Appendix B

CDMA BC0/BC1

CONTENT

Page

1 Effective (Isotropic) Radiated Power Output Data

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	EIRP[dB]	Limit[dBm]	Verdict
CDMA BC1	CDMA /TM1	LCH	21.74	20.94	33	PASS
		MCH	21.59	20.79	33	PASS
		HCH	21.20	20.40	33	PASS

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

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

b: SGP=Signal Generator Level
c: RBW > emission bandwidth, VBW > 3 x RBW.
Detector: RMS

Test Band	Test Mode	Test Channel	Measured[dB]	ERP[dB]	Limit[dBm]	Verdict
CDMA BC0	CDMA /TM1	LCH	21.57	20.57	38.45	PASS
		MCH	21.54	20.54	38.45	PASS
		HCH	21.46	20.46	38.45	PASS

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

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

b: SGP=Signal Generator Level
c: RBW > emission bandwidth, VBW > 3 x RBW.
Detector: RMS

2 Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
BC0	CDMA /TM1	LCH	5.30	13	PASS
		MCH	5.71	13	PASS
		HCH	5.57	13	PASS
BC1	CDMA /TM1	LCH	5.83	13	PASS
		MCH	6.12	13	PASS
		HCH	5.48	13	PASS

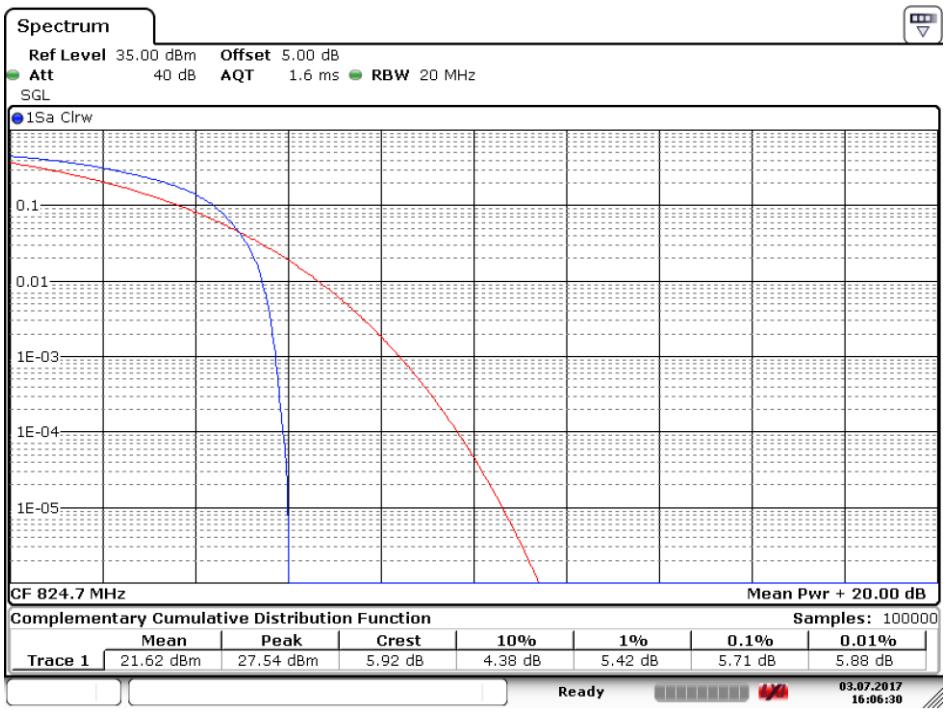
Part II - Test Plots

2.1 For CDMA

2.1.1 Test Band = CDMA BC0

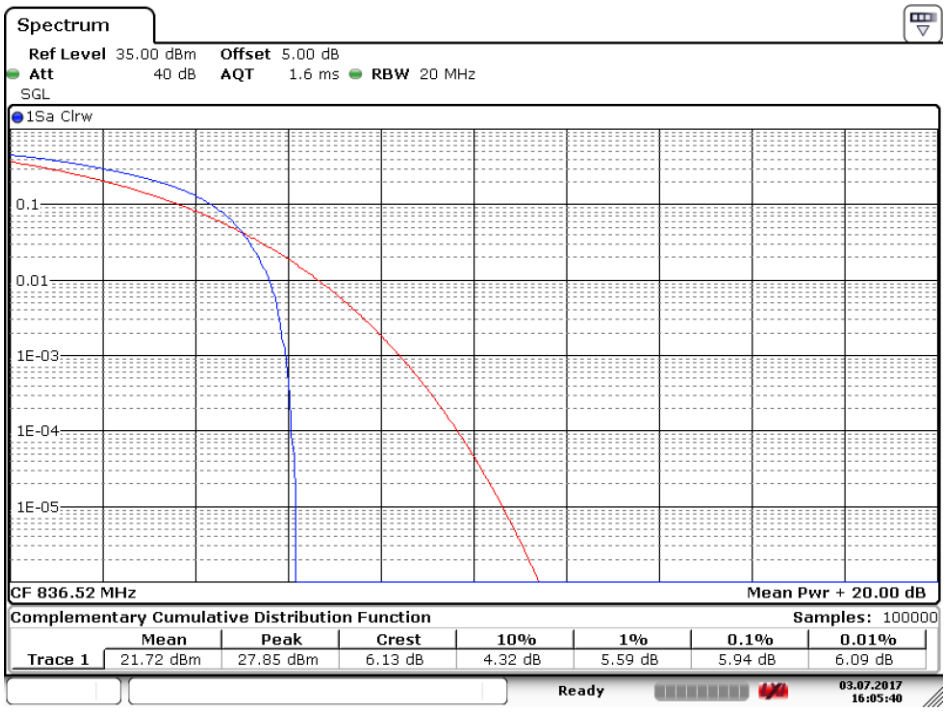
2.1.1.1 Test Mode = CDMA /TM1

2.1.1.1.1 Test Channel = LCH



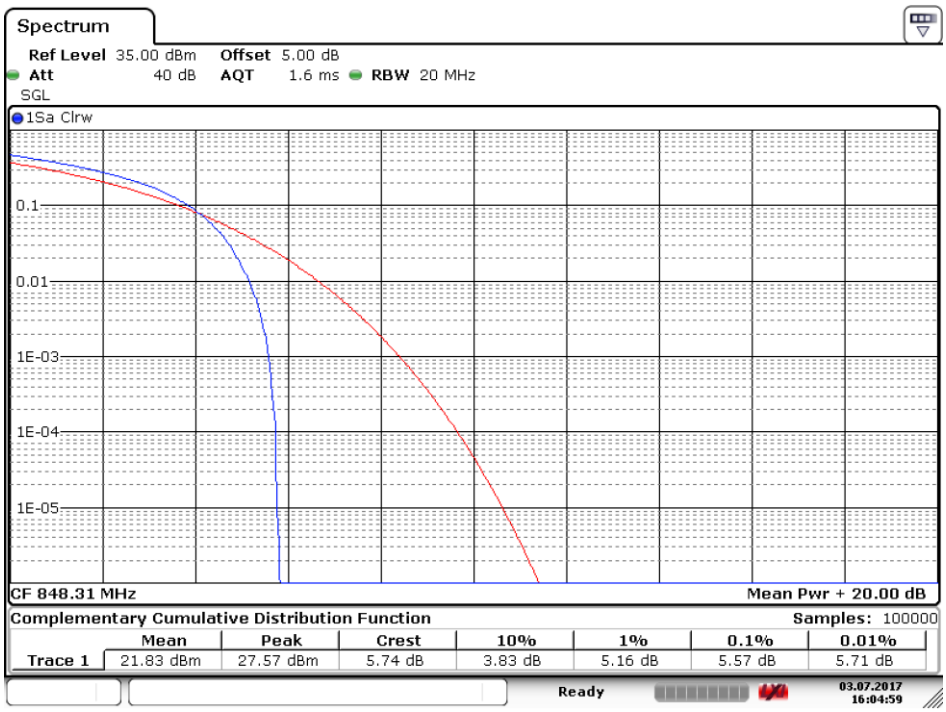
Date: 3.JUL.2017 16:06:31

2.1.1.1.2 Test Channel = MCH



Date: 3.JUL.2017 16:05:40

2.1.1.1.3 Test Channel = HCH

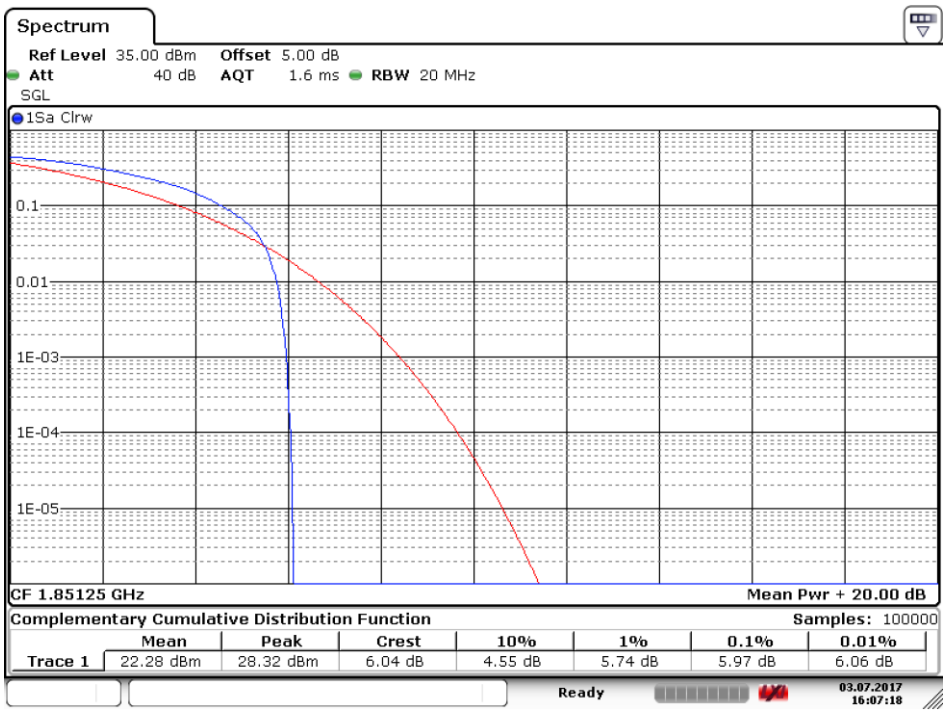


Date: 3.JUL.2017 16:04:59

2.1.2 Test Band = CDMA BC1

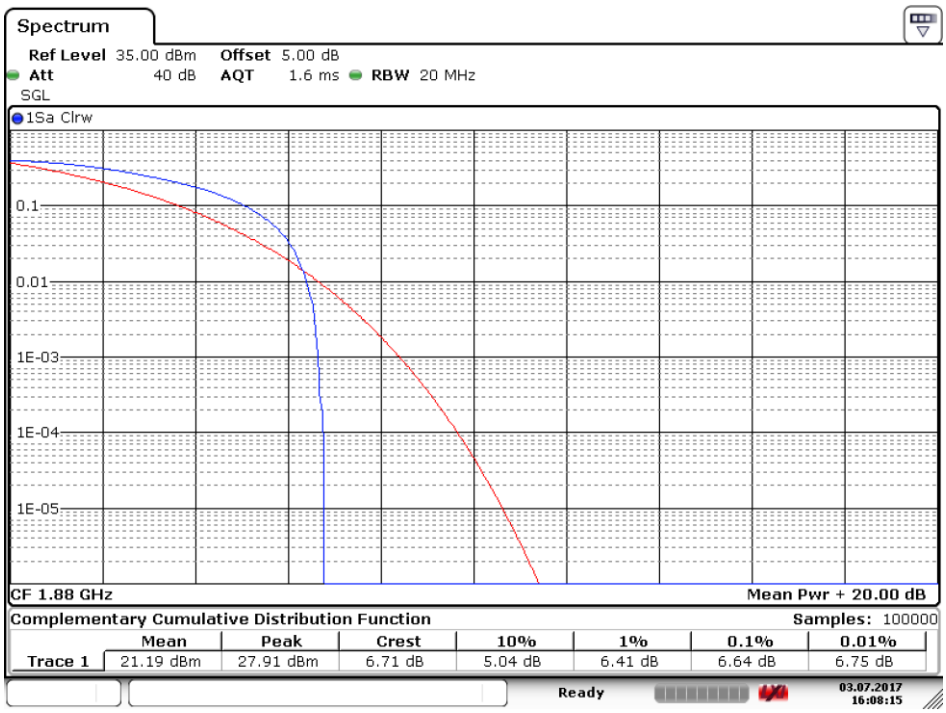
2.1.2.1 Test Mode = CDMA /TM1

2.1.2.1.1 Test Channel = LCH



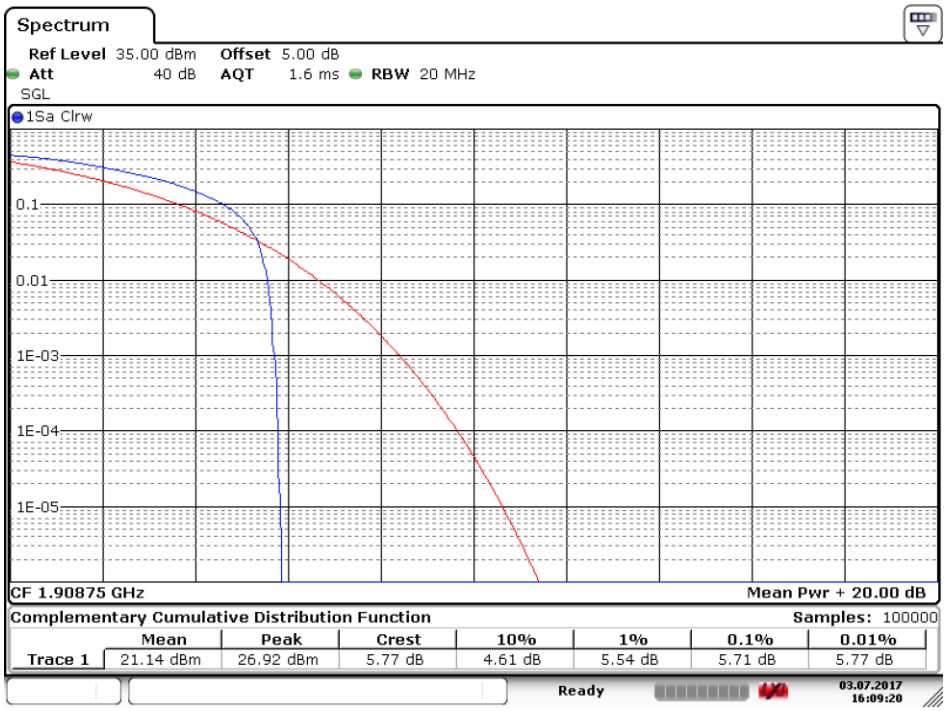
Date: 3.JUL.2017 16:07:17

2.1.2.1.2 Test Channel = MCH



Date: 3.JUL.2017 16:08:15

2.1.2.1.3 Test Channel = HCH



Date: 3.JUL.2017 16:09:20

3 Modulation Characteristics

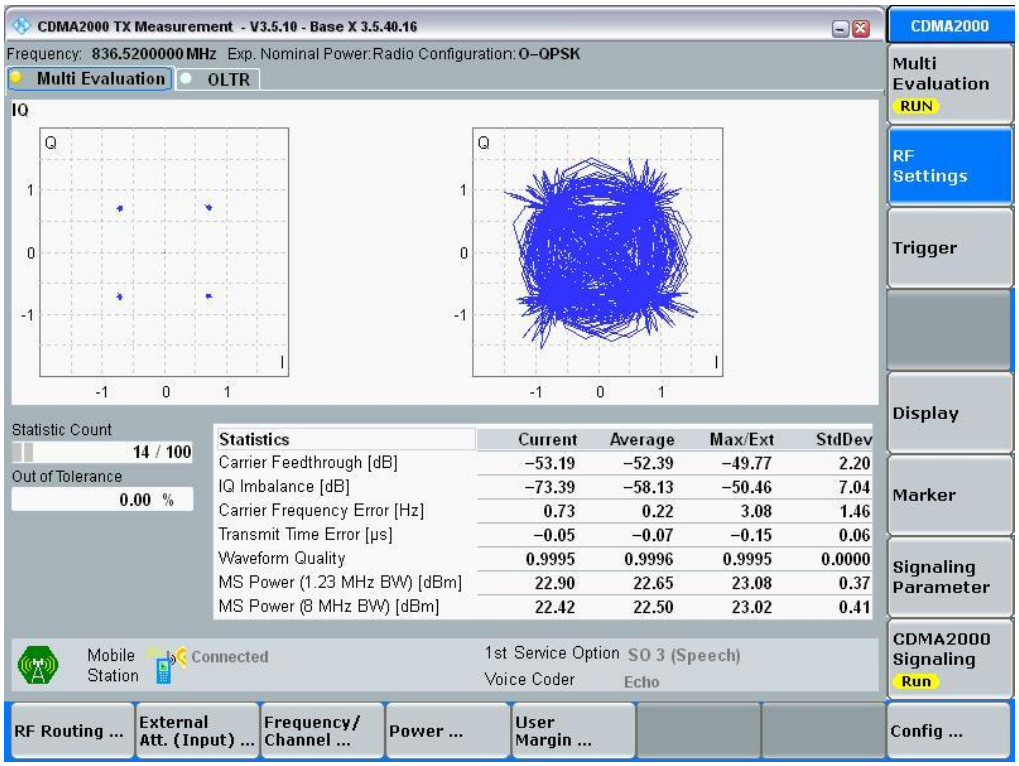
Part I - Test Plots

3.1 For CDMA

3.1.1 Test Band = CDMA BC0

3.1.1.1 Test Mode = CDMA /TM1

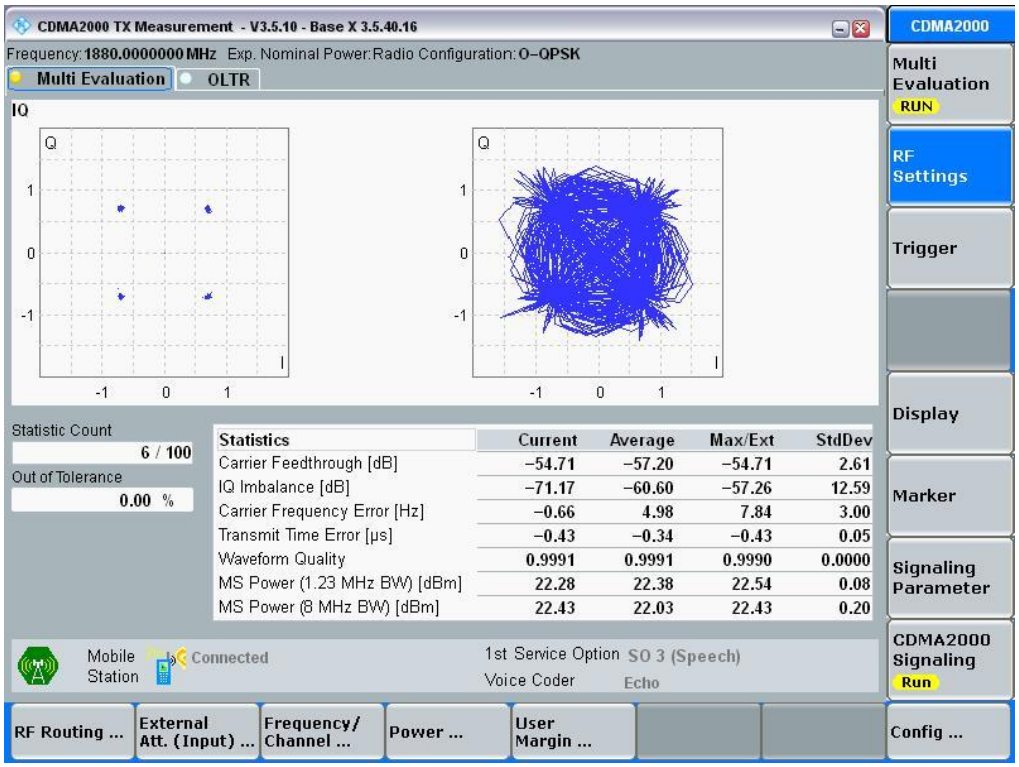
3.1.1.1.1 Test Channel = MCH



3.1.2 Test Band = CDMA BC1

3.1.2.1 Test Mode = CDMA /TM1

3.1.2.1.1 Test Channel = MCH



4 Bandwidth

Part I - Test Results

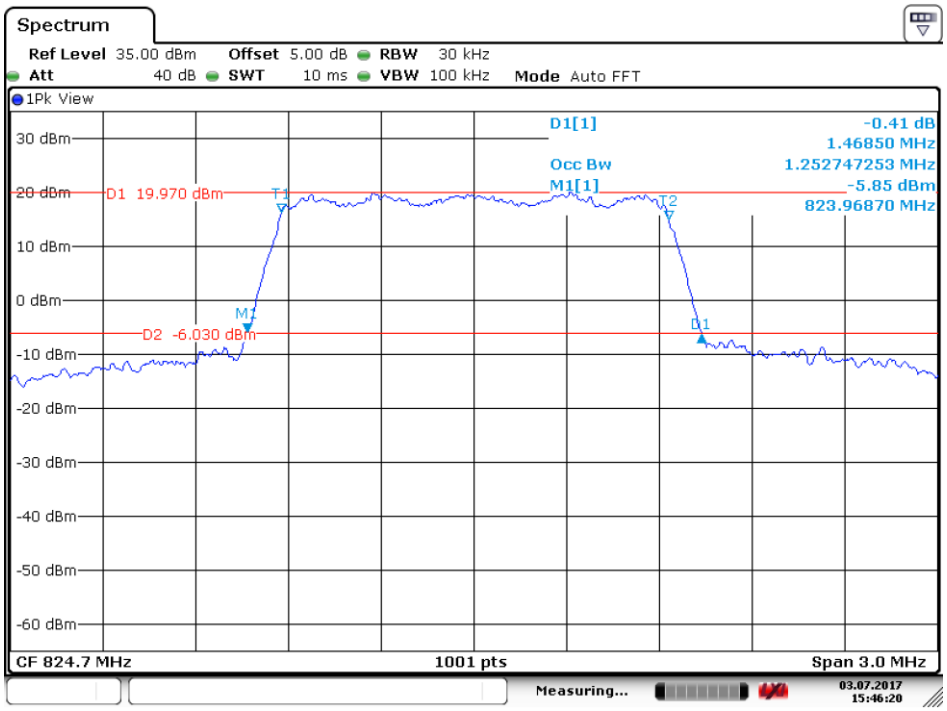
Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
CDMA BC0	CDMA/TM1	LCH	1.27	1.43	PASS
		MCH	1.28	1.43	PASS
		HCH	1.28	1.43	PASS
CDMA BC1	CDMA/TM1	LCH	1.29	1.47	PASS
		MCH	1.28	1.44	PASS
		HCH	1.28	1.45	PASS

4.1 For CDMA

4.1.1 Test Band = CDMA BC0

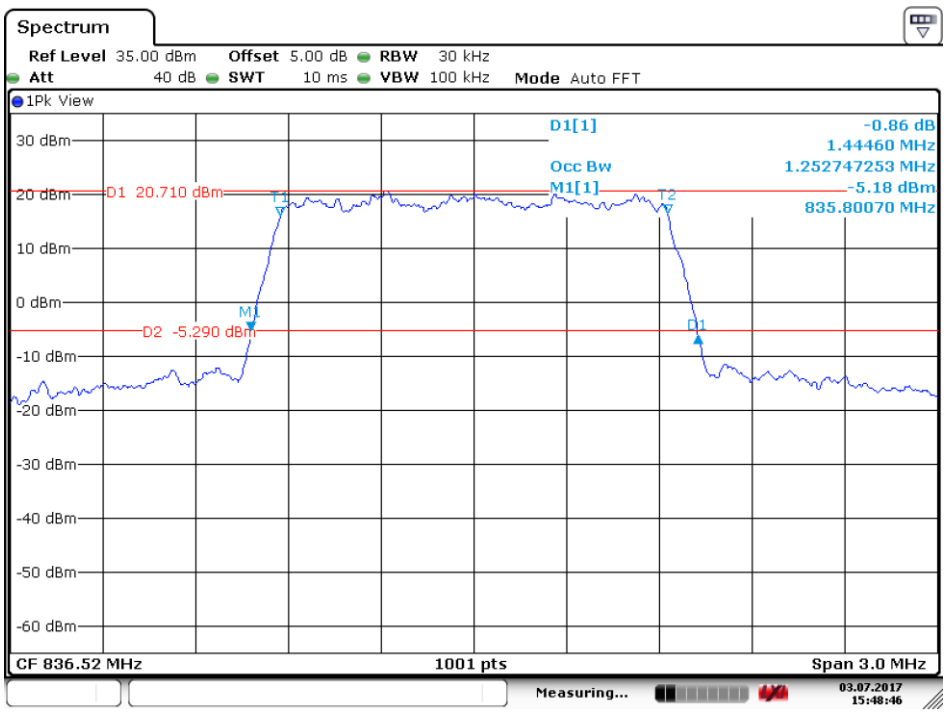
4.1.1.1 Test Mode = CDMA /TM1

4.1.1.1.1 Test Channel = LCH



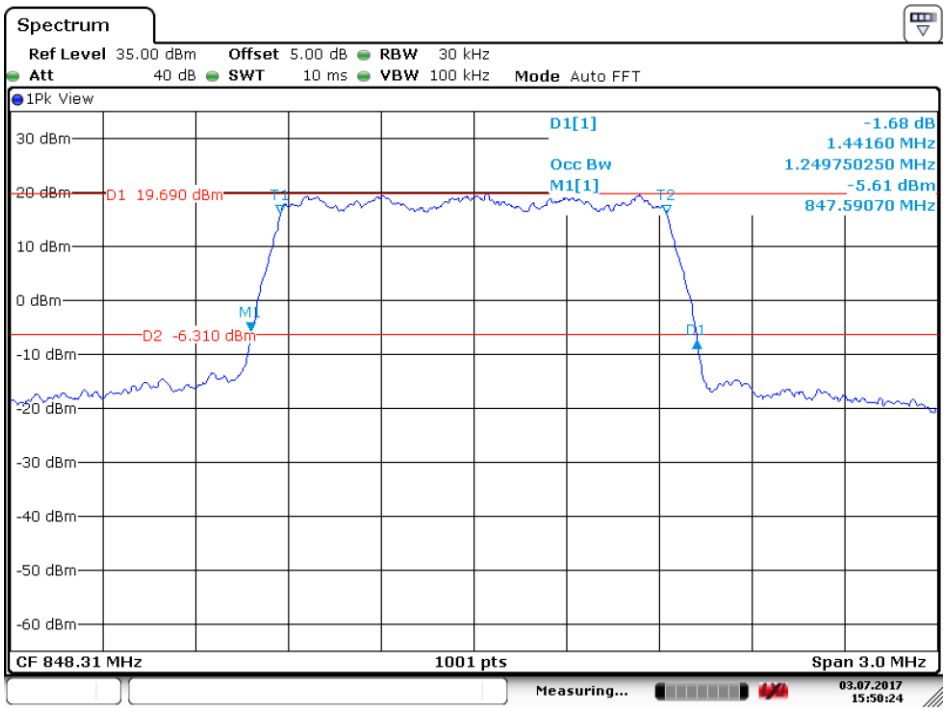
Date: 3.JUL.2017 15:46:20

4.1.1.1.2 Test Channel = MCH



Date: 3.JUL.2017 15:48:46

4.1.1.1.3 Test Channel = HCH

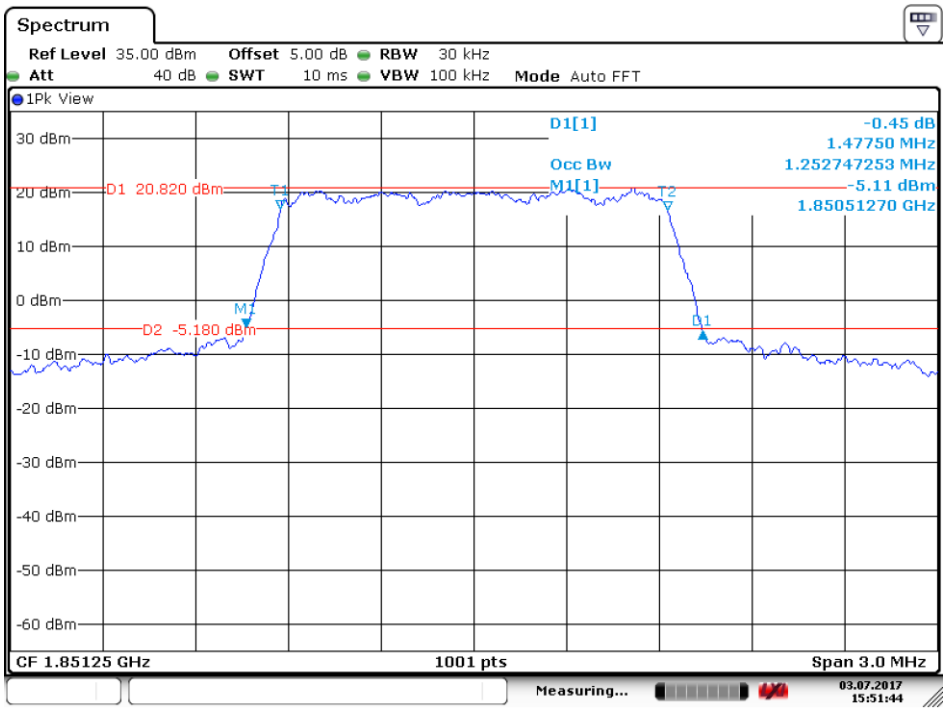


Date: 3.JUL.2017 15:50:24

4.1.2 Test Band = CDMA BC1

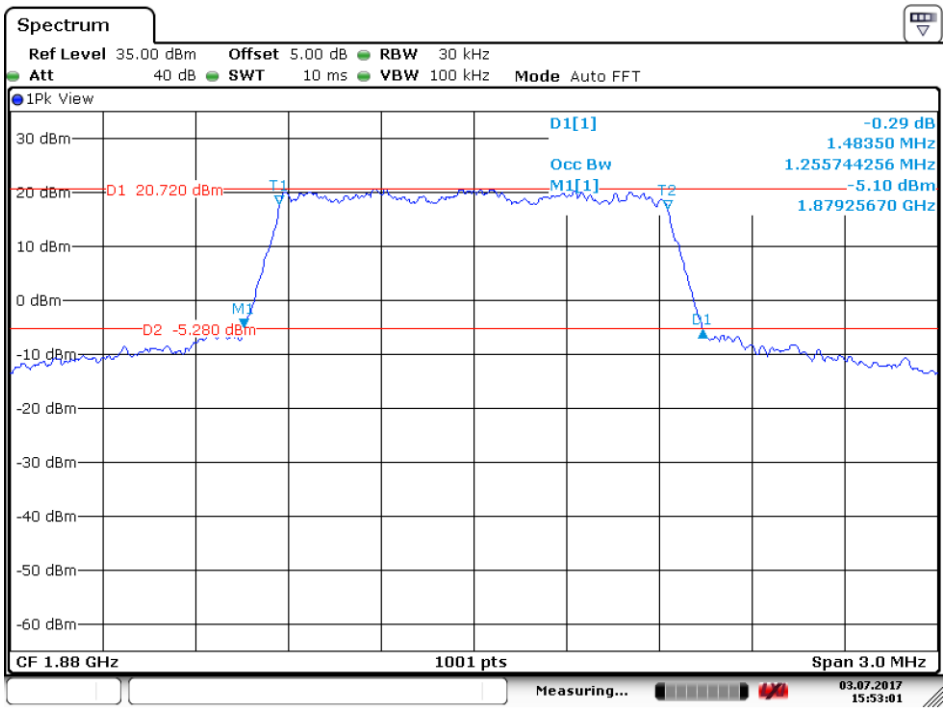
4.1.2.1 Test Mode = CDMA /TM1

4.1.2.1.1 Test Channel = LCH



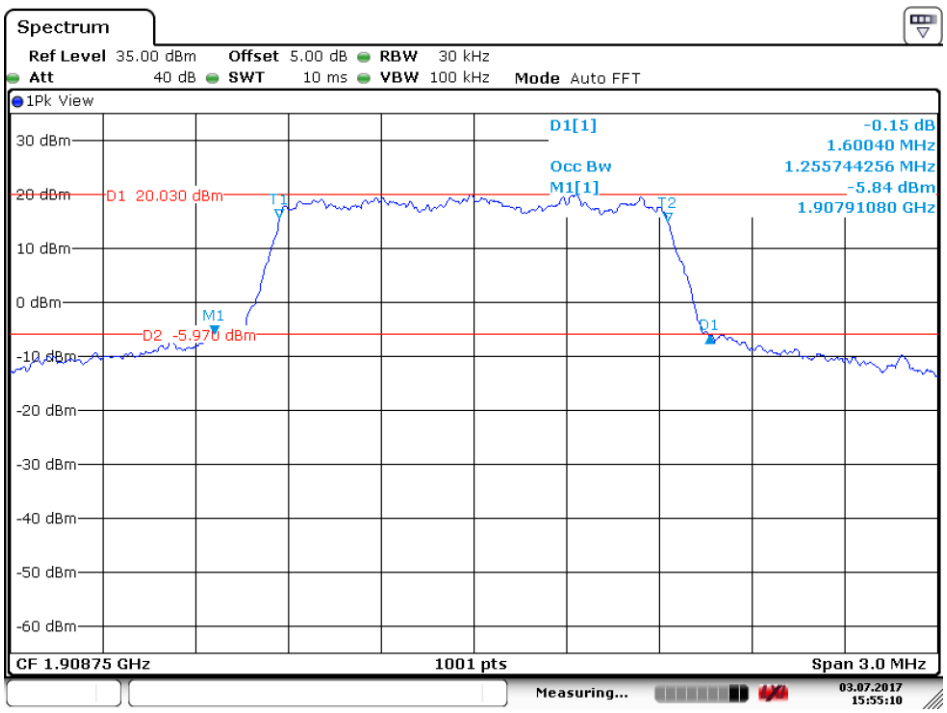
Date: 3.JUL.2017 15:51:44

4.1.2.1.2 Test Channel = MCH



Date: 3.JUL.2017 15:53:01

4.1.2.1.3 Test Channel = HCH



Date: 3.JUL.2017 15:55:10

5 Band Edges Compliance

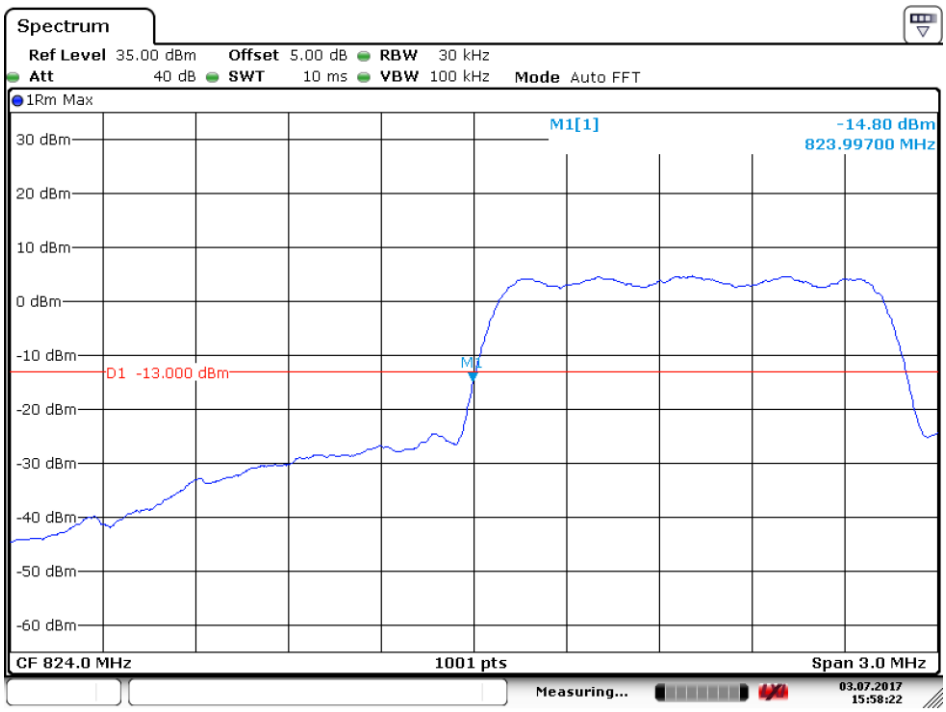
Part I - Test Plots

5.1 For CDMA

5.1.1 Test Band = CDMA BC0

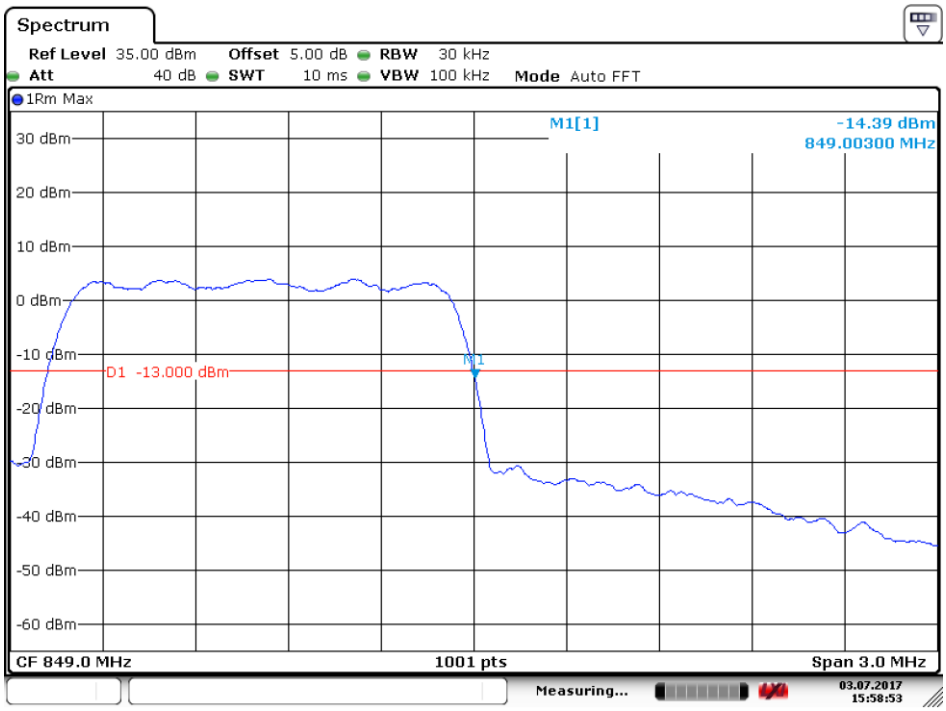
5.1.1.1 Test Mode = CDMA /TM1

5.1.1.1.1 Test Channel = LCH



Date: 3.JUL.2017 15:58:23

5.1.1.1.2 Test Channel = HCH

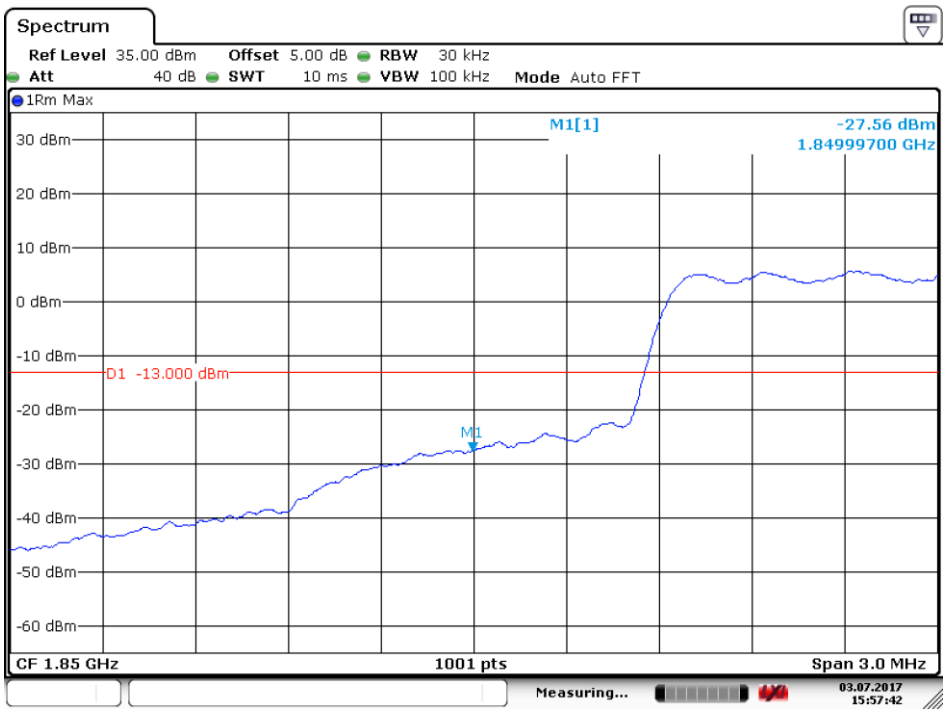


Date: 3.JUL.2017 15:58:53

5.1.2 Test Band = CDMA BC1

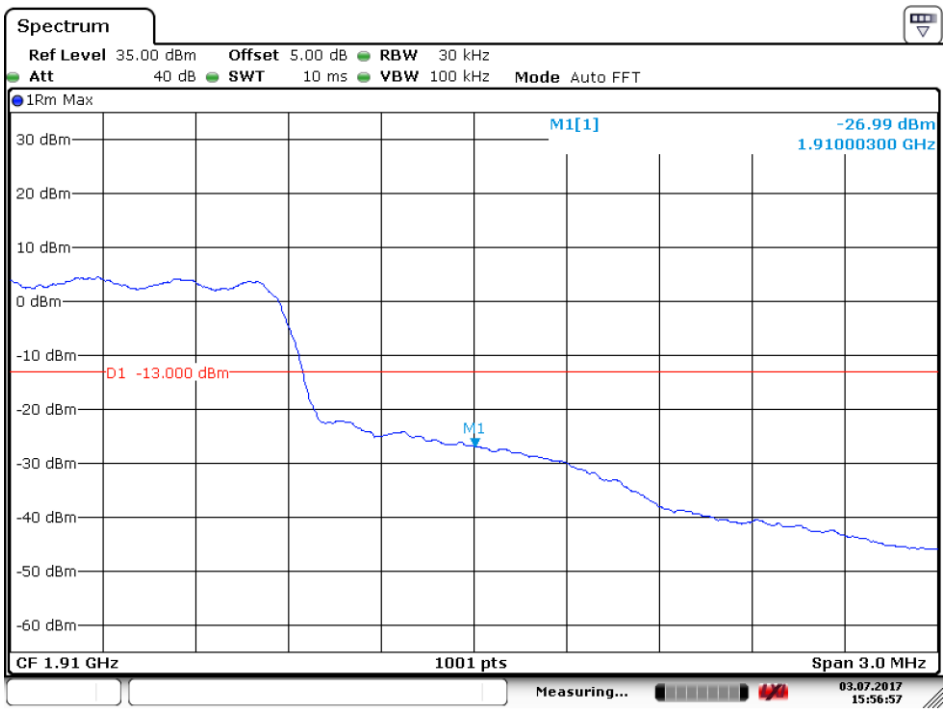
5.1.2.1 Test Mode = CDMA /TM1

5.1.2.1.1 Test Channel = LCH



Date: 3.JUL.2017 15:57:42

5.1.2.1.2 Test Channel = HCH



Date: 3.JUL.2017 15:56:57

6 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.

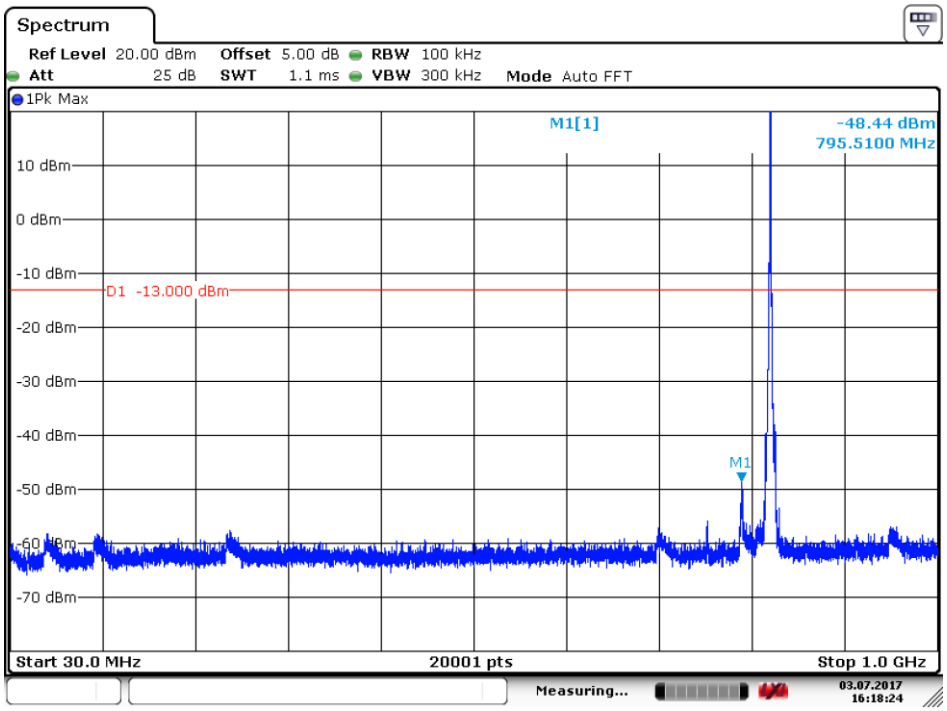
Part I - Test Plots

6.1 For CDMA

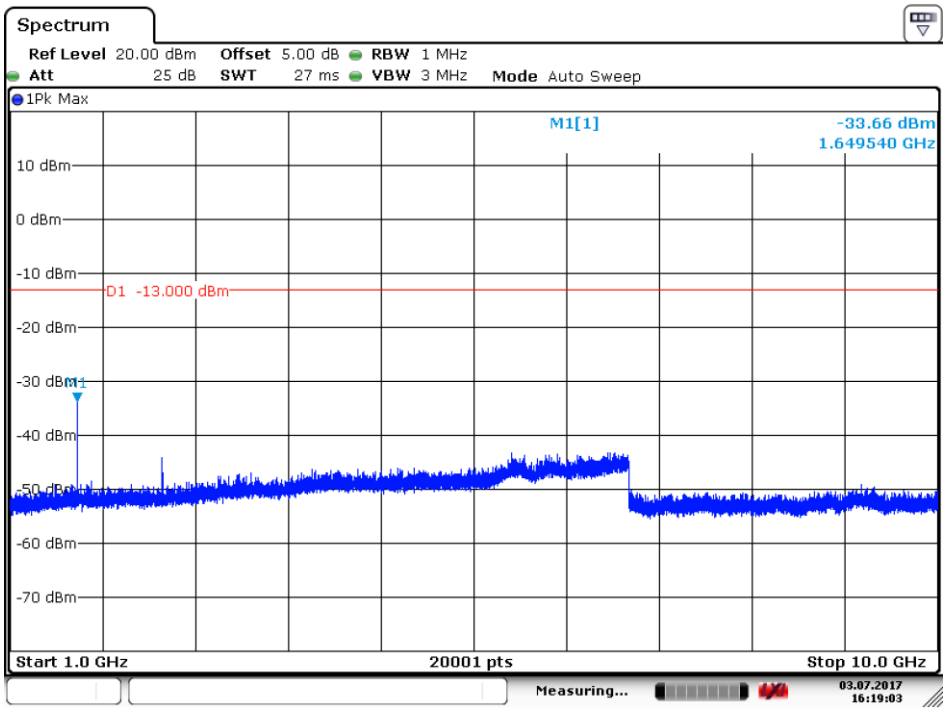
6.1.1 Test Band = CDMA BC0

6.1.1.1 Test Mode = CDMA /TM1

6.1.1.1.1 Test Channel = LCH

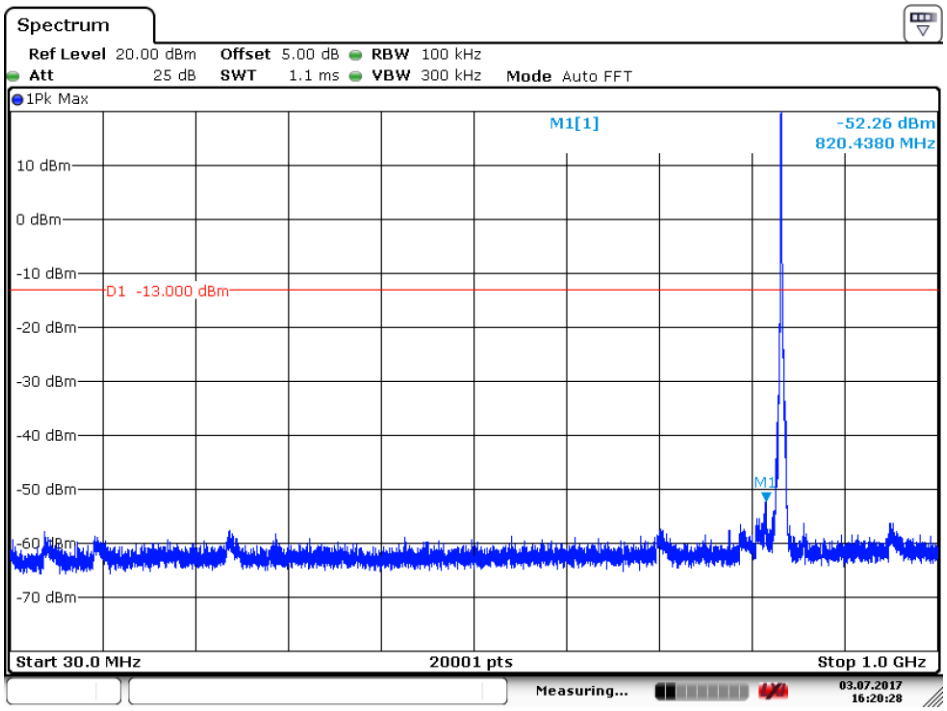


Date: 3.JUL.2017 16:18:24

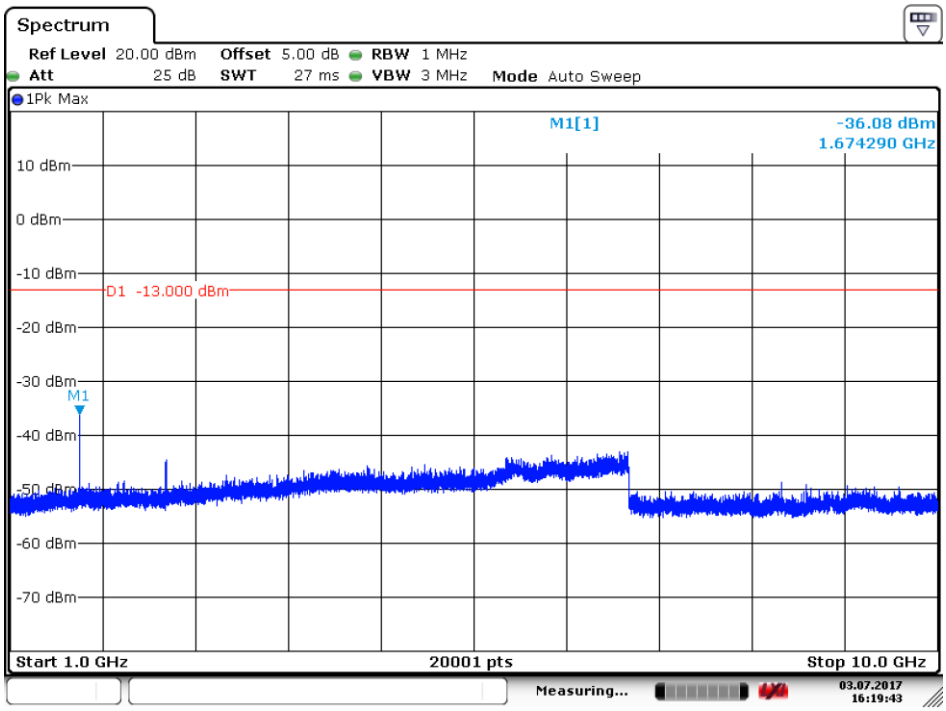


Date: 3.JUL.2017 16:19:03

6.1.1.1.2 Test Channel = MCH

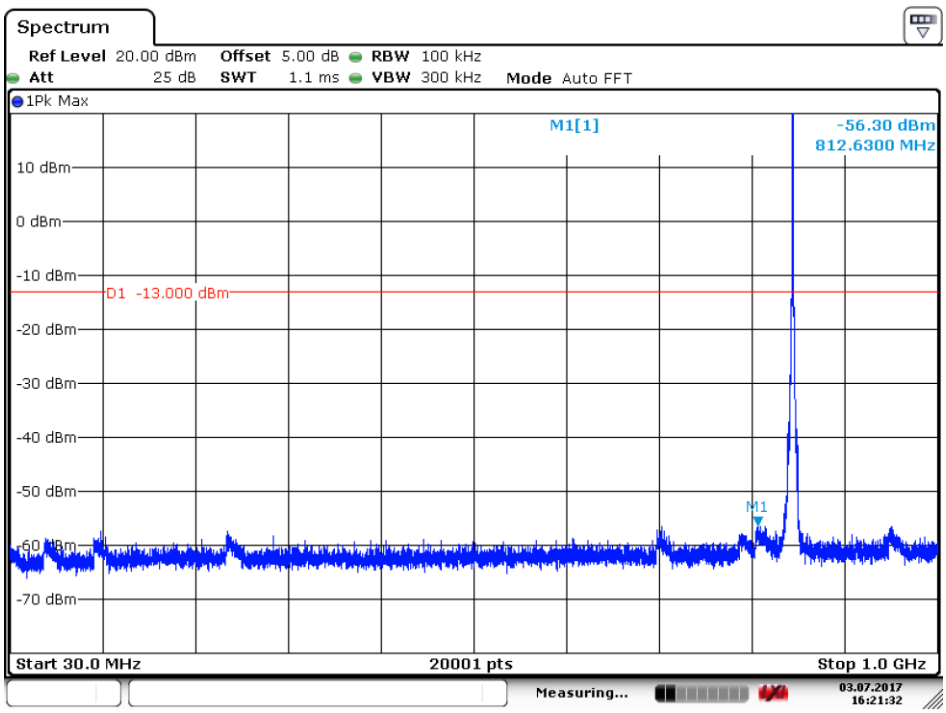


Date: 3.JUL.2017 16:20:28

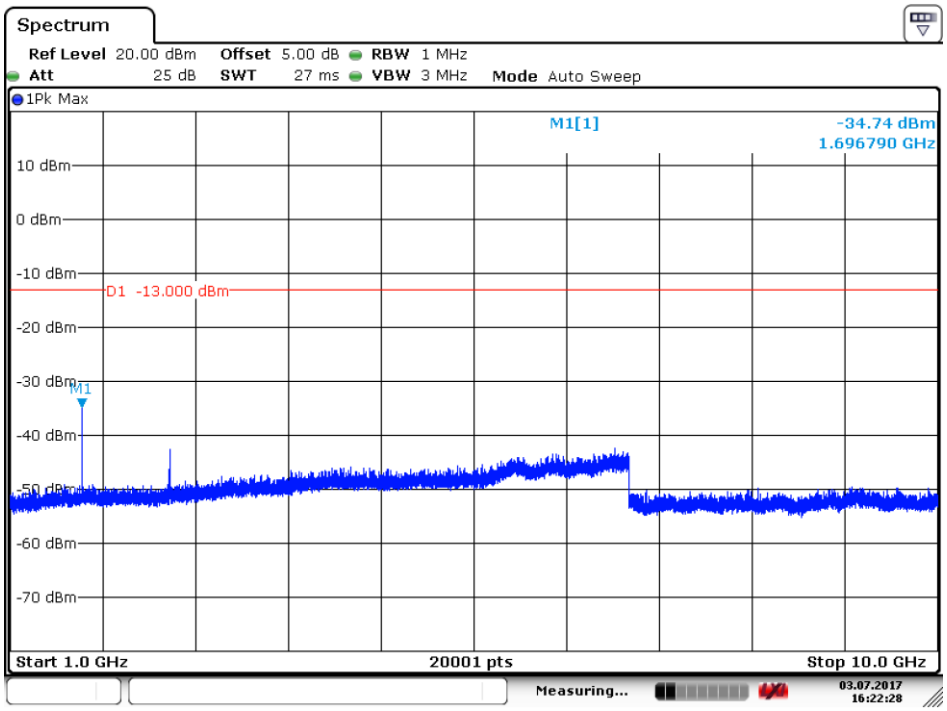


Date: 3.JUL.2017 16:19:43

6.1.1.1.3 Test Channel = HCH



Date: 3.JUL.2017 16:21:32

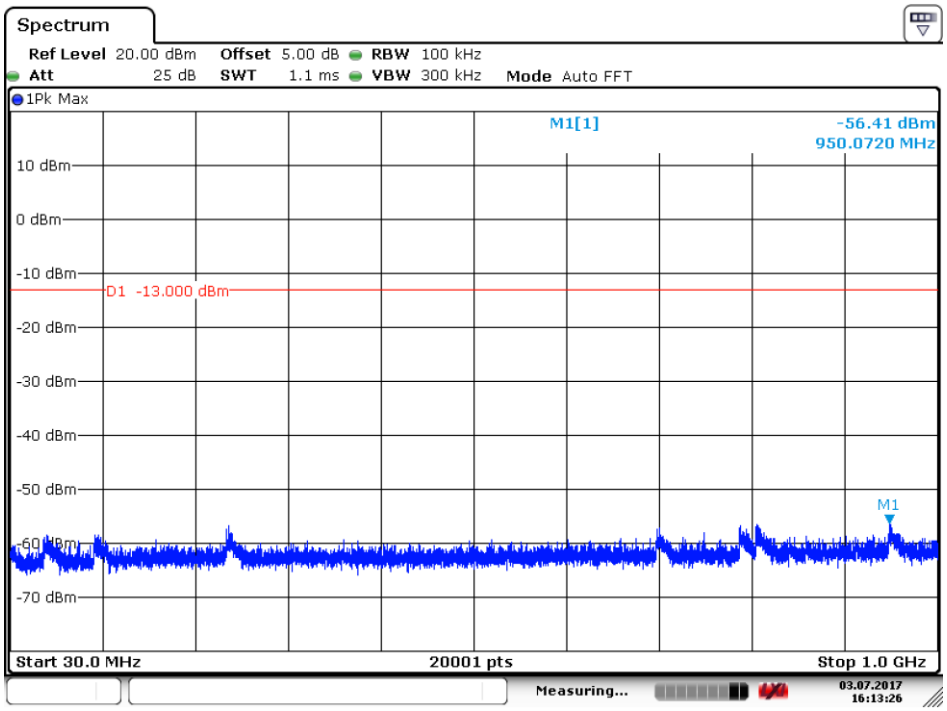


Date: 3.JUL.2017 16:22:29

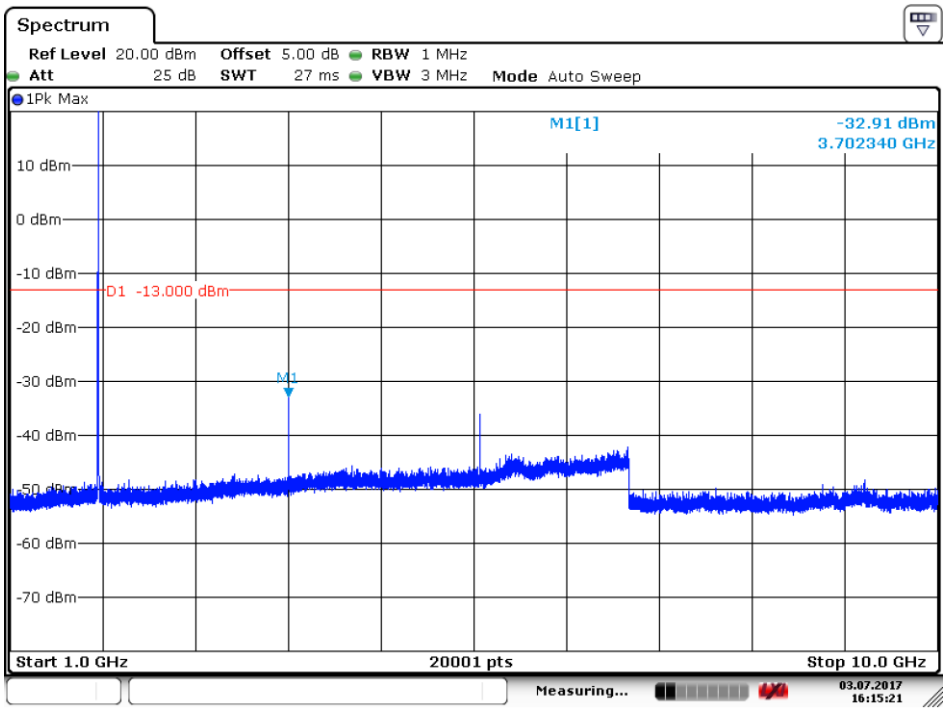
6.1.2 Test Band = CDMA BC1

6.1.2.1 Test Mode = CDMA /TM1

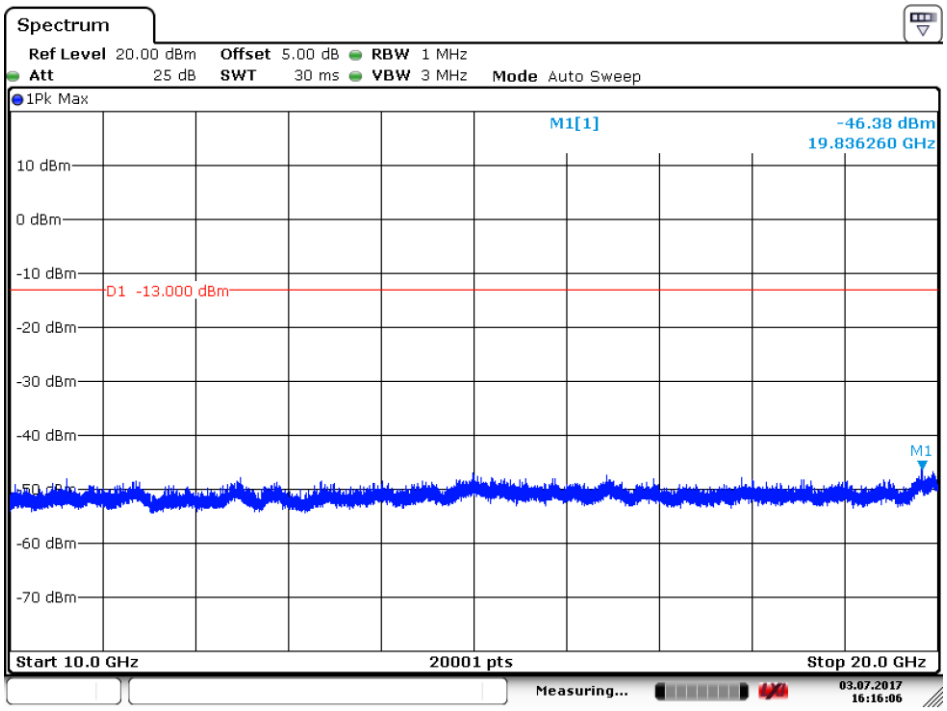
6.1.2.1.1 Test Channel = LCH



Date: 3.JUL.2017 16:13:26

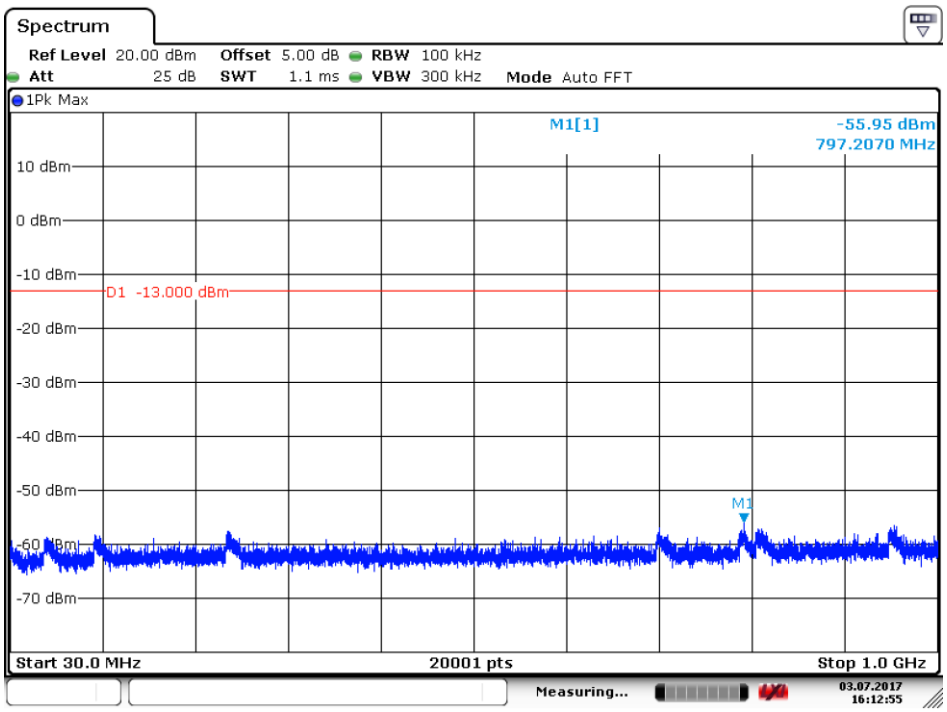


Date: 3.JUL.2017 16:15:21

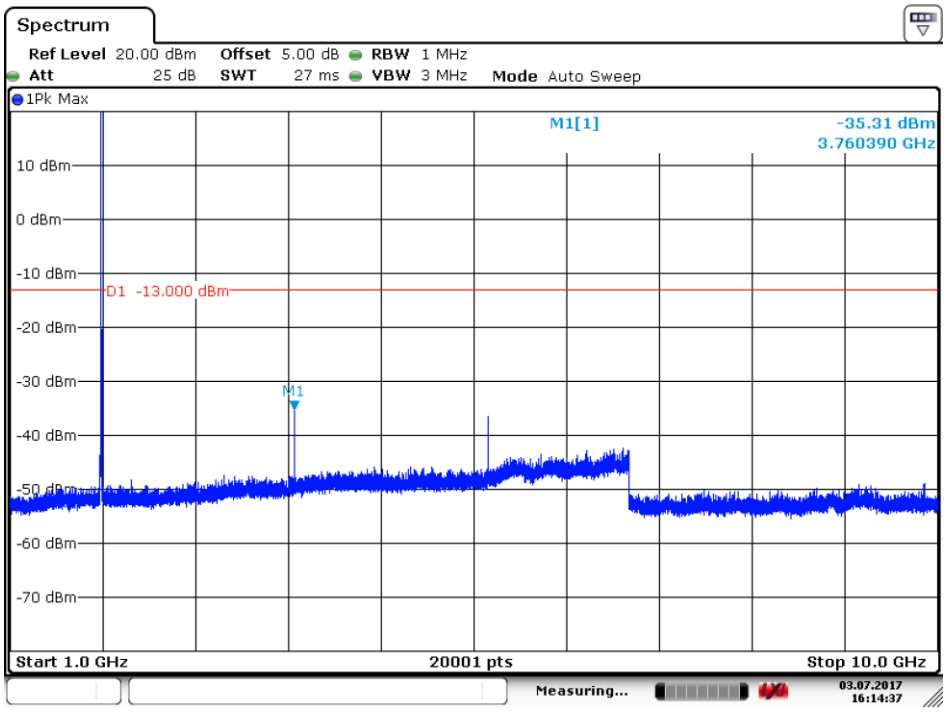


Date: 3.JUL.2017 16:16:07

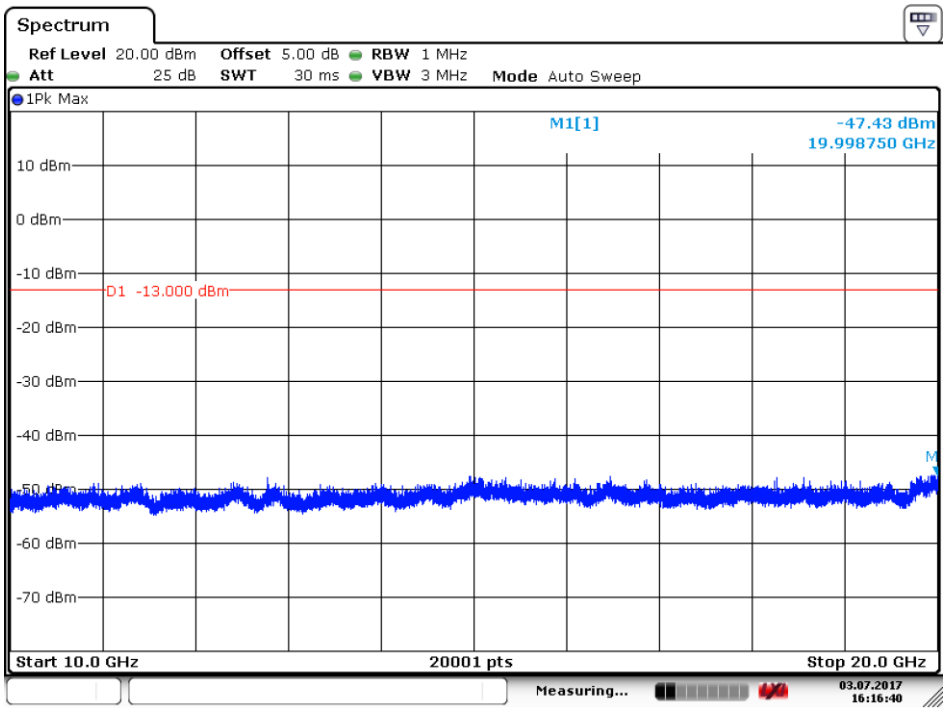
6.1.2.1.2 Test Channel = MCH



Date: 3.JUL.2017 16:12:55

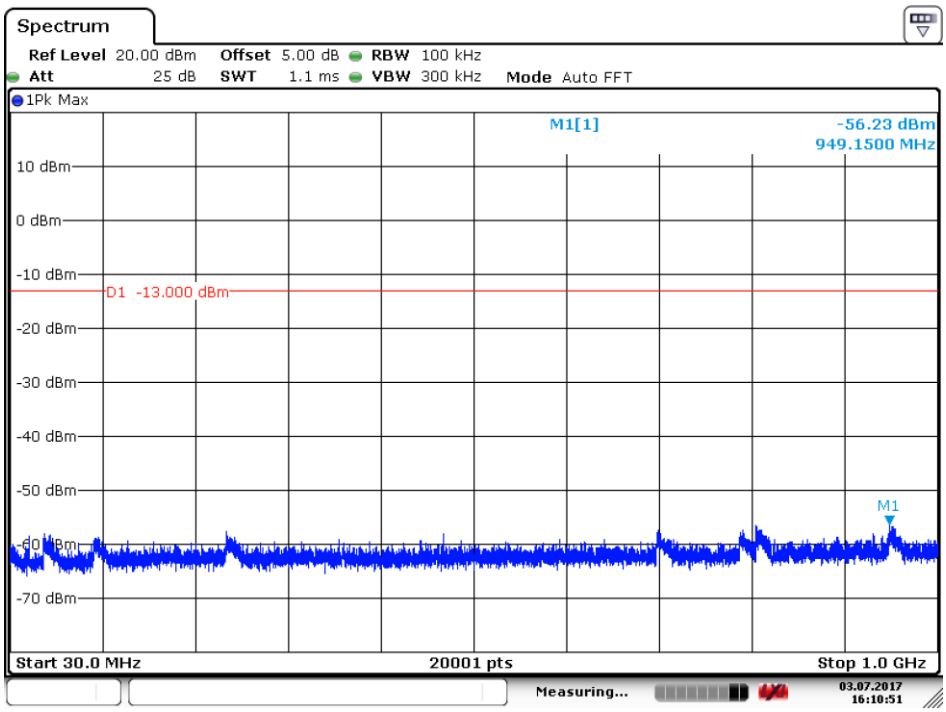


Date: 3.JUL.2017 16:14:37

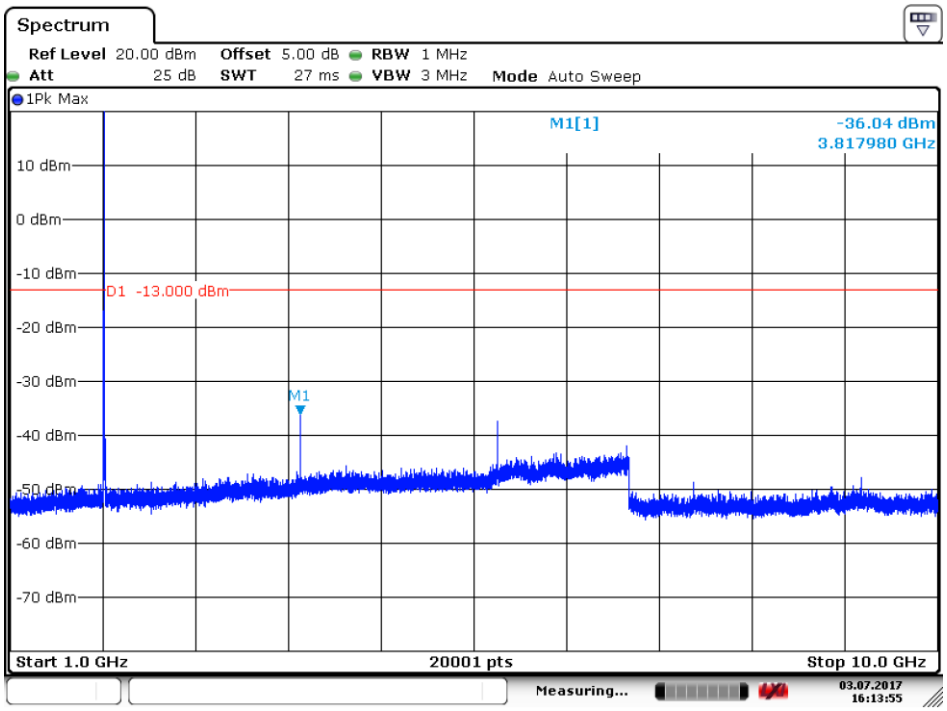


Date: 3.JUL.2017 16:16:41

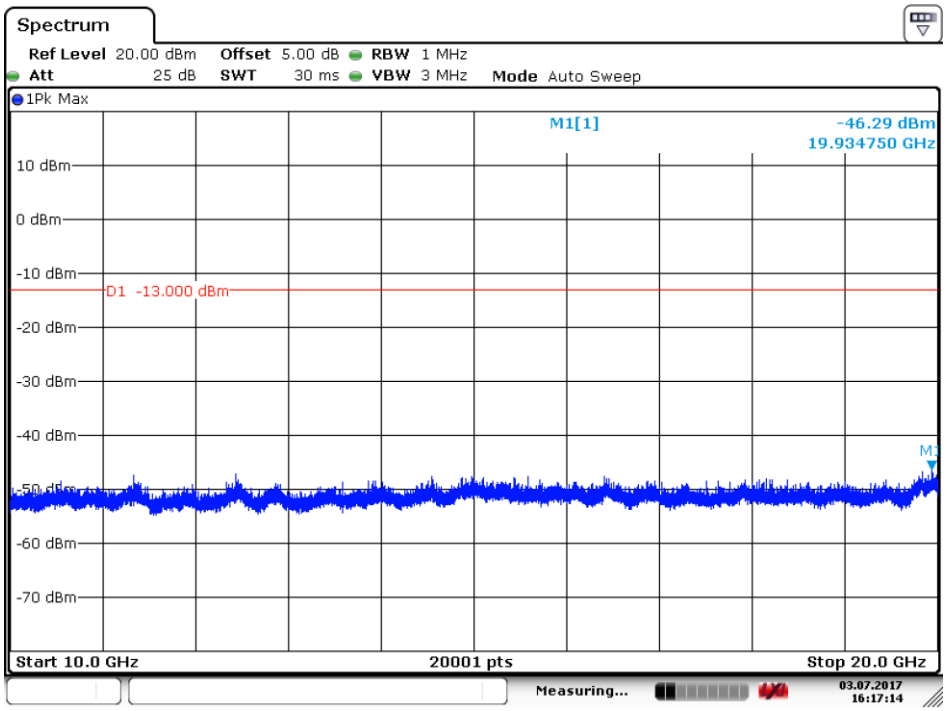
6.1.2.1.3 Test Channel = HCH



Date: 3.JUL.2017 16:10:52



Date: 3.JUL.2017 16:13:56



Date: 3.JUL.2017 16:17:14

7 Field Strength of Spurious Radiation

Part I - Test Plots

7.1 For CDMA

7.1.1 Test Band = CDMA BC0

7.1.1.1 Test Mode = CDMA /TM1

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1244.500	-50.07	-13.00	37.07	Vertical
1895.500	-44.31	-13.00	31.31	Vertical
4410.825	-55.59	-13.00	42.59	Vertical
1160.000	-50.61	-13.00	37.61	Horizontal
2108.500	-44.40	-13.00	31.40	Horizontal
5924.025	-55.37	-13.00	42.37	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1240.000	-48.52	-13.00	-35.52	Vertical
1608.500	-48.67	-13.00	-35.67	Vertical
2728.000	-44.91	-13.00	-31.91	Vertical
1282.000	-50.79	-13.00	-37.79	Horizontal
4267.012	-55.44	-13.00	-42.44	Horizontal
6288.187	-54.55	-13.00	-41.55	Horizontal

7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1387.500	-49.40	-13.00	-36.40	Vertical
5172.300	-55.81	-13.00	-42.81	Vertical
8925.562	-53.06	-13.00	-40.06	Vertical
1196.500	-49.73	-13.00	-36.73	Horizontal
1633.000	-47.46	-13.00	-34.46	Horizontal
4357.200	-55.68	-13.00	-42.68	Horizontal

7.1.2 Test Band = CDMA BC1

7.1.2.1 Test Mode = CDMA /TM1

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
2112.000	-48.36	-13.00	-35.36	Vertical
4838.362	-67.16	-13.00	-54.16	Vertical
10637.175	-63.89	-13.00	-50.89	Vertical
2113.000	-54.41	-13.00	-41.41	Horizontal
5135.737	-66.12	-13.00	-53.12	Horizontal
10622.062	-63.82	-13.00	-50.82	Horizontal

7.1.2.1.1 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
2132.500	-51.54	-13.00	-38.54	Vertical
6930.225	-65.21	-13.00	-52.21	Vertical
10643.512	-63.93	-13.00	-50.93	Vertical
2132.500	-55.60	-13.00	-42.60	Horizontal
6930.225	-64.16	-13.00	-51.16	Horizontal
10646.437	-63.85	-13.00	-50.85	Horizontal

7.1.2.1.2 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
2153.500	-51.06	-13.00	-38.06	Vertical
6282.825	-66.05	-13.00	-53.05	Vertical
10625.475	-63.93	-13.00	-50.93	Vertical
2152.000	-54.70	-13.00	-41.70	Horizontal
7010.175	-63.60	-13.00	-50.60	Horizontal
10617.675	-63.87	-13.00	-50.87	Horizontal

NOTE:

1) The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

8 Frequency Stability

8.1 Frequency Error VS. Voltage

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
CDMA BC0	CDMA/TM1	LCH	TN	VL	3.25	0.00394	PASS
				VN	-0.38	-0.00046	PASS
				VH	2.02	0.00245	PASS
		MCH	TN	VL	4.83	0.00577	PASS
				VN	2.75	0.00329	PASS
				VH	-1.37	-0.00164	PASS
		HCH	TN	VL	1.62	0.00191	PASS
				VN	-2.59	-0.00305	PASS
				VH	-4.34	-0.00512	PASS

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
CDMA BC1	CDMA/TM1	LCH	TN	VL	-4.32	-0.00233	PASS
				VN	-1.54	-0.00083	PASS
				VH	2.32	0.00125	PASS
		MCH	TN	VL	-5.84	-0.00311	PASS
				VN	1.66	0.00088	PASS
				VH	-0.75	-0.00040	PASS
		HCH	TN	VL	1.65	0.00086	PASS
				VN	-3.42	-0.00179	PASS
				VH	3.44	0.00180	PASS

8.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
CDMA BC0	CDMA/TM1	LCH	VN	-30	-4.63	-0.00561	PASS
				-20	2.60	0.00315	PASS
				-10	1.67	0.00202	PASS
				0	-2.68	-0.00325	PASS
				10	3.56	0.00432	PASS
				20	-4.80	-0.00582	PASS
				30	1.60	0.00194	PASS
				40	-2.03	-0.00246	PASS
				50	-6.21	-0.00753	PASS
		MCH	VN	-30	-3.20	-0.00383	PASS
				-20	-5.08	-0.00607	PASS
				-10	-1.39	-0.00166	PASS
				0	-3.38	-0.00404	PASS
				10	1.37	0.00164	PASS
				20	2.72	0.00325	PASS
				30	1.61	0.00192	PASS
				40	3.23	0.00386	PASS
				50	-4.35	-0.00520	PASS
		HCH	VN	-30	-2.17	-0.00256	PASS
				-20	3.68	0.00434	PASS
				-10	2.55	0.00301	PASS
				0	-5.52	-0.00651	PASS
				10	1.32	0.00156	PASS
				20	-2.78	-0.00328	PASS
				30	3.28	0.00387	PASS
				40	-4.63	-0.00546	PASS
				50	-2.50	-0.00295	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
CDMA BC1	CDMA/TM1	LCH	VN	-30	-4.49	-0.00243	PASS
				-20	1.93	0.00104	PASS
				-10	-5.97	-0.00322	PASS
				0	0.59	0.00032	PASS
				10	-4.65	-0.00251	PASS
				20	-4.11	-0.00222	PASS
				30	-3.96	-0.00214	PASS
				40	-6.72	-0.00363	PASS
				50	-2.74	-0.00148	PASS
		MCH	VN	-30	-1.94	-0.00103	PASS
				-20	3.29	0.00175	PASS
				-10	-4.34	-0.00231	PASS
				0	1.68	0.00089	PASS
				10	-5.10	-0.00271	PASS
				20	-3.43	-0.00182	PASS
				30	-1.13	-0.00060	PASS
				40	-2.25	-0.00120	PASS
				50	-3.50	-0.00186	PASS
		HCH	VN	-30	-3.25	-0.00170	PASS
				-20	-6.54	-0.00343	PASS
				-10	-2.73	-0.00143	PASS
				0	-5.34	-0.00280	PASS
				10	4.62	0.00242	PASS
				20	-4.03	-0.00211	PASS
				30	-3.22	-0.00169	PASS
				40	-2.84	-0.00149	PASS
				50	-5.27	-0.00276	PASS

The End