Appendix for test report

1Appendix_A: Effective (Isotropic) Radiated Power Output Data

Part I - Test Results

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
Band17	LTE/TM1	5	LCH	RB1#0	24.37	22.44	34.7	PASS
				RB1#13	24.34	22.41	34.7	PASS
				RB1#24	24.18	22.25	34.7	PASS
				RB12#0	23.18	21.25	34.7	PASS
				RB12#6	23.16	21.23	34.7	PASS
				RB12#13	23.13	21.2	34.7	PASS
				RB25#0	23.17	21.24	34.7	PASS
			MCH	RB1#0	24.13	22.2	34.7	PASS
				RB1#13	24.2	22.27	34.7	PASS
				RB1#24	24.13	22.2	34.7	PASS
				RB12#0	23.23	21.3	34.7	PASS
				RB12#6	23.23	21.3	34.7	PASS
				RB12#13	23.09	21.16	34.7	PASS
				RB25#0	23.12	21.19	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
			HCH	RB1#0	24.13	22.2	34.7	PASS
				RB1#13	24.21	22.28	34.7	PASS
				RB1#24	24.01	22.08	34.7	PASS
				RB12#0	23.12	21.19	34.7	PASS
				RB12#6	23.13	21.2	34.7	PASS
				RB12#13	23.24	21.31	34.7	PASS
				RB25#0	23.13	21.2	34.7	PASS
		10	LCH	RB1#0	24.34	22.41	34.7	PASS
				RB1#25	24.32	22.39	34.7	PASS
				RB1#49	24.12	22.19	34.7	PASS
				RB25#0	23.12	21.19	34.7	PASS
				RB25#13	23.14	21.21	34.7	PASS
				RB25#25	23.09	21.16	34.7	PASS
				RB50#0	23.26	21.33	34.7	PASS
			MCH	RB1#0	24.09	22.16	34.7	PASS
				RB1#25	24.16	22.23	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#49	24.01	22.08	34.7	PASS
				RB25#0	23.12	21.19	34.7	PASS
				RB25#13	23.13	21.2	34.7	PASS
				RB25#25	23.11	21.18	34.7	PASS
				RB50#0	23.13	21.2	34.7	PASS
			HCH	RB1#0	24.21	22.28	34.7	PASS
				RB1#25	24.25	22.32	34.7	PASS
				RB1#49	24.19	22.26	34.7	PASS
				RB25#0	23.25	21.32	34.7	PASS
				RB25#13	23.1	21.17	34.7	PASS
				RB25#25	23.22	21.29	34.7	PASS
				RB50#0	23.17	21.24	34.7	PASS
	LTE/TM2	5	LCH	RB1#0	23.42	21.49	34.7	PASS
				RB1#13	23.42	21.49	34.7	PASS
				RB1#24	23.25	21.32	34.7	PASS
				RB12#0	22.1	20.17	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB12#6	22.18	20.25	34.7	PASS
				RB12#13	22.2	20.27	34.7	PASS
				RB25#0	22.24	20.31	34.7	PASS
			MCH	RB1#0	23.41	21.48	34.7	PASS
				RB1#13	23.32	21.39	34.7	PASS
				RB1#24	23.29	21.36	34.7	PASS
				RB12#0	22.27	20.34	34.7	PASS
				RB12#6	22.22	20.29	34.7	PASS
				RB12#13	22.15	20.22	34.7	PASS
				RB25#0	22.15	20.22	34.7	PASS
			HCH	RB1#0	23.62	21.69	34.7	PASS
				RB1#13	23.63	21.7	34.7	PASS
				RB1#24	23.49	21.56	34.7	PASS
				RB12#0	22.19	20.26	34.7	PASS
				RB12#6	22.12	20.19	34.7	PASS
				RB12#13	22.05	20.12	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#0	22.17	20.24	34.7	PASS
		10	LCH	RB1#0	23.43	21.5	34.7	PASS
				RB1#25	23.47	21.54	34.7	PASS
				RB1#49	23.29	21.36	34.7	PASS
				RB25#0	22.14	20.21	34.7	PASS
				RB25#13	22.15	20.22	34.7	PASS
				RB25#25	22.11	20.18	34.7	PASS
				RB50#0	22.2	20.27	34.7	PASS
			MCH	RB1#0	23.21	21.28	34.7	PASS
				RB1#25	23.45	21.52	34.7	PASS
				RB1#49	23.24	21.31	34.7	PASS
				RB25#0	22.2	20.27	34.7	PASS
				RB25#13	22.15	20.22	34.7	PASS
				RB25#25	22.15	20.22	34.7	PASS
				RB50#0	22.2	20.27	34.7	PASS
			HCH	RB1#0	23.46	21.53	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#25	23.42	21.49	34.7	PASS
				RB1#49	23.46	21.53	34.7	PASS
				RB25#0	22.22	20.29	34.7	PASS
				RB25#13	22.13	20.2	34.7	PASS
				RB25#25	22.16	20.23	34.7	PASS
				RB50#0	22.2	20.27	34.7	PASS

Note1:

a, For getting the ERP (Efficient Radiated Power) or EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

ERP [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBd]

EIRP [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBi]

b, SGP = Signal Generator Level

Note2:

SET Span = 1.5 * OBW

SET RBW = 1% of the OBW, not to exceed 1MHz

SET VBW >= 3 * RBW

SET Sweep time = auto - couple.

Detector: RMS

2Appendix_B: Peak-to-Average Ratio

Part I - Test Results

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
Band17	LTE/TM1	5	LCH	RB1#0	3.88	13	PASS
				RB1#13	3.54	13	PASS
				RB1#24	3.91	13	PASS
				RB12#0	5.21	13	PASS
				RB12#6	4.96	13	PASS
				RB12#13	5.24	13	PASS
				RB25#0	5.51	13	PASS
			MCH	RB1#0	3.77	13	PASS
				RB1#13	4.02	13	PASS
				RB1#24	4.24	13	PASS
				RB12#0	5.59	13	PASS
				RB12#6	5.42	13	PASS
				RB12#13	5.82	13	PASS
				RB25#0	5.80	13	PASS
			HCH	RB1#0	4.49	13	PASS
				RB1#13	3.98	13	PASS
				RB1#24	3.51	13	PASS
				RB12#0	5.54	13	PASS
				RB12#6	5.15	13	PASS
				RB12#13	5.09	13	PASS
				RB25#0	5.71	13	PASS
		10	LCH	RB1#0	3.70	13	PASS
				RB1#25	4.02	13	PASS
				RB1#49	4.30	13	PASS
				RB25#0	5.11	13	PASS
				RB25#13	5.25	13	PASS
				RB25#25	5.69	13	PASS
				RB50#0	5.72	13	PASS
			MCH	RB1#0	3.68	13	PASS
				RB1#25	4.12	13	PASS
				RB1#49	3.82	13	PASS
				RB25#0	5.24	13	PASS
				RB25#13	5.43	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB25#25	5.70	13	PASS
				RB50#0	5.82	13	PASS
			HCH	RB1#0	3.58	13	PASS
				RB1#25	4.14	13	PASS
				RB1#49	3.67	13	PASS
				RB25#0	5.38	13	PASS
				RB25#13	5.53	13	PASS
				RB25#25	5.58	13	PASS
				RB50#0	5.97	13	PASS
	LTE/TM2	5	LCH	RB1#0	4.77	13	PASS
				RB1#13	4.38	13	PASS
				RB1#24	4.73	13	PASS
				RB12#0	5.95	13	PASS
				RB12#6	5.88	13	PASS
				RB12#13	6.09	13	PASS
				RB25#0	6.35	13	PASS
			MCH	RB1#0	4.46	13	PASS
				RB1#13	4.87	13	PASS
				RB1#24	4.98	13	PASS
				RB12#0	6.02	13	PASS
				RB12#6	6.20	13	PASS
				RB12#13	6.57	13	PASS
				RB25#0	6.52	13	PASS
			HCH	RB1#0	4.83	13	PASS
				RB1#13	4.63	13	PASS
				RB1#24	4.39	13	PASS
				RB12#0	6.21	13	PASS
				RB12#6	6.00	13	PASS
				RB12#13	5.98	13	PASS
				RB25#0	6.65	13	PASS
		10	LCH	RB1#0	4.44	13	PASS
				RB1#25	4.50	13	PASS
				RB1#49	4.72	13	PASS
				RB25#0	6.03	13	PASS
				RB25#13	6.14	13	PASS
				RB25#25	6.51	13	PASS
				RB50#0	6.69	13	PASS
			MCH	RB1#0	4.44	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB1#25	4.83	13	PASS
				RB1#49	4.75	13	PASS
				RB25#0	6.11	13	PASS
				RB25#13	6.30	13	PASS
				RB25#25	6.51	13	PASS
				RB50#0	6.55	13	PASS
			HCH	RB1#0	4.40	13	PASS
				RB1#25	5.10	13	PASS
				RB1#49	4.46	13	PASS
				RB25#0	6.16	13	PASS
				RB25#13	6.29	13	PASS
				RB25#25	6.26	13	PASS
				RB50#0	6.44	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

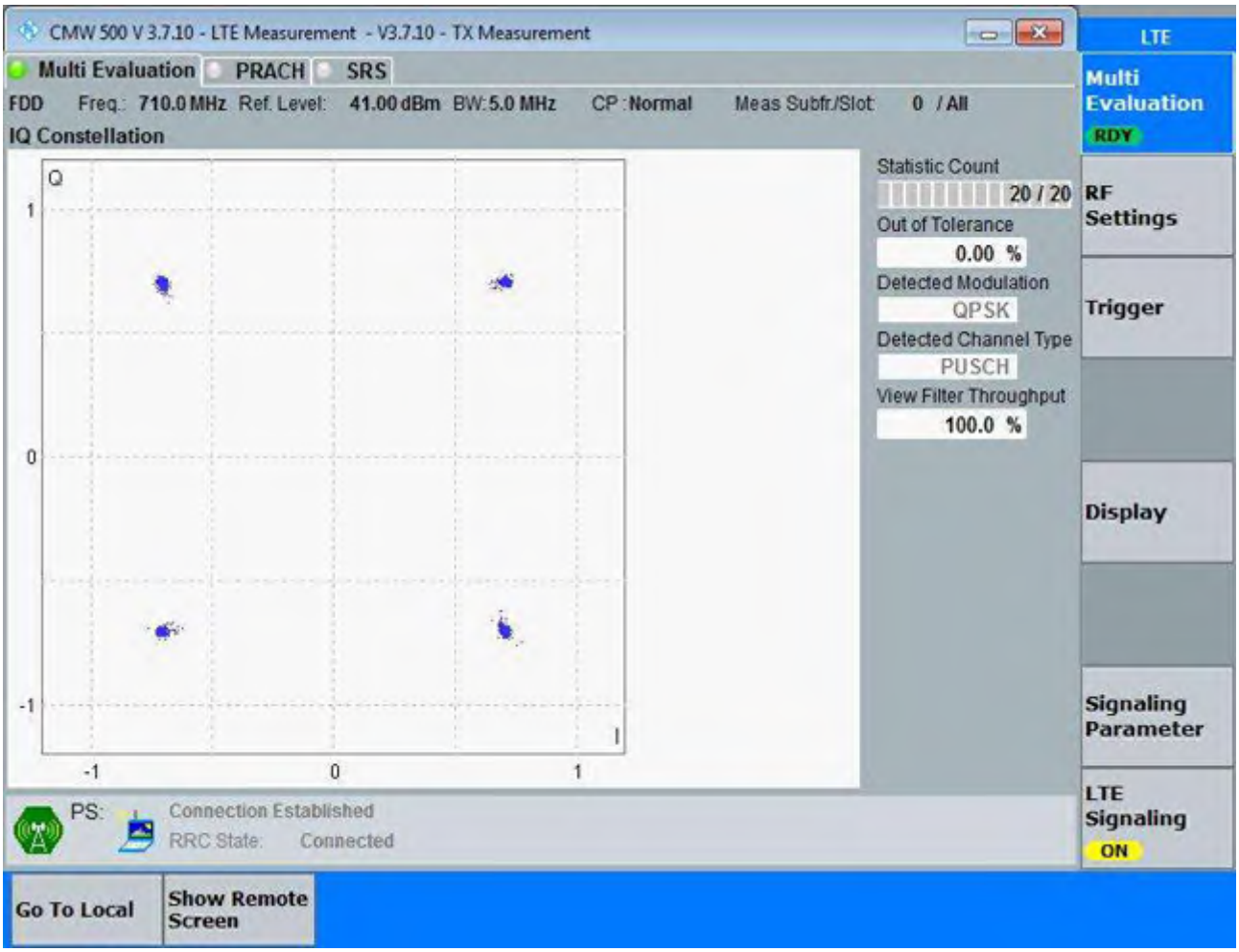
3.1.1 Test Band = Band17

3.1.1.1 Test Mode = LTE/TM1

3.1.1.1.1 Test Bandwidth = 5

3.1.1.1.1.1 Test Channel = MCH

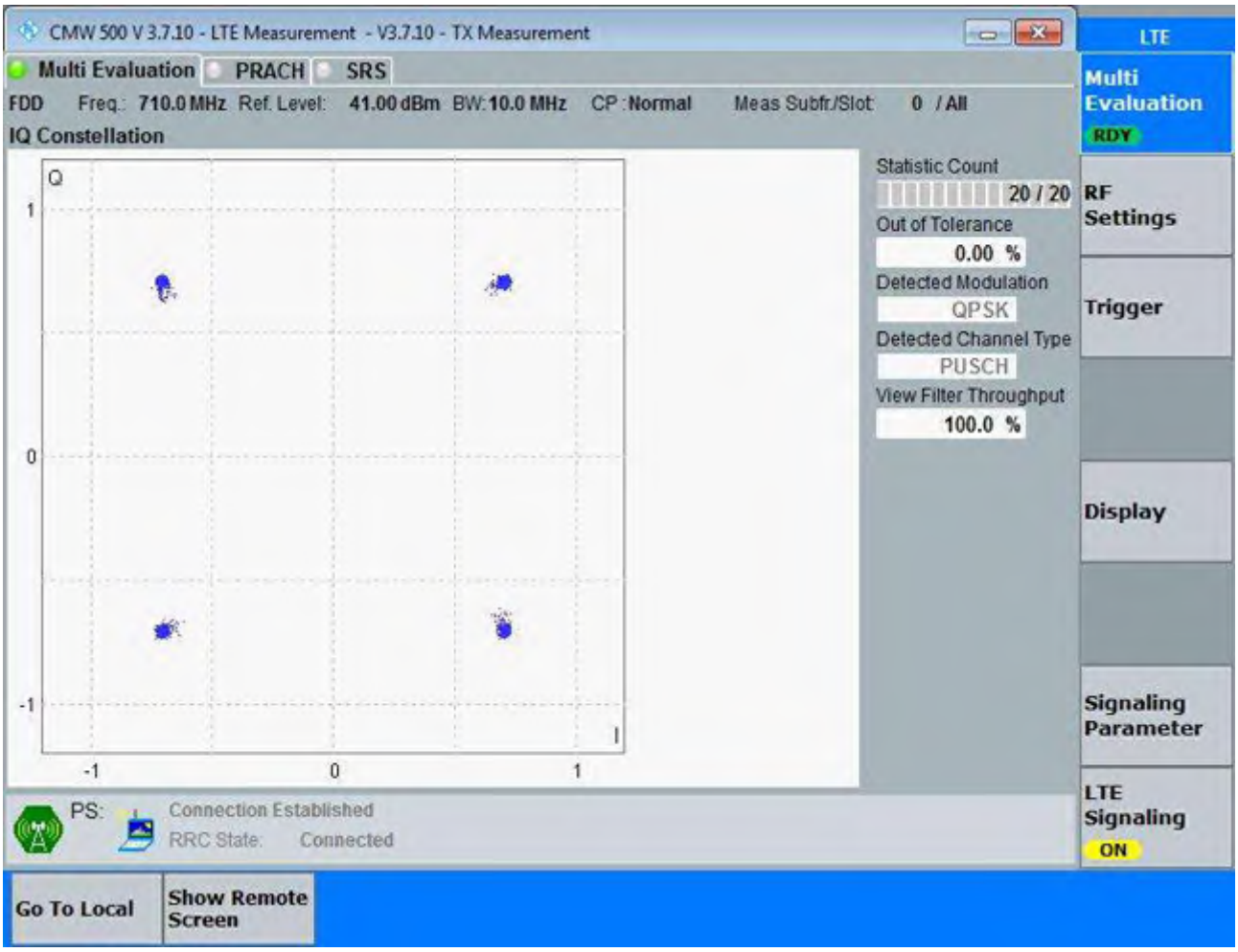
3.1.1.1.1.1.1 Test RB = RB25#0



3.1.1.1.2 Test Bandwidth = 10

3.1.1.1.2.1 Test Channel = MCH

3.1.1.1.2.1.1 Test RB = RB50#0

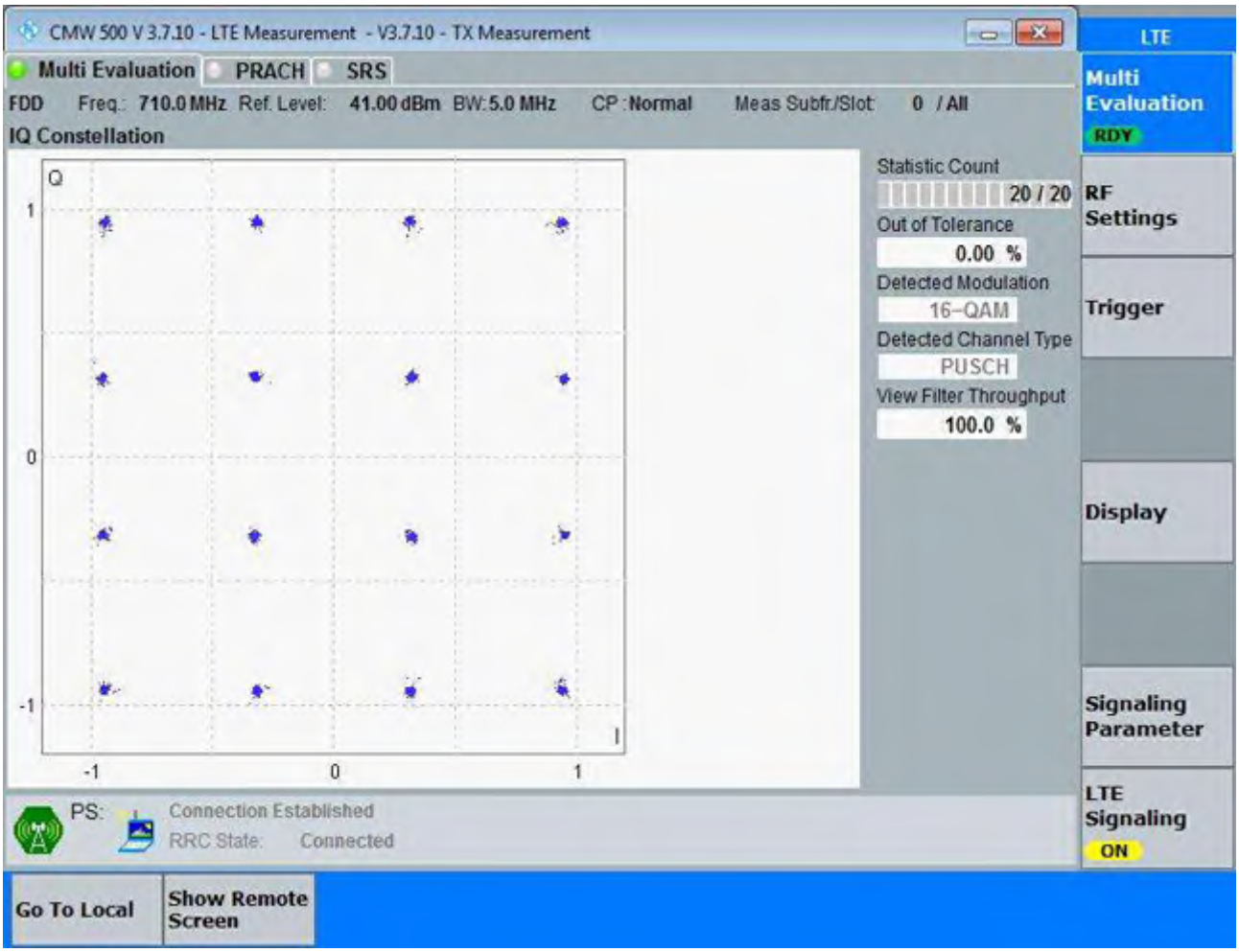


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 5

3.1.1.2.1.1 Test Channel = MCH

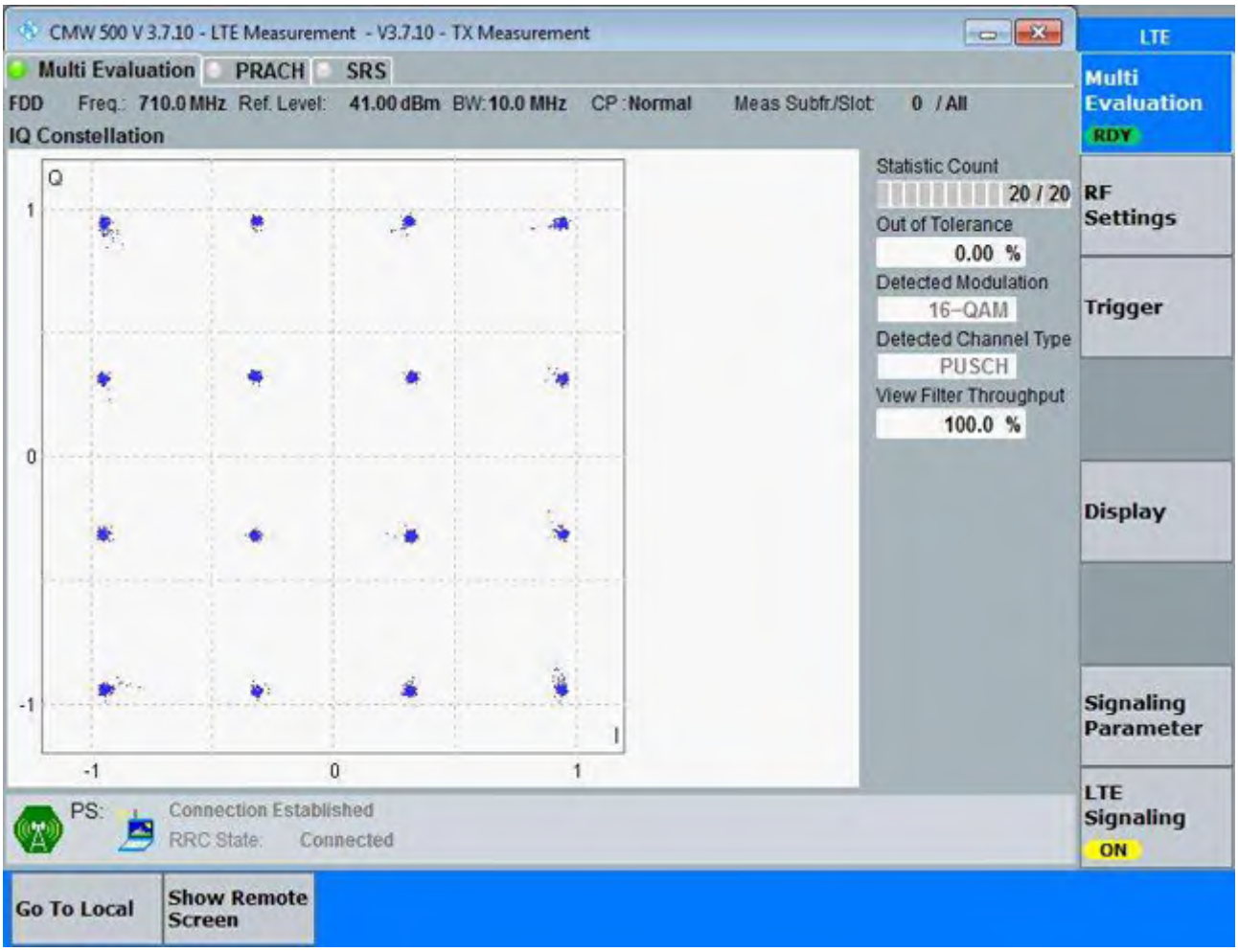
3.1.1.2.1.1.1 Test RB = RB25#0



3.1.1.2.4 Test Bandwidth = 10

3.1.1.2.4.1 Test Channel = MCH

3.1.1.2.4.1.1 Test RB = RB50#0



4Appendix_D: Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Bandwidth	Test Channel	Test RB	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
Band17	LTE/TM1	5	LCH	RB25#0	4.52	4.97	Pass
			MCH	RB25#0	4.53	5.00	Pass
			HCH	RB25#0	4.51	4.97	Pass
		10	LCH	RB50#0	9.01	9.92	Pass
			MCH	RB50#0	9.03	9.95	Pass
			HCH	RB50#0	9.04	9.96	Pass
	LTE/TM2	5	LCH	RB25#0	4.51	4.98	Pass
			MCH	RB25#0	4.52	4.99	Pass
			HCH	RB25#0	4.51	4.95	Pass
		10	LCH	RB50#0	9.02	9.89	Pass
			MCH	RB50#0	9.02	9.88	Pass
			HCH	RB50#0	9.03	9.95	Pass

Part II - Test Plots

4.1 For LTE

4.1.1 Test Band = Band17

4.1.1.1 Test Mode = LTE/TM1

4.1.1.1.1Test Bandwidth = 5

4.1.1.1.1.1 Test Channel = LCH

4.1.1.1.1.1.1 Test RB = RB25#0

4.1.1.1.1.2 Test Channel = MCH

4.1.1.1.1.2.1 Test RB = RB25#0

4.1.1.1.1.3 Test Channel = HCH

4.1.1.1.1.3.1 Test RB = RB25#0

4.1.1.1.2 Test Bandwidth = 10

4.1.1.1.2.1 Test Channel = LCH

4.1.1.1.2.1.1 Test RB = RB50#0

4.1.1.1.2.2 Test Channel = MCH

4.1.1.1.2.2.1 Test RB = RB50#0

4.1.1.1.2.3 Test Channel = HCH

4.1.1.1.2.3.1 Test RB = RB50#0

4.1.1.2 Test Mode = LTE/TM2

4.1.1.2.1 Test Bandwidth = 5

4.1.1.2.1.1 Test Channel = LCH

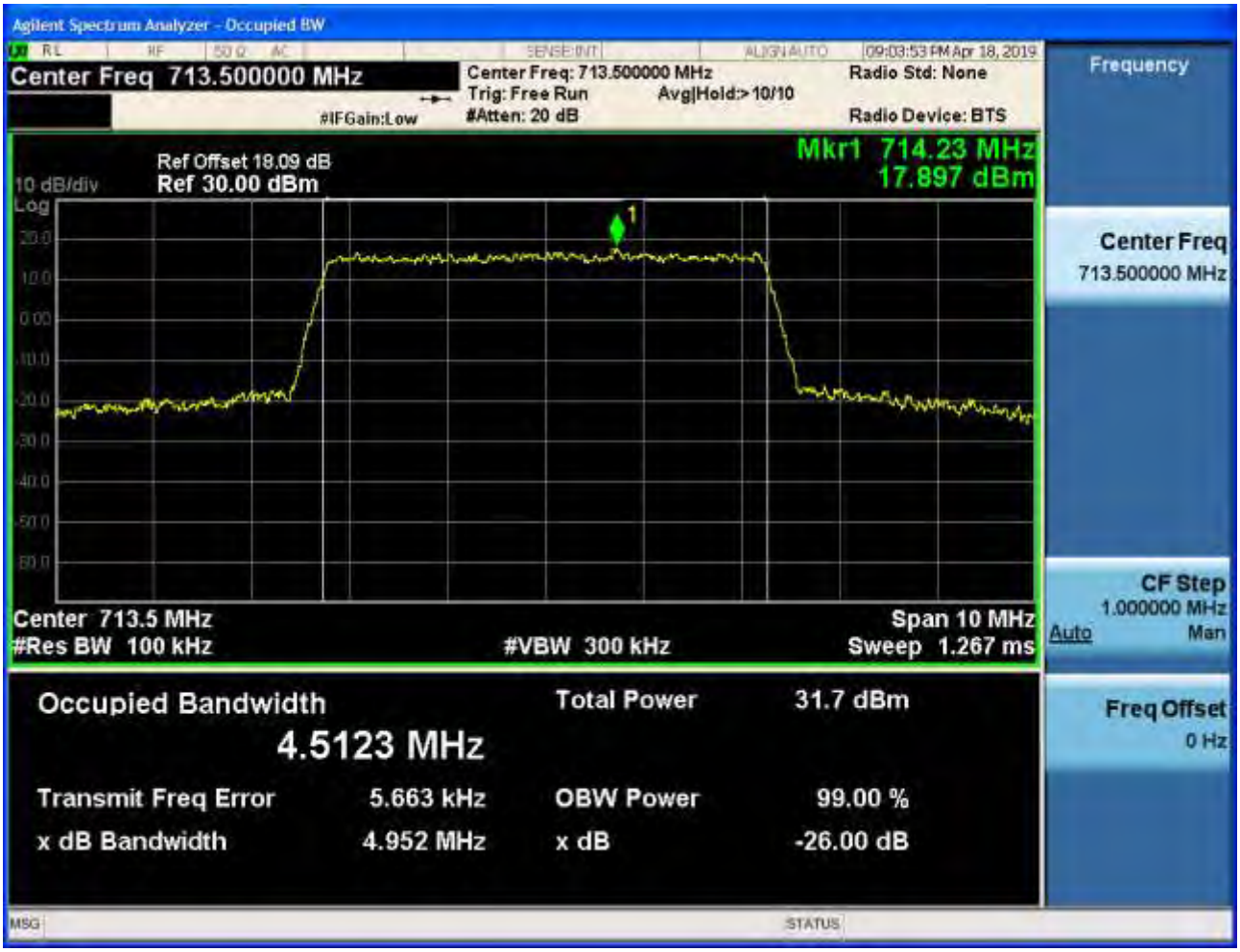
####### 4.1.1.2.1.1.1 Test RB = RB25#0

4.1.1.2.1.2 Test Channel = MCH

4.1.1.2.1.2.1 Test RB = RB25#0

4.1.1.2.1.3 Test Channel = HCH

4.1.1.2.1.3.1 Test RB = RB25#0



4.1.1.2.2 Test Bandwidth = 10

4.1.1.2.2.1 Test Channel = LCH

4.1.1.2.2.1.1 Test RB = RB50#0

4.1.1.2.2.2 Test Channel = MCH

4.1.1.2.2.2.1 Test RB = RB50#0

4.1.1.2.2.3 Test Channel = HCH

4.1.1.2.2.3.1 Test RB = RB50#0

5Appendix_E: Band Edges Compliance

Part I - Test Plots

5.1 For LTE

5.1.1 Test Band = Band17

5.1.1.1 Test Mode = LTE/TM1

5.1.1.1.1 Test Bandwidth = 5

5.1.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1.1 Test RB = RB1#0

5.1.1.1.1.1.2 Test RB = RB1#24

5.1.1.1.1.1.3 Test RB = RB12#6

5.1.1.1.1.1.4 Test RB = RB25#0

5.1.1.1.1.2 Test Channel = HCH

5.1.1.1.1.2.1 Test RB = RB1#0

5.1.1.1.1.2.2 Test RB = RB1#24

5.1.1.1.1.2.3 Test RB = RB12#6

5.1.1.1.1.2.4 Test RB = RB25#0

5.1.1.1.2 Test Bandwidth = 10

5.1.1.1.2.1 Test Channel = LCH

5.1.1.1.2.1.1 Test RB = RB1#0

5.1.1.1.2.1.2 Test RB = RB1#49

5.1.1.1.2.1.3 Test RB = RB25#13

5.1.1.1.2.1.4 Test RB = RB50#0

5.1.1.1.2.2 Test Channel = HCH

5.1.1.1.2.2.1 Test RB = RB1#0

5.1.1.1.2.2.2 Test RB = RB1#49

5.1.1.1.2.2.3 Test RB = RB25#13

5.1.1.1.2.2.4 Test RB = RB50#0

5.1.1.2 Test Mode = LTE/TM2

5.1.1.2.1 Test Bandwidth = 5

5.1.1.2.1.1 Test Channel = LCH

5.1.1.2.1.1.1 Test RB = RB1#0

5.1.1.2.1.1.2 Test RB = RB1#24

5.1.1.2.1.1.3 Test RB = RB12#6

5.1.1.2.1.1.4 Test RB = RB25#0

5.1.1.2.1.2 Test Channel = HCH

5.1.1.2.1.2.1 Test RB = RB1#0

5.1.1.2.1.2.2 Test RB = RB1#24

5.1.1.2.1.2.3 Test RB = RB12#6

5.1.1.2.1.2.4 Test RB = RB25#0

5.1.1.2.2 Test Bandwidth = 10

5.1.1.2.2.1 Test Channel = LCH

5.1.1.2.2.1.1 Test RB = RB1#0

5.1.1.2.2.1.2 Test RB = RB1#49

5.1.1.2.2.1.3 Test RB = RB25#13

5.1.1.2.2.1.4 Test RB = RB50#0

5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 Test RB = RB1#0

5.1.1.2.2.2 Test RB = RB1#49

5.1.1.2.2.3 Test RB = RB25#13

5.1.1.2.2.4 Test RB = RB50#0

6Appendix_F: Spurious Emission at Antenna Terminal

NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of < RBW/2 so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = k * (Span / RBW)" with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

Part I - Test Plots

6.1 For LTE

6.1.1 Test Band = Band17

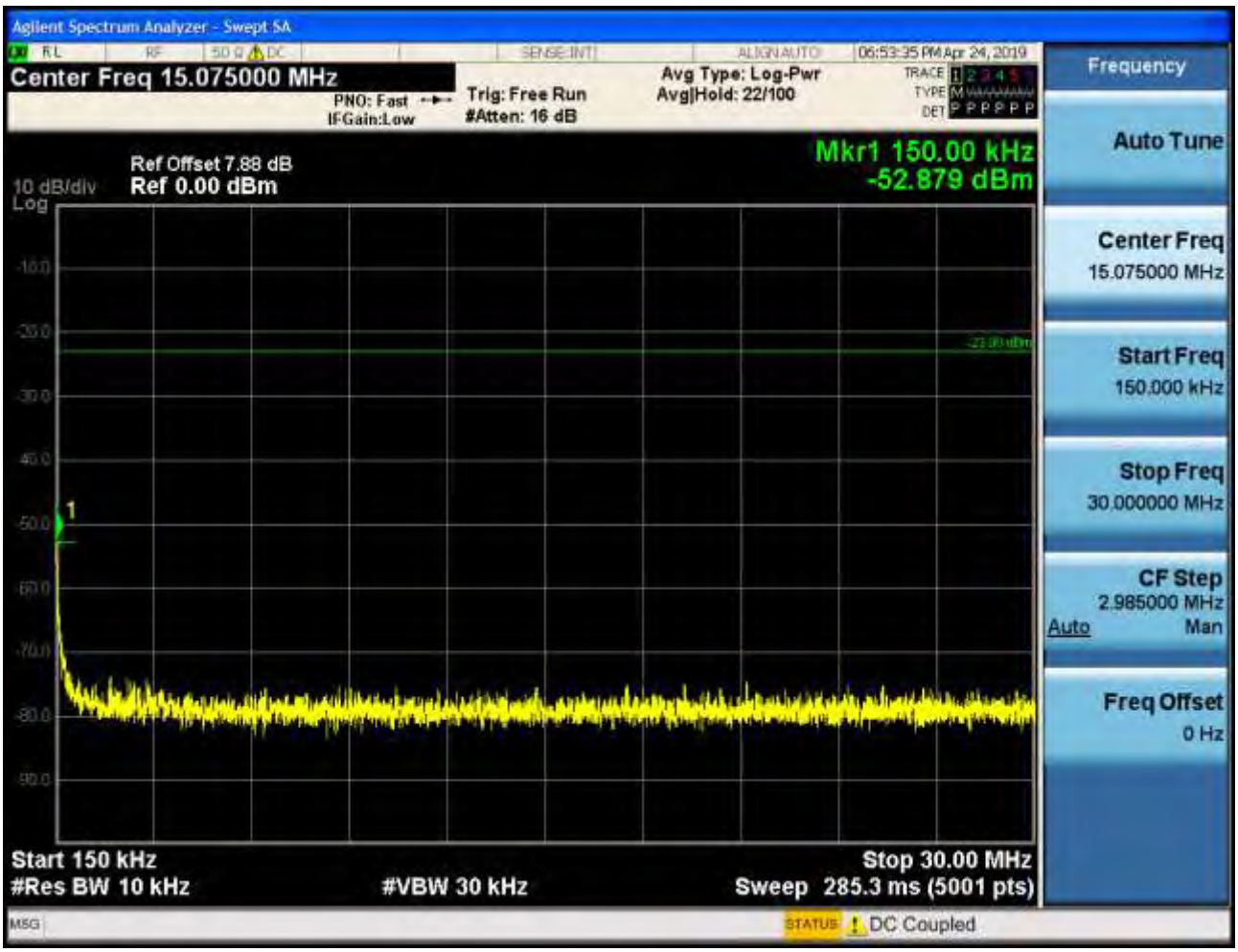
6.1.1.1 Test Mode = LTE/TM1

6.2.1.1.1 Test Bandwidth = 5

6.2.1.1.1.1 Test Channel = LCH

6.2.1.1.1.1.1 Test RB = RB1#0

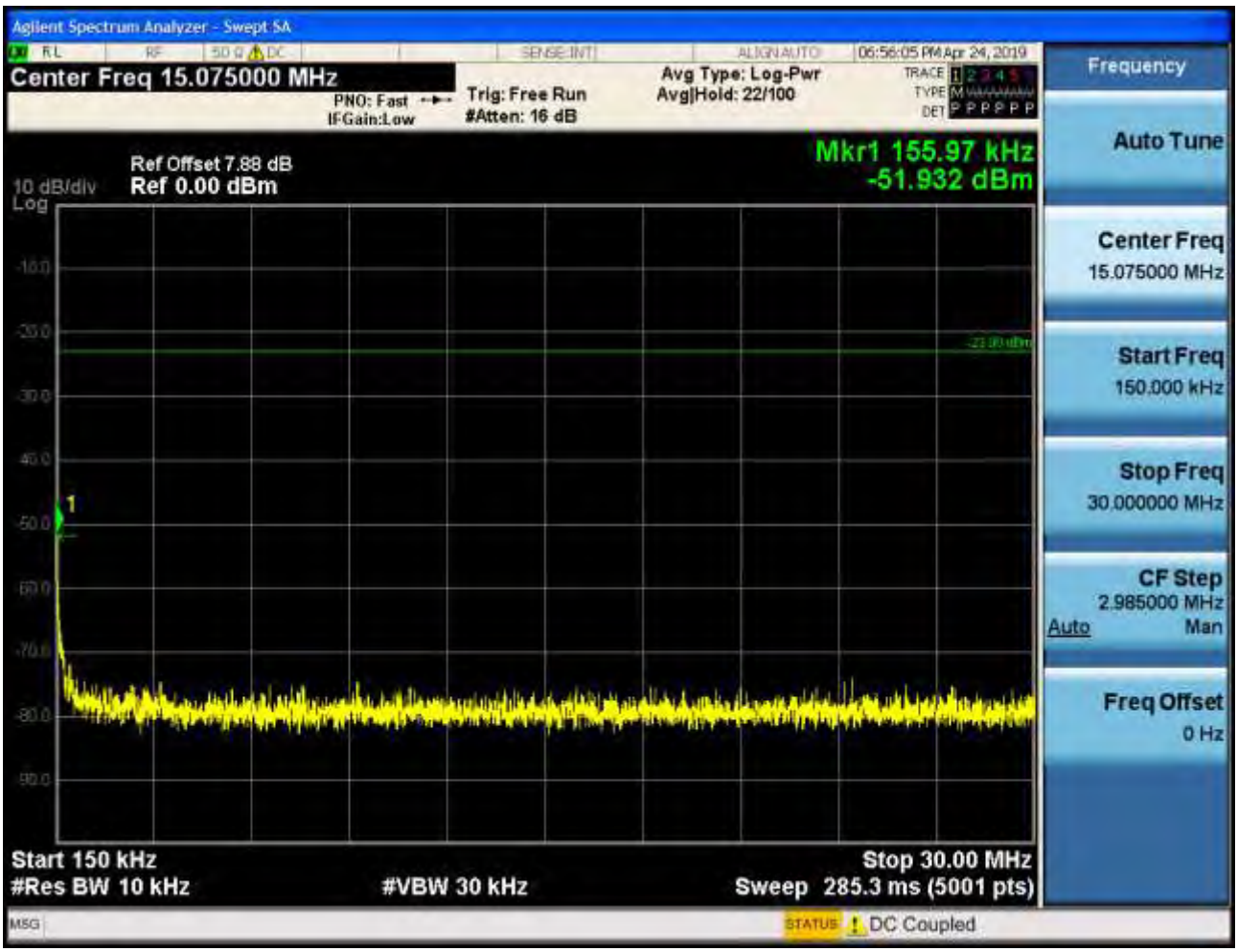

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Log-Pwr
Avg|Hold: 45/100
06:53:25 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 9.282 kHz
-55.747 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz
Stop 150.00 kHz
Sweep 134.8 ms (1001 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
06:53:35 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 150.00 kHz
-52.879 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz
Stop 30.00 MHz
Sweep 285.3 ms (5001 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 26 dB
Avg Type: Log-Pwr
Avg|Hold: 11/100
06:53:51 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 23.88 dBm
Mkr1 702.48 MHz
-23.484 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 954.7 ms (40001 pts)
Frequency
Auto Tune
Center Freq
5.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
10.000000000 GHz
CF Step
997.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

6.2.1.1.1.2 Test Channel = MCH

6.2.1.1.1.2.1 Test RB = RB1#0


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
06:56:05 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 155.97 kHz
-51.932 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz
Stop 30.00 MHz
Sweep 285.3 ms (5001 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 26 dB
Avg Type: Log-Pwr
Avg|Hold: 12/100
06:56:22 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 23.88 dBm
Mkr1 1.415 83 GHz
-37.164 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 954.7 ms (40001 pts)
Frequency
Auto Tune
Center Freq
5.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
10.000000000 GHz
CF Step
997.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

6.2.1.1.1.3 Test Channel = HCH

6.2.1.1.1.3.1 Test RB = RB1#0


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
06:54:49 PM Apr 24, 2019
Ref Offset 7.89 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 150.00 kHz
-53.262 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz
Stop 30.00 MHz
Sweep 285.3 ms (5001 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz

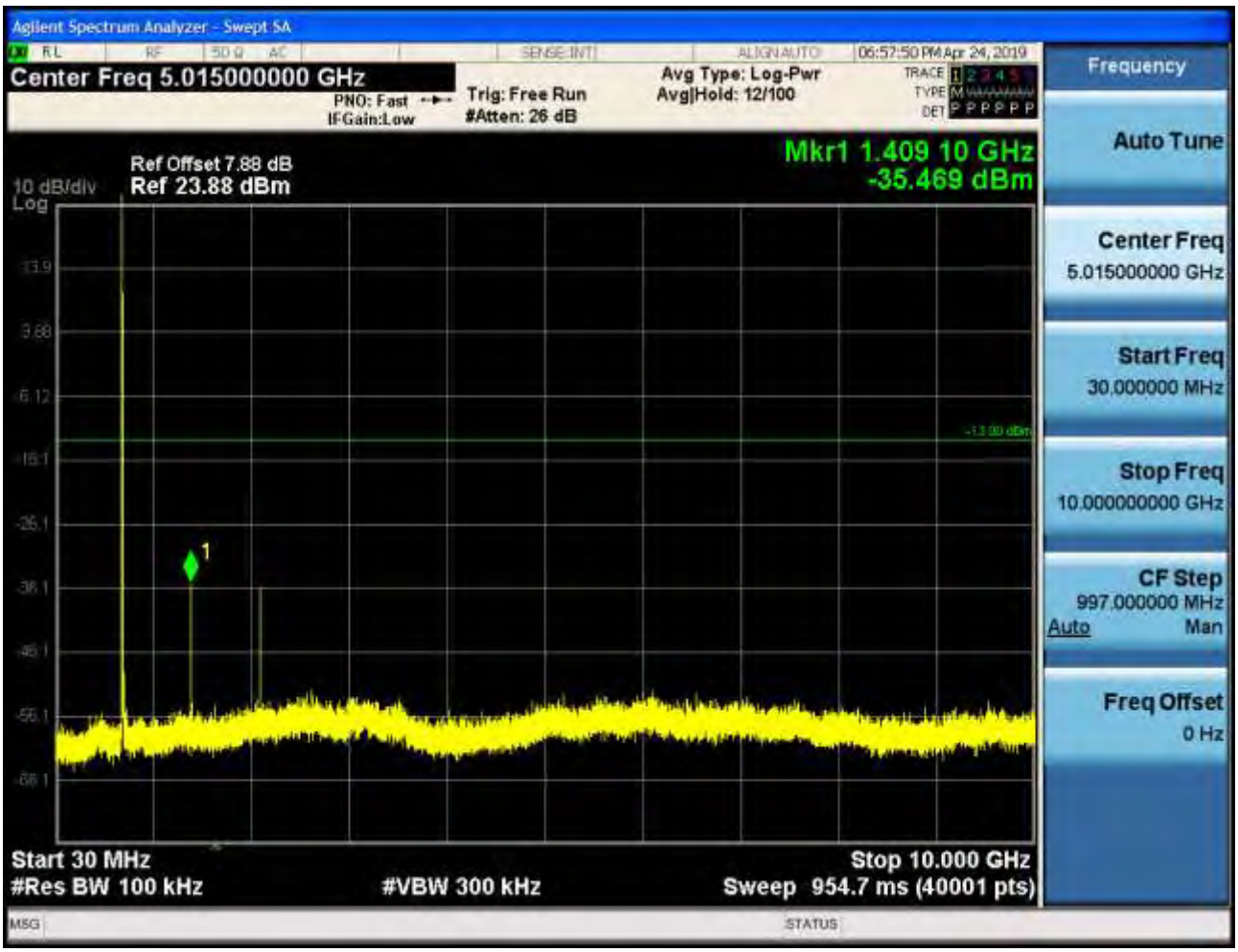

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 26 dB
Avg Type: Log-Pwr
Avg|Hold: 12/100
06:55:06 PM Apr 24, 2019
Ref Offset 7.89 dB
10 dB/div
Log
Ref 23.89 dBm
Mkr1 716.68 MHz
-30.779 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 954.7 ms (40001 pts)
Frequency
Auto Tune
Center Freq
5.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
10.000000000 GHz
CF Step
997.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

6.2.1.1.2 Test Bandwidth = 10

6.2.1.1.2.1 Test Channel = LCH

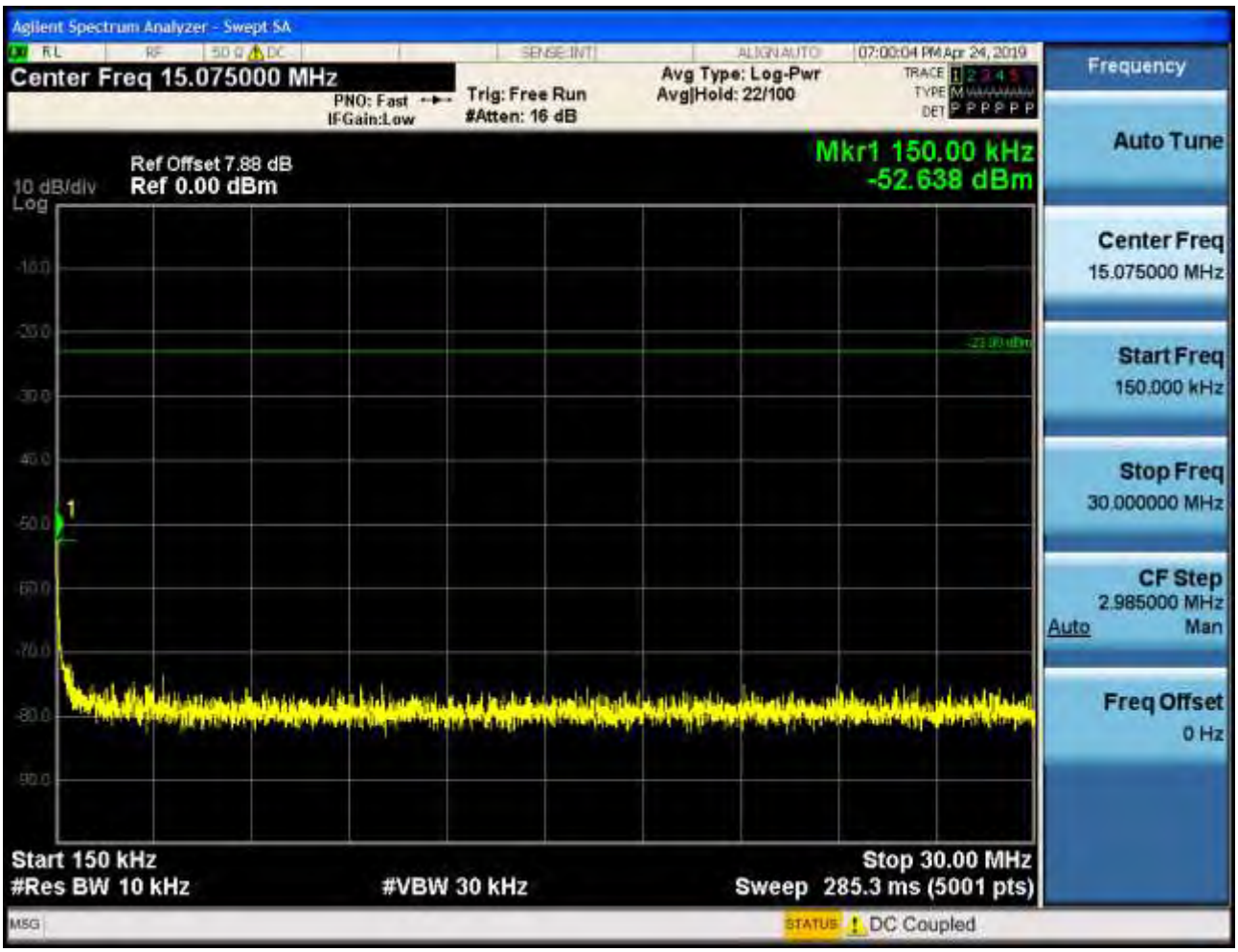
6.2.1.1.2.1.1 Test RB = RB1#0


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
06:57:33 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 150.00 kHz
-50.736 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz
Stop 30.00 MHz
Sweep 285.3 ms (5001 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 26 dB
Avg Type: Log-Pwr
Avg|Hold: 12/100
06:57:50 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 23.88 dBm
Mkr1 1.409 10 GHz
-35.469 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 954.7 ms (40001 pts)
Frequency
Auto Tune
Center Freq
5.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
10.000000000 GHz
CF Step
997.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

6.2.1.1.2.2 Test Channel = MCH

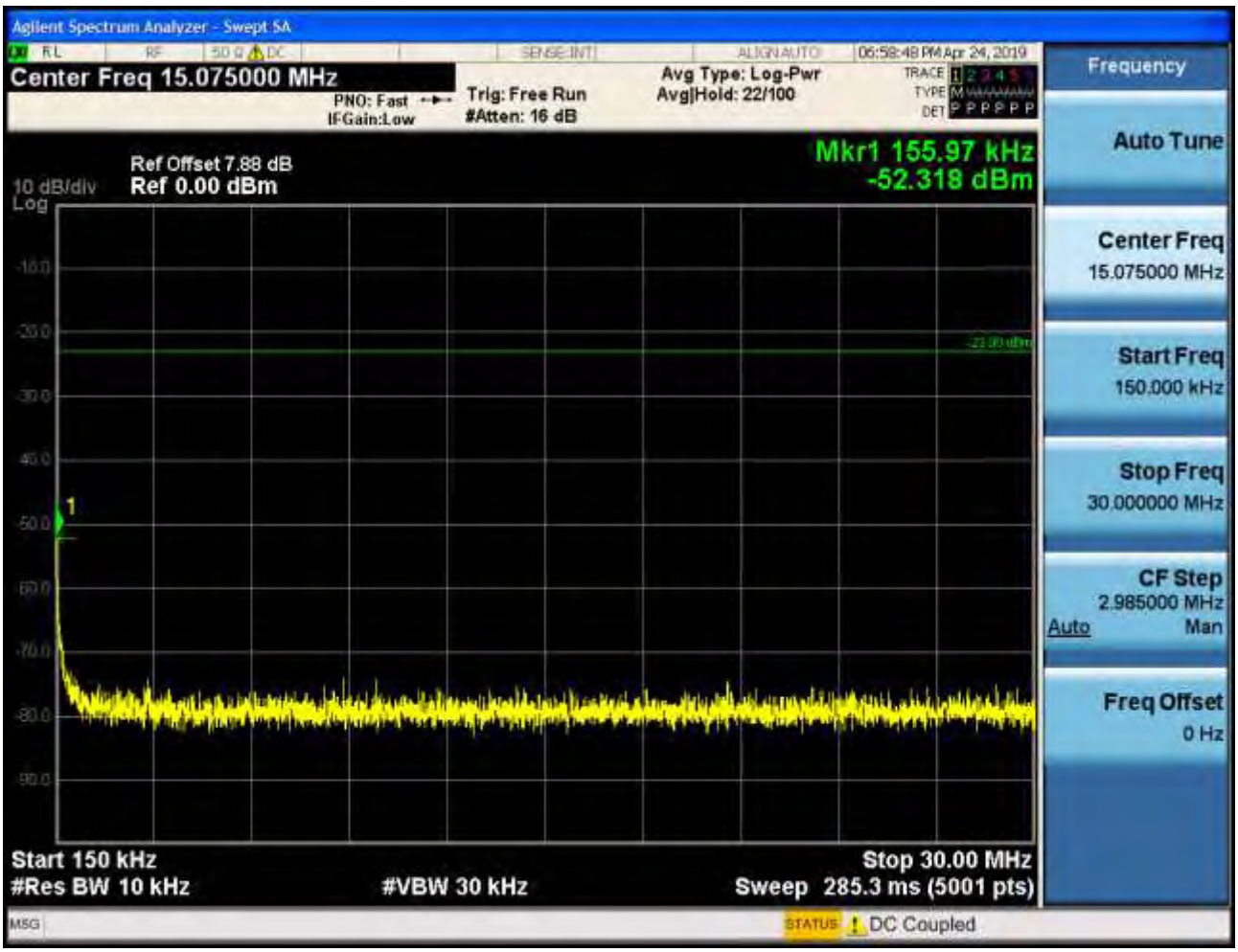
6.2.1.1.2.2.1 Test RB = RB1#0

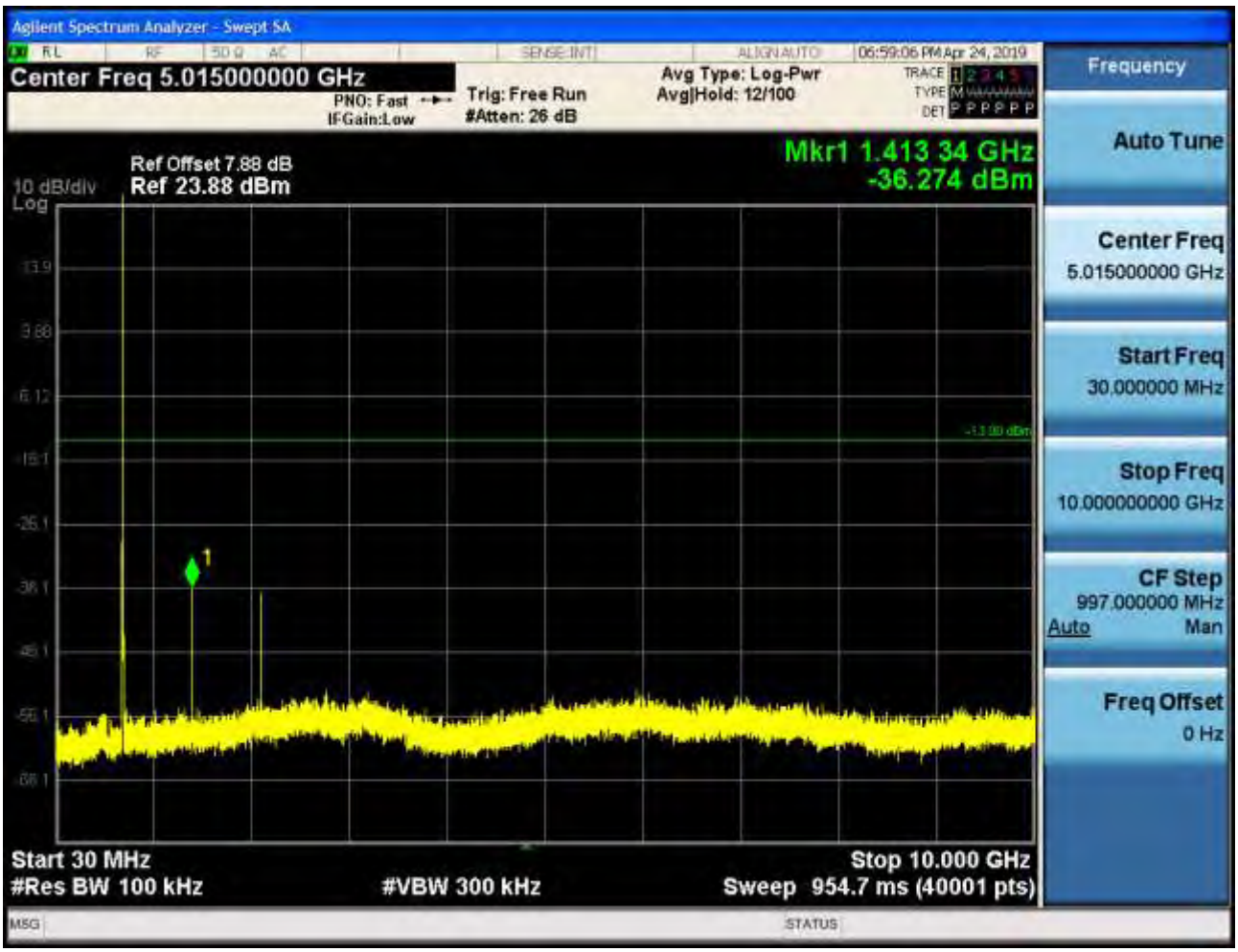

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
07:00:04 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 150.00 kHz
-52.638 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz
Stop 30.00 MHz
Sweep 285.3 ms (5001 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 26 dB
Avg Type: Log-Pwr
Avg|Hold: 12/100
07:00:21 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 23.88 dBm
Mkr1 702.23 MHz
-33.892 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 954.7 ms (40001 pts)
Frequency
Auto Tune
Center Freq
5.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
10.000000000 GHz
CF Step
997.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

6.2.1.1.2.3 Test Channel = HCH

6.2.1.1.2.3.1 Test RB = RB1#0


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
06:58:48 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 155.97 kHz
-52.318 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz
Stop 30.00 MHz
Sweep 285.3 ms (5001 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz

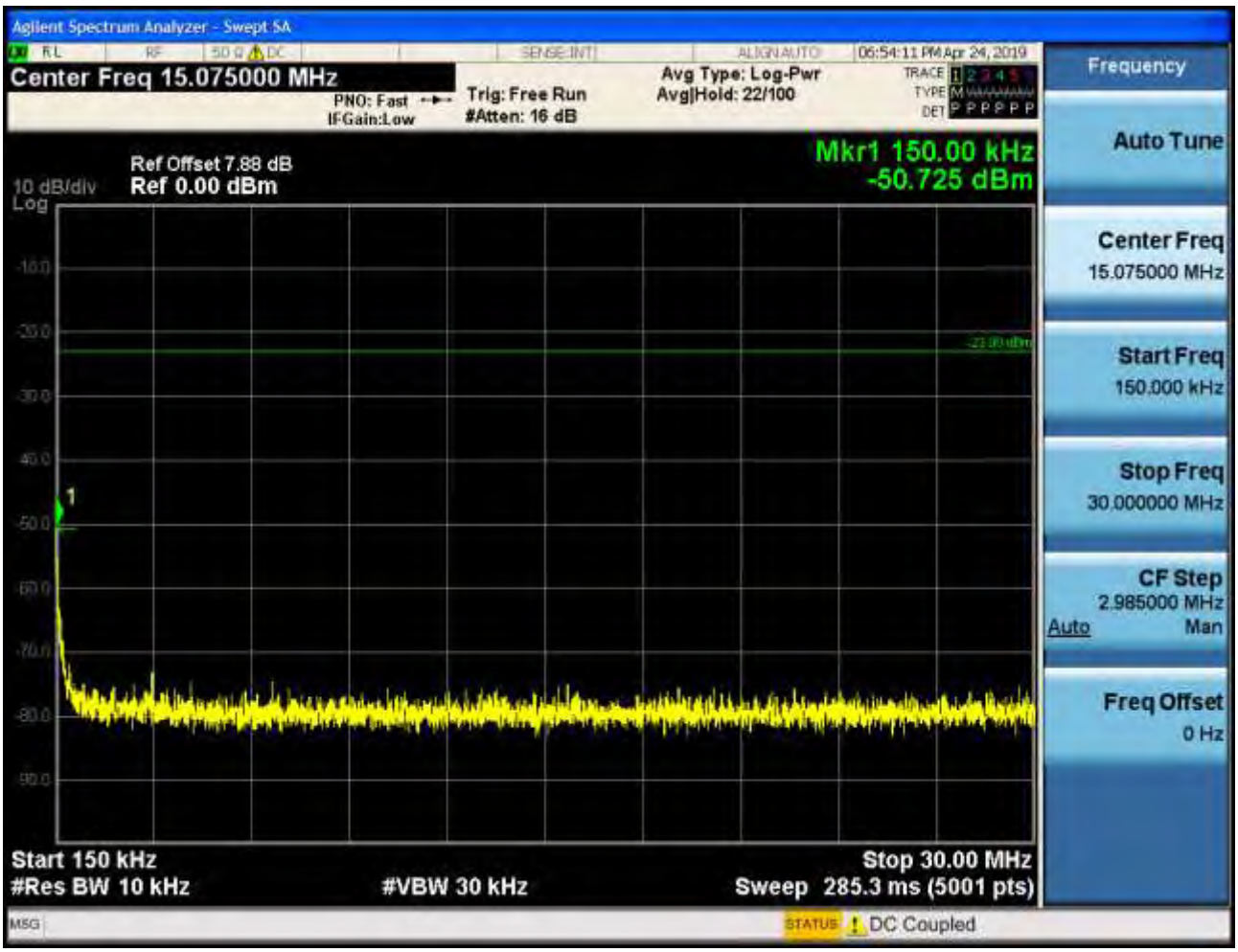

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 26 dB
Avg Type: Log-Pwr
Avg|Hold: 12/100
06:59:06 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 23.88 dBm
Mkr1 1.413 34 GHz
-36.274 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 954.7 ms (40001 pts)
Frequency
Auto Tune
Center Freq
5.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
10.000000000 GHz
CF Step
997.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

6.2.1.2 Test Mode = LTE/TM2

6.2.1.2.1Test Bandwidth = 5

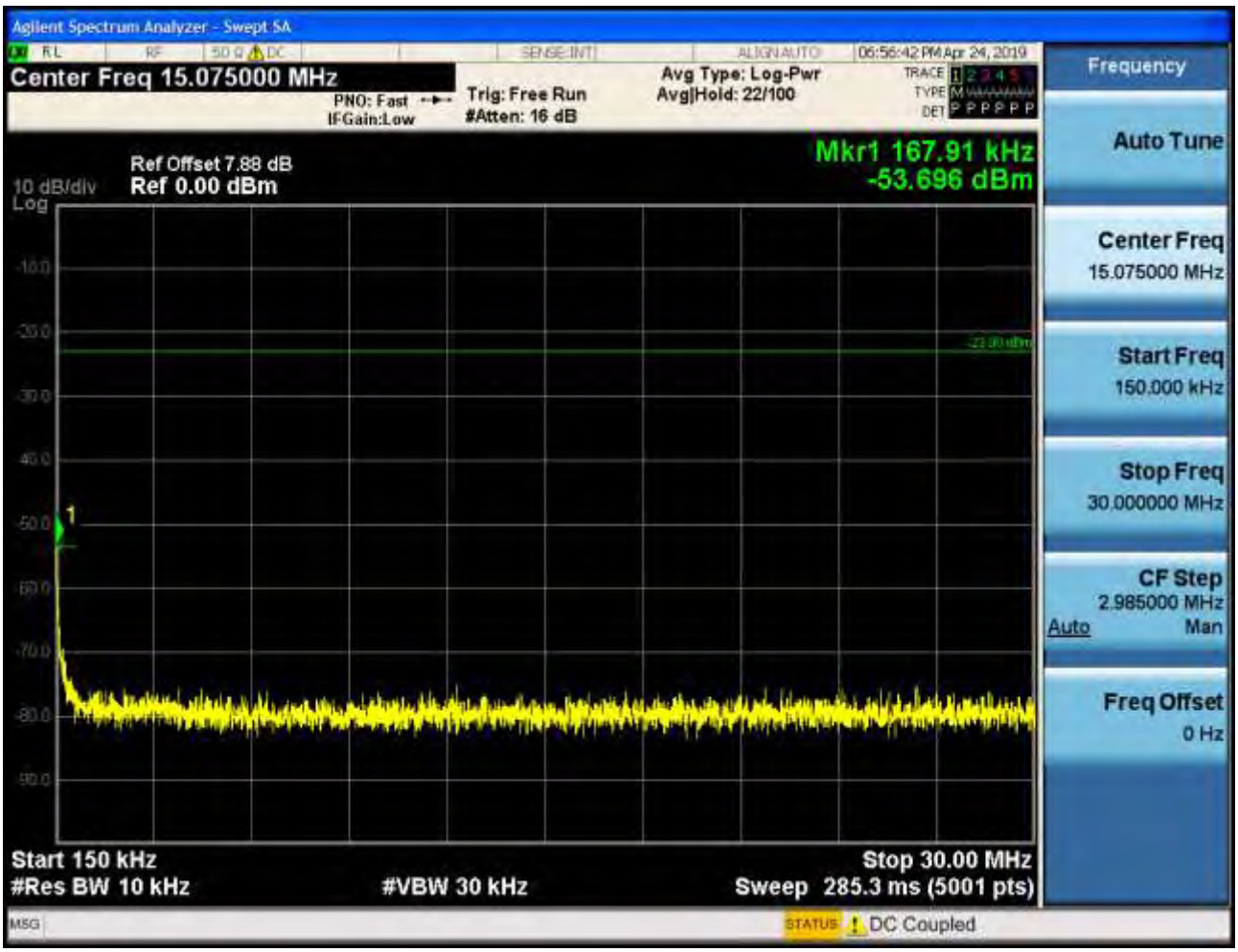
6.2.1.2.1.1 Test Channel = LCH

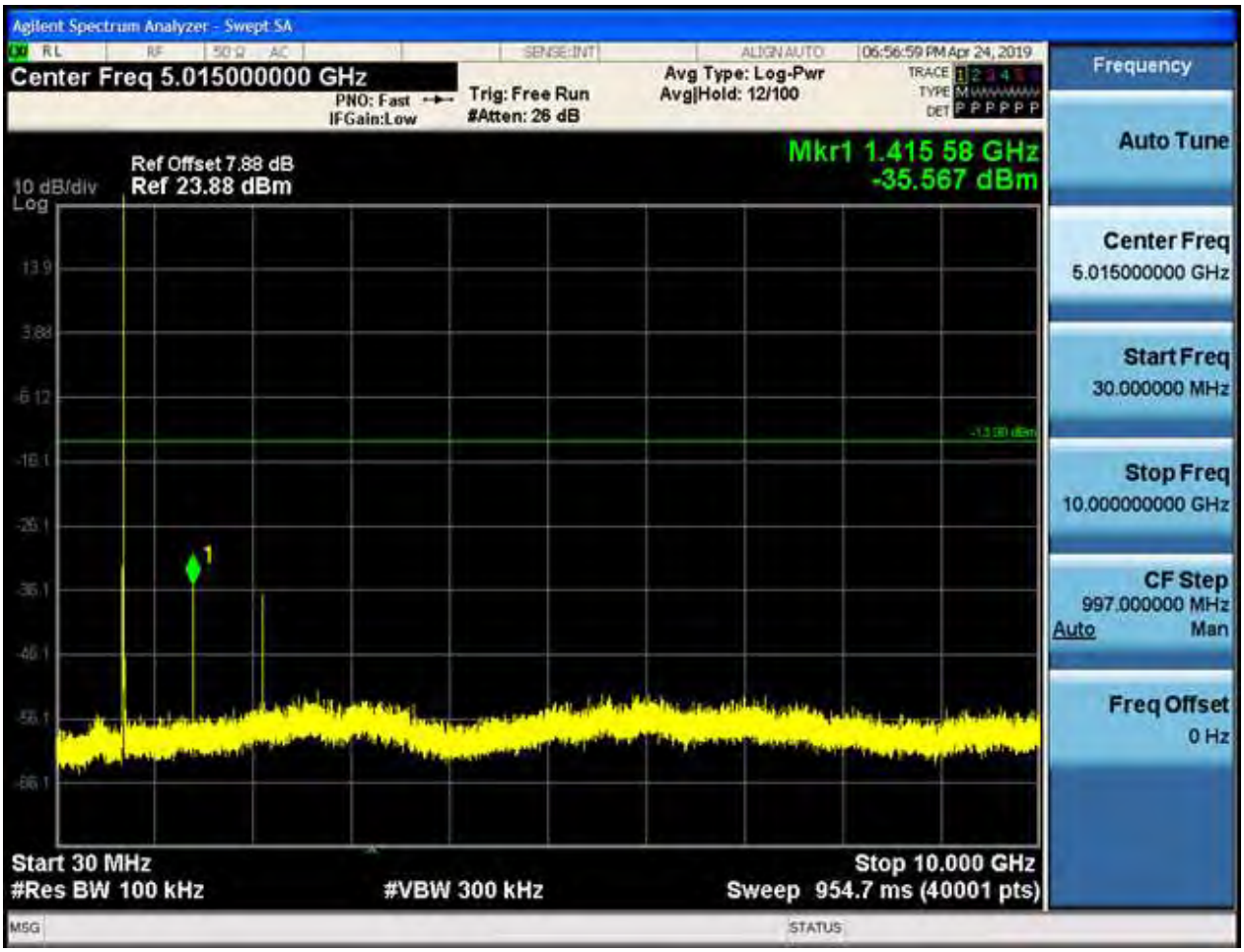
####### 6.2.1.2.1.1.1 Test RB = RB1#0


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
06:54:11 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 150.00 kHz
-50.725 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz
Stop 30.00 MHz
Sweep 285.3 ms (5001 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz

6.2.1.2.1.2 Test Channel = MCH

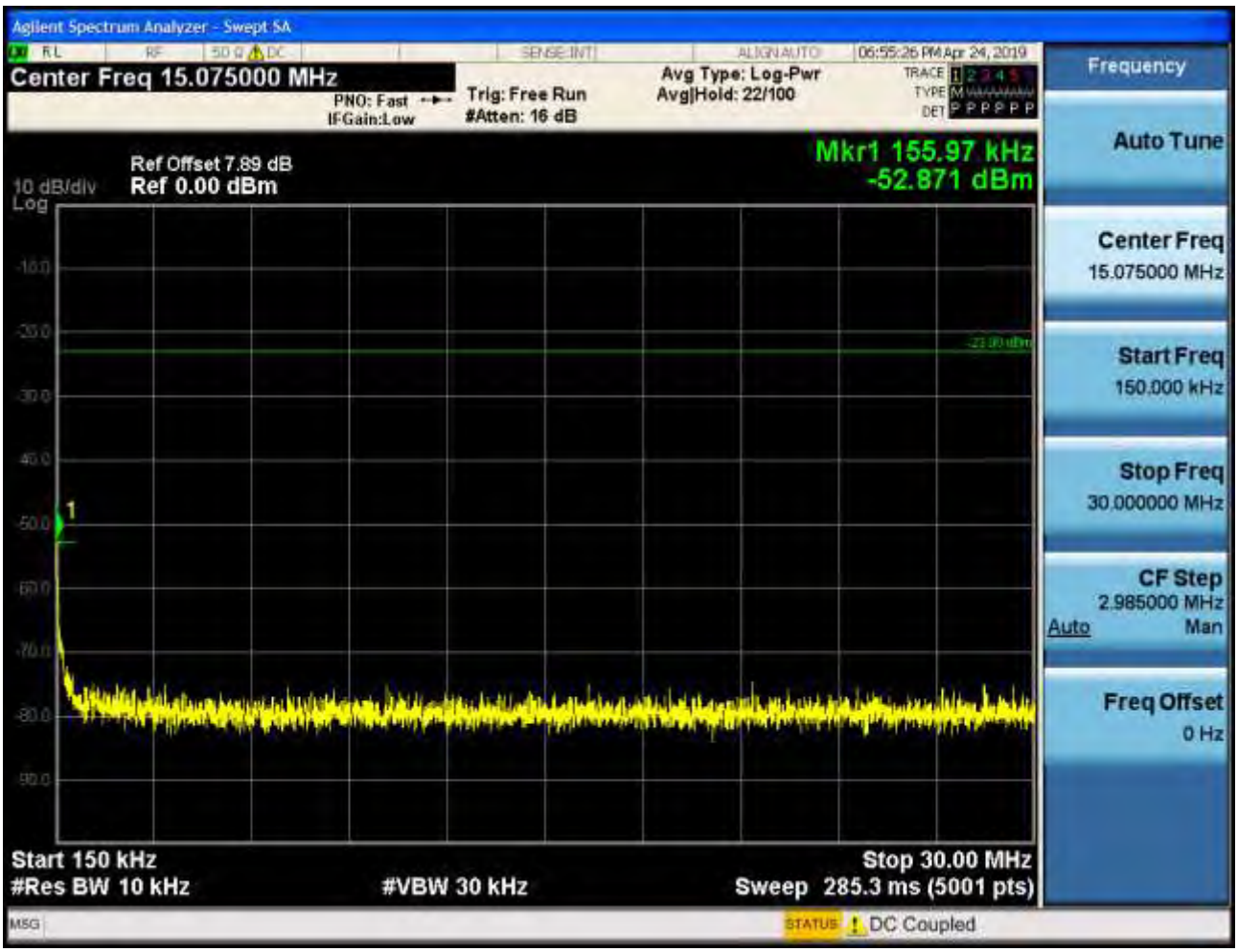
6.2.1.2.1.2.1 Test RB = RB1#0


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
06:56:42 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 167.91 kHz
-53.696 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz
Stop 30.00 MHz
Sweep 285.3 ms (5001 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 26 dB
Avg Type: Log-Pwr
Avg|Hold: 12/100
06:56:59 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 23.88 dBm
Mkr1 1.415 58 GHz
-35.567 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 954.7 ms (40001 pts)
Frequency
Auto Tune
Center Freq
5.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
10.000000000 GHz
CF Step
997.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

6.2.1.2.1.3 Test Channel = HCH

6.2.1.2.1.3.1 Test RB = RB1#0


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
06:55:26 PM Apr 24, 2019
Ref Offset 7.89 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 155.97 kHz
-52.871 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz
Stop 30.00 MHz
Sweep 285.3 ms (5001 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 26 dB
Avg Type: Log-Pwr
Avg|Hold: 12/100
06:55:43 PM Apr 24, 2019
Ref Offset 7.89 dB
10 dB/div
Log
Ref 23.89 dBm
Mkr1 2.133 92 GHz
-35.441 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 954.7 ms (40001 pts)
Frequency
Auto Tune
Center Freq
5.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
10.000000000 GHz
CF Step
997.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

6.2.1.2.2 Test Bandwidth = 10

6.2.1.2.2.1 Test Channel = LCH

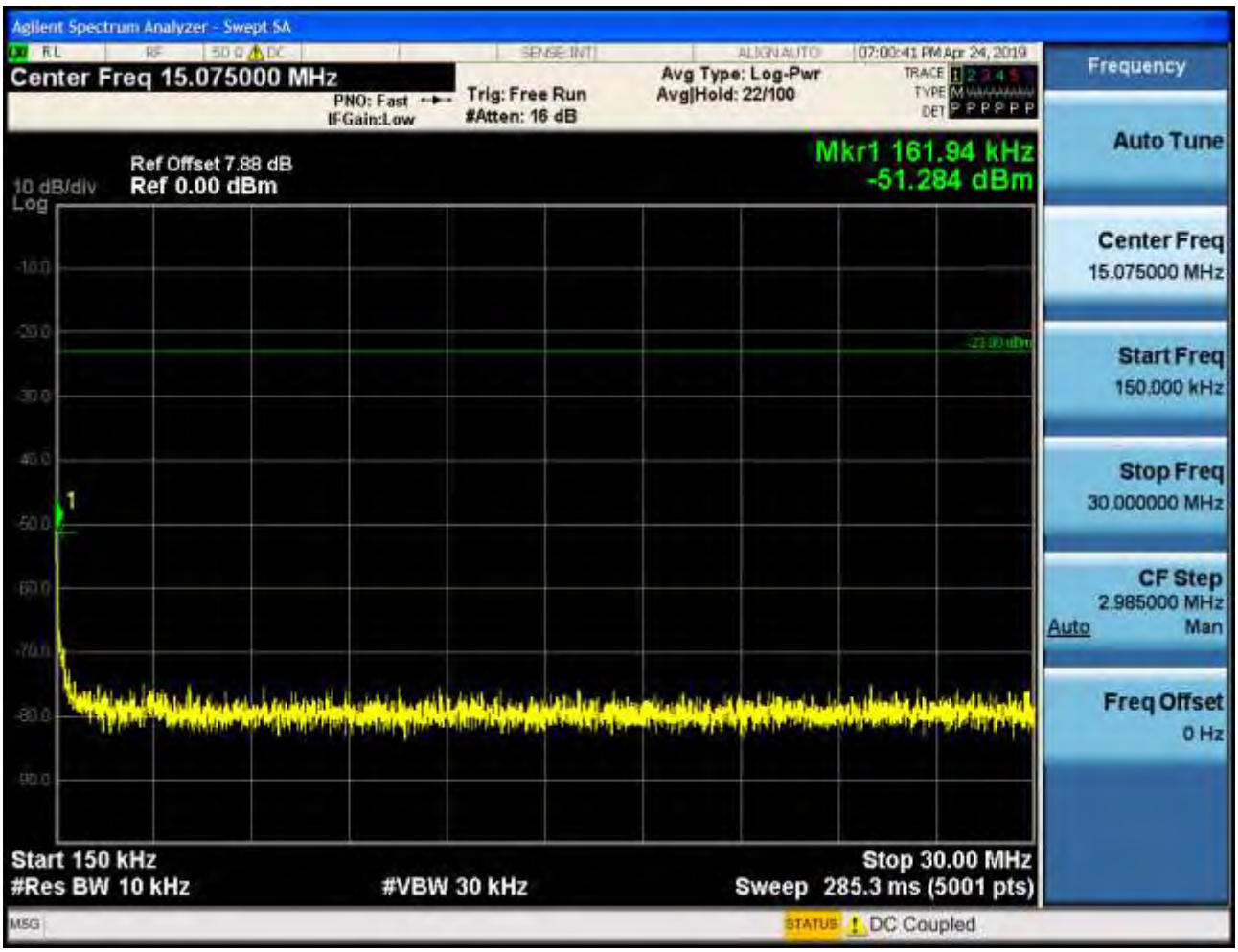
6.2.1.2.2.1.1 Test RB = RB1#0


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
06:58:10 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 150.00 kHz
-52.380 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz
Stop 30.00 MHz
Sweep 285.3 ms (5001 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 26 dB
Avg Type: Log-Pwr
Avg|Hold: 12/100
06:58:27 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 23.88 dBm
Mkr1 700.98 MHz
-33.880 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 954.7 ms (40001 pts)
Frequency
Auto Tune
Center Freq
5.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
10.000000000 GHz
CF Step
997.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

6.2.1.2.2.2 Test Channel = MCH

6.2.1.2.2.2.1 Test RB = RB1#0

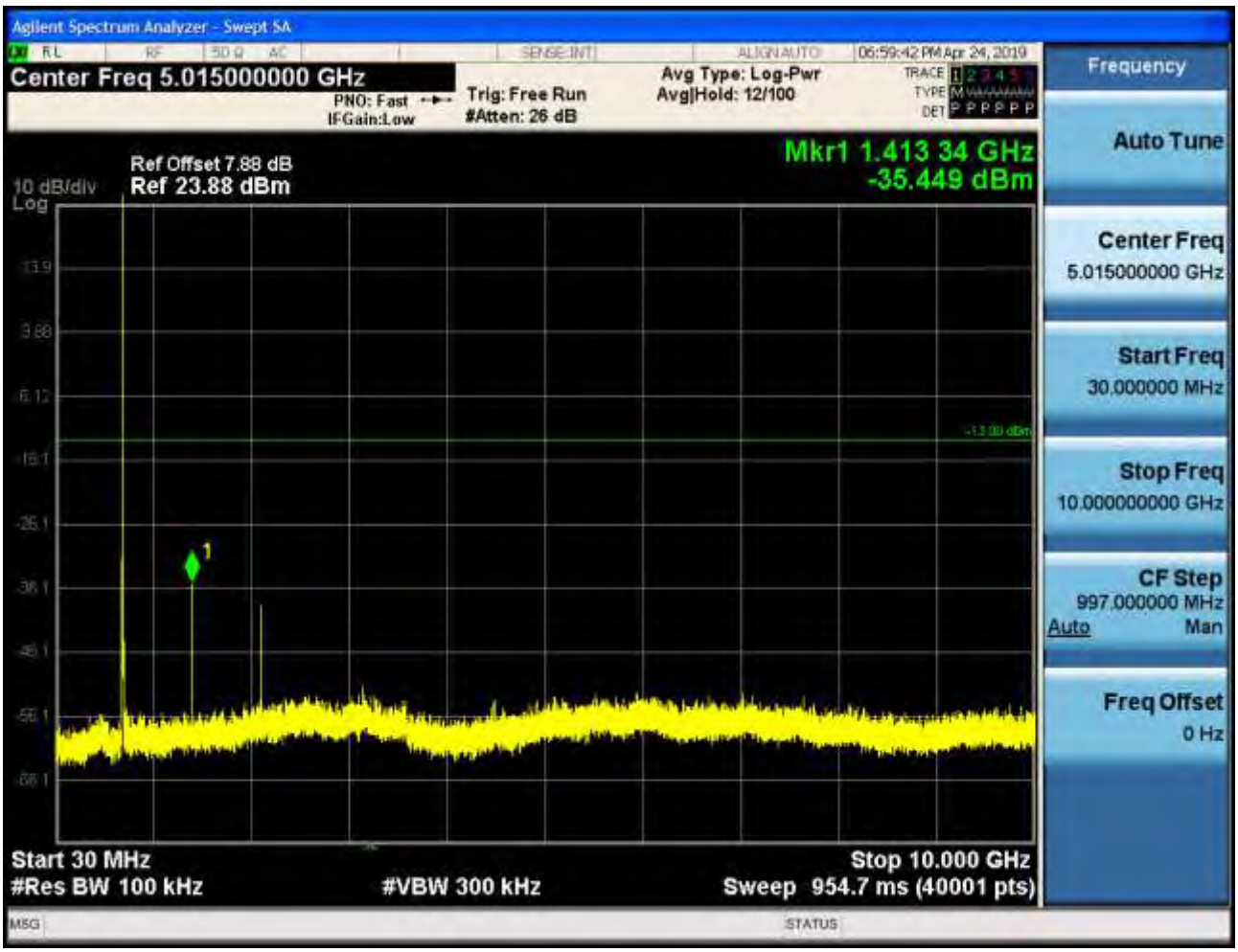

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
07:00:41 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 161.94 kHz
-51.284 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz
Stop 30.00 MHz
Sweep 285.3 ms (5001 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 26 dB
Avg Type: Log-Pwr
Avg|Hold: 12/100
07:00:58 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 23.88 dBm
Mkr1 702.98 MHz
-33.009 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 954.7 ms (40001 pts)
Frequency
Auto Tune
Center Freq
5.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
10.000000000 GHz
CF Step
997.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

6.2.1.2.2.3 Test Channel = HCH

6.2.1.2.2.3.1 Test RB = RB1#0


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
06:59:26 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 167.91 kHz
-55.714 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz
Stop 30.00 MHz
Sweep 285.3 ms (5001 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 26 dB
Avg Type: Log-Pwr
Avg|Hold: 12/100
06:59:42 PM Apr 24, 2019
Ref Offset 7.88 dB
10 dB/div
Log
Ref 23.88 dBm
Mkr1 1.413 34 GHz
-35.449 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 954.7 ms (40001 pts)
Frequency
Auto Tune
Center Freq
5.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
10.000000000 GHz
CF Step
997.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

7Appendix_G: Field Strength of Spurious Radiation

Note:We tested all modes, but the data presented below is the worst case.

9kHz~150kHz, RBW = 200Hz, VBW = 600 Hz, Detector: PK

150kHz~30MHz, RBW = 9kHz, VBW = 30k Hz, Detector: PK

30MHz~1GHz, RBW = 100 kHz, VBW = 300 kHz. Detector: PK

Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

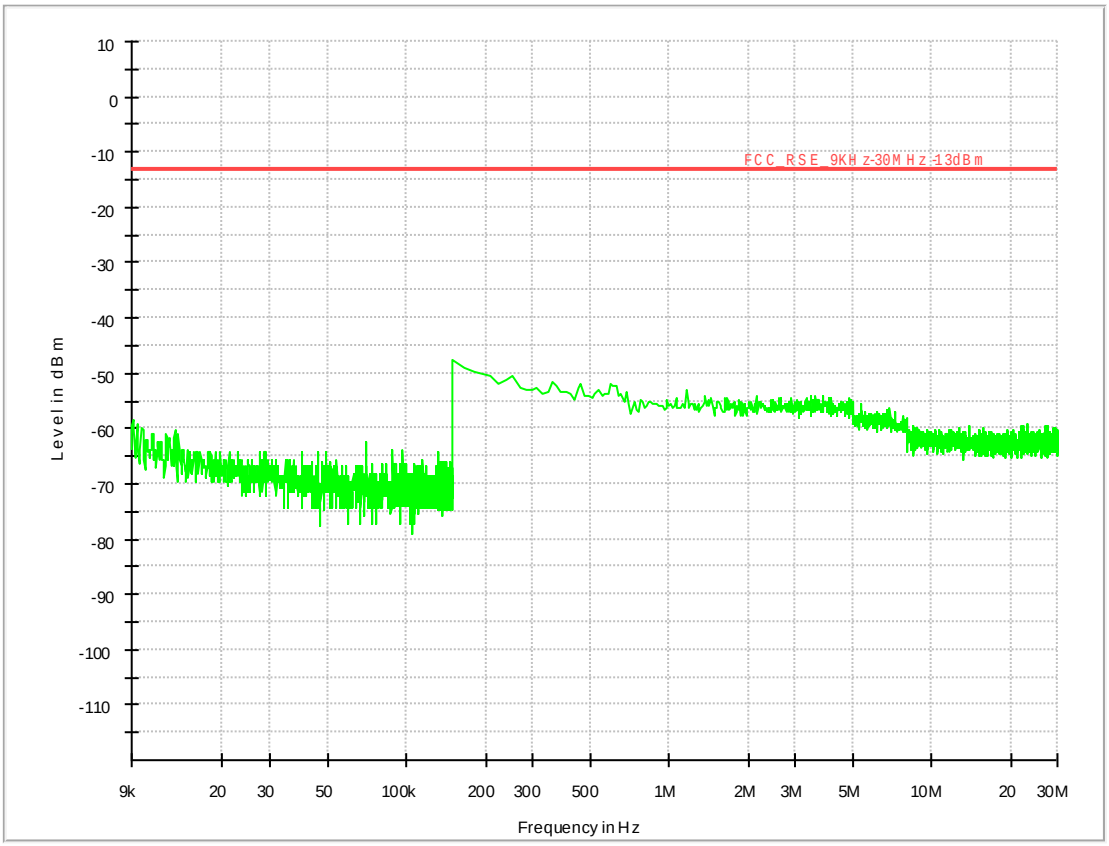
Part I - Test Plots

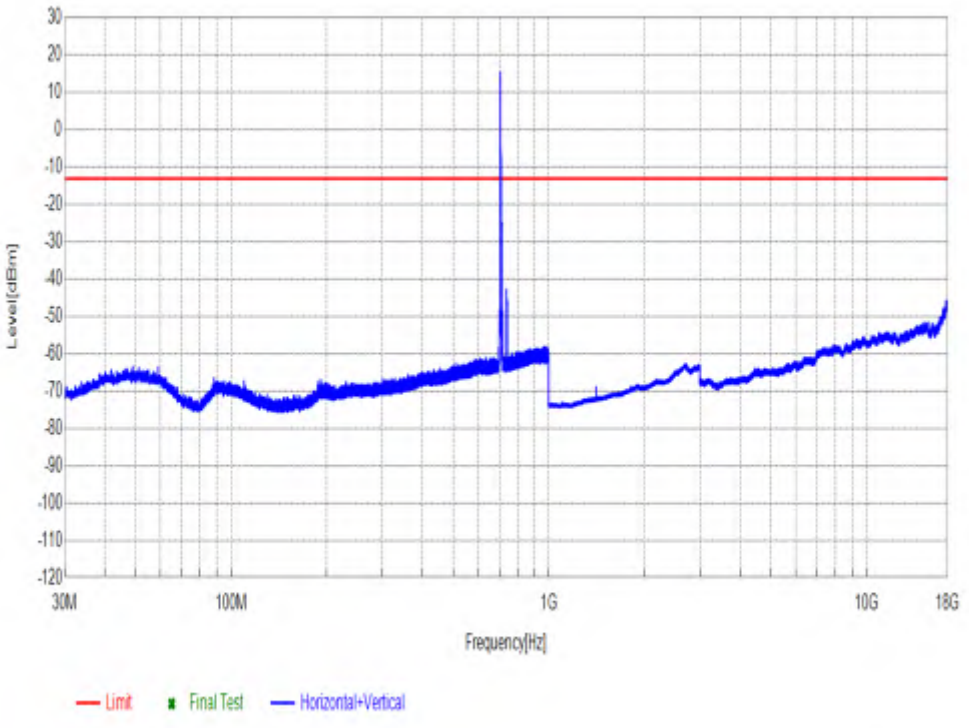
7.1 For LTE

7.1.1 Test Band = Band17

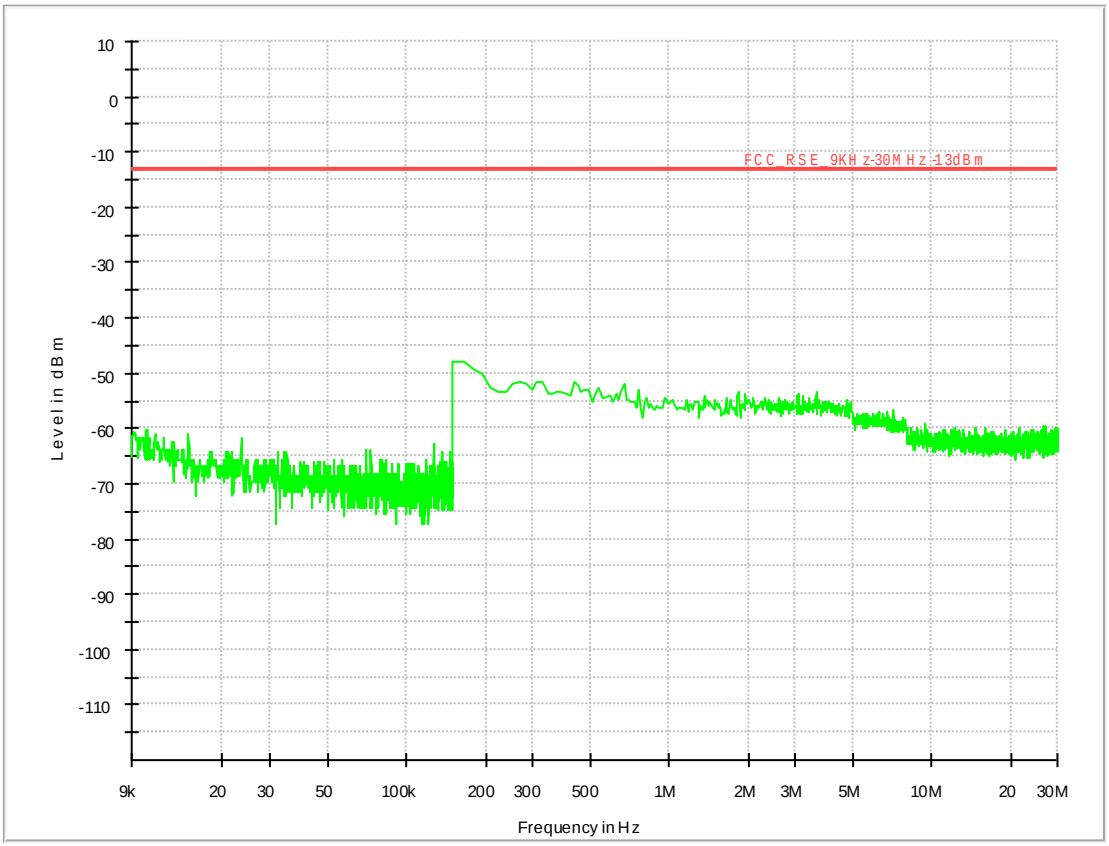
7.1.1.1 Test Bandwidth = 5

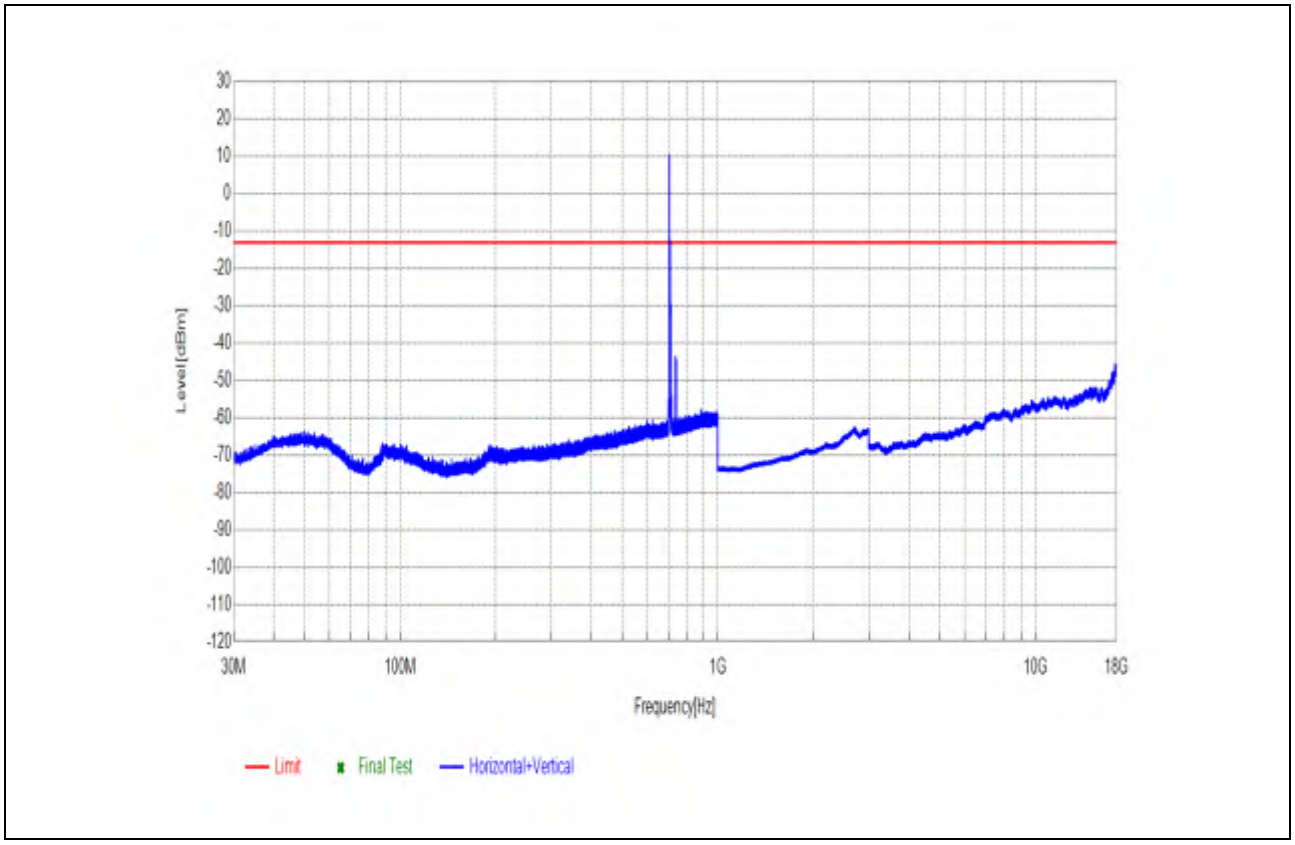
Band17/TM1_Ant1


FCC_RSE_9KHz-30MHz-13dBm
Level in dBm
Frequency in Hz
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
-110
9k
20
30
50
100k
200
300
500
1M
2M
3M
5M
10M
20
30M


Level[dBm]
Frequency[Hz]
30M
100M
1G
10G
18G
Limit
Final Test
Horizontal+Vertical

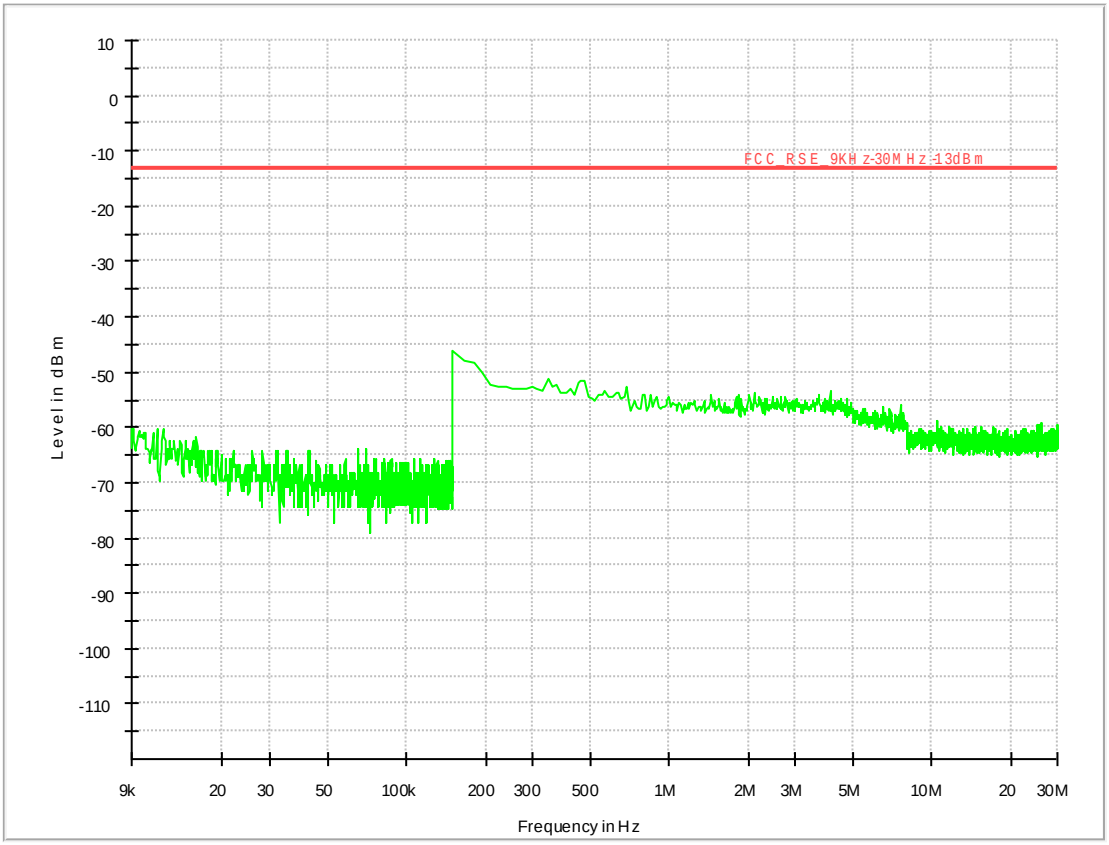
Band17/TM1_Ant2

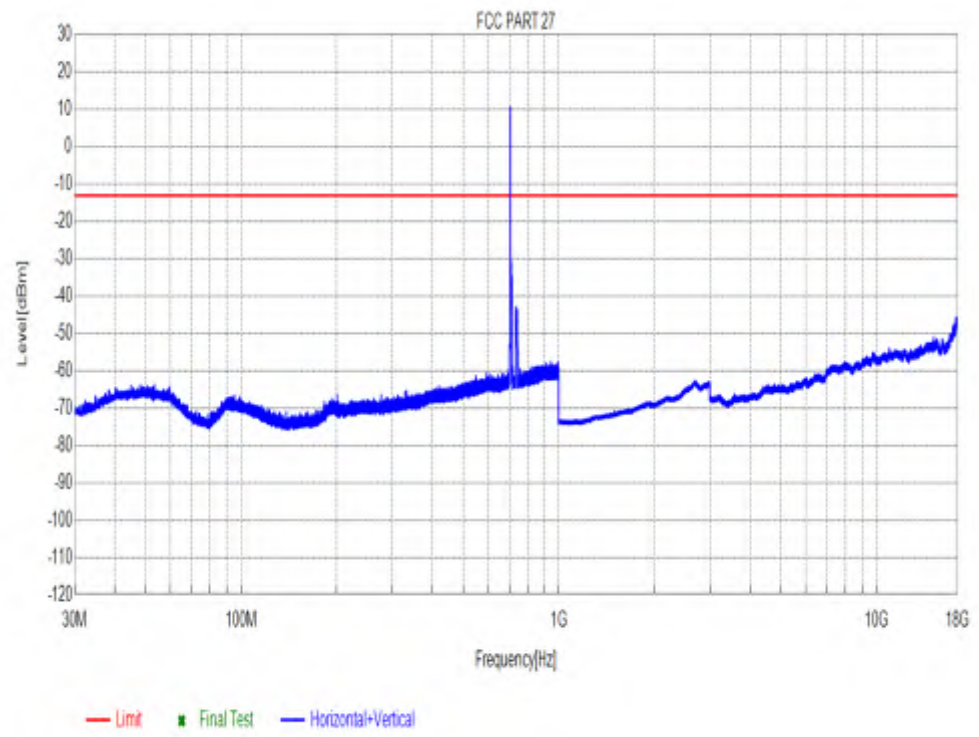




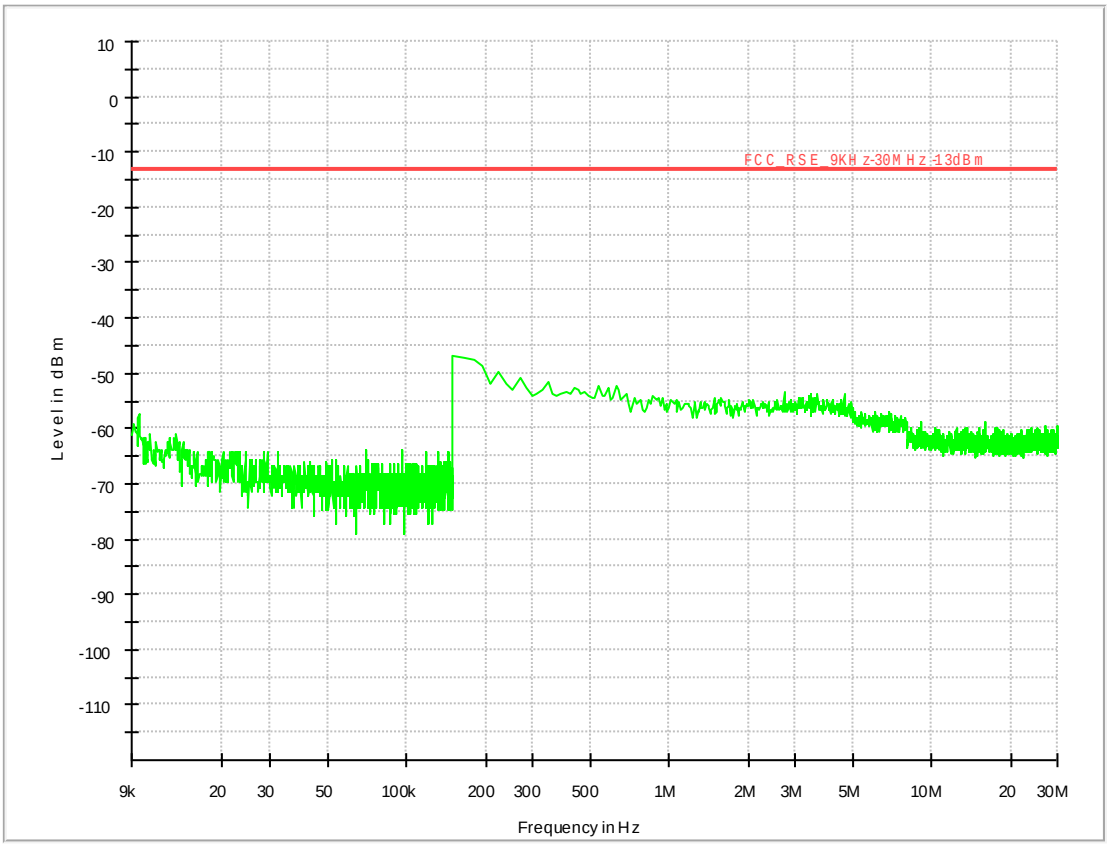
7.1.1.2 Test Bandwidth = 10

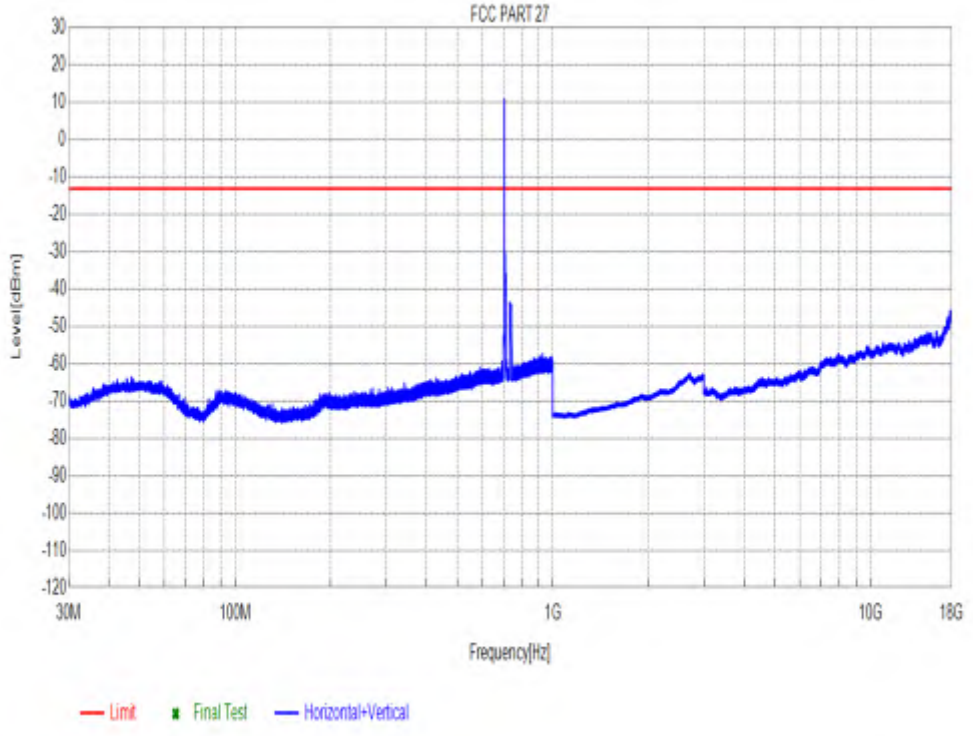
Band17/TM1_Ant1





Band17/TM1_Ant2


FCC_RSE_9KHz-30MHz-13dBm
Level in dBm
Frequency in Hz
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
-110
9k
20
30
50
100k
200
300
500
1M
2M
3M
5M
10M
20
30M


FCC PART 27
Level[dBm]
Frequency[Hz]
30M
100M
1G
10G
18G
Limit
Final Test
Horizontal+Vertical

8Appendix_H: Frequency Stability

8.1 For LTE

8.1.1Frequency Error vs. Voltage:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
Band17	LTE/TM1	5	LCH	TN	VL	-3.69072	-0.00522	PASS
					VN	0.50068	0.00071	PASS
					VH	1.15871	0.00164	PASS
			MCH	TN	VL	2.71797	0.00383	PASS
					VN	-3.13282	-0.00441	PASS
					VH	3.51906	0.00496	PASS
			HCH	TN	VL	1.02997	0.00144	PASS
					VN	6.76632	0.00948	PASS
					VH	0.20027	0.00028	PASS
		10	LCH	TN	VL	119.49060	0.16853	PASS
					VN	39.06727	0.05510	PASS
					VH	29.39701	0.04146	PASS
			MCH	TN	VL	-27.99511	-0.03943	PASS
					VN	-77.10457	-0.10860	PASS
					VH	-25.43449	-0.03582	PASS
			HCH	TN	VL	-25.46310	-0.03581	PASS
					VN	-3.23296	-0.00455	PASS
					VH	-25.26283	-0.03553	PASS
	LTE/TM2	5	LCH	TN	VL	-1.77383	-0.00251	PASS
					VN	-2.21729	-0.00314	PASS
					VH	-1.67370	-0.00237	PASS
			MCH	TN	VL	0.07153	0.00010	PASS
					VN	-0.25749	-0.00036	PASS
					VH	-3.71933	-0.00524	PASS
			HCH	TN	VL	-1.58787	-0.00223	PASS
					VN	5.16415	0.00724	PASS
					VH	-3.01838	-0.00423	PASS
		10	LCH	TN	VL	-0.31471	-0.00044	PASS
					VN	-31.12793	-0.04390	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VH	1.75953	0.00248	PASS
			MCH	TN	VL	20.35618	0.02867	PASS
					VN	-22.17293	-0.03123	PASS
					VH	17.95292	0.02529	PASS
			HCH	TN	VL	19.51218	0.02744	PASS
					VN	-3.54767	-0.00499	PASS
					VH	17.73834	0.02495	PASS

8.1.2Frequency Error vs. Temperature:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
Band17	LTE/TM1	5	LCH	VN	-30	-0.65804	-0.00093	PASS
					-20	2.26021	0.00320	PASS
					-10	2.63214	0.00373	PASS
					0	2.80380	0.00397	PASS
					10	-0.65804	-0.00093	PASS
					20	0.50068	0.00071	PASS
					30	-0.15736	-0.00022	PASS
					40	0.04292	0.00006	PASS
					50	0.47207	0.00067	PASS
			MCH	VN	-30	-1.81675	-0.00256	PASS
					-20	-0.18597	-0.00026	PASS
					-10	1.67370	0.00236	PASS
					0	-3.08990	-0.00435	PASS
					10	0.90122	0.00127	PASS
					20	-3.13282	-0.00441	PASS
					30	1.00136	0.00141	PASS
					40	3.01838	0.00425	PASS
					50	-3.21865	-0.00453	PASS
			HCH	VN	-30	21.40045	0.02999	PASS
					-20	1.75953	0.00247	PASS
					-10	-3.27587	-0.00459	PASS
					0	-1.53065	-0.00215	PASS
					10	-0.27180	-0.00038	PASS
					20	6.76632	0.00948	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					30	-3.70503	-0.00519	PASS
					40	2.80380	0.00393	PASS
					50	3.23296	0.00453	PASS
		10	LCH	VN	-30	-4.27723	-0.00603	PASS
					-20	15.56396	0.02195	PASS
					-10	-44.63196	-0.06295	PASS
					0	14.31942	0.02020	PASS
					10	-23.11707	-0.03261	PASS
					20	39.06727	0.05510	PASS
					30	-27.36568	-0.03860	PASS
					40	22.53056	0.03178	PASS
					50	-8.05378	-0.01136	PASS
			MCH	VN	-30	-12.76016	-0.01797	PASS
					-20	-0.12875	-0.00018	PASS
					-10	-7.81059	-0.01100	PASS
					0	2.67506	0.00377	PASS
					10	11.30104	0.01592	PASS
					20	-77.10457	-0.10860	PASS
					30	-10.08511	-0.01420	PASS
					40	9.21249	0.01298	PASS
					50	-46.77773	-0.06588	PASS
			HCH	VN	-30	-0.17166	-0.00024	PASS
					-20	0.11444	0.00016	PASS
					-10	-42.20009	-0.05935	PASS
					0	40.52639	0.05700	PASS
					10	-15.63549	-0.02199	PASS
					20	-3.23296	-0.00455	PASS
					30	-46.31996	-0.06515	PASS
					40	-39.61086	-0.05571	PASS
					50	12.87460	0.01811	PASS
	LTE/TM2	5	LCH	VN	-30	-1.05858	-0.00150	PASS
					-20	-1.10149	-0.00156	PASS
					-10	-3.73364	-0.00528	PASS
					0	0.11444	0.00016	PASS
					10	-1.53065	-0.00217	PASS
					20	-2.21729	-0.00314	PASS
					30	-0.75817	-0.00107	PASS
					40	-1.84536	-0.00261	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					50	-1.80244	-0.00255	PASS
			MCH	VN	-30	-0.17166	-0.00024	PASS
					-20	-0.50068	-0.00071	PASS
					-10	-2.50339	-0.00353	PASS
					0	-2.56062	-0.00361	PASS
					10	-2.54631	-0.00359	PASS
					20	-0.25749	-0.00036	PASS
					30	-1.95980	-0.00276	PASS
					40	0.40054	0.00056	PASS
					50	-2.23160	-0.00314	PASS
			HCH	VN	-30	-5.62191	-0.00788	PASS
					-20	0.35763	0.00050	PASS
					-10	-2.50339	-0.00351	PASS
					0	4.90665	0.00688	PASS
					10	4.34875	0.00609	PASS
					20	5.16415	0.00724	PASS
					30	-0.04292	-0.00006	PASS
					40	-1.51634	-0.00213	PASS
					50	2.63214	0.00369	PASS
		10	LCH	VN	-30	-2.40326	-0.00339	PASS
					-20	-20.44201	-0.02883	PASS
					-10	16.60824	0.02342	PASS
					0	12.63142	0.01782	PASS
					10	-13.13210	-0.01852	PASS
					20	-31.12793	-0.04390	PASS
					30	-45.16125	-0.06370	PASS
					40	17.65251	0.02490	PASS
					50	-33.35953	-0.04705	PASS
			MCH	VN	-30	-32.98759	-0.04646	PASS
					-20	-54.57401	-0.07686	PASS
					-10	39.19601	0.05521	PASS
					0	-34.68990	-0.04886	PASS
					10	27.62318	0.03891	PASS
					20	-22.17293	-0.03123	PASS
					30	30.08366	0.04237	PASS
					40	-9.99928	-0.01408	PASS
					50	-29.52576	-0.04159	PASS
			HCH	VN	-30	-1.21593	-0.00171	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-20	1.77383	0.00249	PASS
					-10	12.97474	0.01825	PASS
					0	-26.02100	-0.03660	PASS
					10	-0.21458	-0.00030	PASS
					20	-3.54767	-0.00499	PASS
					30	-13.37528	-0.01881	PASS
					40	6.93798	0.00976	PASS
					50	-4.63486	-0.00652	PASS

END