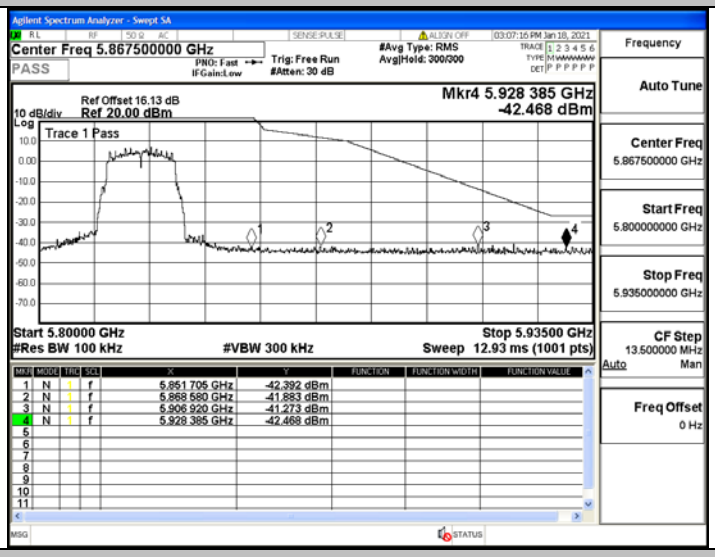
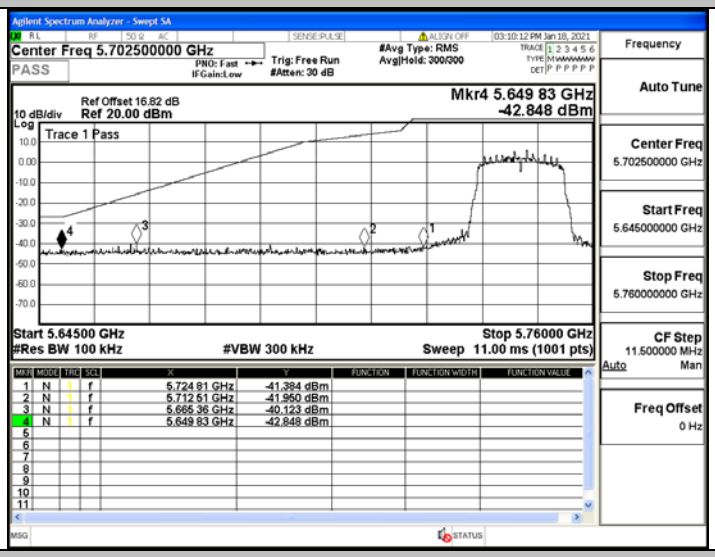
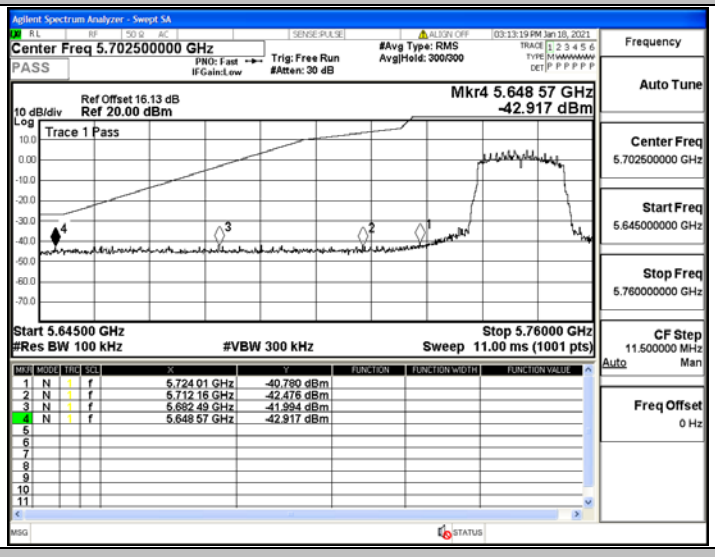
11A_Ant2_High_5825



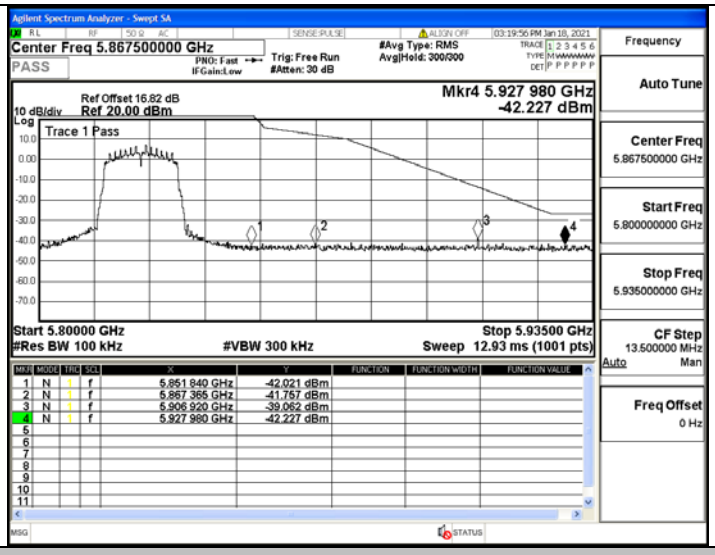
11N20MIMO_Ant1_Low_5745



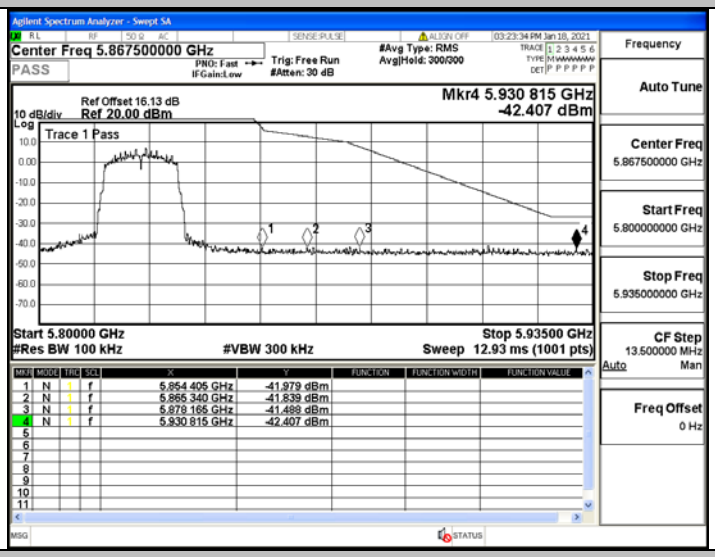
11N20MIMO_Ant2_Low_5745



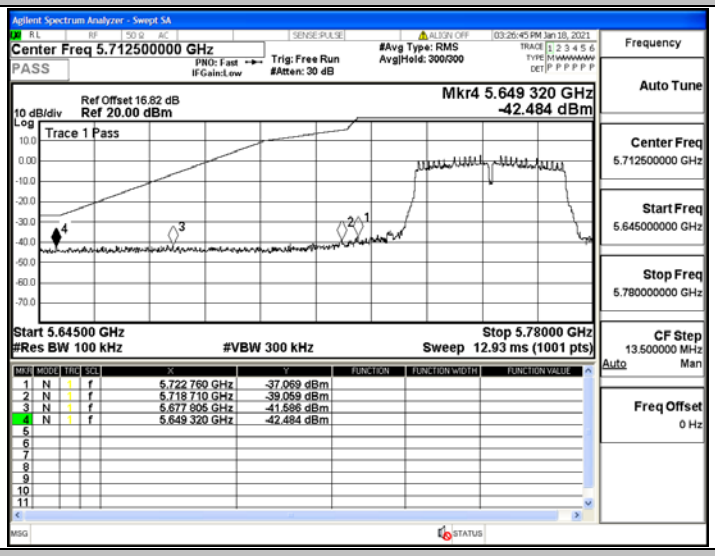
11N20MIMO_Ant1_High_5825



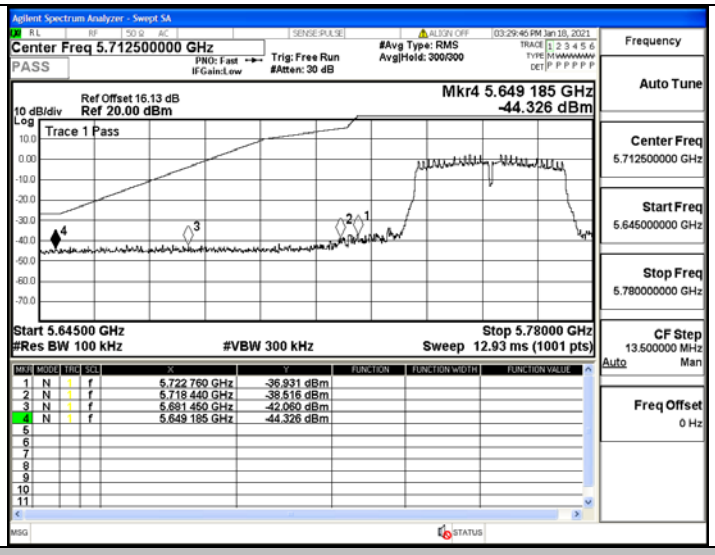
11N20MIMO_Ant2_High_5825



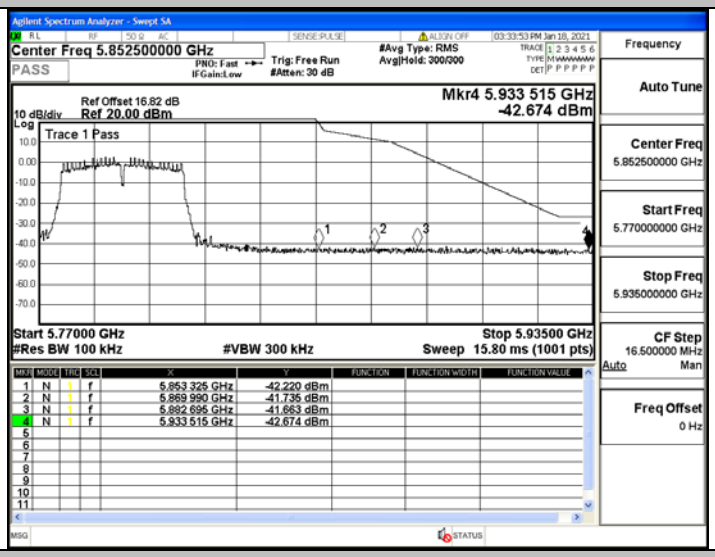
11N40MIMO_Ant1_Low_5755



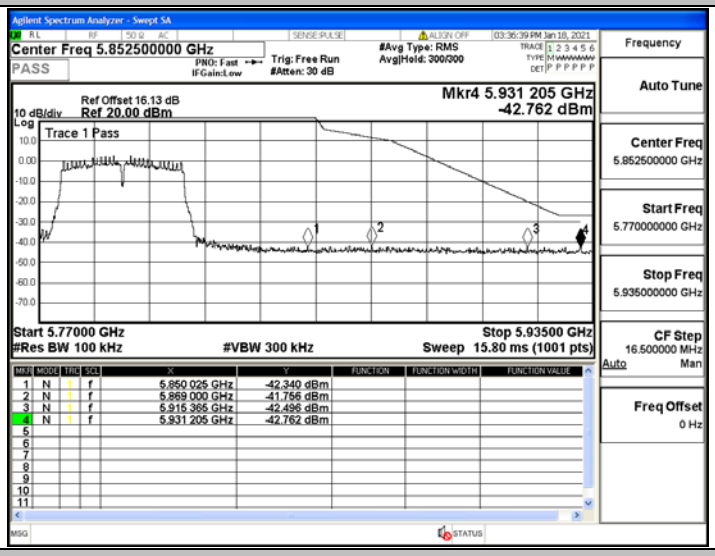
11N40MIMO_Ant2_Low_5755



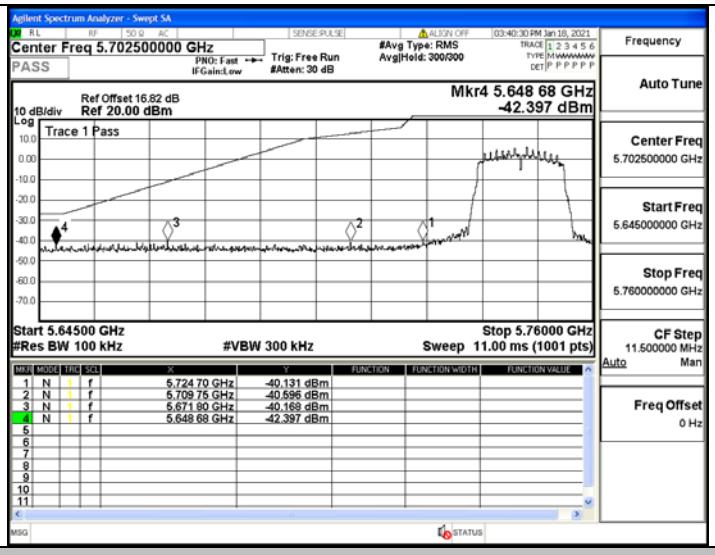
11N40MIMO_Ant1_High_5795



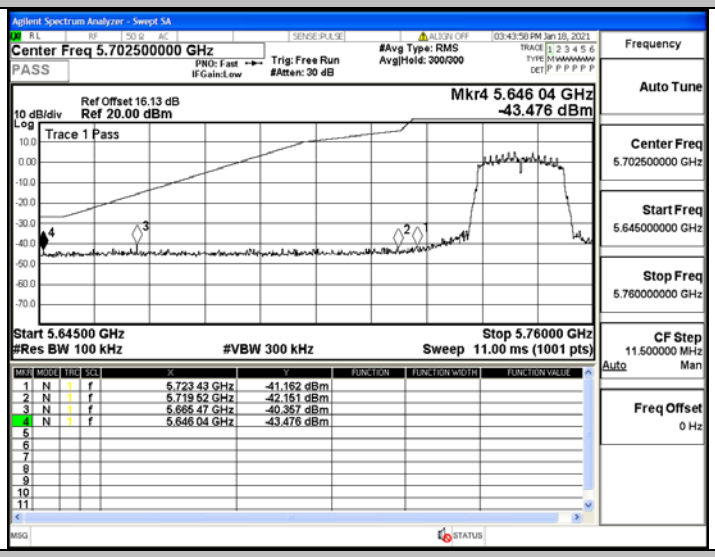
11N40MIMO_Ant2_High_5795



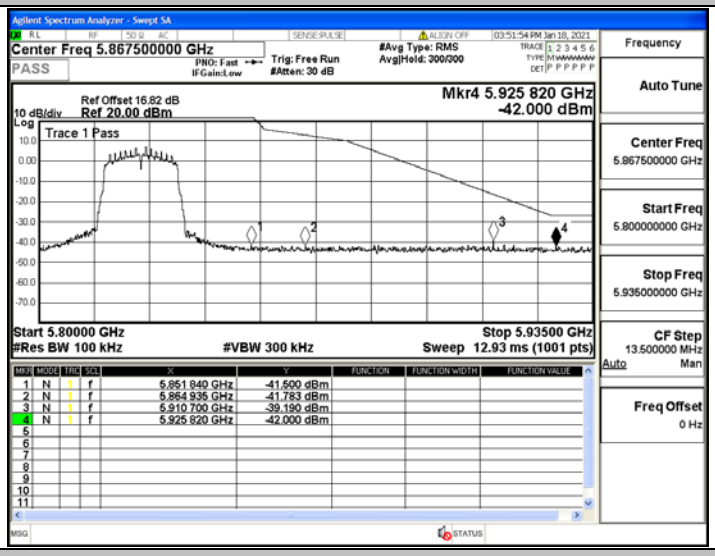
11AC20MIMO_Ant1_Low_5745



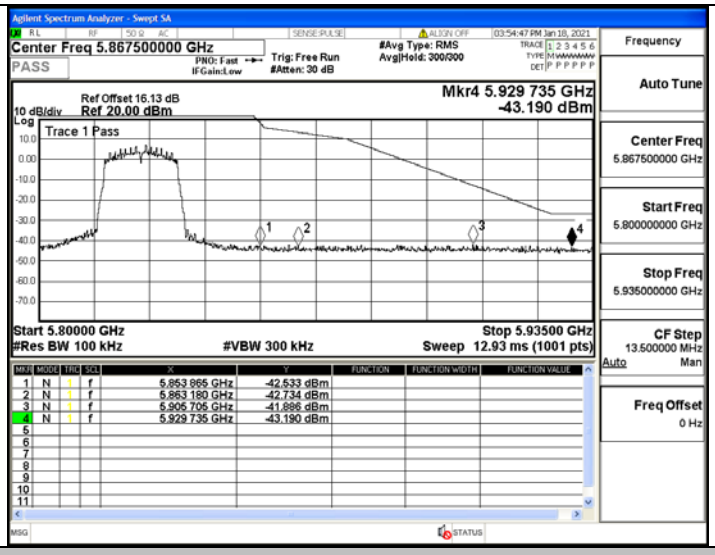
11AC20MIMO_Ant2_Low_5745



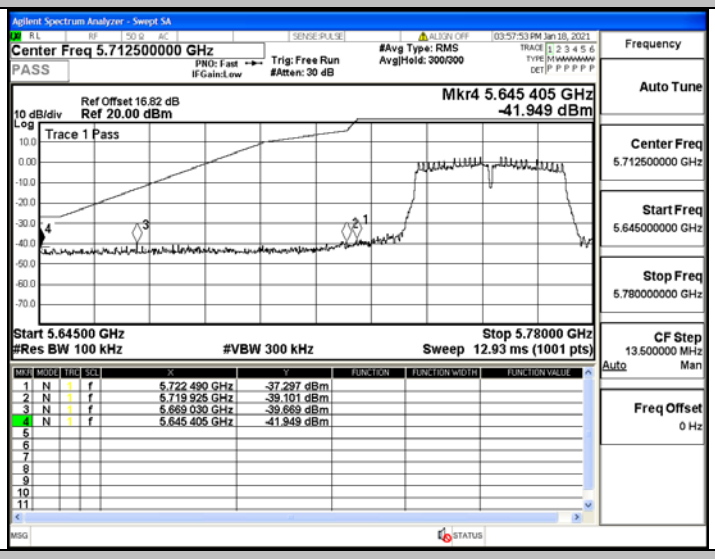
11AC20MIMO_Ant1_High_5825



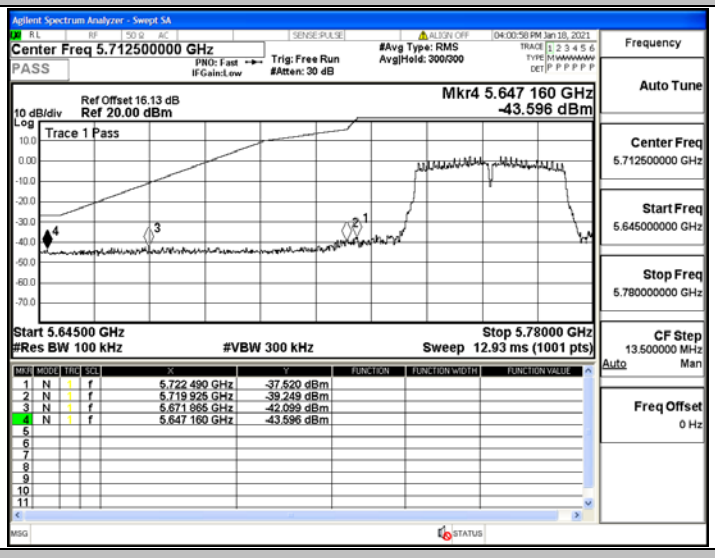
11AC20MIMO_Ant2_High_5825



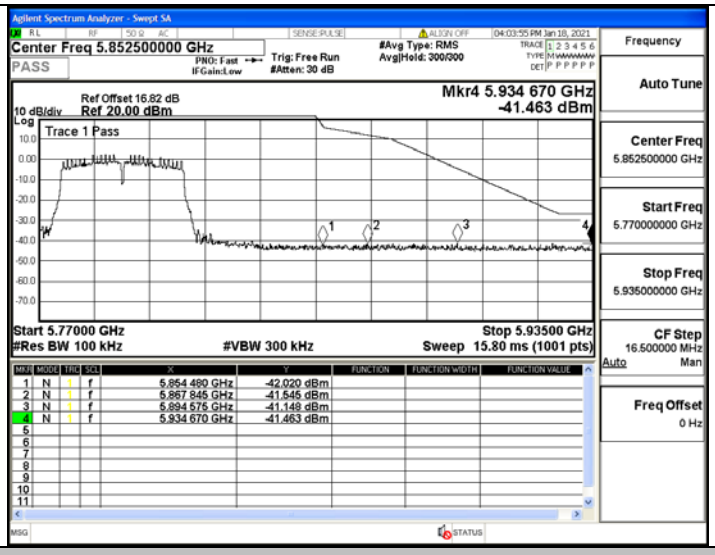
11AC40MIMO_Ant1_Low_5755



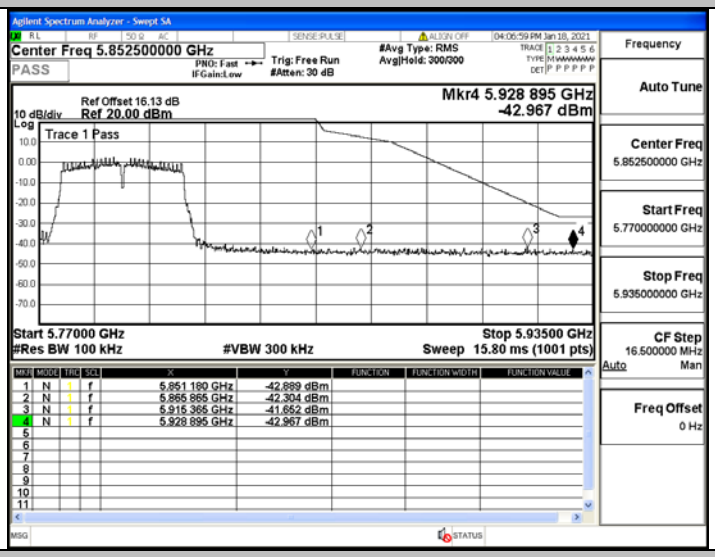
11AC40MIMO_Ant2_Low_5755



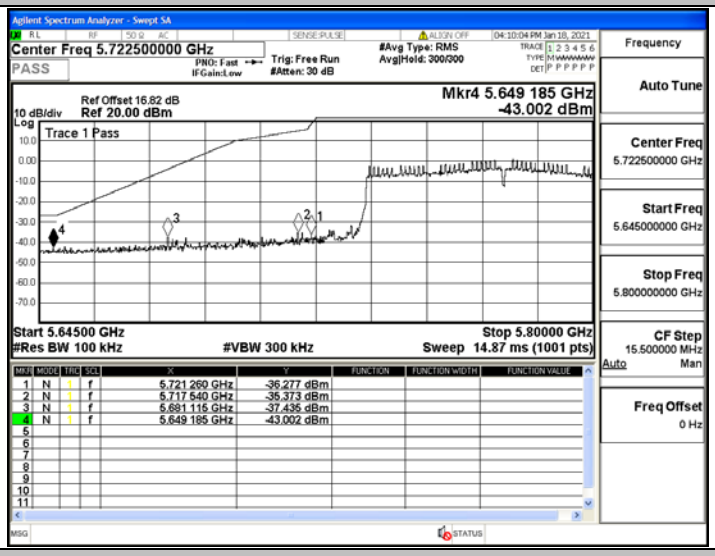
11AC40MIMO_Ant1_High_5795



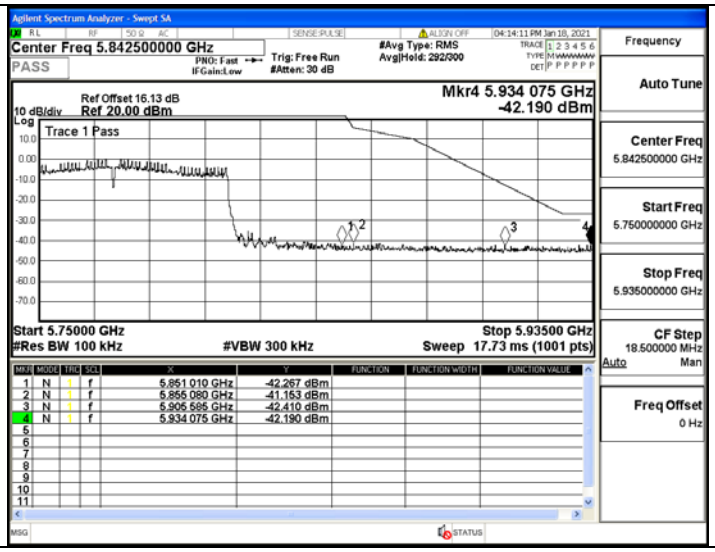
11AC40MIMO_Ant2_High_5795



11AC80MIMO_Ant1_Low_5775



11AC80MIMO_Ant2_High_5775


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.842500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 292/300
04:14:11 PM Jan 18, 2021
PASS
Ref Offset 16.13 dB
10 dB/div Ref 20.00 dBm
Log
Mkr4 5.934 075 GHz
-42.190 dBm
Trace 1 Pass
Start 5.75000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 5.93500 GHz
Sweep 17.73 ms (1001 pts)
1 N 1 f 5.851 010 GHz -42.267 dBm
2 N 1 f 5.855 080 GHz -41.153 dBm
3 N 1 f 5.905 585 GHz -42.410 dBm
4 N 1 f 5.934 075 GHz -42.190 dBm
Frequency
Auto Tune
Center Freq
5.842500000 GHz
Start Freq
5.750000000 GHz
Stop Freq
5.935000000 GHz
CF Step
18.500000 MHz
Auto Man
Freq Offset
0 Hz

Appendix E: Frequency Stability

Test Result

Ant 1

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5745	20	132	5745.067969	5745 – 5825	PASS
5745	20	108	5744.945836	5745 – 5825	PASS
5745	50	120	5744.979009	5745 – 5825	PASS
5745	40	120	5745.092215	5745 – 5825	PASS
5745	30	120	5745.063660	5745 – 5825	PASS
5745	20	120	5745.034602	5745 – 5825	PASS
5745	10	120	5745.041239	5745 – 5825	PASS
5745	0	120	5744.940236	5745 – 5825	PASS
5745	-10	120	5745.010476	5745 – 5825	PASS
5745	-20	120	5744.945464	5745 – 5825	PASS
5745	-30	120	5745.005147	5745 – 5825	PASS

Ant 2

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5745	20	132	5745.095089	5745 – 5825	PASS
5745	20	108	5744.935261	5745 – 5825	PASS
5745	50	120	5745.074573	5745 – 5825	PASS
5745	40	120	5744.984237	5745 – 5825	PASS
5745	30	120	5744.905824	5745 – 5825	PASS
5745	20	120	5744.976499	5745 – 5825	PASS
5745	10	120	5744.924052	5745 – 5825	PASS
5745	0	120	5745.043466	5745 – 5825	PASS
5745	-10	120	5744.966543	5745 – 5825	PASS
5745	-20	120	5745.017671	5745 – 5825	PASS
5745	-30	120	5744.944728	5745 – 5825	PASS

Ant 1

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5785	20	132	5784.964793	5745 – 5825	PASS
5785	20	108	5784.953354	5745 – 5825	PASS
5785	50	120	5784.988558	5745 – 5825	PASS
5785	40	120	5784.960313	5745 – 5825	PASS
5785	30	120	5784.998606	5745 – 5825	PASS
5785	20	120	5785.065066	5745 – 5825	PASS
5785	10	120	5785.075053	5745 – 5825	PASS
5785	0	120	5784.924475	5745 – 5825	PASS
5785	-10	120	5785.061832	5745 – 5825	PASS
5785	-20	120	5785.013696	5745 – 5825	PASS
5785	-30	120	5785.036186	5745 – 5825	PASS

Ant 2

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5785	20	132	5784.955082	5745 – 5825	PASS
5785	20	108	5784.993796	5745 – 5825	PASS
5785	50	120	5785.059435	5745 – 5825	PASS
5785	40	120	5785.073629	5745 – 5825	PASS
5785	30	120	5785.079985	5745 – 5825	PASS
5785	20	120	5784.989849	5745 – 5825	PASS
5785	10	120	5784.909577	5745 – 5825	PASS
5785	0	120	5785.050019	5745 – 5825	PASS
5785	-10	120	5784.911098	5745 – 5825	PASS
5785	-20	120	5784.968968	5745 – 5825	PASS
5785	-30	120	5784.978107	5745 – 5825	PASS

Ant 1

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5825	20	132	5824.979020	5745 – 5825	PASS
5825	20	108	5825.065059	5745 – 5825	PASS
5825	50	120	5824.920586	5745 – 5825	PASS
5825	40	120	5825.031782	5745 – 5825	PASS
5825	30	120	5825.001219	5745 – 5825	PASS
5825	20	120	5824.943477	5745 – 5825	PASS
5825	10	120	5825.081126	5745 – 5825	PASS
5825	0	120	5824.978303	5745 – 5825	PASS
5825	-10	120	5825.043111	5745 – 5825	PASS
5825	-20	120	5824.948876	5745 – 5825	PASS
5825	-30	120	5825.000976	5745 – 5825	PASS

Ant 2

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5825	20	132	5824.925035	5745 – 5825	PASS
5825	20	108	5824.902378	5745 – 5825	PASS
5825	50	120	5824.974465	5745 – 5825	PASS
5825	40	120	5825.091588	5745 – 5825	PASS
5825	30	120	5825.033821	5745 – 5825	PASS
5825	20	120	5825.008473	5745 – 5825	PASS
5825	10	120	5825.008753	5745 – 5825	PASS
5825	0	120	5824.960114	5745 – 5825	PASS
5825	-10	120	5825.068189	5745 – 5825	PASS
5825	-20	120	5825.085375	5745 – 5825	PASS
5825	-30	120	5825.042652	5745 – 5825	PASS

Ant 1

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5755	20	132	5755.097125	5745 – 5825	PASS
5755	20	108	5754.993511	5745 – 5825	PASS
5755	50	120	5755.075190	5745 – 5825	PASS
5755	40	120	5754.937943	5745 – 5825	PASS
5755	30	120	5754.925588	5745 – 5825	PASS
5755	20	120	5754.906200	5745 – 5825	PASS
5755	10	120	5755.064921	5745 – 5825	PASS
5755	0	120	5754.933367	5745 – 5825	PASS
5755	-10	120	5755.013691	5745 – 5825	PASS
5755	-20	120	5754.924672	5745 – 5825	PASS
5755	-30	120	5754.911252	5745 – 5825	PASS

Ant 2

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5755	20	132	5754.990221	5745 – 5825	PASS
5755	20	108	5754.979090	5745 – 5825	PASS
5755	50	120	5755.043427	5745 – 5825	PASS
5755	40	120	5755.034826	5745 – 5825	PASS
5755	30	120	5755.003140	5745 – 5825	PASS
5755	20	120	5754.954688	5745 – 5825	PASS
5755	10	120	5754.912931	5745 – 5825	PASS
5755	0	120	5754.928092	5745 – 5825	PASS
5755	-10	120	5754.995373	5745 – 5825	PASS
5755	-20	120	5754.900863	5745 – 5825	PASS
5755	-30	120	5754.919455	5745 – 5825	PASS

Ant 1

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5795	20	132	5794.933134	5745 – 5825	PASS
5795	20	108	5795.006033	5745 – 5825	PASS
5795	50	120	5794.975652	5745 – 5825	PASS
5795	40	120	5795.056920	5745 – 5825	PASS
5795	30	120	5794.947626	5745 – 5825	PASS
5795	20	120	5795.002544	5745 – 5825	PASS
5795	10	120	5795.086066	5745 – 5825	PASS
5795	0	120	5795.056721	5745 – 5825	PASS
5795	-10	120	5795.046843	5745 – 5825	PASS
5795	-20	120	5795.018201	5745 – 5825	PASS
5795	-30	120	5795.011033	5745 – 5825	PASS

Ant 2

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5795	20	132	5795.042300	5745 – 5825	PASS
5795	20	108	5795.020274	5745 – 5825	PASS
5795	50	120	5795.086791	5745 – 5825	PASS
5795	40	120	5794.931988	5745 – 5825	PASS
5795	30	120	5794.921846	5745 – 5825	PASS
5795	20	120	5794.916594	5745 – 5825	PASS
5795	10	120	5795.080096	5745 – 5825	PASS
5795	0	120	5795.089954	5745 – 5825	PASS
5795	-10	120	5794.923627	5745 – 5825	PASS
5795	-20	120	5794.909269	5745 – 5825	PASS
5795	-30	120	5795.012878	5745 – 5825	PASS

Ant 1

Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5775	20	132	5775.062510	5745 – 5825	PASS
5775	20	108	5774.972659	5745 – 5825	PASS
5775	50	120	5774.946500	5745 – 5825	PASS
5775	40	120	5774.970656	5745 – 5825	PASS
5775	30	120	5775.000055	5745 – 5825	PASS
5775	20	120	5775.030839	5745 – 5825	PASS
5775	10	120	5774.957978	5745 – 5825	PASS
5775	0	120	5775.000090	5745 – 5825	PASS
5775	-10	120	5774.928771	5745 – 5825	PASS
5775	-20	120	5774.942508	5745 – 5825	PASS
5775	-30	120	5774.947290	5745 – 5825	PASS

Ant 2

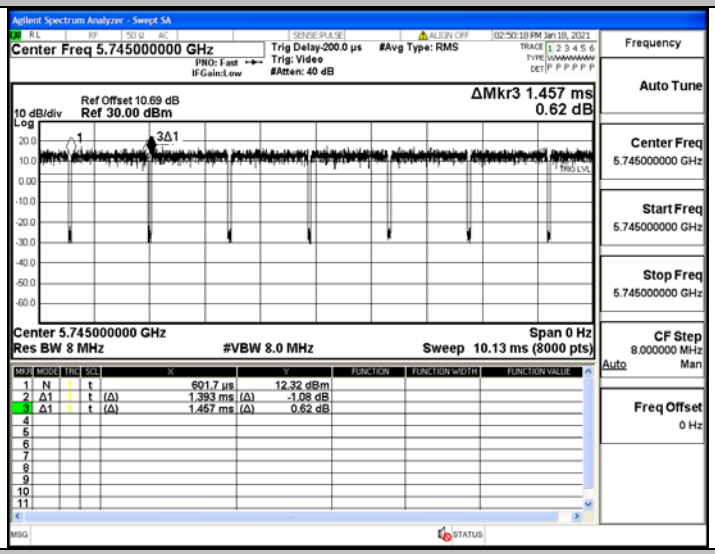
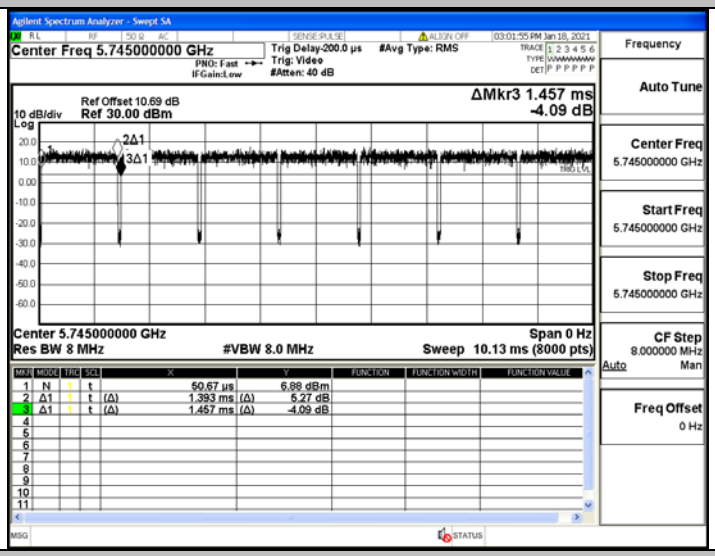
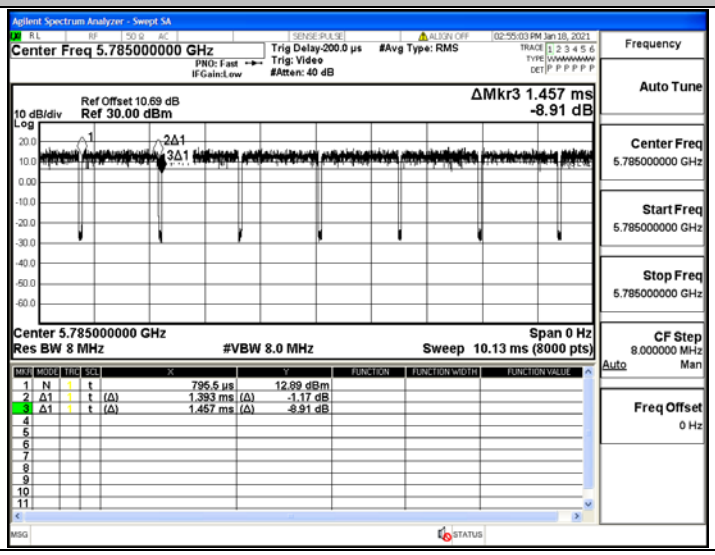
Frequency (MHz)	Enviroment Temperature (Dregree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5775	20	132	5775.048061	5745 – 5825	PASS
5775	20	108	5775.024729	5745 – 5825	PASS
5775	50	120	5775.048103	5745 – 5825	PASS
5775	40	120	5774.966981	5745 – 5825	PASS
5775	30	120	5774.988298	5745 – 5825	PASS
5775	20	120	5774.904104	5745 – 5825	PASS
5775	10	120	5774.984255	5745 – 5825	PASS
5775	0	120	5775.008808	5745 – 5825	PASS
5775	-10	120	5775.011605	5745 – 5825	PASS
5775	-20	120	5774.945879	5745 – 5825	PASS
5775	-30	120	5775.026367	5745 – 5825	PASS

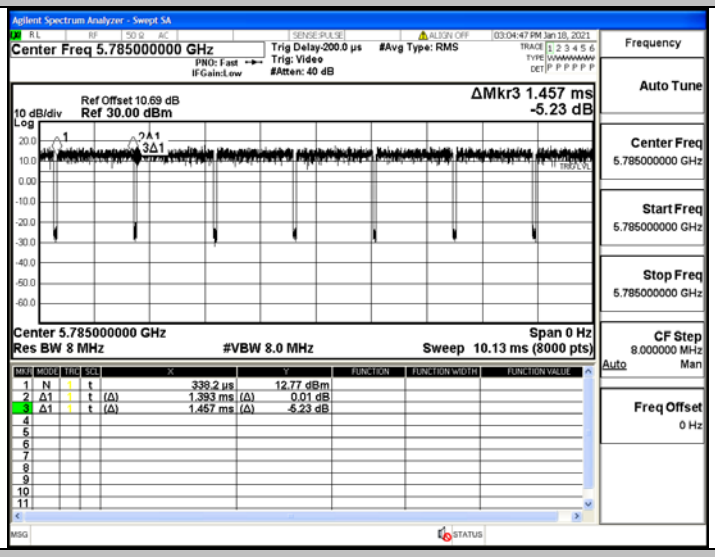
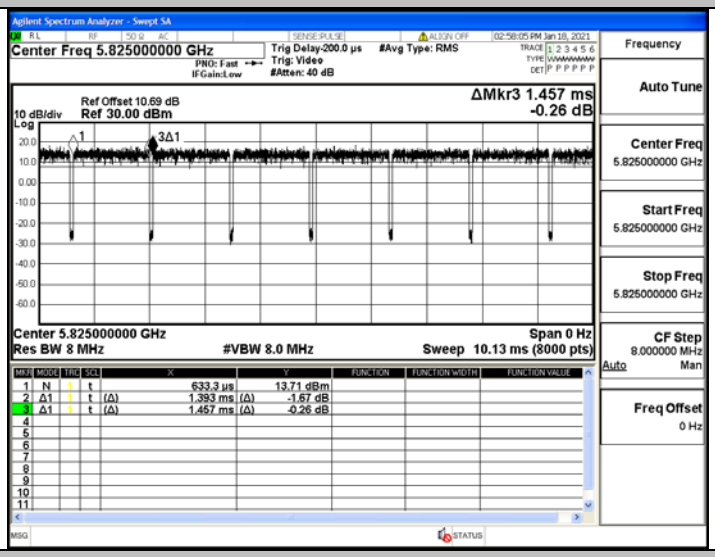
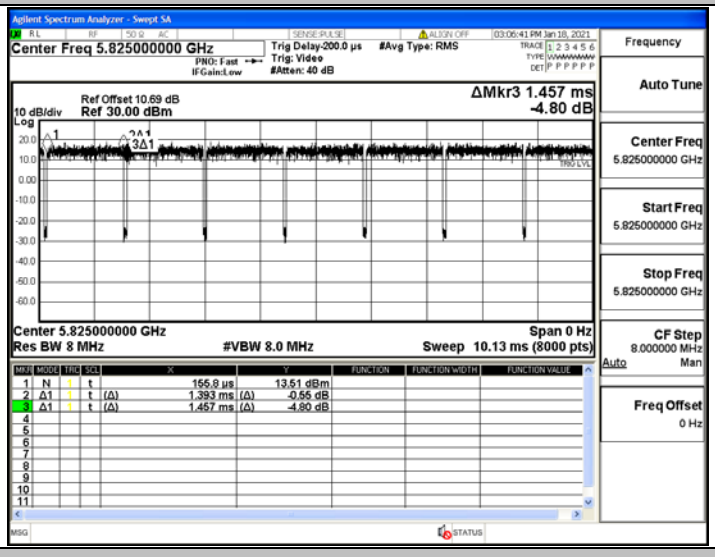
Appendix F: Duty Cycle

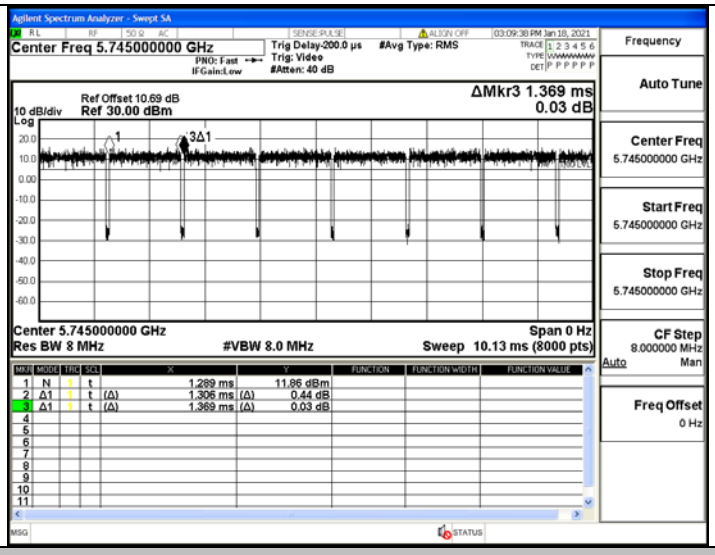
Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5745	1.39	1.46	95.21
	Ant2	5745	1.39	1.46	95.21
	Ant1	5785	1.39	1.46	95.21
	Ant2	5785	1.39	1.46	95.21
	Ant1	5825	1.39	1.46	95.21
	Ant2	5825	1.39	1.46	95.21
11N20MIMO	Ant1	5745	1.31	1.37	95.62
	Ant2	5745	1.31	1.37	95.62
	Ant1	5785	1.31	1.37	95.62
	Ant2	5785	1.31	1.37	95.62
	Ant1	5825	1.30	1.37	94.89
	Ant2	5825	1.31	1.37	95.62
11N40MIMO	Ant1	5755	0.34	0.40	85.00
	Ant2	5755	0.34	0.40	85.00
	Ant1	5795	0.34	0.40	85.00
	Ant2	5795	0.34	0.40	85.00
11AC20MIMO	Ant1	5745	0.68	0.74	91.89
	Ant2	5745	0.68	0.74	91.89
	Ant1	5785	0.68	0.74	91.89
	Ant2	5785	0.68	0.74	91.89
	Ant1	5825	0.68	0.74	91.89
	Ant2	5825	0.68	0.74	91.89
11AC40MIMO	Ant1	5755	0.35	0.41	85.37
	Ant2	5755	0.35	0.41	85.37
	Ant1	5795	0.35	0.41	85.37
	Ant2	5795	0.35	0.41	85.37
11AC80MIMO	Ant1	5775	0.19	0.25	76.00
	Ant2	5775	0.19	0.25	76.00

Test Graph

11A_Ant1_5745

11A_Ant2_5745

11A_Ant1_5785


11A_Ant2_5785

11A_Ant1_5825

11A_Ant2_5825

11N20MIMO_Ant1_5745



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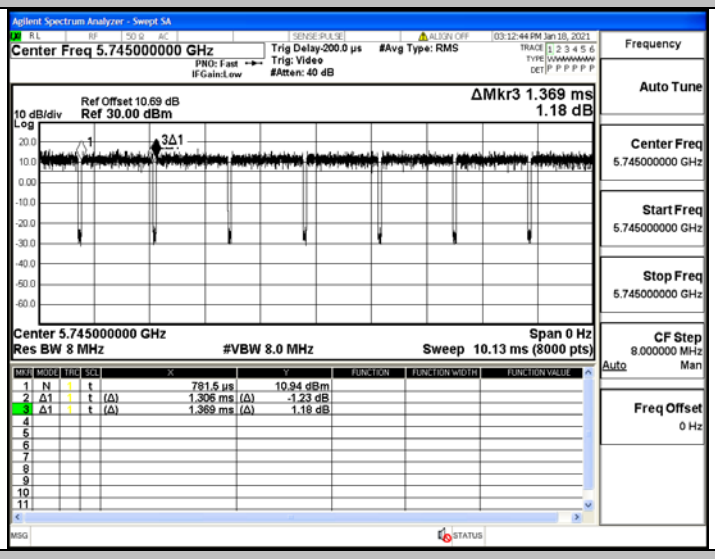

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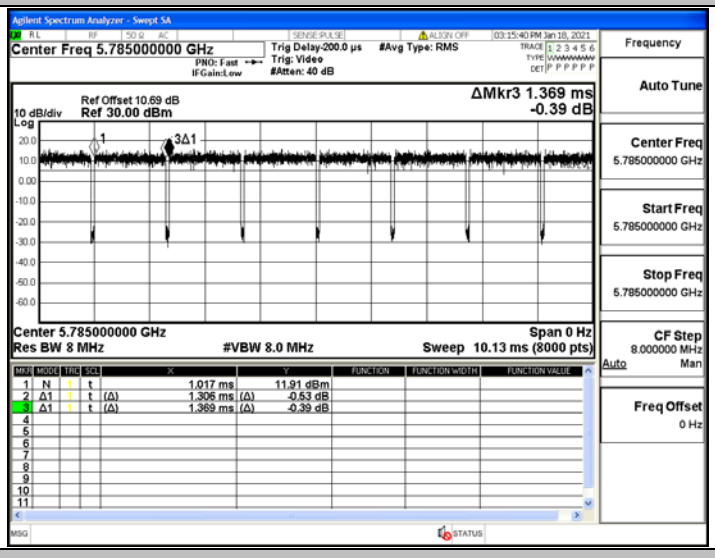

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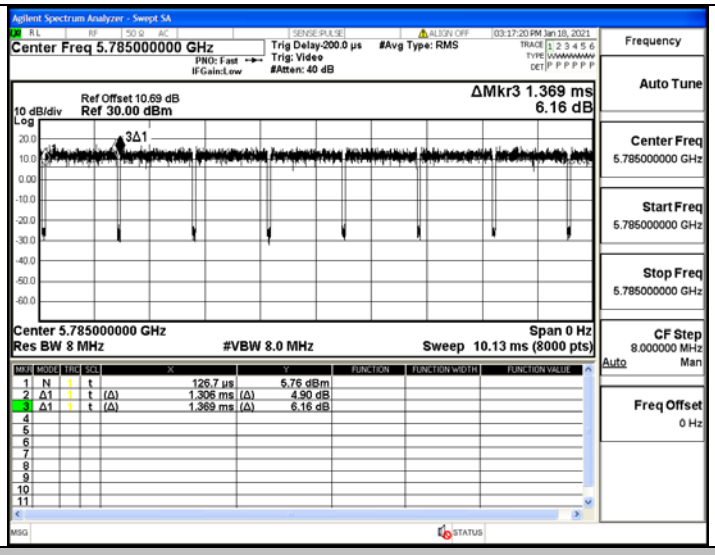

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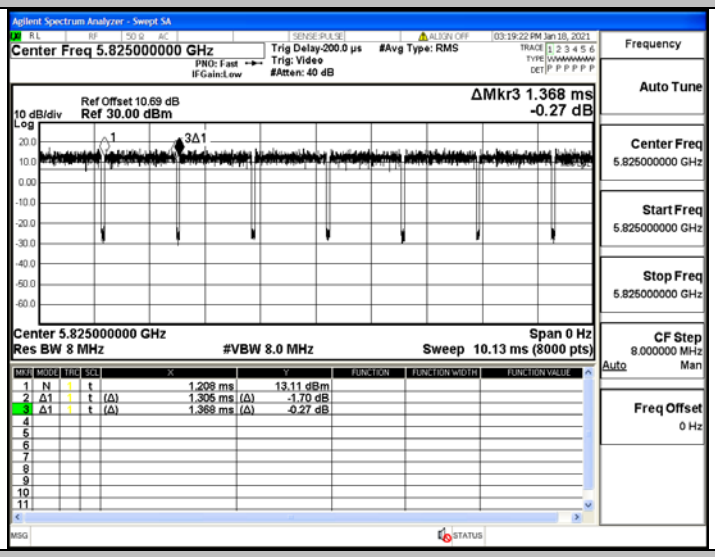

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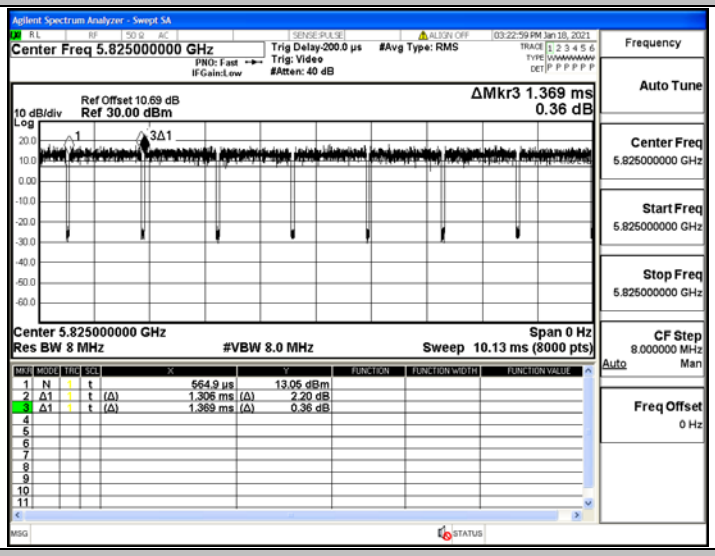

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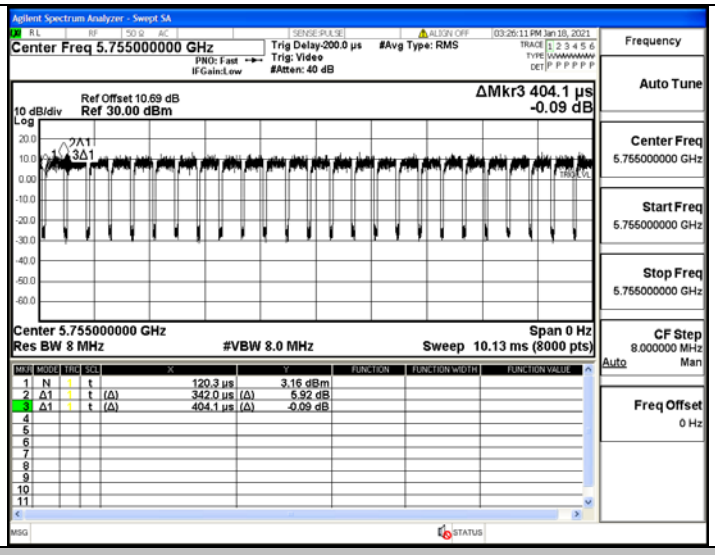

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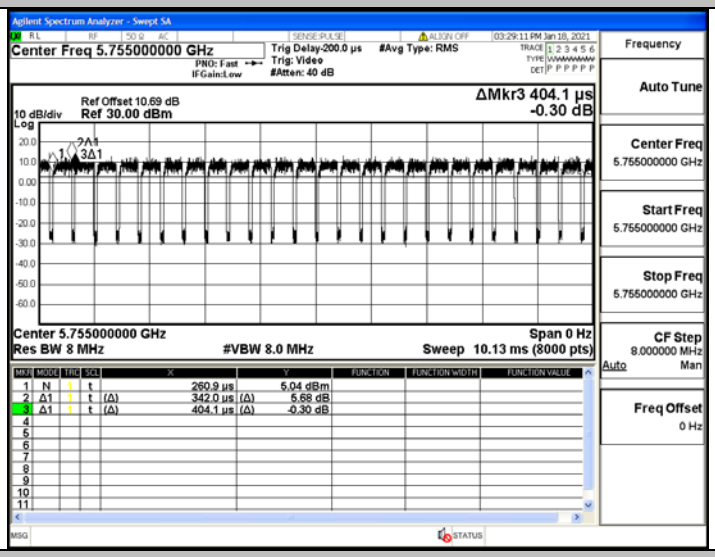

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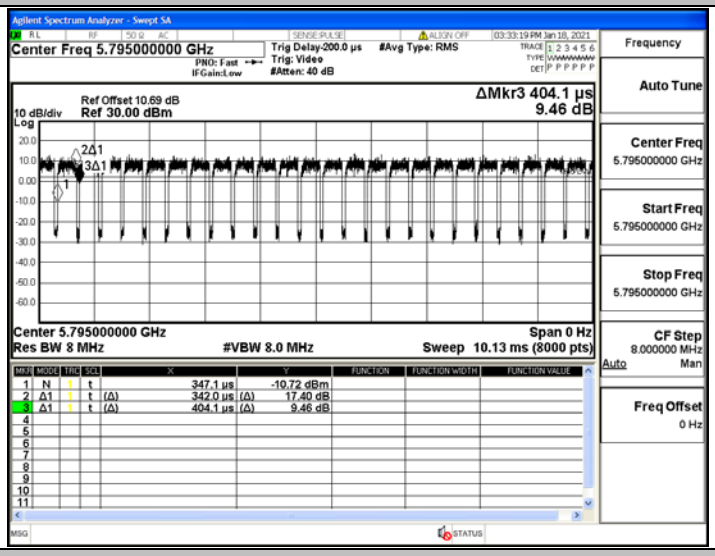

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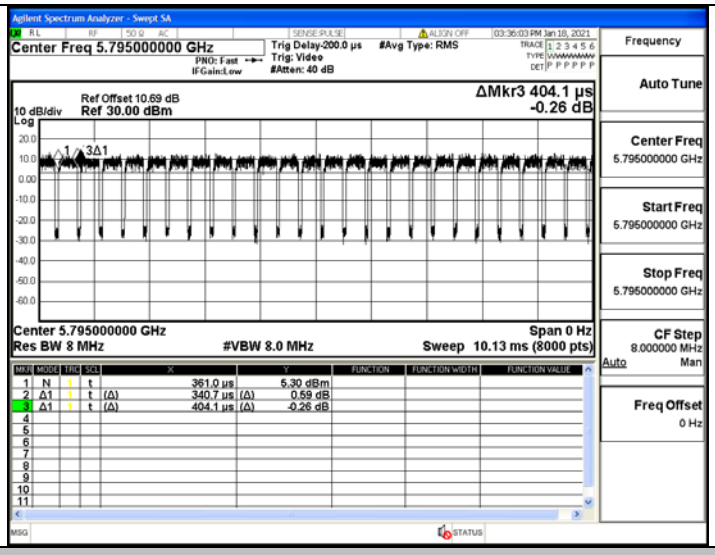

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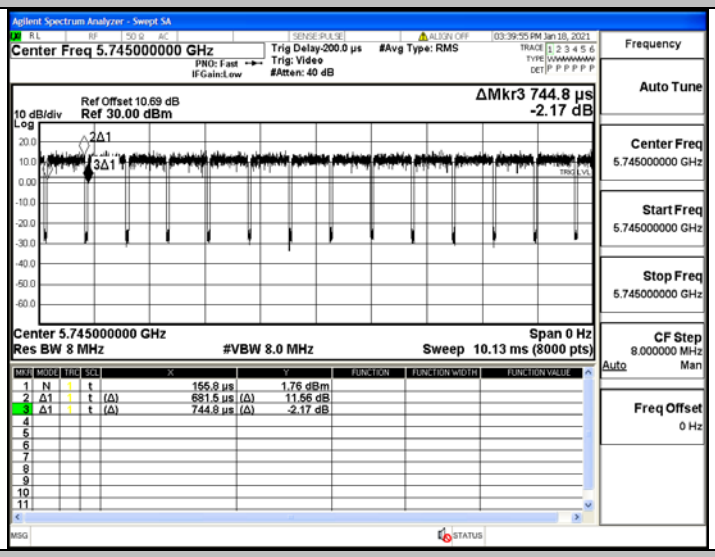

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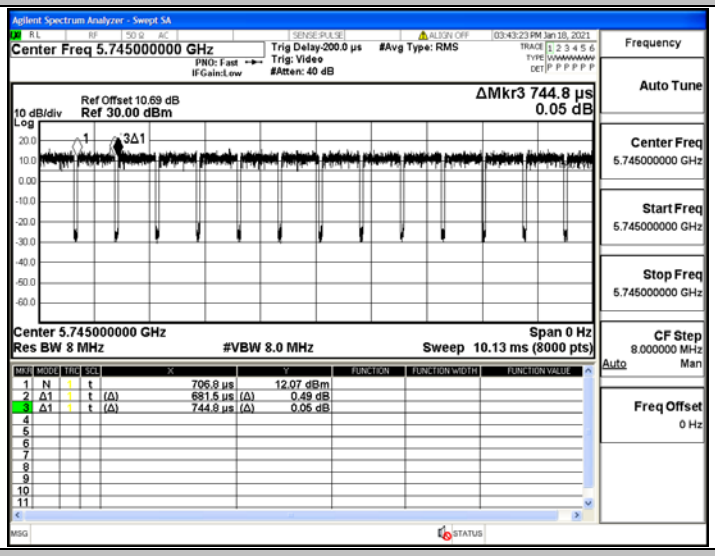

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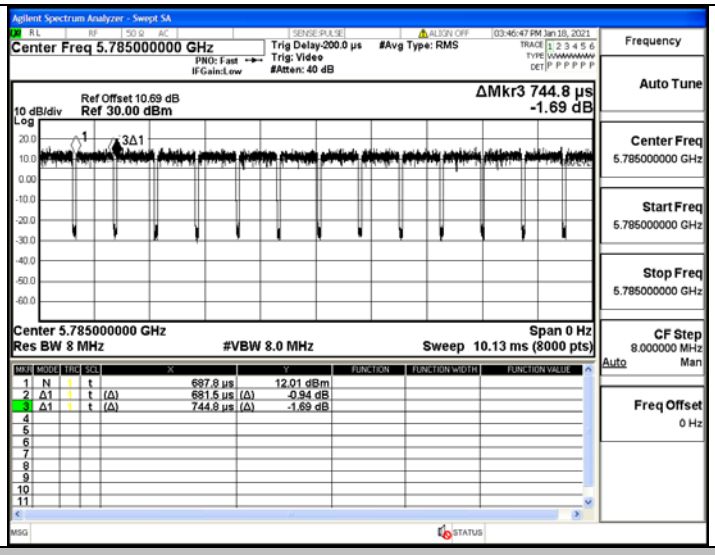

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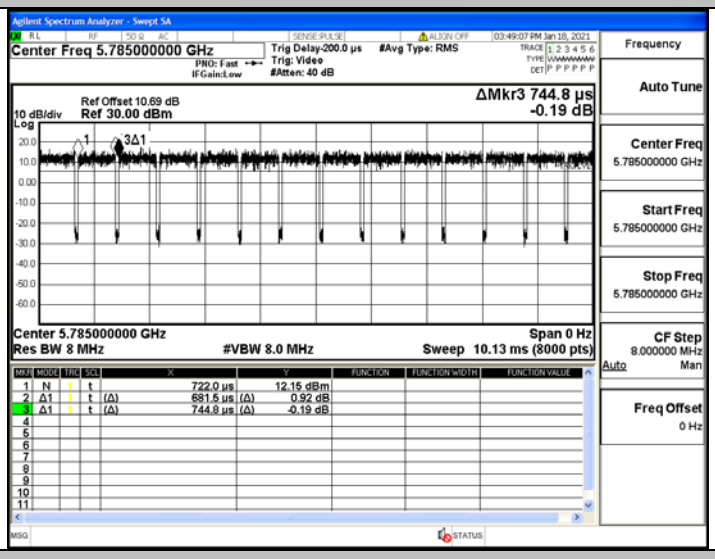

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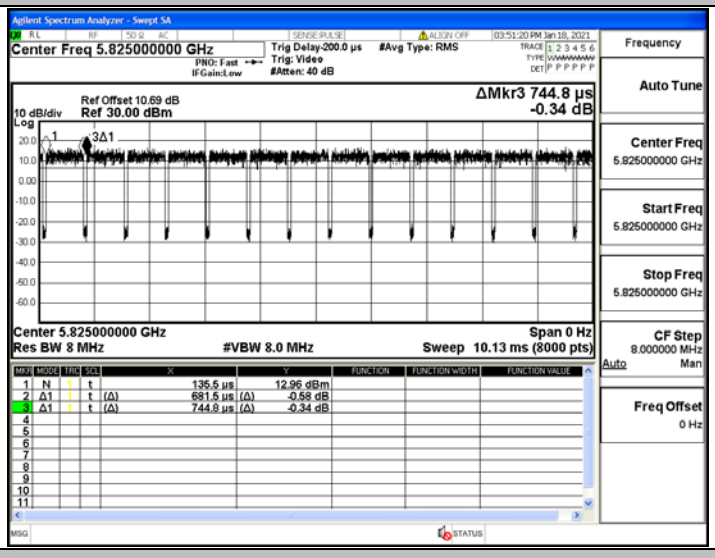

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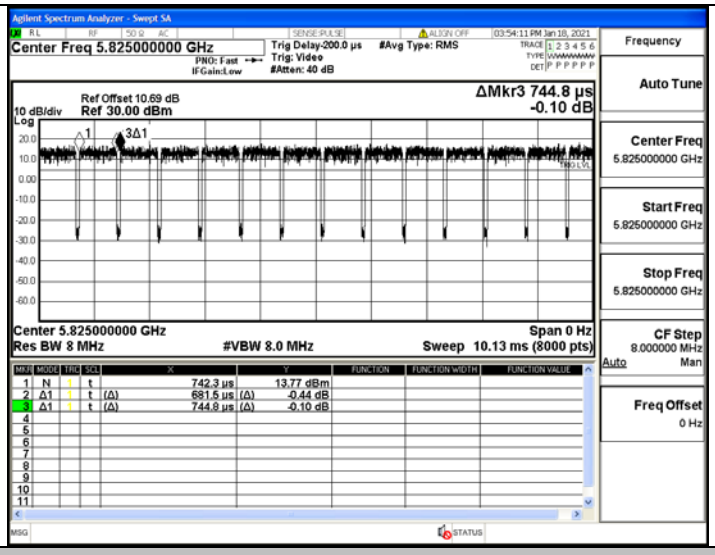

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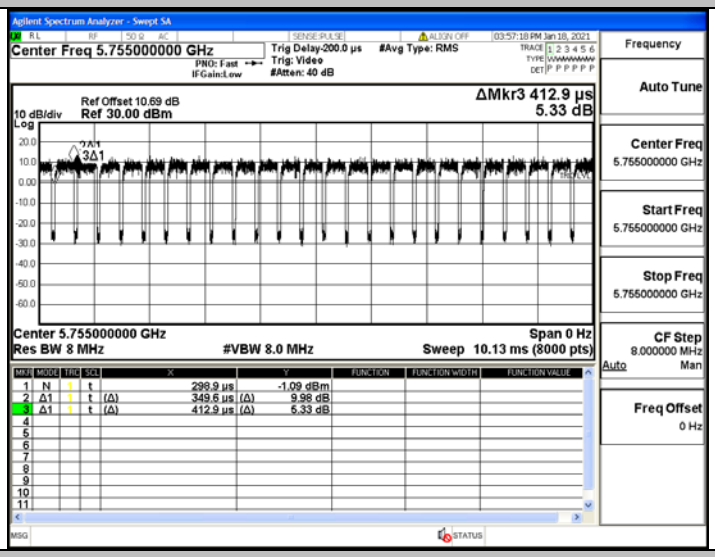

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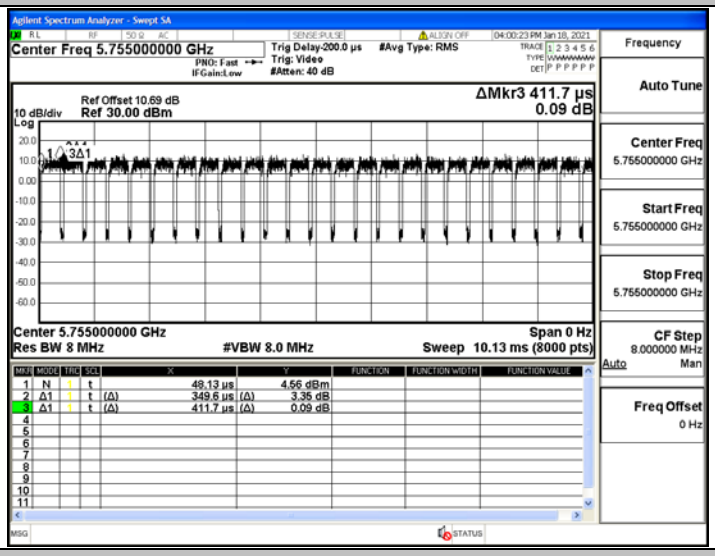

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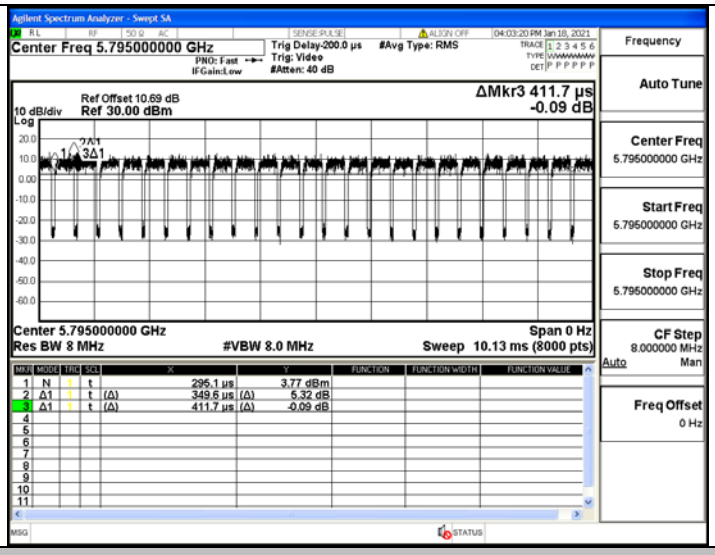

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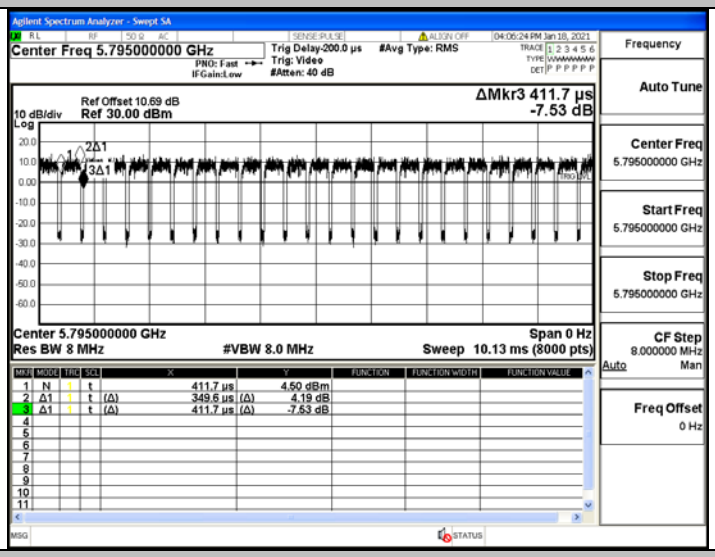

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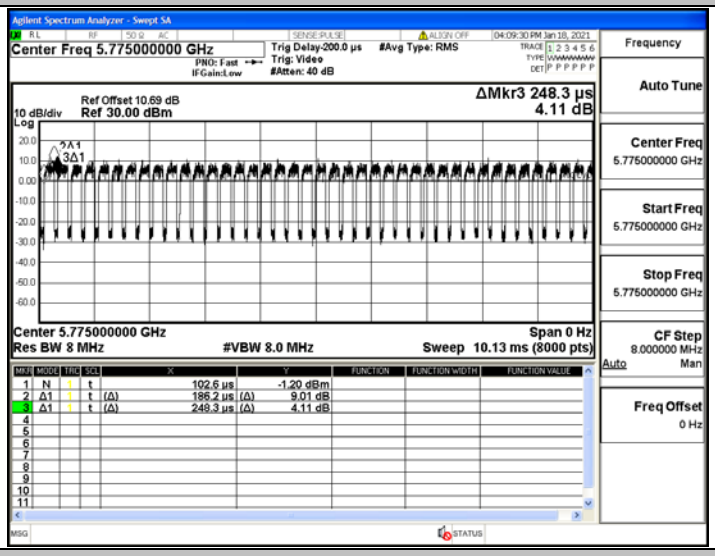

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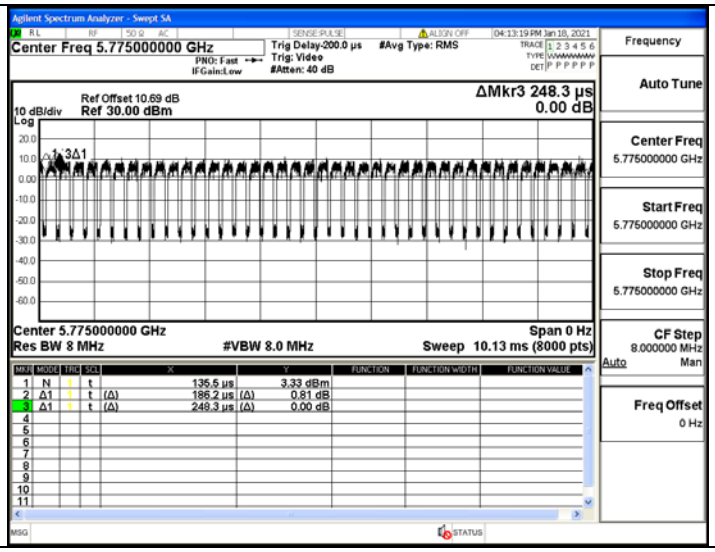
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PNO: Fast
IFGain:Low
Trig Delay-200.0 µs
Trig: Video
#Atten: 40 dB
#Avg Type: RMS
04:13:19 PM Jan 18, 2021
Frequency
Ref Offset 10.69 dB
10 dB/div Ref 30.00 dBm
Log
ΔMkr3 248.3 µs
0.00 dB
Auto Tune
Center Freq
5.775000000 GHz
Start Freq
5.775000000 GHz
Stop Freq
5.775000000 GHz
Center 5.775000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 10.13 ms (8000 pts)
CF Step
8.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 t 135.5 µs 3.33 dBm
2 Δ1 1 t (Δ) 186.2 µs (Δ) 0.81 dB
3 Δ1 1 t (Δ) 249.3 µs (Δ) 0.00 dB
MSG
STATUS