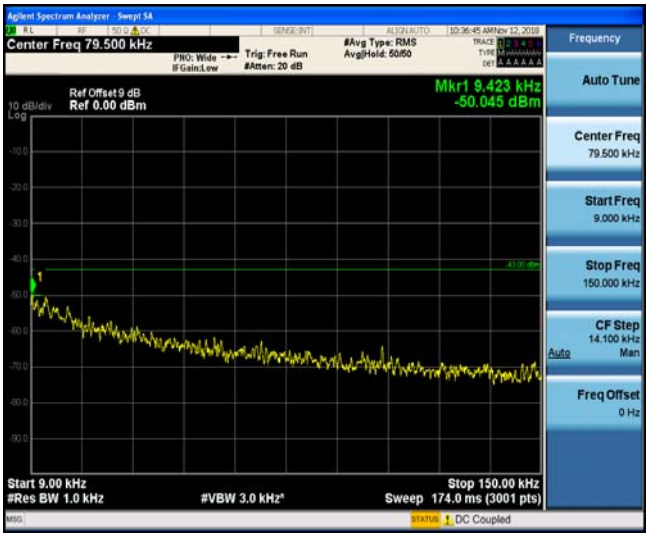
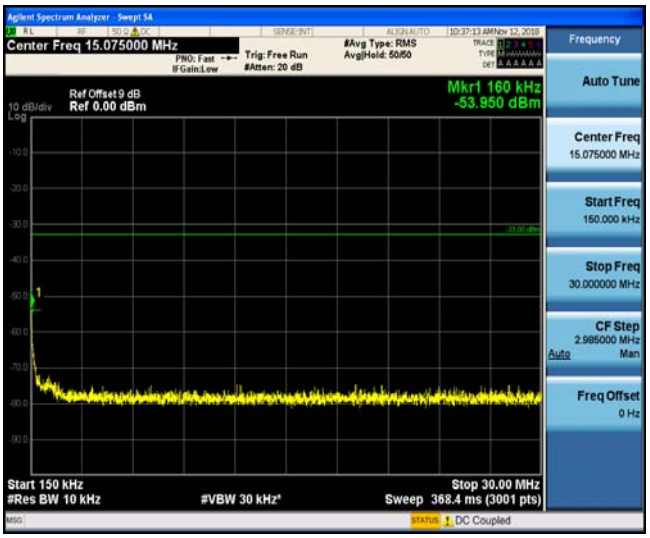
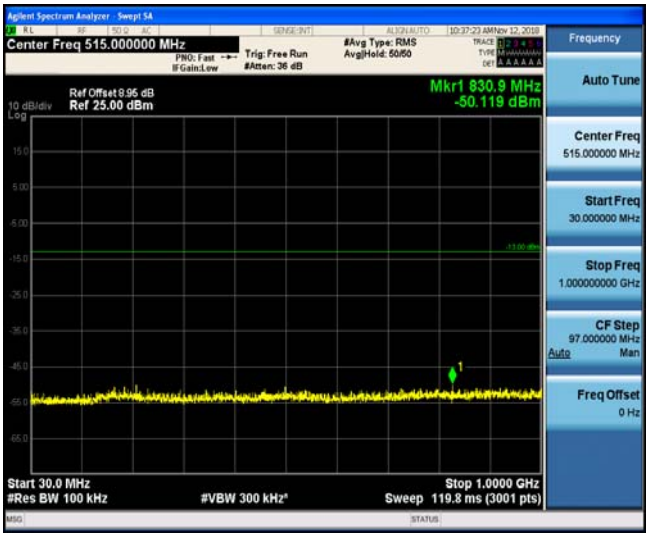
Band2_3MHz_16QAM_18900_1RB#0



Band2_3MHz_16QAM_18900_1RB#0



Band2_3MHz_16QAM_18900_1RB#0

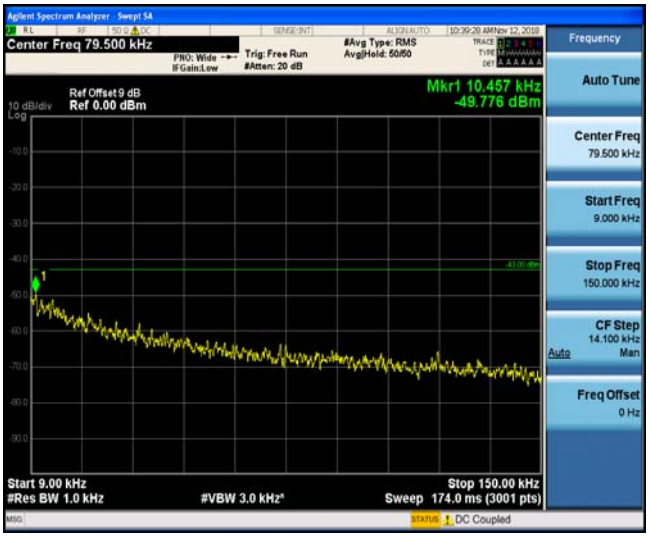


Band2_3MHz_16QAM_18900_1RB#0

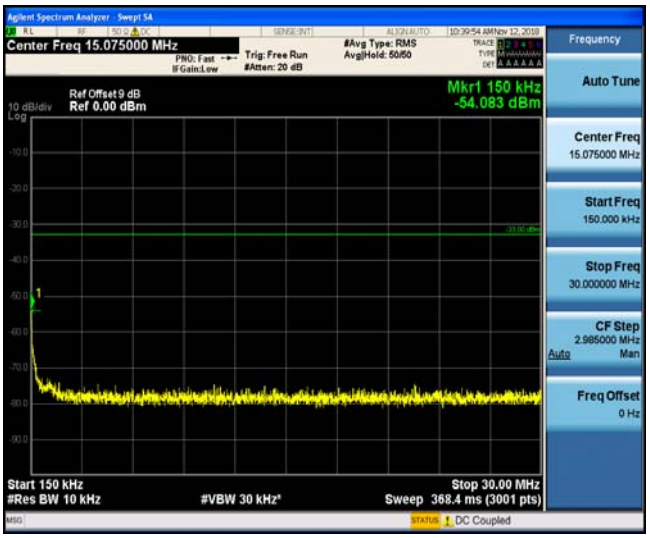
Band2_3MHz_16QAM_18900_1RB#0

Band2_3MHz_16QAM_18900_1RB#0

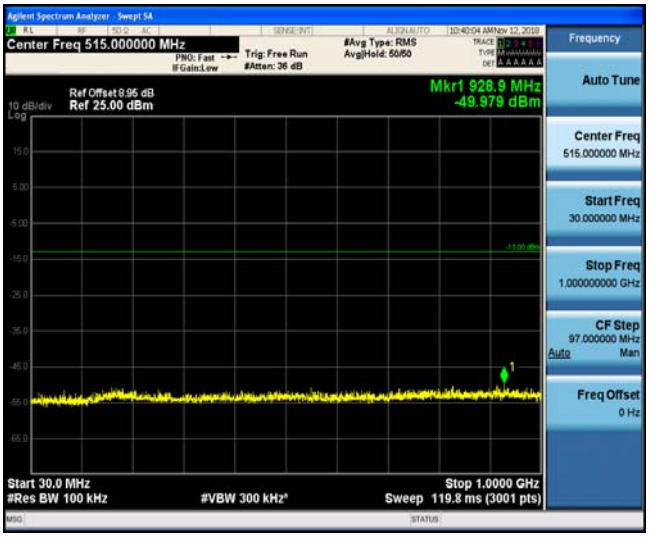
Band2_3MHz_16QAM_19185_1RB#0



Band2_3MHz_16QAM_19185_1RB#0



Band2_3MHz_16QAM_19185_1RB#0



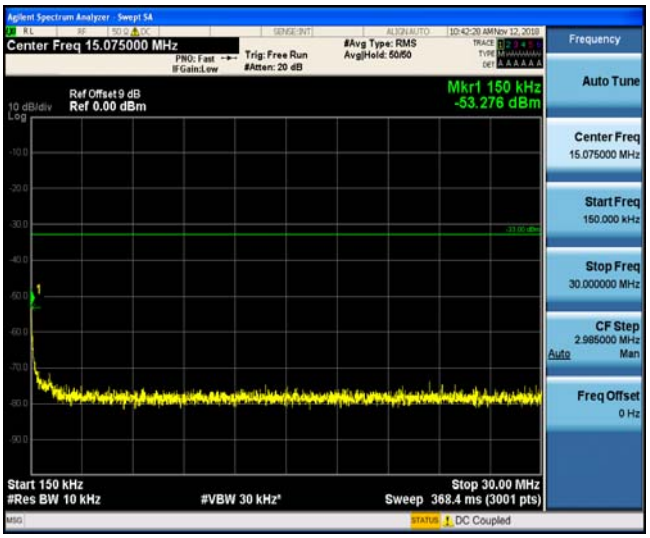
Band2_3MHz_16QAM_19185_1RB#0

Band2_3MHz_16QAM_19185_1RB#0

Band2_3MHz_16QAM_19185_1RB#0

Band2_5MHz_QPSK_18625_1RB#0

Band2_5MHz_QPSK_18625_1RB#0



Band2_5MHz_QPSK_18625_1RB#0

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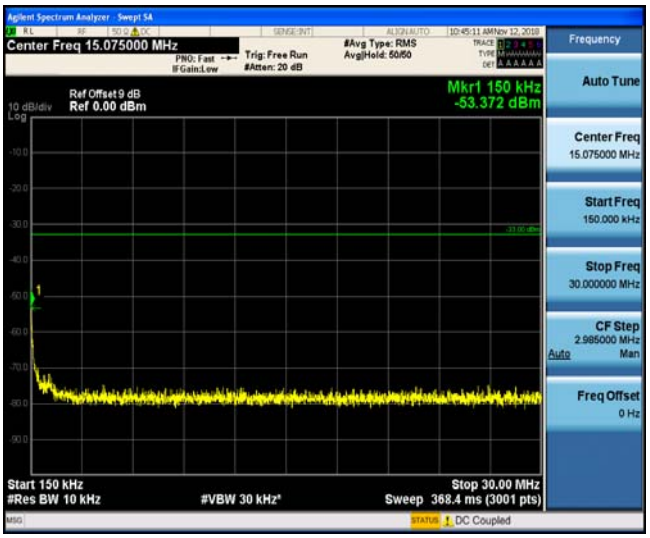
Band2_5MHz_QPSK_18900_1RB#0

Band2_5MHz_QPSK_18900_1RB#0



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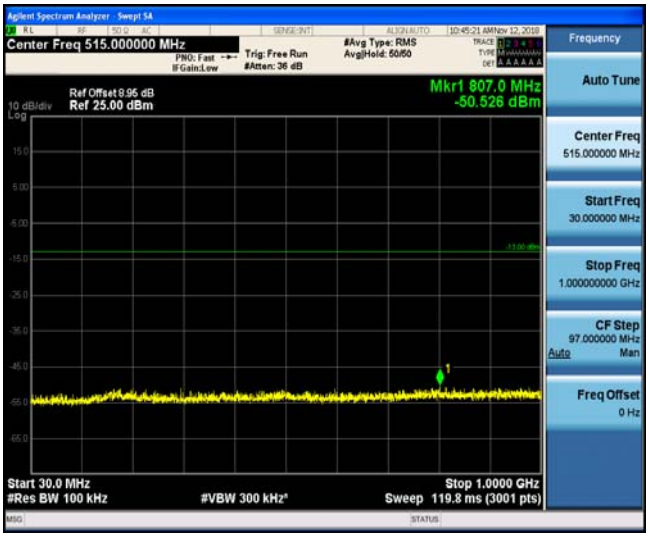
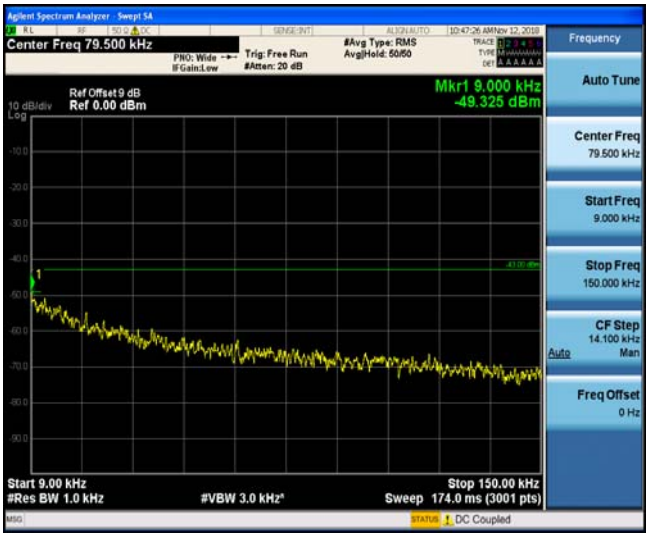


Band2_5MHz_QPSK_18900_1RB#0

Band2_5MHz_QPSK_18900_1RB#0

Band2_5MHz_QPSK_18900_1RB#0

Band2_5MHz_QPSK_19175_1RB#0



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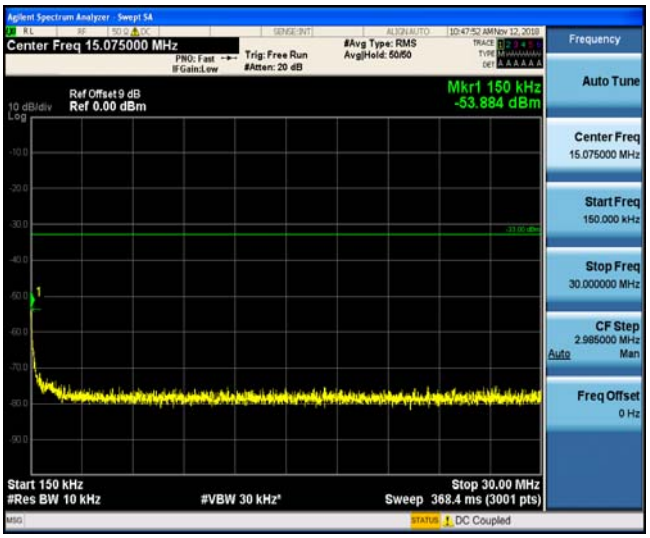

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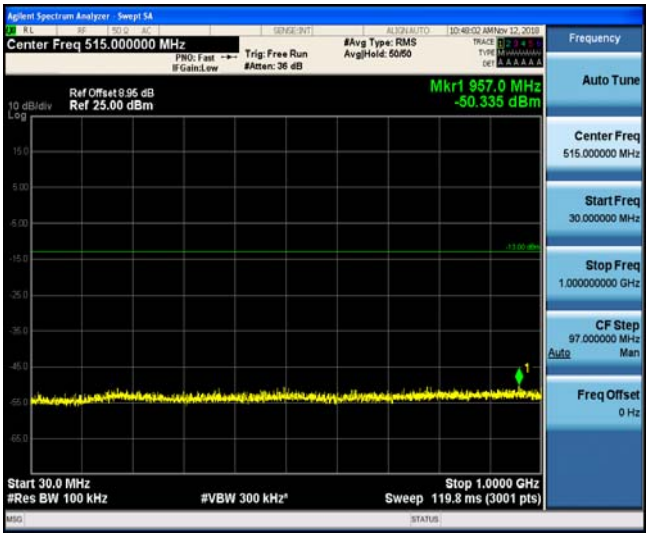
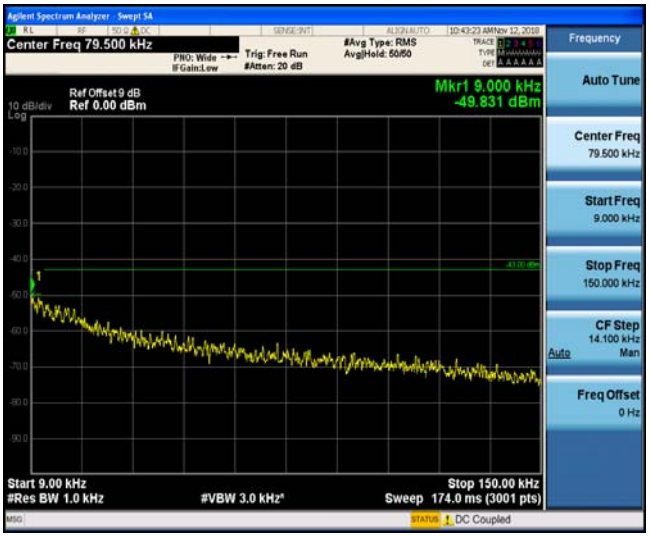


Band2_5MHz_QPSK_19175_1RB#0

Band2_5MHz_QPSK_19175_1RB#0

Band2_5MHz_QPSK_19175_1RB#0

Band2_5MHz_16QAM_18625_1RB#0



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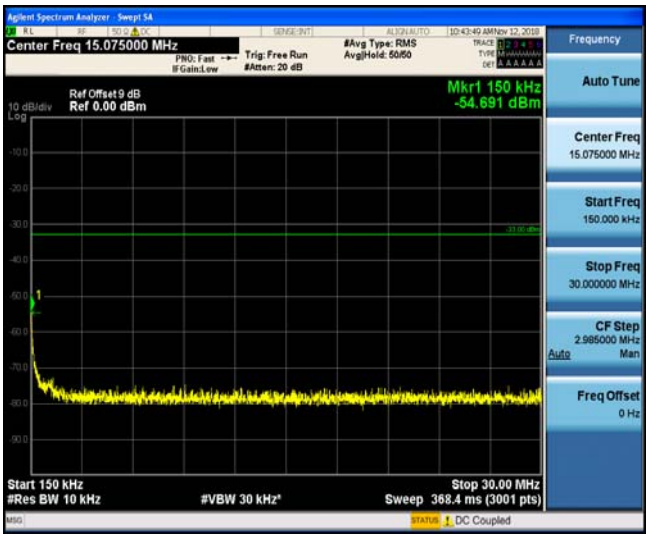
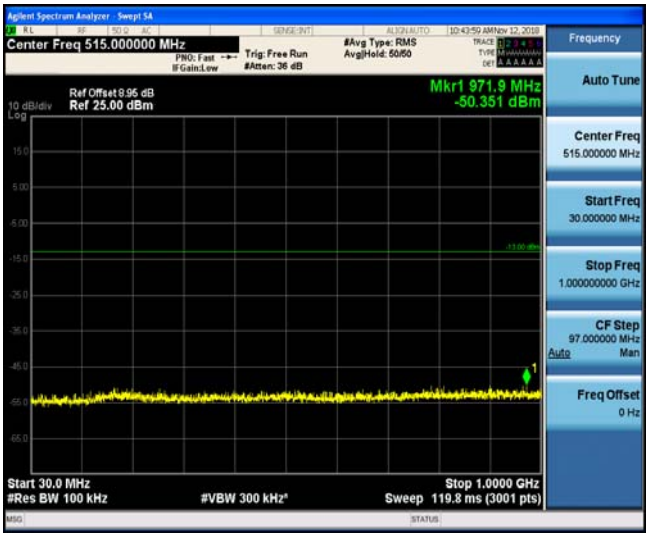


Band2_5MHz_16QAM_18625_1RB#0



Band2_5MHz_16QAM_18625_1RB#0

Band2_5MHz_16QAM_18625_1RB#0

Band2_5MHz_16QAM_18625_1RB#0

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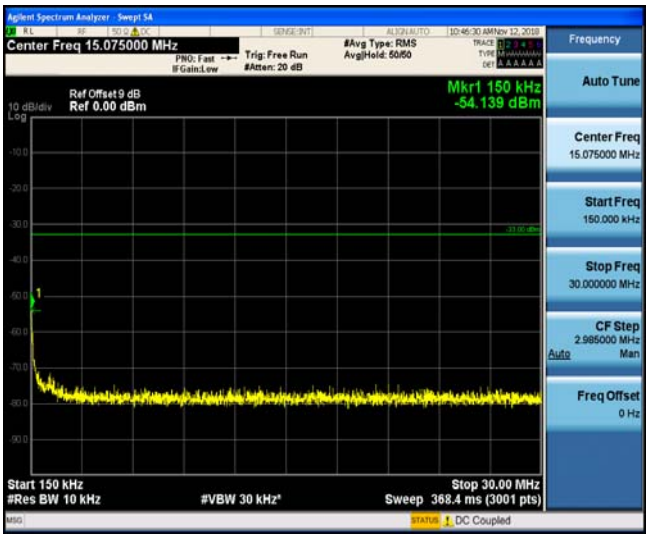
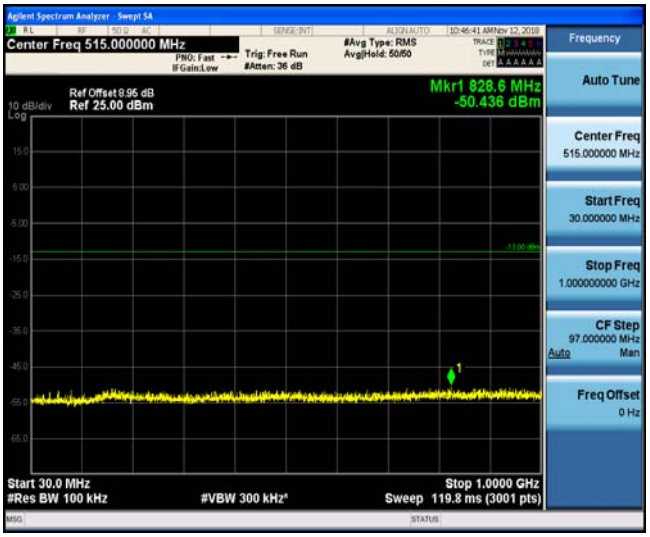
Band2_5MHz_16QAM_18900_1RB#0



Band2_5MHz_16QAM_18900_1RB#0



Band2_5MHz_16QAM_18900_1RB#0

Band2_5MHz_16QAM_18900_1RB#0

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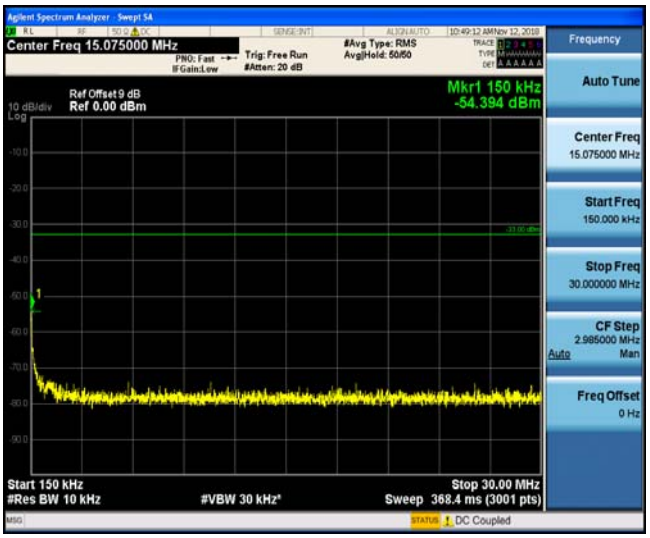
Band2_5MHz_16QAM_19175_1RB#0



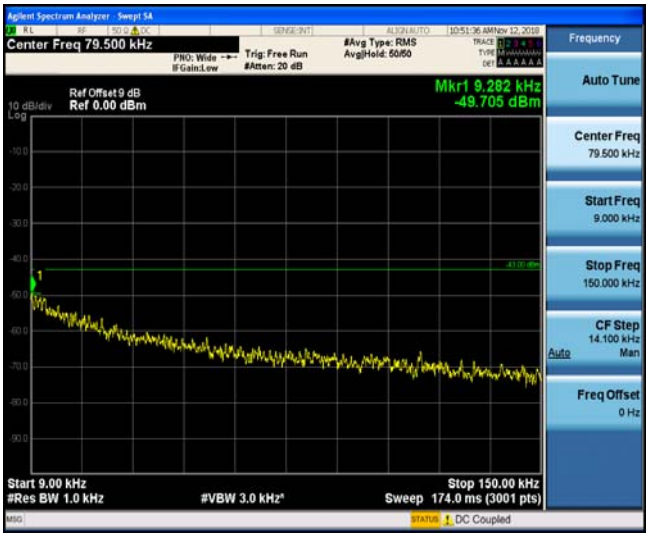
Band2_5MHz_16QAM_19175_1RB#0

Band2_5MHz_16QAM_19175_1RB#0

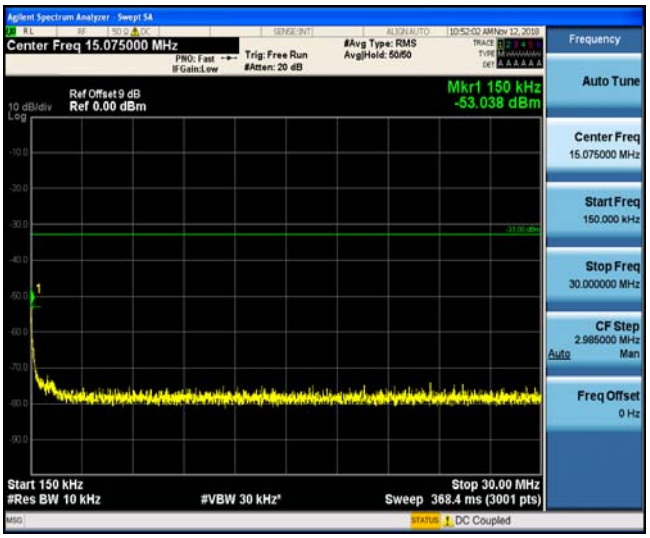
Band2_5MHz_16QAM_19175_1RB#0

Band2_5MHz_16QAM_19175_1RB#0

Band2_10MHz_QPSK_18650_1RB#0



Band2_10MHz_QPSK_18650_1RB#0



Band2_10MHz_QPSK_18650_1RB#0

Band2_10MHz_QPSK_18650_1RB#0

Band2_10MHz_QPSK_18650_1RB#0

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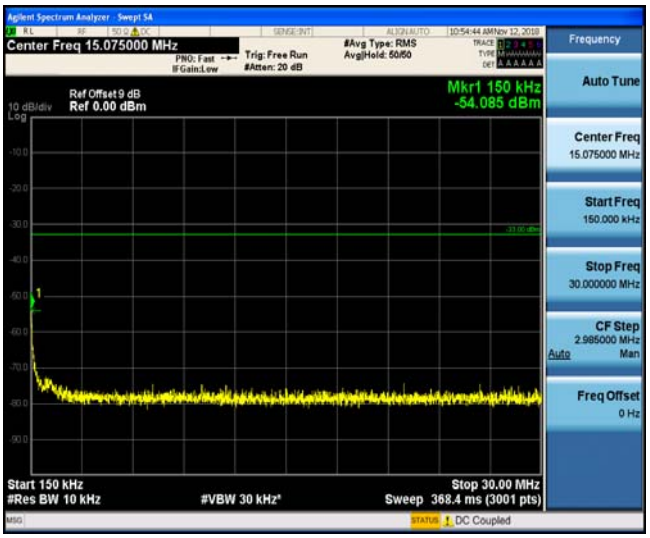
Band2_10MHz_QPSK_18900_1RB#0



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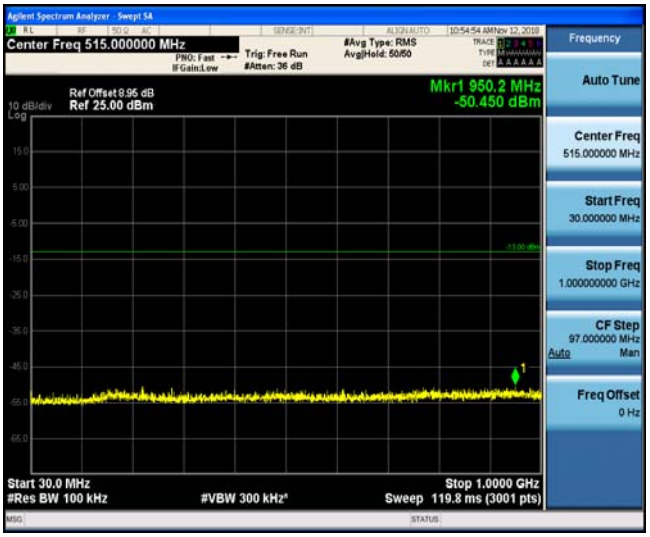
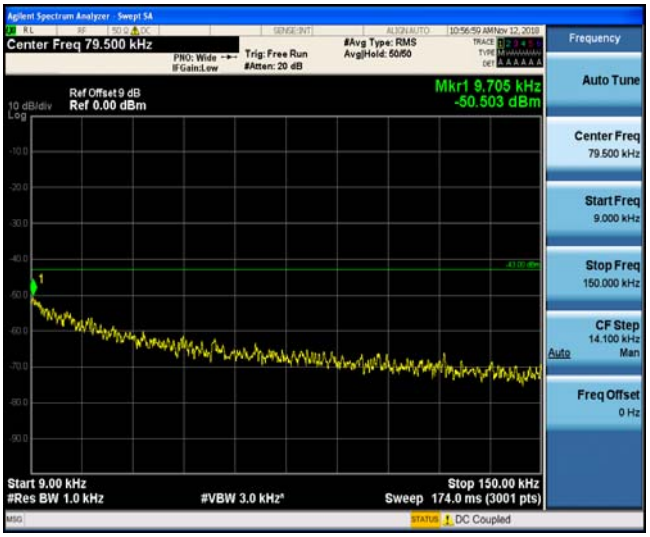


Band2_10MHz_QPSK_18900_1RB#0

Band2_10MHz_QPSK_18900_1RB#0

Band2_10MHz_QPSK_18900_1RB#0

Band2_10MHz_QPSK_19150_1RB#0



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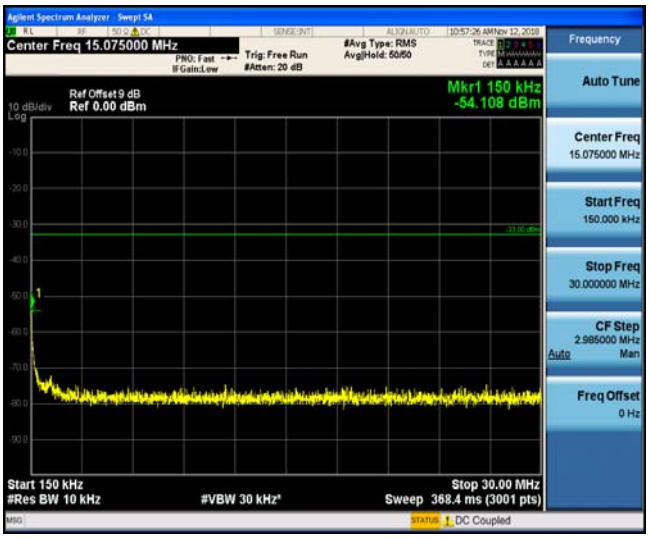

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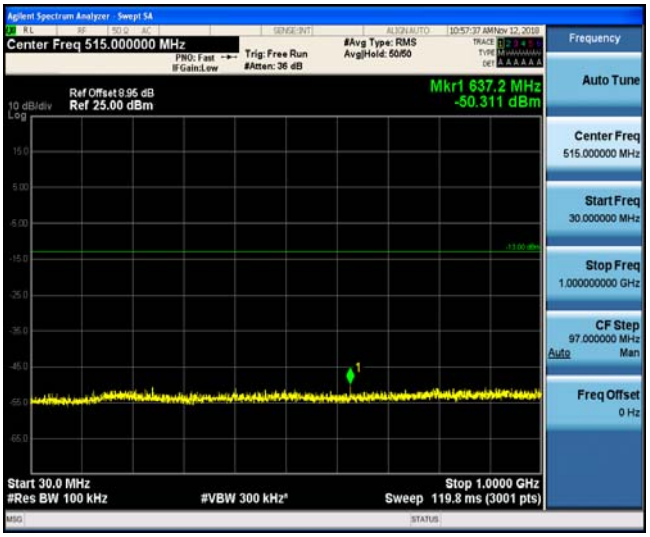
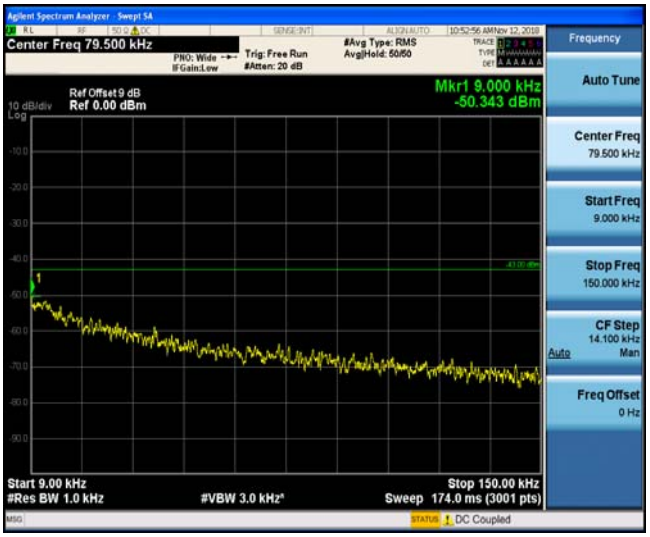


Band2_10MHz_QPSK_19150_1RB#0

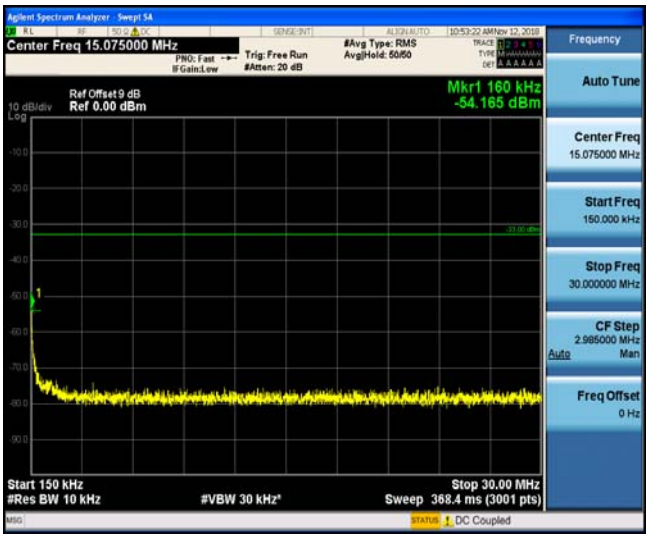
Band2_10MHz_QPSK_19150_1RB#0

Band2_10MHz_QPSK_19150_1RB#0

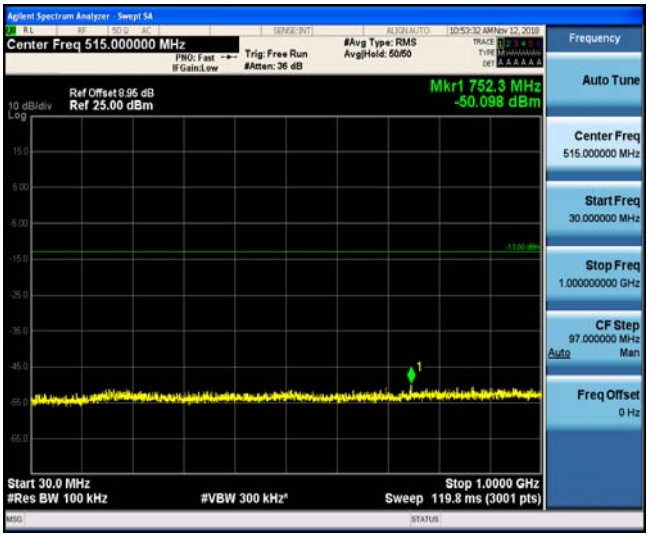
Band2_10MHz_16QAM_18650_1RB#0



Band2_10MHz_16QAM_18650_1RB#0



Band2_10MHz_16QAM_18650_1RB#0

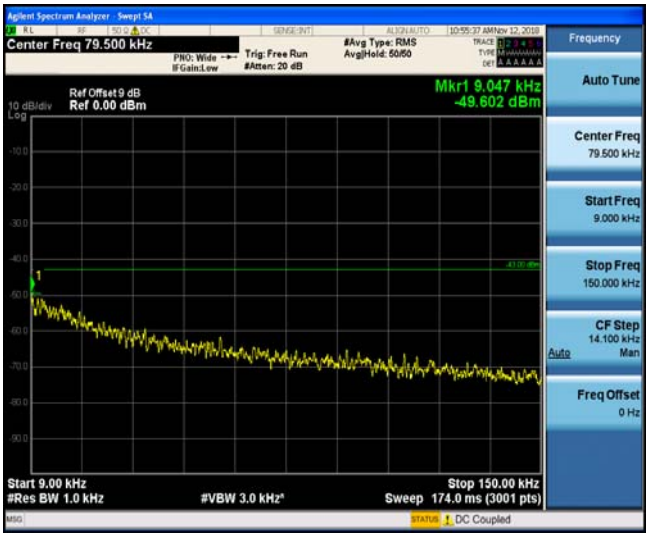


Band2_10MHz_16QAM_18650_1RB#0

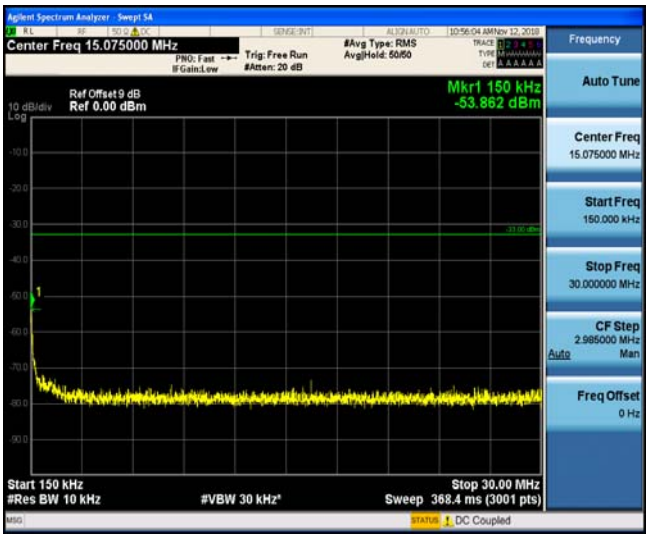
Band2_10MHz_16QAM_18650_1RB#0

Band2_10MHz_16QAM_18650_1RB#0

Band2_10MHz_16QAM_18900_1RB#0

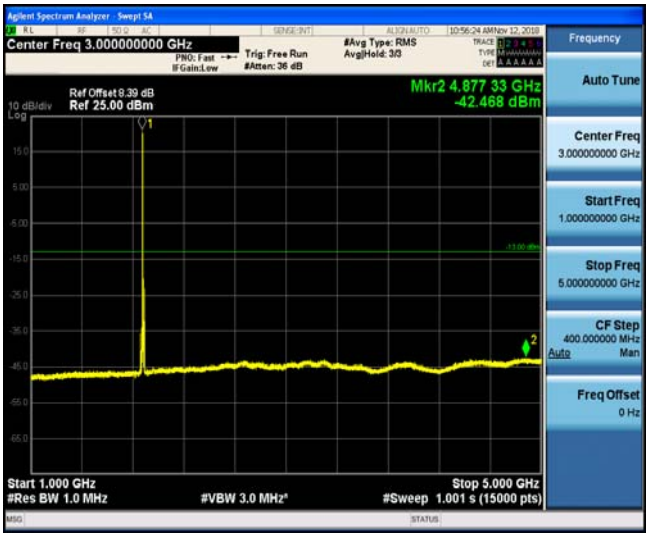


Band2_10MHz_16QAM_18900_1RB#0



Band2_10MHz_16QAM_18900_1RB#0

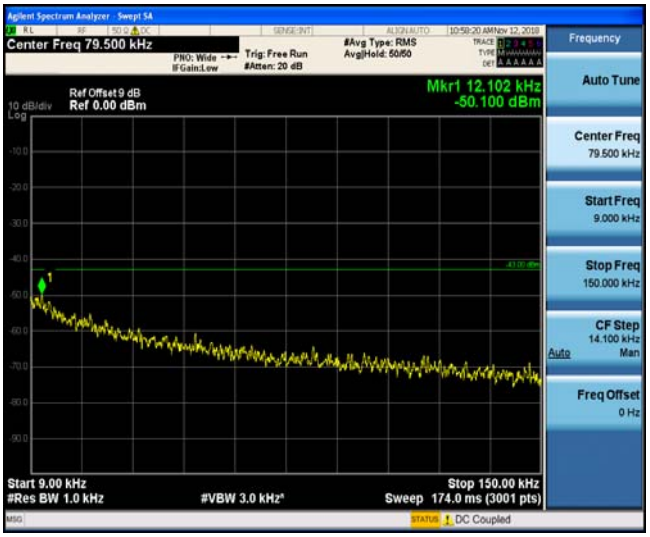
Band2_10MHz_16QAM_18900_1RB#0



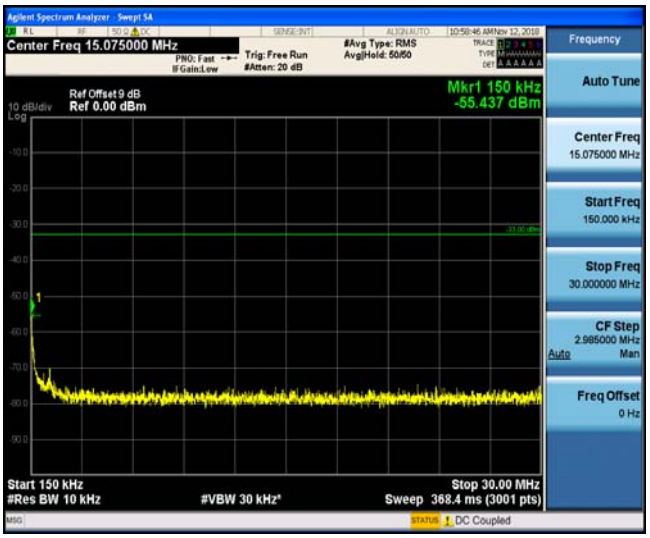
Band2_10MHz_16QAM_18900_1RB#0

Band2_10MHz_16QAM_18900_1RB#0

Band2_10MHz_16QAM_19150_1RB#0



Band2_10MHz_16QAM_19150_1RB#0



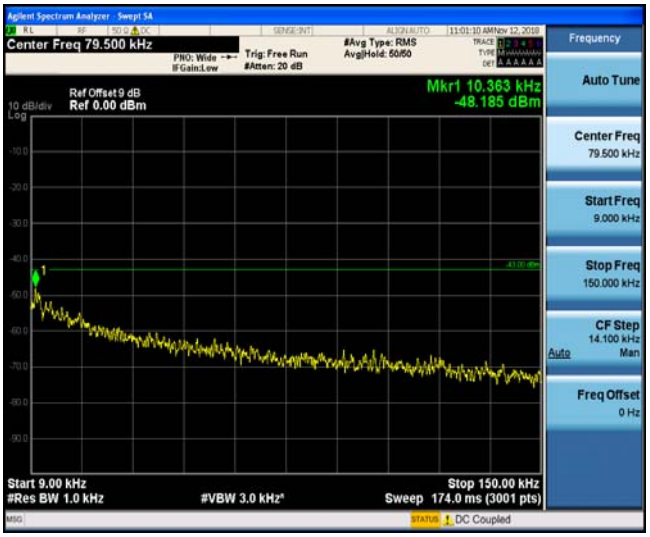
Band2_10MHz_16QAM_19150_1RB#0

Band2_10MHz_16QAM_19150_1RB#0

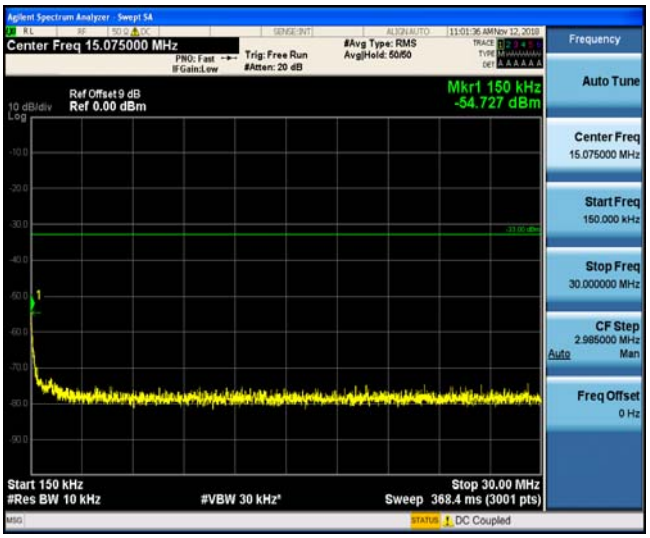
Band2_10MHz_16QAM_19150_1RB#0

Band2_10MHz_16QAM_19150_1RB#0

Band2_15MHz_QPSK_18675_1RB#0



Band2_15MHz_QPSK_18675_1RB#0



Band2_15MHz_QPSK_18675_1RB#0

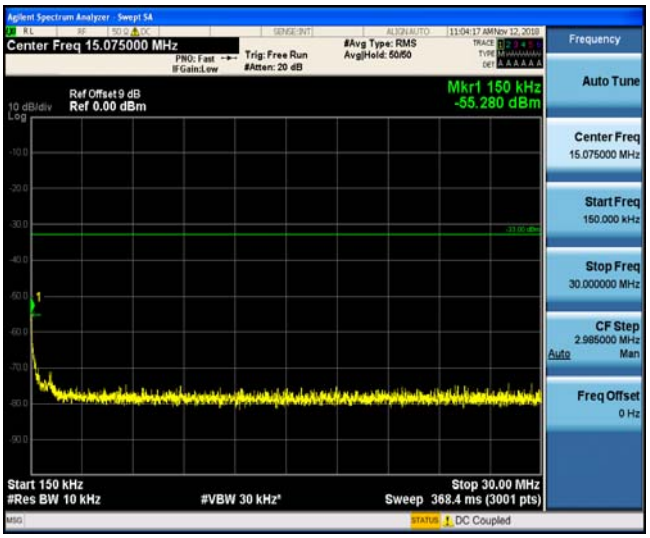
Band2_15MHz_QPSK_18675_1RB#0

Band2_15MHz_QPSK_18675_1RB#0

Band2_15MHz_QPSK_18675_1RB#0

Band2_15MHz_QPSK_18900_1RB#0

Band2_15MHz_QPSK_18900_1RB#0



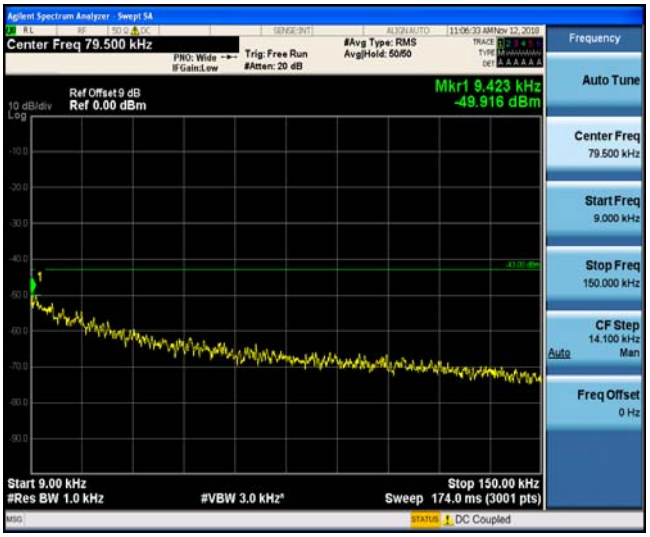
Band2_15MHz_QPSK_18900_1RB#0

Band2_15MHz_QPSK_18900_1RB#0

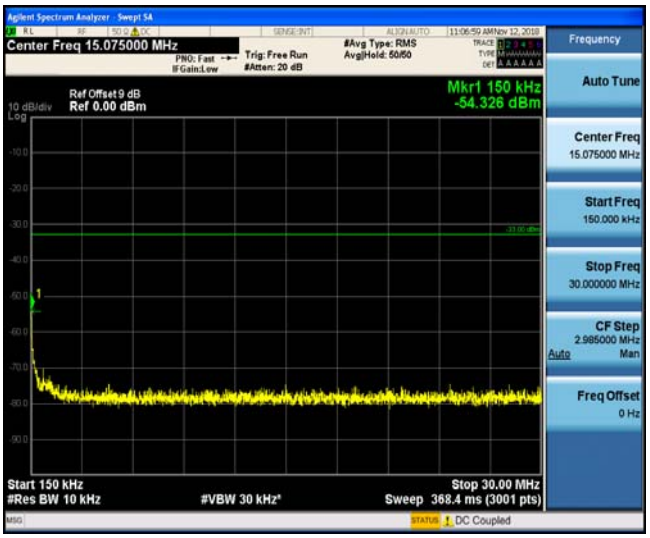
Band2_15MHz_QPSK_18900_1RB#0

Band2_15MHz_QPSK_18900_1RB#0

Band2_15MHz_QPSK_19125_1RB#0



Band2_15MHz_QPSK_19125_1RB#0



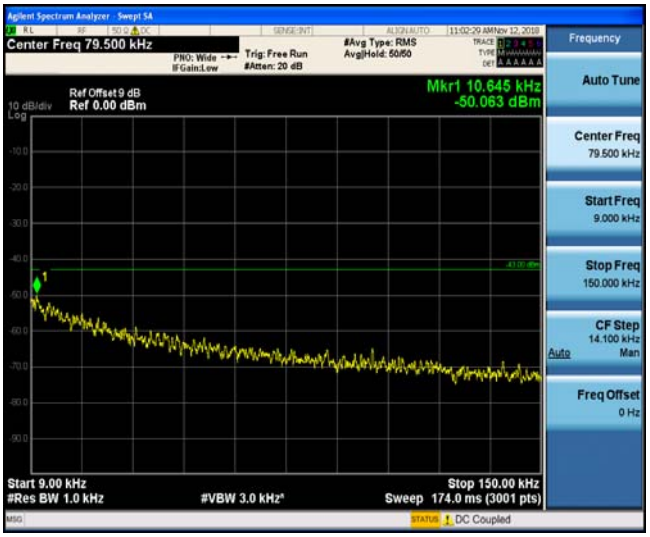
Band2_15MHz_QPSK_19125_1RB#0

Band2_15MHz_QPSK_19125_1RB#0

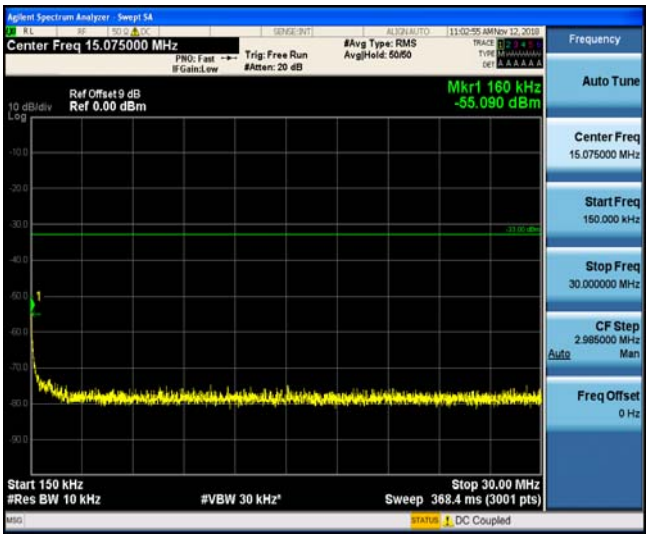
Band2_15MHz_QPSK_19125_1RB#0

Band2_15MHz_QPSK_19125_1RB#0

Band2_15MHz_16QAM_18675_1RB#0



Band2_15MHz_16QAM_18675_1RB#0



Band2_15MHz_16QAM_18675_1RB#0

Band2_15MHz_16QAM_18675_1RB#0

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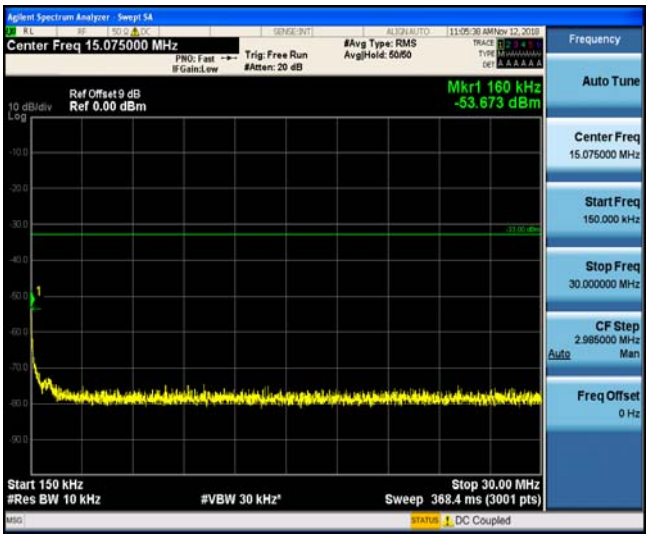
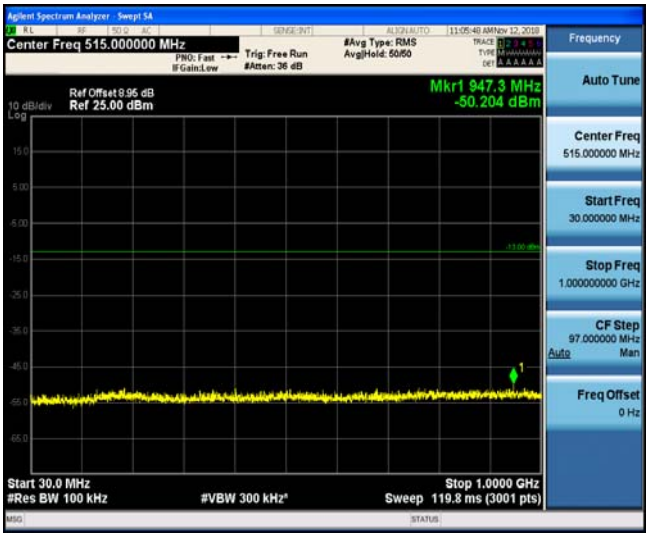
Band2_15MHz_16QAM_18900_1RB#0



Band2_15MHz_16QAM_18900_1RB#0



Band2_15MHz_16QAM_18900_1RB#0

Band2_15MHz_16QAM_18900_1RB#0

Band2_15MHz_16QAM_18900_1RB#0

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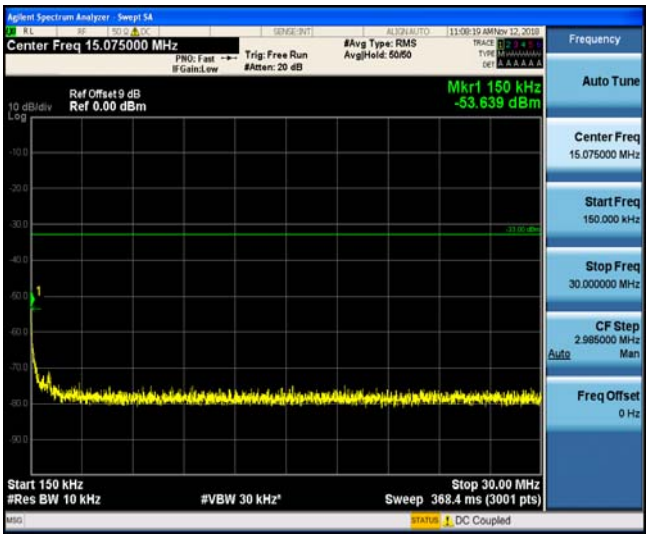
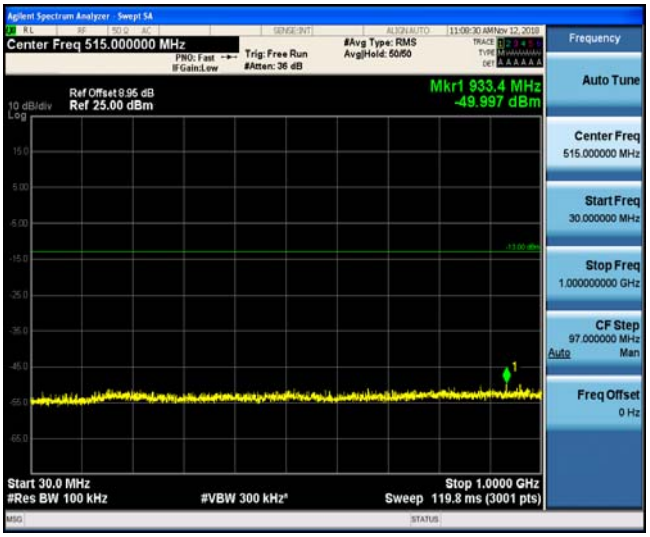
Band2_15MHz_16QAM_19125_1RB#0



Band2_15MHz_16QAM_19125_1RB#0



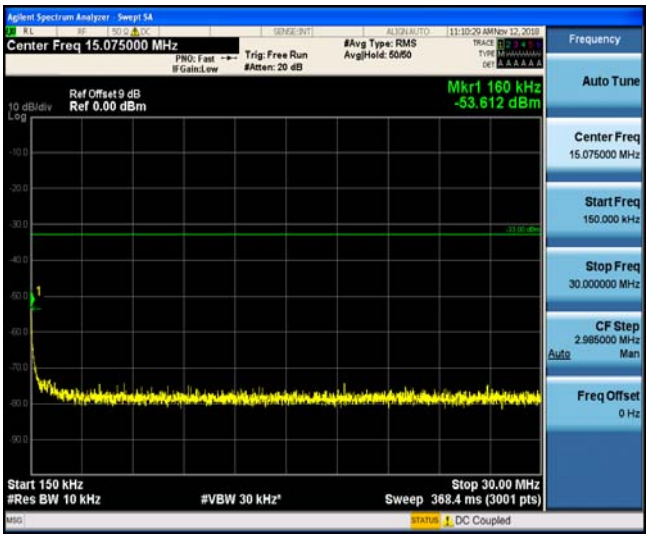
Band2_15MHz_16QAM_19125_1RB#0

Band2_15MHz_16QAM_19125_1RB#0

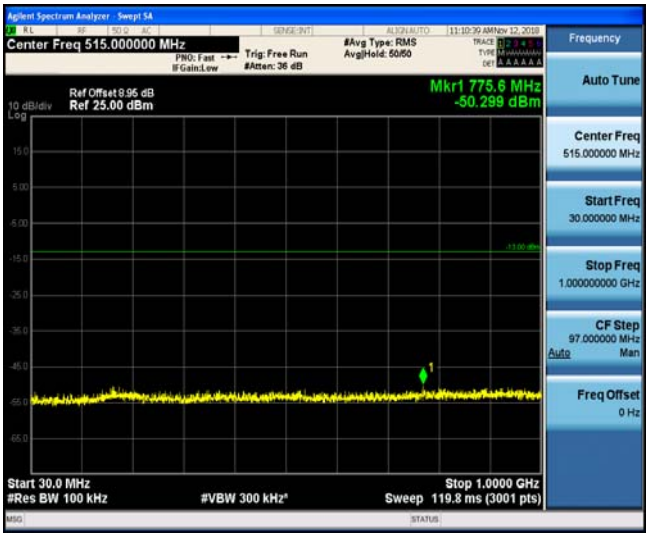
Band2_15MHz_16QAM_19125_1RB#0

Band2_20MHz_QPSK_18700_1RB#0

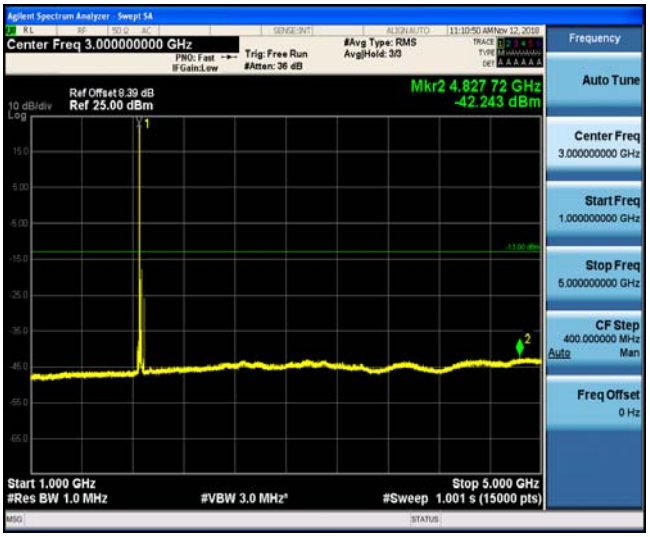
Band2_20MHz_QPSK_18700_1RB#0



Band2_20MHz_QPSK_18700_1RB#0



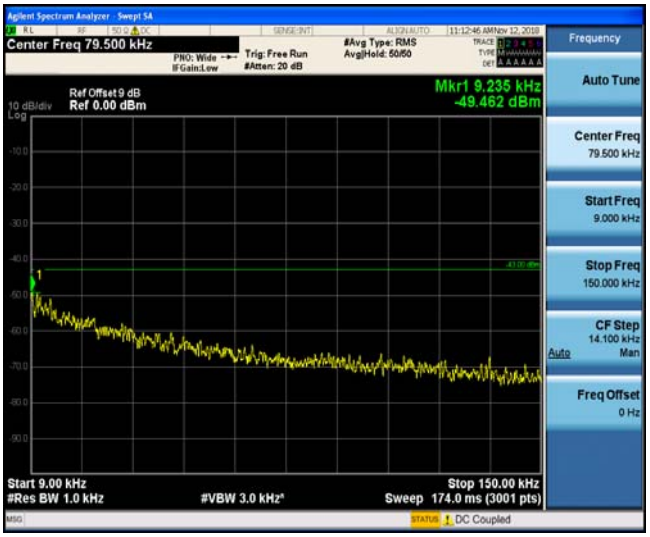
Band2_20MHz_QPSK_18700_1RB#0



Band2_20MHz_QPSK_18700_1RB#0

Band2_20MHz_QPSK_18700_1RB#0

Band2_20MHz_QPSK_18900_1RB#0



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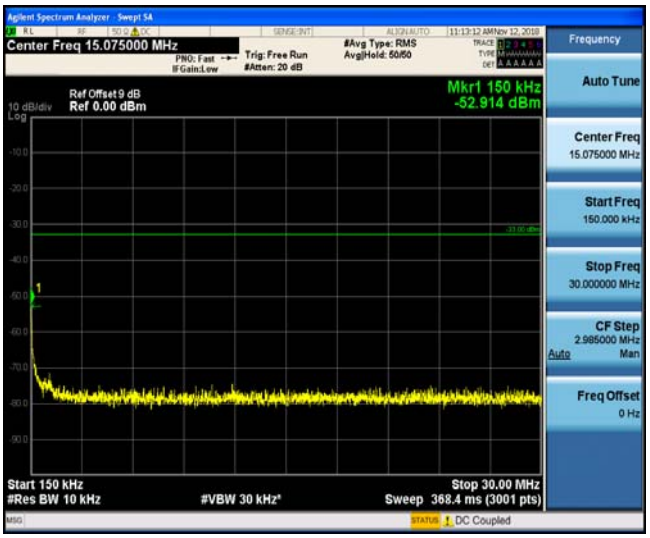

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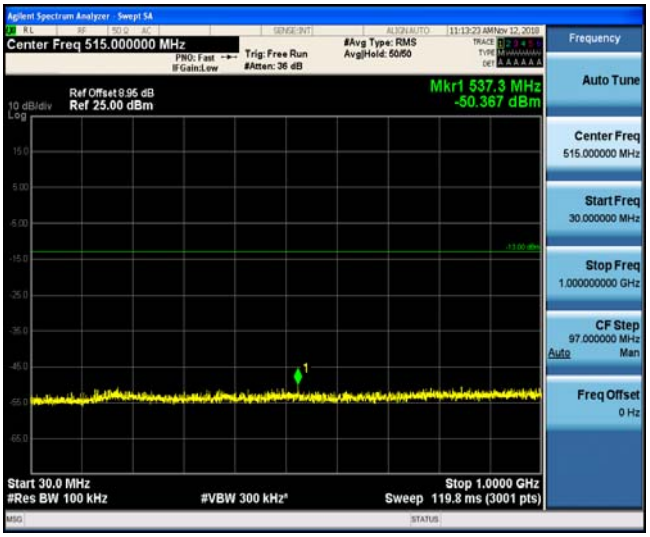

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Band2_20MHz_QPSK_18900_1RB#0

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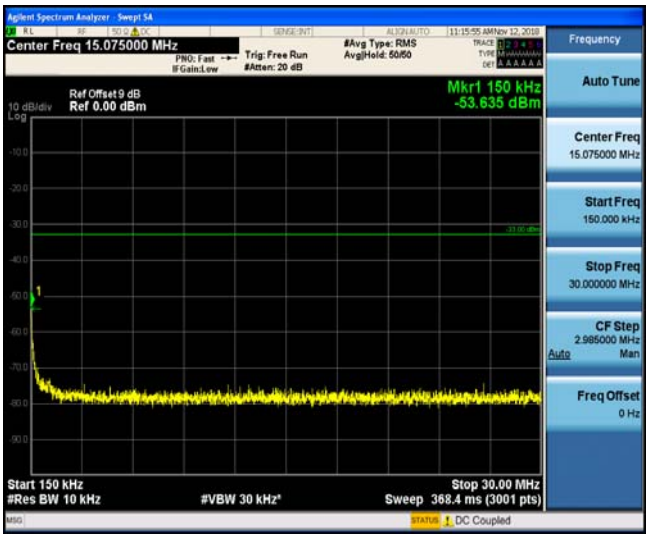
Band2_20MHz_QPSK_19100_1RB#0



Band2_20MHz_QPSK_19100_1RB#0

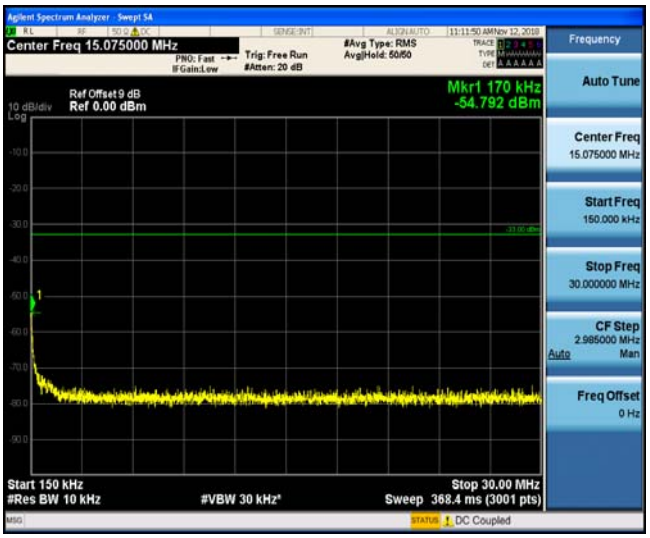
Band2_20MHz_QPSK_19100_1RB#0

Band2_20MHz_QPSK_19100_1RB#0

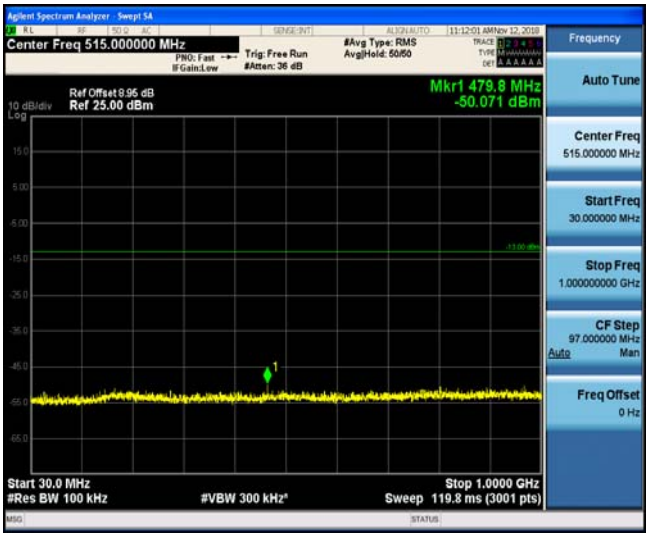
Band2_20MHz_QPSK_19100_1RB#0

Band2_20MHz_16QAM_18700_1RB#0

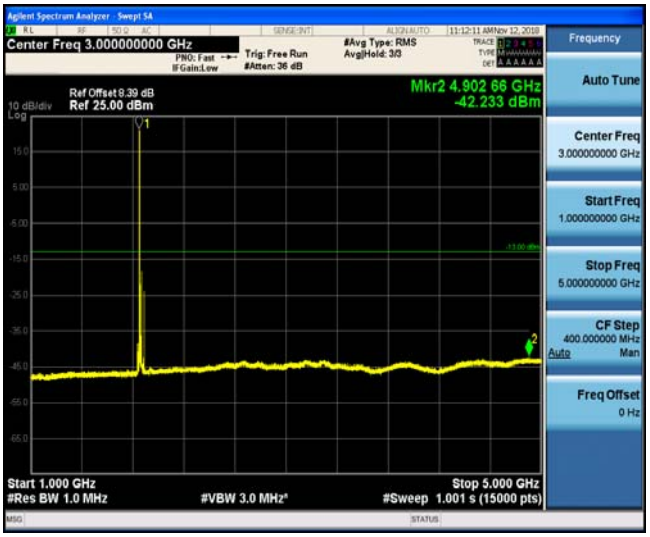
Band2_20MHz_16QAM_18700_1RB#0



Band2_20MHz_16QAM_18700_1RB#0



Band2_20MHz_16QAM_18700_1RB#0

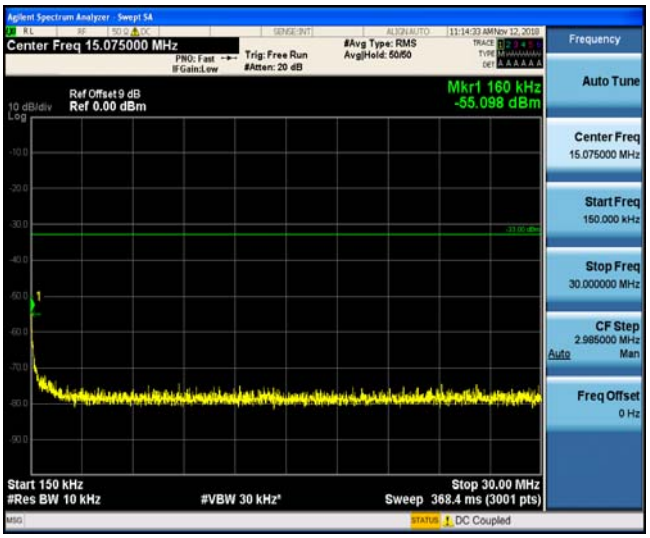


Band2_20MHz_16QAM_18700_1RB#0

Band2_20MHz_16QAM_18700_1RB#0

Band2_20MHz_16QAM_18900_1RB#0

Band2_20MHz_16QAM_18900_1RB#0



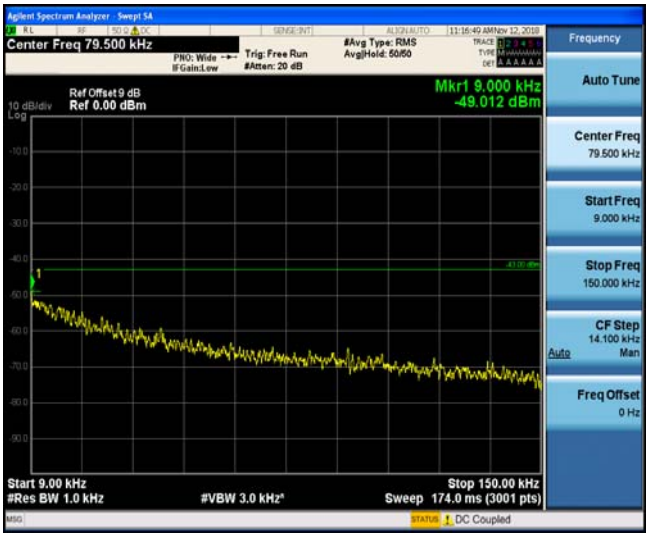
Band2_20MHz_16QAM_18900_1RB#0

Band2_20MHz_16QAM_18900_1RB#0

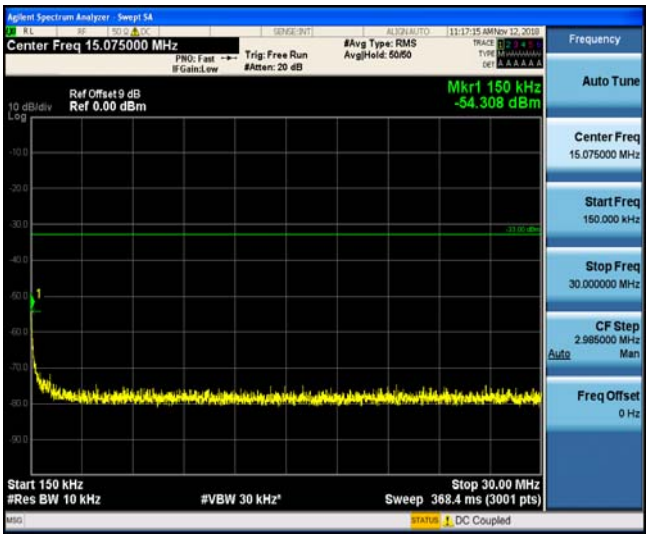
Band2_20MHz_16QAM_18900_1RB#0

Band2_20MHz_16QAM_18900_1RB#0

Band2_20MHz_16QAM_19100_1RB#0

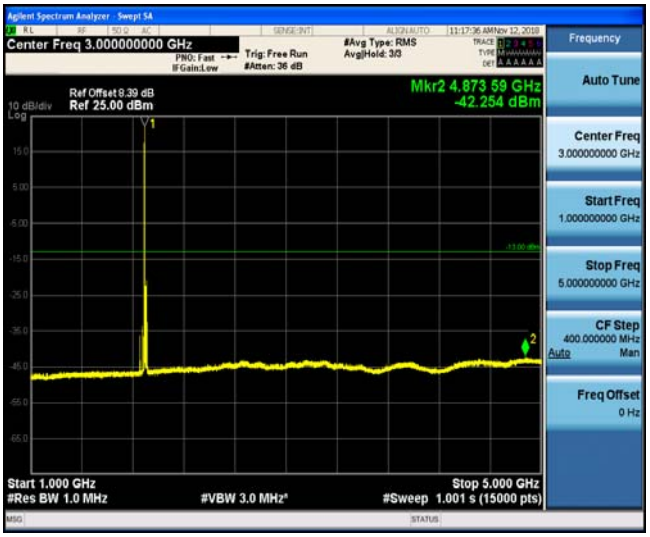


Band2_20MHz_16QAM_19100_1RB#0



Band2_20MHz_16QAM_19100_1RB#0

Band2_20MHz_16QAM_19100_1RB#0



Band2_20MHz_16QAM_19100_1RB#0

Band2_20MHz_16QAM_19100_1RB#0


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
#Avg Type: RMS
Avg|Hold: 3/3
Frequency
Auto Tune
Ref Offset 18.76 dB
10 dB/div
Log
Ref 10.00 dBm
Mkr1 16.993 1 GHz
-40.496 dBm
Center Freq
15.000000000 GHz
Start Freq
12.000000000 GHz
Stop Freq
18.000000000 GHz
CF Step
600.000000 MHz
Auto
Man
Freq Offset
0 Hz
Start 12.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 18.000 GHz
#Sweep 1.001 s (15000 pts)

Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	4.03	0.002178	± 2.5	PASS
		VN	TN	3.29	0.001778	± 2.5	PASS
		VH	TN	-0.26	-0.000140	± 2.5	PASS
	MCH	VL	TN	0.83	0.000441	± 2.5	PASS
		VN	TN	4.61	0.002452	± 2.5	PASS
		VH	TN	3.25	0.001729	± 2.5	PASS
	HCH	VL	TN	-1.46	-0.000765	± 2.5	PASS
		VN	TN	0.12	0.000063	± 2.5	PASS
		VH	TN	4.74	0.002483	± 2.5	PASS
16QAM	LCH	VL	TN	2.29	0.001237	± 2.5	PASS
		VN	TN	4.92	0.002658	± 2.5	PASS
		VH	TN	0.66	0.000357	± 2.5	PASS
	MCH	VL	TN	-1.80	-0.000957	± 2.5	PASS
		VN	TN	0.09	0.000048	± 2.5	PASS
		VH	TN	0.72	0.000383	± 2.5	PASS
	HCH	VL	TN	-0.83	-0.000435	± 2.5	PASS
		VN	TN	3.27	0.001713	± 2.5	PASS
		VH	TN	0.16	0.000084	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.02	0.000011	± 2.5	PASS
		VN	-20	0.70	0.000378	± 2.5	PASS
		VN	-10	-1.82	-0.000983	± 2.5	PASS
		VN	0	-0.24	-0.000130	± 2.5	PASS
		VN	10	3.75	0.002026	± 2.5	PASS
		VN	20	1.43	0.000773	± 2.5	PASS
		VN	30	0.15	0.000081	± 2.5	PASS
		VN	40	-0.46	-0.000249	± 2.5	PASS
		VN	50	0.18	0.000097	± 2.5	PASS
	MCH	VN	-30	0.32	0.000170	± 2.5	PASS
		VN	-20	-1.32	-0.000702	± 2.5	PASS

		VN	-10	3.94	0.002096	± 2.5	PASS
		VN	0	-0.51	-0.000271	± 2.5	PASS
		VN	10	1.85	0.000984	± 2.5	PASS
		VN	20	1.54	0.000819	± 2.5	PASS
		VN	30	4.15	0.002207	± 2.5	PASS
		VN	40	-1.01	-0.000537	± 2.5	PASS
		VN	50	2.33	0.001239	± 2.5	PASS
	HCH	VN	-30	3.85	0.002016	± 2.5	PASS
		VN	-20	0.43	0.000225	± 2.5	PASS
		VN	-10	2.50	0.001309	± 2.5	PASS
		VN	0	3.44	0.001802	± 2.5	PASS
		VN	10	1.62	0.000848	± 2.5	PASS
		VN	20	-0.94	-0.000492	± 2.5	PASS
		VN	30	-0.07	-0.000037	± 2.5	PASS
		VN	40	-0.08	-0.000042	± 2.5	PASS
		VN	50	1.94	0.001016	± 2.5	PASS
16QAM	LCH	VN	-30	4.78	0.002583	± 2.5	PASS
		VN	-20	3.82	0.002064	± 2.5	PASS
		VN	-10	1.90	0.001027	± 2.5	PASS
		VN	0	3.90	0.002107	± 2.5	PASS
		VN	10	2.90	0.001567	± 2.5	PASS
		VN	20	0.85	0.000459	± 2.5	PASS
		VN	30	3.87	0.002091	± 2.5	PASS
		VN	40	-0.87	-0.000470	± 2.5	PASS
		VN	50	-1.86	-0.001005	± 2.5	PASS
	MCH	VN	-30	2.22	0.001181	± 2.5	PASS
		VN	-20	-1.44	-0.000766	± 2.5	PASS
		VN	-10	-0.32	-0.000170	± 2.5	PASS
		VN	0	0.05	0.000027	± 2.5	PASS
		VN	10	4.12	0.002191	± 2.5	PASS
		VN	20	-1.40	-0.000745	± 2.5	PASS
		VN	30	-1.70	-0.000904	± 2.5	PASS
		VN	40	1.20	0.000638	± 2.5	PASS
		VN	50	2.69	0.001431	± 2.5	PASS
	HCH	VN	-30	0.66	0.000346	± 2.5	PASS
		VN	-20	-1.19	-0.000623	± 2.5	PASS
		VN	-10	2.94	0.001540	± 2.5	PASS
		VN	0	3.32	0.001739	± 2.5	PASS
		VN	10	1.75	0.000917	± 2.5	PASS
		VN	20	0.56	0.000293	± 2.5	PASS
		VN	30	0.56	0.000293	± 2.5	PASS

		VN	40	0.98	0.000513	± 2.5	PASS
		VN	50	-0.33	-0.000173	± 2.5	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz+							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-0.17	-0.000092	± 2.5	PASS
		VN	TN	1.34	0.000724	± 2.5	PASS
		VH	TN	-0.89	-0.000481	± 2.5	PASS
	MCH	VL	TN	3.08	0.001638	± 2.5	PASS
		VN	TN	1.13	0.000601	± 2.5	PASS
		VH	TN	0.95	0.000505	± 2.5	PASS
	HCH	VL	TN	3.10	0.001624	± 2.5	PASS
		VN	TN	0.21	0.000110	± 2.5	PASS
		VH	TN	1.22	0.000639	± 2.5	PASS
16QAM	LCH	VL	TN	-1.32	-0.000713	± 2.5	PASS
		VN	TN	0.80	0.000432	± 2.5	PASS
		VH	TN	1.03	0.000556	± 2.5	PASS
	MCH	VL	TN	-0.52	-0.000277	± 2.5	PASS
		VN	TN	4.81	0.002559	± 2.5	PASS
		VH	TN	3.63	0.001931	± 2.5	PASS
	HCH	VL	TN	4.55	0.002384	± 2.5	PASS
		VN	TN	2.38	0.001247	± 2.5	PASS
		VH	TN	4.54	0.002379	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.01	-0.000546	± 2.5	PASS
		VN	-20	4.16	0.002247	± 2.5	PASS
		VN	-10	3.67	0.001982	± 2.5	PASS
		VN	0	-1.46	-0.000789	± 2.5	PASS
		VN	10	-1.89	-0.001021	± 2.5	PASS
		VN	20	4.84	0.002614	± 2.5	PASS
		VN	30	-1.05	-0.000567	± 2.5	PASS
		VN	40	4.91	0.002652	± 2.5	PASS
		VN	50	-0.92	-0.000497	± 2.5	PASS
	MCH	VN	-30	4.93	0.002622	± 2.5	PASS
		VN	-20	3.91	0.002080	± 2.5	PASS
		VN	-10	-0.49	-0.000261	± 2.5	PASS

		VN	0	0.49	0.000261	± 2.5	PASS
		VN	10	1.40	0.000745	± 2.5	PASS
		VN	20	0.72	0.000383	± 2.5	PASS
		VN	30	-0.05	-0.000027	± 2.5	PASS
		VN	40	4.87	0.002590	± 2.5	PASS
		VN	50	0.90	0.000479	± 2.5	PASS
	HCH	VN	-30	-1.92	-0.001006	± 2.5	PASS
		VN	-20	1.13	0.000592	± 2.5	PASS
		VN	-10	-1.27	-0.000665	± 2.5	PASS
		VN	0	3.19	0.001671	± 2.5	PASS
		VN	10	2.45	0.001284	± 2.5	PASS
		VN	20	2.52	0.001320	± 2.5	PASS
		VN	30	2.94	0.001540	± 2.5	PASS
		VN	40	-0.48	-0.000252	± 2.5	PASS
		VN	50	3.18	0.001666	± 2.5	PASS
16QAM	LCH	VN	-30	3.22	0.001739	± 2.5	PASS
		VN	-20	4.04	0.002182	± 2.5	PASS
		VN	-10	4.01	0.002166	± 2.5	PASS
		VN	0	-1.99	-0.001075	± 2.5	PASS
		VN	10	3.73	0.002015	± 2.5	PASS
		VN	20	4.61	0.002490	± 2.5	PASS
		VN	30	4.38	0.002366	± 2.5	PASS
		VN	40	0.63	0.000340	± 2.5	PASS
		VN	50	4.45	0.002403	± 2.5	PASS
	MCH	VN	-30	2.77	0.001473	± 2.5	PASS
		VN	-20	2.83	0.001505	± 2.5	PASS
		VN	-10	-0.54	-0.000287	± 2.5	PASS
		VN	0	-1.73	-0.000920	± 2.5	PASS
		VN	10	-0.92	-0.000489	± 2.5	PASS
		VN	20	-1.41	-0.000750	± 2.5	PASS
		VN	30	1.51	0.000803	± 2.5	PASS
		VN	40	3.68	0.001957	± 2.5	PASS
		VN	50	4.03	0.002144	± 2.5	PASS
	HCH	VN	-30	0.36	0.000189	± 2.5	PASS
		VN	-20	3.46	0.001813	± 2.5	PASS
		VN	-10	1.47	0.000770	± 2.5	PASS
		VN	0	-0.75	-0.000393	± 2.5	PASS
		VN	10	4.84	0.002536	± 2.5	PASS
		VN	20	0.11	0.000058	± 2.5	PASS
		VN	30	-1.99	-0.001043	± 2.5	PASS
		VN	40	-0.52	-0.000272	± 2.5	PASS

		VN	50	1.51	0.000791	± 2.5	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	3.68	0.001987	± 2.5	PASS
		VN	TN	4.40	0.002375	± 2.5	PASS
		VH	TN	4.48	0.002418	± 2.5	PASS
	MCH	VL	TN	2.17	0.001154	± 2.5	PASS
		VN	TN	3.41	0.001814	± 2.5	PASS
		VH	TN	-0.13	-0.000069	± 2.5	PASS
	HCH	VL	TN	-1.09	-0.000571	± 2.5	PASS
		VN	TN	3.32	0.001740	± 2.5	PASS
		VH	TN	3.16	0.001657	± 2.5	PASS
16QAM	LCH	VL	TN	0.58	0.000313	± 2.5	PASS
		VN	TN	0.54	0.000291	± 2.5	PASS
		VH	TN	-0.22	-0.000119	± 2.5	PASS
	MCH	VL	TN	-1.82	-0.000968	± 2.5	PASS
		VN	TN	0.62	0.000330	± 2.5	PASS
		VH	TN	0.88	0.000468	± 2.5	PASS
	HCH	VL	TN	1.78	0.000933	± 2.5	PASS
		VN	TN	3.63	0.001903	± 2.5	PASS
		VH	TN	4.55	0.002385	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.10	0.000594	± 2.5	PASS
		VN	-20	-1.51	-0.000815	± 2.5	PASS
		VN	-10	4.21	0.002273	± 2.5	PASS
		VN	0	0.07	0.000038	± 2.5	PASS
		VN	10	1.58	0.000853	± 2.5	PASS
		VN	20	0.23	0.000124	± 2.5	PASS
		VN	30	0.48	0.000259	± 2.5	PASS
		VN	40	3.98	0.002148	± 2.5	PASS
		VN	50	4.87	0.002629	± 2.5	PASS
	MCH	VN	-30	2.33	0.001239	± 2.5	PASS
		VN	-20	-1.16	-0.000617	± 2.5	PASS
		VN	-10	0.70	0.000372	± 2.5	PASS
		VN	0	0.84	0.000447	± 2.5	PASS

		VN	10	0.87	0.000463	± 2.5	PASS
		VN	20	0.56	0.000298	± 2.5	PASS
		VN	30	-0.46	-0.000245	± 2.5	PASS
		VN	40	0.22	0.000117	± 2.5	PASS
		VN	50	0.82	0.000436	± 2.5	PASS
	HCH	VN	-30	4.03	0.002113	± 2.5	PASS
		VN	-20	-1.79	-0.000938	± 2.5	PASS
		VN	-10	4.16	0.002181	± 2.5	PASS
		VN	0	2.64	0.001384	± 2.5	PASS
		VN	10	-1.58	-0.000828	± 2.5	PASS
		VN	20	3.47	0.001819	± 2.5	PASS
		VN	30	1.76	0.000923	± 2.5	PASS
		VN	40	0.16	0.000084	± 2.5	PASS
		VN	50	-0.29	-0.000152	± 2.5	PASS
	LCH	VN	-30	2.48	0.001339	± 2.5	PASS
		VN	-20	0.15	0.000081	± 2.5	PASS
		VN	-10	2.78	0.001501	± 2.5	PASS
		VN	0	3.15	0.001700	± 2.5	PASS
		VN	10	3.35	0.001808	± 2.5	PASS
		VN	20	-1.09	-0.000588	± 2.5	PASS
		VN	30	4.10	0.002213	± 2.5	PASS
		VN	40	1.67	0.000901	± 2.5	PASS
		VN	50	4.65	0.002510	± 2.5	PASS
16QAM	MCH	VN	-30	0.41	0.000218	± 2.5	PASS
		VN	-20	-0.52	-0.000277	± 2.5	PASS
		VN	-10	1.21	0.000644	± 2.5	PASS
		VN	0	2.15	0.001144	± 2.5	PASS
		VN	10	-1.86	-0.000989	± 2.5	PASS
		VN	20	2.35	0.001250	± 2.5	PASS
		VN	30	1.72	0.000915	± 2.5	PASS
		VN	40	0.11	0.000059	± 2.5	PASS
		VN	50	-1.24	-0.000660	± 2.5	PASS
	HCH	VN	-30	1.18	0.000619	± 2.5	PASS
		VN	-20	1.71	0.000896	± 2.5	PASS
		VN	-10	0.88	0.000461	± 2.5	PASS
		VN	0	2.17	0.001138	± 2.5	PASS
		VN	10	3.60	0.001887	± 2.5	PASS
		VN	20	-0.67	-0.000351	± 2.5	PASS
		VN	30	-0.77	-0.000404	± 2.5	PASS
		VN	40	2.03	0.001064	± 2.5	PASS
		VN	50	4.50	0.002359	± 2.5	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	0.71	0.000383	± 2.5	PASS
		VN	TN	2.32	0.001251	± 2.5	PASS
		VH	TN	4.64	0.002501	± 2.5	PASS
	MCH	VL	TN	1.90	0.001011	± 2.5	PASS
		VN	TN	1.73	0.000920	± 2.5	PASS
		VH	TN	0.41	0.000218	± 2.5	PASS
	HCH	VL	TN	-0.77	-0.000404	± 2.5	PASS
		VN	TN	4.20	0.002205	± 2.5	PASS
		VH	TN	-1.69	-0.000887	± 2.5	PASS
16QAM	LCH	VL	TN	2.19	0.001181	± 2.5	PASS
		VN	TN	0.70	0.000377	± 2.5	PASS
		VH	TN	4.84	0.002609	± 2.5	PASS
	MCH	VL	TN	0.48	0.000255	± 2.5	PASS
		VN	TN	2.14	0.001138	± 2.5	PASS
		VH	TN	2.89	0.001537	± 2.5	PASS
	HCH	VL	TN	4.05	0.002126	± 2.5	PASS
		VN	TN	3.16	0.001659	± 2.5	PASS
		VH	TN	4.14	0.002170	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	1.18	0.000636	± 2.5	PASS
		VN	-20	4.80	0.002588	± 2.5	PASS
		VN	-10	2.86	0.001542	± 2.5	PASS
		VN	0	2.04	0.001100	± 2.5	PASS
		VN	10	-0.84	-0.000453	± 2.5	PASS
		VN	20	2.48	0.001337	± 2.5	PASS
		VN	30	-1.91	-0.001030	± 2.5	PASS
		VN	40	0.64	0.000345	± 2.5	PASS
		VN	50	2.02	0.001089	± 2.5	PASS
	MCH	VN	-30	-1.24	-0.000660	± 2.5	PASS
		VN	-20	1.93	0.001027	± 2.5	PASS
		VN	-10	4.58	0.002436	± 2.5	PASS
		VN	0	3.63	0.001931	± 2.5	PASS
		VN	10	-1.79	-0.000952	± 2.5	PASS
		VN	20	0.94	0.000500	± 2.5	PASS

		VN	30	0.52	0.000277	± 2.5	PASS
		VN	40	4.98	0.002649	± 2.5	PASS
		VN	50	0.98	0.000521	± 2.5	PASS
	HCH	VN	-30	4.92	0.002583	± 2.5	PASS
		VN	-20	1.98	0.001039	± 2.5	PASS
		VN	-10	0.84	0.000441	± 2.5	PASS
		VN	0	-1.83	-0.000961	± 2.5	PASS
		VN	10	4.39	0.002304	± 2.5	PASS
		VN	20	4.95	0.002598	± 2.5	PASS
		VN	30	4.96	0.002604	± 2.5	PASS
		VN	40	1.43	0.000751	± 2.5	PASS
		VN	50	2.60	0.001365	± 2.5	PASS
QPSK	LCH	VN	-30	0.25	0.000135	± 2.5	PASS
		VN	-20	4.24	0.002286	± 2.5	PASS
		VN	-10	0.04	0.000022	± 2.5	PASS
		VN	0	4.76	0.002566	± 2.5	PASS
		VN	10	0.80	0.000431	± 2.5	PASS
		VN	20	-1.76	-0.000949	± 2.5	PASS
		VN	30	-1.67	-0.000900	± 2.5	PASS
		VN	40	1.79	0.000965	± 2.5	PASS
		VN	50	-1.71	-0.000922	± 2.5	PASS
	MCH	VN	-30	3.91	0.002080	± 2.5	PASS
		VN	-20	0.82	0.000436	± 2.5	PASS
		VN	-10	1.33	0.000707	± 2.5	PASS
		VN	0	-0.80	-0.000426	± 2.5	PASS
		VN	10	1.99	0.001059	± 2.5	PASS
		VN	20	-0.79	-0.000420	± 2.5	PASS
		VN	30	-1.16	-0.000617	± 2.5	PASS
		VN	40	4.45	0.002367	± 2.5	PASS
		VN	50	4.43	0.002356	± 2.5	PASS
	HCH	VN	-30	2.99	0.001570	± 2.5	PASS
		VN	-20	2.73	0.001433	± 2.5	PASS
		VN	-10	-1.67	-0.000877	± 2.5	PASS
		VN	0	1.85	0.000971	± 2.5	PASS
		VN	10	3.62	0.001900	± 2.5	PASS
		VN	20	1.41	0.000740	± 2.5	PASS
		VN	30	-1.36	-0.000714	± 2.5	PASS
		VN	40	3.44	0.001806	± 2.5	PASS
		VN	50	2.38	0.001249	± 2.5	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	4.86	0.002616	± 2.5	PASS
		VN	TN	0.21	0.000113	± 2.5	PASS
		VH	TN	0.03	0.000016	± 2.5	PASS
	MCH	VL	TN	4.05	0.002154	± 2.5	PASS
		VN	TN	-0.95	-0.000505	± 2.5	PASS
		VH	TN	0.10	0.000053	± 2.5	PASS
	HCH	VL	TN	2.11	0.001109	± 2.5	PASS
		VN	TN	3.22	0.001693	± 2.5	PASS
		VH	TN	-0.66	-0.000347	± 2.5	PASS
16QAM	LCH	VL	TN	0.61	0.000328	± 2.5	PASS
		VN	TN	1.24	0.000668	± 2.5	PASS
		VH	TN	-0.93	-0.000501	± 2.5	PASS
	MCH	VL	TN	2.74	0.001457	± 2.5	PASS
		VN	TN	4.60	0.002447	± 2.5	PASS
		VH	TN	2.90	0.001543	± 2.5	PASS
	HCH	VL	TN	1.39	0.000731	± 2.5	PASS
		VN	TN	3.65	0.001919	± 2.5	PASS
		VH	TN	4.98	0.002618	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	4.37	0.002353	± 2.5	PASS
		VN	-20	3.00	0.001615	± 2.5	PASS
		VN	-10	4.33	0.002331	± 2.5	PASS
		VN	0	1.18	0.000635	± 2.5	PASS
		VN	10	3.72	0.002003	± 2.5	PASS
		VN	20	3.41	0.001836	± 2.5	PASS
		VN	30	-0.14	-0.000075	± 2.5	PASS
		VN	40	1.67	0.000899	± 2.5	PASS
		VN	50	-0.97	-0.000522	± 2.5	PASS
	MCH	VN	-30	1.34	0.000713	± 2.5	PASS
		VN	-20	-0.83	-0.000441	± 2.5	PASS
		VN	-10	-0.74	-0.000394	± 2.5	PASS
		VN	0	1.63	0.000867	± 2.5	PASS
		VN	10	3.28	0.001745	± 2.5	PASS
		VN	20	-0.52	-0.000277	± 2.5	PASS

		VN	30	-0.67	-0.000356	± 2.5	PASS
		VN	40	2.31	0.001229	± 2.5	PASS
		VN	50	-0.64	-0.000340	± 2.5	PASS
	HCH	VN	-30	2.49	0.001309	± 2.5	PASS
		VN	-20	-0.60	-0.000315	± 2.5	PASS
		VN	-10	4.46	0.002344	± 2.5	PASS
		VN	0	-1.40	-0.000736	± 2.5	PASS
		VN	10	-1.62	-0.000852	± 2.5	PASS
		VN	20	3.28	0.001724	± 2.5	PASS
		VN	30	2.52	0.001325	± 2.5	PASS
		VN	40	-0.18	-0.000095	± 2.5	PASS
		VN	50	1.05	0.000552	± 2.5	PASS
16QAM	LCH	VN	-30	4.51	0.002428	± 2.5	PASS
		VN	-20	0.48	0.000258	± 2.5	PASS
		VN	-10	4.92	0.002649	± 2.5	PASS
		VN	0	-1.63	-0.000878	± 2.5	PASS
		VN	10	0.77	0.000415	± 2.5	PASS
		VN	20	-1.02	-0.000549	± 2.5	PASS
		VN	30	2.72	0.001464	± 2.5	PASS
		VN	40	3.06	0.001647	± 2.5	PASS
		VN	50	-1.90	-0.001023	± 2.5	PASS
	MCH	VN	-30	4.48	0.002383	± 2.5	PASS
		VN	-20	4.95	0.002633	± 2.5	PASS
		VN	-10	3.93	0.002090	± 2.5	PASS
		VN	0	4.28	0.002277	± 2.5	PASS
		VN	10	-0.33	-0.000176	± 2.5	PASS
		VN	20	1.71	0.000910	± 2.5	PASS
		VN	30	3.17	0.001686	± 2.5	PASS
		VN	40	2.59	0.001378	± 2.5	PASS
		VN	50	-0.35	-0.000186	± 2.5	PASS
	HCH	VN	-30	0.82	0.000431	± 2.5	PASS
		VN	-20	2.91	0.001530	± 2.5	PASS
		VN	-10	-0.69	-0.000363	± 2.5	PASS
		VN	0	-0.86	-0.000452	± 2.5	PASS
		VN	10	1.28	0.000673	± 2.5	PASS
		VN	20	0.69	0.000363	± 2.5	PASS
		VN	30	4.61	0.002423	± 2.5	PASS
		VN	40	-1.88	-0.000988	± 2.5	PASS
		VN	50	3.82	0.002008	± 2.5	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	0.70	0.000376	± 2.5	PASS
		VN	TN	-0.22	-0.000118	± 2.5	PASS
		VH	TN	-1.24	-0.000667	± 2.5	PASS
	MCH	VL	TN	0.15	0.000080	± 2.5	PASS
		VN	TN	3.19	0.001697	± 2.5	PASS
		VH	TN	1.87	0.000995	± 2.5	PASS
	HCH	VL	TN	3.01	0.001584	± 2.5	PASS
		VN	TN	-0.83	-0.000437	± 2.5	PASS
		VH	TN	-0.42	-0.000221	± 2.5	PASS
16QAM	LCH	VL	TN	1.31	0.000704	± 2.5	PASS
		VN	TN	4.28	0.002301	± 2.5	PASS
		VH	TN	2.85	0.001532	± 2.5	PASS
	MCH	VL	TN	-0.38	-0.000202	± 2.5	PASS
		VN	TN	-0.16	-0.000085	± 2.5	PASS
		VH	TN	4.35	0.002314	± 2.5	PASS
	HCH	VL	TN	2.19	0.001153	± 2.5	PASS
		VN	TN	3.90	0.002053	± 2.5	PASS
		VH	TN	4.80	0.002526	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	4.42	0.002376	± 2.5	PASS
		VN	-20	1.03	0.000554	± 2.5	PASS
		VN	-10	2.13	0.001145	± 2.5	PASS
		VN	0	2.88	0.001548	± 2.5	PASS
		VN	10	1.40	0.000753	± 2.5	PASS
		VN	20	4.03	0.002167	± 2.5	PASS
		VN	30	1.12	0.000602	± 2.5	PASS
		VN	40	4.78	0.002570	± 2.5	PASS
		VN	50	1.99	0.001070	± 2.5	PASS
	MCH	VN	-30	-0.51	-0.000271	± 2.5	PASS
		VN	-20	0.74	0.000394	± 2.5	PASS
		VN	-10	-0.59	-0.000314	± 2.5	PASS
		VN	0	0.69	0.000367	± 2.5	PASS
		VN	10	3.30	0.001755	± 2.5	PASS
		VN	20	-1.92	-0.001021	± 2.5	PASS

		VN	30	0.85	0.000452	± 2.5	PASS
		VN	40	2.13	0.001133	± 2.5	PASS
		VN	50	-1.47	-0.000782	± 2.5	PASS
	HCH	VN	-30	0.61	0.000321	± 2.5	PASS
		VN	-20	3.59	0.001889	± 2.5	PASS
		VN	-10	2.18	0.001147	± 2.5	PASS
		VN	0	2.79	0.001468	± 2.5	PASS
		VN	10	-1.12	-0.000589	± 2.5	PASS
		VN	20	4.77	0.002511	± 2.5	PASS
		VN	30	4.96	0.002611	± 2.5	PASS
		VN	40	2.40	0.001263	± 2.5	PASS
		VN	50	2.82	0.001484	± 2.5	PASS
16QAM	LCH	VN	-30	4.52	0.002430	± 2.5	PASS
		VN	-20	-1.40	-0.000753	± 2.5	PASS
		VN	-10	-1.90	-0.001022	± 2.5	PASS
		VN	0	1.79	0.000962	± 2.5	PASS
		VN	10	2.33	0.001253	± 2.5	PASS
		VN	20	-1.56	-0.000839	± 2.5	PASS
		VN	30	3.83	0.002059	± 2.5	PASS
		VN	40	4.82	0.002591	± 2.5	PASS
		VN	50	2.57	0.001382	± 2.5	PASS
	MCH	VN	-30	-1.30	-0.000691	± 2.5	PASS
		VN	-20	4.28	0.002277	± 2.5	PASS
		VN	-10	2.64	0.001404	± 2.5	PASS
		VN	0	1.58	0.000840	± 2.5	PASS
		VN	10	1.54	0.000819	± 2.5	PASS
		VN	20	-1.50	-0.000798	± 2.5	PASS
		VN	30	4.25	0.002261	± 2.5	PASS
		VN	40	3.66	0.001947	± 2.5	PASS
		VN	50	0.04	0.000021	± 2.5	PASS
	HCH	VN	-30	3.01	0.001584	± 2.5	PASS
		VN	-20	4.22	0.002221	± 2.5	PASS
		VN	-10	-1.27	-0.000668	± 2.5	PASS
		VN	0	-0.76	-0.000400	± 2.5	PASS
		VN	10	-0.54	-0.000284	± 2.5	PASS
		VN	20	-1.34	-0.000705	± 2.5	PASS
		VN	30	-0.31	-0.000163	± 2.5	PASS
		VN	40	-1.94	-0.001021	± 2.5	PASS
		VN	50	3.08	0.001621	± 2.5	PASS