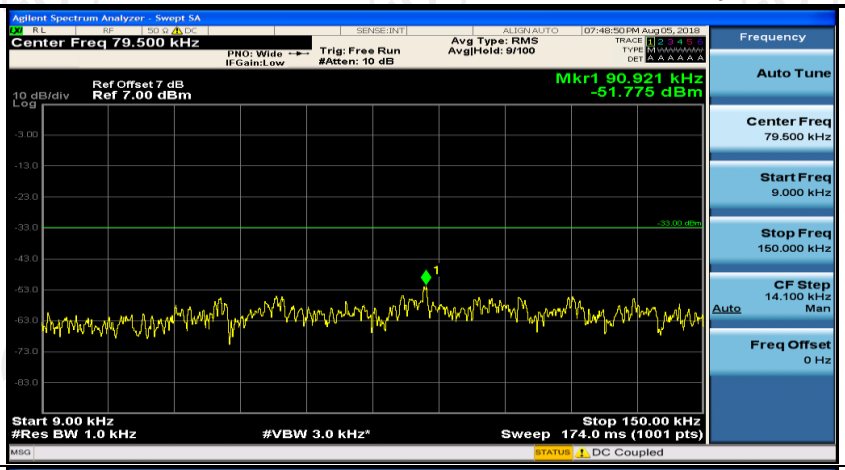
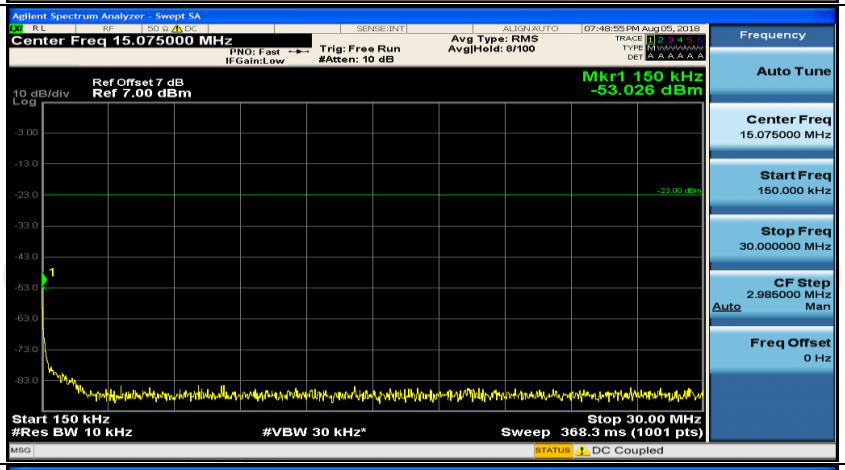
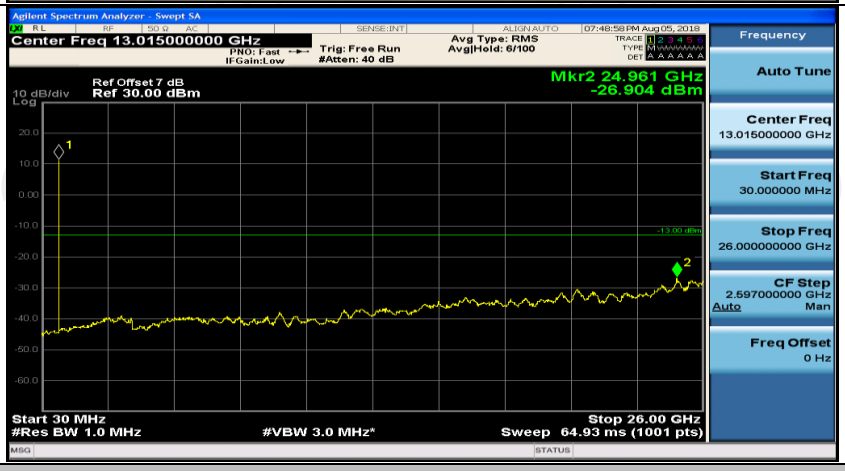
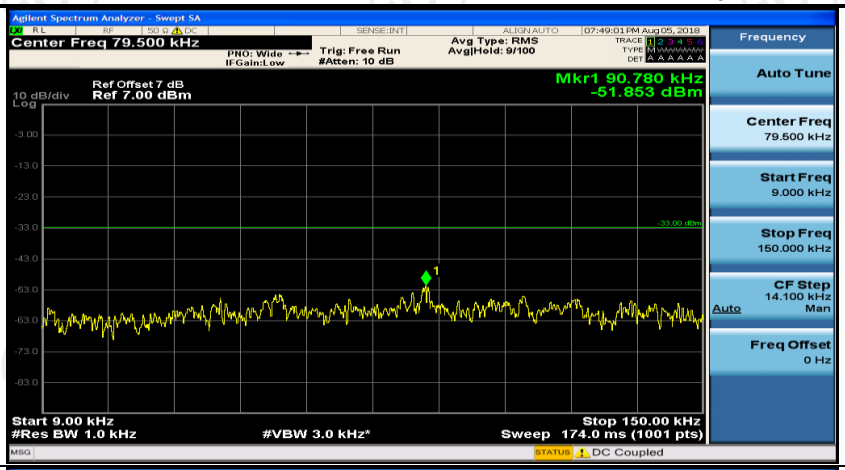
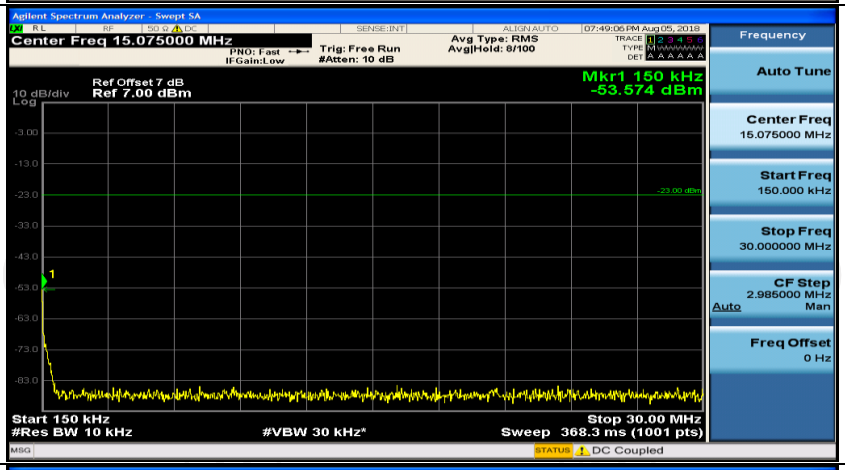


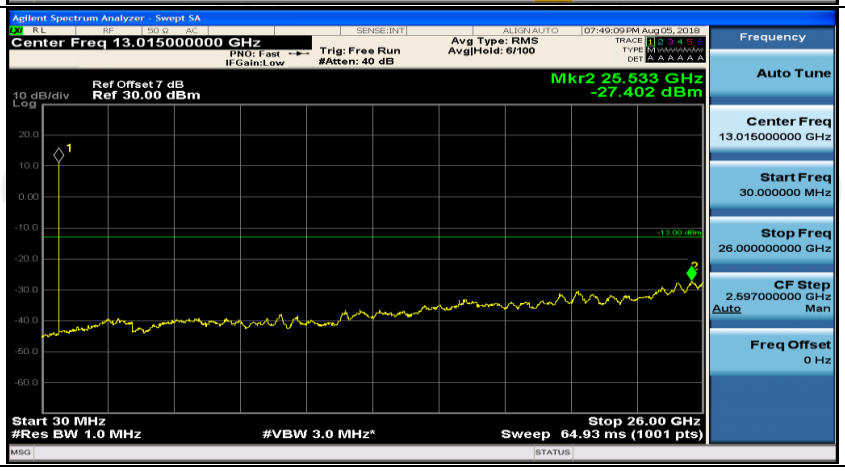




Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49







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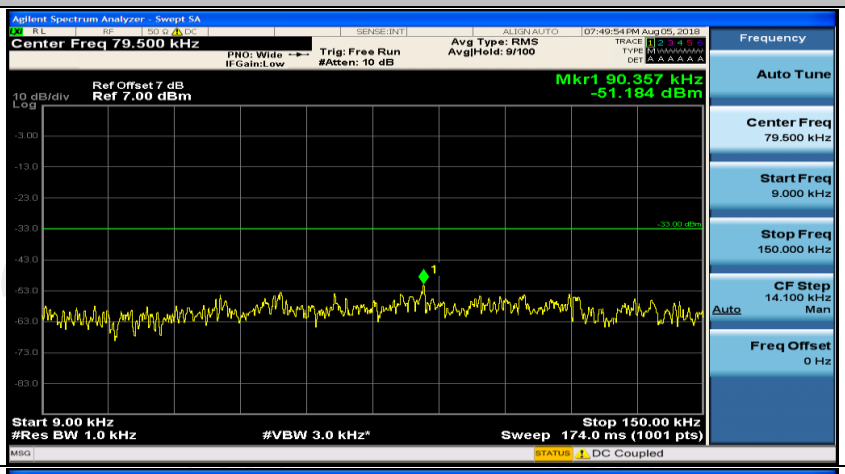
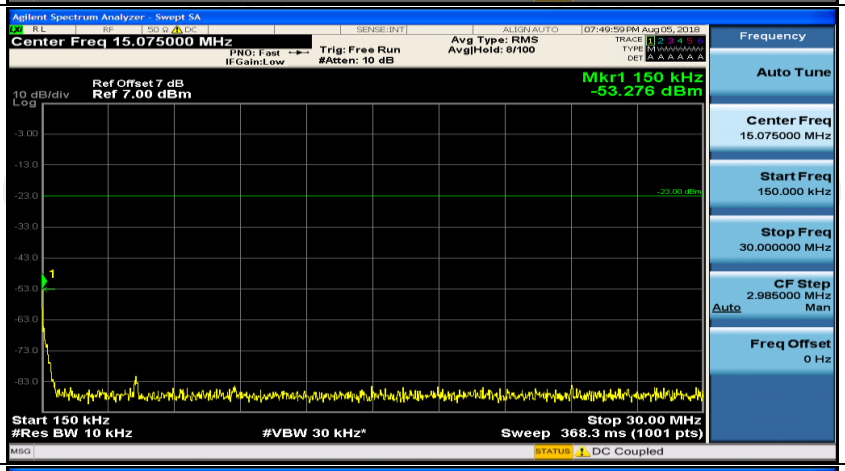
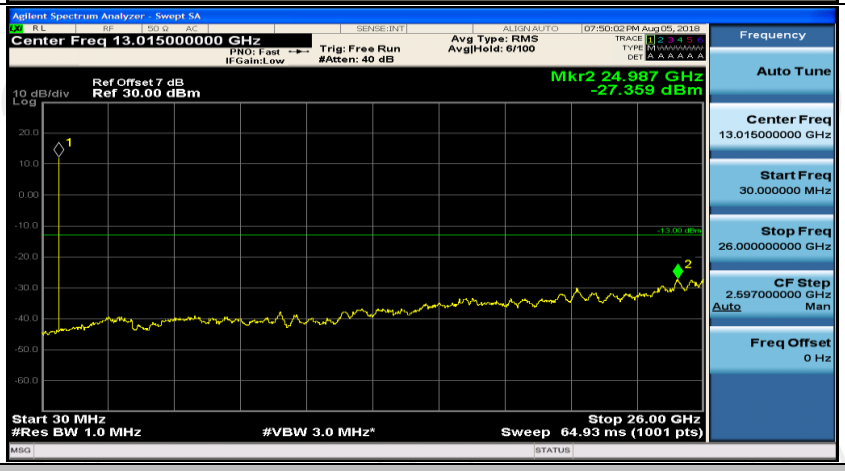
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

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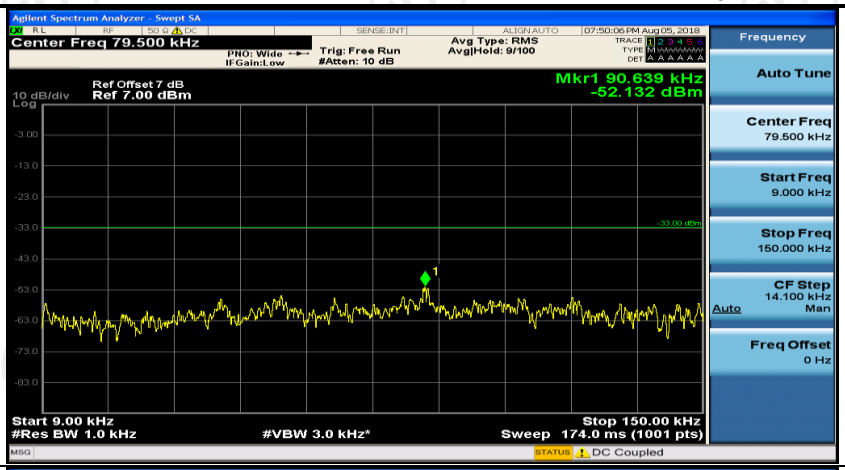

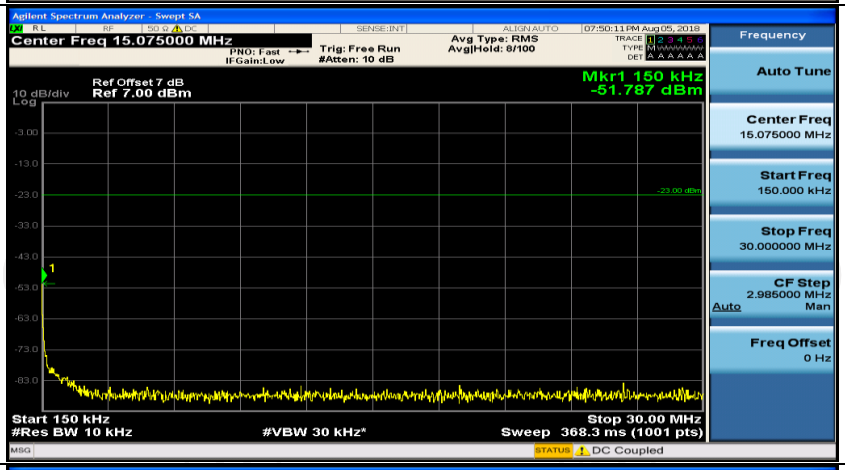

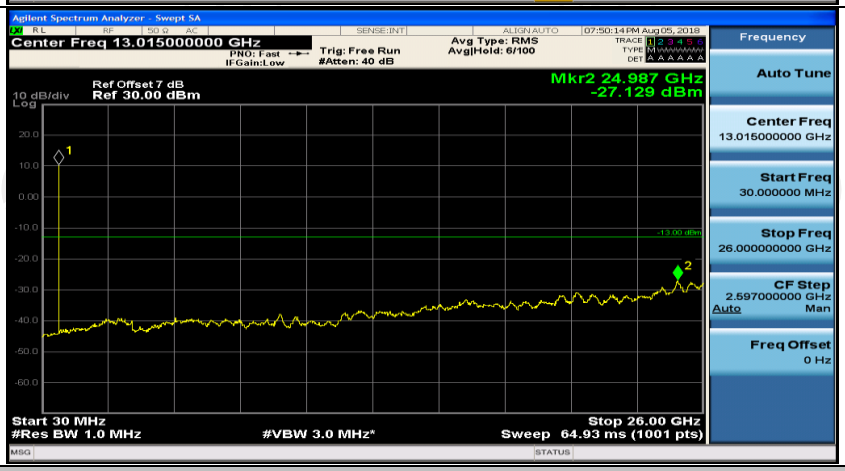

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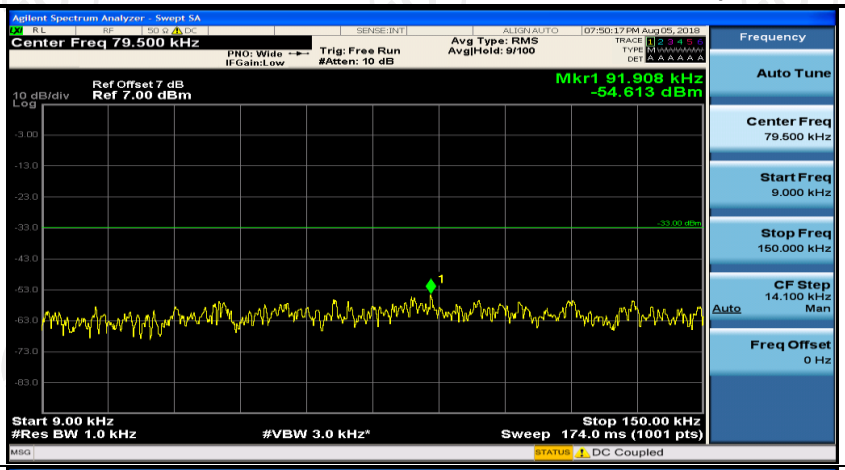

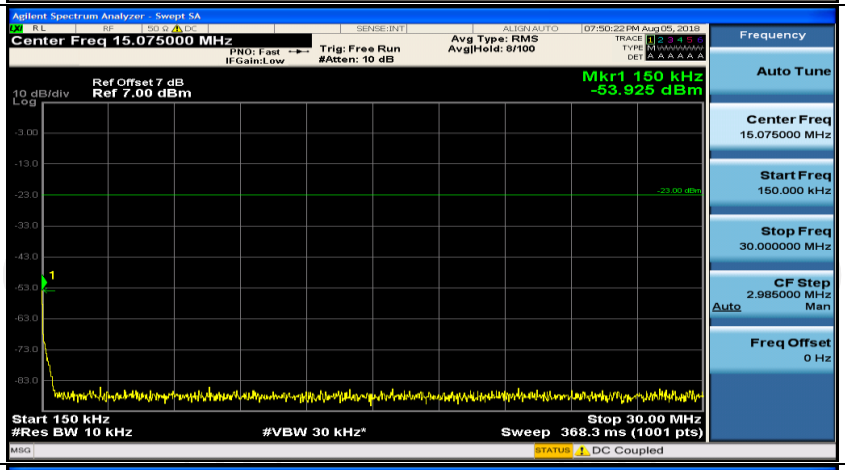

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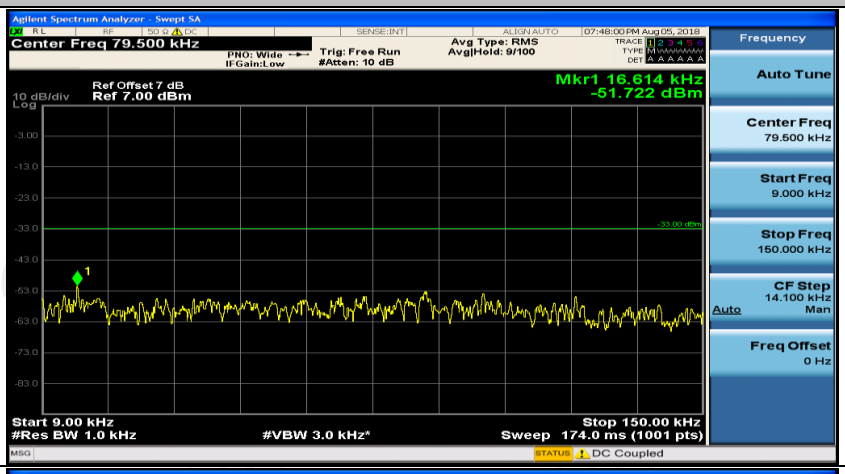
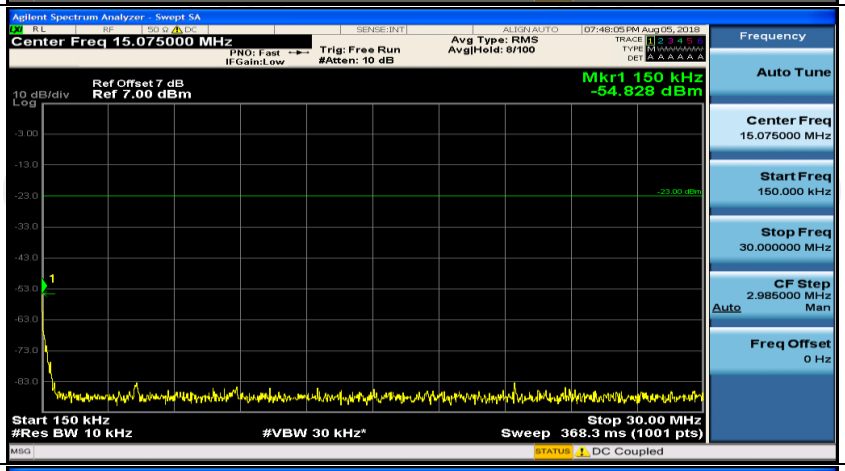
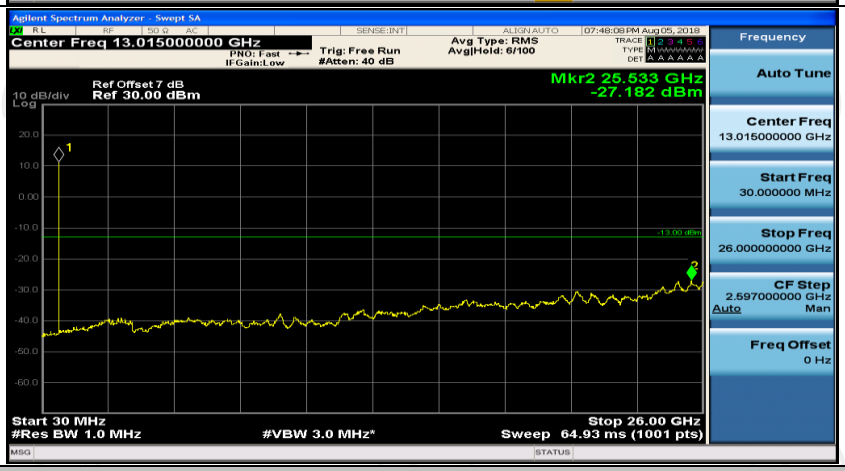
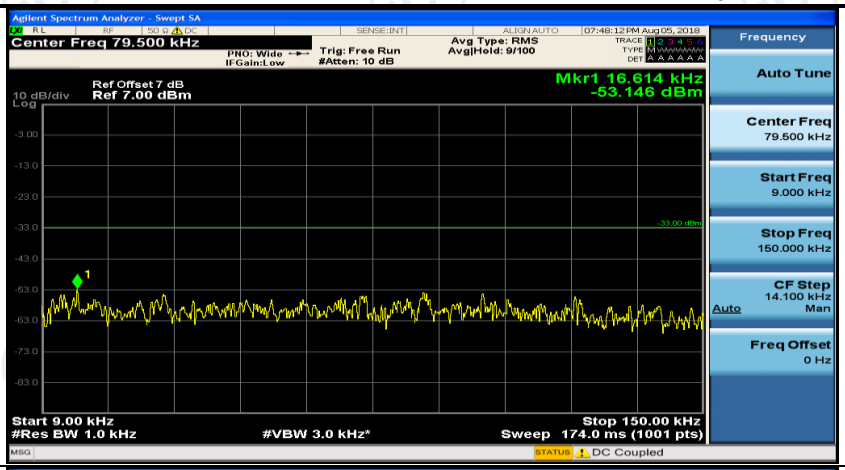
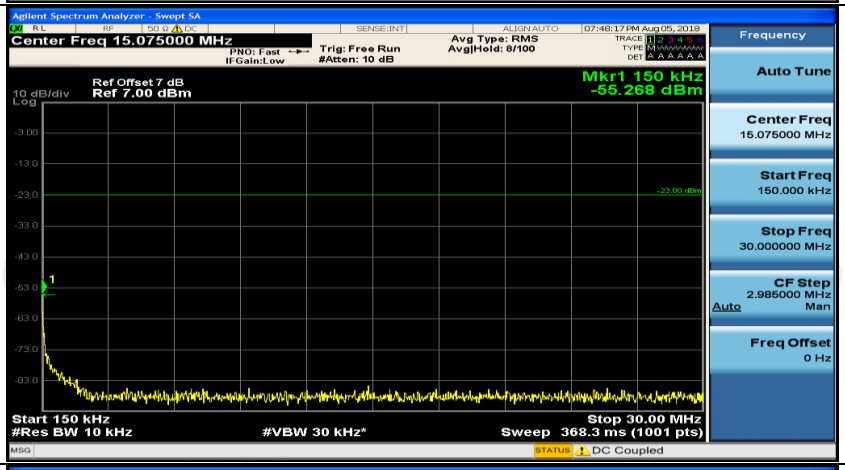
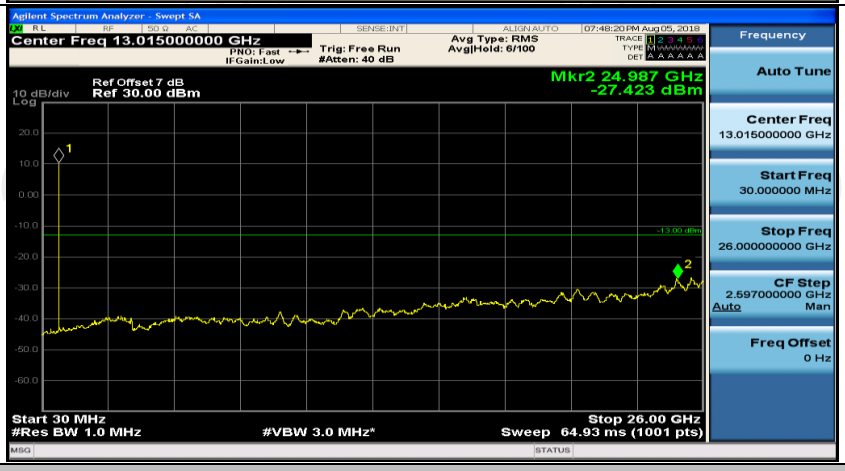
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

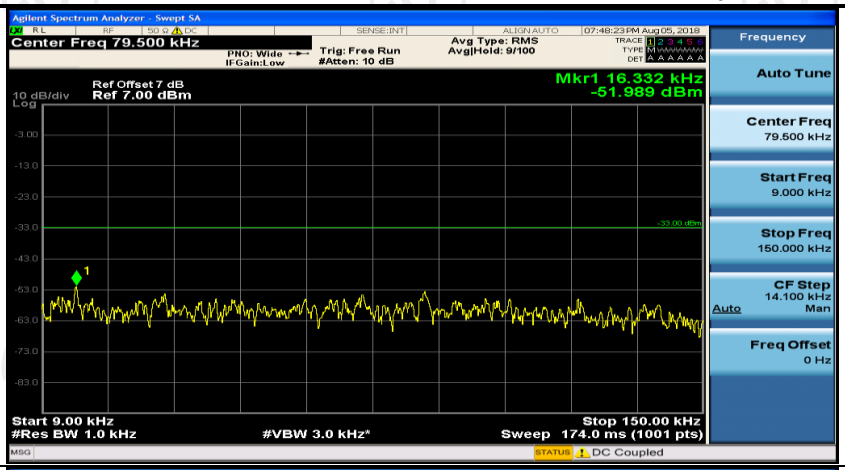
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

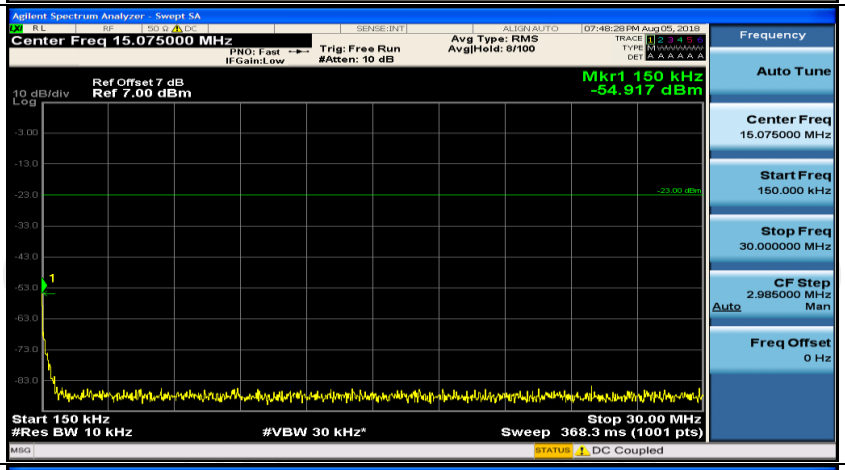


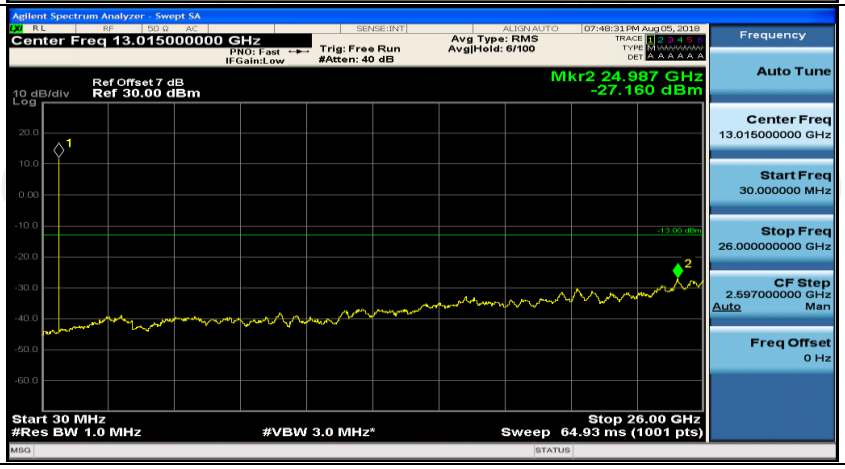




Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#49







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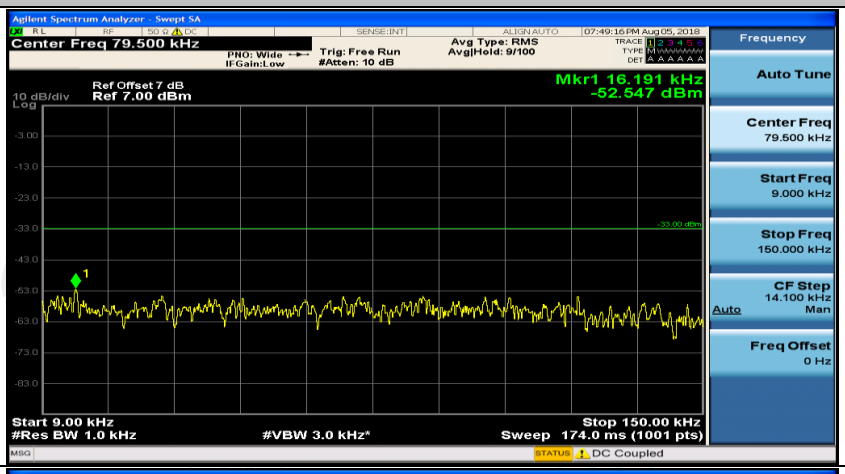
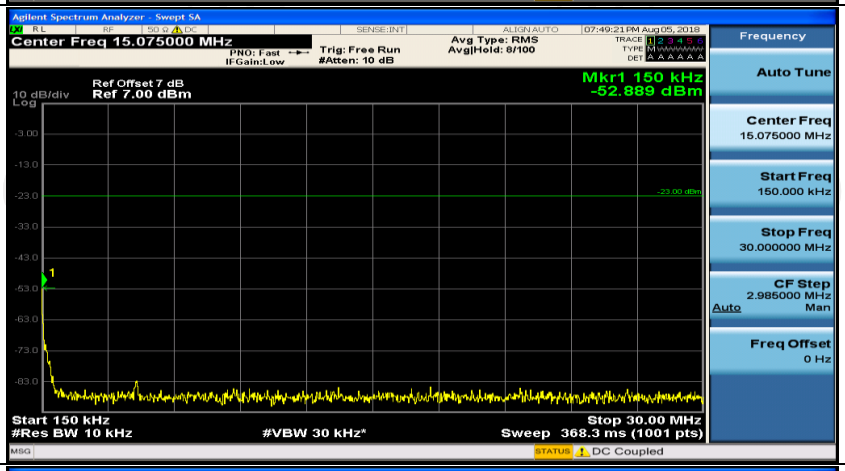
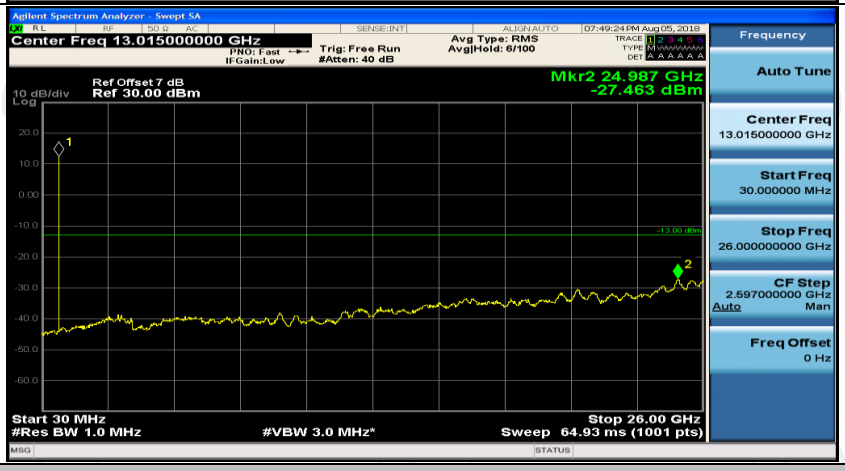
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

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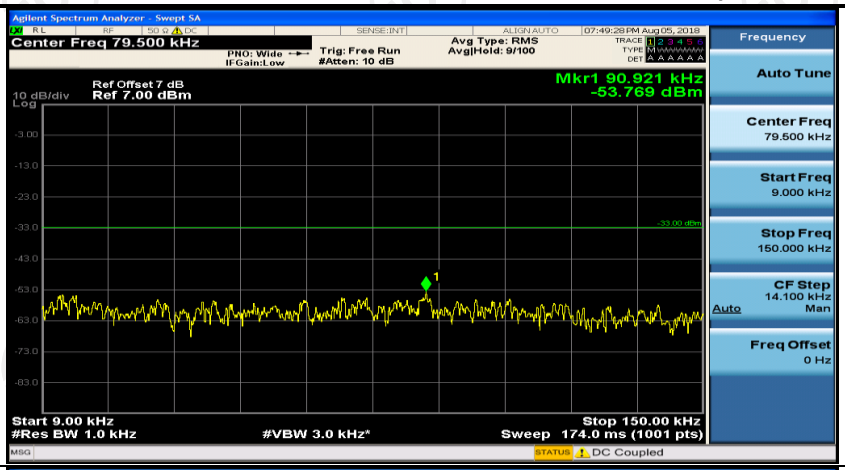
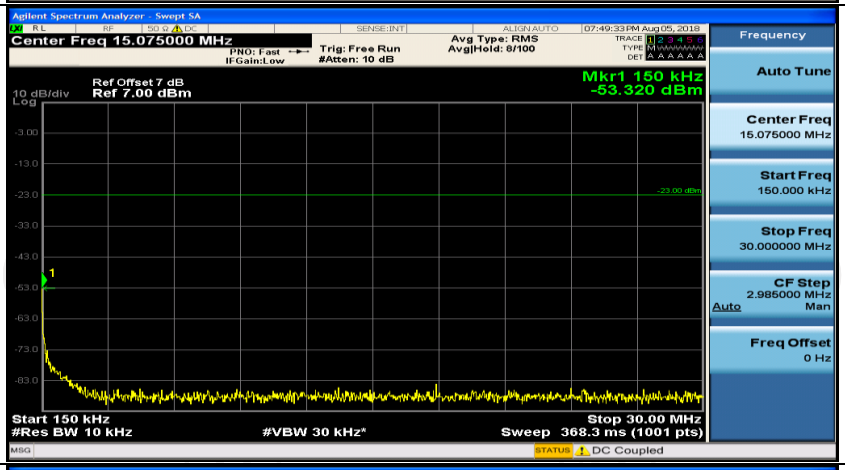
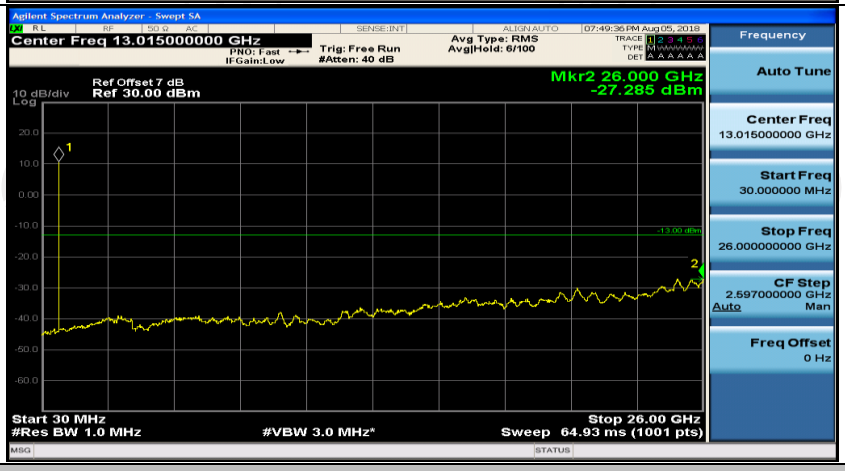
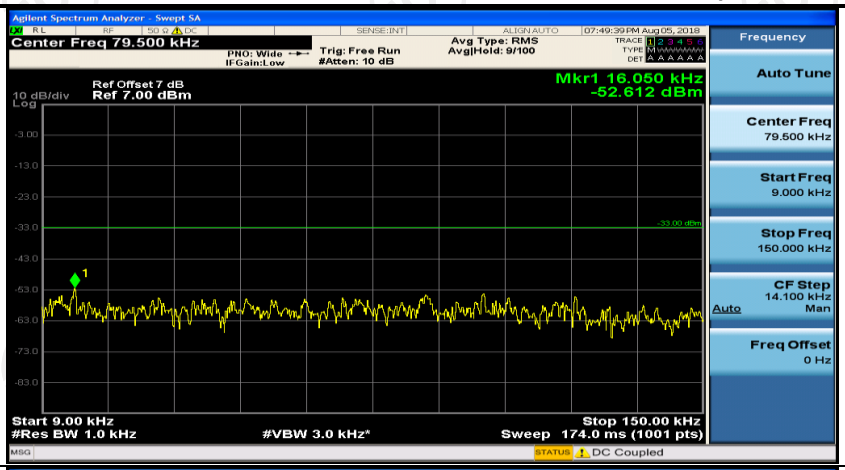
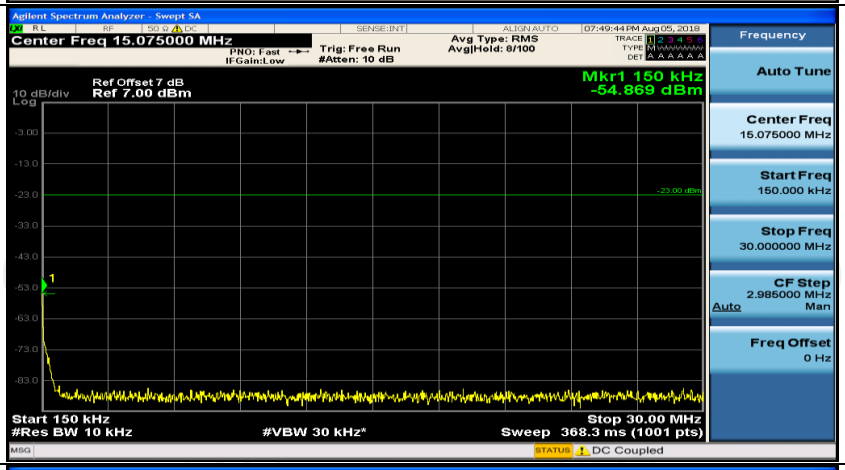


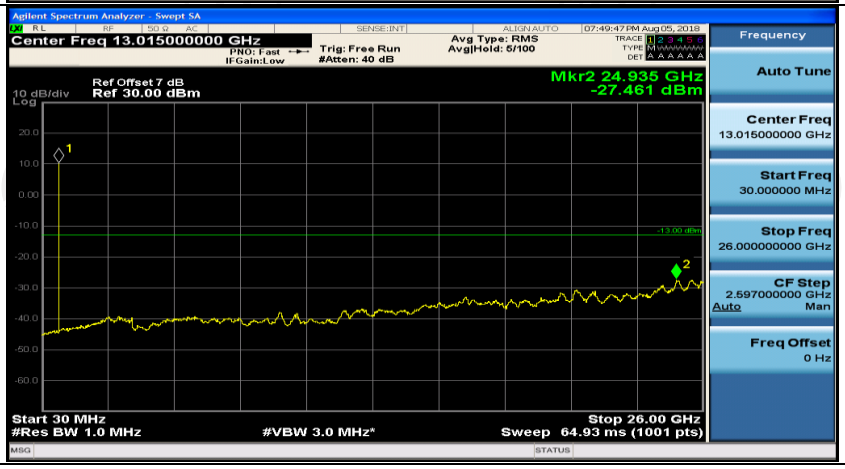




Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49







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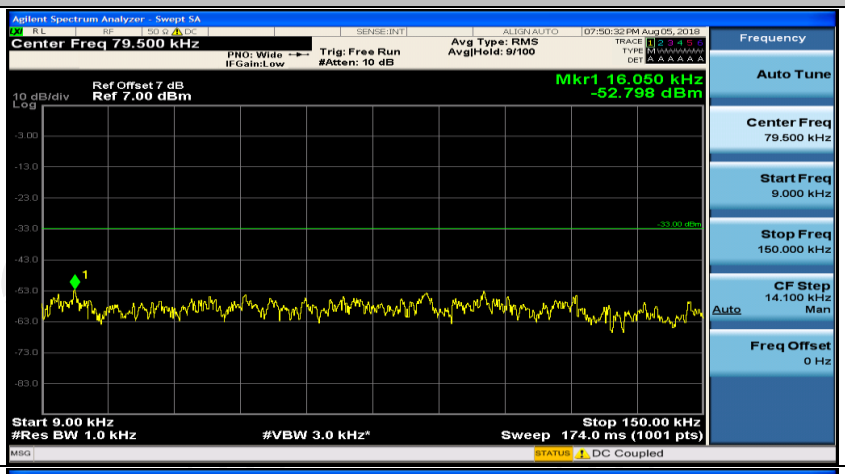
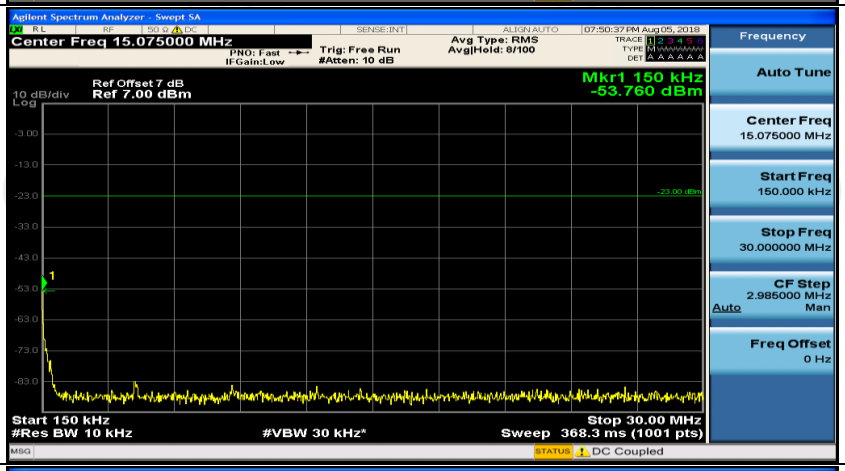
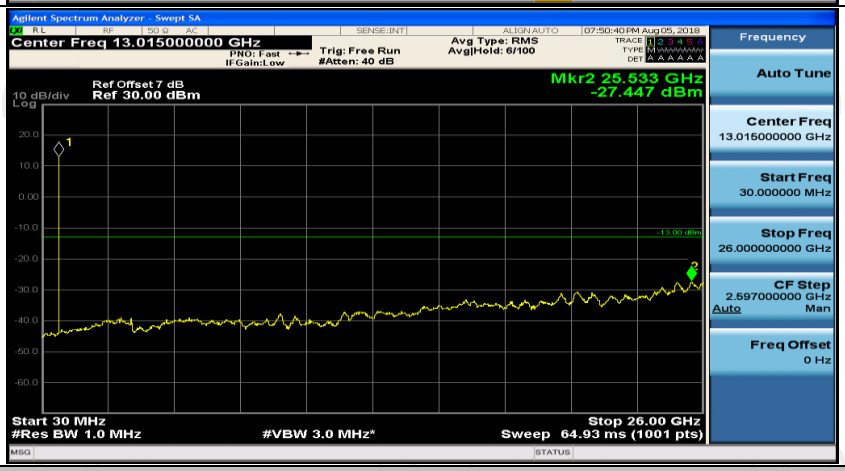
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24

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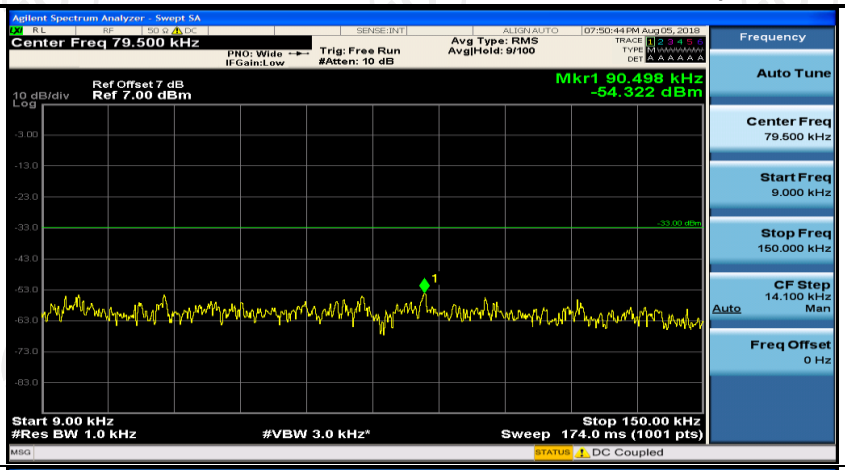
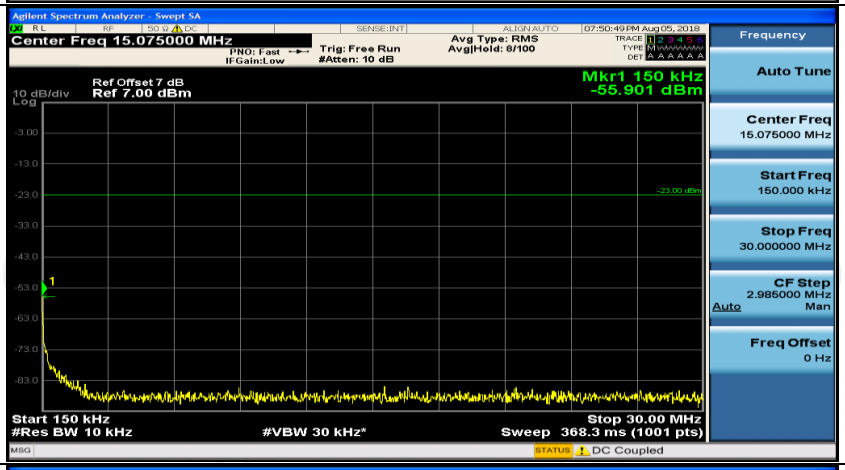
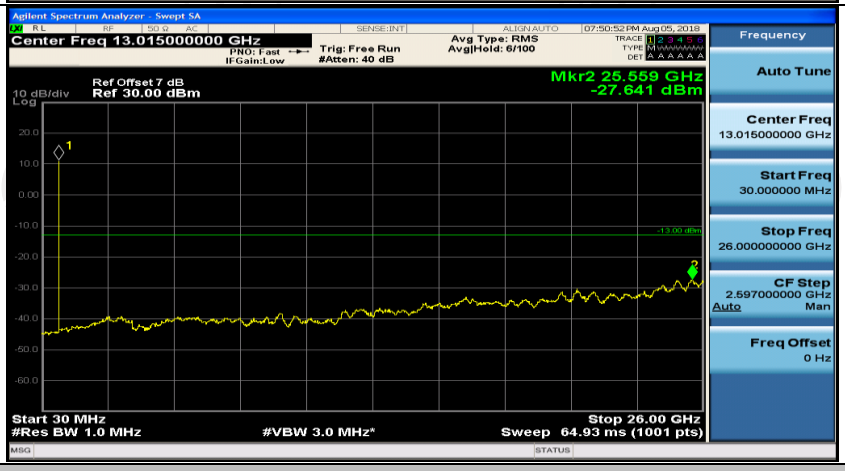
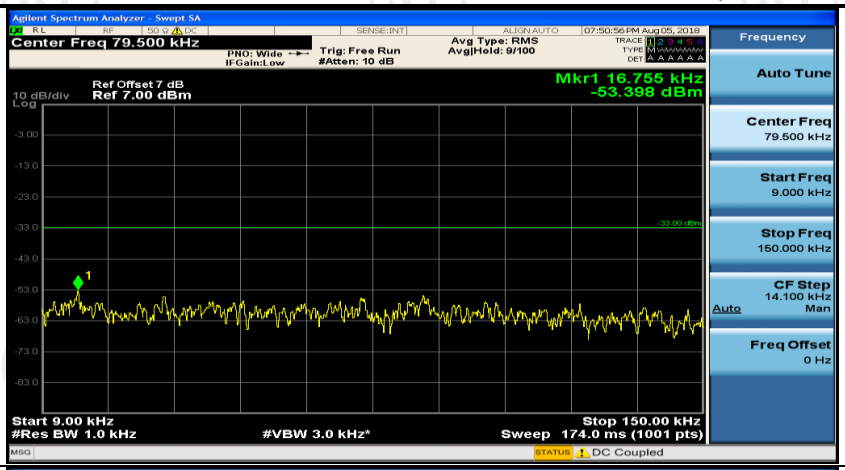
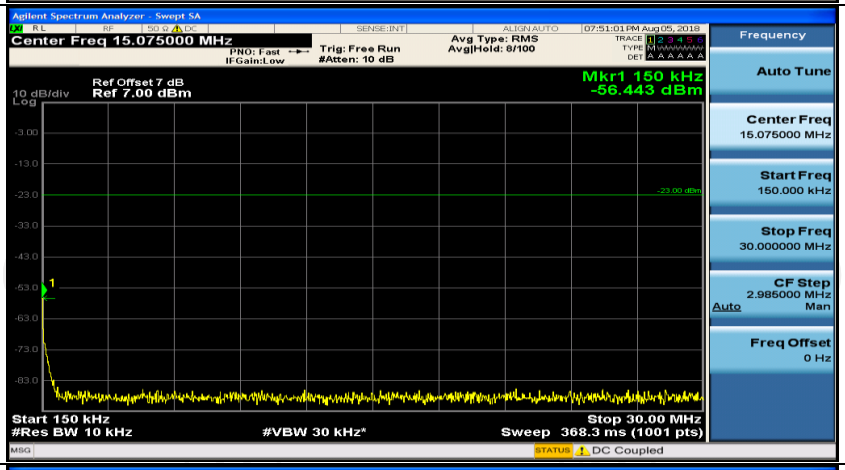


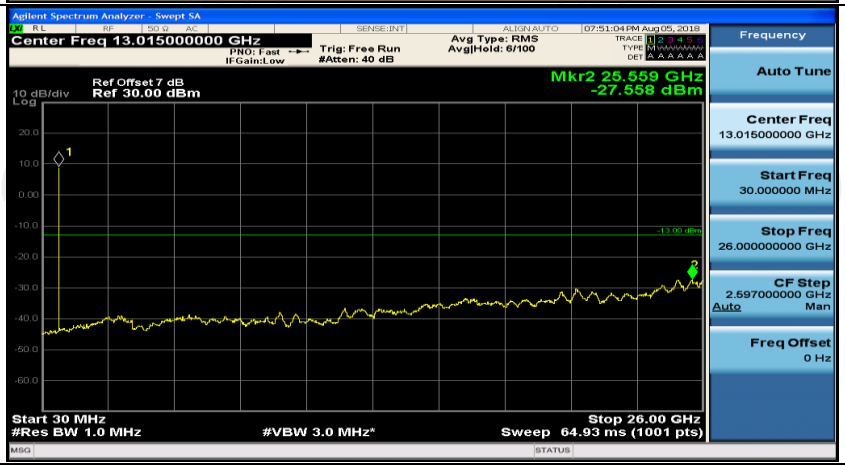




Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#49







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Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Voltage						
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.5	25	-0.000585	± 2.5	PASS
		3.7	25	-0.001701	± 2.5	PASS
		4.2	25	-0.000710	± 2.5	PASS
	MCH	3.5	25	0.001128	± 2.5	PASS
		3.7	25	0.000665	± 2.5	PASS
		4.2	25	0.000773	± 2.5	PASS
	HCH	3.5	25	-0.001791	± 2.5	PASS
		3.7	25	0.000541	± 2.5	PASS
		4.2	25	0.000259	± 2.5	PASS
16QAM	LCH	3.5	25	0.000464	± 2.5	PASS
		3.7	25	-0.001357	± 2.5	PASS
		4.2	25	-0.001183	± 2.5	PASS
	MCH	3.5	25	0.002519	± 2.5	PASS
		3.7	25	0.000826	± 2.5	PASS
		4.2	25	0.001433	± 2.5	PASS
	HCH	3.5	25	0.000181	± 2.5	PASS
		3.7	25	-0.000321	± 2.5	PASS
		4.2	25	-0.000267	± 2.5	PASS
Temperature						
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.7	-30	0.000121	± 2.5	PASS
		3.7	-20	-0.000484	± 2.5	PASS
		3.7	-10	-0.000161	± 2.5	PASS
		3.7	0	-0.000202	± 2.5	PASS
		3.7	10	-0.000295	± 2.5	PASS
		3.7	20	-0.001721	± 2.5	PASS
		3.7	30	-0.001559	± 2.5	PASS
		3.7	40	-0.001154	± 2.5	PASS
		3.7	50	-0.000668	± 2.5	PASS
	MCH	3.7	-30	0.001330	± 2.5	PASS
		3.7	-20	0.002458	± 2.5	PASS
		3.7	-10	0.000322	± 2.5	PASS
		3.7	0	0.000020	± 2.5	PASS
		3.7	10	0.000059	± 2.5	PASS
		3.7	20	0.000826	± 2.5	PASS
		3.7	30	0.001491	± 2.5	PASS

		3.7	40	-0.000363	± 2.5	PASS
		3.7	50	0.001431	± 2.5	PASS
	HCH	3.7	-30	-0.000825	± 2.5	PASS
		3.7	-20	-0.000463	± 2.5	PASS
		3.7	-10	-0.001006	± 2.5	PASS
		3.7	0	-0.000805	± 2.5	PASS
		3.7	10	-0.000114	± 2.5	PASS
		3.7	20	-0.000662	± 2.5	PASS
		3.7	30	-0.001123	± 2.5	PASS
		3.7	40	-0.000441	± 2.5	PASS
		3.7	50	0.000080	± 2.5	PASS
16QAM	LCH	3.7	-30	0.000767	± 2.5	PASS
		3.7	-20	0.001009	± 2.5	PASS
		3.7	-10	-0.000161	± 2.5	PASS
		3.7	0	-0.000726	± 2.5	PASS
		3.7	10	-0.000879	± 2.5	PASS
		3.7	20	-0.000992	± 2.5	PASS
		3.7	30	-0.001397	± 2.5	PASS
		3.7	40	-0.001053	± 2.5	PASS
		3.7	50	-0.000486	± 2.5	PASS
	MCH	3.7	-30	0.000927	± 2.5	PASS
		3.7	-20	0.001350	± 2.5	PASS
		3.7	-10	0.000705	± 2.5	PASS
		3.7	0	0.001209	± 2.5	PASS
		3.7	10	0.000377	± 2.5	PASS
		3.7	20	0.000423	± 2.5	PASS
		3.7	30	0.000242	± 2.5	PASS
		3.7	40	-0.000322	± 2.5	PASS
		3.7	50	0.002015	± 2.5	PASS
	HCH	3.7	-30	0.000121	± 2.5	PASS
		3.7	-20	0.000523	± 2.5	PASS
		3.7	-10	-0.000905	± 2.5	PASS
		3.7	0	-0.000060	± 2.5	PASS
		3.7	10	-0.000947	± 2.5	PASS
		3.7	20	0.001223	± 2.5	PASS
		3.7	30	-0.000140	± 2.5	PASS
		3.7	40	0.000180	± 2.5	PASS
		3.7	50	0.000040	± 2.5	PASS

Note: All bandwidth and modulation are tested, only the worst result is reported.

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Appendix G :Field Strength of Spurious Radiation Measurement

Test Result

Bandwidth:	5M		Test channel:	Lowest
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1413.0	Vertical	-35.65	-13.00	PASS
2119.5	V	-45.71		
-	V	-		
1413.0	Horizontal	-34.43		
2119.5	H	-46.83		
-	H	-		
Bandwidth:	5M		Test channel:	Middle
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1420.0	Vertical	-35.57	-13.00	PASS
2130.0	V	-43.26		
-	V	-		
1420.0	Horizontal	-34.52		
2130.0	H	-45.04		
-	H	-		
Bandwidth:	5M		Test channel:	Highest
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1427.0	Vertical	-33.17	-13.00	PASS
2140.5	V	-45.92		
-	V	-		
1427.0	Horizontal	-32.53		
2140.5	H	-45.28		
-	H	-		

Bandwidth:	5M		Test channel:	Lowest
Modulation:	16QAM		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1413.0	Vertical	-35.80	-13.00	PASS
2119.5	V	-45.34		
-	V	-		
1413.0	Horizontal	-34.38		
2119.5	H	-46.14		
-	H	-		
Bandwidth:	5M		Test channel:	Middle
Modulation:	16QAM		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1420.0	Vertical	-33.50	-13.00	PASS
2130.0	V	-42.02		
-	V	-		
1420.0	Horizontal	-35.48		
2130.0	H	-46.59		
-	H	-		
Bandwidth:	5M		Test channel:	Highest
Modulation:	16QAM		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1427.0	Vertical	-34.29	-13.00	PASS
2140.5	V	-46.68		
-	V	-		
1427.0	Horizontal	-33.30		
2140.5	H	-45.75		
-	H	-		

Note: All bandwidth and modulation are tested, only the worst result is reported.