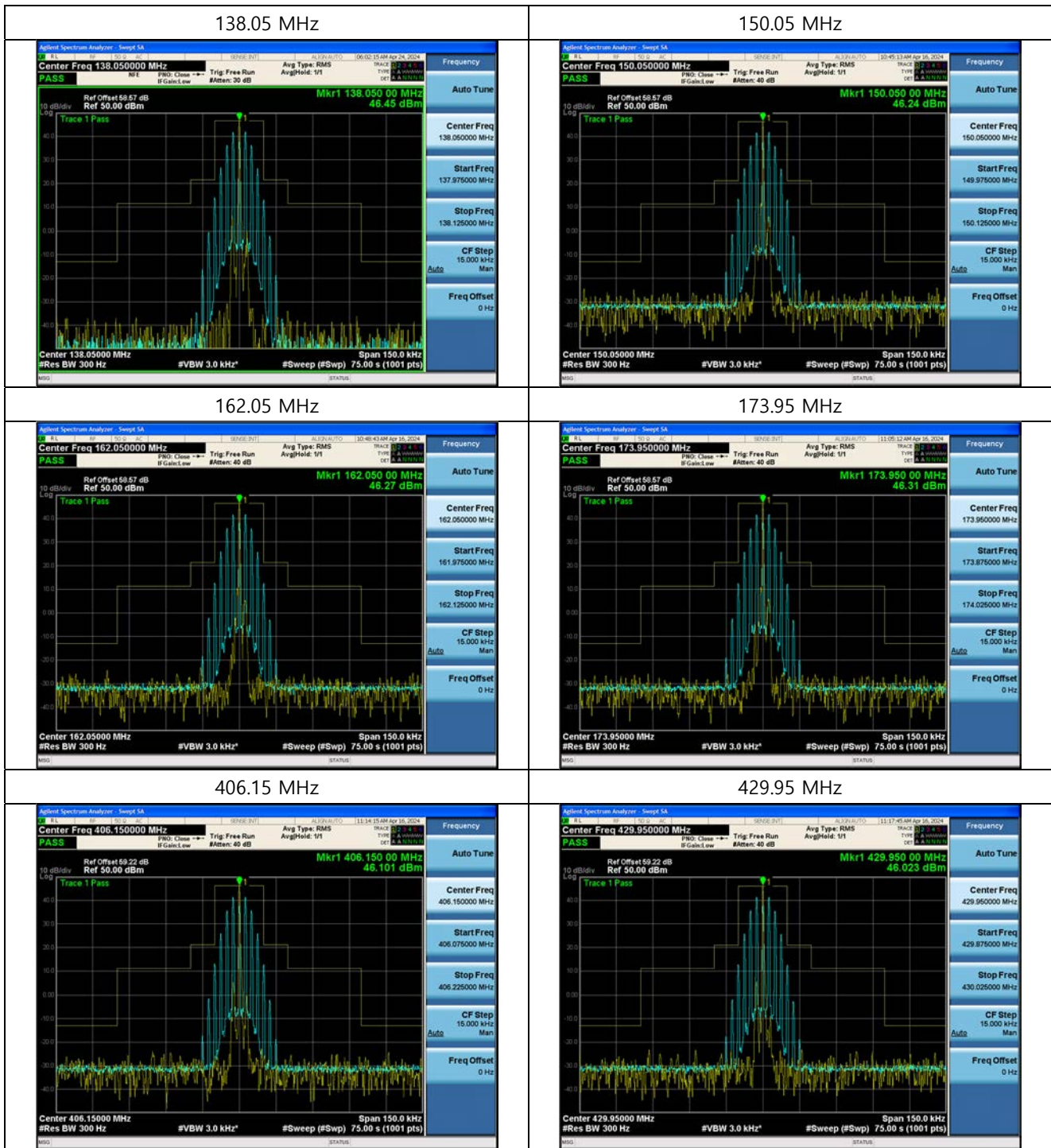
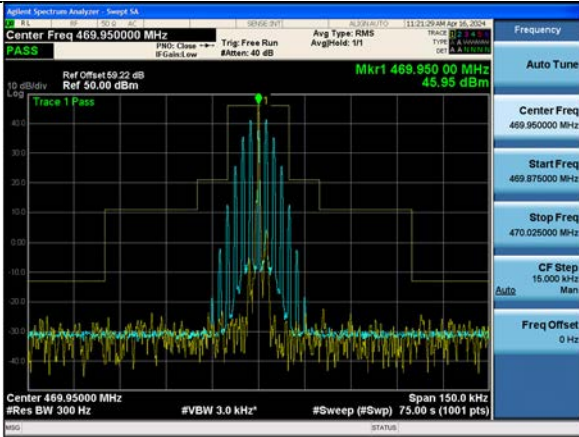


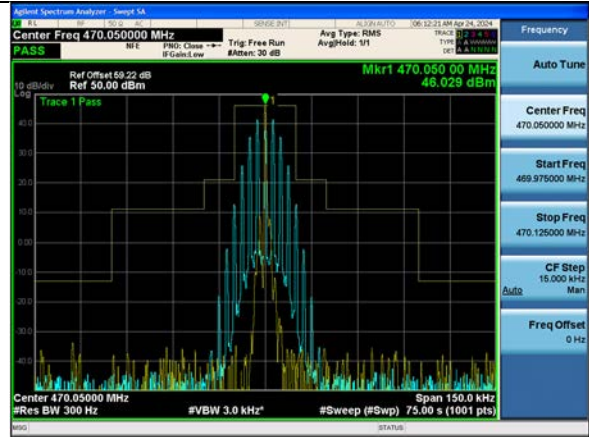
Emission Mask B



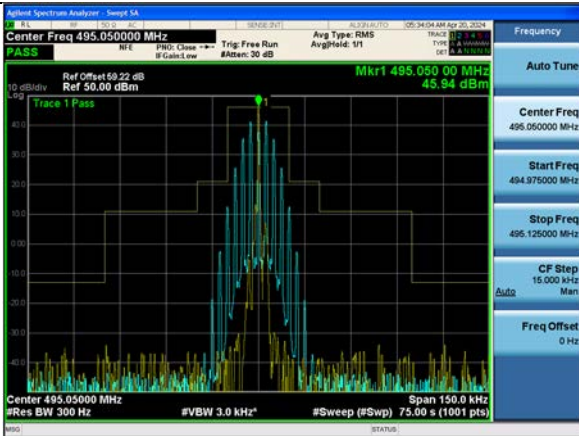
469.95 MHz



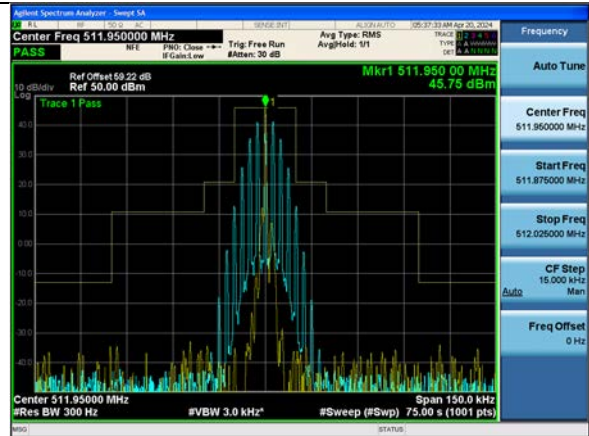
470.05 MHz



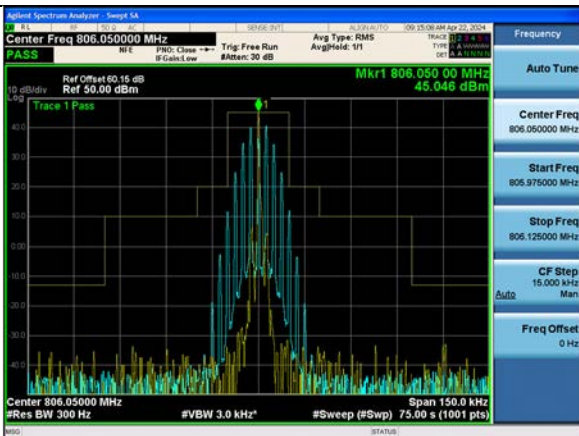
495.05 MHz



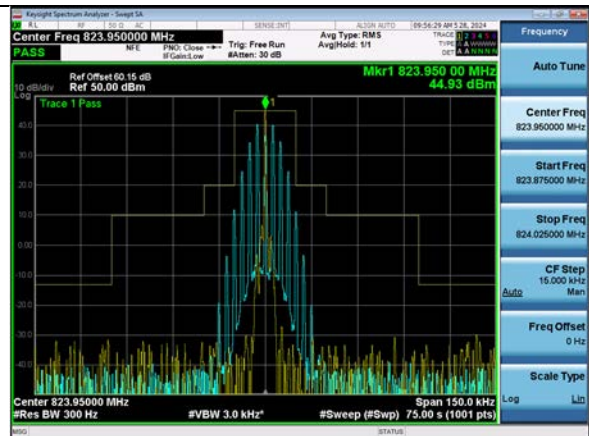
511.95 MHz



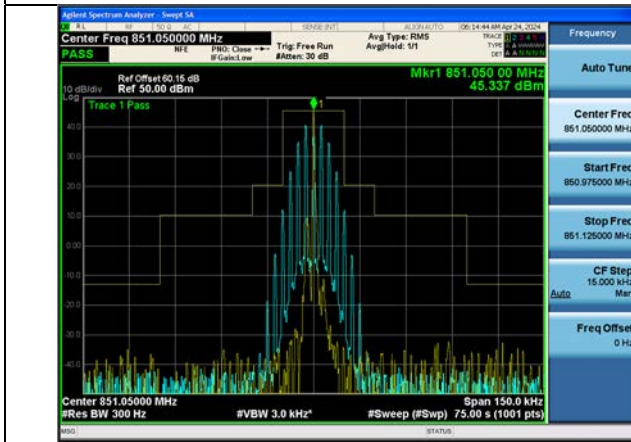
806.05 MHz



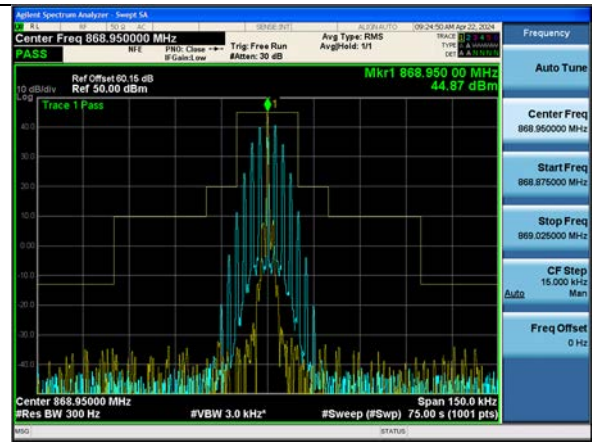
823.95 MHz



851.05 MHz

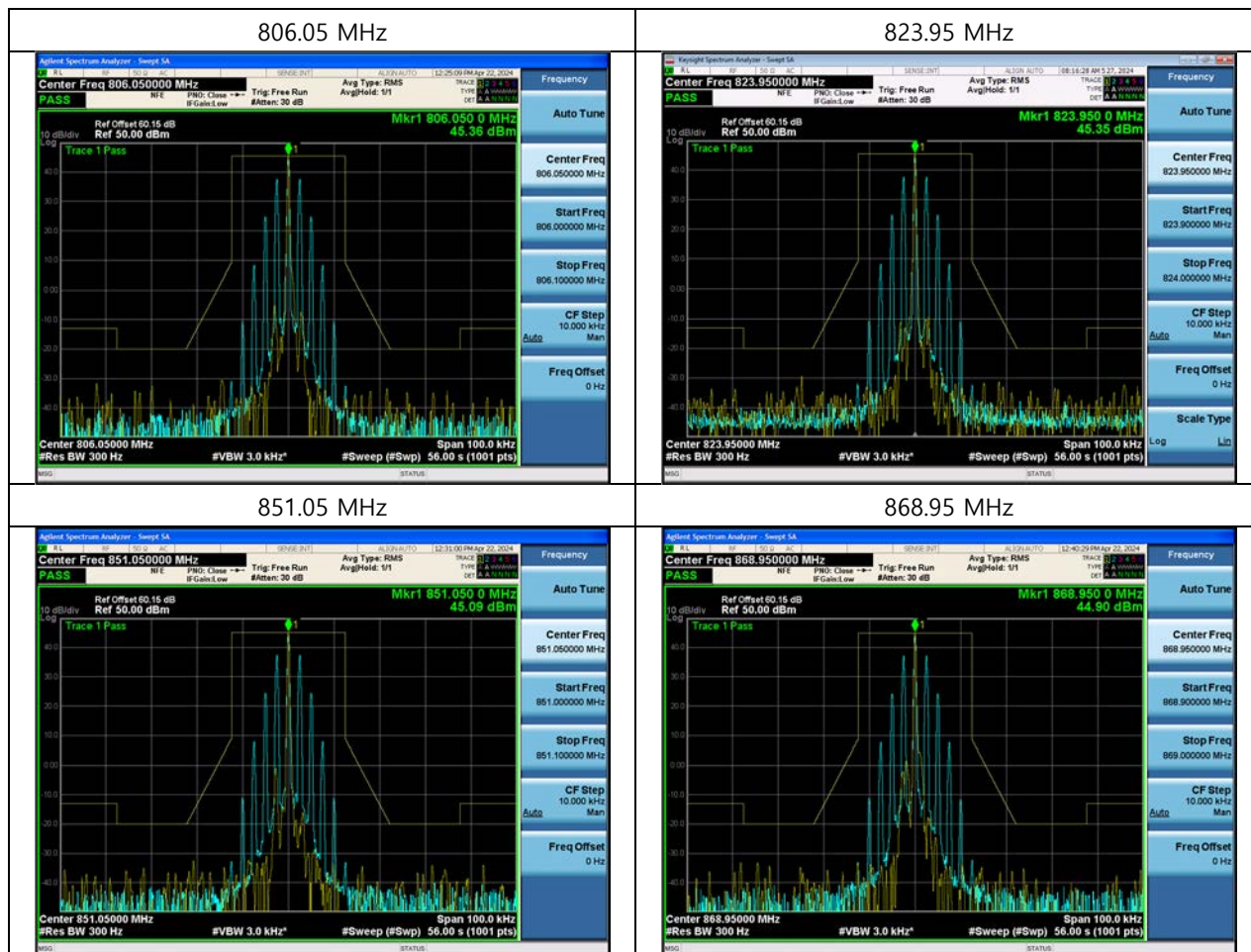


868.95 MHz

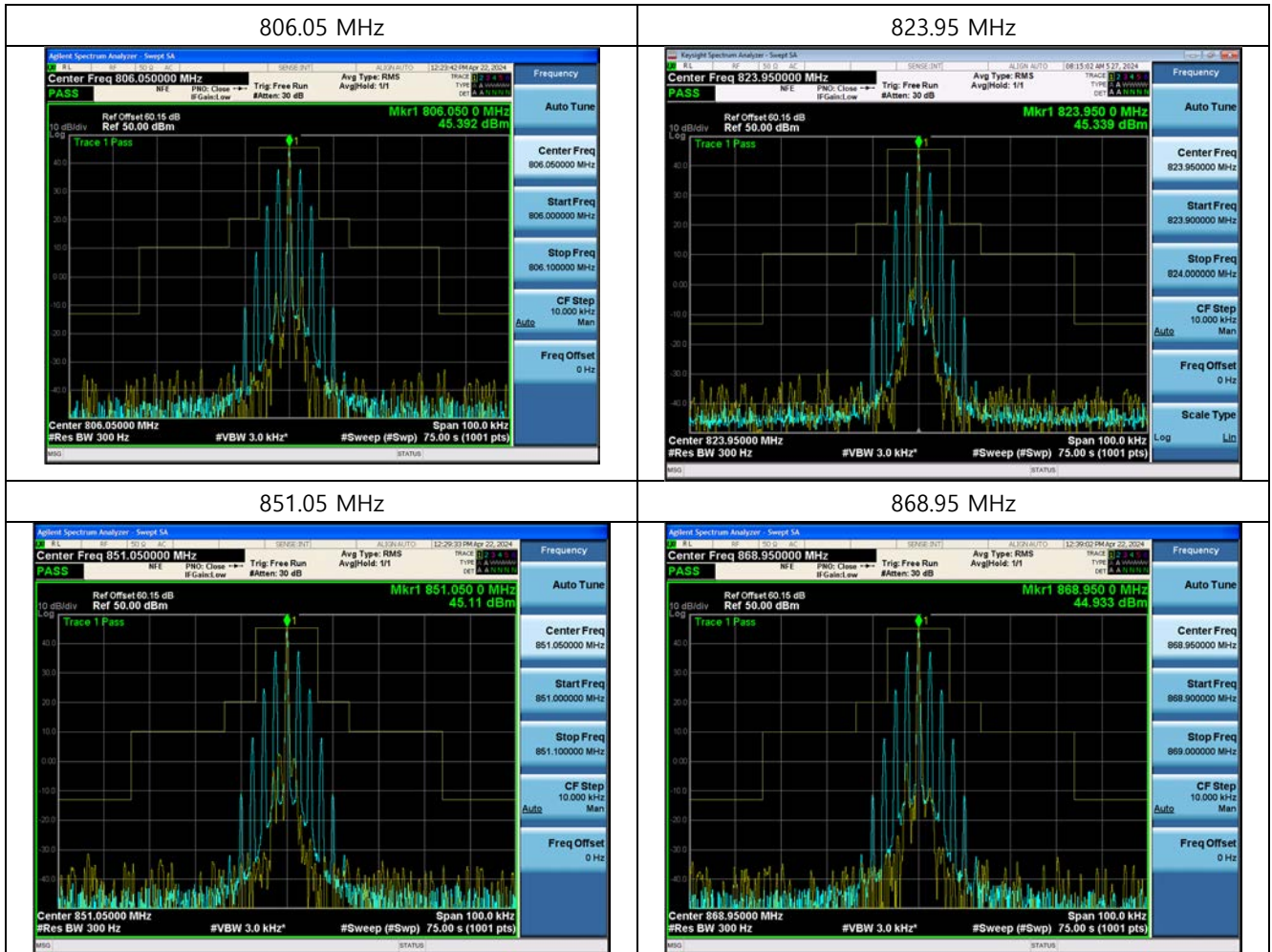


Type of emission: 11K0F3E

Emission Mask EA

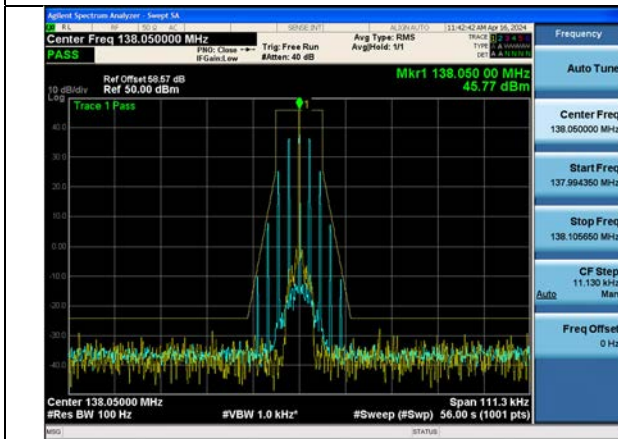


Emission Mask B

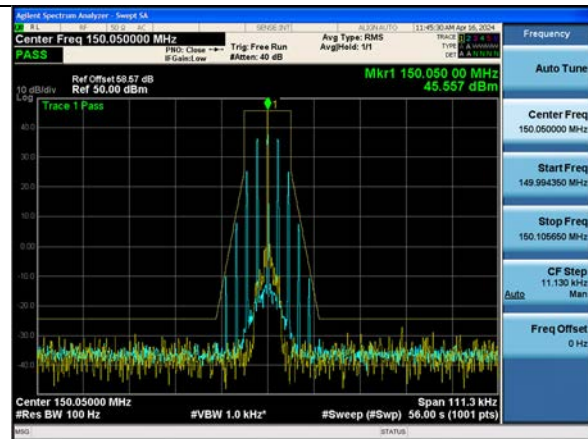


Emission Mask D

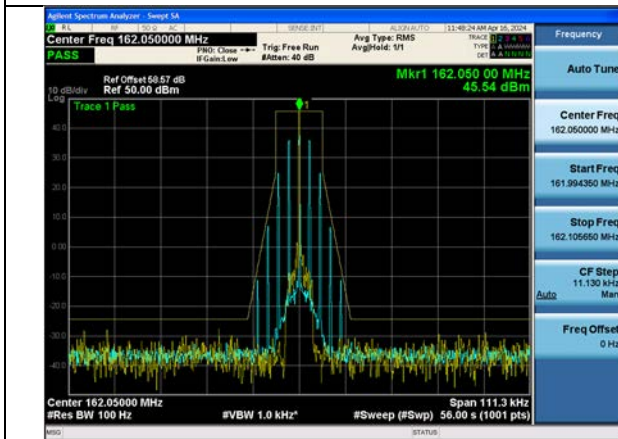
138.05 MHz



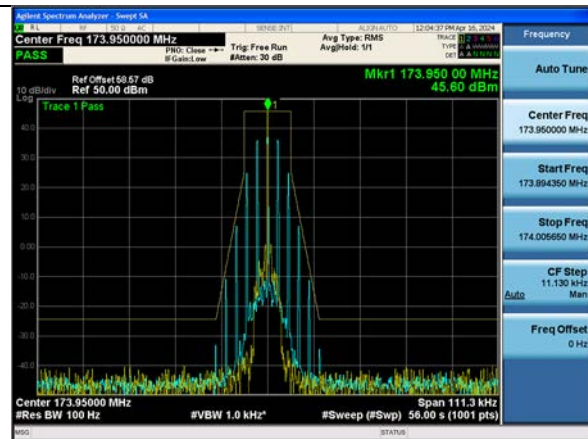
150.05 MHz



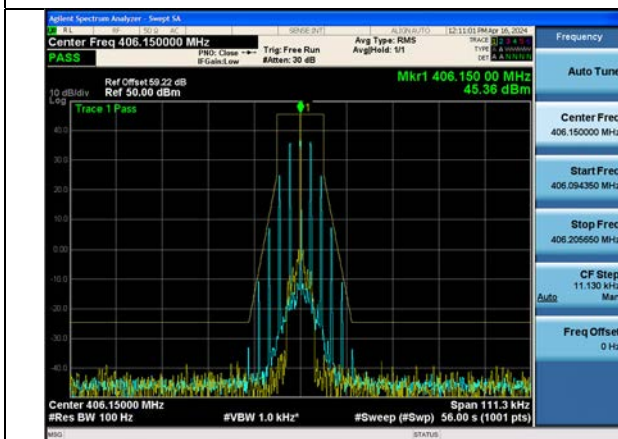
162.05 MHz



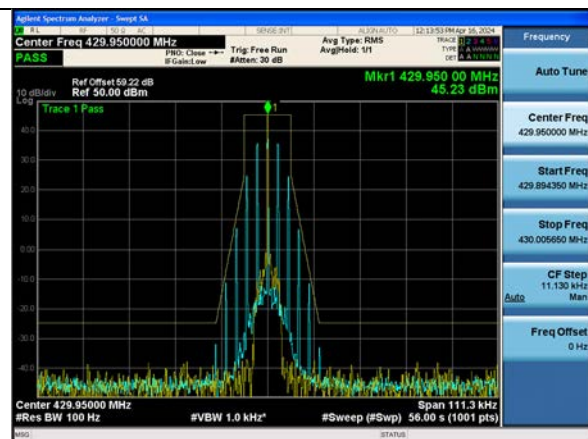
173.95 MHz



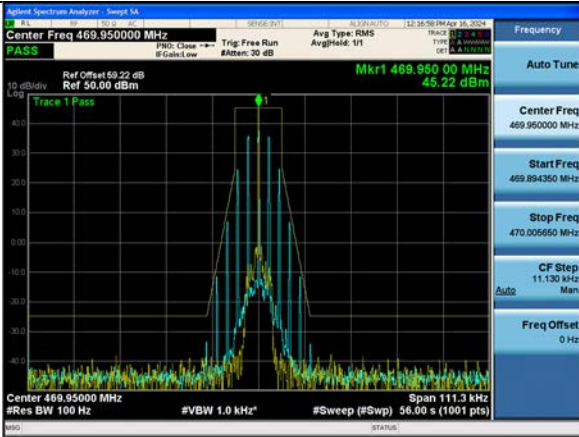
406.15 MHz



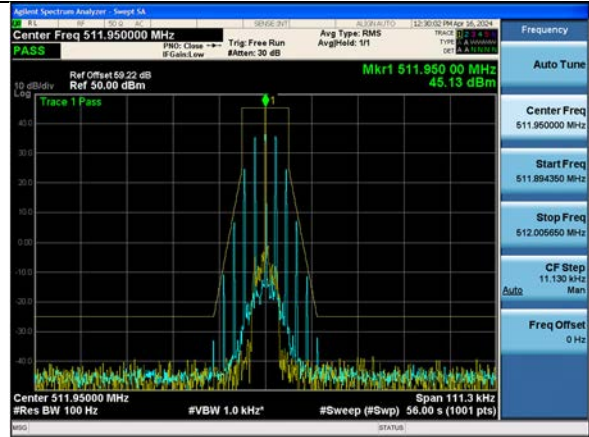
429.95 MHz



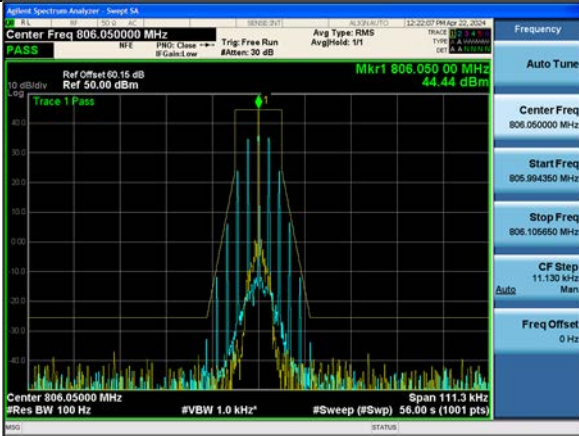
469.95 MHz



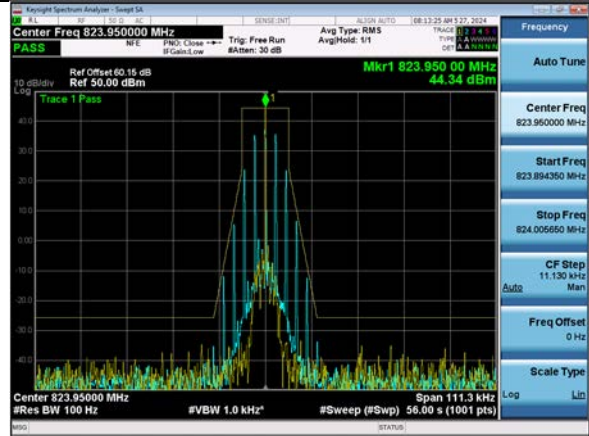
511.95 MHz



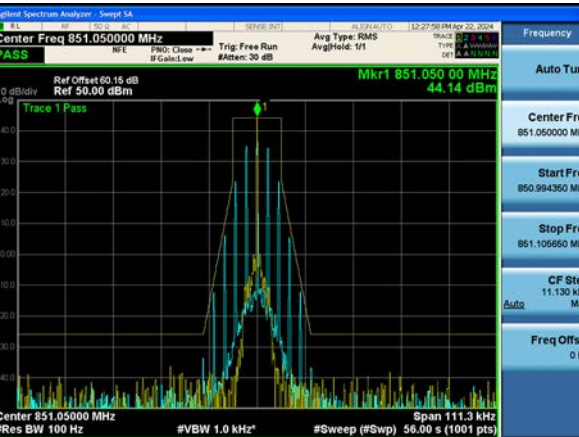
806.05 MHz



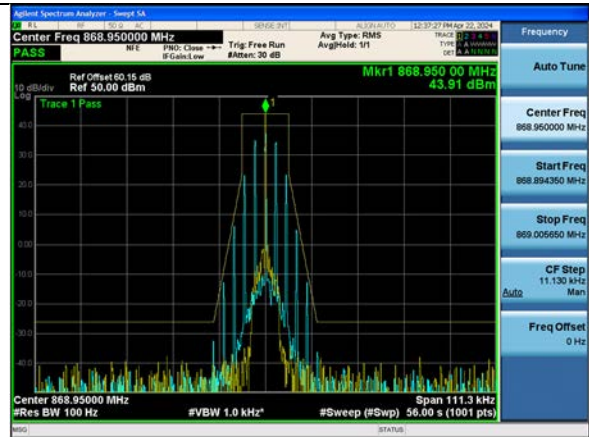
823.95 MHz



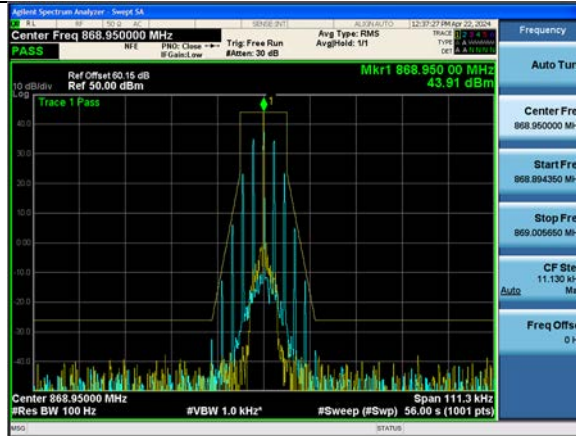
851.05 MHz



860.05 MHz

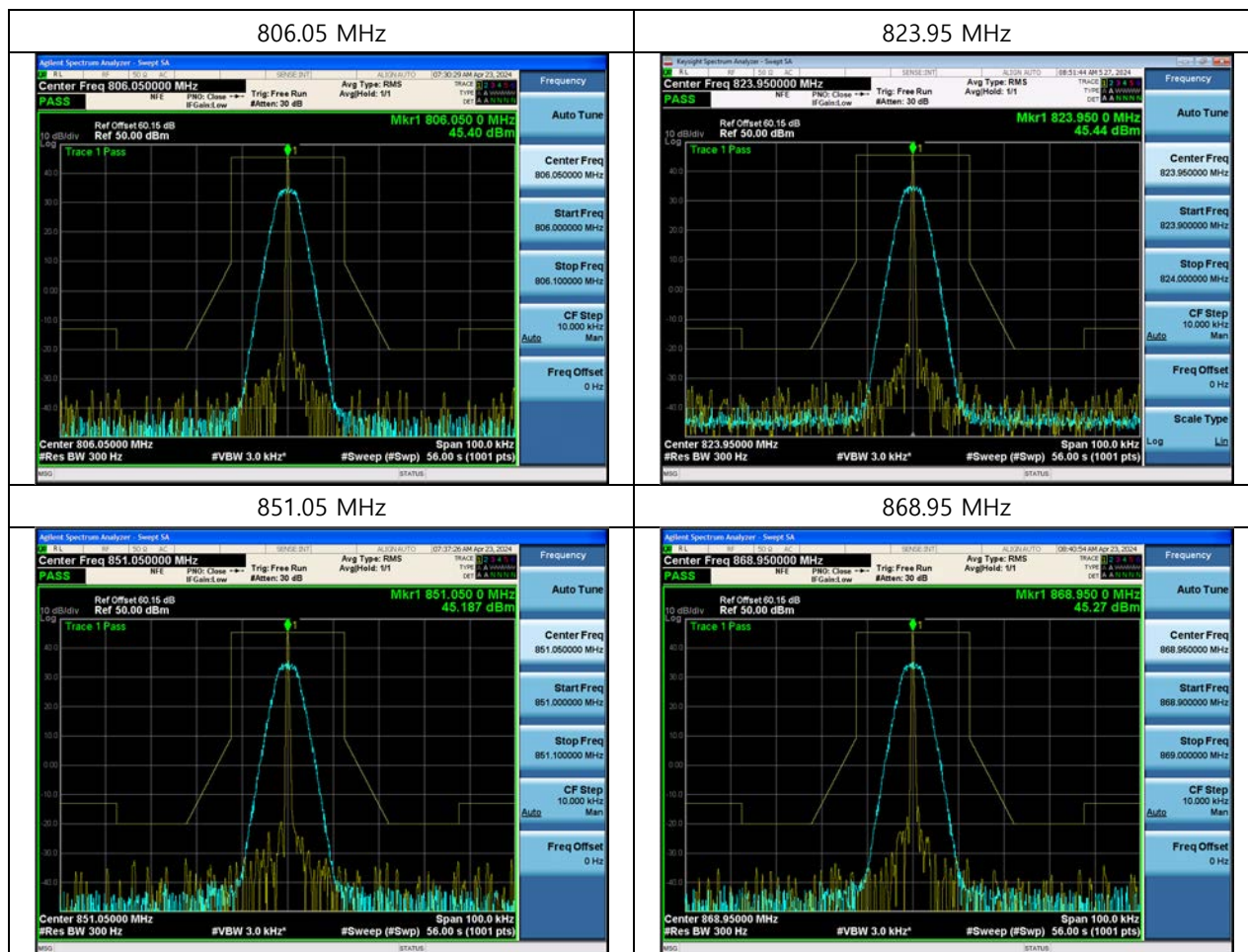


868.95 MHz



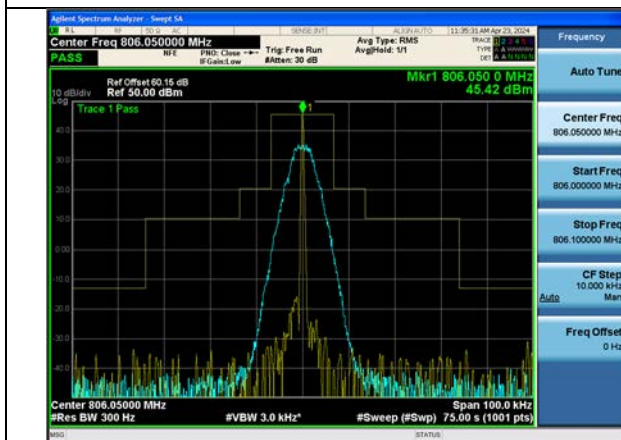
Type of emission: 8K30F1E, 8K30F1D, 8K30F7W

Emission Mask EA

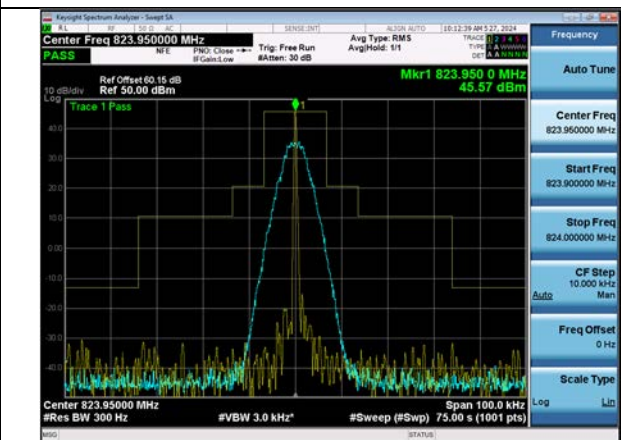


Emission Mask B

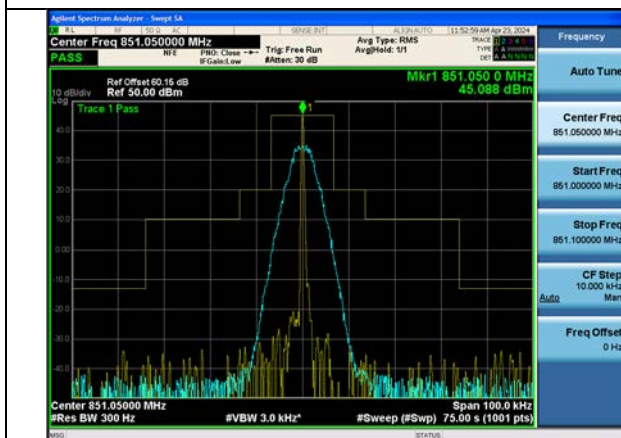
806.05 MHz



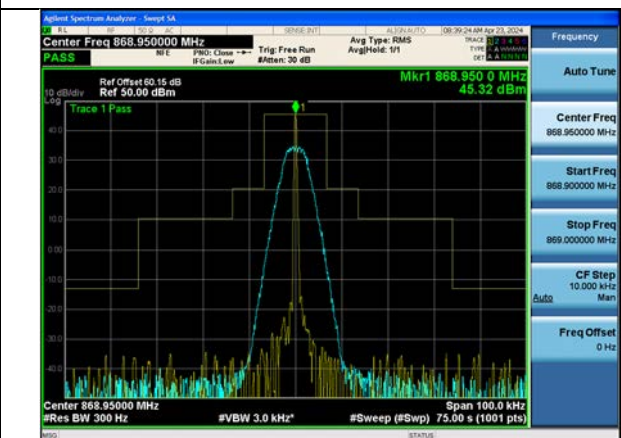
823.95 MHz



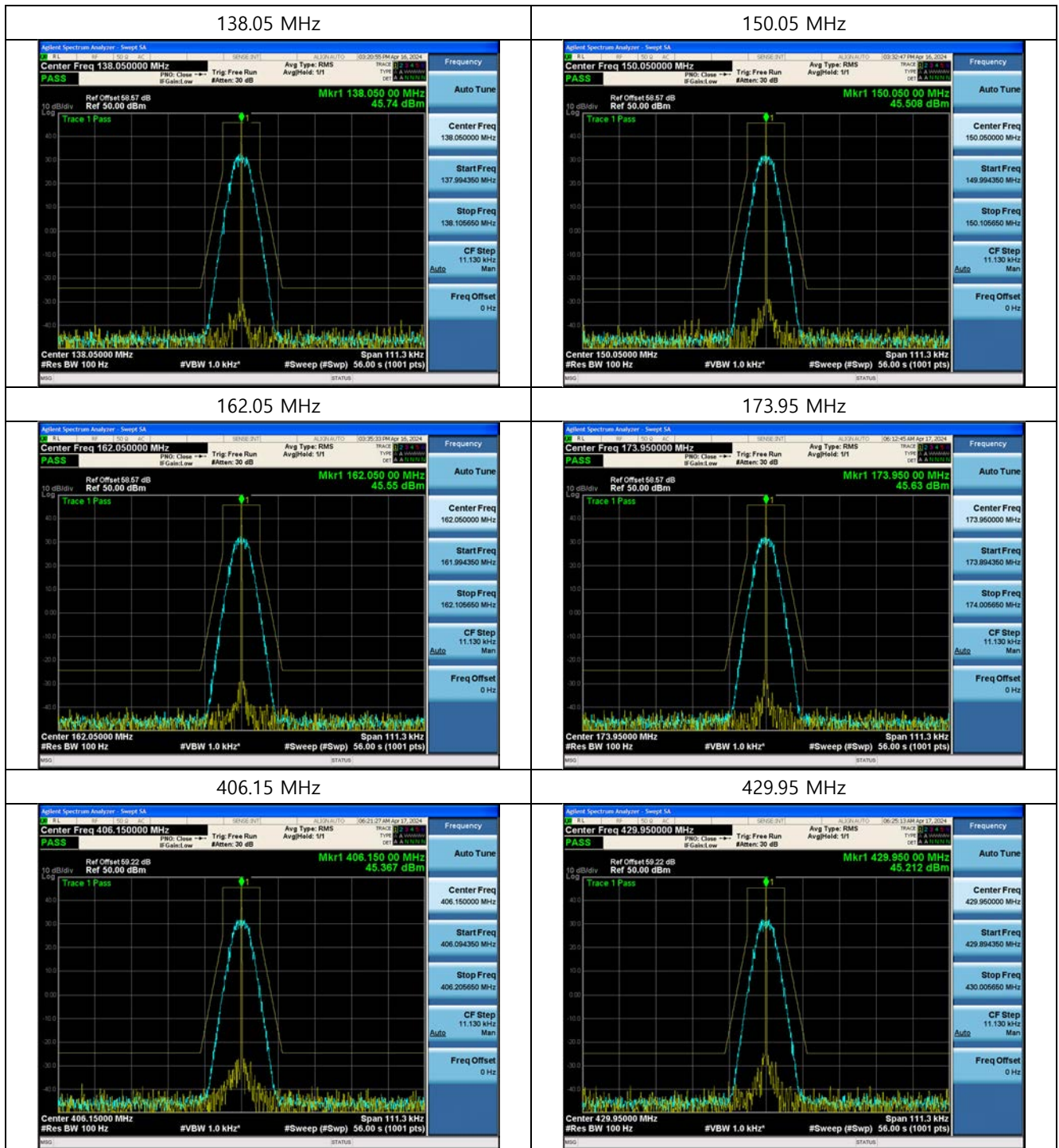
851.05 MHz



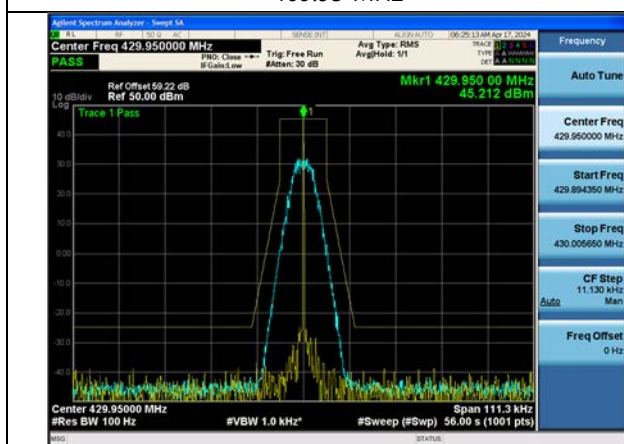
868.95 MHz



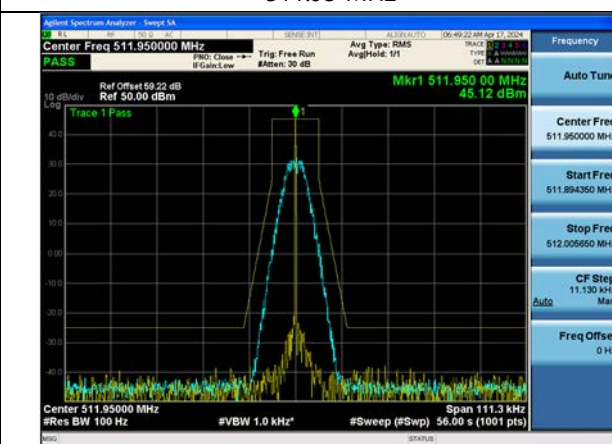
Emission Mask D



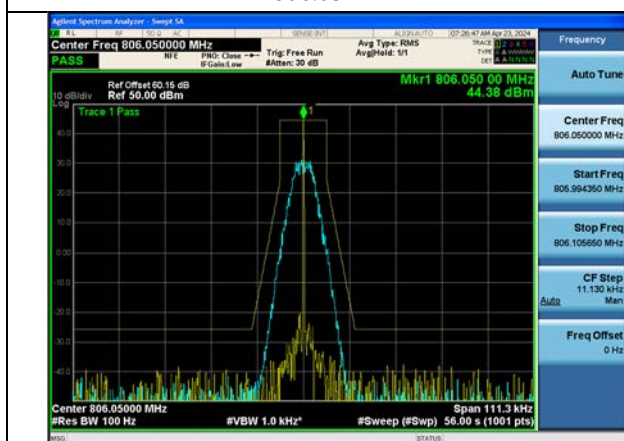
469.95 MHz



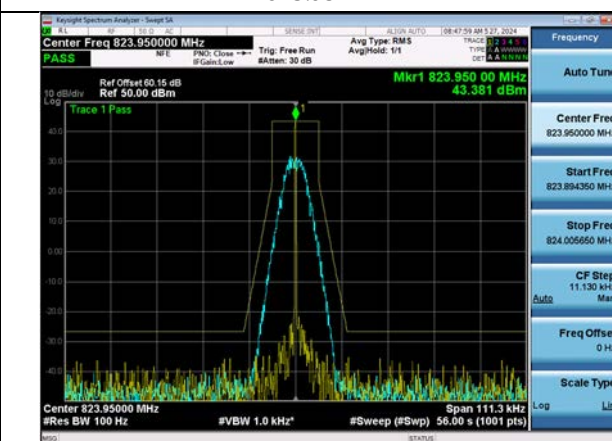
511.95 MHz



806.05 MHz



823.95 MHz



851.05 MHz

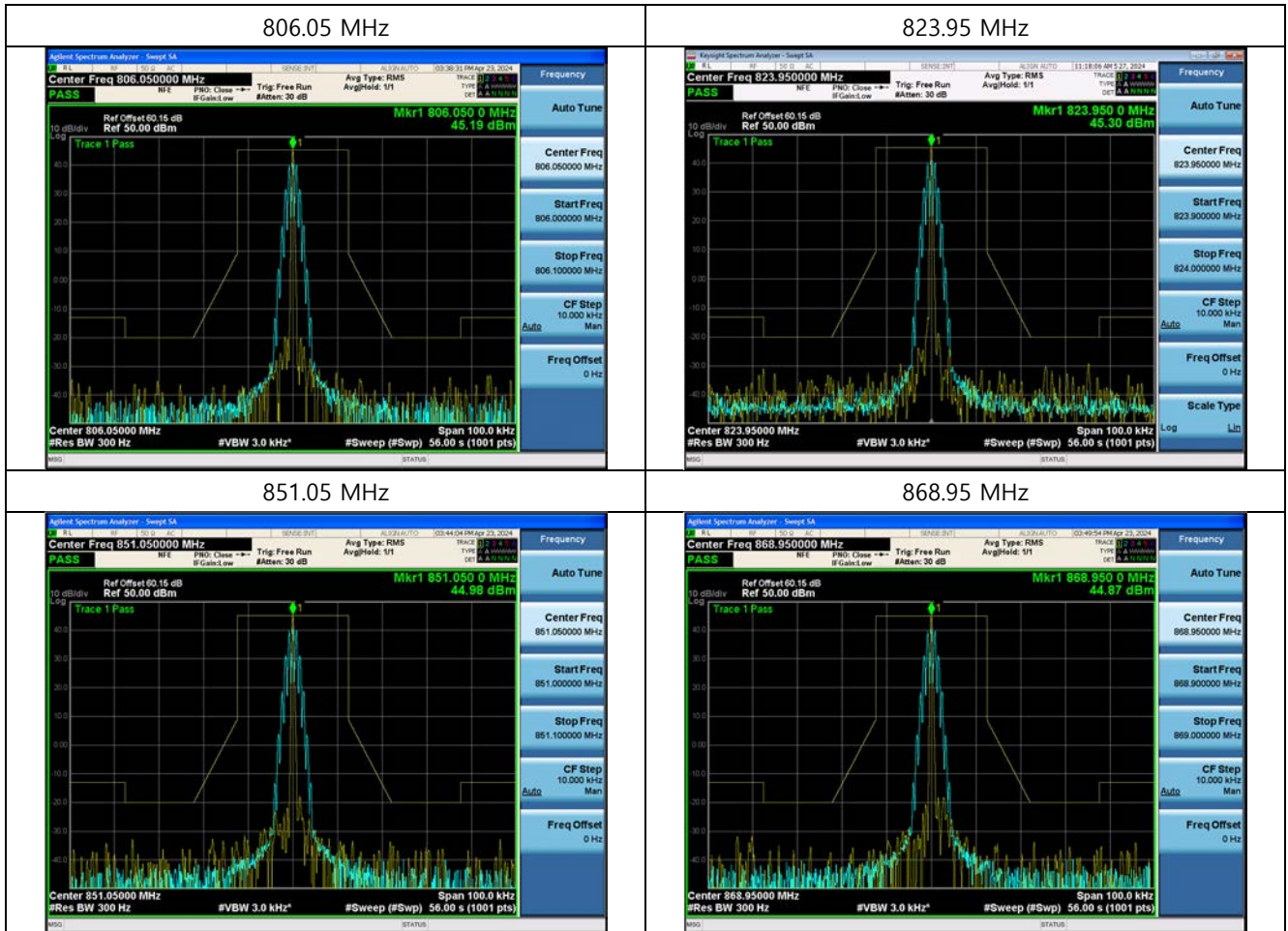


868.95 MHz



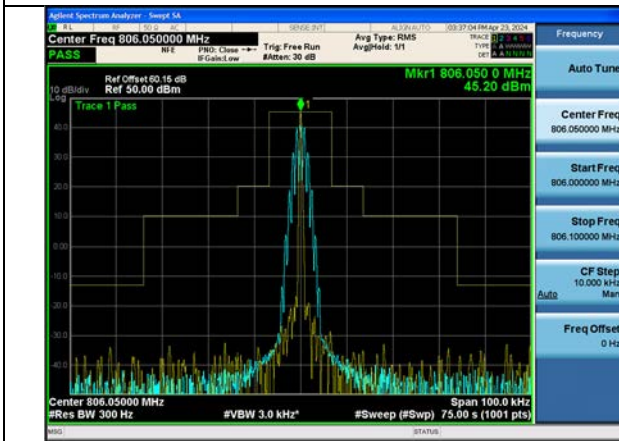
Type of emission: 4K00F2D

Emission Mask EA

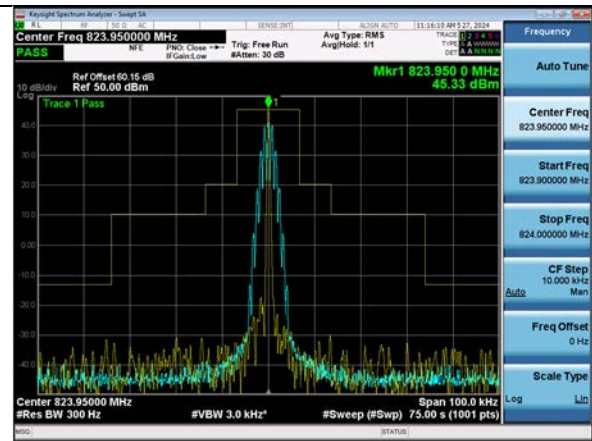


Emission Mask B

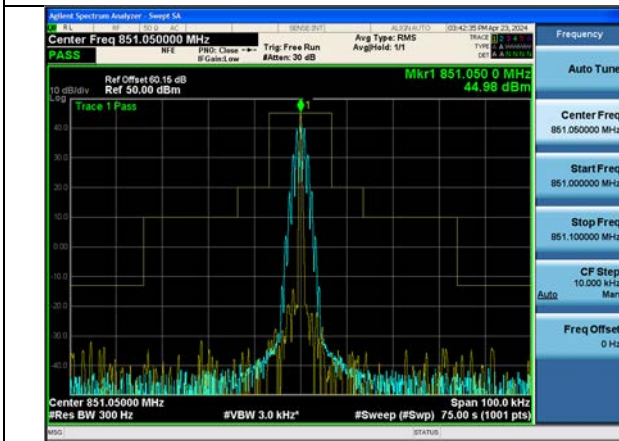
806.05 MHz



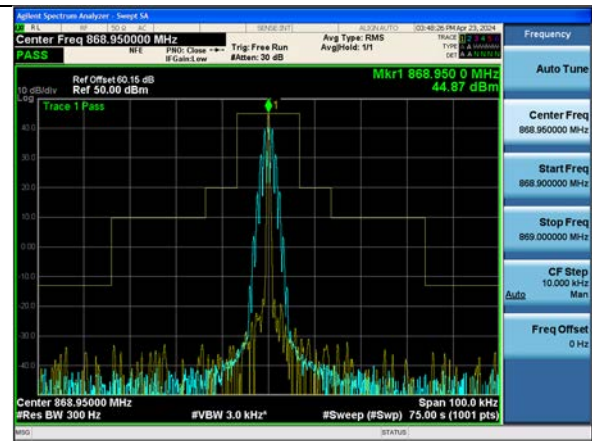
823.95 MHz



851.05 MHz

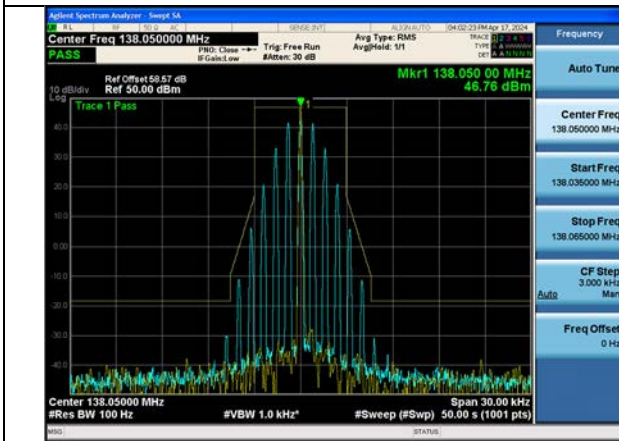


868.95 MHz

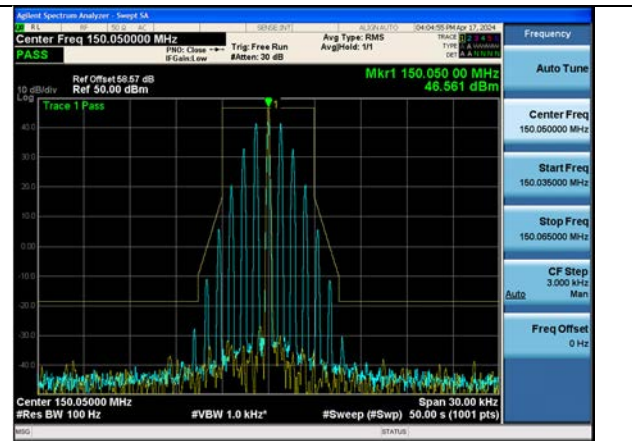


Emission Mask E

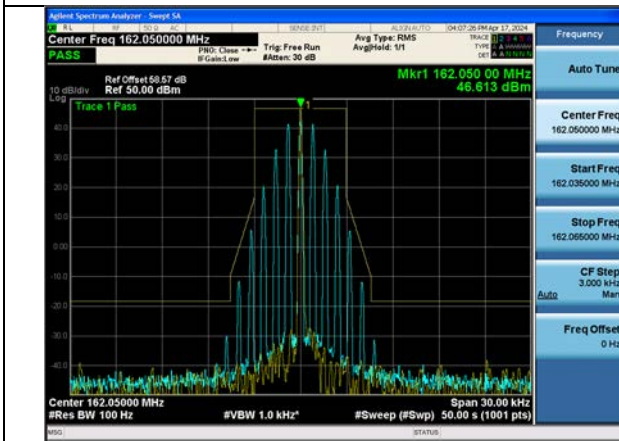
138.05 MHz



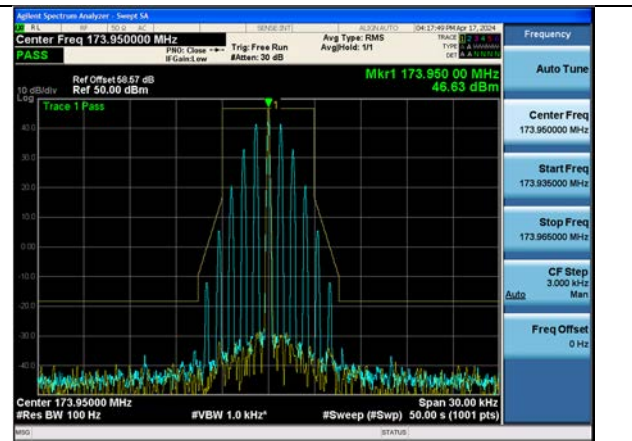
150.05 MHz



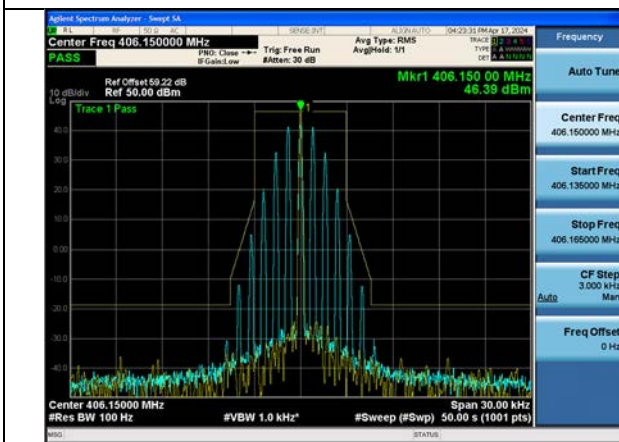
162.05 MHz



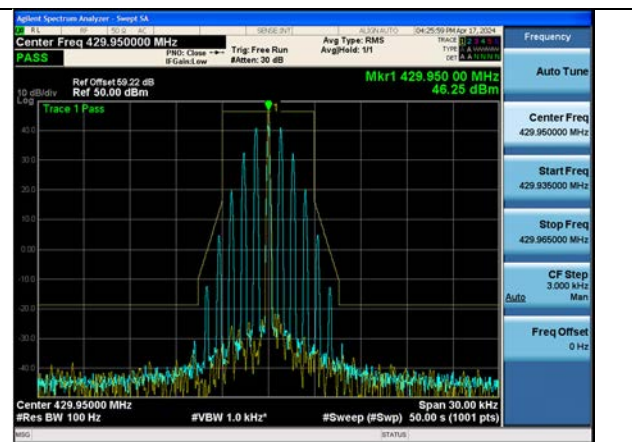
173.95 MHz



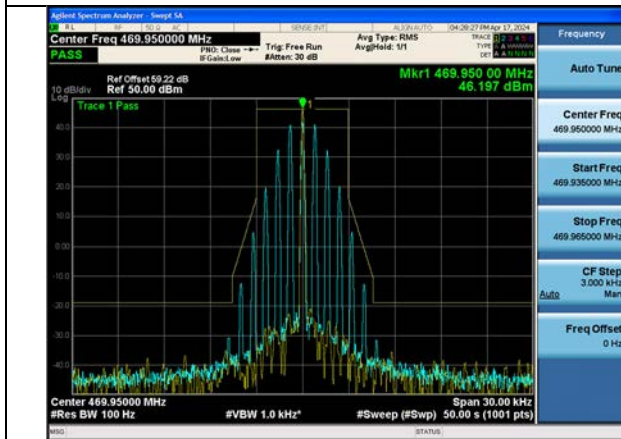
406.15 MHz



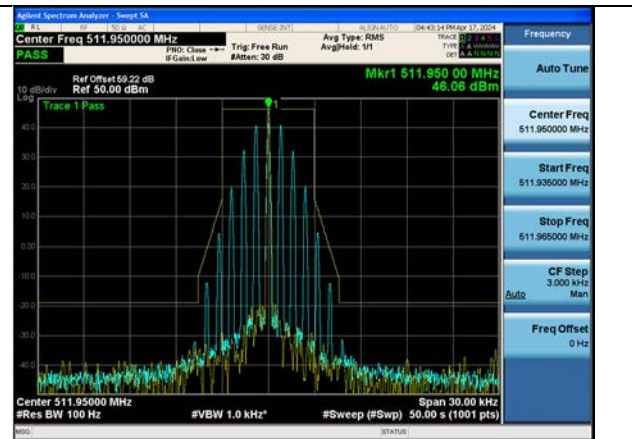
429.95 MHz



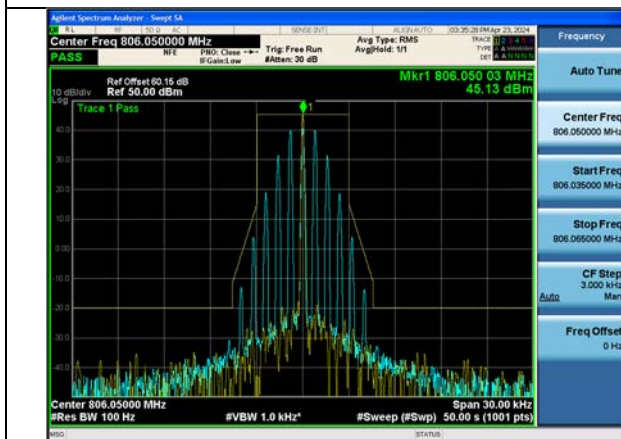
469.95 MHz



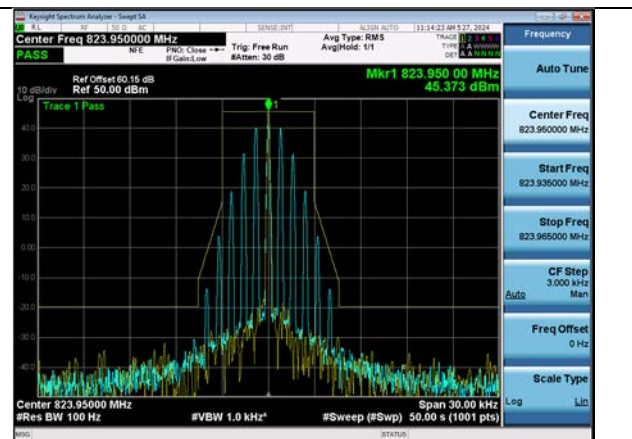
511.95 MHz



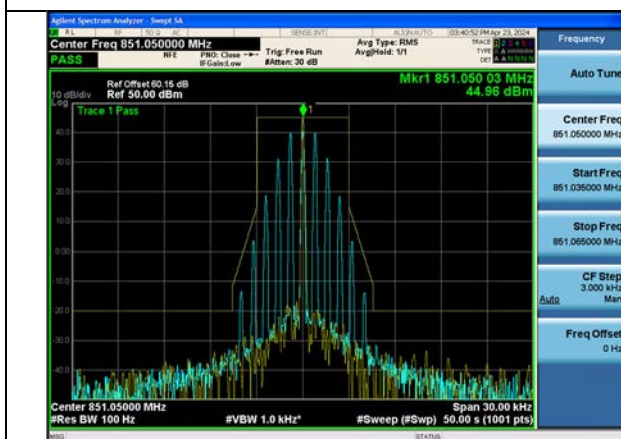
806.05 MHz



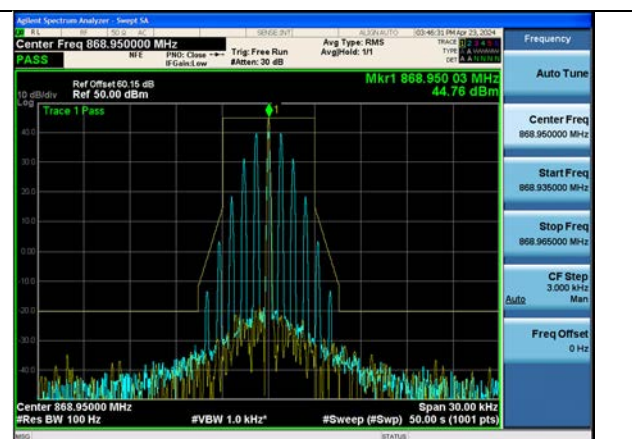
823.95 MHz



851.05 MHz



868.95 MHz

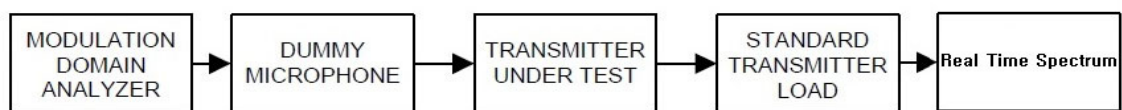


8.7 Transient Frequency Behavior

▣ Definition

Transient frequency behavior is a measure of the difference, as a function in time, of the actual transmitter frequency to the assigned transmitter frequency when the transmitted RF output power is switched on or off.

▣ TEST CONFIGURATION



■ TEST PROCEDURE

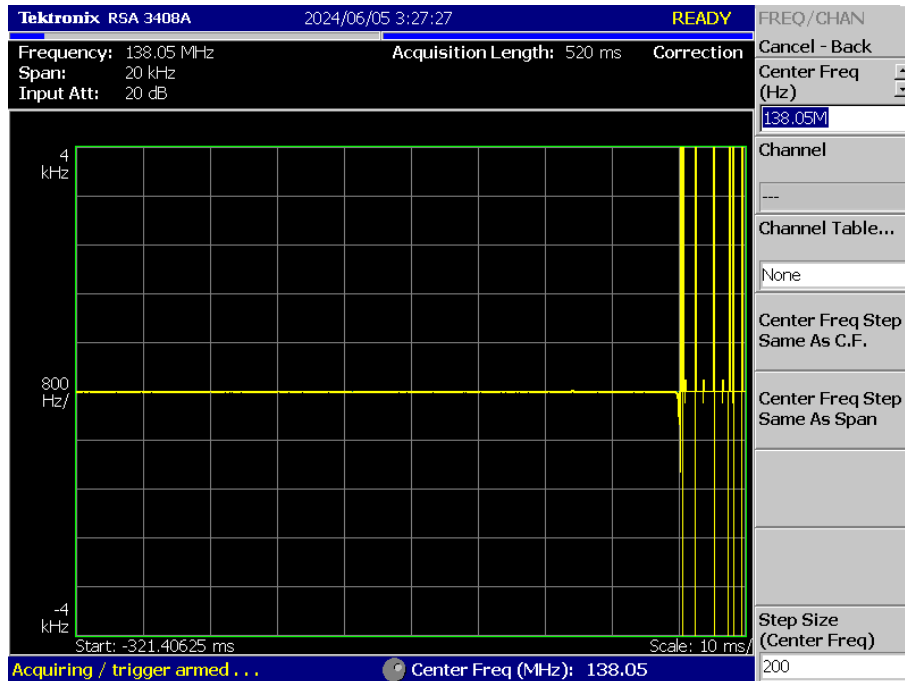
According to 2.2.19 in TIA-603-E Standard.

- a) Connect the equipment as illustrated.
- b) Connect the output of the standard transmitter load to the RF power meter.
Supply sufficient attenuation via the RF attenuator to provide a level that is approximately 40 dB below the maximum allowable input to the modulation domain analyzer.
- c) Unkey the transmitter.
- d) Disconnect the RF power meter and connect the modulation domain analyzer in its place.
Set the envelope trigger of the modulation domain analyzer to the minimum level that will trigger when the transmitter is keyed.
- e) Reduce the attenuation of the RF attenuator so that the input to the modulation domain analyzer is increased by 30 dB when the transmitter is keyed.
- f) Set the modulation domain analyzer to trigger on the rising edge of the waveform in order to capture a single-shot turn-on of the transmitter signal.
- g) Adjust the display of the modulation domain analyzer for proper viewing of the transmitter transient behavior. Set the time base reference to the left for observing the transmitter turn-on transient.
- h) Key the transmitter.
- i) Observe the stored display of the modulation domain analyzer.
The signal trace shall be maintained within the allowable limits during the periods t_1 and t_2 , and shall also remain within limits following t_2 .
- j) Adjust the modulation domain analyzer to trigger on the falling edge of the transmitter waveform in order to capture a single-shot turn-off transient of the transmitter signal.
- k) Adjust the display of the modulation domain analyzer for proper viewing of the transmitter transient behavior. Set the time base reference to the right for observing the transmitter turn-off transient.
- l) Unkey the transmitter.
- m) Observe the stored display of the modulation domain analyzer. The signal trace shall be maintained within the allowable limits during the period t_3 .

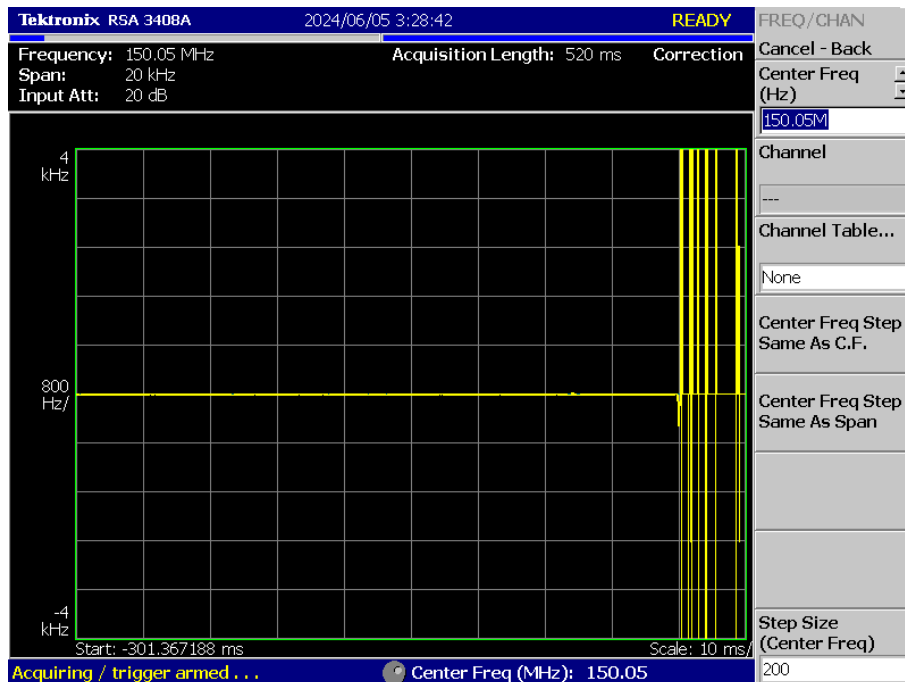
▣ Plots of Transient Frequency Behavior (PTT: ON → OFF)

Type of emission: 4K00F1E, 4K00F1D, 4K00F7W

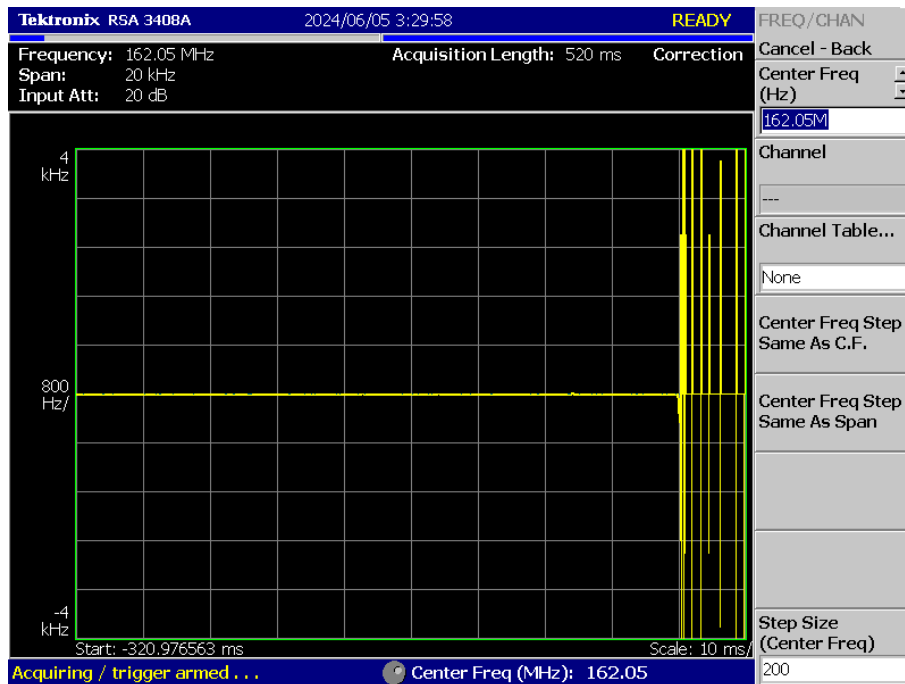
138.05 MHz



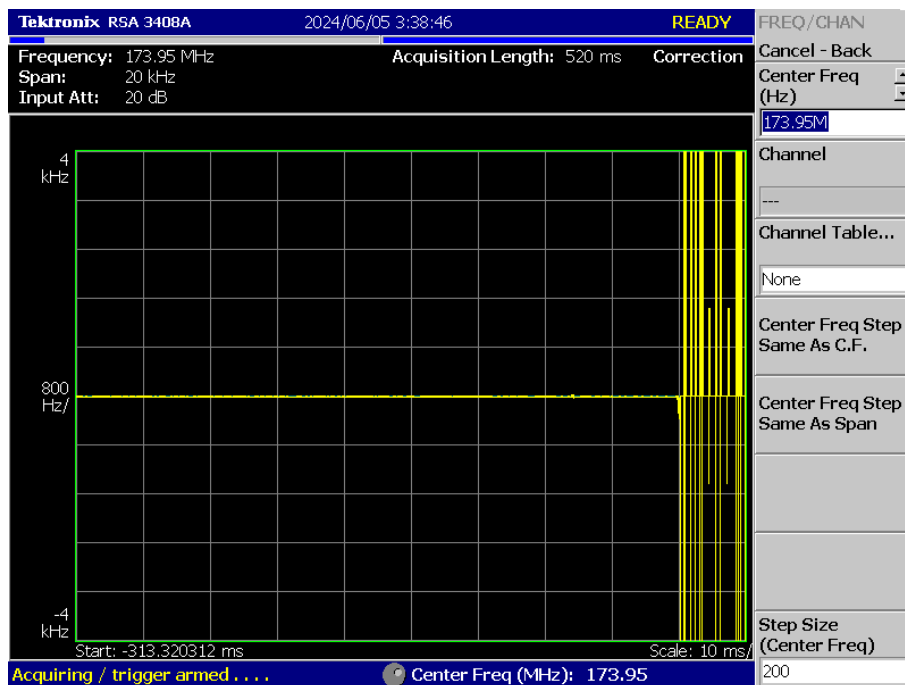
150.05 MHz



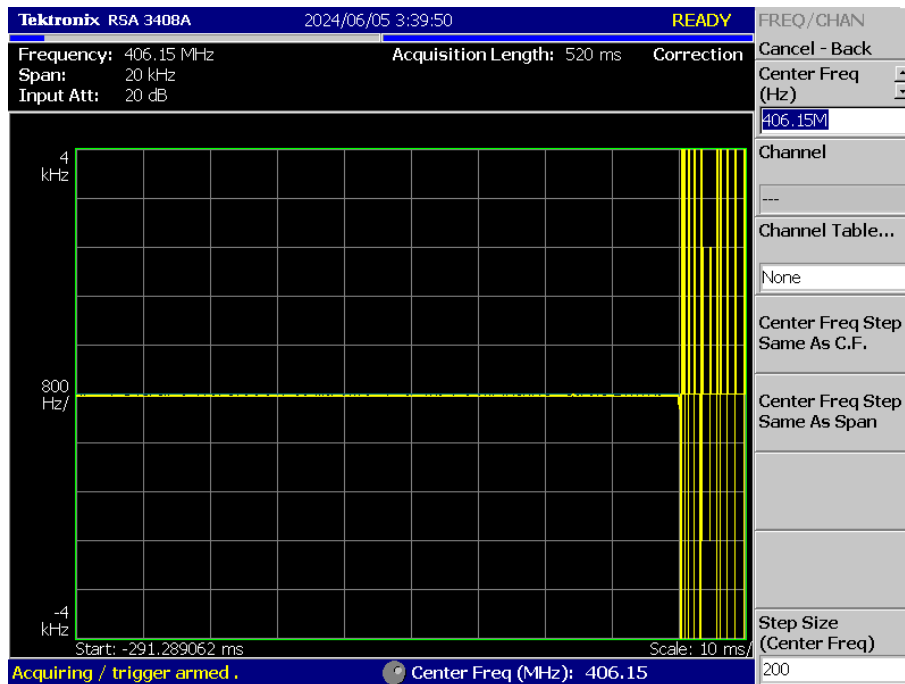
162.05 MHz



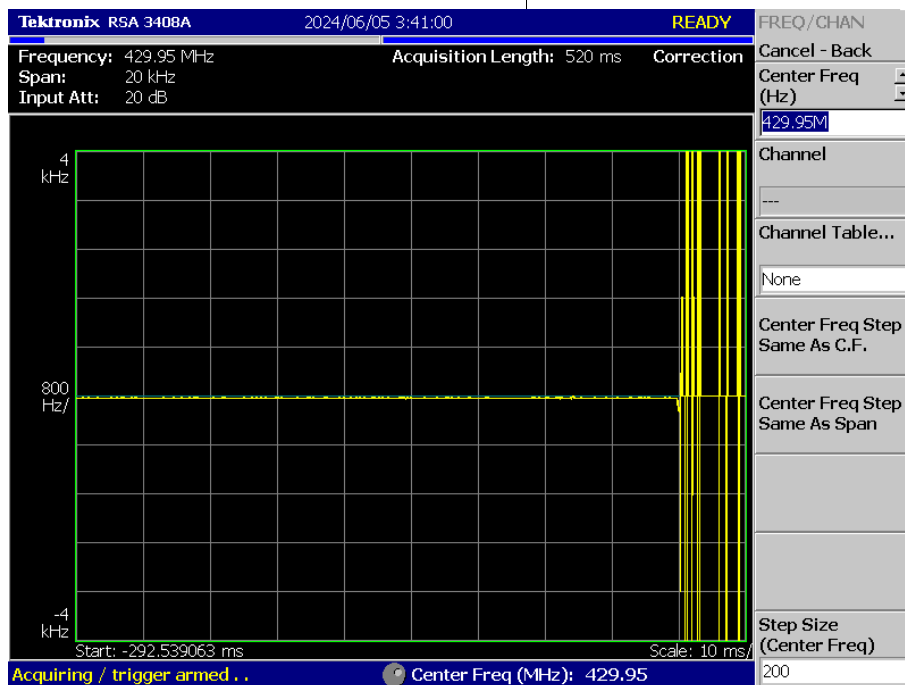
173.95 MHz



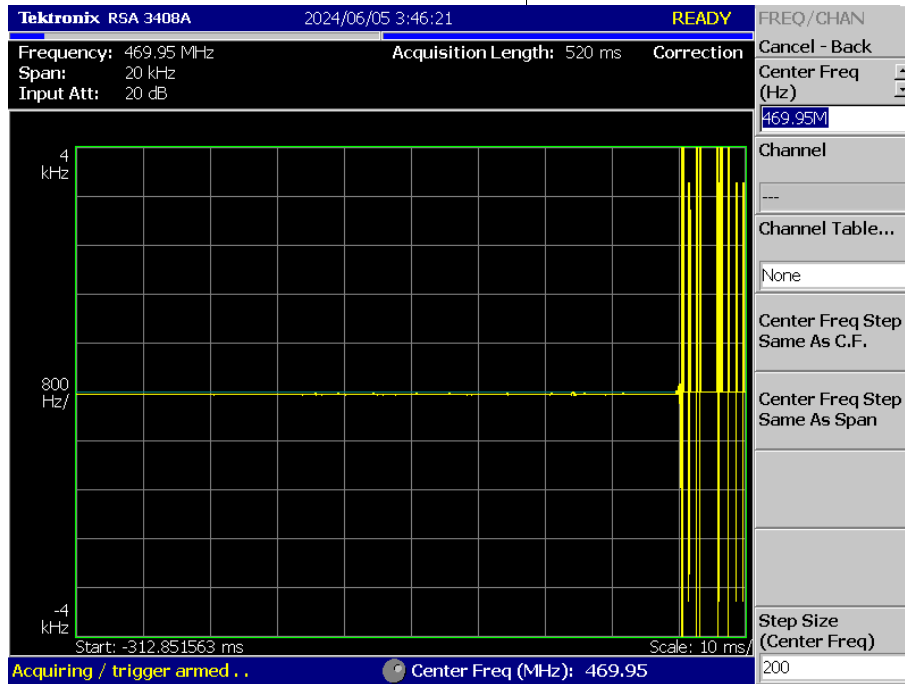
406.15 MHz



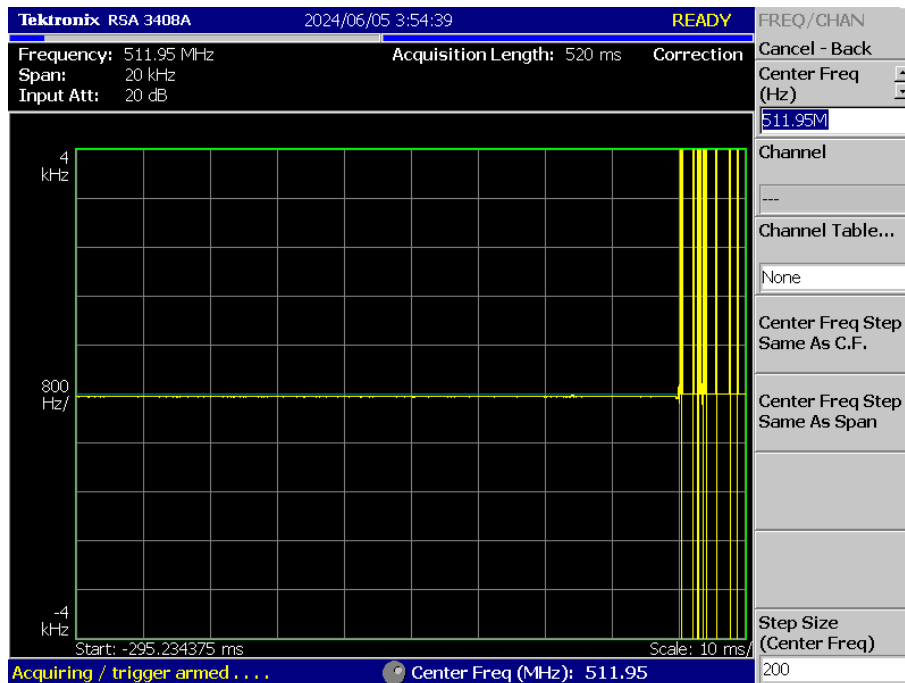
429.95 MHz



469.95 MHz

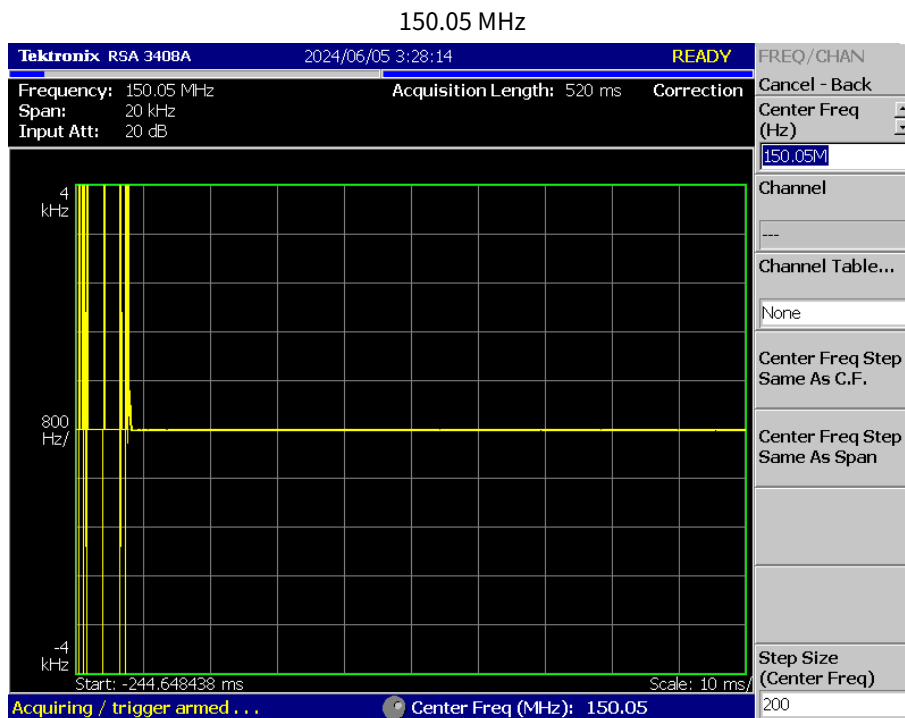
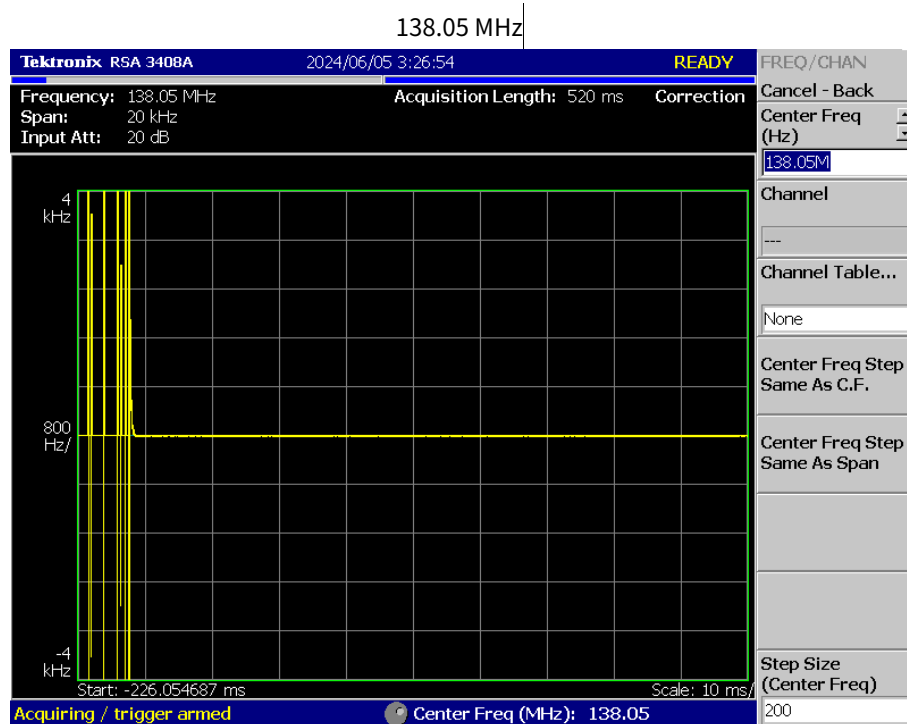


511.95 MHz

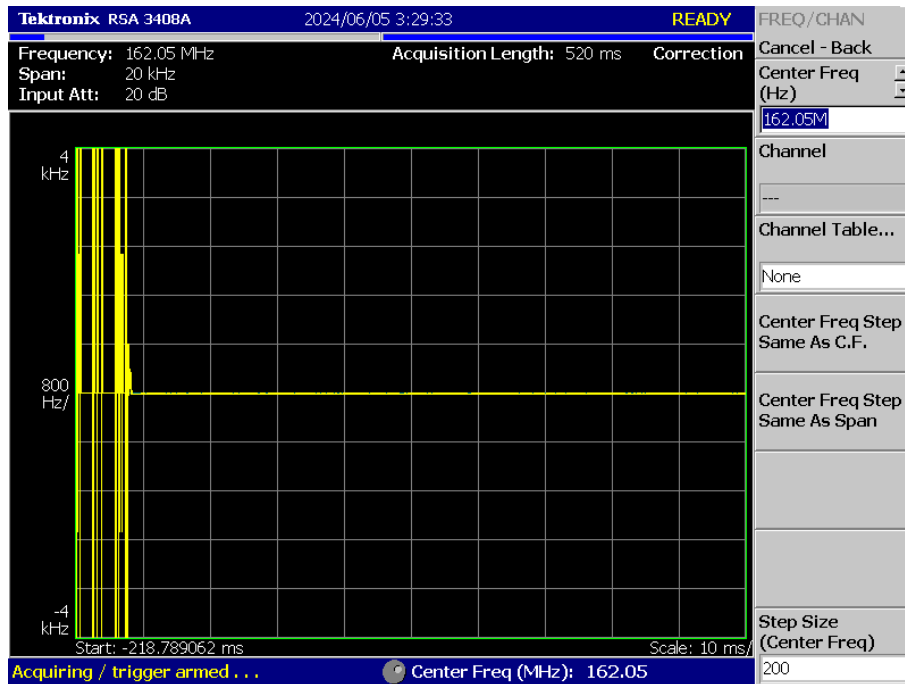


▣ Plots of Transient Frequency Behavior (PTT: OFF → ON)

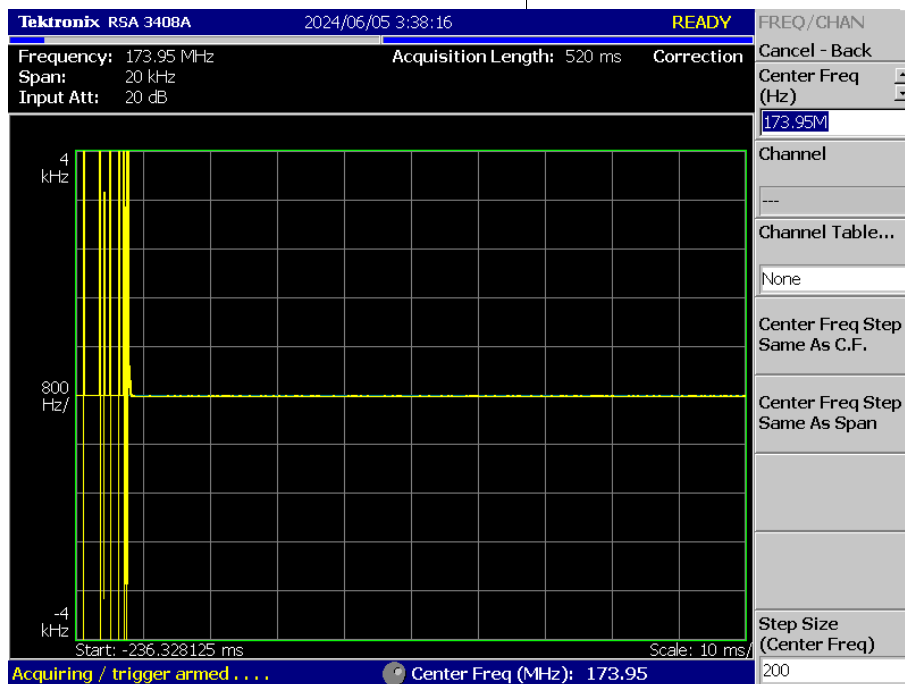
Type of emission: 4K00F1E, 4K00F1D, 4K00F7W



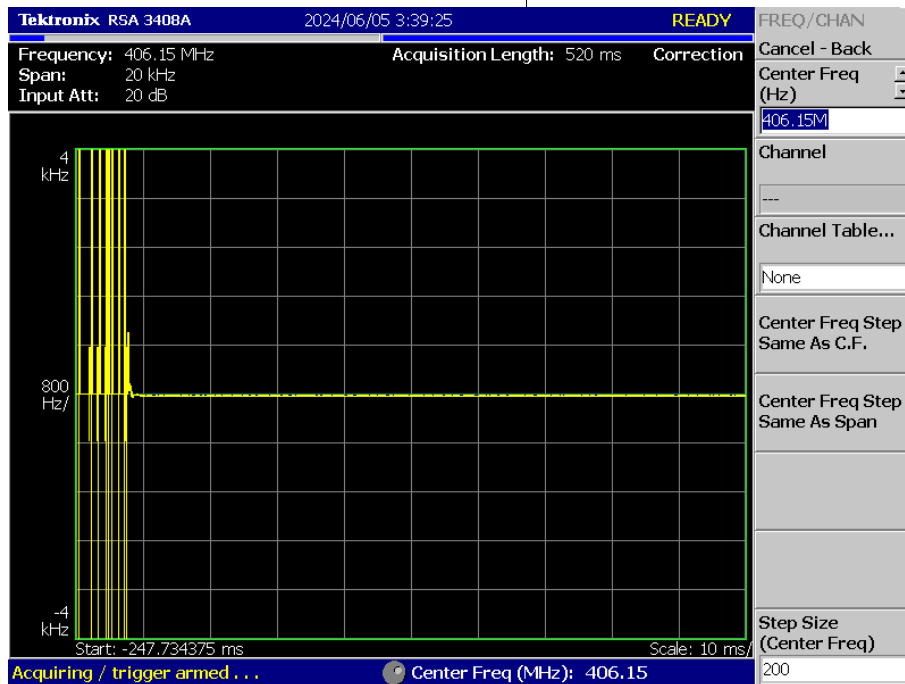
162.05 MHz



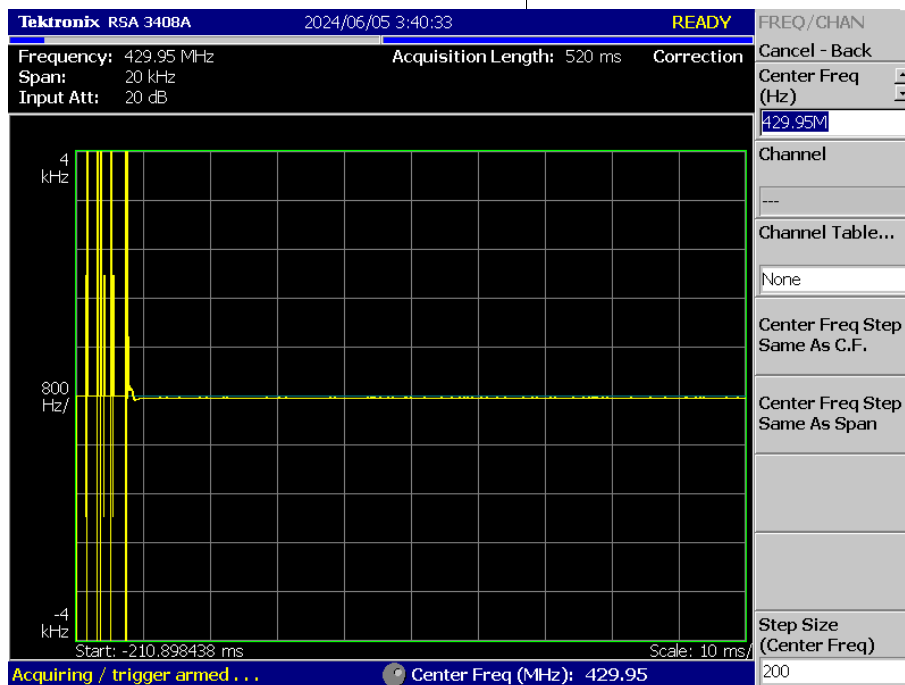
173.95 MHz



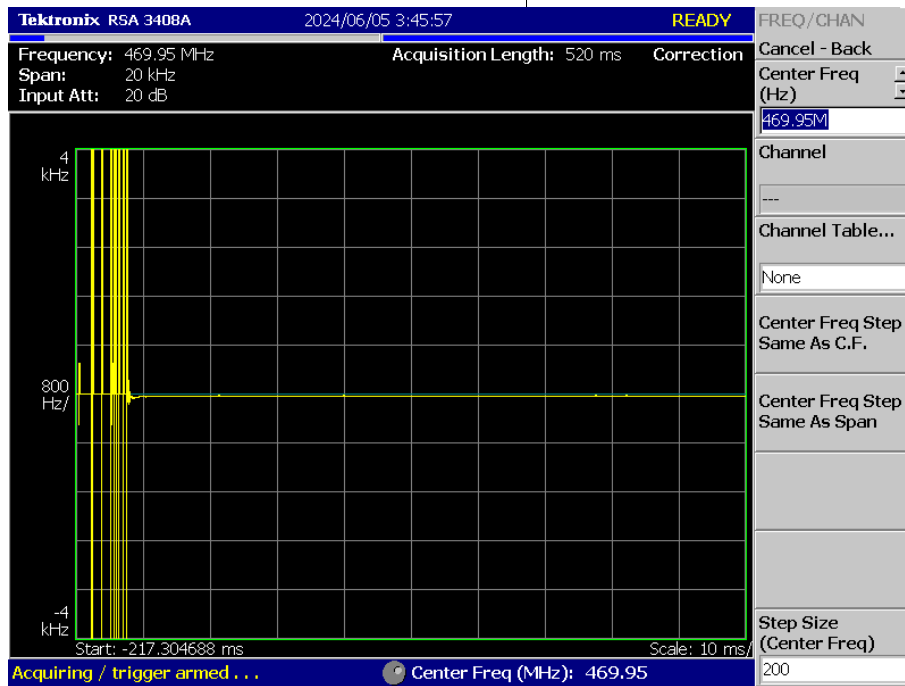
406.15 MHz



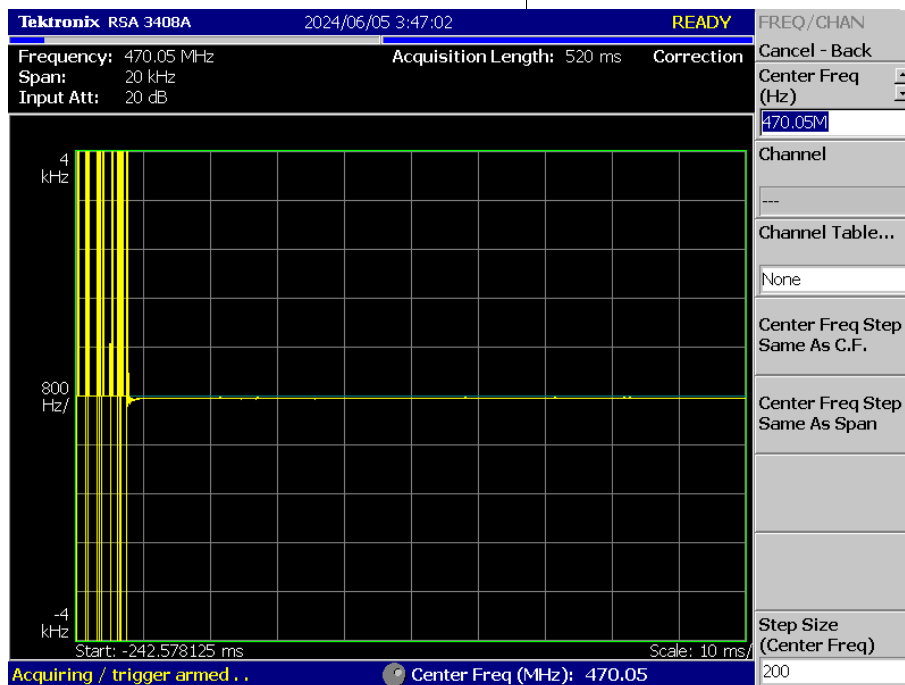
429.95 MHz



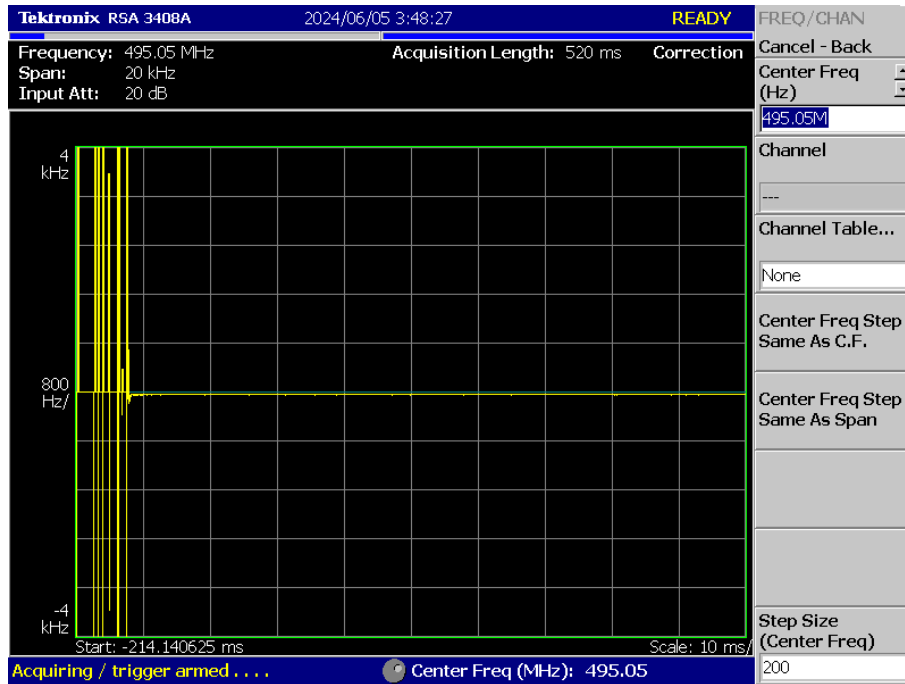
469.95 MHz



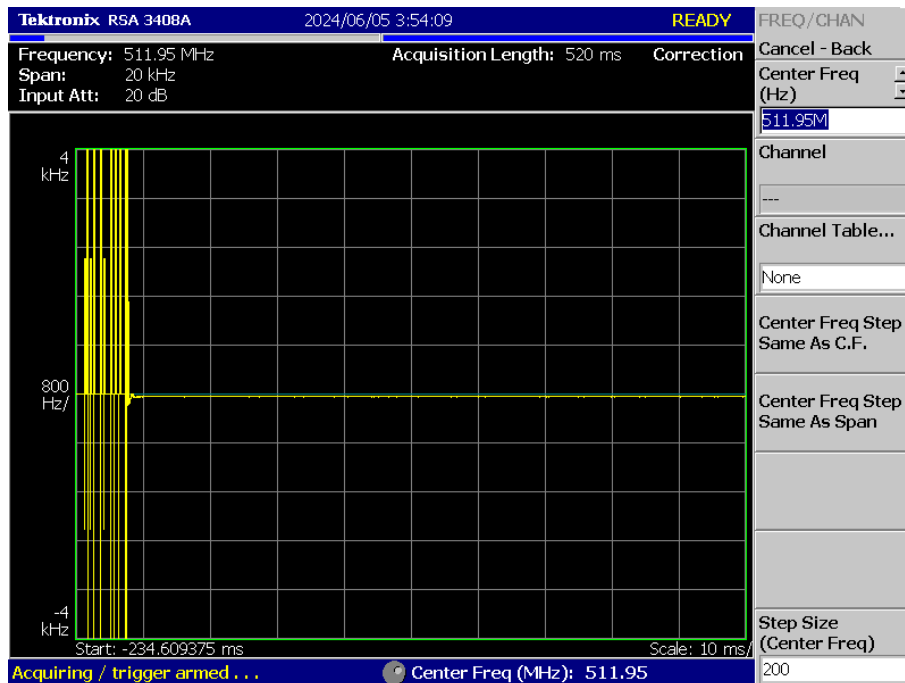
470.05 MHz



495.05 MHz



511.95 MHz

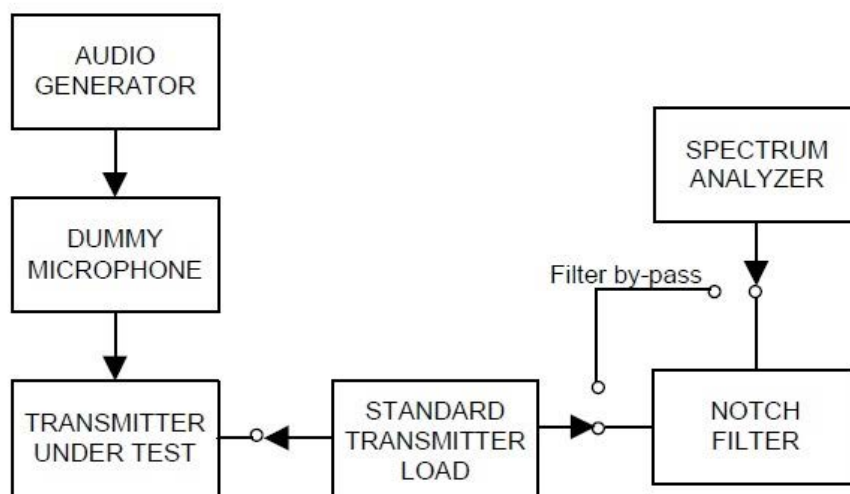


8.8 Unwanted Emissions : Conducted Spurious Emission

▣ Definition

Conducted spurious emissions are emissions at the antenna terminals on a frequency or frequencies that are outside a band sufficient to ensure transmission of information of required quality for the class of communication desired.

▣ TEST CONFIGURATION



■ TEST PROCEDURE

According to 2.2.13 in TIA-603-E Standard.

- a) Connect the equipment as illustrated, with the notch filter by-passed.
- b) Set the center frequency of the spectrum analyzer to the assigned transmitter frequency, key the transmitter, and set the level of the carrier to the full scale reference line.
- c) 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 modulation circuit.
- d) Adjust the spectrum analyzer for the following settings:
 - 1) Resolution Bandwidth = 10 kHz for spurious emissions below 1 GHz, and 1 MHz for spurious emissions above 1 GHz.
 - 2) Video Bandwidth ≥ 3 times the resolution bandwidth.
 - 3) Sweep Speed ≤ 2000 Hz per second.
 - 4) Detector Mode = mean or average power.
- e) Adjust the center frequency of the spectrum analyzer for incremental coverage of the range from:
 - 1) The lowest radio frequency generated in the equipment to the carrier frequency minus the test bandwidth (see 1.3.4.4).
 - 2) The carrier frequency plus the test bandwidth to a frequency less than 2 times the carrier frequency.
- f) Record the frequencies and levels of spurious emissions from step e).
- g) Unkey the transmitter. Replace the transmitter under test with the signal generator and adjust the signal level to reproduce the frequencies and levels of every spurious emission recorded in step f). Record the signal generator levels in dBm.
- h) Insert the notch filter.
- i) Adjust the spectrum analyzer for the following settings:
 - 1) Resolution Bandwidth = 10 kHz for spurious emissions below 1 GHz, and 1 MHz for spurious emissions above 1 GHz.
 - 2) Video Bandwidth ≥ 3 times the resolution bandwidth.
 - 3) Sweep Speed ≤ 2000 Hz per second.
 - 4) Detector Mode = mean or average power.
- j) Key the transmitter. Adjust the center frequency of the spectrum analyzer for incremental coverage of the range from a frequency equal to 2 times the carrier frequency and to the tenth harmonic of the carrier frequency.

TEST RESULTS

Type of emission: 16K0F3E

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
138.05	0.01	-43.587	-13.000	30.587
	0.19	-35.079	-13.000	22.079
	942.76	-36.340	-13.000	23.340
	3680.78	-24.973	-13.000	11.973
150.05	0.01	-42.646	-13.000	29.646
	0.19	-34.131	-13.000	21.131
	689.67	-35.634	-13.000	22.634
	3666.83	-24.747	-13.000	11.747
162.05	0.03	-43.933	-13.000	30.933
	0.19	-33.929	-13.000	20.929
	797.15	-36.799	-13.000	23.799
	3652.43	-24.943	-13.000	11.943
173.95	0.01	-45.182	-13.000	32.182
	0.19	-33.483	-13.000	20.483
	876.89	-36.067	-13.000	23.067
	3704.64	-25.692	-13.000	12.692
406.15	0.03	-43.224	-13.000	30.224
	0.19	-32.307	-13.000	19.307
	765.82	-35.153	-13.000	22.153
	3739.29	-24.831	-13.000	11.831
429.95	0.01	-42.976	-13.000	29.976
	0.19	-32.620	-13.000	19.620
	859.92	-34.088	-13.000	21.088
	5993.00	-24.957	-13.000	11.957
469.95	0.03	-43.034	-13.000	30.034
	0.19	-33.739	-13.000	20.739
	909.68	-35.131	-13.000	22.131
	3717.24	-24.839	-13.000	11.839
470.05	0.01	-42.851	-13.000	29.851
	0.19	-29.029	-13.000	16.029
	882.33	-35.090	-13.000	22.090
	3698.33	-30.946	-13.000	17.946

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
495.05	0.01	-43.686	-13.000	30.686
	0.19	-28.884	-13.000	15.884
	798.51	-35.228	-13.000	22.228
	3744.69	-30.336	-13.000	17.336
511.95	0.01	-44.435	-13.000	31.435
	0.19	-29.164	-13.000	16.164
	780.86	-35.384	-13.000	22.384
	3725.79	-30.778	-13.000	17.778
768.05	0.03	-41.397	-13.000	28.397
	0.19	-22.282	-13.000	9.282
	921.91	-35.080	-13.000	22.080
	3742.89	-30.768	-13.000	17.768
769.05	0.03	-41.752	-13.000	28.752
	0.19	-22.607	-13.000	9.607
	898.92	-34.935	-13.000	21.935
	3694.28	-30.651	-13.000	17.651
774.95	0.01	-44.586	-13.000	31.586
	0.19	-32.570	-13.000	19.570
	876.70	-40.212	-13.000	27.212
	1549.93	-30.287	-13.000	17.287
775.95	0.01	-38.866	-13.000	25.866
	0.19	-32.668	-13.000	19.668
	392.82	-40.448	-13.000	27.448
	1551.73	-30.316	-13.000	17.316
798.05	0.03	-41.344	-13.000	28.344
	0.19	-22.466	-13.000	9.466
	922.59	-34.617	-13.000	21.617
	3665.93	-29.942	-13.000	16.942
799.05	0.01	-39.826	-13.000	26.826
	0.19	-32.568	-13.000	19.568
	873.40	-39.965	-13.000	26.965
	1598.08	-27.974	-13.000	14.974
804.95	0.06	-41.307	-13.000	28.307
	0.19	-22.438	-13.000	9.438
	843.62	-34.262	-13.000	21.262
	3701.49	-30.724	-13.000	17.724

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
805.95	0.03	-41.086	-13.000	28.086
	0.19	-22.268	-13.000	9.268
	910.95	-33.831	-13.000	20.831
	3710.94	-30.336	-13.000	17.336
806.05	0.01	-41.542	-13.000	28.542
	0.19	-40.972	-13.000	27.972
	926.56	-33.782	-13.000	20.782
	1612.03	-29.125	-13.000	16.125
823.95	0.03	-41.273	-13.000	28.273
	0.19	-28.381	-13.000	15.381
	376.81	-39.945	-13.000	26.945
	1648.03	-26.655	-13.000	13.655
851.05	0.01	-41.656	-13.000	28.656
	0.19	-41.297	-13.000	28.297
	466.74	-34.899	-13.000	21.899
	1702.04	-29.744	-13.000	16.744
868.95	0.01	-40.611	-13.000	27.611
	0.19	-42.461	-13.000	29.461
	911.04	-35.003	-13.000	22.003
	7546.48	-30.452	-13.000	17.452

Type of emission: 14K0F3E

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
768.05	0.06	-41.411	-13.000	28.411
	0.19	-22.688	-13.000	9.688
	728.37	-35.208	-13.000	22.208
	3687.98	-30.853	-13.000	17.853
769.05	0.06	-41.907	-13.000	28.907
	0.19	-22.503	-13.000	9.503
	891.83	-34.991	-13.000	21.991
	3728.49	-29.432	-13.000	16.432
774.95	0.01	-39.475	-13.000	26.475
	0.19	-33.103	-13.000	20.103
	955.86	-39.372	-13.000	26.372
	1549.93	-30.051	-13.000	17.051
775.95	0.03	-42.590	-13.000	29.590
	0.19	-31.867	-13.000	18.867
	907.06	-39.707	-13.000	26.707
	1551.73	-30.825	-13.000	17.825
798.05	0.06	-41.795	-13.000	28.795
	0.19	-22.209	-13.000	9.209
	910.07	-35.318	-13.000	22.318
	3697.88	-30.286	-13.000	17.286
799.05	0.01	-39.588	-13.000	26.588
	0.19	-32.260	-13.000	19.260
	896.39	-39.920	-13.000	26.920
	1598.08	-28.485	-13.000	15.485
804.95	0.06	-41.256	-13.000	28.256
	0.19	-22.192	-13.000	9.192
	863.02	-33.736	-13.000	20.736
	6952.90	-30.501	-13.000	17.501

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
805.95	0.01	-40.580	-13.000	27.580
	0.19	-22.321	-13.000	9.321
	758.35	-34.780	-13.000	21.780
	3635.33	-30.405	-13.000	17.405
806.05	0.01	-40.905	-13.000	27.905
	0.19	-41.481	-13.000	28.481
	753.40	-35.217	-13.000	22.217
	3698.33	-30.424	-13.000	17.424
823.95	0.01	-41.118	-13.000	28.118
	0.19	-29.033	-13.000	16.033
	998.64	-38.550	-13.000	25.550
	1648.03	-27.233	-13.000	14.233
851.05	0.06	-44.193	-13.000	31.193
	0.19	-42.667	-13.000	29.667
	902.51	-35.187	-13.000	22.187
	1702.04	-29.637	-13.000	16.637
868.95	0.06	-43.776	-13.000	30.776
	0.19	-43.053	-13.000	30.053
	767.37	-34.626	-13.000	21.626
	3666.83	-30.098	-13.000	17.098

Type of emission: 11K0F3E

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
138.05	0.01	-45.229	-20.000	25.229
	0.19	-31.566	-20.000	11.566
	909.68	-36.078	-20.000	16.078
	3655.13	-32.267	-20.000	12.267
150.05	0.01	-44.229	-20.000	24.229
	0.19	-31.617	-20.000	11.617
	823.35	-36.248	-20.000	16.248
	3630.83	-31.273	-20.000	11.273
162.05	0.01	-42.323	-20.000	22.323
	0.19	-31.258	-20.000	11.258
	958.48	-36.527	-20.000	16.527
	3647.03	-32.007	-20.000	12.007
173.95	0.01	-44.981	-20.000	24.981
	0.19	-32.376	-20.000	12.376
	915.21	-35.961	-20.000	15.961
	3654.23	-32.305	-20.000	12.305
406.15	0.01	-43.517	-20.000	23.517
	0.19	-30.661	-20.000	10.661
	847.40	-35.520	-20.000	15.520
	3647.93	-30.976	-20.000	10.976
429.95	0.01	-42.492	-20.000	22.492
	0.19	-30.797	-20.000	10.797
	859.92	-31.347	-20.000	11.347
	3664.13	-31.352	-20.000	11.352
469.95	0.01	-43.462	-20.000	23.462
	0.19	-30.203	-20.000	10.203
	723.52	-35.906	-20.000	15.906
	6269.31	-31.373	-20.000	11.373

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
511.95	0.01	-43.853	-20.000	23.853
	0.19	-30.732	-20.000	10.732
	748.45	-35.836	-20.000	15.836
	3646.58	-31.412	-20.000	11.412
768.05	0.06	-40.944	-20.000	20.944
	0.19	-22.077	-20.000	2.077
	948.29	-34.459	-20.000	14.459
	3704.64	-30.752	-20.000	10.752
769.05	0.06	-41.836	-20.000	21.836
	0.19	-21.758	-20.000	1.758
	930.64	-33.477	-20.000	13.477
	3675.38	-30.353	-20.000	10.353
774.95	0.01	-40.680	-20.000	20.680
	0.19	-32.346	-20.000	12.346
	908.71	-39.558	-20.000	19.558
	1549.93	-29.912	-20.000	9.912
775.95	0.03	-42.038	-20.000	22.038
	0.19	-31.886	-20.000	11.886
	658.23	-40.378	-20.000	20.378
	1551.73	-28.581	-20.000	8.581
798.05	0.01	-41.965	-20.000	21.965
	0.19	-22.280	-20.000	2.280
	820.34	-34.521	-20.000	14.521
	3667.73	-30.351	-20.000	10.351
799.05	0.03	-41.924	-20.000	21.924
	0.19	-31.986	-20.000	11.986
	673.27	-40.232	-20.000	20.232
	1598.08	-28.770	-20.000	8.770
804.95	0.06	-41.282	-20.000	21.282
	0.19	-22.051	-20.000	2.051
	732.16	-35.120	-20.000	15.120
	7863.74	-30.517	-20.000	10.517

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
805.95	0.06	-40.608	-20.000	20.608
	0.19	-21.922	-20.000	1.922
	865.06	-34.372	-20.000	14.372
	3672.23	-30.251	-20.000	10.251
806.05	0.03	-42.944	-20.000	22.944
	0.19	-43.012	-20.000	23.012
	444.04	-34.543	-20.000	14.543
	1612.03	-29.710	-20.000	9.710
823.95	0.01	-39.268	-20.000	19.268
	0.19	-28.940	-20.000	8.940
	397.76	-40.141	-20.000	20.141
	1648.03	-26.717	-20.000	6.717
851.05	0.01	-43.150	-20.000	23.150
	0.19	-40.850	-20.000	20.850
	934.62	-34.776	-20.000	14.776
	1702.04	-28.748	-20.000	8.748
868.95	0.01	-43.626	-20.000	23.626
	0.19	-43.087	-20.000	23.087
	915.50	-34.785	-20.000	14.785
	3720.84	-30.119	-20.000	10.119

Type of emission: 8K30F1E, 8K30F1D, 8K30F7W

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
138.05	0.01	-45.030	-20.000	25.030
	0.19	-31.051	-20.000	11.051
	899.59	-36.503	-20.000	16.503
	3696.53	-32.409	-20.000	12.409
150.05	0.01	-45.211	-20.000	25.211
	0.19	-30.344	-20.000	10.344
	450.15	-35.890	-20.000	15.890
	3643.88	-32.397	-20.000	12.397
162.05	0.01	-43.700	-20.000	23.700
	0.19	-31.107	-20.000	11.107
	763.30	-36.261	-20.000	16.261
	3658.28	-31.976	-20.000	11.976
173.95	0.01	-44.860	-20.000	24.860
	0.19	-30.585	-20.000	10.585
	806.66	-35.561	-20.000	15.561
	3690.68	-31.696	-20.000	11.696
406.15	0.03	-42.933	-20.000	22.933
	0.19	-29.523	-20.000	9.523
	868.36	-35.198	-20.000	15.198
	3688.43	-30.372	-20.000	10.372
429.95	0.03	-43.008	-20.000	23.008
	0.19	-29.685	-20.000	9.685
	859.92	-32.888	-20.000	12.888
	3670.43	-31.172	-20.000	11.172
469.95	0.03	-43.233	-20.000	23.233
	0.19	-30.029	-20.000	10.029
	923.36	-35.909	-20.000	15.909
	3658.28	-30.803	-20.000	10.803

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
511.95	0.01	-41.758	-20.000	21.758
	0.19	-29.814	-20.000	9.814
	861.08	-35.518	-20.000	15.518
	3683.48	-30.317	-20.000	10.317
768.05	0.06	-41.298	-20.000	21.298
	0.19	-22.059	-20.000	2.059
	915.70	-33.891	-20.000	13.891
	3687.53	-30.153	-20.000	10.153
769.05	0.01	-41.059	-20.000	21.059
	0.19	-22.207	-20.000	2.207
	957.41	-34.715	-20.000	14.715
	7877.24	-30.267	-20.000	10.267
774.95	0.03	-42.182	-20.000	22.182
	0.19	-31.819	-20.000	11.819
	847.11	-40.063	-20.000	20.063
	1549.93	-30.180	-20.000	10.180
775.95	0.03	-42.459	-20.000	22.459
	0.19	-31.411	-20.000	11.411
	741.18	-39.083	-20.000	19.083
	1551.73	-29.479	-20.000	9.479
798.05	0.06	-41.358	-20.000	21.358
	0.19	-22.298	-20.000	2.298
	921.91	-34.684	-20.000	14.684
	3709.14	-30.627	-20.000	10.627
799.05	0.03	-42.572	-20.000	22.572
	0.19	-31.041	-20.000	11.041
	985.93	-40.685	-20.000	20.685
	1598.08	-29.445	-20.000	9.445
804.95	0.06	-41.312	-20.000	21.312
	0.19	-21.912	-20.000	1.912
	891.45	-34.208	-20.000	14.208
	3691.13	-29.830	-20.000	9.830

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
805.95	0.06	-40.667	-20.000	20.667
	0.19	-22.245	-20.000	2.245
	938.88	-34.835	-20.000	14.835
	3682.13	-31.003	-20.000	11.003
806.05	0.01	-40.308	-20.000	20.308
	0.19	-42.532	-20.000	22.532
	425.70	-34.303	-20.000	14.303
	3662.33	-30.255	-20.000	10.255
823.95	0.01	-38.776	-20.000	18.776
	0.19	-28.665	-20.000	8.665
	410.67	-39.662	-20.000	19.662
	1648.03	-26.498	-20.000	6.498
851.05	0.01	-43.851	-20.000	23.851
	0.19	-40.953	-20.000	20.953
	965.66	-35.277	-20.000	15.277
	1702.04	-29.507	-20.000	9.507
868.95	0.01	-43.617	-20.000	23.617
	0.19	-40.615	-20.000	20.615
	764.07	-34.761	-20.000	14.761
	3677.63	-29.683	-20.000	9.683

Type of emission: 8K10F1E, 8K10F1D

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
138.05	0.06	-42.449	-20.000	22.449
	0.19	-31.056	-20.000	11.056
	891.93	-36.476	-20.000	16.476
	3733.44	-31.390	-20.000	11.390
150.05	0.06	-42.931	-20.000	22.931
	0.19	-30.828	-20.000	10.828
	778.53	-36.344	-20.000	16.344
	3666.38	-32.113	-20.000	12.113
162.05	0.01	-42.622	-20.000	22.622
	0.19	-31.121	-20.000	11.121
	889.12	-35.777	-20.000	15.777
	3693.38	-31.873	-20.000	11.873
173.95	0.06	-42.921	-20.000	22.921
	0.19	-30.672	-20.000	10.672
	874.18	-35.852	-20.000	15.852
	3644.78	-31.466	-20.000	11.466
406.15	0.06	-41.788	-20.000	21.788
	0.19	-30.492	-20.000	10.492
	882.23	-34.851	-20.000	14.851
	3674.03	-30.139	-20.000	10.139
429.95	0.06	-42.405	-20.000	22.405
	0.19	-29.773	-20.000	9.773
	859.92	-32.608	-20.000	12.608
	3668.18	-29.976	-20.000	9.976
469.95	0.06	-42.257	-20.000	22.257
	0.19	-29.666	-20.000	9.666
	893.87	-35.393	-20.000	15.393
	3731.19	-30.393	-20.000	10.393

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
511.95	0.06	-41.587	-20.000	21.587
	0.19	-30.207	-20.000	10.207
	770.38	-35.974	-20.000	15.974
	3679.88	-31.490	-20.000	11.490
768.05	0.06	-41.827	-20.000	21.827
	0.19	-24.033	-20.000	4.033
	870.78	-34.370	-20.000	14.370
	3651.53	-30.674	-20.000	10.674
769.05	0.06	-41.318	-20.000	21.318
	0.19	-24.566	-20.000	4.566
	903.38	-34.983	-20.000	14.983
	3701.04	-30.370	-20.000	10.370
774.95	0.03	-41.921	-20.000	21.921
	0.19	-31.232	-20.000	11.232
	908.33	-40.579	-20.000	20.579
	1549.93	-29.632	-20.000	9.632
775.95	0.03	-42.401	-20.000	22.401
	0.19	-31.445	-20.000	11.445
	949.46	-39.823	-20.000	19.823
	1551.73	-31.042	-20.000	11.042
798.05	0.01	-40.638	-20.000	20.638
	0.19	-24.348	-20.000	4.348
	894.26	-34.982	-20.000	14.982
	3739.29	-30.636	-20.000	10.636
799.05	0.03	-42.562	-20.000	22.562
	0.19	-31.015	-20.000	11.015
	495.74	-39.661	-20.000	19.661
	1598.08	-27.735	-20.000	7.735
804.95	0.06	-41.336	-20.000	21.336
	0.19	-24.586	-20.000	4.586
	887.76	-34.879	-20.000	14.879
	3661.43	-30.293	-20.000	10.293

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
805.95	0.06	-41.658	-20.000	21.658
	0.19	-24.477	-20.000	4.477
	907.45	-35.024	-20.000	15.024
	3685.73	-30.530	-20.000	10.530
806.05	0.01	-40.671	-20.000	20.671
	0.19	-42.927	-20.000	22.927
	933.06	-34.602	-20.000	14.602
	3620.93	-30.479	-20.000	10.479
823.95	0.03	-39.427	-20.000	19.427
	0.19	-28.345	-20.000	8.345
	977.30	-39.634	-20.000	19.634
	1648.03	-27.343	-20.000	7.343
851.05	0.06	-43.846	-20.000	23.846
	0.19	-42.317	-20.000	22.317
	685.49	-34.405	-20.000	14.405
	1702.04	-29.417	-20.000	9.417
868.95	0.01	-43.486	-20.000	23.486
	0.19	-44.522	-20.000	24.522
	708.97	-34.807	-20.000	14.807
	3685.28	-30.153	-20.000	10.153

Type of emission: 8K10F1W

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
138.05	0.06	-42.672	-20.000	22.672
	0.19	-30.117	-20.000	10.117
	899.79	-35.924	-20.000	15.924
	3682.13	-31.223	-20.000	11.223
150.05	0.06	-42.841	-20.000	22.841
	0.19	-30.289	-20.000	10.289
	450.15	-36.528	-20.000	16.528
	3667.73	-31.011	-20.000	11.011
162.05	0.06	-42.784	-20.000	22.784
	0.19	-30.450	-20.000	10.450
	843.04	-35.606	-20.000	15.606
	3682.13	-31.197	-20.000	11.197
173.95	0.06	-42.401	-20.000	22.401
	0.19	-29.887	-20.000	9.887
	878.45	-36.057	-20.000	16.057
	3728.04	-31.805	-20.000	11.805
406.15	0.06	-42.267	-20.000	22.267
	0.19	-29.207	-20.000	9.207
	770.77	-35.605	-20.000	15.605
	3738.39	-31.124	-20.000	11.124
429.95	0.06	-41.698	-20.000	21.698
	0.19	-29.261	-20.000	9.261
	859.92	-31.744	-20.000	11.744
	3658.28	-30.205	-20.000	10.205
469.95	0.06	-42.272	-20.000	22.272
	0.19	-29.162	-20.000	9.162
	870.10	-35.177	-20.000	15.177
	6962.80	-31.009	-20.000	11.009

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
511.95	0.06	-42.104	-20.000	22.104
	0.19	-29.460	-20.000	9.460
	824.41	-34.665	-20.000	14.665
	3660.53	-31.071	-20.000	11.071
768.05	0.06	-41.436	-20.000	21.436
	0.19	-24.858	-20.000	4.858
	872.72	-34.576	-20.000	14.576
	6281.91	-30.120	-20.000	10.120
769.05	0.06	-41.489	-20.000	21.489
	0.19	-25.038	-20.000	5.038
	677.44	-35.189	-20.000	15.189
	3669.98	-29.801	-20.000	9.801
774.95	0.01	-41.722	-20.000	21.722
	0.19	-30.942	-20.000	10.942
	725.07	-39.889	-20.000	19.889
	1549.93	-30.483	-20.000	10.483
775.95	0.03	-42.115	-20.000	22.115
	0.19	-31.131	-20.000	11.131
	866.03	-39.202	-20.000	19.202
	1551.73	-29.358	-20.000	9.358
798.05	0.06	-41.823	-20.000	21.823
	0.19	-25.208	-20.000	5.208
	851.48	-34.769	-20.000	14.769
	3744.69	-30.252	-20.000	10.252
799.05	0.01	-40.559	-20.000	20.559
	0.19	-31.240	-20.000	11.240
	832.66	-38.681	-20.000	18.681
	1598.08	-28.255	-20.000	8.255
804.95	0.06	-41.567	-20.000	21.567
	0.19	-24.334	-20.000	4.334
	928.12	-34.869	-20.000	14.869
	3731.19	-30.727	-20.000	10.727

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
805.95	0.06	-41.091	-20.000	21.091
	0.19	-24.760	-20.000	4.760
	869.13	-34.798	-20.000	14.798
	3656.93	-29.964	-20.000	9.964
806.05	0.01	-42.006	-20.000	22.006
	0.19	-42.031	-20.000	22.031
	986.42	-34.704	-20.000	14.704
	1612.03	-30.176	-20.000	10.176
823.95	0.03	-38.909	-20.000	18.909
	0.19	-28.475	-20.000	8.475
	917.15	-38.807	-20.000	18.807
	1648.03	-26.896	-20.000	6.896
851.05	0.01	-42.471	-20.000	22.471
	0.19	-42.014	-20.000	22.014
	905.80	-34.910	-20.000	14.910
	3655.58	-28.889	-20.000	8.889
868.95	0.06	-44.028	-20.000	24.028
	0.19	-43.770	-20.000	23.770
	764.85	-35.055	-20.000	15.055
	3677.63	-30.561	-20.000	10.561

Type of emission: 7K60FXD, 7K60FXE, 7K60F1E, 7K60F1D, 7K60F1W, 7K60FXW

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
138.05	0.01	-44.748	-20.000	24.748
	0.19	-30.624	-20.000	10.624
	913.66	-35.951	-20.000	15.951
	3692.93	-31.752	-20.000	11.752
150.05	0.01	-41.139	-20.000	21.139
	0.19	-30.759	-20.000	10.759
	884.27	-36.506	-20.000	16.506
	3636.68	-32.109	-20.000	12.109
162.05	0.01	-42.306	-20.000	22.306
	0.19	-30.050	-20.000	10.050
	885.82	-36.001	-20.000	16.001
	3689.33	-31.734	-20.000	11.734
173.95	0.01	-44.488	-20.000	24.488
	0.19	-29.947	-20.000	9.947
	790.07	-35.828	-20.000	15.828
	6860.64	-32.230	-20.000	12.230
406.15	0.01	-43.525	-20.000	23.525
	0.19	-30.326	-20.000	10.326
	946.84	-35.245	-20.000	15.245
	3711.84	-30.762	-20.000	10.762
429.95	0.01	-43.985	-20.000	23.985
	0.19	-29.890	-20.000	9.890
	859.92	-32.565	-20.000	12.565
	3690.68	-31.135	-20.000	11.135
469.95	0.01	-44.113	-20.000	24.113
	0.19	-30.321	-20.000	10.321
	954.89	-35.660	-20.000	15.660
	3630.38	-31.321	-20.000	11.321

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
511.95	0.01	-43.439	-20.000	23.439
	0.19	-31.674	-20.000	11.674
	536.29	-34.738	-20.000	14.738
	3680.33	-31.643	-20.000	11.643
768.05	0.06	-41.436	-20.000	21.436
	0.19	-24.858	-20.000	4.858
	872.72	-34.576	-20.000	14.576
	6281.91	-30.120	-20.000	10.120
769.05	0.06	-41.489	-20.000	21.489
	0.19	-25.038	-20.000	5.038
	677.44	-35.189	-20.000	15.189
	3669.98	-29.801	-20.000	9.801
774.95	0.03	-42.622	-20.000	22.622
	0.19	-30.775	-20.000	10.775
	720.71	-39.749	-20.000	19.749
	1549.93	-30.170	-20.000	10.170
775.95	0.01	-40.276	-20.000	20.276
	0.19	-30.761	-20.000	10.761
	965.85	-39.917	-20.000	19.917
	1551.73	-30.511	-20.000	10.511
798.05	0.06	-41.823	-20.000	21.823
	0.19	-25.208	-20.000	5.208
	851.48	-34.769	-20.000	14.769
	3744.69	-30.252	-20.000	10.252
799.05	0.01	-40.647	-20.000	20.647
	0.19	-31.050	-20.000	11.050
	753.79	-38.877	-20.000	18.877
	1598.08	-28.205	-20.000	8.205
804.95	0.06	-41.567	-20.000	21.567
	0.19	-24.334	-20.000	4.334
	928.12	-34.869	-20.000	14.869
	3731.19	-30.727	-20.000	10.727

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
805.95	0.06	-41.091	-20.000	21.091
	0.19	-24.760	-20.000	4.760
	869.13	-34.798	-20.000	14.798
	3656.93	-29.964	-20.000	9.964
806.05	0.01	-42.482	-20.000	22.482
	0.19	-40.209	-20.000	20.209
	901.34	-34.020	-20.000	14.020
	3687.53	-30.042	-20.000	10.042
823.95	0.01	-38.930	-20.000	18.930
	0.19	-28.794	-20.000	8.794
	764.46	-38.967	-20.000	18.967
	1648.03	-25.839	-20.000	5.839
851.05	0.06	-43.996	-20.000	23.996
	0.19	-42.963	-20.000	22.963
	785.32	-33.979	-20.000	13.979
	7490.22	-29.454	-20.000	9.454
868.95	0.01	-41.269	-20.000	21.269
	0.19	-42.339	-20.000	22.339
	748.45	-35.115	-20.000	15.115
	3649.28	-30.721	-20.000	10.721

Type of emission: 4K00F1E, 4K00F1D, 4K00F7W

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
138.05	0.06	-42.014	-25.000	17.014
	0.19	-29.787	-25.000	4.787
	980.21	-35.792	-25.000	10.792
	3695.63	-32.168	-25.000	7.168
150.05	0.06	-42.674	-25.000	17.674
	0.19	-29.540	-25.000	4.540
	973.32	-36.730	-25.000	11.730
	3677.18	-31.476	-25.000	6.476
162.05	0.06	-42.906	-25.000	17.906
	0.19	-29.949	-25.000	4.949
	988.07	-36.251	-25.000	11.251
	3701.94	-31.429	-25.000	6.429
173.95	0.01	-41.647	-25.000	16.647
	0.19	-29.112	-25.000	4.112
	873.60	-36.201	-25.000	11.201
	3680.78	-31.575	-25.000	6.575
406.15	0.01	-47.671	-25.000	22.671
	0.19	-29.203	-25.000	4.203
	826.93	-35.313	-25.000	10.313
	7529.38	-30.759	-25.000	5.759
429.95	0.01	-42.033	-25.000	17.033
	0.19	-28.730	-25.000	3.730
	859.92	-32.478	-25.000	7.478
	3740.19	-31.359	-25.000	6.359
469.95	0.01	-40.966	-25.000	15.966
	0.19	-29.094	-25.000	4.094
	863.90	-34.956	-25.000	9.956
	3660.08	-31.211	-25.000	6.211

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
511.95	0.01	-43.295	-25.000	18.295
	0.19	-28.432	-25.000	3.432
	881.94	-35.793	-25.000	10.793
	3673.13	-30.724	-25.000	5.724
768.05	0.01	-43.389	-25.000	18.389
	0.19	-32.643	-25.000	7.643
	840.81	-34.207	-25.000	9.207
	7204.46	-30.330	-25.000	5.330
769.05	0.01	-40.499	-25.000	15.499
	0.19	-32.504	-25.000	7.504
	697.23	-35.057	-25.000	10.057
	7783.19	-30.207	-25.000	5.207
774.95	0.01	-40.344	-25.000	15.344
	0.19	-30.439	-25.000	5.439
	650.96	-39.716	-25.000	14.716
	1549.48	-31.429	-25.000	6.429
775.95	0.01	-41.916	-25.000	16.916
	0.19	-30.766	-25.000	5.766
	412.41	-40.350	-25.000	15.350
	1551.73	-29.452	-25.000	4.452
798.05	0.01	-42.235	-25.000	17.235
	0.19	-32.288	-25.000	7.288
	871.27	-34.603	-25.000	9.603
	7848.44	-30.486	-25.000	5.486
799.05	0.01	-41.111	-25.000	16.111
	0.19	-30.781	-25.000	5.781
	834.31	-39.395	-25.000	14.395
	1598.08	-27.941	-25.000	2.941
804.95	0.01	-41.943	-25.000	16.943
	0.19	-33.034	-25.000	8.034
	892.32	-34.877	-25.000	9.877
	3690.68	-30.176	-25.000	5.176

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
805.95	0.01	-42.039	-25.000	17.039
	0.19	-32.998	-25.000	7.998
	724.49	-34.927	-25.000	9.927
	3732.54	-29.878	-25.000	4.878
806.05	0.06	-44.074	-25.000	19.074
	0.19	-44.415	-25.000	19.415
	943.54	-34.554	-25.000	9.554
	3687.08	-29.908	-25.000	4.908
823.95	0.03	-40.879	-25.000	15.879
	0.19	-28.274	-25.000	3.274
	745.16	-40.065	-25.000	15.065
	1647.58	-26.669	-25.000	1.669
851.05	0.01	-43.127	-25.000	18.127
	0.19	-43.515	-25.000	18.515
	988.65	-34.010	-25.000	9.010
	1702.04	-28.487	-25.000	3.487
868.95	0.01	-40.966	-25.000	15.966
	0.19	-40.912	-25.000	15.912
	739.82	-34.500	-25.000	9.500
	3714.54	-29.700	-25.000	4.700

Type of emission: 4K00F2D

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
138.05	0.01	-42.306	-25.000	17.306
	0.19	-28.532	-25.000	3.532
	783.77	-35.803	-25.000	10.803
	3656.48	-31.196	-25.000	6.196
150.05	0.01	-44.695	-25.000	19.695
	0.19	-28.576	-25.000	3.576
	947.91	-35.990	-25.000	10.990
	3684.83	-30.955	-25.000	5.955
162.05	0.02	-48.253	-25.000	23.253
	0.19	-28.758	-25.000	3.758
	816.17	-36.382	-25.000	11.382
	3741.09	-32.238	-25.000	7.238
173.95	0.01	-45.244	-25.000	20.244
	0.19	-38.893	-25.000	13.893
	845.37	-36.527	-25.000	11.527
	3642.98	-31.038	-25.000	6.038
406.15	0.01	-42.299	-25.000	17.299
	0.19	-27.478	-25.000	2.478
	885.63	-35.381	-25.000	10.381
	3739.29	-30.300	-25.000	5.300
429.95	0.01	-42.382	-25.000	17.382
	0.19	-27.373	-25.000	2.373
	859.92	-32.662	-25.000	7.662
	3662.78	-30.230	-25.000	5.230
469.95	0.01	-42.641	-25.000	17.641
	0.19	-27.321	-25.000	2.321
	884.27	-35.602	-25.000	10.602
	3663.23	-31.435	-25.000	6.435

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
511.95	0.01	-42.966	-25.000	17.966
	0.19	-26.974	-25.000	1.974
	879.90	-35.162	-25.000	10.162
	3688.88	-31.109	-25.000	6.109
768.05	0.01	-40.813	-25.000	15.813
	0.19	-32.667	-25.000	7.667
	898.62	-34.778	-25.000	9.778
	3719.04	-30.636	-25.000	5.636
769.05	0.01	-42.970	-25.000	17.970
	0.19	-32.510	-25.000	7.510
	899.50	-34.501	-25.000	9.501
	3746.04	-30.184	-25.000	5.184
774.95	0.01	-41.505	-25.000	16.505
	0.19	-30.780	-25.000	5.780
	885.14	-39.322	-25.000	14.322
	1549.93	-30.244	-25.000	5.244
775.95	0.03	-42.326	-25.000	17.326
	0.19	-30.877	-25.000	5.877
	926.95	-39.331	-25.000	14.331
	1551.73	-29.941	-25.000	4.941
798.05	0.01	-42.672	-25.000	17.672
	0.19	-32.278	-25.000	7.278
	917.06	-34.890	-25.000	9.890
	3650.63	-30.510	-25.000	5.510
799.05	0.01	-41.221	-25.000	16.221
	0.19	-30.964	-25.000	5.964
	868.75	-39.513	-25.000	14.513
	1598.08	-28.134	-25.000	3.134
804.95	0.01	-42.440	-25.000	17.440
	0.19	-32.456	-25.000	7.456
	889.99	-34.411	-25.000	9.411
	3693.38	-29.644	-25.000	4.644

Test Frequency (MHz)	Measured Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
805.95	0.01	-41.083	-25.000	16.083
	0.19	-32.220	-25.000	7.220
	907.84	-34.624	-25.000	9.624
	3694.73	-30.454	-25.000	5.454
806.05	0.01	-43.141	-25.000	18.141
	0.19	-41.653	-25.000	16.653
	926.95	-34.710	-25.000	9.710
	1612.03	-30.207	-25.000	5.207
823.95	0.03	-41.578	-25.000	16.578
	0.19	-28.709	-25.000	3.709
	962.46	-39.241	-25.000	14.241
	1648.03	-26.527	-25.000	1.527
851.05	0.01	-43.091	-25.000	18.091
	0.19	-41.353	-25.000	16.353
	727.89	-34.087	-25.000	9.087
	1702.04	-29.441	-25.000	4.441
868.95	0.01	-44.075	-25.000	19.075
	0.19	-42.430	-25.000	17.430
	929.09	-34.700	-25.000	9.700
	3679.43	-30.313	-25.000	5.313

▣ Plots of Unwanted Emissions : Conducted Spurious Emission

Note:

In order to simplify the report, attached plots were only the worst type of emission.

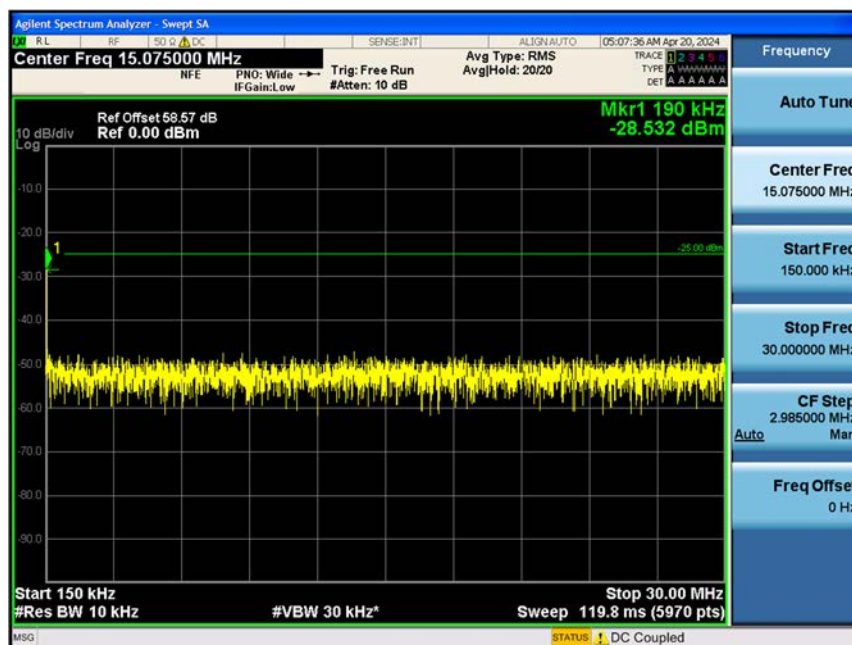
- Worst type of emission: 4K00F2D

Type of emission: 4K00F2D

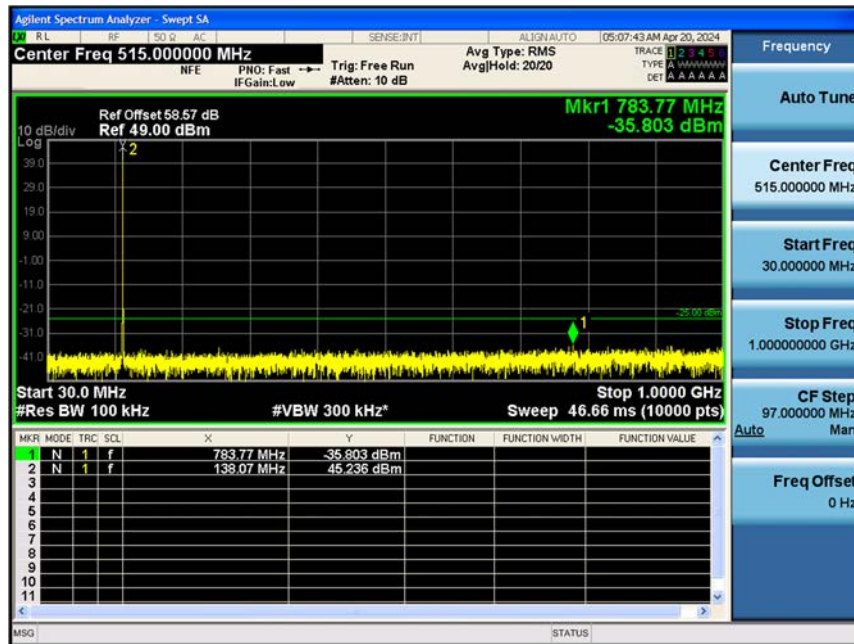
(138.05 MHz)_High
9 kHz~150 kHz



150 kHz~30 MHz



30 MHz~1 GHz

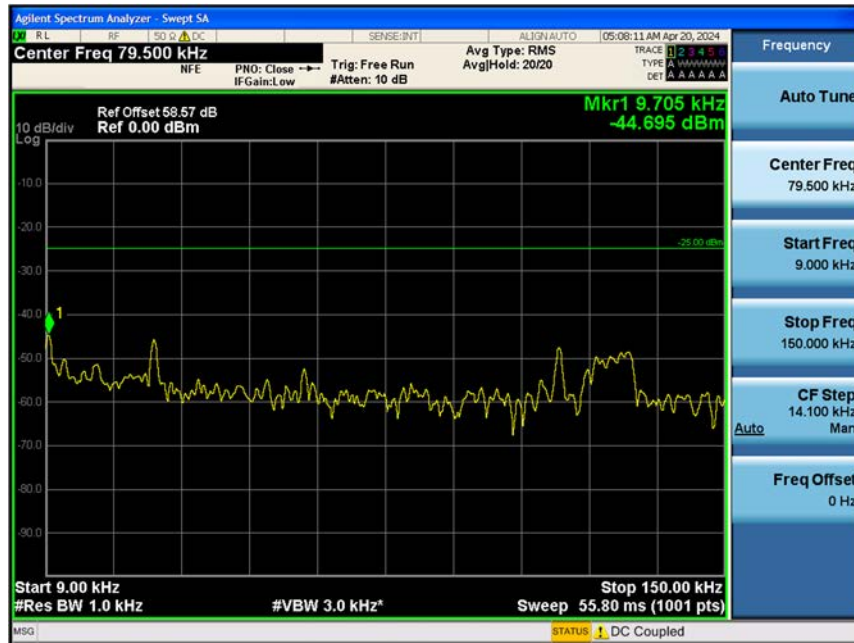


1 GHz~10 GHz

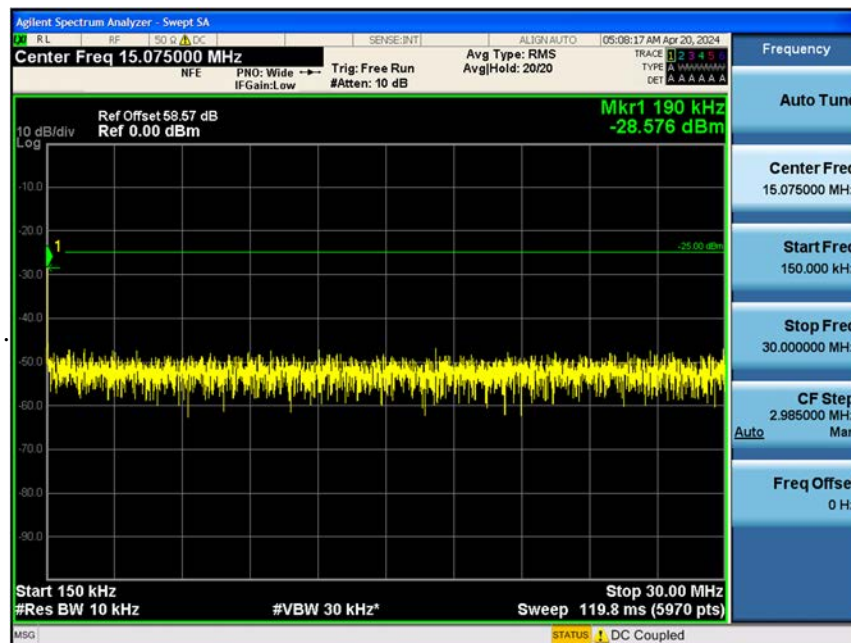


(150.05 MHz)_High

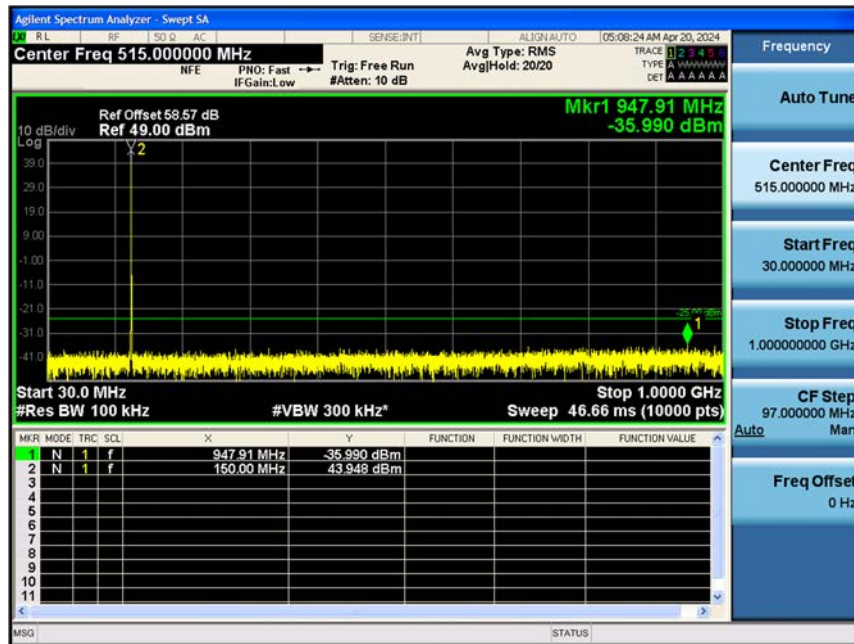
9 kHz~150 kHz



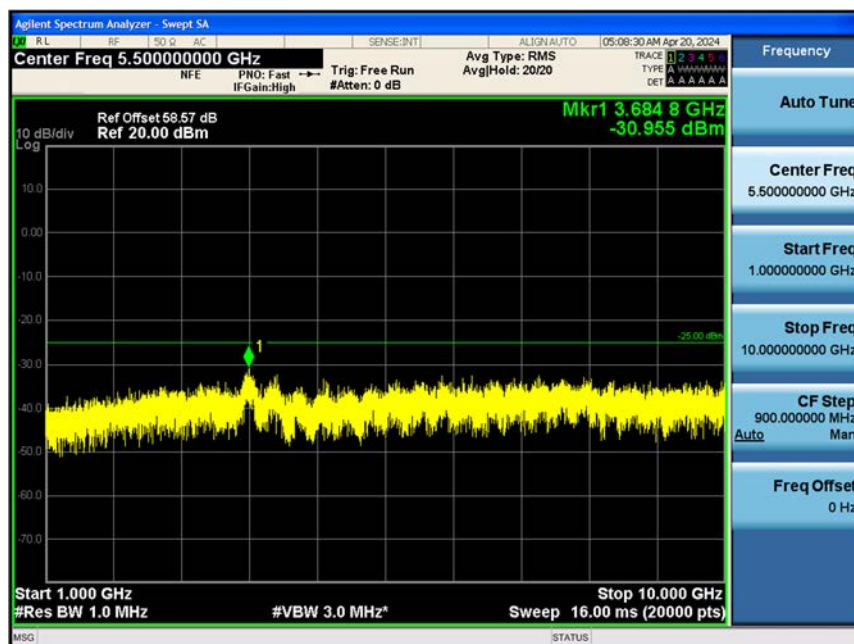
150 kHz~30 MHz



30 MHz~1 GHz



1 GHz~10 GHz

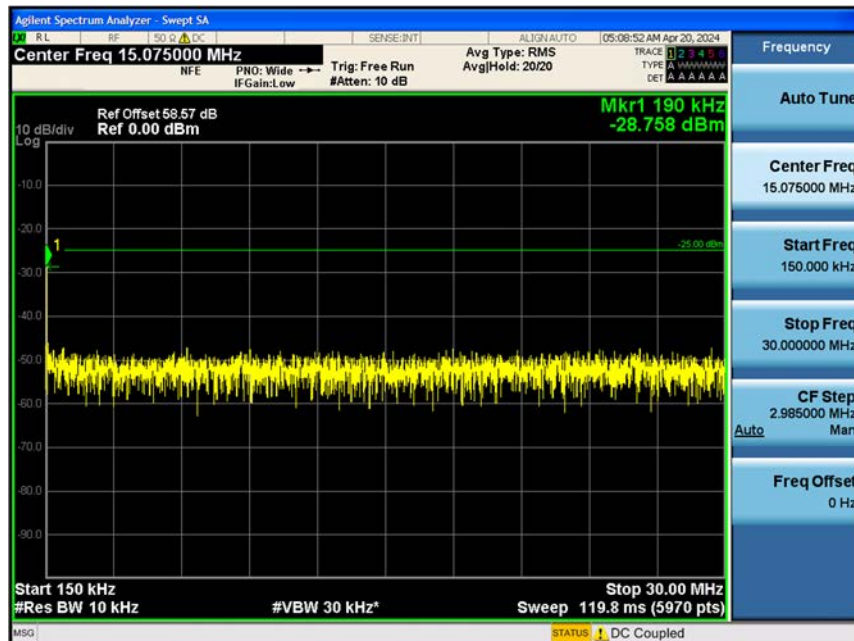


(162.05 MHz)_High

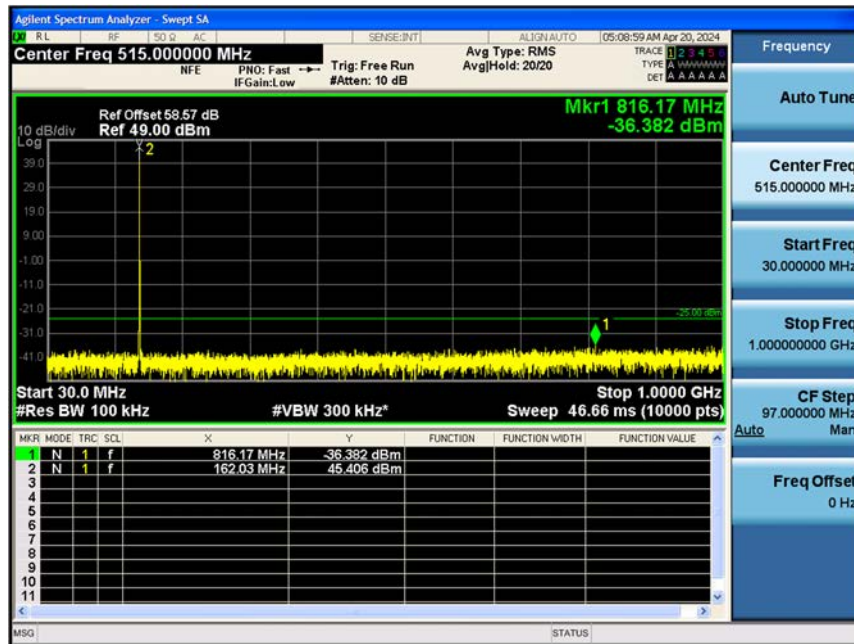
9 kHz~150 kHz



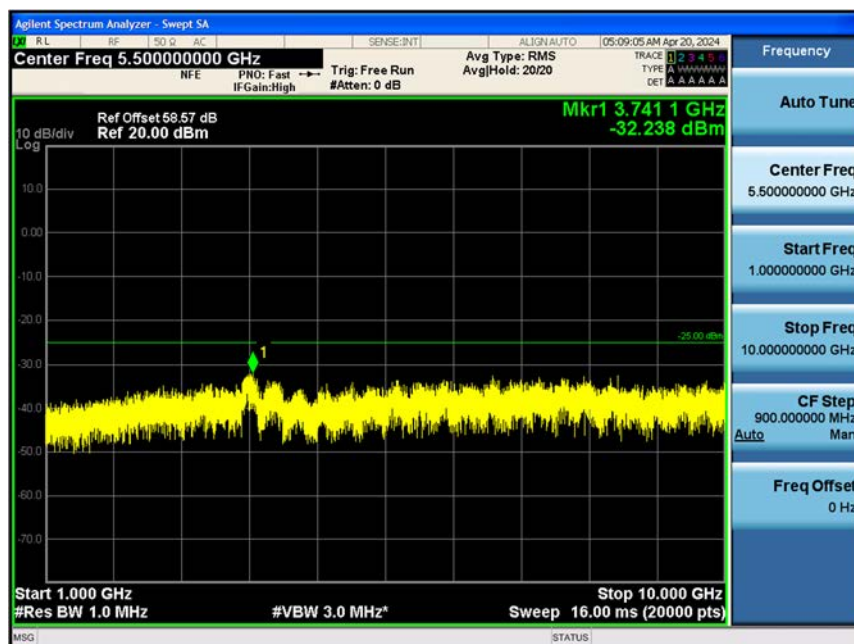
150 kHz~30 MHz



30 MHz~1 GHz



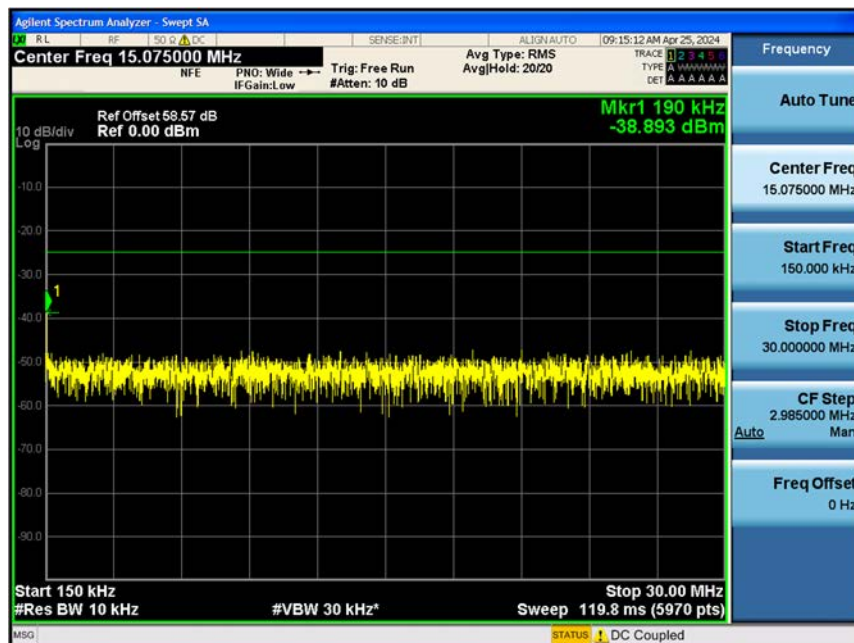
1 GHz~10 GHz



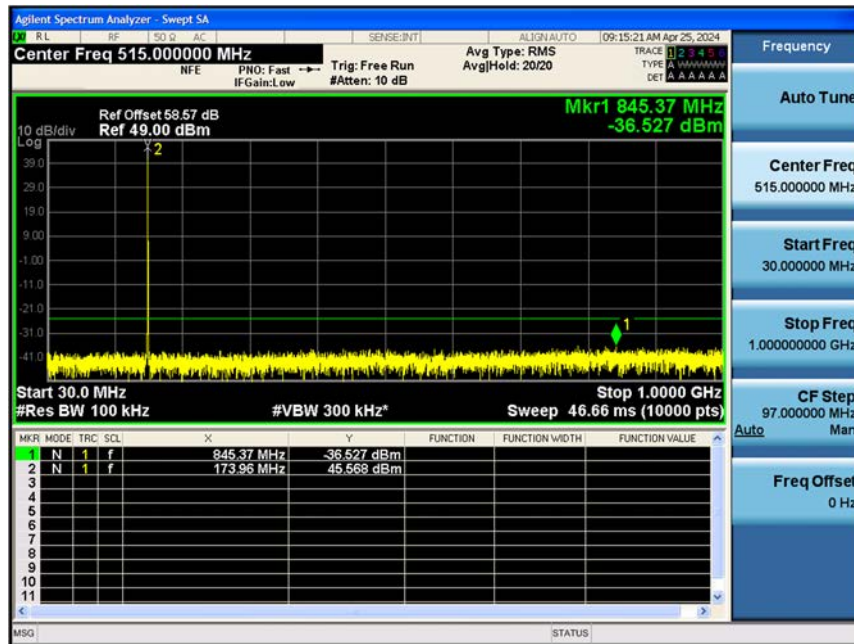
(173.95 MHz)_High
9 kHz~150 kHz



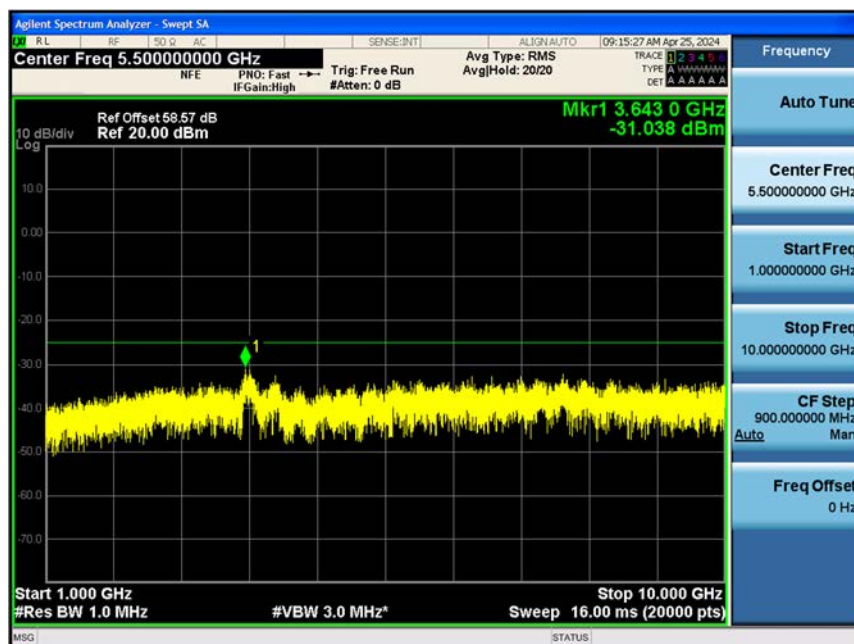
150 kHz~30 MHz



30 MHz~1 GHz



1 GHz~10 GHz

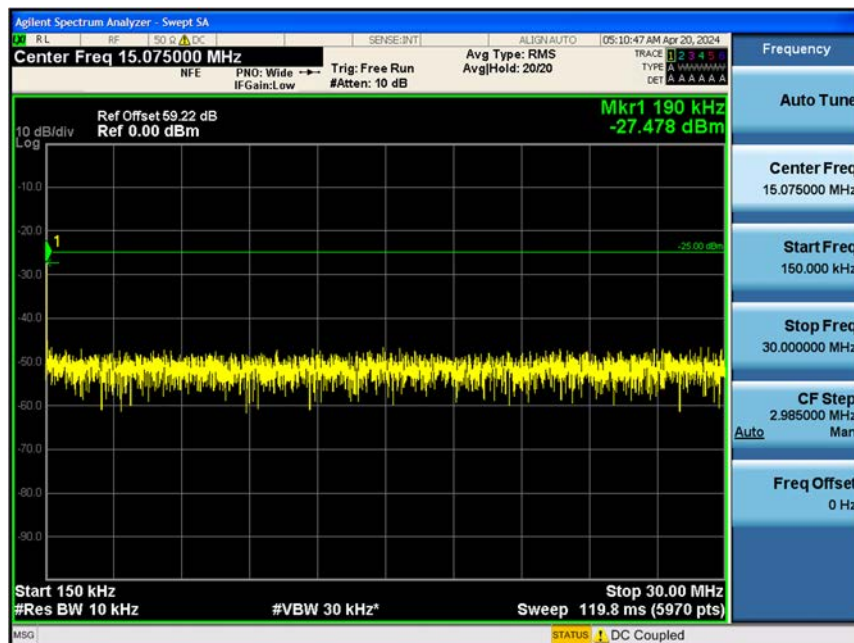


406.15 MHz

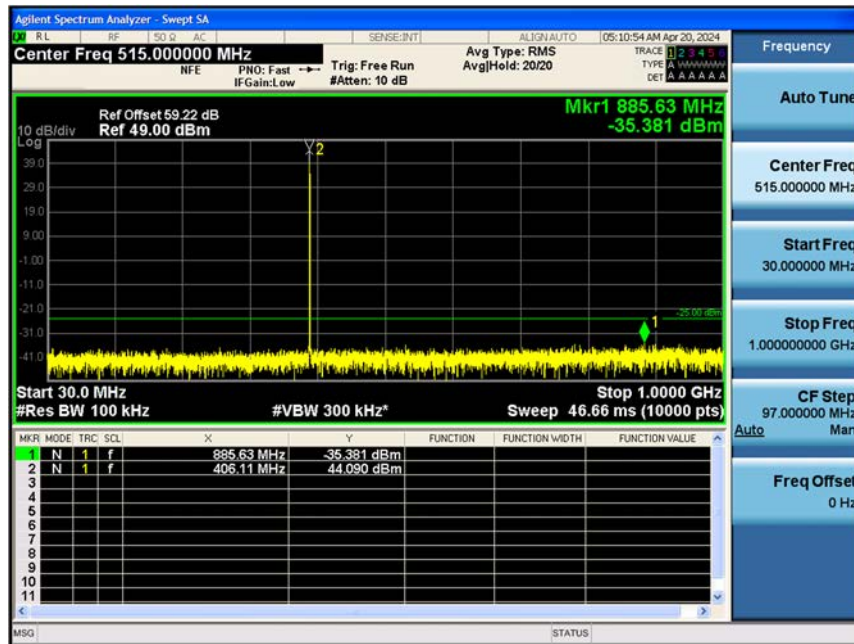
9kHz~150kHz



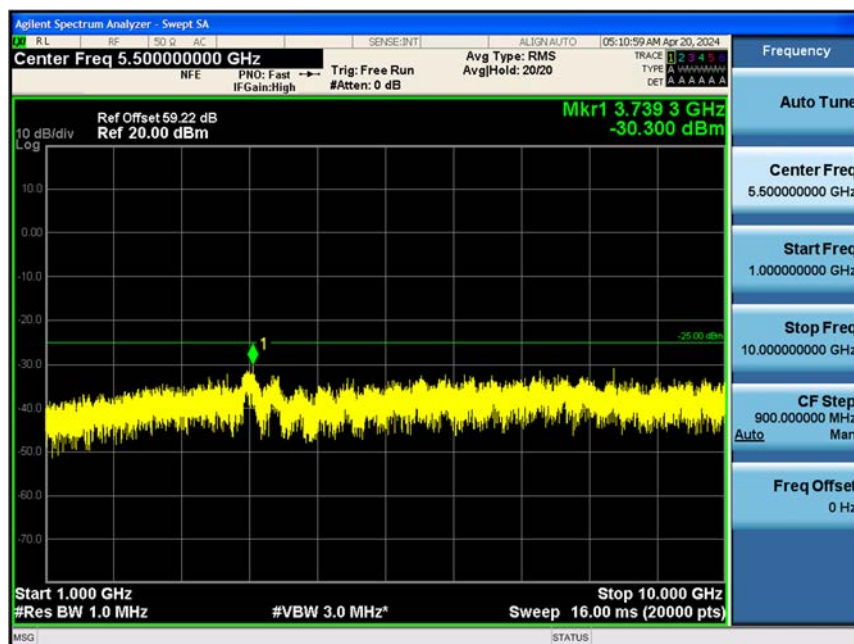
150kHz~30 MHz



30 MHz~1GHz

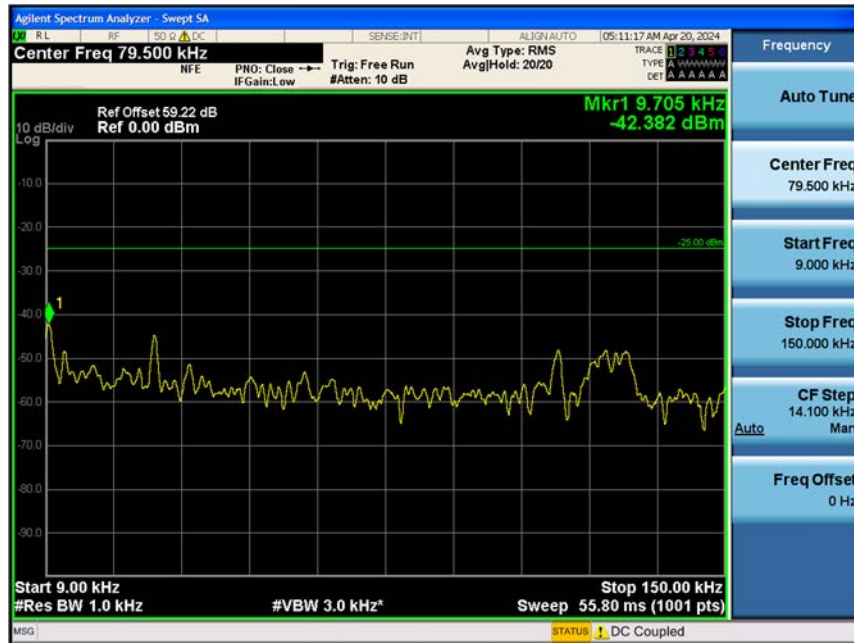


1GHz~10GHz

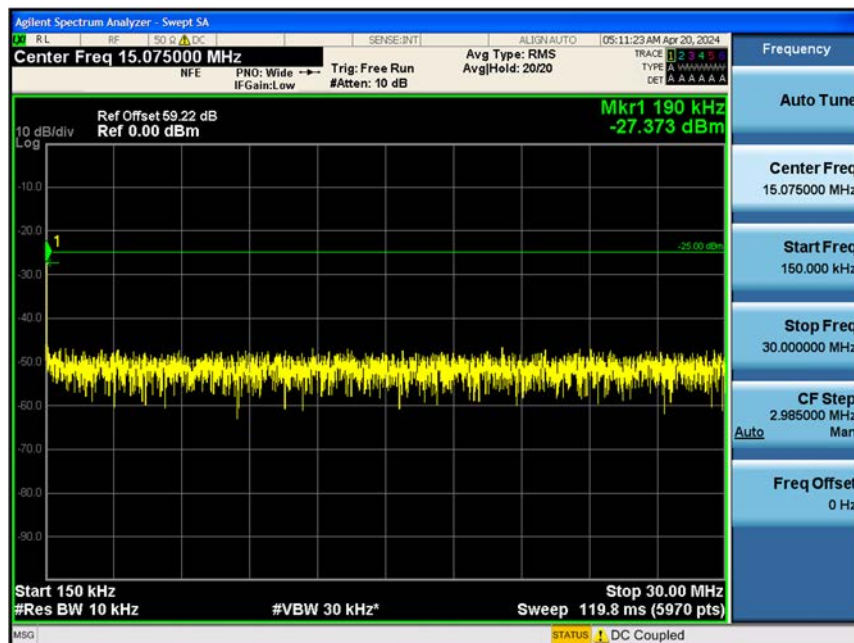


429.95 MHz

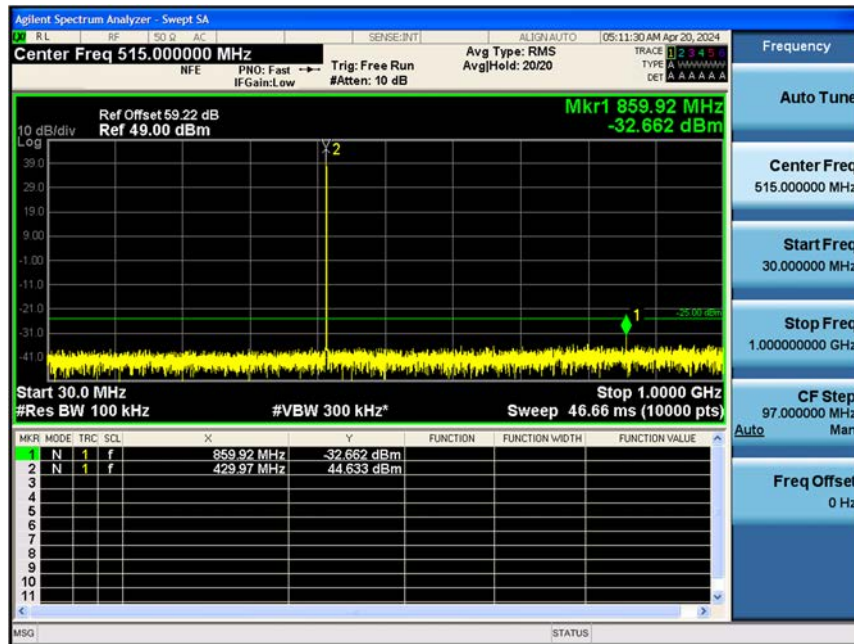
9kHz~150kHz



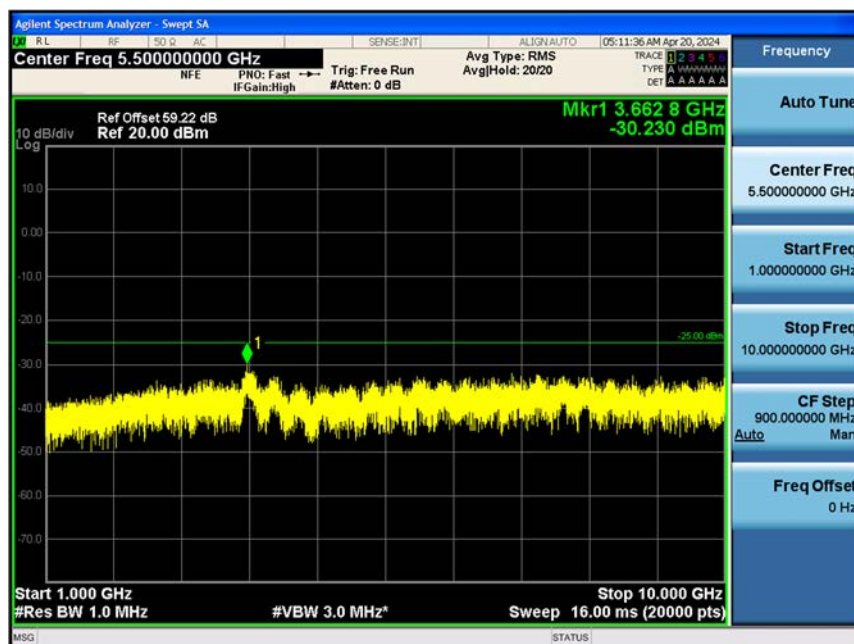
150kHz~30 MHz



30 MHz~1GHz



1GHz~10GHz

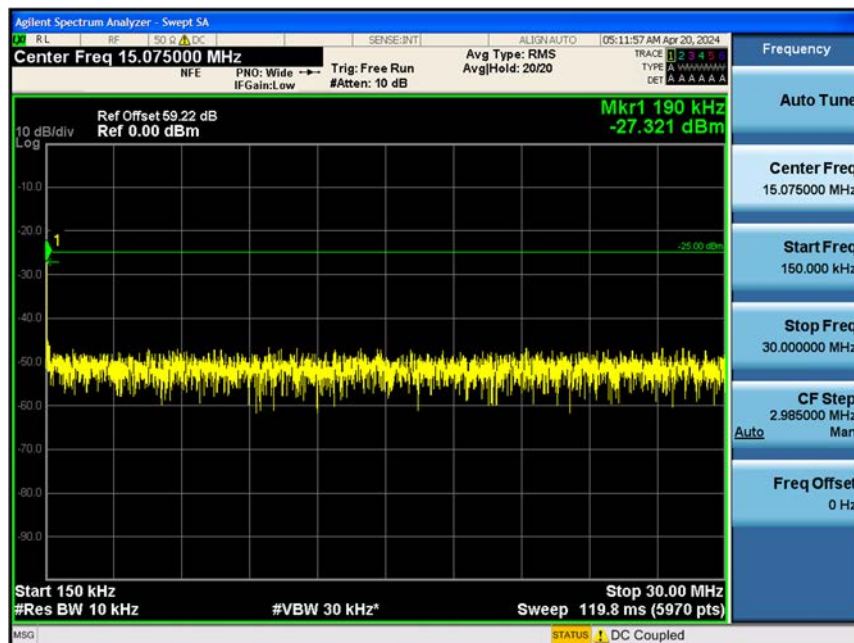


469.95 MHz

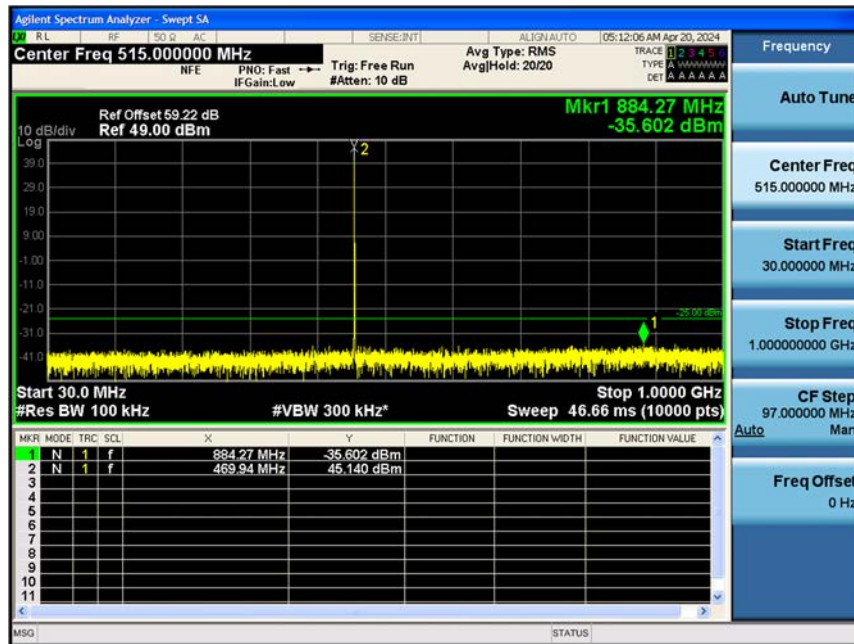
9kHz~150kHz



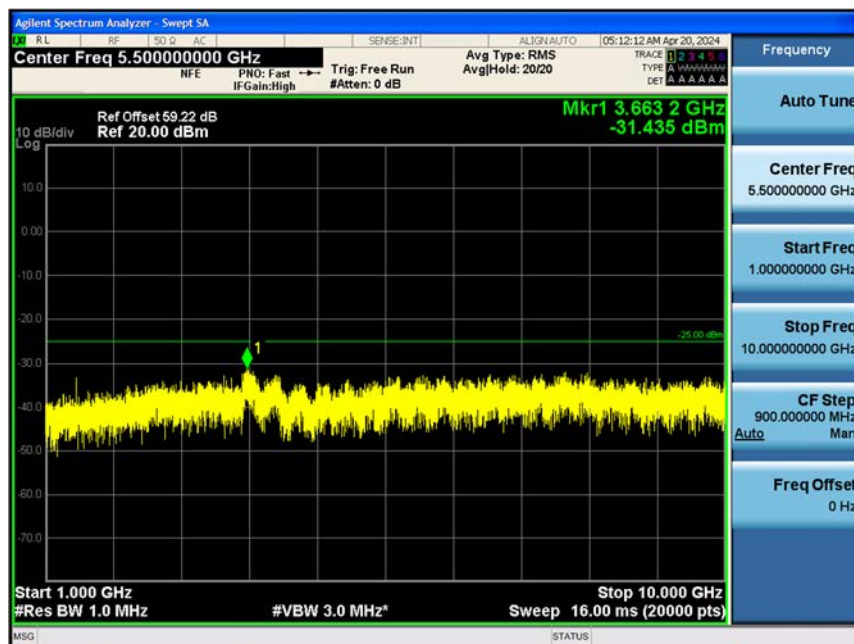
150kHz~30 MHz



30 MHz~1GHz



1GHz~10GHz

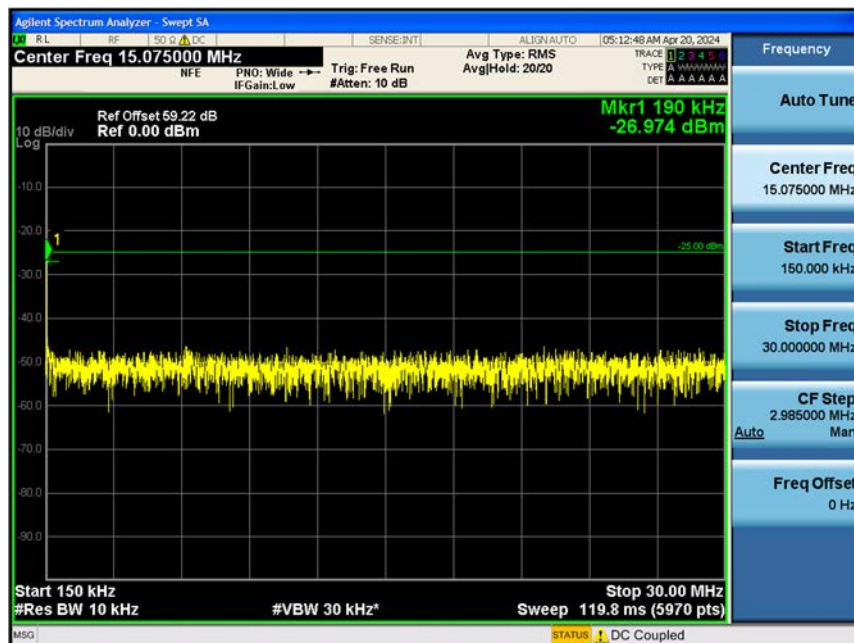


511.95 MHz

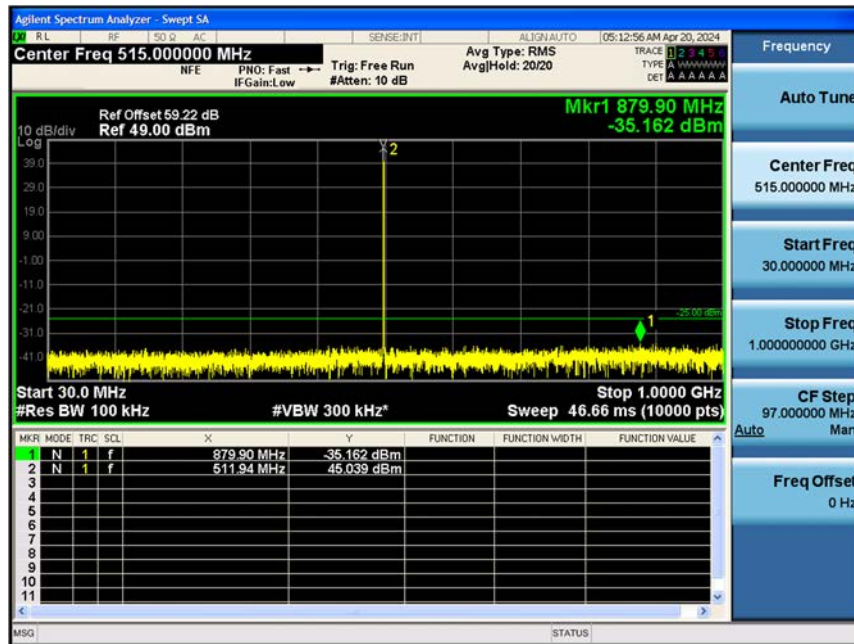
9kHz~150kHz



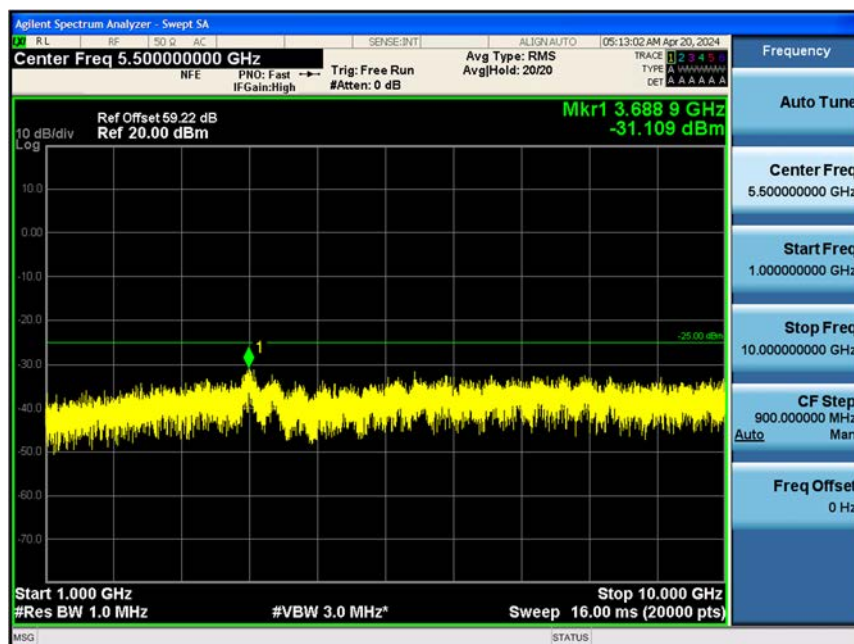
150kHz~30 MHz



30 MHz~1GHz



1GHz~10GHz

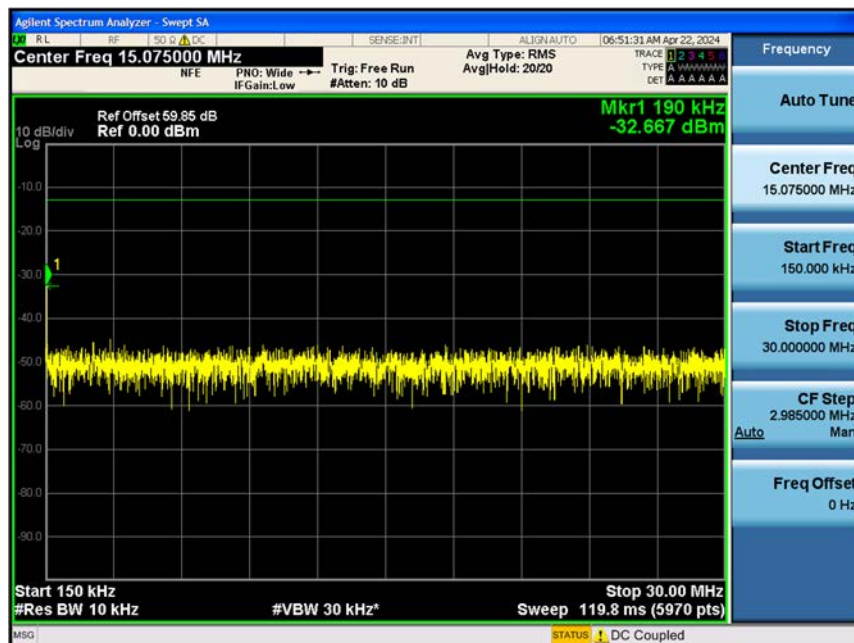


768.05 MHz

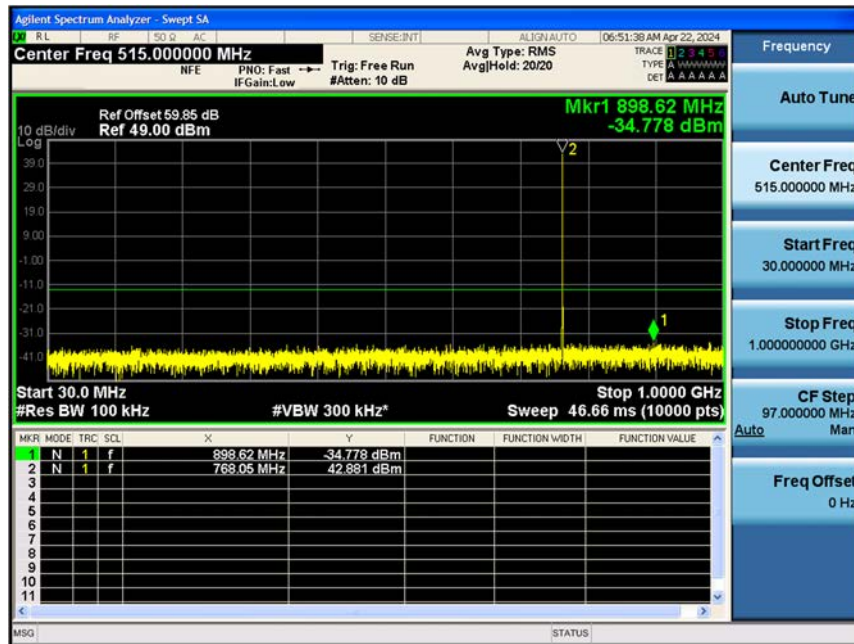
9kHz~150kHz



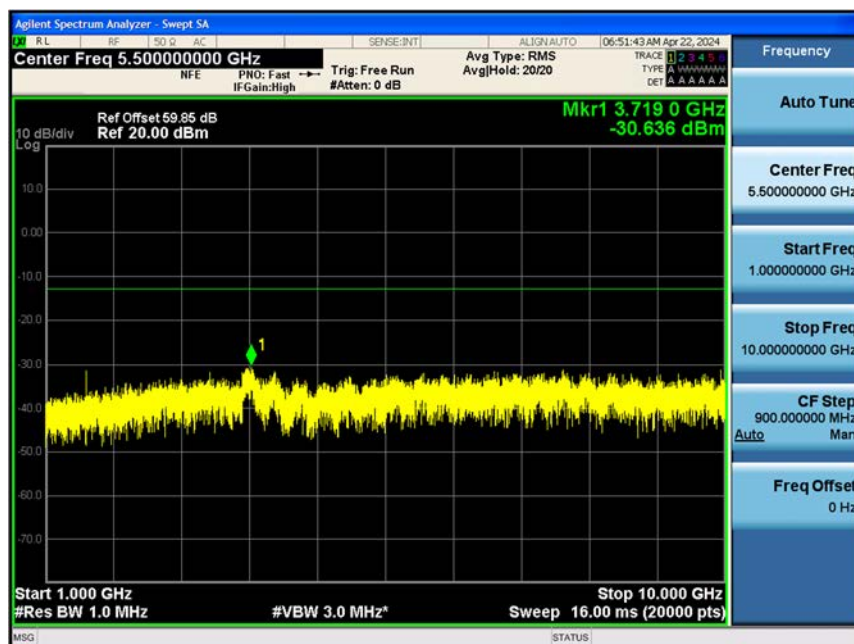
150kHz~30 MHz



30 MHz~1GHz



1GHz~10GHz

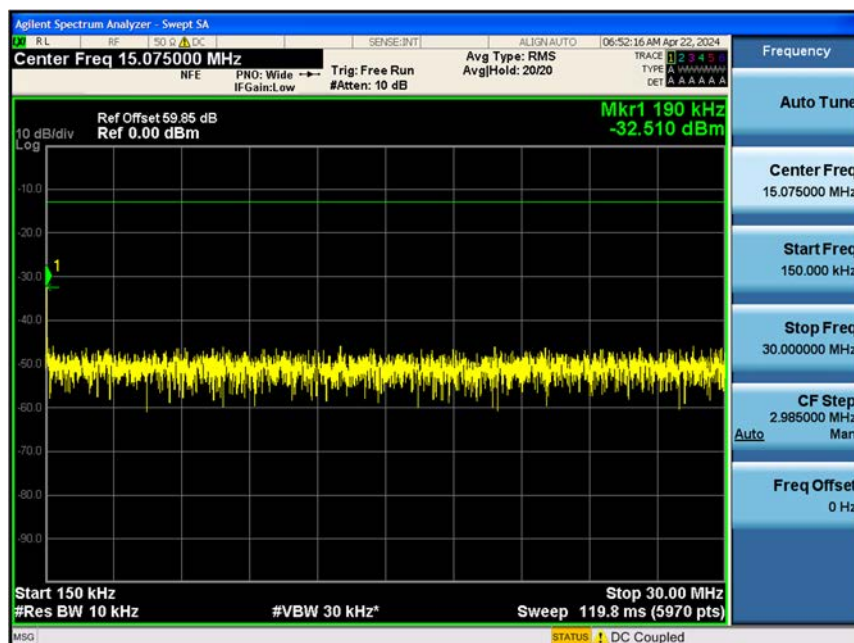


769.05 MHz

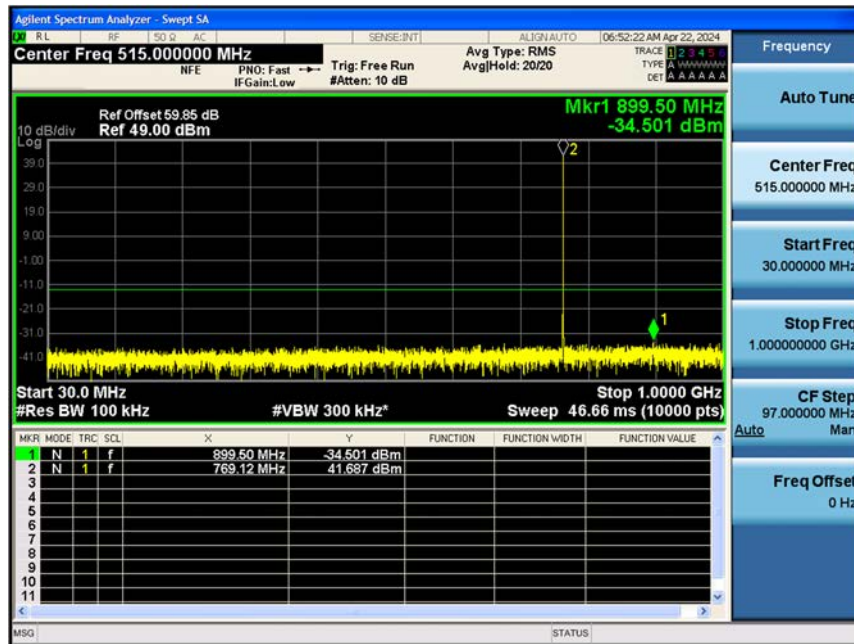
9kHz~150kHz



150kHz~30 MHz8



30 MHz~1GHz



1GHz~10GHz

