



REPORT No.: SZ19070119W07

# TEST REPORT

**APPLICANT** : Nubia Technology Co.,Ltd  
**PRODUCT NAME** : LTE Digital Mobile Phone  
**MODEL NAME** : NX627J  
**BRAND NAME** : NUBIA  
**FCC ID** : 2AHJO-NX627J  
**STANDARD(S)** : 47 CFR Part 22, Subpart H  
                  : 47 CFR Part 24 Subpart E  
**RECEIPT DATE** : 2019-08-22  
**TEST DATE** : 2019-08-23 to 2019-09-15  
**ISSUE DATE** : 2019-09-19

Edited by:

*Zhao Zetian*

Zhao Zetian (Test Engineer)

Approved by:

*Peng Huarui*

Peng Huarui ( Supervisor )

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Change History		
Version	Date	Reason for change
1.0	2019-09-19	First edition

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# 1. Technical Information

**Note:** Provide by applicant.

## 1.1. Applicant and Manufacturer Information

<b>Applicant:</b>	Nubia Technology Co.,Ltd
<b>Applicant Address:</b>	10/F, Tower A, Hans Innovation Mansion, North Ring Rd., No.9018, High-Tech Park, Nanshan District, Shenzhen, China
<b>Manufacturer:</b>	Nubia Technology Co.,Ltd
<b>ManufacturerAddress:</b>	10/F, Tower A, Hans Innovation Mansion, North Ring Rd., No.9018, High-Tech Park, Nanshan District, Shenzhen, China

## 1.2. Equipment Under Test (EUT) Description

<b>Product Name:</b>	NX627J	
<b>Serial No:</b>	(N/A, marked #1 by test site)	
<b>Hardware Version:</b>	NX627J_V1MB	
<b>Software Version:</b>	NX627J_ENCommon_V1.00	
<b>Modulation Type:</b>	CDMA2000 1X:QPSK,OQPSK; EVDO 0:QPSK,OQPSK; EVDO A:QPSK,OQPSK; EVDO B:QPSK,OQPSK	
<b>Operation Band:</b>	CDMA 800MHz: (BC0);CDMA 1900Mhz:(BC1)	
<b>Frequency Range:</b>	CDMA 800MHz(BC0)	Tx: 824.7 – 848.31 MHz; Rx: 869.7-893.31MHz;
	CDMA1900MHz(BC1 )	Tx: 1851.25 MHz -1908.75 MHz; Rx: 1931.25 MHz-1988.75 MHz
<b>Emission Designator:</b>	CDMA 800MHzBC0:1M28F9W,CDMA 1900MHzBC1:1M28F9W	
<b>Antenna Type:</b>	Fixed Internal	
<b>Antenna Gain:</b> <b>( Top Antenna)</b>	CDMA 800MHz, BC0:	1.26 dBi
	CDMA 1900MHzBC1	1.36 dBi
<b>Antenna Gain:</b> <b>(Bottom Antenna)</b>	CDMA 800MHz, BC0:	1.26 dBi
	CDMA 1900MHzBC1	1.36 dBi
<b>Accessory Information::</b>	Battery	
	Brand Name:	ATL



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	Model No.:	Li3839T44P6h866443
	Serial No.:	(N/A, marked #1 by test site)
	Capacity:	3800mAh
	Rated Voltage:	3.82V
	Charge Limit:	4.4V
<b>Accessory Information:</b>	AC Adapter	
	Brand Name:	N/A
	Model No.:	CYNBY090200-A00
	Serial No.:	(N/A, marked #1 by test site)
	Rated Input:	100-240V~50/60Hz 0.5A
	Rated Output:	5V=3.0A; 9V=2.0A; 12V=1.5A

**Note 1:** For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

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## 1.3. Test Standards and Results

The objective of the report is to perform testing according to Part 2 and Part 27 for the EUT FCC ID Certification:

No	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22	Public Mobile Services
3	47 CFR Part 24	Personal Communications Services

Test detailed items/section required by FCC rules and results are as below:

Section	Description	Test Date	Test Engineer	Result
2.1046	Transmitter Conducted Output Power	Aug 27, 2019	Gao Mingzhou	PASS
2.1049	Occupied Bandwidth	Aug 29, 2019	Gao Mingzhou	PASS
24.232(d),27.50(d)	Peak -Average Ratio	Sep 01&03, 2019 Sep 08, 2019	Gao Mingzhou	PASS
2.1055,22.355,24.235	Frequency Stability	Aug 28, 2019	Gao Mingzhou	PASS
2.1051,22.917(a)),24.238(a)	Conducted Spurious Emissions	Aug 29, 2019	Gao Mingzhou	PASS
2.1051,22.917(a),24.238(a)	Band Edge	Aug 25, 2019	Gao Mingzhou	PASS
2.1046, 22.913(a),24.232(a)	Equivalent Isotropic Radiated Power	Sep 01, 2019	Peng xuewei	PASS
2.1053,22.917(a),24.238(a)	Radiated Spurious Emissions	Sep 01&02, 2019	Peng xuewei	PASS
<b>Note:</b> The tests were performed according to the method of measurements prescribed in KDB971168 D01 v03 (Oct 27, 2017)and ANSI/TIA-603-E-2016.				

## 1.4. Environmental Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15 - 35
Relative Humidity (%):	30 -60
Atmospheric Pressure (kPa):	86-106

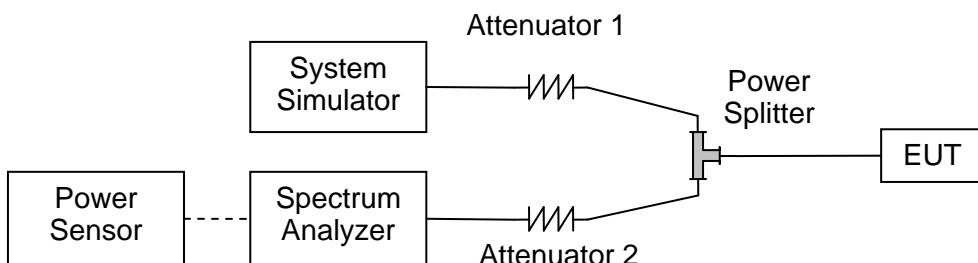
## 2. 47 CFR Part 2,Part22H and Part 24E Requirements

### 2.1. Transmitter Conducted Output Power

#### 2.1.1. Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

#### 2.1.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.



### 2.1.3. Test procedure

KDB 971168 D01v03 Section 5.2 and ANSI/TIA-603-E-2016.

### 2.1.4. Result

#### Top Antenna

Band	CDMA2000 BC0					
TX Channel	1013		384		777	
Frequency (MHz)	824.7		836.52		848.31	
	dBm	W	dBm	W	dBm	W
RC1 SO55	23.66	0.232	23.67	0.233	23.72	0.236
RC3 SO55	23.81	0.240	23.84	0.242	23.76	0.238
RC3 SO32 (F+SCH)	23.74	0.237	23.78	0.239	23.60	0.229
RC3 SO32 (+SCH)	23.73	0.236	23.74	0.237	23.60	0.229
1XEVDO Rev 0	23.60	0.229	23.62	0.230	23.58	0.228
1XEVDO Rev A	23.41	0.219	23.35	0.216	23.40	0.219
1XEVDO Rev B	22.84	0.192	22.87	0.194	22.76	0.189

Band	CDMA2000 BC1					
TX Channel	25		600		1175	
Frequency (MHz)	1851.25		1880		1908.75	
	dBm	W	dBm	W	dBm	W
RC1 SO55	15.26	0.034	15.15	0.033	14.97	0.031
RC3 SO55	15.44	0.035	15.39	0.035	15.43	0.035
RC3 SO32 (F+SCH)	15.27	0.034	15.36	0.034	15.35	0.034
RC3 SO32 (+SCH)	15.27	0.034	15.32	0.034	15.33	0.034
1XEVDO Rev 0	15.24	0.033	15.17	0.033	14.66	0.029
1XEVDO Rev A	14.87	0.031	14.98	0.031	14.61	0.029
1XEVDO Rev B	14.87	0.031	14.98	0.031	14.61	0.029



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**Bottom Antenna**

Band	CDMA2000 BC0					
TX Channel	1013		384		777	
Frequency (MHz)	824.7		836.52		848.31	
	dBm	W	dBm	W	dBm	W
RC1 SO55	23.66	0.232	23.67	0.233	23.72	0.236
RC3 SO55	23.81	0.240	23.84	0.242	23.76	0.238
RC3 SO32 (F+SCH)	23.74	0.237	23.78	0.239	23.60	0.229
RC3 SO32 (+SCH)	23.73	0.236	23.74	0.237	23.60	0.229
1XEVDO Rev 0	23.60	0.229	23.62	0.230	23.58	0.228
1XEVDO Rev A	23.41	0.219	23.35	0.216	23.40	0.219
1XEVDO Rev B	22.84	0.192	22.87	0.194	22.76	0.189

Band	CDMA2000 BC1					
TX Channel	25		600		1175	
Frequency (MHz)	1851.25		1880		1908.75	
	dBm	W	dBm	W	dBm	W
RC1 SO55	17.68	0.059	17.57	0.057	17.39	17.39
RC3 SO55	17.86	0.061	17.81	0.060	17.85	17.85
RC3 SO32 (F+SCH)	17.69	0.059	17.78	0.060	17.77	17.77
RC3 SO32 (+SCH)	17.69	0.059	17.74	0.059	17.75	17.75
1XEVDO Rev 0	17.66	0.058	17.59	0.057	17.08	17.08
1XEVDO Rev A	17.29	0.054	17.40	0.055	17.03	17.03
1XEVDO Rev B	16.75	0.047	16.67	0.046	16.55	16.55

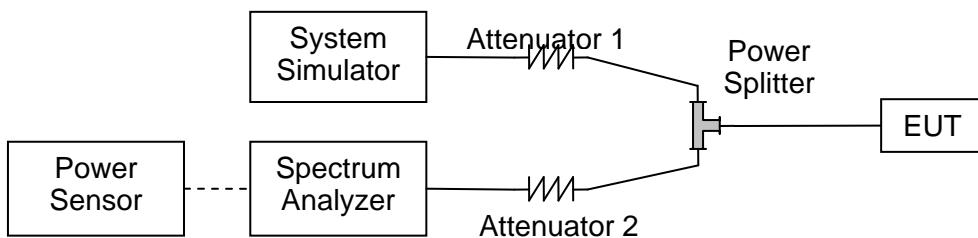
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## 2.2. Occupied Bandwidth

### 2.2.1. Requirement

According to FCC section 2.1049, the occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. Occupied bandwidth is also known as the 99% emission bandwidth.

### 2.2.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

### 2.2.3. Test procedure

KDB 971168 D01v03 Section 4.1 and ANSI/TIA-603-E-2016.



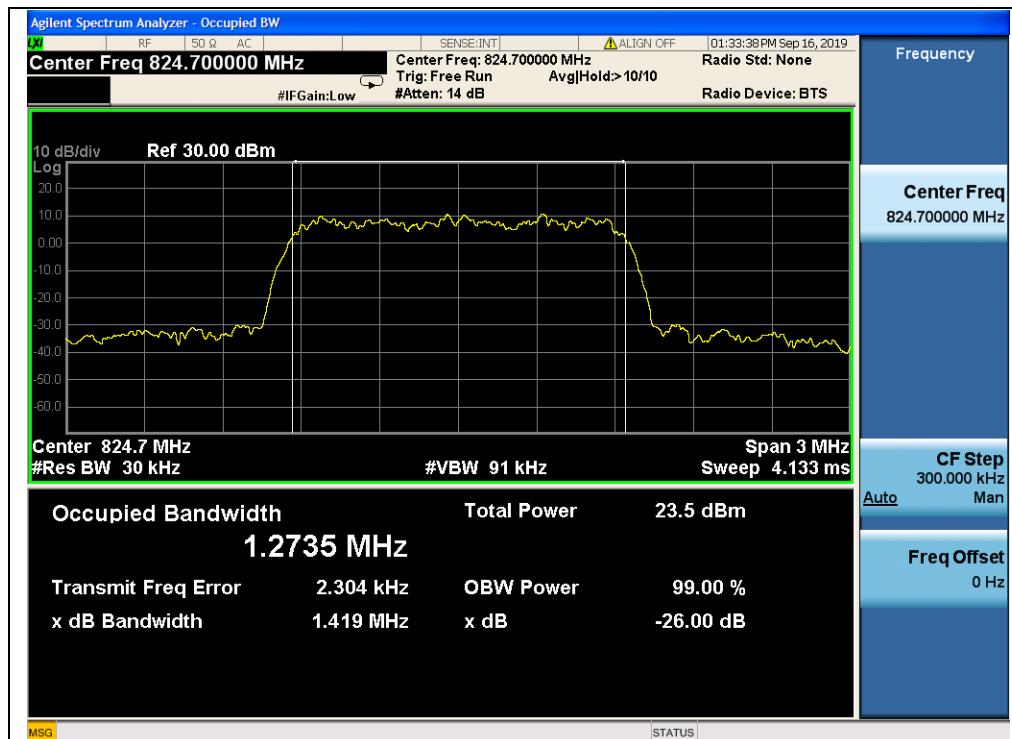
Band	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26dB bandwidth (MHz)	Refer to Plot
CDMA (BC0)	1013	824.7	1.274	1.419	Plot A1 to A3
	384	836.52	1.270	1.427	
	777	848.31	1.269	1.421	
1XEVDO Rev 0 (BC0)	1013	824.7	1.267	1.422	Plot B1 to B3
	384	836.52	1.272	1.418	
	777	848.31	1.274	1.425	
1XEVDO Rev A (BC0)	1013	824.7	1.272	1.419	Plot C1 to C3
	384	836.52	1.272	1.422	
	777	848.31	1.270	1.416	
1XEVDO Rev B (BC0)	1013	824.7	1.270	1.418	Plot D1 to D3
	384	836.52	1.275	1.412	
	777	848.31	1.279	1.418	

Band	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26dB bandwidth (MHz)	Refer to Plot
CDMA (BC1)	25	1851.25	1.272	1.429	Plot F1 to F3
	600	1880	1.271	1.422	
	1175	1908.75	1.272	1.423	
1XEVDO Rev 0 (BC1)	25	1851.25	1.275	1.420	Plot G1 to G3
	600	1880	1.268	1.421	
	1175	1908.75	1.270	1.425	
1XEVDO Rev A (BC1)	25	1851.25	1.272	1.424	Plot H1 to H3
	600	1880	1.273	1.432	
	1175	1908.75	1.273	1.428	
1XEVDO Rev B (BC1)	25	1851.25	1.269	1.419	Plot I1 to I3
	600	1880	1.275	1.430	
	1175	1908.75	1.274	1.430	



## 2.2.4. Test Result

### Test Plots:



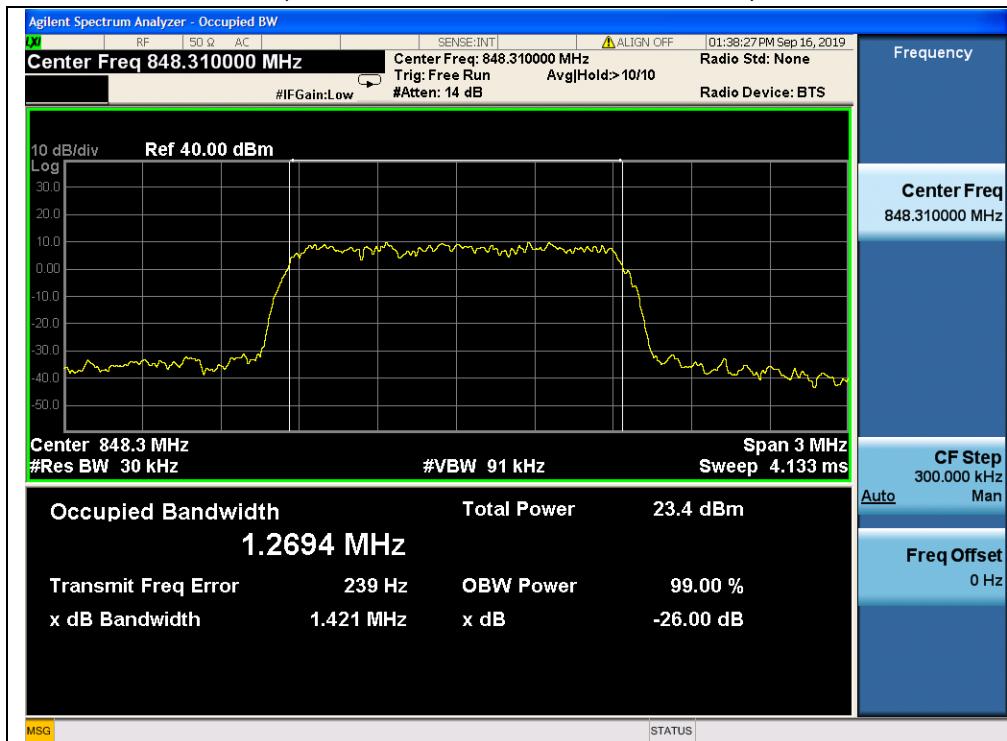
(Plot A1, CDMABC0, Channel = 1013)



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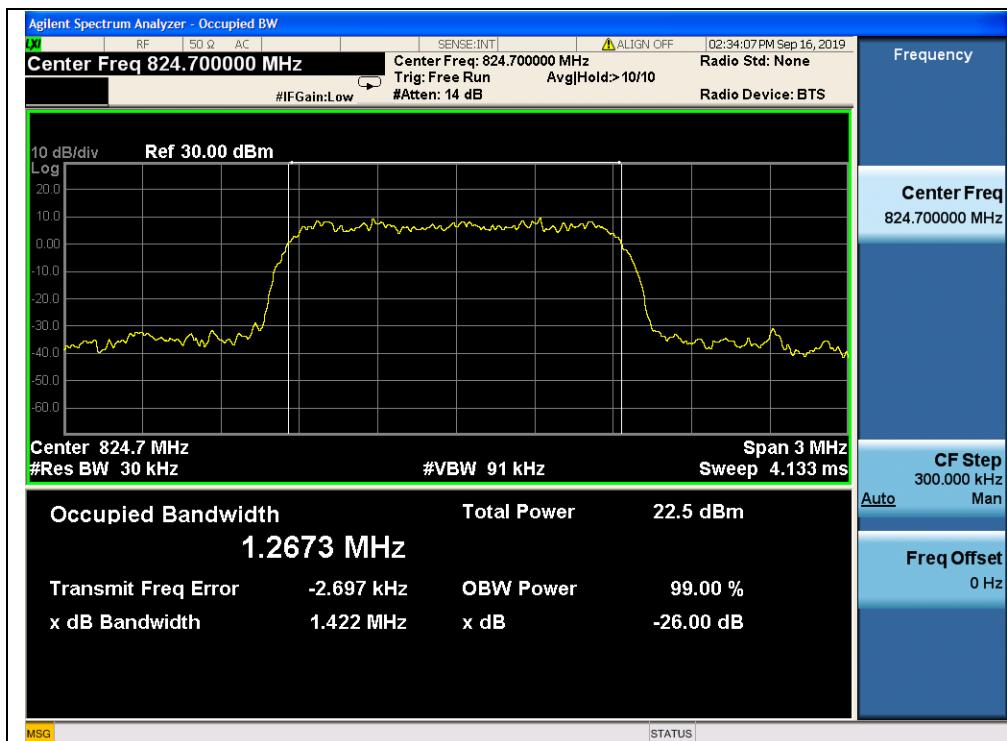
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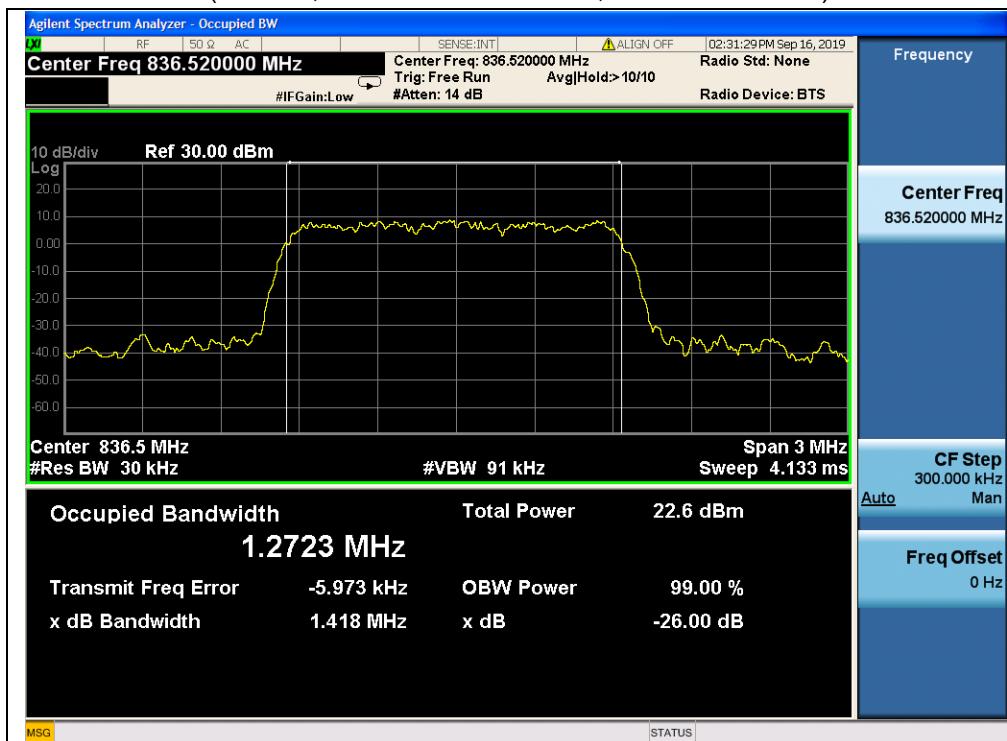
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(Plot B1, 1XEVDO Rev 0 BC0, Channel = 1013)



(Plot B2, 1XEVDO Rev 0 BC0, Channel = 384)

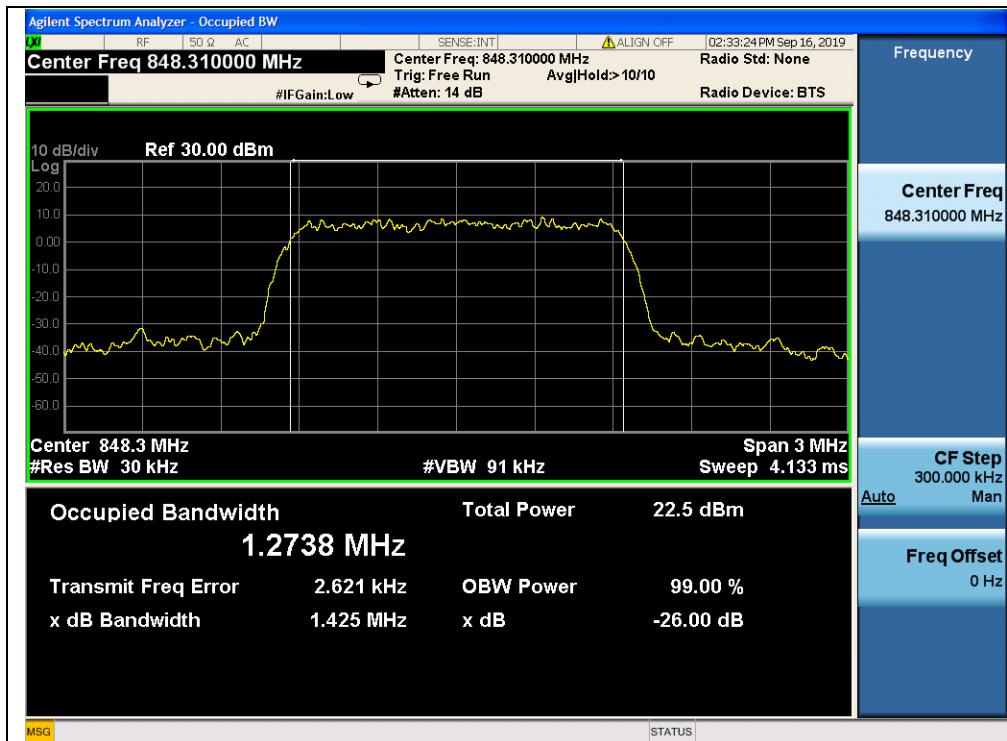
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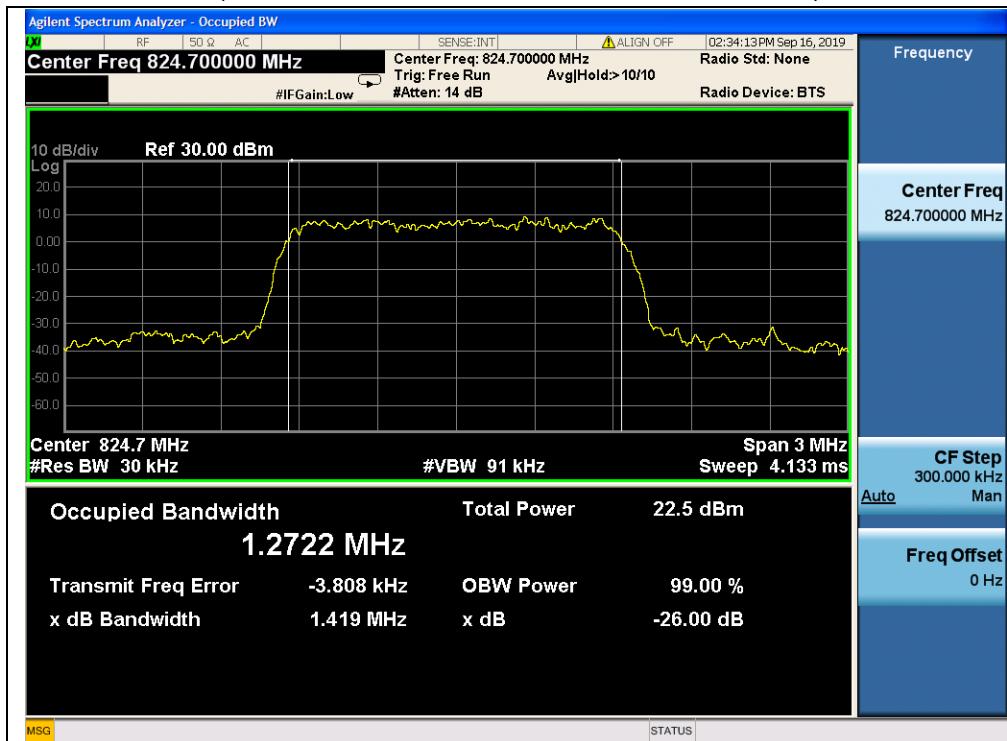
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(Plot B3, 1XEVDO Rev 0 BC0, Channel = 777)



(Plot C1, 1XEVDO Rev A BC0, Channel = 1013)

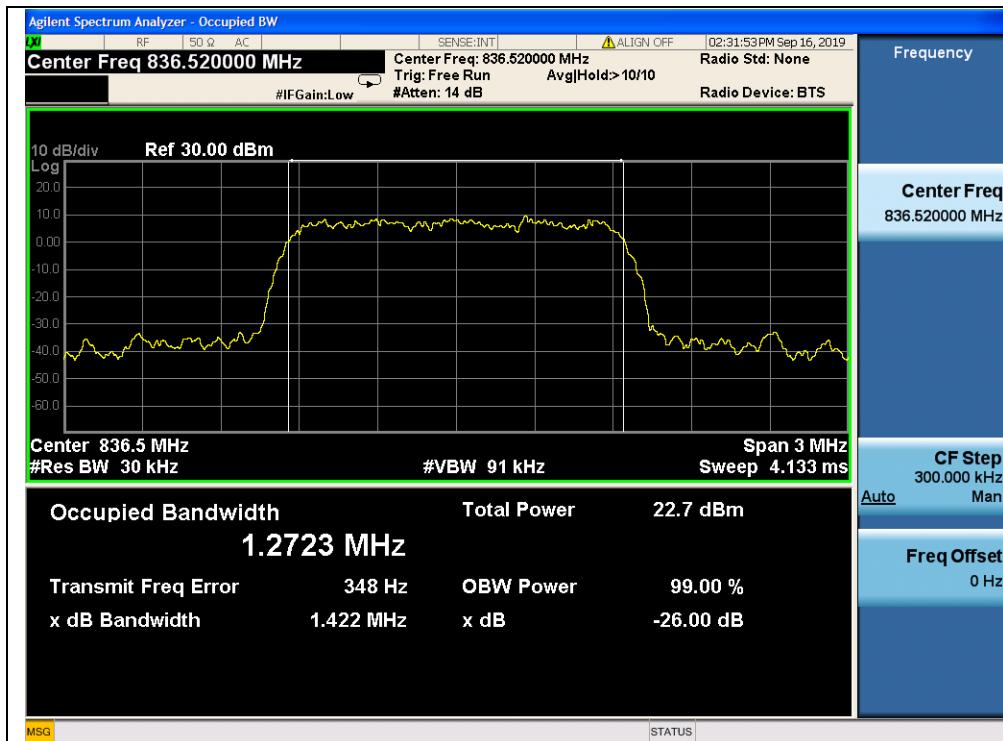
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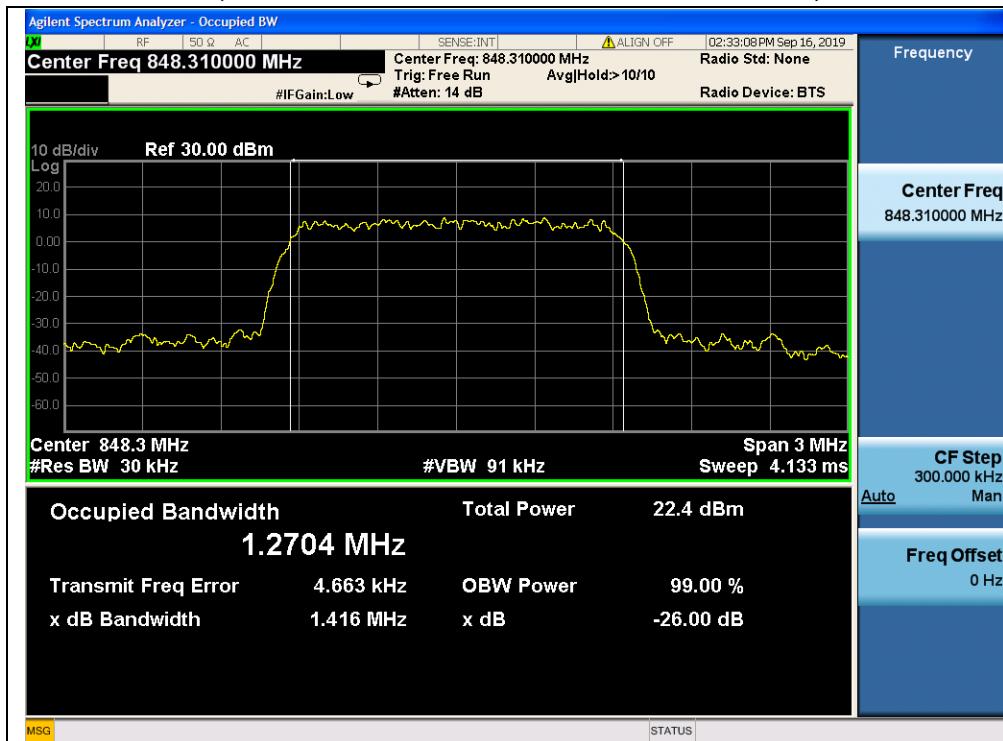
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(Plot C2, 1XEVDO Rev A BC0, Channel = 384)



(Plot C3, 1XEVDO Rev A BC0, Channel = 777)

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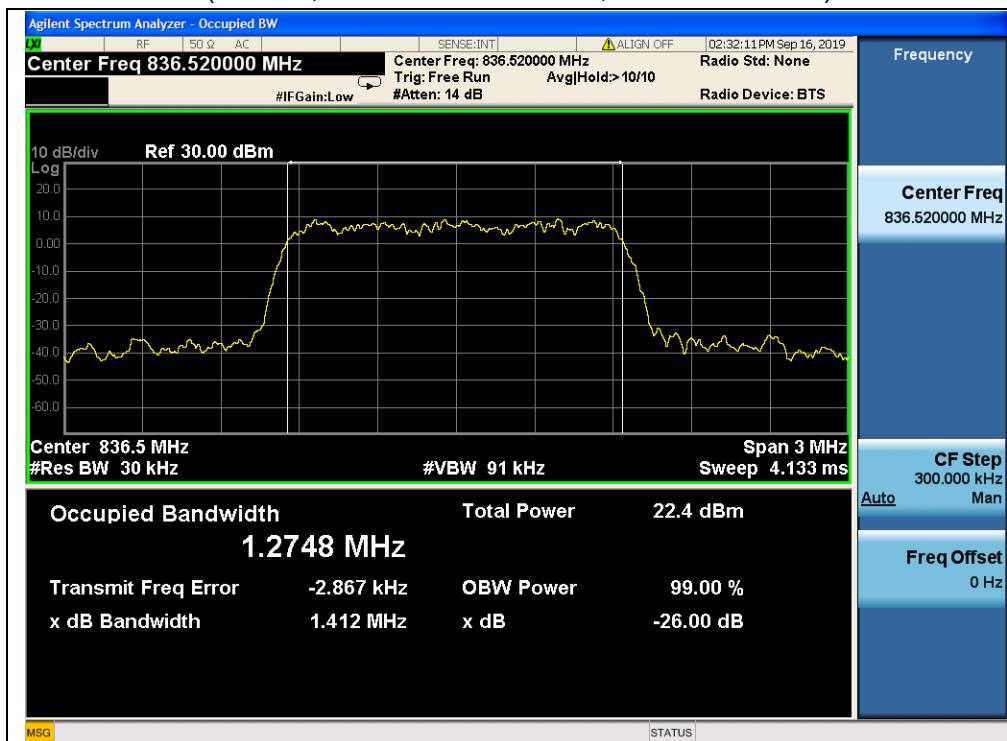
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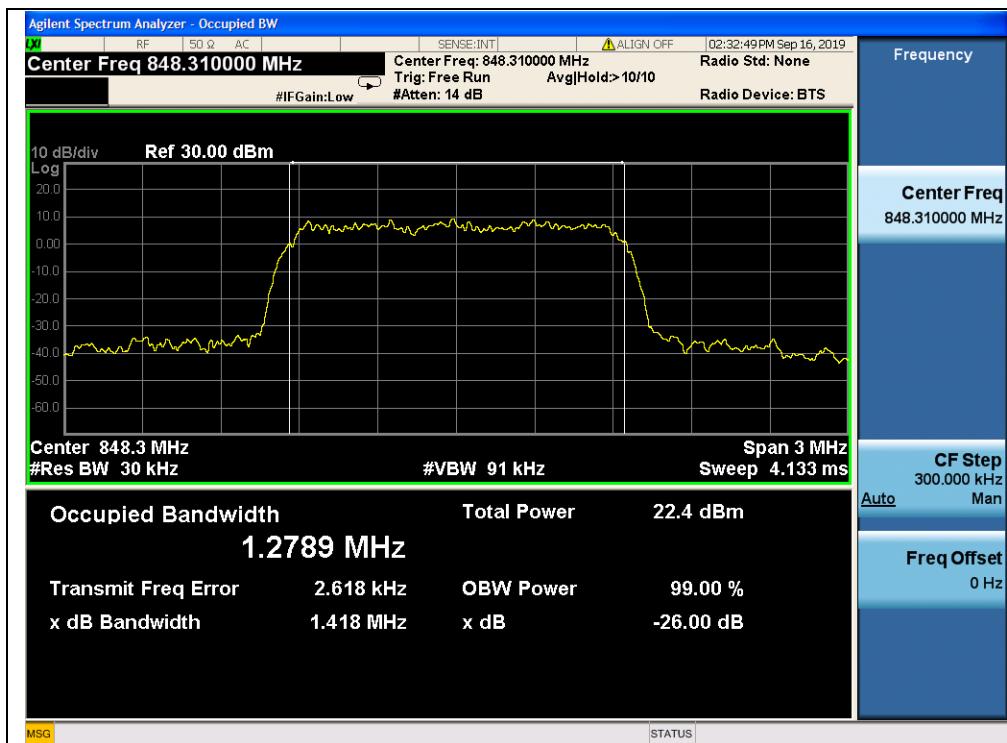
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(Plot D2, 1XEVDO Rev B BC0, Channel = 384)



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(Plot D3, 1XEVDO Rev B BC0, Channel = 777)

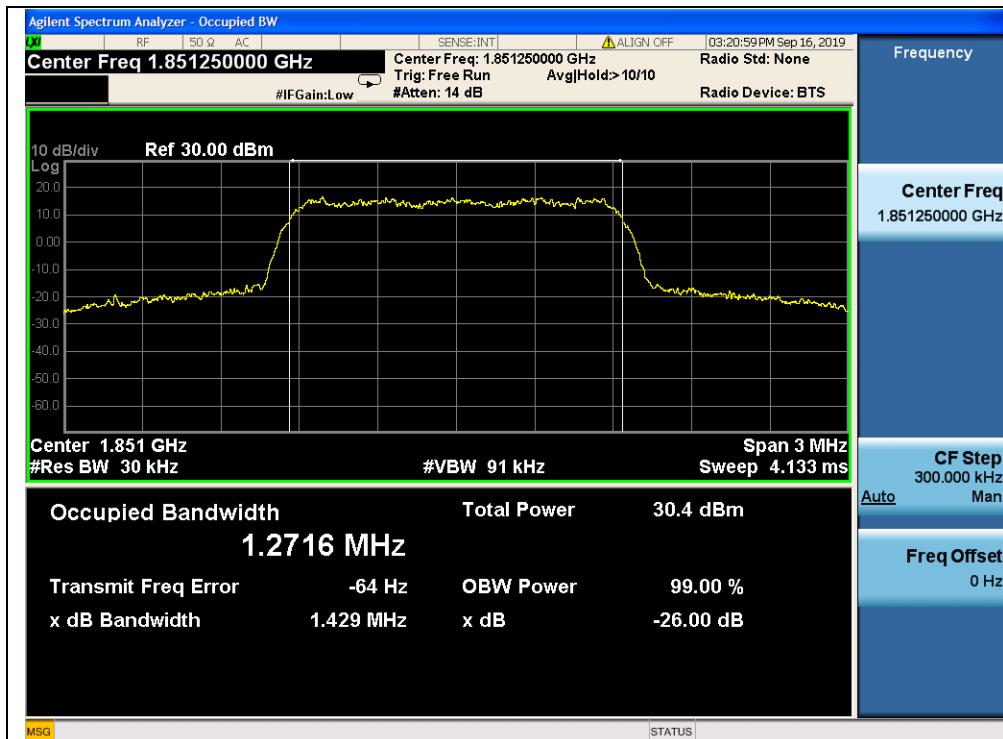
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(Plot F1, CDMABC1, Channel = 25)



(Plot F2, CDMABC1, Channel = 600)

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(Plot F3, CDMABC1, Channel = 1175)



(Plot G1, 1XEVDO Rev 0 BC1, Channel = 25)



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(Plot G2, 1XEVDO Rev 0 BC1, Channel = 600)



(Plot G3, 1XEVDO Rev 0 BC1, Channel = 1175)



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(Plot H1, 1XEVDO Rev ABC1, Channel = 25)



(Plot H2, 1XEVDO Rev A BC1, Channel = 600)

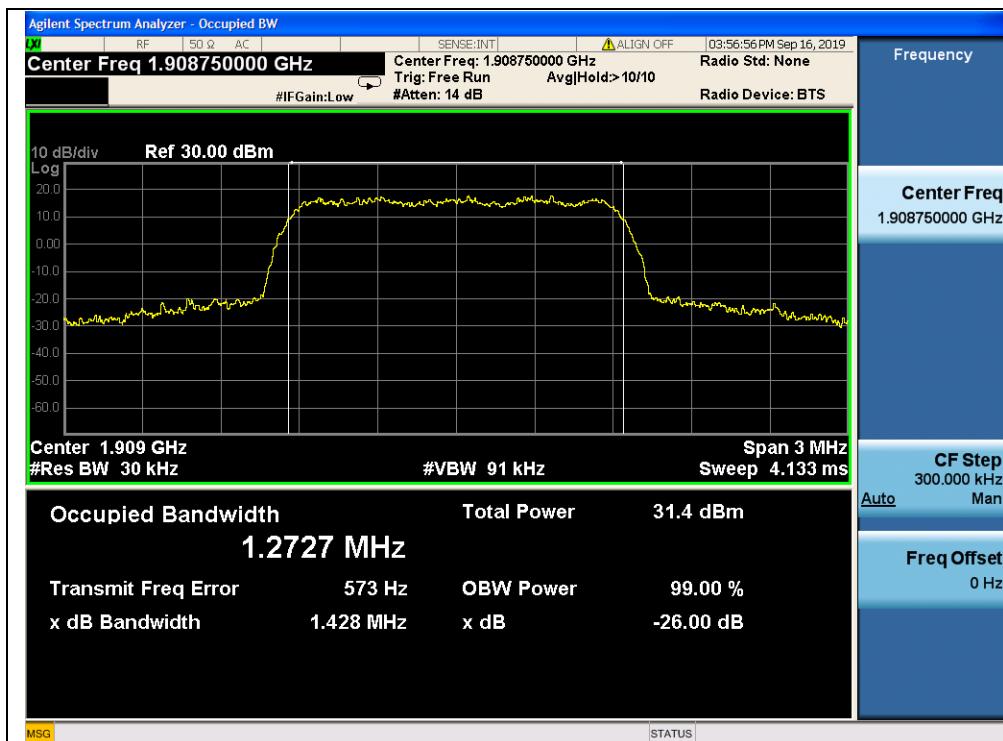
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(Plot H3, 1XEVDO Rev A BC1, Channel =1175)



(Plot I1, 1XEVDO Rev B BC1, Channel = 25)

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(Plot I2, 1XEVDO Rev B BC1, Channel = 600)



(Plot I3, 1XEVDO Rev B BC1, Channel = 1175)

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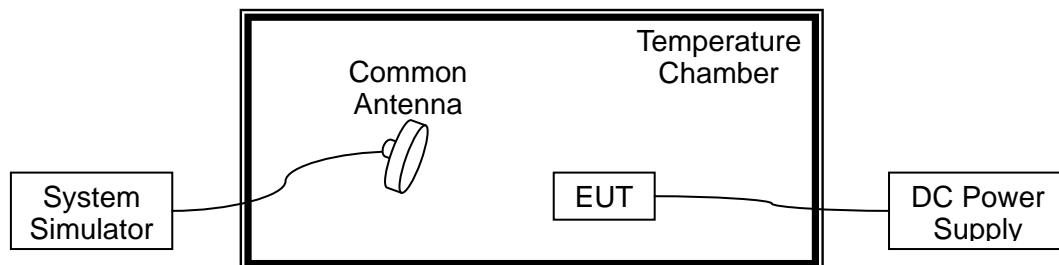
## 2.3. Frequency Stability

### 2.3.1. Requirement

According to FCC section 2.1055 & 22.355&24.235, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

- (a) The temperature is varied from -10°C to +45°C at intervals of not more than 10°C.
- (b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

### 2.3.2. Test Description



The EUT which is powered by the DC Power Supply directly, is located in the Temperature Chamber. The EUT is commanded by the System Simulator (SS) to operate at the maximum output power. A call is established between the EUT and the SS via a Common Antenna.

### 2.3.3. Test procedure

KDB 971168 D01v03 Section 9.0 and ANSI/TIA-603-E-2016.

### 2.3.4. Test Result

The nominal, highest and lowest extreme voltages are separately 3.8VDC, 4.35VDC and 3.5VDC, which are specified by the applicant; the normal temperature here used is 20°C.



REPORT No.: SZ19070119W07

CDMA 800MHz BC0, Channel 384, Frequency 836.52MHz Limit =±2.5ppm					
Voltage(%)	Power(V DC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.8	+20(Ref)	-62	-0.074	PASS
100		-30	42	0.050	
100		-20	34	0.041	
100		-10	-47	-0.056	
100		0	-47	-0.056	
100		+10	-41	-0.049	
100		+20	-22	-0.026	
100		+30	-53	-0.063	
100		+40	67	0.080	
100		+50	25	0.030	
115		+20	23	0.027	
85	4.35	+20	36	0.043	

1XEVDO Rev0 BC0, Channel 384, Frequency 836.52MHz Limit =±2.5ppm					
Voltage(%)	Power(V DC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.8	+20(Ref)	-25	-0.030	PASS
100		-30	42	0.050	
100		-20	34	0.041	
100		-10	-47	-0.056	
100		0	-54	-0.065	
100		+10	-41	-0.049	
100		+20	-73	-0.087	
100		+30	-53	-0.063	
100		+40	67	0.080	
100		+50	84	0.100	
115		+20	23	0.027	
85	4.35	+20	65	0.078	

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REPORT No.: SZ19070119W07

1XEVDO RevA BC0, Channel 384, Frequency 836.52MHz					
Limit =±2.5ppm					
Voltage(%)	Power(V DC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.8	+20(Ref)	-36	-0.043	PASS
100		-30	42	0.050	
100		-20	27	0.032	
100		-10	-47	-0.056	
100		0	-54	-0.065	
100		+10	-41	-0.049	
100		+20	-47	-0.056	
100		+30	-53	-0.063	
100		+40	67	0.080	
100		+50	42	0.050	
115	4.35	+20	23	0.027	
85	3.5	+20	41	0.049	

1XEVDO RevB BC0, Channel 384, Frequency 836.52MHz					
Limit =±2.5ppm					
Voltage(%)	Power(V DC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.8	+20(Ref)	-46	-0.055	PASS
100		-30	42	0.050	
100		-20	31	0.037	
100		-10	-47	-0.056	
100		0	-54	-0.065	
100		+10	-41	-0.049	
100		+20	-47	-0.056	
100		+30	-32	-0.038	
100		+40	67	0.080	
100		+50	96	0.115	
115	4.35	+20	15	0.018	
85	3.5	+20	41	0.049	

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CDMA 1900MHz BC1, Channel 600, Frequency 1880MHz Limit =±1ppm					
Voltage(%)	Power(V DC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.8	+20(Ref)	57	0.068	PASS
100		-30	-11	-0.013	
100		-20	35	0.042	
100		-10	-34	-0.041	
100		0	35	0.042	
100		+10	35	0.042	
100		+20	41	0.049	
100		+30	21	0.025	
100		+40	32	0.038	
100		+50	35	0.042	
115	4.35	+20	29	0.035	
85	3.5	+20	-23	-0.027	

1XEVDO Rev0 BC1, Channel 600, Frequency 1800MHz Limit =±1ppm					
Voltage(%)	Power(V DC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.8	+20(Ref)	61	0.032	PASS
100		-30	43	0.023	
100		-20	26	0.014	
100		-10	-33	-0.018	
100		0	-43	-0.023	
100		+10	-25	-0.013	
100		+20	54	0.029	
100		+30	26	0.014	
100		+40	81	0.043	
100		+50	55	0.029	
115	4.35	+20	65	0.035	
85	3.5	+20	-69	-0.037	

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REPORT No.: SZ19070119W07

1XEVD0 RevA BC1, Channel 600, Frequency 1800MHz Limit =±1ppm					
Voltage(%)	Power(V DC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.8	+20(Ref)	24	0.013	PASS
100		-30	64	0.034	
100		-20	26	0.014	
100		-10	-26	-0.014	
100		0	-43	-0.023	
100		+10	-34	-0.018	
100		+20	54	0.029	
100		+30	26	0.014	
100		+40	81	0.043	
100		+50	31	0.016	
115	4.35	+20	65	0.035	
85	3.5	+20	-43	-0.023	

1XEVD0 RevB BC1, Channel 600, Frequency 1800MHz Limit =±1ppm					
Voltage(%)	Power(V DC)	Temp(°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.8	+20(Ref)	39	0.021	PASS
100		-30	25	0.013	
100		-20	64	0.034	
100		-10	-64	-0.034	
100		0	-43	-0.023	
100		+10	-14	-0.007	
100		+20	54	0.029	
100		+30	26	0.014	
100		+40	23	0.012	
100		+50	31	0.016	
115	4.35	+20	51	0.027	
85	3.5	+20	-33	-0.018	

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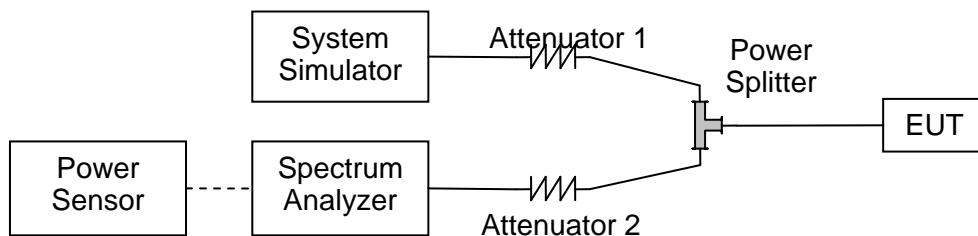
## 2.4. Peak to Average Radio

### 2.4.1. Requirement

According to FCC section 27.50(d)(5), the peak to average ratio (PAR) of the transmission may not exceed 13dB.

### 2.4.2. Test Description

#### A. Test Set:



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

### 2.4.3. Test procedure

KDB 971168 D01v03 Section 5.7 and ANSI/TIA-603-E-2016.

### 2.4.4. Test Result

Record the maximum PAPR level associated with a probability of 0.1%.

Note: This test case only supports CDMA BC 1 band ,not CDMA BC 0 band.



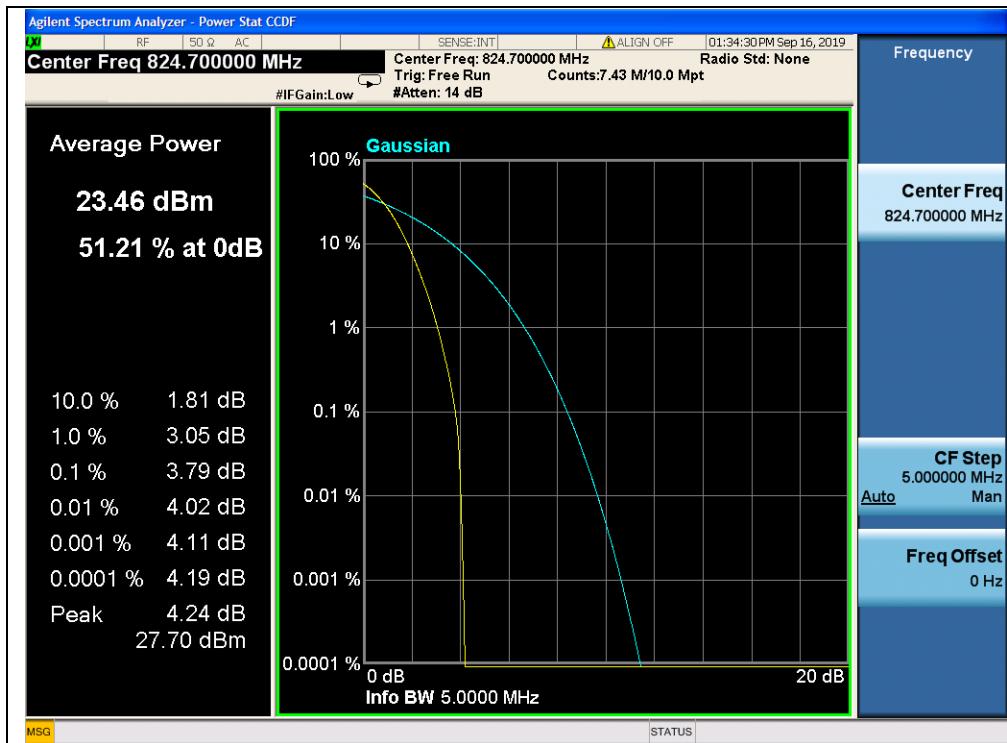
## Test Result

The lowest, middle and highest channels are selected to perform testing to verify the conducted RF output peak power of the Module.

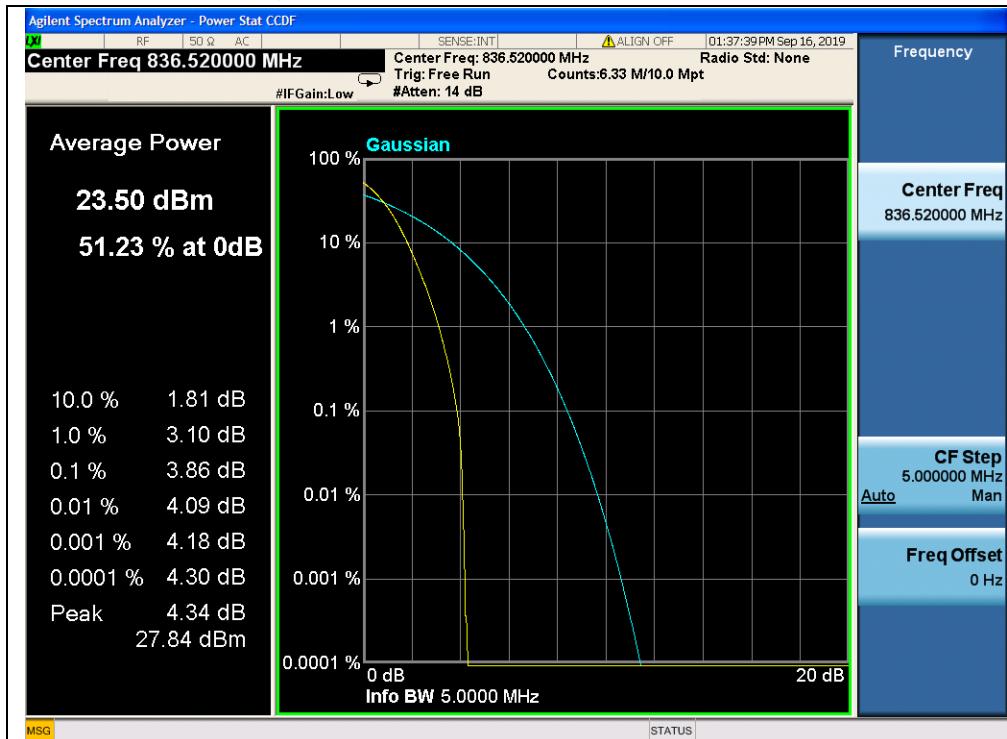
### A. Test Verdict:

Band	Channel	Frequency (MHz)	Peak to Average ratio		Limit dB	Verdict
			dB	Refer to Plot		
CDMA (BC0)	1013	824.7	3.79	Plot A1 to A3	13	PASS
	384	836.52	3.86			PASS
	777	848.31	3.89			PASS
1XEVDO Rev 0 (BC0)	1013	824.7	3.87	Plot A4 to A6	13	PASS
	384	836.52	3.91			PASS
	777	848.31	3.91			PASS
1XEVDO Rev A (BC0)	1013	824.7	3.83	Plot A7 to A9	13	PASS
	384	836.52	3.90			PASS
	777	848.31	3.90			PASS
1XEVDO Rev B (BC0)	1013	824.7	3.82	Plot A10 to A12	13	PASS
	384	836.52	3.92			PASS
	777	848.31	3.89			PASS

Band	Channel	Frequency (MHz)	Peak to Average ratio		Limit dB	Verdict
			dB	Refer to Plot		
CDMA (BC1)	25	1851.25	3.65	Plot B1 to B3	13	PASS
	600	1880	3.37			PASS
	1175	1908.75	3.38			PASS
1XEVDO Rev 0 (BC1)	25	1851.25	3.63	Plot B4 to B6	13	PASS
	600	1880	3.37			PASS
	1175	1908.75	4.00			PASS
1XEVDO Rev A (BC1)	25	1851.25	3.66	Plot B7 to B9	13	PASS
	600	1880	3.34			PASS
	1175	1908.75	3.38			PASS
1XEVDO Rev B (BC1)	25	1851.25	3.65	Plot B10 to B12	13	
	600	1880	4.05			
	1175	1908.75	3.42			

**Test Plots:**

(Plot A1, CDMABC0, Channel = 1013)



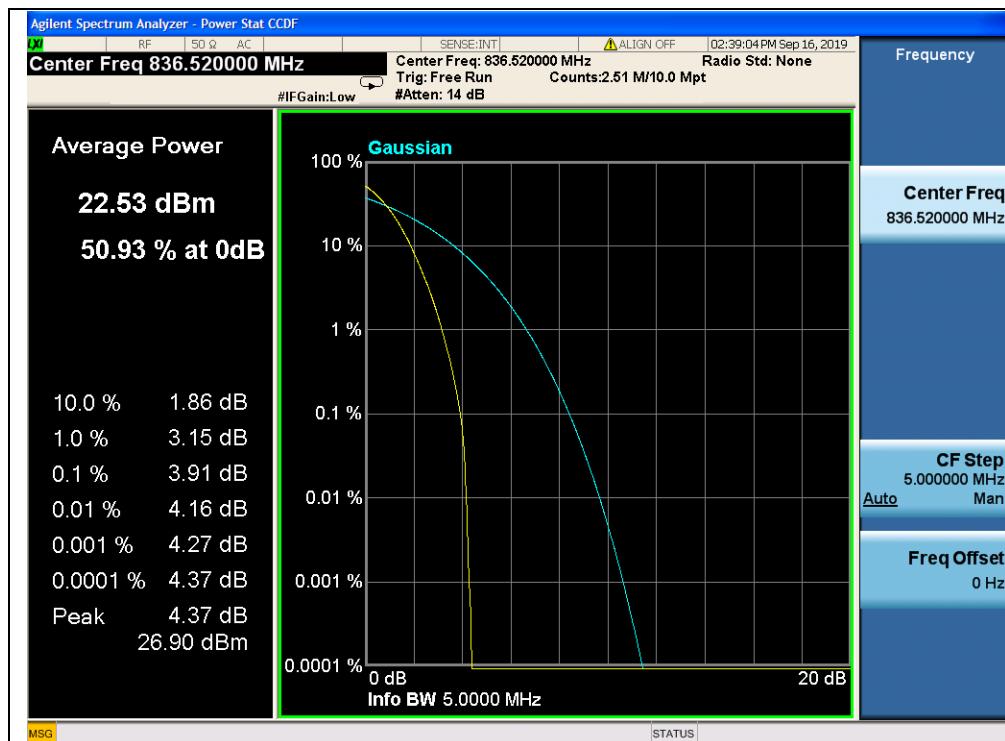
(Plot A2, CDMABC0, Channel = 384)



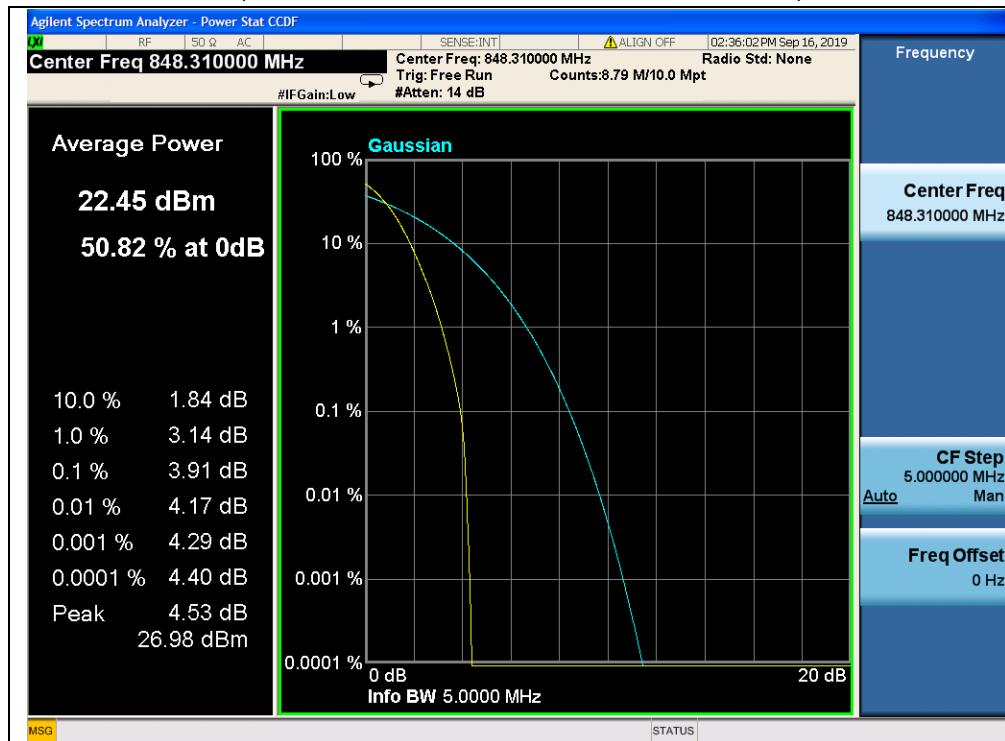
(Plot A3, CDMABC0, Channel = 777)



(Plot A4, EVDO Rev 0 BC0, Channel = 1013)



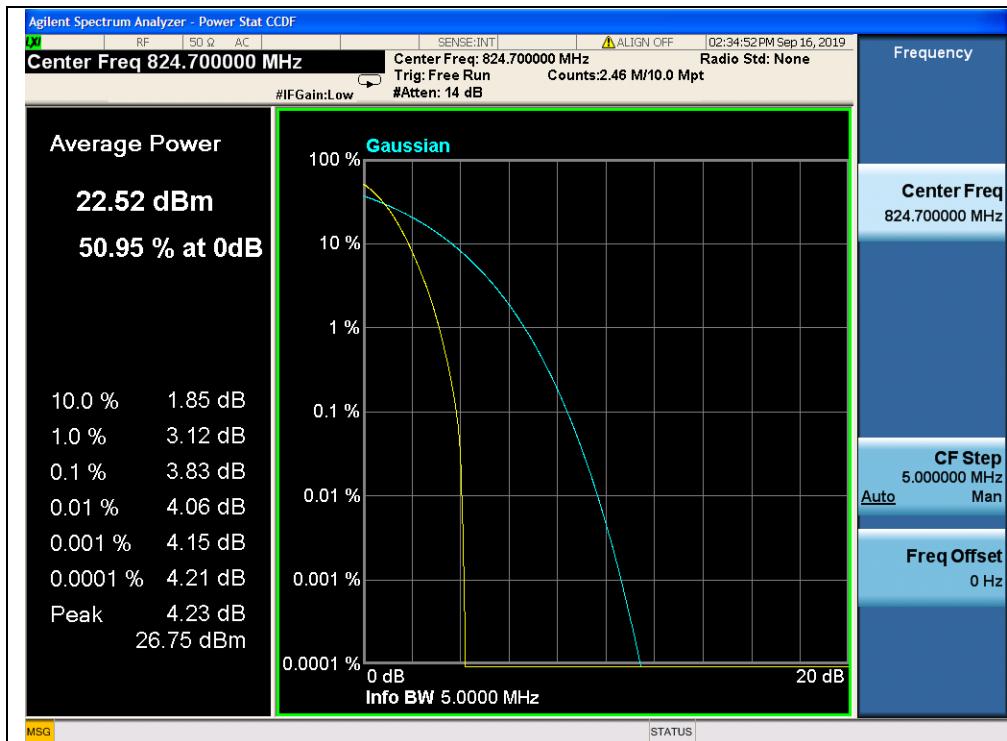
(Plot A5, EVDO Rev 0 BC0, Channel = 384)



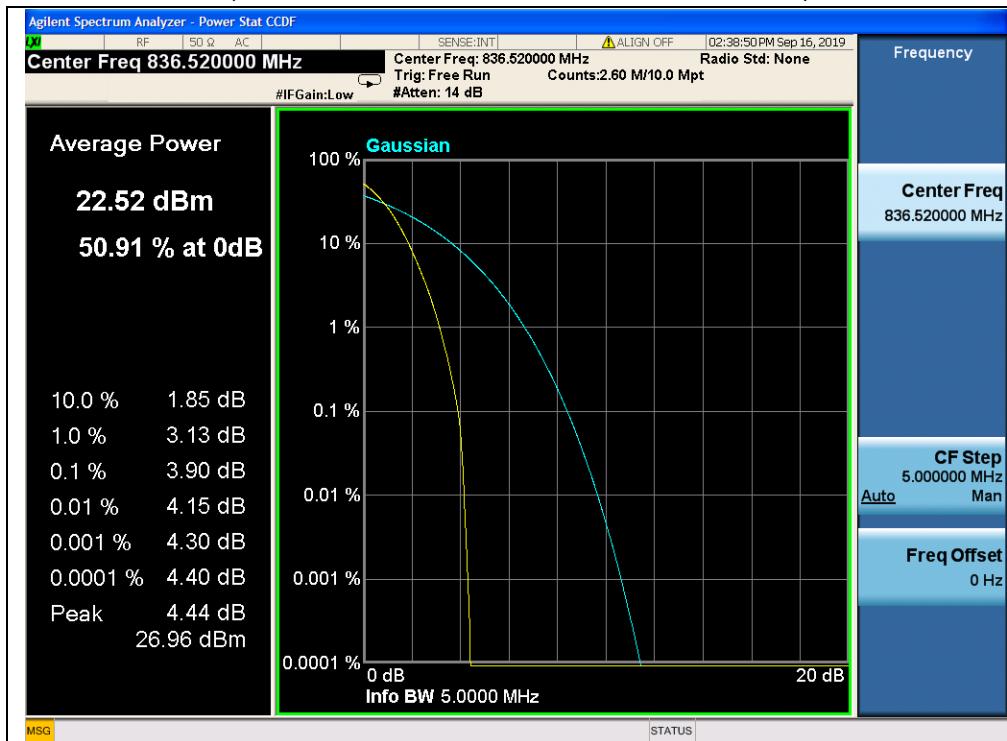
(Plot A6, EVDO Rev 0 BC0, Channel = 777)



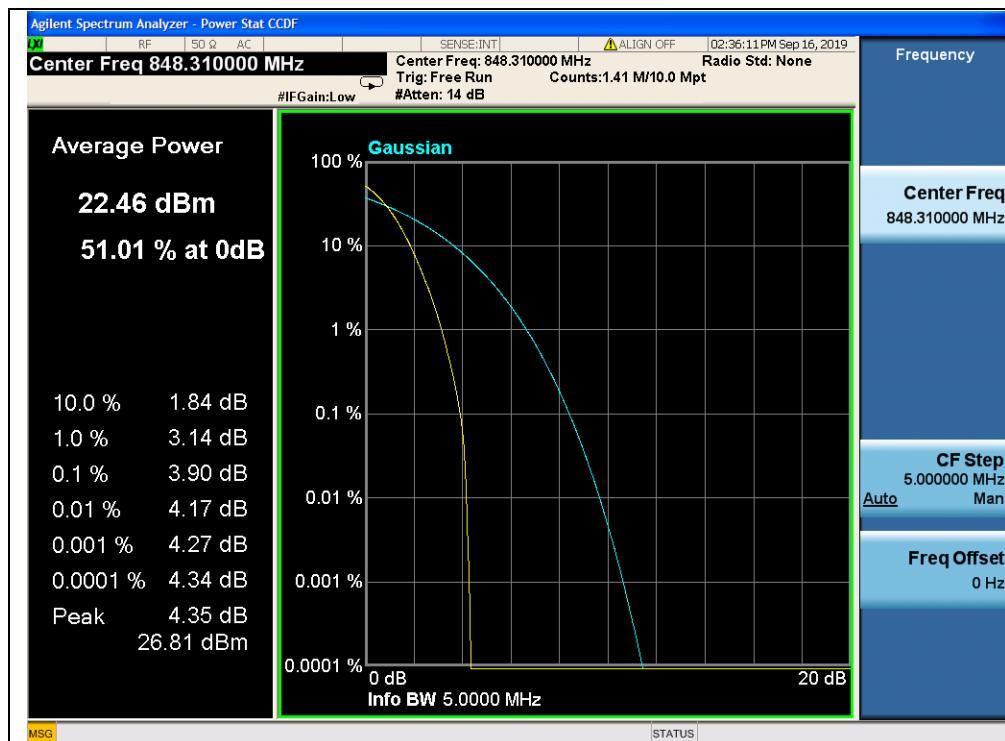
REPORT No.: SZ19070119W07



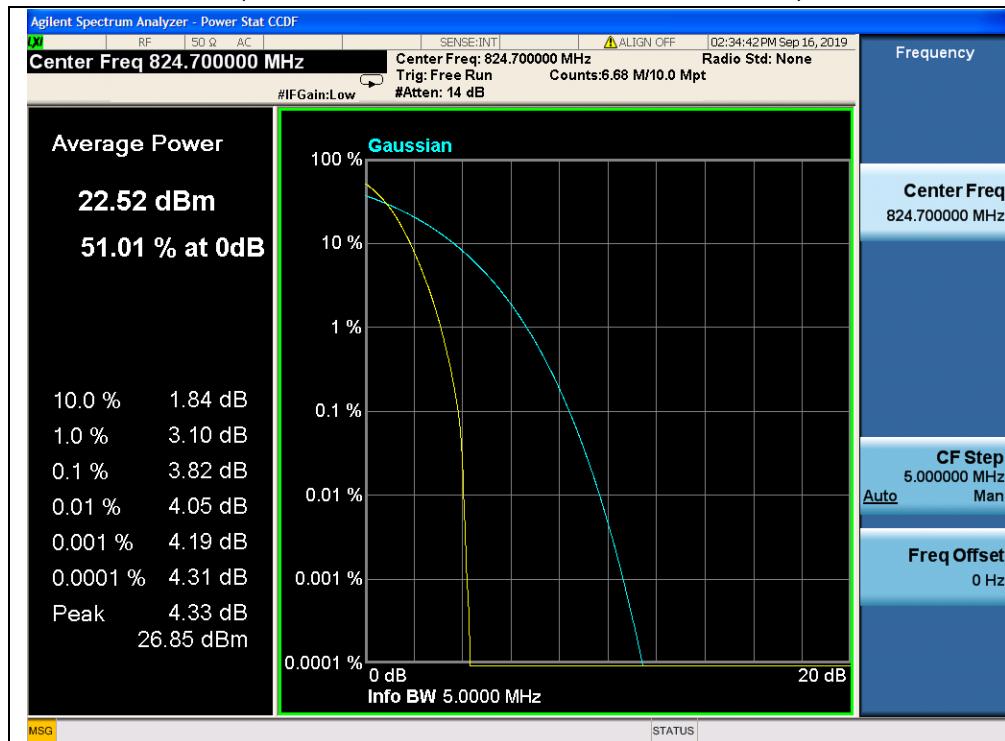
(Plot A7, EVDO Rev A BC0, Channel = 1013)



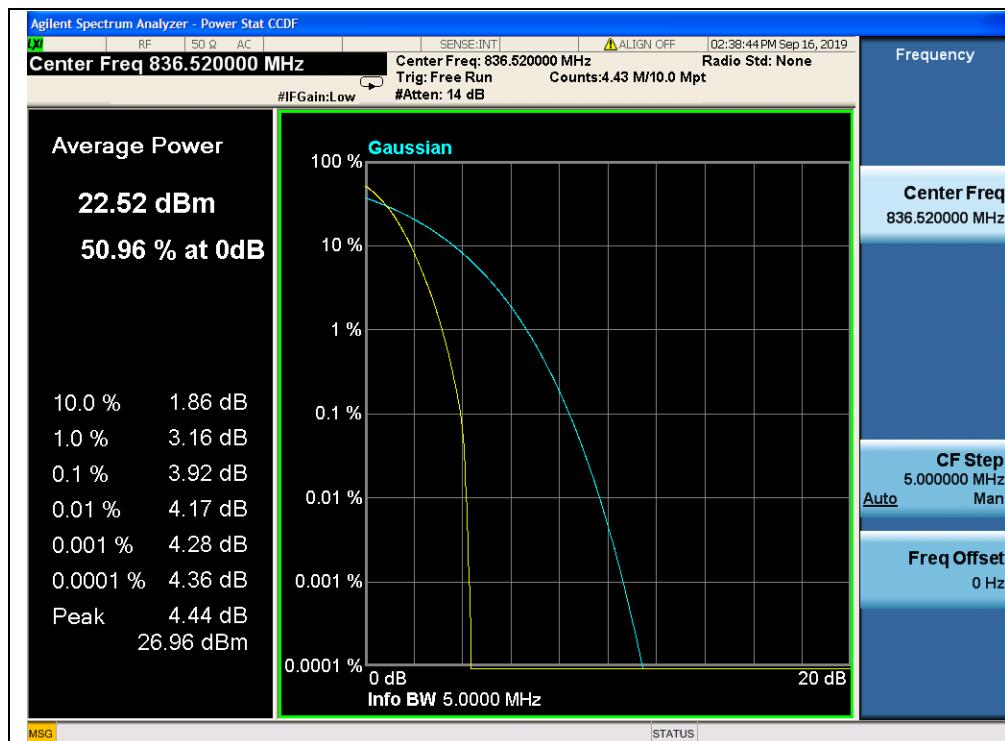
(Plot A8, EVDO Rev A BC0, Channel = 384)



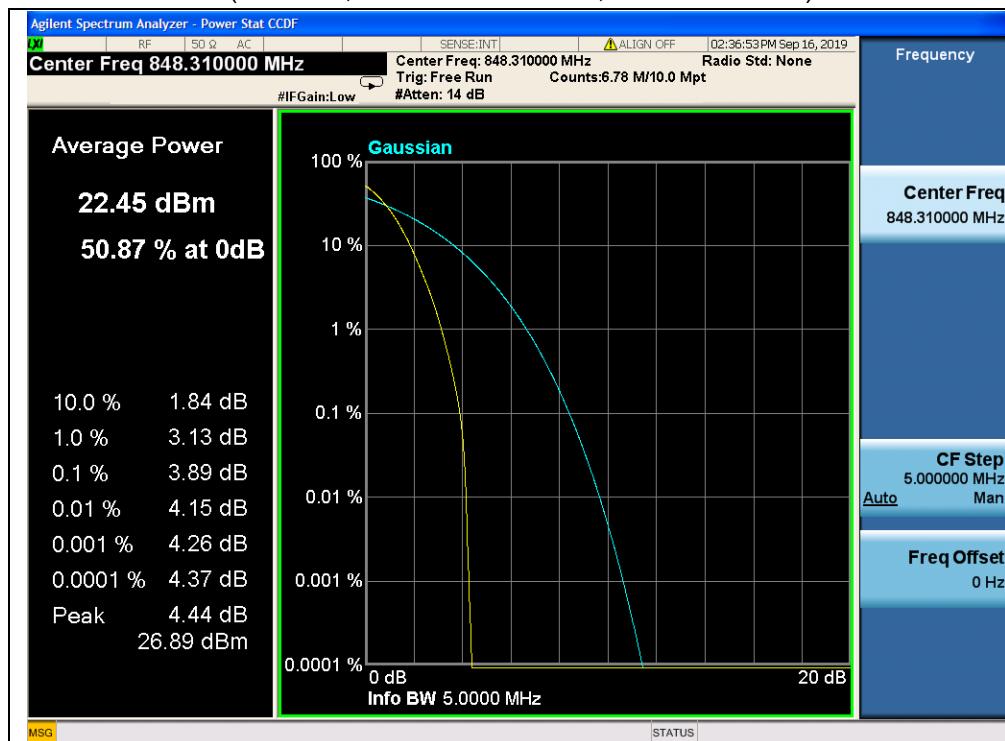
(Plot A9, EVDO Rev A BC0, Channel = 777)



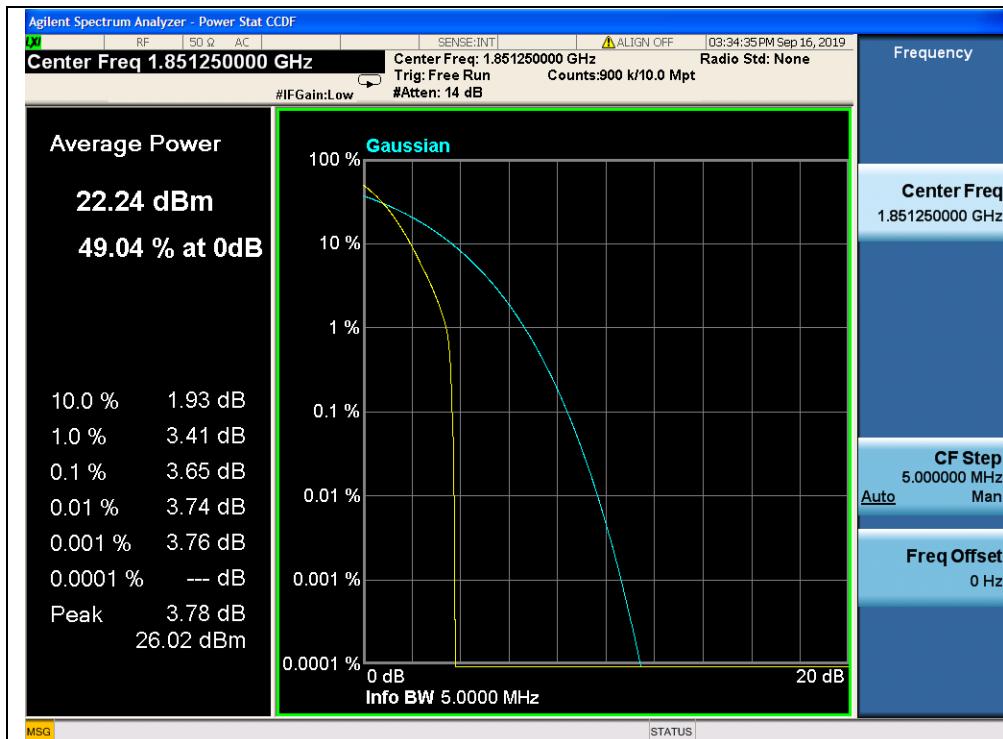
(Plot A10, EVDO Rev B BC0, Channel = 1013)



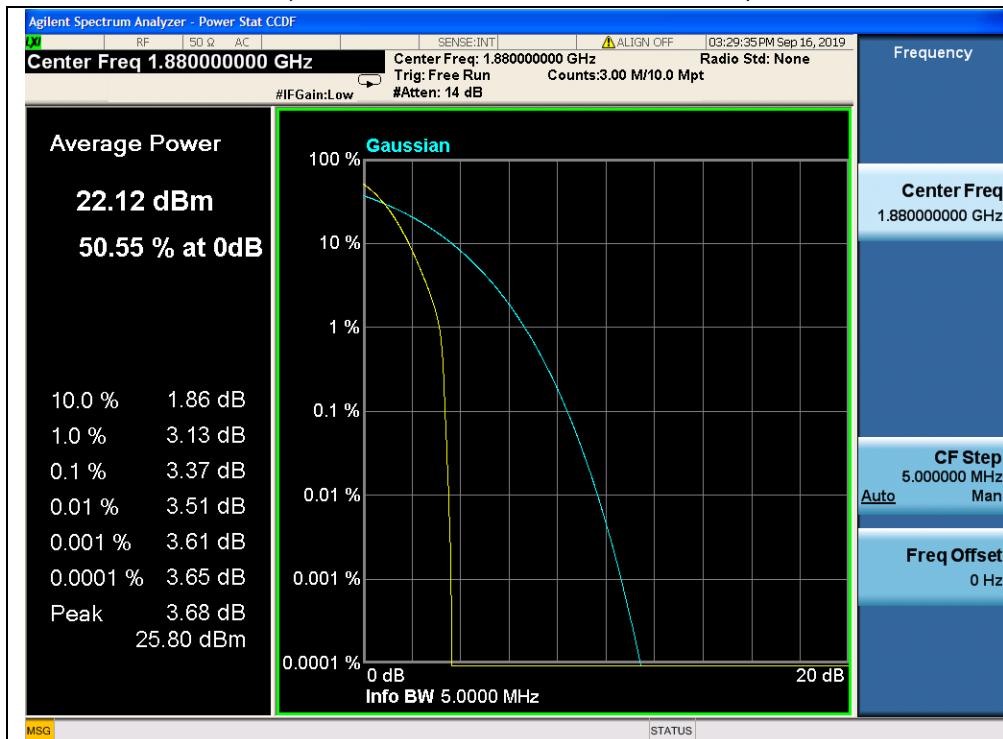
(Plot A11, EVDO Rev B BC0, Channel = 384)



(Plot A12, EVDO Rev B BC0, Channel = 777)



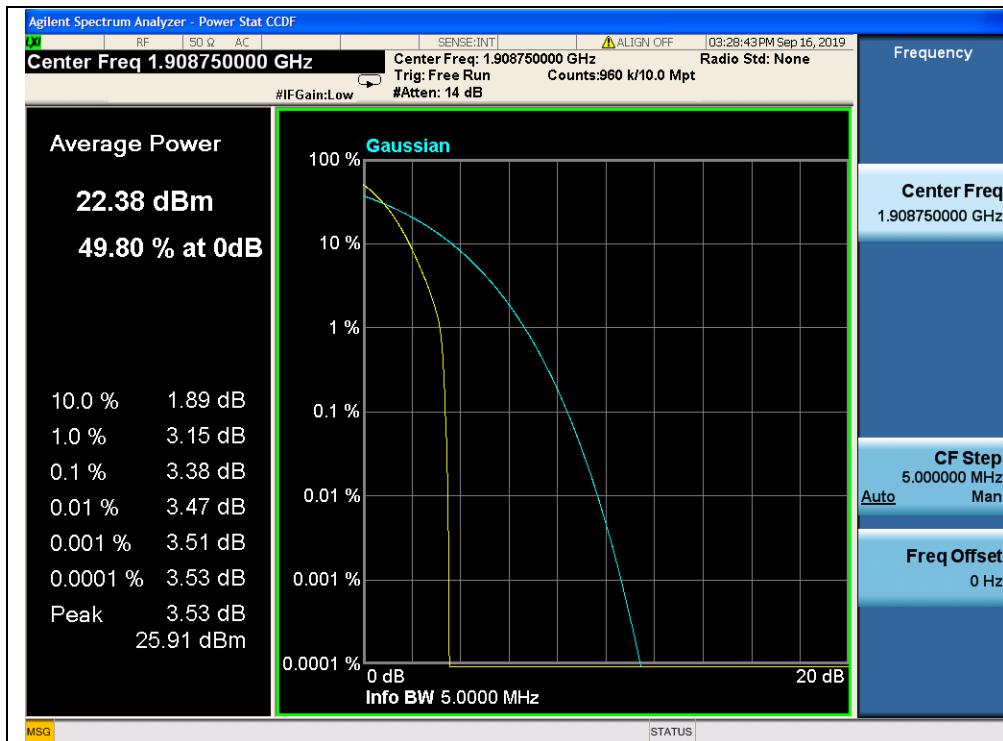
(Plot B1, CDMA BC1, Channel = 25)



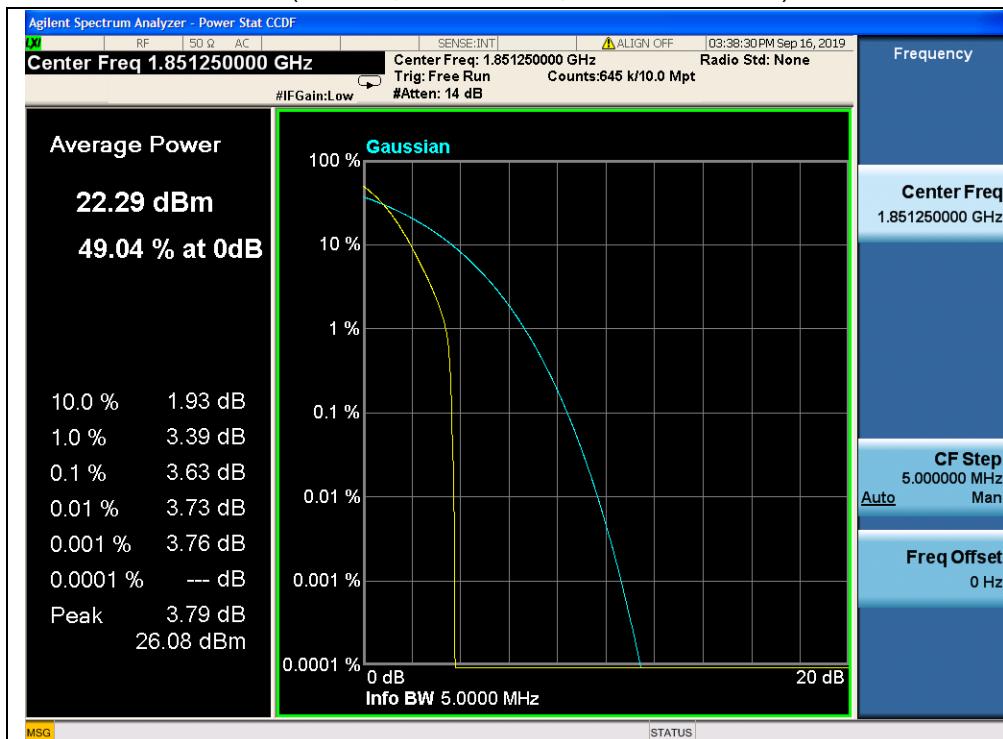
(Plot B2, CDMA BC1, Channel = 600)



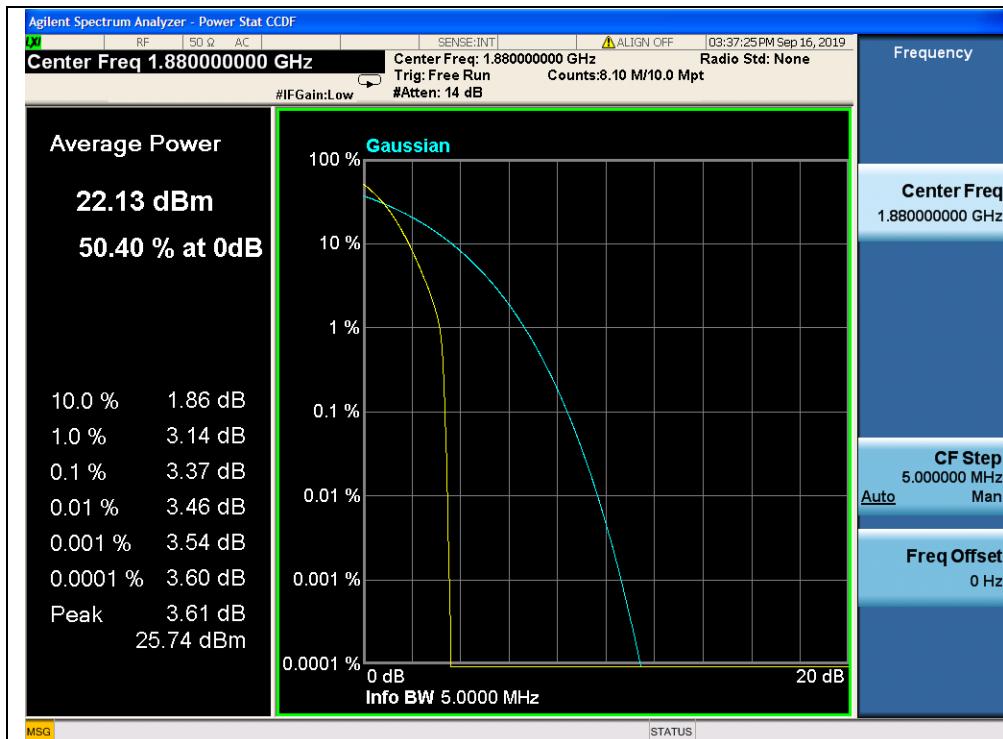
REPORT No.: SZ19070119W07



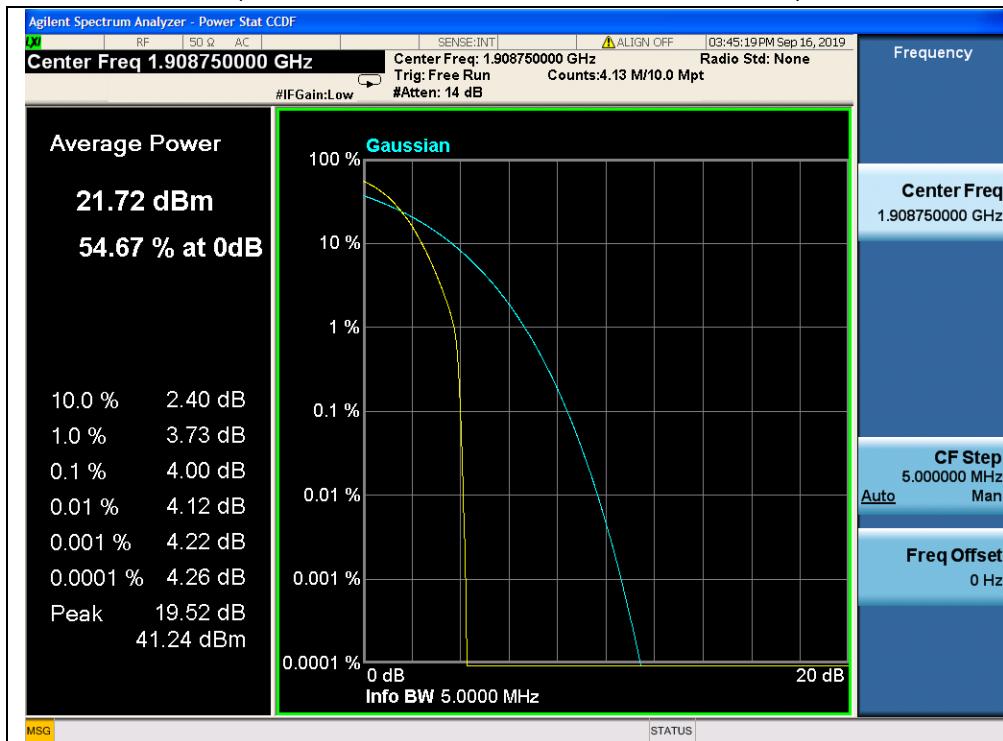
(Plot B3, CDMA BC1, Channel = 1175)



(Plot B4, EVDO Rev 0 BC1, Channel = 25)



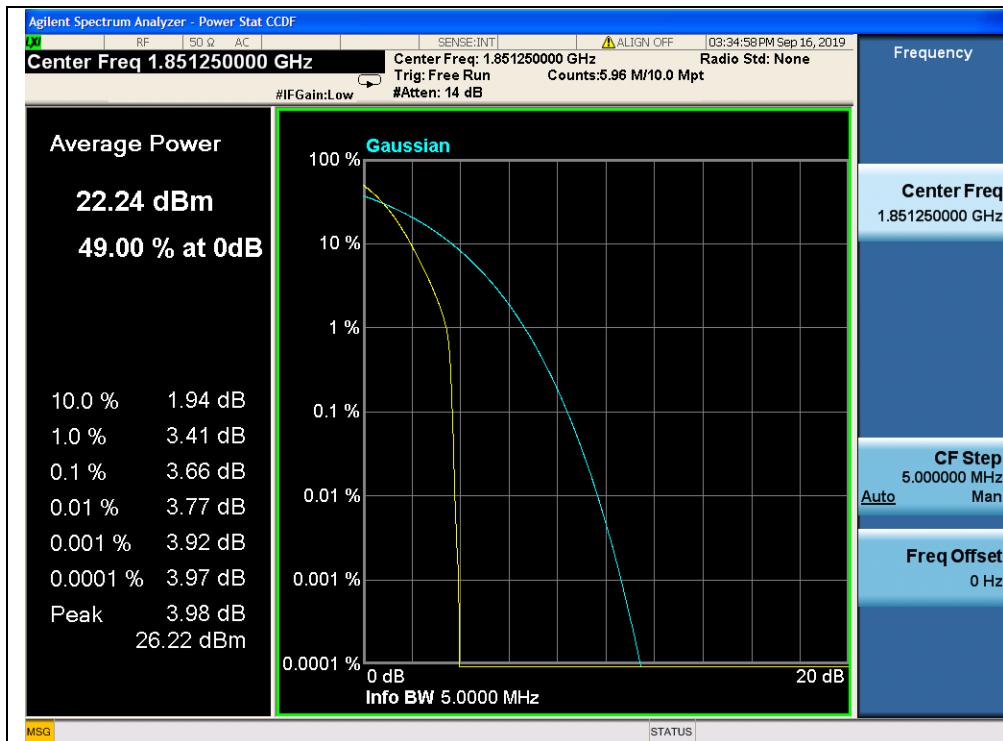
(Plot B5, EVDO Rev 0 BC1, Channel = 600)



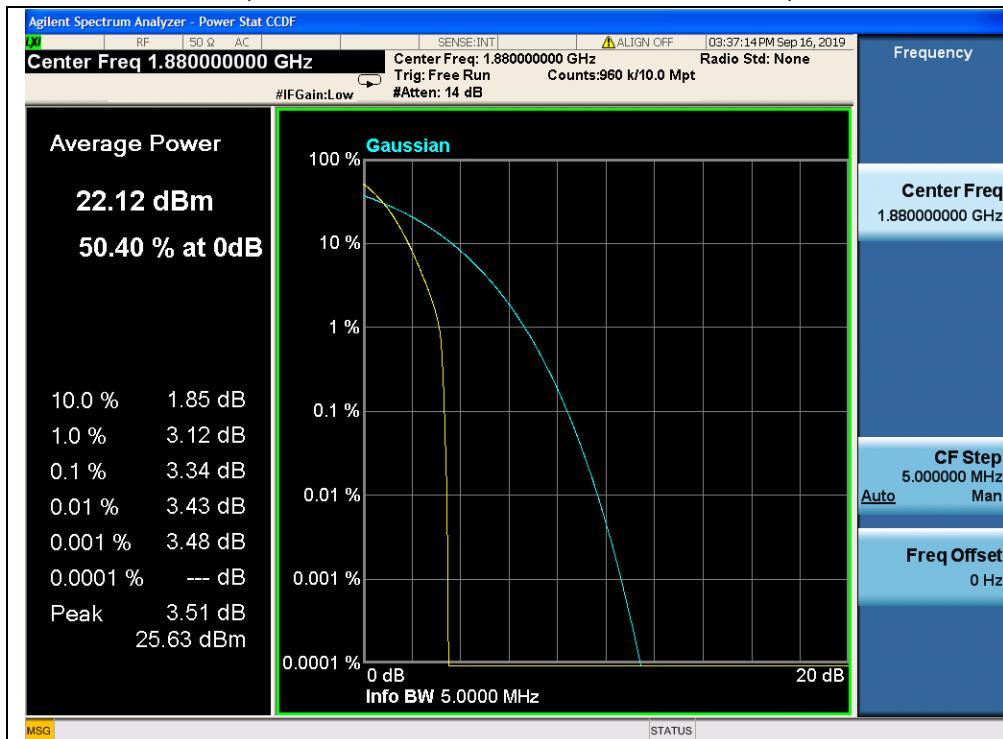
(Plot B6, EVDO Rev 0 BC1, Channel = 1175)



REPORT No.: SZ19070119W07



(Plot B7, EVDO Rev A BC1, Channel = 25)



(Plot B8, EVDO Rev A BC1, Channel = 600)

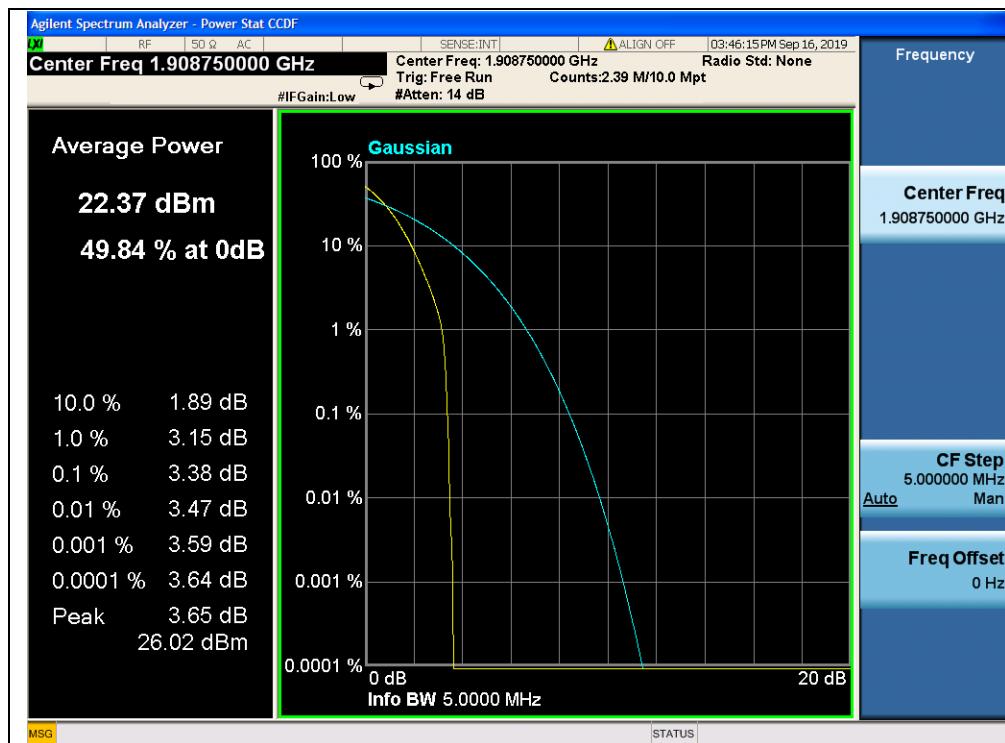
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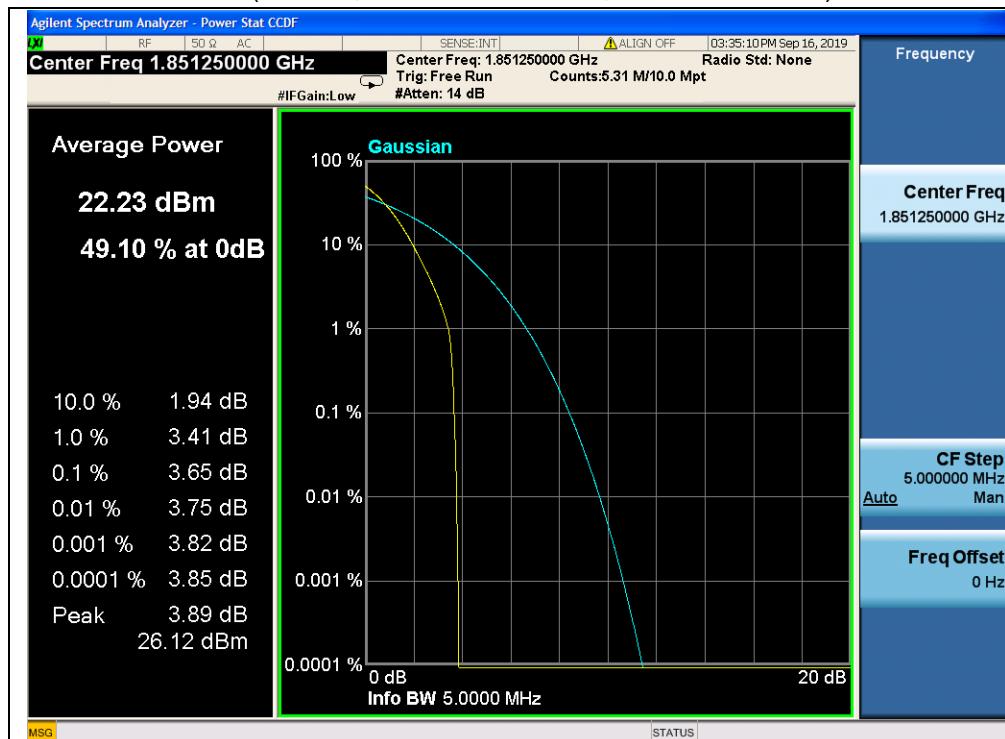
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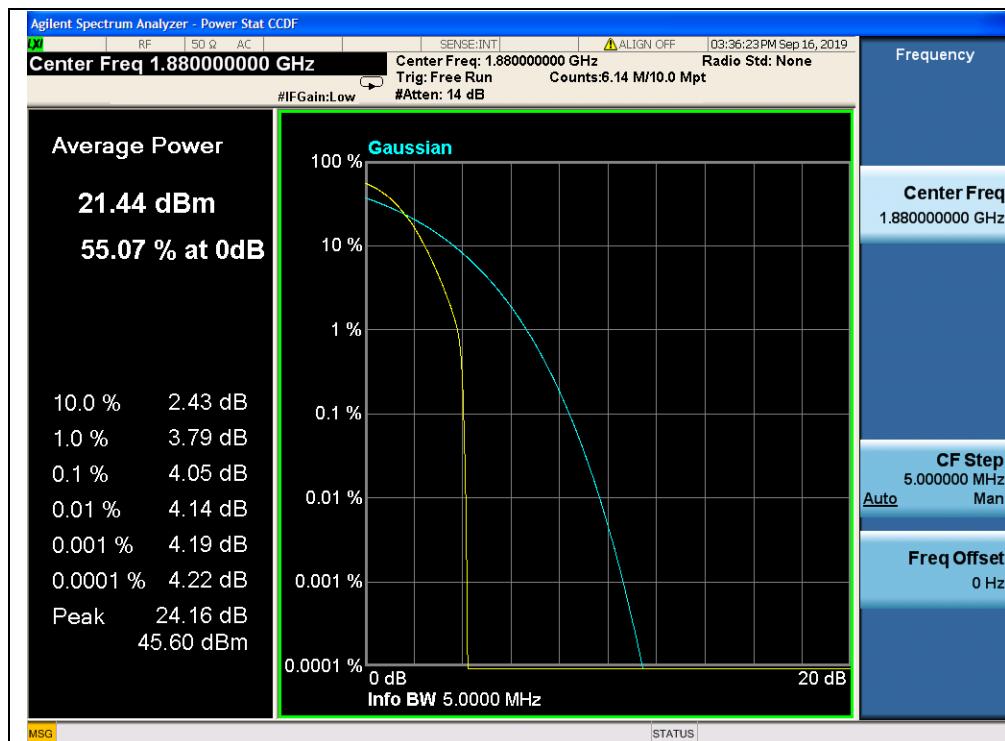
(Plot B9, EVDO Rev A BC1, Channel = 1175)



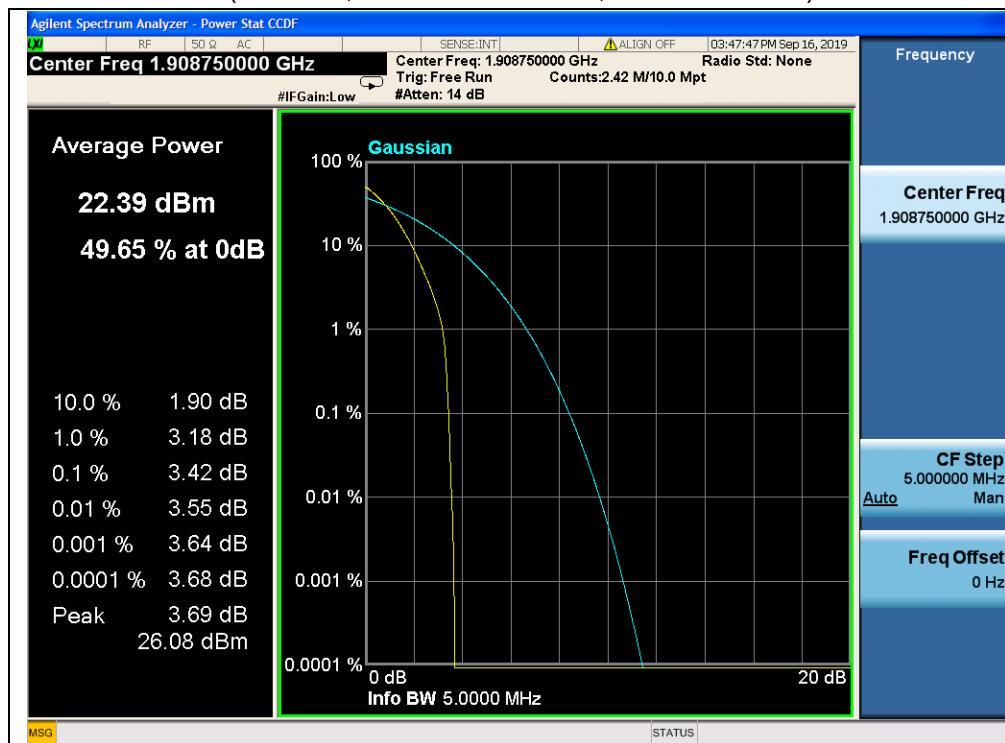
(Plot B10, EVDO Rev B BC1, Channel = 25)



REPORT No.: SZ19070119W07



(Plot B11, EVDO Rev B BC1, Channel = 600)



(Plot B12, EVDO Rev B BC1, Channel = 1175)

## 2.5. Conducted Spurious Emissions

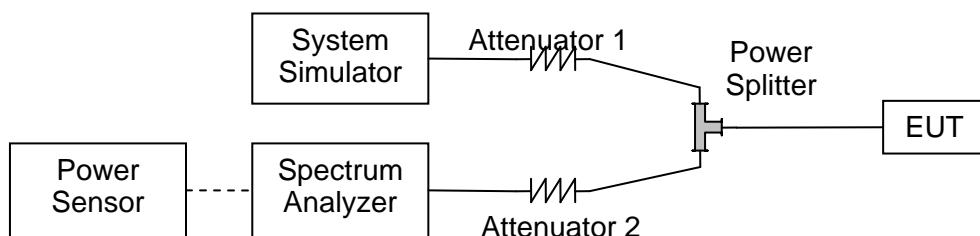
### 2.5.1. Requirement

According to FCC section 2.1051, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43+10\log(P)$  dB. This calculated to be -13dBm.

Additional requirement for LTE Band 7:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $55 + 10 \log(P)$  dB. This calculated to be -25dBm.

### 2.5.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

### 2.5.3. Test procedure

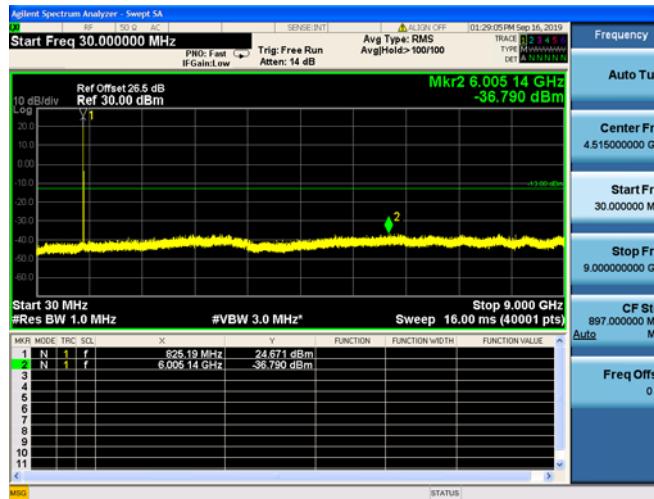
KDB 971168 D01v03 Section 6.0 and ANSI/TIA-603-E-2016.

### 2.5.4. Test Result

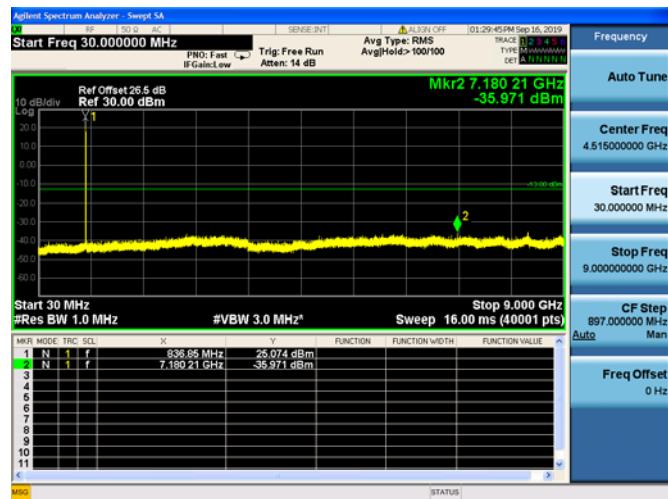


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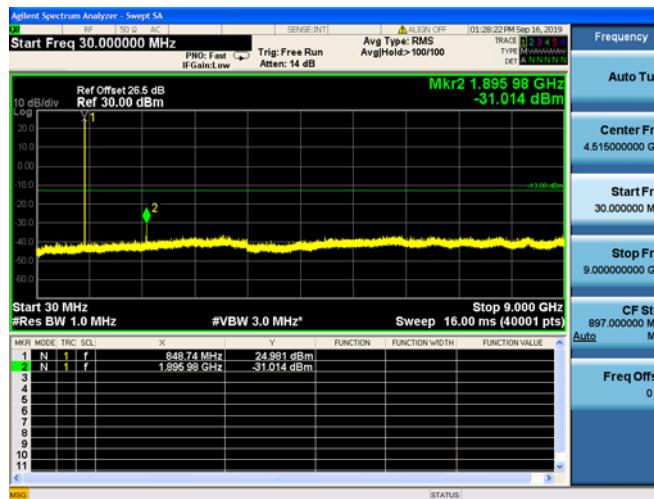
## CDMA BC0, Channel=1013



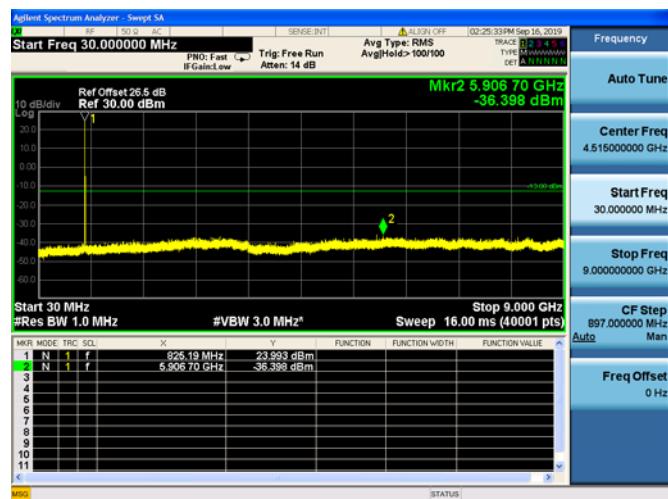
## CDMA BC0, Channel=384



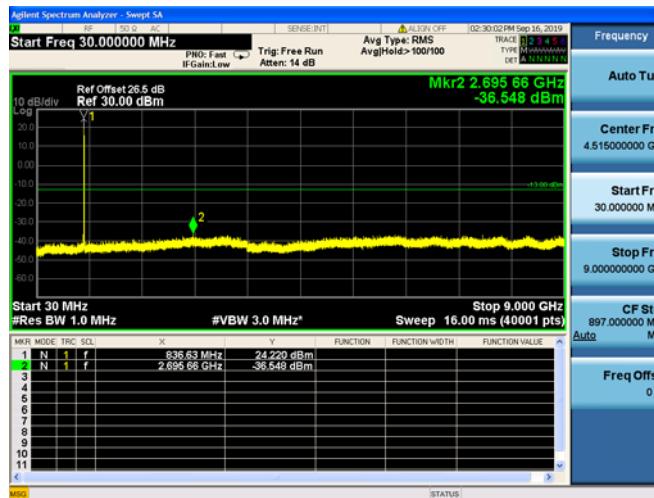
## CDMA BC0, Channel=777



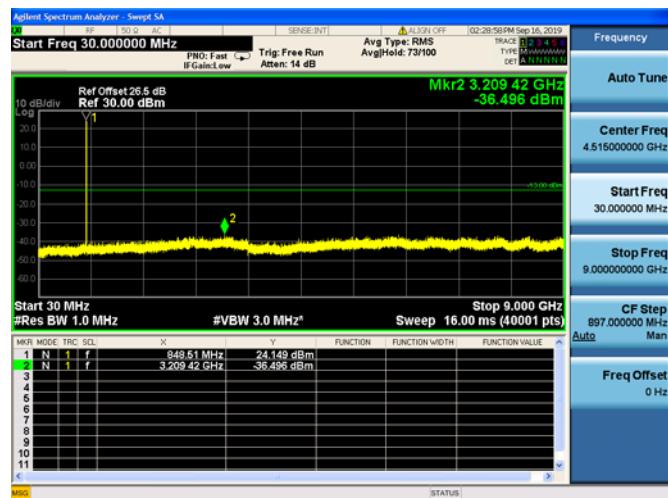
## 1XEVDO Rev 0 BC0, Channel=1013



## 1XEVDO Rev 0 BC0, Channel=384



## 1XEVDO Rev 0 BC0, Channel=777



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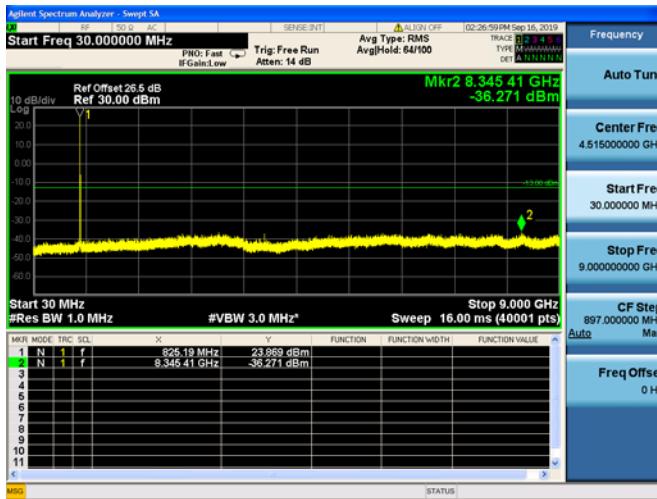
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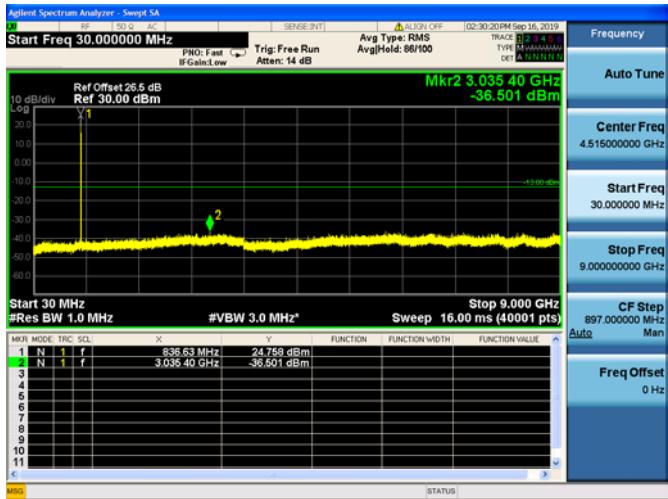


REPORT No.: SZ19070119W07

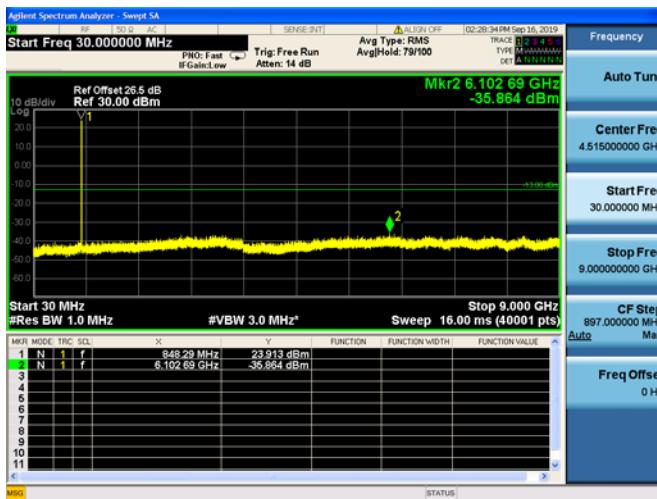
## 1XEVD0 Rev A BC0, Channel=1013



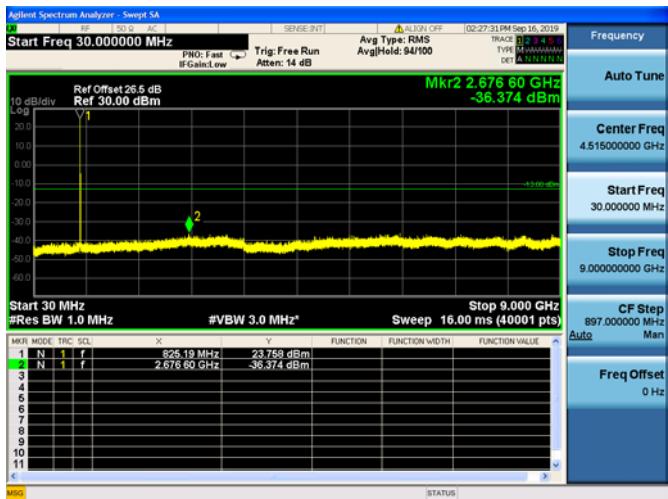
## 1XEVD0 Rev A BC0, Channel=384



## 1XEVD0 Rev A BC0, Channel=777



## 1XEVD0 Rev B BC0, Channel=1013



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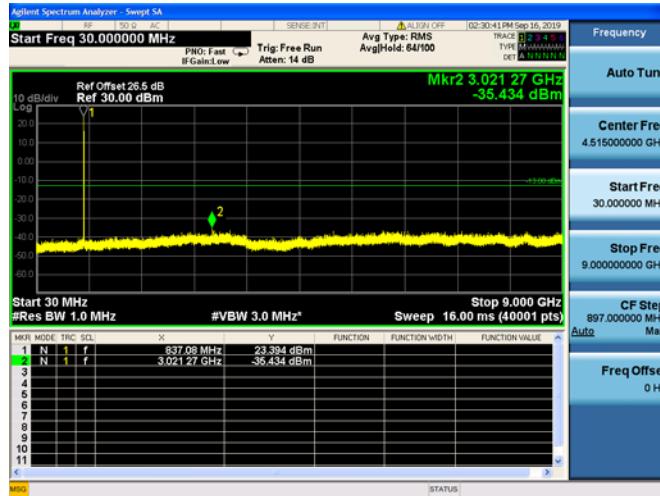
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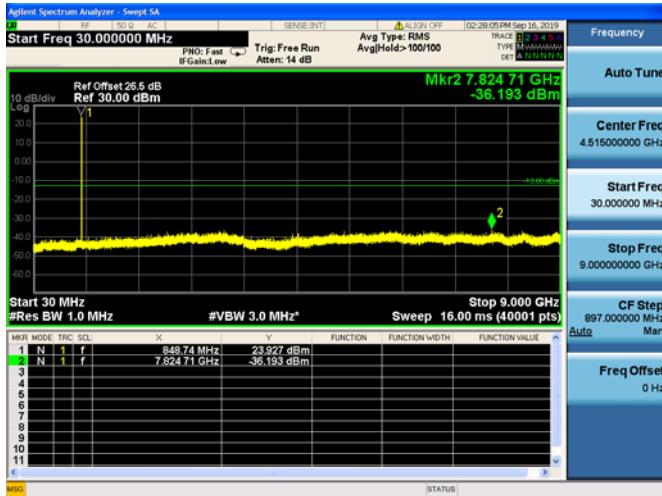


REPORT No.: SZ19070119W07

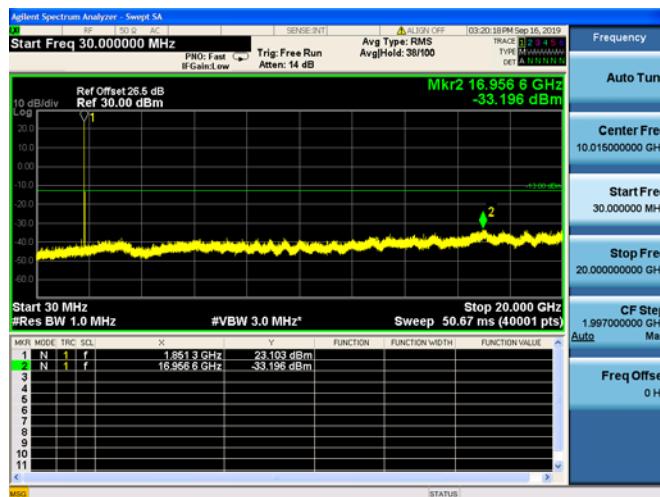
## 1XEVDO Rev B BC0, Channel=384



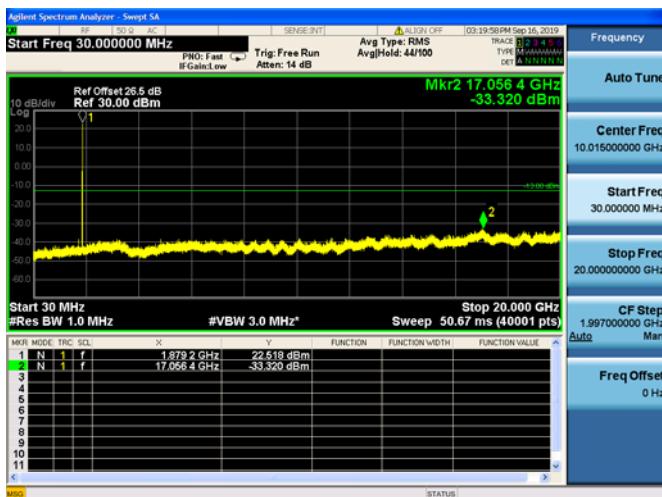
## 1XEVDO Rev B BC0, Channel=777



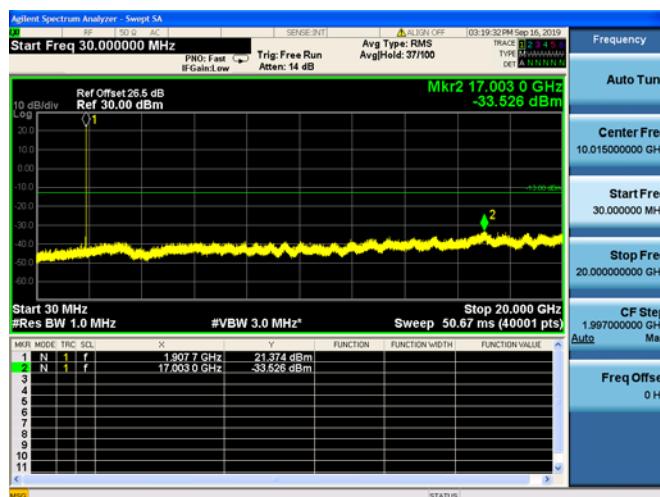
## CDMA BC1, Channel=25



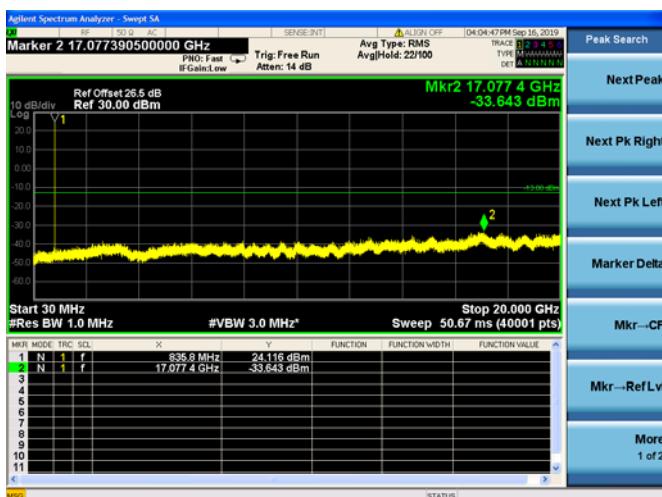
## CDMA BC1, Channel=600



## CDMA BC1, Channel=1175



## 1XEVDO Rev 0 BC1, Channel=25



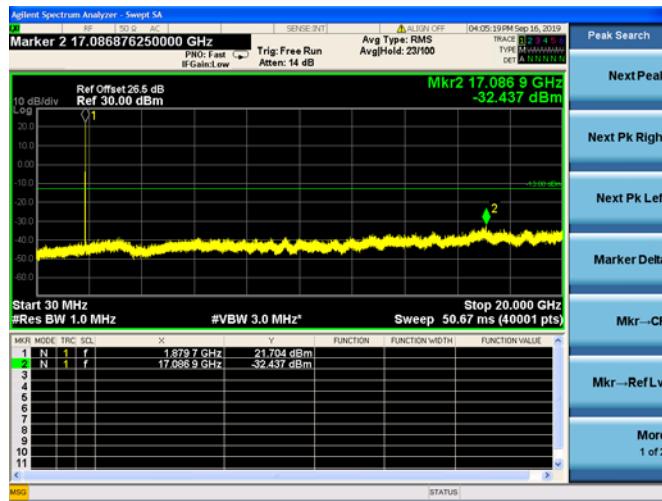
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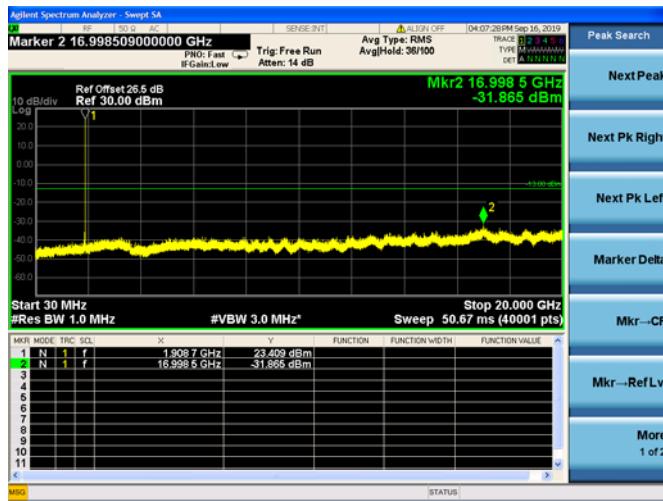


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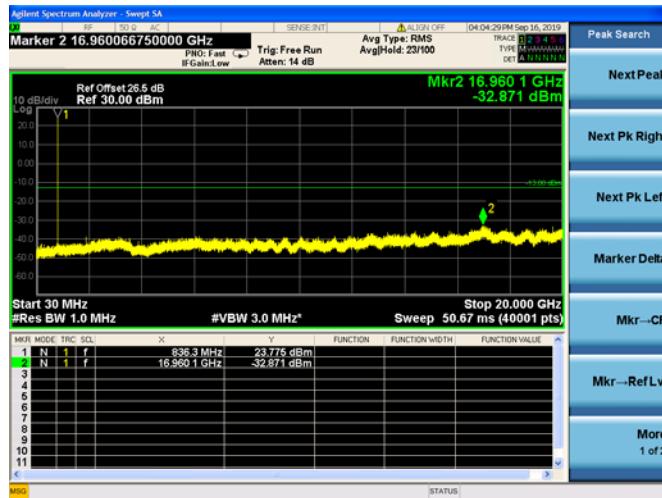
## 1XEVDO Rev 0 BC1, Channel=600



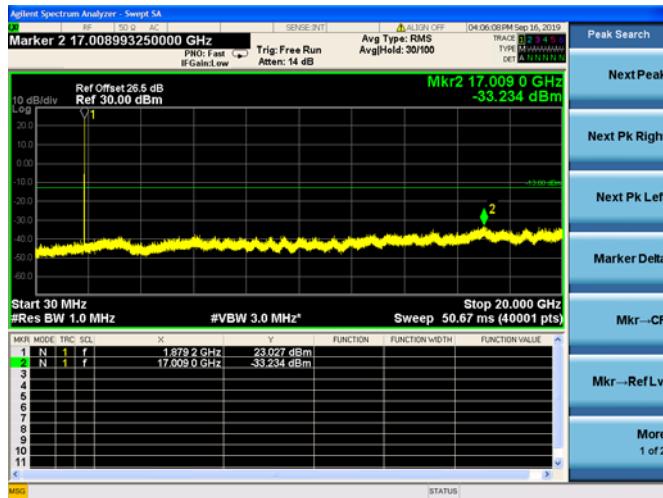
## 1XEVDO Rev 0 BC0, Channel=1175



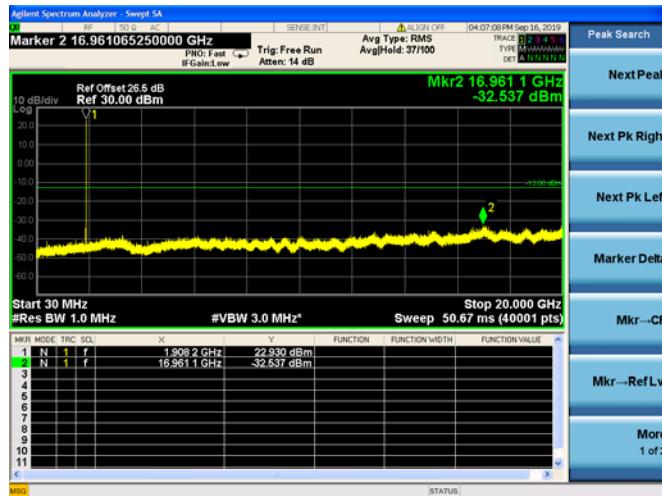
## 1XEVDO Rev A BC1, Channel=25



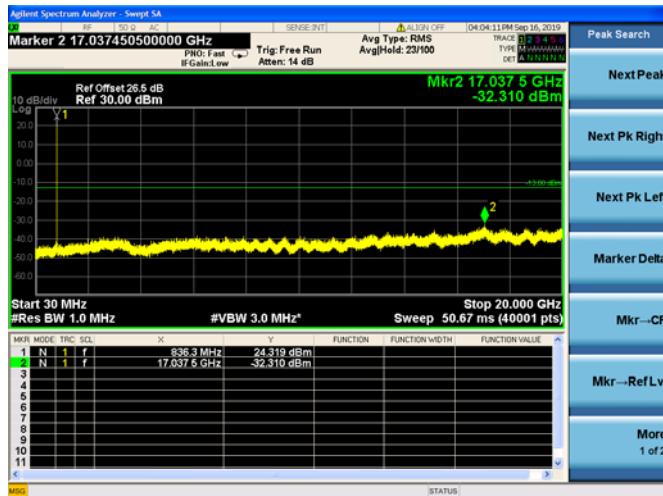
## 1XEVDO Rev A BC1, Channel=600



## 1XEVDO Rev A BC1, Channel=1175



## 1XEVDO Rev B BC1, Channel=25



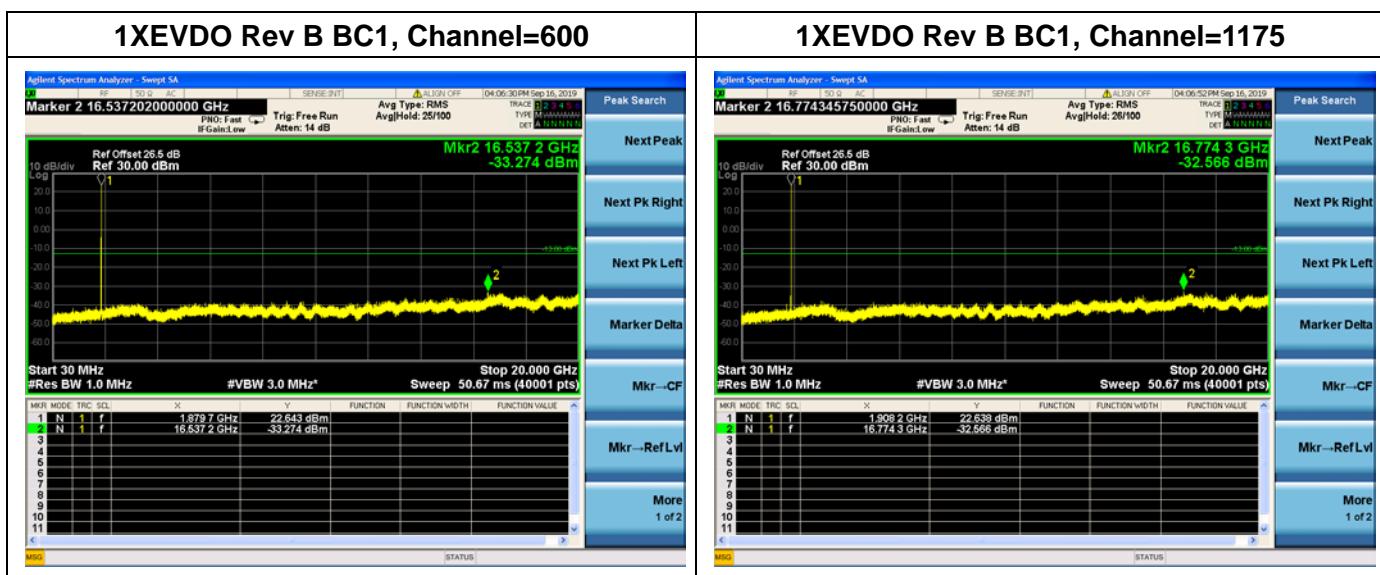
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## 2.6. Band Edge

### 2.6.1. Requirement

According to FCC section 22.917(a), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB.

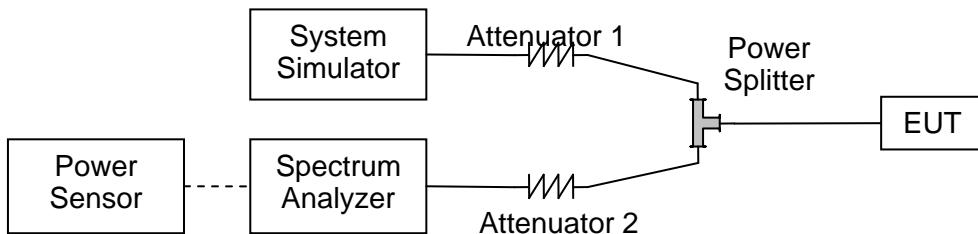
According to FCC section 24.238(a), The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB.

According to FCC section 27.53(g), For operations in the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log(P)$  dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

According to FCC section 27.53(h), For operations in the 1710–1755MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least  $43 + 10 \log(P)$  dB.

According to FCC section 27.53(m) (4), For mobile digital stations, the attenuation factor shall be not less than  $40 + 10 \log(P)$  dB on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log(P)$  dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and  $55 + 10 \log(P)$  dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than  $43 + 10 \log(P)$  dB on all frequencies between 2490.5 MHz and 2496 MHz and  $55 + 10 \log(P)$  dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

## 2.6.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

## 2.6.3. Test procedure

KDB 971168 D01v03 Section 6.0 and ANSI/TIA-603-E-2016.



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#### **2.6.4. Test Result**

The center frequency of spectrum is the band edge frequency and span is 2MHz, Record the max trace into the test report.

