

Appendix for Band 12

Product Name: Zenius08

Model No: GMT-08QA-2301

Appendix A: Average Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	23.03	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.15	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	22.99	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	23.05	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	23.04	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	23.04	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.04	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.08	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.13	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	23.07	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	23.16	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	23.13	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	23.17	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.11	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.07	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.22	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	22.98	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	23.11	PASS
Band12	1.4MHz	QPSK	23173	3RB#1	23.13	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	23.15	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.12	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	22.16	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	22.32	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	22.13	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	21.95	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	21.94	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	21.89	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.09	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.19	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.35	PASS

Band12	1.4MHz	16QAM	23095	1RB#5	22.25	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	22.00	PASS
Band12	1.4MHz	16QAM	23095	3RB#1	21.98	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	22.04	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	21.17	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	22.17	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	22.28	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	22.19	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	22.01	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	21.99	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	22.01	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	20.99	PASS
Band12	3MHz	QPSK	23025	1RB#0	22.98	PASS
Band12	3MHz	QPSK	23025	1RB#8	22.55	PASS
Band12	3MHz	QPSK	23025	1RB#14	22.56	PASS
Band12	3MHz	QPSK	23025	8RB#0	21.48	PASS
Band12	3MHz	QPSK	23025	8RB#4	21.69	PASS
Band12	3MHz	QPSK	23025	8RB#7	21.77	PASS
Band12	3MHz	QPSK	23025	15RB#0	21.71	PASS
Band12	3MHz	QPSK	23095	1RB#0	23.16	PASS
Band12	3MHz	QPSK	23095	1RB#8	22.73	PASS
Band12	3MHz	QPSK	23095	1RB#14	22.58	PASS
Band12	3MHz	QPSK	23095	8RB#0	21.93	PASS
Band12	3MHz	QPSK	23095	8RB#4	22.03	PASS
Band12	3MHz	QPSK	23095	8RB#7	22.00	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.08	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.19	PASS
Band12	3MHz	QPSK	23165	1RB#8	22.94	PASS
Band12	3MHz	QPSK	23165	1RB#14	22.59	PASS
Band12	3MHz	QPSK	23165	8RB#0	21.70	PASS
Band12	3MHz	QPSK	23165	8RB#4	21.86	PASS
Band12	3MHz	QPSK	23165	8RB#7	21.84	PASS
Band12	3MHz	QPSK	23165	15RB#0	21.91	PASS
Band12	3MHz	16QAM	23025	1RB#0	21.68	PASS
Band12	3MHz	16QAM	23025	1RB#8	21.62	PASS
Band12	3MHz	16QAM	23025	1RB#14	21.71	PASS
Band12	3MHz	16QAM	23025	8RB#0	20.62	PASS

Band12	3MHz	16QAM	23025	8RB#4	20.71	PASS
Band12	3MHz	16QAM	23025	8RB#7	20.73	PASS
Band12	3MHz	16QAM	23025	15RB#0	20.84	PASS
Band12	3MHz	16QAM	23095	1RB#0	21.90	PASS
Band12	3MHz	16QAM	23095	1RB#8	21.93	PASS
Band12	3MHz	16QAM	23095	1RB#14	21.77	PASS
Band12	3MHz	16QAM	23095	8RB#0	20.98	PASS
Band12	3MHz	16QAM	23095	8RB#4	21.10	PASS
Band12	3MHz	16QAM	23095	8RB#7	21.00	PASS
Band12	3MHz	16QAM	23095	15RB#0	20.87	PASS
Band12	3MHz	16QAM	23165	1RB#0	21.55	PASS
Band12	3MHz	16QAM	23165	1RB#8	21.55	PASS
Band12	3MHz	16QAM	23165	1RB#14	21.48	PASS
Band12	3MHz	16QAM	23165	8RB#0	20.84	PASS
Band12	3MHz	16QAM	23165	8RB#4	21.11	PASS
Band12	3MHz	16QAM	23165	8RB#7	20.82	PASS
Band12	3MHz	16QAM	23165	15RB#0	20.91	PASS
Band12	5MHz	QPSK	23035	1RB#0	22.56	PASS
Band12	5MHz	QPSK	23035	1RB#12	22.69	PASS
Band12	5MHz	QPSK	23035	1RB#24	22.60	PASS
Band12	5MHz	QPSK	23035	12RB#0	21.49	PASS
Band12	5MHz	QPSK	23035	12RB#6	21.47	PASS
Band12	5MHz	QPSK	23035	12RB#13	21.66	PASS
Band12	5MHz	QPSK	23035	25RB#0	21.56	PASS
Band12	5MHz	QPSK	23095	1RB#0	22.70	PASS
Band12	5MHz	QPSK	23095	1RB#12	22.66	PASS
Band12	5MHz	QPSK	23095	1RB#24	22.57	PASS
Band12	5MHz	QPSK	23095	12RB#0	21.64	PASS
Band12	5MHz	QPSK	23095	12RB#6	21.70	PASS
Band12	5MHz	QPSK	23095	12RB#13	21.60	PASS
Band12	5MHz	QPSK	23095	25RB#0	21.62	PASS
Band12	5MHz	QPSK	23155	1RB#0	22.70	PASS
Band12	5MHz	QPSK	23155	1RB#12	22.74	PASS
Band12	5MHz	QPSK	23155	1RB#24	22.57	PASS
Band12	5MHz	QPSK	23155	12RB#0	21.68	PASS
Band12	5MHz	QPSK	23155	12RB#6	21.68	PASS
Band12	5MHz	QPSK	23155	12RB#13	21.55	PASS

Band12	5MHz	QPSK	23155	25RB#0	21.62	PASS
Band12	5MHz	16QAM	23035	1RB#0	21.53	PASS
Band12	5MHz	16QAM	23035	1RB#12	21.66	PASS
Band12	5MHz	16QAM	23035	1RB#24	21.56	PASS
Band12	5MHz	16QAM	23035	12RB#0	20.44	PASS
Band12	5MHz	16QAM	23035	12RB#6	20.46	PASS
Band12	5MHz	16QAM	23035	12RB#13	20.63	PASS
Band12	5MHz	16QAM	23035	25RB#0	20.60	PASS
Band12	5MHz	16QAM	23095	1RB#0	21.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	21.83	PASS
Band12	5MHz	16QAM	23095	1RB#24	21.75	PASS
Band12	5MHz	16QAM	23095	12RB#0	20.72	PASS
Band12	5MHz	16QAM	23095	12RB#6	20.75	PASS
Band12	5MHz	16QAM	23095	12RB#13	20.68	PASS
Band12	5MHz	16QAM	23095	25RB#0	20.67	PASS
Band12	5MHz	16QAM	23155	1RB#0	21.70	PASS
Band12	5MHz	16QAM	23155	1RB#12	21.70	PASS
Band12	5MHz	16QAM	23155	1RB#24	21.61	PASS
Band12	5MHz	16QAM	23155	12RB#0	20.71	PASS
Band12	5MHz	16QAM	23155	12RB#6	20.72	PASS
Band12	5MHz	16QAM	23155	12RB#13	20.60	PASS
Band12	5MHz	16QAM	23155	25RB#0	20.71	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.24	PASS
Band12	10MHz	QPSK	23060	1RB#24	22.86	PASS
Band12	10MHz	QPSK	23060	1RB#49	22.59	PASS
Band12	10MHz	QPSK	23060	25RB#0	21.56	PASS
Band12	10MHz	QPSK	23060	25RB#12	21.58	PASS
Band12	10MHz	QPSK	23060	25RB#25	21.67	PASS
Band12	10MHz	QPSK	23060	50RB#0	21.72	PASS
Band12	10MHz	QPSK	23095	1RB#0	22.75	PASS
Band12	10MHz	QPSK	23095	1RB#24	22.77	PASS
Band12	10MHz	QPSK	23095	1RB#49	22.63	PASS
Band12	10MHz	QPSK	23095	25RB#0	21.68	PASS
Band12	10MHz	QPSK	23095	25RB#12	21.72	PASS
Band12	10MHz	QPSK	23095	25RB#25	21.69	PASS
Band12	10MHz	QPSK	23095	50RB#0	21.65	PASS
Band12	10MHz	QPSK	23130	1RB#0	22.83	PASS

Band12	10MHz	QPSK	23130	1RB#24	22.87	PASS
Band12	10MHz	QPSK	23130	1RB#49	22.58	PASS
Band12	10MHz	QPSK	23130	25RB#0	21.88	PASS
Band12	10MHz	QPSK	23130	25RB#12	21.85	PASS
Band12	10MHz	QPSK	23130	25RB#25	21.67	PASS
Band12	10MHz	QPSK	23130	50RB#0	21.74	PASS
Band12	10MHz	16QAM	23060	1RB#0	21.69	PASS
Band12	10MHz	16QAM	23060	1RB#24	21.96	PASS
Band12	10MHz	16QAM	23060	1RB#49	21.79	PASS
Band12	10MHz	16QAM	23060	25RB#0	20.72	PASS
Band12	10MHz	16QAM	23060	25RB#12	20.59	PASS
Band12	10MHz	16QAM	23060	25RB#25	20.71	PASS
Band12	10MHz	16QAM	23060	50RB#0	20.76	PASS
Band12	10MHz	16QAM	23095	1RB#0	21.83	PASS
Band12	10MHz	16QAM	23095	1RB#24	21.96	PASS
Band12	10MHz	16QAM	23095	1RB#49	21.79	PASS
Band12	10MHz	16QAM	23095	25RB#0	20.78	PASS
Band12	10MHz	16QAM	23095	25RB#12	20.86	PASS
Band12	10MHz	16QAM	23095	25RB#25	20.69	PASS
Band12	10MHz	16QAM	23095	50RB#0	20.69	PASS
Band12	10MHz	16QAM	23130	1RB#0	21.70	PASS
Band12	10MHz	16QAM	23130	1RB#24	21.67	PASS
Band12	10MHz	16QAM	23130	1RB#49	21.53	PASS
Band12	10MHz	16QAM	23130	25RB#0	20.91	PASS
Band12	10MHz	16QAM	23130	25RB#12	20.95	PASS
Band12	10MHz	16QAM	23130	25RB#25	20.73	PASS
Band12	10MHz	16QAM	23130	50RB#0	20.72	PASS

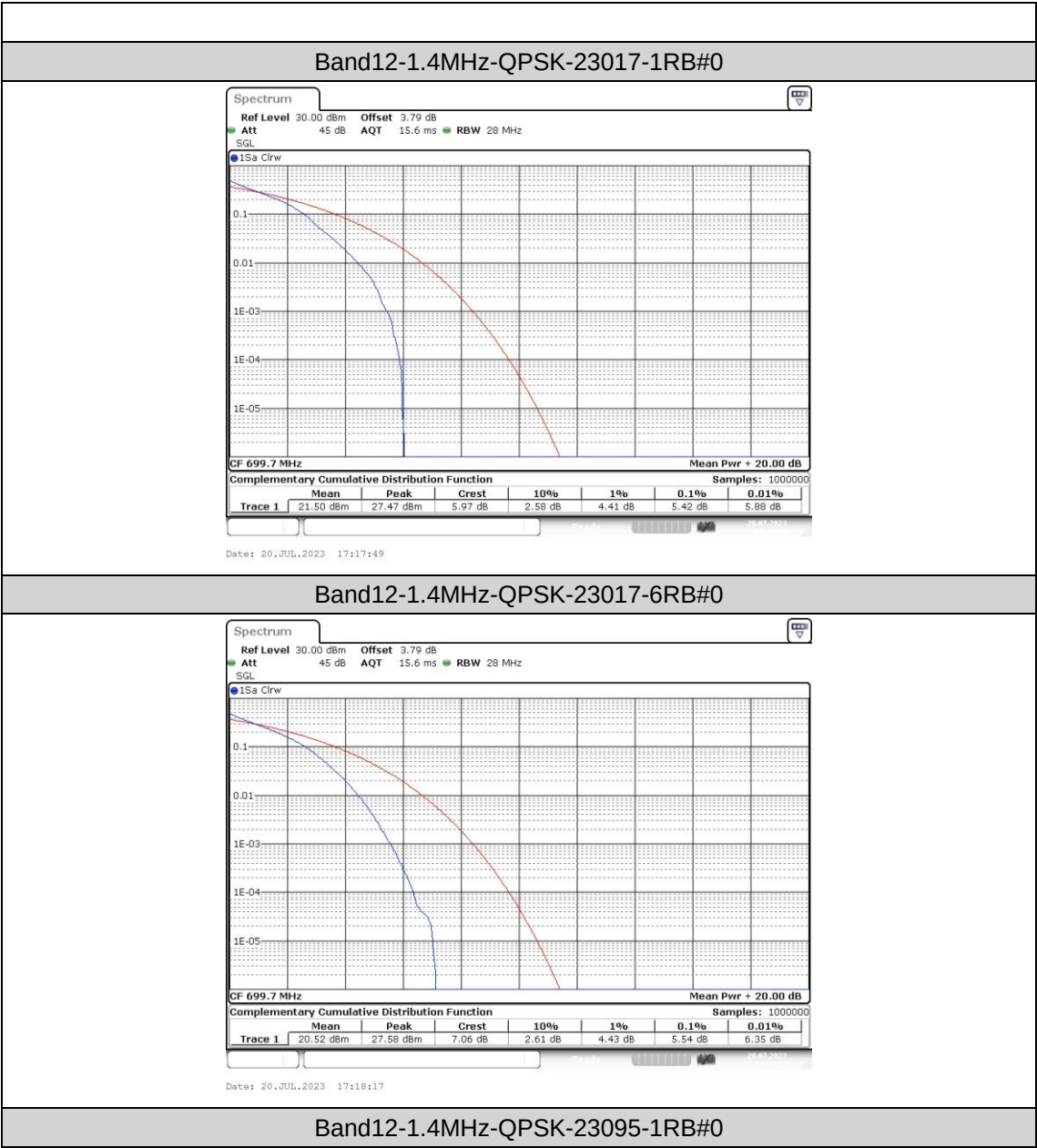
Appendix B: Peak-to-Average Ratio(CCDF)

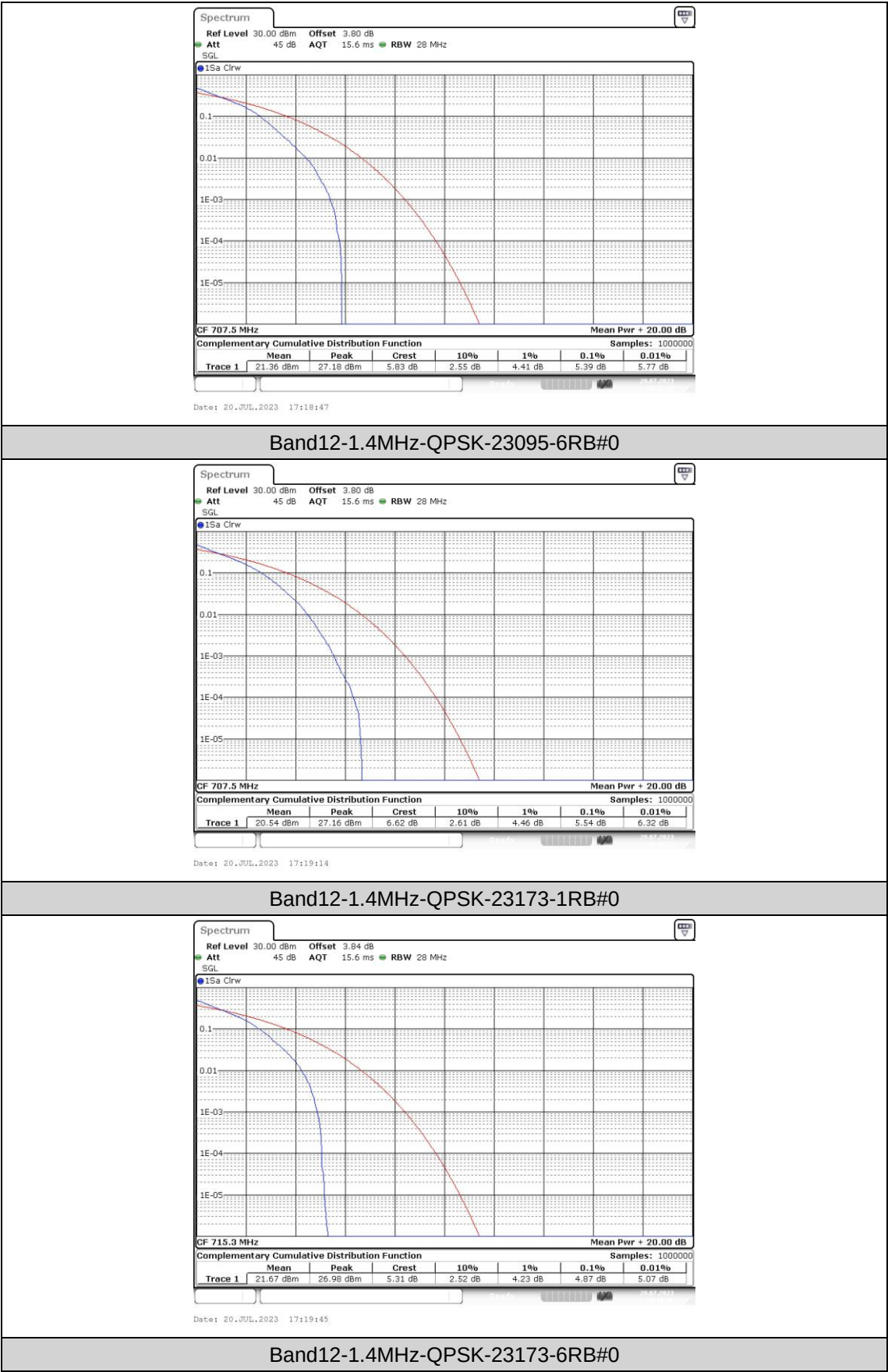
Test Result

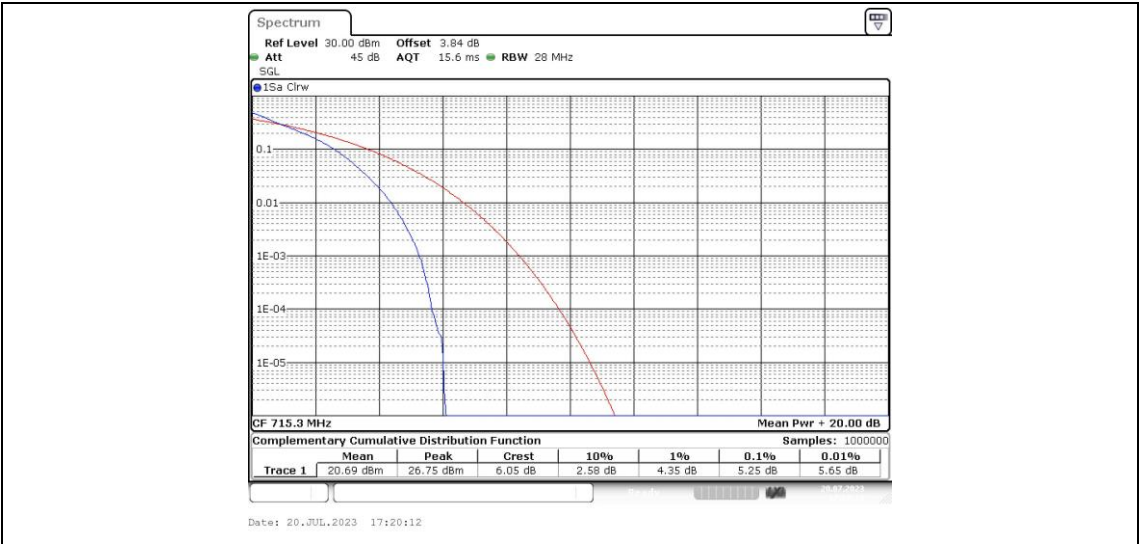
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	5.42	13	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	5.54	13	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	5.39	13	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	5.54	13	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	4.87	13	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	5.25	13	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	6.29	13	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	6.26	13	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	6.20	13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	6.23	13	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	5.97	13	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	5.94	13	PASS
Band12	3MHz	QPSK	23025	1RB#0	5.36	13	PASS
Band12	3MHz	QPSK	23025	15RB#0	5.59	13	PASS
Band12	3MHz	QPSK	23095	1RB#0	5.13	13	PASS
Band12	3MHz	QPSK	23095	15RB#0	5.54	13	PASS
Band12	3MHz	QPSK	23165	1RB#0	5.42	13	PASS
Band12	3MHz	QPSK	23165	15RB#0	5.45	13	PASS
Band12	3MHz	16QAM	23025	1RB#0	6.29	13	PASS
Band12	3MHz	16QAM	23025	15RB#0	6.32	13	PASS
Band12	3MHz	16QAM	23095	1RB#0	5.71	13	PASS
Band12	3MHz	16QAM	23095	15RB#0	6.38	13	PASS
Band12	3MHz	16QAM	23165	1RB#0	6.23	13	PASS
Band12	3MHz	16QAM	23165	15RB#0	6.29	13	PASS
Band12	5MHz	QPSK	23035	1RB#0	5.48	13	PASS
Band12	5MHz	QPSK	23035	25RB#0	5.68	13	PASS
Band12	5MHz	QPSK	23095	1RB#0	5.39	13	PASS
Band12	5MHz	QPSK	23095	25RB#0	5.51	13	PASS
Band12	5MHz	QPSK	23155	1RB#0	5.57	13	PASS
Band12	5MHz	QPSK	23155	25RB#0	5.51	13	PASS
Band12	5MHz	16QAM	23035	1RB#0	6.09	13	PASS
Band12	5MHz	16QAM	23035	25RB#0	6.32	13	PASS
Band12	5MHz	16QAM	23095	1RB#0	5.97	13	PASS
Band12	5MHz	16QAM	23095	25RB#0	6.26	13	PASS
Band12	5MHz	16QAM	23155	1RB#0	6.14	13	PASS
Band12	5MHz	16QAM	23155	25RB#0	6.20	13	PASS

Band12	10MHz	QPSK	23060	1RB#0	5.33	13	PASS
Band12	10MHz	QPSK	23060	50RB#0	5.57	13	PASS
Band12	10MHz	QPSK	23095	1RB#0	5.19	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.51	13	PASS
Band12	10MHz	QPSK	23130	1RB#0	5.30	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	5.62	13	PASS
Band12	10MHz	16QAM	23060	1RB#0	6.29	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	6.29	13	PASS
Band12	10MHz	16QAM	23095	1RB#0	5.88	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	6.32	13	PASS
Band12	10MHz	16QAM	23130	1RB#0	6.12	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	6.32	13	PASS

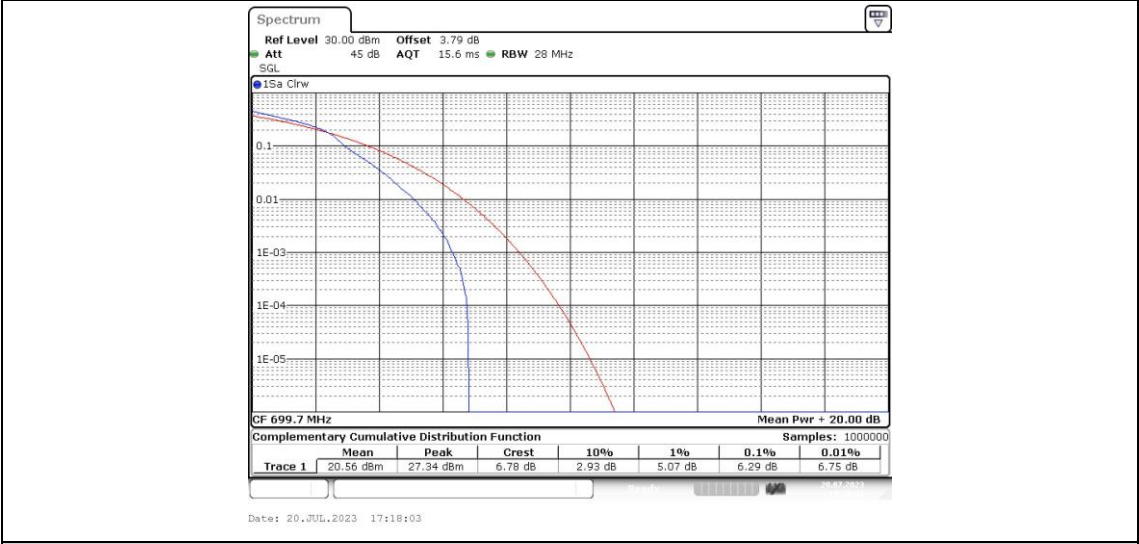
Test Graphs



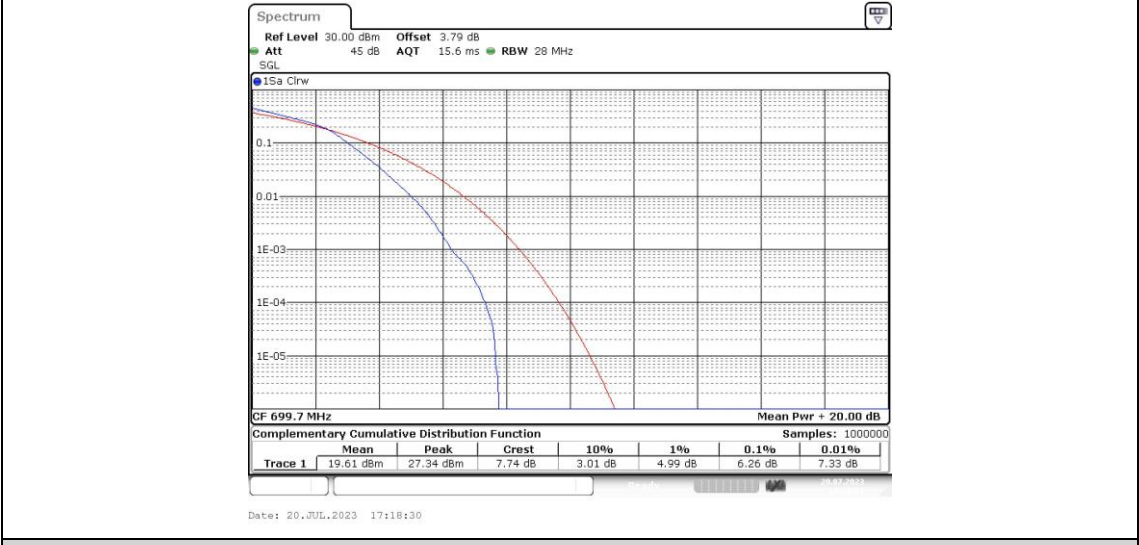




Band12-1.4MHz-16QAM-23017-1RB#0



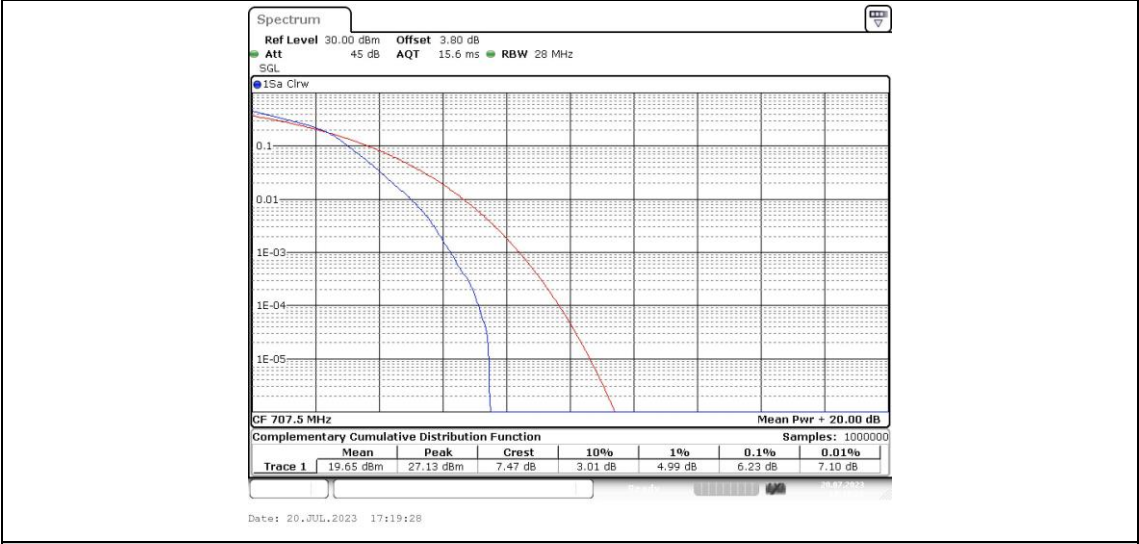
Band12-1.4MHz-16QAM-23017-6RB#0



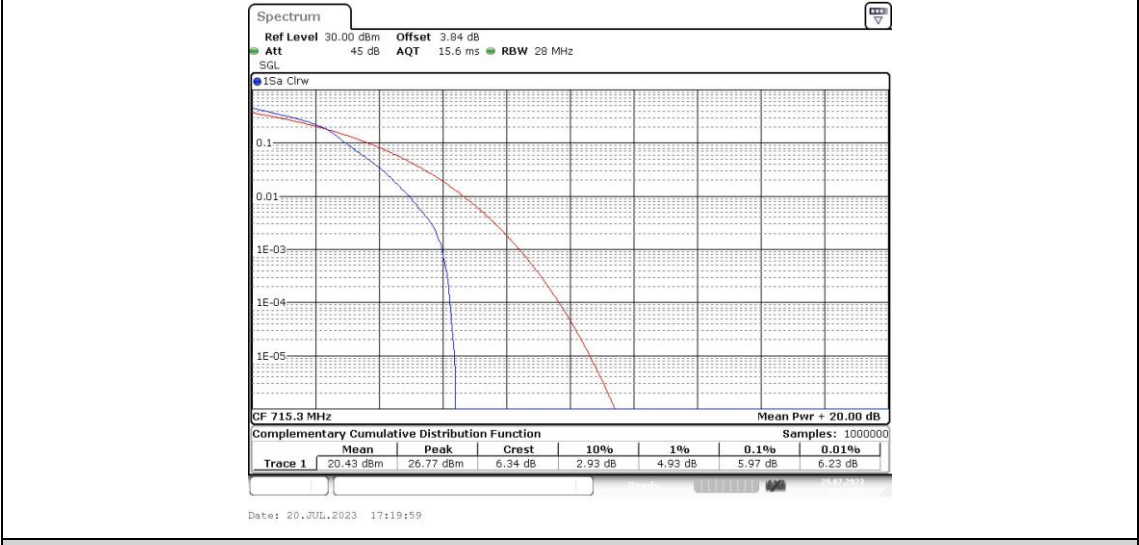
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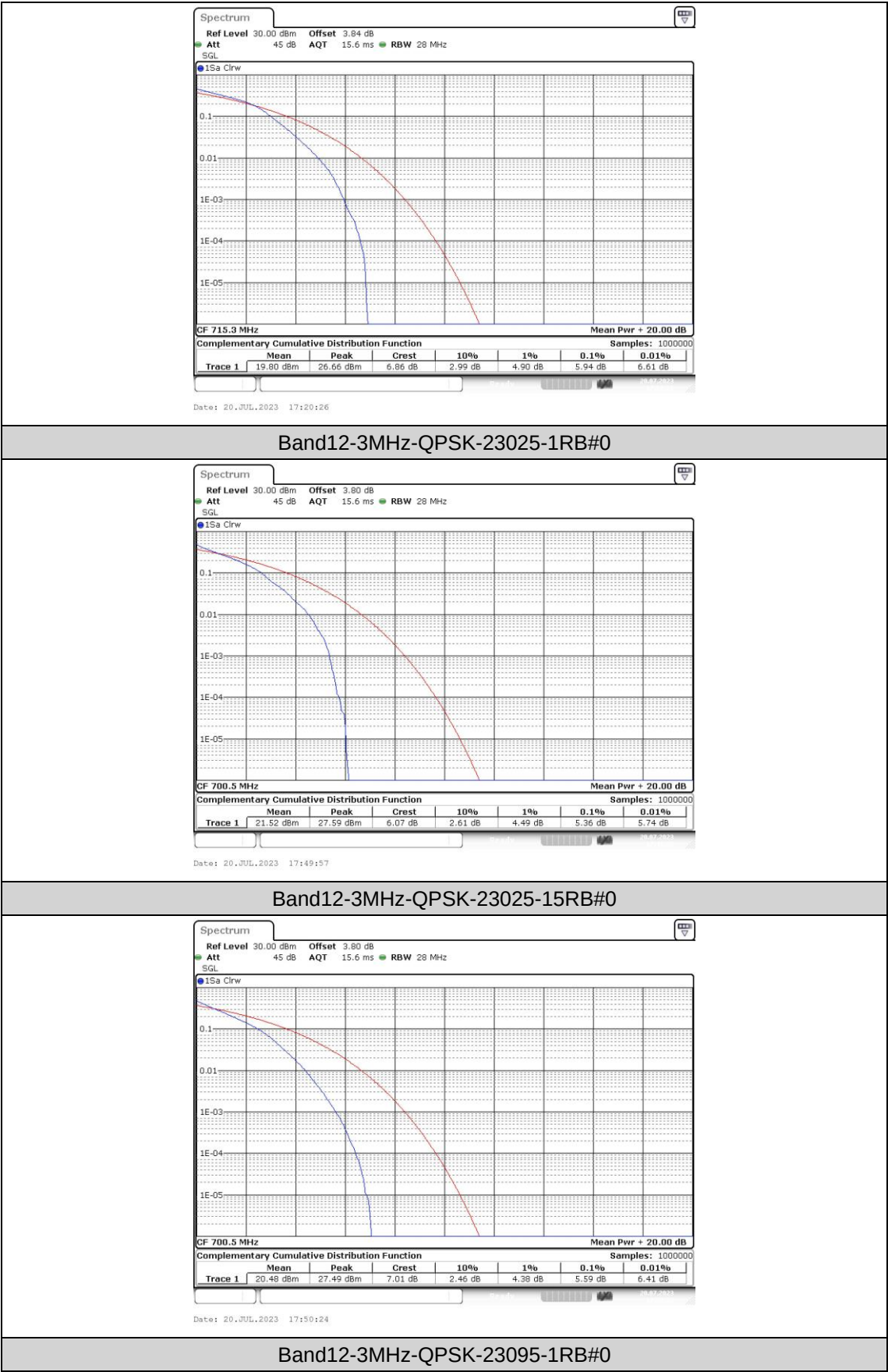
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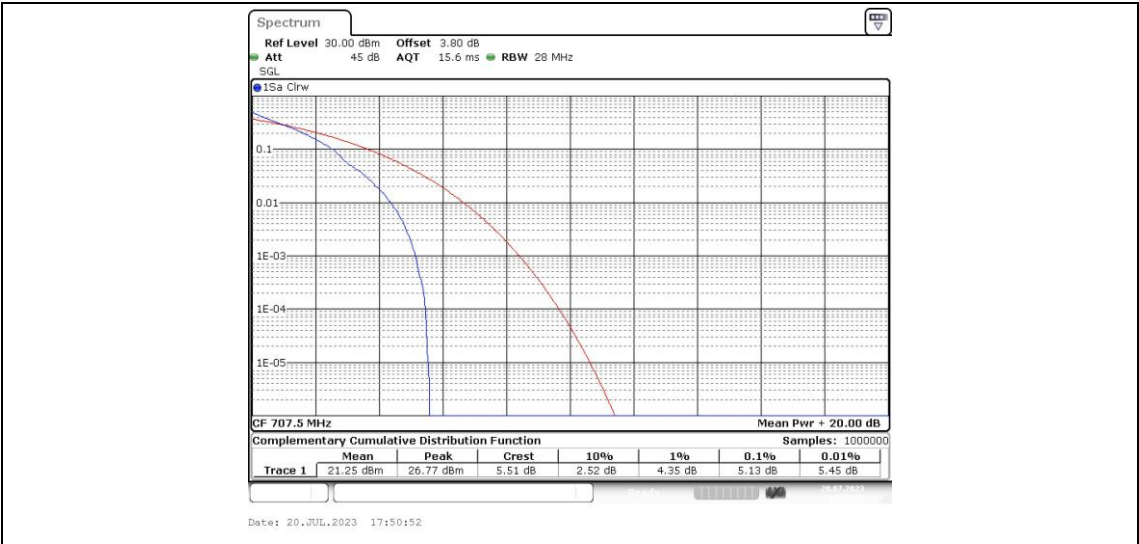


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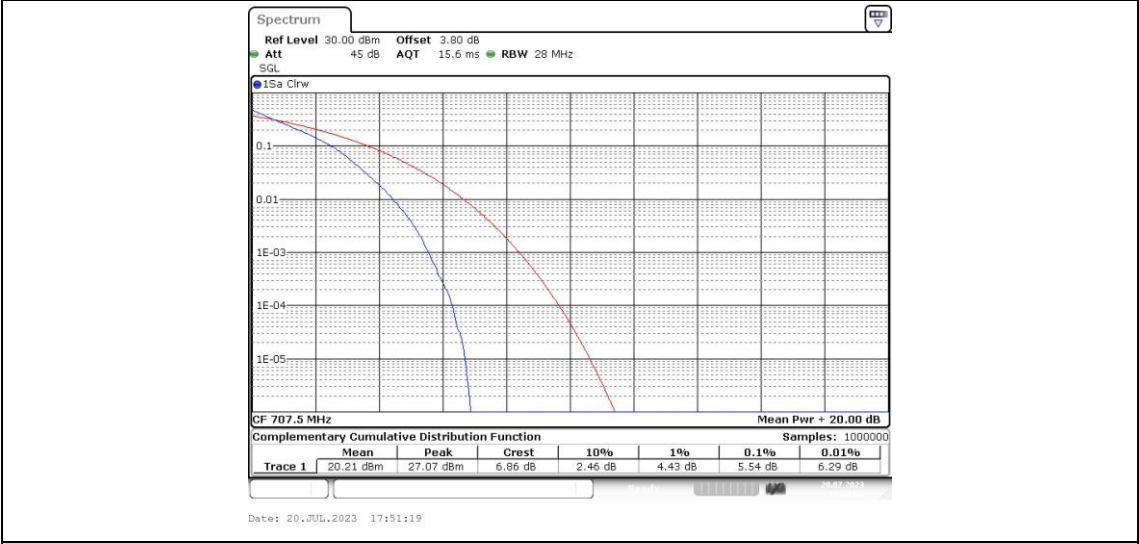


Band12-1.4MHz-16QAM-23173-6RB#0





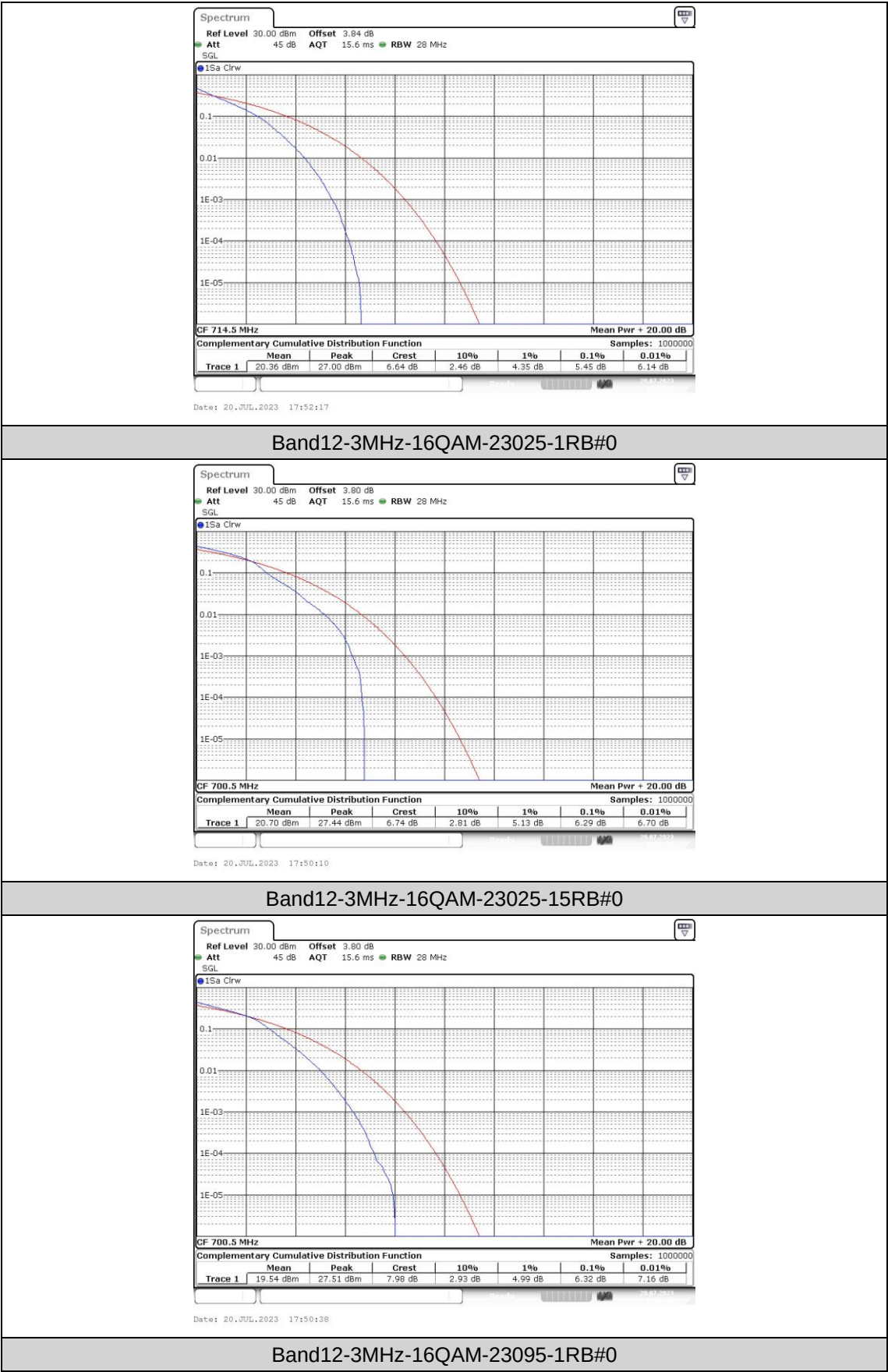
Band12-3MHz-QPSK-23095-15RB#0

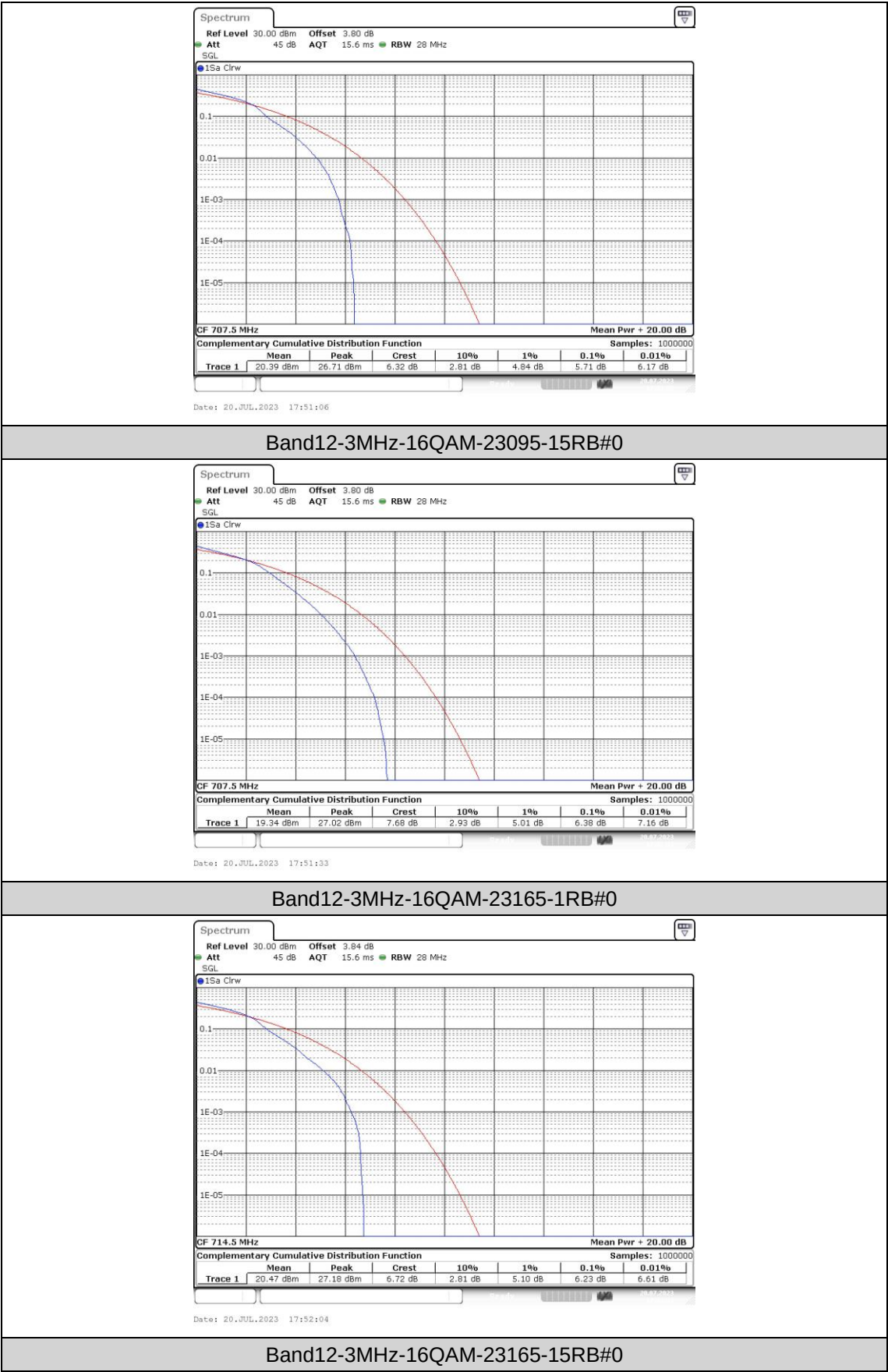


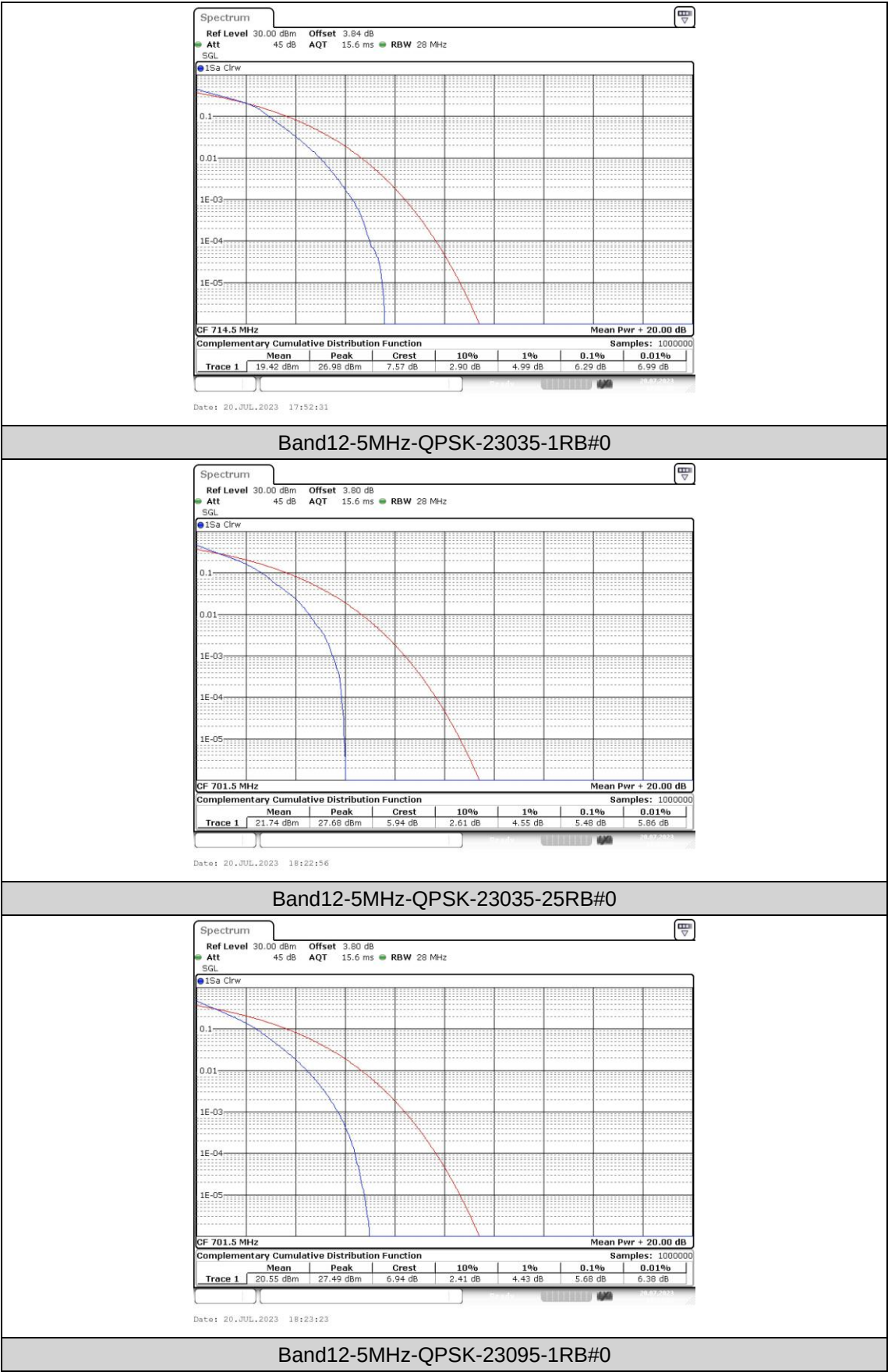
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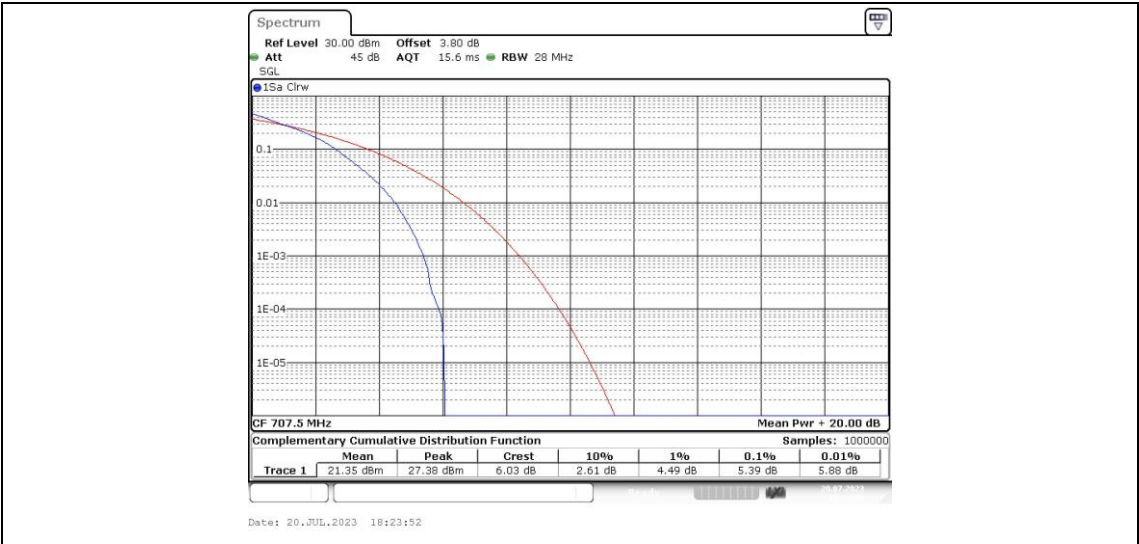


Band12-3MHz-QPSK-23165-15RB#0

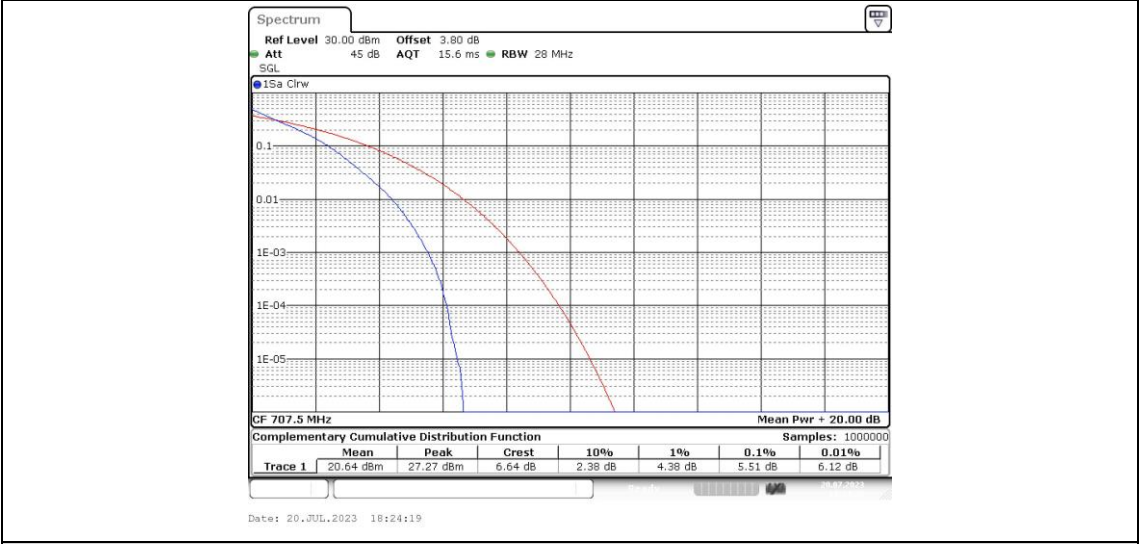




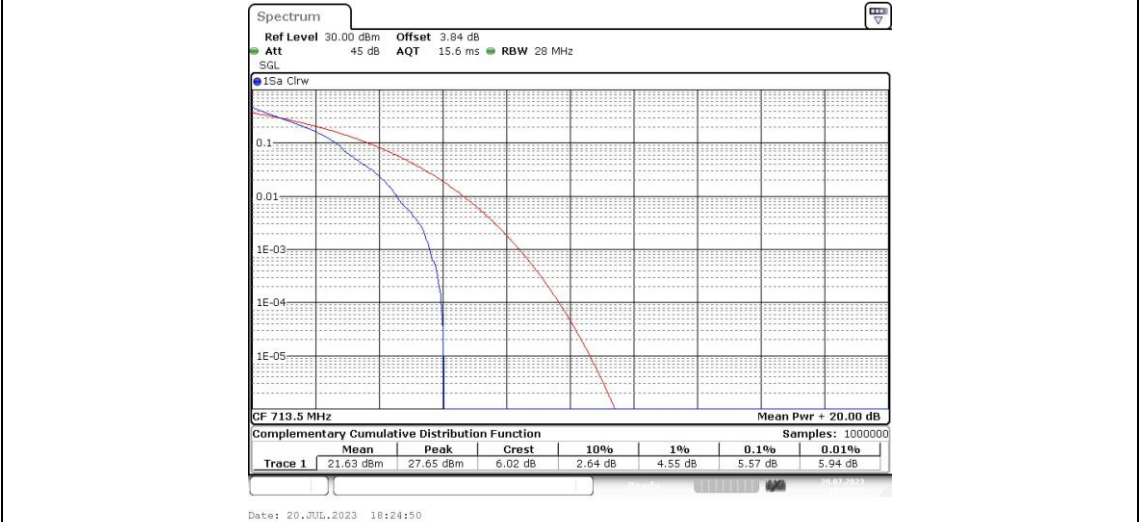




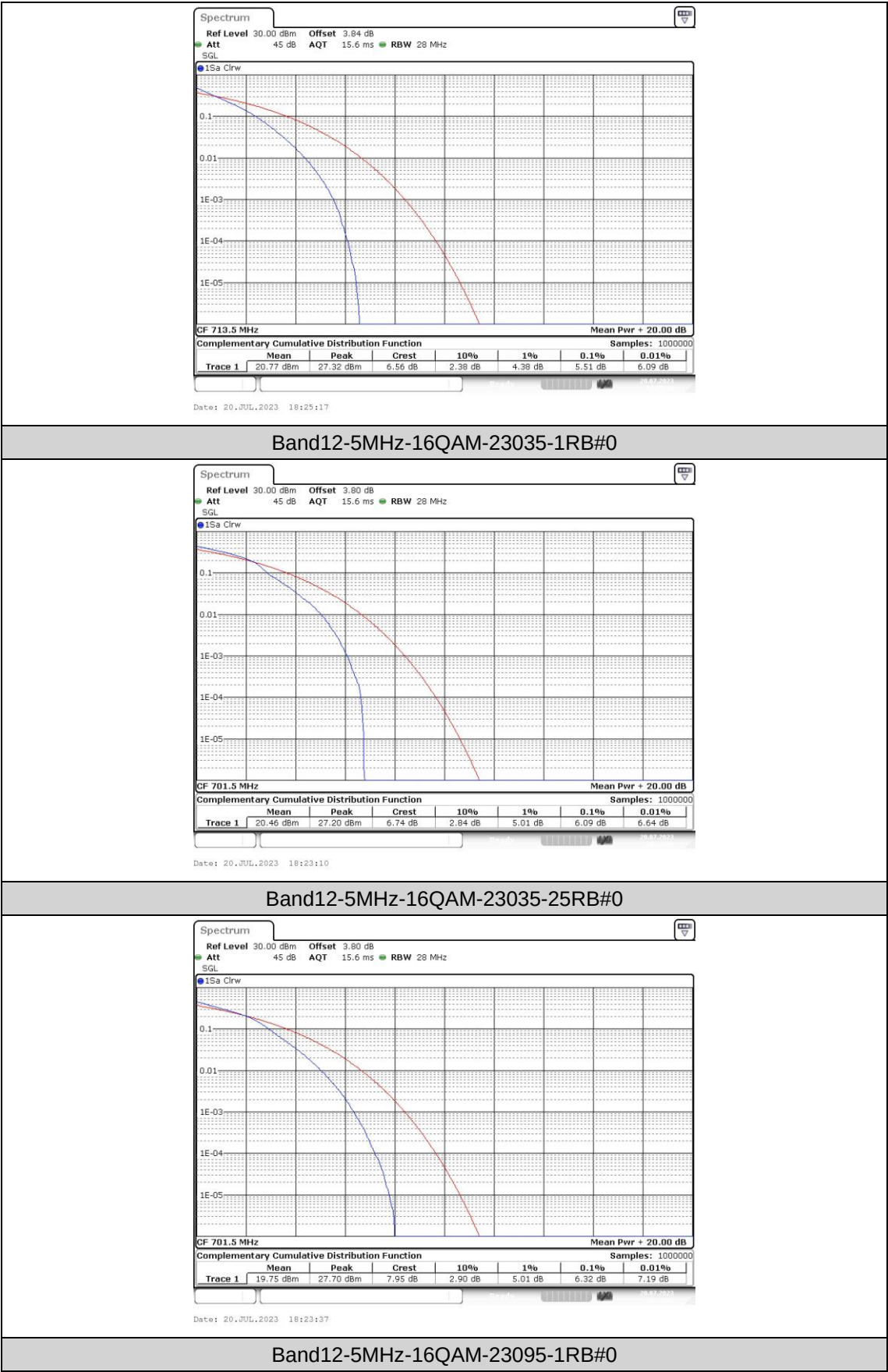
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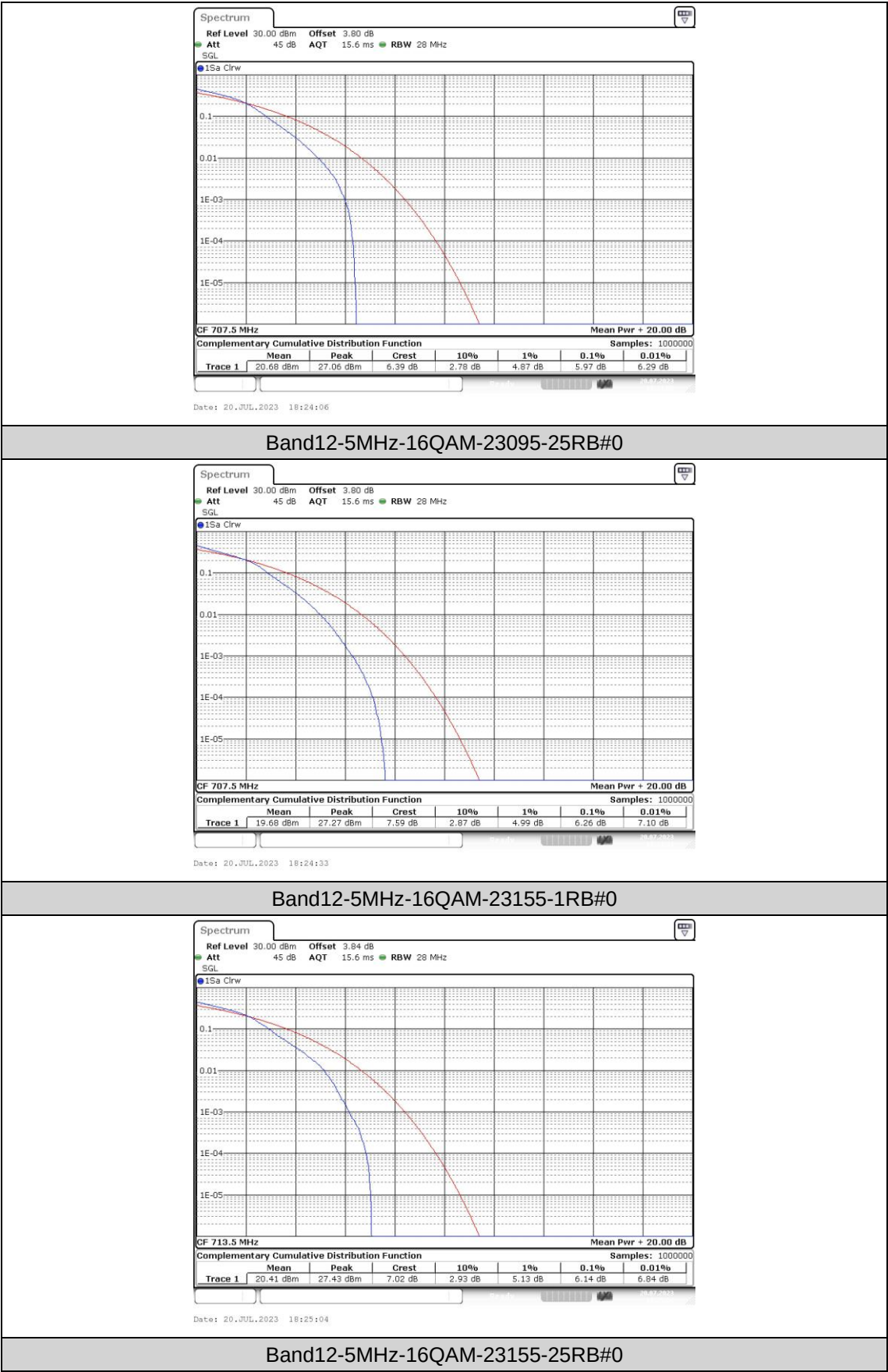


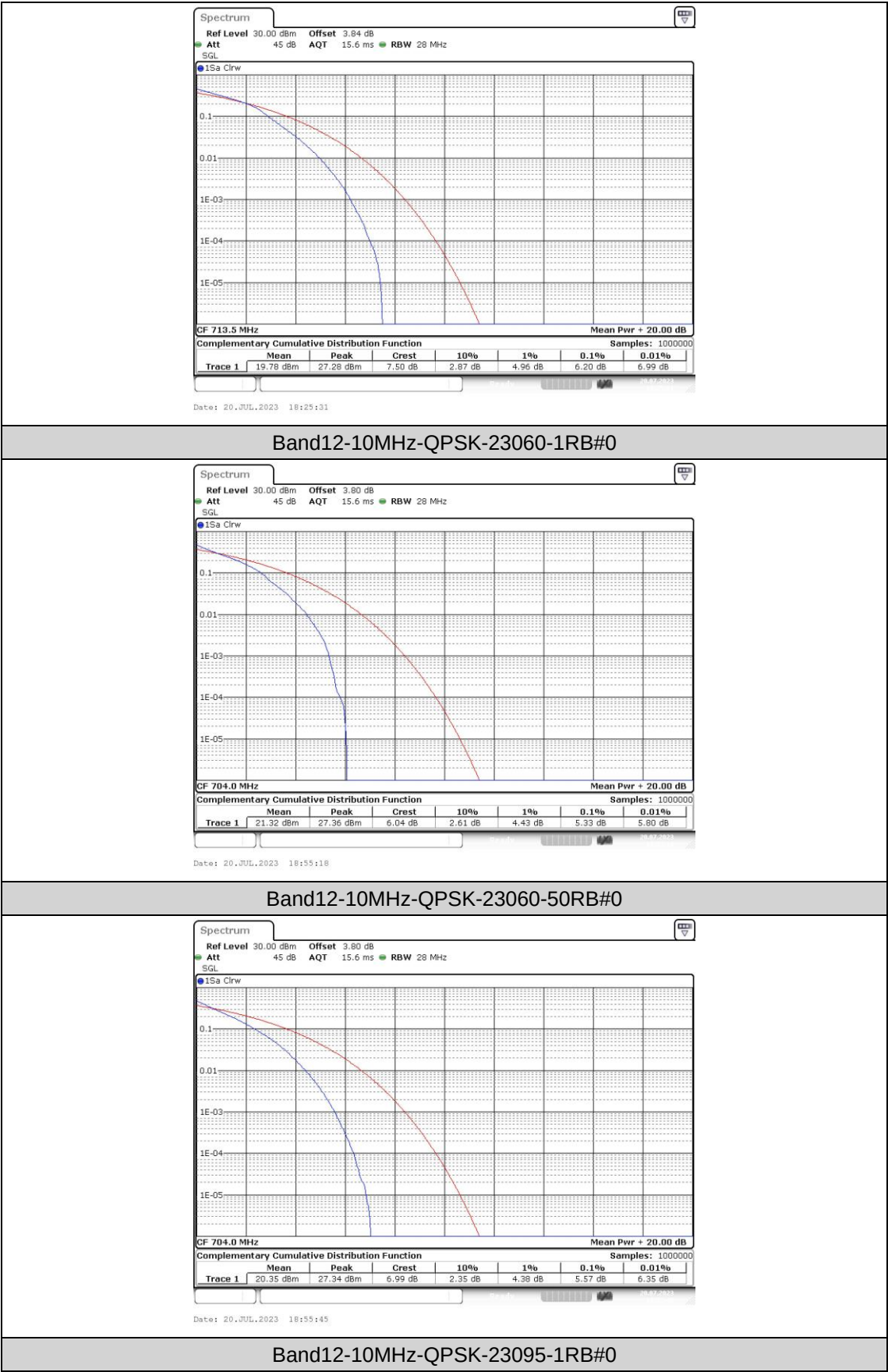
Band12-5MHz-QPSK-23155-1RB#0

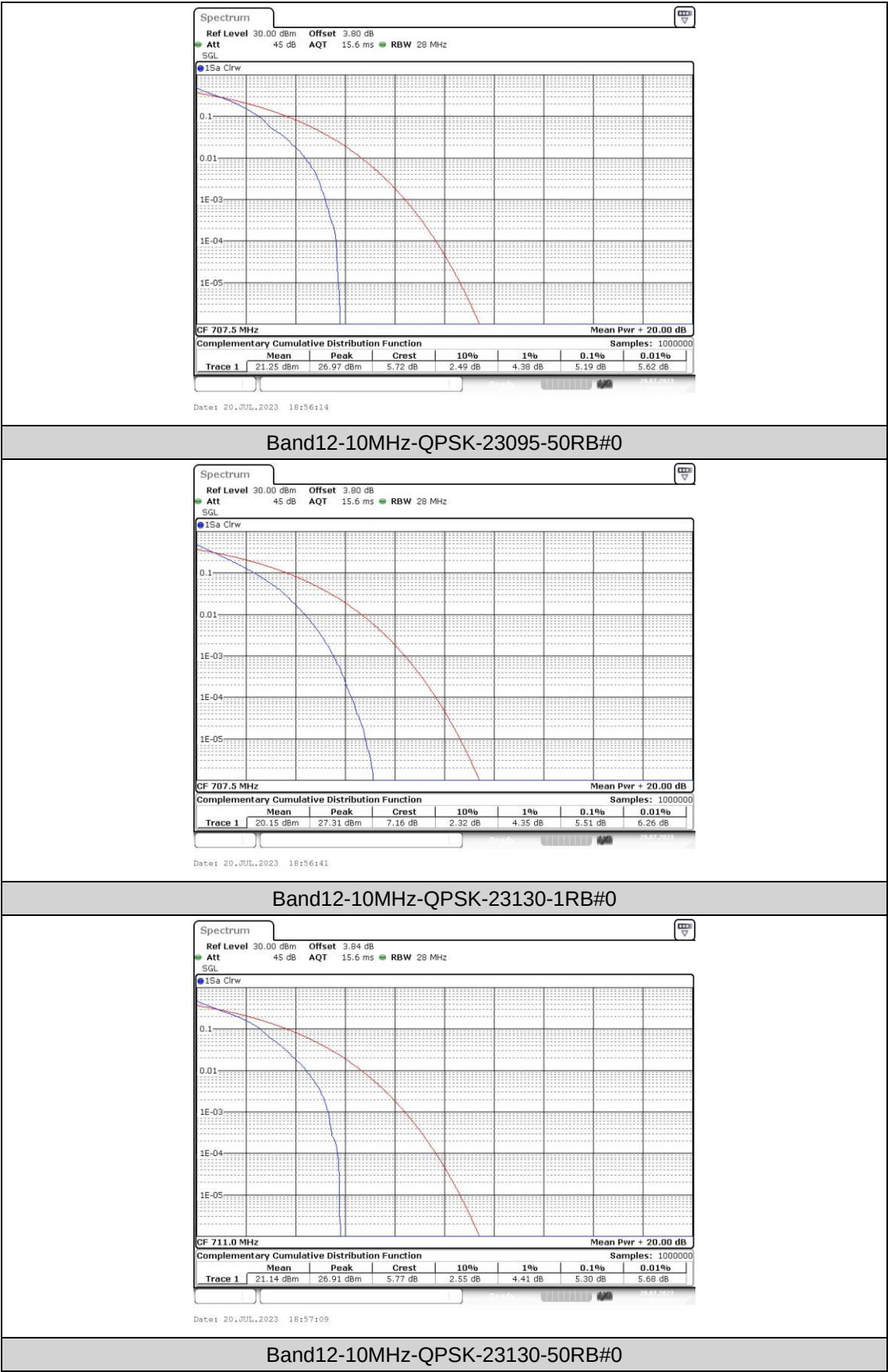


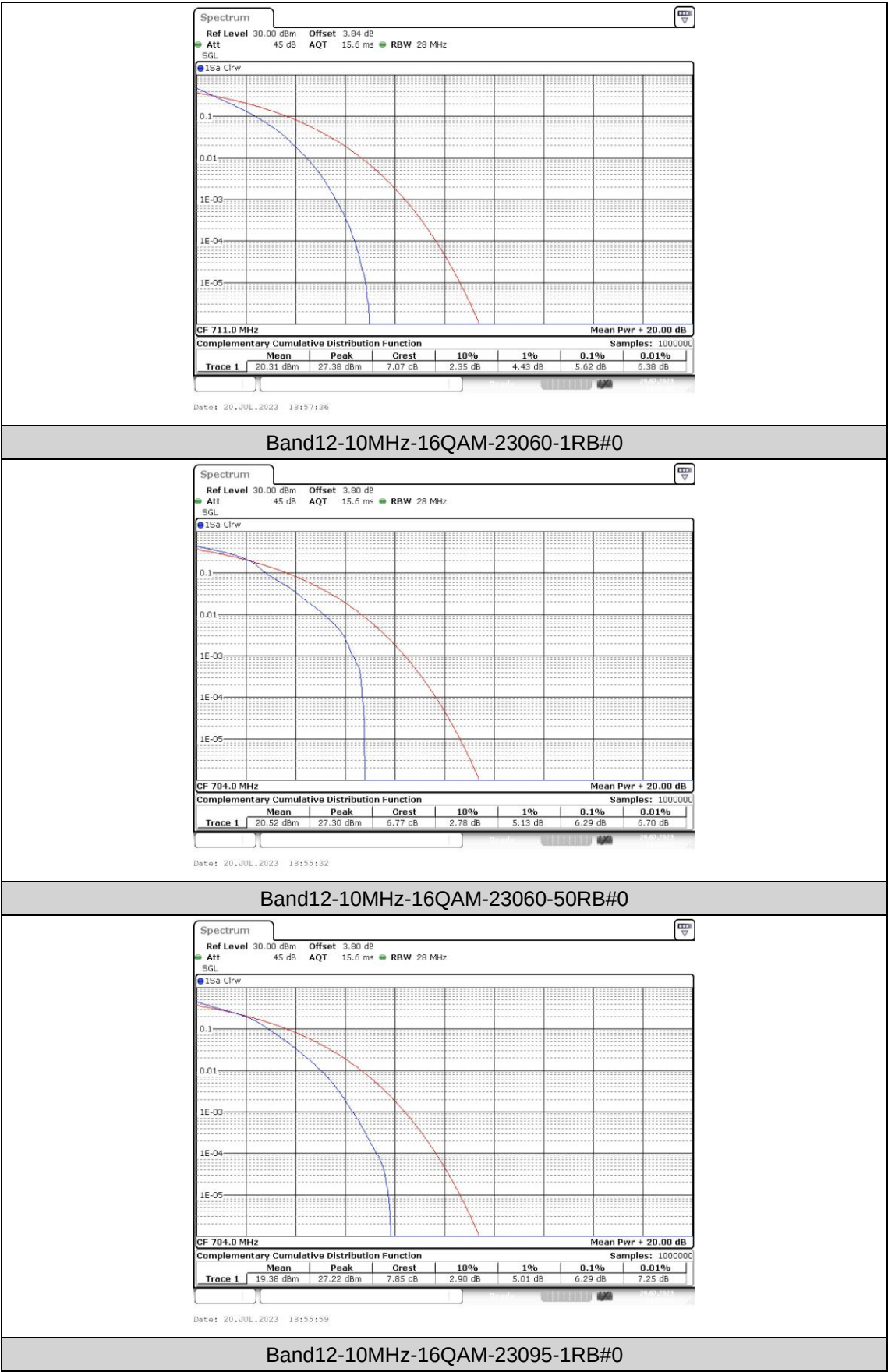
Band12-5MHz-QPSK-23155-25RB#0

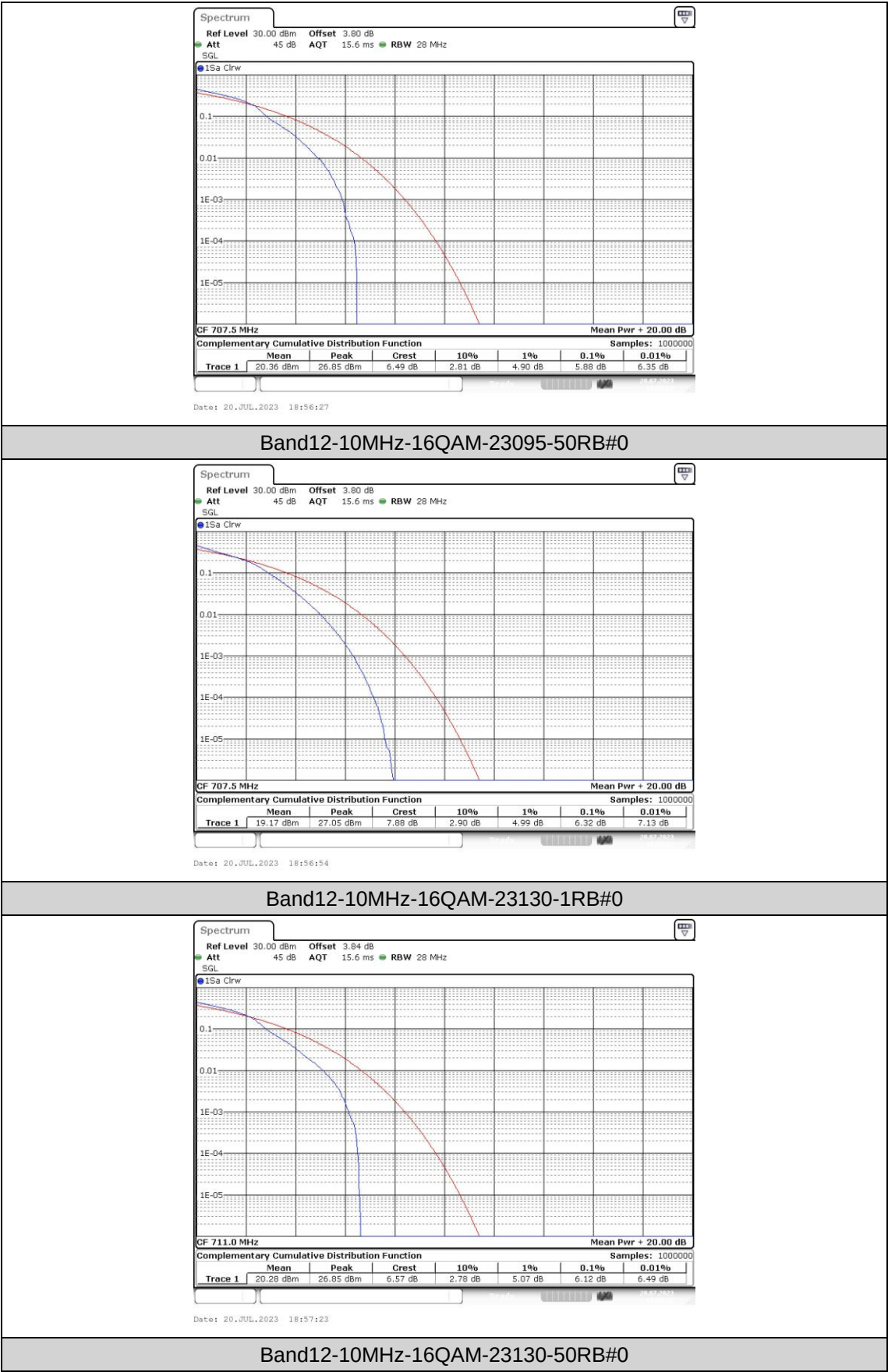














Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.088	1.21	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.088	1.22	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.088	1.23	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.088	1.21	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.088	1.23	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.088	1.22	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.676	2.84	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.696	2.85	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.686	2.84	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.686	2.84	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.686	2.84	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.696	2.85	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.505	4.79	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.496	4.78	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.496	4.79	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.505	4.80	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.496	4.79	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.505	4.78	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.985	9.57	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.985	9.53	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.985	9.53	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.985	9.53	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.952	9.53	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.985	9.53	PASS

Band12-1.4MHz-QPSK-23017-6RB#0

Spectrum

Ref Level 25.00 dBm Offset 3.79 dB RBW 30 kHz
 Att 40 dB SWT 100 ms VBW 100 kHz Mode Auto Sweep
 SQL Count 30/30

1Av Max

CF 699.7 MHz 601 pts Span 3.0 MHz

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	699.1 MHz	-16.80 dBm		
T1		1	699.15591 MHz	4.71 dBm	Occ Bw	1.088186356 MHz
T2		1	700.24409 MHz	3.45 dBm		
M2		1	699.27 MHz	9.74 dBm		
D3	M1	1	1.21 MHz	0.17 dB		

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Band12-1.4MHz-QPSK-23095-6RB#0

Spectrum

Ref Level 25.00 dBm Offset 3.80 dB RBW 30 kHz
 Att 40 dB SWT 100 ms VBW 100 kHz Mode Auto Sweep
 SQL Count 30/30

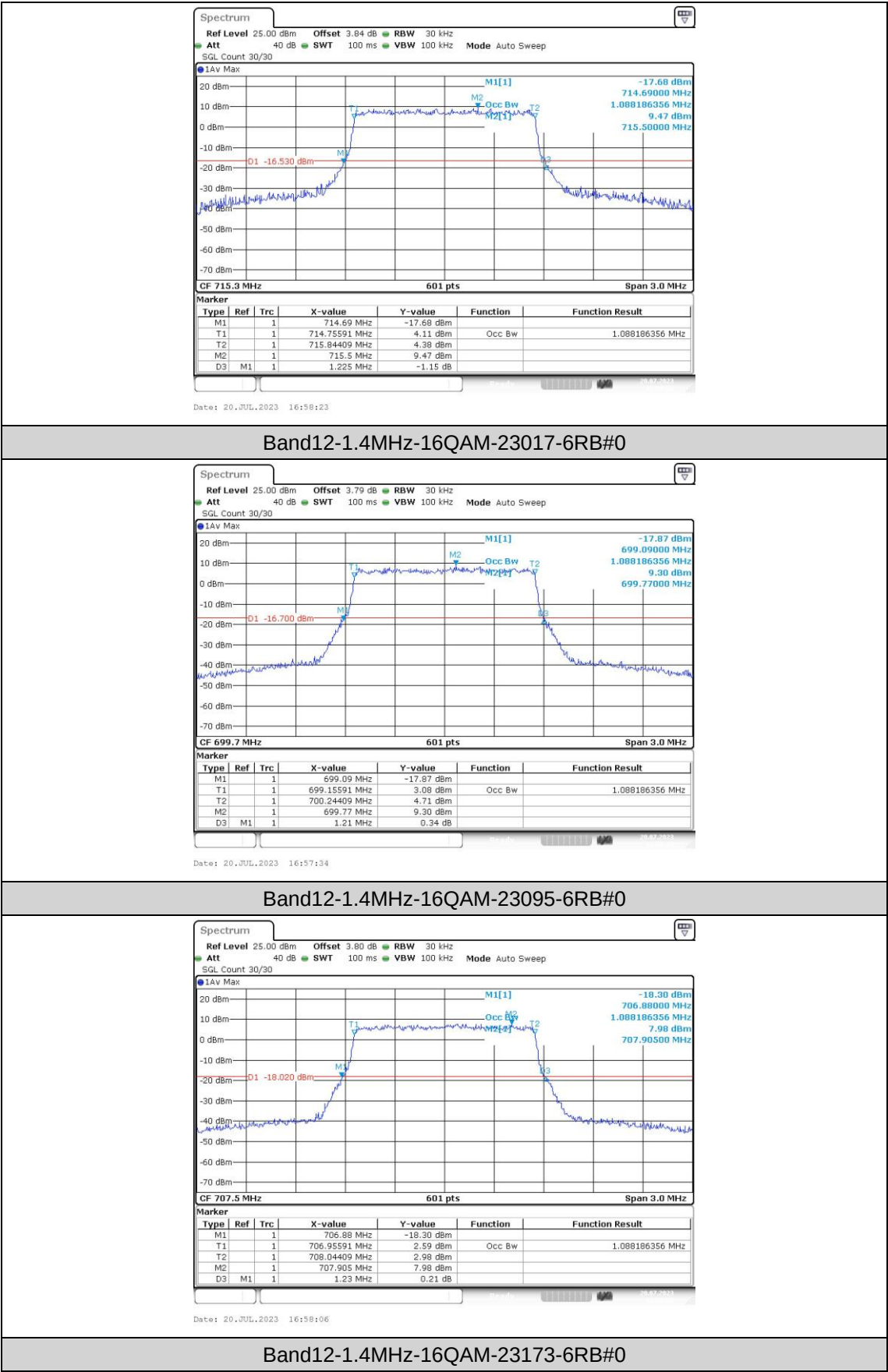
1Av Max

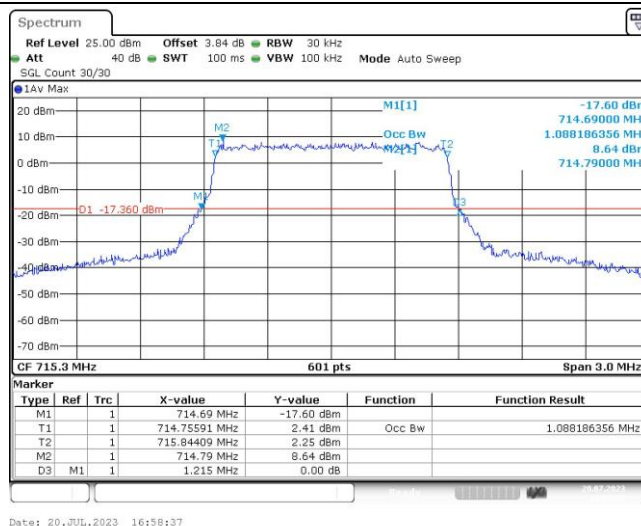
CF 707.5 MHz 601 pts Span 3.0 MHz

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	706.89 MHz	-16.930 dBm		
T1		1	706.95591 MHz	5.13 dBm	Occ Bw	1.088186356 MHz
T2		1	708.04409 MHz	2.47 dBm		
M2		1	707.065 MHz	9.07 dBm		
D3	M1	1	1.215 MHz	1.41 dB		

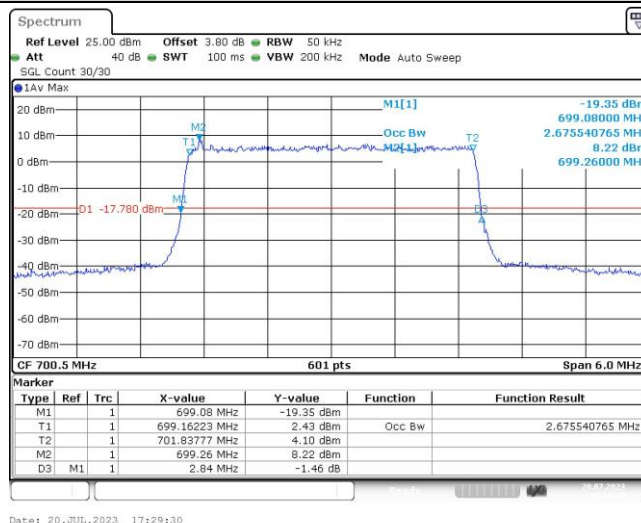
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Band12-1.4MHz-QPSK-23173-6RB#0

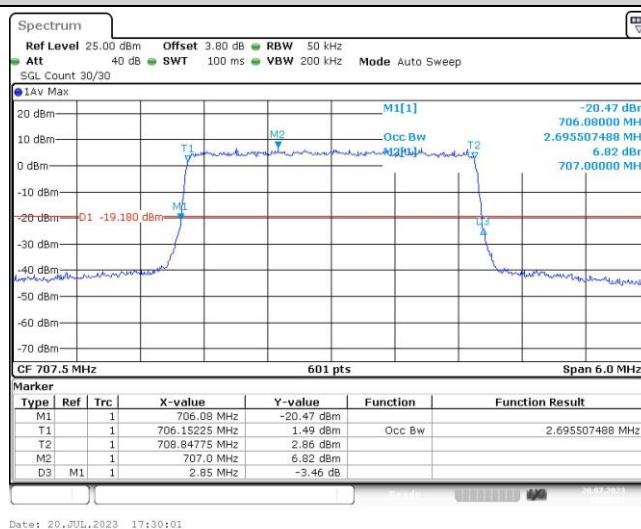




Band12-3MHz-QPSK-23025-15RB#0



Band12-3MHz-QPSK-23095-15RB#0



Band12-3MHz-QPSK-23165-15RB#0



