REPORT No.: SZ15080082W01

FCC RF TEST REPORT

APPLICANT	:	TCL Communication Ltd.
PRODUCT NAME	:	Car Wifi Hotspot
MODEL NAME	:	Y856UB
TRADE NAME	:	ALCATEL ONETOUCH
BRAND NAME	:	ALCATEL ONETOUCH
FCC ID	:	2ACCJB028
STANDARD(S)	:	47 CFR Part 22 Subpart H 47 CFR Part 24 Subpart E 47 CFR Part 90 Subpart S
ISSUE DATE	:	2015-11-11

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DIRECTORY

Change History		
Issue	Date	Reason for change
1.0	2015-11-11	First edition

TEST REPORT DECLARATION

Applicant	TCL Communication Ltd.
Applicant Address	5F, C-Tower, No.232, Liangjing Road, Zhangjiang High-tech Park, Pudong,Shanghai,China
Manufacturer	TCL Mobile Communication Co. Ltd. Huizhou
Manufacturer Address	70 Huifeng 4rd., ZhongKai High-Technology Development District, Huizhou, Guangdong, PRC. 516006
Product Name	Car Wifi Hotspot
Model Name	Y856UB
Brand Name	ALCATEL ONETOUCH
HW Version	03
SW Version	Y856_00_03.28_07
Test Standards	47 CFR Part 22 Subpart H 47 CFR Part 24 Subpart E 47 CFR Part 90 Subpart S
Test Date	2015-10-10 to 2015-11-01
Test Result	PASS

Tested by : Zou Jian
Zou Jian (Test Engineer)

Reviewed by : Qiu Xiaojun
Qiu Xiaojun (RF Manager)

Approved by : Zeng Dexing
Zeng Dexing (Chief Engineer)

1. GENERAL INFORMATION

1.1 EUT Description

EUT Type ..... : Car Wifi Hotspot
Model Name..... : Y856UB
Serial No. ..... : (n.a, marked #1 by test site)
Hardware Version ..... : 03
Software Version..... : Y856_00_03.28_07
Applicant ..... : TCL Communication Ltd.
5F, C-Tower, No.232, Liangjing Road, Zhangjiang High-tech Park, Pudong,Shanghai,China
Manufacturer..... : TCL Mobile Communication Co. Ltd. Huizhou
70 Huifeng 4rd., ZhongKai High-Technology Development District, Huizhou, Guangdong, PRC. 516006
Frequency Range ..... : CDMA 800MHz: (BC 0)
Tx: 824.7 – 848.31 MHz;
Rx: 869.7-- 893.31MHz
CDMA 1900MHz: (BC 1)
Tx: 1851.25 MHz -1908.75 MHz;
Rx: 1931.25 MHz-1988.75 MHz
CDMA 800MHz: (BC 10, Spreading Rate 1)
Band Subclass2---Tx: 817.25-819.75MHz;
Rx: 862.25-864.75MHz
Band Subclass3---Tx: 822.25-822.75MHz;
Rx: 862.25-864.75MHz
Modulation Type..... : CDMA 1X; EVDO 0; EVDO A
Emission Designators ..... : BC0:1M28F9W
BC1: 1M28F9W
BC10: 1M27F9W

Note 1: The EUT support CDMA BC0/BC1/BC10 three bands. The lowest, middle, highest channel of every band were tested in this report. The following table show the test channel and the frequency.

Band Class	Lowest		Middle		Highest	
	Channel Number	Frequency	Channel Number	Frequency	Channel Number	Frequency
BC0	1013	824.7	384	836.52	777	848.31
BC1	25	1851.25	600	1880	1175	1908.75
BC10(Subclass2)	450	817.25	500	818.5	550	819.75
BC10(Subclass3)	650	822.25	660	822.5	670	822.75

Note 2: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

1.2 Test Standards and Results

The objective of the report is to perform testing according to:

No.	Identity (FCC)	Document Title
1	47 CFR Part 2 (10-1-09 Edition)	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22 (10-1-09 Edition)	Public Mobile Services
3	47 CFR Part 24 (10-1-13 Edition)	Personal Communications Services
4	47 CFR Part 90 (10-1-13 Edition)	PRIVATE LAND MOBILE RADIO SERVICES

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

No.	Section	Description	Result
1	2.1046	Conducted RF Output Power	PASS
2.	24.232(d)；	Peak to average radio	PASS
3	2.1049;22.917;24.238; 90.209	99% Occupied Bandwidth	PASS
4	90.691	Emissions Mask	PASS
5	2.1055;22.355;24.235;90.213	Frequency Stability	PASS
6	2.1051;2.1057 22.917;24.238;90.691	Conducted Out of Band Emissions	PASS
7	2.1051;2.1057 22.917;24.238;90.691	Band Edge	PASS
8	2.1046，22.913;24.232;90.635	Transmitter Radiated Power (EIPR/ERP)	PASS
9	2.1053,2.1057 22.917,24.238;90.691	Radiated Out of Band Emissions	PASS

NOTE: Measurement method according to ANSI/TIA-603-D 2010.

1.3 Facilities and Accreditations

1.3.1 Facilities

All measurement facilities used to collect the measurement data are located at FL.1, Building A, FeiYang Science Park, No.8 LongChang Road,Block 67, BaoAn District, ShenZhen, GuangDong Province,P. R. China 518101. The test site is constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22; the FCC registration number is 695796.

1.3.2 Test Environment 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 PART2, PART 22H, PART24E, PART90S, REQUIREMENTS

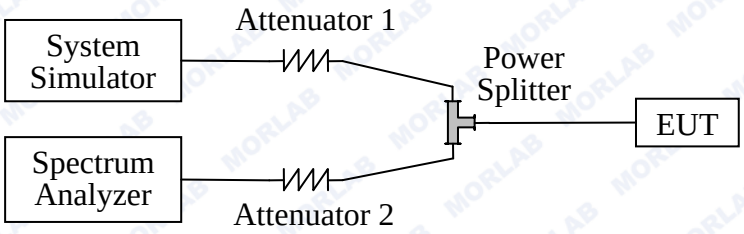
2.1 Conducted RF Output Power

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.

2.1.2 Test Description

Test Setup:



The EUT, which is powered by the Battery, 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 i.e. A call is established between the EUT and the SS.

Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
System Simulator	Agilent	E5515C	GB43130131	2015.02.26	2016.02.25
Spectrum Analyzer	Agilent	E7405A	US44210471	2015.02.26	2016.02.25
Power Meter	Agilent	E4418B	GB43318055	2015.02.26	2016.02.25
Power Sensor	Agilent	8482A	MY41091706	2015.02.26	2016.02.25
Power Splitter	Weinschel	1506A	NW521	2015.02.26	2016.02.25
Attenuator 1	Resnet	20dB	(n.a.)	2015.02.26	2016.02.25
Attenuator 2	Resnet	3dB	(n.a.)	2015.02.26	2016.02.25

2.1.3 Test Result

Here the lowest, middle and highest channels are selected to perform testing to verify the conducted RF output power of the EUT. For the CDMA 800MHz(BC0) operates at maximum output Power, the rated conducted RF output power is 38.5dBm, and For the CDMA1900MHz(BC1) operates at

maximum output Power, the rated conducted RF output power is 33dBm. For the CDMA 800MHz(BC10) operates at maximum output Power, the rated conducted RF output power is 50dBm.

Test Verdict:

Band	Channel Number	Frequency (MHz)	Measured Power		Refer Plot	Limits	
			dBm	W		dBm	W
CDMA（BC0）	1013	824.7	28.75	0.75	Plot1	38.5	7
	384	836.52	28.76	0.75	Plot2		
	777	848.31	28.66	0.73	Plot3		
EVDO 0（BC0）	1013	824.7	26.78	0.48	Plot4	38.5	7
	384	836.52	26.94	0.49	Plot5		
	777	848.31	26.97	0.50	Plot6		
EVDO A（BC0）	1013	824.7	28.14	0.65	Plot7	38.5	7
	384	836.52	28.61	0.73	Plot8		
	777	848.31	28.26	0.67	Plot9		
CDMA（BC1）	25	1851.25	26.81	0.48	Plot10	33	2
	600	1880.00	26.84	0.48	Plot11		
	1175	1908.75	26.89	0.49	Plot12		
EVDO 0（BC1）	25	1851.25	26.71	0.47	Plot13	33	2
	600	1880.00	26.71	0.47	Plot14		
	1175	1908.75	26.96	0.50	Plot15		
EVDO A（BC1）	25	1851.25	26.54	0.45	Plot16	33	2
	600	1880.00	26.52	0.45	Plot17		
	1175	1908.75	26.79	0.48	Plot18		

Band	Channel Number	Frequency (MHz)	Measured Power		Refer Plot	Limits	
			dBm	W		dBm	W
CDMA (BC10) Subclass 2	450	817.25	28.34	0.68	Plot19	50	100
	500	818.50	28.62	0.73	Plot20		
	550	819.75	28.31	0.68	Plot21		
EVDO 0 (BC10) Subclass 2	450	817.25	28.60	0.72	Plot22		
	500	818.50	28.58	0.72	Plot23		
	550	819.75	28.32	0.68	Plot24		
EVDO A (BC10) Subclass 2	450	817.25	28.31	0.68	Plot25	50	100
	500	818.50	28.60	0.72	Plot26		
	550	819.75	28.57	0.72	Plot27		
CDMA (BC10) Subclass 3	650	822.25	28.64	0.73	Plot28		
	660	822.50	28.67	0.74	Plot29		
	670	822.75	28.57	0.72	Plot30		
EVDO 0 (BC10) Subclass 3	650	822.25	28.72	0.74	Plot31	50	100
	660	822.50	28.66	0.73	Plot32		
	670	822.75	28.59	0.72	Plot33		
EVDO A (BC10) Subclass 3	650	822.25	28.62	0.73	Plot34		
	660	822.50	28.62	0.73	Plot35		
	670	822.75	28.64	0.73	Plot36		

Test Plots:

(Plot 1: CDMA BC0 Channel = 1013)

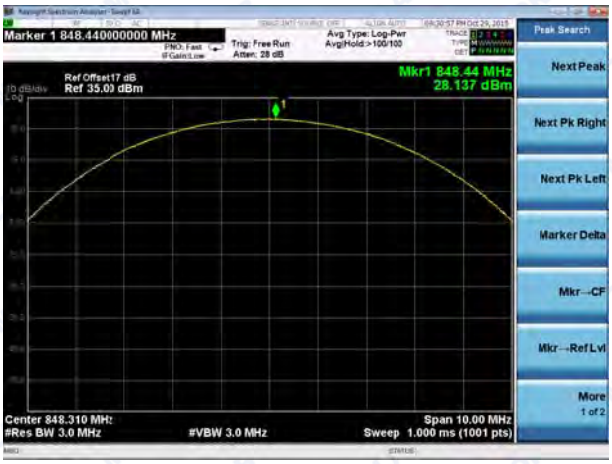
(Plot 2: CDMA BC0 Channel = 384)

(Plot 3: CDMA BC0 Channel = 777)

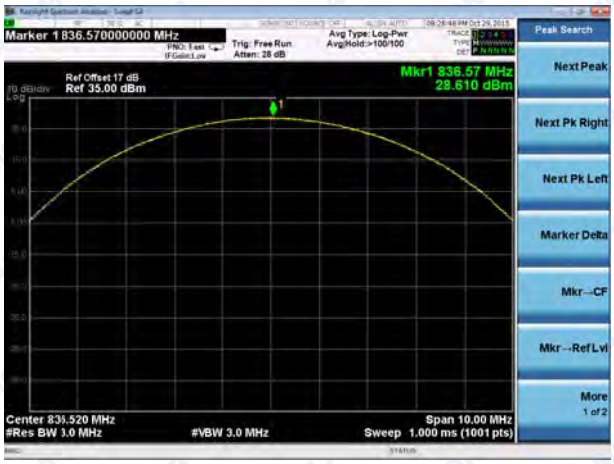
(Plot 4: EVDO 0 BC0 Channel = 1013)

(Plot 5: EVDO 0 BC0 Channel = 384)

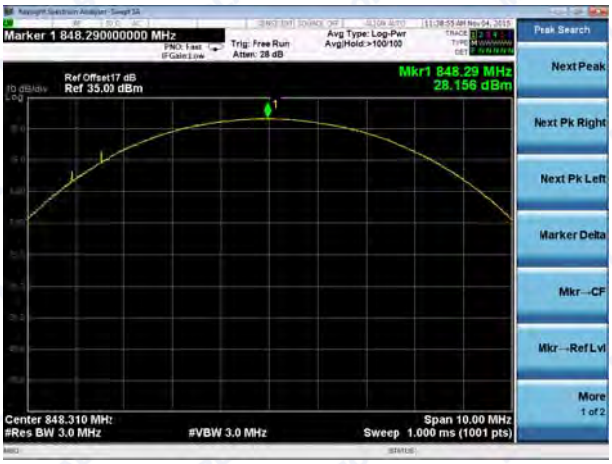
(Plot 6: EVDO 0 BC0 Channel = 777)



(Plot 7: EVDO A BC0 Channel = 1013)



(Plot 8: EVDO A BC0 Channel = 384)



(Plot 9: EVDO A BC0 Channel = 777)

(Plot 10: CDMA BC1 Channel = 25)

(Plot 11: CDMA BC1 Channel = 600)

(Plot 12: CDMA BC1 Channel = 1175)

(Plot 13: EVDO 0 BC1 Channel = 25)

(Plot 14: EVDO 0 BC1 Channel = 600)

(Plot 15: EVDO 0 BC1 Channel = 1175)

(Plot 16: EVDO A BC1 Channel = 25)

(Plot 17: EVDO A BC1 Channel = 600)

(Plot 18: EVDO A BC1 Channel = 1175)

(Plot 19: CDMA BC10 Channel = 450)

(Plot 20: CDMA BC10 Channel = 500)

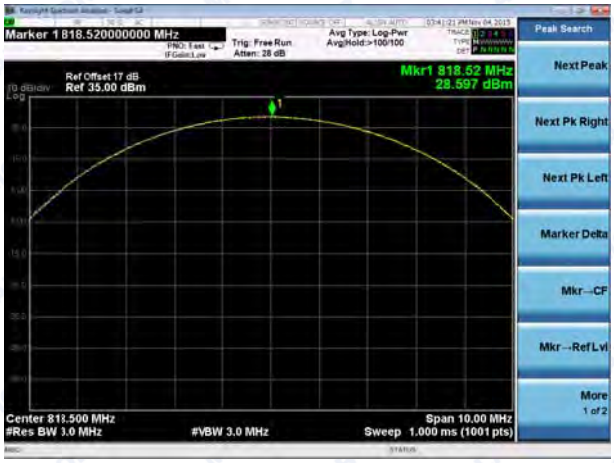
(Plot 21: CDMA BC10 Channel =550)

(Plot 22:EVDO 0 BC10 Channel =450)

(Plot 23: EVDO 0 BC10 Channel = 500)

(Plot 24: EVDO 0 BC10 Channel = 550)

(Plot 25: EVDO A BC10 Channel = 450)



(Plot 26: EVDO A BC10 Channel = 500)

(Plot 27: EVDO A BC10 Channel =550)

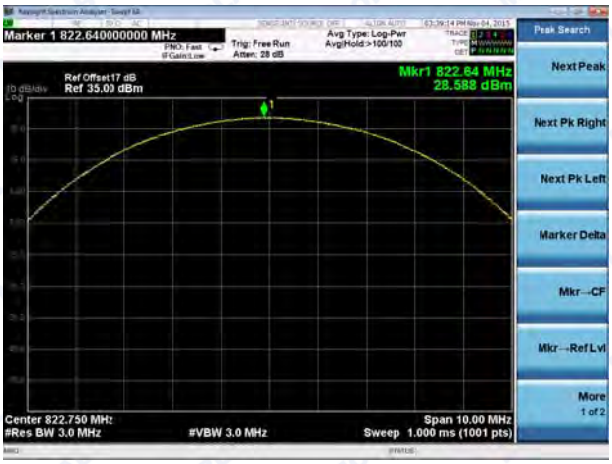
(Plot 28: CDMA BC10 Channel = 650)

(Plot 29: CDMA 0 BC10 Channel = 660)

(Plot 30: CDMA 0 BC10 Channel = 670)

(Plot 31: EVDO 0 BC10 Channel = 650)

(Plot 32: EVDO 0 BC10 Channel = 660)



(Plot 33: EVDO 0 BC10 Channel =670)

(Plot 34: EVDO A BC10 Channel = 650)

(Plot 35: EVDO A BC10 Channel = 660)

(Plot 36: EVDO A BC10 Channel = 670)

2.2 Peak to Average Radio

2.2.1 Definition

According to FCC section 2.1049 and FCC 24.232(d) the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

2.2.2 Test Description

See section 2.1.2 of this report.

2.2.3 Test Verdict

Here the lowest, middle and highest channels are selected to perform testing to verify the peak-to-average ratio.

Test procedures:

A .For GSM/EGPRS operating mode:

a. Set RBW=1MHz, VBW=1MHz, peak detector in spectrum analyzer.

b. Set EUT in maximum output power, and triggered the bust signal.

c. Measured respectively the peak level and mean level, and the deviation was recorded as Peak to Average radio.

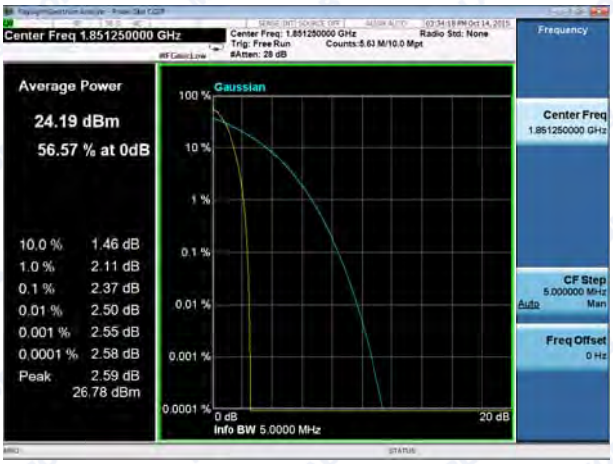
B. For UMTS operating mode:

a. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.

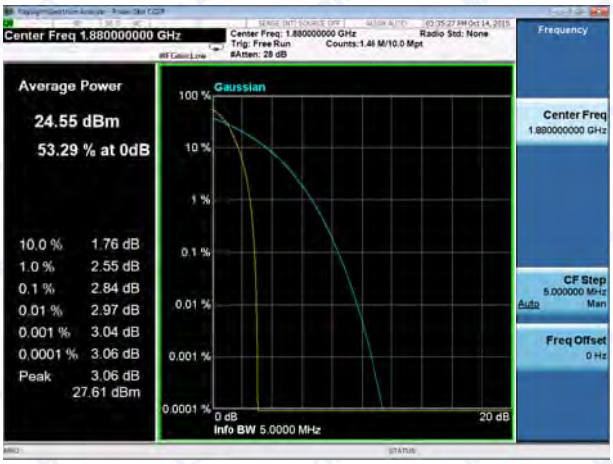
b. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1%.

Test Verdict:

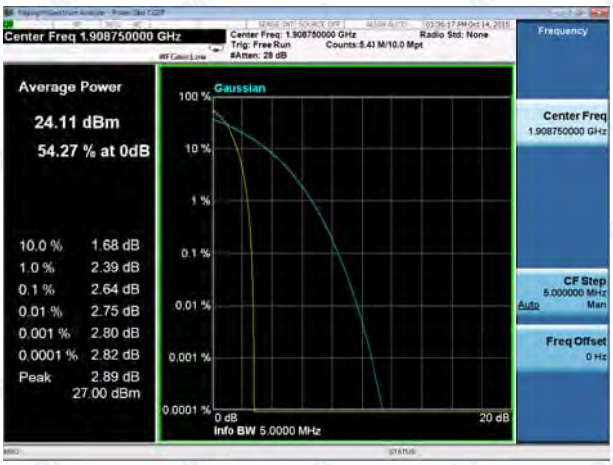
Band	Channel	Frequency (MHz)	Peak to Average radio		Limit	Verdict
			dBm	Refer to Plot	dB	
CDMA (BC1)	25	1851.25	2.37	Plot A1 to A3	13	PASS
	600	1880.0	2.84			PASS
	1175	1908.75	2.64			PASS
EVDO 0 (BC1)	25	1851.25	2.40	Plot A4 to A6	13	PASS
	600	1880.0	3.04			PASS
	1175	1908.75	2.90			PASS
EVDO A (BC1)	25	1851.25	2.56	Plot A7 to A9	13	PASS
	600	1880.0	2.98			PASS
	1175	1908.75	2.73			PASS



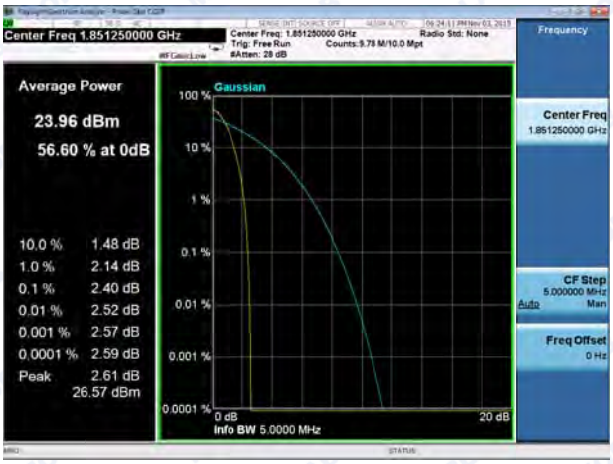
(Plot A1:CDMA BC1: Channel =25)



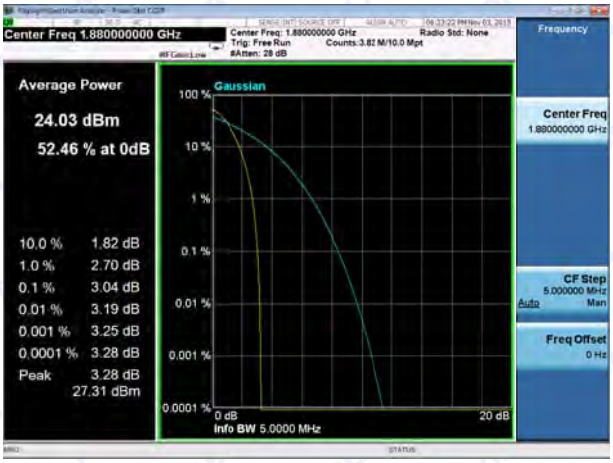
(Plot A2:CDMA BC1:Channel =600)



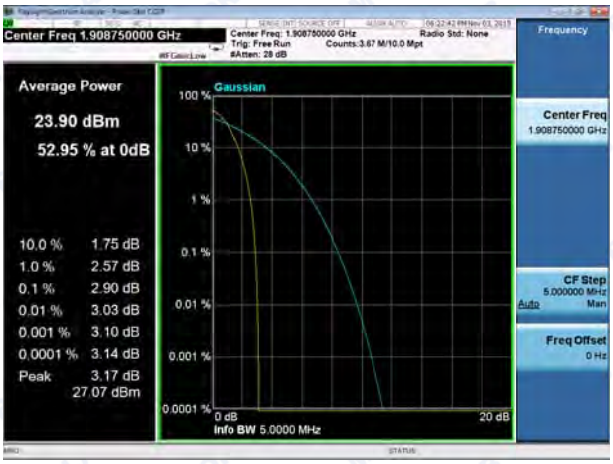
(Plot A3:CDMA BC1: Channel =1175)



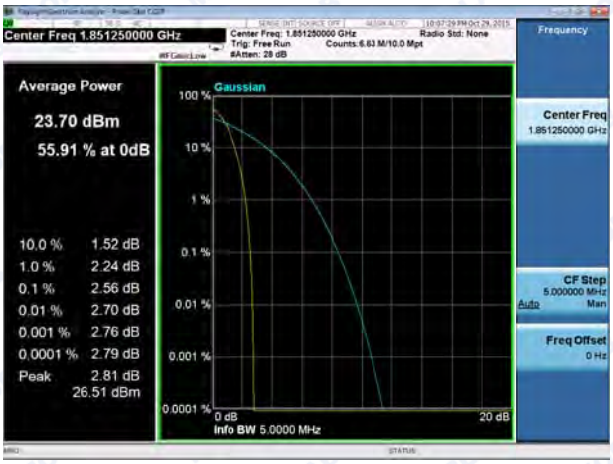
(Plot A4:EVDO 0 BC1: Channel =25)



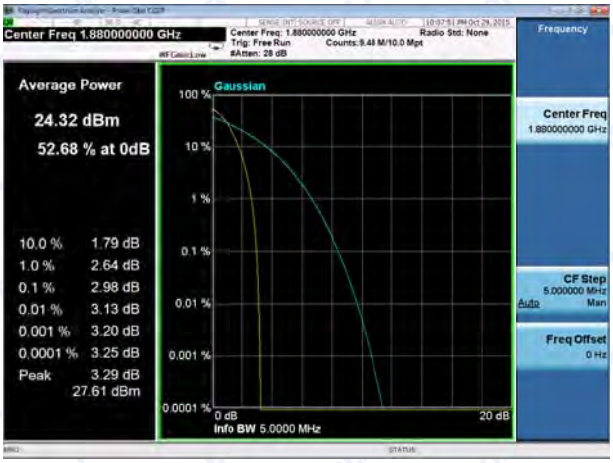
(Plot A5:EVDO 0 BC1:Channel =600)



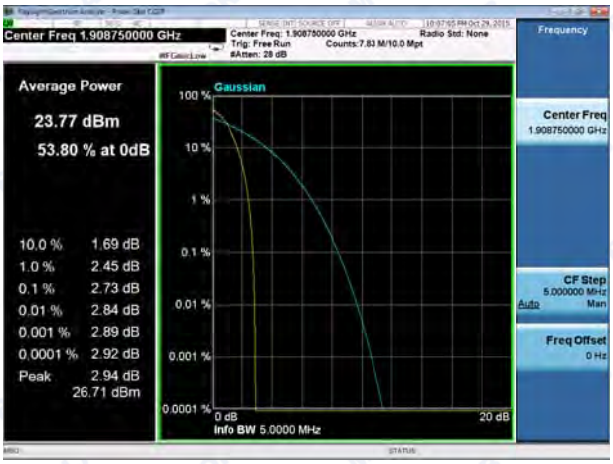
(Plot A6:EVDO 0 BC1: Channel =1175)



(Plot A7:EVDO A BC1: Channel =25)



(Plot A8:EVDO A BC1:Channel =600)



(Plot A9:EVDO A BC1: Channel =1175)

2.3 99% Occupied Bandwidth

2.3.1 Definition

According to FCC section 2.1049, 22.917;24.238 and 90.209the 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.

2.3.2 Test Description

See section 2.1.2 of this report.

2.3.3 Test Verdict

Here the lowest, middle and highest channels are tested to record the 99% occupied bandwidth.

Test Verdict:

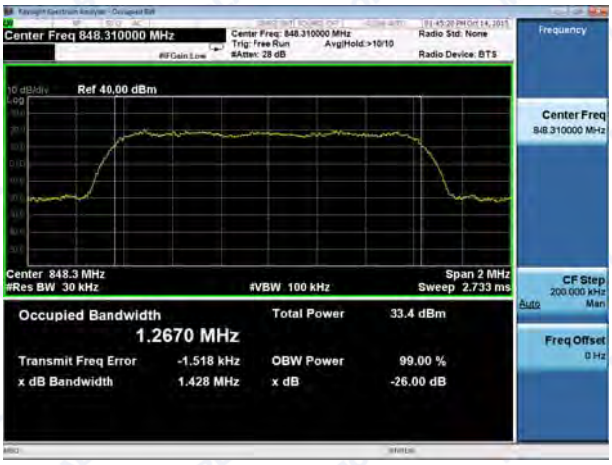
Band	Channel Number	Frequency (MHz)	Measured 99% Occupied Bandwidth (MHz)	Refer Plot
CDMA（BC0）	1013	824.7	1.28	Plot1
	384	836.52	1.27	Plot2
	777	848.31	1.27	Plot3
EVDO 0（BC0）	1013	824.7	1.27	Plot4
	384	836.52	1.28	Plot5
	777	848.31	1.27	Plot6
EVDO A（BC0）	1013	824.7	1.27	Plot7
	384	836.52	1.27	Plot8
	777	848.31	1.27	Plot9
CDMA（BC1）	25	1851.25	1.28	Plot10
	600	1880.00	1.27	Plot11
	1175	1908.75	1.27	Plot12
EVDO 0（BC1）	25	1851.25	1.27	Plot13
	600	1880.00	1.27	Plot14
	1175	1908.75	1.26	Plot15
EVDO A（BC1）	25	1851.25	1.28	Plot16
	600	1880.00	1.27	Plot17
	1175	1908.75	1.27	Plot18

Band	Channel Number	Frequency (MHz)	Measured 99% Occupied Bandwidth (MHz)	Refer Plot
CDMA （BC10） Subclass 2	450	817.25	1.27	Plot19
	500	818.50	1.27	Plot20
	550	819.75	1.27	Plot21
EVDO 0 （BC10） Subclass 2	450	817.25	1.27	Plot22
	500	818.50	1.27	Plot23
	550	819.75	1.27	Plot24
EVDO A （BC10） Subclass 2	450	817.25	1.27	Plot25
	500	818.50	1.27	Plot26
	550	819.75	1.27	Plot27
CDMA （BC10） Subclass 3	650	822.25	1.27	Plot28
	660	822.50	1.27	Plot29
	670	822.75	1.27	Plot30
EVDO 0 （BC10） Subclass 3	650	822.25	1.27	Plot31
	660	822.50	1.27	Plot32
	670	822.75	1.27	Plot33
EVDO A （BC10） Subclass 3	650	822.25	1.27	Plot34
	660	822.50	1.27	Plot35
	670	822.75	1.27	Plot36

Test Plots:

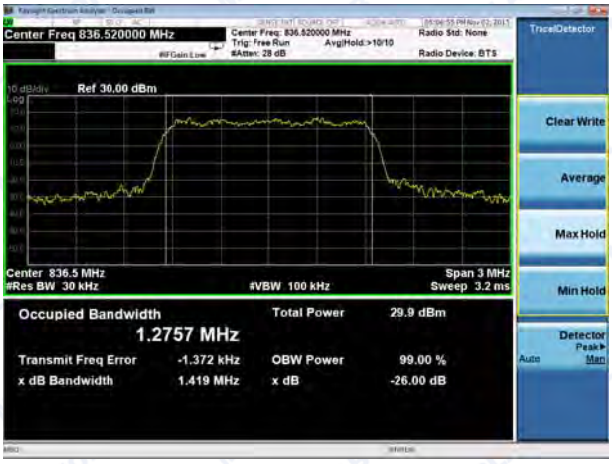
(Plot 1: CDMA BC0 Channel = 1013)

(Plot 2: CDMA BC0 Channel = 384)

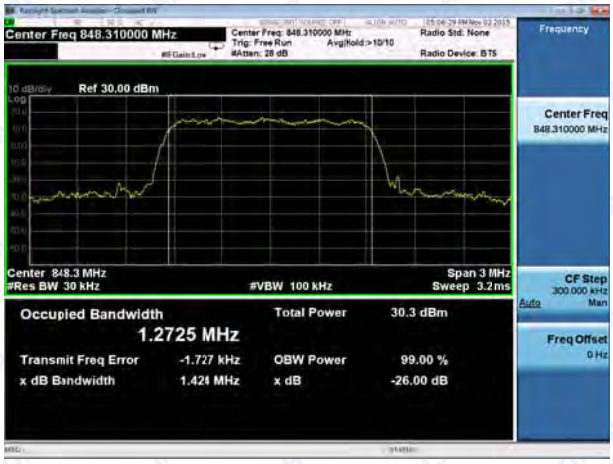


(Plot 3: CDMA BC0 Channel = 777)

(Plot 4: EVDO 0 BC0 Channel = 1013)

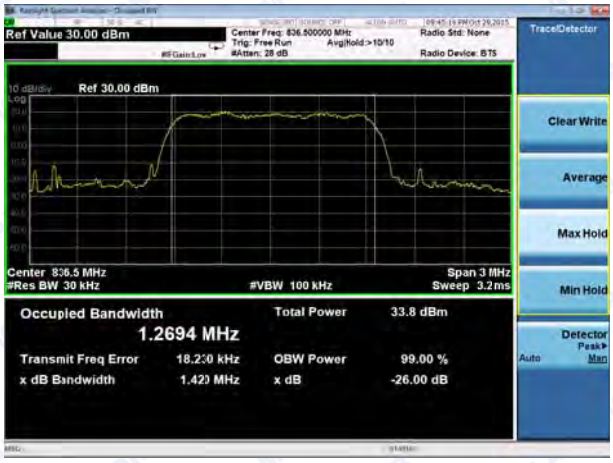


(Plot 5: EVDO 0 BC0 Channel = 384)

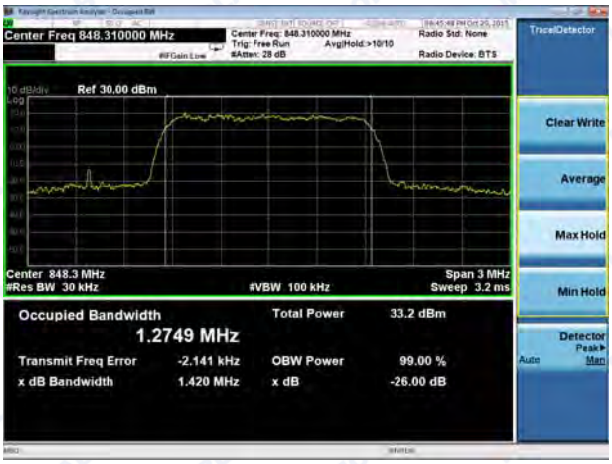


(Plot 6: EVDO 0 BC0 Channel = 777)

(Plot 7: EVDO A BC0 Channel = 1013)



(Plot 8: EVDO A BC0 Channel = 384)

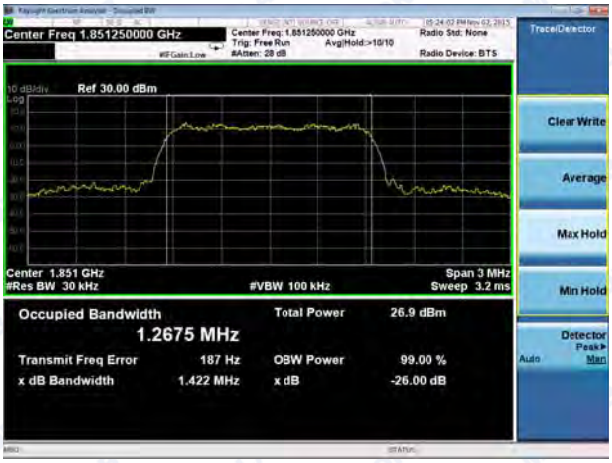


(Plot 9: EVDO A BC0 Channel = 777)

(Plot 10: CDMA BC1 Channel = 25)

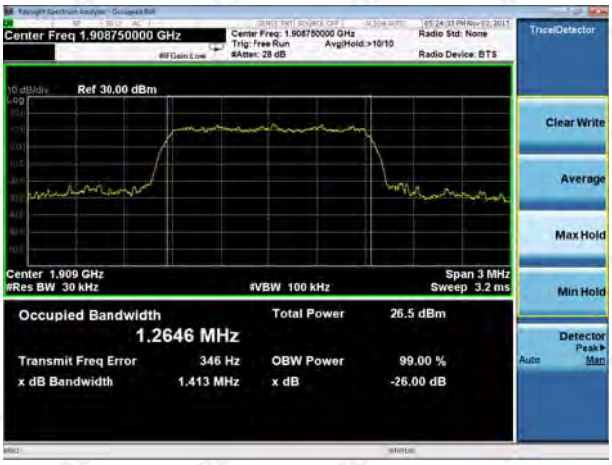
(Plot 11: CDMA BC1 Channel = 600)

(Plot 12: CDMA BC1 Channel = 1175)



(Plot 13: EVDO 0 BC1 Channel = 25)

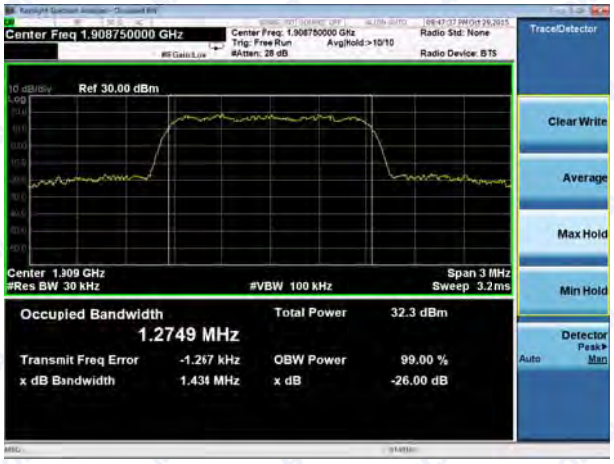
(Plot 14: EVDO 0 BC1 Channel = 600)



(Plot 15:EVDO 0 BC1 Channel = 1175)

(Plot 16: EVDO A BC1 Channel = 25)

(Plot 17: EVDO A BC1 Channel = 600)

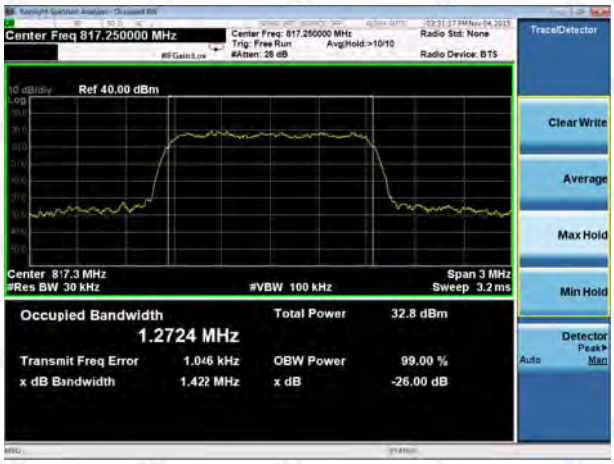


(Plot18:EVDO A BC1 Channel = 1175)

(Plot 19: CDMA BC10 Channel = 450)

(Plot 20: CDMA BC10 Channel = 500)

(Plot 21: CDMA BC10 Channel =550)



(Plot 22: EVDO 0 BC10 Channel = 450)

(Plot 23: EVDO 0 BC10 Channel = 500)

(Plot 24: EVDO 0 BC10 Channel = 550)

(Plot 25: EVDO A BC10 Channel = 450)

(Plot 26: EVDO A BC10 Channel = 500)

(Plot 27: EVDO A BC10 Channel =550)

(Plot 28: CDMA BC10 Channel =650)

(Plot 29: CDMA BC10 Channel = 660)

(Plot 30: CDMA BC10 Channel = 670)

(Plot 31: EVDO 0 BC10 Channel = 650)

(Plot 32: EVDO 0 BC10 Channel = 660)

(Plot 33: EVDO 0 BC10 Channel =670)

(Plot 34: EVDO A BC10 Channel = 650)

(Plot 35: EVDO A BC10 Channel = 660)

(Plot 36: EVDO A BC10 Channel = 670)

2.4 Emissions Mask Measurement

2.4.1 Description of Emissions Mask Measurement

According to FCC section 90 the Equipment used in this licensed to EA or non-EA systems shall comply with the emission mask provisions of FCC
Part 90.691.(a)(1)

(a). Out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

2.4.2 Measuring Instruments

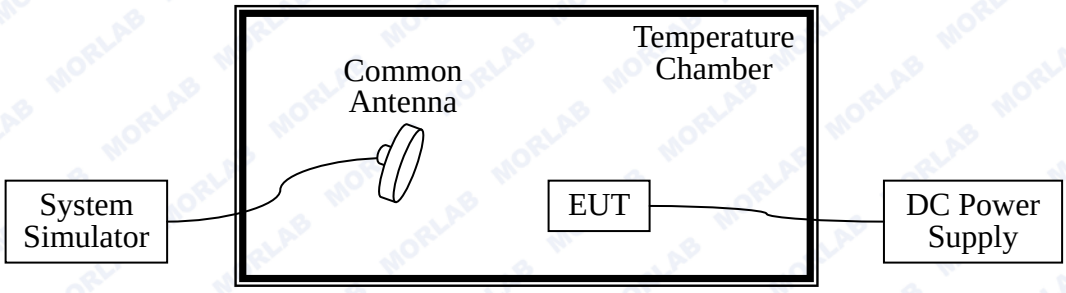
See list of measuring instruments of this test report.

2.4.3 Test Procedures

1. The EUT was connected to spectrum analyzer and base station via power divider.
2. The emissions mask of low and high channels for the highest RF powers were measured.
3. The RBW was set 30 kHz, higher than 1% of bandwidth 1.27MHz, and VBW was set 3 times of RBW.
4. The final test results were shown below plots with a correction offset factor including cable loss, insertion loss of power divider.
5. The 1% of bandwidth 1.256MHz approximately was 13kHz. The test results need to follow below equation.

Test Result(dBm) = PwrAbs(dBm) + 10*LOG(13kHz/30KHz)(dB) (~ -3.63dB)

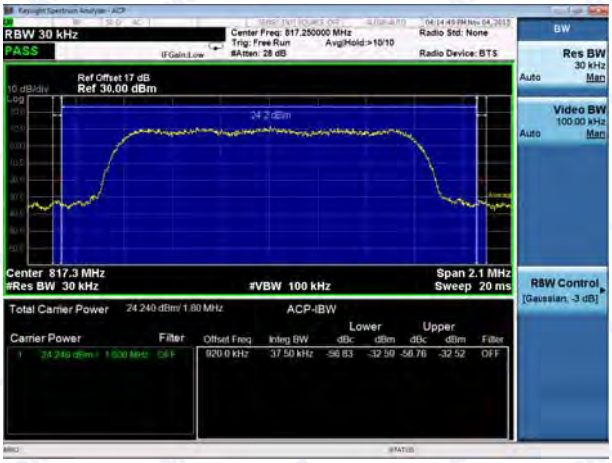
2.4.4 Test Setup



2.4.5 Test Result (Plots) of Conducted Emissions Mask(BC10)

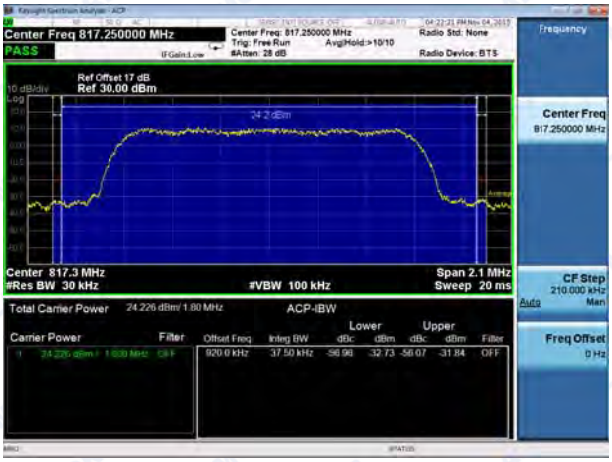
Band	Lowest Channel	Highest Channel	Refer Plot	verdict
CDMA BC10 (Subclass 2)	450	550	Plot1/2	Pass
EVDO 0 BC10 (Subclass 2)	450	550	Plot3/4	Pass
EVDO A BC10 (Subclass 2)	450	550	Plot5/6	Pass
CDMA BC10 (Subclass 3)	650	670	Plot7/8	Pass
EVDO 0 BC10 (Subclass 3)	650	670	Plot9/10	Pass
EVDO A BC10 (Subclass 3)	650	670	Plot11/12	Pass

Test Plots:



(Plot1: CDMA BC10 Channel 450)

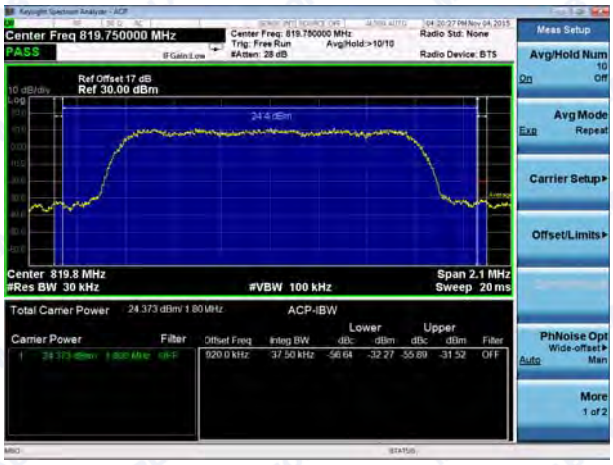
(Plot1: CDMA BC10 Channel 550)



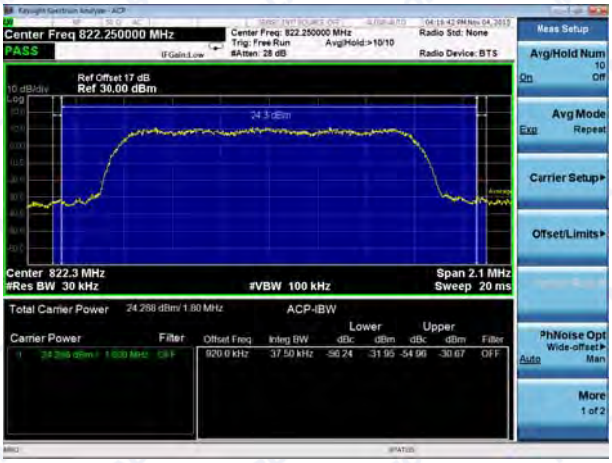
(Plot1: EVDO 0 BC10 Channel 450)

(Plot1: EVDO 0 BC10 Channel 550)

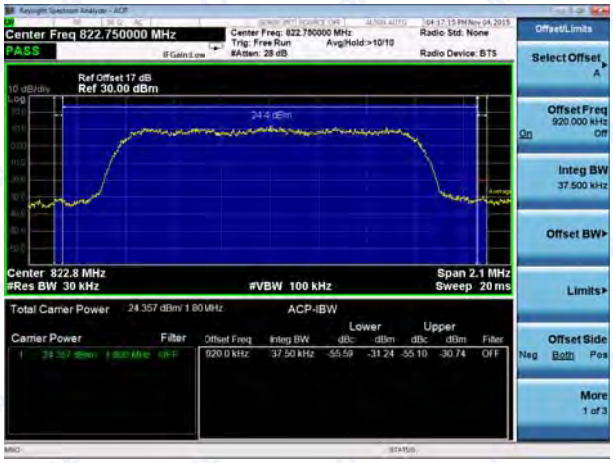
(Plot1: EVDO A BC10 Channel 450)



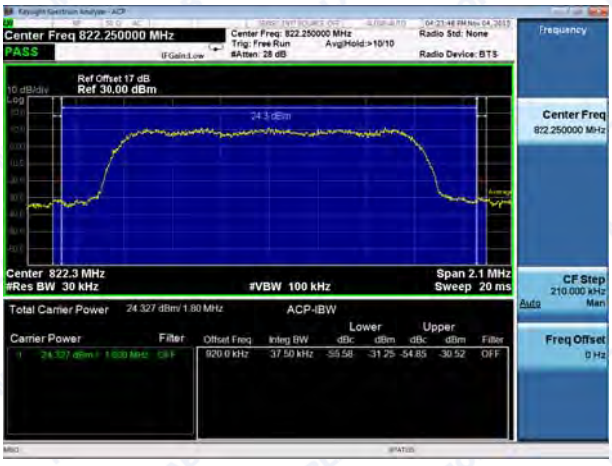
(Plot1: EVDO A BC10 Channel 550)



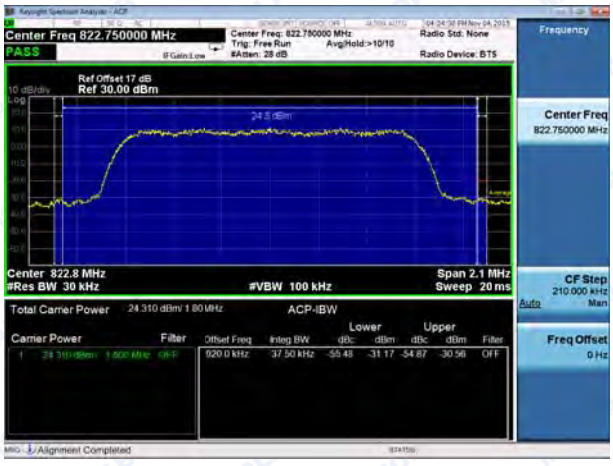
(Plot1: CDMA BC10 Channel 650)



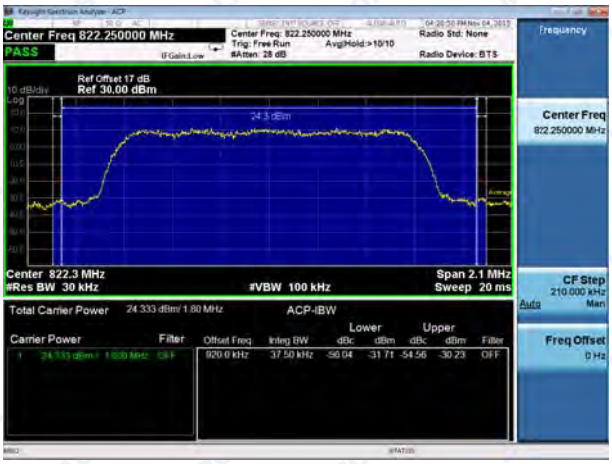
(Plot1: CDMA BC10 Channel 670)



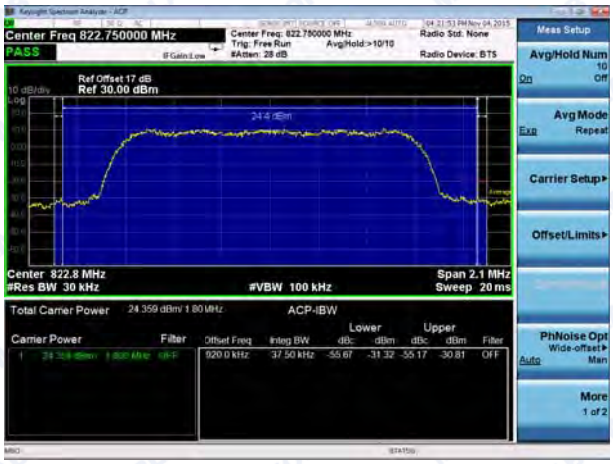
(Plot1: EVDO 0 BC10 Channel 650)



(Plot1: EVDO 0 BC10 Channel 670)



(Plot1: EVDO A BC10 Channel 650)



(Plot1: EVDO A BC10 Channel 670)

2.5 Frequency Stability

2.5.1 Requirement

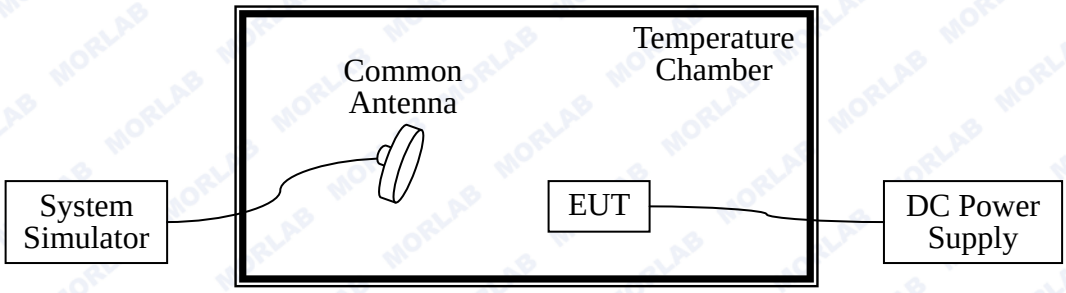
According to FCC section 2.1055 , 22.355 ;24.235 and 90.213 ,the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. the test conditions are:

(a) The temperature is varied from -30°C to +50°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 manufacture. 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.

2.5.2 Test Description

Test Setup:



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.

Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
System Simulator	Agilent	E5515C	GB43130131	2015.02.26	2016.02.25
DC Power Supply	Good Will	GPS-3030DD	EF920938	2015.02.26	2016.02.25
Temperature Chamber	YOMA Experimental Equip.	HL4003T	(n.a.)	2015.02.26	2016.02.25

2.5.3 Test Verdict

The nominal, highest and lowest extreme voltages are separately 12VDC, 18VDC and 8VDC, which

are specified by the applicant; the normal temperature here used is 25°C. The frequency deviation limit of BC0 /BC10 band is ±2.5ppm, and BC1is ±1ppm

Band	Test Conditions		Frequency Deviation						Verdict
	Power (VDC)	Temperature (°C)	Channel = 1013 (824.7MHz)		Channel = 384 (836.52MHz)		Channel =777 (848.31MHz)		
			Hz	Limits	Hz	Limits	Hz	Limits	
CDMA (BC0)	12	-30	13.	±2061.75	8	±2091.30	17	±2120.78	PASS
		-20	3.0		2		6		
		-10	-8		-3		-3		
		0	-9		-19		-11		
		+10	-11		-3		-9		
		+20	12		10		9		
		+30	-9		-9		-7		
		+40	-9		-7		-8		
		+50	11		12		9		
	27	+25	11		12		12		
	9	+25	-13		-14		-13		

Band	Test Conditions		Frequency Deviation						Verdict
	Power (VDC)	Temperature (°C)	Channel = 1013 (824.7MHz)		Channel = 384 (836.52MHz)		Channel =777 (848.31MHz)		
			Hz	Limits	Hz	Limits	Hz	Limits	
EVDO 0 (BC0)	12	-30	8	±2061.75	-7	±2091.30	-10-2	±2120.78	PASS
		-20	5		-6		8		
		-10	-2		5		-3		
		0	11		-9		15		
		+10	-3		10		-4		
		+20	4		-10		8		
		+30	-16		-25		12		
		+40	-3		-11		10		
		+50	-2		10		-8		
	27	+25	9		-8		-9		
	9	+25	-5		-11		17		

Band	Test Conditions		Frequency Deviation						Verdict
	Power (VDC)	Temperature (°C)	Channel = 1013 (824.7MHz)		Channel = 384 (836.52MHz)		Channel =777 (848.31MHz)		
			Hz	Limits	Hz	Limits	Hz	Limits	
EVDO A (BC0)	12	-30	13	±2061.75	8	±2091.30	14	±2120.78	PASS
		-20	3		8		-8		
		-10	-8		-8		8		
		0	-9		11		6		
		+10	-6		14		-11		
		+20	19		-8		-6		
		+30	-10		-10		13		
		+40	-9		4		18		
		+50	15		6		21		
	27	+25	12		11		-11		
	9	+25	-13		-4		12		

Band	Test Conditions		Frequency Deviation						Verdict
	Power (VDC)	Temperature (°C)	Channel = 25 (1851.25MHz)		Channel = 600 (1880MHz)		Channel =1175 (1908.75MHz)		
			Hz	Limits	Hz	Limits	Hz	Limits	
CDMA (BC1)	12	-30	16	±1851.25	15	±1880.0	12	±1908.75	PASS
		-20	-10		-9		-11		
		-10	9		14		9		
		0	10		11		10		
		+10	-8		-8		-8		
		+20	-10		-10		-9		
		+30	7		19		13		
		+40	13		10		10		
		+50	8		14		17		
	27	+25	9		9		9		
	9	+25	-6		-12		-4		

Band	Test Conditions		Frequency Deviation						Verdict
	Power (VDC)	Temperature (°C)	Channel = 25 (1851.25MHz)		Channel = 600 (1880MHz)		Channel =1175 (1908.75MHz)		
			Hz	Limits	Hz	Limits	Hz	Limits	
EVDO 0 (BC1)	12	-30	-10	±1851.25	5	±1880.0	-4	±1908.75	PASS
		-20	11		11		-11		
		-10	-15		-2		8		
		0	9		-8		13		
		+10	-15		19		16		
		+20	10		13		14		
		+30	14		-10		-9		
		+40	-9		8		-17		
		+50	-2		11		-12		
	27	+25	17		9		8		
	9	+25	-5		-10		12		

Band	Test Conditions		Frequency Deviation						Verdict
	Power (VDC)	Temperature (°C)	Channel = 25 (1851.25MHz)		Channel = 600 (1880MHz)		Channel =1175 (1908.75MHz)		
			Hz	Limits	Hz	Limits	Hz	Limits	
EVDO A (BC1)	12	-30	13	±1851.25	8	±1880.0	17	±1908.75	PASS
		-20	3		12		6		
		-10	-8		-3		-8		
		0	-14		-9		-14		
		+10	-12		-8		-9		
		+20	9		9		14		
		+30	-9		-11		-15		
		+40	-111		-10		-10		
		+50	15		12		12		
	27	+25	10		19		10		
	9	+25	-13		-14		-13		

Band	Test Conditions		Frequency Deviation						Verdict
	Power (VDC)	Temperature (°C)	Channel = 450 (817.25MHz)		Channel = 500 (818.50MHz)		Channel =550 (819.75MHz)		
			Hz	Limits	Hz	Limits	Hz	Limits	
CDMA (BC10) Subclass2	12	-30	12	±2043.13	8	±2046.25	-16	±2049.38	PASS
		-20	6		9		19		
		-10	-12		-2		-11		
		0	-17		-10		14		
		+10	-8		-8		-12		
		+20	11		11		15		
		+30	17		-10		14		
		+40	-12		-8		-11		
		+50	14		11		8		
	27	+25	10		15		-7		
	9	+25	-8		-12		13		

Band	Test Conditions		Frequency Deviation						Verdict
	Power (VDC)	Temperature (°C)	Channel = 450 (817.25MHz)		Channel = 500 (818.50MHz)		Channel =550 (819.75MHz)		
			Hz	Limits	Hz	Limits	Hz	Limits	
EVDO 0 (BC10) Subclass2	12	-30	-7	±2043.13	11	±2046.25	-4	±2049.38	PASS
		-20	2		-13		17		
		-10	11		-8		15		
		0	-9		8		11		
		+10	5		-12		-12		
		+20	-12		17		-9		
		+30	8		14		12		
		+40	3		-3		17		
		+50	-7		18		13		
	27	+25	-17		-14		-4		
	9	+25	11		-9		-12		

Band	Test Conditions		Frequency Deviation						Verdict
	Power (VDC)	Temperature (°C)	Channel = 450 (817.25MHz)		Channel = 500 (818.50MHz)		Channel =550 (819.75MHz)		
			Hz	Limits	Hz	Limits	Hz	Limits	
EVDO A (BC10) Subclass2	12	-30	12	±2043.13	9	±2046.25	12	±2049.38	PASS
		-20	4		2		6		
		-10	-11		-2		-7		
		0	-18		-7		-11		
		+10	-8		-3		-11		
		+20	13		19		11		
		+30	-17		-17		-18		
		+40	-19		-14		-17		
		+50	12		15		12		
	27	+25	17		10		13		
	9	+25	-10		-17		-11		

Band	Test Conditions		Frequency Deviation						Verdict
	Power (VDC)	Temperature (°C)	Channel = 650 (822.25MHz)		Channel = 660 (822.50MHz)		Channel =670 (822.75MHz)		
			Hz	Limits	Hz	Limits	Hz	Limits	
CDMA (BC10) Subclass3	12	-30	10	±2055.63	11	±2056.25	-19	±2056.87	PASS
		-20	4		12		16		
		-10	-14		1		-14		
		0	-19		-7		11		
		+10	-10		-5		-15		
		+20	9		14		12		
		+30	15		-7		11		
		+40	-14		-5		-14		
		+50	12		14		5		
	27	+25	8		18		-10		
	9	+25	-10		-9		10		

Band	Test Conditions		Frequency Deviation						Verdict
	Power (VDC)	Temperature (°C)	Channel = 650 (822.25MHz)		Channel = 660 (822.50MHz)		Channel =670 (822.75MHz)		
			Hz	Limits	Hz	Limits	Hz	Limits	
EVDO 0 (BC10) Subclass3	12	-30	-13	±2055.63	17	±2056.25	-8	±2056.87	PASS
		-20	6		-7		13		
		-10	10		10		11		
		0	-11		12		10		
		+10	-10		-10		-7		
		+20	-19		21		-3		
		+30	7		15		18		
		+40	4		-6		14		
		+50	-9		-12		11		
	27	+25	-13		1		-7		
	9	+25	12		-8		-17		

Band	Test Conditions		Frequency Deviation						Verdict
	Power (VDC)	Temperature (°C)	Channel = 650 (822.25MHz)		Channel = 660 (822.50MHz)		Channel =670 (822.75MHz)		
			Hz	Limits	Hz	Limits	Hz	Limits	
EVDO A (BC10) Subclass3	12	-30	18	±2055.63	4	±2056.25	21	±2056.87	PASS
		-20	8		1		10		
		-10	-4		-8		1		
		0	-5		-13		-10		
		+10	-1		-12		-6		
		+20	24		10		19		
		+30	-5		-15		-7		
		+40	-9		-13		-4		
		+50	20		14		17		
	27	+25	17		7		14		
	9	+25	-8		-22		-9		

2.6 Conducted Out of Band Emissions

2.6.1 Requirement

According to FCC section 2.1051, FCC section 22.917(a) 24.238(a), and 90.691. 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.

2.6.2 Test Description

See section 2.1.2 of this report.

2.6.3 Test Result

The measurement frequency range is from 30MHz to the 10^{th} harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the out of band emissions.

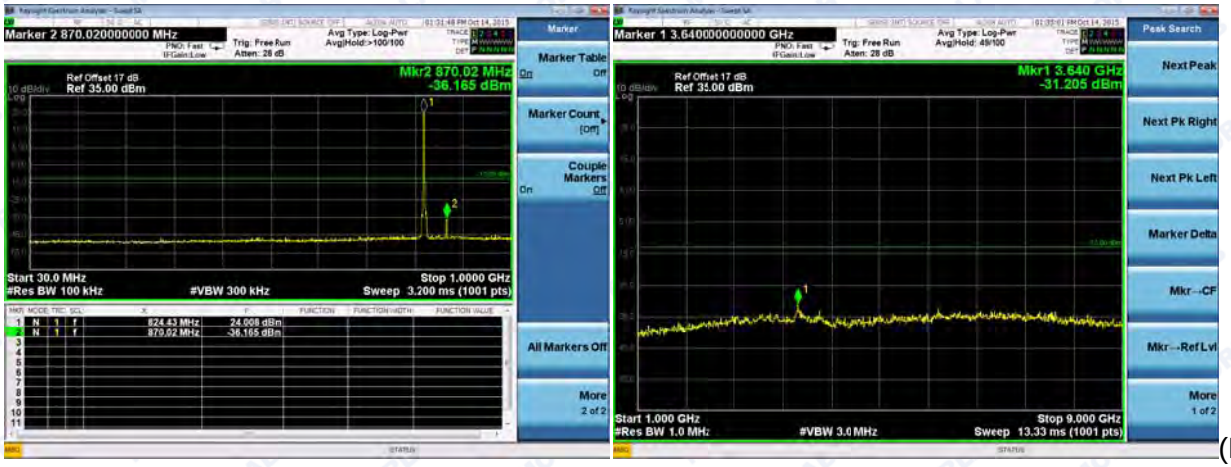
Test Verdict:

Band	Channel	Frequency(MHz)	Measured Max Spurious Emission(dBm)	Refer Plot	Limit(dBm)
CDMA（BC0）	1013	824.7	< -25	Plot B1	-13
	384	836.52	< -25	Plot B2	-13
	777	848.31	< -25	Plot B3	-13
EVDO 0（BC0）	1013	824.7	< -25	Plot B4	-13
	384	836.52	< -25	Plot B5	-13
	777	848.31	< -25	Plot B6	-13
EVDO A（BC0）	1013	824.7	< -25	Plot B7	-13
	384	836.52	< -25	Plot B8	-13
	777	848.31	< -25	Plot B9	-13
CDMA（BC1）	25	1851.25	< -25	Plot B10	-13
	600	1880.00	< -25	Plot B11	-13
	1175	1908.75	< -25	Plot B12	-13
EVDO 0（BC1）	25	1851.25	< -25	Plot B13	-13
	600	1880.00	< -25	Plot B14	-13
	1175	1908.75	< -25	Plot B15	-13
EVDO A（BC1）	25	1851.25	< -25	Plot B16	-13
	600	1880.00	< -25	Plot B17	-13
	1175	1908.75	< -25	Plot B18	-13

Band	Channel	Frequency(MHz)	Measured Max Spurious Emission(dBm)	Refer Plot	Limit(dBm)
CDMA （BC10） Subclass 2	450	817.25	< -25	Plot B19	-13
	500	818.50	< -25	Plot B20	-13
	550	819.75	< -25	Plot B21	-13
EVDO 0 （BC10） Subclass 2	450	817.25	< -25	Plot B22	-13
	500	818.50	< -25	Plot B23	-13
	550	819.75	< -25	Plot B24	-13
EVDO A （BC10） Subclass 2	450	817.25	< -25	Plot B25	-13
	500	818.50	< -25	Plot B26	-13
	550	819.75	< -25	Plot B27	-13
CDMA （BC10） Subclass 3	650	822.25	< -25	Plot B28	-13
	660	822.50	< -25	Plot B29	-13
	670	822.75	< -25	Plot B30	-13
EVDO 0 （BC10） Subclass 3	650	822.25	< -25	Plot B31	-13
	660	822.50	< -25	Plot B32	-13
	670	822.75	< -25	Plot B33	-13
EVDO A （BC10） Subclass 3	650	822.25	< -25	Plot B34	-13
	660	822.50	< -25	Plot B35	-13
	670	822.75	< -25	Plot B36	-13

Test Plots for the Whole Measurement Frequency Range:

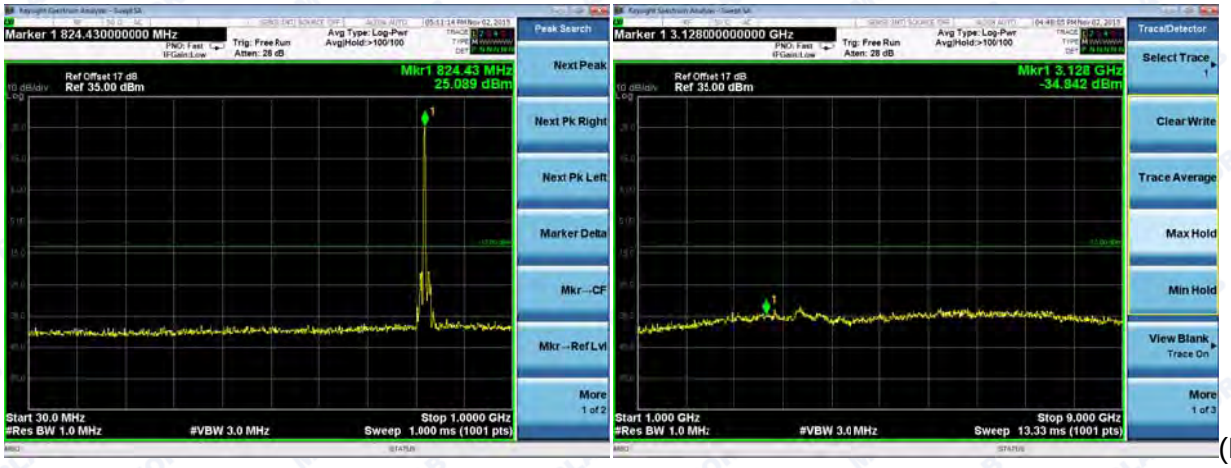
Note: the power of the EUT transmitting frequency should be ignored.



(Plot B1: CDMA BC0 Channel = 1013, 30MHz to 9GHz)

(Plot B2: CDMA BC0 Channel = 384, 30MHz to 9GHz)

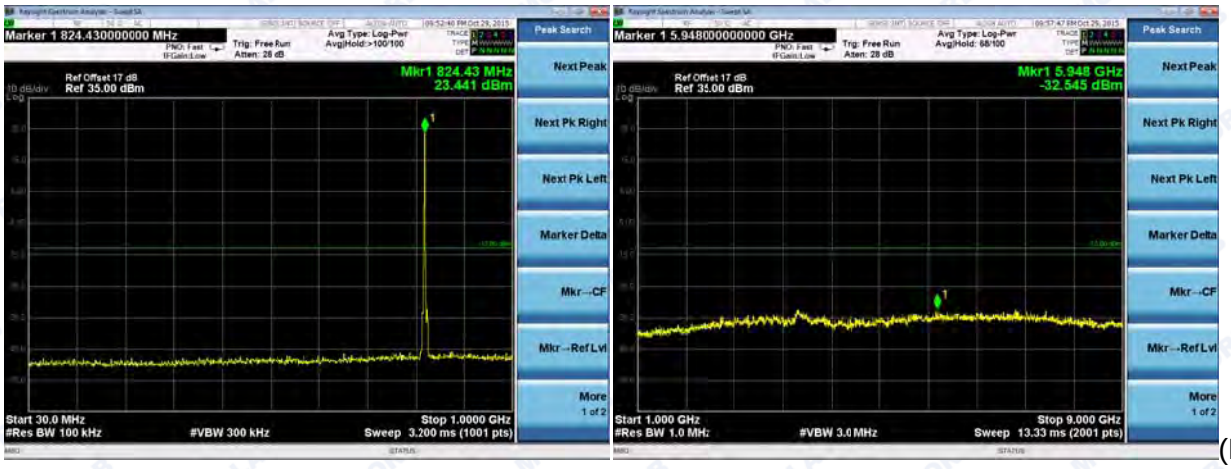
(Plot B3: CDMA BC0 Channel = 777, 30MHz to 9GHz)



(Plot B4: EVDO 0 BC0 Channel = 1013, 30MHz to 9GHz)

(Plot B5: EVDO 0 BC0 Channel = 384, 30MHz to 9GHz)

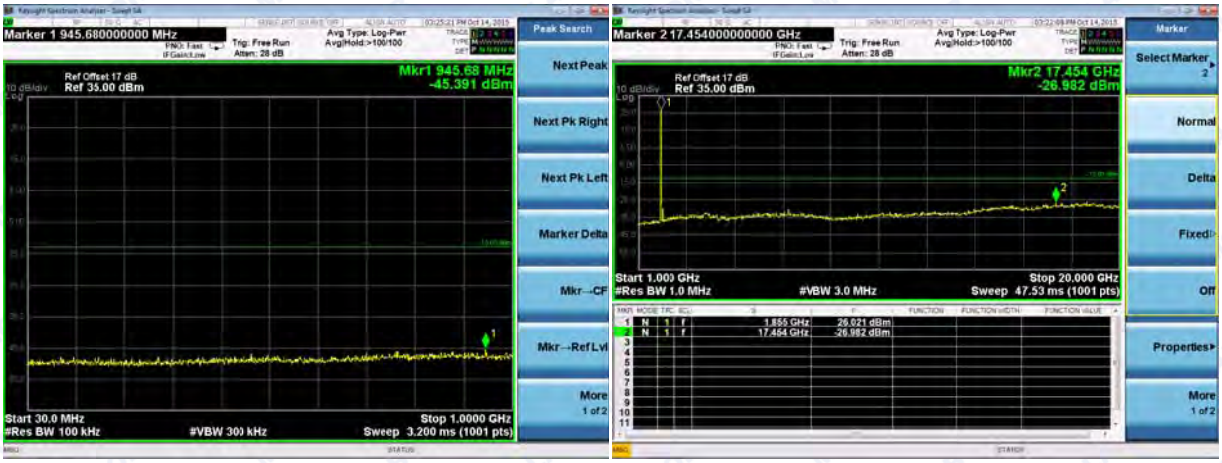
(Plot B6: EVDO 0 BC0 Channel = 777, 30MHz to 9GHz)



(Plot B7: EVDO A BC0 Channel = 1013, 30MHz to 9GHz)

(Plot B8: EVDO A BC0 Channel = 384, 30MHz to 9GHz)

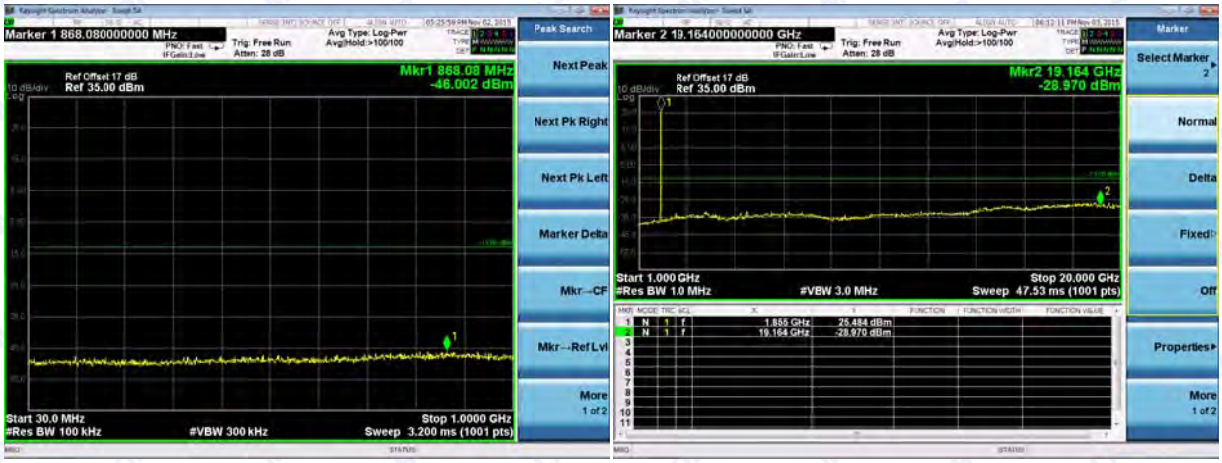
(Plot B9: EVDO A BC0 Channel = 777, 30MHz to 9GHz)



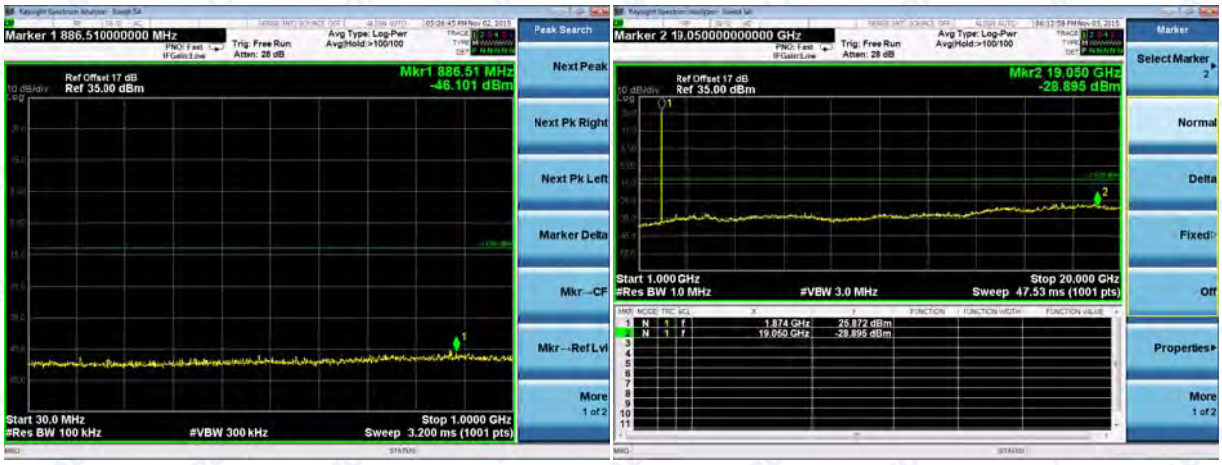
(Plot B10: CDMA BC1 Channel = 25, 30MHz to 20GHz)

(Plot B11: CDMA BC1 Channel = 600, 30MHz to 20GHz)

(Plot B12: CDMA BC1 Channel = 1175, 30MHz to 20GHz)

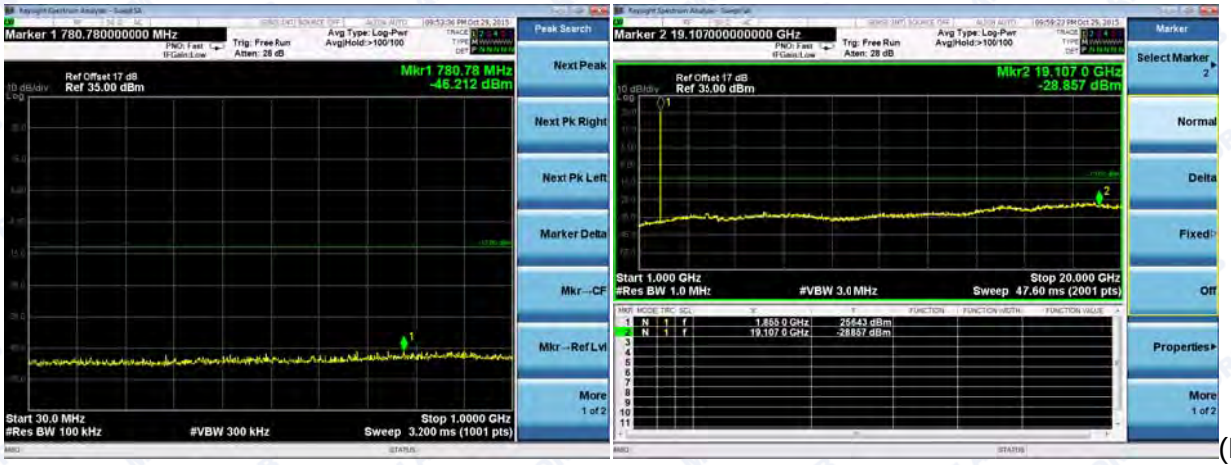


(Plot B13: EVDO 0 BC1 Channel = 25, 30MHz to 20GHz)



(Plot B14: EVDO 0 BC1 Channel = 600, 30MHz to 20GHz)

(Plot B15: EVDO 0 BC1 Channel =1175, 30MHz to 20GHz)



(Plot B16: EVDO A BC1 Channel = 25, 30MHz to 20GHz)

(Plot B17: EVDO A BC1 Channel = 600, 30MHz to 20GHz)

(Plot B18: EVDO A BC1 Channel =1175, 30MHz to 20GHz)

(Plot B19: CDMA BC10 Channel = 450, 30MHz to 9GHz)

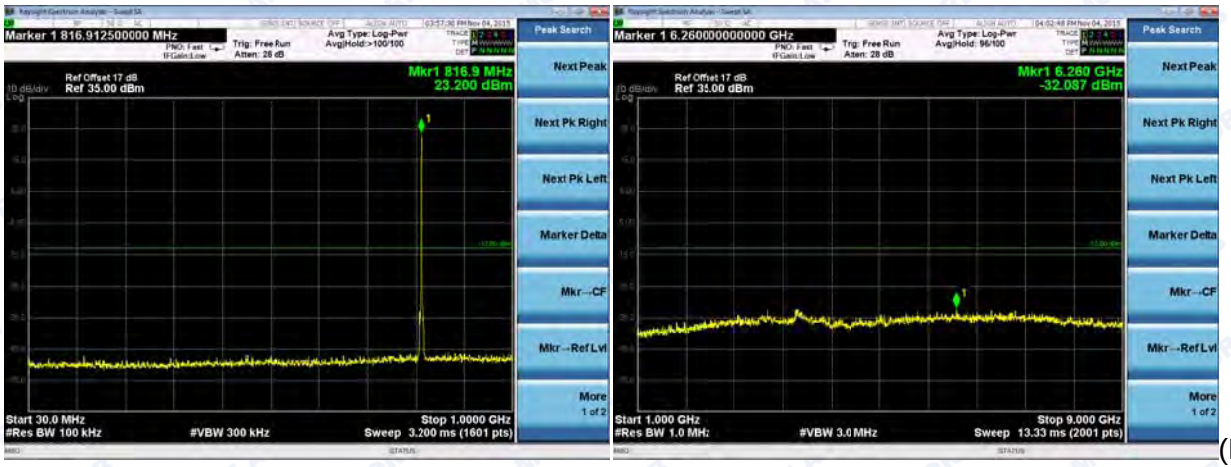
(Plot B20: CDMA BC0 Channel = 500, 30MHz to 9GHz)

(Plot B21: CDMA BC0 Channel = 550, 30MHz to 9GHz)

(Plot B22: EVDO 0 BC10 Channel = 450, 30MHz to 9GHz)

(Plot B23: EVDO 0 BC10 Channel = 500, 30MHz to 9GHz)

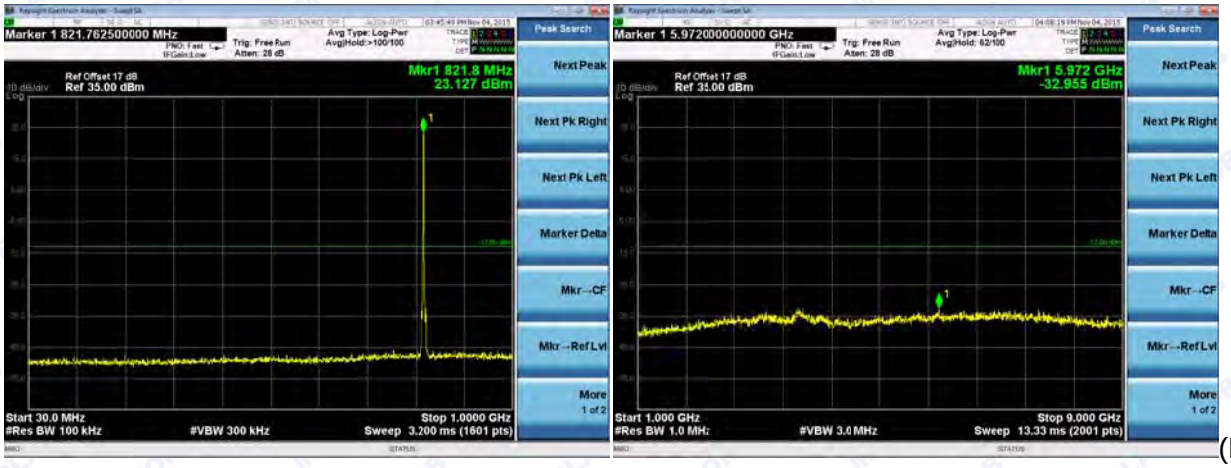
(Plot B24: EVDO 0 BC10 Channel = 550, 30MHz to 9GHz)



(Plot B25: EVDO A BC10 Channel = 450, 30MHz to 9GHz)

(Plot B26: EVDO A BC10 Channel = 500, 30MHz to 9GHz)

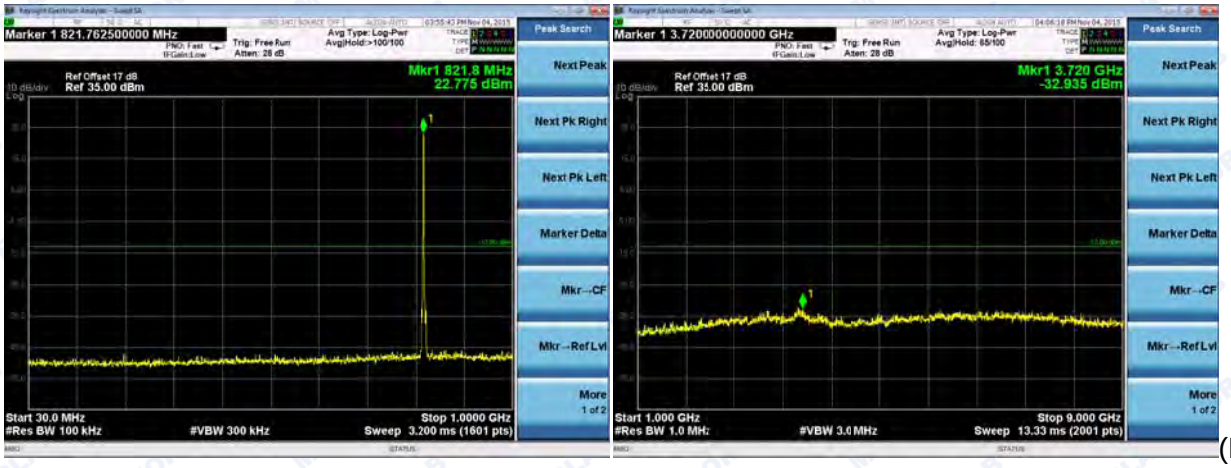
(Plot B27: EVDO A BC10 Channel = 550, 30MHz to 9GHz)



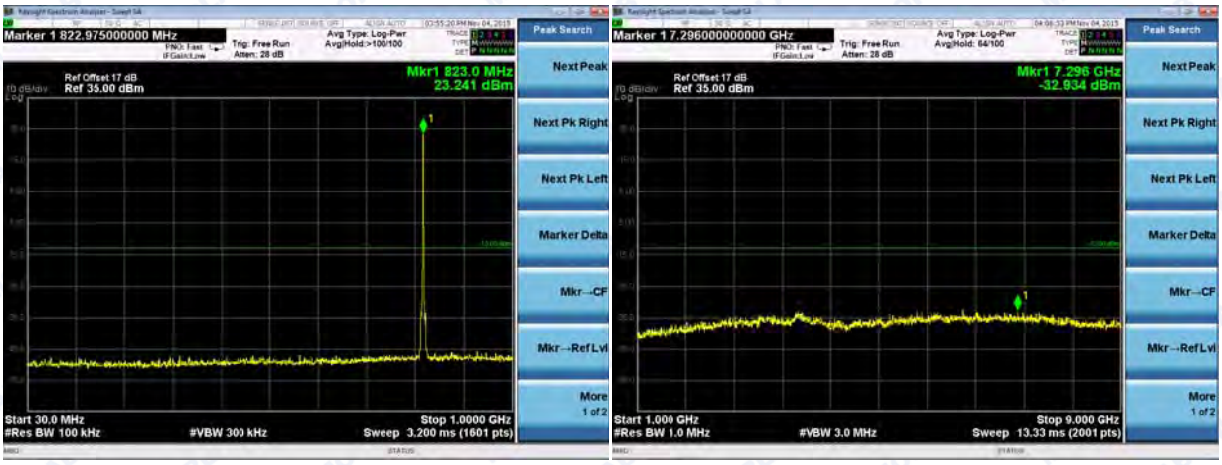
(Plot B28: CDMA BC10 Channel = 650, 30MHz to 9GHz)

(Plot B29: CDMA BC0 Channel = 660, 30MHz to 9GHz)

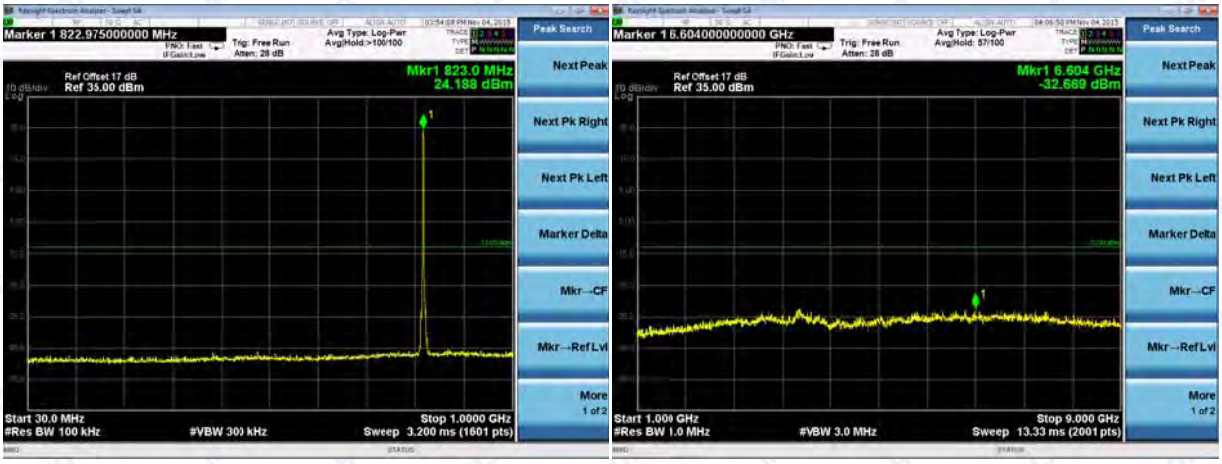
(Plot B30: CDMA BC0 Channel = 670, 30MHz to 9GHz)



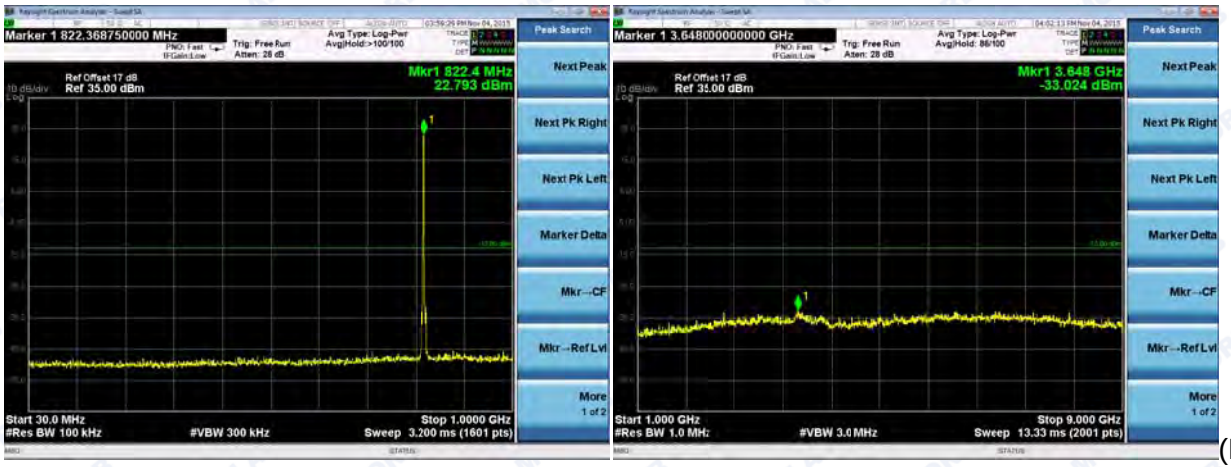
(Plot B31: EVDO 0 BC10 Channel = 650, 30MHz to 9GHz)



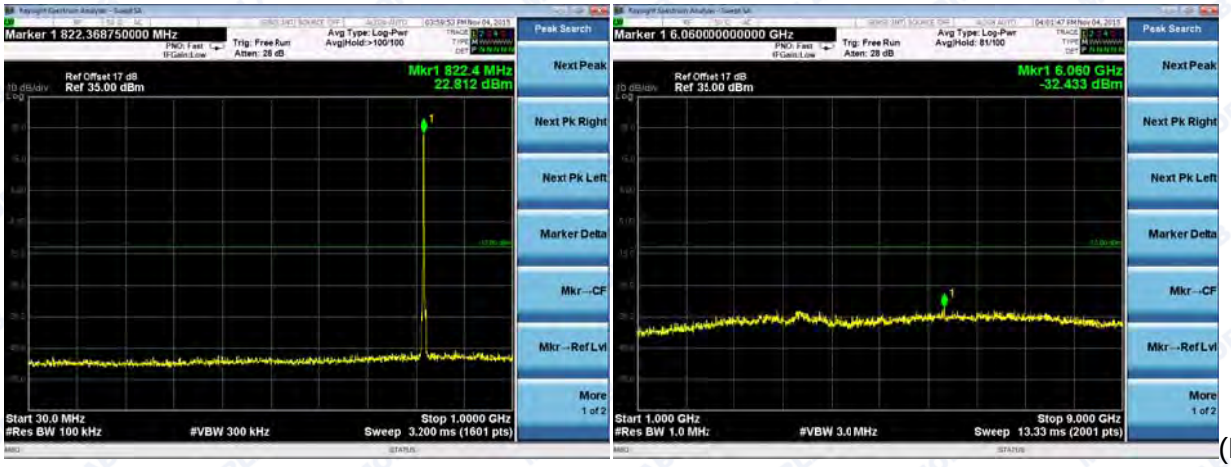
(Plot B32: EVDO 0 BC10 Channel = 660, 30MHz to 9GHz)



(Plot B33: EVDO 0 BC10 Channel = 670, 30MHz to 9GHz)



(Plot B34: EVDO A BC10 Channel = 650, 30MHz to 9GHz)



(Plot B35: EVDO A BC10 Channel = 660, 30MHz to 9GHz)

(Plot B36: EVDO A BC10 Channel = 670, 30MHz to 9GHz)

2.7 Band Edge

2.7.1 Requirement

According to FCC section 2.1051, FCC section 22.917(b) 24.238(b) and 90.691.in the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth (26dB emission bandwidth) of the fundamental emission of the transmitter may be employed.

2.7.2 Test Description

See section 2.1.2 of this report.

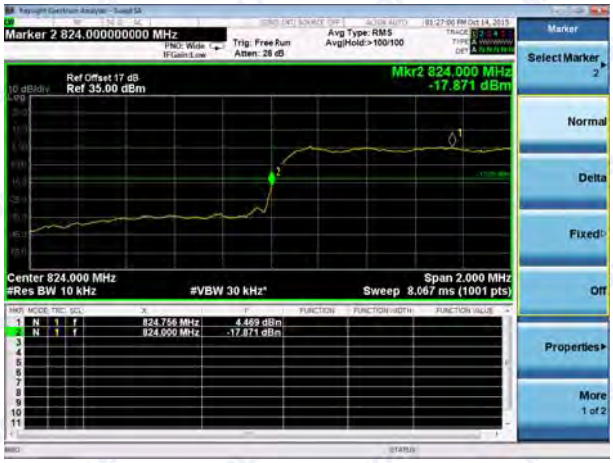
2.7.3 Test Result

The lowest and highest channels are tested to verify the band edge emissions.

Test Verdict:

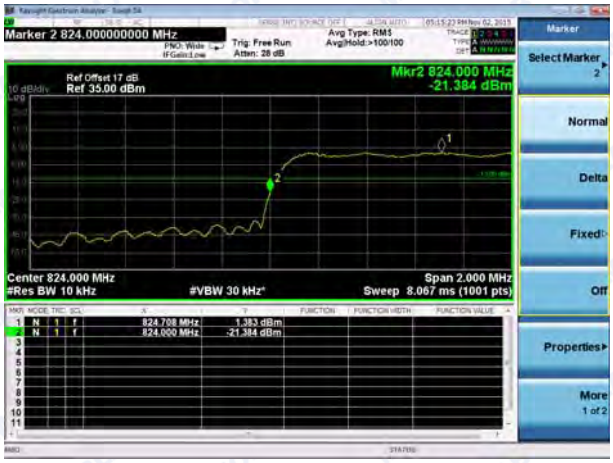
Band	Channel	Frequency (MHz)	Measured Max. Band Edge Emission (dBm)	Refer to Plot	Limit (dBm)	Verdict
CDMA （BC0）	1013	824.7	-17.87	Plot C1	-13	PASS
	777	848.31	-13.72	Plot C2		PASS
EVDO 0 （BC0）	1013	824.7	-21.38	Plot C3	-13	PASS
	777	848.31	-16.97	Plot C4		PASS
EVDO A （BC0）	1013	824.7	-18.08	Plot C5	-13	PASS
	777	848.31	-14.05	Plot C6		PASS
CDMA （BC1）	25	1851.25	-28.83	Plot C7	-13	PASS
	1175	1908.75	-32.07	Plot C8		PASS
EVDO A （BC1）	25	1851.25	-28.07	Plot C9	-13	PASS
	1175	1908.75	-34.11	Plot C10		PASS
EVDO A （BC1）	25	1851.25	-29.05	Plot C11	-13	PASS
	1175	1908.75	-32.19	Plot C12		PASS

Test Plots:



(Plot C1: CDMA BC0 Channel = 1013)

(Plot C2: CDMA BC0 Channel = 777)



(Plot C3: EVDO 0 BC0 Channel = 1013)

(Plot C4: EVDO 0 BC0 Channel = 777)

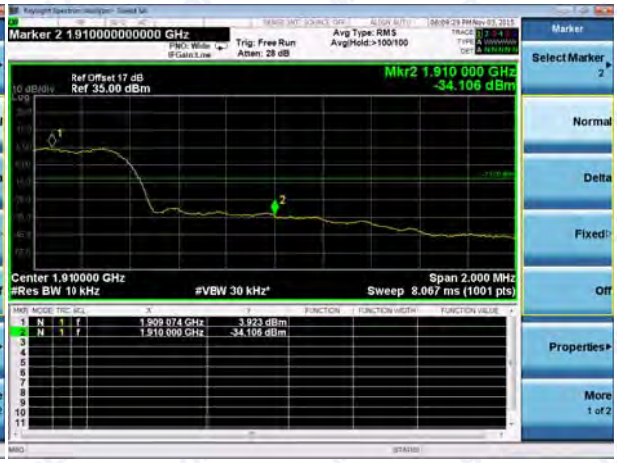
(Plot C5: EVDO A BC0 Channel = 1013)

(Plot C6: EVDO A BC0 Channel = 777)

(Plot C7: CDMA BC1 Channel = 25)

(Plot C8: CDMA BC1 Channel = 1175)

(Plot C9: EVDO 0 BC1 Channel = 25)



(Plot C10: EVDO 0 BC1 Channel = 1175)

(Plot C11: EVDO A BC1 Channel = 25)

(Plot C12: EVDO A BC1 Channel = 1175)

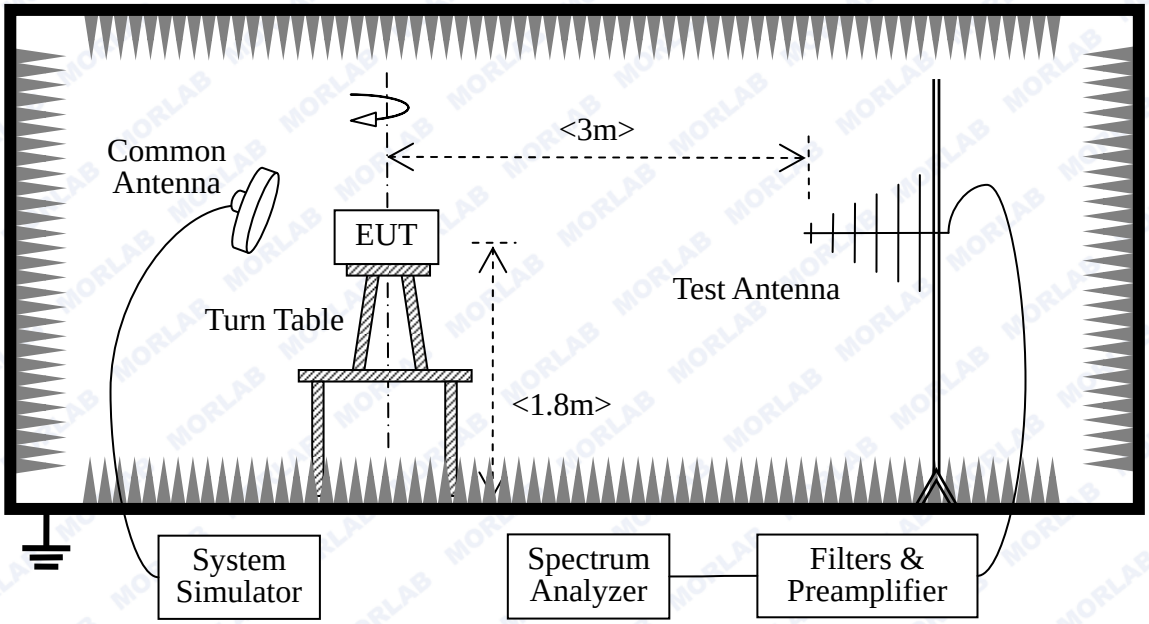
2.8 Transmitter Radiated Power (EIRP/ERP)

2.8.1 Requirement

According to FCC section 22.913; 24.232 and 90.635, the Effective Radiated Power (ERP) of mobile transmitters and auxiliary test transmitters must not exceed 7Watts.

2.8.2 Test Description

Test Setup:



The resolution bandwidth of the Spectrum Analyzer is set to be comparable to the emission bandwidth of the transmitter, e.g. for GSM modulated signal (here used): RBW=VBW=1MHz, for CDMA modulated signal: RBW=VBW=3MHz.

The low, middle and the high channels are selected to perform tests respectively.

Employ the bi-log Test Antenna as the test system receiving antenna; set the polarization of the Test Antenna to be the same as that of the EUT transmitting antenna.

Set the frequency range of the Spectrum Analyzer suitably to capture the waveform; actuate the Turn Table to turn from 0 degrees to 360 degrees to find the maximum reading via the Spectrum Analyzer, mark the peak; finally record the peak and the plot.

-Maximum RF output power: CDMA BC0 28.10dBm, EVDO A BC0 27.97dBm, CDMA BC1 27.14dBm, EVDO A BC1 27.09dBm.

- Step size (dB): 3dB

- Minimum RF power: CDMA800 0.5dBm, EVDO 0 800 0.5dBm, EVDO A 800 0.7dBm, EVDO B 800 0.7dBm

Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
System Simulator	Agilent	E5515C	GB43130131	2015.02.26	2016.02.25
Spectrum Analyzer	Agilent	E7405A	US44210471	2015.02.26	2016.02.25
Full-Anechoic Chamber	Albatross	9m*6m*6m	(n.a.)	2015.02.26	2016.02.25
Test Antenna - Bi-Log	Schwarzbeck	VULB 9163	9163-274	2015.02.26	2016.02.25
Test Antenna - Horn	Schwarzbeck	UG -596A/U	A0902607	2015.02.26	2016.02.25
Test Antenna - Horn	Schwarzbeck	BBHA 9120C	9120C-384	2015.02.26	2016.02.25
Substitution Antenna	Schwarzbeck	BBHA 9120C	9120C-384	2015.02.26	2016.02.25
Pre-AMPs	lucix	S10M100L3802	S020180L3203	2015.02.26	2016.02.25
Notch Filter	COM-MW	ZBSF-C836.5-25-X	NA	2015.02.26	2016.02.25
Notch Filter	COM-MW	ZBSF-C1747.5-75-X2	NA	2015.02.26	2016.02.25
Notch Filter	COM-MW	ZBSF-C1880-60-X2	NA	2015.02.26	2016.02.25

2.8.3 Test Result

The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested.

The substitution corrections are obtained as described below:

$A_{SUBST} = P_{SUBST\_TX} - P_{SUBST\_RX} - L_{SUBST\_CABLES} + G_{SUBST\_TX\_ANT}$

$A_{TOT} = L_{CABLES} + A_{SUBST}$

Where A_{SUBST} is the final substitution correction including receive antenna gain.

P_{SUBST_TX} is signal generator level,

P_{SUBST_RX} is receiver level,

L_{SUBST_CABLES} is cable losses including TX cable,

$G_{SUBST\_TX\_ANT}$ is substitution antenna gain.

A_{TOT} is total correction factor including cable loss and substitution correction

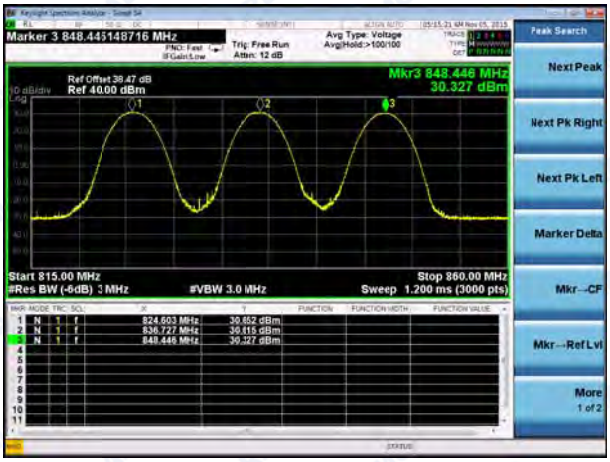
During the test, the data of A_{TOT} was added in the Test Spectrum Analyze, so Spectrum Analyze reading is the final values which contain the data of A_{TOT}.

Test Verdict:

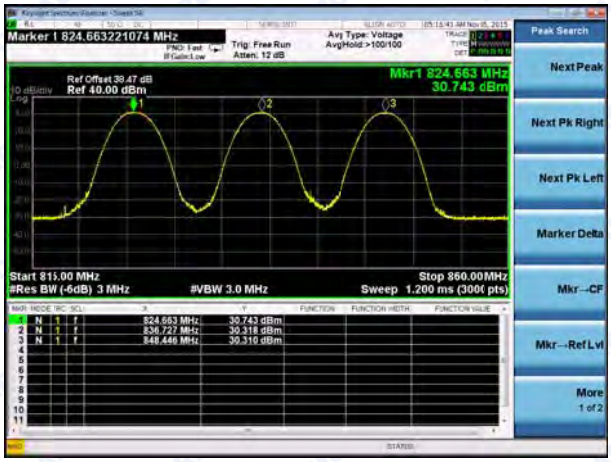
Band	Channel Number	Frequency (MHz)	Measured Power		Refer Plot	Limits	
			dBm	W		dBm	W
CDMA（BC0）	1013	824.7	30.66	1.16	Plot1	38.5	7
	384	836.52	30.62	1.15			
	777	848.31	30.33	1.08			
EVDO 0（BC0）	1013	824.7	30.74	1.19	Plot2	38.5	7
	384	836.52	30.31	1.07			
	777	848.31	30.31	1.07			
EVDO A（BC0）	1013	824.7	30.80	1.20	Plo3	38.5	7
	384	836.52	30.87	1.22			
	777	848.31	30.63	1.16			
CDMA（BC1）	25	1851.25	28.64	0.73	Plot4	33	2
	600	1880.00	28.92	0.78			
	1175	1908.75	28.32	0.68			
EVDO 0（BC1）	25	1851.25	28.44	0.70	Plot5	33	2
	600	1880.00	28.75	0.75			
	1175	1908.75	28.70	0.74			
EVDO A（BC1）	25	1851.25	28.70	0.74	Plot6	33	2
	600	1880.00	28.84	0.77			
	1175	1908.75	28.35	0.68			

Band	Channel Number	Frequency (MHz)	Measured Power		Refer Plot	Limits	
			dBm	W		dBm	W
CDMA (BC10) Subclass 2	450	817.25	30.67	1.17	Plot7	50	100
	500	818.50	30.43	1.10	Plot8		
	550	819.75	30.44	1.11	Plot9		
EVDO 0 (BC10) Subclass 2	450	817.25	30.35	1.08	Plot10		
	500	818.50	30.37	1.09	Plot11		
	550	819.75	30.84	1.21	Plot12		
EVDO A (BC10) Subclass 2	450	817.25	30.29	1.07	Plot13	50	100
	500	818.50	30.69	1.17	Plot14		
	550	819.75	30.54	1.13	Plot15		
CDMA (BC10) Subclass 3	650	822.25	30.79	1.20	Plot16		
	660	822.50	30.25	1.06	Plot17		
	670	822.75	30.48	1.12	Plot18		
EVDO 0 (BC10) Subclass 3	650	822.25	30.52	1.13	Plot19	50	100
	660	822.50	30.23	1.05	Plot20		
	670	822.75	30.34	1.08	Plot21		
EVDO A (BC10) Subclass 3	650	822.25	30.45	1.11	Plot22		
	660	822.50	30.19	1.04	Plot23		
	670	822.75	30.34	1.08	Plot24		

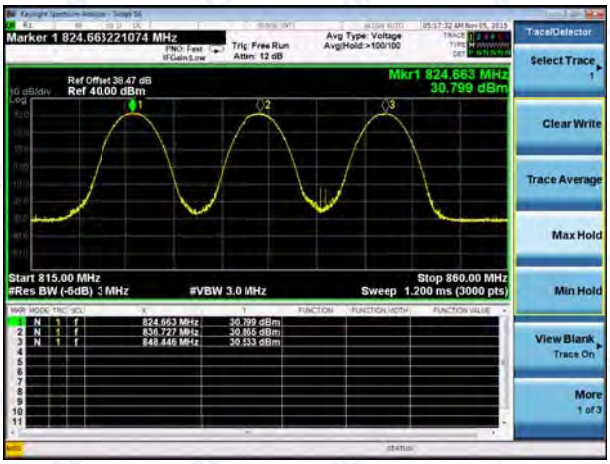
Test Plots:



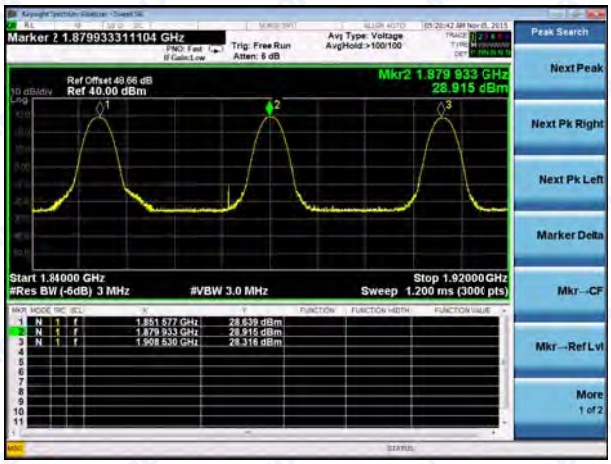
(Plot 1:CDMA BC0 Channel = 1013,384,777)



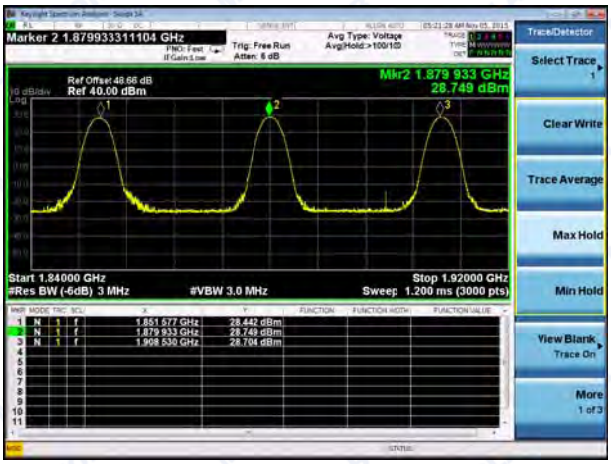
(Plot2:EVDO 0 BC0 Channel = 1013,384,777)



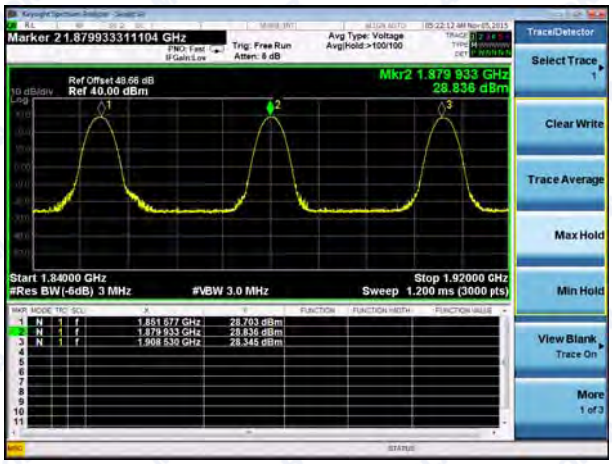
(Plot 3:EVDO A BC0 Channel = 1013,384,777)



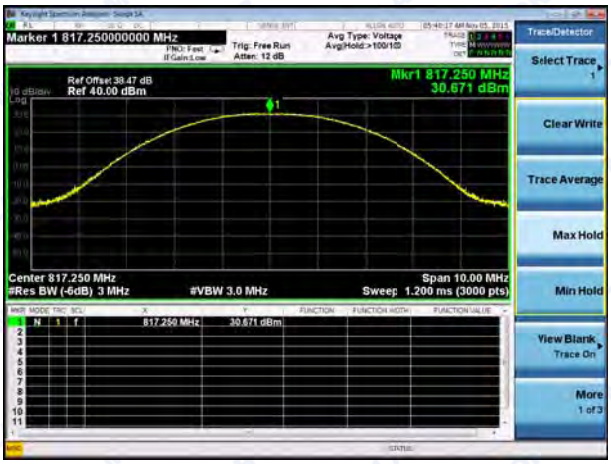
(Plot4: CDMA BC1 Channel = 25,600,1175)



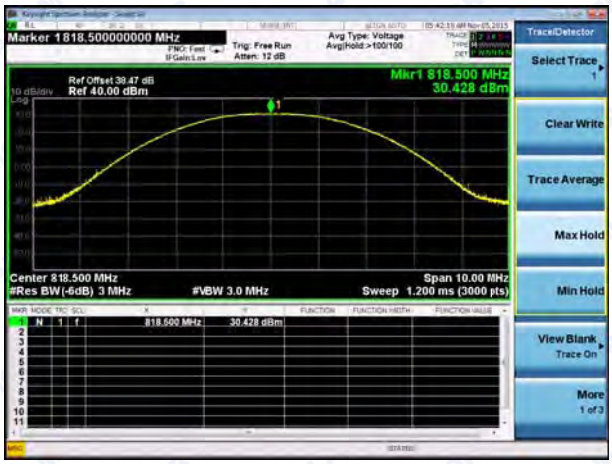
(Plot 5:EVDO 0 BC1 Channel = 25,600,1175)



(Plot 6:EVDO A BC1 Channel = 25,600,1175)

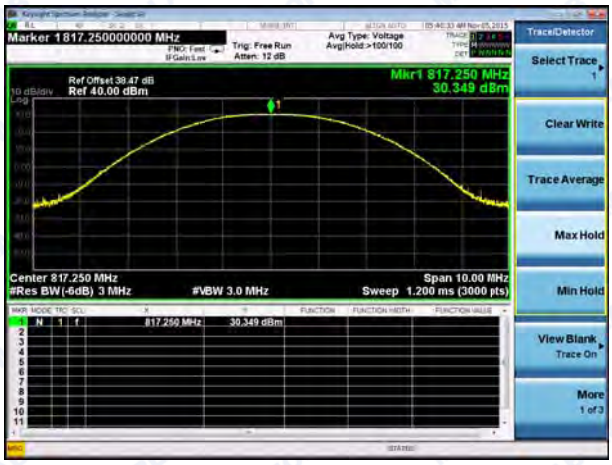


(Plot 7:CDMA BC10 Channel = 450)



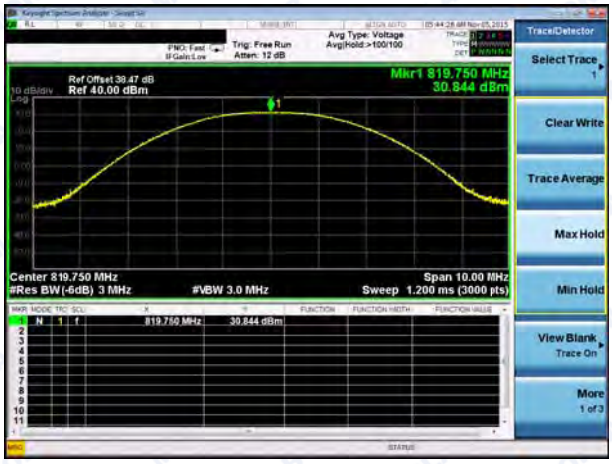
(Plot 8: CDMA BC10 Channel = 500)

(Plot 9: CDMA BC10 Channel = 550)



(Plot 10: EVDO 0 BC10 Channel=450)

(Plot 11:EVDO 0 BC10 Channel =500)



(Plot 12:EVDO 0 BC10 Channel =550)

(Plot 13: EVDO A BC10 Channel=450)

(Plot 14: EVDO A BC10 Channel=500)

(Plot 15: EVDO A BC10 Channel=550)

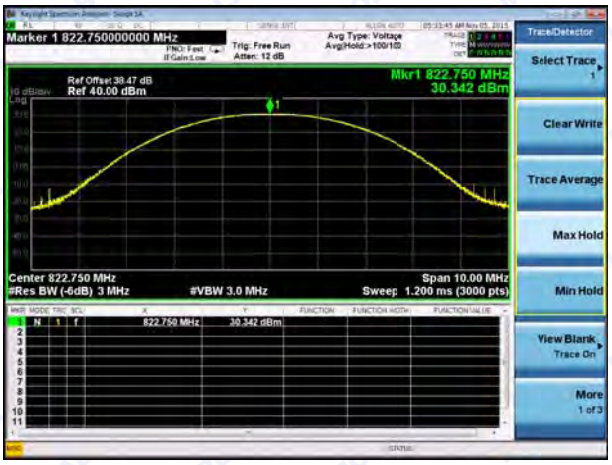
(Plot 16:CDMA BC10 Channel = 650)

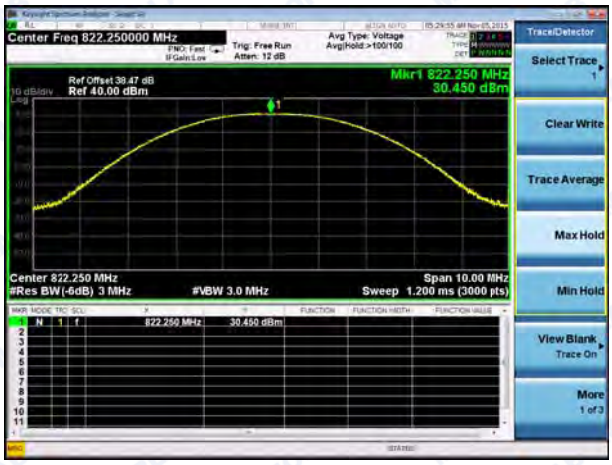
(Plot 17: CDMA BC10 Channel = 660)

(Plot 18: CDMA BC10 Channel =670)

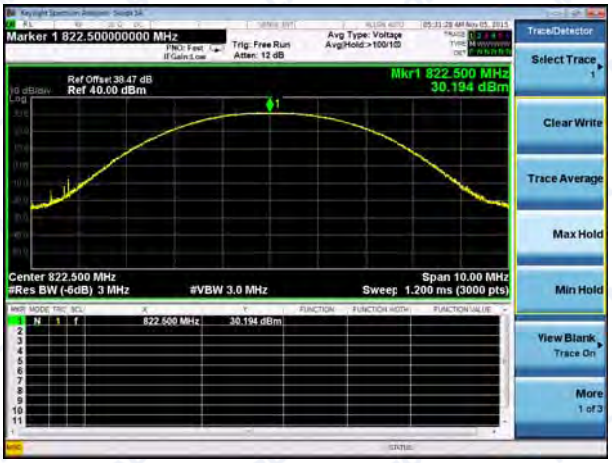
(Plot 19: EVDO 0 BC10 Channel=650)

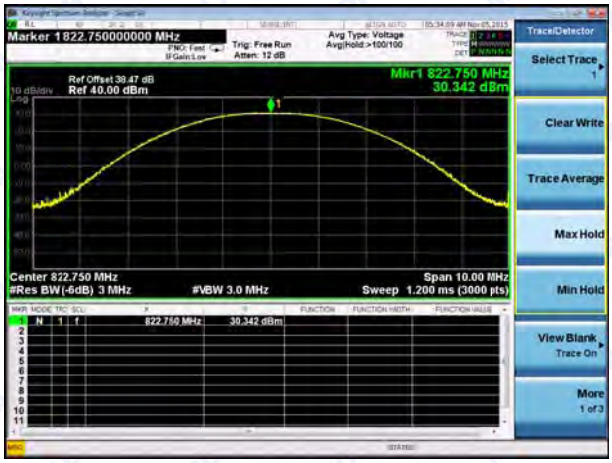
(Plot 20:EVDO 0 BC10 Channel =660)





(Plot 21:EVDO 0 BC10 Channel =670) (Plot 22: EVDO A BC10 Channel=650)





(Plot 23: EVDO A BC10 Channel=660) (Plot 24: EVDO A BC10 Channel=670)

2.9 Radiated Out of Band Emissions

2.9.1 Requirement

According to FCC section 2.1053， FCC section 22.917(a) ;24.238(a) and 90.691, 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.

2.9.2 Test Description

See section 2.8.2 of this report.

Note: when doing measurements above 1GHz, the EUT has been within the 3dB cone width of the horn antenna during horizontal antenna.

2.9.3 Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested to verify the out of band emissions.

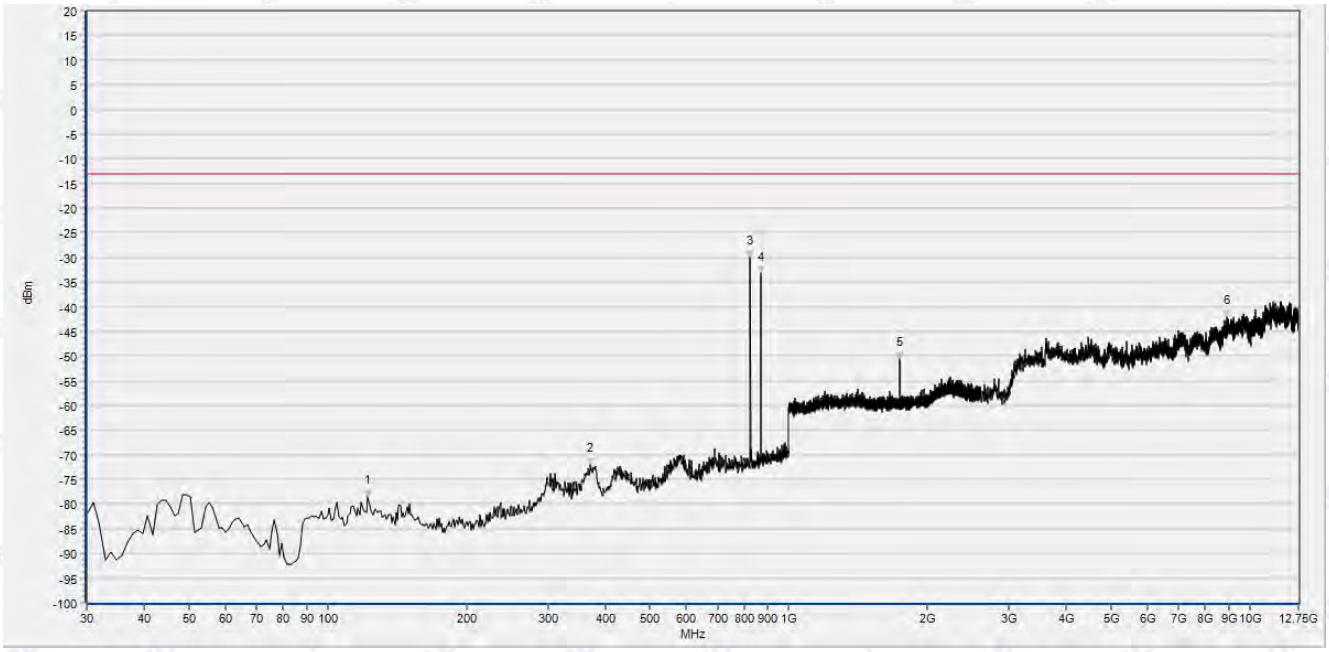
Test Verdict:

Band	Channel	Frequency (MHz)	Measured Max. Spurious Emission (dBm)		Refer to Plot	Limit (dBm)	Verdict
			Test Antenna Horizontal	Test Antenna Vertical			
CDMA（BC0）	1013	824.7	< -25	< -25	Plot E1/2	-13	PASS
	384	836.52	< -25	< -25	Plot E3/4		PASS
	777	848.31	< -25	< -25	Plot E5/6		PASS
EVDO 0（BC0）	1013	824.7	< -25	< -25	Plot E7/8	-13	PASS
	384	836.52	< -25	< -25	Plot E9/10		PASS
	777	848.31	< -25	< -25	Plot E11/12		PASS
EVDO A（BC0）	1013	824.7	< -25	< -25	Plot E13/14	-13	PASS
	384	836.52	< -25	< -25	Plot E15/16		PASS
	777	848.31	< -25	< -25	Plot E17/18		PASS
CDMA（BC1）	25	1851.25	< -25	< -25	Plot E19/20	-13	PASS
	600	1880.00	< -25	< -25	Plot E21/22		PASS
	1175	1908.75	< -25	< -25	Plot E23/24		PASS
EVDO 0（BC1）	25	1851.25	< -25	< -25	Plot E25/26	-13	PASS
	600	1880.00	< -25	< -25	Plot E27/28		PASS
	1175	1908.75	< -25	< -25	Plot E29/30		PASS
EVDO A（BC1）	25	1851.25	< -25	< -25	Plot E31/32	-13	PASS
	600	1880.00	< -25	< -25	Plot E33/34		PASS
	1175	1908.75	< -25	< -25	Plot E35/36		PASS

Band	Channel	Frequency (MHz)	Measured Max. Spurious Emission (dBm)		Refer to Plot	Limit (dBm)	Verdict
			Test Antenna Horizontal	Test Antenna Vertical			
CDMA (BC10) Subclass 2	450	817.25	< -25	< -25	Plot E37/38	-13	PASS
	500	818.50	< -25	< -25	Plot E39/40		PASS
	550	819.75	< -25	< -25	Plot E41/42		PASS
EVDO 0 (BC10) Subclass 2	450	817.25	< -25	< -25	Plot E43/44	-13	PASS
	500	818.50	< -25	< -25	Plot E45/46		PASS
	550	819.75	< -25	< -25	Plot E47/48		PASS
EVDO A (BC10) Subclass 2	450	817.25	< -25	< -25	Plot E49/50	-13	PASS
	500	818.50	< -25	< -25	Plot E51/52		PASS
	550	819.75	< -25	< -25	Plot E53/54		PASS
CDMA (BC10) Subclass 3	650	822.25	< -25	< -25	Plot E55/56	-13	PASS
	660	822.50	< -25	< -25	Plot E57/58		PASS
	670	822.75	< -25	< -25	Plot E59/60		PASS
EVDO 0 (BC10) Subclass 3	650	822.25	< -25	< -25	Plot E61/62	-13	PASS
	660	822.50	< -25	< -25	Plot E63/64		PASS
	670	822.75	< -25	< -25	Plot E65/66		PASS
EVDO A (BC10) Subclass 3	650	822.25	< -25	< -25	Plot E67/68	-13	PASS
	660	822.50	< -25	< -25	Plot E69/70		PASS
	670	822.75	< -25	< -25	Plot E71/72		PASS

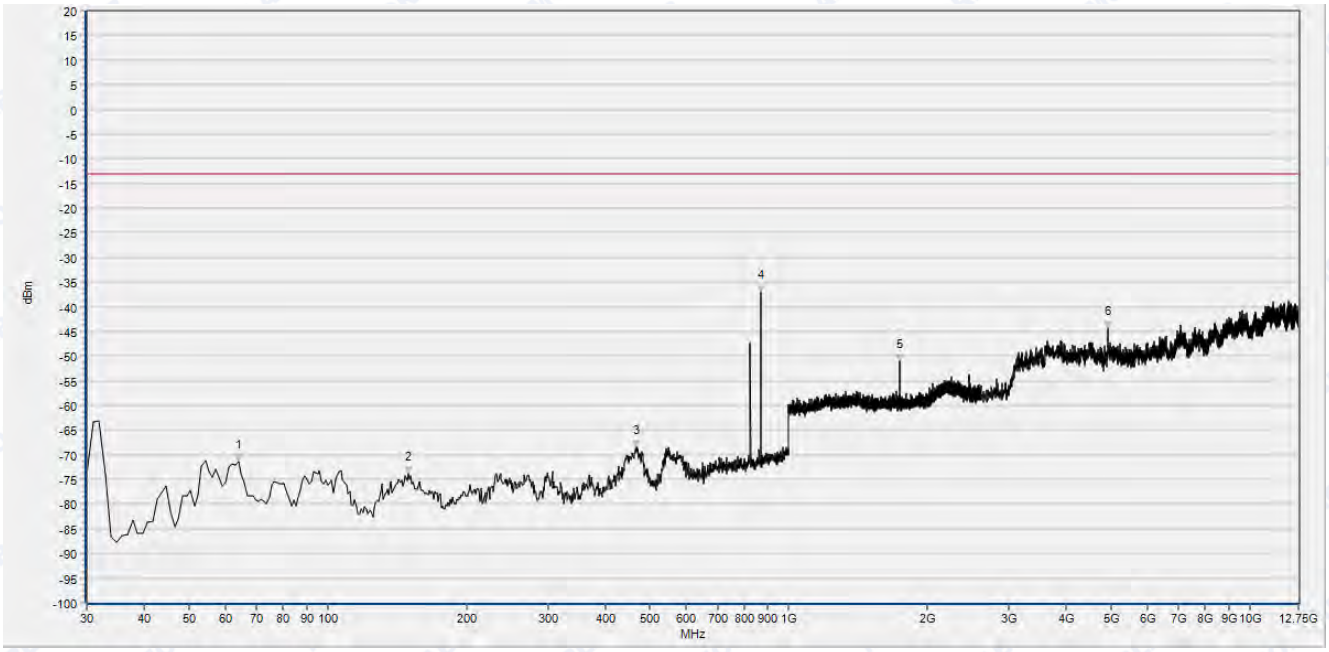
Test Plots for the Whole Measurement Frequency Range:

Note: the power of the EUT transmitting frequency should be ignored



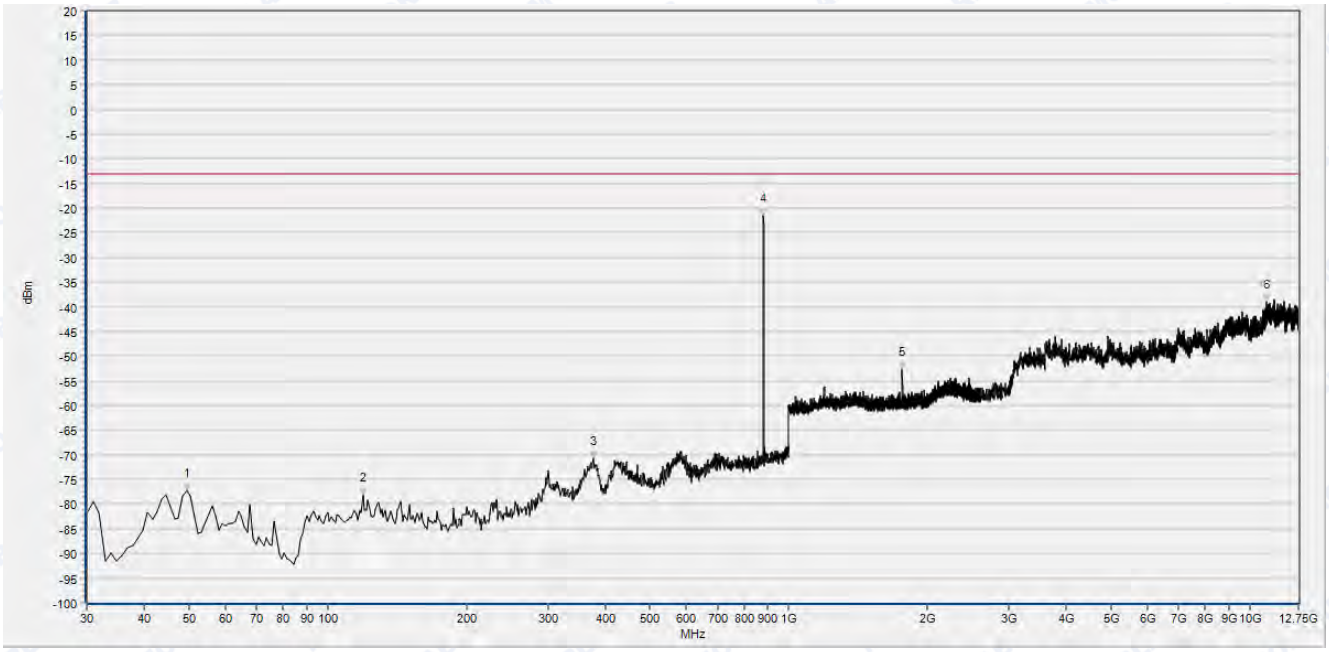
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	122.242	-78.66	-13.00	H	PASS
2	371.782	-72.17	-13.00	H	PASS
3	824.254	-30.06	-13.00	H	PASS
4	869.890	-33.22	-13.00	H	N/A
5	1739.446	-50.65	-13.00	H	PASS
6	8905.252	-42.21	-13.00	H	PASS

(Plot E1:CDMA BC0 Channel = 1013, Test Antenna Horizontal)



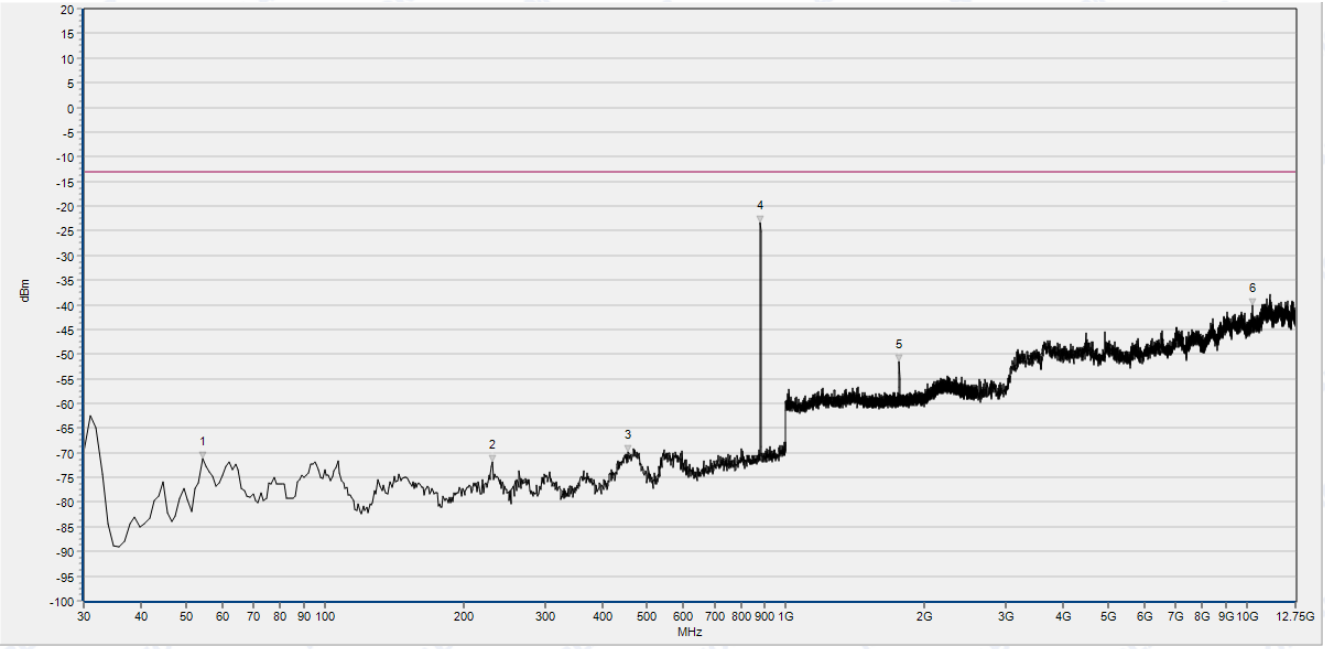
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	63.984	-71.30	-13.00	V	PASS
2	149.429	-73.89	-13.00	V	PASS
3	467.908	-68.59	-13.00	V	PASS
4	869.890	-37.05	-13.00	V	N/A
5	1739.980	-51.14	-13.00	V	PASS
6	4925.125	-44.29	-13.00	V	PASS

(Plot E2: CDMA BC0 Channel = 1013, Test Antenna Vertical)



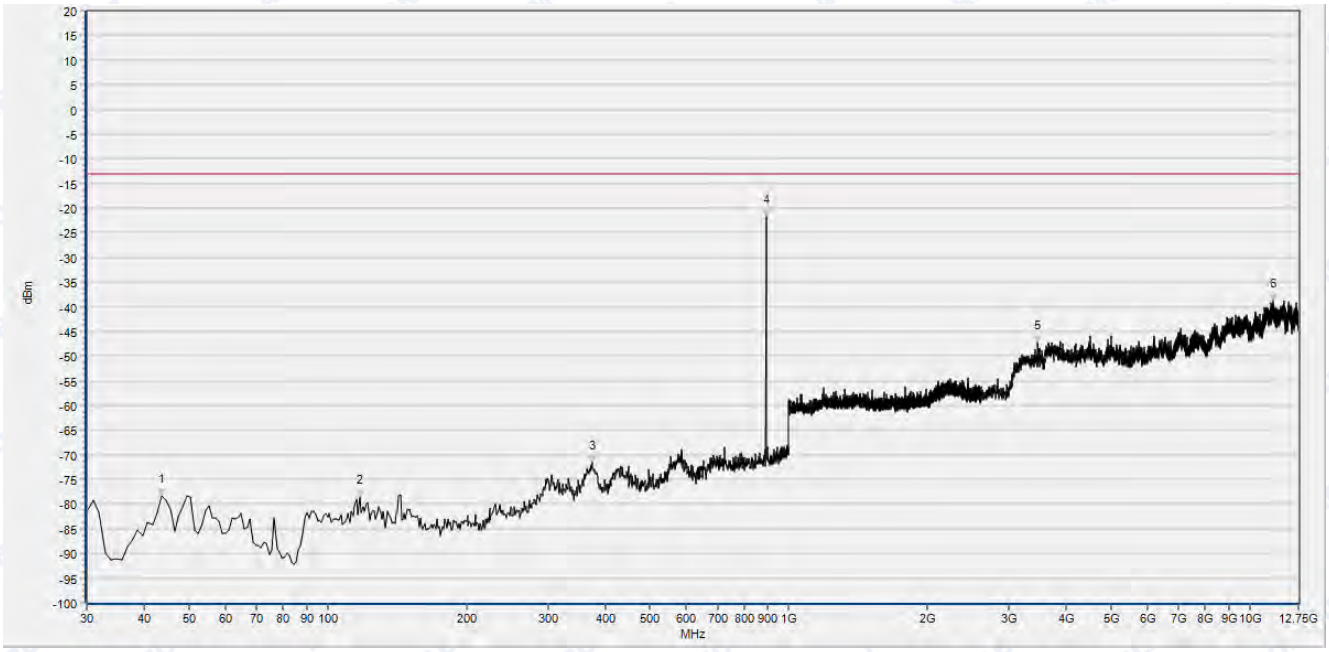
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	49.419	-77.17	-13.00	H	PASS
2	119.329	-77.99	-13.00	H	PASS
3	376.637	-70.83	-13.00	H	PASS
4	881.542	-21.57	-13.00	H	N/A
5	1763.454	-52.69	-13.00	H	PASS
6	10844.548	-38.90	-13.00	H	PASS

(Plot E3: CDMA BC0 Channel = 384, Test Antenna Horizontal)



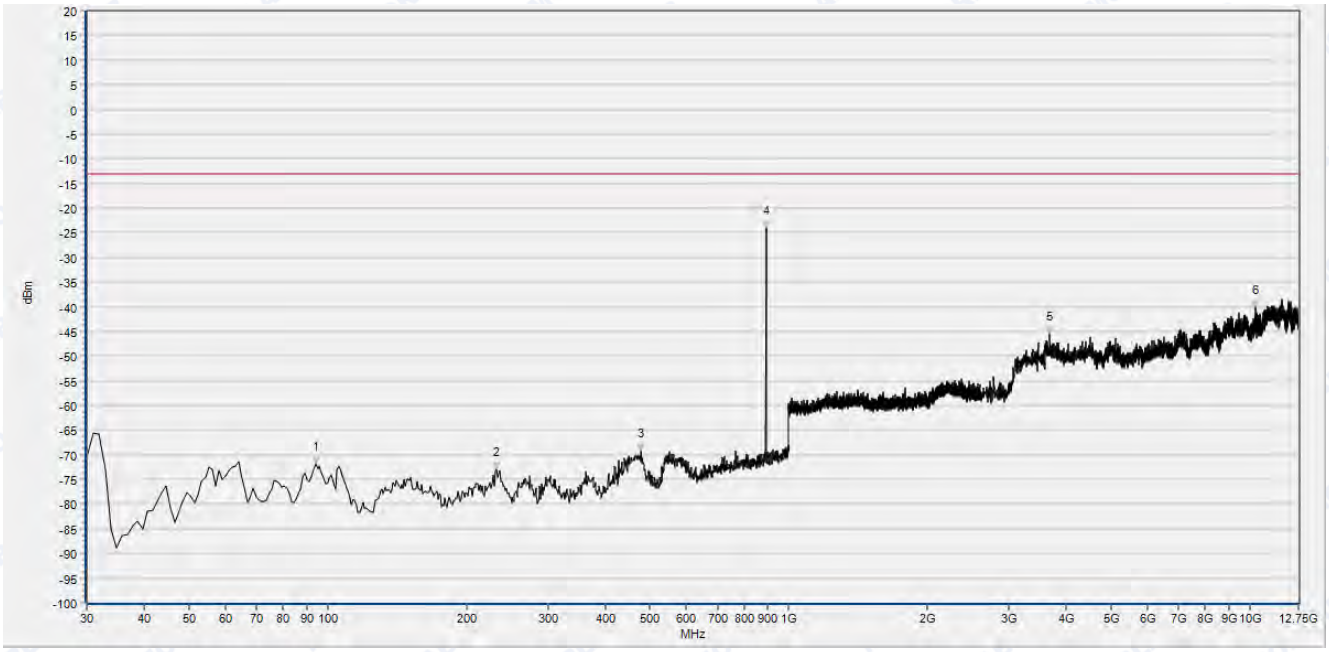
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	54.274	-71.07	-13.00	V	PASS
2	230.991	-71.86	-13.00	V	PASS
3	455.285	-69.93	-13.00	V	PASS
4	881.542	-23.31	-13.00	V	N/A
5	1763.988	-51.54	-13.00	V	PASS
6	10289.496	-40.12	-13.00	V	PASS

(PlotE4: CDMA BC0 Channel = 384, Test Antenna Vertical)



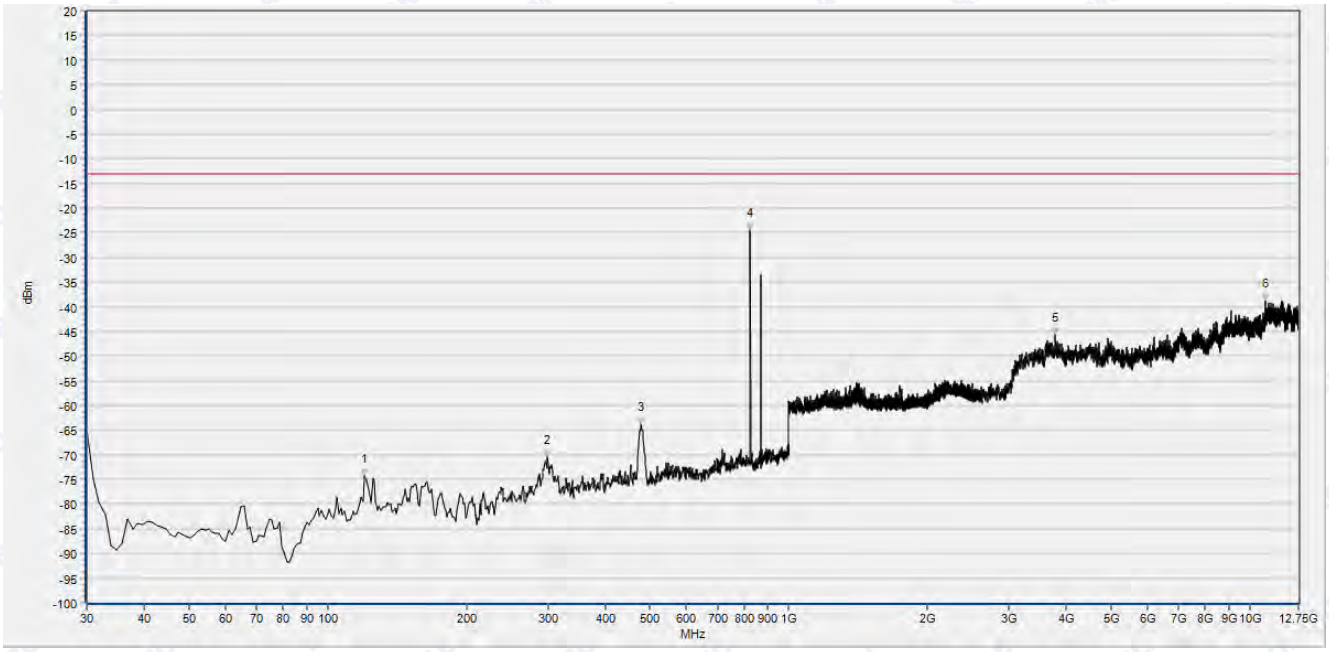
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	43.594	-78.26	-13.00	H	PASS
2	117.387	-78.63	-13.00	H	PASS
3	374.695	-71.63	-13.00	H	PASS
4	893.193	-21.72	-13.00	H	N/A
5	3469.807	-47.23	-13.00	H	PASS
6	11213.454	-38.76	-13.00	H	PASS

(Plot E5: CDMA BC0 Channel = 777, Test Antenna Horizont



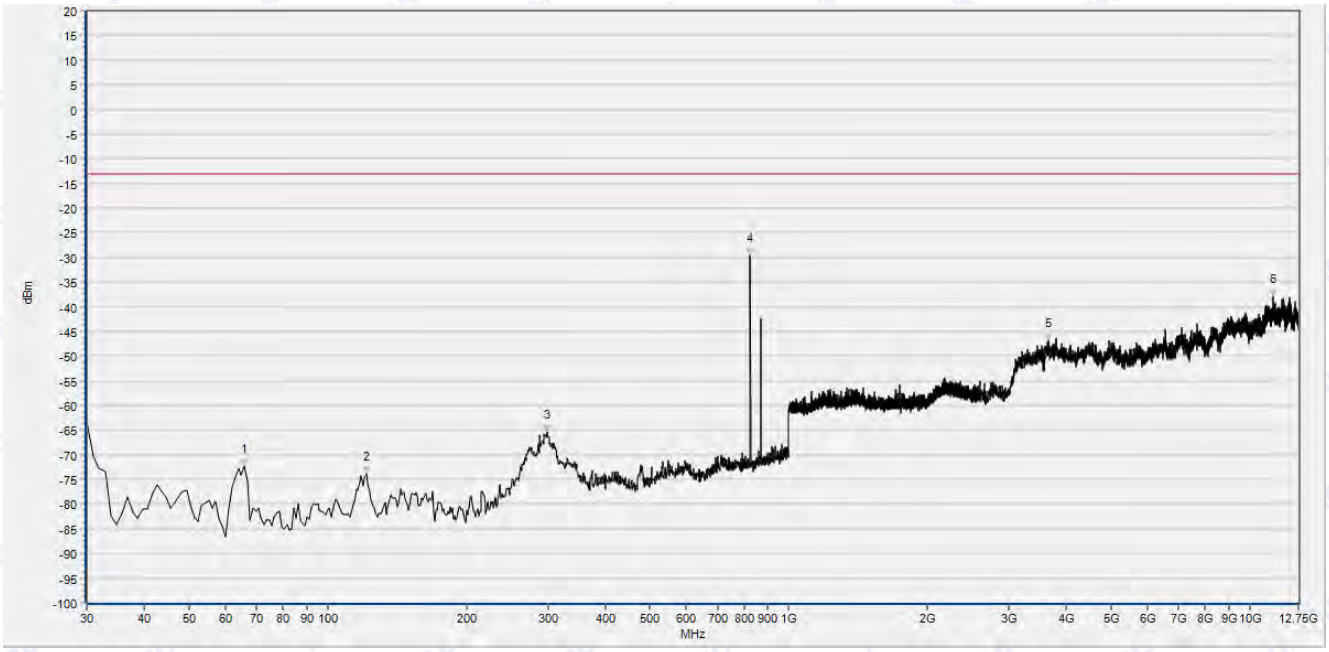
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	94.084	-71.75	-13.00	V	PASS
2	231.962	-72.90	-13.00	V	PASS
3	478.589	-69.14	-13.00	V	PASS
4	893.193	-23.95	-13.00	V	N/A
5	3683.028	-45.51	-13.00	V	PASS
6	10289.496	-40.15	-13.00	V	PASS

(Plot E6: CDMA BC0 Channel = 777, Test Antenna Vertical)



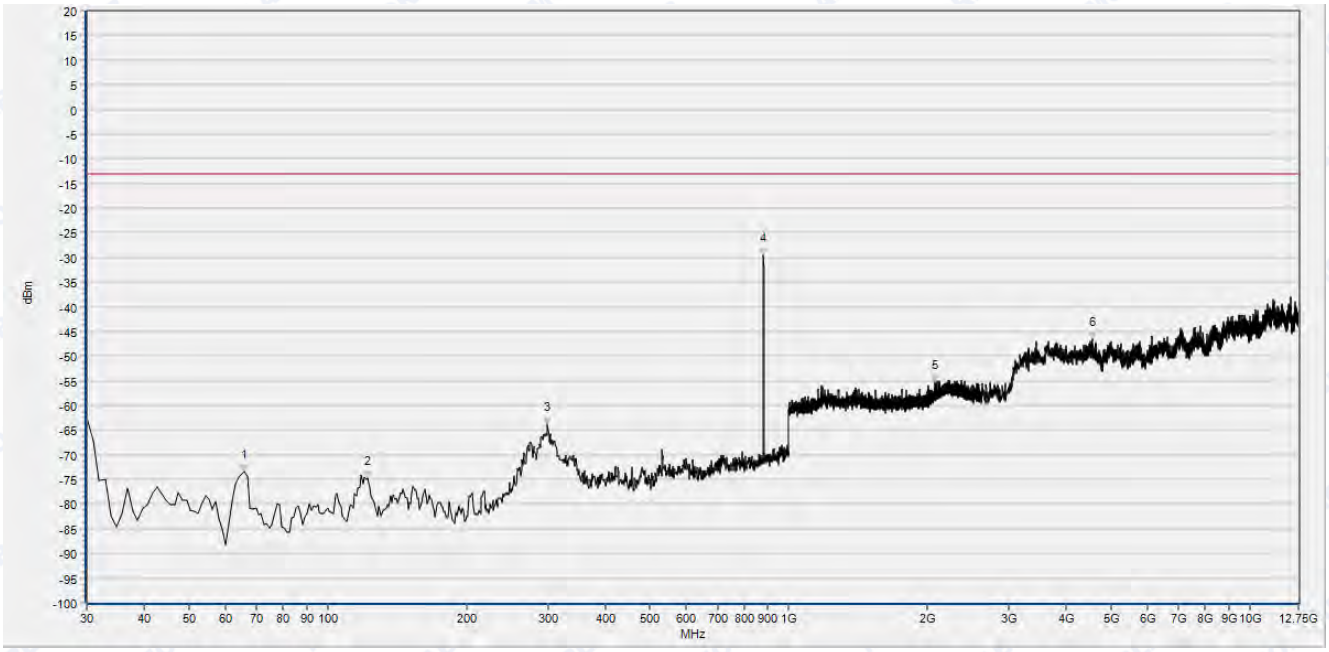
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	120.300	-74.41	-13.00	H	PASS
2	299.930	-70.45	-13.00	H	PASS
3	478.589	-63.75	-13.00	H	PASS
4	824.254	-24.37	-13.00	H	N/A
5	3784.562	-45.74	-13.00	H	PASS
6	10824.241	-38.74	-13.00	H	PASS

(Plot E7: EVDO 0 BC0 Channel = 1013, Test Antenna Horizontal)



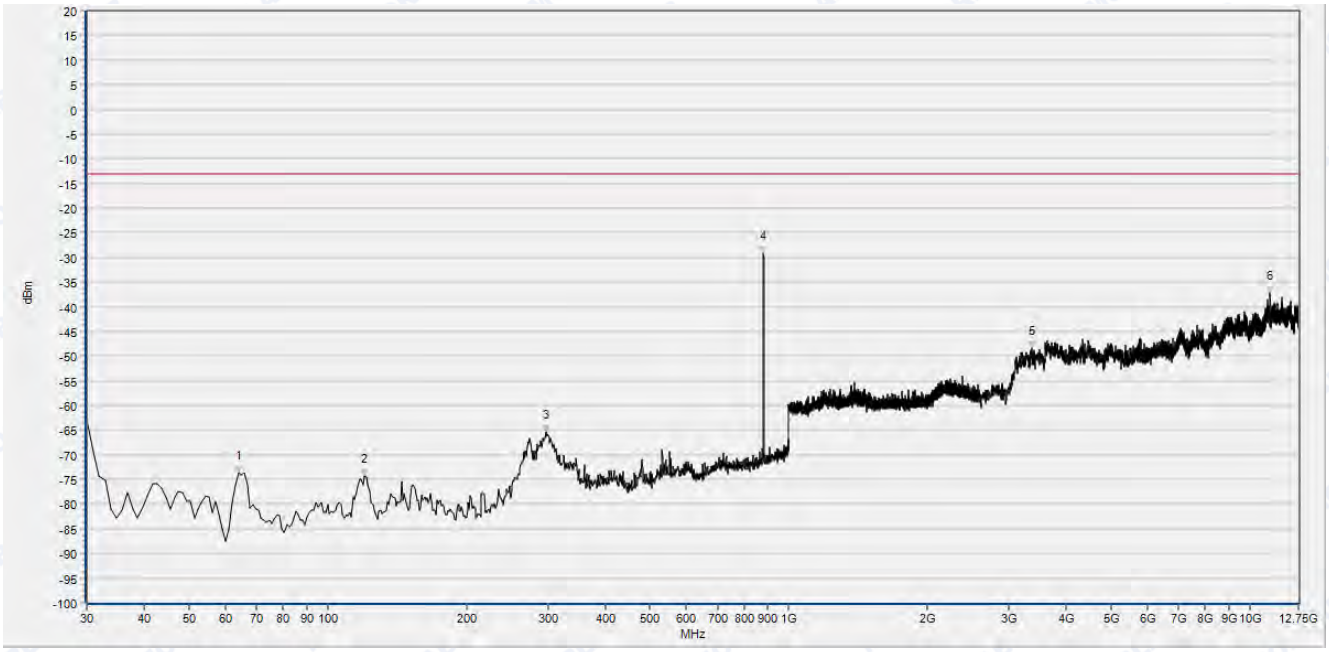
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	65.926	-72.40	-13.00	V	PASS
2	121.271	-73.82	-13.00	V	PASS
3	298.959	-65.39	-13.00	V	PASS
4	824.254	-29.66	-13.00	V	N/A
5	3666.105	-46.91	-13.00	V	PASS
6	11216.839	-37.93	-13.00	V	PASS

(Plot E8: EVDO 0 BC0 Channel = 1013, Test Antenna Vertical)



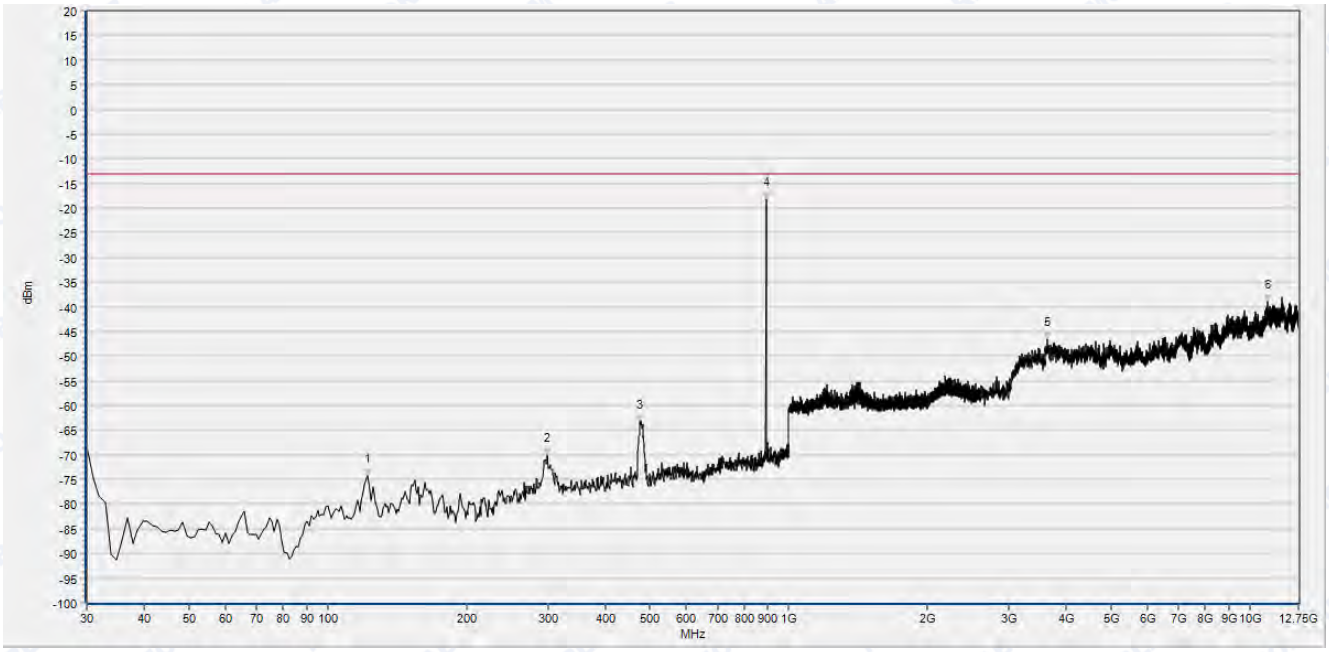
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	65.926	-73.48	-13.00	H	PASS
2	122.242	-74.81	-13.00	H	PASS
3	299.930	-63.69	-13.00	H	PASS
4	881.542	-29.56	-13.00	H	N/A
5	2076.092	-55.30	-13.00	H	PASS
6	4546.065	-46.70	-13.00	H	PASS

(Plot E9: EVDO 0 BC0 Channel = 384, Test Antenna Horizontal)



Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	63.984	-73.60	-13.00	V	PASS
2	120.300	-74.21	-13.00	V	PASS
3	297.017	-65.31	-13.00	V	PASS
4	881.542	-29.12	-13.00	V	N/A
5	3361.504	-48.46	-13.00	V	PASS
6	11074.692	-37.20	-13.00	V	PASS

(Plot E10: EVDO 0 BC0 Channel = 384, Test Antenna Vertical)



Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	122.242	-74.36	-13.00	H	PASS
2	299.930	-70.08	-13.00	H	PASS
3	475.676	-63.39	-13.00	H	PASS
4	893.193	-18.13	-13.00	H	N.A
5	3639.030	-46.52	-13.00	H	PASS
6	10952.851	-39.09	-13.00	H	PASS

(Plot E11: EVDO 0 BC0 Channel = 777, Test Antenna Horizontal)