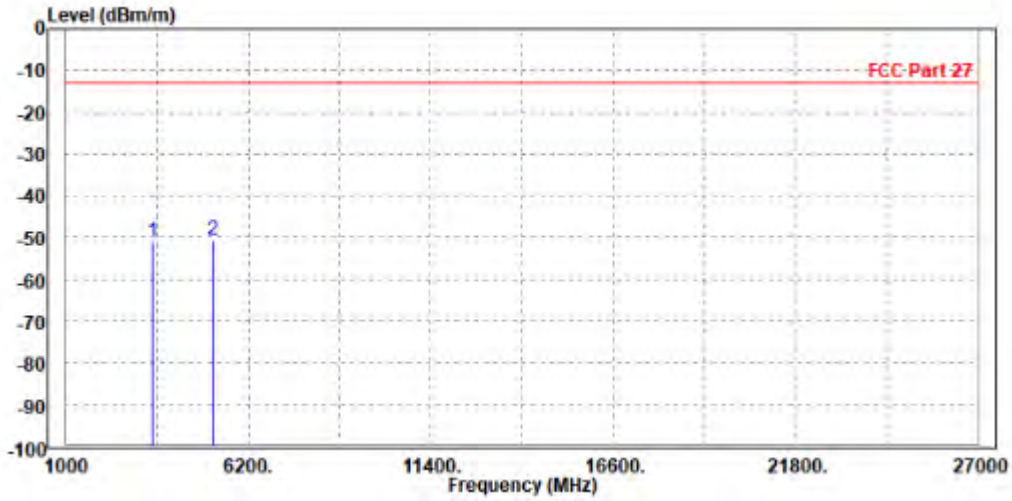
MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 4.0V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1		3470.000	-50.91	-58.18	-13.00	-37.91	7.27	Peak	Vertical
2	PP	5197.500	-50.45	-60.90	-13.00	-37.45	10.45	Peak	Vertical

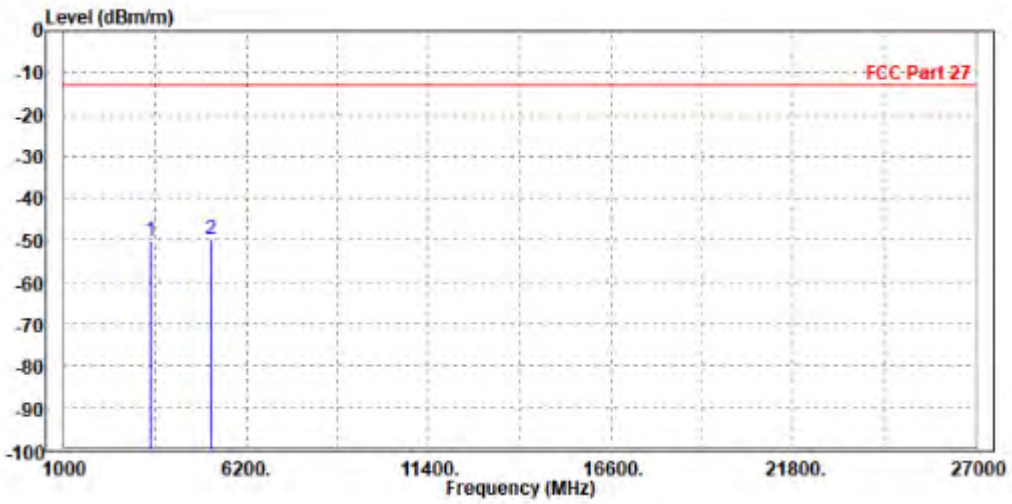


CHANNEL BANDWIDTH: 20MHz / QPSK

CH 20175

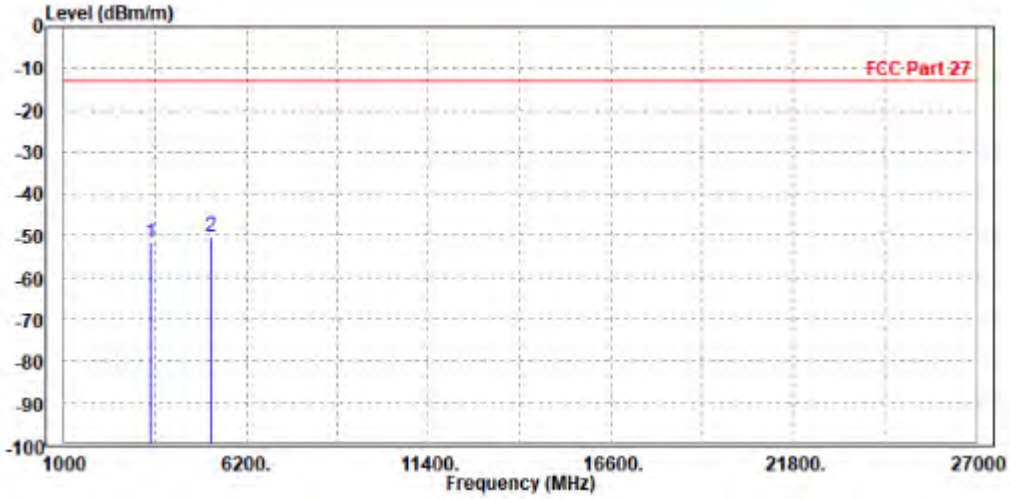
MODE	TX channel 20175	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 4.0V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3470.000	-50.26	-57.54	-13.00	-37.26	7.28	Peak	Horizontal
2 PP	5197.500	-49.85	-59.85	-13.00	-36.85	10.00	Peak	Horizontal



MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 4.0V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

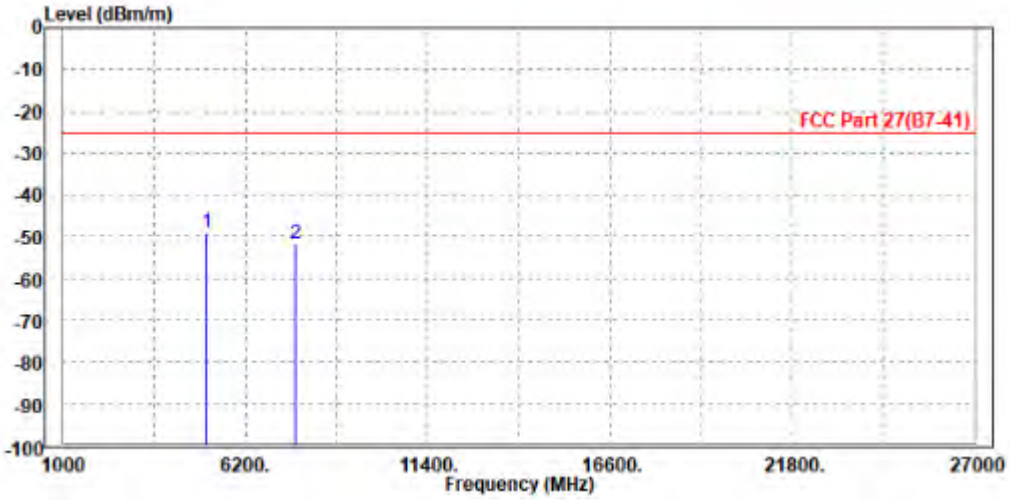
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3465.000	-51.63	-58.89	-13.00	-38.63	7.26	Peak	Vertical
2 PP	5186.000	-50.29	-60.73	-13.00	-37.29	10.44	Peak	Vertical



LTE Band 7
CHANNEL BANDWIDTH: 5MHz / QPSK
CH 21100

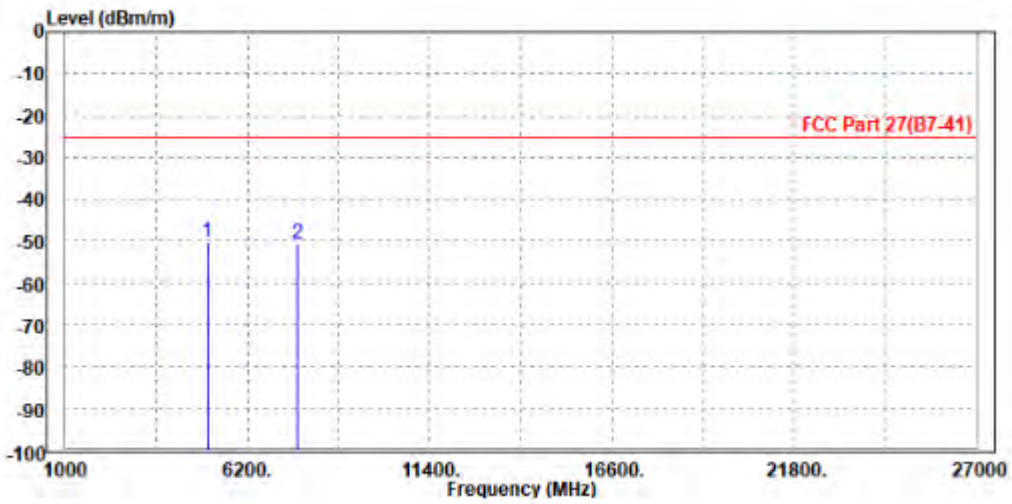
MODE	TX channel 21100	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 4.0V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP	5082.000	-49.06	-58.88	-25.00	-24.06	9.82	Peak	Horizontal
2	7605.000	-51.63	-63.81	-25.00	-26.63	12.18	Peak	Horizontal



MODE	TX channel 21100	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 4.0V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5070.000	-50.31	-60.64	-25.00	-25.31	10.33	Peak	Vertical
2		7604.000	-50.55	-65.40	-25.00	-25.55	14.85	Peak	Vertical

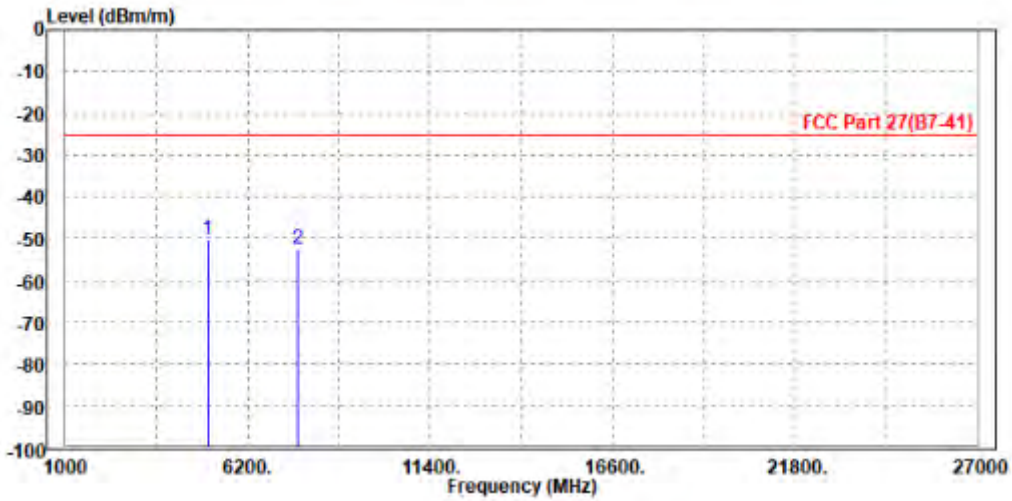


CHANNEL BANDWIDTH: 10MHz / QPSK

CH21100

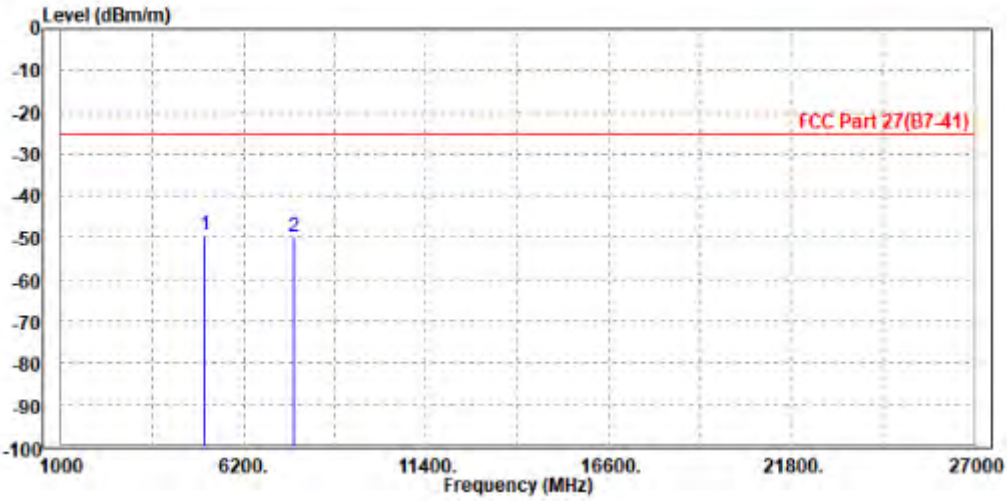
MODE	TX channel 21100	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 4.0V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP	5070.000	-50.14	-59.94	-25.00	-25.14	9.80	Peak	Horizontal
2	7604.000	-52.48	-64.65	-25.00	-27.48	12.17	Peak	Horizontal



MODE	TX channel 21100	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 4.0V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

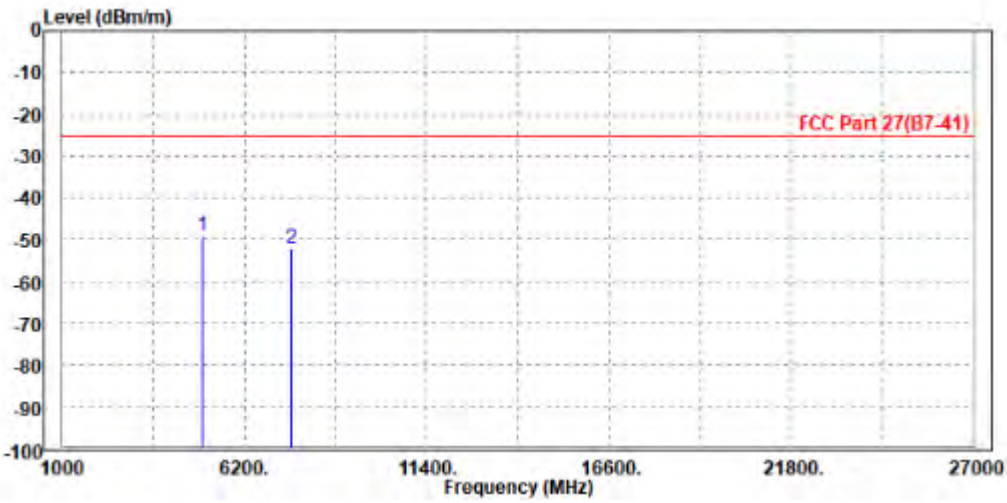
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5082.000	-49.42	-59.76	-25.00	-24.42	10.34	Peak	Vertical
2		7605.000	-49.63	-64.48	-25.00	-24.63	14.85	Peak	Vertical



CHANNEL BANDWIDTH: 15MHz / QPSK
CH 20825

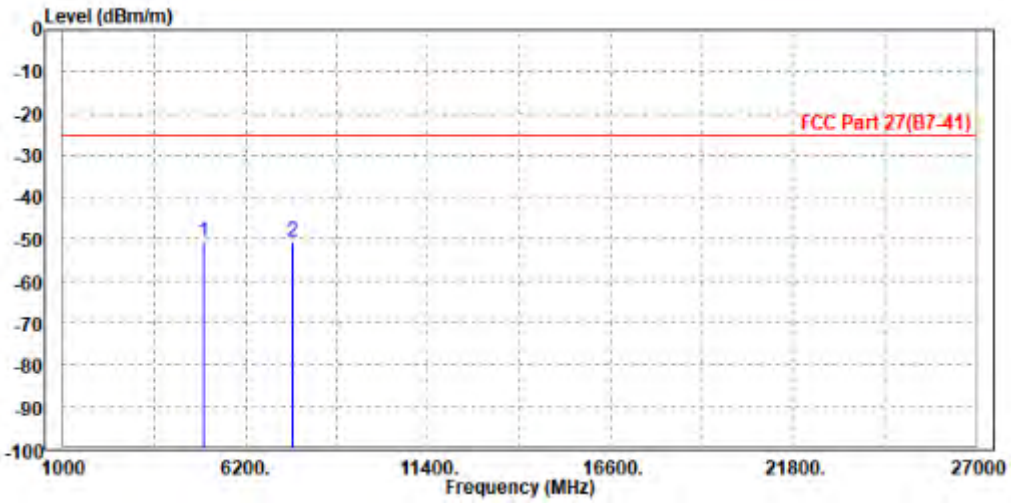
MODE	TX channel 20825	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 4.0V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP	5015.000	-49.23	-58.94	-25.00	-24.23	9.71	Peak	Horizontal
2	7526.000	-51.98	-63.59	-25.00	-26.98	11.61	Peak	Horizontal



MODE	TX channel 20825	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 4.0V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

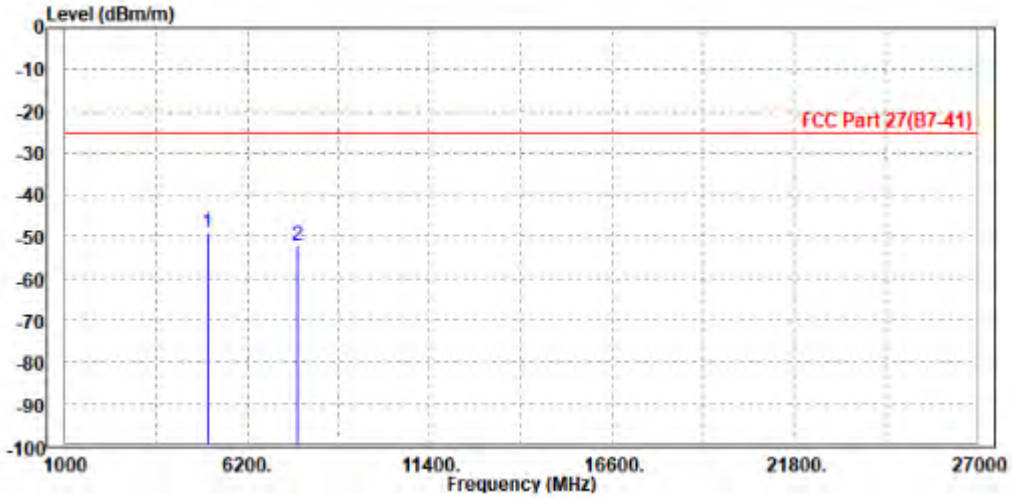
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5004.000	-50.38	-60.65	-25.00	-25.38	10.27	Peak	Vertical
2		7522.500	-50.45	-65.18	-25.00	-25.45	14.73	Peak	Vertical



CH 21100

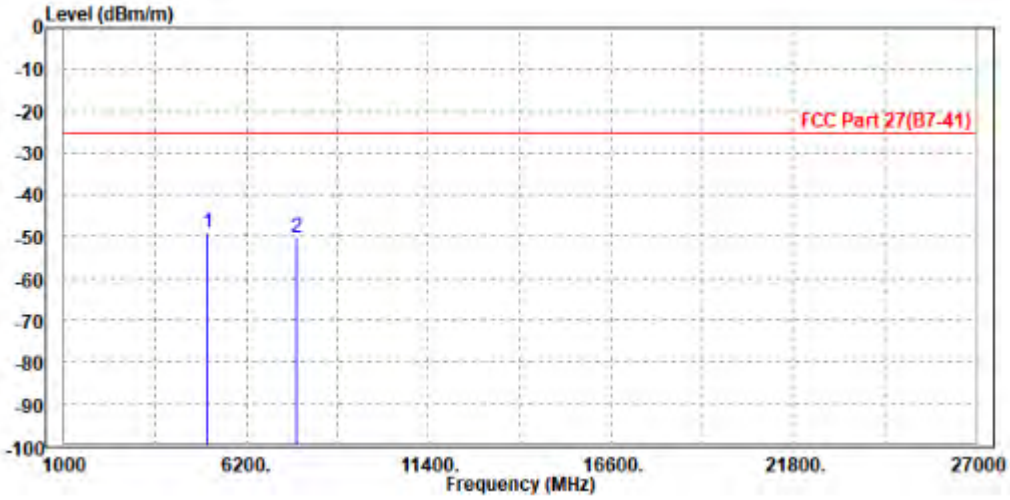
MODE	TX channel 21100	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 4.0V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP	5070.000	-49.24	-59.04	-25.00	-24.24	9.80	Peak	Horizontal
2	7604.000	-51.99	-64.16	-25.00	-26.99	12.17	Peak	Horizontal



MODE	TX channel 21100	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 4.0V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

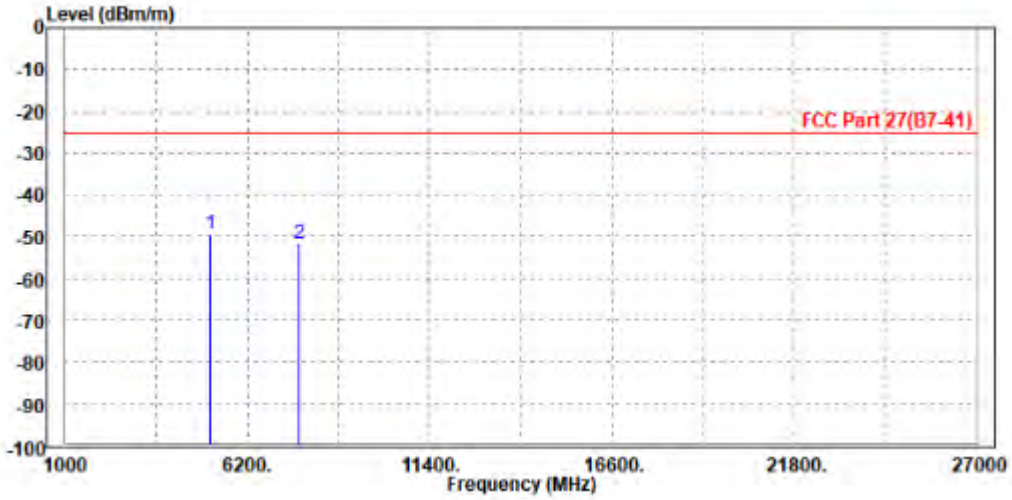
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5082.000	-48.94	-59.28	-25.00	-23.94	10.34	Peak	Vertical
2		7605.000	-50.27	-65.12	-25.00	-25.27	14.85	Peak	Vertical



CH 21375

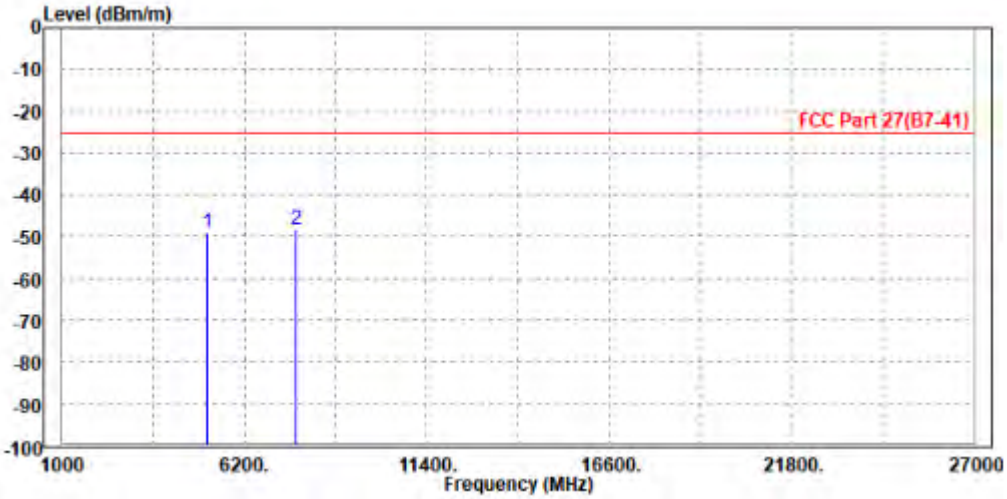
MODE	TX channel 21375	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 4.0V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5134.000	-49.43	-59.33	-25.00	-24.43	9.90	Peak	Horizontal
2		7687.500	-51.74	-64.52	-25.00	-26.74	12.78	Peak	Horizontal



MODE	TX channel 21375	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 4.0V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

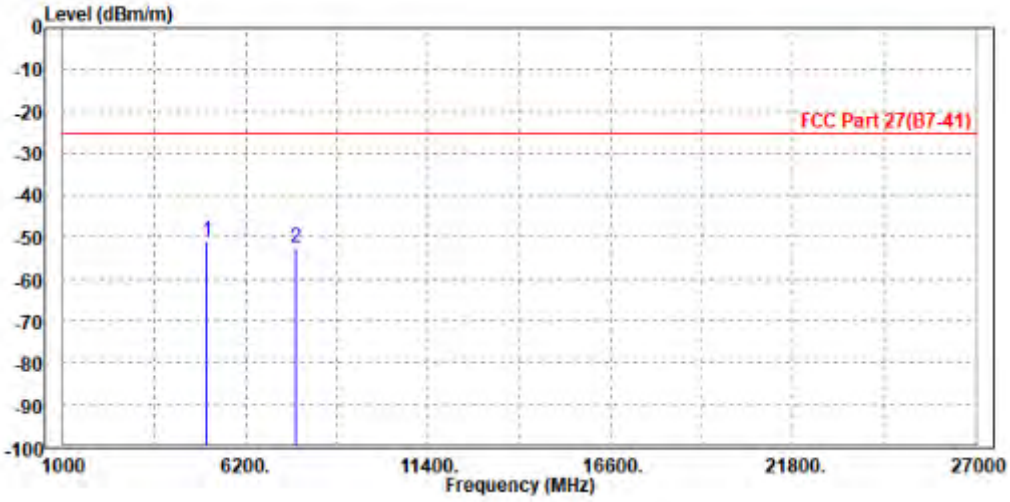
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	5125.000	-49.05	-59.43	-25.00	-24.05	10.38	Peak	Vertical
2 PP	7682.000	-48.10	-63.07	-25.00	-23.10	14.97	Peak	Vertical



CHANNEL BANDWIDTH: 20MHz / QPSK
CH 21100

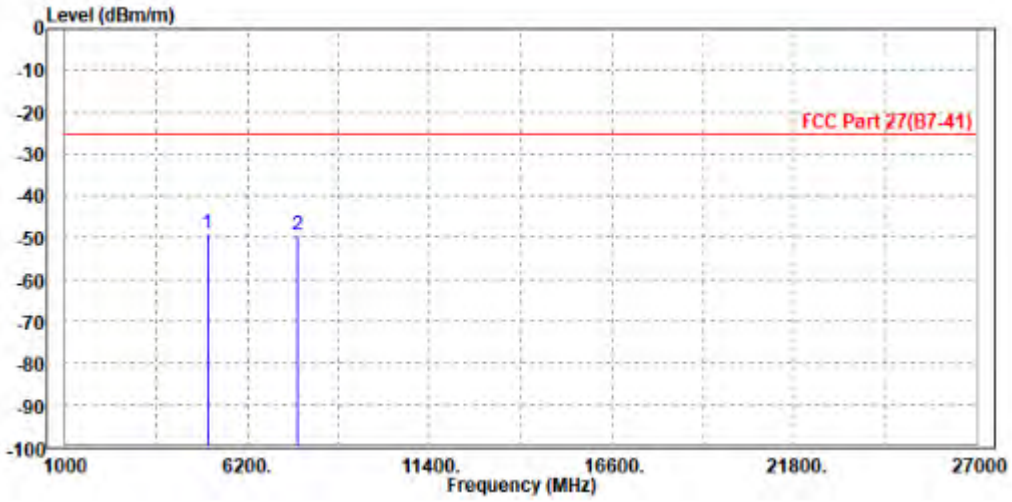
MODE	TX channel 21100	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 4.0V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 PP	5082.000	-50.93	-60.75	-25.00	-25.93	9.82	Peak	Horizontal
2	7605.000	-52.46	-64.64	-25.00	-27.46	12.18	Peak	Horizontal



MODE	TX channel 21100	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 4.0V
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5070.000	-49.21	-59.54	-25.00	-24.21	10.33	Peak	Vertical
2		7604.000	-49.57	-64.42	-25.00	-24.57	14.85	Peak	Vertical

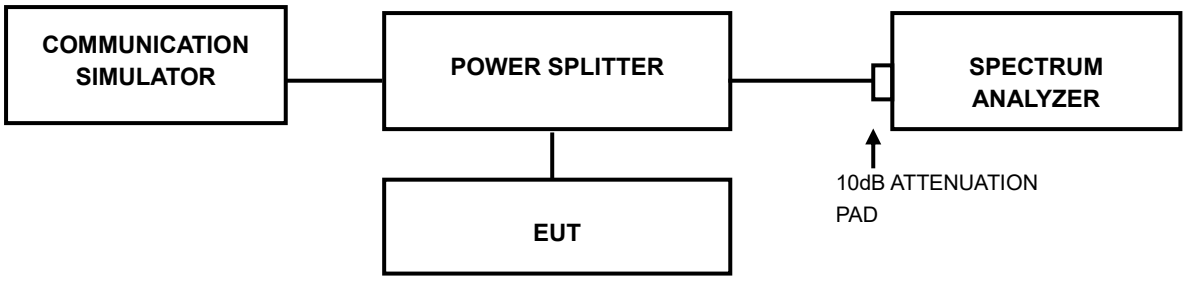


3.7 PEAK TO AVERAGE RATIO

3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT

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

3.7.2 TEST SETUP



3.7.3 TEST PROCEDURES

1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.

3.7.4 TEST RESULTS

Please Refer to Appendix C Of this test report.

4 INFORMATION ON THE TESTING LABORATORIES

We, BV 7LAYERS COMMUNICATIONS TECHNOLOGY (SHENZHEN) CO. LTD., were founded in 2015 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Shenzhen EMC/RF Lab:
Tel: +86-755-88696566
Fax: +86-755-88696577

Email: customerservice.sw@bureauveritas.com
Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also.

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

Please Refer to Appendix C Of this test report.

APPENDIX C:

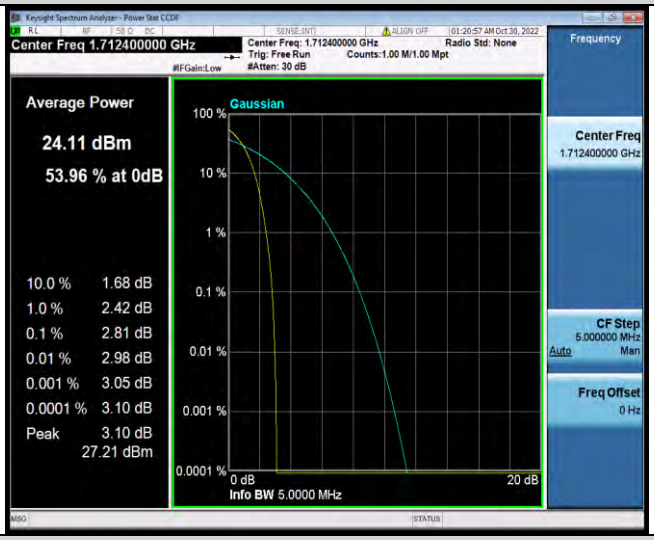
WCDMA BAND4

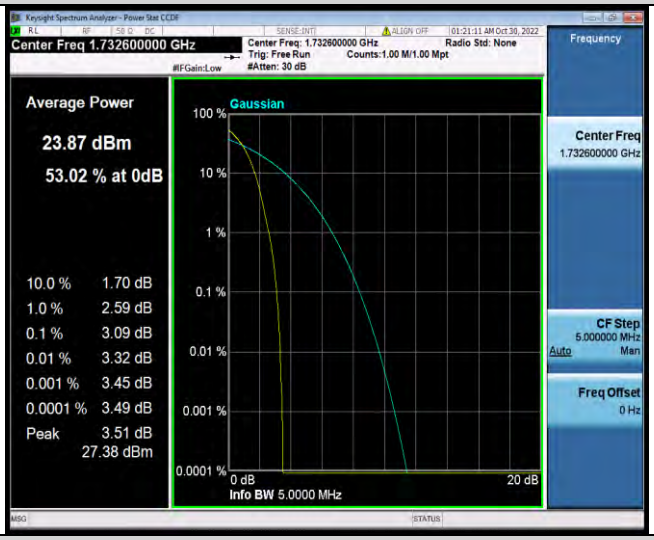
PEAK-TO-AVERAGE RATIO

Test Result

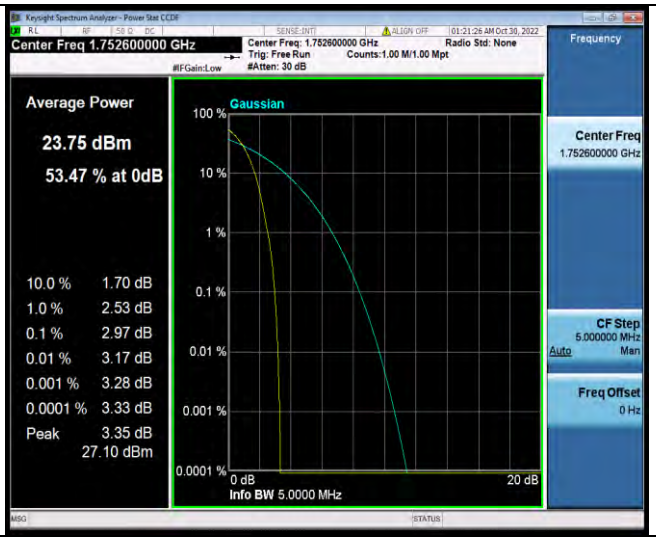
Band	Channel	Peak-to-Average Ratio(dB)	Limit(dBm)	Verdict
Band4	1312	2.81	13	PASS
Band4	1413	3.09	13	PASS
Band4	1513	2.97	13	PASS

Test Graphs

Band4-1312


Band4-1413


Band4-1513


Keysight Spectrum Analyzer - Power Stat CCDF
Center Freq 1.752600000 GHz
Center Freq: 1.752600000 GHz
Trig: Free Run
Counts:1.00 M/1.00 Mpt
#Atten: 30 dB
Radio Std: None
Frequency
Average Power
23.75 dBm
53.47 % at 0dB
10.0 % 1.70 dB
1.0 % 2.53 dB
0.1 % 2.97 dB
0.01 % 3.17 dB
0.001 % 3.28 dB
0.0001 % 3.33 dB
Peak 3.35 dB
27.10 dBm
Gaussian
100 %
10 %
1 %
0.1 %
0.01 %
0.001 %
0.0001 %
0 dB
20 dB
Info BW 5.0000 MHz
Center Freq
1.752600000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

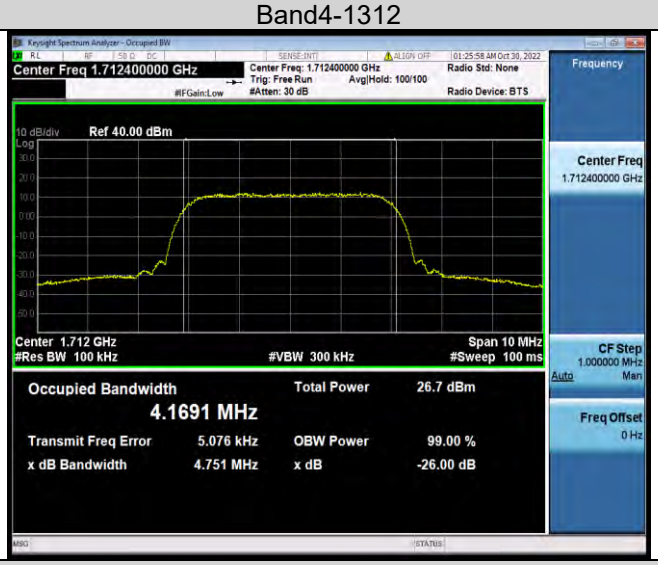
26DB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(MHz)	Verdict
Band4	1312	4.1691	4.751	---	PASS
Band4	1413	4.1659	4.728	---	PASS
Band4	1513	4.1640	4.737	---	PASS

Test Graphs

Band4-1312



Band4-1413

Band4-1513

Keysight Spectrum Analyzer - Occupied BW
Center Freq 1.752600000 GHz
Center Freq: 1.752600000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 13.18 dB
10 dB/div
Ref 40.00 dBm
Center Freq
1.752600000 GHz
Center 1.753 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 10 MHz
#Sweep 100 ms
CF Step
1.000000 MHz
Auto
Man
Occupied Bandwidth
4.1640 MHz
Total Power 26.3 dBm
Transmit Freq Error 700 Hz
OBW Power 99.00 %
x dB Bandwidth 4.737 MHz
x dB -26.00 dB
Freq Offset
0 Hz

BAND EDGE

Test Result

Band	Channel	Frequency (MHz)	Result (dBm)	Limit(dBm)	Verdict
Band4	1312	1710.00	-22.74	-13	PASS
Band4	1513	1755.00	-23.24	-13	PASS

Test Graphs

Band4-1312

Band4-1513

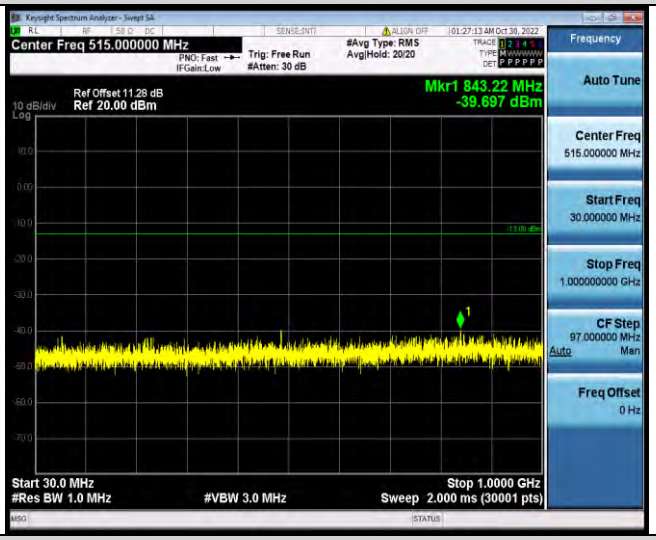
CONDUCTED SPURIOUS EMISSION

Test Result

Band	Channel	Frequency Range (Mhz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band4	1312	30~1000MHz	843.22	-39.7	-13	PASS
Band4	1312	1000~20000MHz	3697.37	-32.01	-13	PASS
Band4	1413	30~1000MHz	913.31	-39.77	-13	PASS
Band4	1413	1000~20000MHz	19321.07	-32.25	-13	PASS
Band4	1513	30~1000MHz	983.51	-40.02	-13	PASS
Band4	1513	1000~20000MHz	18442	-31.83	-13	PASS

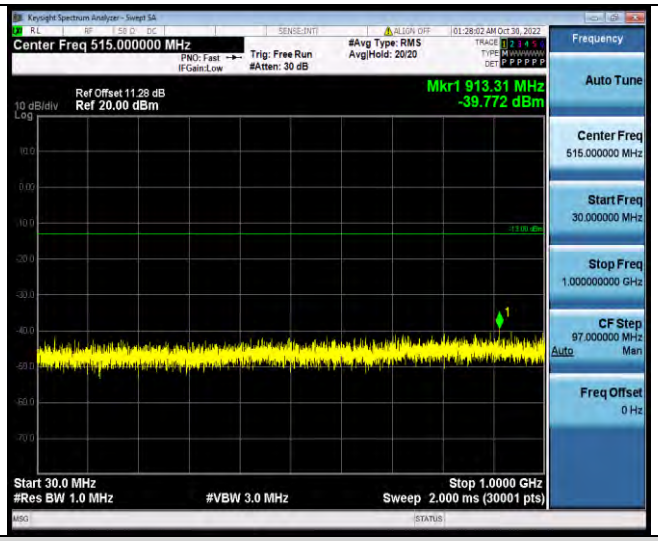
Test Graphs

Band4-1312-30~1000MHz



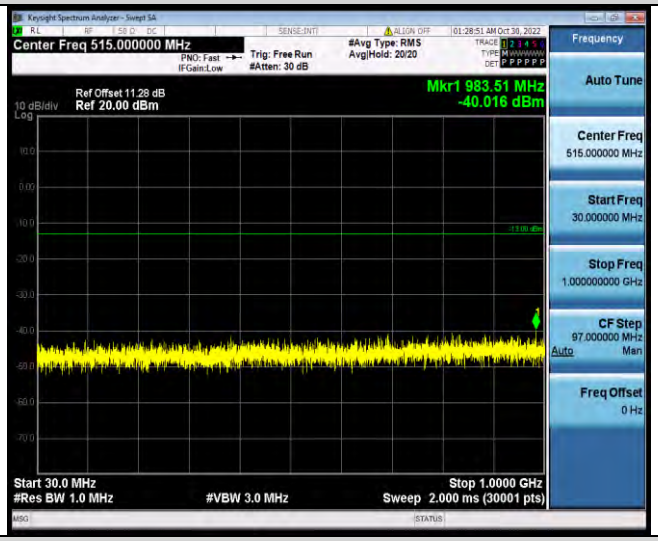
Band4-1312-1000~20000MHz

Band4-1413-30~1000MHz



Band4-1413-1000~20000MHz

Band4-1513-30~1000MHz



Band4-1513-1000~20000MHz

Keysight Spectrum Analyzer - Swept SA
Center Freq 10.500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 10/10
01:29:29 AM Oct 30, 2022
Ref Offset 12.72 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr2 18.442 0 GHz
-31.834 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 20.000 GHz
#Sweep 3.000 s (30001 pts)
Frequency
Auto Tune
Center Freq
10.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
20.000000000 GHz
CF Step
1.900000000 GHz
Auto
Man
Freq Offset
0 Hz

FREQUENCY STABILITY

Test Result

Voltage							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1312	VL	NT	17.29	0.010097	±2.5	PASS
Band4	1312	VN	NT	17.50	0.010220	±2.5	PASS
Band4	1312	VH	NT	17.36	0.010138	±2.5	PASS
Band4	1413	VL	NT	-12.26	-0.007076	±2.5	PASS
Band4	1413	VN	NT	-12.47	-0.007197	±2.5	PASS
Band4	1413	VH	NT	-12.22	-0.007053	±2.5	PASS
Band4	1513	VL	NT	-11.19	-0.006385	±2.5	PASS
Band4	1513	VN	NT	-10.84	-0.006185	±2.5	PASS
Band4	1513	VH	NT	-11.05	-0.006305	±2.5	PASS

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1312	NV	-30	17.24	0.010068	±2.5	PASS
Band4	1312	NV	-20	17.40	0.010161	±2.5	PASS
Band4	1312	NV	0	17.53	0.010237	±2.5	PASS
Band4	1312	NV	10	17.41	0.010167	±2.5	PASS
Band4	1312	NV	20	17.45	0.010190	±2.5	PASS
Band4	1312	NV	30	17.30	0.010103	±2.5	PASS
Band4	1312	NV	40	17.49	0.010214	±2.5	PASS
Band4	1312	NV	50	17.57	0.010260	±2.5	PASS
Band4	1413	NV	-30	-12.03	-0.006943	±2.5	PASS
Band4	1413	NV	-20	-11.89	-0.006863	±2.5	PASS
Band4	1413	NV	0	-12.06	-0.006961	±2.5	PASS
Band4	1413	NV	10	-12.30	-0.007099	±2.5	PASS
Band4	1413	NV	20	-12.07	-0.006966	±2.5	PASS
Band4	1413	NV	30	-12.53	-0.007232	±2.5	PASS
Band4	1413	NV	40	-12.27	-0.007082	±2.5	PASS
Band4	1413	NV	50	-12.04	-0.006949	±2.5	PASS
Band4	1513	NV	-30	-10.84	-0.006185	±2.5	PASS
Band4	1513	NV	-20	-10.85	-0.006191	±2.5	PASS
Band4	1513	NV	0	-10.43	-0.005951	±2.5	PASS
Band4	1513	NV	10	-10.64	-0.006071	±2.5	PASS
Band4	1513	NV	20	-10.43	-0.005951	±2.5	PASS
Band4	1513	NV	30	-10.89	-0.006214	±2.5	PASS
Band4	1513	NV	40	-10.69	-0.006100	±2.5	PASS
Band4	1513	NV	50	-10.66	-0.006082	±2.5	PASS

LTE BAND4

PEAK-TO-AVERAGE RATIO(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band4	1.4MHz	QPSK	19957	1RB#0	3.08	13	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	4.29	13	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	3.82	13	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	5.18	13	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	3.55	13	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	4.81	13	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	4.27	13	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	5.17	13	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	5.42	13	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	5.97	13	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	5.00	13	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	5.72	13	PASS
Band4	3MHz	QPSK	19965	1RB#0	3.05	13	PASS
Band4	3MHz	QPSK	19965	15RB#0	4.31	13	PASS
Band4	3MHz	QPSK	20175	1RB#0	3.65	13	PASS
Band4	3MHz	QPSK	20175	15RB#0	5.06	13	PASS
Band4	3MHz	QPSK	20385	1RB#0	3.30	13	PASS
Band4	3MHz	QPSK	20385	15RB#0	4.70	13	PASS
Band4	3MHz	16QAM	19965	1RB#0	4.28	13	PASS
Band4	3MHz	16QAM	19965	15RB#0	5.21	13	PASS
Band4	3MHz	16QAM	20175	1RB#0	5.13	13	PASS
Band4	3MHz	16QAM	20175	15RB#0	5.95	13	PASS
Band4	3MHz	16QAM	20385	1RB#0	4.64	13	PASS
Band4	3MHz	16QAM	20385	15RB#0	5.62	13	PASS
Band4	5MHz	QPSK	19975	1RB#0	3.00	13	PASS
Band4	5MHz	QPSK	19975	25RB#0	4.48	13	PASS
Band4	5MHz	QPSK	20175	1RB#0	3.70	13	PASS
Band4	5MHz	QPSK	20175	25RB#0	5.15	13	PASS
Band4	5MHz	QPSK	20375	1RB#0	3.35	13	PASS
Band4	5MHz	QPSK	20375	25RB#0	4.66	13	PASS
Band4	5MHz	16QAM	19975	1RB#0	4.34	13	PASS
Band4	5MHz	16QAM	19975	25RB#0	5.33	13	PASS
Band4	5MHz	16QAM	20175	1RB#0	5.31	13	PASS
Band4	5MHz	16QAM	20175	25RB#0	5.98	13	PASS
Band4	5MHz	16QAM	20375	1RB#0	4.58	13	PASS
Band4	5MHz	16QAM	20375	25RB#0	5.54	13	PASS
Band4	10MHz	QPSK	20000	1RB#0	3.06	13	PASS
Band4	10MHz	QPSK	20000	50RB#0	4.87	13	PASS
Band4	10MHz	QPSK	20175	1RB#0	3.79	13	PASS
Band4	10MHz	QPSK	20175	50RB#0	5.24	13	PASS
Band4	10MHz	QPSK	20350	1RB#0	3.27	13	PASS
Band4	10MHz	QPSK	20350	50RB#0	4.77	13	PASS
Band4	10MHz	16QAM	20000	1RB#0	4.29	13	PASS
Band4	10MHz	16QAM	20000	50RB#0	5.69	13	PASS

Band4	10MHz	16QAM	20175	1RB#0	5.34	13	PASS
Band4	10MHz	16QAM	20175	50RB#0	6.04	13	PASS
Band4	10MHz	16QAM	20350	1RB#0	4.67	13	PASS
Band4	10MHz	16QAM	20350	50RB#0	5.63	13	PASS
Band4	15MHz	QPSK	20025	1RB#0	2.99	13	PASS
Band4	15MHz	QPSK	20025	75RB#0	5.20	13	PASS
Band4	15MHz	QPSK	20175	1RB#0	3.65	13	PASS
Band4	15MHz	QPSK	20175	75RB#0	5.40	13	PASS
Band4	15MHz	QPSK	20325	1RB#0	3.19	13	PASS
Band4	15MHz	QPSK	20325	75RB#0	4.92	13	PASS
Band4	15MHz	16QAM	20025	1RB#0	4.14	13	PASS
Band4	15MHz	16QAM	20025	75RB#0	5.94	13	PASS
Band4	15MHz	16QAM	20175	1RB#0	5.21	13	PASS
Band4	15MHz	16QAM	20175	75RB#0	6.11	13	PASS
Band4	15MHz	16QAM	20325	1RB#0	4.60	13	PASS
Band4	15MHz	16QAM	20325	75RB#0	5.69	13	PASS
Band4	20MHz	QPSK	20050	1RB#0	2.95	13	PASS
Band4	20MHz	QPSK	20050	100RB#0	5.03	13	PASS
Band4	20MHz	QPSK	20175	1RB#0	3.67	13	PASS
Band4	20MHz	QPSK	20175	100RB#0	5.19	13	PASS
Band4	20MHz	QPSK	20300	1RB#0	3.36	13	PASS
Band4	20MHz	QPSK	20300	100RB#0	4.92	13	PASS
Band4	20MHz	16QAM	20050	1RB#0	4.28	13	PASS
Band4	20MHz	16QAM	20050	100RB#0	5.86	13	PASS
Band4	20MHz	16QAM	20175	1RB#0	5.32	13	PASS
Band4	20MHz	16QAM	20175	100RB#0	6.01	13	PASS
Band4	20MHz	16QAM	20300	1RB#0	4.94	13	PASS
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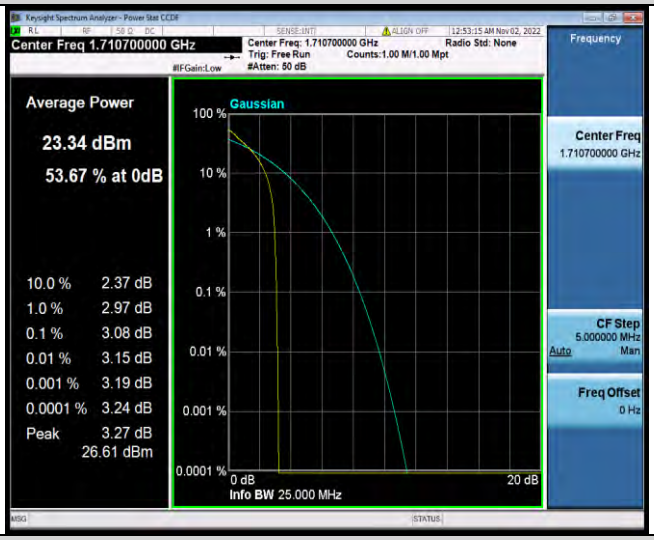
Test Graphs

Band4-1.4MHz-QPSK-19957-1RB#0


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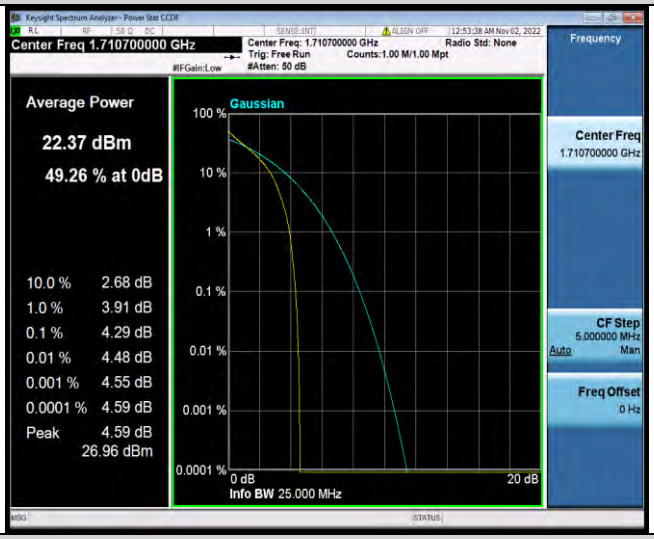

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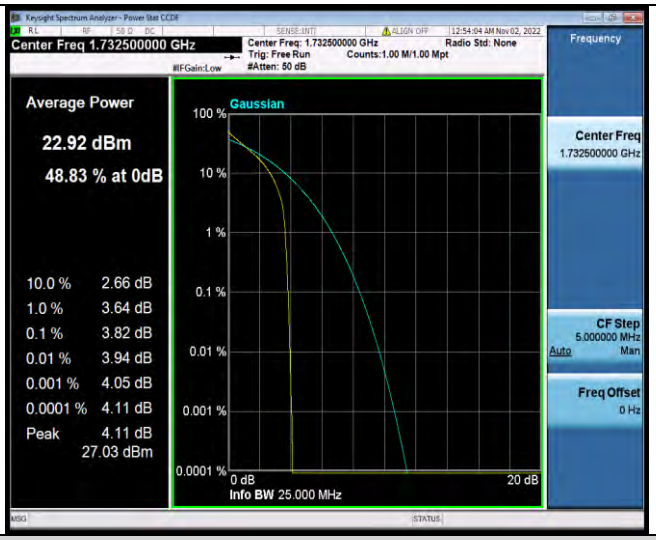

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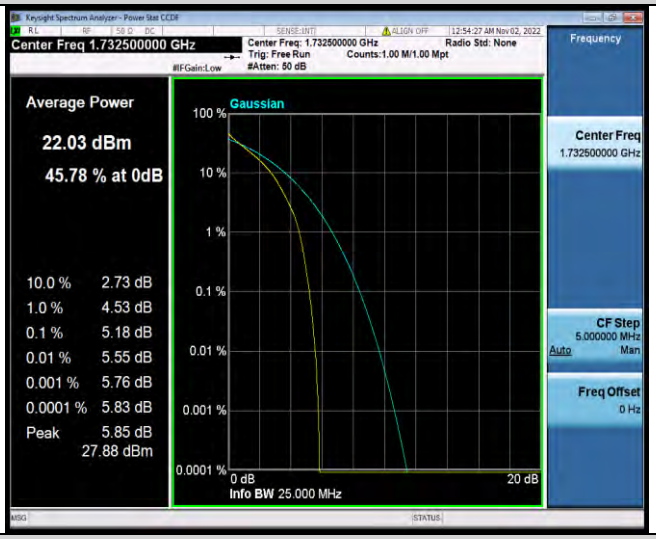

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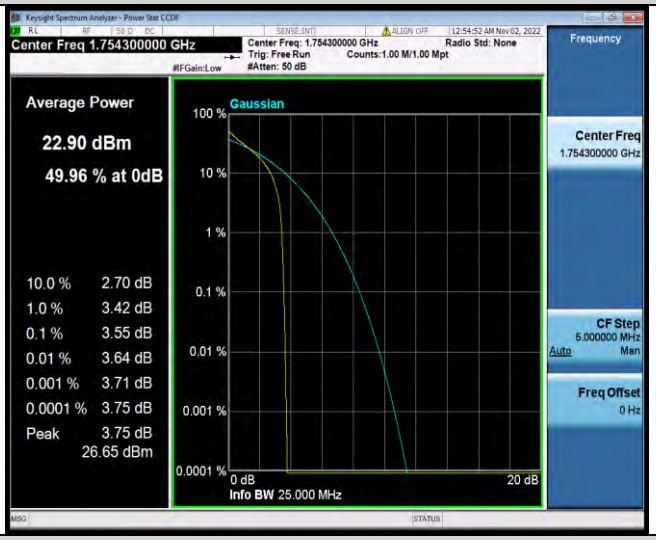

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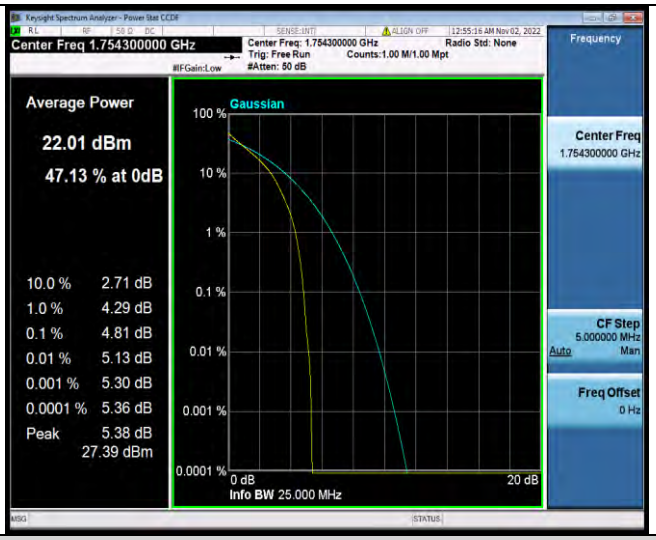

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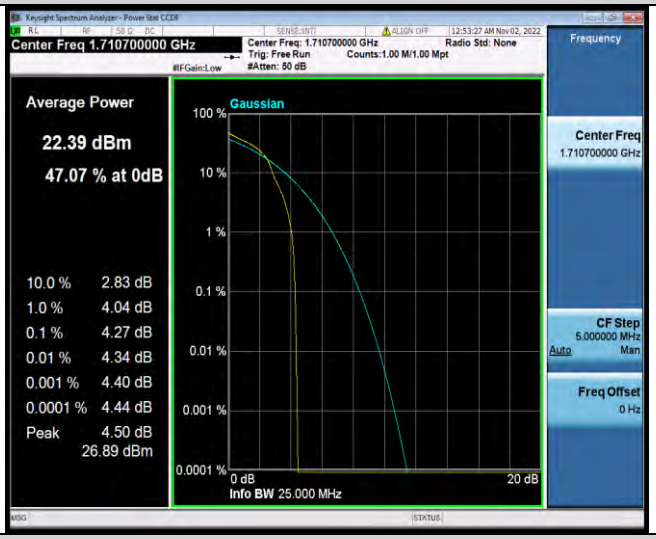

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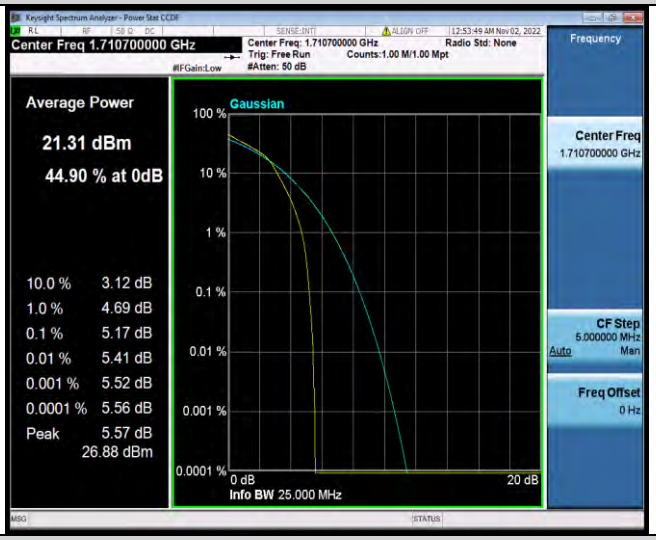

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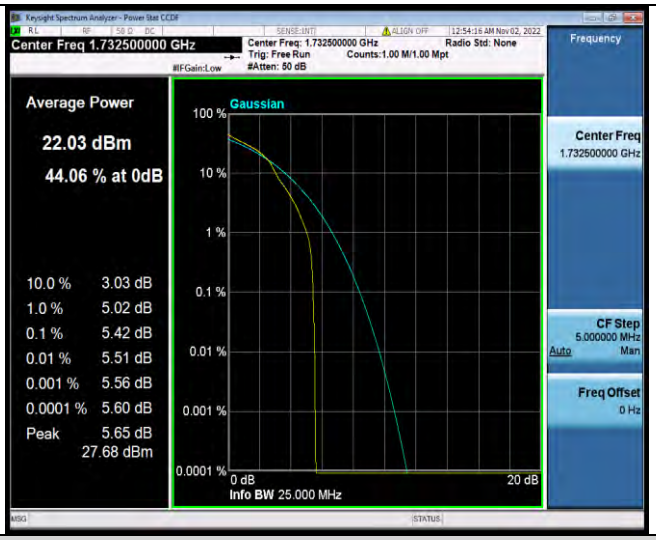

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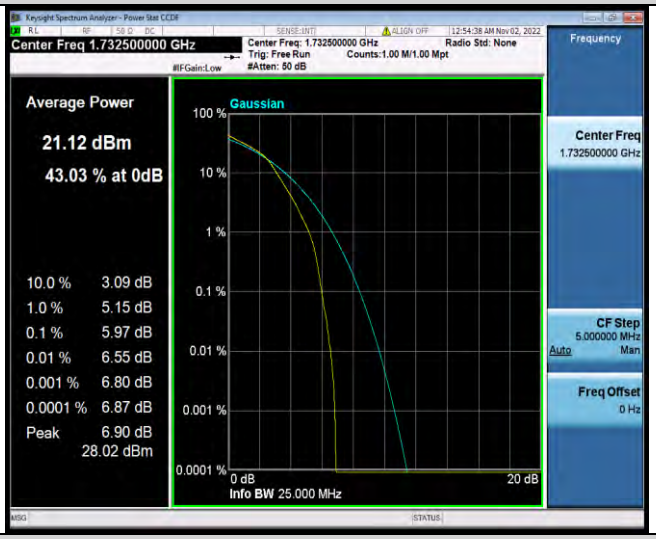

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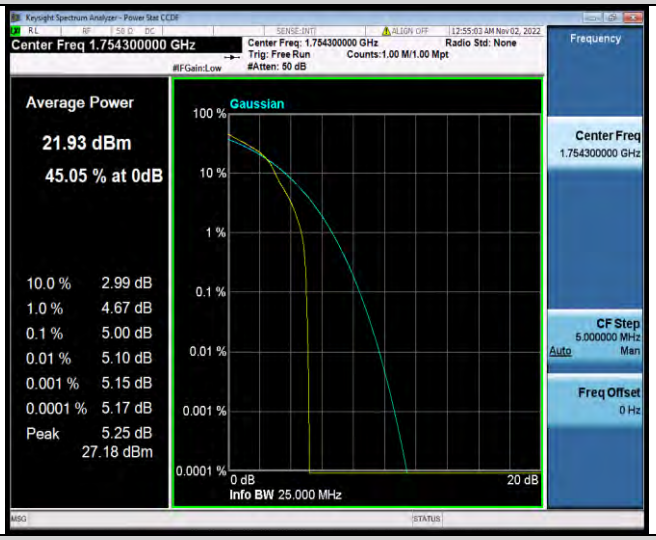

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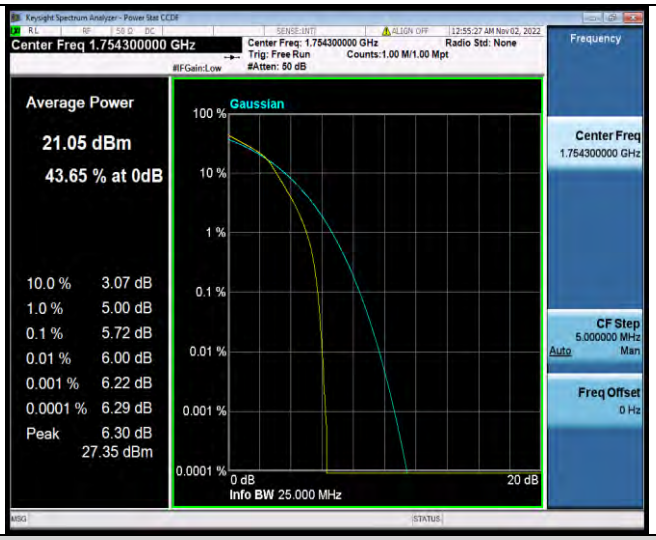
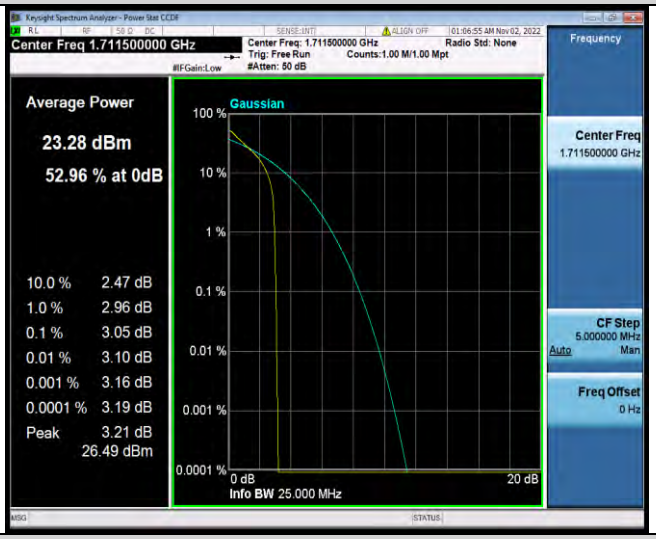
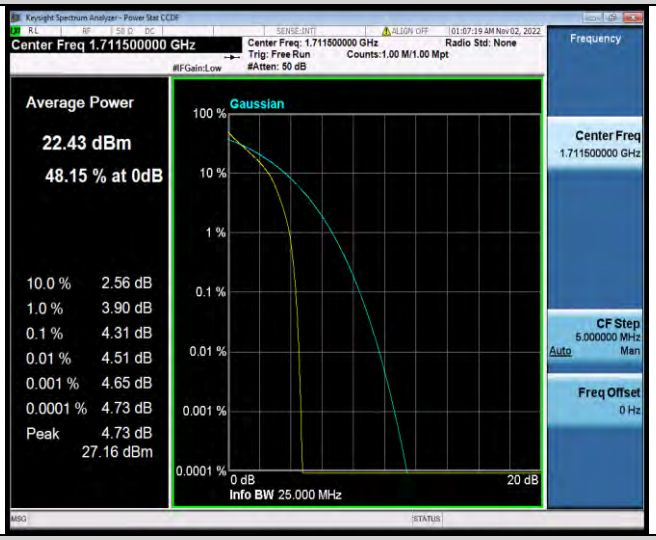


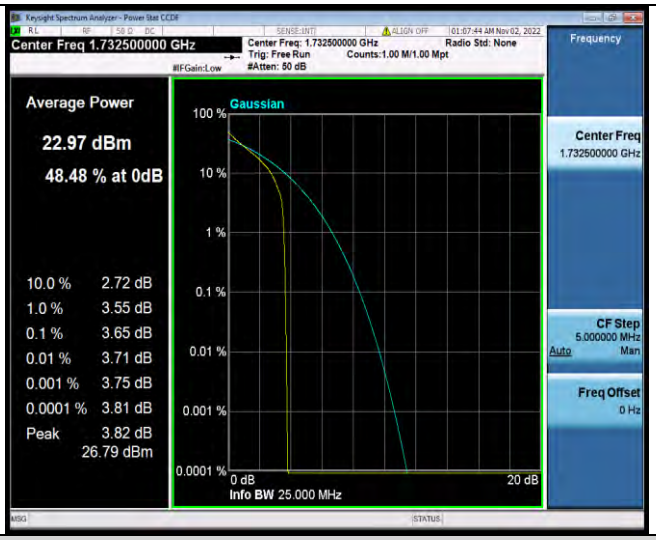
Band4-3MHz-QPSK-19965-1RB#0



Band4-3MHz-QPSK-19965-15RB#0



Band4-3MHz-QPSK-20175-1RB#0



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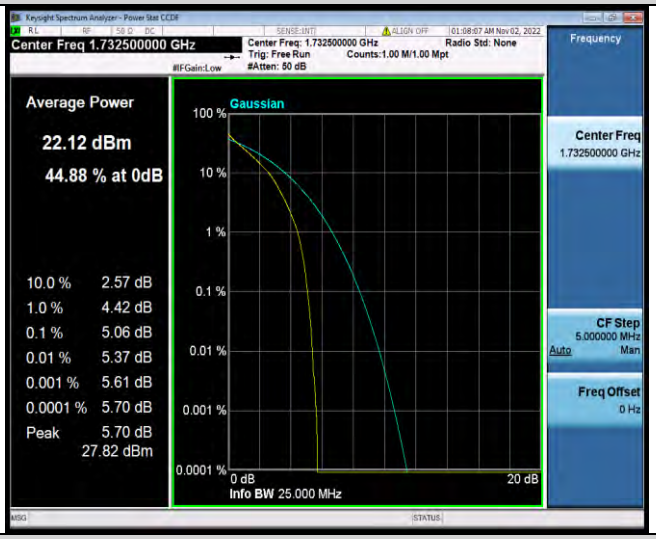
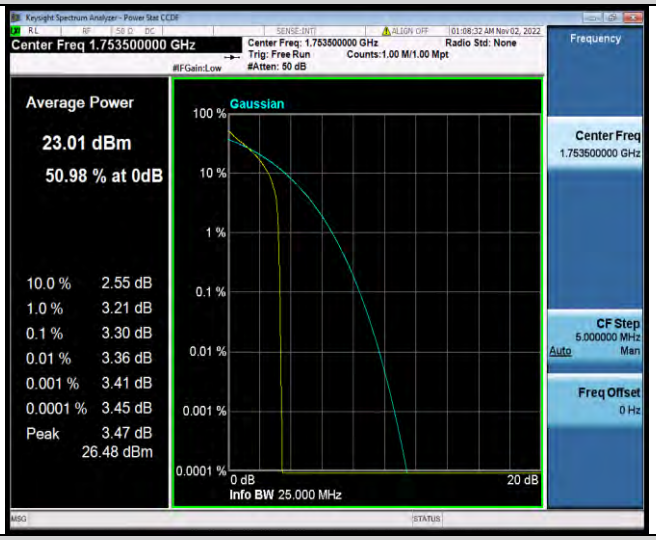


Band4-3MHz-QPSK-20385-1RB#0



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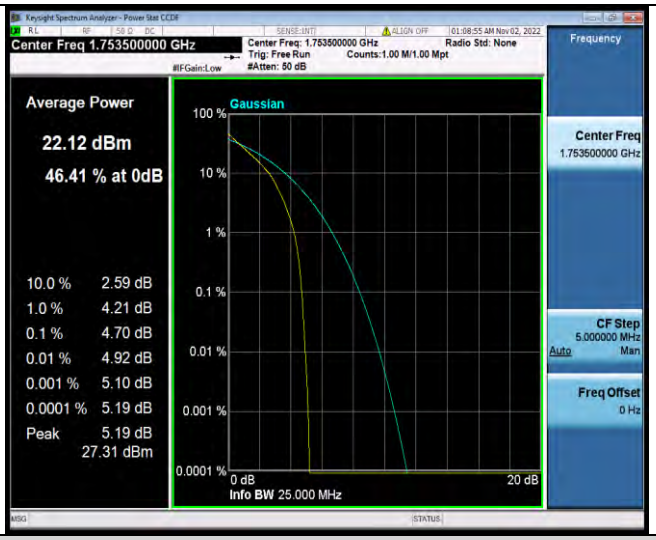
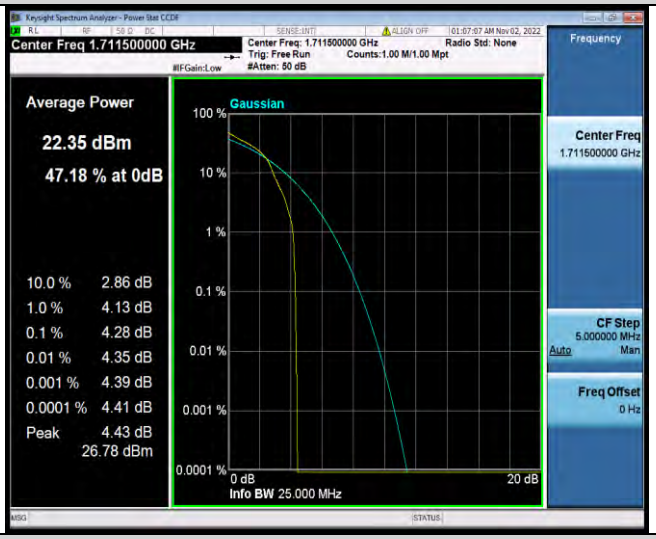


Band4-3MHz-16QAM-19965-1RB#0



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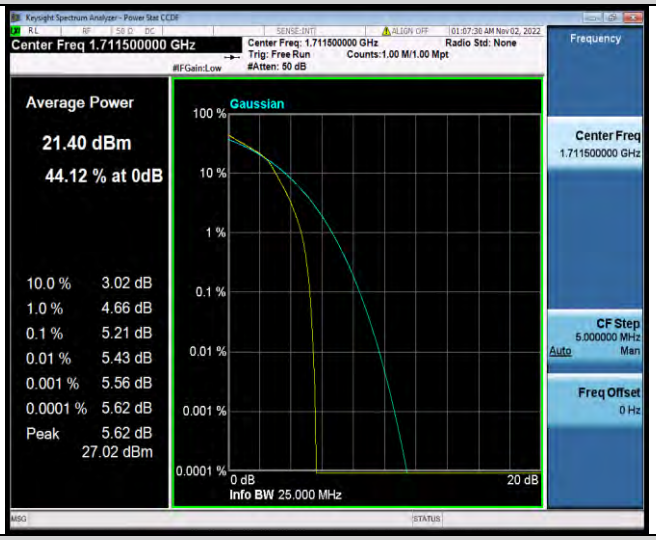

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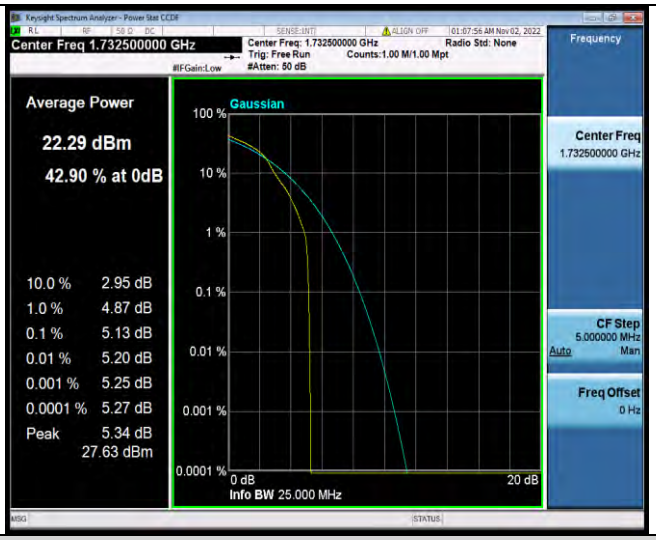

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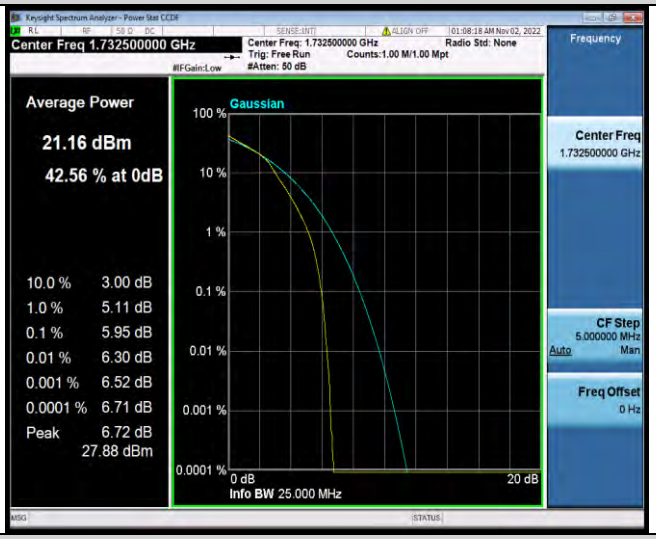

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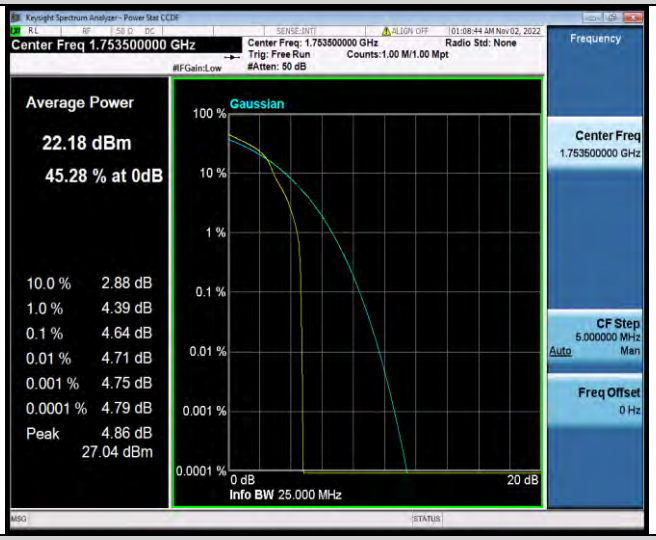
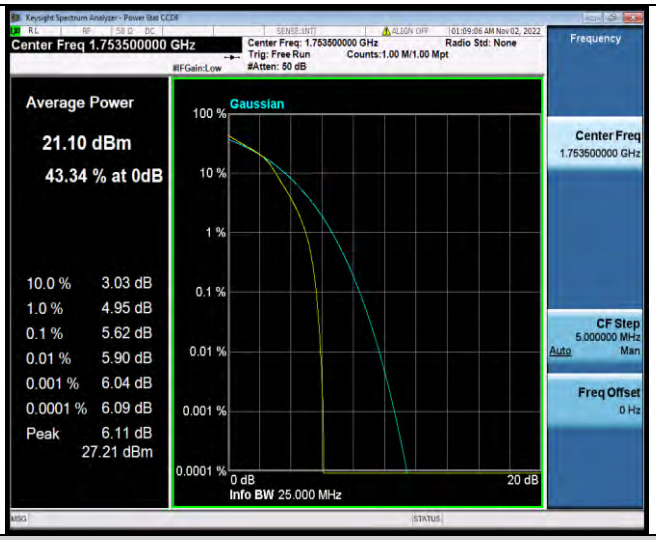


Band4-3MHz-16QAM-20385-15RB#0



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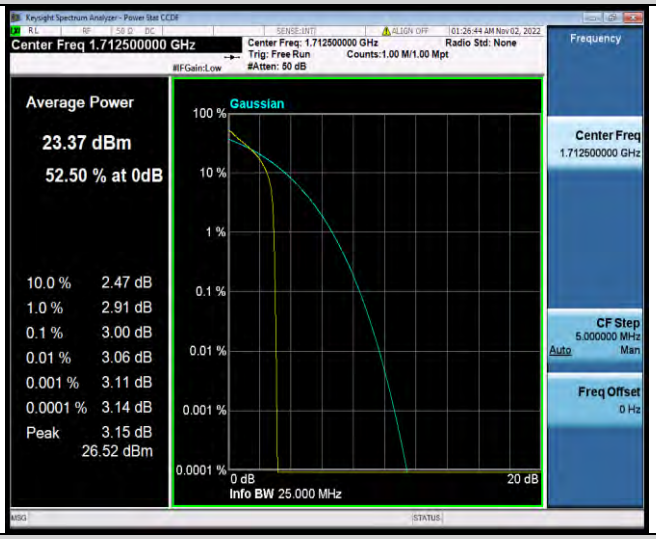

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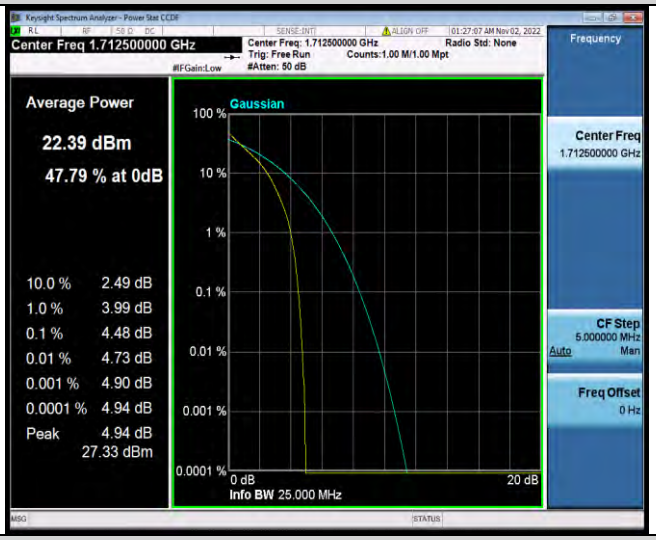
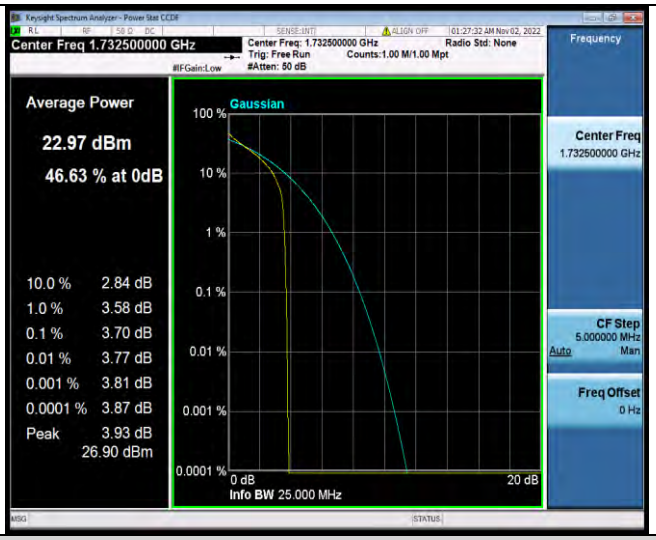
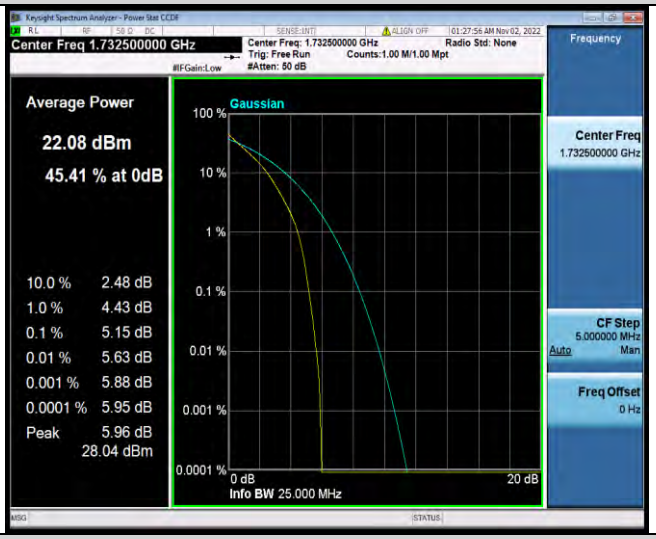


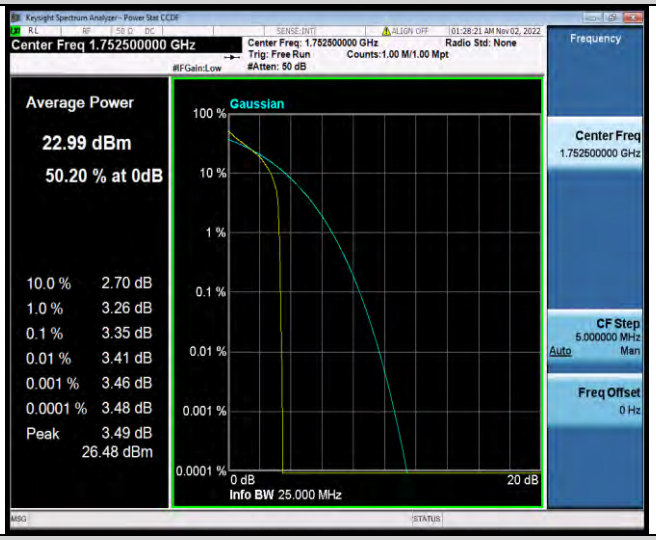
Band4-5MHz-QPSK-20175-1RB#0



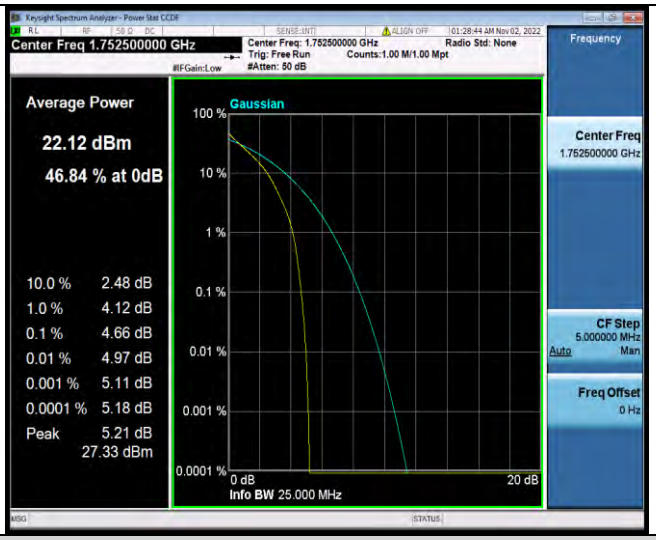
Band4-5MHz-QPSK-20175-25RB#0



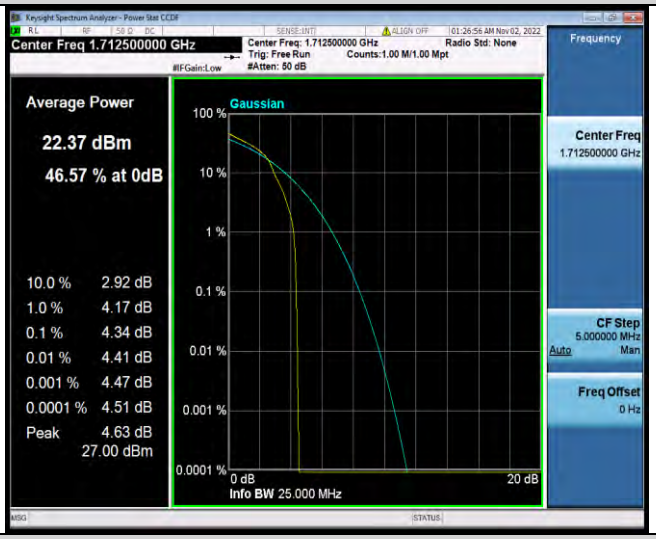
Band4-5MHz-QPSK-20375-1RB#0



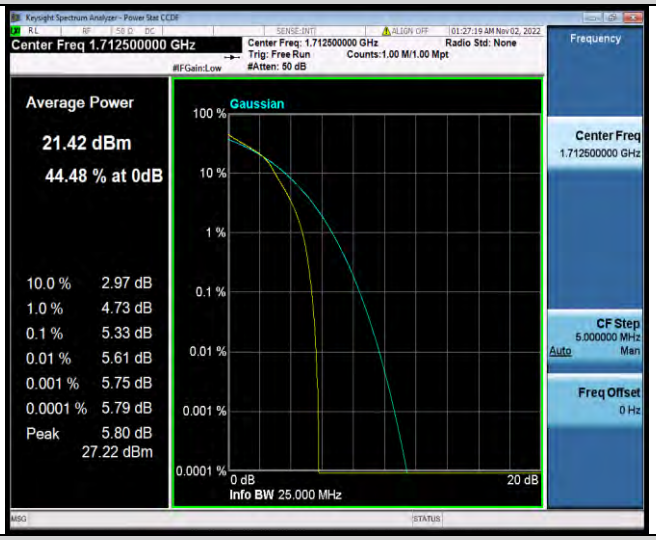
Band4-5MHz-QPSK-20375-25RB#0



Band4-5MHz-16QAM-19975-1RB#0



Band4-5MHz-16QAM-19975-25RB#0



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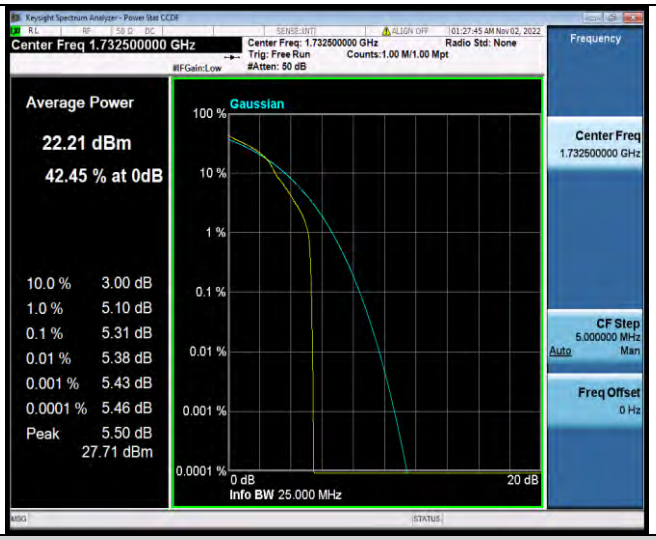

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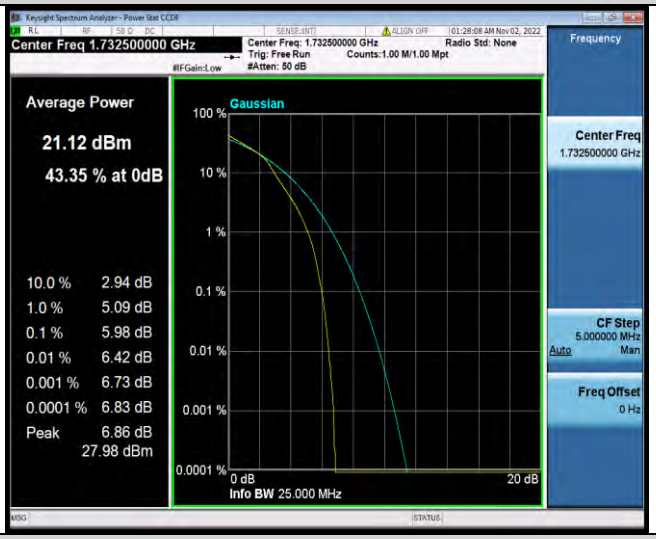

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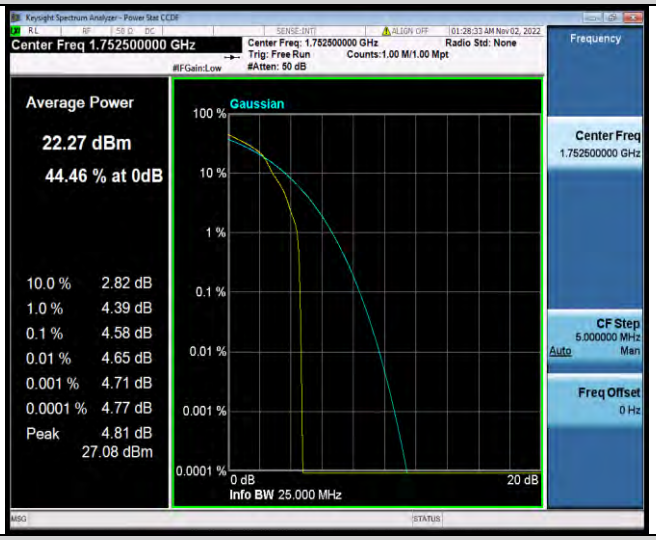
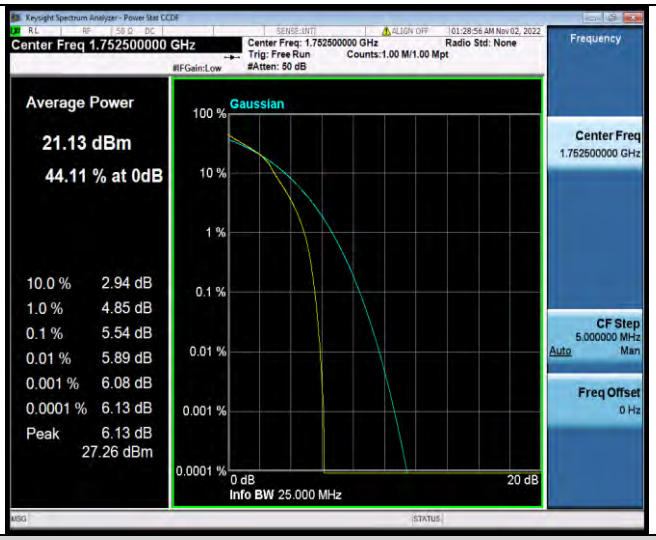
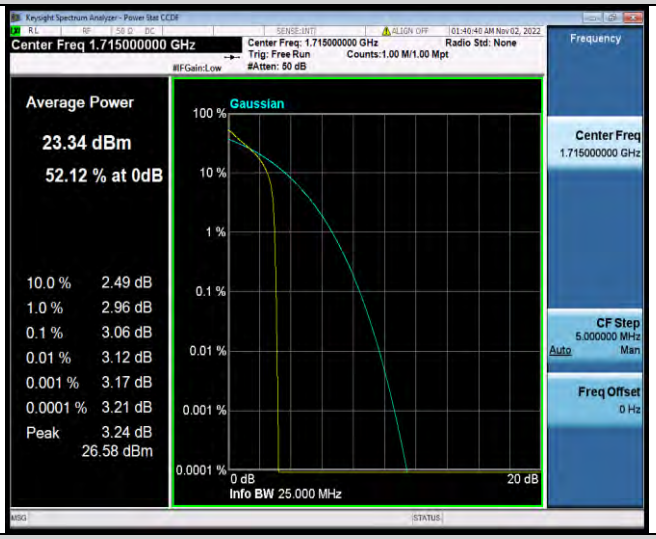


Band4-5MHz-16QAM-20375-25RB#0



Band4-10MHz-QPSK-20000-1RB#0



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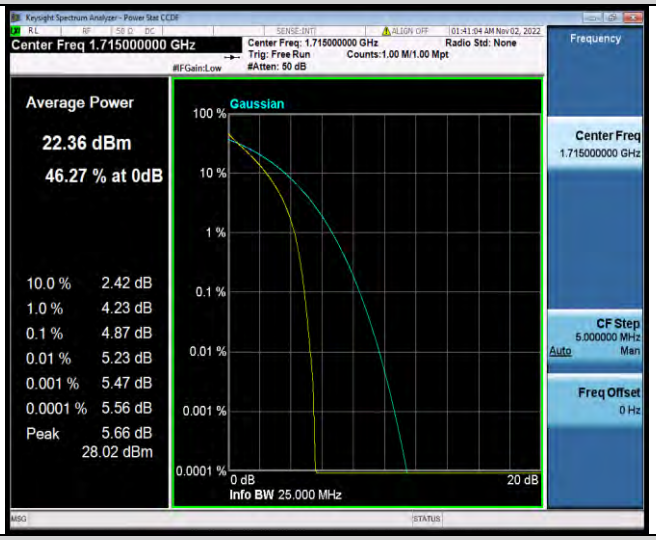

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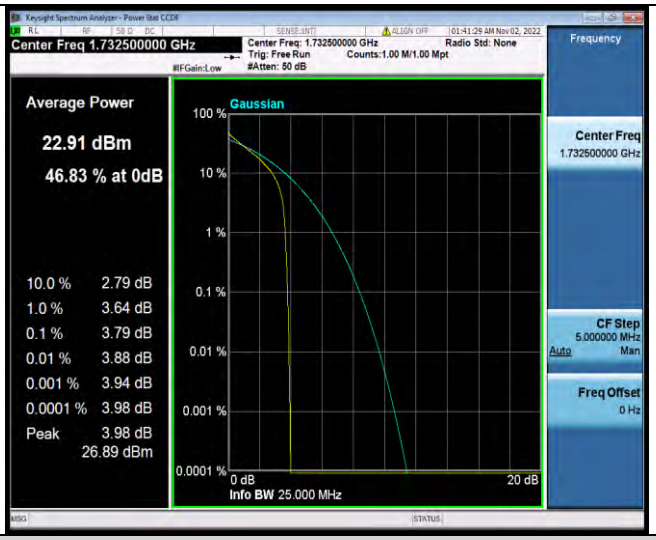

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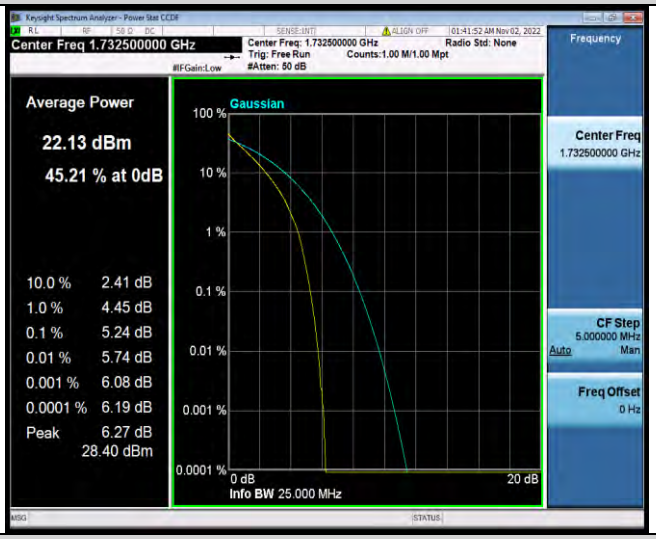

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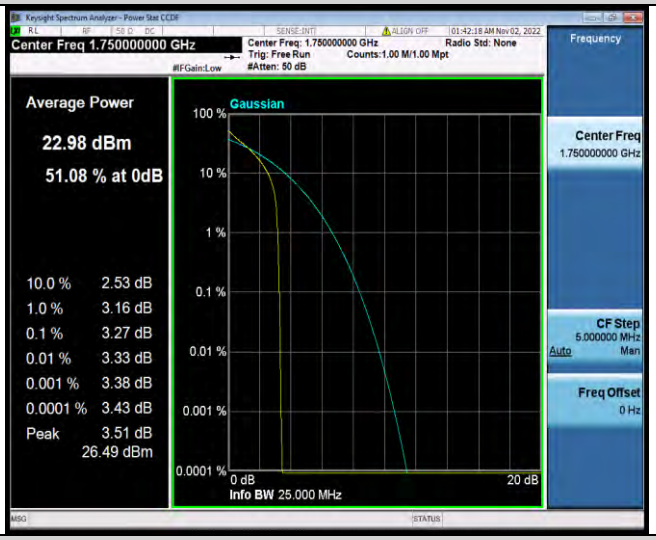

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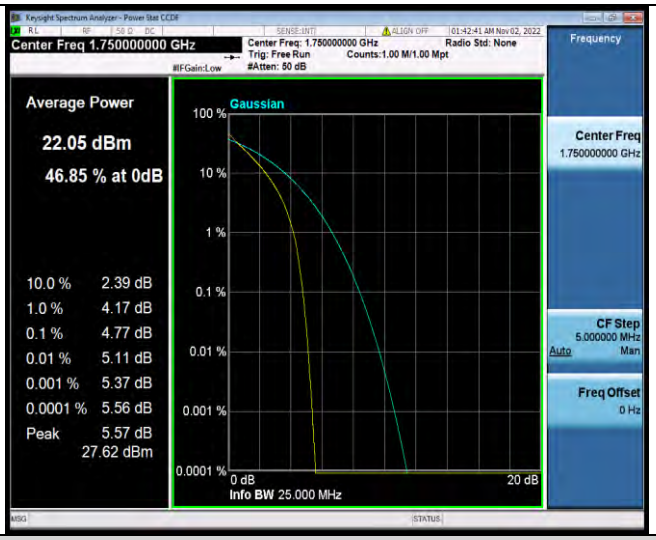
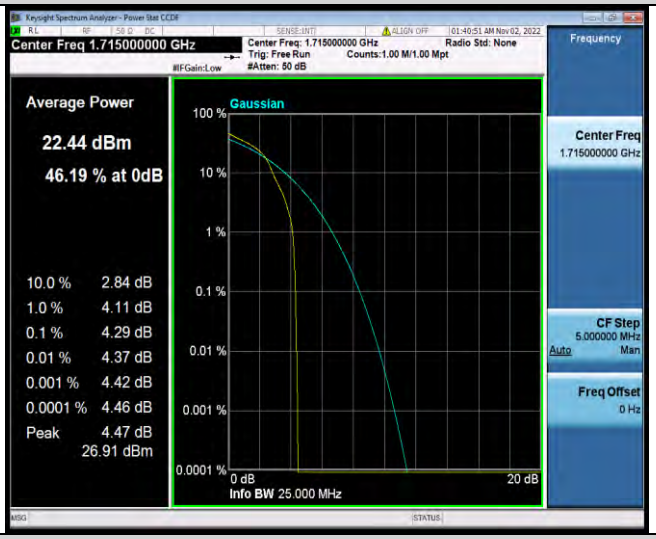


Band4-10MHz-16QAM-20000-1RB#0



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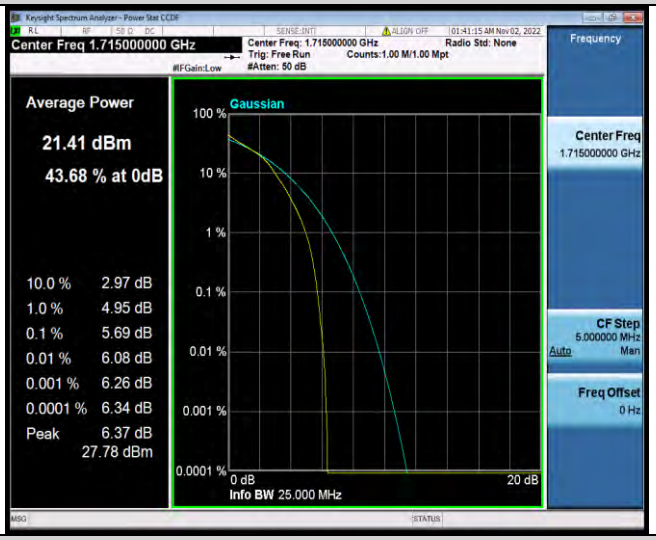
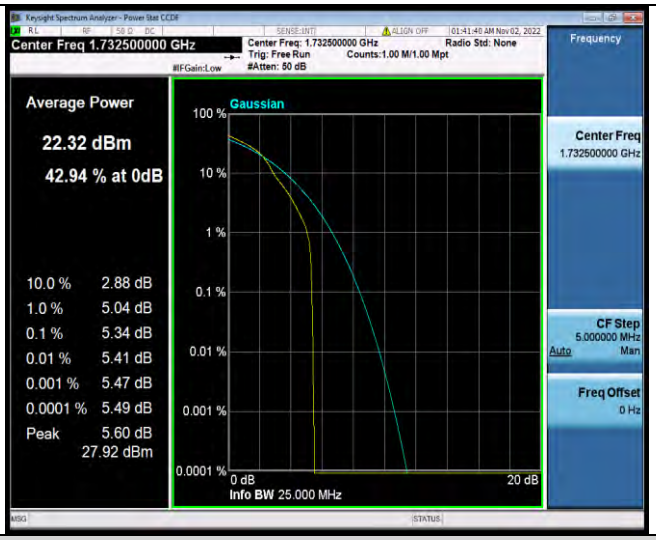


Band4-10MHz-16QAM-20175-1RB#0



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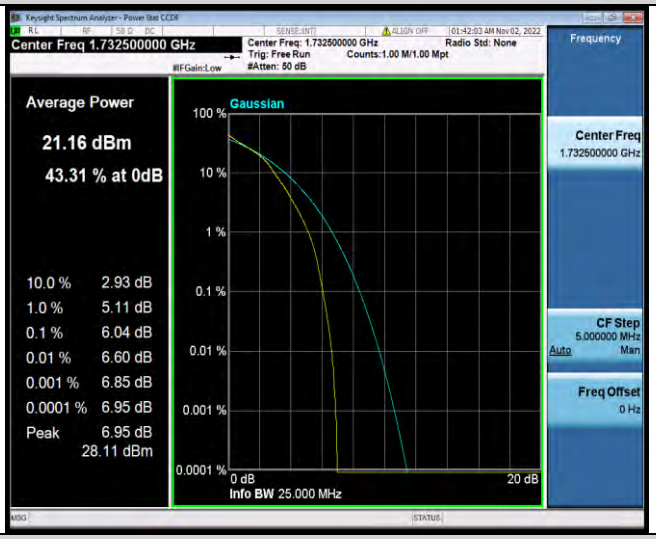
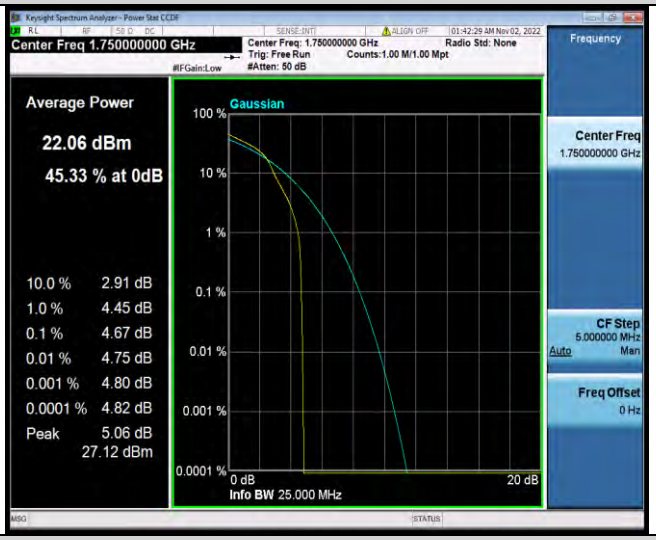


Band4-10MHz-16QAM-20350-1RB#0



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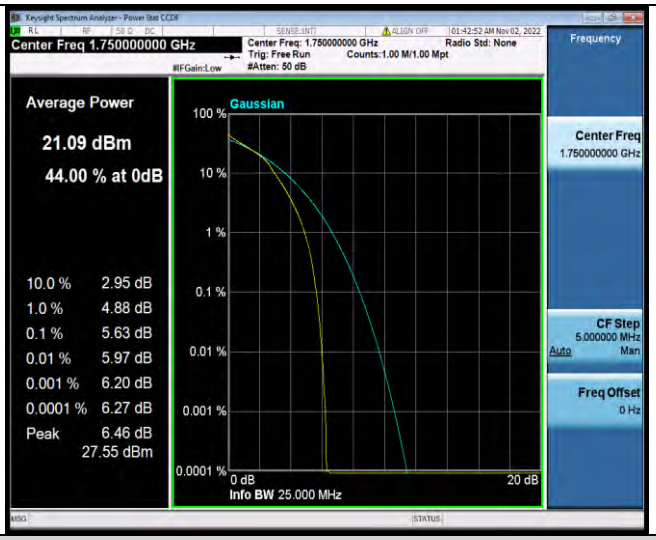

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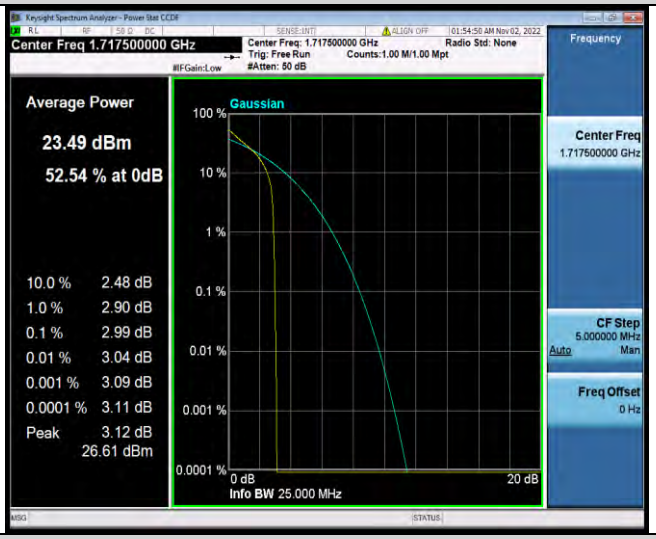

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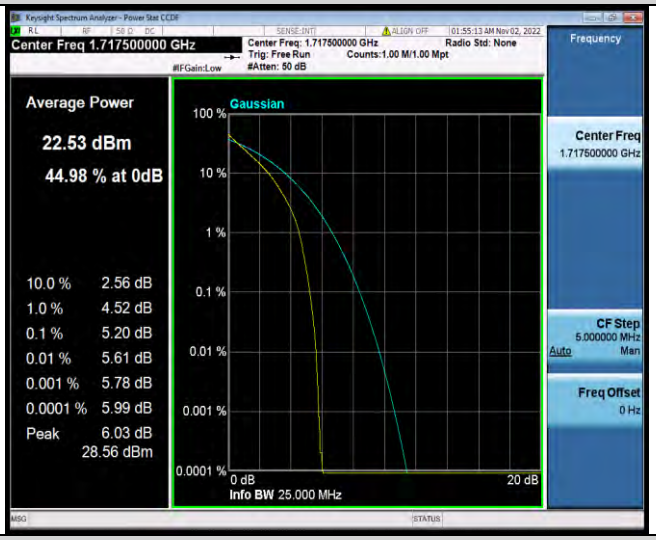

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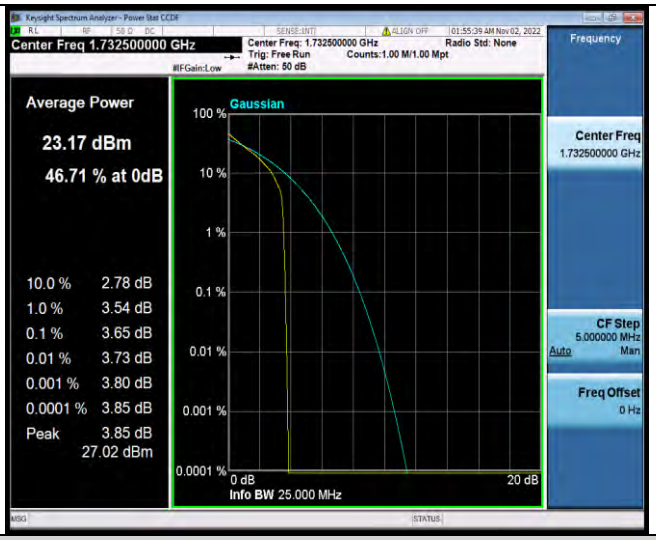

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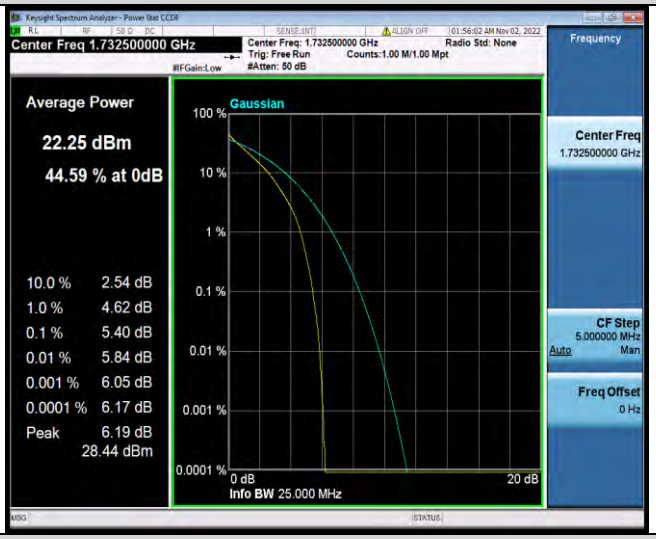

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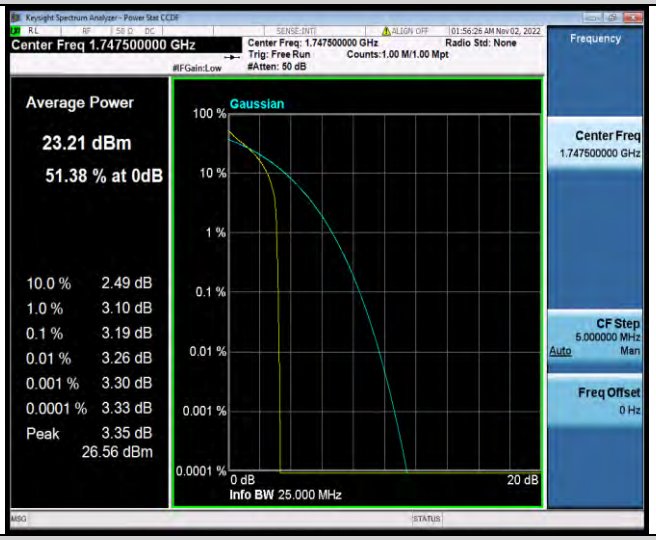

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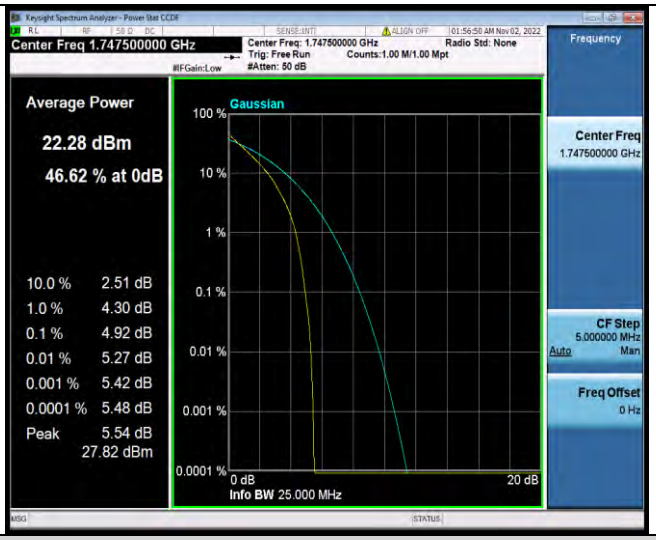

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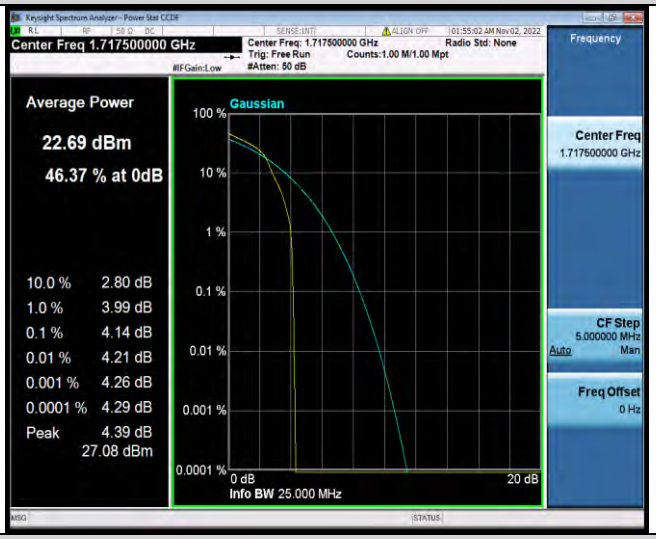

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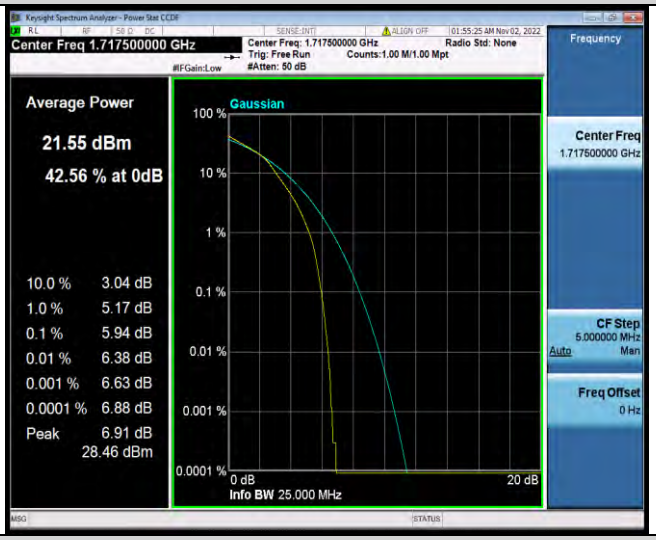

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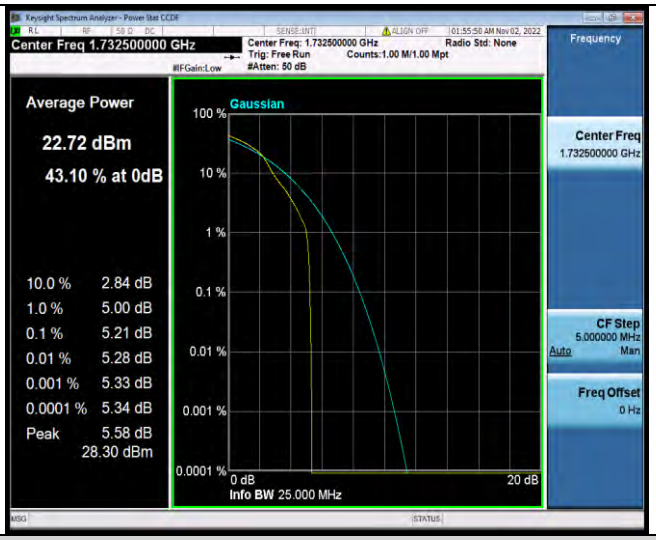

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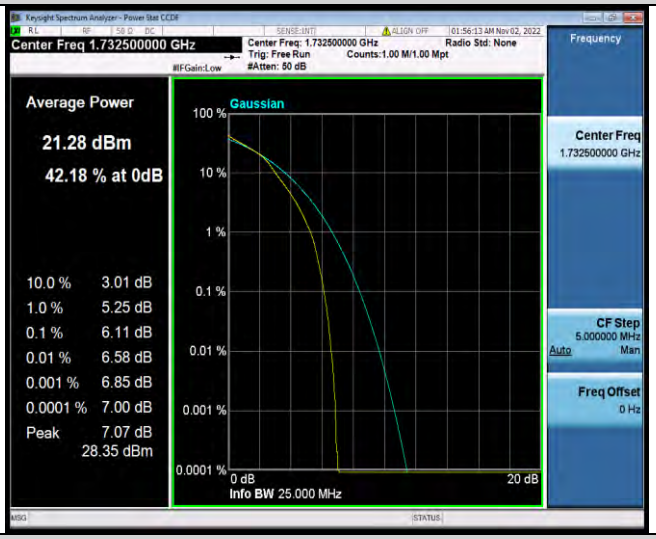

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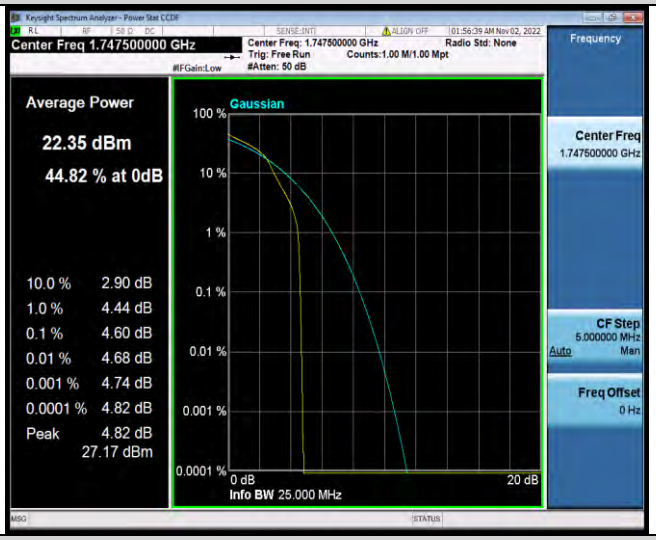

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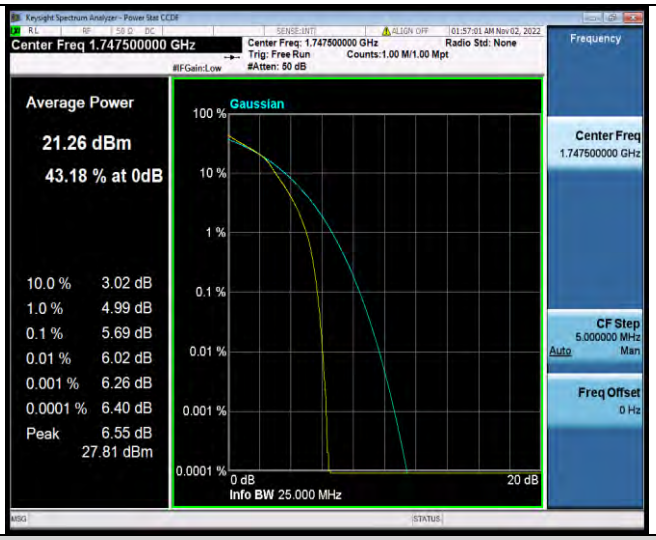
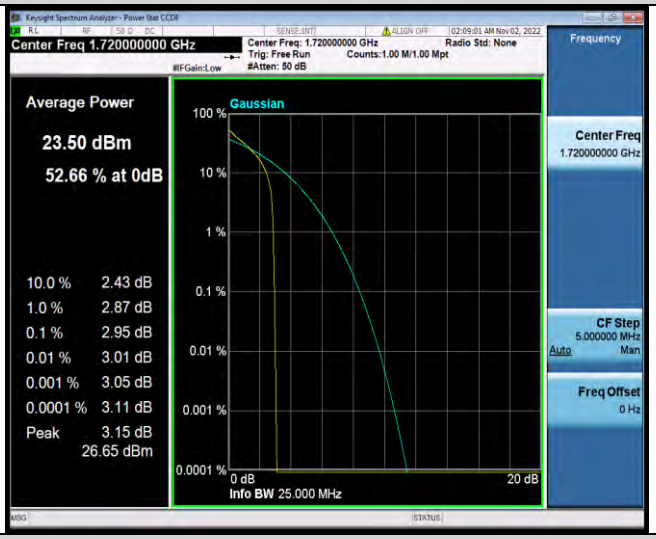


Band4-20MHz-QPSK-20050-1RB#0



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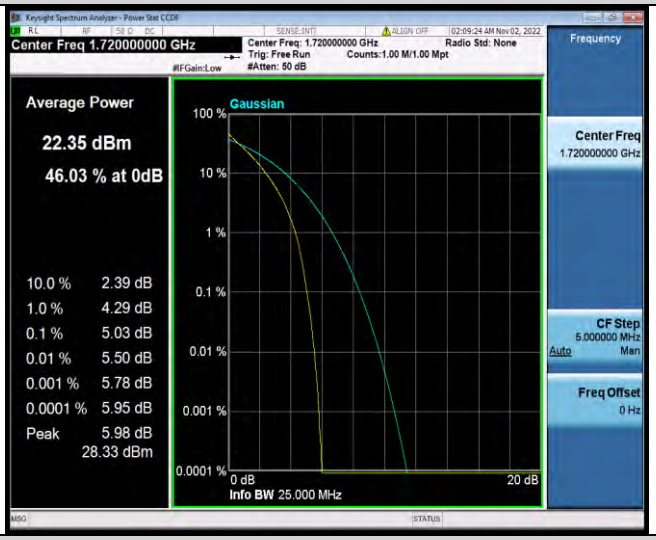
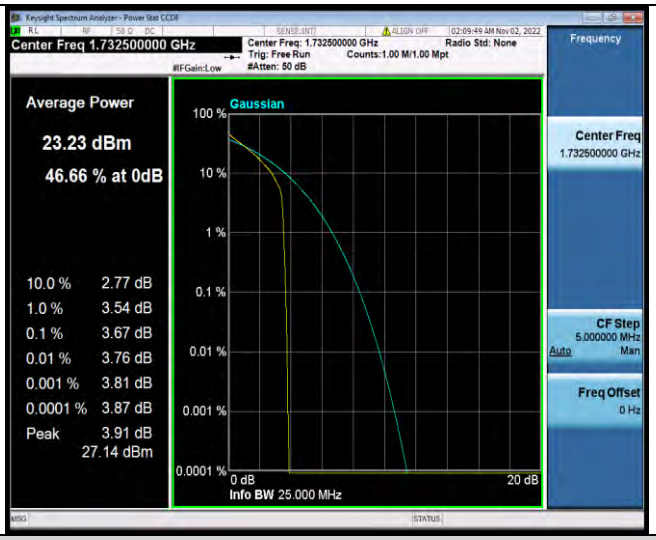
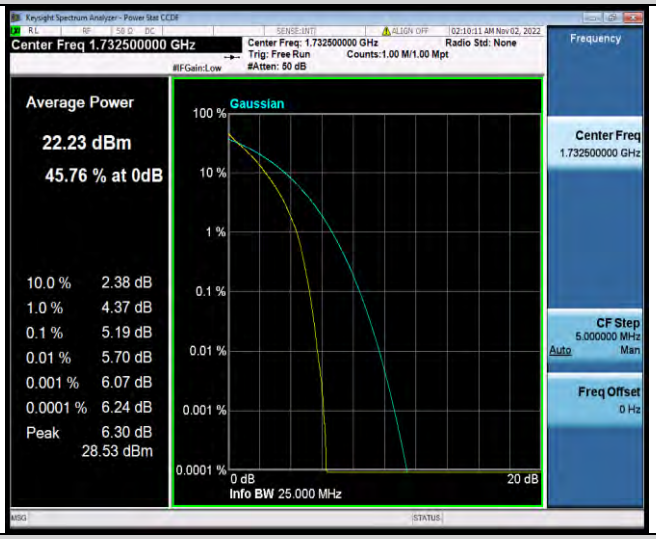


Band4-20MHz-QPSK-20175-1RB#0



Band4-20MHz-QPSK-20175-100RB#0



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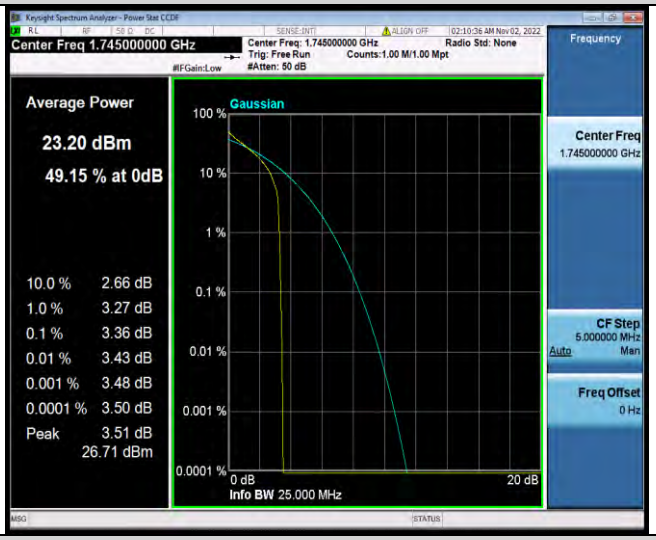
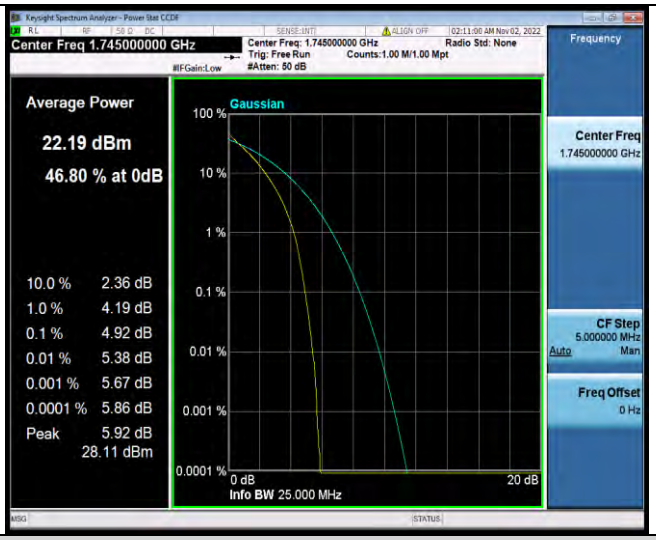


Band4-20MHz-QPSK-20300-100RB#0



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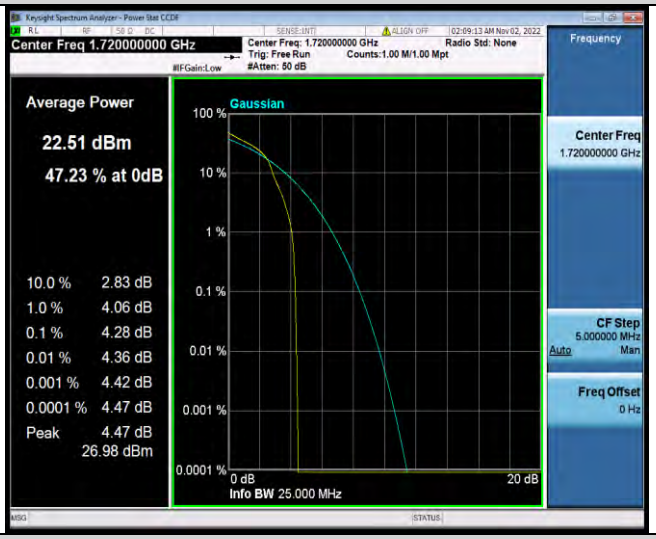

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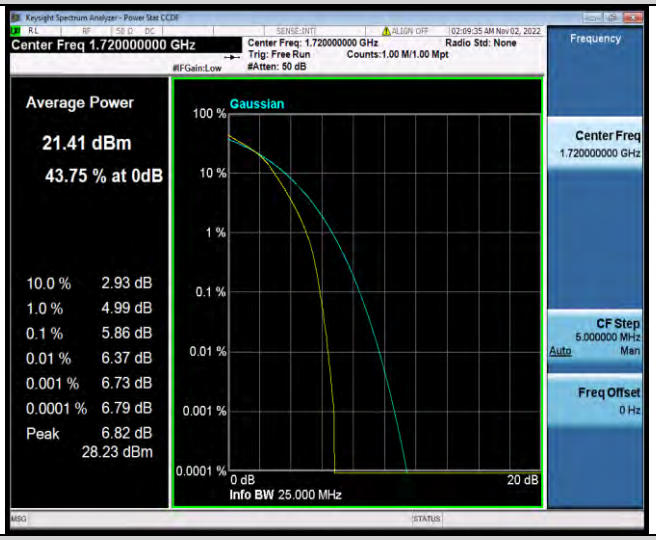
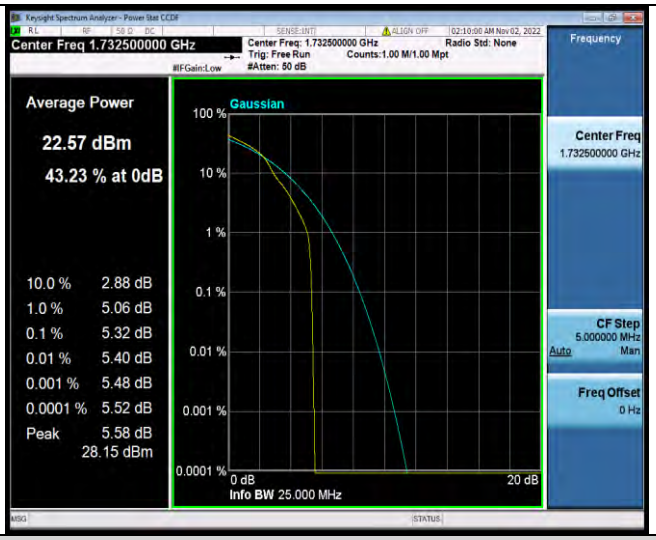
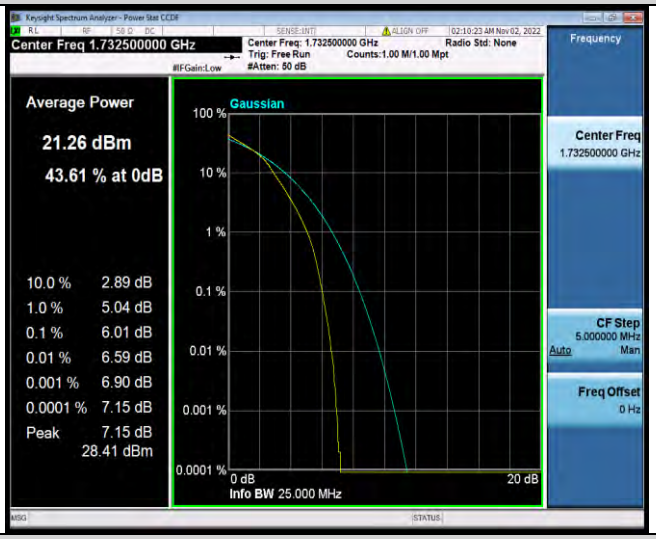


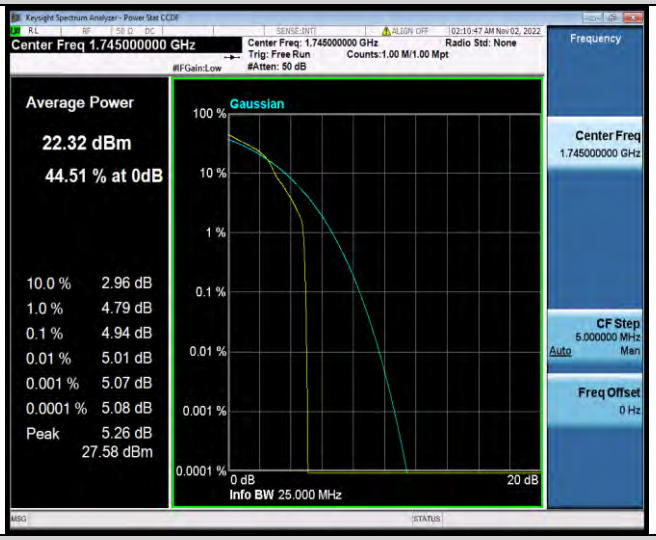
Band4-20MHz-16QAM-20175-1RB#0



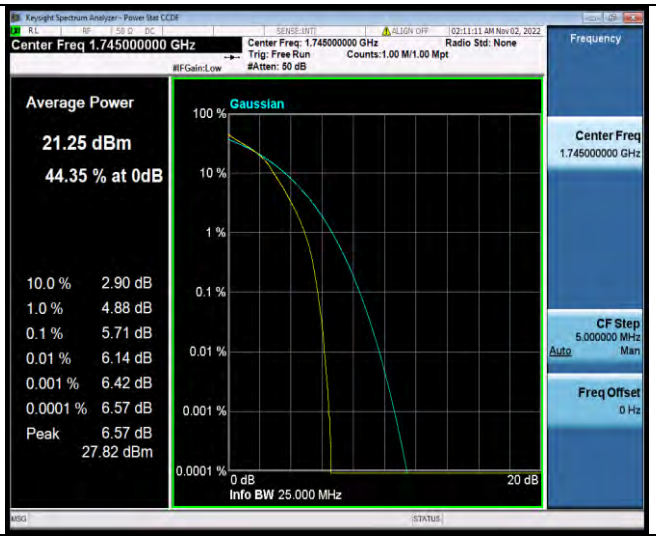
Band4-20MHz-16QAM-20175-100RB#0



Band4-20MHz-16QAM-20300-1RB#0



Band4-20MHz-16QAM-20300-100RB#0


Keysight Spectrum Analyzer - Power Stat CCDF
Center Freq 1.745000000 GHz
Center Freq: 1.745000000 GHz
Trig: Free Run
Counts:1.00 M/1.00 Mpt
#Atten: 50 dB
Radio Std: None
Frequency
Average Power
21.25 dBm
44.35 % at 0dB
10.0 % 2.90 dB
1.0 % 4.88 dB
0.1 % 5.71 dB
0.01 % 6.14 dB
0.001 % 6.42 dB
0.0001 % 6.57 dB
Peak 6.57 dB
27.82 dBm
Gaussian
100 %
10 %
1 %
0.1 %
0.01 %
0.001 %
0.0001 %
0 dB
20 dB
Info BW 25.000 MHz
Center Freq
1.745000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

26DB BANDWIDTH AND OCCUPIED BANDWIDTH

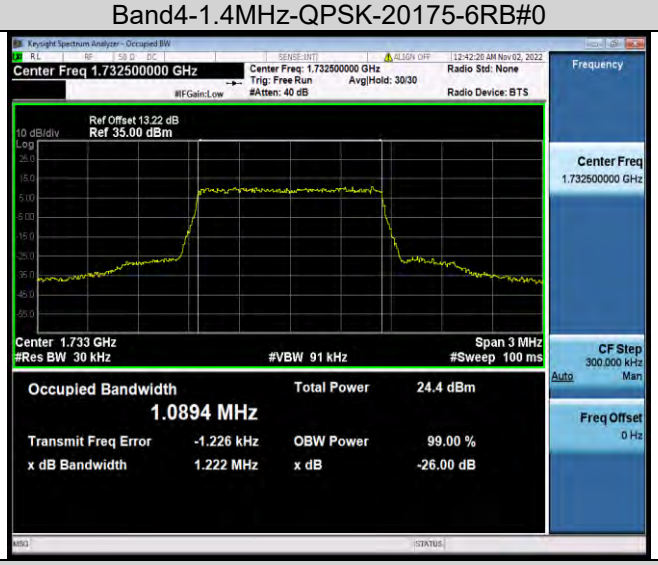
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band4	1.4MHz	QPSK	19957	6RB#0	1.0905	1.210	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	1.0894	1.222	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	1.0882	1.219	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	1.0885	1.234	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	1.0894	1.224	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	1.0897	1.230	PASS
Band4	3MHz	QPSK	19965	15RB#0	2.6945	2.928	PASS
Band4	3MHz	QPSK	20175	15RB#0	2.6925	2.905	PASS
Band4	3MHz	QPSK	20385	15RB#0	2.6976	2.916	PASS
Band4	3MHz	16QAM	19965	15RB#0	2.6907	2.937	PASS
Band4	3MHz	16QAM	20175	15RB#0	2.6909	2.929	PASS
Band4	3MHz	16QAM	20385	15RB#0	2.6967	2.931	PASS
Band4	5MHz	QPSK	19975	25RB#0	4.5031	4.879	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.5034	4.878	PASS
Band4	5MHz	QPSK	20375	25RB#0	4.4952	4.838	PASS
Band4	5MHz	16QAM	19975	25RB#0	4.5036	4.862	PASS
Band4	5MHz	16QAM	20175	25RB#0	4.5020	4.817	PASS
Band4	5MHz	16QAM	20375	25RB#0	4.5003	4.886	PASS
Band4	10MHz	QPSK	20000	50RB#0	8.9813	9.542	PASS
Band4	10MHz	QPSK	20175	50RB#0	8.9840	9.549	PASS
Band4	10MHz	QPSK	20350	50RB#0	8.9892	9.540	PASS
Band4	10MHz	16QAM	20000	50RB#0	8.9691	9.542	PASS
Band4	10MHz	16QAM	20175	50RB#0	8.9701	9.535	PASS
Band4	10MHz	16QAM	20350	50RB#0	8.9828	9.546	PASS
Band4	15MHz	QPSK	20025	75RB#0	13.467	14.31	PASS
Band4	15MHz	QPSK	20175	75RB#0	13.470	14.28	PASS
Band4	15MHz	QPSK	20325	75RB#0	13.459	14.28	PASS
Band4	15MHz	16QAM	20025	75RB#0	13.458	14.27	PASS
Band4	15MHz	16QAM	20175	75RB#0	13.456	14.28	PASS
Band4	15MHz	16QAM	20325	75RB#0	13.458	14.30	PASS
Band4	20MHz	QPSK	20050	100RB#0	17.947	18.97	PASS
Band4	20MHz	QPSK	20175	100RB#0	17.928	19.00	PASS
Band4	20MHz	QPSK	20300	100RB#0	17.937	18.99	PASS
Band4	20MHz	16QAM	20050	100RB#0	17.937	18.98	PASS
Band4	20MHz	16QAM	20175	100RB#0	17.945	18.99	PASS
Band4	20MHz	16QAM	20300	100RB#0	17.948	18.99	PASS

Test Graphs

Band4-1.4MHz-QPSK-19957-6RB#0

Band4-1.4MHz-QPSK-20175-6RB#0



Band4-1.4MHz-QPSK-20393-6RB#0

Band4-1.4MHz-16QAM-19957-6RB#0

Band4-1.4MHz-16QAM-20175-6RB#0

Band4-1.4MHz-16QAM-20393-6RB#0

Band4-3MHz-QPSK-19965-15RB#0

Band4-3MHz-QPSK-20175-15RB#0

Band4-3MHz-QPSK-20385-15RB#0