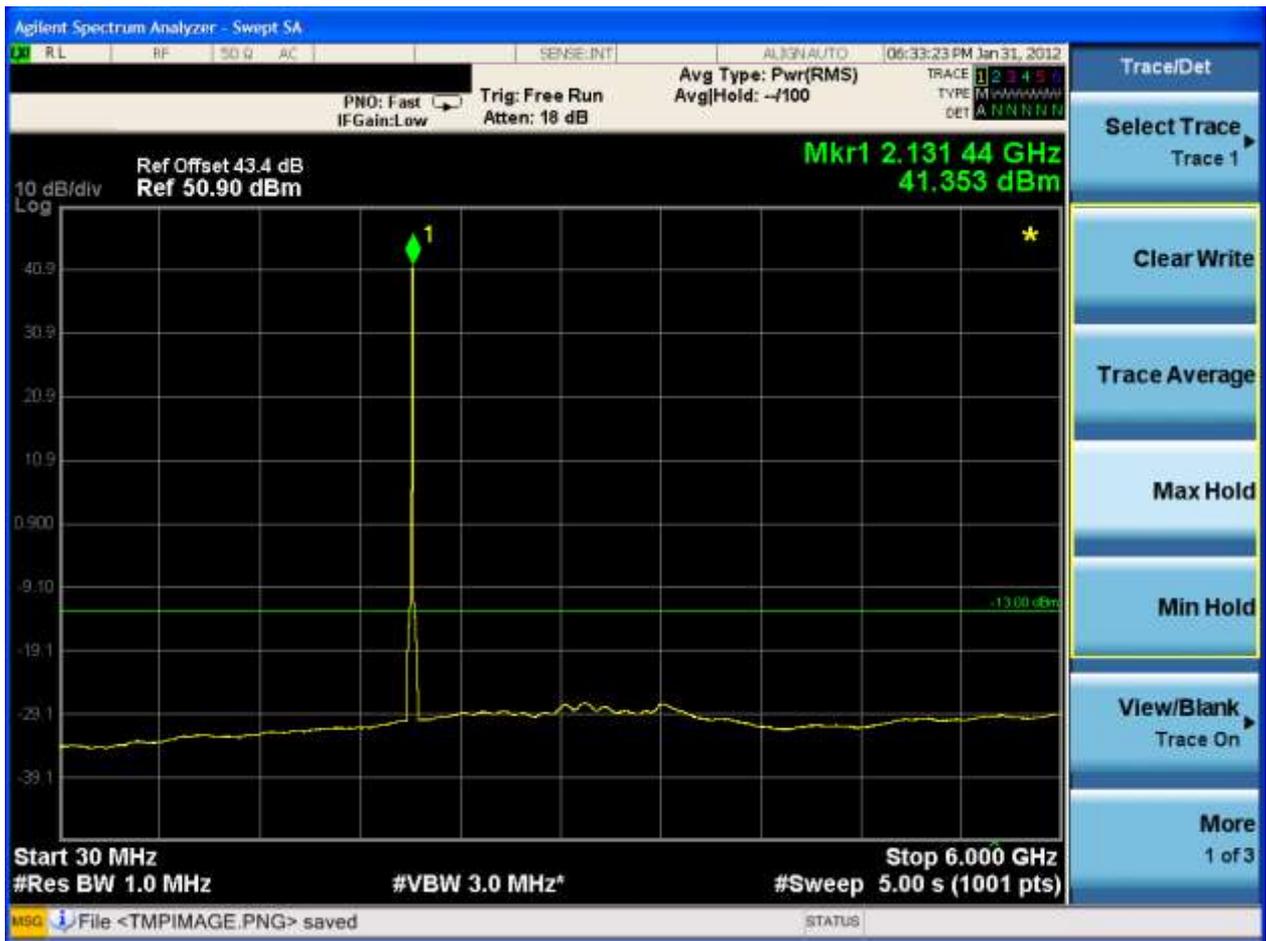




2.2.2.2 Ch. M









2.2.2.3 Ch. T







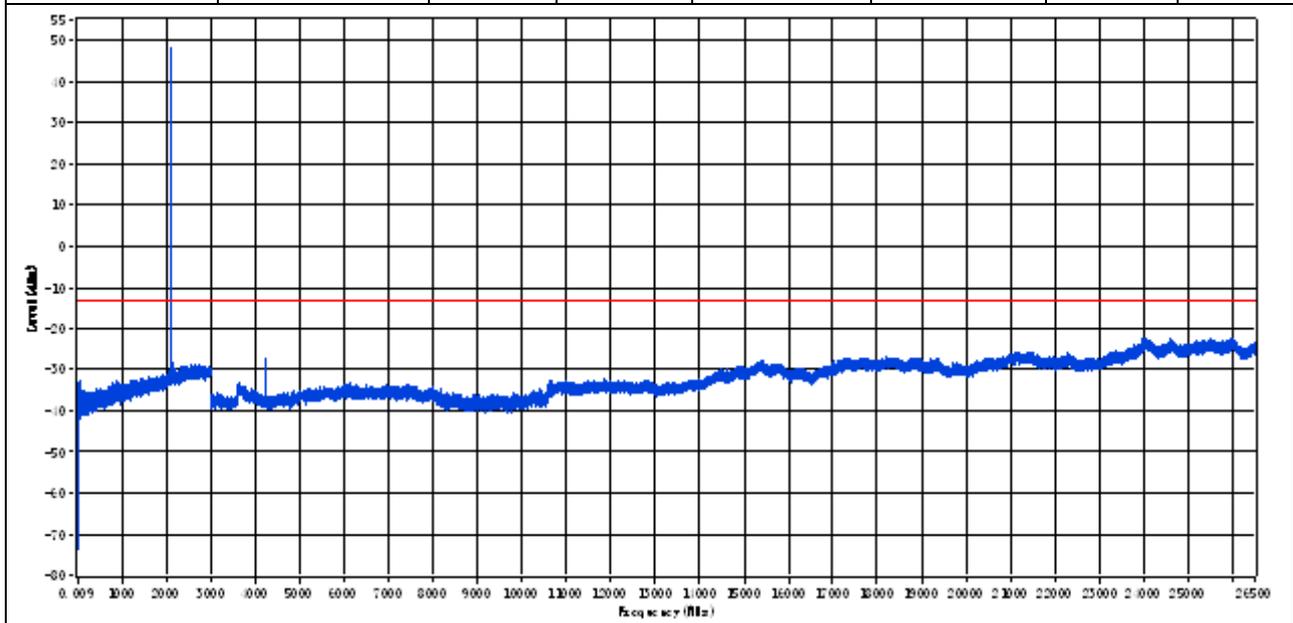


2.3 Test Mode = LTE

2.3.1 Carrier Conf. =1.4M (60W)

2.3.1.1 Ch. B

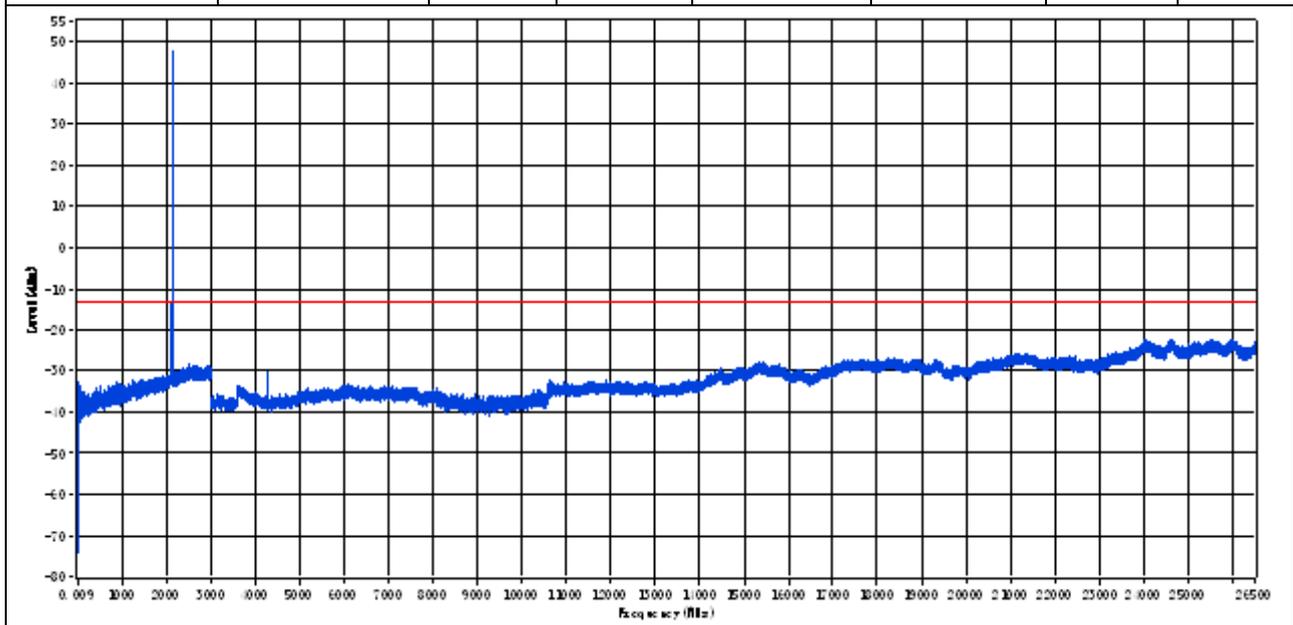
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	62.626 k	-34.67	-13.00	Pass
0.15	30	0.01	RMS	248.505 k	-33.16	-13.00	Pass
30	3000	1	RMS	2.111 G	48.28	-13.00	---
3000	26500	1	RMS	25.988 G	-22.18	-13.00	Pass





2.3.1.2 Ch. M

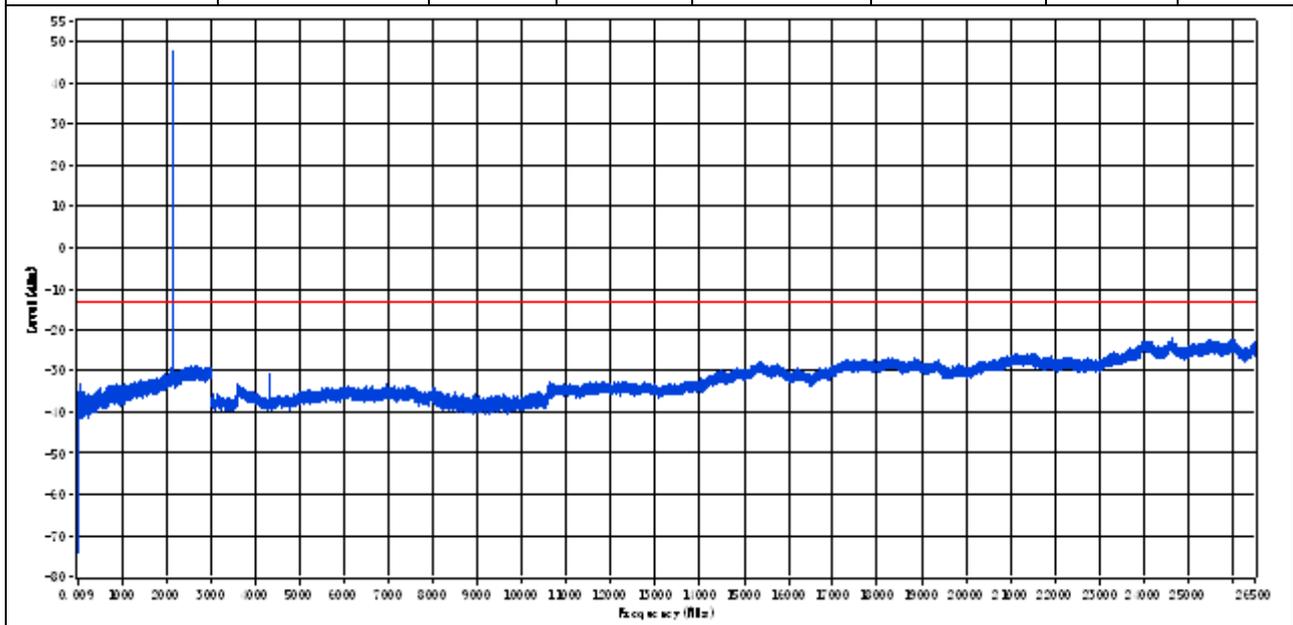
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	62.358 k	-34.47	-13.00	Pass
0.15	30	0.01	RMS	250.744 k	-32.60	-13.00	Pass
30	3000	1	RMS	2.133 G	47.82	-13.00	---
3000	26500	1	RMS	25.981 G	-22.13	-13.00	Pass





2.3.1.3 Ch. T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	62.471 k	-34.73	-13.00	Pass
0.15	30	0.01	RMS	275.370 k	-34.90	-13.00	Pass
30	3000	1	RMS	2.154 G	47.81	-13.00	---
3000	26500	1	RMS	24.637 G	-22.06	-13.00	Pass

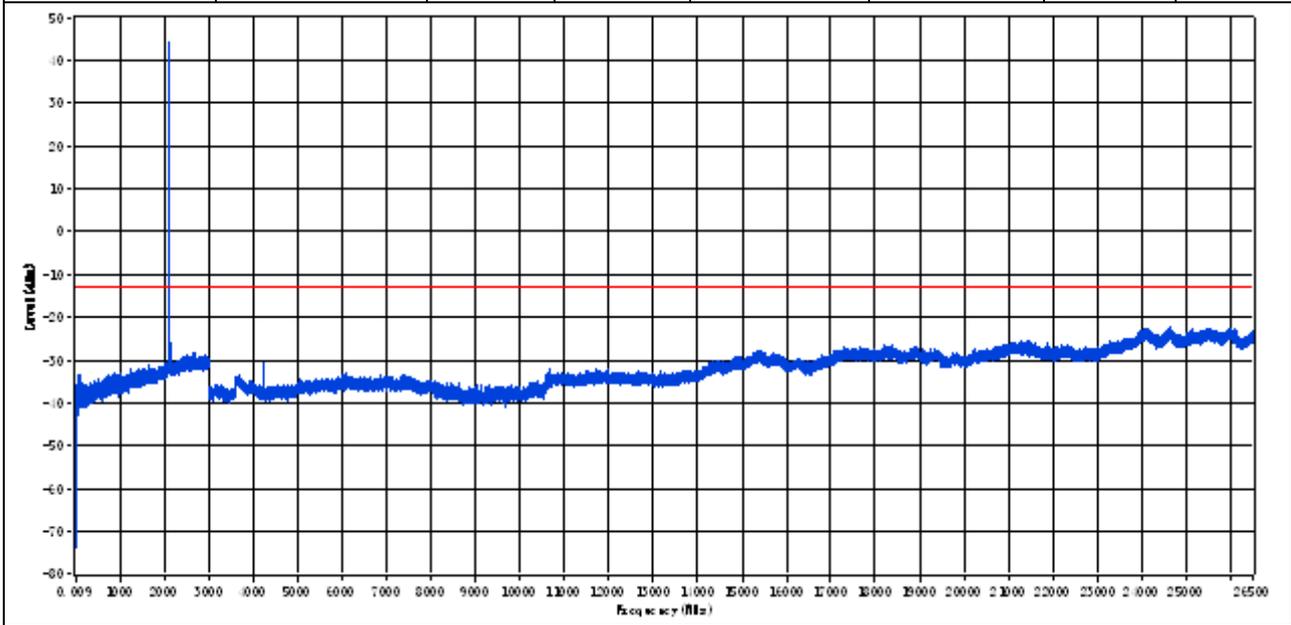




2.3.2 Carrier Conf. = 3M (60W)

2.3.2.1 Ch. B

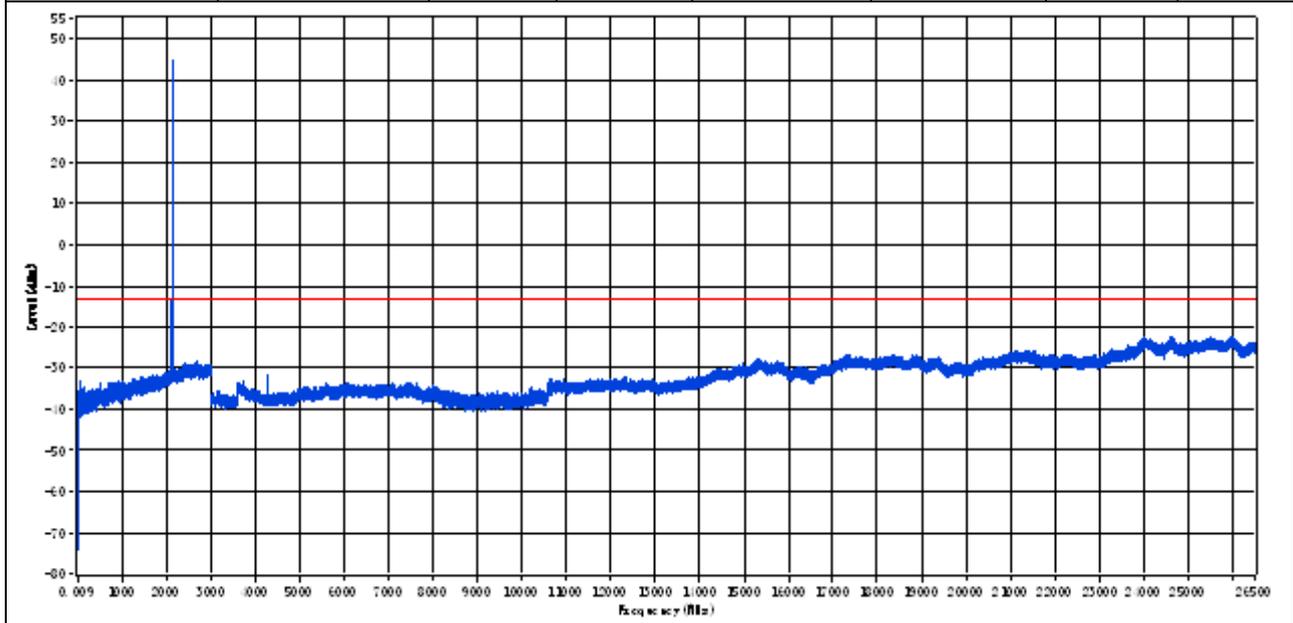
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	62.485 k	-35.40	-13.00	Pass
0.15	30	0.01	RMS	250.744 k	-36.38	-13.00	Pass
30	3000	1	RMS	2.112 G	44.30	-13.00	---
3000	26500	1	RMS	24.638 G	-22.26	-13.00	Pass





2.3.2.2 Ch. M

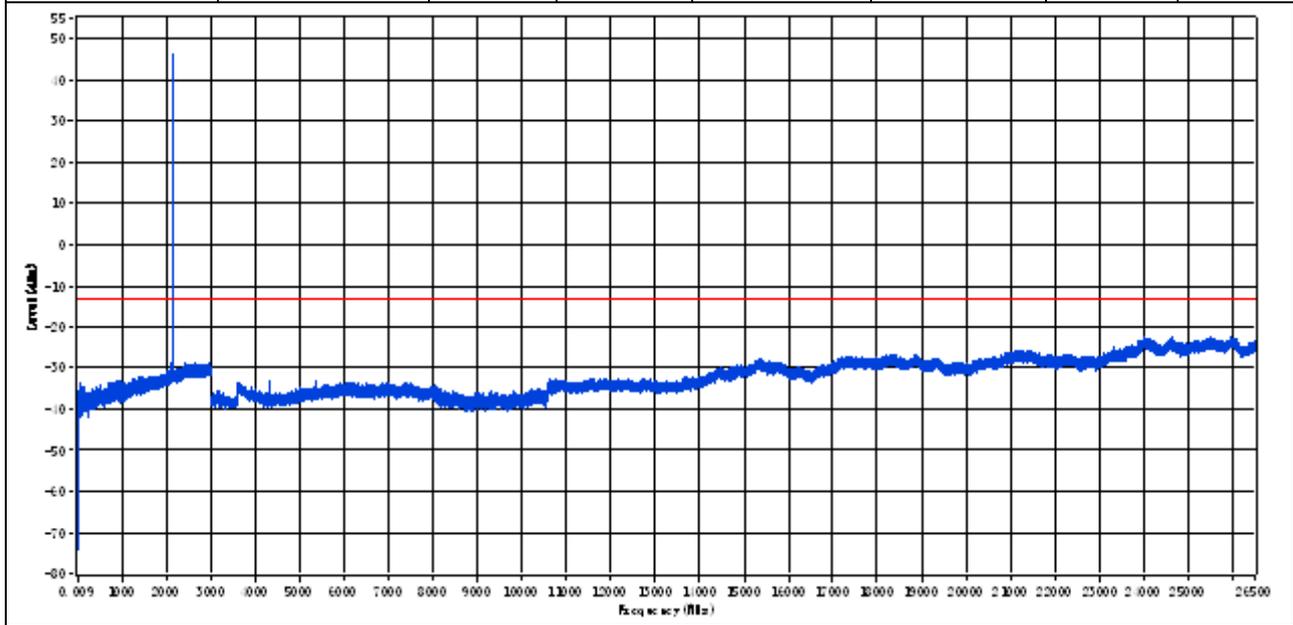
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	62.566 k	-35.44	-13.00	Pass
0.15	30	0.01	RMS	253.729 k	-36.75	-13.00	Pass
30	3000	1	RMS	2.132 G	45.03	-13.00	---
3000	26500	1	RMS	24.008 G	-22.18	-13.00	Pass





2.3.2.3 Ch. T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	62.397 k	-35.19	-13.00	Pass
0.15	30	0.01	RMS	252.236 k	-36.31	-13.00	Pass
30	3000	1	RMS	2.154 G	46.15	-13.00	---
3000	26500	1	RMS	25.957 G	-22.38	-13.00	Pass

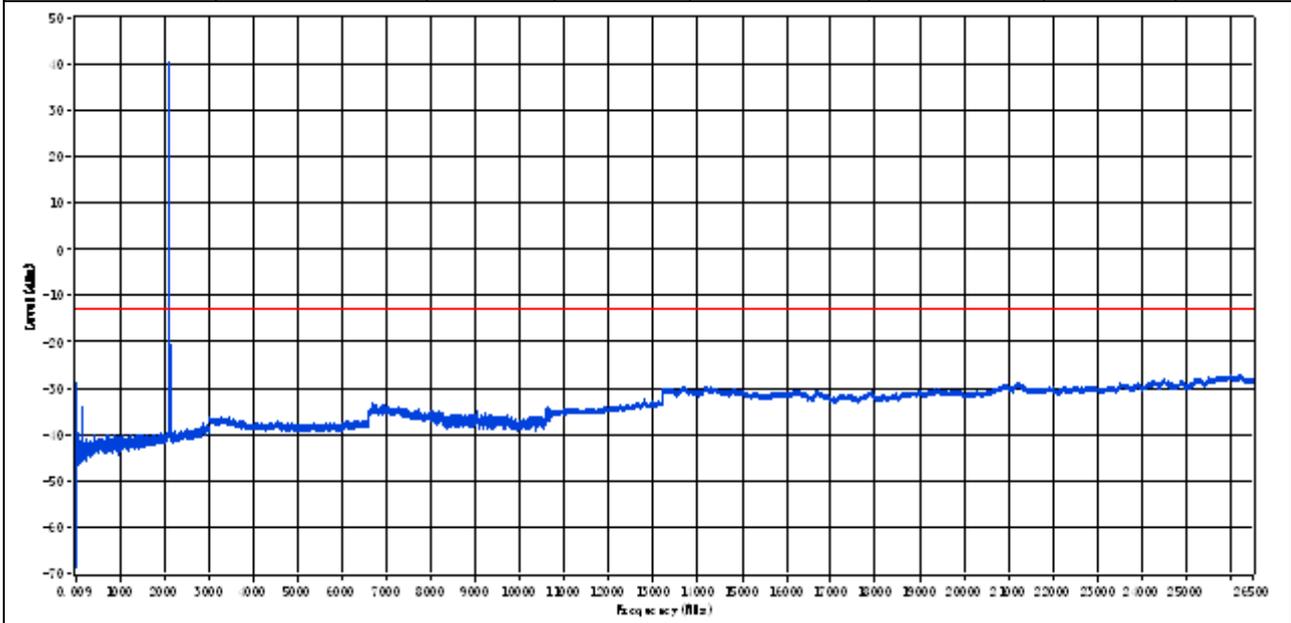




2.3.3 Carrier Conf. = 5M (60W)

2.3.3.1 Ch. B

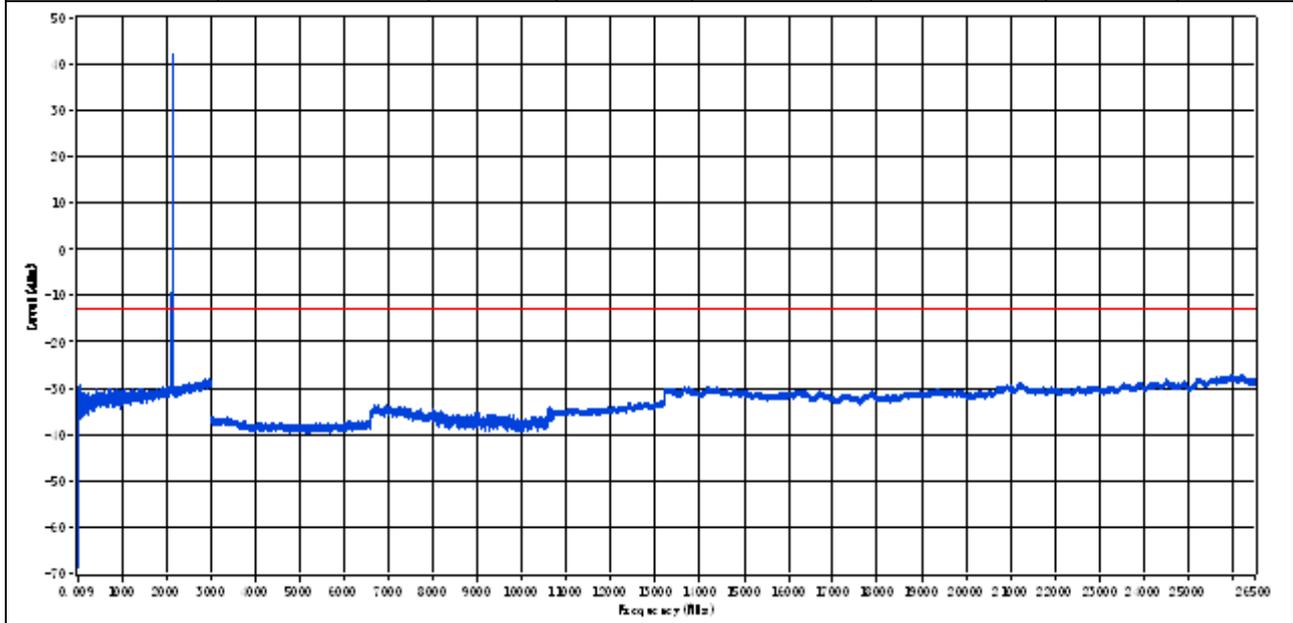
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	125.057 k	-41.47	-13.00	Pass
0.15	30	0.01	RMS	248.912 k	-28.60	-13.00	Pass
30	3000	1	RMS	2.111 G	40.57	-13.00	---
3000	26500	1	RMS	26.010 G	-27.08	-13.00	Pass





2.3.3.2 Ch. M

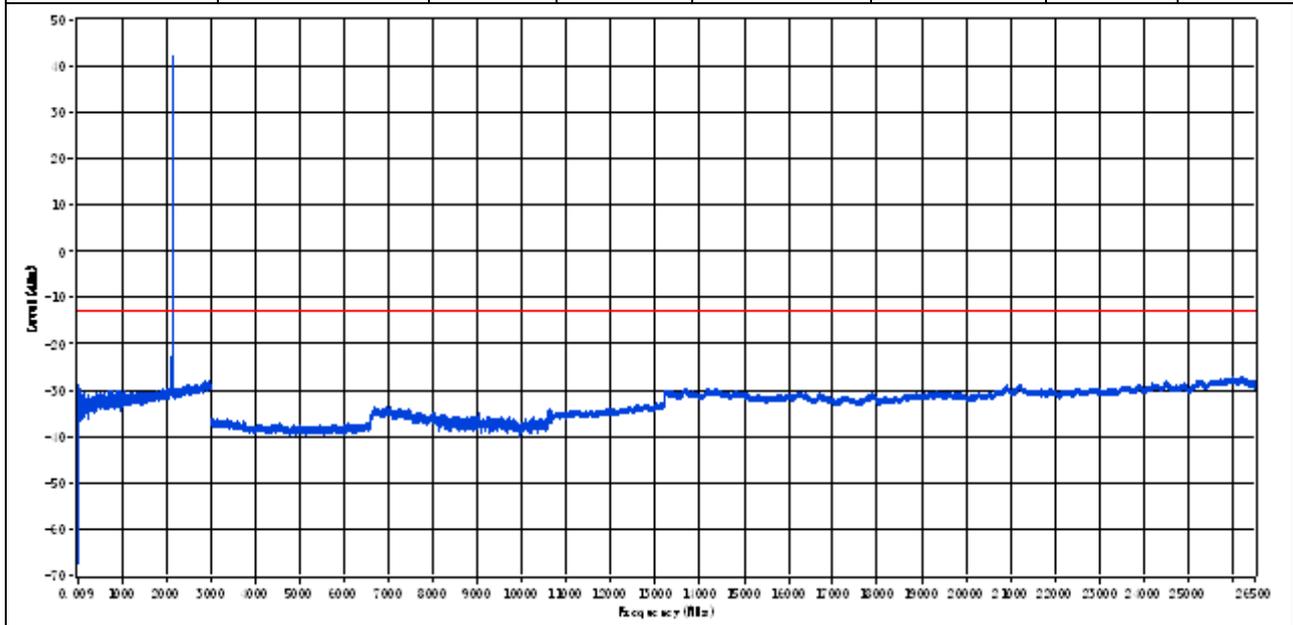
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	124.919 k	-42.17	-13.00	Pass
0.15	30	0.01	RMS	251.212 k	-29.32	-13.00	Pass
30	3000	1	RMS	2.132 G	42.38	-13.00	---
3000	26500	1	RMS	26.191 G	-27.12	-13.00	Pass





2.3.3.3 Ch. T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	124.936 k	-41.71	-13.00	Pass
0.15	30	0.01	RMS	248.912 k	-28.70	-13.00	Pass
30	3000	1	RMS	2.153 G	42.21	-13.00	---
3000	26500	1	RMS	26.189 G	-27.12	-13.00	Pass

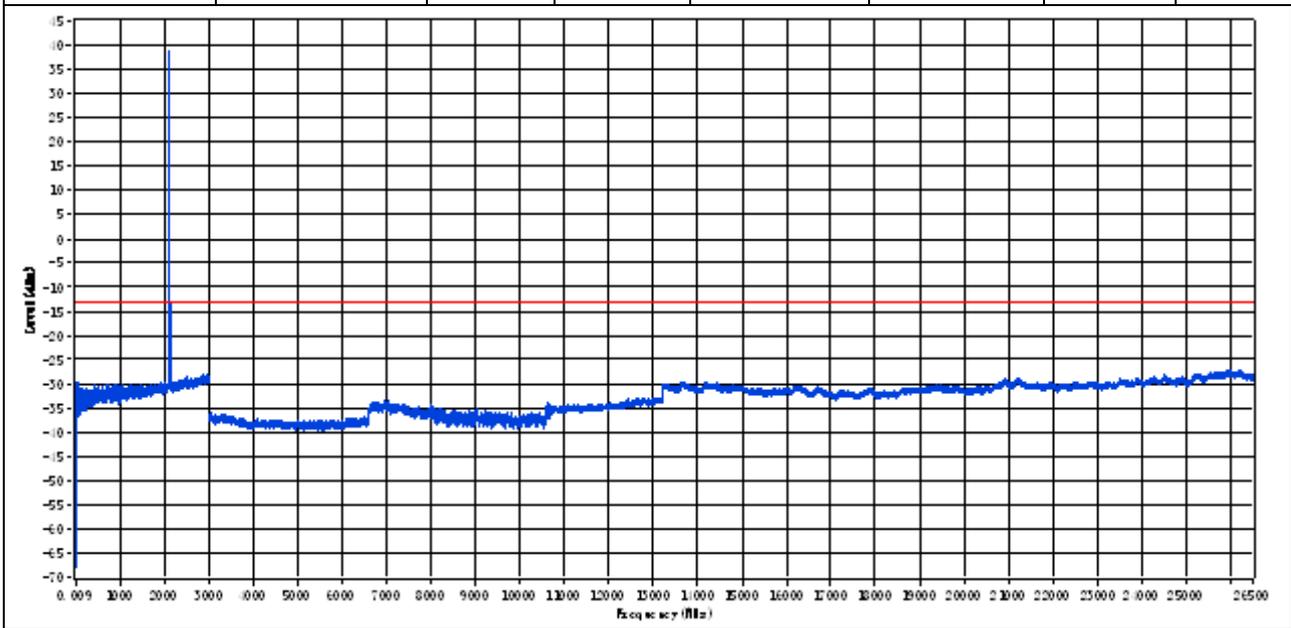




2.3.4 Carrier Conf. = 10M (60W)

2.3.4.1 Ch. B

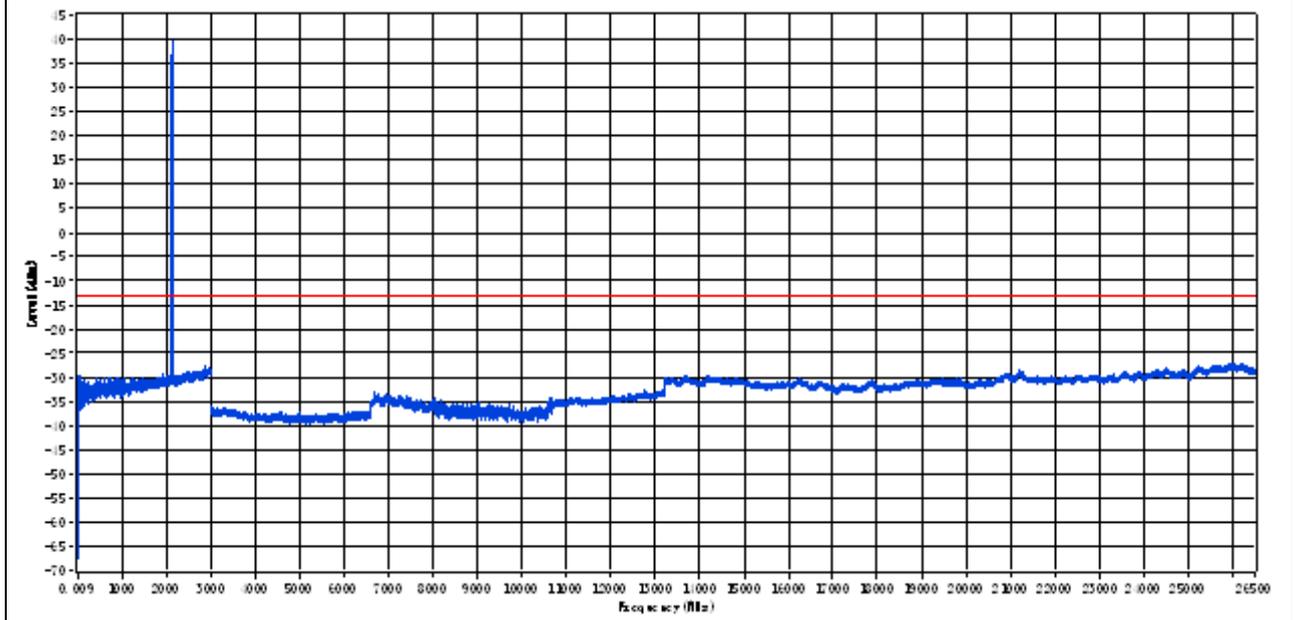
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	124.936 k	-41.97	-13.00	Pass
0.15	30	0.01	RMS	248.912 k	-29.52	-13.00	Pass
30	3000	1	RMS	2.118 G	38.69	-13.00	---
3000	26500	1	RMS	26.225 G	-27.05	-13.00	Pass





2.3.4.2 Ch. M

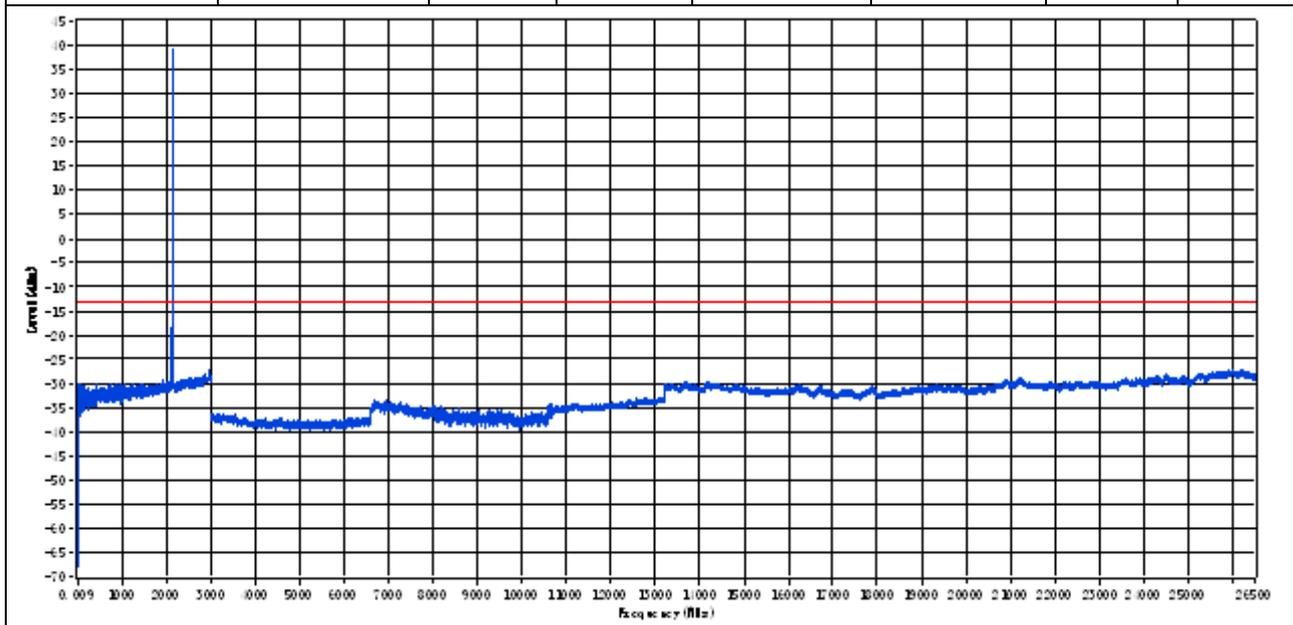
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	125.126 k	-42.45	-13.00	Pass
0.15	30	0.01	RMS	251.212 k	-29.50	-13.00	Pass
30	3000	1	RMS	2.136 G	39.51	-13.00	---
3000	26500	1	RMS	26.196 G	-26.99	-13.00	Pass





2.3.4.3 Ch. T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	124.936 k	-42.18	-13.00	Pass
0.15	30	0.01	RMS	248.912 k	-29.87	-13.00	Pass
30	3000	1	RMS	2.147 G	39.16	-13.00	---
3000	26500	1	RMS	25.991 G	-27.11	-13.00	Pass

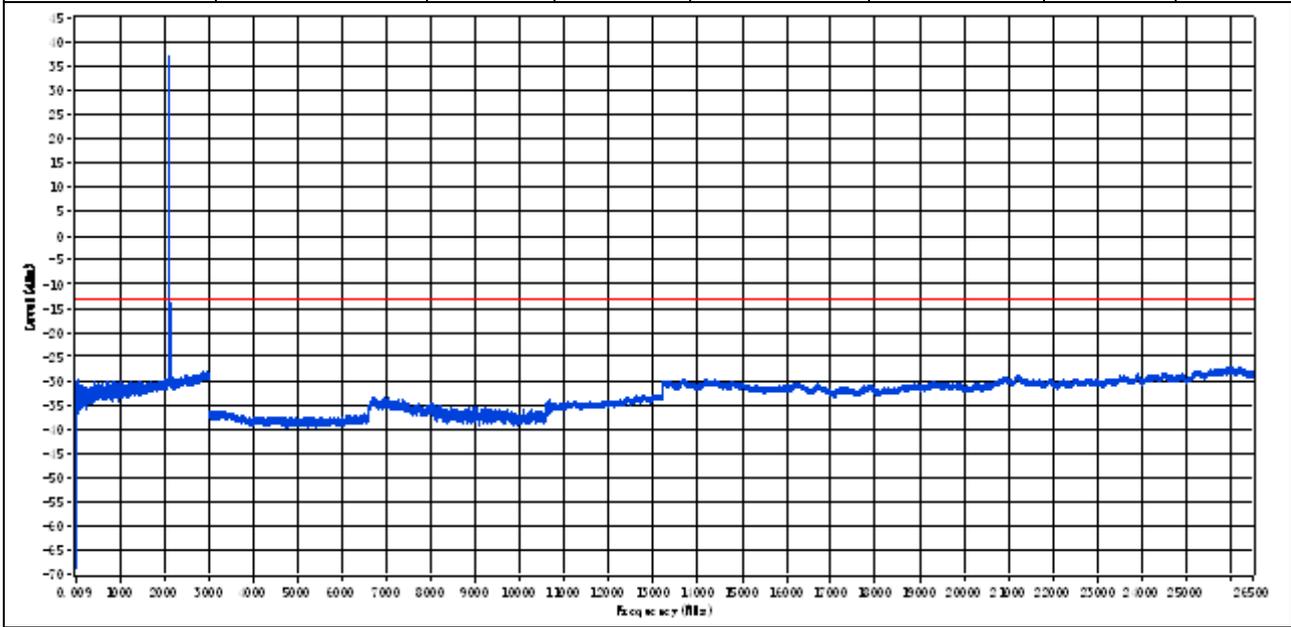




2.3.5 Carrier Conf. = 15M (60W)

2.3.5.1 Ch. B

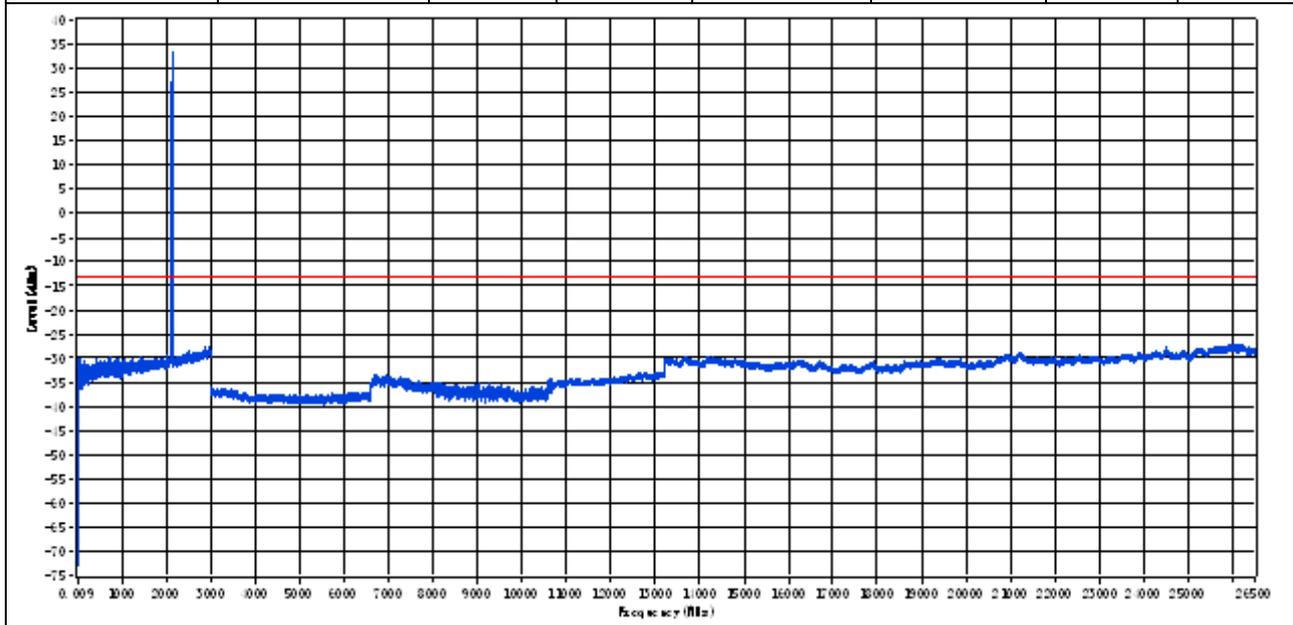
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	125.022 k	-40.40	-13.00	Pass
0.15	30	0.01	RMS	248.912 k	-29.73	-13.00	Pass
30	3000	1	RMS	2.123 G	37.18	-13.00	---
3000	26500	1	RMS	26.191 G	-27.04	-13.00	Pass





2.3.5.2 Ch. M

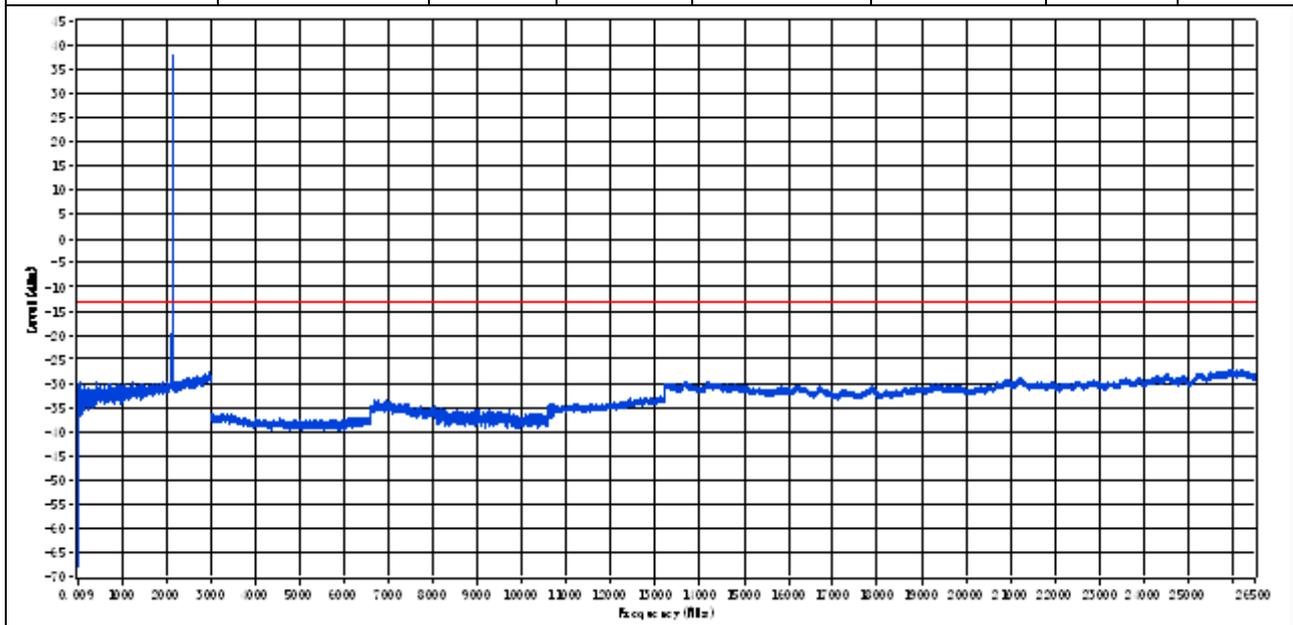
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	125.177 k	-42.52	-13.00	Pass
0.15	30	0.01	RMS	248.912 k	-30.12	-13.00	Pass
30	3000	1	RMS	2.133 G	33.39	-13.00	---
3000	26500	1	RMS	26.198 G	-27.12	-13.00	Pass





2.3.5.3 Ch. T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	125.005 k	-42.54	-13.00	Pass
0.15	30	0.01	RMS	248.912 k	-29.89	-13.00	Pass
30	3000	1	RMS	2.153 G	37.83	-13.00	---
3000	26500	1	RMS	26.210 G	-27.15	-13.00	Pass

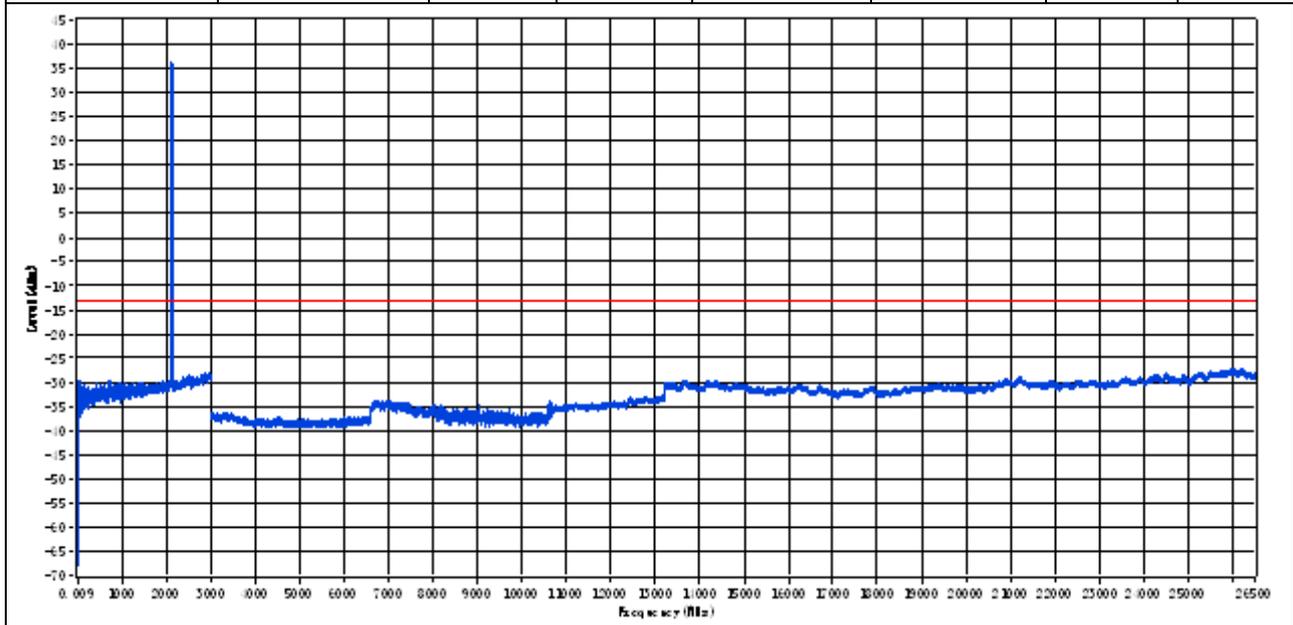




2.3.6 Carrier Conf. = 20M (60W)

2.3.6.1 Ch. B

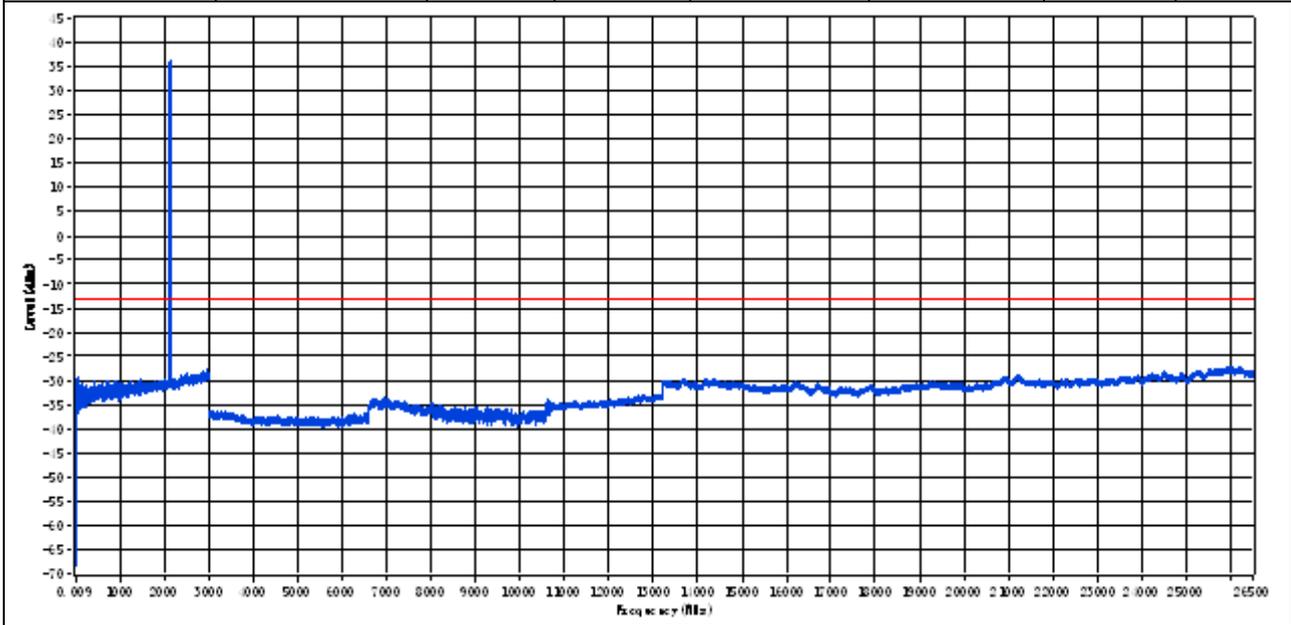
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	125.074 k	-42.05	-13.00	Pass
0.15	30	0.01	RMS	248.912 k	-29.33	-13.00	Pass
30	3000	1	RMS	2.128 G	36.28	-13.00	---
3000	26500	1	RMS	26.205 G	-26.86	-13.00	Pass





2.3.6.2 Ch. M

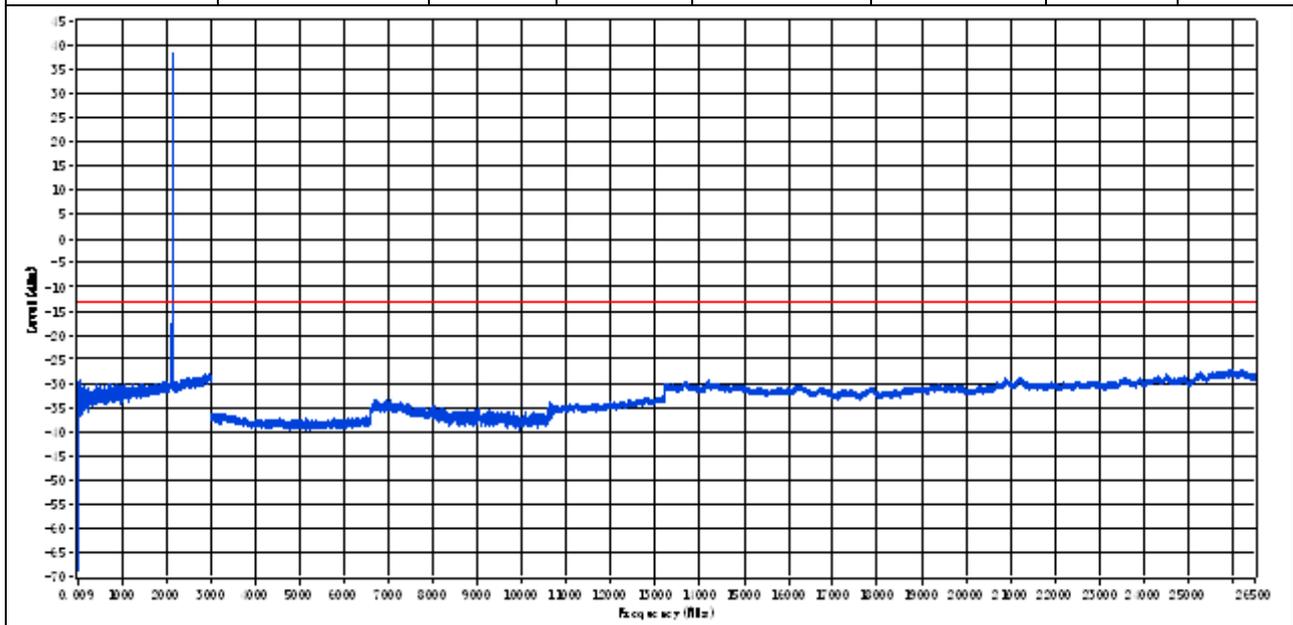
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	125.022 k	-42.16	-13.00	Pass
0.15	30	0.01	RMS	248.912 k	-29.54	-13.00	Pass
30	3000	1	RMS	2.132 G	36.51	-13.00	---
3000	26500	1	RMS	26.204 G	-27.08	-13.00	Pass





2.3.6.3 Ch. T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	125.143 k	-42.35	-13.00	Pass
0.15	30	0.01	RMS	248.912 k	-29.66	-13.00	Pass
30	3000	1	RMS	2.142 G	38.40	-13.00	---
3000	26500	1	RMS	26.197 G	-27.10	-13.00	Pass

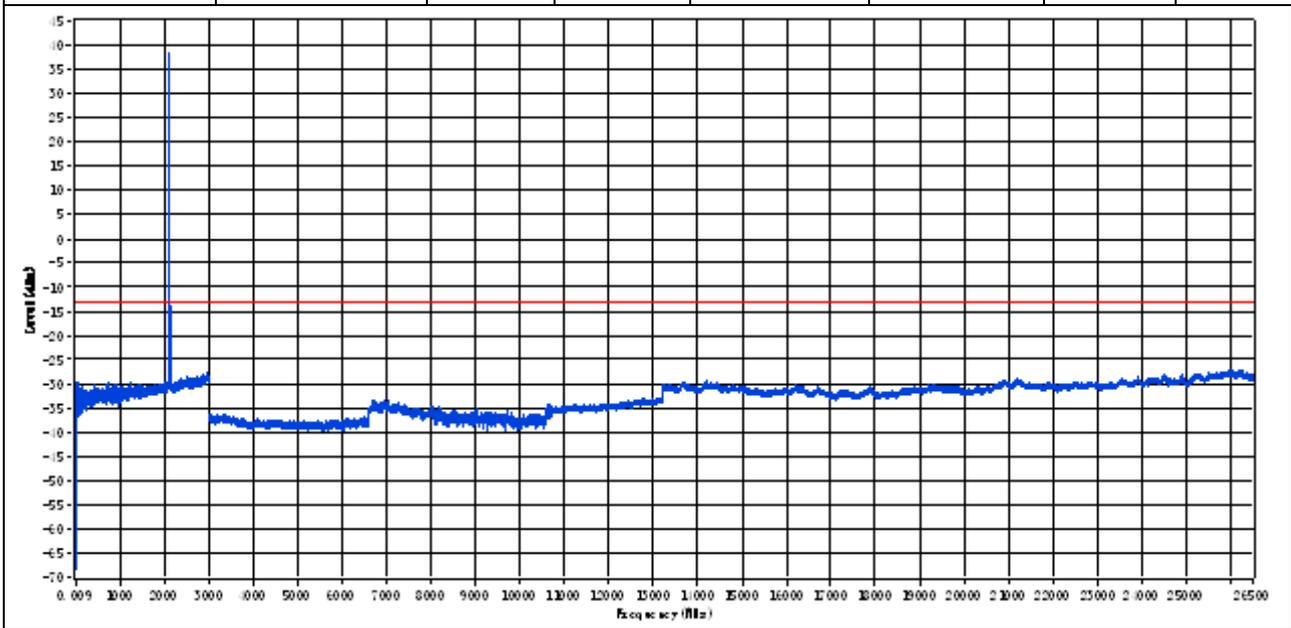




2.3.7 Carrier Conf. = 5M (20W) + 10M (40W)

2.3.7.1 Ch. B

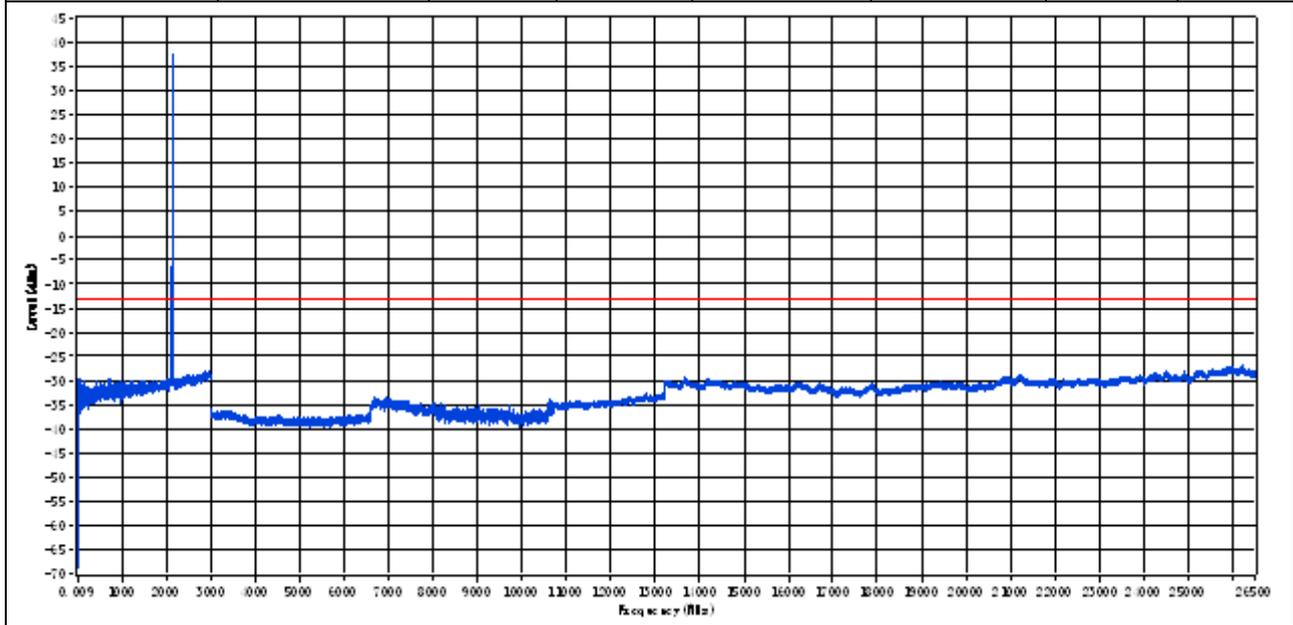
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	125.195 k	-42.40	-13.00	Pass
0.15	30	0.01	RMS	248.912 k	-29.37	-13.00	Pass
30	3000	1	RMS	2.116 G	38.42	-13.00	---
3000	26500	1	RMS	26.188 G	-27.00	-13.00	Pass





2.3.7.2 Ch. M

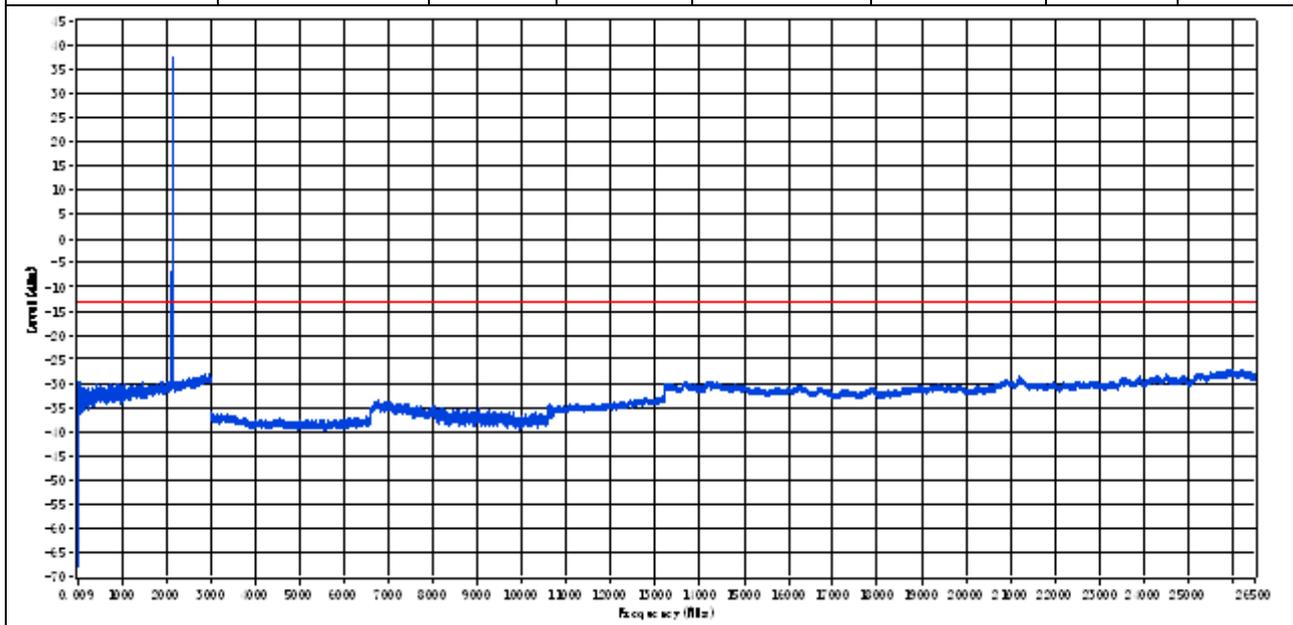
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	124.954 k	-42.63	-13.00	Pass
0.15	30	0.01	RMS	251.212 k	-29.58	-13.00	Pass
30	3000	1	RMS	2.132 G	37.61	-13.00	---
3000	26500	1	RMS	26.226 G	-26.95	-13.00	Pass





2.3.7.3 Ch. T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	125.212 k	-42.45	-13.00	Pass
0.15	30	0.01	RMS	248.912 k	-29.71	-13.00	Pass
30	3000	1	RMS	2.142 G	37.67	-13.00	---
3000	26500	1	RMS	25.986 G	-27.02	-13.00	Pass











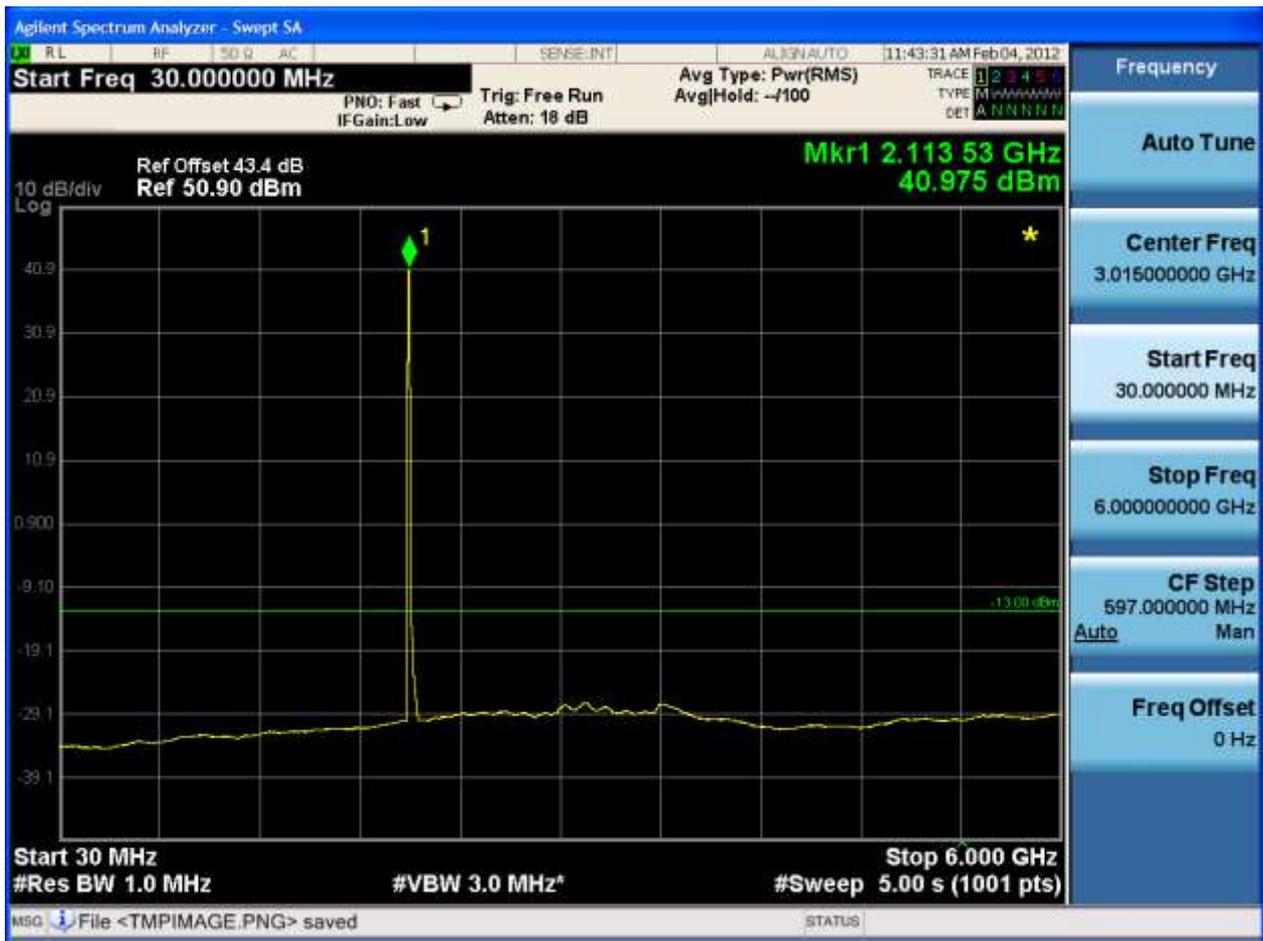




2.4.2 Carrier Conf. =1X+DO+1L_3M (20W+20W+20W)

2.4.2.1 Ch. B













2.4.2.3 Ch. T









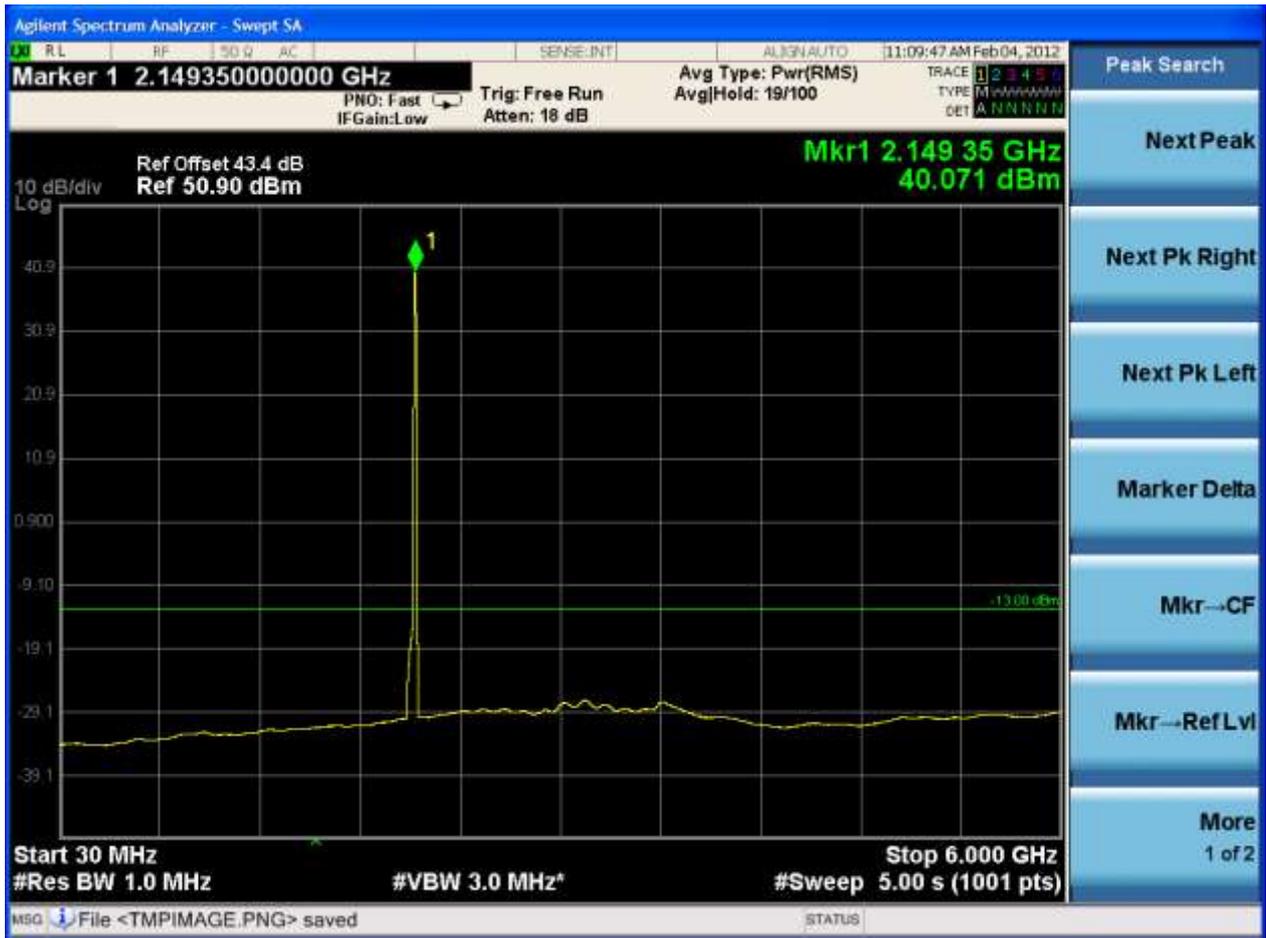






2.4.3.3 Ch. T









2.4.4 Carrier Conf. = 1X+DO+1L_10M (20W+20W+20W)

2.4.4.1 Ch. B









2.4.4.2 Ch. M









2.4.4.3 Ch. T



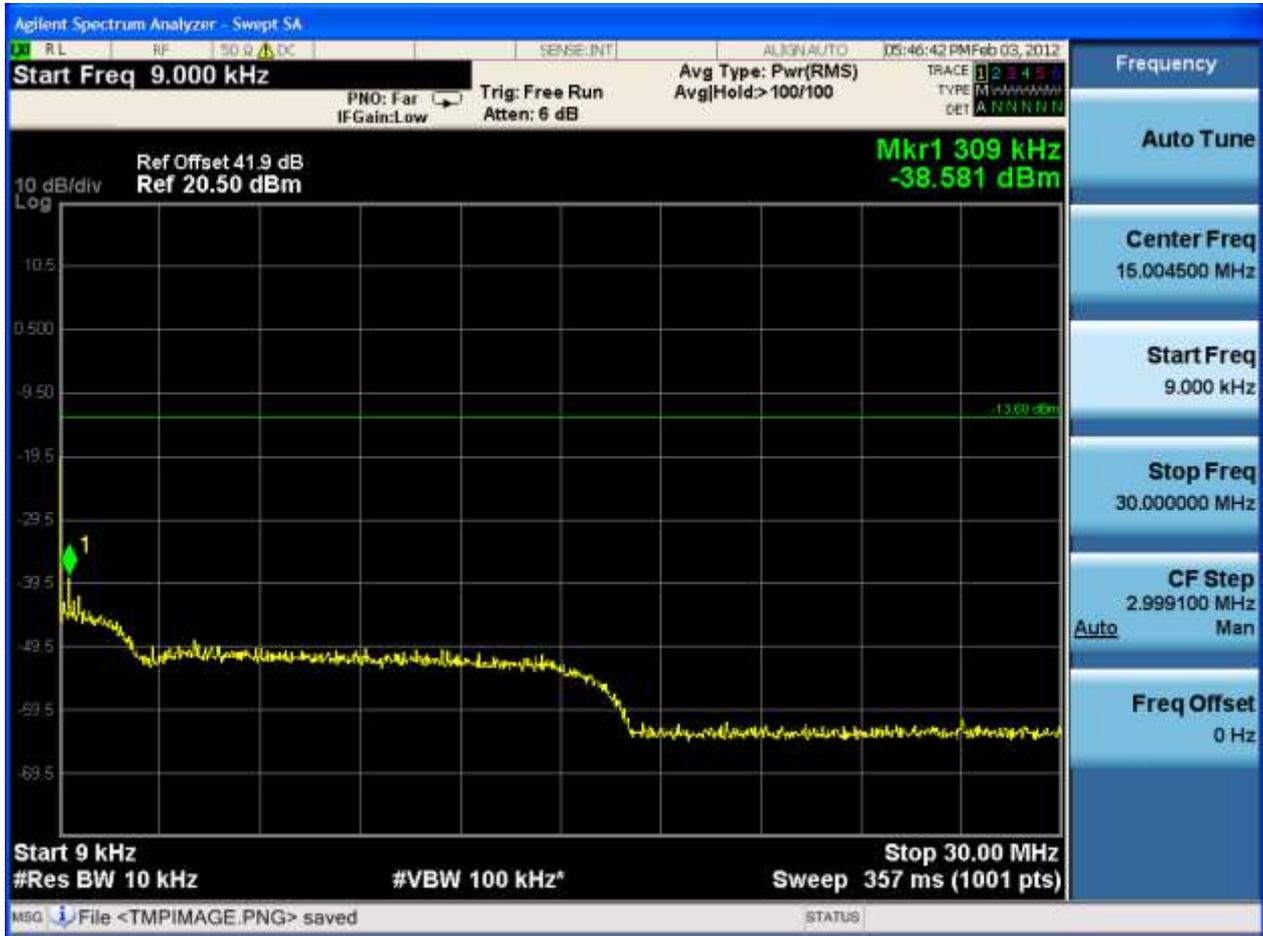






2.4.5 Carrier Conf. = 1X+DO+1L_15M (20W+20W+20W)

2.4.5.1 Ch. B









2.4.5.2 Ch. M

















2.4.6.2 Ch. T









Appendix F: Field Strength of Spurious Radiation



1 Result Table

Test Mode	Carrier Conf.	RF Ch.	Field Strength of Spurious Radiation [dBm]	Verdict
CDMA	1(60W)	M	Below -13dBm	Pass
LTE	1(60W)	M	Below -13dBm	Pass

NOTE: An arbitrary test mode is selected as a representative since the un-modulation carrier configuration is required by the standards/rules.



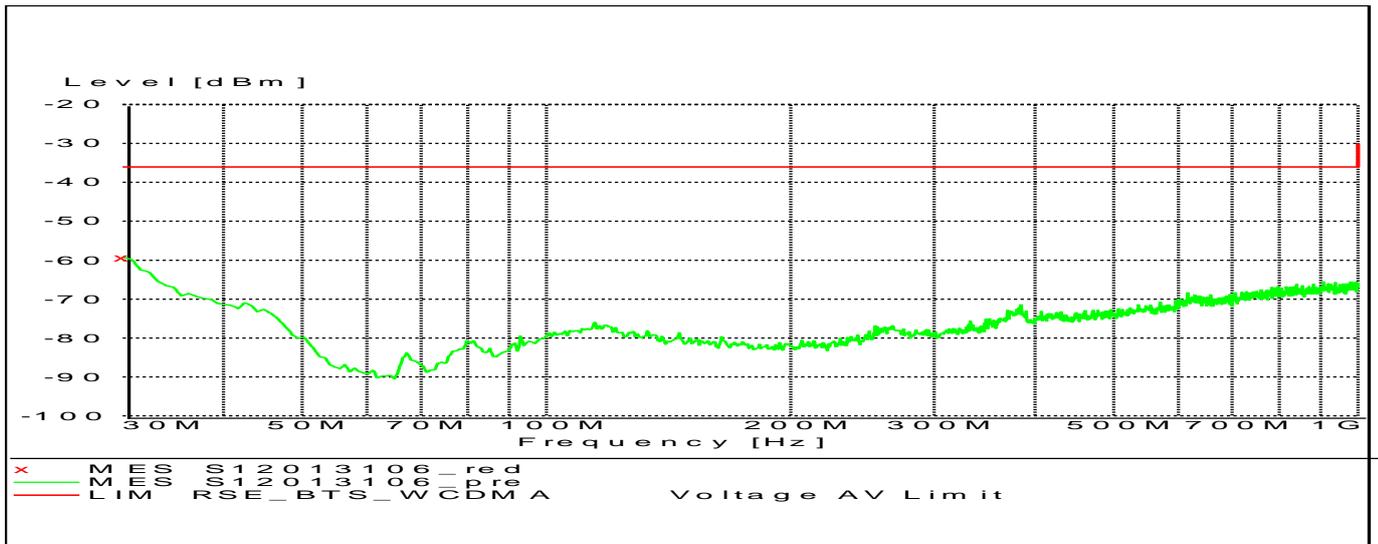
2 Test Plot

2.1 Test Mode =CDMA2000

2.1.1 Carrier Conf. = 1(60W)

2.1.1.1 Ch. M

Below 1GHz



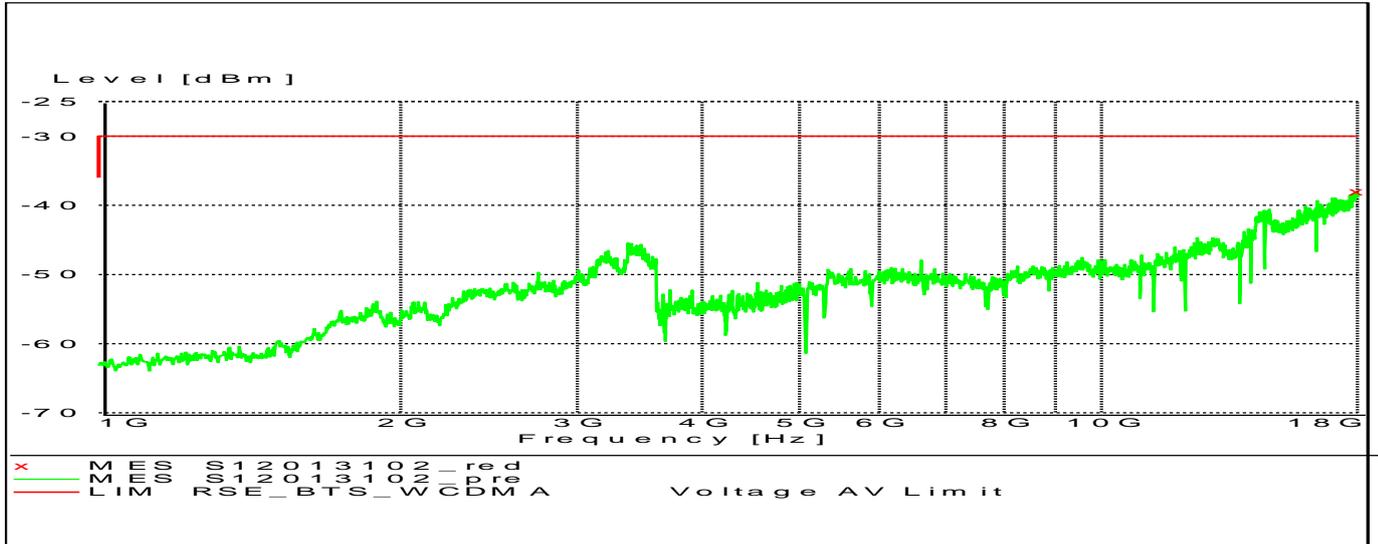
MEASUREMENT RESULT: "S12013106_red"

1/31/2012 3:14PM

Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBm	dB	dBm	dB	dB	cm	deg	deg
30.000000	-59.20	-104.4	-36	23.2	---	100.0	360.00	HORIZONTAL



Above 1GHz



MEASUREMENT RESULT: "S12013102_red"

1/31/2012 1:47PM

Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBm	dB	dBm	dB	dB	cm	deg	deg
18000.000000	-38.10	-76.4	-30	8.1	---	200.0	0.00	VERTICAL

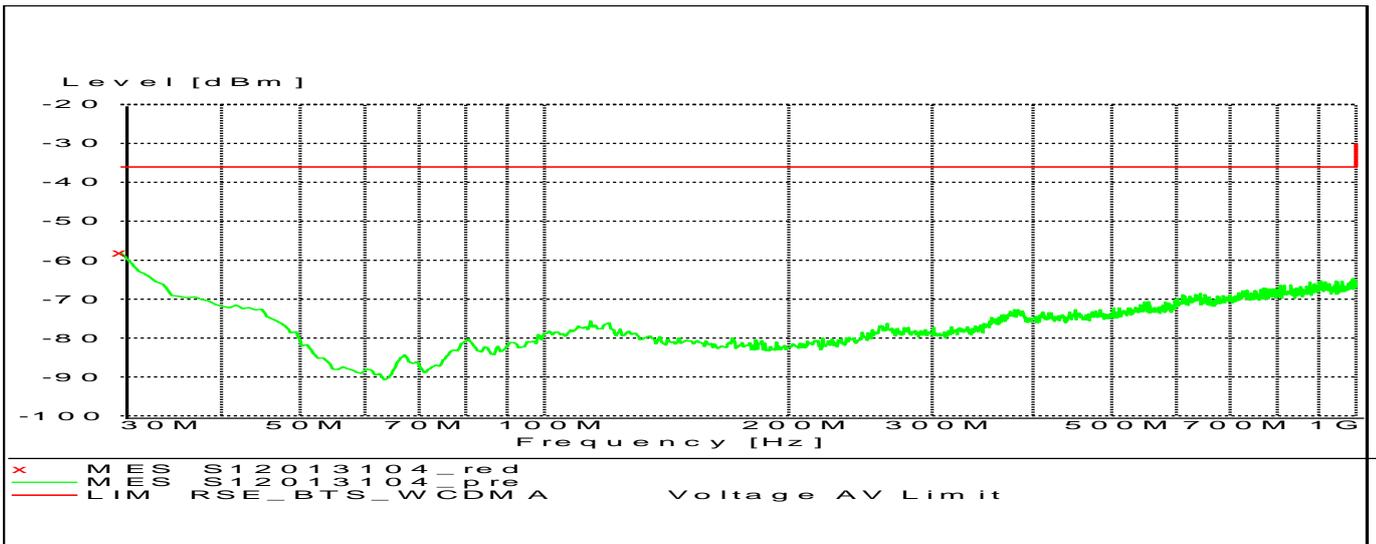


2.2 Test Mode =LTE

2.2.1 Carrier Conf. = 1(60W)

2.2.1.1 Ch. M

Below 1GHz



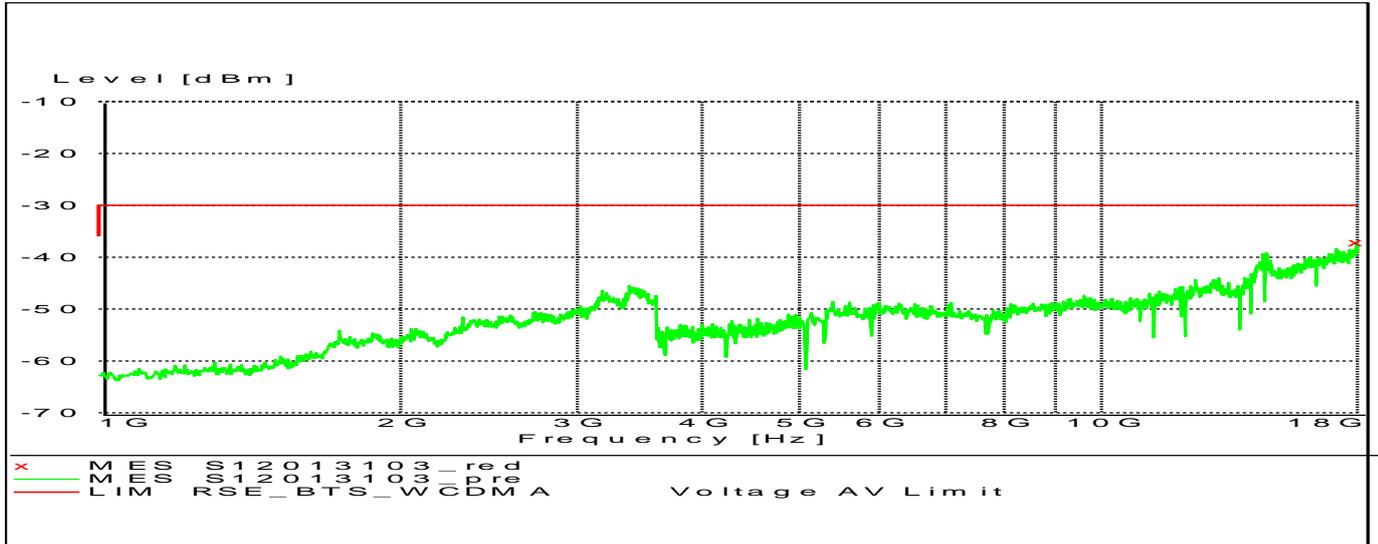
MEASUREMENT RESULT: "S12013104_red"

1/31/2012 2:43PM

Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBm	dB	dBm	dB	dB	cm	deg	deg
30.000000	-58.00	-104.4	-36	22.0	---	200.0	360.00	HORIZONTAL



Above 1GHz



MEASUREMENT RESULT: "S12013103_red"

1/31/2012 2:07PM

Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBm	dB	dBm	dB	dB	cm	deg	deg
17979.200000	-37.10	-76.5	-30	7.1	---	200.0	270.00	VERTICAL



Appendix G: Frequency Stability



NOTE: An arbitrary test mode is selected as a representative since the un-modulation carrier configuration is required by the standards/rules.

1 Frequency Error vs. Temperature:

Test Mode	Carrier Conf.	RF Ch.	Volt.	Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Verdict
QPSK	1	M	100%	-30 °C	5.7	0.003	--	Pass
				-20 °C	-2.8	-0.001	--	Pass
				-10 °C	-2.1	-0.001	--	Pass
				0 °C	-13.9	-0.007	--	Pass
				10 °C	2.2	0.001	--	Pass
				20 °C	-11.1	-0.005	--	Pass
				30 °C	5.8	0.003	--	Pass
				40 °C	-7.4	-0.003	--	Pass
				50 °C	9.7	0.005	--	Pass

2 Frequency Error vs. Voltage:

Test Mode	Carrier Conf.	RF Ch.	Temp.	Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Verdict
QPSK	1	M	20 °C	85 %	-3.6	-0.002	--	Pass
				100 %	-16.1	-0.008	--	Pass
				115 %	-14.6	-0.007	--	Pass



Appendix H: Receiver Spurious Emissions (Conducted)



NOTE: The requirements are only applicable to IC requirements.

1 Result Table

Test Mode	Carrier Conf.	RF Ch.	Receiver Spurious Emissions (Conducted) [dBm]	Verdict
CDMA	1(60W)	M	Below -57dBm before 1 GHz Below -53dBm after 1 GHz	Pass
LTE	1(60W)	M	Below -57dBm before 1 GHz Below -53dBm after 1 GHz	Pass



2 Test Plot

2.1 Test Mode = CDMA

2.1.1 Carrier Conf. = 1.25M (60W)

2.1.1.1 Ch. M





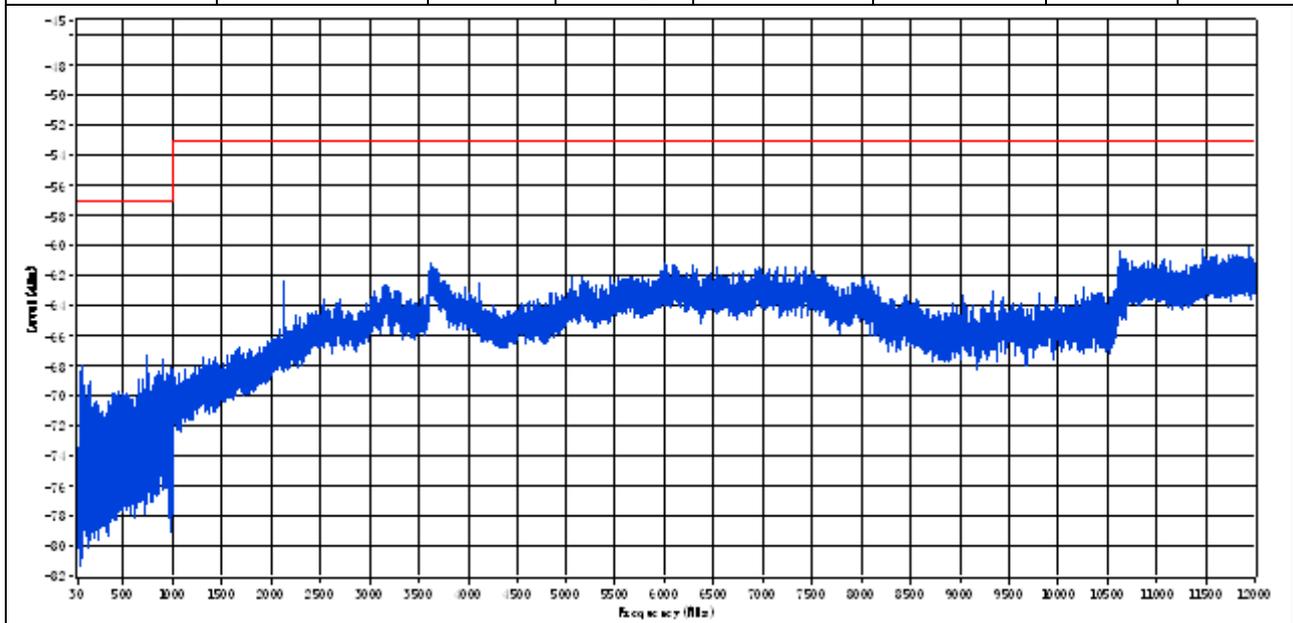


2.2 Test Mode = LTE

2.2.1 Carrier Conf. = 5M (60W)

2.2.1.1 Ch. M

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
30	1000	0.1	MaxPeak	725.169 M	-67.26	-57.00	Pass
1000	12000	1	Average	11.932 G	-60.08	-53.00	Pass





Appendix I: Photos of Test Setup

1 Test Setup 3

1.1 Frequency range below 1 GHz



1.2 Frequency range above 1 GHz



END