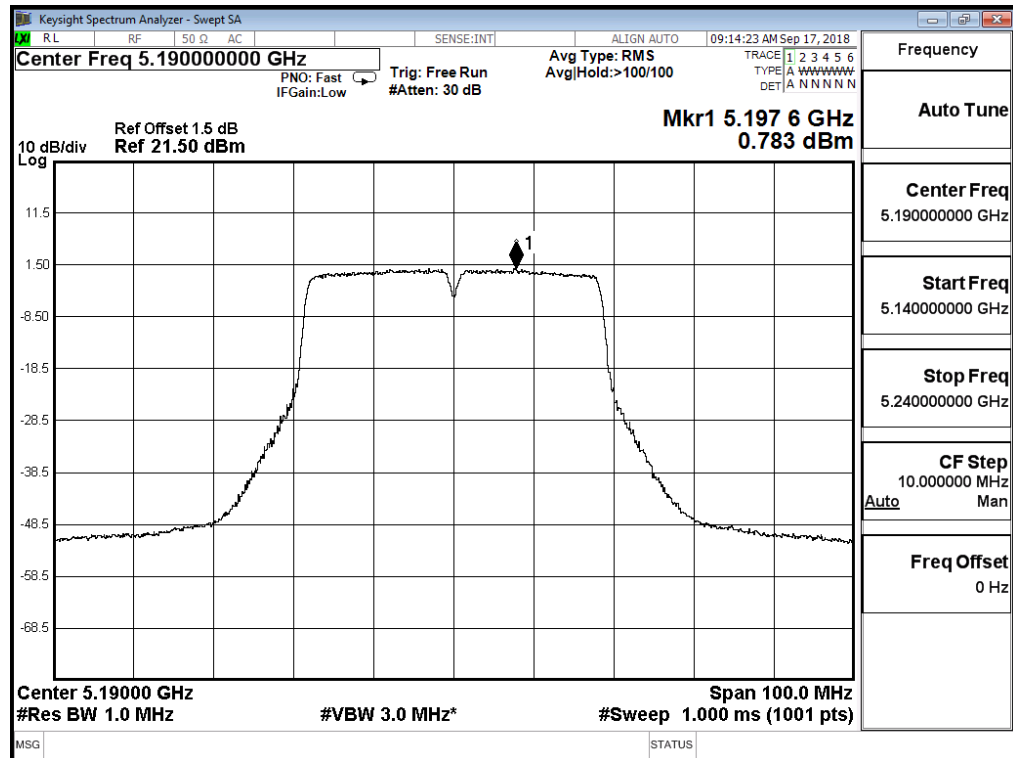
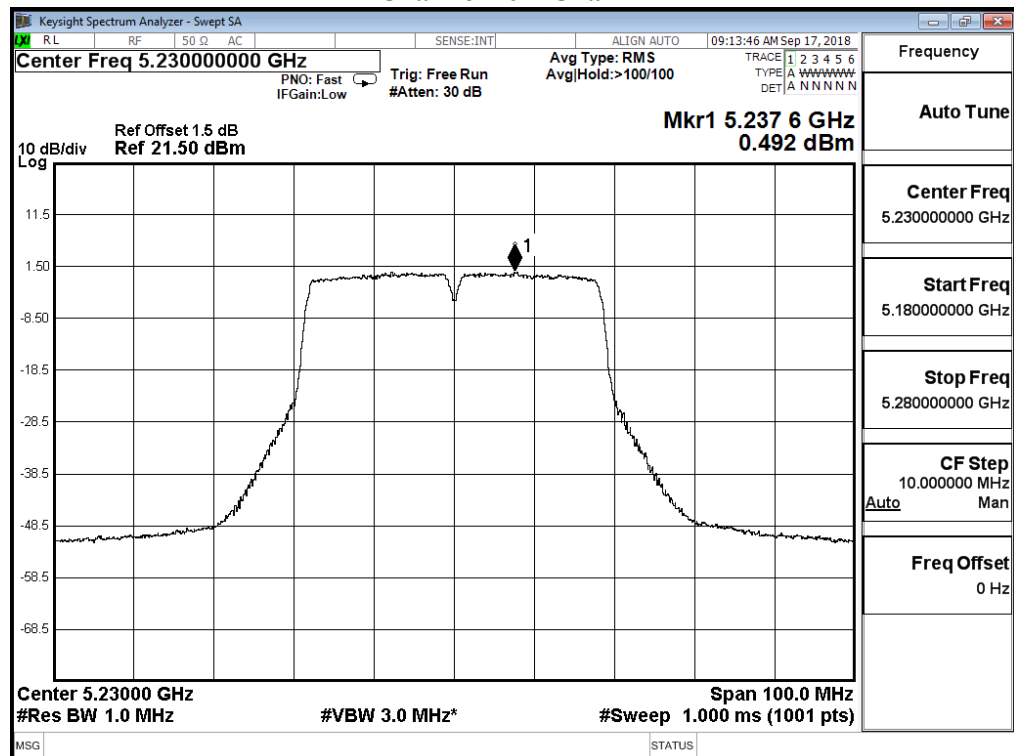


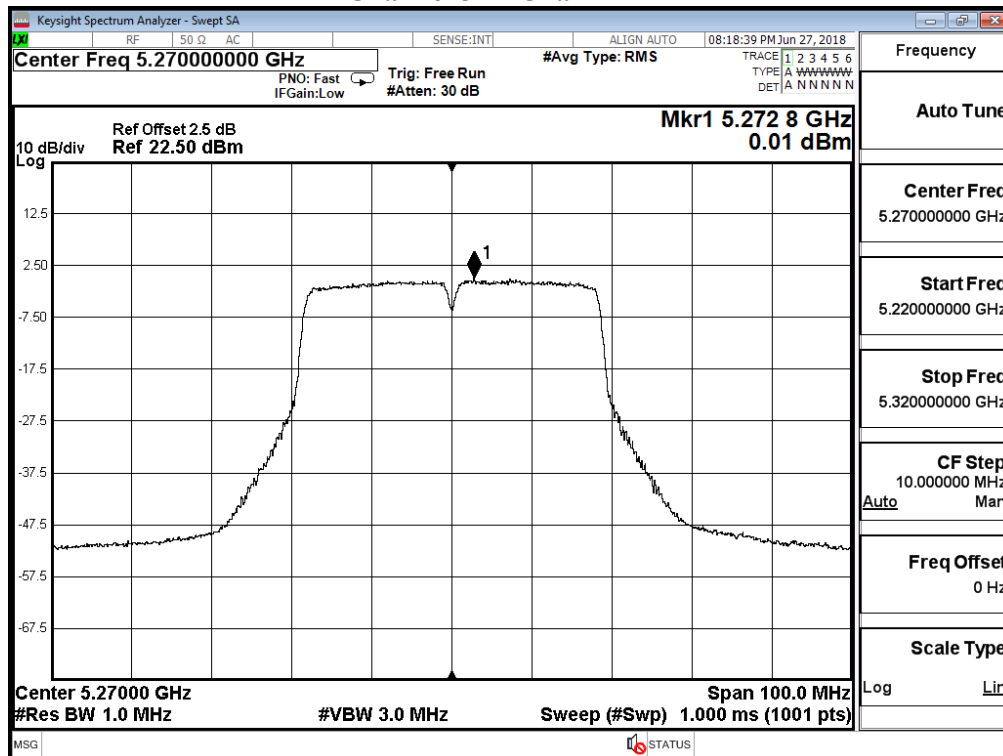
Channel 38 – Chain B



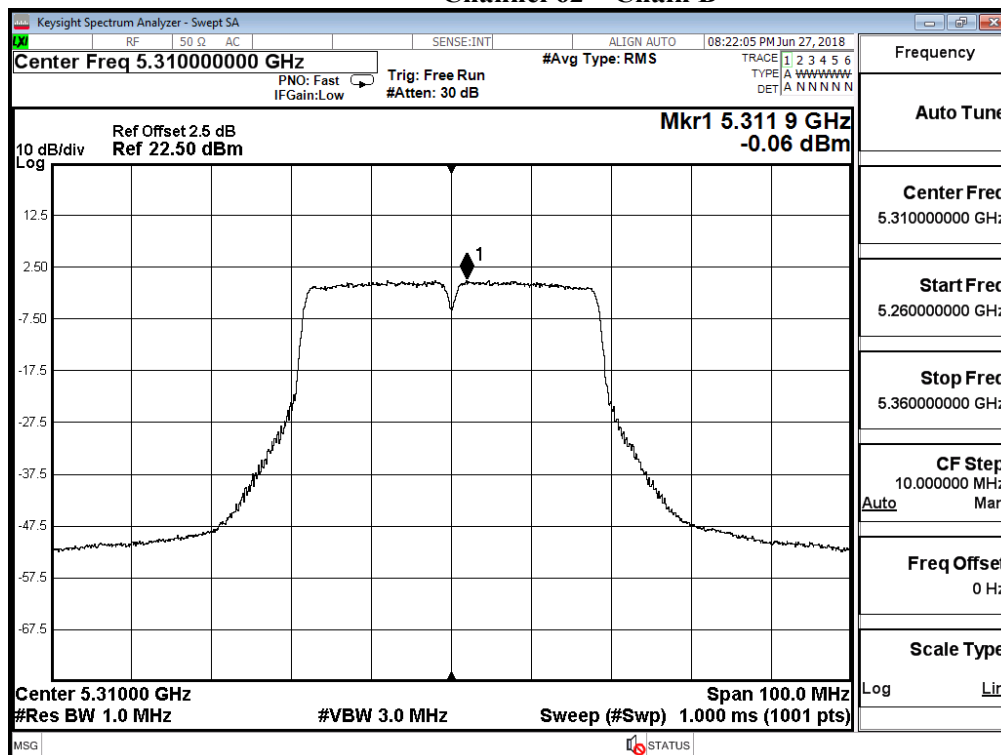
Channel 46 – Chain B



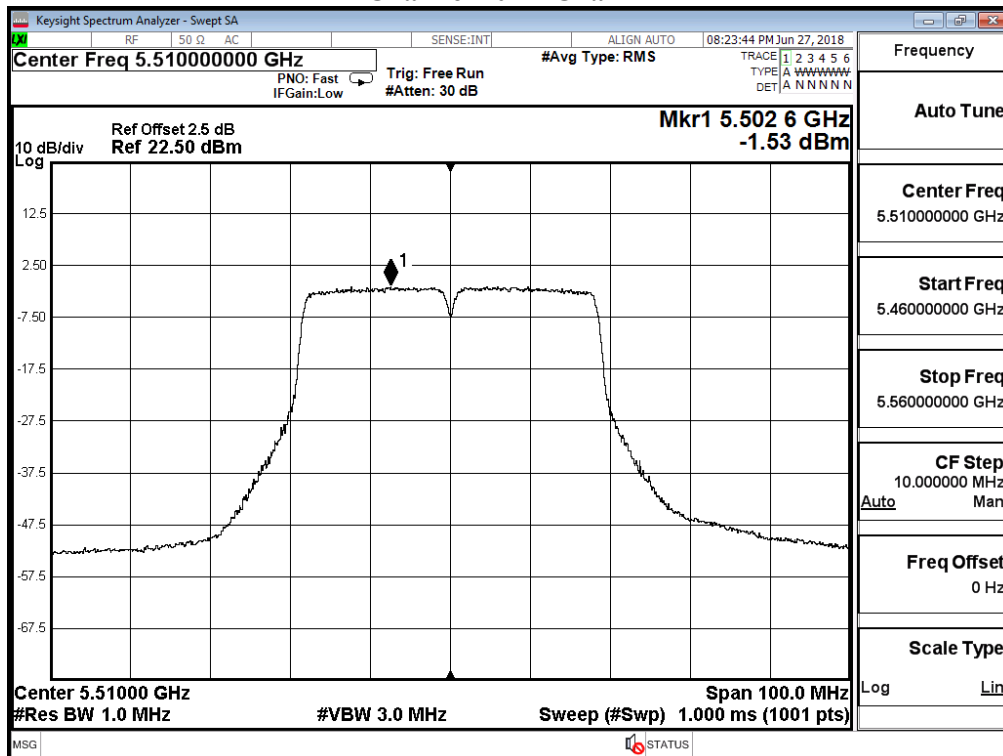
Channel 54 – Chain B



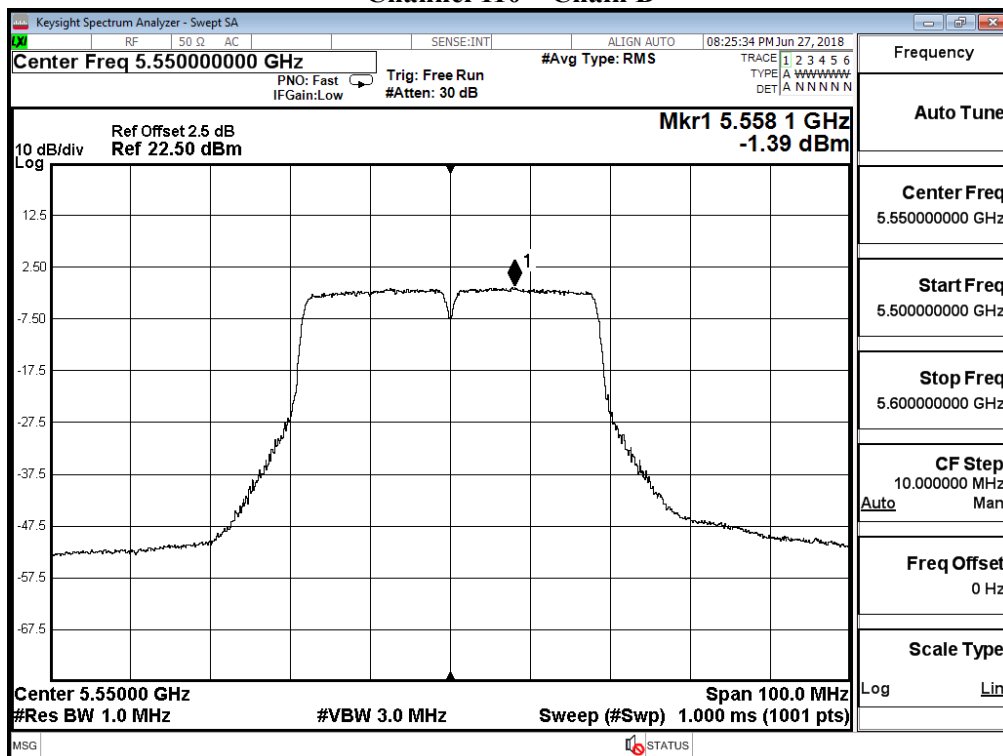
Channel 62 – Chain B



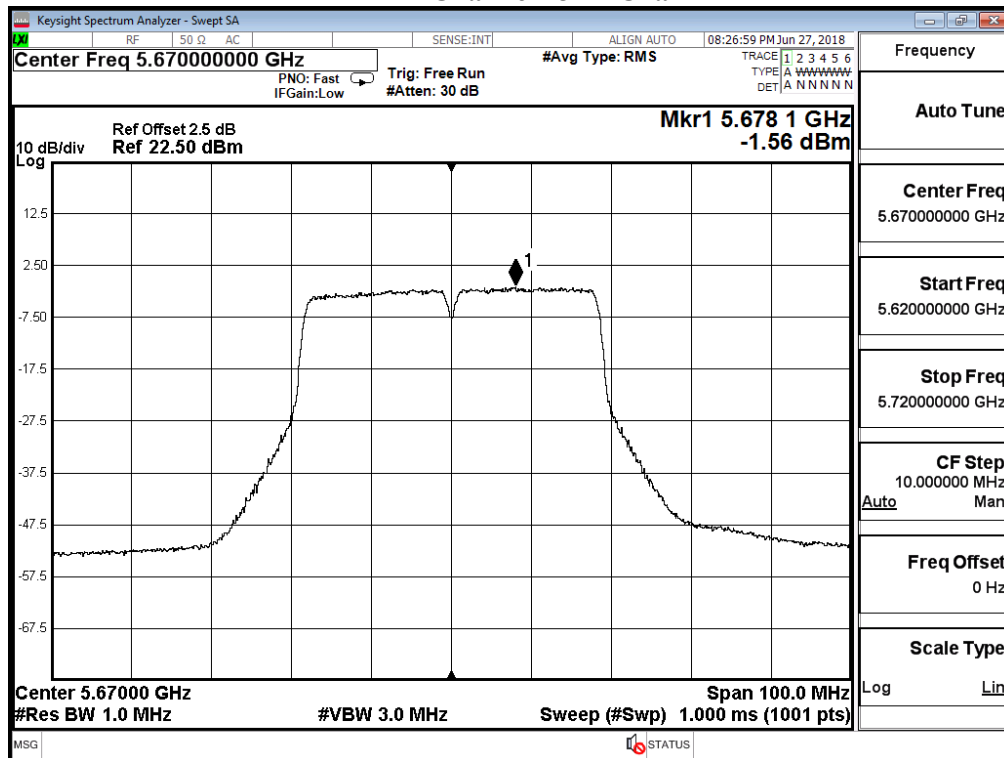
Channel 102 – Chain B



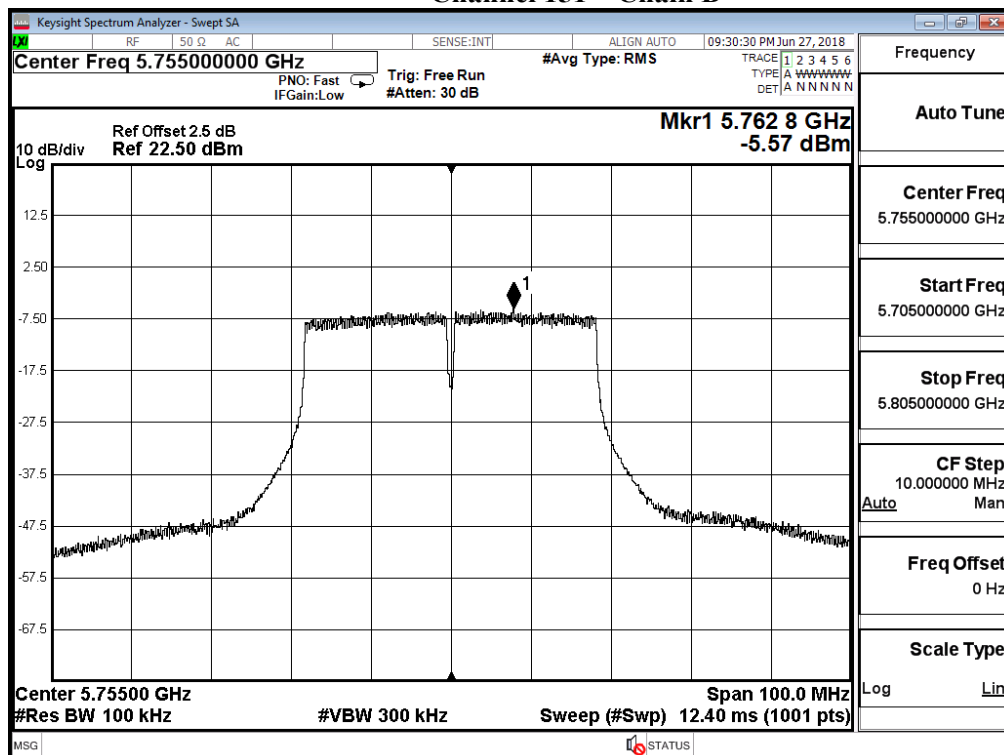
Channel 110 – Chain B



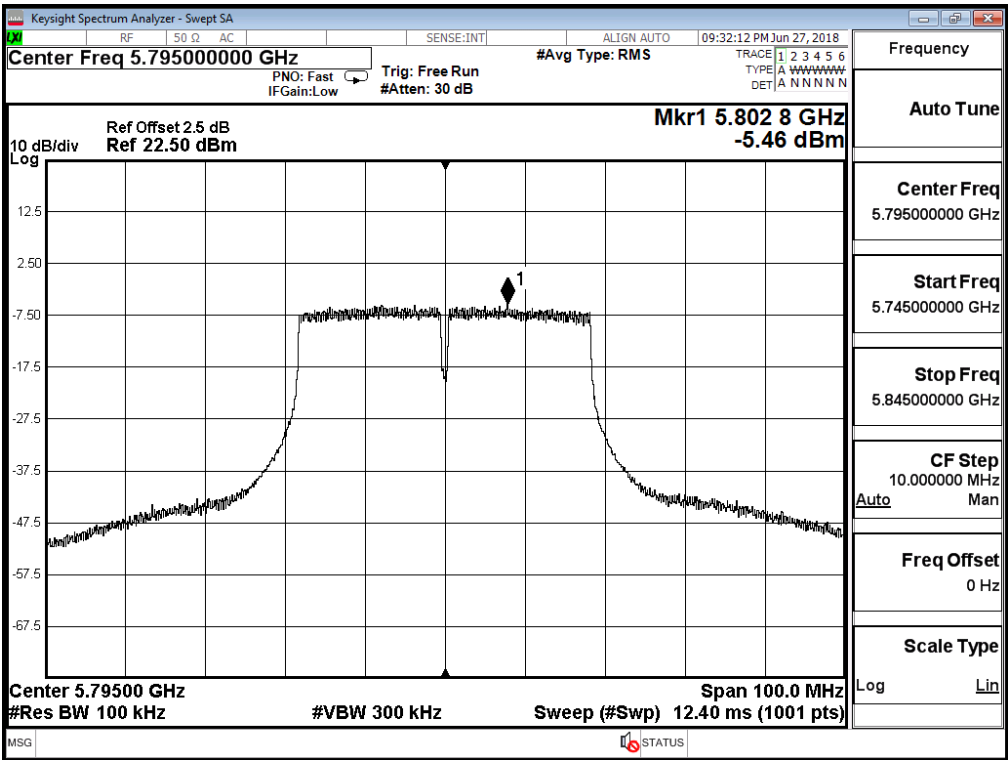
Channel 134 – Chain B



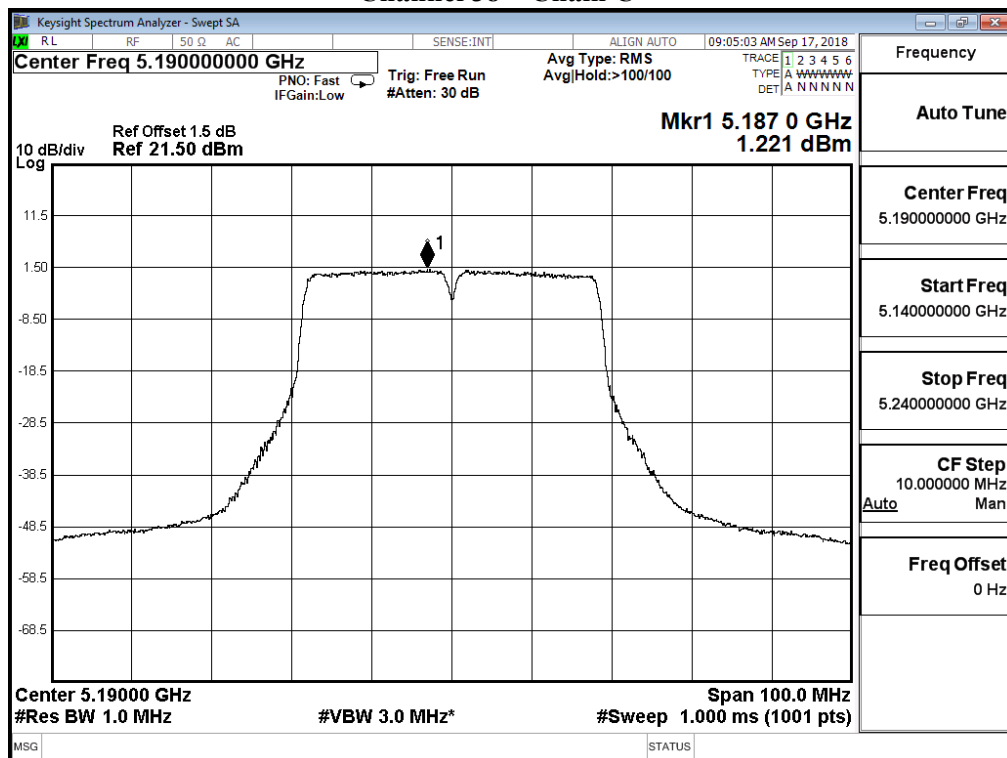
Channel 151 – Chain B



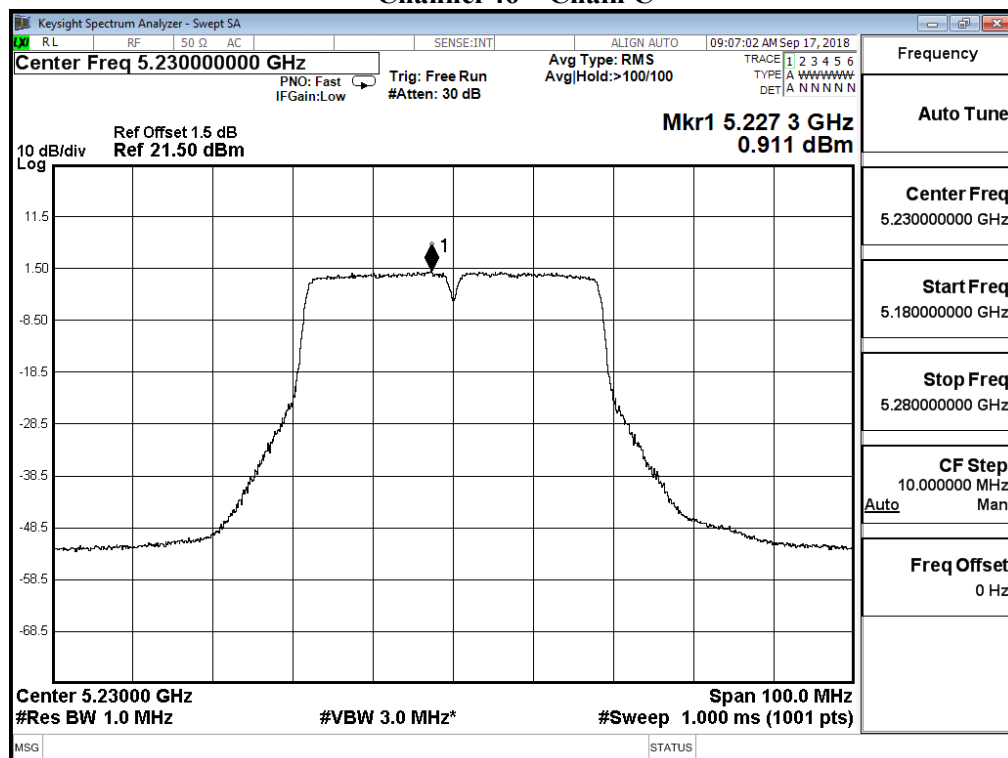
Channel 159 – Chain B



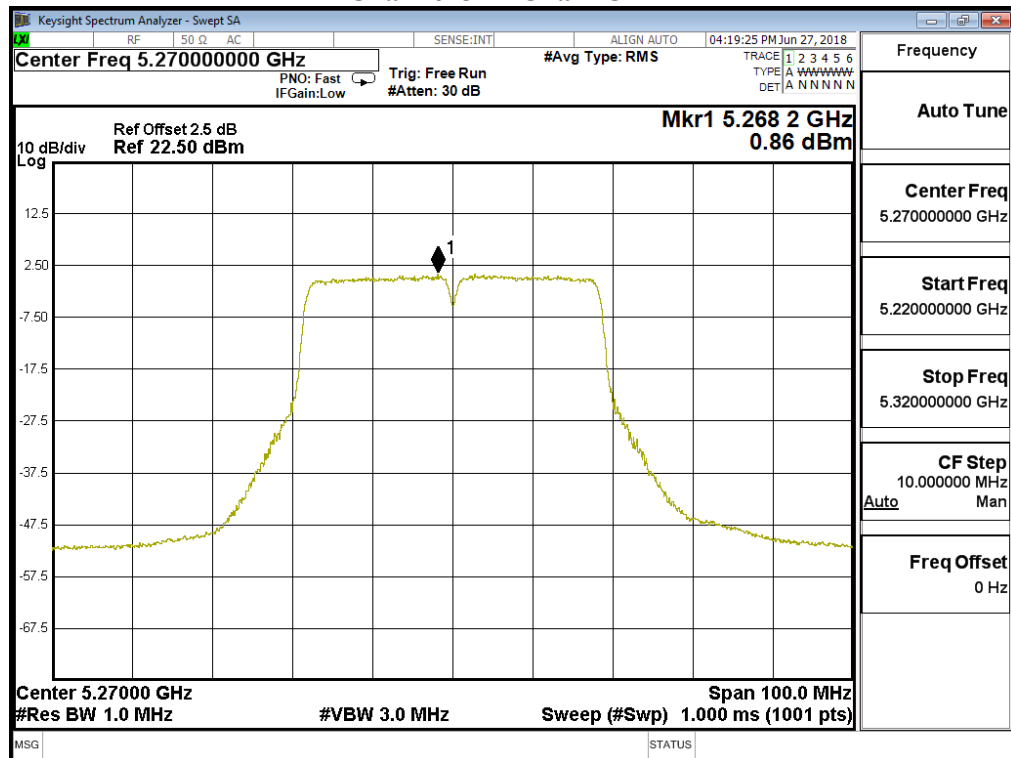
Channel 38 – Chain C



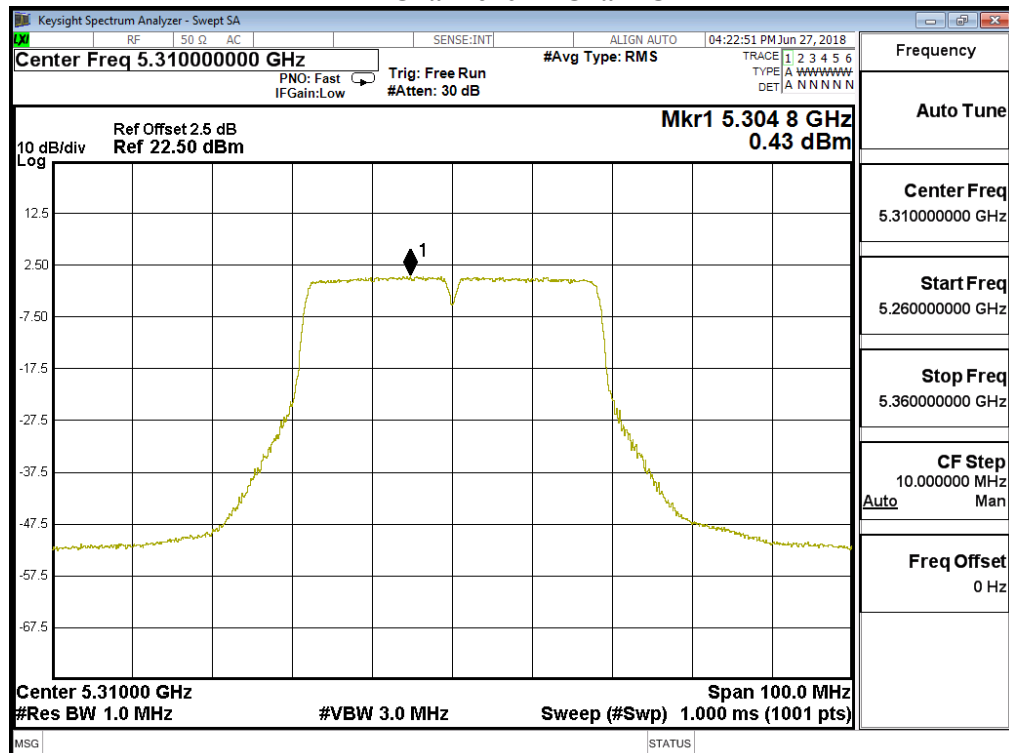
Channel 46 – Chain C



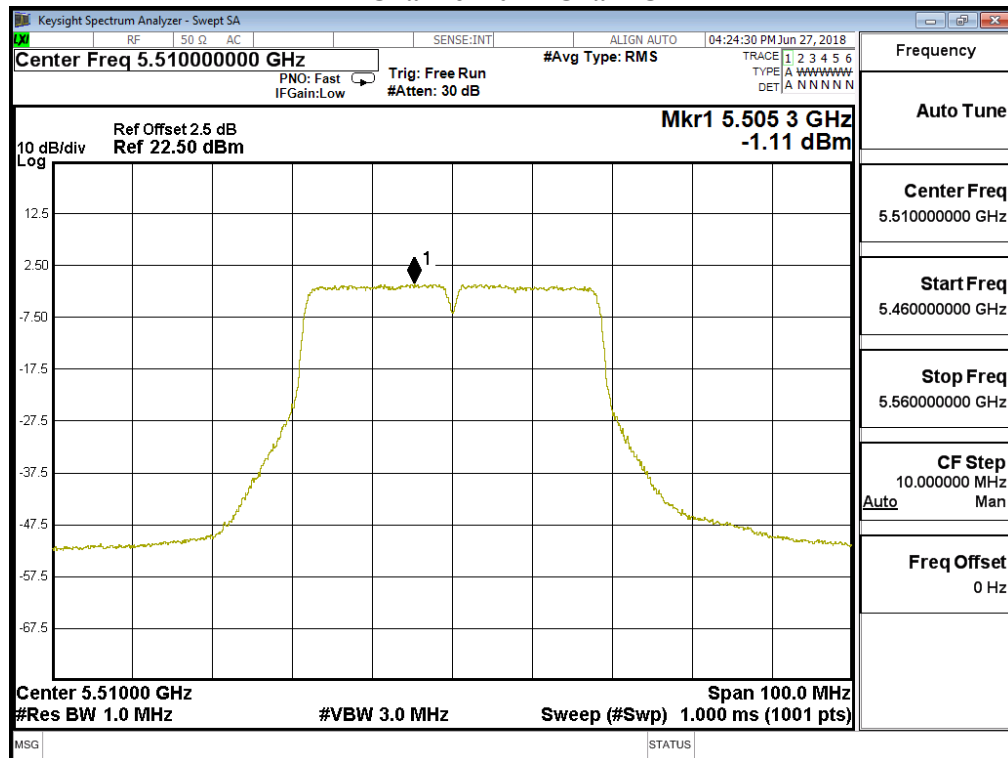
Channel 54 – Chain C



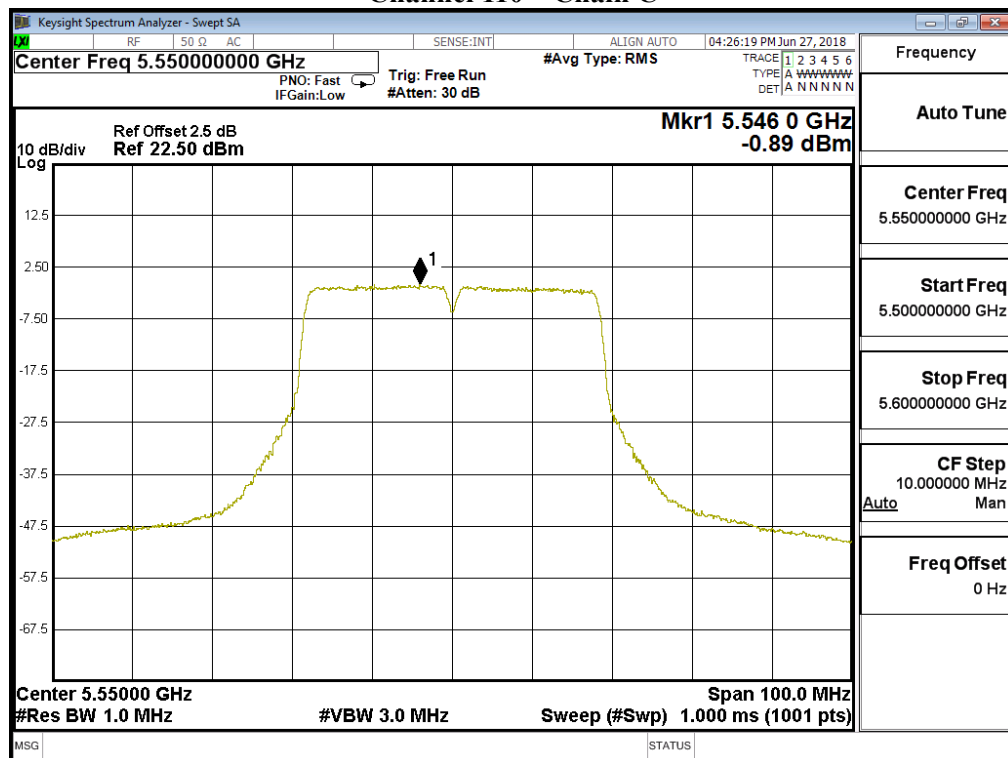
Channel 62 – Chain C



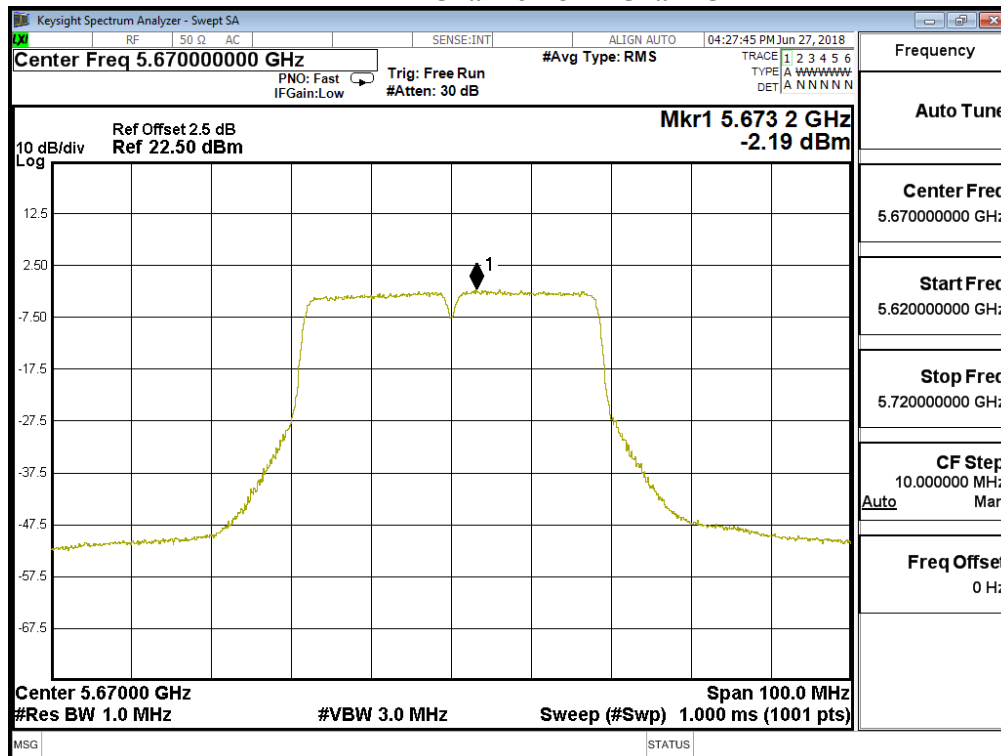
Channel 102 – Chain C



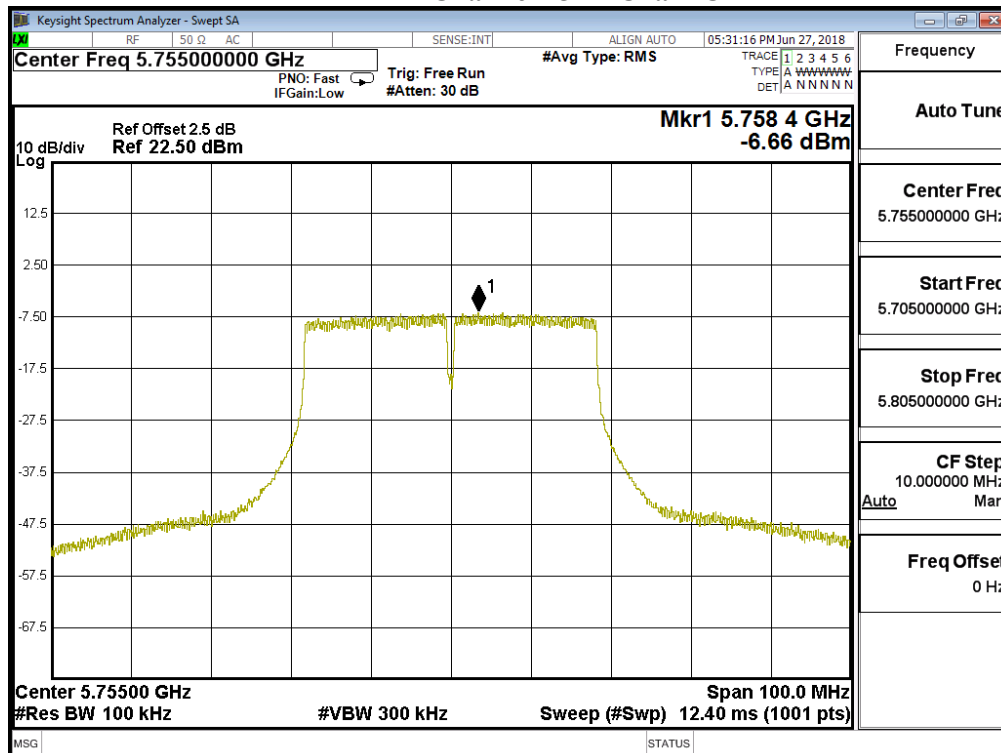
Channel 110 – Chain C



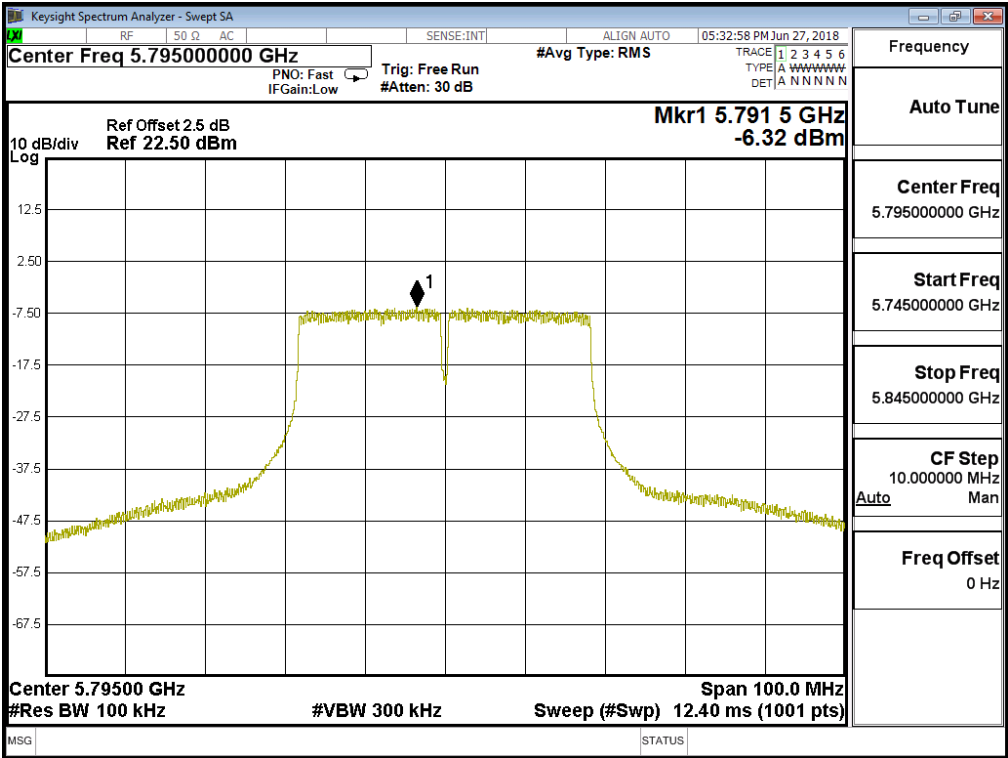
Channel 134 – Chain C



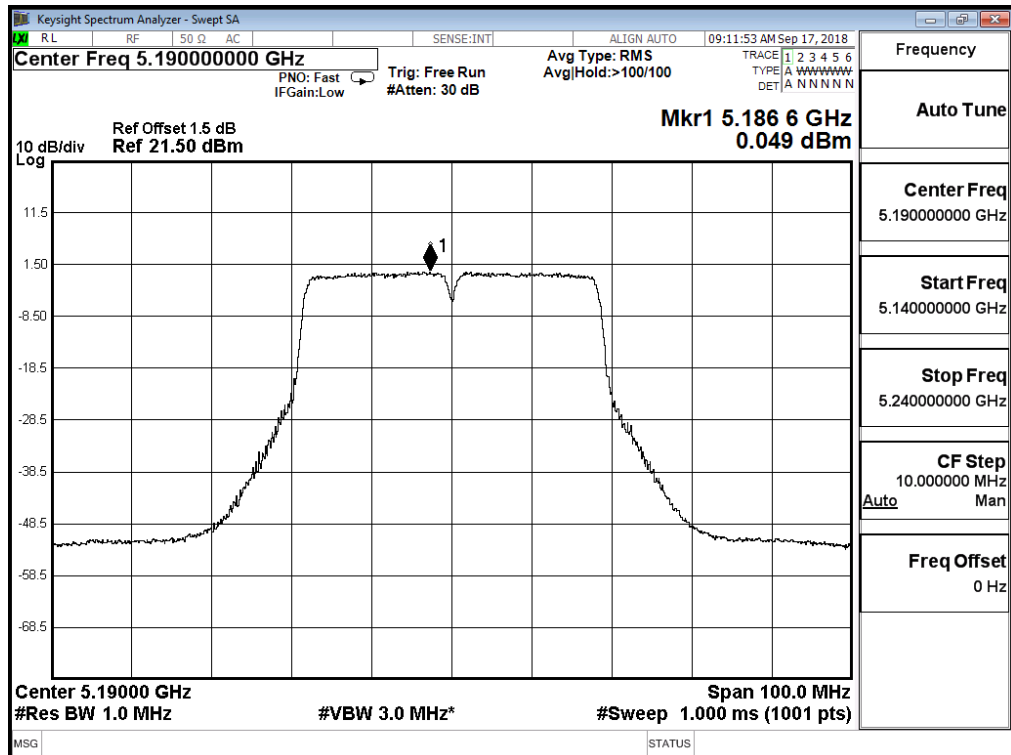
Channel 151 – Chain C



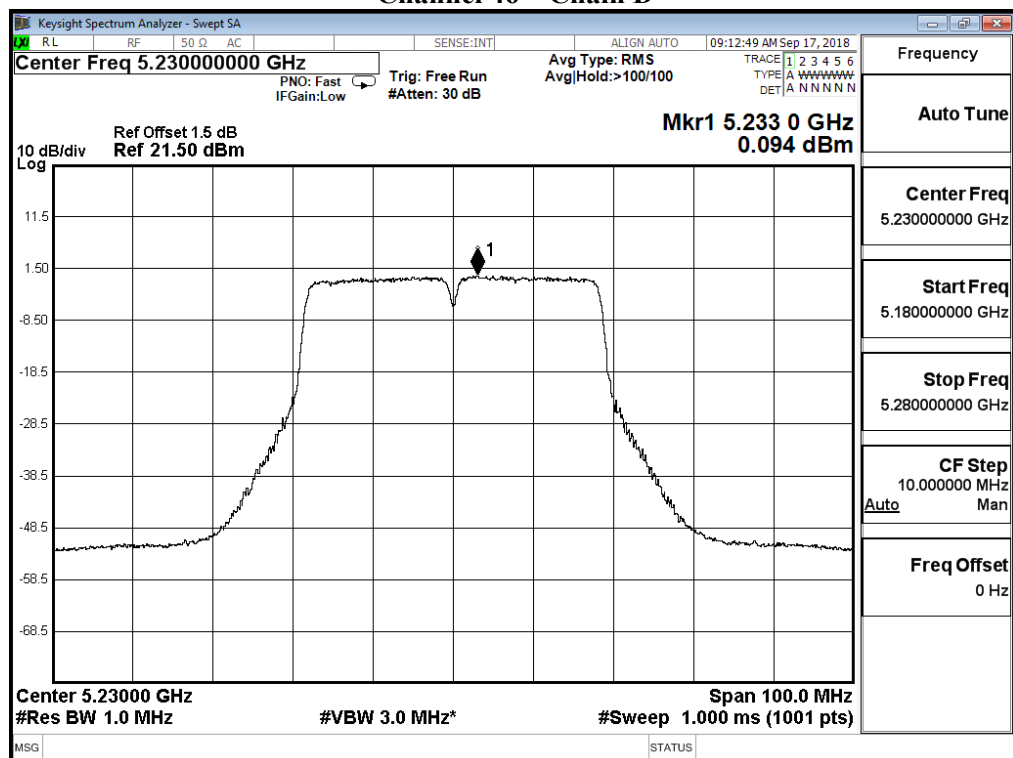
Channel 159 – Chain C



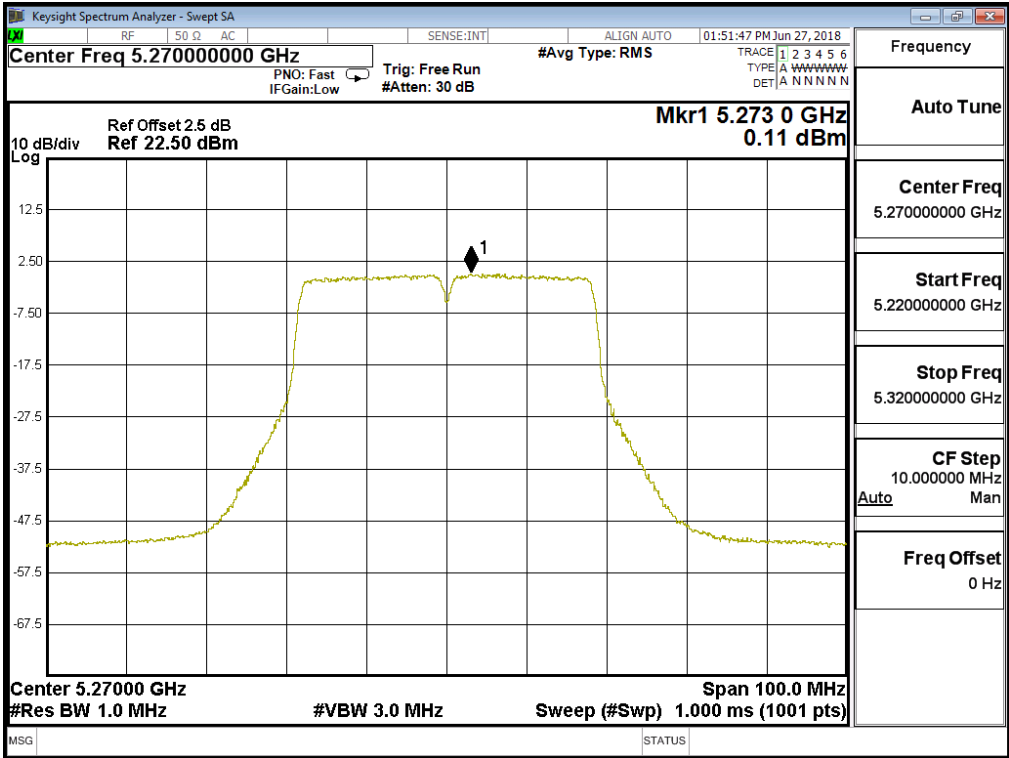
Channel 38 – Chain D



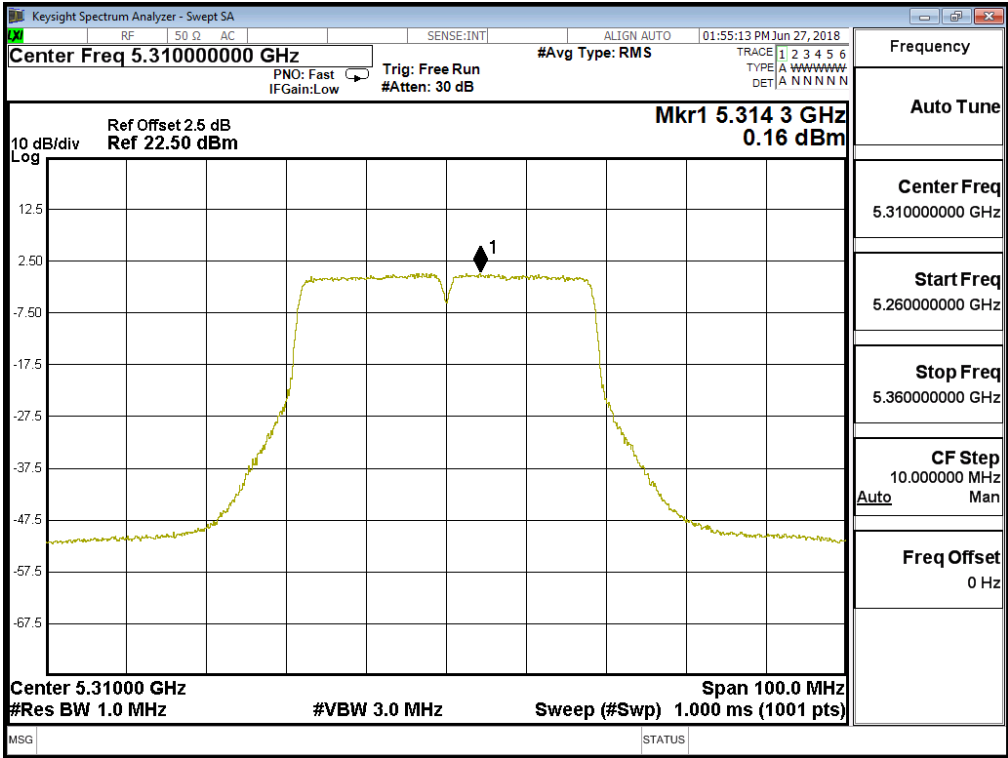
Channel 46 – Chain D



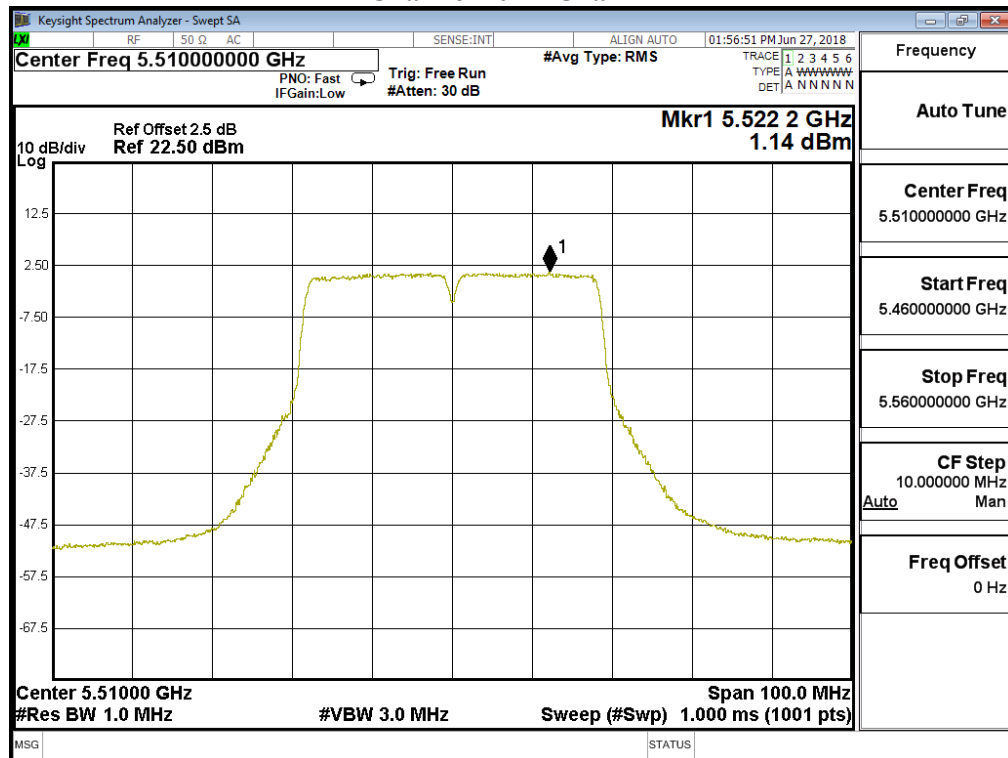
Channel 54 – Chain D



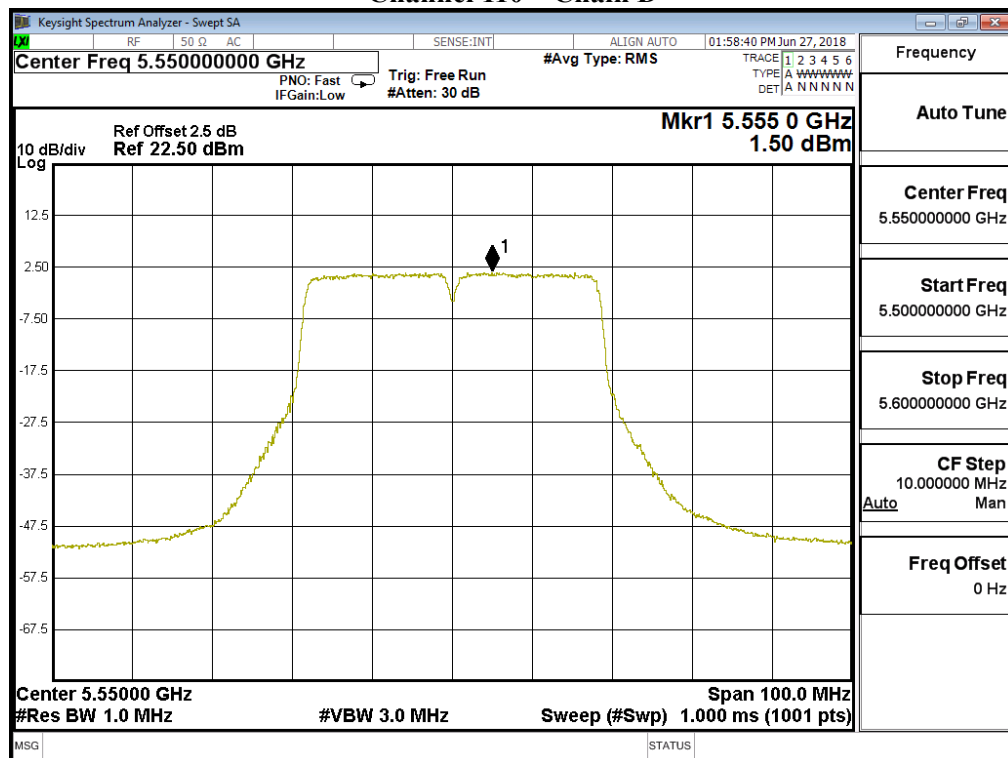
Channel 62 – Chain D



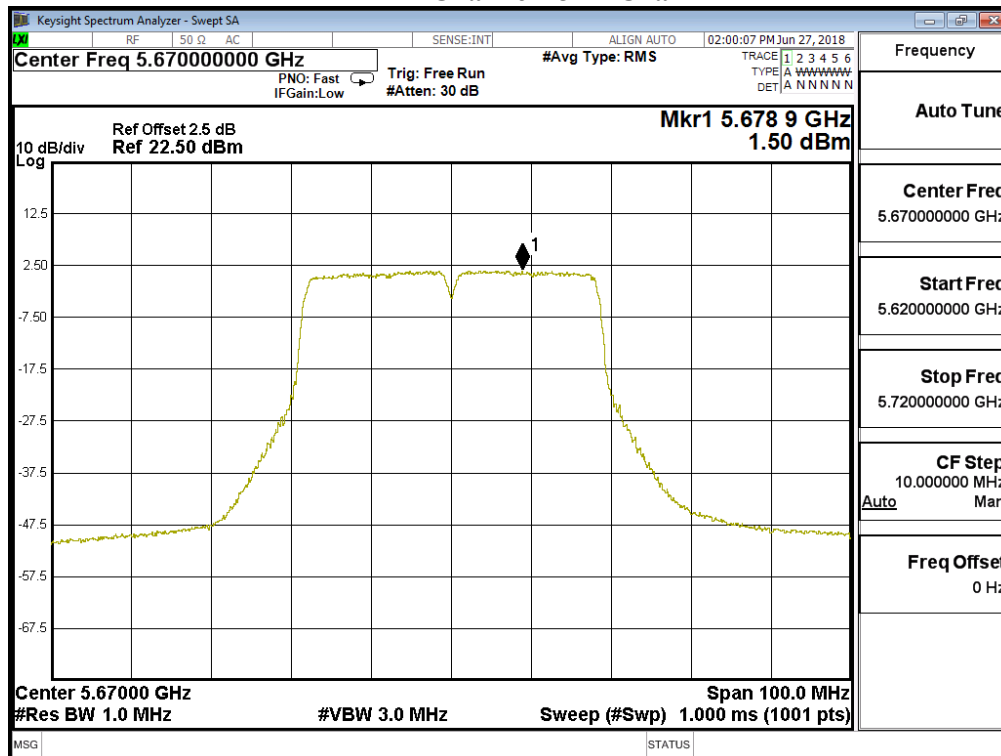
Channel 102 – Chain D



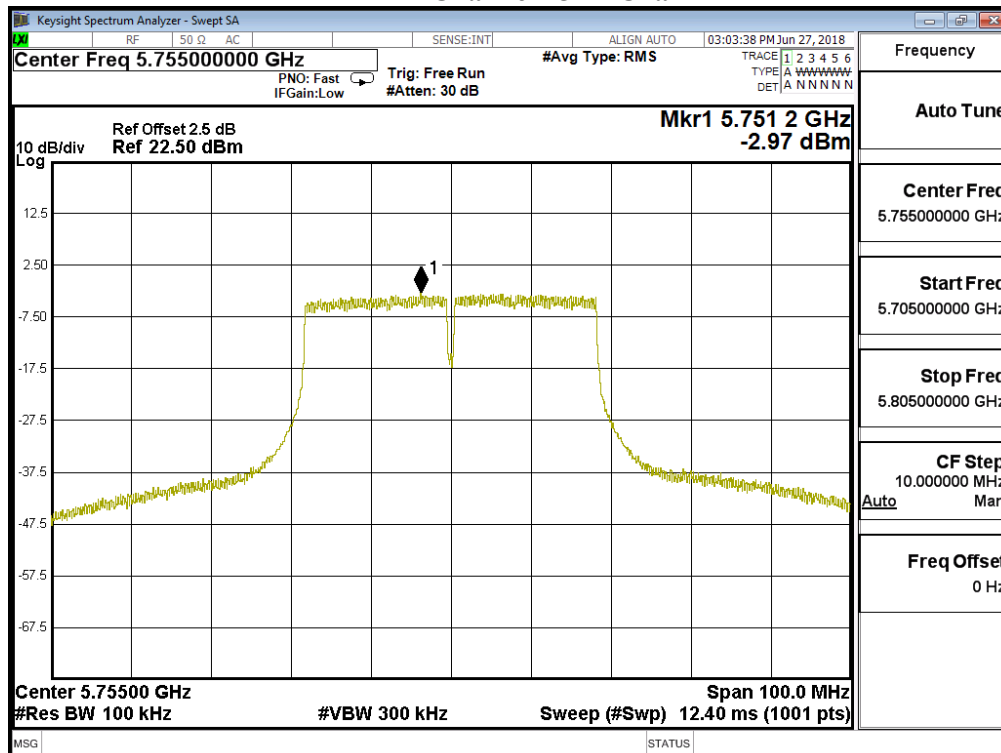
Channel 110 – Chain D



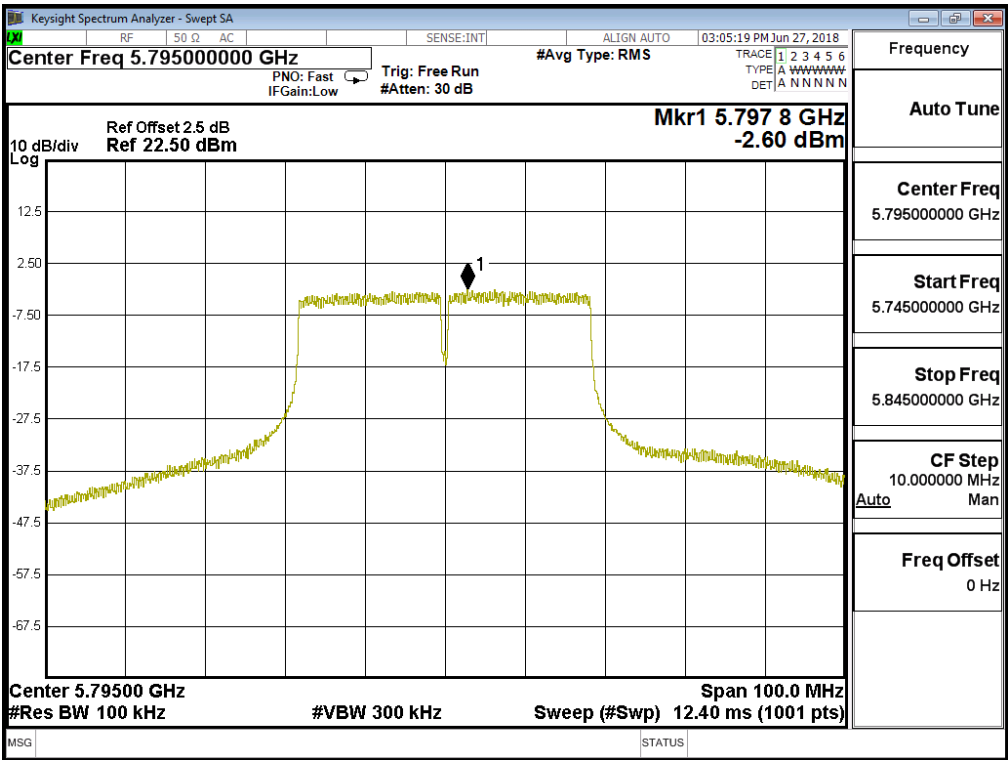
Channel 134 – Chain D



Channel 151 – Chain D



Channel 159 – Chain D

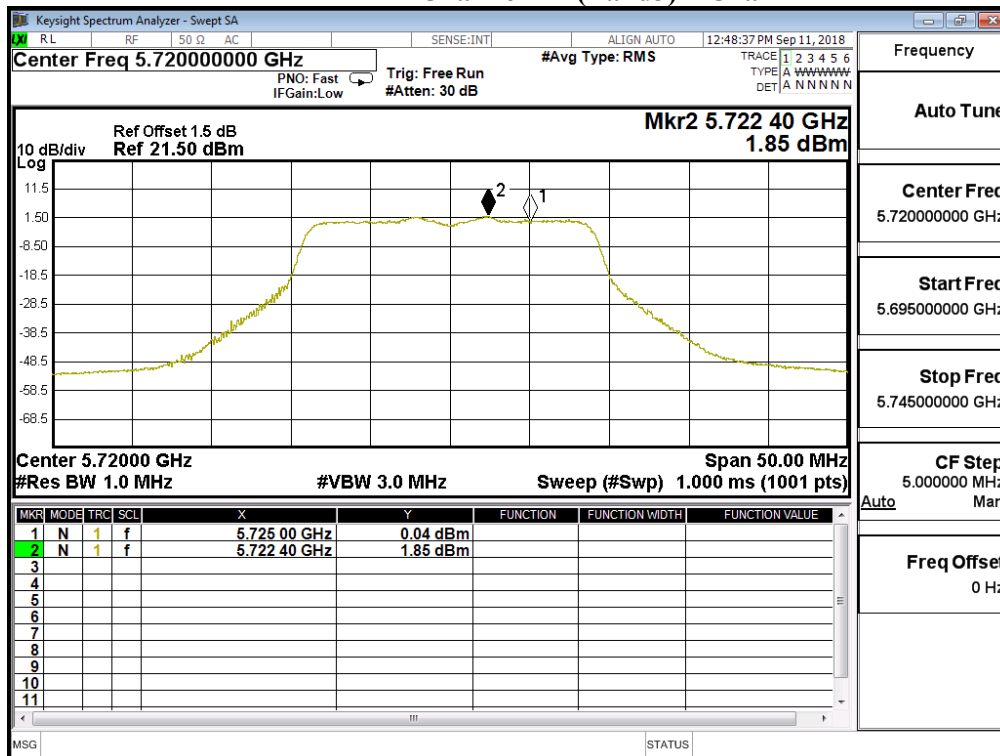


Product : MOXA IEEE 802.11a/n/ac 4*4 module
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Date : 2018/08/11
 Test Mode : Mode 4: Transmit (802.11ac-20BW-28.8Mbps) (Antenna No.1)

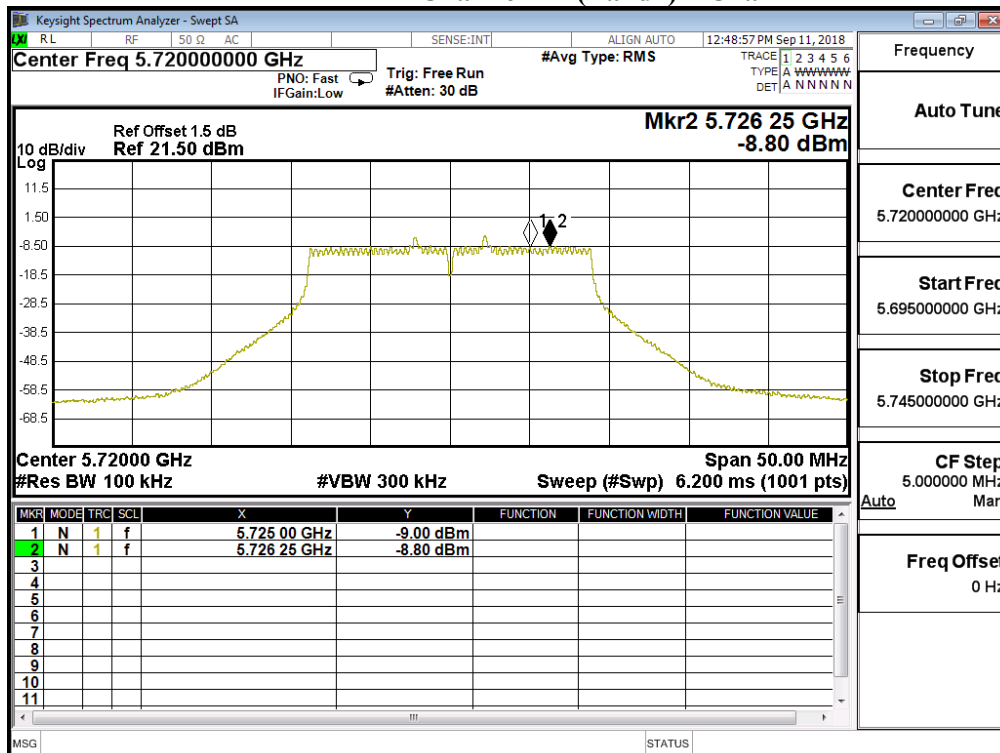
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Total PSD (dBm) ¹	Required Limit (dBm)	Result
144	5720(Band3)	A	1.850	--	7.870	<8.5	Pass
		B	2.020	--	8.040	<8.5	Pass
		C	1.870	--	7.890	<8.5	Pass
		D	1.780	--	7.800	<8.5	Pass
144	5720(Band4)	A	-8.800	6.98	4.200	<27.82	Pass
		B	-8.340	6.98	4.660	<27.82	Pass
		C	-8.670	6.98	4.330	<27.82	Pass
		D	-8.730	6.98	4.270	<27.82	Pass

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

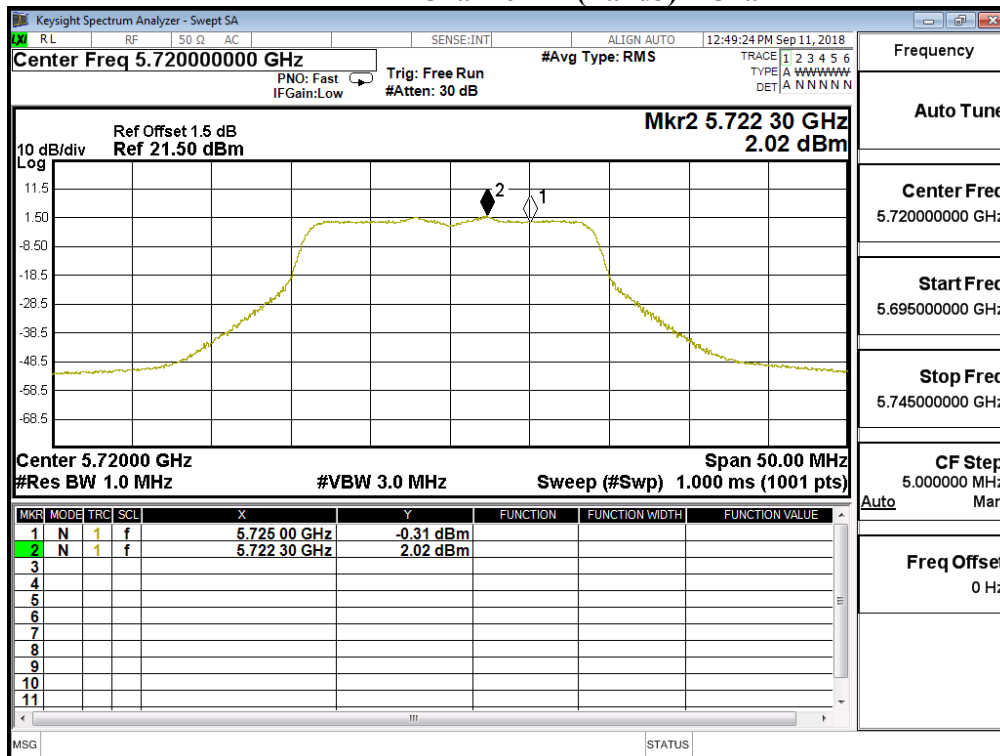
Channel 144(Band3) – Chain A



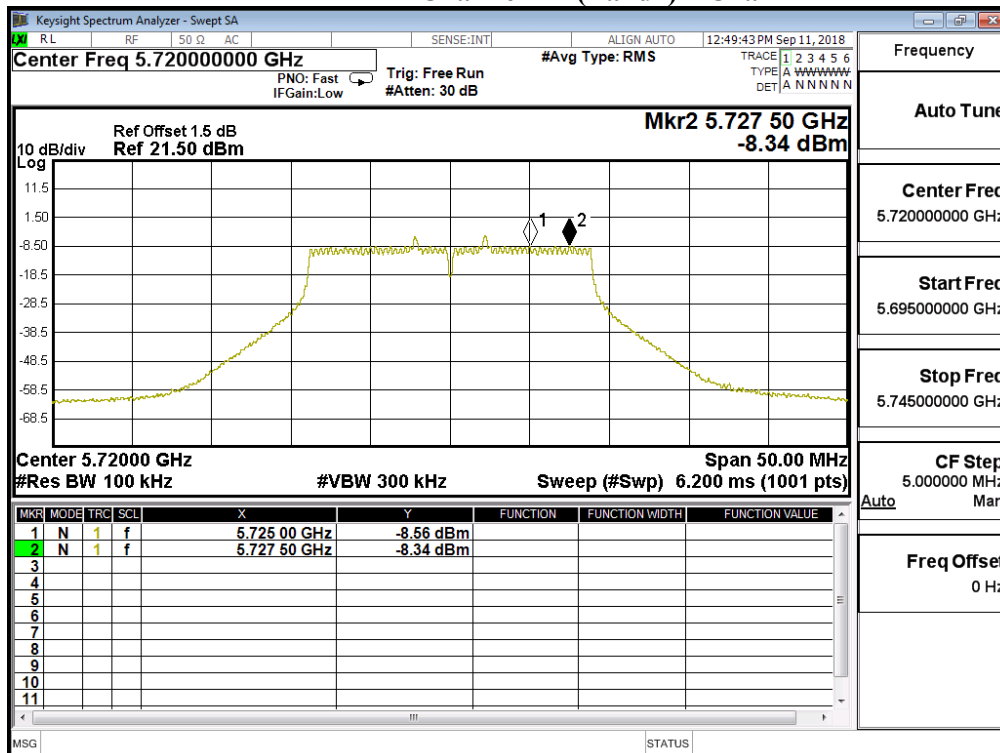
Channel 144(Band4) – Chain A



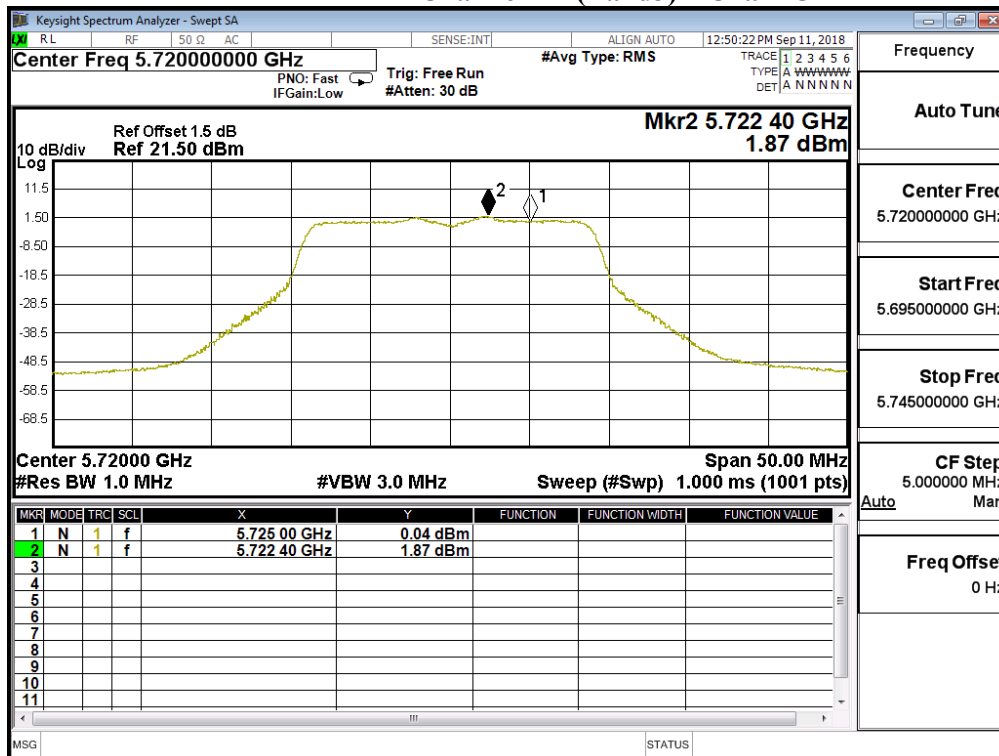
Channel 144(Band3) – Chain B



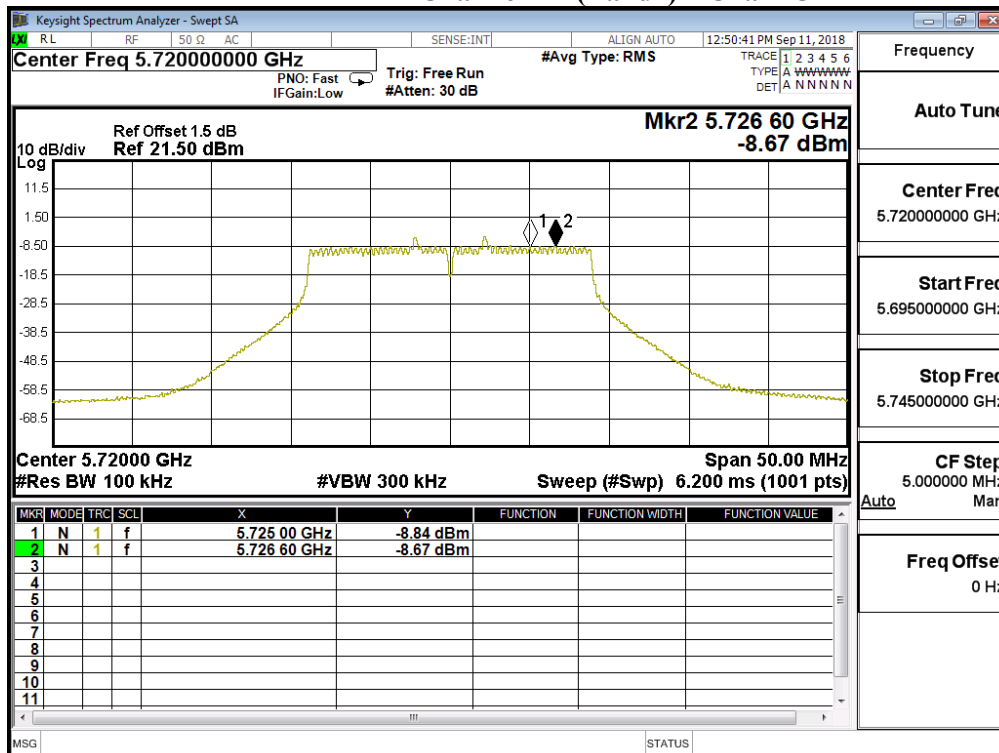
Channel 144(Band4) – Chain B



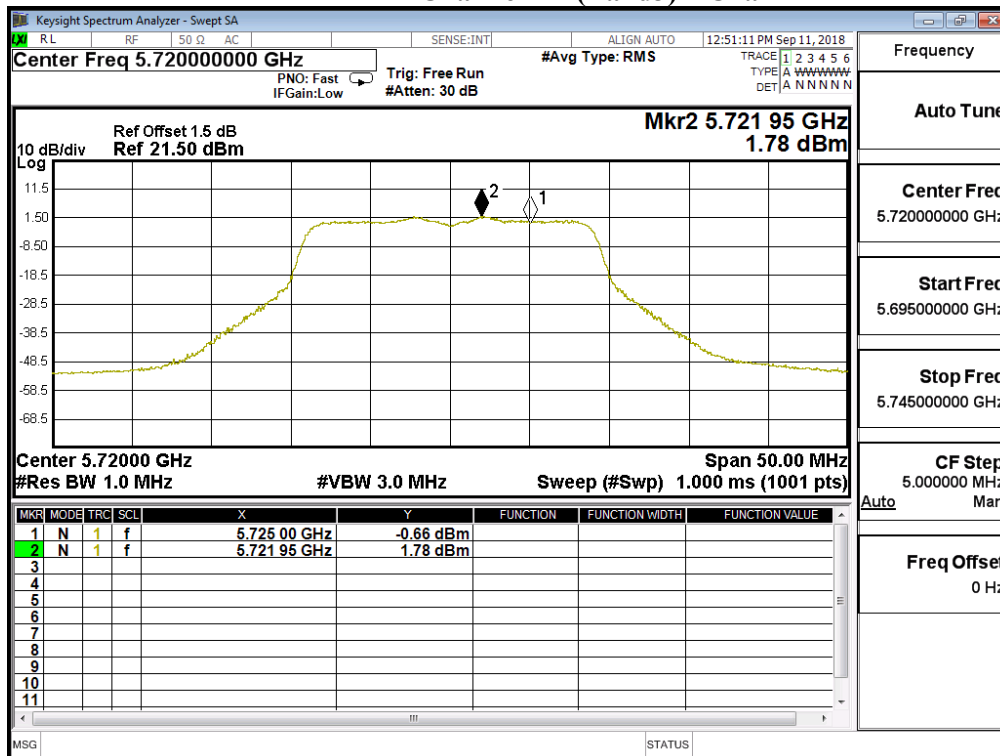
Channel 144(Band3) – Chain C



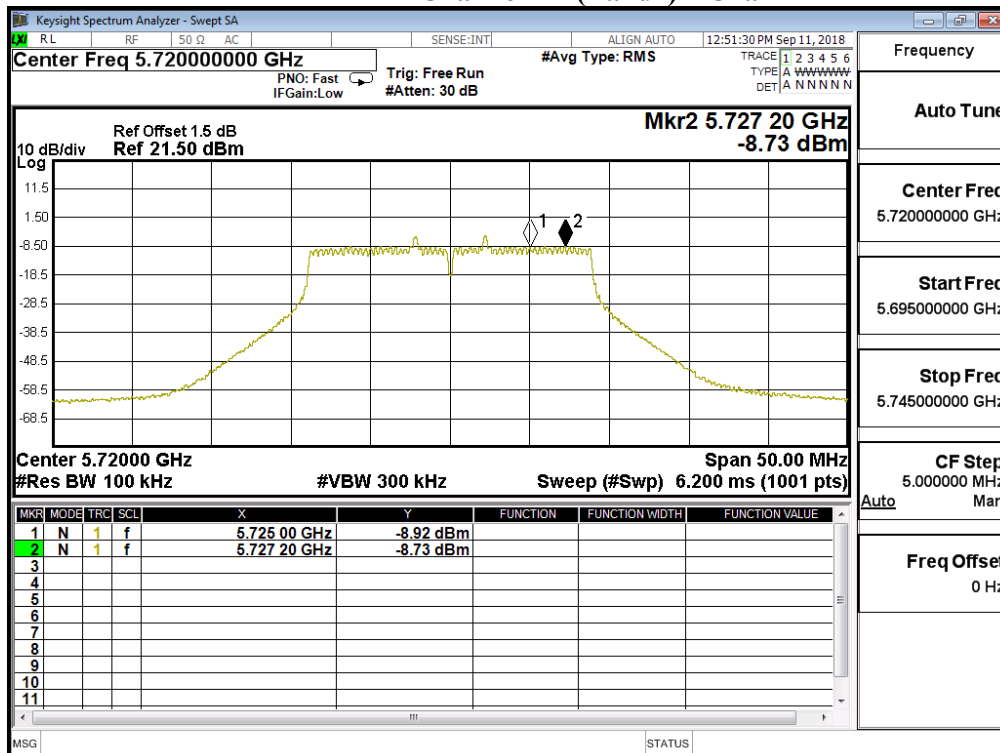
Channel 144(Band4) – Chain C



Channel 144(Band3) – Chain D



Channel 144(Band4) – Chain D

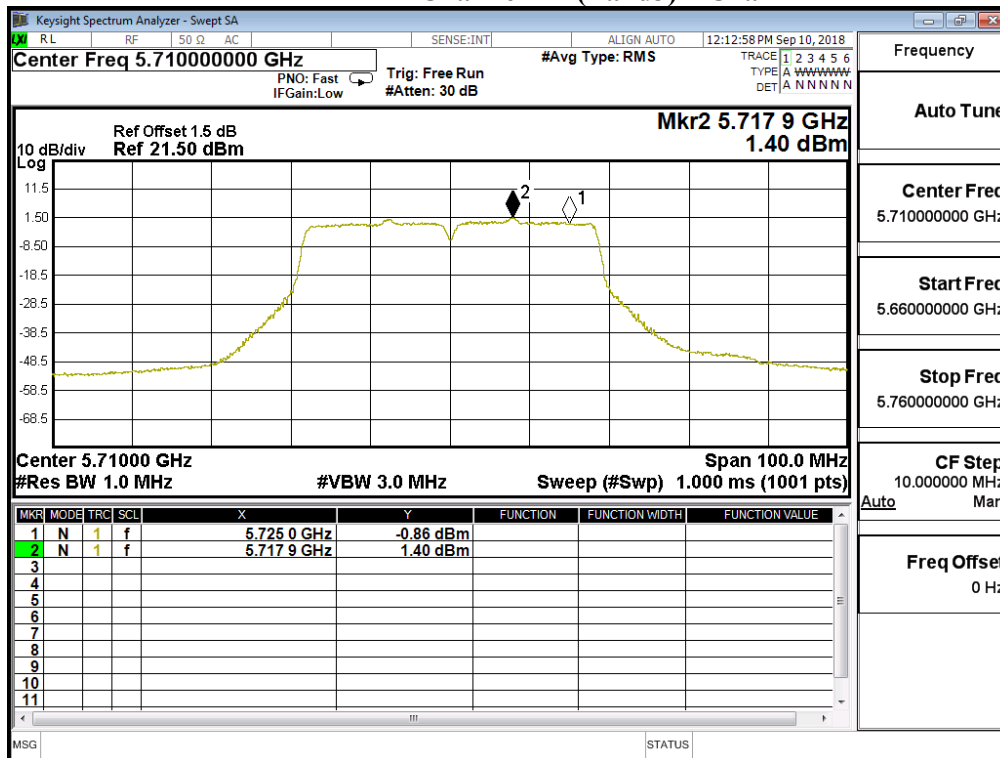


Product : MOXA IEEE 802.11a/n/ac 4*4 module
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Date : 2018/08/11
 Test Mode : Mode 5: Transmit (802.11ac-40BW-60Mbps) (Antenna No.1)

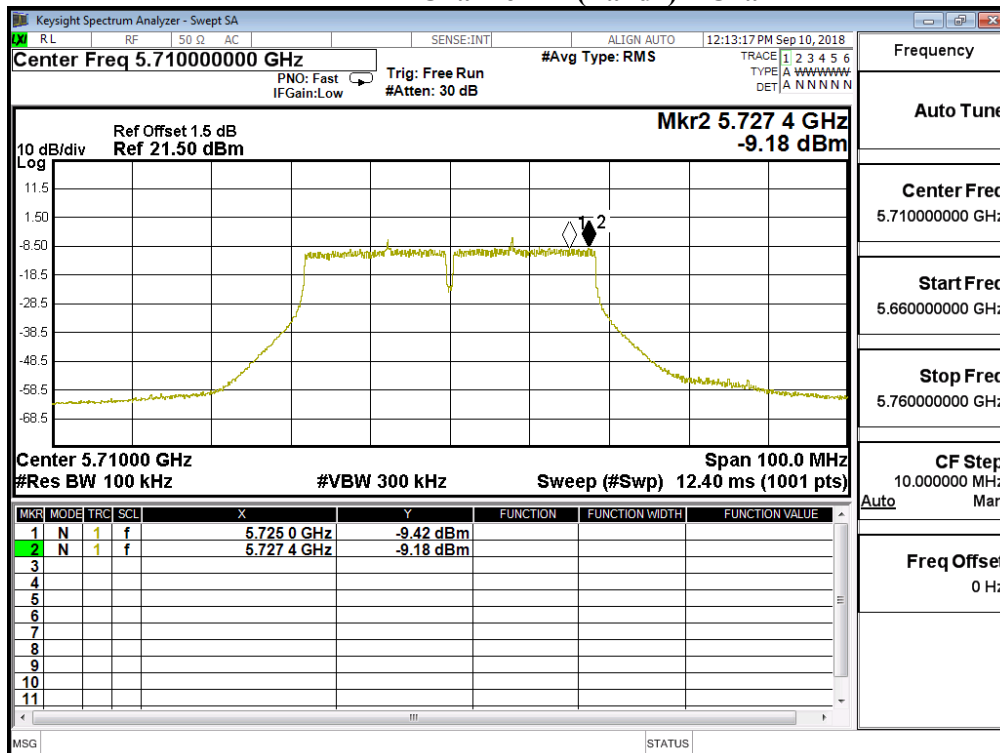
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Total PPSD (dBm) ¹	Required Limit (dBm)	Result
142	5710(Band3)	A	1.400	--	7.420	<8.5	Pass
		B	1.170	--	7.190	<8.5	Pass
		C	1.510	--	7.530	<8.5	Pass
		D	1.120	--	7.140	<8.5	Pass
142	5710(Band4)	A	-9.180	6.98	3.820	<27.82	Pass
		B	-9.230	6.98	3.770	<27.82	Pass
		C	-9.380	6.98	3.620	<27.82	Pass
		D	-8.850	6.98	4.150	<27.82	Pass

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

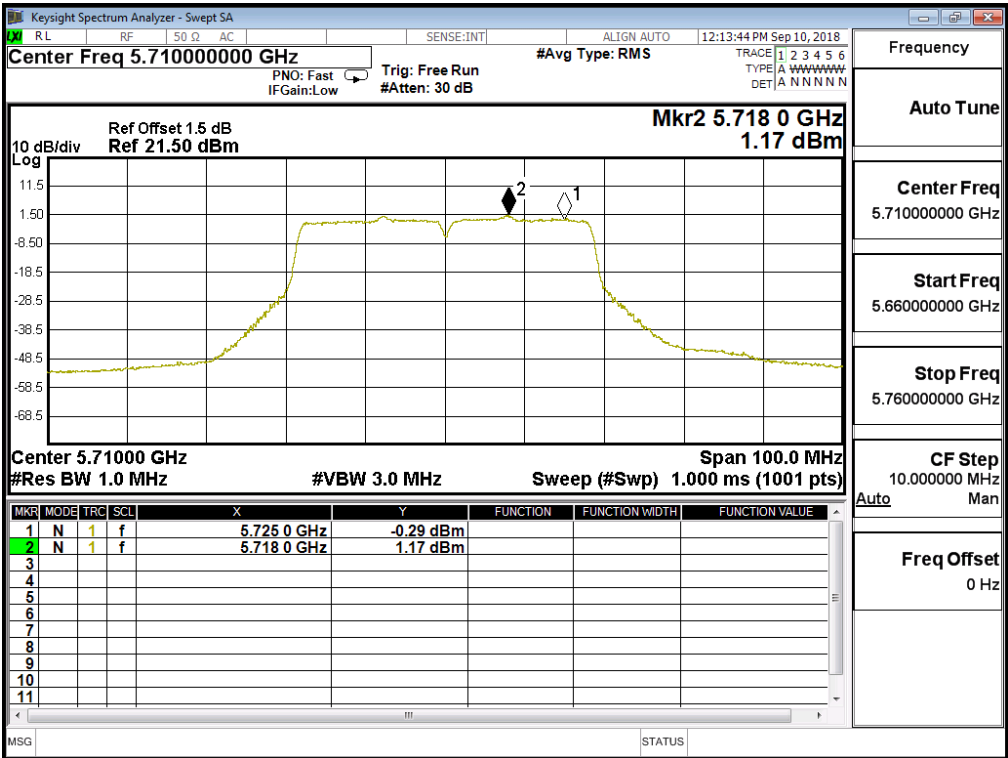
Channel 142(Band3) – Chain A



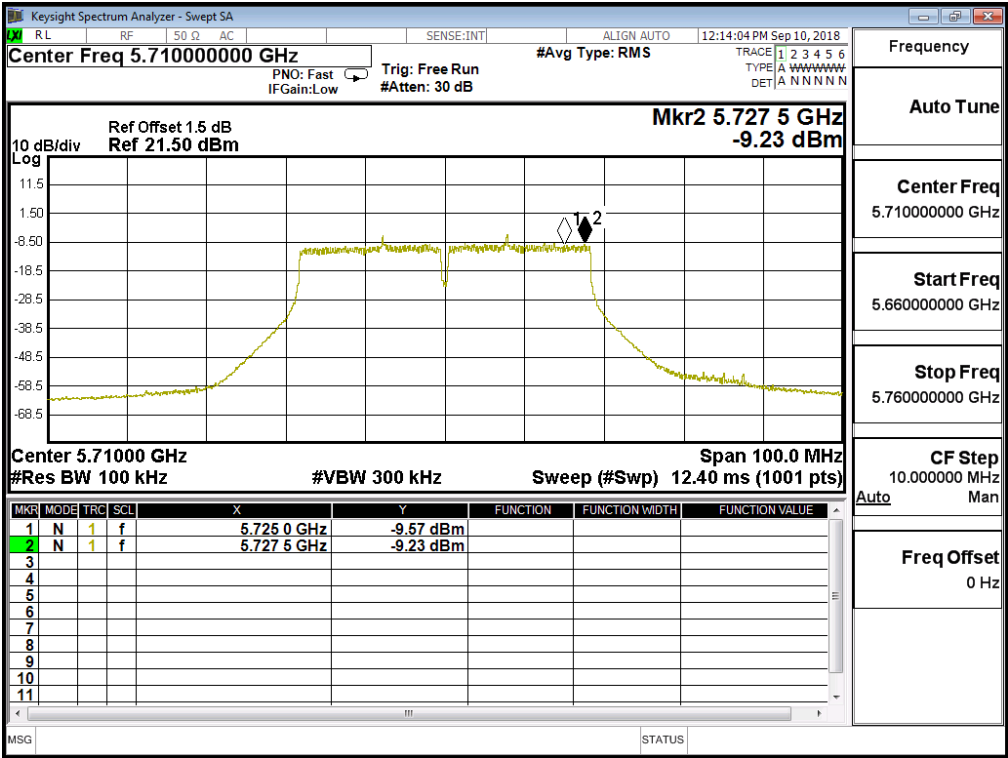
Channel 142(Band4) – Chain A



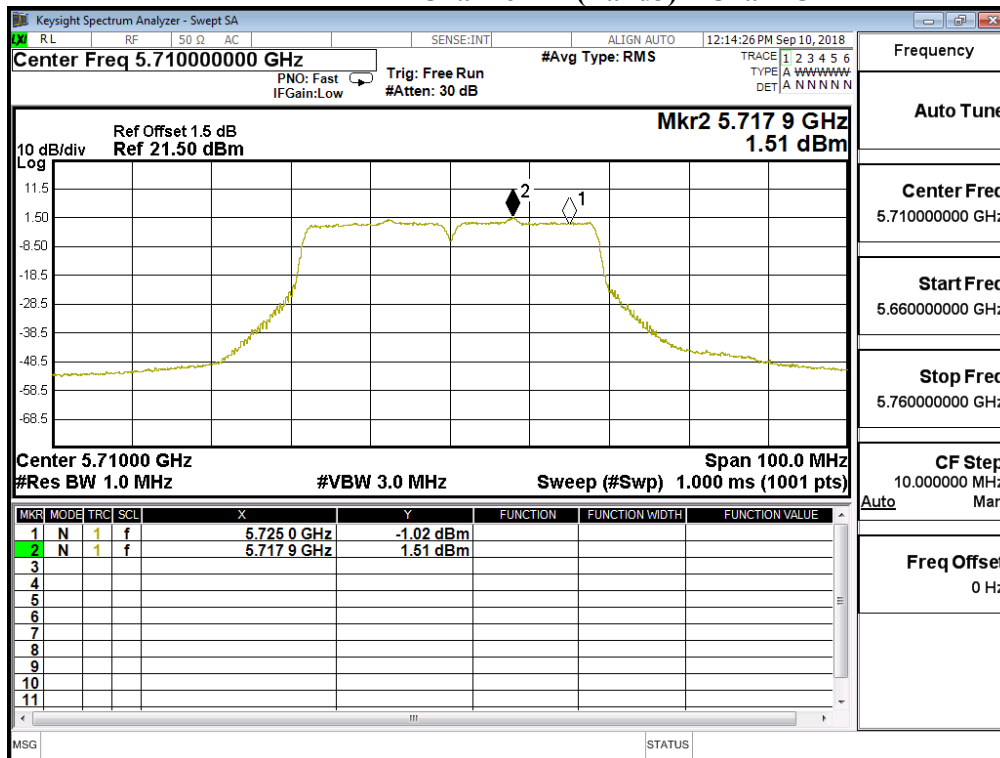
Channel 142(Band3) – Chain B



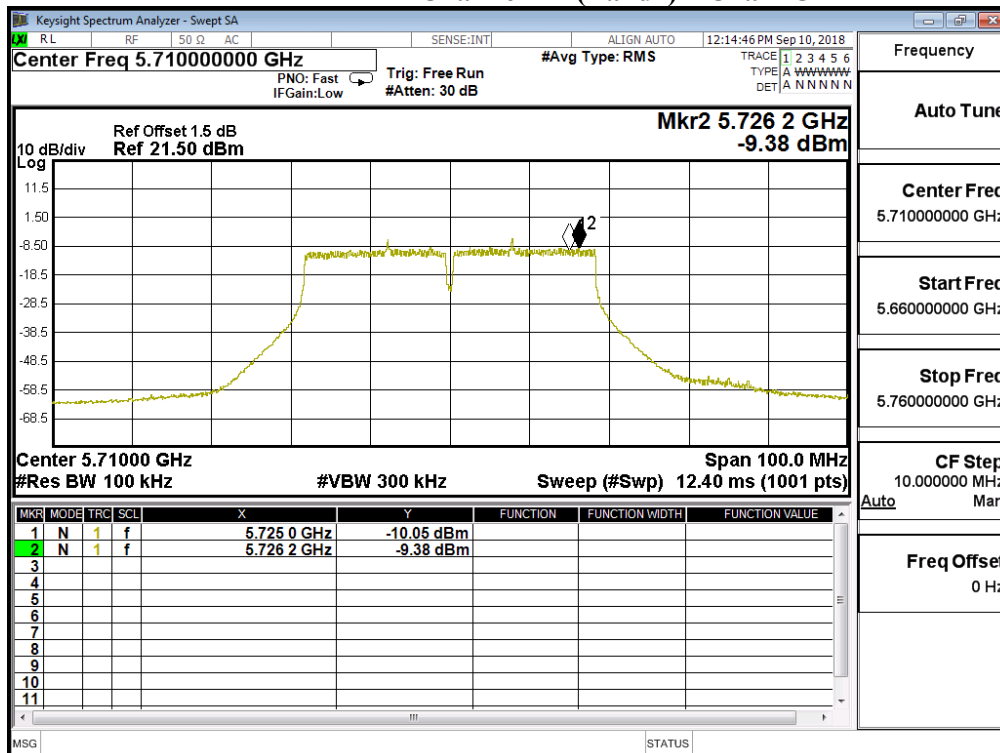
Channel 142(Band4) – Chain B



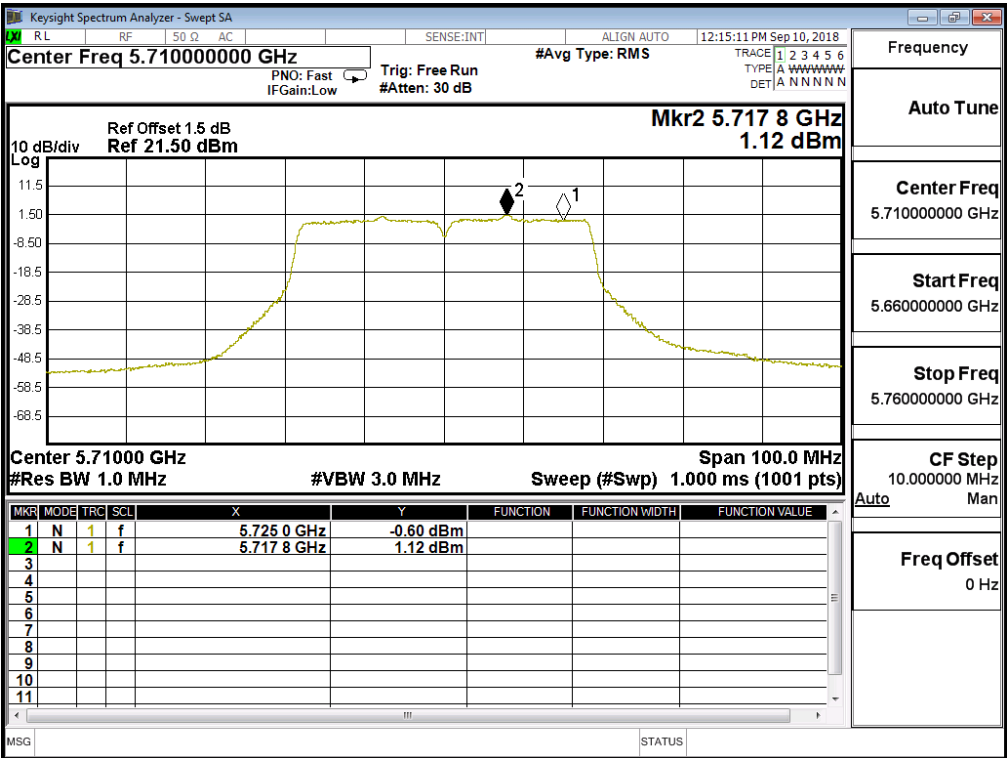
Channel 142(Band3) – Chain C



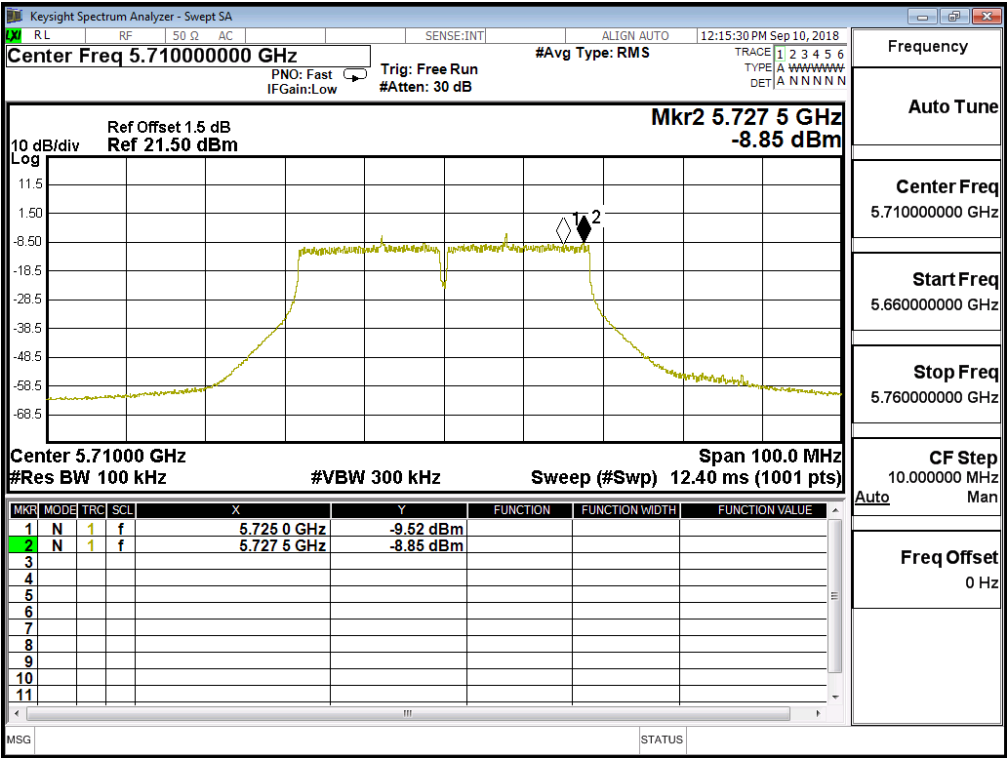
Channel 142(Band4) – Chain C



Channel 142(Band3) – Chain D



Channel 142(Band4) – Chain D



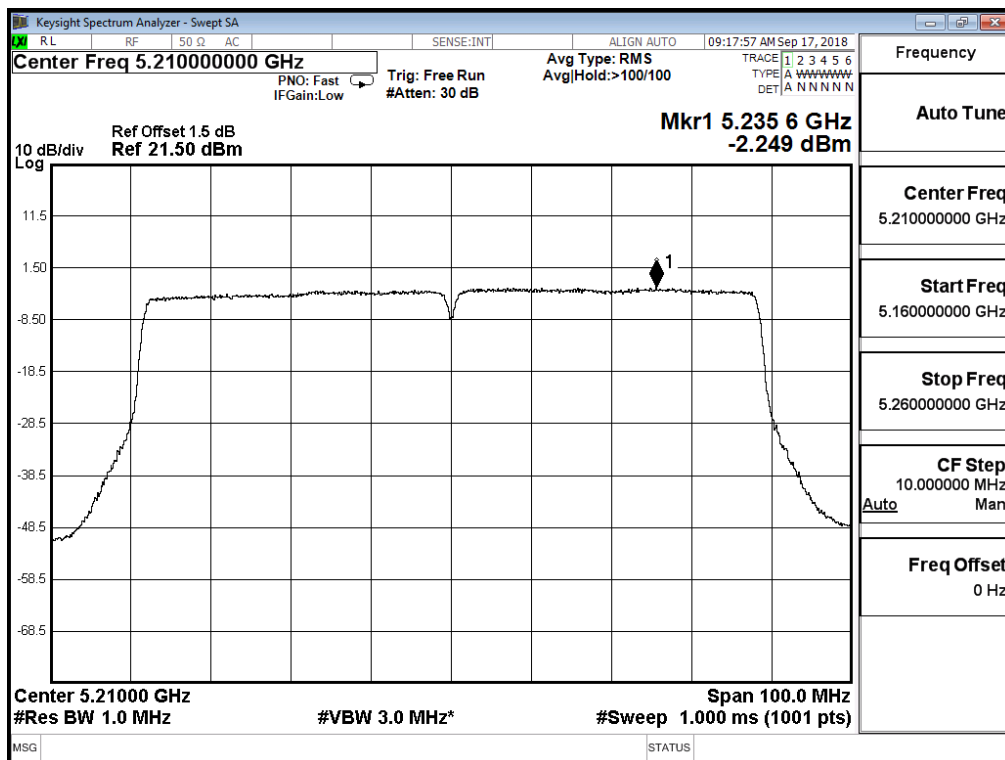
Product : MOXA IEEE 802.11a/n/ac 4*4 module
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Date : 2018/07/20
 Test Mode : Mode 6: Transmit (802.11ac-80BW-130Mbps) (Antenna No.1)

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	Total PSD (dBm)	Required Limit (dBm)	Result
42	5210	A	-2.249	3.771	<8.23	Pass
		B	-2.701	3.319	<8.23	Pass
		C	-2.112	3.908	<8.23	Pass
		D	-2.922	3.098	<8.23	Pass
58	5290	A	-3.560	2.460	<8.23	Pass
		B	-3.910	2.110	<8.23	Pass
		C	-2.960	3.060	<8.23	Pass
		D	-3.380	2.640	<8.23	Pass
106	5530	A	-3.460	2.560	<8.23	Pass
		B	-5.480	0.540	<8.5	Pass
		C	-4.160	1.860	<8.5	Pass
		D	-1.980	4.040	<8.5	Pass
122	5610	A	-3.810	2.210	<8.5	Pass
		B	-5.020	1.000	<8.5	Pass
		C	-4.990	1.030	<8.5	Pass
		D	-1.540	4.480	<8.5	Pass
138	5690 (Band3)	A	-4.460	1.560	<8.5	Pass
		B	-0.550	5.470	<8.5	Pass
		C	-2.040	3.980	<8.5	Pass
		D	-1.950	4.070	<8.5	Pass

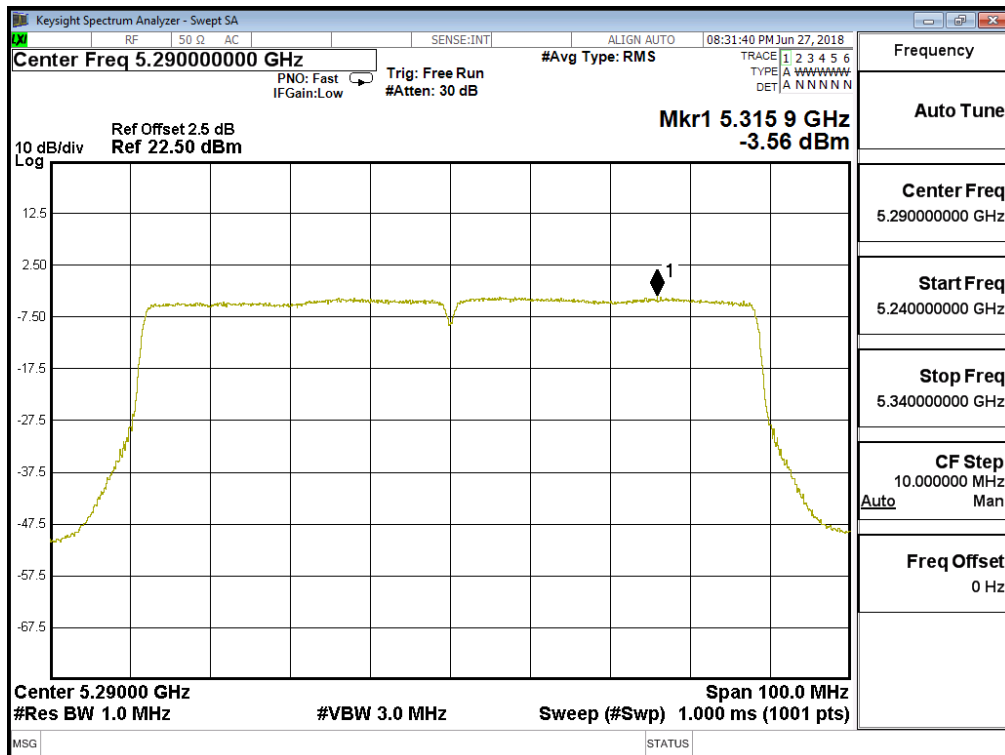
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Total PSD (dBm) ₁	Required Limit (dBm)	Result
138	5690 (Band4)	A	-14.190	6.98	-1.190	<27.82	Pass
		B	-9.810	6.98	3.190	<27.82	Pass
		C	-11.810	6.98	1.190	<27.82	Pass
		D	-11.520	6.98	1.480	<27.82	Pass
155	5775	A	-6.570	6.98	6.430	<27.82	Pass
		B	-6.190	6.98	6.810	<27.82	Pass
		C	-8.010	6.98	4.990	<27.82	Pass
		D	-4.220	6.98	8.780	<27.82	Pass

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

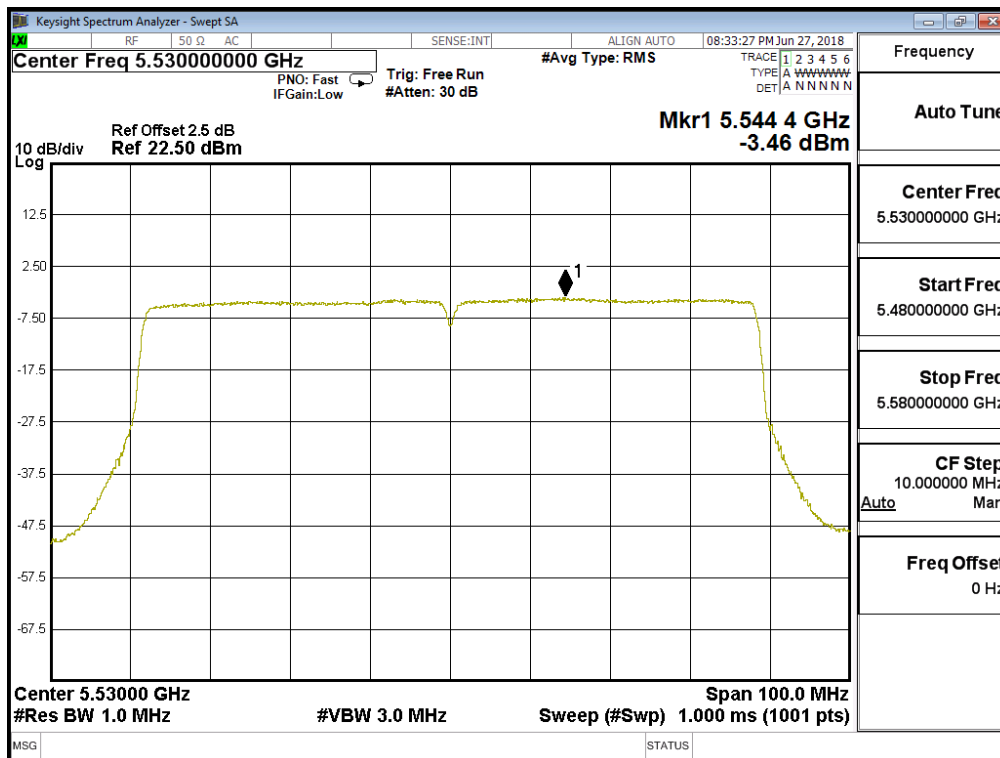
Channel 42 – Chain A



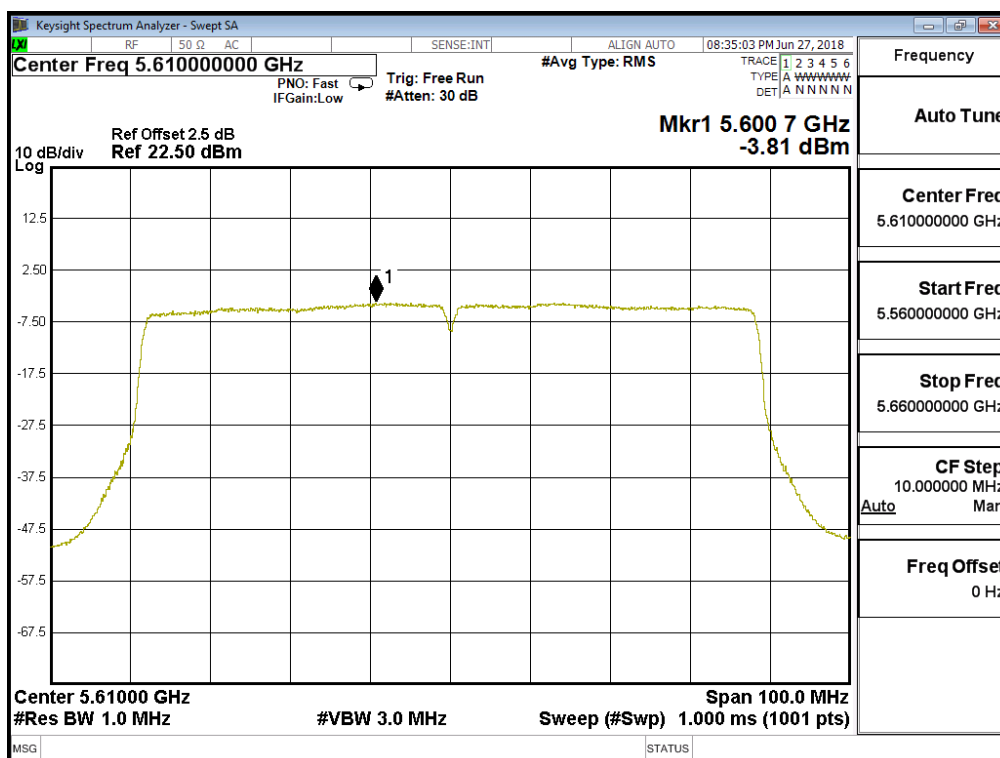
Channel 58 – Chain A



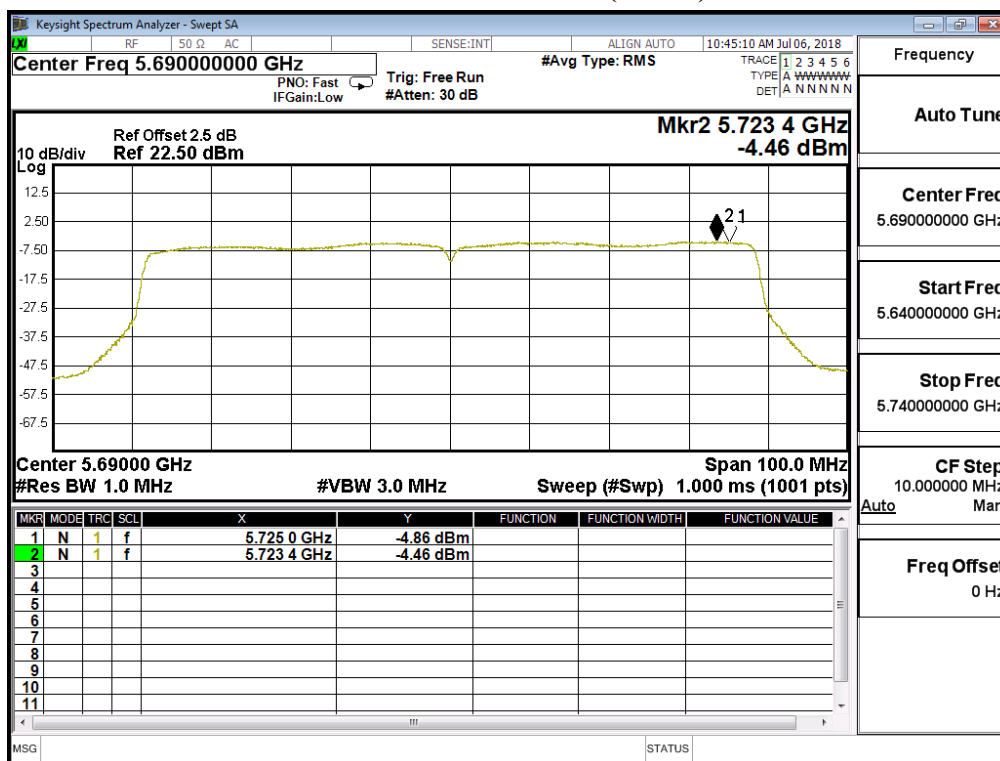
Channel 106 – Chain A



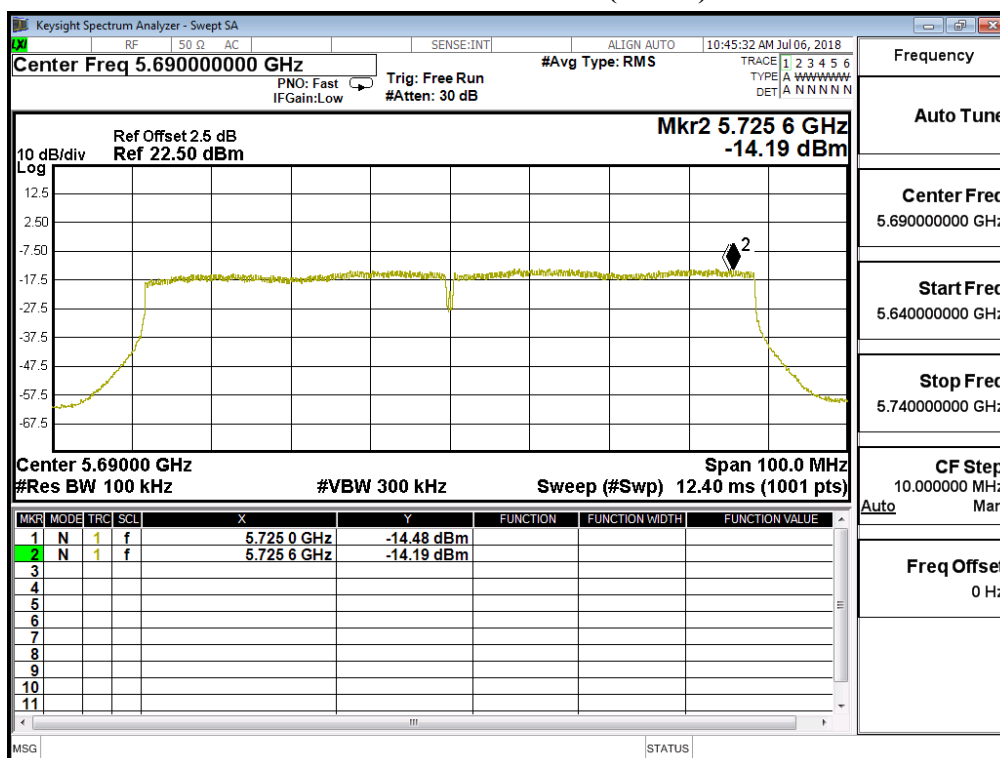
Channel 122 – Chain A



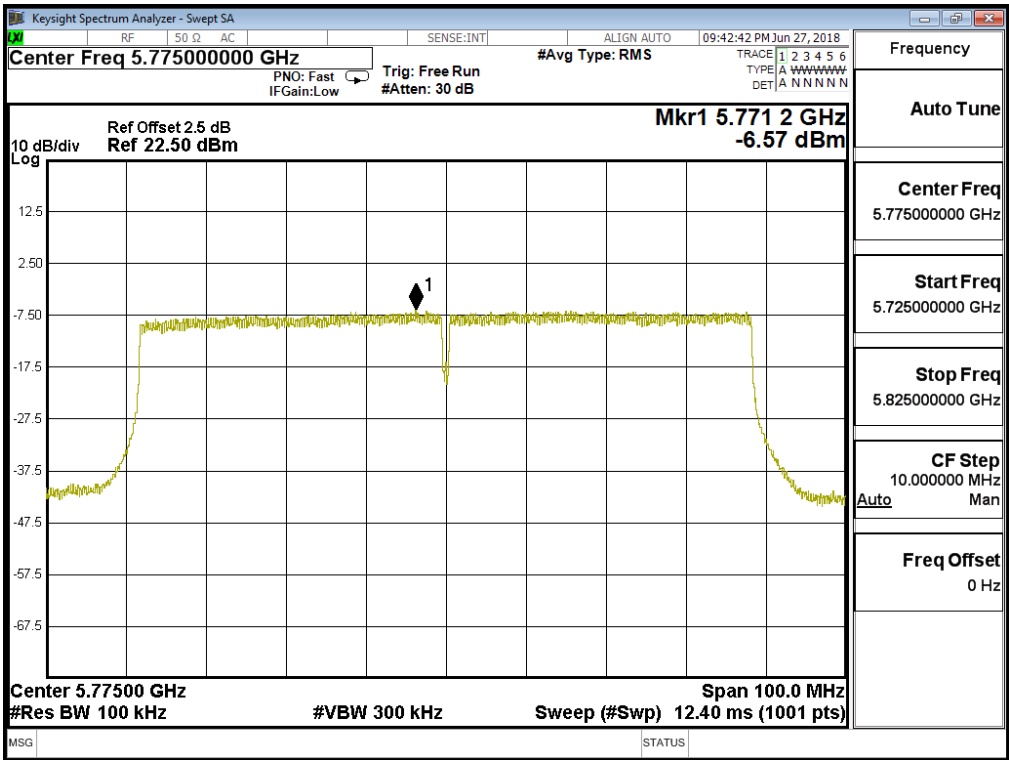
Channel 138(Band3) – Chain A



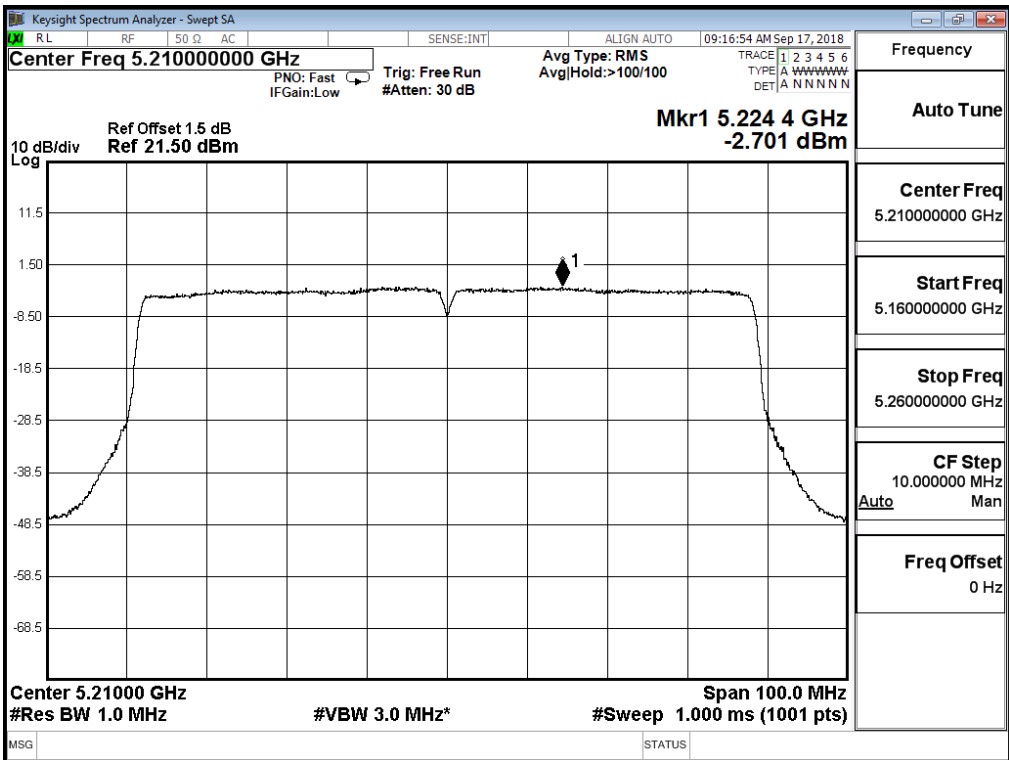
Channel 138(Band4) – Chain A



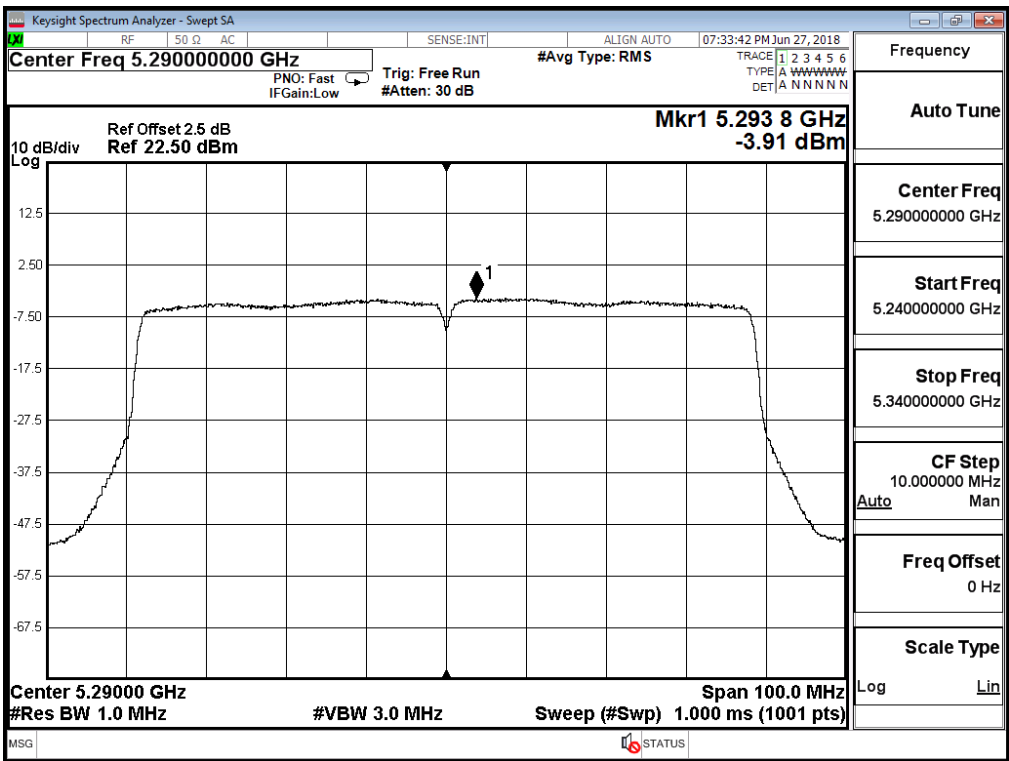
Channel 155: CHAIN A



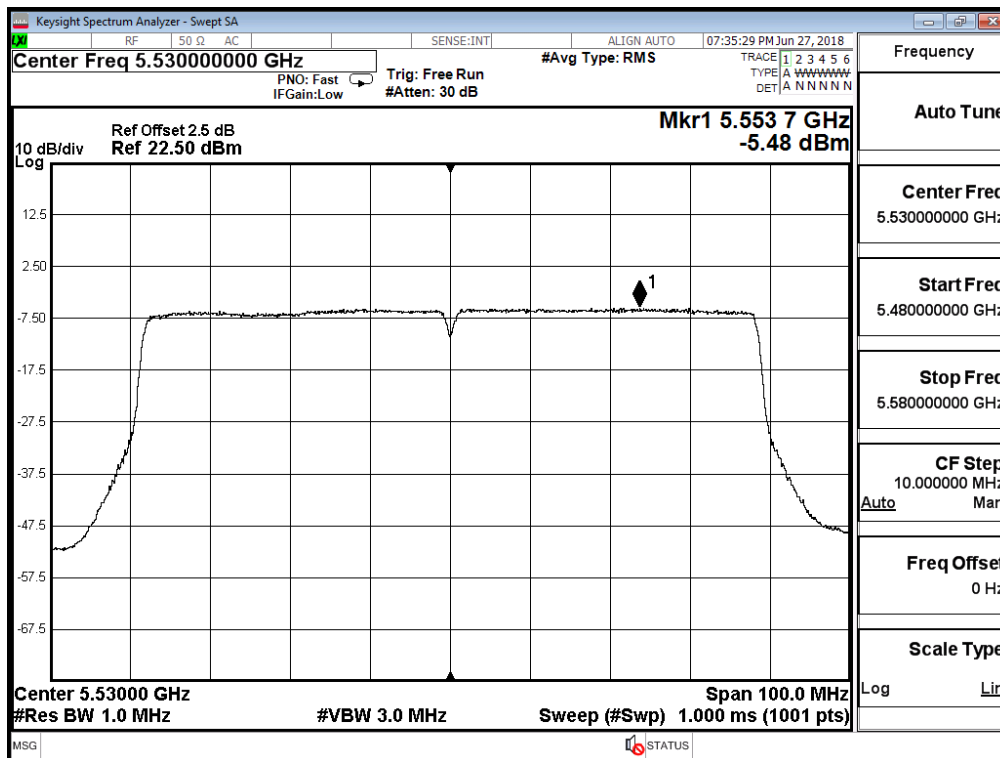
Channel 42 – Chain B



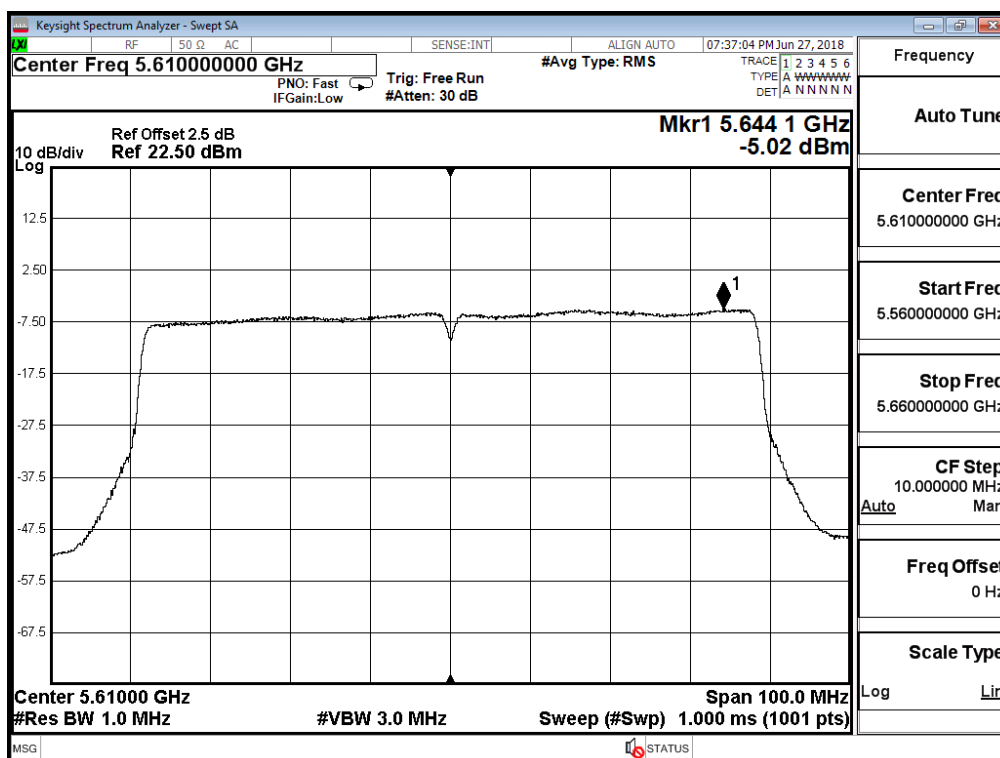
Channel 58 – Chain B



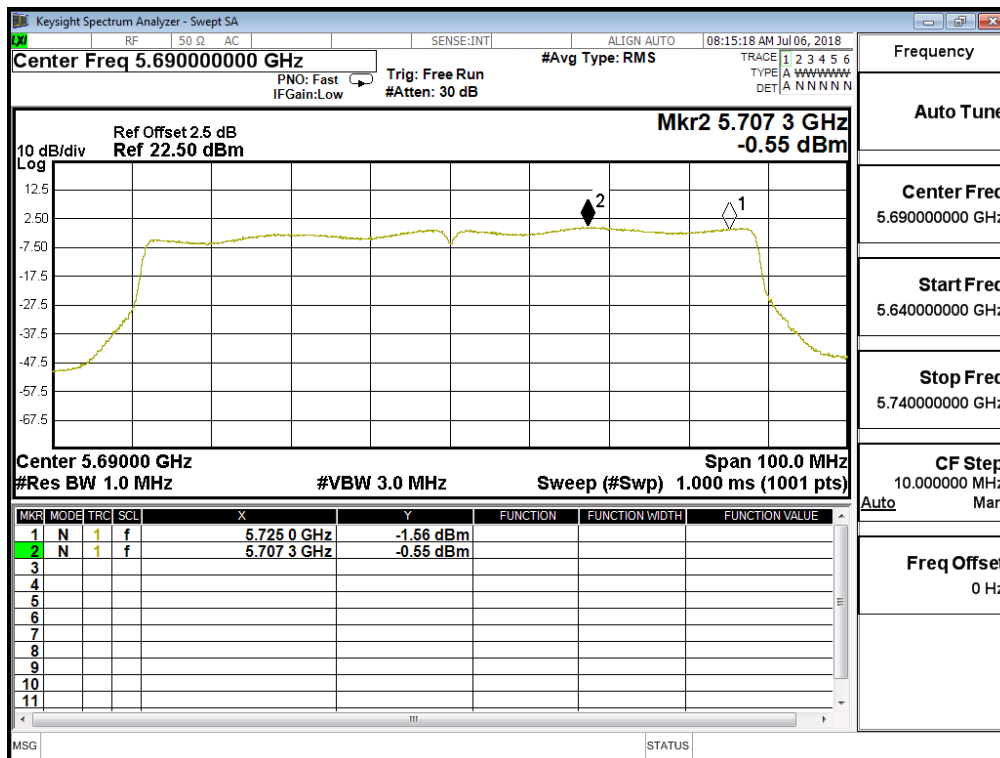
Channel 106 – Chain B



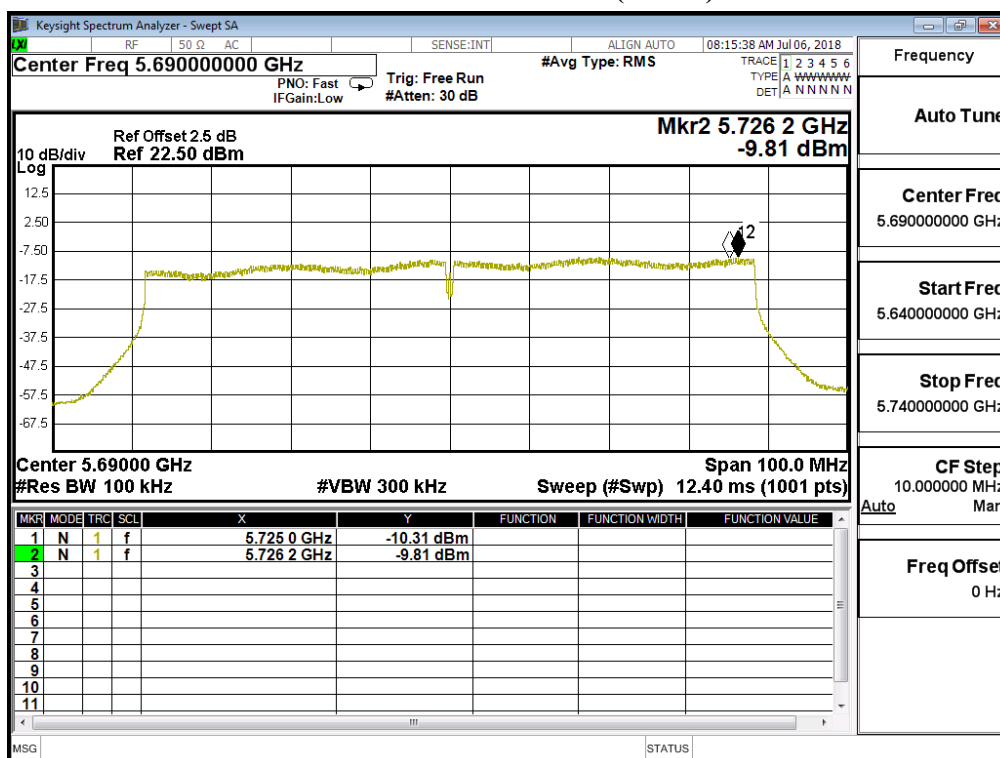
Channel 122 – Chain B



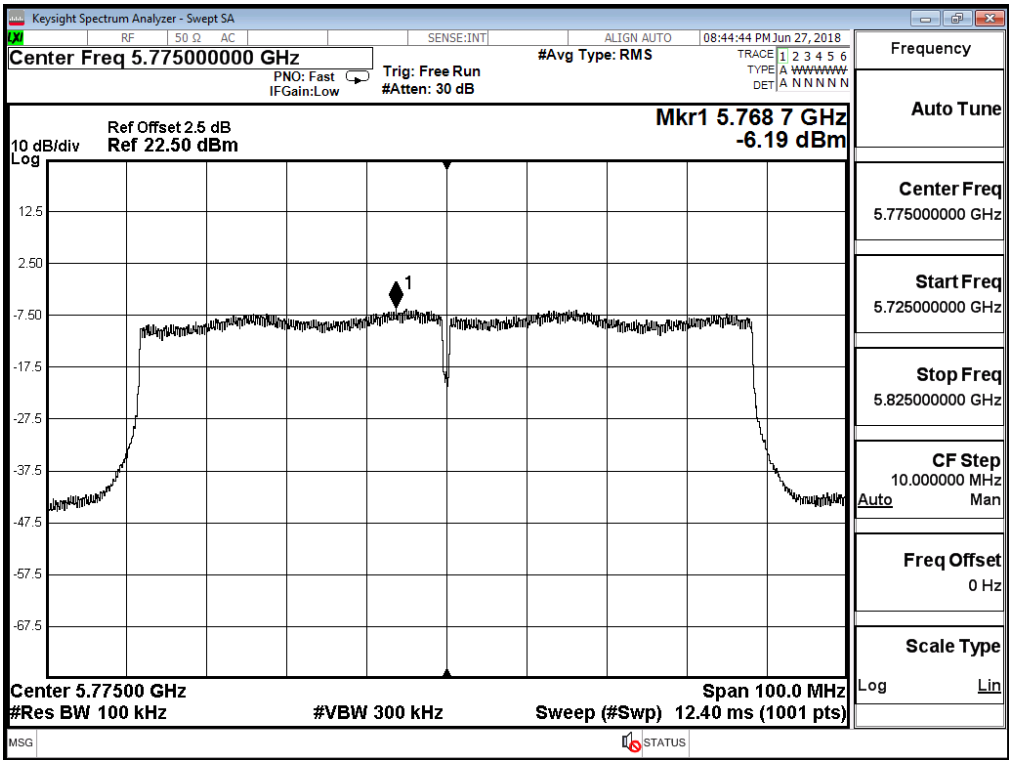
Channel 138 (Band3) – Chain B



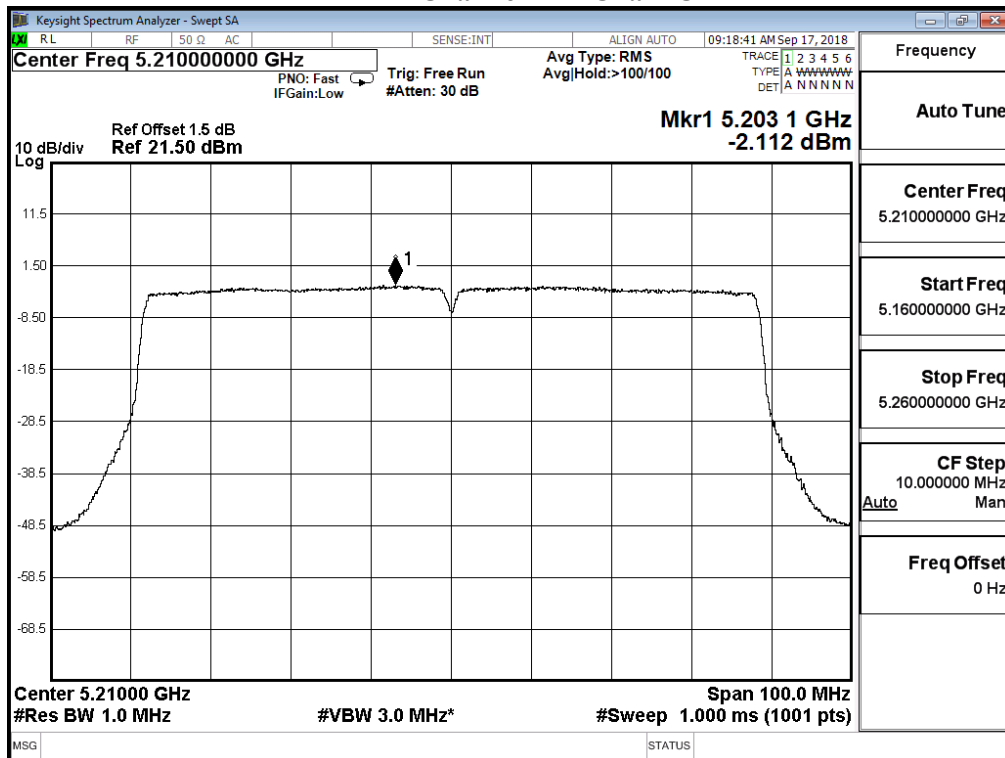
Channel 138 (Band4) – Chain B



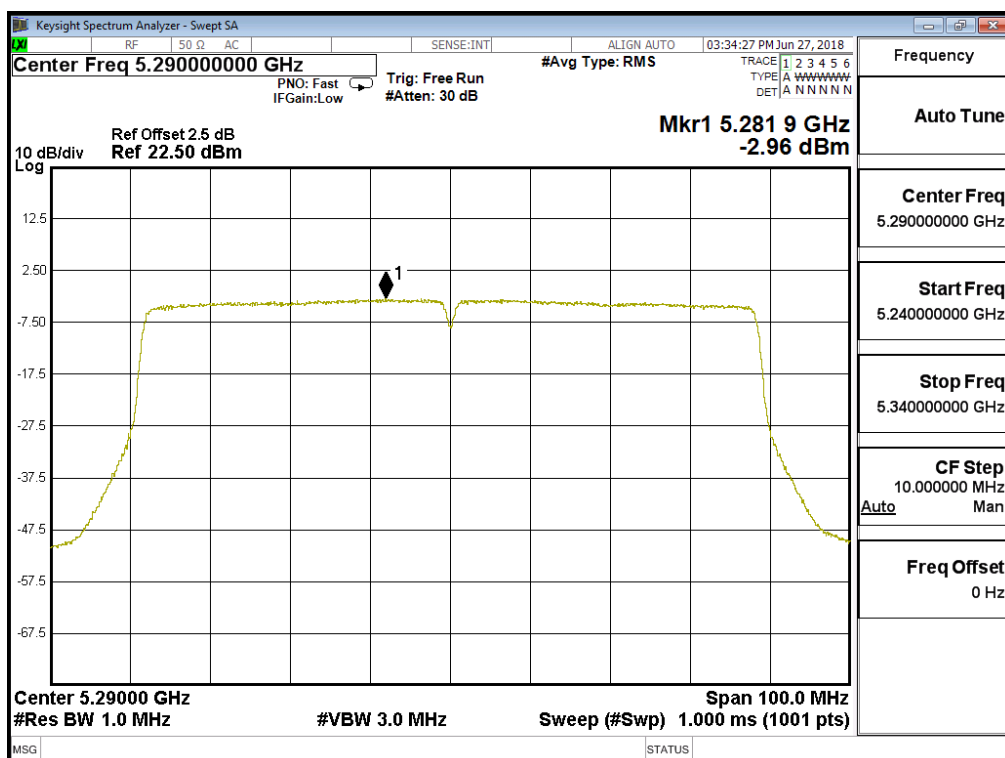
Channel 155: CHAIN B



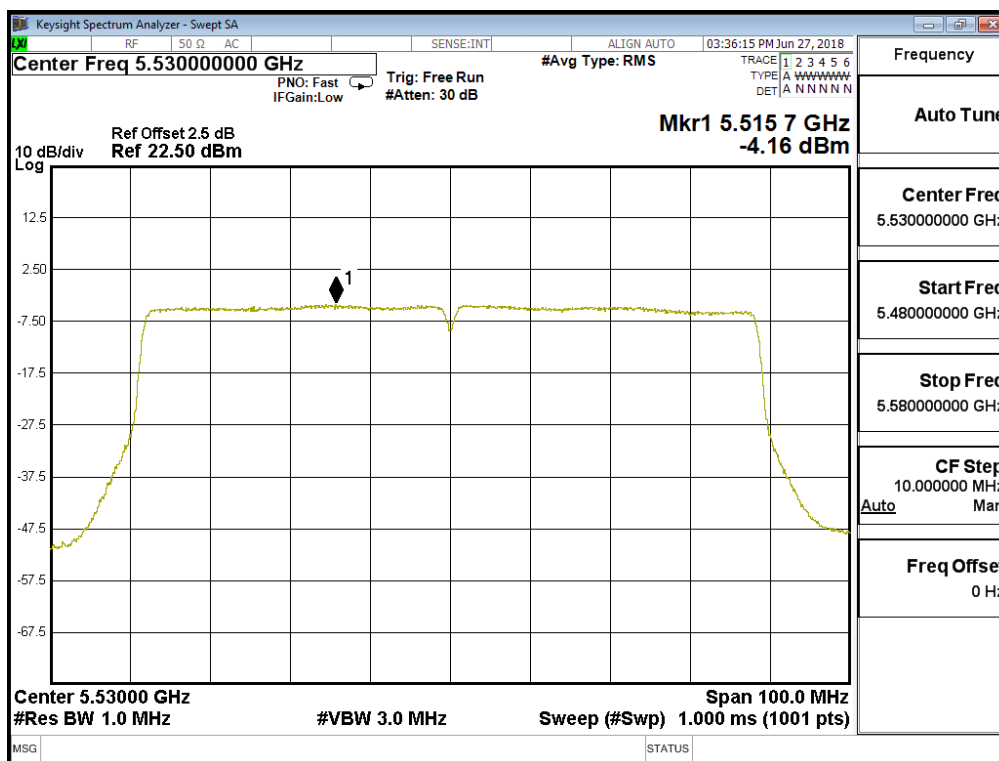
Channel 42 – Chain C



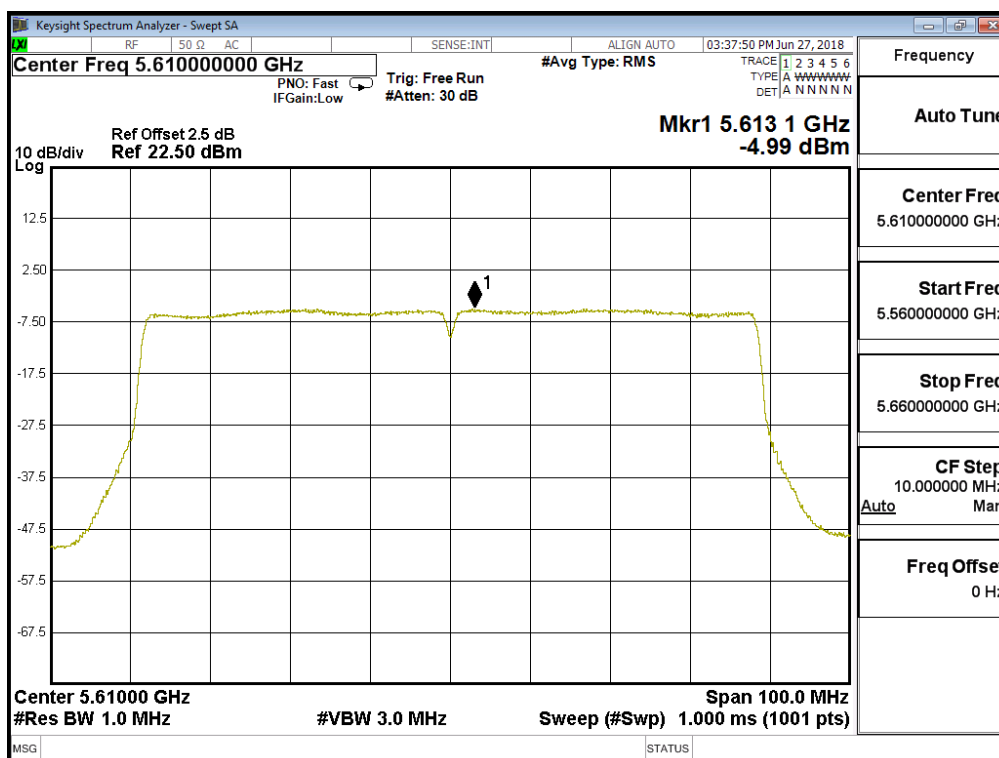
Channel 58 – Chain C



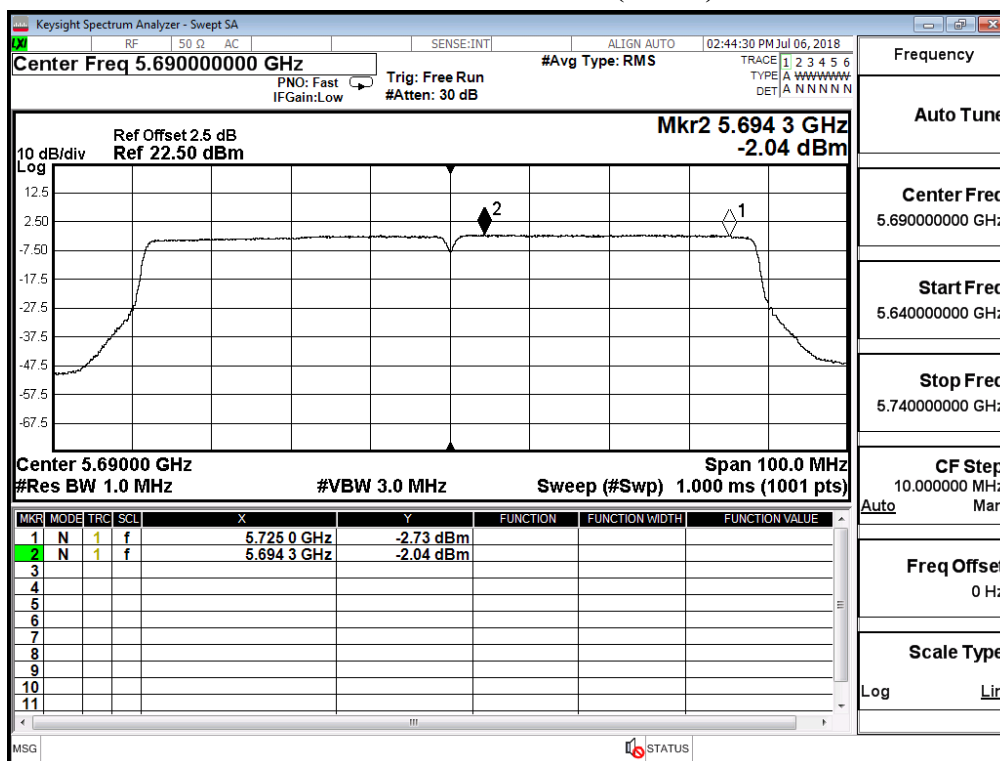
Channel 106 – Chain C



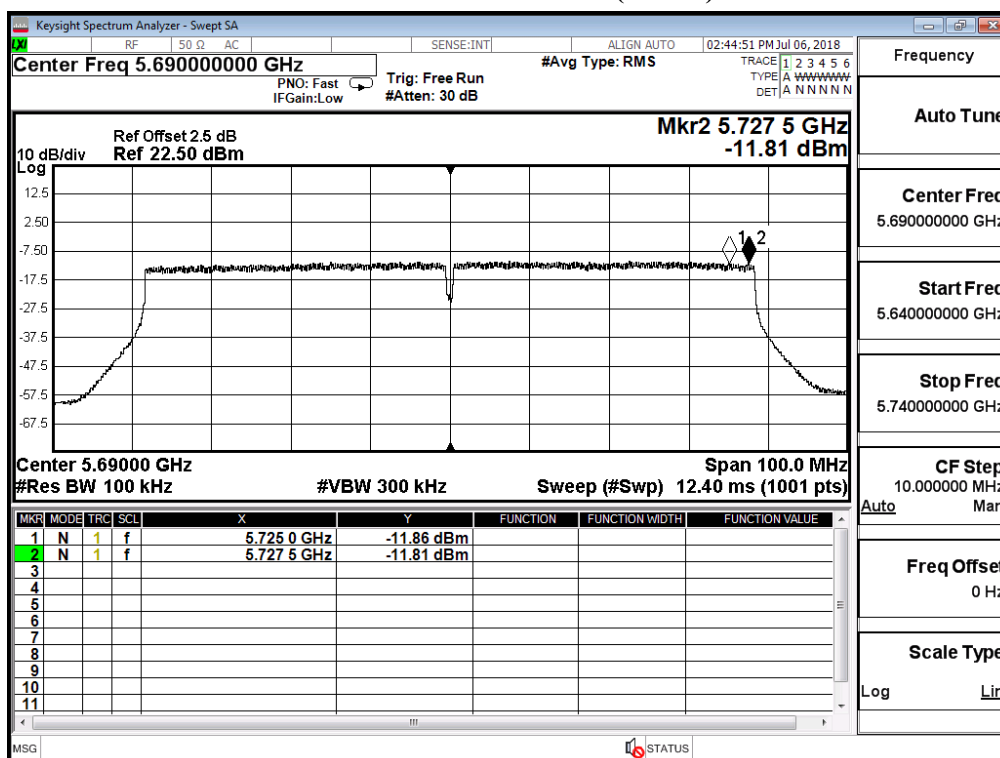
Channel 122 – Chain C



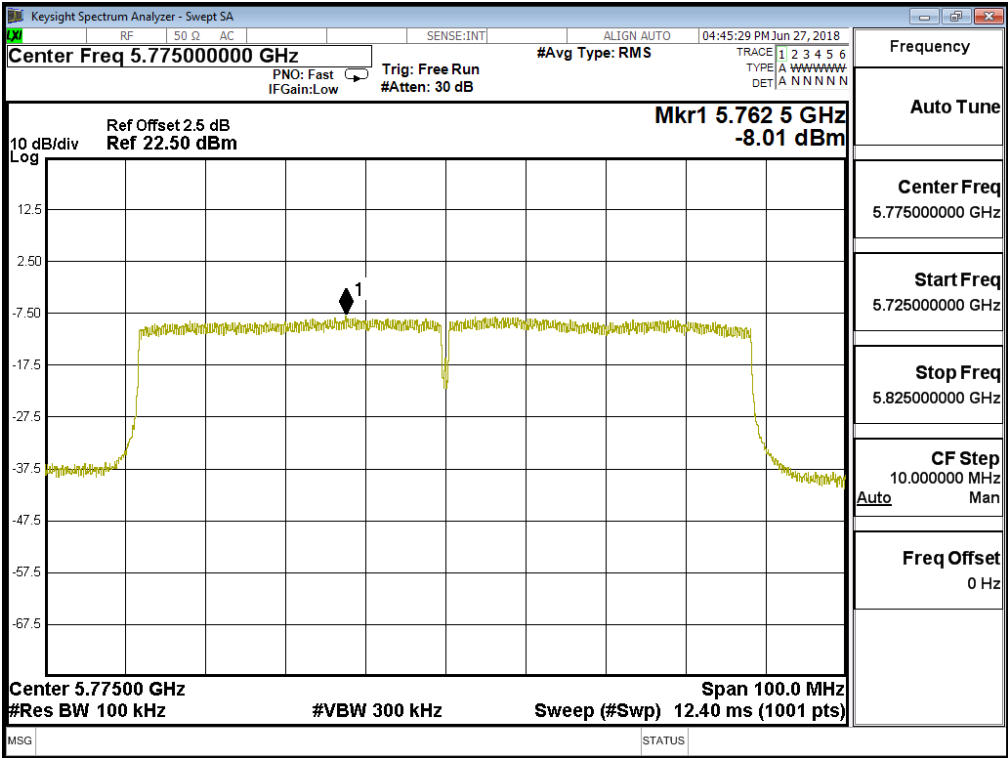
Channel 138 (Band3) – Chain C



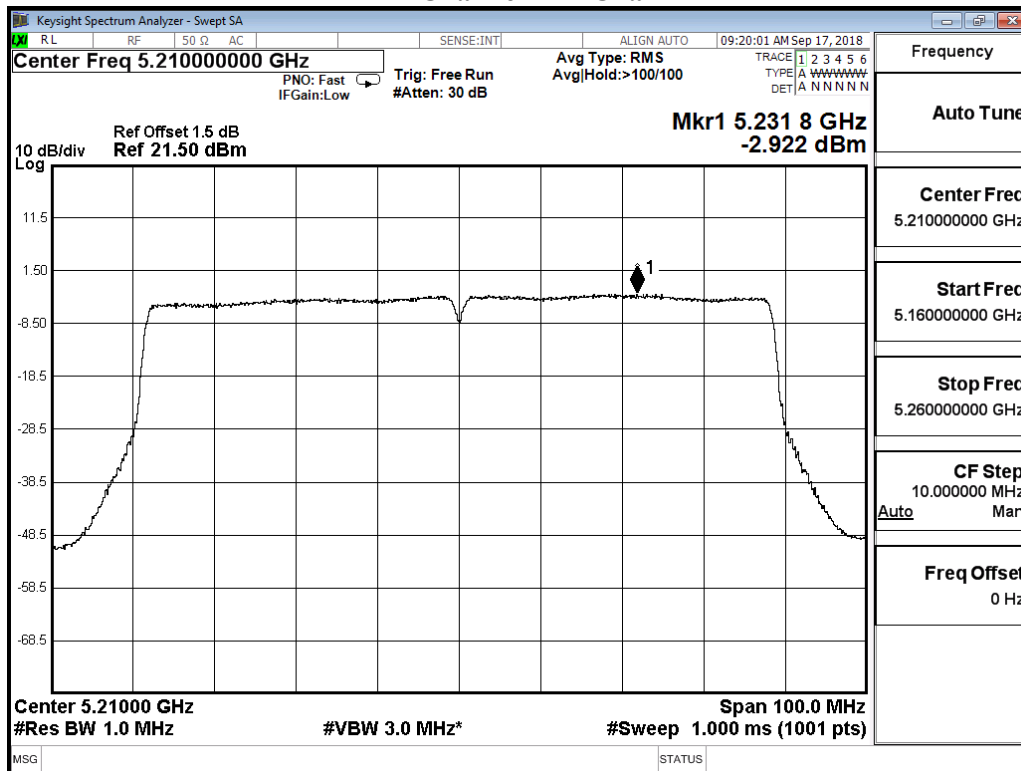
Channel 138 (Band4) – Chain C



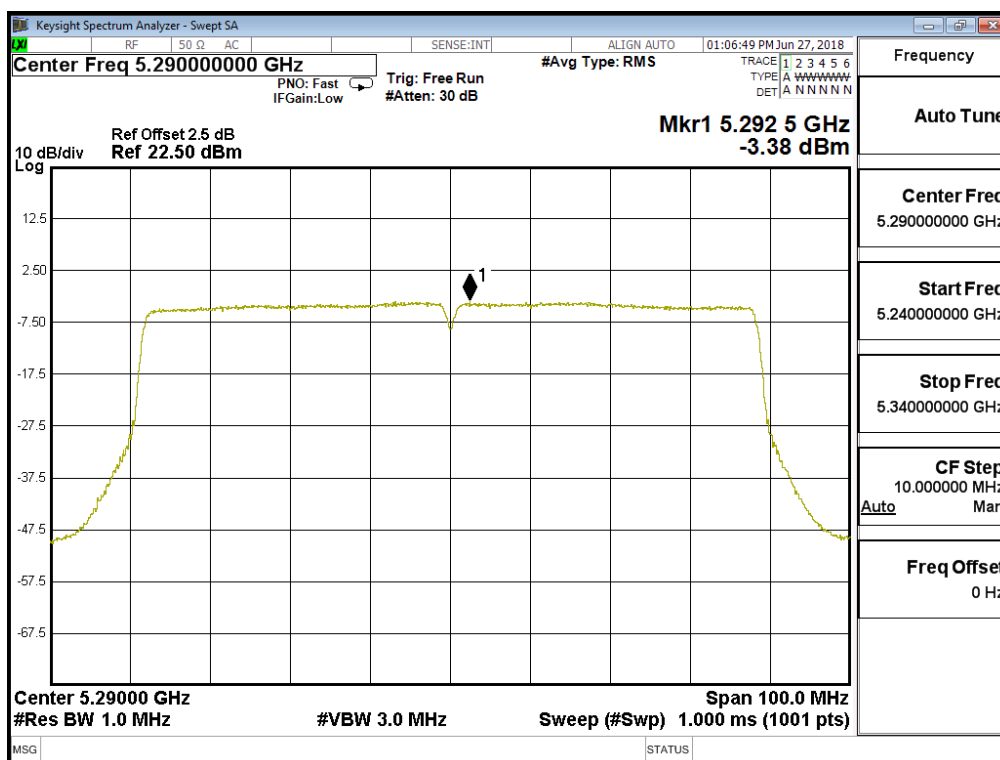
Channel 155: CHAIN C



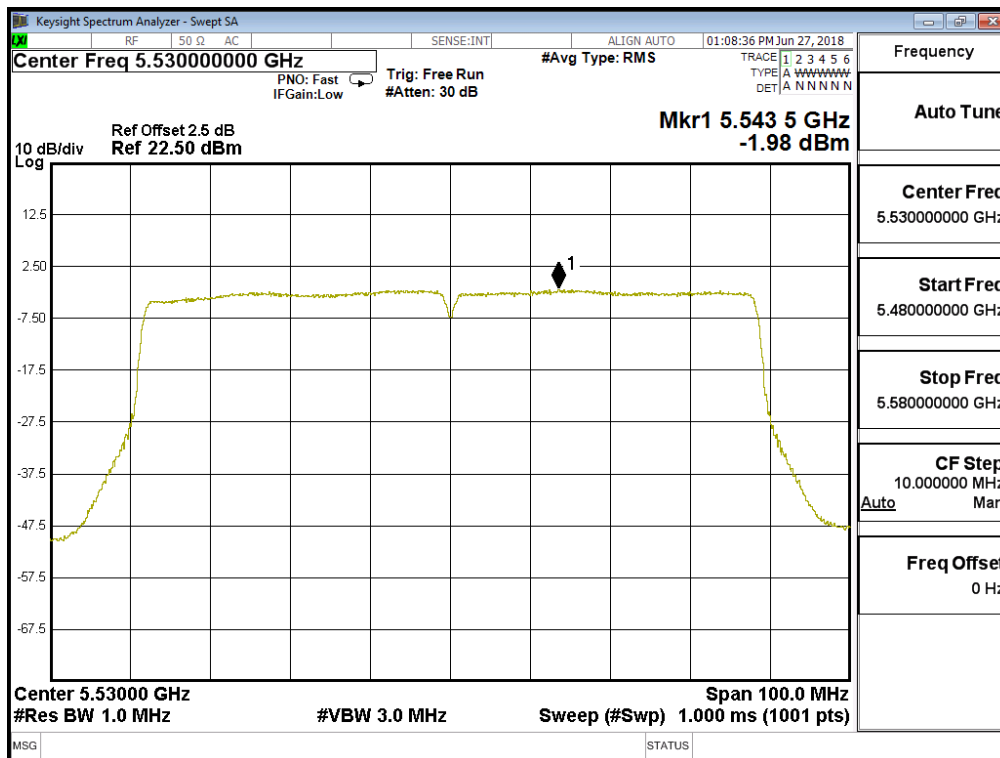
Channel 42 – Chain D



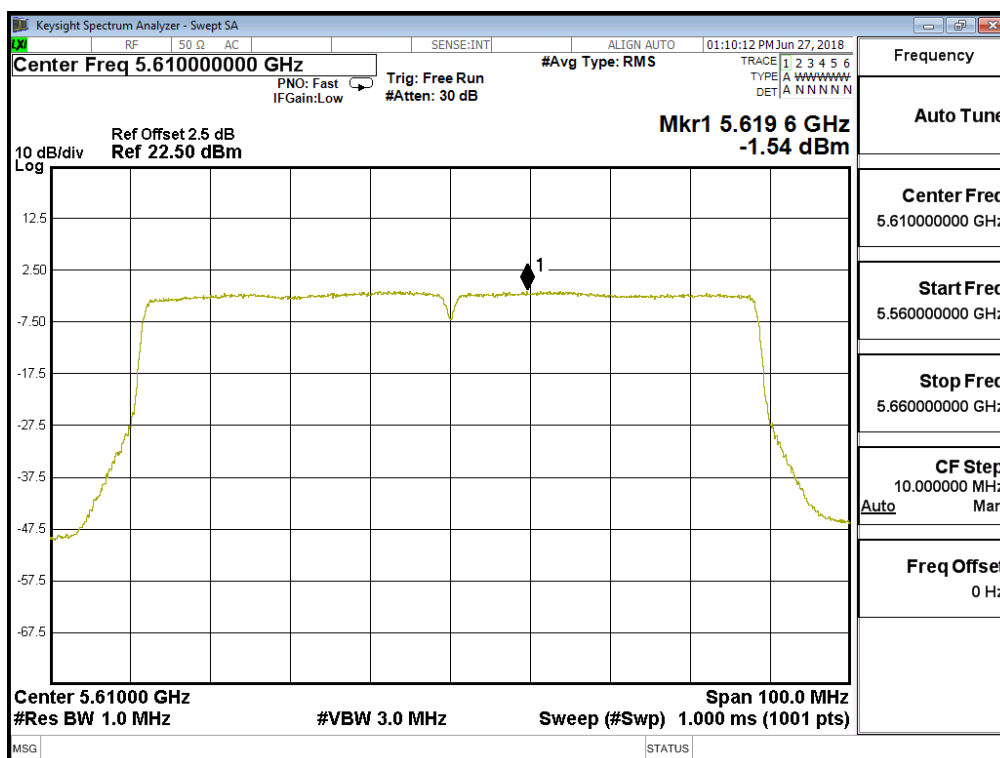
Channel 58 – Chain D



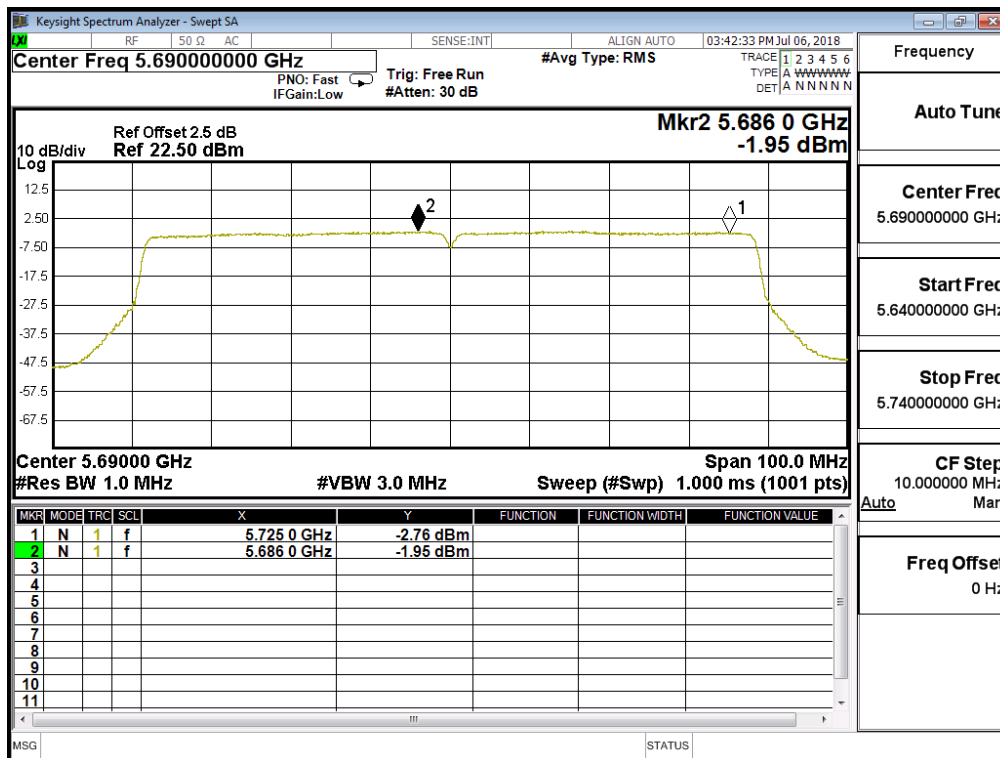
Channel 106 – Chain D



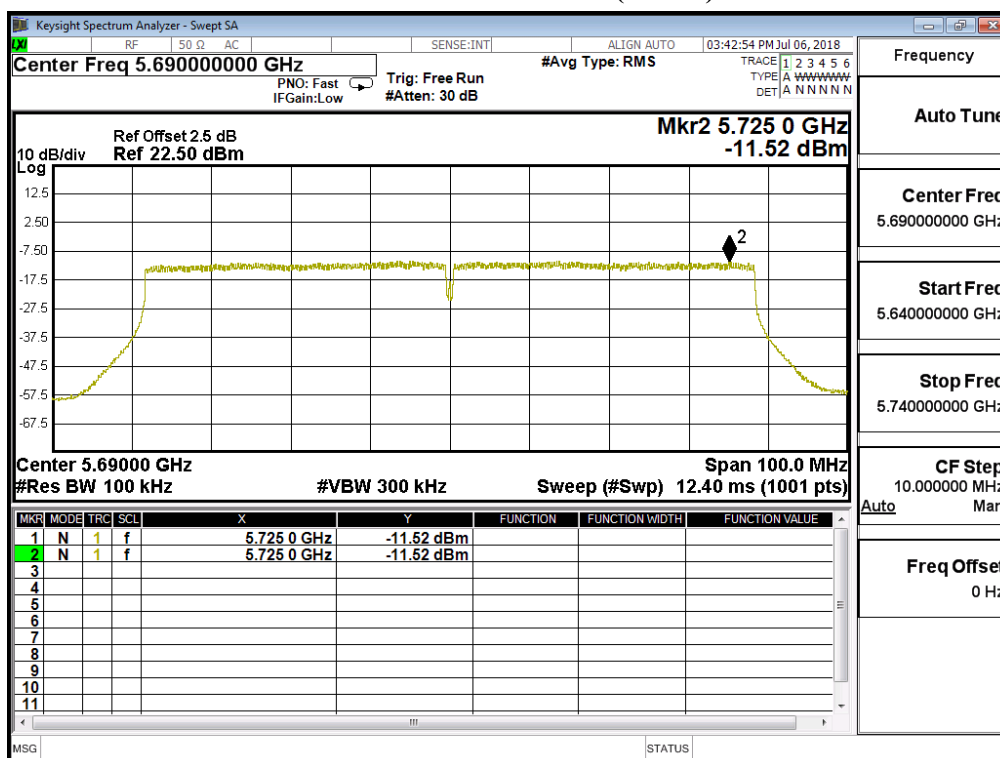
Channel 122 – Chain D



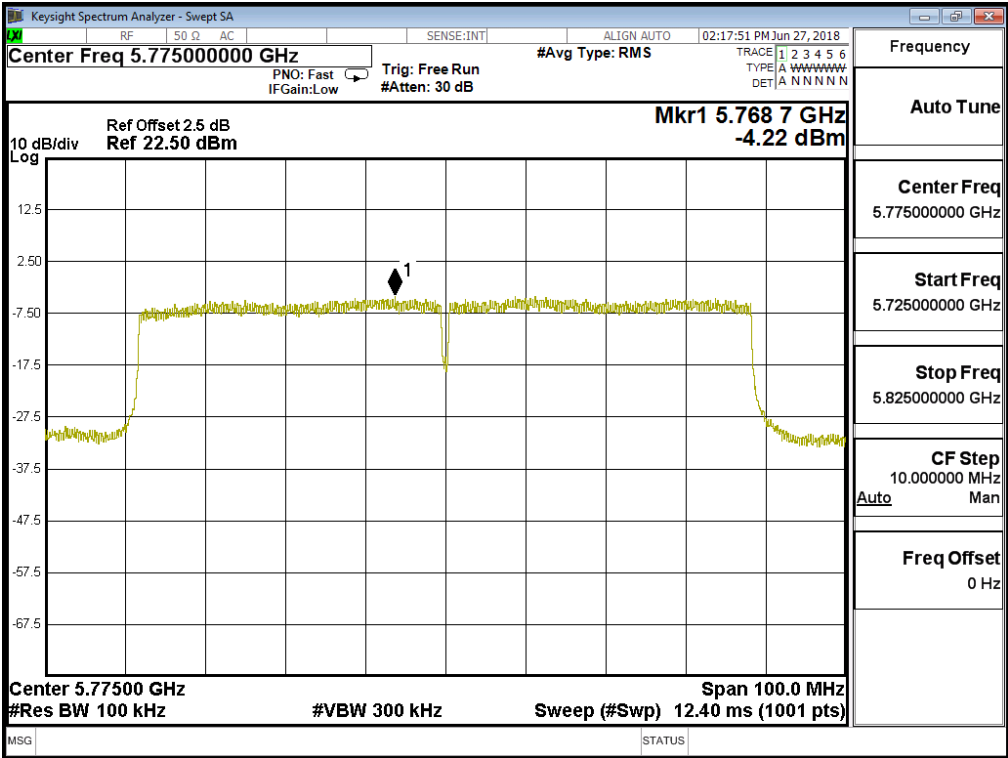
Channel 138 (Band3) – Chain D



Channel 138 (Band4) – Chain D



Channel 155: CHAIN D

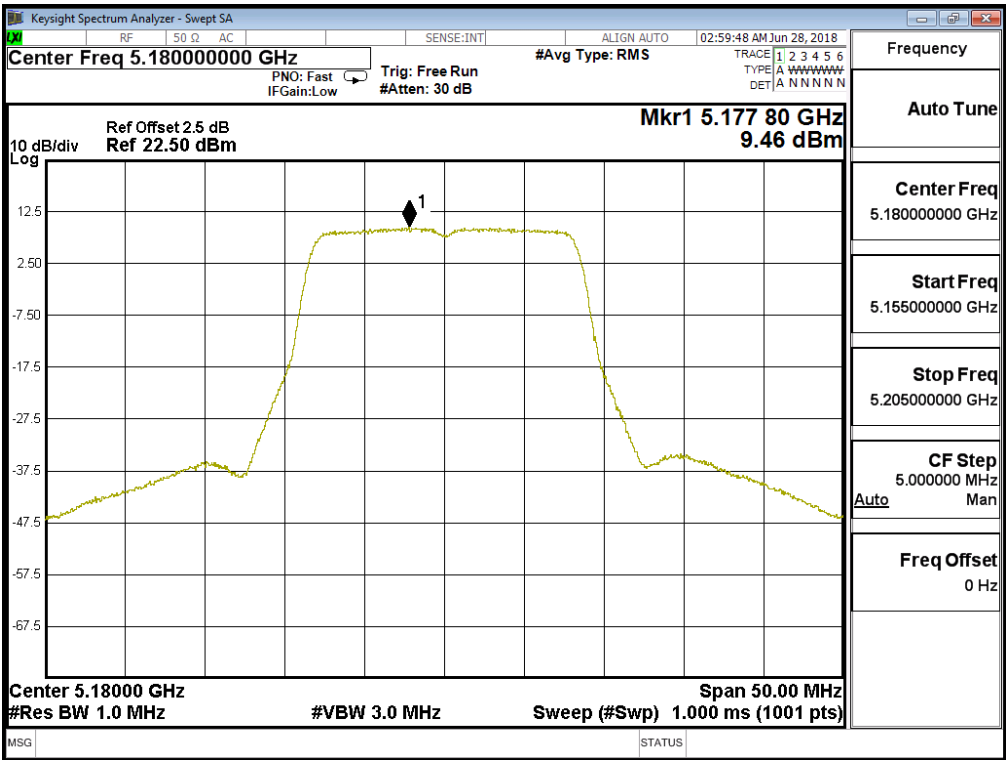


Product : MOXA IEEE 802.11a/n/ac 4*4 module
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Date : 2018/06/14
 Test Mode : Mode 1: Transmit (802.11a-6Mbps) (Antenna No.7)

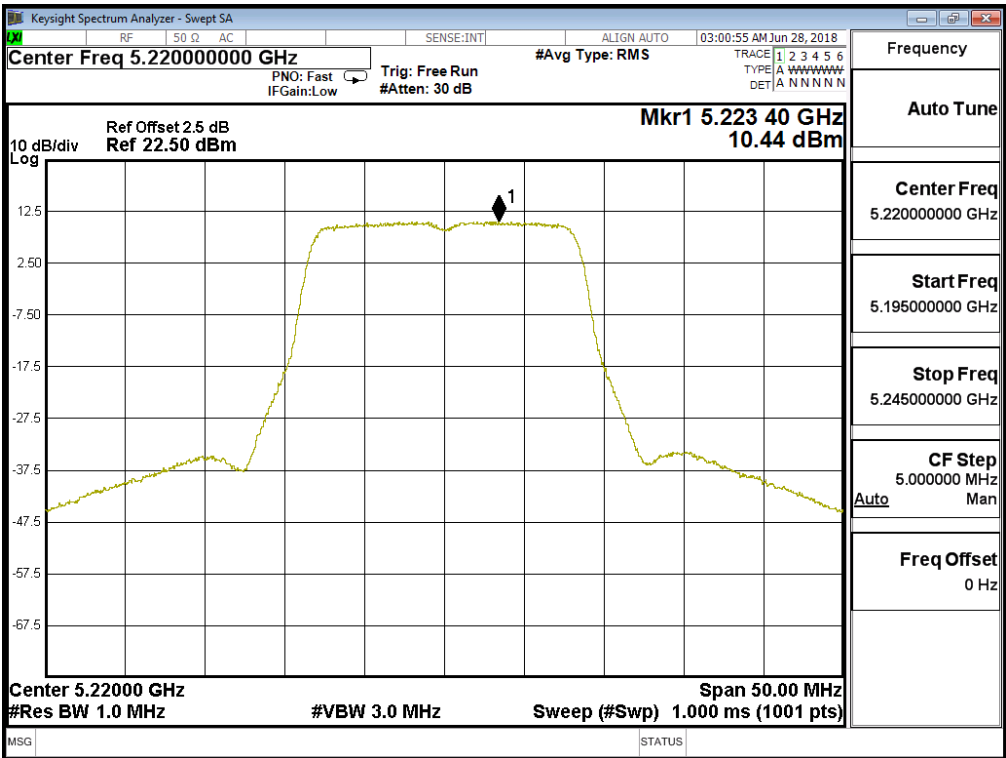
Channel Number	Frequency (MHz)	Data Rate (Mbps)	Measurement Level (dBm)	Required Limit (dBm)	Result
36	5180	6	9.46	11	Pass
44	5220	6	10.44	11	Pass
48	5240	6	10.50	11	Pass
52	5260	6	9.81	11	Pass
60	5300	6	9.61	11	Pass
64	5320	6	10.26	11	Pass
100	5500	6	10.35	11	Pass
116	5580	6	10.90	11	Pass
140	5700	6	8.53	11	Pass

Channel Number	Frequency (MHz)	Data Rate (Mbps)	PPSD (dBm)	BWCF (dB)	Total PSD (dBm)	Required Limit (dBm)	Result
149	5745	6	-0.57	6.98	12.43	<30	Pass
157	5785	6	0.23	6.98	13.23	<30	Pass
165	5825	6	0.00	6.98	13.00	<30	Pass

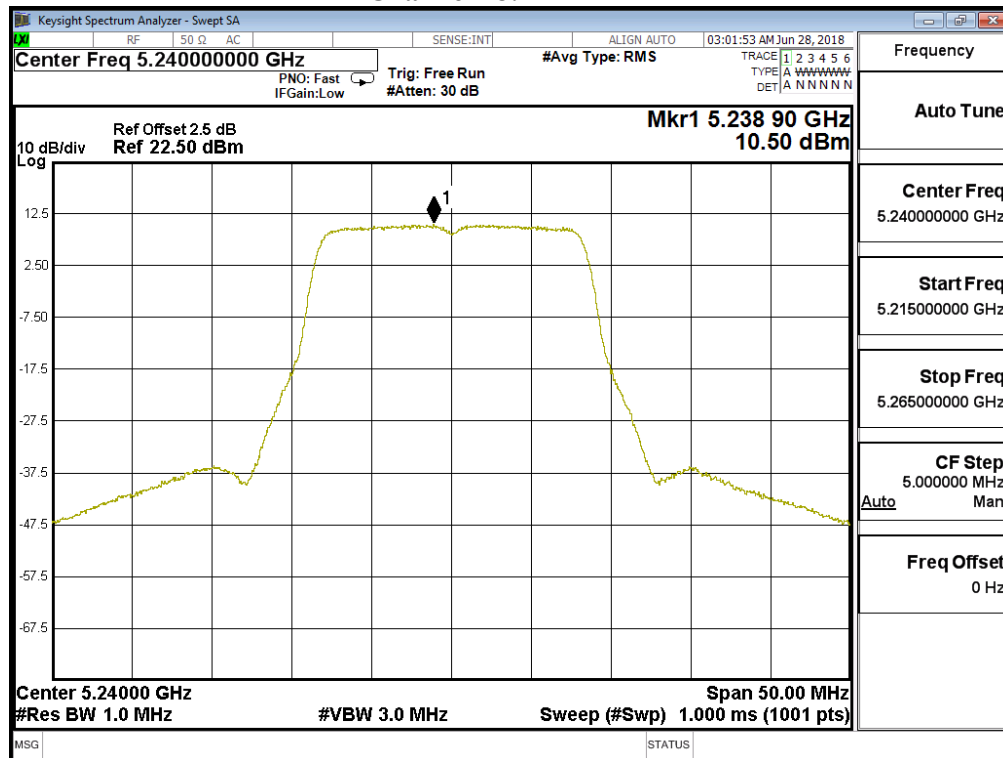
Channel 36:



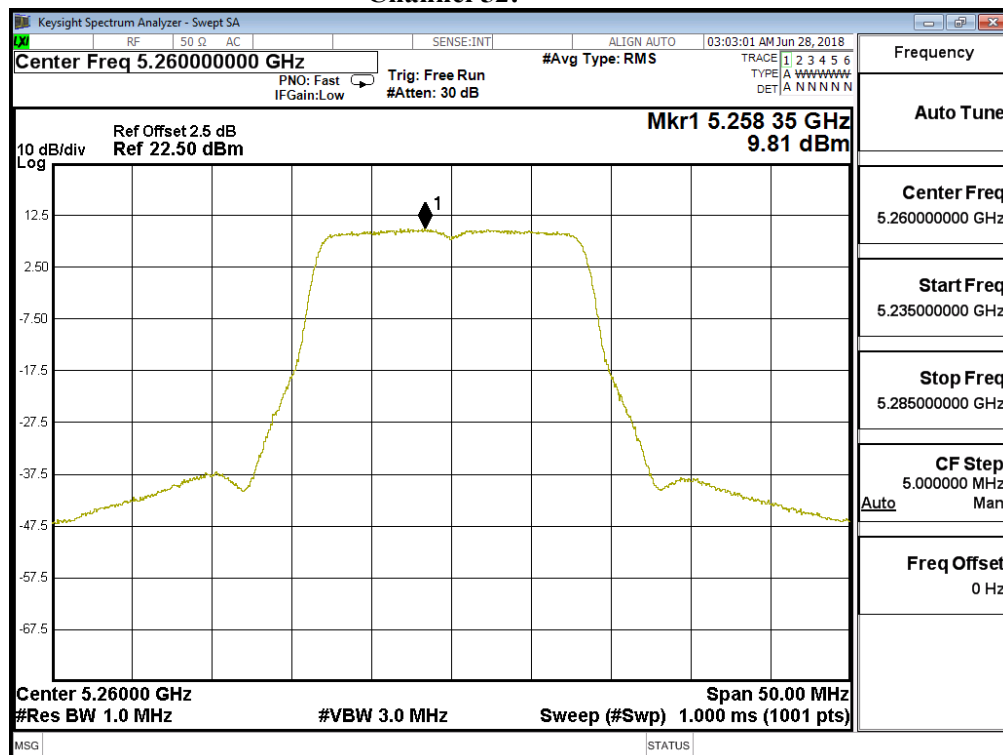
Channel 44:



Channel 48:



Channel 52:



Keysight Spectrum Analyzer - Swept SA

RF 50 Ω AC SENSE:INT ALIGN AUTO 03:04:16 AM Jun 28, 2018

Center Freq 5.300000000 GHz PNO: Fast IFGain:Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS

TRACE 1 2 3 4 5 6
TYPE A N N N N N
DET A N N N N N

Ref Offset 2.5 dB
Ref 22.50 dBm

Mkr1 5.297 30 GHz
9.61 dBm

10 dB/div
Log

Center 5.30000 GHz Span 50.00 MHz
#Res BW 1.0 MHz #VBW 3.0 MHz Sweep (#Swp) 1.000 ms (1001 pts)

MSG STATUS

Keysight Spectrum Analyzer - Swept SA

RF 50 Ω AC SENSE:INT ALIGN AUTO 03:06:12 AM Jun 28, 2018

Center Freq 5.500000000 GHz #Avg Type: RMS

PNO: Fast Trg: Free Run TYPE: A 1 2 3 4 5 6
IFGain: Low #Atten: 30 dB DET: A N N N N N

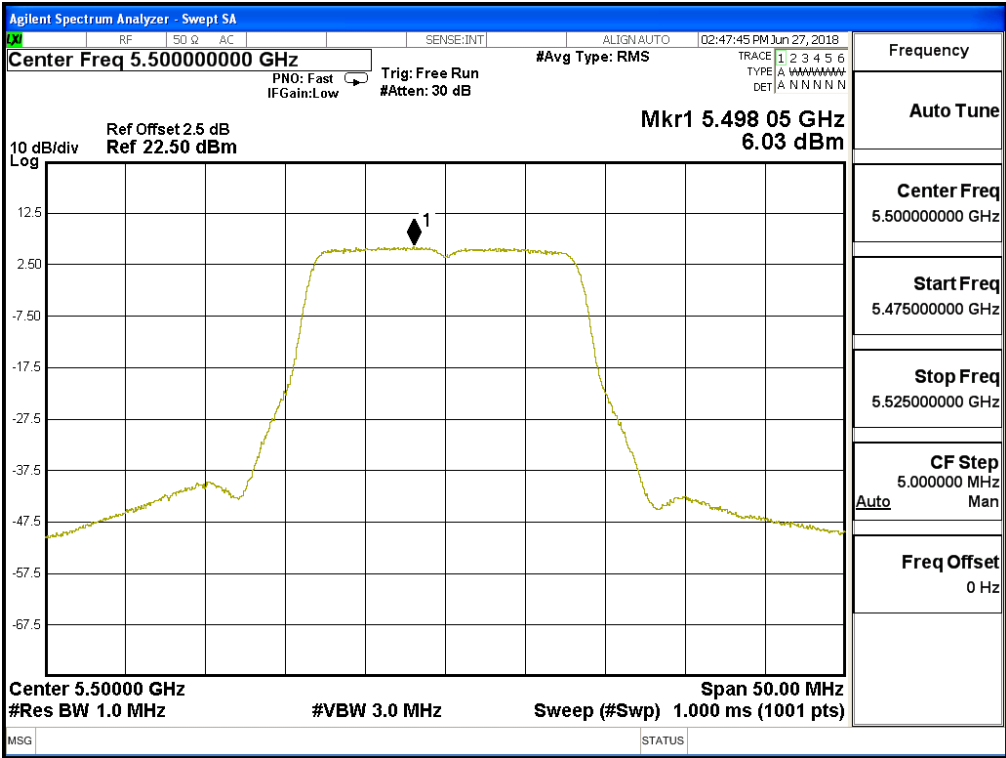
Ref Offset 2.5 dB Mkr1 5.50135 GHz
Ref 22.50 dBm 10.35 dBm

10 dB/div Log

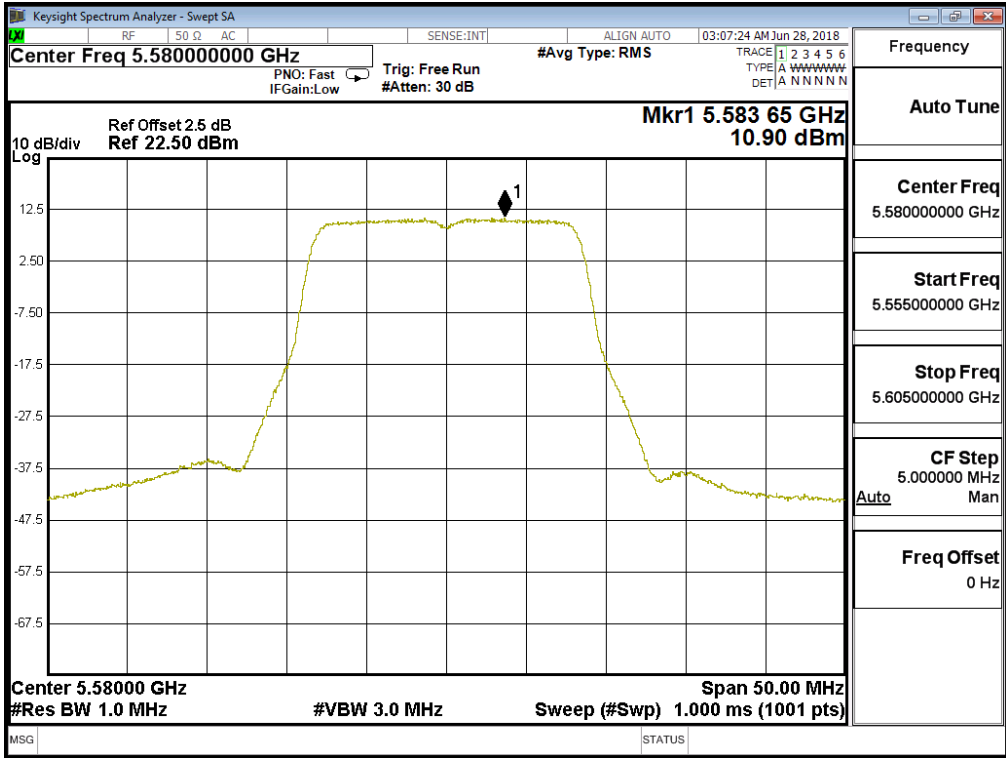
Center 5.50000 GHz Span 50.00 MHz
#Res BW 1.0 MHz #VBW 3.0 MHz Sweep (#Swp) 1.000 ms (1001 pts)

MSG STATUS

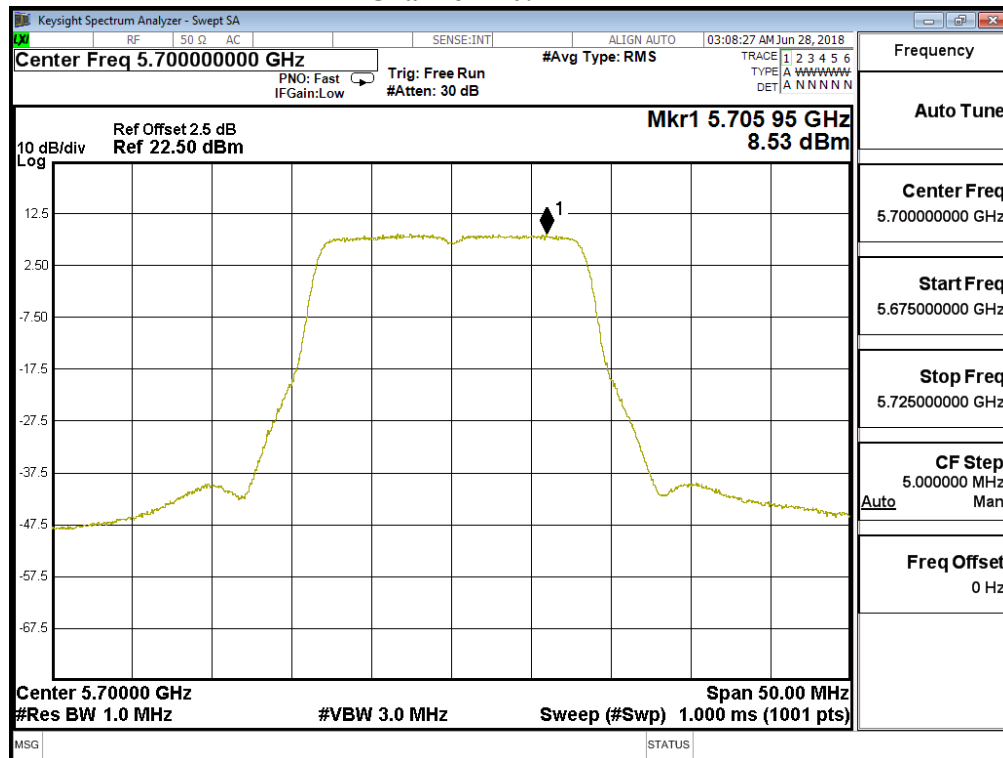
Channel 100:



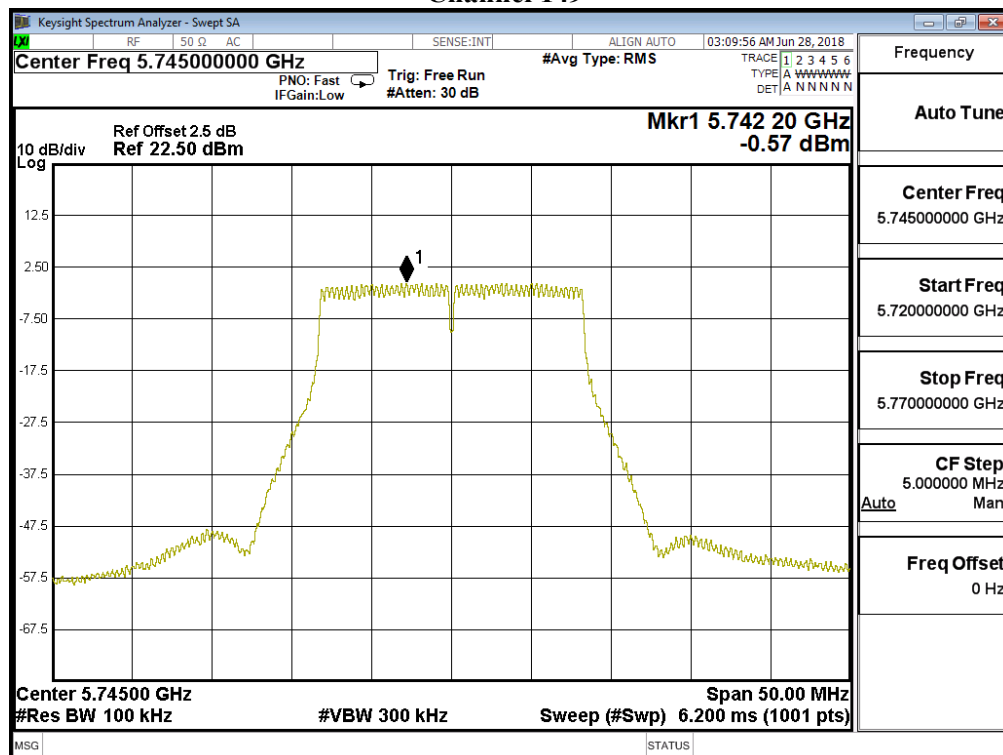
Channel 116:



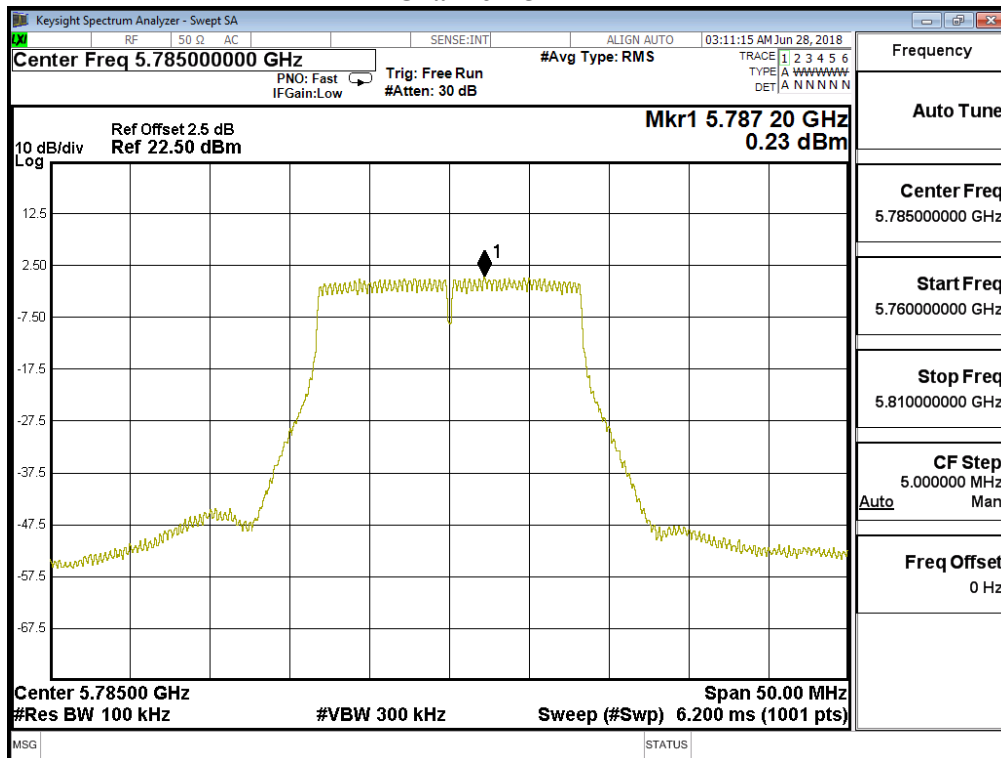
Channel 140:



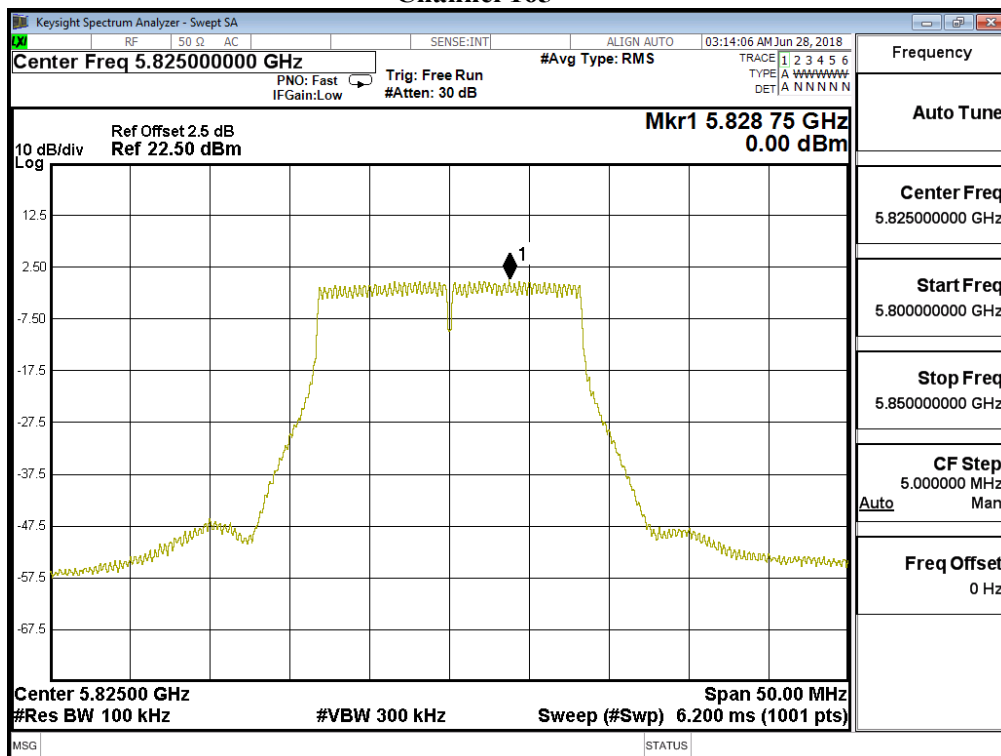
Channel 149



Channel 157



Channel 165



Product : MOXA IEEE 802.11a/n/ac 4*4 module
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Date : 2018/06/14
 Test Mode : Mode 2: Transmit (802.11n-20BW 28.8Mbps) (Antenna No.7)

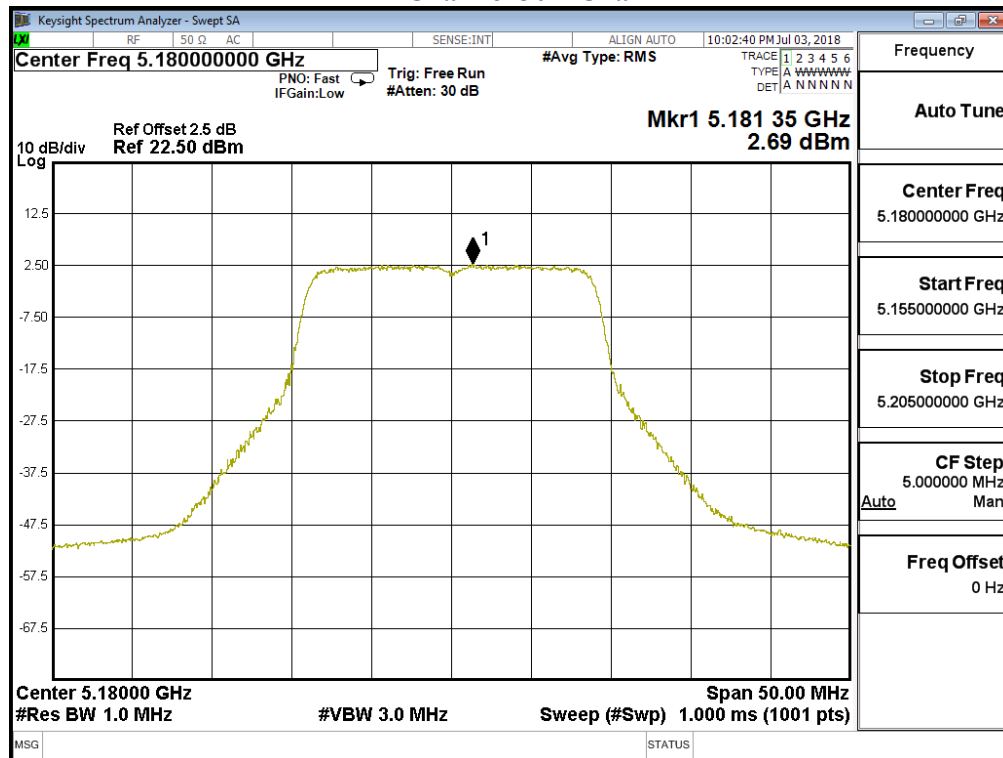
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	Total PPSD (dBm)1	Required Limit (dBm)	Result
36	5180	A	2.69	8.71	11	Pass
		B	4.01	10.03	11	Pass
		C	4.59	10.61	11	Pass
		D	3.35	9.37	11	Pass
44	5220	A	3.89	9.91	11	Pass
		B	4.07	10.09	11	Pass
		C	4.67	10.69	11	Pass
		D	3.89	9.91	11	Pass
48	5240	A	3.73	9.75	11	Pass
		B	3.43	9.45	11	Pass
		C	4.65	10.67	11	Pass
		D	3.40	9.42	11	Pass
52	5260	A	4.05	10.07	11	Pass
		B	3.62	9.64	11	Pass
		C	4.84	10.86	11	Pass
		D	3.20	9.22	11	Pass
60	5300	A	3.51	9.53	11	Pass
		B	3.83	9.85	11	Pass
		C	4.66	10.68	11	Pass
		D	3.23	9.25	11	Pass
64	5320	A	3.72	9.74	11	Pass
		B	4.03	10.05	11	Pass
		C	4.97	10.99	11	Pass
		D	3.71	9.73	11	Pass
100	5500	A	2.97	8.99	11	Pass
		B	4.27	10.29	11	Pass
		C	4.80	10.82	11	Pass

		D	4.42	10.44	11	Pass
116	5580	A	1.92	7.94	11	Pass
		B	4.74	10.76	11	Pass
		C	4.96	10.98	11	Pass
		D	4.77	10.79	11	Pass
140	5700	A	2.14	8.16	11	Pass
		B	4.35	10.37	11	Pass
		C	4.42	10.44	11	Pass
		D	4.03	10.05	11	Pass

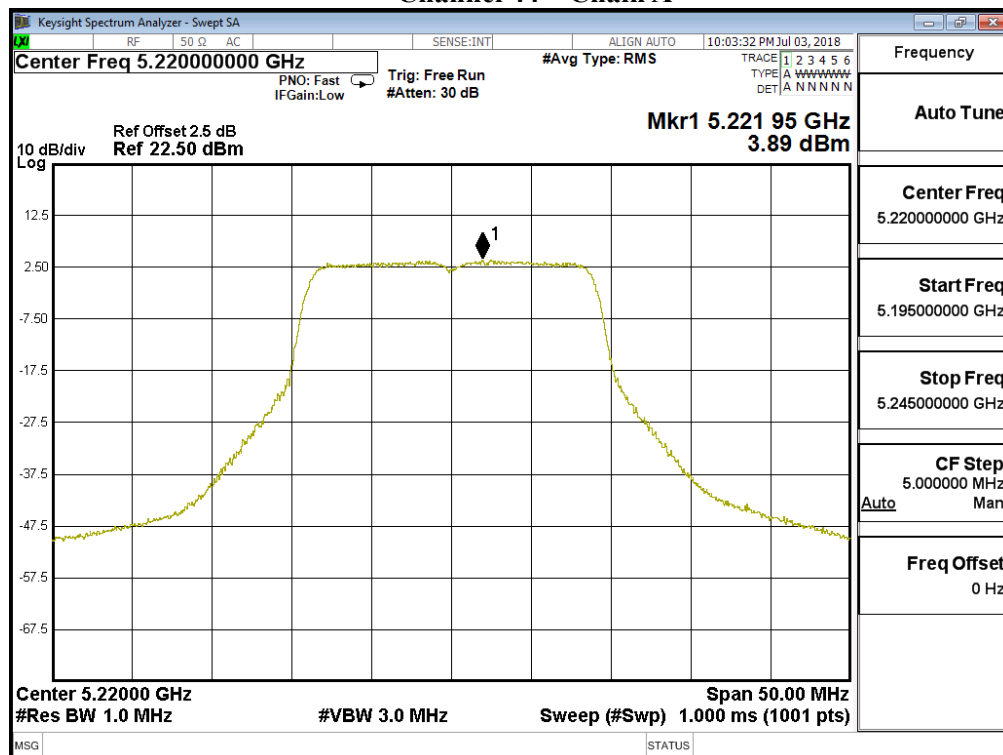
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Total PSD (dBm) ₁	Required Limit (dBm)	Result
149	5745	A	-2.04	6.98	10.96	<30	Pass
		B	-2.77	6.98	10.23	<30	Pass
		C	-3.33	6.98	9.67	<30	Pass
		D	0.53	6.98	13.53	<30	Pass
157	5785	A	-1.47	6.98	11.53	<30	Pass
		B	-2.67	6.98	10.33	<30	Pass
		C	-2.91	6.98	10.09	<30	Pass
		D	0.54	6.98	13.54	<30	Pass
165	5825	A	-1.42	6.98	11.58	<30	Pass
		B	-3.34	6.98	9.66	<30	Pass
		C	-3.86	6.98	9.14	<30	Pass
		D	0.07	6.98	13.07	<30	Pass

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

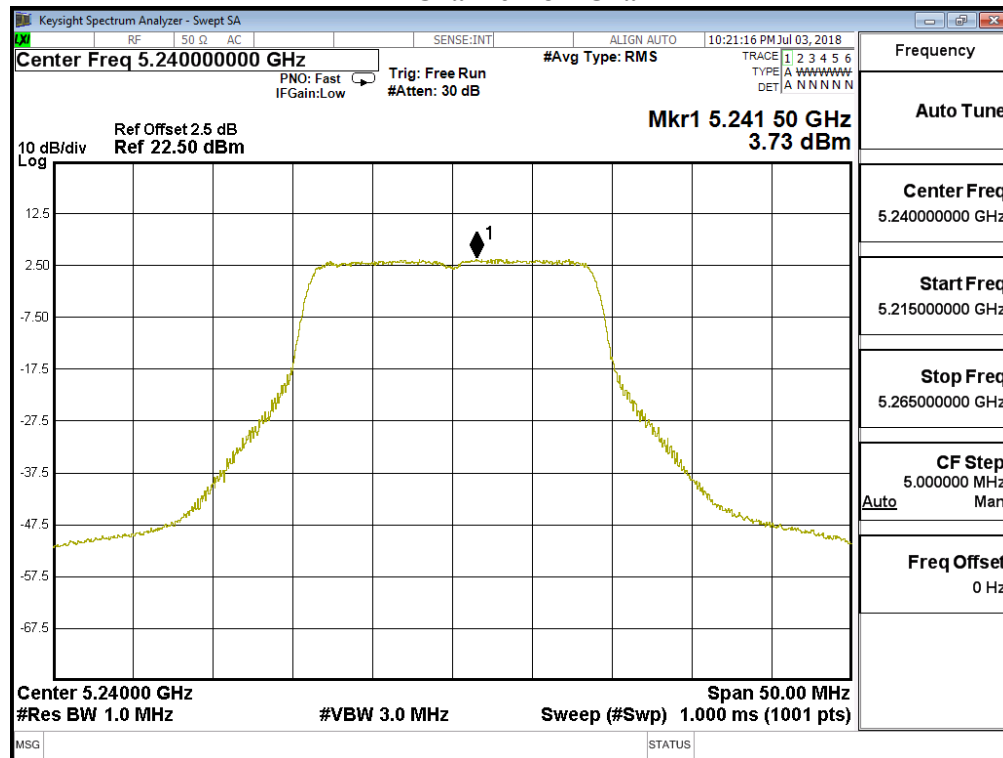
Channel 36 – Chain A



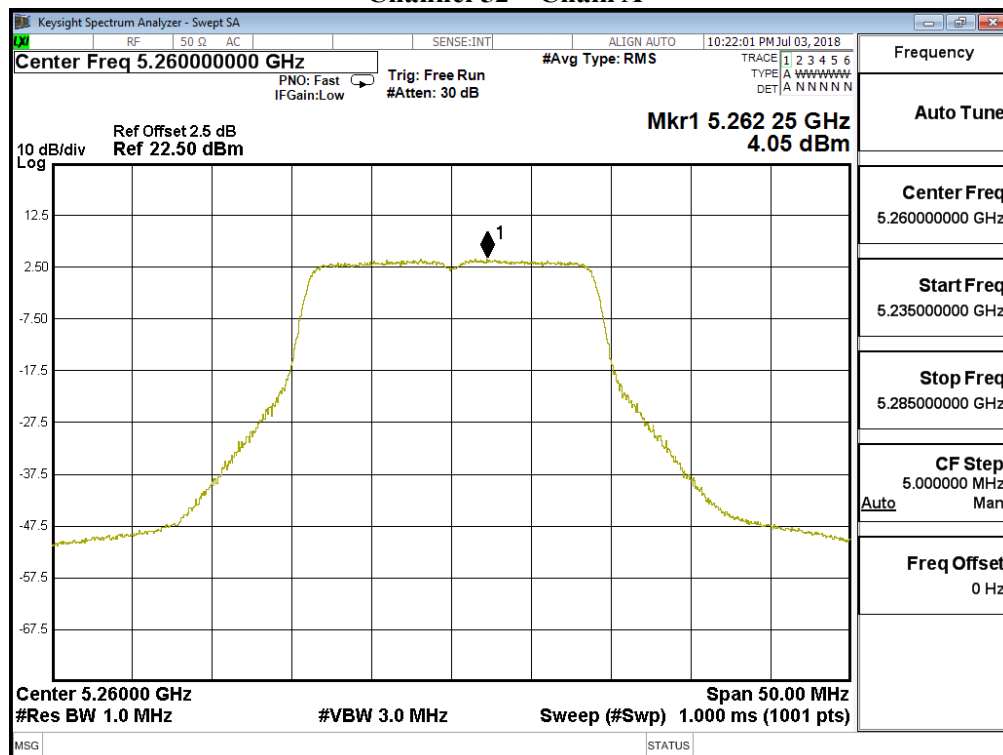
Channel 44 – Chain A



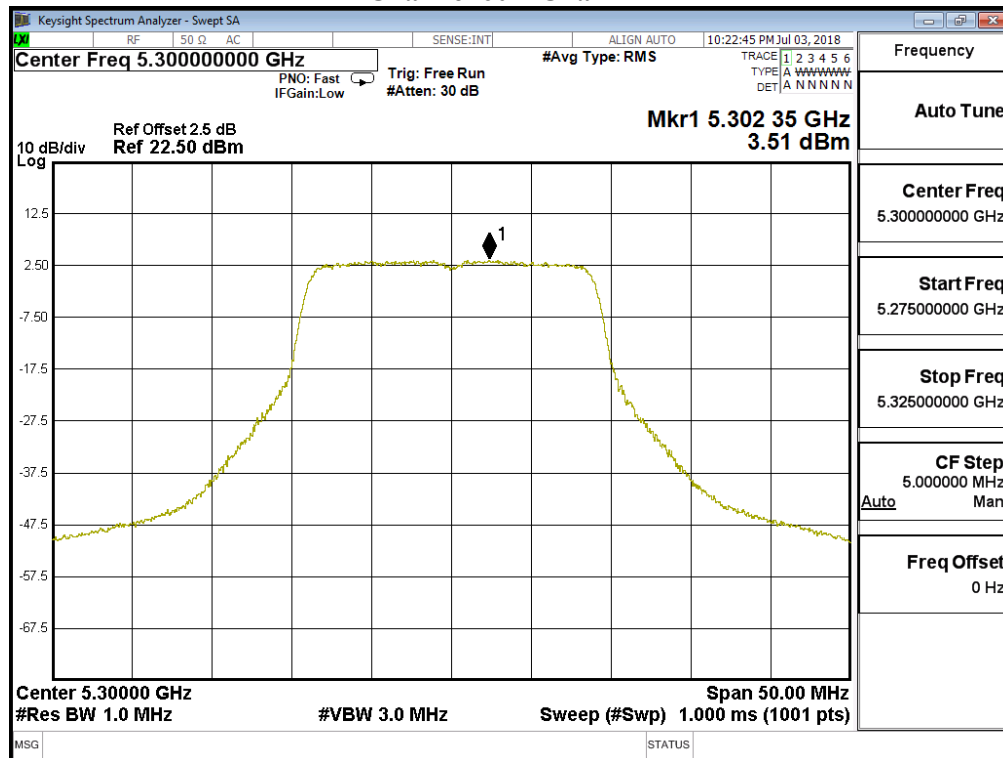
Channel 48 – Chain A



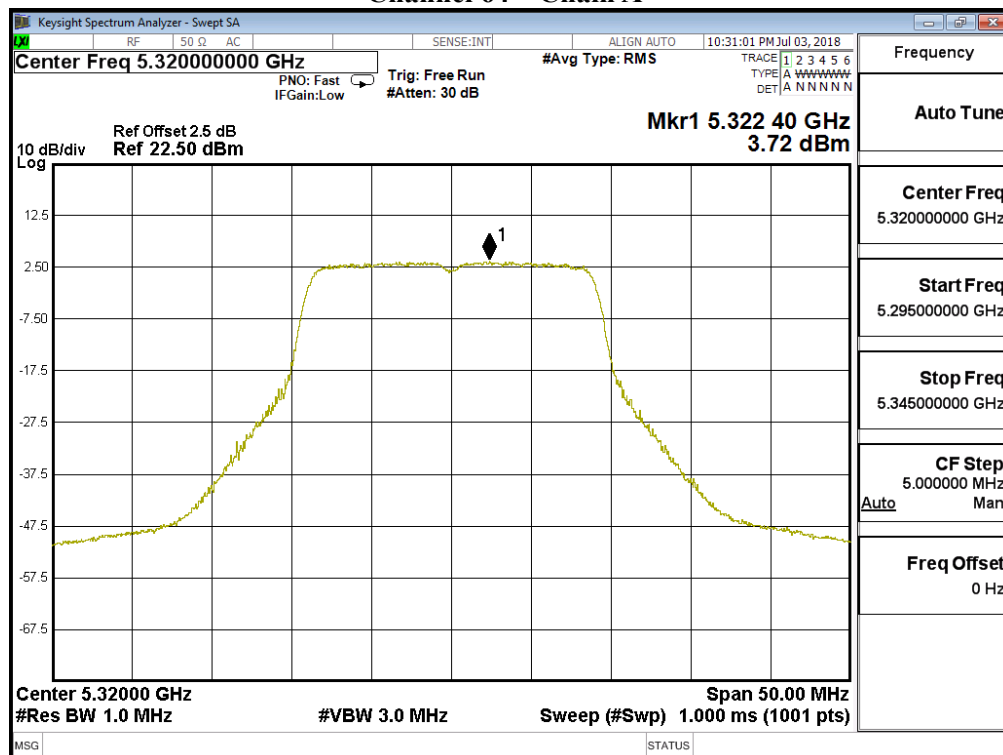
Channel 52 – Chain A



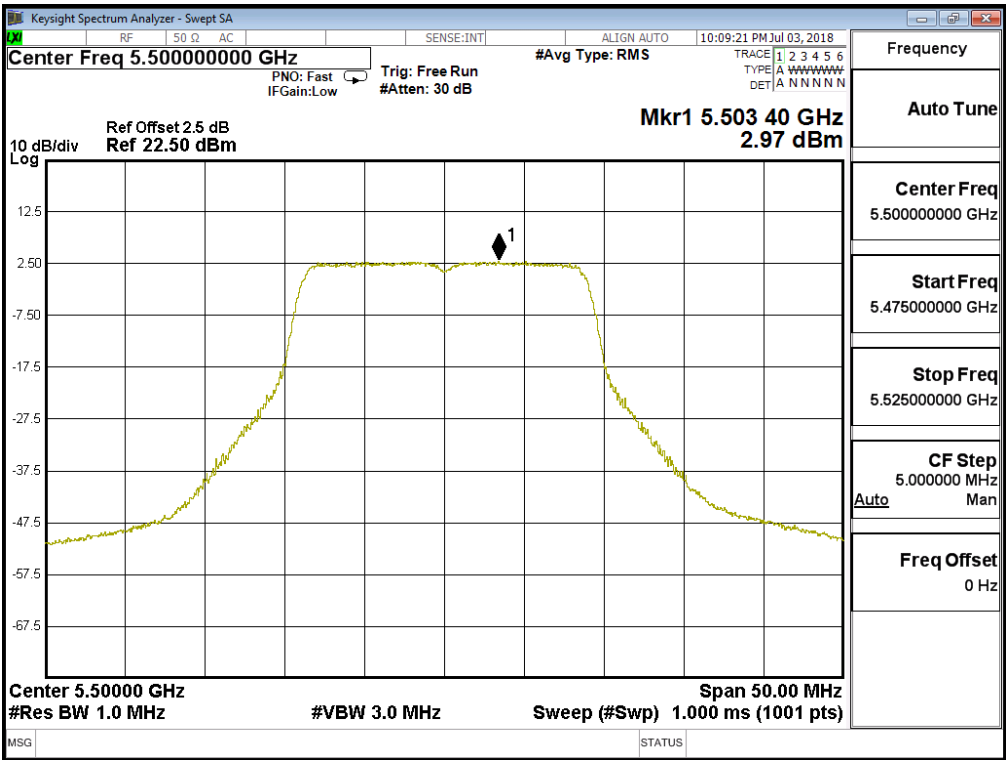
Channel 60 – Chain A



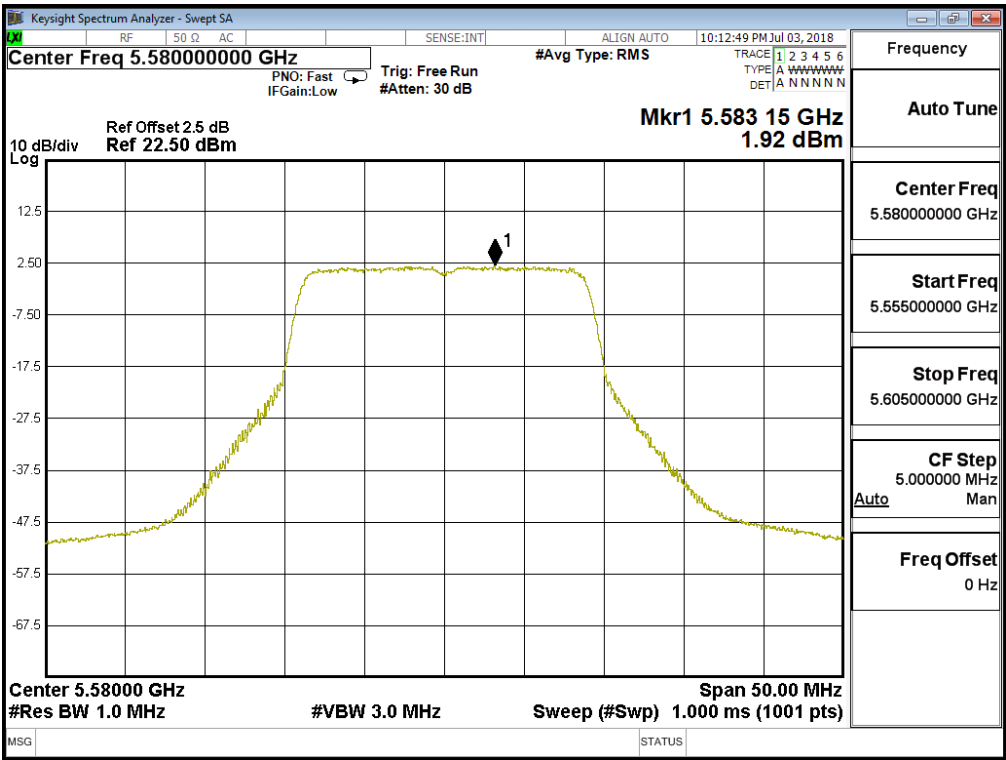
Channel 64 – Chain A



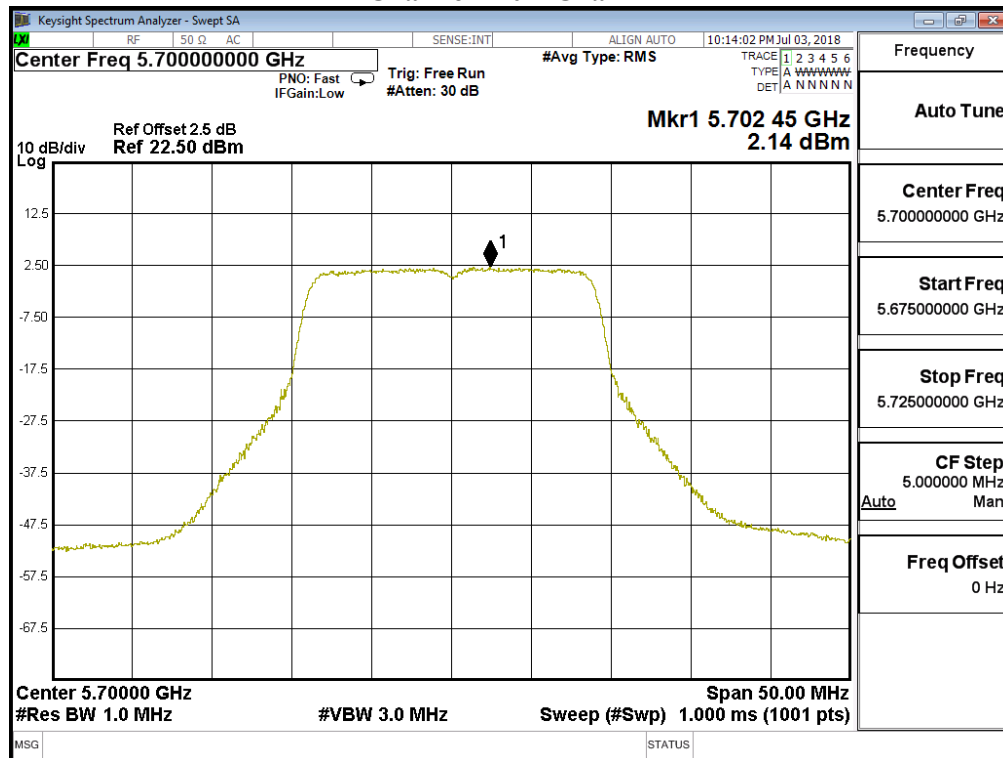
Channel 100 – Chain A



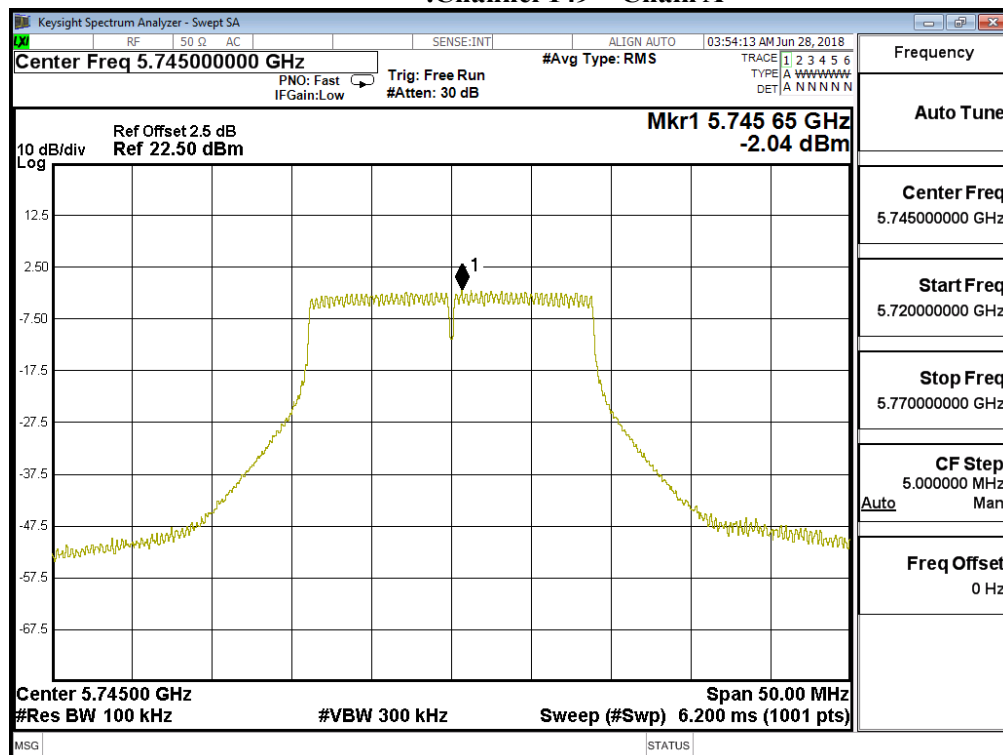
Channel 116 – Chain A



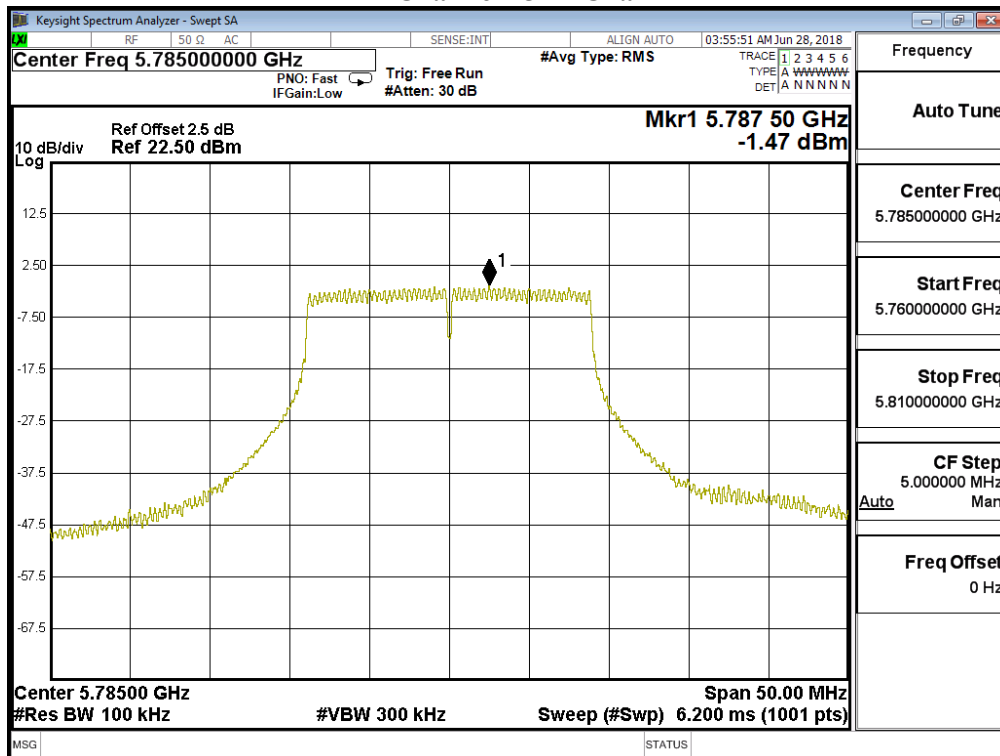
Channel 140 – Chain A



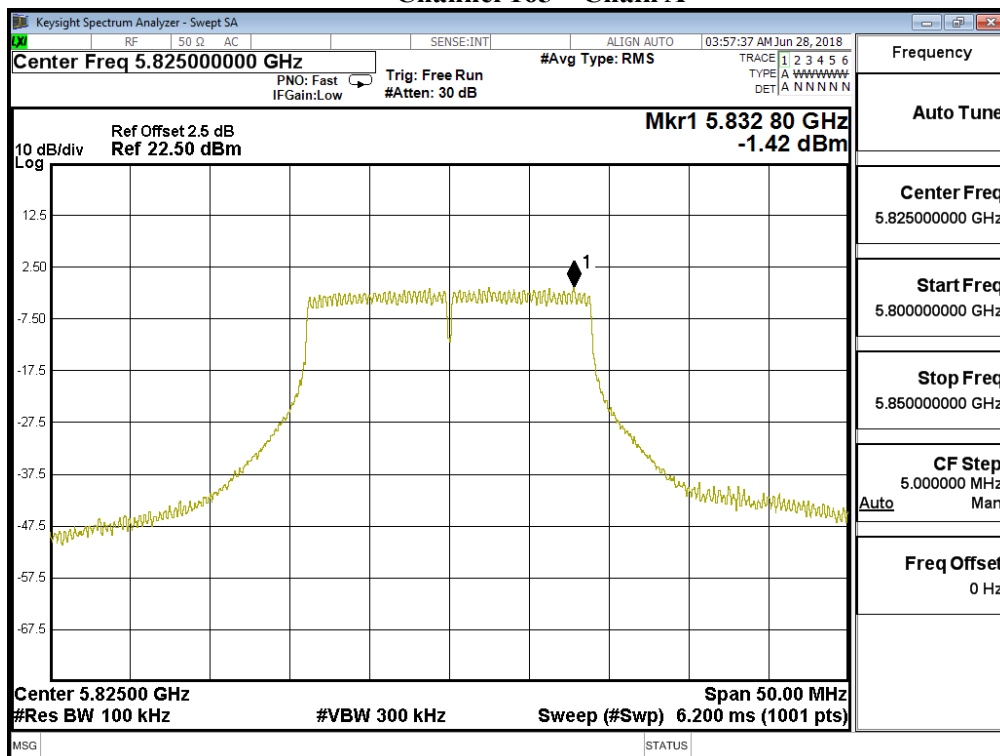
.Channel 149 – Chain A



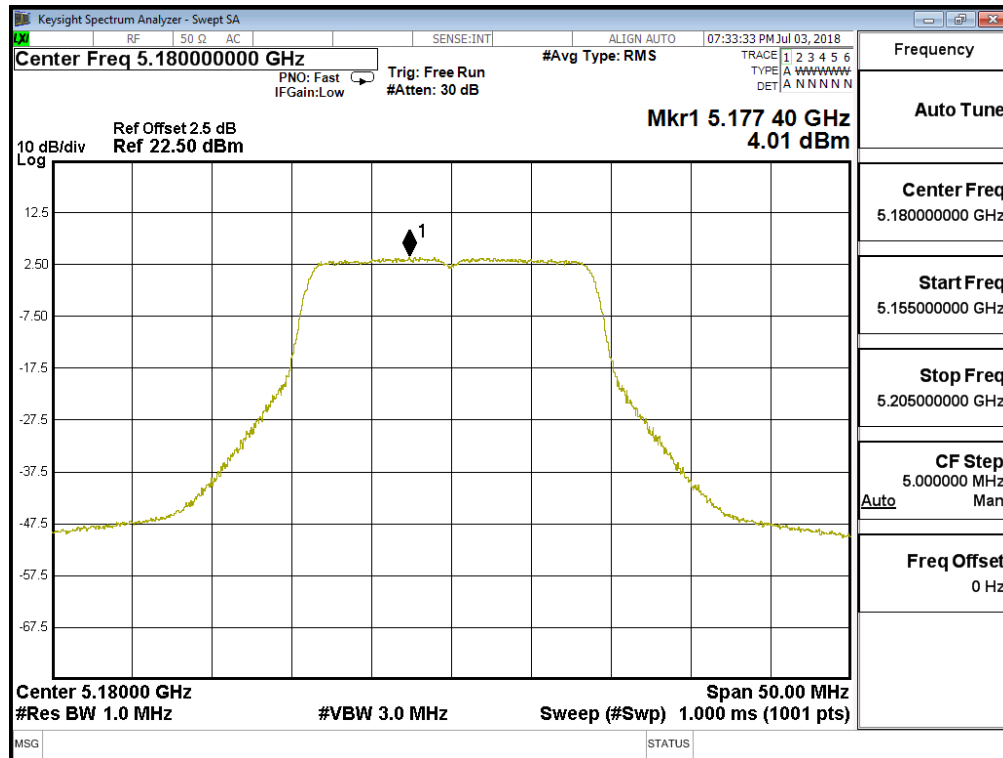
Channel 157 – Chain A



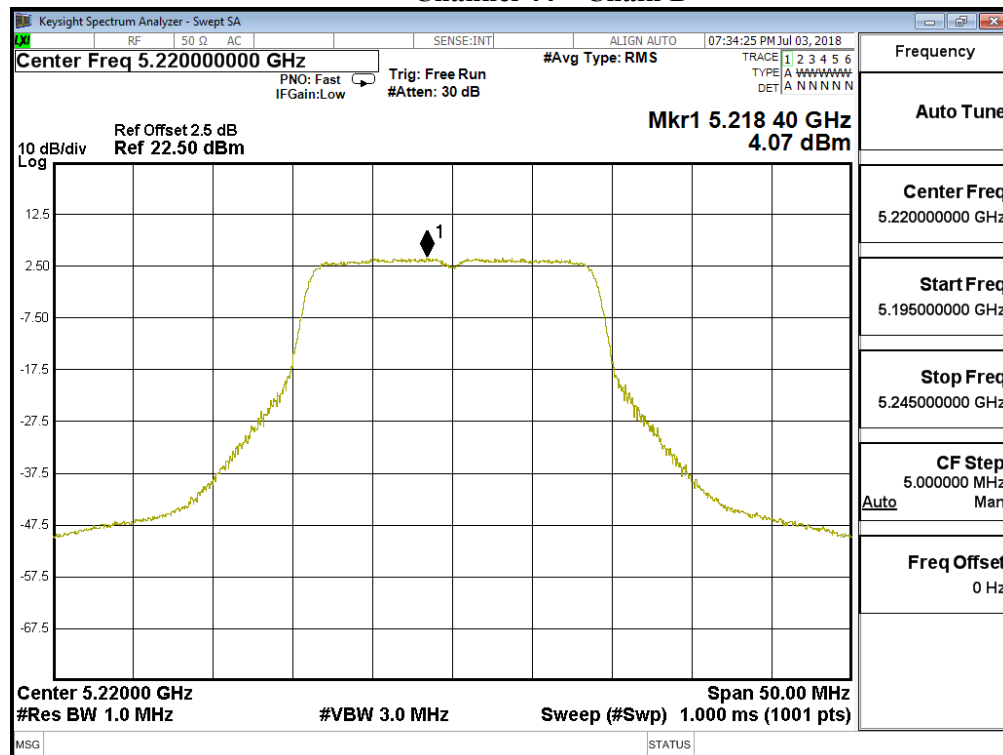
Channel 165 – Chain A



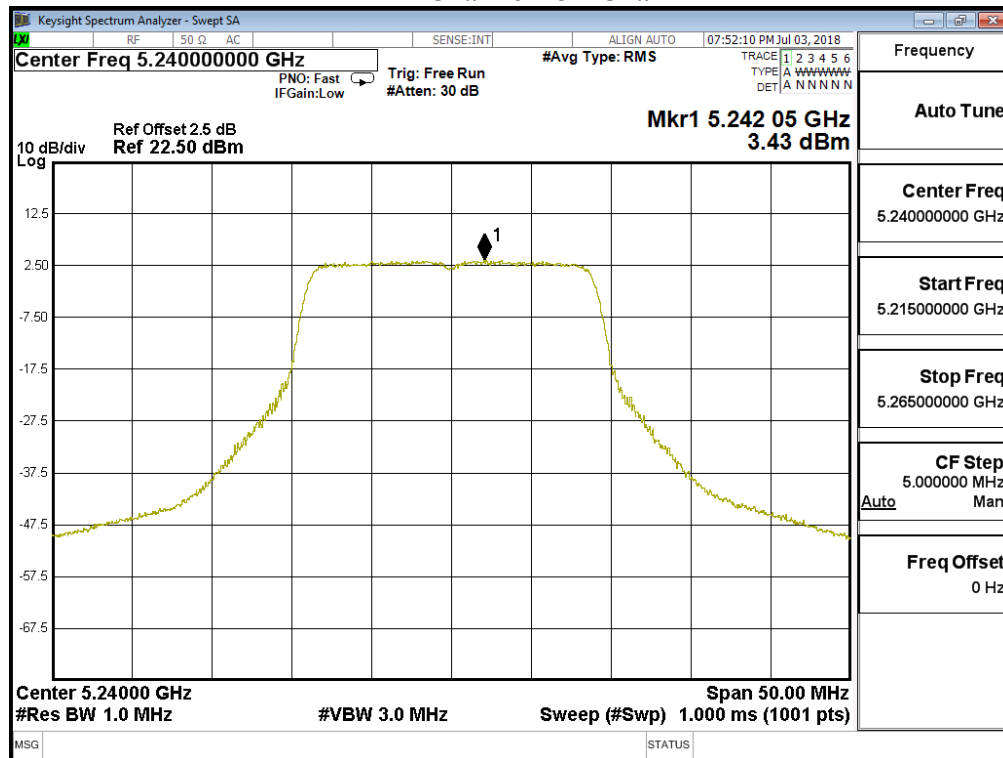
Channel 36 – Chain B



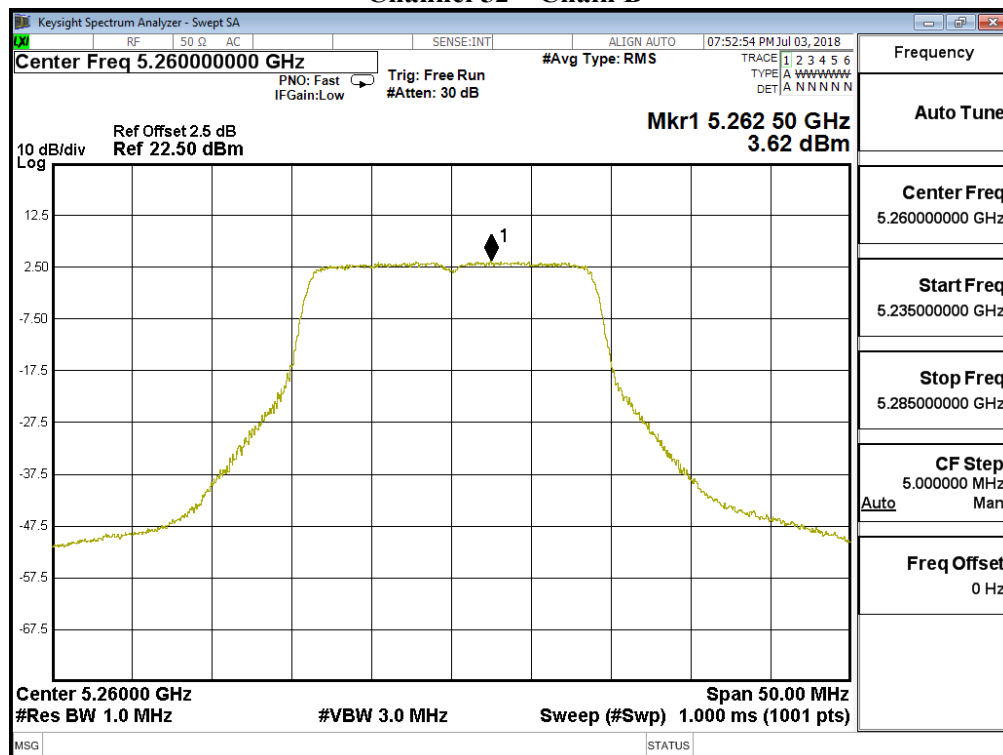
Channel 44 – Chain B



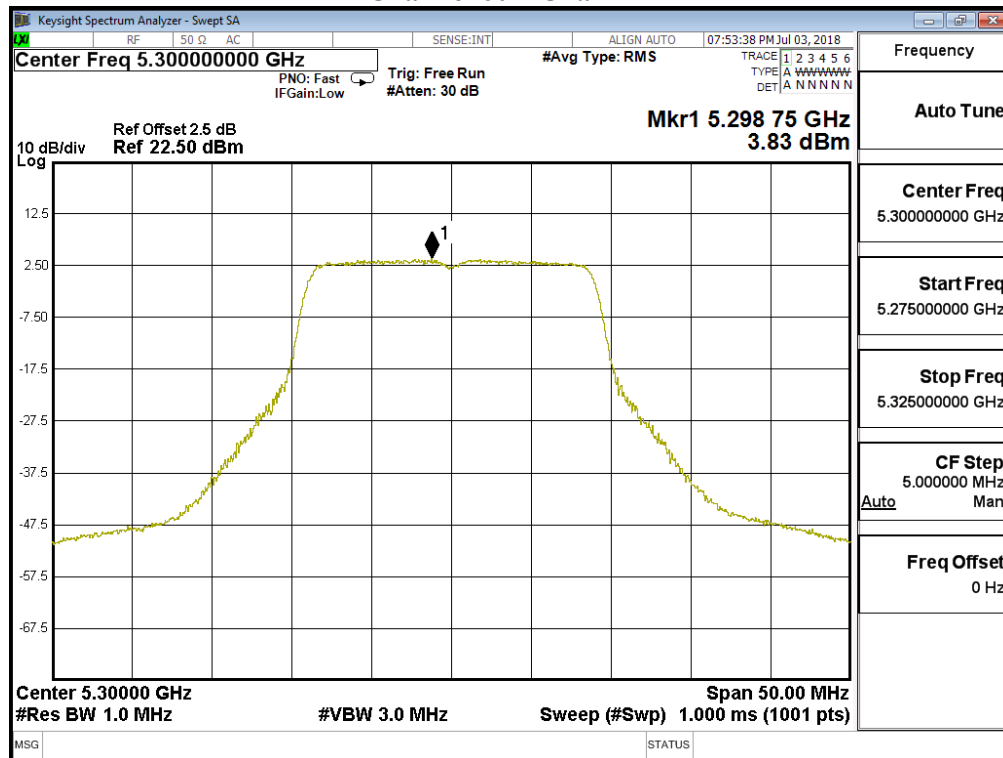
Channel 48 – Chain B



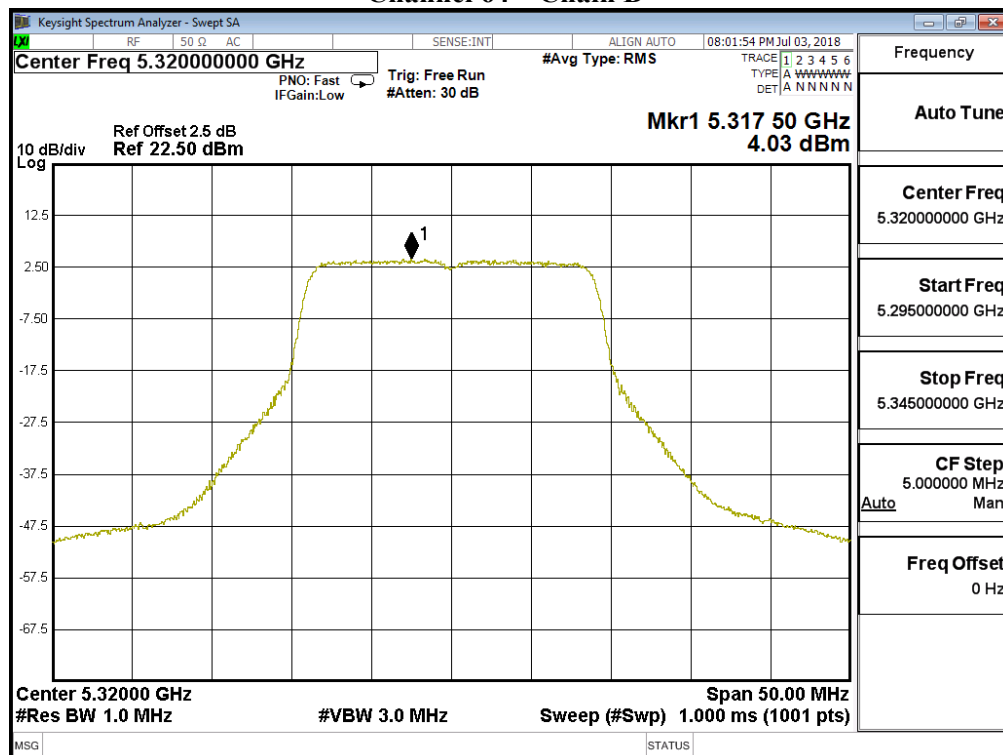
Channel 52 – Chain B



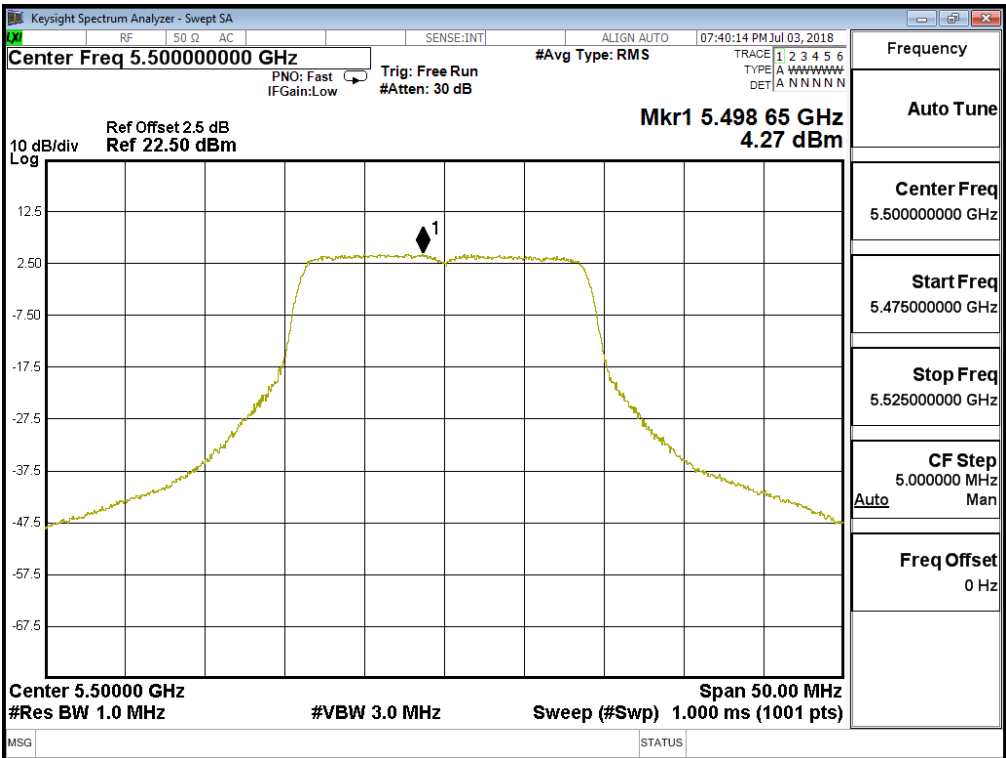
Channel 60 – Chain B



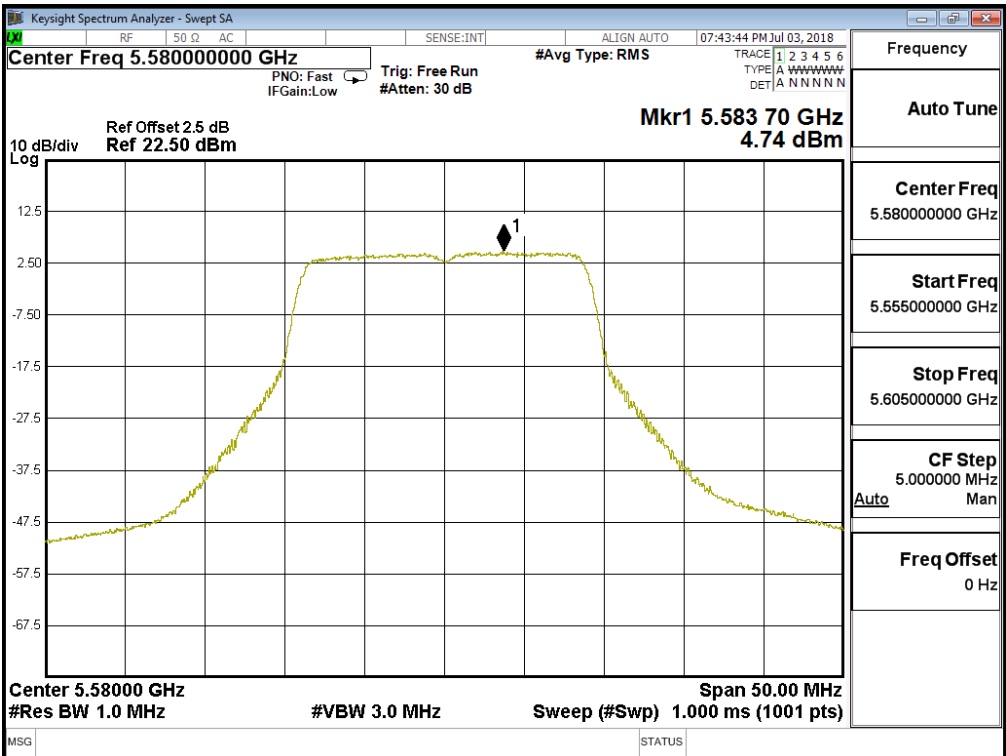
Channel 64 – Chain B



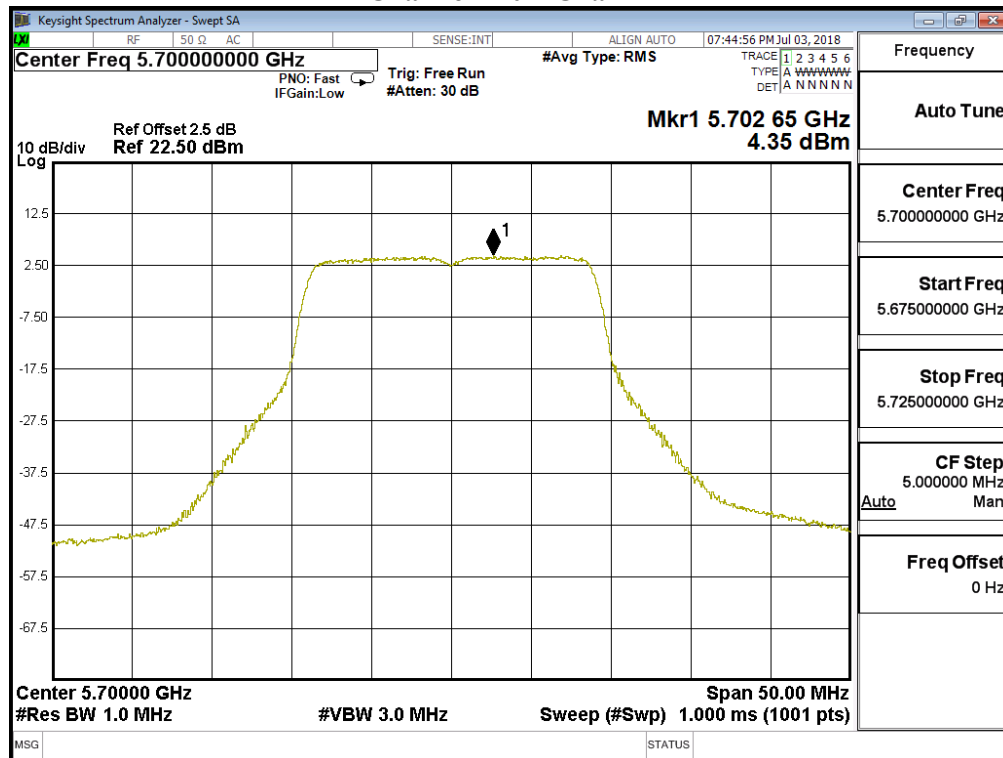
Channel 100 – Chain B



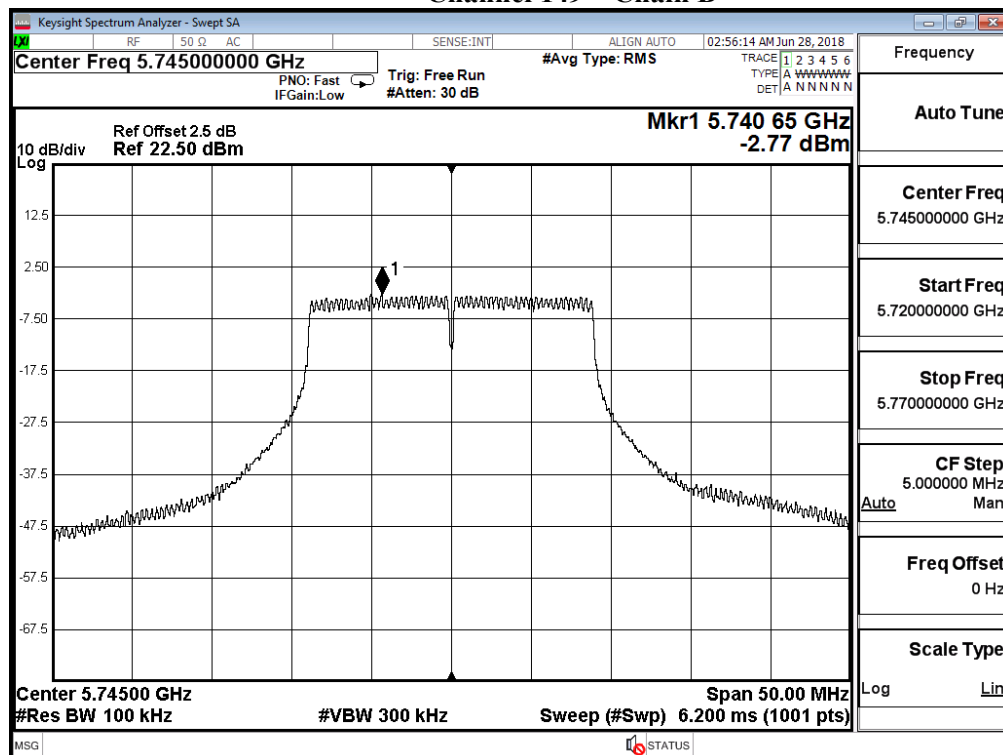
Channel 116 – Chain B



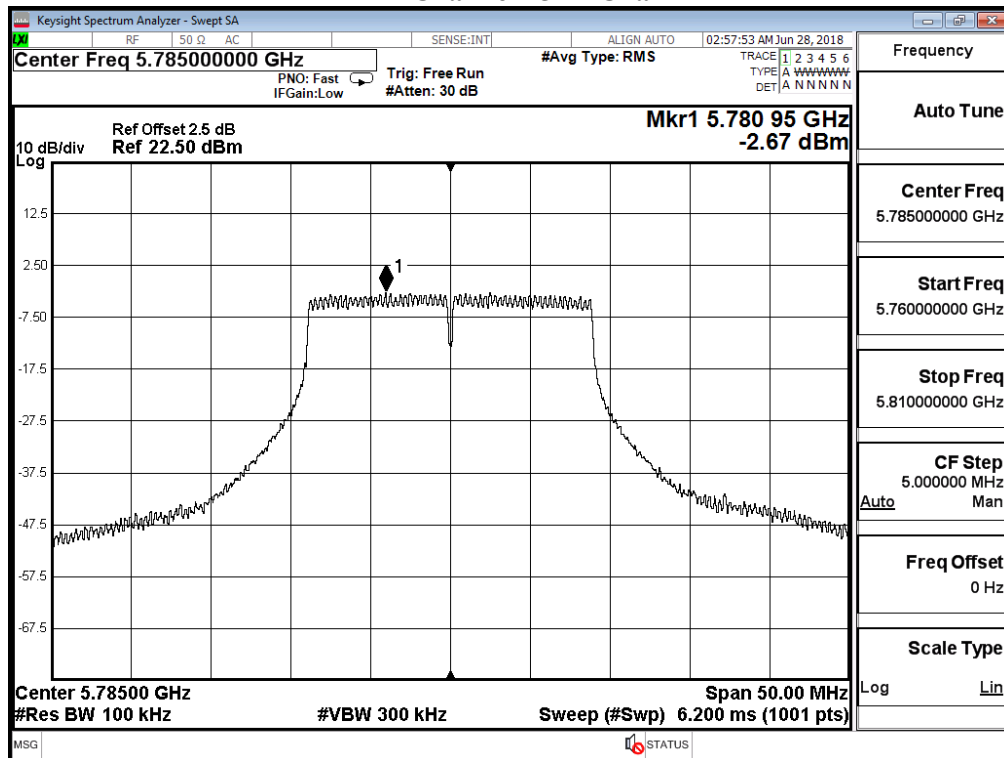
Channel 140 – Chain B



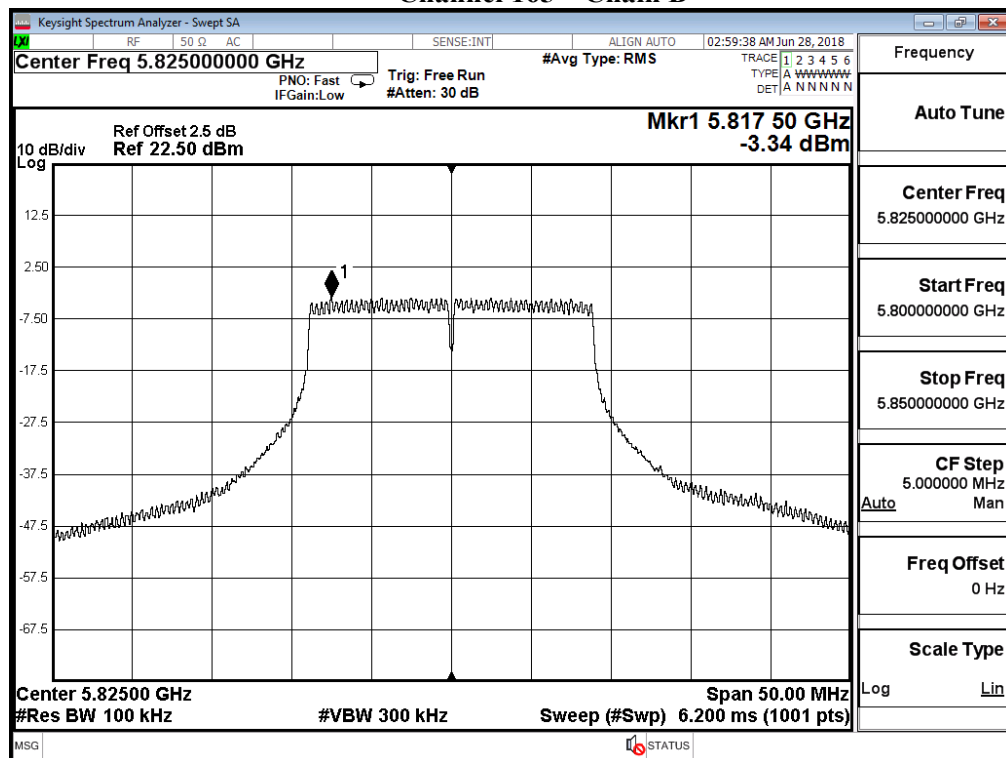
Channel 149 – Chain B



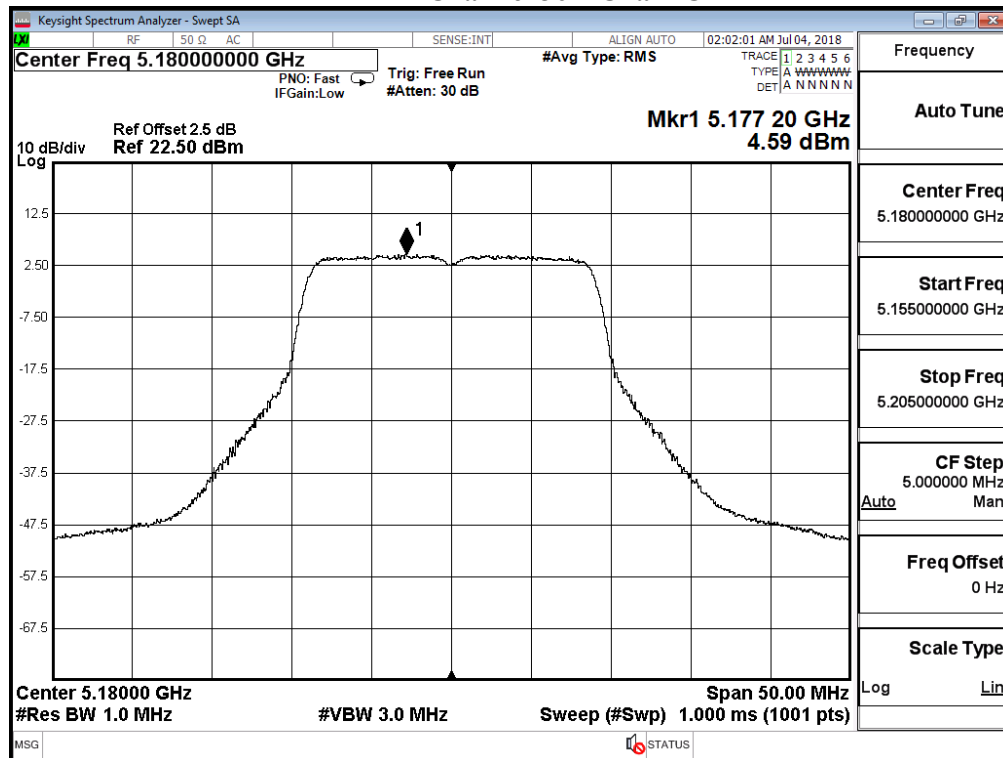
Channel 157 – Chain B



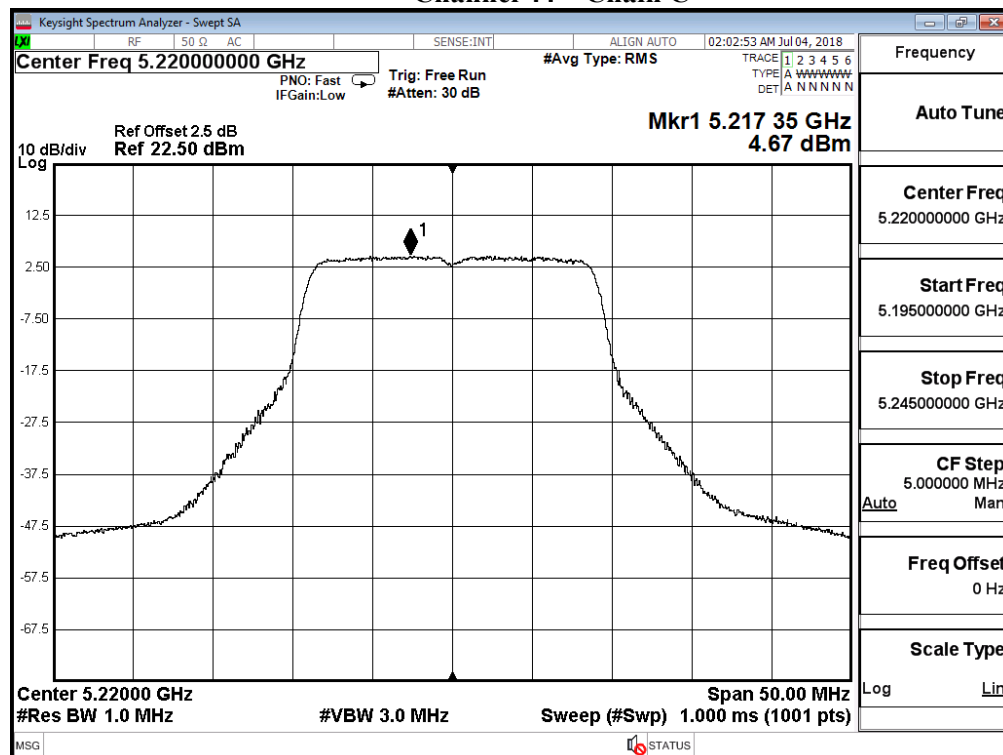
Channel 165 – Chain B



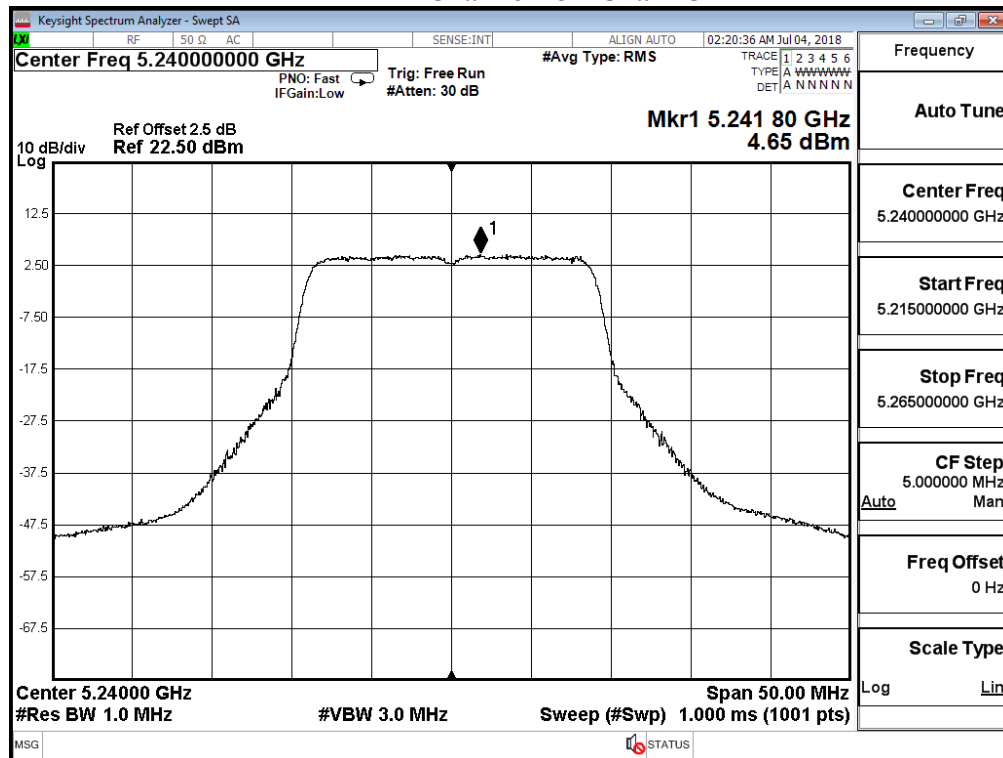
Channel 36 – Chain C



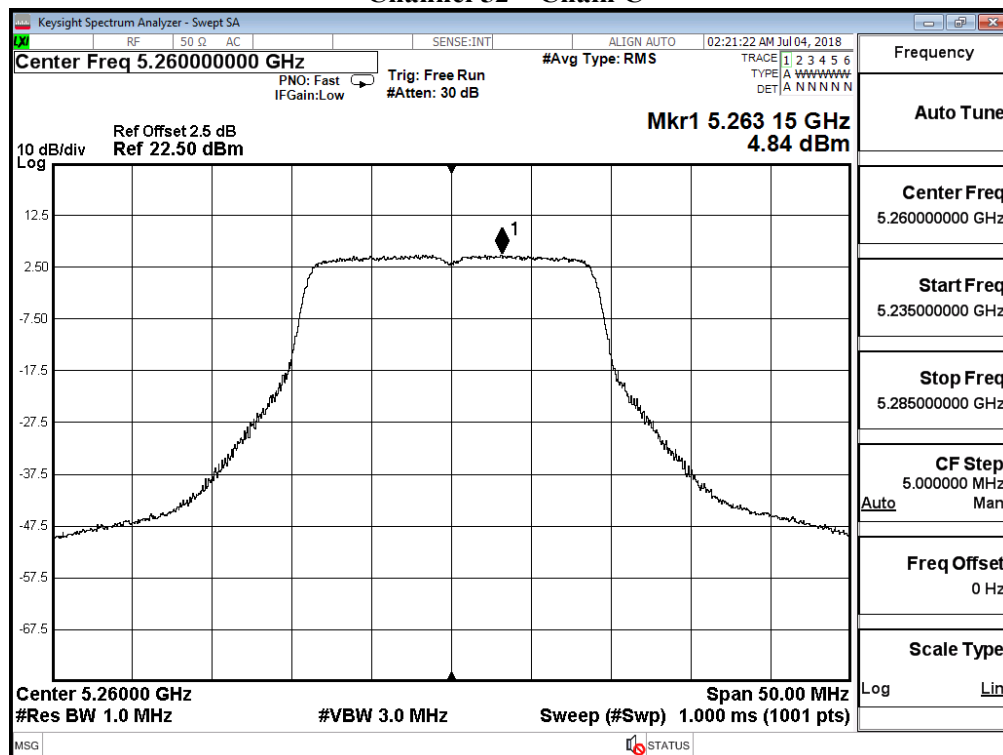
Channel 44 – Chain C



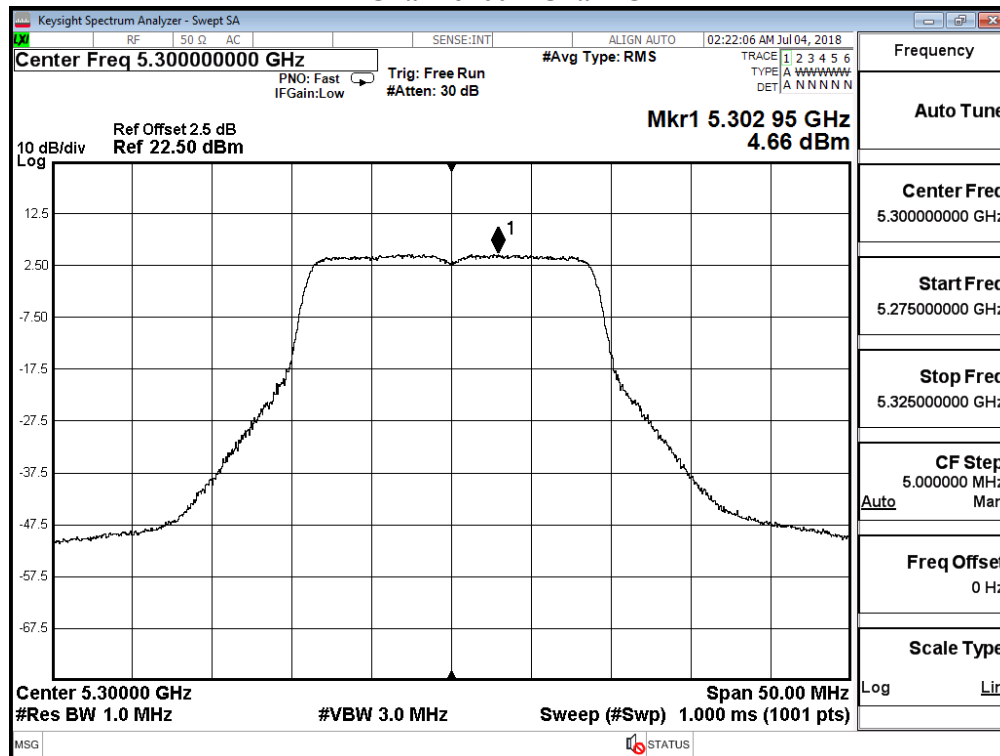
Channel 48 – Chain C



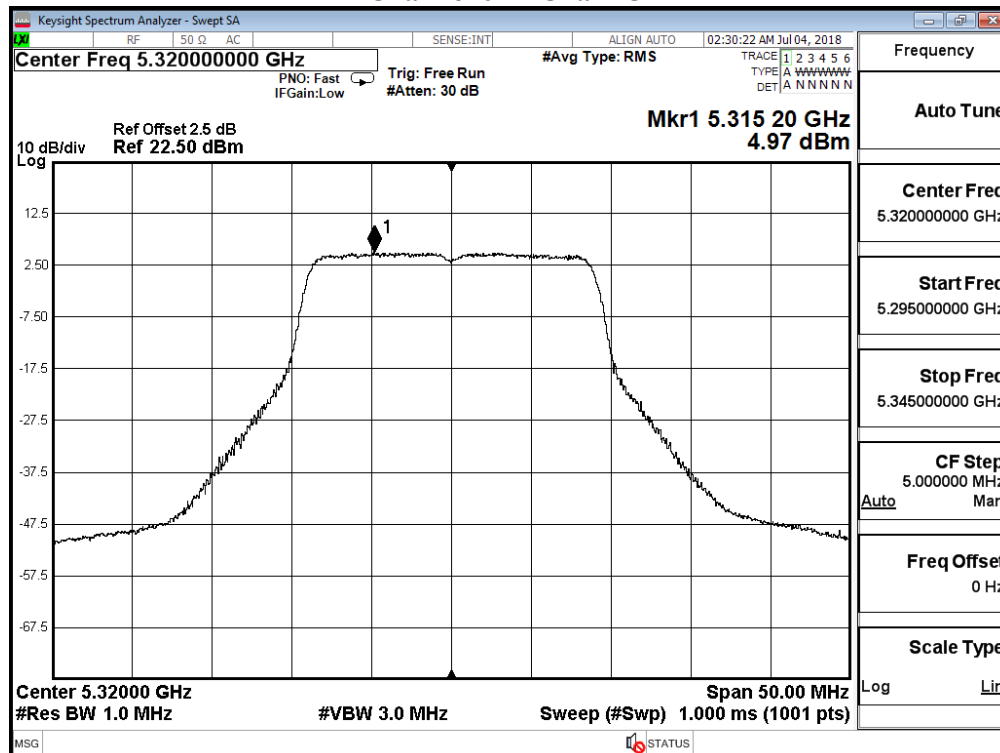
Channel 52 – Chain C



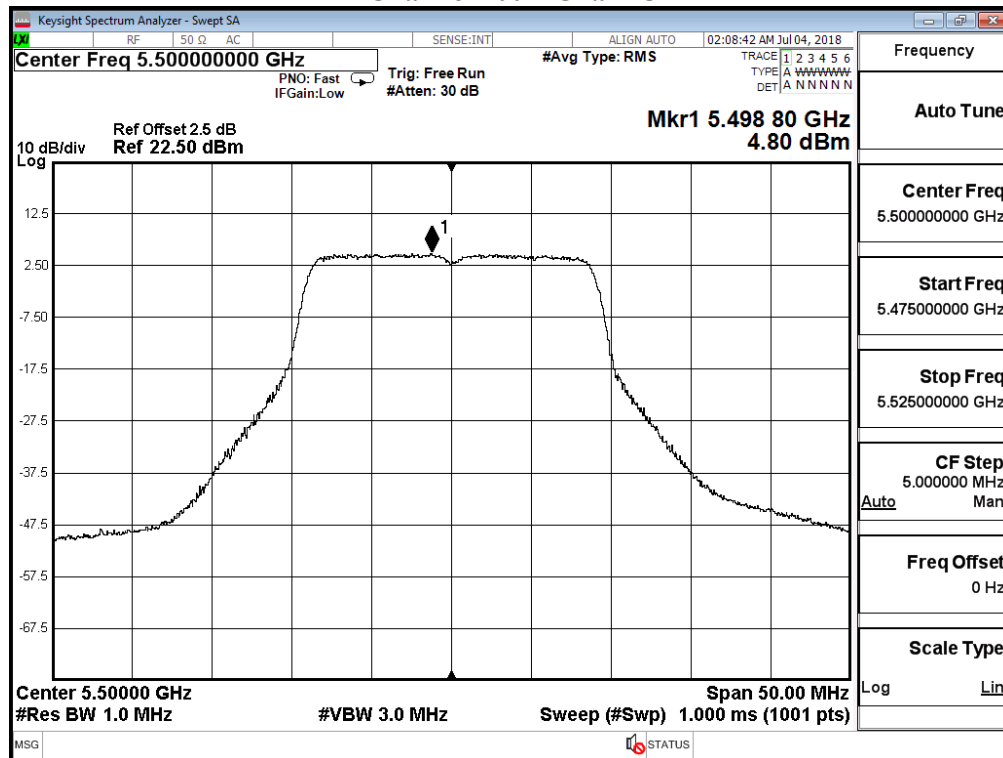
Channel 60 – Chain C



Channel 64 – Chain C



Channel 100 – Chain C



Channel 116 – Chain C

