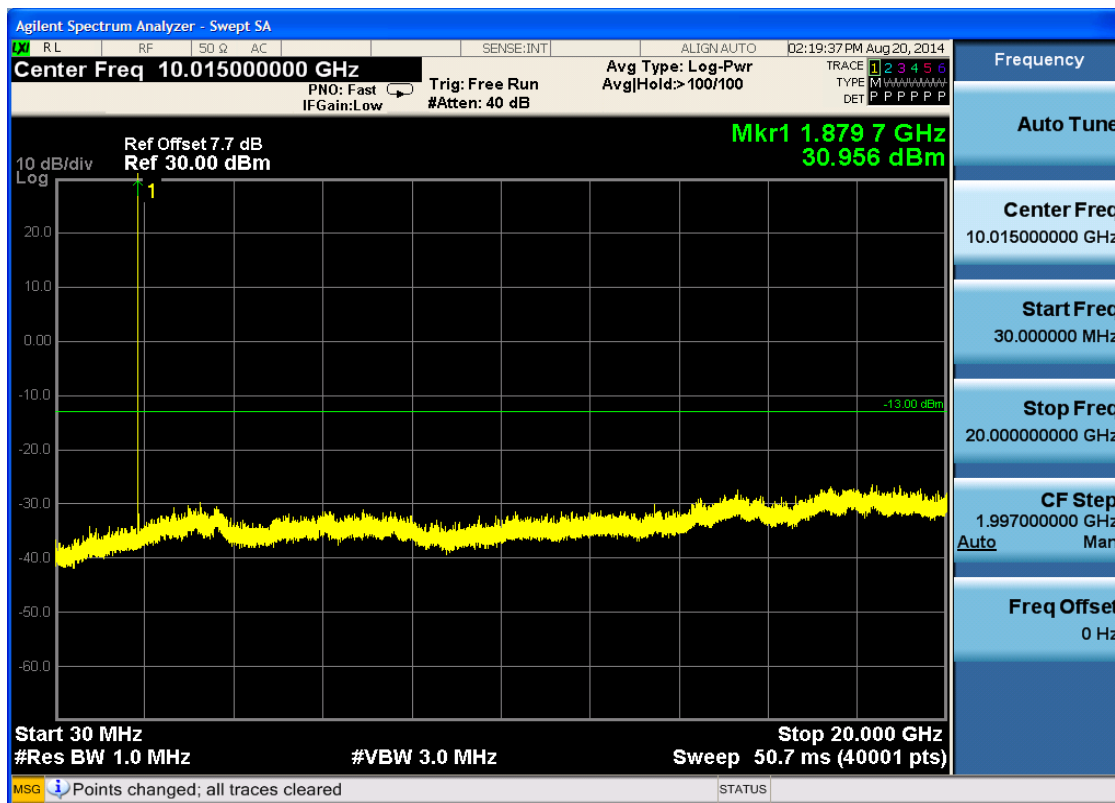
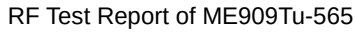






Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

Ref Offset 7.7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 13.794 kHz
-61.617 dBm

Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 10 kHz

Stop 150.00 kHz
Sweep 130 ms (1001 pts)

Frequency

Auto Tune

Center Freq
79.500 kHz

Start Freq
9.000 kHz

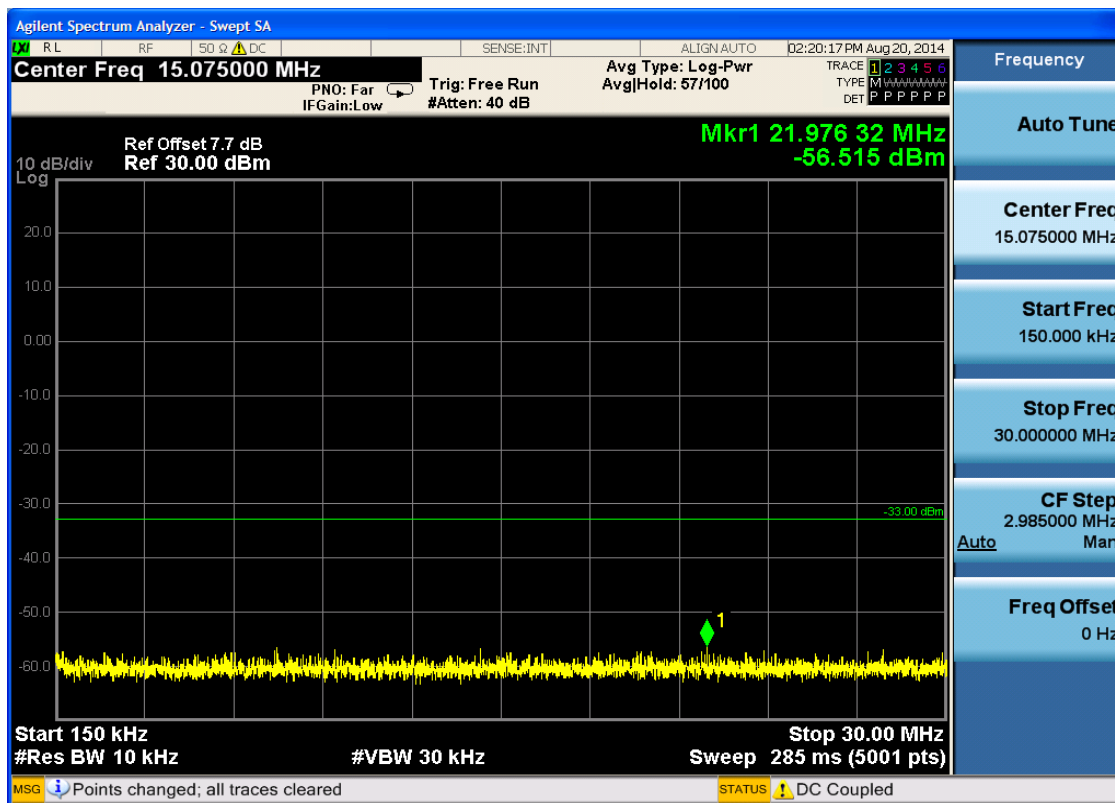
Stop Freq
150.000 kHz

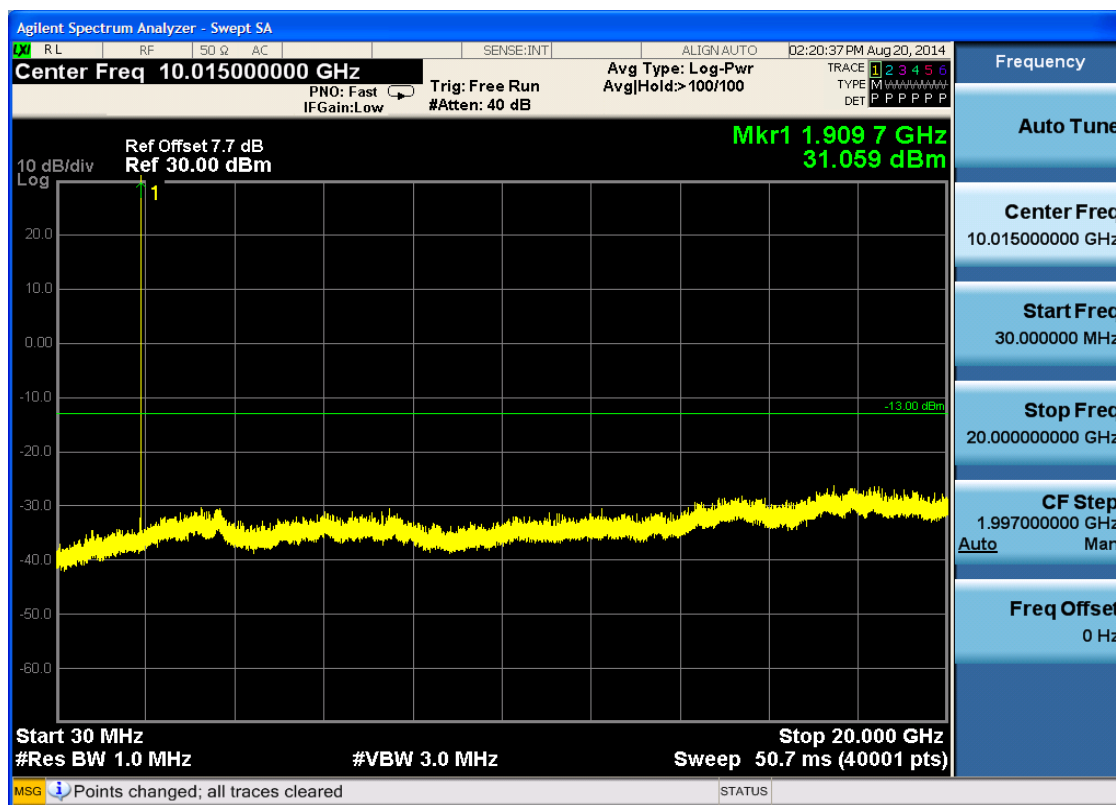
CF Step
14.100 kHz
Man

Freq Offset
0 Hz

MSG Points changed; all traces cleared

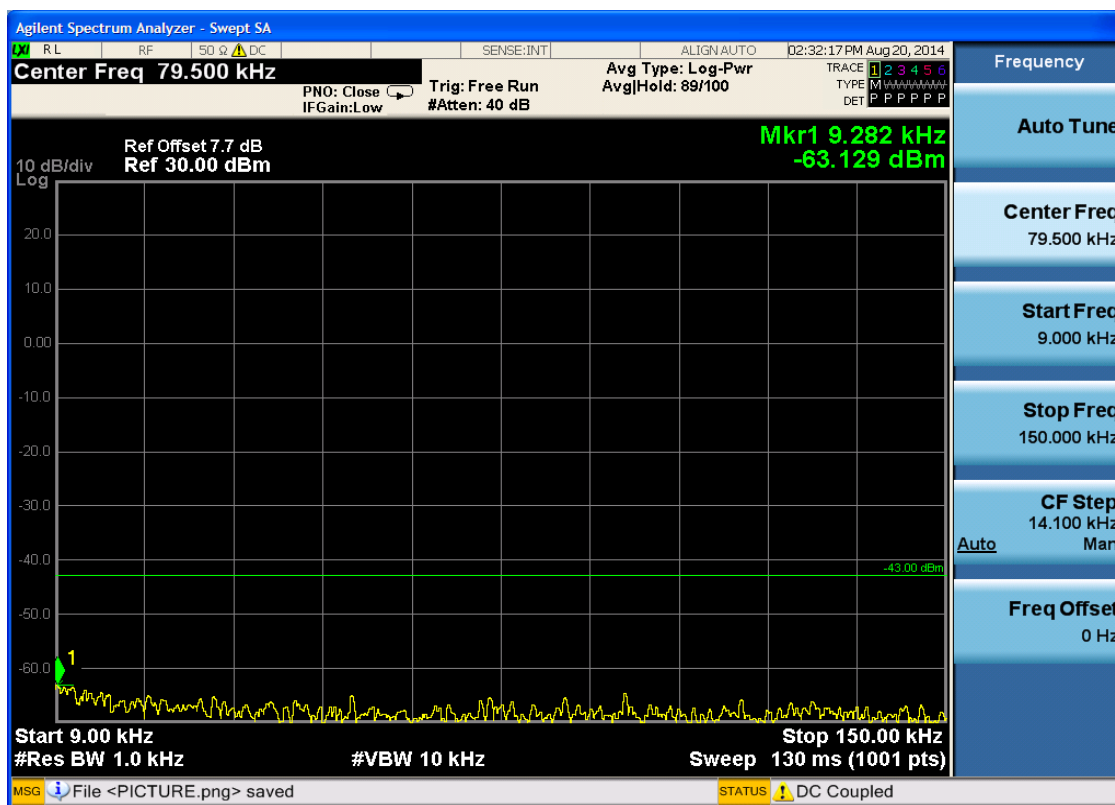
STATUS DC Coupled

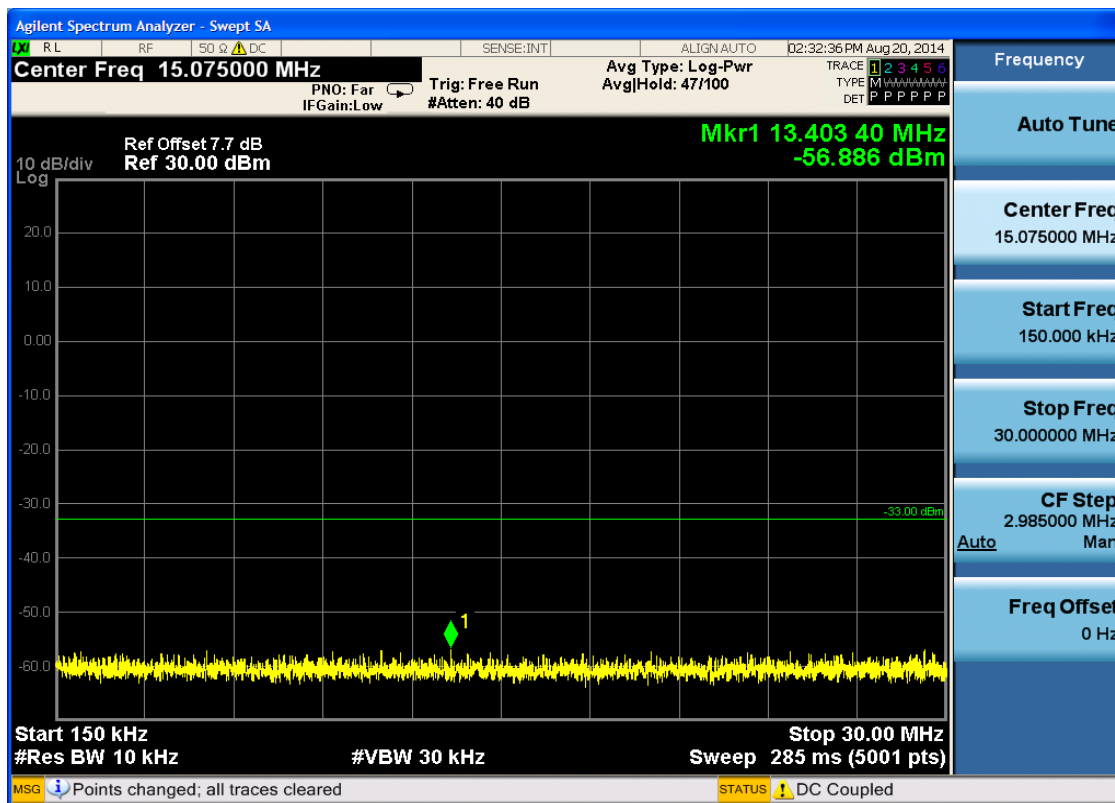


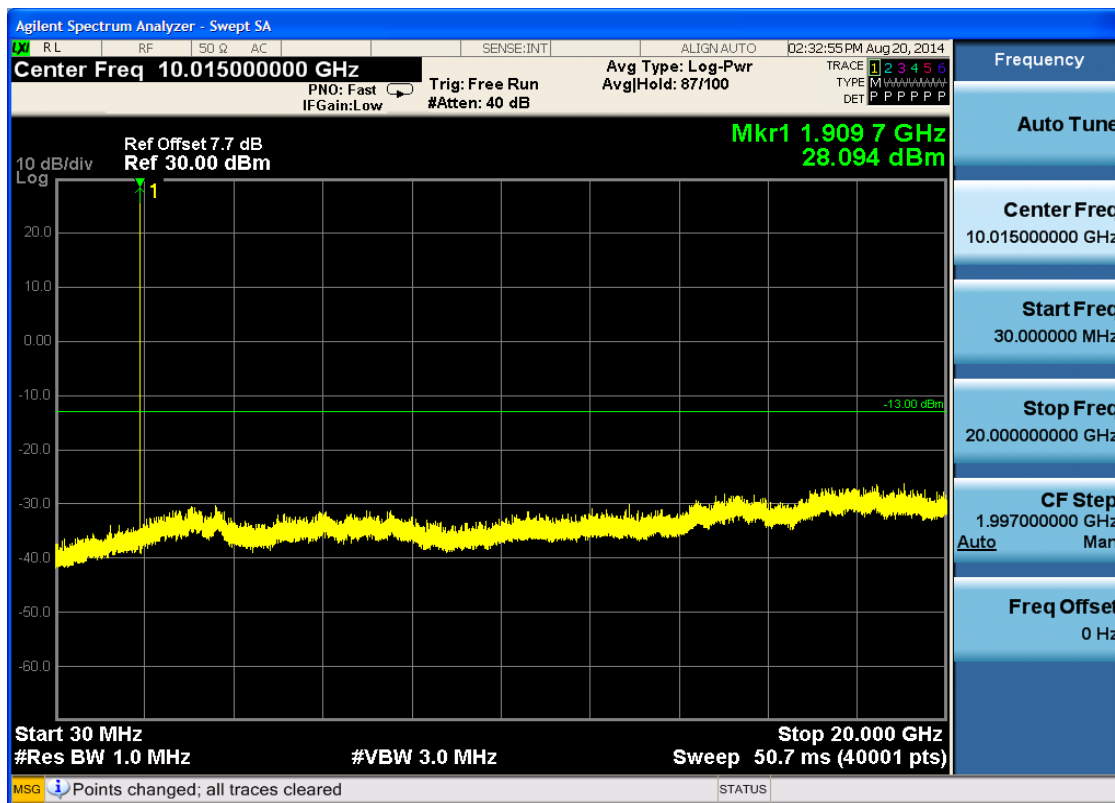


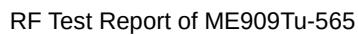
6.1.2.2 Test Mode = GSM/TM2

6.1.2.2.1 Test Channel = LCH









Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω DC SENSE:INT ALIGN:AUTO 02:33:14 PM Aug 20, 2014

Center Freq 79.500 kHz

PNO: Close Trig: Free Run Avg Type: Log-Pwr Avg|Hold: 90/100

IFGain:Low #Atten: 40 dB

TRACE 1 2 3 4 5 6
TYPE M M M M M M
DET P P P P P P

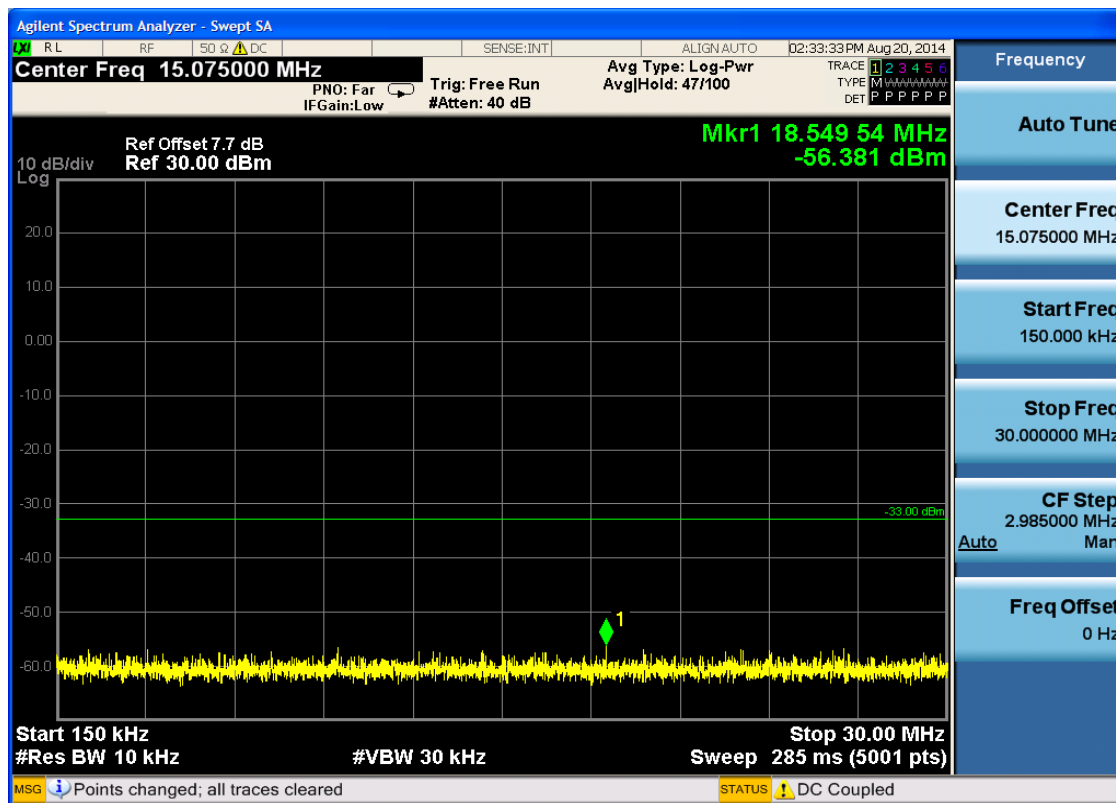
Ref Offset 7.7 dB Mkr1 11.538 kHz
Ref 30.00 dBm -63.323 dBm

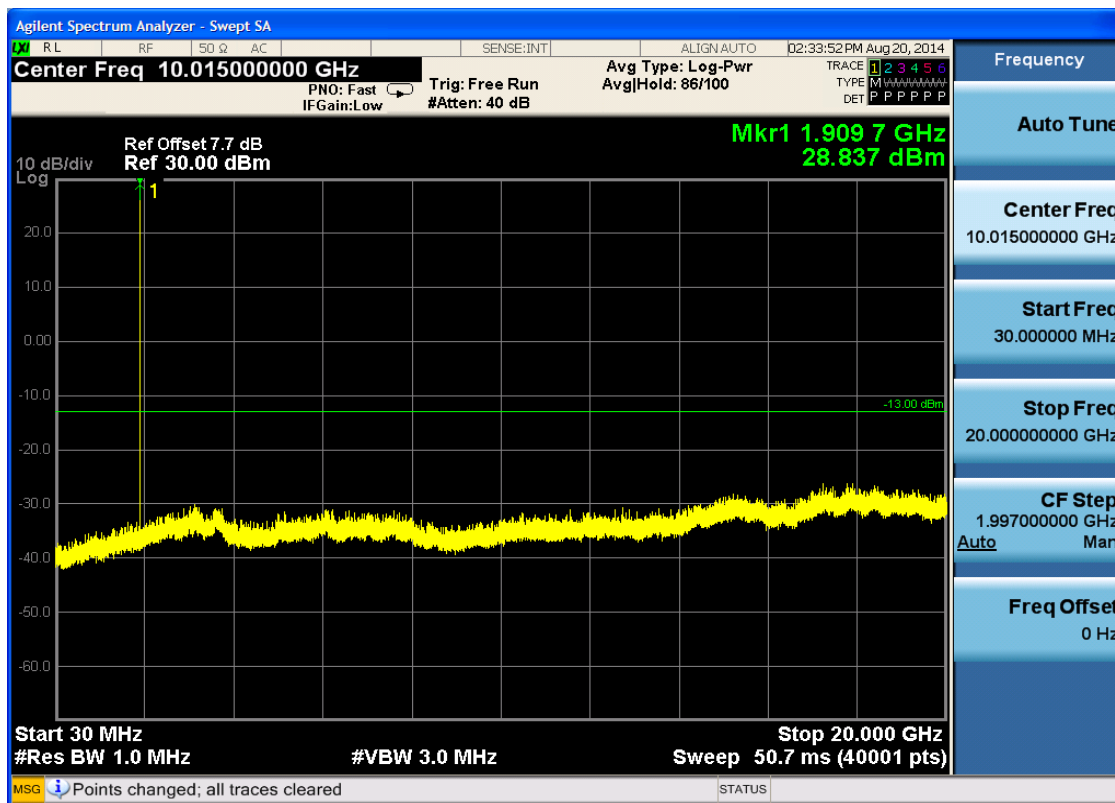
10 dB/div Log

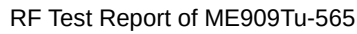
Start 9.00 kHz Stop 150.00 kHz
#Res BW 1.0 kHz #VBW 10 kHz Sweep 130 ms (1001 pts)

MSG Points changed; all traces cleared STATUS DC Coupled

The screenshot displays a spectrum analyzer interface with a black background and a grid. The vertical axis represents power in dBm, ranging from -60.0 to 20.0. The horizontal axis represents frequency in kHz, ranging from 9.00 to 150.00. A yellow trace shows a noisy signal floor at approximately -43.00 dBm. A green horizontal line is drawn across the screen at -43.00 dBm. A green marker labeled '1' is positioned at the start of the sweep (9.00 kHz) with a value of -63.323 dBm. The right side of the screen features a blue sidebar with various settings: Frequency (Auto Tune), Center Freq (79.500 kHz), Start Freq (9.000 kHz), Stop Freq (150.000 kHz), CF Step (14.100 kHz), Auto, Freq Offset (0 Hz), and a status indicator for DC Coupled.







Agilent Spectrum Analyzer - Swept SA

R.L.	RF	50 Ω DC	SENSE:INT	ALIGN AUTO	02:34:11PM Aug 20, 2014
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Center Freq 79.500 kHz PNO: Close IFGain:Low Trig: Free Run #Atten: 40 dB Avg Type: Log-Pwr AvgHld: 89/100

TRACE 1 2 3 4 5 6
TYPE M M M M M M M M M M
DET P P P P P P P

Ref Offset 7.7 dB
Ref 30.00 dBm

Mkr1 9.282 kHz
-63.468 dBm

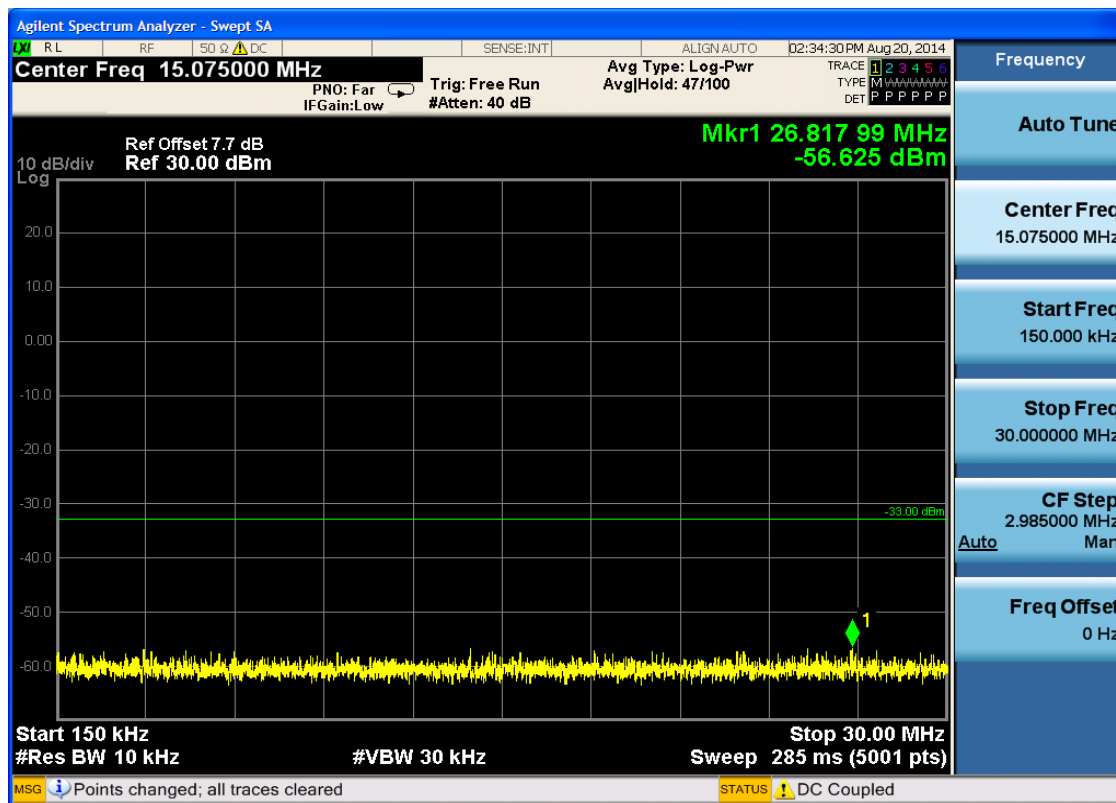
10 dB/div
Log

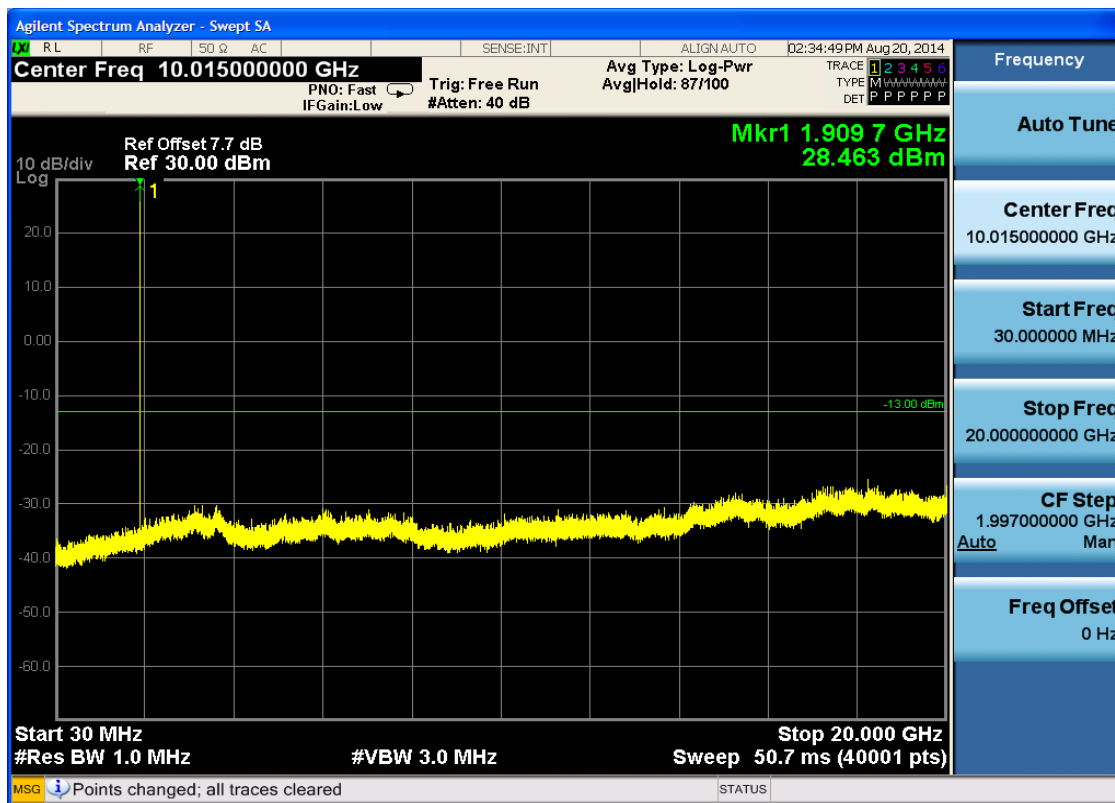
Start 9.00 kHz Stop 150.00 kHz
#Res BW 1.0 kHz #VBW 10 kHz Sweep 130 ms (1001 pts)

-43.00 dBm

MSG Points changed; all traces cleared STATUS 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 Man
Freq Offset 0 Hz



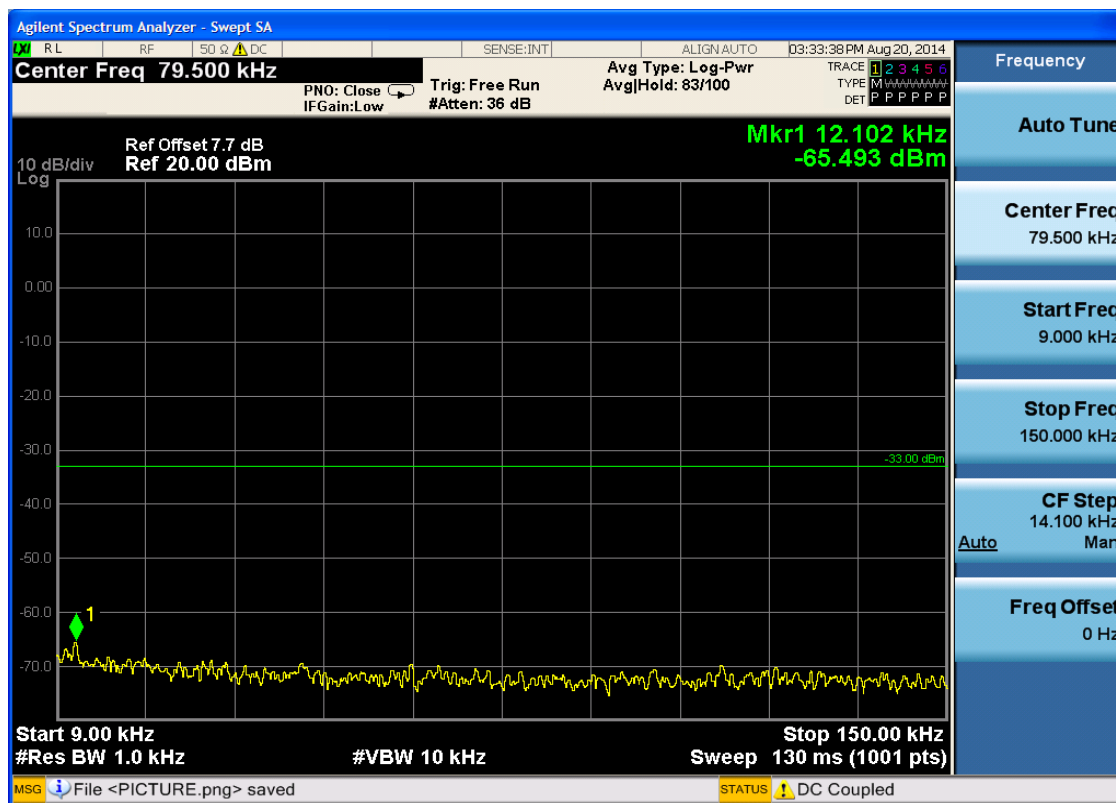


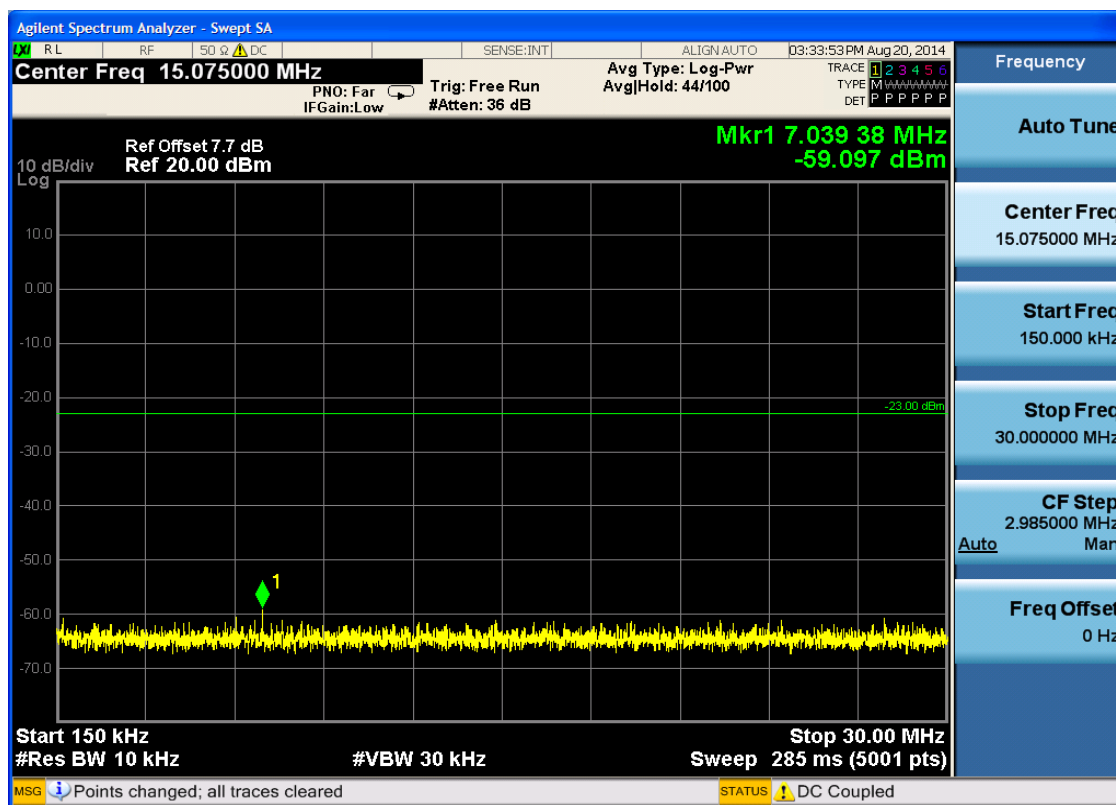
6.2 For UMTS

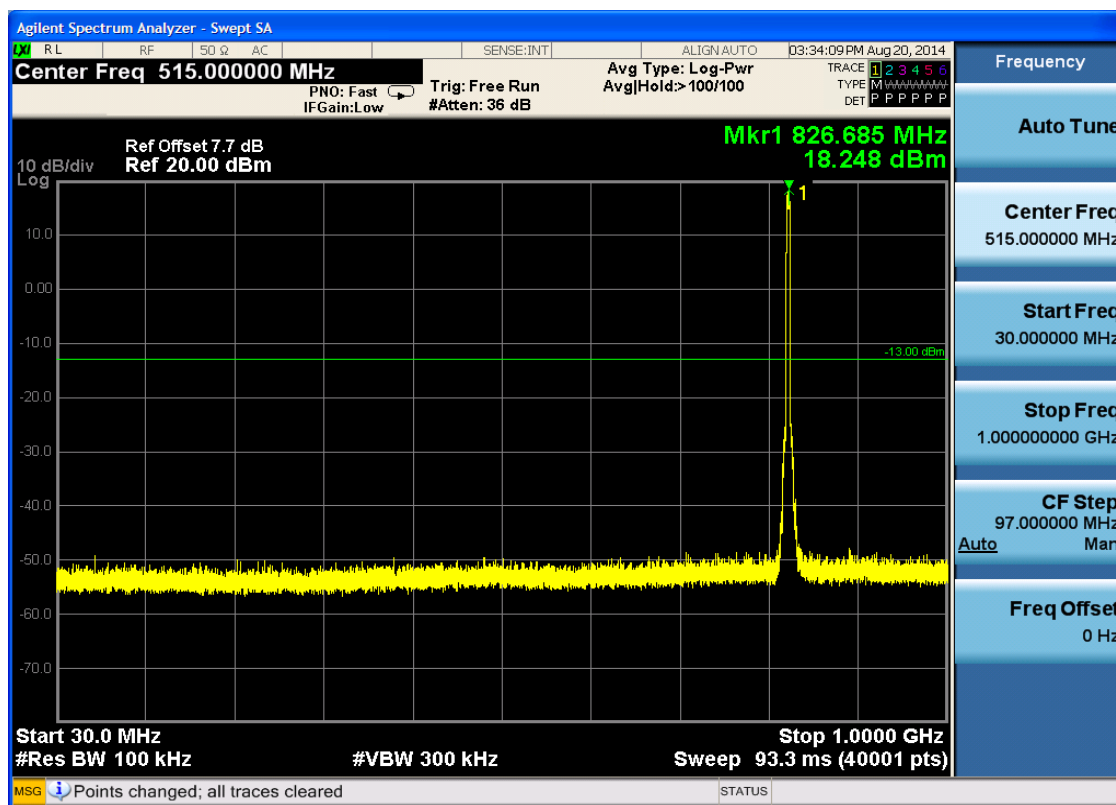
6.2.1 Test Band = WCDMA850

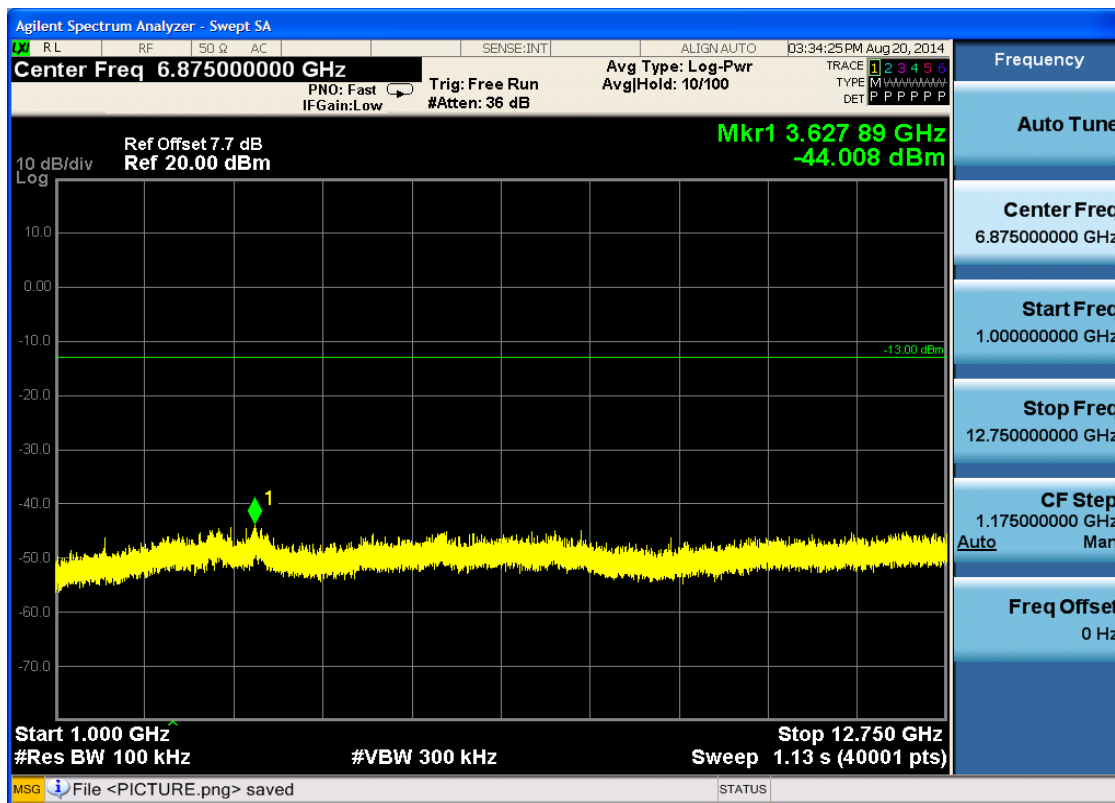
6.2.1.1 Test Mode = UMTS/TM1

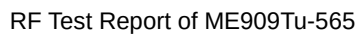
6.2.1.1.1 Test Channel = LCH











Agilent Spectrum Analyzer - Swept SA

☒ R.L. RF 50 Ω DC SENSE:INT ALIGN:AUTO 03:34:41 PM Aug 20, 2014

Center Freq 79.500 kHz PNO: Close Trig: Free Run Avg Type: Log-Pwr TRACE 1 2 3 4 5 6
 IF Gain: Low #Atten: 36 dB Avg/Hold: 83/100 TYPE M DET P P P P P P

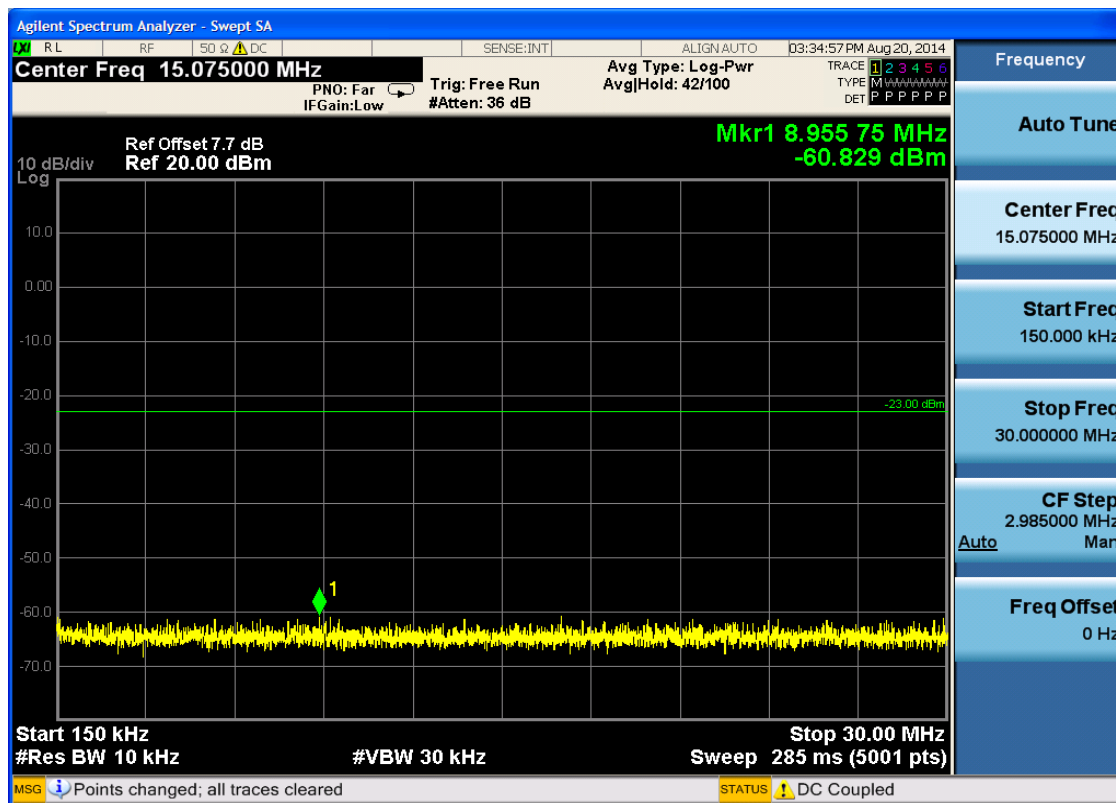
Ref Offset 7.7 dB Mkr1 13.512 kHz
 Ref 20.00 dBm -67.205 dBm

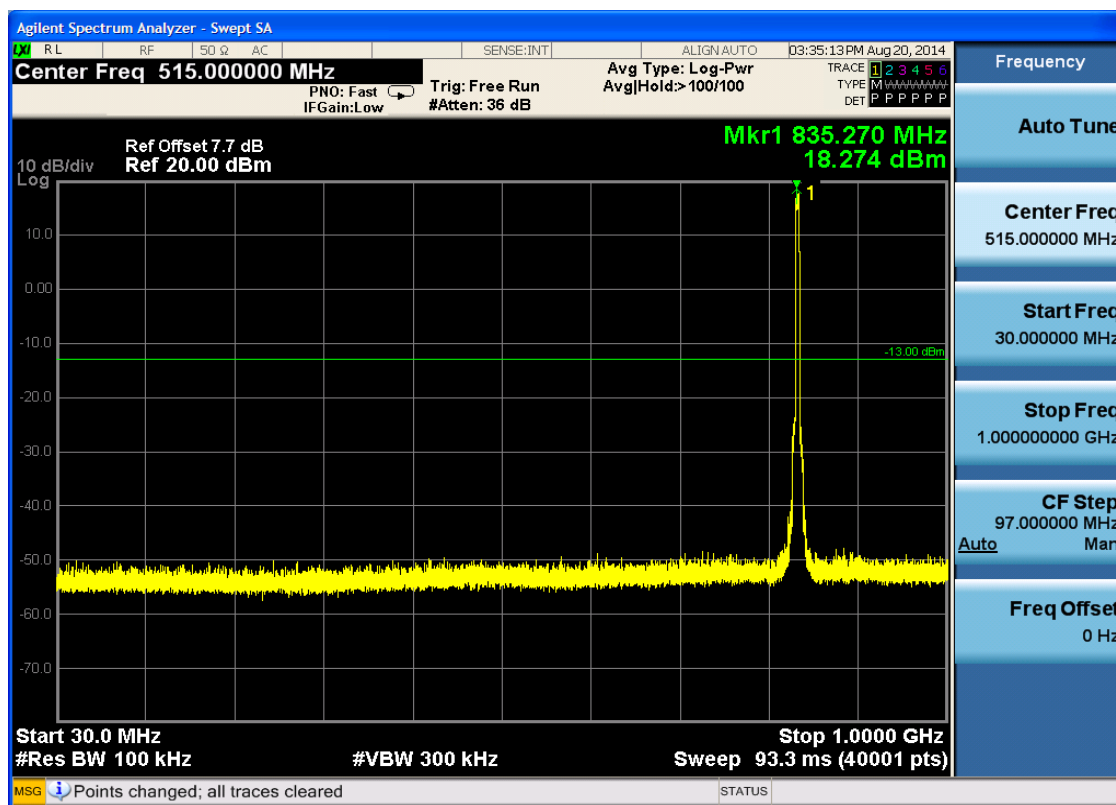
10 dB/div
Log

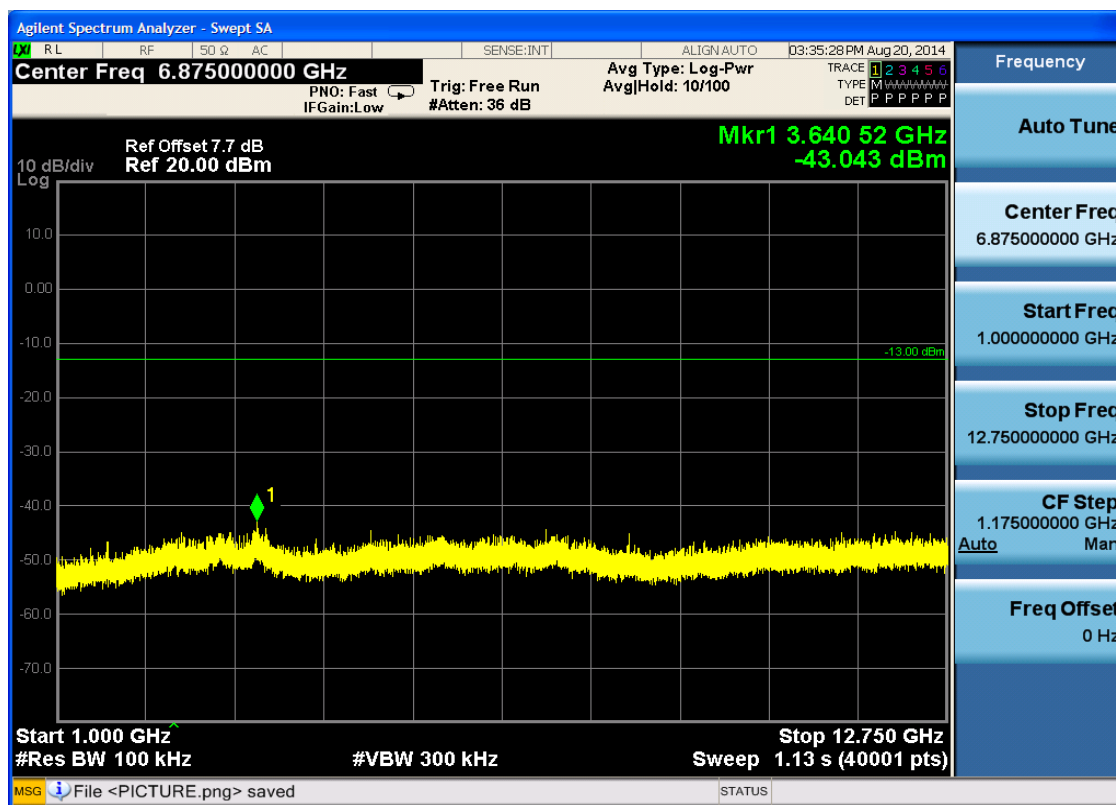
Start 9.00 kHz Stop 150.00 kHz
 #Res BW 1.0 kHz #VBW 10 kHz Sweep 130 ms (1001 pts)

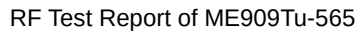
MSG Points changed; all traces cleared STATUS DC Coupled

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

R L	RF	50 Ω DC	SENSE:INT	ALIGN AUTO	03:35:45 PM Aug 20, 2014
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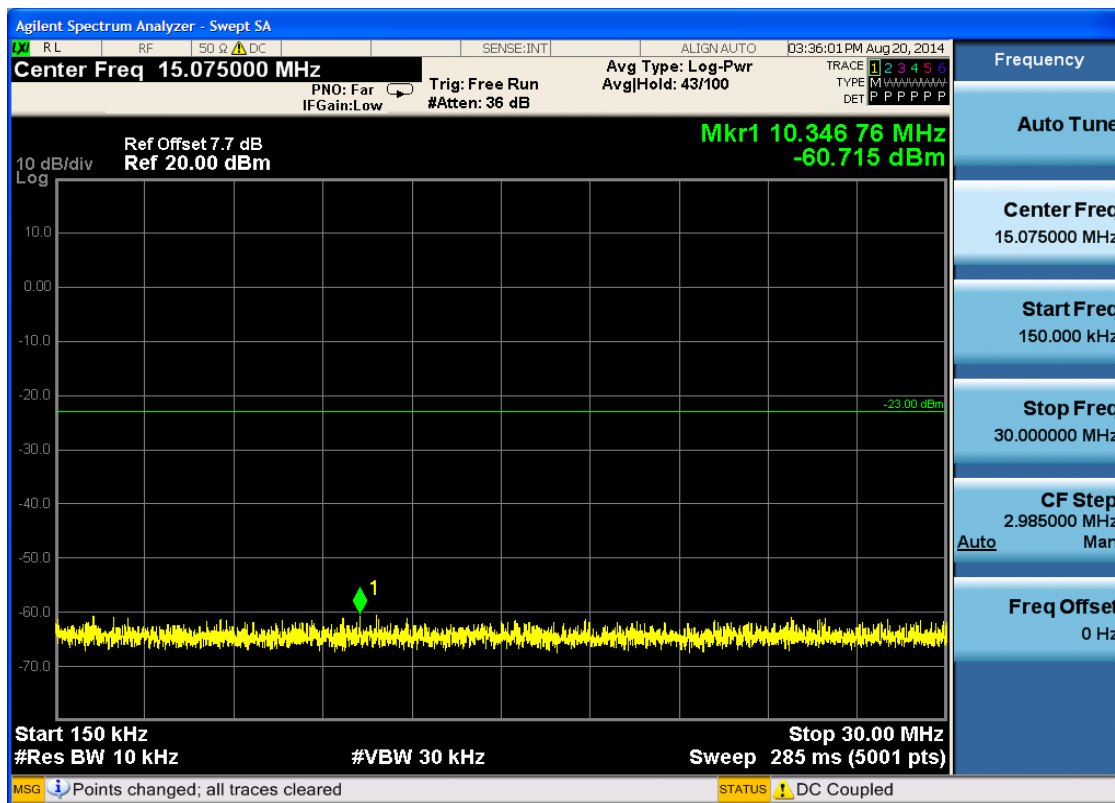
Center Freq 79.500 kHz PNO: Close IF Gain: Low Trig: Free Run #Atten: 36 dB Avg Type: Log-Pwr Avg/Hold: 83/100 TRACE 1 2 3 4 5 6 TYPE M W W W W W W W DET P P P P P P

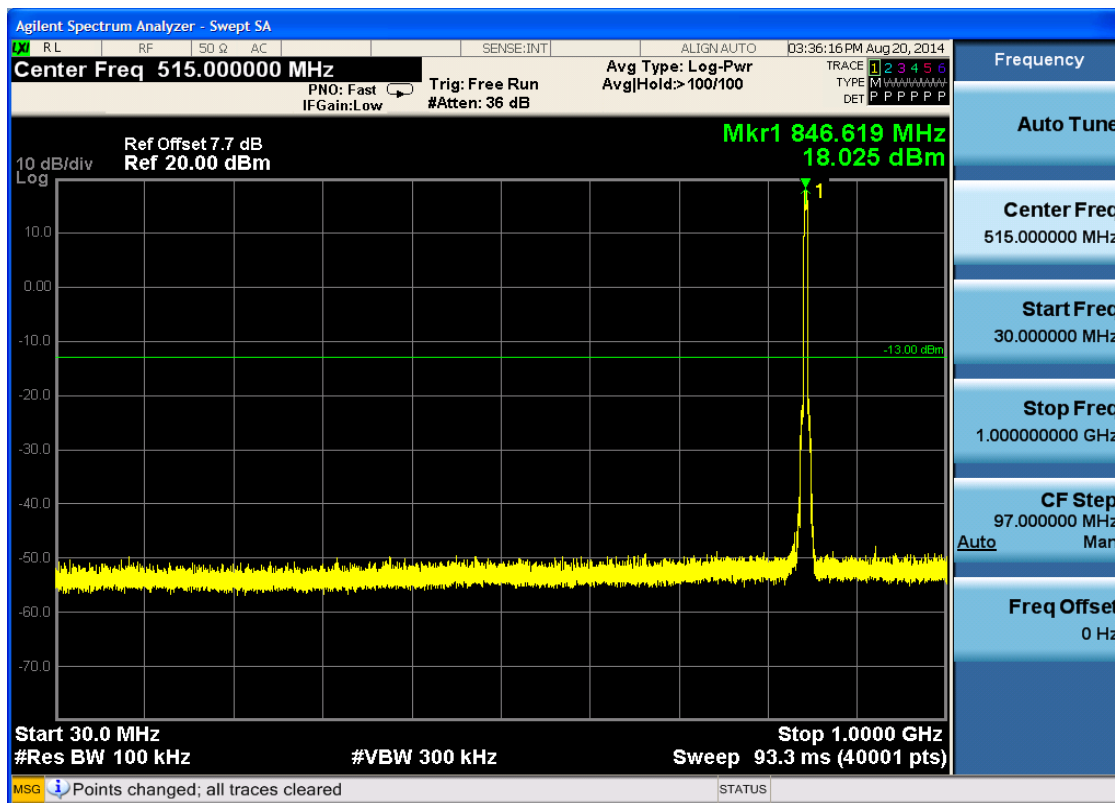
Ref Offset 7.7 dB
Ref 20.00 dBm

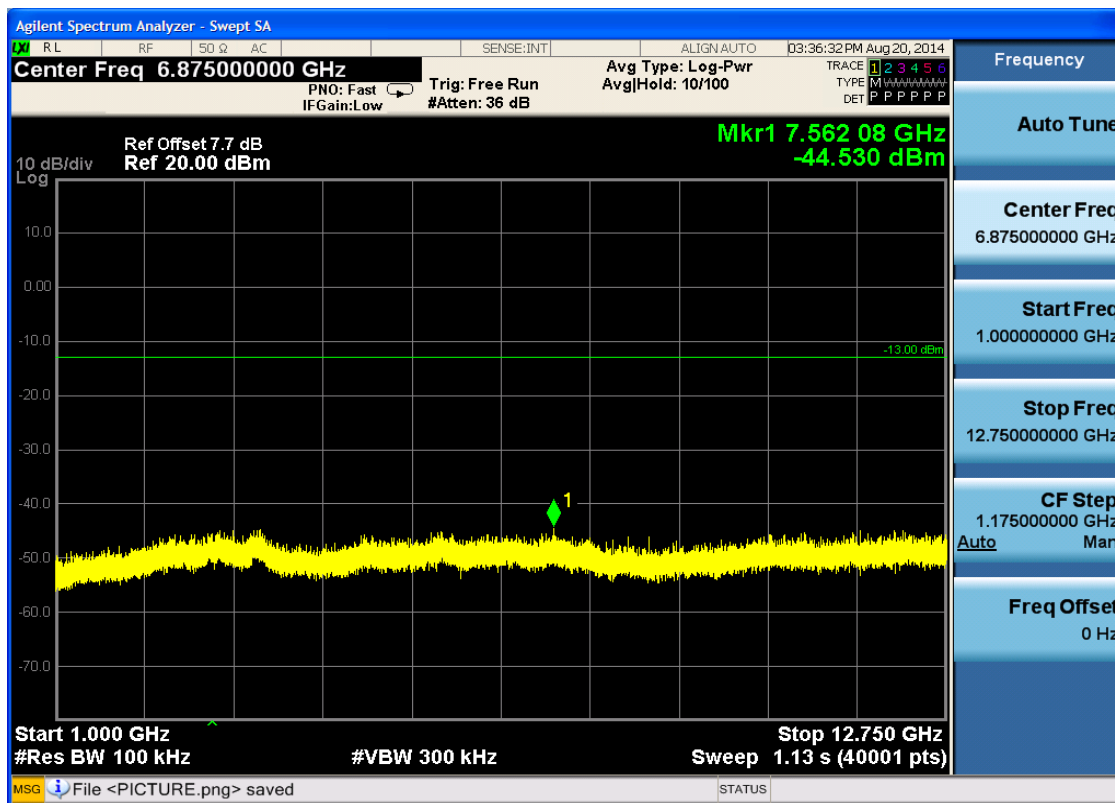
Mkr1 22.254 kHz
-66.610 dBm

Start 9.00 kHz Stop 150.00 kHz
#Res BW 1.0 kHz #VBW 10 kHz Sweep 130 ms (1001 pts)

MSG Points changed; all traces cleared STATUS DC Coupled





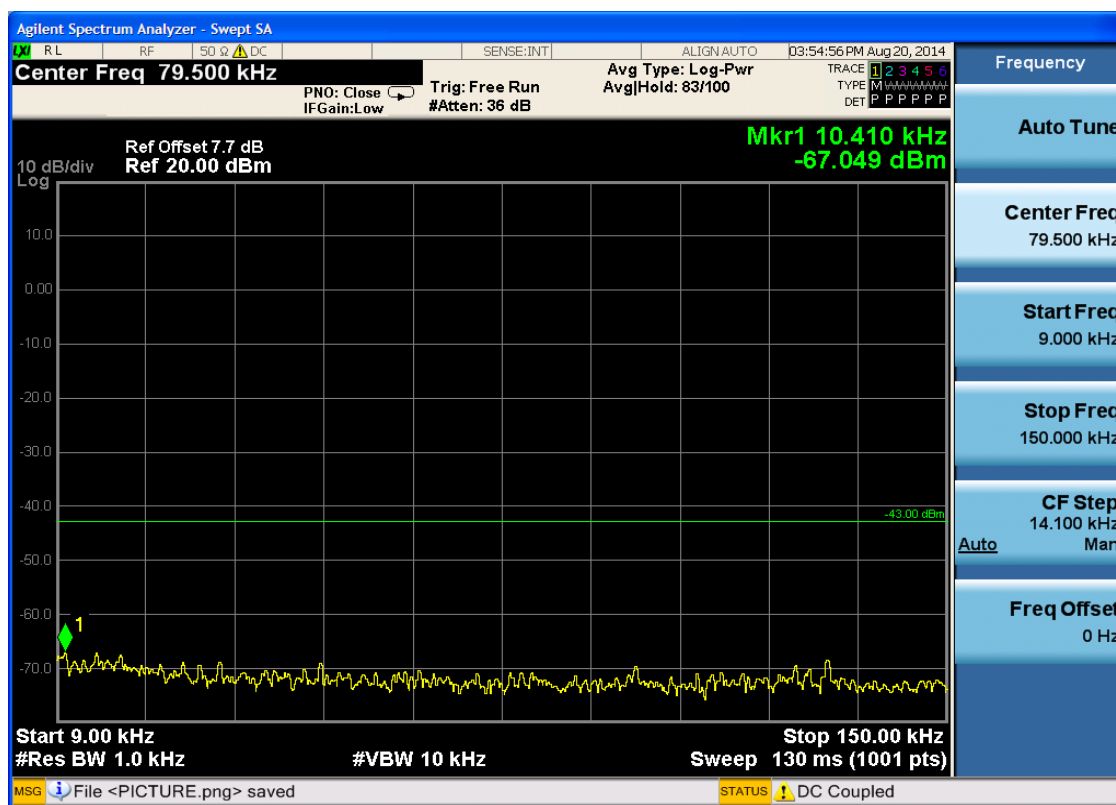


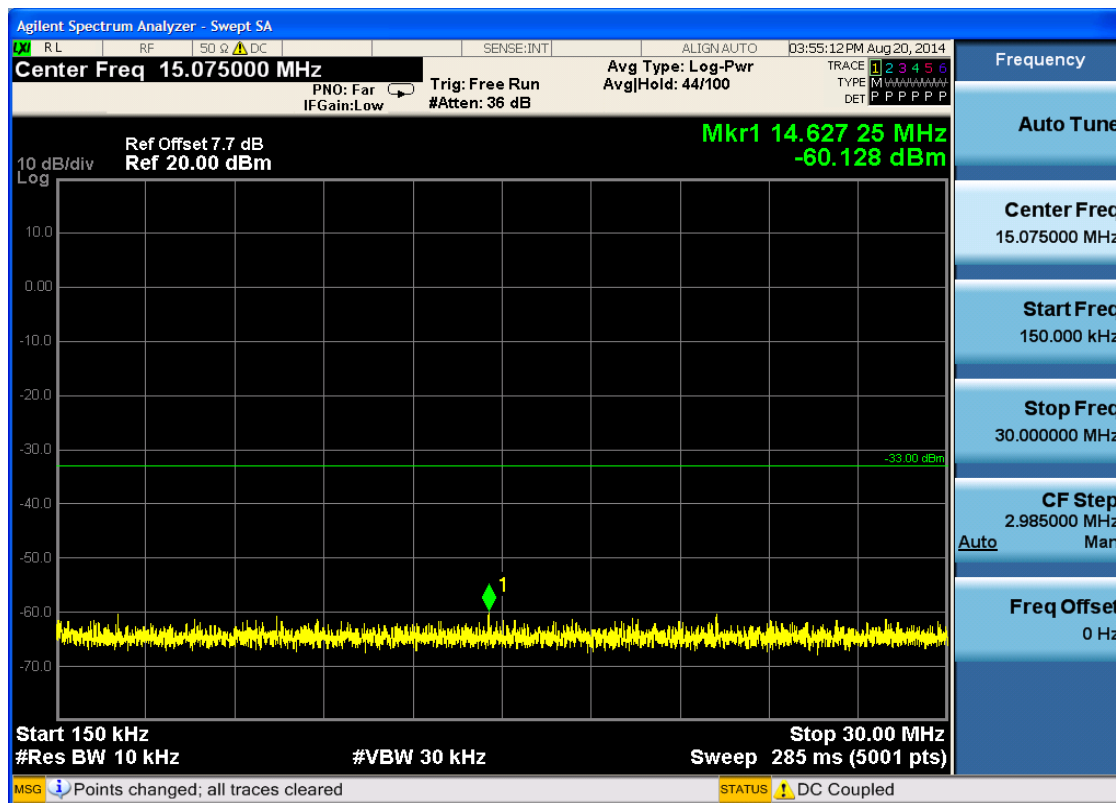


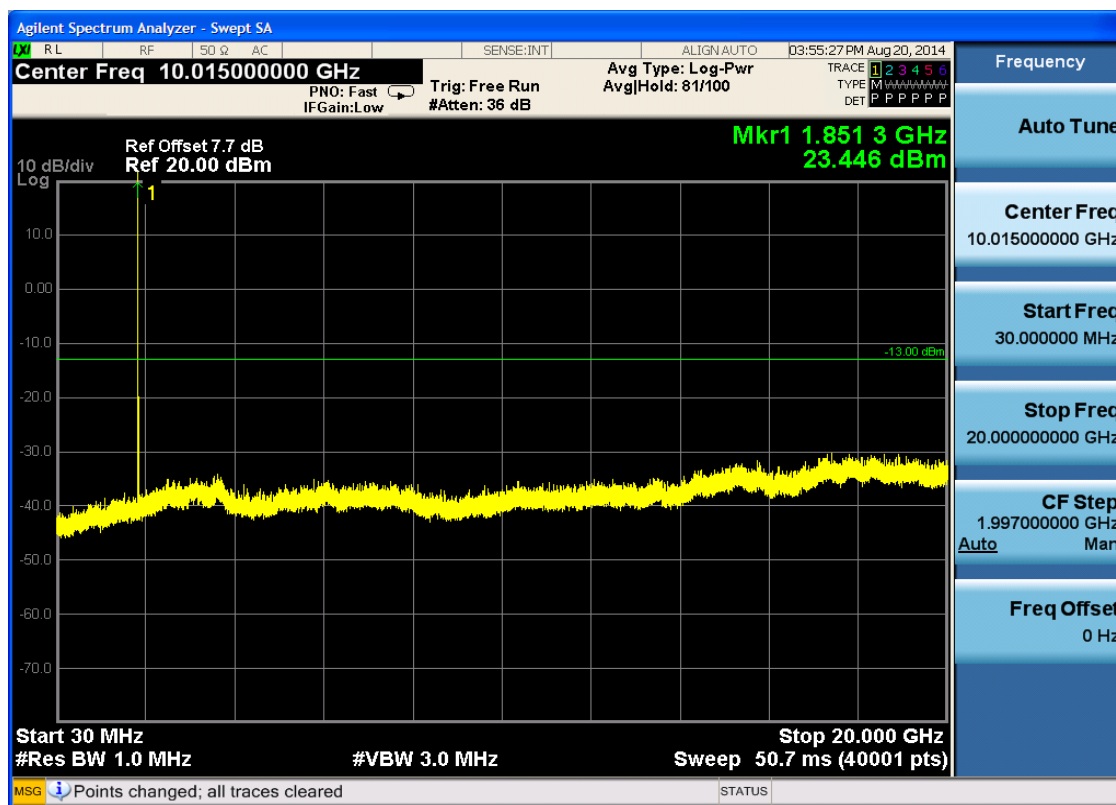
6.2.2 Test Band = WCDMA1900

6.2.2.1 Test Mode = UMTS/TM1

6.2.2.1.1 Test Channel = LCH

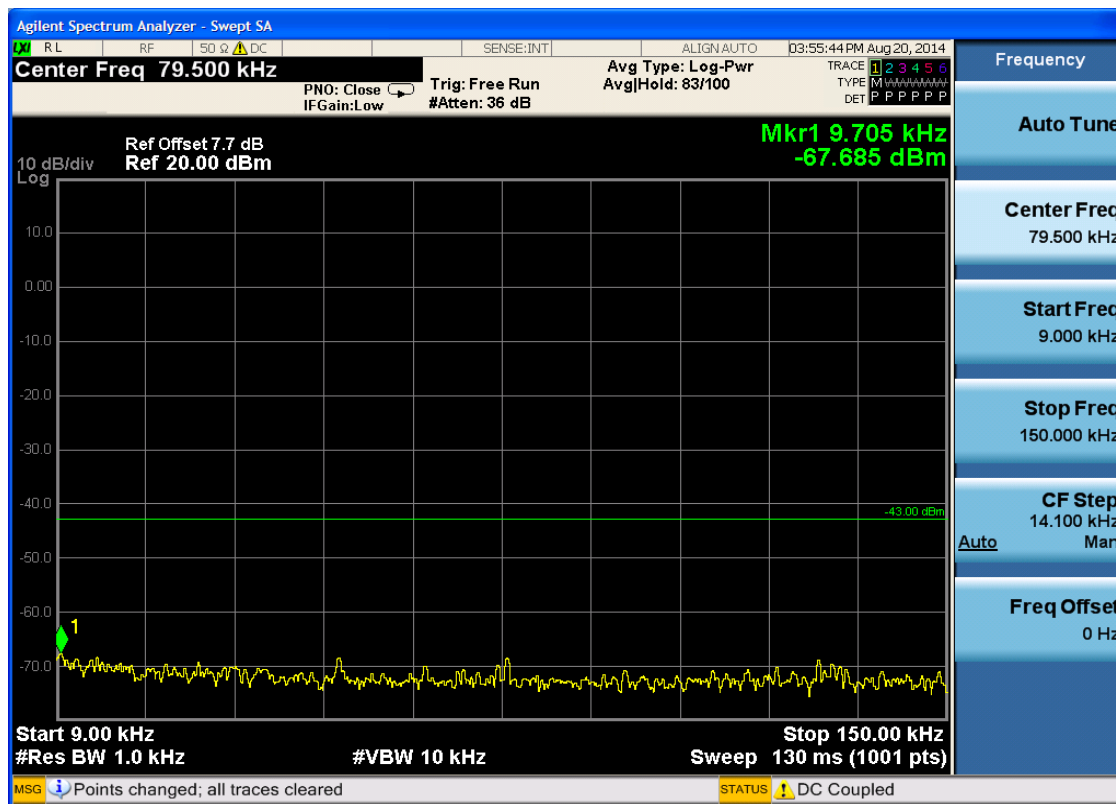


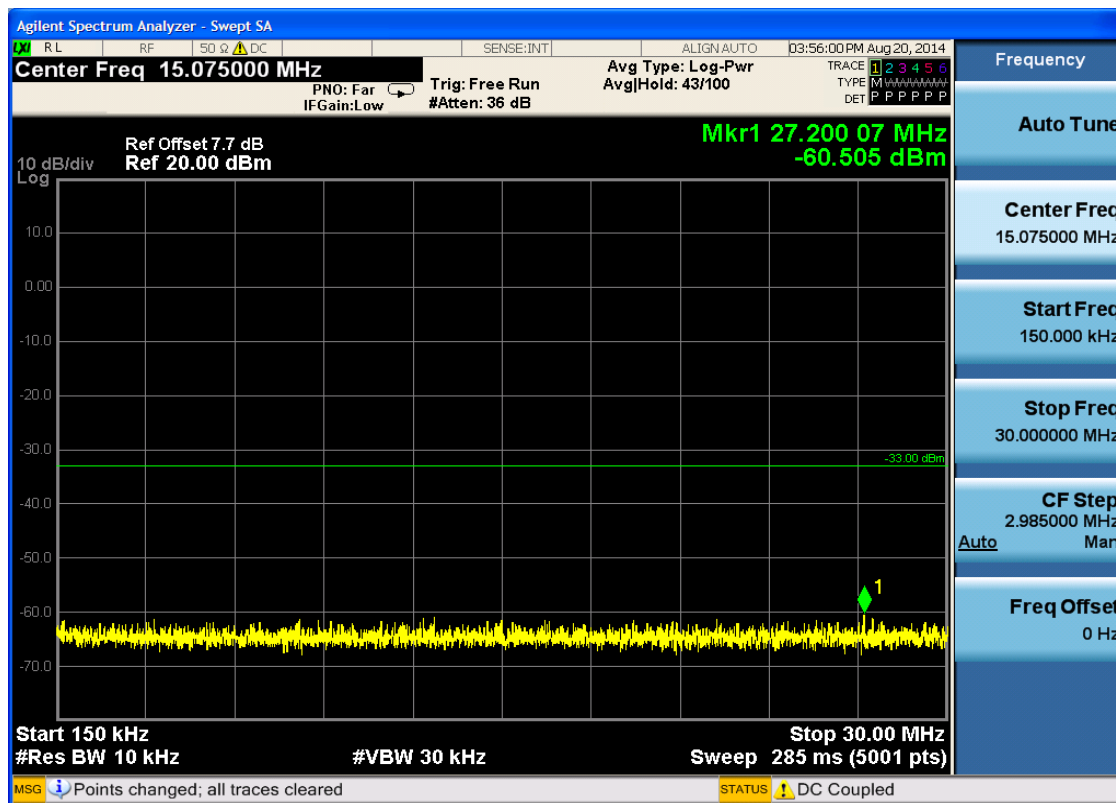


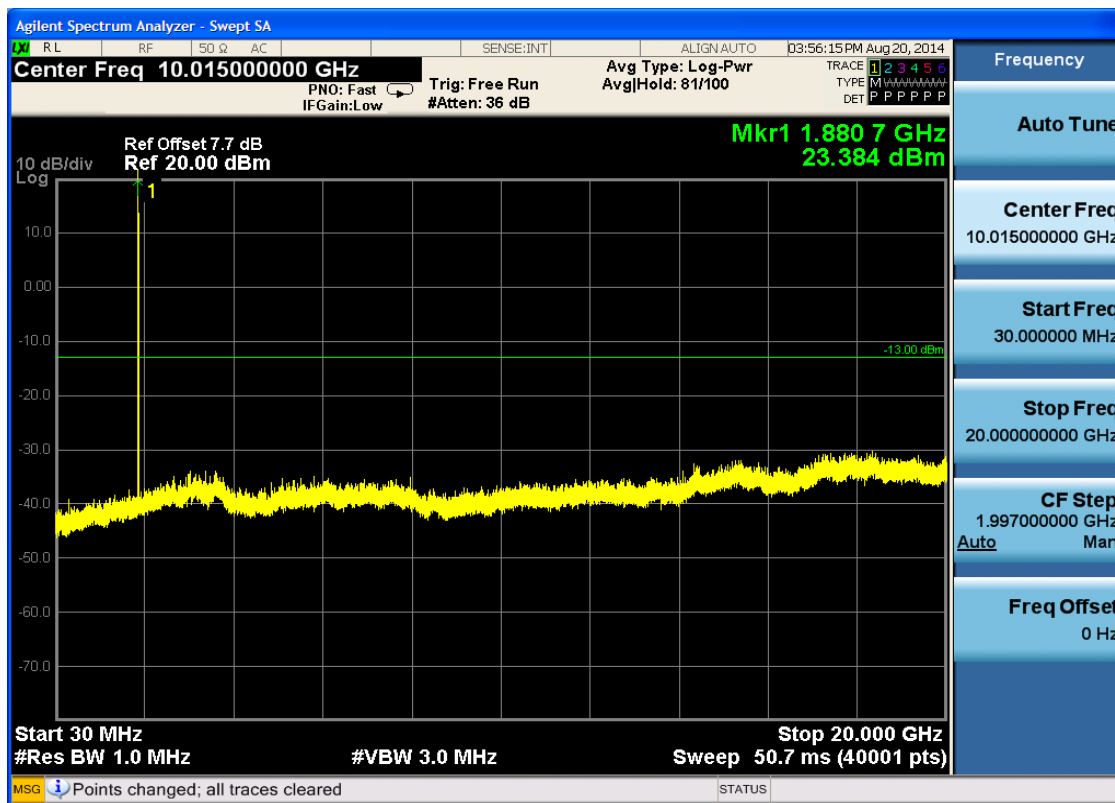




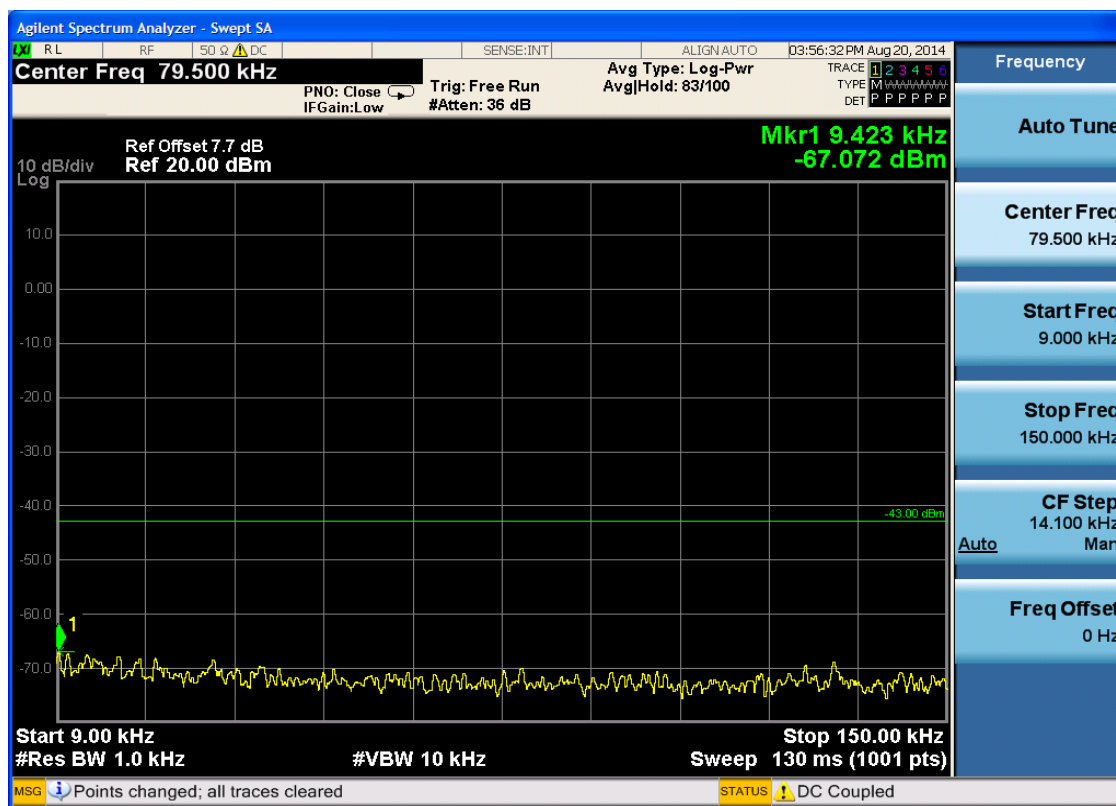
6.2.2.1.2 Test Channel = MCH

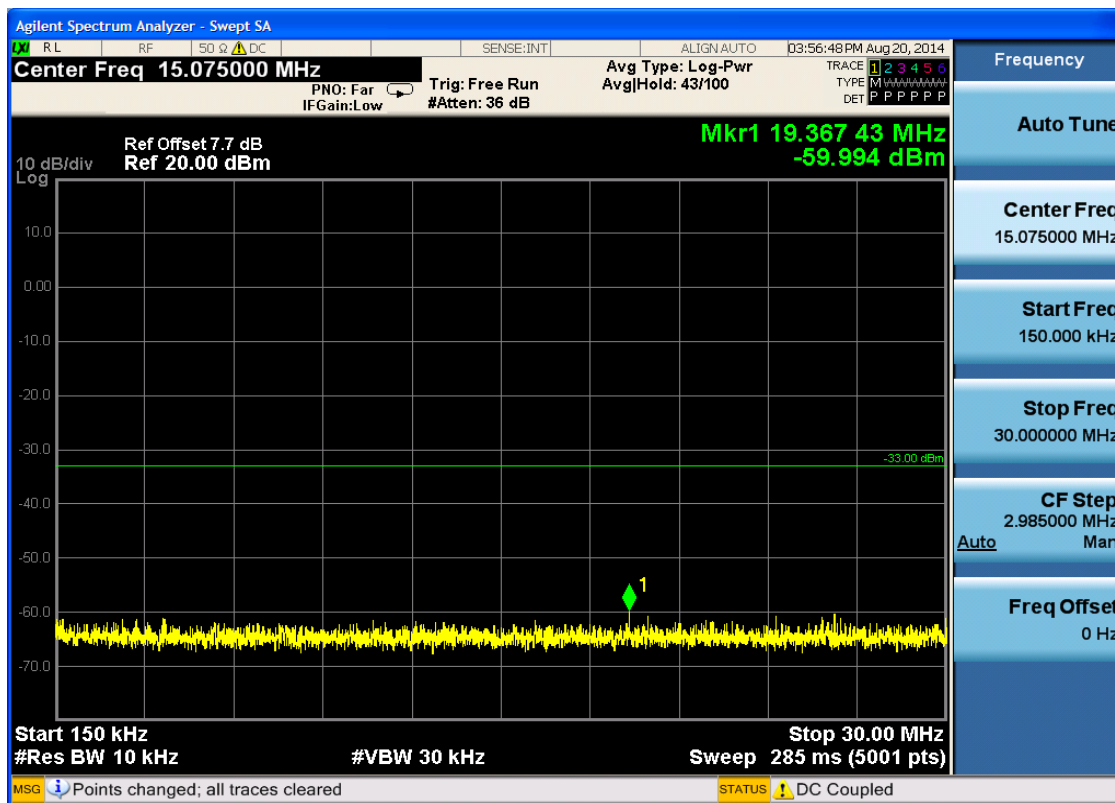


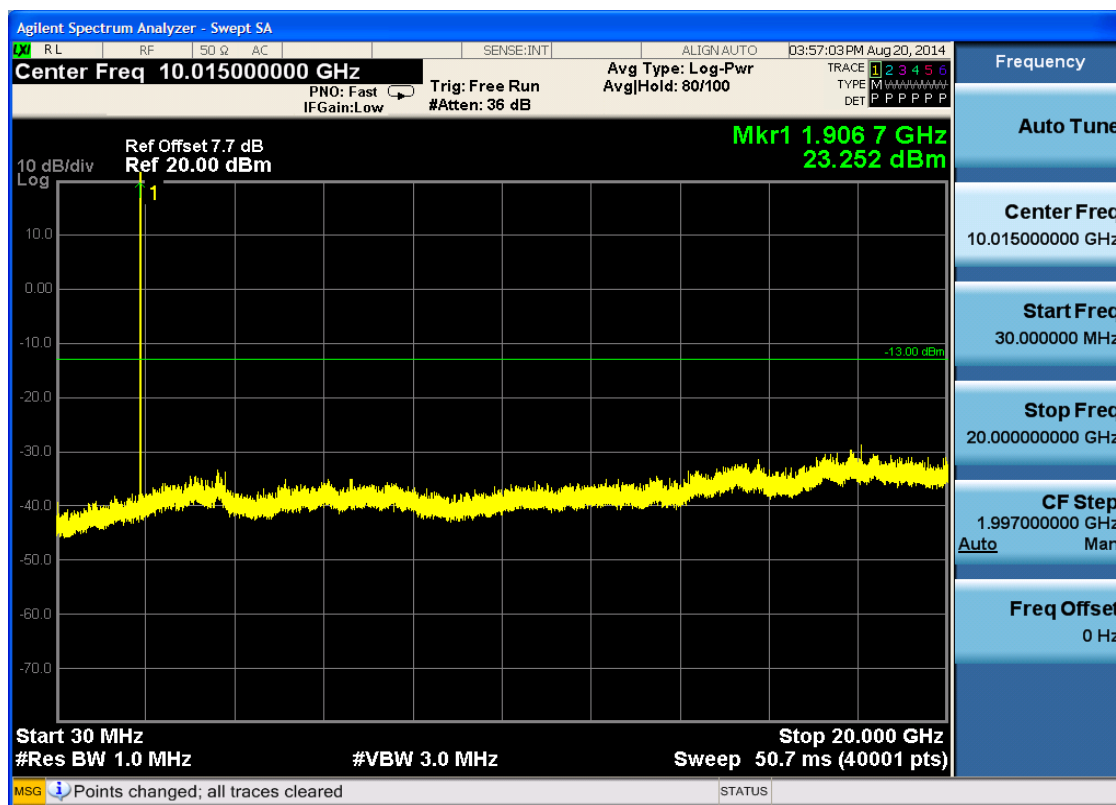




6.2.2.1.3 Test Channel = HCH





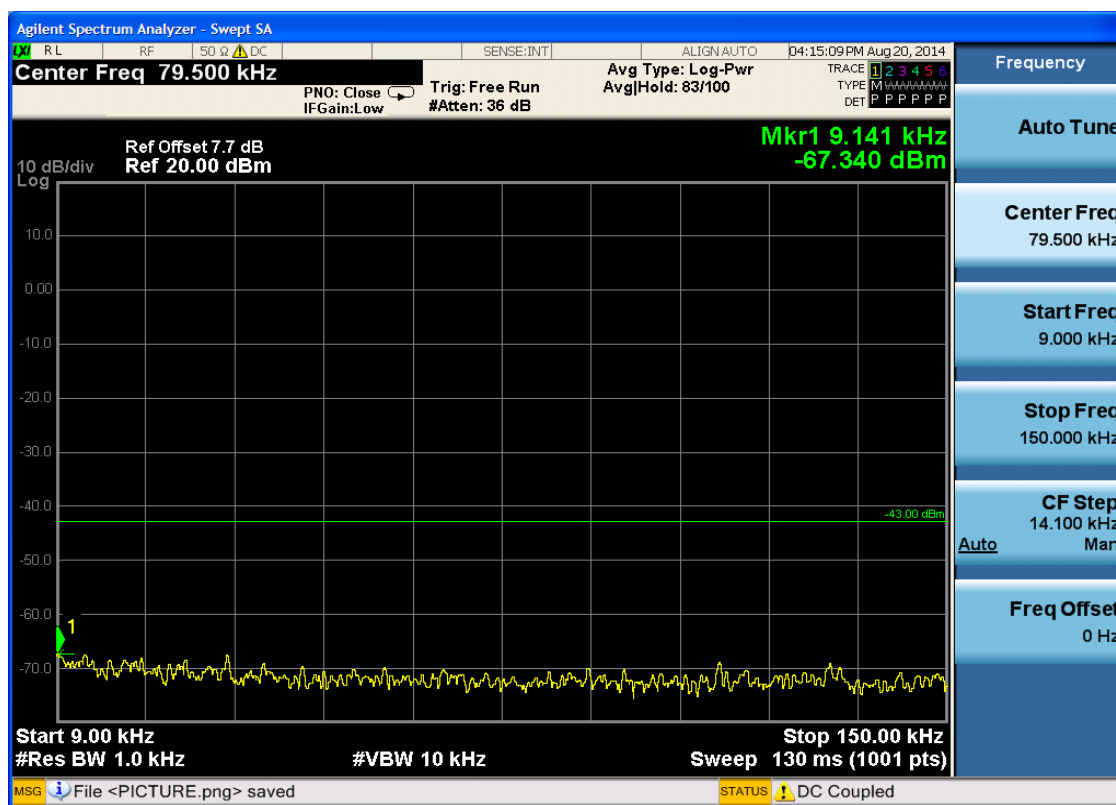


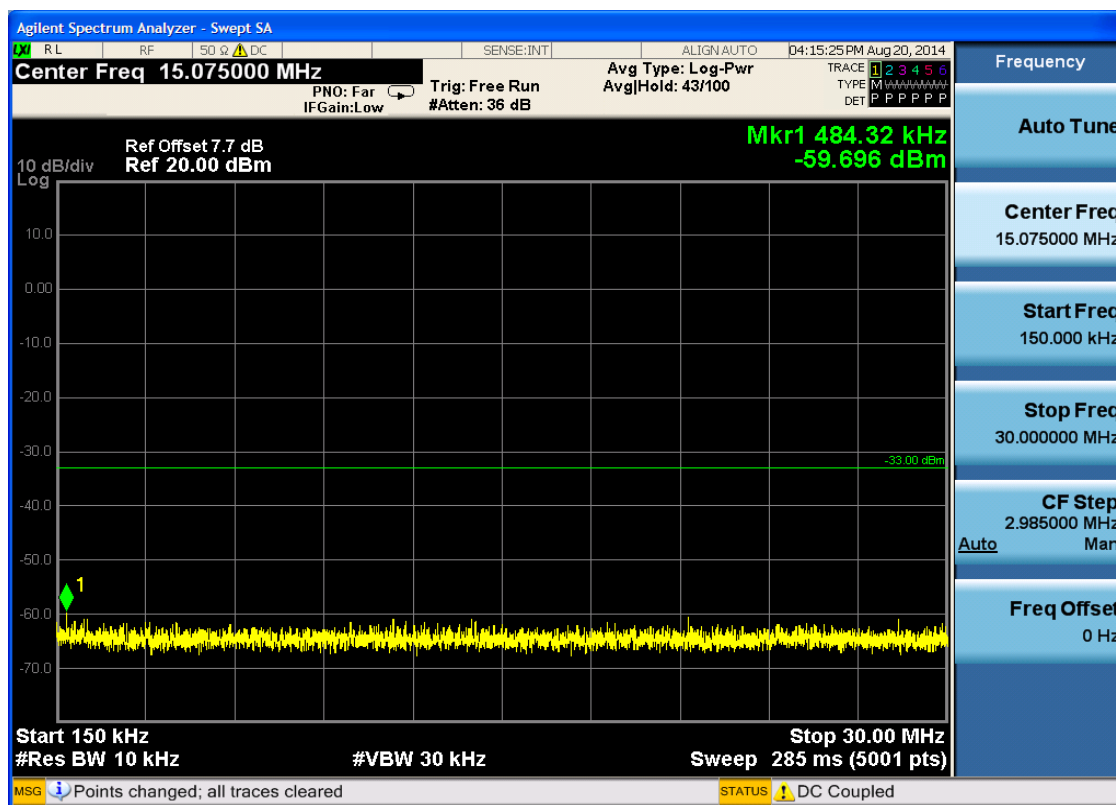


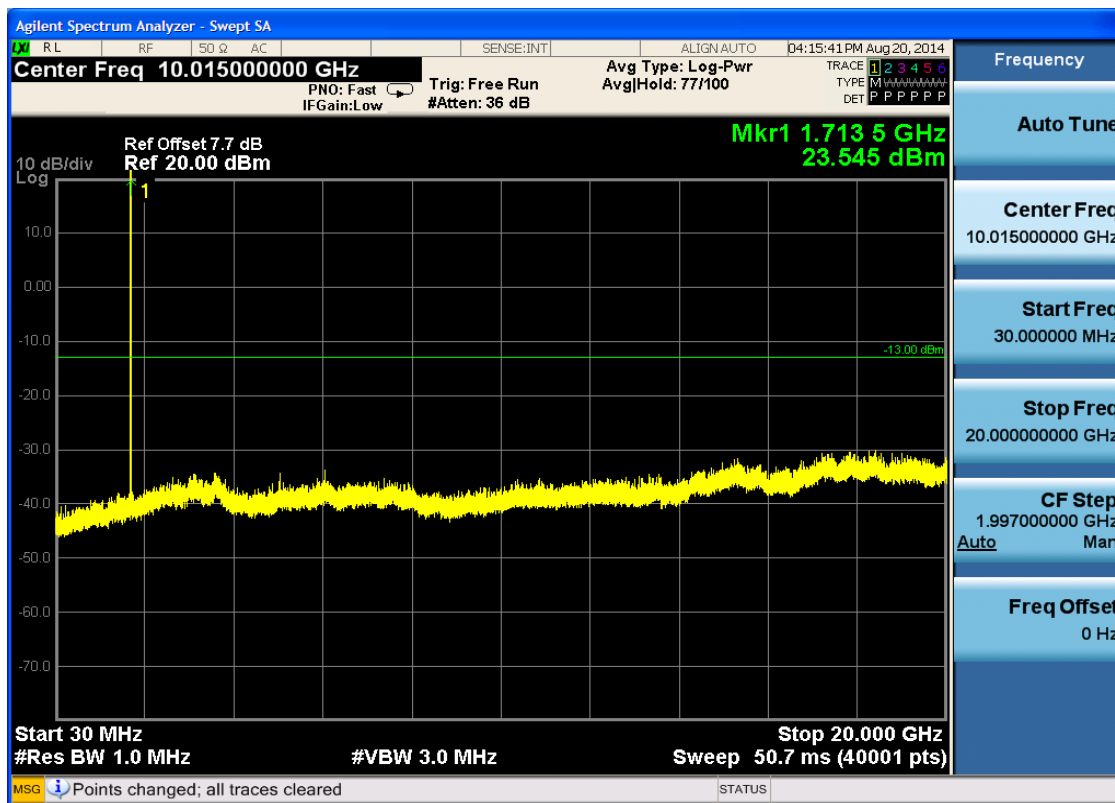
6.2.3 Test Band = WCDMA1700

6.2.3.1 Test Mode = UMTS/TM1

6.2.3.1.1 Test Channel = LCH

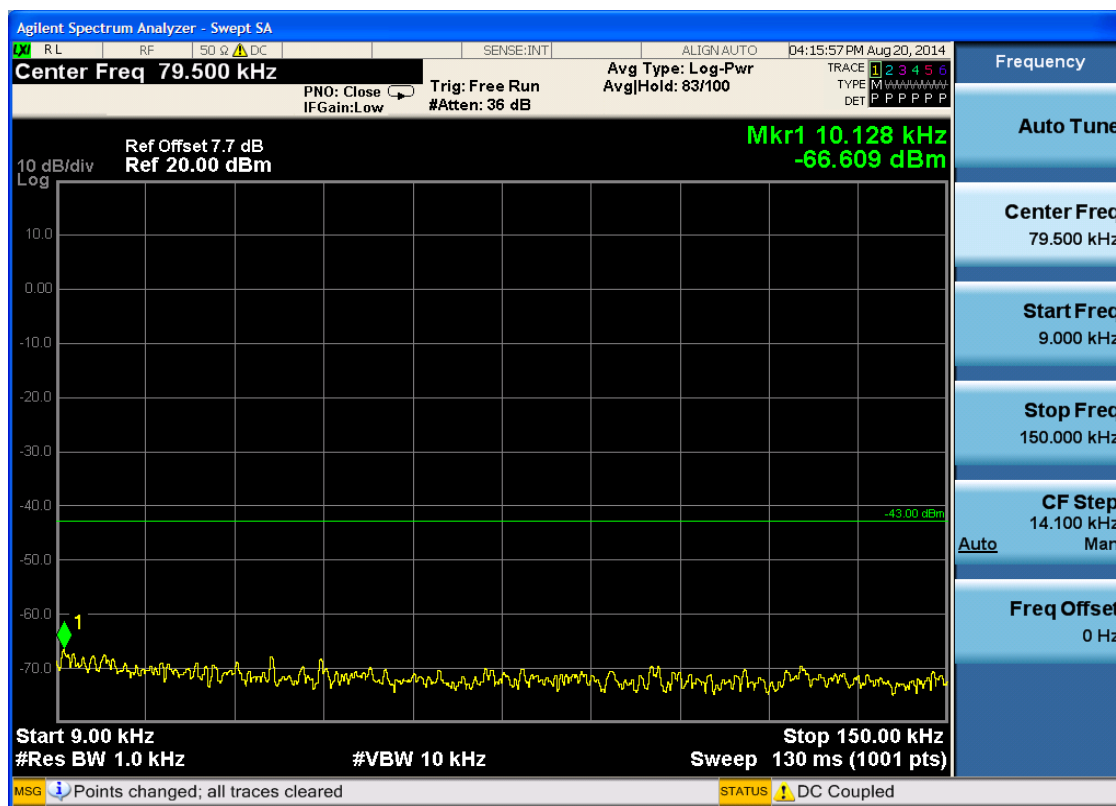


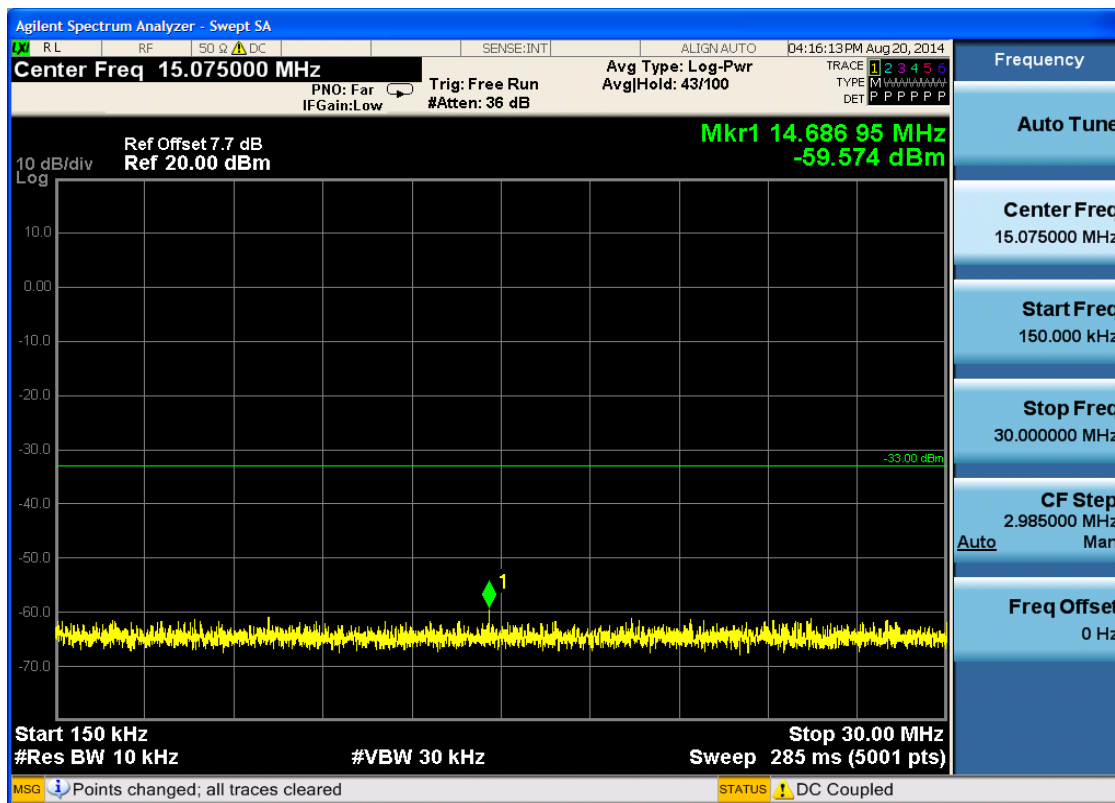


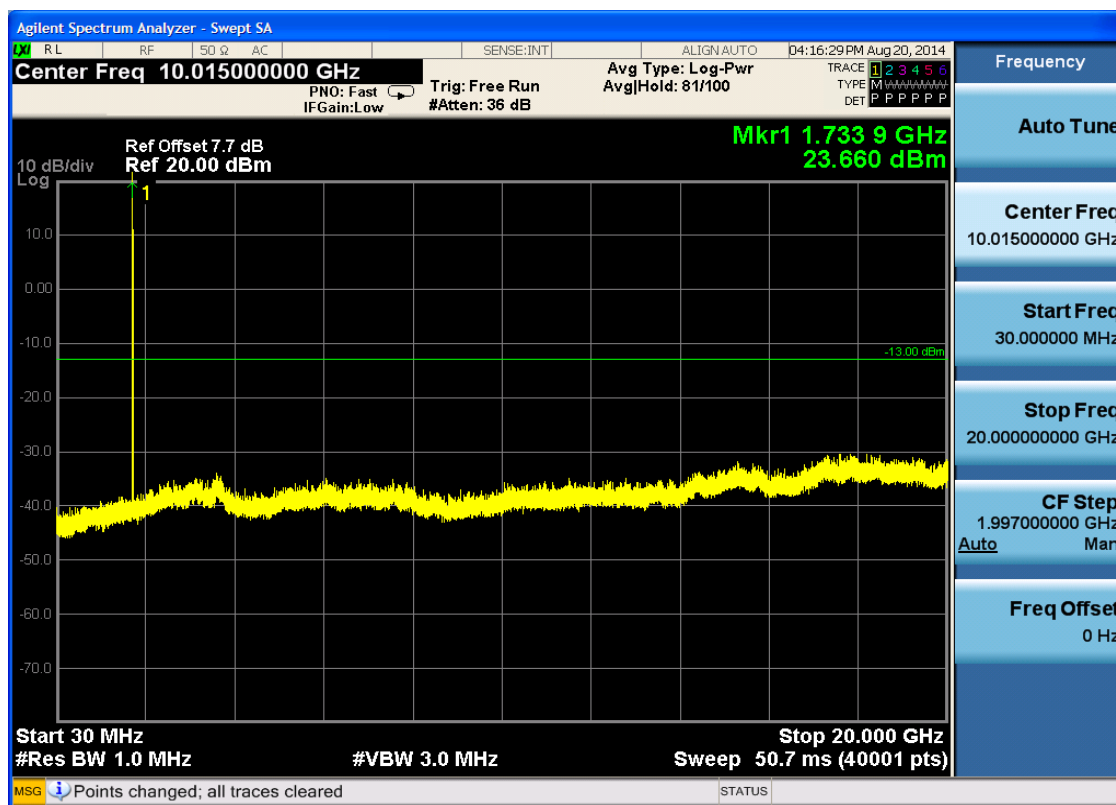




6.2.3.1.2 Test Channel = MCH

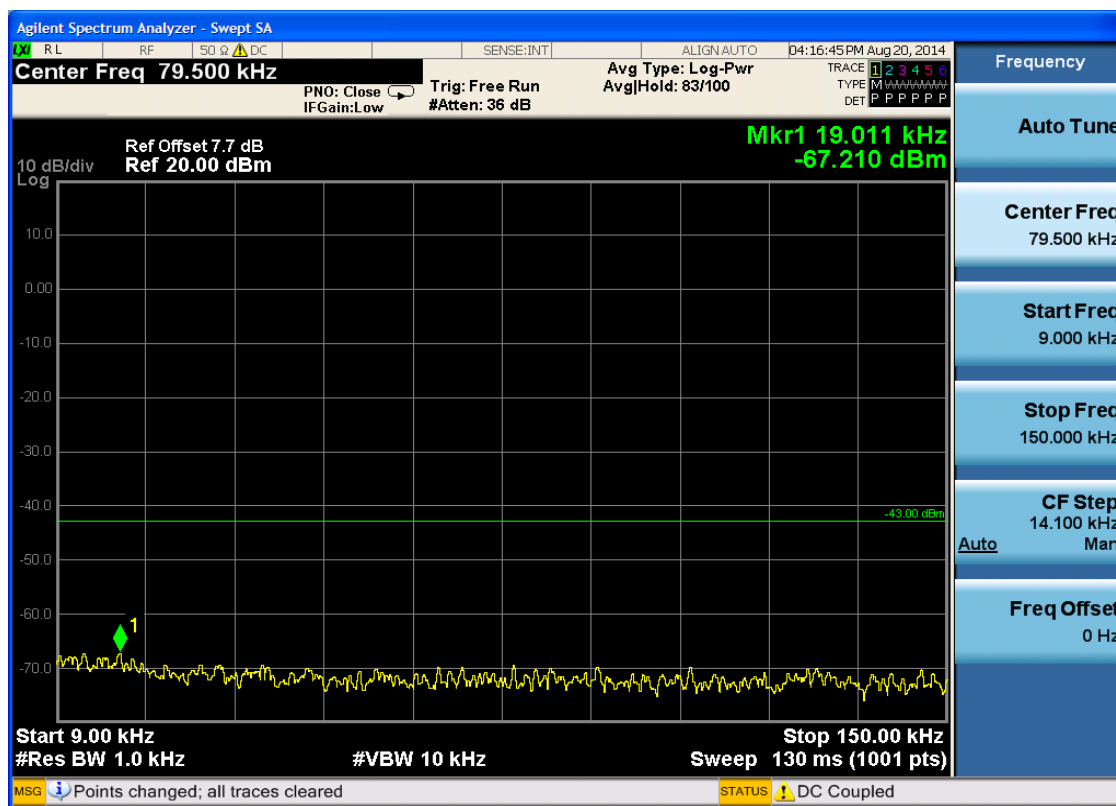


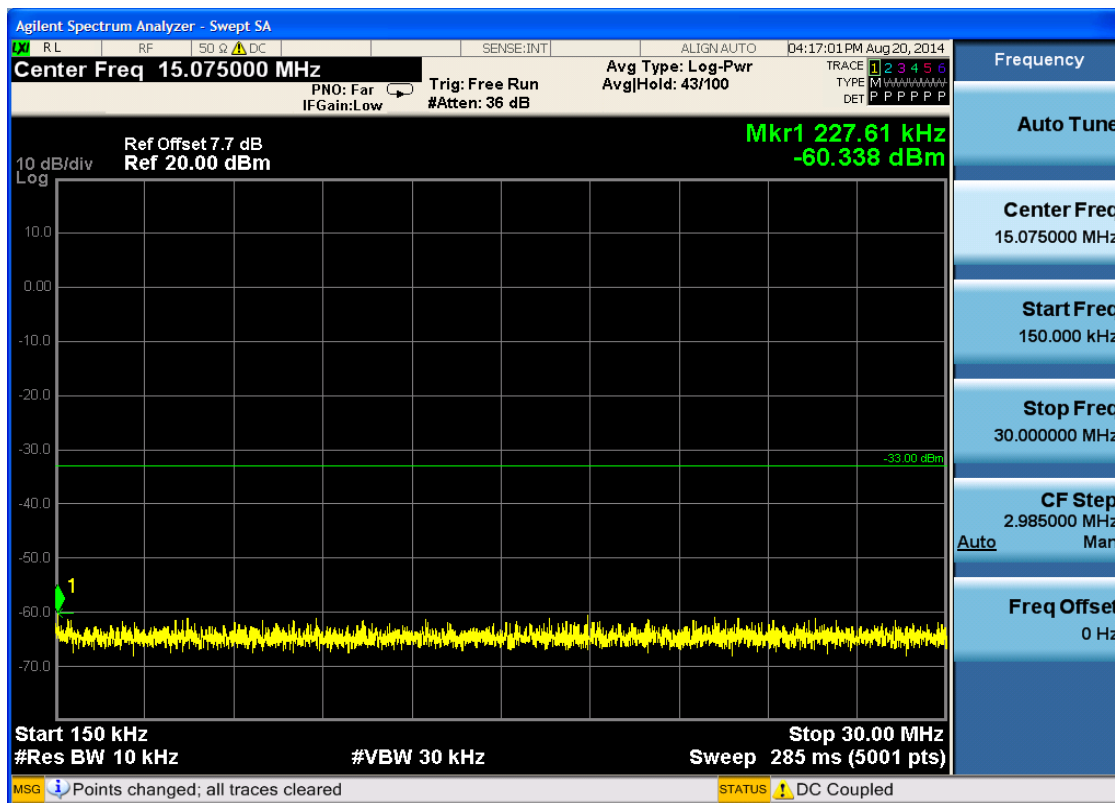


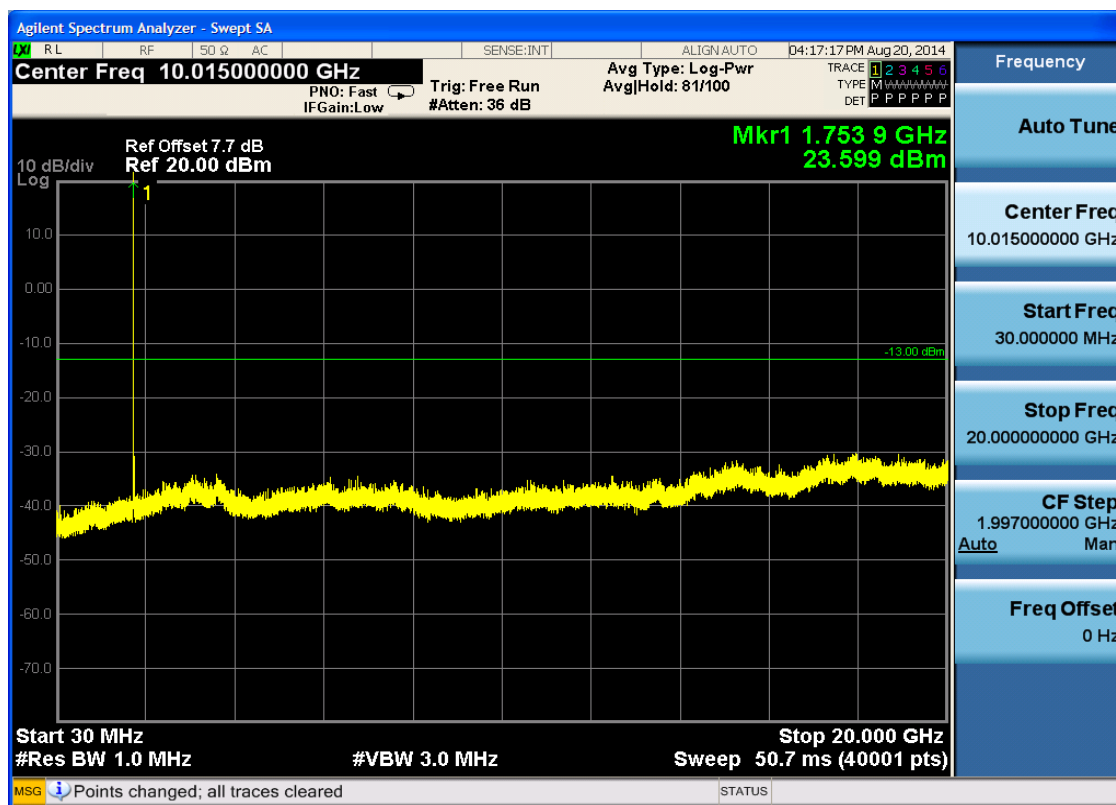




6.2.3.1.3 Test Channel = HCH







7Appendix_G: Field Strength of Spurious Radiation

Note:

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

150kHz~30MHz, VBW = 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

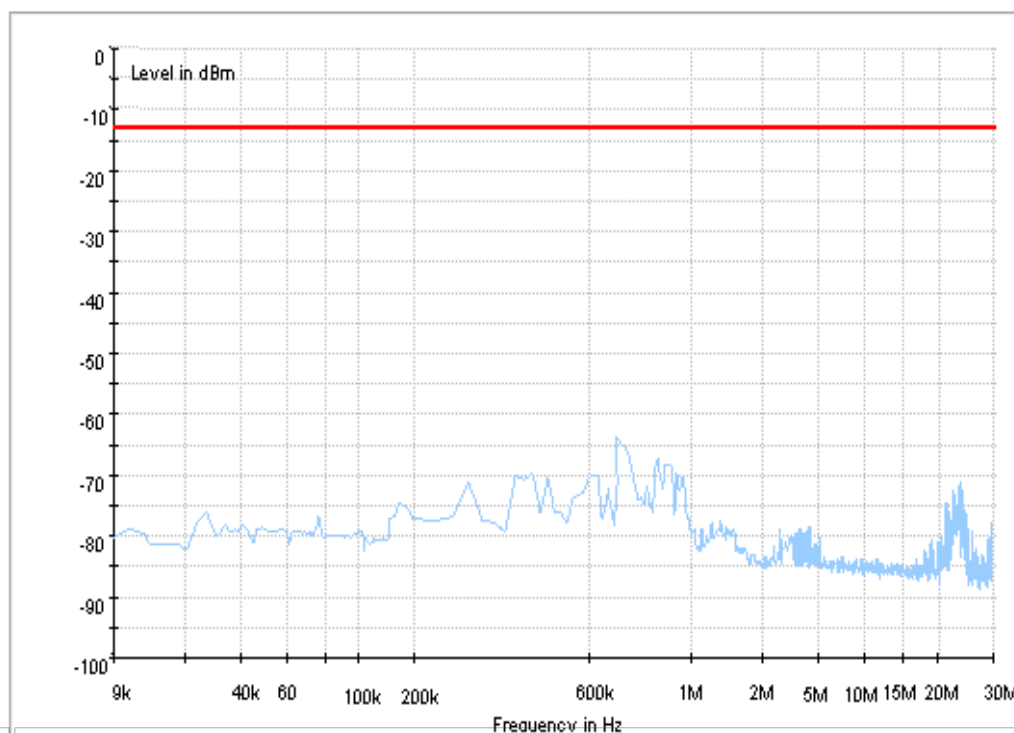
We tested all modes, but the data presented below is the worst case.

Part I - Test Plots

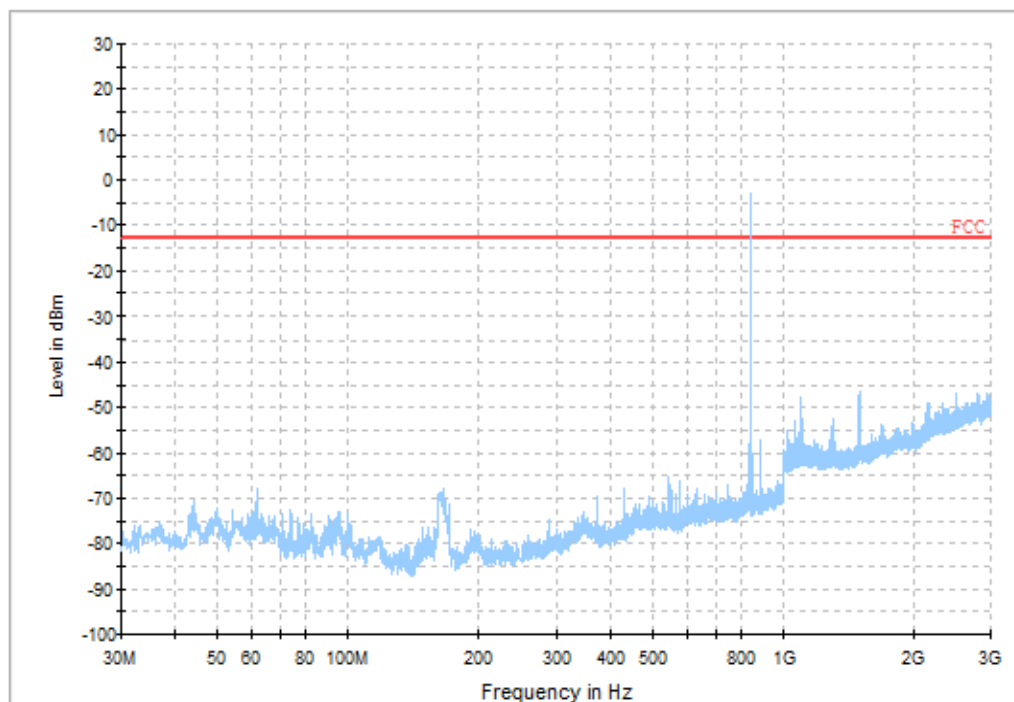
7.1 For GSM

7.1.1 Test Band = GSM850

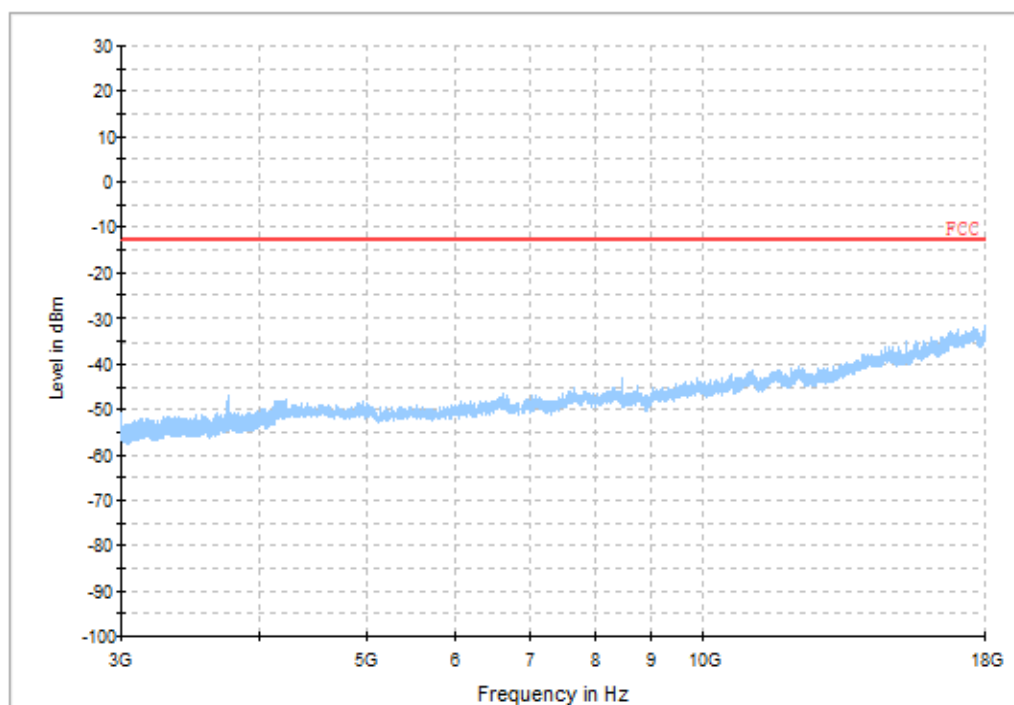
7.1.1.1 Test Mode = GSM/TM1



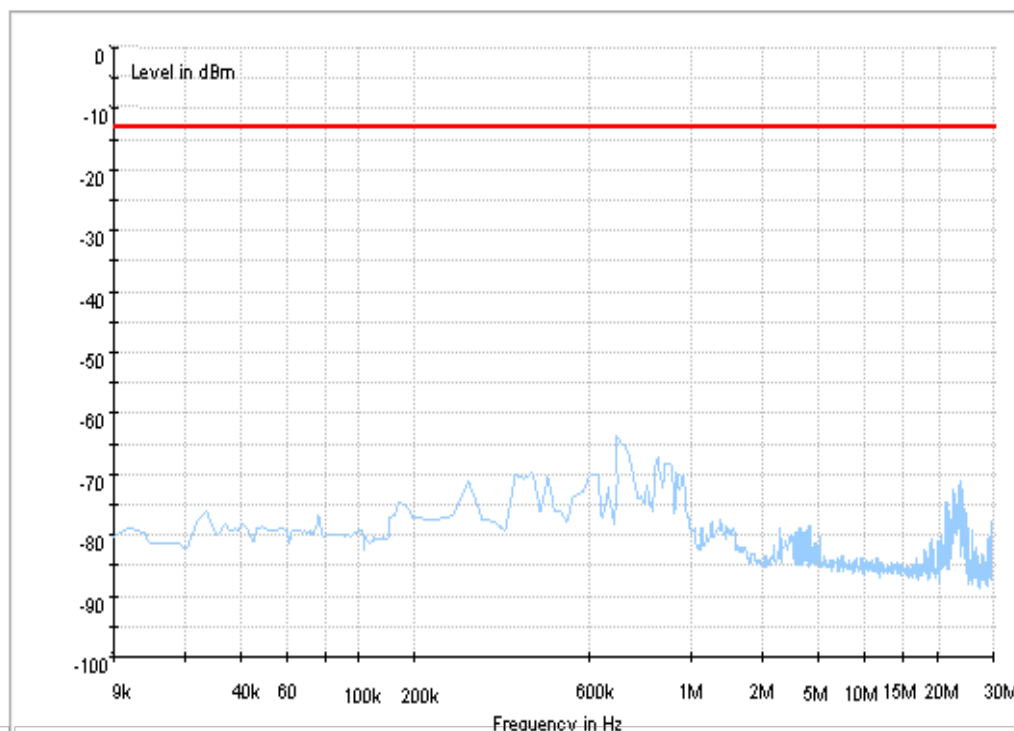
Copy of FCC PART22 GSM850_L



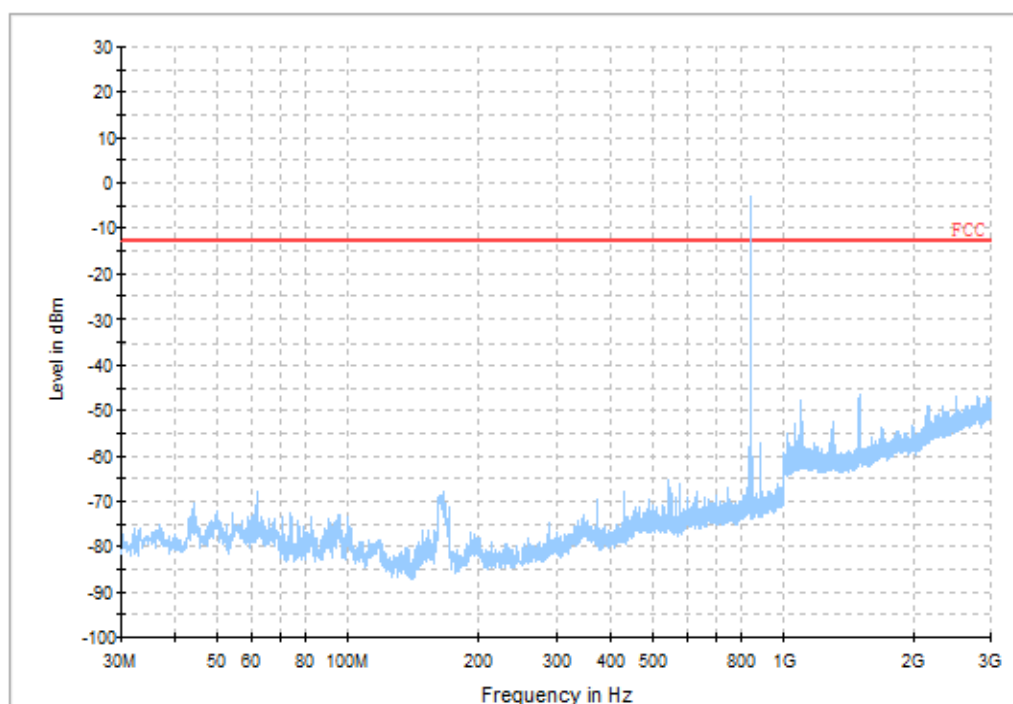
Copy of FCC PART22 GSM850_H



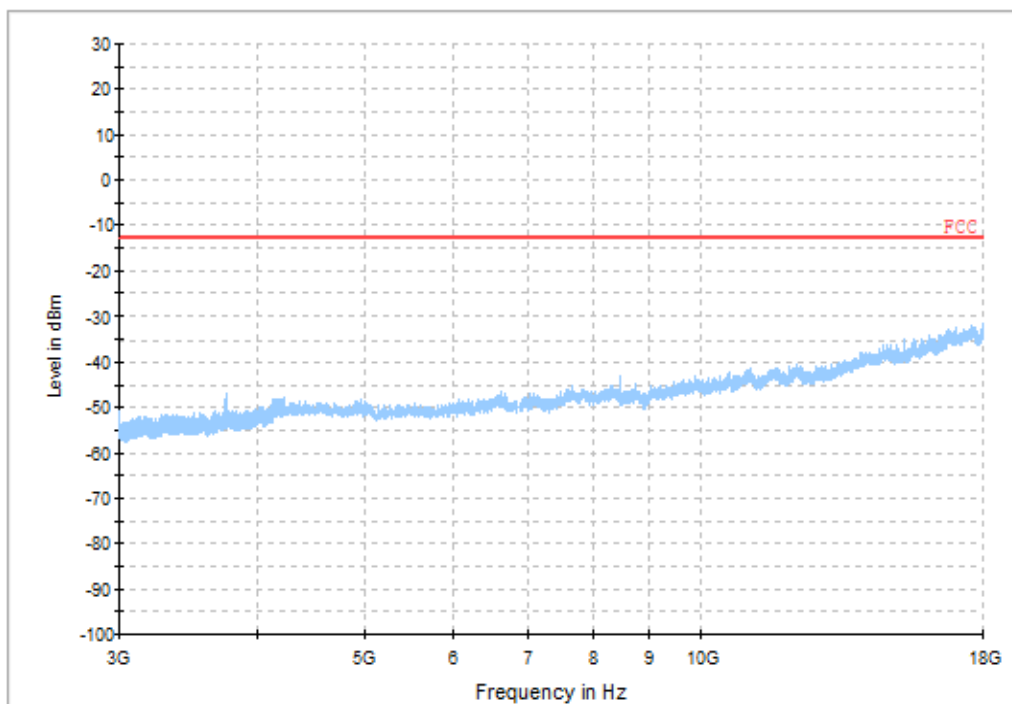
7.1.1.2 Test Mode = GSM/TM2



Copy of FCC PART22 GSM850_L

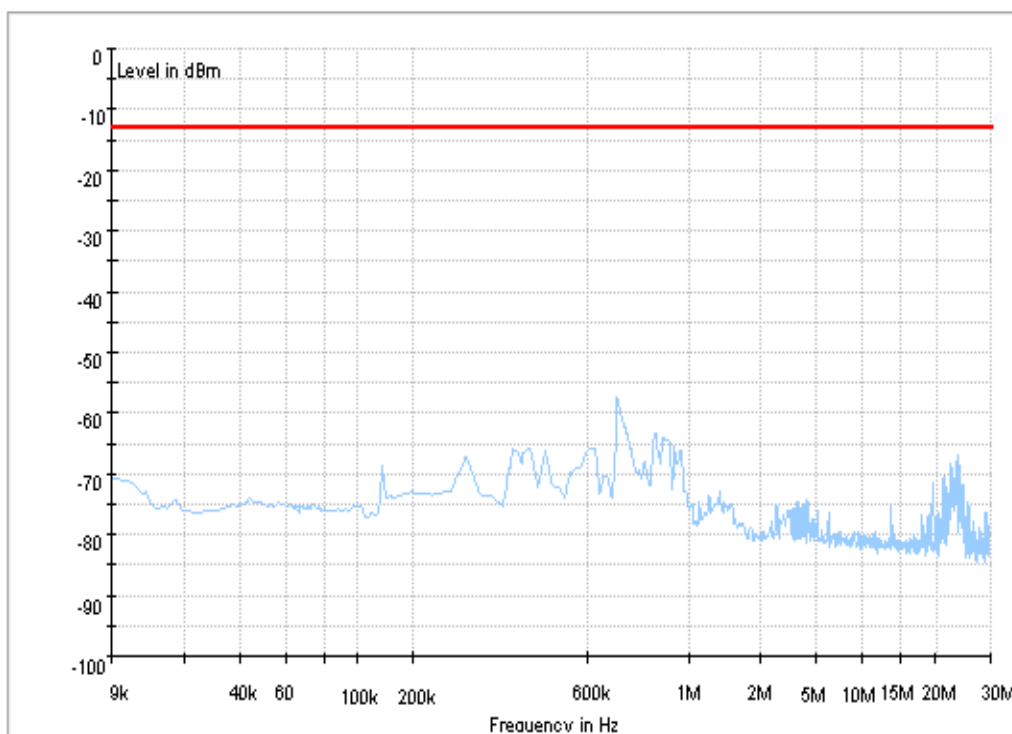


Copy of FCC PART22 GSM850_H

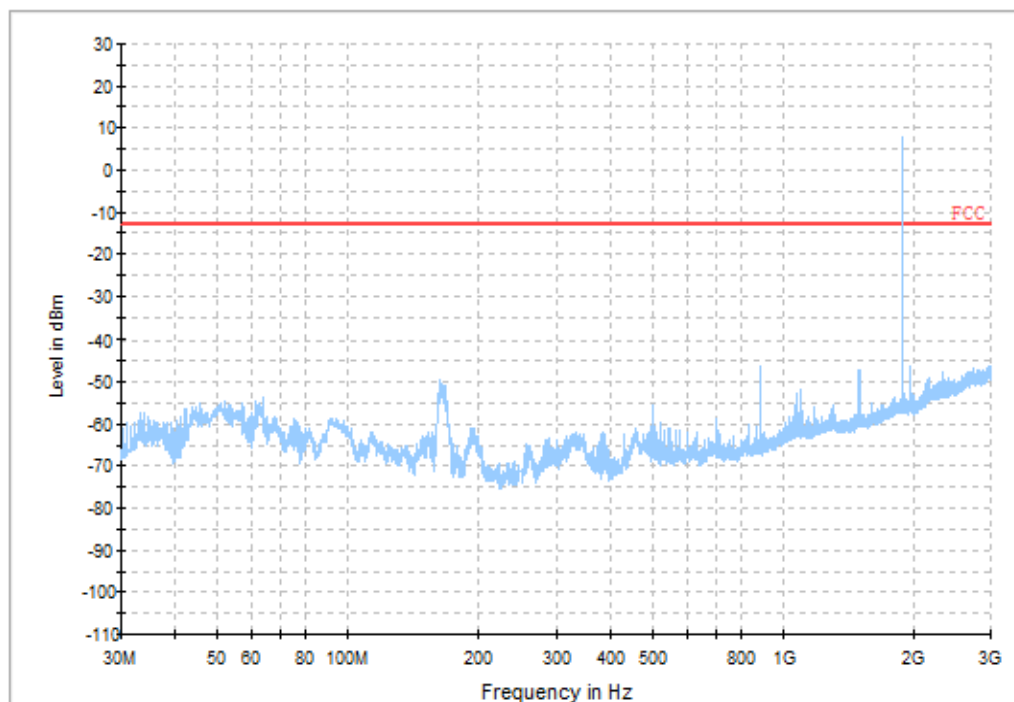


7.1.2 Test Band = GSM1900

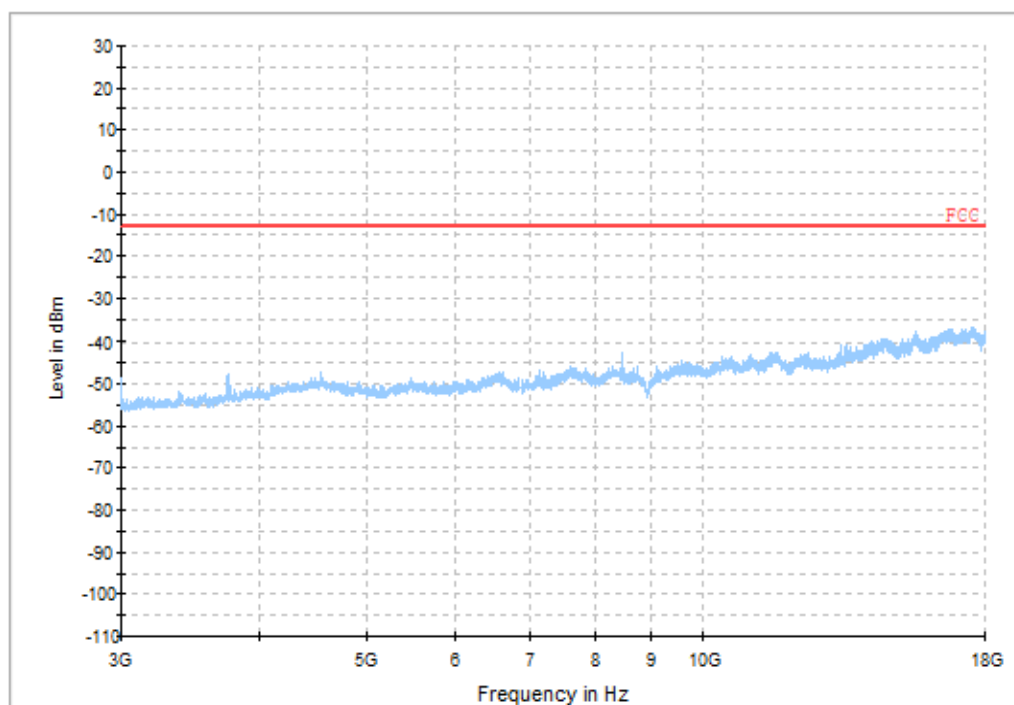
7.1.2.1 Test Mode = GSM/TM1

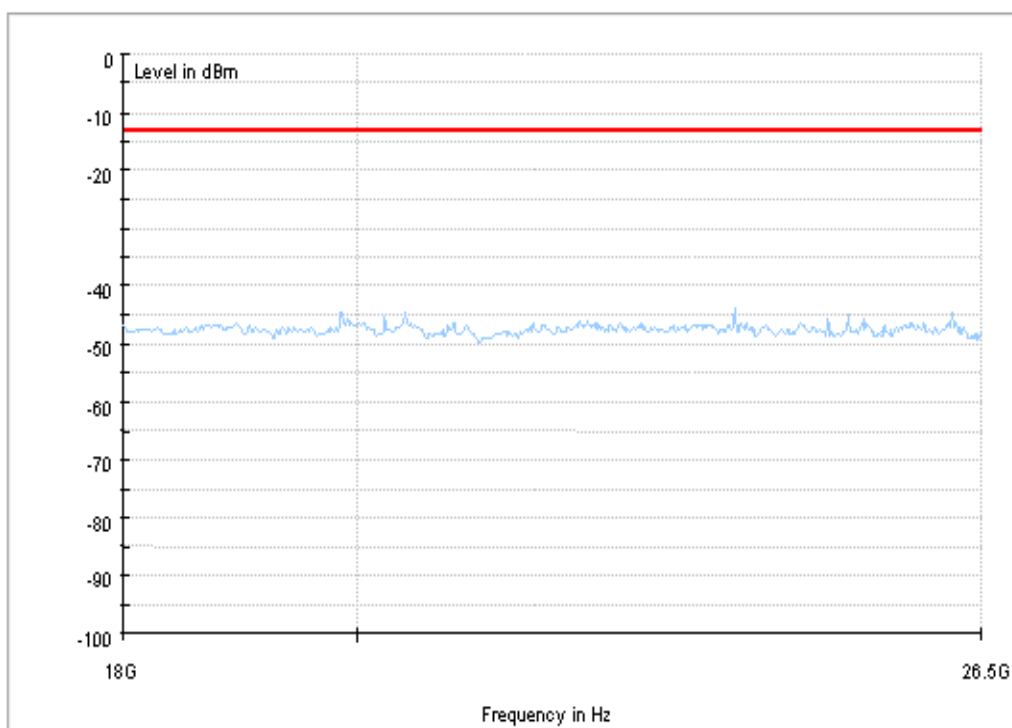


Copy of FCC PART24 GSM1900_L

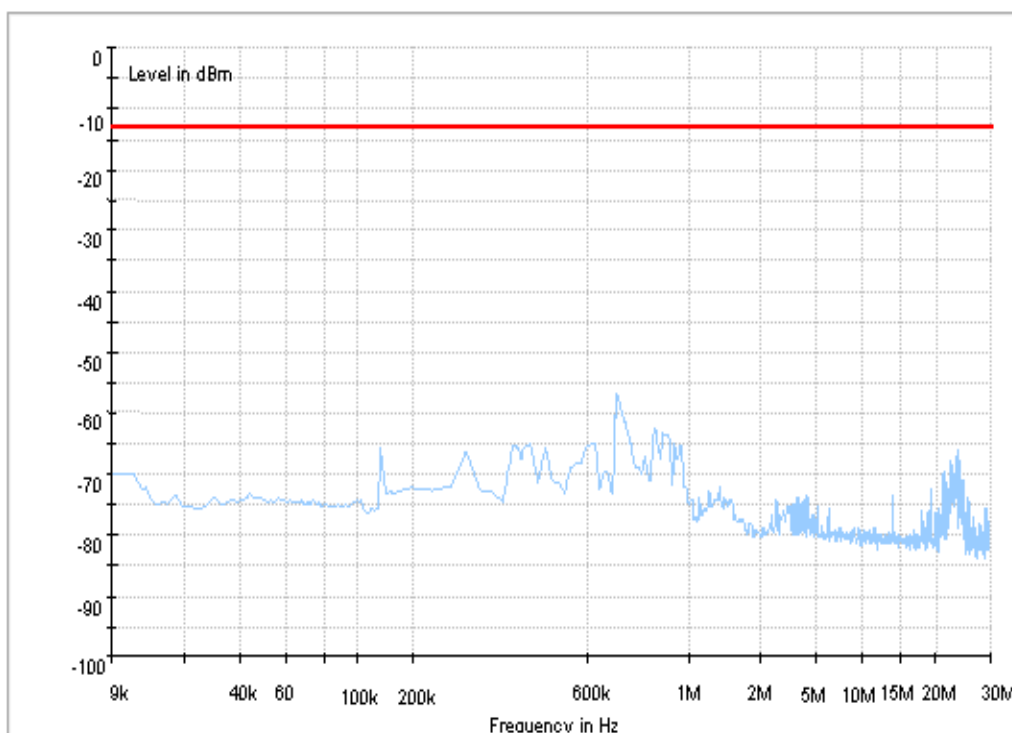


Copy of FCC PART24 GSM1900_H

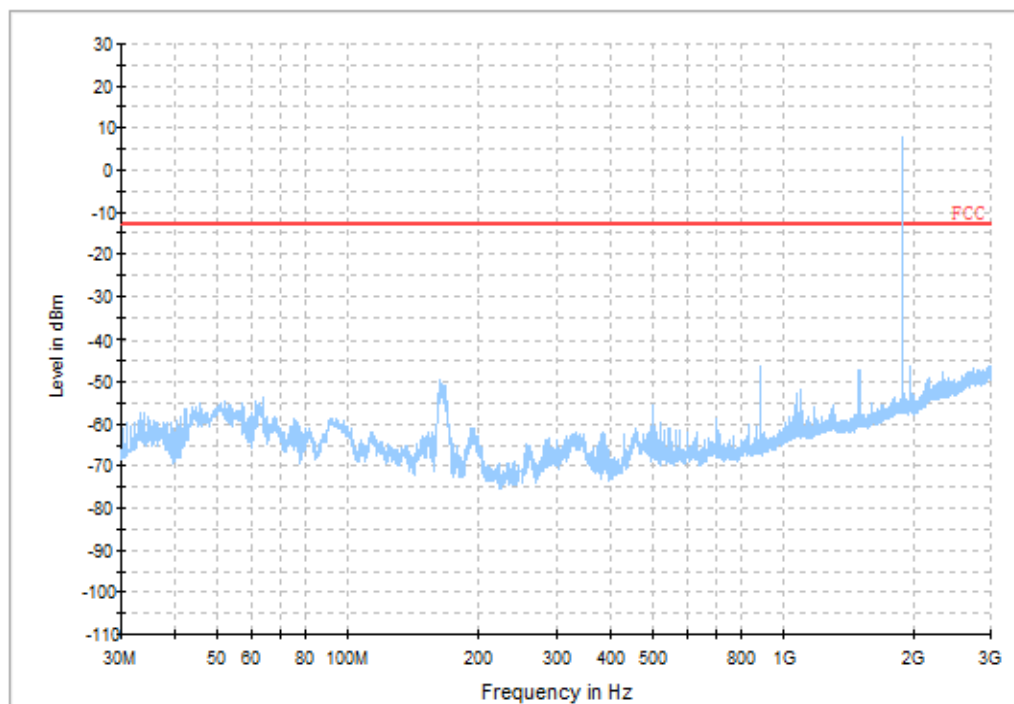




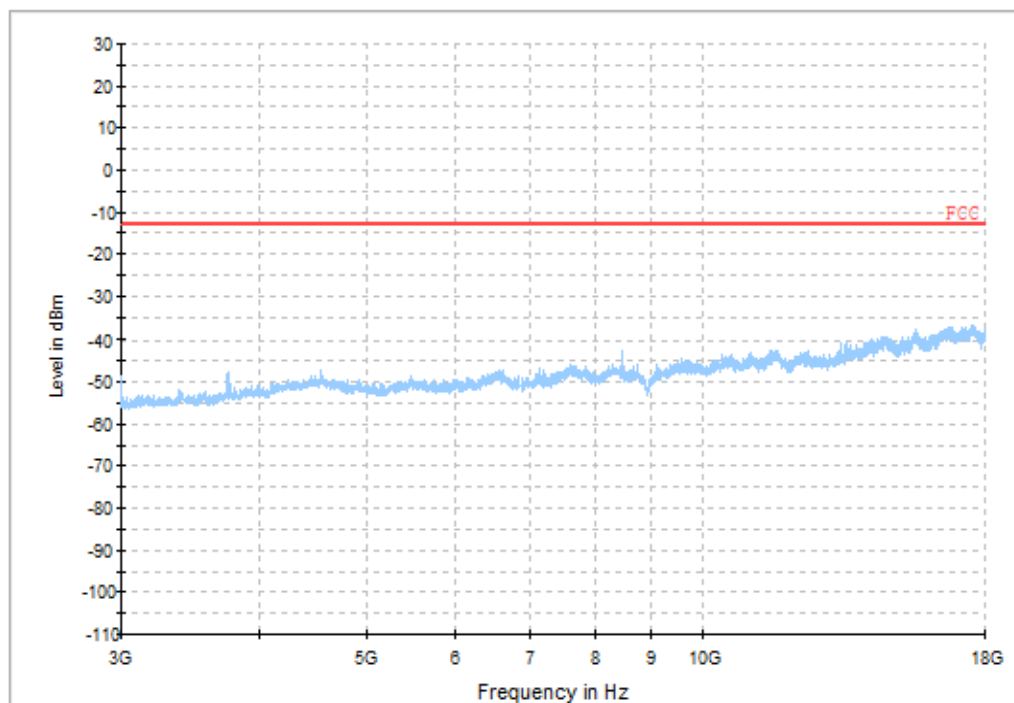
7.1.2.2 Test Mode = GSM/TM2

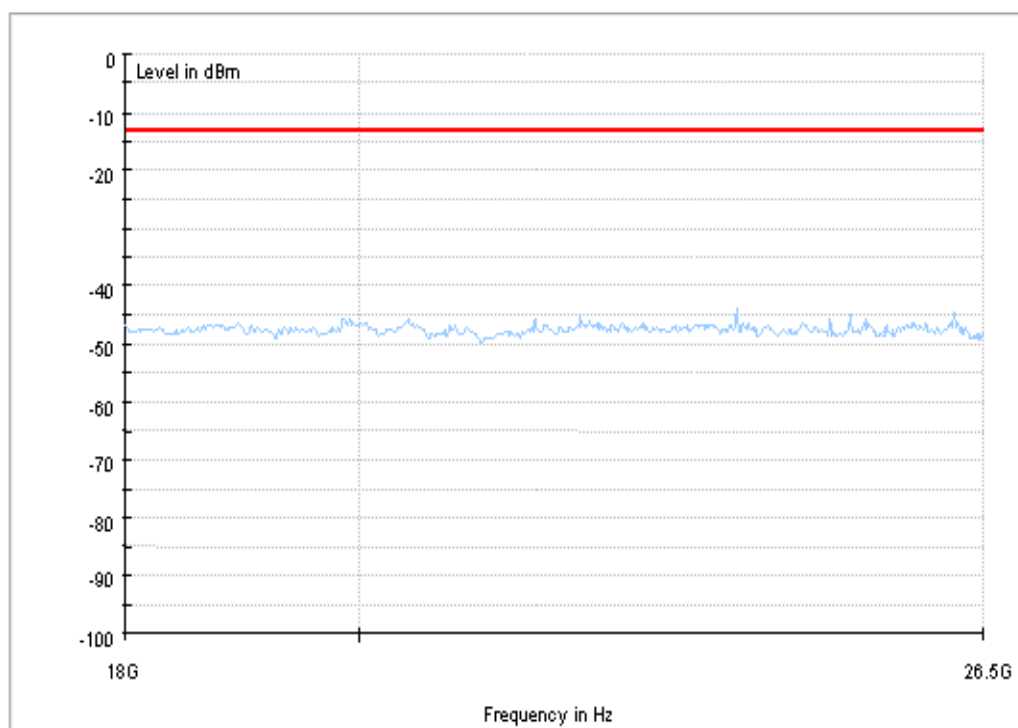


Copy of FCC PART24 GSM1900_L



Copy of FCC PART24 GSM1900_H

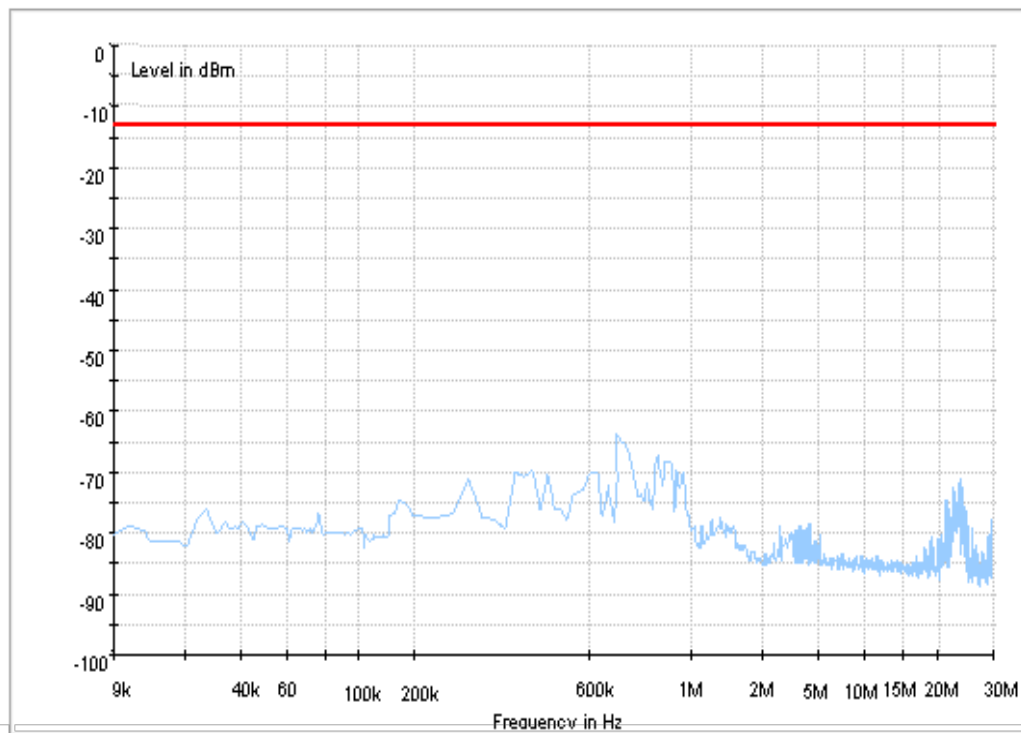




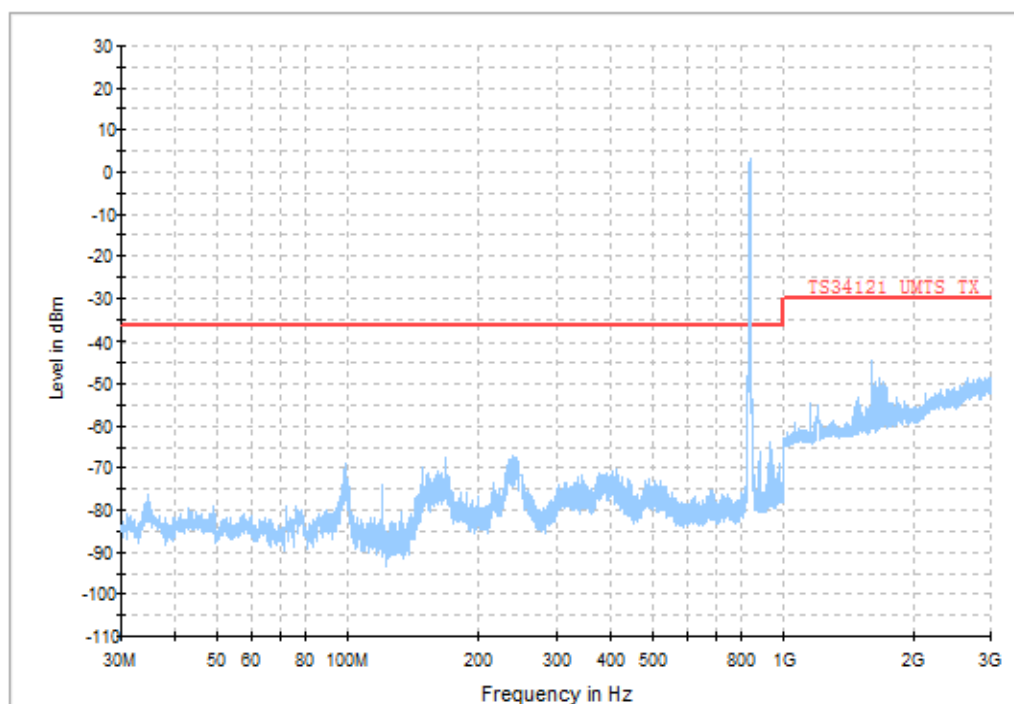
7.2 For UMTS

7.2.1 Test Band = WCDMA850

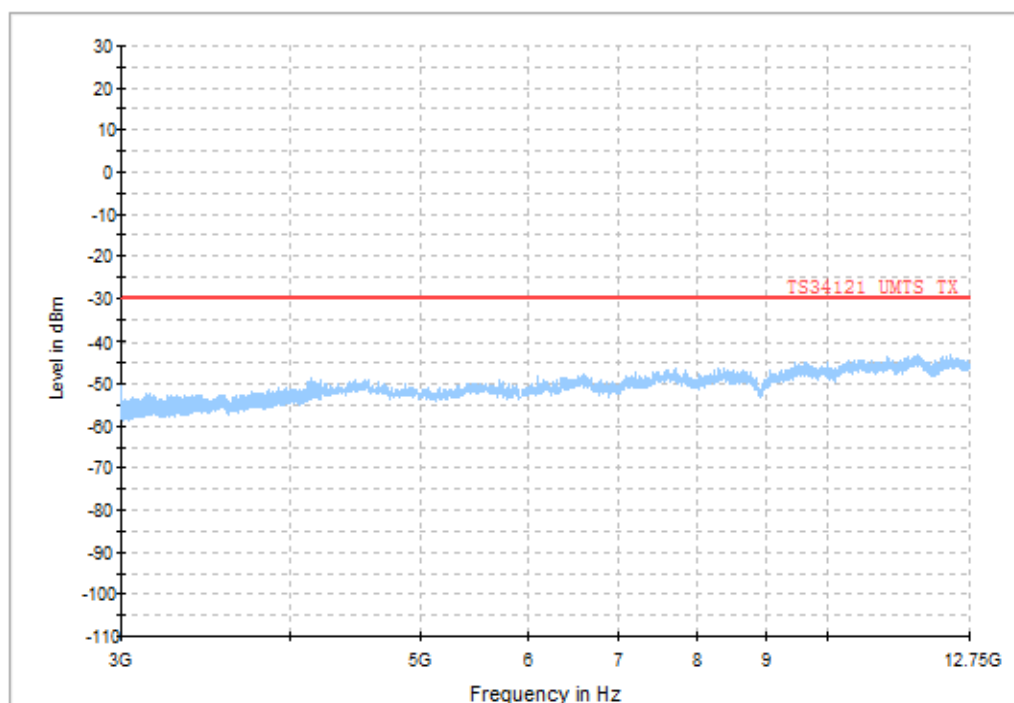
7.2.1.1 Test Mode = UMTS/TM1



Copy of RSE - TX - UMTS BAND V_L

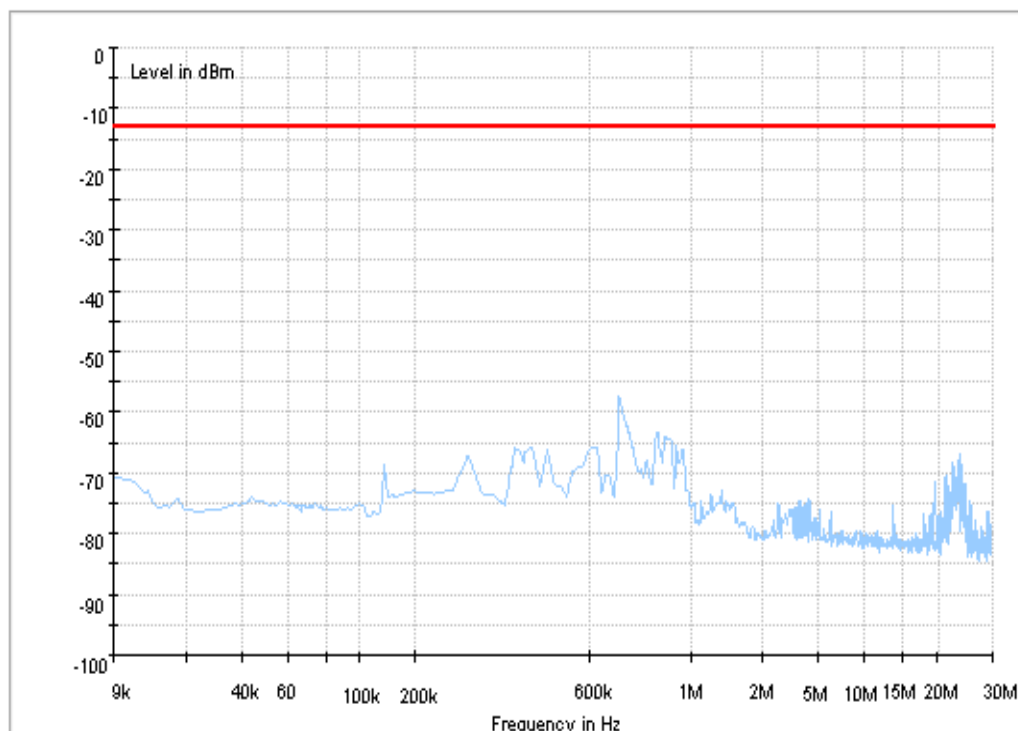


Copy of RSE - TX - UMTS BAND V_H

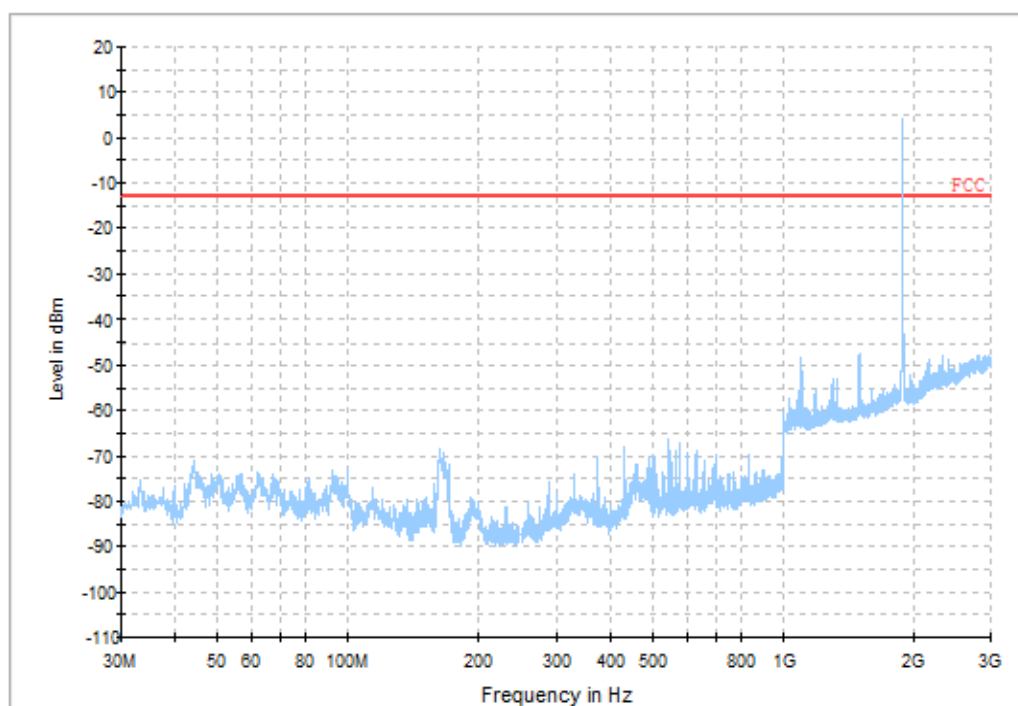


7.2.2 Test Band = WCDMA1900

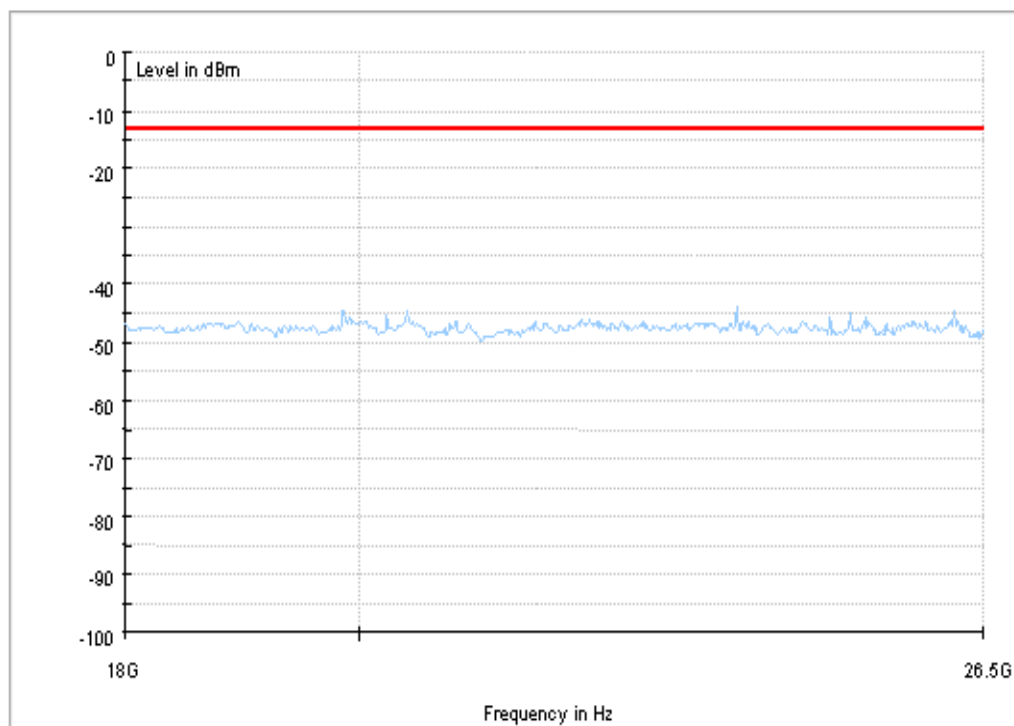
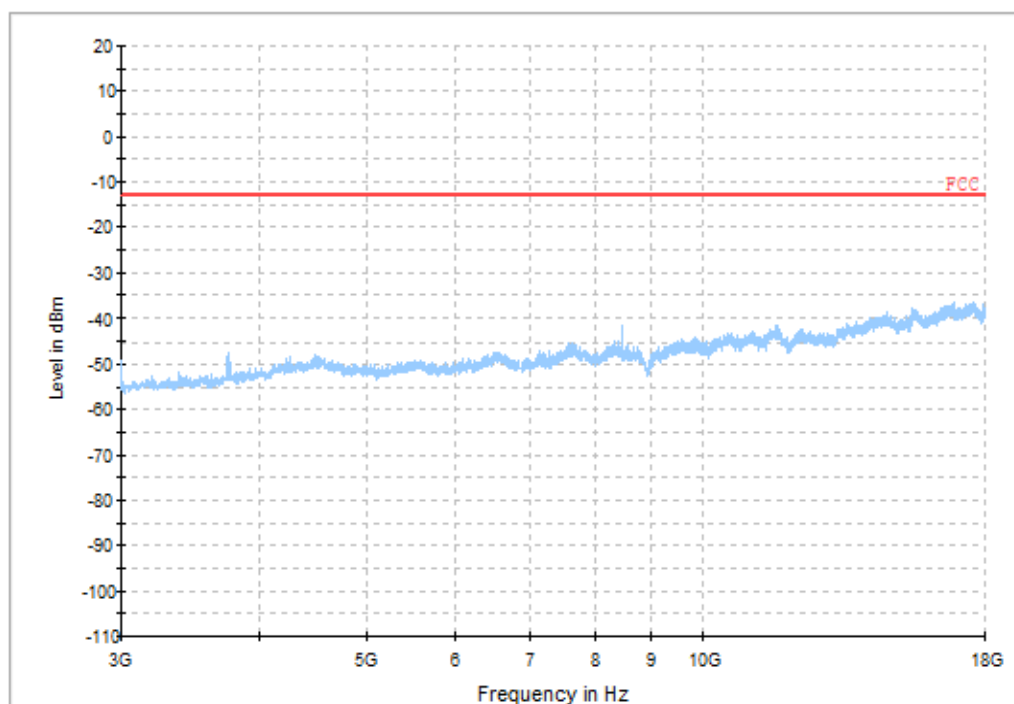
7.2.2.1 Test Mode = UMTS/TM1



Copy of FCC PART24 WCDMA1900_L

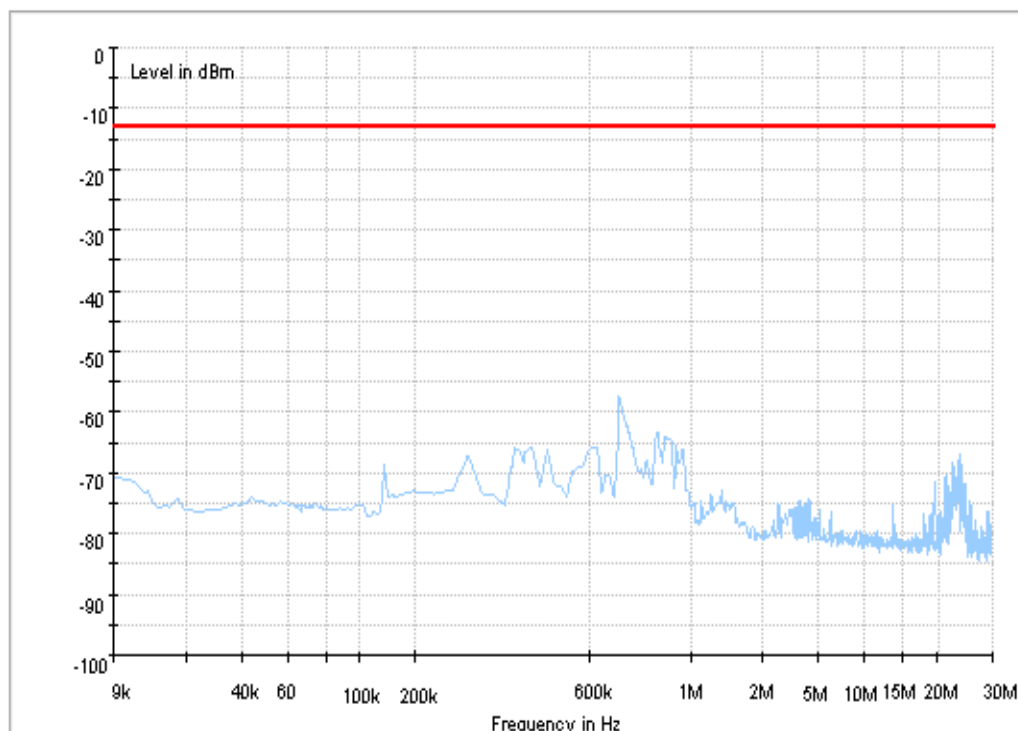


Copy of FCC PART24 WCDMA1900_H

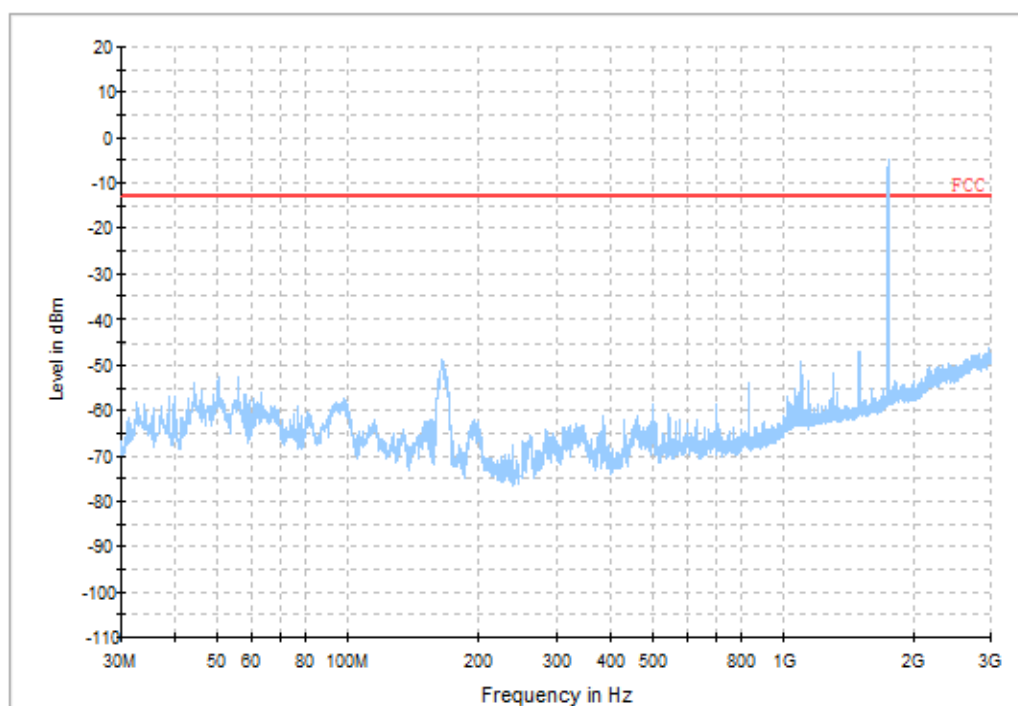


7.2.3 Test Band = WCDMA1700

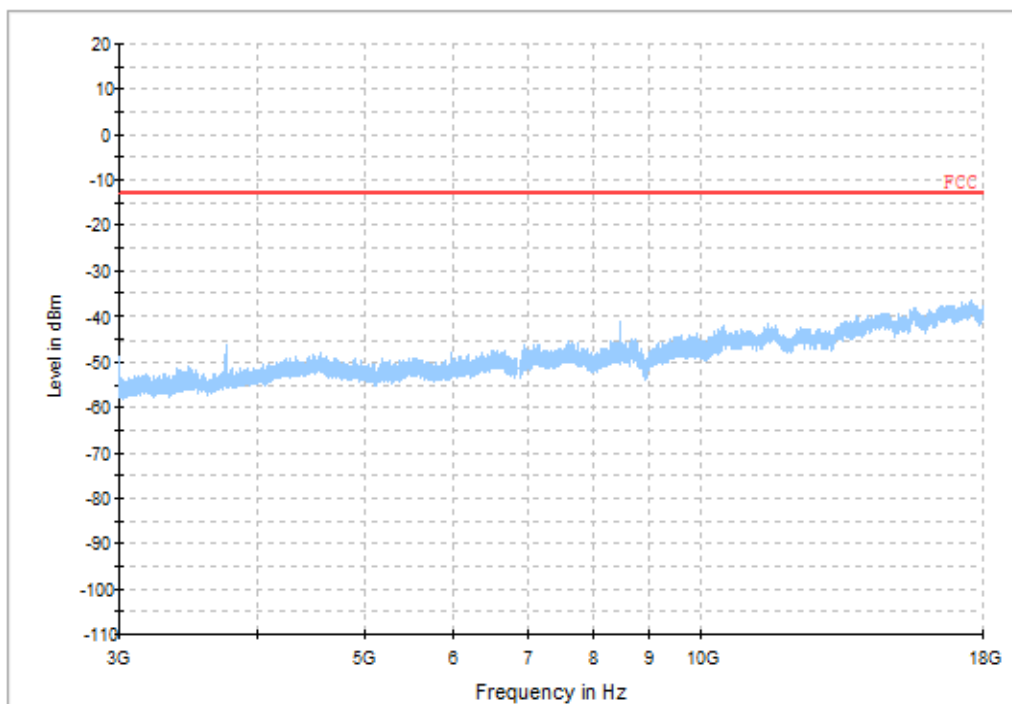
7.2.3.1 Test Mode = UMTS/TM1



Copy of FCC PART27 WCDMA1700_L



Copy of FCC PART27 WCDMA1700_H



8Appendix_H: Frequency Stability

8.1 For GSM

8.1.1Frequency Error vs. Voltage:

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM850	GSM/TM1	LCH	TN	VL	8.91	0.01081	PASS
				VN	4.39	0.00533	PASS
				VH	5.88	0.00713	PASS
		MCH	TN	VL	-4.84	-0.00579	PASS
				VN	0.26	0.00031	PASS
				VH	0.77	0.00092	PASS
		HCH	TN	VL	-2.65	-0.00312	PASS
				VN	2.26	0.00266	PASS
				VH	3.16	0.00372	PASS
	GSM/TM2	LCH	TN	VL	-4.39	-0.00533	PASS
				VN	-3.36	-0.00408	PASS
				VH	-6.36	-0.00772	PASS
		MCH	TN	VL	-2.55	-0.00305	PASS
				VN	-4.26	-0.00509	PASS
				VH	-7.52	-0.00899	PASS
		HCH	TN	VL	-4.39	-0.00517	PASS
				VN	-2.65	-0.00312	PASS
				VH	-6.88	-0.00811	PASS
GSM1900	GSM/TM1	LCH	TN	VL	-14.14	-0.00764	PASS
				VN	-19.05	-0.0103	PASS
				VH	-19.69	-0.01064	PASS
		MCH	TN	VL	-12.07	-0.00642	PASS
				VN	-19.44	-0.01034	PASS
				VH	-11.17	-0.00594	PASS
		HCH	TN	VL	-19.57	-0.01025	PASS
				VN	-8.72	-0.00457	PASS
				VH	-20.08	-0.01051	PASS
	GSM/TM2	LCH	TN	VL	-20.66	-0.01117	PASS
				VN	-20.73	-0.0112	PASS
				VH	-22.21	-0.012	PASS

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		MCH	TN	VL	-9.88	-0.00526	PASS
				VN	-12.59	-0.0067	PASS
				VH	-15.01	-0.00798	PASS
		HCH	TN	VL	-20.02	-0.01048	PASS
				VN	-16.98	-0.00889	PASS
				VH	-25.73	-0.01347	PASS

8.1.2 Frequency Error vs. Temperature:

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM850	GSM/TM1	LCH	VN	-30	4.52	0.00548	PASS
				-20	4.84	0.00587	PASS
				-10	2.45	0.00297	PASS
				0	8.27	0.01003	PASS
				10	9.94	0.01206	PASS
				20	5.49	0.00666	PASS
				30	7.94	0.00963	PASS
				40	8.01	0.00972	PASS
				50	6.72	0.00815	PASS
		MCH	VN	-30	2.26	0.0027	PASS
				-20	6.39	0.00764	PASS
				-10	-2.07	-0.00247	PASS
				0	5.42	0.00648	PASS
				10	2.91	0.00348	PASS
				20	4.33	0.00518	PASS
				30	2.26	0.0027	PASS
				40	4.58	0.00547	PASS
				50	5.04	0.00602	PASS
		HCH	VN	-30	1.68	0.00198	PASS
				-20	-1.81	-0.00213	PASS
				-10	-1.1	-0.0013	PASS
				0	-2.26	-0.00266	PASS
				10	-1.94	-0.00229	PASS
				20	1.94	0.00229	PASS
				30	-6.84	-0.00806	PASS
				40	-1.03	-0.00121	PASS
				50	-1.68	-0.00198	PASS
	GSM/TM2	LCH	VN	-30	-7.01	-0.00851	PASS
				-20	-2.03	-0.00246	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
				-10	-10.91	-0.01324	PASS
				0	-6.3	-0.00764	PASS
				10	-4.58	-0.00556	PASS
				20	-3.45	-0.00419	PASS
				30	-6.26	-0.0076	PASS
				40	-7.52	-0.00912	PASS
				50	-6.94	-0.00842	PASS
		MCH	VN	-30	-9.36	-0.01119	PASS
				-20	-4.52	-0.0054	PASS
				-10	-6.3	-0.00753	PASS
				0	-8.36	-0.00999	PASS
				10	-4.84	-0.00579	PASS
				20	-5.29	-0.00632	PASS
				30	-12.75	-0.01524	PASS
				40	-7.68	-0.00918	PASS
				50	-4.75	-0.00568	PASS
		HCH	VN	-30	-7.75	-0.00913	PASS
				-20	-3.65	-0.0043	PASS
				-10	-7.49	-0.00882	PASS
				0	-2.65	-0.00312	PASS
				10	-7.46	-0.00879	PASS
				20	-7.07	-0.00833	PASS
				30	-0.06	-0.00007	PASS
				40	-4.84	-0.0057	PASS
				50	-7.04	-0.00829	PASS
GSM1900	GSM/TM1	LCH	VN	-30	-18.4	-0.00994	PASS
				-20	-3.16	-0.00171	PASS
				-10	-5.49	-0.00297	PASS
				0	-18.08	-0.00977	PASS
				10	-18.73	-0.01012	PASS
				20	-15.3	-0.00827	PASS
				30	-18.02	-0.00974	PASS
				40	-12.53	-0.00677	PASS
				50	-16.01	-0.00865	PASS
		MCH	VN	-30	-17.63	-0.00938	PASS
				-20	-17.43	-0.00927	PASS
				-10	-15.76	-0.00838	PASS
				0	-23.05	-0.01226	PASS
				10	-6.97	-0.00371	PASS
				20	-13.62	-0.00724	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
				30	-23.83	-0.01268	PASS
				40	-10.72	-0.0057	PASS
				50	-22.6	-0.01202	PASS
		HCH	VN	-30	-23.76	-0.01244	PASS
				-20	-16.98	-0.00889	PASS
				-10	-25.31	-0.01325	PASS
				0	-11.75	-0.00615	PASS
				10	-13.11	-0.00686	PASS
				20	-15.37	-0.00805	PASS
				30	-12.72	-0.00666	PASS
				40	-11.24	-0.00589	PASS
				50	-19.69	-0.01031	PASS
	GSM/TM2	LCH	VN	-30	-18.21	-0.00984	PASS
				-20	-9.46	-0.00511	PASS
				-10	-20.21	-0.01092	PASS
				0	-9.85	-0.00532	PASS
				10	-5.75	-0.00311	PASS
				20	-24.09	-0.01302	PASS
				30	-14.3	-0.00773	PASS
				40	-15.27	-0.00825	PASS
				50	-22.21	-0.012	PASS
		MCH	VN	-30	-14.33	-0.00762	PASS
				-20	-11.2	-0.00596	PASS
				-10	-16.95	-0.00902	PASS
				0	-16.18	-0.00861	PASS
				10	-12.2	-0.00649	PASS
				20	-11.98	-0.00637	PASS
				30	-14.98	-0.00797	PASS
				40	-22.12	-0.01177	PASS
				50	-20.21	-0.01075	PASS
		HCH	VN	-30	-24.5	-0.01283	PASS
				-20	-26.09	-0.01366	PASS
				-10	-23.7	-0.01241	PASS
				0	-21.73	-0.01138	PASS
				10	-24.34	-0.01274	PASS
				20	-27.8	-0.01456	PASS
				30	-14.59	-0.00764	PASS
				40	-15.69	-0.00822	PASS
				50	-19.15	-0.01003	PASS

8.2 For UMTS

8.2.1 Frequency Error vs. Voltage:

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
WCDMA850	UMTS/TM1	LCH	TN	VL	1.79	0.00217	PASS
				VN	0.58	0.0007	PASS
				VH	-1.51	-0.00183	PASS
		MCH	TN	VL	-0.79	-0.00094	PASS
				VN	0.98	0.00117	PASS
				VH	4.07	0.00487	PASS
		HCH	TN	VL	-1.85	-0.00219	PASS
				VN	2.32	0.00274	PASS
				VH	-0.63	-0.00074	PASS
WCDMA1900	UMTS/TM1	LCH	TN	VL	-5.89	-0.00318	PASS
				VN	-6.96	-0.00376	PASS
				VH	-4.76	-0.00257	PASS
		MCH	TN	VL	-8.76	-0.00466	PASS
				VN	-3.65	-0.00194	PASS
				VH	-3.22	-0.00171	PASS
		HCH	TN	VL	-6.26	-0.00328	PASS
				VN	-8.36	-0.00438	PASS
				VH	-5.63	-0.00295	PASS
WCDMA1700	UMTS/TM1	LCH	TN	VL	3.49	0.00204	PASS
				VN	0.55	0.00032	PASS
				VH	5.91	0.00345	PASS
		MCH	TN	VL	8.42	0.00486	PASS
				VN	4.9	0.00283	PASS
				VH	2.27	0.00131	PASS
		HCH	TN	VL	-8.85	-0.00505	PASS
				VN	-8.06	-0.0046	PASS
				VH	-8.45	-0.00482	PASS

8.2.2 Frequency Error vs. Temperature:

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
WCDMA850	UMTS/TM1	LCH	VN	-30	0.37	0.00045	PASS
				-20	2.91	0.00352	PASS
				-10	-1.27	-0.00154	PASS
				0	0.52	0.00063	PASS
				10	0.15	0.00018	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
				20	2.53	0.00306	PASS
				30	1.02	0.00123	PASS
				40	-2.09	-0.00253	PASS
				50	1.79	0.00217	PASS
		MCH	VN	-30	0.6	0.00072	PASS
				-20	-1.37	-0.00164	PASS
				-10	0.2	0.00024	PASS
				0	1.28	0.00153	PASS
				10	-0.78	-0.00093	PASS
				20	0.81	0.00097	PASS
				30	1.66	0.00198	PASS
				40	0.18	0.00022	PASS
				50	0.56	0.00067	PASS
		HCH	VN	-30	-0.75	-0.00089	PASS
				-20	-0.85	-0.001	PASS
				-10	-0.29	-0.00034	PASS
				0	-0.72	-0.00085	PASS
				10	-1.77	-0.00209	PASS
				20	0.17	0.0002	PASS
				30	-1.24	-0.00146	PASS
				40	-1.28	-0.00151	PASS
				50	-3.8	-0.00449	PASS
WCDMA1900	UMTS/TM1	LCH	VN	-30	-3.19	-0.00172	PASS
				-20	-6.12	-0.0033	PASS
				-10	-3.63	-0.00196	PASS
				0	-5.08	-0.00274	PASS
				10	-3.92	-0.00212	PASS
				20	-4.88	-0.00263	PASS
				30	-1.54	-0.00083	PASS
				40	-6.58	-0.00355	PASS
				50	-5.83	-0.00315	PASS
		MCH	VN	-30	-6.77	-0.0036	PASS
				-20	-4.58	-0.00244	PASS
				-10	-4.55	-0.00242	PASS
				0	-8.36	-0.00445	PASS
				10	-4.46	-0.00237	PASS
				20	-4.85	-0.00258	PASS
				30	-6.39	-0.0034	PASS
				40	-7.52	-0.004	PASS
				50	-4.82	-0.00256	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		HCH	VN	-30	-9.09	-0.00477	PASS
				-20	-5.22	-0.00274	PASS
				-10	-8.87	-0.00465	PASS
				0	-8.87	-0.00465	PASS
				10	-5.16	-0.0027	PASS
				20	-8.12	-0.00426	PASS
				30	-7.25	-0.0038	PASS
				40	-5.34	-0.0028	PASS
				50	-7.68	-0.00403	PASS
WCDMA1700	UMTS/TM1	LCH	VN	-30	3.19	0.00186	PASS
				-20	2.56	0.00149	PASS
				-10	-0.03	-0.00002	PASS
				0	3.14	0.00183	PASS
				10	-1.27	-0.00074	PASS
				20	-0.37	-0.00022	PASS
				30	0.92	0.00054	PASS
				40	0.31	0.00018	PASS
				50	1.33	0.00078	PASS
		MCH	VN	-30	6.79	0.00392	PASS
				-20	2.46	0.00142	PASS
				-10	2.91	0.00168	PASS
				0	4.43	0.00256	PASS
				10	0.26	0.00015	PASS
				20	2.46	0.00142	PASS
				30	4.59	0.00265	PASS
				40	5.45	0.00315	PASS
				50	4.76	0.00275	PASS
		HCH	VN	-30	-7.28	-0.00415	PASS
				-20	-12.86	-0.00734	PASS
				-10	-7.77	-0.00443	PASS
				0	-7.02	-0.00401	PASS
				10	-7.89	-0.0045	PASS
				20	-2.58	-0.00147	PASS
				30	-7.22	-0.00412	PASS
				40	-7.34	-0.00419	PASS
				50	-5.95	-0.00339	PASS

END