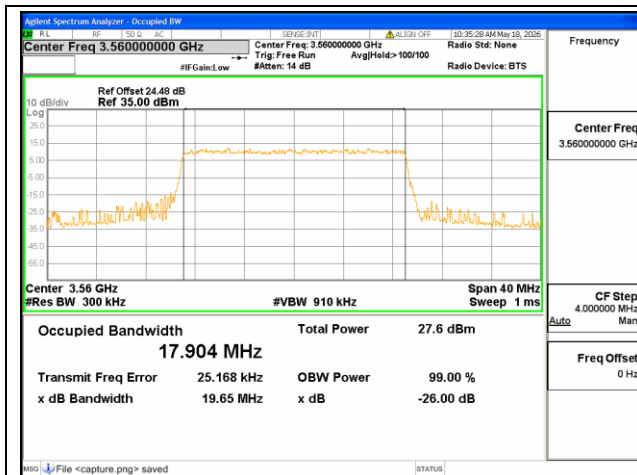
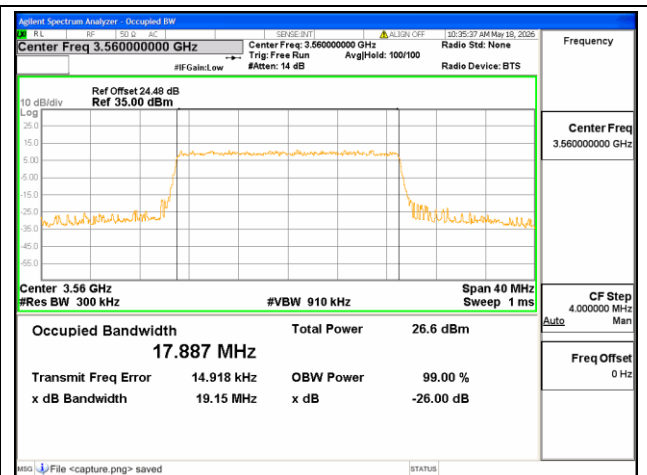
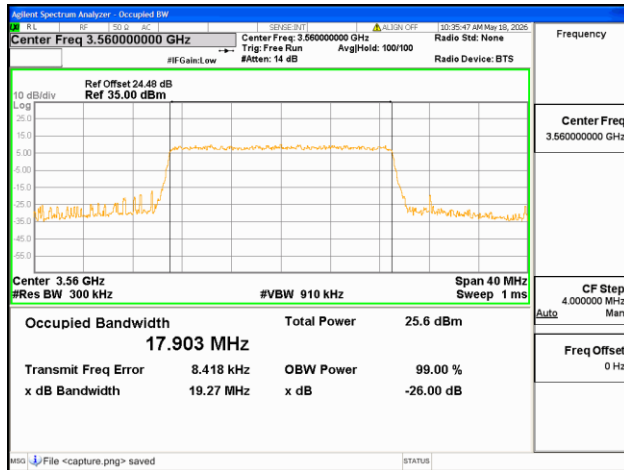




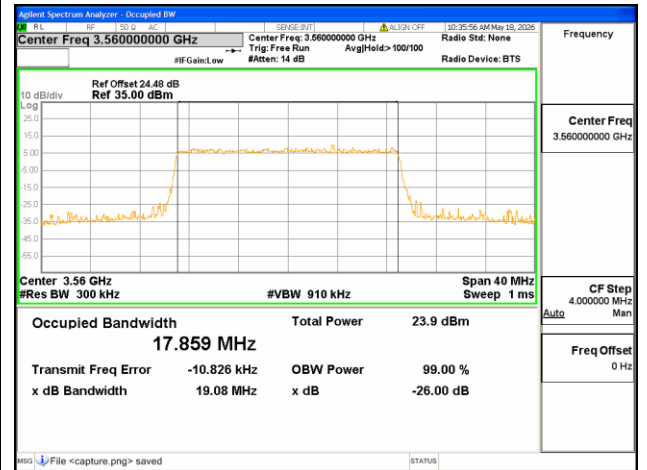
B48 / 20MHz / QPSK/ Low CH



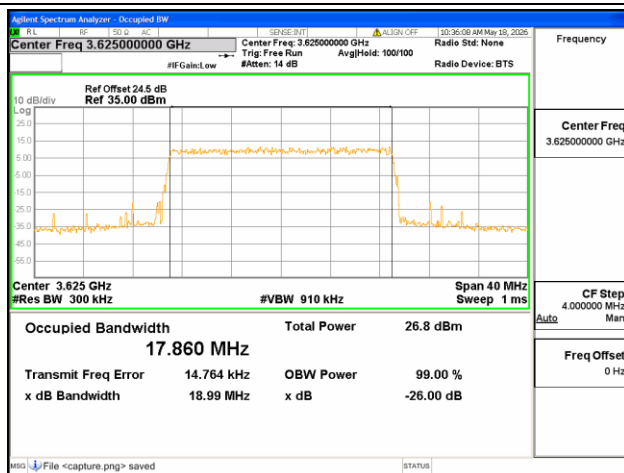
B48 / 20MHz / 16QAM/ Low CH



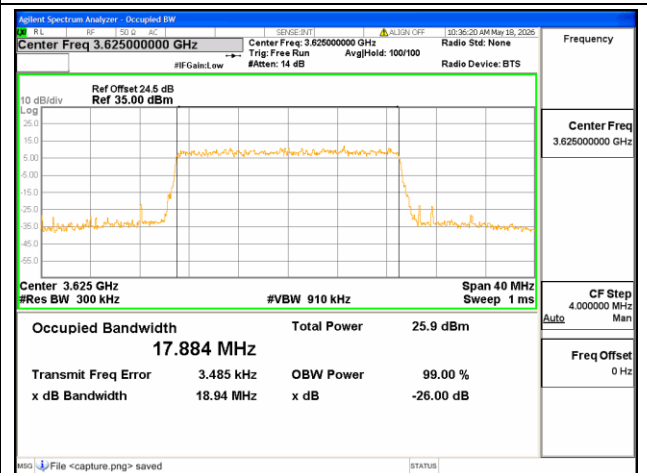
B48 / 20MHz / 64QAM/ Low CH



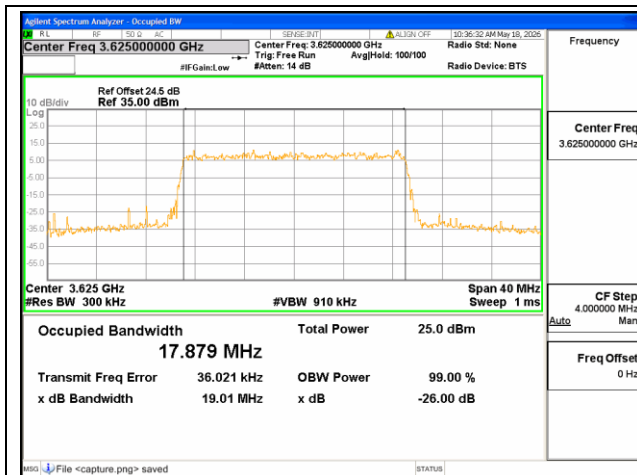
B48 / 20MHz / 256QAM/ Low CH



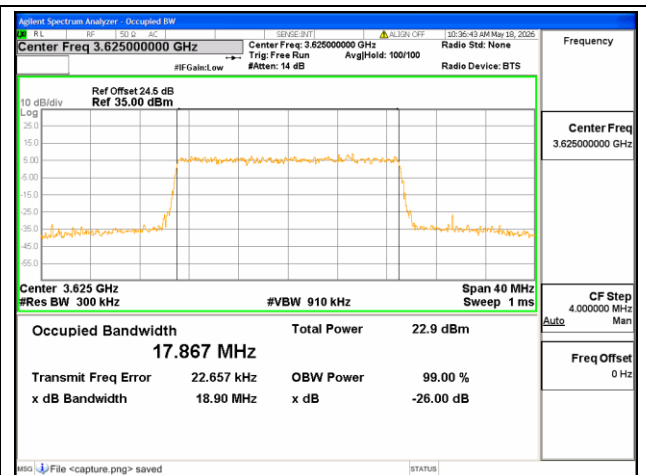
B48 / 20MHz / QPSK/ Mid CH



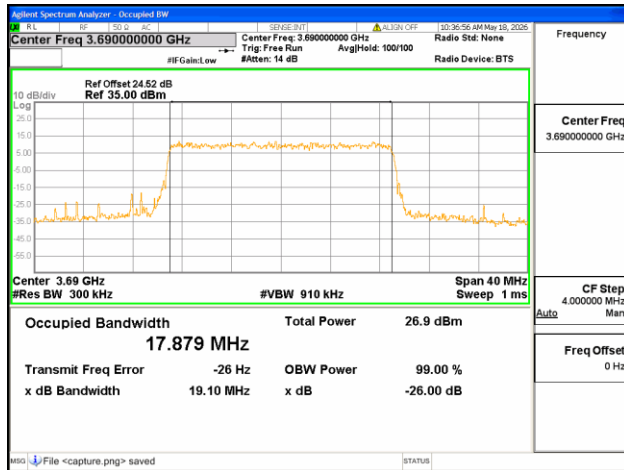
B48 / 20MHz / 16QAM/ Mid CH



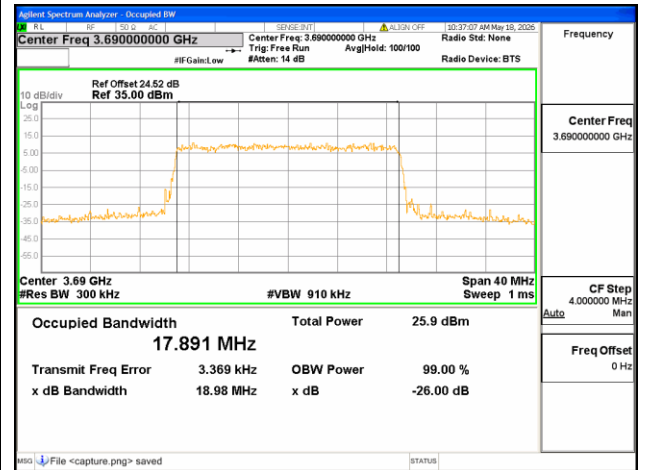
B48 / 20MHz / 64QAM/ Mid CH



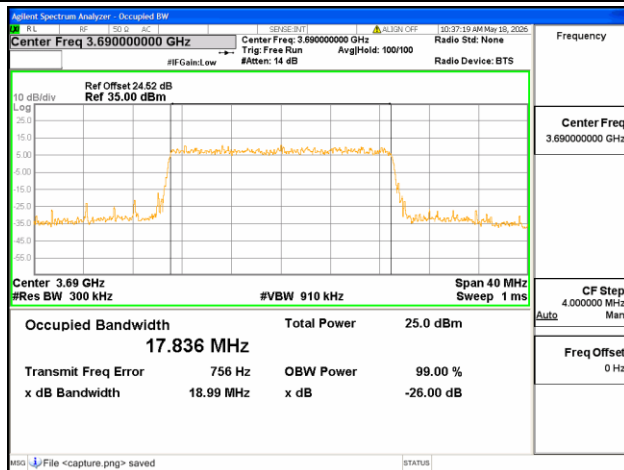
B48 / 20MHz / 256QAM/ Mid CH



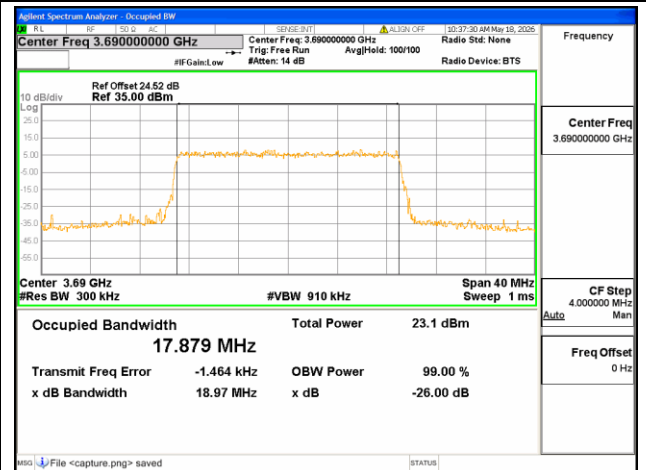
B48 / 20MHz / QPSK/ High CH



B48 / 20MHz / 16QAM/ High CH



B48 / 20MHz / 64QAM/ High CH



B48 / 20MHz / 256QAM/ High CH

2.3. Frequency Stability

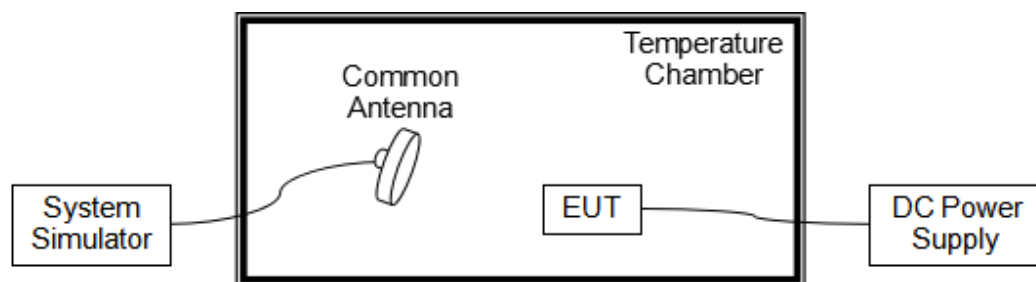
2.3.1. Requirement

According to FCC section 2.1055 & 90.213, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

- (a) The temperature is varied from -30°C to $+50^{\circ}\text{C}$ at intervals of not more than 10°C .
- (b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

Note: The operating temperature of EUT is from -10°C to 45°C , which are specified by the applicant.

2.3.2. Test Description



The EUT which is powered by the DC Power Supply directly, is located in the Temperature Chamber. The EUT is commanded by the System Simulator (SS) to operate at the maximum output power. A call is established between the EUT and the SS via a Common Antenna.

2.3.3. Test procedure

KDB 971168 D01v03 Section 9.0 and ANSI/TIA-603-E-2016.



2.3.4.Test Result

The nominal, highest and lowest extreme voltages are separately 3.86V, 4.45V and 3.60V, which are specified by the applicant; the normal temperature here used is 20°C.

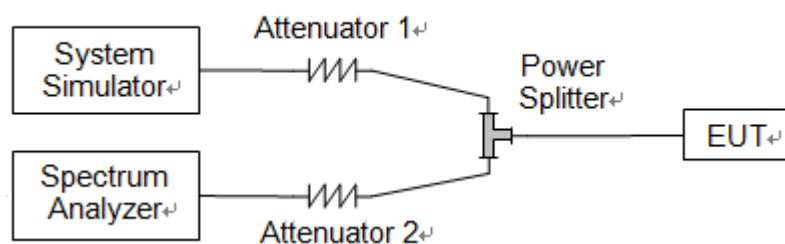
LTE Band 48, 256QAM, Channel 26740, Frequency 3625.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.86	+20(Ref)	14	0.004	PASS
Normal		-10	-16	-0.004	
Normal		0	10	0.003	
Normal		+10	18	0.005	
Normal		+20	3	0.001	
Normal		+30	13	0.004	
Normal		+40	17	0.005	
Normal		+45	-19	-0.005	
High	4.45	+20	5	0.001	
BATT.ENDPOINT	3.60	+20	18	0.005	

2.4. Peak to Average Ratio

2.4.1. Requirement

According to FCC 96.41(g), the peak-to-average power ratio (PAPR) of any CBSD transmitter output power must not exceed 13 dB.

2.4.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

2.4.3. Test procedure

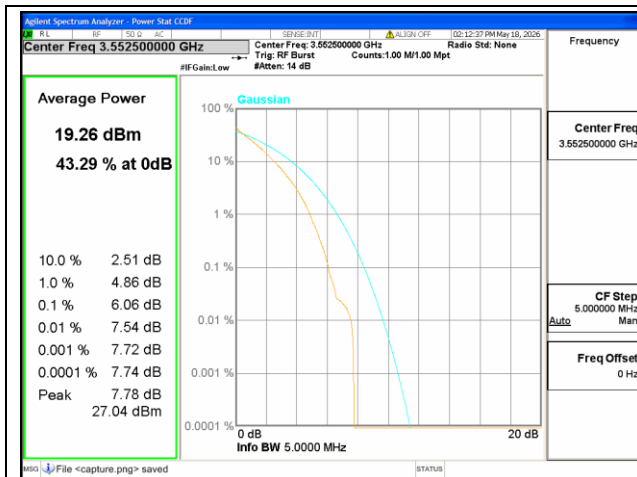
KDB 971168 D01v03 Section 5.7 and ANSI/TIA-603-E-2016.

**2.4.4. Test Result**

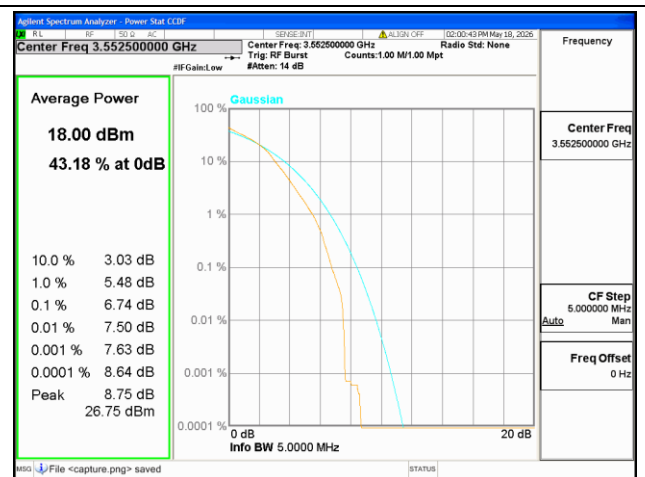
LTE Band	BW(MHz)	Channel Level	Channel	Frequency (MHz)	Modulation	Peak to Average Radio(dB)	Verdict
B48	5	Low	55265	3552.5	QPSK	6.06	PASS
B48	5	Low	55265	3552.5	16QAM	6.74	PASS
B48	5	Low	55265	3552.5	64QAM	7.15	PASS
B48	5	Low	55265	3552.5	256QAM	6.82	PASS
B48	5	Mid	55990	3625	QPSK	6.05	PASS
B48	5	Mid	55990	3625	16QAM	6.65	PASS
B48	5	Mid	55990	3625	64QAM	7.09	PASS
B48	5	Mid	55990	3625	256QAM	6.78	PASS
B48	5	High	56715	3697.5	QPSK	6.13	PASS
B48	5	High	56715	3697.5	16QAM	6.76	PASS
B48	5	High	56715	3697.5	64QAM	7.19	PASS
B48	5	High	56715	3697.5	256QAM	6.76	PASS
B48	10	Low	55290	3555	QPSK	5.86	PASS
B48	10	Low	55290	3555	16QAM	6.46	PASS
B48	10	Low	55290	3555	64QAM	6.87	PASS
B48	10	Low	55290	3555	256QAM	6.57	PASS
B48	10	Mid	55990	3625	QPSK	5.87	PASS
B48	10	Mid	55990	3625	16QAM	6.46	PASS
B48	10	Mid	55990	3625	64QAM	6.83	PASS
B48	10	Mid	55990	3625	256QAM	6.53	PASS
B48	10	High	56690	3695	QPSK	5.95	PASS
B48	10	High	56690	3695	16QAM	6.52	PASS
B48	10	High	56690	3695	64QAM	6.92	PASS
B48	10	High	56690	3695	256QAM	6.55	PASS
B48	15	Low	55315	3557.5	QPSK	5.89	PASS
B48	15	Low	55315	3557.5	16QAM	6.43	PASS
B48	15	Low	55315	3557.5	64QAM	6.69	PASS
B48	15	Low	55315	3557.5	256QAM	6.62	PASS
B48	15	Mid	55990	3625	QPSK	5.86	PASS
B48	15	Mid	55990	3625	16QAM	6.41	PASS
B48	15	Mid	55990	3625	64QAM	6.62	PASS
B48	15	Mid	55990	3625	256QAM	6.54	PASS
B48	15	High	56665	3692.5	QPSK	5.98	PASS



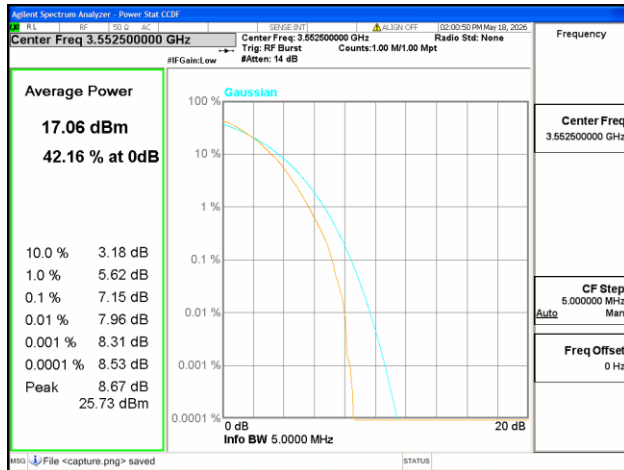
B48	15	High	56665	3692.5	16QAM	6.49	PASS
B48	15	High	56665	3692.5	64QAM	6.72	PASS
B48	15	High	56665	3692.5	256QAM	6.57	PASS
B48	20	Low	55340	3560	QPSK	6.01	PASS
B48	20	Low	55340	3560	16QAM	6.51	PASS
B48	20	Low	55340	3560	64QAM	6.91	PASS
B48	20	Low	55340	3560	256QAM	6.68	PASS
B48	20	Mid	55990	3625	QPSK	6.03	PASS
B48	20	Mid	55990	3625	16QAM	6.47	PASS
B48	20	Mid	55990	3625	64QAM	6.89	PASS
B48	20	Mid	55990	3625	256QAM	6.59	PASS
B48	20	High	56640	3690	QPSK	6.13	PASS
B48	20	High	56640	3690	16QAM	6.59	PASS
B48	20	High	56640	3690	64QAM	7.01	PASS
B48	20	High	56640	3690	256QAM	6.62	PASS



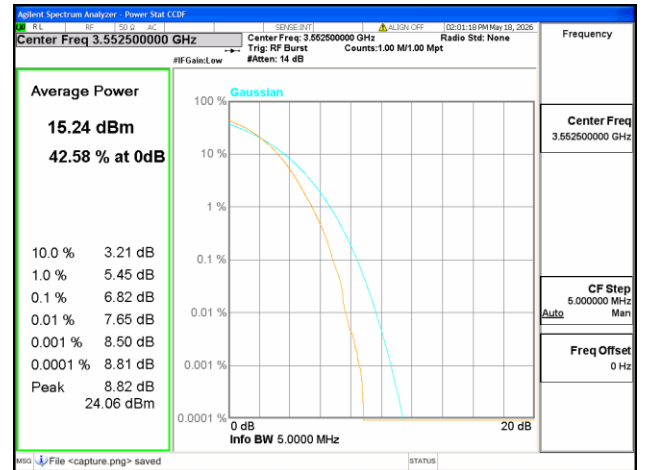
B48 / 5MHz / Low CH / QPSK



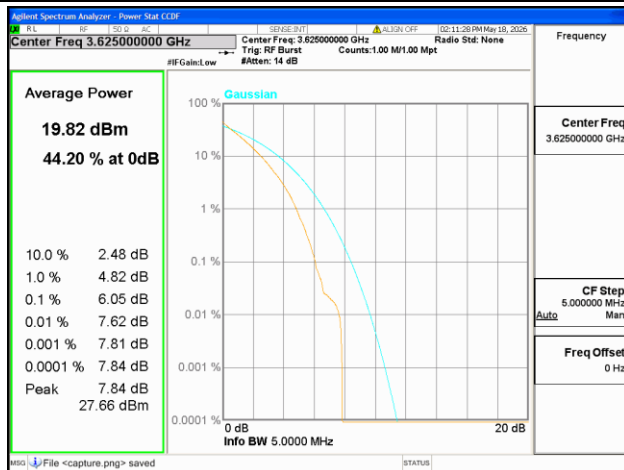
B48 / 5MHz / Low CH / 16QAM



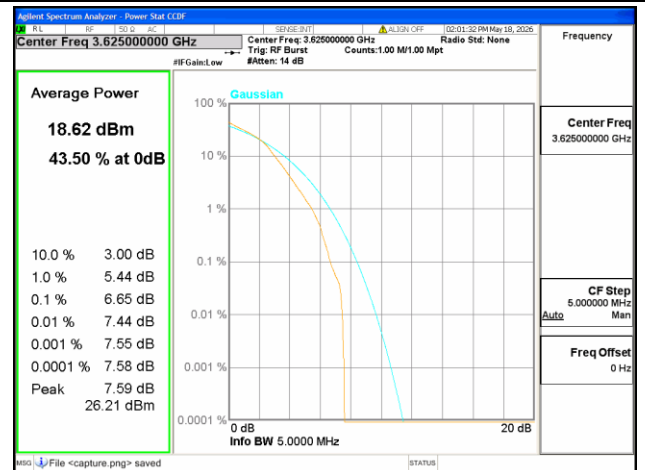
B48 / 5MHz / Low CH / 64QAM



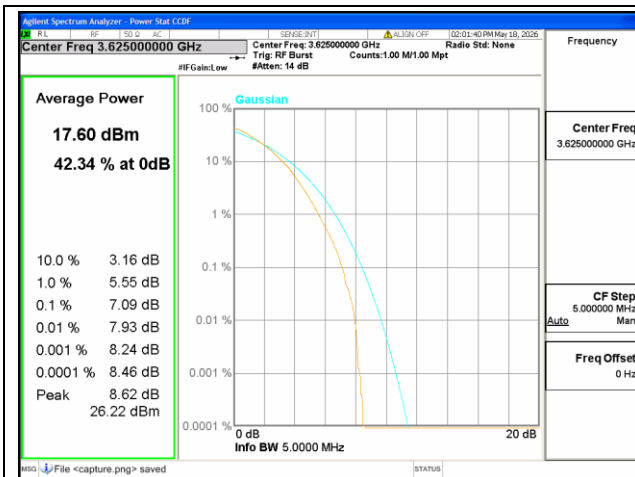
B48 / 5MHz / Low CH / 256QAM



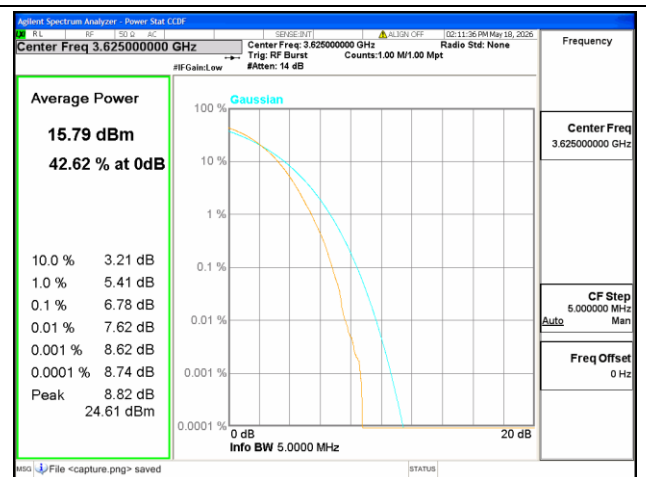
B48 / 5MHz / Mid CH / QPSK



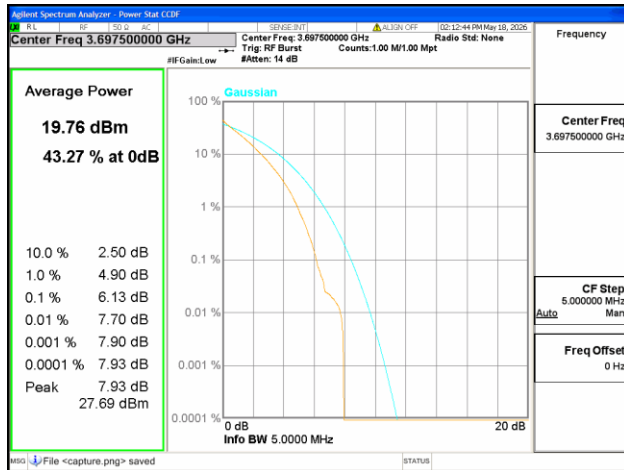
B48 / 5MHz / Mid CH / 16QAM



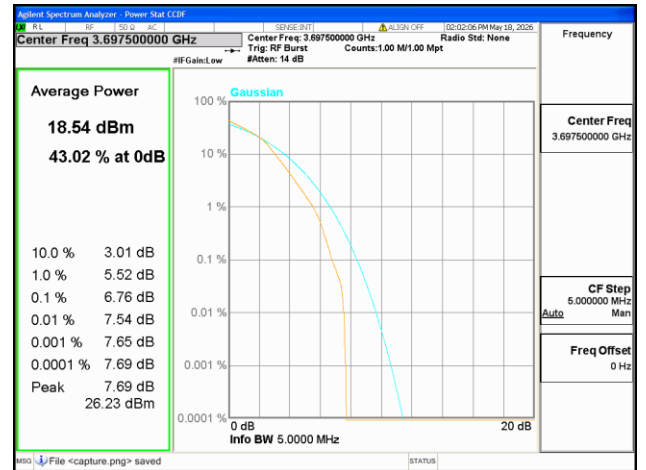
B48 / 5MHz / Mid CH / 64QAM



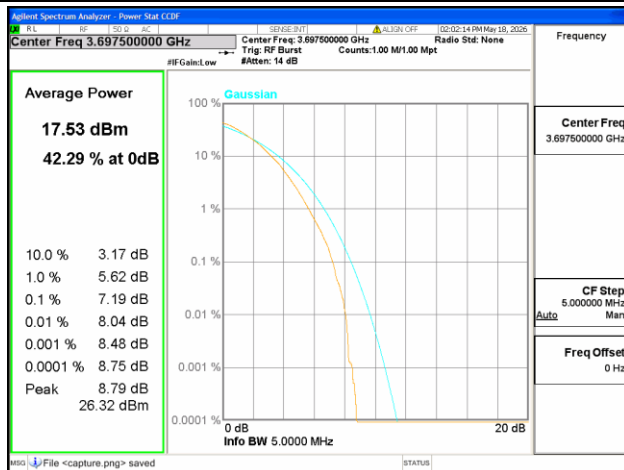
B48 / 5MHz / Mid CH / 256QAM



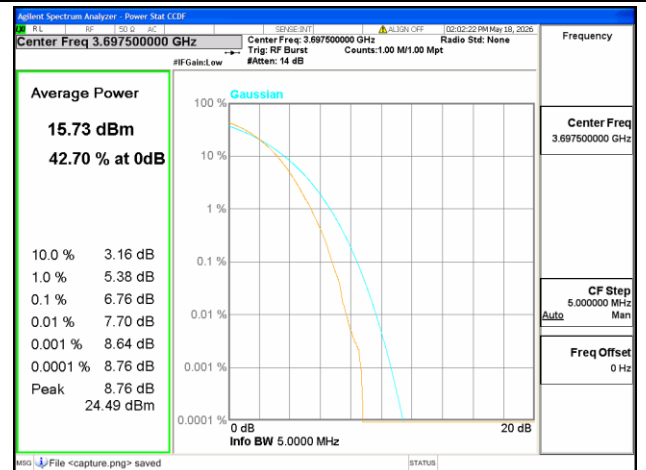
B48 / 5MHz / High CH / QPSK



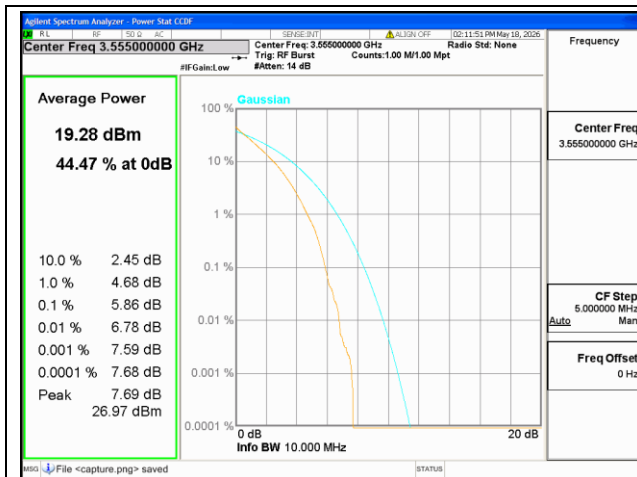
B48 / 5MHz / High CH / 16QAM



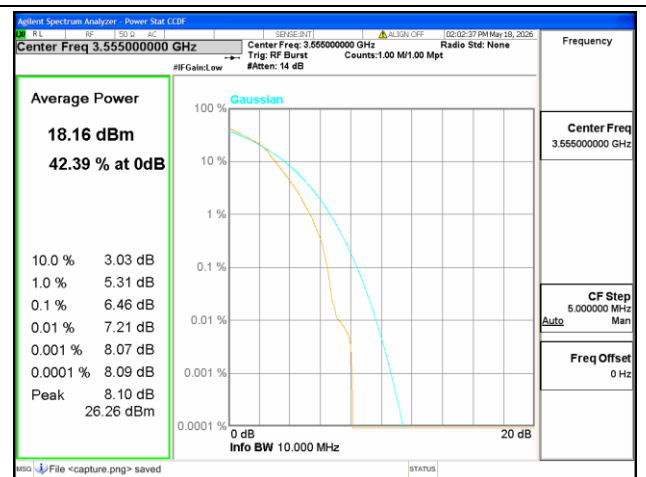
B48 / 5MHz / High CH / 64QAM



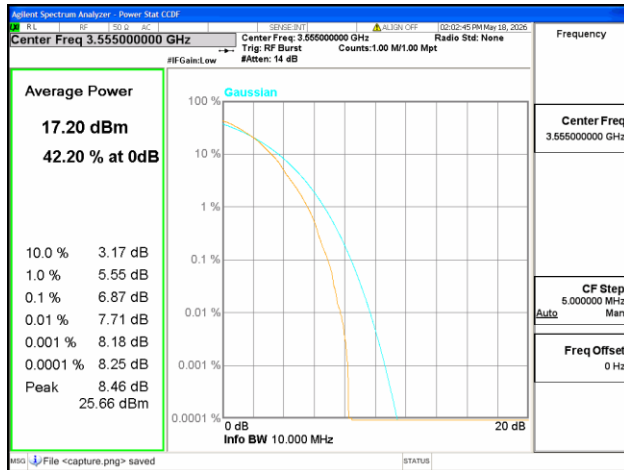
B48 / 5MHz / High CH / 256QAM



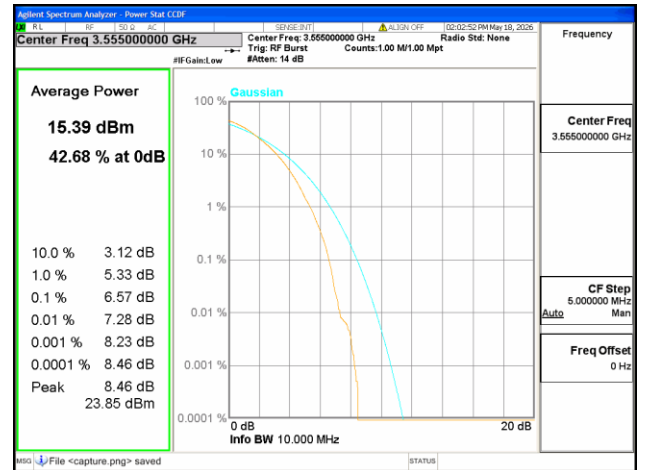
B48 / 10MHz / Low CH / QPSK



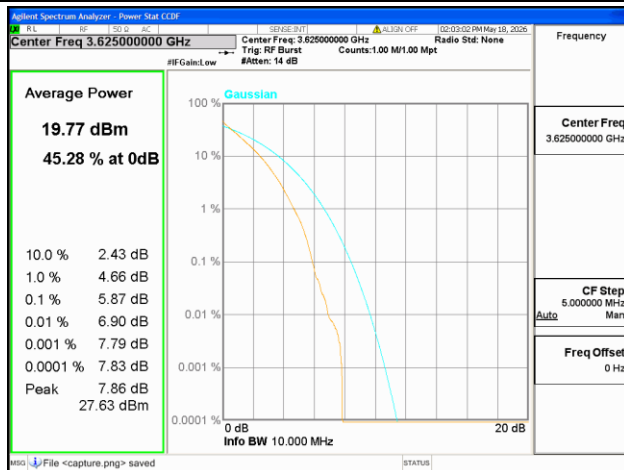
B48 / 10MHz / Low CH / 16QAM



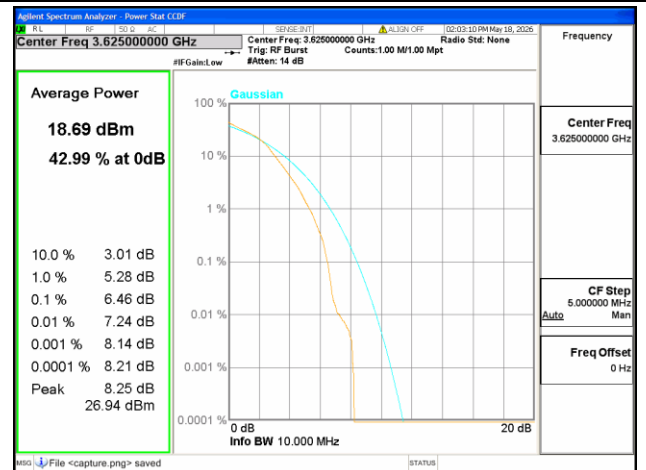
B48 / 10MHz / Low CH / 64QAM



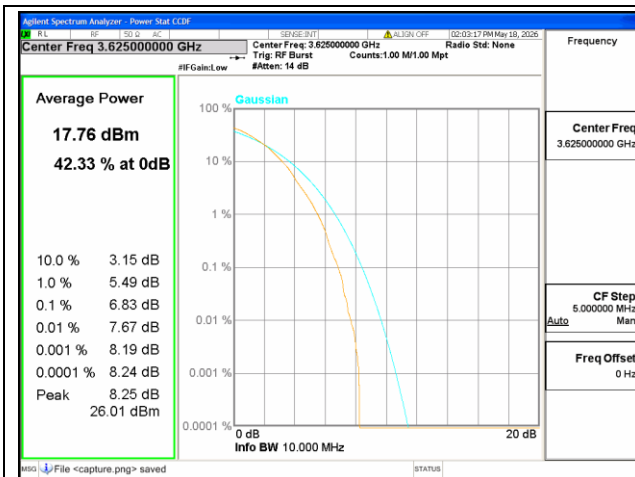
B48 / 10MHz / Low CH / 256QAM



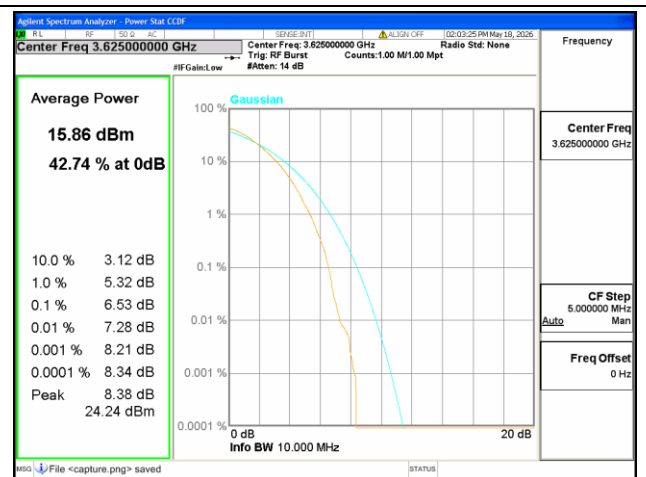
B48 / 10MHz / Mid CH / QPSK



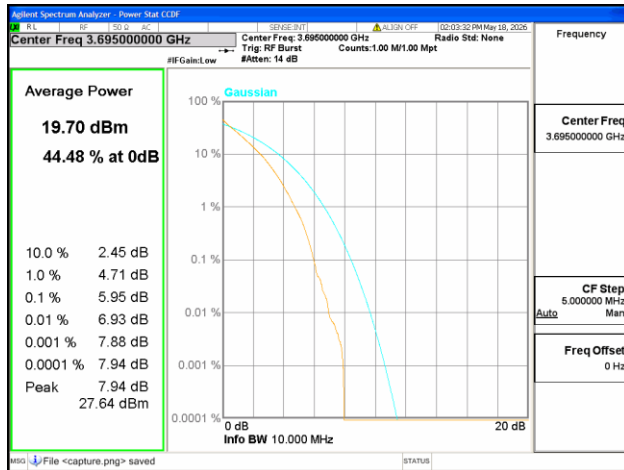
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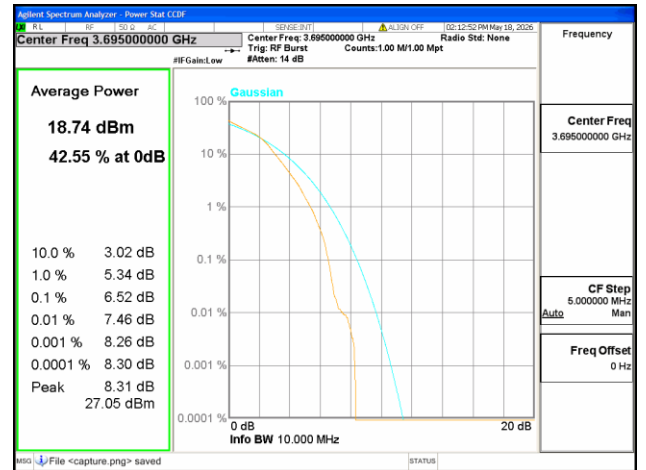
B48 / 10MHz / Mid CH / 64QAM



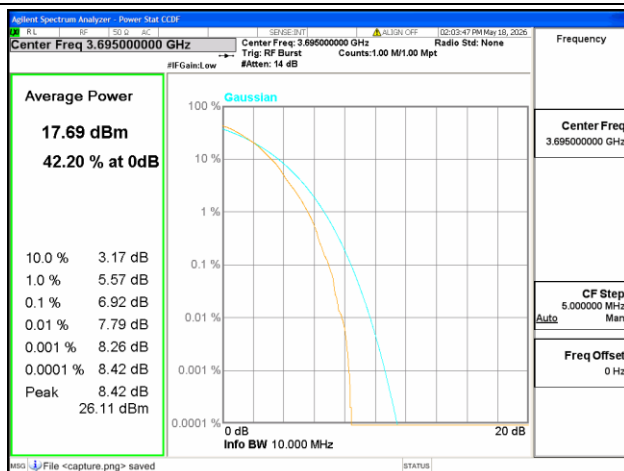
B48 / 10MHz / Mid CH / 256QAM



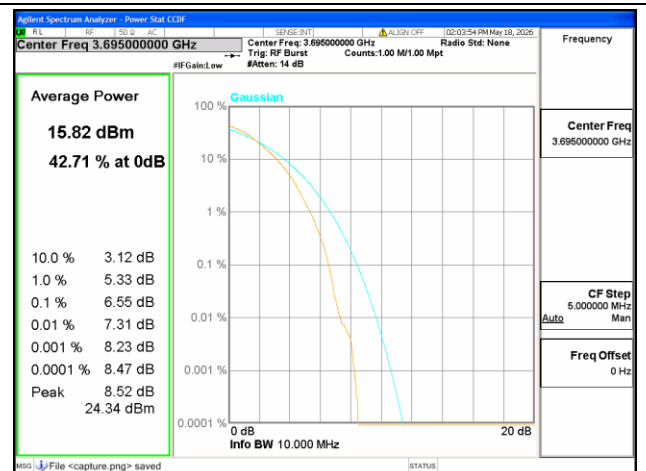
B48 / 10MHz / High CH / QPSK



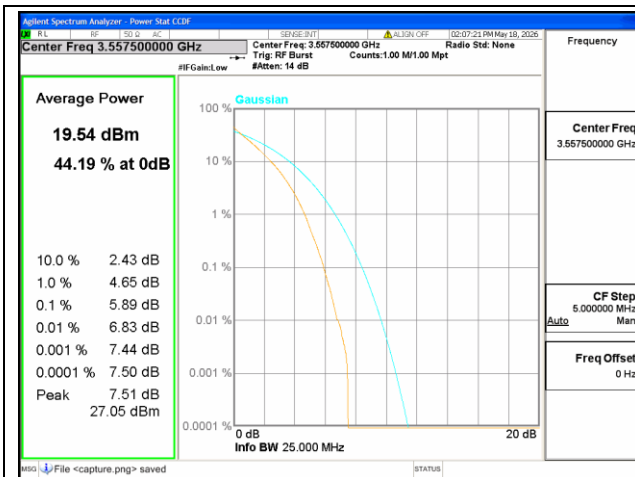
B48 / 10MHz / High CH / 16QAM



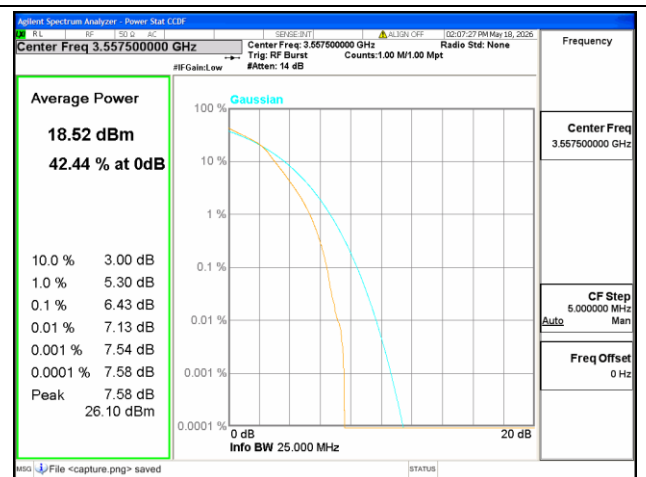
B48 / 10MHz / High CH / 64QAM



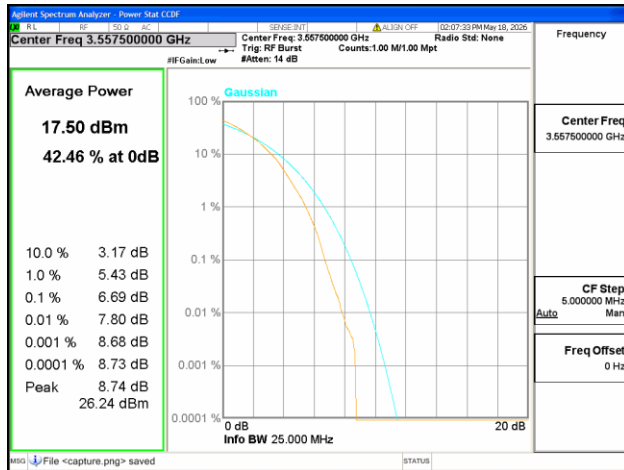
B48 / 10MHz / High CH / 256QAM



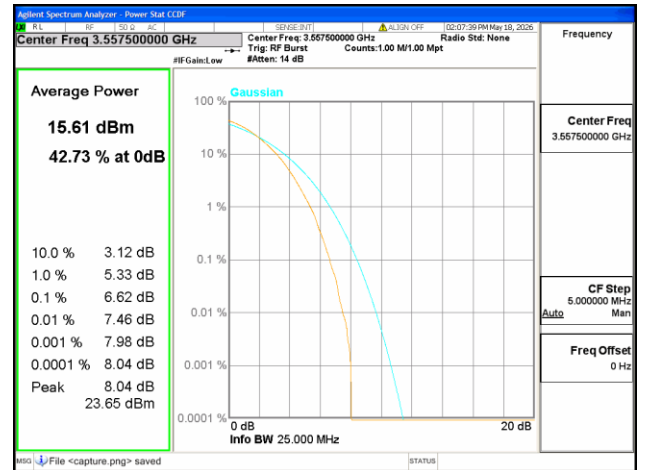
B48 / 15MHz / Low CH / QPSK



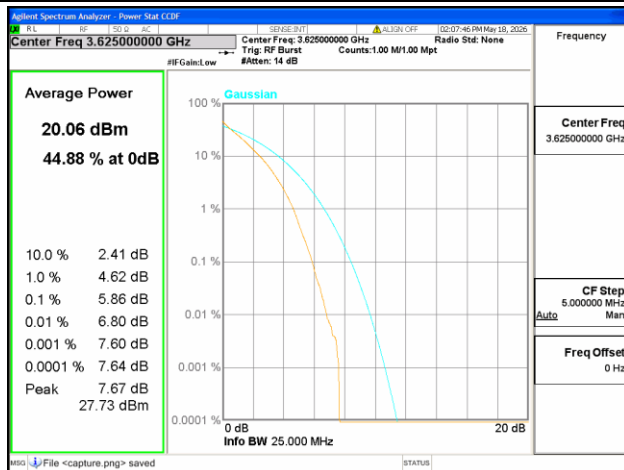
B48 / 15MHz / Low CH / 16QAM



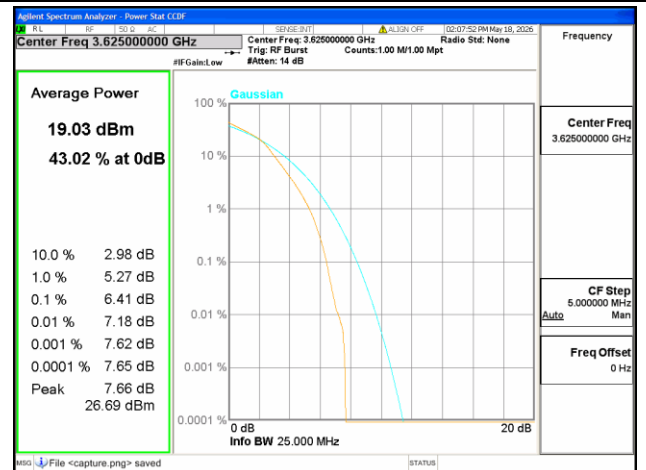
B48 / 15MHz / Low CH / 64QAM



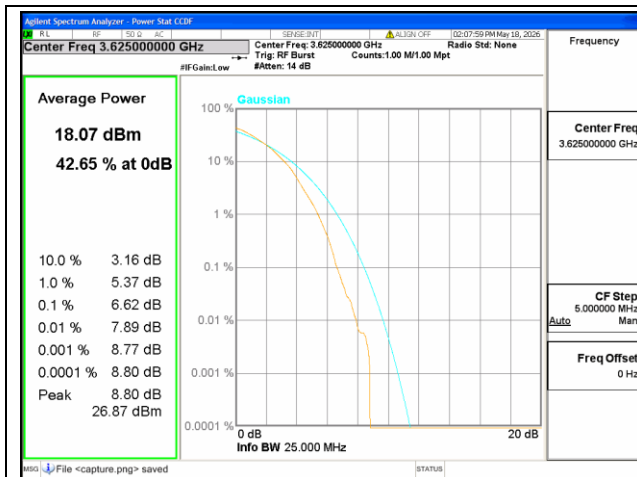
B48 / 15MHz / Low CH / 256QAM



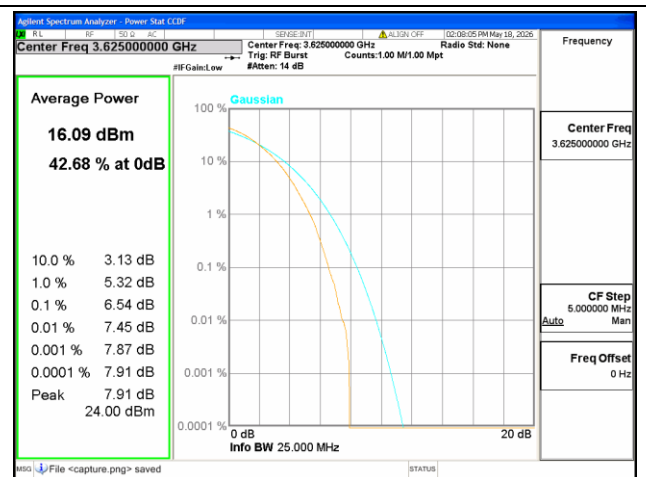
B48 / 15MHz / Mid CH / QPSK



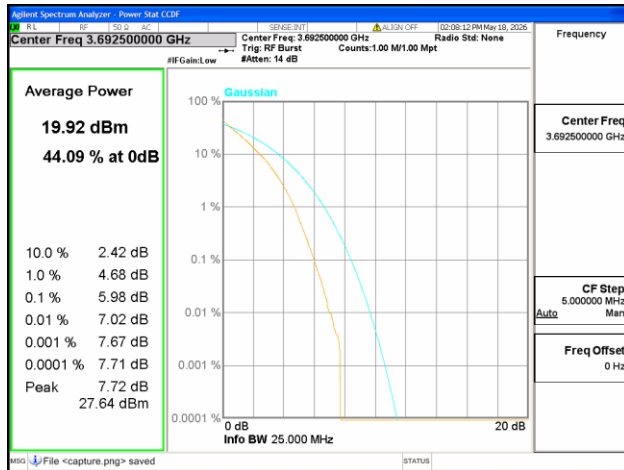
B48 / 15MHz / Mid CH / 16QAM



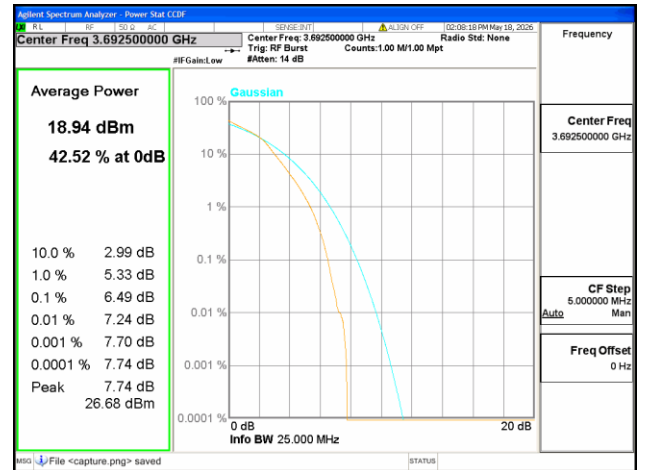
B48 / 15MHz / Mid CH / 64QAM



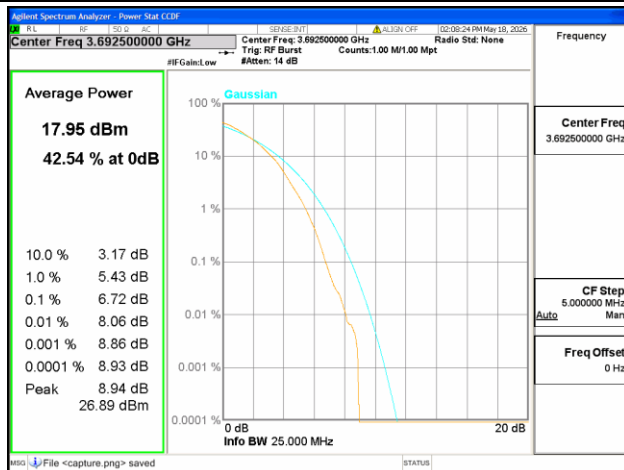
B48 / 15MHz / Mid CH / 256QAM



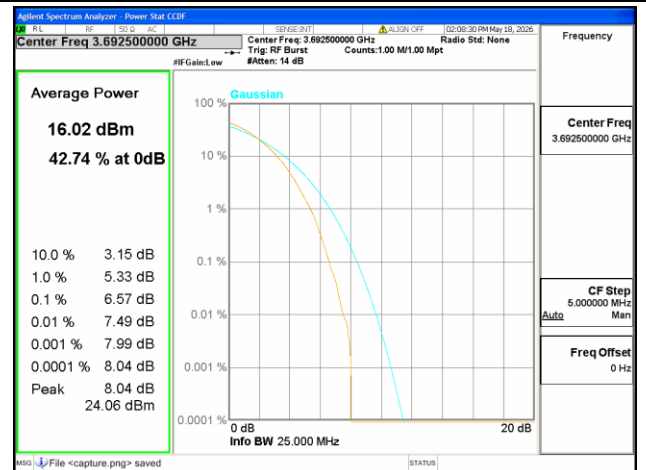
B48 / 15MHz / High CH / QPSK



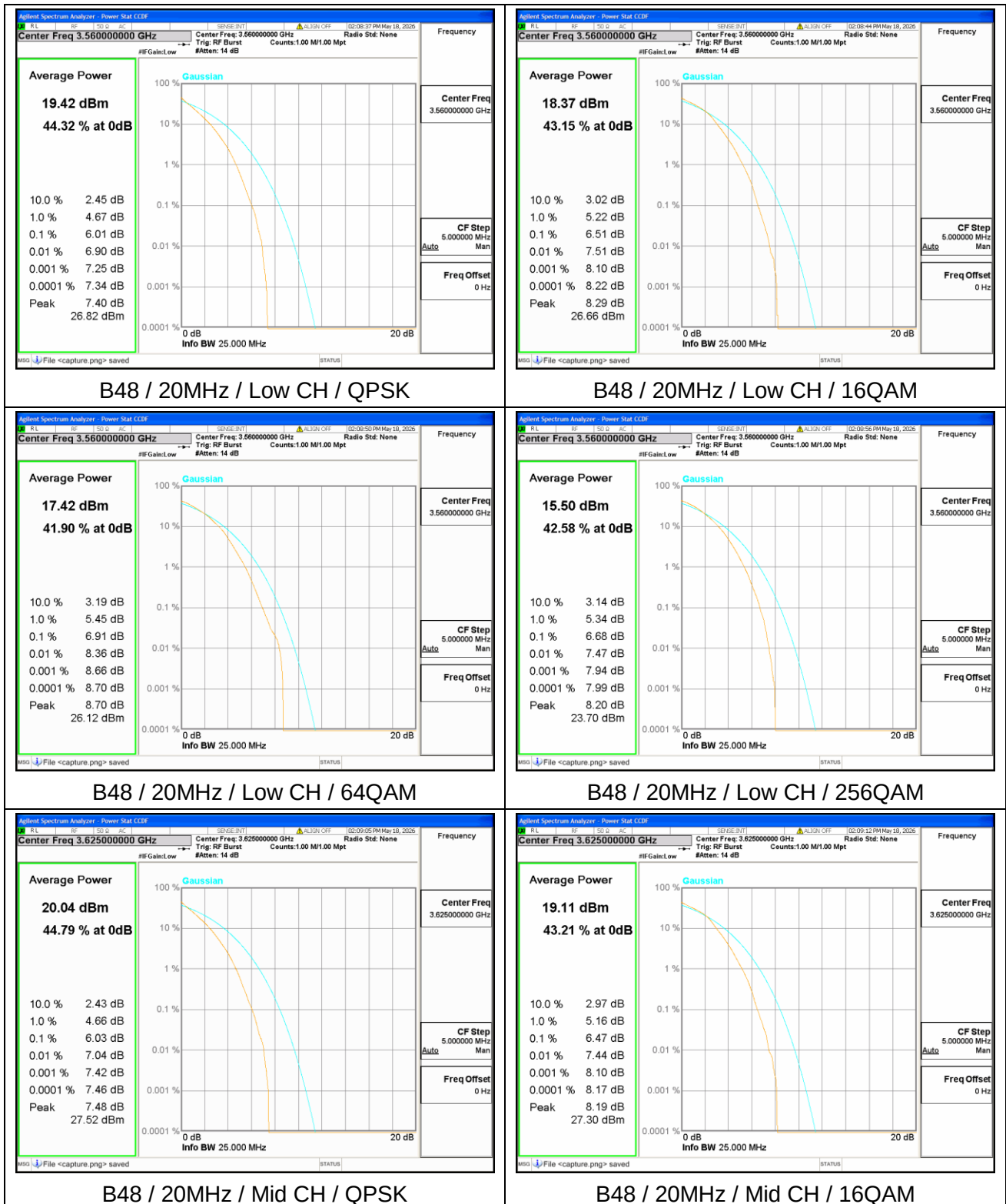
B48 / 15MHz / High CH / 16QAM

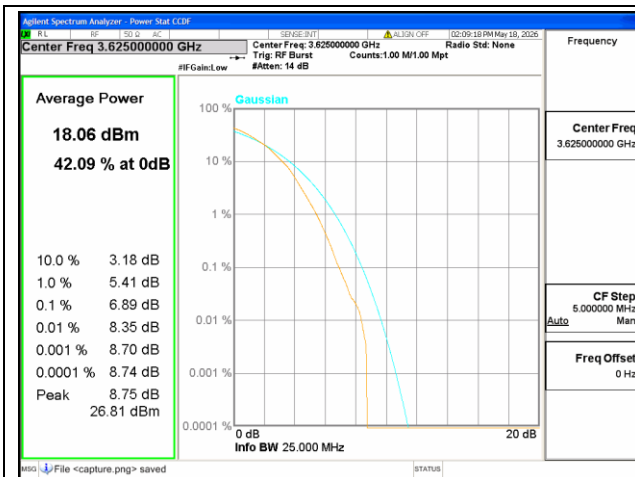


B48 / 15MHz / High CH / 64QAM

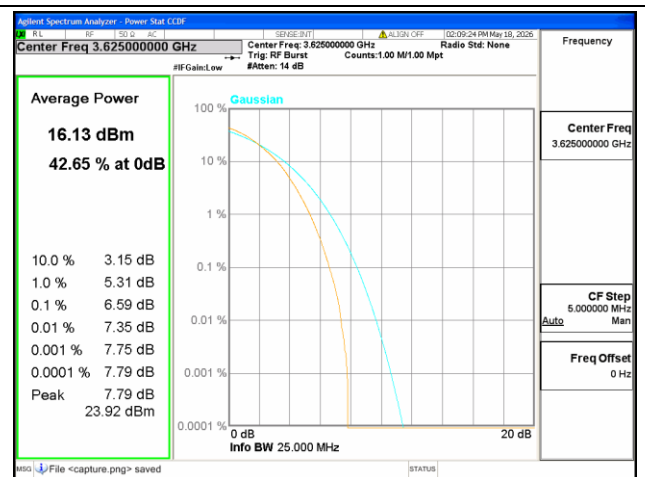


B48 / 15MHz / High CH / 256QAM

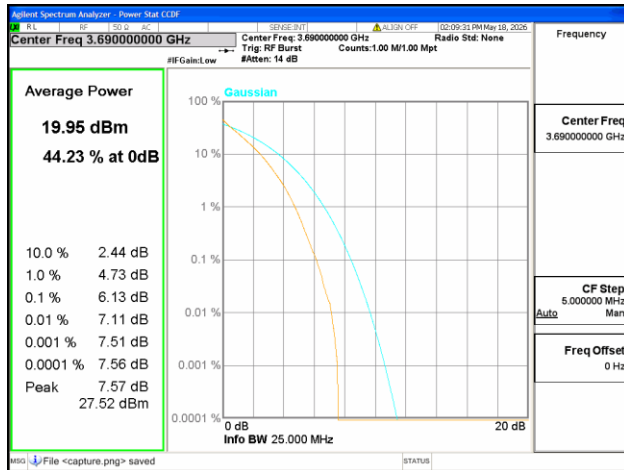




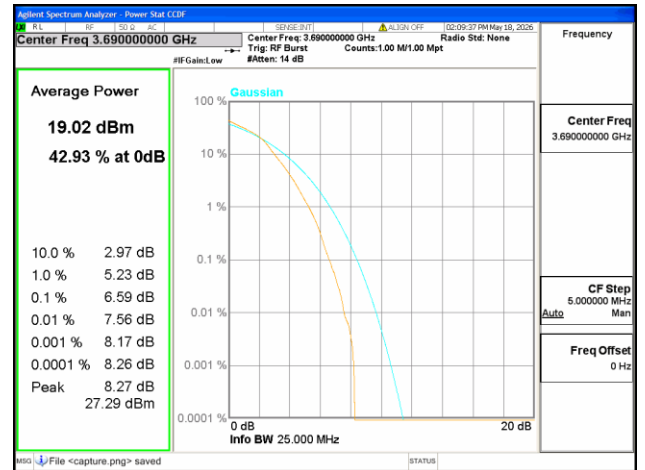
B48 / 20MHz / Mid CH / 64QAM



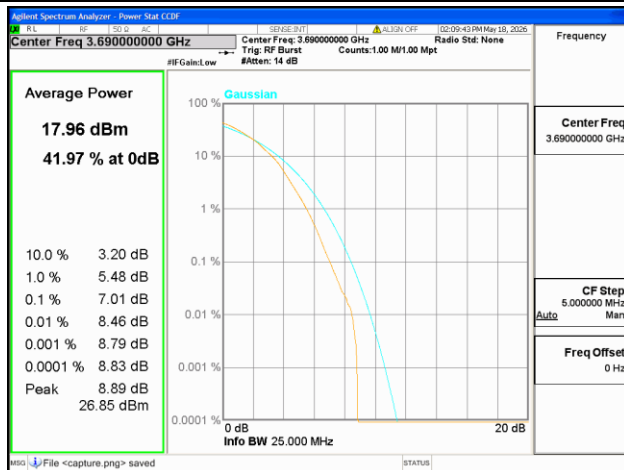
B48 / 20MHz / Mid CH / 256QAM



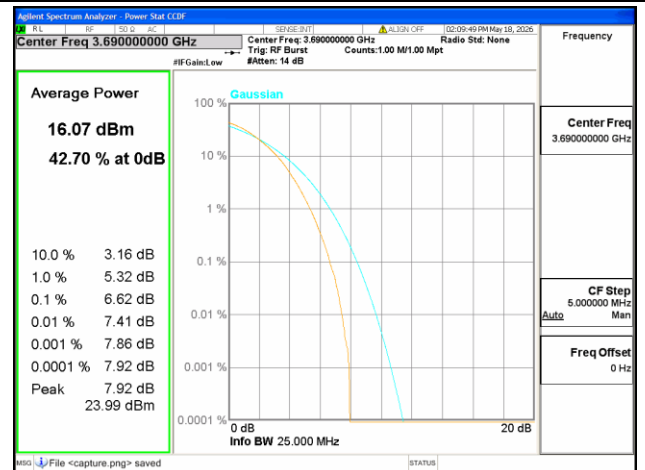
B48 / 20MHz / High CH / QPSK



B48 / 20MHz / High CH / 16QAM



B48 / 20MHz / High CH / 64QAM



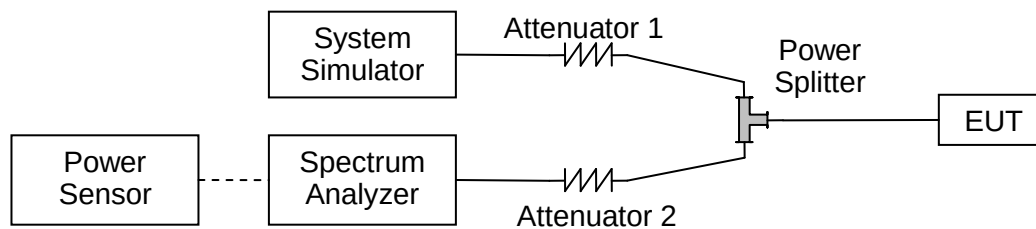
B48 / 20MHz / High CH / 256QAM

2.5. Conducted Spurious Emissions

2.5.1. Requirement

According to FCC section 96.41(e), the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz .

2.5.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

2.5.1. Test procedure

KDB 971168 D01v03 Section 6.0 and ANSI/TIA-603-E-2016.