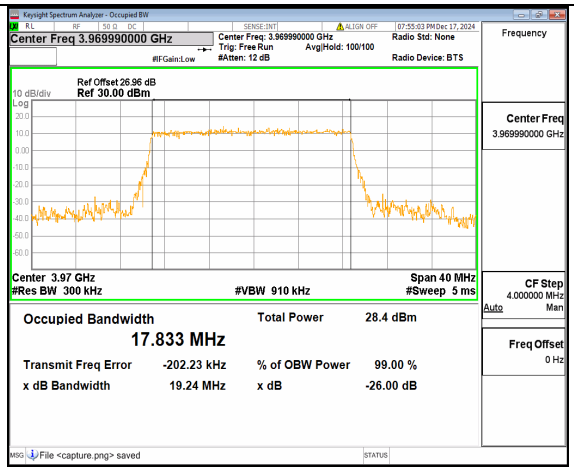
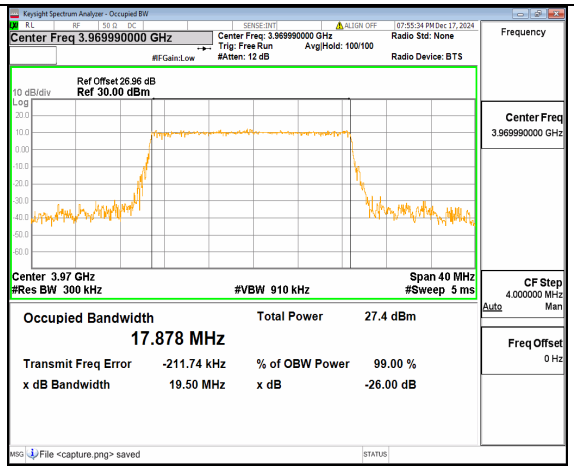
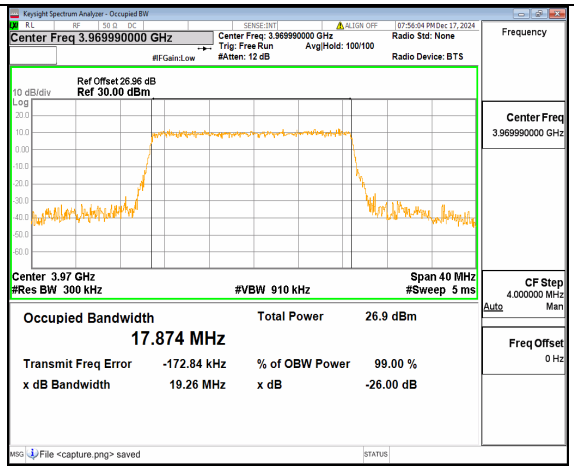
n77(3700-3980MHz) 20M DFT-s-OFDM BPSK Outer_Full High



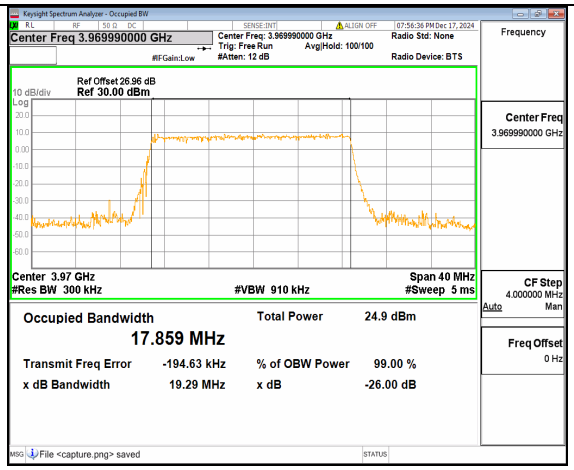
n77(3700-3980MHz) 20M DFT-s-OFDM QPSK Outer_Full High



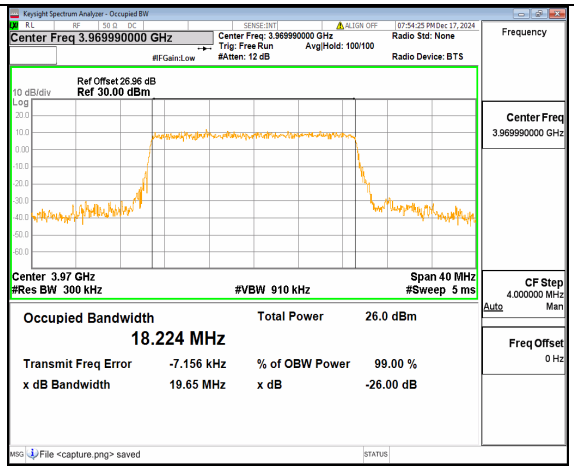
n77(3700-3980MHz) 20M DFT-s-OFDM 16QAM Outer_Full High



n77(3700-3980MHz) 20M DFT-s-OFDM 64QAM Outer_Full High



n77(3700-3980MHz) 20M DFT-s-OFDM 256QAM Outer_Full High



n77(3700-3980MHz) 20M CP-OFDM QPSK Outer_Full High

2.3. Frequency Stability

2.3.1.Requirement

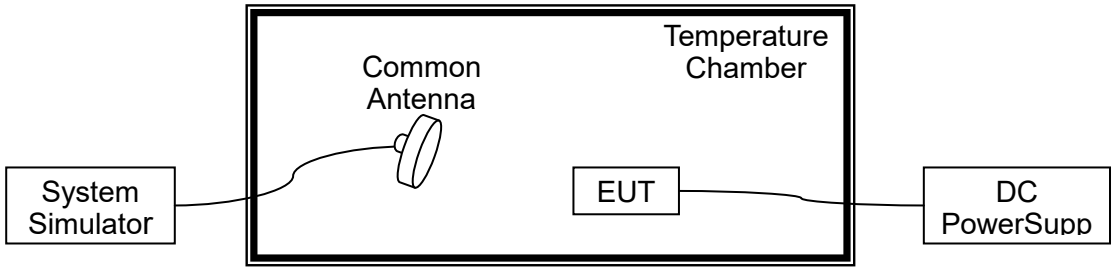
According to FCC section 2.1055, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

(a) The temperature is varied from 0°C to +35°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 55°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 3.85VDC, 4.3VDC and 3.5VDC, which are specified by the applicant; the normal temperature here used is 20°C.

NR n2, QPSK, Channel 376000, SCS 15kHz, Frequency 1880.0MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.85	+20(Ref)	-18	-0.010	PASS
Normal		-10	9	0.005	
Normal		0	19	0.010	
Normal		+10	13	0.007	
Normal		+20	-15	-0.008	
Normal		+30	14	0.007	
Normal		+40	7	0.004	
Normal		+50	19	0.010	
Normal		+55	20	**0.011**	
High	4.3	+20	15	0.008	
BATT.ENDPOINT	3.5	+20	7	0.004	

NR n5, QPSK, Channel 167300, SCS 15kHz, Frequency 836.5 MHz Limit=±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.85	+20(Ref)	17	0.020	PASS
Normal		-10	1	0.001	
Normal		0	20	0.024	
Normal		+10	16	0.019	
Normal		+20	16	0.019	
Normal		+30	11	0.013	
Normal		+40	16	0.019	
Normal		+50	-2	-0.002	
Normal		+55	18	0.022	
High	4.3	+20	18	0.022	
BATT.ENDPOINT	3.5	+20	21	**0.025**	

NR n7, QPSK, Channel 507000, SCS 15kHz, Frequency 2535 MHz Limit=±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.85	+20(Ref)	1	0.000	PASS
Normal		-10	15	0.006	
Normal		0	2	0.001	
Normal		+10	18	0.007	
Normal		+20	14	0.006	
Normal		+30	20	**0.008**	
Normal		+40	20	**0.008**	
Normal		+50	13	0.005	
Normal		+55	4	0.002	
High	4.3	+20	17	0.007	
BATT.ENDPOINT	3.5	+20	19	0.007	

NR n12, QPSK, Channel 141500, SCS 15kHz, Frequency 707.5 MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.85	+20(Ref)	17	0.024	PASS
Normal		-10	-20	-0.028	
Normal		0	-2	-0.003	
Normal		+10	16	0.023	
Normal		+20	20	**0.028**	
Normal		+30	15	0.021	
Normal		+40	-8	-0.011	
Normal		+50	15	0.021	
Normal		+55	13	0.018	
High	4.3	+20	20	**0.028**	
BATT.ENDPOINT	3.5	+20	14	0.020	

NR n14, QPSK, Channel 158600, SCS 15kHz, Frequency 793 MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.85	+20(Ref)	17	0.021	PASS
Normal		-10	19	**0.024**	
Normal		0	18	0.023	
Normal		+10	9	0.011	
Normal		+20	14	0.018	
Normal		+30	-13	-0.016	
Normal		+40	-16	-0.020	
Normal		+50	-14	-0.018	
Normal		+55	-4	-0.005	
High	4.3	+20	17	0.021	
BATT.ENDPOINT	3.5	+20	14	0.018	

NR n25, QPSK, Channel 376500, SCS 15kHz, Frequency 1882.5 MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.85	+20(Ref)	-10	-0.005	PASS
Normal		-10	14	0.007	
Normal		0	19	0.010	
Normal		+10	19	0.010	
Normal		+20	13	0.007	
Normal		+30	-10	-0.005	
Normal		+40	19	0.010	
Normal		+50	16	0.008	
Normal		+55	22	**0.012**	
High	4.3	+20	0	0.000	
BATT.ENDPOINT	3.5	+20	16	0.008	

NR n26(814-824MHz), QPSK, Channel 163800, SCS 15kHz, Frequency 819 MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.85	+20(Ref)	-6	-0.007	PASS
Normal		-10	17	0.020	
Normal		0	-2	-0.002	
Normal		+10	19	**0.023**	
Normal		+20	8	0.010	
Normal		+30	17	0.020	
Normal		+40	6	0.007	
Normal		+50	18	0.022	
Normal		+55	-11	-0.013	
High	4.3	+20	14	0.017	
BATT.ENDPOINT	3.5	+20	18	0.022	

NR n26(824-849MHz), QPSK, Channel 167300, SCS 15kHz, Frequency 836.5 MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.85	+20(Ref)	13	0.016	PASS
Normal		-10	17	0.021	
Normal		0	-13	-0.016	
Normal		+10	-21	-0.026	
Normal		+20	0	0.000	
Normal		+30	20	0.024	
Normal		+40	-13	-0.016	
Normal		+50	22	**0.027**	
Normal		+55	18	0.022	
High	4.3	+20	12	0.015	
BATT.ENDPOINT	3.5	+20	17	0.021	

NR n30, QPSK, Channel 462000, SCS 15kHz, Frequency 2310 MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.85	+20(Ref)	16	0.007	PASS
Normal		-10	-5	-0.002	
Normal		0	13	0.006	
Normal		+10	17	**0.007**	
Normal		+20	17	**0.007**	
Normal		+30	15	0.006	
Normal		+40	10	0.004	
Normal		+50	17	**0.007**	
Normal		+55	16	0.007	
High	4.3	+20	15	0.006	
BATT.ENDPOINT	3.5	+20	-15	-0.006	

NR n41, QPSK, Channel 518598, SCS 30kHz, Frequency 2593MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.85	+20(Ref)	-3	-0.001	PASS
Normal		-10	17	0.007	
Normal		0	-7	-0.003	
Normal		+10	14	0.005	
Normal		+20	-4	-0.002	
Normal		+30	17	0.007	
Normal		+40	13	0.005	
Normal		+50	20	**0.008**	
Normal		+55	-12	-0.005	
High	4.3	+20	19	0.007	
BATT.ENDPOINT	3.5	+20	-6	-0.002	

NR n48, QPSK, Channel 641666, SCS 30kHz, Frequency 3624.99MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.85	+20(Ref)	15	0.004	PASS
Normal		-10	16	0.004	
Normal		0	16	0.004	
Normal		+10	18	0.005	
Normal		+20	18	0.005	
Normal		+30	13	0.004	
Normal		+40	7	0.002	
Normal		+50	18	0.005	
Normal		+55	-12	-0.003	
High	4.3	+20	20	**0.006**	
BATT.ENDPOINT	3.5	+20	2	0.001	

NR n66, QPSK, Channel 349000, SCS 15kHz, Frequency 1745MHz Limit=±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.85	+20(Ref)	-7	-0.004	PASS
Normal		-10	17	0.010	
Normal		0	16	0.009	
Normal		+10	13	0.007	
Normal		+20	9	0.005	
Normal		+30	16	0.009	
Normal		+40	18	0.010	
Normal		+50	19	**0.011**	
Normal		+55	19	**0.011**	
High	4.3	+20	16	0.009	
BATT.ENDPOINT	3.5	+20	15	0.009	

NR n71, QPSK, Channel 136100, SCS 15kHz, Frequency 680.5 MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.85	+20(Ref)	20	**0.029**	PASS
Normal		-10	15	0.022	
Normal		0	20	**0.029**	
Normal		+10	-8	-0.012	
Normal		+20	14	0.021	
Normal		+30	17	0.025	
Normal		+40	14	0.021	
Normal		+50	16	0.024	
Normal		+55	5	0.007	
High	4.3	+20	16	0.024	
BATT.ENDPOINT	3.5	+20	19	0.028	

NR n77(3700 MHz ~ 3980 MHz), QPSK, Channel 656000, SCS 30kHz, Frequency 3840MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.85	+20(Ref)	-10	-0.003	PASS
Normal		-10	17	0.004	
Normal		0	23	**0.006**	
Normal		+10	19	0.005	
Normal		+20	1	0.000	
Normal		+30	18	0.005	
Normal		+40	16	0.004	
Normal		+50	4	0.001	
Normal		+55	18	0.005	
High	4.3	+20	19	0.005	
BATT.ENDPOINT	3.5	+20	20	0.005	

NR n77 (3450 MHz ~ 3550 MHz), QPSK, Channel 633334, SCS 30kHz, Frequency 3550MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.85	+20(Ref)	20	**0.006**	PASS
Normal		-10	-4	-0.001	
Normal		0	20	**0.006**	
Normal		+10	20	**0.006**	
Normal		+20	20	**0.006**	
Normal		+30	5	0.001	
Normal		+40	19	0.005	
Normal		+50	16	0.005	
Normal		+55	-22	-0.006	
High	4.3	+20	-20	-0.006	
BATT.ENDPOINT	3.5	+20	-18	-0.005	

2.4. Peak to Average Ratio

2.4.1.Requirement

According to FCC section 24.232(d) for n2, n25, 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.

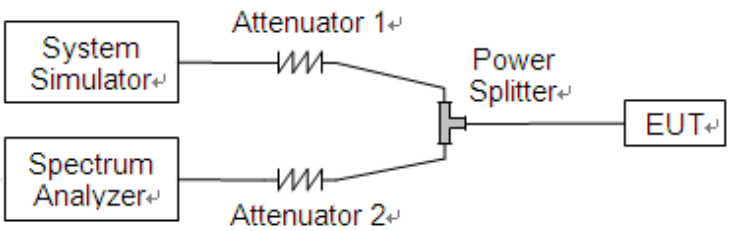
According to FCC section 96.41(g) for n48, the peak-to-average power ratio (PAPR) of any CBSD transmitter output power must not exceed 13 dB. PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities or another Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

According to FCC section 27.50(d)(5) for n66, 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.

According to FCC section 27.50(j)(4) and 25.50(k)(4) for n77,n78, 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.

2.4.2.Test Description

Test Set:



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

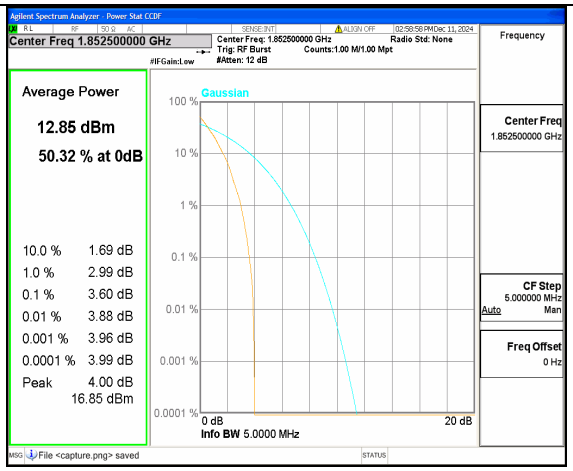
Record the maximum PAPR level associated with a probability of 0.1%.

Note: In the same NR frequency band, The measured power in SA mode is higher than that in NSA mode，SA mode is selected to test all test cases.

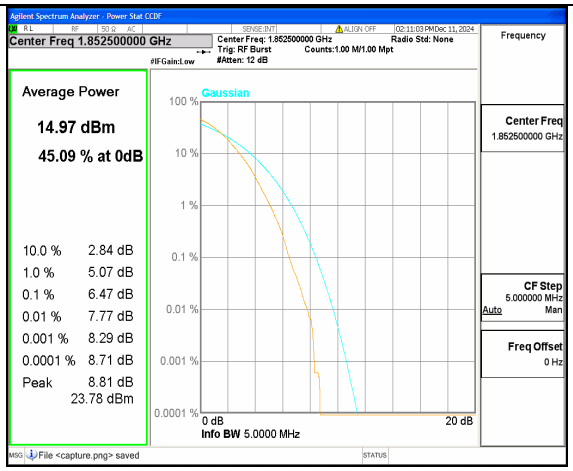
Band	SCS (kHz)	BW (MHz)	ARFCN	Modulation	RB	Result (dB)	Limit (dB)	Verdict
n2	15	5	370500	DFT-s-OFDM PI/2 BPSK	25/0	3.6	13	PASS
n2	15	5	370500	DFT-s-OFDM 256QAM	25/0	6.47	13	PASS
n2	15	5	370500	CP-OFDM QPSK	25/0	7.08	13	PASS
n2	15	5	370500	CP-OFDM 256QAM	25/0	8.28	13	PASS
n2	15	5	376000	DFT-s-OFDM PI/2 BPSK	25/0	3.54	13	PASS
n2	15	5	376000	DFT-s-OFDM 256QAM	25/0	6.45	13	PASS
n2	15	5	376000	CP-OFDM QPSK	25/0	6.98	13	PASS
n2	15	5	376000	CP-OFDM 256QAM	25/0	8.18	13	PASS
n2	15	5	381500	DFT-s-OFDM PI/2 BPSK	25/0	4.56	13	PASS
n2	15	5	381500	DFT-s-OFDM 256QAM	25/0	6.37	13	PASS
n2	15	5	381500	CP-OFDM QPSK	25/0	6.78	13	PASS
n2	15	5	381500	CP-OFDM 256QAM	25/0	8.18	13	PASS
n2	15	10	371000	DFT-s-OFDM PI/2 BPSK	50/0	4.1	13	PASS
n2	15	10	371000	DFT-s-OFDM 256QAM	50/0	6.54	13	PASS
n2	15	10	371000	CP-OFDM QPSK	52/0	6.85	13	PASS
n2	15	10	371000	CP-OFDM 256QAM	52/0	7.92	13	PASS

n2	15	10	376000	DFT-s-OFDM PI/2 BPSK	50/0	4.03	13	PASS
n2	15	10	376000	DFT-s-OFDM 256QAM	50/0	6.42	13	PASS
n2	15	10	376000	CP-OFDM QPSK	52/0	6.72	13	PASS
n2	15	10	376000	CP-OFDM 256QAM	52/0	7.99	13	PASS
n2	15	10	381000	DFT-s-OFDM PI/2 BPSK	50/0	5.36	13	PASS
n2	15	10	381000	DFT-s-OFDM 256QAM	50/0	6.4	13	PASS
n2	15	10	381000	CP-OFDM QPSK	52/0	7.16	13	PASS
n2	15	10	381000	CP-OFDM 256QAM	52/0	8	13	PASS
n2	15	15	371500	DFT-s-OFDM PI/2 BPSK	75/0	5.79	13	PASS
n2	15	15	371500	DFT-s-OFDM 256QAM	75/0	6.27	13	PASS
n2	15	15	371500	CP-OFDM QPSK	79/0	7.43	13	PASS
n2	15	15	371500	CP-OFDM 256QAM	79/0	8.24	13	PASS
n2	15	15	376000	DFT-s-OFDM PI/2 BPSK	75/0	5.74	13	PASS
n2	15	15	376000	DFT-s-OFDM 256QAM	75/0	6.34	13	PASS
n2	15	15	376000	CP-OFDM QPSK	79/0	7.38	13	PASS
n2	15	15	376000	CP-OFDM 256QAM	79/0	8.4	13	PASS
n2	15	15	380500	DFT-s-OFDM PI/2 BPSK	75/0	5.7	13	PASS
n2	15	15	380500	DFT-s-OFDM 256QAM	75/0	6.27	13	PASS
n2	15	15	380500	CP-OFDM QPSK	79/0	7.63	13	PASS
n2	15	15	380500	CP-OFDM 256QAM	79/0	8.29	13	PASS
n2	15	20	372000	DFT-s-OFDM PI/2 BPSK	100/0	6.3	13	PASS
n2	15	20	372000	DFT-s-OFDM 256QAM	100/0	6.34	13	PASS
n2	15	20	372000	CP-OFDM	106/0	7.23	13	PASS

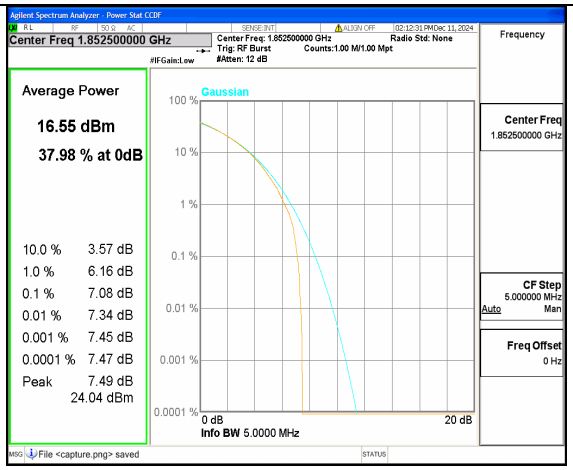
				QPSK				
n2	15	20	372000	CP-OFDM 256QAM	106/0	8.16	13	PASS
n2	15	20	376000	DFT-s-OFDM PI/2 BPSK	100/0	5.47	13	PASS
n2	15	20	376000	DFT-s-OFDM 256QAM	100/0	6.38	13	PASS
n2	15	20	376000	CP-OFDM QPSK	106/0	6.87	13	PASS
n2	15	20	376000	CP-OFDM 256QAM	106/0	8.23	13	PASS
n2	15	20	380000	DFT-s-OFDM PI/2 BPSK	100/0	6.12	13	PASS
n2	15	20	380000	DFT-s-OFDM 256QAM	100/0	6.26	13	PASS
n2	15	20	380000	CP-OFDM QPSK	106/0	7.09	13	PASS
n2	15	20	380000	CP-OFDM 256QAM	106/0	8.18	13	PASS



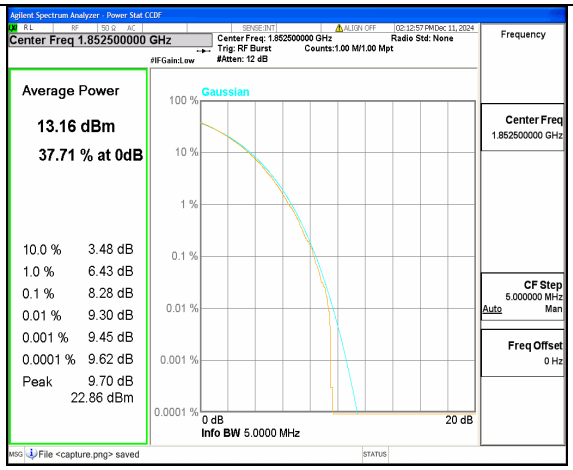
n2 5M DFT-s-OFDM BPSK Outer_Full Low



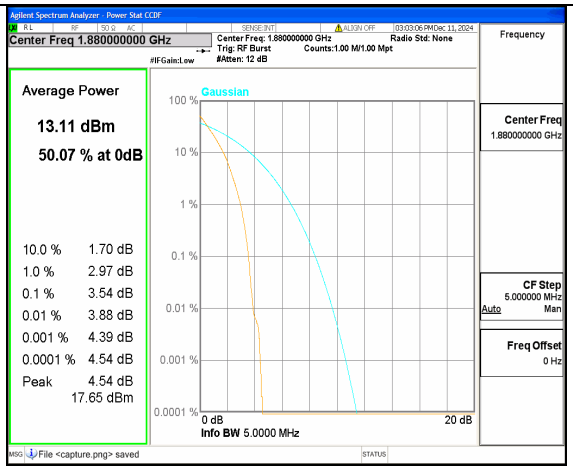
n2 5M DFT-s-OFDM 256QAM Outer_Full Low



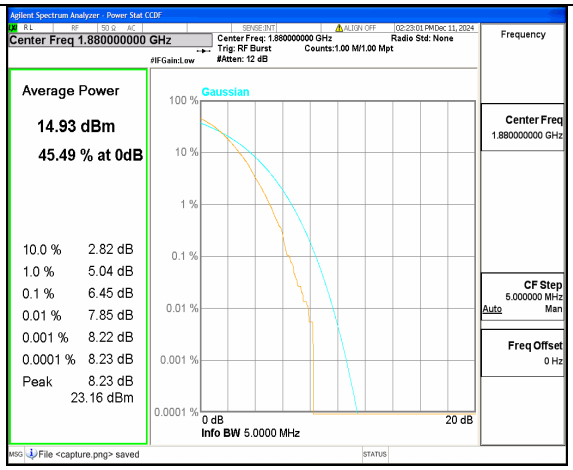
n2 5M CP-OFDM QPSK Outer_Full Low



n2 5M CP-OFDM 256QAM Outer_Full Low



n2 5M DFT-s-OFDM BPSK Outer_Full Mid



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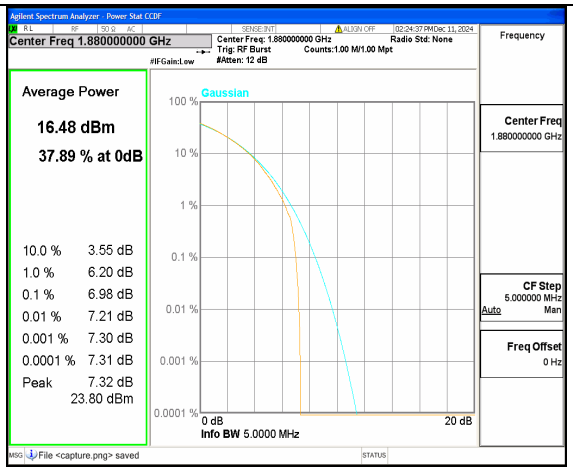

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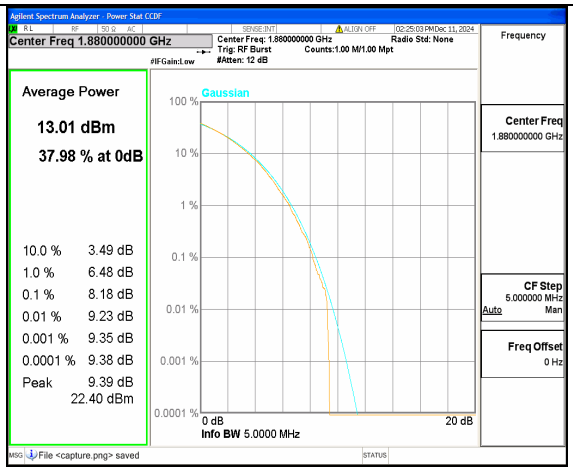

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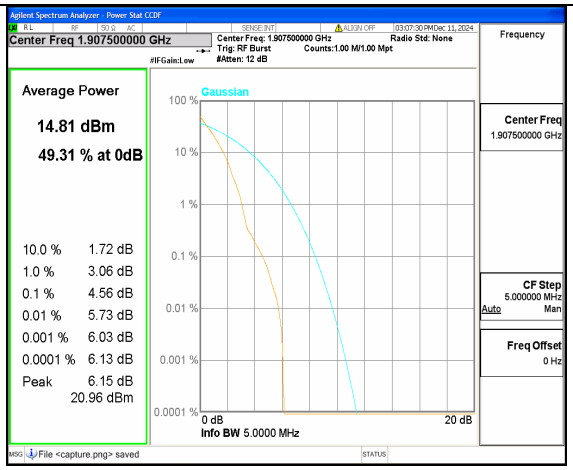

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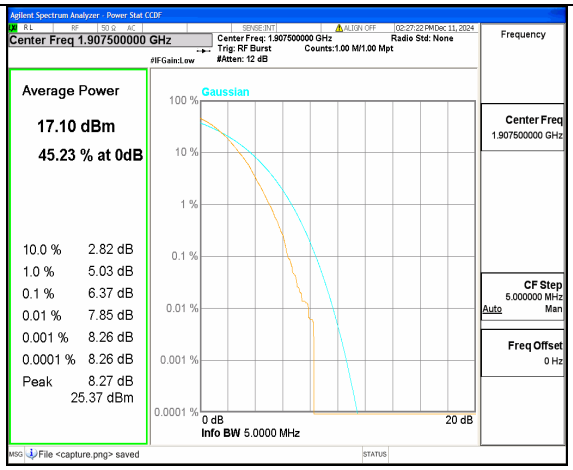

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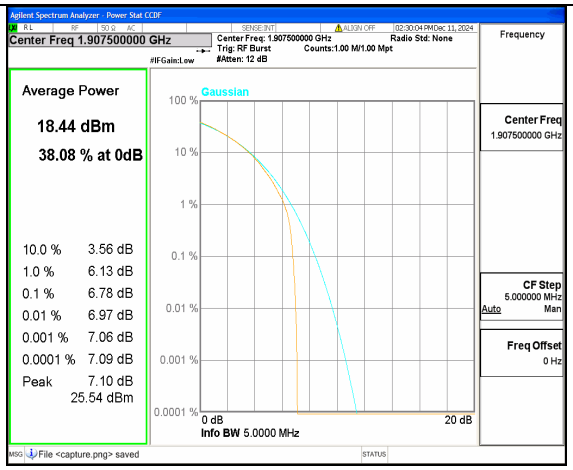

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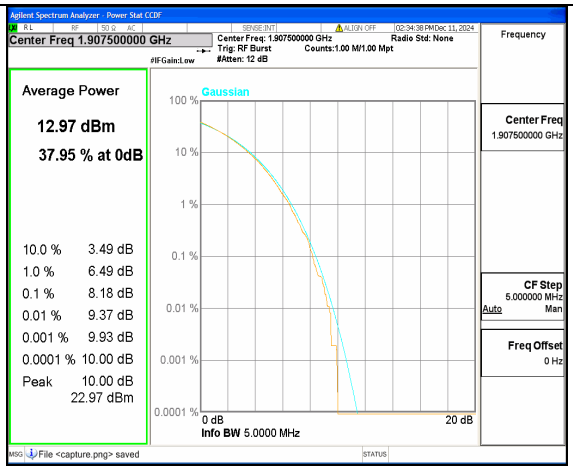

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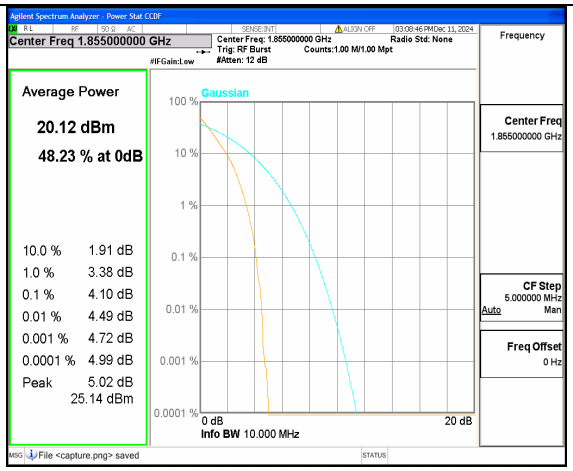
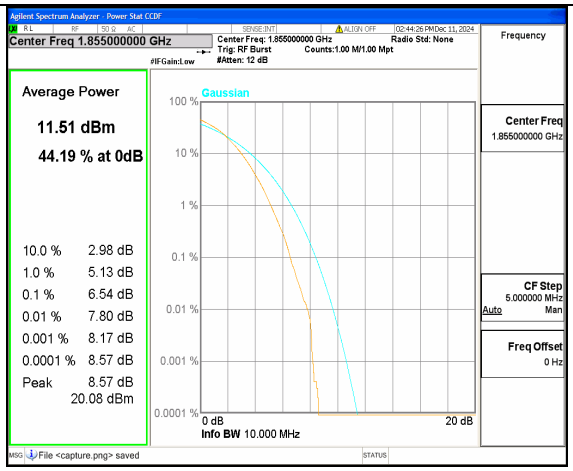


n2 10M DFT-s-OFDM BPSK Outer_Full Low



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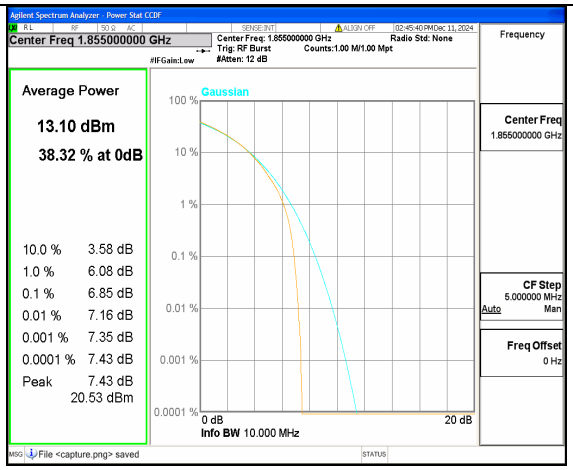

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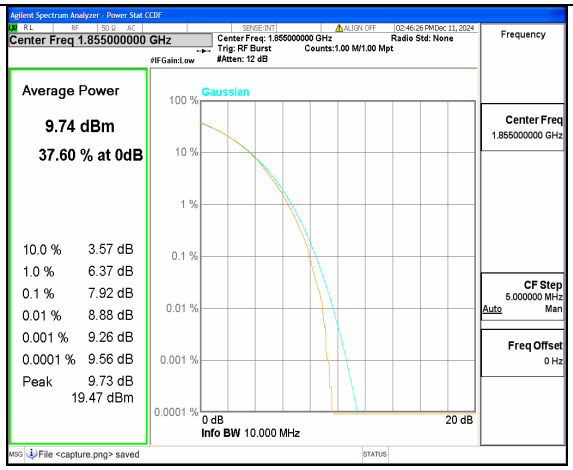

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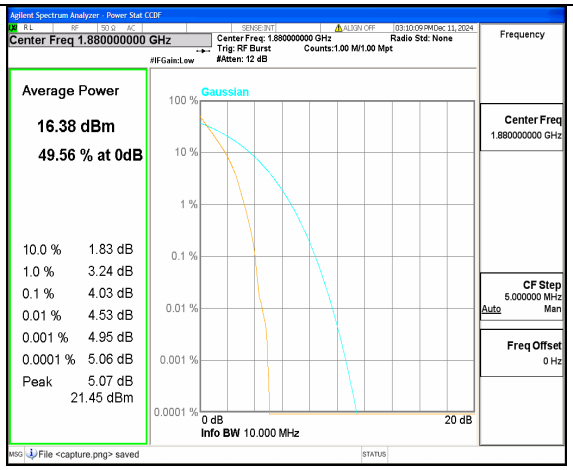

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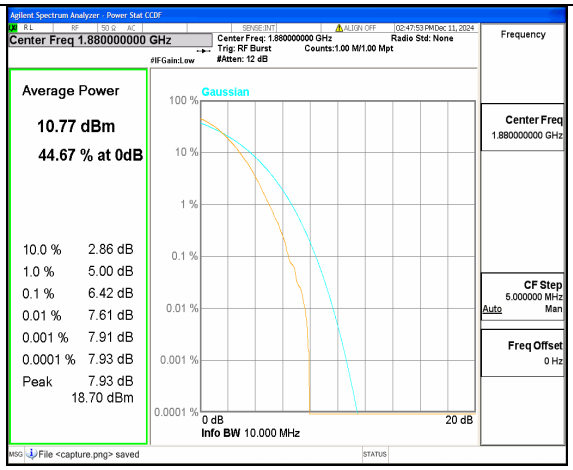

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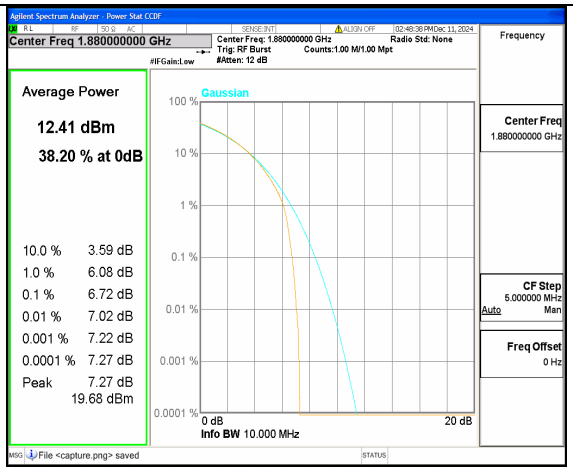
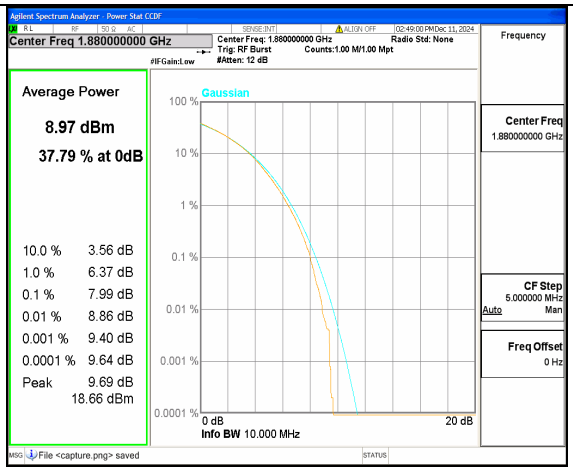
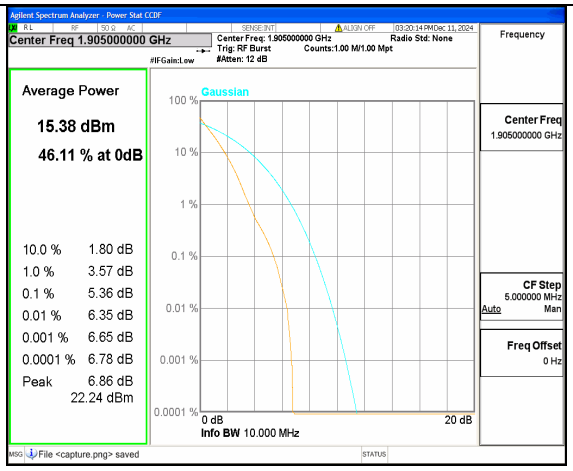


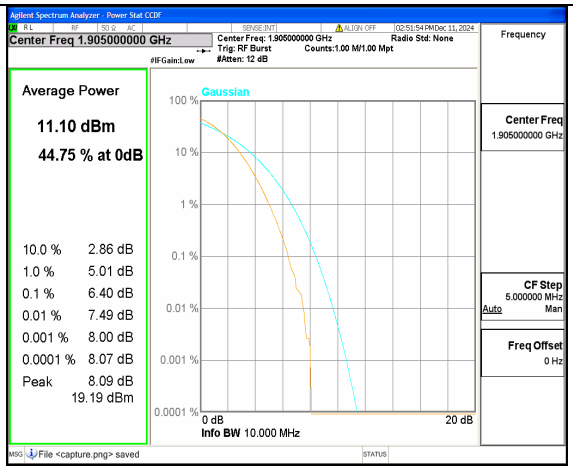
n2 10M CP-OFDM QPSK Outer_Full Mid



n2 10M CP-OFDM 256QAM Outer_Full Mid



n2 10M DFT-s-OFDM BPSK Outer_Full High



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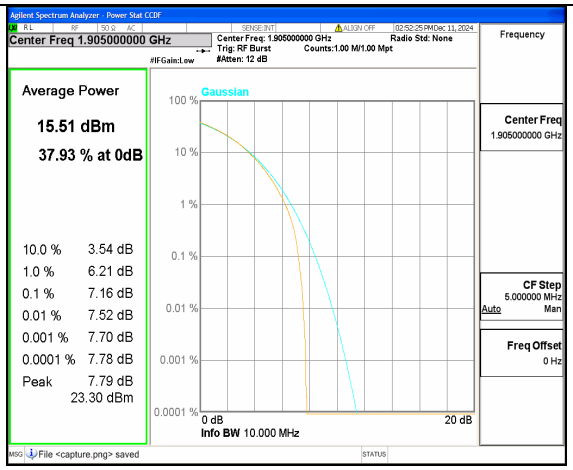

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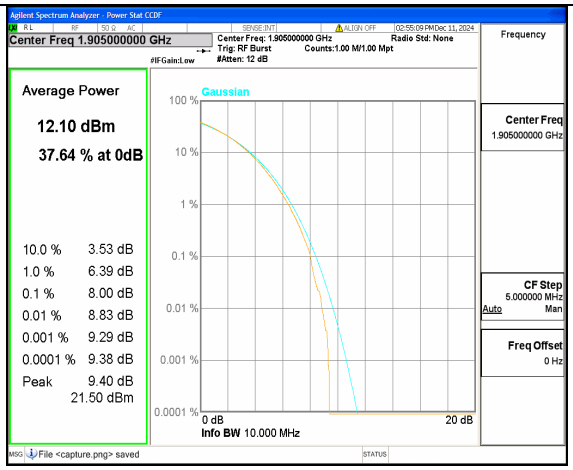
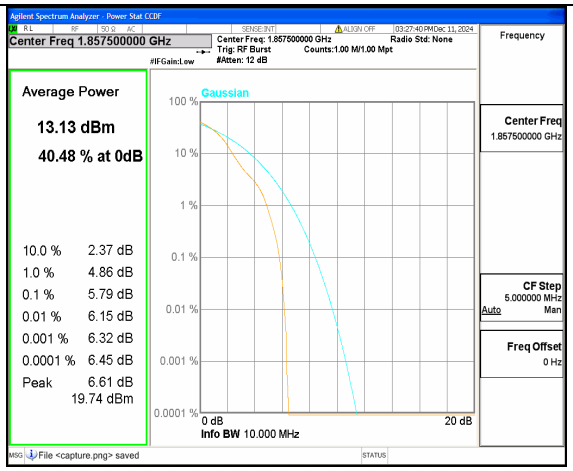
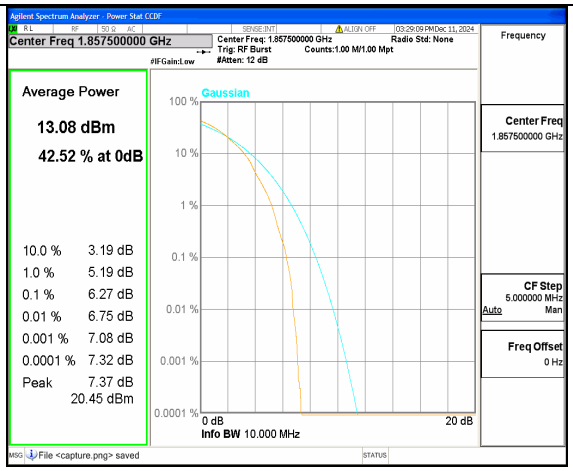


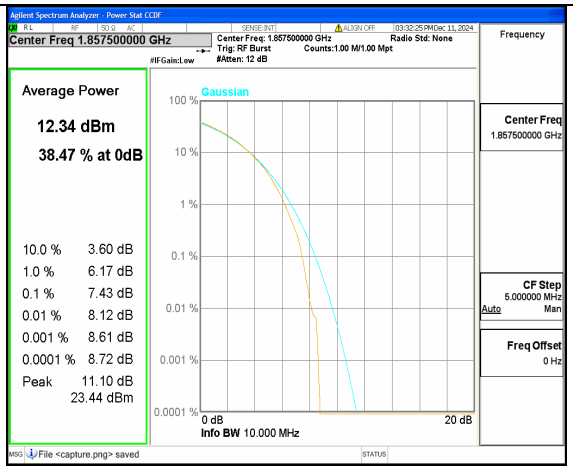
n2 10M CP-OFDM 256QAM Outer_Full High



n2 15M DFT-s-OFDM BPSK Outer_Full Low



n2 15M DFT-s-OFDM 256QAM Outer_Full Low



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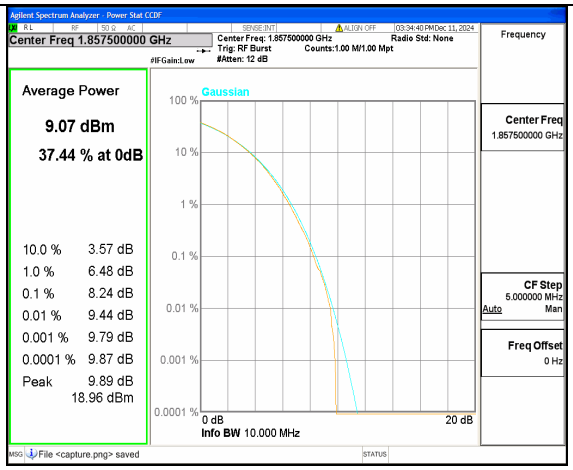
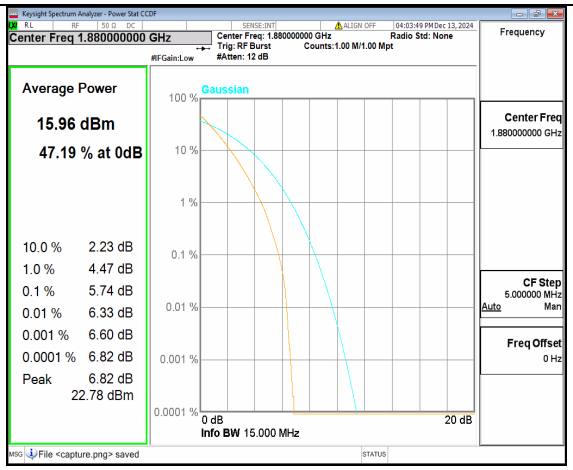
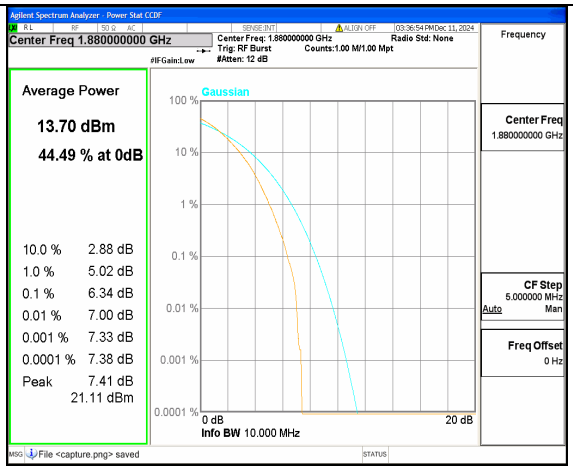


n2 15M CP-OFDM 256QAM Outer_Full Low



n2 15M DFT-s-OFDM BPSK Outer_Full Mid



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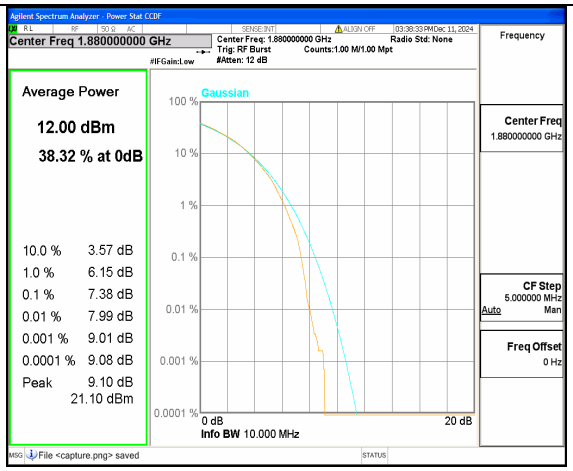

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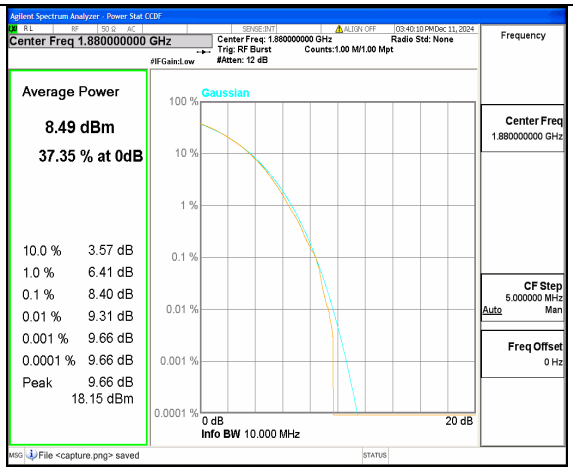

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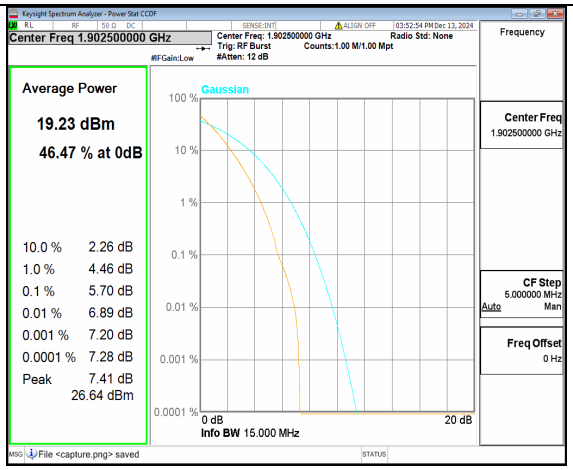
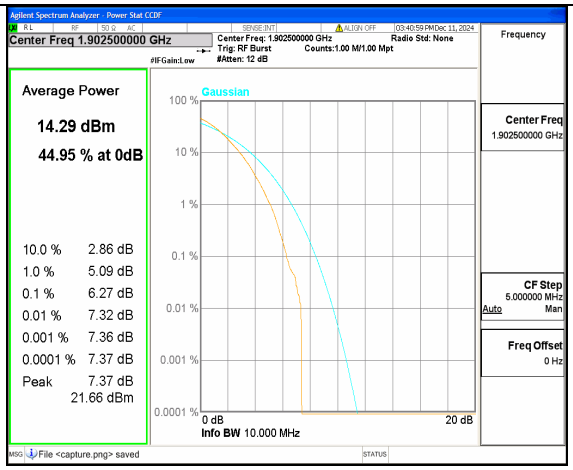


n2 15M DFT-s-OFDM BPSK Outer_Full High



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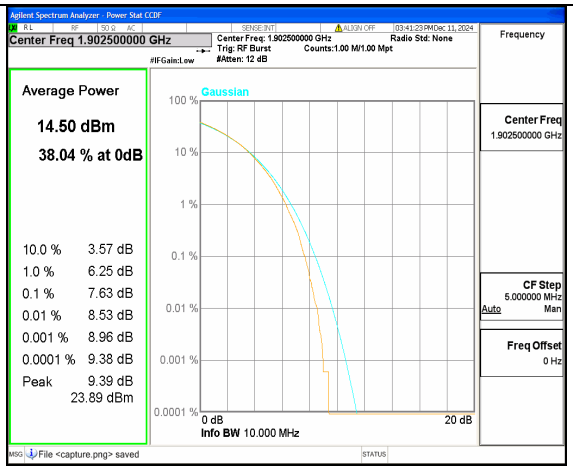

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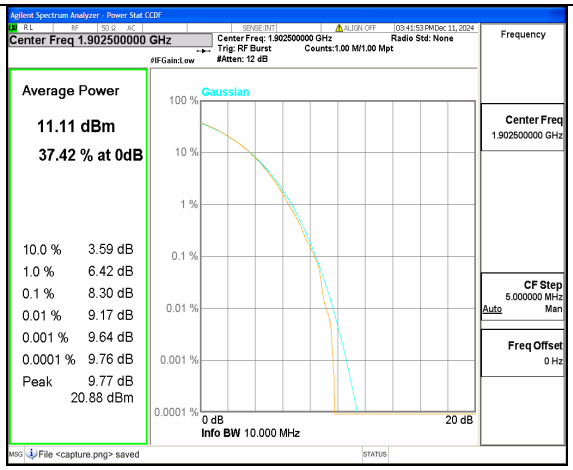
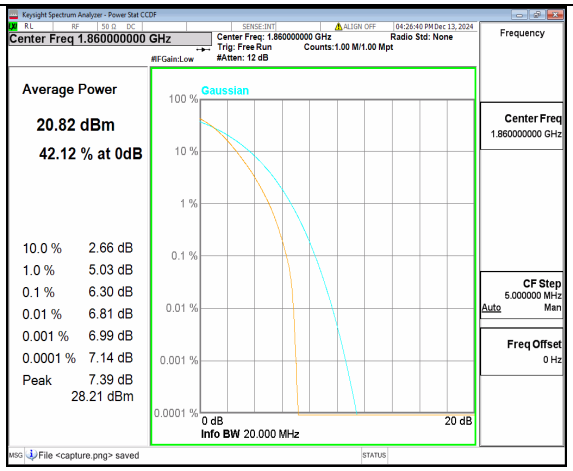
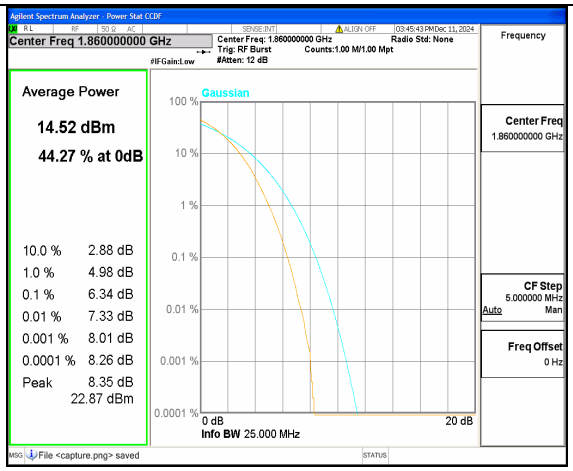


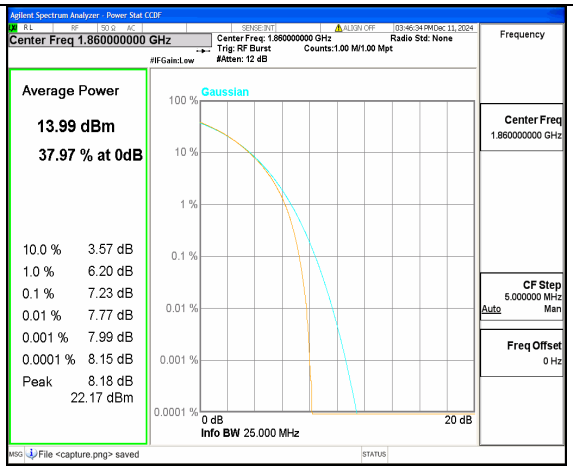
n2 15M CP-OFDM 256QAM Outer_Full High



n2 20M DFT-s-OFDM BPSK Outer_Full Low



n2 20M DFT-s-OFDM 256QAM Outer_Full Low



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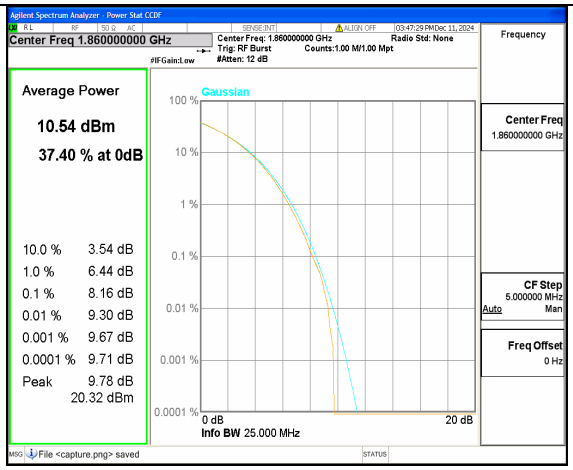
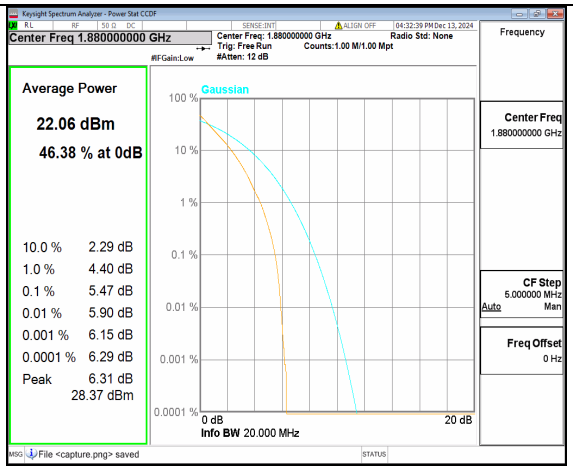
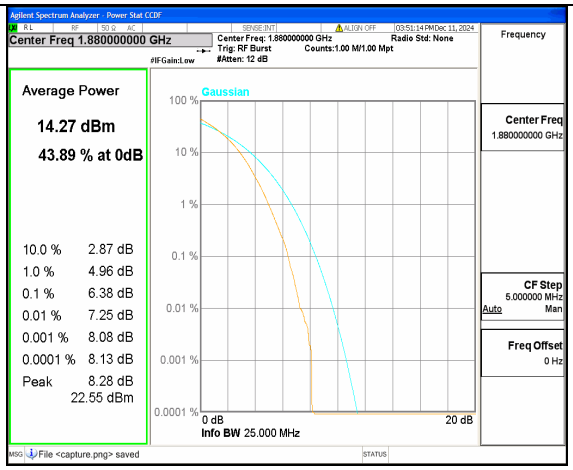


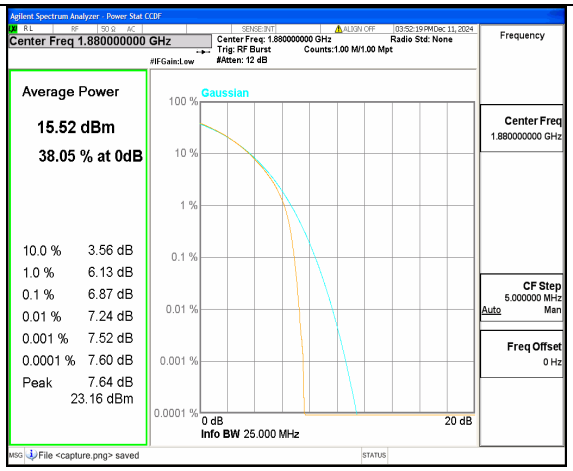
n2 20M CP-OFDM 256QAM Outer_Full Low



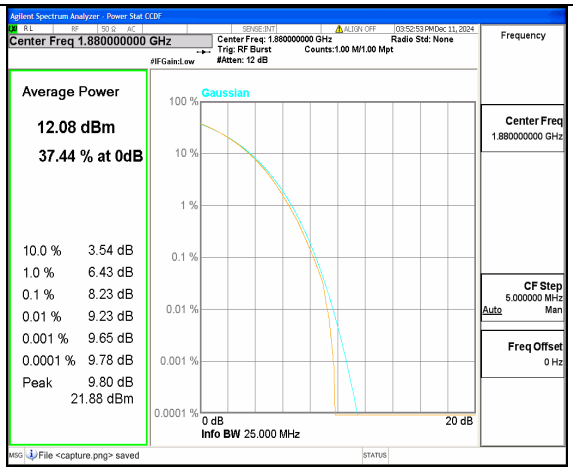
n2 20M DFT-s-OFDM BPSK Outer_Full Mid



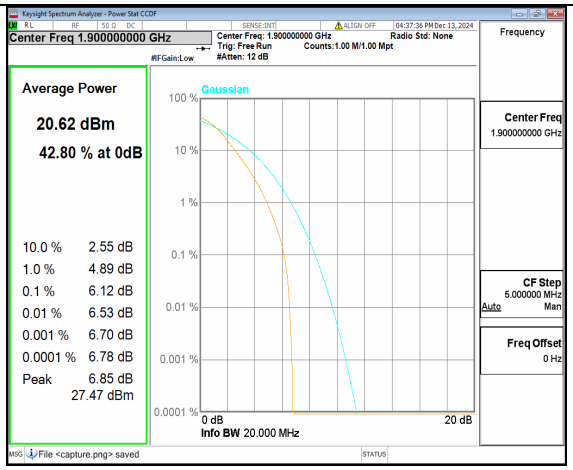
n2 20M DFT-s-OFDM 256QAM Outer_Full Mid



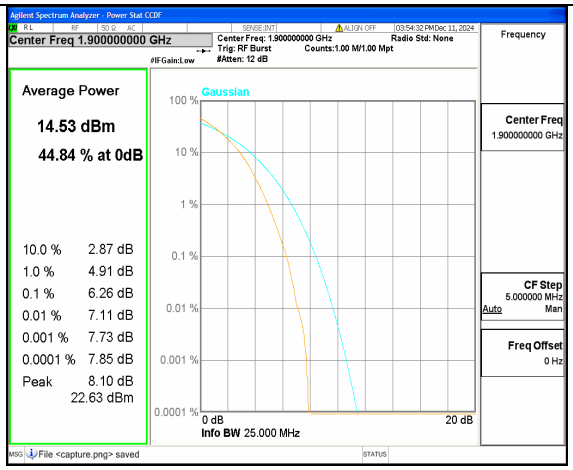
n2 20M CP-OFDM QPSK Outer_Full Mid



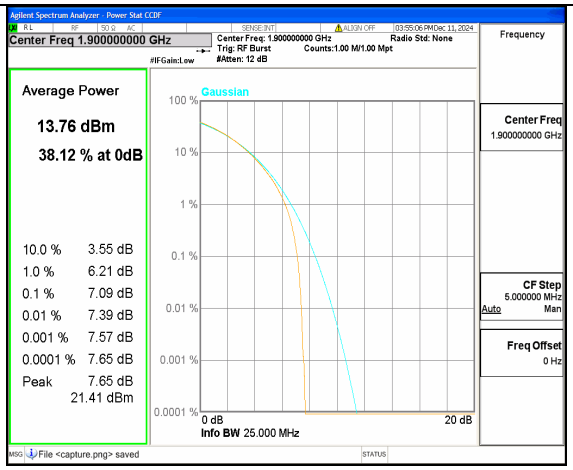
n2 20M CP-OFDM 256QAM Outer_Full Mid



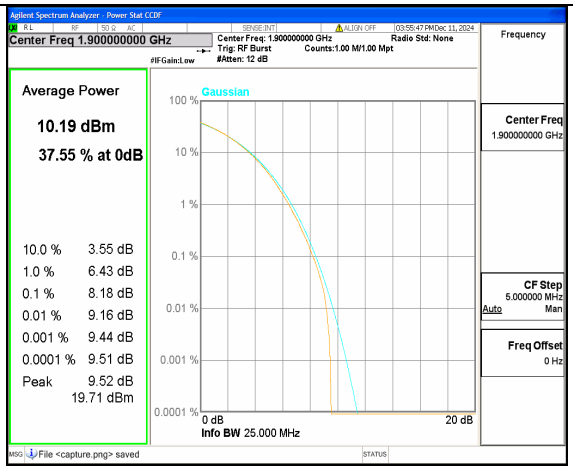
n2 20M DFT-s-OFDM BPSK Outer_Full High



n2 20M DFT-s-OFDM 256QAM Outer_Full High



n2 20M CP-OFDM QPSK Outer_Full High



n2 20M CP-OFDM 256QAM Outer_Full High

Band	SCS (kHz)	BW (MHz)	ARFCN	Modulation	RB	Result (dB)	Limit (dB)	Verdict
n25	15	5	370500	DFT-s-OFDM PI/2 BPSK	25/0	7.52	13	PASS
n25	15	5	370500	DFT-s-OFDM 256QAM	25/0	6.51	13	PASS
n25	15	5	370500	CP-OFDM QPSK	25/0	7.16	13	PASS
n25	15	5	370500	CP-OFDM 256QAM	25/0	8.2	13	PASS
n25	15	5	376500	DFT-s-OFDM PI/2 BPSK	25/0	5.54	13	PASS
n25	15	5	376500	DFT-s-OFDM 256QAM	25/0	7.62	13	PASS
n25	15	5	376500	CP-OFDM QPSK	25/0	6.85	13	PASS
n25	15	5	376500	CP-OFDM 256QAM	25/0	8.24	13	PASS
n25	15	5	382500	DFT-s-OFDM PI/2 BPSK	25/0	5.17	13	PASS
n25	15	5	382500	DFT-s-OFDM 256QAM	25/0	6.59	13	PASS
n25	15	5	382500	CP-OFDM QPSK	25/0	6.41	13	PASS
n25	15	5	382500	CP-OFDM 256QAM	25/0	7.95	13	PASS
n25	15	10	371000	DFT-s-OFDM PI/2 BPSK	50/0	8.69	13	PASS
n25	15	10	371000	DFT-s-OFDM 256QAM	50/0	7.41	13	PASS
n25	15	10	371000	CP-OFDM QPSK	52/0	6.94	13	PASS
n25	15	10	371000	CP-OFDM 256QAM	52/0	8.27	13	PASS
n25	15	10	376500	DFT-s-OFDM PI/2 BPSK	50/0	5.6	13	PASS
n25	15	10	376500	DFT-s-OFDM 256QAM	50/0	6.59	13	PASS
n25	15	10	376500	CP-OFDM QPSK	52/0	6.79	13	PASS
n25	15	10	376500	CP-OFDM 256QAM	52/0	8.03	13	PASS
n25	15	10	382000	DFT-s-OFDM PI/2 BPSK	50/0	5.32	13	PASS
n25	15	10	382000	DFT-s-OFDM	50/0	6.57	13	PASS

				256QAM				
n25	15	10	382000	CP-OFDM QPSK	52/0	7.09	13	PASS
n25	15	10	382000	CP-OFDM 256QAM	52/0	7.97	13	PASS
n25	15	15	371500	DFT-s-OFDM PI/2 BPSK	75/0	5.27	13	PASS
n25	15	15	371500	DFT-s-OFDM 256QAM	75/0	6.43	13	PASS
n25	15	15	371500	CP-OFDM QPSK	79/0	7.51	13	PASS
n25	15	15	371500	CP-OFDM 256QAM	79/0	8.35	13	PASS
n25	15	15	376500	DFT-s-OFDM PI/2 BPSK	75/0	6.64	13	PASS
n25	15	15	376500	DFT-s-OFDM 256QAM	75/0	6.42	13	PASS
n25	15	15	376500	CP-OFDM QPSK	79/0	7.04	13	PASS
n25	15	15	376500	CP-OFDM 256QAM	79/0	8.28	13	PASS
n25	15	15	381500	DFT-s-OFDM PI/2 BPSK	75/0	5.39	13	PASS
n25	15	15	381500	DFT-s-OFDM 256QAM	75/0	6.5	13	PASS
n25	15	15	381500	CP-OFDM QPSK	79/0	7.38	13	PASS
n25	15	15	381500	CP-OFDM 256QAM	79/0	8.14	13	PASS
n25	15	20	372000	DFT-s-OFDM PI/2 BPSK	100/0	5.32	13	PASS
n25	15	20	372000	DFT-s-OFDM 256QAM	100/0	6.42	13	PASS
n25	15	20	372000	CP-OFDM QPSK	106/0	6.83	13	PASS
n25	15	20	372000	CP-OFDM 256QAM	106/0	8.25	13	PASS
n25	15	20	376500	DFT-s-OFDM PI/2 BPSK	100/0	5.44	13	PASS
n25	15	20	376500	DFT-s-OFDM 256QAM	100/0	6.46	13	PASS
n25	15	20	376500	CP-OFDM QPSK	106/0	7.06	13	PASS
n25	15	20	376500	CP-OFDM 256QAM	106/0	8.21	13	PASS

n25	15	20	381000	DFT-s-OFDM PI/2 BPSK	100/0	5.33	13	PASS
n25	15	20	381000	DFT-s-OFDM 256QAM	100/0	6.4	13	PASS
n25	15	20	381000	CP-OFDM QPSK	106/0	6.82	13	PASS
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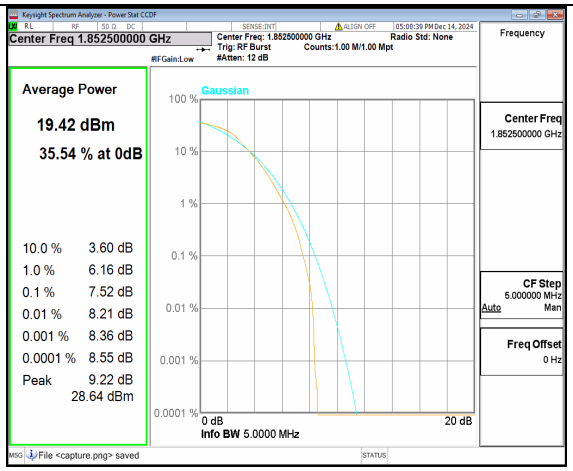
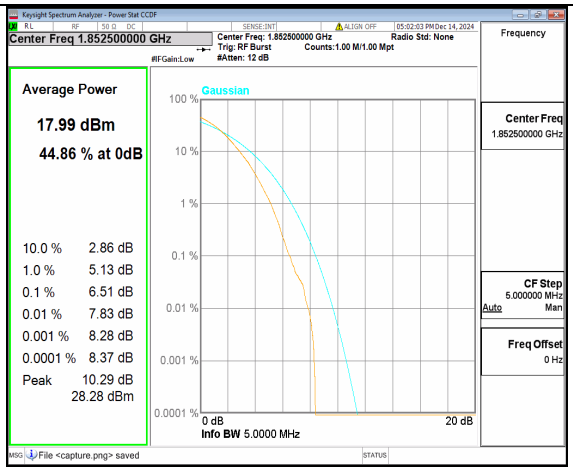
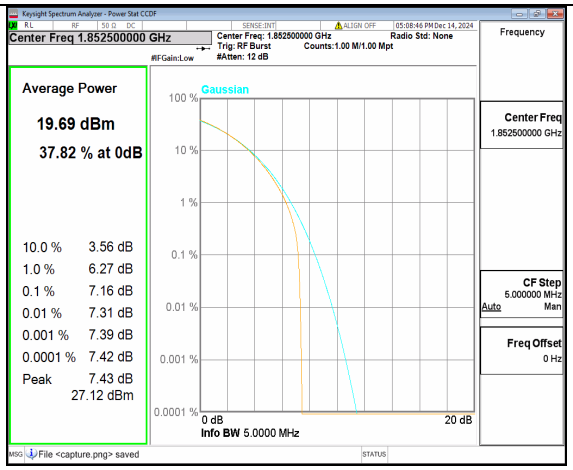


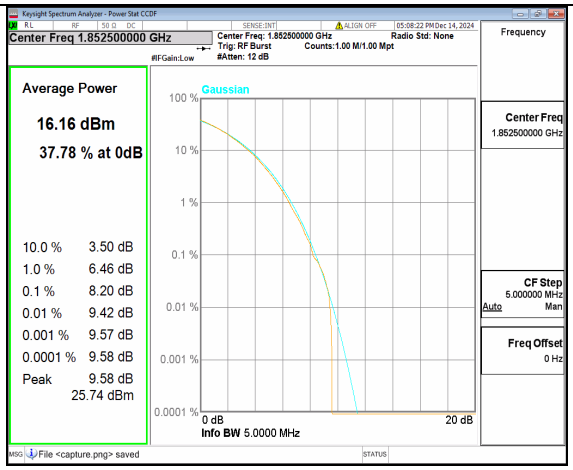
n25 5M DFT-s-OFDM BPSK Outer_Full Low



n25 5M DFT-s-OFDM 256QAM Outer_Full Low



n25 5M CP-OFDM QPSK Outer_Full Low



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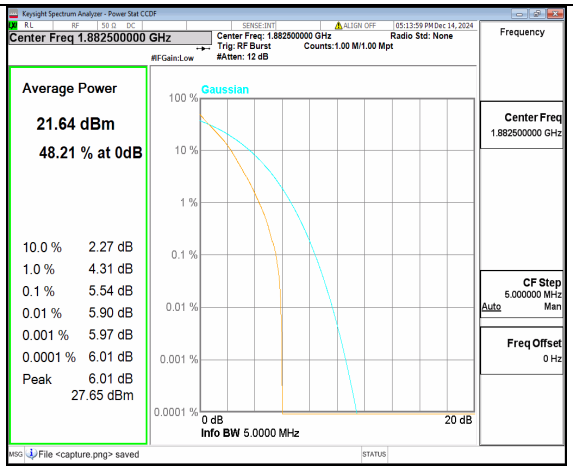
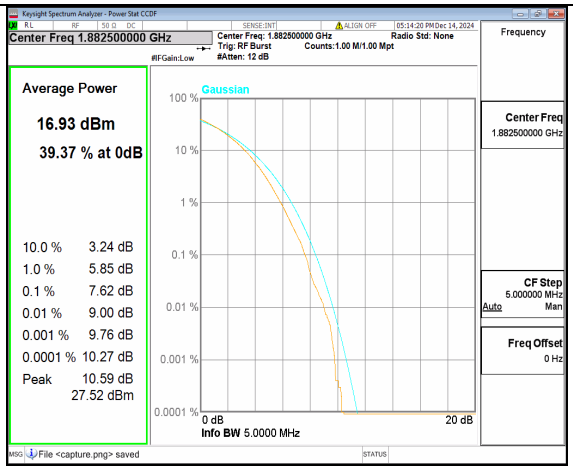
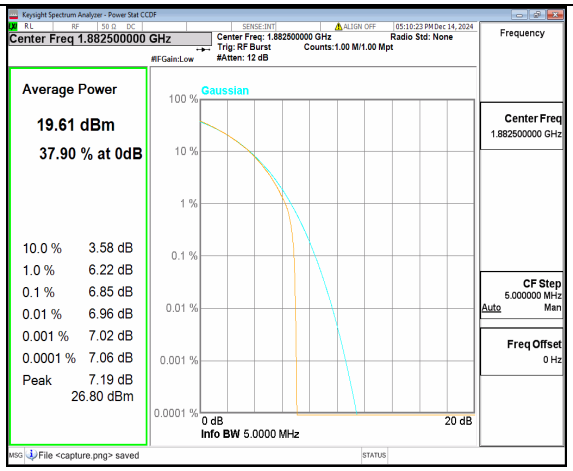


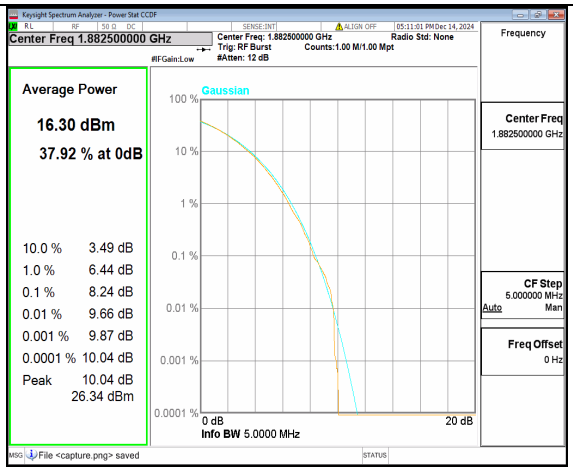
n25 5M DFT-s-OFDM BPSK Outer_Full Mid



n25 5M DFT-s-OFDM 256QAM Outer_Full Mid



n25 5M CP-OFDM QPSK Outer_Full Mid



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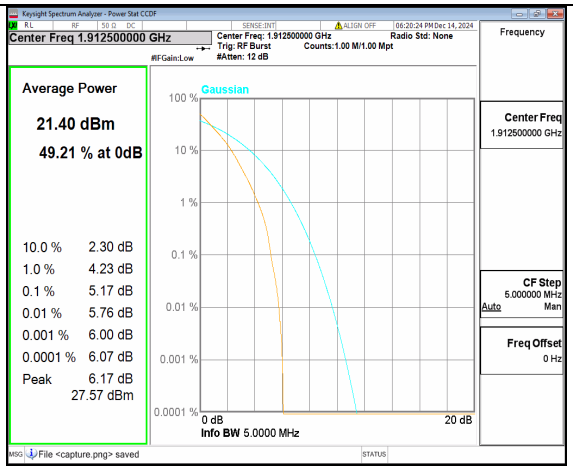
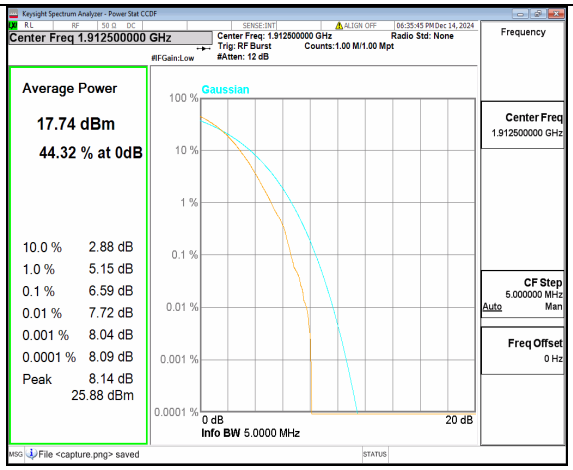


n25 5M DFT-s-OFDM BPSK Outer_Full High



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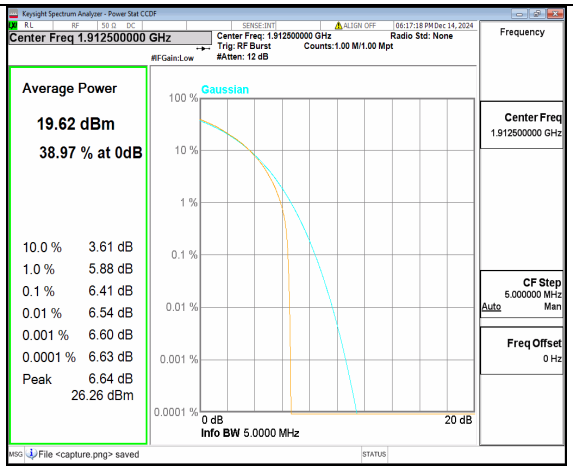

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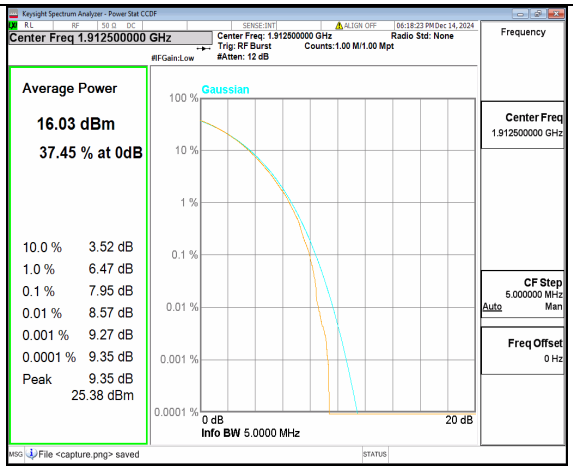

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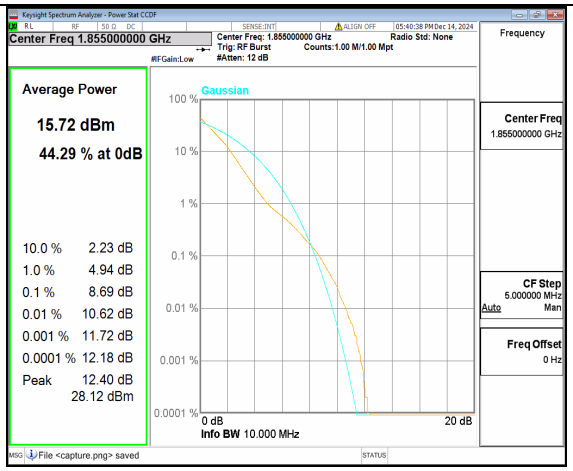
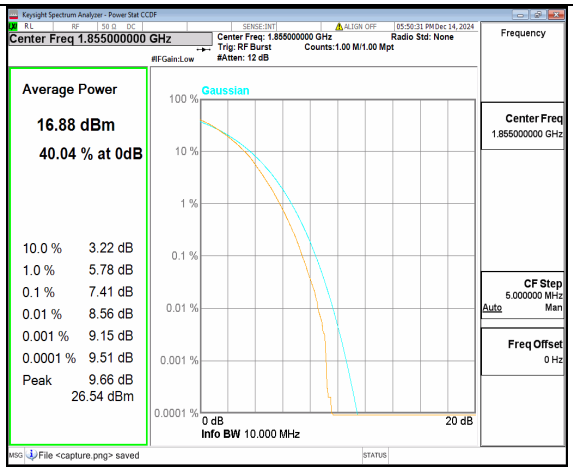
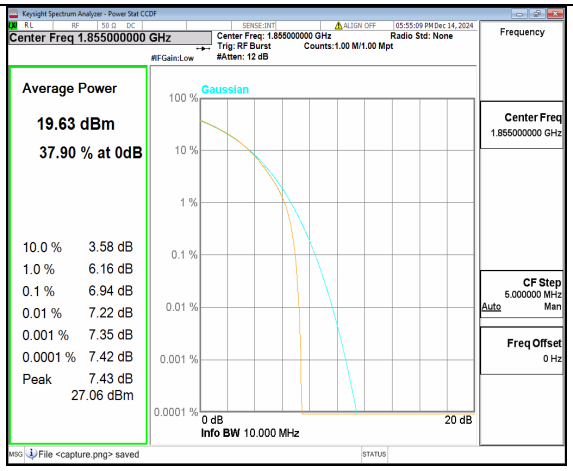


n25 10M DFT-s-OFDM BPSK Outer_Full Low



n25 10M DFT-s-OFDM 256QAM Outer_Full Low



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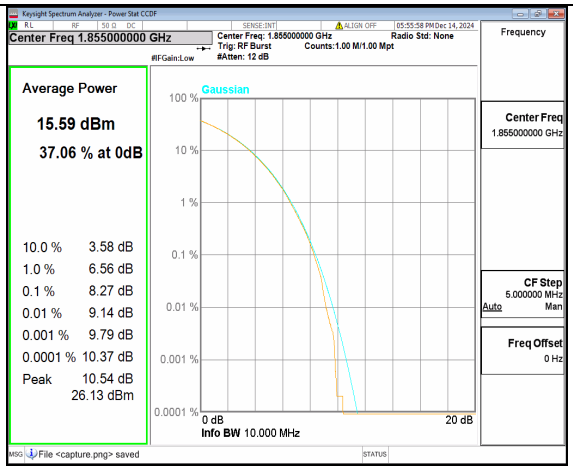

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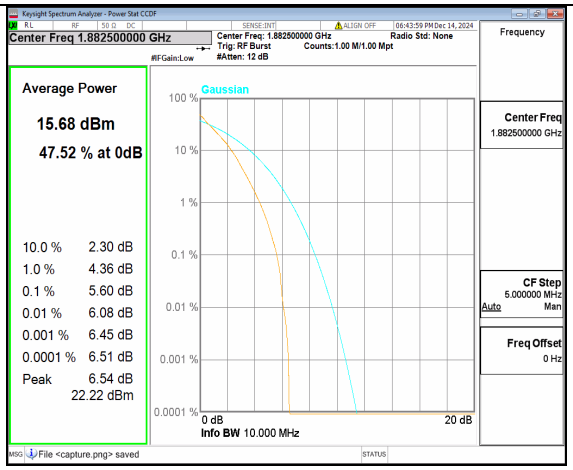

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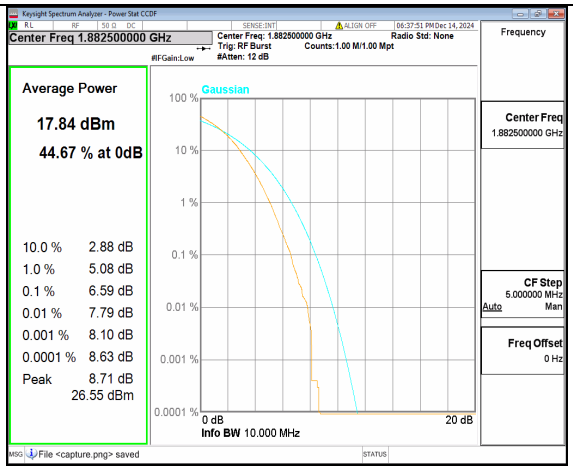

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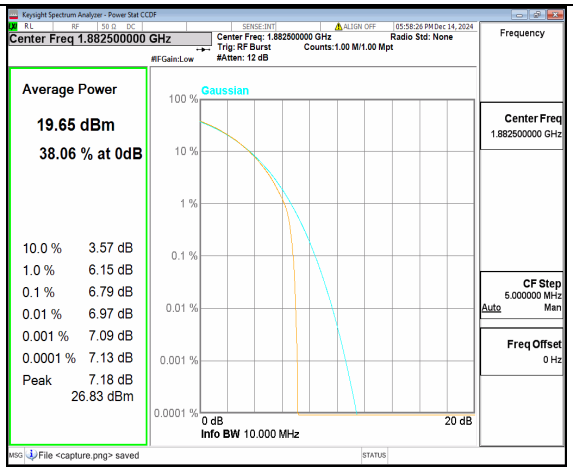

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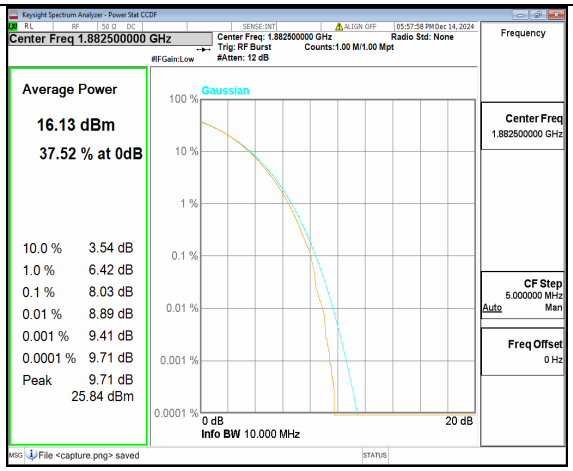

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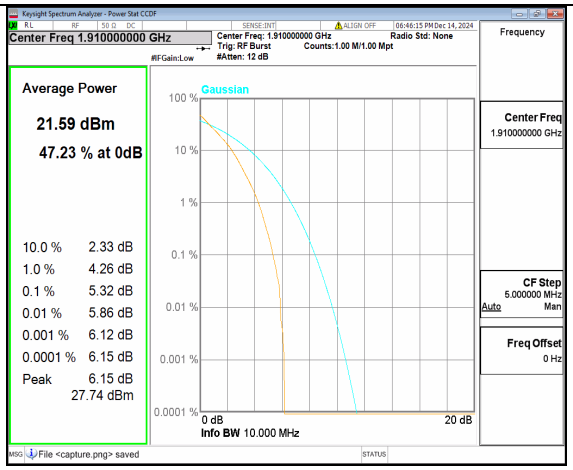

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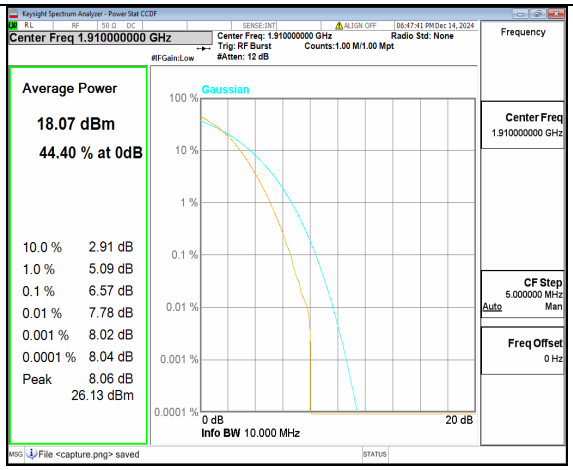

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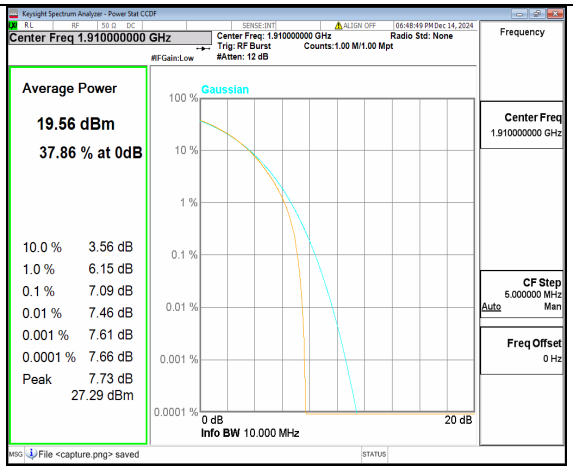

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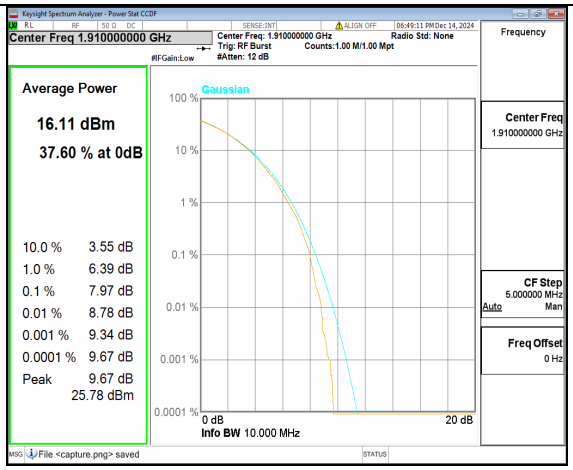

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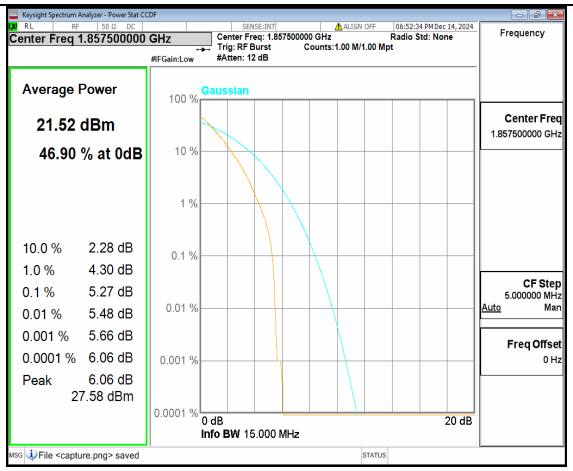
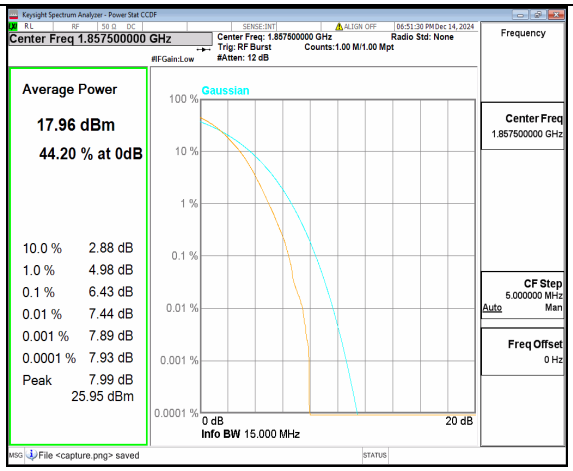


n25 15M DFT-s-OFDM BPSK Outer_Full Low



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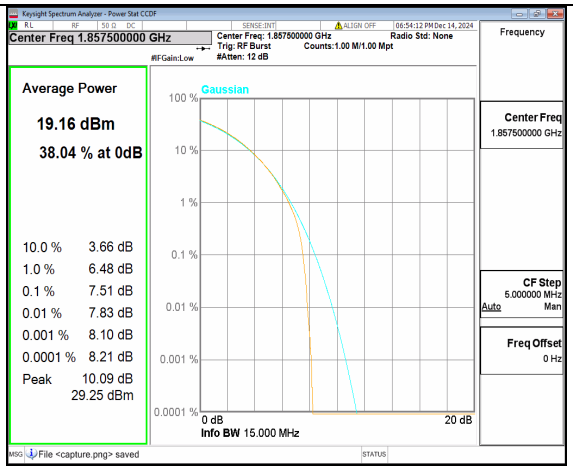

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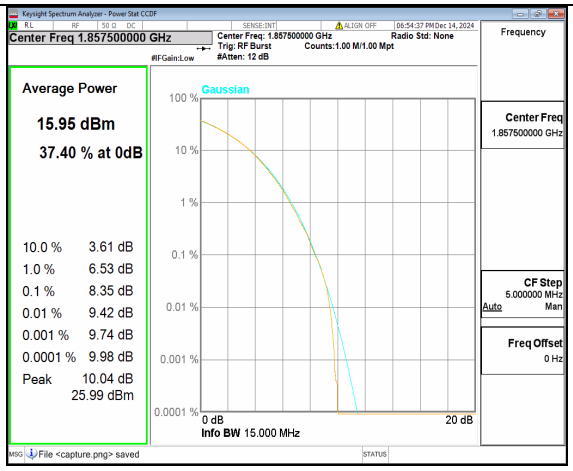

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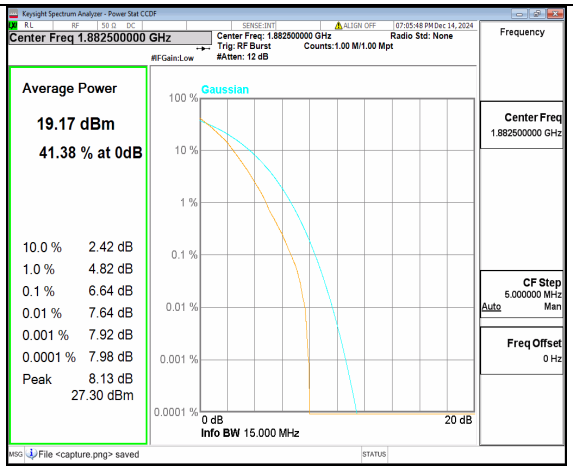

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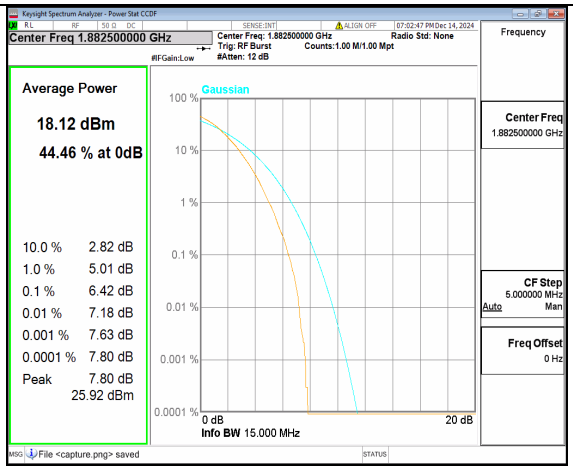

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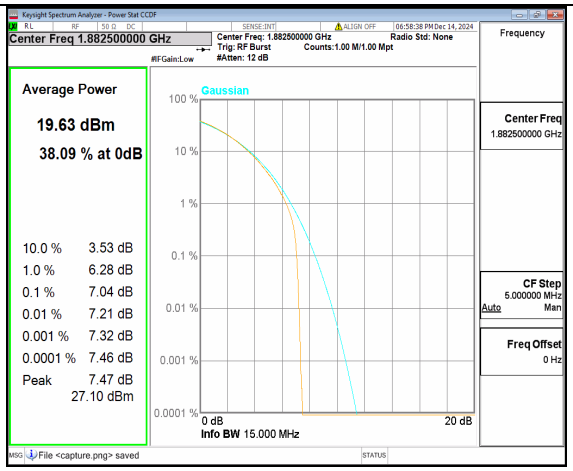

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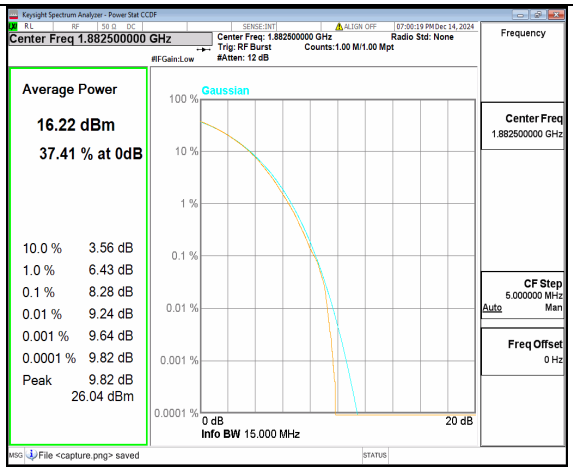

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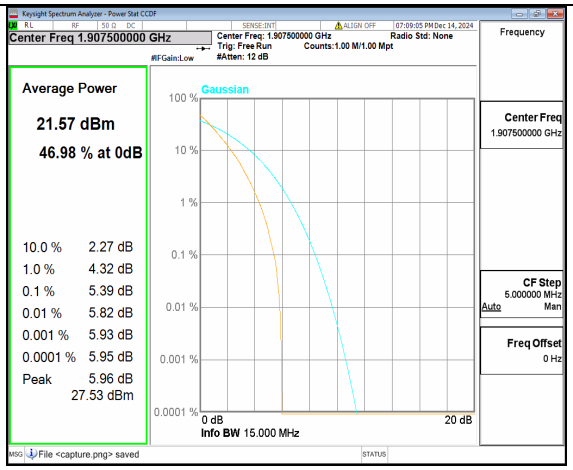

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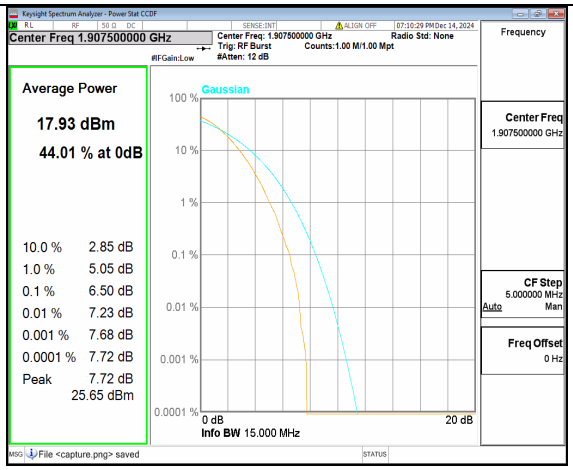

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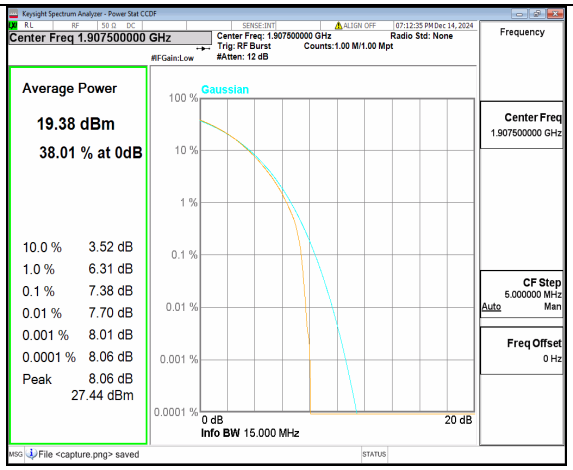

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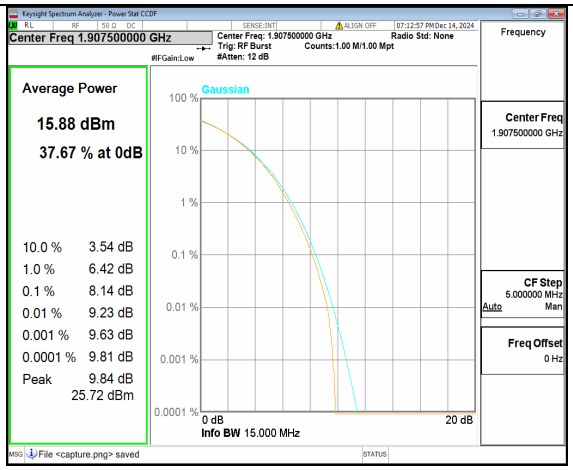

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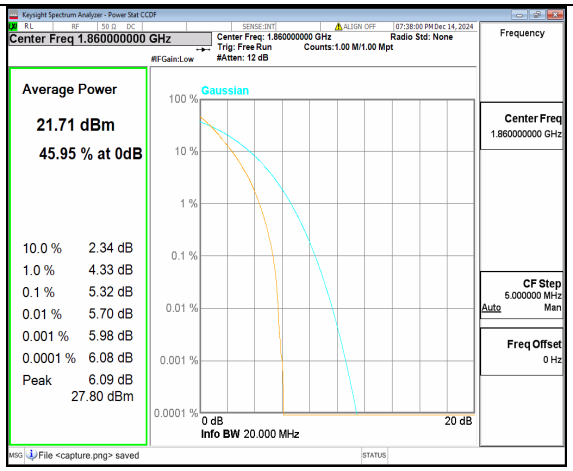
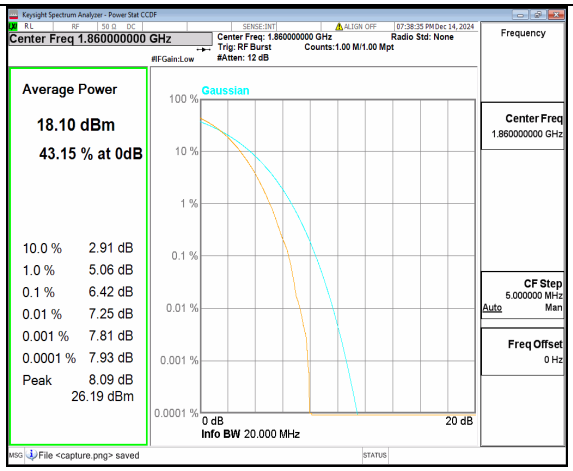


n25 20M DFT-s-OFDM BPSK Outer_Full Low



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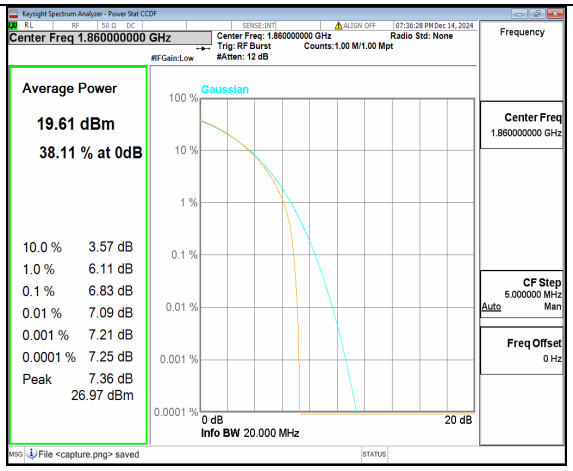

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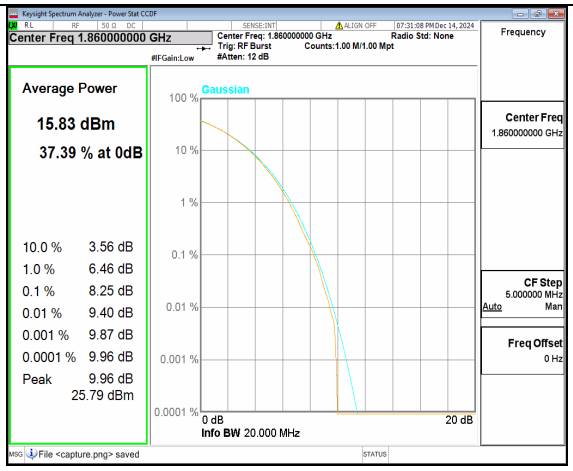

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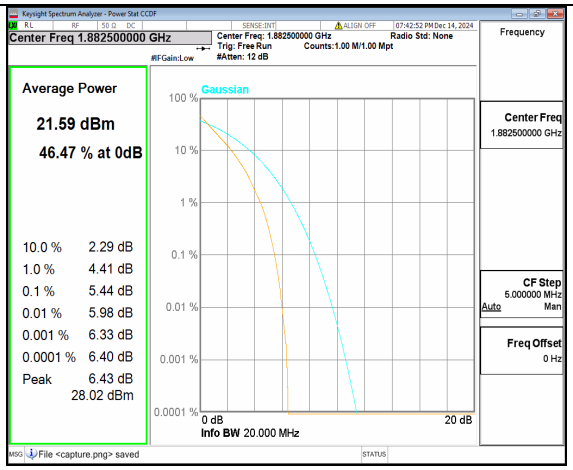

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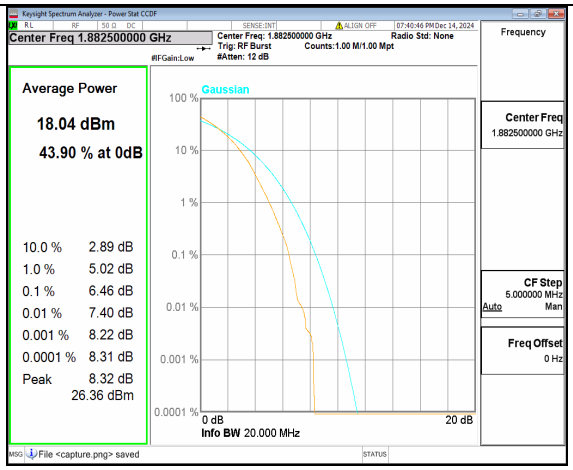
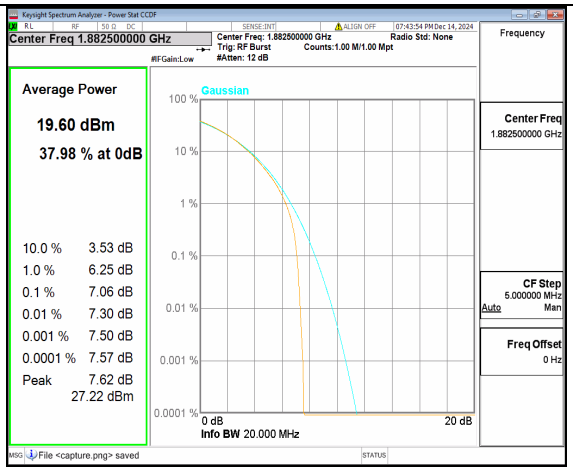
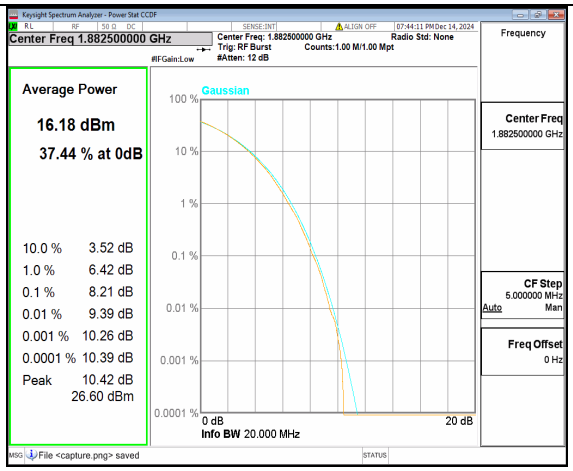


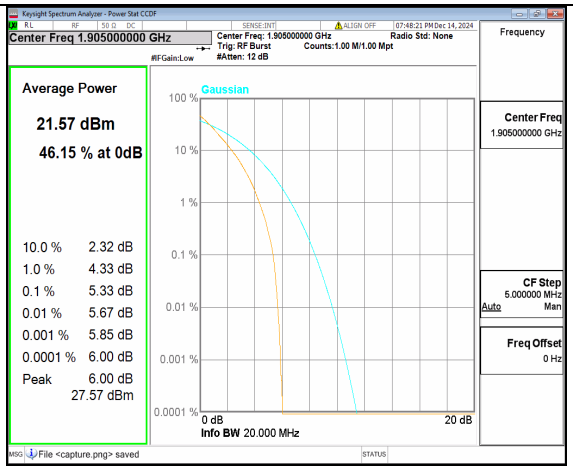
n25 20M DFT-s-OFDM 256QAM Outer_Full Mid



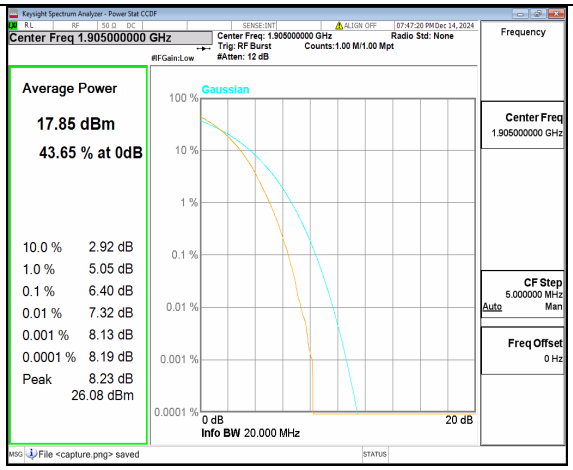
n25 20M CP-OFDM QPSK Outer_Full Mid



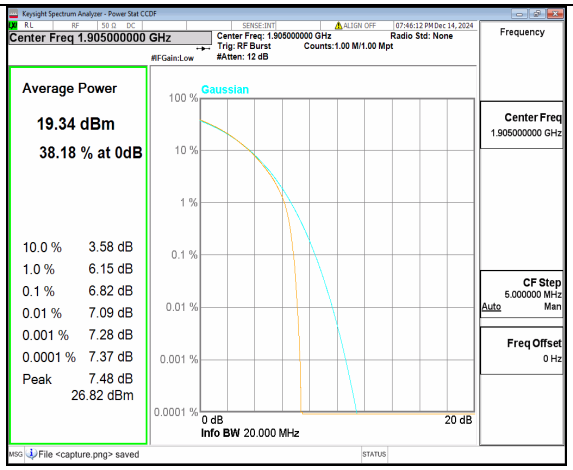
n25 20M CP-OFDM 256QAM Outer_Full Mid



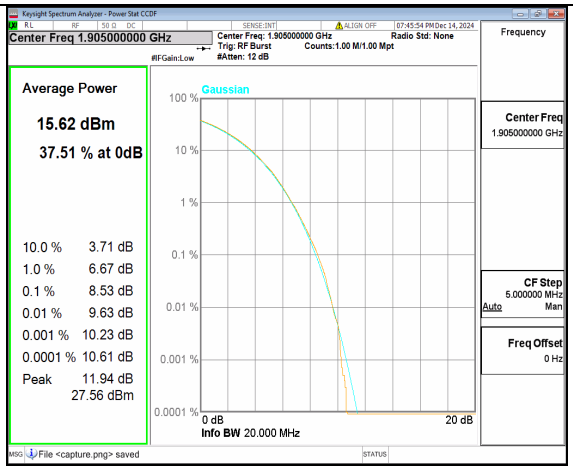
n25 20M DFT-s-OFDM BPSK Outer_Full High



n25 20M DFT-s-OFDM 256QAM Outer_Full High



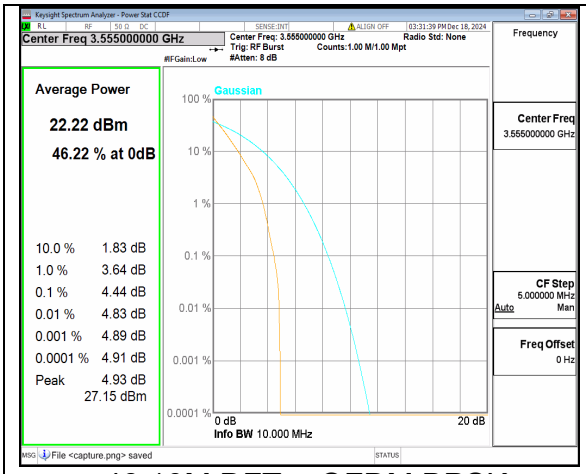
n25 20M CP-OFDM QPSK Outer_Full High



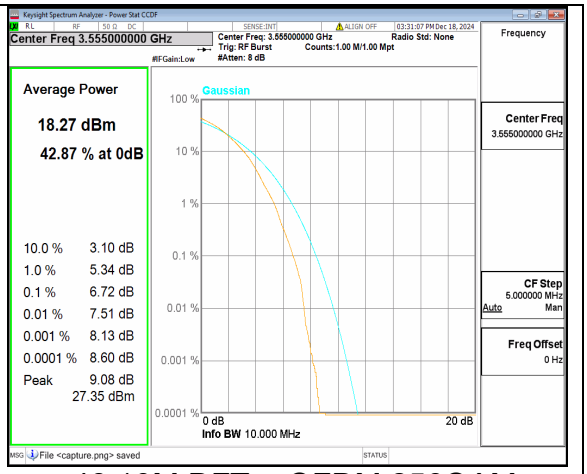
n25 20M CP-OFDM 256QAM Outer_Full High

Band	SCS (kHz)	BW (MHz)	ARFCN	Modulation	RB	Result (dB)	Limit (dB)	Verdict
n48	30	10	637000	DFT-s-OFDM PI/2 BPSK	24/0	4.44	13	PASS
n48	30	10	637000	DFT-s-OFDM 256QAM	24/0	6.72	13	PASS
n48	30	10	637000	CP-OFDM QPSK	24/0	7.6	13	PASS
n48	30	10	637000	CP-OFDM 256QAM	24/0	8.33	13	PASS
n48	30	10	641666	DFT-s-OFDM PI/2 BPSK	24/0	4.54	13	PASS
n48	30	10	641666	DFT-s-OFDM 256QAM	24/0	6.72	13	PASS
n48	30	10	641666	CP-OFDM QPSK	24/0	7.06	13	PASS
n48	30	10	641666	CP-OFDM 256QAM	24/0	8.3	13	PASS
n48	30	10	646332	DFT-s-OFDM PI/2 BPSK	24/0	4.53	13	PASS
n48	30	10	646332	DFT-s-OFDM 256QAM	24/0	6.78	13	PASS
n48	30	10	646332	CP-OFDM QPSK	24/0	7.76	13	PASS
n48	30	10	646332	CP-OFDM 256QAM	24/0	8.42	13	PASS
n48	30	15	637168	DFT-s-OFDM PI/2 BPSK	36/0	4.42	13	PASS
n48	30	15	637168	DFT-s-OFDM 256QAM	36/0	6.57	13	PASS
n48	30	15	637168	CP-OFDM QPSK	36/0	7.41	13	PASS
n48	30	15	637168	CP-OFDM 256QAM	36/0	8.37	13	PASS
n48	30	15	641666	DFT-s-OFDM PI/2 BPSK	36/0	4.63	13	PASS
n48	30	15	641666	DFT-s-OFDM 256QAM	36/0	6.58	13	PASS
n48	30	15	641666	CP-OFDM QPSK	36/0	7.19	13	PASS
n48	30	15	641666	CP-OFDM 256QAM	36/0	7.91	13	PASS
n48	30	15	646166	DFT-s-OFDM PI/2 BPSK	36/0	4.46	13	PASS
n48	30	15	646166	DFT-s-OFDM	36/0	6.7	13	PASS

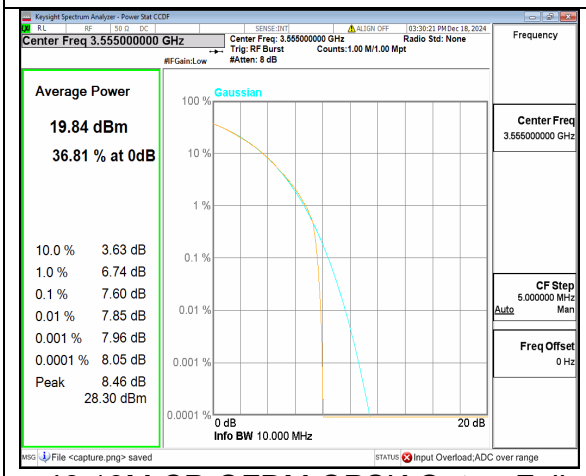
				256QAM				
n48	30	15	646166	CP-OFDM QPSK	36/0	7.75	13	PASS
n48	30	15	646166	CP-OFDM 256QAM	36/0	7.94	13	PASS
n48	30	20	637334	DFT-s-OFDM PI/2 BPSK	50/0	4.59	13	PASS
n48	30	20	637334	DFT-s-OFDM 256QAM	50/0	6.91	13	PASS
n48	30	20	637334	CP-OFDM QPSK	51/0	7.68	13	PASS
n48	30	20	637334	CP-OFDM 256QAM	51/0	8.29	13	PASS
n48	30	20	641666	DFT-s-OFDM PI/2 BPSK	50/0	4.69	13	PASS
n48	30	20	641666	DFT-s-OFDM 256QAM	50/0	6.92	13	PASS
n48	30	20	641666	CP-OFDM QPSK	51/0	7.34	13	PASS
n48	30	20	641666	CP-OFDM 256QAM	51/0	8.27	13	PASS
n48	30	20	646000	DFT-s-OFDM PI/2 BPSK	50/0	4.44	13	PASS
n48	30	20	646000	DFT-s-OFDM 256QAM	50/0	6.77	13	PASS
n48	30	20	646000	CP-OFDM QPSK	51/0	7.89	13	PASS
n48	30	20	646000	CP-OFDM 256QAM	51/0	8.32	13	PASS



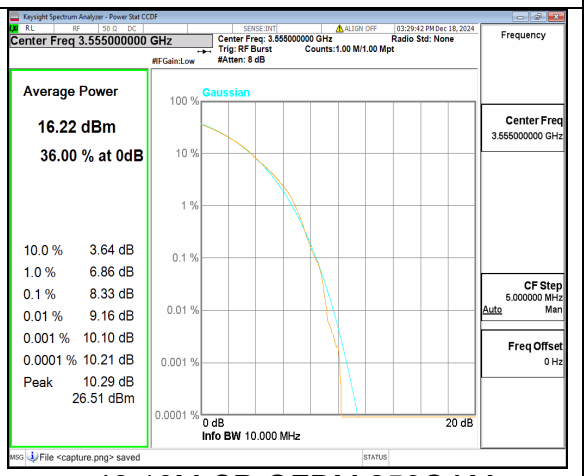
n48 10M DFT-s-OFDM BPSK Outer_Full Low



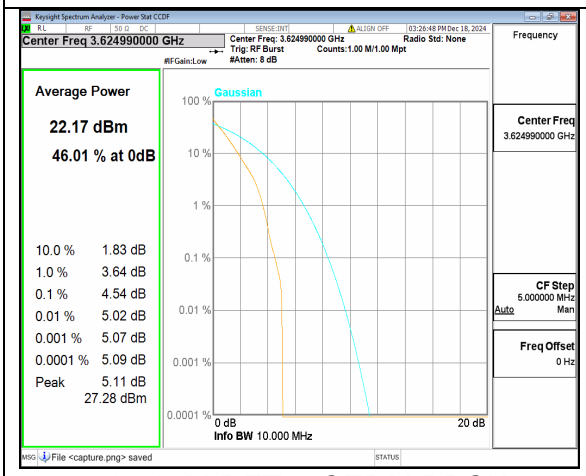
n48 10M DFT-s-OFDM 256QAM Outer_Full Low



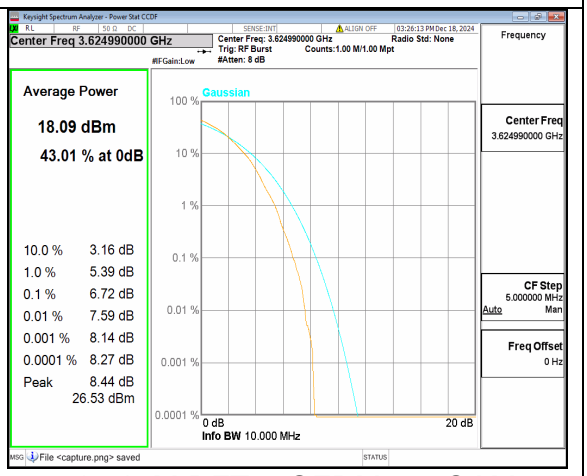
n48 10M CP-OFDM QPSK Outer_Full Low



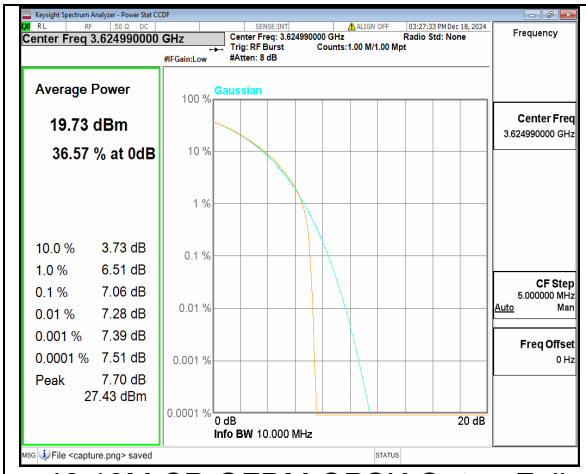
n48 10M CP-OFDM 256QAM Outer_Full Low



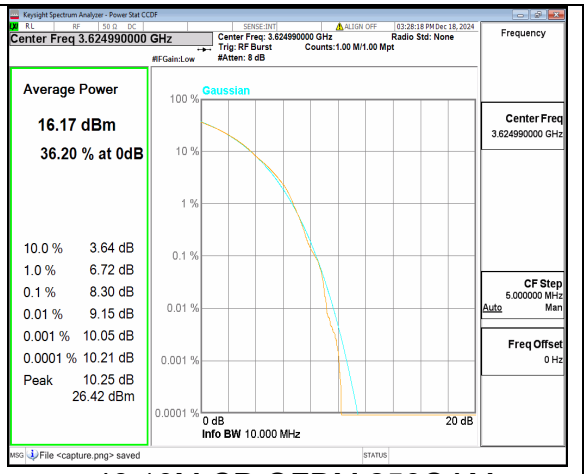
n48 10M DFT-s-OFDM BPSK Outer_Full Mid



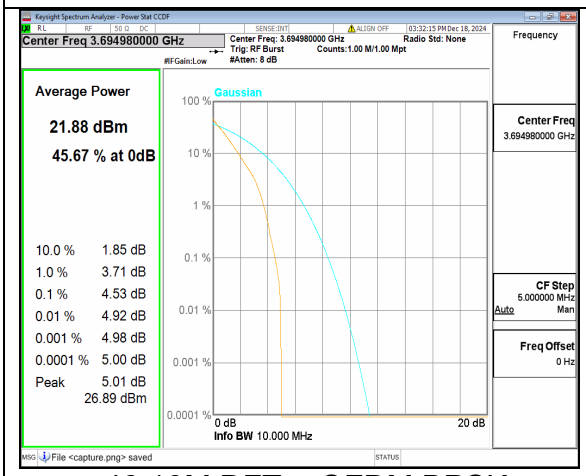
n48 10M DFT-s-OFDM 256QAM Outer_Full Mid



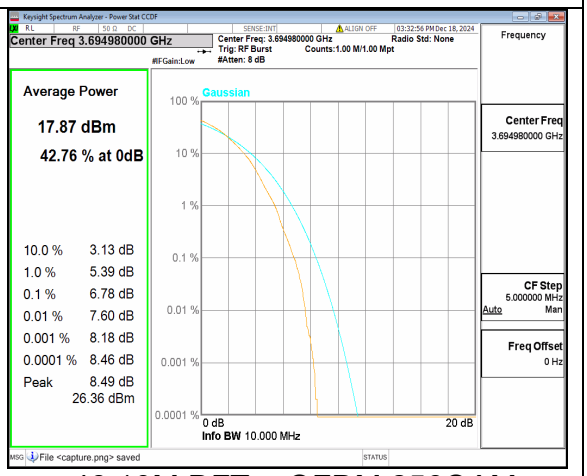
n48 10M CP-OFDM QPSK Outer_Full Mid



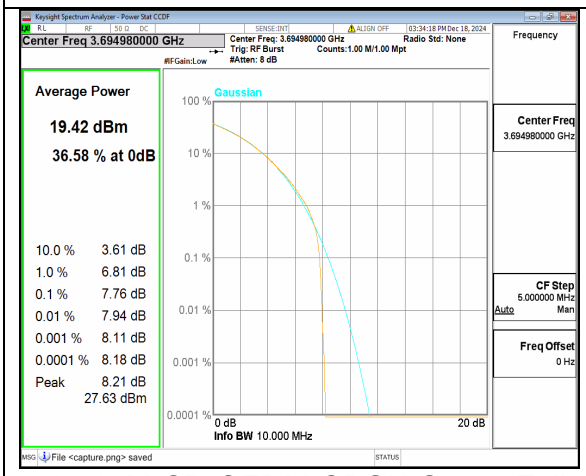
n48 10M CP-OFDM 256QAM Outer_Full Mid



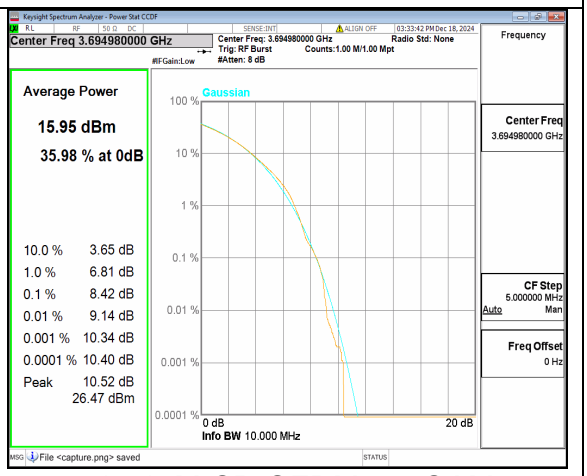
n48 10M DFT-s-OFDM BPSK Outer_Full High



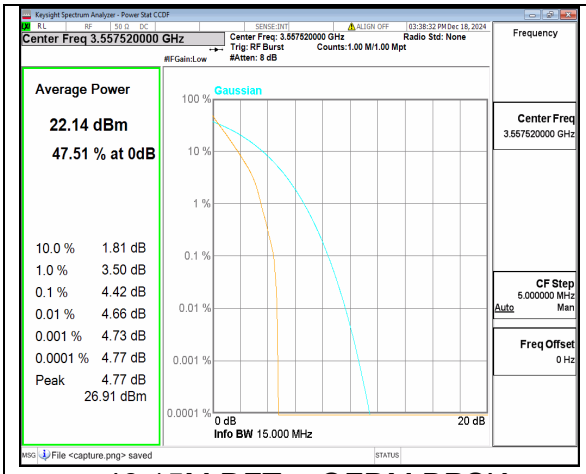
n48 10M DFT-s-OFDM 256QAM Outer_Full High



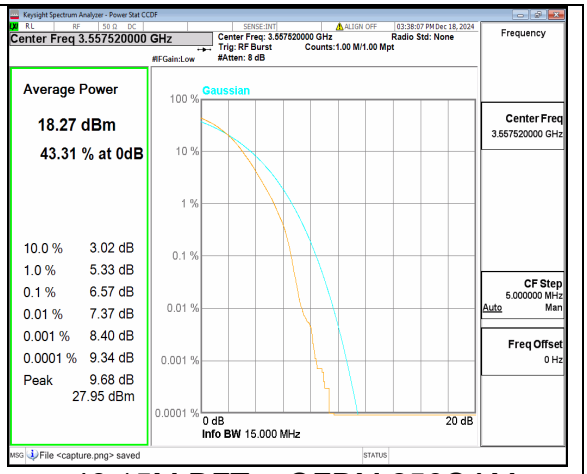
n48 10M CP-OFDM QPSK Outer_Full High



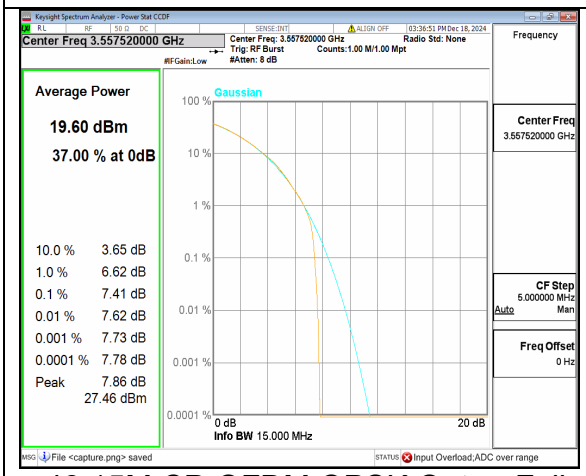
n48 10M CP-OFDM 256QAM Outer_Full High



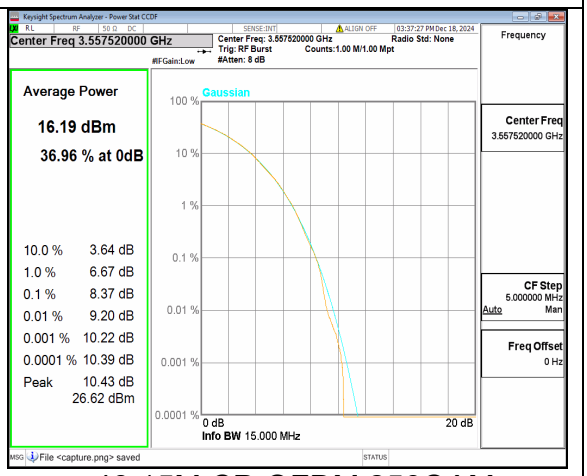
n48 15M DFT-s-OFDM BPSK Outer_Full Low



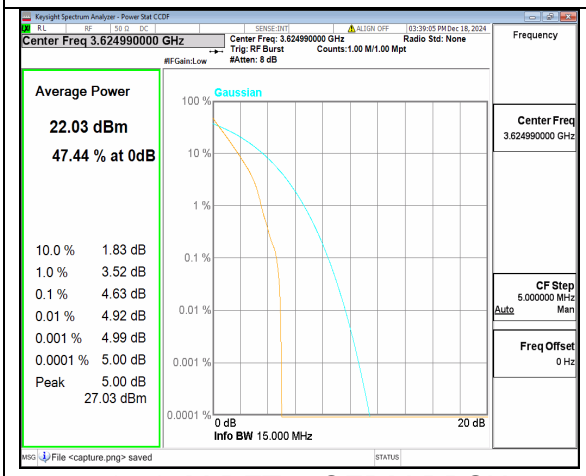
n48 15M DFT-s-OFDM 256QAM Outer_Full Low



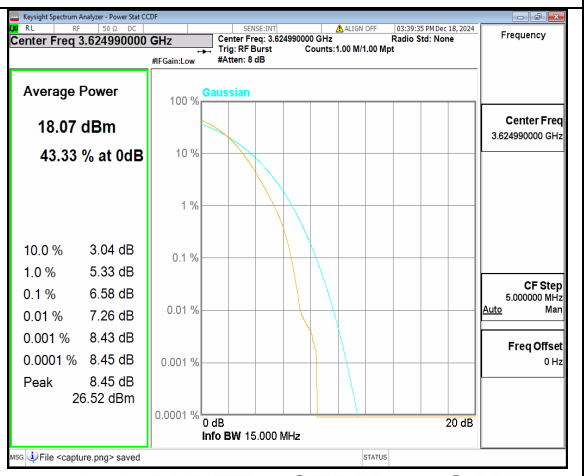
n48 15M CP-OFDM QPSK Outer_Full Low



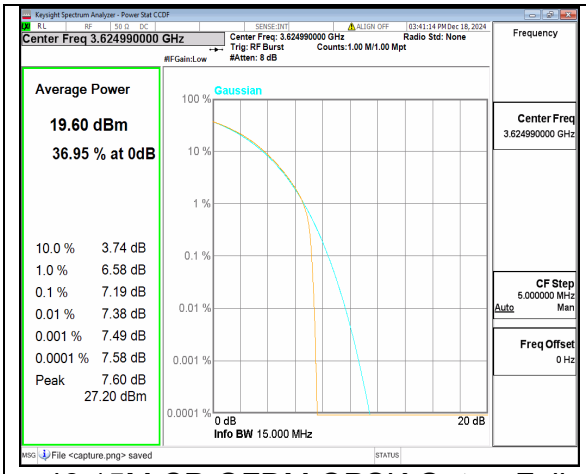
n48 15M CP-OFDM 256QAM Outer_Full Low



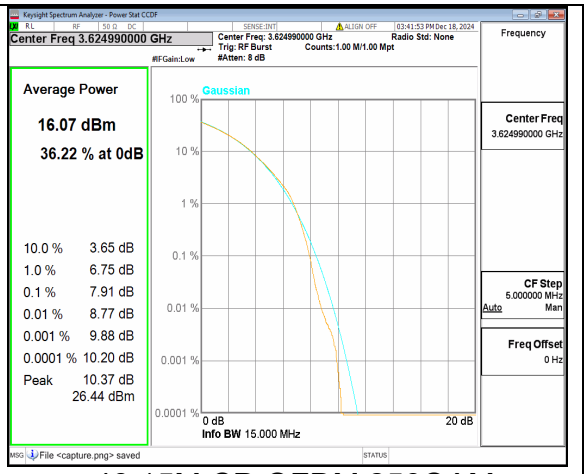
n48 15M DFT-s-OFDM BPSK Outer_Full Mid



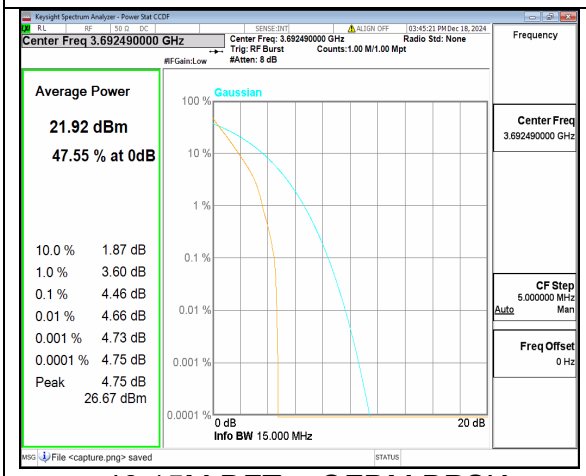
n48 15M DFT-s-OFDM 256QAM Outer_Full Mid



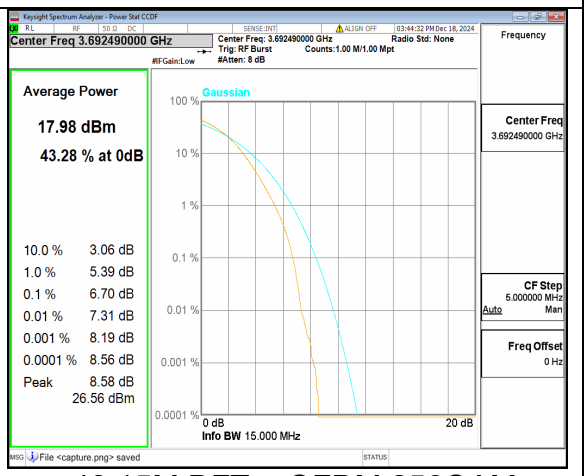
n48 15M CP-OFDM QPSK Outer_Full Mid



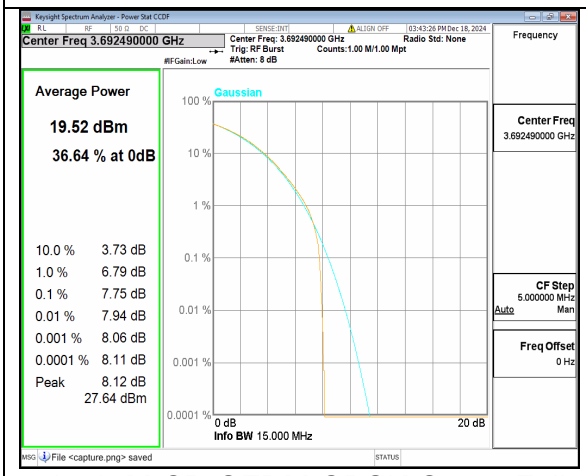
n48 15M CP-OFDM 256QAM Outer_Full Mid



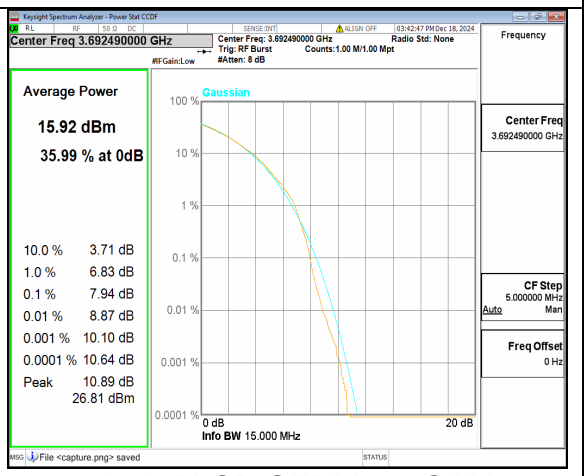
n48 15M DFT-s-OFDM BPSK Outer_Full High



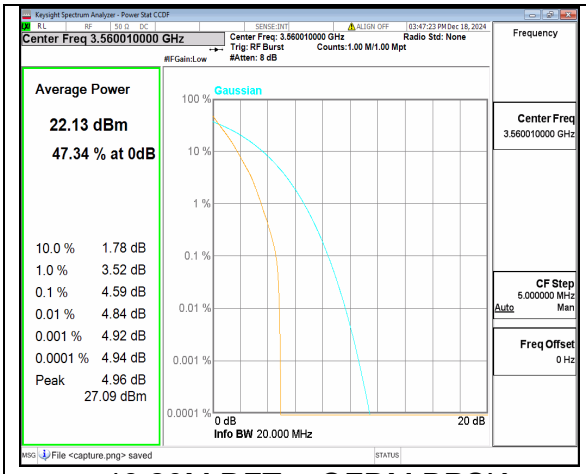
n48 15M DFT-s-OFDM 256QAM Outer_Full High



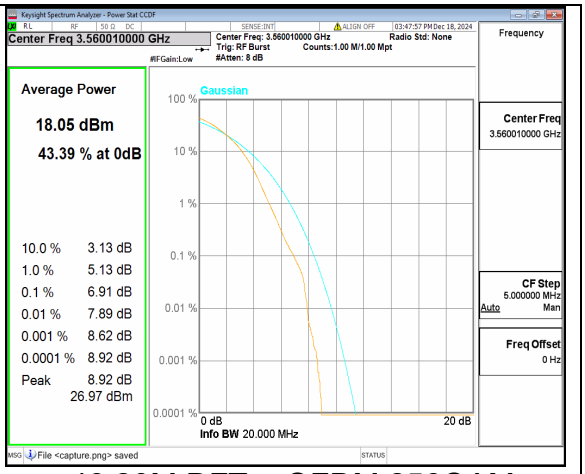
n48 15M CP-OFDM QPSK Outer_Full High



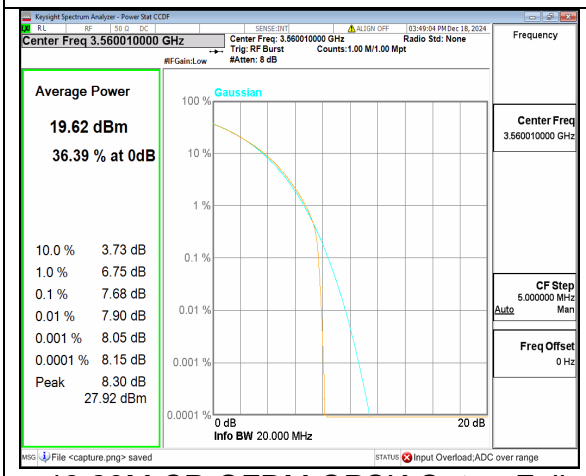
n48 15M CP-OFDM 256QAM Outer_Full High



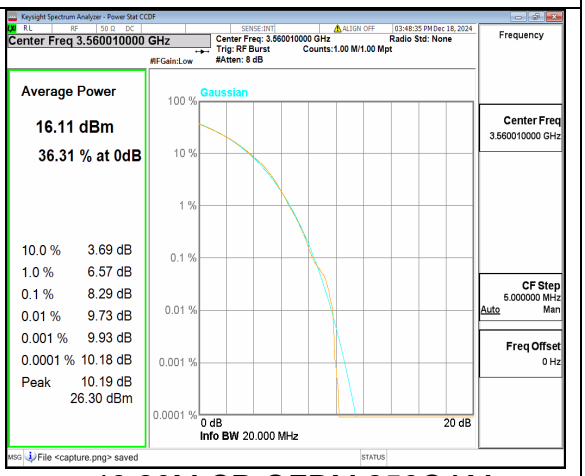
n48 20M DFT-s-OFDM BPSK Outer_Full Low



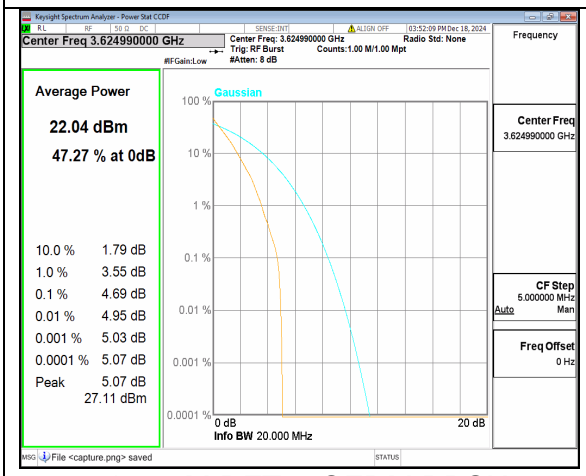
n48 20M DFT-s-OFDM 256QAM Outer_Full Low



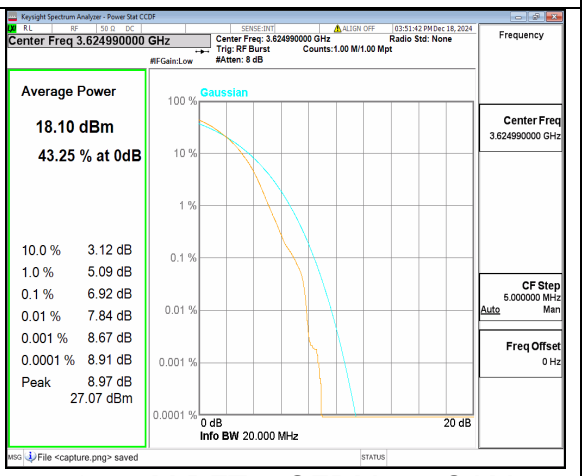
n48 20M CP-OFDM QPSK Outer_Full Low



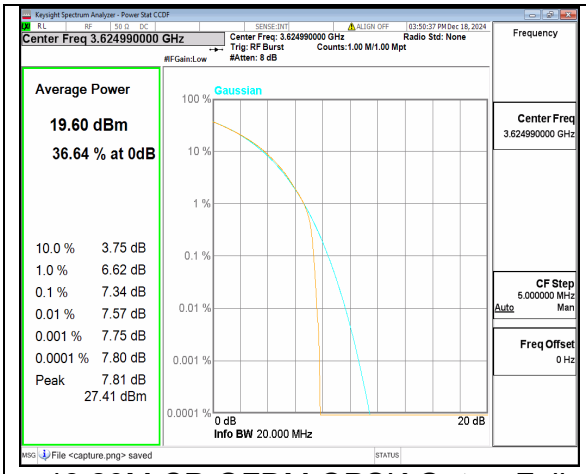
n48 20M CP-OFDM 256QAM Outer_Full Low



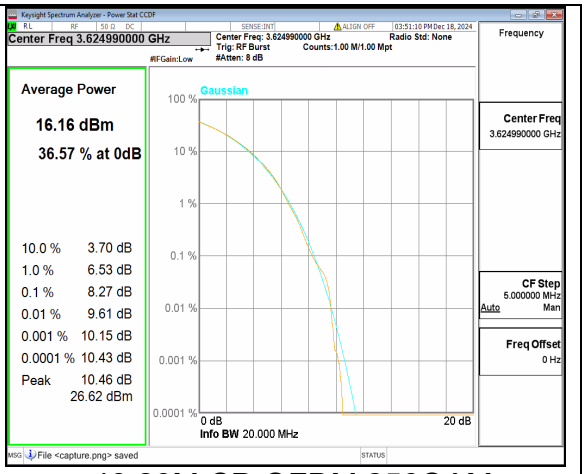
n48 20M DFT-s-OFDM BPSK Outer_Full Mid



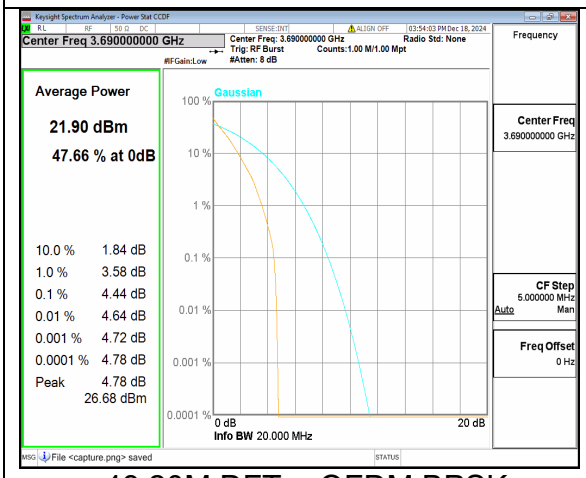
n48 20M DFT-s-OFDM 256QAM Outer_Full Mid



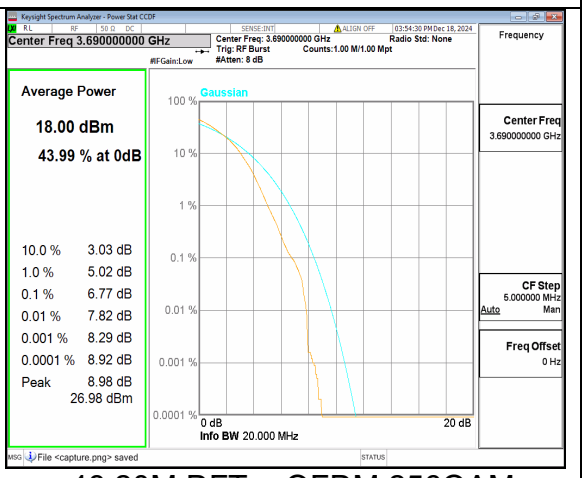
n48 20M CP-OFDM QPSK Outer_Full Mid



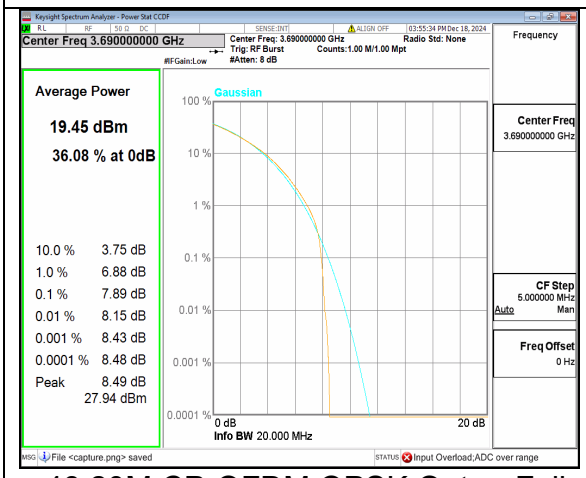
n48 20M CP-OFDM 256QAM Outer_Full Mid



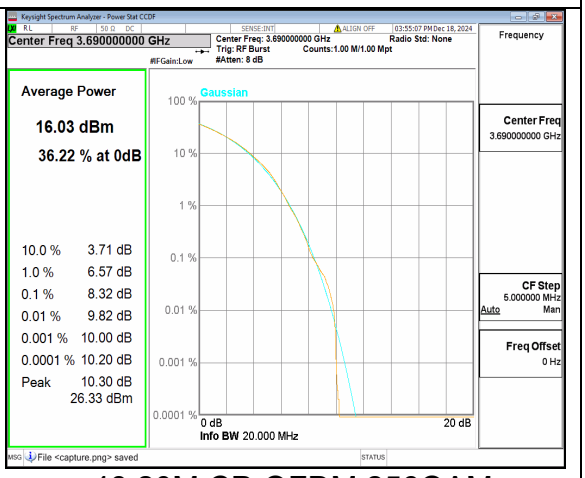
n48 20M DFT-s-OFDM BPSK Outer_Full High



n48 20M DFT-s-OFDM 256QAM Outer_Full High



n48 20M CP-OFDM QPSK Outer_Full High



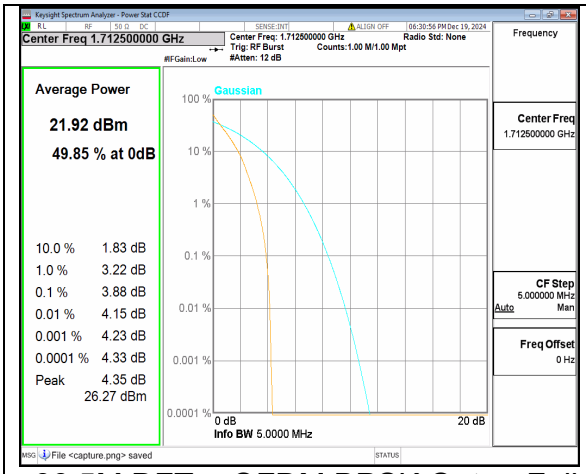
n48 20M CP-OFDM 256QAM Outer_Full High

Band	SCS	BW	ARFCN	Modulation	RB	Result	Limit	Verdict

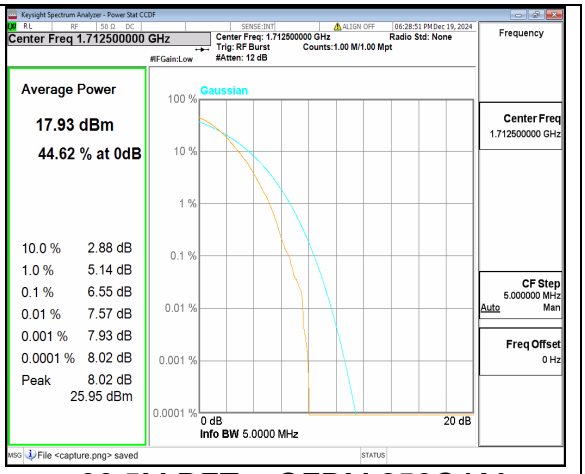
	(kHz)	(MHz)				(dB)	(dB)	
n66	15	5	342500	DFT-s-OFDM PI/2 BPSK	25/0	3.88	13	PASS
n66	15	5	342500	DFT-s-OFDM 256QAM	25/0	6.55	13	PASS
n66	15	5	342500	CP-OFDM QPSK	25/0	6.97	13	PASS
n66	15	5	342500	CP-OFDM 256QAM	25/0	8.25	13	PASS
n66	15	5	349000	DFT-s-OFDM PI/2 BPSK	25/0	5.77	13	PASS
n66	15	5	349000	DFT-s-OFDM 256QAM	25/0	5.3	13	PASS
n66	15	5	349000	CP-OFDM QPSK	25/0	7.08	13	PASS
n66	15	5	349000	CP-OFDM 256QAM	25/0	8.43	13	PASS
n66	15	5	355500	DFT-s-OFDM PI/2 BPSK	25/0	3.99	13	PASS
n66	15	5	355500	DFT-s-OFDM 256QAM	25/0	6.4	13	PASS
n66	15	5	355500	CP-OFDM QPSK	25/0	6.8	13	PASS
n66	15	5	355500	CP-OFDM 256QAM	25/0	8.4	13	PASS
n66	15	10	343000	DFT-s-OFDM PI/2 BPSK	50/0	4.22	13	PASS
n66	15	10	343000	DFT-s-OFDM 256QAM	50/0	6.56	13	PASS
n66	15	10	343000	CP-OFDM QPSK	52/0	6.93	13	PASS
n66	15	10	343000	CP-OFDM 256QAM	52/0	7.99	13	PASS
n66	15	10	349000	DFT-s-OFDM PI/2 BPSK	50/0	5.43	13	PASS
n66	15	10	349000	DFT-s-OFDM 256QAM	50/0	6.6	13	PASS
n66	15	10	349000	CP-OFDM QPSK	52/0	6.82	13	PASS
n66	15	10	349000	CP-OFDM 256QAM	52/0	8.03	13	PASS
n66	15	10	355000	DFT-s-OFDM PI/2 BPSK	50/0	3.96	13	PASS
n66	15	10	355000	DFT-s-OFDM 256QAM	50/0	6.49	13	PASS

n66	15	10	355000	CP-OFDM QPSK	52/0	6.76	13	PASS
n66	15	10	355000	CP-OFDM 256QAM	52/0	8.01	13	PASS
n66	15	15	343500	DFT-s-OFDM PI/2 BPSK	75/0	4.09	13	PASS
n66	15	15	343500	DFT-s-OFDM 256QAM	75/0	6.42	13	PASS
n66	15	15	343500	CP-OFDM QPSK	79/0	7.13	13	PASS
n66	15	15	343500	CP-OFDM 256QAM	79/0	8.3	13	PASS
n66	15	15	349000	DFT-s-OFDM PI/2 BPSK	75/0	4.27	13	PASS
n66	15	15	349000	DFT-s-OFDM 256QAM	75/0	6.41	13	PASS
n66	15	15	349000	CP-OFDM QPSK	79/0	7.18	13	PASS
n66	15	15	349000	CP-OFDM 256QAM	79/0	8.19	13	PASS
n66	15	15	354500	DFT-s-OFDM PI/2 BPSK	75/0	4.03	13	PASS
n66	15	15	354500	DFT-s-OFDM 256QAM	75/0	6.36	13	PASS
n66	15	15	354500	CP-OFDM QPSK	79/0	6.88	13	PASS
n66	15	15	354500	CP-OFDM 256QAM	79/0	8.24	13	PASS
n66	15	20	344000	DFT-s-OFDM PI/2 BPSK	100/0	3.94	13	PASS
n66	15	20	344000	DFT-s-OFDM 256QAM	100/0	6.38	13	PASS
n66	15	20	344000	CP-OFDM QPSK	106/0	6.75	13	PASS
n66	15	20	344000	CP-OFDM 256QAM	106/0	8.27	13	PASS
n66	15	20	349000	DFT-s-OFDM PI/2 BPSK	100/0	4.25	13	PASS
n66	15	20	349000	DFT-s-OFDM 256QAM	100/0	6.43	13	PASS
n66	15	20	349000	CP-OFDM QPSK	106/0	7.23	13	PASS
n66	15	20	349000	CP-OFDM 256QAM	106/0	8.31	13	PASS
n66	15	20	354000	DFT-s-OFDM	100/0	5.05	13	PASS

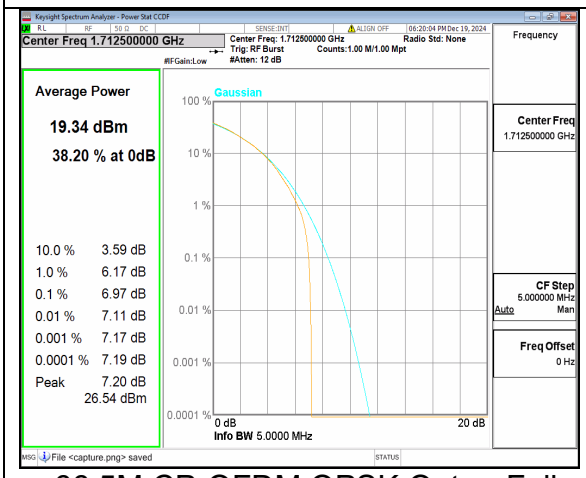
				PI/2 BPSK				
n66	15	20	354000	DFT-s-OFDM 256QAM	100/0	5.34	13	PASS
n66	15	20	354000	CP-OFDM QPSK	106/0	6.55	13	PASS
n66	15	20	354000	CP-OFDM 256QAM	106/0	8.16	13	PASS



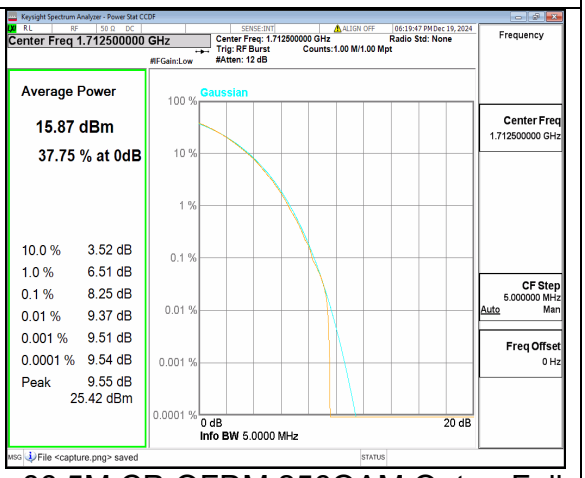
n66 5M DFT-s-OFDM BPSK Outer_Full Low



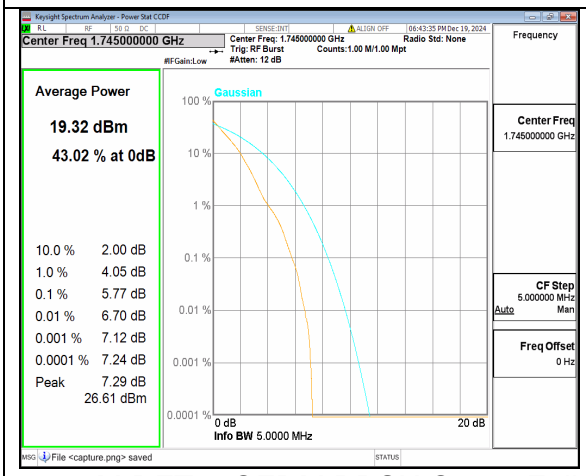
n66 5M DFT-s-OFDM 256QAM Outer_Full Low



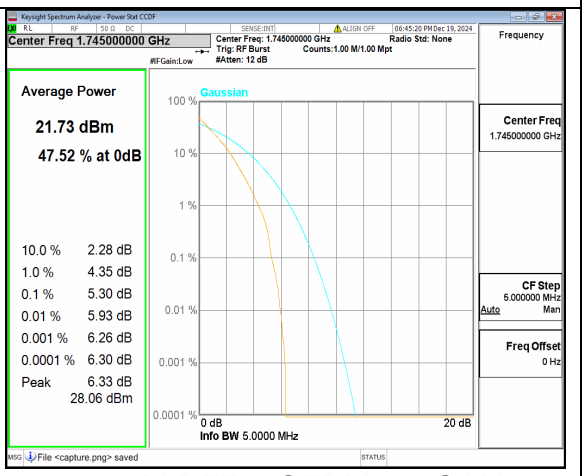
n66 5M CP-OFDM QPSK Outer_Full Low



n66 5M CP-OFDM 256QAM Outer_Full Low



n66 5M DFT-s-OFDM BPSK Outer_Full Mid



n66 5M DFT-s-OFDM 256QAM Outer_Full Mid