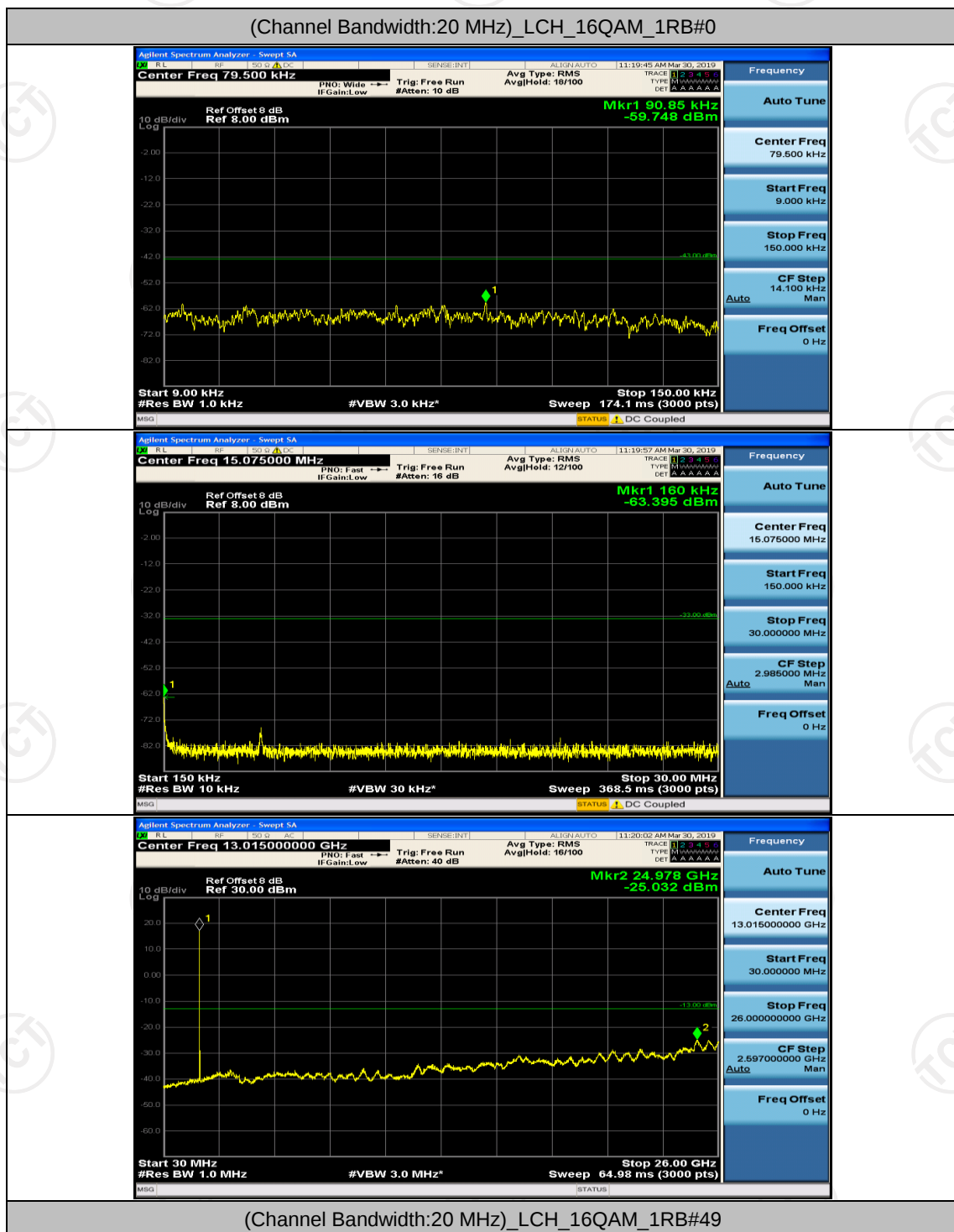
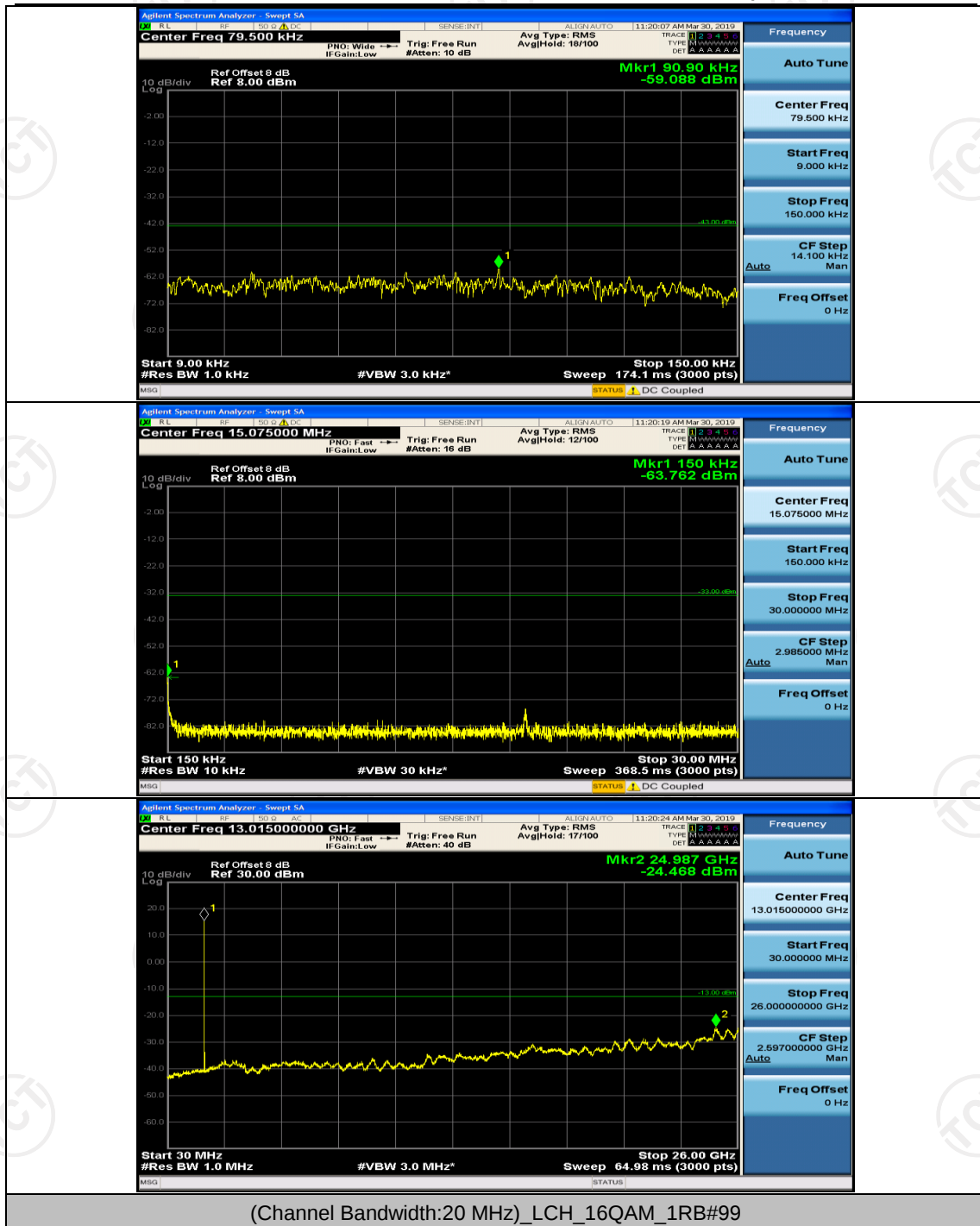
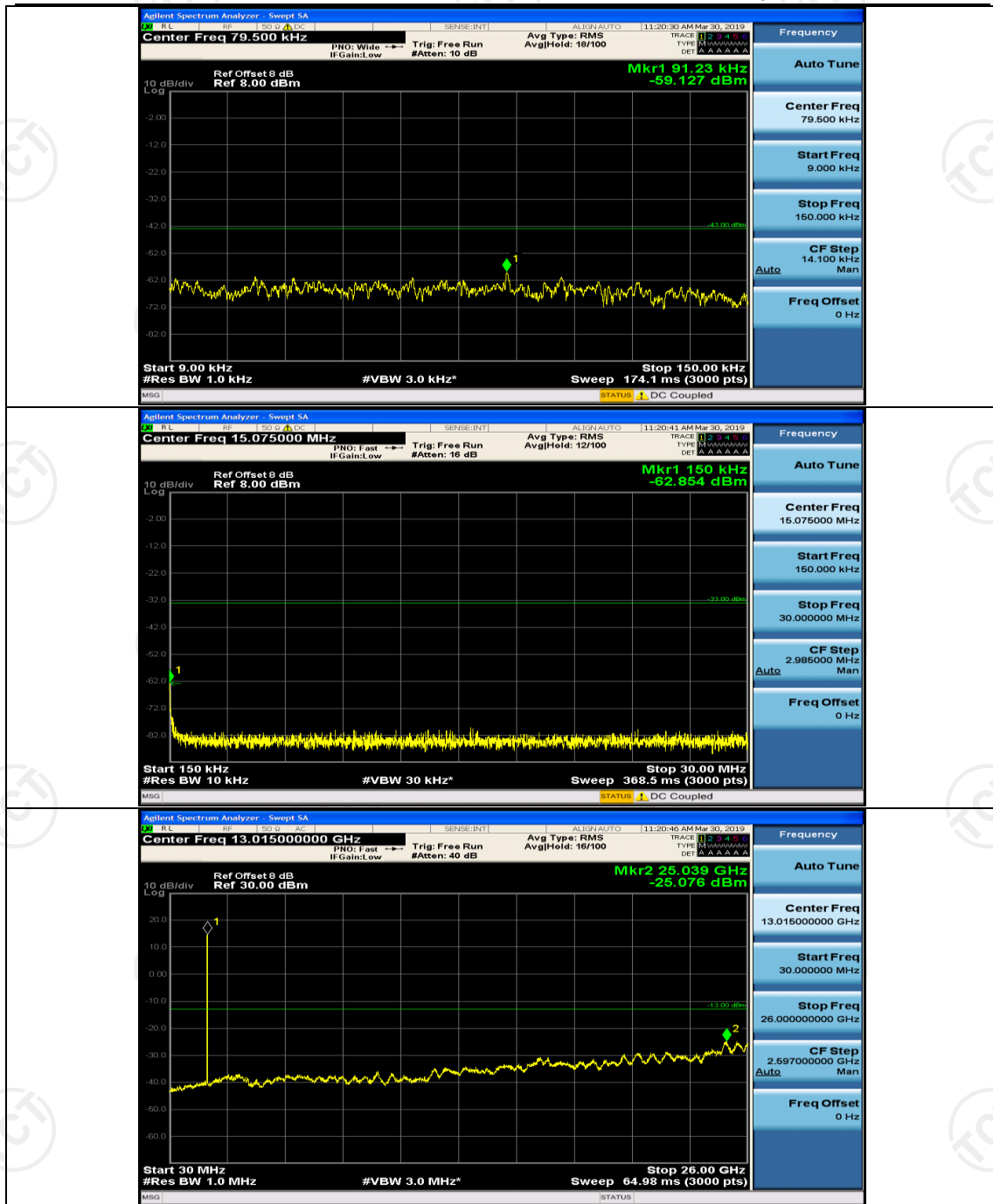
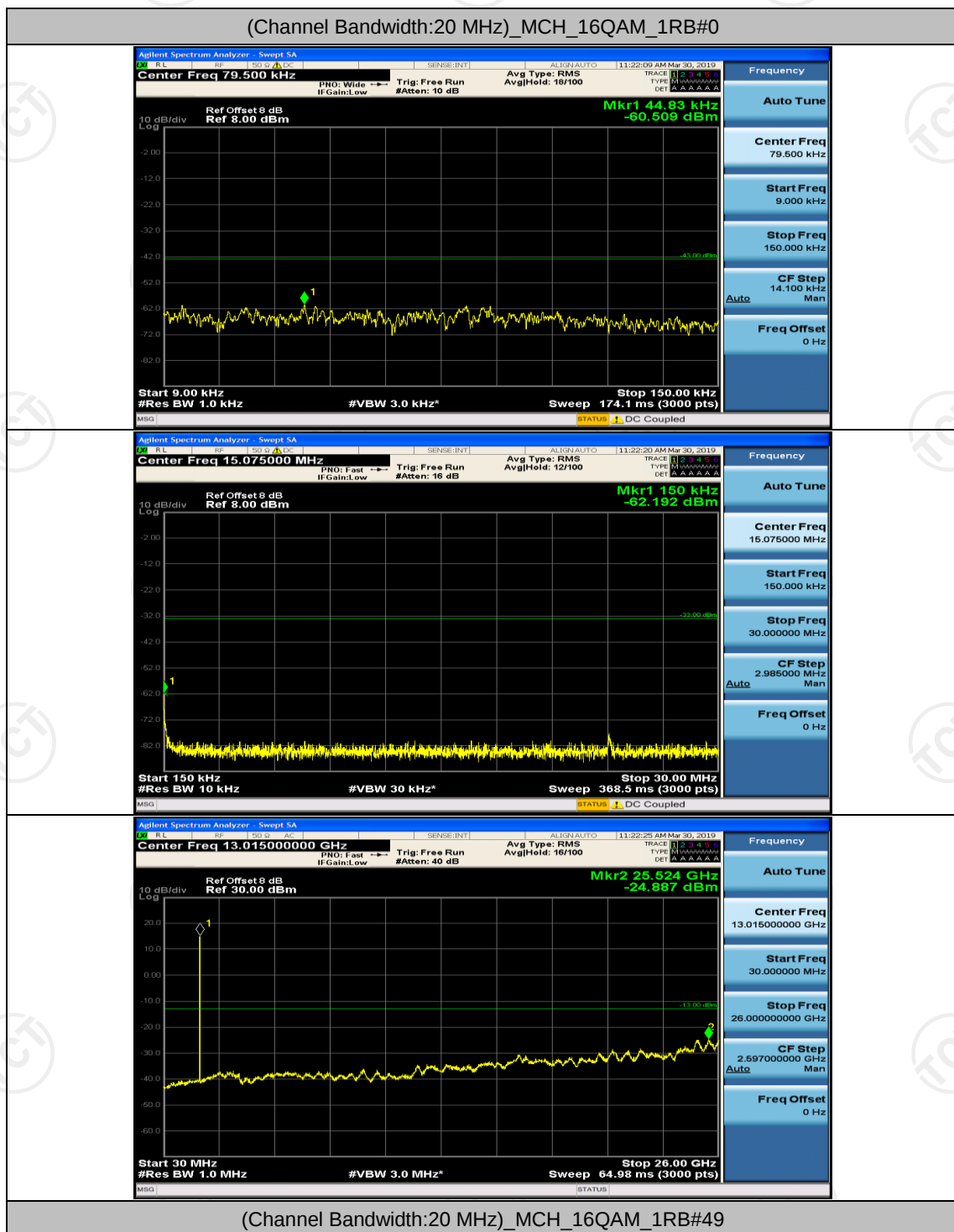
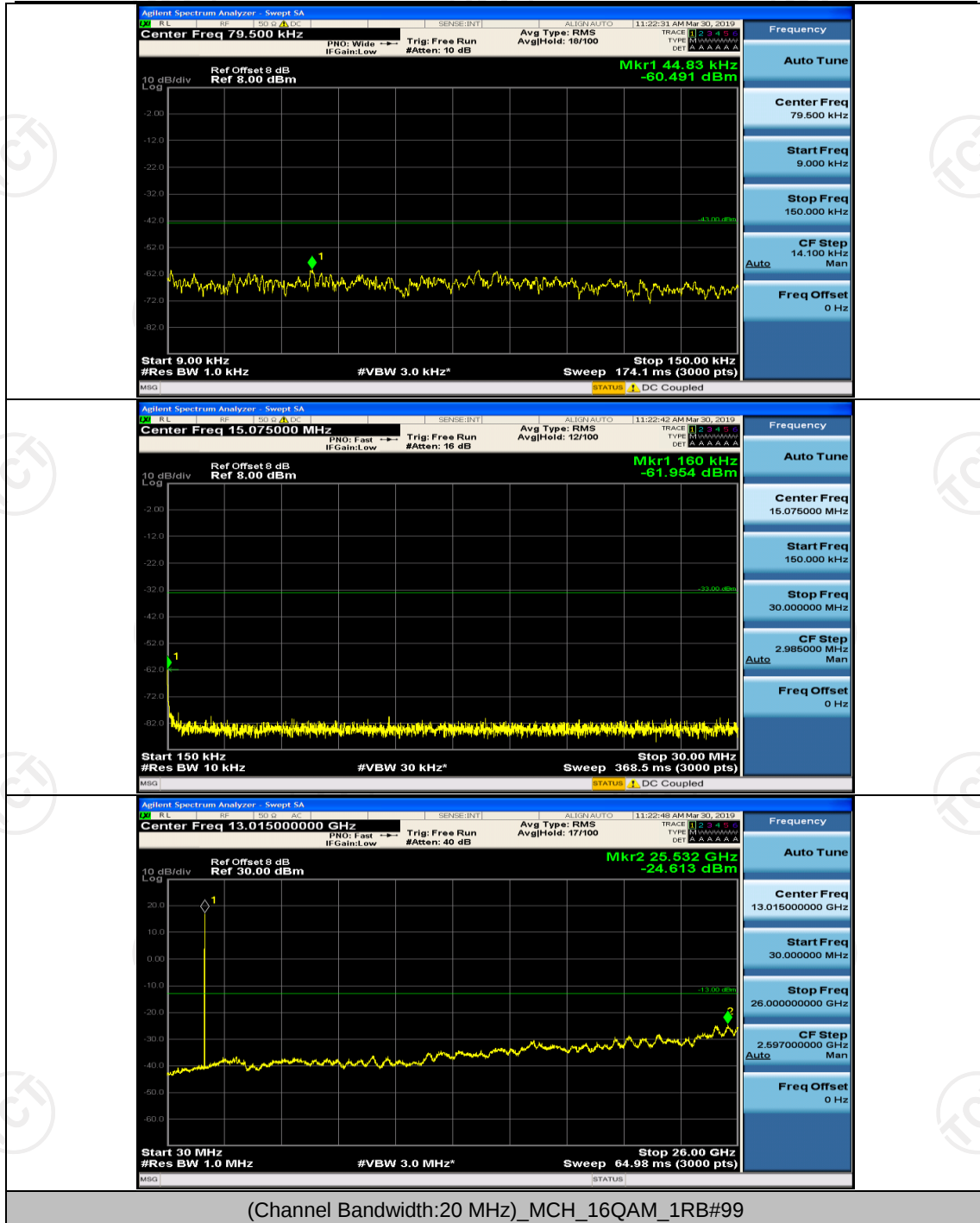


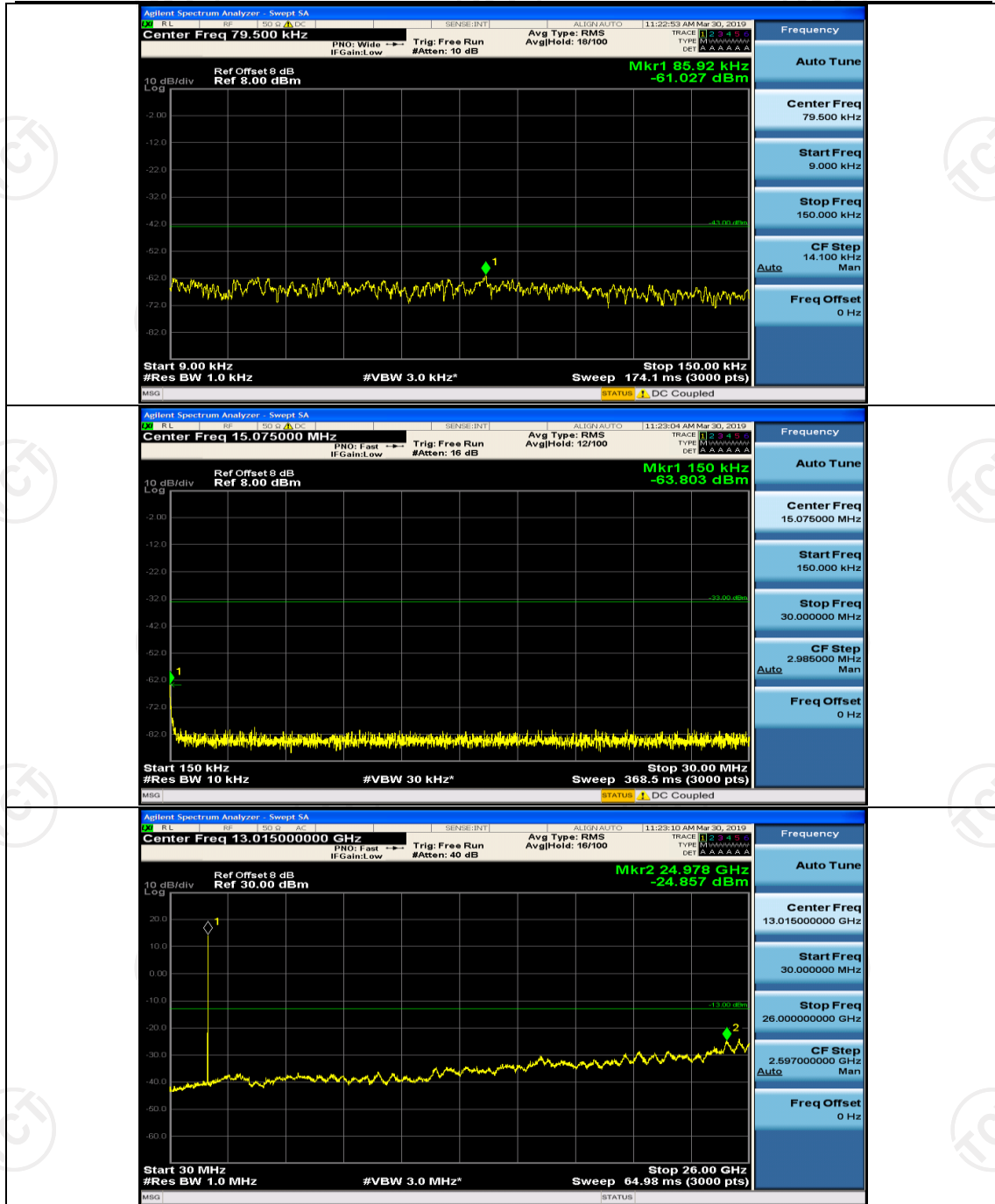


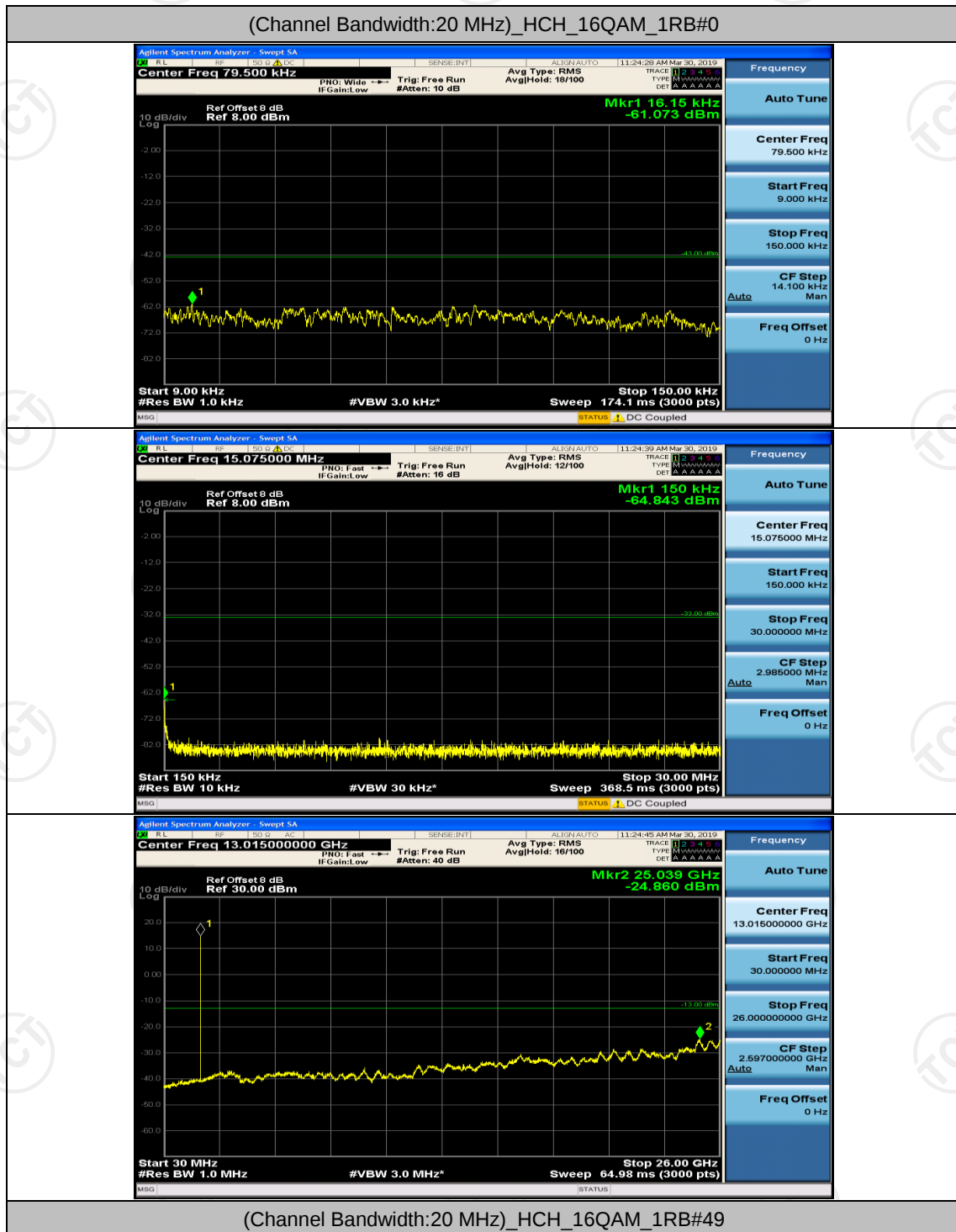


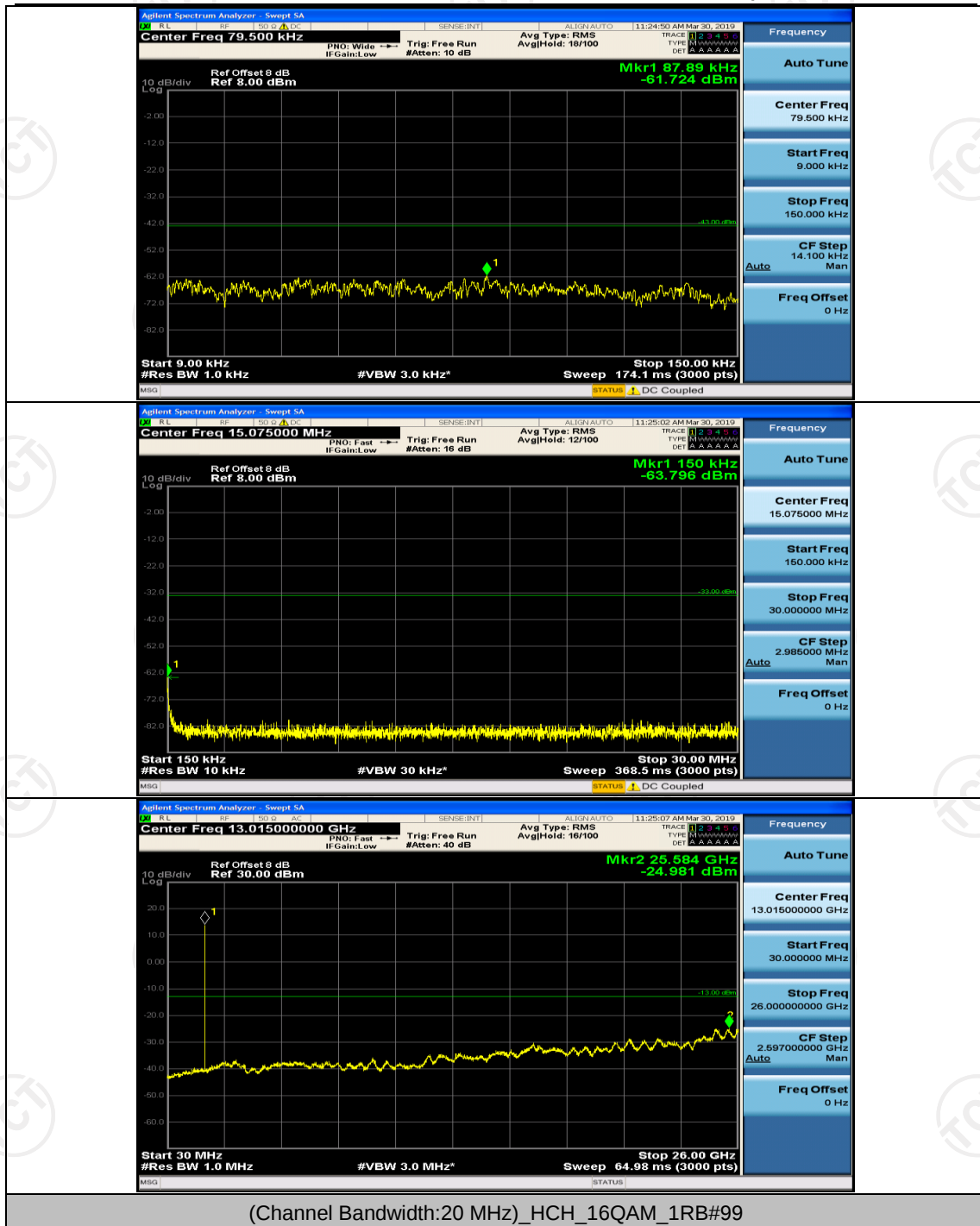


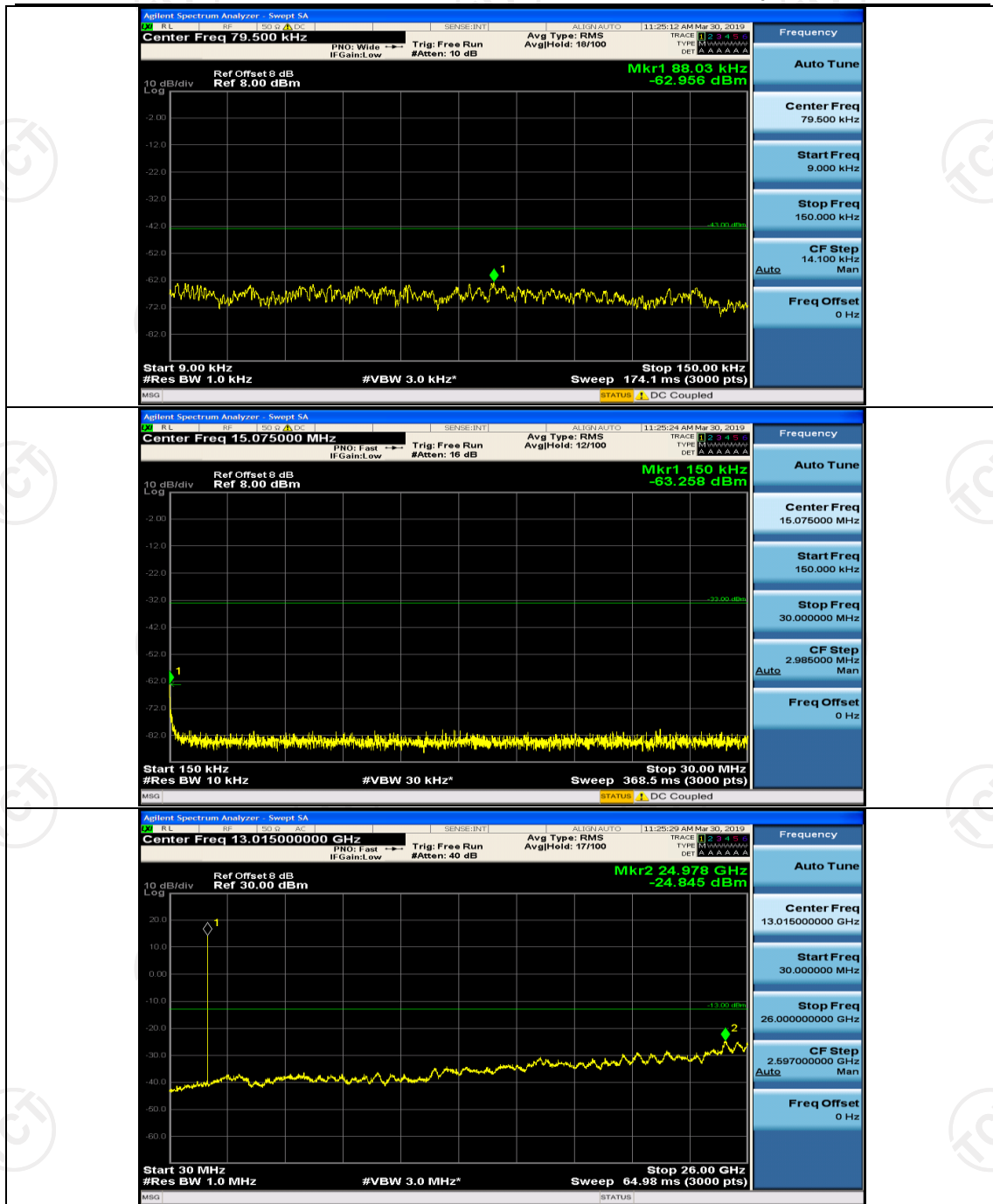












Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 1.4 MHz

Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
Voltage						
QPSK	LCH	9	25	-0.000134	± 2.5	PASS
		12	25	-0.000451	± 2.5	PASS
		15	25	0.000635	± 2.5	PASS
	MCH	9	25	0.000811	± 2.5	PASS
		12	25	-0.000140	± 2.5	PASS
		15	25	-0.001191	± 2.5	PASS
	HCH	9	25	-0.001045	± 2.5	PASS
		12	25	-0.001892	± 2.5	PASS
		15	25	0.001016	± 2.5	PASS
16QAM	LCH	9	25	0.002064	± 2.5	PASS
		12	25	0.000435	± 2.5	PASS
		15	25	0.001115	± 2.5	PASS
	MCH	9	25	0.001734	± 2.5	PASS
		12	25	0.000817	± 2.5	PASS
		15	25	0.000742	± 2.5	PASS
	HCH	9	25	0.001077	± 2.5	PASS
		12	25	-0.002397	± 2.5	PASS
		15	25	-0.004753	± 2.5	PASS
Temperature						
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	12	-30	0.000881	± 2.5	PASS
		12	-20	0.000408	± 2.5	PASS
		12	-10	0.000930	± 2.5	PASS
		12	0	0.000265	± 2.5	PASS
		12	10	0.002383	± 2.5	PASS
		12	20	0.001112	± 2.5	PASS
		12	30	0.000753	± 2.5	PASS
		12	40	0.000736	± 2.5	PASS
		12	50	0.000686	± 2.5	PASS
	MCH	12	-30	0.001305	± 2.5	PASS
		12	-20	0.001247	± 2.5	PASS
		12	-10	0.001645	± 2.5	PASS
		12	0	0.001495	± 2.5	PASS
		12	10	0.002357	± 2.5	PASS
		12	20	-0.000322	± 2.5	PASS

		12	30	-0.000025	± 2.5	PASS
		12	40	-0.000314	± 2.5	PASS
		12	50	-0.000182	± 2.5	PASS
	HCH	12	-30	0.002145	± 2.5	PASS
		12	-20	0.001453	± 2.5	PASS
		12	-10	0.002042	± 2.5	PASS
		12	0	0.001077	± 2.5	PASS
		12	10	0.001452	± 2.5	PASS
		12	20	-0.001941	± 2.5	PASS
		12	30	-0.001696	± 2.5	PASS
		12	40	-0.001223	± 2.5	PASS
		12	50	-0.001509	± 2.5	PASS
		12	-30	0.001651	± 2.5	PASS
16QAM	LCH	12	-20	0.001197	± 2.5	PASS
		12	-10	0.001287	± 2.5	PASS
		12	0	0.002412	± 2.5	PASS
		12	10	-0.001191	± 2.5	PASS
		12	20	-0.000435	± 2.5	PASS
		12	30	0.000719	± 2.5	PASS
		12	40	0.000259	± 2.5	PASS
		12	50	0.001137	± 2.5	PASS
	MCH	12	-30	0.002434	± 2.5	PASS
		12	-20	0.001562	± 2.5	PASS
		12	-10	0.001234	± 2.5	PASS
		12	0	0.001456	± 2.5	PASS
		12	10	-0.001191	± 2.5	PASS
		12	20	-0.000025	± 2.5	PASS
		12	30	0.000834	± 2.5	PASS
		12	40	0.000413	± 2.5	PASS
		12	50	0.000372	± 2.5	PASS
	HCH	12	-30	0.001963	± 2.5	PASS
		12	-20	0.001364	± 2.5	PASS
		12	-10	0.001503	± 2.5	PASS
		12	0	0.001538	± 2.5	PASS
		12	10	-0.001236	± 2.5	PASS
		12	20	-0.002120	± 2.5	PASS
		12	30	-0.001280	± 2.5	PASS
		12	40	-0.002471	± 2.5	PASS
		12	50	-0.001492	± 2.5	PASS

Appendix G :Field Strength of Spurious Radiation Measurement

Test Result

Bandwidth:	1.4M		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)		
3421.4	Vertical	-25.74	-13.00	PASS
5132.1	V	-32.03		
-	V	-		
3421.4	Horizontal	-24.02		
5132.1	H	-30.21		
-	H	-		
Bandwidth:	1.4M		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)		
3465	Vertical	-26.83	-13.00	PASS
5197.5	V	-32.35		
-	V	-		
3465	Horizontal	-25.32		
5197.5	H	-31.57		
-	H	-		
Bandwidth:	1.4M		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)		
3508.6	Vertical	-25.63	-13.00	PASS
5262.9	V	-31.24		
-	V	-		
3508.6	Horizontal	-27.45		
5262.9	H	-33.08		

-	H	-	
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Bandwidth:	1.4M		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)		
3421.4	Vertical	-25.43	-13.00	PASS
5132.1	V	-31.13		
-	V	-		
3421.4	Horizontal	-27.30		
5132.1	H	-32.88		
-	H	-		
Bandwidth:	1.4M		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)		
3465	Vertical	-25.72	-13.00	PASS
5197.5	V	-31.28		
-	V	-		
3465	Horizontal	-27.07		
5197.5	H	-32.59		
-	H	-		
Bandwidth:	1.4M		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)		
3508.6	Vertical	-25.48	-13.00	PASS
5262.9	V	-31.23		
-	V	-		
3508.6	Horizontal	-26.88		
5262.9	H	-33.37		
-	H	-		

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

