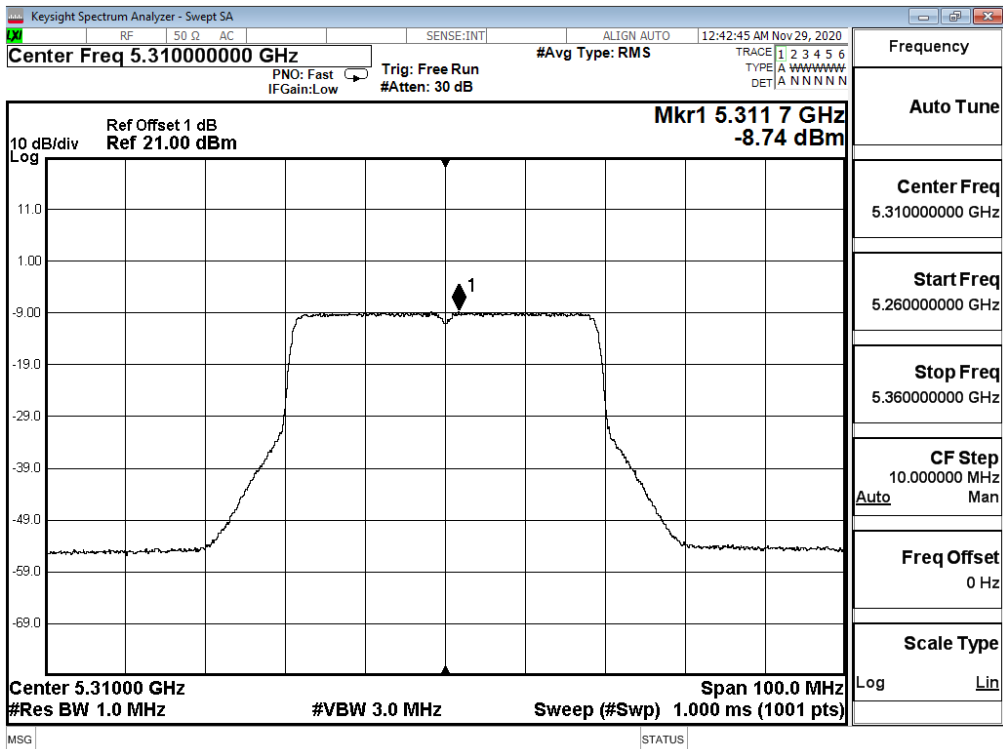
Channel 46 – Chain A



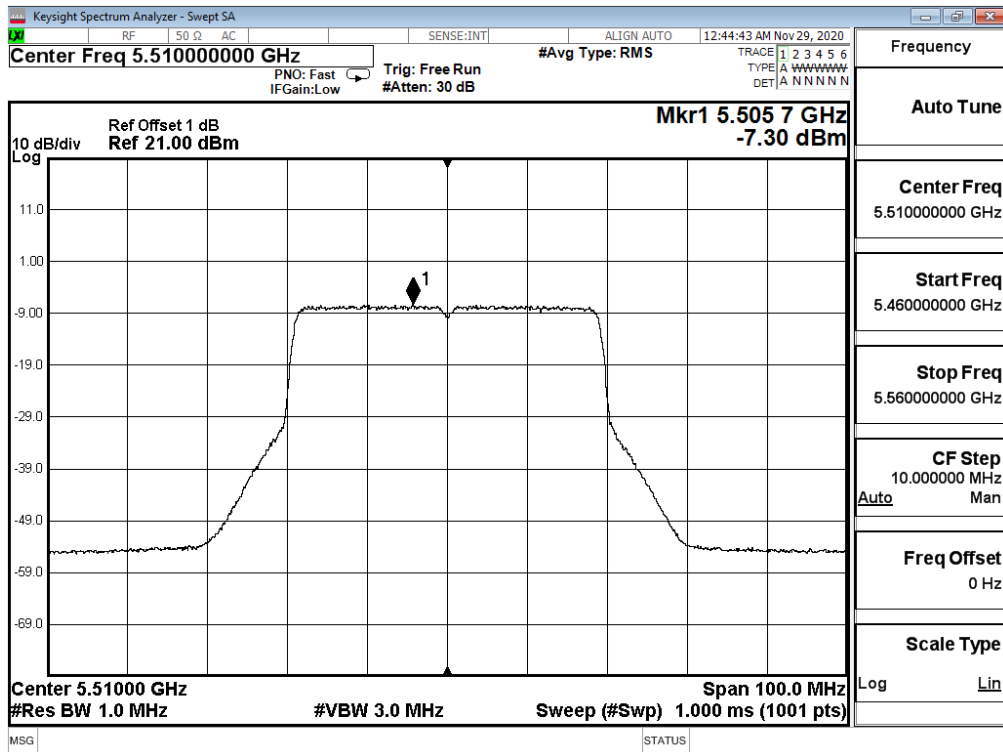
Channel 54 – Chain A



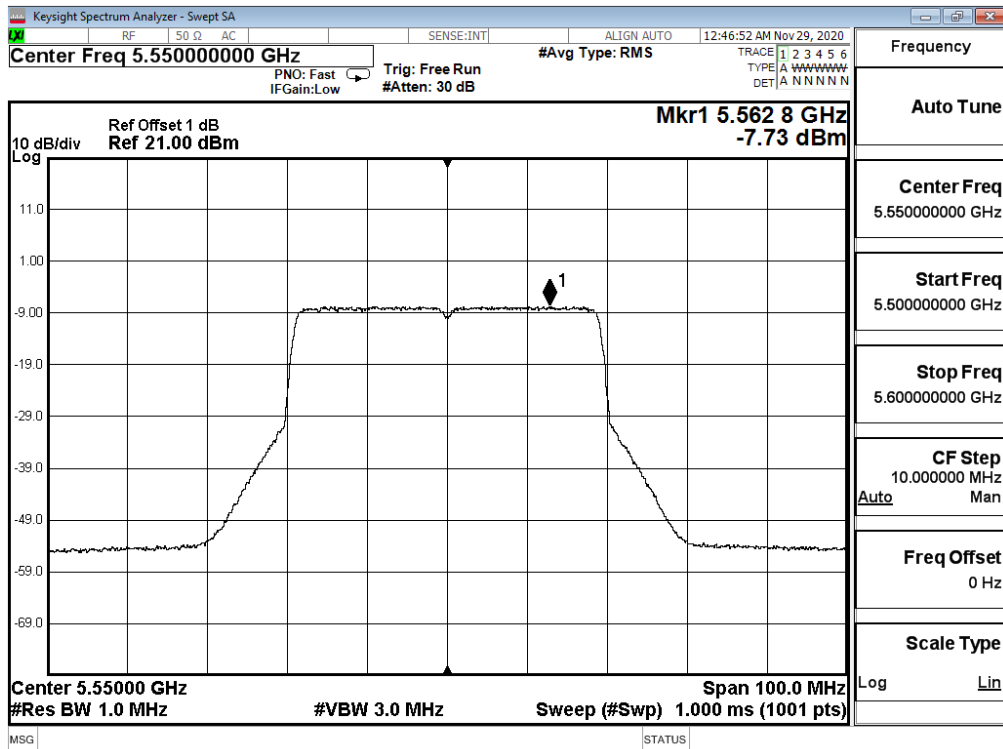
Channel 62 – Chain A



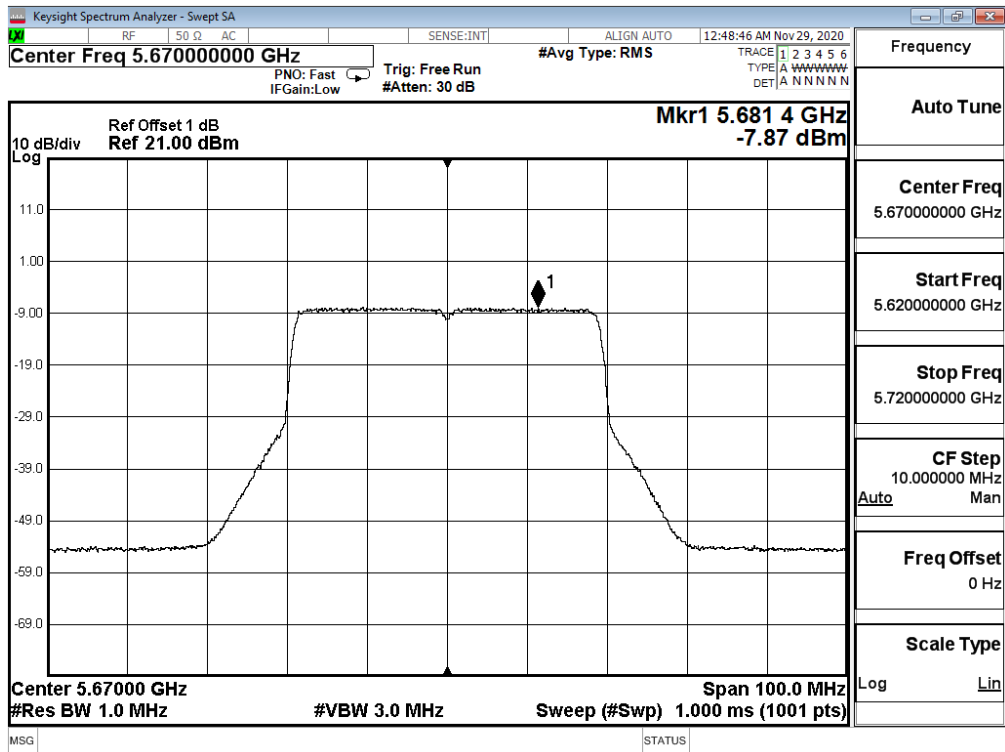
Channel 102 – Chain A



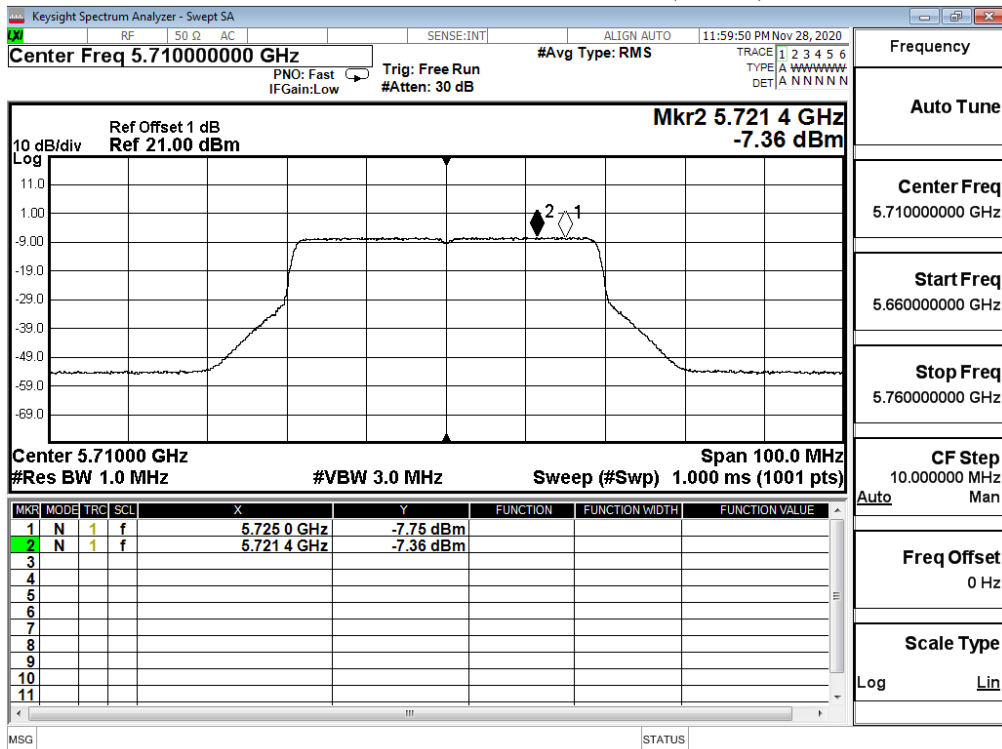
Channel 110 – Chain A



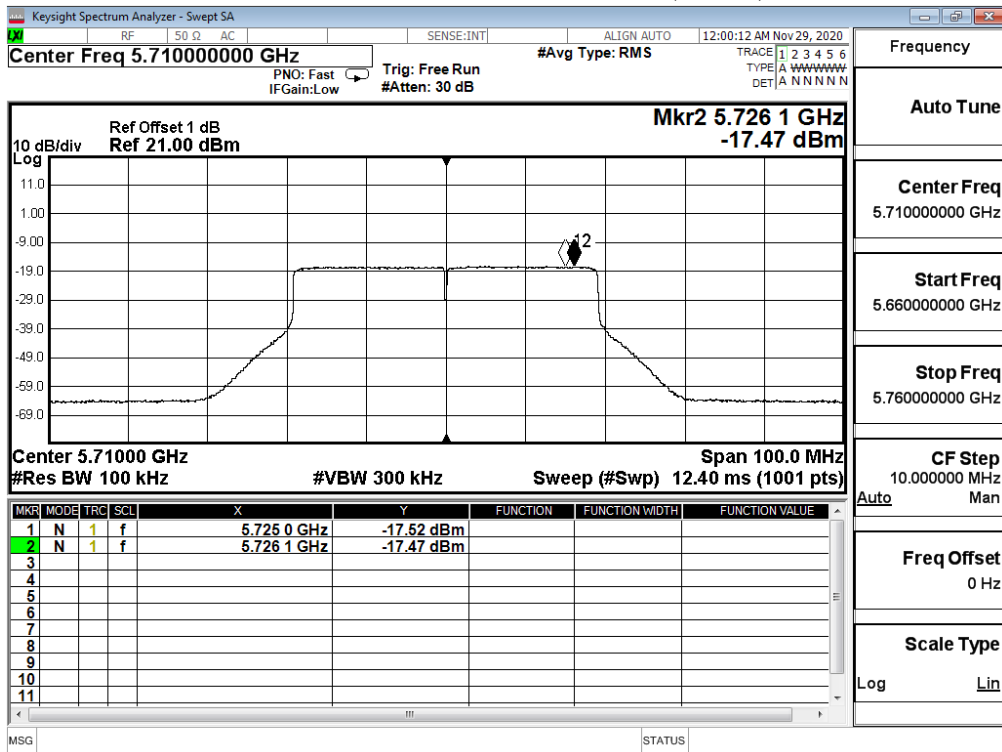
Channel 134 – Chain A



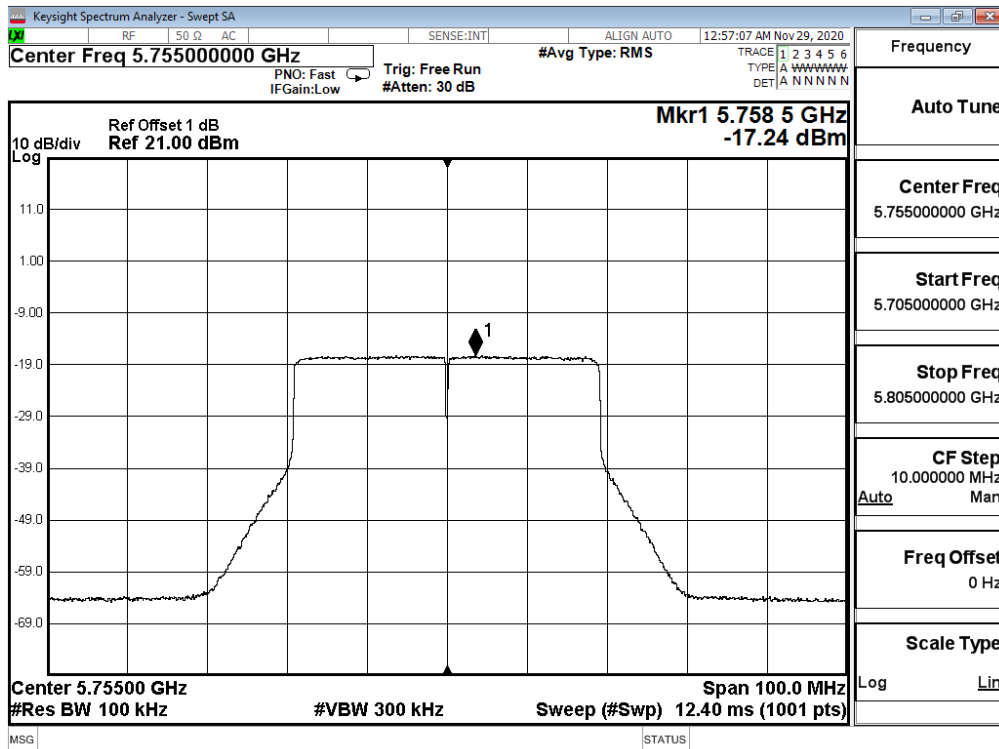
Channel 142 – Chain A (Band3)



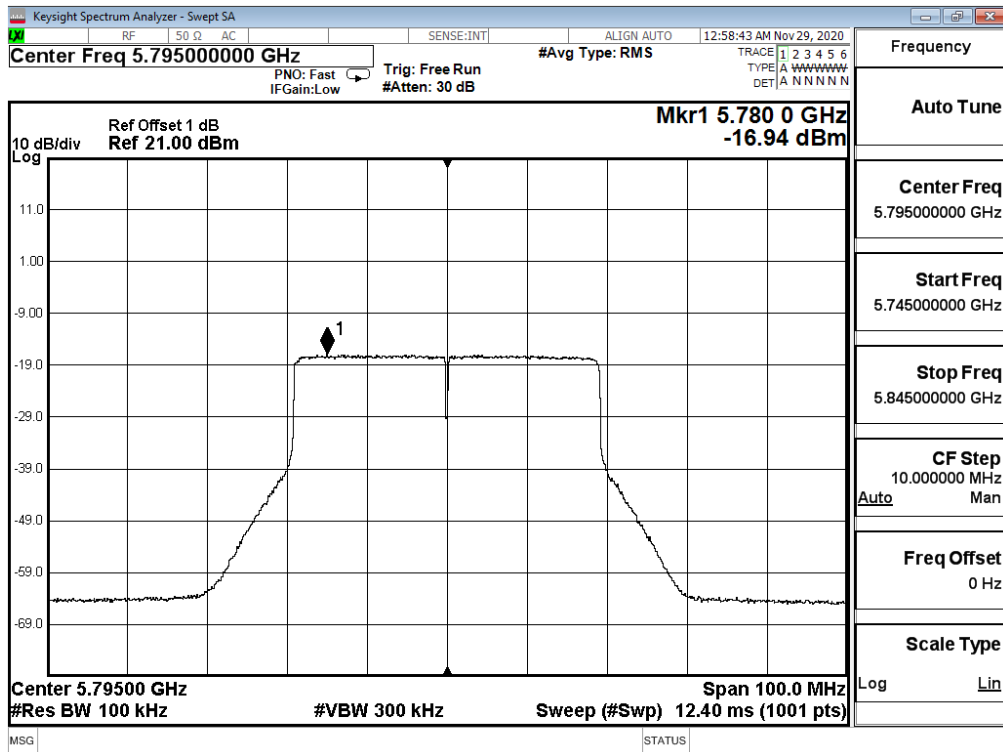
Channel 142 – Chain A (Band4)



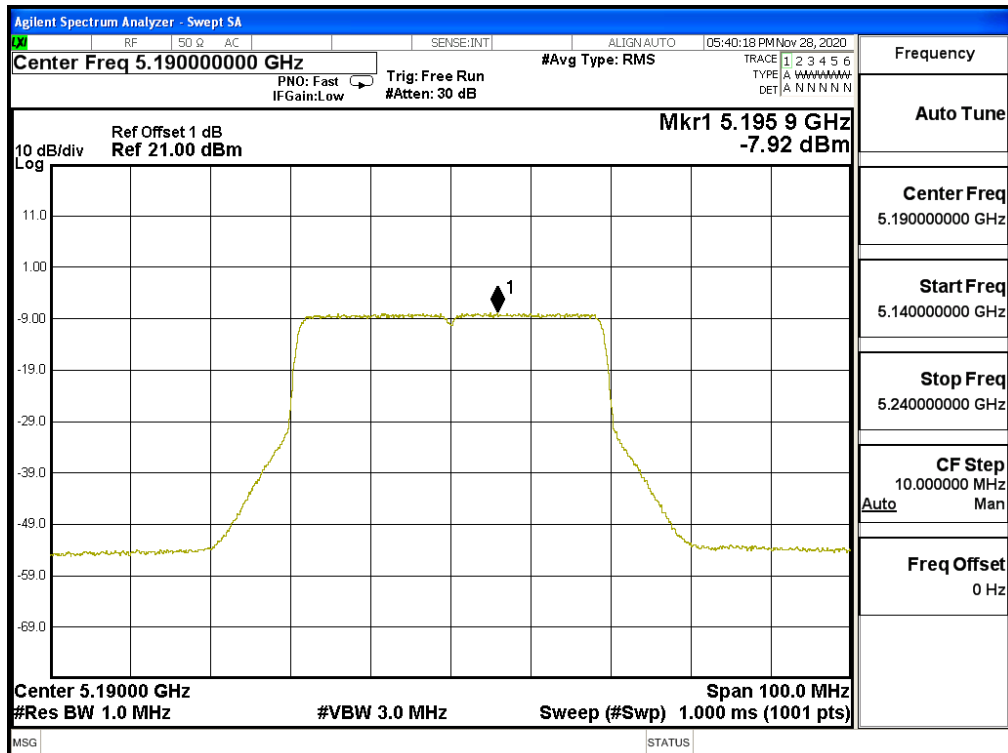
Channel 151 – Chain A



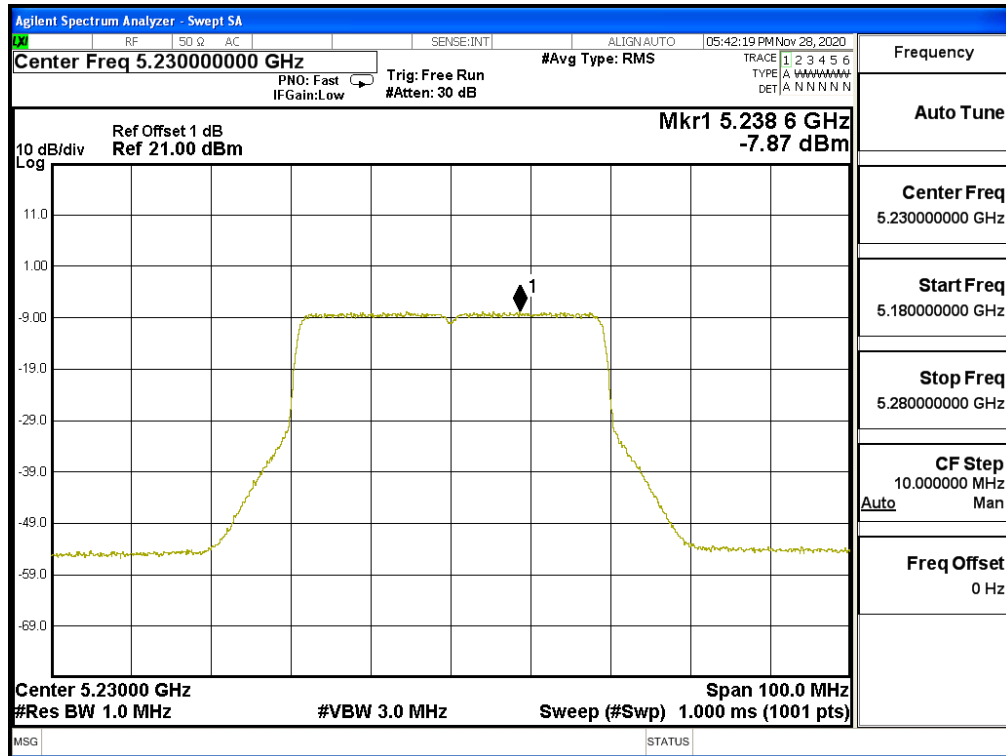
Channel 159 – Chain A



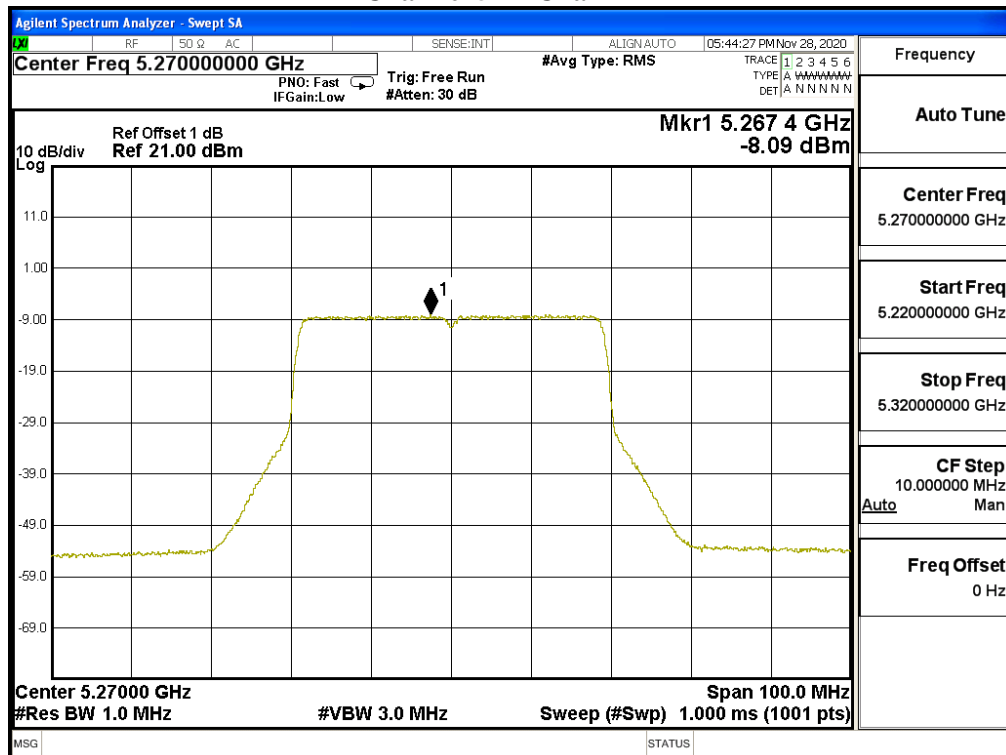
Channel 38 – Chain B



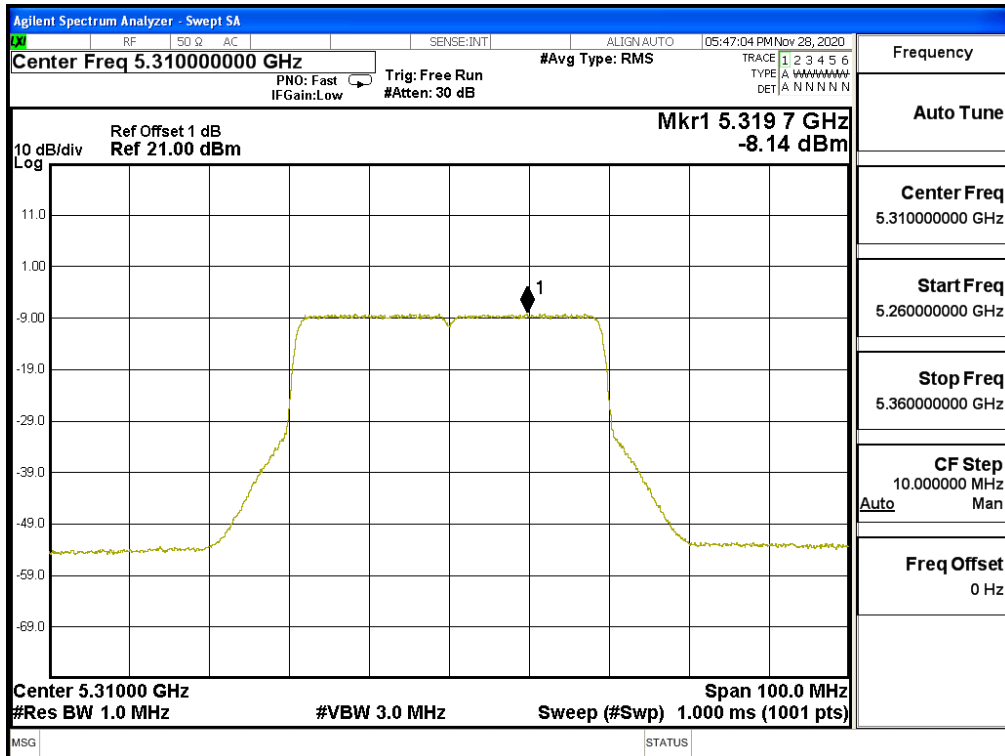
Channel 46 – Chain B



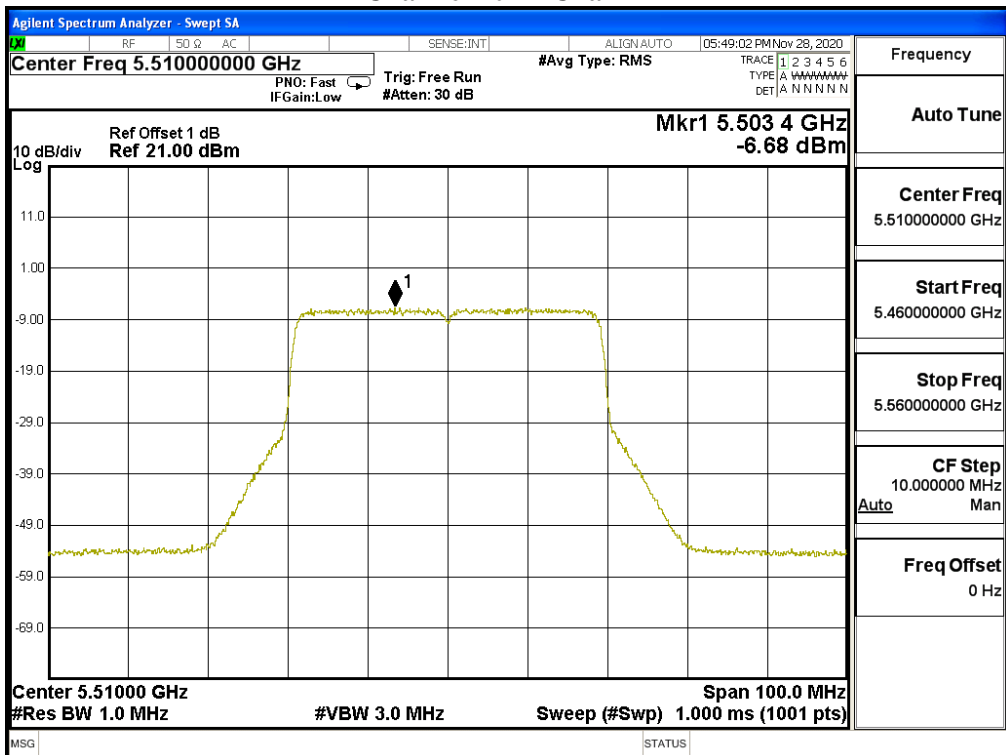
Channel 54 – Chain B



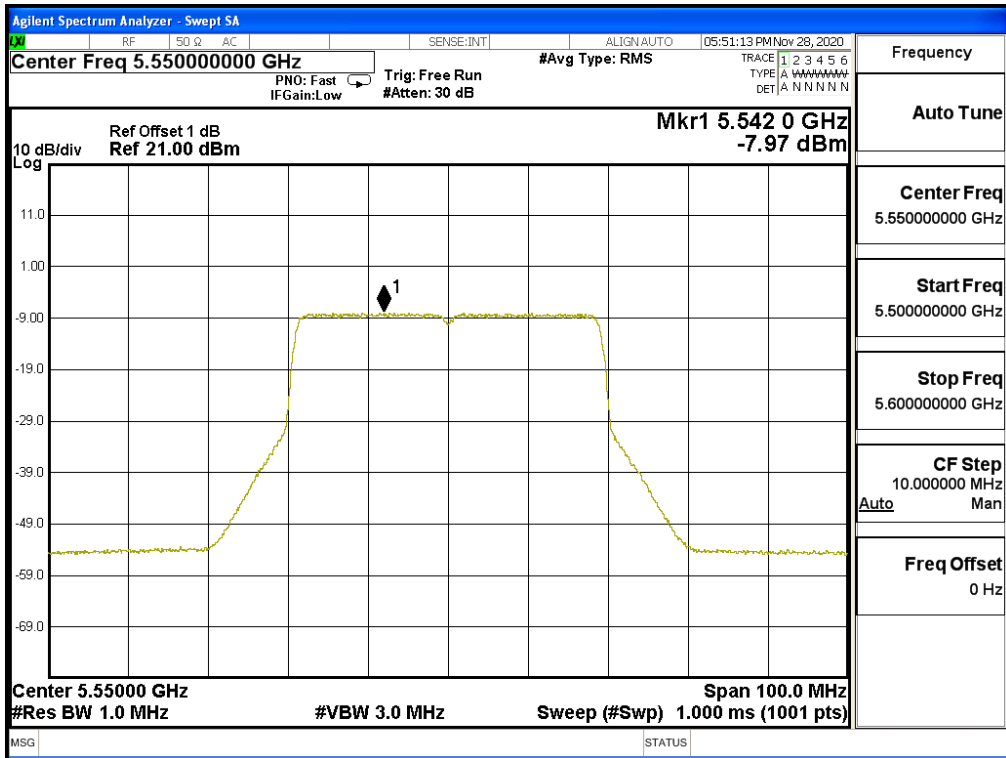
Channel 62 – Chain B



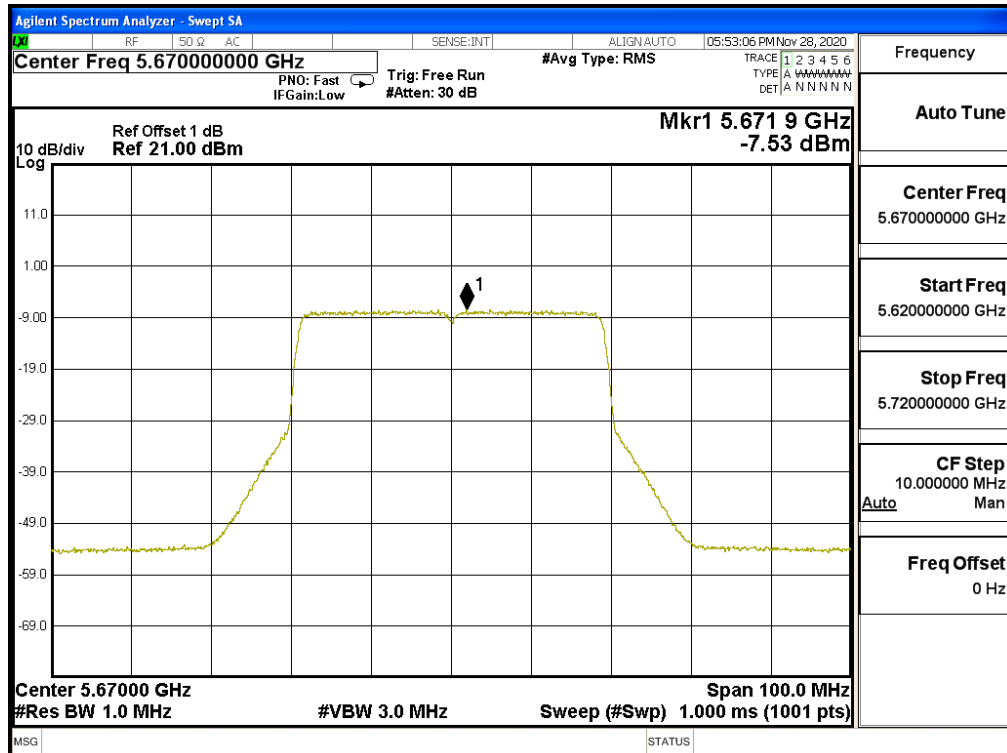
Channel 102 – Chain B



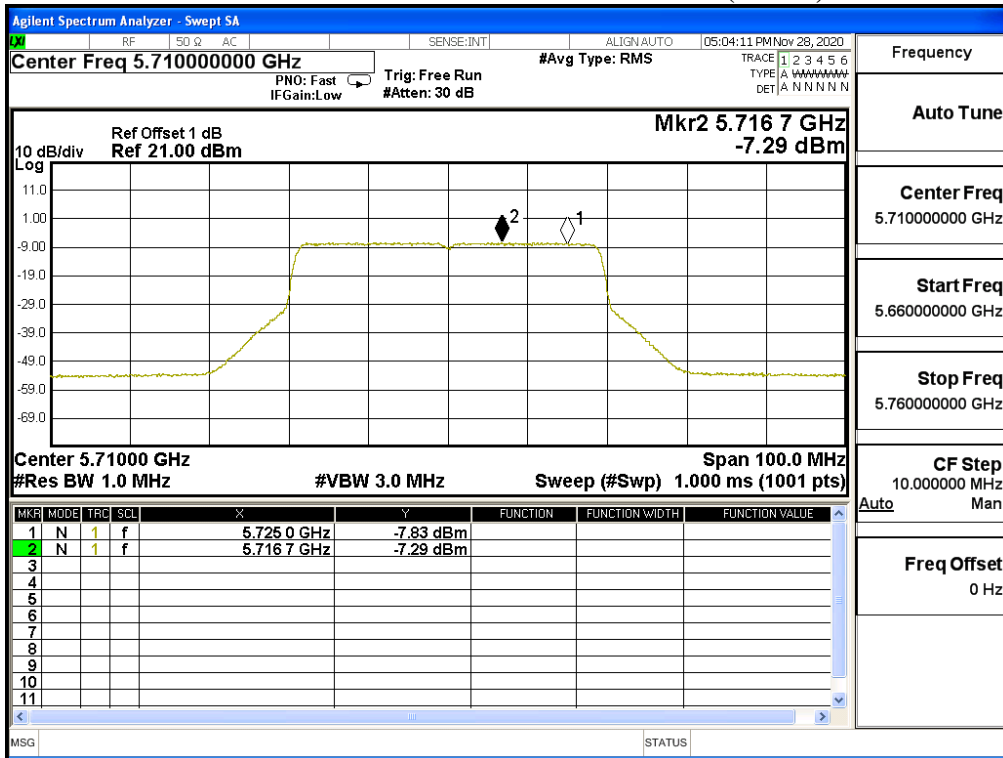
Channel 110 – Chain B



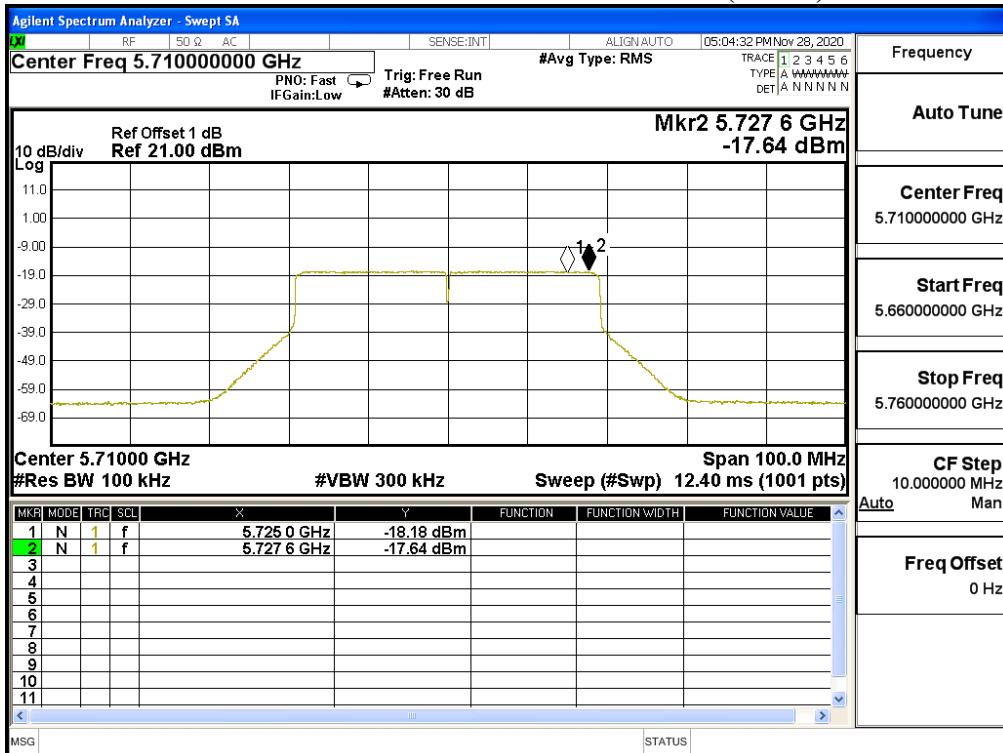
Channel 134 – Chain B



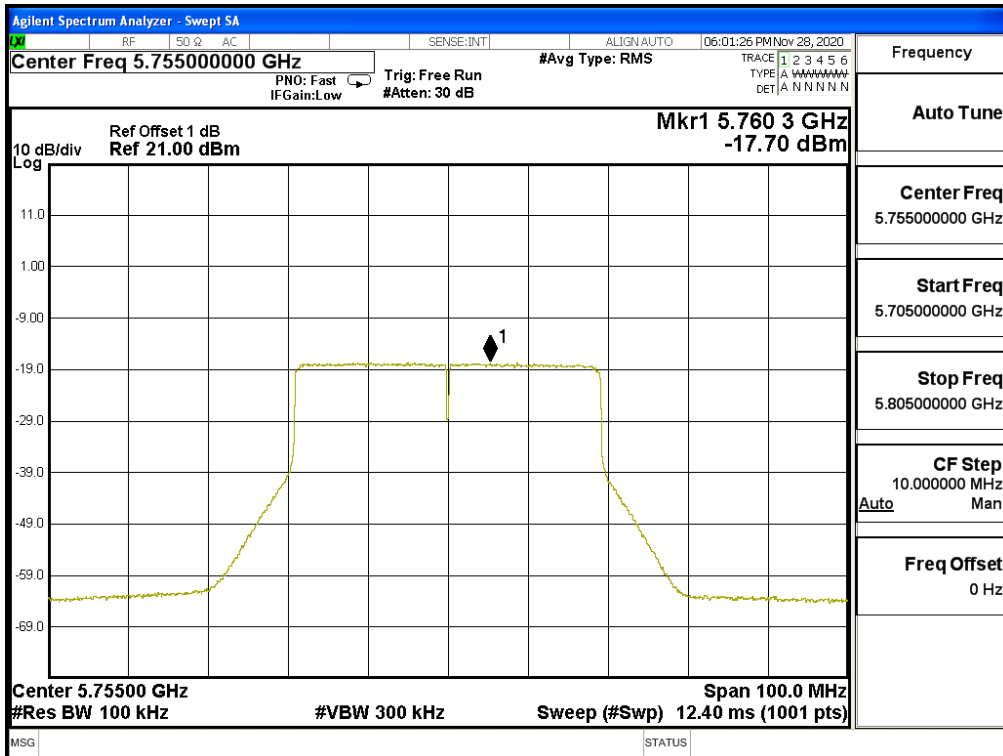
Channel 142 – Chain B (Band3)



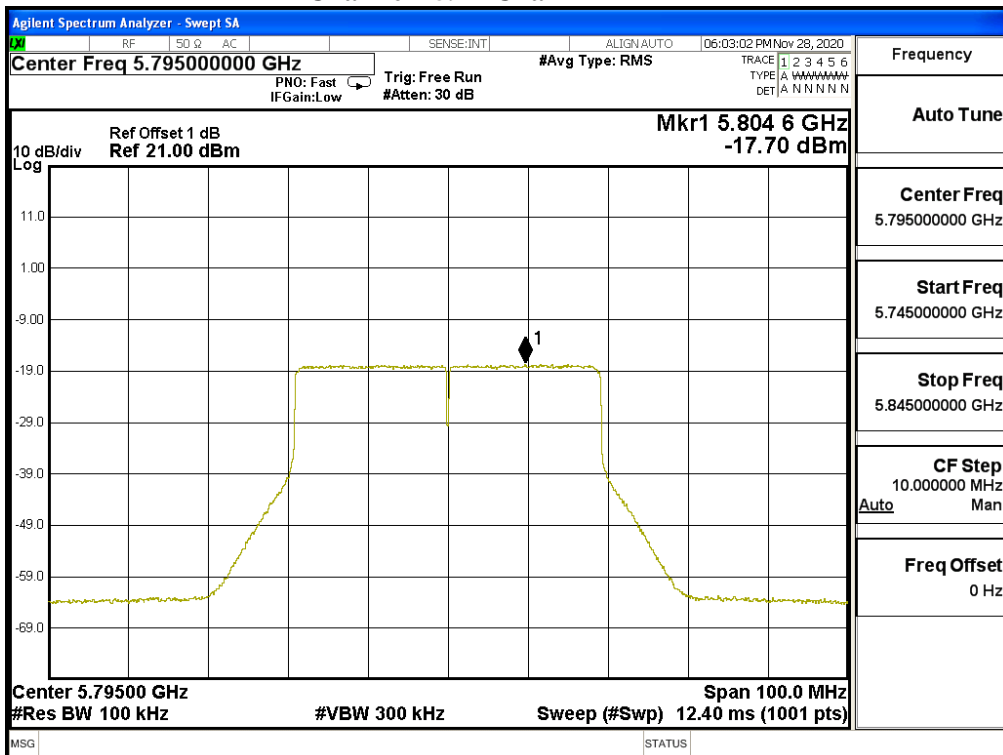
Channel 142 – Chain B (Band4)



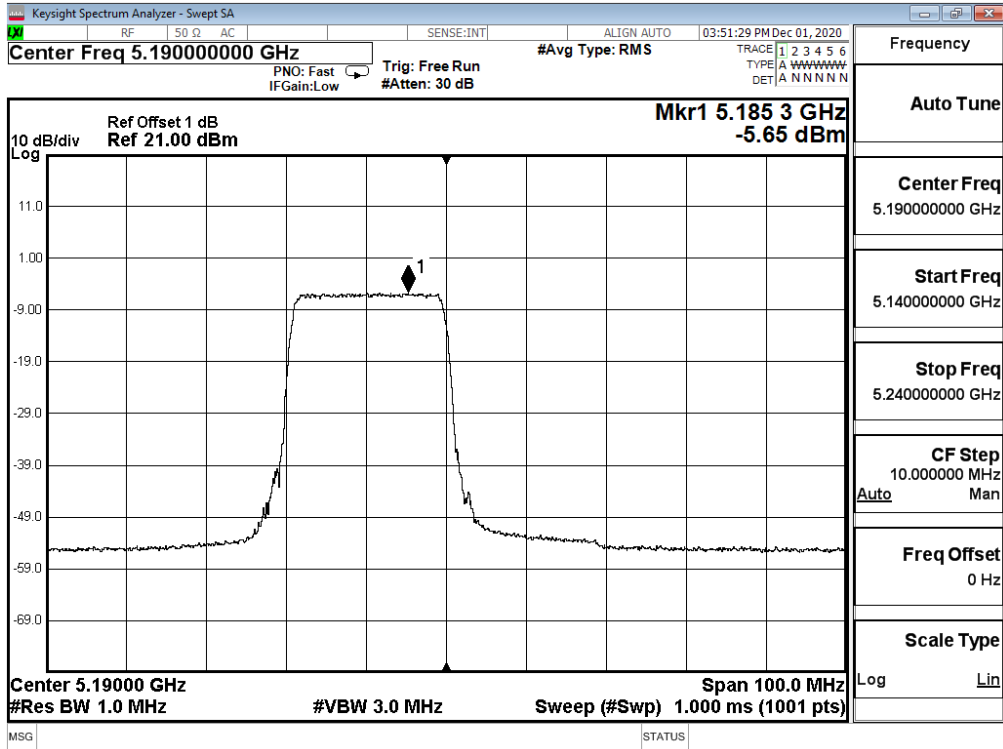
Channel 151 – Chain B



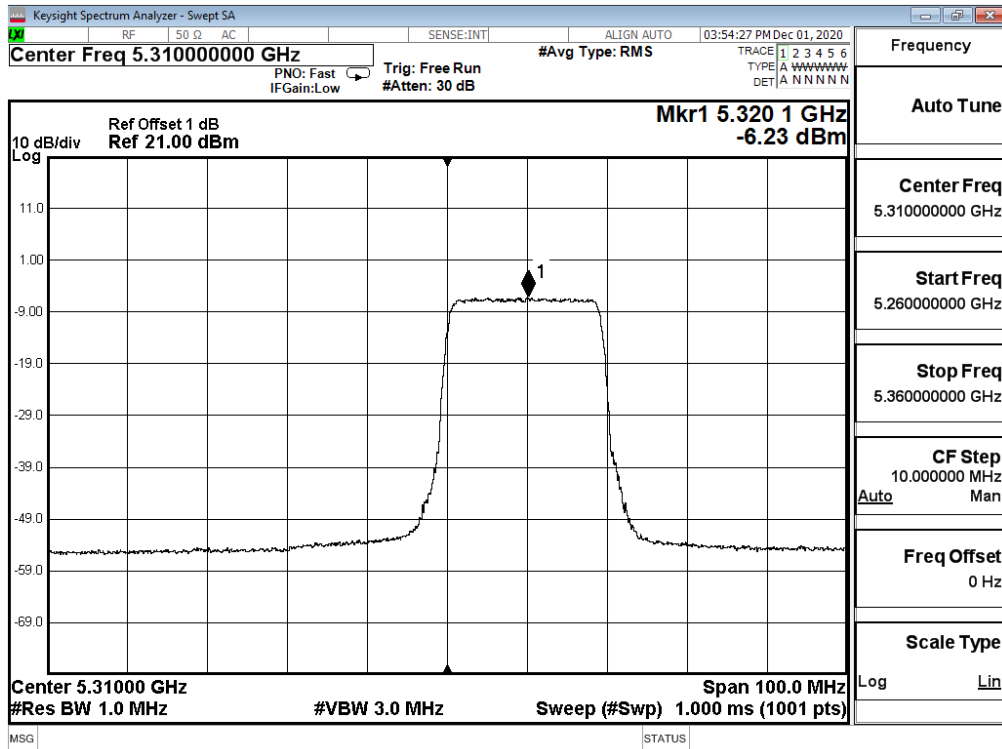
Channel 159 – Chain B



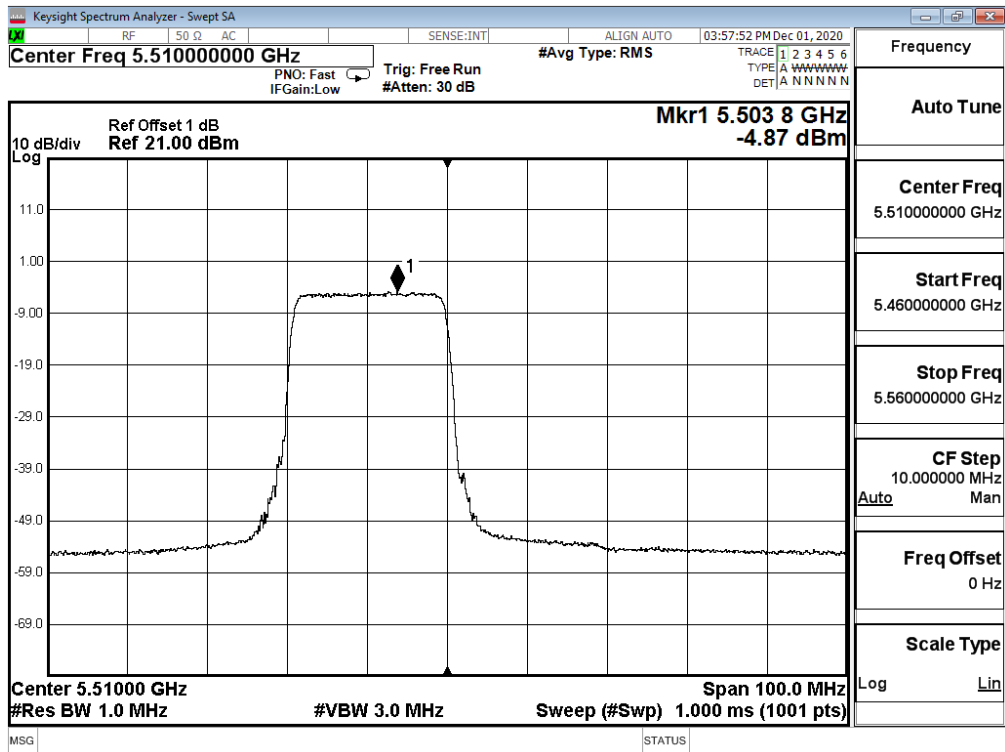
RU config: Other
Channel 38 – 242/61 Chain A



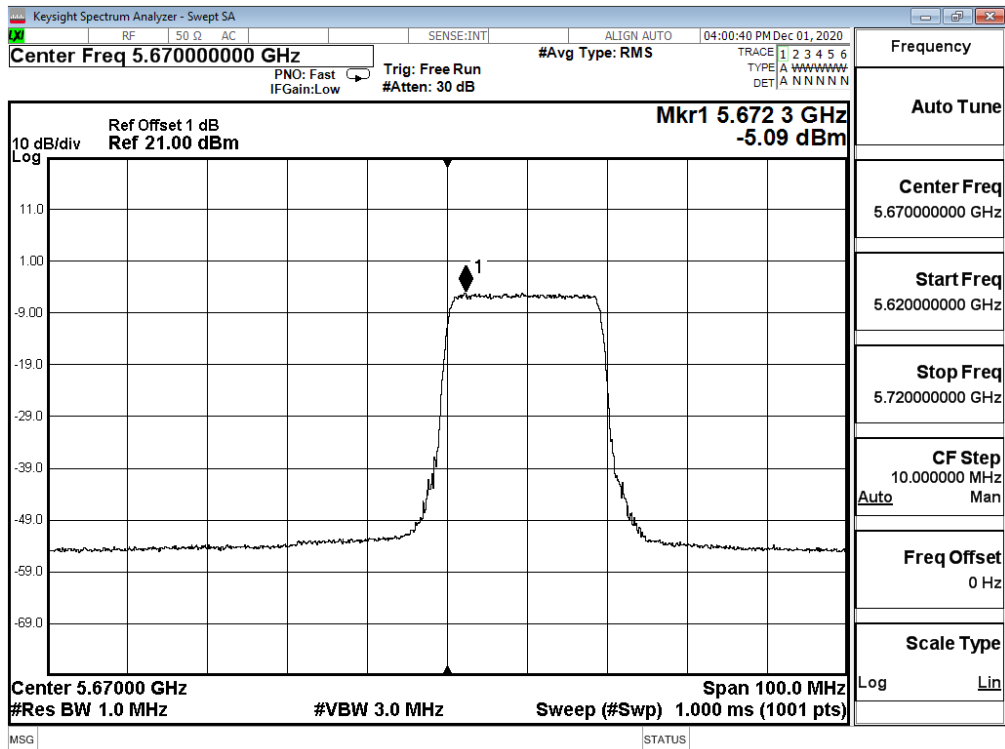
Channel 62 –242/62 Chain A



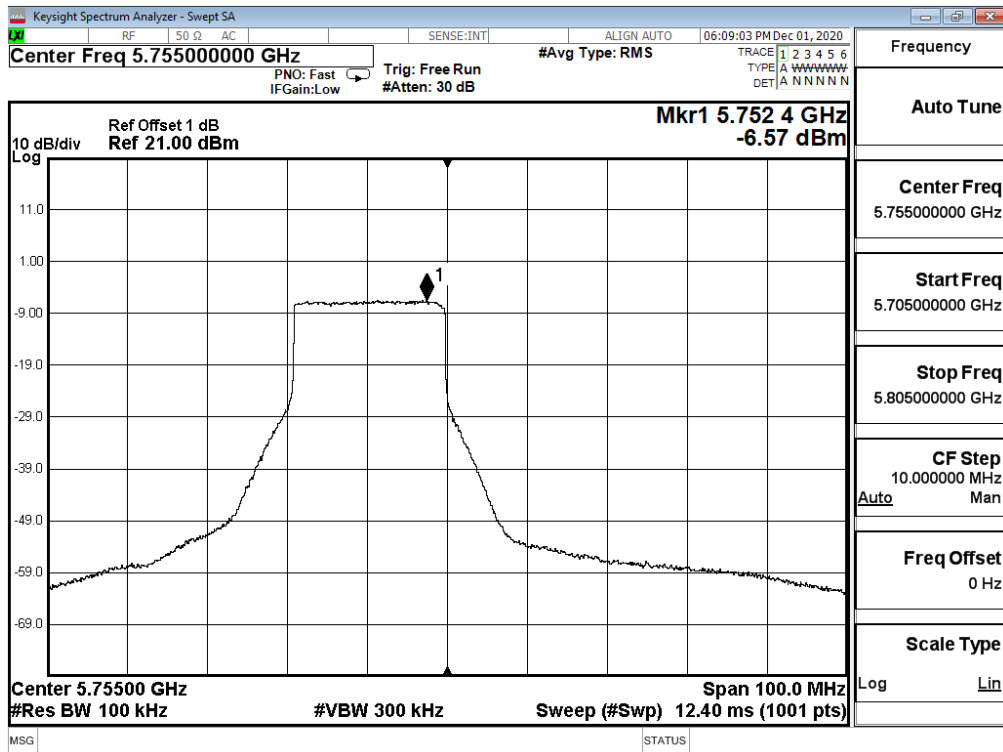
Channel 102 –242/61 Chain A



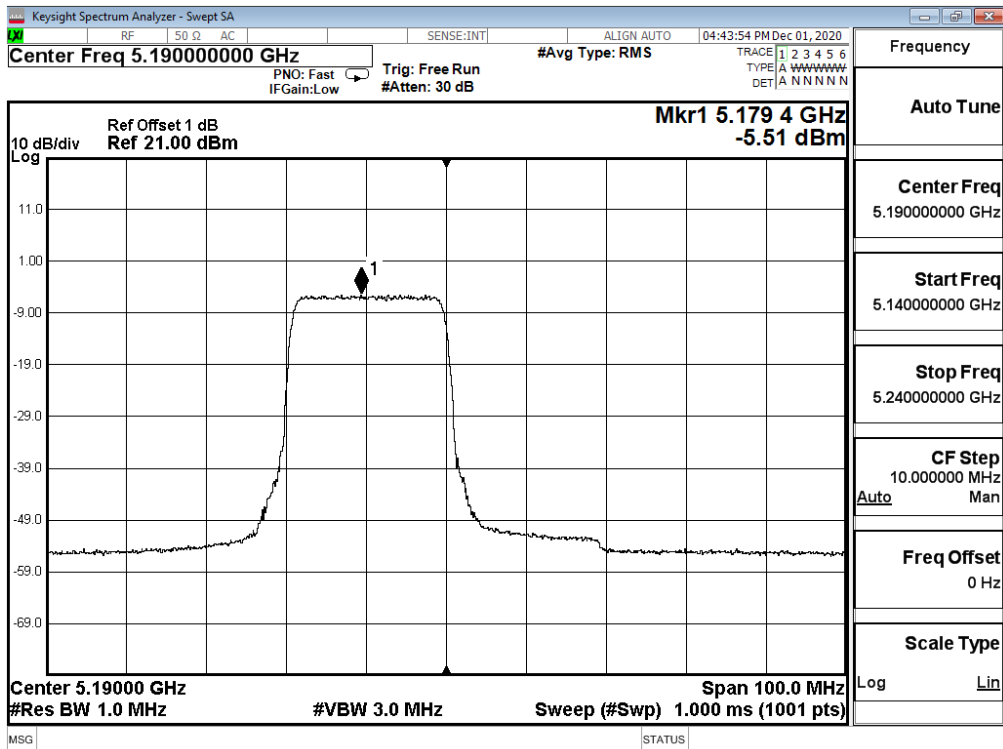
Channel 134 – 242/62 Chain A



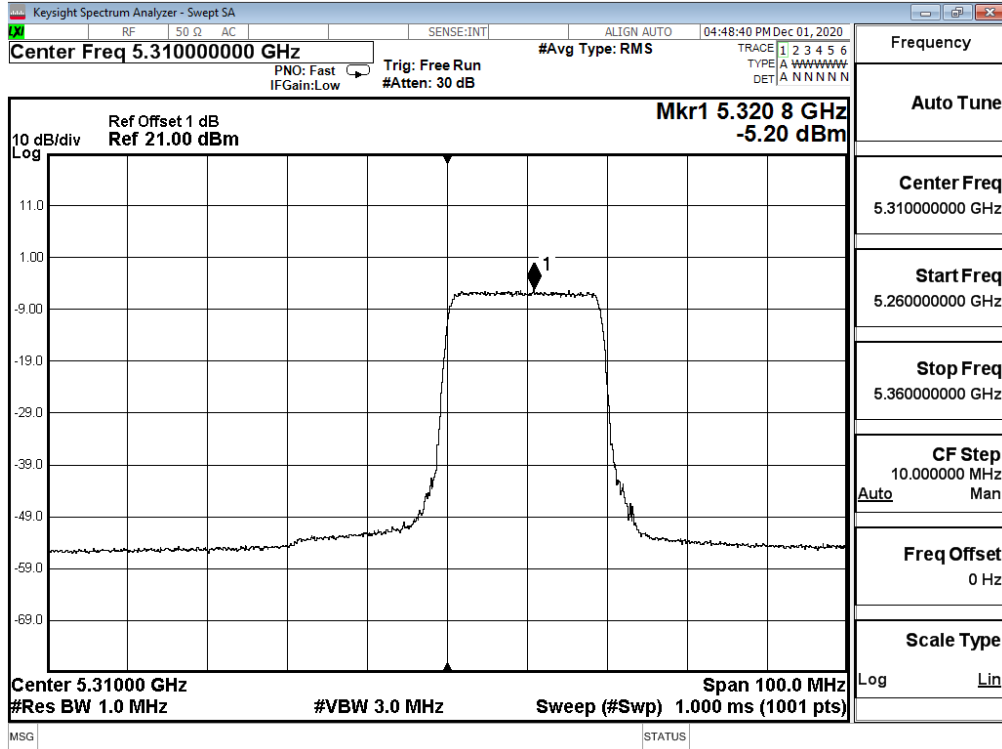
Channel 151 – 242/61 Chain A



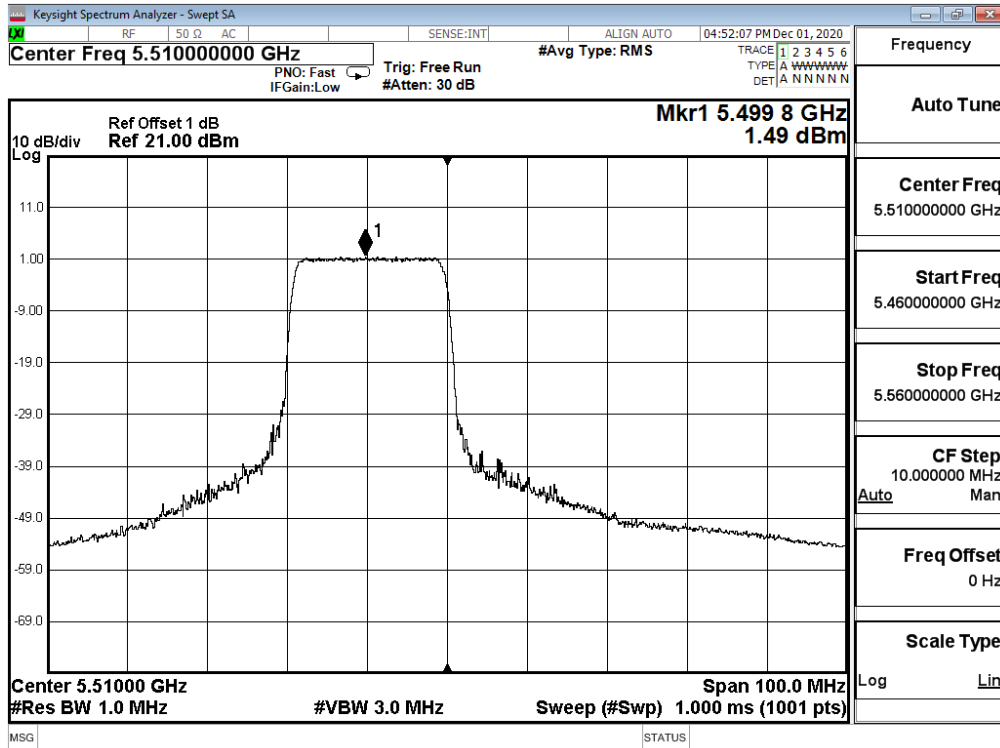
Channel 38 – 242/61 Chain B



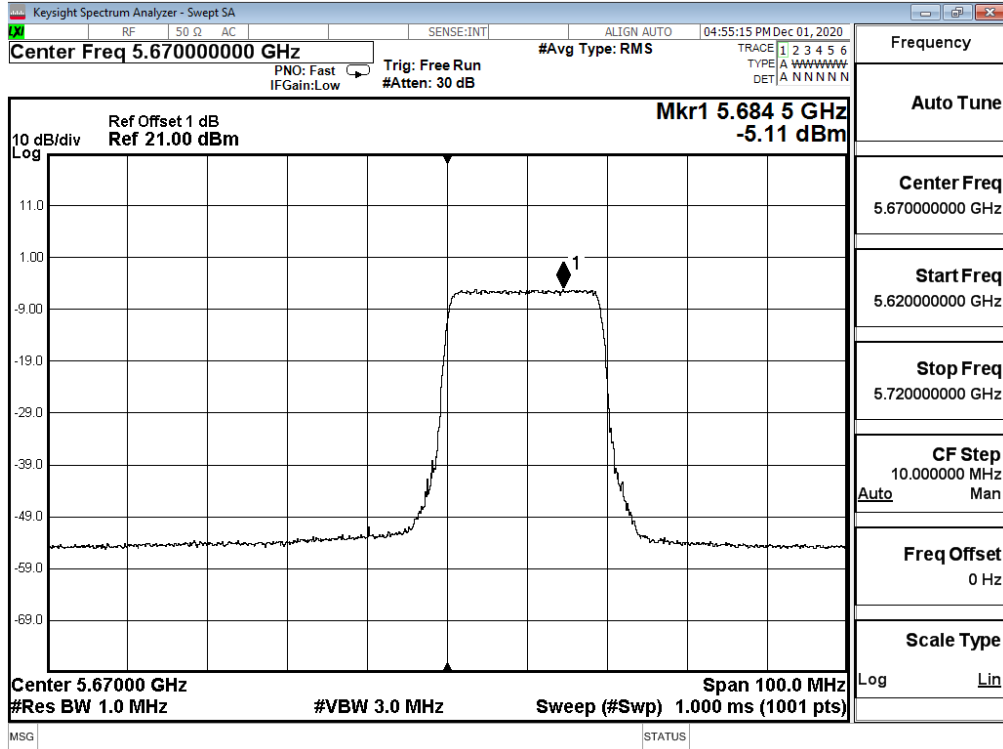
Channel 62 -242/62 Chain B



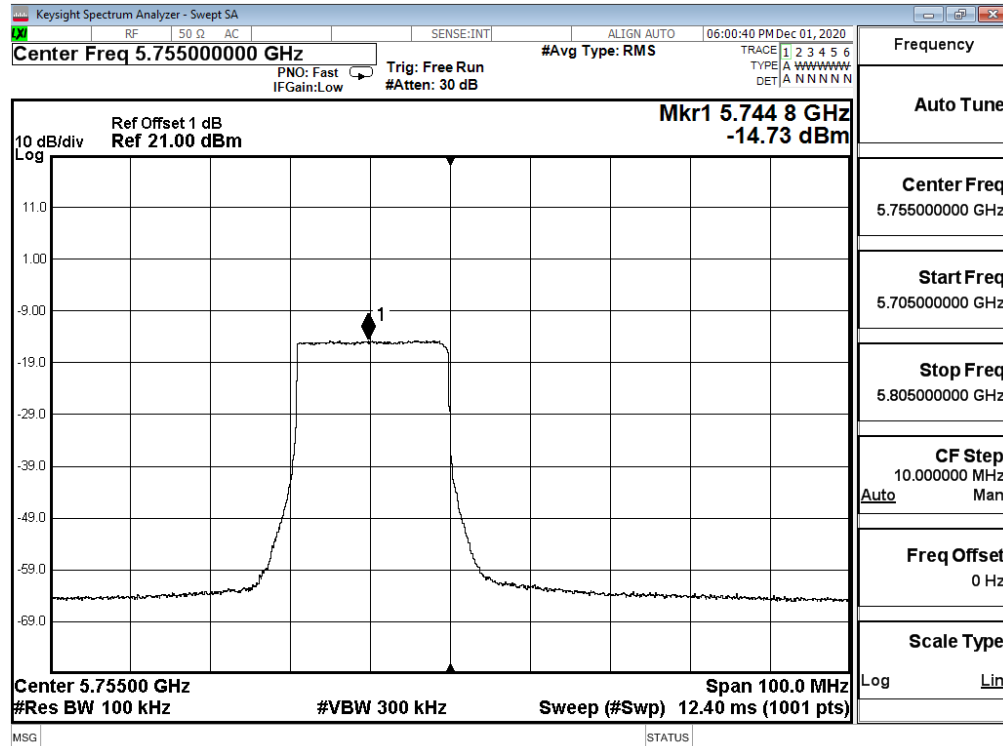
Channel 102 -242/61 Chain B



Channel 134 – 242/62 Chain B



Channel 151 – 242/61 Chain B



Product : Notebook Computers
 Test Item : Peak Power Spectral Density
 Test Mode : Mode 25: MIMO Transmit (802.11ax-80BW_72.1Mbps)

RU config: Full

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	10*log(2) (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
42	5210	A	-11.210	3.01	0.31	-7.890	<11	Pass
		B	-9.770	3.01	0.31	-6.450	<11	Pass
58	5290	A	-10.940	3.01	0.31	-7.620	<11	Pass
		B	-9.900	3.01	0.31	-6.580	<11	Pass
106	5530	A	-10.030	3.01	0.31	-6.710	<11	Pass
		B	-9.280	3.01	0.31	-5.960	<11	Pass
122	5610	A	-10.110	3.01	0.31	-6.790	<11	Pass
		B	-9.640	3.01	0.31	-6.320	<11	Pass

Note 1: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
138	5690(Band3)	A	-9.94	--	0.31	-6.62	<11	Pass
		B	-9.49	6.98	0.31	0.81	<30	Pass
138	5690(Band4)	A	-23.68	--	0.31	-20.36	<11	Pass
		B	-23.49	6.98	0.31	-13.19	<30	Pass
155ac80	5775	A	-19.45	6.98	0.31	-9.15	<30	Pass
		B	-19.89	6.98	0.31	-9.59	<30	Pass

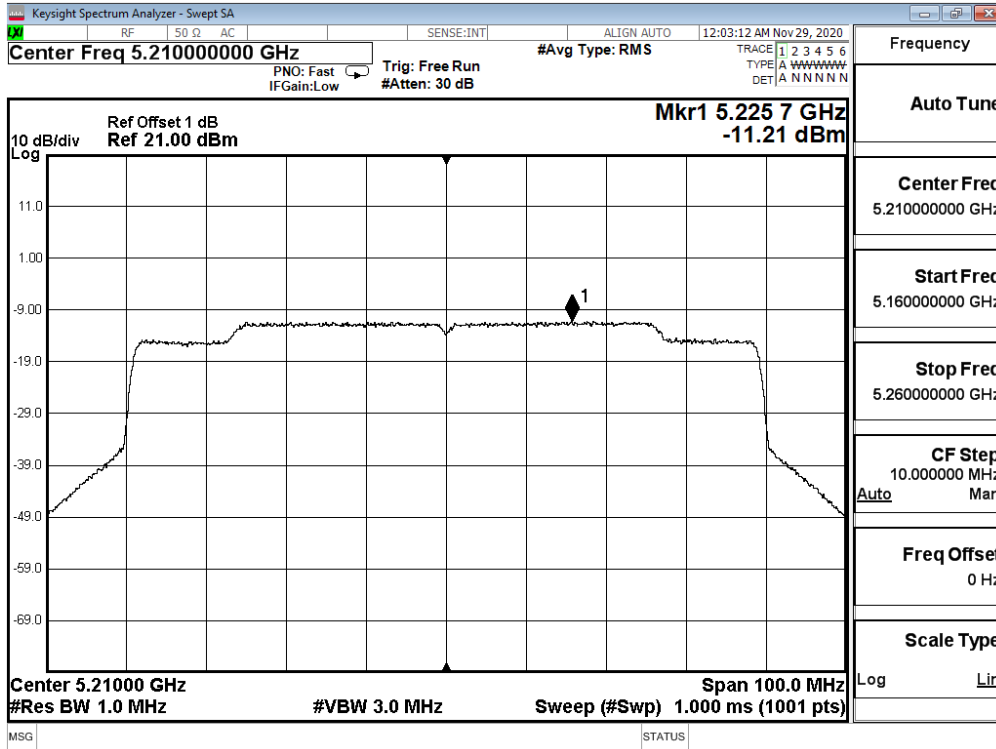
Note 1: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

RU config: Other

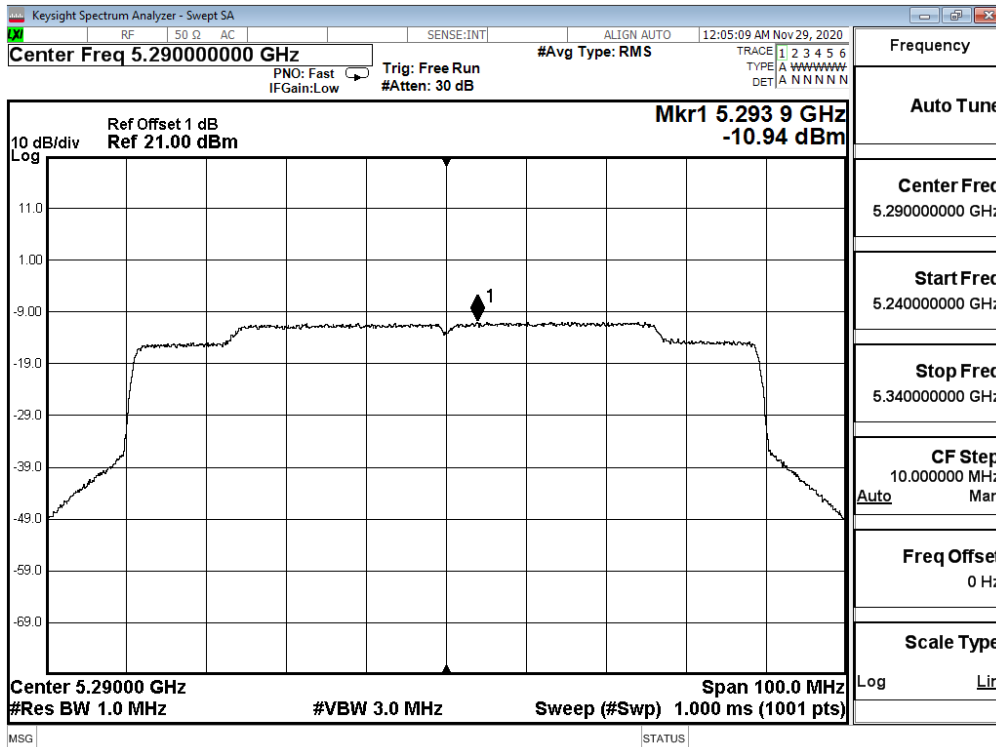
Channel / Frequenc	RU setting	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
42/5210	484/65	A	-9.13	--	0.25	-5.87	<11	Pass
		B	-2.17	--	0.25	1.09	<11	Pass
58/5290	484/66	A	-9.03	--	0.25	-5.77	<11	Pass
		B	-7.97	--	0.25	-4.71	<11	Pass
106/5530	484/65	A	-7.81	--	0.25	-4.55	<11	Pass
		B	-1.52	--	0.25	1.74	<11	Pass
155/5775	484/65	A	-16.63	6.98	0.25	-6.39	<30	Pass
		B	-17.50	6.98	0.25	-7.26	<30	Pass

Note 1: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

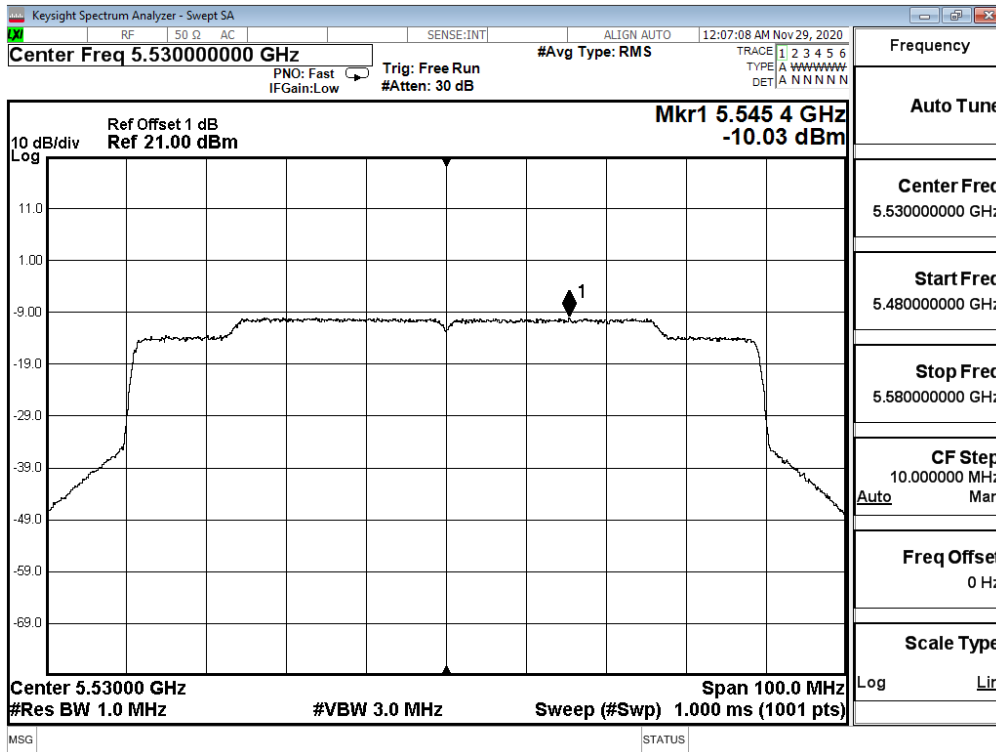
RU config: Full
Channel 42 – Chain A



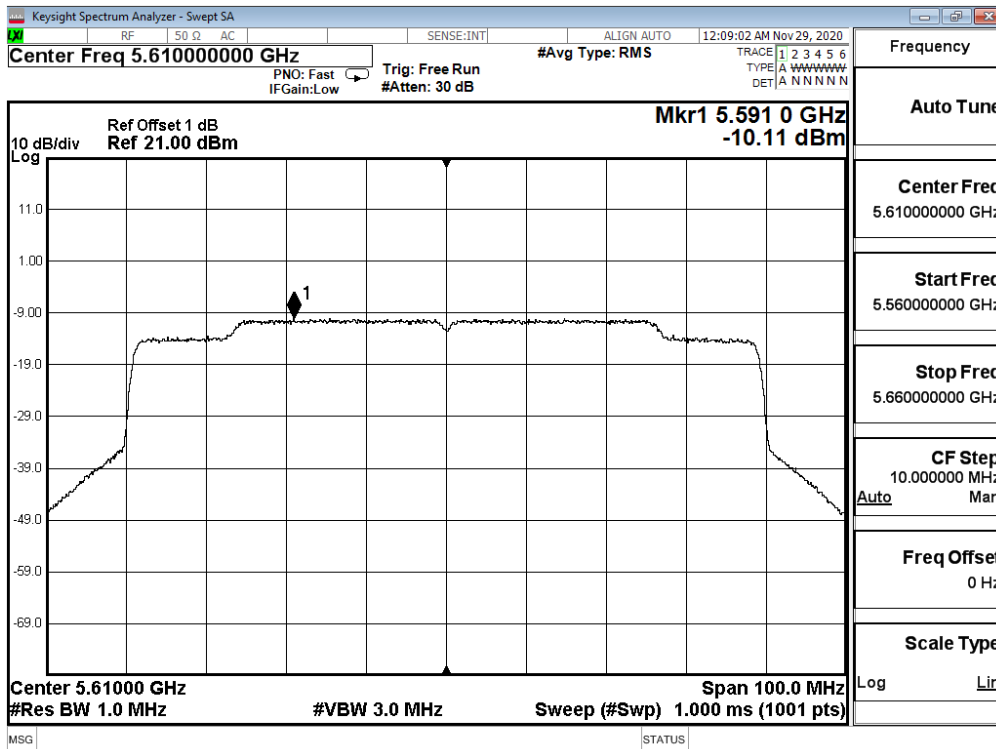
Channel 58 – Chain A



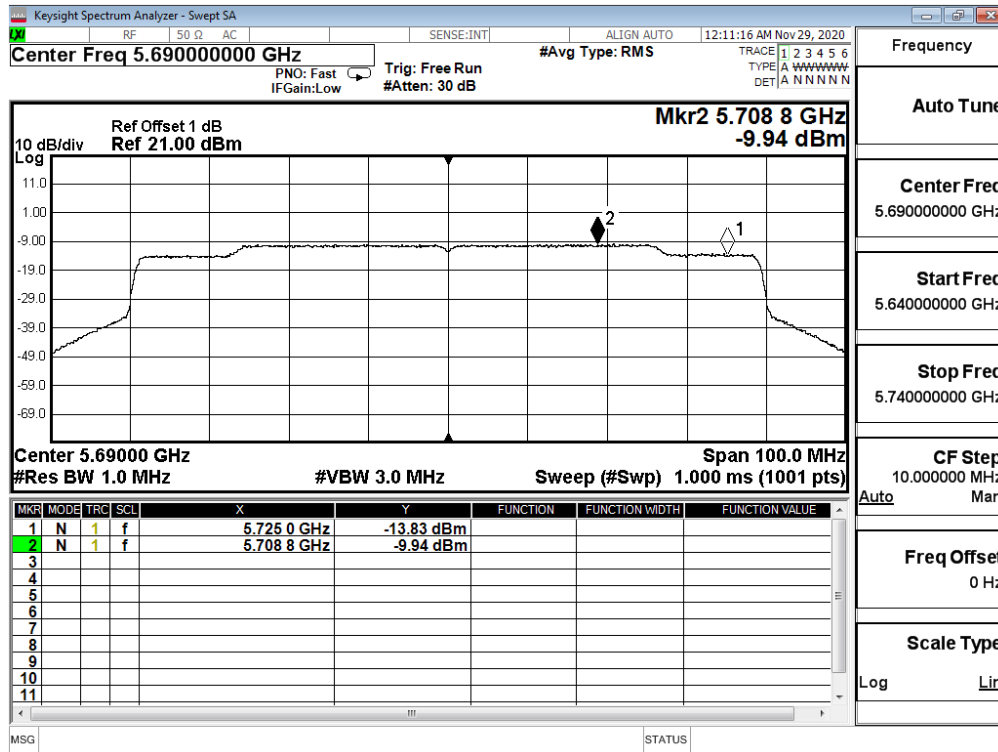
Channel 106 – Chain A



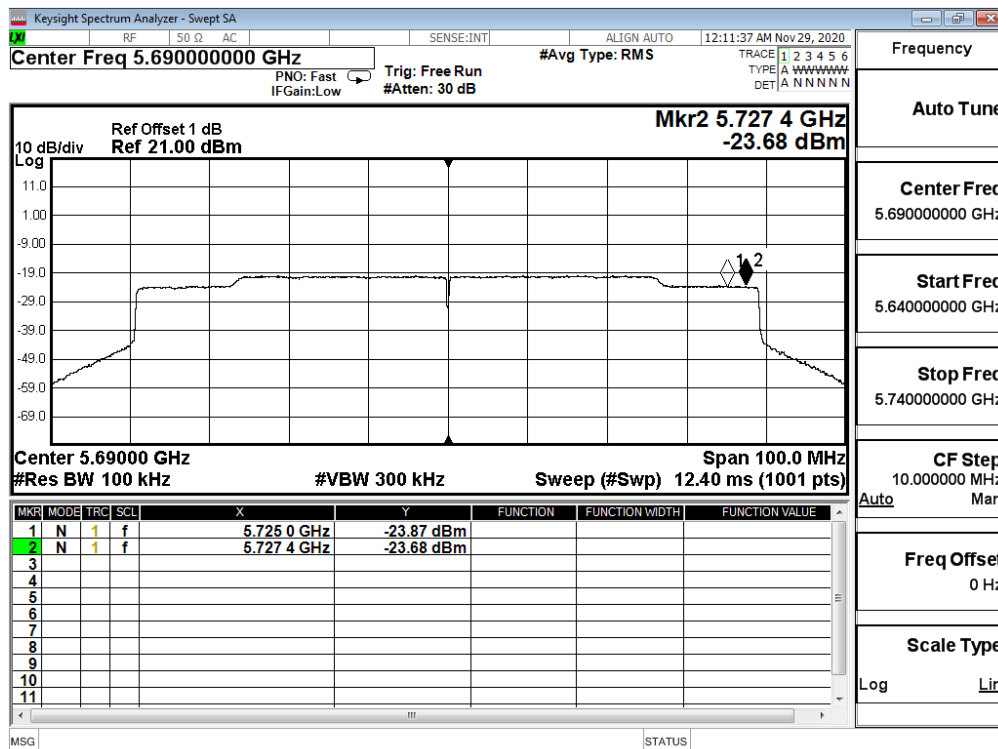
Channel 122 – Chain A



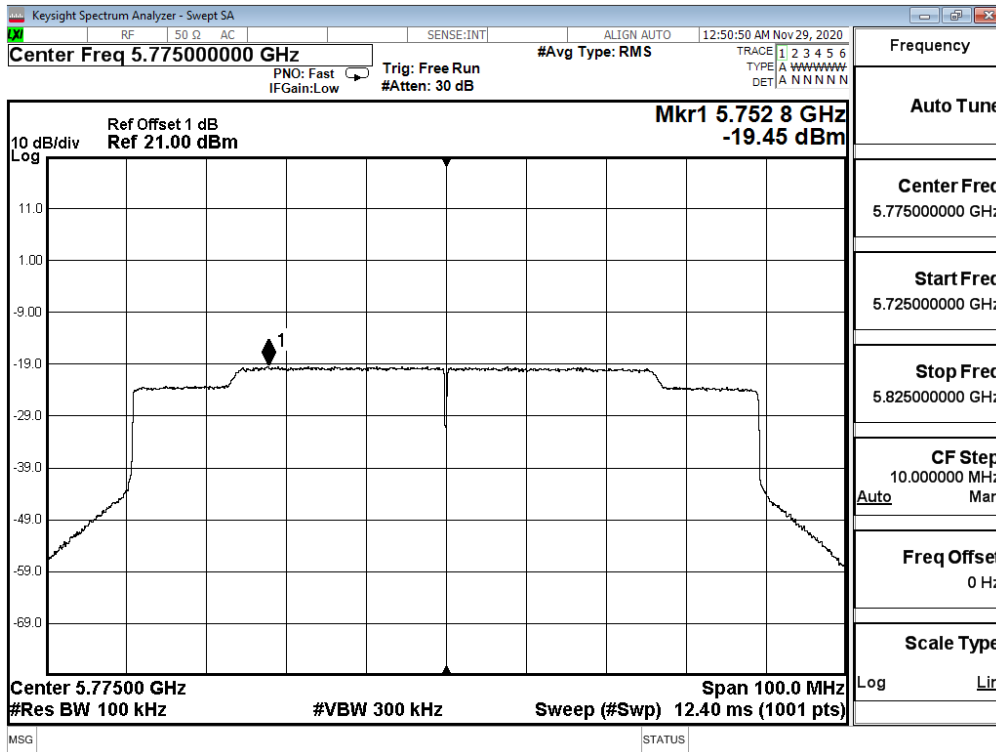
Channel 138 – Chain A (Band3)



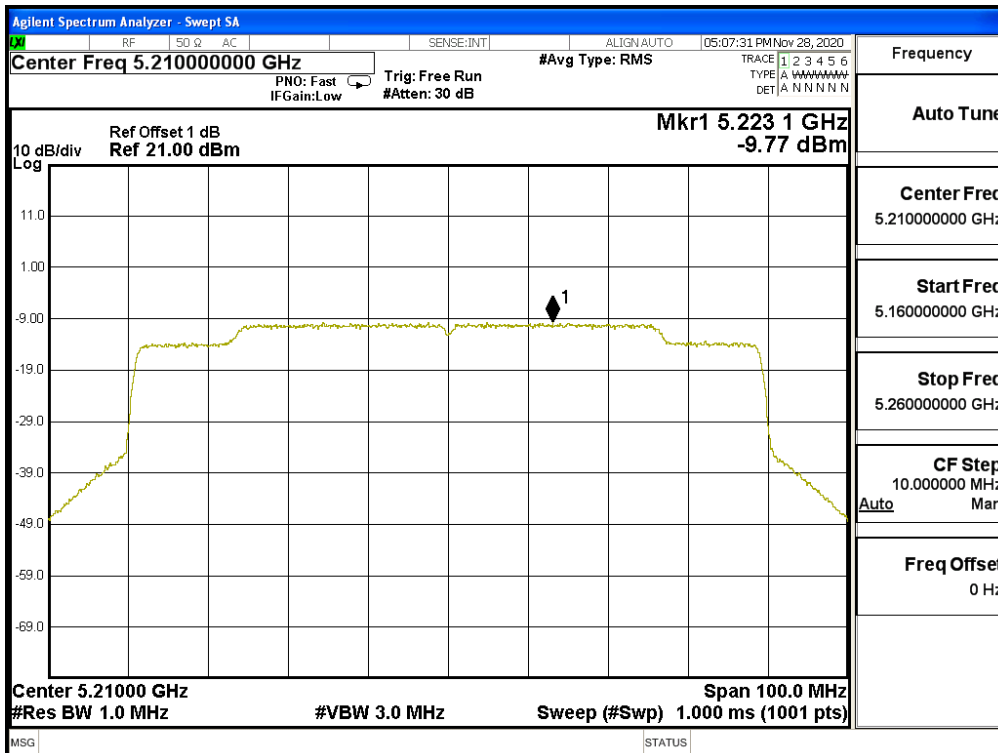
Channel 138 – Chain A (Band4)



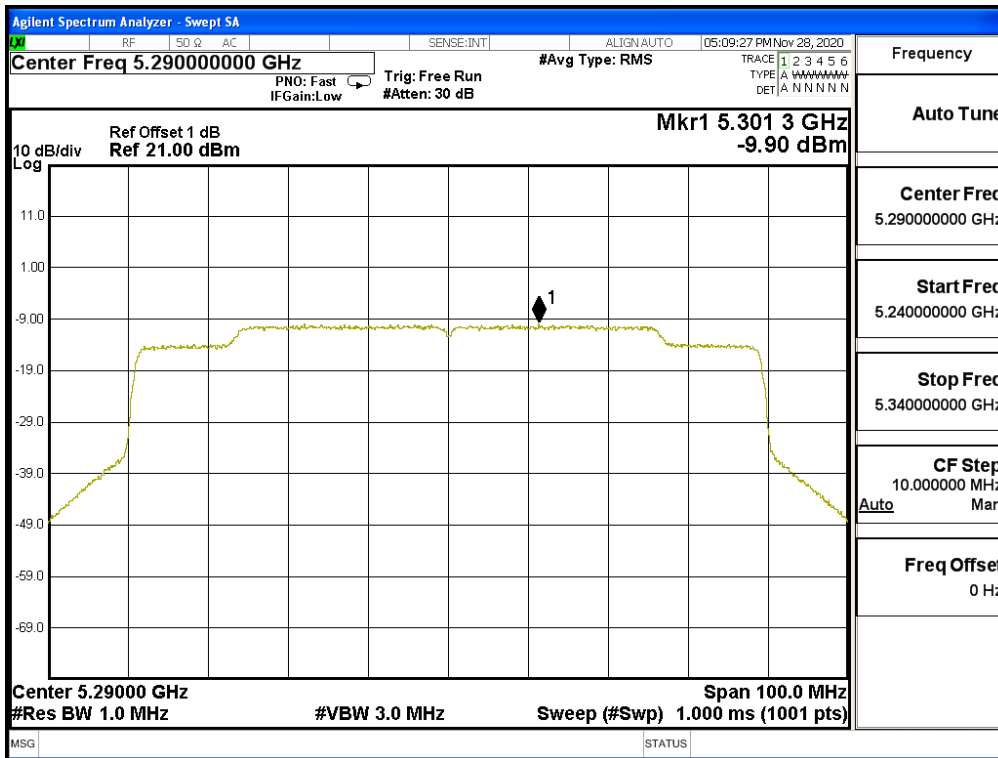
Channel 155 – Chain A



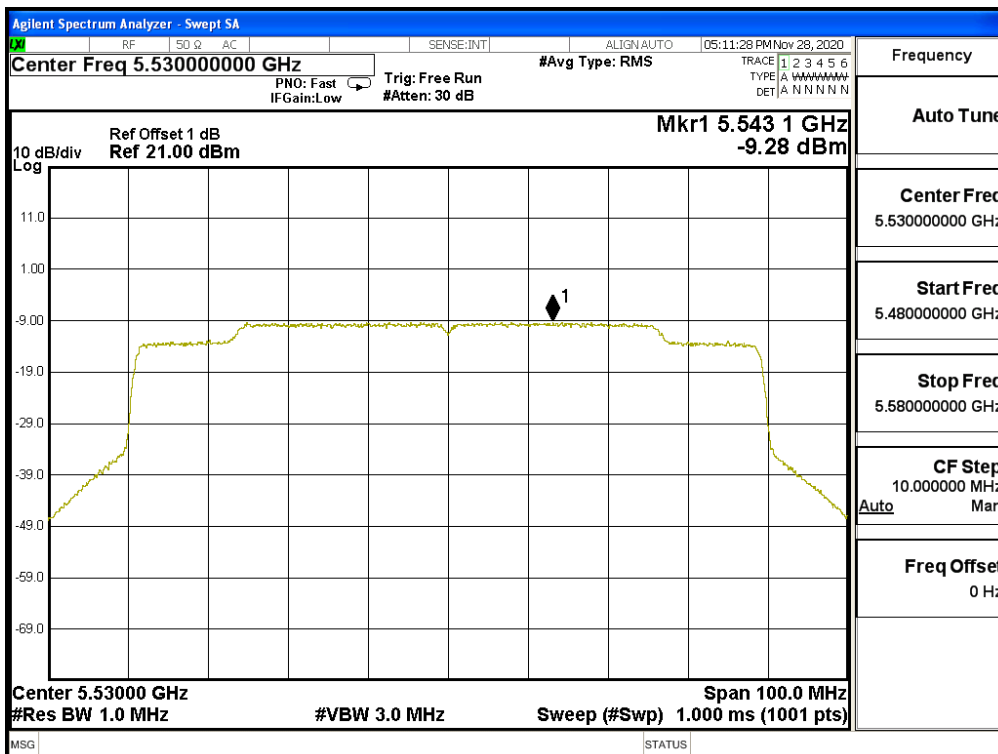
Channel 42 – Chain B



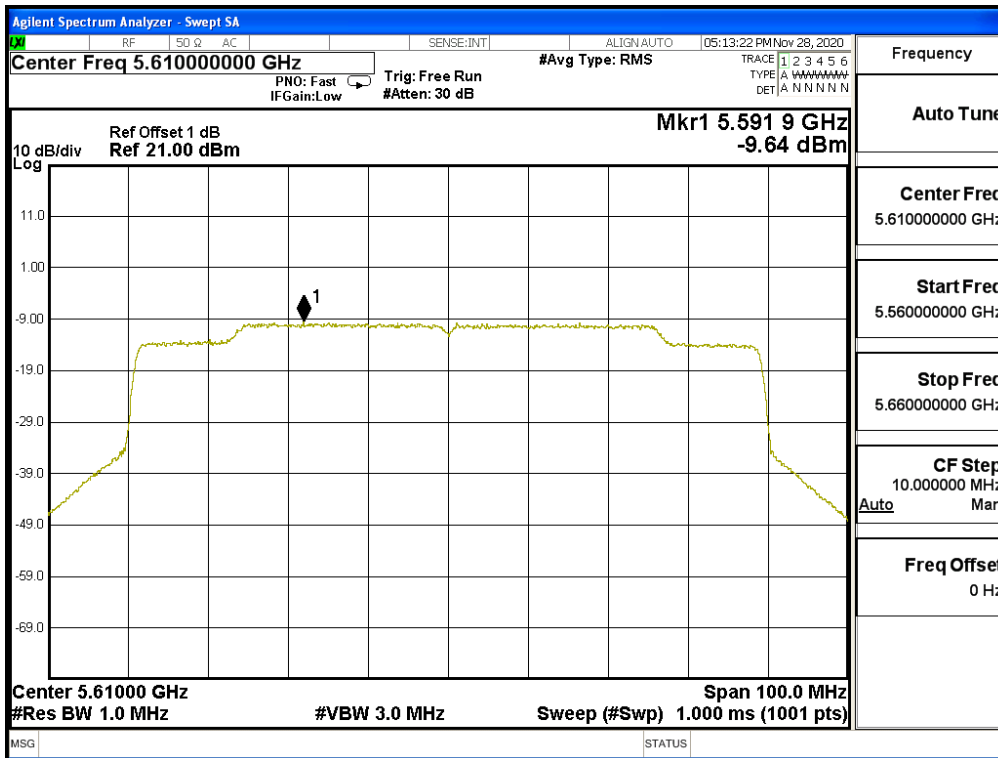
Channel 58 – Chain B



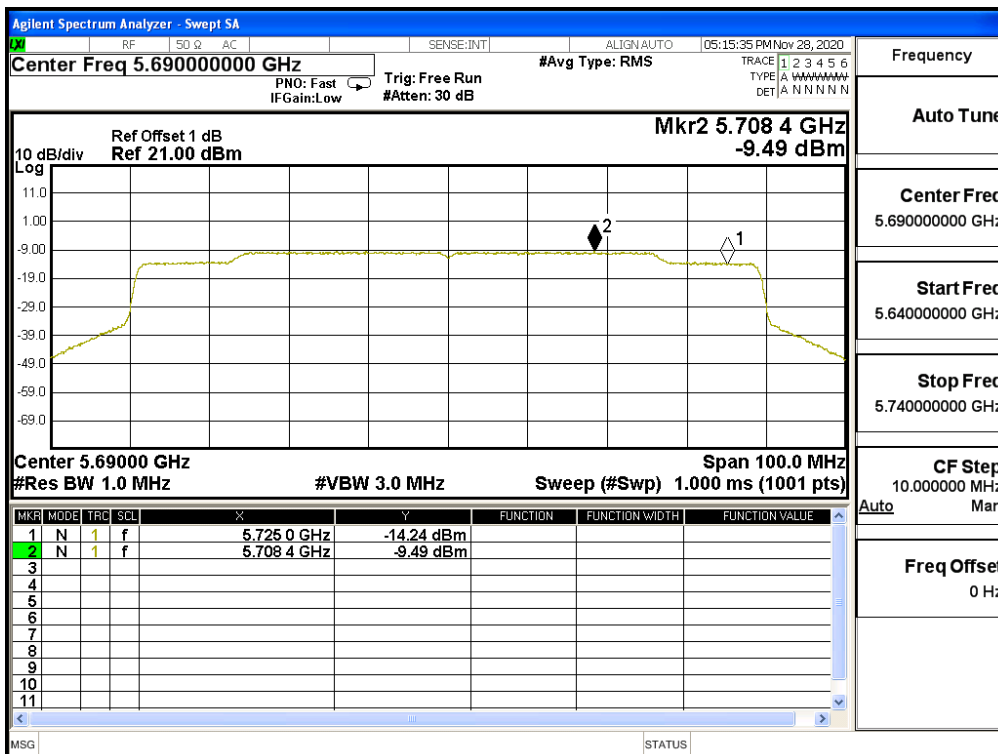
Channel 106 – Chain B



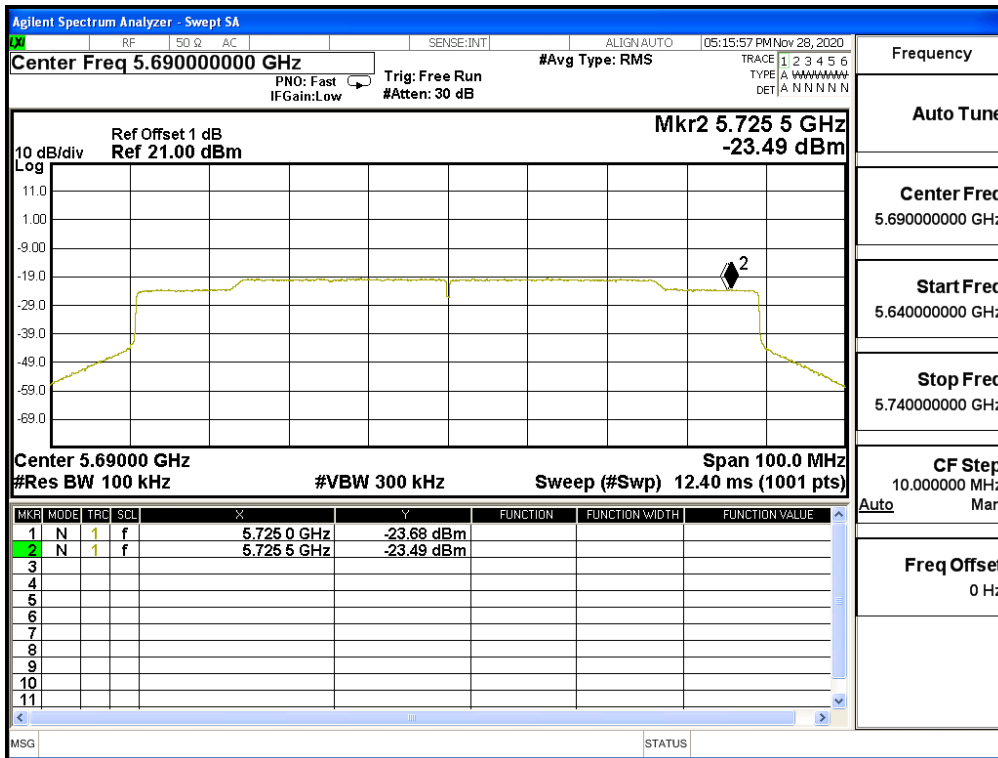
Channel 122 – Chain B



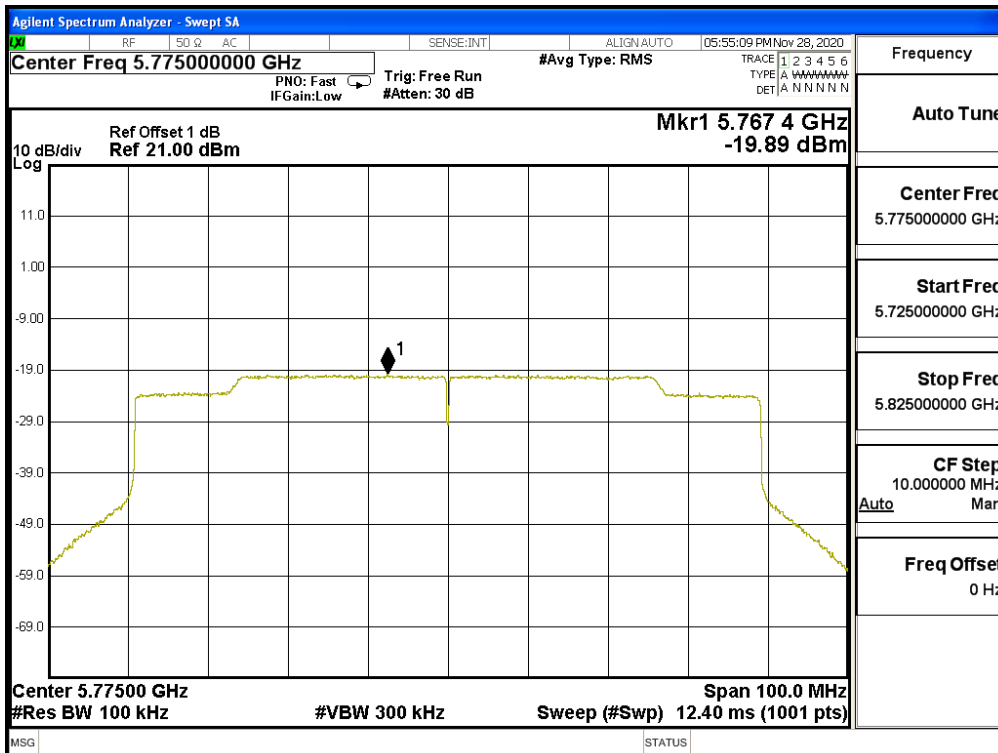
Channel 138 – Chain B (Band3)



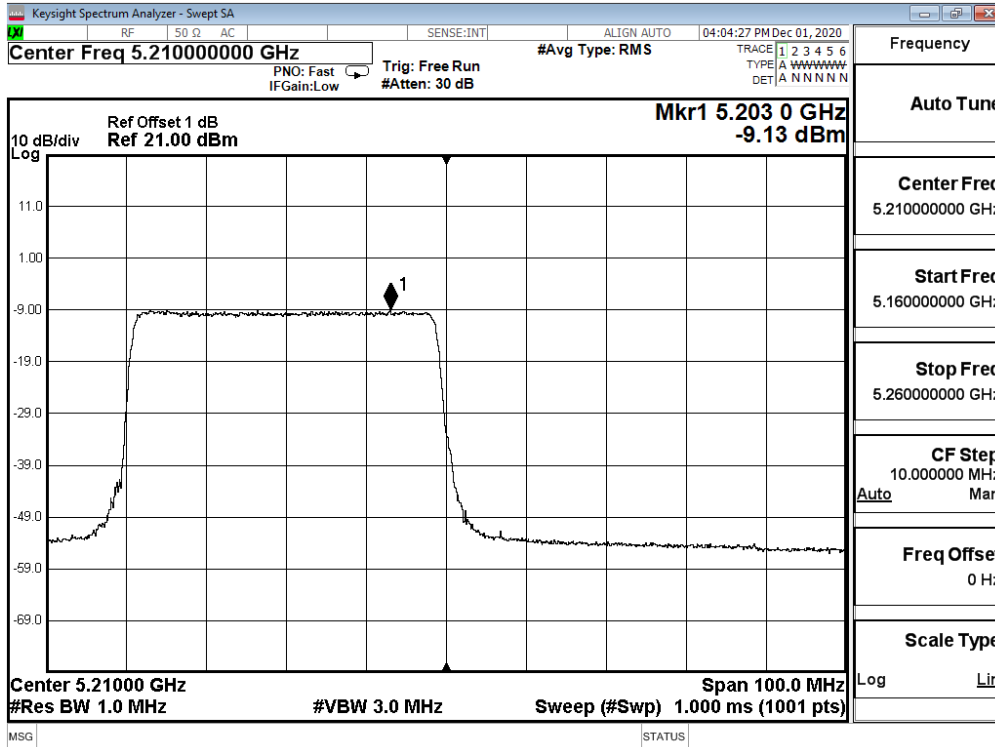
Channel 138 – Chain B (Band4)



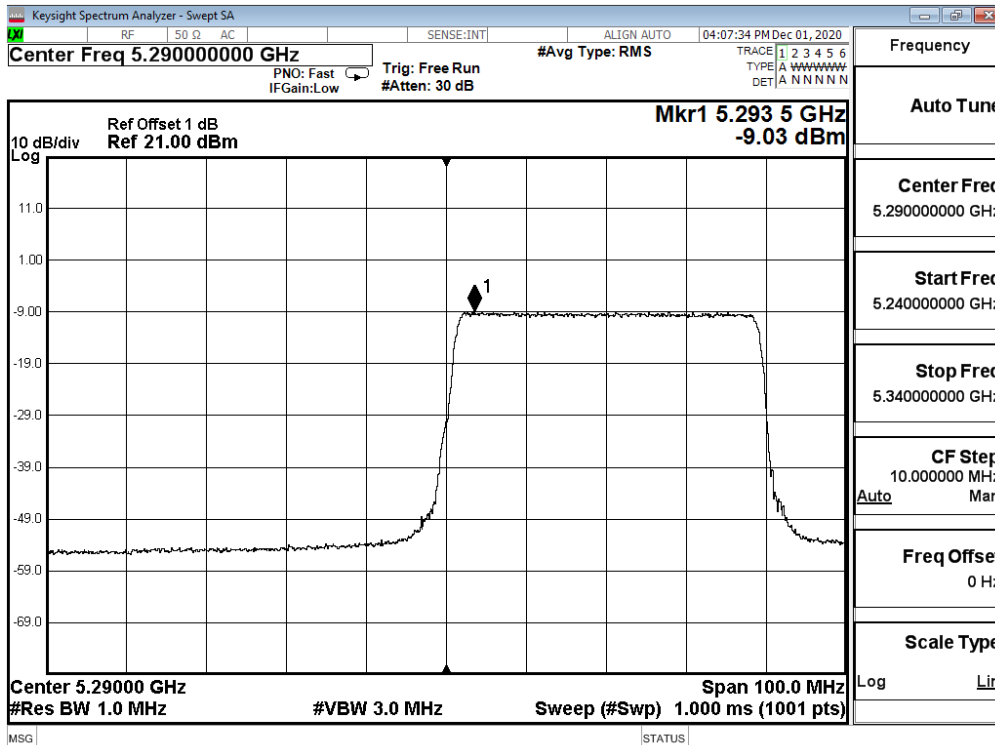
Channel 155 - Chain B



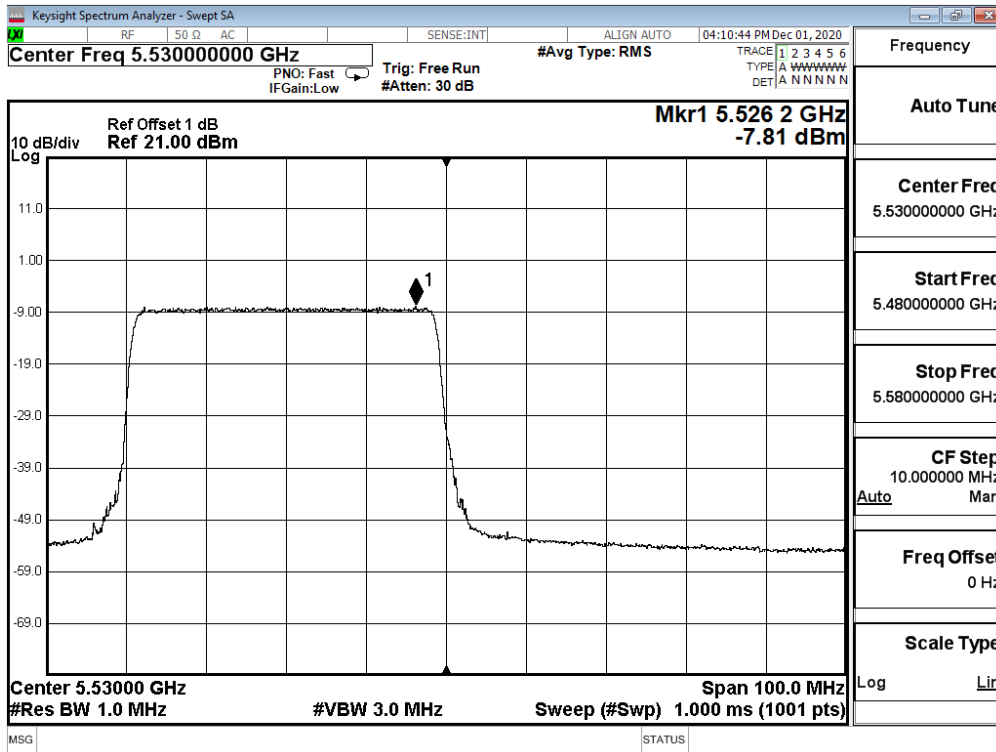
RU config: Other
Channel 42 – 484/65 Chain A



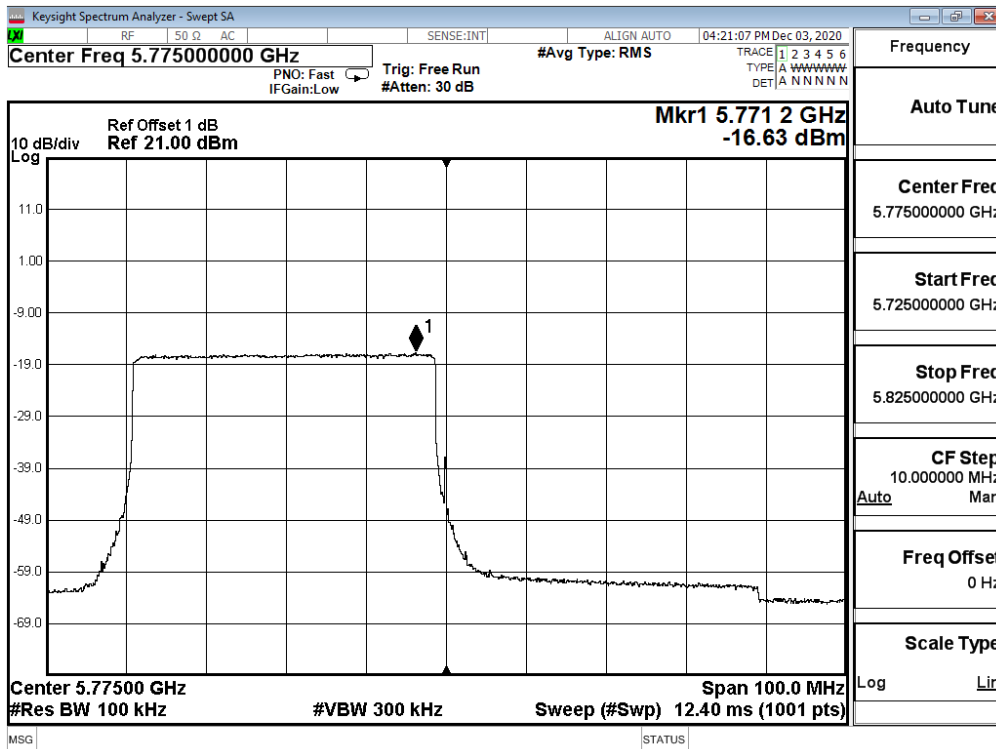
Channel 58 – 484/66 Chain A



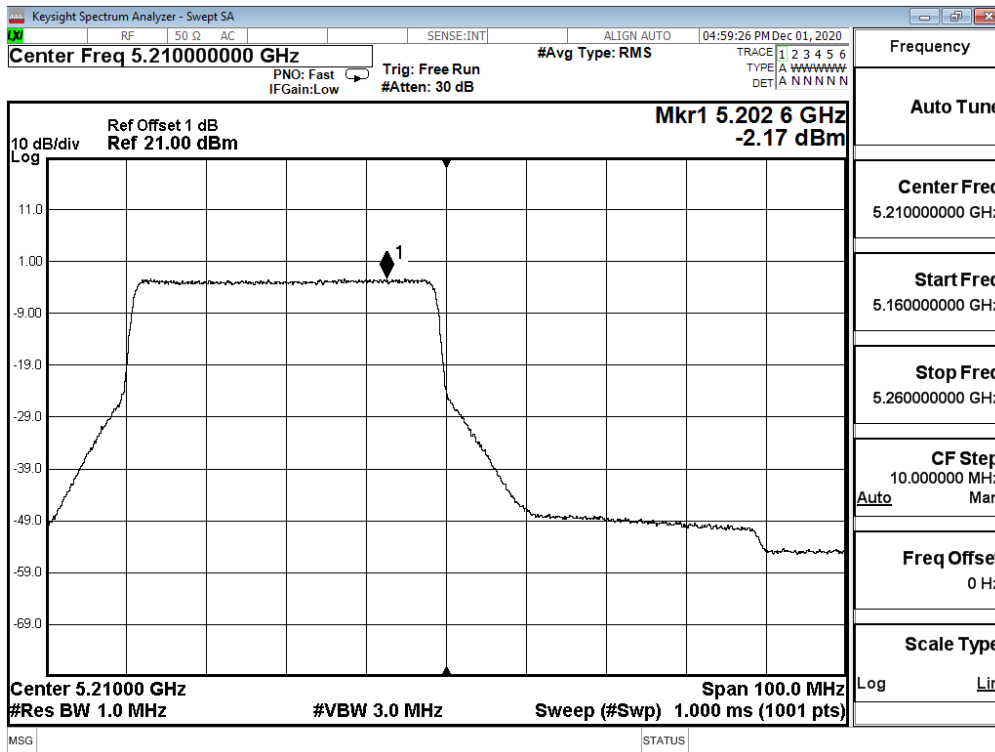
Channel 106 – 484/65 Chain A



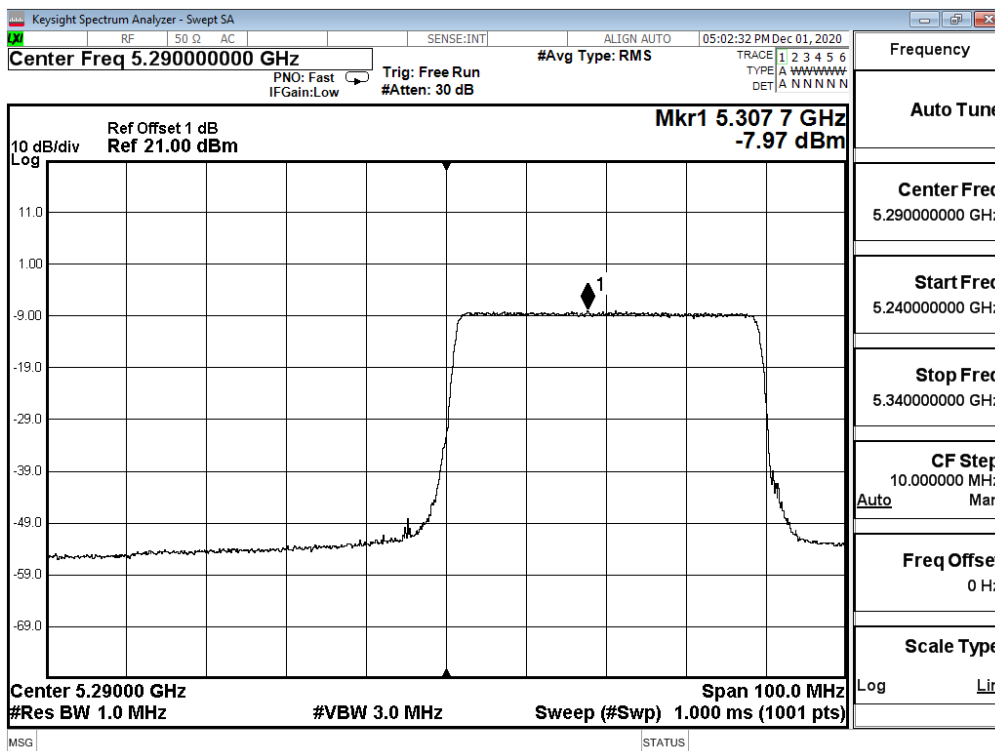
Channel 155 – 484/65 Chain A



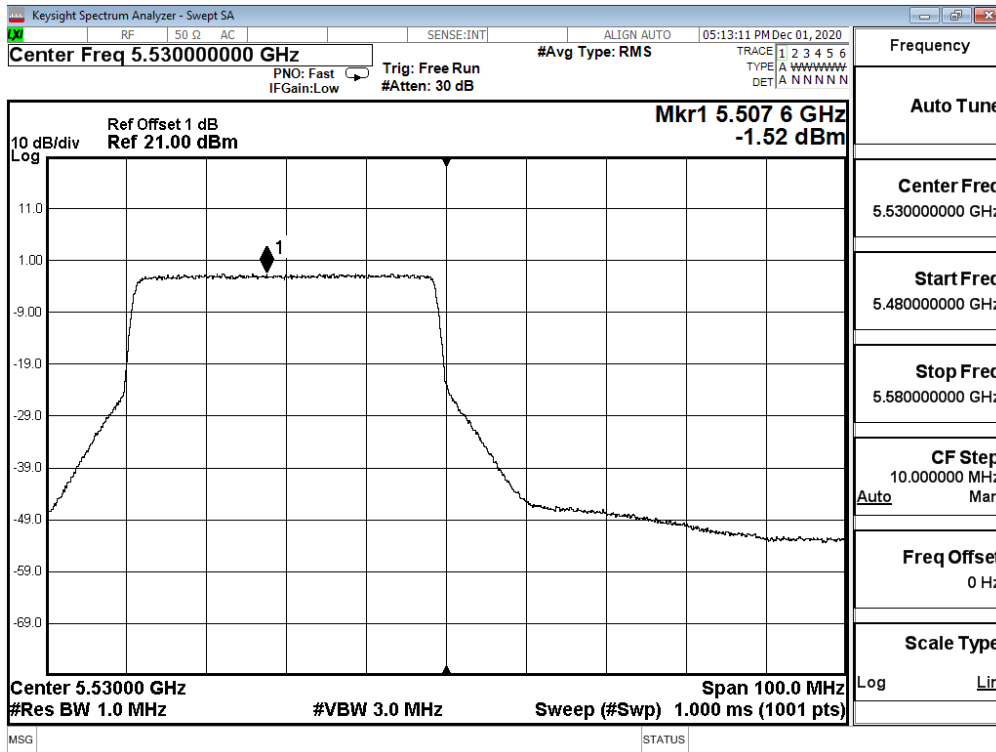
Channel 42 – 484/65 Chain B



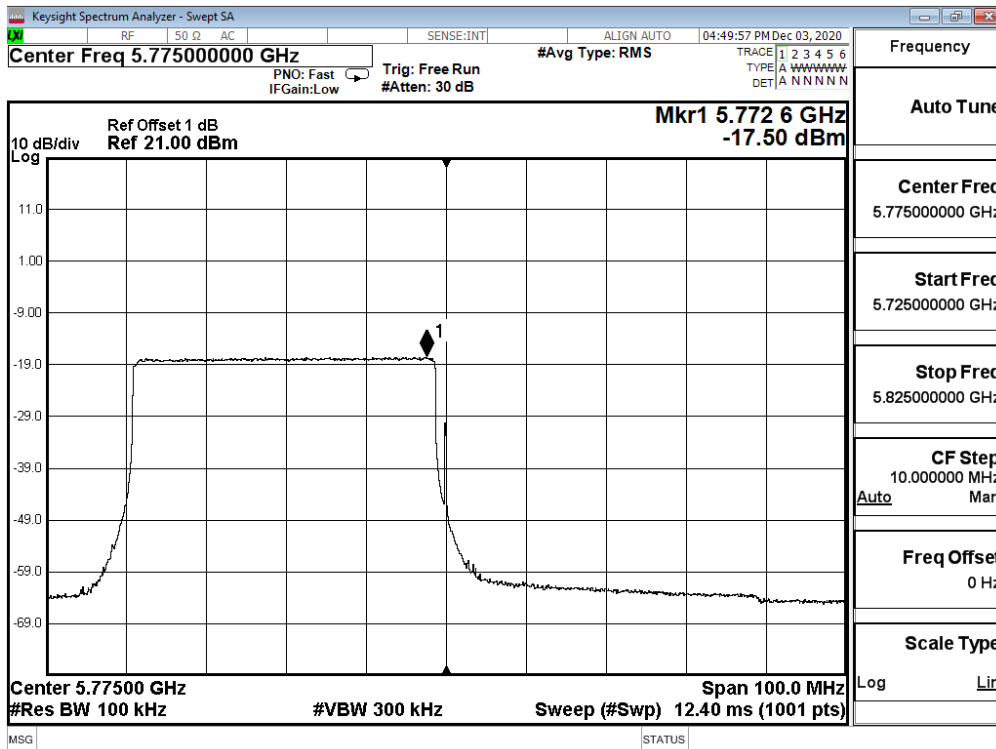
Channel 58 – 484/66 Chain B



Channel 106 – 484/65 Chain B



Channel 155 – 484/65 Chain B



Product : Notebook Computers
 Test Item : Peak Power Spectral Density
 Test Mode : Mode 26: MIMO Transmit (802.11ax-160BW_144.1Mbps)

RU config: Full

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	10*log(2) (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
50	5250(Band1)	A	-15.000	3.01	0.47	-11.520	<11	Pass
		B	-13.630	3.01	0.47	-10.150	<11	Pass
50	5250(Band2)	A	-14.250	3.01	0.47	-10.770	<11	Pass
		B	-13.210	3.01	0.47	-9.730	<11	Pass
114	5570	A	-13.090	3.01	0.47	-9.610	<11	Pass
		B	-12.570	3.01	0.47	-9.090	<11	Pass

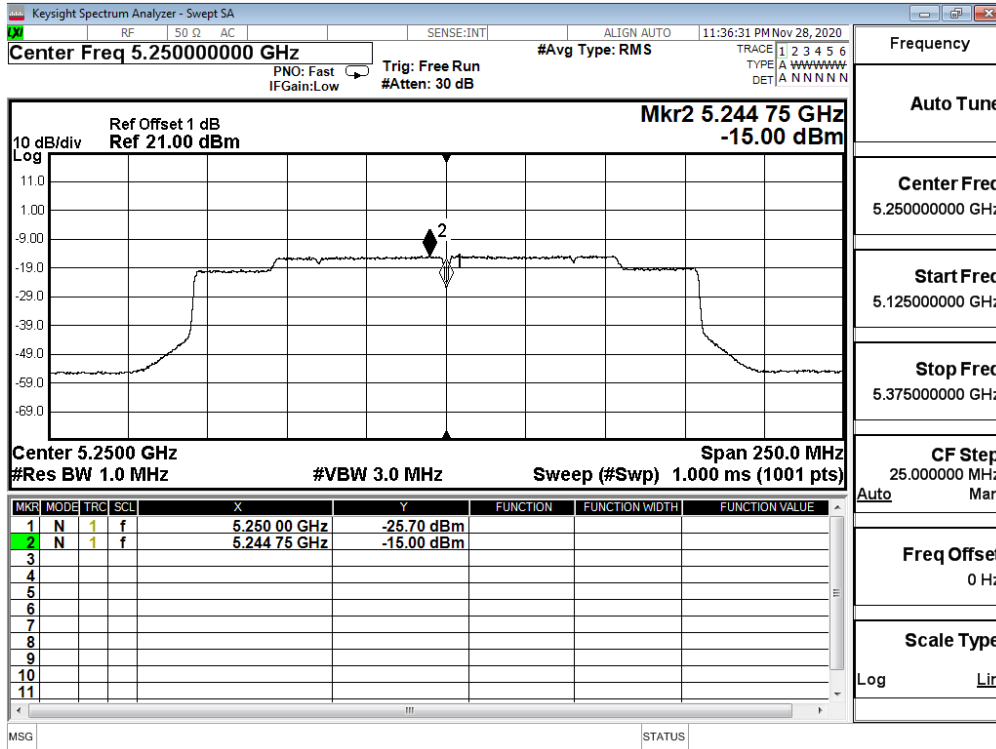
Note 1: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

RU config: Other

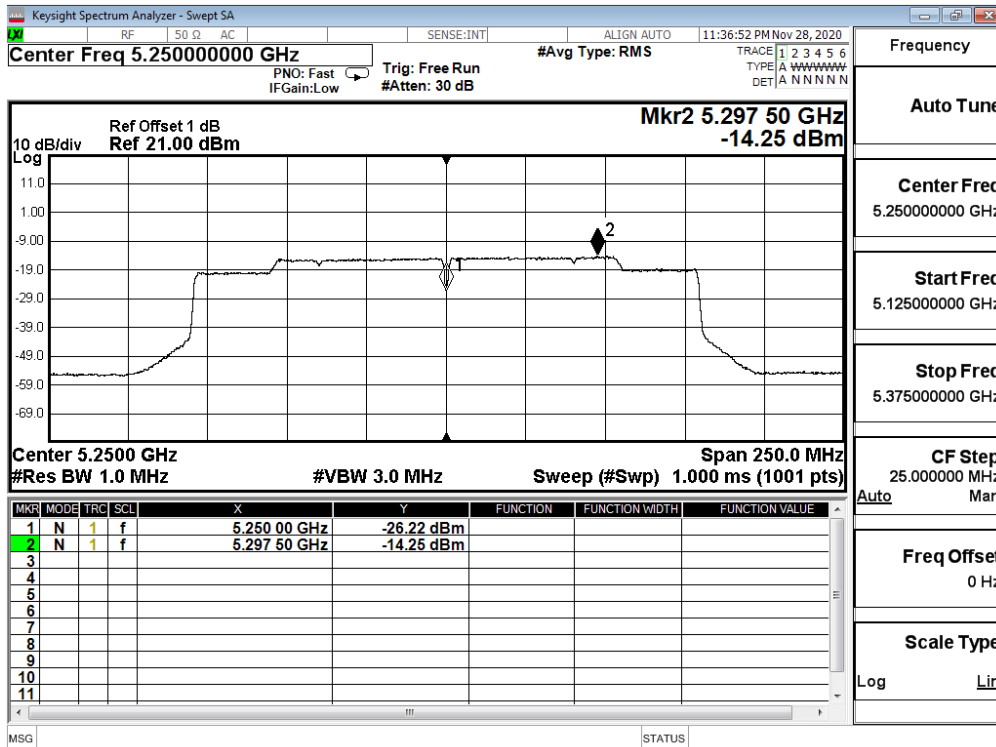
Channel / Frequenc	RU setting	Chain	PPSD (dBm)	10*log(2) (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
50/5250(Band1)	996/67	A	-11.58	3.01	0.25	-8.32	<11	Pass
		B	-10.78	3.01	0.25	-7.52	<11	Pass
50/5250(Band2)	996/S67	A	-11.32	3.01	0.25	-8.06	<11	Pass
		B	-10.43	3.01	0.25	-7.17	<11	Pass
114/5570	996/67	A	-9.96	3.01	0.25	-6.70	<11	Pass
		B	-9.89	3.01	0.25	-6.63	<11	Pass
114/5570	996/S67	A	-9.99	3.01	0.25	-6.73	<11	Pass
		B	-9.93	3.01	0.25	-6.67	<11	Pass

Note 1: The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

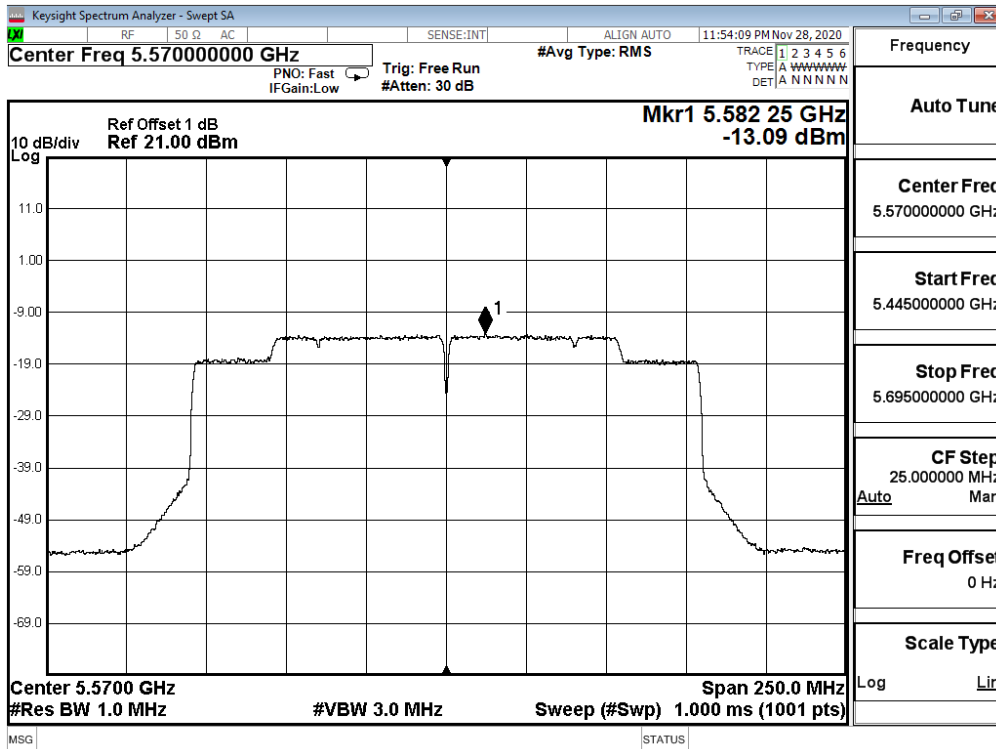
RU config: Full
Channel 50 – Chain A (Band1)



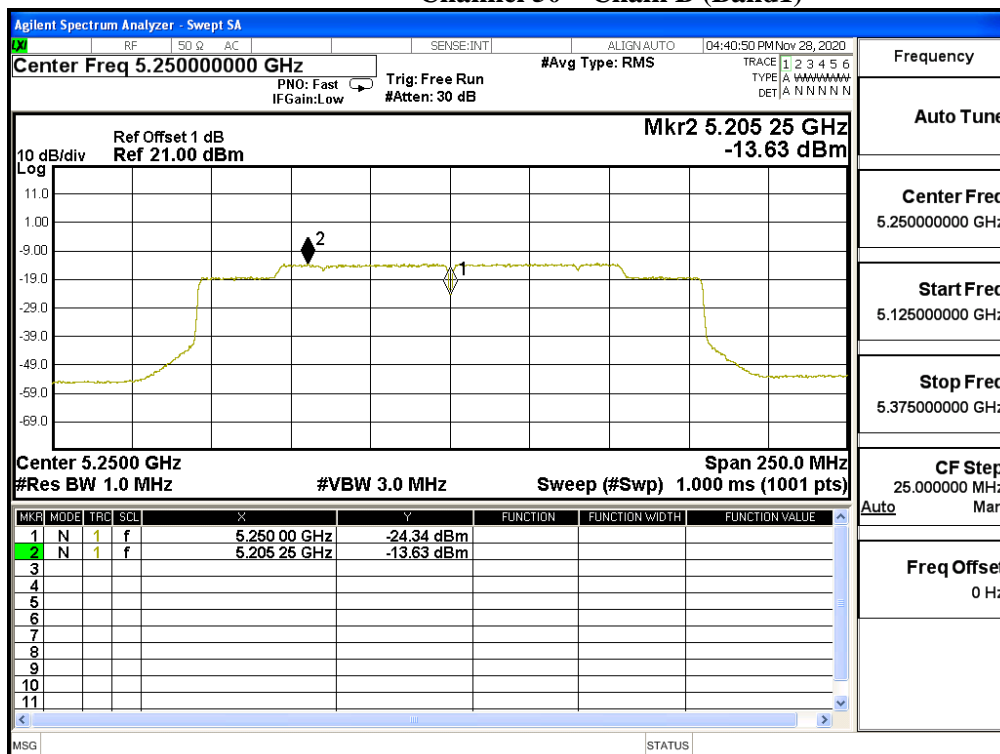
Channel 50 – Chain A (Band2)



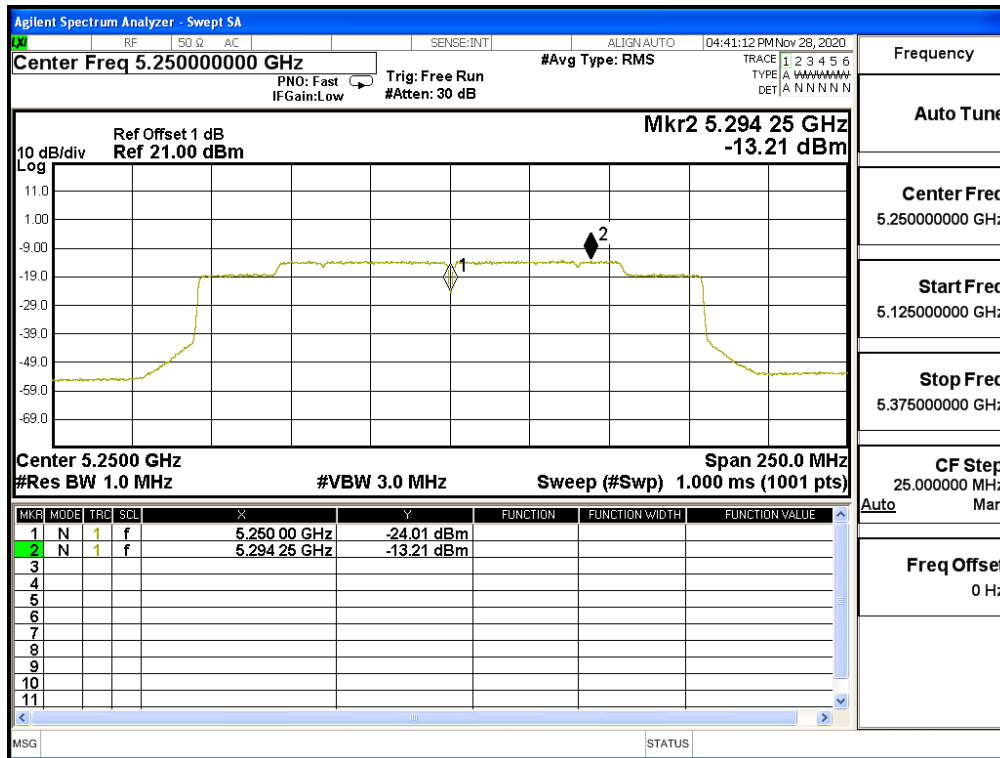
Channel 114 – Chain A



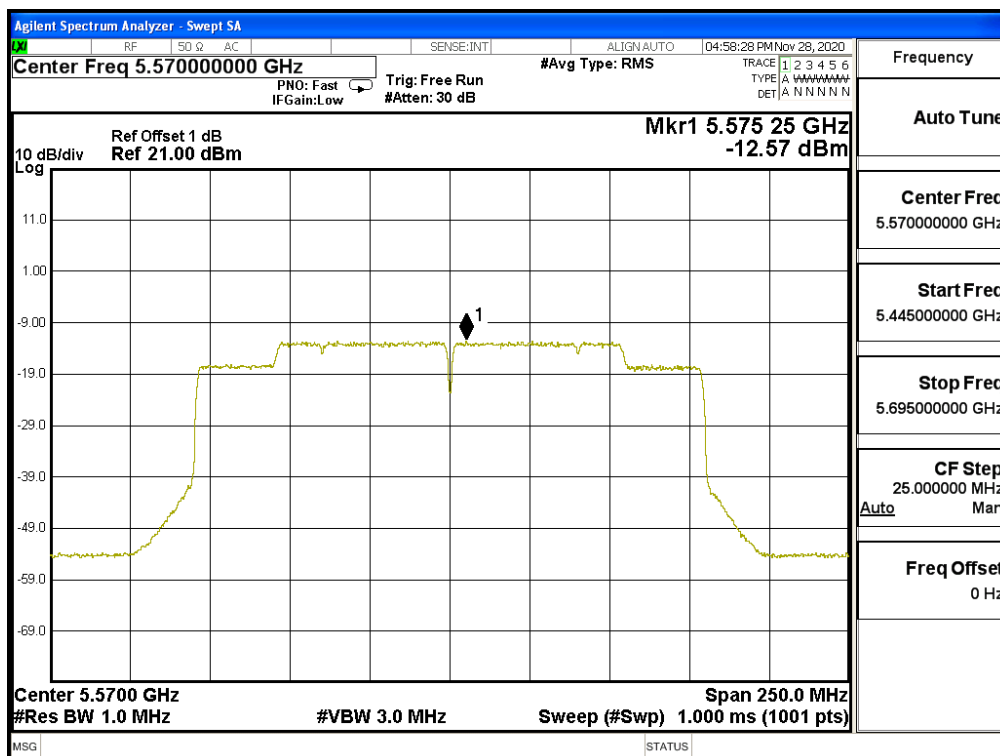
Channel 50 – Chain B (Band1)



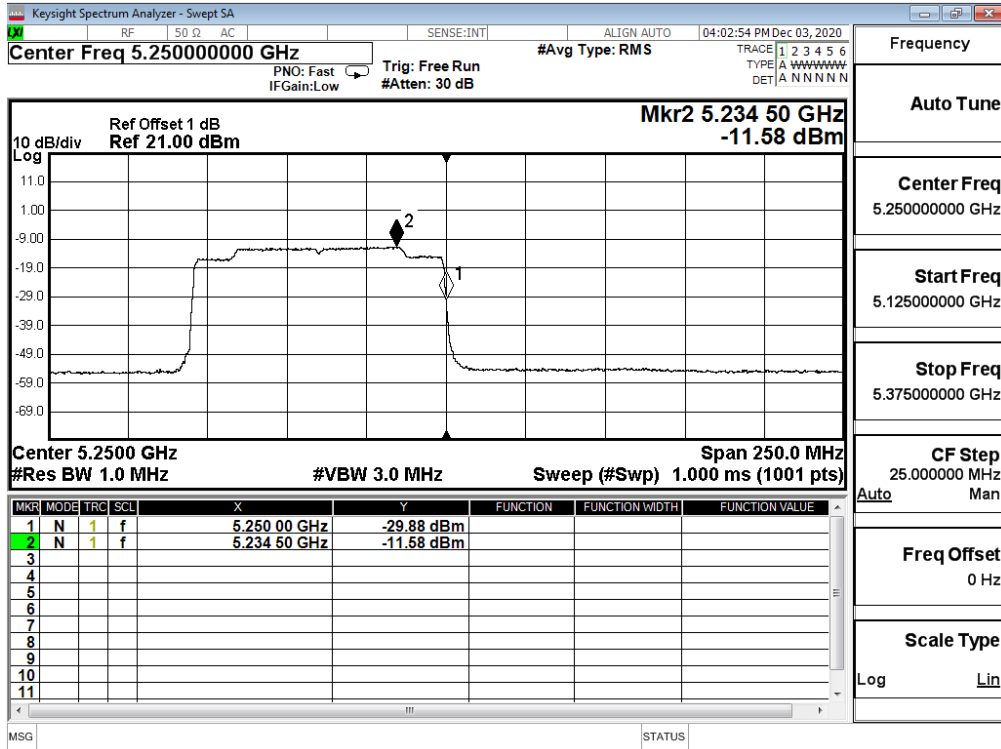
Channel 50 – Chain B (Band2)



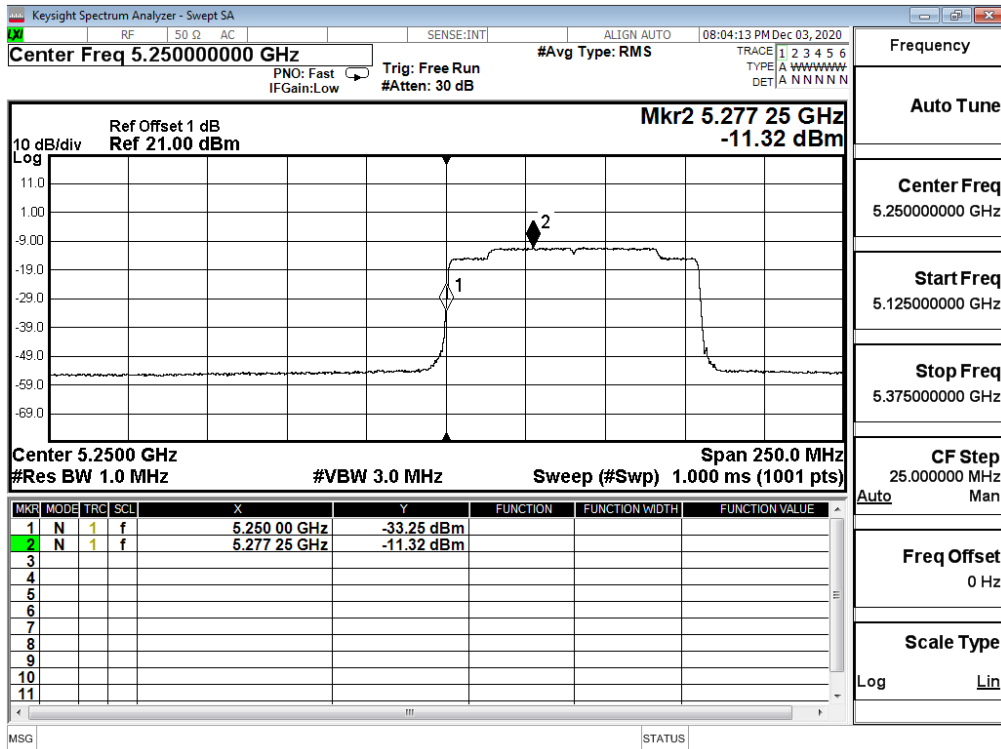
Channel 114 – Chain B



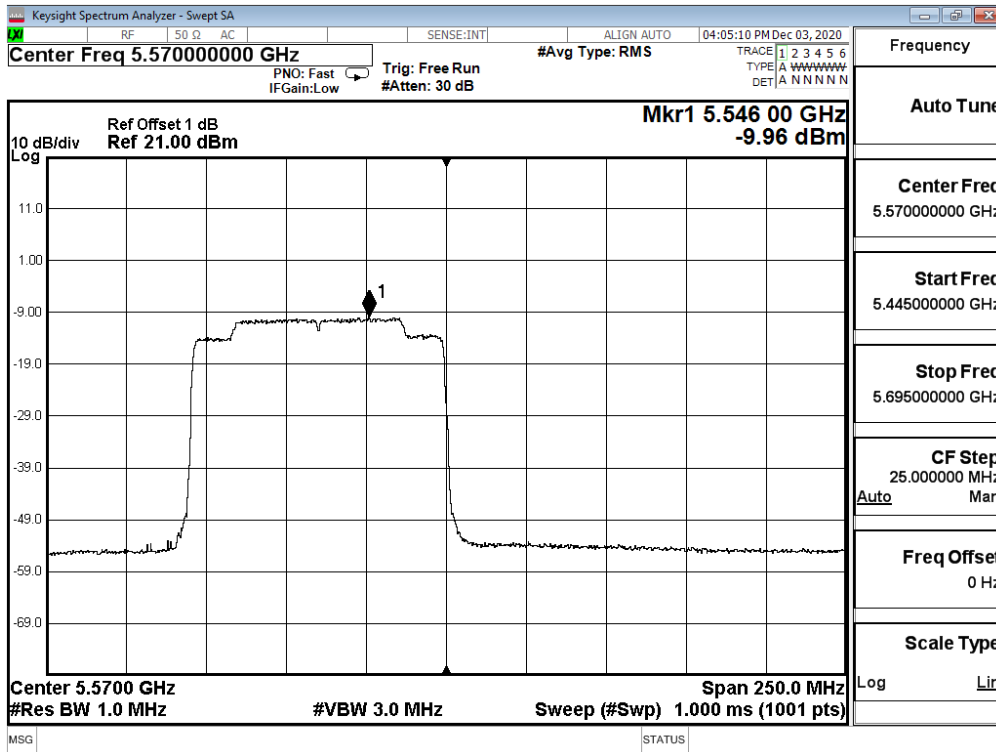
RU config: Other
Channel 50 – 996/67 Chain A (Band1)



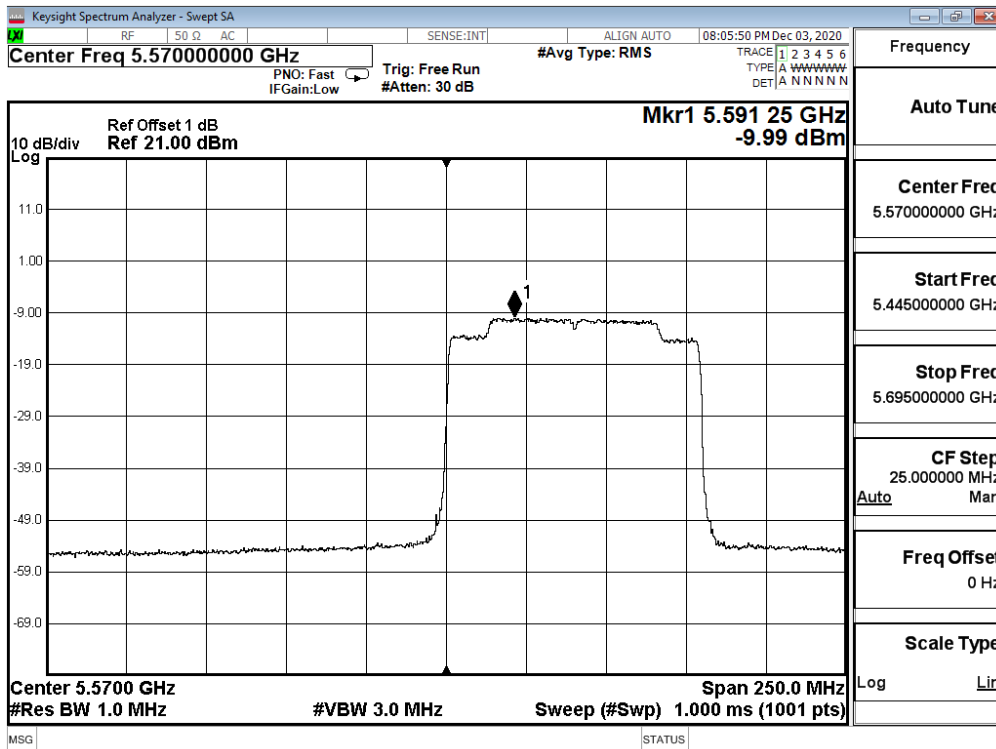
Channel 50 – 996/S67 Chain A (Band2)



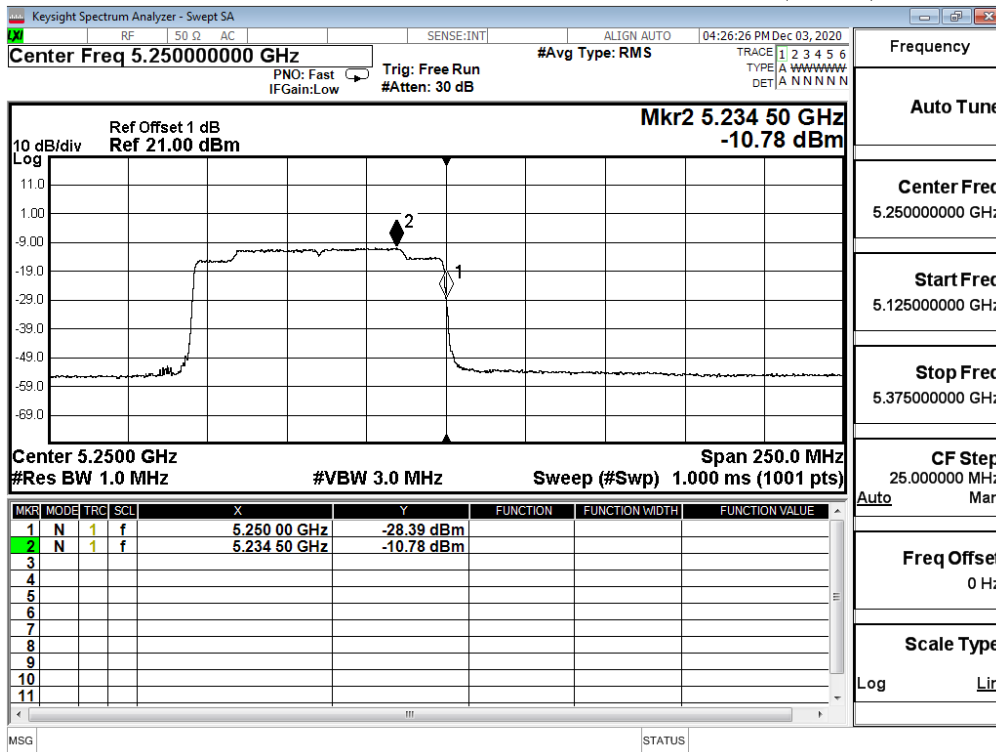
Channel 114 – 996/67 Chain A



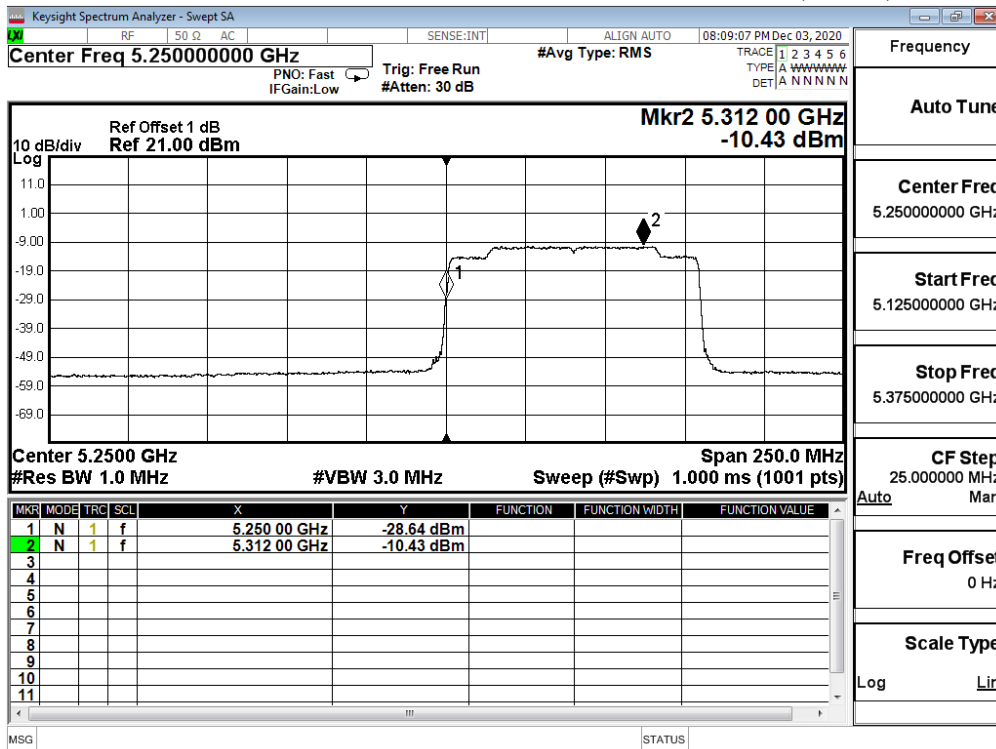
Channel 114 – 996/S67 Chain A



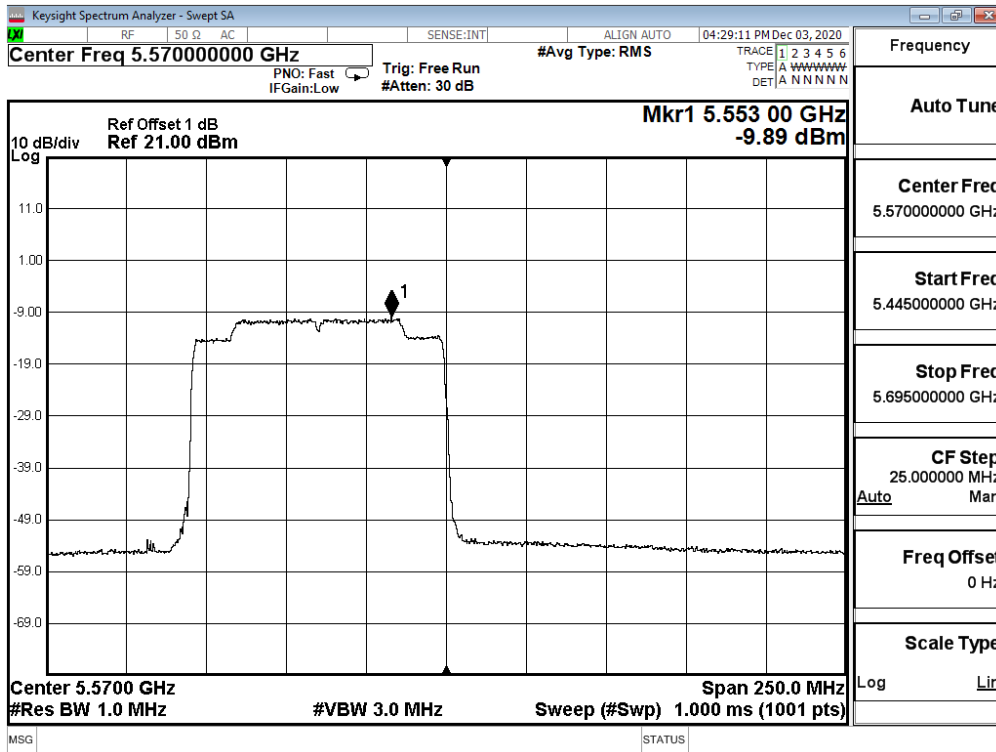
Channel 50 – 996/67 Chain B (Band1)



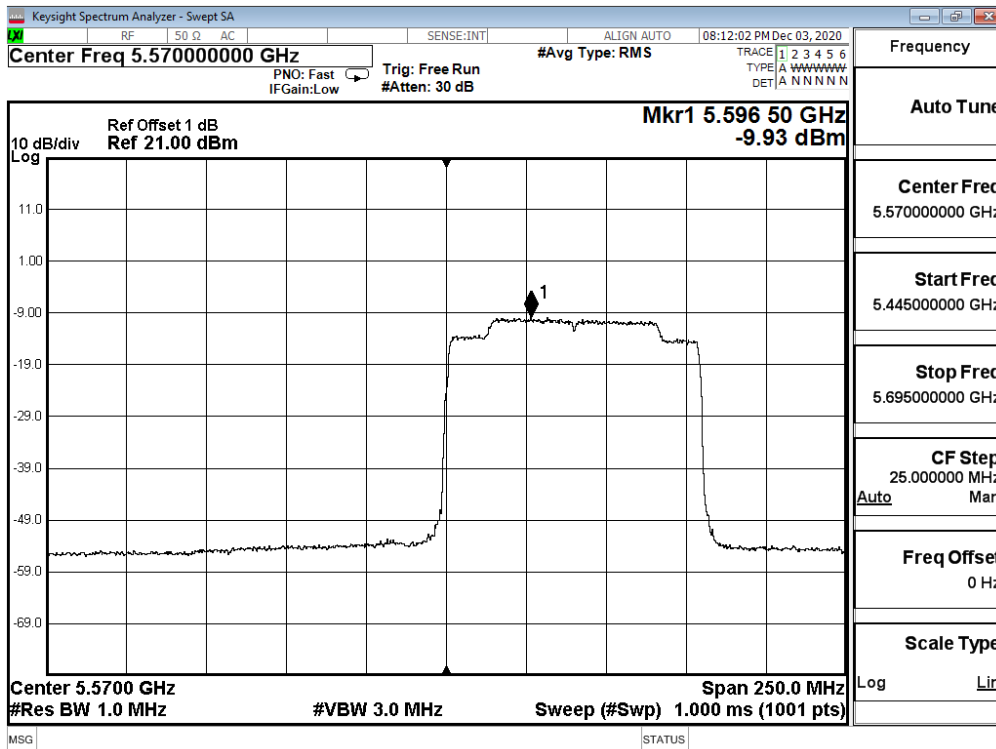
Channel 50 – 996/S67 Chain B (Band1)



Channel 114 – 996/67 Chain B

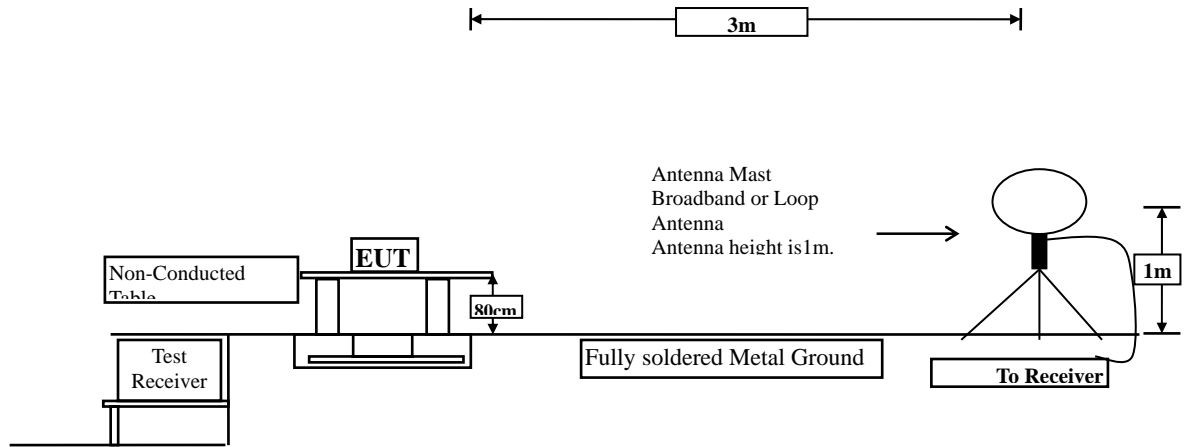


Channel 114 – 996/S67 Chain B

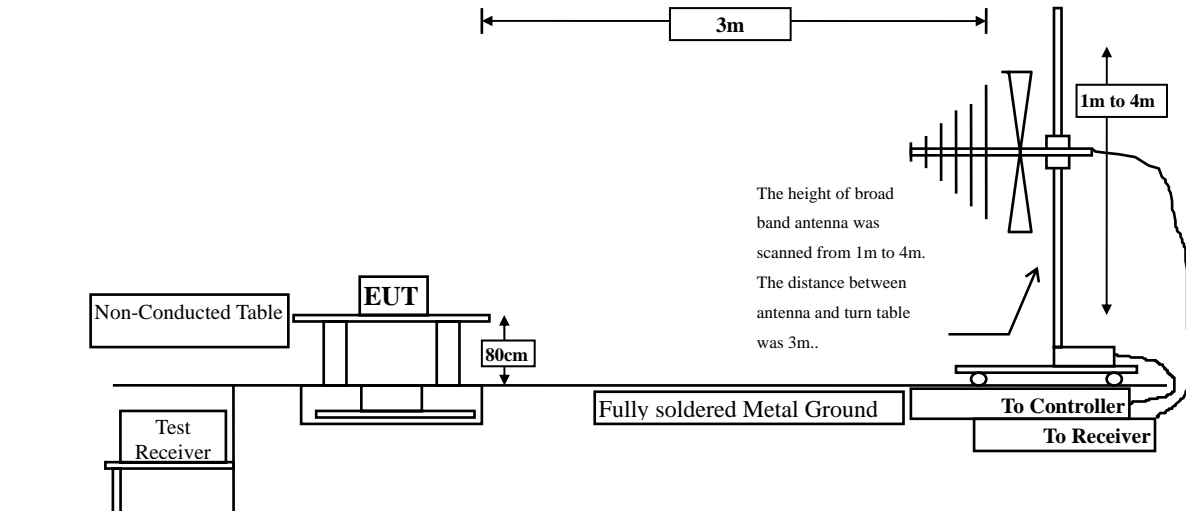


5. Radiated Emission

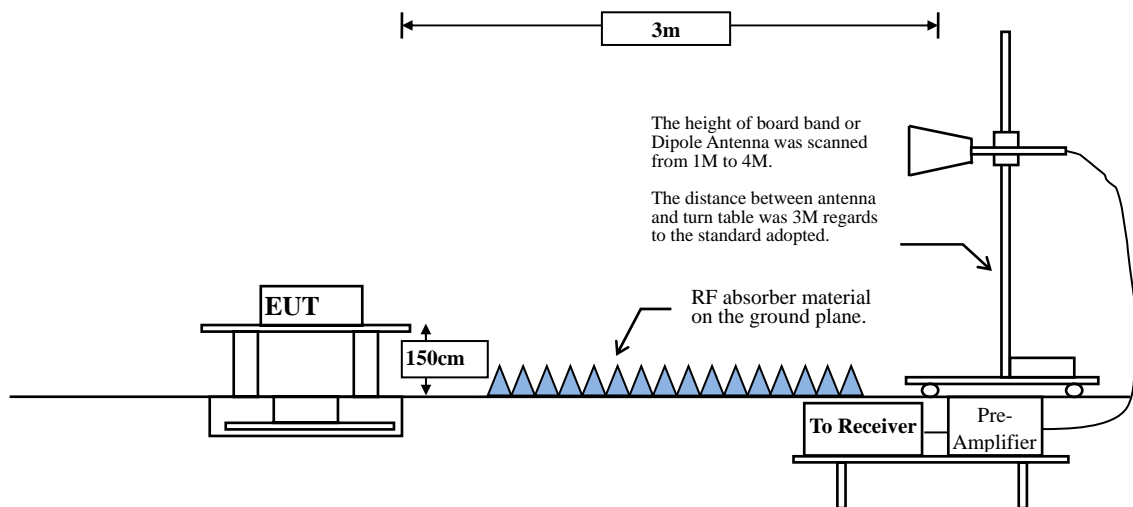
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



5.1. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits		
Frequency MHz	Field strength (microvolts/meter)	Measurement distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remarks: E field strength (dB μ V/m) = 20 log E field strength (uV/m)

5.2. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to FCC KDB-789033 test procedure for compliance to FCC 47CFR 15. 407 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground, when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 meter above ground.

The turn table is rotated 360 degrees to determine the position of the maximum emission level.

The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

The measurement frequency range from 9kHz - 10th Harmonic of fundamental was investigated.

RBW and VBW Parameter setting:

According to KDB 789033 section II.G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW \geq 3MHz.

According to KDB 789033 section II.G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW = 10Hz, when duty cycle \geq 98 %

VBW \geq 1/T, when duty cycle < 98 %

(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

SISO A

5GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
802.11 a	88.98	2.0899	478	500
802.11 ax20	98.84	24.7826	40	10
802.11 ax40	98.47	18.6232	54	10
802.11 ax80	97.86	16.5942	60	100
802.11 ax160	94.51	4.4928	223	500
802.11 ax20-26/0-RU	93.94	5.3949	185	500
802.11 ax20-52/37-RU	94.42	5.3949	185	500
802.11 ax20-106/53-RU	94.42	5.3949	185	500
802.11 ax40-242-61-RU	94.93	5.4239	184	500
802.11 ax80-484-65-RU	93.94	5.3949	185	500
802.11 ax160-996-67-RU	94.69	5.4348	184	500

Note: Duty Cycle Refer to Section 8.

MIMO

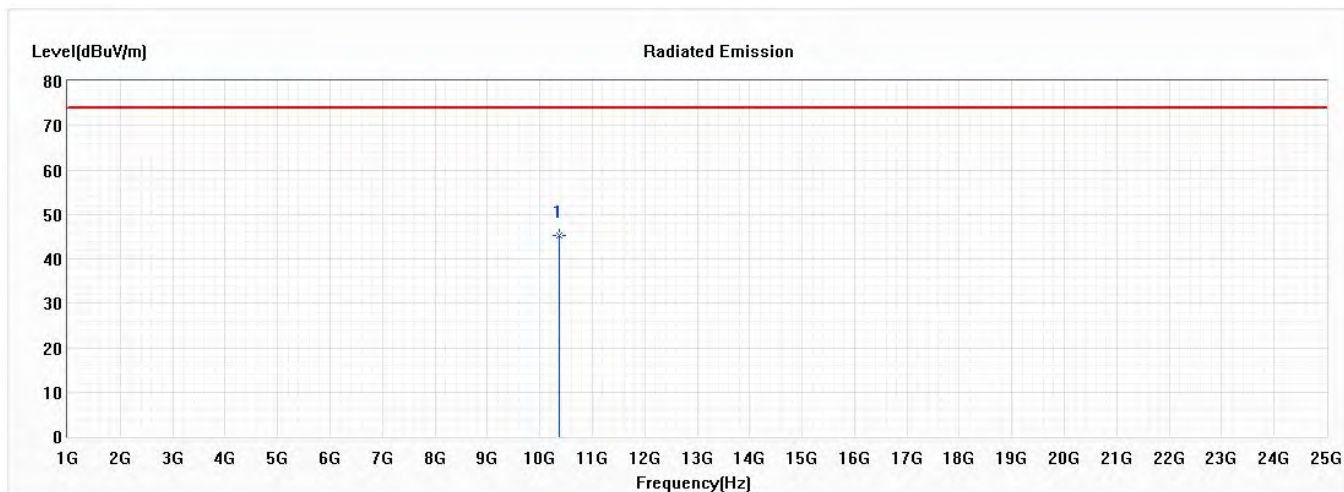
5GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
802.11 n20	98.31	18.5110	54	10
802.11 n40	96.23	8.8732	113	500
802.11 ac80	94.48	5.4529	183	500
802.11 ac160	89.44	2.6993	370	500
802.11 ax20	98.36	18.6899	54	10
802.11 ax40	96.62	9.3116	107	500
802.11 ax80	93.18	4.4565	224	500
802.11 ax160	89.71	2.2754	439	500
802.11 ax20-26/0-RU	94.70	5.4348	184	500
802.11 ax20-52/37-RU	94.70	5.4348	184	500
802.11 ax20-106/53-RU	94.68	5.4130	185	500
802.11 ax40-242-61-RU	94.68	5.4130	185	500
802.11 ax80-484-65-RU	94.34	5.4348	184	500
802.11 ax160-996-67-RU	94.32	5.4130	185	500

Note: Duty Cycle Refer to Section 8.

5.3. Test Result of Radiated Emission

Product : Notebook Computers
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2020/12/07
 Test Mode : Mode 1: SISO A Transmit (802.11a_6Mbps) (5180MHz)

Horizontal



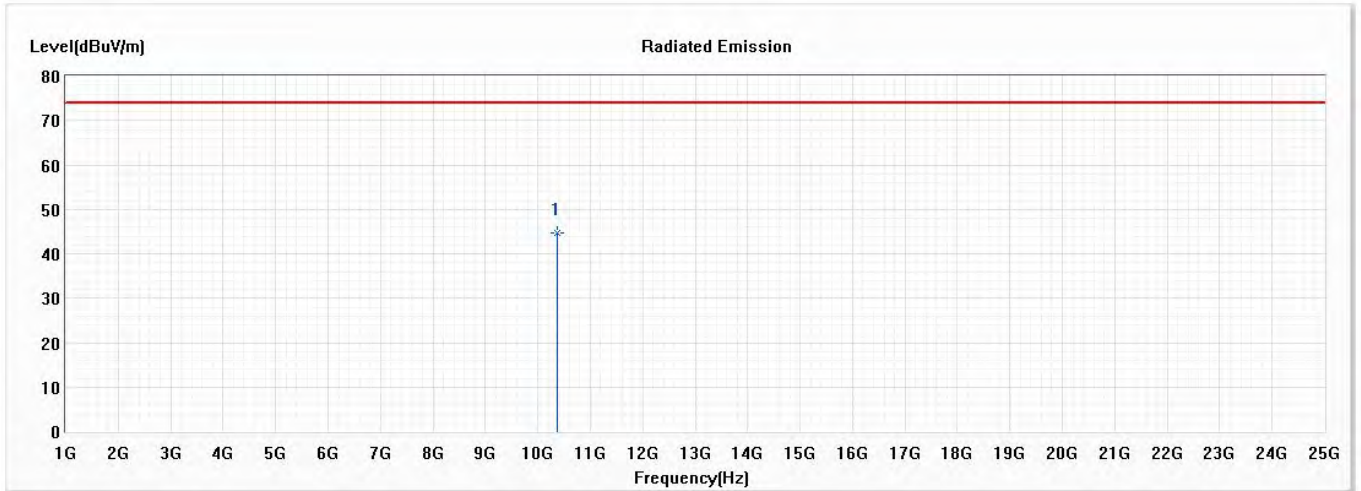
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10360.000	45.33	74.00	-28.67	55.55	-10.22	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Notebook Computers
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2020/12/07
 Test Mode : Mode 1: SISO A Transmit (802.11a_6Mbps) (5180MHz)

Vertical



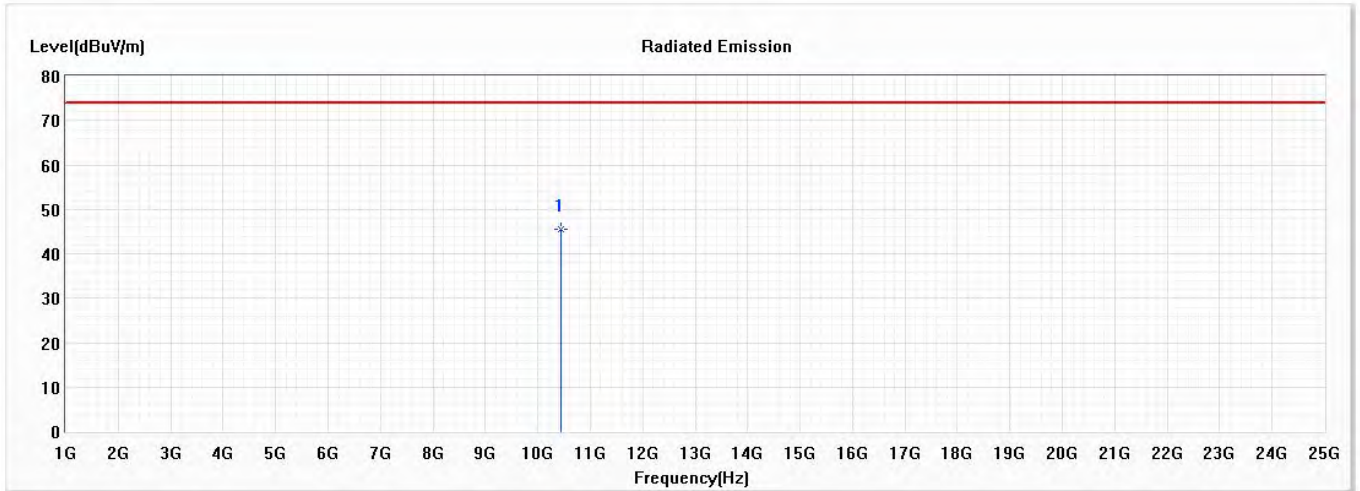
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10360.000	44.81	74.00	-29.19	55.03	-10.22	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Notebook Computers
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2020/12/07
 Test Mode : Mode 1: SISO A Transmit (802.11a_6Mbps) (5220MHz)

Horizontal



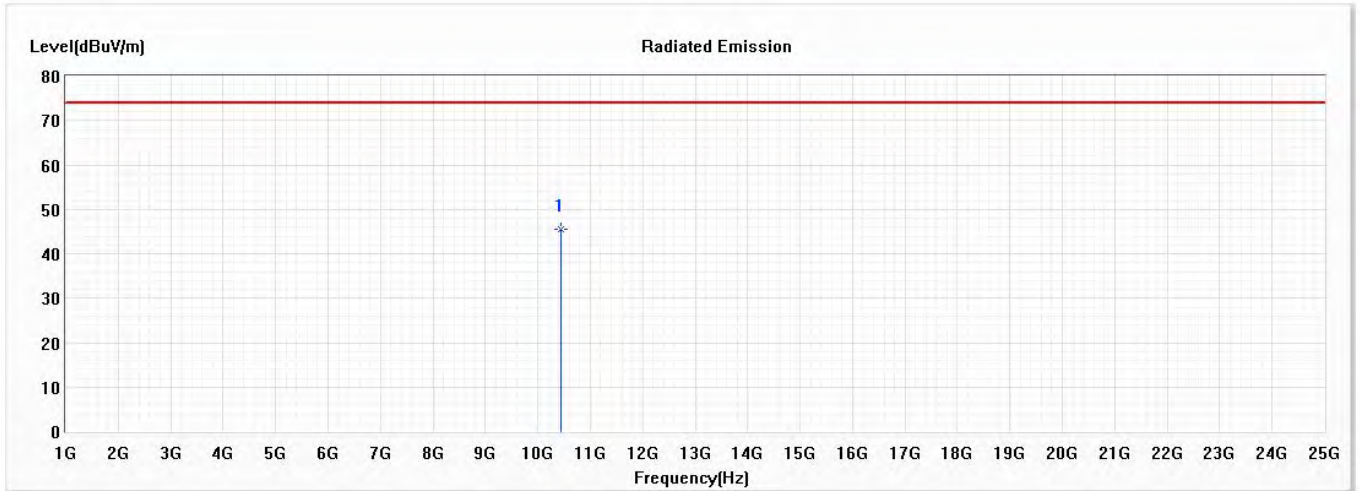
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10440.000	45.48	74.00	-28.52	55.57	-10.09	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Notebook Computers
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2020/12/07
 Test Mode : Mode 1: SISO A Transmit (802.11a_6Mbps) (5220MHz)

Vertical



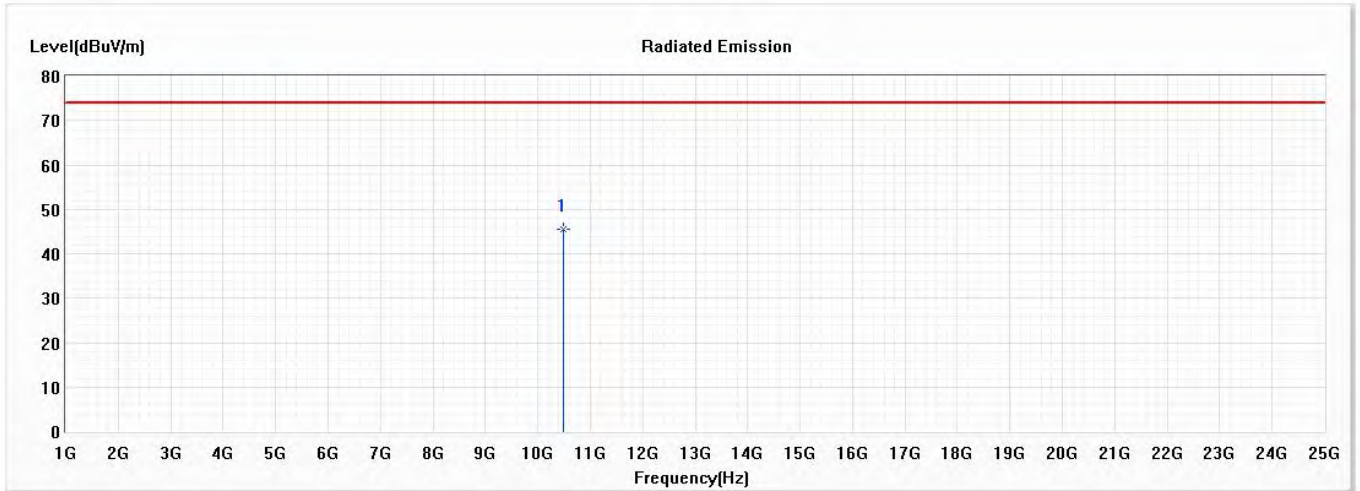
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10440.000	45.61	74.00	-28.39	55.70	-10.09	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Notebook Computers
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2020/12/07
 Test Mode : Mode 1: SISO A Transmit (802.11a_6Mbps) (5240MHz)

Horizontal



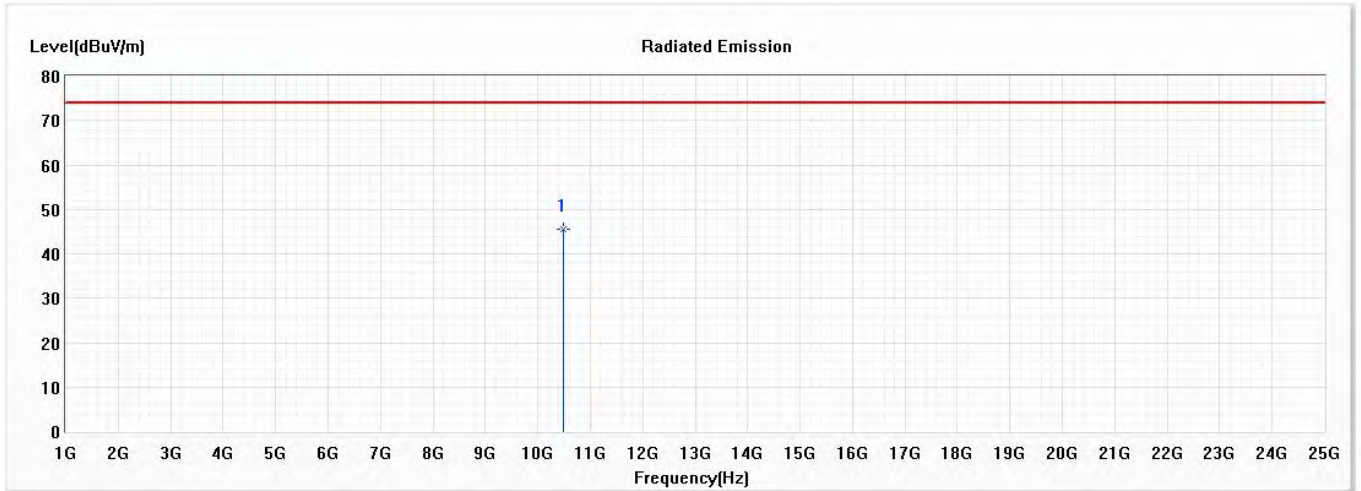
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10480.000	45.38	74.00	-28.62	55.30	-9.92	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Notebook Computers
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2020/12/07
 Test Mode : Mode 1: SISO A Transmit (802.11a_6Mbps) (5240MHz)

Vertical



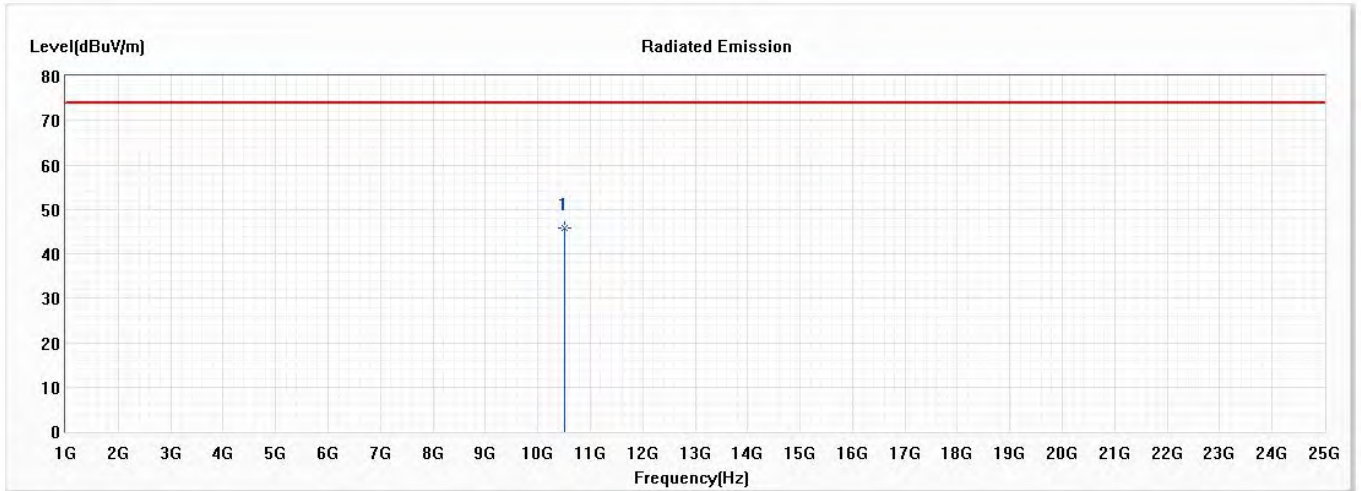
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10480.000	45.60	74.00	-28.40	55.52	-9.92	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Notebook Computers
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2020/12/07
 Test Mode : Mode 1: SISO A Transmit (802.11a_6Mbps) (5260MHz)

Horizontal



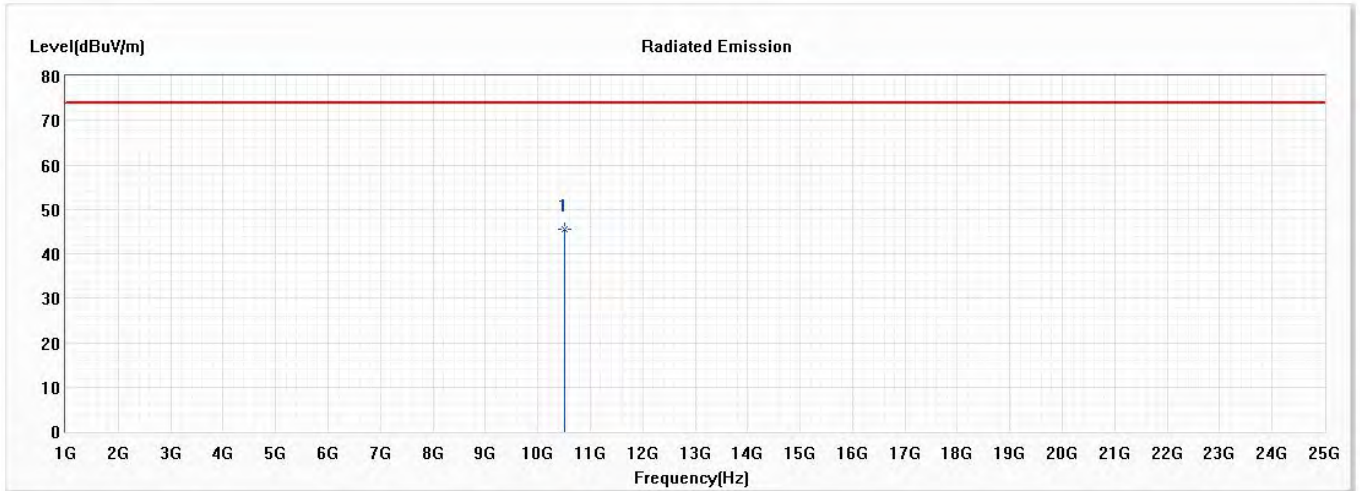
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10520.000	45.71	74.00	-28.29	55.61	-9.90	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Notebook Computers
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2020/12/07
 Test Mode : Mode 1: SISO A Transmit (802.11a_6Mbps) (5260MHz)

Vertical



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10520.000	45.49	74.00	-28.51	55.39	-9.90	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.