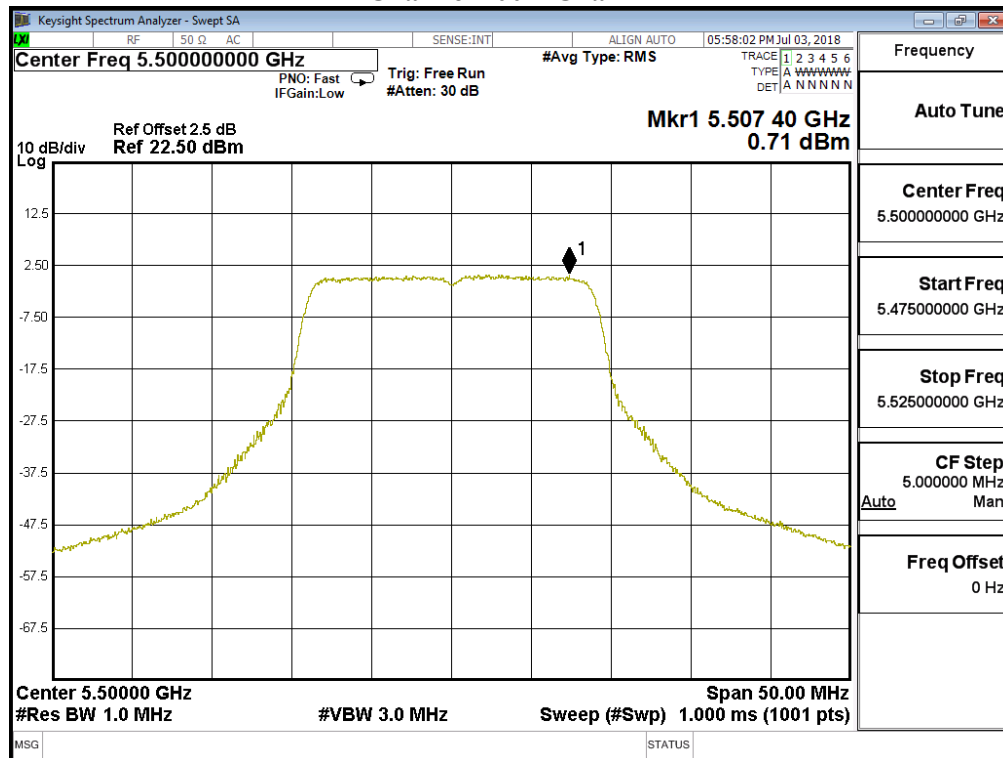
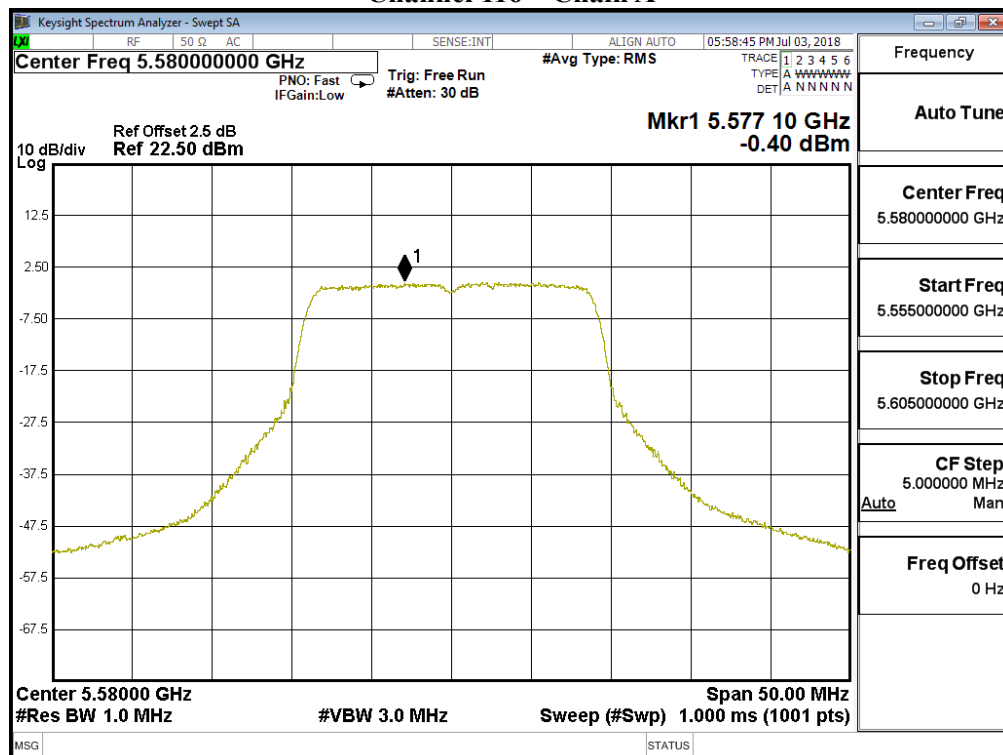


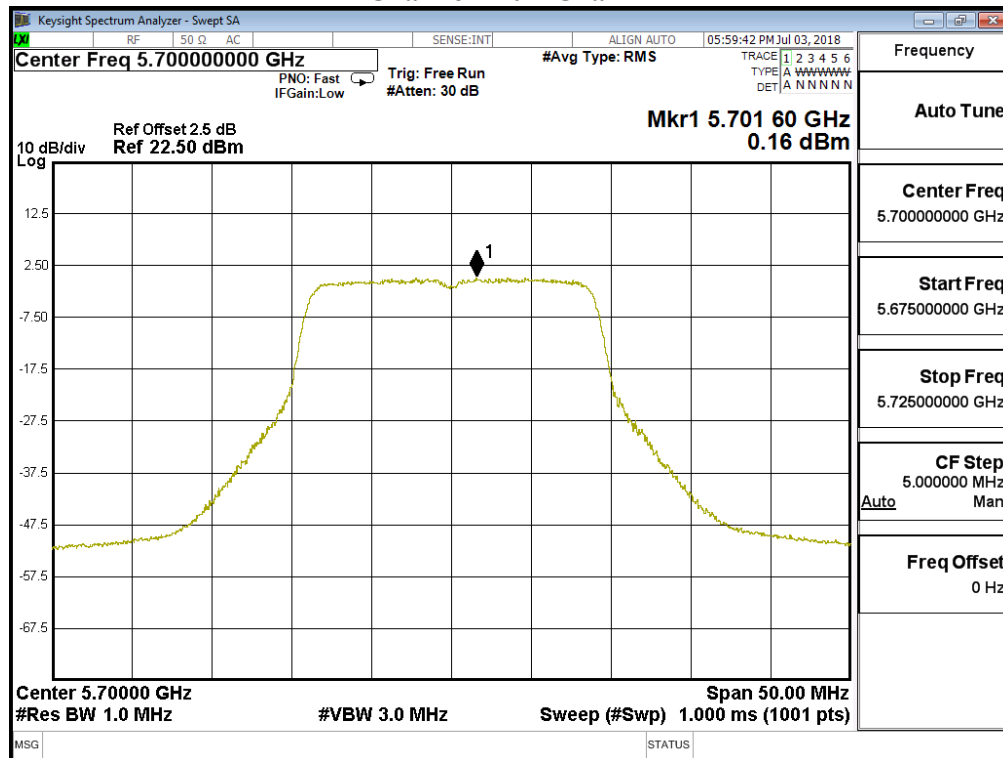
Channel 100 – Chain A



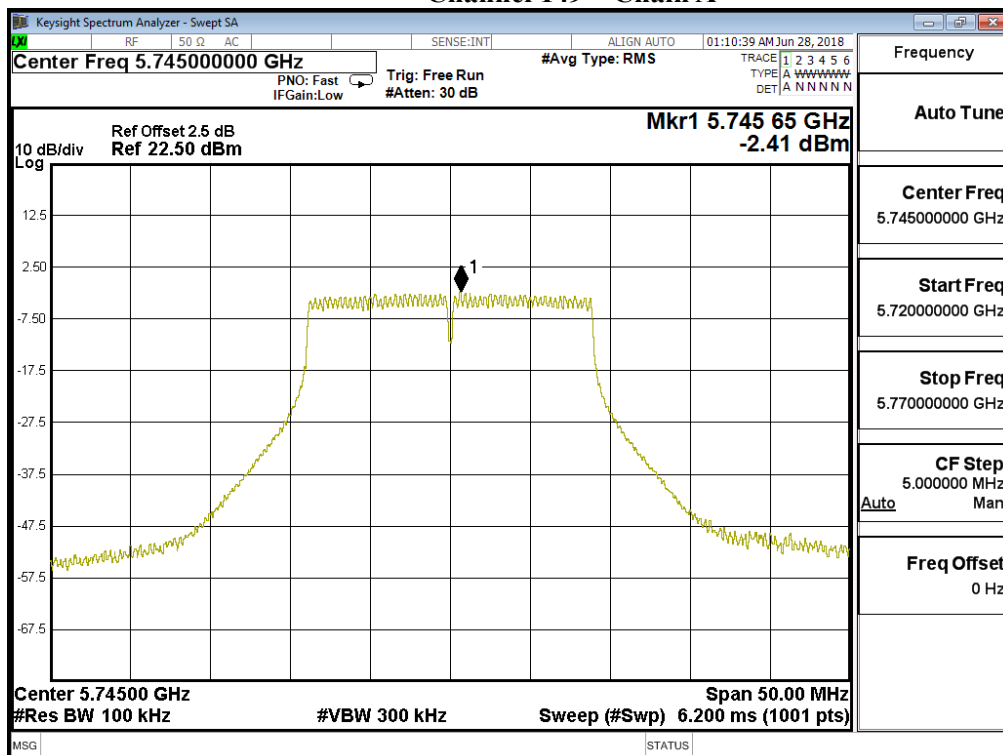
Channel 116 – Chain A



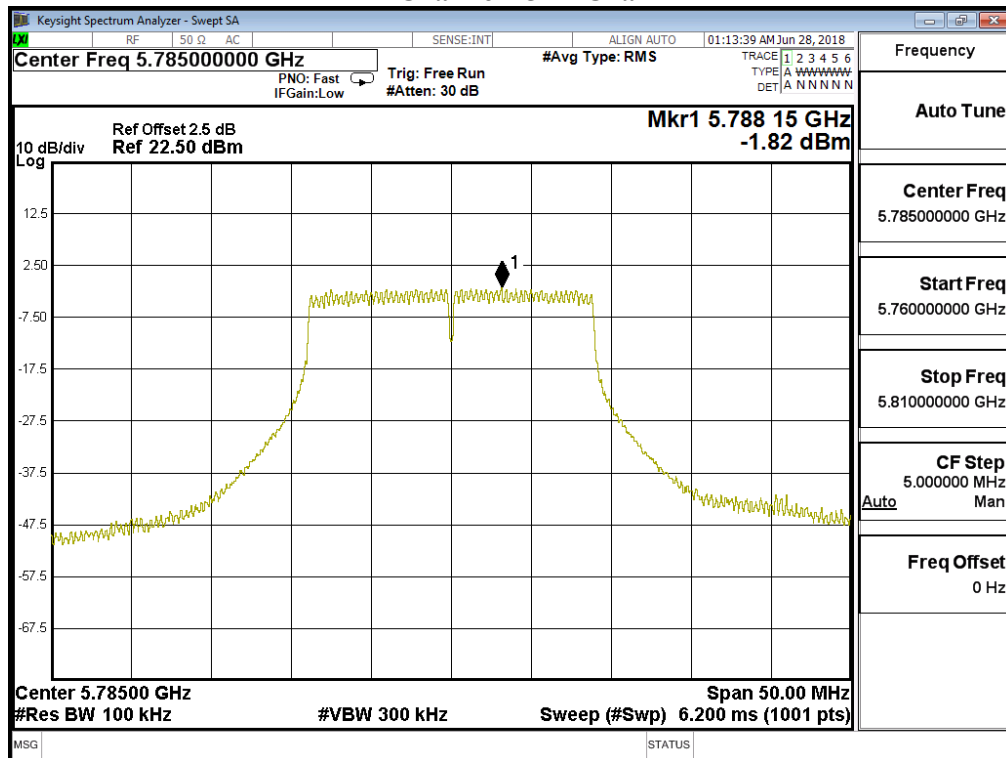
Channel 140 – Chain A



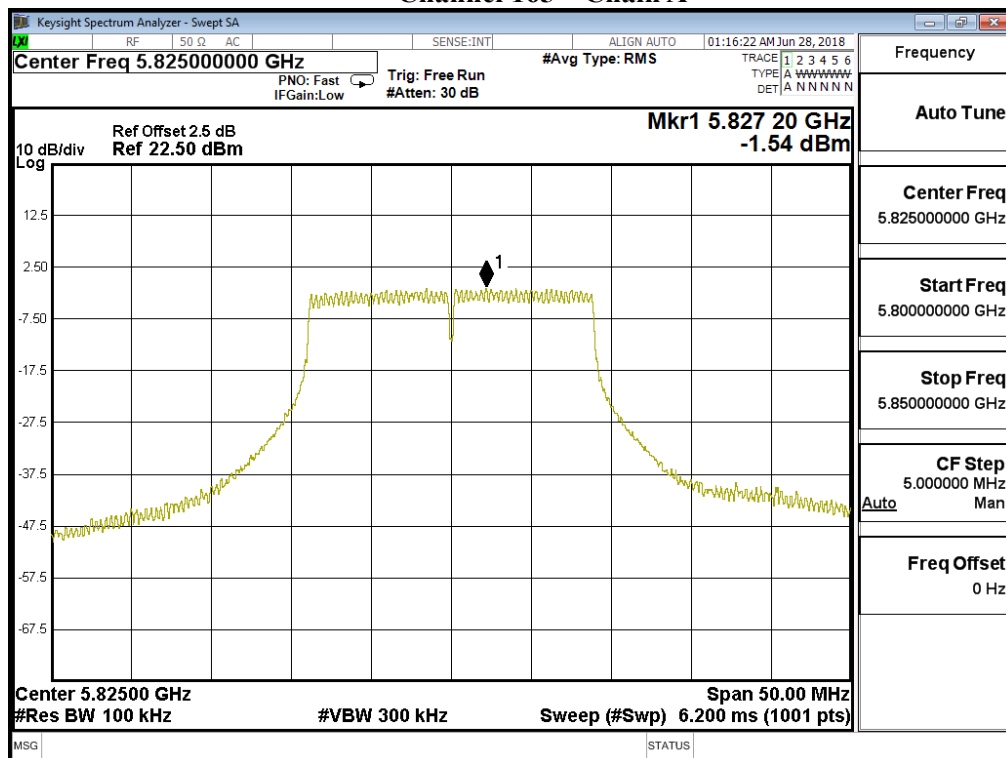
Channel 149 – Chain A



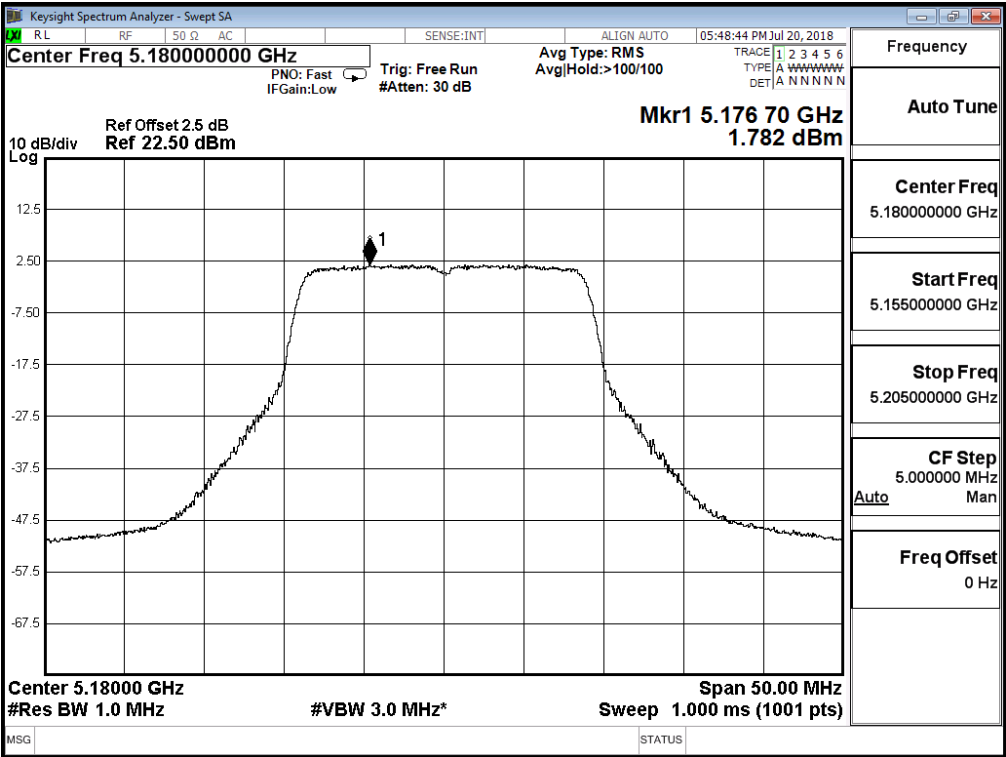
Channel 157 – Chain A



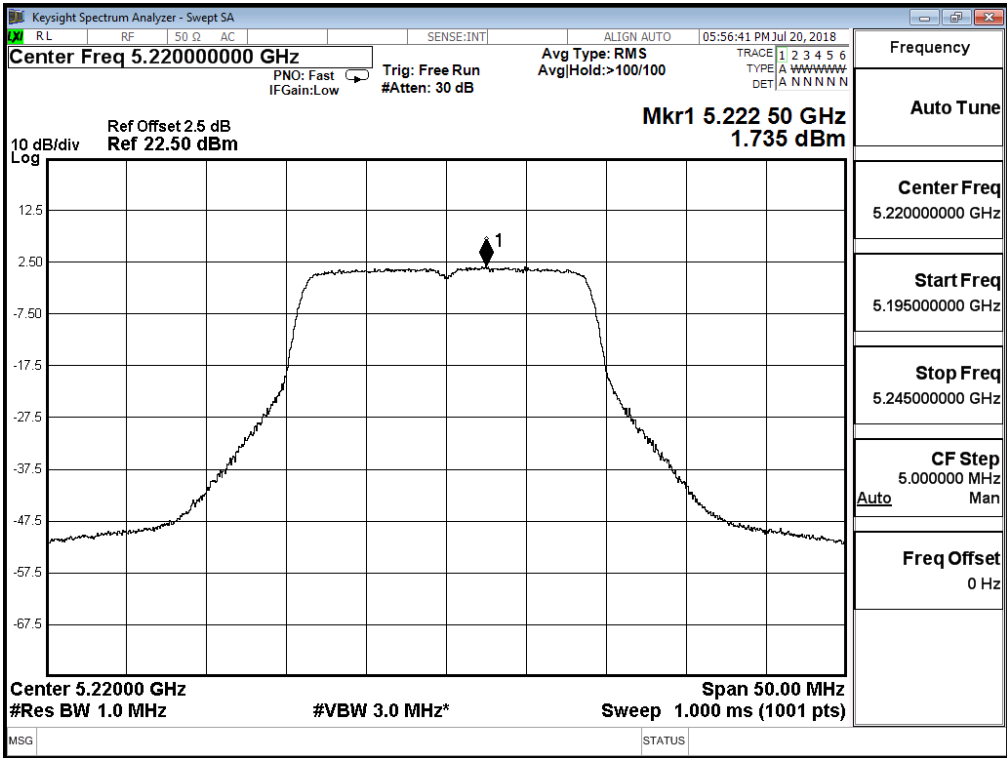
Channel 165 – Chain A



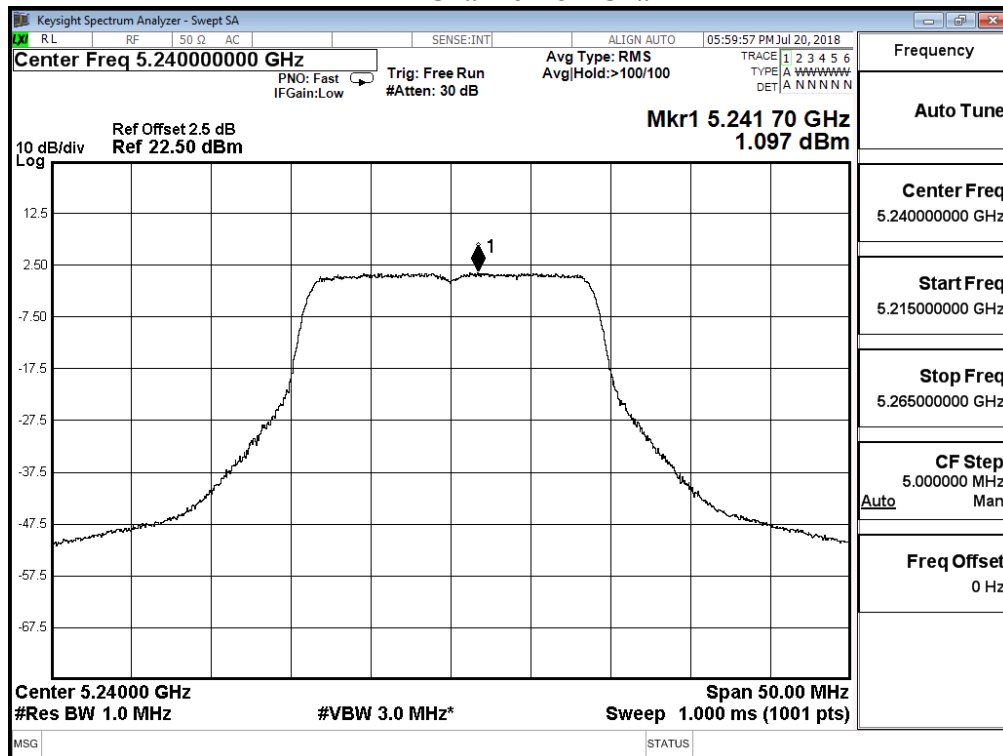
Channel 36 – Chain B



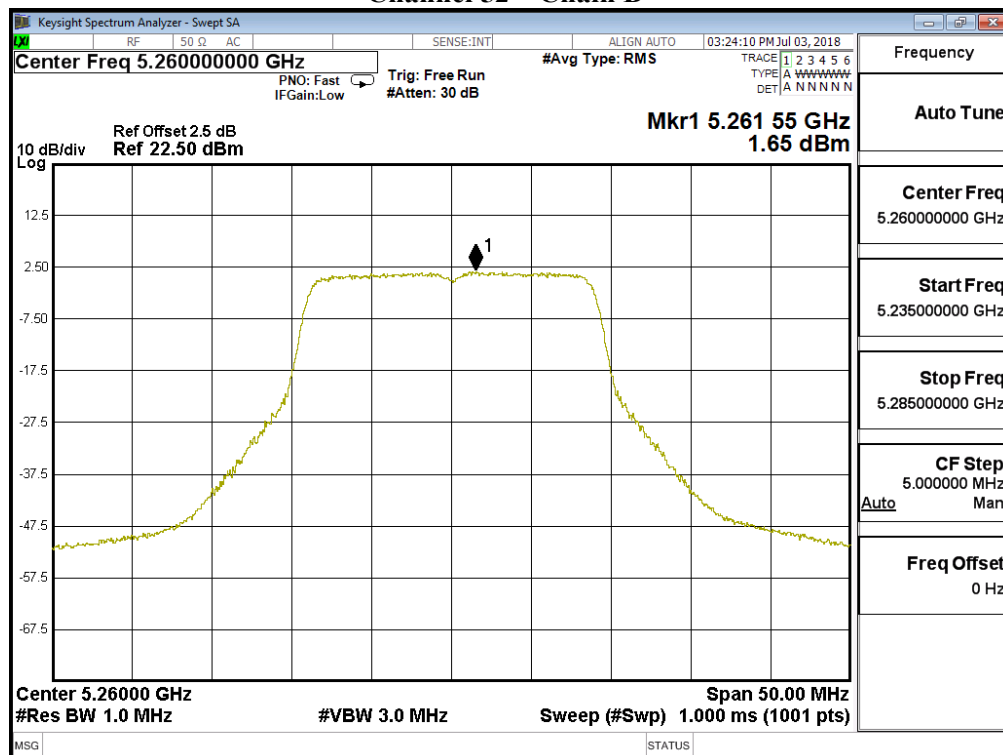
Channel 44 – Chain B



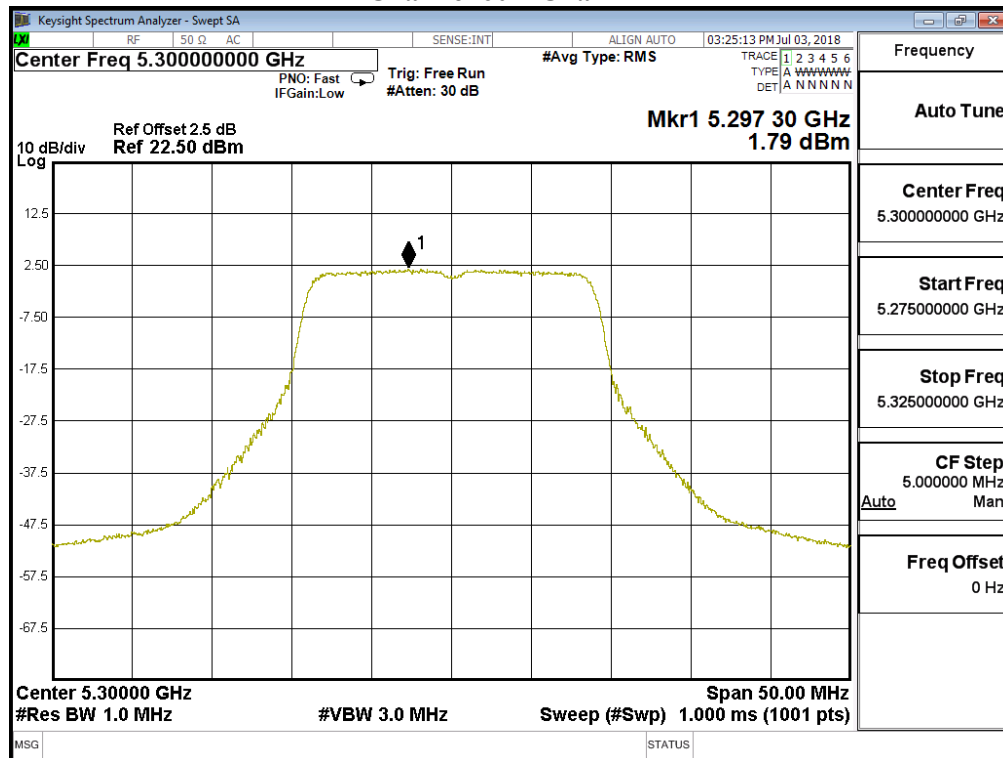
Channel 48 – Chain B



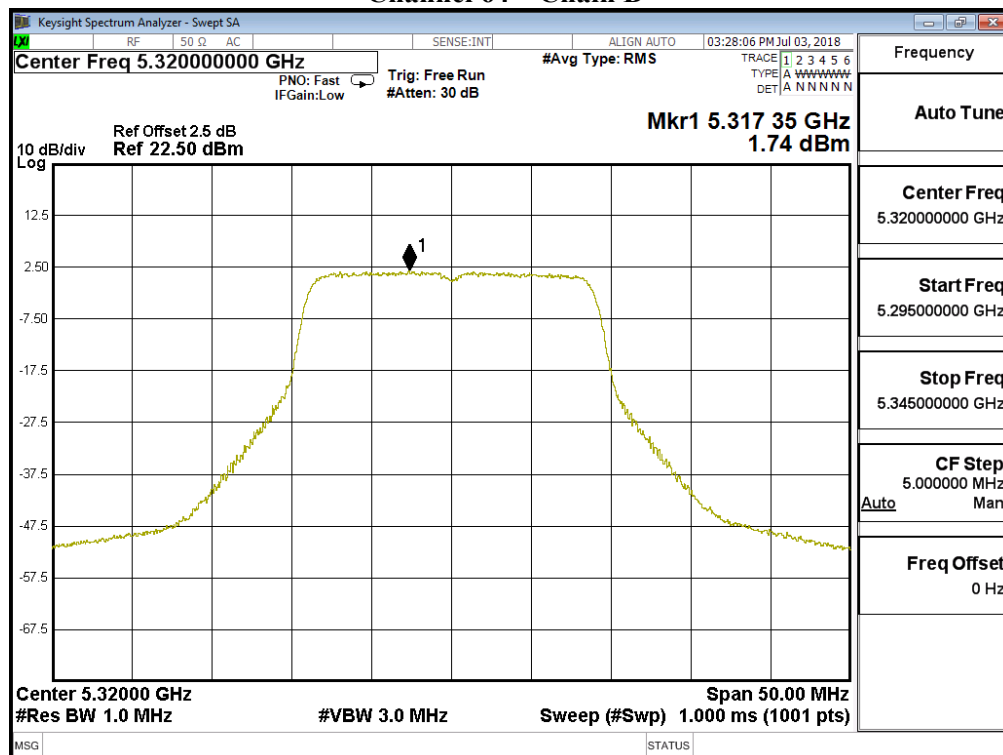
Channel 52 – Chain B



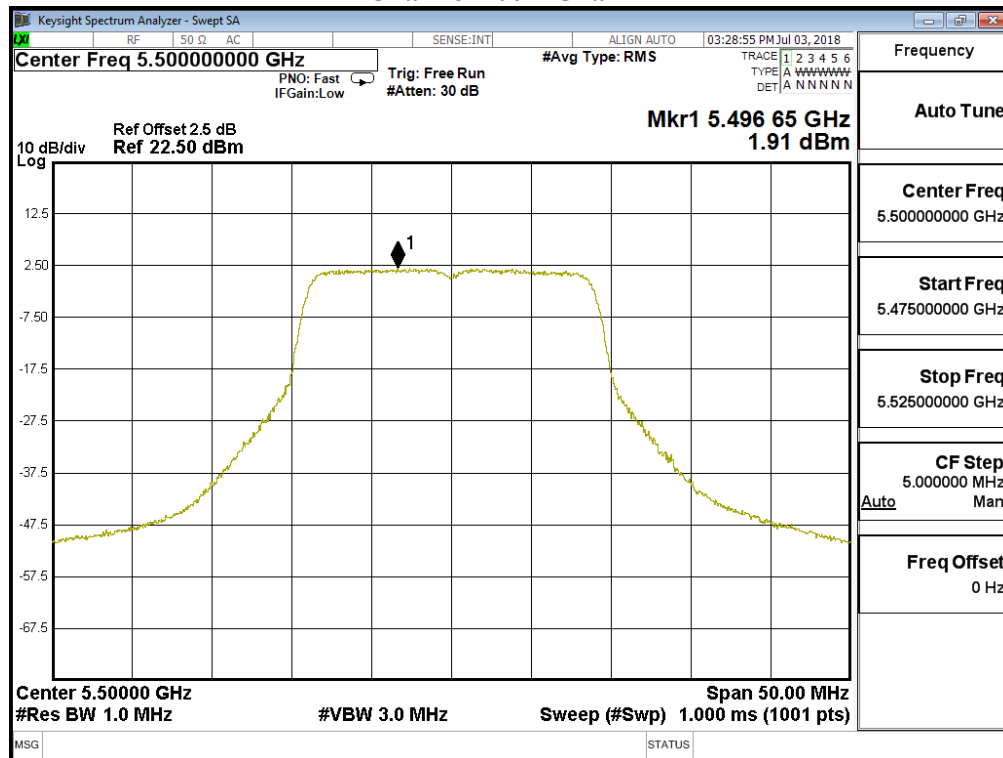
Channel 60 – Chain B



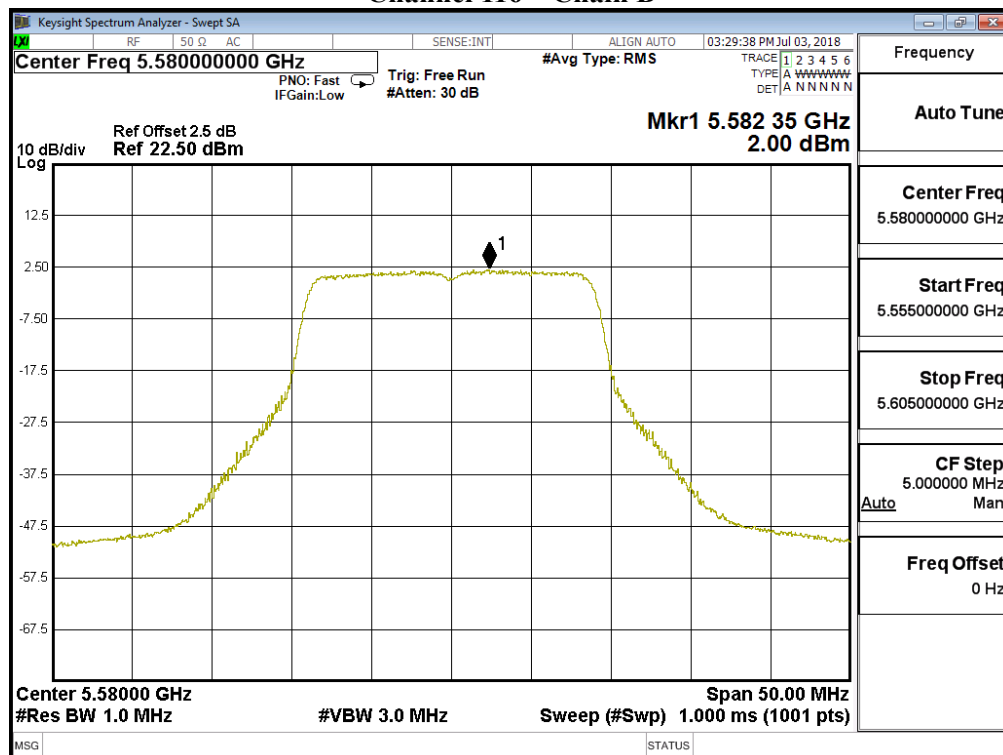
Channel 64 – Chain B



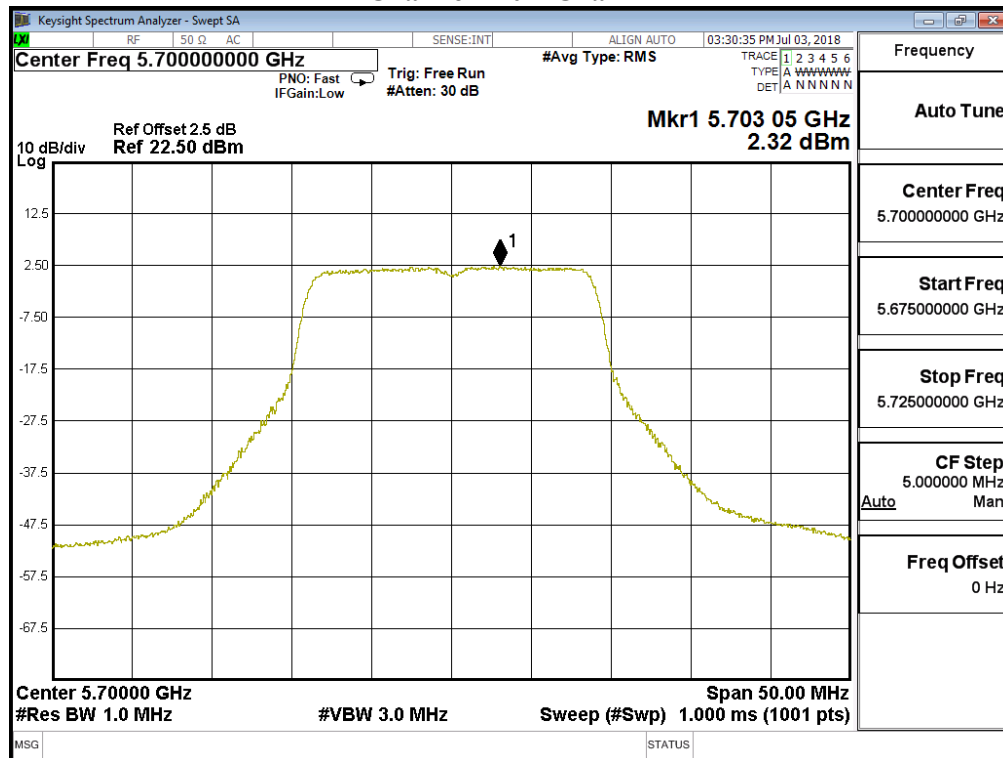
Channel 100 – Chain B



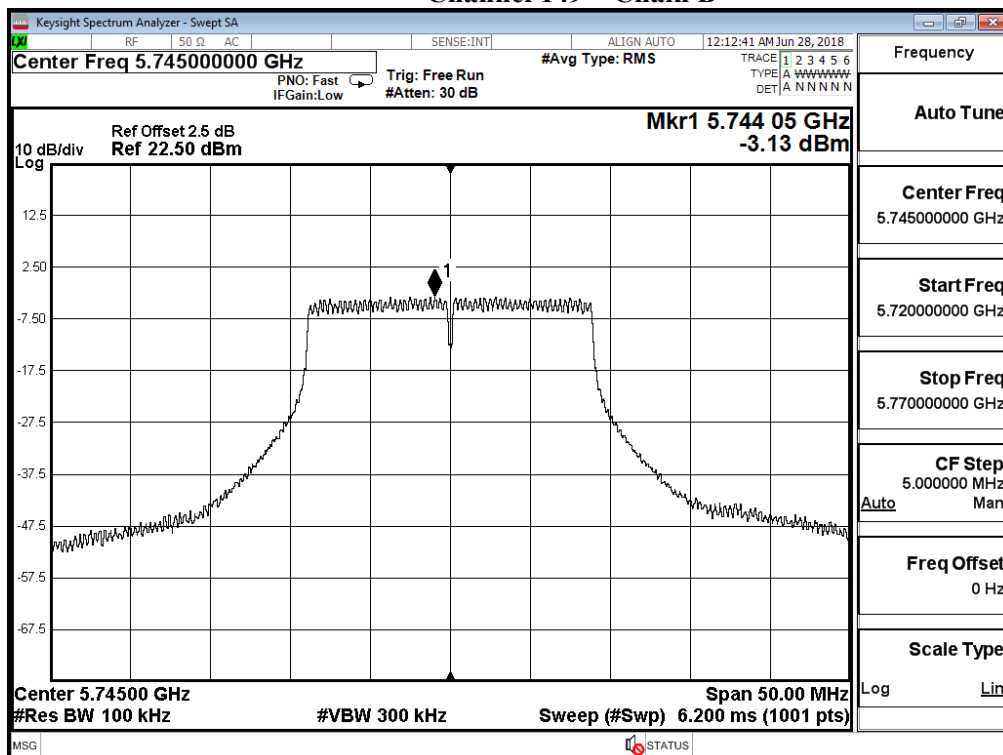
Channel 116 – Chain B



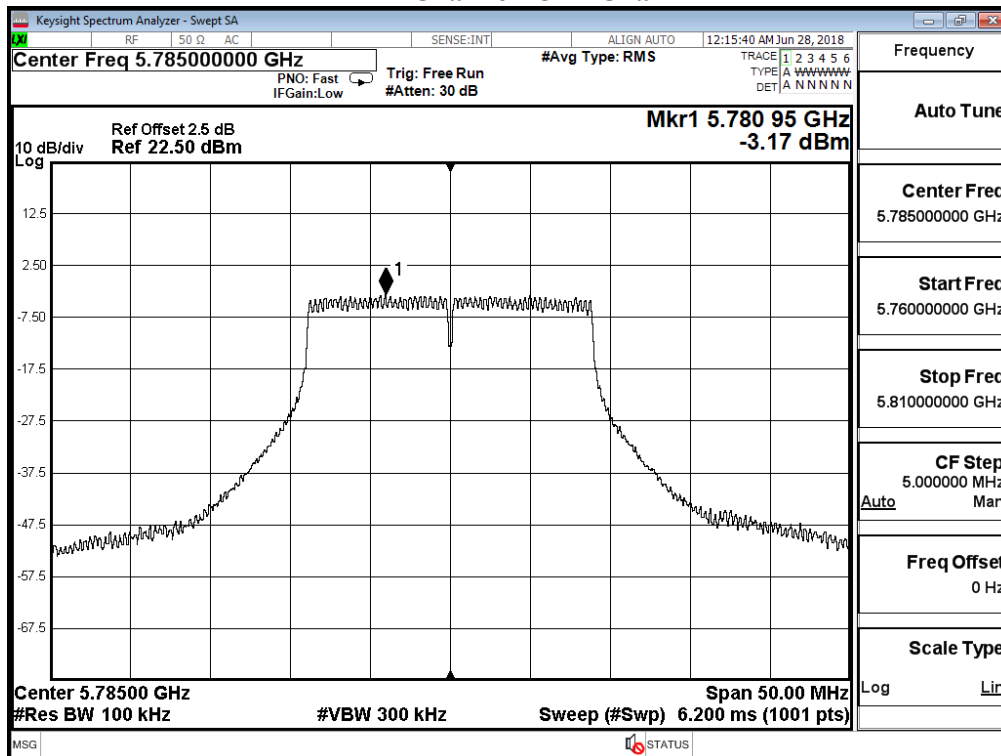
Channel 140 – Chain B



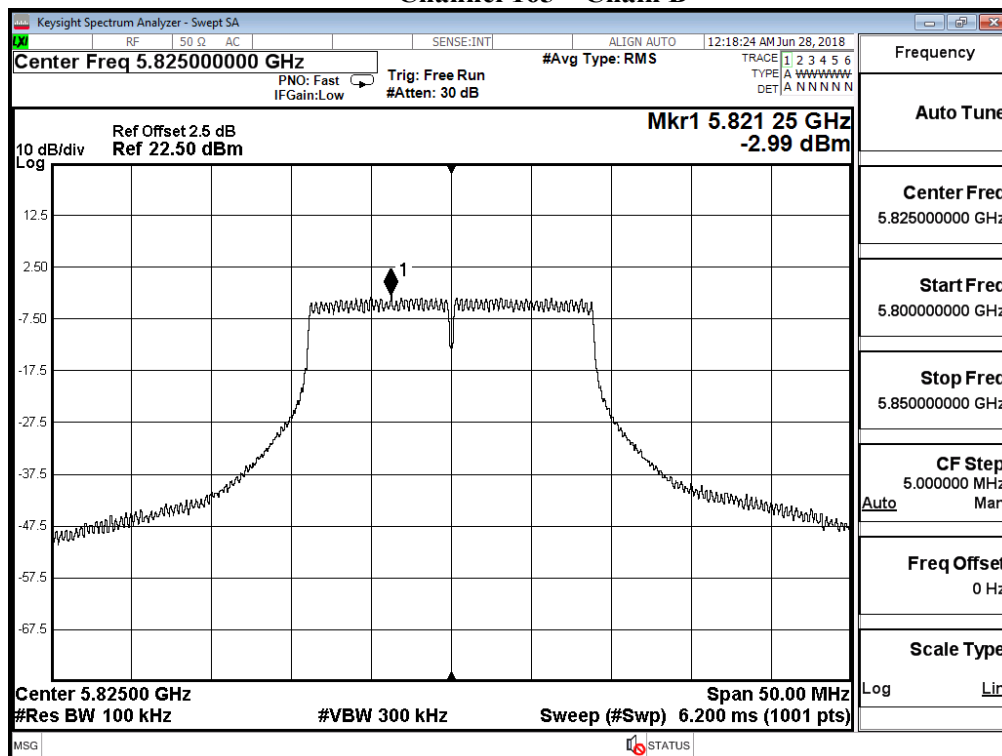
Channel 149 – Chain B



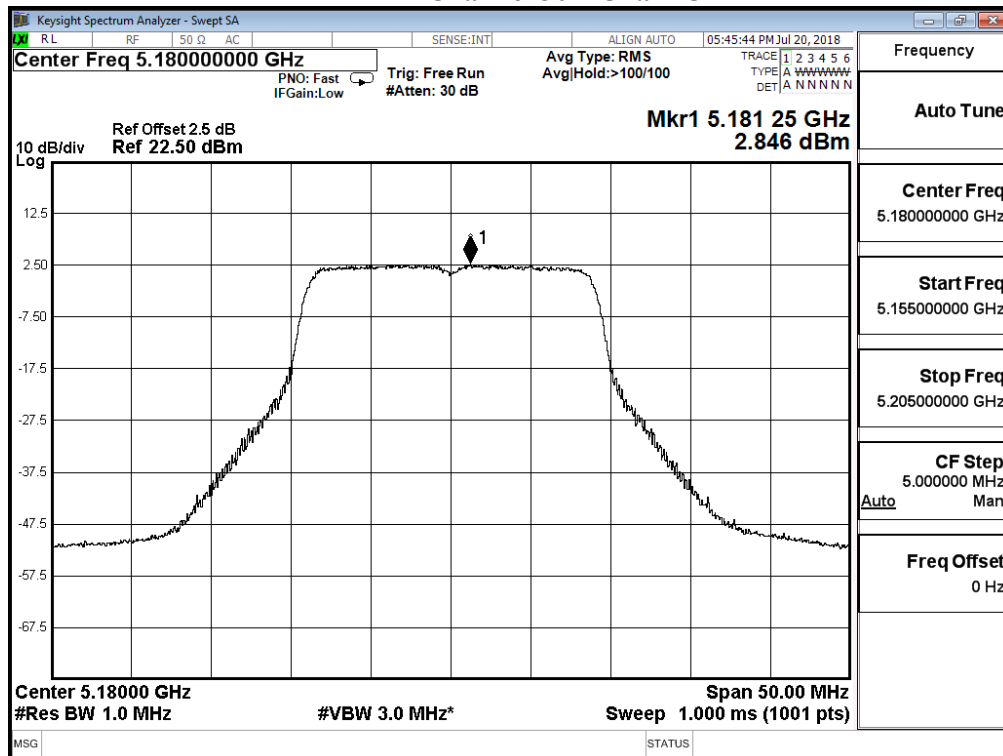
Channel 157 – Chain B



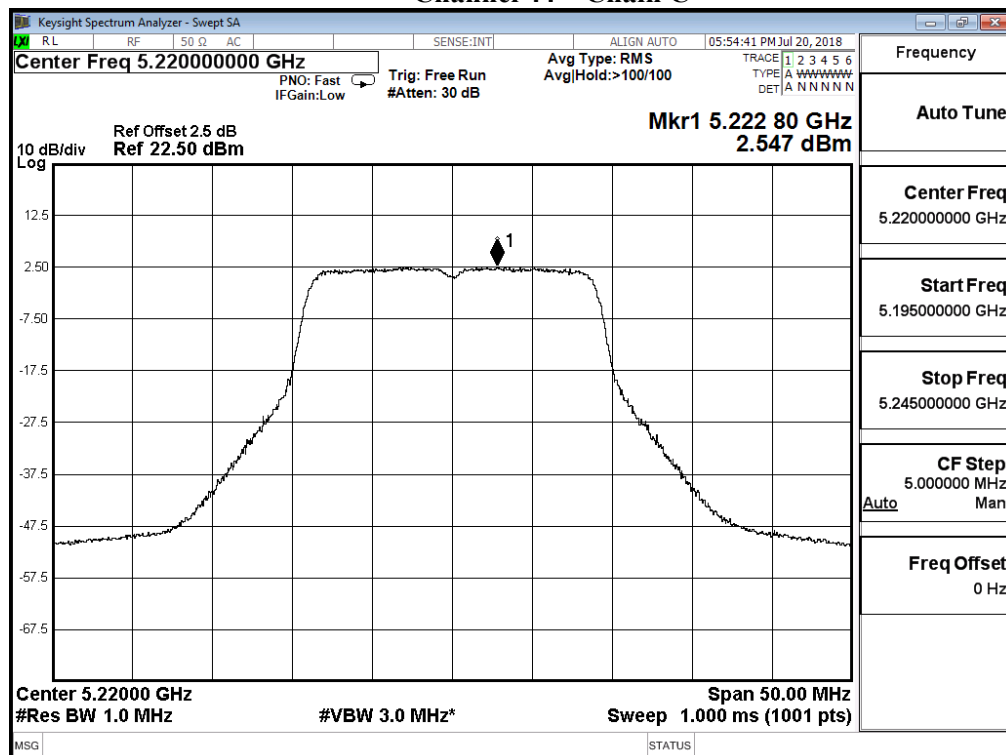
Channel 165 – Chain B



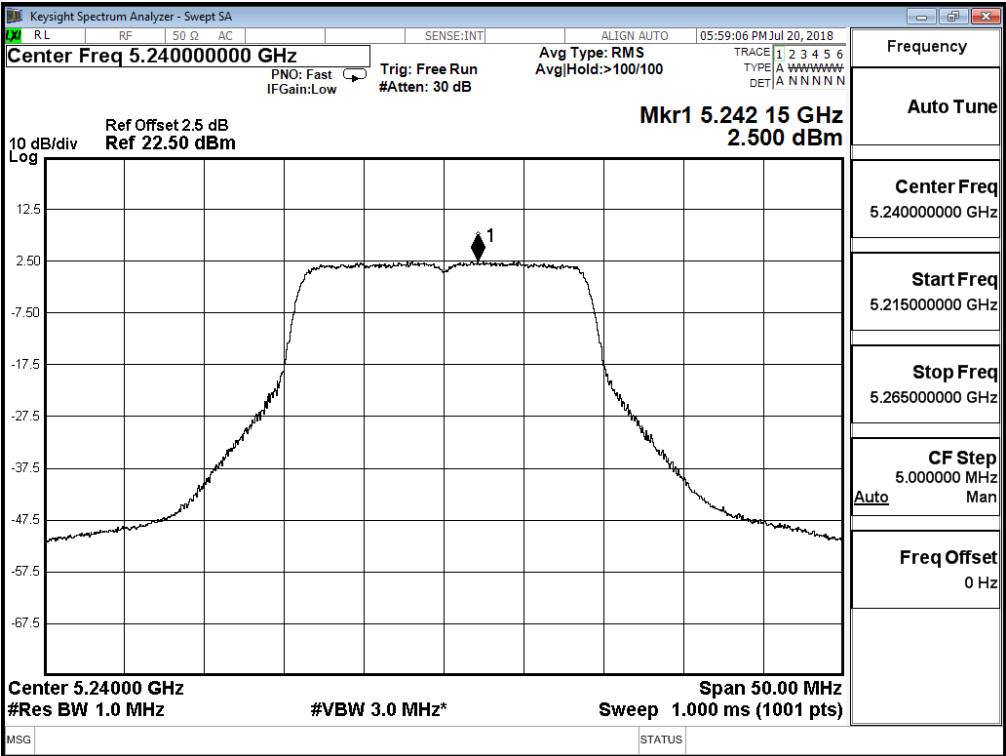
Channel 36 – Chain C



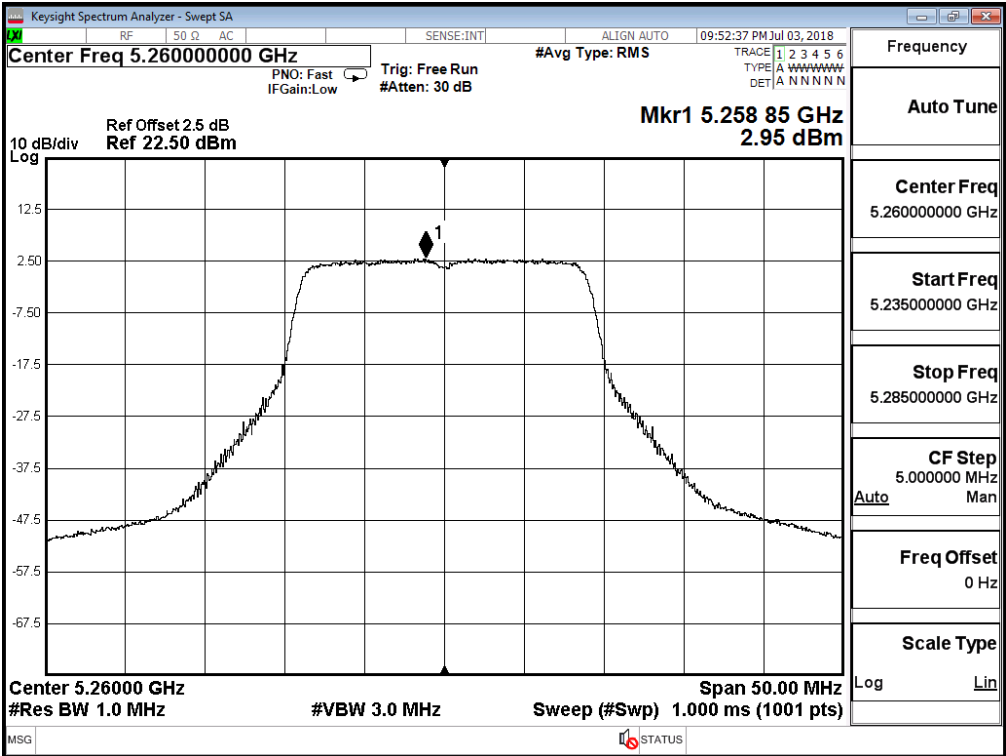
Channel 44 – Chain C



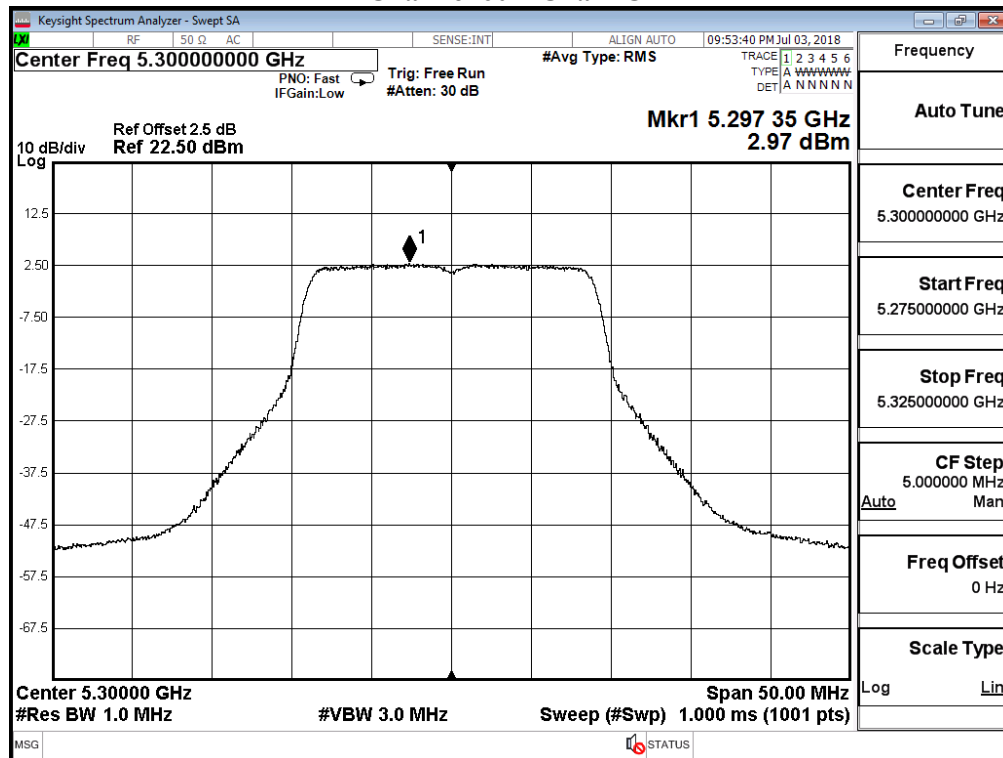
Channel 48 – Chain C



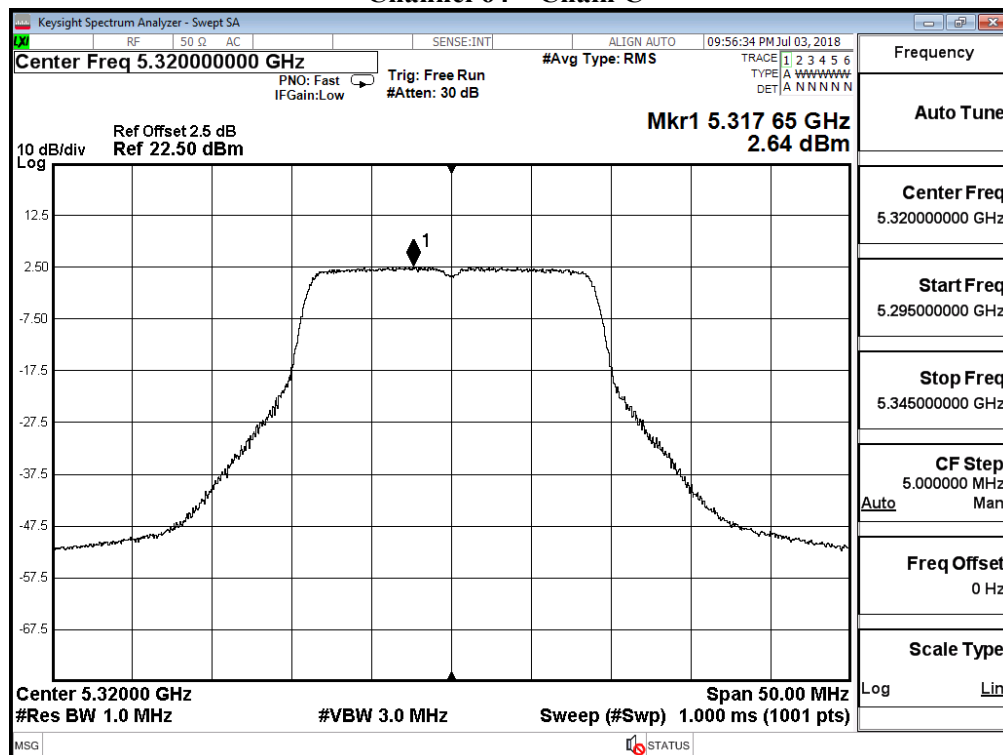
Channel 52 – Chain C



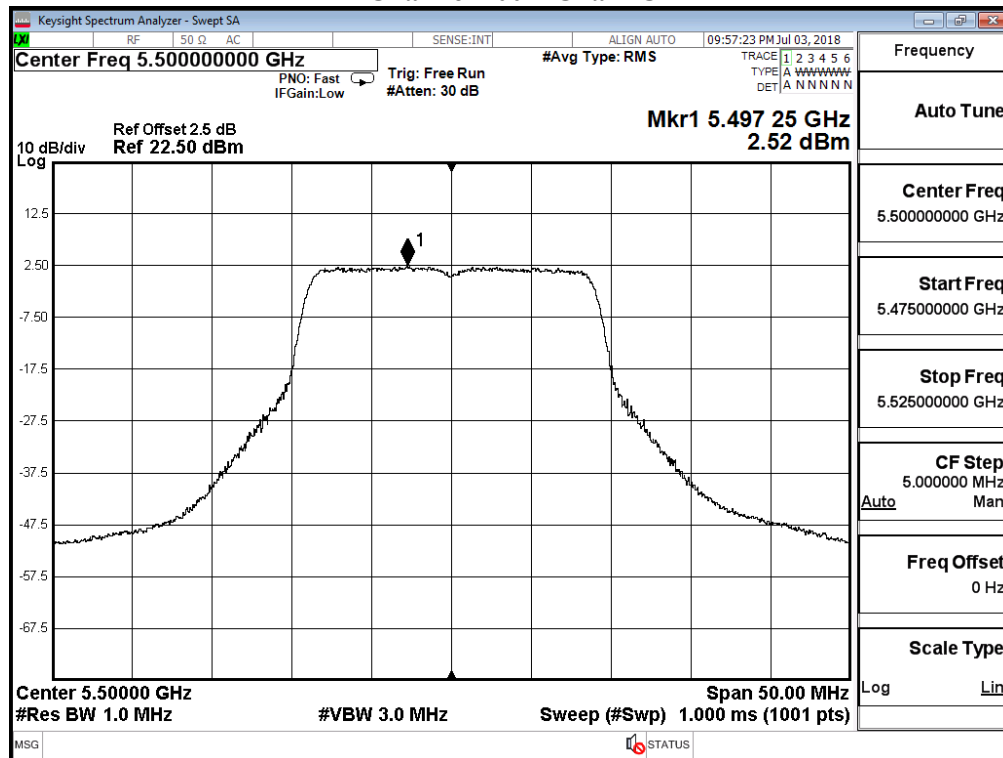
Channel 60 – Chain C



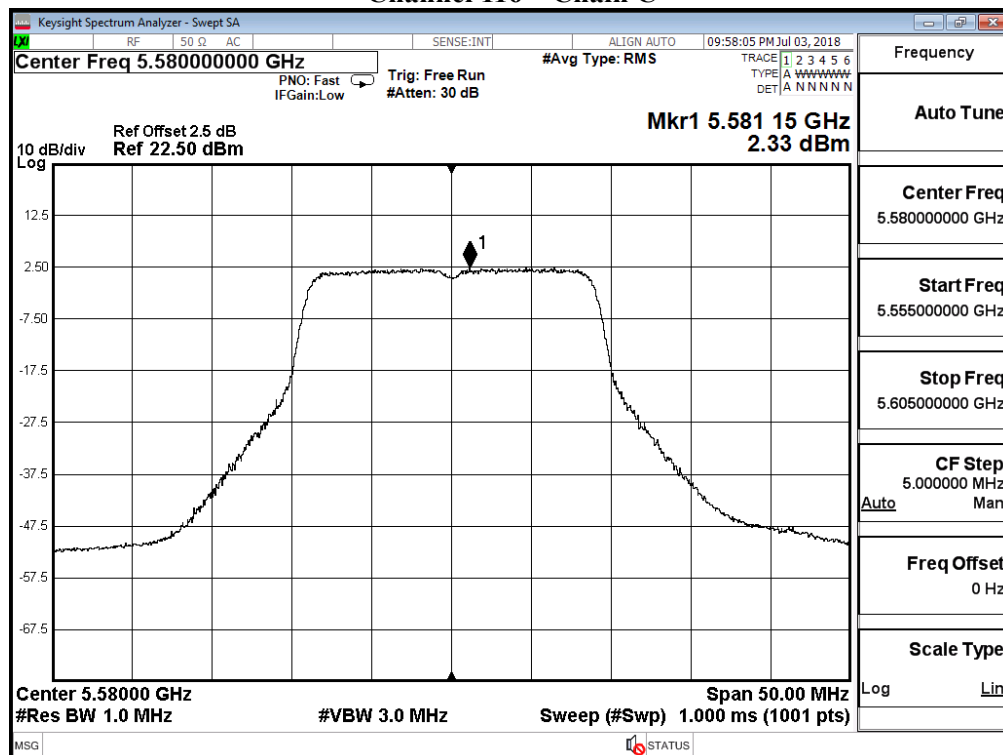
Channel 64 – Chain C



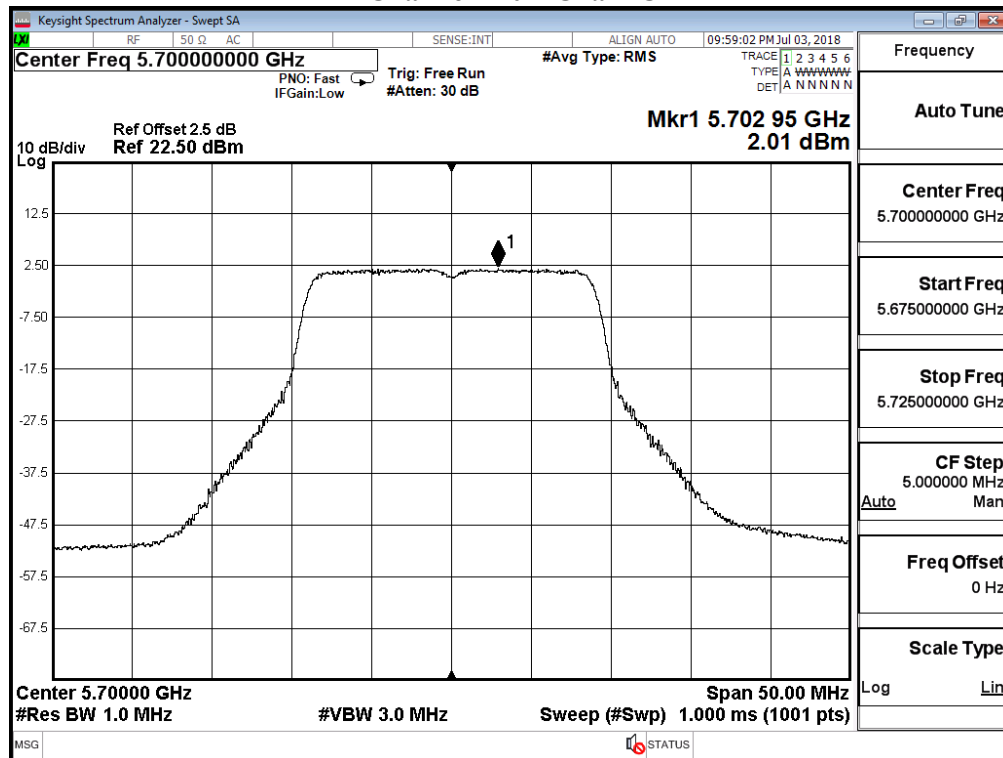
Channel 100 – Chain C



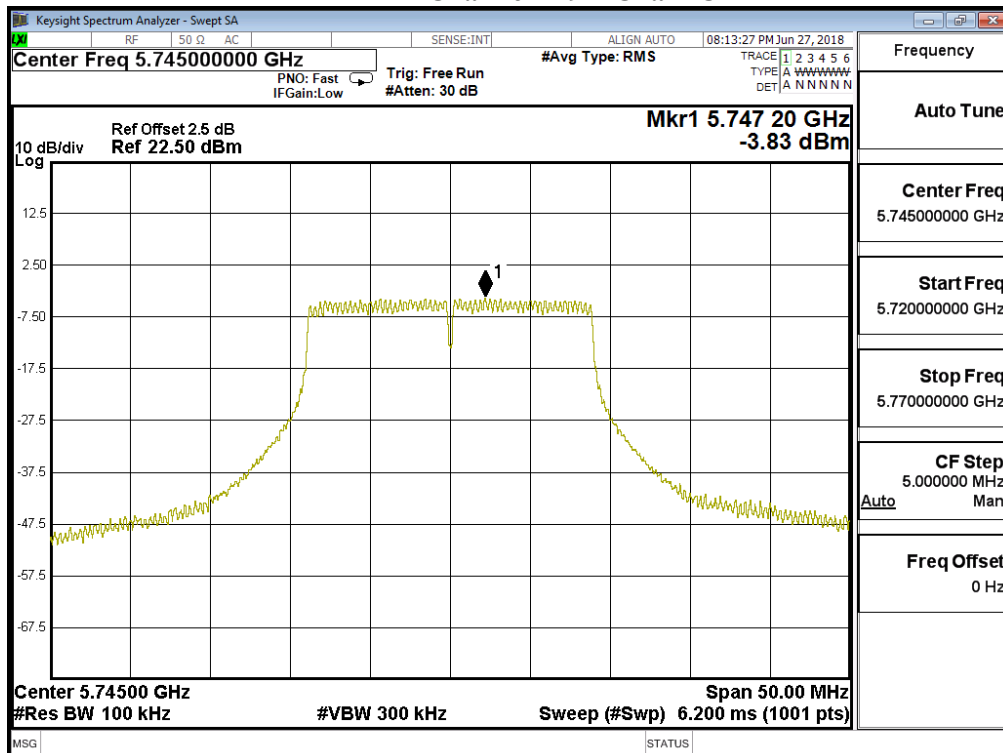
Channel 116 – Chain C



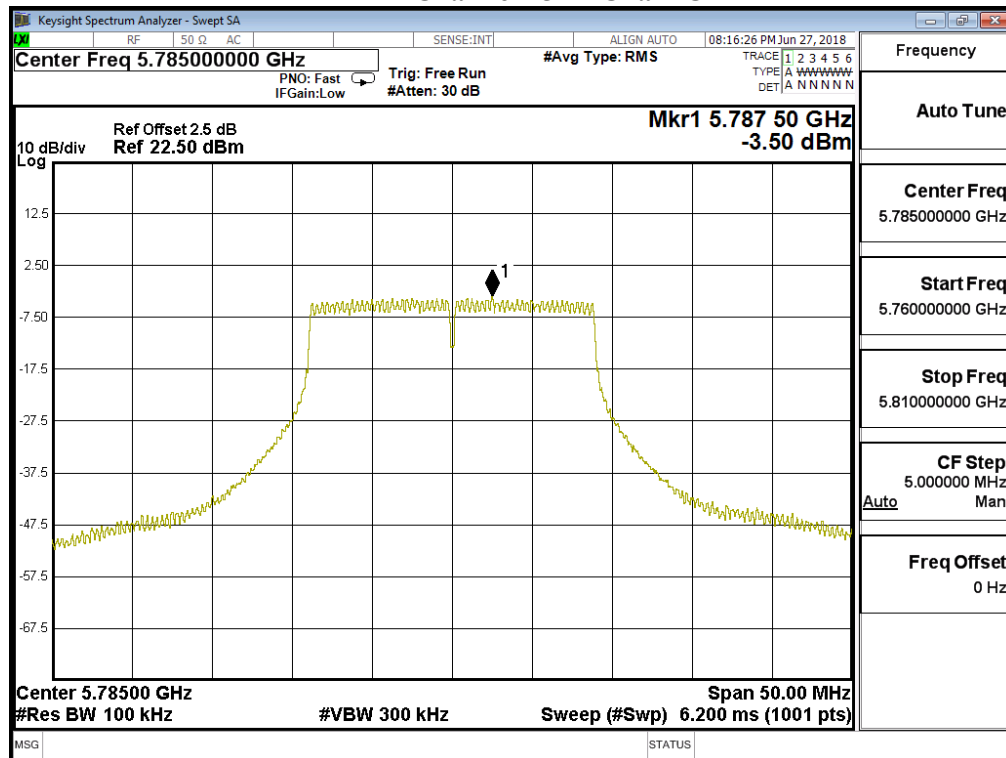
Channel 140 – Chain C



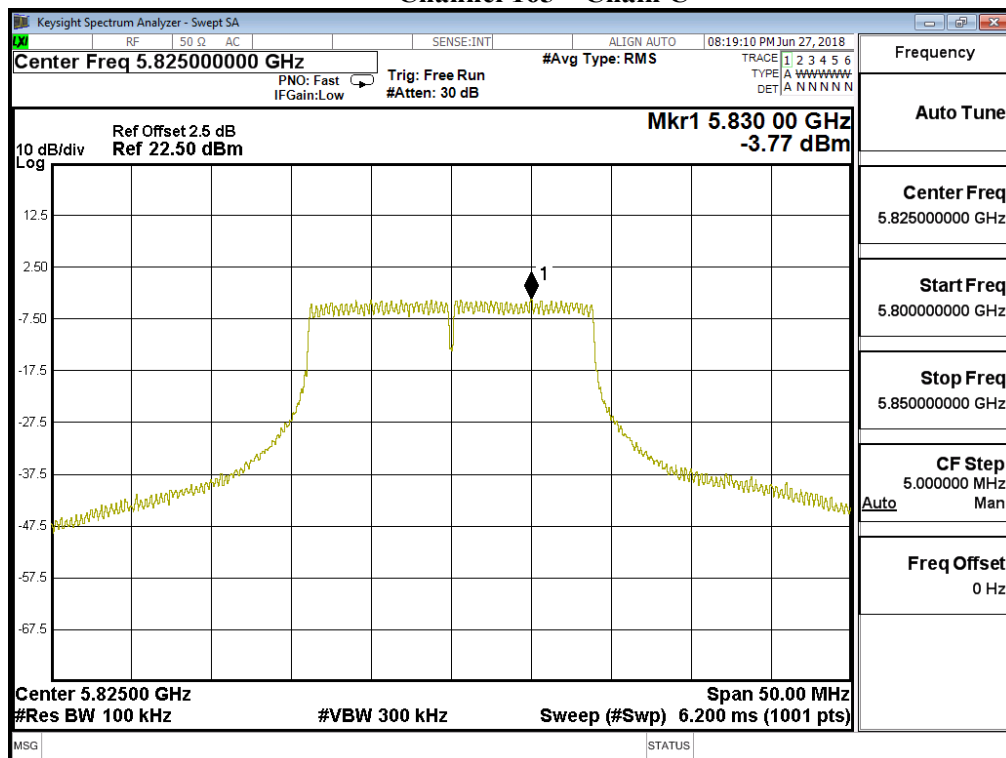
Channel 149 – Chain C



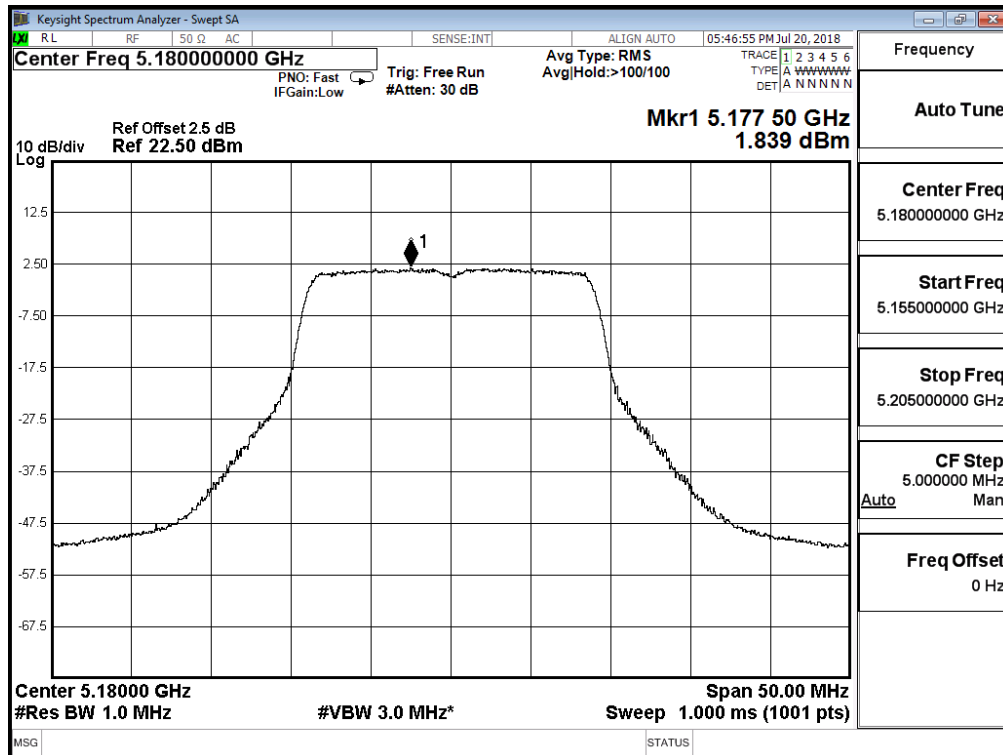
Channel 157 – Chain C



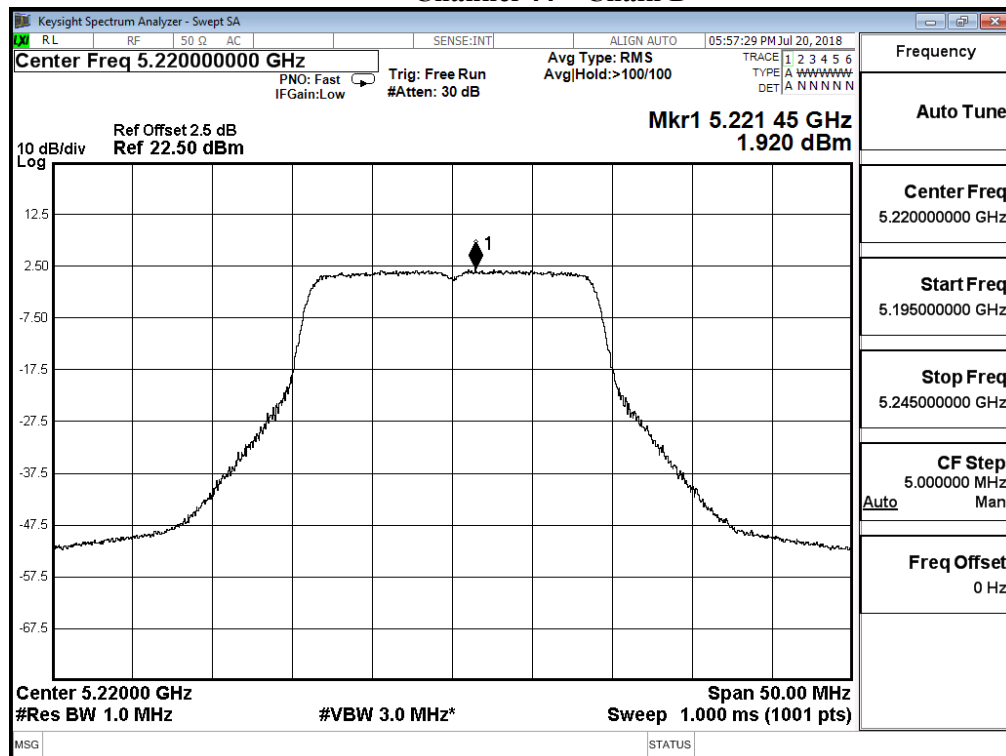
Channel 165 – Chain C



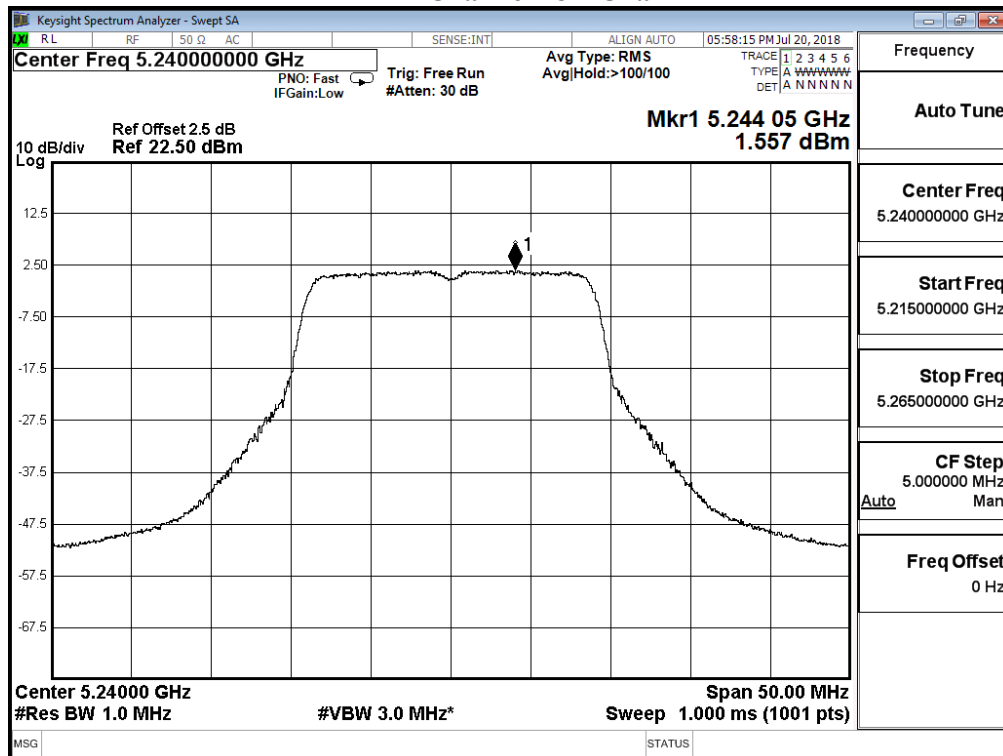
Channel 36 – Chain D



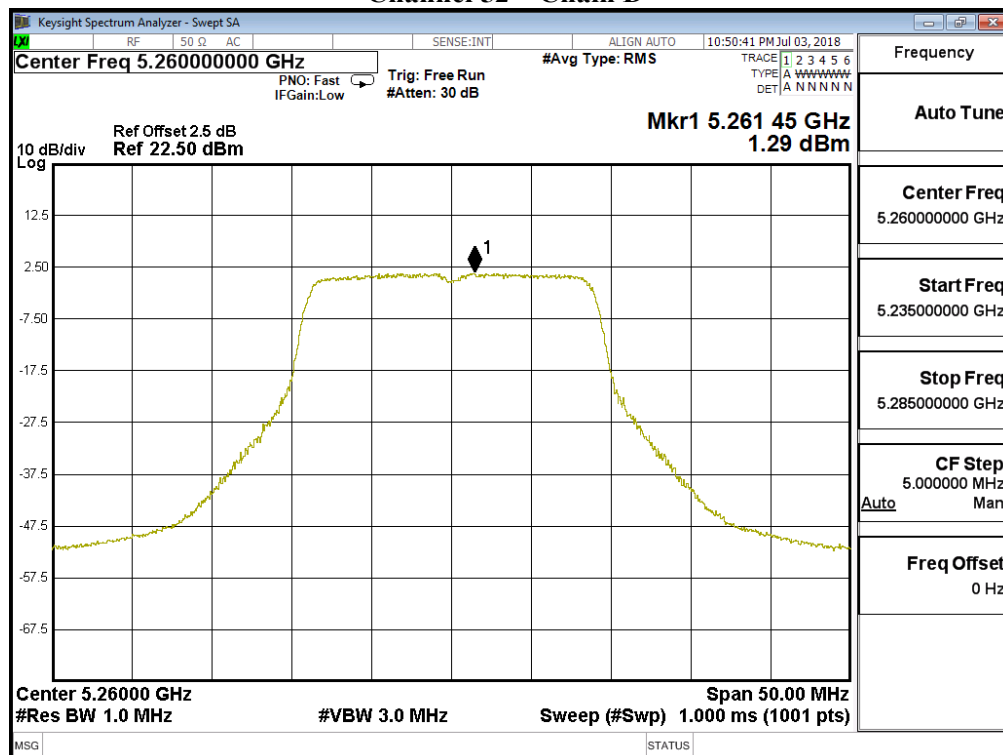
Channel 44 – Chain D



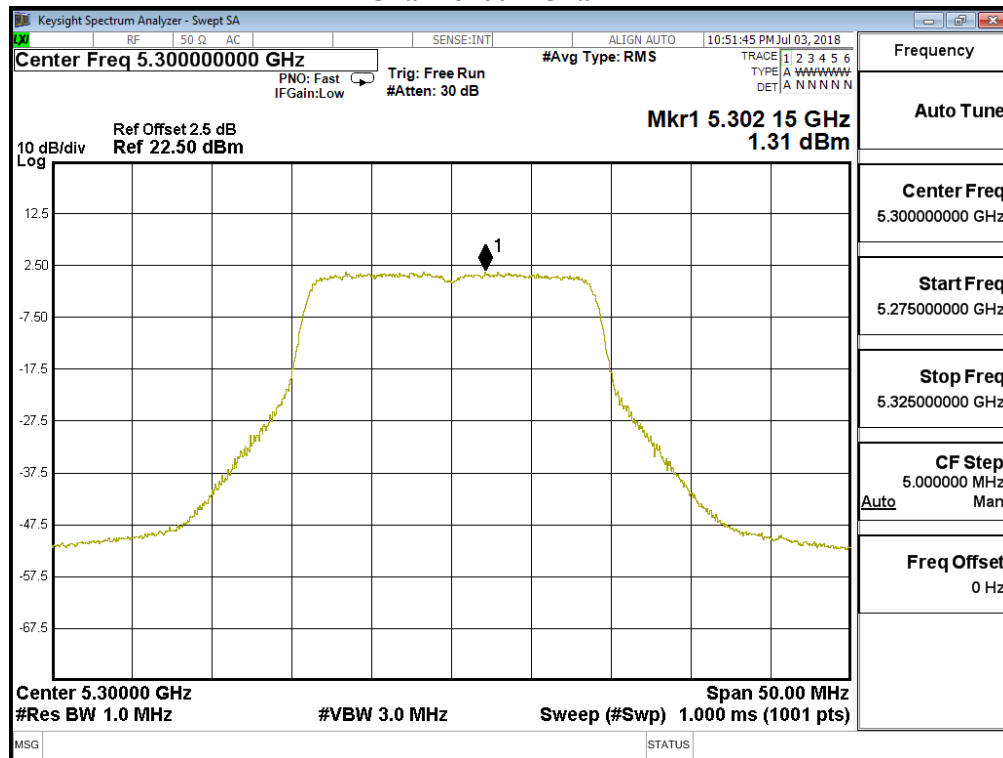
Channel 48 – Chain D



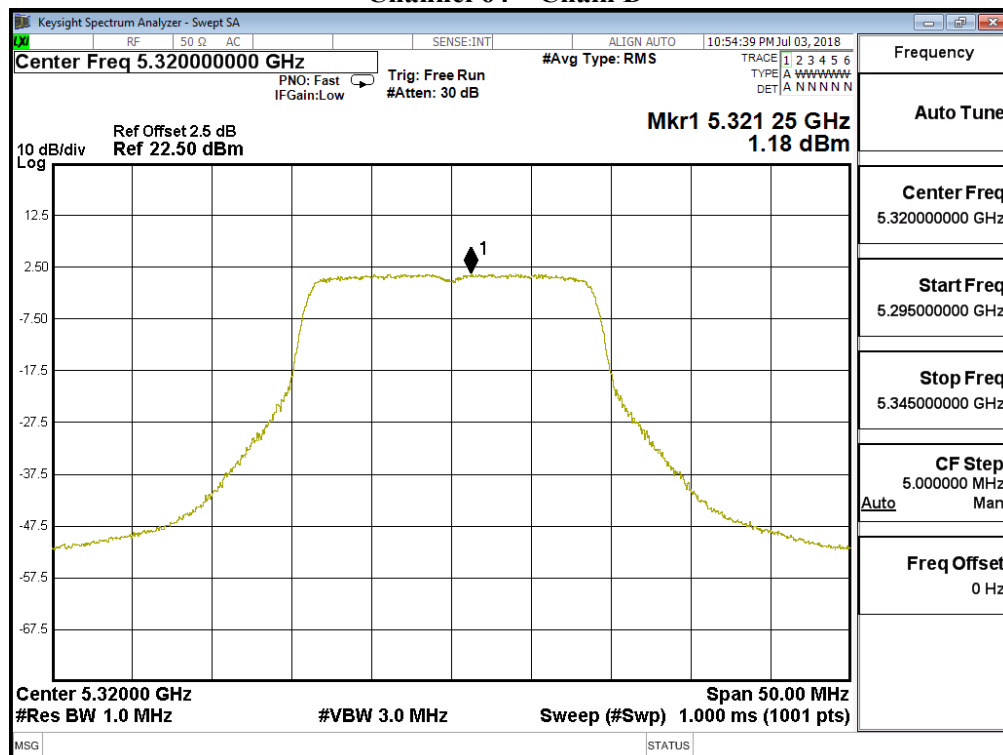
Channel 52 – Chain D



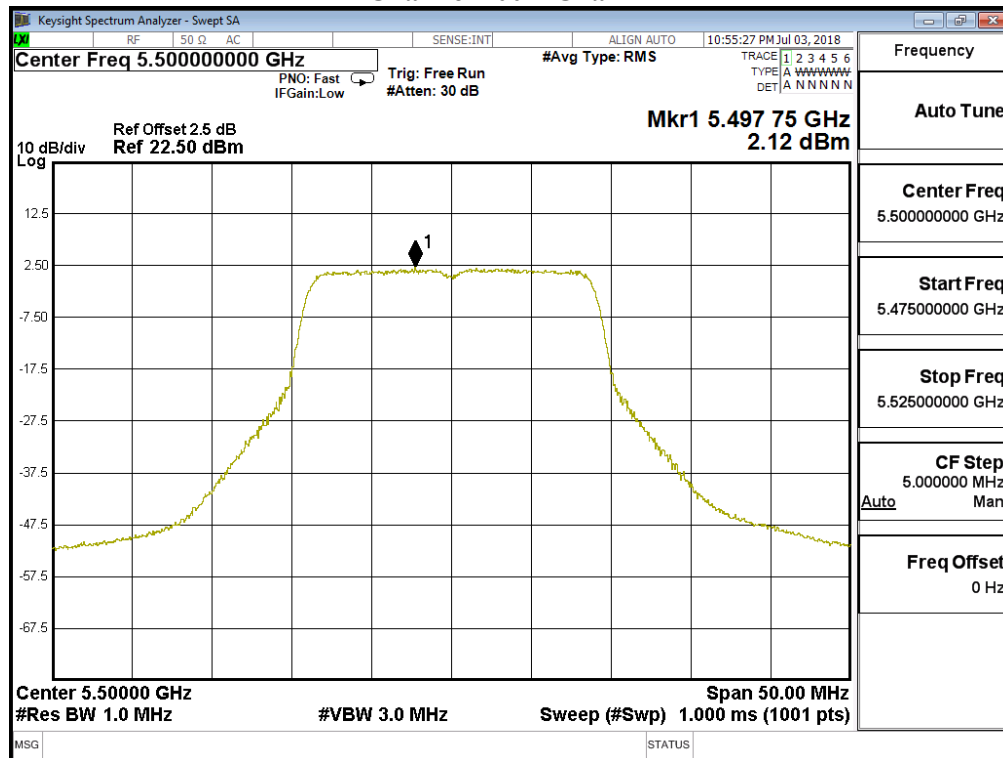
Channel 60 – Chain D



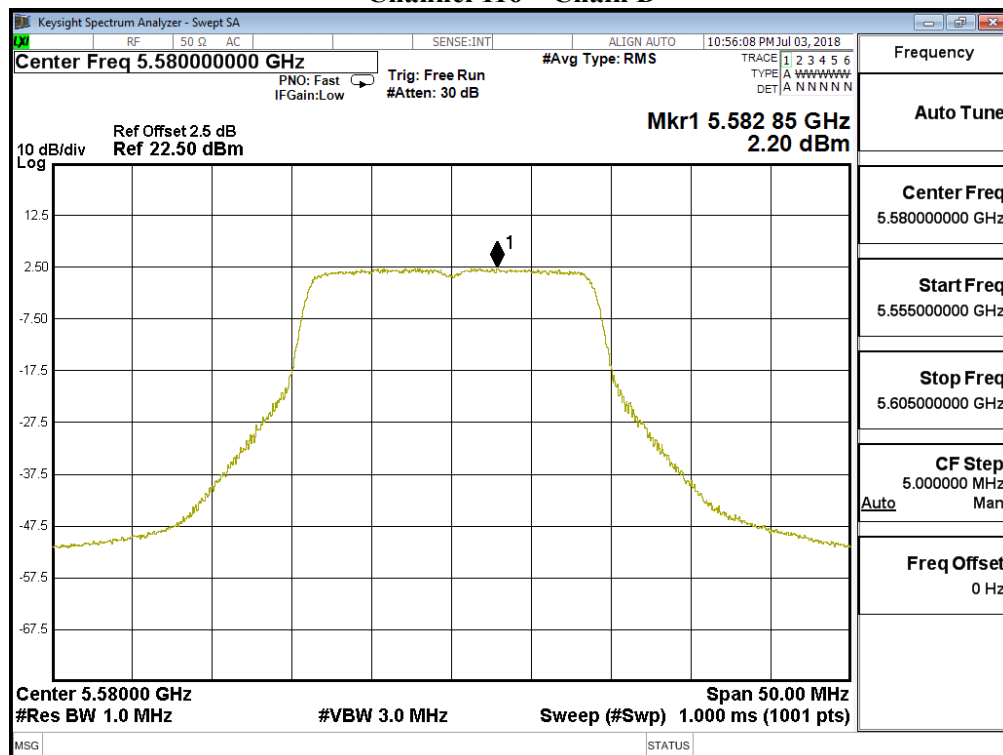
Channel 64 – Chain D



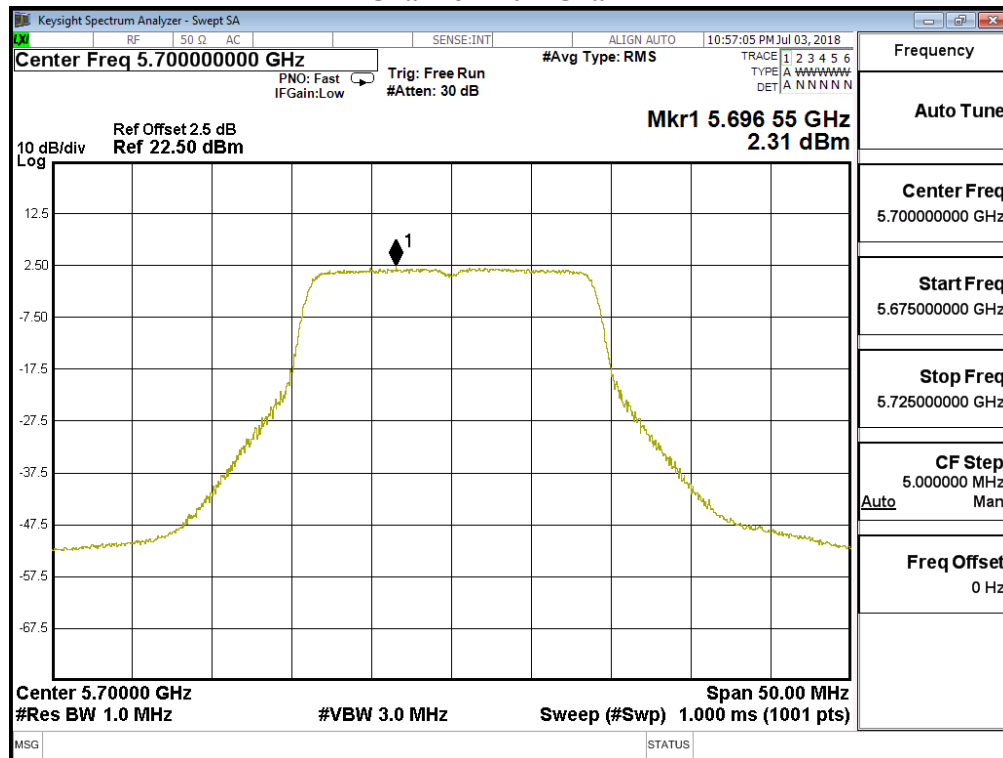
Channel 100 – Chain D



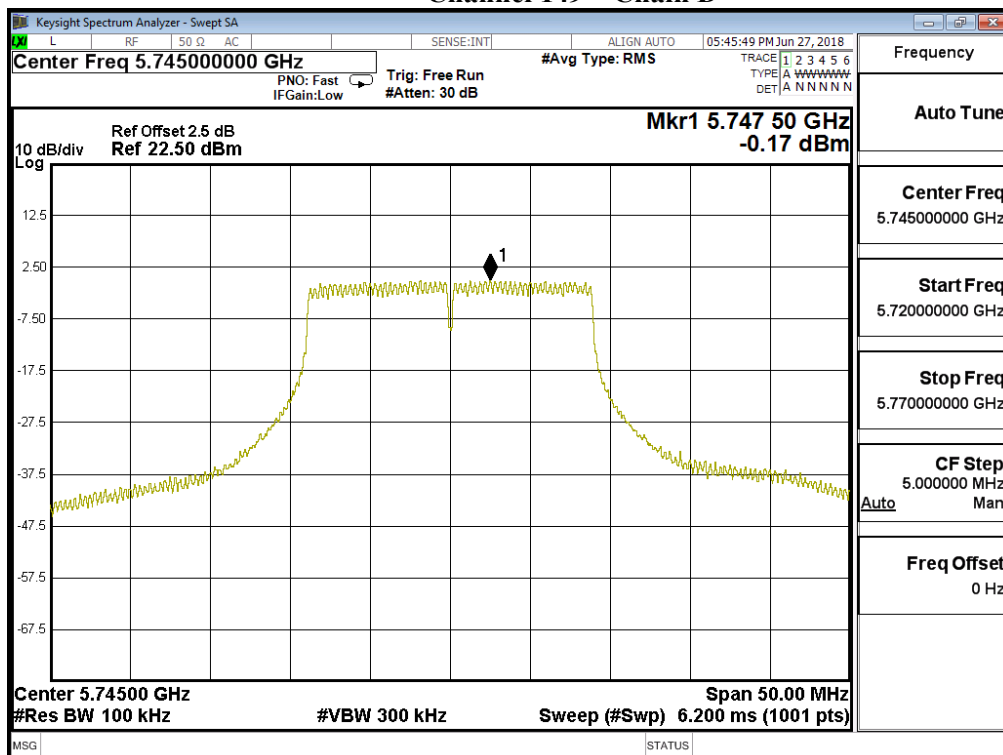
Channel 116 – Chain D



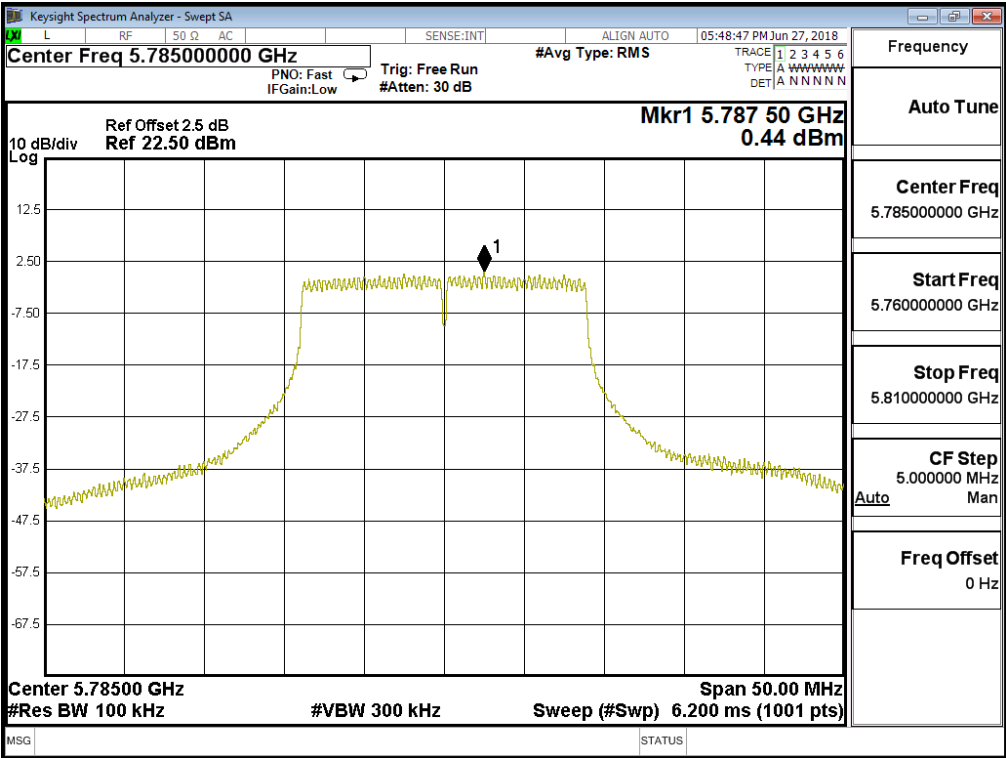
Channel 140 – Chain D



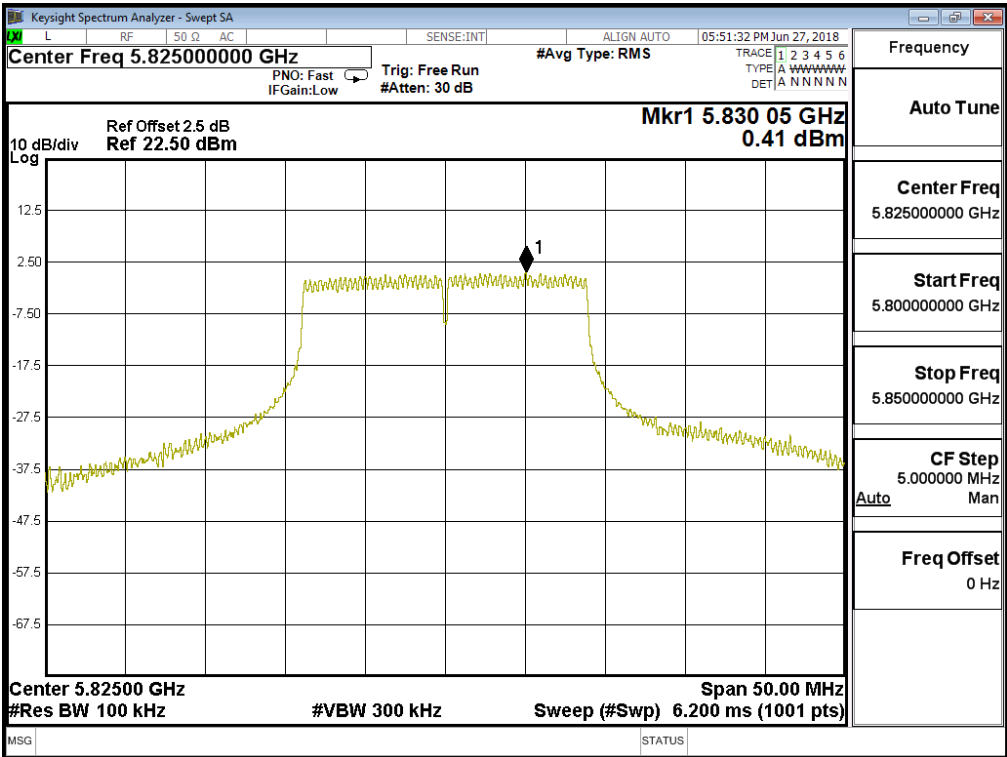
Channel 149 – Chain D



Channel 157 – Chain D



Channel 165 – Chain D



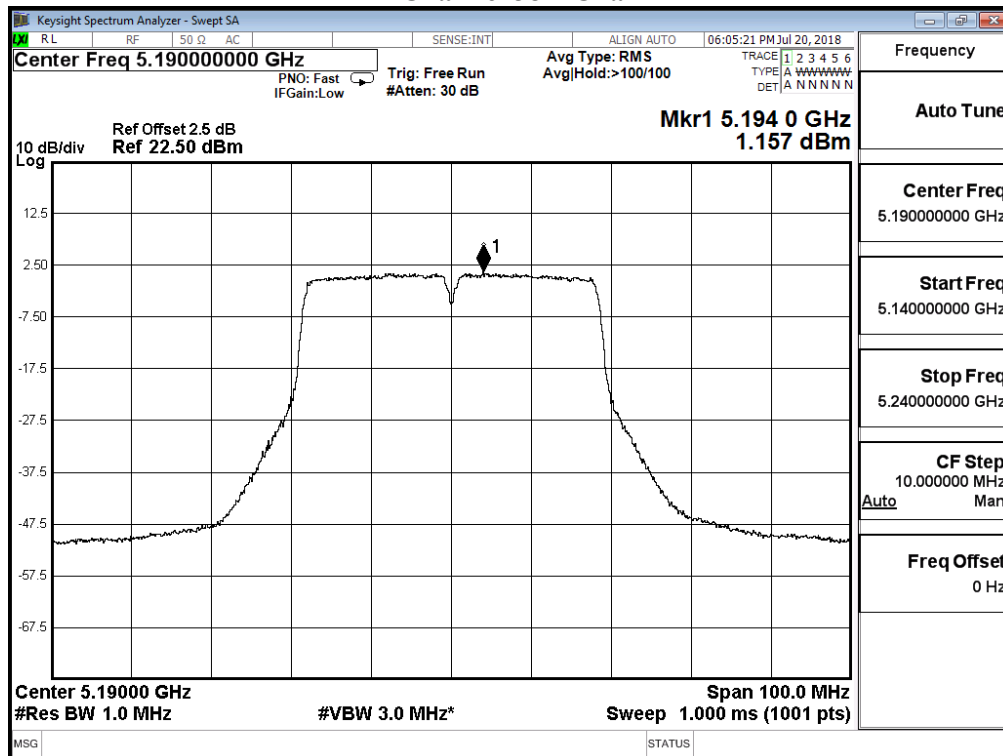
Product : MOXA IEEE 802.11a/n/ac 4*4 module
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Date : 2018/07/20
 Test Mode : Mode 3: Transmit (802.11n-40BW 60Mbps) (Antenna No.17)

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	Total PSD (dBm) ¹	Required Limit (dBm)	Result
38	5190	A	1.16	7.18	9	Pass
		B	1.48	7.50	9	Pass
		C	2.13	8.15	9	Pass
		D	1.12	7.14	9	Pass
46	5230	A	1.70	7.72	9	Pass
		B	1.60	7.62	9	Pass
		C	2.04	8.06	9	Pass
		D	1.45	7.47	9	Pass
54	5270	A	1.25	7.27	9	Pass
		B	1.59	7.61	9	Pass
		C	2.31	8.33	9	Pass
		D	1.48	7.50	9	Pass
62	5310	A	1.15	7.17	9	Pass
		B	1.11	7.13	9	Pass
		C	1.68	7.70	9	Pass
		D	1.07	7.09	9	Pass
102	5510	A	0.48	6.50	9	Pass
		B	-0.08	5.94	9	Pass
		C	0.10	6.12	9	Pass
		D	2.16	8.18	9	Pass
110	5550	A	1.49	7.51	9	Pass
		B	-0.11	5.91	9	Pass
		C	0.22	6.24	9	Pass
		D	2.77	8.79	9	Pass
134	5670	A	1.04	7.06	9	Pass
		B	-0.26	5.76	9	Pass
		C	-0.48	5.54	9	Pass
		D	2.89	8.91	9	Pass

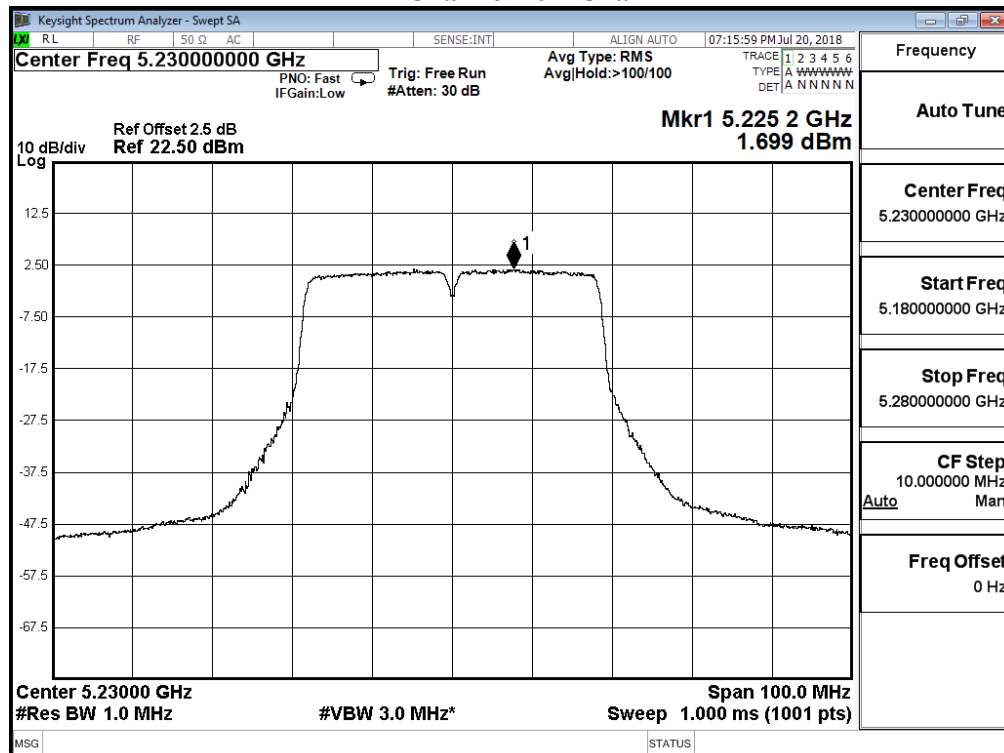
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Total PSD (dBm) ₁	Required Limit (dBm)	Result
151	5755	A	-5.91	6.98	7.09	<28	Pass
		B	-6.17	6.98	6.83	<28	Pass
		C	-6.87	6.98	6.13	<28	Pass
		D	-3.35	6.98	9.65	<28	Pass
159	5795	A	-4.62	6.98	8.38	<28	Pass
		B	-5.96	6.98	7.04	<28	Pass
		C	-6.96	6.98	6.04	<28	Pass
		D	-3.13	6.98	9.87	<28	Pass

Note 1: The quantity $10 \cdot \log 4$ (four antennas) is added to the spectrum peak value according to document 662911 D01.

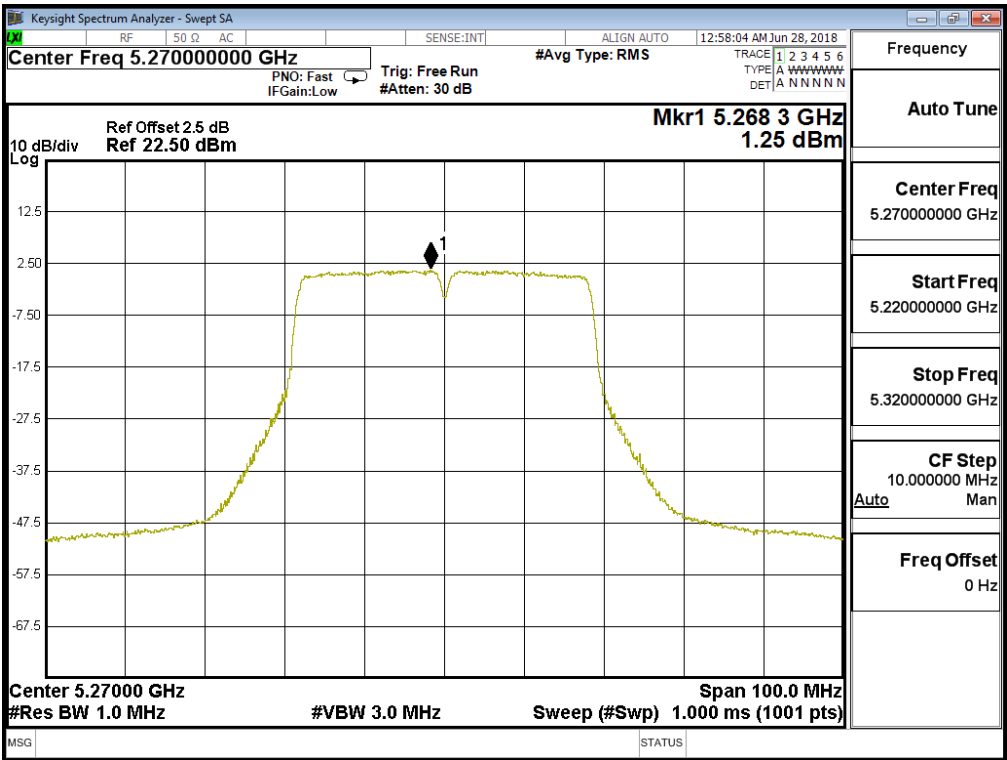
Channel 38 – Chain A



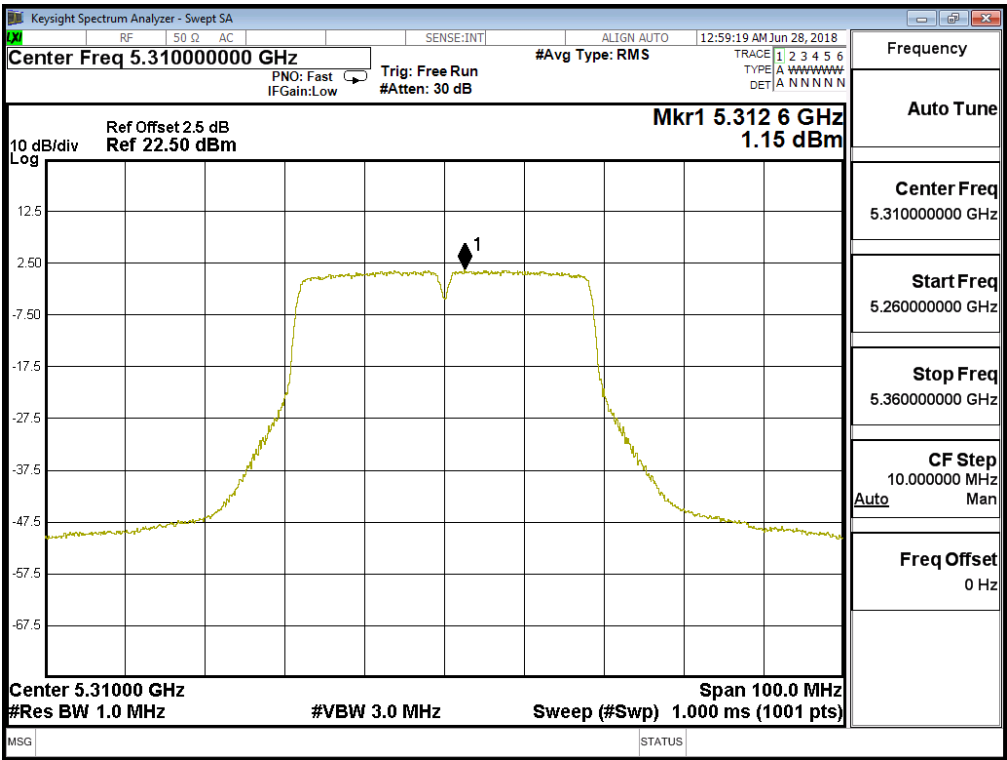
Channel 46 – Chain A



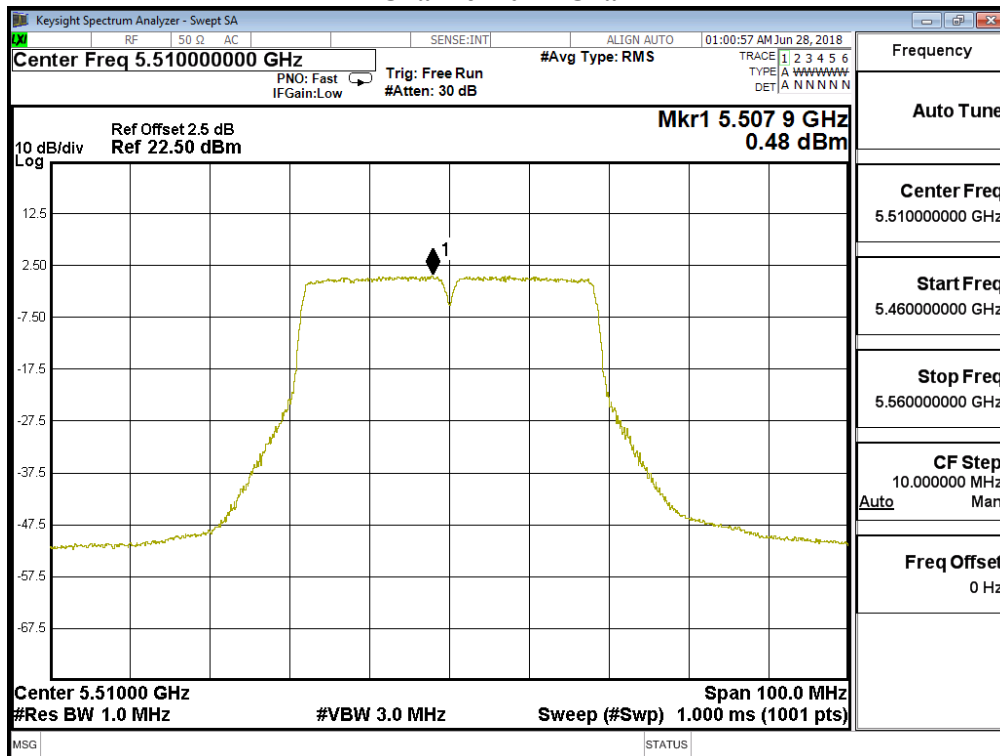
Channel 54 – Chain A



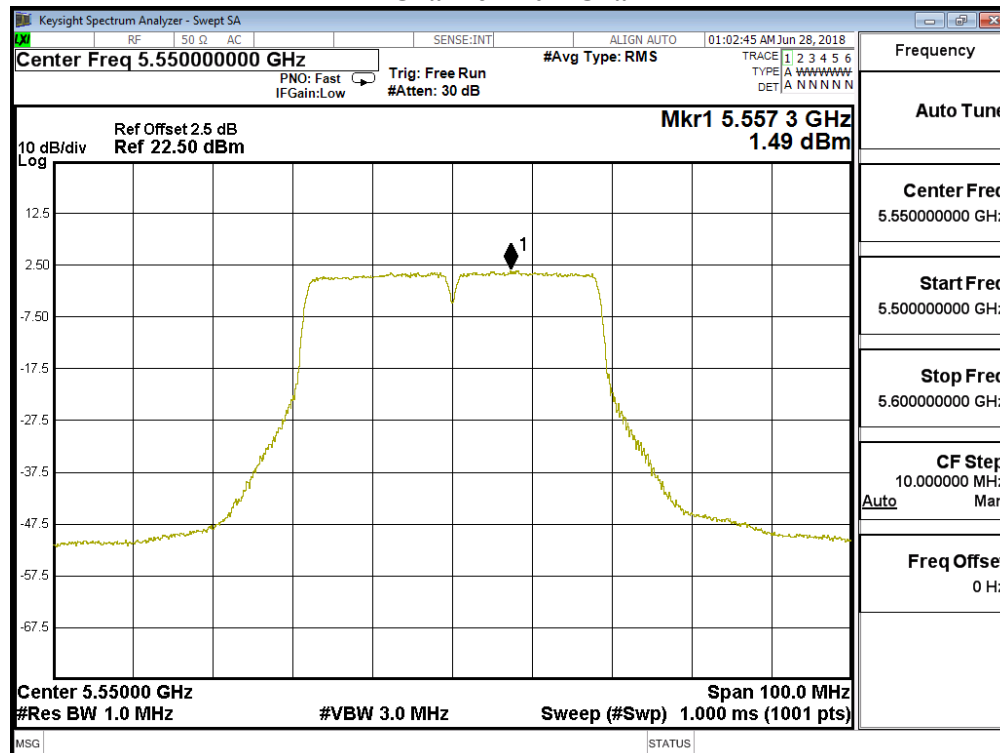
Channel 62 – Chain A



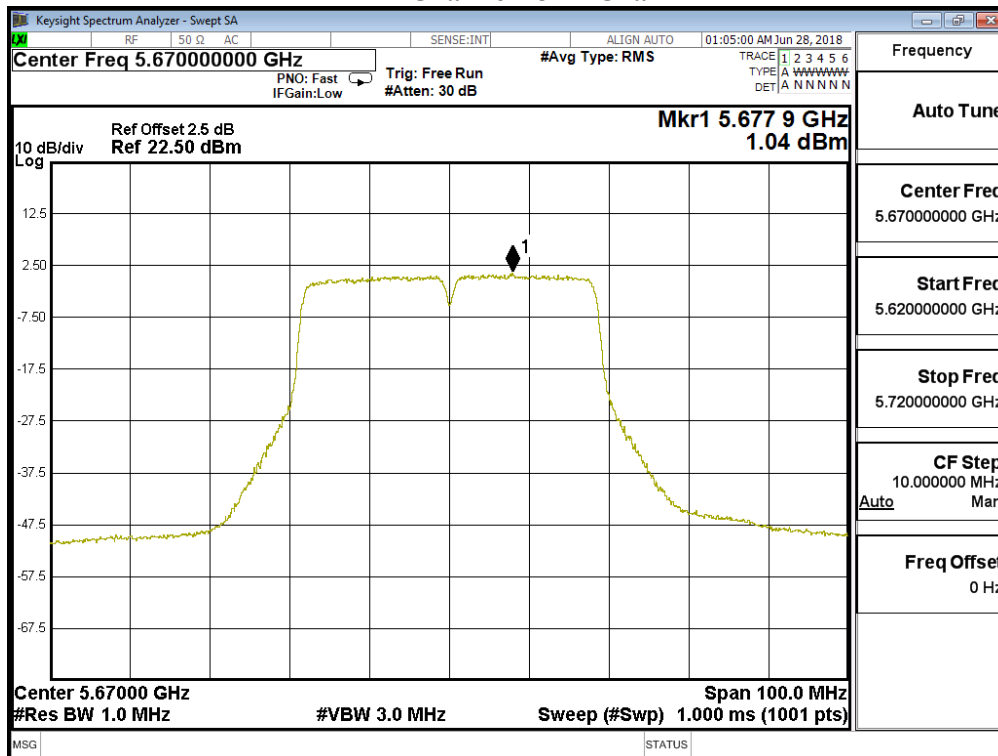
Channel 102 – Chain A



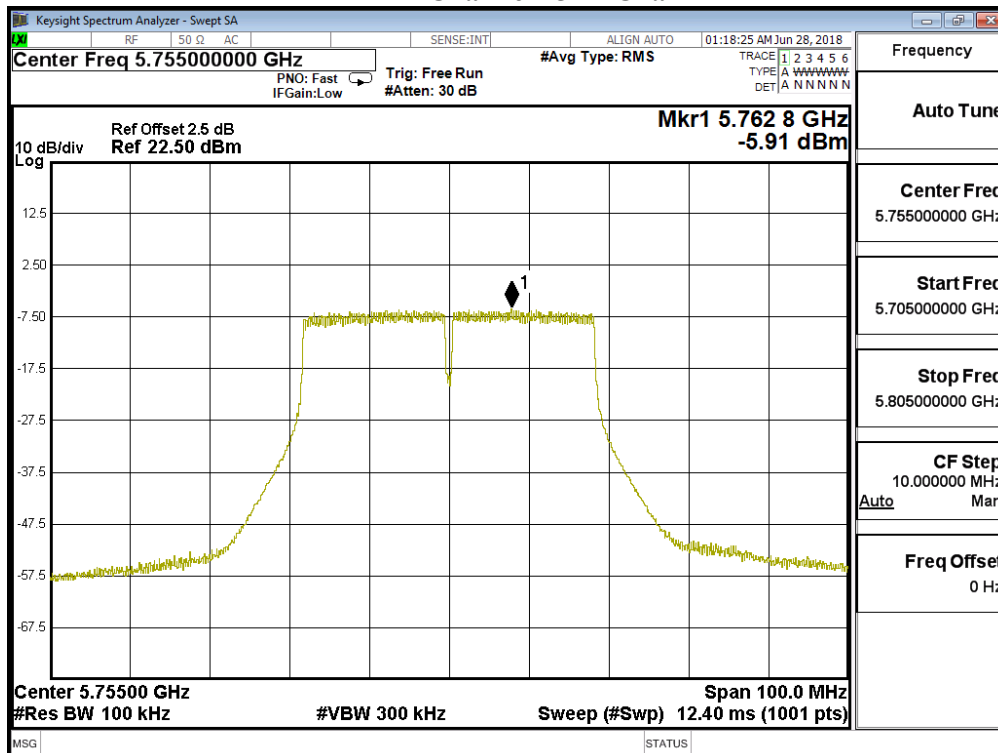
Channel 110 – Chain A



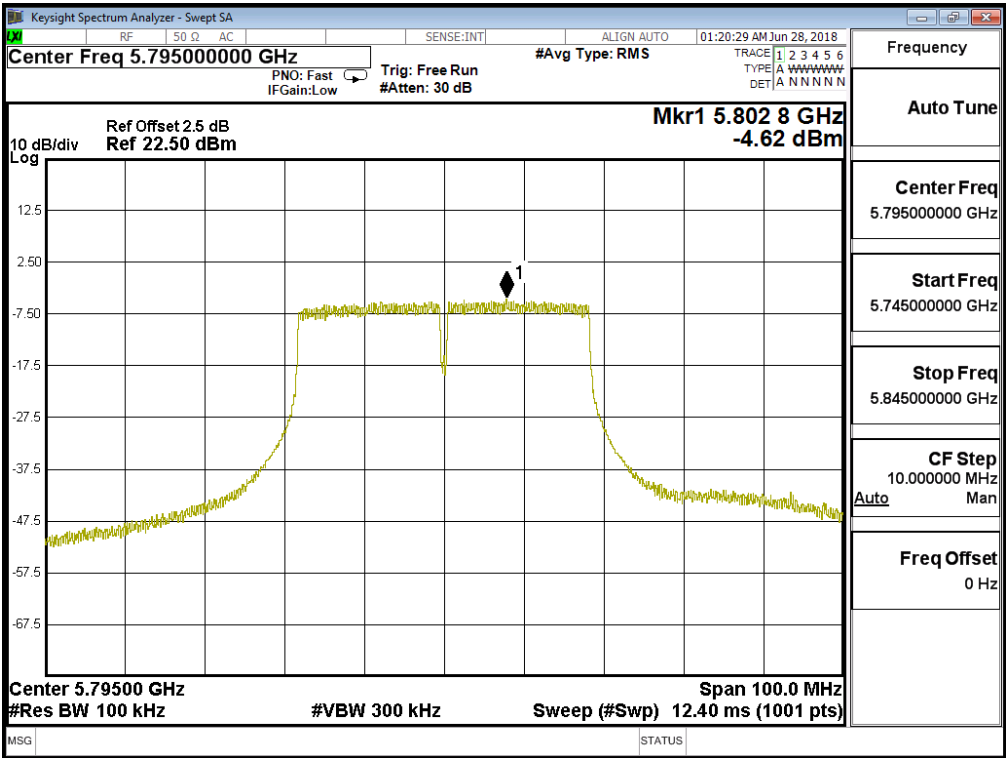
Channel 134 – Chain A



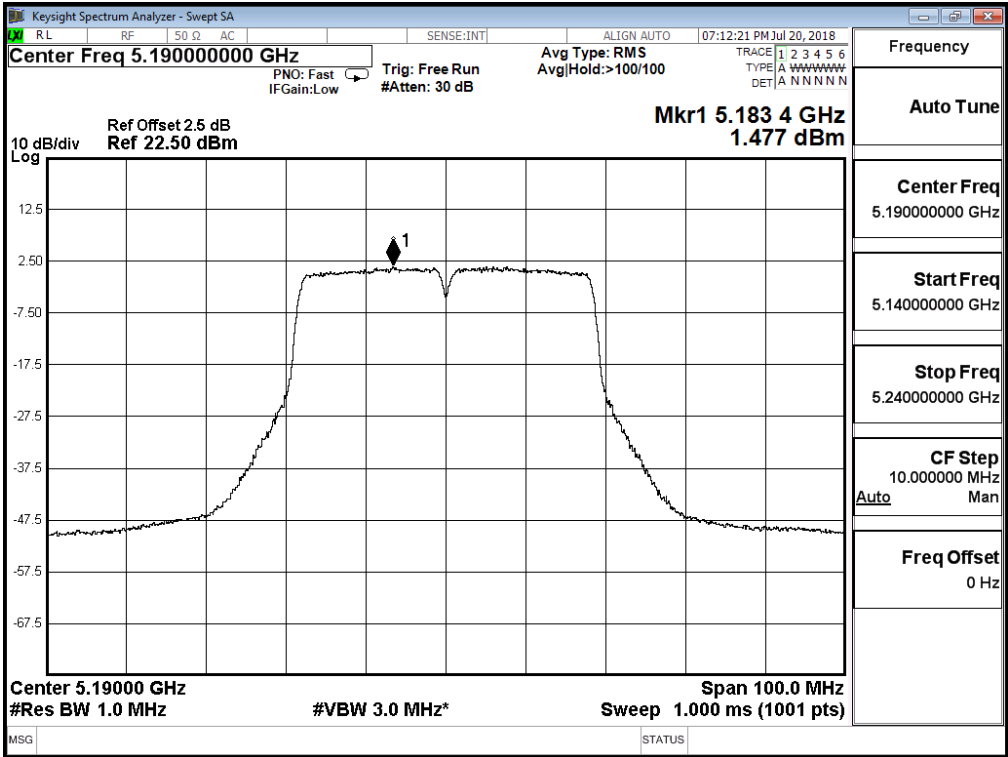
Channel 151 – Chain A



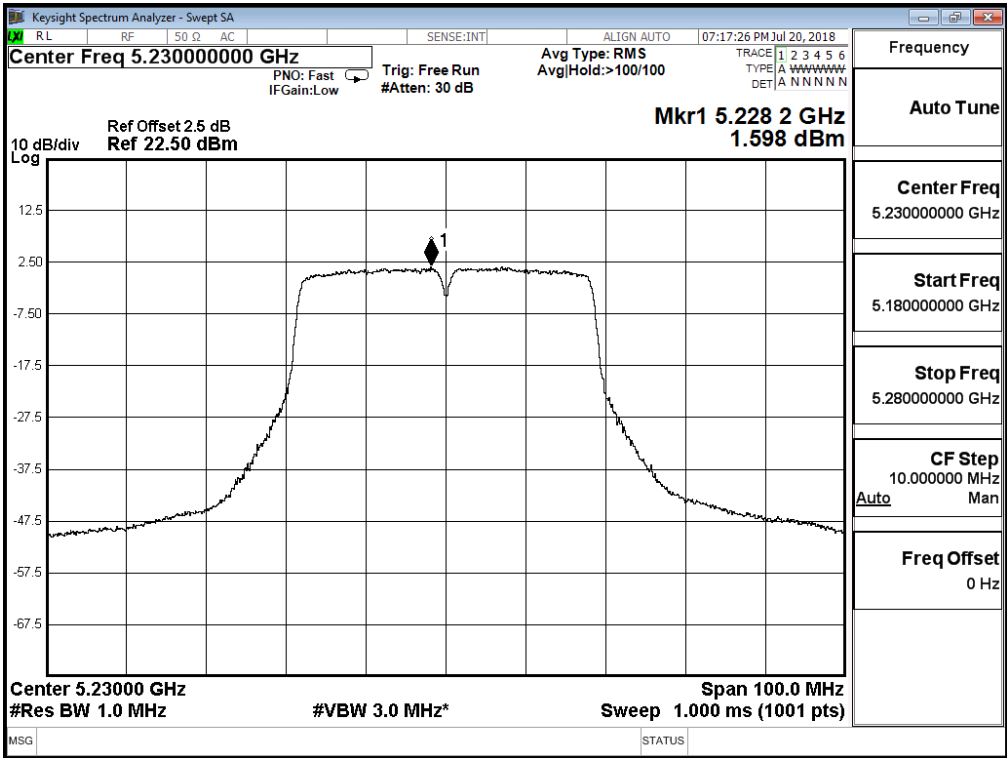
Channel 159 – Chain A



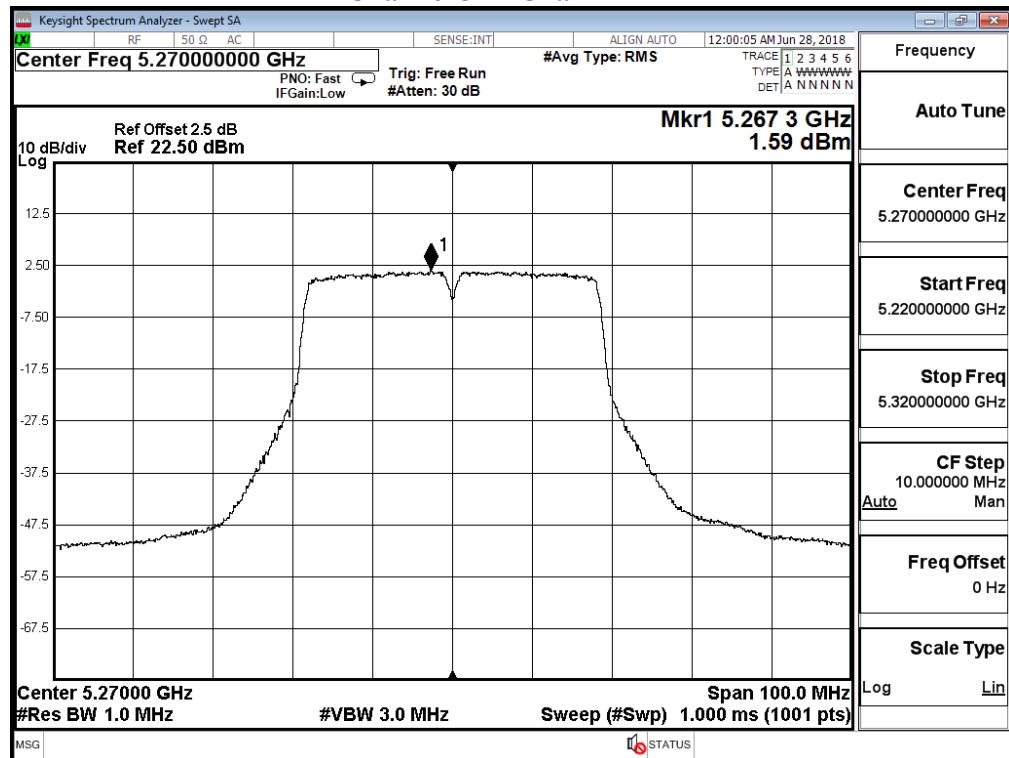
Channel 38 – Chain B



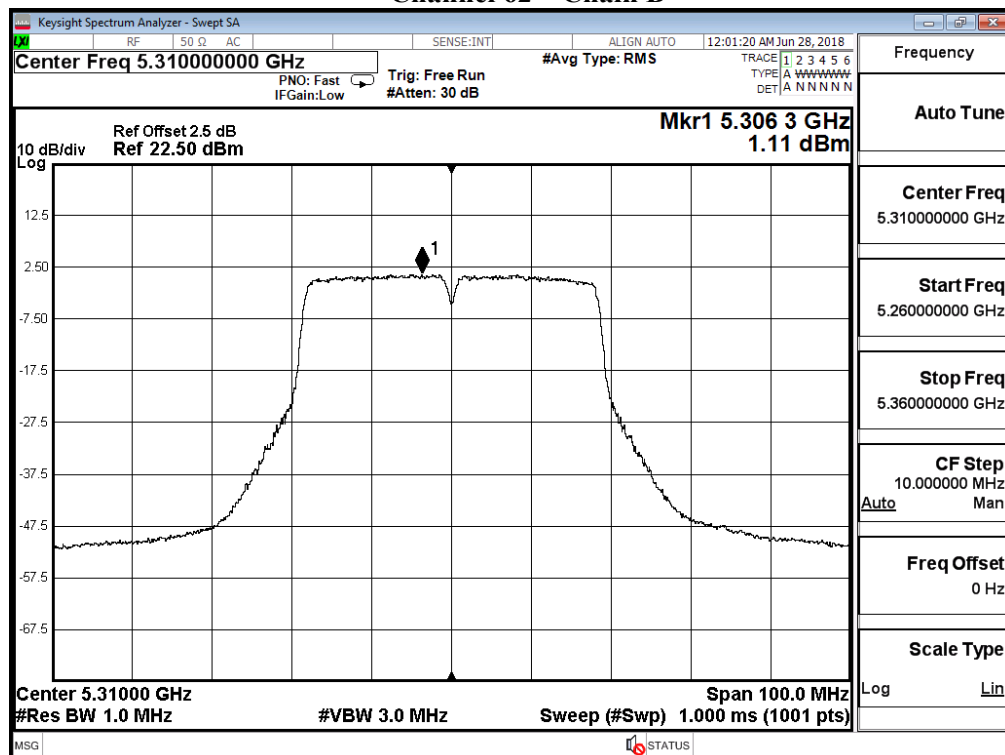
Channel 46 – Chain B



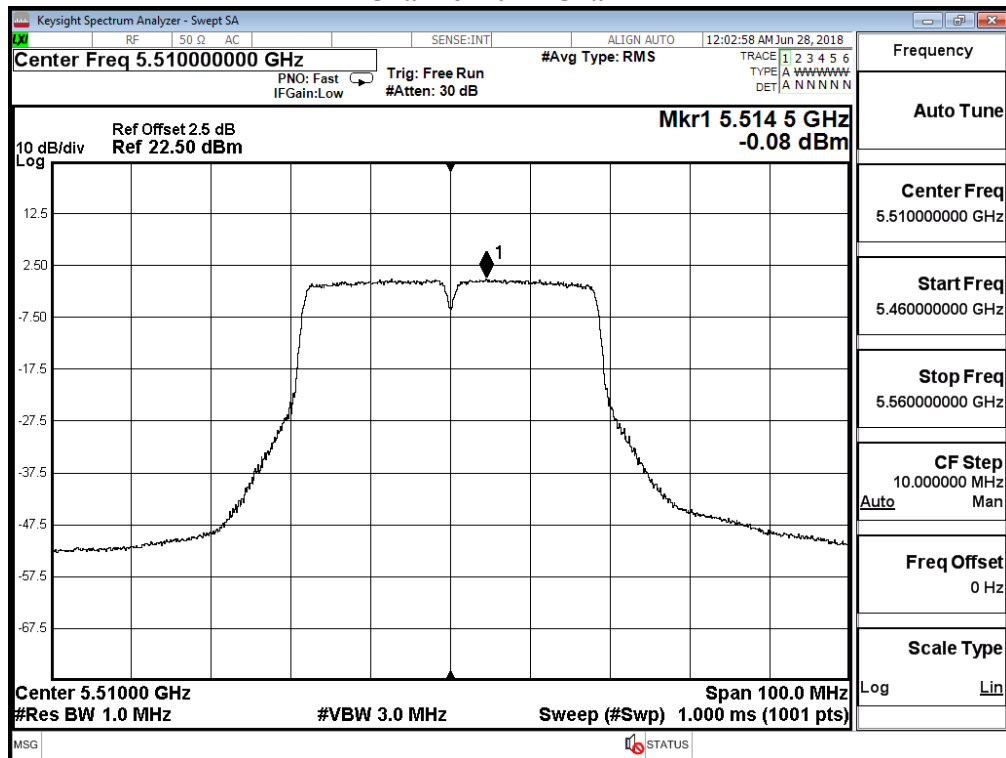
Channel 54 – Chain B



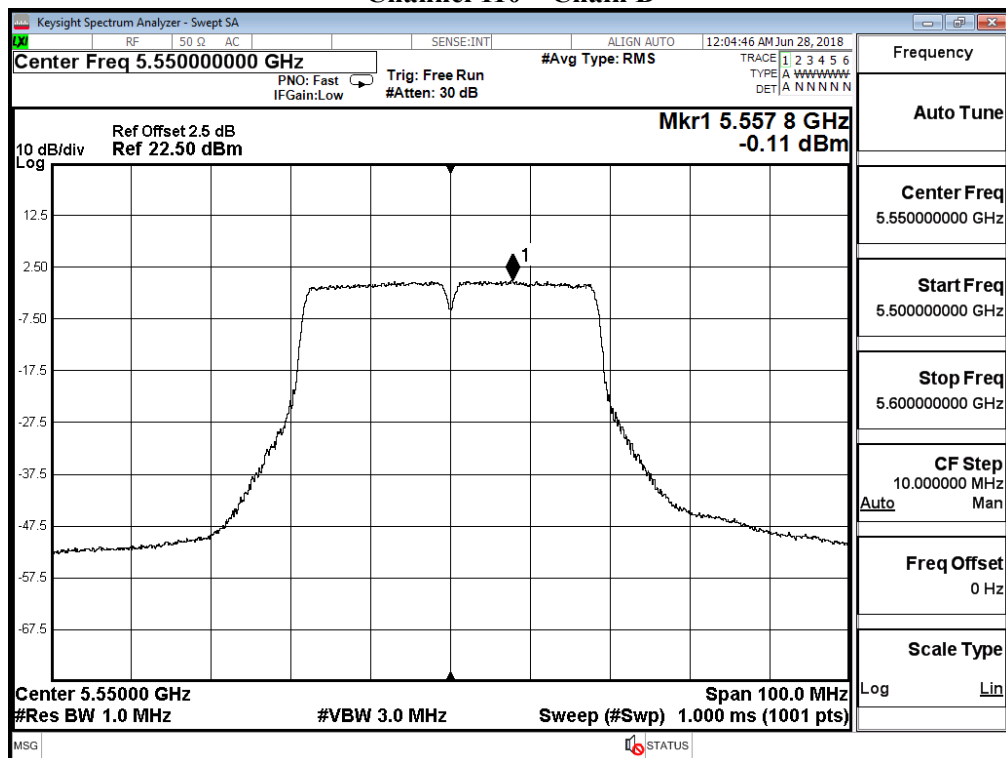
Channel 62 – Chain B



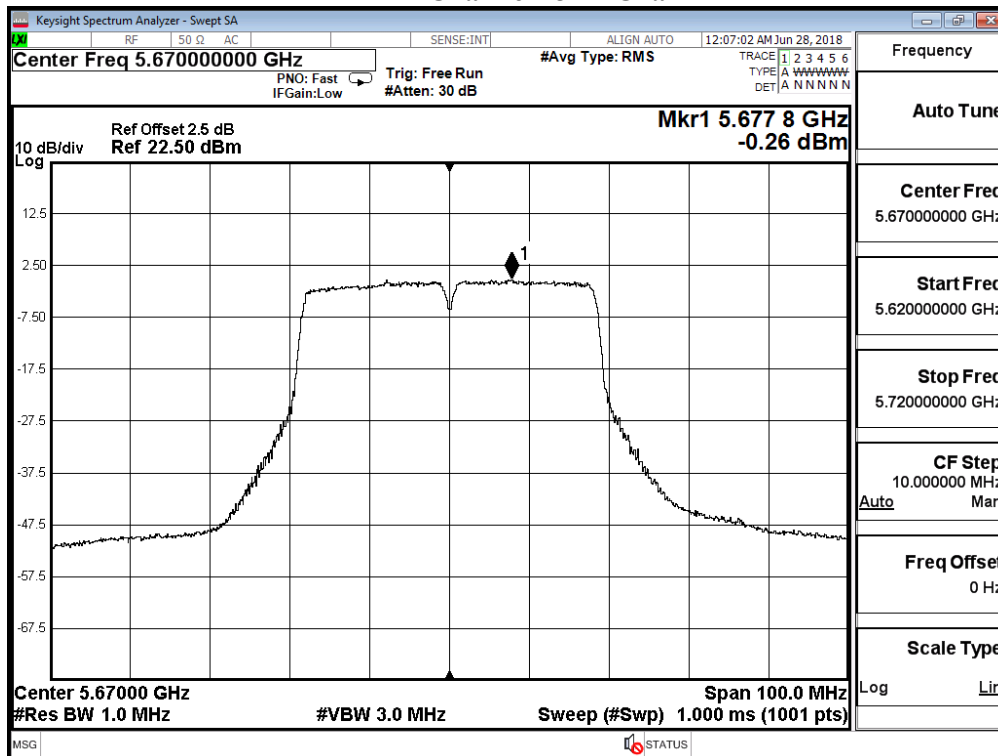
Channel 102 – Chain B



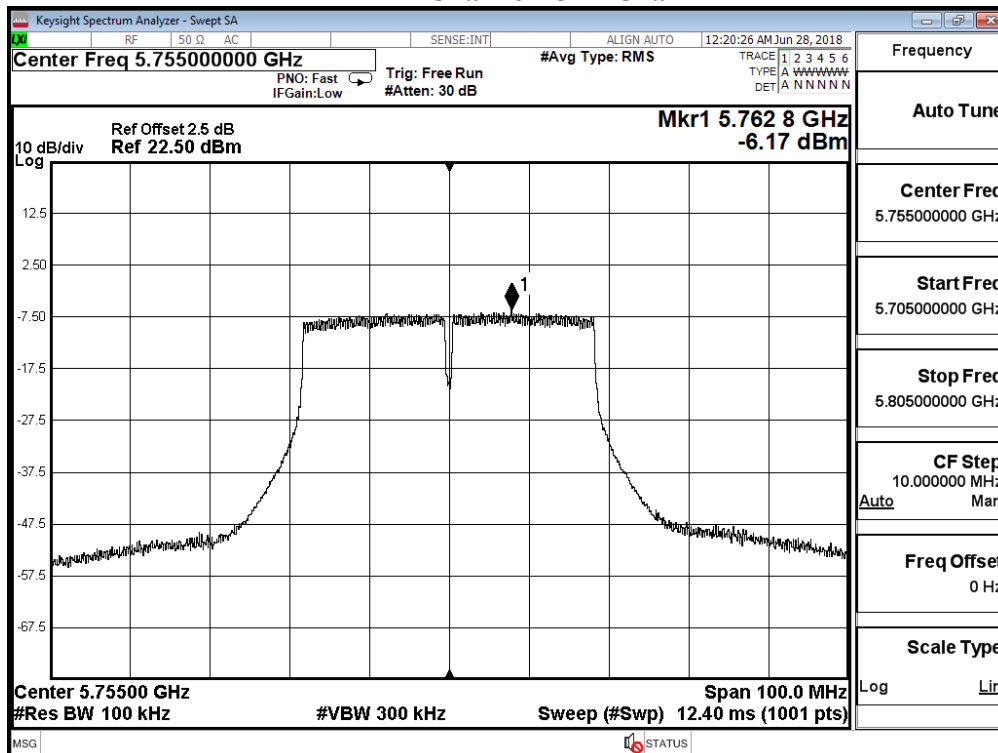
Channel 110 – Chain B



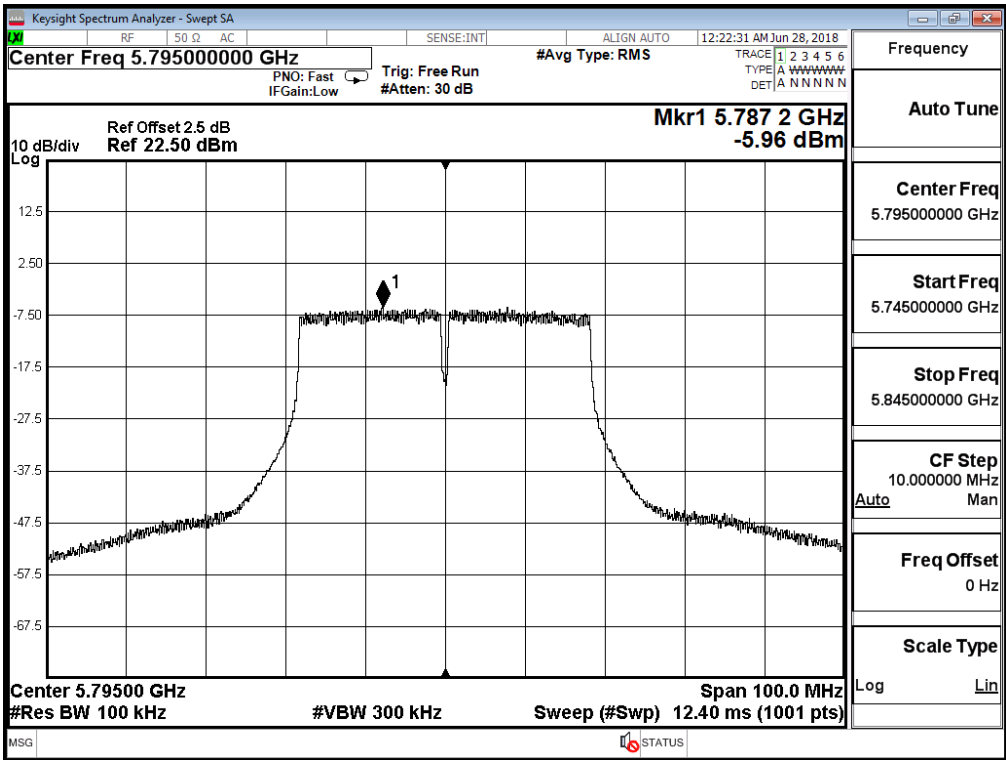
Channel 134 – Chain B



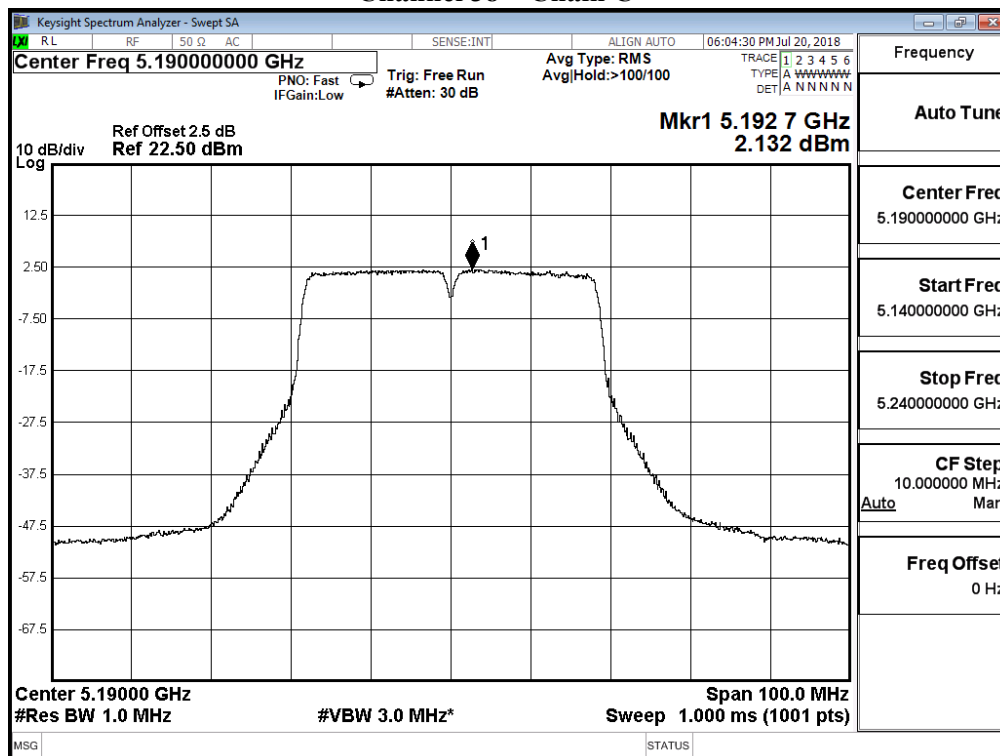
Channel 151 – Chain B



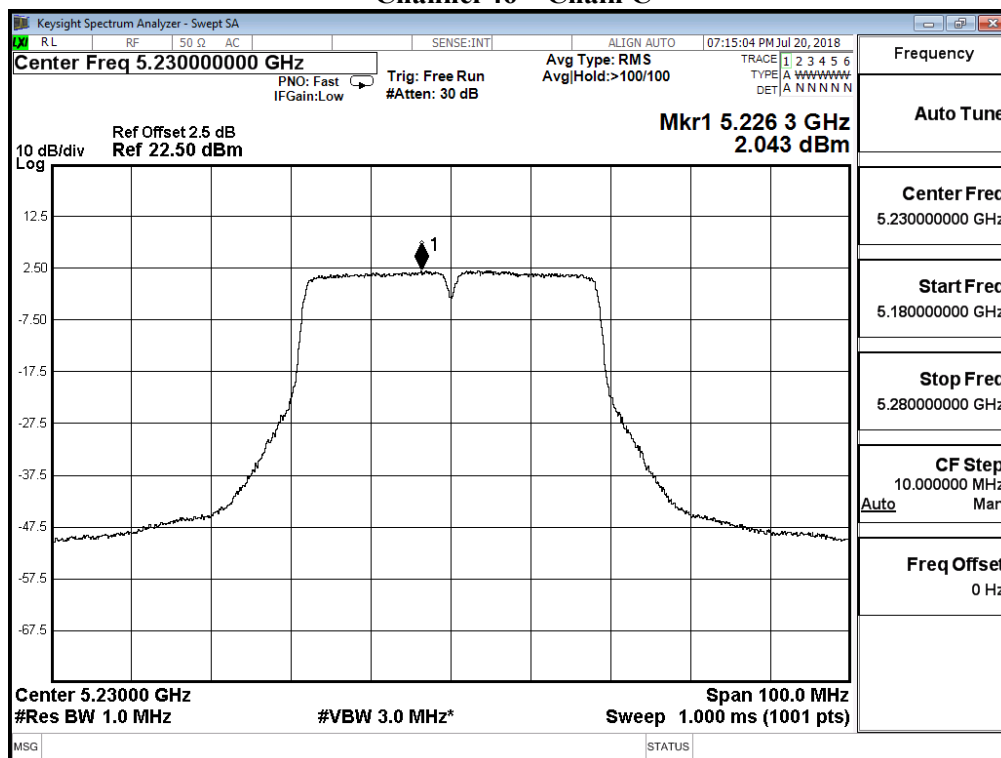
Channel 159 – Chain B



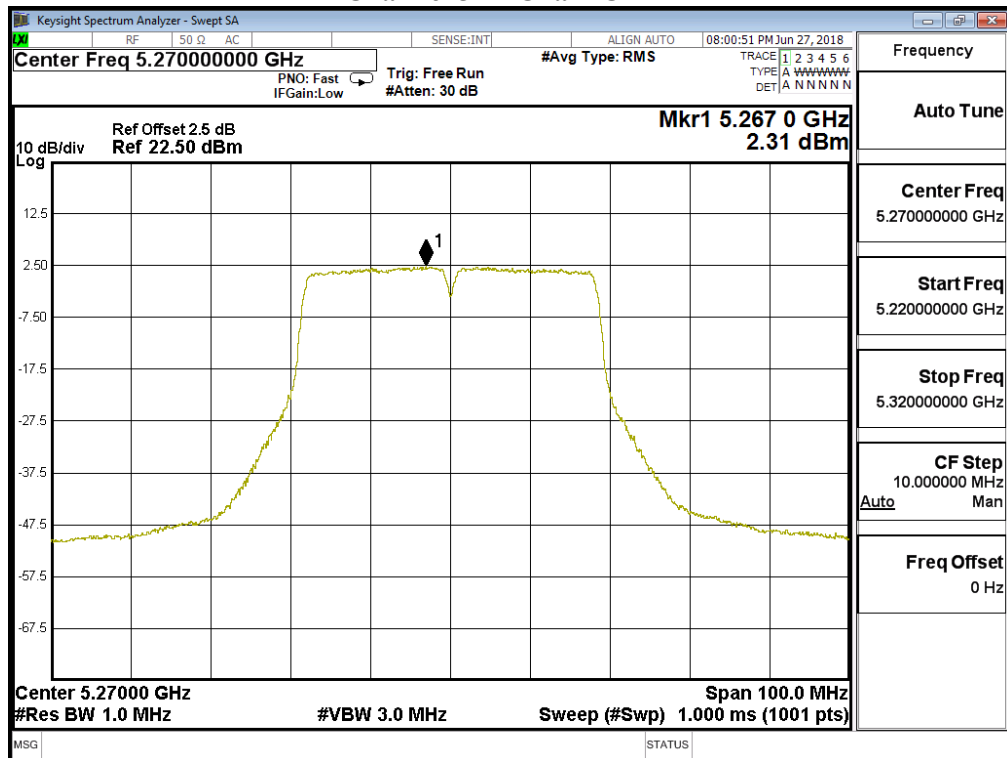
Channel 38 – Chain C



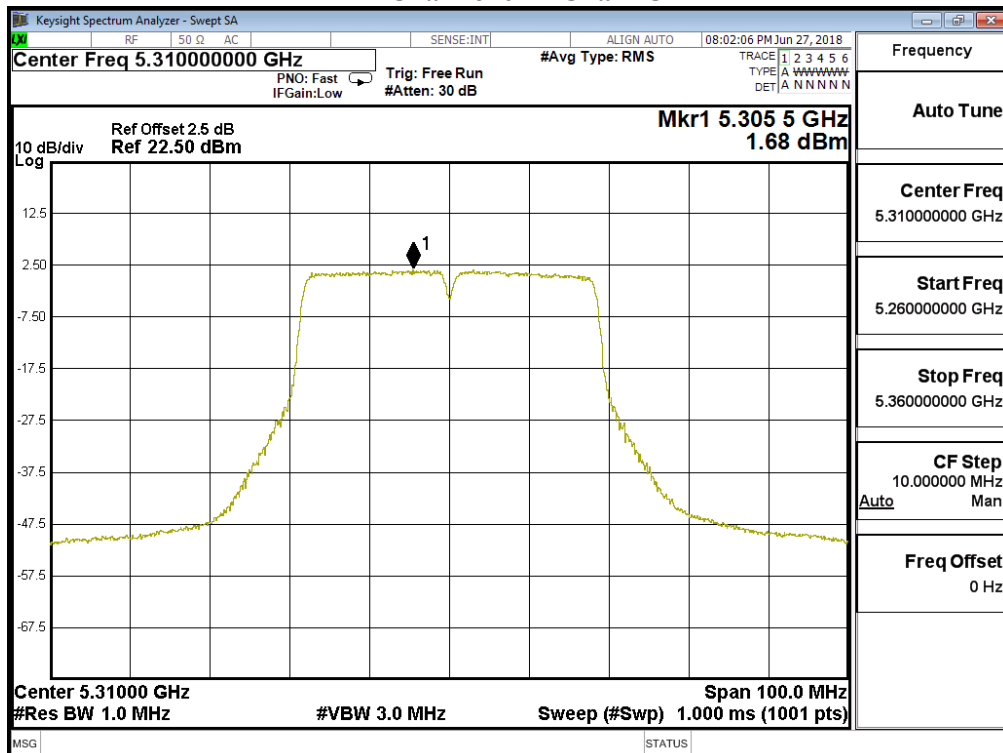
Channel 46 – Chain C



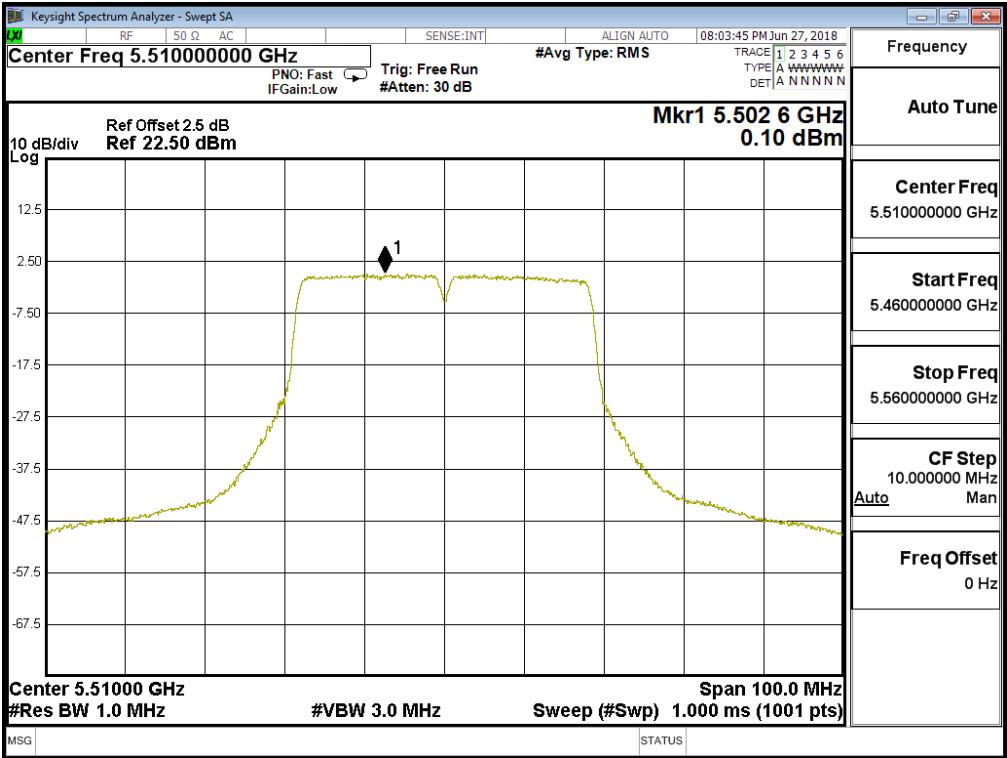
Channel 54 – Chain C



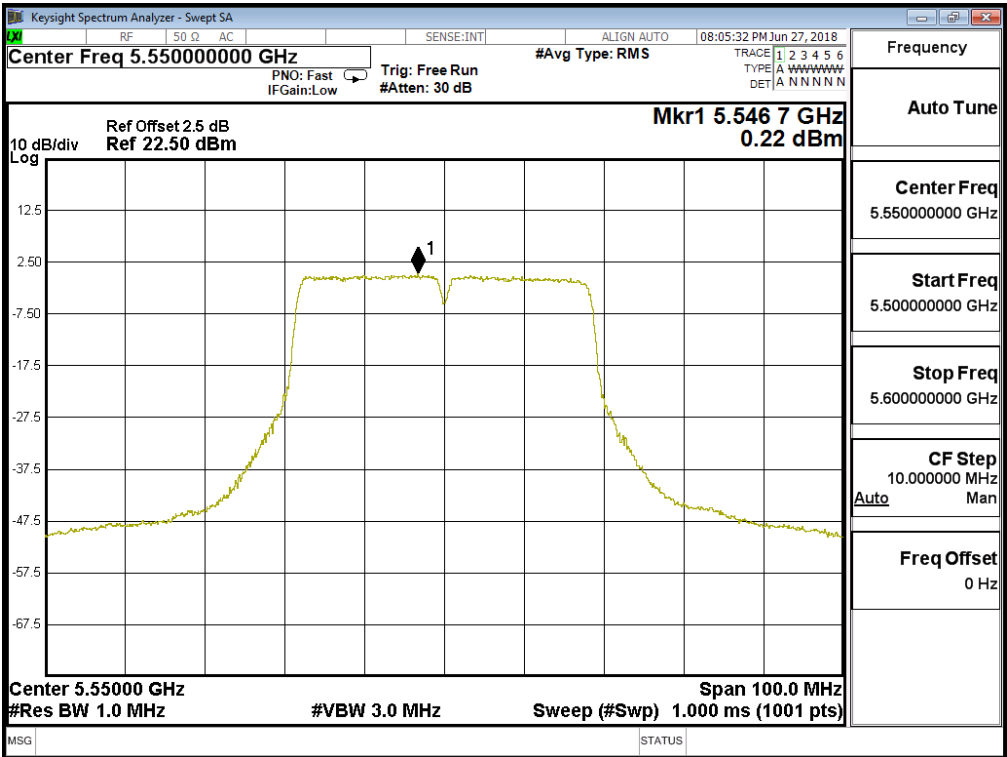
Channel 62 – Chain C



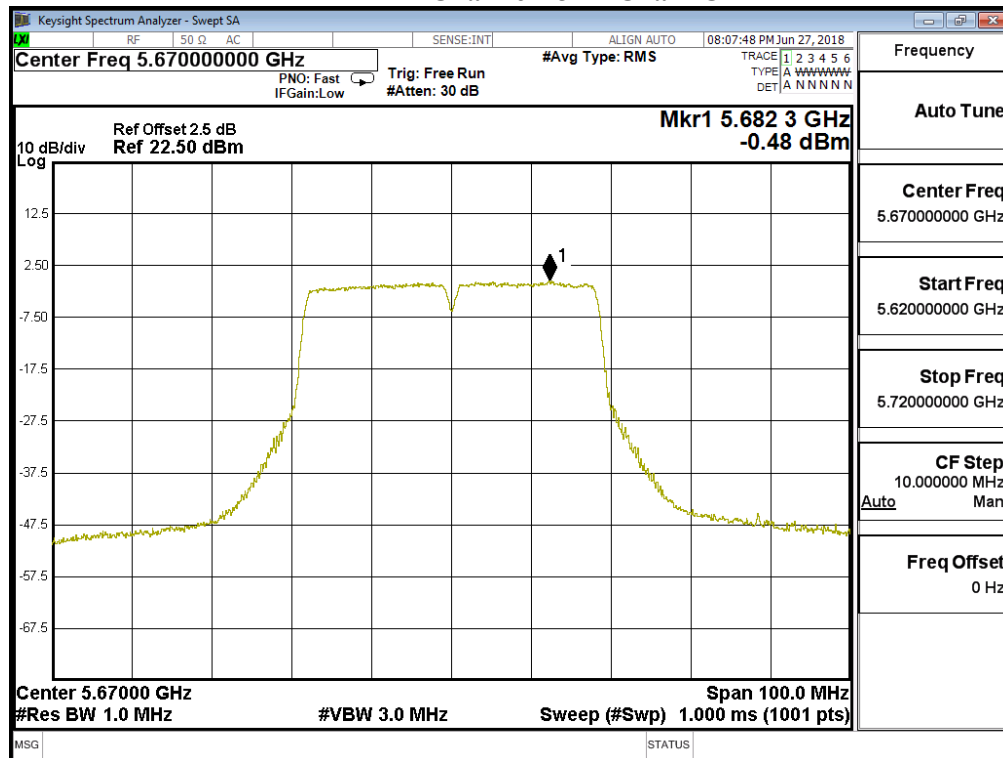
Channel 102 – Chain C



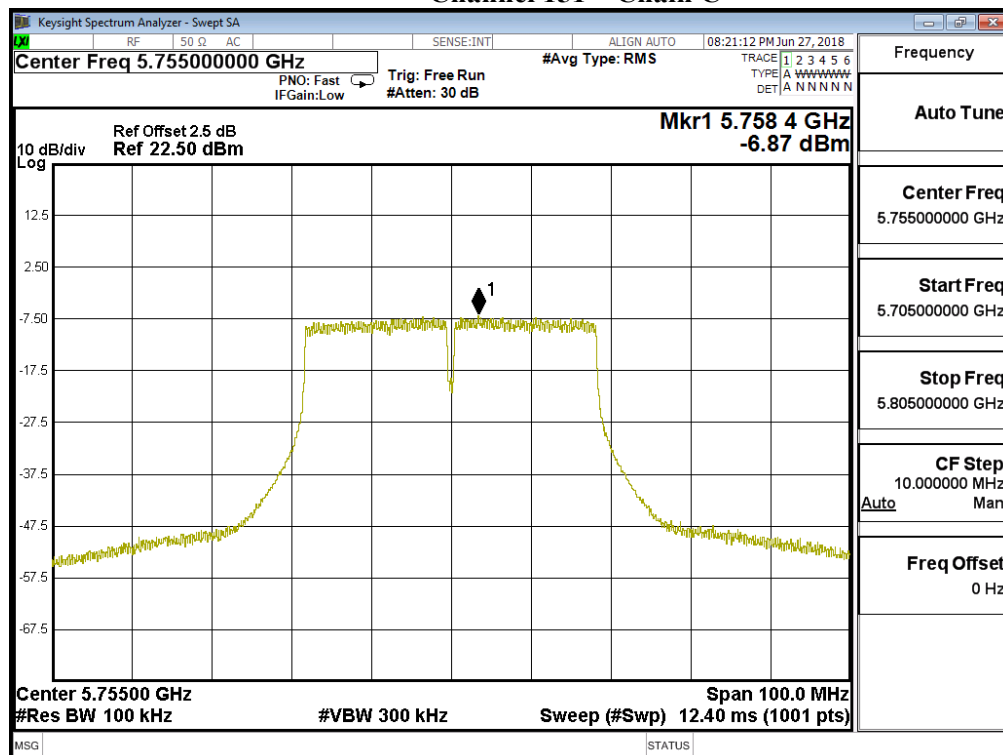
Channel 110 – Chain C



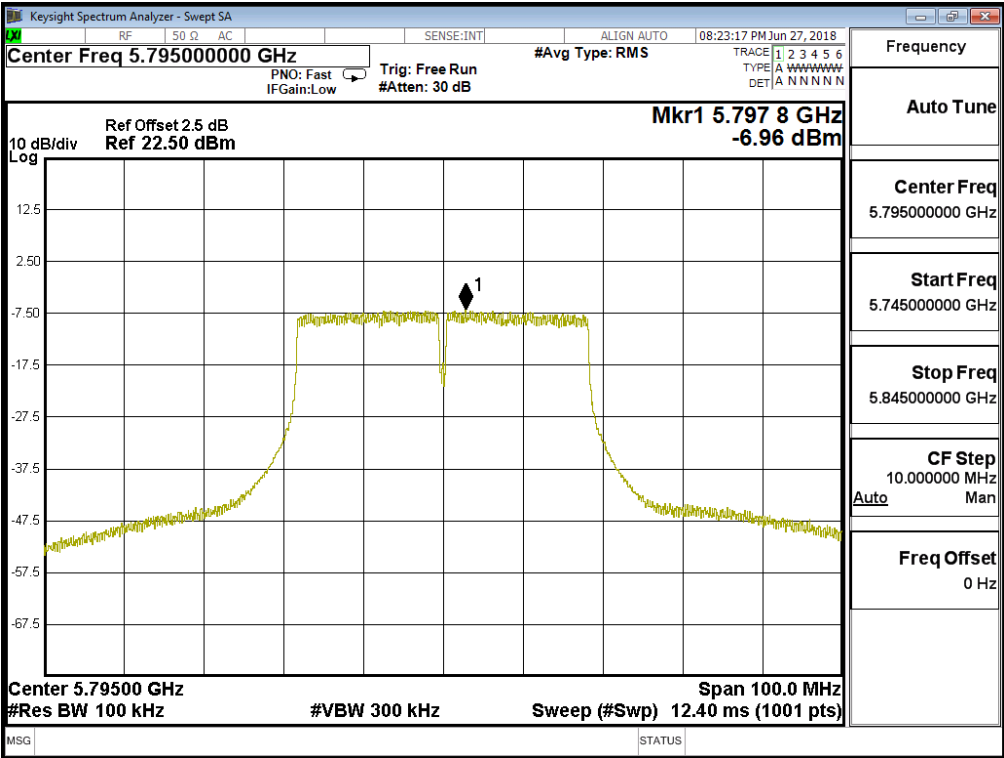
Channel 134 – Chain C



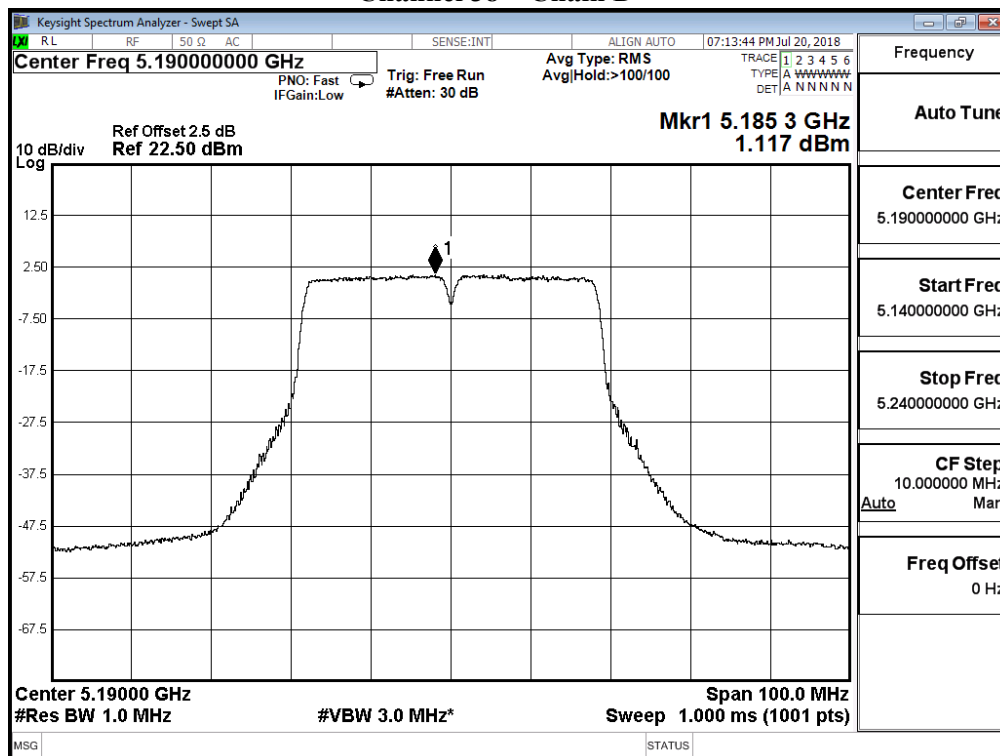
Channel 151 – Chain C



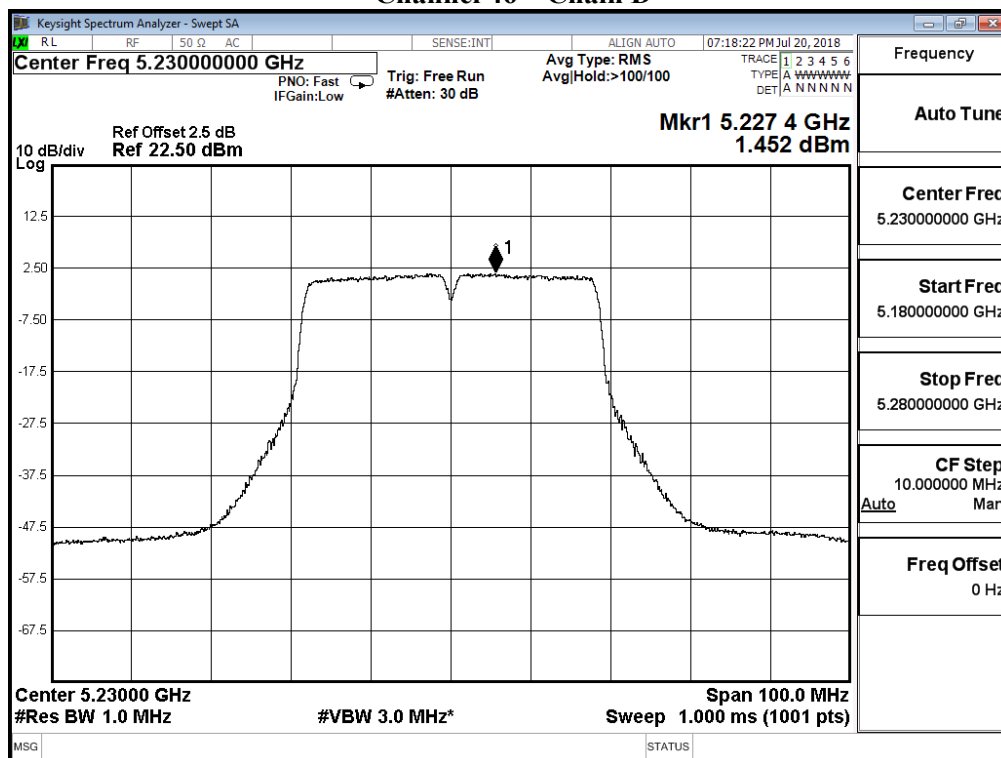
Channel 159 – Chain C



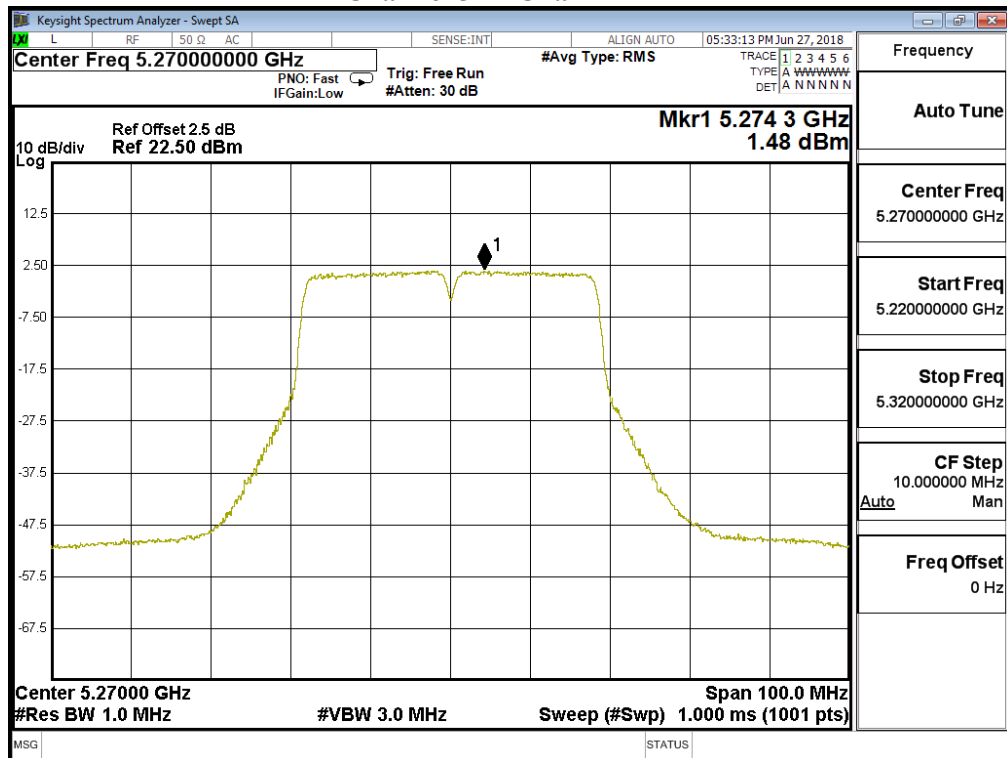
Channel 38 – Chain D



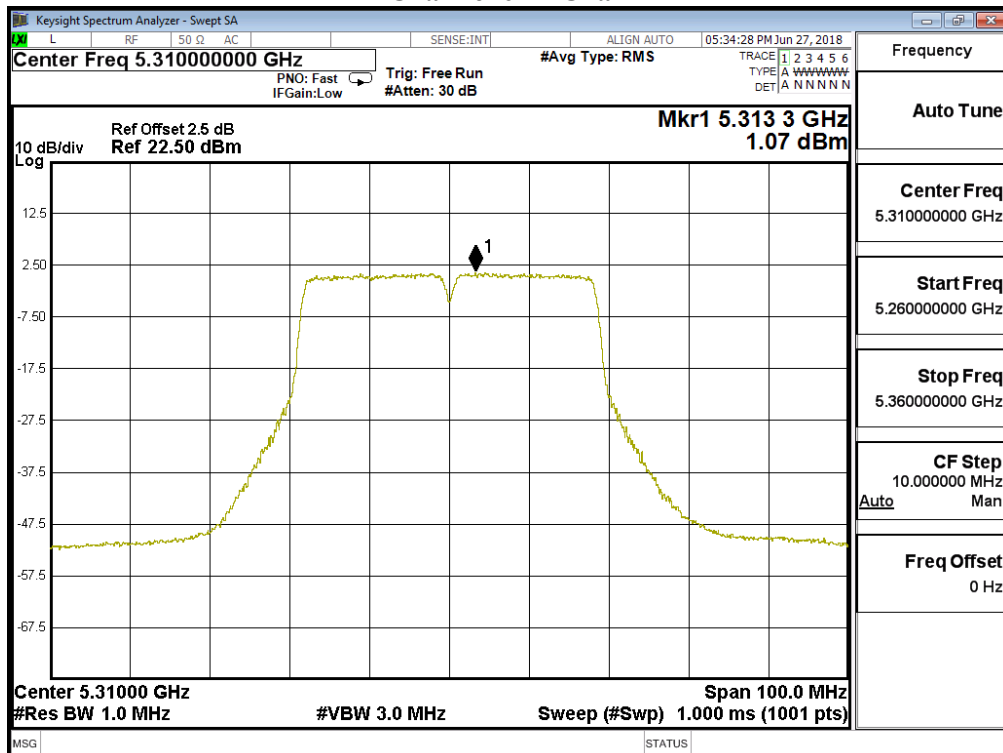
Channel 46 – Chain D



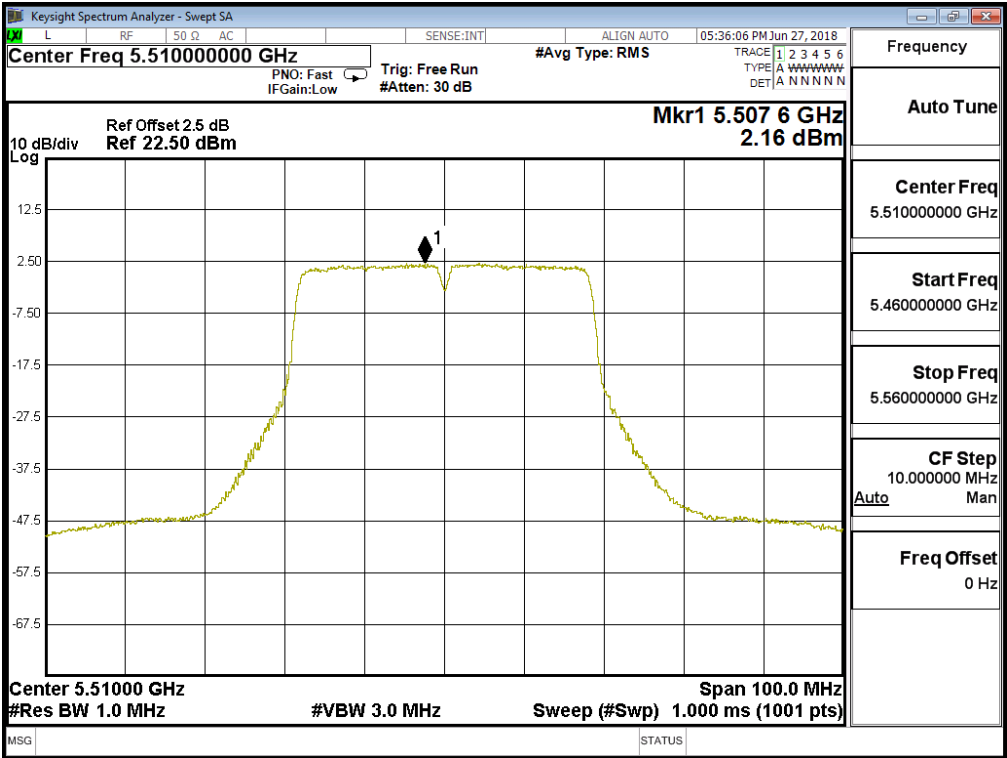
Channel 54 – Chain D



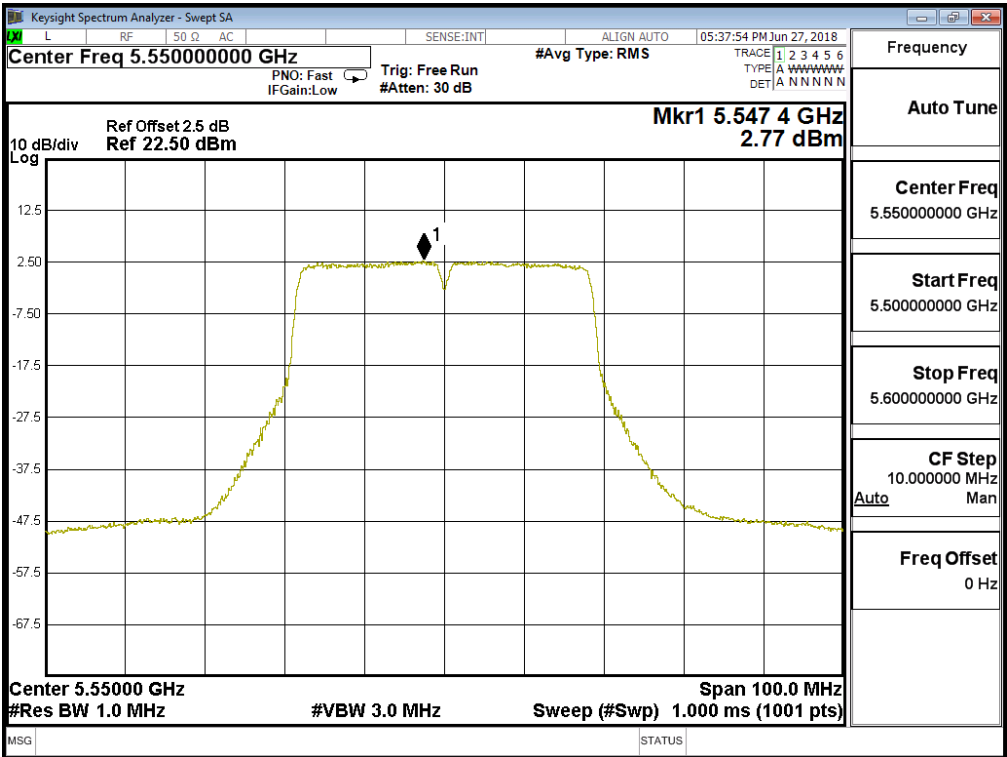
Channel 62 – Chain D



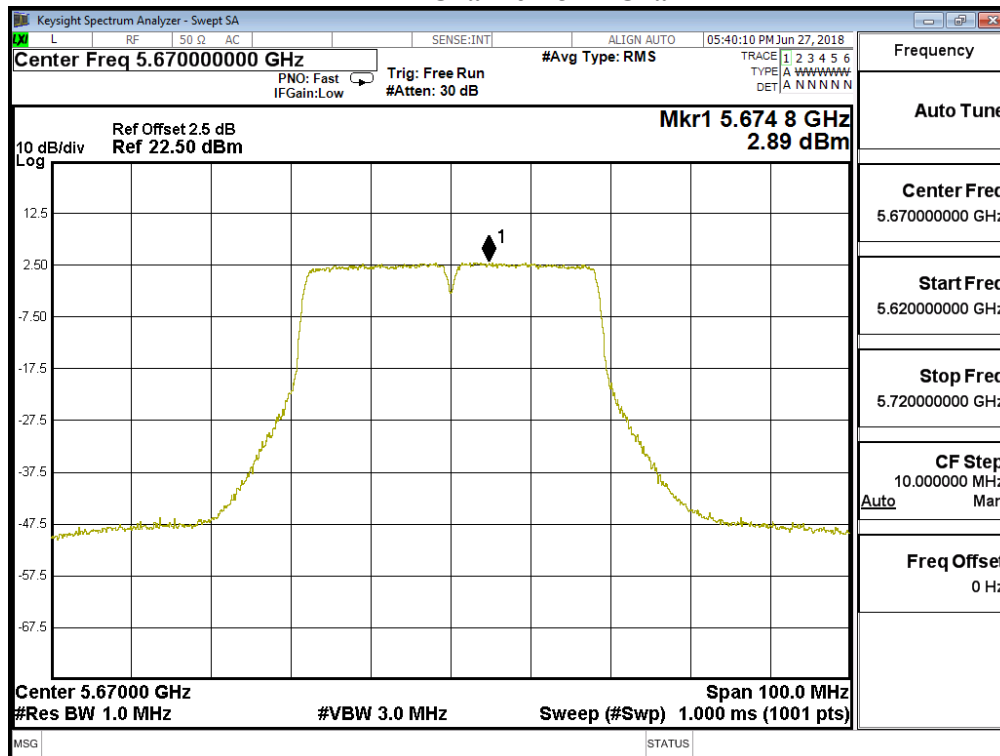
Channel 102 – Chain D



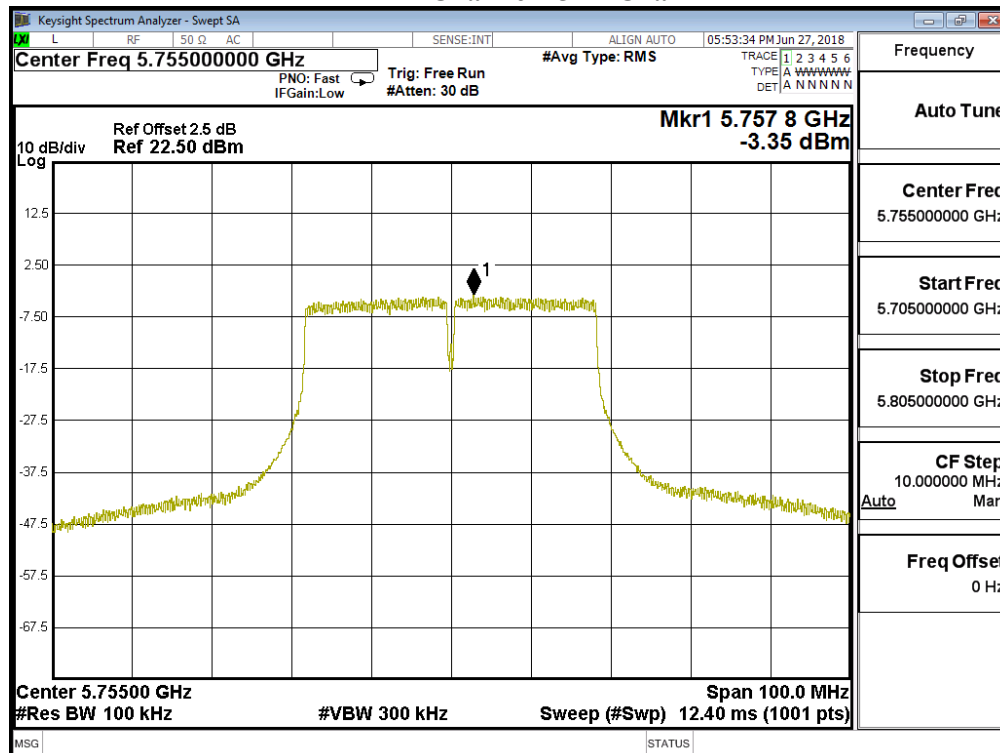
Channel 110 – Chain D



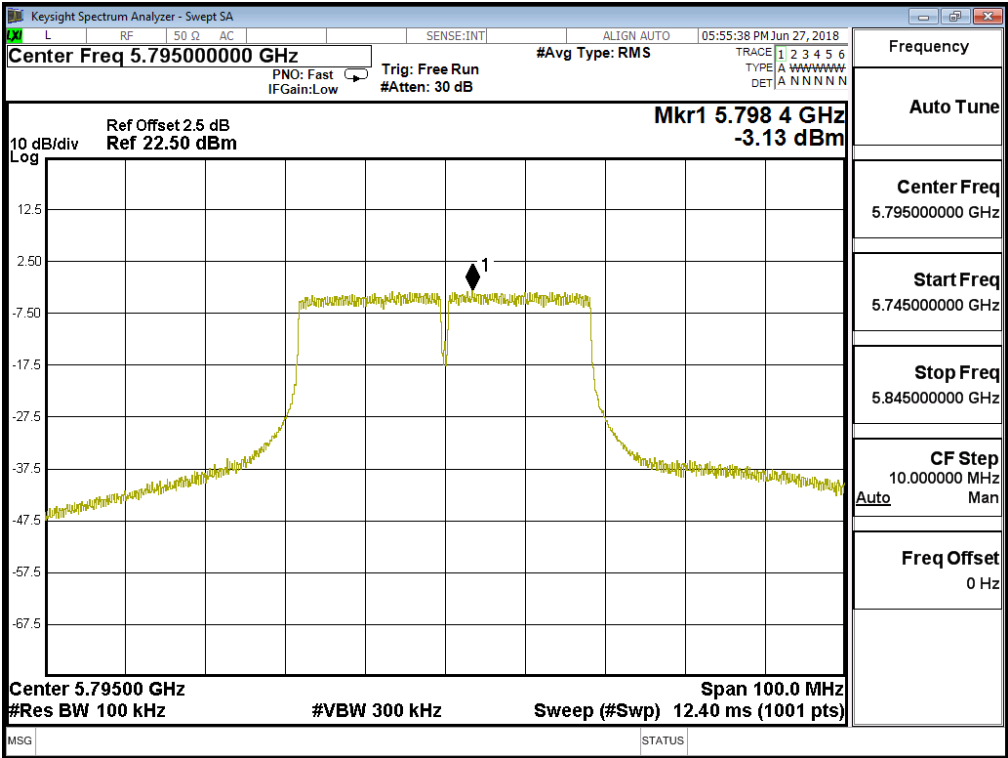
Channel 134 – Chain D



Channel 151 – Chain D



Channel 159 – Chain D

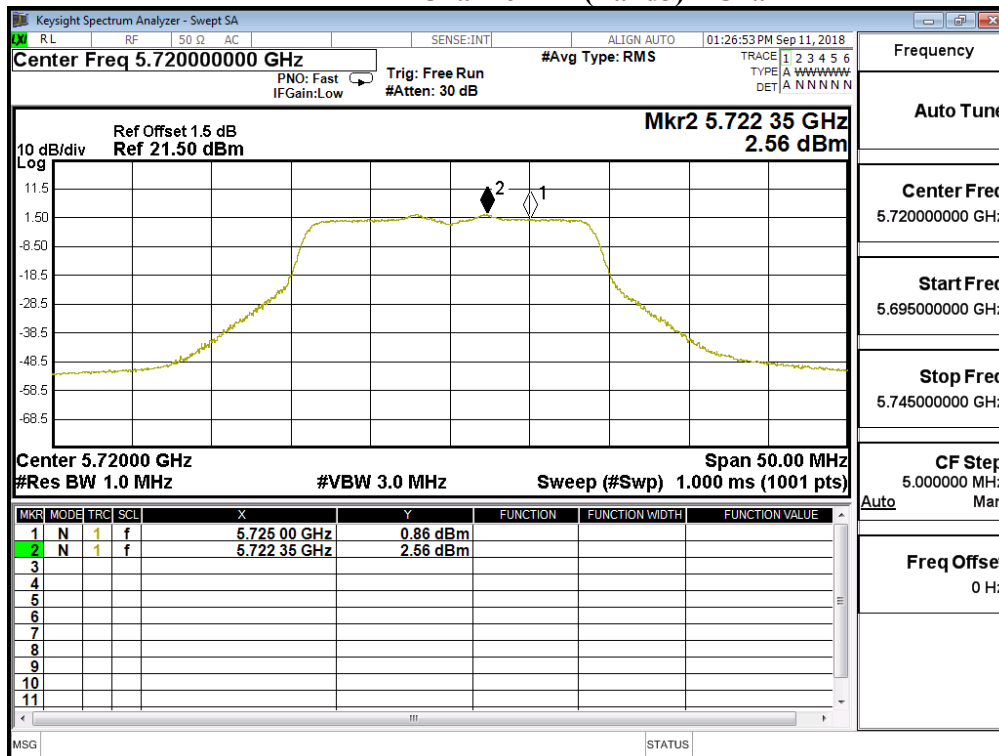


Product : MOXA IEEE 802.11a/n/ac 4*4 module
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Date : 2018/08/11
 Test Mode : Mode 4: Transmit (802.11ac-20BW-28.8Mbps) (Antenna No.17)

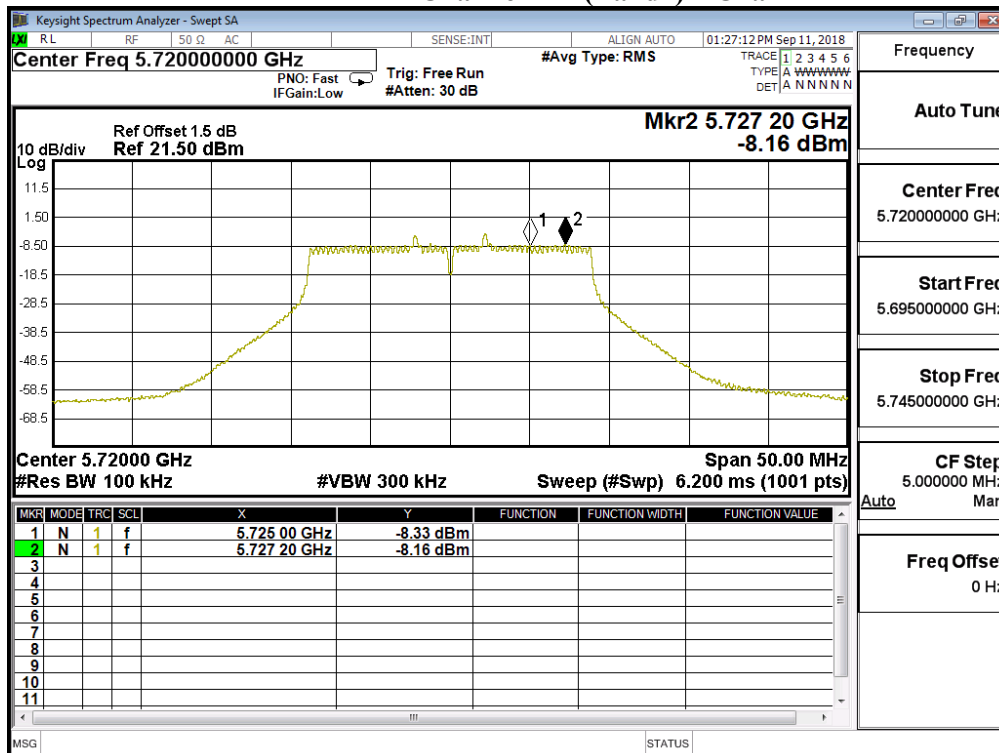
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Total PPSD (dBm) ¹	Required Limit (dBm)	Result
144	5720(Band3)	A	2.560	--	8.580	<9	Pass
		B	2.680	--	8.700	<9	Pass
		C	2.790	--	8.810	<9	Pass
		D	2.480	--	8.500	<9	Pass
144	5720(Band4)	A	-8.160	6.98	4.840	<28	Pass
		B	-7.760	6.98	5.240	<28	Pass
		C	-7.770	6.98	5.230	<28	Pass
		D	-8.070	6.98	4.930	<28	Pass

Note 1: The quantity $10 \cdot \log 4$ (four antennas) is added to the spectrum peak value according to document 662911 D01.

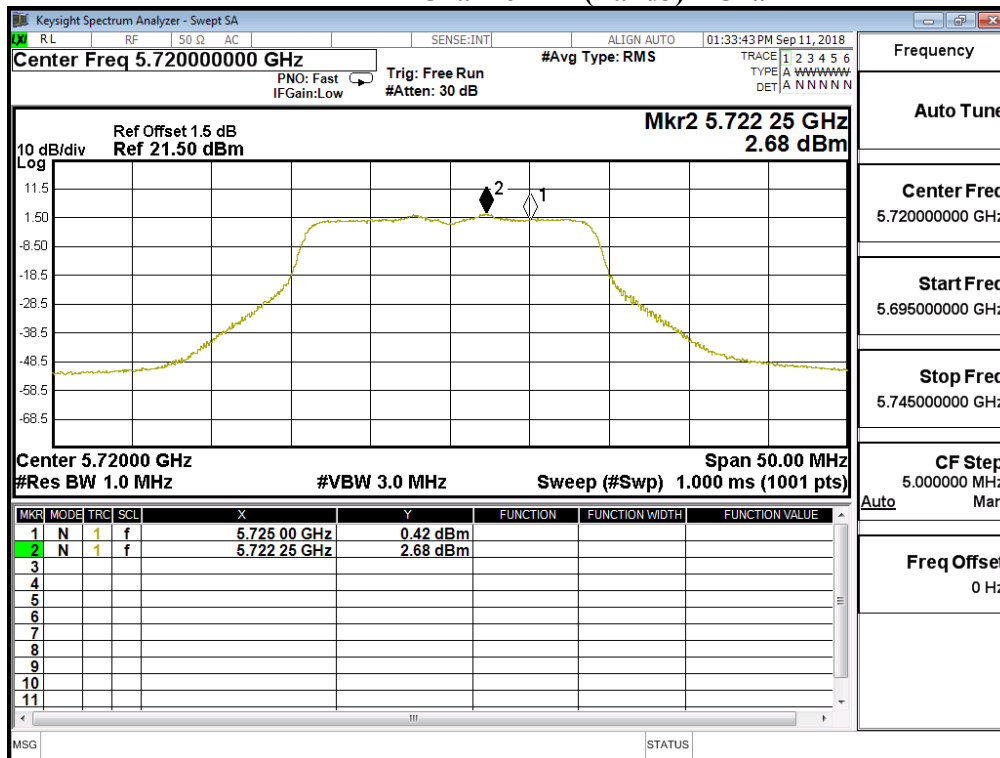
Channel 144 (Band3) – Chain A



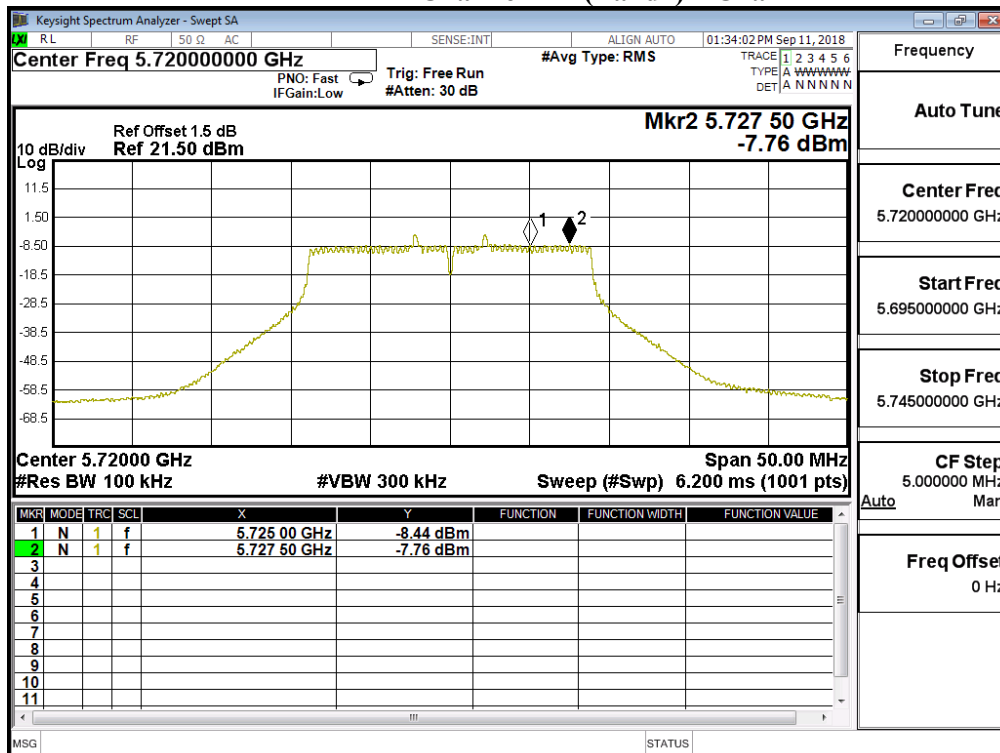
Channel 144 (Band4) – Chain A



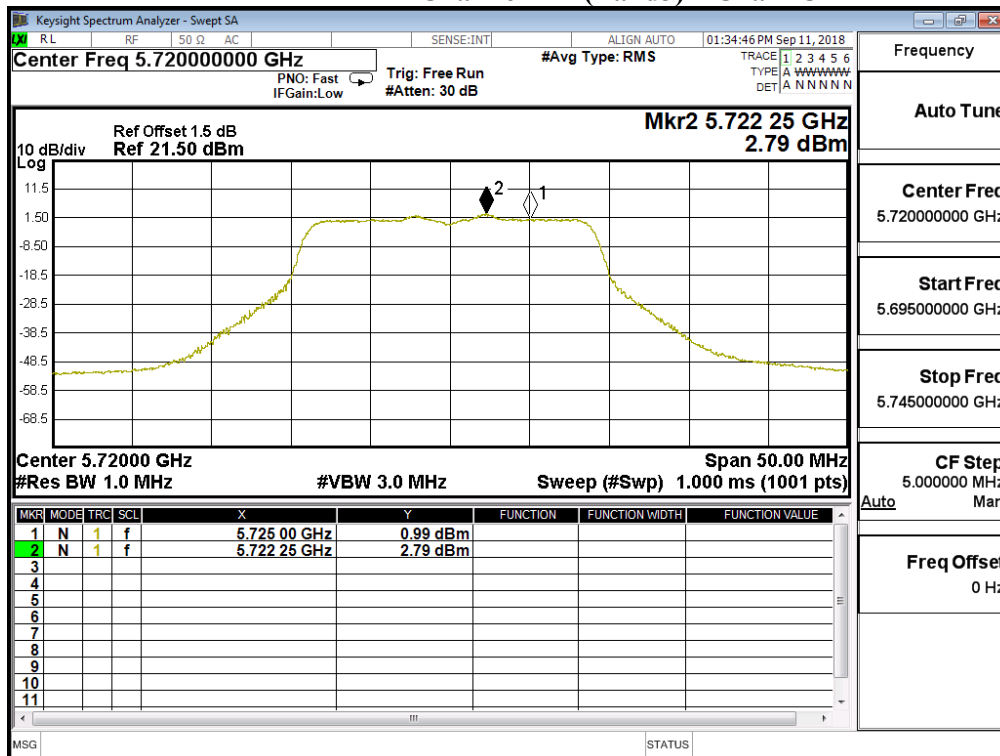
Channel 144 (Band3) – Chain B



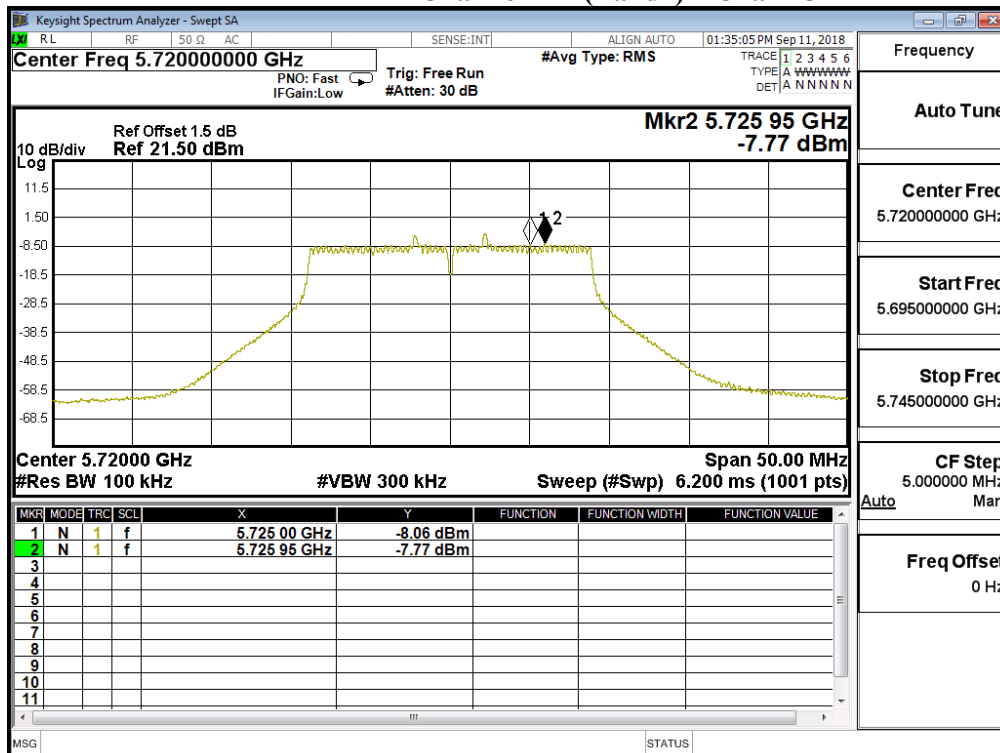
Channel 144 (Band4) – Chain B



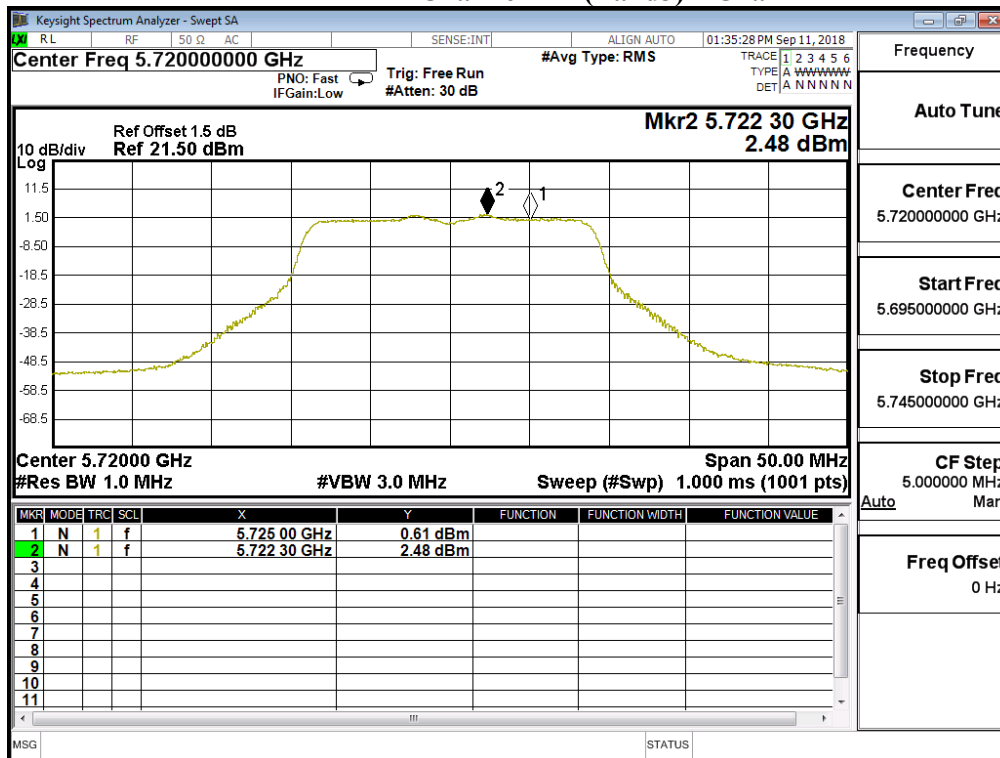
Channel 144 (Band3) – Chain C



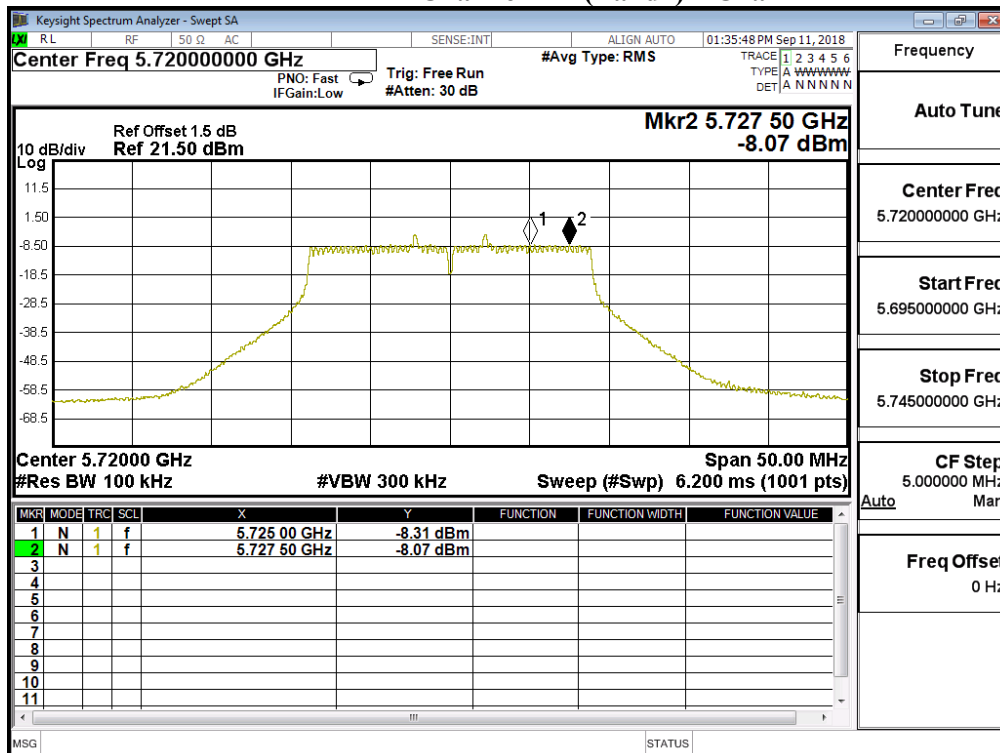
Channel 144 (Band4) – Chain C



Channel 144 (Band3) – Chain D



Channel 144 (Band4) – Chain D

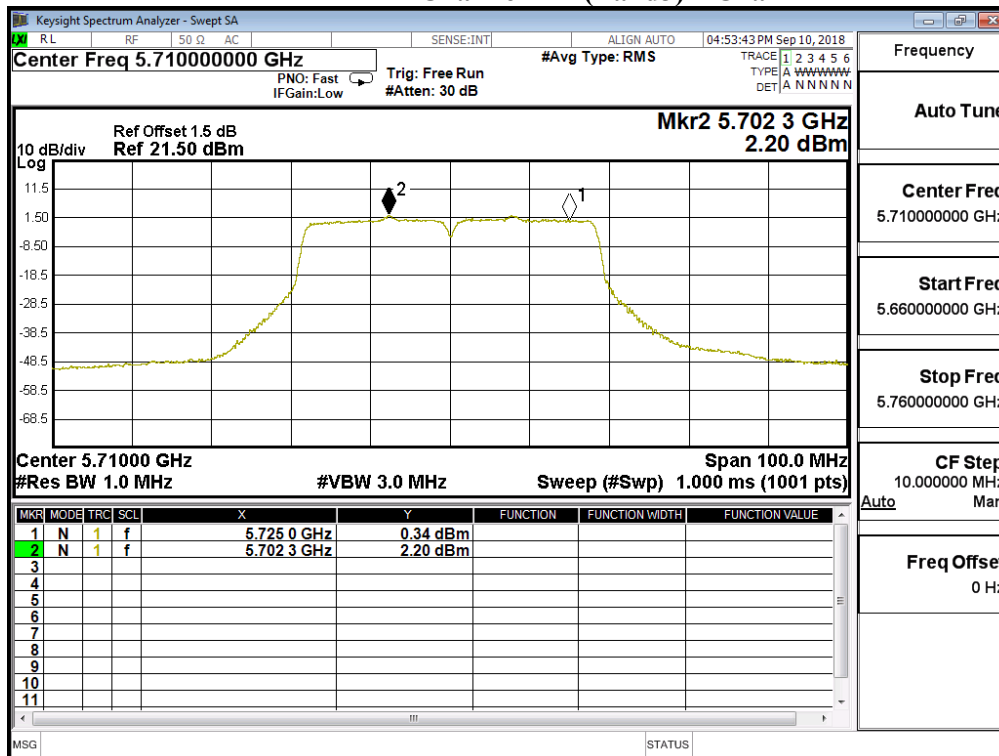


Product : MOXA IEEE 802.11a/n/ac 4*4 module
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Date : 2018/08/11
 Test Mode : Mode 5: Transmit (802.11ac-40BW-60Mbps) (Antenna No.17)

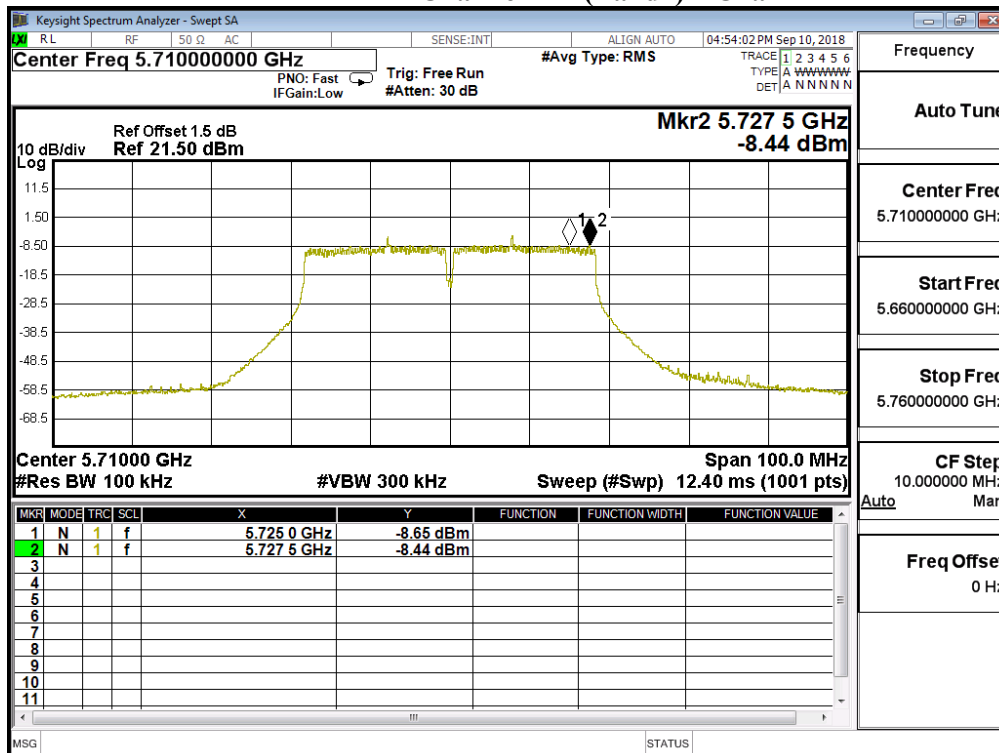
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Total PPSD (dBm) ¹	Required Limit (dBm)	Result
142	5710(Band3)	A	2.200	--	8.220	<9	Pass
		B	2.090	--	8.110	<9	Pass
		C	2.280	--	8.300	<9	Pass
		D	2.400	--	8.420	<9	Pass
142	5710(Band4)	A	-8.440	6.98	4.560	<28	Pass
		B	-8.670	6.98	4.330	<28	Pass
		C	-8.480	6.98	4.520	<28	Pass
		D	-8.280	6.98	4.720	<28	Pass

Note 1: The quantity $10 \cdot \log 4$ (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 142 (Band3) – Chain A



Channel 142 (Band4) – Chain A



Keysight Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:54:24 PM Sep 10, 2018

Center Freq 5.71000000 GHz **#Avg Type: RMS** PNO: Fast Trig: Free Run IFGain:Low #Atten: 30 dB TRACE 1 2 3 4 5 6 TYPE A W W W W W W W W DET A N N N N N

Ref Offset 1.5 dB Mkr2 5.717 6 GHz
Ref 21.50 dBm 2.09 dBm

10 dB/div Log

Center 5.71000 GHz Span 100.0 MHz
#Res BW 1.0 MHz #VBW 3.0 MHz Sweep (#Swp) 1.000 ms (1001 pts)

Mkr	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	5.725 0 GHz	0.10 dBm			
2	N	1	f	5.717 6 GHz	2.09 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

Frequency Auto Tune

Center Freq 5.71000000 GHz

Start Freq 5.660000000 GHz

Stop Freq 5.760000000 GHz

CF Step 10.000000 MHz Auto Man

Freq Offset 0 Hz

STATUS

Keysight Spectrum Analyzer - Sweep SA

R L 50 Ω AC SENSE:INT ALIGN AUTO 04:54:44 PM Sep 10, 2018

Center Freq 5.71000000 GHz PNO: Fast Trig: Free Run #Avg Type: RMS
IFGain:Low #Atten: 30 dB TYPE A WWWWWW DET A NNNN N

Ref Offset 1.5 dB Mkr2 5.725 0 GHz
Ref 21.50 dBm -8.67 dBm

10 dB/div Log

The spectrum plot shows a frequency range from approximately 5.66 GHz to 5.76 GHz. The vertical axis represents power density in dBm/dB, ranging from -68.5 to -11.5. A yellow trace displays a signal centered at 5.725 GHz, which has been manually marked with a diamond cursor labeled '2'. The signal level at this mark is -8.67 dBm. The baseline noise floor is around -58 dBm.

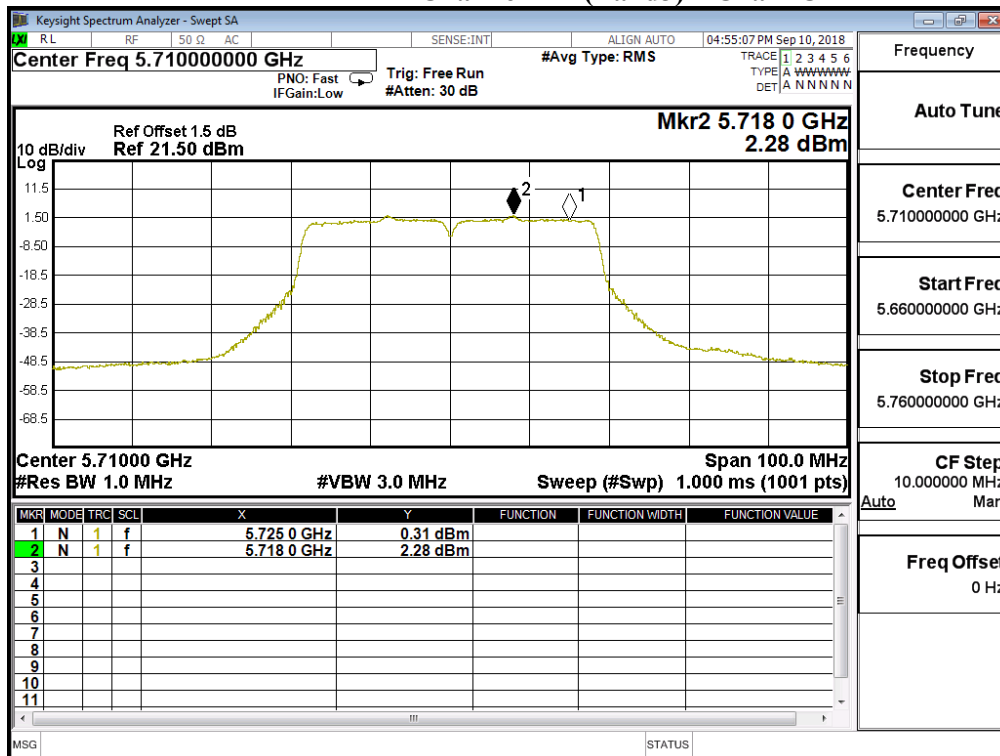
Center 5.71000 GHz Span 100.0 MHz
#Res BW 100 kHz #VBW 300 kHz Sweep (#Swp) 12.40 ms (1001 pts)

MkR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f	f	5.725 0 GHz	-8.67 dBm			
2	N	f	f	5.725 0 GHz	-8.67 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

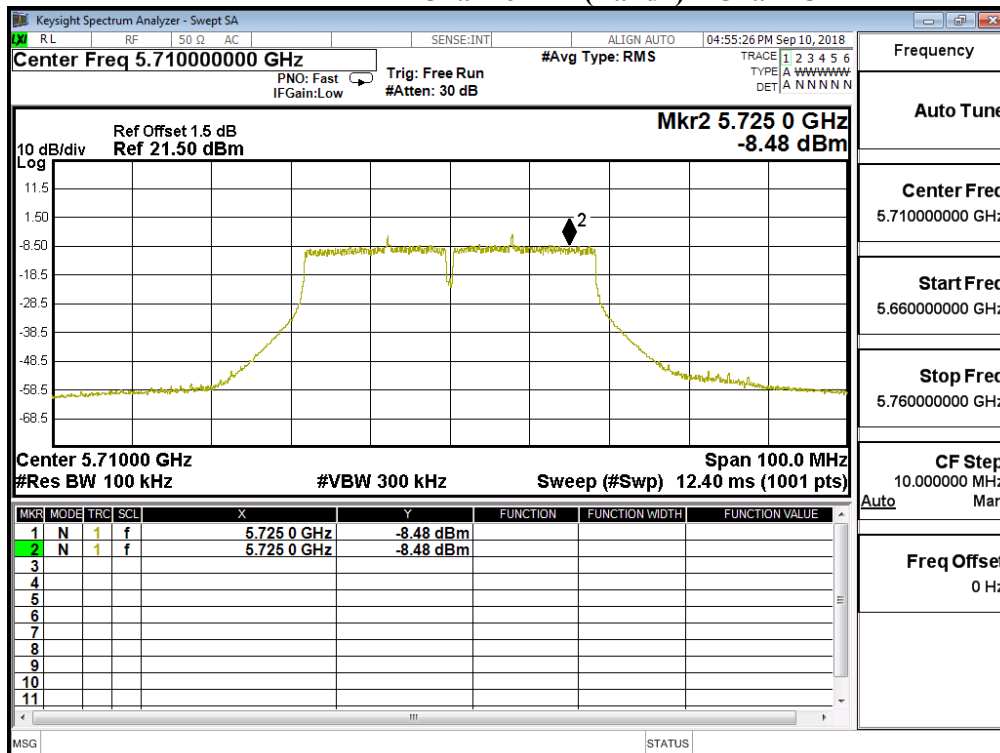
MSG STATUS

Frequency Auto Tune Center Freq 5.71000000 GHz Start Freq 5.66000000 GHz Stop Freq 5.76000000 GHz CF Step 10.000000 MHz Man Auto Freq Offset 0 Hz

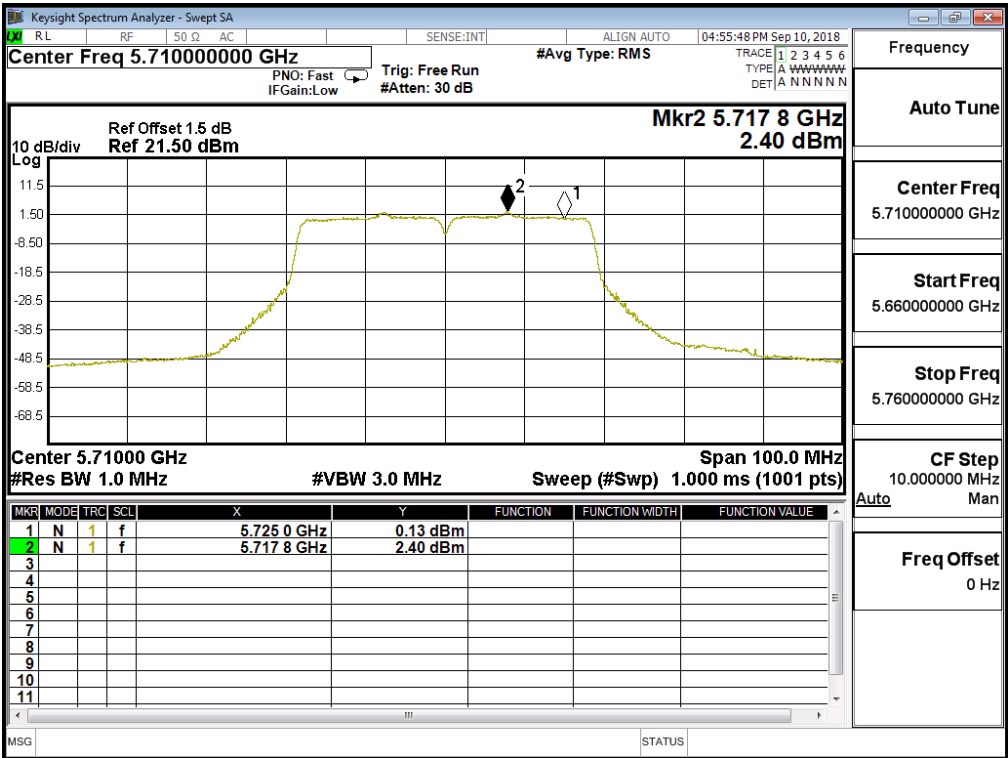
Channel 142 (Band3) – Chain C



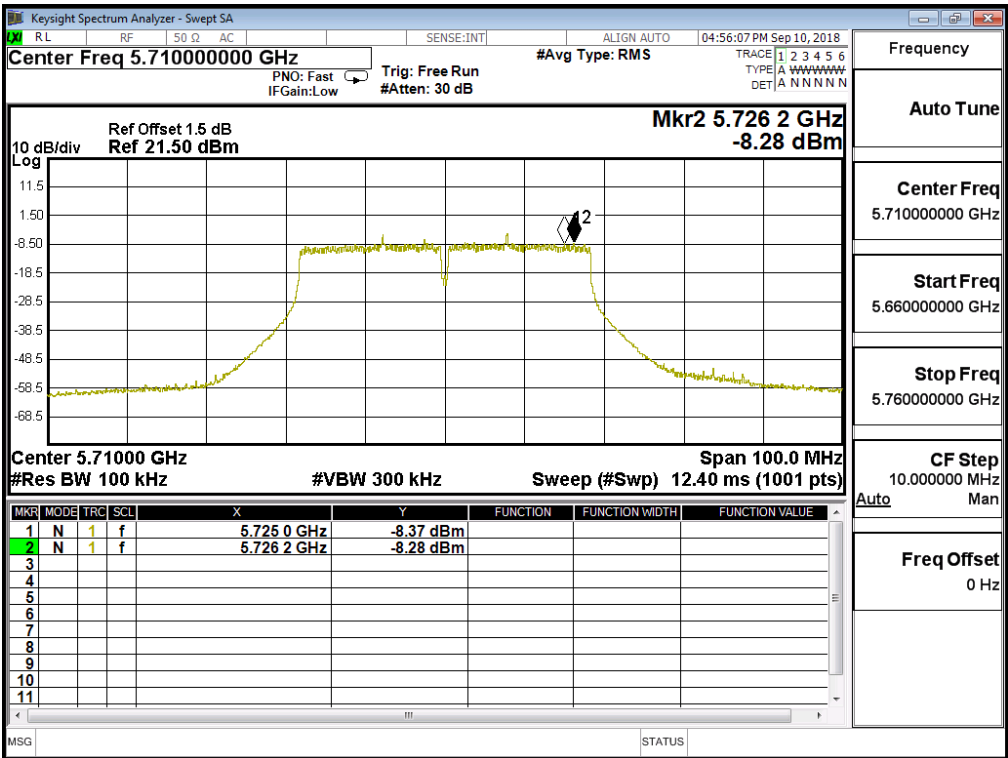
Channel 142 (Band4) – Chain C



Channel 142 (Band3) – Chain D



Channel 142 (Band4) – Chain D



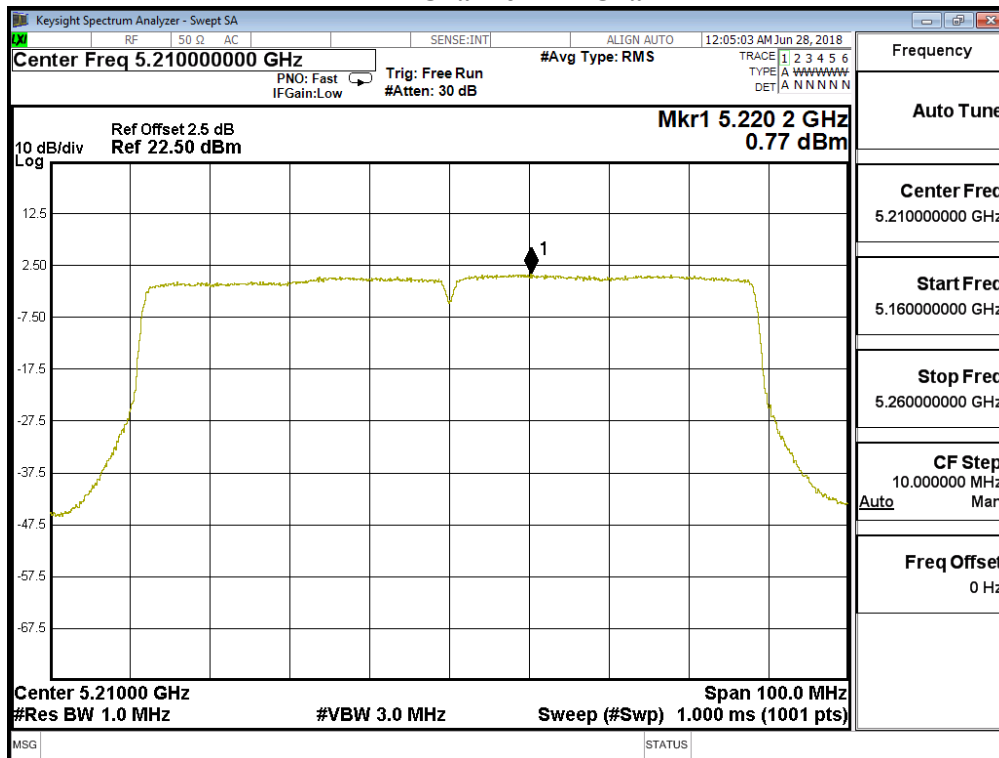
Product : MOXA IEEE 802.11a/n/ac 4*4 module
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Date : 2018/07/20
 Test Mode : Mode 6: Transmit (802.11ac-80BW-130Mbps) (Antenna No.17)

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	Total PSD (dBm)	Required Limit (dBm)	Result
42	5210	A	0.770	6.790	<9	Pass
		B	-0.380	5.640	<9	Pass
		C	0.360	6.380	<9	Pass
		D	0.630	6.650	<9	Pass
58	5290	A	-2.250	3.770	<9	Pass
		B	-2.110	3.910	<9	Pass
		C	-1.580	4.440	<9	Pass
		D	-1.920	4.100	<9	Pass
106	5530	A	-2.520	3.500	<9	Pass
		B	-3.840	2.180	<9	Pass
		C	-3.270	2.750	<9	Pass
		D	-0.560	5.460	<9	Pass
122	5610	A	-2.640	3.380	<9	Pass
		B	-4.090	1.930	<9	Pass
		C	-3.980	2.040	<9	Pass
		D	-0.480	5.540	<9	Pass
138	5690 (Band3)	A	-4.460	1.560	<9	Pass
		B	-0.550	5.470	<9	Pass
		C	-2.040	3.980	<9	Pass
		D	-1.950	4.070	<9	Pass

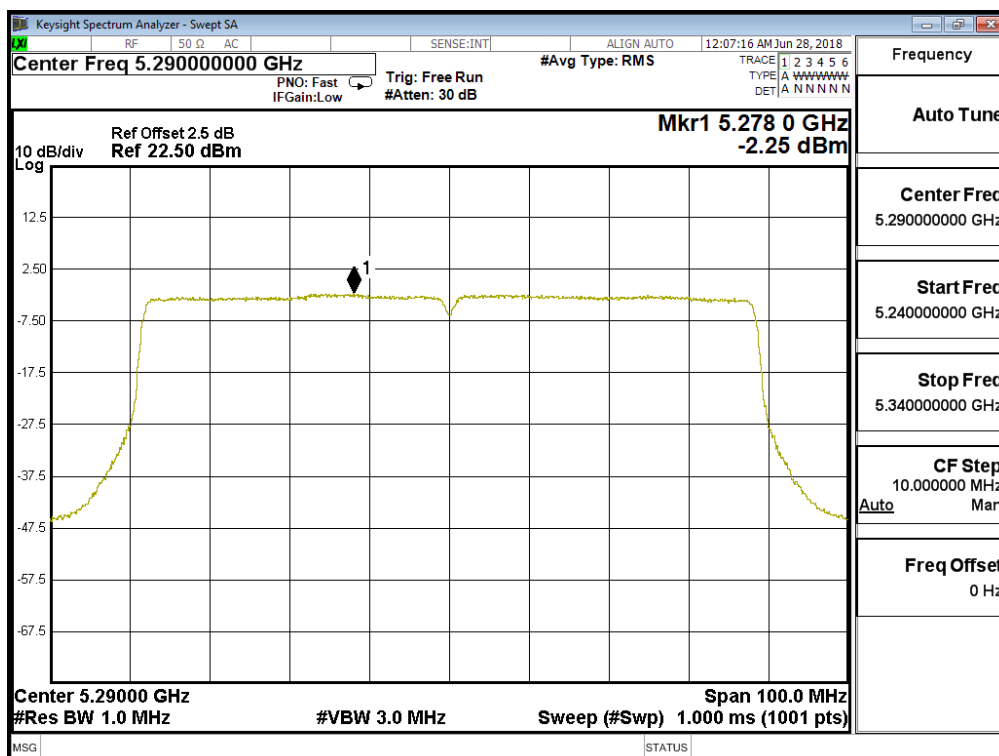
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Total PSD (dBm) ₁	Required Limit (dBm)	Result
138	5690 (Band4)	A	-14.190	6.98	-1.190	<28	Pass
		B	-9.810	6.98	3.190	<28	Pass
		C	-11.810	6.98	1.190	<28	Pass
		D	-11.520	6.98	1.480	<28	Pass
155	5775	A	-8.910	6.98	4.090	<28	Pass
		B	-9.490	6.98	3.510	<28	Pass
		C	-10.440	6.98	2.560	<28	Pass
		D	-6.880	6.98	6.120	<28	Pass

Note 1: The quantity $10 \cdot \log 4$ (four antennas) is added to the spectrum peak value according to document 662911 D01.

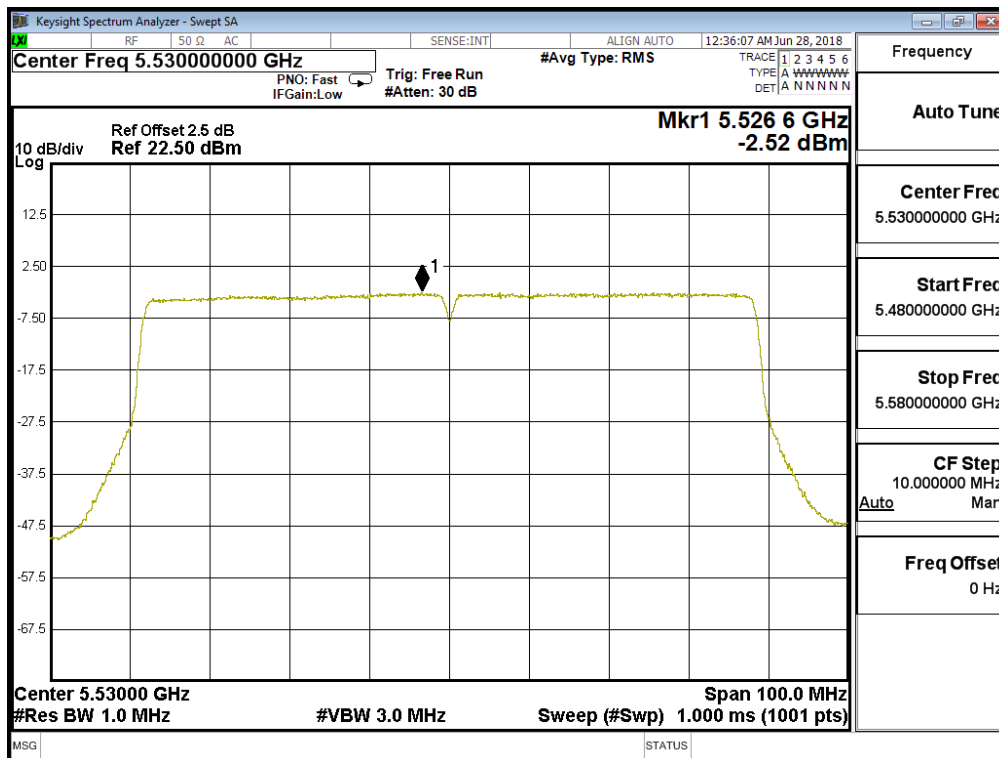
Channel 42 – Chain A



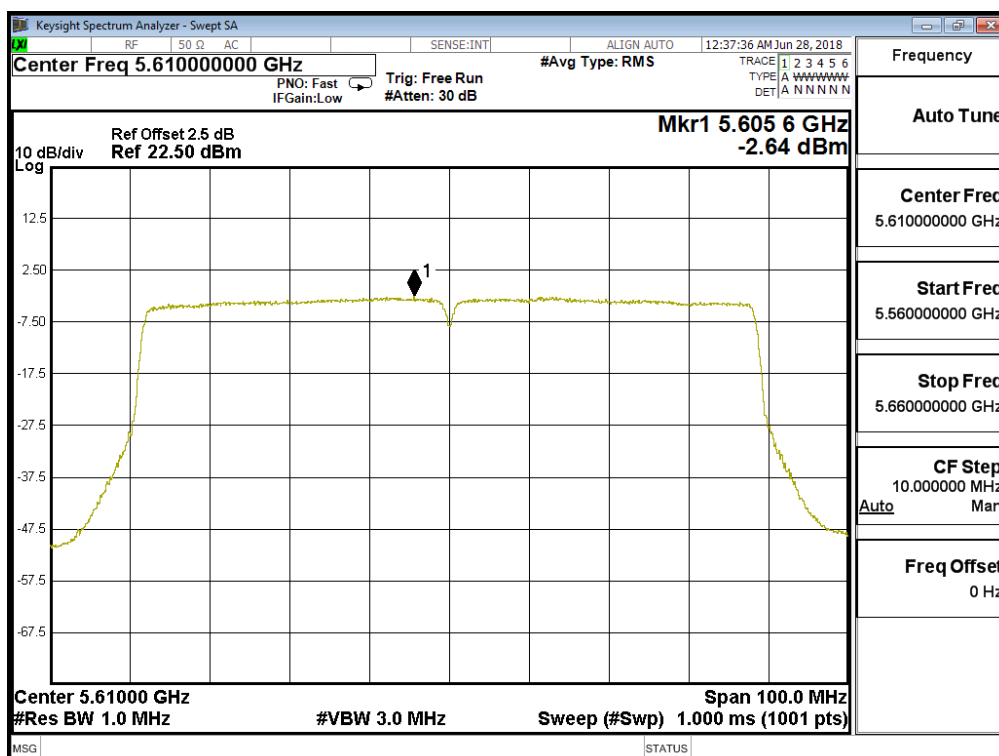
Channel 58 – Chain A



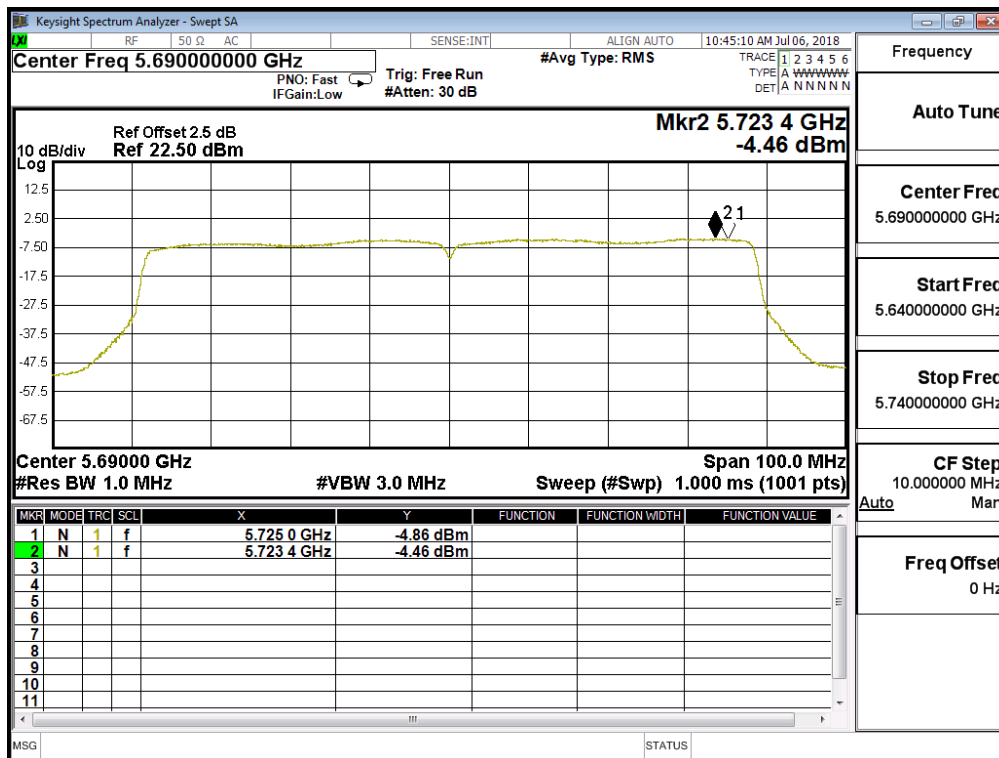
Channel 106 – Chain A



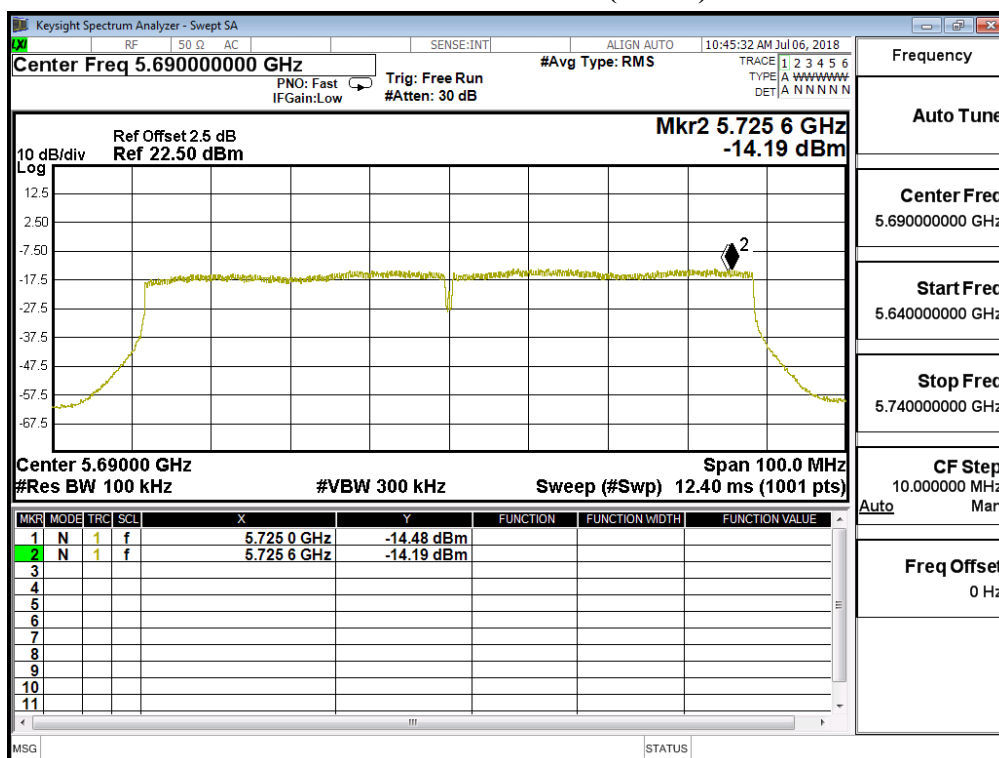
Channel 122 – Chain A



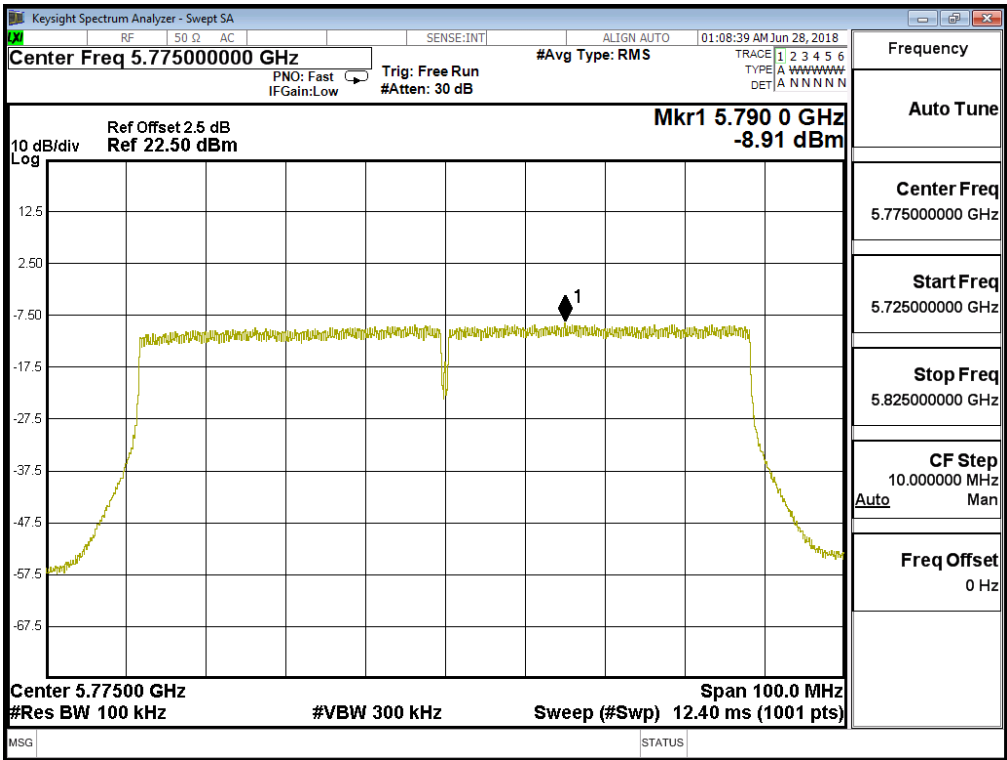
Channel 138(Band3) – Chain A



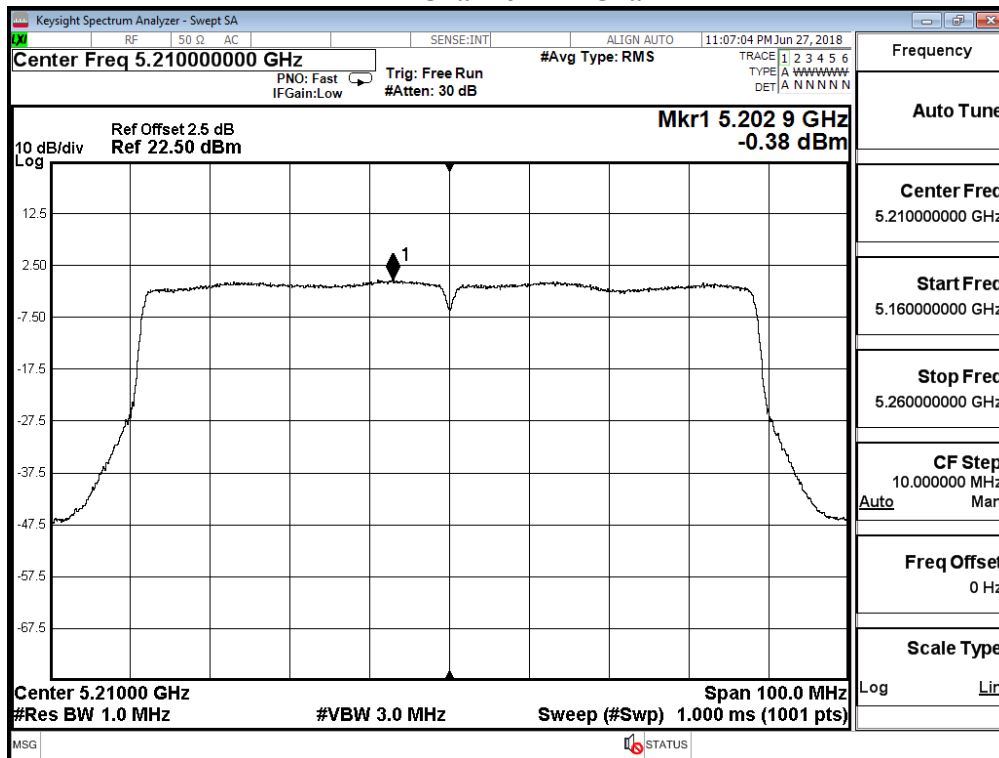
Channel 138(Band4) – Chain A



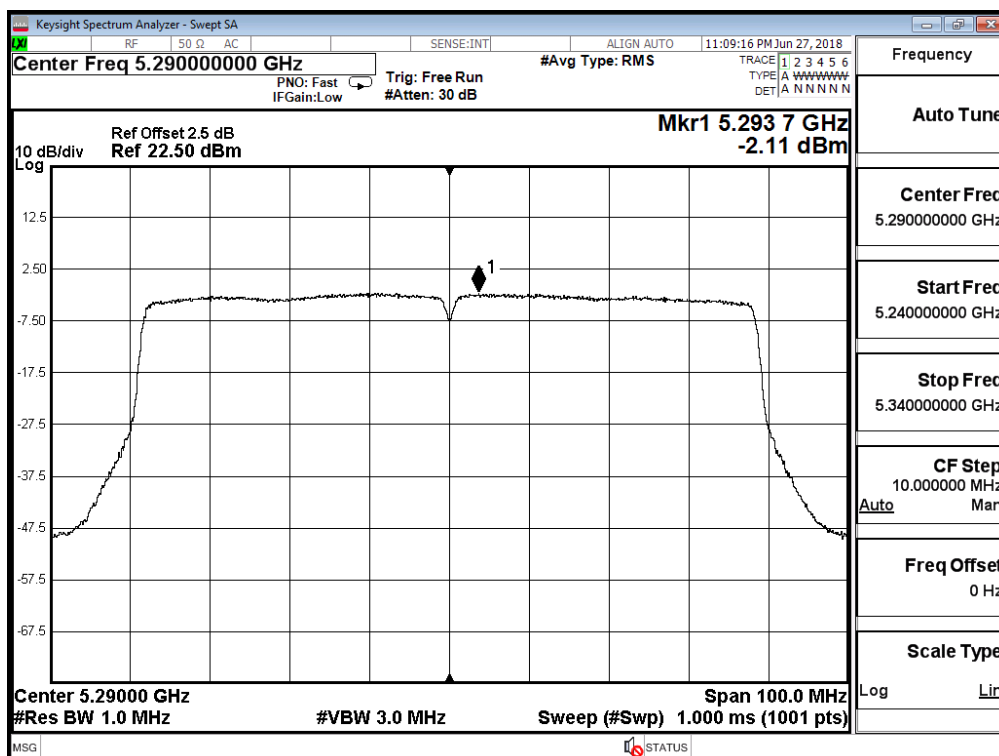
Channel 155: CHAIN A



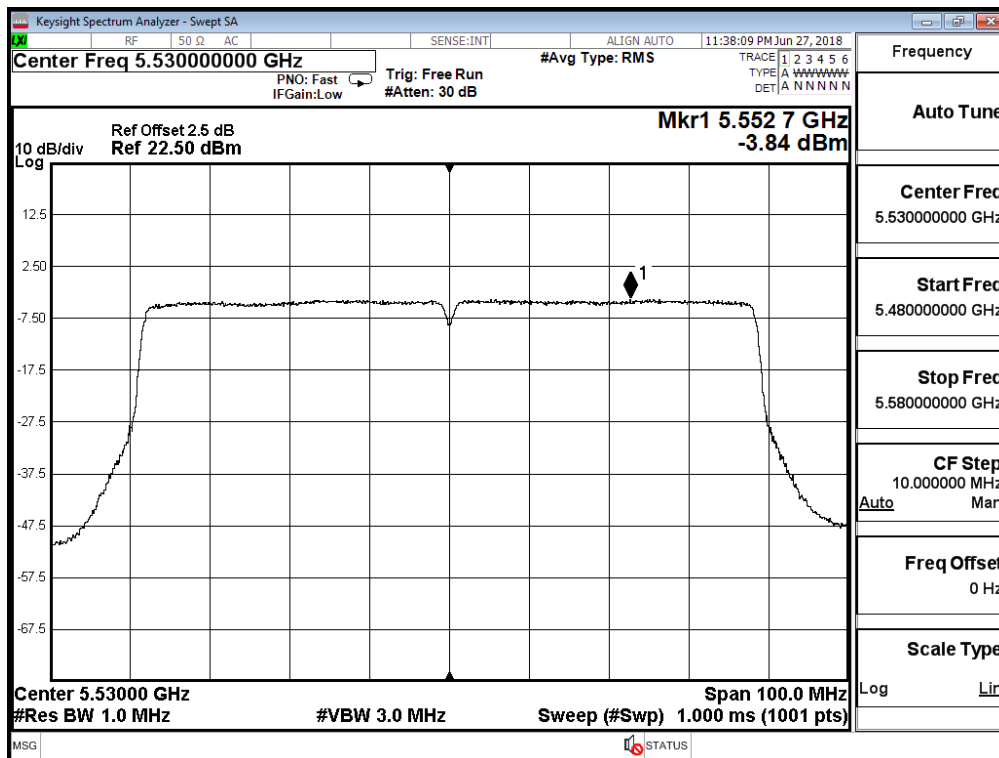
Channel 42 – Chain B



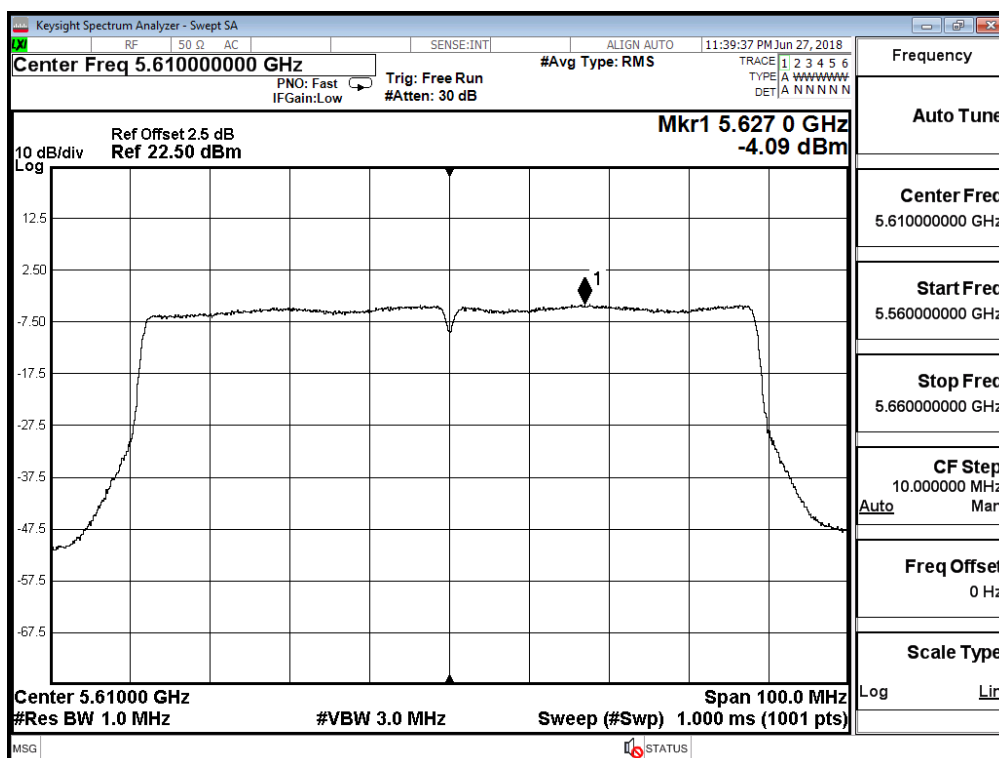
Channel 58 – Chain B



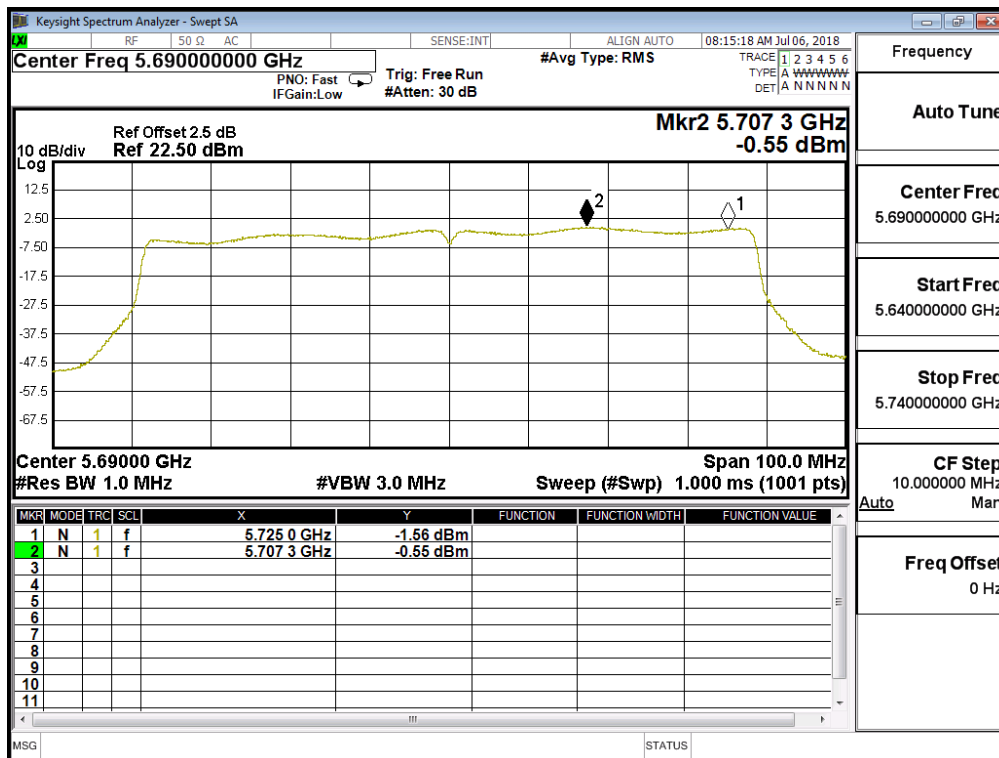
Channel 106 – Chain B



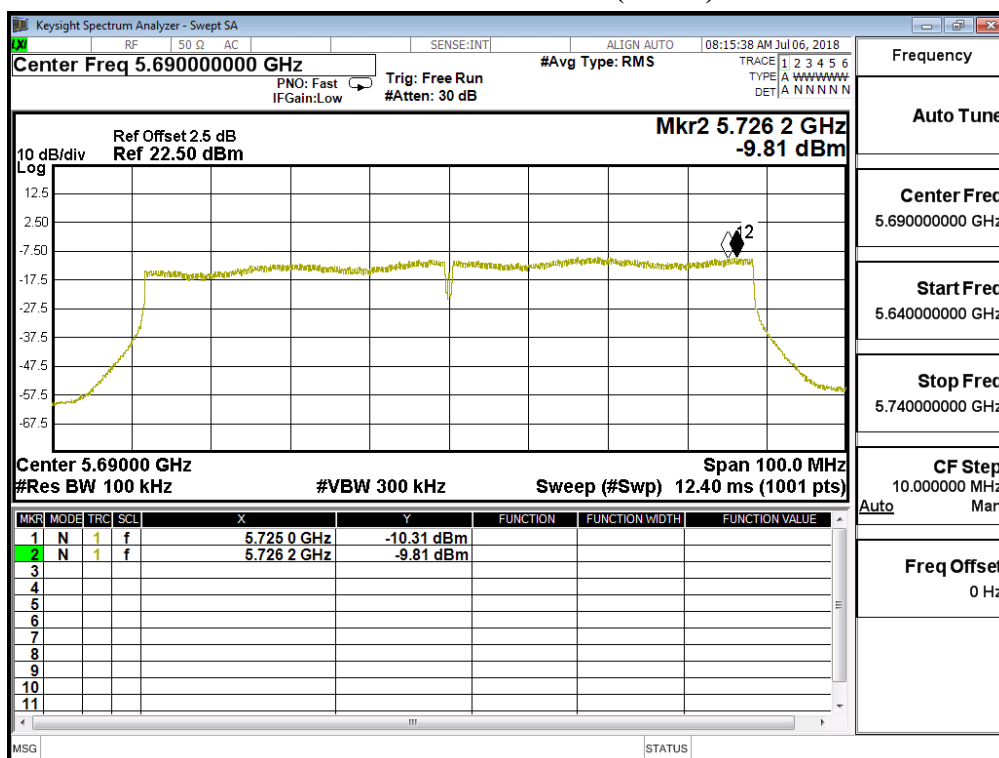
Channel 122 – Chain B



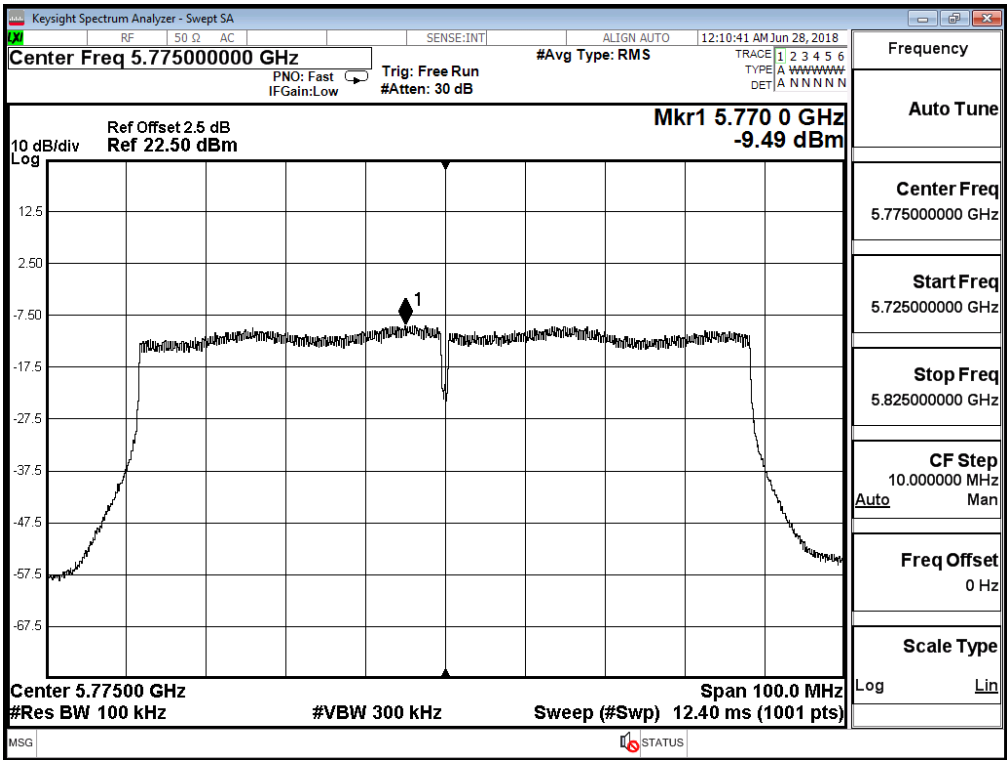
Channel 138 (Band3) – Chain B



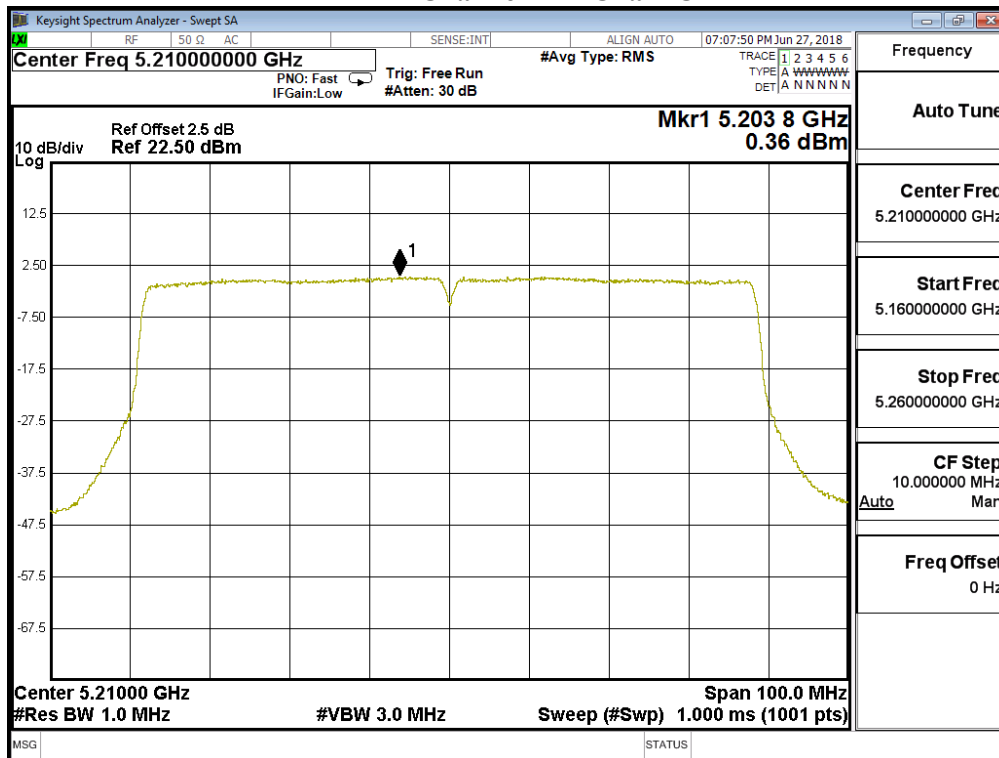
Channel 138 (Band4) – Chain B



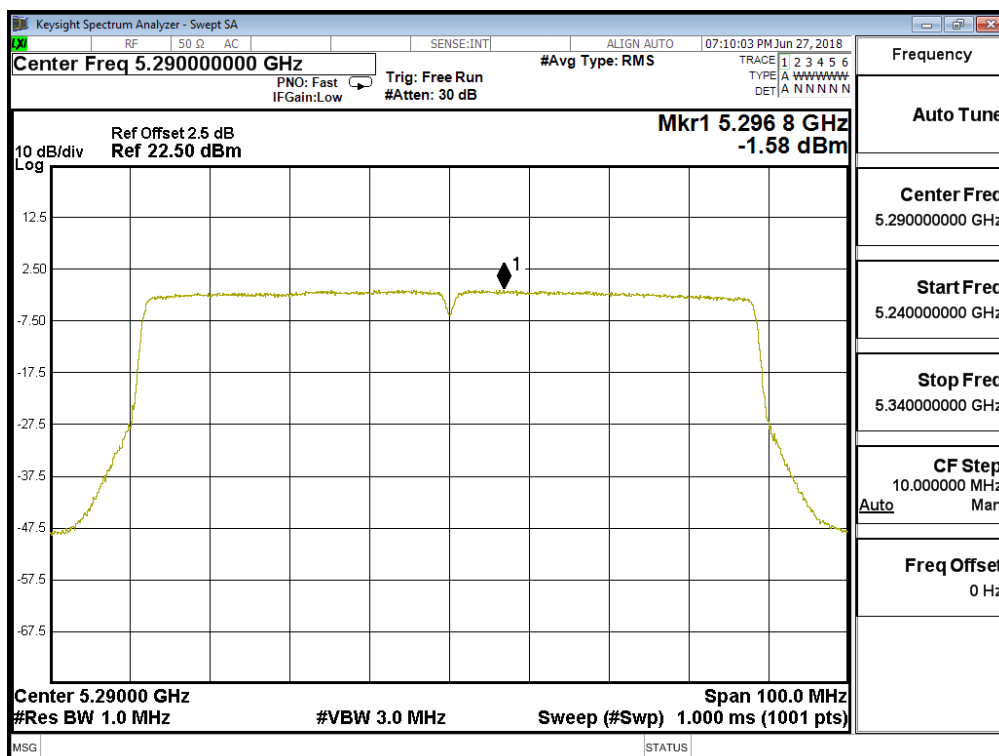
Channel 155: CHAIN B



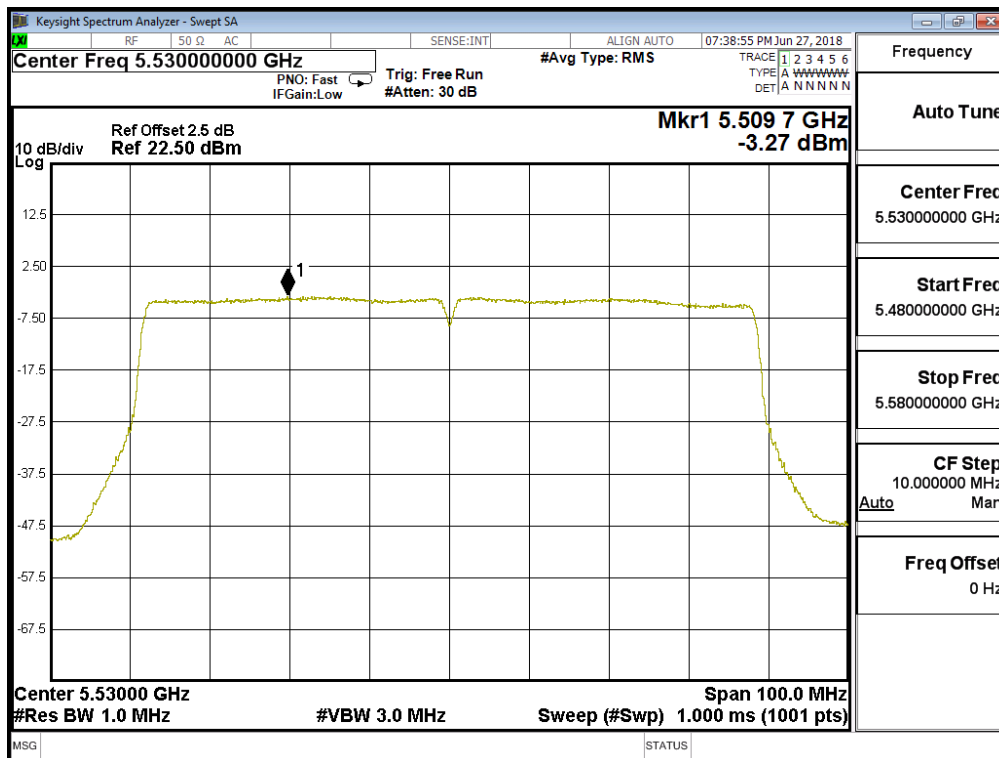
Channel 42 – Chain C



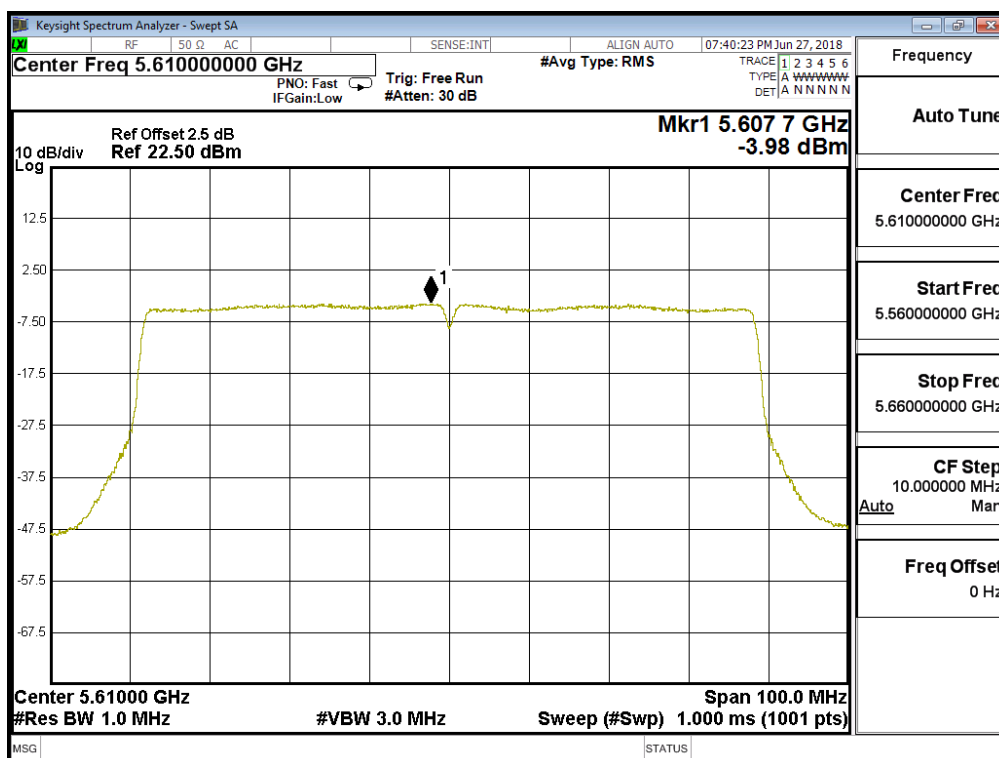
Channel 58 – Chain C



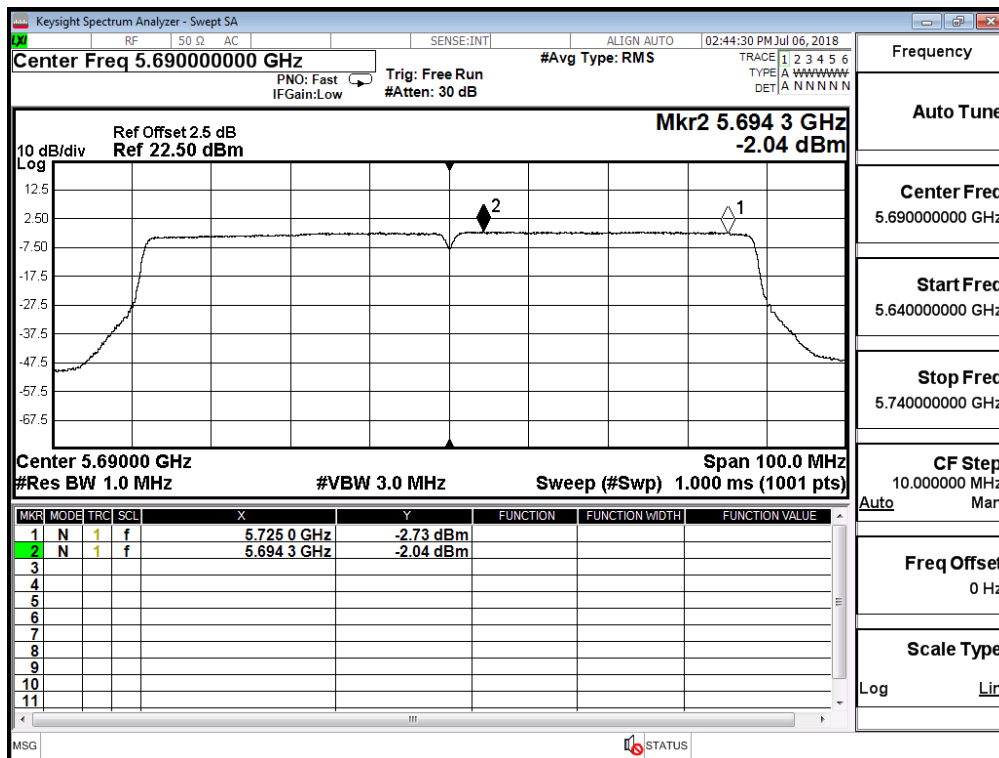
Channel 106 – Chain C



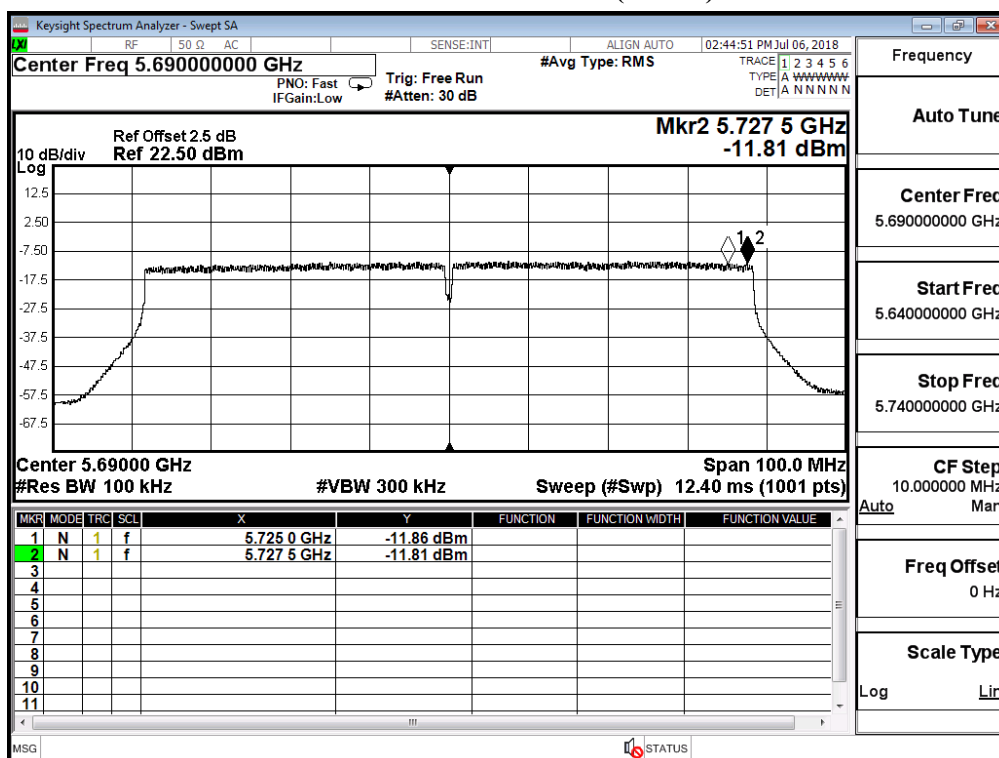
Channel 122 – Chain C



Channel 138 (Band3) – Chain C



Channel 138 (Band4) – Chain C



Channel 155: CHAIN C

