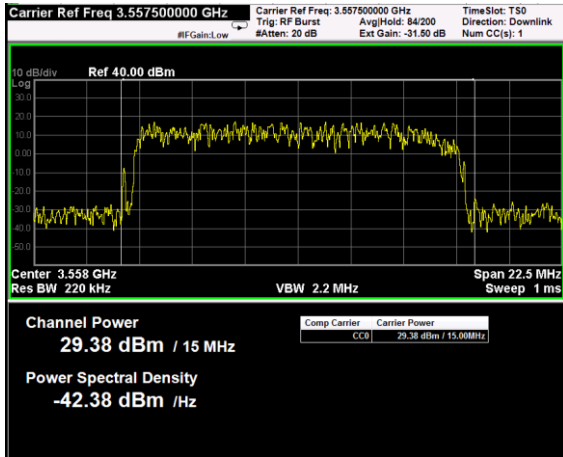## RF PORT 1 plots
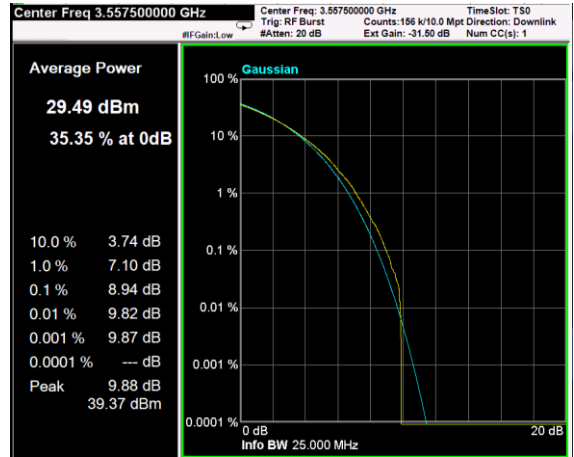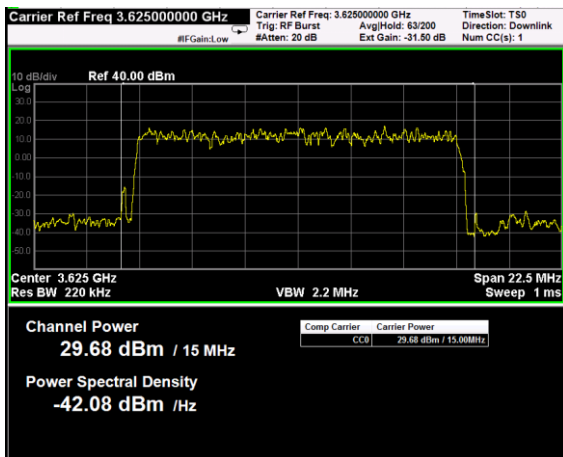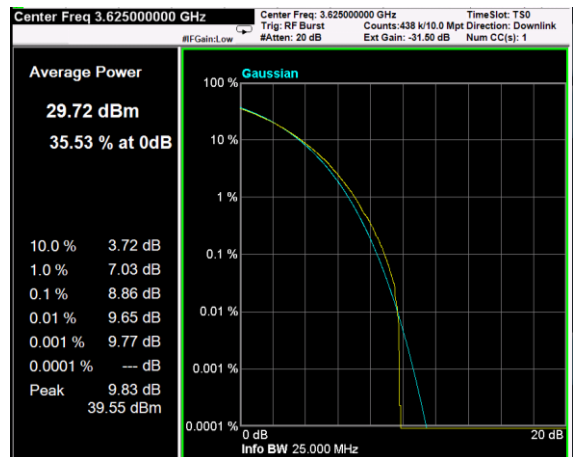

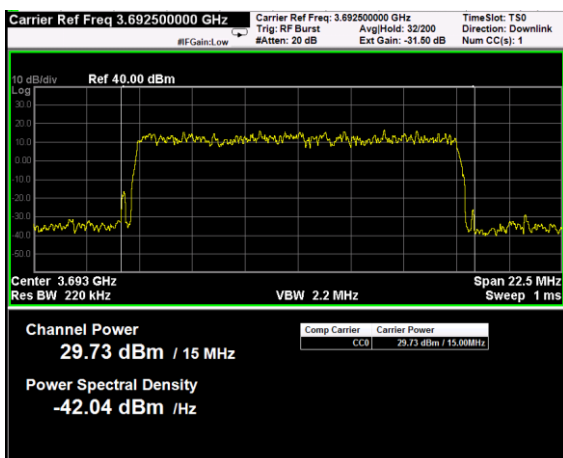Channel: BOTTOM, Modulation: QPSK, BW=15MHz, Channel Power

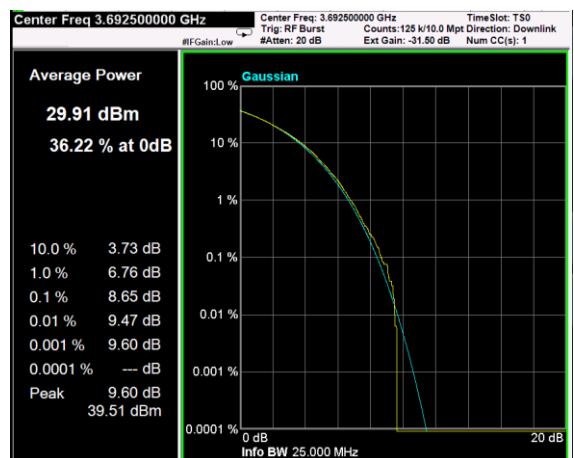Channel: BOTTOM, Modulation: QPSK, BW=15MHz, CCDF

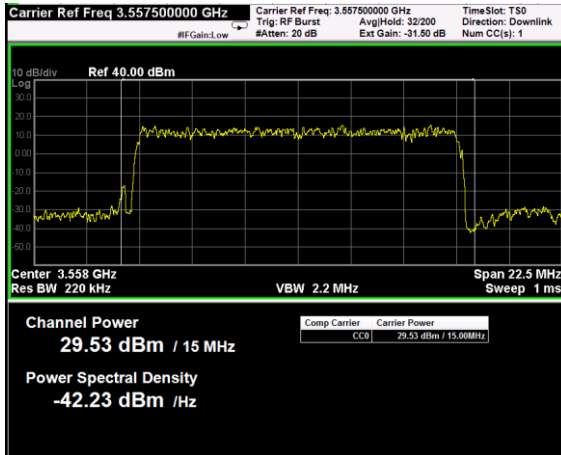Channel: MIDDLE, Modulation: QPSK, BW=15MHz, Channel Power

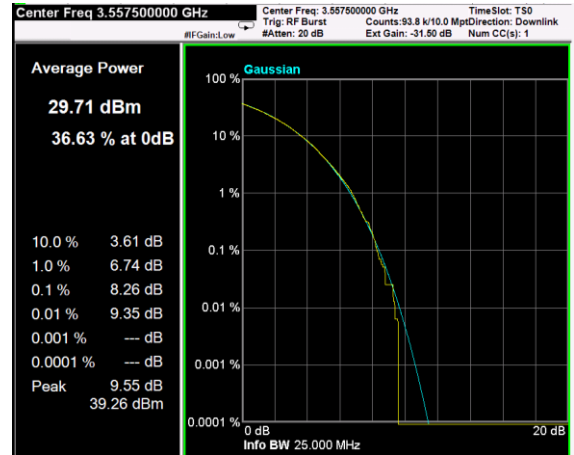Channel: MIDDLE, Modulation: QPSK, BW=15MHz, CCDF

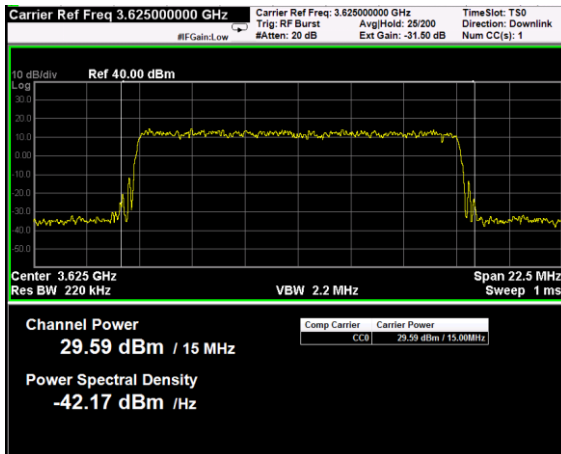Channel: TOP, Modulation: QPSK, BW=15MHz, Channel Power

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

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

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

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

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

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

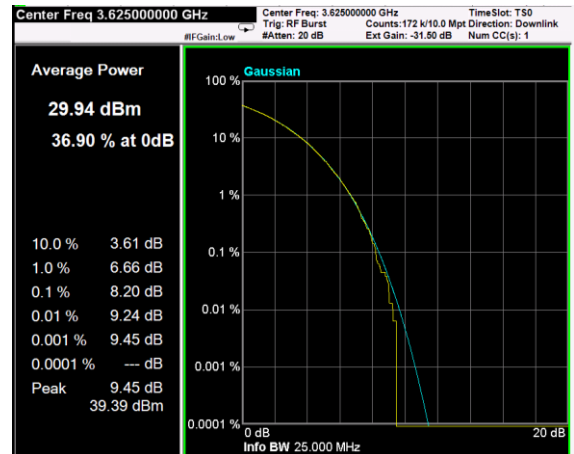Channel: TOP, Modulation: 16QAM,
BW=15MHz, CCDF

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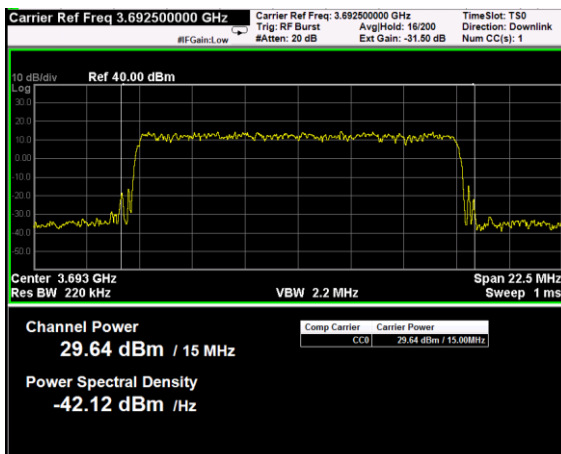BW=15MHz, Channel Power

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

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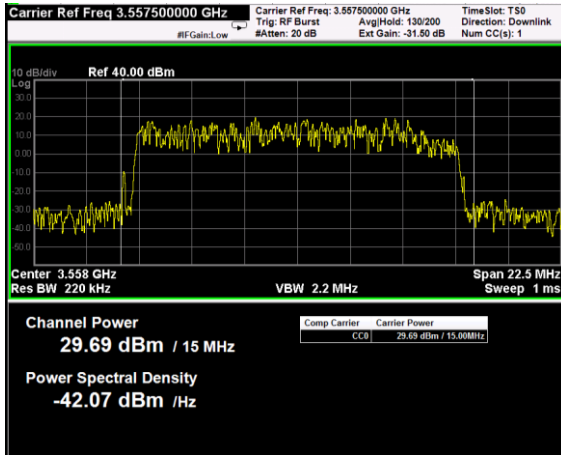BW=15MHz, Channel Power

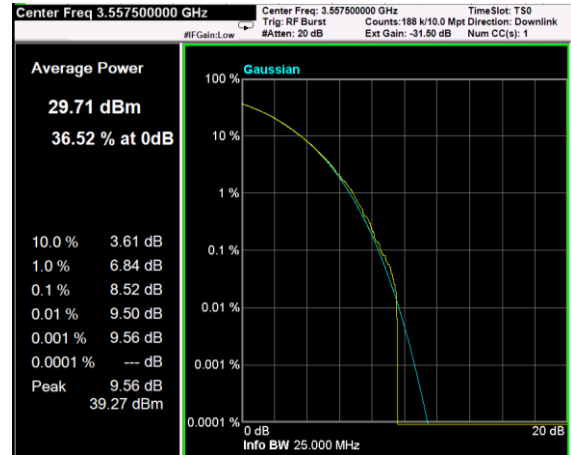Channel: MIDDLE, Modulation: 64QAM,
BW=15MHz, CCDF

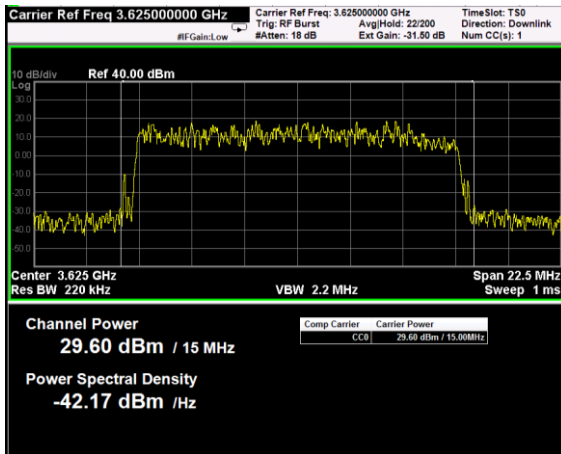Channel: TOP, Modulation: 64QAM,
BW=15MHz, Channel Power

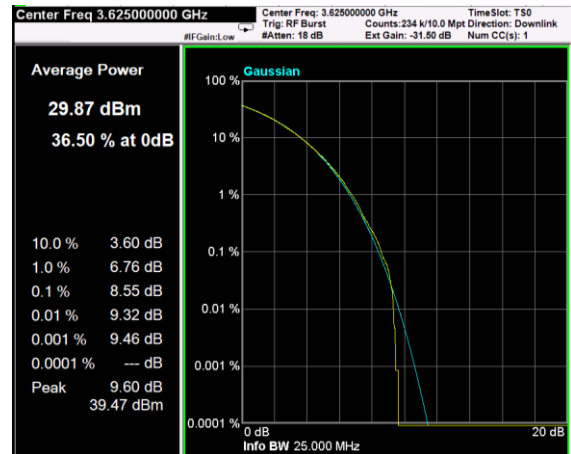Channel: TOP, Modulation: 64QAM,
BW=15MHz, CCDF

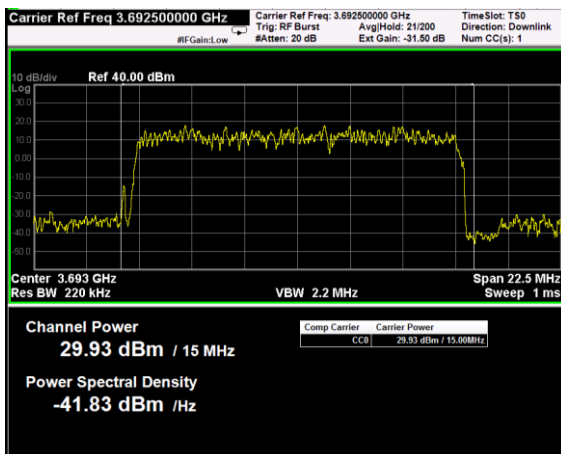Channel: BOTTOM, Modulation: 256QAM, BW=15MHz, Channel Power

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

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

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

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

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

RF PORT 2 plots

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

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

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

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

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

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

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

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

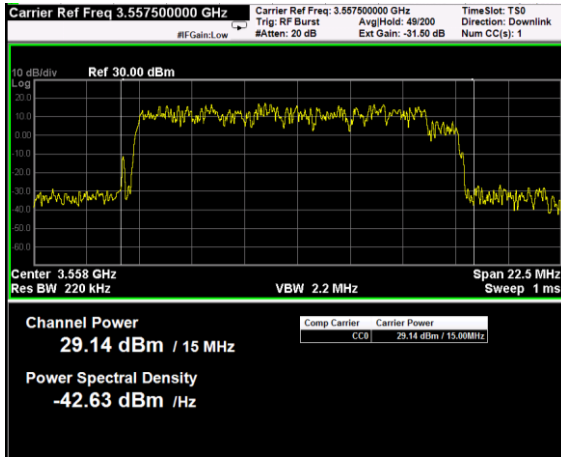Channel: MIDDLE, Modulation: 16QAM,
BW=15MHz, Channel Power

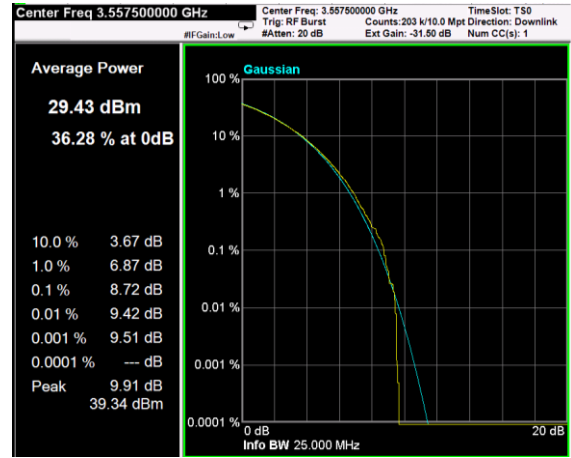Channel: MIDDLE, Modulation: 16QAM,
BW=15MHz, CCDF

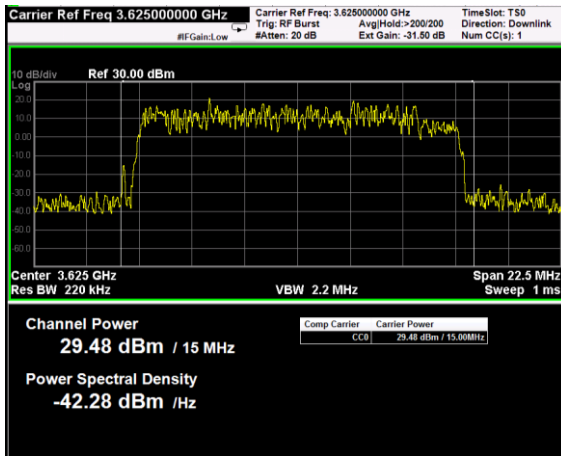Channel: TOP, Modulation: 16QAM,
BW=15MHz, Channel Power

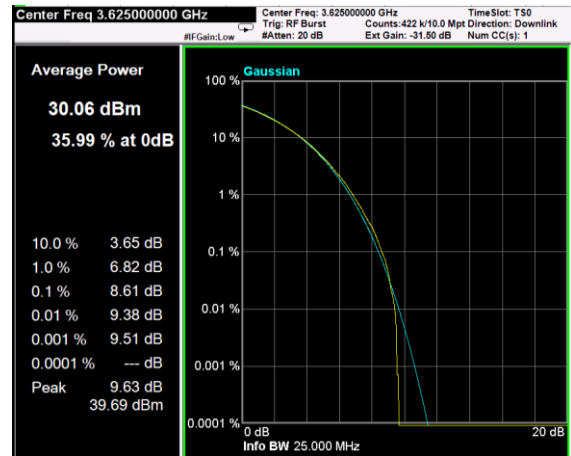Channel: TOP, Modulation: 16QAM,
BW=15MHz, CCDF

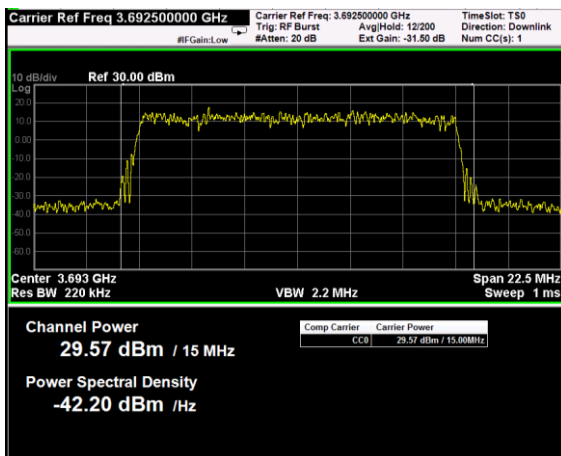Channel: BOTTOM, Modulation: 64QAM,
BW=15MHz, Channel Power
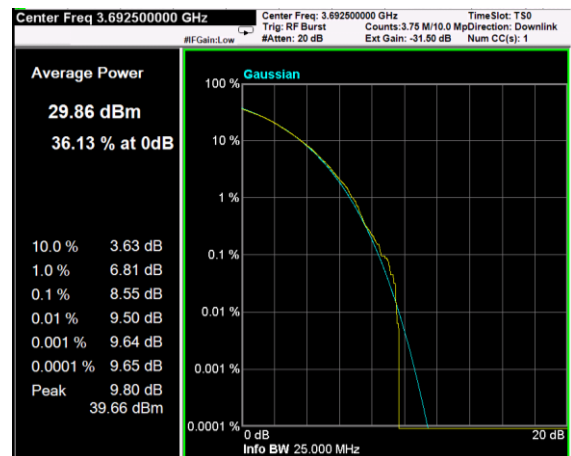

Channel: BOTTOM, Modulation: 64QAM,
BW=15MHz, CCDF

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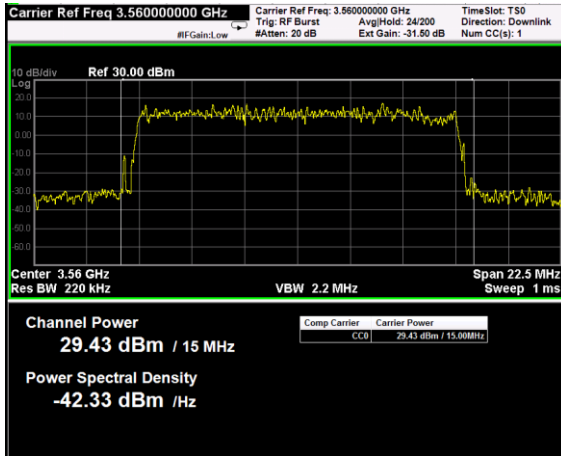

Channel: MIDDLE, Modulation: 64QAM,
BW=15MHz, CCDF
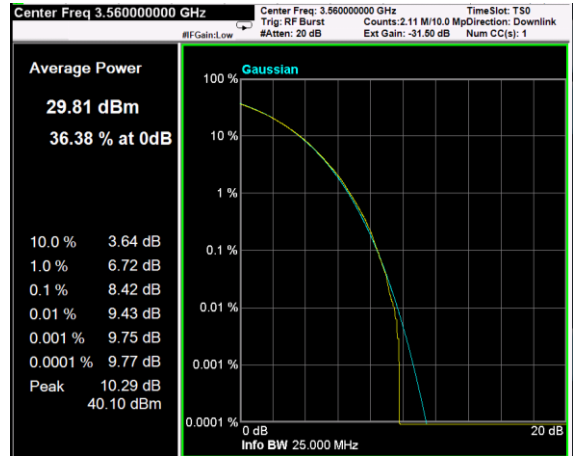

Channel: TOP, Modulation: 64QAM,
BW=15MHz, Channel Power

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

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

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

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

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

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

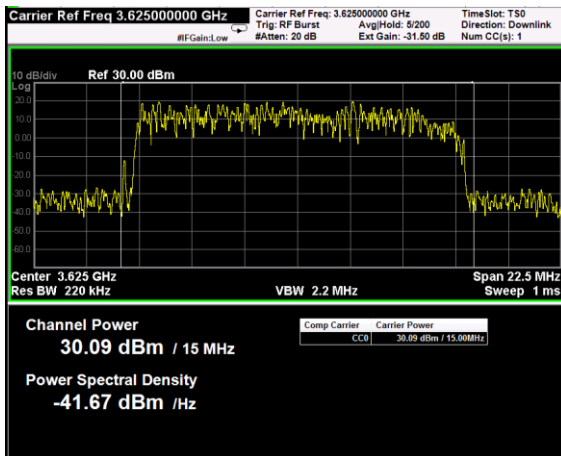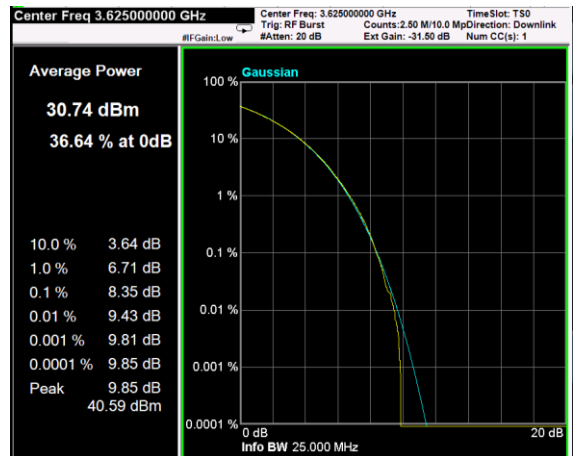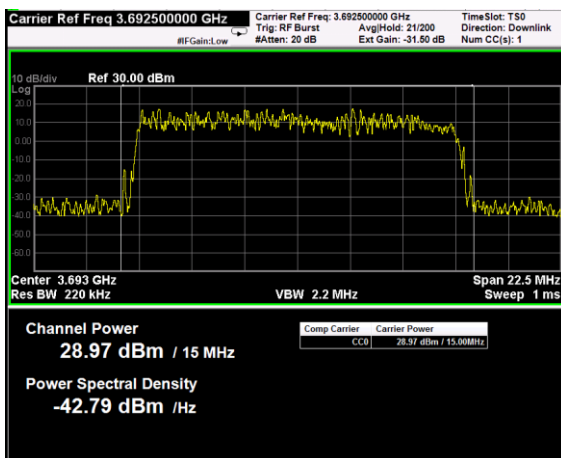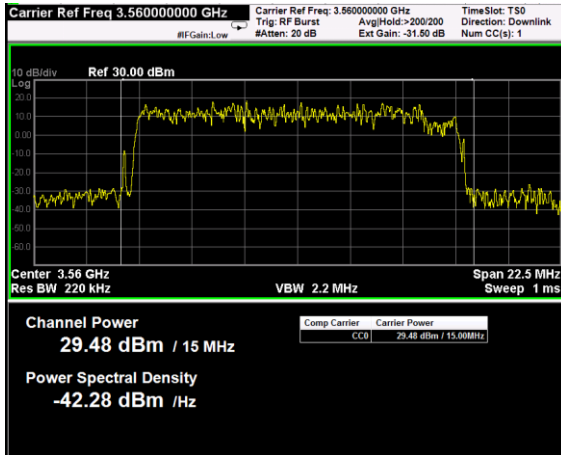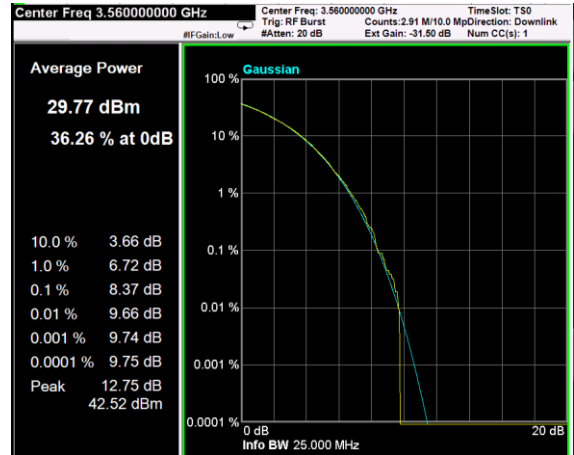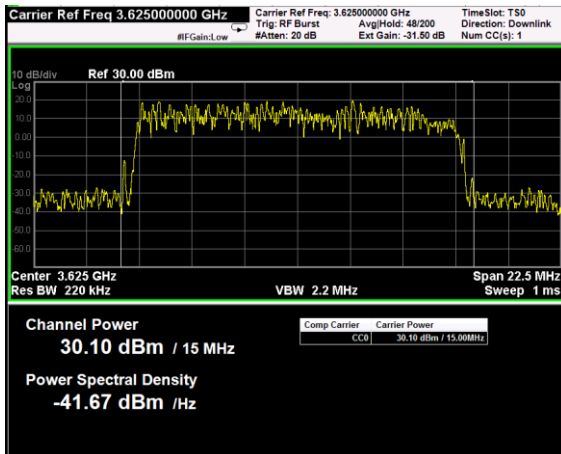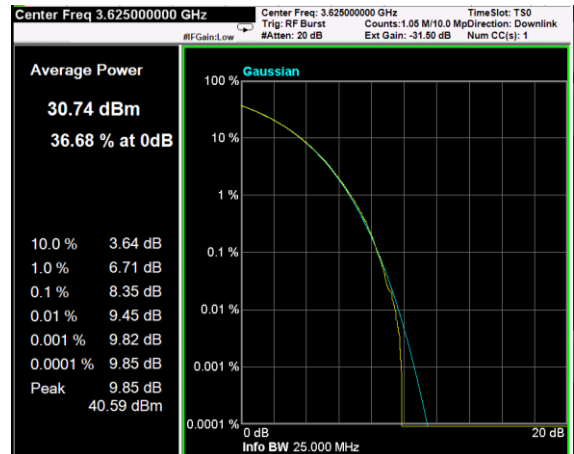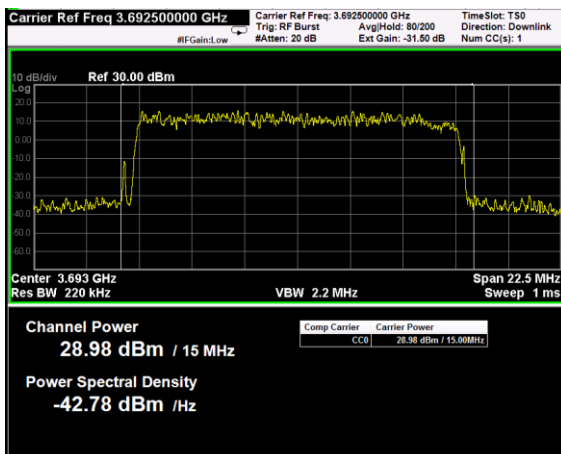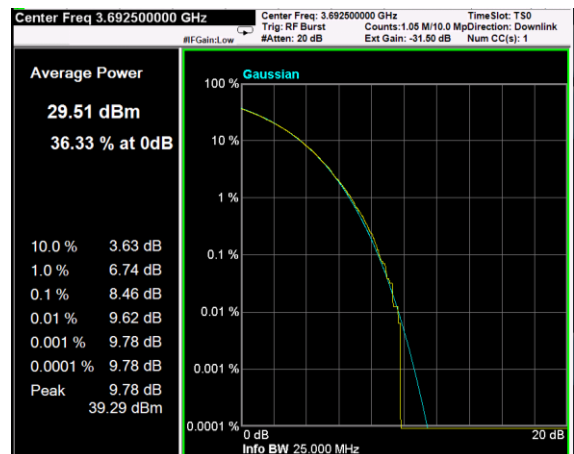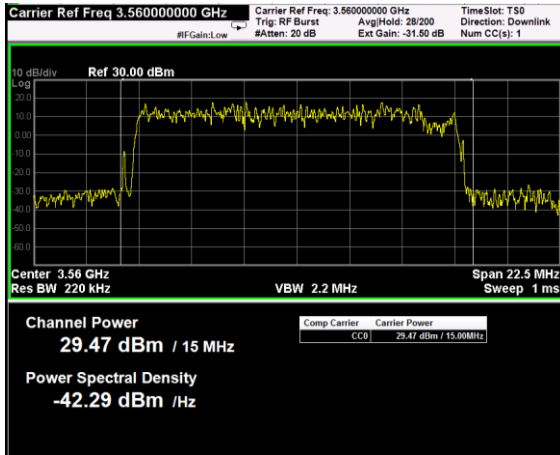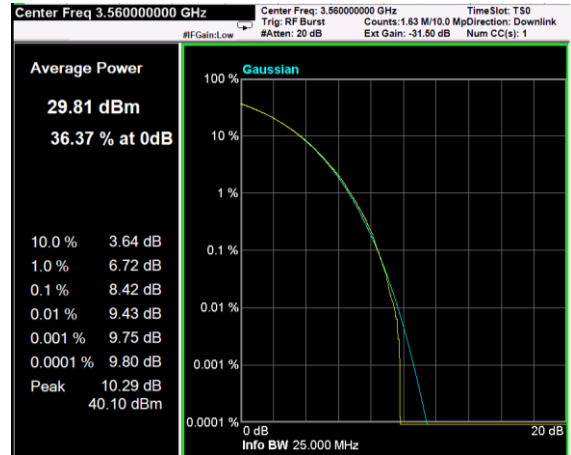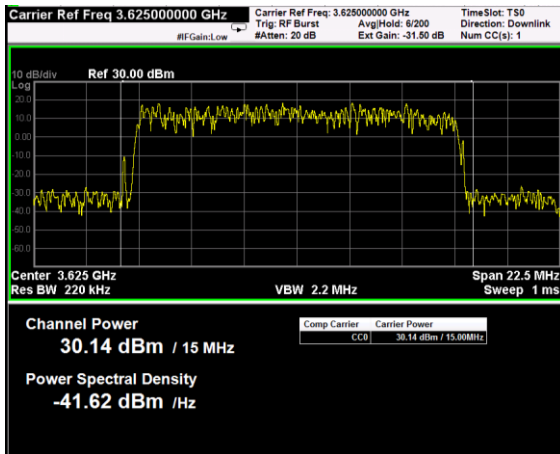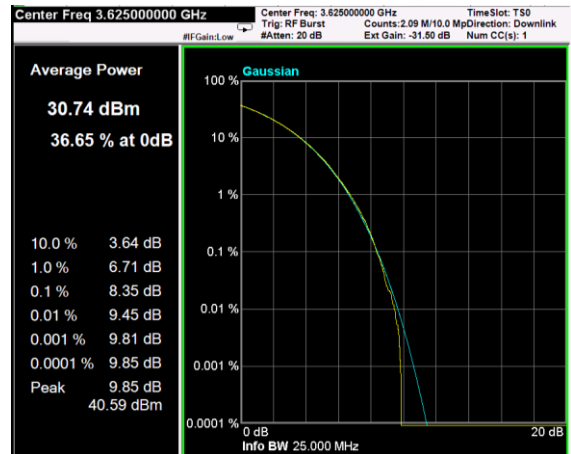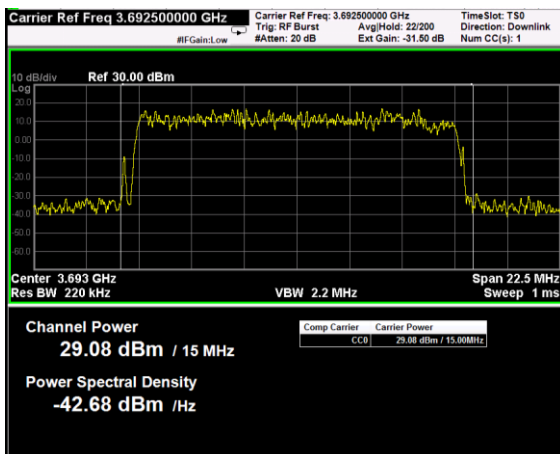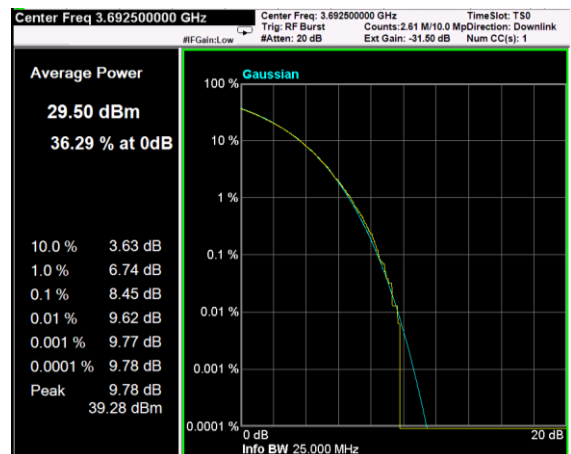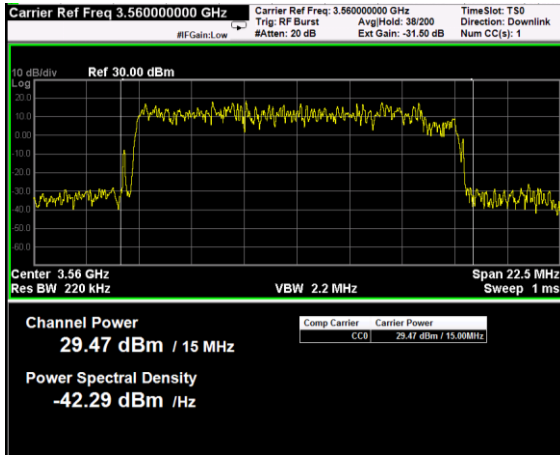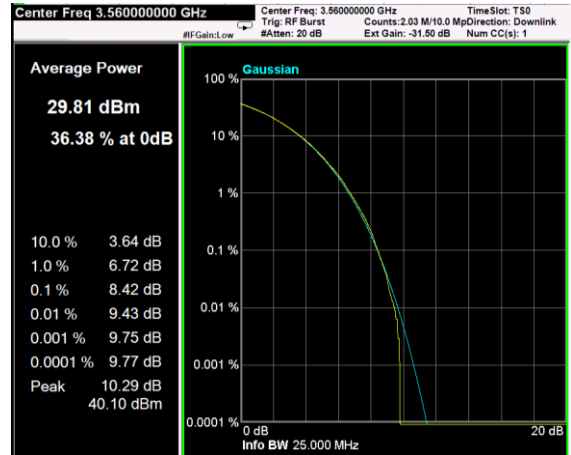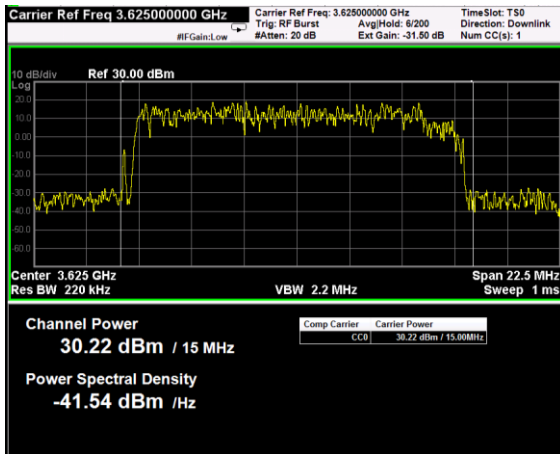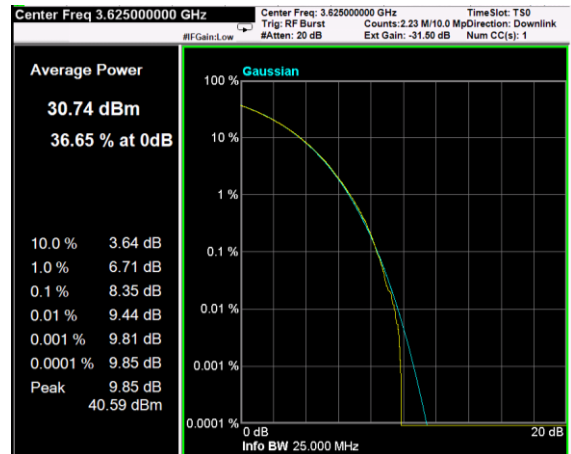Channel: TOP, Modulation: 256QAM,
BW=15MHz, CCDF

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 20MHz (QPSK)	3560	29.33	0.857	-43.68	16.32	9.08
Down-link	LTE 20MHz (QPSK)	3625	29.8	0.955	-43.21	16.79	9.48
Down-link	LTE 20MHz (QPSK)	3690	29.91	0.981	-43.10	16.90	9.07
Down-link	LTE 20MHz (16QAM)	3560	29.5	0.891	-43.51	16.49	9.17
Down-link	LTE 20MHz (16QAM)	3625	29.51	0.893	-43.50	16.5	9.42
Down-link	LTE 20MHz (16QAM)	3690	29.92	0.982	-43.09	16.91	9.42
Down-link	LTE 20MHz (64QAM)	3560	29.39	0.869	-43.62	16.38	9.42
Down-link	LTE 20MHz (64QAM)	3625	29.47	0.885	-43.54	16.46	9.45
Down-link	LTE 20MHz (64QAM)	3690	29.76	0.946	-43.25	16.75	9.47
Down-link	LTE 20MHz (256QAM)	3560	29.09	0.811	-43.92	16.08	9.54
Down-link	LTE 20MHz (256QAM)	3625	29.38	0.867	-43.63	16.37	9.31
Down-link	LTE 20MHz (256QAM)	3560	30.04	1.009	-43.97	16.03	9.06

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 20MHz (QPSK)	3560	29.86	0.968	-43.15	16.85	9.39
Down-link	LTE 20MHz (QPSK)	3625	29.95	0.989	-43.06	16.94	9.41
Down-link	LTE 20MHz (QPSK)	3690	29.47	0.885	-43.54	16.46	9.42
Down-link	LTE 20MHz (16QAM)	3560	29.96	0.991	-43.05	16.95	9.39
Down-link	LTE 20MHz (16QAM)	3625	30.01	1.002	-43	17	9.38
Down-link	LTE 20MHz (16QAM)	3690	29.36	0.863	-43.65	16.35	9.41
Down-link	LTE 20MHz (64QAM)	3560	29.79	0.953	-43.22	16.78	9.39
Down-link	LTE 20MHz (64QAM)	3625	29.95	0.989	-43.06	16.94	9.41
Down-link	LTE 20MHz (64QAM)	3690	29.47	0.885	-43.54	16.46	9.42
Down-link	LTE 20MHz (256QAM)	3560	29.83	0.962	-43.18	16.82	9.39
Down-link	LTE 20MHz (256QAM)	3625	29.95	0.989	-43.06	16.94	9.41
Down-link	LTE 20MHz (256QAM)	3690	29.45	0.881	-43.56	16.44	9.42

Special notes

Maximum EIRP ≤ 30dBm/10MHz
 Maximum PSD eirp ≤ 20dBm/1MHz
 	
 PSD eirp (in 1 MHz) = PSD_{max} + 10Log(N_{Ant}) − N + G_{max} = 17 + 3 − N + G_{max} ≤ 20
 G_{max} ≤ (20-17-3+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
   - 10Log(N_{Ant}), with N_{Ant} = 2 due to MIMO application, in according to "662911 D01 Multiple Transmitter Output v02r01"
   - 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 Gmax = N and Output power setting = 30 dBm

RF PORT 1 plots

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

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

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

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

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

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

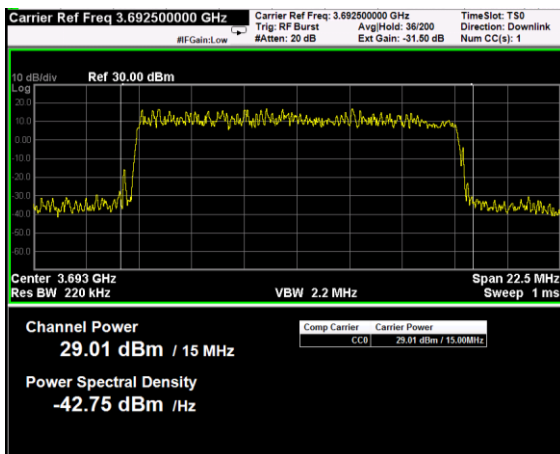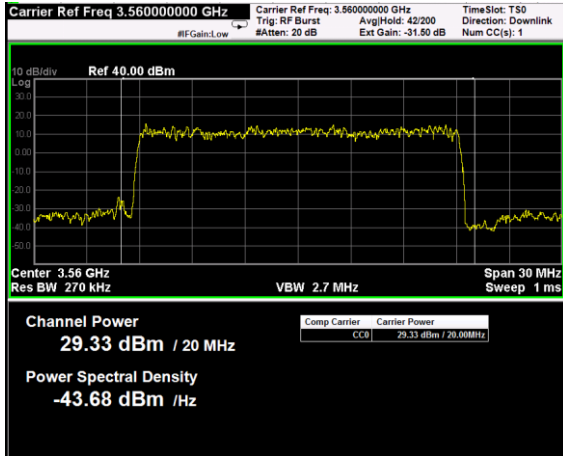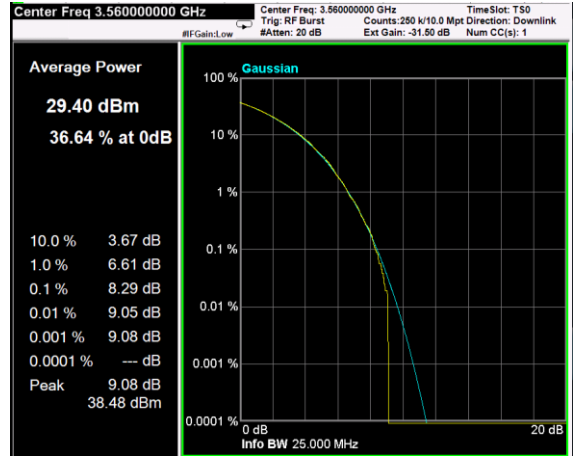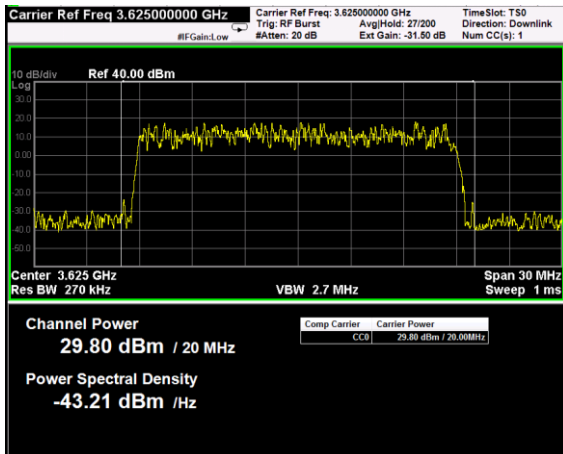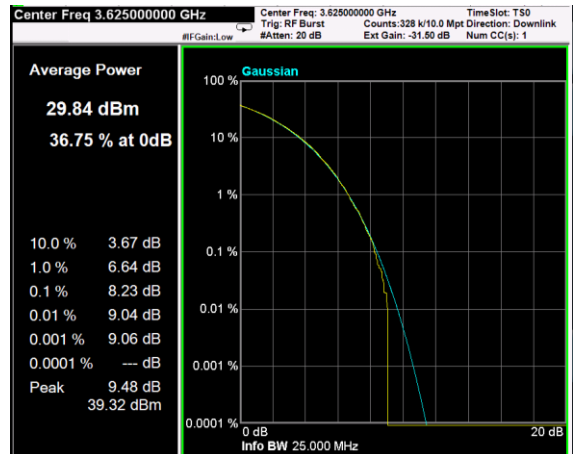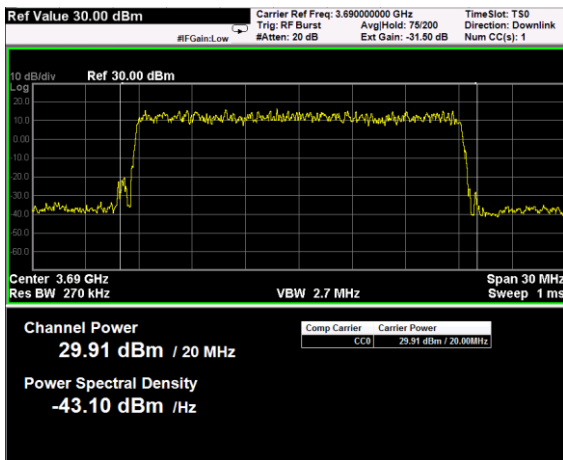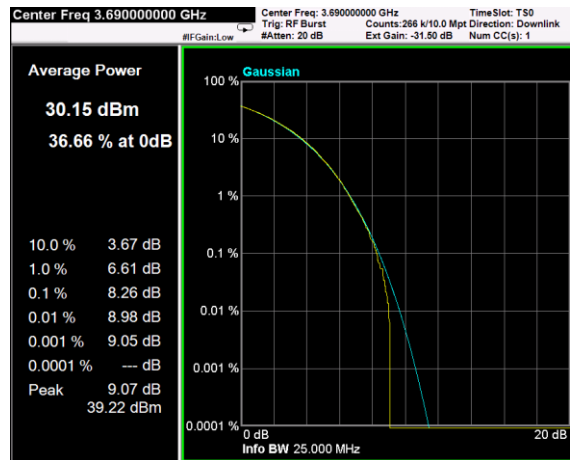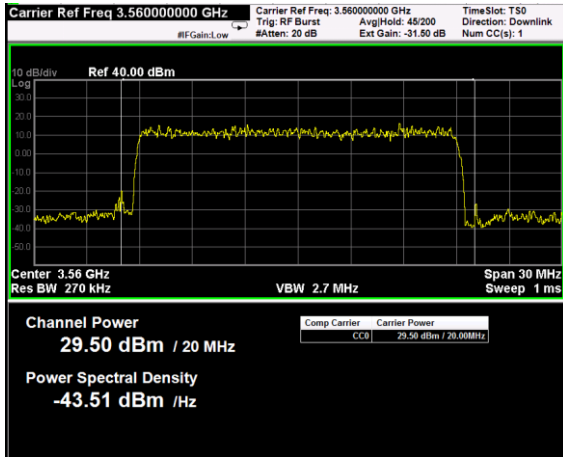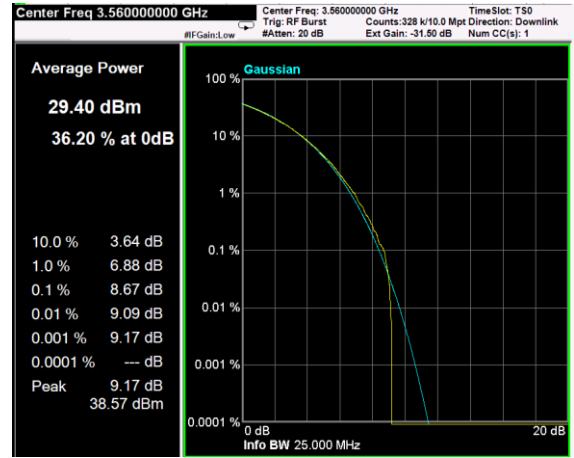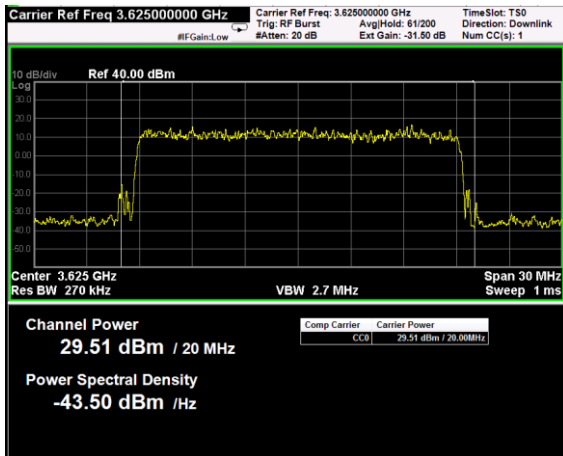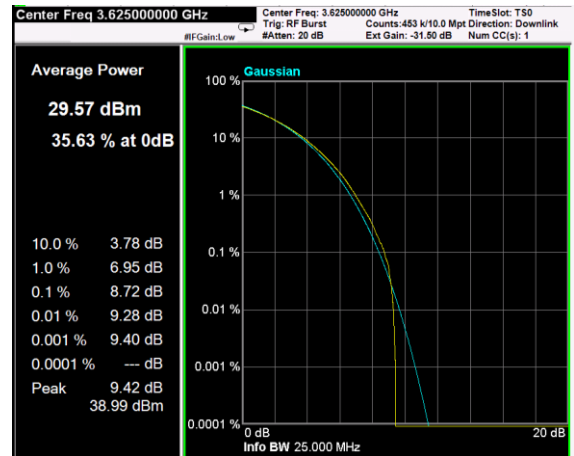Channel: BOTTOM, Modulation: 16QAM,
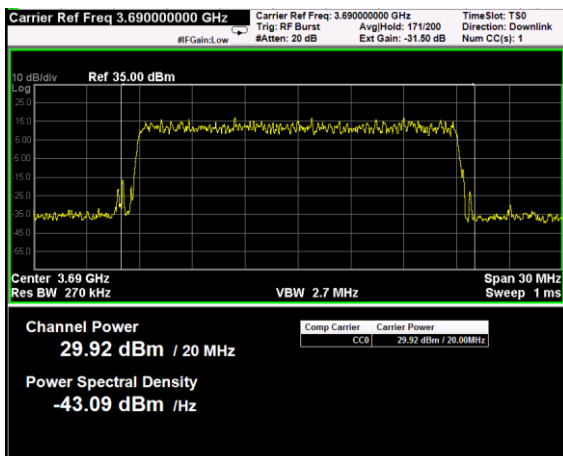BW=20MHz, Channel Power

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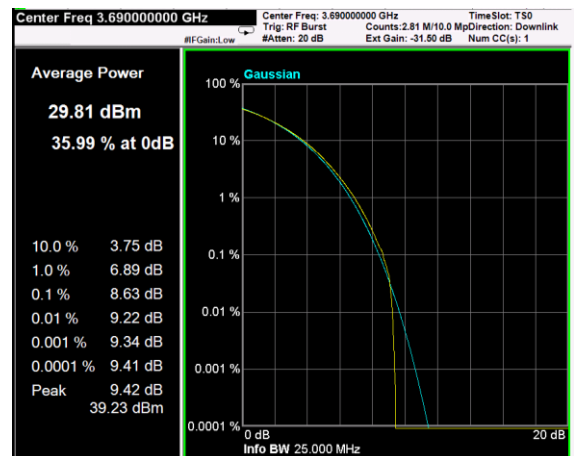BW=20MHz, CCDF

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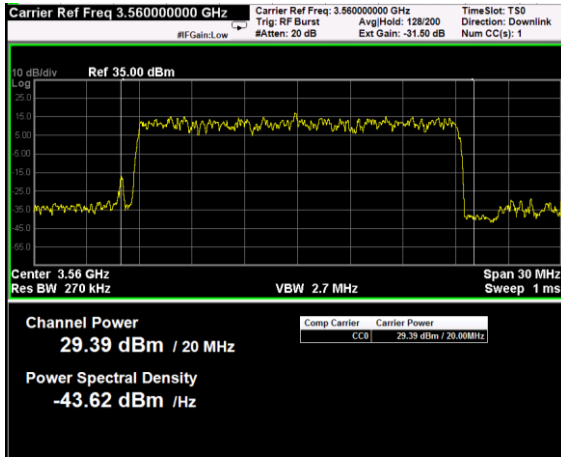BW=20MHz, Channel Power

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

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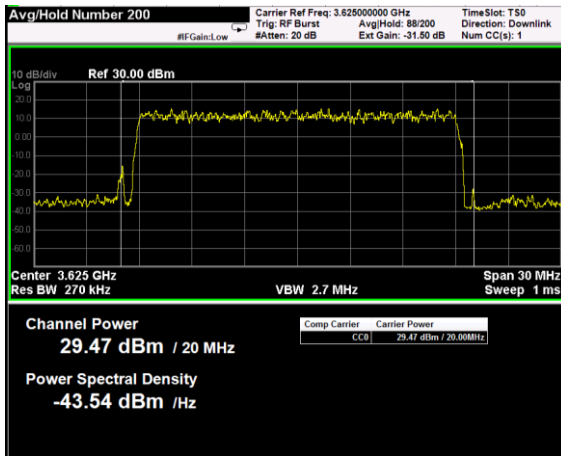BW=20MHz, Channel Power
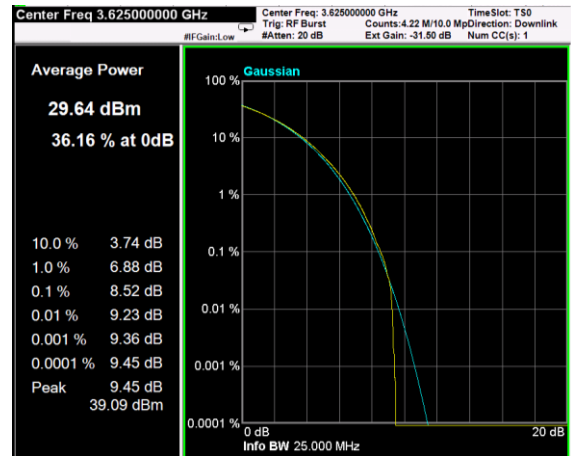

Channel: TOP, Modulation: 16QAM,
BW=20MHz, CCDF

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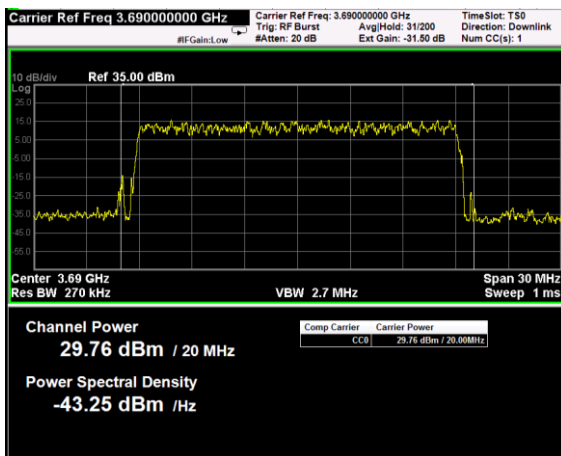BW=20MHz, Channel Power

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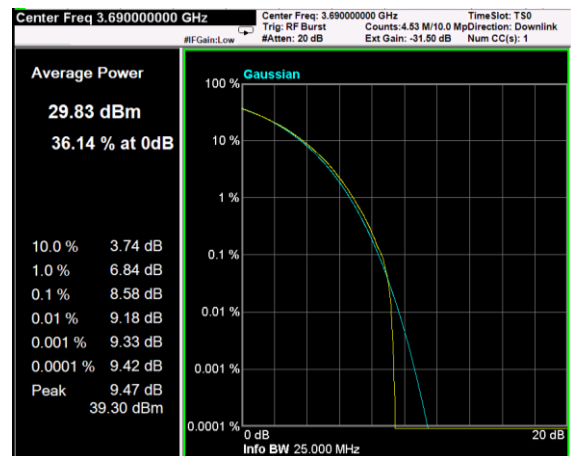BW=20MHz, CCDF

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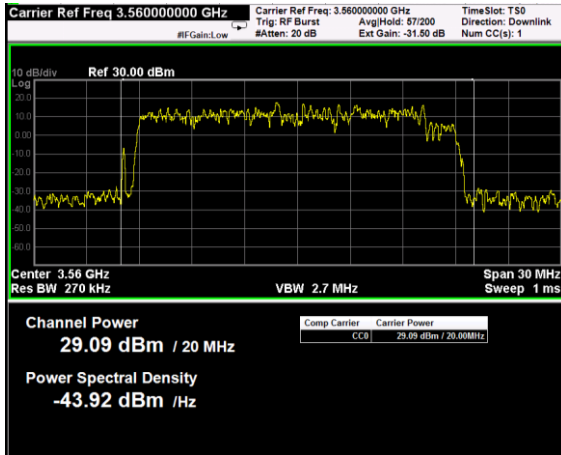BW=20MHz, Channel Power

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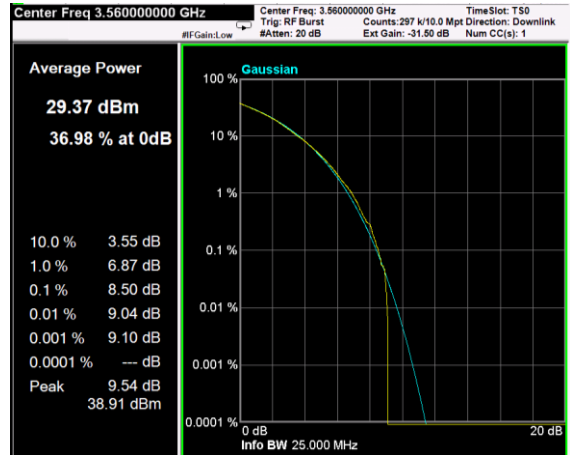BW=20MHz, CCDF

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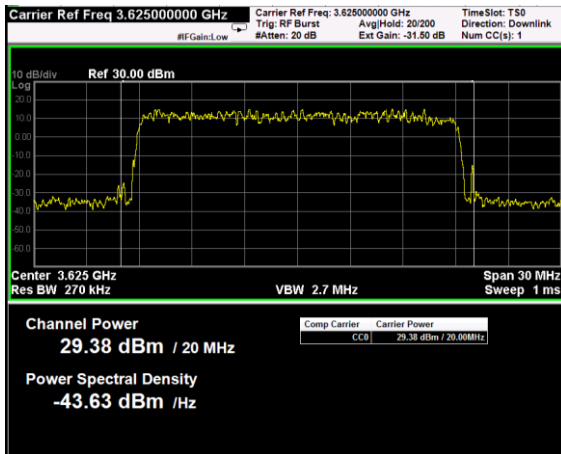BW=20MHz, Channel Power

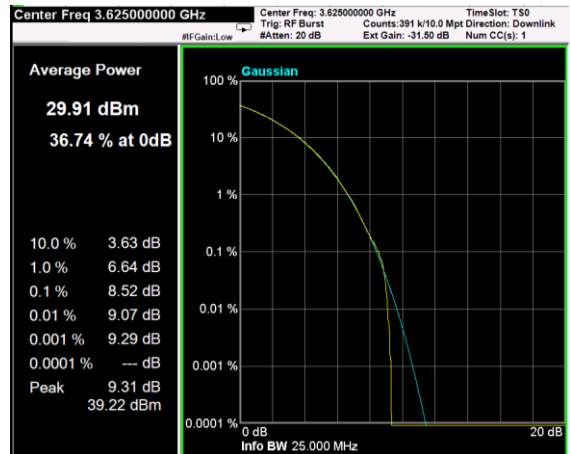Channel: TOP, Modulation: 64QAM,
BW=20MHz, CCDF

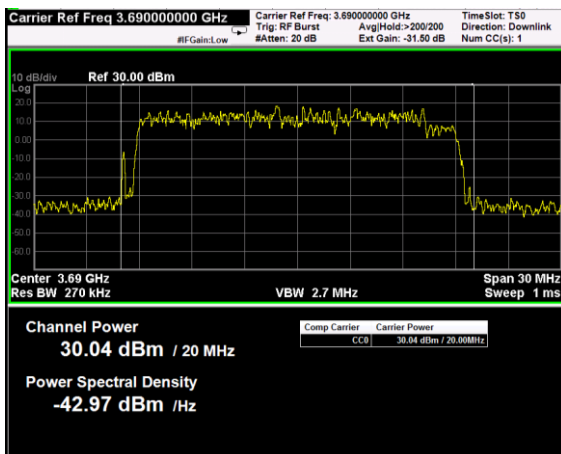Channel: BOTTOM, Modulation: 256QAM, BW=20MHz, Channel Power

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

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

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

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

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