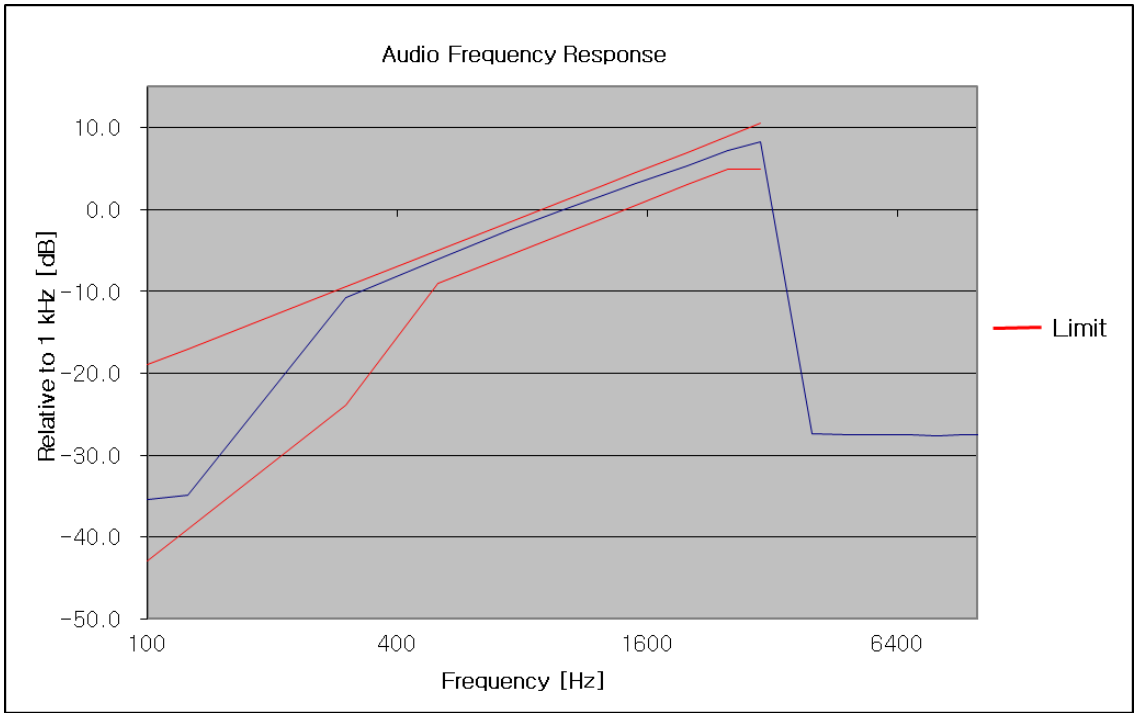
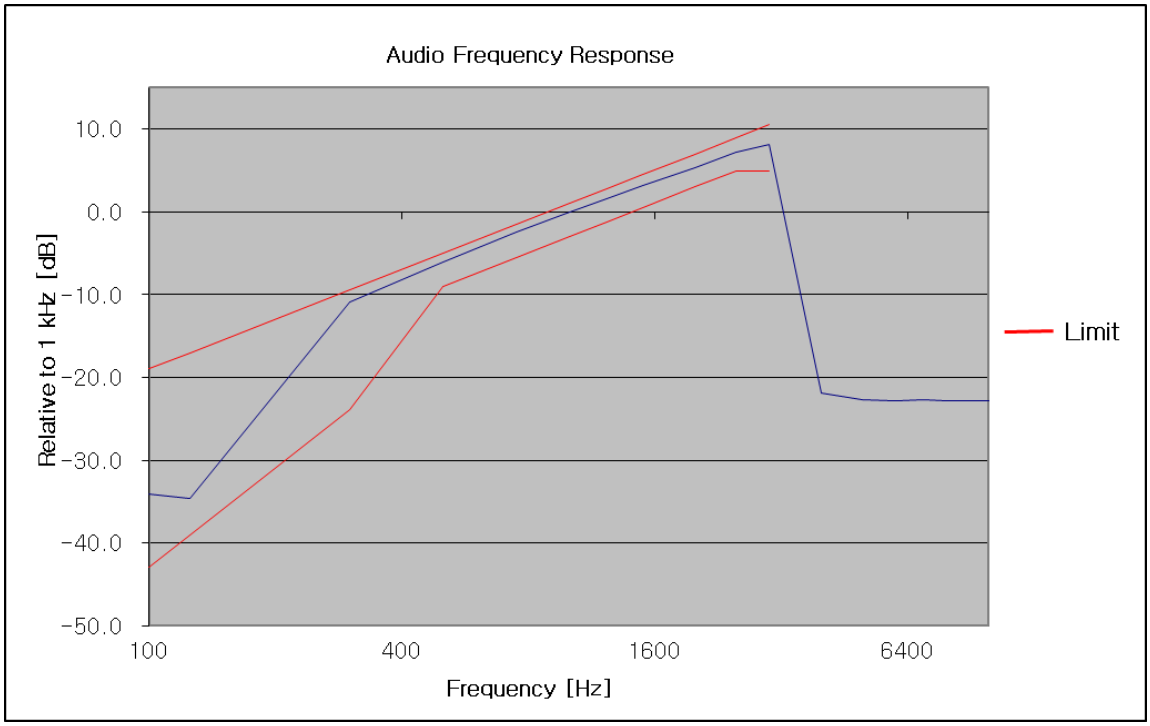

Audio Frequency Response
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
Relative to 1 kHz [dB]
100
400
1600
6400
Frequency [Hz]
Limit

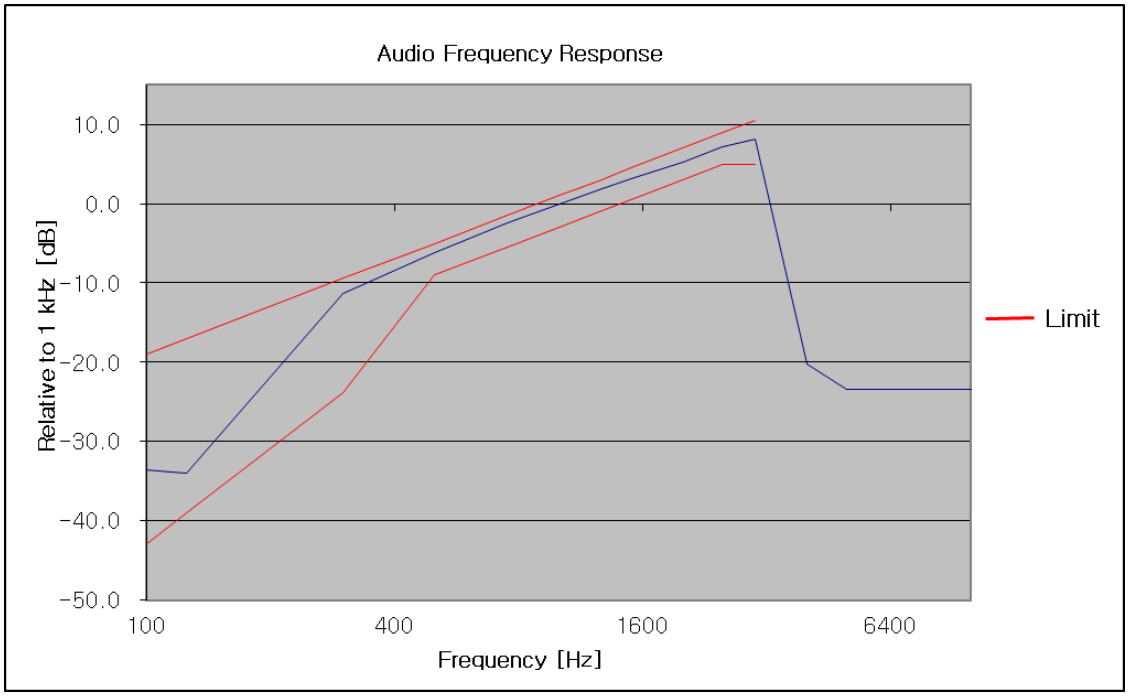
162.05 MHz

Frequency (Hz)	Attenuation Rel. to 1kHz (dB)	Upper limit (dB)	Lower limit (dB)
100	-34.02	-18.93	-42.86
125	-34.66	-17.00	-39.00
300	-10.92	-9.42	-23.84
500	-6.05	-5.00	-9.00
750	-2.42	-1.49	-5.49
1000	0.00	1.00	-3.00
1250	1.77	2.93	-1.07
1500	3.24	4.51	0.51
2000	5.29	7.00	3.00
2500	7.22	8.93	4.93
3000	8.19	10.51	4.93
4000	-21.82	-	-
5000	-22.71	-	-
6000	-22.78	-	-
7000	-22.68	-	-
8000	-22.78	-	-
9000	-22.75	-	-
10000	-22.86	-	-
20000	-22.82	-	-
30000	-22.78	-	-
40000	-22.86	-	-


Audio Frequency Response
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
Relative to 1 kHz [dB]
100
400
1600
6400
Frequency [Hz]
Limit

173.95 MHz

Frequency (Hz)	Attenuation Rel. to 1kHz (dB)	Upper limit (dB)	Lower limit (dB)
100	-33.60	-18.93	-42.86
125	-33.98	-17.00	-39.00
300	-11.36	-9.42	-23.84
500	-6.11	-5.00	-9.00
750	-2.43	-1.49	-5.49
1000	0.00	1.00	-3.00
1250	1.76	2.93	-1.07
1500	3.21	4.51	0.51
2000	5.25	7.00	3.00
2500	7.20	8.93	4.93
3000	8.17	10.51	4.93
4000	-20.23	-	-
5000	-23.38	-	-
6000	-23.38	-	-
7000	-23.46	-	-
8000	-23.42	-	-
9000	-23.38	-	-
10000	-23.38	-	-
20000	-23.34	-	-
30000	-23.57	-	-
40000	-23.42	-	-

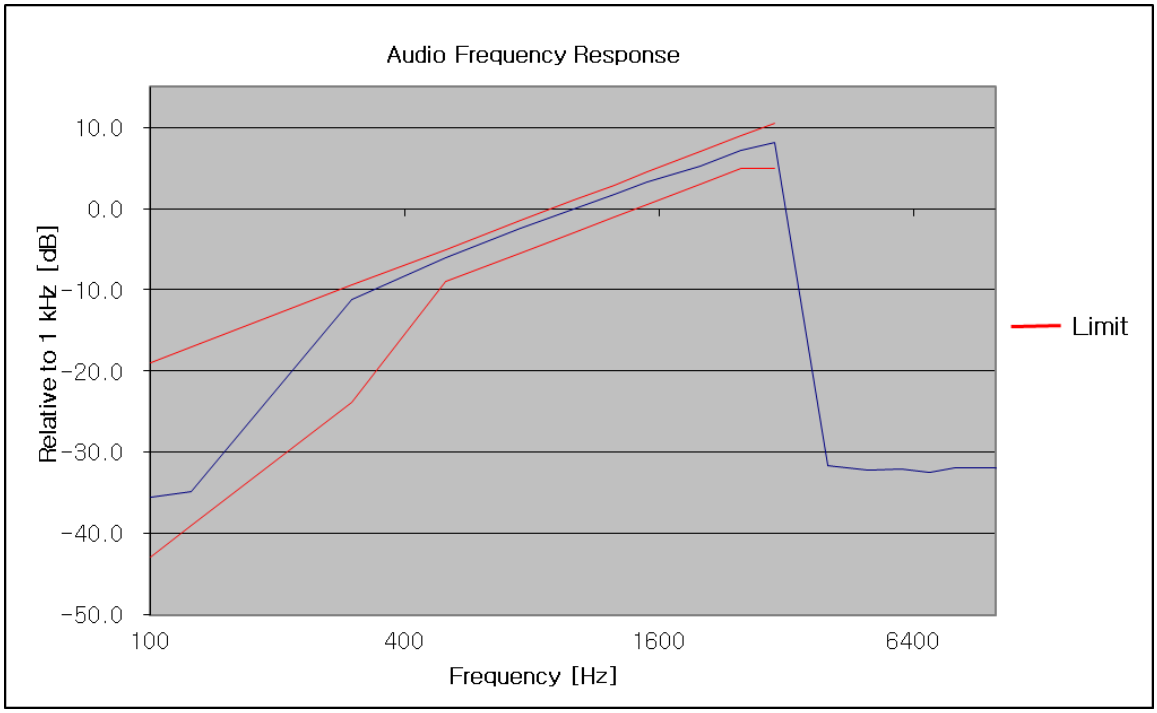

Audio Frequency Response
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
Relative to 1 kHz [dB]
100
400
1600
6400
Frequency [Hz]
Limit

▣ TEST RESULTS (16K0F3E)

HIGH POWER

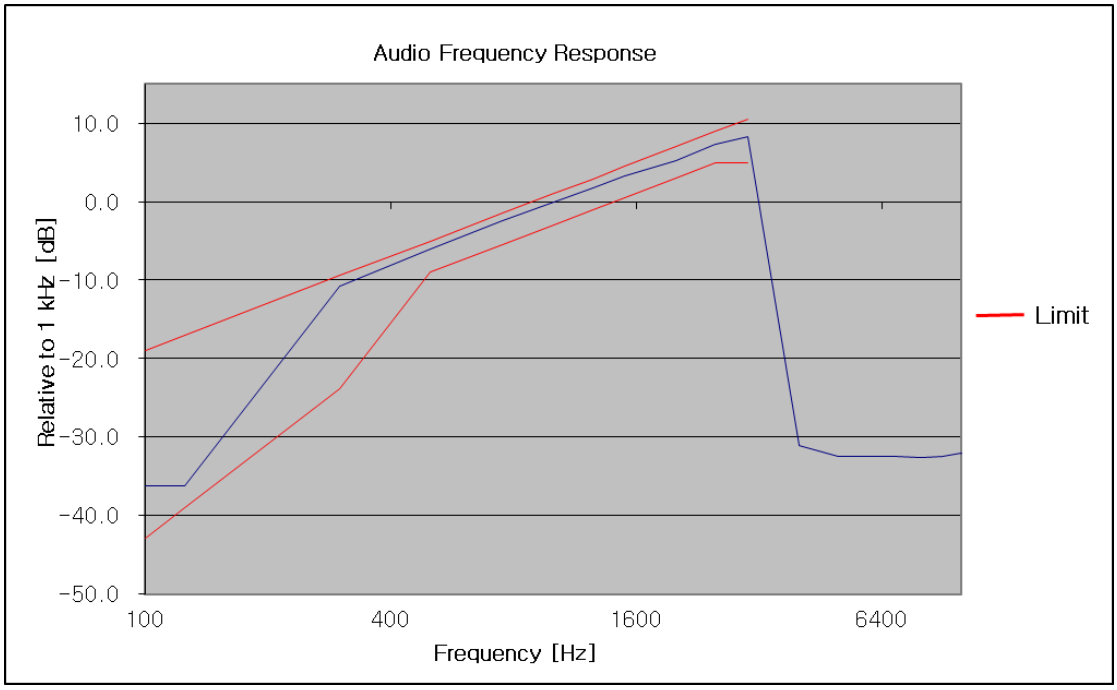
138.05 MHz

Frequency (Hz)	Attenuation Rel. to 1kHz (dB)	Upper limit (dB)	Lower limit (dB)
100	-35.49	-18.93	-42.86
125	-34.89	-17.00	-39.00
300	-11.15	-9.42	-23.84
500	-6.06	-5.00	-9.00
750	-2.42	-1.49	-5.49
1000	0.00	1.00	-3.00
1250	1.78	2.93	-1.07
1500	3.24	4.51	0.51
2000	5.29	7.00	3.00
2500	7.24	8.93	4.93
3000	8.22	10.51	4.93
4000	-31.57	-	-
5000	-32.18	-	-
6000	-32.04	-	-
7000	-32.43	-	-
8000	-31.94	-	-
9000	-31.87	-	-
10000	-31.87	-	-
20000	-32.29	-	-
30000	-32.15	-	-
40000	-32.29	-	-


Audio Frequency Response
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
Relative to 1 kHz [dB]
100
400
1600
6400
Frequency [Hz]
Limit

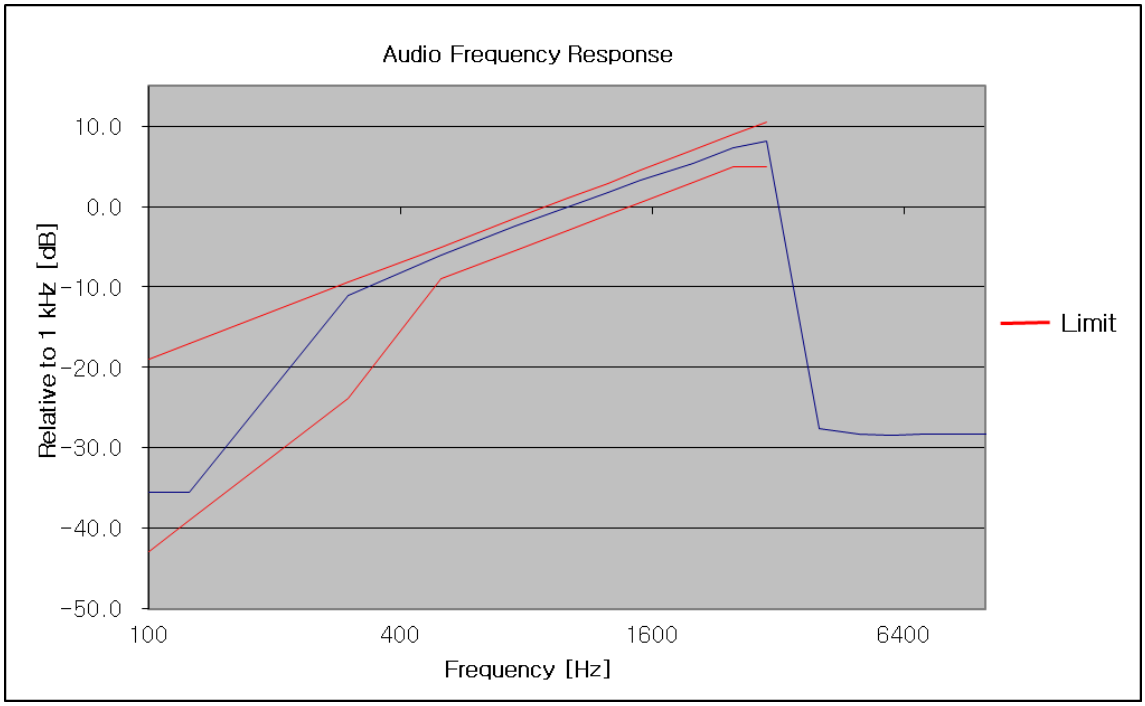
150.05 MHz

Frequency (Hz)	Attenuation Rel. to 1kHz (dB)	Upper limit (dB)	Lower limit (dB)
100	-36.25	-18.93	-42.86
125	-36.25	-17.00	-39.00
300	-10.80	-9.42	-23.84
500	-6.01	-5.00	-9.00
750	-2.43	-1.49	-5.49
1000	0.00	1.00	-3.00
1250	1.79	2.93	-1.07
1500	3.25	4.51	0.51
2000	5.30	7.00	3.00
2500	7.26	8.93	4.93
3000	8.25	10.51	4.93
4000	-31.02	-	-
5000	-32.43	-	-
6000	-32.43	-	-
7000	-32.43	-	-
8000	-32.58	-	-
9000	-32.43	-	-
10000	-32.01	-	-
20000	-32.22	-	-
30000	-32.54	-	-
40000	-32.43	-	-


Audio Frequency Response
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
Relative to 1 kHz [dB]
100
400
1600
6400
Frequency [Hz]
Limit

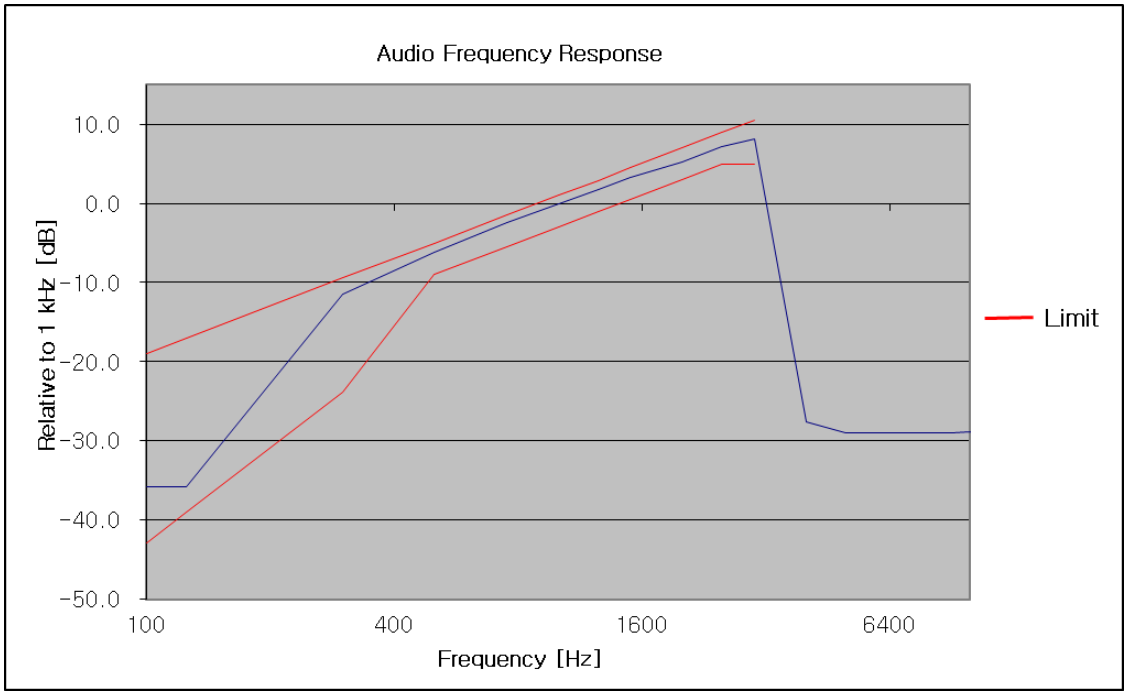
162.05 MHz

Frequency (Hz)	Attenuation Rel. to 1kHz (dB)	Upper limit (dB)	Lower limit (dB)
100	-35.55	-18.93	-42.86
125	-35.54	-17.00	-39.00
300	-11.06	-9.42	-23.84
500	-6.04	-5.00	-9.00
750	-2.42	-1.49	-5.49
1000	0.00	1.00	-3.00
1250	1.80	2.93	-1.07
1500	3.26	4.51	0.51
2000	5.32	7.00	3.00
2500	7.25	8.93	4.93
3000	8.22	10.51	4.93
4000	-27.54	-	-
5000	-28.29	-	-
6000	-28.40	-	-
7000	-28.36	-	-
8000	-28.29	-	-
9000	-28.25	-	-
10000	-28.27	-	-
20000	-28.34	-	-
30000	-28.27	-	-
40000	-28.43	-	-


Audio Frequency Response
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
Relative to 1 kHz [dB]
100
400
1600
6400
Frequency [Hz]
Limit

173.95 MHz

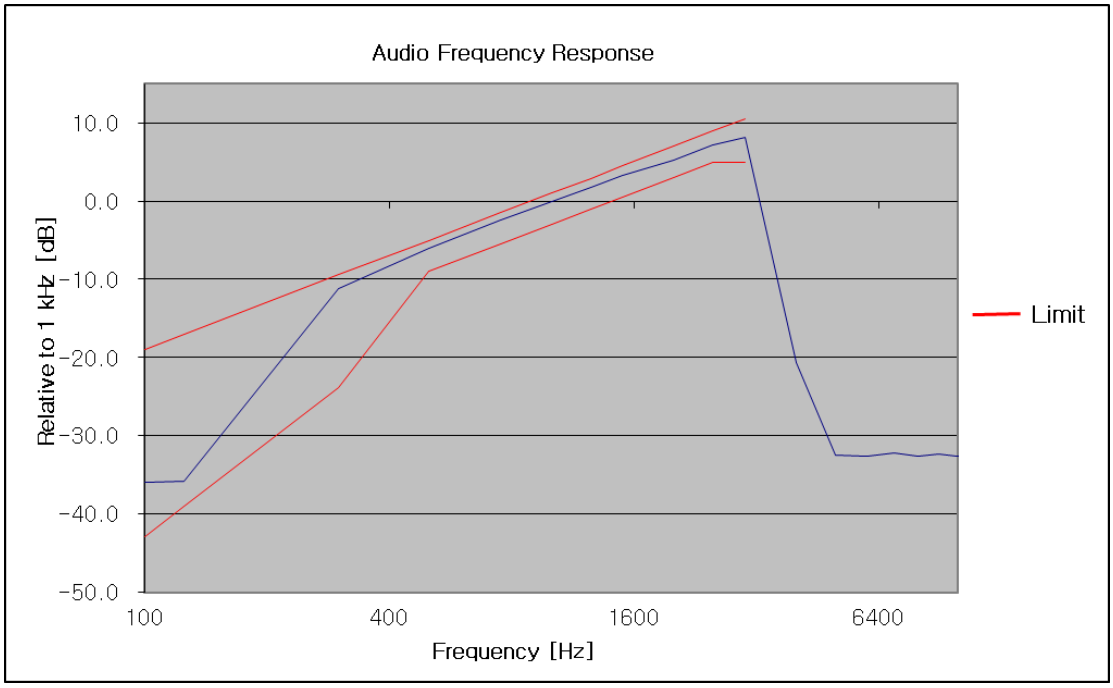
Frequency (Hz)	Attenuation Rel. to 1kHz (dB)	Upper limit (dB)	Lower limit (dB)
100	-35.76	-18.93	-42.86
125	-35.76	-17.00	-39.00
300	-11.45	-9.42	-23.84
500	-6.11	-5.00	-9.00
750	-2.46	-1.49	-5.49
1000	0.00	1.00	-3.00
1250	1.76	2.93	-1.07
1500	3.22	4.51	0.51
2000	5.25	7.00	3.00
2500	7.19	8.93	4.93
3000	8.17	10.51	4.93
4000	-27.59	-	-
5000	-29.02	-	-
6000	-29.02	-	-
7000	-29.05	-	-
8000	-28.95	-	-
9000	-28.97	-	-
10000	-28.90	-	-
20000	-29.12	-	-
30000	-28.90	-	-
40000	-29.05	-	-


Audio Frequency Response
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
Relative to 1 kHz [dB]
100
400
1600
6400
Frequency [Hz]
Limit

LOW POWER

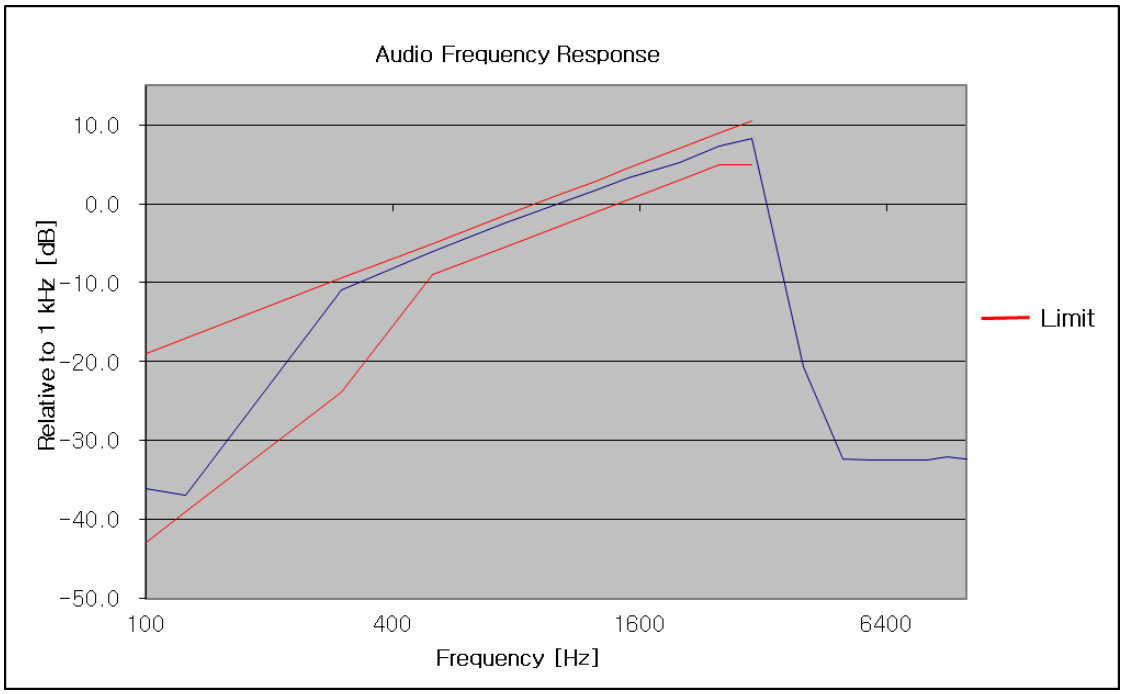
138.05 MHz

Frequency (Hz)	Attenuation Rel. to 1kHz (dB)	Upper limit (dB)	Lower limit (dB)
100	-35.92	-18.93	-42.86
125	-35.81	-17.00	-39.00
300	-11.18	-9.42	-23.84
500	-6.09	-5.00	-9.00
750	-2.43	-1.49	-5.49
1000	-0.01	1.00	-3.00
1250	1.78	2.93	-1.07
1500	3.24	4.51	0.51
2000	5.28	7.00	3.00
2500	7.22	8.93	4.93
3000	8.20	10.51	4.93
4000	-20.60	-	-
5000	-32.43	-	-
6000	-32.58	-	-
7000	-32.25	-	-
8000	-32.54	-	-
9000	-32.32	-	-
10000	-32.58	-	-
20000	-32.36	-	-
30000	-32.11	-	-
40000	-32.43	-	-


Audio Frequency Response
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
Relative to 1 kHz [dB]
100
400
1600
6400
Frequency [Hz]
Limit

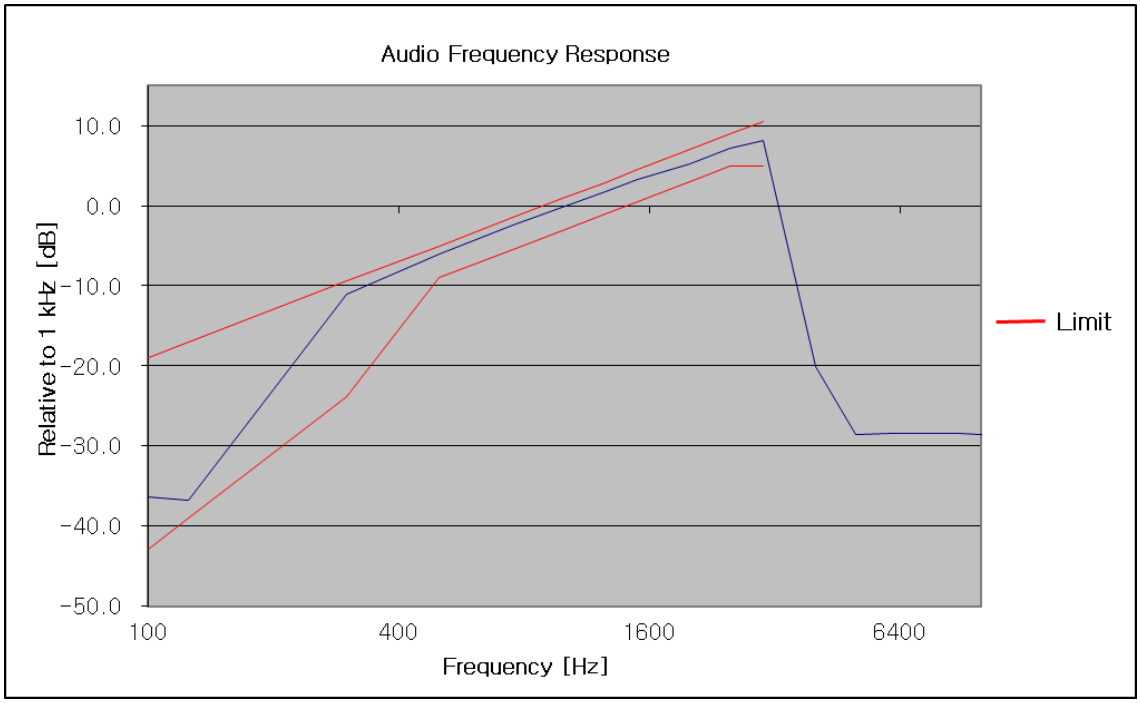
150.05 MHz

Frequency (Hz)	Attenuation Rel. to 1kHz (dB)	Upper limit (dB)	Lower limit (dB)
100	-36.03	-18.93	-42.86
125	-36.90	-17.00	-39.00
300	-10.84	-9.42	-23.84
500	-6.06	-5.00	-9.00
750	-2.46	-1.49	-5.49
1000	-0.03	1.00	-3.00
1250	1.78	2.93	-1.07
1500	3.24	4.51	0.51
2000	5.30	7.00	3.00
2500	7.25	8.93	4.93
3000	8.23	10.51	4.93
4000	-20.60	-	-
5000	-32.32	-	-
6000	-32.47	-	-
7000	-32.43	-	-
8000	-32.47	-	-
9000	-32.04	-	-
10000	-32.32	-	-
20000	-32.25	-	-
30000	-32.65	-	-
40000	-32.43	-	-


Audio Frequency Response
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
Relative to 1 kHz [dB]
100
400
1600
6400
Frequency [Hz]
Limit

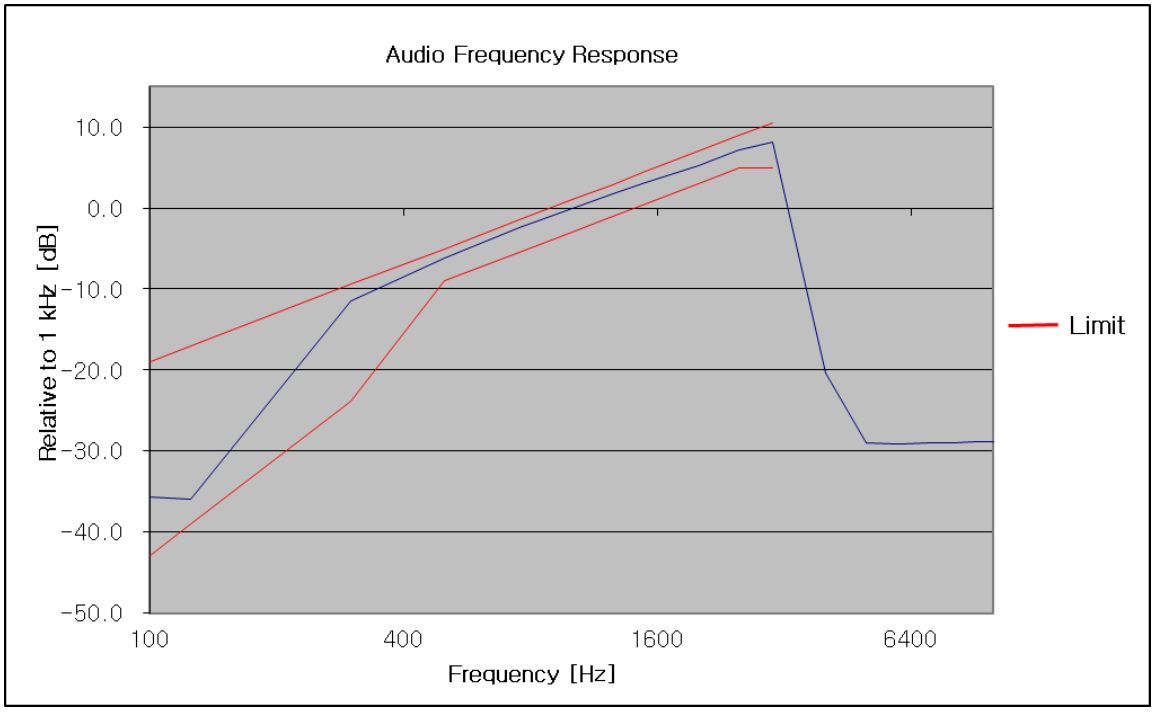
162.05 MHz

Frequency (Hz)	Attenuation Rel. to 1kHz (dB)	Upper limit (dB)	Lower limit (dB)
100	-36.42	-18.93	-42.86
125	-36.77	-17.00	-39.00
300	-11.02	-9.42	-23.84
500	-6.06	-5.00	-9.00
750	-2.43	-1.49	-5.49
1000	0.01	1.00	-3.00
1250	1.78	2.93	-1.07
1500	3.24	4.51	0.51
2000	5.26	7.00	3.00
2500	7.23	8.93	4.93
3000	8.21	10.51	4.93
4000	-20.13	-	-
5000	-28.52	-	-
6000	-28.45	-	-
7000	-28.50	-	-
8000	-28.45	-	-
9000	-28.50	-	-
10000	-28.59	-	-
20000	-28.50	-	-
30000	-28.45	-	-
40000	-28.45	-	-


Audio Frequency Response
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
Relative to 1 kHz [dB]
100
400
1600
6400
Frequency [Hz]
Limit

173.95 MHz

Frequency (Hz)	Attenuation Rel. to 1kHz (dB)	Upper limit (dB)	Lower limit (dB)
100	-35.60	-18.93	-42.86
125	-35.92	-17.00	-39.00
300	-11.42	-9.42	-23.84
500	-6.11	-5.00	-9.00
750	-2.46	-1.49	-5.49
1000	-0.03	1.00	-3.00
1250	1.74	2.93	-1.07
1500	3.20	4.51	0.51
2000	5.25	7.00	3.00
2500	7.18	8.93	4.93
3000	8.17	10.51	4.93
4000	-20.37	-	-
5000	-28.97	-	-
6000	-29.10	-	-
7000	-29.05	-	-
8000	-28.95	-	-
9000	-28.90	-	-
10000	-28.90	-	-
20000	-29.25	-	-
30000	-29.02	-	-
40000	-28.95	-	-

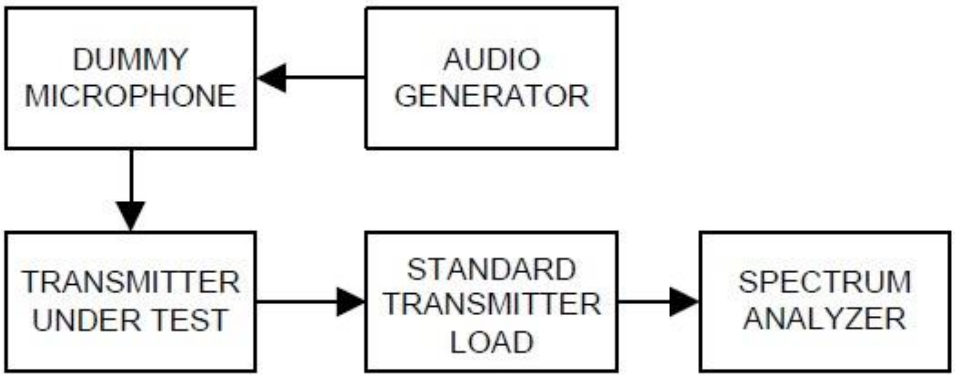

Audio Frequency Response
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
Relative to 1 kHz [dB]
100
400
1600
6400
Frequency [Hz]
Limit

8.6 Emission Mask

▣ Definition

The transmitter sideband spectrum denotes the sideband power produced at a discrete frequency separation from the carrier up to the test bandwidth (see 1.3.4.4) due to all sources of unwanted noise within the transmitter in a modulated condition.

▣ TEST CONFIGURATION



▣ TEST PROCEDURE

According to 2.2.11 in TIA-603-E Standard.

a) Connect the equipment as illustrated. Use the table to determine the spectrum analyzer resolution bandwidth:

Spectrum Analyzer Resolution Bandwidth

Frequency Band (MHz)	Mask for Equipment with Audio Low Pass Filter	Mask for Equipment without Low Pass Filter	Spectrum Analyzer Resolution Bandwidth (Hz)
25-50	B	C	300
72-76	B	C	300
138-174	NTIA	NTIA	300
150-174	B	C	300
150-174	D or E	D or E	100
406-420	NTIA	NTIA	300
421-512	B	C	300
421-512	D or E	D or E	100
806-821/851-866	B or EA	G or EA	300
821-824/866-869	B	H	300
896-901/935-940	I	J	300

b) Adjust the spectrum analyzer for the following settings:

1) Resolution Bandwidth per the above table

2) Video Bandwidth at least 10 times the resolution bandwidth.

3) Sweep Speed slow enough to maintain measurement calibration.

4) Detector Mode = Positive Peak.

5) Span that will allow proper viewing of the test bandwidth (see 1.3.4.4).

c) Set the center frequency of the spectrum analyzer to the assigned transmitter frequency. Key the transmitter, and set the level of the unmodulated carrier to a full scale reference line. This is the 0 dB reference for the measurement.

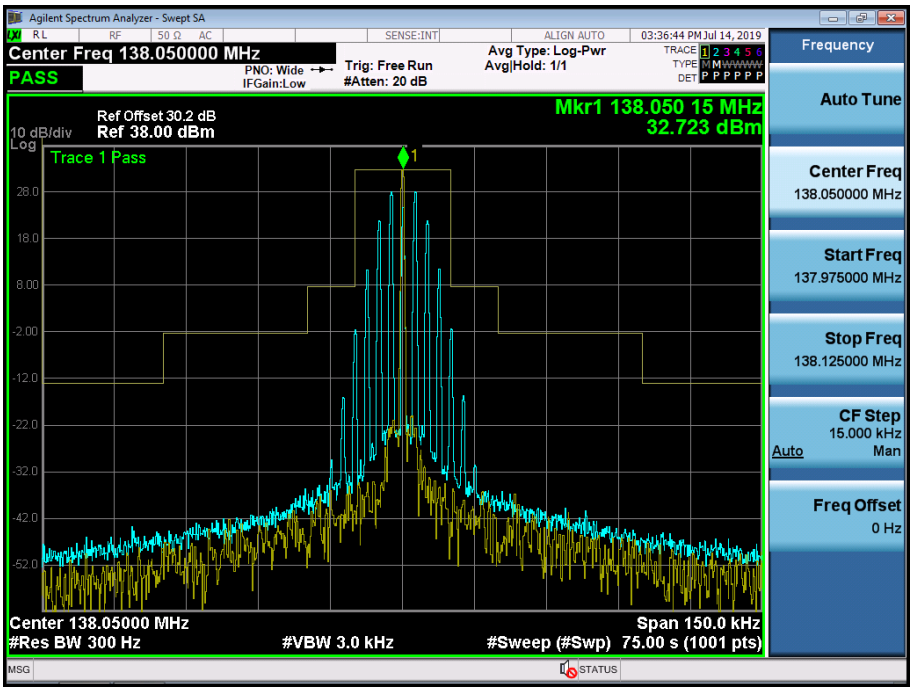
d) Modulate the transmitter with a 2500 Hz sine wave at an input level 16 dB greater than that necessary to produce 50% of rated system deviation. The input level shall be established at the frequency of maximum response of the audio modulating circuit. Transmitters employing digital modulation techniques that bypass the limiter and the audio low-pass filter shall be modulated as specified by the manufacturer.

e) Record the resulting spectrum analyzer presentation of the emission level with an on-line recording device or in a photograph. It is recommended that the emission limit (as given in 3.2.11) be drawn on the plotted graph or photograph. The spectrum analyzer presentation is the sideband spectrum.

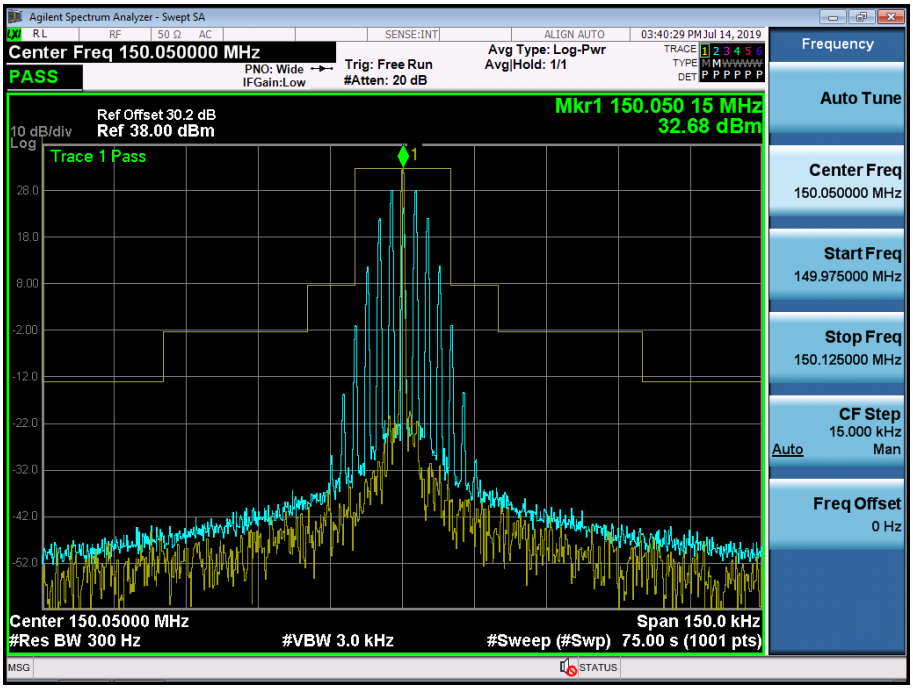
▣ Plots of Emission Mask

16K0F3E_FCC

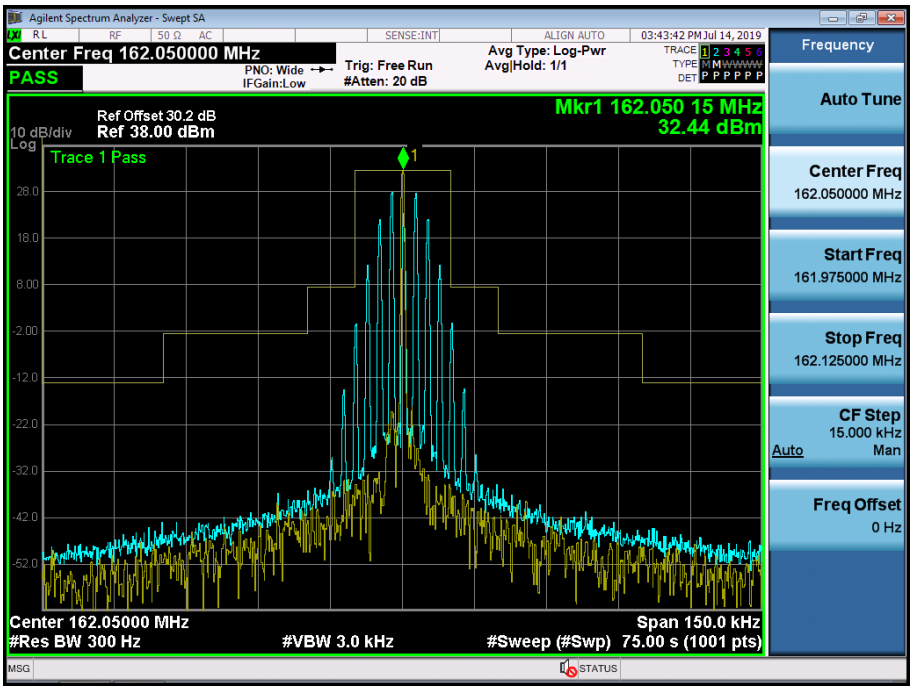
(138.05 MHz)_High



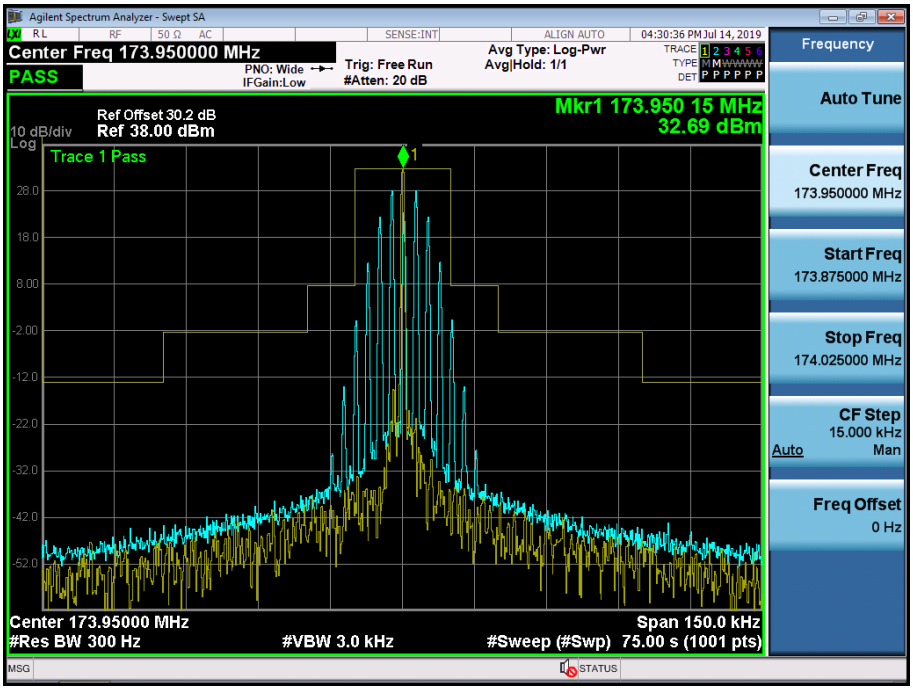
(150.05 MHz)_High



(162.05 MHz)_High

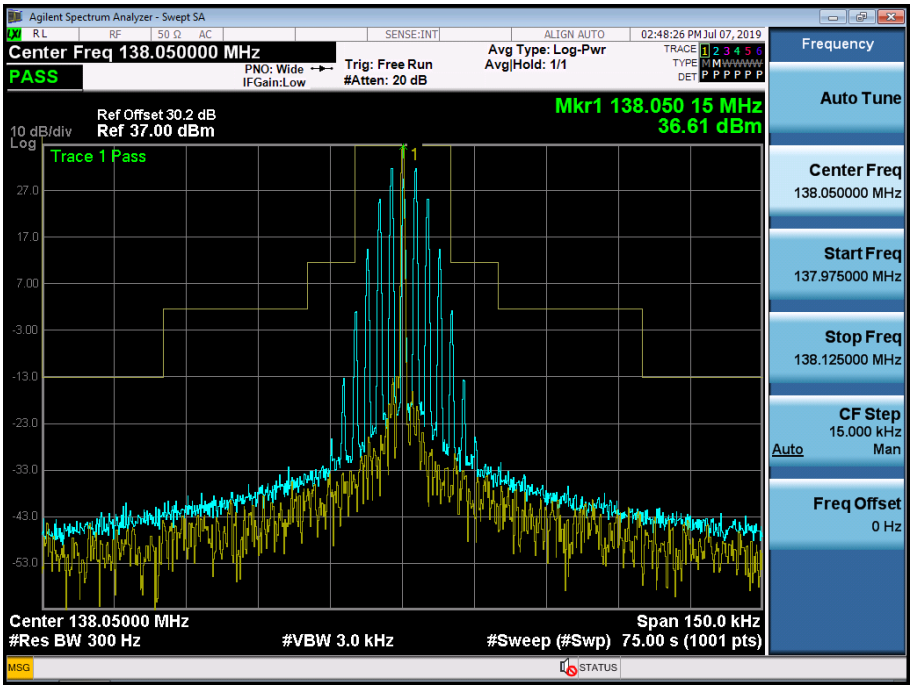


(173.95 MHz)_High

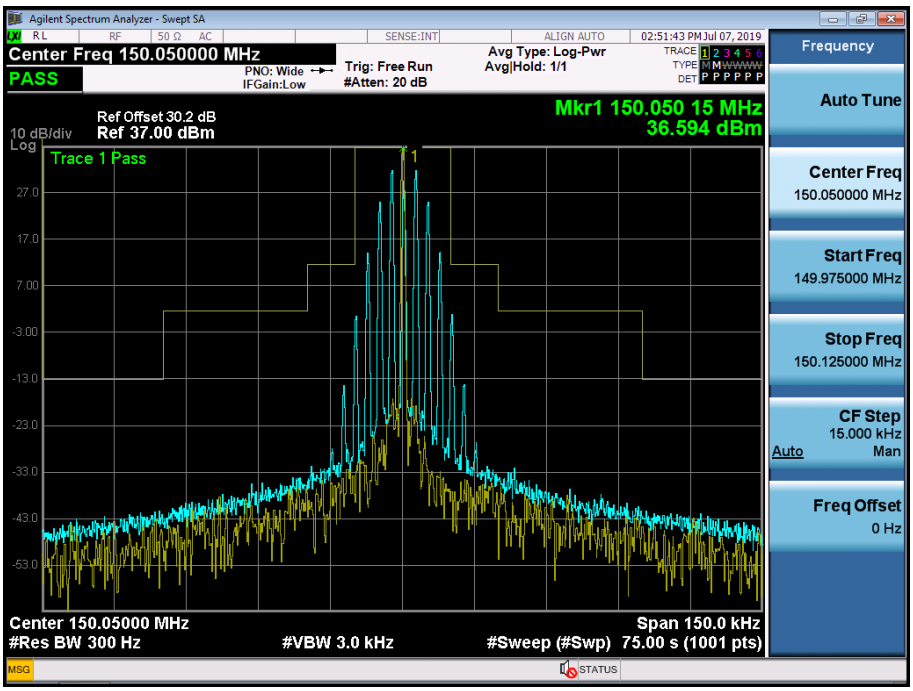


16K0F3E_IC

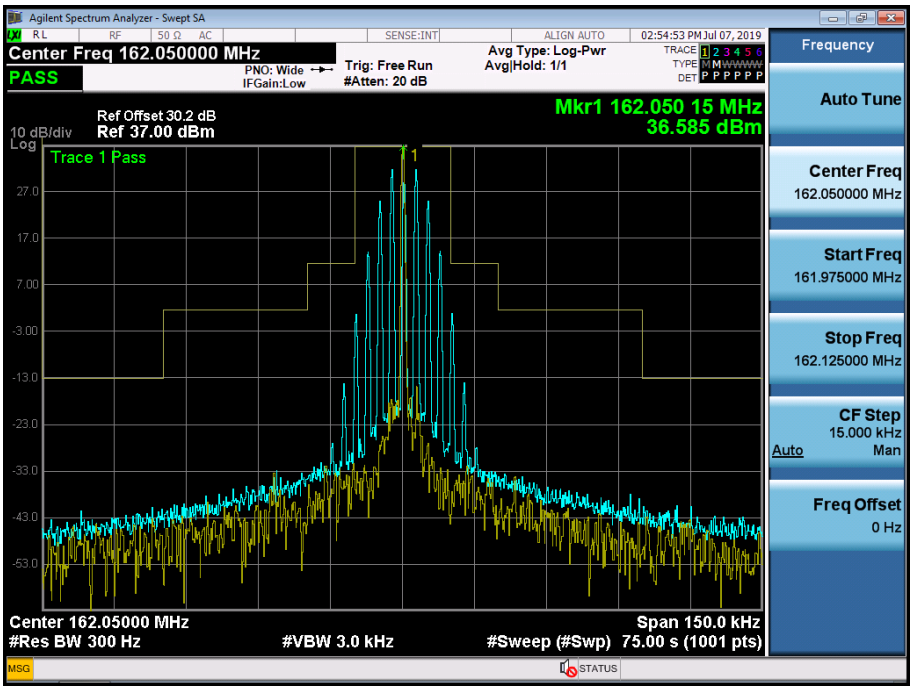
(138.05 MHz)_High



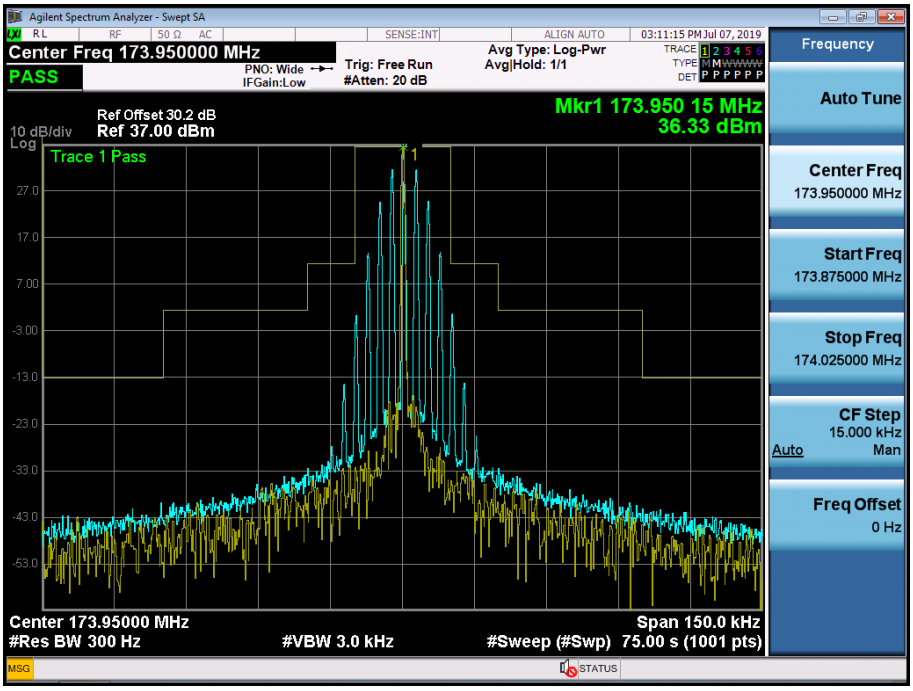
(150.05 MHz)_High



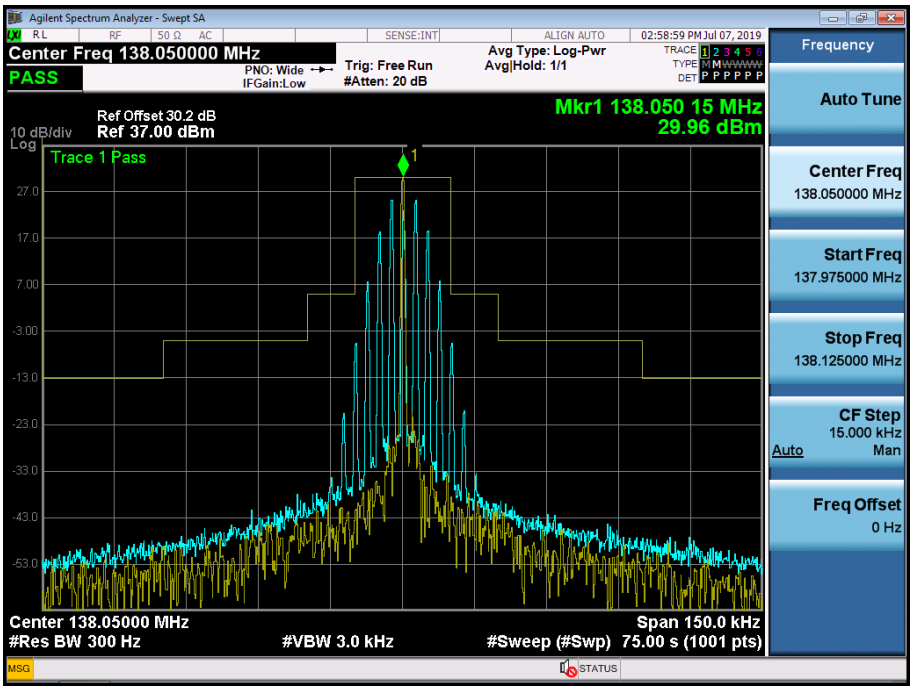
(162.05 MHz)_High



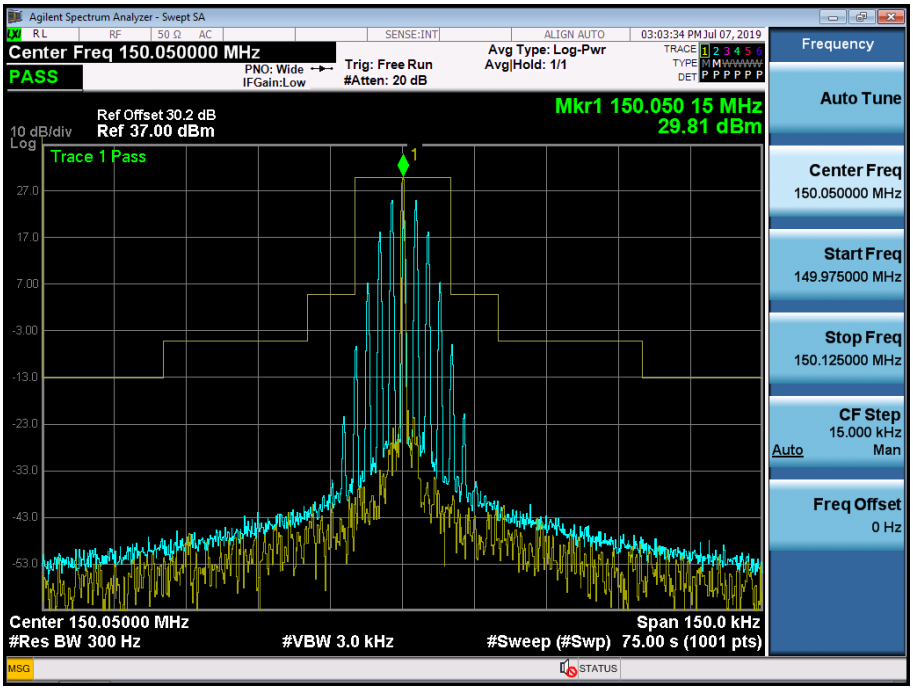
(173.95 MHz)_High



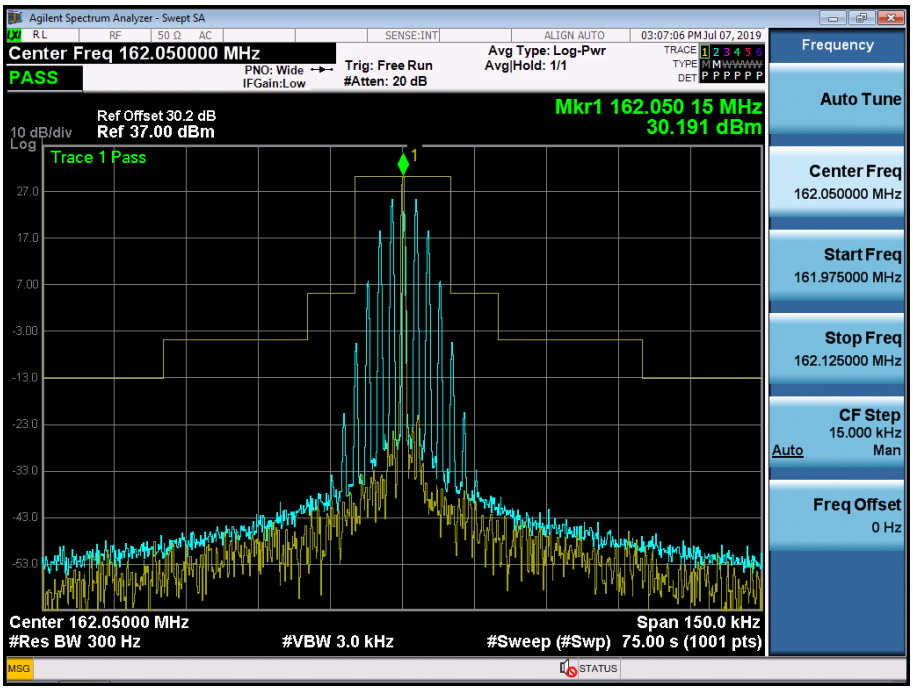
(138.05 MHz)_Low



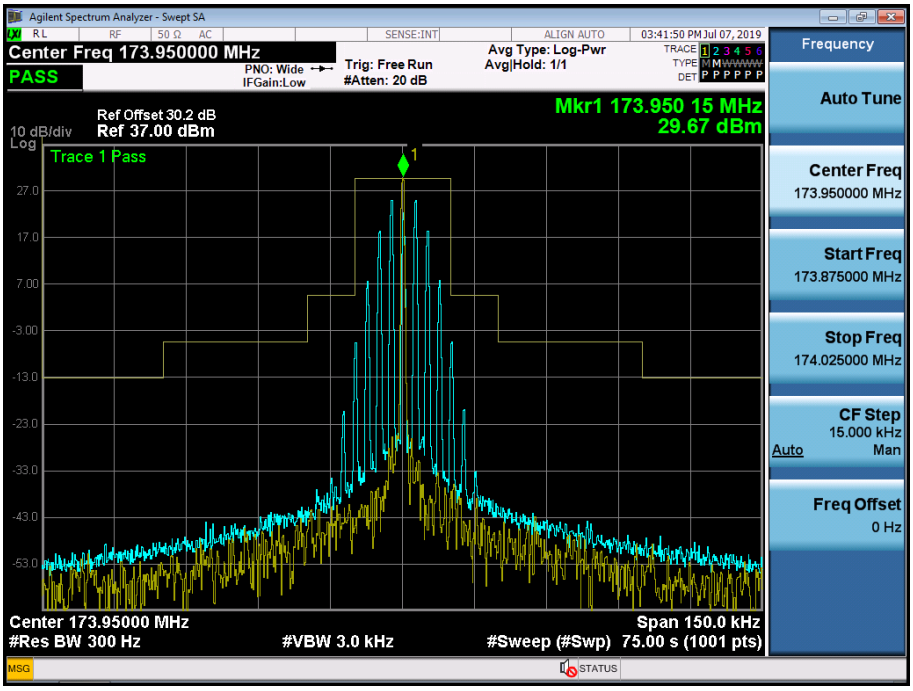
(150.05 MHz)_ Low



(162.05 MHz)_ Low

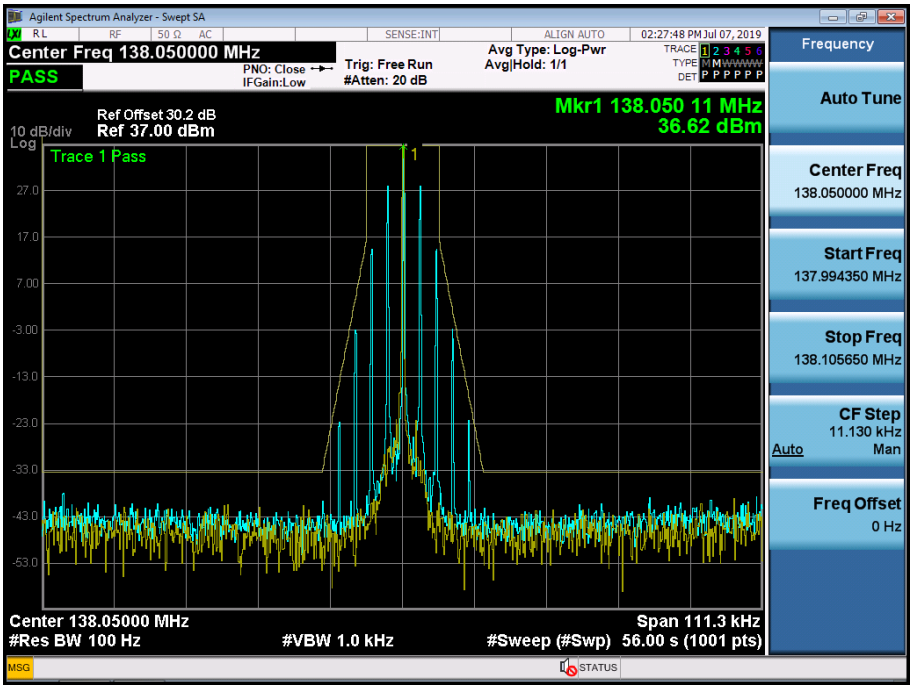


(173.95 MHz)_ Low

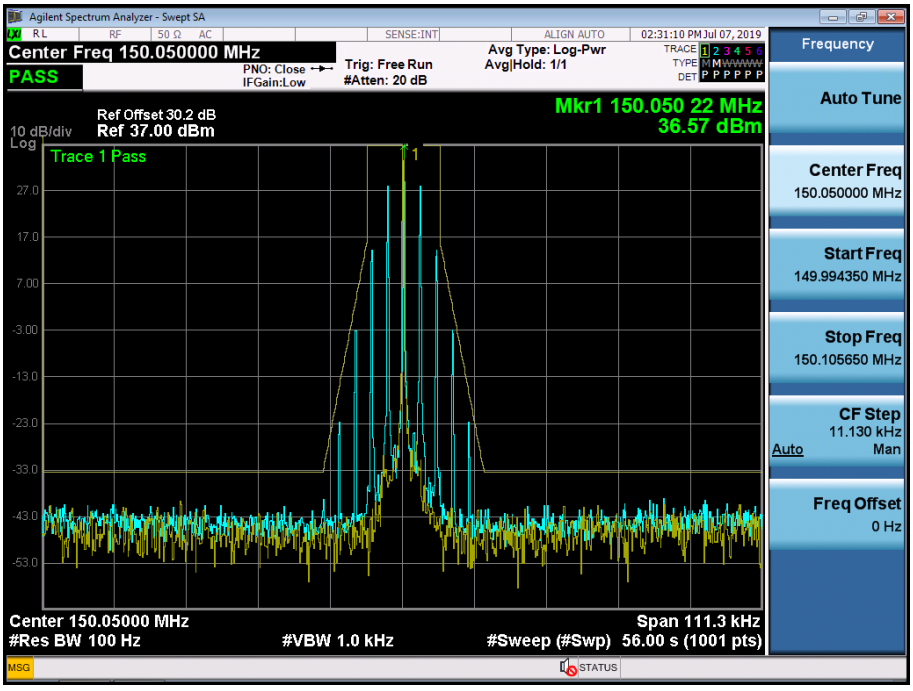


11K0F3E_FCC/IC

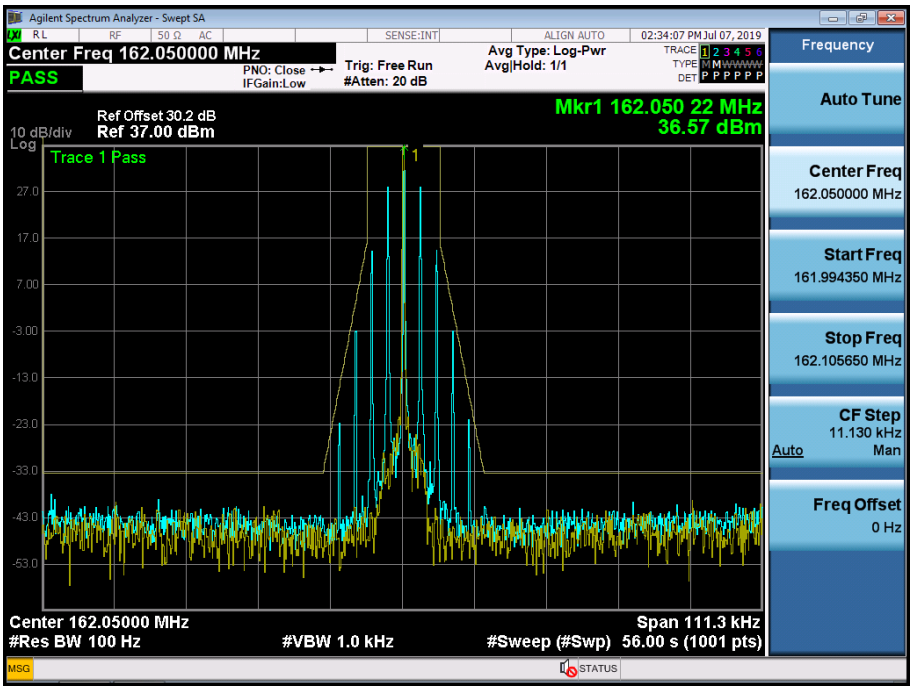
(138.05 MHz)_High



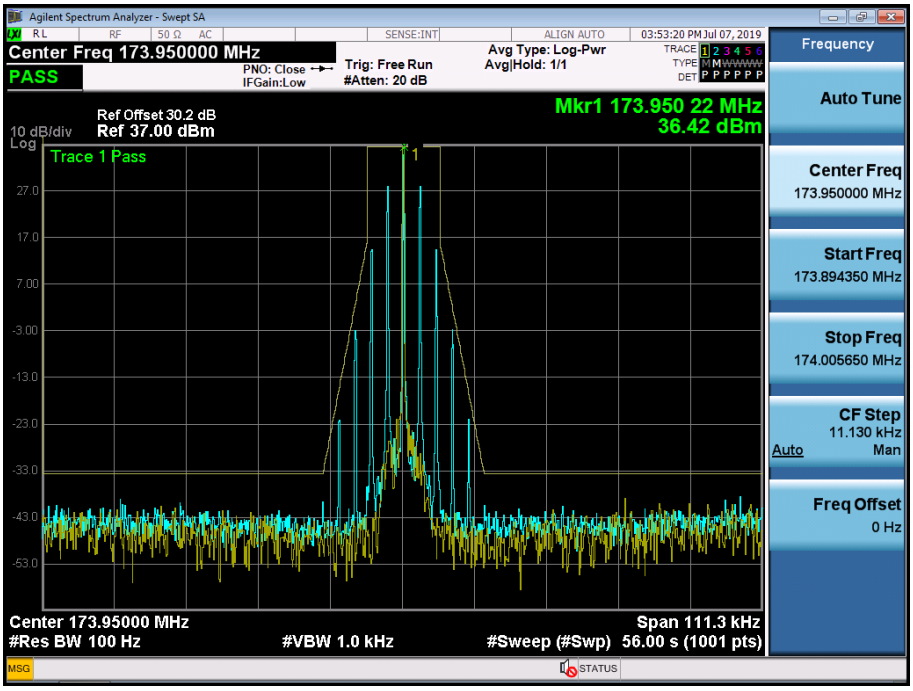
(150.05 MHz)_High



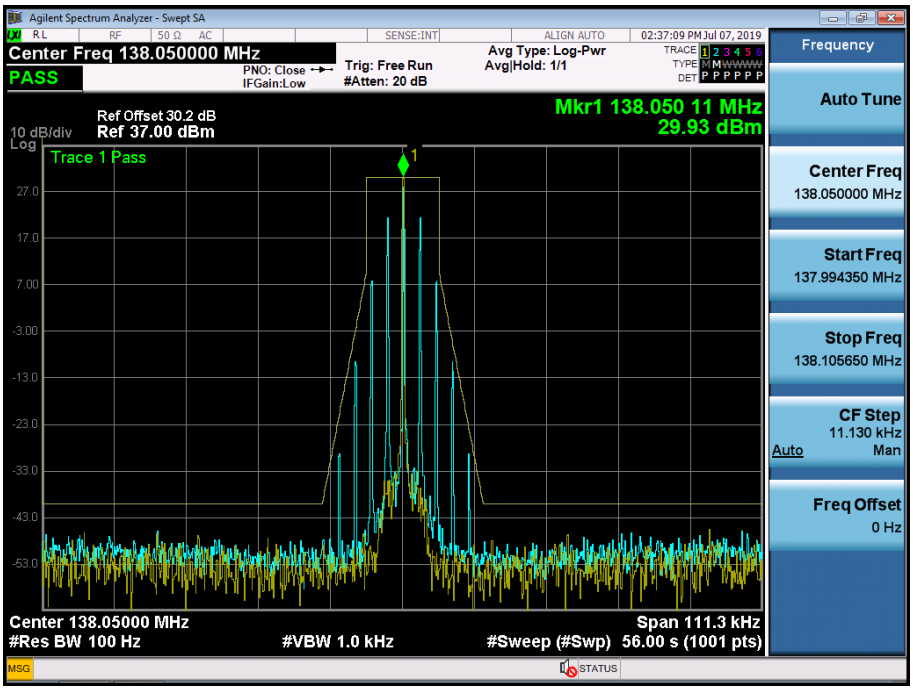
(162.05 MHz)_High



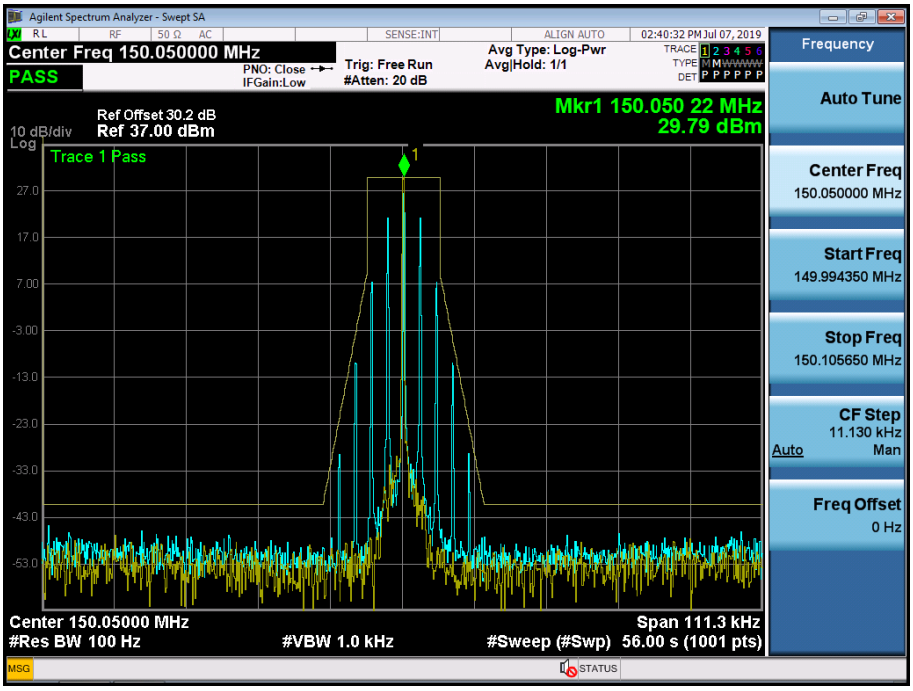
(173.95 MHz)_High



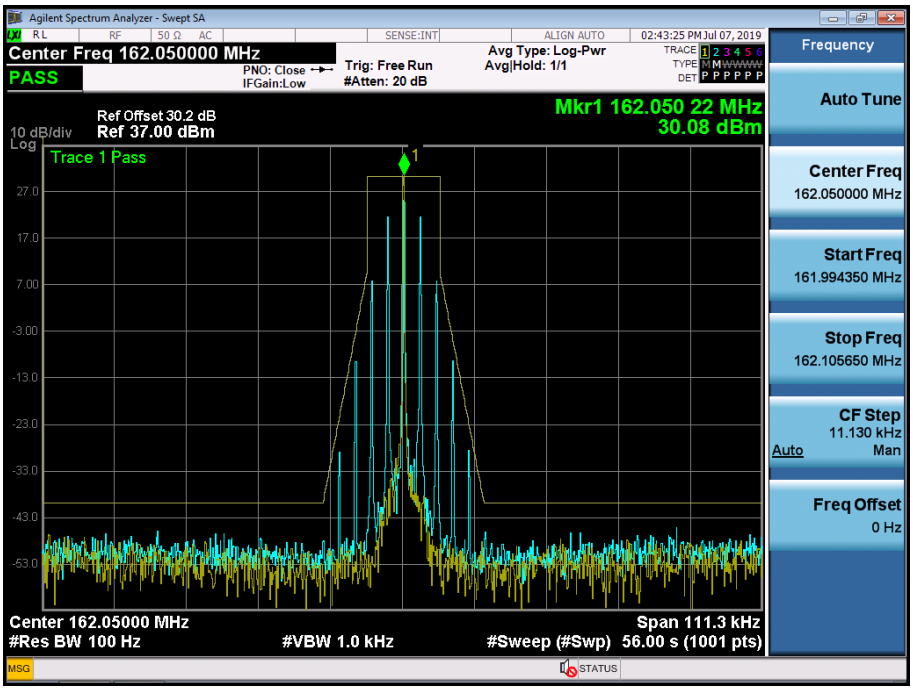
(138.05 MHz)_Low



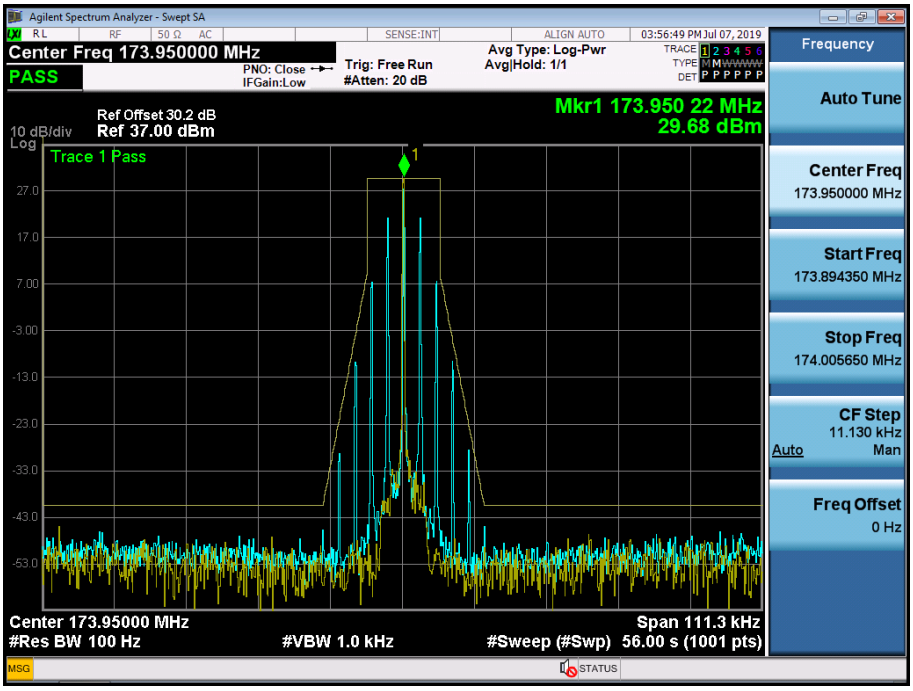
(150.05 MHz)_ Low



(162.05 MHz)_ Low

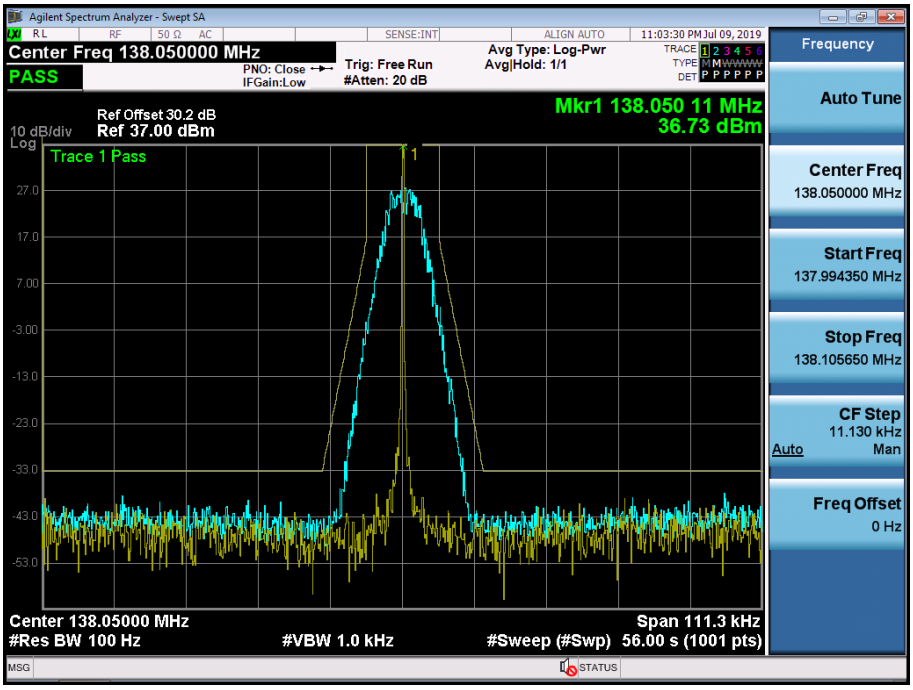


(173.95 MHz)_ Low

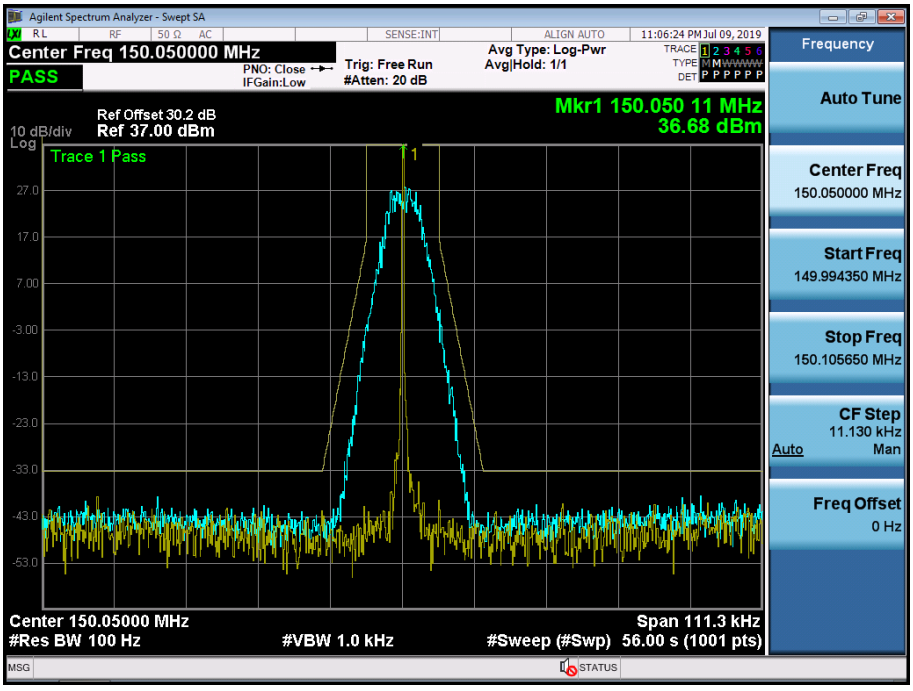


8K30F1E, 8K30F1D, 8K30F7W_FCC/IC

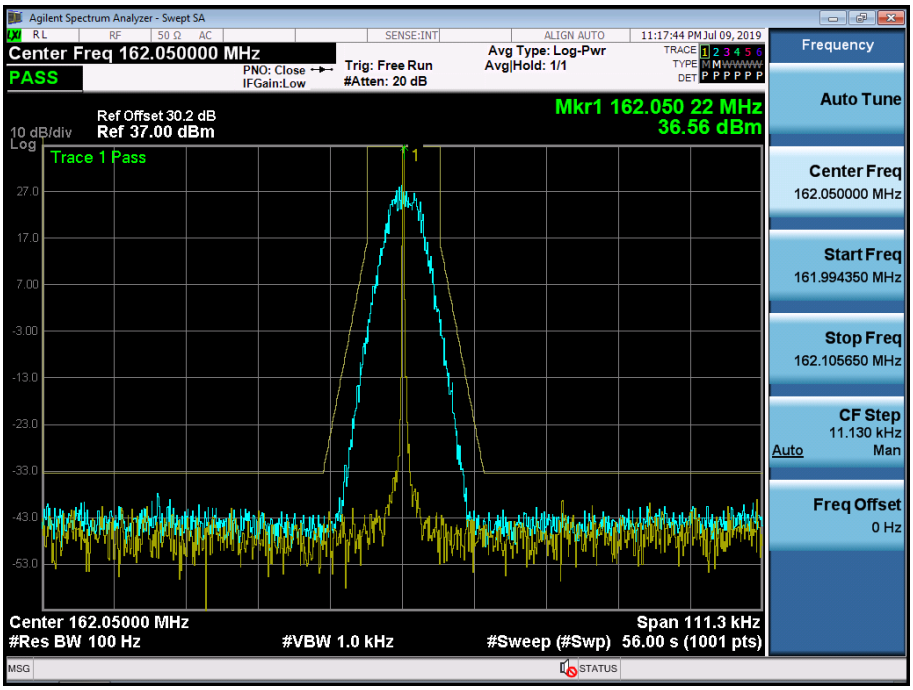
(138.05 MHz)_High



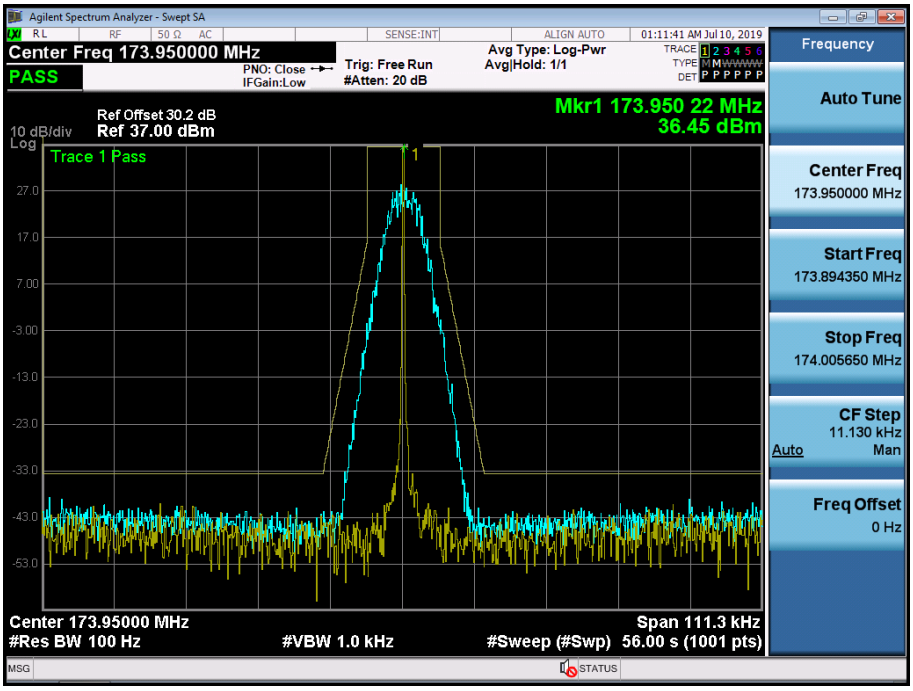
(150.05 MHz)_High



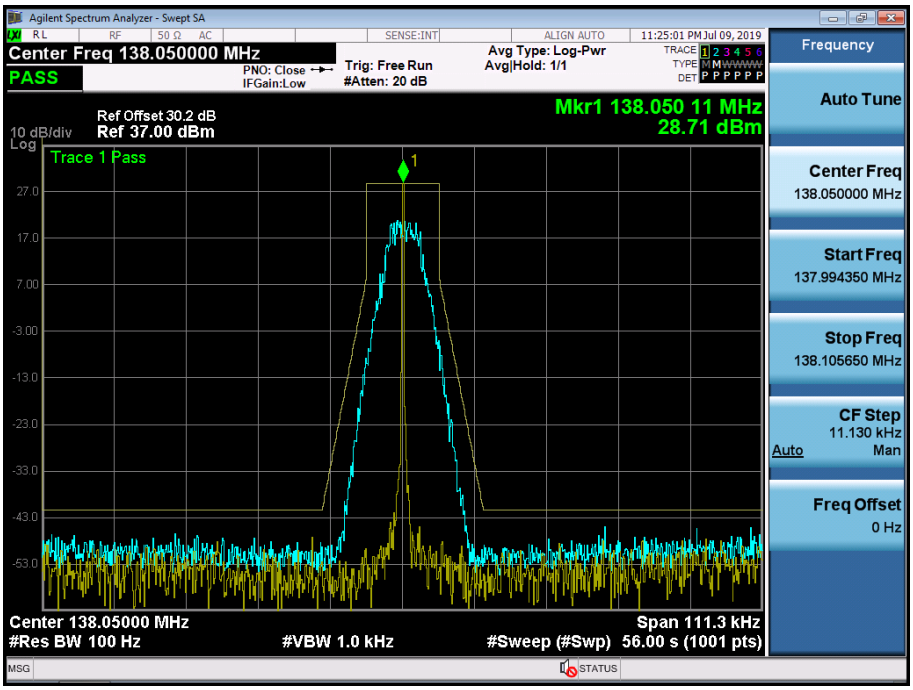
(162.05 MHz)_High



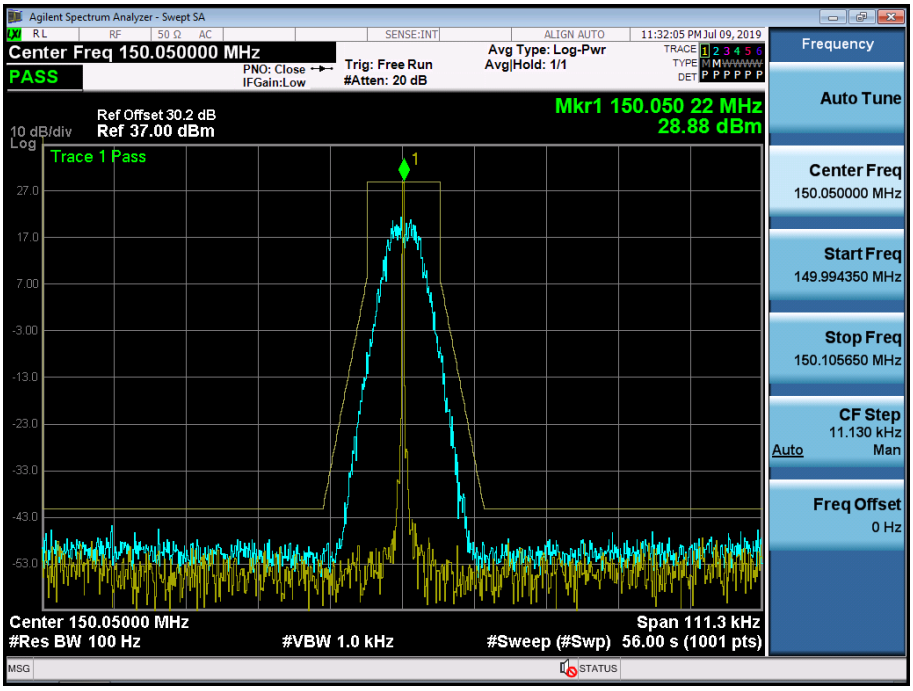
(173.95 MHz)_High



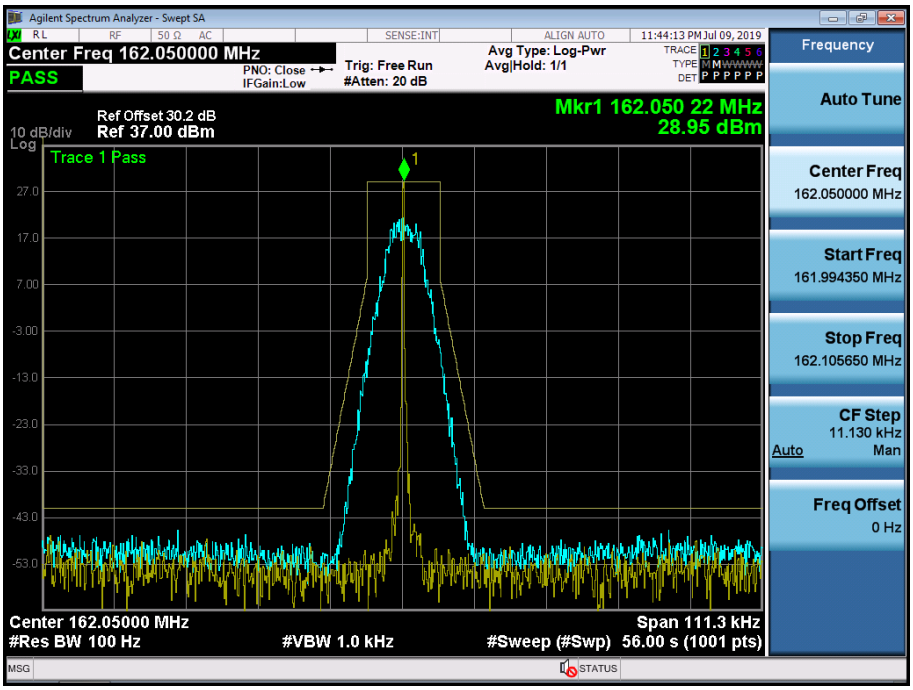
(138.05 MHz)_Low



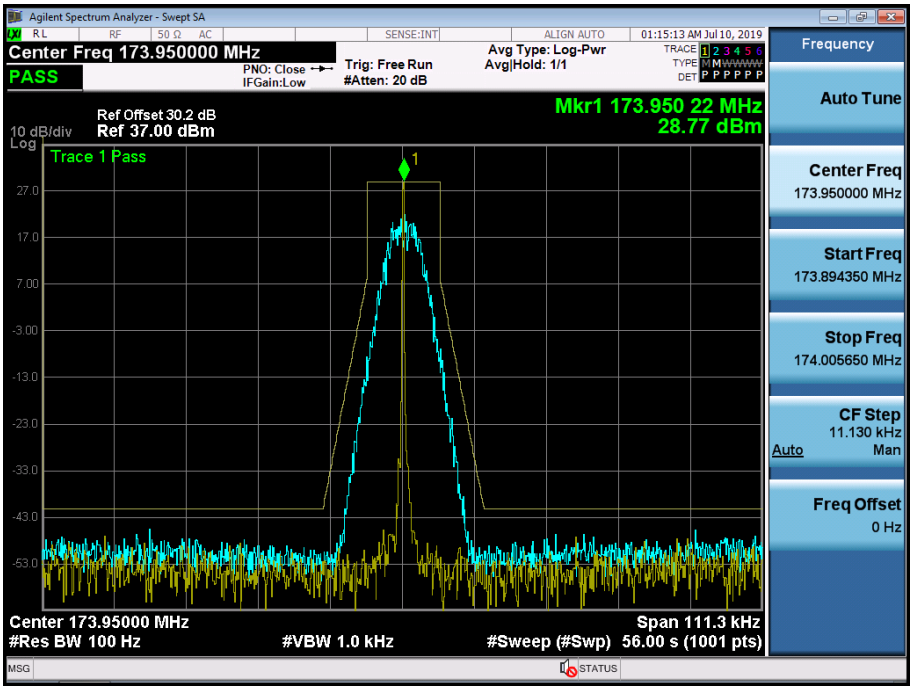
(150.05 MHz)_ Low



(162.05 MHz)_ Low

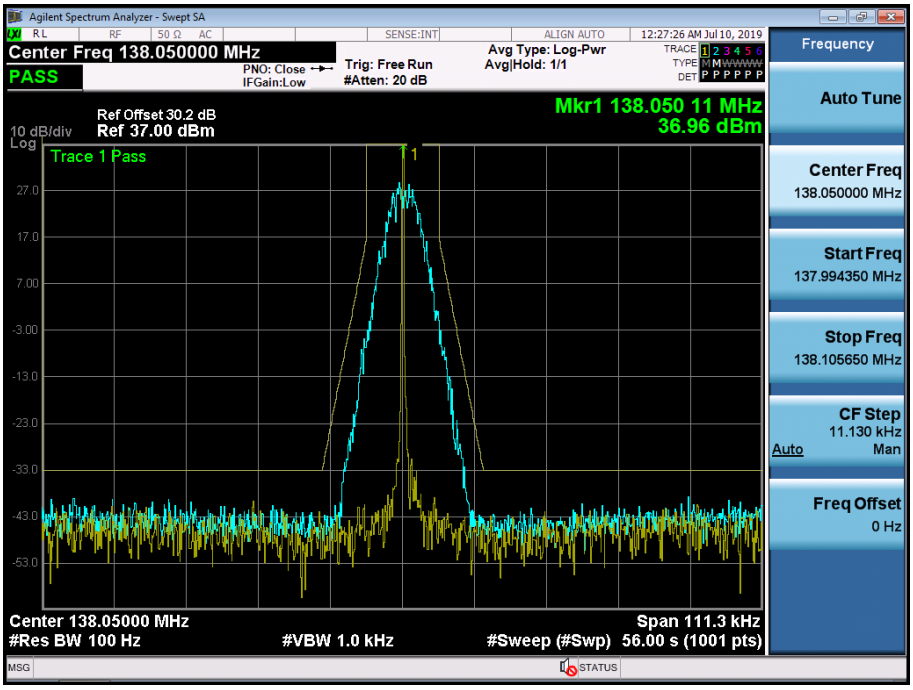


(173.95 MHz)_ Low

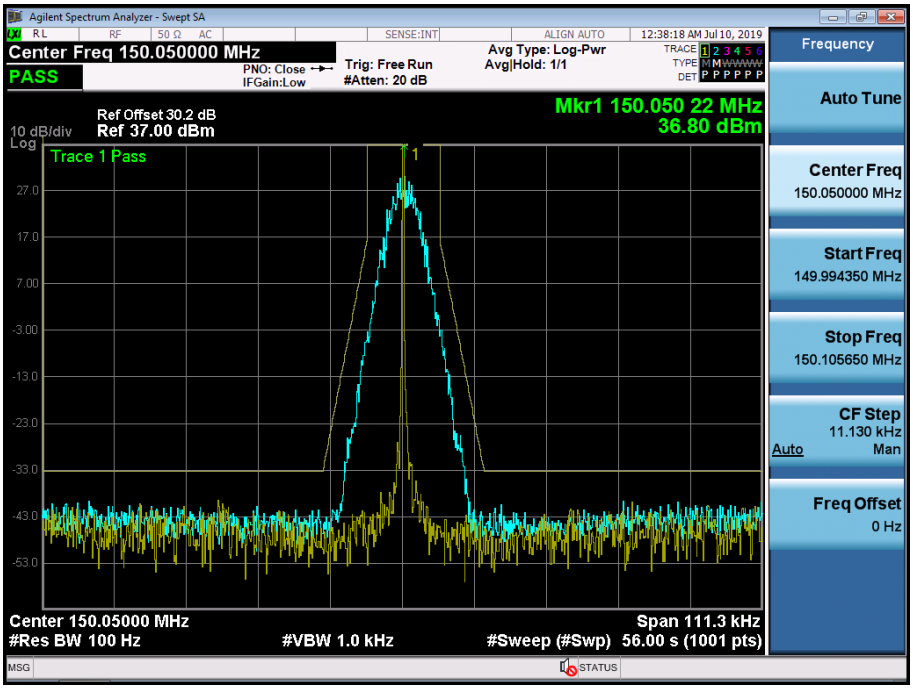


7K60FXD, 7K60FXE_FCC/IC

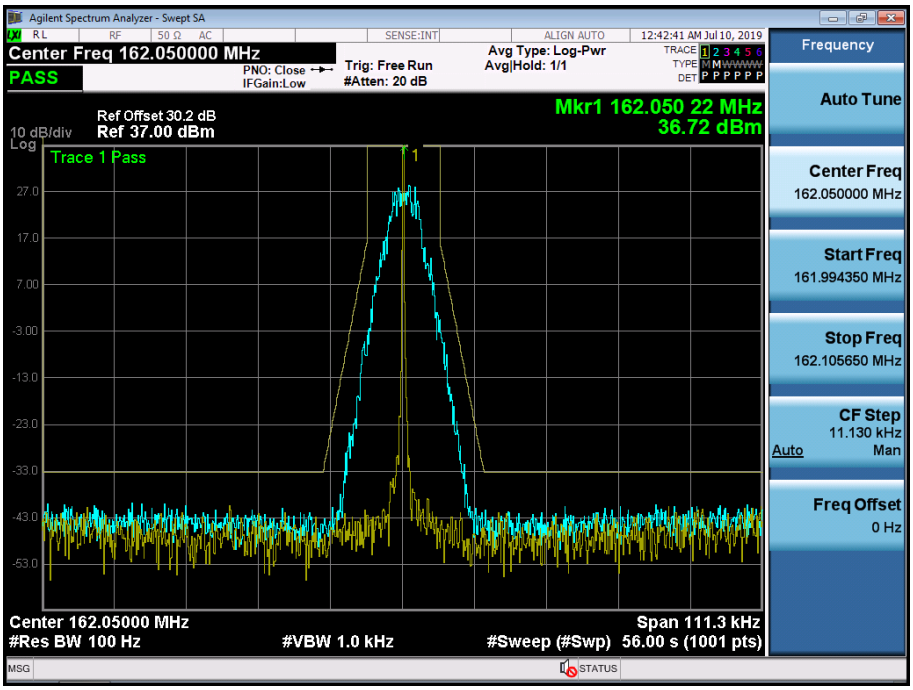
(138.05 MHz)_High



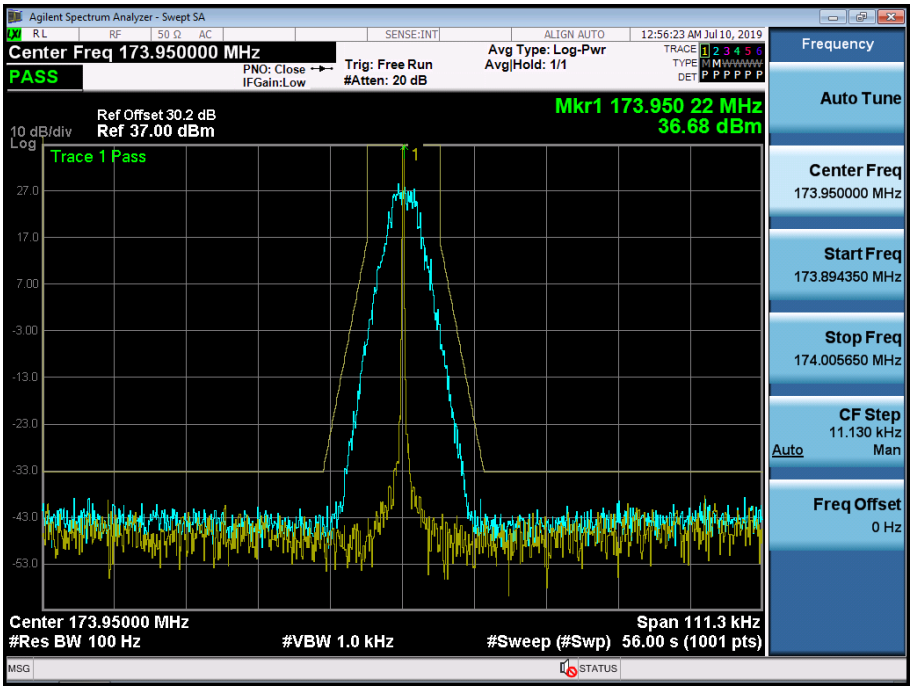
(150.05 MHz)_High



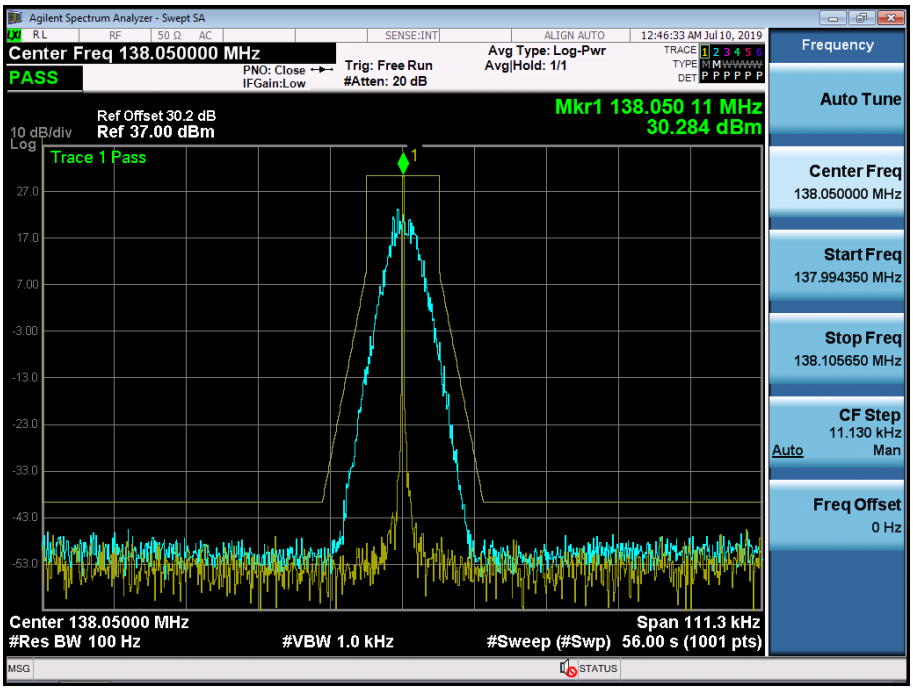
(162.05 MHz)_High



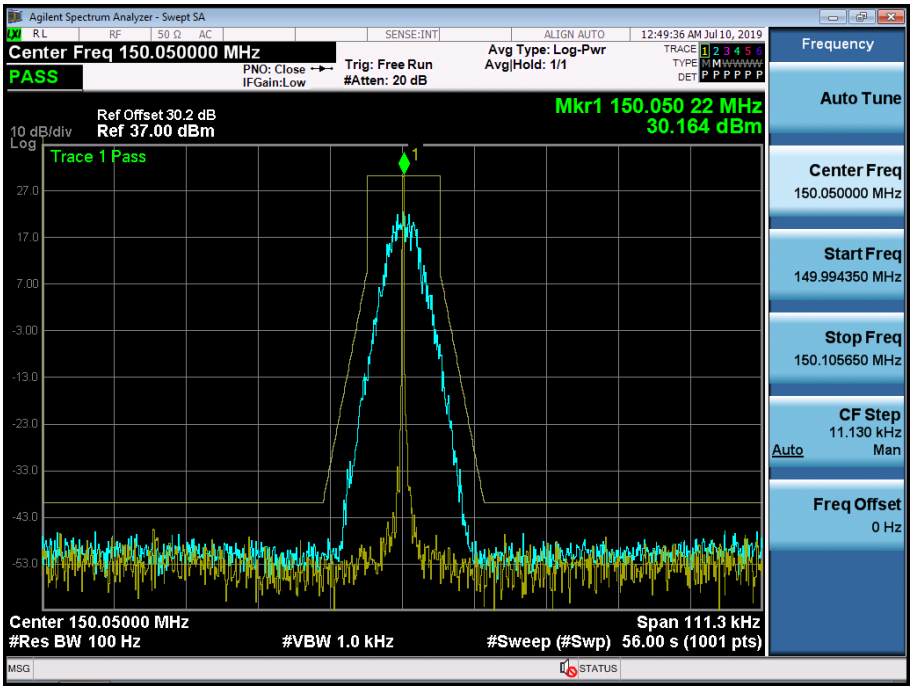
(173.95 MHz)_High



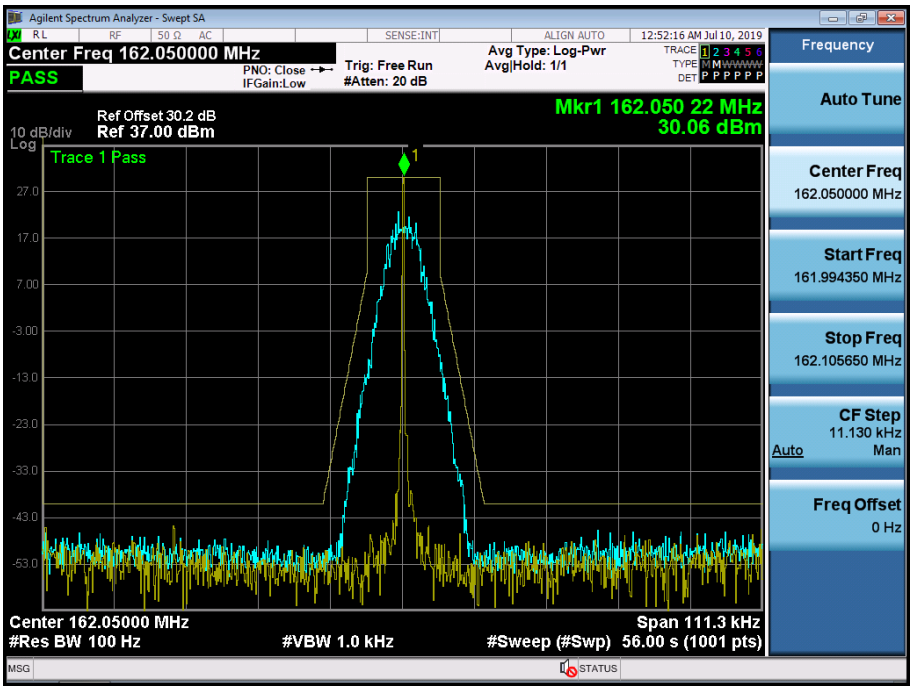
(138.05 MHz)_Low



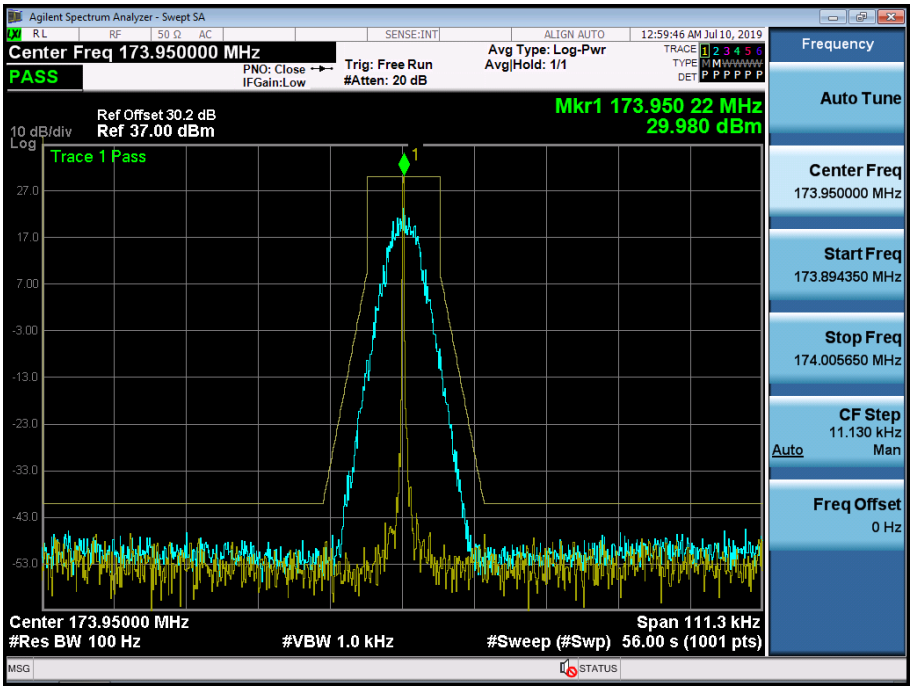
(150.05 MHz)_ Low



(162.05 MHz)_ Low

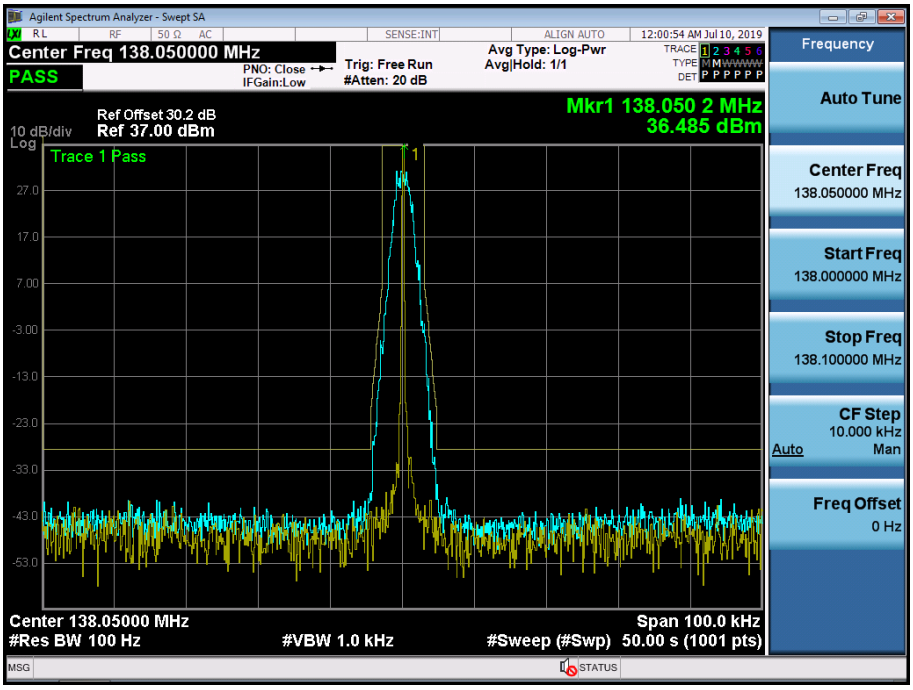


(173.95 MHz)_ Low

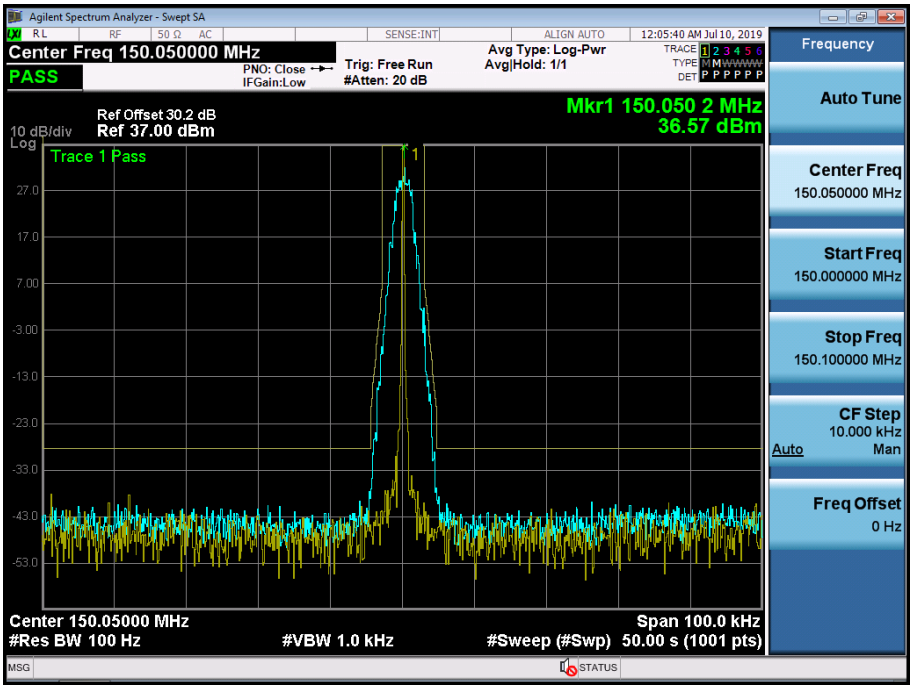


4K00F1E, 4K00F1D, 4K00F7W_FCC/IC

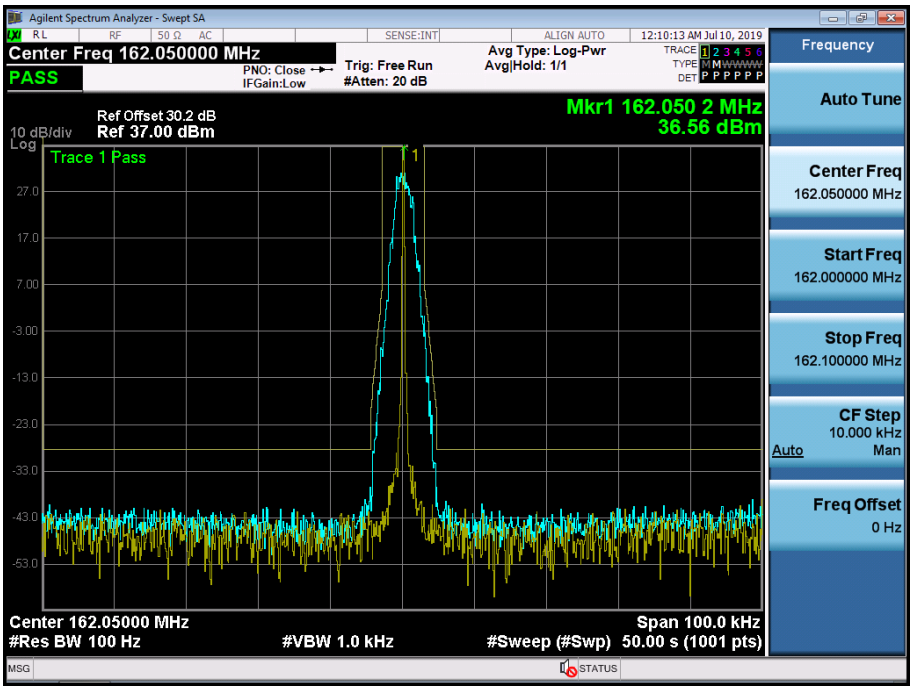
(138.05 MHz)_High



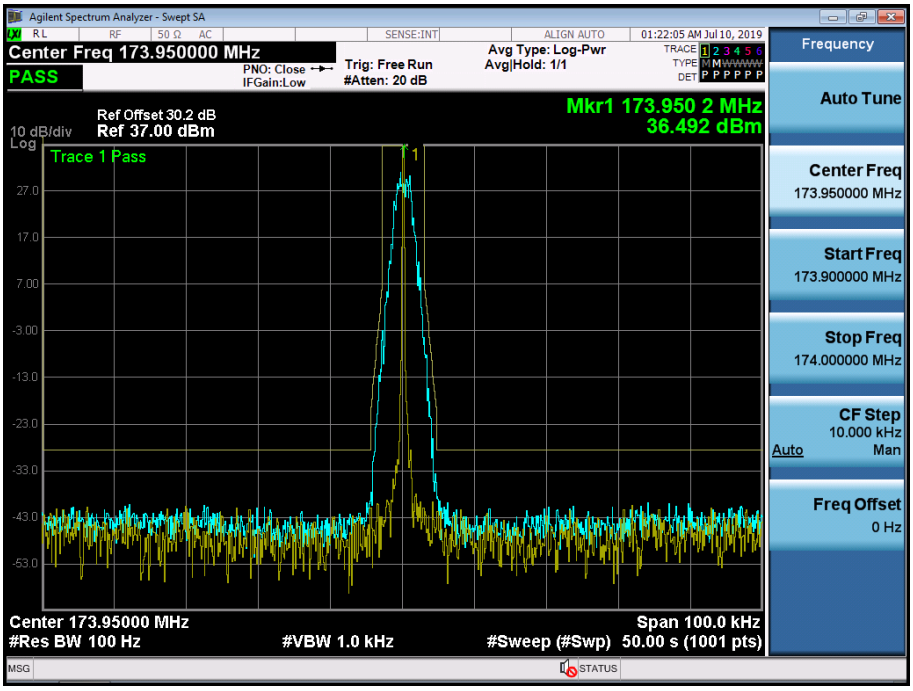
(150.05 MHz)_High



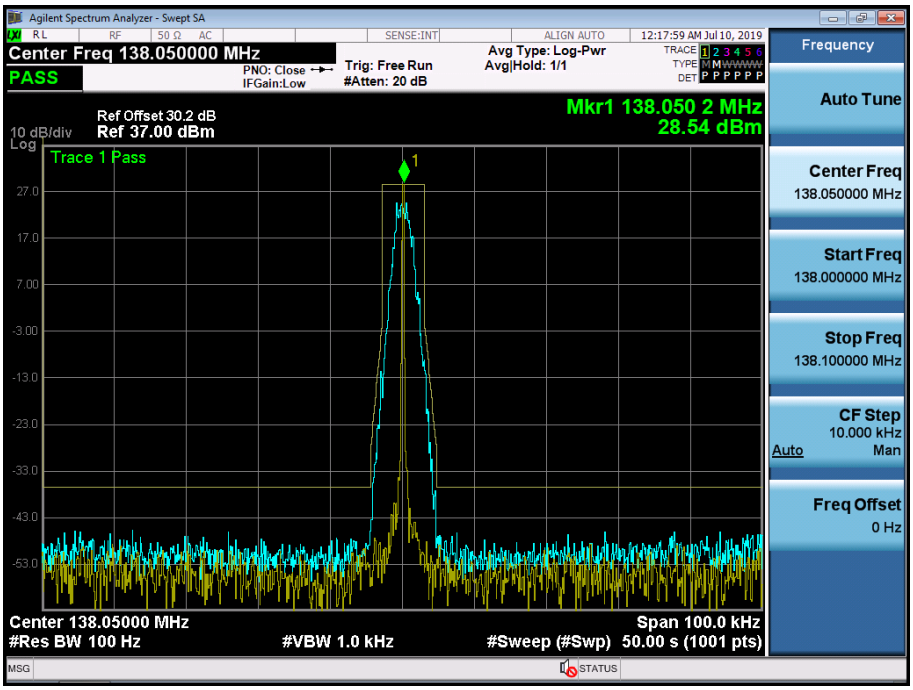
(162.05 MHz)_High



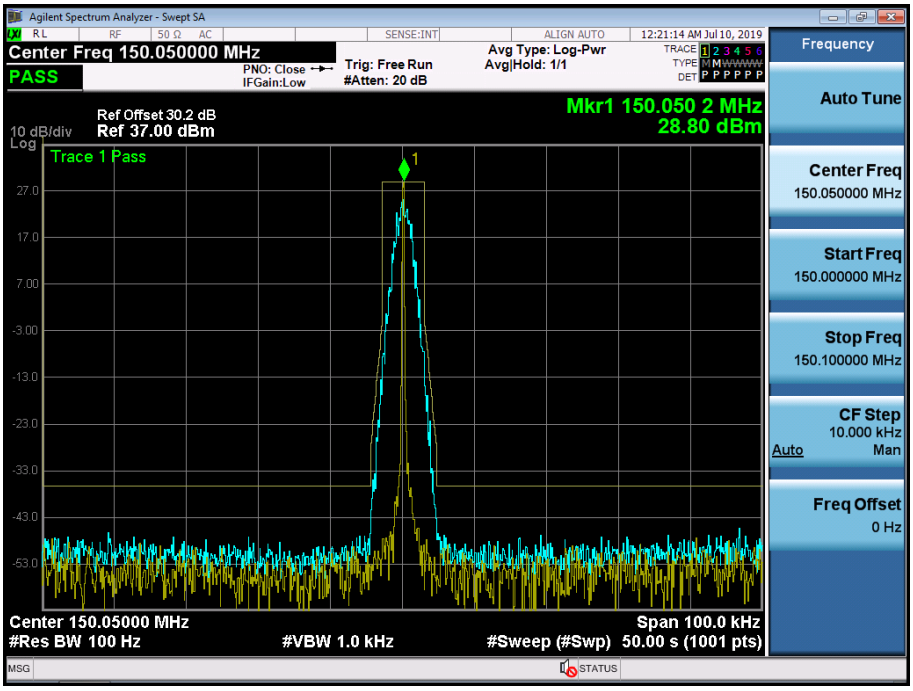
(173.95 MHz)_High



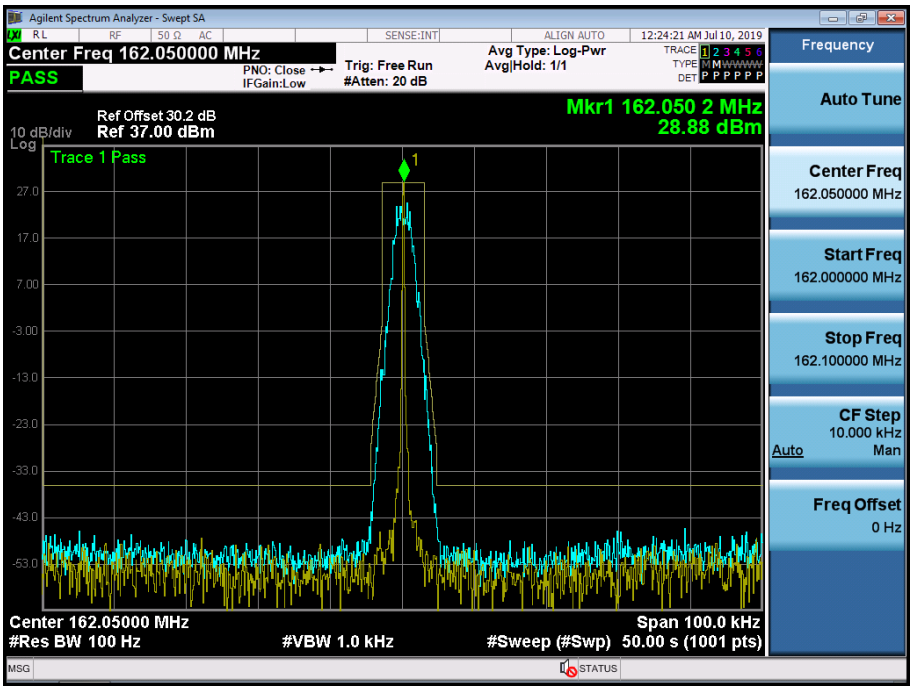
(138.05 MHz)_Low



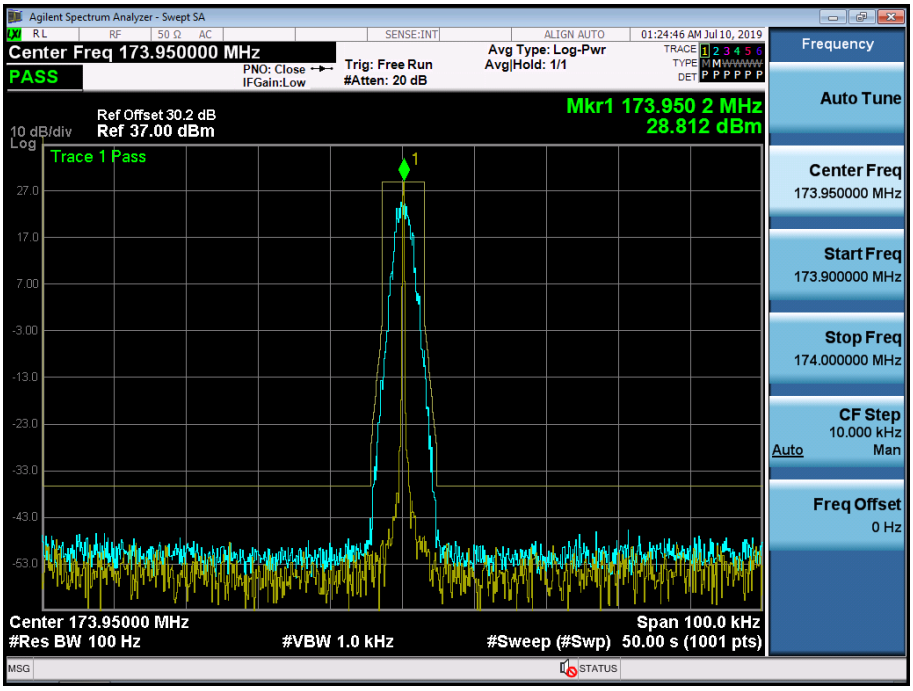
(150.05 MHz)_ Low



(162.05 MHz)_ Low

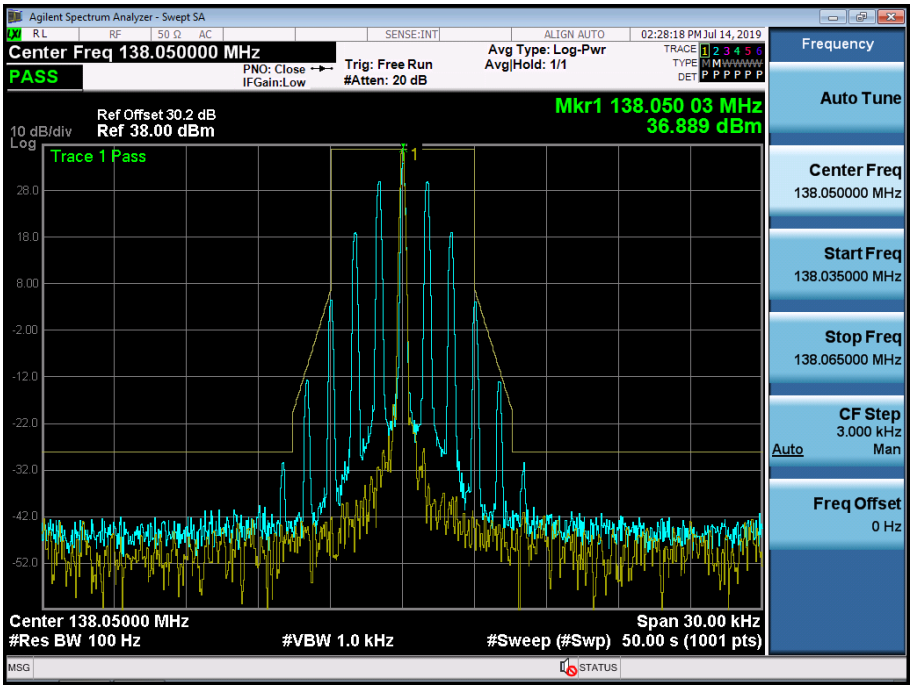


(173.95 MHz)_ Low

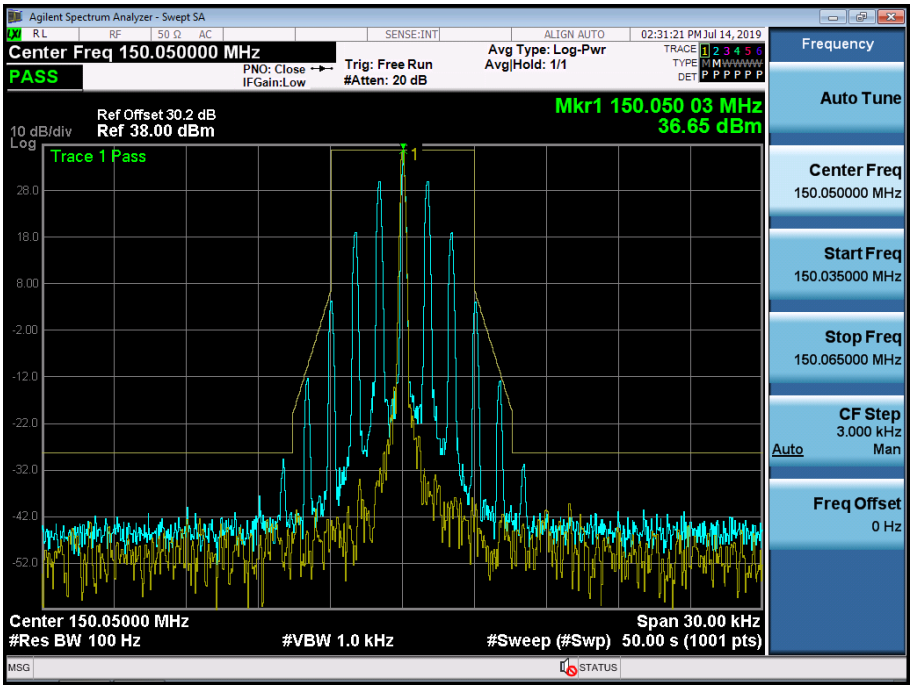


4K00F2D_FCC/IC

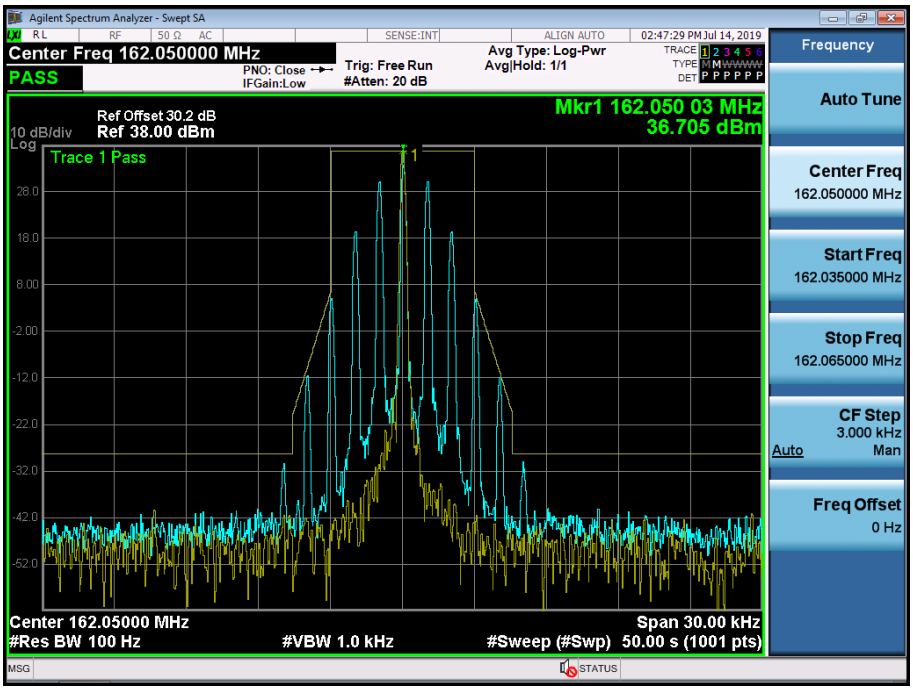
(138.05 MHz)_High



(150.05 MHz)_High



(162.05 MHz)_High



(173.95 MHz)_High