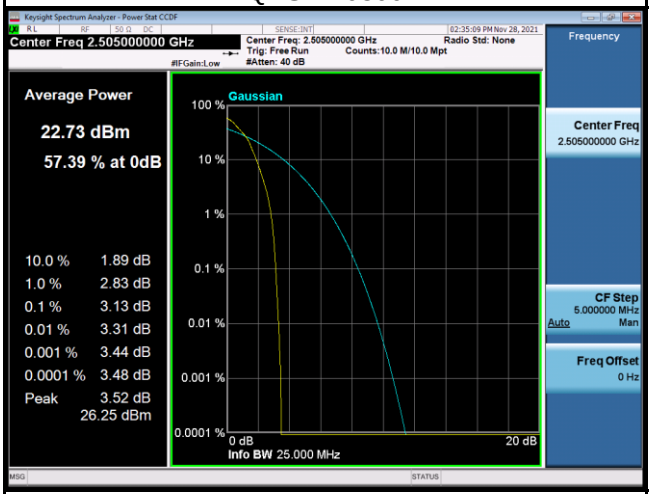
LTE Band 7 _10M

QPSK-20800



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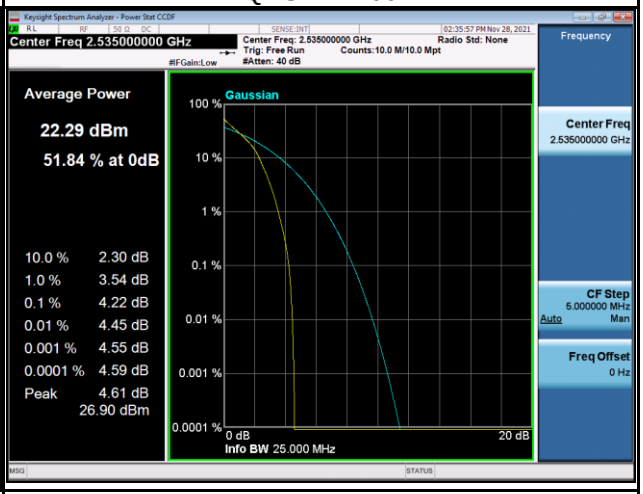
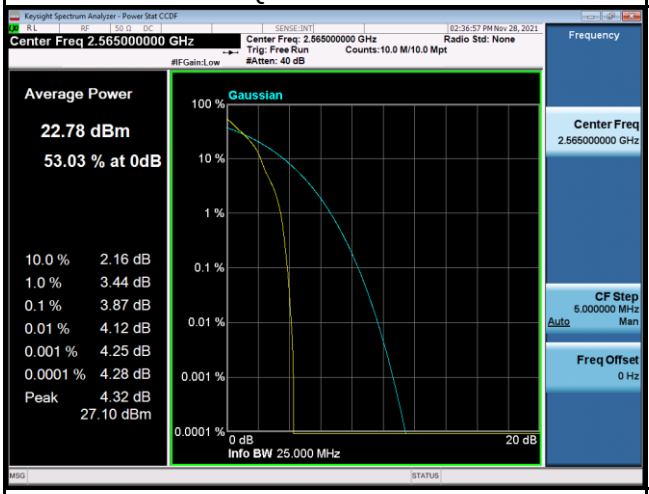


QPSK-21400



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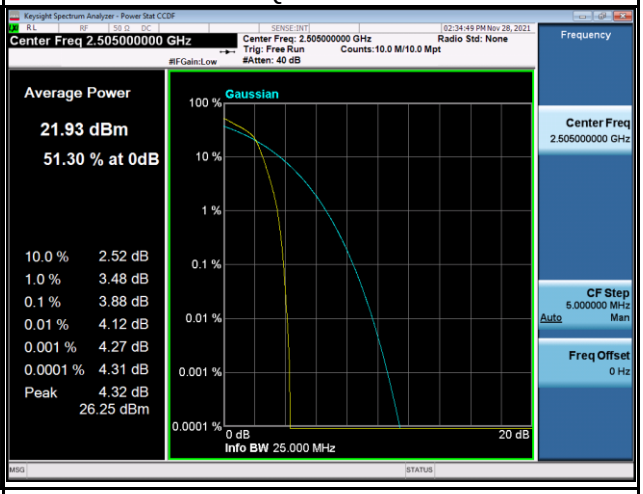

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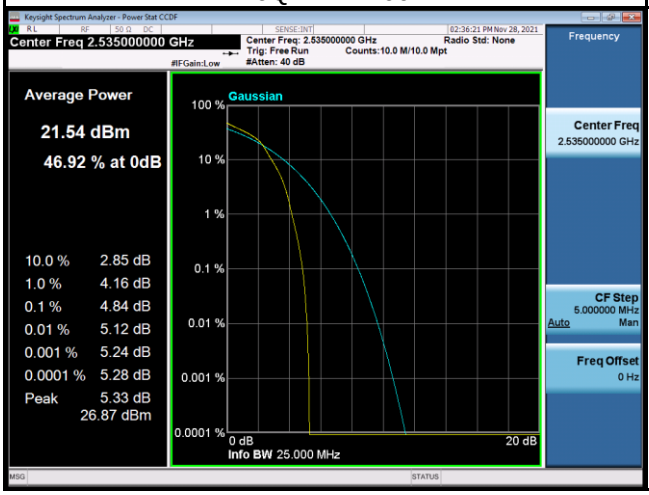

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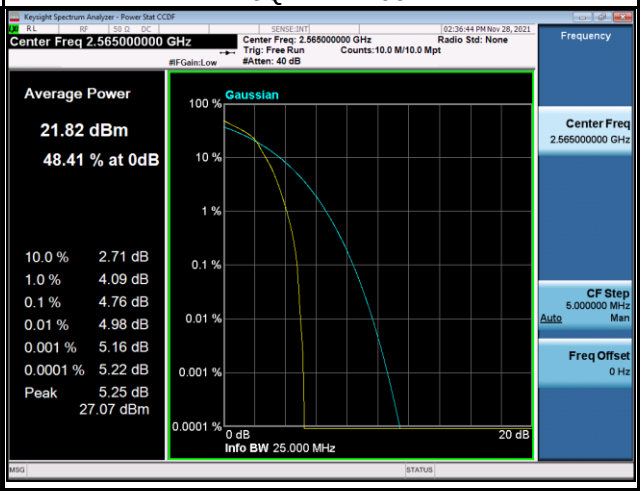
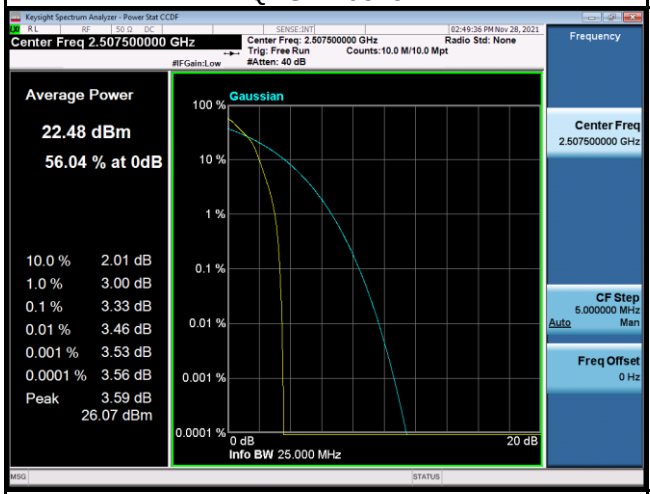


LTE Band 7 _15M

QPSK-20825



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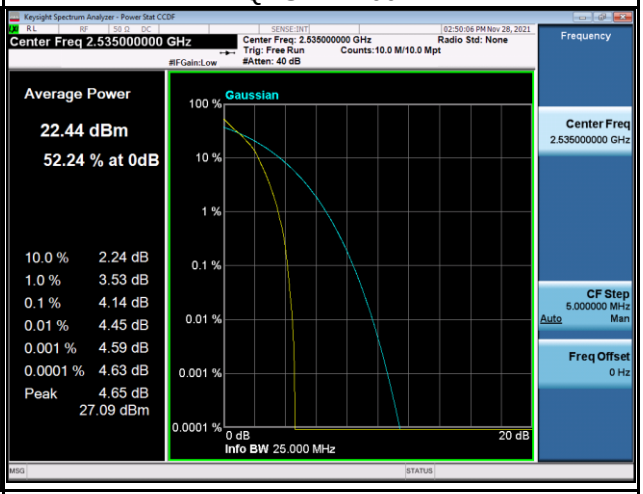

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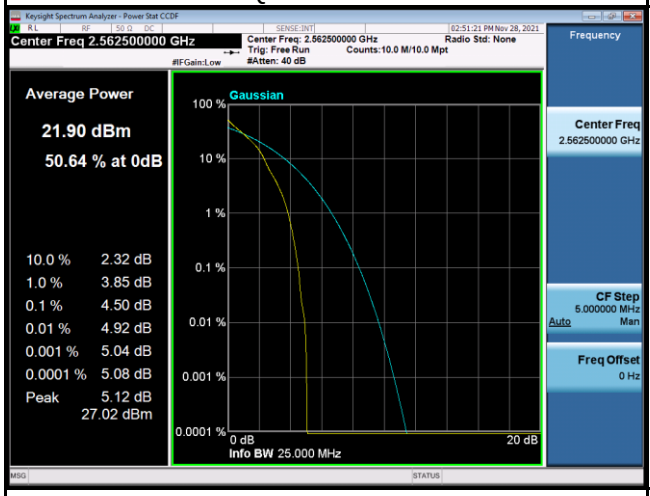

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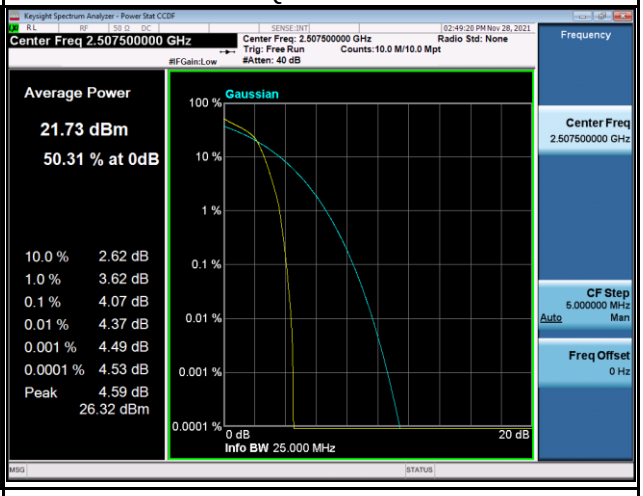

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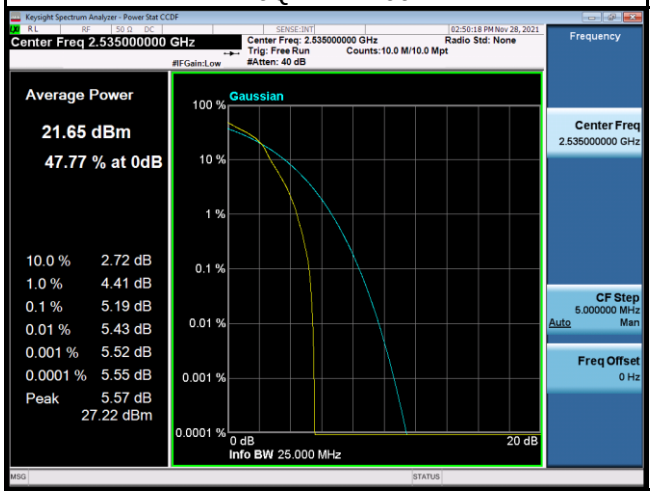

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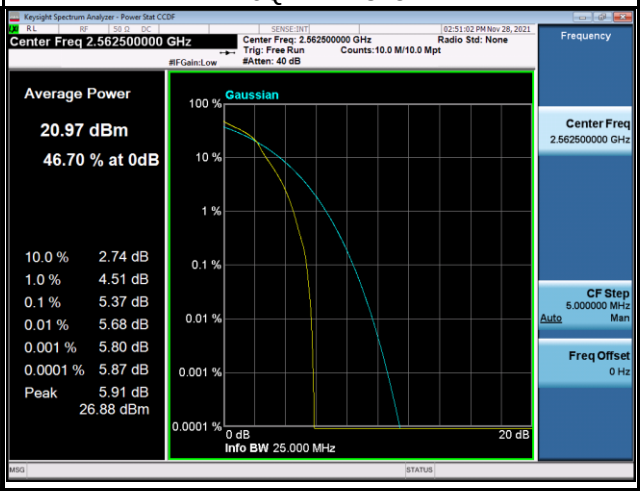
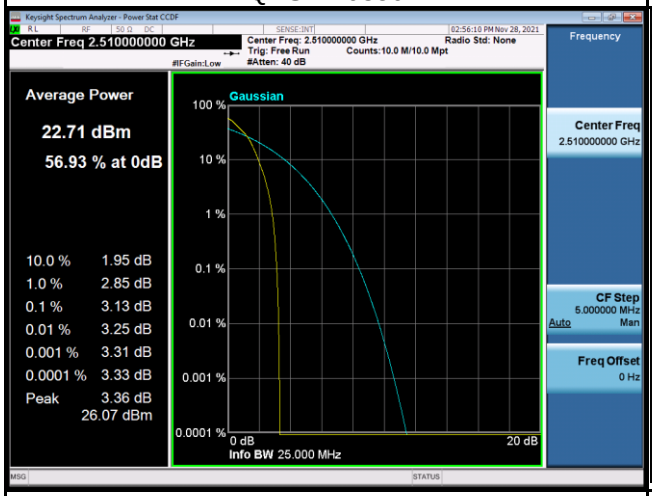


LTE Band 7 _20M

QPSK-20850



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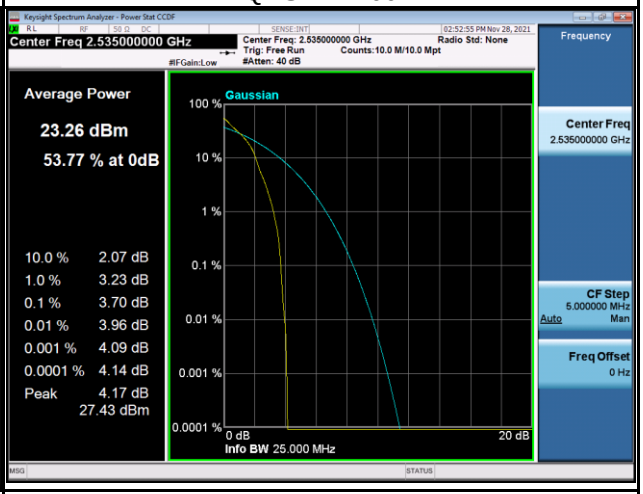

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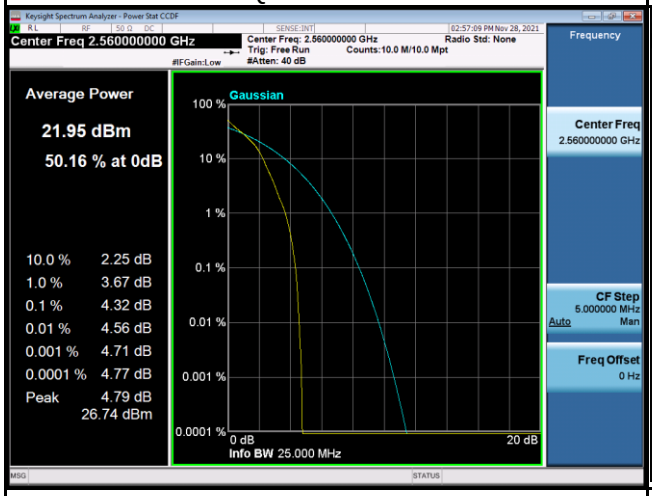

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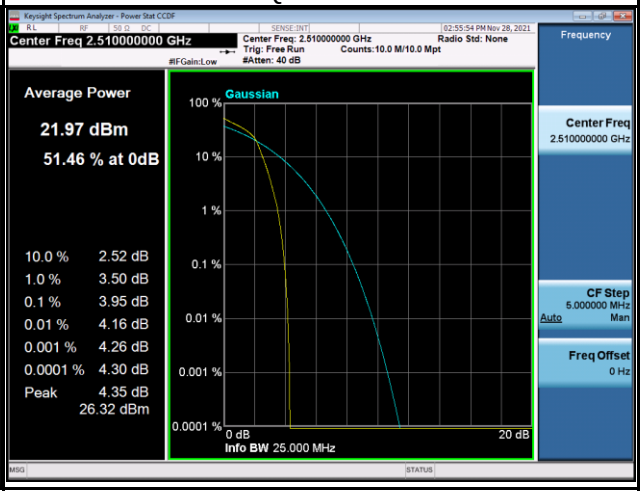

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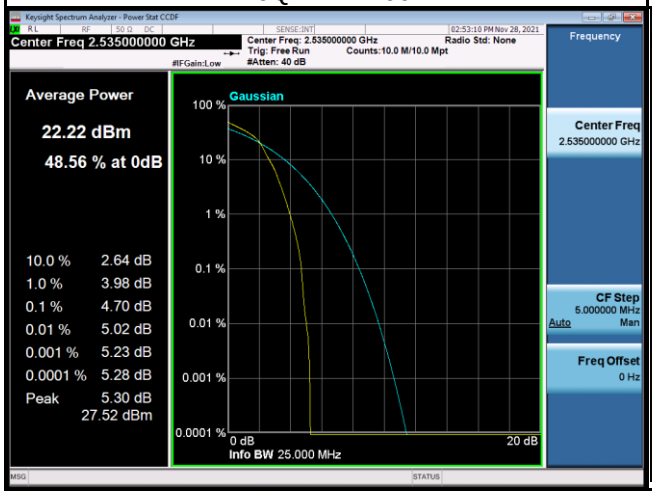

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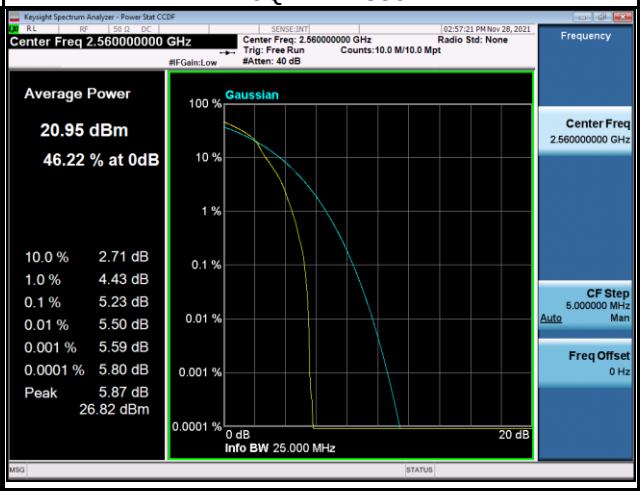

LTE Band 66 _1.4M

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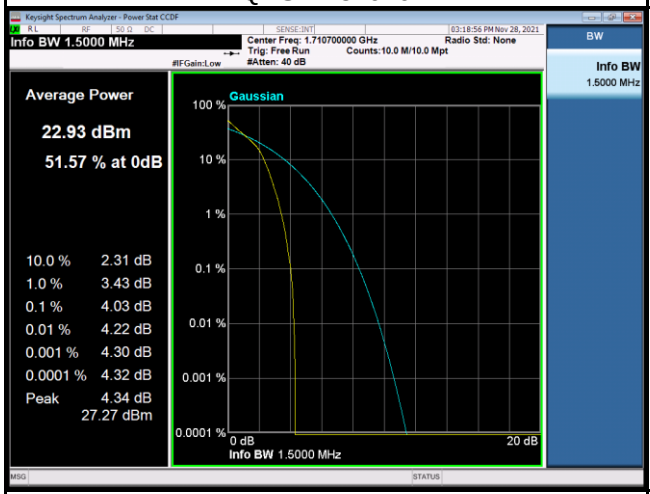

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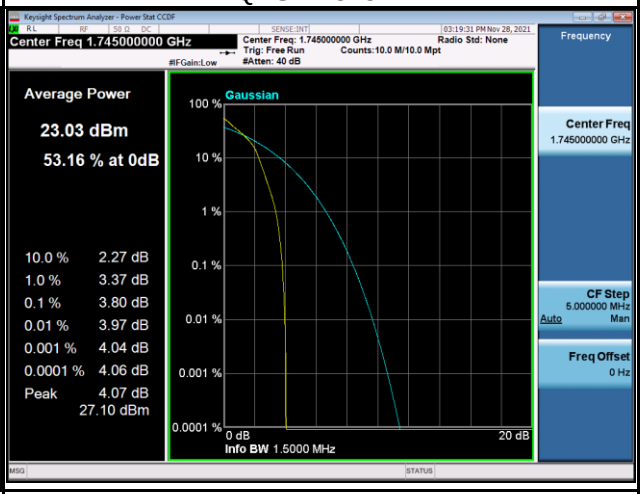
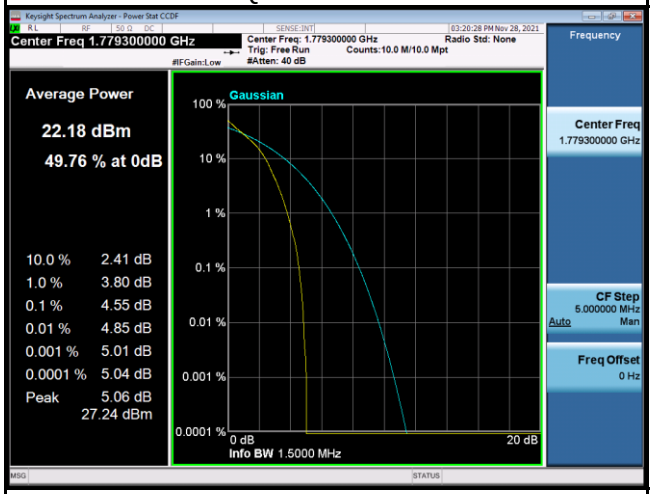


QPSK-132665



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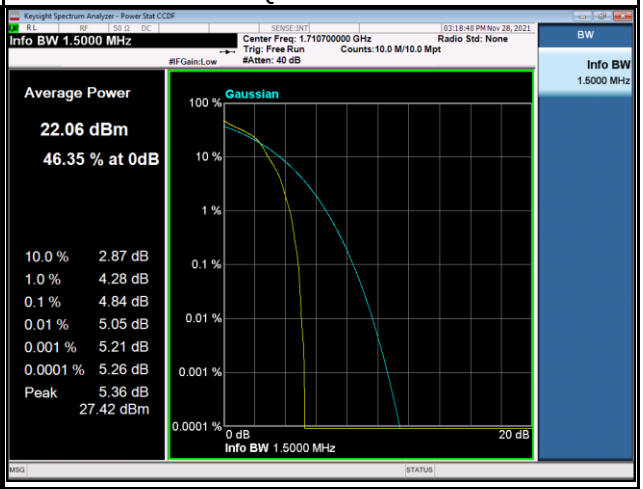

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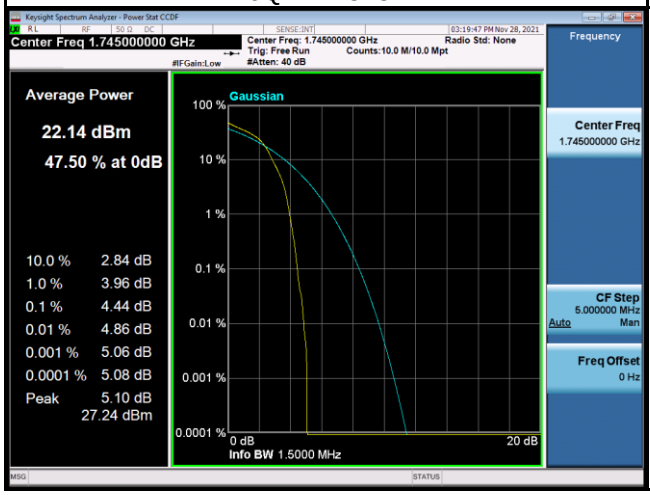

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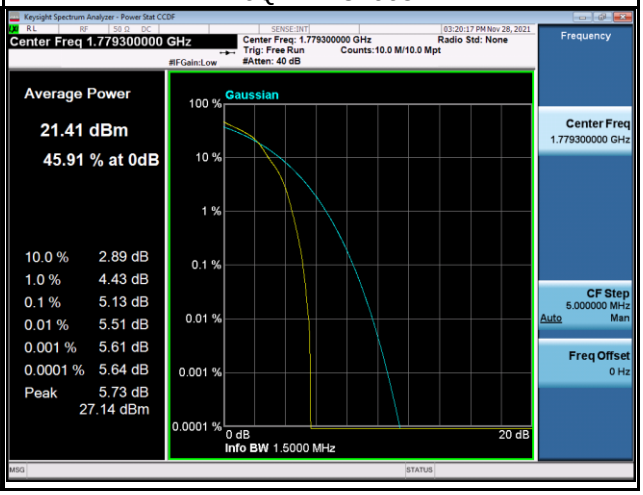
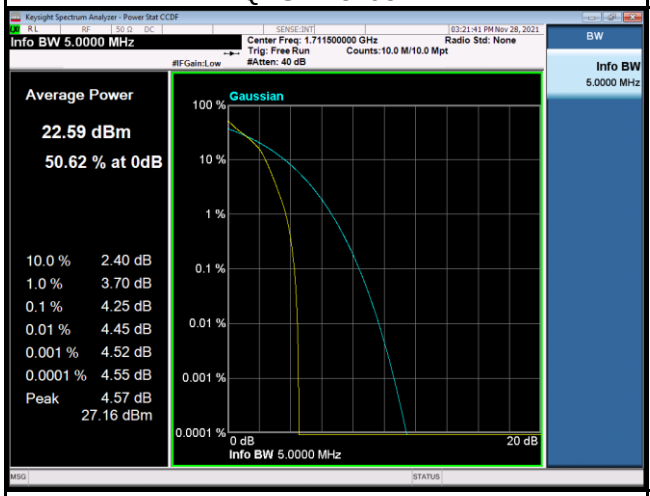


LTE Band 66 _3M

QPSK-131987



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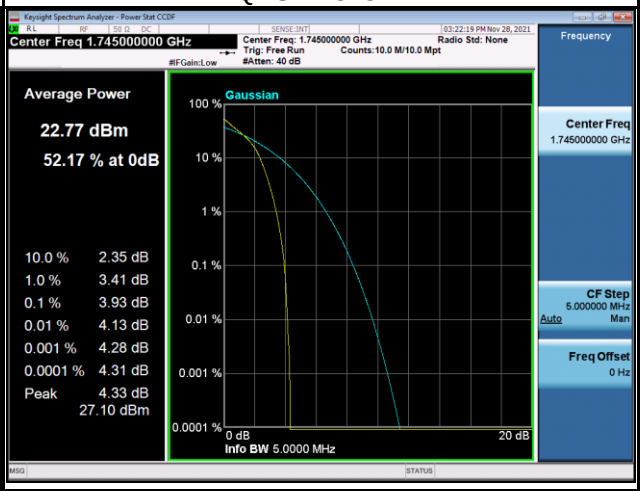

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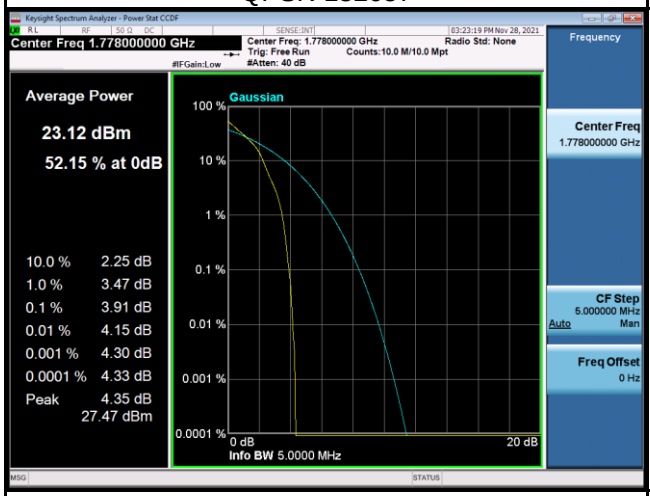

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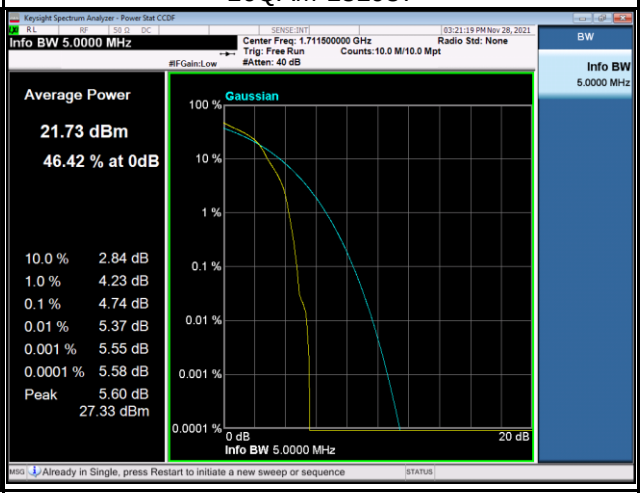

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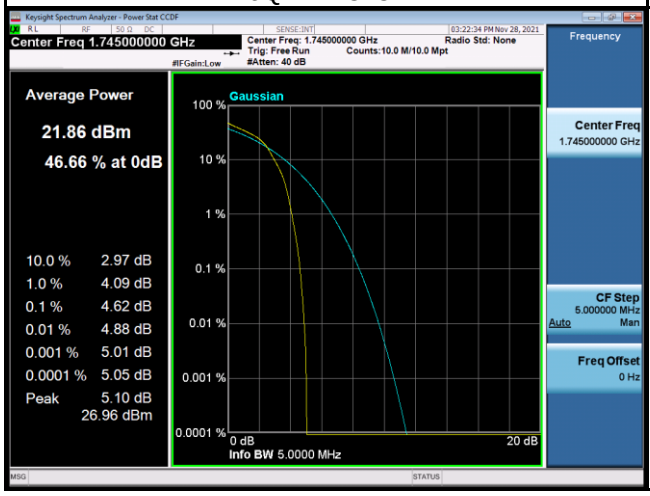

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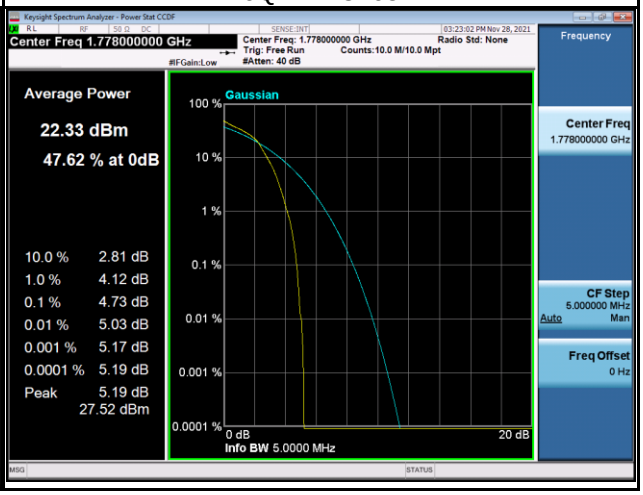

LTE Band 66 _5M

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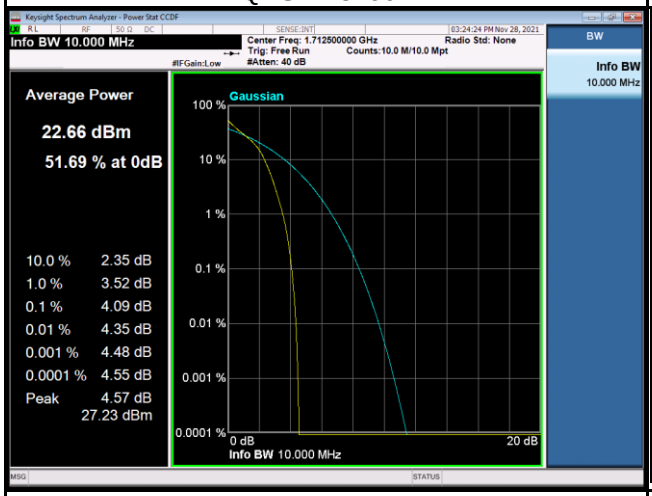

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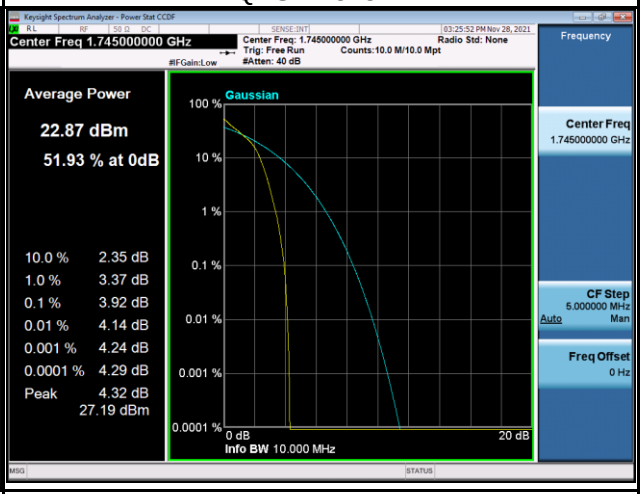

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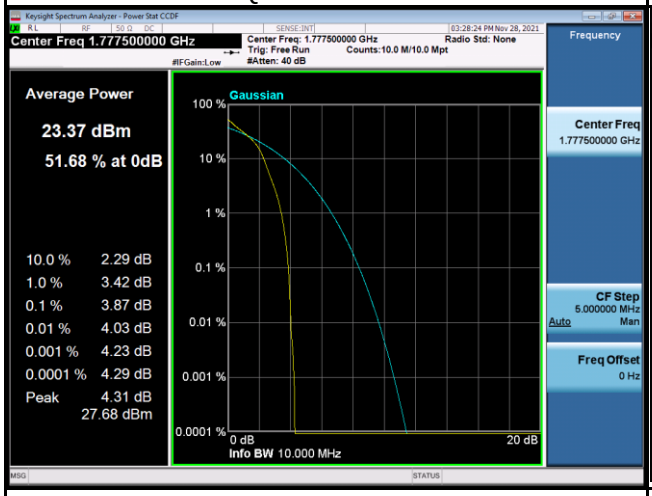
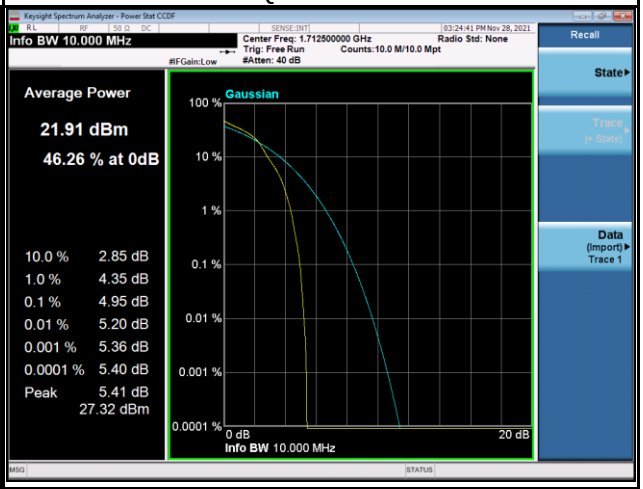


16QAM-131997



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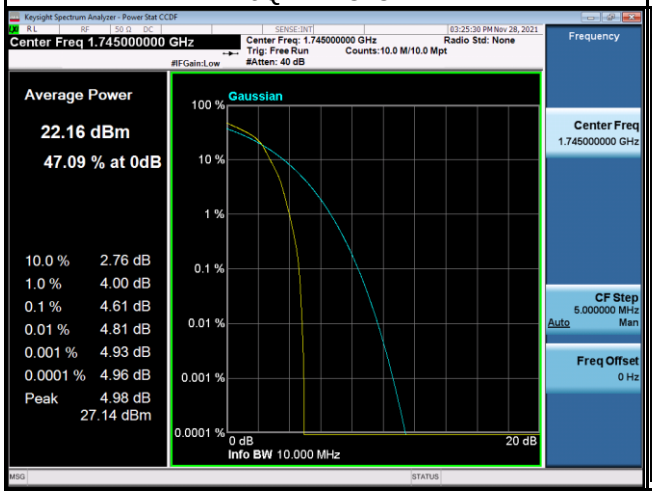

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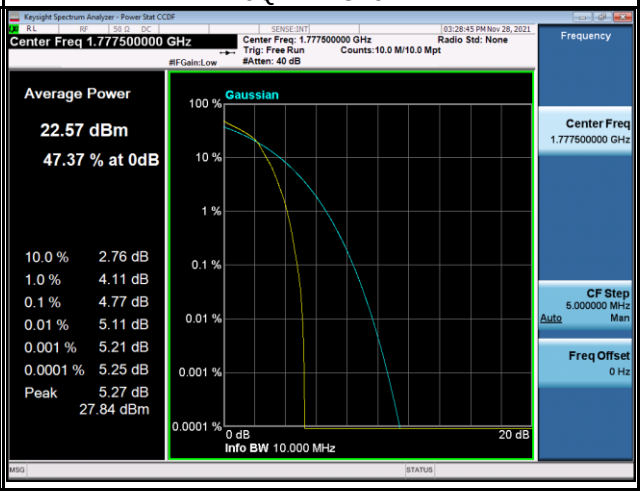

LTE Band 66 _10M

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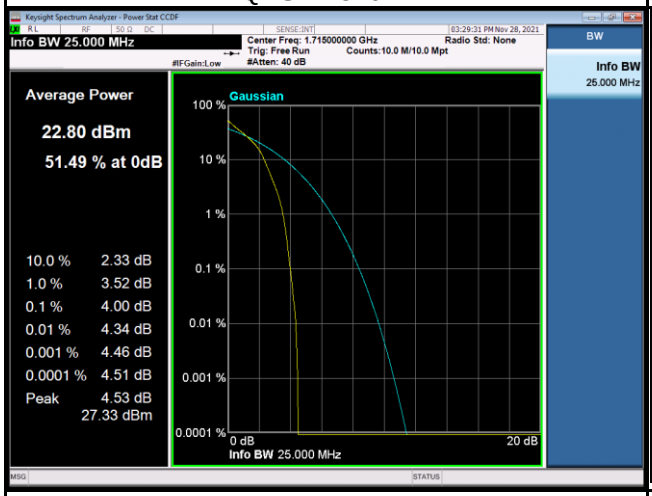

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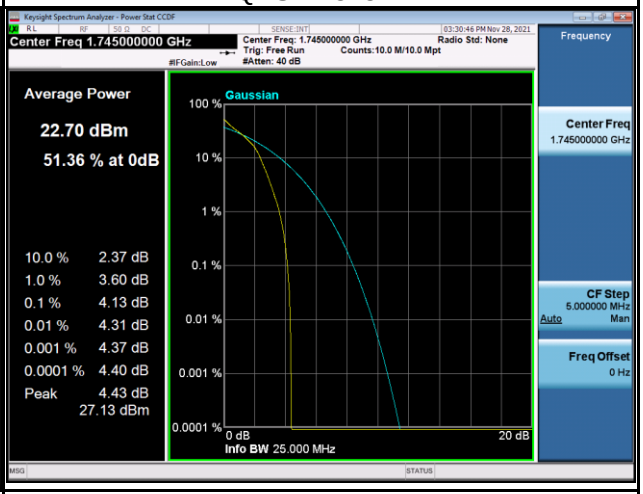

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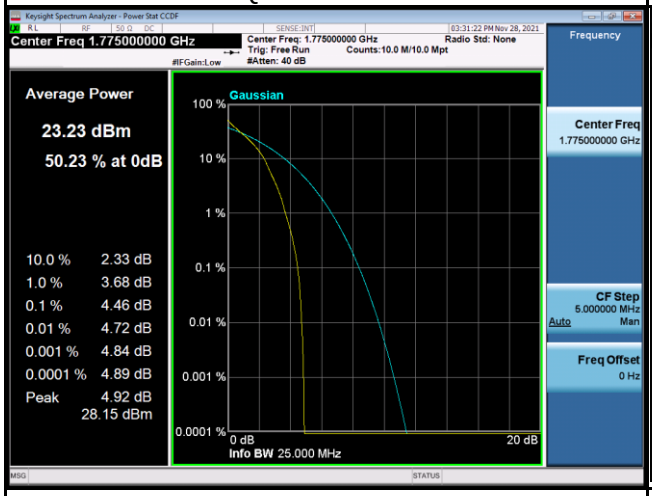

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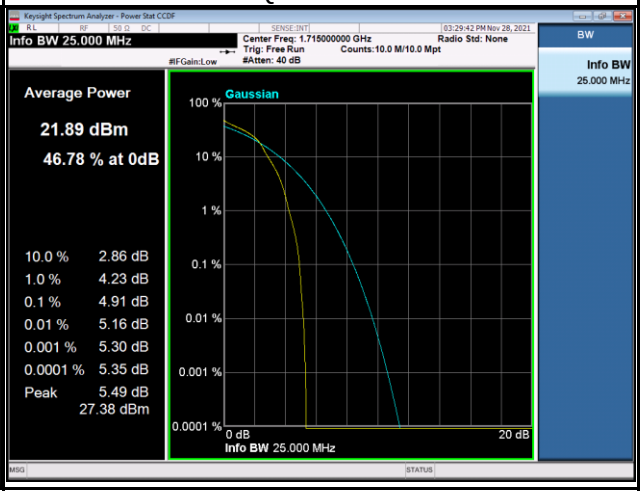

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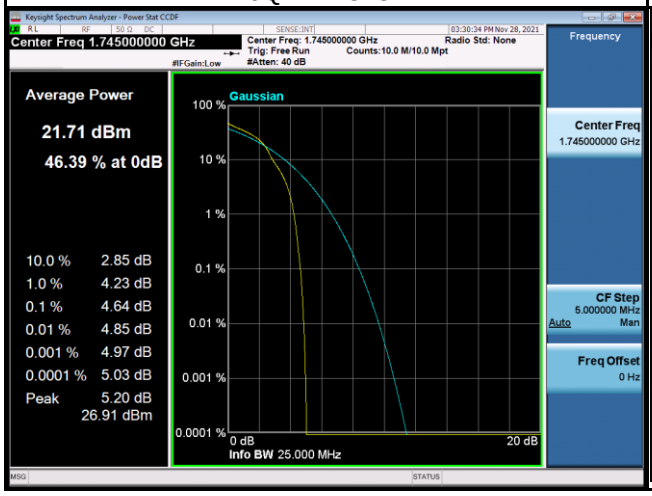

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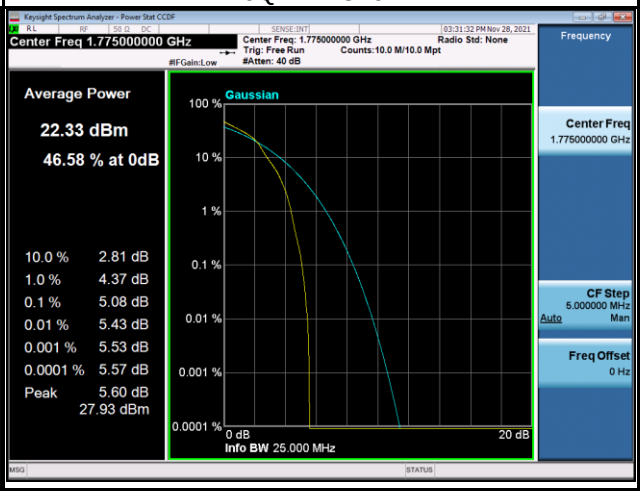

LTE Band 66 _15M	
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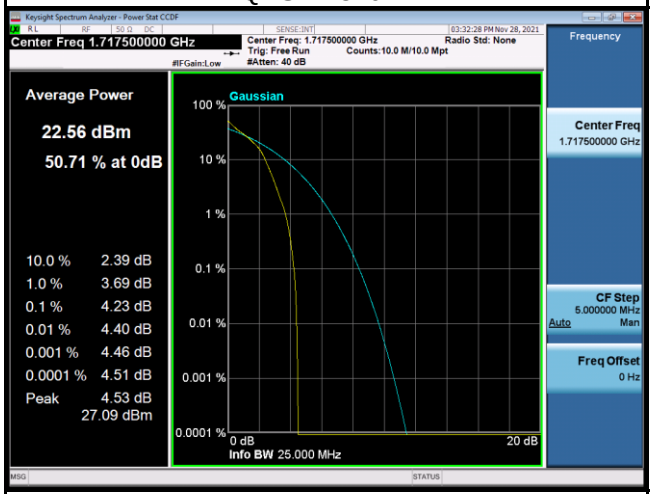	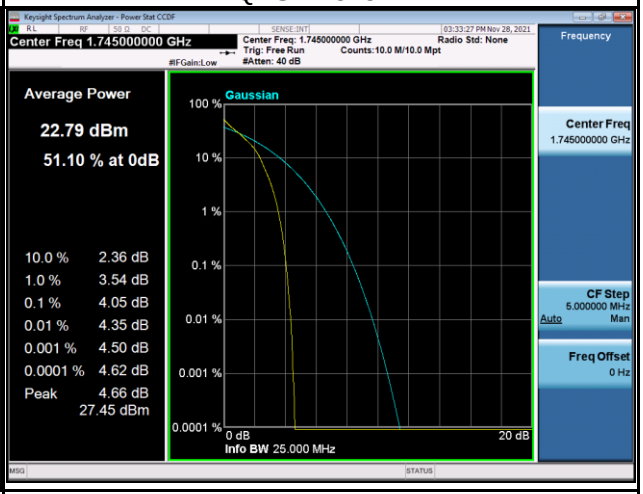
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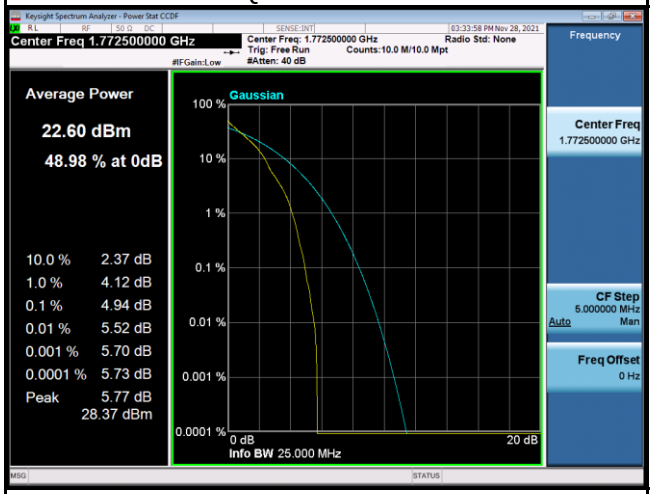	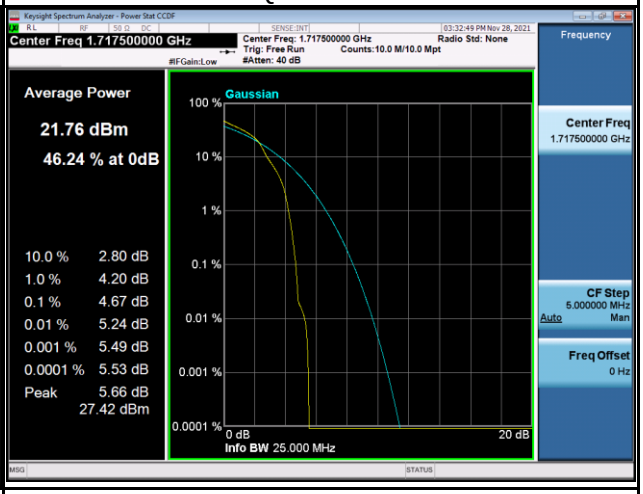
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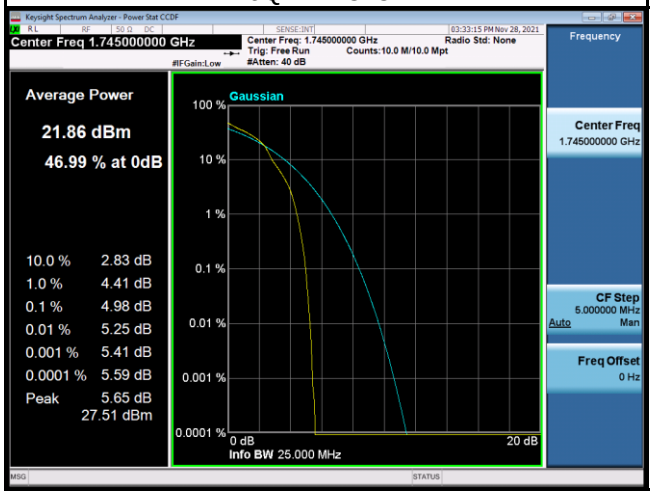	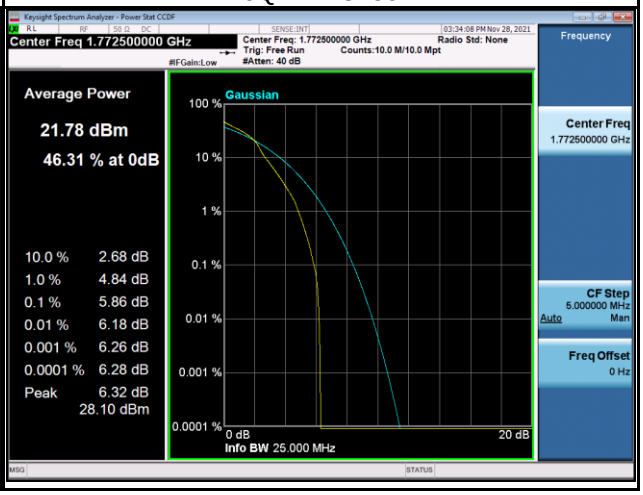

LTE Band 66 _20M	
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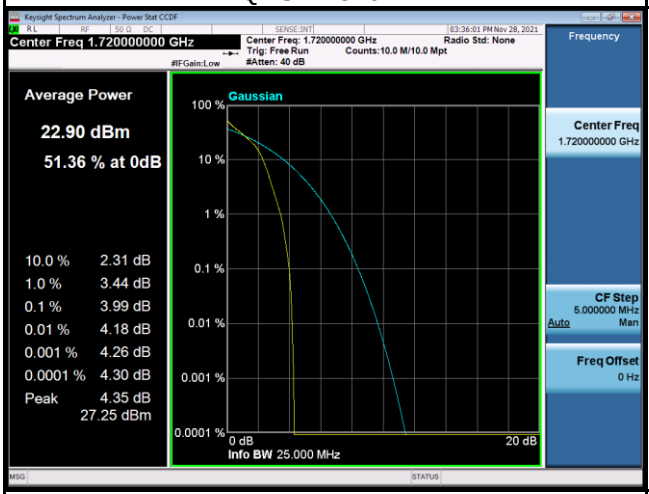	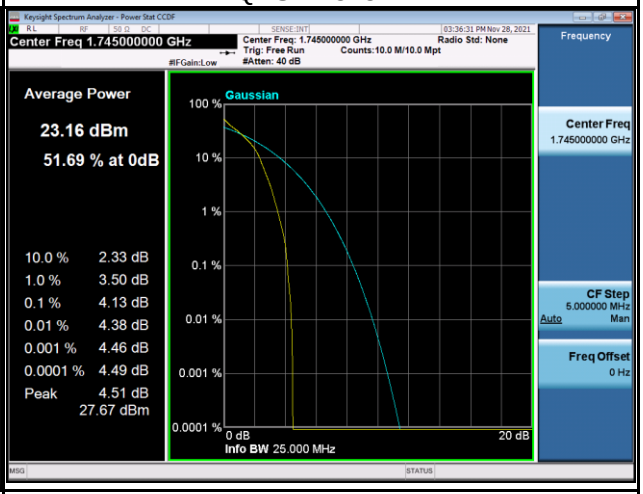
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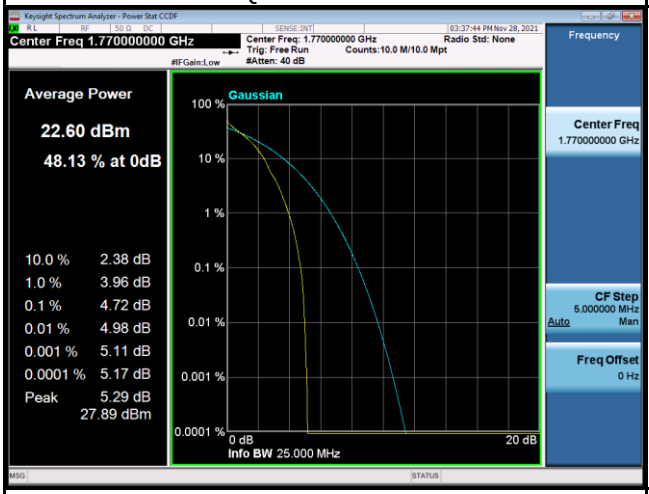
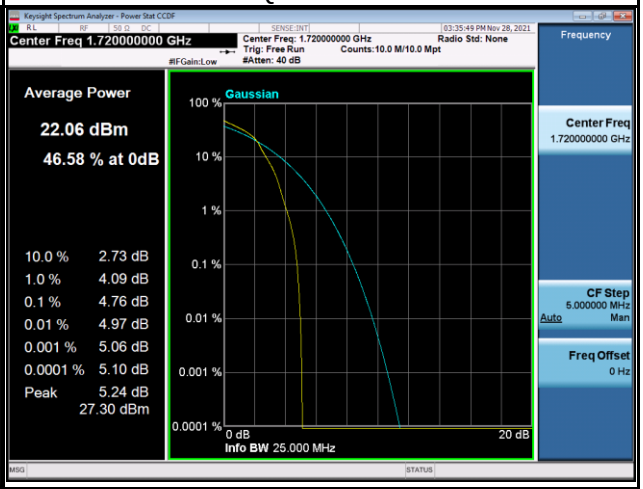
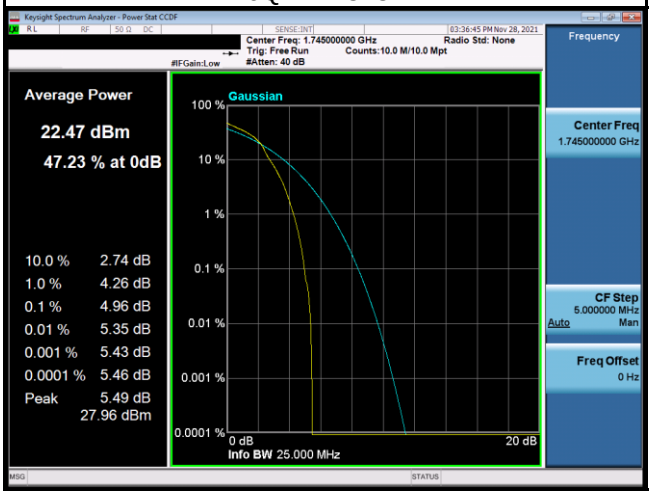
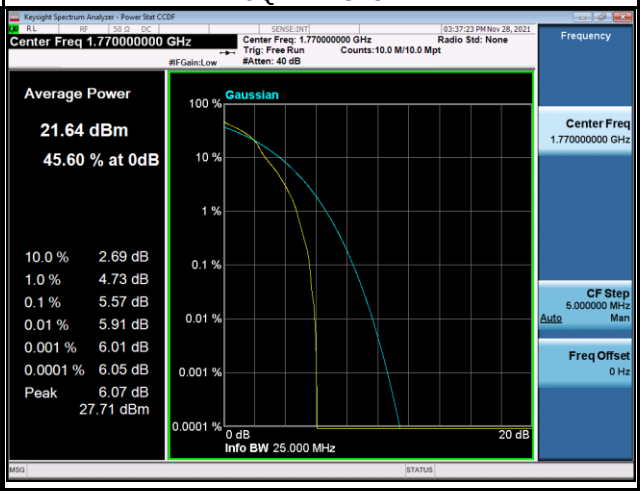
	
16QAM-132322	16QAM-132572
	

APPENDIX I - FREQUENCY STABILITY

Test Mode:	WCDMA Band IV _CH1638

Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	-4.27	0.002464504	±2.5
-10	-5.34	0.003082073	
0	-4.49	0.002591481	
10	5.67	0.003272538	
20	3.46	0.001996999	
30	2.24	0.001292855	
40	-3.65	0.002106661	
50	-4.18	0.002412559	
Max. Deviation (ppm)	5.67	0.003272538	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	-5.89	0.003399515	±2.5
3.8	-7.23	0.004172919	
3.4	-7.05	0.004069029	
Max. Deviation (ppm)	7.23	0.004172919	

Test Mode:	LTE Band 4_CH20175_1.4M

Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	5.91	0.00341164	±2.5
-10	4.01	0.002317436	
0	6.10	0.003518868	
10	5.96	0.003441582	
20	3.25	0.001873698	
30	2.78	0.001606441	
40	5.78	0.003337122	
50	3.44	0.001984907	
Max. Deviation (ppm)	6.10	0.003518868	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	-4.95	-0.002857143	±2.5
3.8	-3.27	-0.001885839	
3.4	-3.60	-0.002075739	
Max. Deviation (ppm)	-4.95	-0.002857143	

Test Mode:	LTE Band 4_CH20175_3M

Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	-3.25	-0.001873681	±2.5
-10	3.72	0.002144952	
0	2.73	0.001573121	
10	4.12	0.002379825	
20	2.62	0.001510538	
30	-1.69	-0.000976349	
40	-2.53	-0.001457833	
50	-2.28	-0.001317306	
Max. Deviation (ppm)	4.12	0.002379825	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	-5.04	-0.002908321	±2.5
3.8	1.89	0.001089518	
3.4	2.85	0.001644749	
Max. Deviation (ppm)	-5.04	-0.002908321	

Test Mode:	LTE Band 4_CH20175_5M

Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	-1.65	-0.000951348	±2.5
-10	3.58	0.002064386	
0	-3.97	-0.002291861	
10	-1.38	-0.000794454	
20	-2.64	-0.00152329	
30	-5.94	-0.003426416	
40	-4.53	-0.002612857	
50	-4.39	-0.002533882	
Max. Deviation (ppm)	-5.94	-0.003426416	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	4.02	0.002322953	±2.5
3.8	4.02	0.00231938	
3.4	-3.17	-0.001831596	
Max. Deviation (ppm)	4.02	0.002322953	

Test Mode:	LTE Band 4_CH20175_10M

Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	3.17	0.001829254	±2.5
-10	4.93	0.00284284	
0	-2.76	-0.001592799	
10	-0.35	-0.000204734	
20	-1.80	-0.001040766	
30	-4.36	-0.002517755	
40	-3.27	-0.001885055	
50	-2.83	-0.001634879	
Max. Deviation (ppm)	4.93	0.00284284	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	-4.56	-0.002630757	±2.5
3.8	5.34	0.003080778	
3.4	2.60	0.001499863	
Max. Deviation (ppm)	5.34	0.003080778	

Test Mode:	LTE Band 4_CH20175_15M

Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	4.36	0.002516519	±2.5
-10	5.04	0.002910872	
0	-2.41	-0.00139218	
10	5.54	0.003198946	
20	-0.90	-0.000520114	
30	-4.67	-0.002694993	
40	-3.35	-0.001933423	
50	-6.46	-0.003728197	
Max. Deviation (ppm)	-6.46	-0.003728197	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	4.52	0.002609829	±2.5
3.8	-2.55	-0.001474626	
3.4	-4.33	-0.002500331	
Max. Deviation (ppm)	4.52	0.002609829	

Test Mode:	LTE Band 4_CH20175_20M

Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	4.34	0.002503244	±2.5
-10	4.79	0.002763784	
0	-2.79	-0.0016097	
10	5.23	0.003021016	
20	-1.26	-0.000727423	
30	-4.89	-0.002821802	
40	-3.25	-0.001873868	
45	-6.73	-0.003883827	
Max. Deviation (ppm)	-6.73	-0.003883827	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	5.97	0.00344817	±2.5
3.8	4.32	0.002494146	
3.4	-5.31	-0.003063453	
Max. Deviation (ppm)	5.97	0.00344817	

Test Mode:	LTE Band 7_CH21100_5M

Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	-1.24	-0.000490329	±2.5
-10	-3.87	-0.001527397	
0	-2.18	-0.000860792	
10	-5.07	-0.001999148	
20	1.56	0.000614844	
30	-5.26	-0.002074432	
40	1.18	0.000466142	
50	-5.35	-0.002110475	
Max. Deviation (ppm)	-5.35	-0.002110475	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	-4.25	-0.001675138	±2.5
3.8	3.97	0.001564377	
3.4	-2.23	-0.000881539	
Max. Deviation (ppm)	-4.25	-0.001675138	

Test Mode:	LTE Band 7_CH21100_10M

Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	-1.36	-0.000537502	±2.5
-10	4.52	0.001783215	
0	-1.83	-0.000722595	
10	3.45	0.001359703	
20	-2.96	-0.001168022	
30	-4.27	-0.001685718	
40	-4.64	-0.001828481	
50	2.43	0.000956915	
Max. Deviation (ppm)	-4.64	-0.001828481	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	1.11	0.00043871	±2.5
3.8	4.48	0.001768779	
3.4	2.51	0.000989118	
Max. Deviation (ppm)	4.48	0.001768779	

Test Mode:	LTE Band 7_CH21100_15M

Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	-4.24	-0.001673395	±2.5
-10	-3.99	-0.001572114	
0	-2.74	-0.001079921	
10	3.82	0.001508024	
20	3.03	0.001194565	
30	-1.01	-0.000400255	
40	1.22	0.000480692	
50	3.29	0.00129634	
Max. Deviation (ppm)	-4.24	-0.001673395	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	-6.36	-0.002508774	±2.5
3.8	-5.15	-0.002029739	
3.4	2.83	0.001117643	
Max. Deviation (ppm)	-6.36	-0.002508774	

Test Mode:	LTE Band 7_CH21100_20M

Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	2.78	0.001098462	±2.5
-10	-5.02	-0.001978488	
0	-4.11	-0.001622245	
10	2.36	0.000929877	
20	3.90	0.001537371	
30	1.81	0.000713271	
40	1.68	0.000662296	
50	2.85	0.001122976	
Max. Deviation (ppm)	-5.02	-0.001978488	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	-3.67	-0.001448829	±2.5
3.8	-4.71	-0.001857729	
3.4	5.19	0.002048147	
Max. Deviation (ppm)	5.19	0.002048147	

Test Mode:	LTE Band 66_CH132322_1.4M

Temperature vs. Frequency Stabiility

Temperature(℃)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	3.88	0.005546935	±2.5
-10	-4.20	-0.006003668	
0	5.11	0.007301306	
10	-4.95	-0.007077066	
20	-1.84	-0.002631319	
30	3.12	0.004450019	
40	1.82	0.002598961	
50	-1.69	-0.002410733	
Max. Deviation (ppm)	5.11	0.007301306	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	-4.23	-0.006040133	±2.5
3.8	4.51	0.006449444	
3.4	-4.30	-0.006145699	
Max. Deviation (ppm)	4.51	0.006449444	

Test Mode:	LTE Band 66_CH132322_3M

Temperature vs. Frequency Stabiility

Temperature(℃)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	4.23	0.006043637	±2.5
-10	6.65	0.009502885	
0	-3.34	-0.00477447	
10	1.27	0.001817978	
20	4.70	0.006717275	
30	1.37	0.001960037	
40	1.28	0.001824208	
50	-5.62	-0.00802522	
Max. Deviation (ppm)	6.65	0.009502885	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	6.18	0.008835362	±2.5
3.8	4.97	0.007104009	
3.4	3.03	0.004331506	
Max. Deviation (ppm)	6.18	0.008835362	

Test Mode:	LTE Band 66_CH132322_5M

Temperature vs. Frequency Stabiility

Temperature(℃)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	5.00	0.007147185	±2.5
-10	4.13	0.005893159	
0	2.86	0.004087593	
10	4.05	0.005788234	
20	-5.72	-0.008177308	
30	4.00	0.005720579	
40	2.46	0.003510708	
50	-4.58	-0.006542434	
Max. Deviation (ppm)	-5.72	-0.008177308	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	-4.60	-0.006564286	±2.5
3.8	-2.99	-0.004276725	
3.4	-1.83	-0.002616936	
Max. Deviation (ppm)	-4.60	-0.006564286	

Test Mode:	LTE Band 66_CH132322_10M

Temperature vs. Frequency Stabiility

Temperature(℃)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	-4.95	-0.007067362	±2.5
-10	-4.16	-0.005942767	
0	1.92	0.002742774	
10	4.37	0.006243793	
20	2.34	0.003347572	
30	-2.55	-0.00363867	
40	1.76	0.002520403	
50	-3.10	-0.004426111	
Max. Deviation (ppm)	-4.95	-0.007067362	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	5.13	0.007321689	±2.5
3.8	4.89	0.006985232	
3.4	2.93	0.00418816	
Max. Deviation (ppm)	5.13	0.007321689	

Test Mode:	LTE Band 66_CH132322_15M

Temperature vs. Frequency Stabiility

Temperature(℃)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	4.83	0.006906	±2.5
-10	-5.89	-0.00841	
0	-3.57	-0.00511	
10	4.50	0.006427	
20	-4.61	-0.00659	
30	-4.03	-0.00576	
40	3.99	0.005694	
50	4.09	0.005847	
Max. Deviation (ppm)	-5.89	-0.00841	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	-5.81	-0.0083	±2.5
3.8	2.51	0.003582	
3.4	2.66	0.003805	
Max. Deviation (ppm)	-5.81	-0.0083	

Test Mode:	LTE Band 66_CH132322_20M

Temperature vs. Frequency Stabiility

Temperature(℃)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	2.24	0.0032	±2.5
-10	1.14	0.001624	
0	2.93	0.00418	
10	-7.05	-0.01007	
20	3.87	0.005533	
30	3.63	0.005181	
40	3.99	0.005703	
50	4.90	0.007006	
Max. Deviation (ppm)	-7.05	-0.01007	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.5	-3.11	-0.00444	±2.5
3.8	-3.04	-0.00434	
3.4	2.69	0.003839	
Max. Deviation (ppm)	-3.11	-0.00444	

End of Test Report