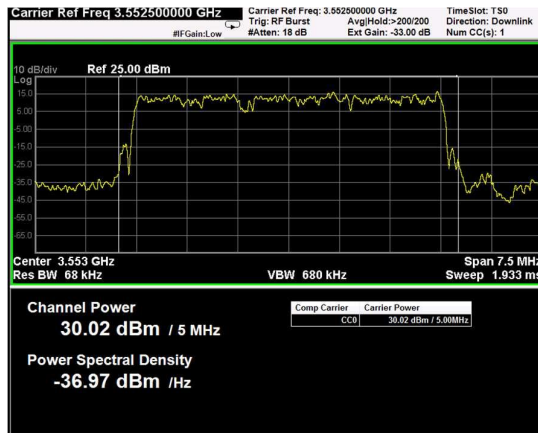
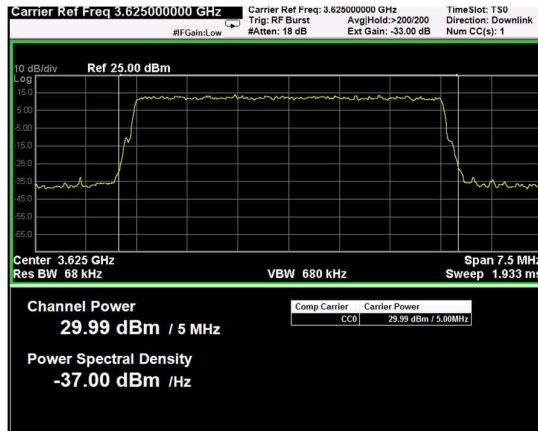




Channel: BOTTOM, Modulation: 256QAM, BW=5MHz, Channel Power



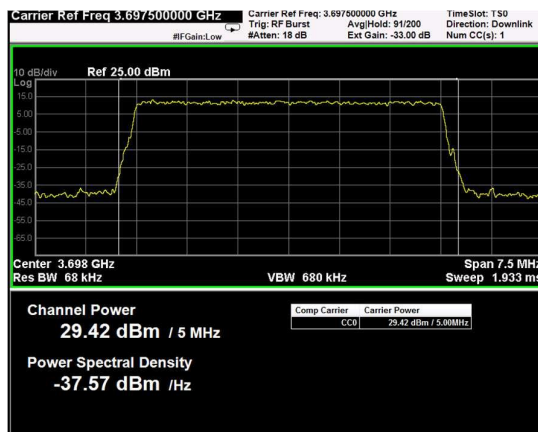
Channel: BOTTOM, Modulation: 256QAM, BW=5MHz, CCDF



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



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

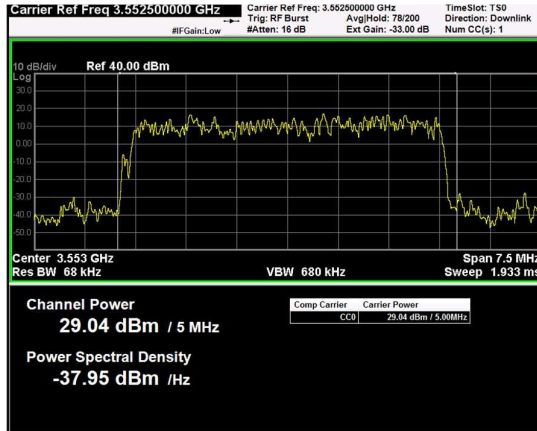


Channel: TOP, Modulation: 256QAM, BW=5MHz, Channel Power



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

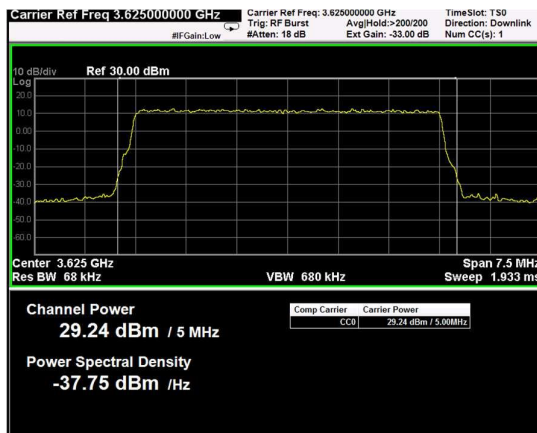
RF PORT 2



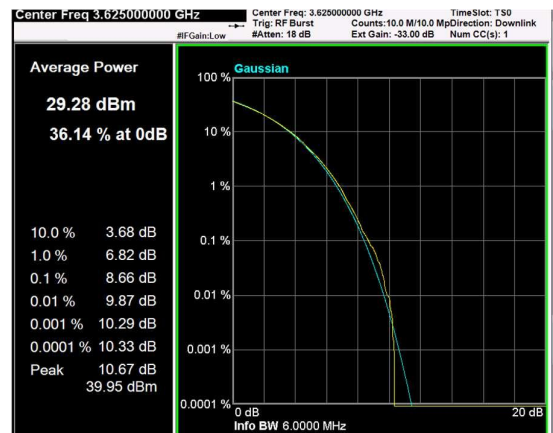
Channel: BOTTOM, Modulation: QPSK,
BW=5MHz, Channel Power



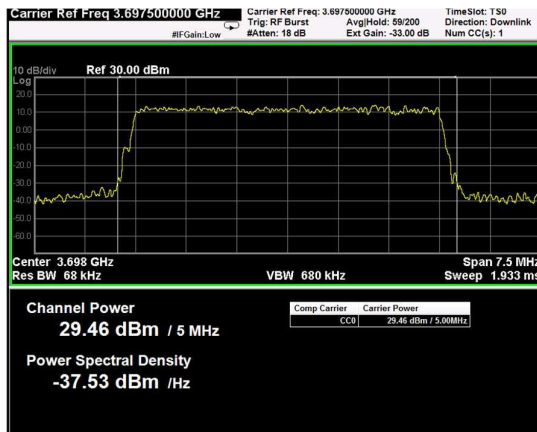
Channel: BOTTOM, Modulation: QPSK,
BW=5MHz, CCDF



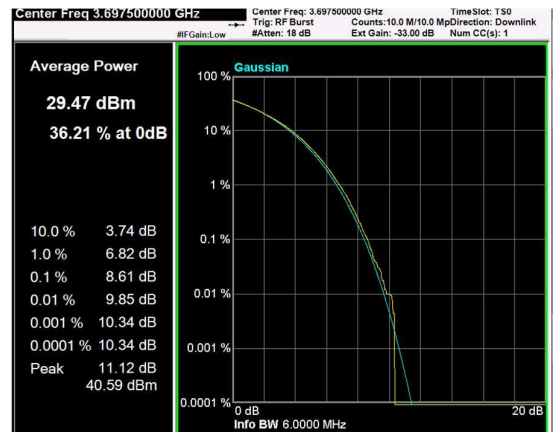
Channel: MIDDLE, Modulation: QPSK,
BW=5MHz, Channel Power



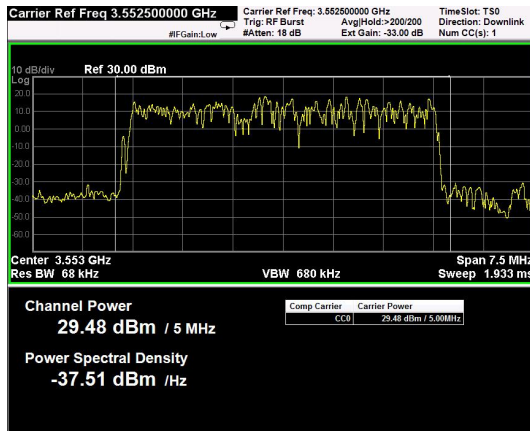
Channel: MIDDLE, Modulation: QPSK,
BW=5MHz, CCDF



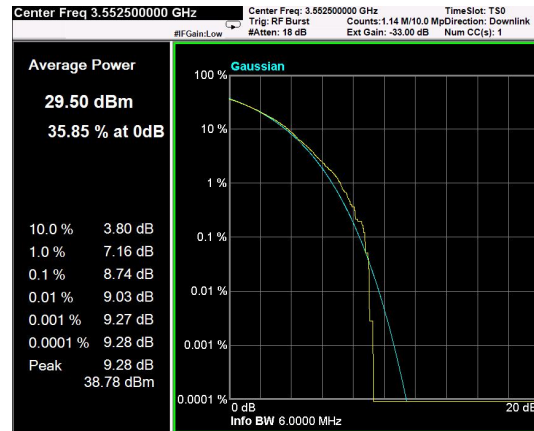
Channel: TOP, Modulation: QPSK,
BW=5MHz, Channel Power



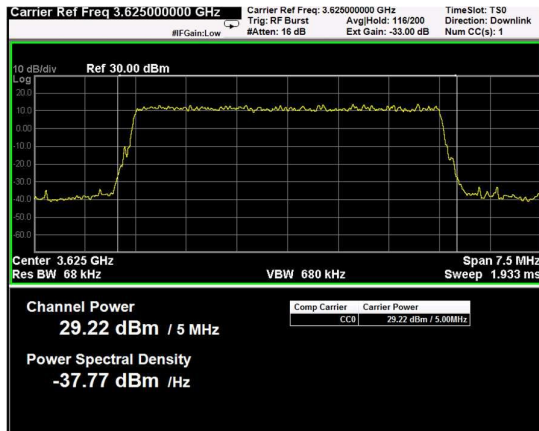
Channel: TOP, Modulation: QPSK,
BW=5MHz, CCDF



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



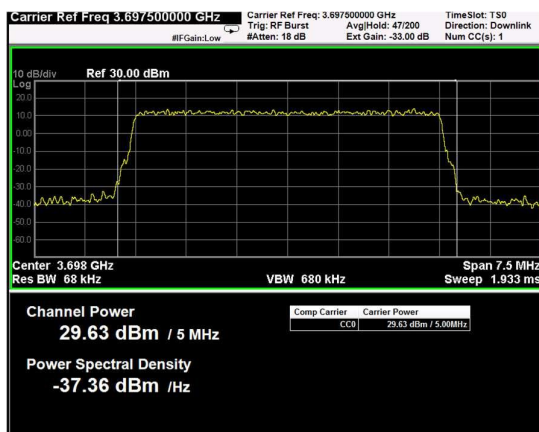
Channel: BOTTOM, Modulation: 16QAM, BW=5MHz, CCDF



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



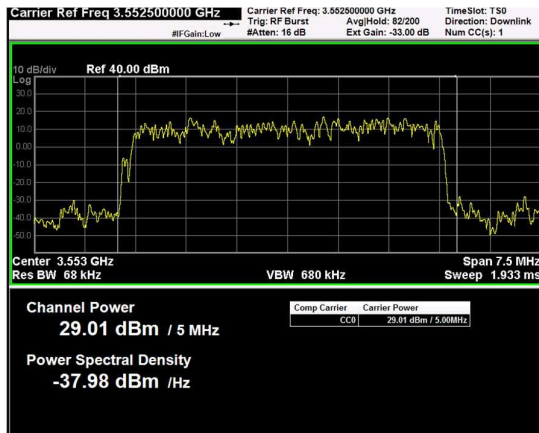
Channel: MIDDLE, Modulation: 16QAM, BW=5MHz, CCDF



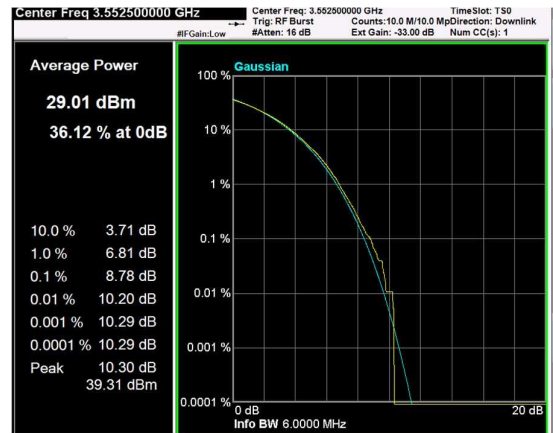
Channel: TOP, Modulation: 16QAM, BW=5MHz, Channel Power



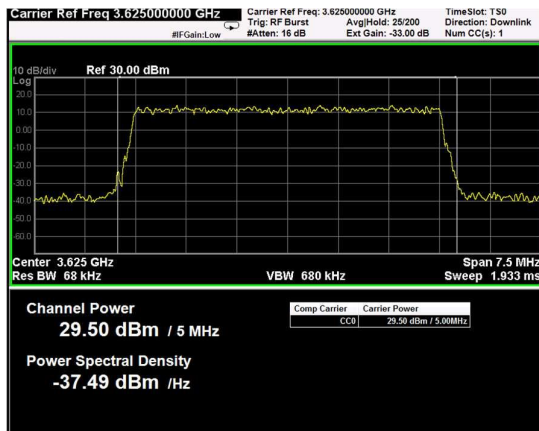
Channel: TOP, Modulation: 16QAM, BW=5MHz, CCDF



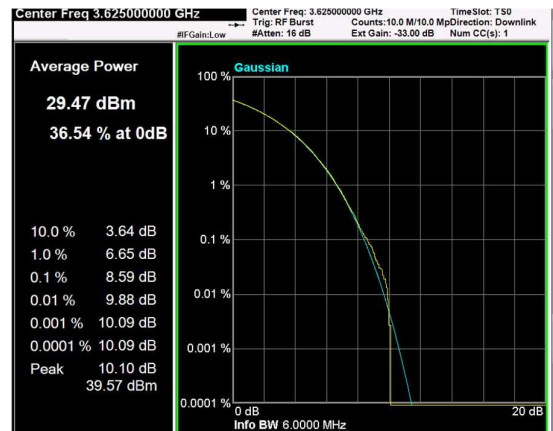
Channel: BOTTOM, Modulation: 64QAM, BW=5MHz, Channel Power



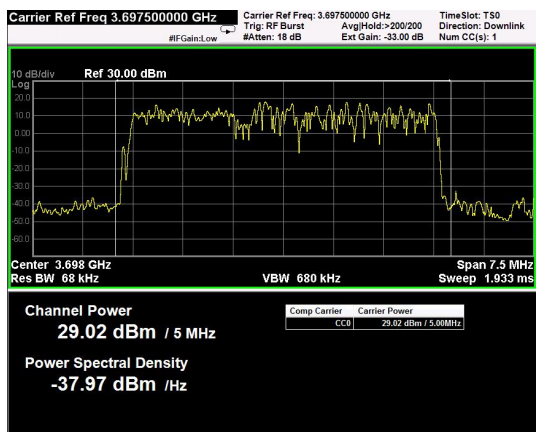
Channel: BOTTOM, Modulation: 64QAM, BW=5MHz, CCDF



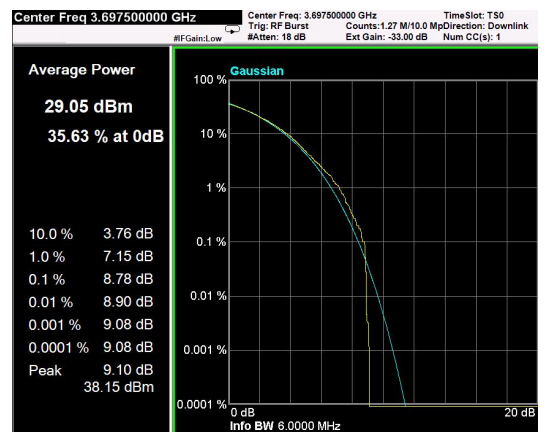
Channel: MIDDLE, Modulation: 64QAM, BW=5MHz, Channel Power



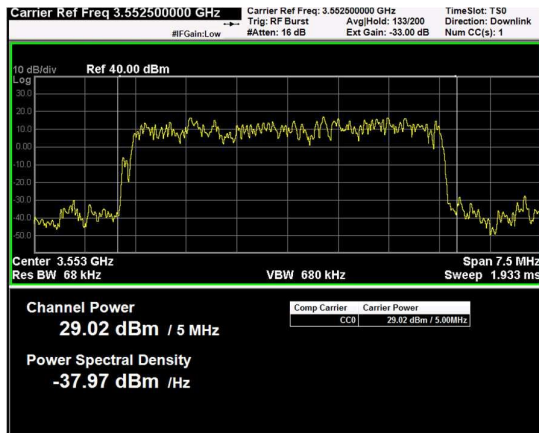
Channel: MIDDLE, Modulation: 64QAM, BW=5MHz, CCDF



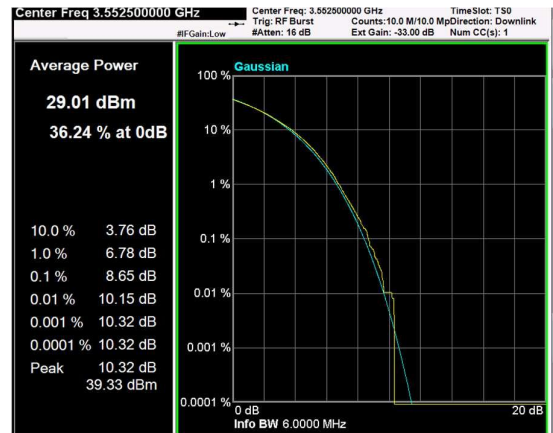
Channel: TOP, Modulation: 64QAM, BW=5MHz, Channel Power



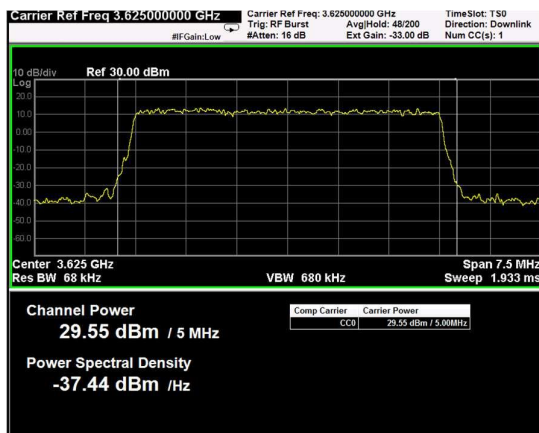
Channel: TOP, Modulation: 64QAM, BW=5MHz, CCDF



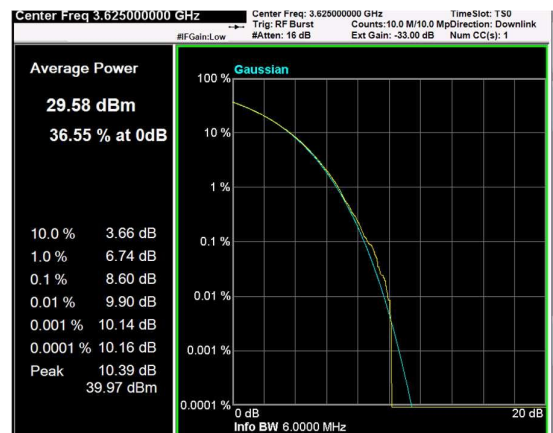
Channel: BOTTOM, Modulation: 256QAM, BW=5MHz, Channel Power



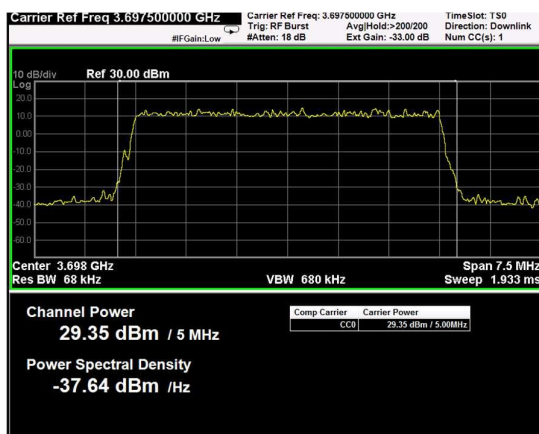
Channel: BOTTOM, Modulation: 256QAM, BW=5MHz, CCDF



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

RF PORT 1

Test data							
Direction	Modulation	Frequency (MHz)	RF output Power (dBm)	RF output channel Power (W)	PSD (dBm/Hz)	PSD (dBm/MHz)	PAR (dB)
Down-link	LTE 10MHz (QPSK)	3555	29.5	0.891	-40.5	19.5	9.2
Down-link	LTE 10MHz (QPSK)	3625	29.7	0.931	-40.3	19.7	9.2
Down-link	LTE 10MHz (QPSK)	3695	29.1	0.818	-40.9	19.1	9.3
Down-link	LTE 10MHz (16QAM)	3555	30.3	1.059	-39.8	20.3	9.5
Down-link	LTE 10MHz (16QAM)	3625	30.1	1.012	-40.0	20.1	9.3
Down-link	LTE 10MHz (16QAM)	3695	29.6	0.916	-40.4	19.6	9.3
Down-link	LTE 10MHz (64QAM)	3555	30.2	1.052	-39.8	20.2	10.0
Down-link	LTE 10MHz (64QAM)	3625	30.3	1.069	-39.7	20.3	9.3
Down-link	LTE 10MHz (64QAM)	3695	29.9	0.968	-40.1	19.9	9.3
Down-link	LTE 10MHz (256QAM)	3555	29.5	0.895	-40.5	19.5	9.3
Down-link	LTE 10MHz (256QAM)	3625	29.6	0.916	-40.4	19.6	9.3
Down-link	LTE 10MHz (256QAM)	3695	29.7	0.940	-40.3	19.7	9.3

RF PORT 2

Test data							
Direction	Modulation	Frequency (MHz)	RF output Power (dBm)	RF output channel Power (W)	PSD (dBm/Hz)	PSD (dBm/MHz)	PAR (dB)
Down-link	LTE 10MHz (QPSK)	3555.0	29.8	0.964	-40.2	19.8	9.2
Down-link	LTE 10MHz (QPSK)	3625.0	29.7	0.931	-40.3	19.7	9.2
Down-link	LTE 10MHz (QPSK)	3695.0	29.2	0.828	-40.8	19.2	9.5
Down-link	LTE 10MHz (16QAM)	3555.0	30.4	1.091	-39.6	20.4	9.2
Down-link	LTE 10MHz (16QAM)	3625.0	29.6	0.916	-40.4	19.6	9.3
Down-link	LTE 10MHz (16QAM)	3695.0	29.3	0.841	-40.8	19.3	9.3
Down-link	LTE 10MHz (64QAM)	3555.0	30.4	1.104	-39.6	20.4	11.7
Down-link	LTE 10MHz (64QAM)	3625.0	29.7	0.931	-40.3	19.7	9.2
Down-link	LTE 10MHz (64QAM)	3695.0	29.3	0.847	-40.7	19.3	9.3
Down-link	LTE 10MHz (256QAM)	3555.0	30.5	1.114	-39.5	20.5	9.2
Down-link	LTE 10MHz (256QAM)	3625.0	30.3	1.069	-39.7	20.3	9.3
Down-link	LTE 10MHz (256QAM)	3695.0	29.2	0.838	-40.8	19.2	9.3

Special notes

Maximum EIRP $\leq 30\text{dBm}/10\text{MHz}$

Maximum PSD eirp $\leq 20\text{dBm}/1\text{MHz}$

Remark: MIMO application where only cross-polarized antennas are allowed (KDB "662911 D01 Multiple Transmitter Output v02r01", chapter F, paragraph 2), letter c), item (i)).

PSD eirp (in 1 MHz) = $\text{PSD}_{\text{max}} - N + G_{\text{max}} = 20 - N + G_{\text{max}} \leq 20$

$G_{\text{max}} \leq (20 - 20 + N) = N$

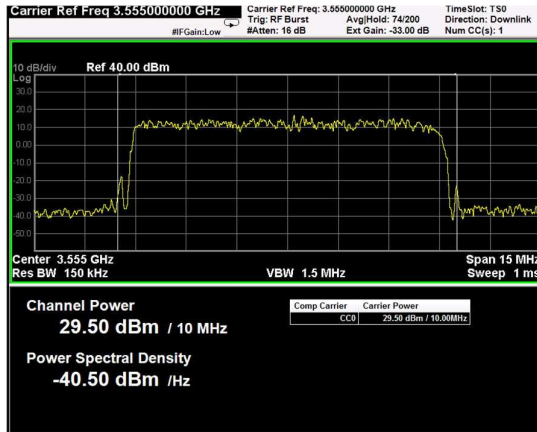
Where:

- PSD_{max} is the maximum PSD value measured on the antenna connector of the equipment and it depends on the LTE bandwidth signal
- N is system path loss (in dB) due to cable insertion, splitter, etc....
- G_{max} is the maximum antenna gain (in dBi)

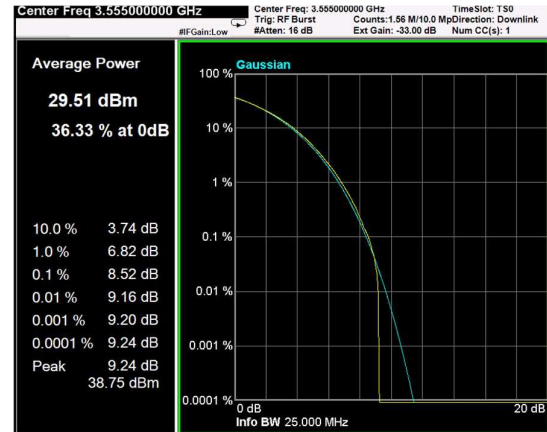
Therefore:

- Maximum antenna gain $G_{\text{max}} = N$ and Output power setting = 30 dBm

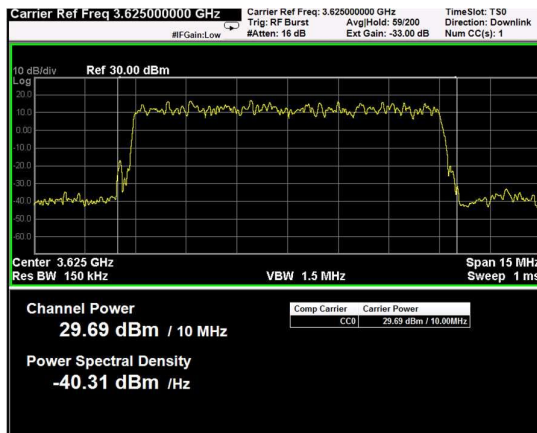
RF PORT 1 PLOT



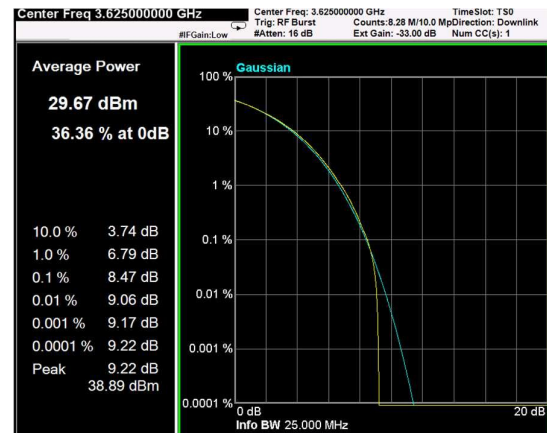
Channel: BOTTOM, Modulation: QPSK, BW=10MHz, Channel Power



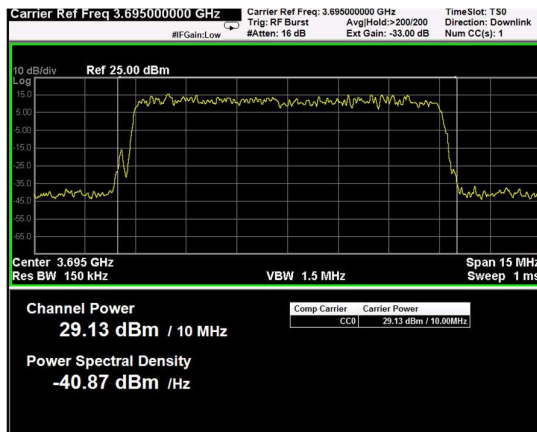
Channel: BOTTOM, Modulation: QPSK, BW=10MHz, CCDF



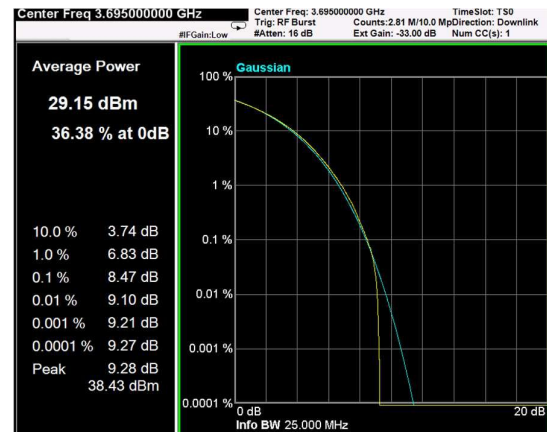
Channel: MIDDLE, Modulation: QPSK, BW=10MHz, Channel Power



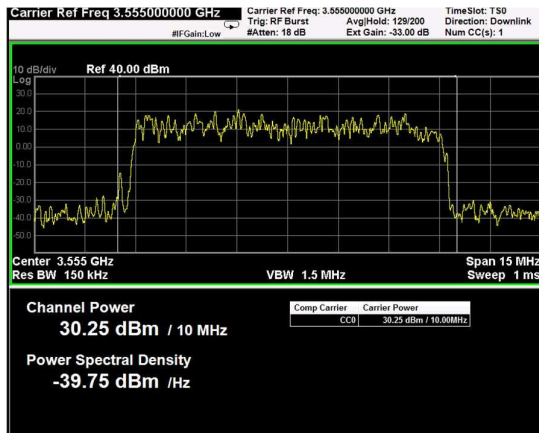
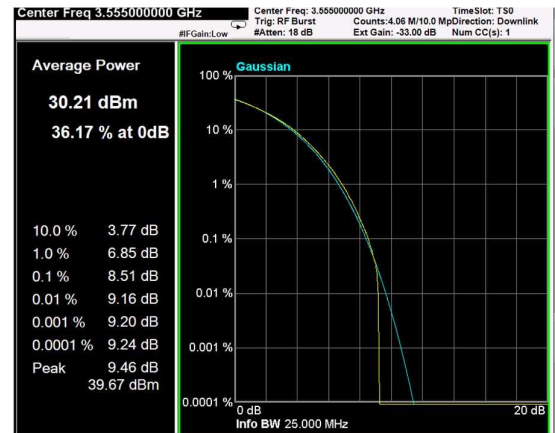
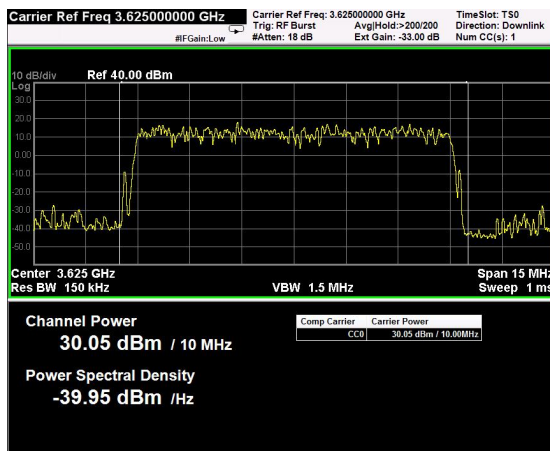
Channel: MIDDLE, Modulation: QPSK, BW=10MHz, CCDF

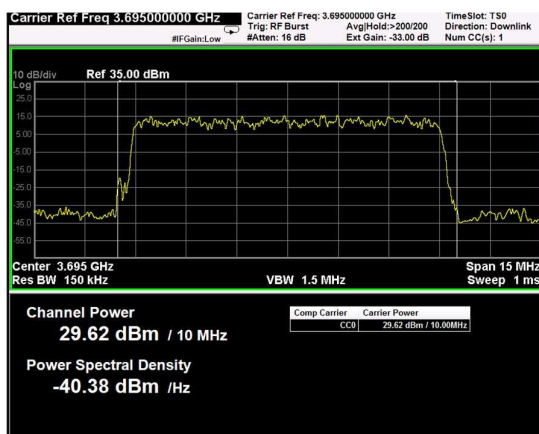
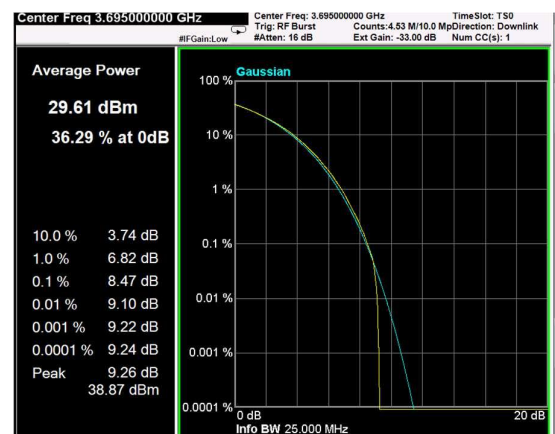


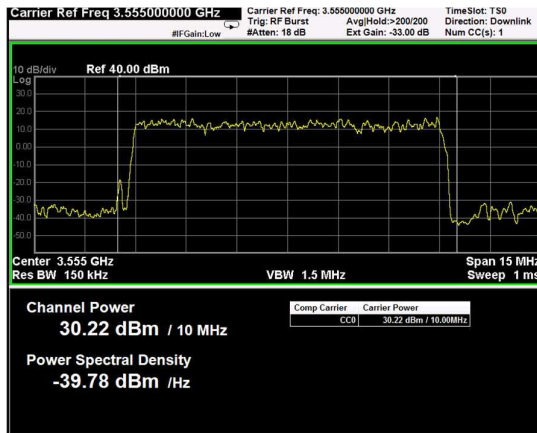
Channel: TOP, Modulation: QPSK, BW=10MHz, Channel Power



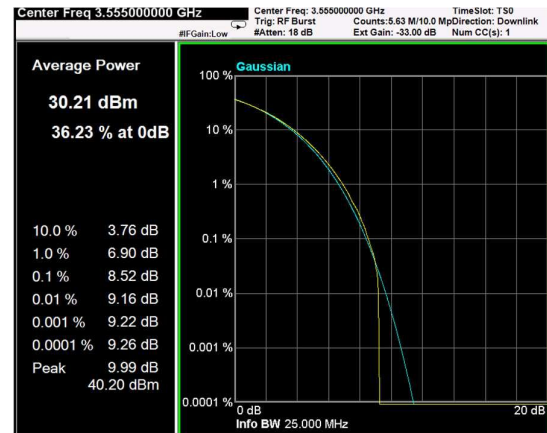
Channel: TOP, Modulation: QPSK, BW=10MHz, CCDF


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

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

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

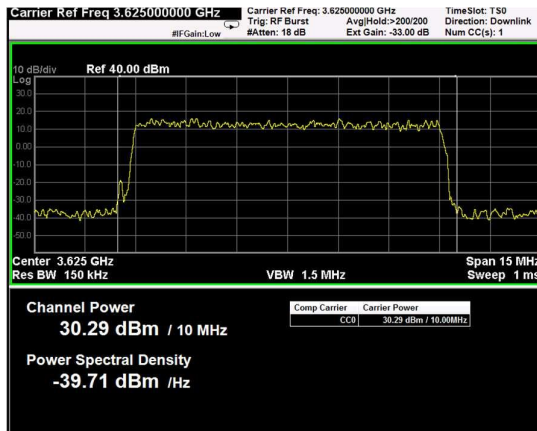
Channel: MIDDLE, Modulation: 16QAM,
 BW=10MHz, CCDF

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

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



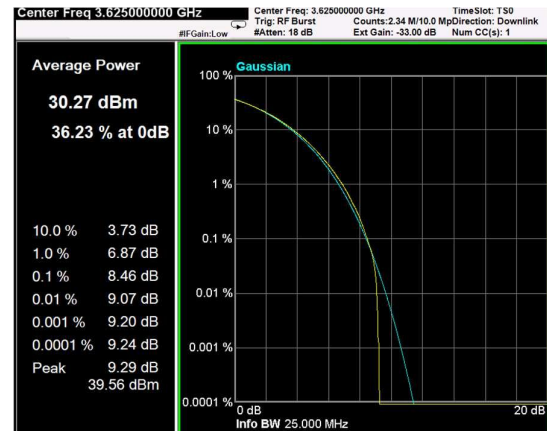
Channel: BOTTOM, Modulation: 64QAM, BW=10MHz, Channel Power



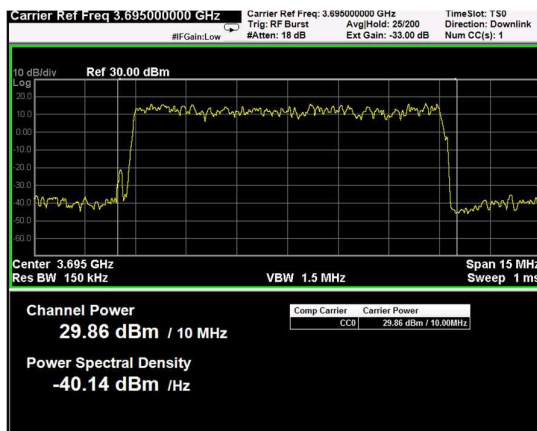
Channel: BOTTOM, Modulation: 64QAM, BW=10MHz, CCDF



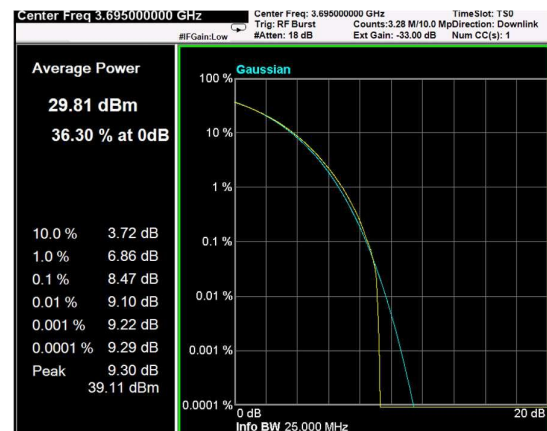
Channel: MIDDLE, Modulation: 64QAM, BW=10MHz, Channel Power



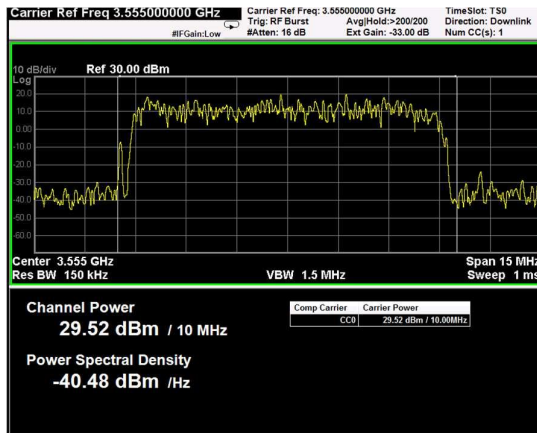
Channel: MIDDLE, Modulation: 64QAM, BW=10MHz, CCDF



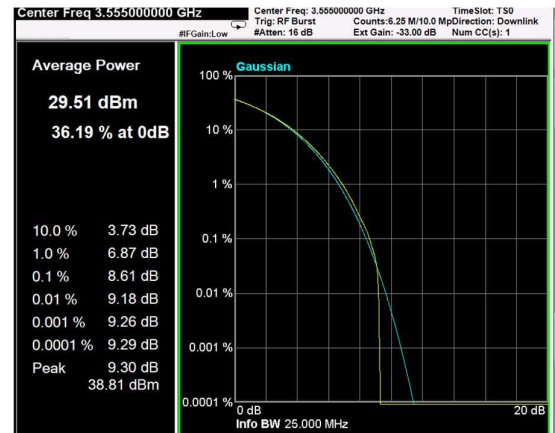
Channel: TOP, Modulation: 64QAM, BW=10MHz, Channel Power



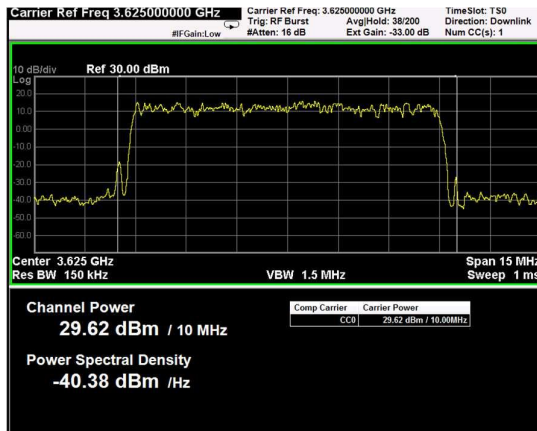
Channel: TOP, Modulation: 64QAM, BW=10MHz, CCDF



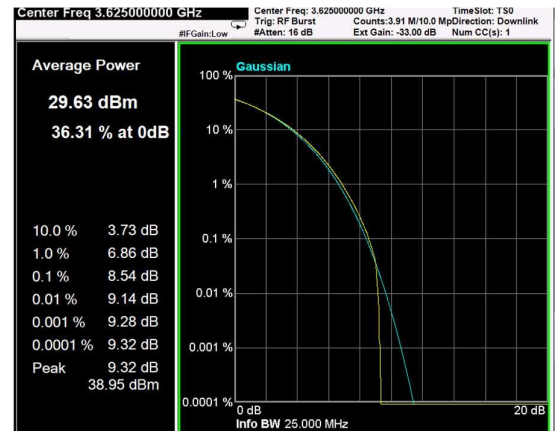
Channel: BOTTOM, Modulation: 256QAM, BW=10MHz, Channel Power



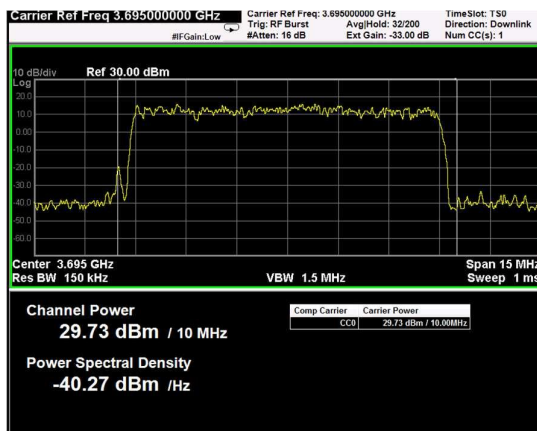
Channel: BOTTOM, Modulation: 256QAM, BW=10MHz, CCDF



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



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

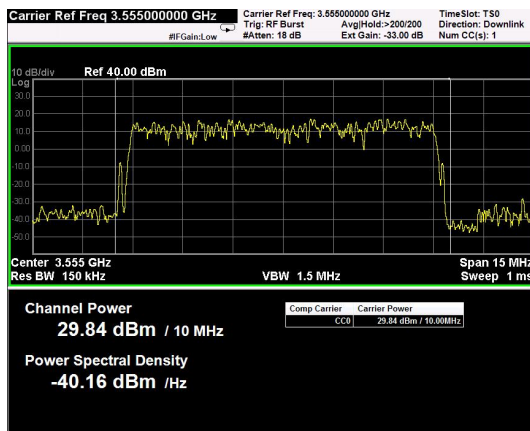


Channel: TOP, Modulation: 256QAM, BW=10MHz, Channel Power

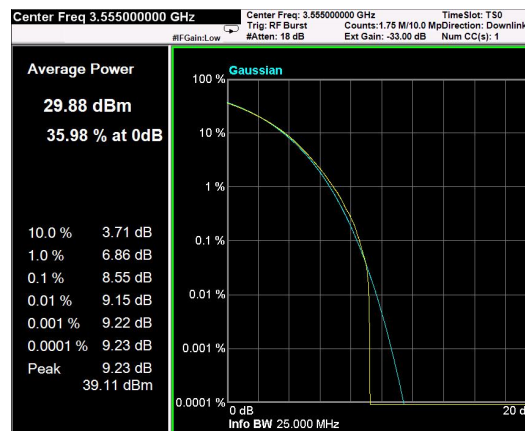


Channel: TOP, Modulation: 256QAM, BW=10MHz, CCDF

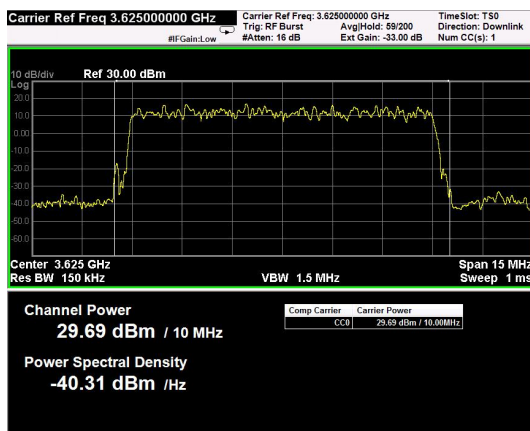
RF PORT 2



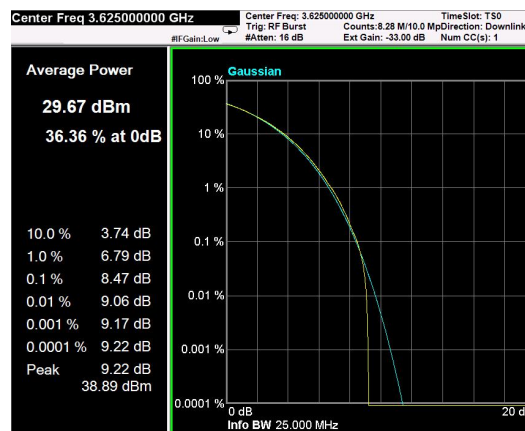
Channel: BOTTOM, Modulation: QPSK,
 BW=10MHz, Channel Power



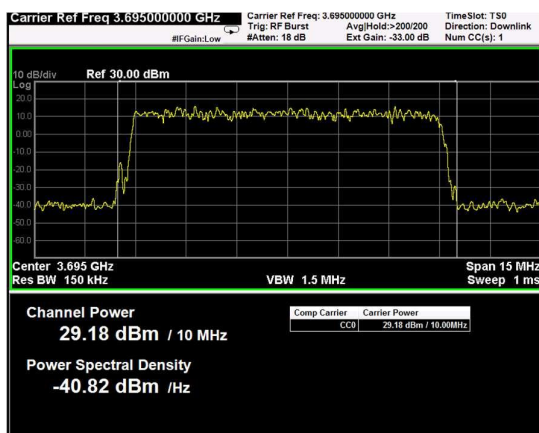
Channel: BOTTOM, Modulation: QPSK,
 BW=10MHz, CCDF



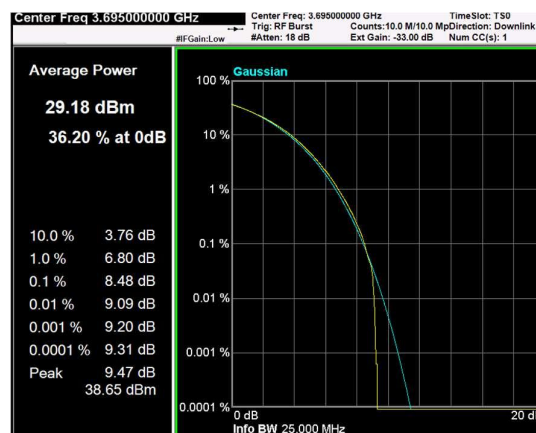
Channel: MIDDLE, Modulation: QPSK,
 BW=10MHz, Channel Power



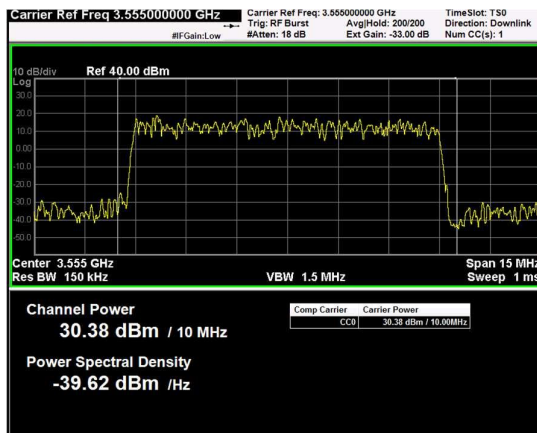
Channel: MIDDLE, Modulation: QPSK,
 BW=10MHz, CCDF



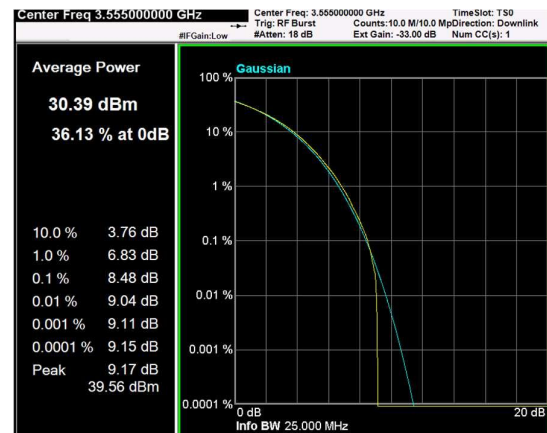
Channel: TOP, Modulation: QPSK,
 BW=10MHz, Channel Power



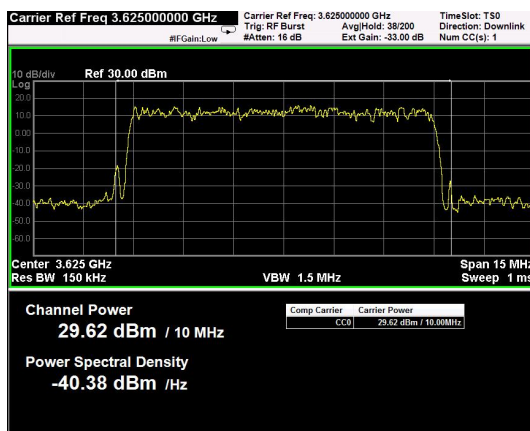
Channel: TOP, Modulation: QPSK,
 BW=10MHz, CCDF



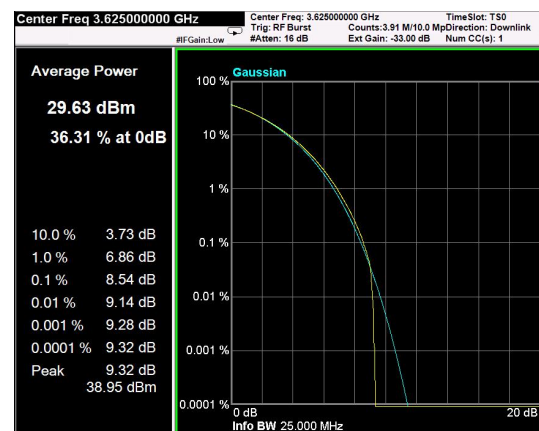
Channel: BOTTOM, Modulation: 16QAM, BW=10MHz, Channel Power



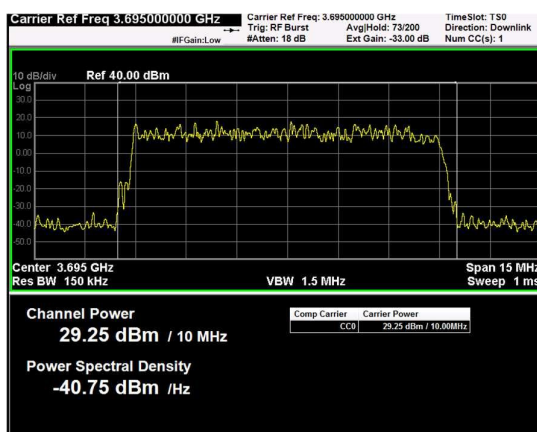
Channel: BOTTOM, Modulation: 16QAM, BW=10MHz, CCDF



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



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



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



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