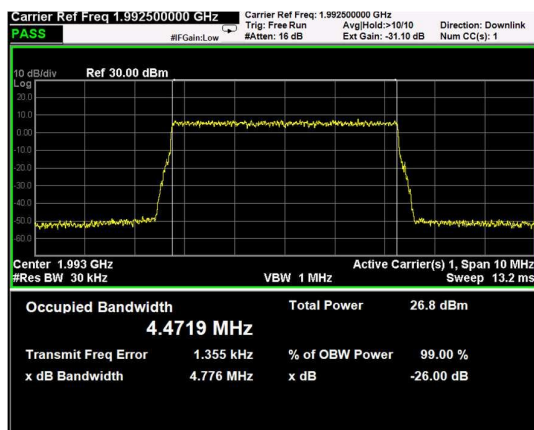
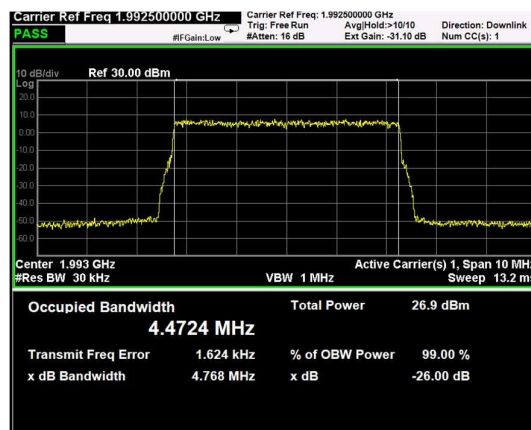
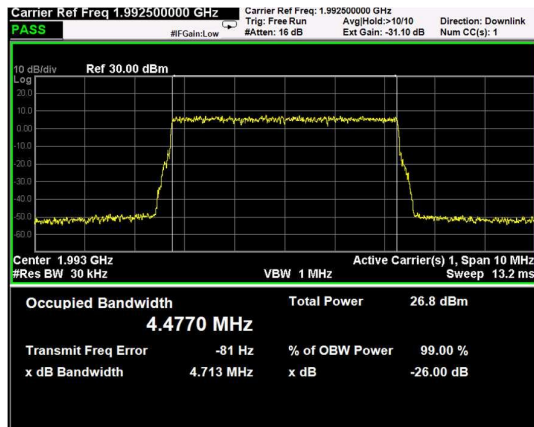




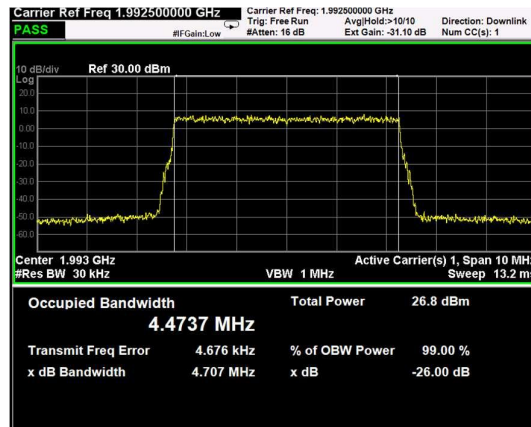
Channel: TOP, Modulation: QPSK,
 BW=5MHz



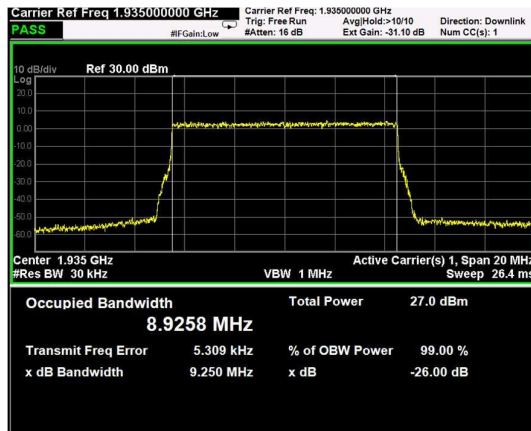
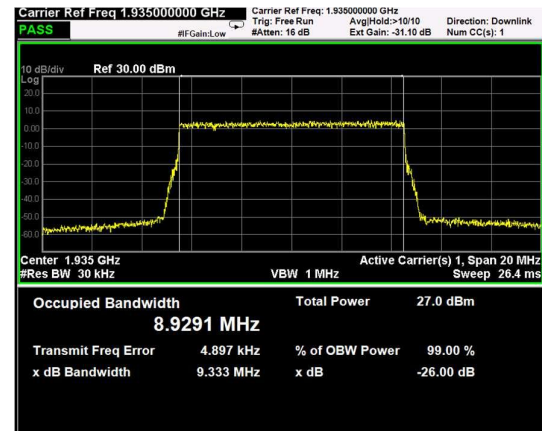
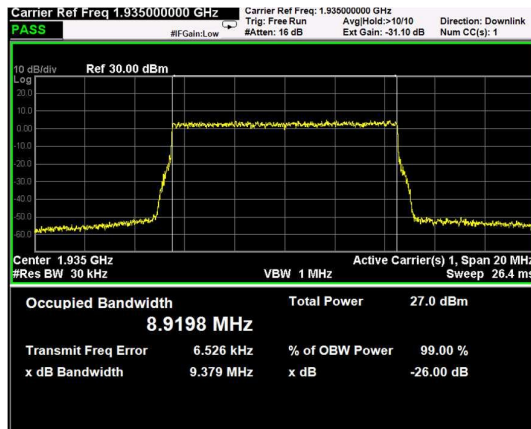
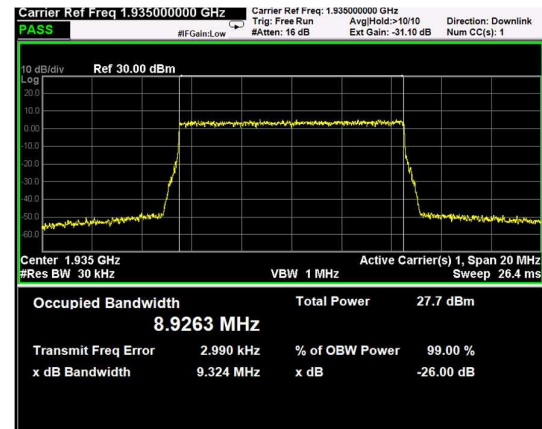
Channel: TOP, Modulation: 16QAM,
 BW=5MHz

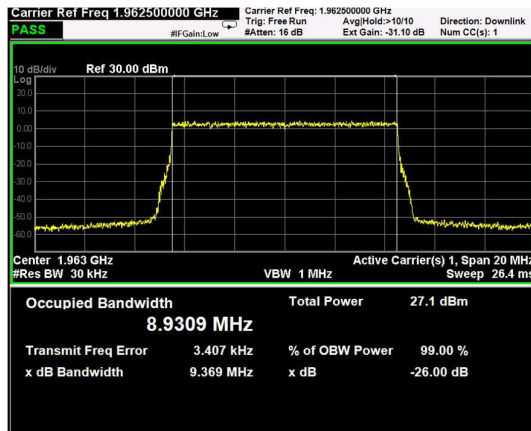
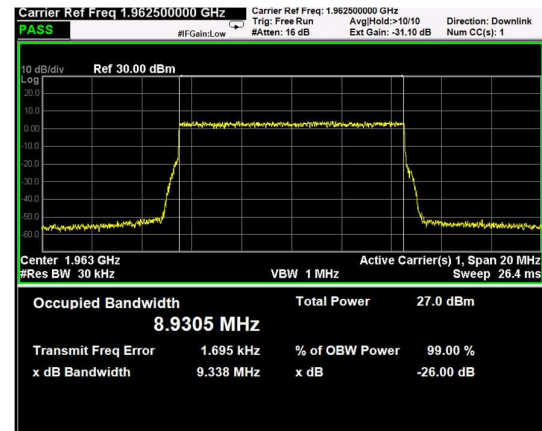
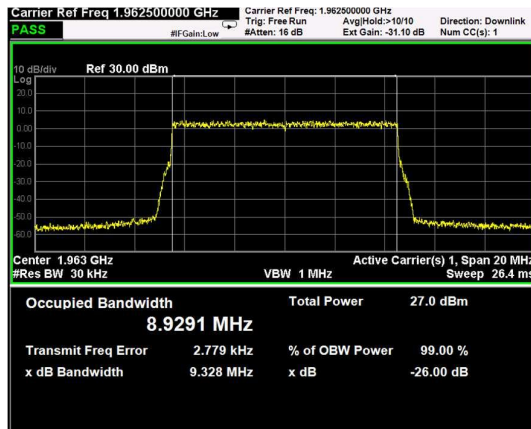
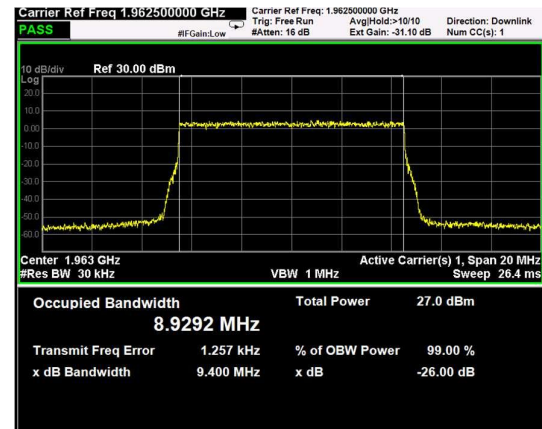


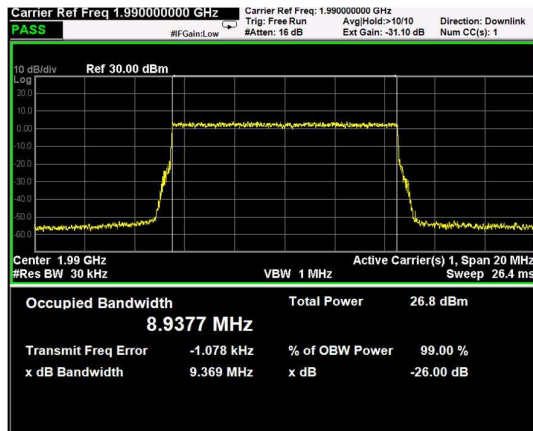
Channel: TOP, Modulation: 64QAM,
 BW=5MHz



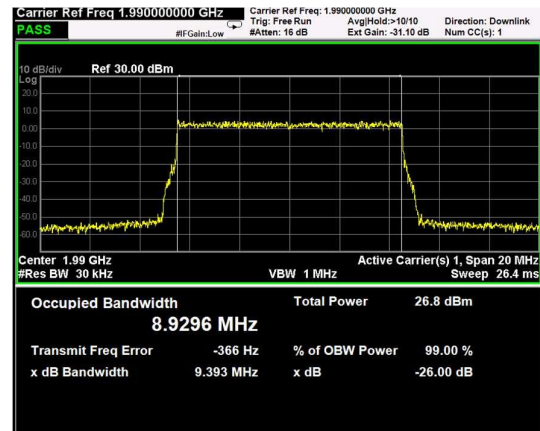
Channel: TOP, Modulation: 256QAM,
 BW=5MHz


Channel: BOTTOM, Modulation: QPSK,
BW=10MHz

Channel: BOTTOM, Modulation: 16QAM,
BW=10MHz

Channel: BOTTOM, Modulation: 64QAM,
BW=10MHz

Channel: BOTTOM, Modulation: 256QAM,
BW=10MHz

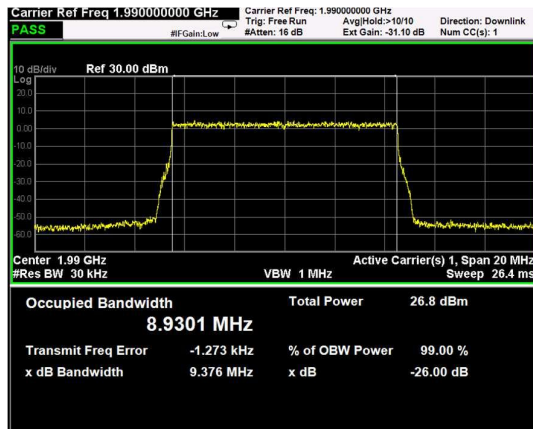

Channel: MIDDLE, Modulation: QPSK,
BW=10MHz

Channel: MIDDLE, Modulation: 16QAM,
BW=10MHz

Channel: MIDDLE, Modulation: 64QAM,
BW=10MHz

Channel: MIDDLE, Modulation: 256QAM,
BW=10MHz



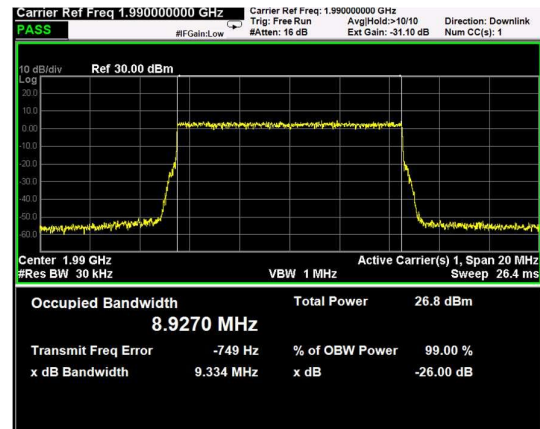
Channel: TOP, Modulation: QPSK,
BW=10MHz



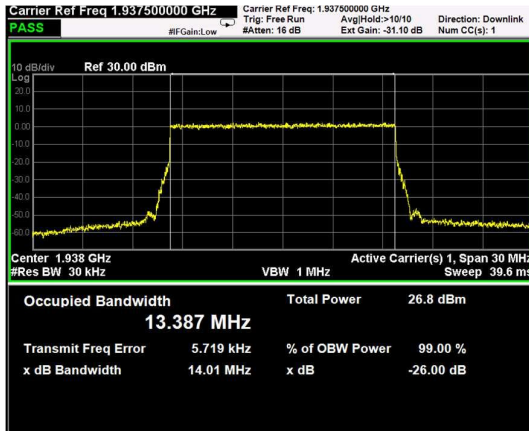
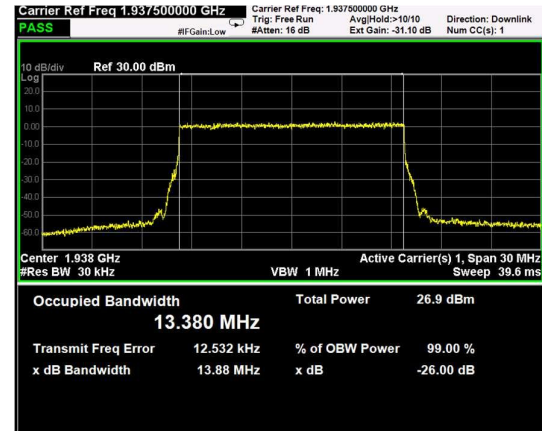
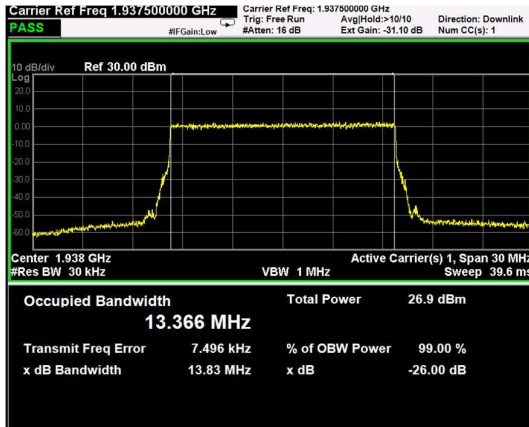
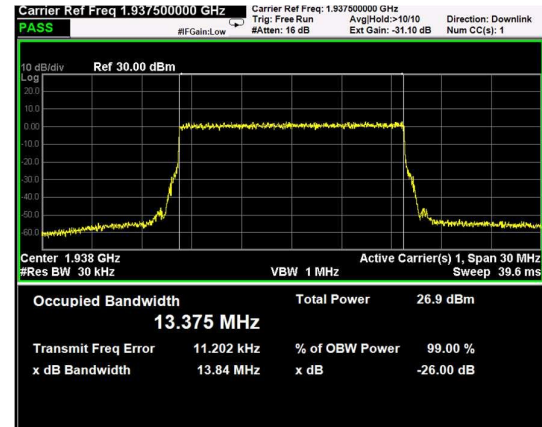
Channel: TOP, Modulation: 16QAM,
BW=10MHz

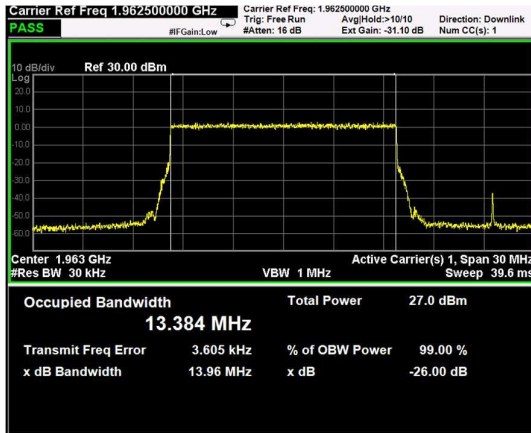


Channel: TOP, Modulation: 64QAM,
BW=10MHz

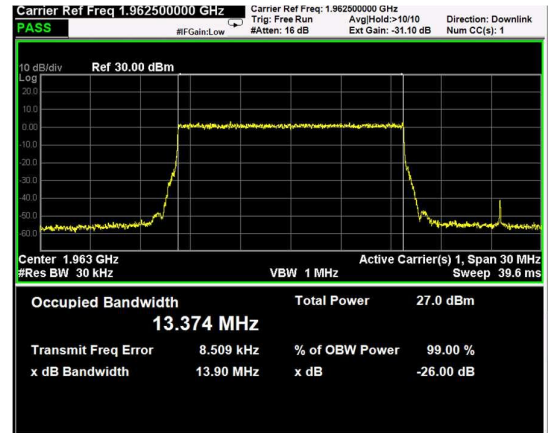


Channel: TOP, Modulation: 256QAM,
BW=10MHz

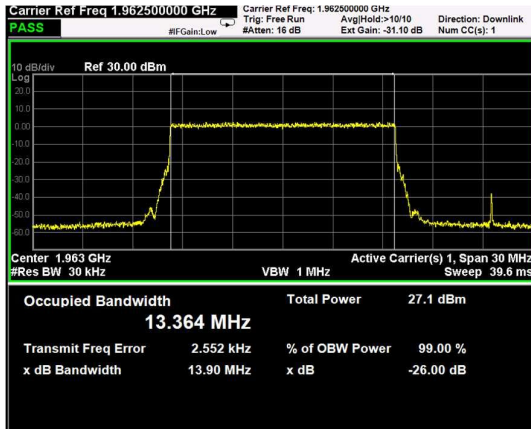

Channel: BOTTOM, Modulation: QPSK,
BW=15MHz

Channel: BOTTOM, Modulation: 16QAM,
BW=15MHz

Channel: BOTTOM, Modulation: 64QAM,
BW=15MHz

Channel: BOTTOM, Modulation: 256QAM,
BW=15MHz



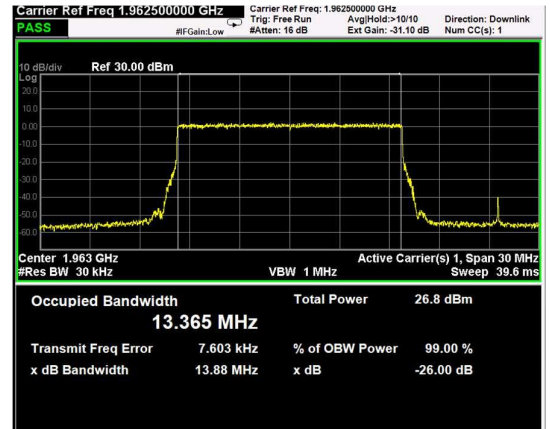
Channel: MIDDLE, Modulation: QPSK,
 BW=15MHz



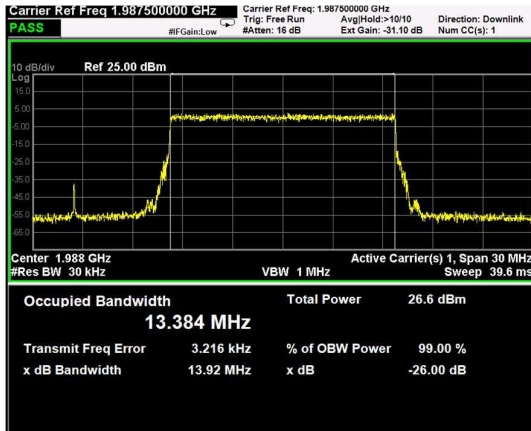
Channel: MIDDLE, Modulation: 16QAM,
 BW=15MHz



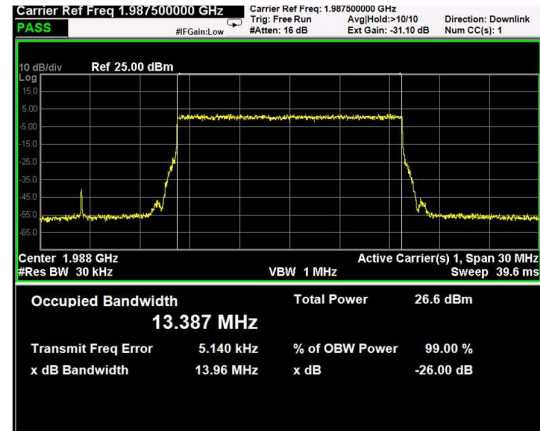
Channel: MIDDLE, Modulation: 64QAM,
 BW=15MHz



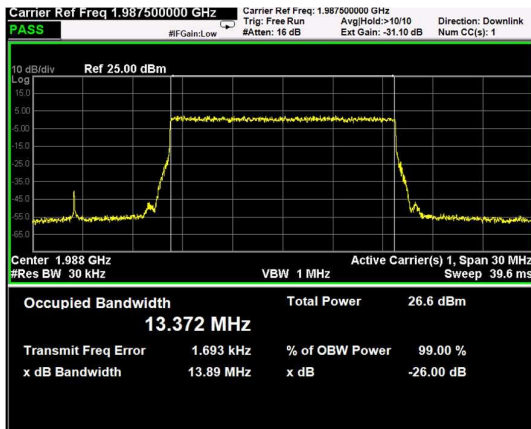
Channel: MIDDLE, Modulation: 256QAM,
 BW=15MHz



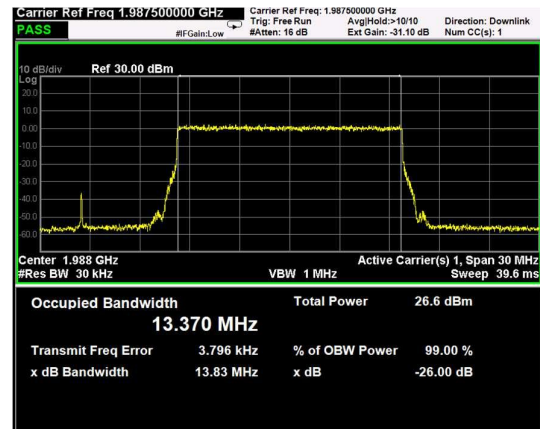
Channel: TOP, Modulation: QPSK,
BW=15MHz



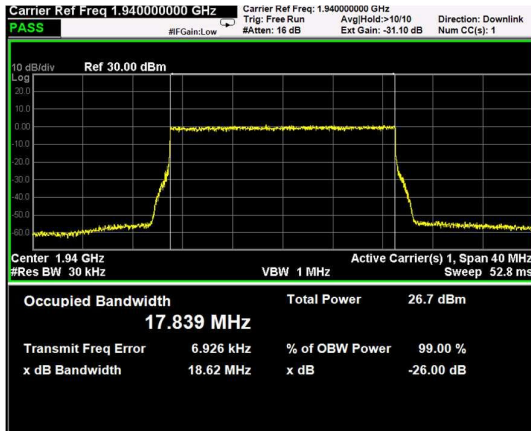
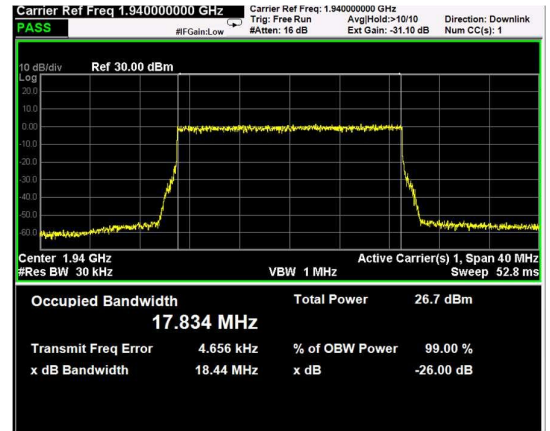
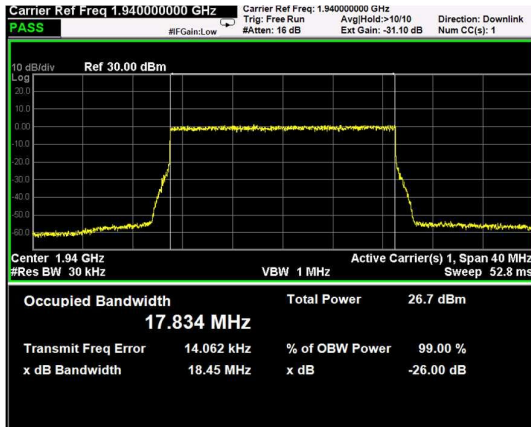
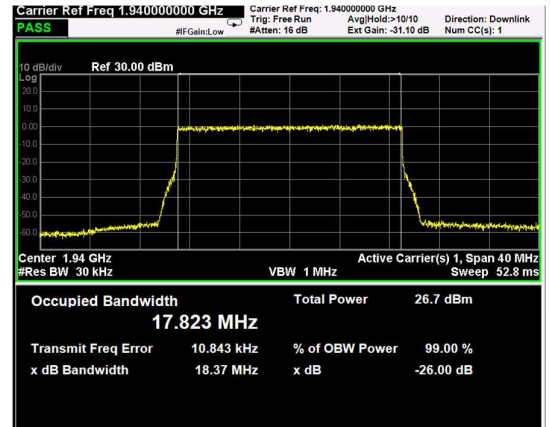
Channel: TOP, Modulation: 16QAM,
BW=15MHz

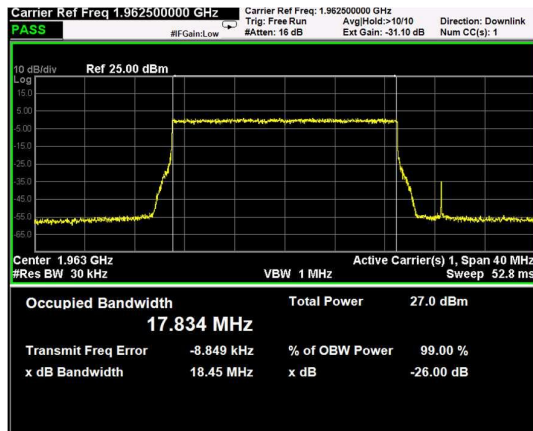
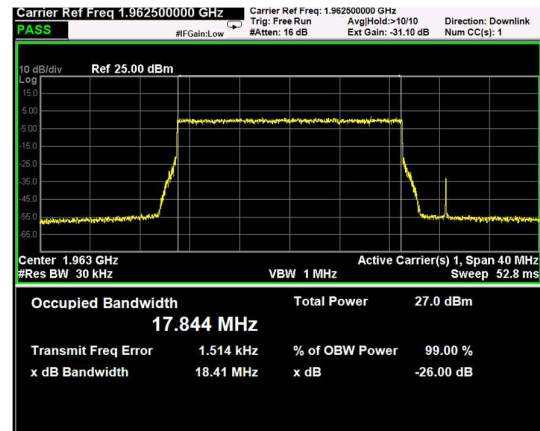
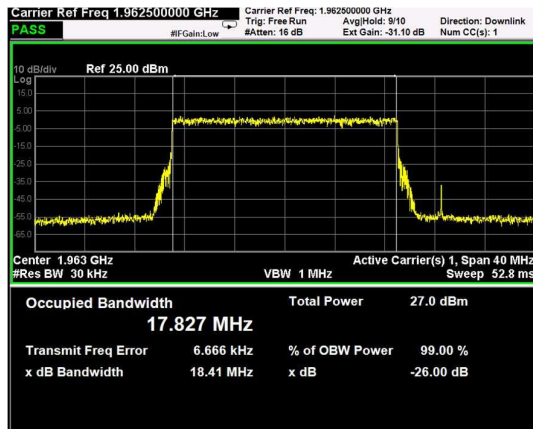
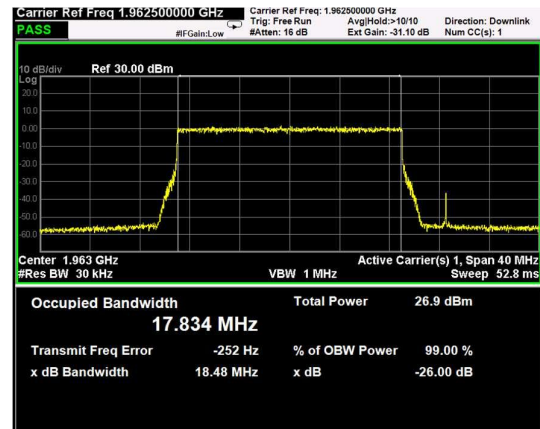


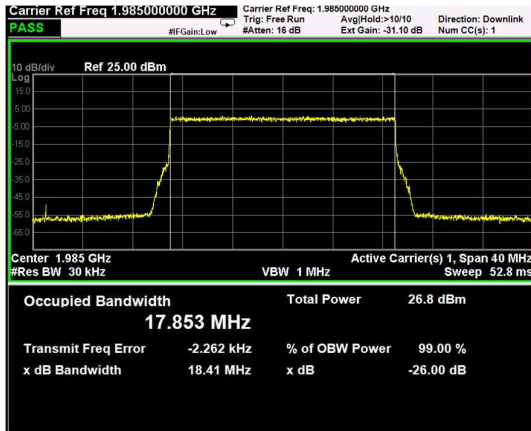
Channel: TOP, Modulation: 64QAM,
BW=15MHz



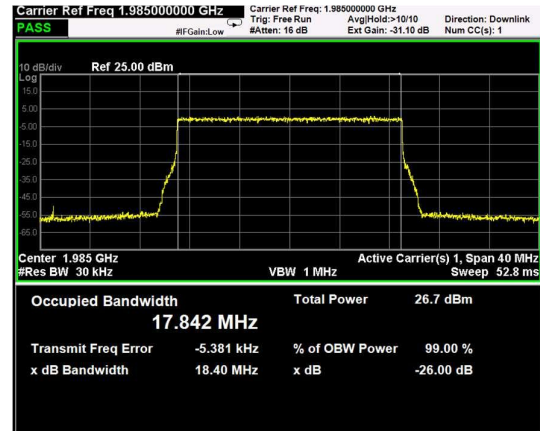
Channel: TOP, Modulation: 256QAM,
BW=15MHz


Channel: BOTTOM, Modulation: QPSK,
BW=20MHz

Channel: BOTTOM, Modulation: 16QAM,
BW=20MHz

Channel: BOTTOM, Modulation: 64QAM,
BW=20MHz

Channel: BOTTOM, Modulation: 256QAM,
BW=20MHz

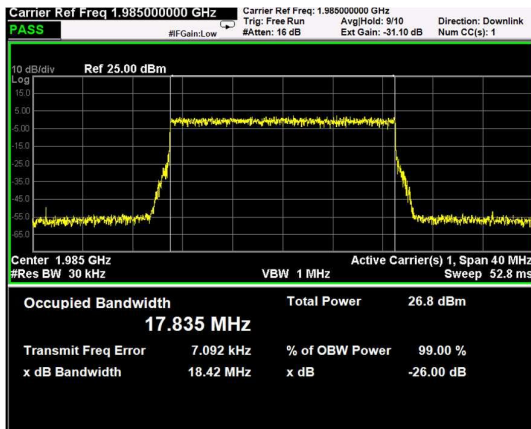

Channel: MIDDLE, Modulation: QPSK,
BW=20MHz

Channel: MIDDLE, Modulation: 16QAM,
BW=20MHz

Channel: MIDDLE, Modulation: 64QAM,
BW=20MHz

Channel: MIDDLE, Modulation: 256QAM,
BW=20MHz



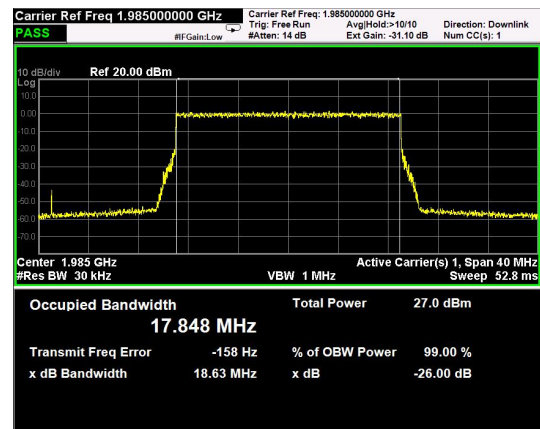
Channel: TOP, Modulation: QPSK,
BW=20MHz



Channel: TOP, Modulation: 16QAM,
BW=20MHz



Channel: TOP, Modulation: 64QAM,
BW=20MHz



Channel: TOP, Modulation: 256QAM,
BW=20MHz

Clause 24.232(a) Peak output power at RF antenna connector

(a) (1) Base stations with an emission bandwidth of 1 MHz or less are limited to 1640 watts equivalent isotropically radiated power (EIRP) with an antenna height up to 300 meters HAAT, except as described in paragraph (b) below.

(a) (2) Base stations with an emission bandwidth greater than 1 MHz are limited to 1640 watts/MHz equivalent isotropically radiated power (EIRP) with an antenna height up to 300 meters HAAT, except as described in paragraph (b) below.

(d) Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of §24.51. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

Test date: 10/21/2019 to 12/13/2019

Test results: Pass

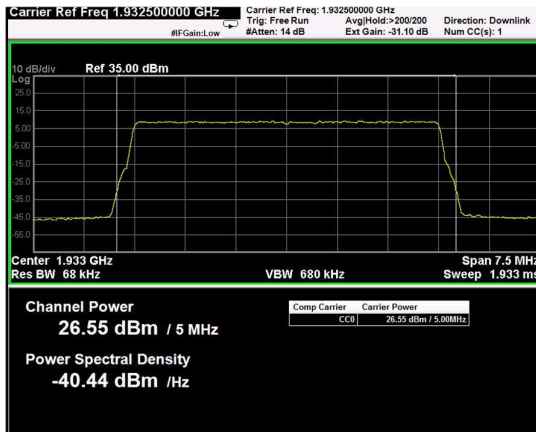
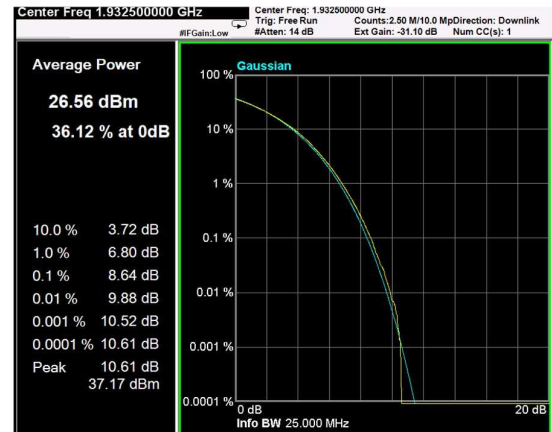
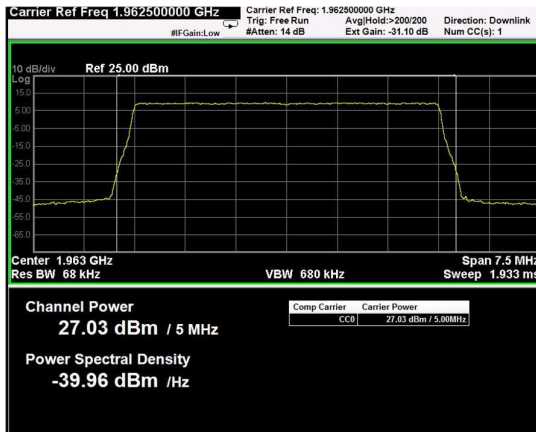
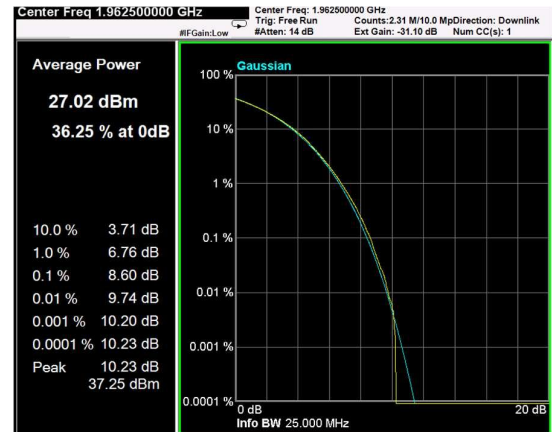
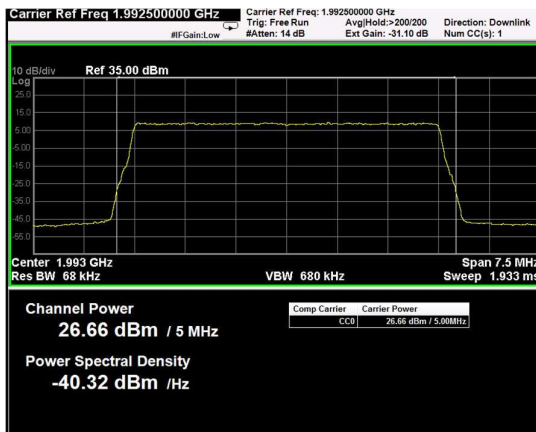
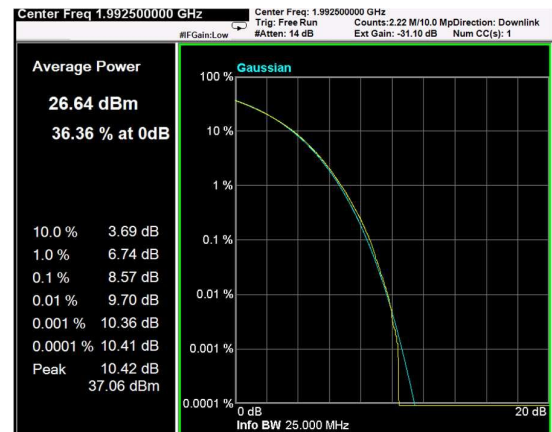
Special notes

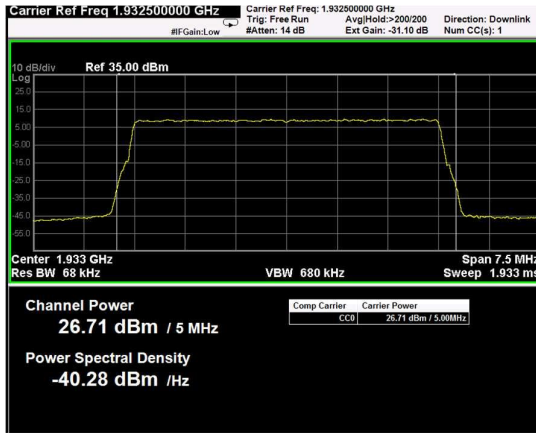
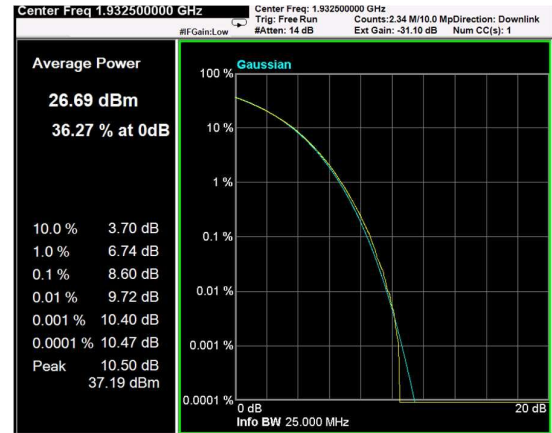
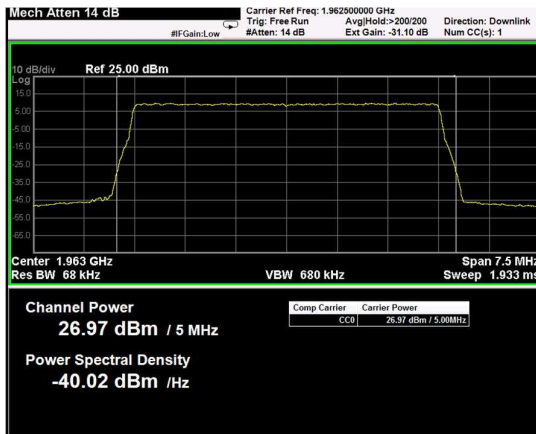
Clause 24.232(a) Peak output power at RF antenna connector

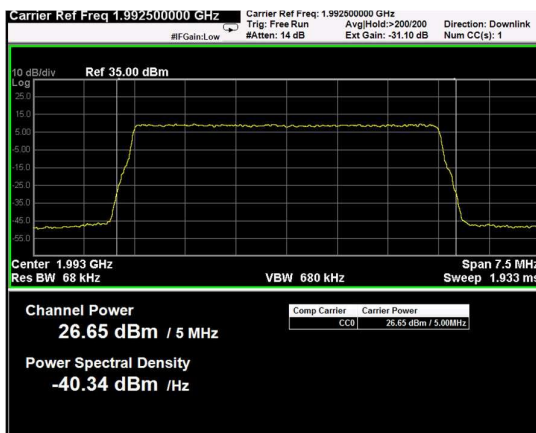
Test data

RF PORT 1

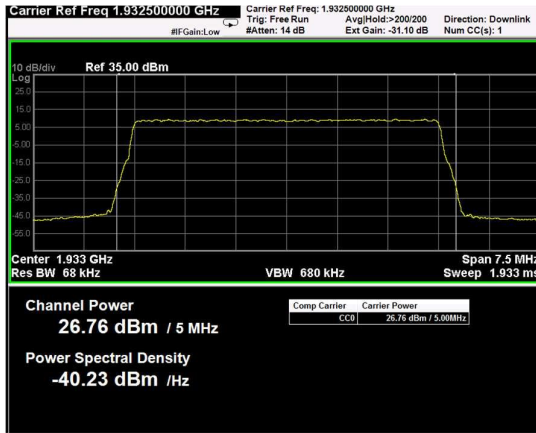
Test data					
Direction	Modulation	Frequency (MHz)	RF output Power (dBm)	RF output channel Power (W)	PAR (dB)
Down-link	LTE 5MHz (QPSK)	1932.5	26.6	0.452	10.6
Down-link	LTE 5MHz (QPSK)	1962.5	27.0	0.505	10.2
Down-link	LTE 5MHz (QPSK)	1992.5	26.7	0.463	10.4
Down-link	LTE 5MHz (16QAM)	1932.5	26.7	0.469	10.5
Down-link	LTE 5MHz (16QAM)	1962.5	27.0	0.498	10.3
Down-link	LTE 5MHz (16QAM)	1992.5	26.7	0.462	10.4
Down-link	LTE 5MHz (64QAM)	1932.5	26.8	0.474	10.6
Down-link	LTE 5MHz (64QAM)	1962.5	27.0	0.501	10.3
Down-link	LTE 5MHz (64QAM)	1992.5	26.3	0.426	10.4
Down-link	LTE 5MHz (256QAM)	1932.5	26.8	0.474	10.5
Down-link	LTE 5MHz (256QAM)	1962.5	27.1	0.516	10.3
Down-link	LTE 5MHz (256QAM)	1992.5	26.9	0.488	10.6


Channel: BOTTOM, Modulation: QPSK,
BW=5MHz, Channel Power

Channel: BOTTOM, Modulation: QPSK,
BW=5MHz, CCDF

Channel: MIDDLE, Modulation: QPSK,
BW=5MHz, Channel Power

Channel: MIDDLE, Modulation: QPSK,
BW=5MHz, CCDF

Channel: TOP, Modulation: QPSK,
BW=5MHz, Channel Power

Channel: TOP, Modulation: QPSK,
BW=5MHz, CCDF


Channel: BOTTOM, Modulation: 16QAM,
BW=5MHz, Channel Power

Channel: BOTTOM, Modulation: 16QAM,
BW=5MHz, CCDF

Channel: MIDDLE, Modulation: 16QAM,
BW=5MHz, Channel Power

Channel: MIDDLE, Modulation: 16QAM,
BW=5MHz, CCDF

Channel: TOP, Modulation: 16QAM,
BW=5MHz, Channel Power

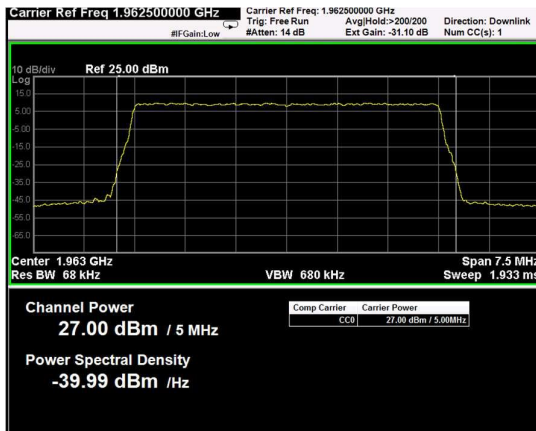
Channel: TOP, Modulation: 16QAM,
BW=5MHz, CCDF



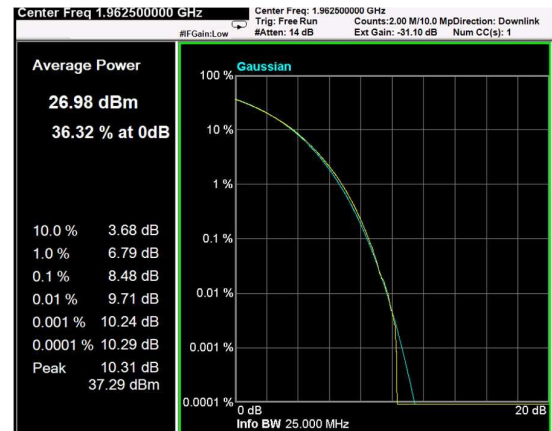
Channel: BOTTOM, Modulation: 64QAM, BW=5MHz, Channel Power



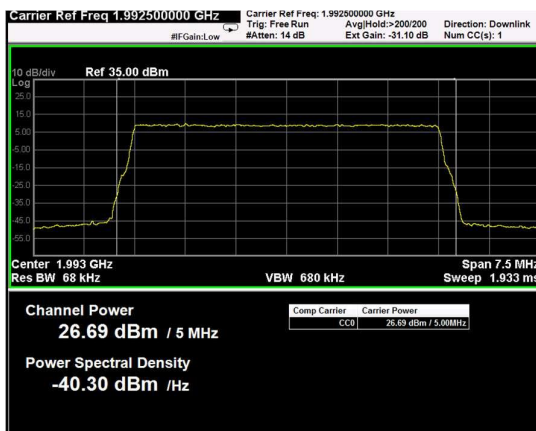
Channel: BOTTOM, Modulation: 64QAM, BW=5MHz, CCDF



Channel: MIDDLE, Modulation: 64QAM, BW=5MHz, Channel Power



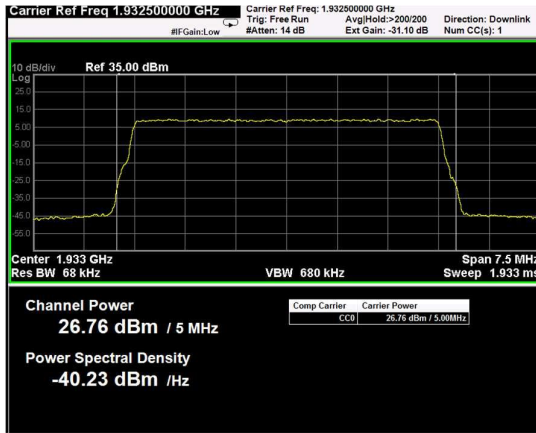
Channel: MIDDLE, Modulation: 64QAM, BW=5MHz, CCDF



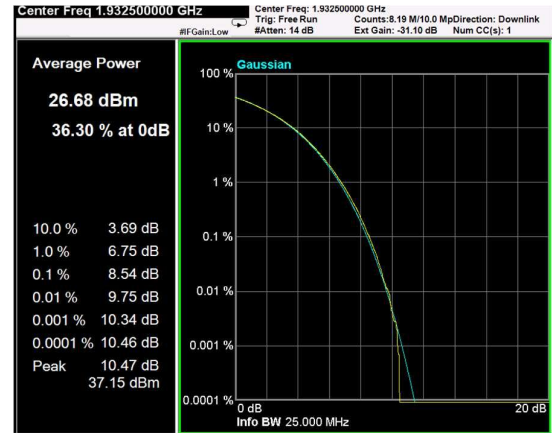
Channel: TOP, Modulation: 64QAM, BW=5MHz, Channel Power



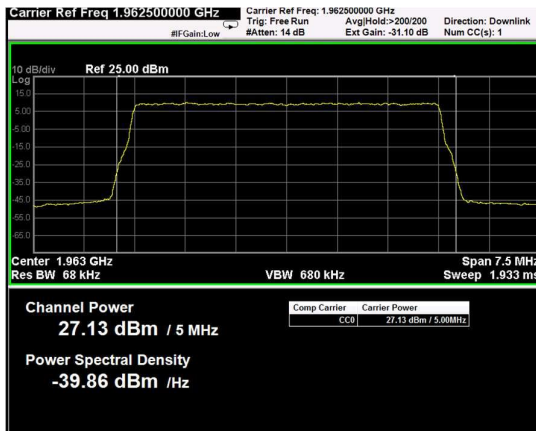
Channel: TOP, Modulation: 64QAM, BW=5MHz, CCDF



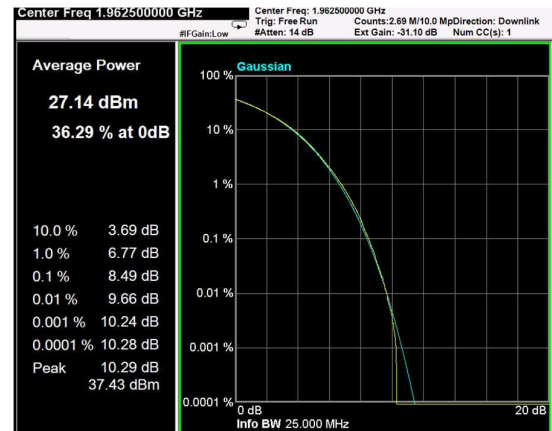
Channel: BOTTOM, Modulation: 256QAM, BW=5MHz, Channel Power



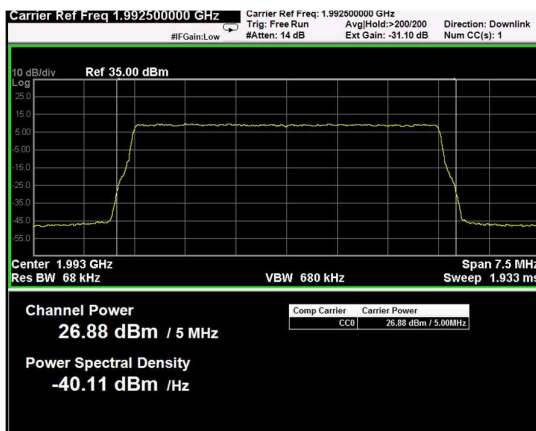
Channel: BOTTOM, Modulation: 256QAM, BW=5MHz, CCDF



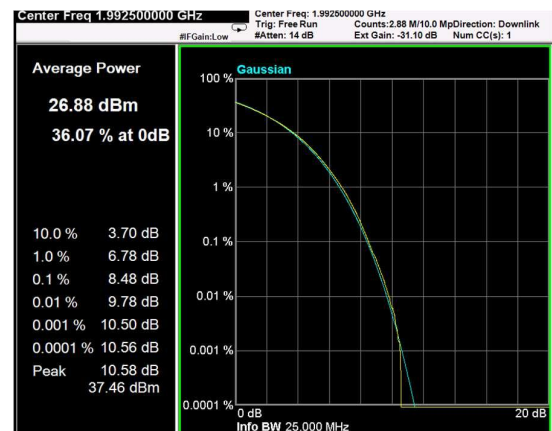
Channel: MIDDLE, Modulation: 256QAM, BW=5MHz, Channel Power



Channel: MIDDLE, Modulation: 256QAM, BW=5MHz, CCDF



Channel: TOP, Modulation: 256QAM, BW=5MHz, Channel Power



Channel: TOP, Modulation: 256QAM, BW=5MHz, CCDF

Test data					
Direction	Modulation	Frequency (MHz)	RF output Power (dBm)	RF output channel Power (W)	PAR (dB)
Down-link	LTE 10MHz (QPSK)	1935	26.9	0.486	9.4
Down-link	LTE 10MHz (QPSK)	1962.5	27.0	0.498	9.1
Down-link	LTE 10MHz (QPSK)	1990	27.2	0.522	9.1
Down-link	LTE 10MHz (16QAM)	1935	26.9	0.492	9.4
Down-link	LTE 10MHz (16QAM)	1962.5	27.0	0.500	9.2
Down-link	LTE 10MHz (16QAM)	1990	27.2	0.524	9.1
Down-link	LTE 10MHz (64QAM)	1935	26.9	0.489	9.3
Down-link	LTE 10MHz (64QAM)	1962.5	27.0	0.502	9.1
Down-link	LTE 10MHz (64QAM)	1990	27.2	0.520	9.1
Down-link	LTE 10MHz (256QAM)	1935	26.9	0.488	9.3
Down-link	LTE 10MHz (256QAM)	1962.5	27.0	0.502	9.1
Down-link	LTE 10MHz (256QAM)	1990	27.2	0.526	9.1