

FCC / IC Test Report

FCC ID : N7NMC7350
IC : 2417C-MC7350
Equipment : Wireless Module
Model No. : AirPrime MC7350
Brand Name : AirPrime
Applicant : Sierra Wireless Inc.
Address : 13811 Wireless Way Richmond, British
Columbia, Canada, V6V 3A4.
Standard : 47 CFR FCC Part 24 Subpart E
RSS-133 Issue 6 January 2013
Received Date : Oct. 07, 2013
Tested Date : Oct. 14 ~ Oct. 31, 2013

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Approved & Reviewed by:



Gary Chang / Manager



Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	Local Support Equipment List	7
1.3	Test Setup Chart	7
1.4	The Equipment List	9
1.5	Test Standards	10
1.6	Measurement Uncertainty	10
2	TEST CONFIGURATION	11
2.1	Testing Condition and Location Information.....	11
2.2	The Worst Test Modes and Channel Details	12
3	TEST RESULTS.....	13
3.1	Equivalent Isotropically Radiated Power	13
3.2	Radiated Emissions.....	22
3.3	Conducted Emissions.....	35
3.4	Band Edge.....	44
3.5	Occupied Bandwidth	58
3.6	Peak to Average Ratio	66
3.7	Frequency Stability.....	74
4	TEST LABORATORY INFORMATION	79

Release Record

Report No.	Version	Description	Issued Date
FG3O0701P24	Rev. 01	Initial issue	Nov. 15, 2013

Summary of Test Results

FCC Rules	IC Rules	Test Items	Measured	Result
2.1046 24.232(c)	RSS-133 6.4	Equivalent Isotropically Radiated Power	Power[dBm] : CDMA: 26.24 LTE: 25.14	Pass
2.1053/ 24.238(a)	RSS-133 6.5	Radiated Emissions	Meet the requirement of limit	Pass
2.1051 24.238(a)	RSS-133 6.5	Conducted Emissions	Meet the requirement of limit	Pass
2.1051 24.238(a)	RSS-133 6.5	Band Edge	Meet the requirement of limit	Pass
2.1049 24.238(a)	RSS-133 2.3	Occupied Bandwidth	Meet the requirement of limit	Pass
24.232(d)	RSS-133 6.4	Peak to average ratio	Meet the requirement of limit	Pass
2.1055 24.235	RSS-133 6.3	Frequency Stability	Meet the requirement of limit	Pass

1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

H/W Version	1.0
S/W Version	SWI9x15E_04.04.00.00
CDMA 2000 BC1	
Operating Band (MHz)	CDMA2000 1xRTT 1xEV-DO Release 0, Revision A BC1, 1851.25~1908.75MHz
Modulation	QPSK, QQPSK, HPSK
LTE Band 25	
Operating Frequency (MHz)	Channel Bandwidth: 1.4MHz: 1850.7 ~ 1914.3 Channel Bandwidth: 3MHz: 1851.5 ~ 1913.5 Channel Bandwidth: 5MHz: 1852.5 ~ 1912.5 Channel Bandwidth: 10MHz: 1855.0 ~ 1910.0 Channel Bandwidth: 15MHz: 1857.5 ~ 1907.5 Channel Bandwidth: 20MHz: 1860.0 ~ 1905.0
Modulation Type	Uplink : QPSK, 16QAM Downlink : QPSK, 16QAM, 64QAM
Duplex Mode	FDD
Category	3

1.1.2 Maximum ERP, Frequency Tolerance and Emission Designator

Mode	Modulation	Maximum EIRP (W)	Emission Designator
CDMA 2000 BC1	HPSK	0.421	1M27F9W
LTE Band 25, CB: 1.4MHz	QPSK	0.297	1M09G7D
LTE Band 25, CB: 1.4MHz	16QAM	0.231	1M09W7D
LTE Band 25, CB: 3MHz	QPSK	0.289	2M69G7D
LTE Band 25, CB: 3MHz	16QAM	0.222	2M69W7D
LTE Band 25, CB: 5MHz	QPSK	0.294	4M50G7D
LTE Band 25, CB: 5MHz	16QAM	0.250	4M50W7D
LTE Band 25, CB: 10MHz	QPSK	0.315	9M00G7D
LTE Band 25, CB: 10MHz	16QAM	0.232	8M94W7D
LTE Band 25, CB: 15MHz	QPSK	0.284	13M46G7D
LTE Band 25, CB: 15MHz	16QAM	0.218	13M46W7D
LTE Band 25, CB: 20MHz	QPSK	0.327	17M95G7D
LTE Band 25, CB: 20MHz	16QAM	0.249	17M95W7D

1.1.3 Antenna Details

Ant. No.	Type	Gain (dBi)	Connector	Remark
1	Dipole	1.75	SMA	---

1.1.4 EUT Operational Condition

Supply Voltage	<input type="checkbox"/> AC mains	<input checked="" type="checkbox"/> DC	
Type of DC Source	<input type="checkbox"/> Internal DC supply	<input type="checkbox"/> External DC adapter	<input checked="" type="checkbox"/> From host
Operational Voltage	<input checked="" type="checkbox"/> Vnom (120 V)	<input checked="" type="checkbox"/> Vmax (126.5 V)	<input checked="" type="checkbox"/> Vmin (93.5 V)
Operational Climatic	<input checked="" type="checkbox"/> Tnom (20°C)	<input checked="" type="checkbox"/> Tmax (50°C)	<input checked="" type="checkbox"/> Tmin (-30°C)

1.1.5 Operating Channel List

CDMA 2000 BC1		
Channel location	Channel	Frequency (MHz)
Low	25	1851.25
Middle	600	1880.00
High	1175	1908.75

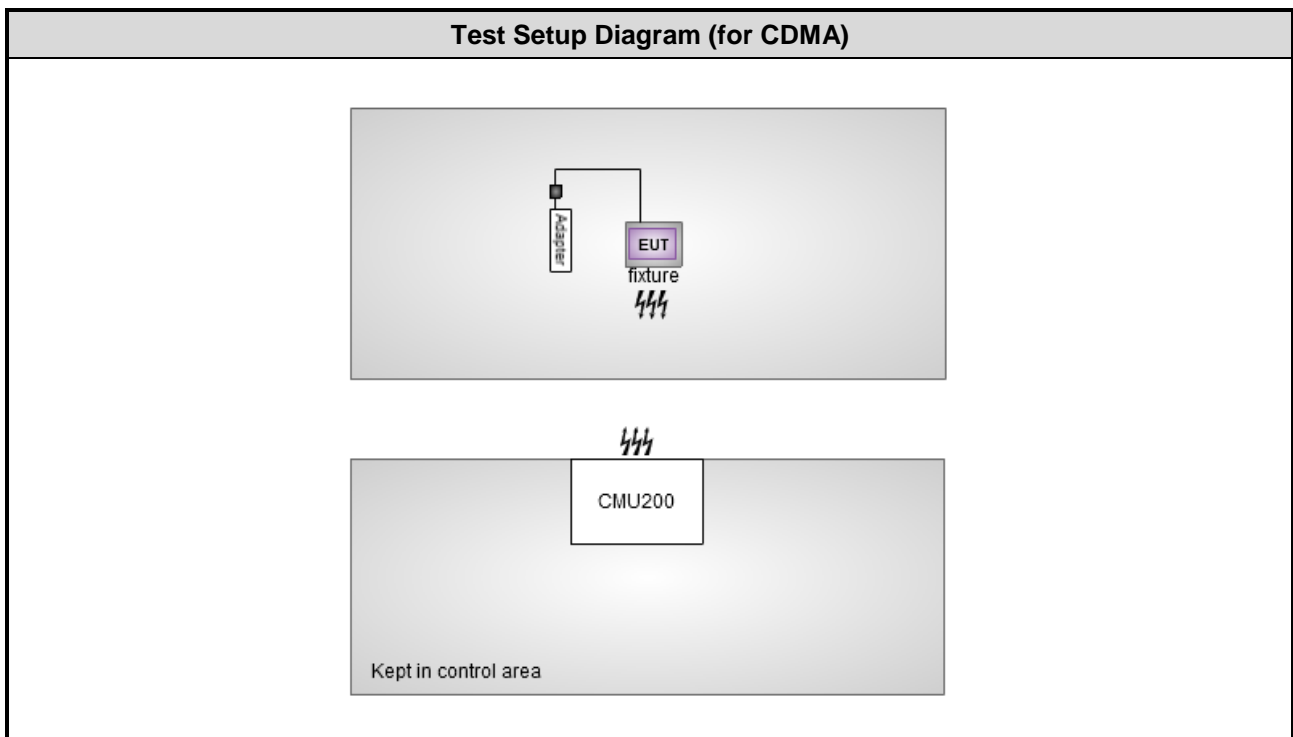
LTE Band 25			
Bandwidth (MHz)	Channel location	Channel	Frequency (MHz)
1.4	Low	26047	1850.7
	Middle	26365	1882.5
	High	26683	1914.3
3	Low	26055	1851.5
	Middle	26365	1882.5
	High	26675	1913.5
5	Low	26065	1852.5
	Middle	26365	1882.5
	High	26665	1912.5
10	Low	26090	1855
	Middle	26365	1882.5
	High	26640	1910
15	Low	26115	1857.5
	Middle	26365	1882.5
	High	26615	1907.5
20	Low	26140	1860
	Middle	26365	1882.5
	High	26590	1905

1.2 Local Support Equipment List

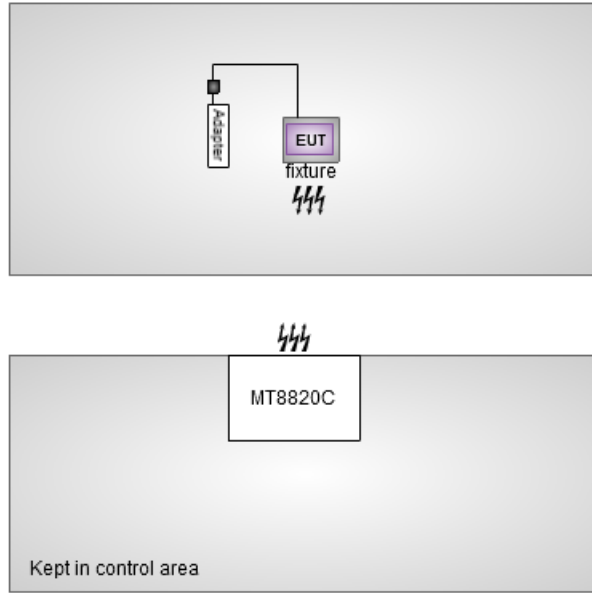
Support Equipment List						
No.	Equipment	Brand	Model	S/N	FCC ID	Signal cable / Length (m)
1	Fixture	---	---	---	---	---
2	Adapter for fixture	GlobTek, Inc.	GT-41062-1805	---	---	USB, 1.8m shielded w/o core

Note: Item 1,2 was provided by applicant.

1.3 Test Setup Chart



Test Setup Diagram (for LTE)



1.4 The Equipment List

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
3m semi-anechoic chamber	CHAMPRO	SAC-03	03CH01-WS	Jan. 04, 2013	Jan. 03, 2014
Spectrum Analyzer	R&S	FSV40	101498	Jan. 24, 2013	Jan. 23, 2014
Receiver	R&S	ESR3	101658	Jan. 28, 2013	Jan. 27, 2014
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jan. 11, 2013	Jan. 10, 2014
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Feb. 18, 2013	Feb. 17, 2014
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Jan. 14, 2013	Jan. 13, 2014
Amplifier	Burgeon	BPA-530	100219	Nov. 28, 2012	Nov. 27, 2013
Amplifier	Agilent	83017A	MY39501308	Dec. 18, 2012	Dec. 17, 2013
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Dec. 25, 2012	Dec. 24, 2013
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Dec. 25, 2012	Dec. 24, 2013
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16139/4	Dec. 25, 2012	Dec. 24, 2013
RF Cable-R03m	Woken	CFD400NL-LW	CFD400NL-001	Dec. 25, 2012	Dec. 24, 2013
RF Cable-R10m	Woken	CFD400NL-LW	CFD400NL-002	Dec. 25, 2012	Dec. 24, 2013
control	EM Electronics	EM1000	60612	N/A	N/A

Note: Calibration Interval of instruments listed above is one year.

Loop Antenna	R&S	HFH2-Z2	100330	Nov. 15, 2012	Nov. 14, 2014
Amplifier	MITEQ	AMF-6F-260400	9121372	Apr. 19, 2013	Apr. 18, 2015

Note: Calibration Interval of instruments listed above is two year.

Test Item	RF Conducted				
Test Site	RF Conducted (TH01-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV 40	101063	Feb. 18, 2013	Feb. 17, 2014
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Nov. 29, 2012	Nov. 28, 2013
Signal Generator	R&S	SMB100A	175727	Jan. 14, 2013	Jan. 13, 2014
Radio Communication Analyzer	Anritsu	MT8820C	6201240341	Mar. 13, 2013	Mar. 12, 2014
Radio Communication Analyzer	R&S	CMU200	112403	Jan. 31, 2013	Jan. 30, 2014

Note: Calibration Interval of instruments listed above is one year.

1.5 Test Standards

According to the specification of EUT, the EUT must comply with following standards.

47 CFR FCC Part 24 Subpart E

47 CFR FCC Part 2

ANSI C63.4-2003

RSS-133 Issue 6 January 2013

SRSP 510 Issue 5, February 2009

ANSI / TIA / EIA-603-C -2004

1.6 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor ($k=2$))

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	± 40.246 Hz
Conducted power	± 0.552 dB
Frequency error	± 40.246 Hz
Temperature	± 0.3 °C
Conducted emission	± 2.946 dB
AC conducted emission	± 2.43 dB
Radiated emission	± 2.49 dB

2 Test Configuration

2.1 Testing Condition and Location Information

Test Item	Test Site	Ambient Condition	Tested By
RF conducted	TH01-WS	22°C / 63%	Brad Wu
Radiated Emissions	03CH01-WS	22°C / 63%	Anderson Hong

- FCC site registration No.: 657002
- IC site registration No.: 10807A-1

2.2 The Worst Test Modes and Channel Details

Test item	Mode	Modulation	Test channel
E.I.R.P	CDMA 2000 BC1 LTE Band 25	HPSK QPSK / 16QAM	25, 600, 1175 CB 1.4MHz: 26047, 26365, 26683 CB 3MHz: 26055, 26365, 26675 CB 5MHz: 26065, 26365, 26665 CB 10MHz: 26090, 26365, 26640 CB 15MHz: 26115, 26365, 26615 CB 20MHz: 26140, 26365, 26590
Conducted Emissions Occupied Bandwidth Peak to Average Ratio	CDMA 2000 BC1 1xEV-DO LTE Band 25	HPSK HPSK QPSK / 16QAM	25, 600, 1175 25, 600, 1175 CB 1.4MHz: 26047, 26365, 26683 CB 3MHz: 26055, 26365, 26675 CB 5MHz: 26065, 26365, 26665 CB 10MHz: 26090, 26365, 26640 CB 15MHz: 26115, 26365, 26615 CB 20MHz: 26140, 26365, 26590
Radiated Emission \leq 1GHz	CDMA 2000 BC1 LTE Band 25	HPSK QPSK	600 CB 1.4MHz: 26365 CB 3MHz: 26365 CB 5MHz: 26365 CB 10MHz: 26365 CB 15MHz: 26365 CB 20MHz: 26365
Radiated Emission > 1GHz	CDMA 2000 BC1 LTE Band 25	HPSK QPSK	25, 600, 1175 CB 1.4MHz: 26047, 26365, 26683 CB 3MHz: 26055, 26365, 26675 CB 5MHz: 26065, 26365, 26665 CB 10MHz: 26090, 26365, 26640 CB 15MHz: 26115, 26365, 26615 CB 20MHz: 26140, 26365, 26590
Band Edge	CDMA 2000 BC1 1xEV-DO LTE Band 25	HPSK HPSK QPSK / 16QAM	25, 1175 25, 1175 CB 1.4MHz: 26047, 26683 CB 3MHz: 26055, 26675 CB 5MHz: 26065, 26665 CB 10MHz: 26090, 26640 CB 15MHz: 26115, 26615 CB 20MHz: 26140, 26590
Frequency Stability	CDMA 2000 BC1 1xEV-DO LTE Band 25	HPSK HPSK QPSK	600 600 CB 1.4MHz: 26365 CB 3MHz: 26365 CB 5MHz: 26365 CB 10MHz: 26365 CB 15MHz: 26365 CB 20MHz: 26365

3 Test Results

3.1 Equivalent Isotropically Radiated Power

3.1.1 Limit of Equivalent Isotropically Radiated Power

Mobile and portable stations are limited to 2 watts EIRP.

3.1.2 Test Procedures

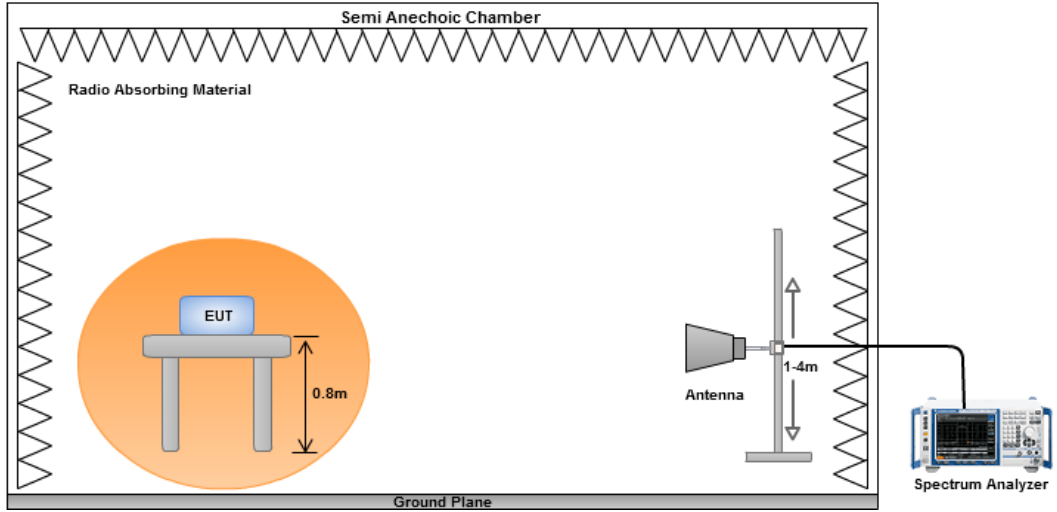
1. The EUT links up with simulator and is set to maximum output power level at low / middle / high channel. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at a height of 0.8 m test table above the ground plane.
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.
4. After finding the max radiated emission, substitution method will be used for getting effective radiated power. EUT will be removed and substitution antenna will be placed at same position. Signal generator will output CW signal to substitution antenna through a RF cable. Rotate turntable and move antenna to find maximum radiated emission. Adjust output power of signal generator to let the maximum radiated emission is same as step 3. Record the output power level.
5. E.I.R.P = output power of step 4 + gain of substitution antenna – cable loss of RF cable.

For Conducted power measurement

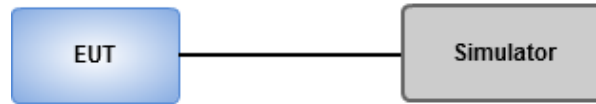
1. The EUT links up with simulator and is set to maximum output power level at low / middle / high channel.
2. Measure the output power of low / middle / high channel of the EUT

3.1.3 Test Setup

Equivalent Isotropically Radiated Power Measurement



Conducted Power Measurement



3.1.4 Test Result of Conducted power (dBm)

Band	CDMA 2000 BC1		
Channel	25	600	1175
Frequency (MHz)	1851.25	1880	1908.75
RC1+SO55	23.76	23.78	23.69
RC3+SO55	23.79	23.89	23.86
RC3+SO32(+F-SCH)	23.73	23.81	23.84
RC3+SO32(+SCH)	23.76	23.84	23.78
RTAP 153.6	23.39	23.42	23.43
RETAP 4096	23.33	23.35	23.36

Band / Channel Bandwidth			LTE Band 25 / CB: 1.4MHz		
Channel			26047	26365	26683
Frequency (MHz)			1850.7	1882.5	1914.3
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	22.89	22.97	22.91
	1	5	22.88	22.95	22.88
	3	2	22.87	22.96	22.91
	6	0	21.93	21.94	21.96
16QAM	1	0	21.96	21.97	21.96
	1	5	21.81	21.96	21.93
	3	2	21.85	21.95	21.92
	6	0	20.95	20.97	20.96

Band / Channel Bandwidth			LTE Band 25 / CB: 3MHz		
Channel			26055	26365	26675
Frequency (MHz)			1851.5	1882.5	1913.5
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	22.84	22.97	22.88
	1	14	22.91	22.82	22.93
	8	4	21.92	21.96	21.97
	15	0	21.84	21.97	21.95
16QAM	1	0	21.90	21.97	21.88
	1	14	21.94	21.87	21.92
	8	4	21.13	21.22	21.16
	15	0	20.87	20.95	20.97

Band / Channel Bandwidth			LTE Band 25 / CB: 5MHz		
Channel			26065	26365	26665
Frequency (MHz)			1852.5	1882.5	1912.5
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	22.84	22.95	22.90
	1	24	22.86	22.84	22.92
	12	6	21.97	21.97	21.97
	25	0	21.86	21.97	21.93
16QAM	1	0	21.83	21.96	21.86
	1	24	21.87	21.86	21.90
	12	6	20.94	20.97	20.95
	25	0	20.90	20.92	20.91

Band / Channel Bandwidth			LTE Band 25 / CB: 10MHz		
Channel			26090	26365	26640
Frequency (MHz)			1855	1882.5	1910
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	22.84	22.96	22.88
	1	49	22.73	22.78	22.84
	25	12	21.83	21.89	21.91
	50	0	21.70	21.82	21.70
16QAM	1	0	21.89	21.91	21.92
	1	49	21.78	21.82	21.90
	25	12	20.80	20.88	20.88
	50	0	20.67	20.80	20.70

Band / Channel Bandwidth			LTE Band 25 / CB: 15MHz		
Channel			26115	26365	26615
Frequency (MHz)			1857.5	1882.5	1907.5
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	22.93	22.95	22.91
	1	74	22.86	22.84	22.89
	36	18	21.85	21.90	21.88
	75	0	21.77	21.81	21.80
16QAM	1	0	21.89	21.92	21.95
	1	74	21.87	21.85	21.87
	36	18	20.78	20.84	20.83
	75	0	20.75	20.75	20.79

Band / Channel Bandwidth			LTE Band 25 / CB: 20MHz		
Channel			26140	26365	26590
Frequency (MHz)			1860	1882.5	1905
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	22.92	22.95	22.91
	1	99	22.89	22.77	22.86
	50	25	21.78	21.81	21.87
	100	0	21.81	21.87	21.92
16QAM	1	0	21.96	21.94	21.94
	1	99	21.94	21.78	21.91
	50	25	20.77	20.85	20.84
	100	0	20.86	20.91	20.91

3.1.5 Test Result of Equivalent Isotropically Radiated Power (dBm)

Mode	CDMA2000 RC3+SO55						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
25	1851.25	26.24	33	-6.76	-14.14	21.62	4.62
600	1880.00	25.45	33	-7.55	-15.49	20.89	4.56
1175	1908.75	25.07	33	-7.93	-16.42	20.57	4.50

Note: EIRP = S.G Power value + Correction factor

Mode							
CB: 1.4MHz, 1RB, Offset 0, QPSK							
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
26047	1850.7	24.49	30	-5.51	-15.88	19.87	4.62
26365	1882.5	24.73	30	-5.27	-16.25	20.17	4.56
26683	1914.3	24.29	30	-5.71	-17.30	19.80	4.49

Mode							
CB: 1.4MHz, 1RB, Offset 0, 16QAM							
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
26047	1850.7	23.37	30	-6.63	-17.00	18.75	4.62
26365	1882.5	23.64	30	-6.36	-17.34	19.08	4.56
26683	1914.3	23.11	30	-6.89	-18.48	18.62	4.49

Note: EIRP = S.G Power value + Correction factor

Mode							
CB: 3MHz, 1RB, Offset 0, QPSK							
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
26055	1851.5	24.28	30	-5.72	-16.11	19.66	4.62
26365	1882.5	24.61	30	-5.39	-16.37	20.05	4.56
26675	1913.5	24.12	30	-5.88	-17.46	19.63	4.49

Mode							
CB: 3MHz, 1RB, Offset 0, 16QAM							
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
26055	1851.5	23.22	30	-6.78	-17.17	18.60	4.62
26365	1882.5	23.47	30	-6.53	-17.51	18.91	4.56
26675	1913.5	22.93	30	-7.07	-18.65	18.44	4.49

Note: EIRP = S.G Power value + Correction factor

Mode	CB: 5MHz, 1RB, Offset 0, QPSK						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
26065	1852.5	24.21	30	-5.79	-16.20	19.59	4.62
26365	1882.5	24.68	30	-5.32	-16.30	20.12	4.56
26665	1912.5	24.07	30	-5.93	-17.49	19.57	4.50

Mode	CB: 5MHz, 1RB, Offset 0, 16QAM						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
26065	1852.5	23.13	30	-6.87	-17.28	18.51	4.62
26365	1882.5	23.98	30	-6.02	-17.00	19.42	4.56
26665	1912.5	22.73	30	-7.27	-18.83	18.23	4.50

Note: EIRP = S.G Power value + Correction factor

Mode	CB: 10MHz, 1RB, Offset 0, QPSK						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
26090	1855.0	24.46	30	-5.54	-16.00	19.85	4.61
26365	1882.5	24.98	30	-5.02	-16.00	20.42	4.56
26640	1910.0	24.28	30	-5.72	-17.23	19.78	4.50

Mode	CB: 10MHz, 1RB, Offset 0, 16QAM						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
26090	1855.0	23.35	30	-6.65	-17.11	18.74	4.61
26365	1882.5	23.66	30	-6.34	-17.32	19.10	4.56
26640	1910.0	23.34	30	-6.66	-18.17	18.84	4.50

Note: EIRP = S.G Power value + Correction factor

Mode							
CB: 15MHz, 1RB, Offset 0, QPSK							
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
26115	1857.5	24.06	30	-5.94	-16.44	19.45	4.61
26365	1882.5	24.53	30	-5.47	-16.45	19.97	4.56
26615	1907.5	23.92	30	-6.08	-17.54	19.41	4.51

Mode							
CB: 15MHz, 1RB, Offset 0, 16QAM							
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
26115	1857.5	22.93	30	-7.07	-17.57	18.32	4.61
26365	1882.5	23.39	30	-6.61	-17.59	18.83	4.56
26615	1907.5	22.78	30	-7.22	-18.68	18.27	4.51

Note: EIRP = S.G Power value + Correction factor

Mode							
CB: 20MHz, 1RB, Offset 0, QPSK							
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
26140	1860.0	24.60	30	-5.40	-15.95	20.00	4.60
26365	1882.5	25.14	30	-4.86	-15.84	20.58	4.56
26590	1905.0	24.48	30	-5.52	-16.94	19.97	4.51

Mode							
CB: 20MHz, 1RB, Offset 0, 16QAM							
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
26140	1860.0	23.52	30	-6.48	-17.03	18.92	4.60
26365	1882.5	23.97	30	-6.03	-17.01	19.41	4.56
26590	1905.0	23.37	30	-6.63	-18.05	18.86	4.51

Note: EIRP = S.G Power value + Correction factor

3.2 Radiated Emissions

3.2.1 Limit of Radiated Emissions

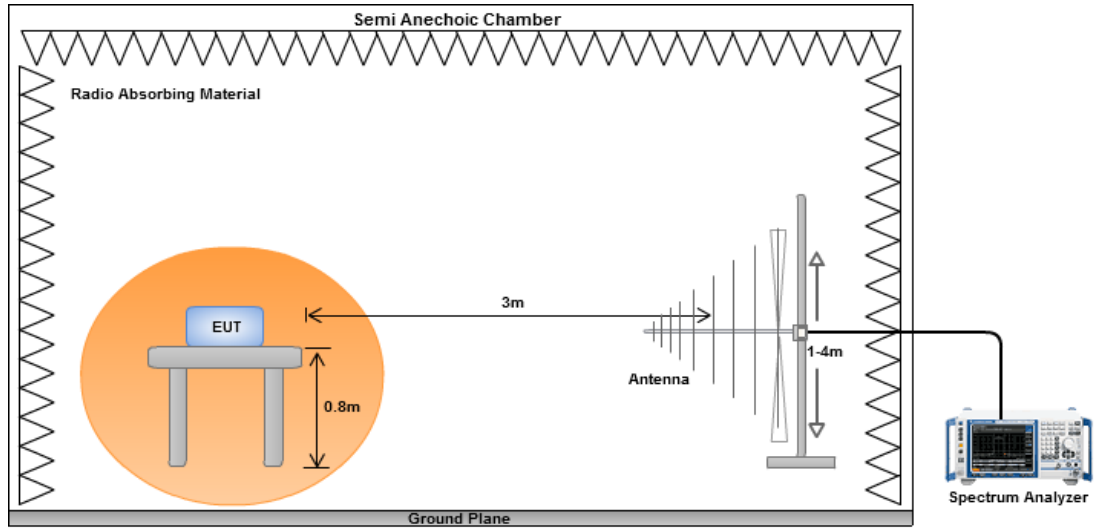
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB equal to -13dBm.

3.2.2 Test Procedures

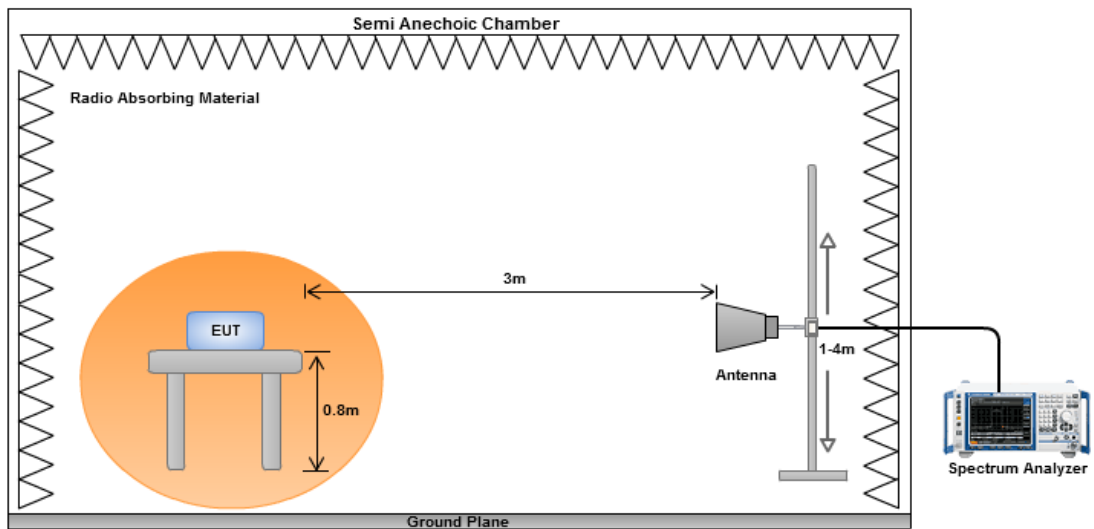
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at a height of 0.8 m test table above the ground plane.
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.
4. After finding the max radiated emission, substitution method will be used for getting effective radiated power. EUT will be removed and substitution antenna will be placed at same position. Signal generator will output CW signal to substitution antenna through a RF cable. Rotate turntable and move antenna to find maximum radiated emission. Adjust output power of signal generator to let the maximum radiated emission is same as step 3. Record the output power level.
5. E.I.R.P = output power of step 4 + gain of substitution antenna – cable loss of RF cable.

3.2.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz



3.2.4 Test Result of Radiated Emissions below 1GHz

Mode	CDMA2000 RC3+SO55, Channel : 600						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
107.83	H	-50.38	-13.00	-37.38	-37.47	-50.73	0.35
132.66	H	-52.47	-13.00	-39.47	-43.56	-52.52	0.05
240.43	H	-52.63	-13.00	-39.63	-43.18	-58.30	5.67
264.74	H	-50.12	-13.00	-37.12	-41.77	-55.71	5.59
374.35	H	-52.93	-13.00	-39.93	-46.64	-58.45	5.52
675.10	H	-51.49	-13.00	-38.49	-50.16	-55.78	4.29
35.64	V	-46.38	-13.00	-33.38	-37.87	-34.54	-11.84
92.10	V	-49.27	-13.00	-36.27	-38.82	-49.68	0.41
130.88	V	-46.63	-13.00	-33.63	-42.12	-46.68	0.05
264.78	V	-43.24	-13.00	-30.24	-36.37	-48.83	5.59
321.95	V	-43.60	-13.00	-30.60	-38.06	-49.17	5.57
381.23	V	-48.03	-13.00	-35.03	-43.86	-53.54	5.51

Note: EIRP = S.G Power value + Correction factor

Mode	LTE Band 25, CB: 1.4MHz, 1RB, Offset 0, Channel : 26365						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
107.60	H	-56.04	-13.00	-43.04	-43.10	-56.39	0.35
174.53	H	-56.31	-13.00	-43.31	-47.47	-59.19	2.88
240.49	H	-53.22	-13.00	-40.22	-43.78	-58.88	5.66
264.74	H	-52.56	-13.00	-39.56	-44.21	-58.15	5.59
374.35	H	-58.51	-13.00	-45.51	-52.22	-64.03	5.52
675.05	H	-52.84	-13.00	-39.84	-51.51	-57.13	4.29
106.63	V	-49.57	-13.00	-36.57	-41.30	-49.94	0.37
130.88	V	-48.32	-13.00	-35.32	-43.81	-48.37	0.05
264.74	V	-46.52	-13.00	-33.52	-39.65	-52.11	5.59
321.97	V	-47.85	-13.00	-34.85	-42.31	-53.42	5.57
381.14	V	-50.38	-13.00	-37.38	-46.20	-55.89	5.51
806.00	V	-52.16	-13.00	-39.16	-54.35	-56.01	3.85

Note: EIRP = S.G Power value + Correction factor

Mode	LTE Band 25, CB: 3MHz, 1RB, Offset 0, Channel : 26365						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
107.82	H	-56.43	-13.00	-43.43	-43.52	-56.78	0.35
174.60	H	-56.49	-13.00	-43.49	-47.64	-59.38	2.89
240.53	H	-53.44	-13.00	-40.44	-44.00	-59.10	5.66
264.82	H	-52.83	-13.00	-39.83	-44.48	-58.42	5.59
374.48	H	-58.73	-13.00	-45.73	-52.44	-64.25	5.52
675.11	H	-52.29	-13.00	-39.29	-50.96	-56.58	4.29
106.82	V	-49.82	-13.00	-36.82	-41.58	-50.19	0.37
130.75	V	-48.73	-13.00	-35.73	-44.20	-48.78	0.05
264.66	V	-46.11	-13.00	-33.11	-39.23	-51.70	5.59
321.76	V	-47.28	-13.00	-34.28	-41.74	-52.85	5.57
381.29	V	-50.66	-13.00	-37.66	-46.48	-56.17	5.51
806.23	V	-52.23	-13.00	-39.23	-54.42	-56.08	3.85

Note: EIRP = S.G Power value + Correction factor

Mode	LTE Band 25, CB: 5MHz, 1RB, Offset 0, Channel : 26365						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
107.82	H	-56.30	-13.00	-43.30	-43.39	-56.65	0.35
174.50	H	-56.80	-13.00	-43.80	-47.96	-59.68	2.88
240.49	H	-53.68	-13.00	-40.68	-44.24	-59.34	5.66
264.78	H	-52.93	-13.00	-39.93	-44.58	-58.52	5.59
374.11	H	-58.24	-13.00	-45.24	-51.95	-63.76	5.52
675.10	H	-52.00	-13.00	-39.00	-50.67	-56.29	4.29
106.83	V	-49.82	-13.00	-36.82	-41.58	-50.19	0.37
130.54	V	-48.50	-13.00	-35.50	-43.94	-48.55	0.05
264.80	V	-46.22	-13.00	-33.22	-39.35	-51.81	5.59
321.79	V	-47.53	-13.00	-34.53	-41.99	-53.10	5.57
381.41	V	-50.19	-13.00	-37.19	-46.01	-55.70	5.51
806.18	V	-52.32	-13.00	-39.32	-54.51	-56.17	3.85

Note: EIRP = S.G Power value + Correction factor

Mode	LTE Band 25, CB: 10MHz, 1RB, Offset 0, Channel : 26365						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
107.54	H	-56.43	-13.00	-43.43	-43.48	-56.78	0.35
174.52	H	-56.24	-13.00	-43.24	-47.40	-59.12	2.88
240.35	H	-53.12	-13.00	-40.12	-43.67	-58.79	5.67
264.72	H	-52.68	-13.00	-39.68	-44.33	-58.27	5.59
374.26	H	-58.53	-13.00	-45.53	-52.24	-64.05	5.52
675.36	H	-52.29	-13.00	-39.29	-50.96	-56.58	4.29
106.93	V	-49.22	-13.00	-36.22	-41.00	-49.59	0.37
130.55	V	-48.52	-13.00	-35.52	-43.96	-48.57	0.05
264.34	V	-46.72	-13.00	-33.72	-39.82	-52.31	5.59
321.82	V	-47.53	-13.00	-34.53	-41.99	-53.10	5.57
381.58	V	-50.24	-13.00	-37.24	-46.07	-55.75	5.51
806.43	V	-52.68	-13.00	-39.68	-54.87	-56.53	3.85

Note: EIRP = S.G Power value + Correction factor

Mode	LTE Band 25, CB: 15MHz, 1RB, Offset 0, Channel : 26365						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
107.86	H	-56.73	-13.00	-43.73	-43.82	-57.08	0.35
174.53	H	-56.99	-13.00	-43.99	-48.15	-59.87	2.88
240.49	H	-53.48	-13.00	-40.48	-44.04	-59.14	5.66
264.82	H	-52.56	-13.00	-39.56	-44.21	-58.15	5.59
374.41	H	-58.68	-13.00	-45.68	-52.39	-64.20	5.52
675.22	H	-52.40	-13.00	-39.40	-51.07	-56.69	4.29
106.82	V	-48.69	-13.00	-35.69	-40.45	-49.06	0.37
130.28	V	-48.92	-13.00	-35.92	-44.32	-48.97	0.05
264.55	V	-46.82	-13.00	-33.82	-39.93	-52.41	5.59
321.73	V	-47.83	-13.00	-34.83	-42.29	-53.40	5.57
381.69	V	-50.84	-13.00	-37.84	-46.67	-56.35	5.51
806.47	V	-52.91	-13.00	-39.91	-55.10	-56.76	3.85

Note: EIRP = S.G Power value + Correction factor

Mode	LTE Band 25, CB: 20MHz, 1RB, Offset 0, Channel : 26365						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
107.93	H	-56.82	-13.00	-43.82	-43.92	-57.17	0.35
174.08	H	-56.08	-13.00	-43.08	-47.27	-58.89	2.81
240.35	H	-53.81	-13.00	-40.81	-44.36	-59.48	5.67
264.77	H	-52.64	-13.00	-39.64	-44.29	-58.23	5.59
374.84	H	-58.22	-13.00	-45.22	-51.94	-63.74	5.52
675.40	H	-52.72	-13.00	-39.72	-51.39	-57.01	4.29
106.73	V	-49.51	-13.00	-36.51	-41.26	-49.88	0.37
130.75	V	-48.91	-13.00	-35.91	-44.38	-48.96	0.05
264.66	V	-46.00	-13.00	-33.00	-39.12	-51.59	5.59
321.62	V	-47.54	-13.00	-34.54	-42.00	-53.11	5.57
381.64	V	-50.27	-13.00	-37.27	-46.10	19.79	-70.06
806.34	V	-53.35	-13.00	-40.35	-55.54	-57.20	3.85

Note: EIRP = S.G Power value + Correction factor

3.2.5 Test Result of Radiated Emissions above 1GHz

Mode							
CDMA2000 RC3+SO55 , Channel : 25							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
3702.50	H	-48.10	-13.00	-35.10	-60.30	-53.42	5.32
5553.75	H	-35.37	-13.00	-22.37	-54.27	-39.88	4.51
7405.00	H	-42.92	-13.00	-29.92	-64.67	-45.71	2.79
3702.50	V	-41.88	-13.00	-28.88	-55.51	-47.20	5.32
5553.75	V	-29.12	-13.00	-16.12	-46.81	-33.63	4.51
7405.00	V	-44.36	-13.00	-31.36	-64.07	-47.15	2.79

Mode							
CDMA2000 RC3+SO55 , Channel : 600							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
3760.00	H	-47.60	-13.00	-34.60	-34.60	-52.85	5.25
5640.00	H	-34.77	-13.00	-21.77	-21.77	-39.12	4.35
7520.00	H	-42.19	-13.00	-29.19	-29.19	-44.73	2.54
3760.00	V	-41.16	-13.00	-28.16	-55.11	-46.41	5.25
5640.00	V	-28.37	-13.00	-15.37	-46.44	-32.72	4.35
7520.00	V	-43.91	-13.00	-30.91	-63.37	-46.45	2.54

Mode							
CDMA2000 RC3+SO55 , Channel : 1175							
Frequency (MHz)	Antenna Polarity.	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
3817.50	H	-48.82	-13.00	-35.82	-61.75	-54.00	5.18
5726.25	H	-35.58	-13.00	-22.58	-55.08	-39.74	4.16
7635.00	H	-42.72	-13.00	-29.72	-63.62	-45.13	2.41
3817.50	V	-42.38	-13.00	-29.38	-56.59	-47.56	5.18
5726.25	V	-29.34	-13.00	-16.34	-47.63	-33.50	4.16
7635.00	V	-44.53	-13.00	-31.53	-63.93	-46.94	2.41

Note: EIRP = S.G Power value + Correction factor

Mode							
LTE Band 25, CB: 1.4MHz, 1RB, Offset 0, Channel : 26047							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-49.80	-13.00	-36.80	-51.00	-54.83	5.03
3700.50	H	-47.66	-13.00	-34.66	-59.85	-52.98	5.32
5550.70	H	-30.01	-13.00	-17.01	-48.91	-34.53	4.52
1316.00	V	-48.86	-13.00	-35.86	-49.77	-53.89	5.03
3700.50	V	-41.31	-13.00	-28.31	-54.93	-46.63	5.32
5550.70	V	-24.68	-13.00	-11.68	-42.35	-29.20	4.52

Mode							
LTE Band 25, CB: 1.4MHz, 1RB, Offset 0, Channel : 26365							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-49.55	-13.00	-36.55	-50.75	-54.58	5.03
3764.10	H	-47.32	-13.00	-34.32	-59.93	-52.56	5.24
5646.20	H	-29.68	-13.00	-16.68	-48.82	-34.01	4.33
1316.00	V	-48.62	-13.00	-35.62	-49.53	-53.65	5.03
3764.10	V	-40.96	-13.00	-27.96	-54.93	-46.20	5.24
5646.20	V	-24.28	-13.00	-11.28	-42.37	-28.61	4.33

Mode							
LTE Band 25, CB: 1.4MHz, 1RB, Offset 0, Channel : 26683							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-50.19	-13.00	-37.19	-51.39	-55.22	5.03
3827.60	H	-47.93	-13.00	-34.93	-60.91	-53.10	5.17
5741.50	H	-30.36	-13.00	-17.36	-49.93	-34.49	4.13
1316.00	V	-49.11	-13.00	-36.11	-50.02	-54.14	5.03
3827.60	V	-41.59	-13.00	-28.59	-55.81	-46.76	5.17
5741.50	V	-24.97	-13.00	-11.97	-43.30	-29.10	4.13

Note: EIRP = S.G Power value + Correction factor

Mode	LTE Band 25, CB: 3MHz, 1RB, Offset 0, Channel : 26055						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-49.96	-13.00	-36.96	-51.16	-54.99	5.03
3700.50	H	-47.43	-13.00	-34.43	-59.62	-52.75	5.32
5550.70	H	-30.39	-13.00	-17.39	-49.29	-34.91	4.52
1316.00	V	-48.63	-13.00	-35.63	-49.54	-53.66	5.03
3700.50	V	-41.18	-13.00	-28.18	-54.80	-46.50	5.32
5550.70	V	-24.85	-13.00	-11.85	-42.52	-29.37	4.52

Mode	LTE Band 25, CB: 3MHz, 1RB, Offset 0, Channel : 26365						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-49.82	-13.00	-36.82	-51.02	-54.85	5.03
3762.50	H	-47.69	-13.00	-34.69	-60.29	-52.94	5.25
5643.60	H	-29.99	-13.00	-16.99	-49.12	-34.33	4.34
1316.00	V	-48.98	-13.00	-35.98	-49.89	-54.01	5.03
3762.50	V	-41.28	-13.00	-28.28	-55.25	-46.53	5.25
5643.60	V	-24.57	-13.00	-11.57	-42.65	-28.91	4.34

Mode	LTE Band 25, CB: 3MHz, 1RB, Offset 0, Channel : 26675						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-50.36	-13.00	-37.36	-51.56	-55.39	5.03
3825.40	H	-48.30	-13.00	-35.30	-61.26	-53.47	5.17
5736.70	H	-30.67	-13.00	-17.67	-50.23	-34.81	4.14
1316.00	V	-48.84	-13.00	-35.84	-49.75	-53.87	5.03
3825.40	V	-41.22	-13.00	-28.22	-55.43	-46.39	5.17
5736.70	V	-25.24	-13.00	-12.24	-43.56	-29.38	4.14

Note: EIRP = S.G Power value + Correction factor

Mode							
LTE Band 25, CB: 5MHz, 1RB, Offset 0, Channel : 26065							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-50.18	-13.00	-37.18	-51.38	-55.21	5.03
3700.60	H	-47.76	-13.00	-34.76	-59.95	-53.08	5.32
5551.00	H	-30.72	-13.00	-17.72	-49.62	-35.24	4.52
1316.00	V	-48.89	-13.00	-35.89	-49.80	-53.92	5.03
3700.60	V	-41.47	-13.00	-28.47	-55.09	-46.79	5.32
5551.00	V	-25.22	-13.00	-12.22	-42.89	-29.74	4.52

Mode							
LTE Band 25, CB: 5MHz, 1RB, Offset 0, Channel : 26365							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-50.10	-13.00	-37.10	-51.30	-55.13	5.03
3760.70	H	-47.92	-13.00	-34.92	-60.51	-53.17	5.25
5640.90	H	-30.25	-13.00	-17.25	-49.36	-34.59	4.34
1316.00	V	-49.28	-13.00	-36.28	-50.19	-54.31	5.03
3760.70	V	-41.57	-13.00	-28.57	-55.53	-46.82	5.25
5640.90	V	-24.83	-13.00	-11.83	-42.90	-29.17	4.34

Mode							
LTE Band 25, CB: 5MHz, 1RB, Offset 0, Channel : 26665							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-50.69	-13.00	-37.69	-51.89	-55.72	5.03
3820.70	H	-48.55	-13.00	-35.55	-61.50	-53.73	5.18
5731.00	H	-30.93	-13.00	-17.93	-50.46	-35.08	4.15
1316.00	V	-48.88	-13.00	-35.88	-49.79	-53.91	5.03
3820.70	V	-41.50	-13.00	-28.50	-55.71	-46.68	5.18
5731.00	V	-25.62	-13.00	-12.62	-43.93	-29.77	4.15

Note: EIRP = S.G Power value + Correction factor

Mode							
LTE Band 25, CB: 10MHz, 1RB, Offset 0, Channel : 26090							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-50.30	-13.00	-37.30	-51.50	-55.33	5.03
3701.10	H	-47.82	-13.00	-34.82	-60.01	-53.14	5.32
5551.70	H	-30.30	-13.00	-17.30	-49.20	-34.81	4.51
1316.00	V	-49.24	-13.00	-36.24	-50.15	-54.27	5.03
3701.10	V	-41.58	-13.00	-28.58	-55.21	-46.90	5.32
5551.70	V	-24.96	-13.00	-11.96	-42.64	-29.47	4.51

Mode							
LTE Band 25, CB: 10MHz, 1RB, Offset 0, Channel : 26365							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-48.43	-13.00	-35.43	-49.34	-53.46	5.03
3756.10	H	-40.43	-13.00	-27.43	-54.35	-45.68	5.25
5634.10	H	-24.36	-13.00	-11.36	-42.42	-28.72	4.36
1316.00	V	-49.82	-13.00	-36.82	-51.02	-54.85	5.03
3756.10	V	-47.69	-13.00	-34.69	-60.24	-52.94	5.25
5634.10	V	-29.81	-13.00	-16.81	-48.90	-34.17	4.36

Mode							
LTE Band 25, CB: 10MHz, 1RB, Offset 0, Channel : 26640							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-49.86	-13.00	-36.86	-51.06	-54.89	5.03
3811.20	H	-47.39	-13.00	-34.39	-60.29	-52.58	5.19
5716.70	H	-30.13	-13.00	-17.13	-49.59	-34.31	4.18
1316.00	V	-48.84	-13.00	-35.84	-49.75	-53.87	5.03
3811.20	V	-41.28	-13.00	-28.28	-55.47	-46.47	5.19
5716.70	V	-24.49	-13.00	-11.49	-42.75	-28.67	4.18

Note: EIRP = S.G Power value + Correction factor

Mode							
LTE Band 25, CB: 15MHz, 1RB, Offset 0, Channel : 26115							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-49.82	-13.00	-36.82	-51.02	-54.85	5.03
3701.60	H	-47.26	-13.00	-34.26	-59.45	-52.58	5.32
5552.60	H	-30.48	-13.00	-17.48	-49.38	-34.99	4.51
1316.00	V	-48.92	-13.00	-35.92	-49.83	-53.95	5.03
3701.60	V	-41.43	-13.00	-28.43	-55.06	-46.75	5.32
5552.60	V	-24.53	-13.00	-11.53	-42.21	-29.04	4.51

Mode							
LTE Band 25, CB: 15MHz, 1RB, Offset 0, Channel : 26365							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-49.56	-13.00	-36.56	-50.76	-54.59	5.03
3751.70	H	-47.52	-13.00	-34.52	-60.04	-52.78	5.26
5627.60	H	-29.43	-13.00	-16.43	-48.49	-33.80	4.37
1316.00	V	-48.55	-13.00	-35.55	-49.46	-53.58	5.03
3751.70	V	-41.43	-13.00	-28.43	-55.33	-46.69	5.26
5627.60	V	-24.27	-13.00	-11.27	-42.31	-28.64	4.37

Mode							
LTE Band 25, CB: 15MHz, 1RB, Offset 0, Channel : 26615							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-49.81	-13.00	-36.81	-51.01	-54.84	5.03
3801.60	H	-48.02	-13.00	-35.02	-60.88	-53.22	5.20
5702.50	H	-30.24	-13.00	-17.24	-49.64	-34.45	4.21
1316.00	V	-48.36	-13.00	-35.36	-49.27	-53.39	5.03
3801.60	V	-40.86	-13.00	-27.86	-55.04	-46.06	5.20
5702.50	V	-25.39	-13.00	-12.39	-43.62	-29.60	4.21

Note: EIRP = S.G Power value + Correction factor

Mode							
LTE Band 25, CB: 20MHz, 1RB, Offset 0, Channel : 26140							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-49.49	-13.00	-36.49	-50.69	-54.52	5.03
3702.10	H	-47.09	-13.00	-34.09	-59.29	-52.41	5.32
5553.30	H	-29.98	-13.00	-16.98	-48.88	-34.49	4.51
1316.00	V	-48.16	-13.00	-35.16	-49.07	-53.19	5.03
3702.10	V	-40.86	-13.00	-27.86	-54.49	-46.18	5.32
5553.30	V	-24.42	-13.00	-11.42	-42.11	-28.93	4.51

Mode							
LTE Band 25, CB: 20MHz, 1RB, Offset 0, Channel : 26365							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-49.51	-13.00	-36.51	-50.71	-54.54	5.03
3742.20	H	-47.24	-13.00	-34.24	-59.74	-52.51	5.27
5620.70	H	-29.58	-13.00	-16.58	-48.60	-33.97	4.39
1316.00	V	-48.36	-13.00	-35.36	-49.27	-53.39	5.03
3742.20	V	-40.98	-13.00	-27.98	-54.86	-46.25	5.27
5620.70	V	-24.28	-13.00	-11.28	-42.30	-28.67	4.39

Mode							
LTE Band 25, CB: 20MHz, 1RB, Offset 0, Channel : 26590							
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1316.00	H	-50.00	-13.00	-37.00	-51.20	-55.03	5.03
3792.20	H	-47.90	-13.00	-34.90	-60.69	-53.11	5.21
5688.20	H	-30.42	-13.00	-17.42	-49.75	-34.66	4.24
1316.00	V	-48.57	-13.00	-35.57	-49.48	-53.60	5.03
3792.20	V	-41.03	-13.00	-28.03	-55.16	-46.24	5.21
5688.20	V	-24.84	-13.00	-11.84	-43.03	-29.08	4.24

Note: EIRP = S.G Power value + Correction factor

3.3 Conducted Emissions

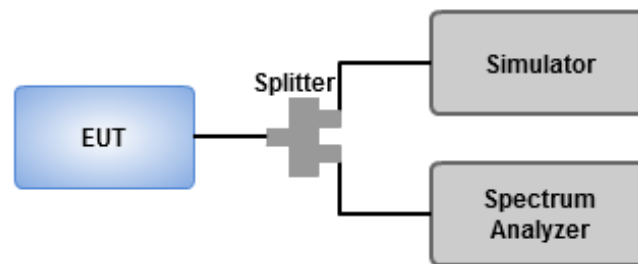
3.3.1 Limit of Conducted Emissions

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 equal to -13dBm.

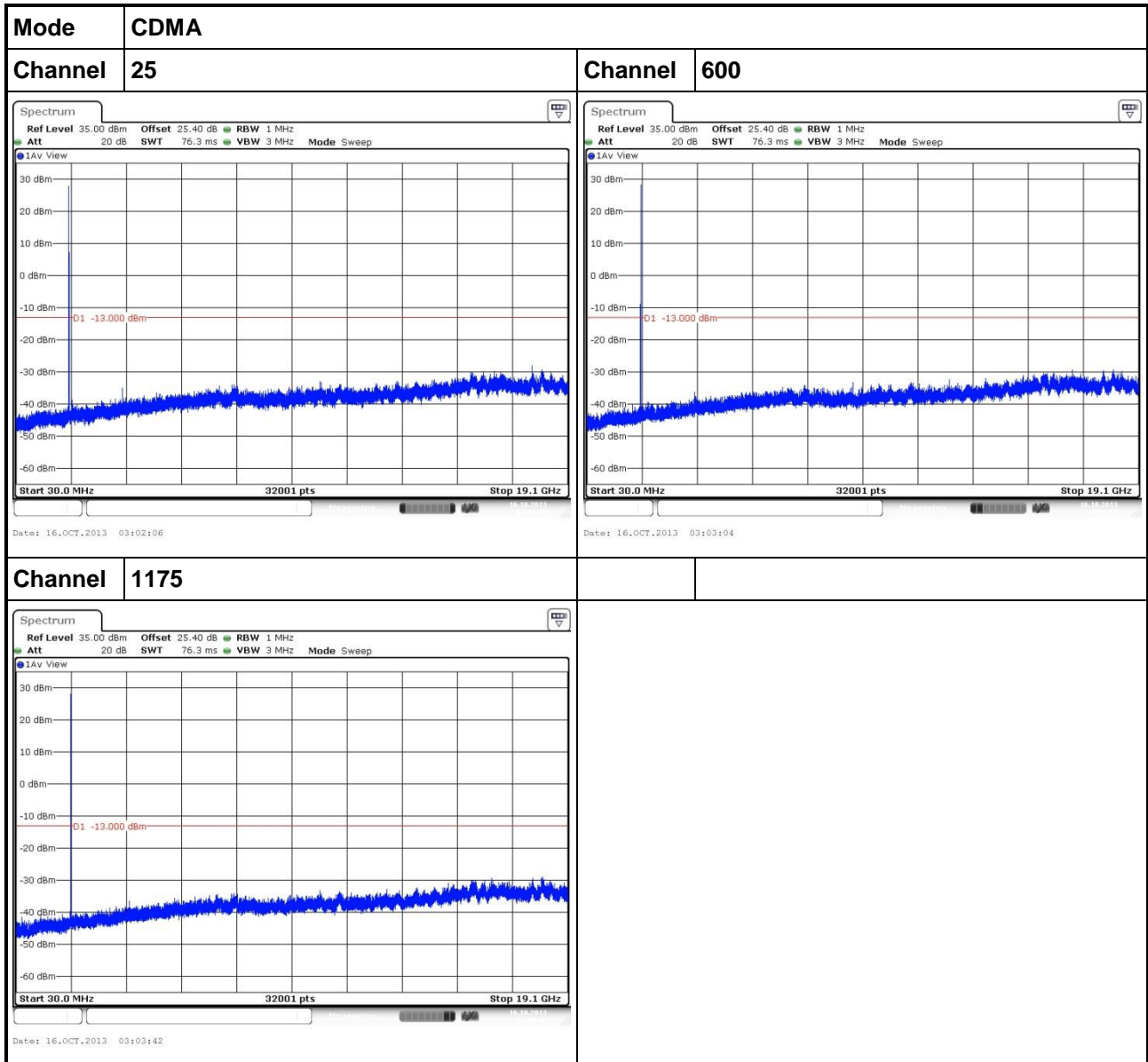
3.3.2 Test Procedures

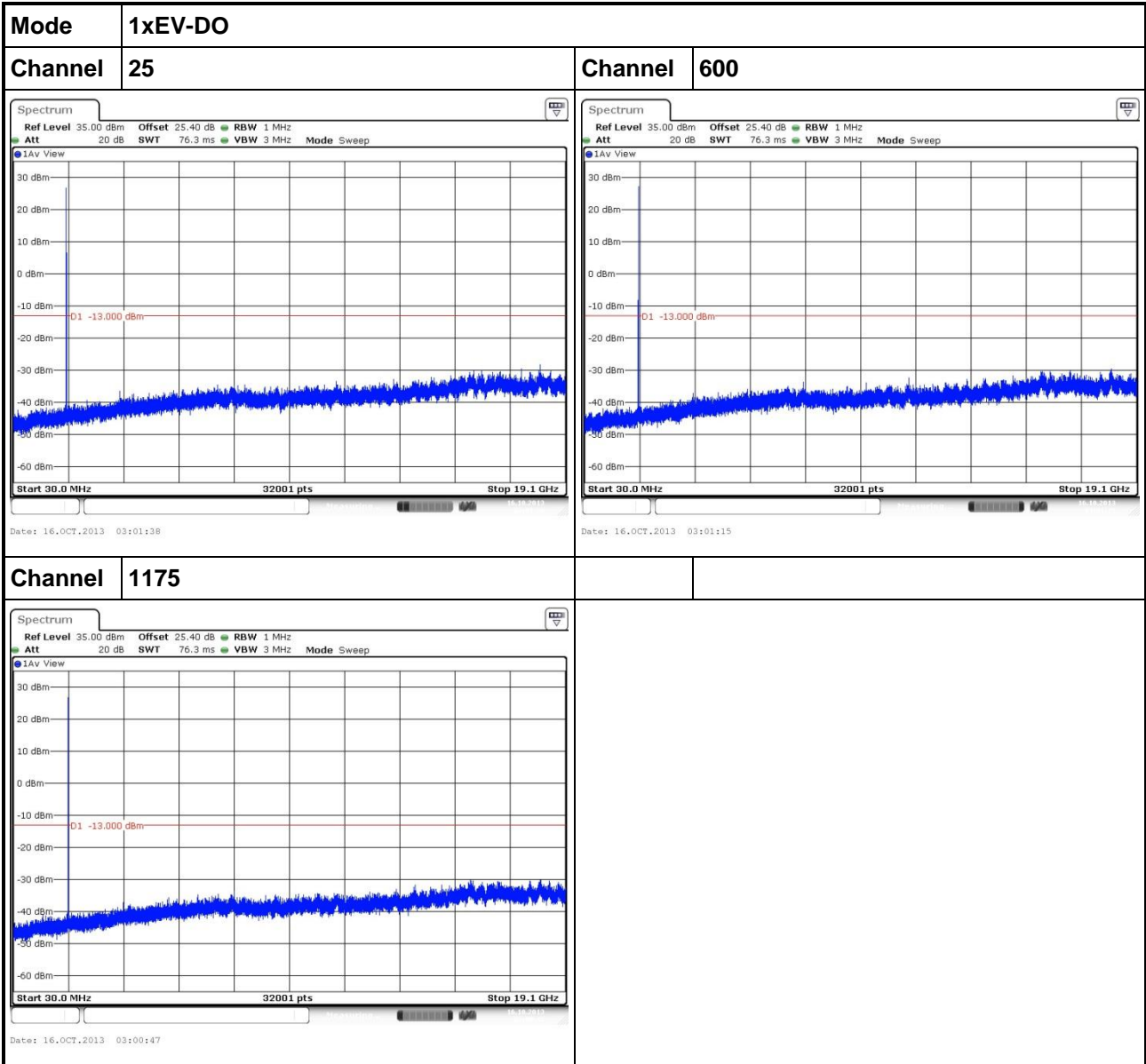
1. Lowest, middle and highest operating channels are tested for this item.
2. Scan frequency range is from 30MHz~19.1GHz.
3. Set RBW = 1MHz, VBW = 3MHz, detector = Peak, sweep time = auto.
4. Record the max trace value and capture the test plot of each sub frequency band.

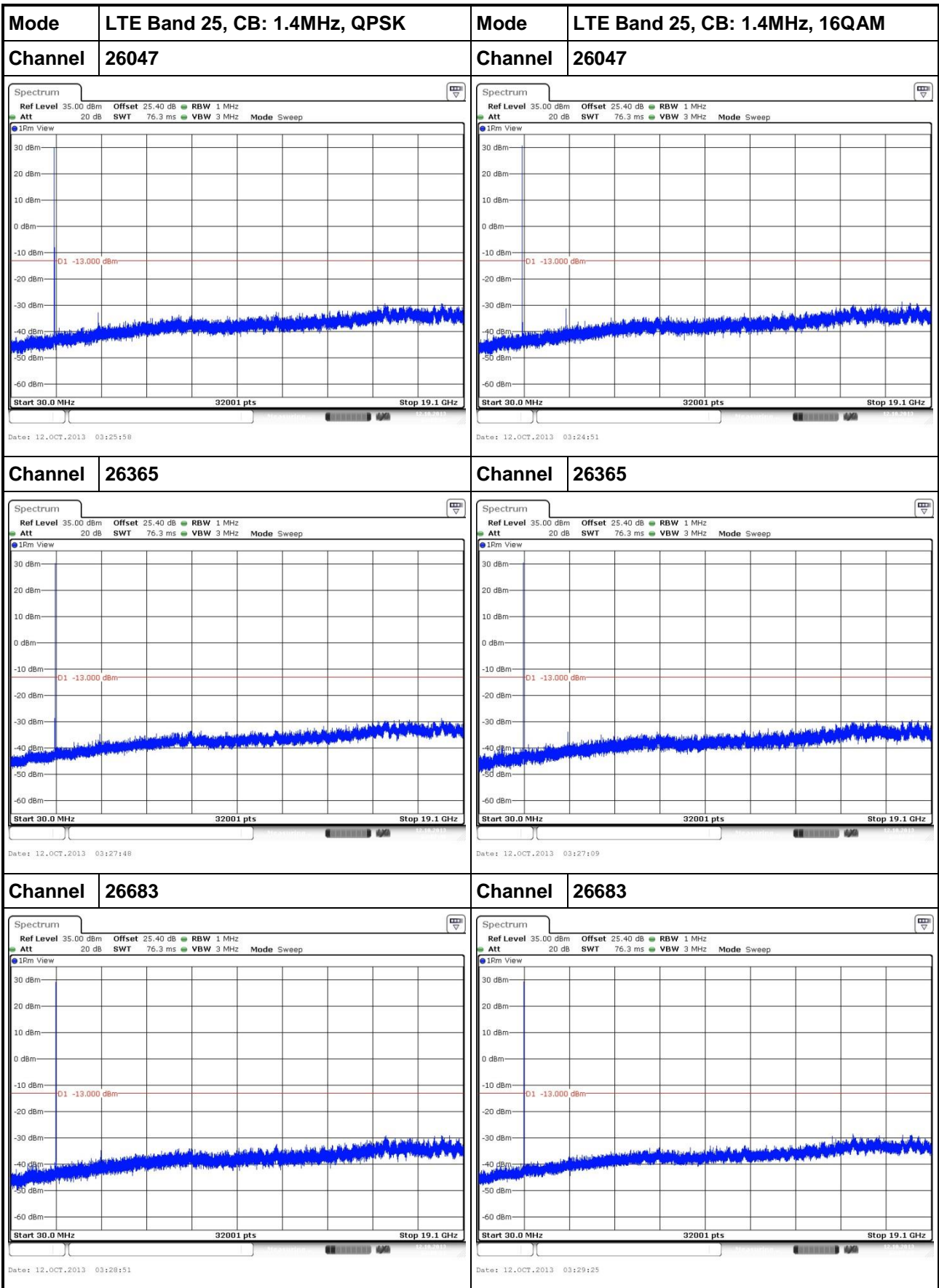
3.3.3 Test Setup

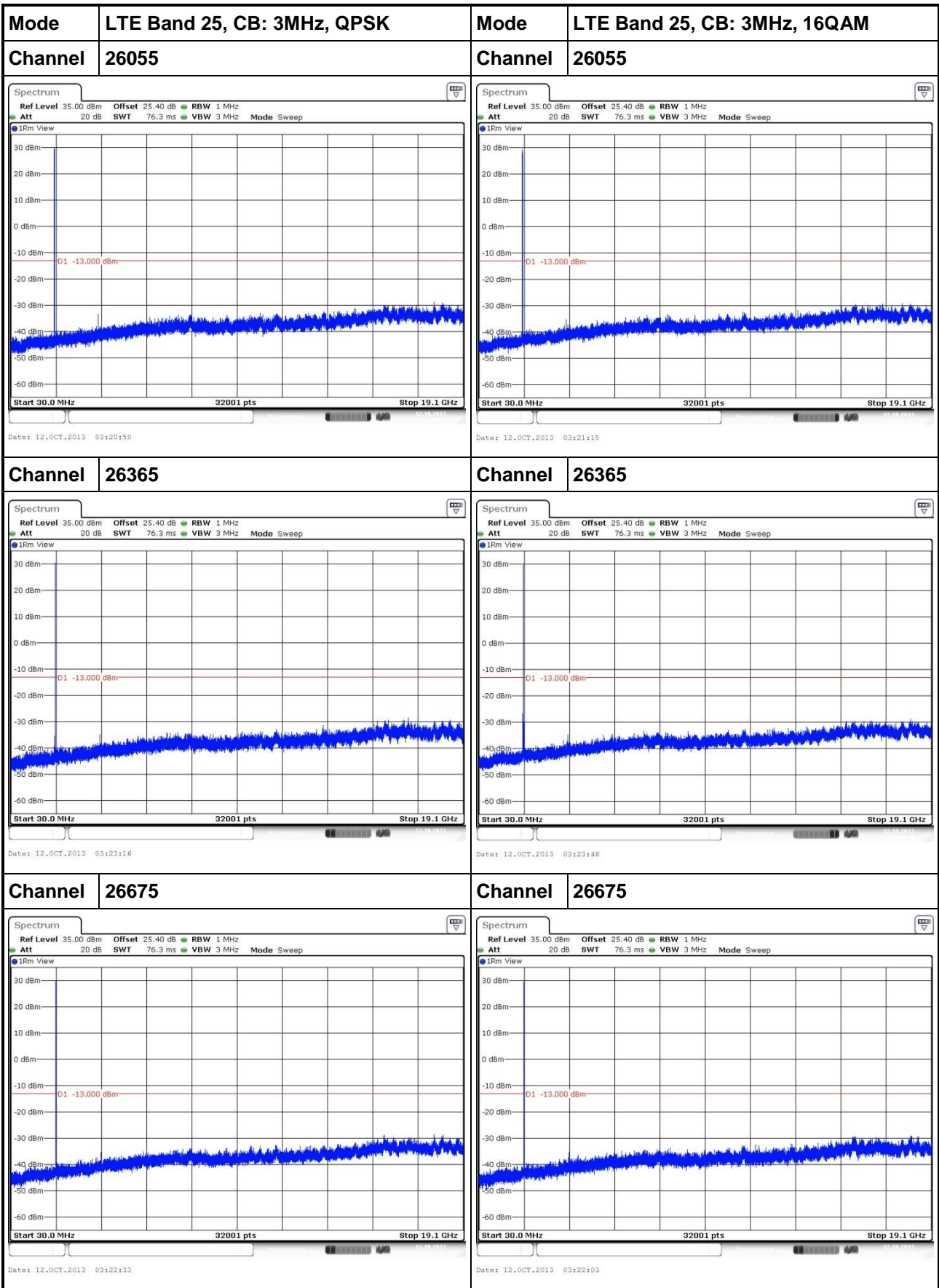


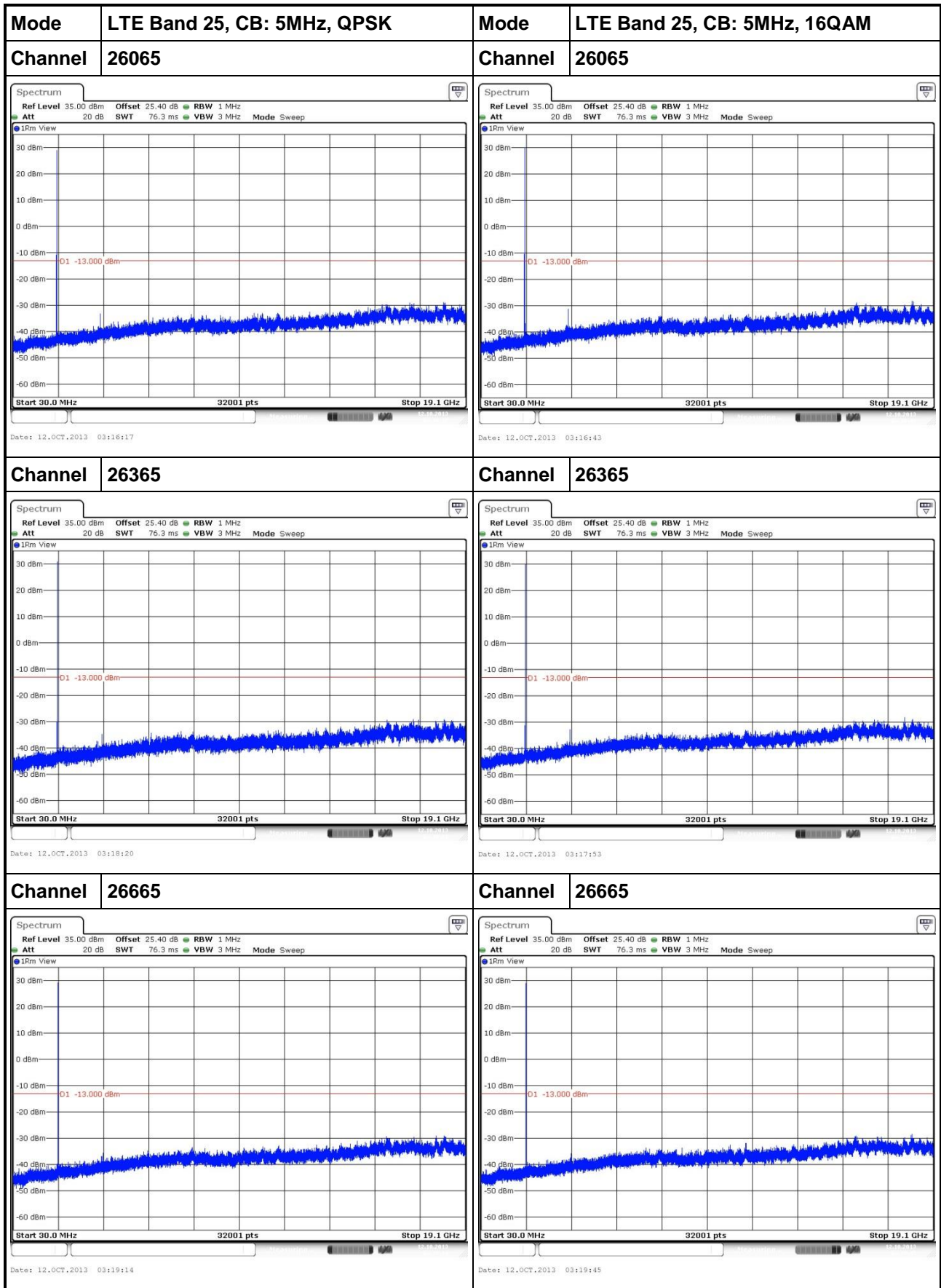
3.3.4 Test Result of Conducted Emissions

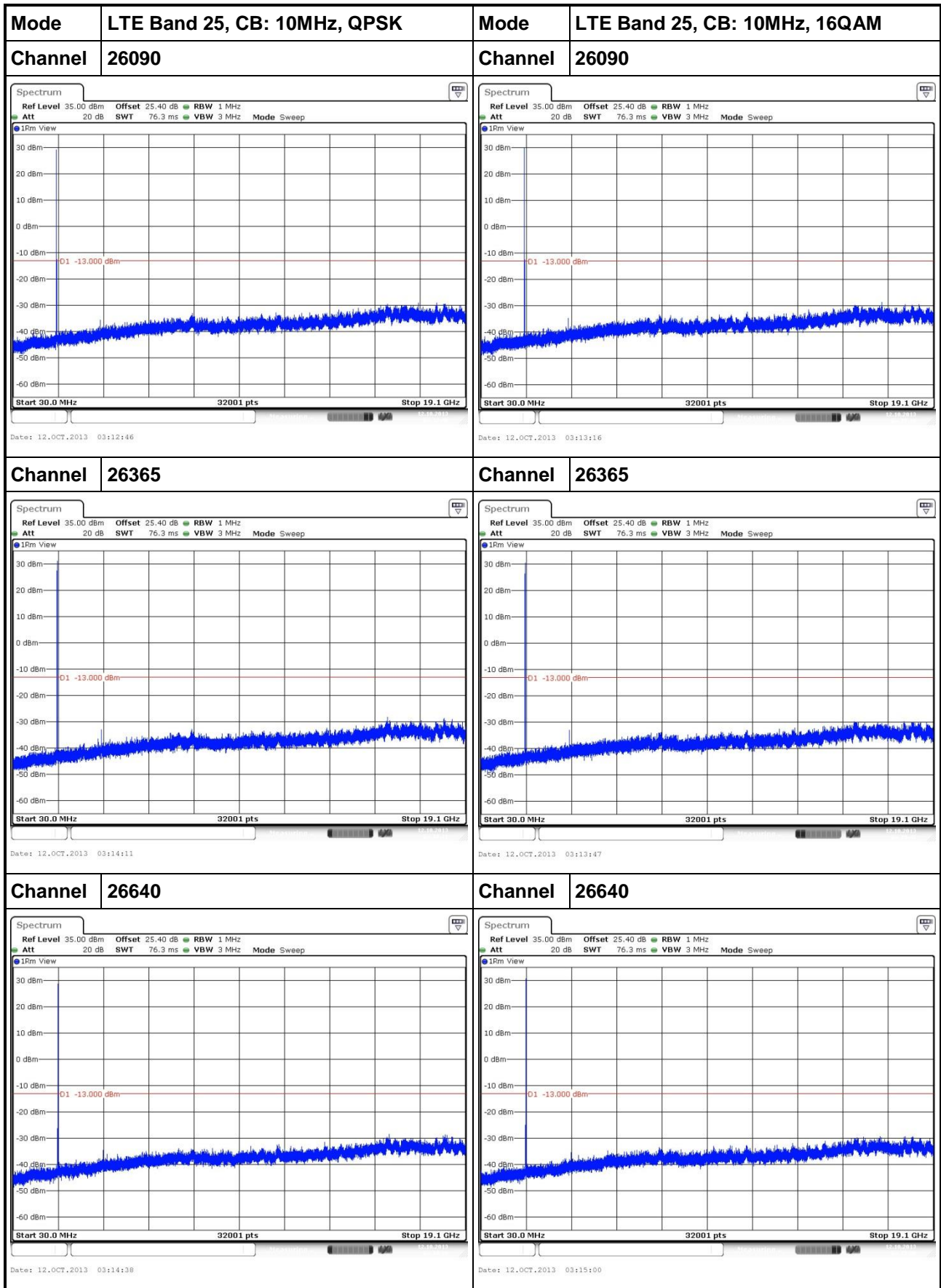


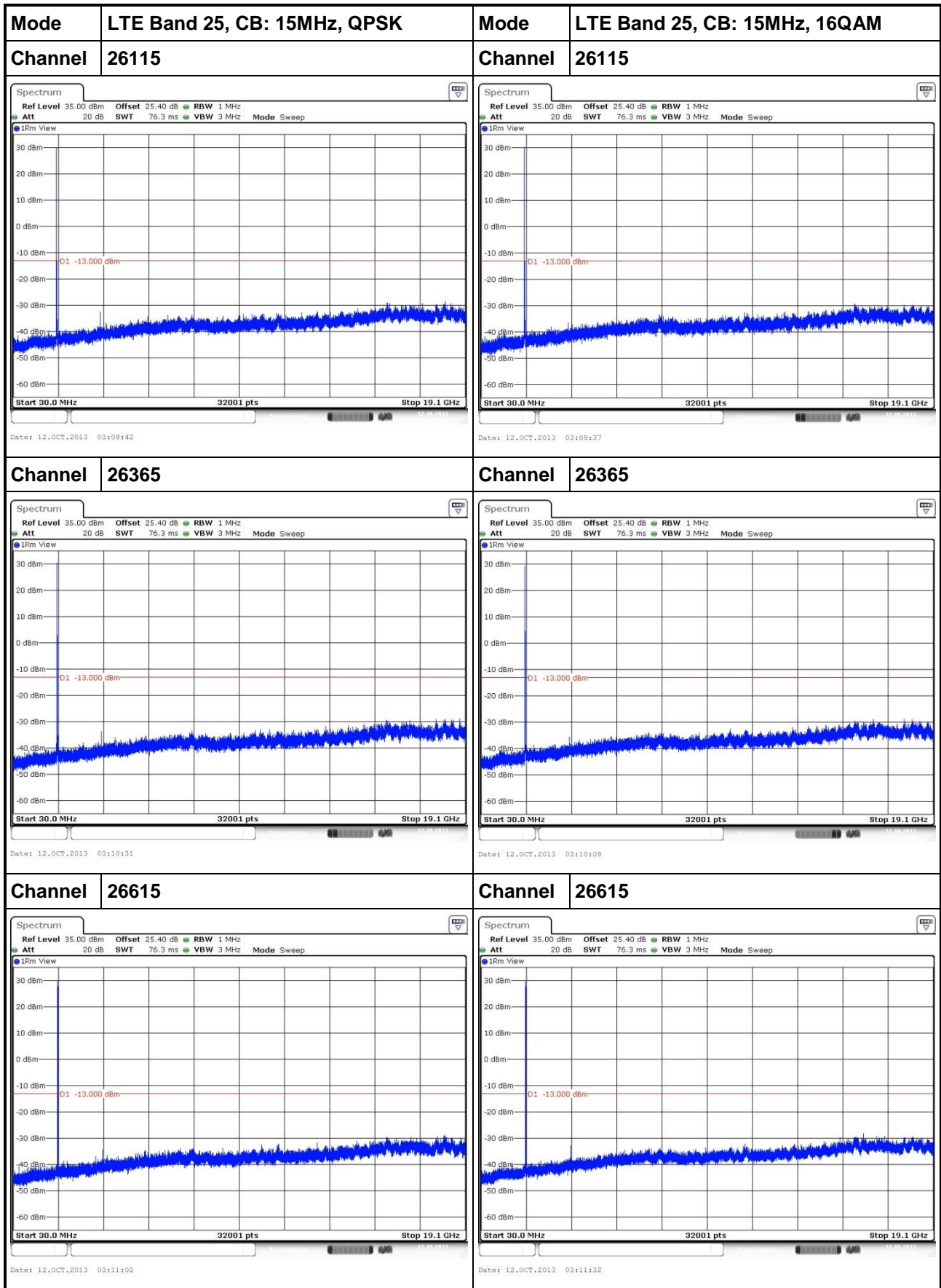


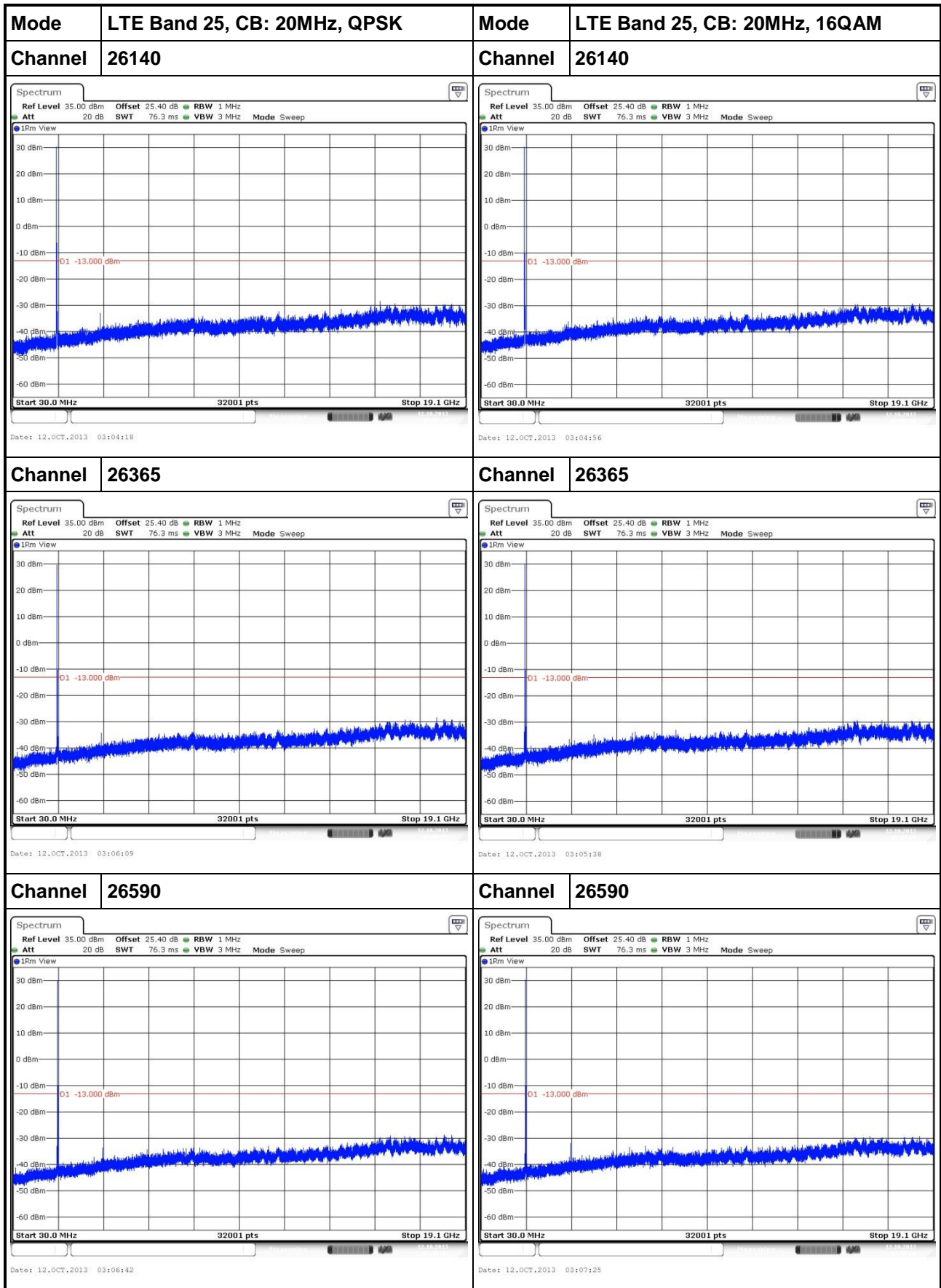












3.4 Band Edge

3.4.1 Limit of Band Edge

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 equal to -13dBm.

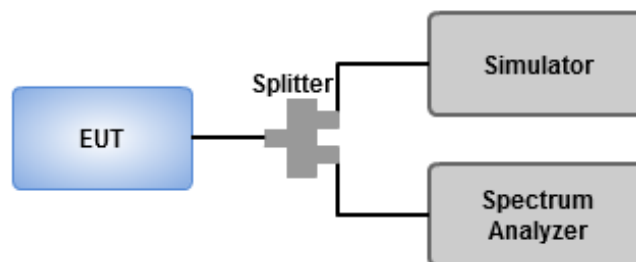
3.4.2 Test Procedures

1. Lowest and highest operating channels are tested for this item.
2. The center frequency of spectrum analyzer will be set to 1850 and 1910 MHz.
3. Set RBW =10kHz, VBW = 30 kHz, span = 3 MHz, detector = RMS, sweep time = auto for CDMA mode
4. Set as below setting for LTE mode

Bandwidth (MHz)	RBW (kHz)	VBW (KHz)	Detector	Sweep time
1.4	20	100	RMS	Auto
3	30	100	RMS	Auto
5	50	200	RMS	Auto
10	100	300	RMS	Auto
15	200	1000	RMS	Auto
20	200	1000	RMS	Auto

5. Record the max trace value and capture the test plot.

3.4.3 Test Setup



3.4.4 Test Result of Band Edge

MODE	Channel	Frequency (MHz)	Measured value (dBm)	Correction Factor (dB)	Correction Value(dBm)	Limit (dBm)
CDMA	25	1851.25	-36.84	1.76	-35.08	-13
CDMA	1175	1908.75	-37.92	1.76	-36.16	-13
1xEV-DO	25	1851.25	-38.34	1.76	-36.58	-13
1xEV-DO	1175	1908.75	-38.46	1.76	-36.70	-13

Note: 10kHz is used for measurement since used spectrum analyser has no 15kHz (1% of 26dB bandwidth) setting. Thus correction factor is required for measured value
 Correction factor = $10 * \log(15\text{kHz}/10\text{kHz}) = 1.76 \text{ dB}$

