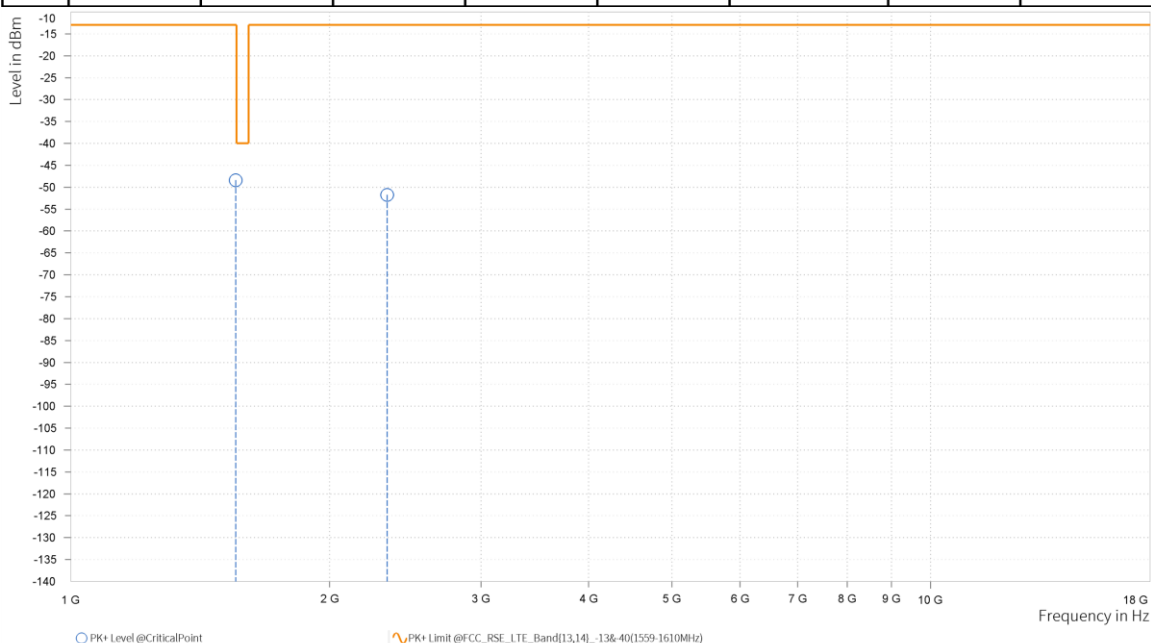


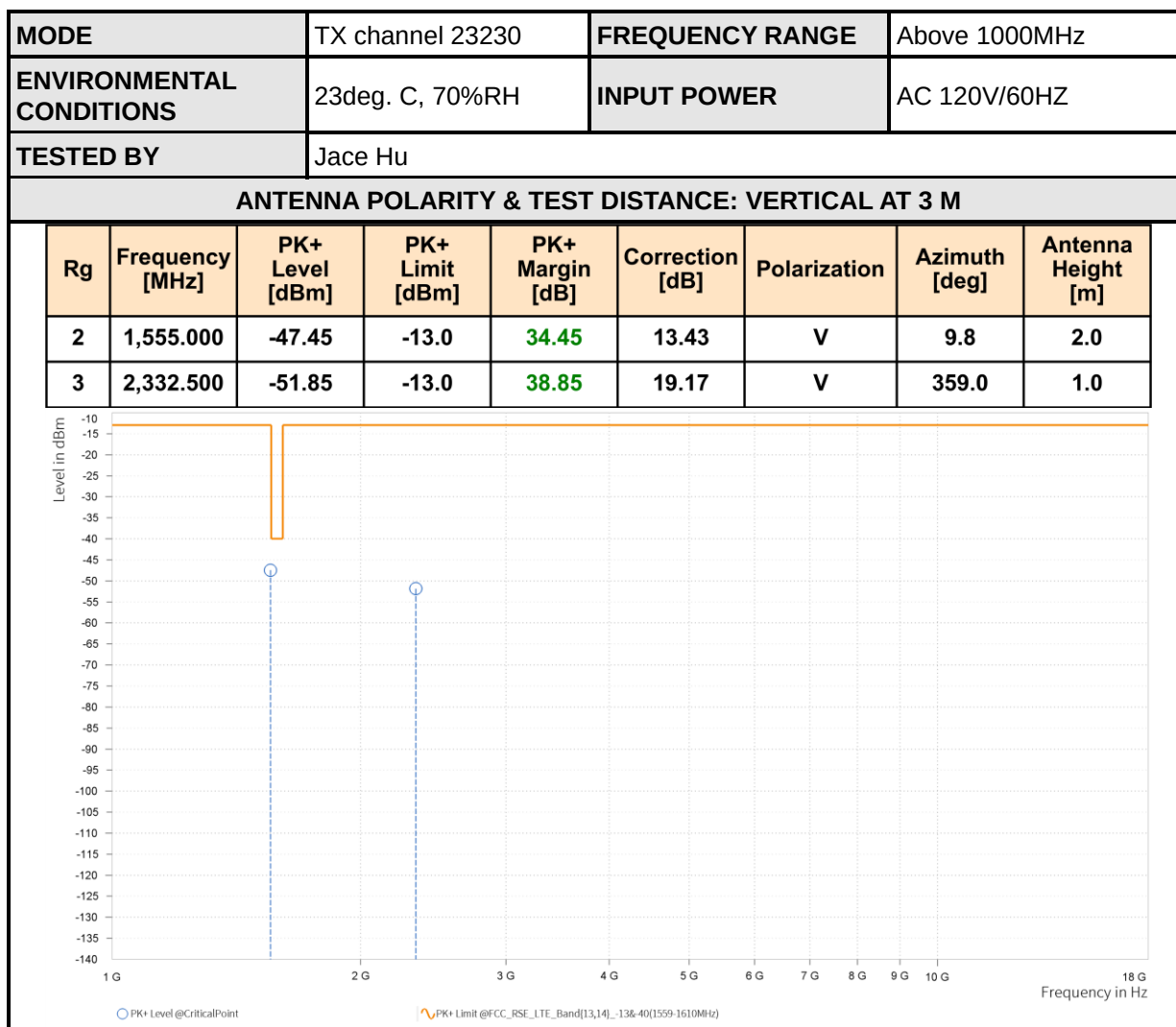
CHANNEL BANDWIDTH: 10MHz /QPSK

MODE	TX channel 23230	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,555.000	-48.42	-13.0	35.42	12.09	H	35.3	1.0
3	2,332.500	-51.72	-13.0	38.72	18.59	H	65.0	1.0



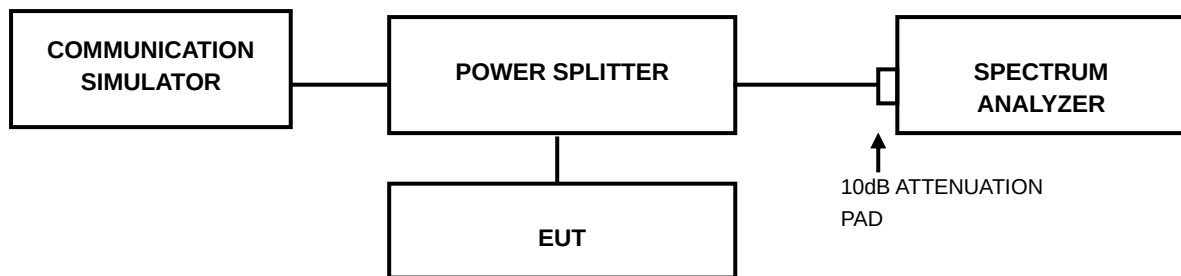


3.7 PEAK TO AVERAGE RATIO

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 $\geq$ 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%.



Test Report No.: PSU-NQN2406210109RF03

3.7.4 TEST RESULTS

Please Refer to Appendix Of this test report.



Test Report No.: PSU-NQN2406210109RF03

4 INFORMATION ON THE TESTING LABORATORIES

We, Huarui 7layers High Technology (Suzhou) Co., Ltd. ,were founded in 2020 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

Huarui 7Layers High Technology (Suzhou) Co., Ltd.

Lab Address:

Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province

Accredited Test Lab Cert 6613.01

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

Suzhou EMC/RF Lab:

Tel: +86 (0557) 368 1008

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.

6 Appendix

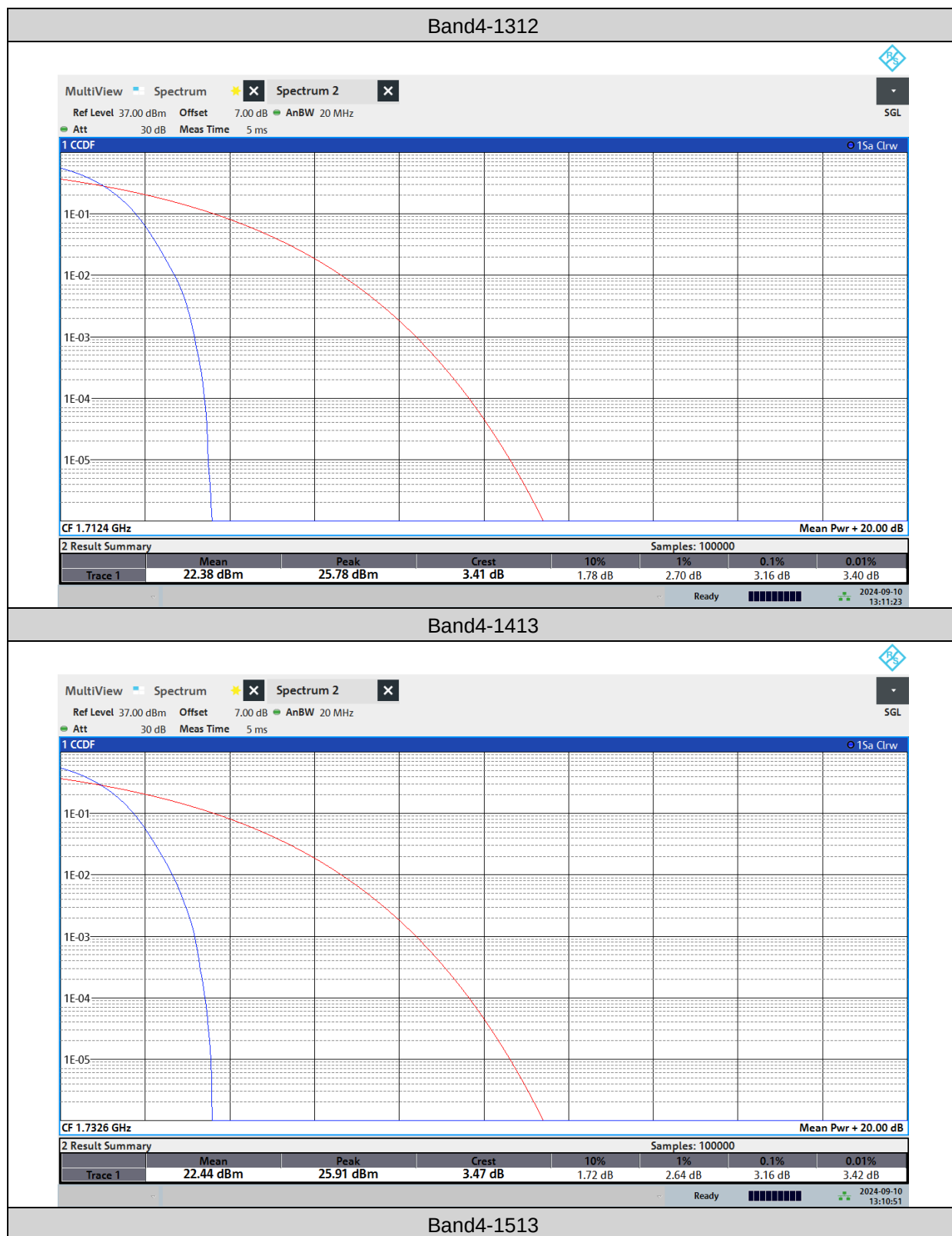
WCDMA BAND4

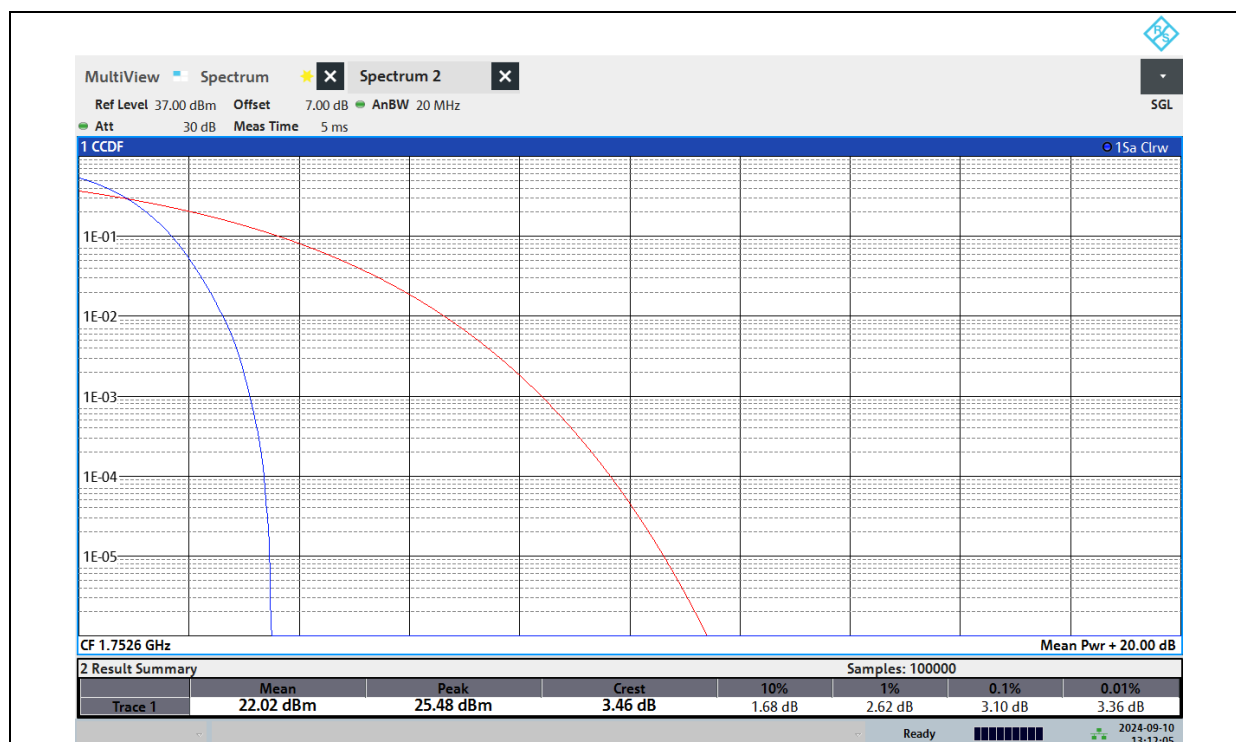
PEAK-TO-AVERAGE RATIO

Test Result

Band	Channel	Peak-to-Average Ratio(dB)	Limit(dBm)	Verdict
Band4	1312	3.16	13	PASS
Band4	1413	3.16	13	PASS
Band4	1513	3.10	13	PASS

Test Graphs





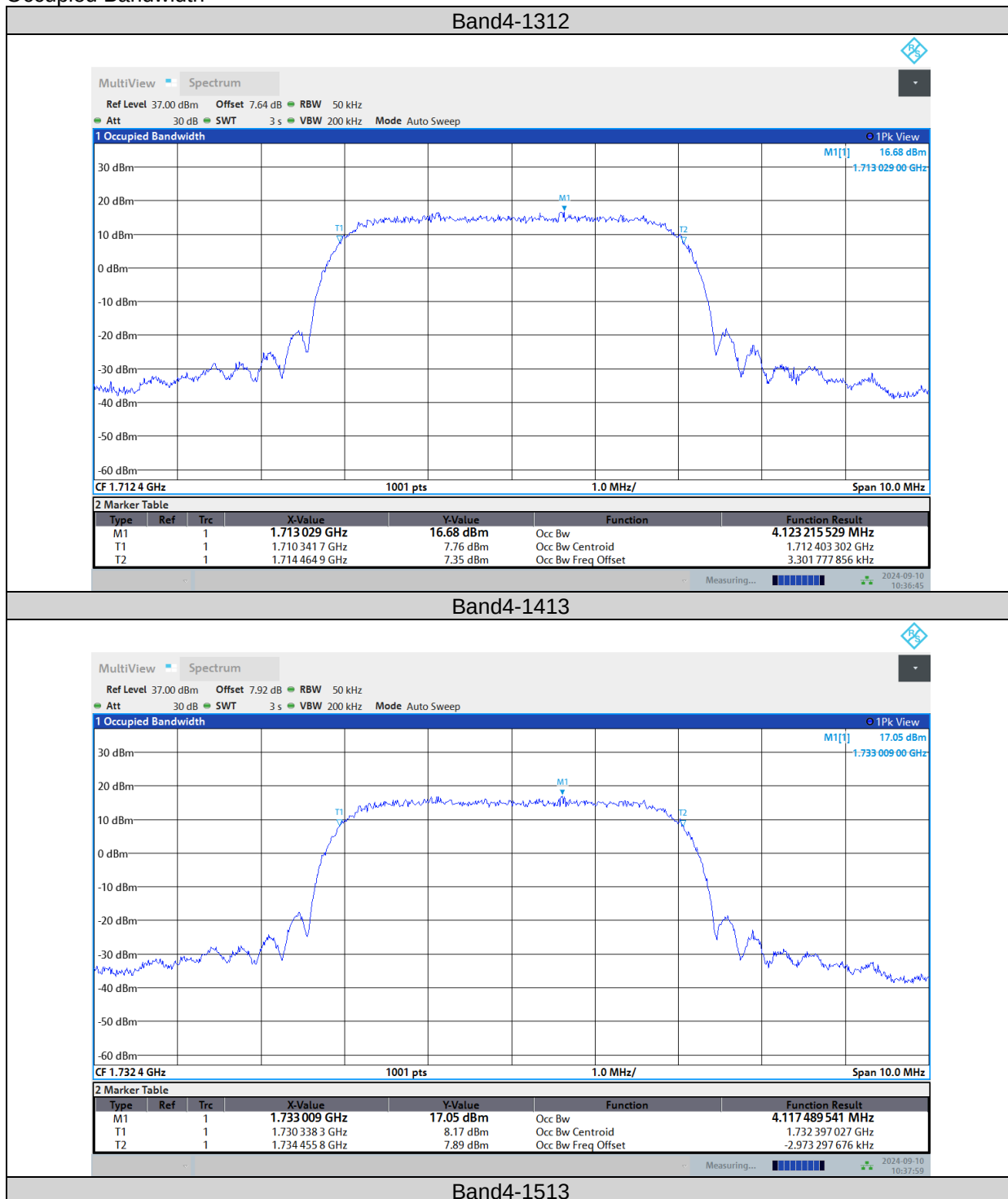
26DB BANDWIDTH AND OCCUPIED BANDWIDTH

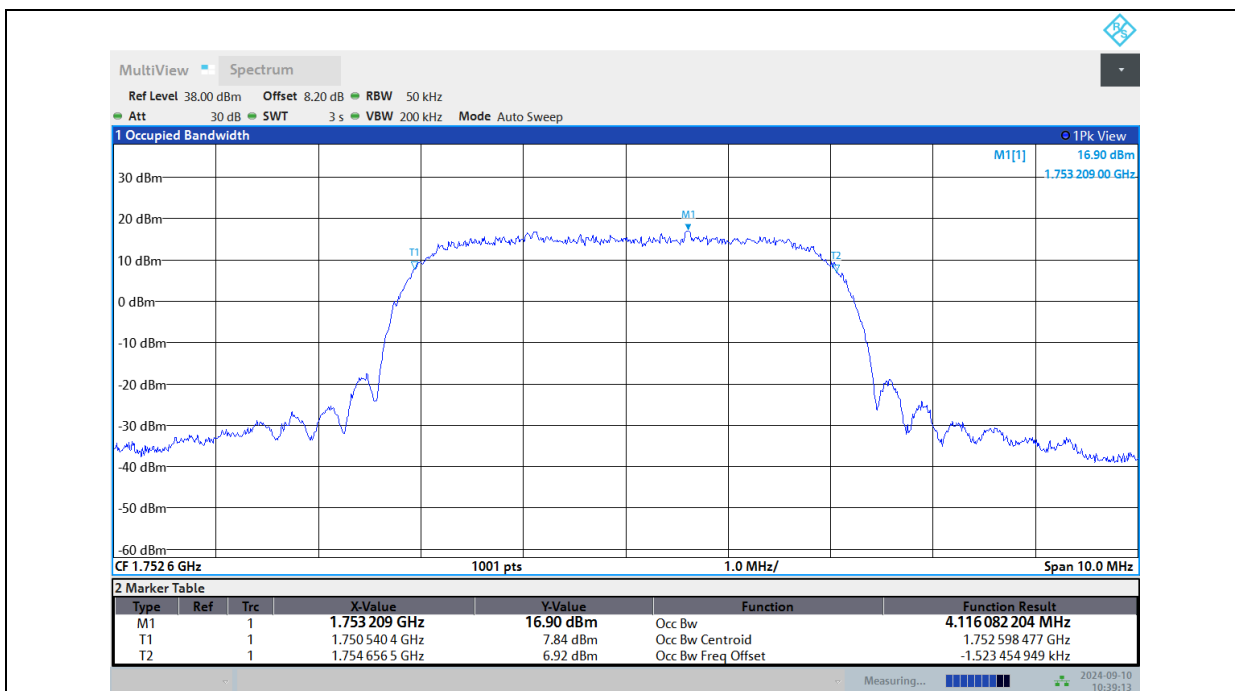
Test Result

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band4	1312	4.123	4.68	PASS
Band4	1413	4.117	4.68	PASS
Band4	1513	4.116	4.67	PASS

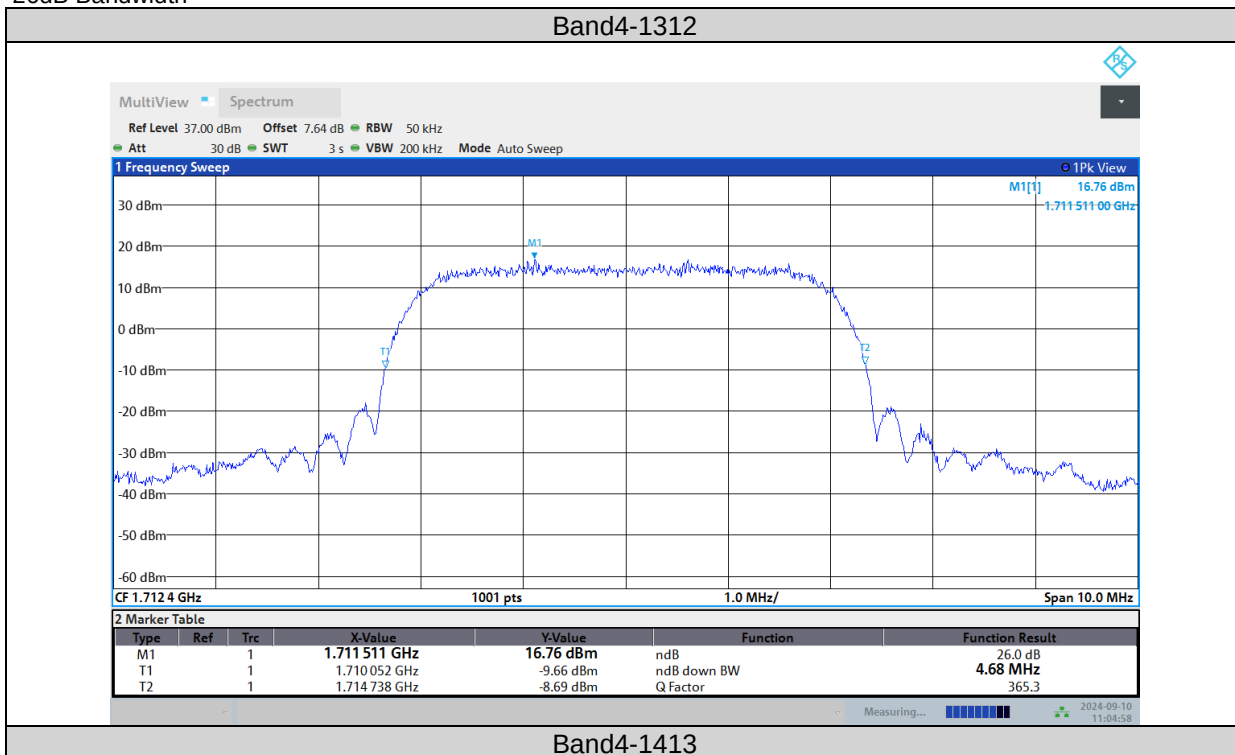
Test Graphs

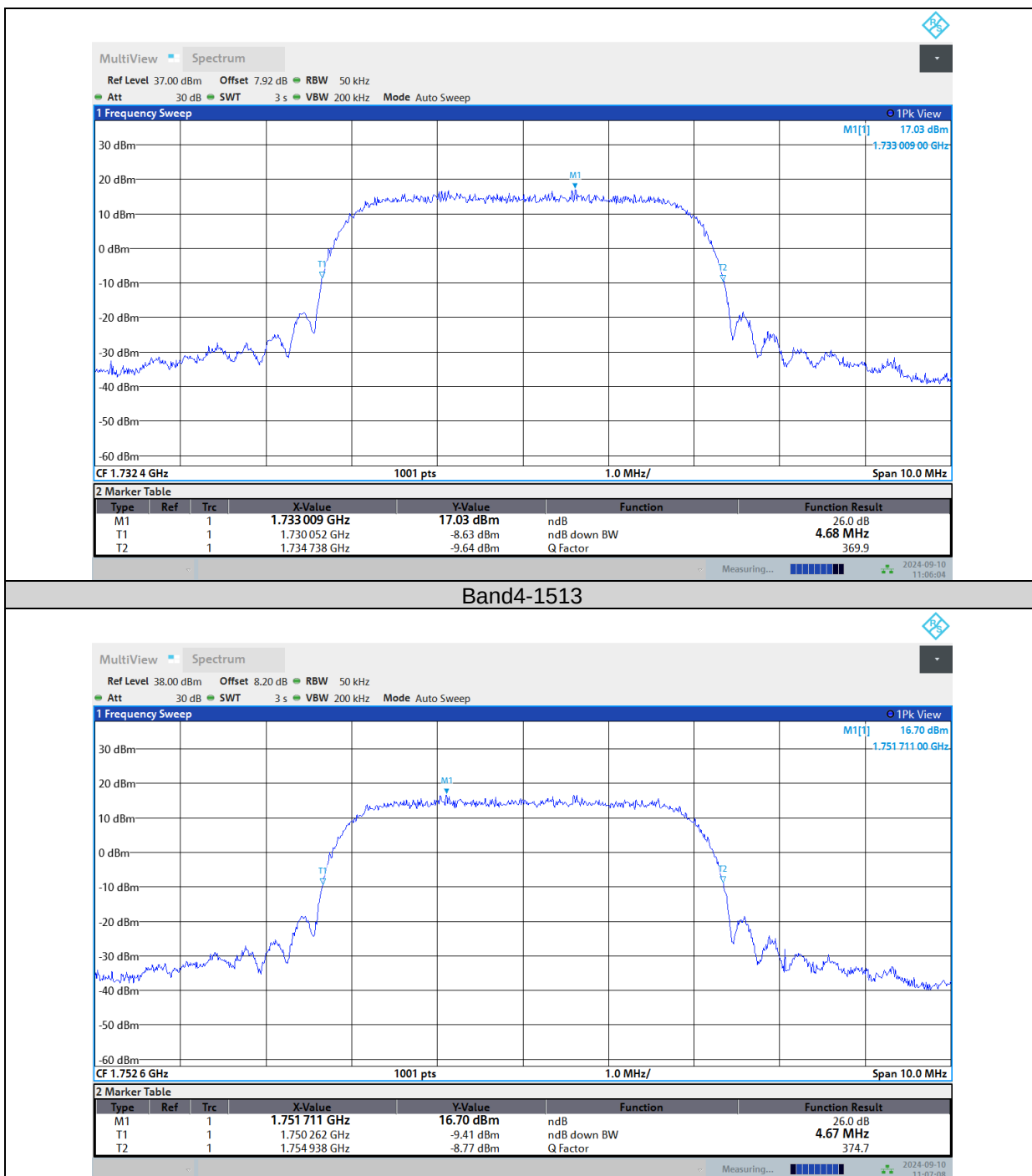
Occupied Bandwidth





26dB Bandwidth







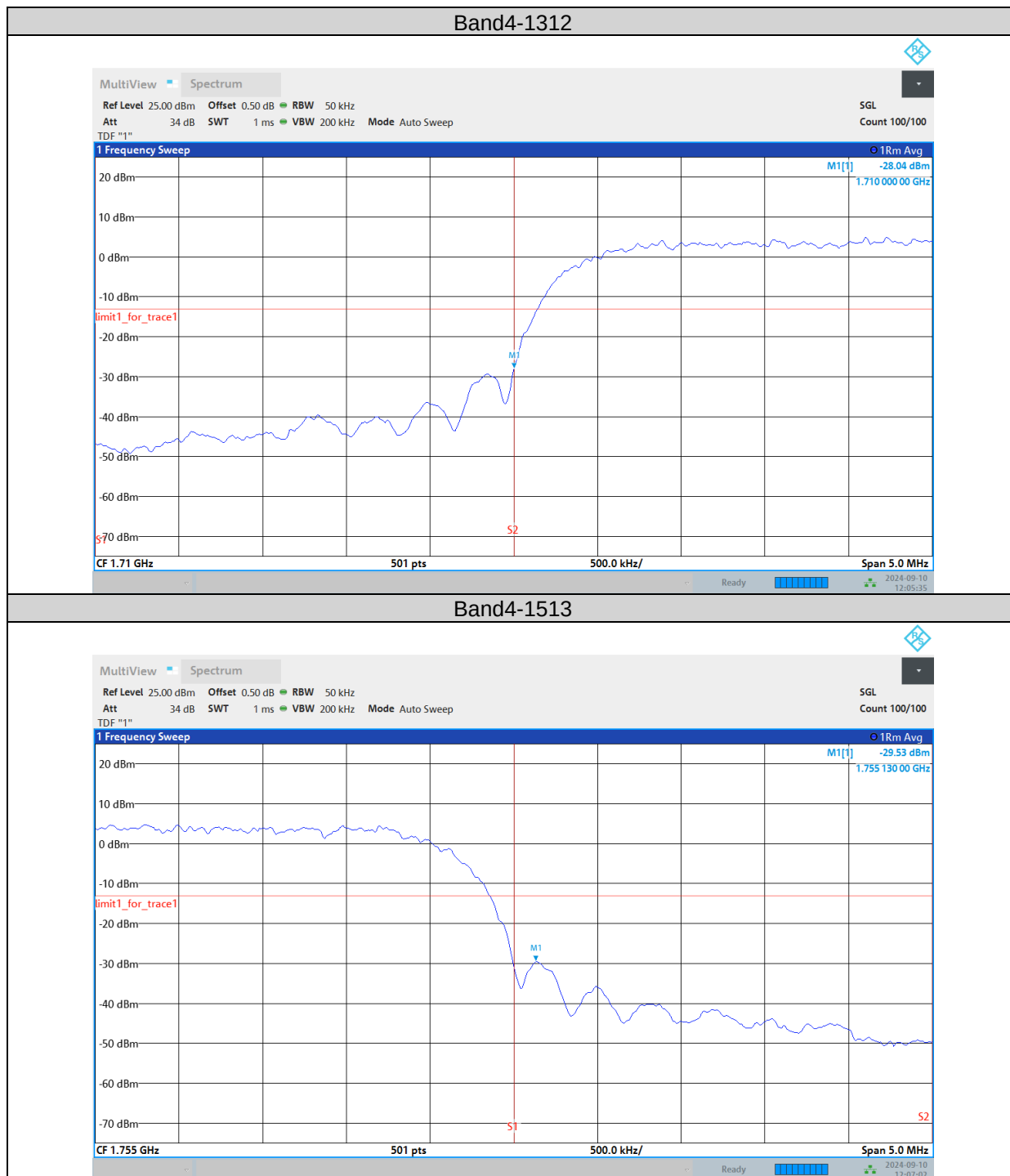
Test Report No.: PSU-NQN2406210109RF03

BAND EDGE

Test Result

Band	Channel	Frequency (MHz)	Result (dBm)	Limit(dBm)	Verdict
Band4	1312	1710.00	-28.04	-13	PASS
Band4	1513	1755.13	-29.53	-13	PASS

Test Graphs

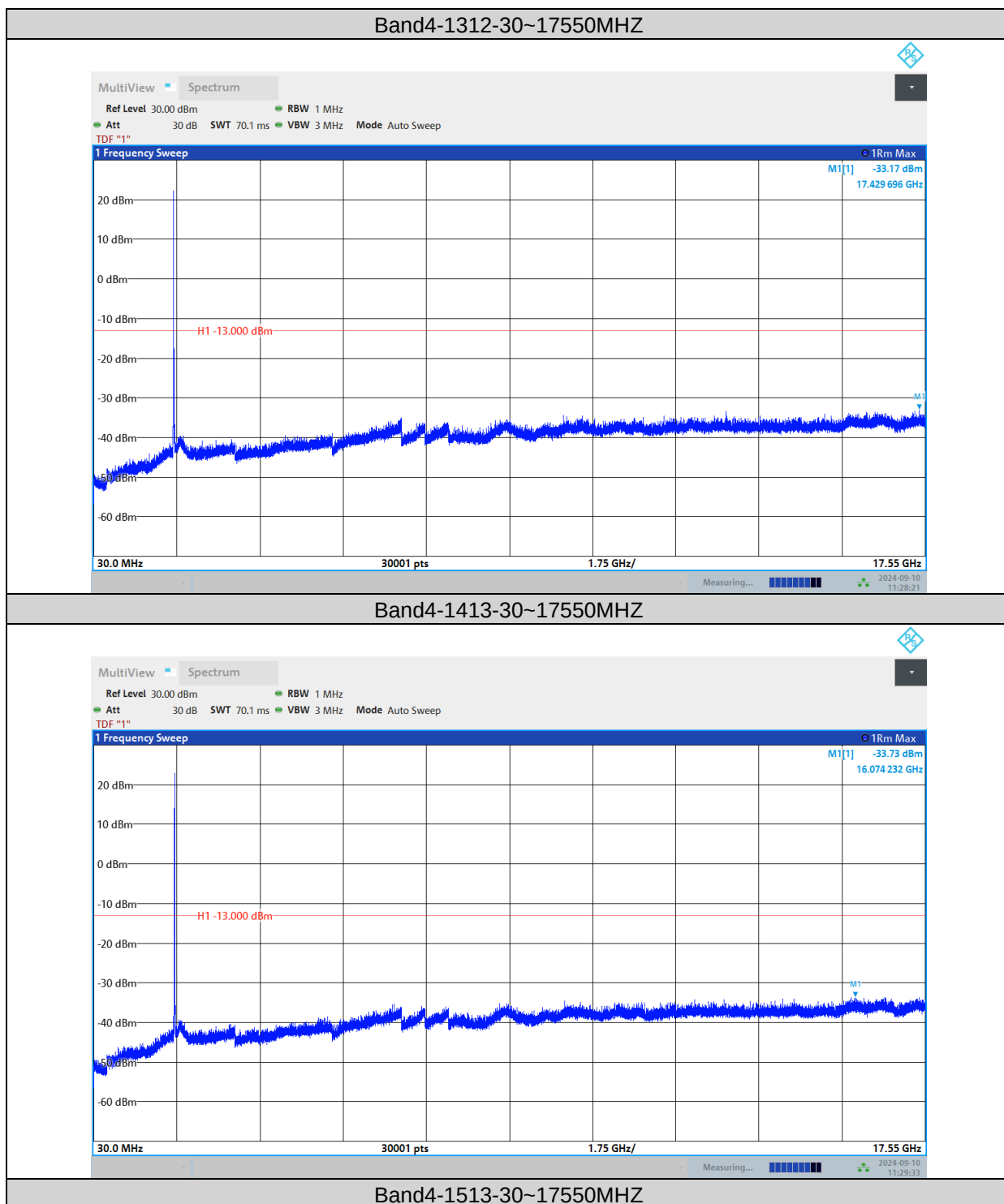


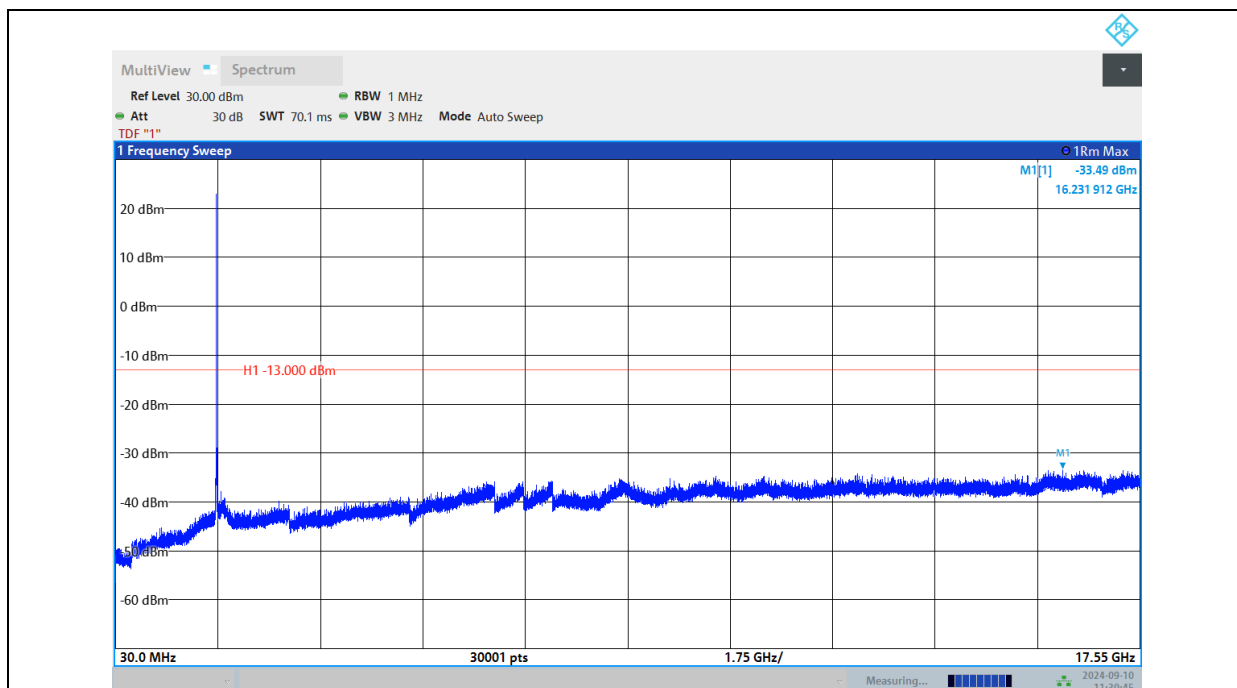
CONDUCTED SPURIOUS EMISSION

Test Result

Band	Channel	Frequency Range (Mhz)	Frequency (MHz)	Result (dBm)	Limit (dBm)	Verdict
Band4	1312	30~17550MHZ	17429.696	-33.17	-13	PASS
Band4	1413	30~17550MHZ	16074.232	-33.73	-13	PASS
Band4	1513	30~17550MHZ	16231.912	-33.49	-13	PASS

Test Graphs





FREQUENCY STABILITY

Test Result

Voltage							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1312	VL	NT	9.20	0.0054	±2.5	PASS
Band4	1312	VN	NT	1.99	0.0012	±2.5	PASS
Band4	1312	VH	NT	2.77	0.0016	±2.5	PASS
Band4	1413	VL	NT	-4.36	-0.0025	±2.5	PASS
Band4	1413	VN	NT	7.86	0.0045	±2.5	PASS
Band4	1413	VH	NT	-7.08	-0.0041	±2.5	PASS
Band4	1513	VL	NT	-7.61	-0.0043	±2.5	PASS
Band4	1513	VN	NT	3.00	0.0017	±2.5	PASS
Band4	1513	VH	NT	-0.70	-0.0004	±2.5	PASS

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1312	NV	-30	-4.59	0.0053	±2.5	PASS
Band4	1312	NV	-20	-0.77	0.0009	±2.5	PASS
Band4	1312	NV	0	-3.07	-0.0018	±2.5	PASS
Band4	1312	NV	-10	6.78	0.0040	±2.5	PASS
Band4	1312	NV	10	-1.20	-0.0007	±2.5	PASS
Band4	1312	NV	20	2.35	0.0014	±2.5	PASS
Band4	1312	NV	30	1.86	0.0011	±2.5	PASS
Band4	1312	NV	40	-3.32	-0.0019	±2.5	PASS
Band4	1312	NV	50	5.67	0.0033	±2.5	PASS
Band4	1413	NV	-30	9.58	0.0055	±2.5	PASS
Band4	1413	NV	-20	-3.52	-0.0020	±2.5	PASS
Band4	1413	NV	-10	8.98	0.0051	±2.5	PASS
Band4	1413	NV	0	8.89	0.0051	±2.5	PASS
Band4	1413	NV	10	-0.56	-0.0003	±2.5	PASS
Band4	1413	NV	20	-7.31	-0.0042	±2.5	PASS
Band4	1413	NV	30	-8.79	-0.0050	±2.5	PASS
Band4	1413	NV	40	9.81	0.0056	±2.5	PASS
Band4	1413	NV	50	3.08	0.0018	±2.5	PASS
Band4	1513	NV	-30	8.05	0.0045	±2.5	PASS
Band4	1513	NV	-20	0.63	0.0004	±2.5	PASS
Band4	1513	NV	-10	5.94	0.0033	±2.5	PASS
Band4	1513	NV	0	-6.50	-0.0036	±2.5	PASS
Band4	1513	NV	10	2.52	0.0014	±2.5	PASS
Band4	1513	NV	20	5.20	0.0029	±2.5	PASS
Band4	1513	NV	30	2.16	0.0012	±2.5	PASS
Band4	1513	NV	40	-5.00	-0.0028	±2.5	PASS
Band4	1513	NV	50	-5.69	-0.0032	±2.5	PASS

MAX Deviation calculation

Frequency Stability	Frequency (MHz)	Limit Line(MHz)	Result
$f_L - \text{MAX}(\Delta f) $	1710.314490	≥ 1710	PASS
$f_H + \text{MAX}(\Delta f) $	1754.680010	≤ 1755	

- Note:
1. $|\text{MAX}(\Delta f)|$ = Max Deviation
 2. f_L = Occ low channel f_L (-13dBm/MHz)
 3. f_H = Occ High channel f_H (-13dBm/MHz)
 4. $|\text{MAX}(\Delta f)|$ = 9.62Hz.

LTE BAND7

PEAK-TO-AVERAGE RATIO(CCDF)

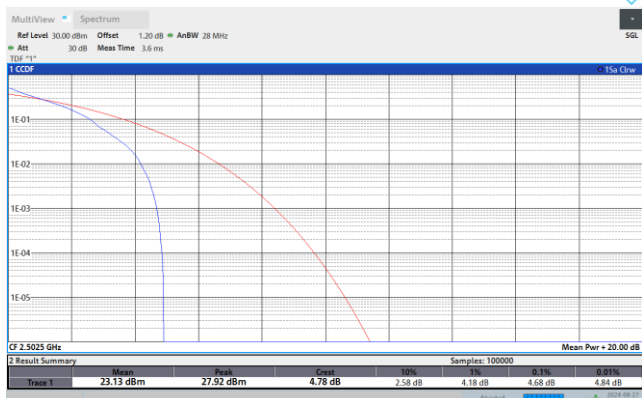
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	4.68	13	PASS
Band7	5MHz	QPSK	20775	25RB#0	5.40	13	PASS
Band7	5MHz	QPSK	21100	1RB#0	5.14	13	PASS
Band7	5MHz	QPSK	21100	25RB#0	5.52	13	PASS
Band7	5MHz	QPSK	21425	1RB#0	4.70	13	PASS
Band7	5MHz	QPSK	21425	25RB#0	5.66	13	PASS
Band7	5MHz	16QAM	20775	1RB#0	5.40	13	PASS
Band7	5MHz	16QAM	20775	25RB#0	6.20	13	PASS
Band7	5MHz	16QAM	21100	1RB#0	5.74	13	PASS
Band7	5MHz	16QAM	21100	25RB#0	6.32	13	PASS
Band7	5MHz	16QAM	21425	1RB#0	5.56	13	PASS
Band7	5MHz	16QAM	21425	25RB#0	6.50	13	PASS
Band7	5MHz	64QAM	20775	1RB#0	5.92	13	PASS
Band7	5MHz	64QAM	20775	25RB#0	6.22	13	PASS
Band7	5MHz	64QAM	21100	1RB#0	6.60	13	PASS
Band7	5MHz	64QAM	21100	25RB#0	6.34	13	PASS
Band7	5MHz	64QAM	21425	1RB#0	6.48	13	PASS
Band7	5MHz	64QAM	21425	25RB#0	6.64	13	PASS
Band7	10MHz	QPSK	20800	1RB#0	4.56	13	PASS
Band7	10MHz	QPSK	20800	50RB#0	5.44	13	PASS
Band7	10MHz	QPSK	21100	1RB#0	5.12	13	PASS
Band7	10MHz	QPSK	21100	50RB#0	5.50	13	PASS
Band7	10MHz	QPSK	21400	1RB#0	4.72	13	PASS
Band7	10MHz	QPSK	21400	50RB#0	5.62	13	PASS
Band7	10MHz	16QAM	20800	1RB#0	5.56	13	PASS
Band7	10MHz	16QAM	20800	50RB#0	6.12	13	PASS
Band7	10MHz	16QAM	21100	1RB#0	5.72	13	PASS
Band7	10MHz	16QAM	21100	50RB#0	6.22	13	PASS
Band7	10MHz	16QAM	21400	1RB#0	5.46	13	PASS
Band7	10MHz	16QAM	21400	50RB#0	6.40	13	PASS
Band7	10MHz	64QAM	20800	1RB#0	5.82	13	PASS
Band7	10MHz	64QAM	20800	50RB#0	6.24	13	PASS
Band7	10MHz	64QAM	21100	1RB#0	6.10	13	PASS
Band7	10MHz	64QAM	21100	50RB#0	6.40	13	PASS
Band7	10MHz	64QAM	21400	1RB#0	6.48	13	PASS
Band7	10MHz	64QAM	21400	50RB#0	6.50	13	PASS
Band7	15MHz	QPSK	20825	1RB#0	4.50	13	PASS
Band7	15MHz	QPSK	20825	75RB#0	5.68	13	PASS
Band7	15MHz	QPSK	21100	1RB#0	4.98	13	PASS
Band7	15MHz	QPSK	21100	75RB#0	5.80	13	PASS
Band7	15MHz	QPSK	21375	1RB#0	5.02	13	PASS

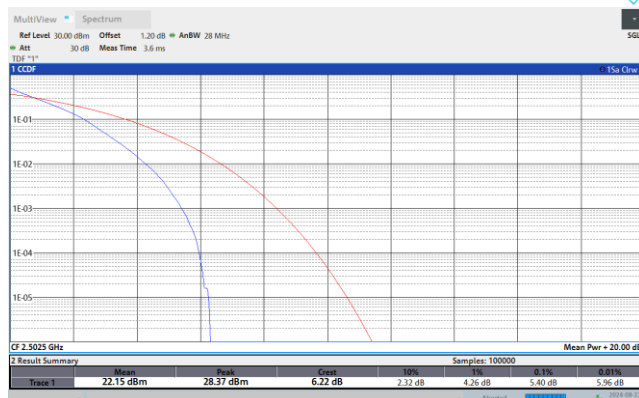
Band7	15MHz	QPSK	21375	75RB#0	5.60	13	PASS
Band7	15MHz	16QAM	20825	1RB#0	5.46	13	PASS
Band7	15MHz	16QAM	20825	75RB#0	6.28	13	PASS
Band7	15MHz	16QAM	21100	1RB#0	6.14	13	PASS
Band7	15MHz	16QAM	21100	75RB#0	6.36	13	PASS
Band7	15MHz	16QAM	21375	1RB#0	5.68	13	PASS
Band7	15MHz	16QAM	21375	75RB#0	6.52	13	PASS
Band7	15MHz	64QAM	20825	1RB#0	5.80	13	PASS
Band7	15MHz	64QAM	20825	75RB#0	6.38	13	PASS
Band7	15MHz	64QAM	21100	1RB#0	6.16	13	PASS
Band7	15MHz	64QAM	21100	75RB#0	6.44	13	PASS
Band7	15MHz	64QAM	21375	1RB#0	6.48	13	PASS
Band7	15MHz	64QAM	21375	75RB#0	6.56	13	PASS
Band7	20MHz	QPSK	20850	1RB#0	4.54	13	PASS
Band7	20MHz	QPSK	20850	100RB#0	5.44	13	PASS
Band7	20MHz	QPSK	21100	1RB#0	4.94	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.58	13	PASS
Band7	20MHz	QPSK	21350	1RB#0	5.02	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.60	13	PASS
Band7	20MHz	16QAM	20850	1RB#0	5.08	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	6.26	13	PASS
Band7	20MHz	16QAM	21100	1RB#0	5.88	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	6.38	13	PASS
Band7	20MHz	16QAM	21350	1RB#0	5.94	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	6.38	13	PASS
Band7	20MHz	64QAM	20850	1RB#0	5.86	13	PASS
Band7	20MHz	64QAM	20850	100RB#0	6.38	13	PASS
Band7	20MHz	64QAM	21100	1RB#0	6.20	13	PASS
Band7	20MHz	64QAM	21100	100RB#0	6.48	13	PASS
Band7	20MHz	64QAM	21350	1RB#0	6.16	13	PASS
Band7	20MHz	64QAM	21350	100RB#0	6.44	13	PASS

Test Graphs

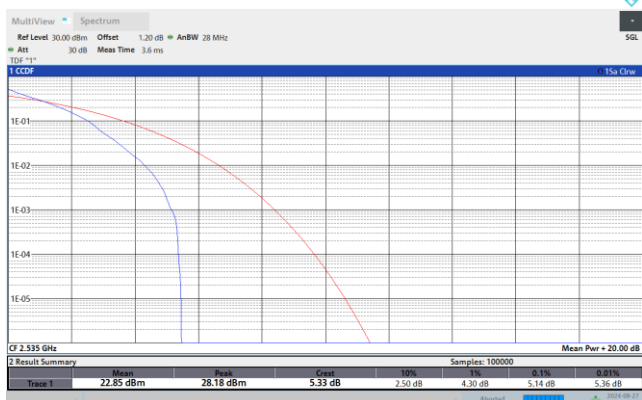
Band7-5MHz-QPSK-20775-1RB#0



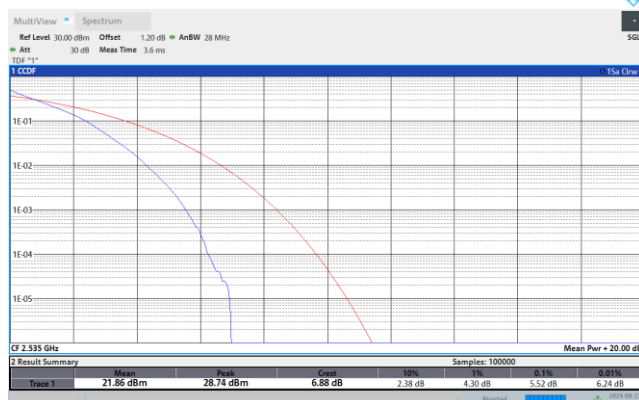
Band7-5MHz-QPSK-20775-25RB#0



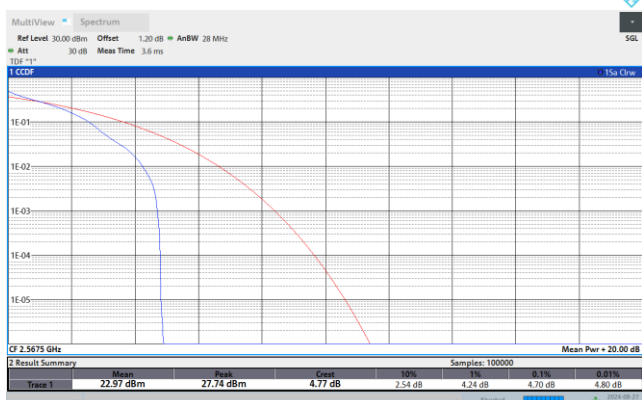
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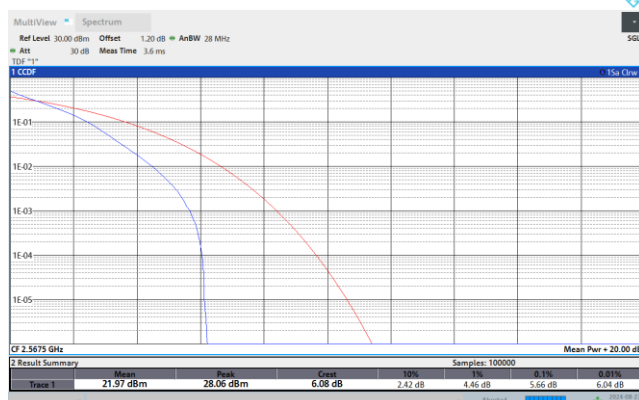
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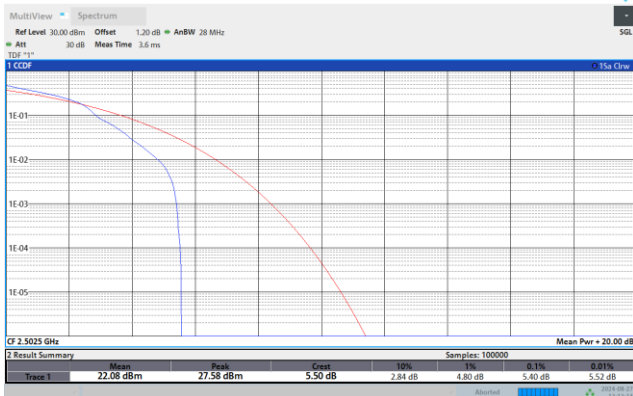


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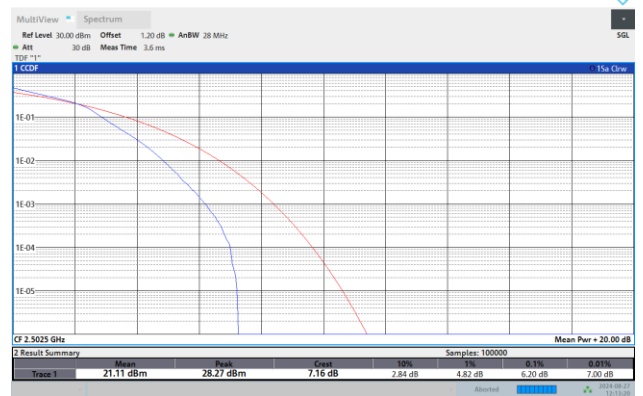


Band7-5MHz-16QAM-20775-1RB#0

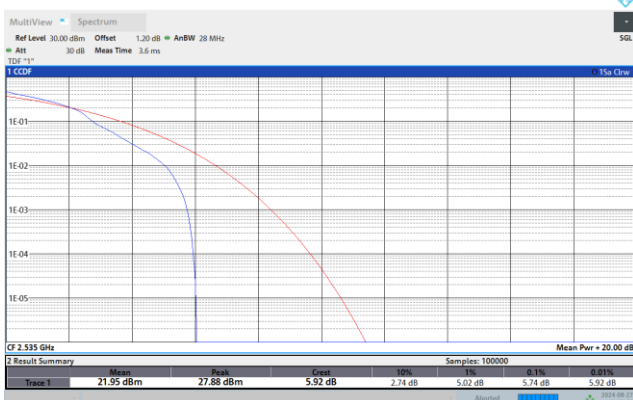
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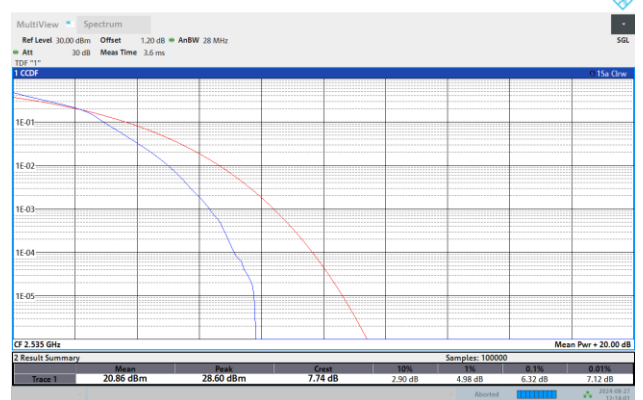
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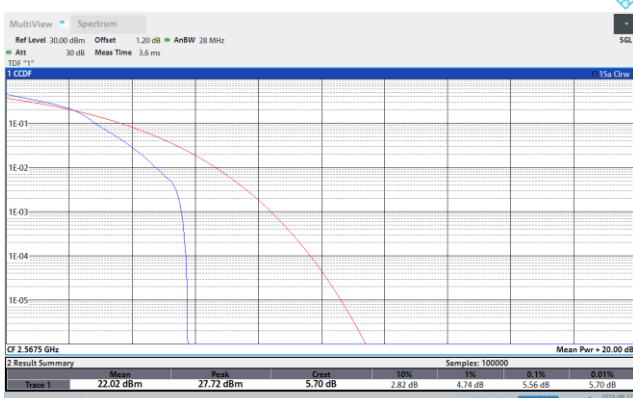
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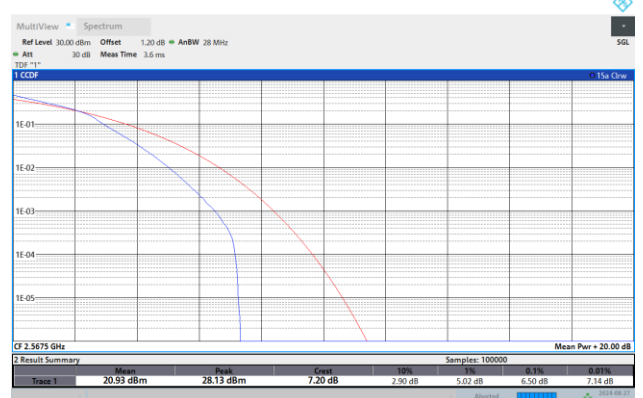
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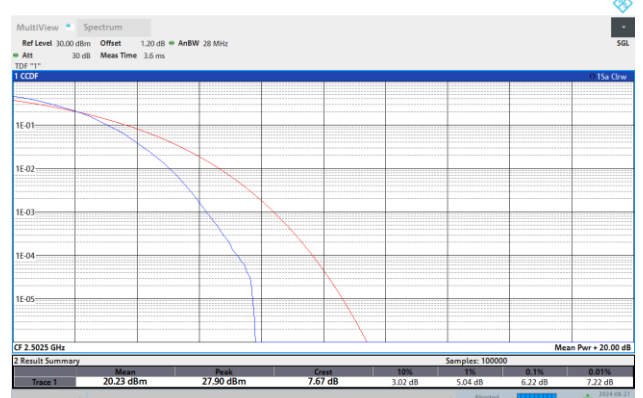
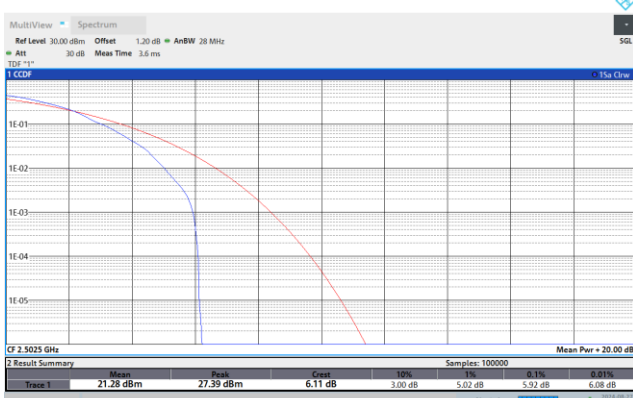
Band7-5MHz-16QAM-21425-25RB#0



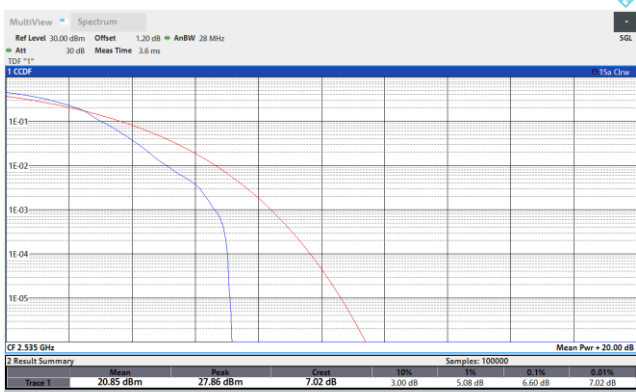
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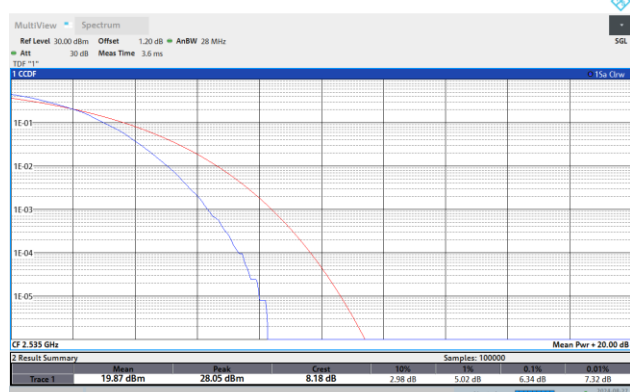
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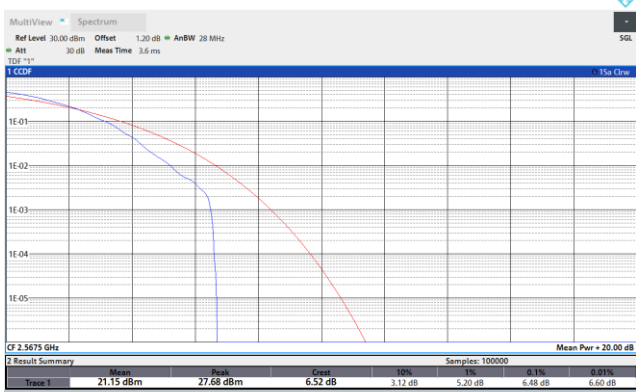
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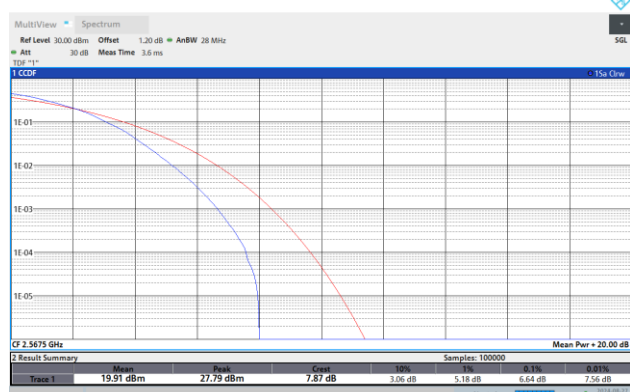
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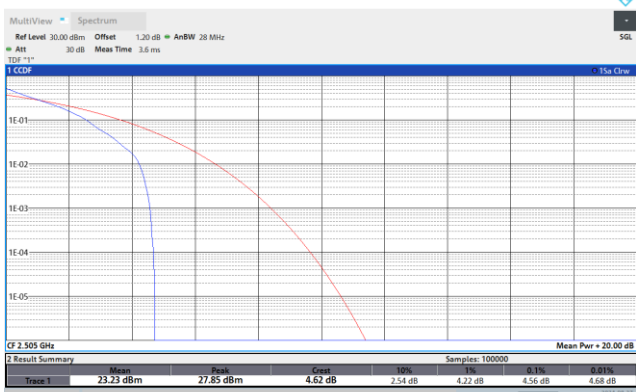
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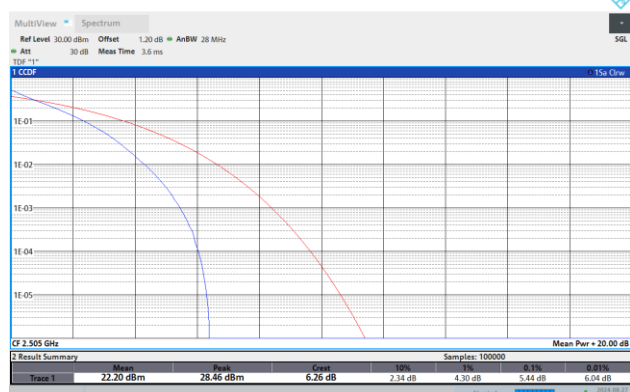
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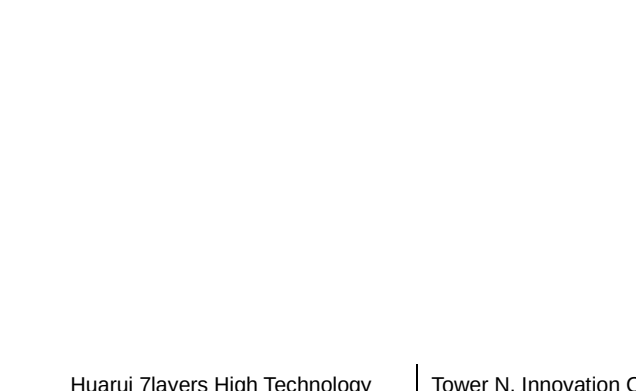
Band7-10MHz-QPSK-20800-1RB#0



Band7-10MHz-QPSK-20800-50RB#0

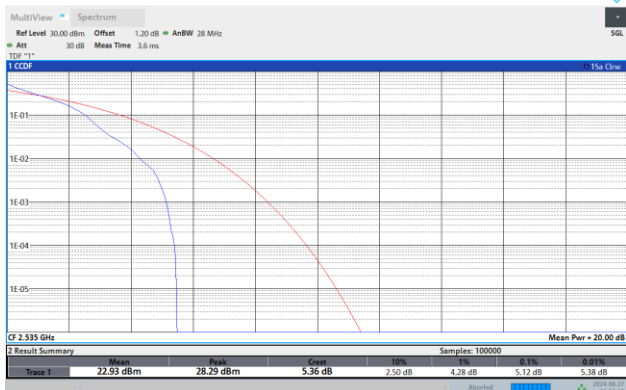


Band7-10MHz-QPSK-21100-1RB#0

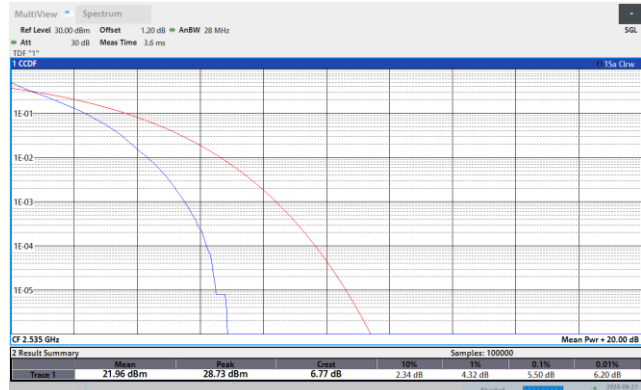


Band7-10MHz-QPSK-21100-50RB#0

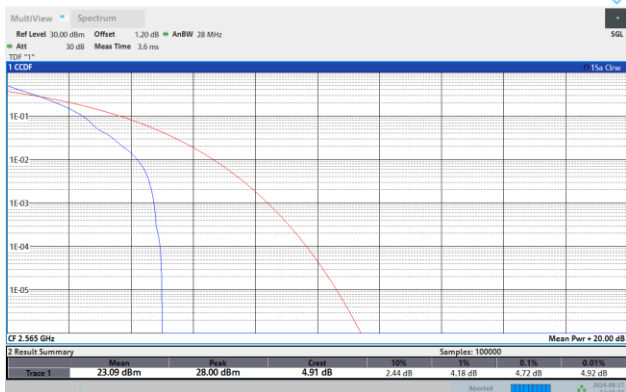




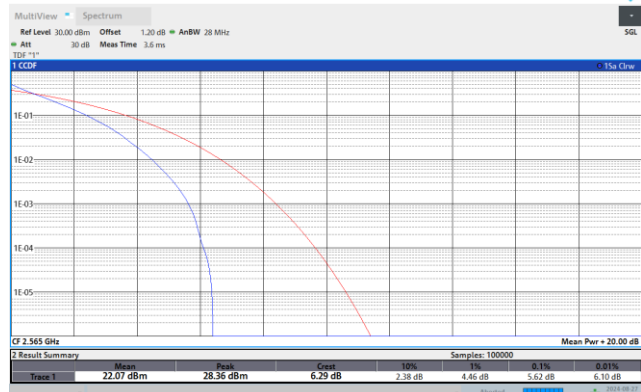
Band7-10MHz-QPSK-21400-1RB#0



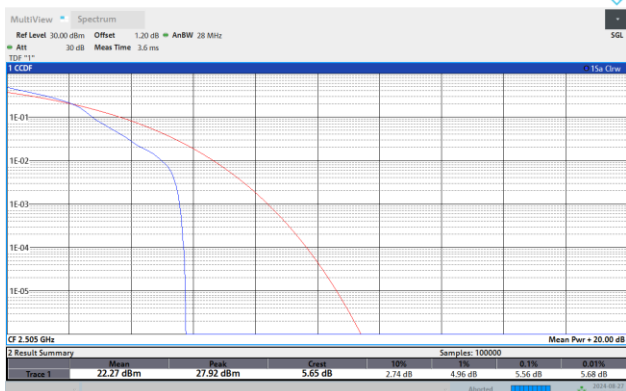
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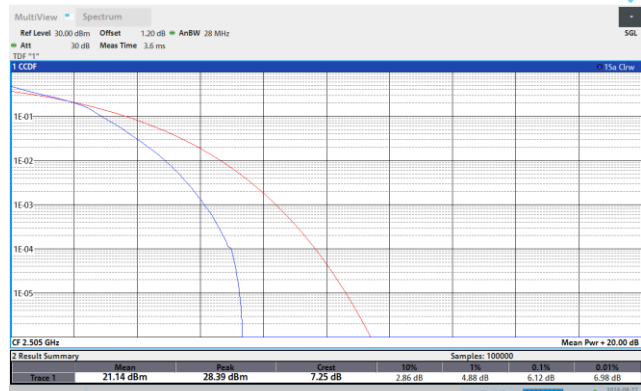
Band7-10MHz-16QAM-20800-1RB#0



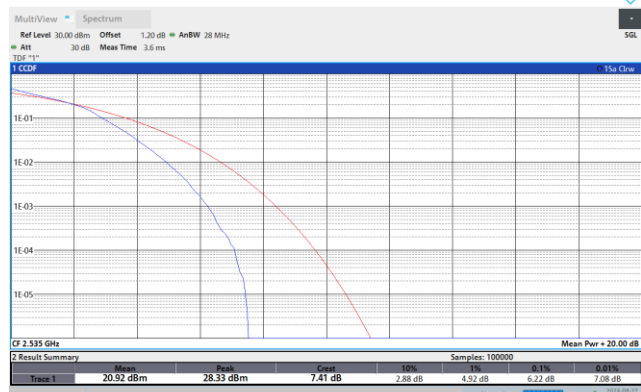
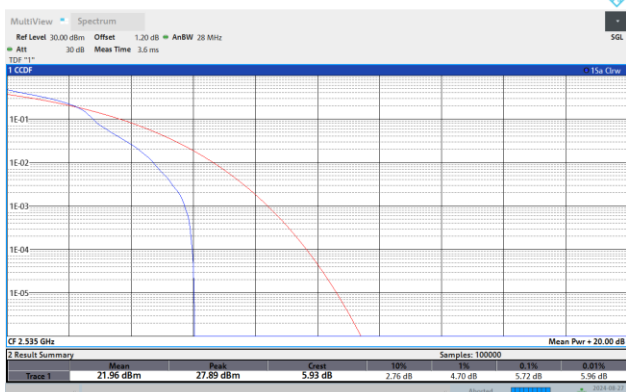
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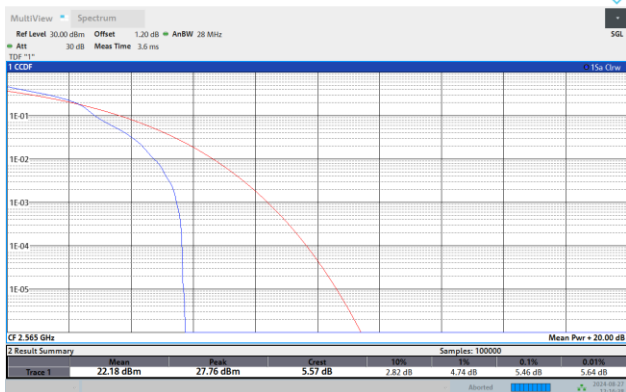
Band7-10MHz-16QAM-21100-1RB#0



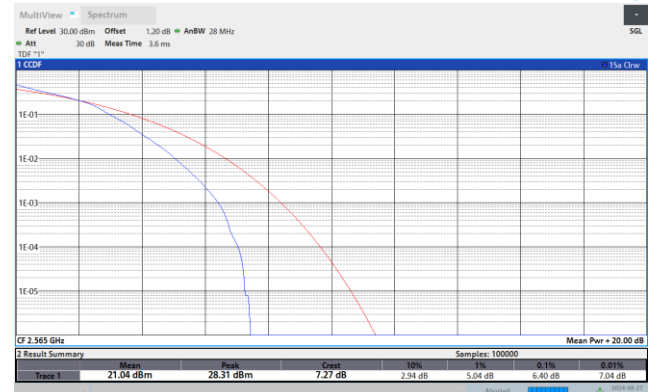
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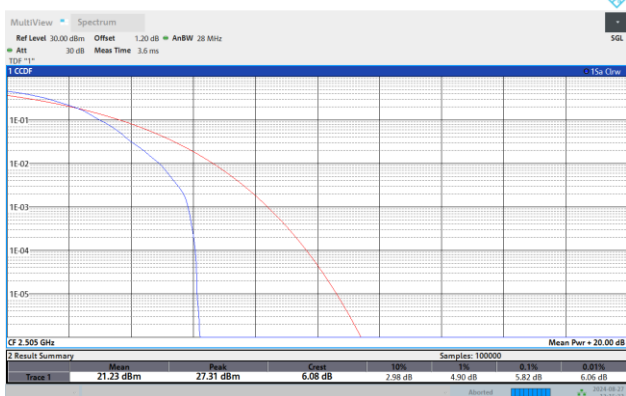
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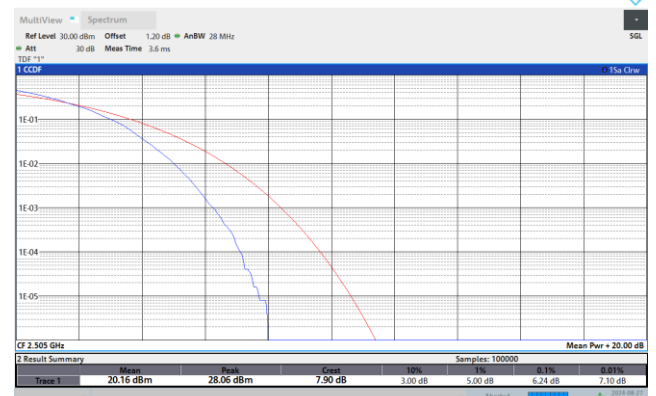
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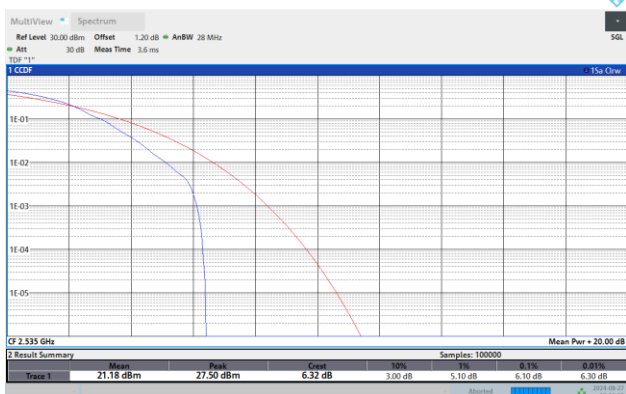
Band7-10MHz-64QAM-20800-1RB#0



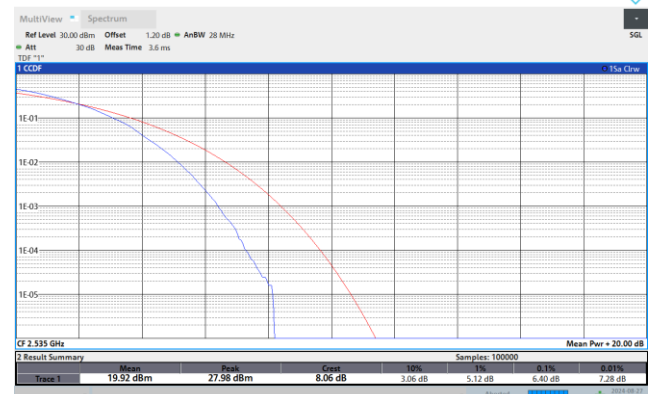
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Band7-10MHz-64QAM-21100-1RB#0

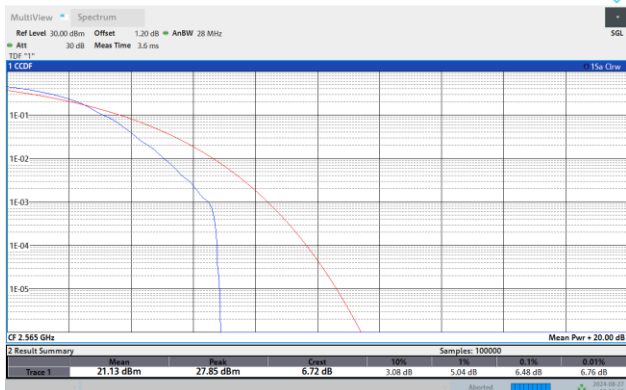


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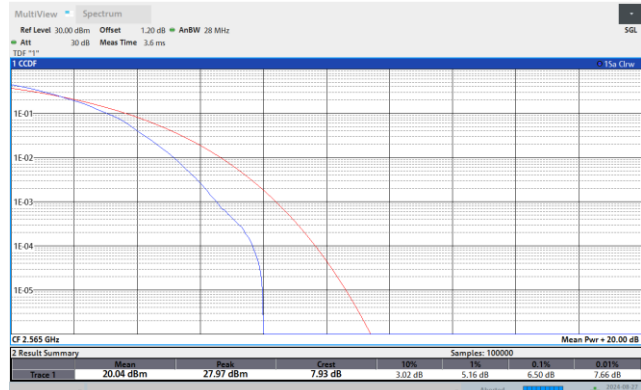


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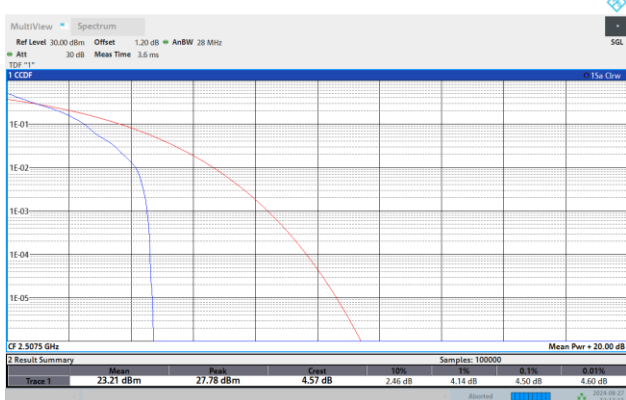
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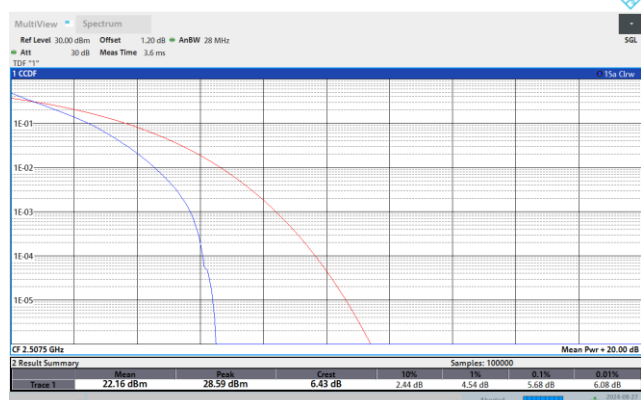
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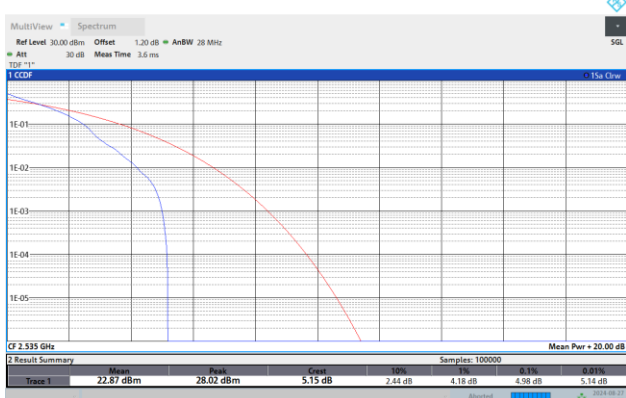
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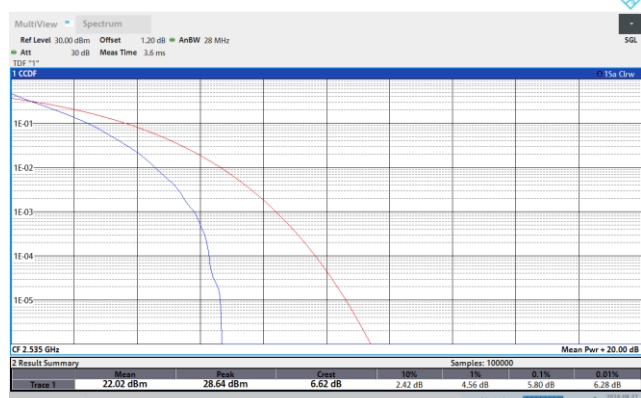
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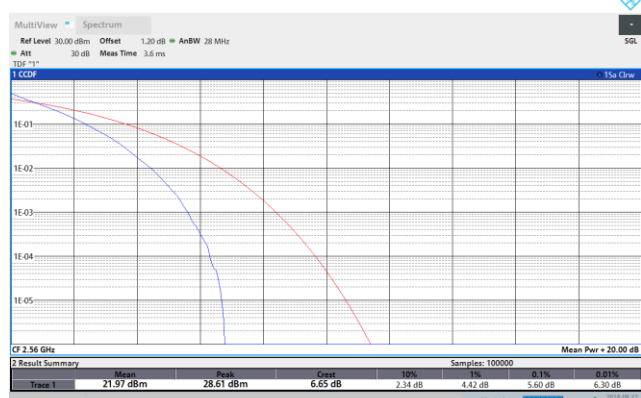
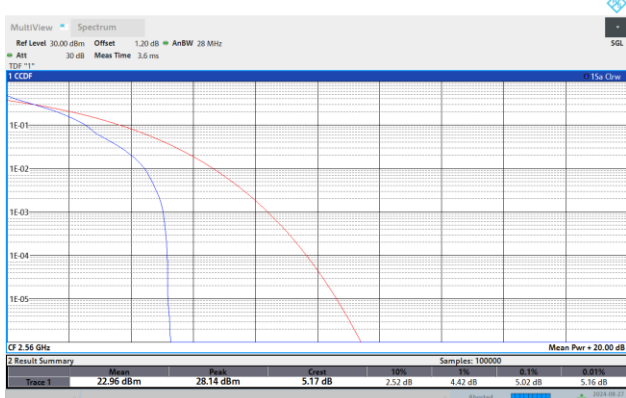
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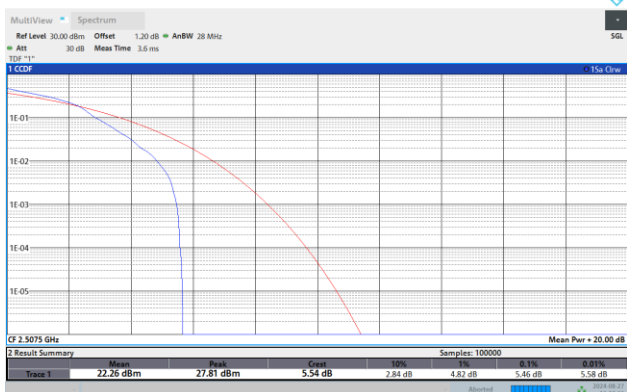
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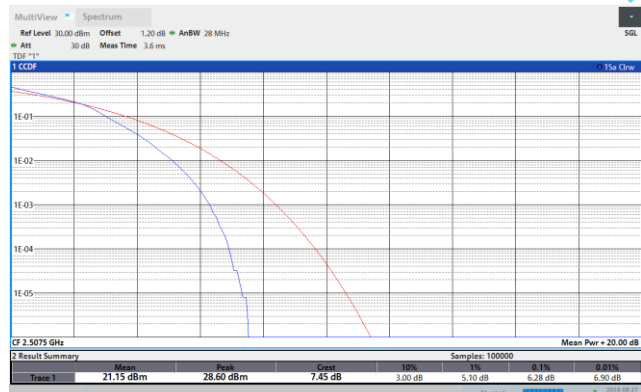
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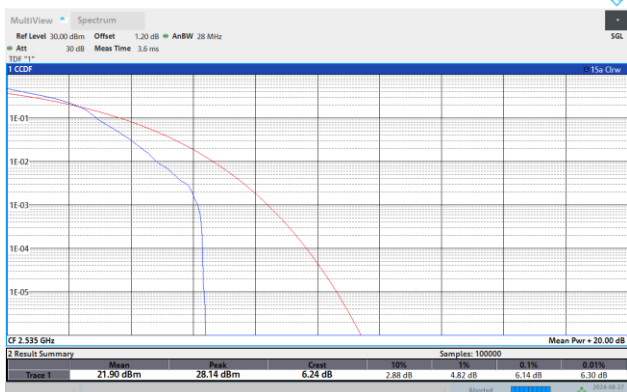
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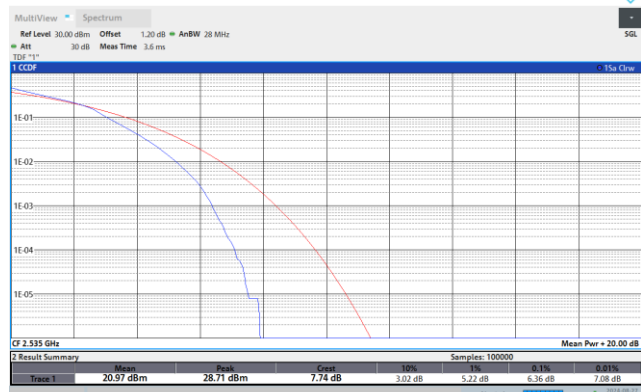
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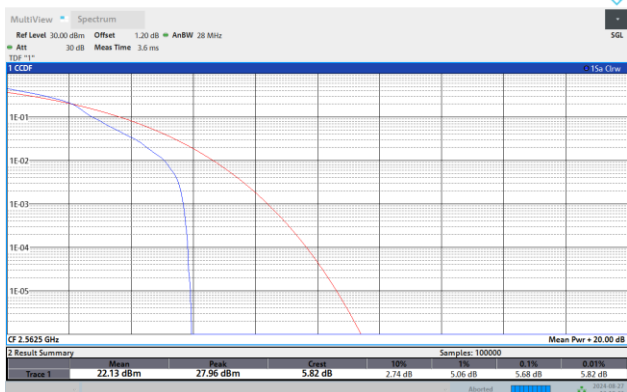
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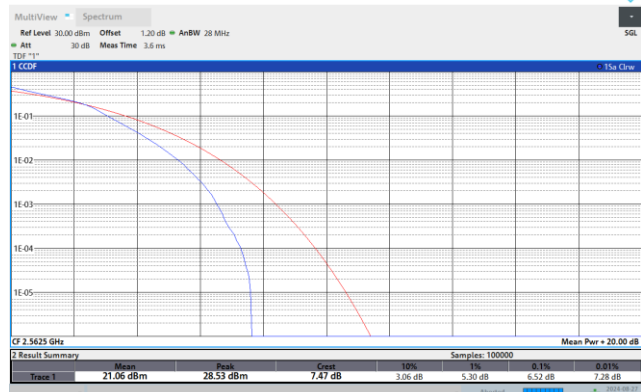
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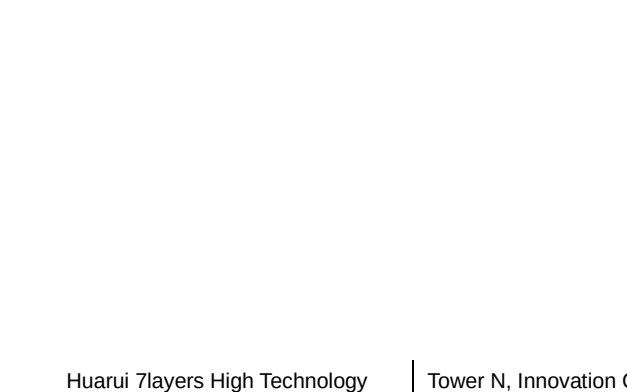
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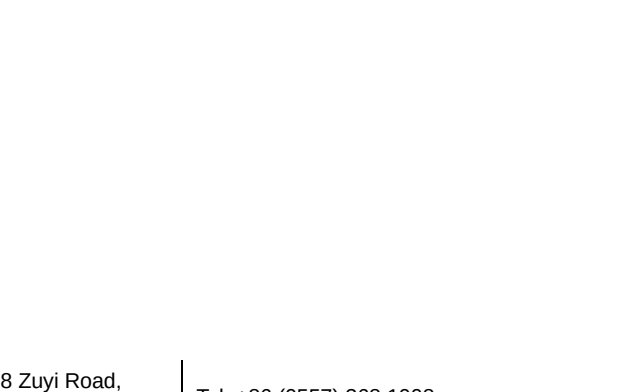
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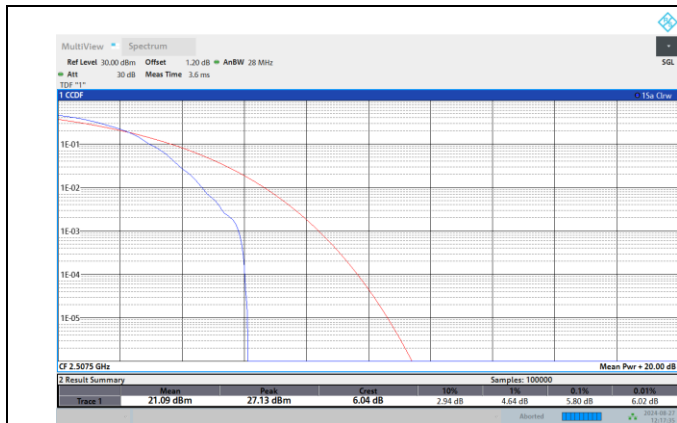


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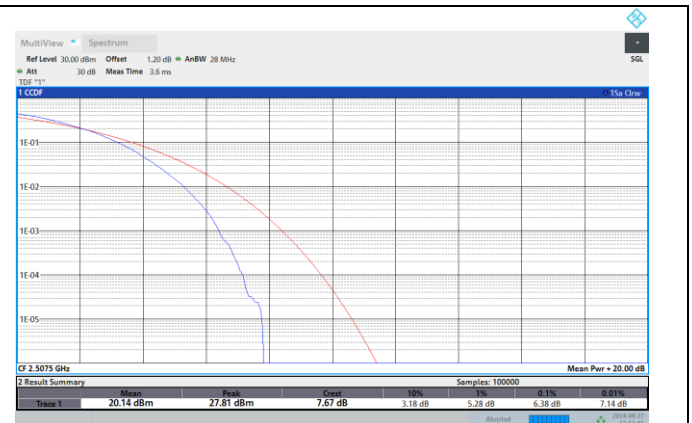


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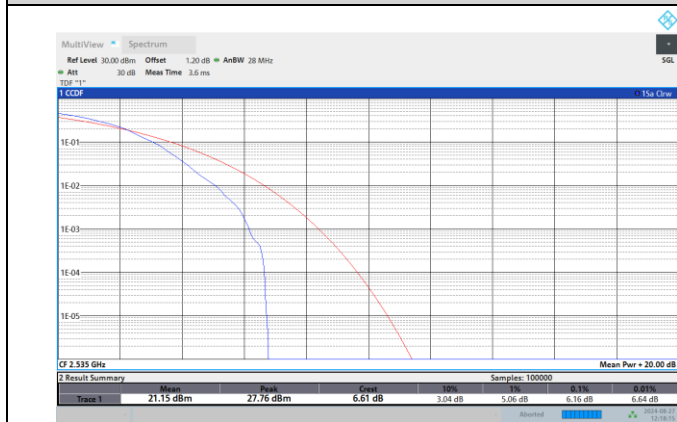




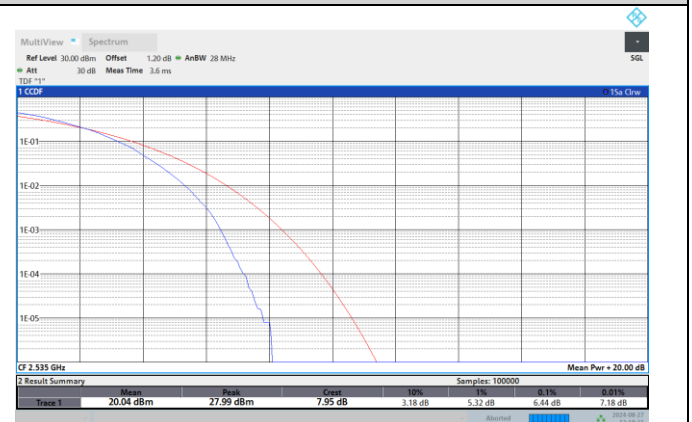
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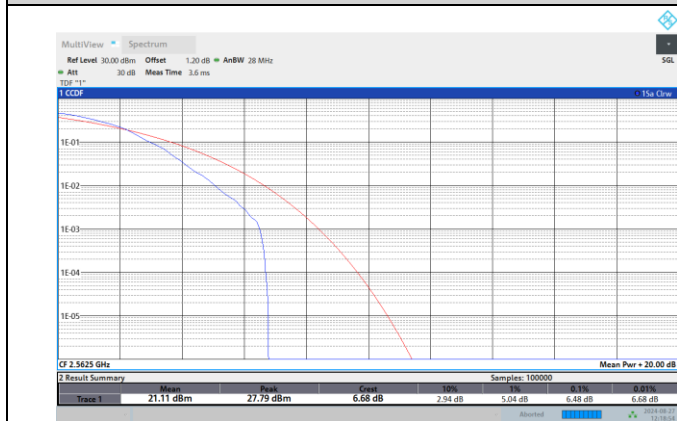
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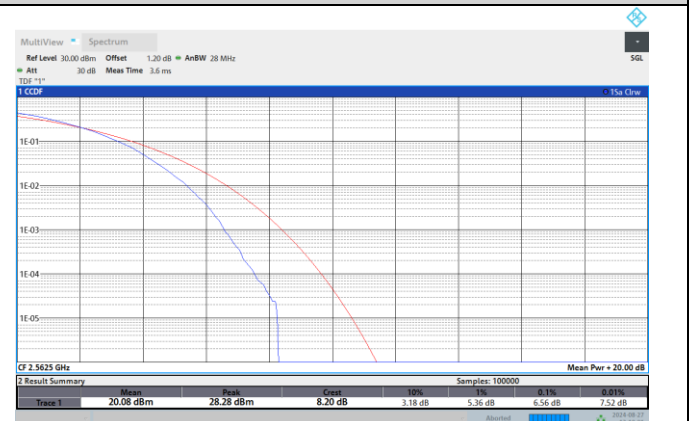
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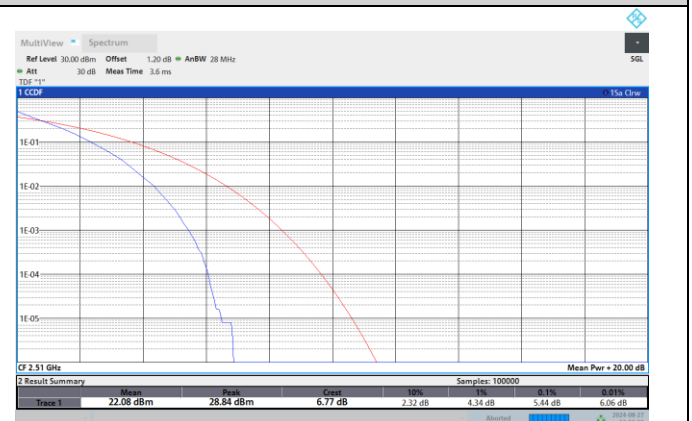
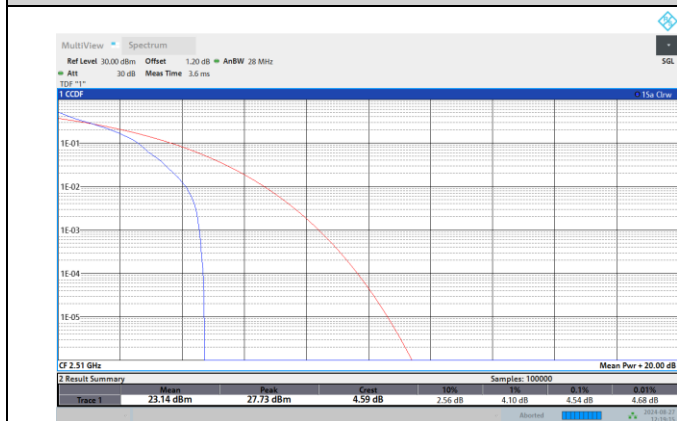
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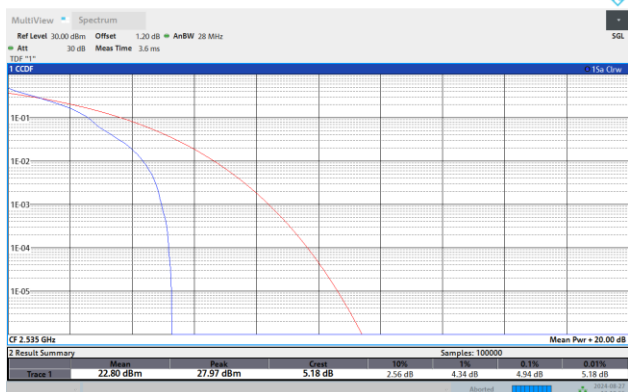
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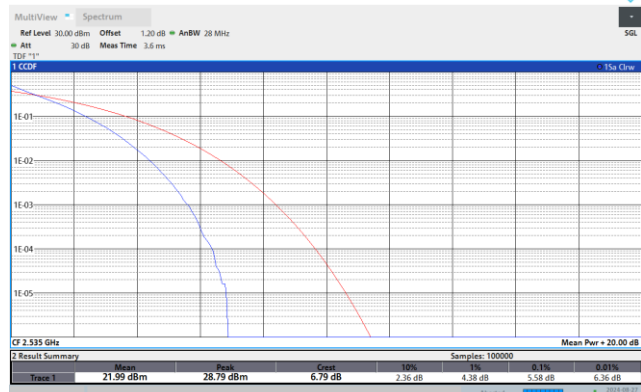
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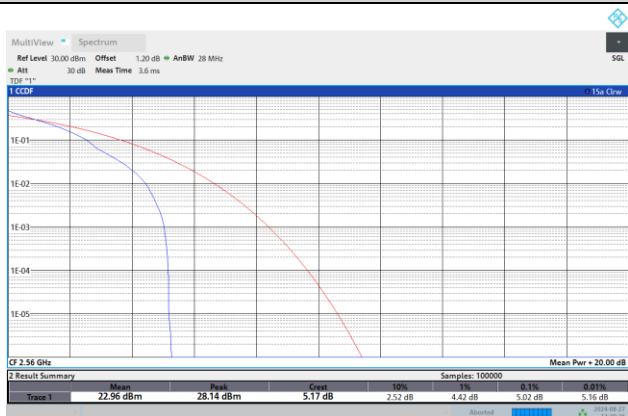
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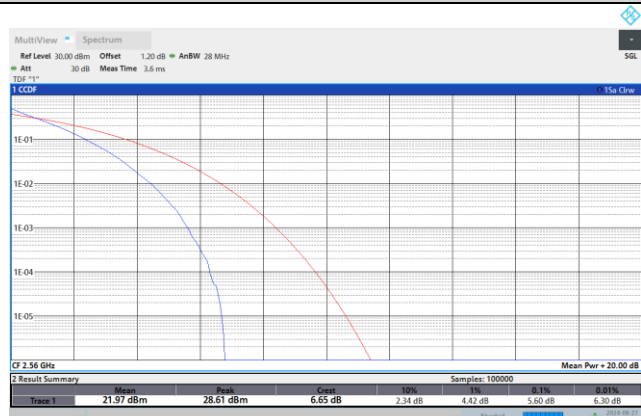
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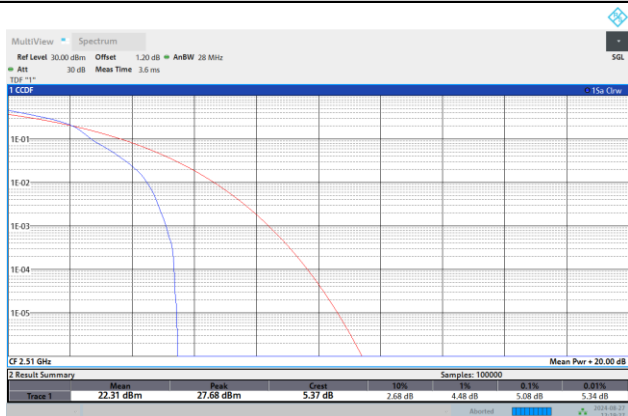
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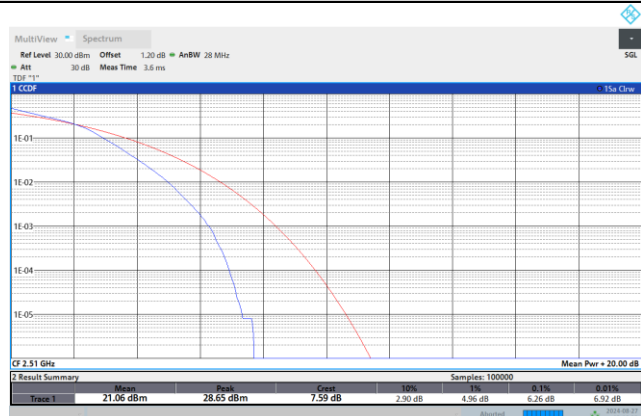
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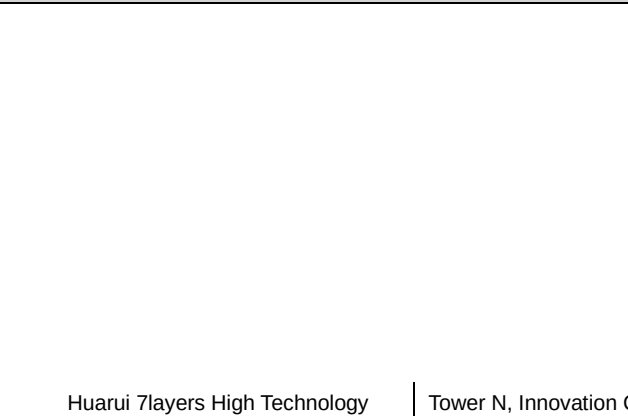
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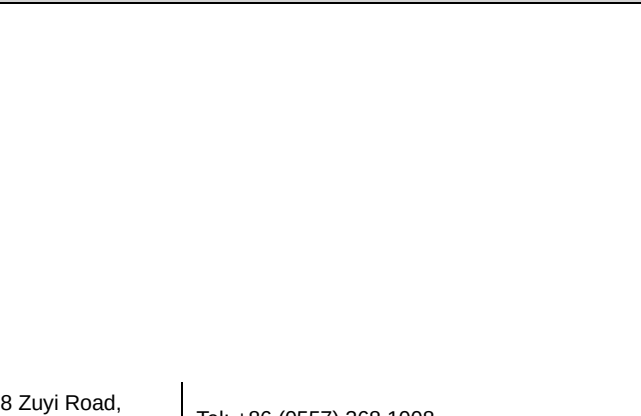
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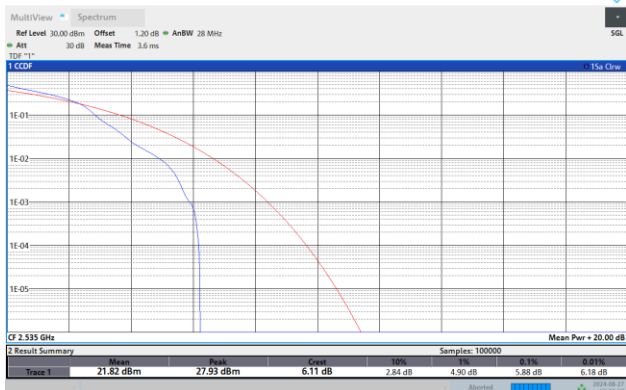


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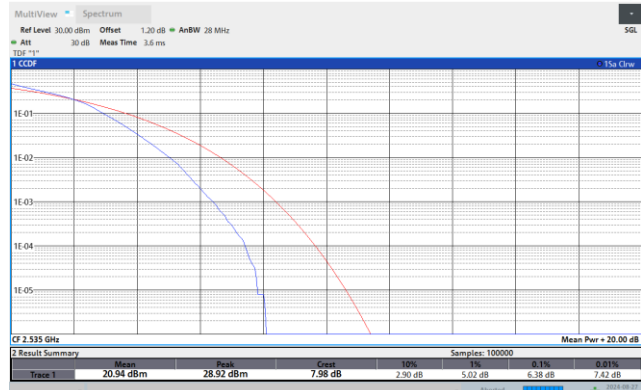


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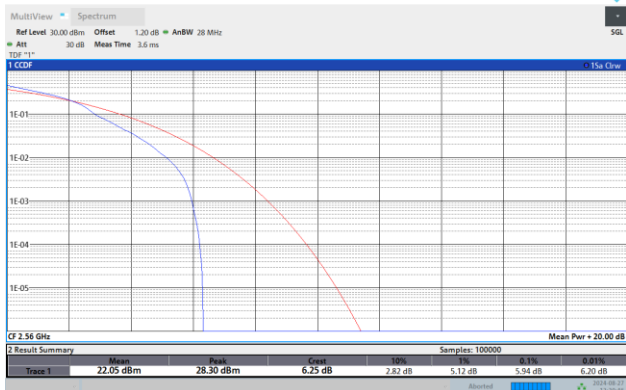




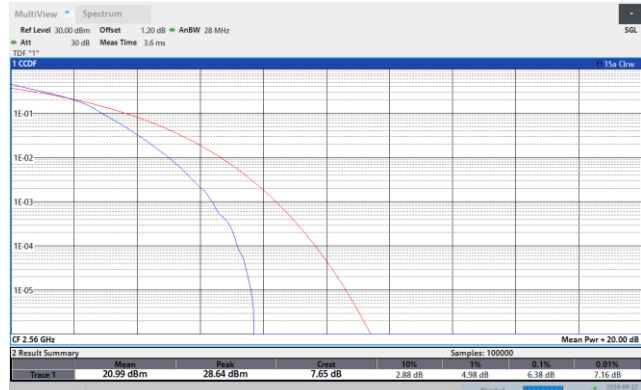
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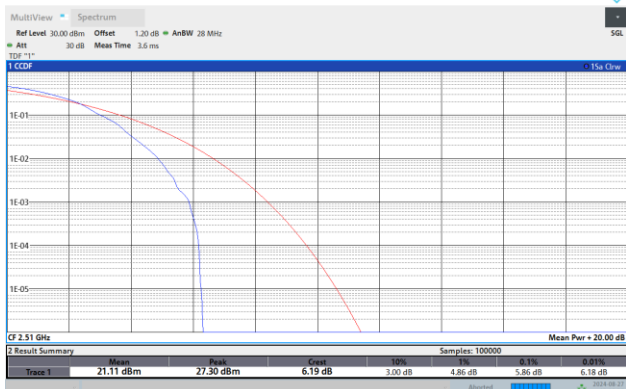
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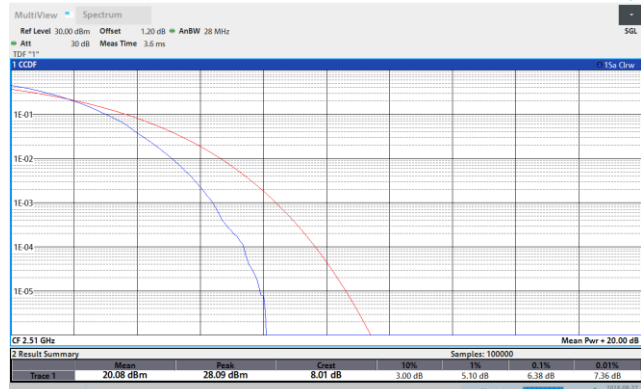
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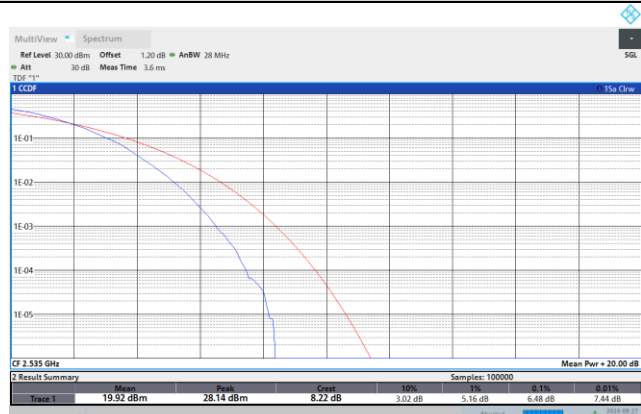
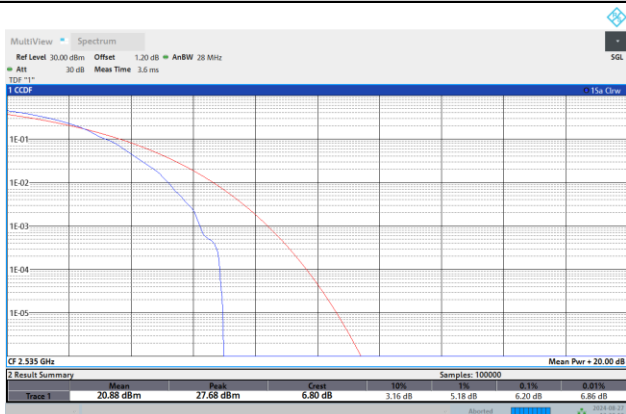
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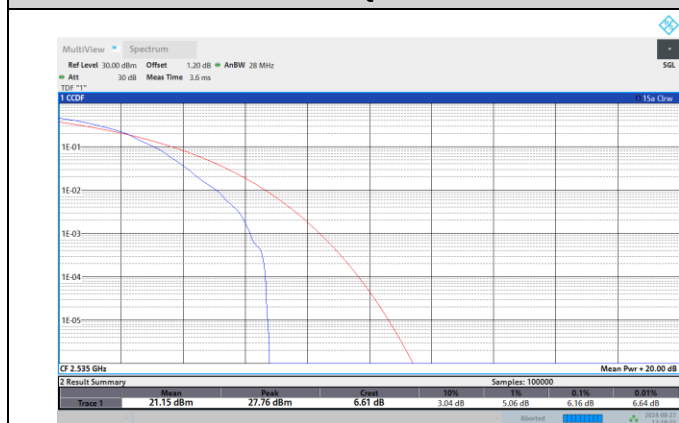
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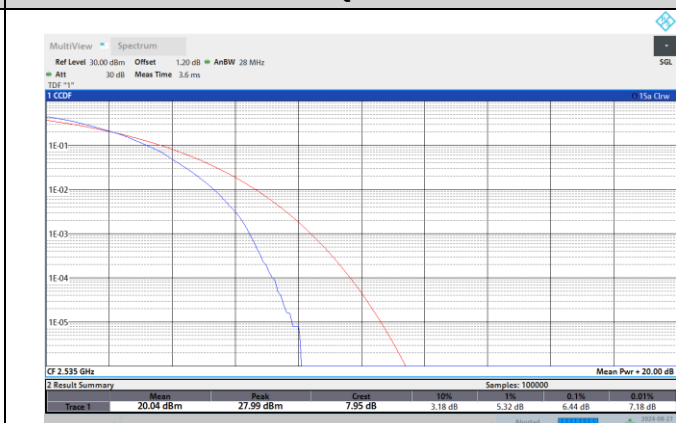
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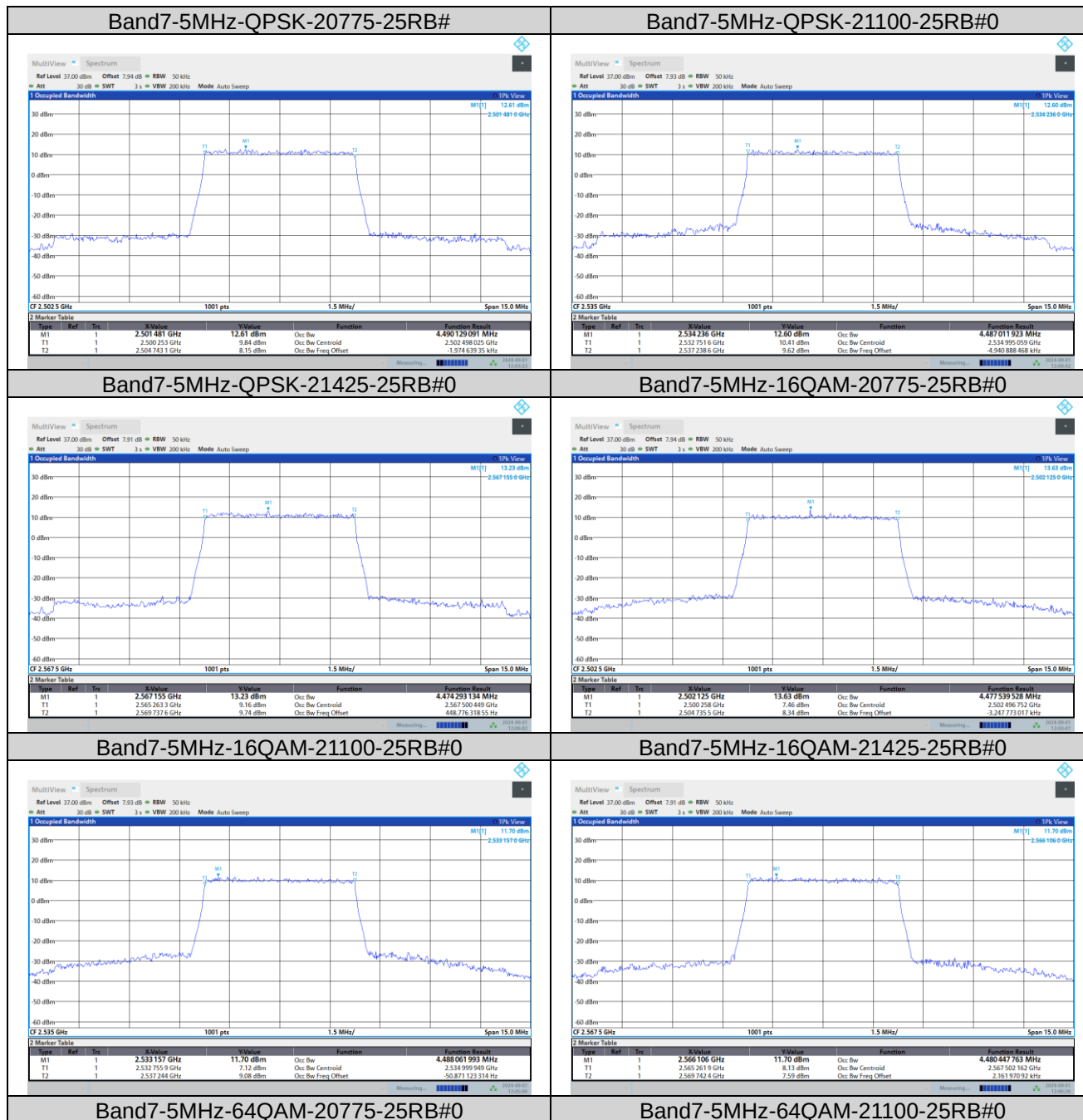
26DB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.490	4.945	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.487	4.915	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.474	4.885	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.478	4.840	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.488	4.900	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.480	4.930	PASS
Band7	5MHz	64QAM	20775	25RB#0	4.479	4.900	PASS
Band7	5MHz	64QAM	21100	25RB#0	4.483	4.915	PASS
Band7	5MHz	64QAM	21425	25RB#0	4.471	4.885	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.954	9.800	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.936	9.710	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.940	9.710	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.948	9.710	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.942	9.710	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.940	9.710	PASS
Band7	10MHz	64QAM	20800	50RB#0	8.944	9.620	PASS
Band7	10MHz	64QAM	21100	50RB#0	8.931	9.710	PASS
Band7	10MHz	64QAM	21400	50RB#0	8.935	9.680	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.465	14.700	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.399	14.565	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.407	14.565	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.442	14.610	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.432	14.610	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.427	14.610	PASS
Band7	15MHz	64QAM	20825	75RB#0	13.408	14.610	PASS
Band7	15MHz	64QAM	21100	75RB#0	13.418	14.565	PASS
Band7	15MHz	64QAM	21375	75RB#0	13.446	14.520	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.877	19.061	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.858	19.061	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.909	19.361	PASS
Band7	20MHz	16QAM	20850	100RB#0	17.901	19.241	PASS
Band7	20MHz	16QAM	21100	100RB#0	17.877	19.301	PASS
Band7	20MHz	16QAM	21350	100RB#0	17.877	19.181	PASS
Band7	20MHz	64QAM	20850	100RB#0	17.879	19.241	PASS
Band7	20MHz	64QAM	21100	100RB#0	17.883	19.181	PASS
Band7	20MHz	64QAM	21350	100RB#0	17.857	19.061	PASS

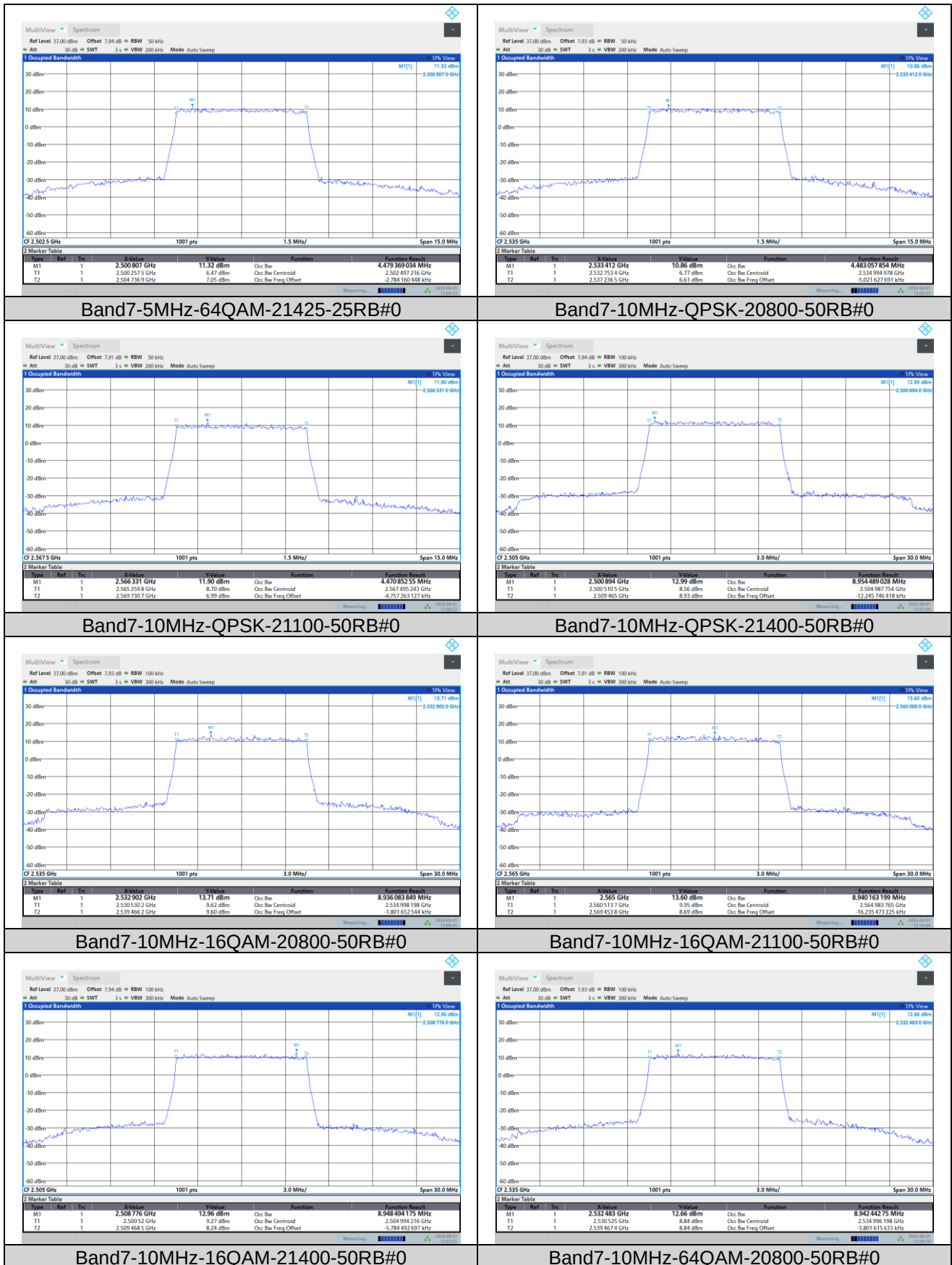
Test Graphs

Occupied Bandwidth





Test Report No.: PSU-NQN2406210109RF03





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