EXHIBIT 11

TEST REPORT

This test report presents the measurement data required by the Commission for certifying the Class II Permissive Change of the Alcatel-Lucent 850 RRH 2x60 Distributed Base Station, subject of this application, for LTE application and operation in the domestic Cellular A, B, A", A' and B' bands (869-894MHz), E-UTRAN Band 5, under AS5ONEBTS-26.

As stated before, the distributed wireless RRH base station system is comprised of two separate modules 1) the BBU and 2) the RRH. These two modules are interconnected by CPRI though optic fiber or metallic coax cables. All RF functionality is contained in the RRH, including transceiver, power amplifier and transmitting and receiving filters. The BBU provides the digital I and Q baseband signals, plus the timing reference signal to the RRH. The BBU and RRH units can be co-located or remotely located.

The 850 LTE RRH 2x60W has two antenna ports and supports transmit diversity and/or 2x2 MIMO operation.

The 850 LTE RRH 2x60W can provide up to 60 Watts (47.8dBm) per LTE carrier, 5MHz or 10MHz bandwidth carriers, 60 Watts (47.8dBm) per port and 120 Watts (50.8dBm) per RRH at the base station transmitting antenna terminals. The 850 LTE RRH 2x60W is powered by -48VDC and available in indoor and outdoor versions.

As stated before, the hardware of the 850 LTE RRH is identical to that of the 850 UMTS RRH. In 850 LTE RRH, there are no modifications in the transmitting and receiving frequency ranges, the basic carrier frequency determining circuitry, the basic modulation circuit, the network interface circuitry and the major RF components (transmitter and power amplifier in the RRH) certified under AS5ONEBTS-26 for the 850 UMTS RRH. Therefore, only the characteristics impacted by LTE technology were evaluated.

All testing results submitted in this report were performed on the -48VDC 850 2x60W LTE RRH outdoor during the period of November 9~ 28, 2012. The above 850 2x60W LTE RRH passed FCC Part 15 Class A radiated emissions requirements. The performance of indoor version of the 850 2x60W LTE RRH will be evaluated and authorized through FCC Class I permissive change procedure.

The measurement results have demonstrated that Alcatel-Lucent 850 2x60W LTE RRH is in full compliance with the Rules of the Commission.

SUBEXHIBIT 11.1

Section 2.1033 (c)(14) REQUIRED MEASUREMENT DATA

The required measurement data is presented in the following exhibits as follows:

SUBEXHIBIT 11.2	Section 2.1046	Measurements Required: RF Power Output
SUBEXHIBIT 11.3	Section 2.1047	Modulation Characteristics
SUBEXHIBIT 11.4	Section 2.1049, 22.917	Measurements Required: Occupied Bandwidth and Out-of-Band Emissions
SUBEXHIBIT 11.5	Sections 2.1051, 22.917	Measurements Required: Spurious Emissions at Antenna Terminals
SUBEXHIBIT 11.6	Sections 2.1053, 22.917	Measurements Required: Field Strength of Spurious Radiation
SUBEXHIBIT 11.8	Section 2.947	List of Test Equipment Used

SUBEXHIBIT 11.2

Section 2.1046 MEASUREMENT REQUIRED: RF POWER OUTPUT

This test is a measurement of the total RF power level transmitted at the antenna-transmitting terminal (J4), as shown in the accompanying test set-up diagram. The radio was tuned to a channel which is transmitting in the 869-894 MHz frequency band. The power level of the base station was calibrated to allow the base station to operate at the manufacturer's maximum rated mean power level, i.e., +47.8dBm (60W) per carrier for LTE, and +47.8 dBm (60W) per port at the antenna-transmitting terminal.

For LTE, the RF power output with QPSK, 16QAM and 64QAM modulation were measured respectively.

Power measurements were made with a Power Meter in the average mode. The test set-up for conducting the RF power output measurement is shown in the following figure. Before the testing was started, the Base Station was given a sufficient "warm-up" period as required.

The maximum rated mean power at the antenna transmitting terminal was measured for a single carrier with LTE technology, both 5MHz and 10MHz, across 850 bands 869-894MHz. The RF power output measured for each configuration was shown as "Ref Lvl" in the plots provided in SubExhibit 11.4. The following channels were measured.

Table 11.2.1. 5MHz LTE Carrier Frequencies to Be Measured for RF Power Output (QPSK, 16QAM, 64QAM).

Band	EARFCN	Frequency (MHz)	Frequency Band
850	2425	871.5	A
	2485	877.5	A
	2535	882.5	B
	2585	887.5	B
	2625	891.5	B

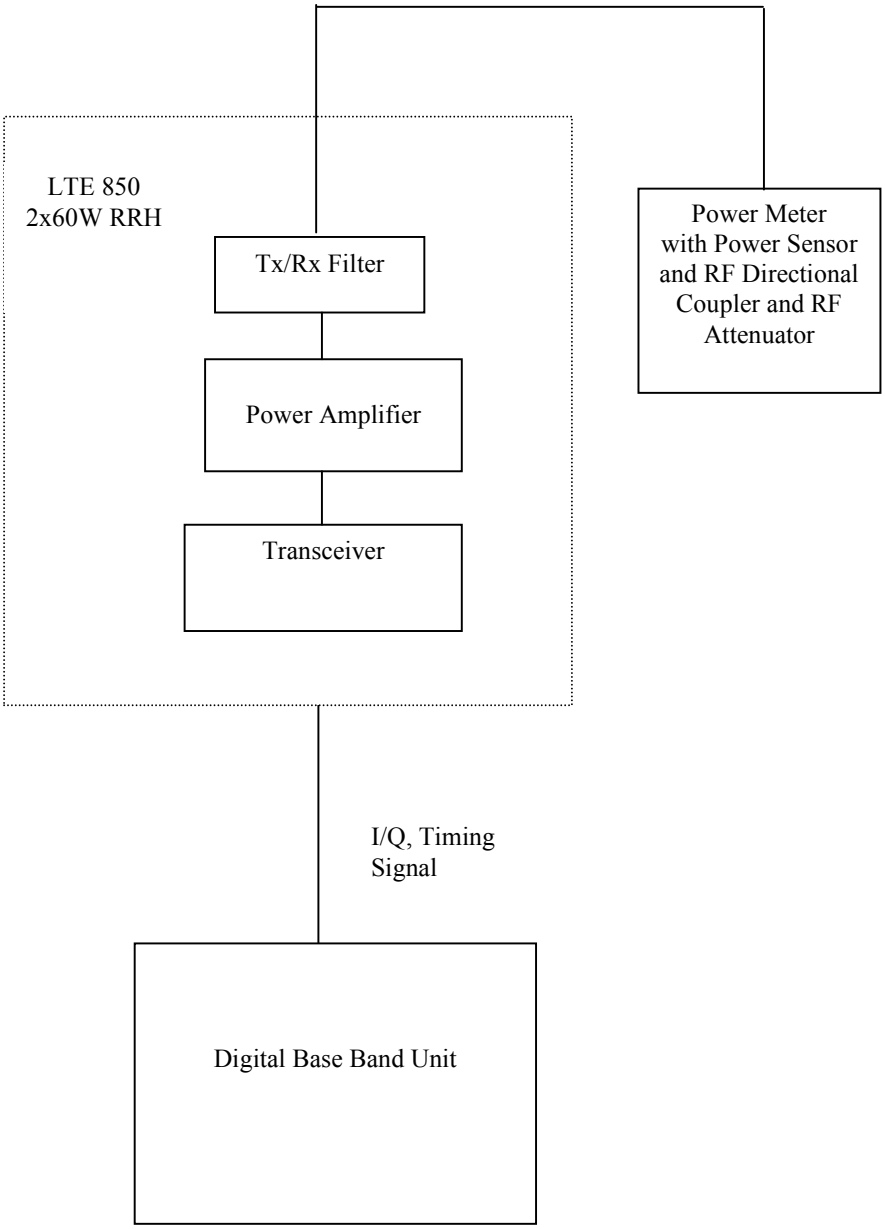
Table 11.2.2. 10MHz LTE Carrier Frequencies to Be Measured for RF Power Output (QPSK, 16QAM, 64QAM).

Band	EARFCN	Frequency (MHz)	Frequency Band
850	2450	874	A
	2560	885	B
	2600	889	B

Results:

The maximum rated mean RF power outputs of the Alcatel-Lucent LTE 2x60W 850 RRH at its antenna transmitting terminals across the 850 frequency band 869 – 894 MHz measured are 60W (+47.8 dBm) per carrier, 60W (+47.8 dBm) per port and 120 W (+50.8 dBm) per RRH, within ±1dB derivation, and are in full compliance with the Rules of the Commission.

FIGURE 11.2.1 TEST SET-UP FOR MEASUREMENT OF RADIO FREQUENCY POWER OUTPUT



SUBEXHIBIT 11.3

Section 2.1047 MEASUREMENT REQUIRED: MODULATION CHARACTERISTICS

The 850 2x60W LTE RRH supports LTE technology. The LTE utilizes Orthogonal Frequency Division Multiplex (OFDM) modulation techniques, where the data is distributed over a large number of closely spaced orthogonal subcarriers. The subcarriers are modulated with conventional modulation scheme, such as QPSK, 16QAM and 64QAM.

In LTE, the modulation characteristics for QPSK, 16QAM and 64QAM modulations are measured.

The measurement was performed for QPSK, 16QAM and 64QAM, respectively, for the following channels, where the carrier power level was adjusted to the rated maximum mean power +47.8dBm (60W) at the output terminal,

Table 11.3.1. 5MHz LTE Carrier Frequencies Measured for Modulation (QPSK, 16QAM, 64QAM).

Band	EARFCN	Frequency (MHz)	Frequency Band
850	2425	871.5	A
	2585	887.5	B

Table 11.3.2. 10MHz LTE Carrier Frequencies Measured for Modulation Characteristics (QPSK, 16QAM, 64QAM).

Band	EARFCN	Frequency (MHz)	Frequency Band
850	2450	874	A
	2560	885	B

The measurements were performed at the antenna transmitting terminal of the base station system with an Agilent N9020A MXA Signal Analyzer which was calibrated in accordance with ISO 9001 process.

The test set-up diagram is given in the Figure 11.3.1, where the Agilent N9020A MXA used the external signals from the base station as its trigger source and time reference.

Results:

Figure 11.3.2 shows three representative screen plots of the modulation measurement at 887.5MHz B band for a 5MHz LTE carrier, in QPSK, 16QAM and 64QAM modulations, respectively. Figure 11.3.3 shows three representative screen plots of the modulation measurement at 874MHz A band for a 10MHz LTE carrier, in QPSK, 16QAM and 64QAM modulations, respectively. They are in compliance with the Rules of the Commission for measurement requirement for modulation characteristics of the LTE 850 2x60W RRH.

FIGURE 11.3.1 TEST SET-UP FOR MEASUREMENT OF MODULATION ACCURACY, OCCUPIED BANDWIDTH AND OUT-OF-BAND EMISSIONS

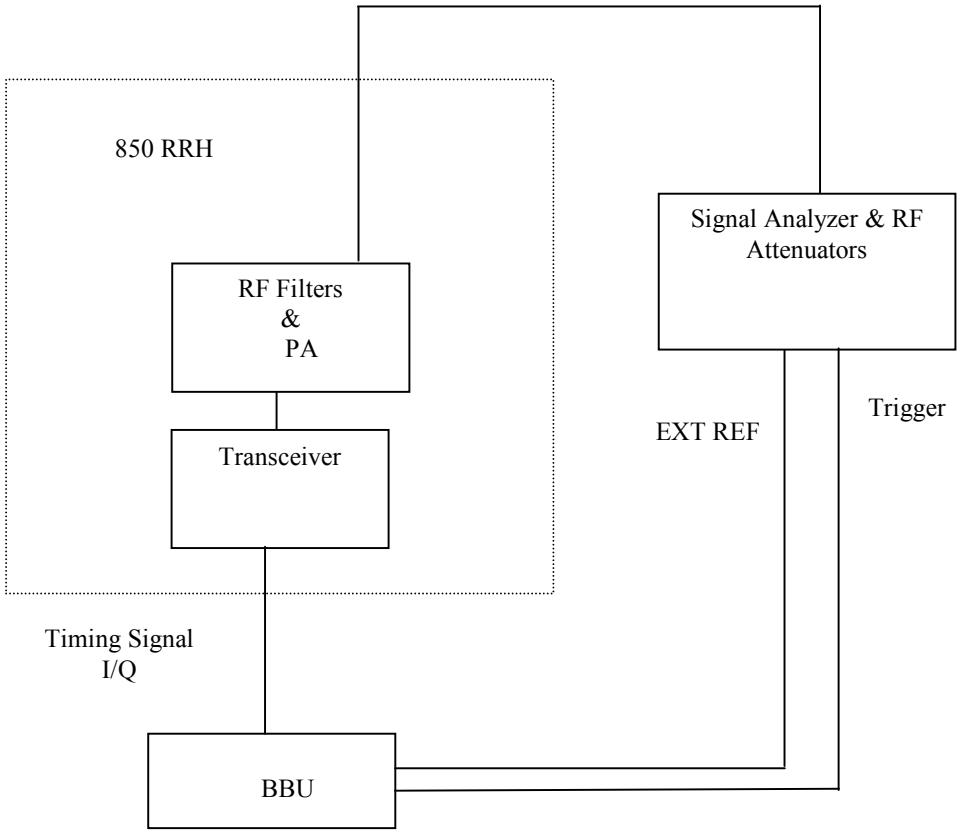
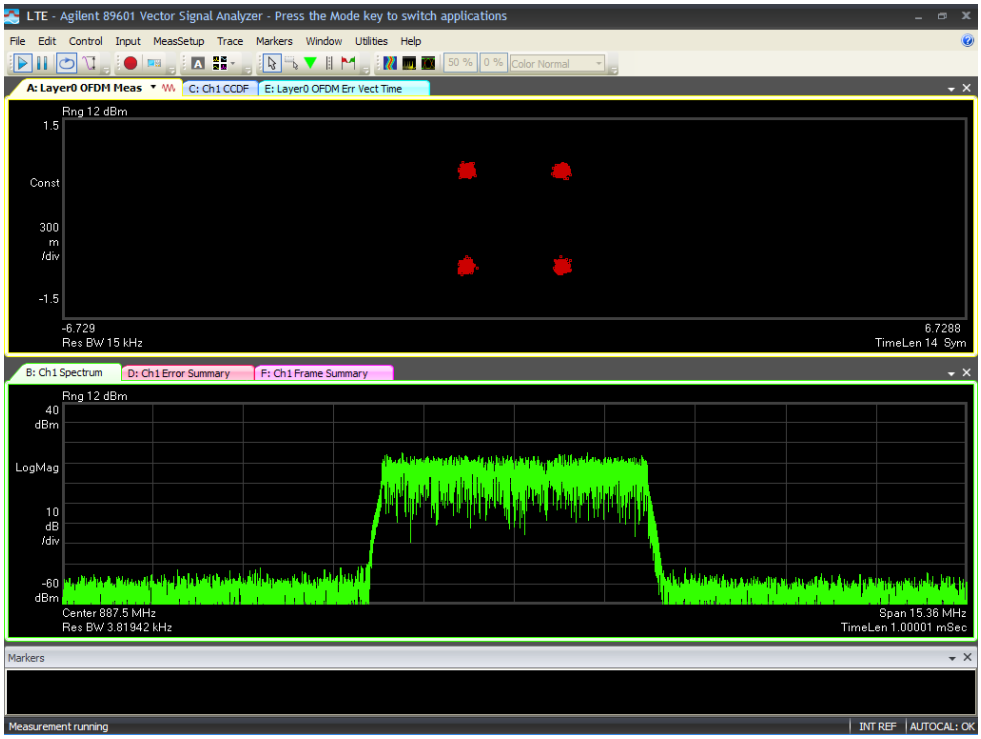
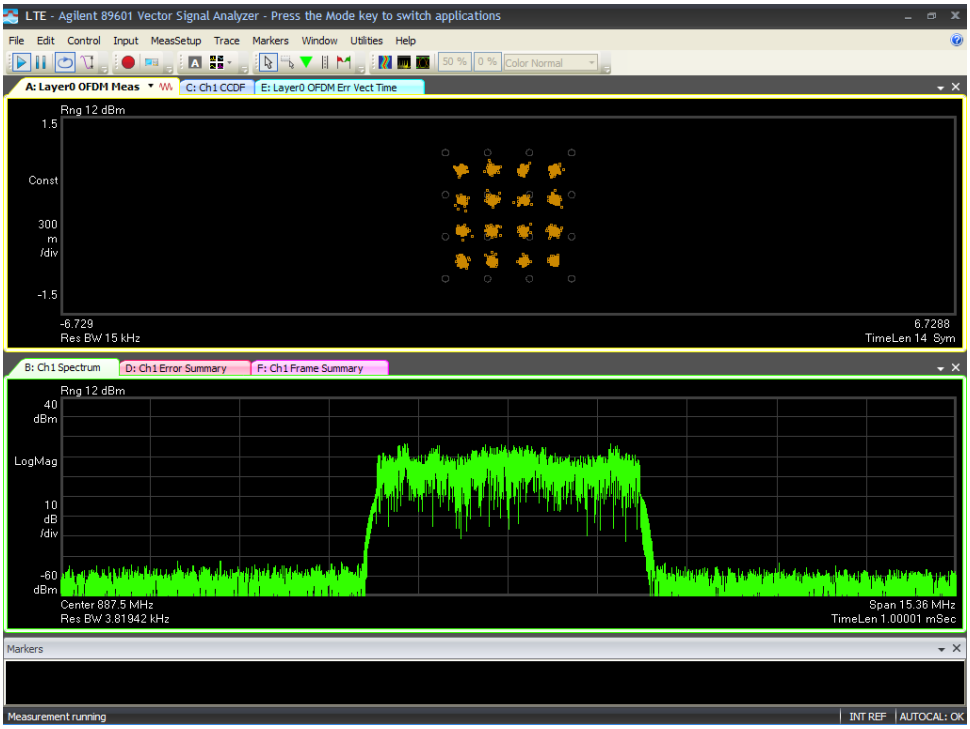


FIGURE 11.3.2 SCREEN PLOTS OF MODULATION MEASUREMENT AT 887.50 MHZ, B BAND, 5MHZ LTE WITH QPSK, 16QAM AND 64QAM MODULATIONS





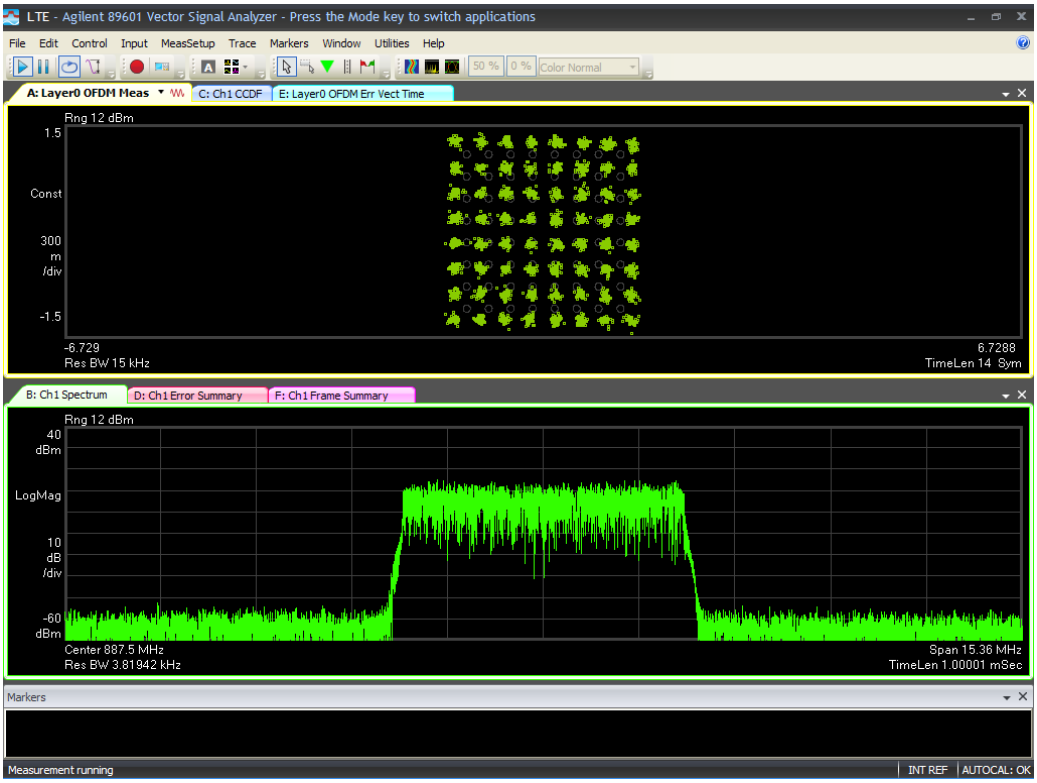
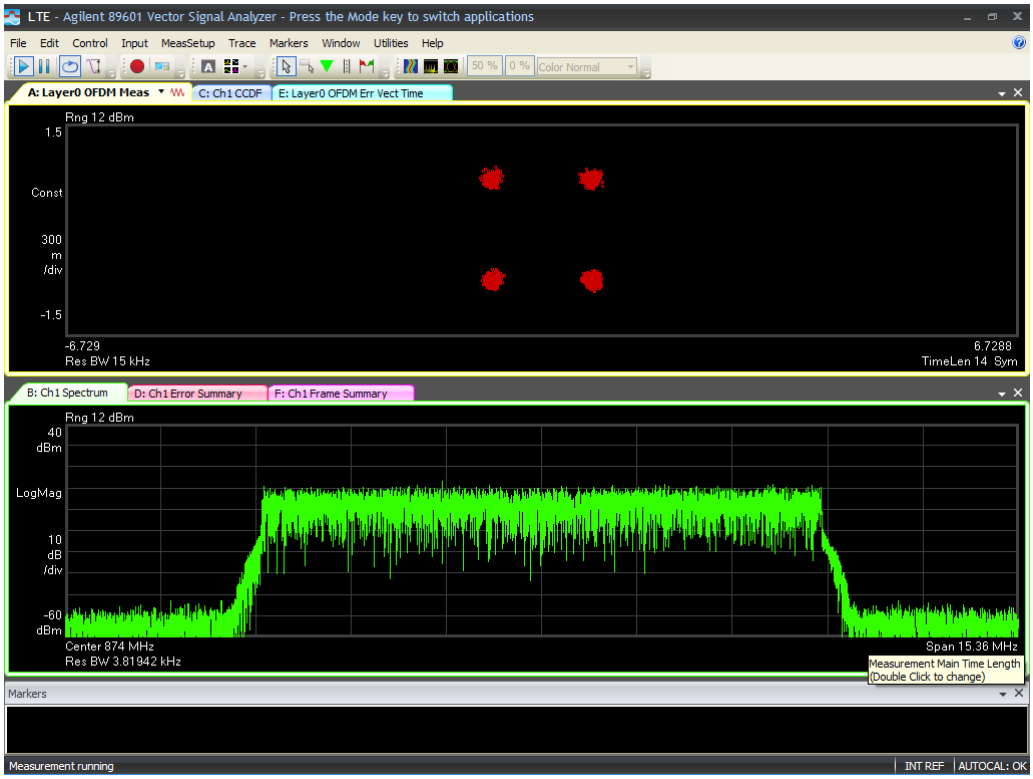
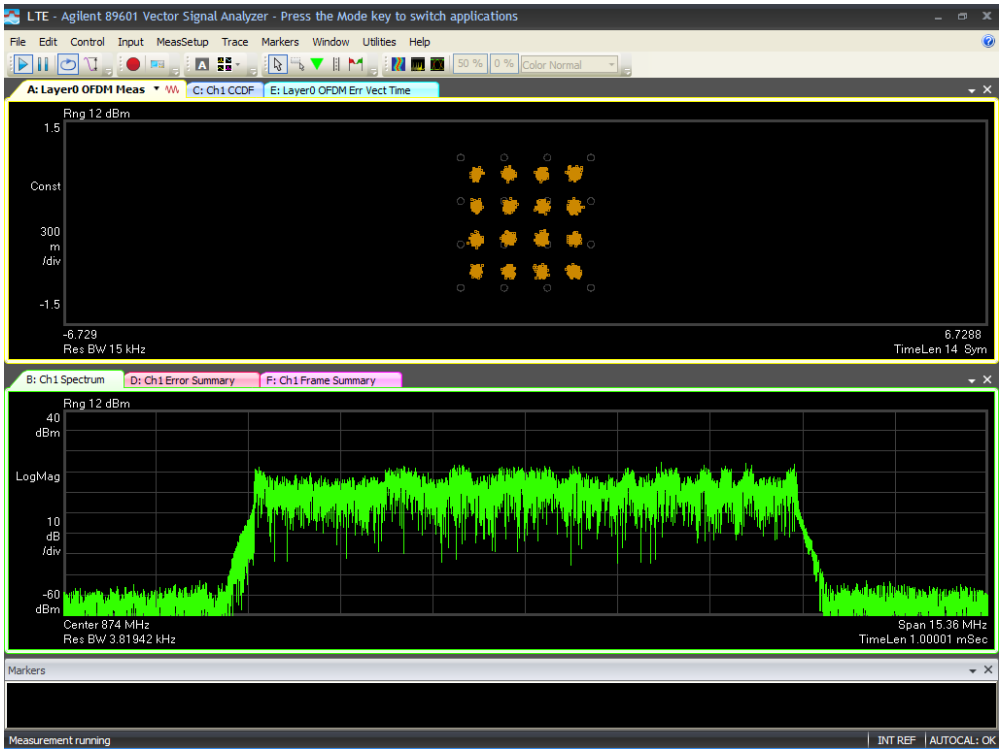
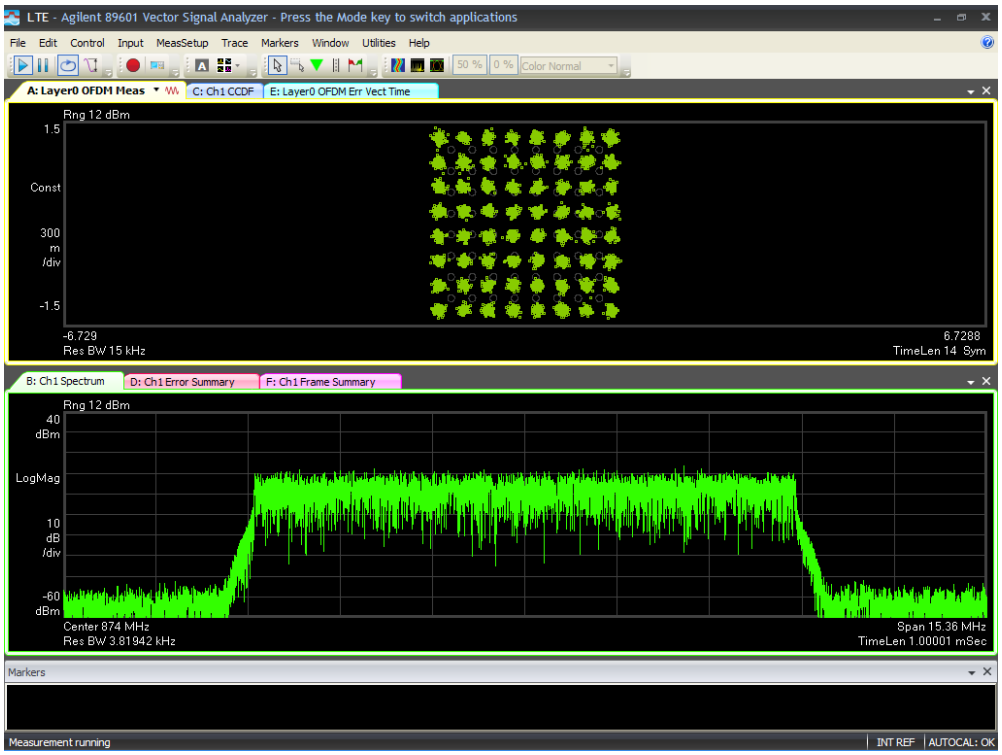


FIGURE 11.3.3 SCREEN PLOTS OF MODULATION MEASUREMENT AT 874 MHZ, A BAND, 10MHZ LTE WITH QPSK, 16QAM AND 64QAM MODULATIONS




LTE - Agilent 89601 Vector Signal Analyzer - Press the Mode key to switch applications
File Edit Control Input MeasSetup Trace Markers Window Utilities Help
A: Layer0 OFDM Meas
C: Ch1 CCDF
E: Layer0 OFDM Err Vect Time
Rng 12 dBm
1.5
Const
300
m
/div
-1.5
-6.729
Res BW 15 kHz
6.7288
TimeLen 14 Sym
B: Ch1 Spectrum
D: Ch1 Error Summary
F: Ch1 Frame Summary
Rng 12 dBm
40
dBm
LogMag
10
dB
/div
-60
dBm
Center 874 MHz
Res BW 3.81942 kHz
Span 15.36 MHz
TimeLen 1.00001 mSec
Markers
Measurement running
INT REF
AUTOCAL: OK


LTE - Agilent 89601 Vector Signal Analyzer - Press the Mode key to switch applications
File Edit Control Input MeasSetup Trace Markers Window Utilities Help
A: Layer0 OFDM Meas
C: Ch1 CCDF
E: Layer0 OFDM Err Vect Time
Rng 12 dBm
1.5
Const
300
m
/div
-1.5
-6.729
Res BW 15 kHz
6.7288
TimeLen 14 Sym
B: Ch1 Spectrum
D: Ch1 Error Summary
F: Ch1 Frame Summary
Rng 12 dBm
40
dBm
LogMag
10
dB
/div
-60
dBm
Center 874 MHz
Res BW 3.81942 kHz
Span 15.36 MHz
TimeLen 1.00001 mSec
Markers
Measurement running
INT REF
AUTOCAL: OK

SUBEXHIBIT 11.4

Section 2.1049 MEASUREMENT REQUIRED: OCCUPIED BANDWIDTH AND OUT-OF-BAND EMISSIONS

The 850 LTE 2x60W RRH transmits in the domestic 850 Band (Tx: 869-894 MHz and Rx: 824-849 MHz) with LTE and 2x60W. The two 25MHz bandwidth 850 spectrum is divided into A (A", A, and A') and B bands (B and B') as shown in the following table.

Table 11.4.1 Cellular Bands

850 Bands (BC 5)	Tx Frequency (MHz)	Rx Frequency (MHz)	Bandwidth (MHz)
A"	869-870	824 - 825	1
A	870 - 880	825 - 835	10
B	880 - 890	835 - 845	10
A'	890 – 891.5	844 – 845.5	1.5
B'	891.5 - 894	845.5 - 848	2.5

The 850 LTE RRH 2x60W Distributed Base station system supports one-carrier and multiple-carrier configurations per transmitting path with LTE technology. However, the current software release supports one 5MHz or 10MHz LTE single carrier per transmitting path.

The occupied bandwidth and out-of-band emissions measurements were made at the antenna transmitting terminal (J4) for one 5 MHz LTE carrier and one 10MHz LTE carrier in each of the A and B bands. The occupied bandwidth and out-of-band emissions measurements were made at the antenna transmitting terminal for one 5 MHz LTE carrier on the two channels which correspond to the lowest and highest available LTE channels in each of the 850 A and B frequency bands, respectively. The channels to be evaluated are given in Tables 11.2.1 and 11.2.2. The measurement was performed for QPSK, 16QAM and 64QAM modulations, respectively. At each of the carrier frequencies, the carrier power level at the antenna terminal was adjusted to the maximum rated mean power +47.8 dBm (60W).

The minimum emission requirements and the setting of measurement equipment for the occupied bandwidth measurement of an 850 carrier were specified in FCC Part 22. The FCC's requirements are tabulated in the following table, where MIMO requirement/margin is not included.

Table 11.4.2 FCC Part 22.917 Transmitter Unwanted Emission Limits

Frequency	Required Minimum Attenuation below the Mean Carrier Power *P*	Minimum Resolution Bandwidth of Spectrum Analyzer
1MHz Bands Immediately Outside the Transmitting Frequency Band	(43 + P dBW) dBc	50kHz for 5MHz carrier and 100kHz for 10MHz carrier
Outside the above Frequency Range	(43 + P dBW) dBc	100 kHz

The requirement of FCC Part 22.917 was used as the required emission limit mask in the LTE measurement.

The measurements were performed with a Rohde & Schwarz EMI Receiver, which was calibrated in accordance with ISO 9001 process. The test set-up diagram is same as the one shown in the Figure 11.3.1.

For the 99% occupied bandwidth measurement, the spectrum analyzer was set with a 200 kHz resolution bandwidth and 20 MHz span for the 99% occupied bandwidth measurement.

For the out-of-band emissions measurement, the spectrum analyzer was set with a 40MHz span. The emissions outside the above spans were evaluated in Measurement Required: Out-of-block Spurious Conducted Emissions.

For a 5MHz LTE carrier measurement, the spectrum analyzer was set with a 50 kHz resolution bandwidth as shown in the plots of the occupied bandwidth measurement attached in the following pages. The maximum mean output power of the LTE carrier, measured with a 3 MHz resolution bandwidth (maximum available), aligns with the top of the spectrum analyzer display reticule (Ref Lvl) minus 2.2dB for a 5MHz carrier. The 2.2 dB offset for a 5MHz LTE carrier was due to the fact that 10 log (5MHz/3MHz) = 2.2 dB. The top of the carrier measured with a 50 kHz resolution bandwidth, thus, was 20 dB below the LTE carrier power measured with a resolution bandwidth greater than the carrier bandwidth 5 MHz (if available). This 20dB offset was due to the fact that 10 log (5,000kHz/50kHz) = 20 dB.

For a 10MHz LTE carrier measurement, the spectrum analyzer was set with a 100 kHz resolution bandwidth as shown in the plots of the occupied bandwidth measurement attached in the following pages. The maximum mean output power of the LTE carrier, measured with a 3 MHz resolution bandwidth (maximum available), aligns with the top of the spectrum analyzer display reticule (Ref Lvl) minus 5.2dB. The 5.2 dB offset for LTE carrier was due to the fact that 10 log (10MHz/3MHz) = 5.2 dB. The top of the carrier measured with a 100 kHz resolution bandwidth, thus, was 20 dB below the LTE carrier power measured with a resolution bandwidth greater than the carrier bandwidth 10 MHz (if available). This 20dB offset was due to the fact that 10 log (10,000kHz/100kHz) = 20 dB.

Two 99% Occupied Bandwidth plots were submitted which have the largest bandwidth among all the modulations QPSK, 16QAM and 64 QAM evaluated for a 5MHz LTE carrier and a 10MHz LTE carrier, respectively.

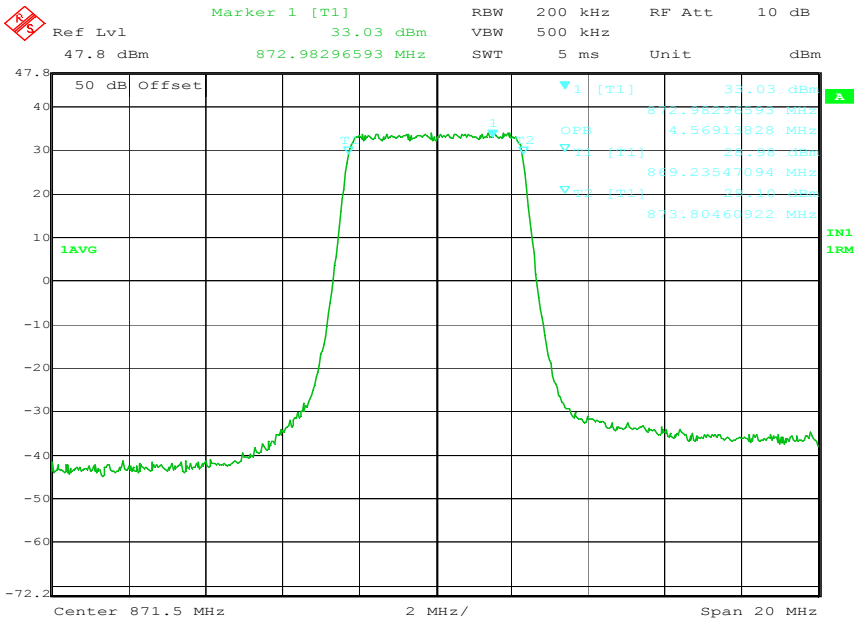
One emission plot is submitted for each 5MHz carrier and 10MHz carrier, respectively, which has the least margin among all 850 channels evaluated with QPSK, 16QAM or 64QAM modulations. The limits specified in FCC Part 22.917 are displayed in the plots.

Results:

From the occupied bandwidth and out-of-band plots attached in the following, it can be seen that all the waveforms are under the required FCC emission mask with more than 3dB margin. The measurement results demonstrate the full compliance with the Rules of the Commission at the lowest and highest settable channels of each available 850 band, including A"+A, B and B+A'+B' frequency bands.

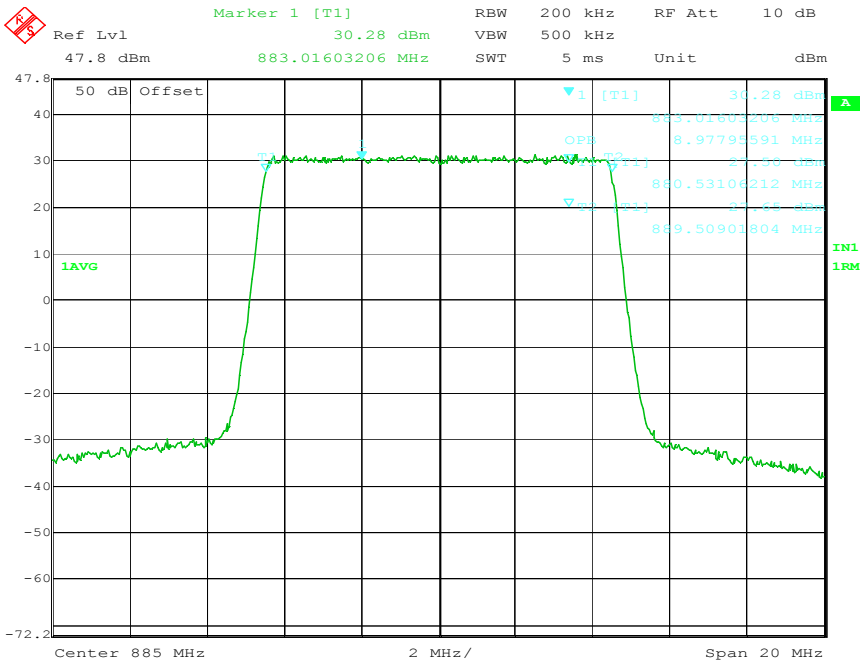
FIGURE 11.4.1 99% OCCUPIED BANDWIDTH PLOTS

(a) 5MHZ LTE CHANNEL 871.50 MHz WITH QPSK MODULATION — 4.57MHZ



Title: 99% POWER BANDWIDTH; TEST ENGINEER: SEG
Comment A: RRH 2X60 850 (LTE); 5MHz BW; TX:871.5 MHz
PWR: 60W; QPSK; FCC Part 22; FCCID: AS5ONEBTS-21
Date: 13.NOV.2012 10:12:56

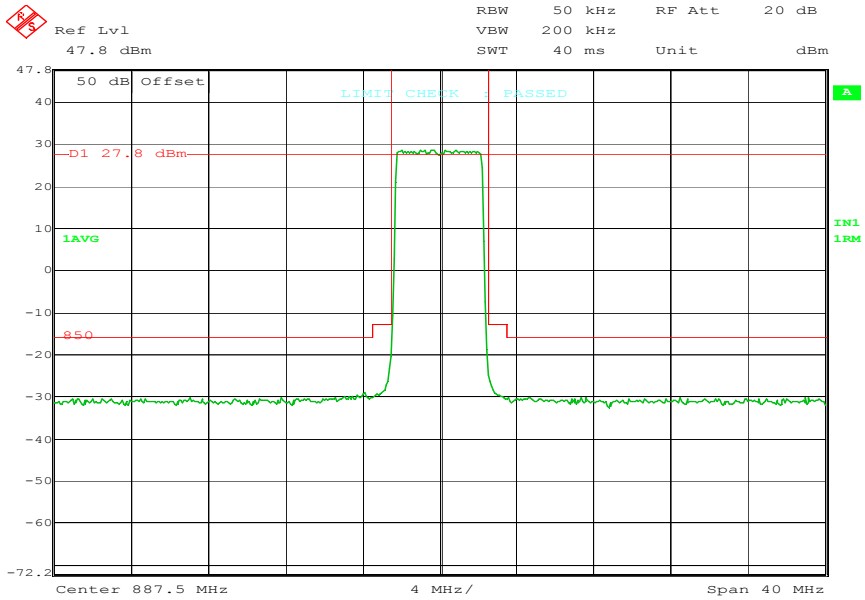
(b) 10MHZ LTE CHANNEL 885 MHz WITH 64QAM MODULATION — 8.98MHZ



Title: 99% POWER BANDWIDTH; TEST ENGINEER: SEG
Comment A: RRH 2X60 850 (LTE); 10MHz BW; TX: 885.0 MHz
PWR: 60W; 64QAM; FCC Part 22; FCCID: AS5ONEBTS-26
Date: 19.NOV.2012 13:01:26

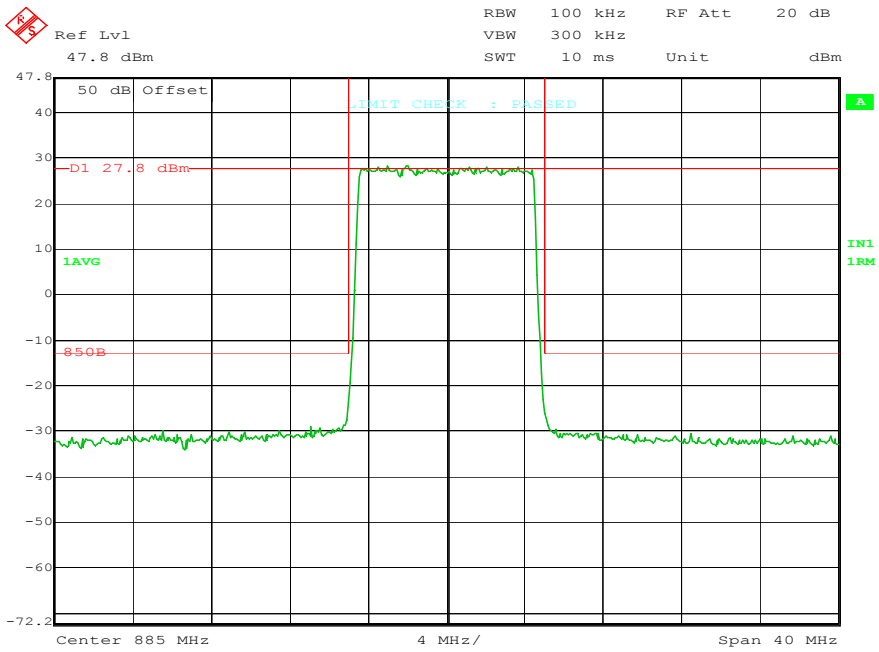
FIGURE 11.4.2 OCCUPIED BANDWIDTH AND OUT-OF-BAND EMISSIONS PLOTS

(a) LTE, B BAND, 887.50MHZ, 5MHZ, 60W/C, QPSK



Title: OCCUPIED BANDWIDTH; TEST ENGINEER: SEG
Comment A: RRH 2X60 850 (LTE); 5MHz BW; TX: 887.5 MHz
PWR: 60W; QPSK; FCC Part 22; FCCID: AS5ONEBTS-26
Date: 16.NOV.2012 10:23:11

(b) LTE, B BAND, 885.0MHZ, 10MHZ, 60W/C, 64QAM



Title: OCCUPIED BANDWIDTH; TEST ENGINEER: SEG
Comment A: RRH 2X60 850 (LTE); 10MHz BW; TX: 885.0 MHz
PWR: 60W; 64QAM; FCC Part 22; FCCID: AS5ONEBTS-26
Date: 19.NOV.2012 13:06:15

SUBEXHIBIT 11.5

Section 2.1051 MEASUREMENT REQUIRED: SPURIOUS EMISSIONS AT THE ANTENNA TERMINALS

The out-of-block spurious emissions at the antenna transmitting terminal were investigated from 10 MHz to the 10th harmonic of the carrier or 9 GHz, per Section 2.1057(a)(1).

The carrier setup and configurations are same as in Sub-exhibit 11.4.

The emission limitations and the setting of measurement equipment for the unwanted emissions measurement of 5MHz or 10MHz LTE carrier were specified in 22.917 and shown in Sub-exhibit 11.4.

For the mean output power of +47.8 dBm (60 W) at J4, the required spurious emissions attenuation per (43 + *P* dBW) dBc, is 60.8dBc. FCC CFR 47, Sections 2.1051 and 2.1057(c) specify that the spurious emissions attenuated more than 20 dB below the permissible value need not be reported. So the reportable limit is –80.8 dBc.

The measurements were performed with a Rohde & Schwarz EMI Receiver, which was calibrated in accordance with ISO 9001 process. The test set-up diagram is given in the Figure 11.3.1.

The carrier power level at the antenna transmitting terminal was calibrated before the conducted spurious emissions testing for each test.

The spectrum analyzer was set to a 100kHz resolution bandwidth. The r.m.s detector was used.

The spurious emissions in the frequency range of 10MHz to 9GHz are well under the required emission limit with more than approximately 23dB margins for all QPSK, 16QAM and 64QAM modulations evaluated. Therefore, there are no reportable emissions.

Results:

The out-of-block spurious emissions of the Alcatel-Lucent LTE 850 RRH2x60W in the entire spectrum investigated (10MHz to 9GHz) are under the required emission limit with sufficient margins. The measurement results demonstrate that the subject of the application is in full compliance with the Rules of the Commission.

SUBEXHIBIT 11.6

Section 2.1053 MEASUREMENT REQUIRED: FIELD STRENGTH OF SPURIOUS RADIATION

The field strength measurements of radiated spurious emissions were made in a FCC (Site Registration Number: 515091) and IC (Filing Number: 6933F-5) registered three meter semi-anechoic chamber AR-5 which is maintained by Alcatel-Lucent in Murray Hill, New Jersey.

The -48VDC LTE 850 2x60W RRH was investigated from 30 MHz to the 10th harmonic of the carrier or 9 GHz, per Section 2.1057(a)(1). The equipment under test (EUT) was configured as in the normal mode of the installation and operation. The recommendations of ANSI C63.4–2009 were followed for EUT testing setup and cabling.

The base station was configured to transmit one 5MHz LTE carrier on each Tx1 and Tx2 with the maximum mean power of 60W each. The test models used for configuring LTE carriers were described in Sub-exhibit 11.4. All carriers were transmitting to non-radiating 50 Ω resistive loads.

The emission limitations and the setting of measurement equipment for the conducted spurious emissions measurement of an 850 carrier were specified in 22.917 and shown in Sub-Exhibit 11.4.

By using the relation between the electric field strength of an ideal dipole and its excitation power given in Reference Data for Radio Engineers, page 676, 4th edition, ITT Corp., the emission limit calculated equals

Frequency of Emission (MHz)	Separation Distance (m)	E (dBμV/m)	Detector/RBW
10-9,000	3	84.1	Average/100kHz

The field strength of radiated spurious emissions measured was determined by

$$E\ (\text{dB}\mu\text{V/m}) = V_{\text{meas}}\ (\text{dB}\mu\text{V}) + \text{Cable Loss (dB)} + \text{Antenna Factor (dB1/m)}.$$

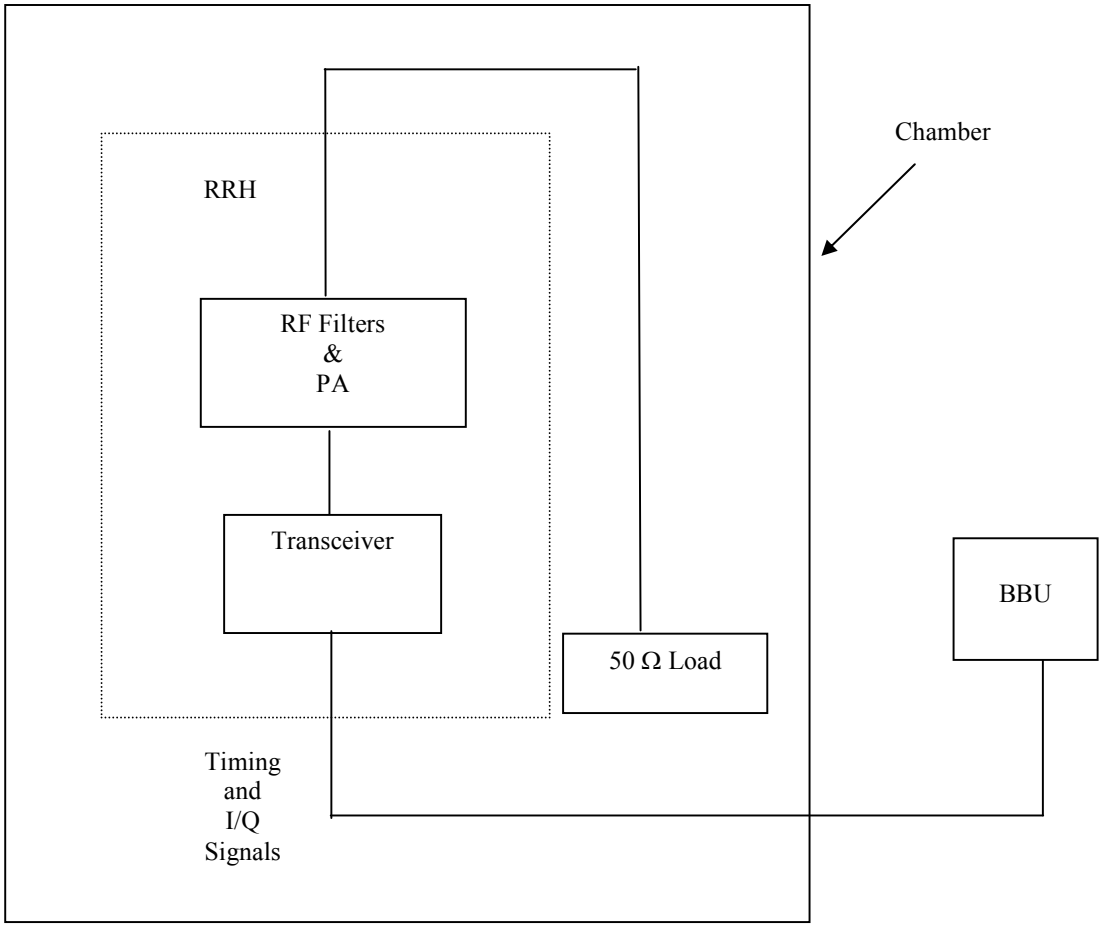
Sections 2.1051 and 2.1057(c) specify that the spurious emissions attenuated more than 23 dB below the permissible value need not be reported. Therefore, the reportable limit at 3 meter is 61.1 dBμV/m.

All the measurement equipment used, including antennas, was calibrated in accordance with ISO 9001 process. The EUT setup diagram is given in the Figure 11.6.1.

Results:

Over the frequency spectrum investigated (30MHz to 9GHz), no reportable radiated spurious emissions were detected. The measurement results of the Alcatel-Lucent LTE 850 2x60W RRH, subject of this application, demonstrate the full compliance with the Rules of the Commission.

FIGURE 11.6.1 EUT FOR MEASUREMENT OF RADIATED SPURIOUS EMISSIONS



SUBEXHIBIT 11.7

Section 2.947 LISTING OF TEST EQUIPMENT USED

Equipment	Manufacturer	Model	Serial No.	Calibrated Date	Due Cal. Date
Power Meter	HP	437B	3125U21135	10/2/2012	10/2/2013
Power Sensor	HP	8481A	3318A90195	7/26/2012	7/26/2013
EMI Test Receiver (20Hz to 40 GHz)	Rohde & Schwarz	ESIB40	100044	6/27/2012	8/27/2013
EMI Test Receiver (20Hz to 40 GHz)	Rohde & Schwarz	ESIB40	100100	3/28/2012	3/28/2013
MXA	Agilent	N9020A	MY50510383	4/07/2011	4/07/2013
Spectrum Analyzer 9kHz-22GHz	Hewlett-Packard	8593E	3911A04009	9/22/2011	12/22/2012
Attenuator 5dB (5W)	Weinschel	2-6	BX3438	1/23/2012	1/23/2013
Attenuator (100 W)	Weinschel	48-30-33, E961	AY8323	N/A	N/A
Attenuator (150W)	Weinschel	66-20-34, E 815	BW7320	8/31/2011	11/30/2012
Directional Coupler	HP	778D, E1122	18655	N/A	N/A
Bilogical Antenna 25-2000MHz	A.H. Systems	SAS-521-2	408	2/07/2012	2/07/2013
Double Ridged Horn Ant. 1-18GHz	EMCO	3115	9903-5769	1/17/2012	1/17/2013
Pre-amplifier 1-26.5GHz	Hewlett-Packard	8449B	3008A01270	9/10/2012	9/10/2013
Pre-amplifier 9kHz-1.3GHz	Hewlett-Packard	8447D	2944A09820	9/10/2012	9/10/2013