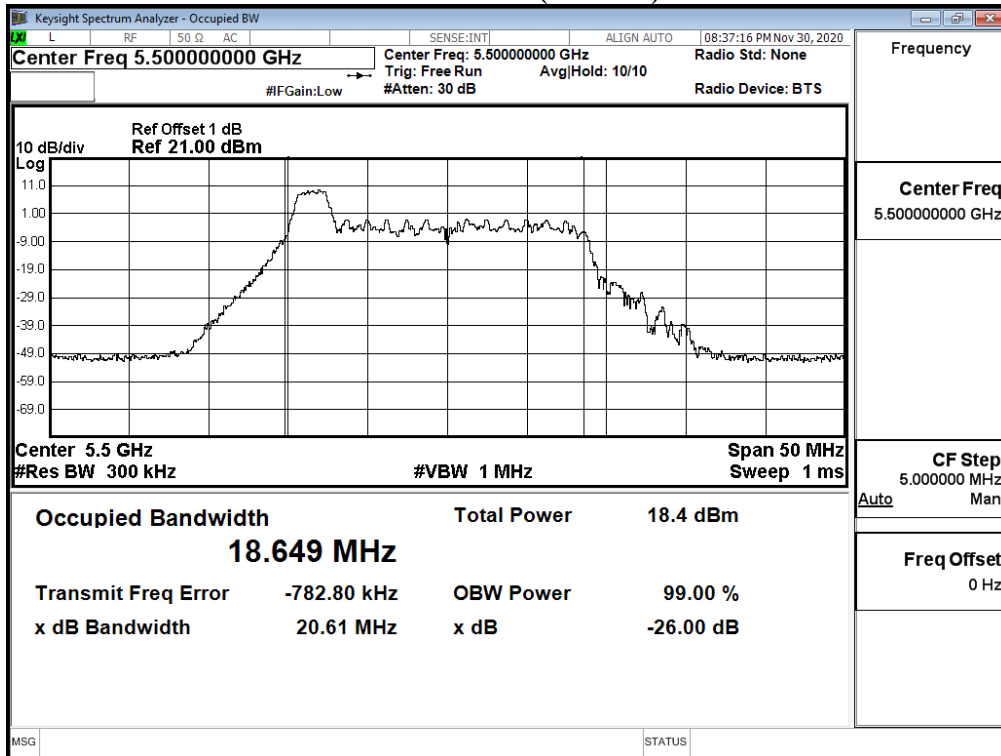
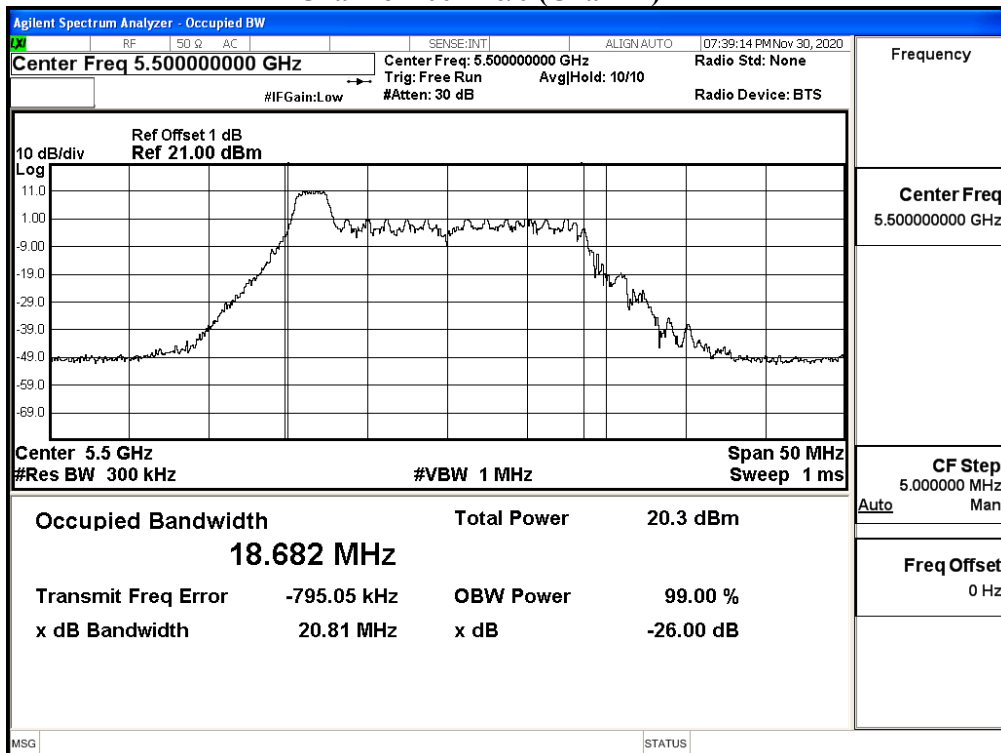


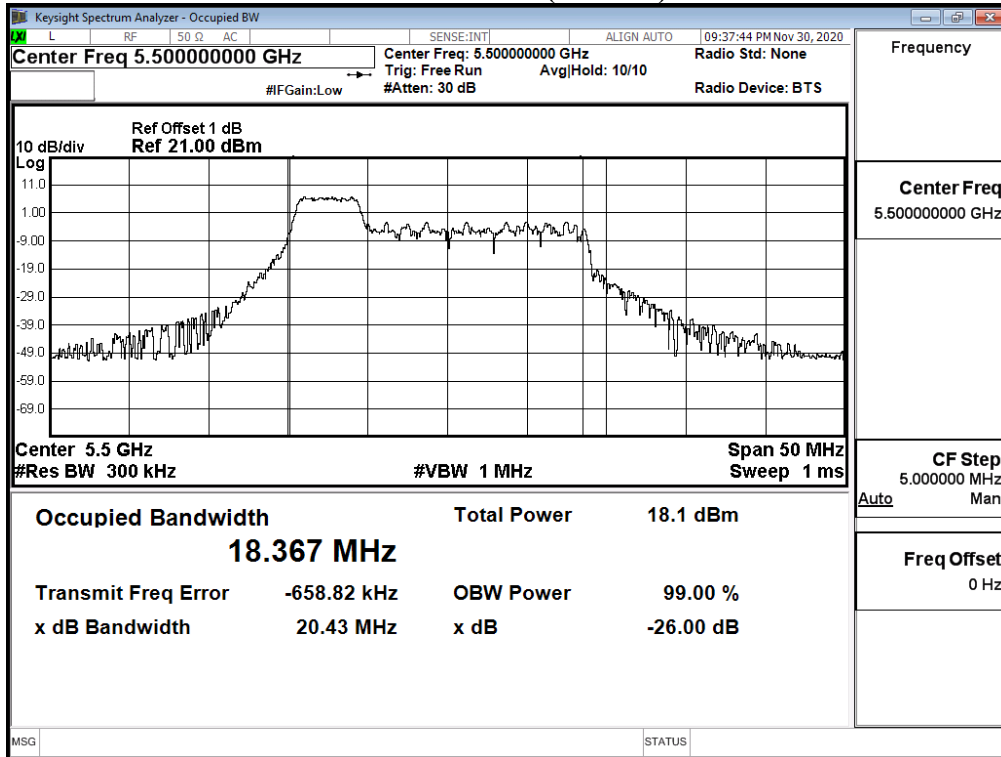
Channel 100 - 26/0 (Chain A)



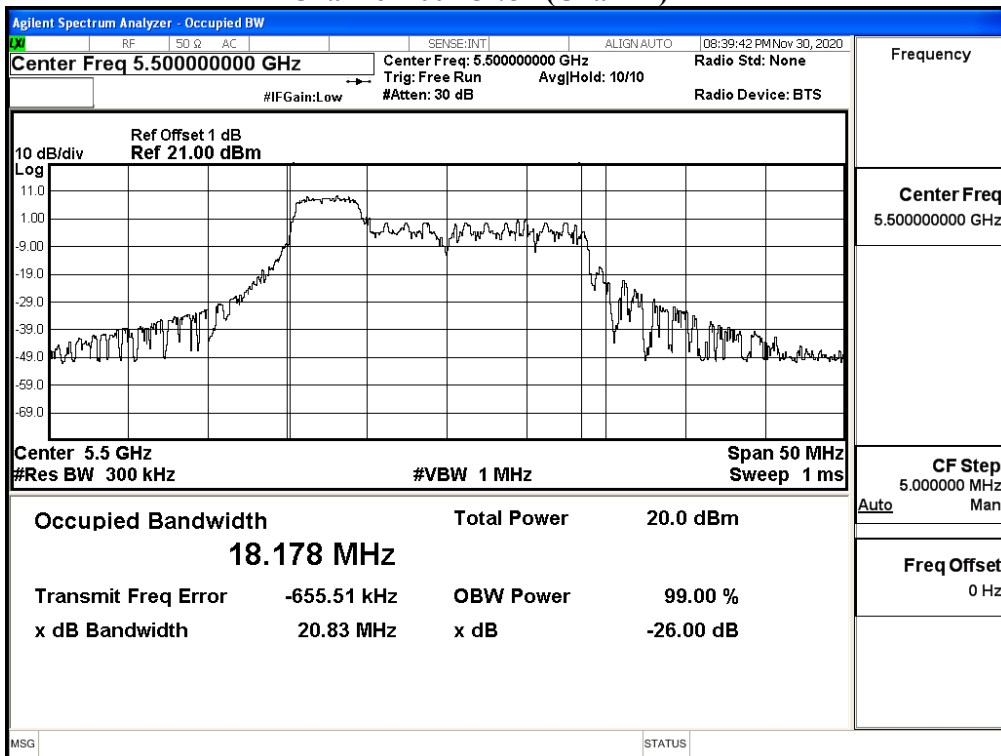
Channel 100 - 26/0 (Chain B)



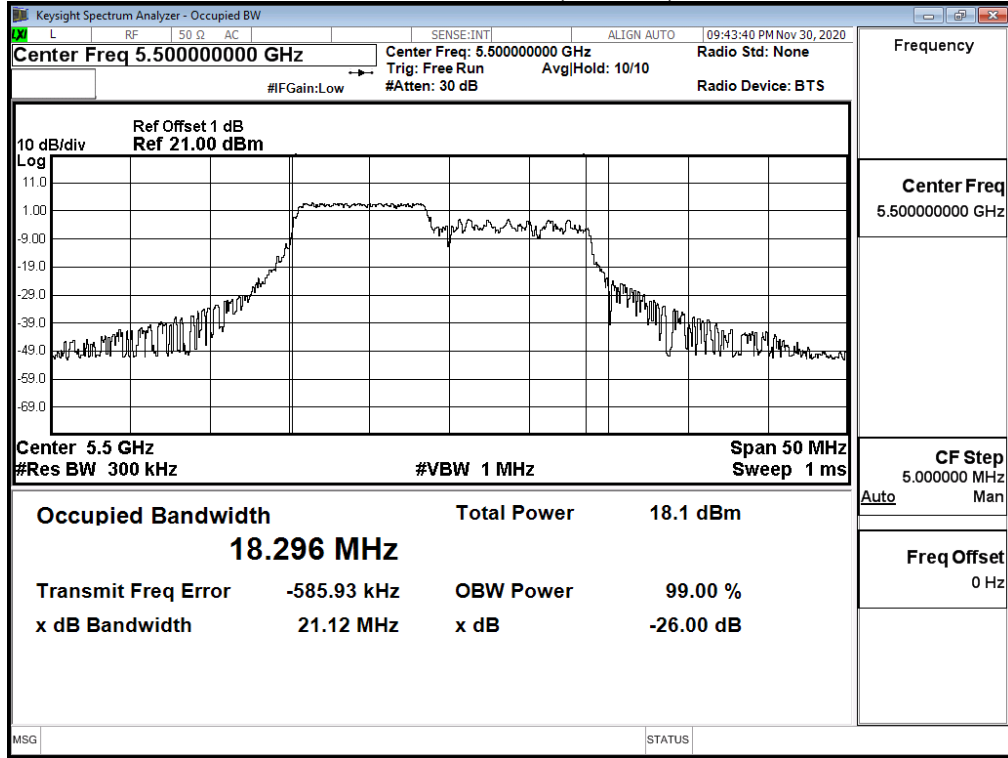
Channel 100 - 52/37 (Chain A)



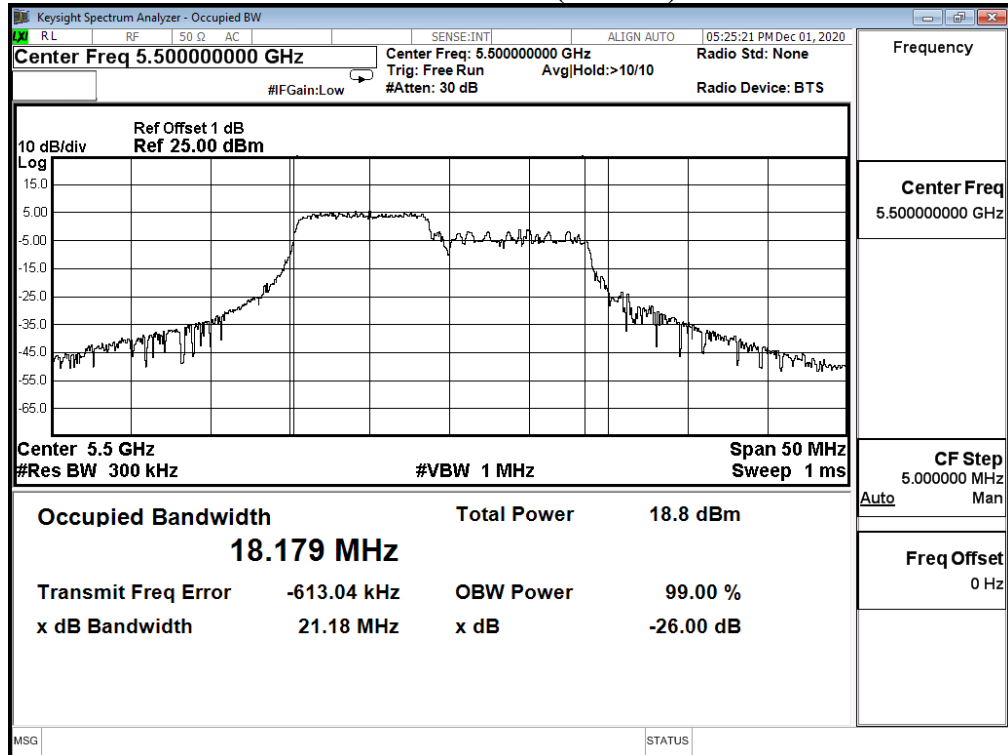
Channel 100 - 52/37 (Chain B)



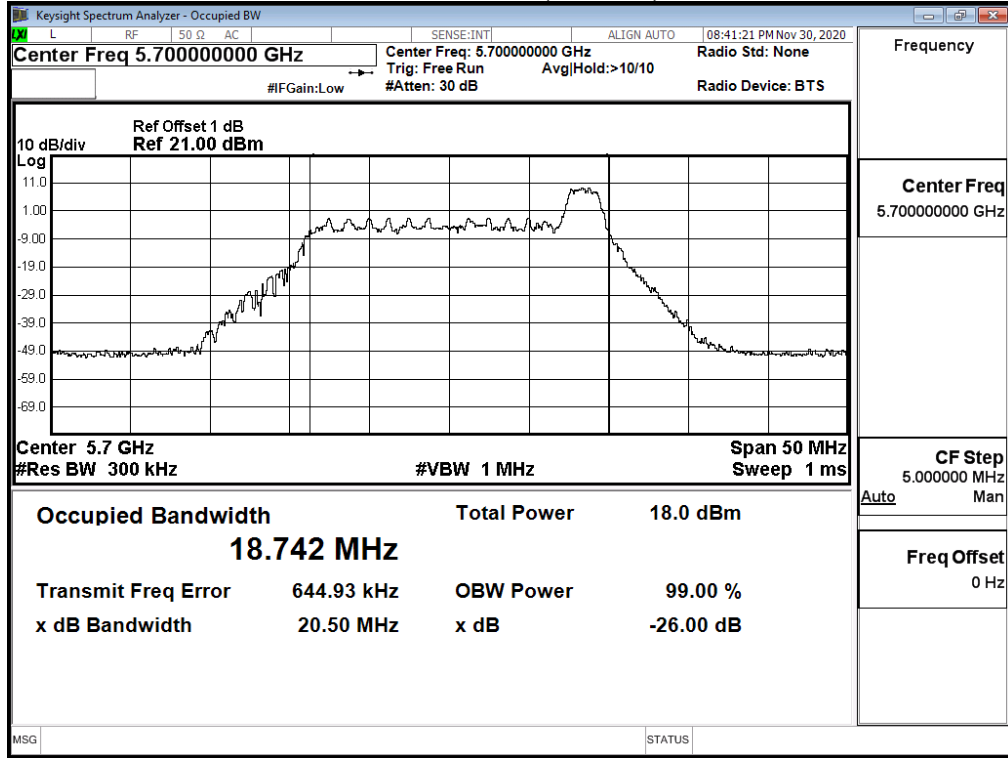
Channel 100 - 106/53 (Chain A)



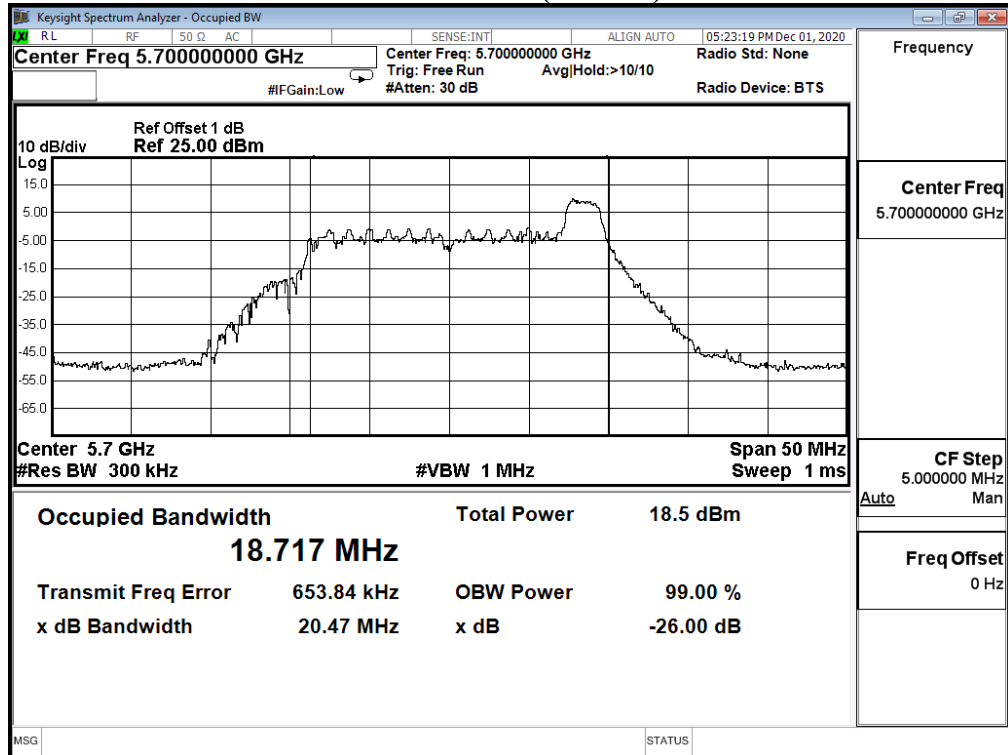
Channel 100 - 106/53 (Chain B)



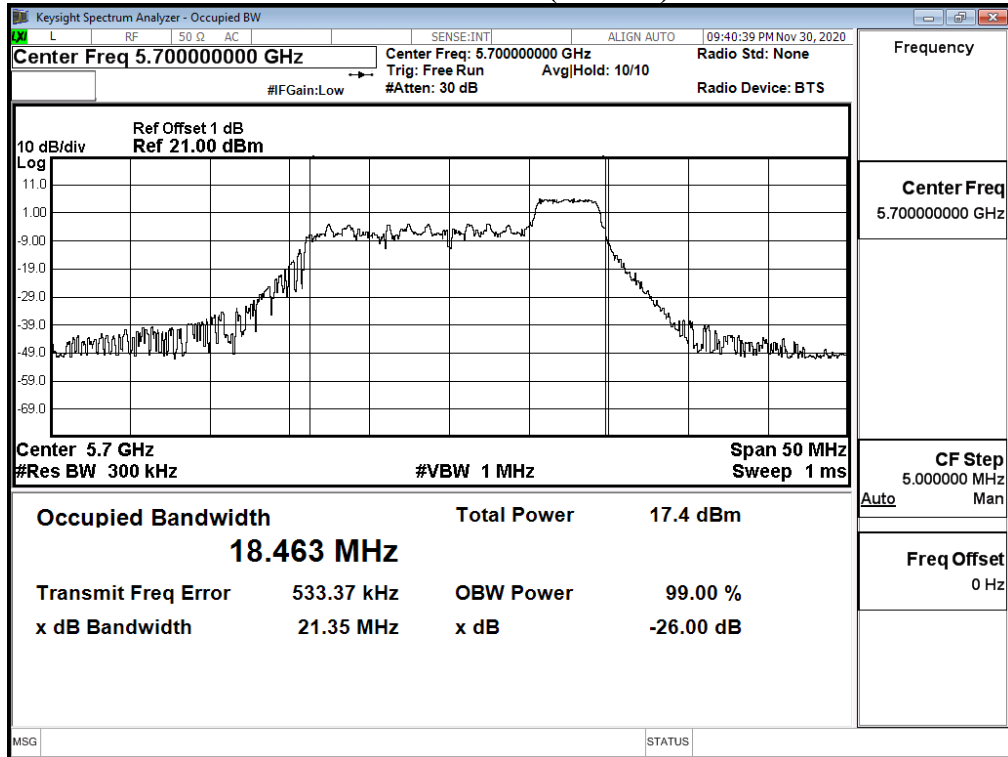
Channel 140 - 26/8 (Chain A)



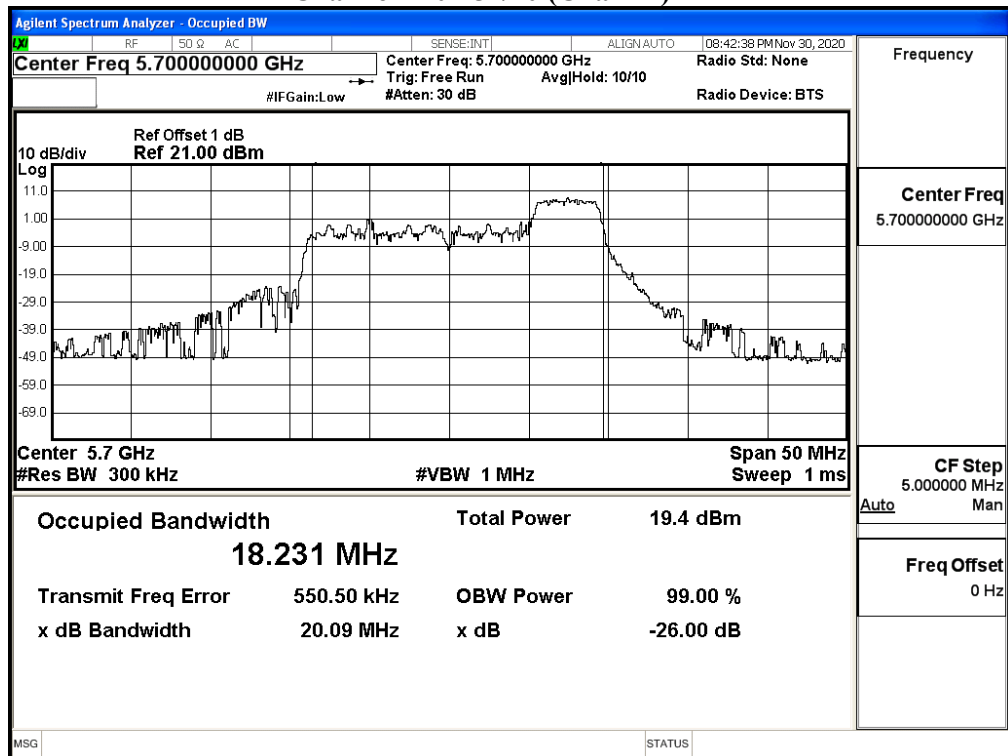
Channel 140 - 26/8 (Chain B)



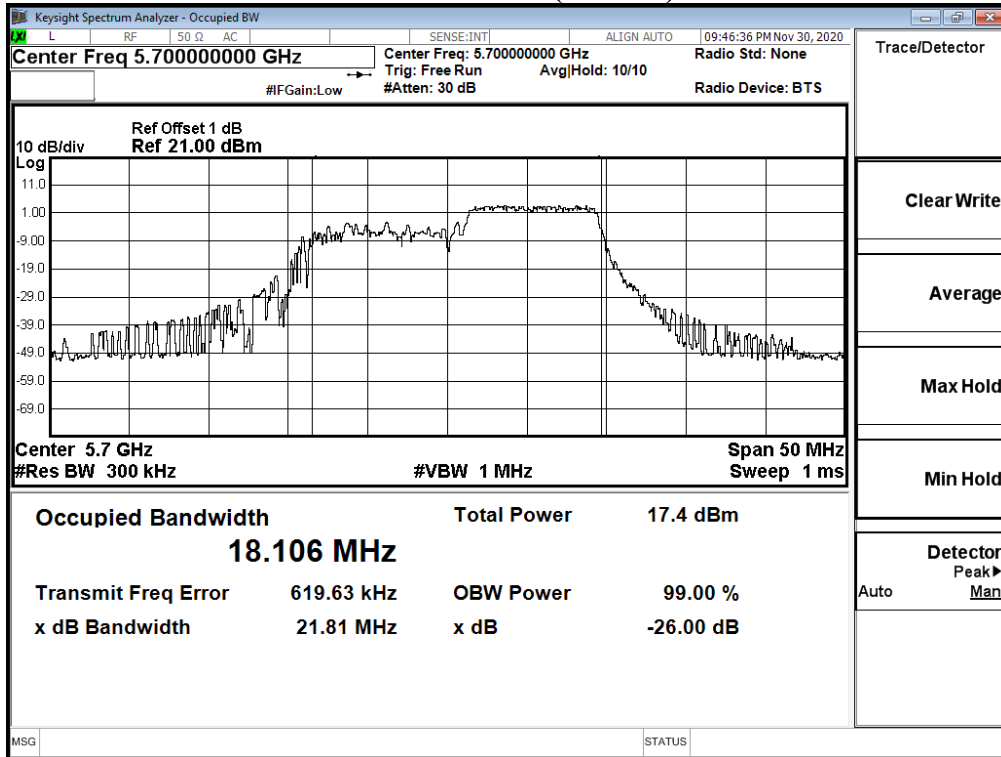
Channel 140 - 52/40 (Chain A)



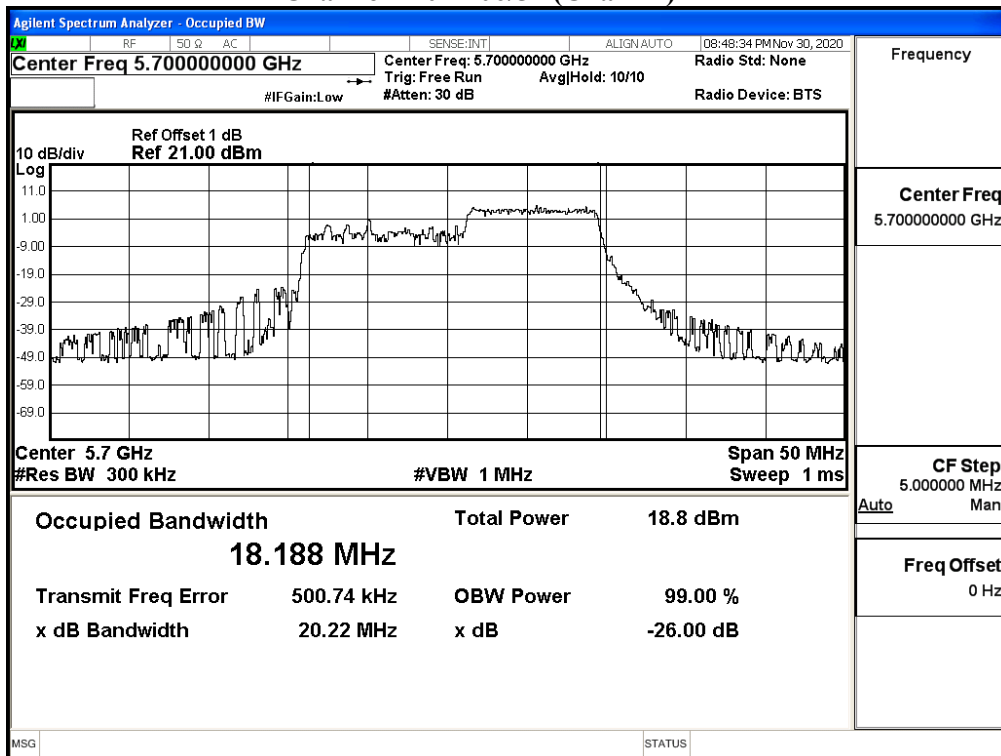
Channel 140 - 52/40 (Chain B)



Channel 140 - 106/54 (Chain A)



Channel 140 - 106/54 (Chain B)



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 24: MIMO: Transmit (802.11ax-40BW_34.4Mbps)

Chain A
RU config: Full

Cable loss=1dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	Data Rate (Mbps)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
38	5190	7.78	--	--	--	--	--	--	--	--	--	--	--
46	5230	7.62	7.56	7.53	7.44	7.34	7.29	7.26	7.22	7.16	7.09	7.01	6.98
54	5270	7.62	--	--	--	--	--	--	--	--	--	--	--
62	5310	7.61	7.53	7.50	7.40	7.32	7.23	7.16	7.11	7.07	6.99	6.94	6.84
102	5510	7.24	--	--	--	--	--	--	--	--	--	--	--
110	5550	7.05	6.99	6.91	6.86	6.76	6.72	6.68	6.60	6.52	6.47	6.41	6.31
134	5670	7.02	--	--	--	--	--	--	--	--	--	--	--
142F(Band3)	5710	6.58	6.48	6.38	6.31	6.26	6.20	6.16	6.08	6.03	5.97	5.87	5.83
142F(Band4)	5710	-3.01	-3.09	-3.14	-3.24	-3.31	-3.40	-3.50	-3.58	-3.66	-3.76	-3.80	-3.86
151	5755	10.60	--	--	--	--	--	--	--	--	--	--	--
159	5795	10.64	10.54	10.50	10.42	10.39	10.32	10.27	10.20	10.16	10.06	10.03	9.98

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B
RU config: Full

Cable loss=1dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	Data Rate (Mbps)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
38	5190	10.69	--	--	--	--	--	--	--	--	--	--	--
46	5230	10.61	10.58	10.54	10.51	10.44	10.41	10.34	10.31	10.28	10.21	10.17	10.11
54	5270	10.78	--	--	--	--	--	--	--	--	--	--	--
62	5310	10.64	10.56	10.47	10.40	10.36	10.28	10.20	10.14	10.09	10.04	9.96	9.91
102	5510	9.58	--	--	--	--	--	--	--	--	--	--	--
110	5550	9.53	9.50	9.47	9.41	9.34	9.24	9.19	9.16	9.09	8.99	8.95	8.88
134	5670	9.77	--	--	--	--	--	--	--	--	--	--	--
142F(Band3)	5710	9.13	9.07	9.00	8.97	8.91	8.85	8.80	8.72	8.62	8.54	8.48	8.41
142F(Band4)	5710	-0.36	-0.42	-0.48	-0.54	-0.61	-0.69	-0.76	-0.80	-0.88	-0.97	-1.00	-1.10
151	5755	10.66	--	--	--	--	--	--	--	--	--	--	--
159	5795	10.60	10.51	10.48	10.40	10.35	10.27	10.18	10.08	9.98	9.91	9.82	9.75

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit		Result
						(dBm)	dBm+10log(BW)	
38	5190	--	7.78	10.69	12.48	24	--	Pass
46	5230	--	7.62	10.61	12.38	24	--	Pass
54	5270	42.780	7.62	10.78	12.49	24	27.31	Pass
62	5310	43.370	7.61	10.64	12.39	24	27.37	Pass
102	5510	44.080	7.24	9.58	11.58	24	27.44	Pass
110	5550	43.110	7.05	9.53	11.47	24	27.35	Pass
134	5670	43.820	7.02	9.77	11.62	24	27.42	Pass
142F(Band3)	5710	36.400	6.58	9.13	11.05	24	26.61	Pass
142F(Band4)	5710	--	-3.01	-0.36	1.52	30	--	Pass
151	5755	--	10.60	10.66	13.64	30	--	Pass
159	5795	--	10.64	10.60	13.63	30	--	Pass

Note:

1. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
2. 26dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Chain A

RU config: Other

Channel No / Frequency (MHz)	RU setting	Average Power Output (dBm)													Required Limi
		Data Rate (Mbps)													
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11		
38 / 5190	242/61	7.72	--	--	--	--	--	--	--	--	--	--	--	--	<24dBm
62 / 5310	242/62	7.76	7.70	7.62	7.53	7.46	7.43	7.40	7.31	7.28	7.24	7.21	7.13	<24dBm	
102 / 5510	242/61	7.06	--	--	--	--	--	--	--	--	--	--	--	<24dBm	
134 / 5670	242/62	7.12	7.04	6.99	6.93	6.84	6.76	6.70	6.62	6.53	6.48	6.44	6.40	<24dBm	
151 / 5755	242/61	10.63	--	--	--	--	--	--	--	--	--	--	--	<24dBm	

Chain B

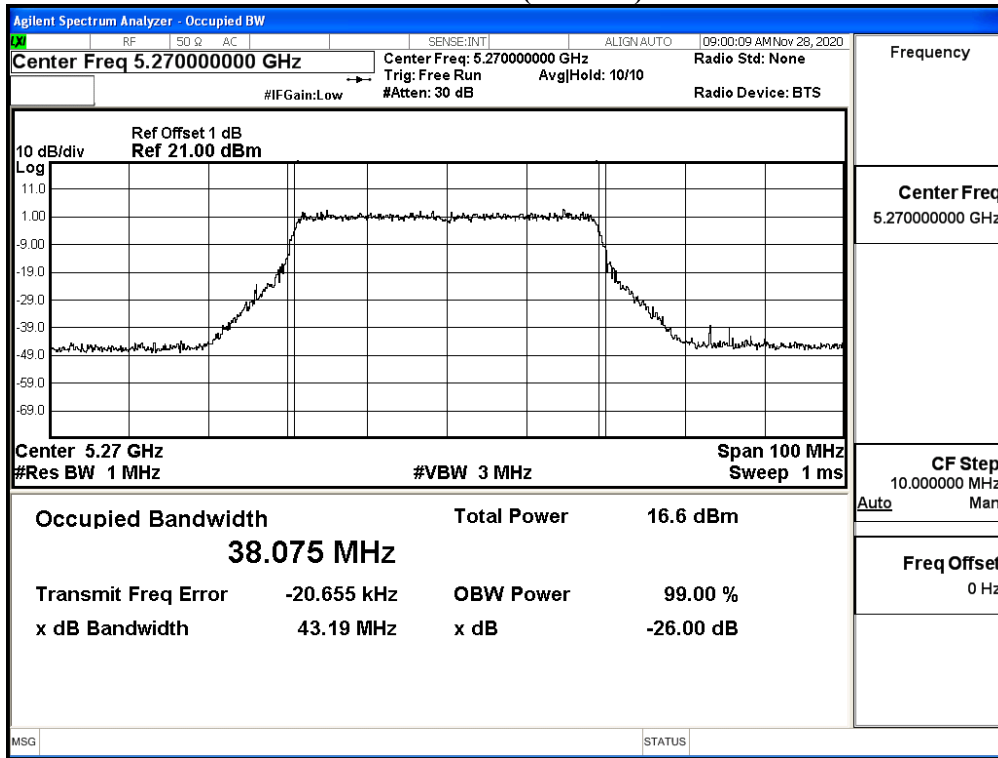
RU config: Other

Channel No / Frequency (MHz)	RU setting	Average Power Output (dBm)													Required Limi
		Data Rate (Mbps)													
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11		
38 / 5190	242/61	10.79	--	--	--	--	--	--	--	--	--	--	--	<24dBm	
62 / 5310	242/62	10.75	10.72	10.67	10.60	10.57	10.50	10.45	10.39	10.31	10.25	10.22	10.15	<24dBm	
102 / 5510	242/61	9.77	--	--	--	--	--	--	--	--	--	--	--	<24dBm	
134 / 5670	242/62	9.51	9.46	9.41	9.38	9.29	9.23	9.14	9.04	8.97	8.89	8.84	8.76	<24dBm	
151 / 5755	242/61	10.78	--	--	--	--	--	--	--	--	--	--	--	<24dBm	

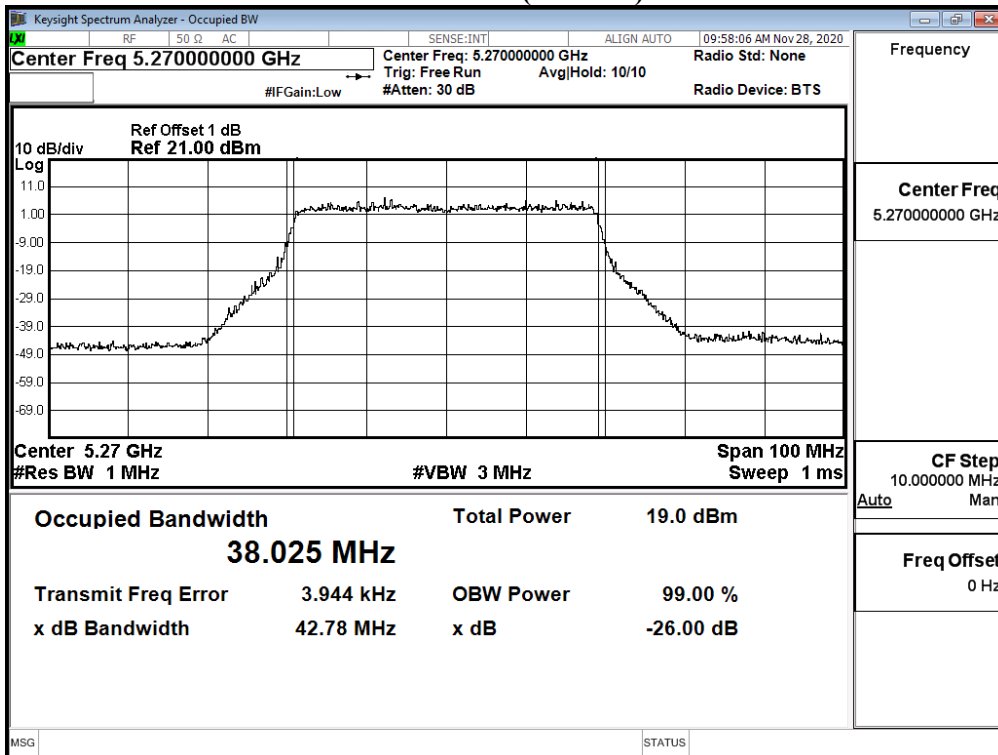
Maximum conducted output power Measurement:

Channel No / Frequency Range	RU setting	26dB Bandwidth	Chain A Power	Chain B Power	Output Power Limit	Output power limit		Result
		(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	dBm+10log (BW)	
38 / 5190	242/61		7.72	10.79	12.53	24		Pass
62 / 5310	242/62	23.720	7.76	10.75	12.52	24	24.75	Pass
102 / 5510	242/61	21.900	7.06	9.77	11.63	24	24.40	Pass
134 / 5670	242/62	23.140	7.12	9.51	11.49	24	24.64	Pass
151 / 5755	242/61		10.63	10.78	13.72	30		Pass

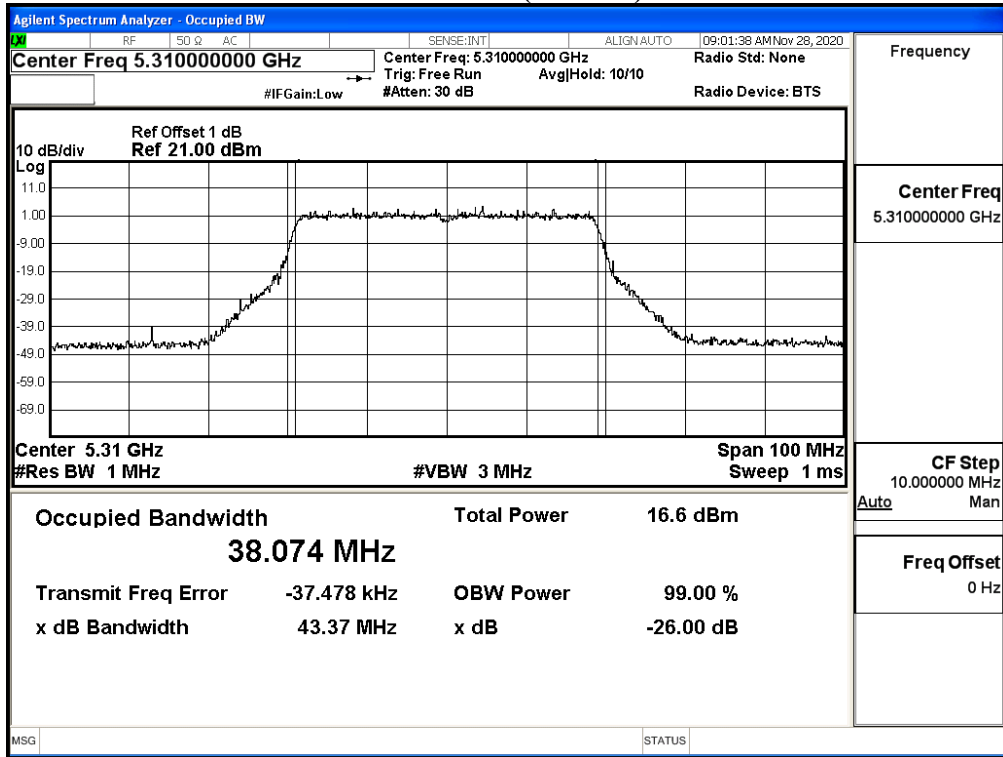
RU config: Full
26dB Occupied Bandwidth:
Channel 54 (Chain A)



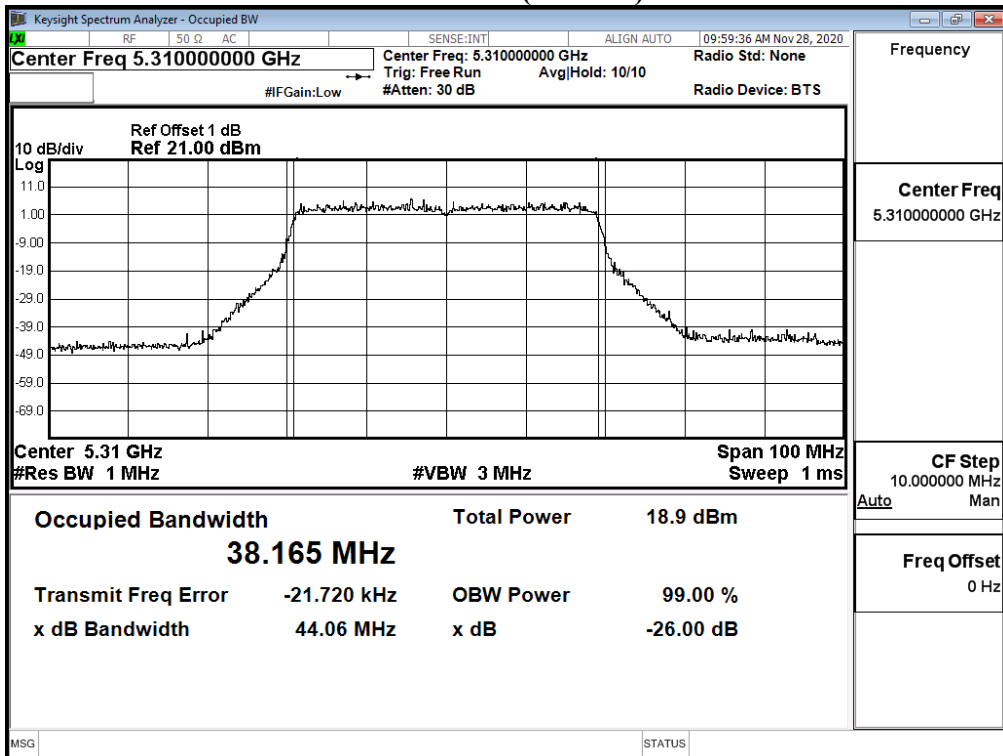
Channel 54 (Chain B)



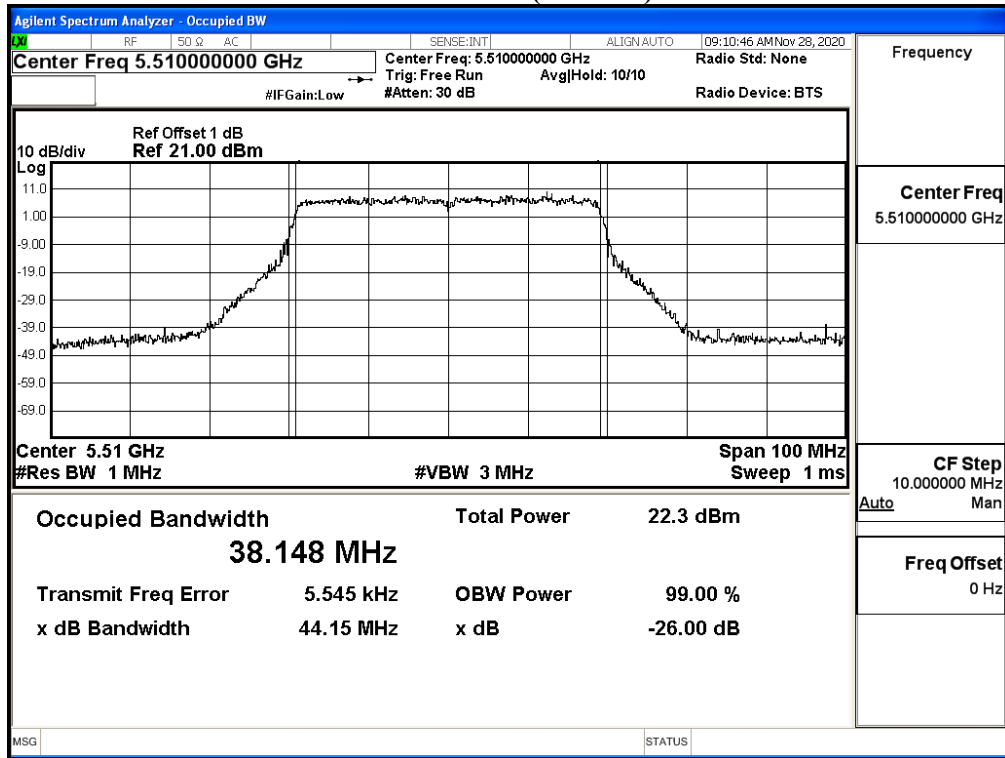
Channel 62 (Chain A)



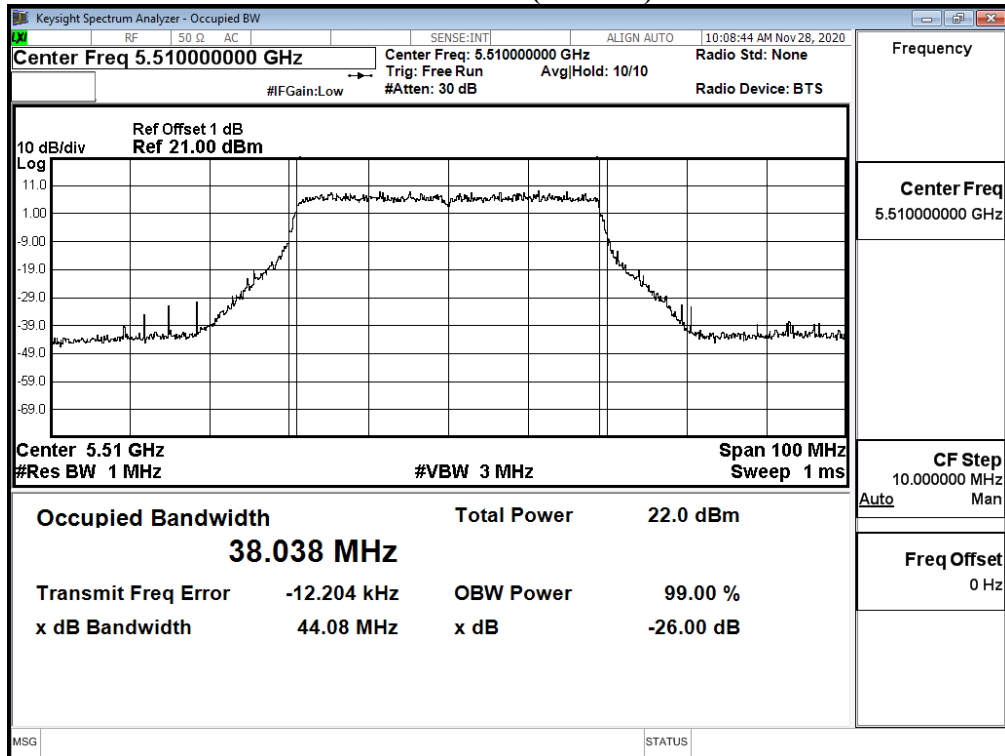
Channel 62 (Chain B)



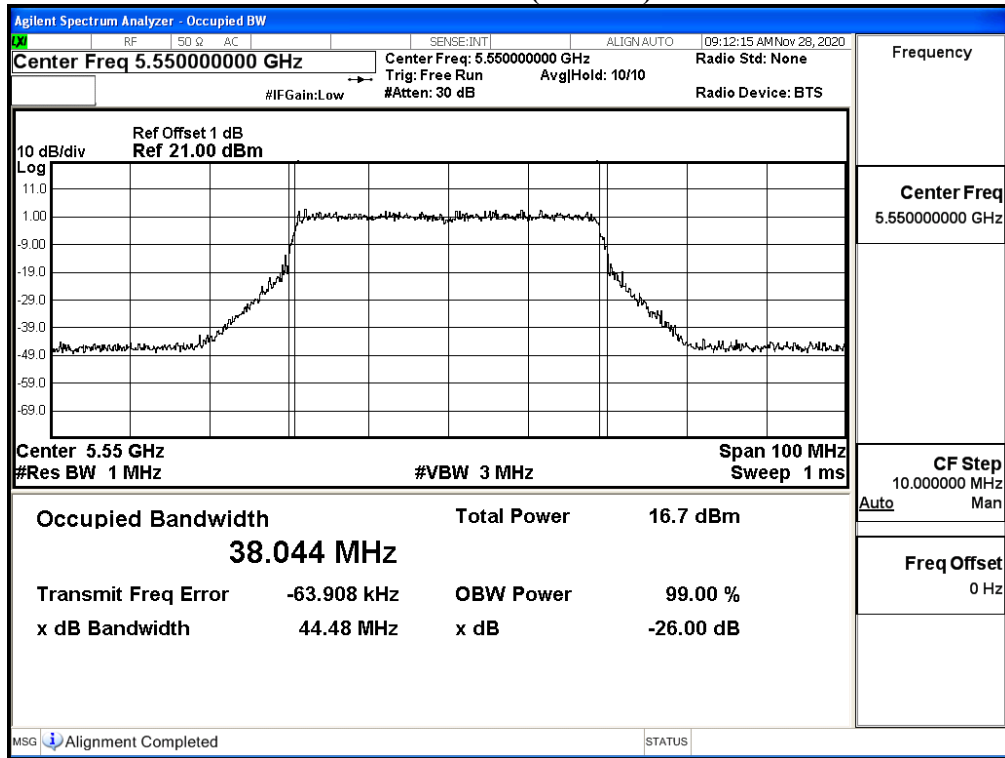
Channel 102 (Chain A)



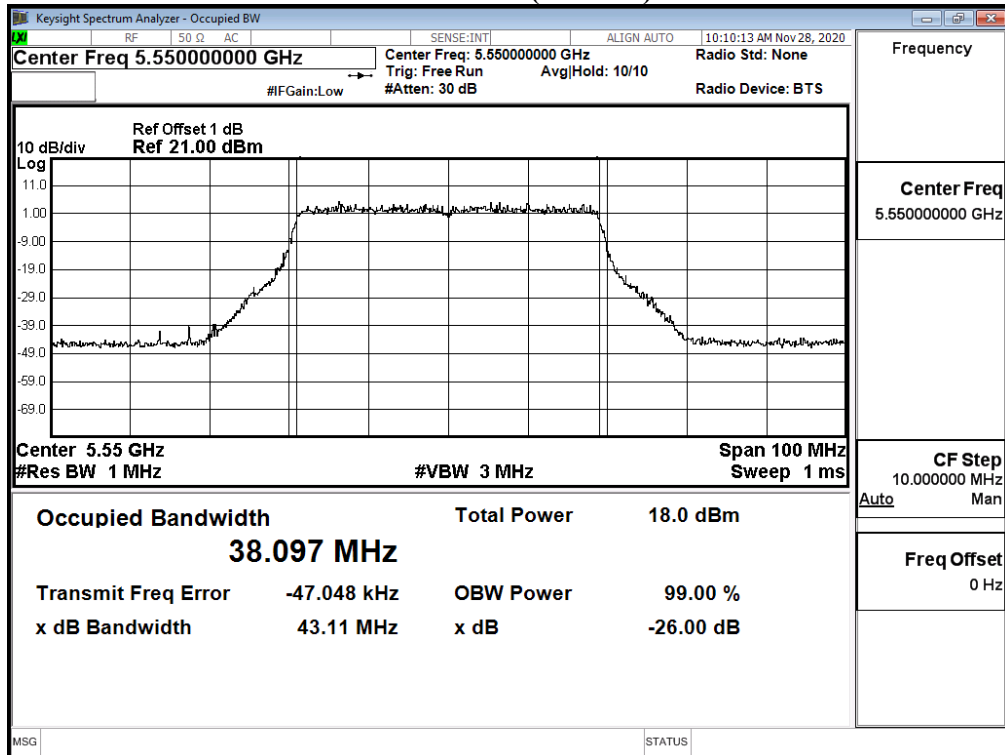
Channel 102 (Chain B)



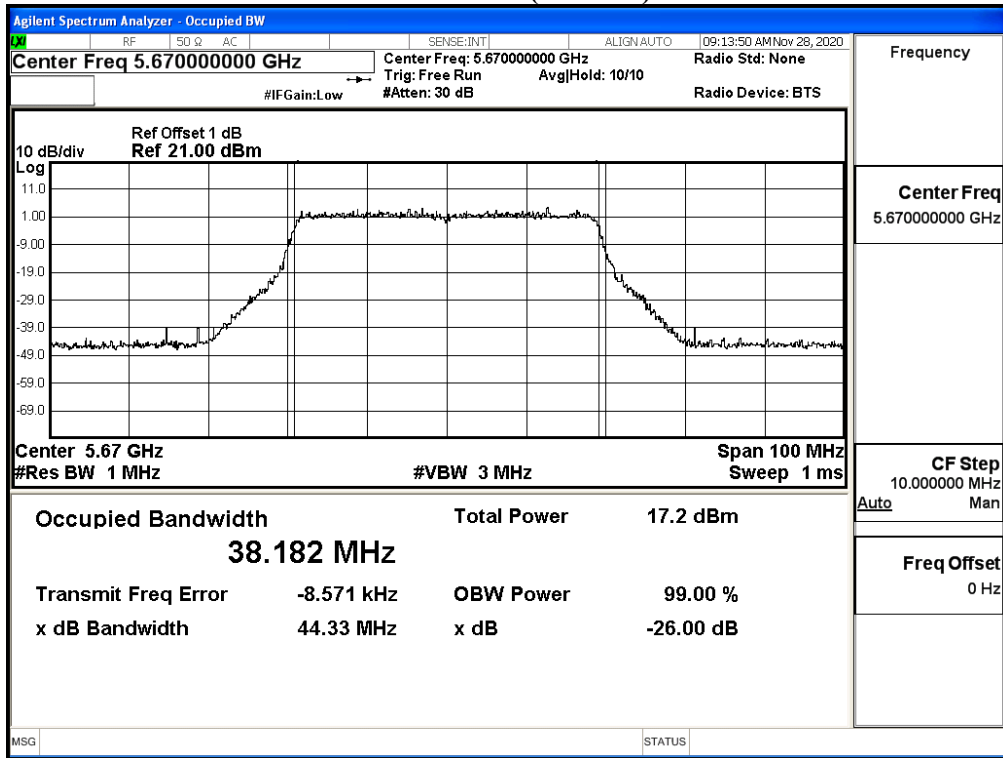
Channel 110 (Chain A)



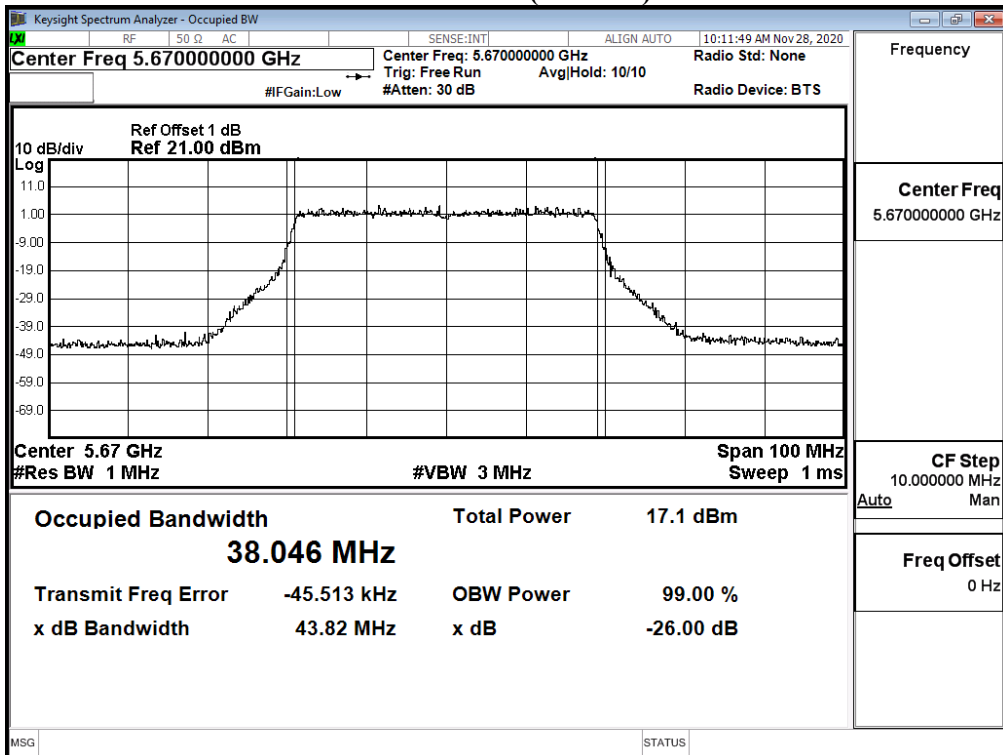
Channel 110 (Chain B)



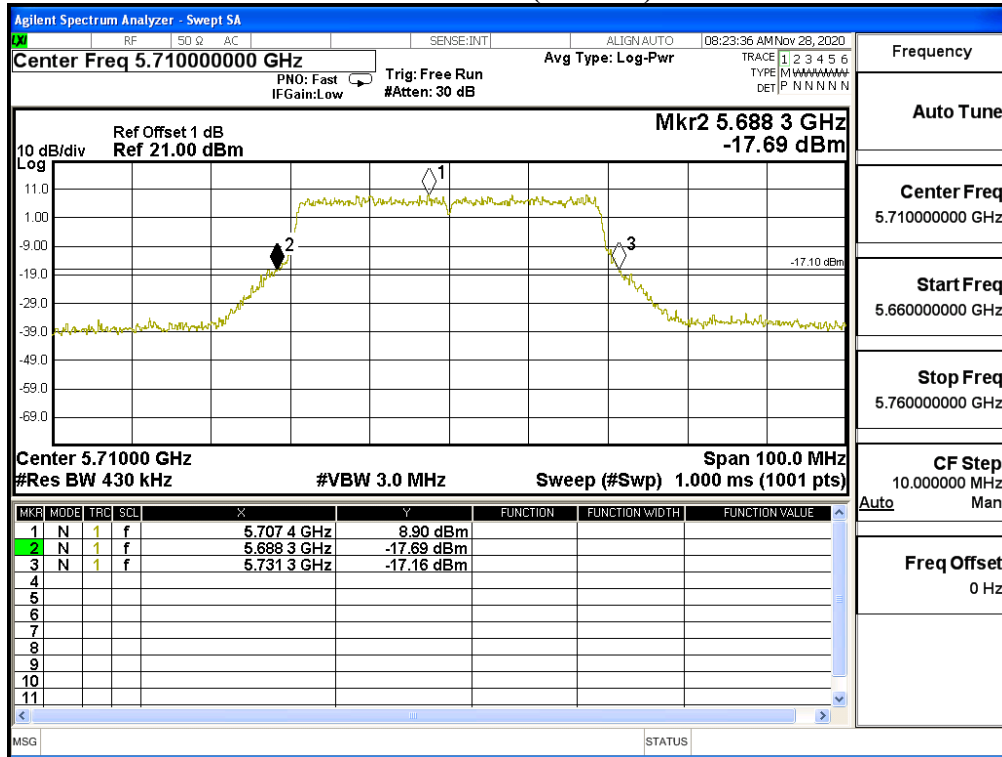
Channel 134 (Chain A)



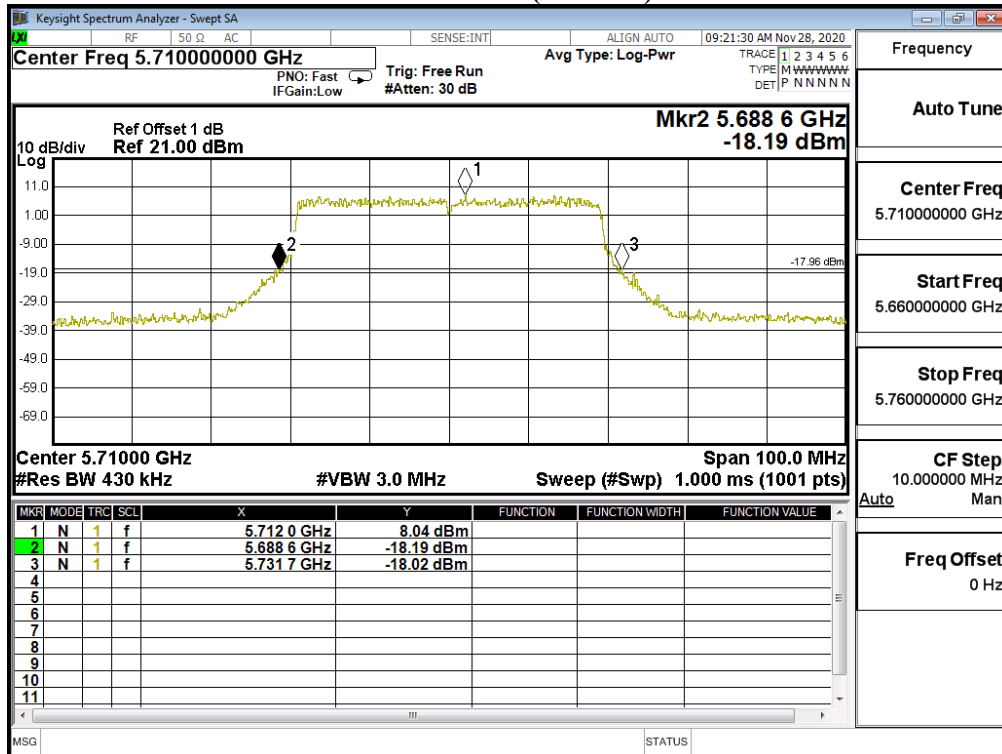
Channel 134 (Chain B)



Channel 142 (Chain A)



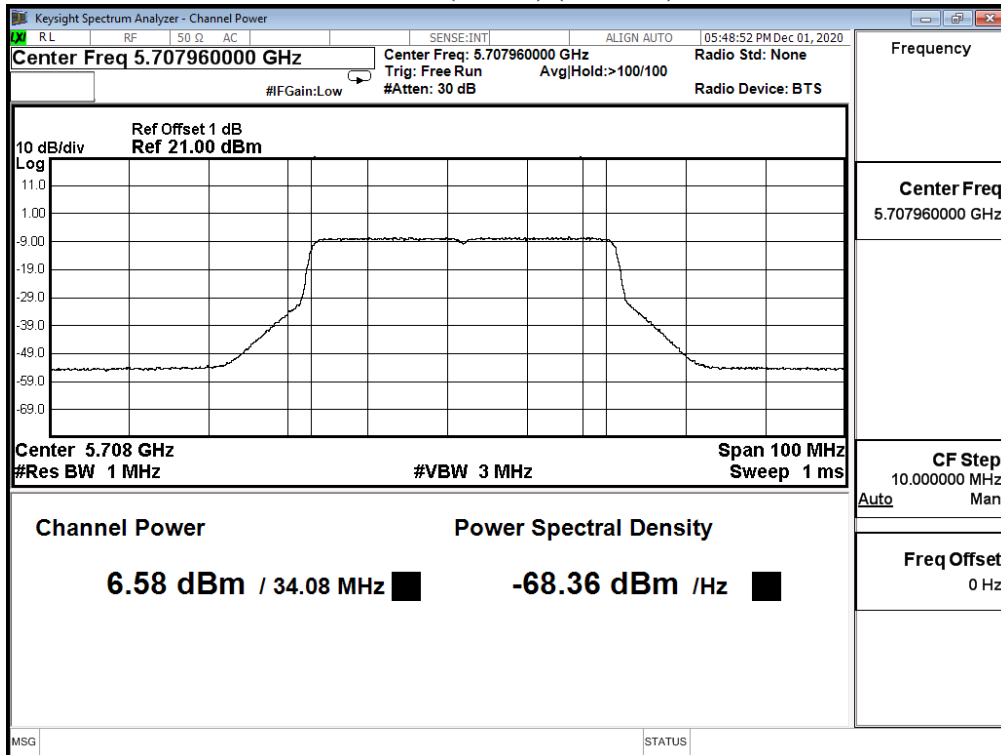
Channel 142 (Chain B)



RU config: Full

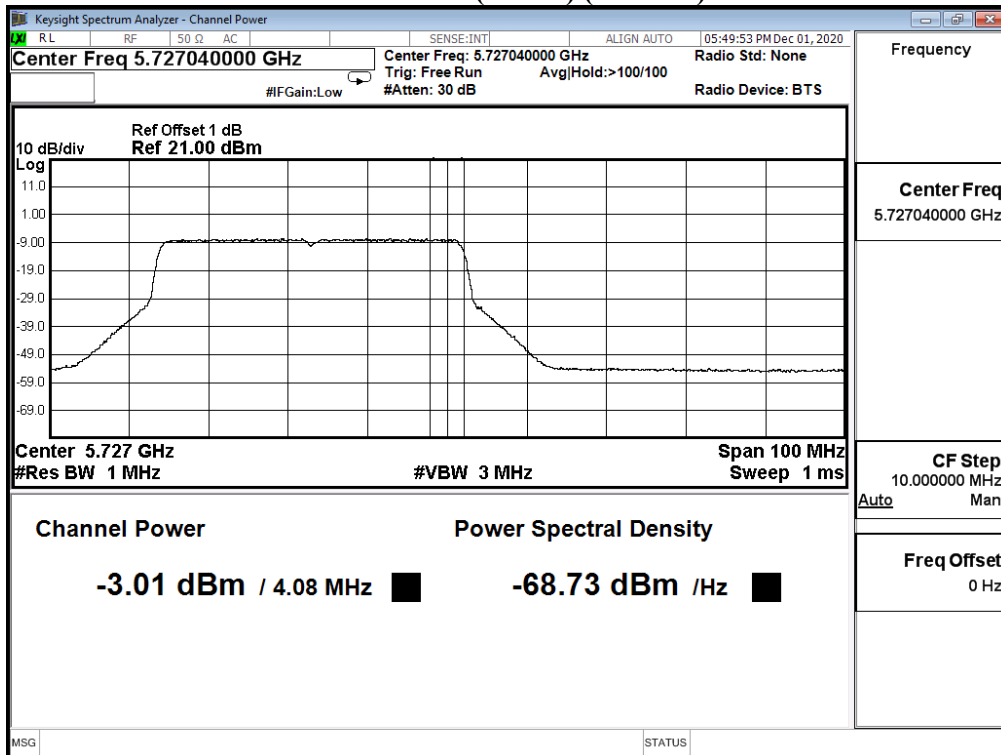
Maximum conducted output power:

Channel 142 (Band3) (Chain A)

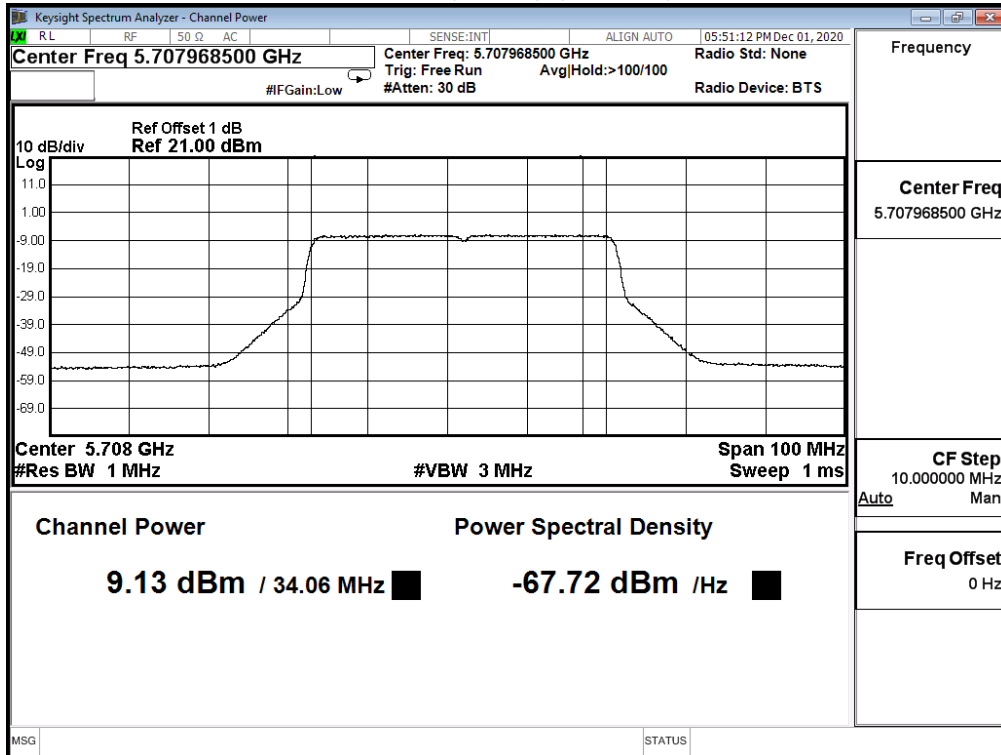


Maximum conducted output power:

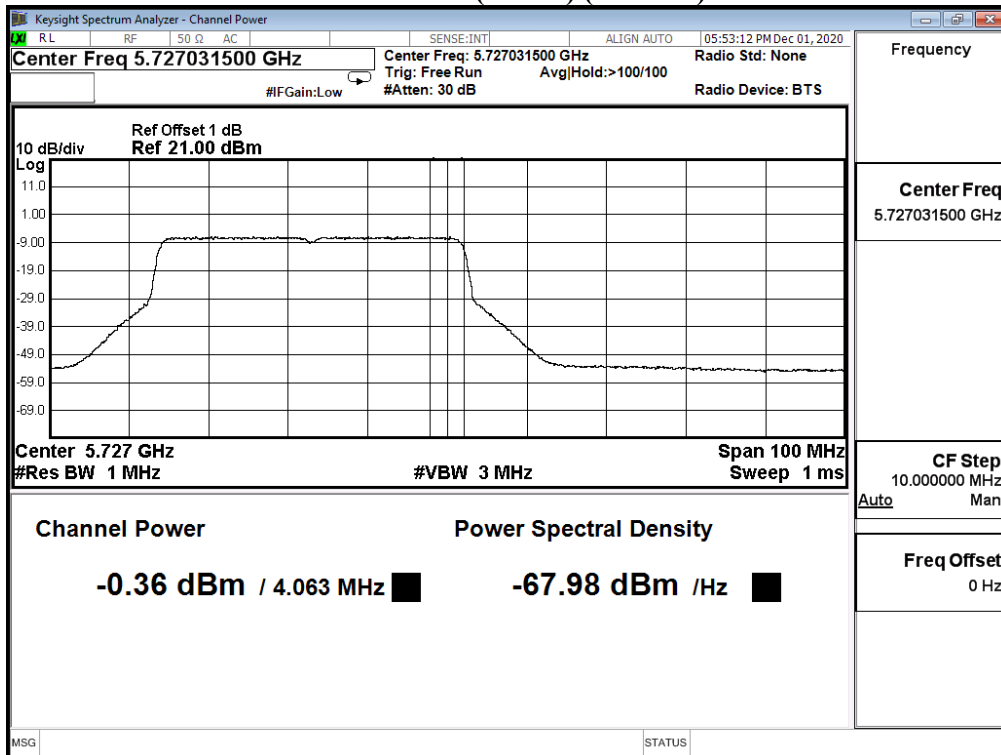
Channel 142 (Band4) (Chain A)



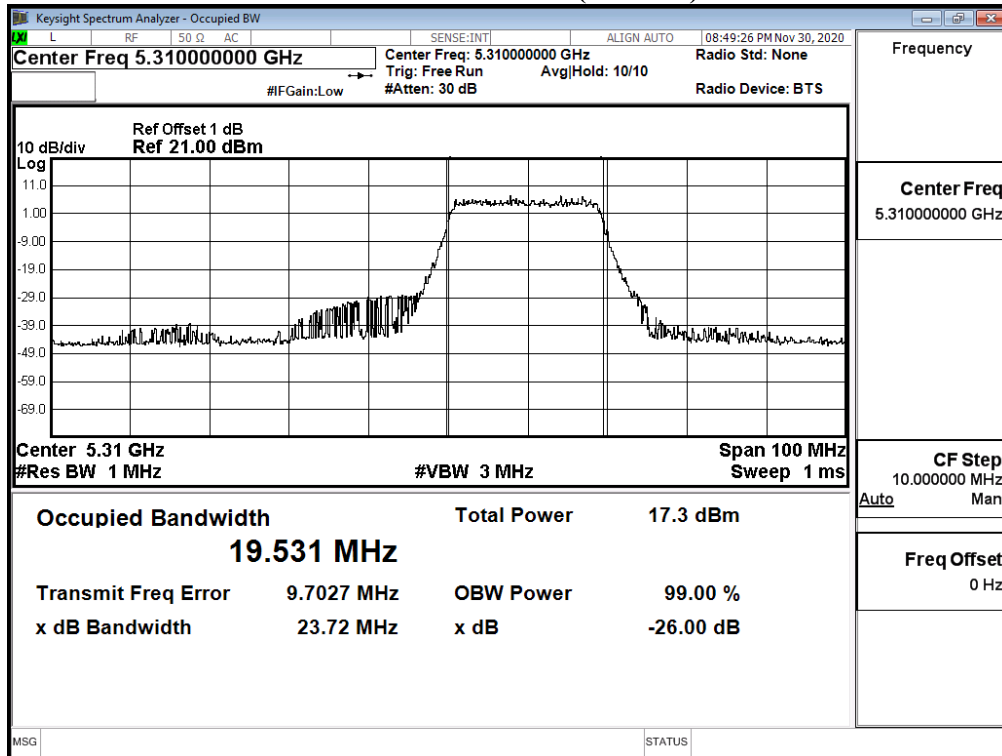
**Maximum conducted output power:
Channel 142 (Band3) (Chain B)**



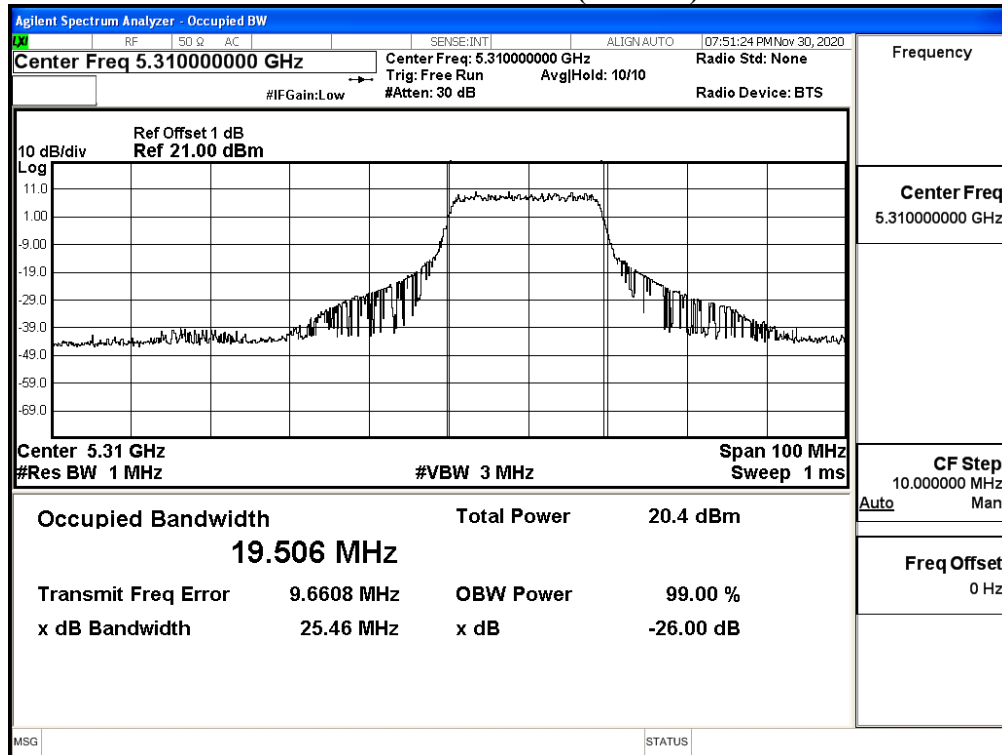
**Maximum conducted output power:
Channel 142 (Band4) (Chain B)**



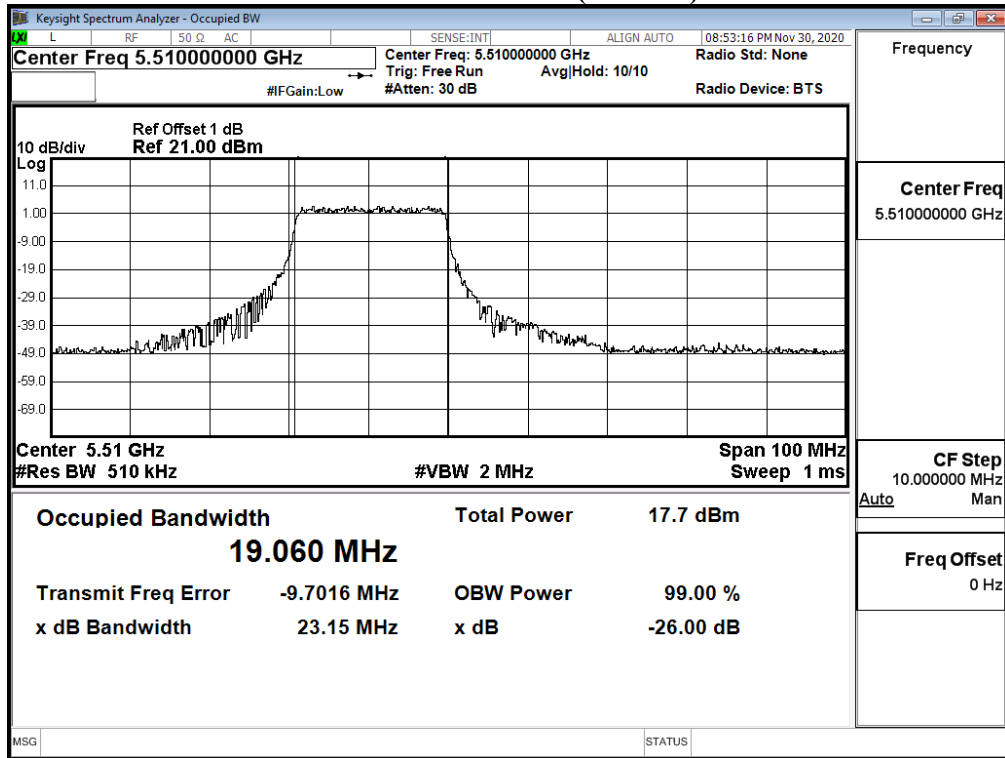
RU config: Other
26dB Occupied Bandwidth:
Channel 62 - 242/62 (Chain A)



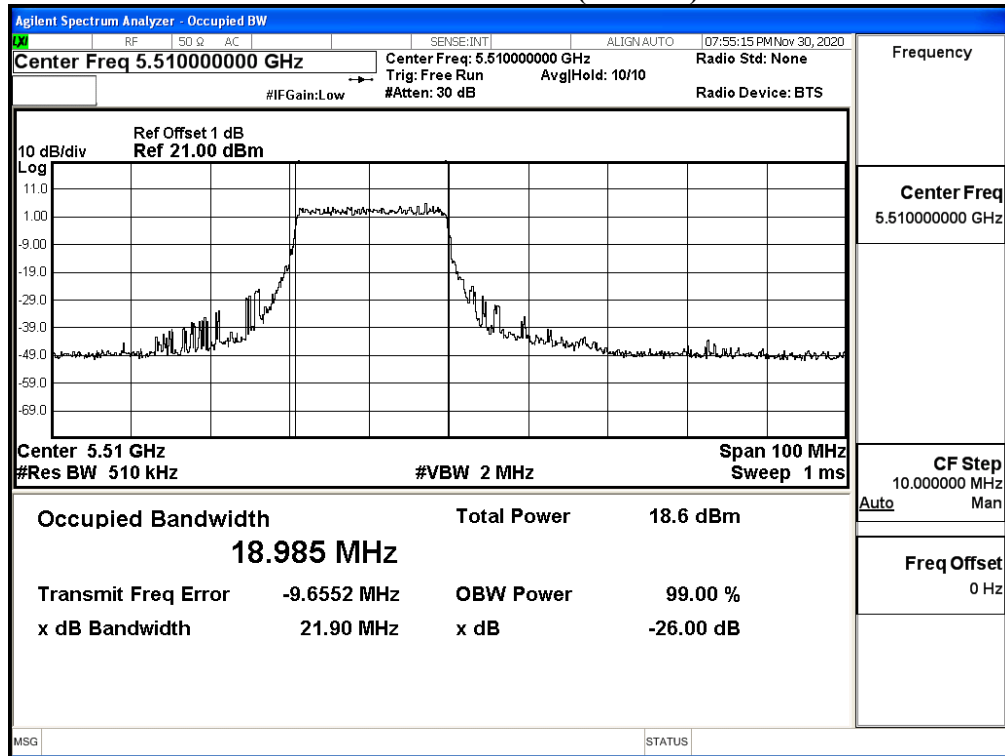
Channel 62 - 242/62 (Chain B)



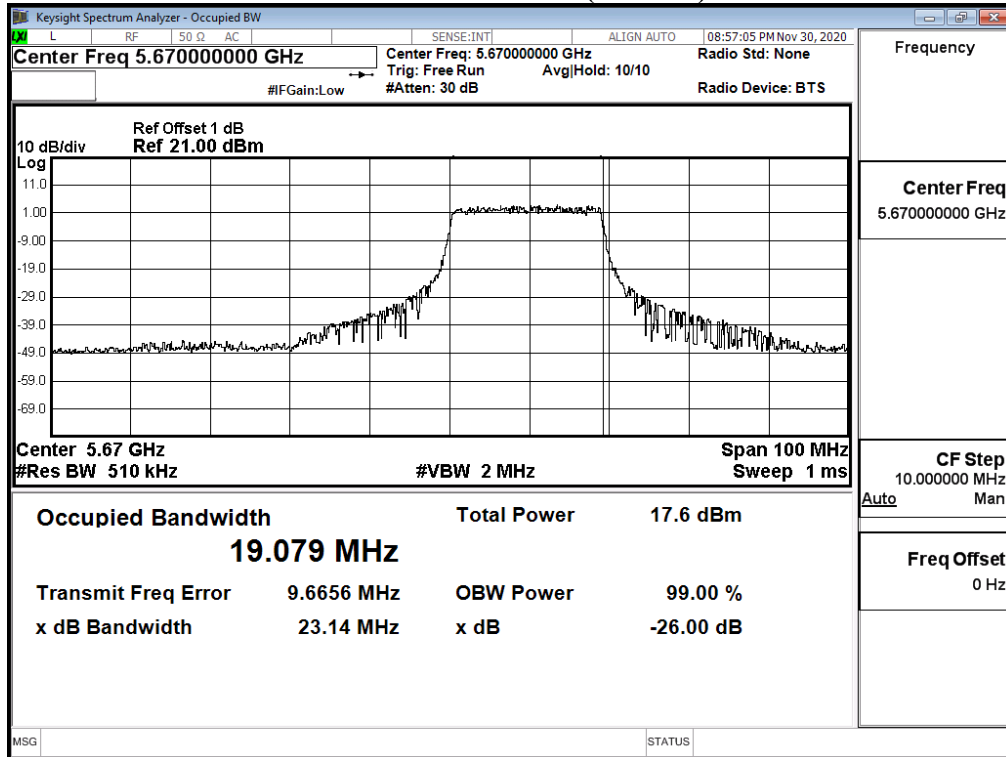
Channel 102 - 242/6 (Chain A)



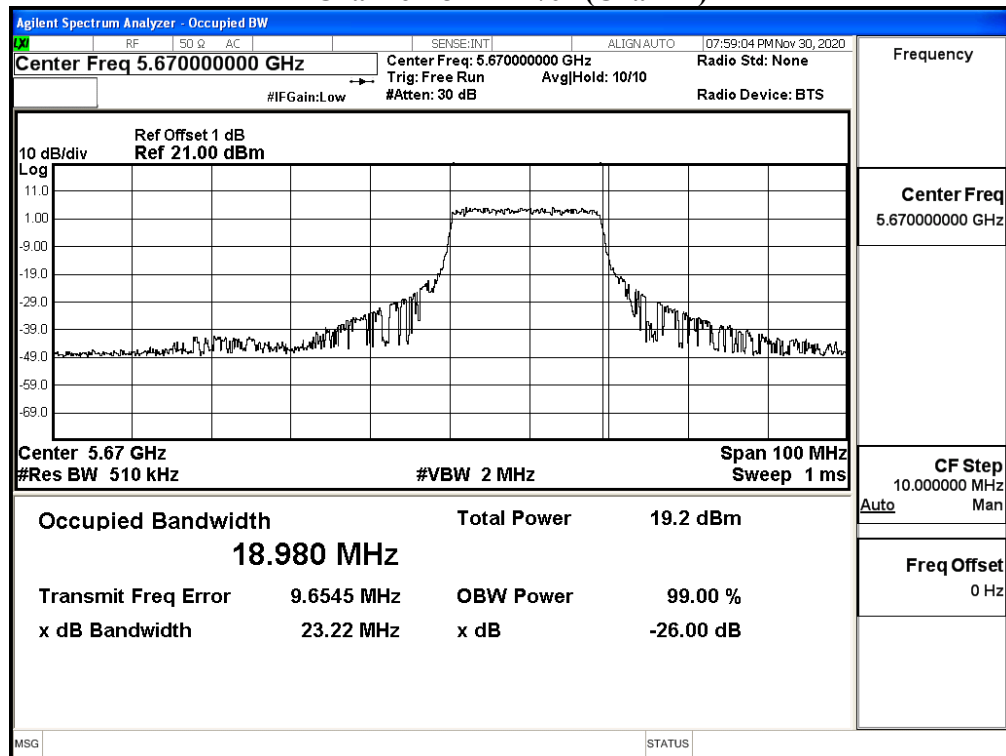
Channel 102 - 242/6 (Chain B)



Channel 134 - 242/62 (Chain A)



Channel 134 - 242/62 (Chain B)



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 25: MIMO: Transmit (802.11ax-80BW_72.1Mbps)

Chain A**RU config: Full**

Cable loss=1dB		Maximum conducted output power											
Channel No	Frequency (MHz)	Data Rate (Mbps)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
42	5210	7.72	7.67	7.59	7.56	7.50	7.45	7.35	7.28	7.18	7.10	7.05	6.97
58	5290	7.75	7.72	7.64	7.55	7.45	7.35	7.25	7.21	7.12	7.05	6.99	6.96
106ac80	5530	7.01	--	--	--	--	--	--	--	--	--	--	--
122ac80	5610	7.06	7.01	6.92	6.87	6.79	6.72	6.63	6.54	6.51	6.41	6.35	6.25
138ac80(Band3)	5690	7.04	6.95	6.92	6.86	6.78	6.69	6.65	6.61	6.51	6.43	6.40	6.34
138ac80(Band4)	5690	-9.18	-9.25	-9.31	-9.38	-9.44	-9.48	-9.52	-9.58	-9.64	-9.74	-9.82	-9.85
155ac80	5775	10.71	10.63	10.58	10.54	10.49	10.42	10.32	10.25	10.21	10.14	10.08	10.05

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain B**RU config: Full**

Cable loss=1dB		Maximum conducted output power											
Channel No	Frequency (MHz)	Data Rate (Mbps)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
42	5210	10.77	10.73	10.68	10.61	10.56	10.51	10.47	10.41	10.37	10.31	10.25	10.15
58	5290	10.77	10.71	10.62	10.57	10.54	10.45	10.39	10.33	10.25	10.15	10.09	10.05
106ac80	5530	9.72	--	--	--	--	--	--	--	--	--	--	--
122ac80	5610	9.80	9.74	9.71	9.65	9.55	9.51	9.46	9.41	9.38	9.30	9.27	9.22
138ac80(Band3)	5690	9.46	9.41	9.34	9.27	9.17	9.11	9.03	8.97	8.92	8.89	8.86	8.78
138ac80(Band4)	5690	-6.66	-6.76	-6.86	-6.93	-6.97	-7.03	-7.09	-7.16	-7.22	-7.31	-7.34	-7.37
155ac80	5775	10.68	10.65	10.61	10.56	10.53	10.44	10.35	10.26	10.20	10.13	10.03	9.96

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit		Result
						(dBm)	dBm+10log(BW)	
42	5210	--	7.72	10.77	12.52	24	--	Pass
58	5290	82.600	7.75	10.77	12.53	24	30.17	Pass
106ac80	5530	81.390	7.01	9.72	11.58	24	30.11	Pass
122ac80	5610	82.390	7.06	9.80	11.65	24	30.16	Pass
138ac80(Band3)	5690	76.000	7.04	9.46	11.43	24	29.81	Pass
138ac80(Band4)	5690	--	-9.18	-6.66	-4.73	30	--	Pass
155ac80	5775	--	10.71	10.68	13.71	30	--	Pass

Note:

1. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
2. 26dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Chain A**RU config: Other**

Channel No / Frequency Range (MHz)	RU setting	Maximum Conducted Power Output (dBm)													Required Limit
		Data Rate (Mbps)													
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11		
42/5210	484/65	7.70	7.61	7.58	7.50	7.45	7.38	7.32	7.26	7.23	7.16	7.11	7.07	<24dBm	
58/5290	484/66	7.60	7.57	7.52	7.47	7.42	7.34	7.25	7.20	7.15	7.12	7.02	6.93	<24dBm	
106/5530	484/65	7.04	6.96	6.93	6.87	6.82	6.75	6.68	6.59	6.52	6.48	6.45	6.40	<24dBm	
155/5775	484/65	10.66	10.57	10.50	10.42	10.38	10.28	10.20	10.12	10.04	9.95	9.91	9.83	<30dBm	

Chain B**RU config: Other**

Channel No / Frequency Range (MHz)	RU setting	Maximum Conducted Power Output (dBm)													Required Limit
		Data Rate (Mbps)													
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11		
42/5210	484/65	10.73	10.65	10.55	10.50	10.47	10.42	10.33	10.29	10.22	10.14	10.09	10.05	<24dBm	
58/5290	484/66	10.67	10.57	10.54	10.47	10.38	10.31	10.21	10.15	10.05	10.00	9.95	9.92	<24dBm	
106/5530	484/65	9.77	9.68	9.61	9.57	9.50	9.43	9.40	9.34	9.29	9.22	9.19	9.15	<24dBm	
155/5775	484/65	10.76	10.72	10.66	10.62	10.56	10.47	10.38	10.35	10.25	10.18	10.10	10.07	<30dBm	

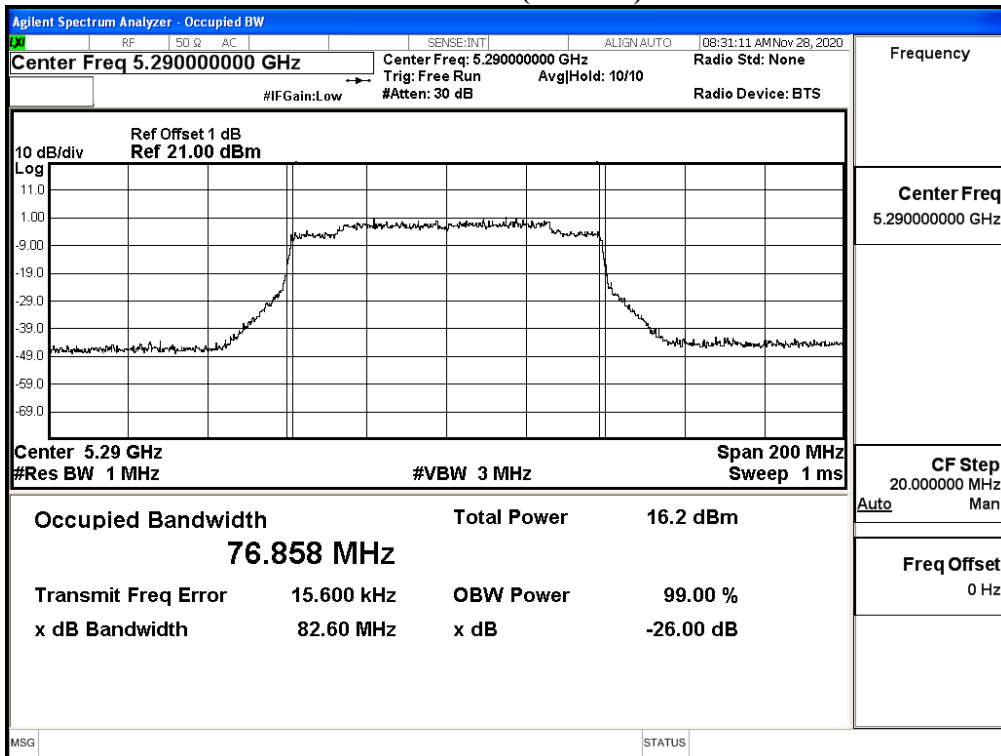
Maximum conducted output power Measurement:

Channel No / Frequency Range	RU setting	26dB Bandwidth	Chain A Power	Chain B Power	Output Power Limit	Output power limit		Result
		(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	dBm+10log (BW)	
42/5210	484/65	--	7.70	10.73	12.48	24	--	Pass
58/5290	484/66	45.460	7.60	10.67	12.41	24	27.58	Pass
106/5530	484/65	44.730	7.04	9.77	11.63	24	27.51	Pass
155/5775	484/65	--	10.66	10.76	13.72	30	--	Pass

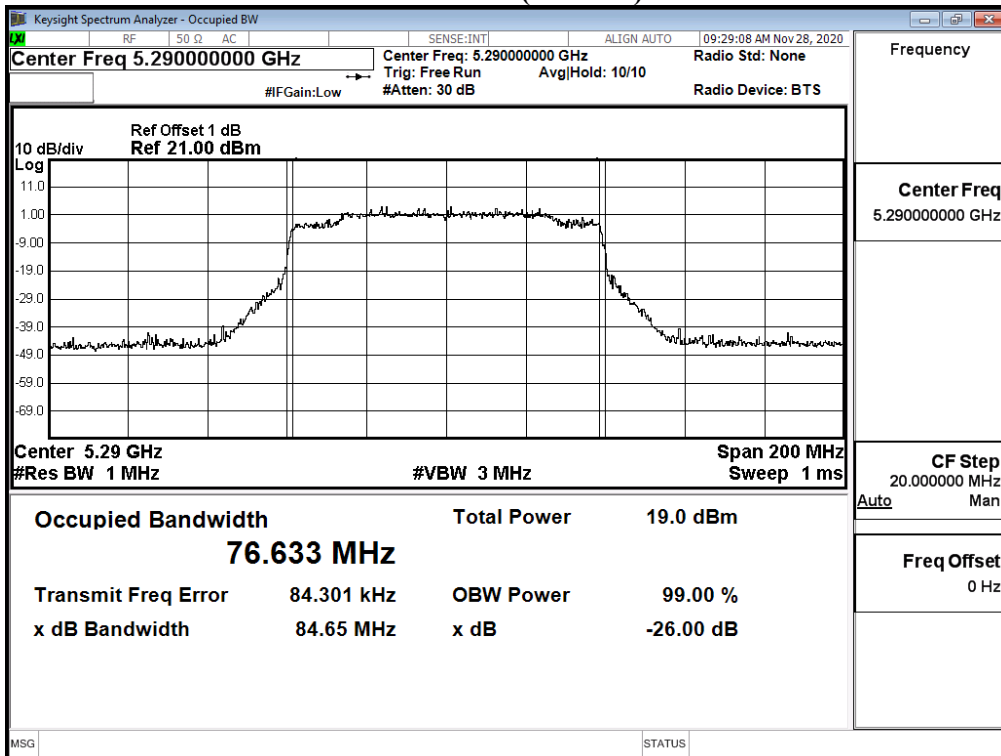
Note:

1. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
2. 26dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

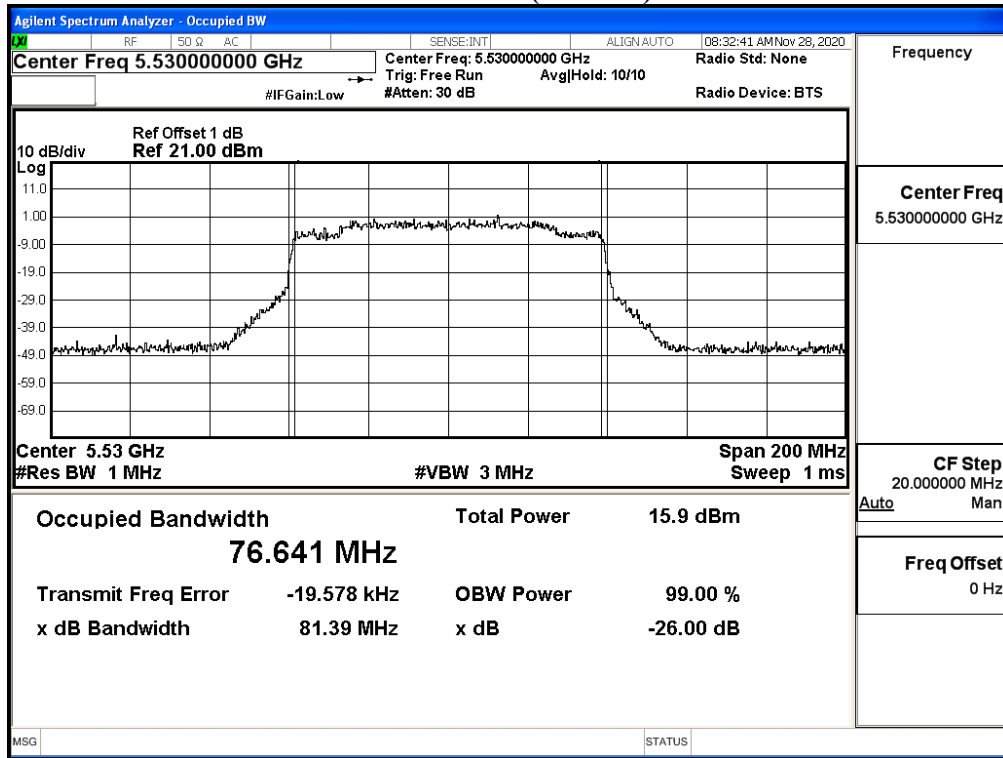
RU config: Full
26dB Occupied Bandwidth:
Channel 58 (Chain A)



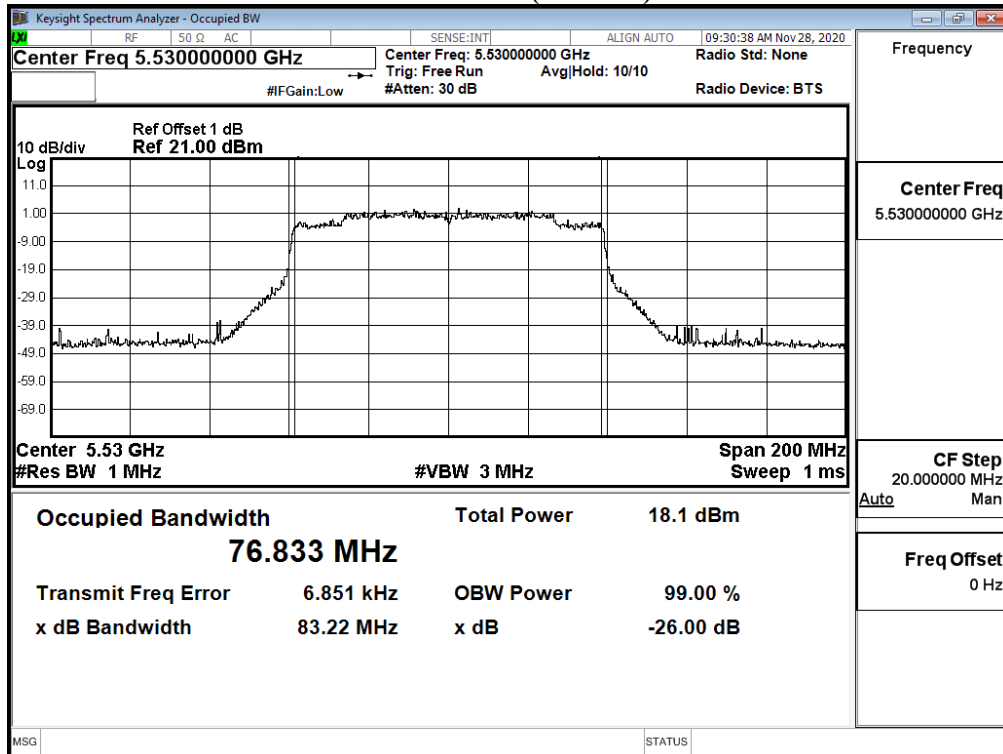
Channel 58 (Chain B)



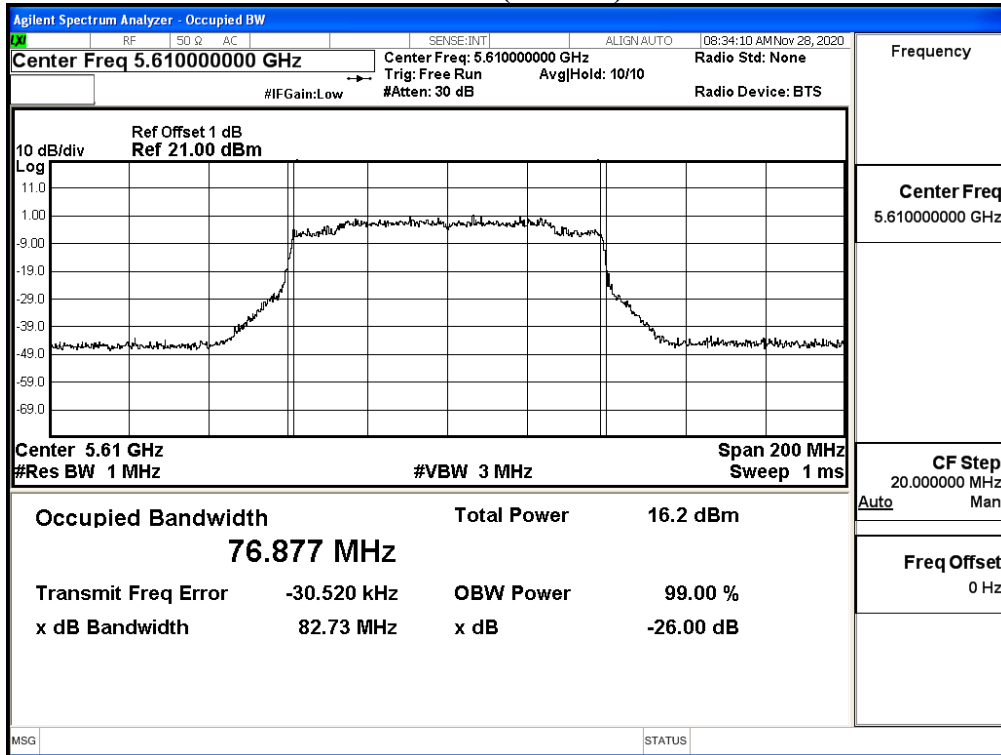
Channel 106 (Chain A)



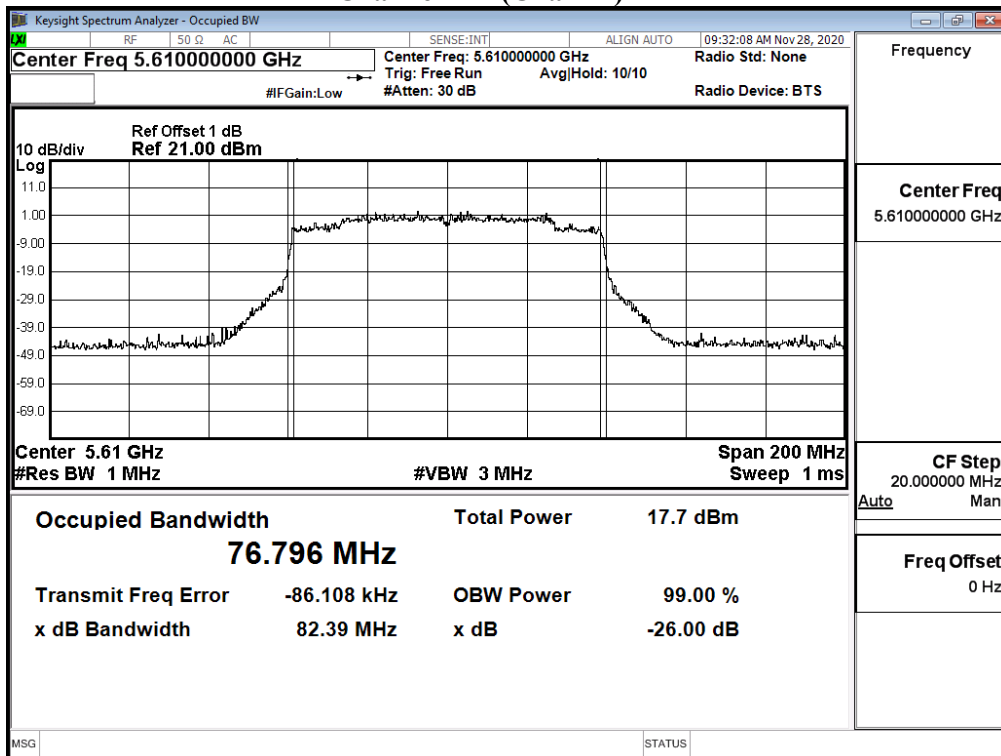
Channel 106 (Chain B)



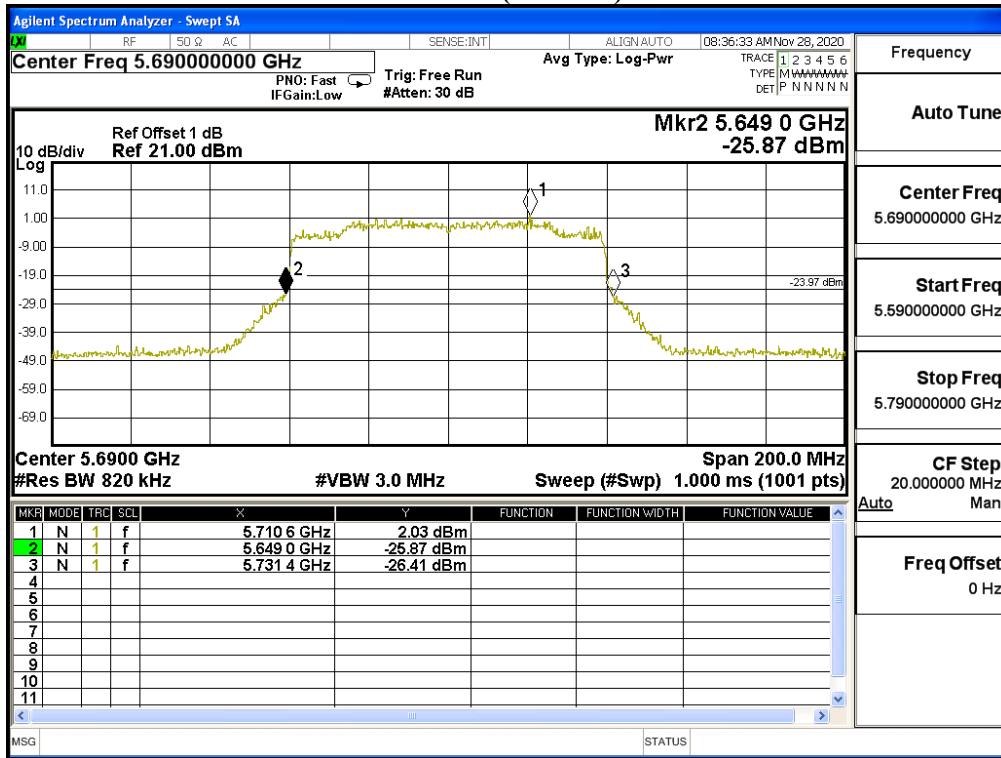
Channel 122 (Chain A)



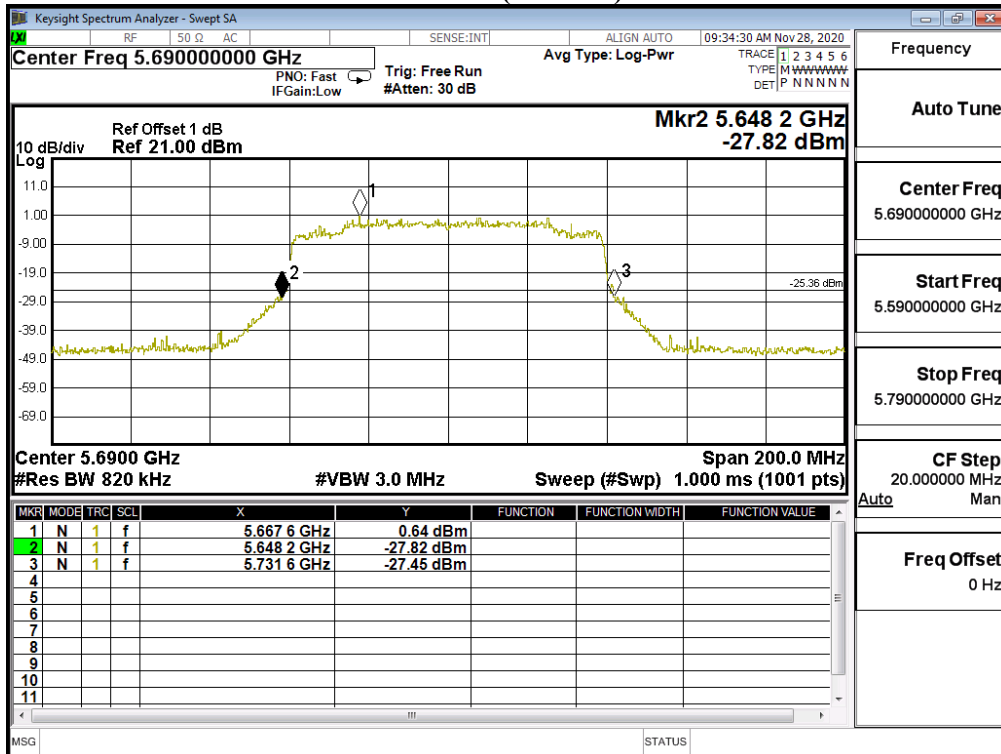
Channel 122 (Chain B)



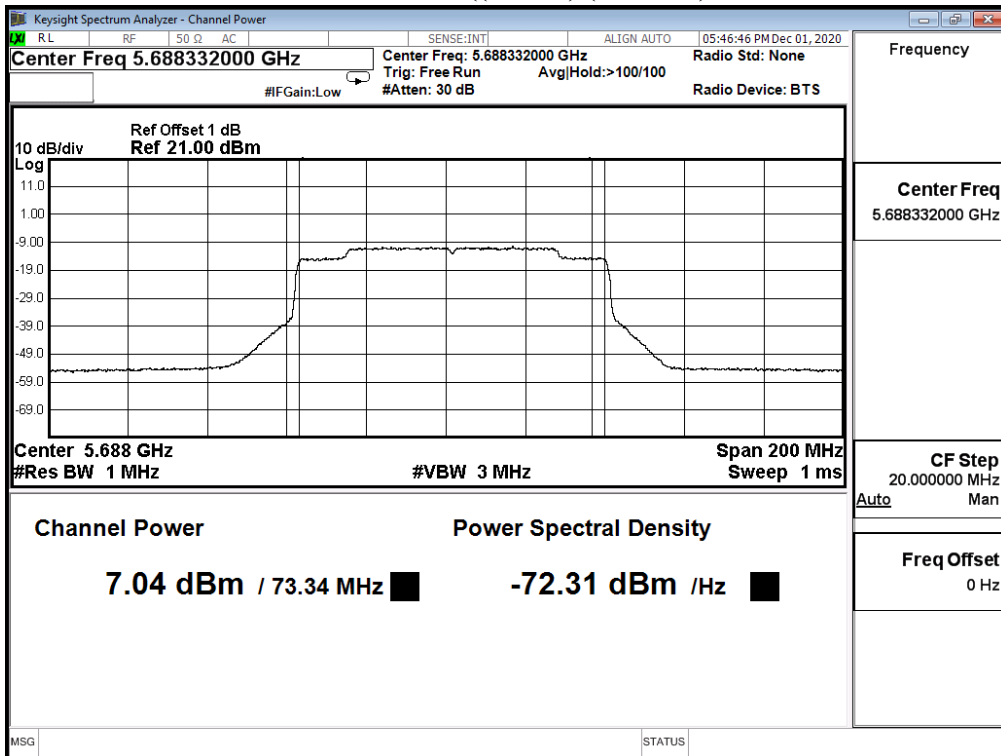
Channel 138 (Chain A)



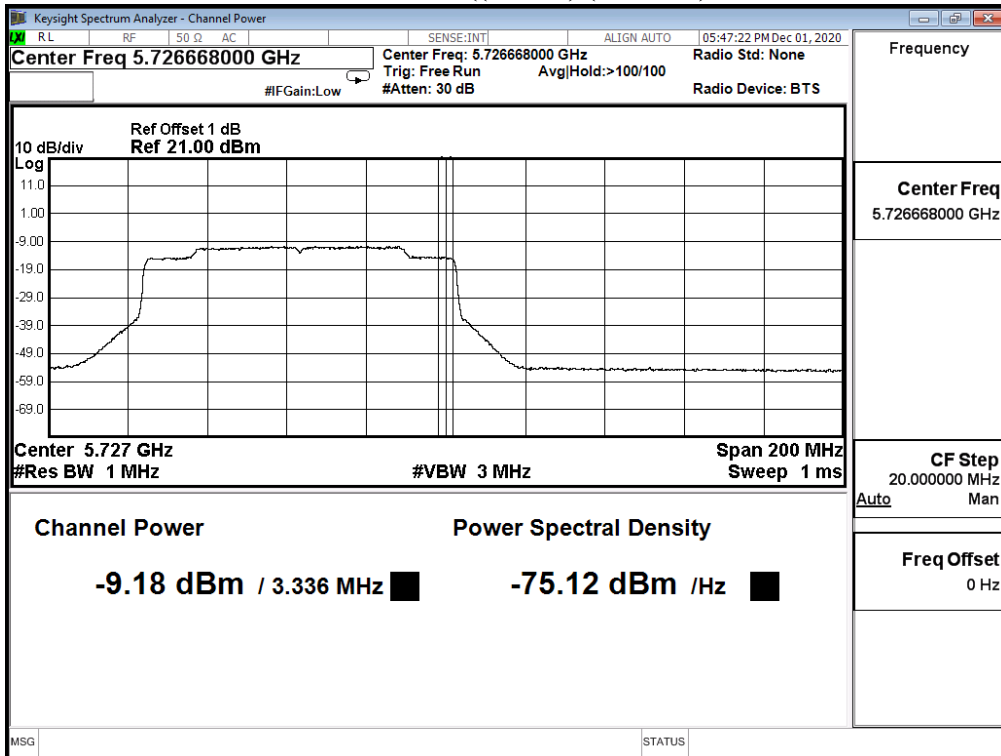
Channel 138 (Chain B)



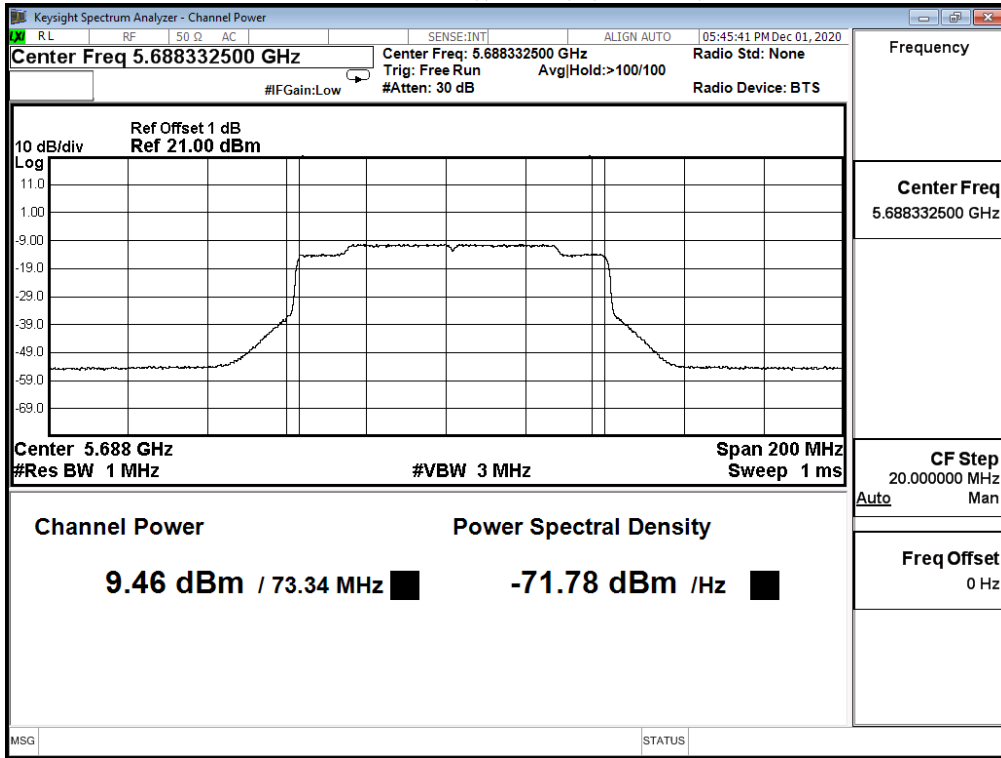
RU config: Full
Maximum conducted output power:
Channel 138 ((Band3) (Chain A))



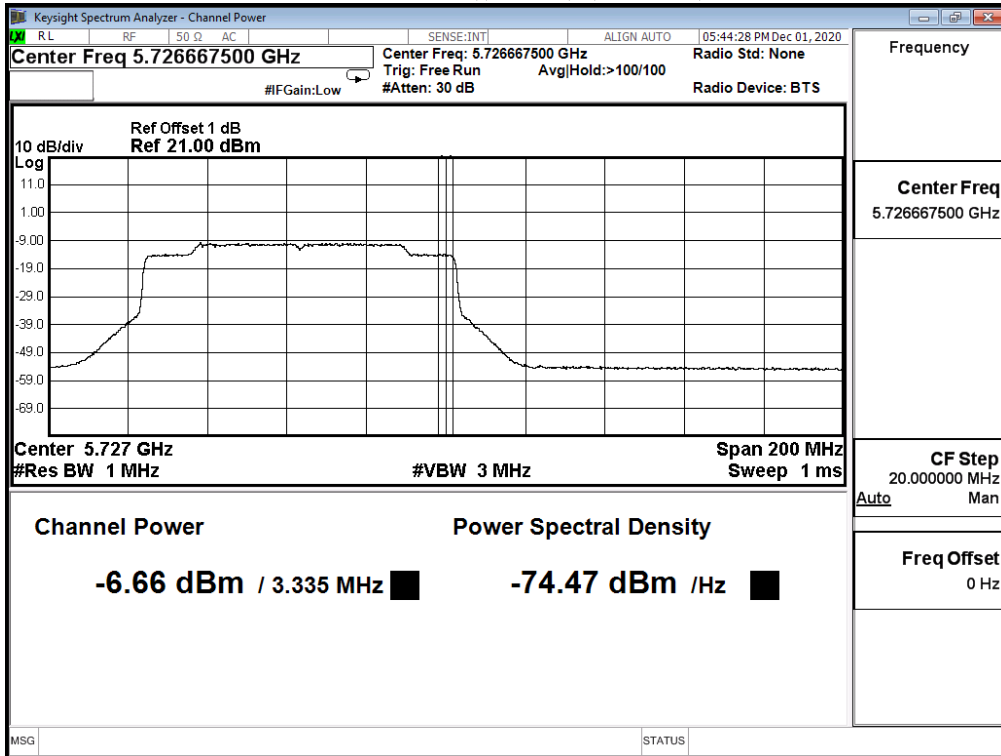
Maximum conducted output power:
Channel 138 ((Band4) (Chain A))



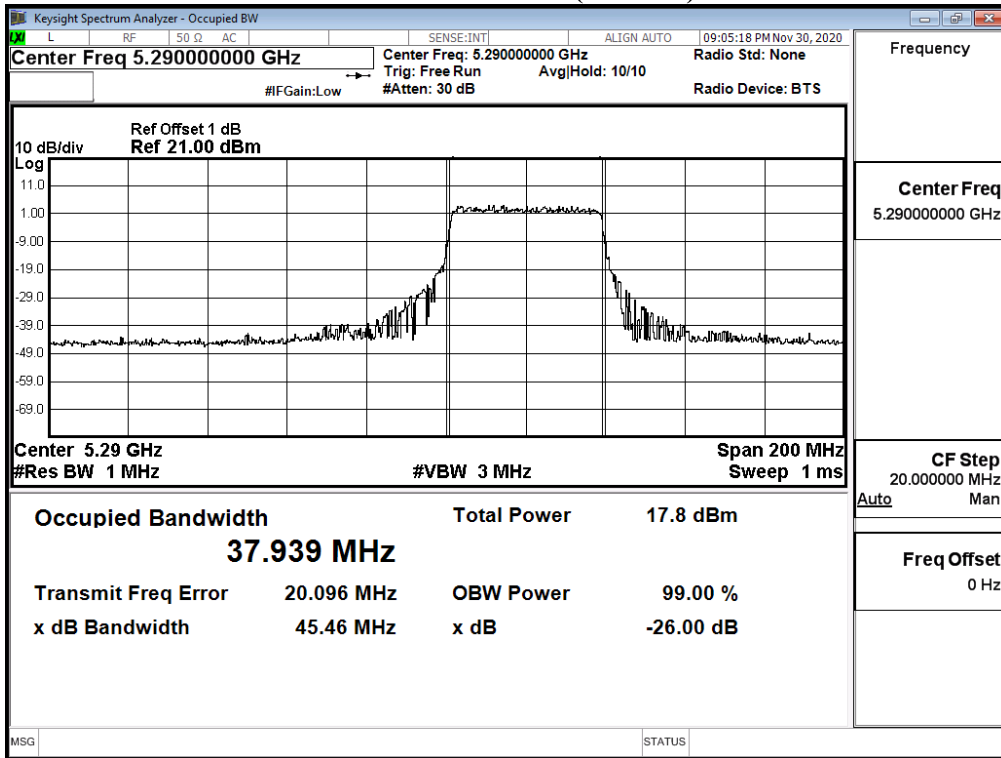
**Maximum conducted output power:
Channel 138 ((Band3) (Chain B))**



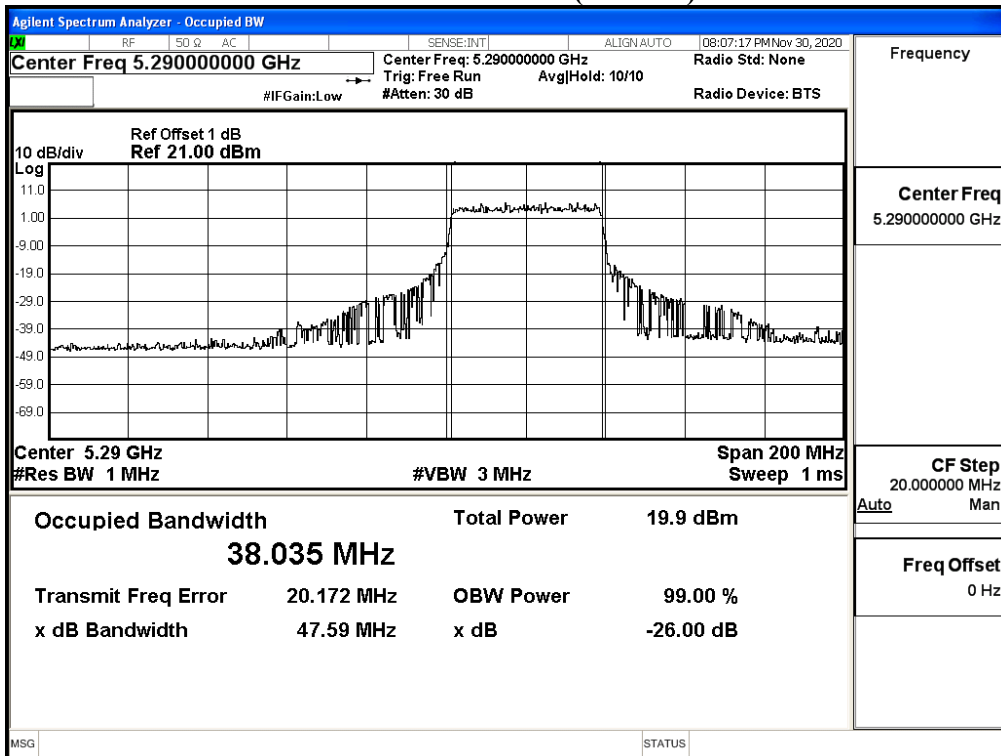
**Maximum conducted output power:
Channel 138 ((Band4) (Chain B))**



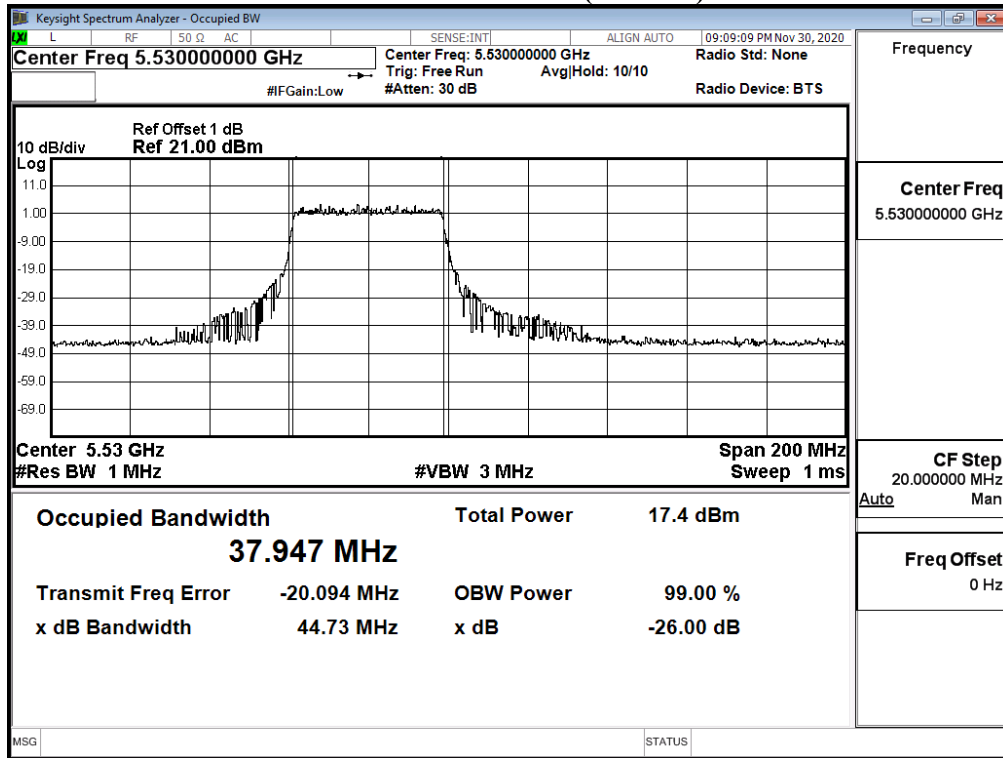
RU config: Other
26dB Occupied Bandwidth:
Channel 58 - 484/66 (Chain A)



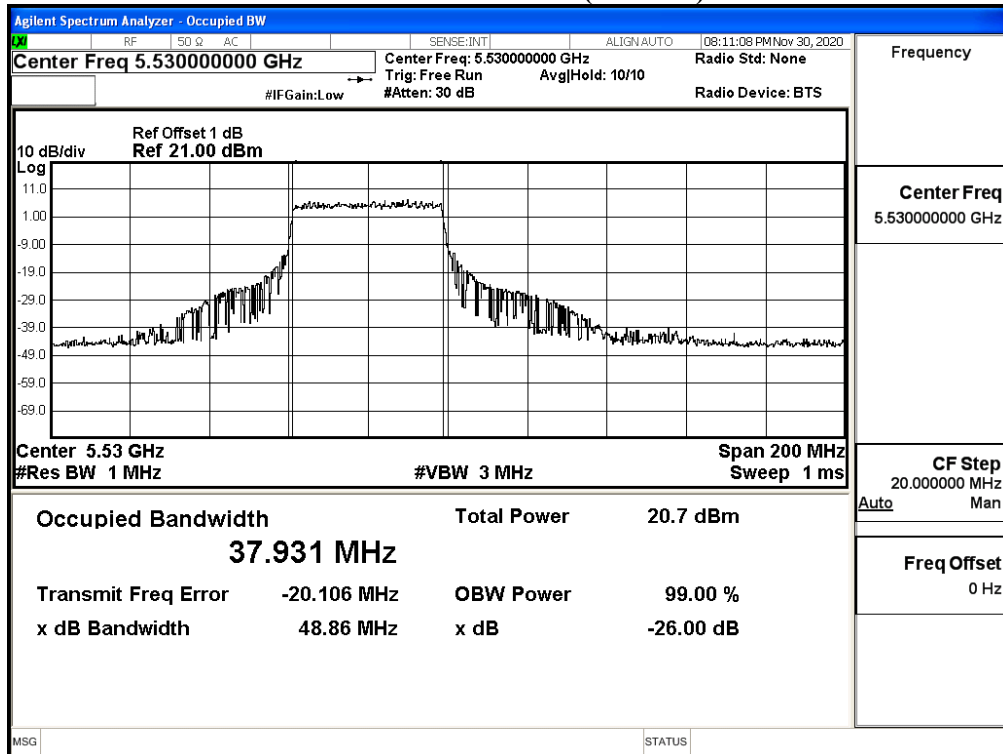
Channel 58 - 484/66 (Chain B)



Channel 106 - 484/65 (Chain A)



Channel 106 - 484/65 (Chain B)



Product : Notebook Computers
 Test Item : Maximum conducted output power
 Test Date : 2020/11/19
 Test Mode : Mode 26: MIMO: Transmit (802.11ax-160BW_144.1Mbps)

Chain A
RU config: Full

Cable loss=1dB		Maximum conducted output power											
Channel No	Frequency (MHz)	Data Rate (Mbps)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
50ac160(Band1)	5250	4.68	4.61	4.53	4.44	4.40	4.33	4.24	4.15	4.09	4.00	3.94	3.84
50ac160(Band2)	5250	4.55	4.47	4.41	4.31	4.26	4.21	4.14	4.11	4.03	4.00	3.91	3.81
114ac160	5570	7.04	6.99	6.96	6.91	6.81	6.73	6.69	6.65	6.61	6.51	6.41	6.34

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain B
RU config: Full

Cable loss=1dB		Maximum conducted output power											
Channel No	Frequency (MHz)	Data Rate (Mbps)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
50ac160(Band1)	5250	7.42	7.39	7.30	7.20	7.17	7.11	7.03	6.97	6.88	6.83	6.80	6.75
50ac160(Band2)	5250	8.03	8.00	7.94	7.84	7.78	7.68	7.61	7.52	7.45	7.40	7.37	7.33
114ac160	5570	9.53	9.46	9.36	9.28	9.23	9.13	9.04	8.98	8.93	8.90	8.80	8.74

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit		Result
						(dBm)	dBm+10log(BW)	
50ac160(Band1)	5250	--	4.68	7.42	9.27	24	--	Pass
80ac160(Band2)	5250	81.900	4.55	8.03	9.64	24	30.13	Pass
114ac160	5570	163.400	7.04	9.53	11.47	24	33.13	Pass

Note:

1. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
2. 26dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

Chain A
RU config: Other

Channel No / Frequency (MHz)	RU setting	Average Power Output (dBm)													Required Limit
		Data Rate (Mbps)													
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11		
50/5250	996/67	7.79	7.70	7.63	7.60	7.50	7.44	7.37	7.33	7.25	7.18	7.10	7.00	<24dBm	
	996/S67	7.80	7.72	7.68	7.65	7.60	7.53	7.50	7.41	7.38	7.33	7.27	7.17	<24dBm	
114/5570	996/67	7.13	7.03	6.95	6.87	6.84	6.75	6.69	6.62	6.53	6.45	6.39	6.33	<24dBm	
	996/S67	7.03	6.97	6.92	6.86	6.76	6.73	6.67	6.59	6.52	6.42	6.33	6.23	<24dBm	

Chain B
RU config: Other

Channel No / Frequency (MHz)	RU setting	Average Power Output (dBm)													Required Limit
		Data Rate (Mbps)													
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11		
50/5250	996/67	10.76	10.71	10.62	10.59	10.56	10.52	10.49	10.43	10.33	10.28	10.21	10.11	<24dBm	
	996/S67	10.77	10.72	10.64	10.58	10.50	10.46	10.40	10.37	10.32	10.27	10.21	10.17	<24dBm	
114/5570	996/67	9.51	9.48	9.38	9.34	9.27	9.17	9.11	9.04	8.95	8.89	8.83	8.73	<24dBm	
	996/S67	9.51	9.44	9.37	9.28	9.21	9.16	9.11	9.02	8.96	8.87	8.82	8.78	<24dBm	

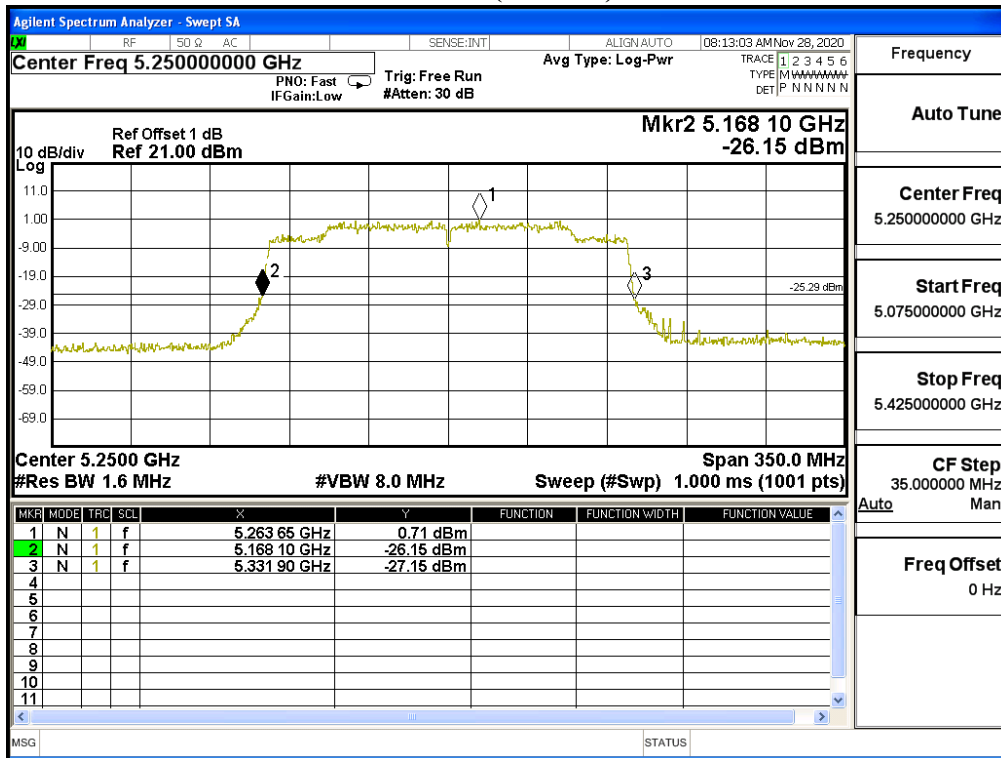
Maximum conducted output power Measurement:

Channel No / Frequency Range	RU setting	26dB Bandwidth	Chain A Power	Chain B Power	Output Power Limit	Output power limit		Result
		(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	dBm+10log (BW)	
50/5250	996/67	--	7.79	10.76	12.53	24	--	Pass
	996/S67	84.580	7.80	10.77	12.54	24	30.27	Pass
114/5570	996/67	86.830	7.13	9.51	11.49	24	30.39	Pass
	996/S67	87.950	7.03	9.51	11.45	24	30.44	Pass

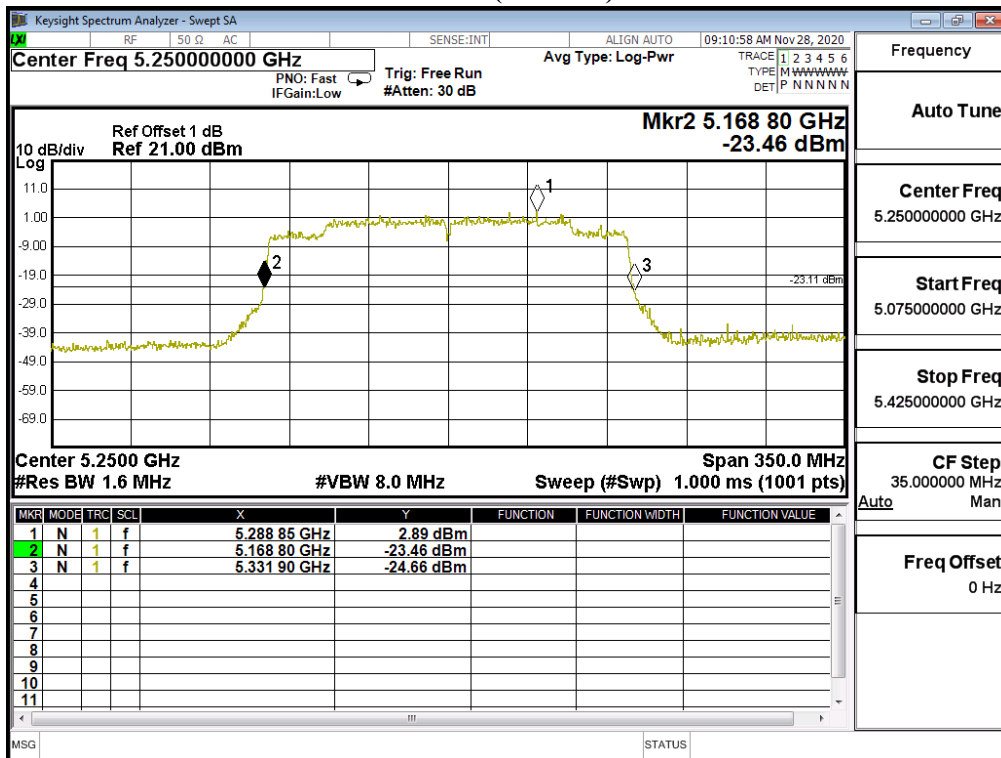
Note:

1. Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))
2. 26dB Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

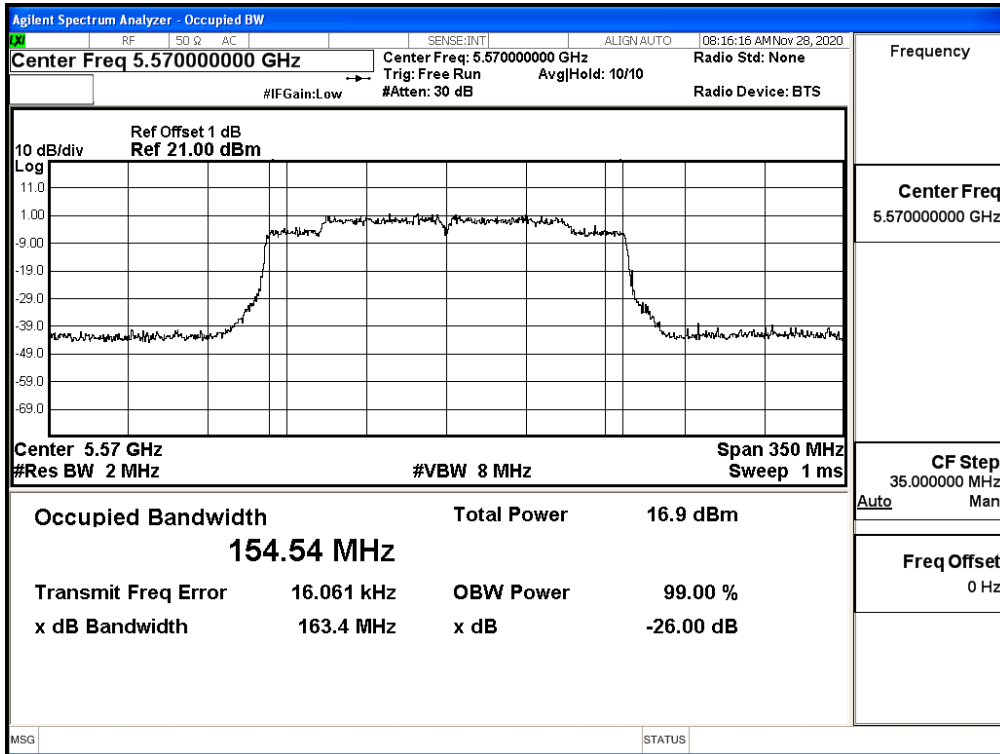
RU config: Full
26dB Occupied Bandwidth:
Channel 50 (Chain A)



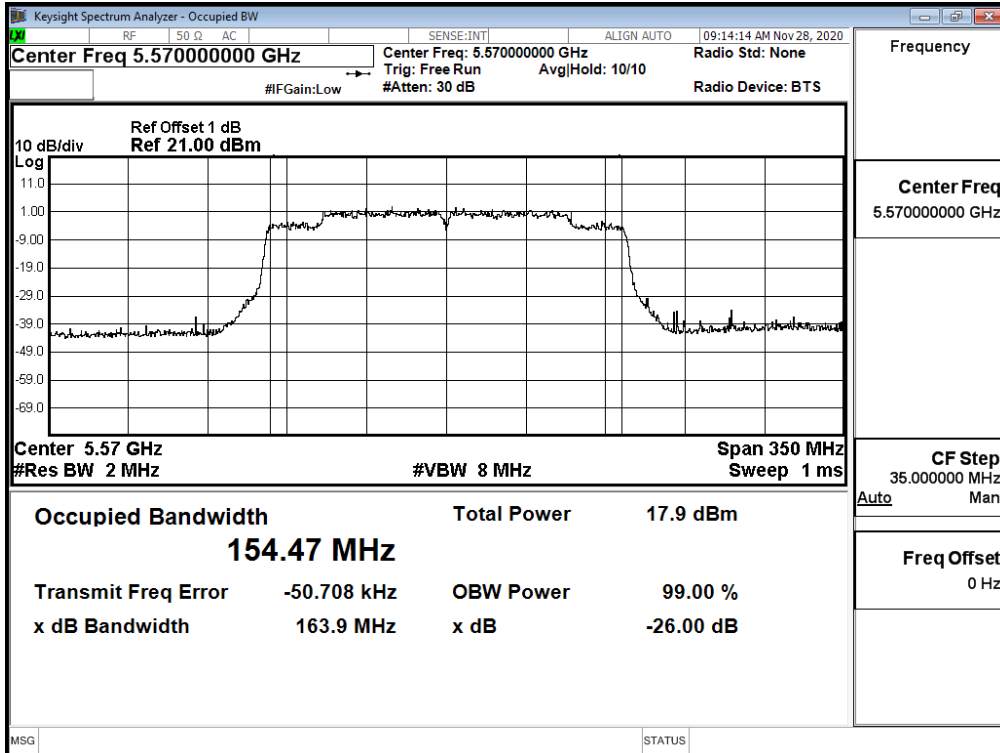
Channel 50 (Chain B)



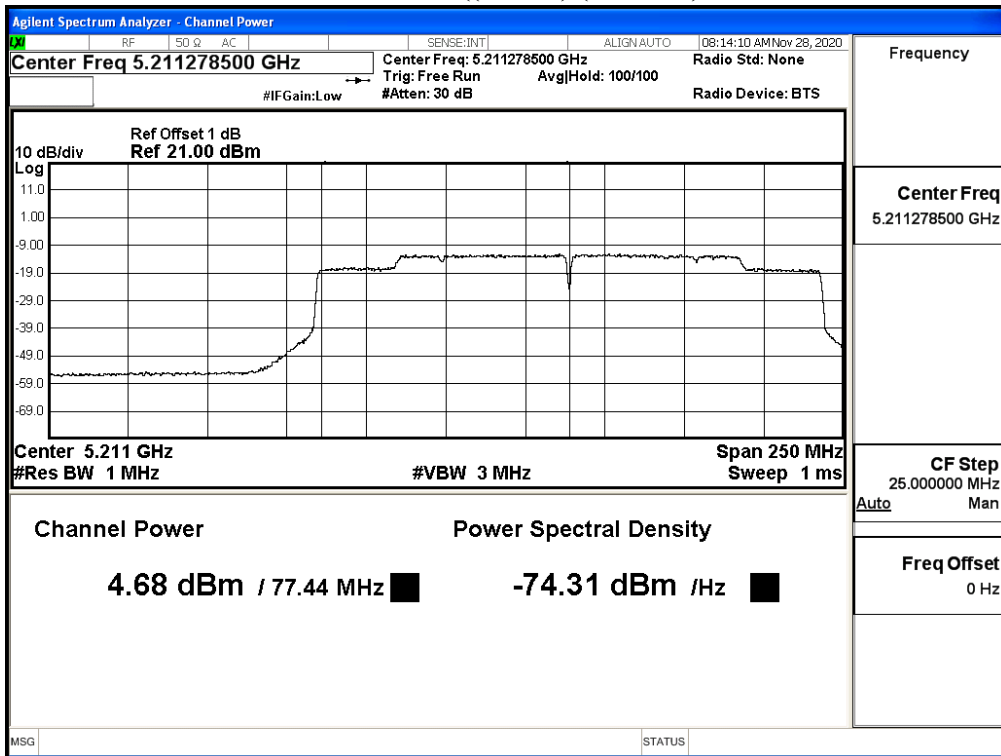
Channel 114 (Chain A)



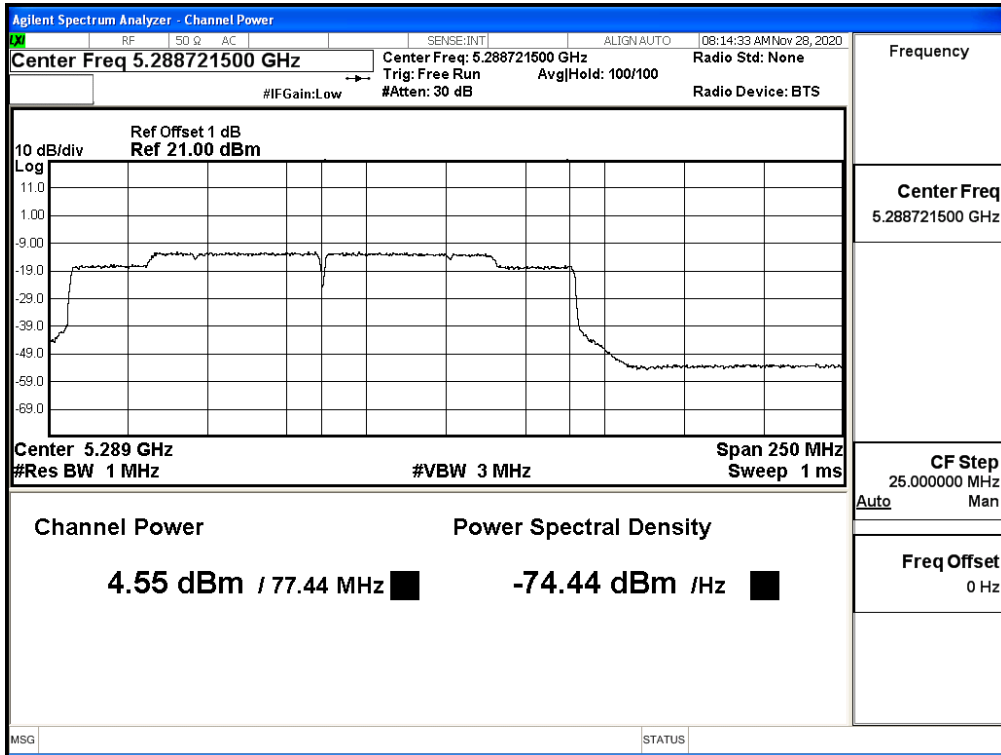
Channel 114 (Chain B)



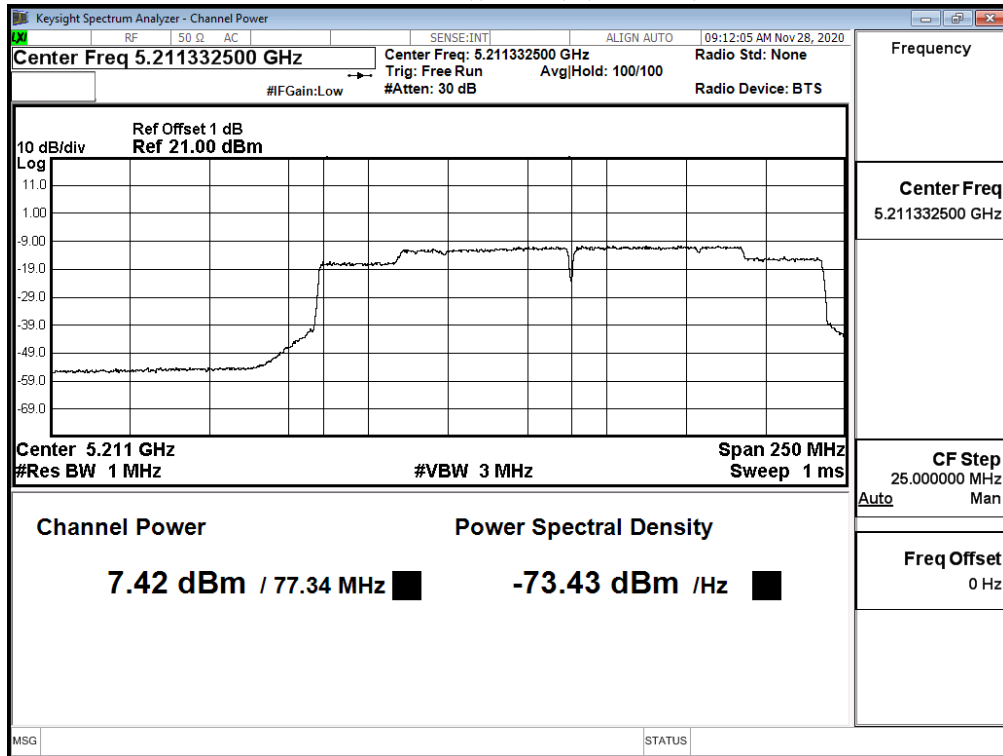
RU config: Full
Maximum conducted output power:
Channel 50 ((Band1) (Chain A))



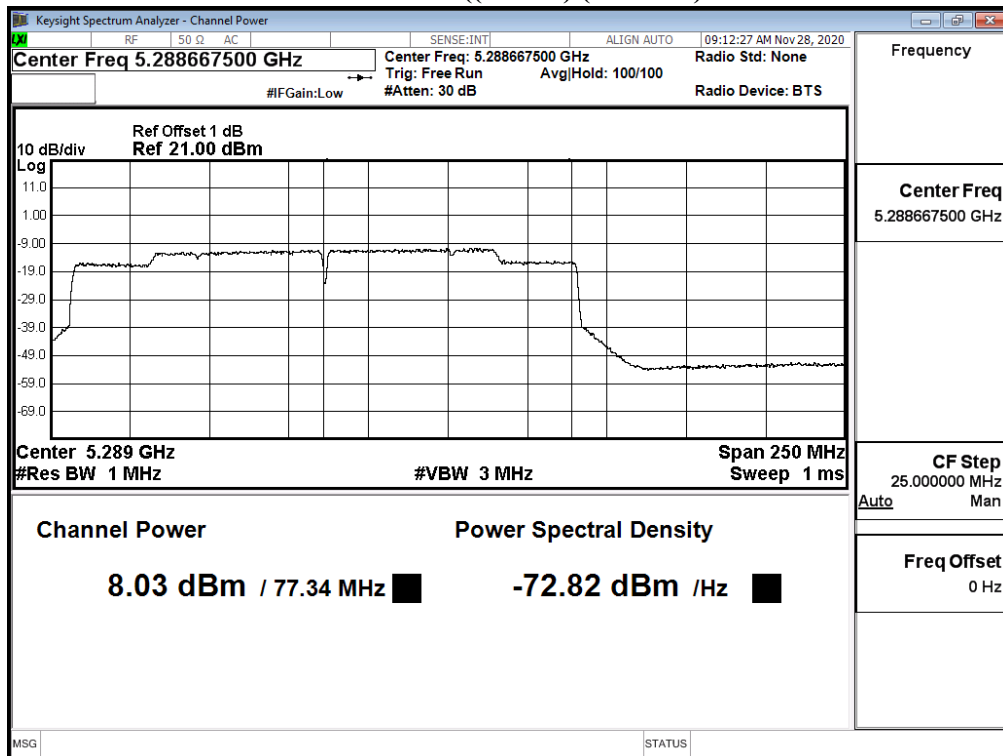
Maximum conducted output power:
Channel 50 ((Band2) (Chain A))



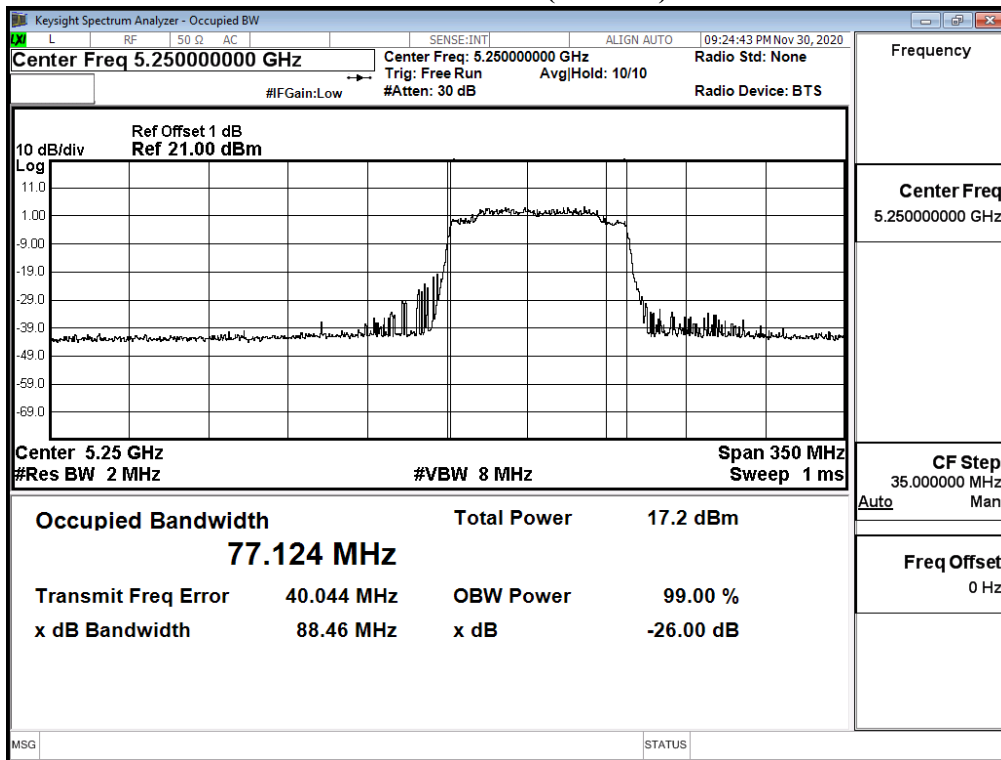
**Maximum conducted output power:
Channel 50 ((Band1) (Chain B)**



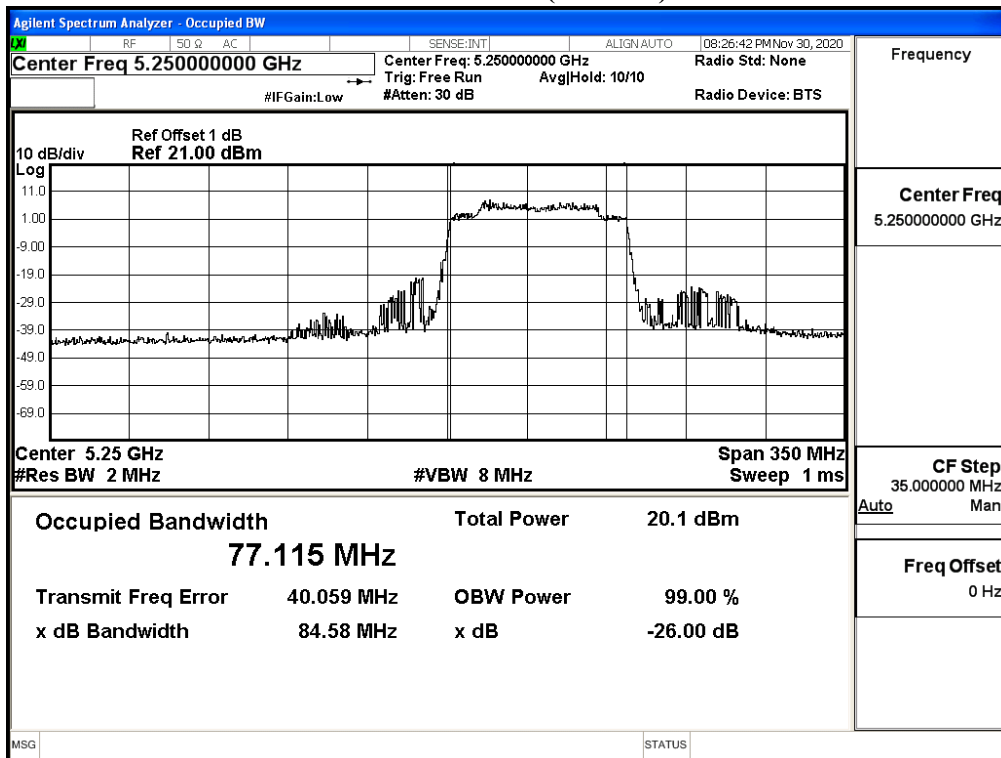
**Maximum conducted output power:
Channel 50 ((Band2) (Chain B)**



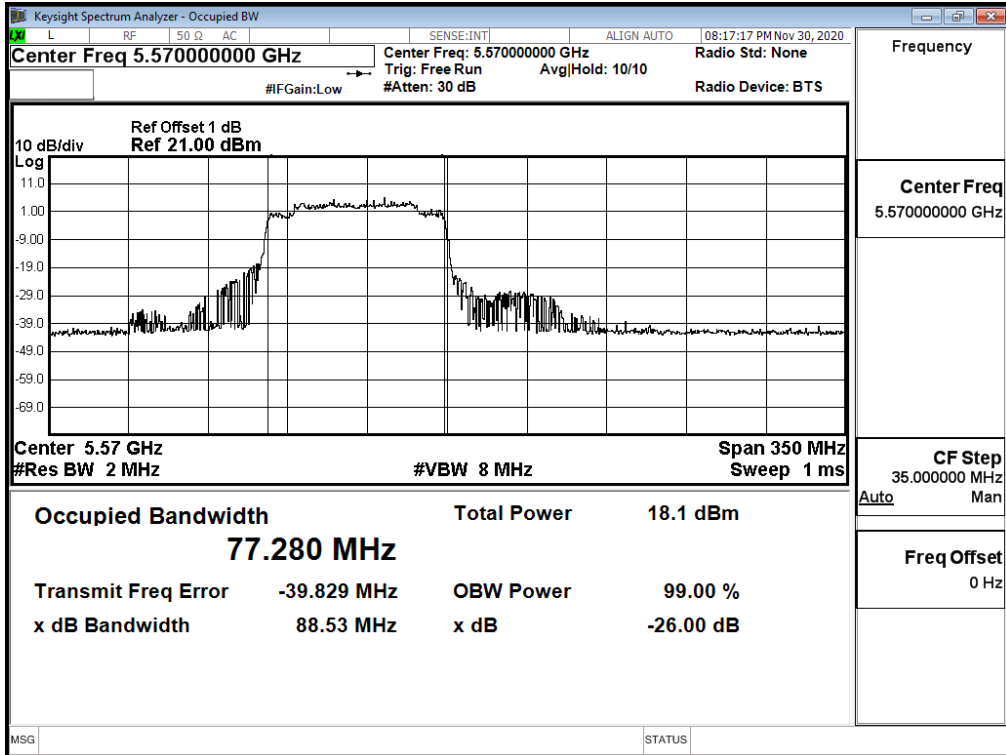
RU config: Other
26dB Occupied Bandwidth:
Channel 50 - 996/67 (Chain A)



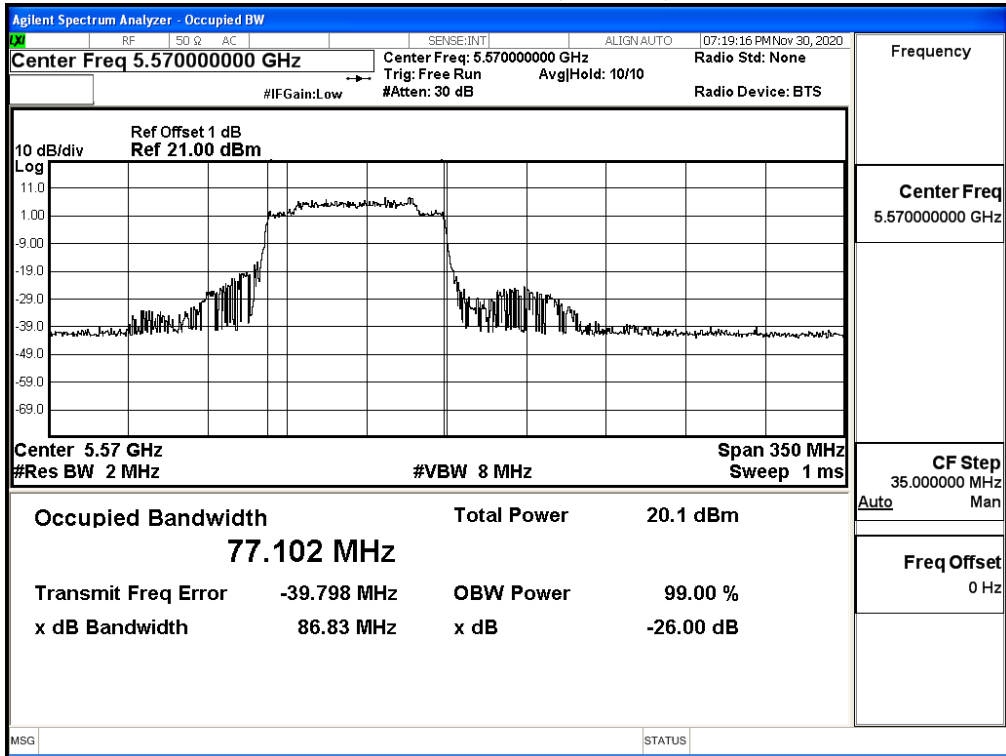
Channel 50 - 996/67 (Chain B)



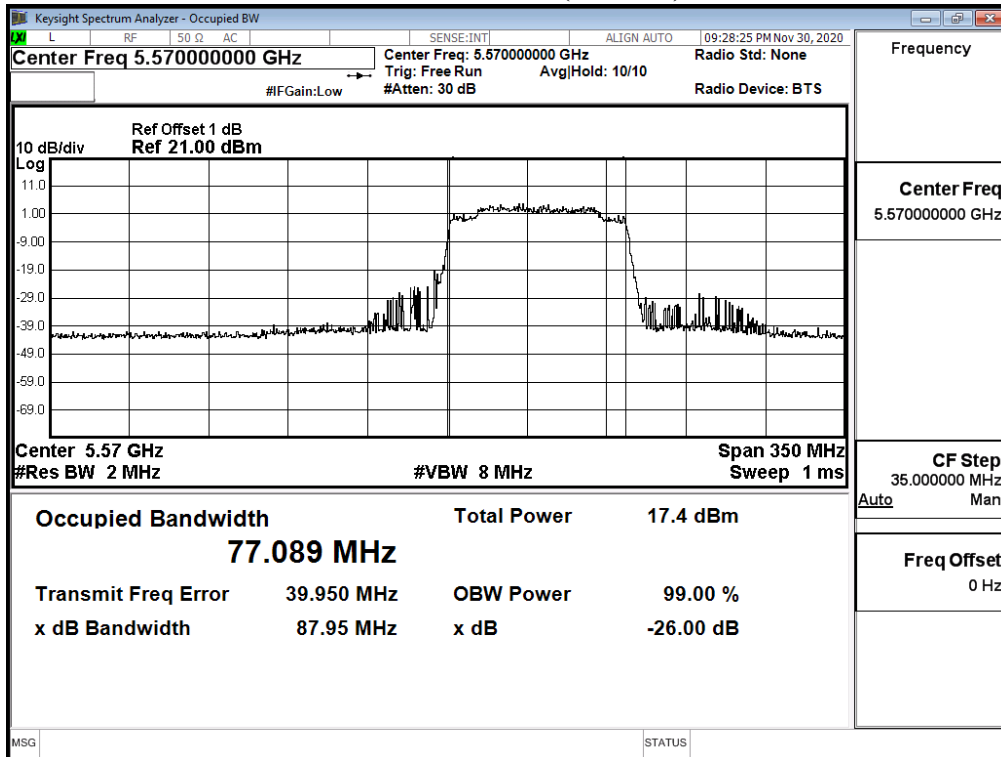
Channel 114 - 996/67 (Chain A)



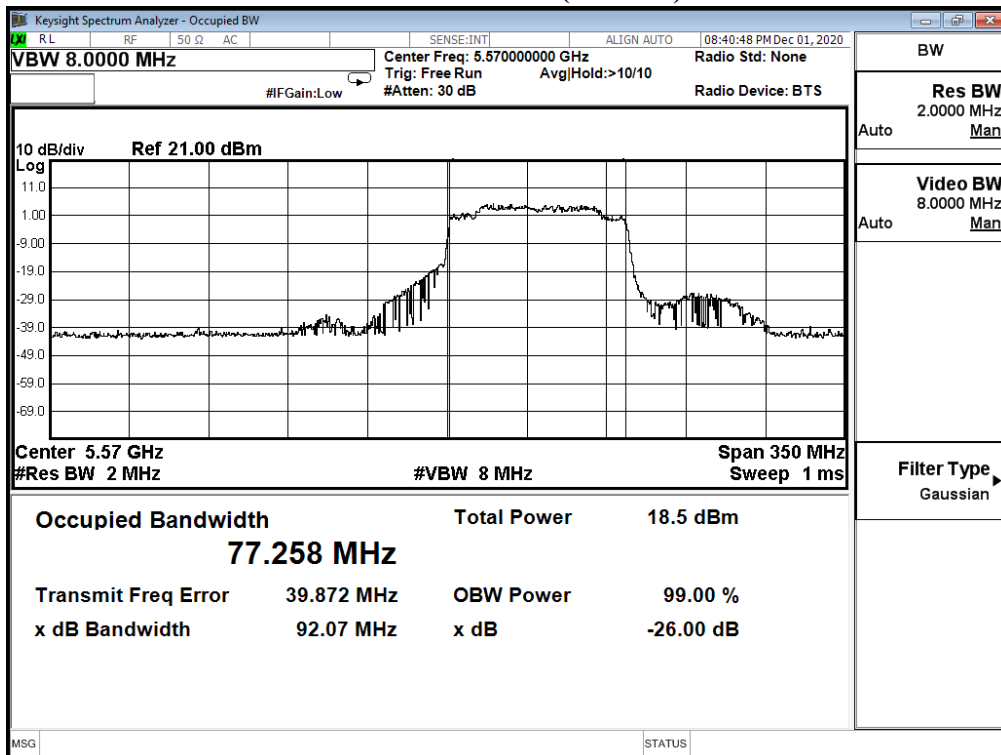
Channel 114 - 996/67 (Chain B)



Channel 114 - 996/S67 (Chain A)

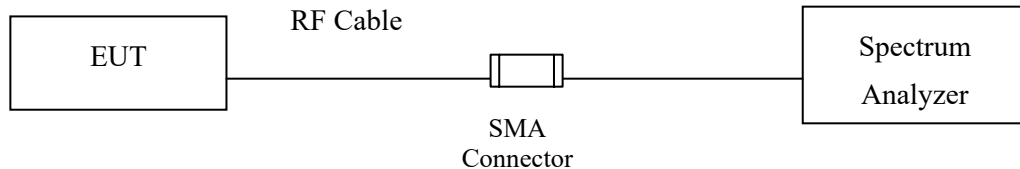


Channel 114 - 996/S67 (Chain B)



4. Peak Power Spectral Density

4.1. Test Setup



4.2. Limits

- (1) For the band 5.15-5.25 GHz,
 - (i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
 - (ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
 - (iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
 - (iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.+
- (2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

- (3) For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point UNII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

4.3. Test Procedure

The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

The Peak Power Spectral Density using KDB 789033 section F) procedure, Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer.

SA-1 method is selected to run the test.

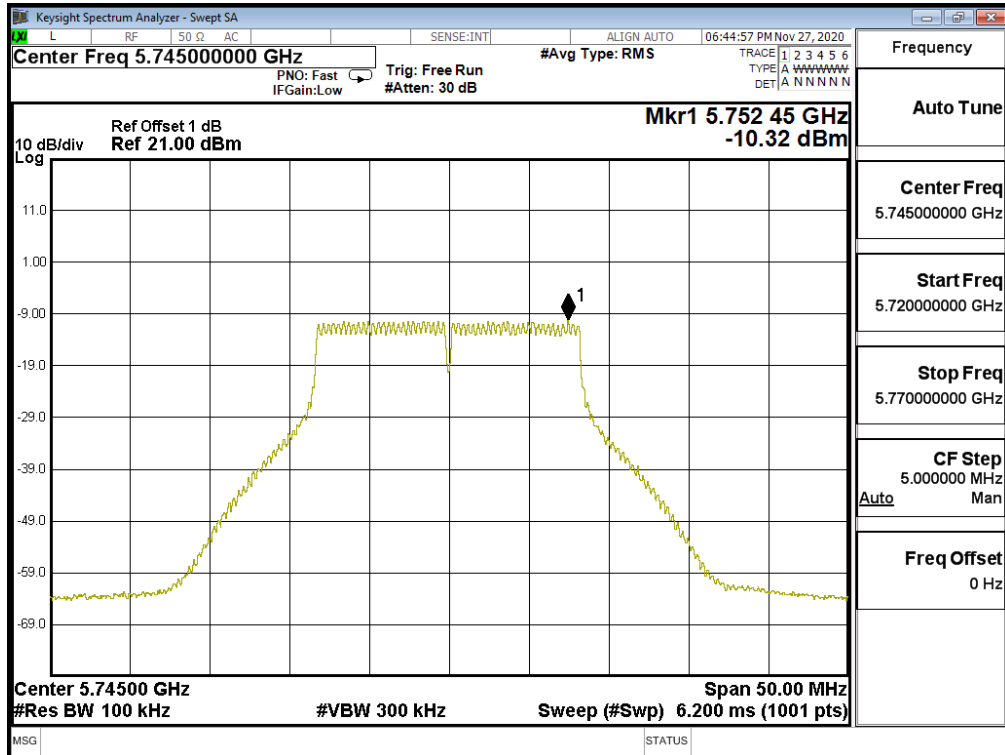
For the band 5.725-5.85 GHz, Scale the observed power level to an equivalent value in 500 kHz by adjusting (increase) the measured power by a bandwidth correction factor (BWCF) where $BWCF = 10\log(500\text{ kHz}/100\text{ kHz}) = 6.98\text{ dB}$.

4.4. Test Result of Peak Power Spectral Density

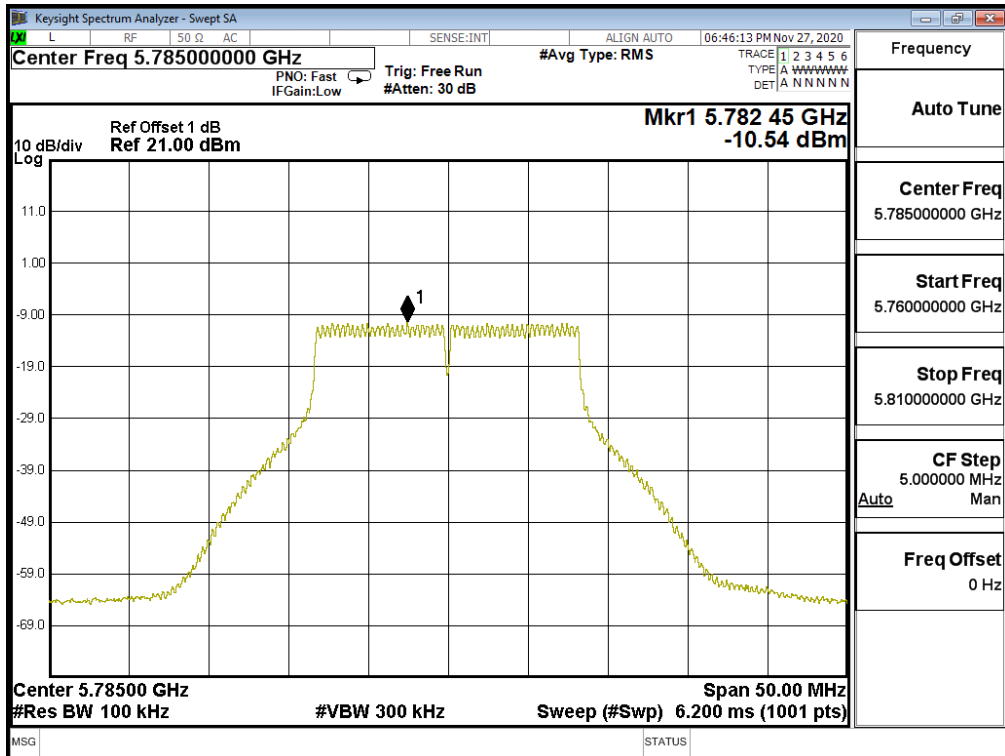
Product : Notebook Computers
Test Item : Peak Power Spectral Density
Test Mode : Mode 1 SISO A: Transmit (802.11a_6Mbps)

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
149	5745	A	-10.32	6.98	0.51	-2.83	<30	Pass
157	5785	A	-10.54	6.98	0.51	-3.05	<30	Pass
165	5825	A	-10.03	6.98	0.51	-2.54	<30	Pass

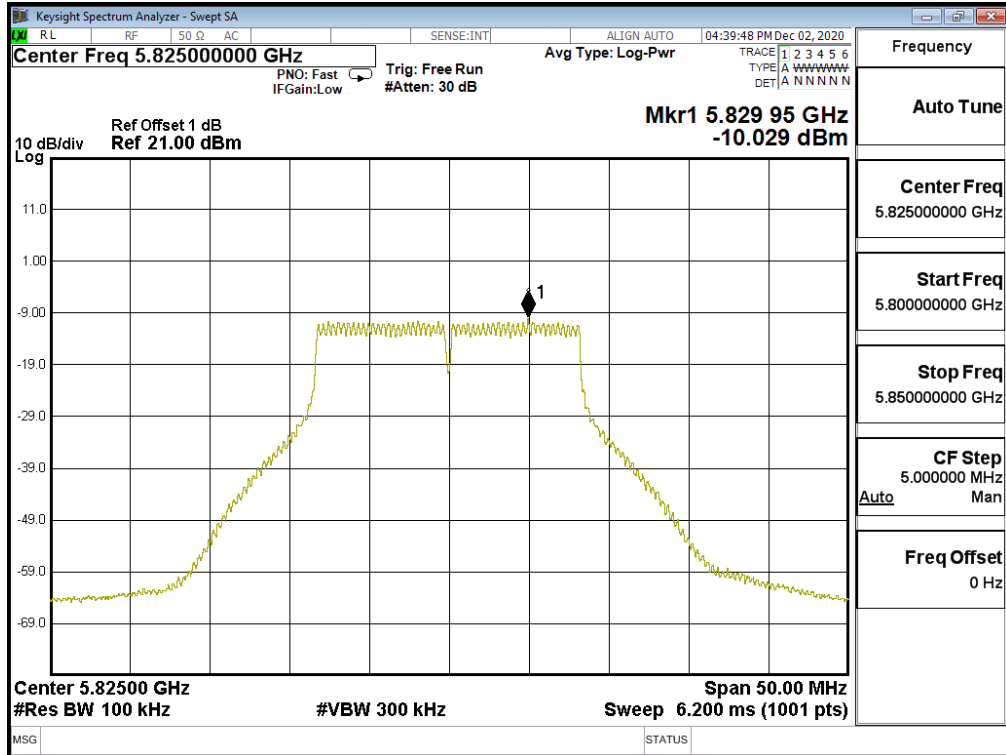
Channel 149 - Chain A



Channel 157 - Chain A



Channel 165 - Chain A



Product : Notebook Computers
 Test Item : Peak Power Spectral Density
 Test Mode : Mode 6: SISO A: Transmit (802.11ax-20BW_8.6Mbps)

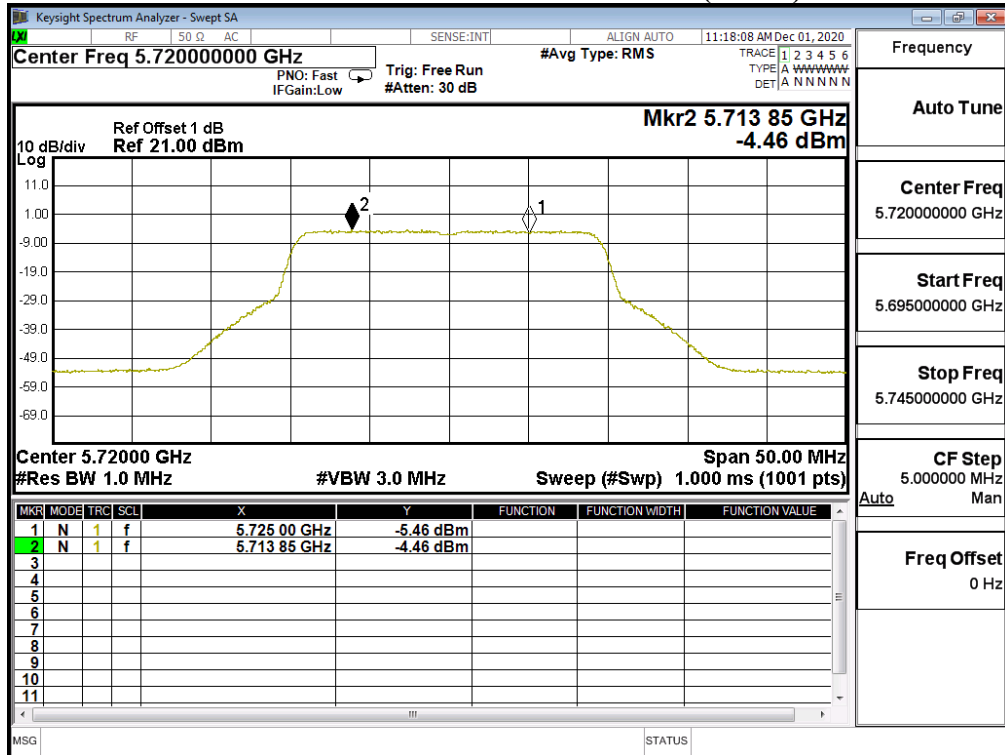
RU config: Full

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
144(Band3)	5720	A	-4.46	--	0.06	-4.40	<11	Pass
144(Band4)	5720	A	-14.72	6.98	0.06	-7.68	<30	Pass
149	5745	A	-11.38	6.98	0.06	-4.34	<30	Pass
157	5785	A	-11.58	6.98	0.06	-4.54	<30	Pass
165	5825	A	-11.53	6.98	0.06	-4.49	<30	Pass

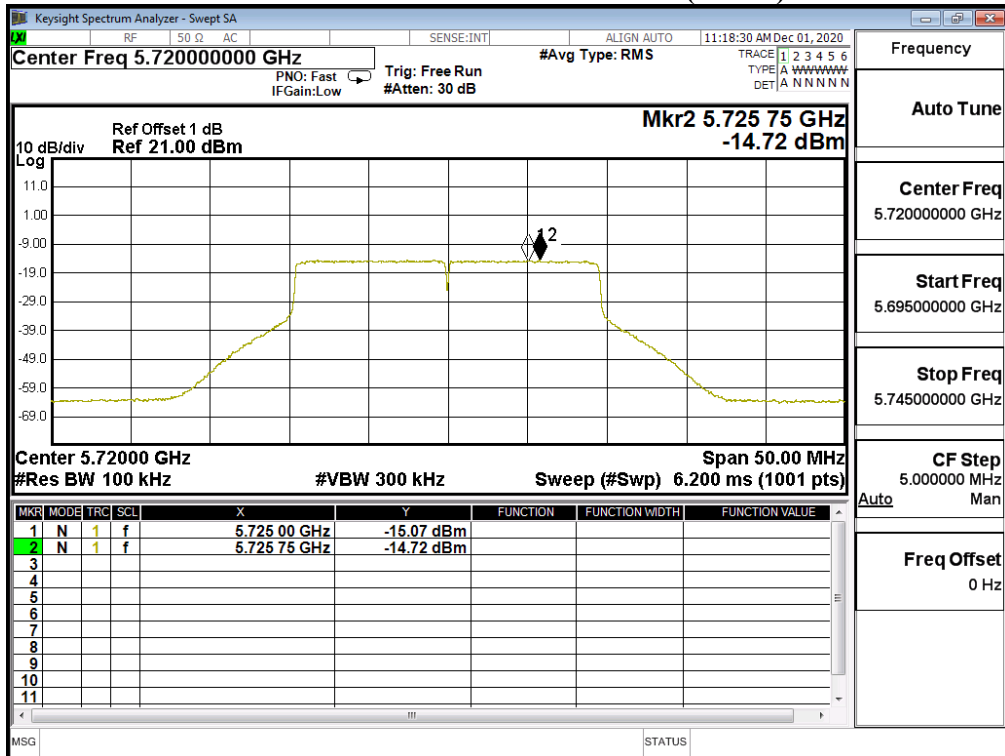
RU config: Other

Channel / Frequenc	RU setting	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
5745	26-0	A	-1.13	6.98	0.14	5.99	<30	Pass
	52-37	A	-3.61	6.98	0.19	3.56	<30	Pass
	106-53	A	-6.68	6.98	0.14	0.44	<30	Pass

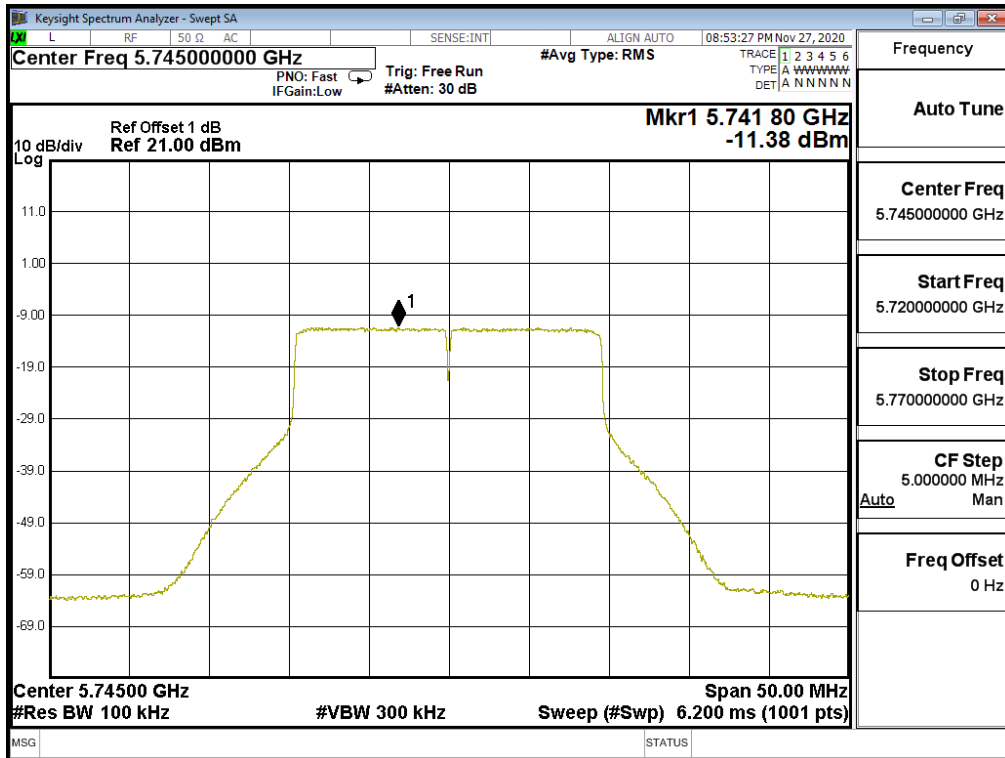
RU config: Full
Channel 144 - Chain A (Band3)



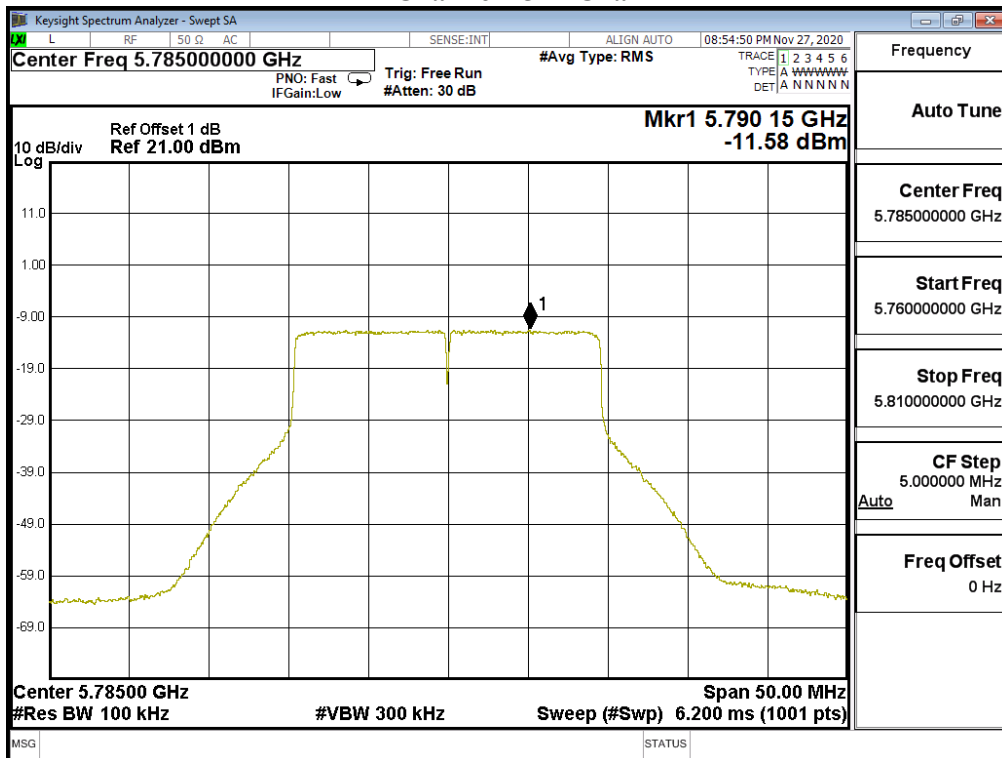
Channel 144 - Chain A (Band4)



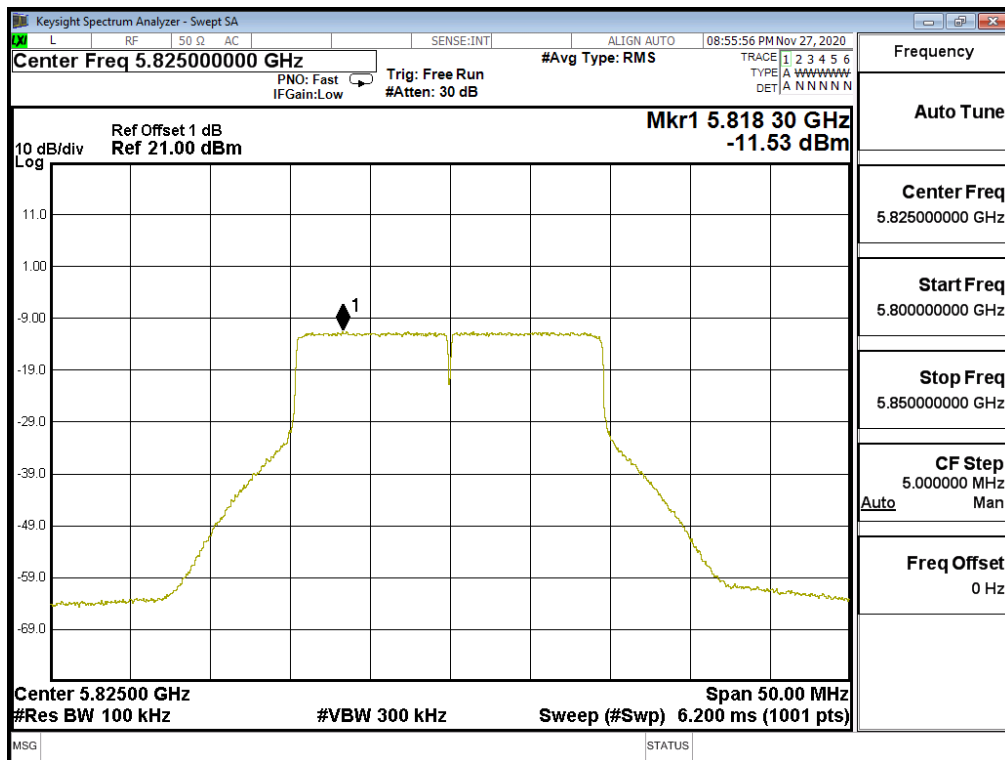
Channel 149 - Chain A



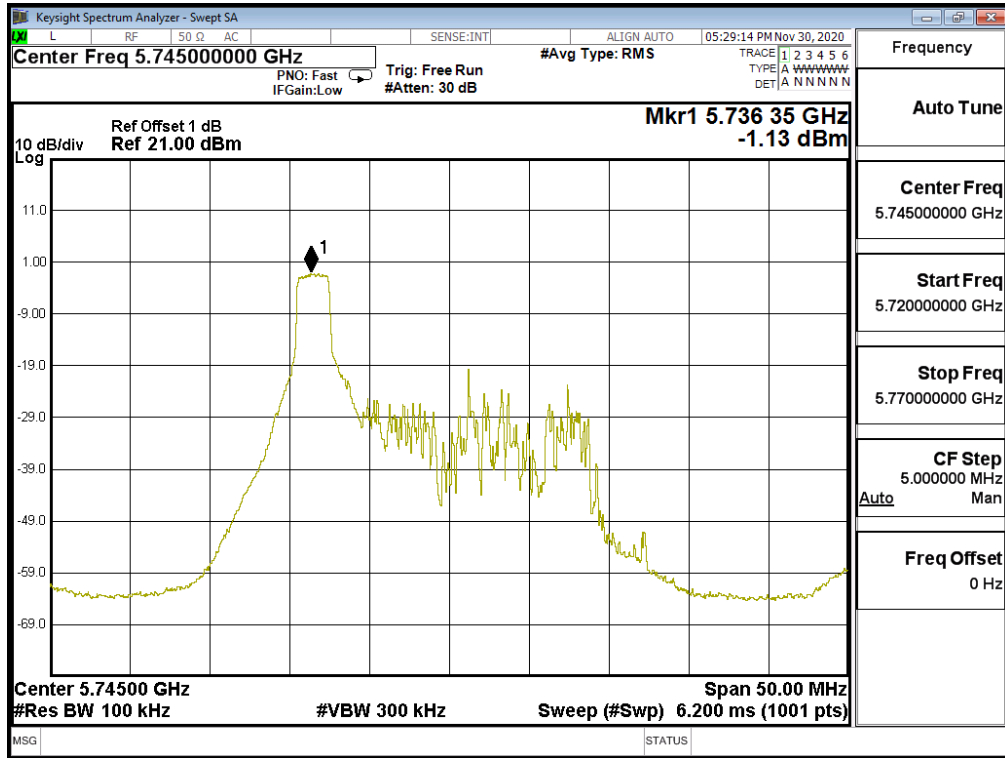
Channel 157 - Chain A



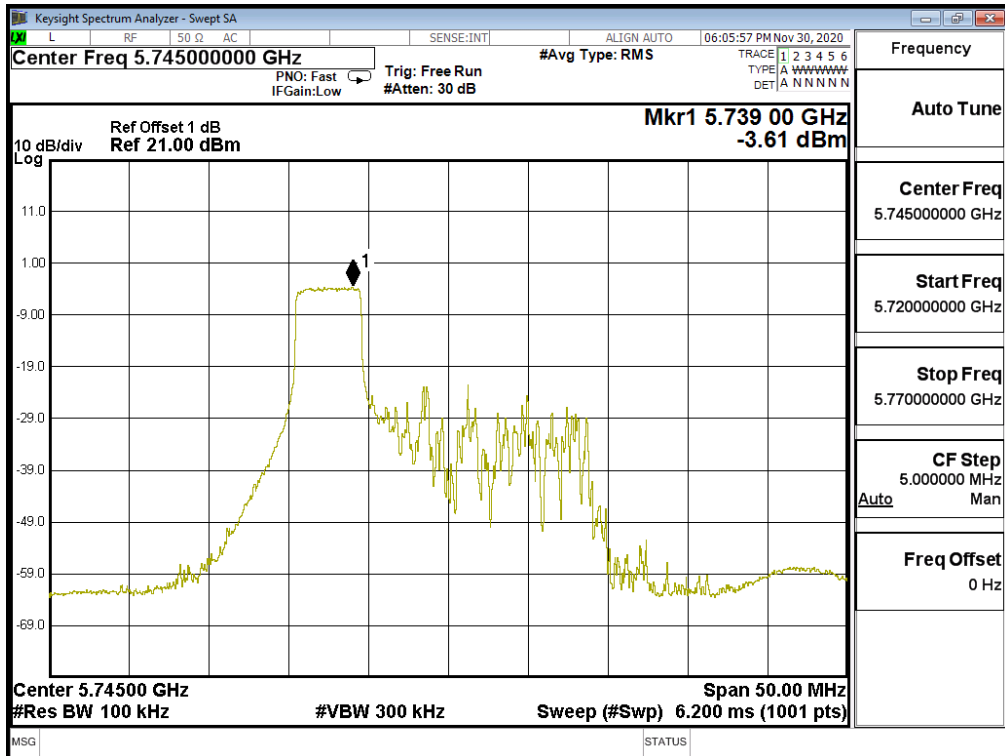
Channel 165 - Chain A



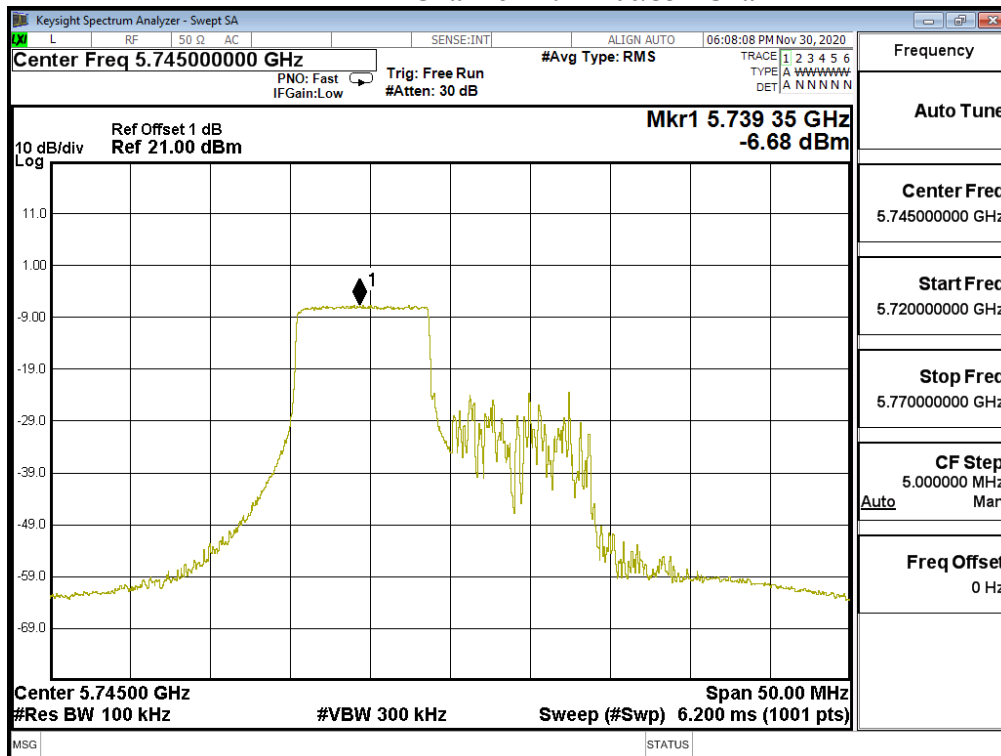
RU config: Other
Channel 149 – 26/0 - Chain A



Channel 149 – 52/37- Chain A



Channel 149 – 106/53 - Chain A



Product : Notebook Computers
 Test Item : Peak Power Spectral Density
 Test Mode : Mode 7: SISO A: Transmit (802.11ax-40BW_17.2Mbps)

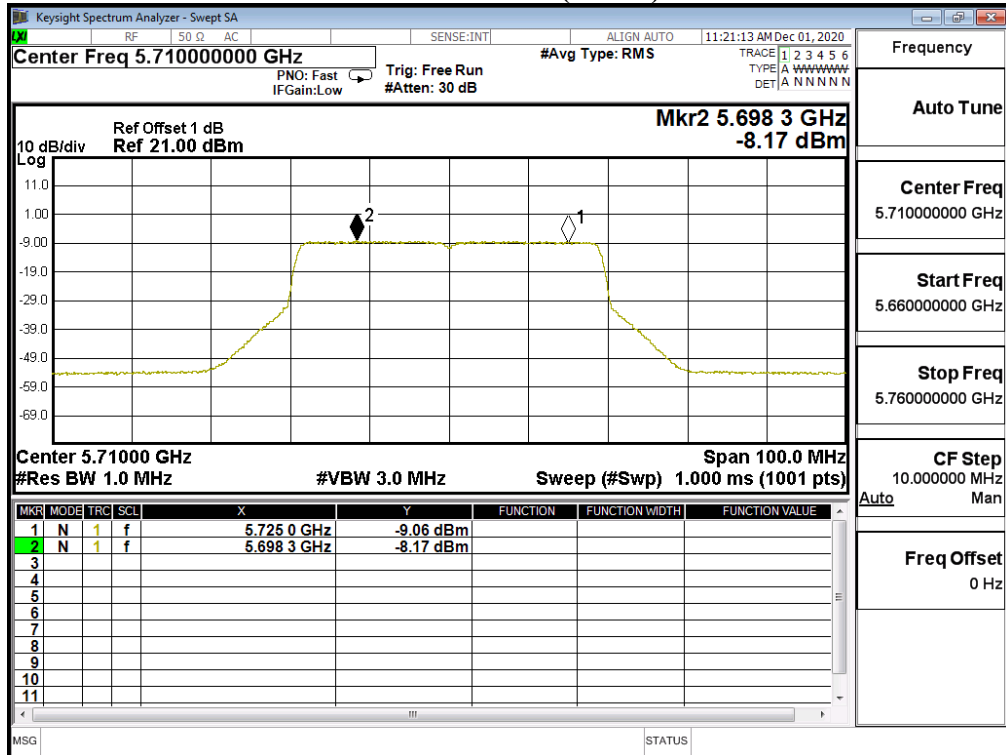
RU config: Full

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
142(Band3)	5710	A	-8.17	--	0.06	-8.11	<11	Pass
142(Band4)	5710	A	-18.51	6.98	0.06	-11.47	<30	Pass
151	5755	A	-14.73	6.98	0.06	-7.69	<30	Pass
159	5795	A	-14.93	6.98	0.06	-7.89	<30	Pass

RU config: Other

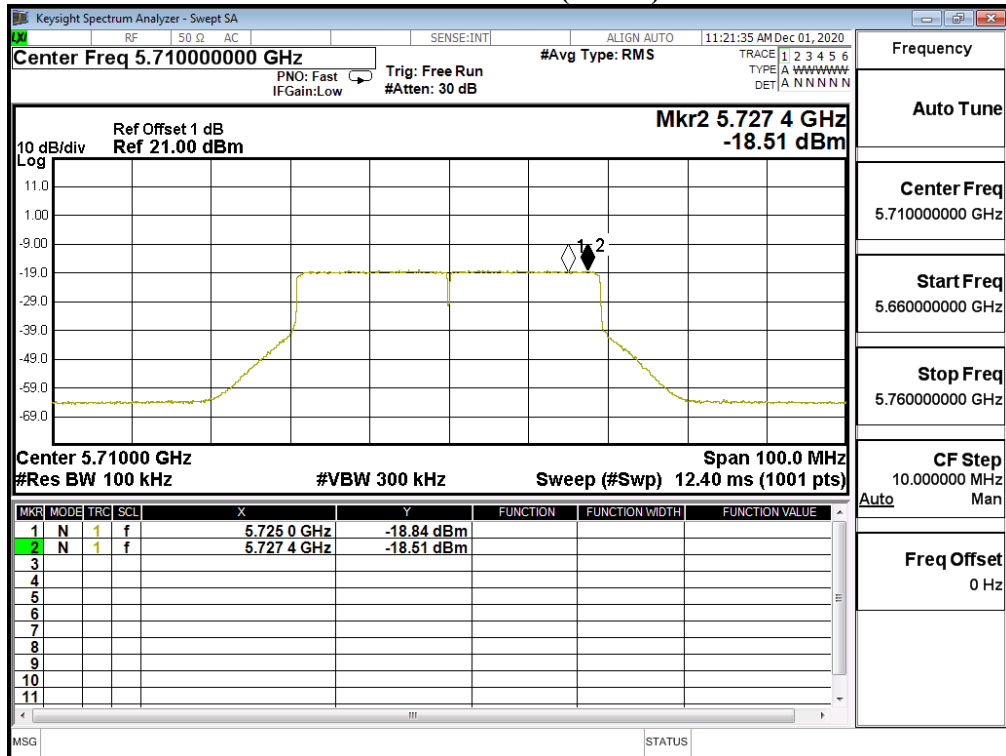
Channel / Frequenc	RU setting	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
5755	242-61	A	-10.09	6.98	0.12	-2.99	<30	Pass

RU config: Full
Channel 142 (Band3) - Chain A



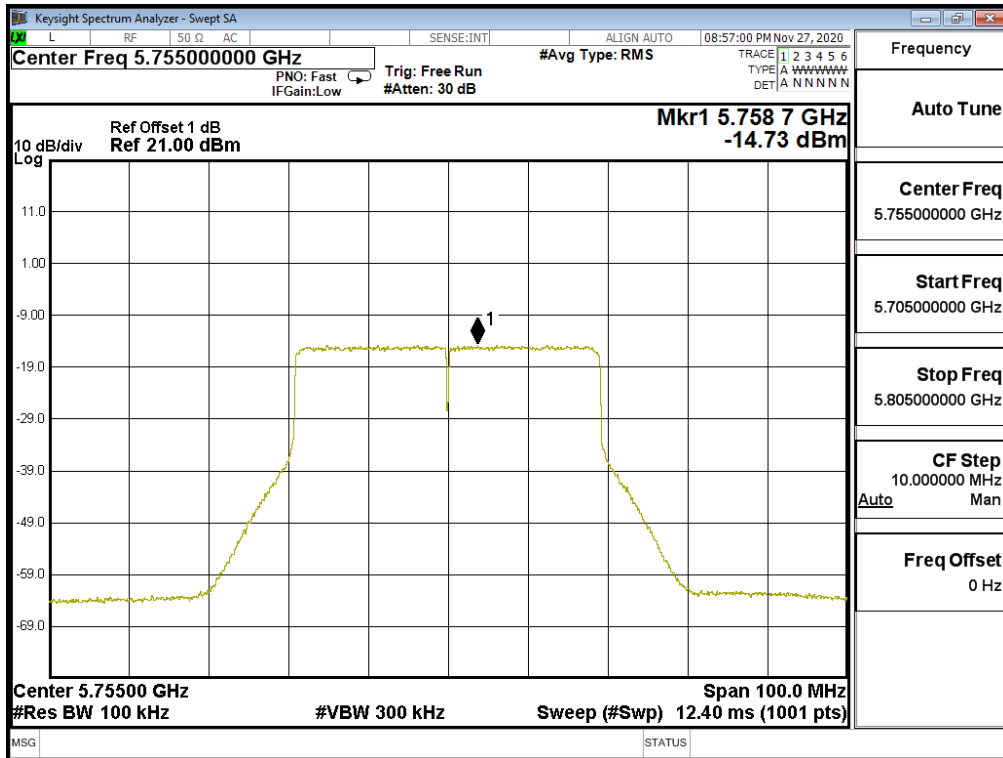
Frequency
Auto Tune
Center Freq 5.71000000 GHz
Start Freq 5.66000000 GHz
Stop Freq 5.76000000 GHz
CF Step 10.000000 MHz Auto Man
Freq Offset 0 Hz

Channel 142 (Band4) - Chain A

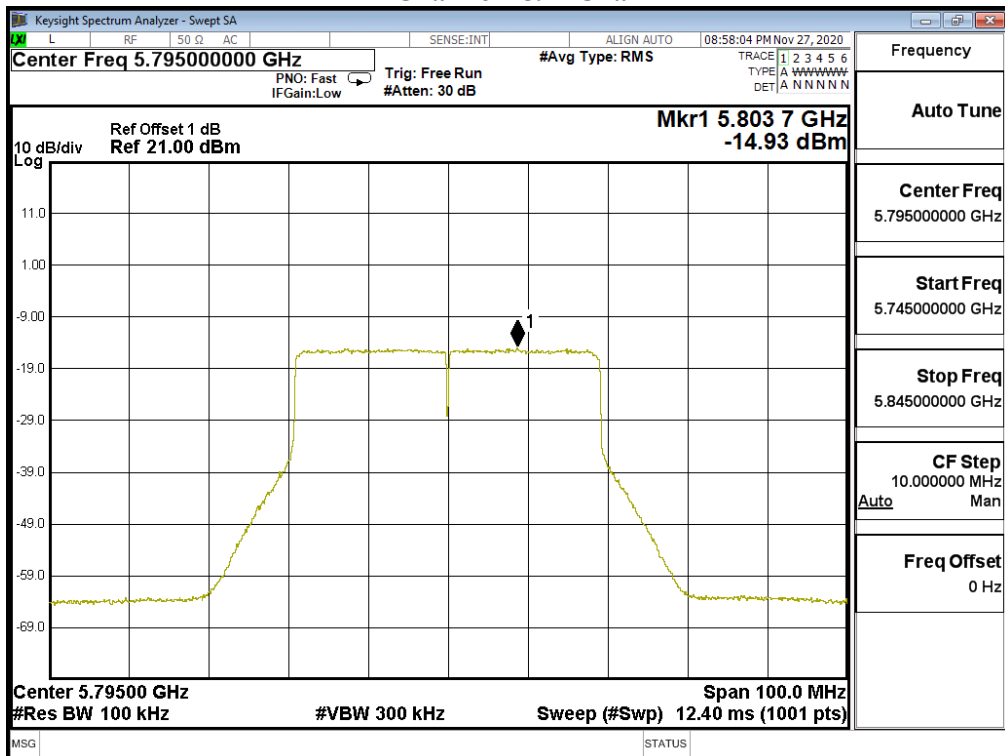


Frequency
Auto Tune
Center Freq 5.71000000 GHz
Start Freq 5.66000000 GHz
Stop Freq 5.76000000 GHz
CF Step 10.000000 MHz Auto Man
Freq Offset 0 Hz

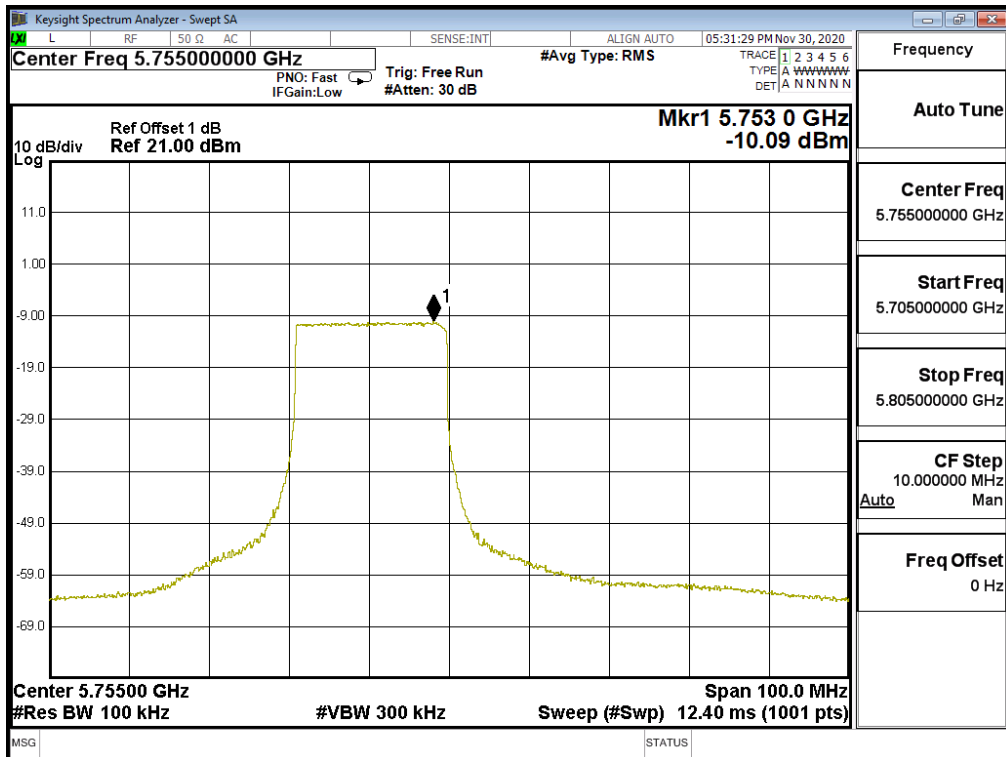
Channel 151 - Chain A



Channel 159 - Chain A



RU config: Other
Channel 151 – 242/61 - Chain A



Product : Notebook Computers
 Test Item : Peak Power Spectral Density
 Test Mode : Mode 8: SISO A: Transmit (802.11ax-80BW_36Mbps)

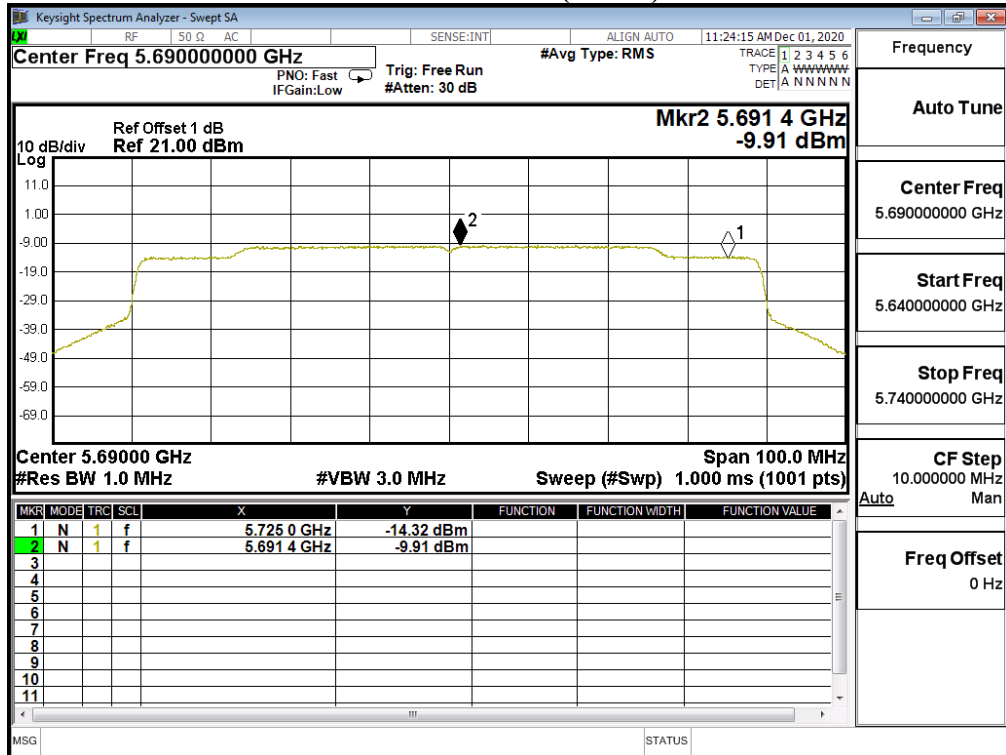
RU config: Full

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
138	5690(Band3)	A	-9.91	--	0.20	-9.71	<11	Pass
	5690(Band4)	A	-23.88	6.98	0.20	-16.70	<30	Pass
155	5775	A	-16.62	6.98	0.20	-9.44	<30	Pass

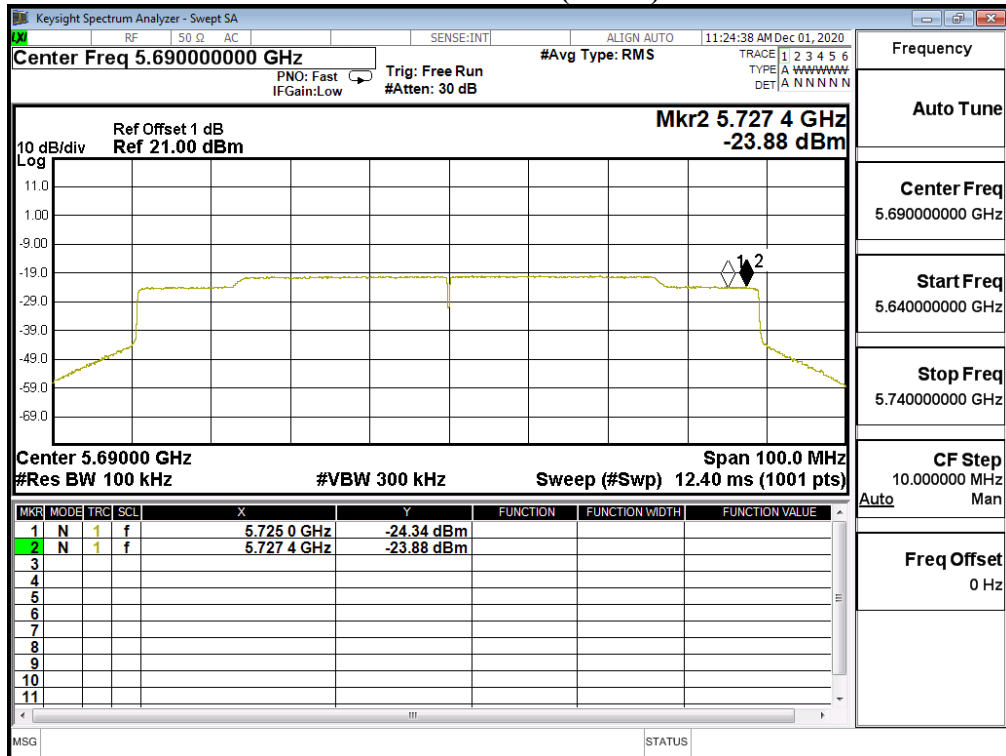
RU config: Other

Channel / Frequenc	RU setting	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
5775	484-65	A	-13.05	6.98	0.14	-5.93	<30	Pass

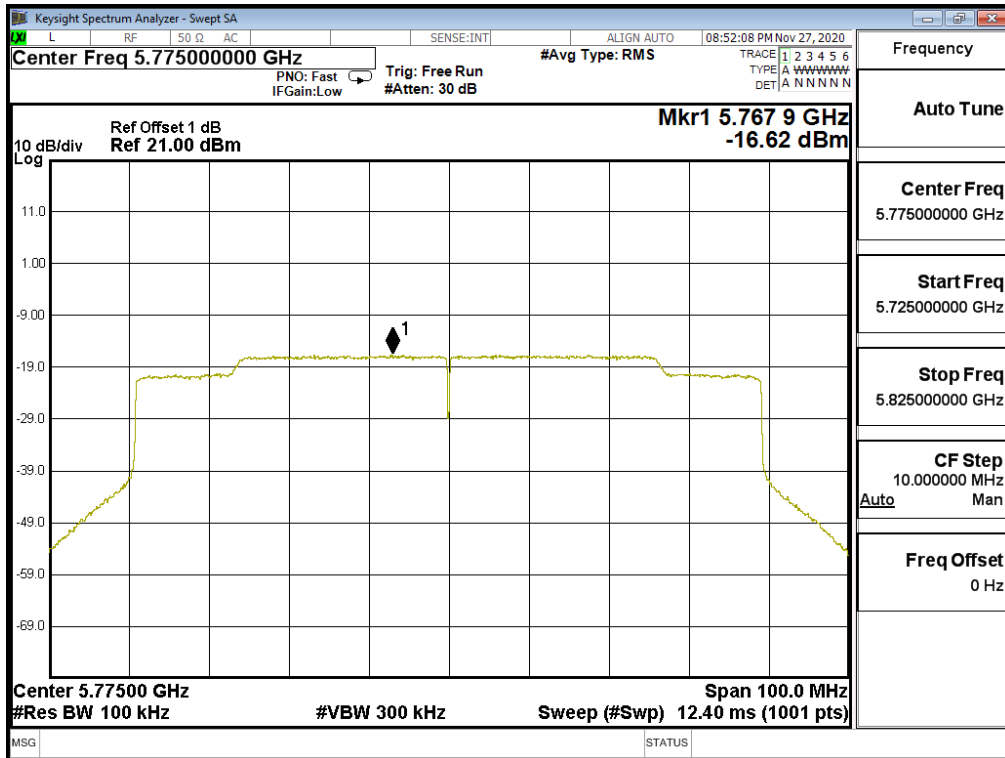
RU config: Full
Channel 138 (Band3) - Chain A



Channel 138 (Band4) - Chain A

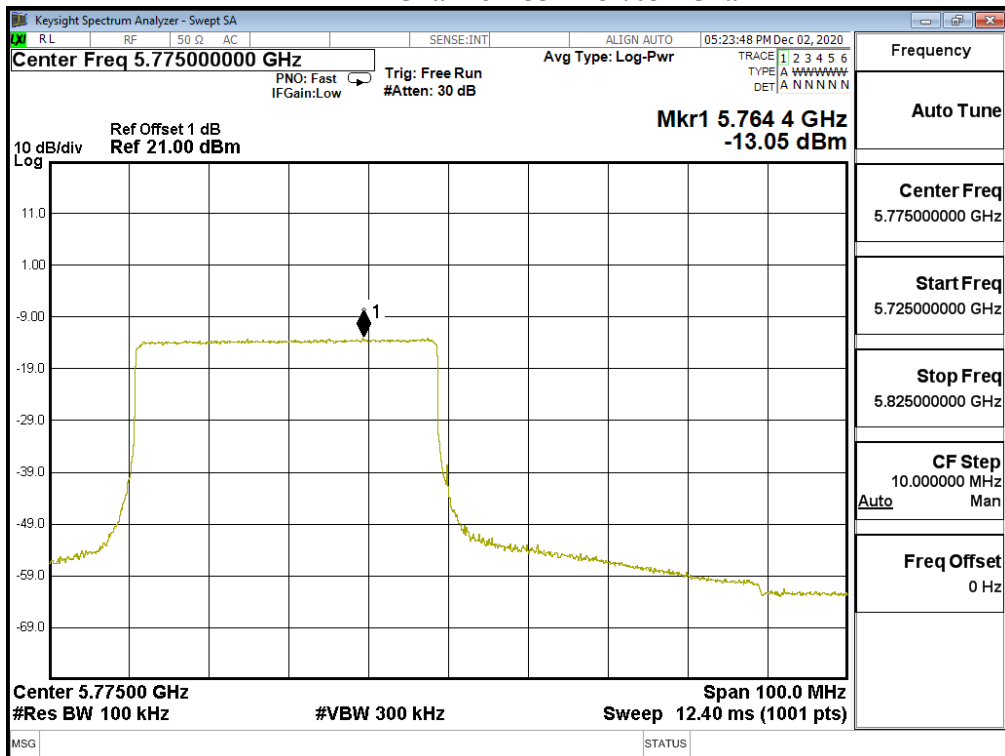


Channel 155 - Chain A



RU config: Other

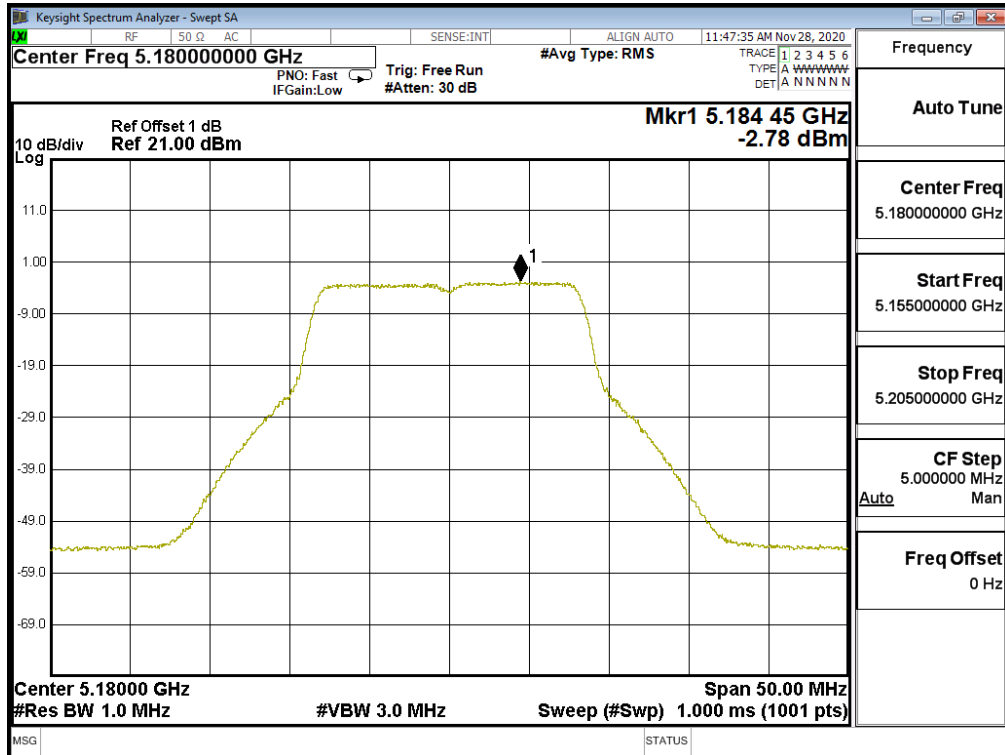
Channel 155 - 484/65 - Chain A



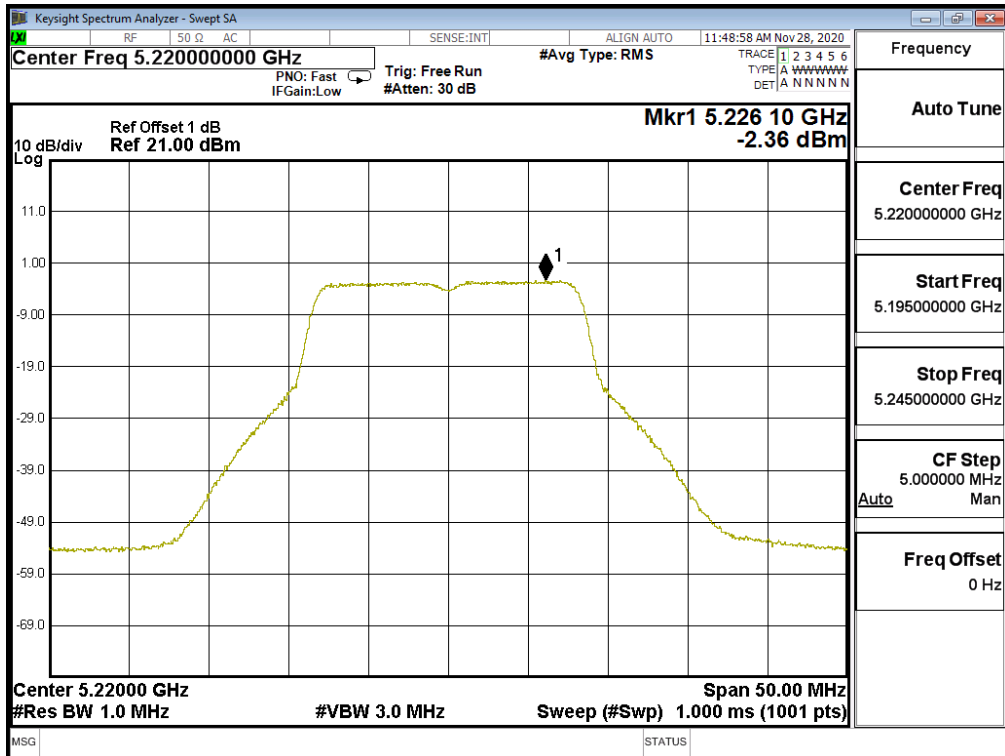
Product : Notebook Computers
Test Item : Peak Power Spectral Density
Test Mode : Mode 10 SISO B: Transmit (802.11a_6Mbps)

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
36	5180	B	-2.78	--	0.51	-2.27	<11	Pass
44	5220	B	-2.36	--	0.51	-1.85	<11	Pass
48	5240	B	-2.16	--	0.51	-1.65	<11	Pass
52	5260	B	-2.41	--	0.51	-1.90	<11	Pass
60	5300	B	-2.36	--	0.51	-1.85	<11	Pass
64	5320	B	-2.30	--	0.51	-1.79	<11	Pass
100	5500	B	-3.93	--	0.51	-3.42	<11	Pass
116	5580	B	-4.10	--	0.51	-3.59	<11	Pass
140	5700	B	-4.20	--	0.51	-3.69	<11	Pass

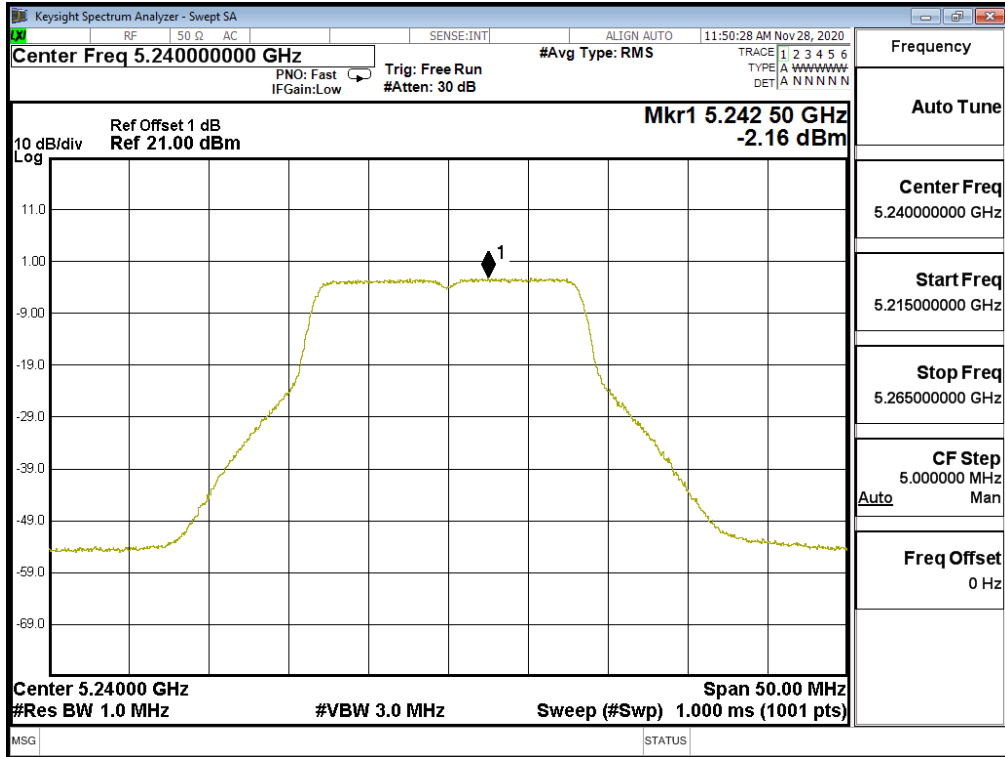
Channel 36 - Chain B



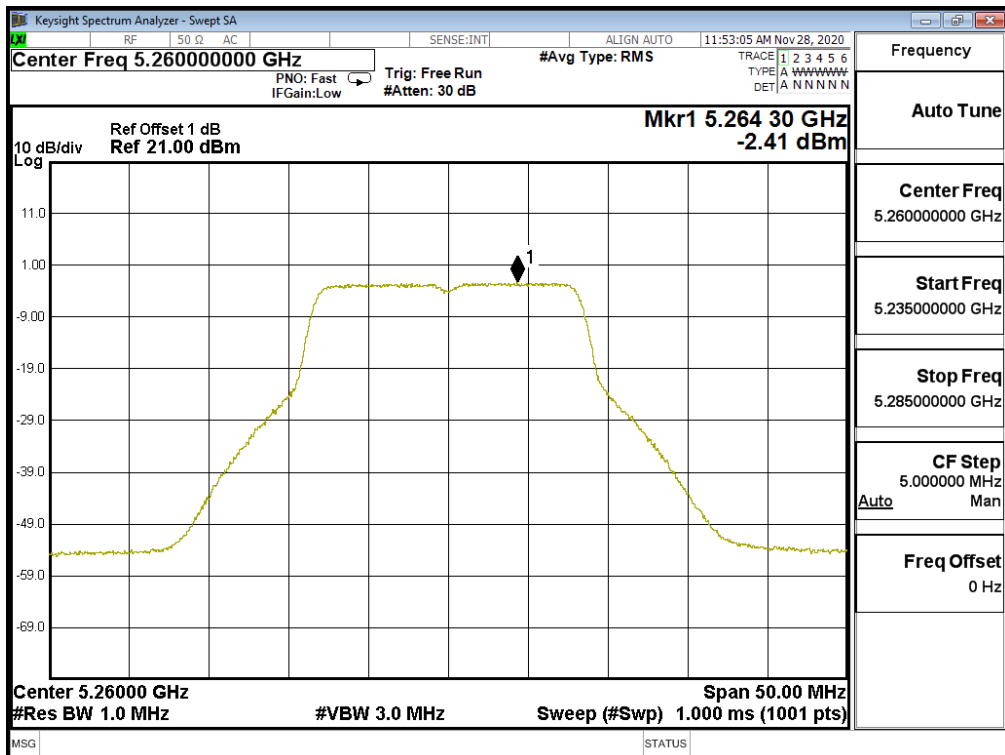
Channel 44 - Chain B



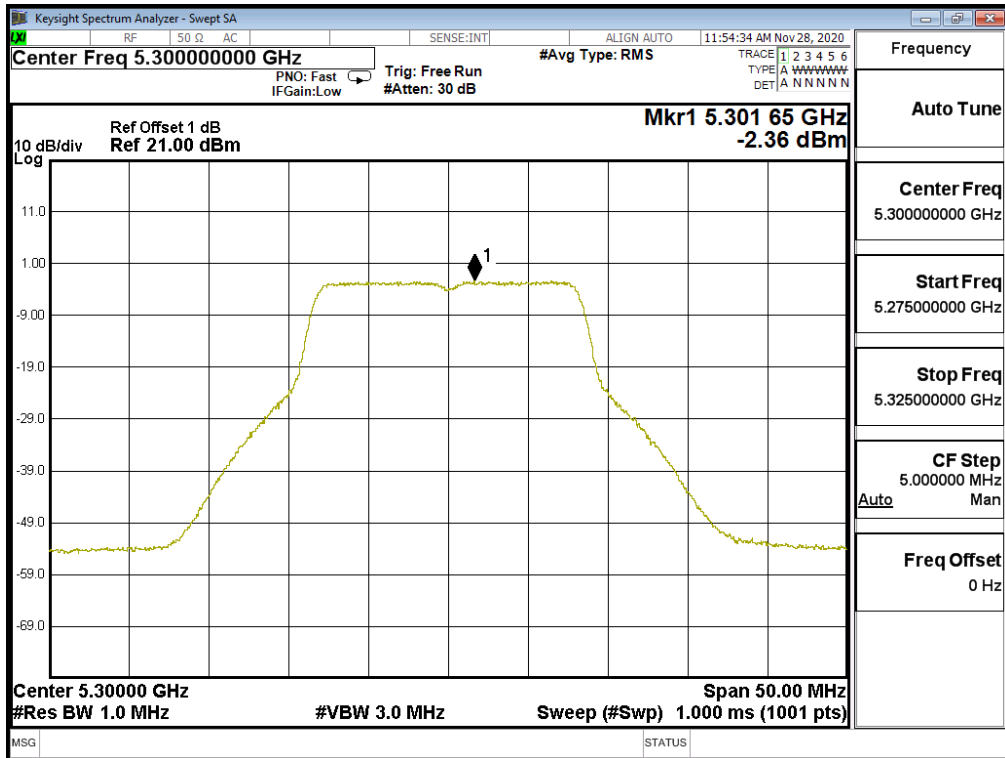
Channel 48 - Chain B



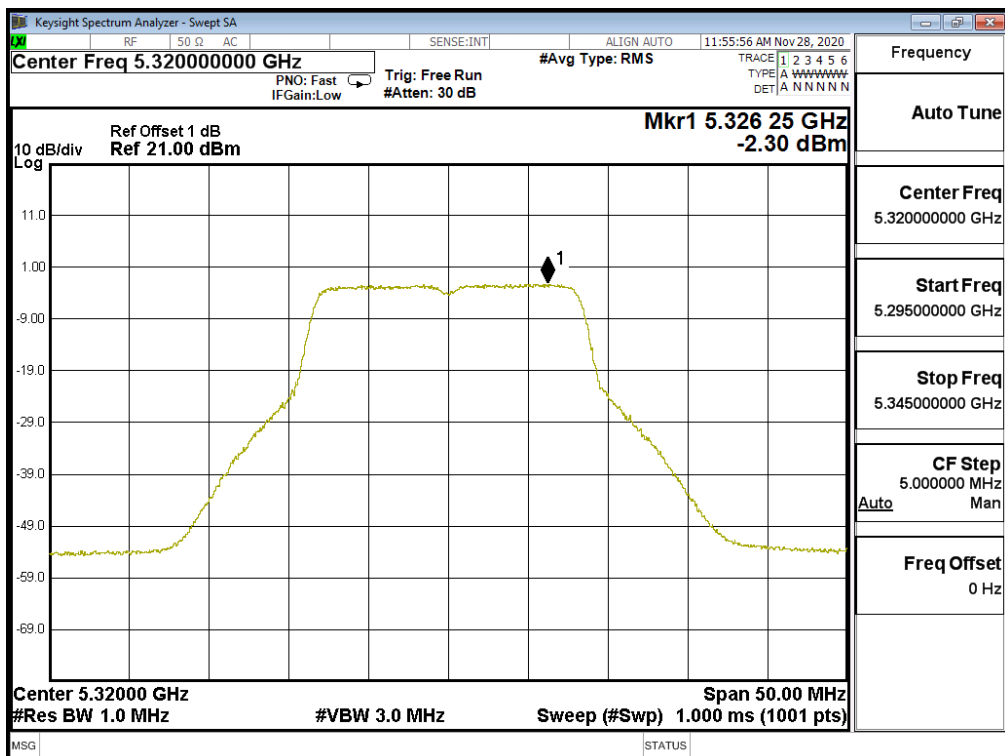
Channel 52- Chain B



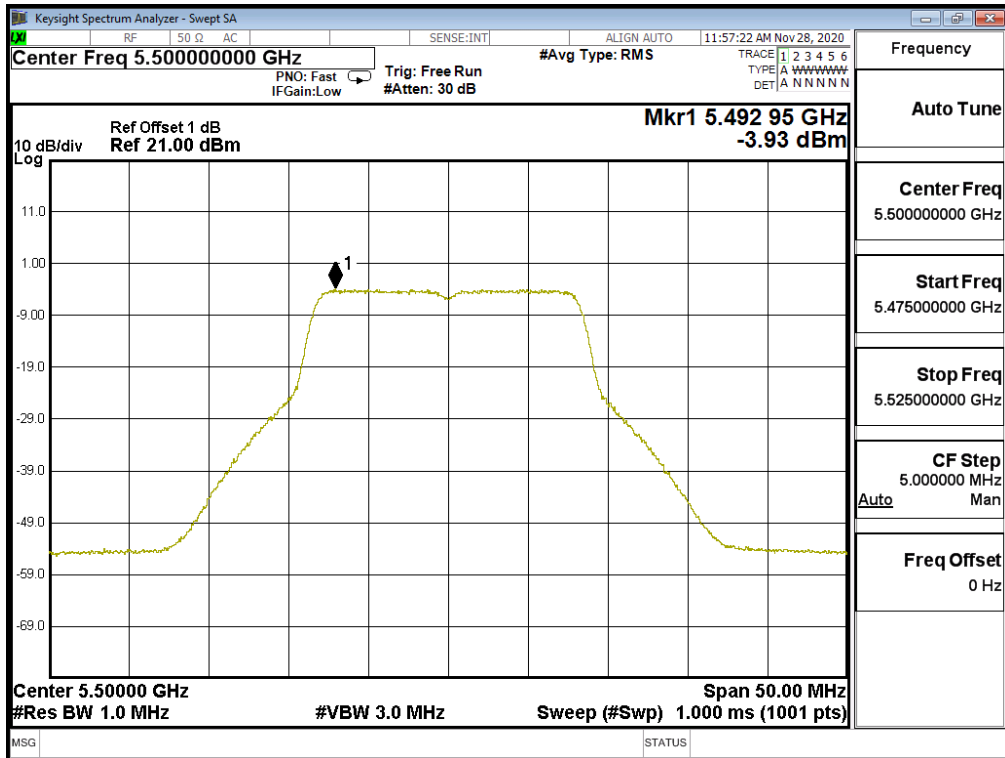
Channel 60 - Chain B



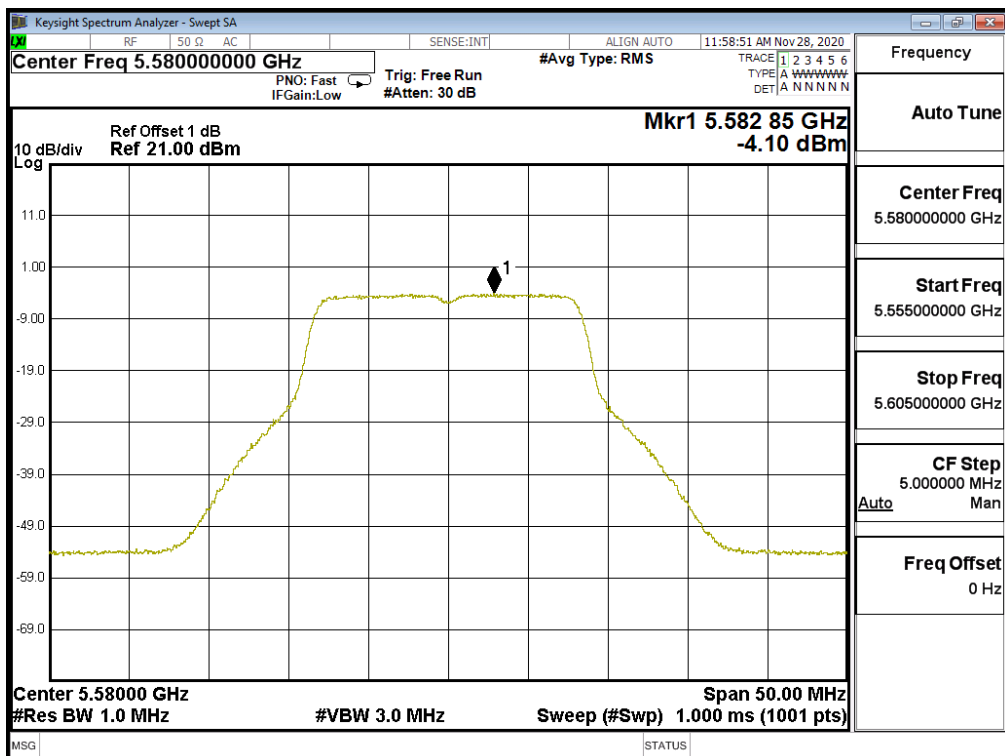
Channel 64- Chain B



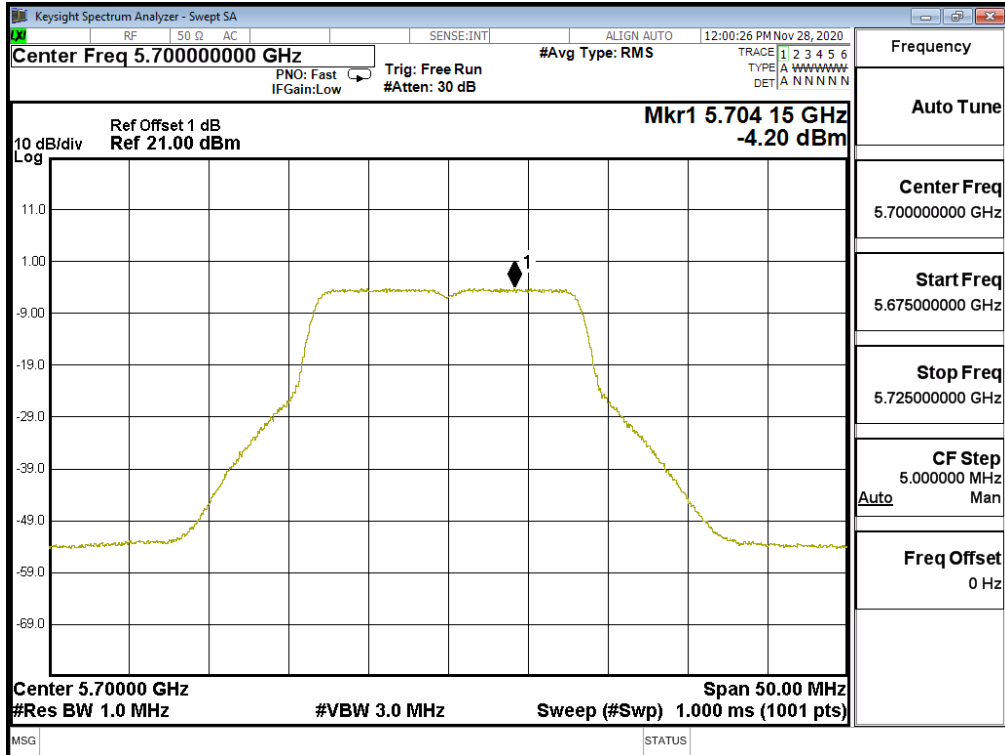
Channel 100 - Chain B



Channel 116 Chain B



Channel 140 - Chain B



Product : Notebook Computers
 Test Item : Peak Power Spectral Density
 Test Mode : Mode 15: SISO B: Transmit (802.11ax-20BW_8.6Mbps)

RU config: Full

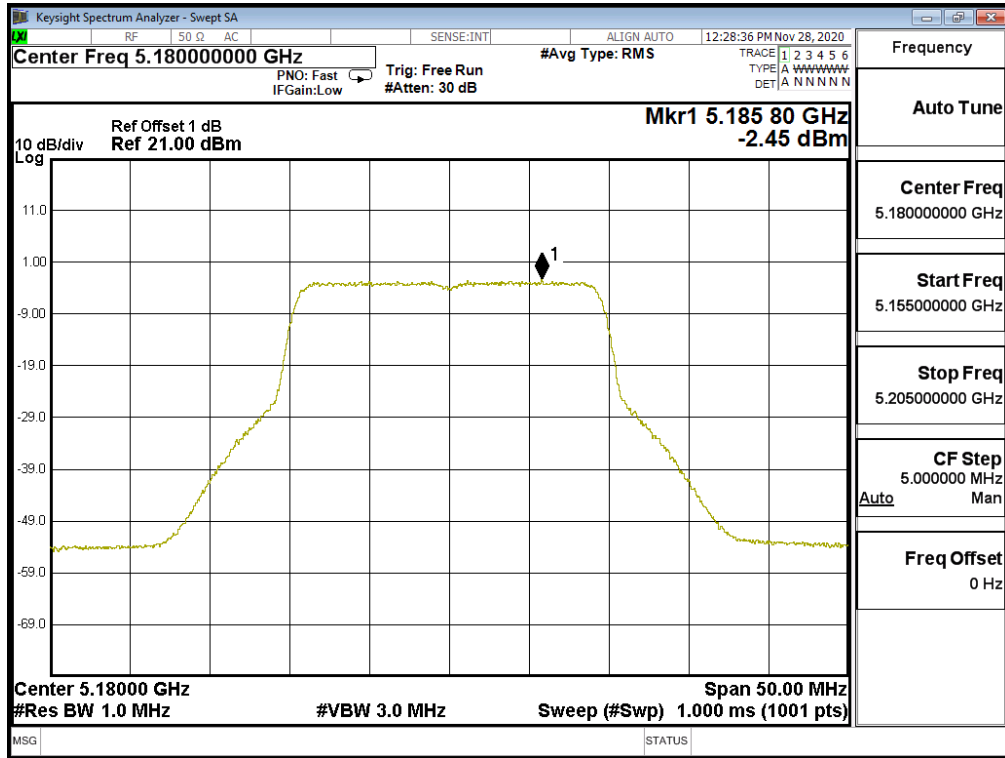
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
36	5180	B	-2.45	--	0.09	-2.36	<11	Pass
44	5220	B	-2.69	--	0.09	-2.60	<11	Pass
48	5240	B	-2.58	--	0.09	-2.49	<11	Pass
52	5260	B	-2.48	--	0.09	-2.39	<11	Pass
60	5300	B	-2.42	--	0.09	-2.33	<11	Pass
64	5320	B	-2.53	--	0.09	-2.44	<11	Pass
100	5500	B	-3.97	--	0.09	-3.88	<11	Pass
116	5580	B	-4.46	--	0.09	-4.37	<11	Pass
140	5700	B	-4.08	--	0.09	-3.99	<11	Pass

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
144(Band3)	5720	B	-2.58	--	0.09	-2.49	<11	Pass
144(Band4)	5720	B	-12.67	6.98	0.09	-5.60	<30	Pass

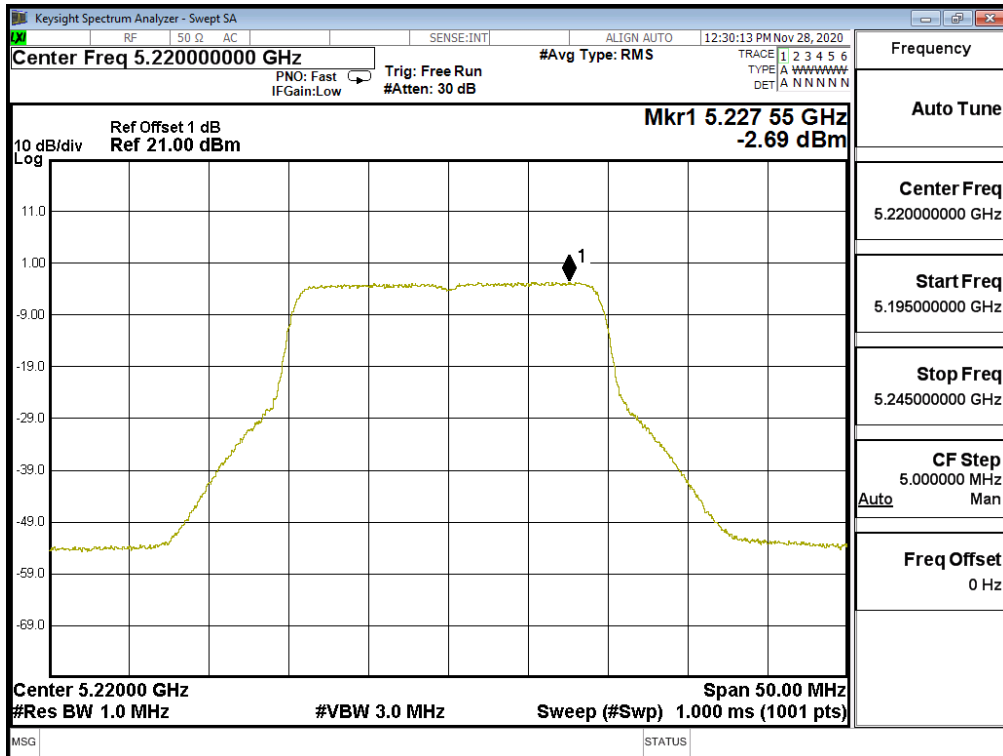
RU config: Other

Channel / Frequenc	RU setting	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
5180	26-0	B	6.86	--	0.14	7.00	<11	Pass
	52-37	B	4.73	--	0.14	4.87	<11	Pass
	106-53	B	1.33	--	0.09	1.42	<11	Pass
5320	26-8	B	7.18	--	0.14	7.32	<11	Pass
	52-40	B	4.36	--	0.14	4.50	<11	Pass
	106-54	B	1.74	--	0.09	1.83	<11	Pass
5500	26-0	B	6.51	--	0.14	6.65	<11	Pass
	52-37	B	3.67	--	0.14	3.81	<11	Pass
	106-53	B	0.73	--	0.09	0.82	<11	Pass
5700	26-8	B	5.95	--	0.14	6.09	<11	Pass
	52-40	B	2.87	--	0.14	3.01	<11	Pass
	106-54	B	-0.11	--	0.09	-0.02	<11	Pass

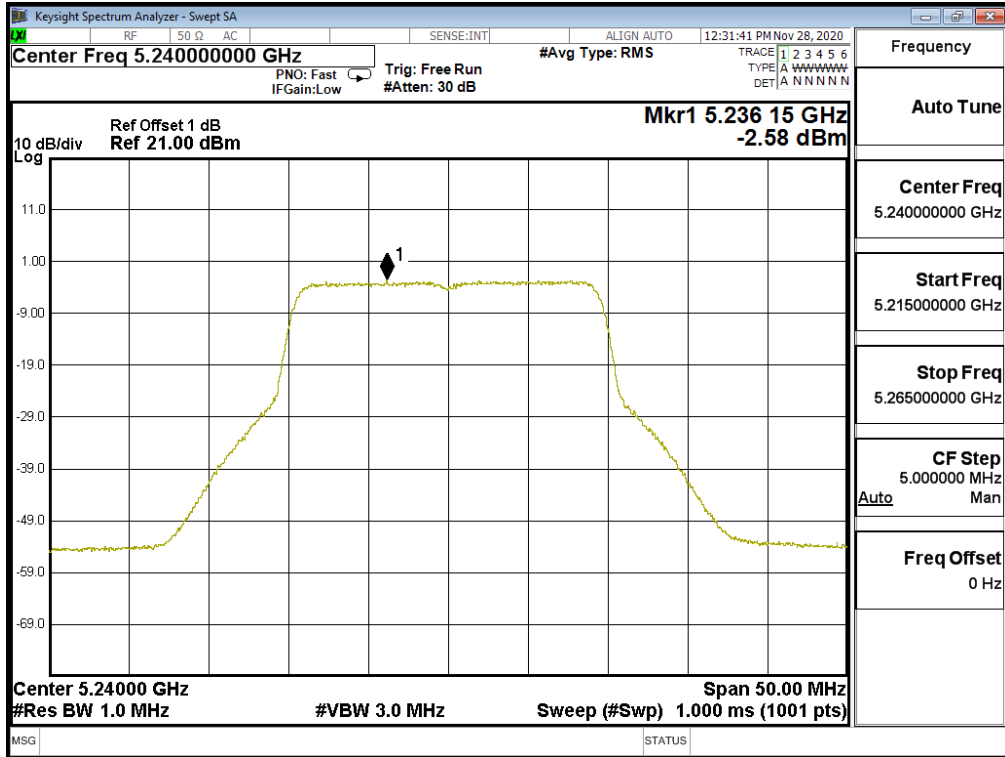
RU config: Full
Channel 36 - Chain B



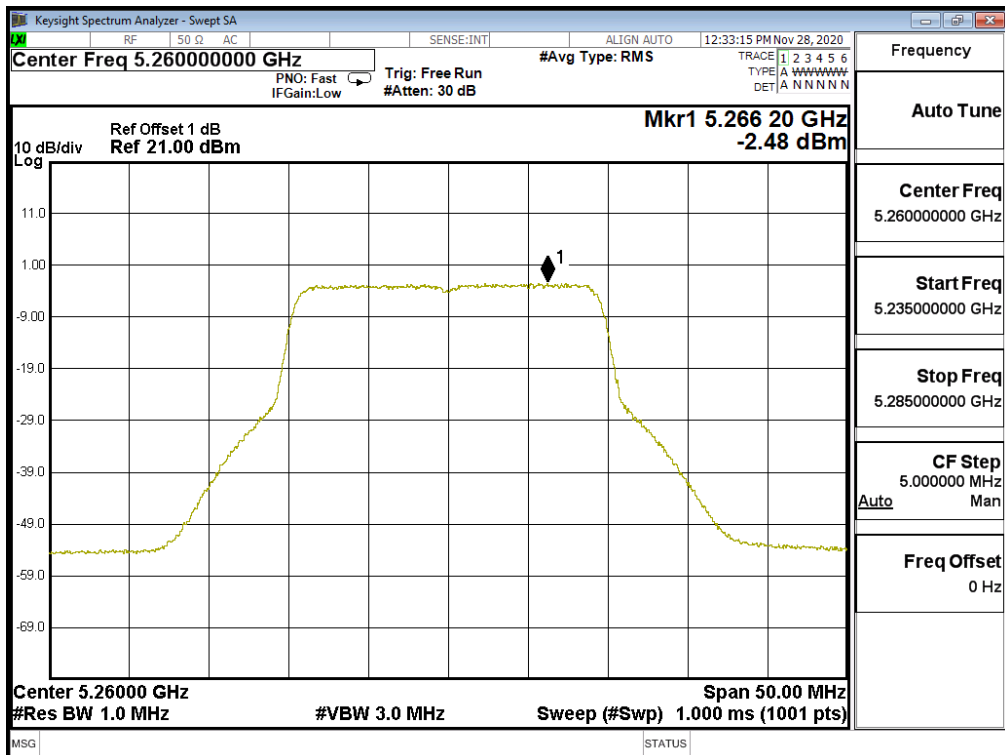
Channel 44 - Chain B



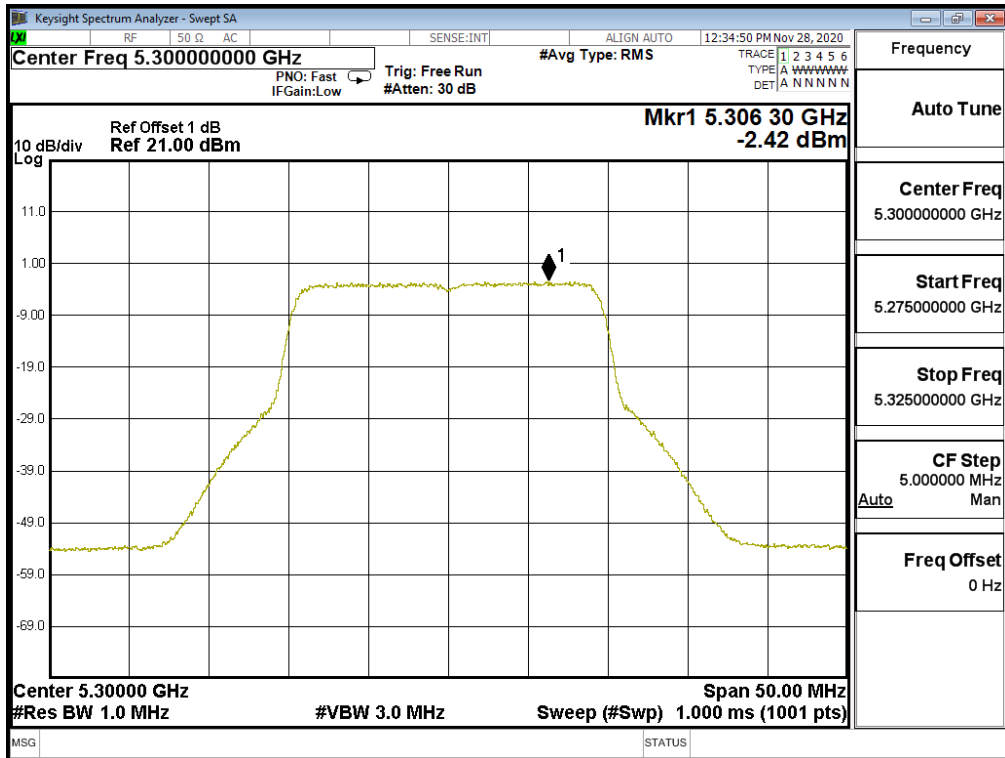
Channel 48 - Chain B



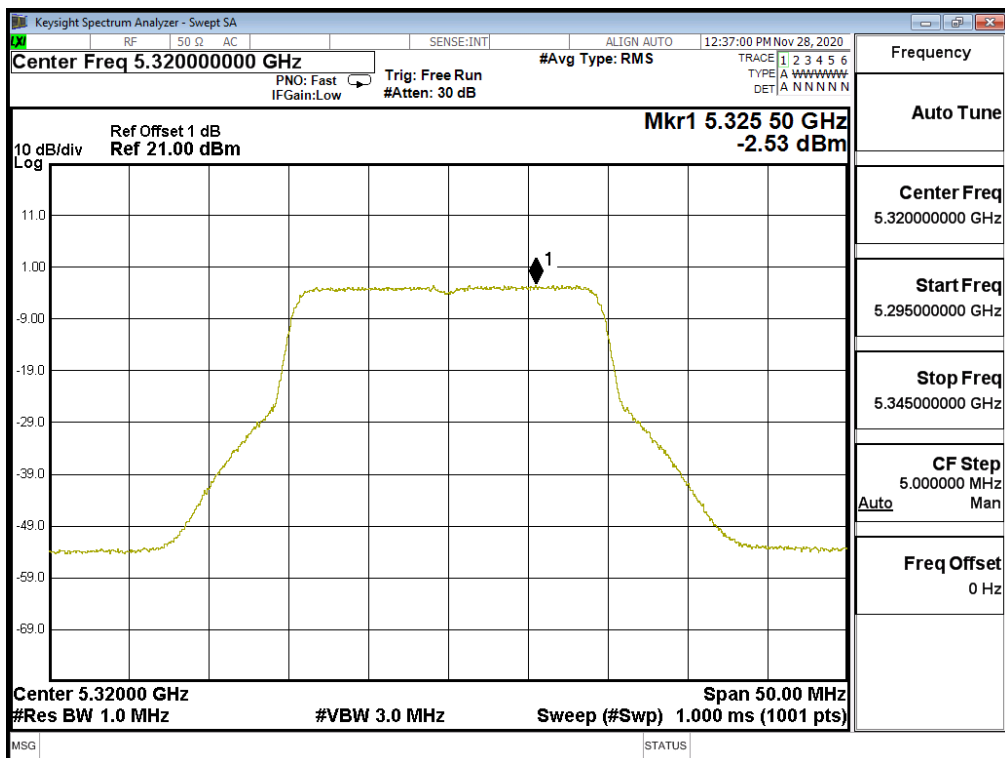
Channel 52- Chain B



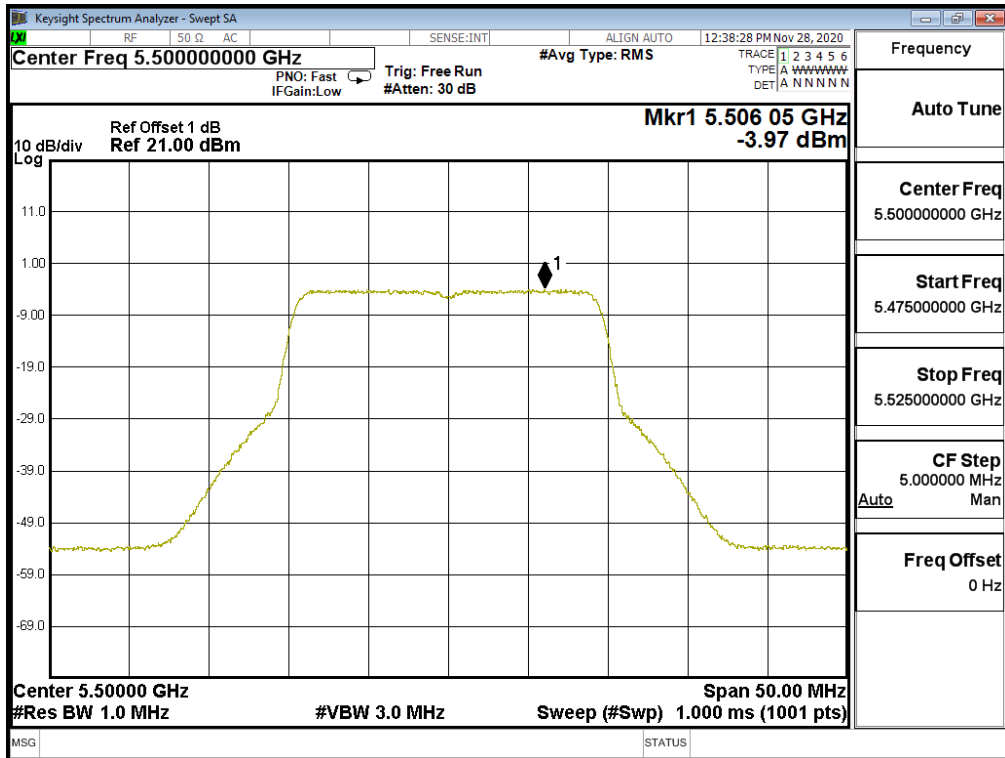
Channel 60 - Chain B



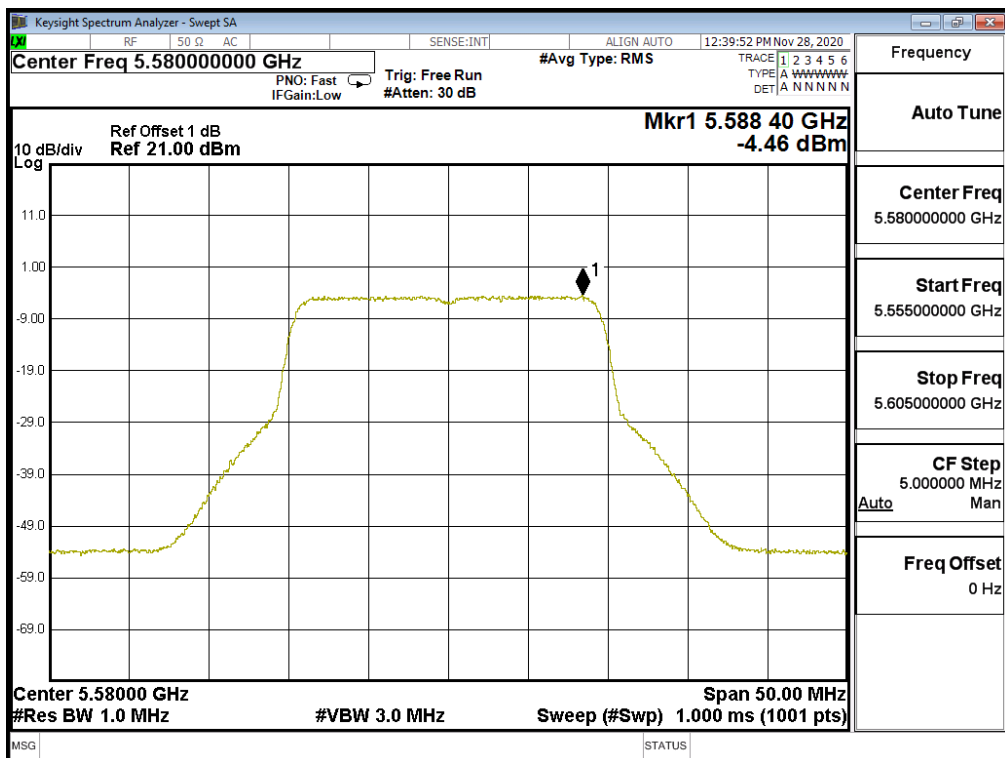
Channel 64- Chain B



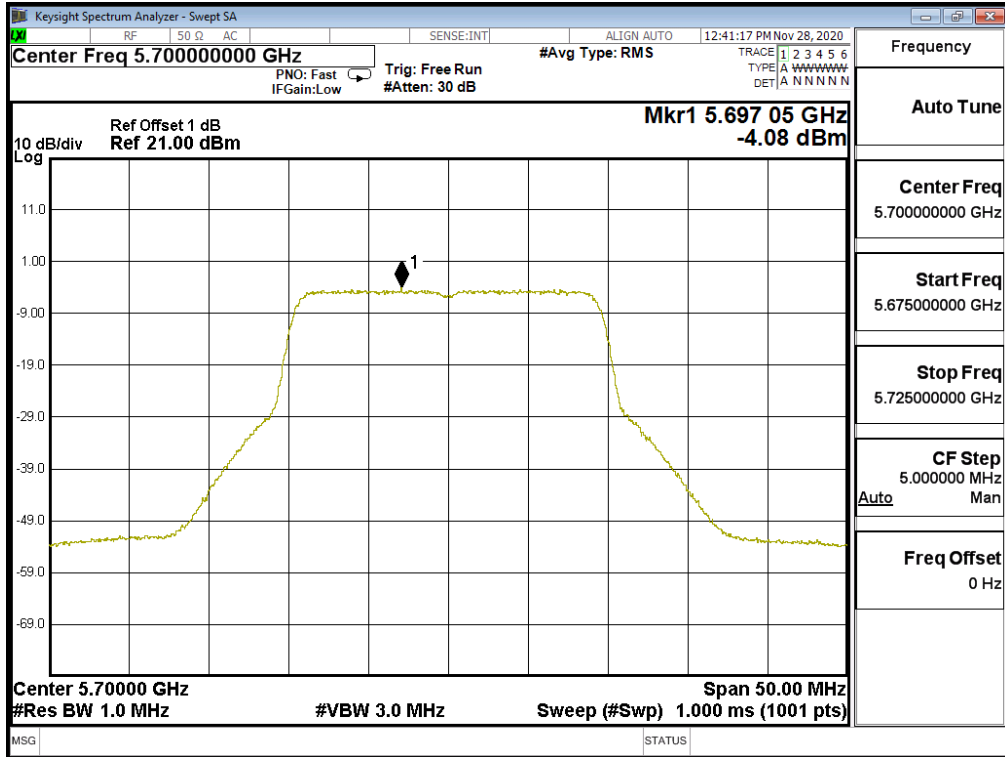
Channel 100 - Chain B



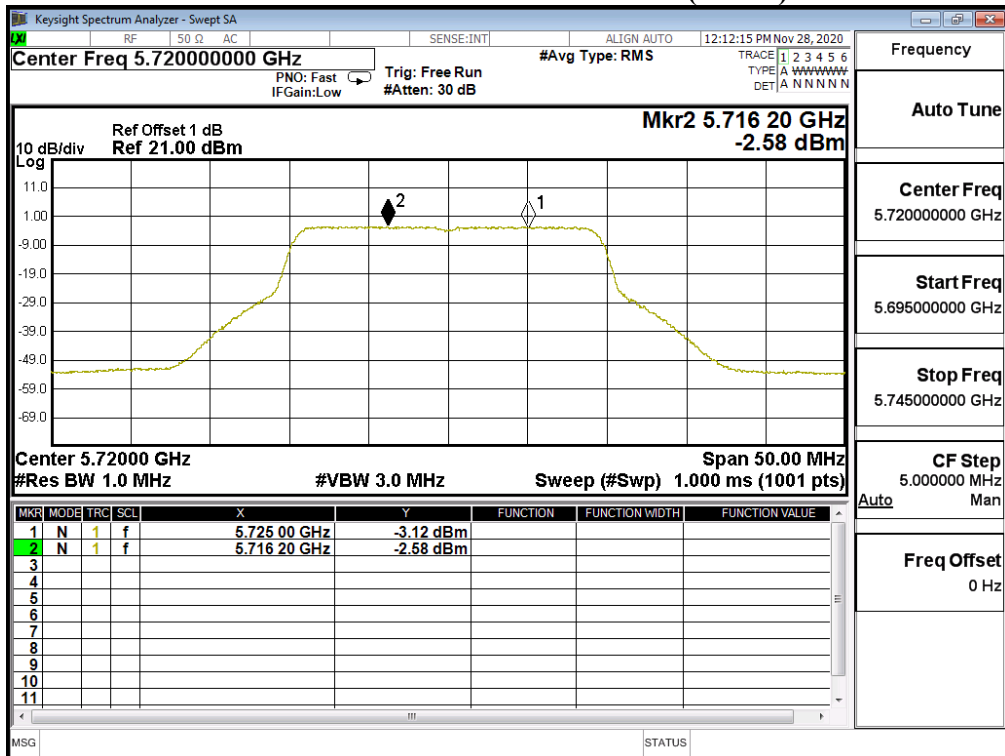
Channel 116 - Chain B



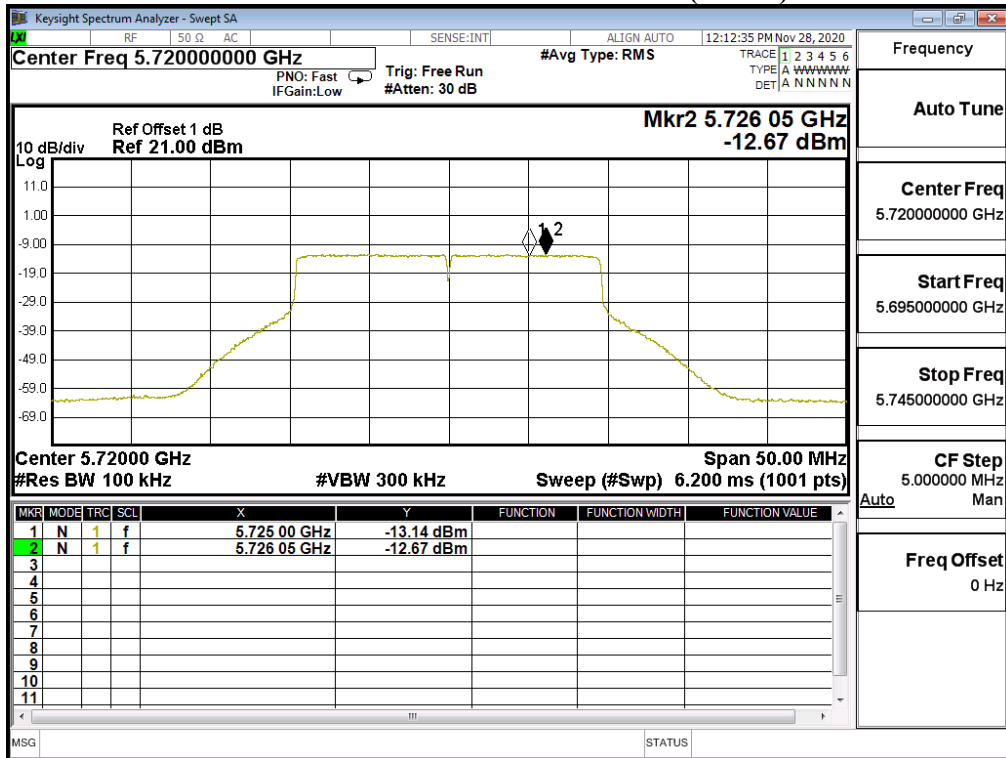
Channel 140 - Chain B



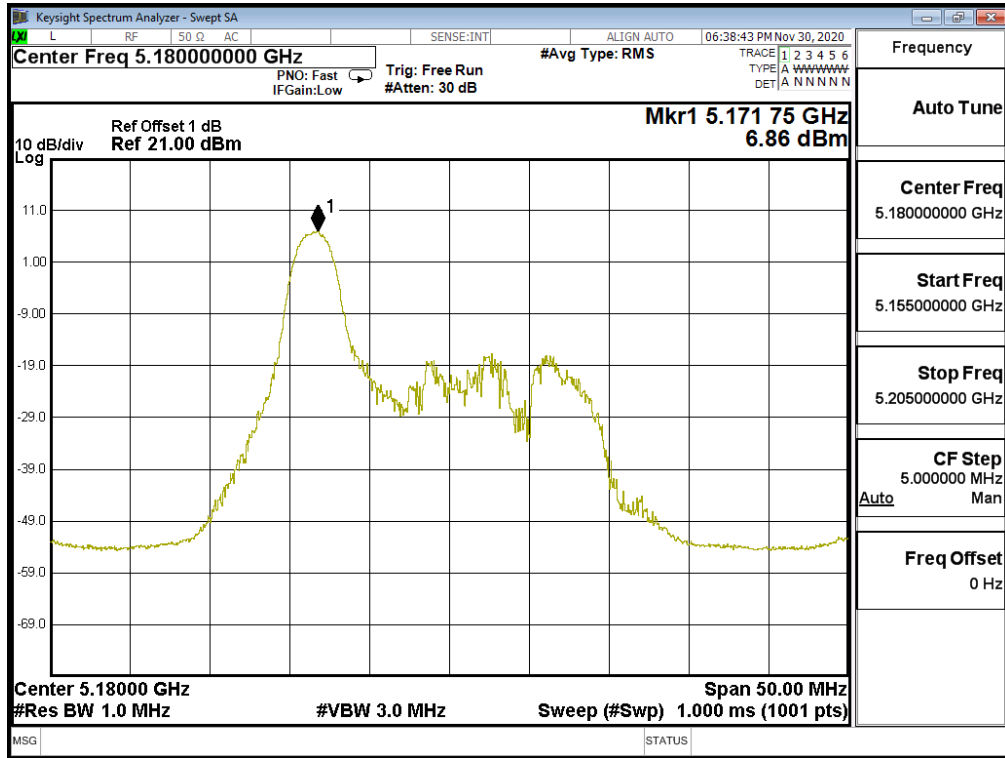
Channel 144 - Chain B (Band3)



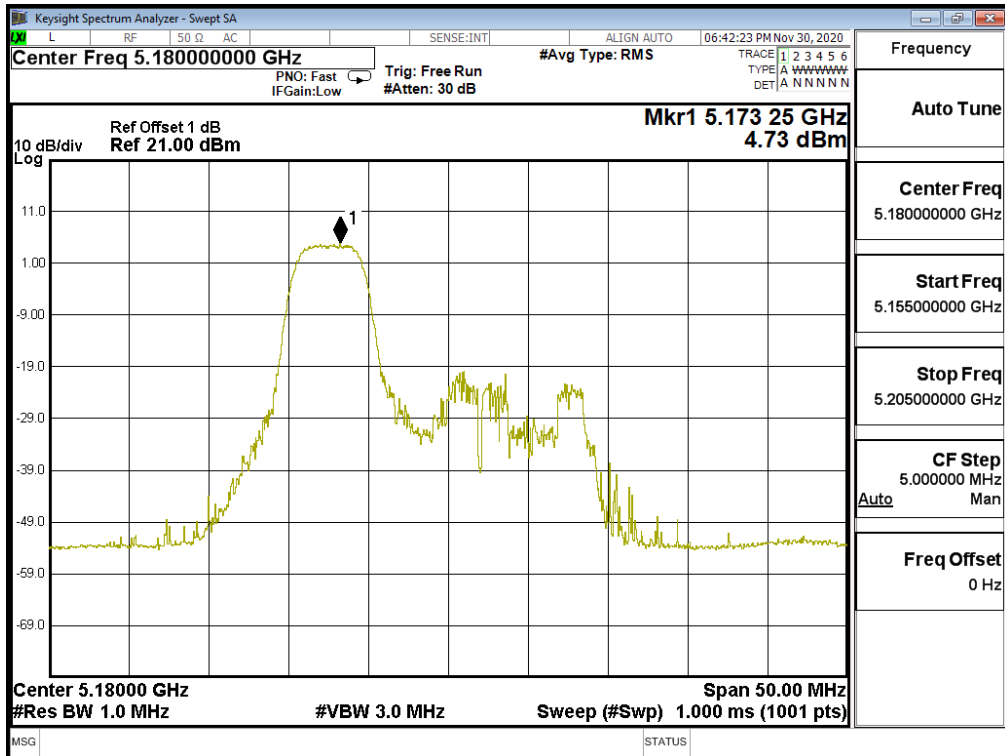
Channel 144 - Chain B (Band4)



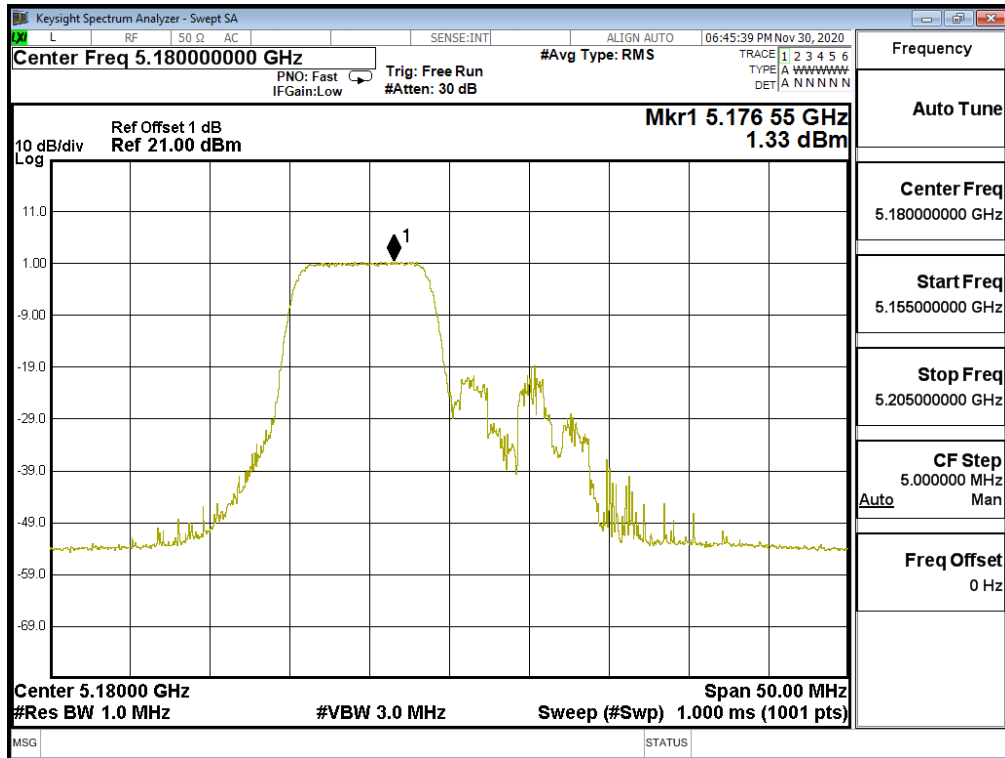
RU config: Other
Channel 36 – 26/0 - Chain B



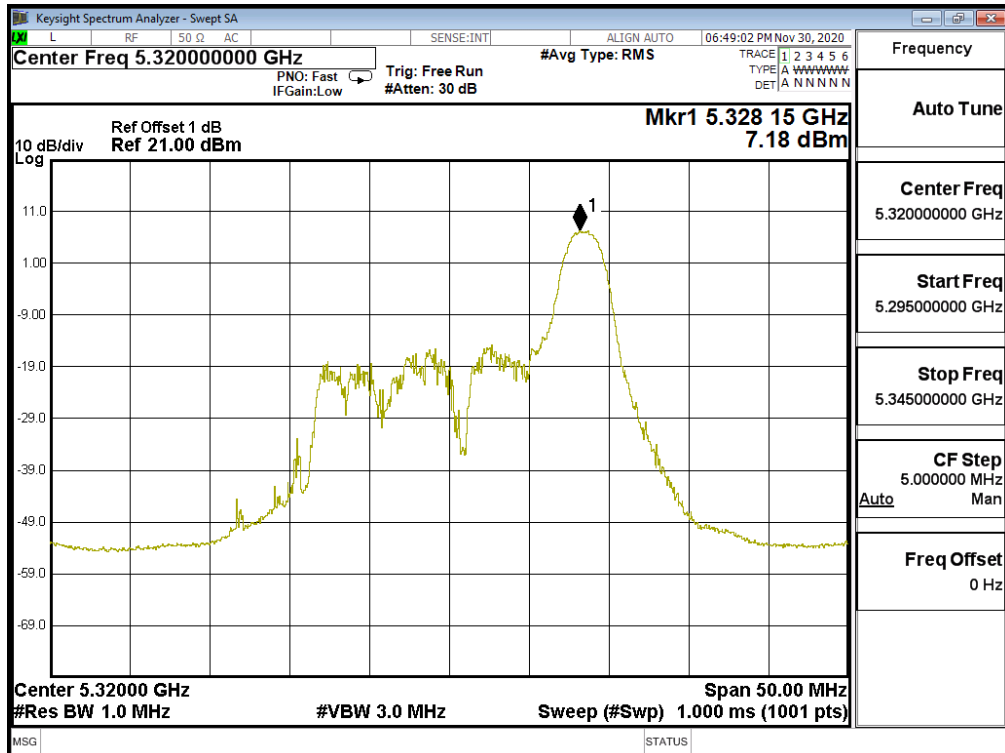
Channel 36– 52/37- Chain B



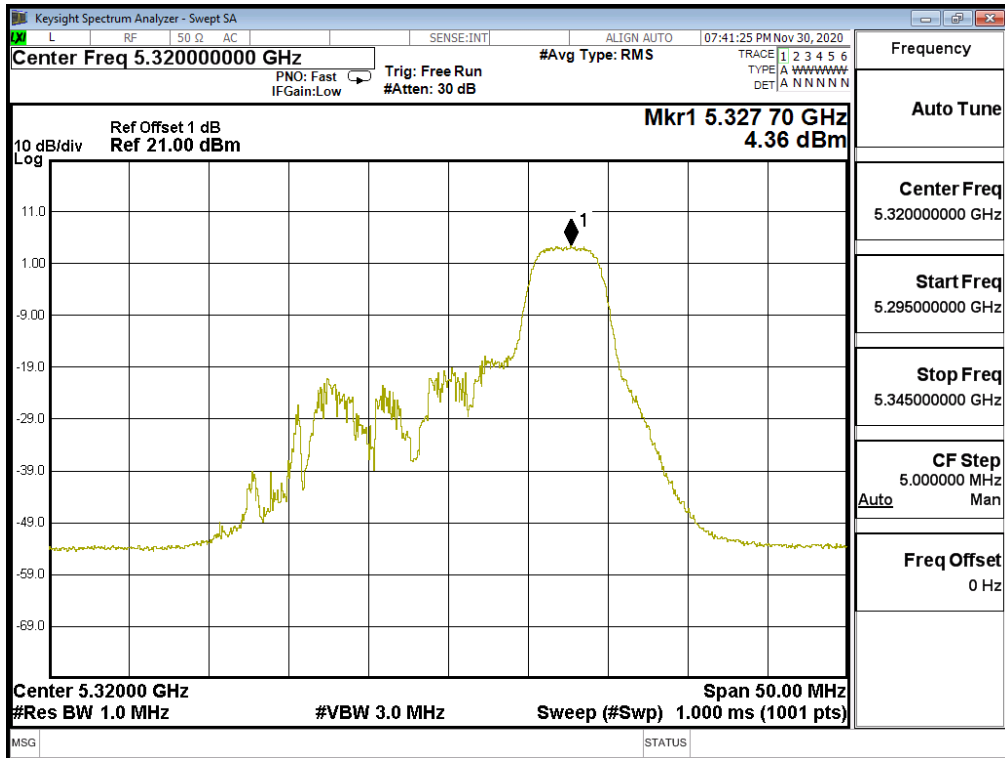
Channel 36 – 106/53 - Chain B



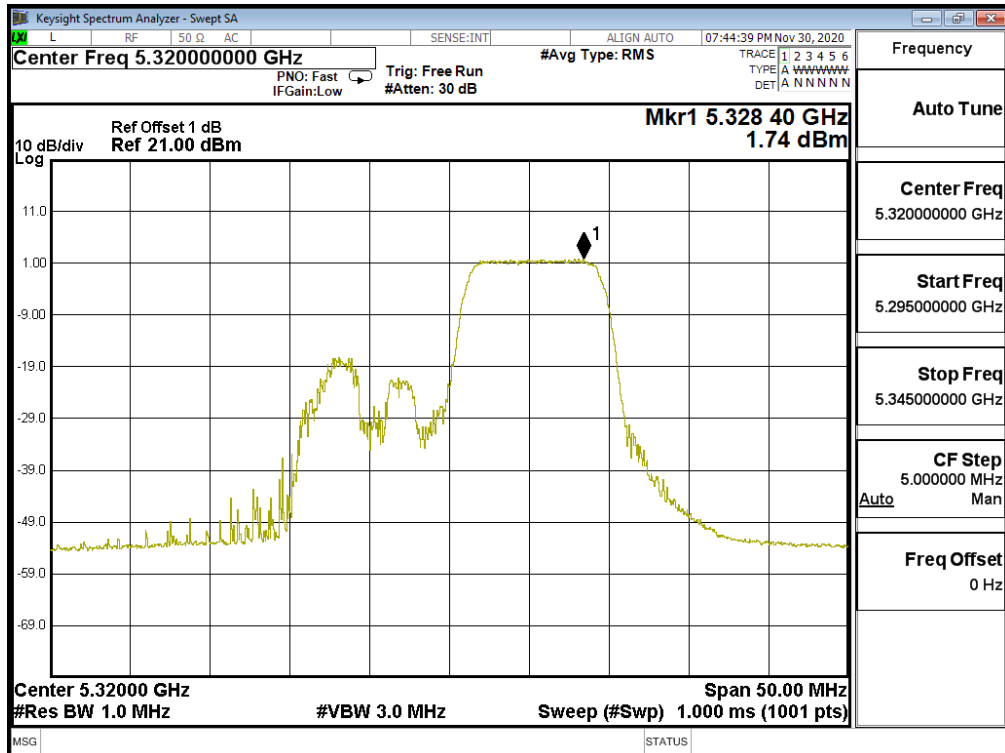
Channel 64 – 26/8 - Chain B



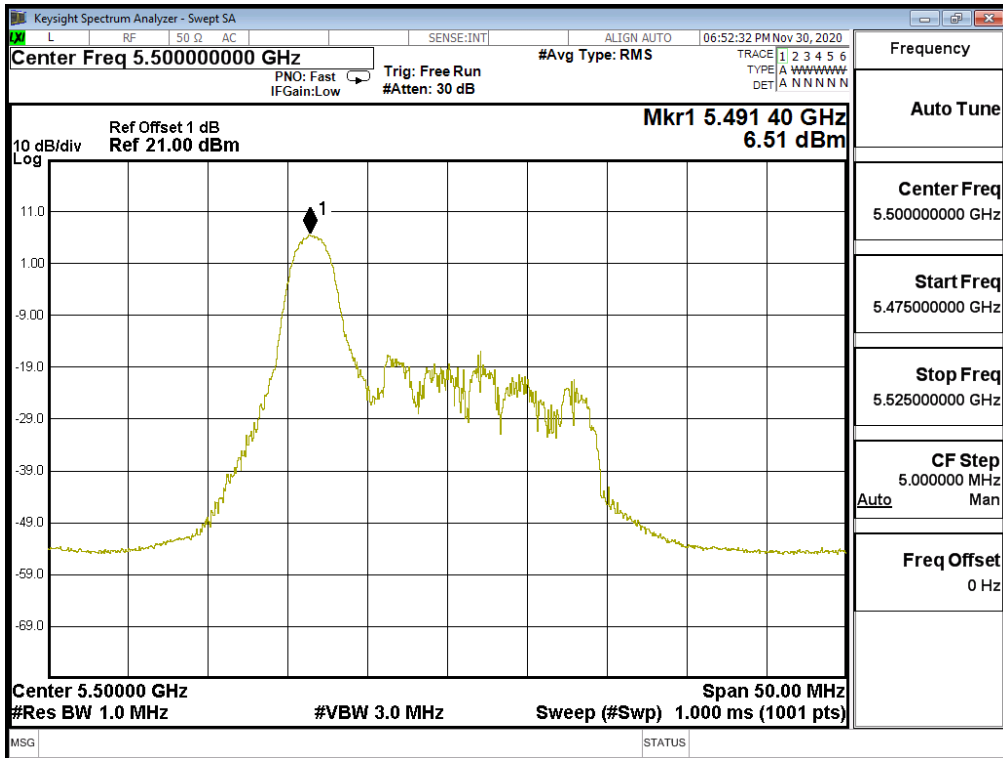
Channel 64– 52/40- Chain B



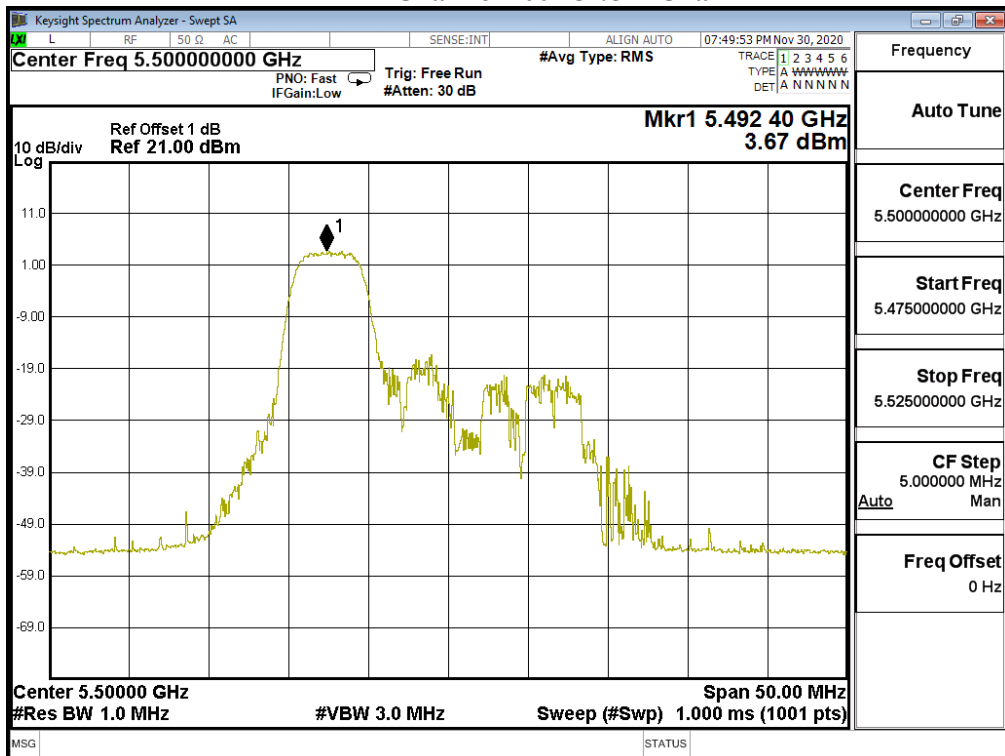
Channel 64 – 106/54 - Chain B



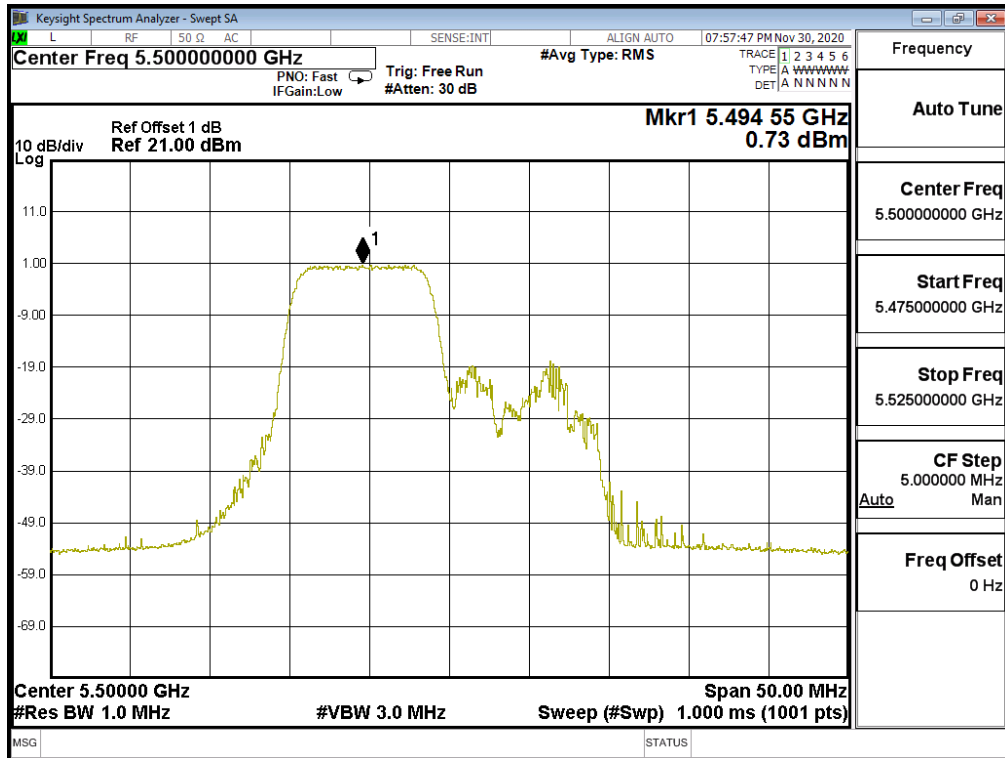
Channel 100 – 26/0 - Chain B



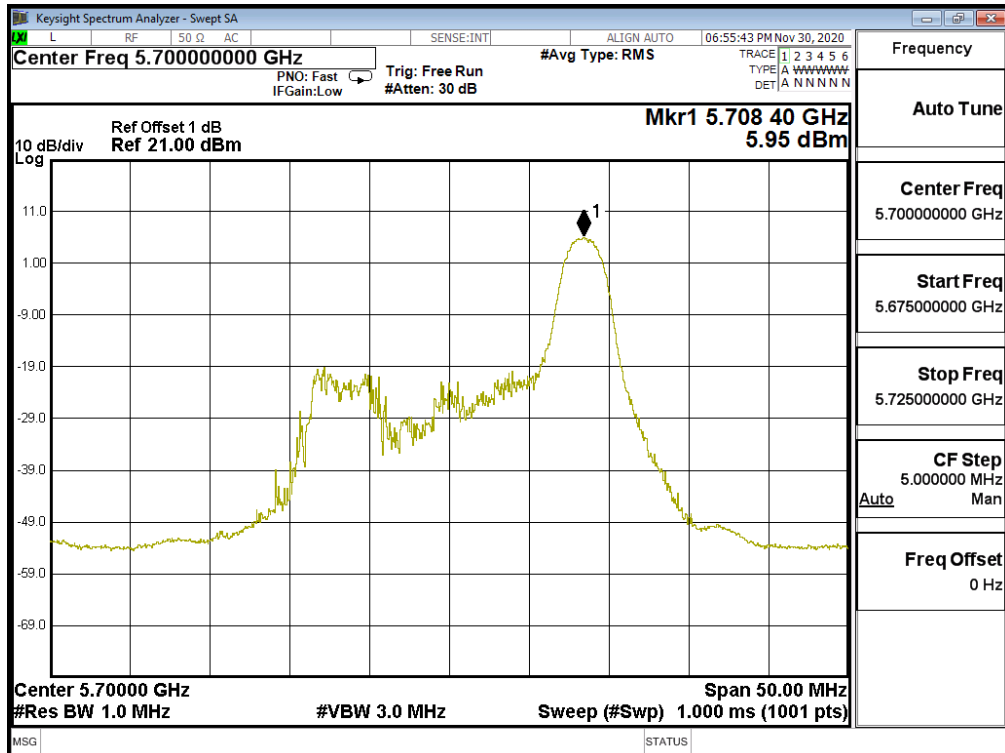
Channel 100– 52/37- Chain B



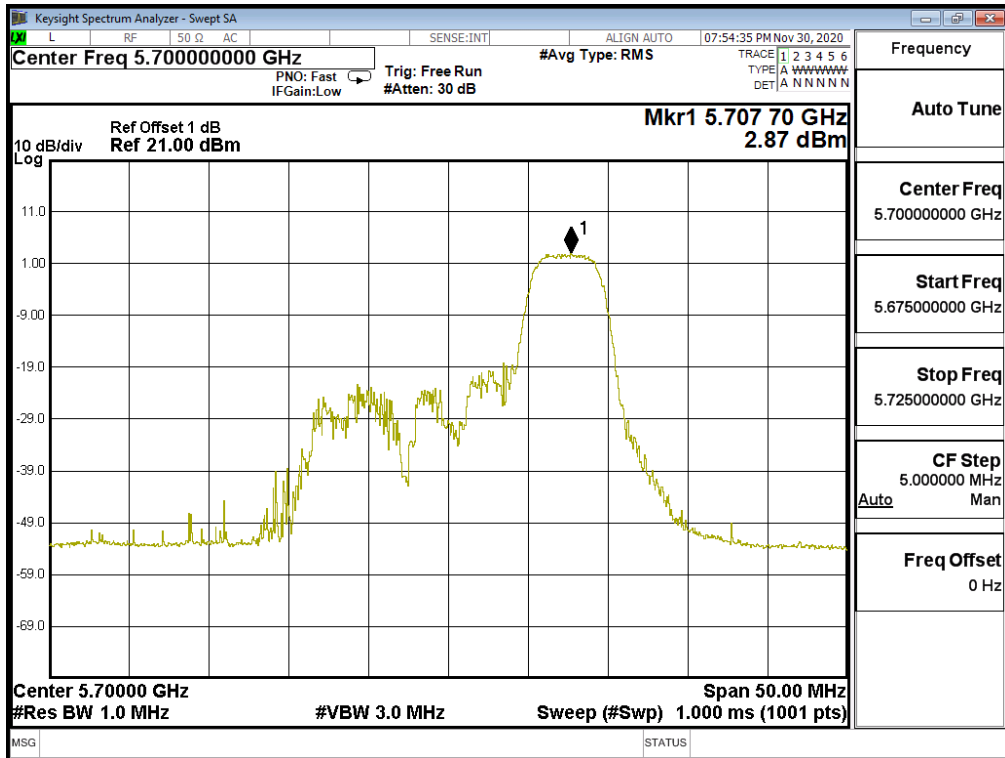
Channel 100– 106/53 - Chain B



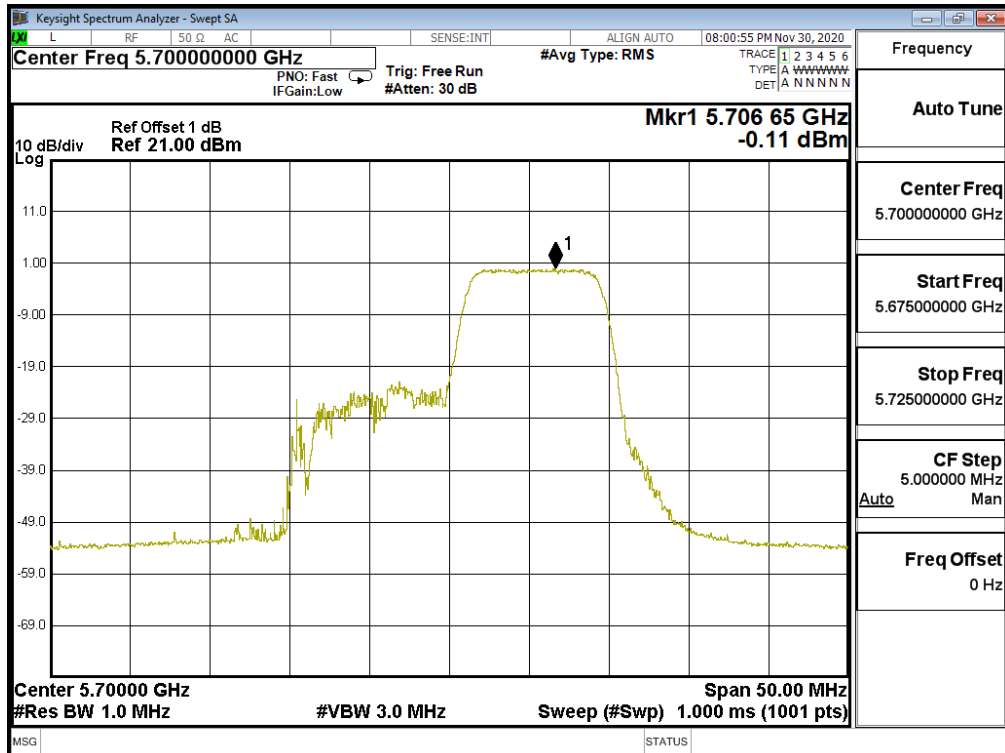
Channel 140 – 26/8 - Chain B



Channel 140– 52/40- Chain B



Channel 140– 106/54 - Chain B



Product : Notebook Computers
 Test Item : Peak Power Spectral Density
 Test Mode : Mode 16: SISO B: Transmit (802.11ax-40BW_17.2Mbps)

RU config: Full

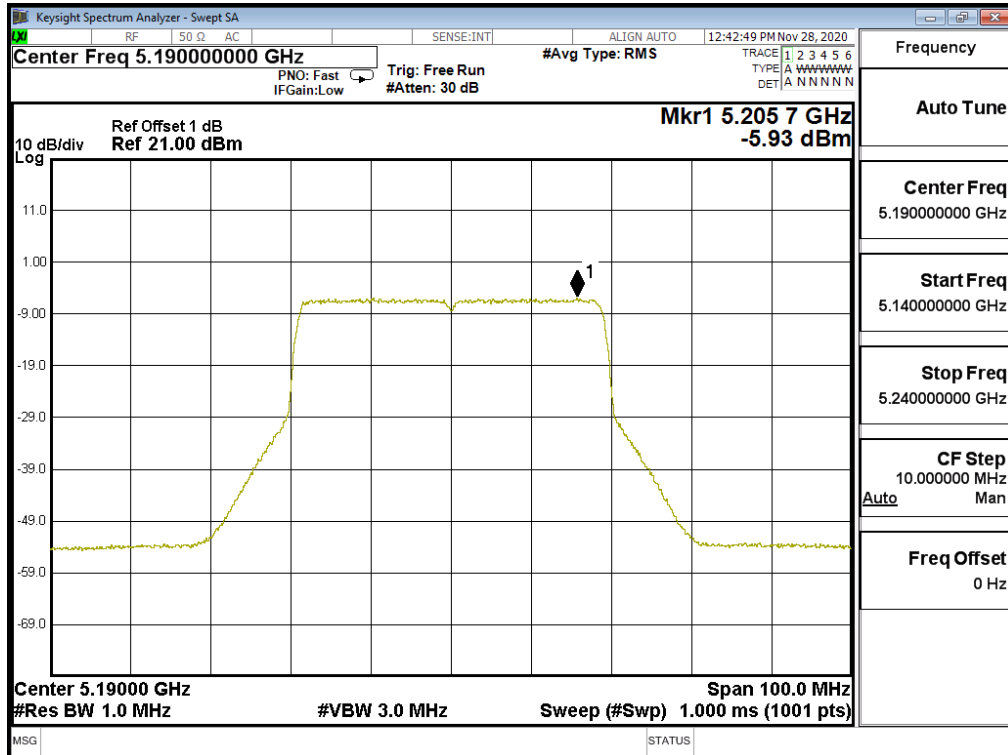
Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
38	5190	B	-5.93	--	0.09	-5.84	<11	Pass
46	5230	B	-5.27	--	0.09	-5.18	<11	Pass
54	5270	B	-5.10	--	0.09	-5.01	<11	Pass
62	5310	B	-5.20	--	0.09	-5.11	<11	Pass
102	5510	B	-5.93	--	0.09	-5.84	<11	Pass
110	5550	B	-6.11	--	0.09	-6.02	<11	Pass
134	5670	B	-6.72	--	0.09	-6.63	<11	Pass

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
142(Band3)	5710	B	-7.03	--	0.09	-6.94	<11	Pass
142(Band4)	5710	B	-17.68	6.98	0.09	-10.61	<11	Pass

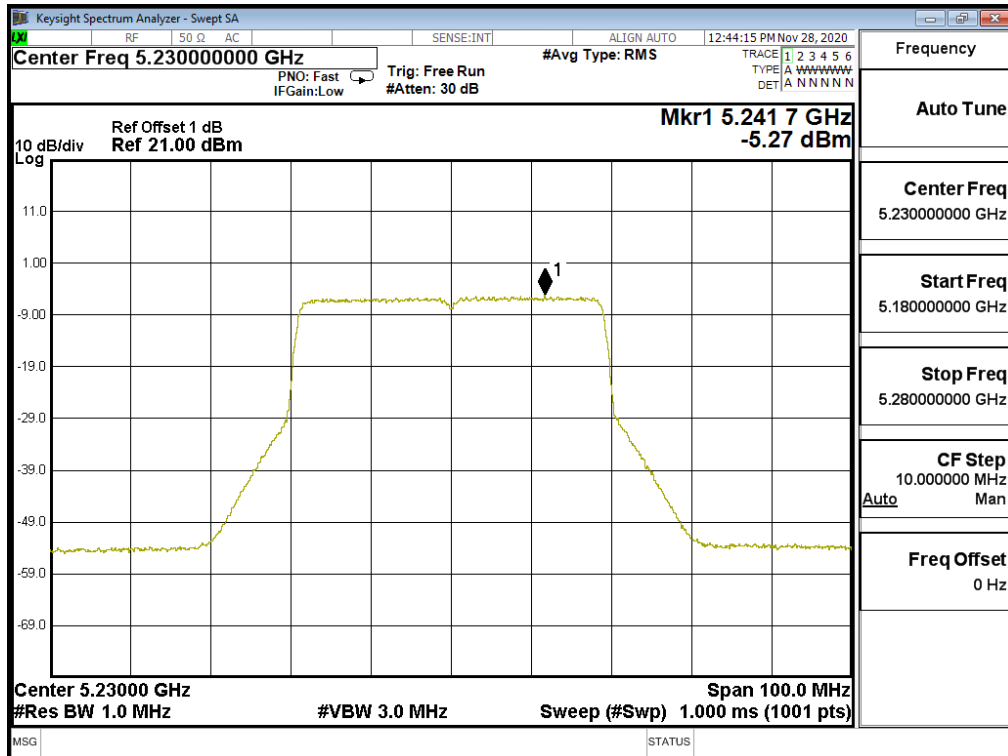
RU config: Other

Channel / Frequenc	RU setting	Chain	PPSD (dBm)	BWCF (dB)	Duty Factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
5190	242-61	B	-2.31	--	0.10	-2.21	<11	Pass
5310	242-62	B	-1.88	--	0.10	-1.78	<11	Pass
5510	242-61	B	-2.31	--	0.10	-2.21	<11	Pass
5670	242-62	B	-2.85	--	0.10	-2.75	<11	Pass

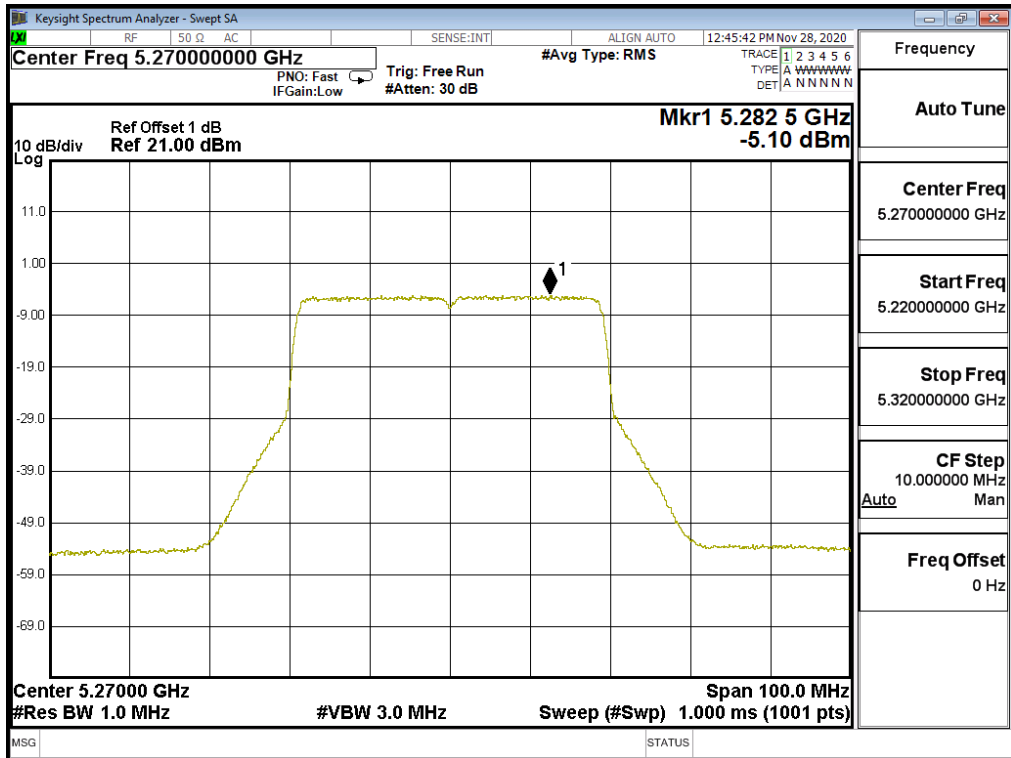
RU config: Full
Channel 38 - Chain B



Channel 46 - Chain B



Channel 54 - Chain B



Channel 62- Chain B

