

Appendix for n7A (2500-2570)

Catalogue

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1. Effective Isotropic Radiated Power

1.1. Test Results @ Ant2 (Antenna Gain=-3.80dBi)

SCS	Bandwidth	Channel	Modulation	Conducted Result (dBm)			Max EIRP (dBm)	Limit (dBm)	Verdict
				Inner_1RB_Left	Inner_1RB_Right	Inner_Full			
15KHz	5MHz	LCH	DFT-Pi2BPSK	23.38	23.50	23.40	19.70	33.00	Pass
15KHz	5MHz	LCH	DFT-QPSK	23.29	23.36	23.45	19.65	33.00	Pass
15KHz	5MHz	LCH	DFT-16QAM	22.39	22.45	22.51	18.71	33.00	Pass
15KHz	5MHz	LCH	DFT-64QAM	20.96	21.01	20.93	17.21	33.00	Pass
15KHz	5MHz	LCH	DFT-256QAM	18.28	18.34	18.78	14.98	33.00	Pass
15KHz	5MHz	LCH	CP-QPSK	21.86	21.79	21.79	18.06	33.00	Pass
15KHz	5MHz	MCH	DFT-Pi2BPSK	23.49	23.62	23.61	19.82	33.00	Pass
15KHz	5MHz	MCH	DFT-QPSK	23.56	23.51	23.49	19.76	33.00	Pass
15KHz	5MHz	MCH	DFT-16QAM	22.39	22.52	22.55	18.75	33.00	Pass
15KHz	5MHz	MCH	DFT-64QAM	21.15	21.17	21.02	17.37	33.00	Pass
15KHz	5MHz	MCH	DFT-256QAM	18.44	18.42	18.96	15.16	33.00	Pass
15KHz	5MHz	MCH	CP-QPSK	21.89	21.95	21.98	18.18	33.00	Pass
15KHz	5MHz	HCH	DFT-Pi2BPSK	23.60	23.67	23.77	19.97	33.00	Pass
15KHz	5MHz	HCH	DFT-QPSK	23.57	23.58	23.68	19.88	33.00	Pass
15KHz	5MHz	HCH	DFT-16QAM	22.53	22.69	22.67	18.89	33.00	Pass
15KHz	5MHz	HCH	DFT-64QAM	21.21	21.22	21.11	17.42	33.00	Pass
15KHz	5MHz	HCH	DFT-256QAM	18.52	18.53	18.99	15.19	33.00	Pass
15KHz	5MHz	HCH	CP-QPSK	22.04	21.98	22.02	18.24	33.00	Pass
15KHz	10MHz	LCH	DFT-Pi2BPSK	23.37	23.45	23.44	19.65	33.00	Pass
15KHz	10MHz	LCH	DFT-QPSK	23.26	23.42	23.42	19.62	33.00	Pass
15KHz	10MHz	LCH	DFT-16QAM	22.29	22.46	22.36	18.66	33.00	Pass
15KHz	10MHz	LCH	DFT-64QAM	21.00	21.08	20.84	17.28	33.00	Pass
15KHz	10MHz	LCH	DFT-256QAM	18.20	18.32	18.78	14.98	33.00	Pass
15KHz	10MHz	LCH	CP-QPSK	21.85	21.88	21.82	18.08	33.00	Pass
15KHz	10MHz	MCH	DFT-Pi2BPSK	23.46	23.57	23.59	19.79	33.00	Pass
15KHz	10MHz	MCH	DFT-QPSK	23.43	23.47	23.45	19.67	33.00	Pass
15KHz	10MHz	MCH	DFT-16QAM	22.40	22.54	22.45	18.74	33.00	Pass
15KHz	10MHz	MCH	DFT-64QAM	21.05	21.18	20.88	17.38	33.00	Pass
15KHz	10MHz	MCH	DFT-256QAM	18.31	18.42	18.87	15.07	33.00	Pass
15KHz	10MHz	MCH	CP-QPSK	21.90	21.94	21.91	18.14	33.00	Pass
15KHz	10MHz	HCH	DFT-Pi2BPSK	23.73	23.66	23.70	19.93	33.00	Pass
15KHz	10MHz	HCH	DFT-QPSK	23.57	23.61	23.60	19.81	33.00	Pass
15KHz	10MHz	HCH	DFT-16QAM	22.64	22.75	22.58	18.95	33.00	Pass
15KHz	10MHz	HCH	DFT-64QAM	21.01	20.97	21.04	17.24	33.00	Pass
15KHz	10MHz	HCH	DFT-256QAM	18.43	18.49	18.99	15.19	33.00	Pass
15KHz	10MHz	HCH	CP-QPSK	22.00	22.02	22.00	18.22	33.00	Pass
15KHz	15MHz	LCH	DFT-Pi2BPSK	23.60	23.64	23.65	19.85	33.00	Pass
15KHz	15MHz	LCH	DFT-QPSK	23.52	23.62	23.56	19.82	33.00	Pass
15KHz	15MHz	LCH	DFT-16QAM	22.50	22.58	22.56	18.78	33.00	Pass
15KHz	15MHz	LCH	DFT-64QAM	21.21	21.26	21.10	17.46	33.00	Pass
15KHz	15MHz	LCH	DFT-256QAM	18.49	18.49	18.97	15.17	33.00	Pass
15KHz	15MHz	LCH	CP-QPSK	22.03	22.08	22.04	18.28	33.00	Pass
15KHz	15MHz	MCH	DFT-Pi2BPSK	23.62	23.77	23.68	19.97	33.00	Pass
15KHz	15MHz	MCH	DFT-QPSK	23.56	23.74	23.72	19.94	33.00	Pass
15KHz	15MHz	MCH	DFT-16QAM	22.63	22.65	22.75	18.95	33.00	Pass
15KHz	15MHz	MCH	DFT-64QAM	21.19	21.32	21.12	17.52	33.00	Pass
15KHz	15MHz	MCH	DFT-256QAM	18.59	18.65	18.99	15.19	33.00	Pass
15KHz	15MHz	MCH	CP-QPSK	22.15	22.24	22.13	18.44	33.00	Pass
15KHz	15MHz	HCH	DFT-Pi2BPSK	23.73	23.72	23.72	19.93	33.00	Pass
15KHz	15MHz	HCH	DFT-QPSK	23.71	23.71	23.73	19.93	33.00	Pass
15KHz	15MHz	HCH	DFT-16QAM	22.77	22.63	22.77	18.97	33.00	Pass
15KHz	15MHz	HCH	DFT-64QAM	21.39	21.34	21.24	17.59	33.00	Pass
15KHz	15MHz	HCH	DFT-256QAM	18.65	18.57	19.07	15.27	33.00	Pass
15KHz	15MHz	HCH	CP-QPSK	22.22	22.16	22.19	18.42	33.00	Pass
15KHz	20MHz	LCH	DFT-Pi2BPSK	23.59	23.74	23.73	19.94	33.00	Pass
15KHz	20MHz	LCH	DFT-QPSK	23.48	23.56	23.60	19.80	33.00	Pass
15KHz	20MHz	LCH	DFT-16QAM	22.54	22.53	22.55	18.75	33.00	Pass
15KHz	20MHz	LCH	DFT-64QAM	21.23	21.20	21.12	17.43	33.00	Pass

15KHz	20MHz	LCH	DFT-256QAM	18.44	18.54	19.01	15.21	33.00	Pass
15KHz	20MHz	LCH	CP-QPSK	22.01	22.03	22.06	18.26	33.00	Pass
15KHz	20MHz	MCH	DFT-Pi2BPSK	23.74	23.75	23.63	19.95	33.00	Pass
15KHz	20MHz	MCH	DFT-QPSK	23.56	23.70	23.68	19.90	33.00	Pass
15KHz	20MHz	MCH	DFT-16QAM	22.60	22.68	22.67	18.88	33.00	Pass
15KHz	20MHz	MCH	DFT-64QAM	21.23	21.27	21.15	17.47	33.00	Pass
15KHz	20MHz	MCH	DFT-256QAM	18.59	18.63	19.01	15.21	33.00	Pass
15KHz	20MHz	MCH	CP-QPSK	22.12	22.14	22.07	18.34	33.00	Pass
15KHz	20MHz	HCH	DFT-Pi2BPSK	23.75	23.74	23.73	19.95	33.00	Pass
15KHz	20MHz	HCH	DFT-QPSK	23.65	23.70	23.75	19.95	33.00	Pass
15KHz	20MHz	HCH	DFT-16QAM	22.73	22.63	22.73	18.93	33.00	Pass
15KHz	20MHz	HCH	DFT-64QAM	21.37	21.28	21.25	17.57	33.00	Pass
15KHz	20MHz	HCH	DFT-256QAM	18.63	18.53	19.16	15.36	33.00	Pass
15KHz	20MHz	HCH	CP-QPSK	22.23	22.07	22.14	18.43	33.00	Pass
15KHz	25MHz	LCH	DFT-Pi2BPSK	23.60	23.64	23.60	19.84	33.00	Pass
15KHz	25MHz	LCH	DFT-QPSK	23.56	23.57	23.54	19.77	33.00	Pass
15KHz	25MHz	LCH	DFT-16QAM	22.53	22.55	22.50	18.75	33.00	Pass
15KHz	25MHz	LCH	DFT-64QAM	21.19	21.30	21.04	17.50	33.00	Pass
15KHz	25MHz	LCH	DFT-256QAM	18.49	18.52	18.98	15.18	33.00	Pass
15KHz	25MHz	LCH	CP-QPSK	22.11	22.10	22.02	18.31	33.00	Pass
15KHz	25MHz	MCH	DFT-Pi2BPSK	23.75	23.82	23.61	20.02	33.00	Pass
15KHz	25MHz	MCH	DFT-QPSK	23.68	23.75	23.65	19.95	33.00	Pass
15KHz	25MHz	MCH	DFT-16QAM	22.64	22.83	22.63	19.03	33.00	Pass
15KHz	25MHz	MCH	DFT-64QAM	21.24	21.42	21.11	17.62	33.00	Pass
15KHz	25MHz	MCH	DFT-256QAM	18.54	18.67	18.97	15.17	33.00	Pass
15KHz	25MHz	MCH	CP-QPSK	22.06	22.27	22.03	18.47	33.00	Pass
15KHz	25MHz	HCH	DFT-Pi2BPSK	23.89	23.86	23.75	20.09	33.00	Pass
15KHz	25MHz	HCH	DFT-QPSK	23.76	23.78	23.73	19.98	33.00	Pass
15KHz	25MHz	HCH	DFT-16QAM	22.80	22.81	22.70	19.01	33.00	Pass
15KHz	25MHz	HCH	DFT-64QAM	21.31	21.32	21.14	17.52	33.00	Pass
15KHz	25MHz	HCH	DFT-256QAM	18.71	18.69	19.09	15.29	33.00	Pass
15KHz	25MHz	HCH	CP-QPSK	22.33	22.25	22.17	18.53	33.00	Pass
15KHz	30MHz	LCH	DFT-Pi2BPSK	23.60	23.69	23.64	19.89	33.00	Pass
15KHz	30MHz	LCH	DFT-QPSK	23.52	23.61	23.52	19.81	33.00	Pass
15KHz	30MHz	LCH	DFT-16QAM	22.52	22.70	22.47	18.90	33.00	Pass
15KHz	30MHz	LCH	DFT-64QAM	21.16	21.24	21.04	17.44	33.00	Pass
15KHz	30MHz	LCH	DFT-256QAM	18.49	18.58	19.05	15.25	33.00	Pass
15KHz	30MHz	LCH	CP-QPSK	22.07	22.14	22.08	18.34	33.00	Pass
15KHz	30MHz	MCH	DFT-Pi2BPSK	23.73	23.81	23.60	20.01	33.00	Pass
15KHz	30MHz	MCH	DFT-QPSK	23.59	23.73	23.64	19.93	33.00	Pass
15KHz	30MHz	MCH	DFT-16QAM	22.54	22.81	22.58	19.01	33.00	Pass
15KHz	30MHz	MCH	DFT-64QAM	21.21	21.33	21.10	17.53	33.00	Pass
15KHz	30MHz	MCH	DFT-256QAM	18.44	18.70	18.99	15.19	33.00	Pass
15KHz	30MHz	MCH	CP-QPSK	22.09	22.21	22.11	18.41	33.00	Pass
15KHz	30MHz	HCH	DFT-Pi2BPSK	23.78	23.84	23.82	20.04	33.00	Pass
15KHz	30MHz	HCH	DFT-QPSK	23.65	23.74	23.74	19.94	33.00	Pass
15KHz	30MHz	HCH	DFT-16QAM	22.70	22.75	22.68	18.95	33.00	Pass
15KHz	30MHz	HCH	DFT-64QAM	21.31	21.33	21.25	17.53	33.00	Pass
15KHz	30MHz	HCH	DFT-256QAM	18.64	18.72	19.12	15.32	33.00	Pass
15KHz	30MHz	HCH	CP-QPSK	22.21	22.22	22.19	18.42	33.00	Pass
15KHz	40MHz	LCH	DFT-Pi2BPSK	22.08	23.82	23.73	20.02	33.00	Pass
15KHz	40MHz	LCH	DFT-QPSK	23.51	23.67	23.69	19.89	33.00	Pass
15KHz	40MHz	LCH	DFT-16QAM	22.56	22.68	22.63	18.88	33.00	Pass
15KHz	40MHz	LCH	DFT-64QAM	21.20	21.30	21.01	17.50	33.00	Pass
15KHz	40MHz	LCH	DFT-256QAM	18.55	18.64	19.03	15.23	33.00	Pass
15KHz	40MHz	LCH	CP-QPSK	21.97	22.17	22.05	18.37	33.00	Pass
15KHz	40MHz	MCH	DFT-Pi2BPSK	23.72	23.90	23.63	20.10	33.00	Pass
15KHz	40MHz	MCH	DFT-QPSK	23.56	23.72	23.67	19.92	33.00	Pass
15KHz	40MHz	MCH	DFT-16QAM	22.52	22.78	22.67	18.98	33.00	Pass
15KHz	40MHz	MCH	DFT-64QAM	21.16	21.42	21.10	17.62	33.00	Pass
15KHz	40MHz	MCH	DFT-256QAM	18.51	18.76	19.00	15.20	33.00	Pass
15KHz	40MHz	MCH	CP-QPSK	22.03	22.29	22.07	18.49	33.00	Pass

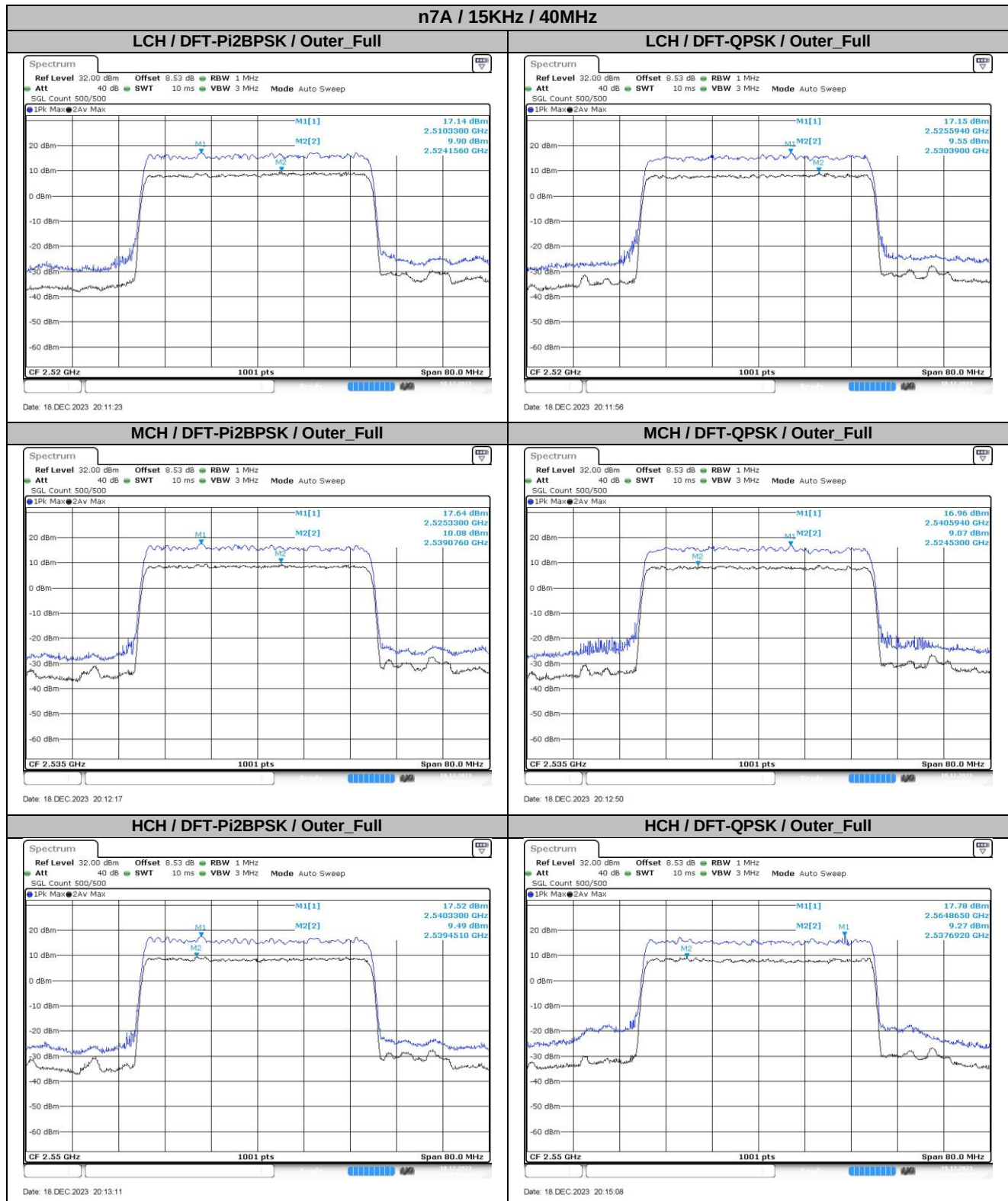
15KHz	40MHz	HCH	DFT-Pi2BPSK	23.79	23.88	23.72	20.08	33.00	Pass
15KHz	40MHz	HCH	DFT-QPSK	23.64	23.75	23.77	19.97	33.00	Pass
15KHz	40MHz	HCH	DFT-16QAM	22.65	22.77	22.77	18.97	33.00	Pass
15KHz	40MHz	HCH	DFT-64QAM	21.19	21.31	21.08	17.51	33.00	Pass
15KHz	40MHz	HCH	DFT-256QAM	18.55	18.63	19.02	15.22	33.00	Pass
15KHz	40MHz	HCH	CP-QPSK	22.06	22.18	22.14	18.38	33.00	Pass

2. Peak-to-Average Ratio

2.1. Test Results

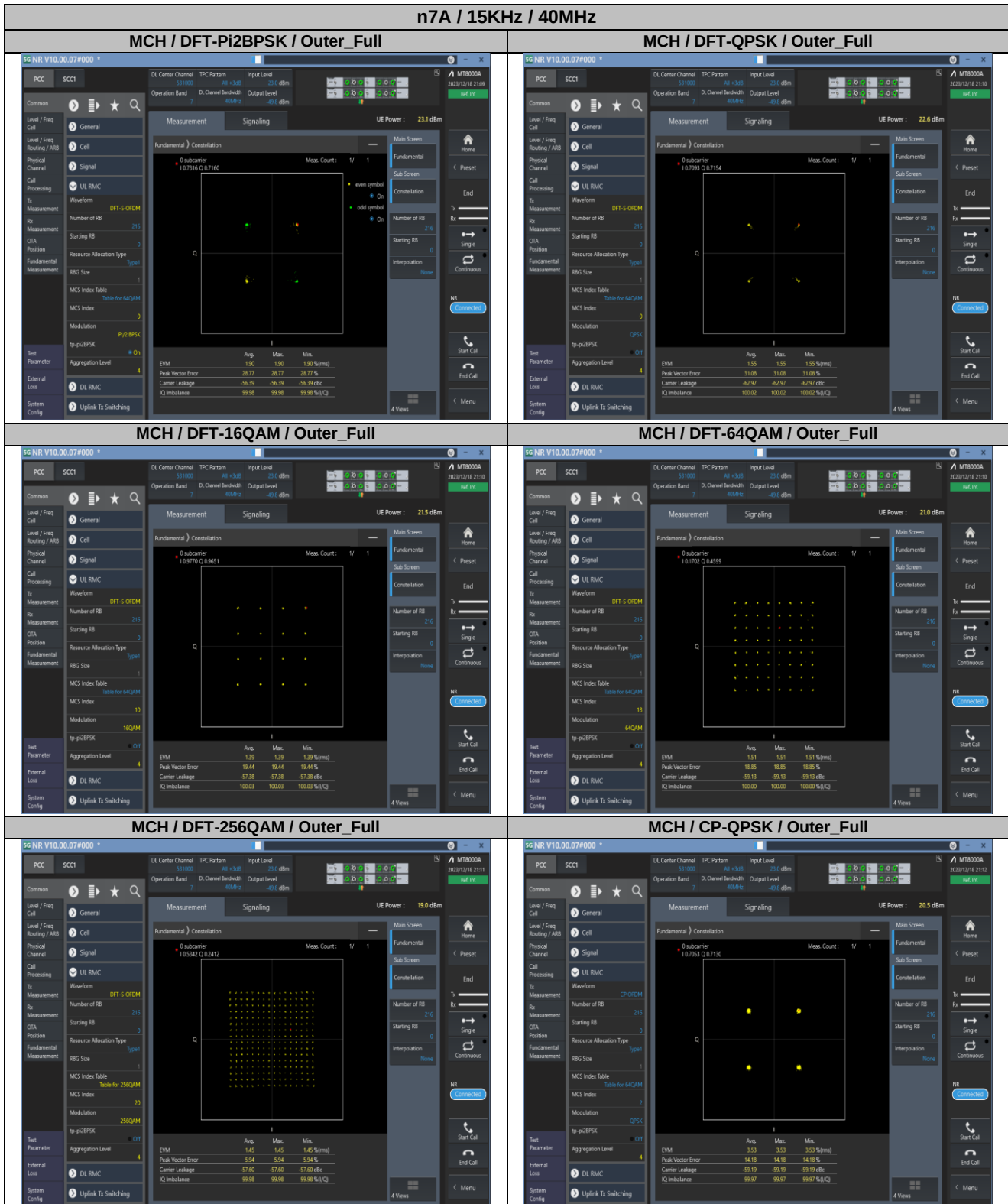
SCS	Bandwidth	Channel	Modulation	Result (dB)		Limit (dB)	Verdict
				DFT-Pi2BPSK	DFT-QPSK		
15KHz	40MHz	LCH	Outer_Full	7.24	7.60	13.00	Pass
15KHz	40MHz	MCH	Outer_Full	7.56	7.89	13.00	Pass
15KHz	40MHz	HCH	Outer_Full	8.03	8.51	13.00	Pass

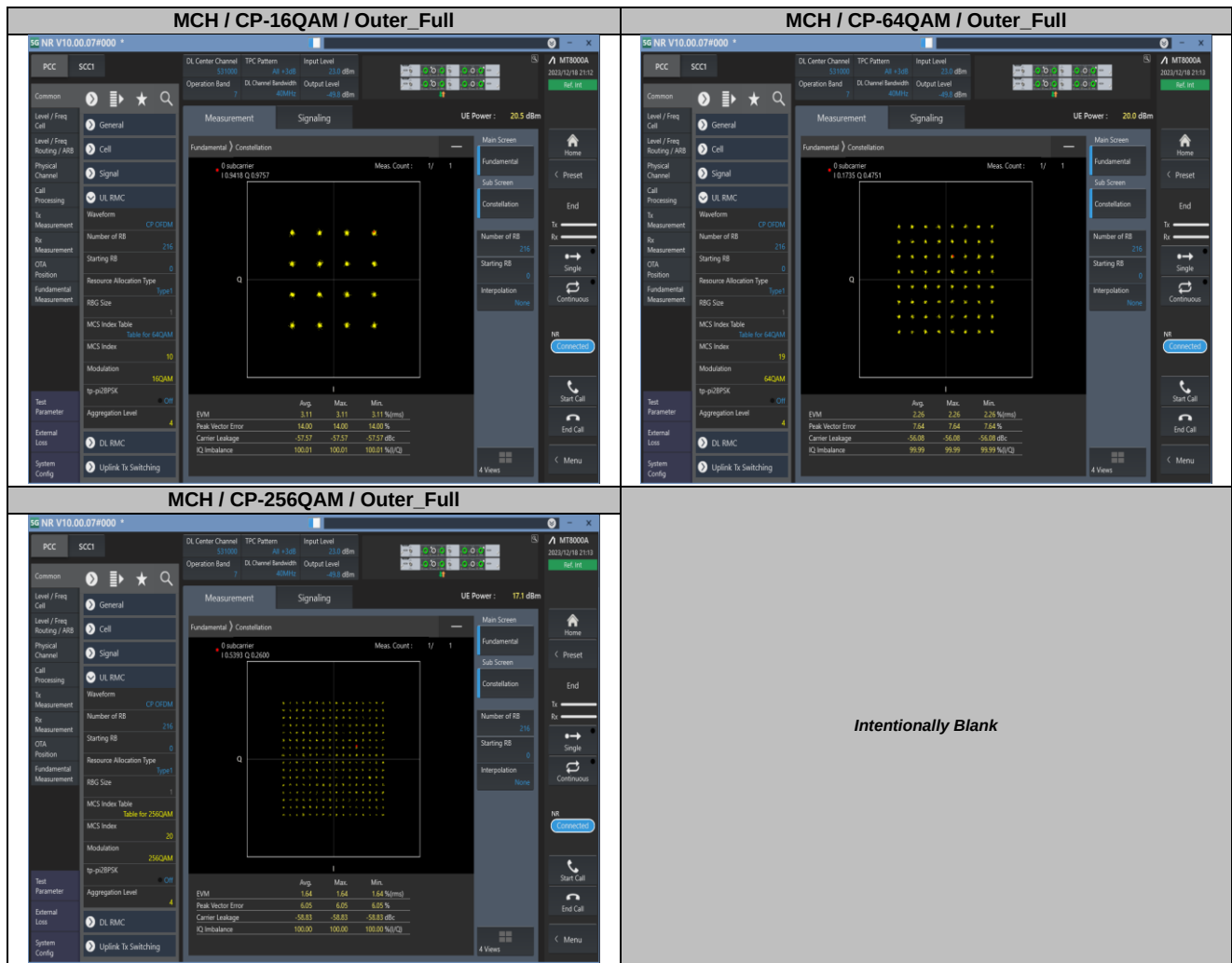
2.2. Test Plots



3. Modulation Characteristics

3.1. Test Plots



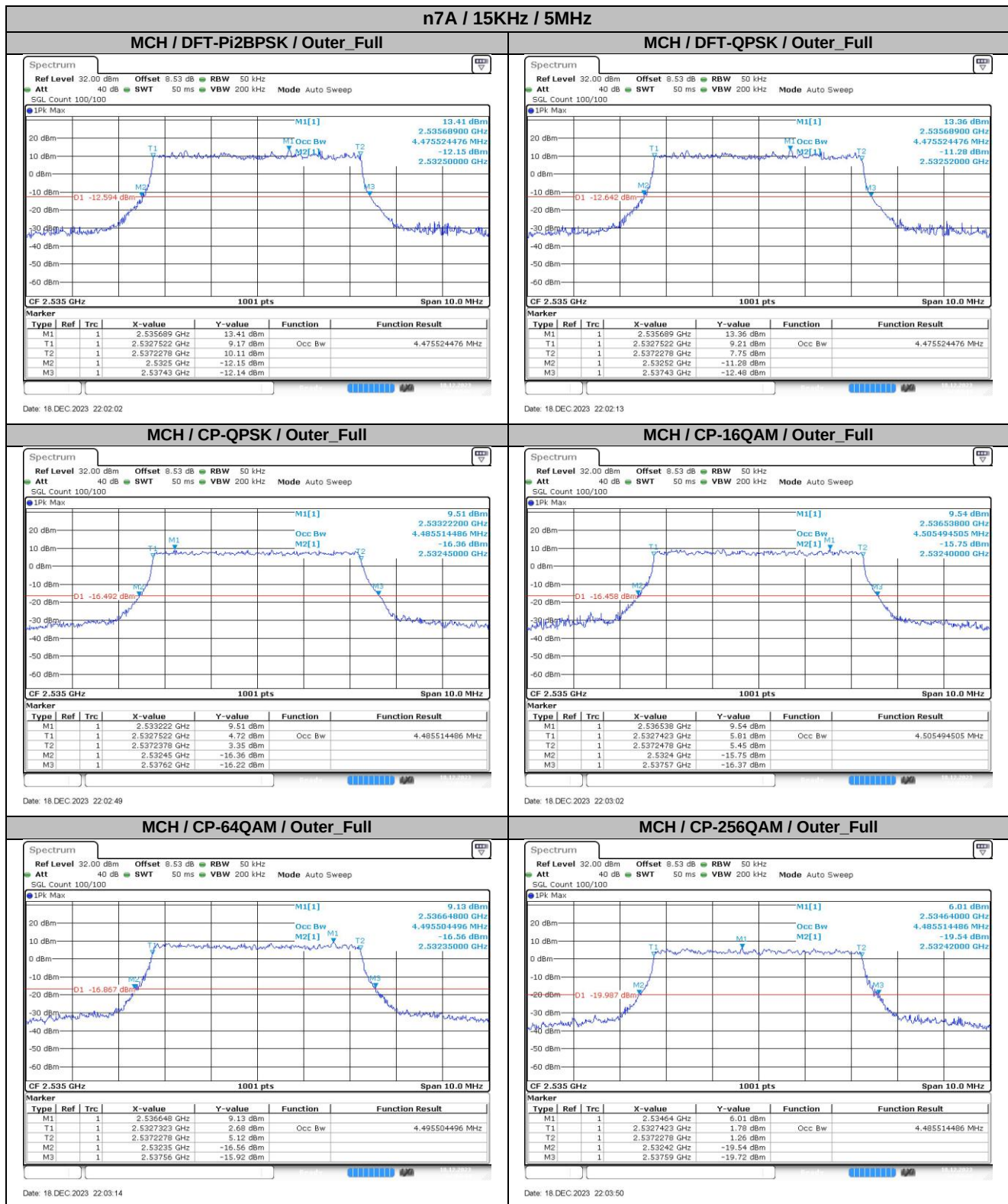


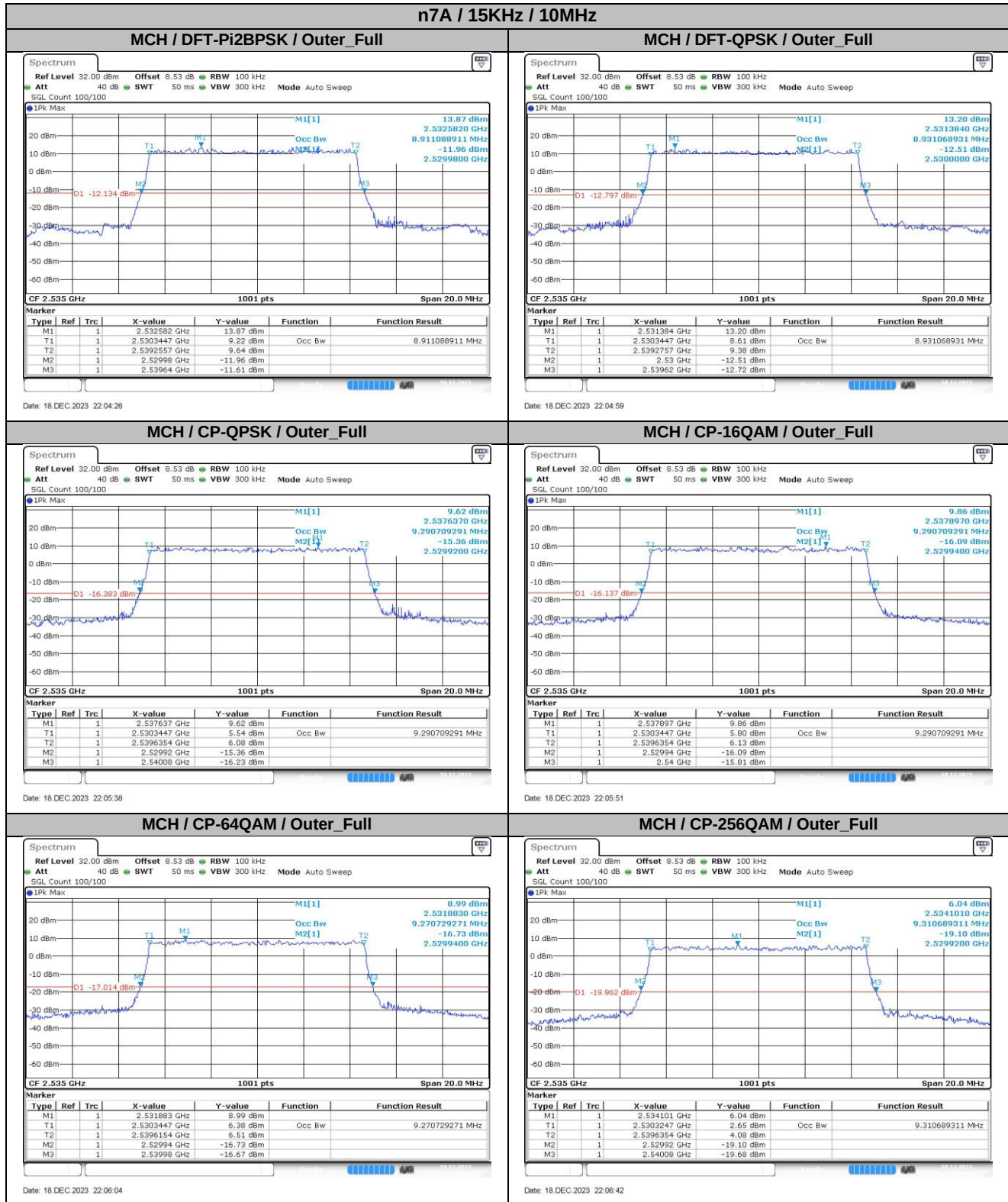
4. 99% Occupied Bandwidth & 26dB Emission Bandwidth

4.1. Test Results

SCS	Bandwidth	Modulation	RB Config	99% Occupied Bandwidth (MHz)	26dB Emission Bandwidth (MHz)	Verdict
15KHz	5MHz	DFT-Pi2BPSK	Outer_Full	4.48	4.93	Pass
15KHz	5MHz	DFT-QPSK	Outer_Full	4.48	4.91	Pass
15KHz	5MHz	CP-QPSK	Outer_Full	4.49	5.17	Pass
15KHz	5MHz	CP-16QAM	Outer_Full	4.51	5.17	Pass
15KHz	5MHz	CP-64QAM	Outer_Full	4.50	5.21	Pass
15KHz	5MHz	CP-256QAM	Outer_Full	4.49	5.17	Pass
15KHz	10MHz	DFT-Pi2BPSK	Outer_Full	8.91	9.66	Pass
15KHz	10MHz	DFT-QPSK	Outer_Full	8.93	9.62	Pass
15KHz	10MHz	CP-QPSK	Outer_Full	9.29	10.16	Pass
15KHz	10MHz	CP-16QAM	Outer_Full	9.29	10.06	Pass
15KHz	10MHz	CP-64QAM	Outer_Full	9.27	10.04	Pass
15KHz	10MHz	CP-256QAM	Outer_Full	9.31	10.16	Pass
15KHz	15MHz	DFT-Pi2BPSK	Outer_Full	13.43	14.37	Pass
15KHz	15MHz	DFT-QPSK	Outer_Full	13.43	14.37	Pass
15KHz	15MHz	CP-QPSK	Outer_Full	14.12	15.12	Pass
15KHz	15MHz	CP-16QAM	Outer_Full	14.12	15.18	Pass
15KHz	15MHz	CP-64QAM	Outer_Full	14.15	15.18	Pass
15KHz	15MHz	CP-256QAM	Outer_Full	14.09	15.12	Pass
15KHz	20MHz	DFT-Pi2BPSK	Outer_Full	17.90	18.88	Pass
15KHz	20MHz	DFT-QPSK	Outer_Full	17.86	18.84	Pass
15KHz	20MHz	CP-QPSK	Outer_Full	18.94	20.00	Pass
15KHz	20MHz	CP-16QAM	Outer_Full	18.94	20.00	Pass
15KHz	20MHz	CP-64QAM	Outer_Full	18.90	19.96	Pass
15KHz	20MHz	CP-256QAM	Outer_Full	18.98	20.04	Pass
15KHz	25MHz	DFT-Pi2BPSK	Outer_Full	22.88	23.95	Pass
15KHz	25MHz	DFT-QPSK	Outer_Full	22.83	24.05	Pass
15KHz	25MHz	CP-QPSK	Outer_Full	23.73	24.95	Pass
15KHz	25MHz	CP-16QAM	Outer_Full	23.73	24.95	Pass
15KHz	25MHz	CP-64QAM	Outer_Full	23.73	25.00	Pass
15KHz	25MHz	CP-256QAM	Outer_Full	23.73	24.95	Pass
15KHz	30MHz	DFT-Pi2BPSK	Outer_Full	28.53	29.82	Pass
15KHz	30MHz	DFT-QPSK	Outer_Full	28.47	29.70	Pass
15KHz	30MHz	CP-QPSK	Outer_Full	28.53	29.88	Pass
15KHz	30MHz	CP-16QAM	Outer_Full	28.59	29.82	Pass
15KHz	30MHz	CP-64QAM	Outer_Full	28.53	29.88	Pass
15KHz	30MHz	CP-256QAM	Outer_Full	28.59	29.94	Pass
15KHz	40MHz	DFT-Pi2BPSK	Outer_Full	38.52	40.32	Pass
15KHz	40MHz	DFT-QPSK	Outer_Full	38.52	40.32	Pass
15KHz	40MHz	CP-QPSK	Outer_Full	38.52	40.16	Pass
15KHz	40MHz	CP-16QAM	Outer_Full	38.44	40.16	Pass
15KHz	40MHz	CP-64QAM	Outer_Full	38.68	40.16	Pass
15KHz	40MHz	CP-256QAM	Outer_Full	38.52	40.16	Pass

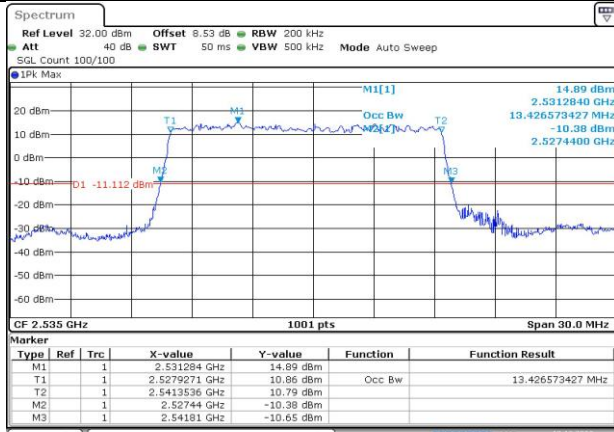
4.2. Test Plots





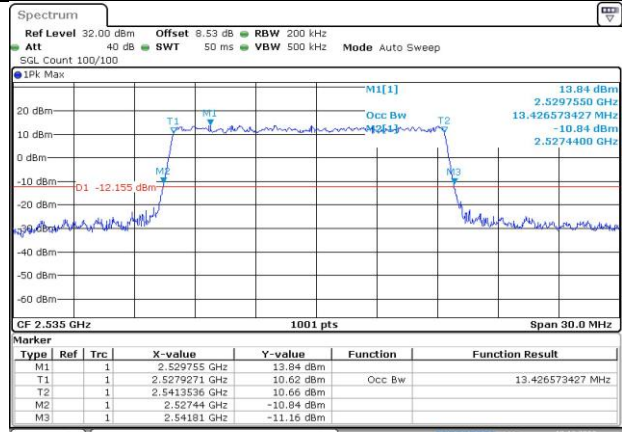
n7A / 15KHz / 15MHz

MCH / DFT-Pi2BPSK / Outer_Full



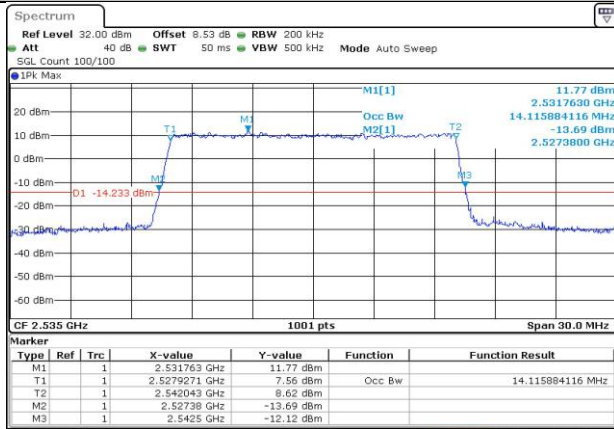
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MCH / DFT-QPSK / Outer_Full



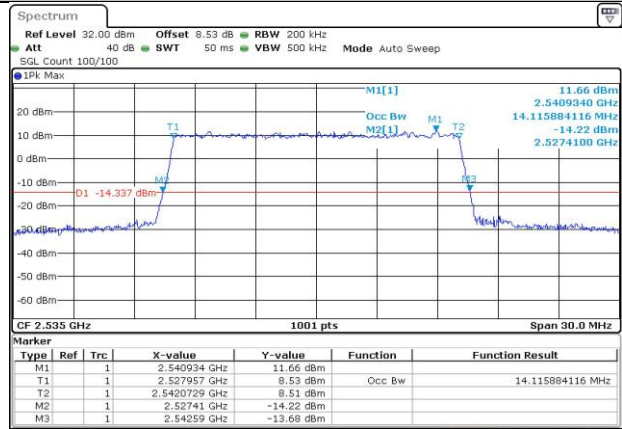
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MCH / CP-QPSK / Outer_Full



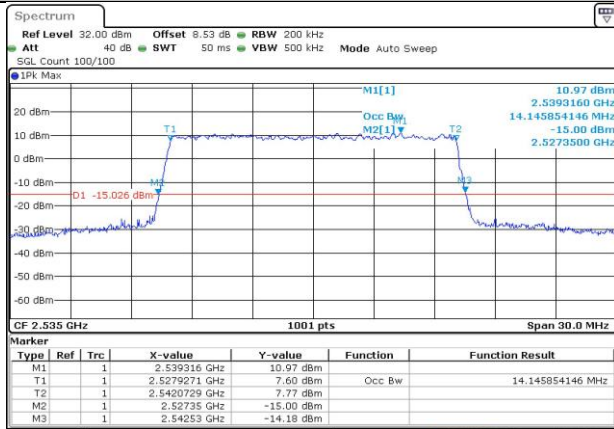
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MCH / CP-16QAM / Outer_Full



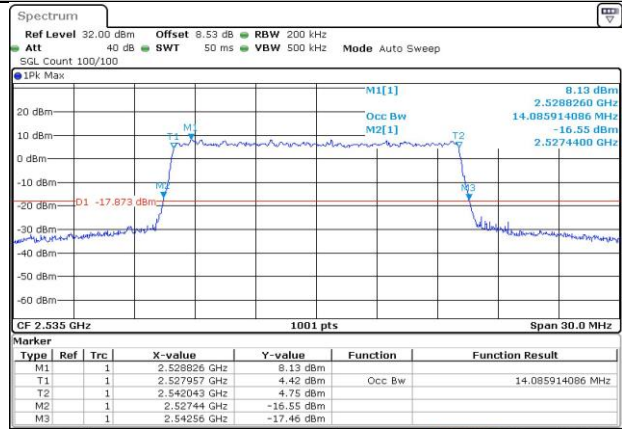
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MCH / CP-64QAM / Outer_Full



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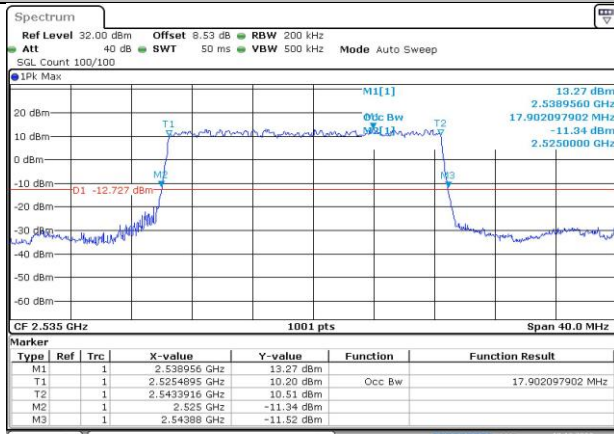
MCH / CP-256QAM / Outer_Full



Date: 18 DEC 2023 22:09:34

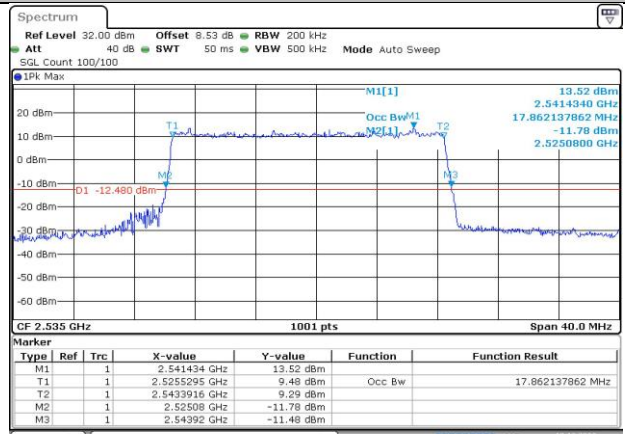
n7A / 15KHz / 20MHz

MCH / DFT-Pi2BPSK / Outer_Full



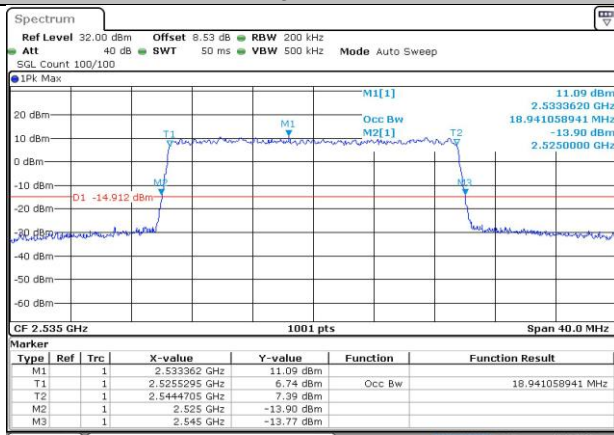
Date: 18 DEC 2023 22:10:11

MCH / DFT-QPSK / Outer_Full



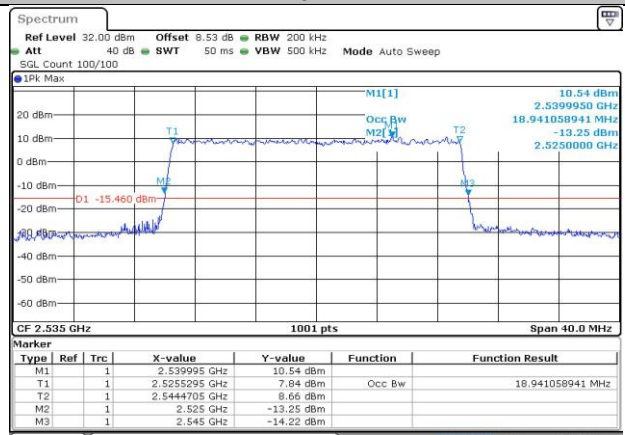
Date: 18 DEC 2023 22:10:44

MCH / CP-QPSK / Outer_Full



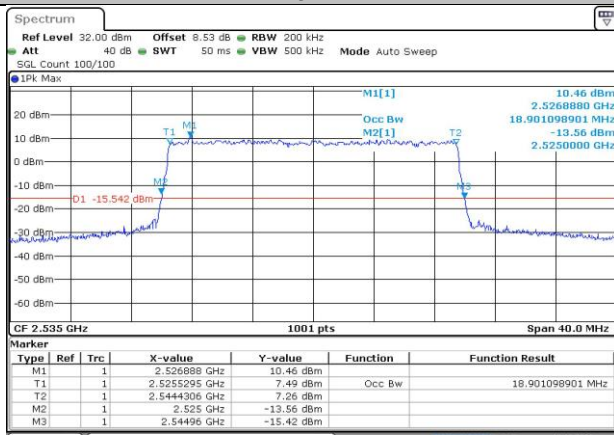
Date: 18 DEC 2023 22:11:22

MCH / CP-16QAM / Outer_Full



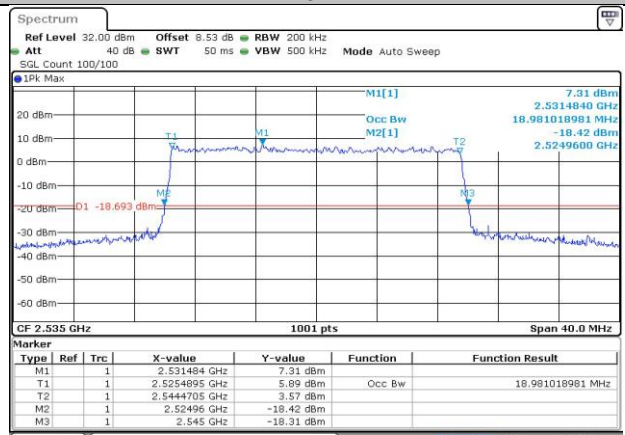
Date: 18 DEC 2023 22:11:34

MCH / CP-64QAM / Outer_Full

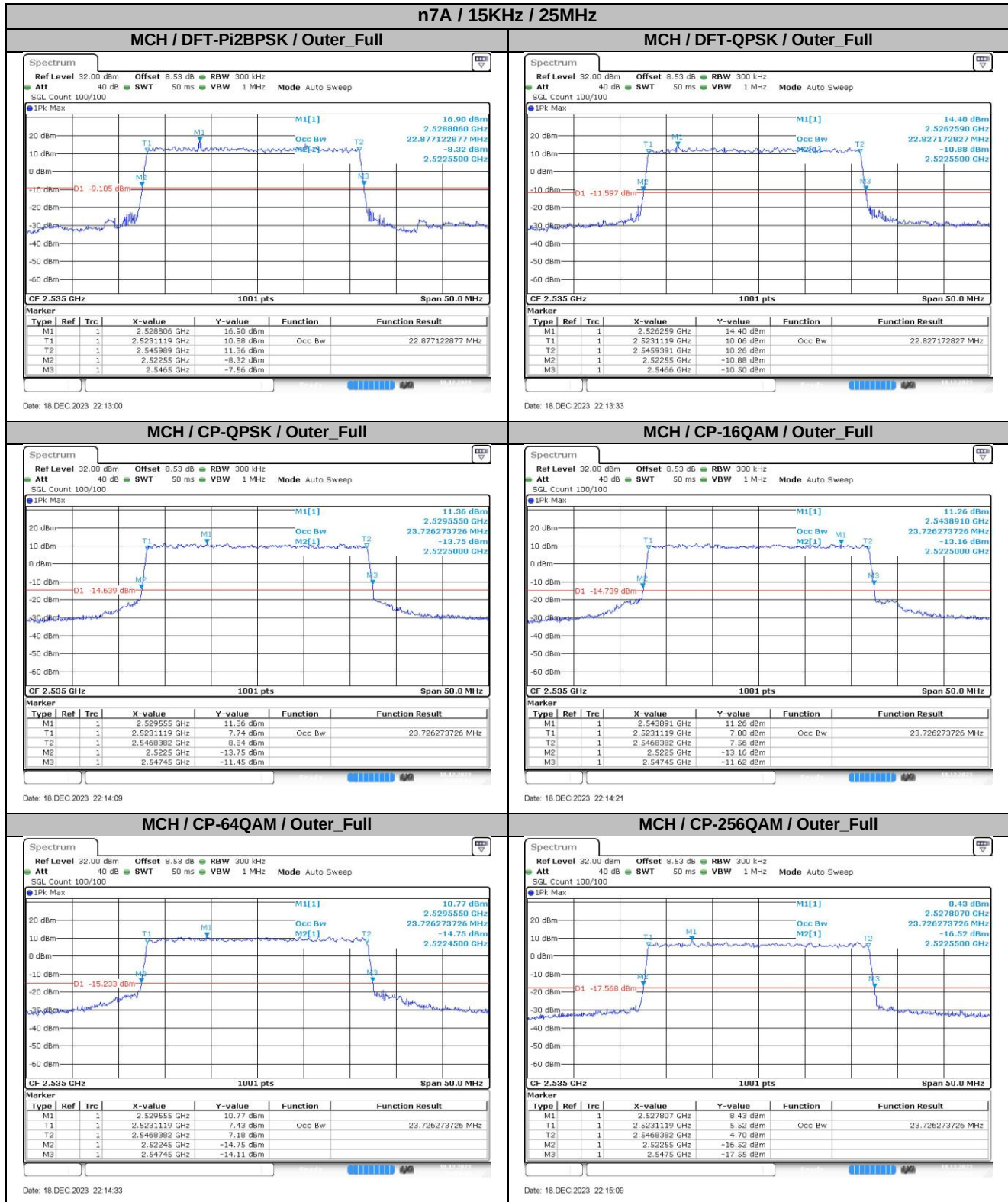


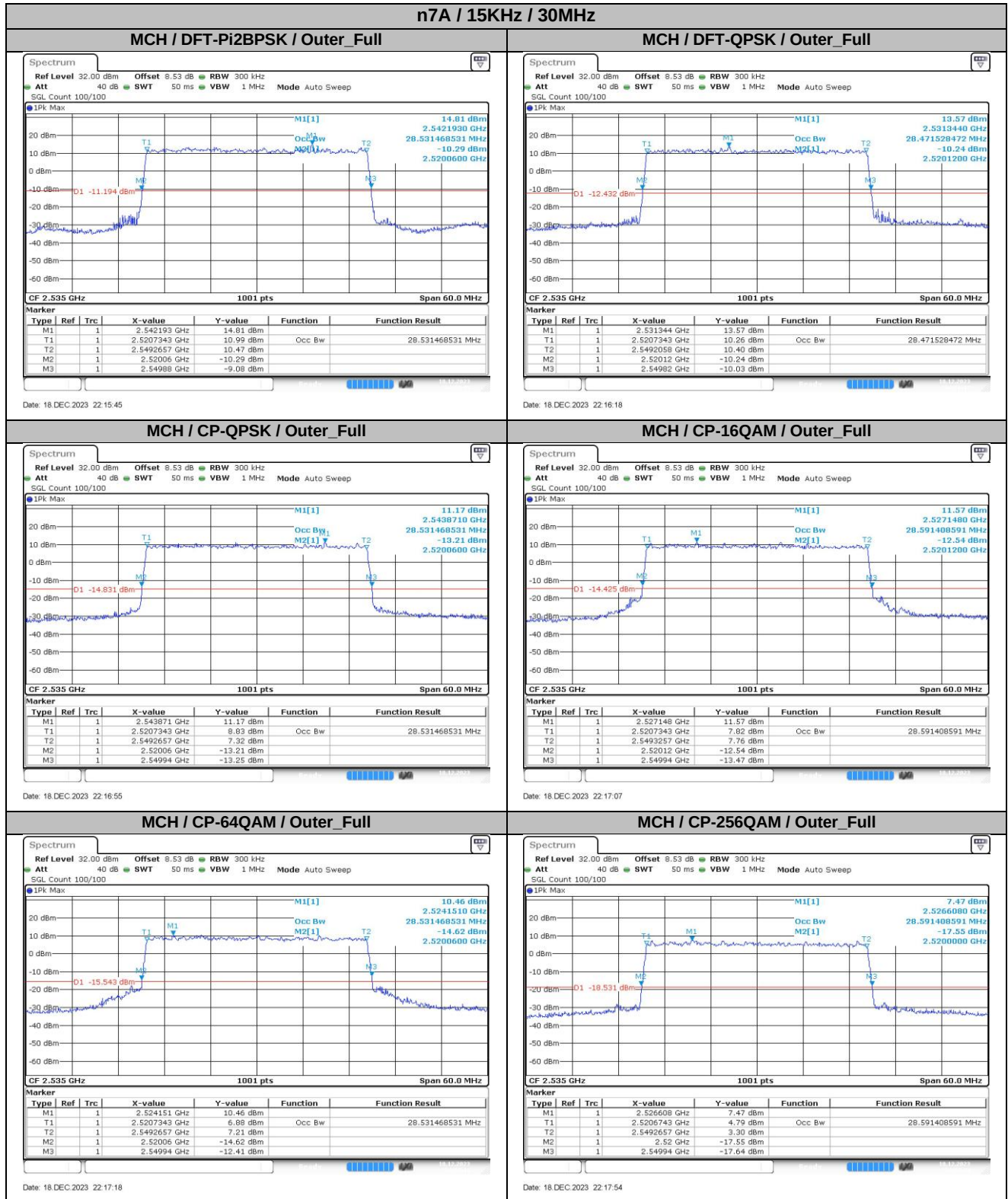
Date: 18 DEC 2023 22:11:47

MCH / CP-256QAM / Outer_Full



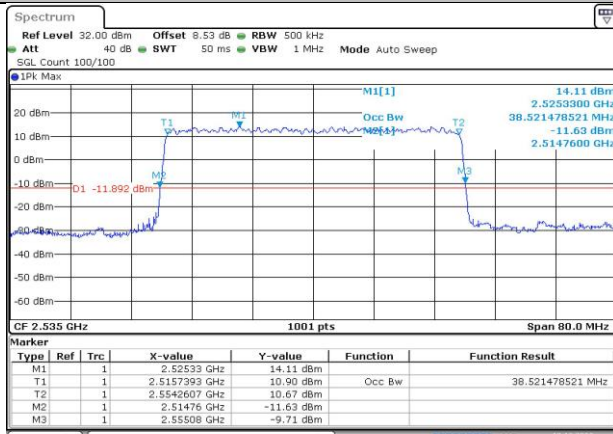
Date: 18 DEC 2023 22:12:25





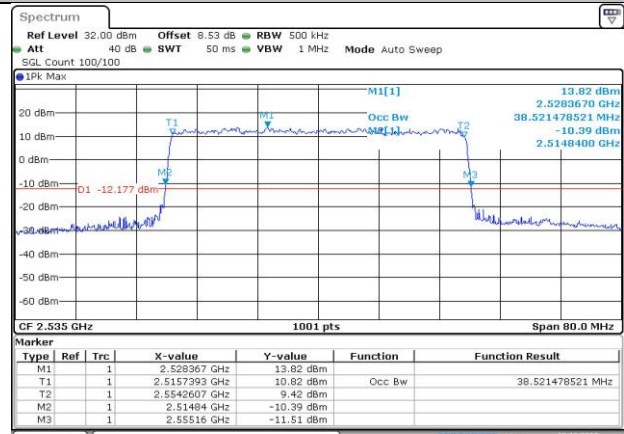
n7A / 15KHz / 40MHz

MCH / DFT-Pi2BPSK / Outer_Full



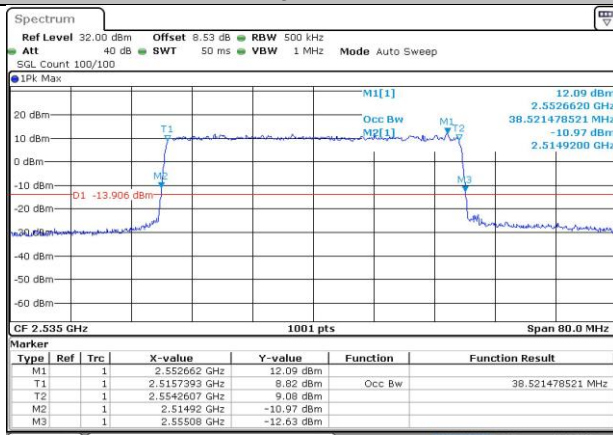
Date: 18 DEC 2023 22:18:30

MCH / DFT-QPSK / Outer_Full



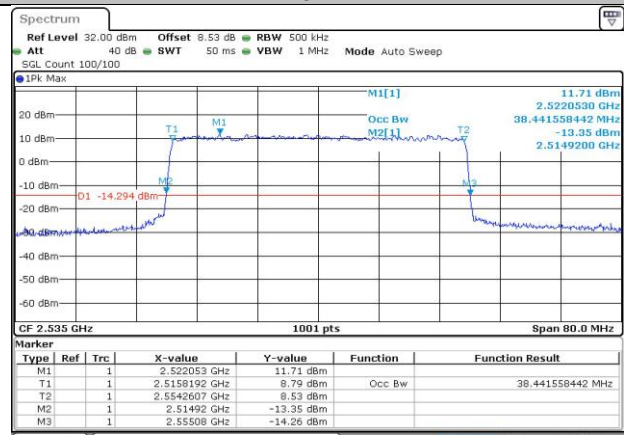
Date: 18 DEC 2023 22:19:02

MCH / CP-QPSK / Outer_Full



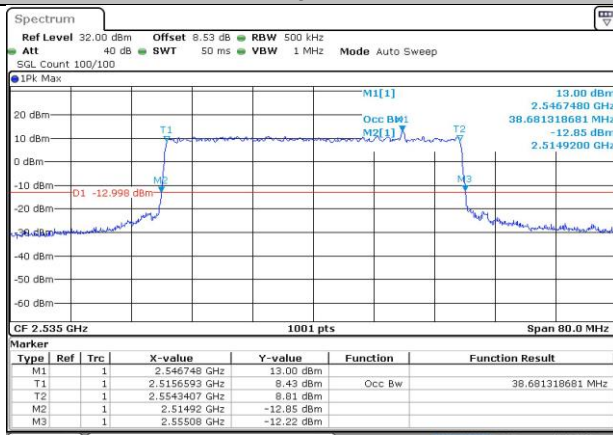
Date: 18 DEC 2023 22:19:38

MCH / CP-16QAM / Outer_Full



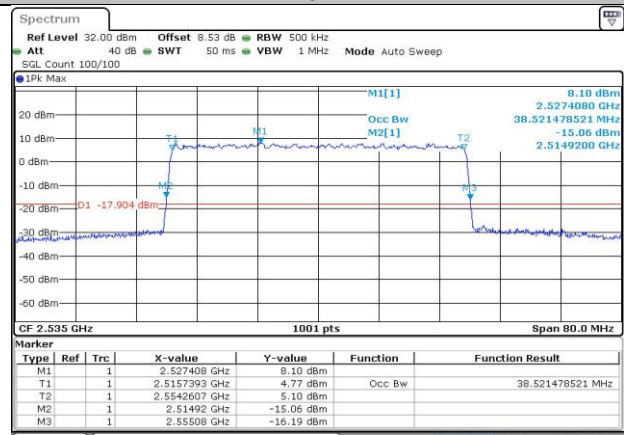
Date: 18 DEC 2023 22:19:51

MCH / CP-64QAM / Outer_Full



Date: 18 DEC 2023 22:20:02

MCH / CP-256QAM / Outer_Full

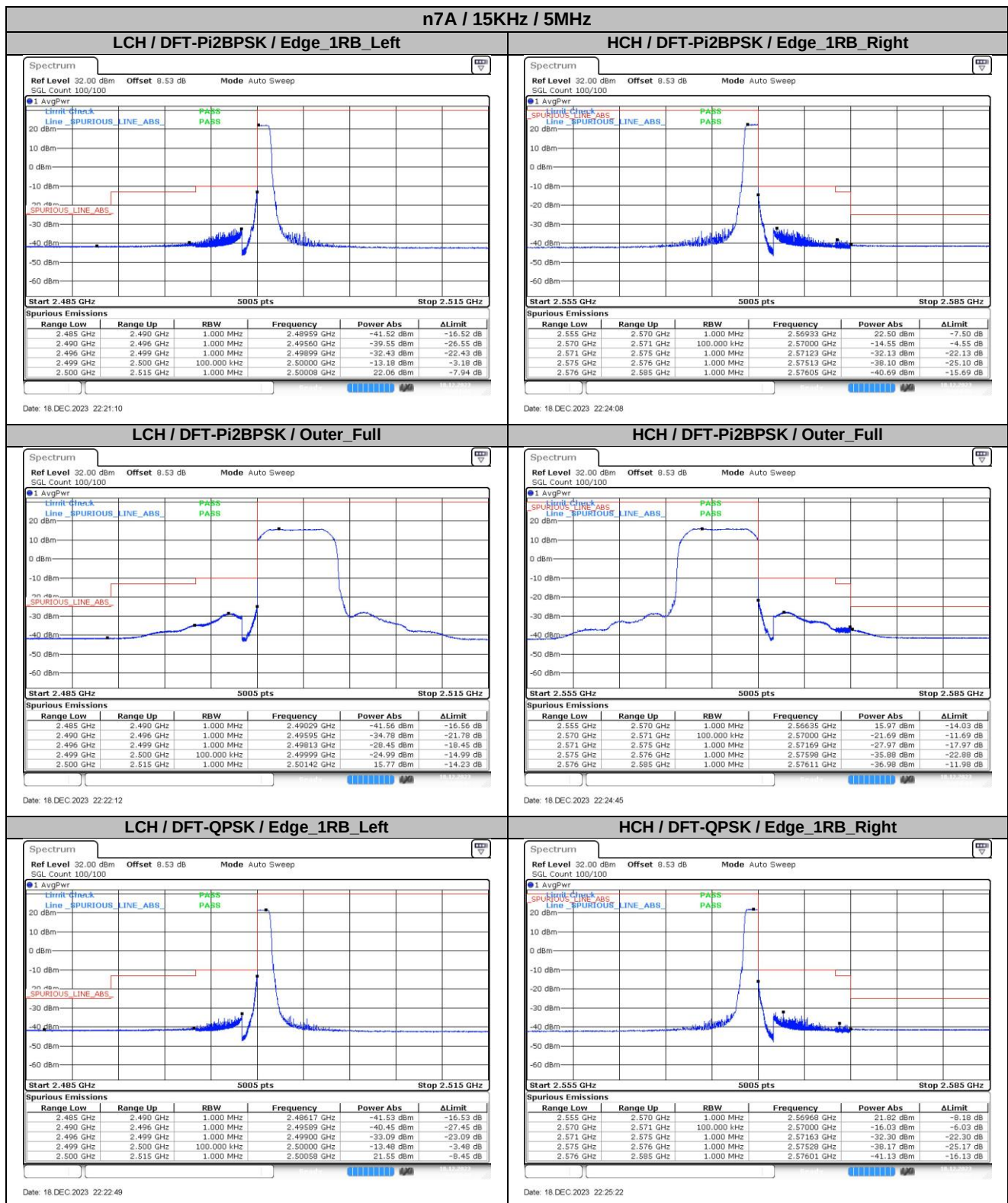


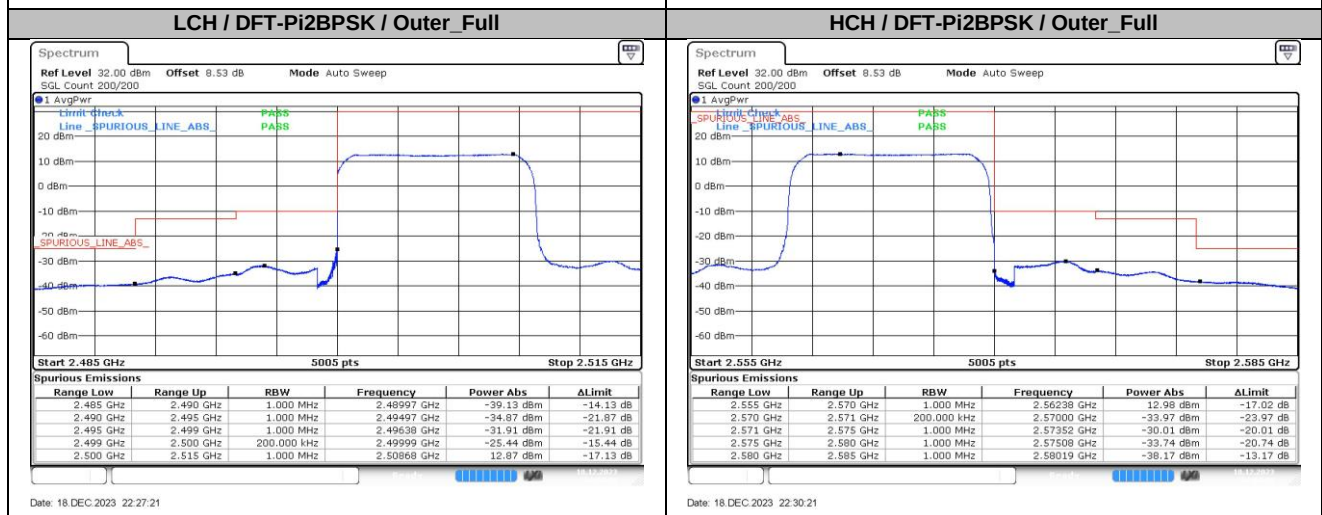
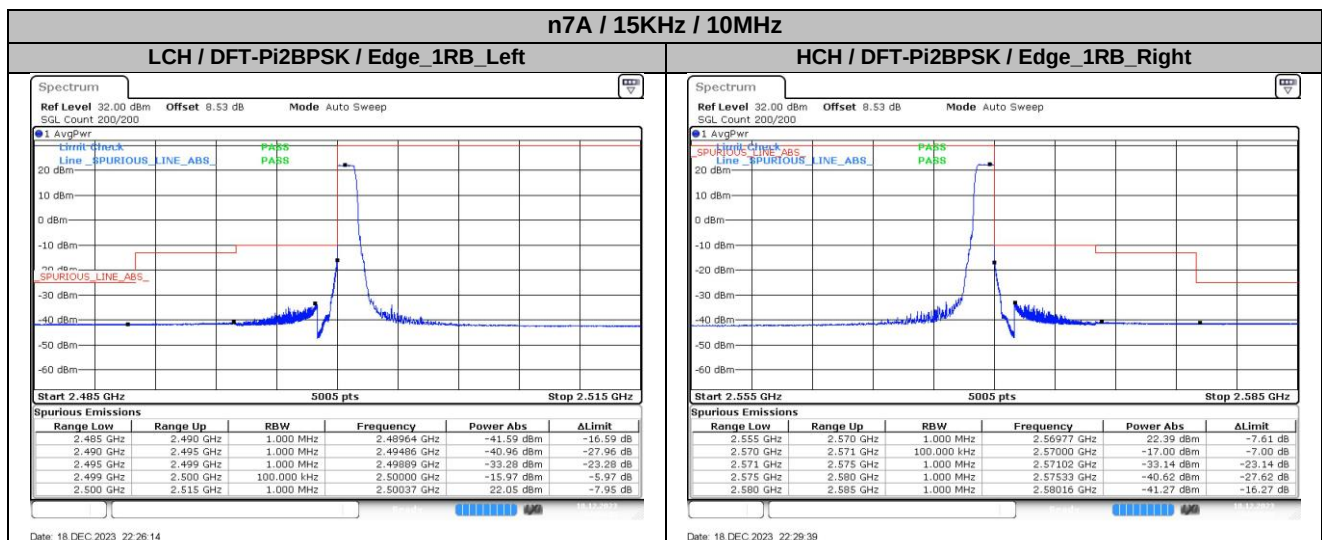
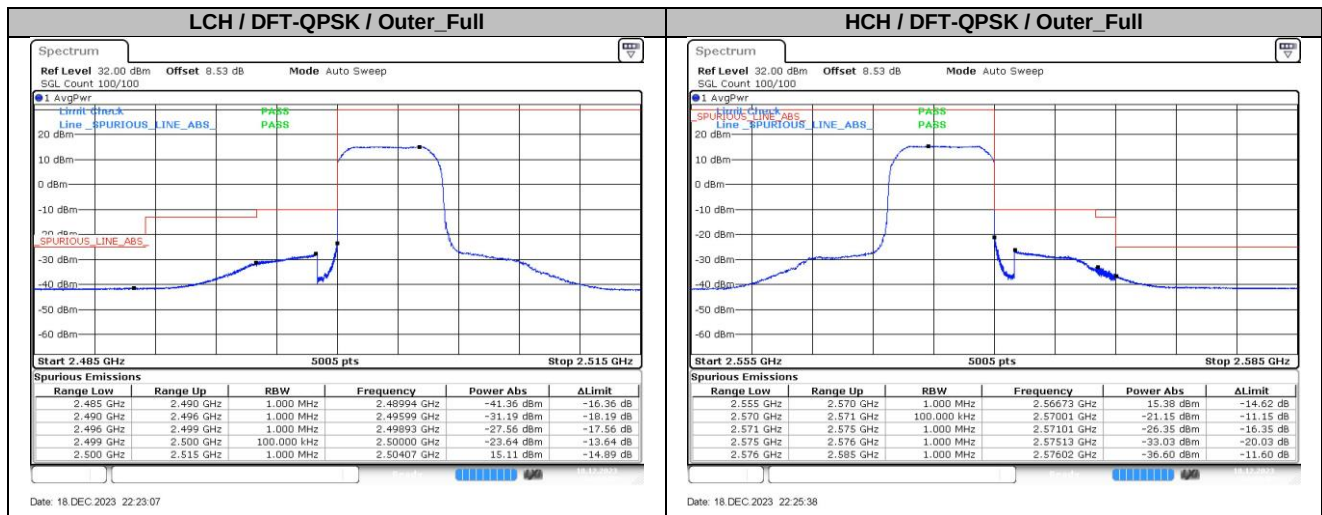
Date: 18 DEC 2023 22:20:39

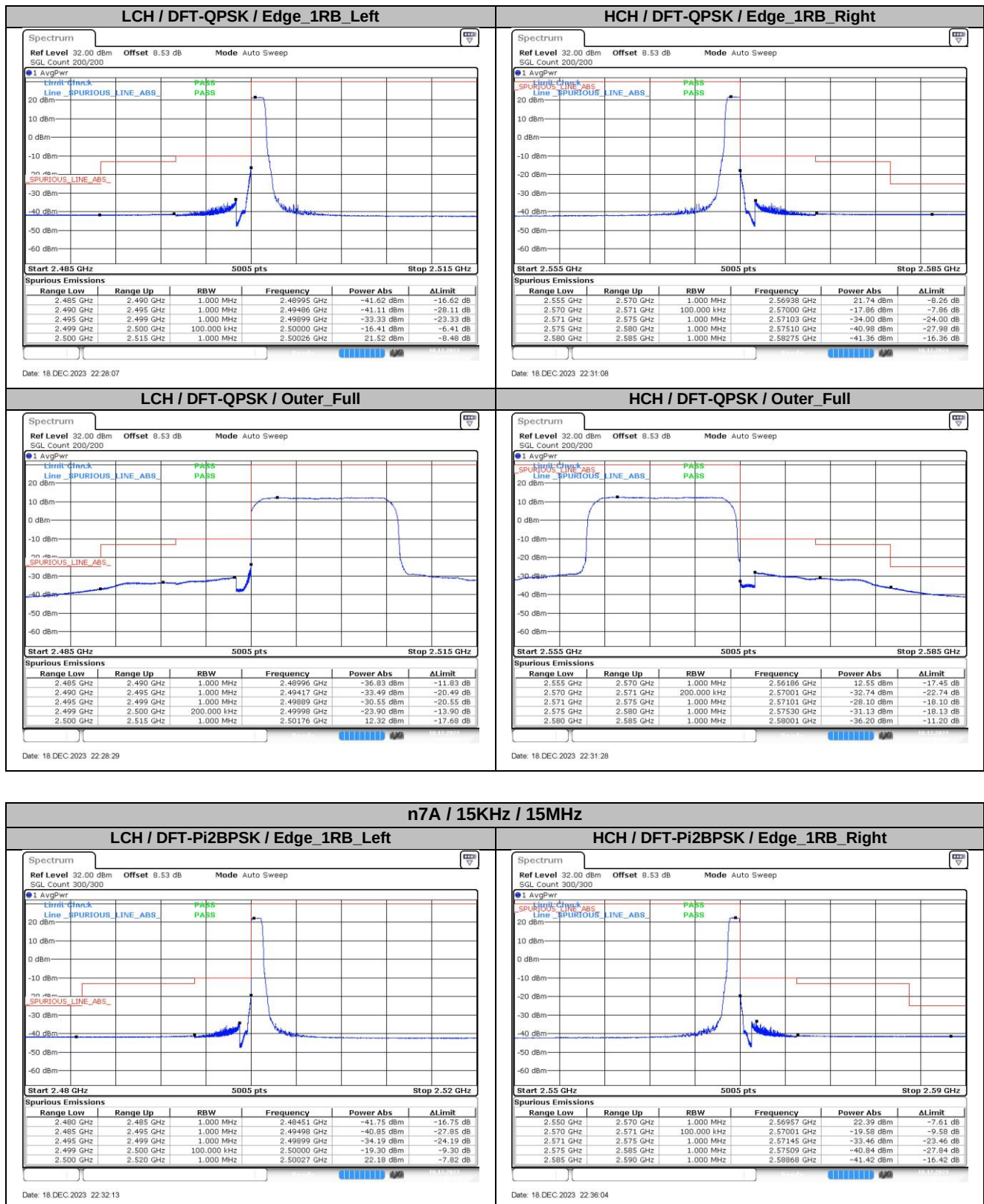
5. Conducted Band Edges

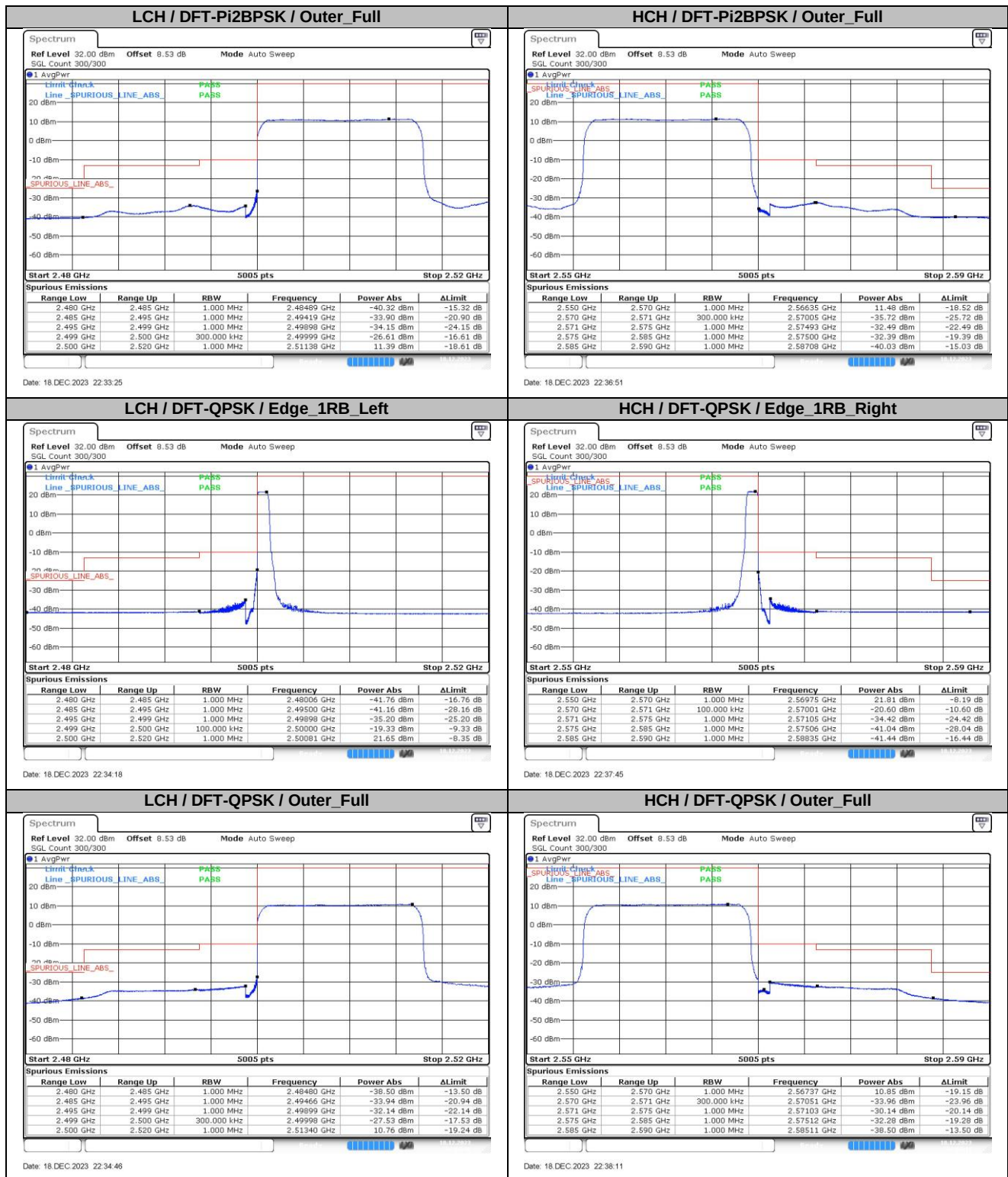
5.1. Test Plots

5.1.1. Bandwidth:5MHz



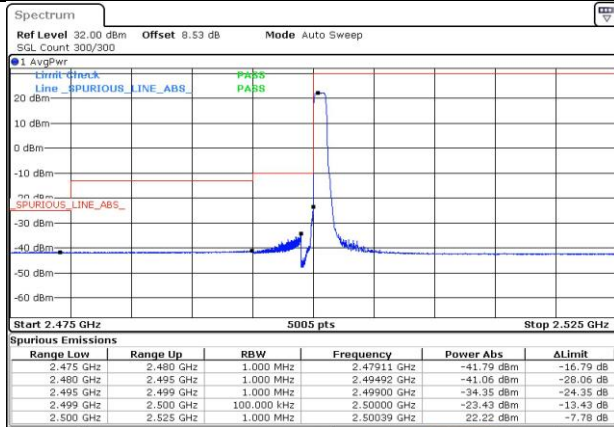






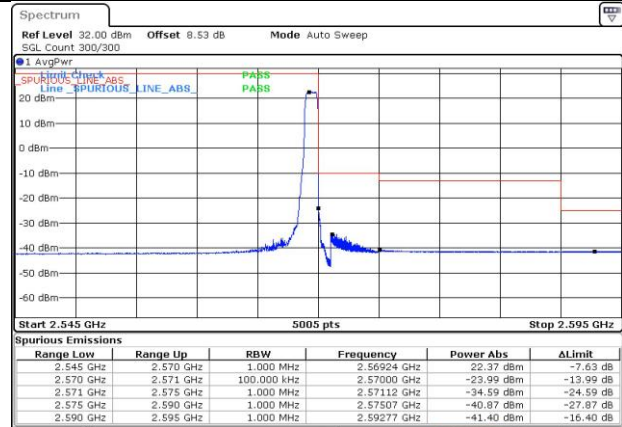
n7A / 15KHz / 20MHz

LCH / DFT-Pi2BPSK / Edge_1RB_Left



Date: 18 DEC 2023 22:38:54

HCH / DFT-Pi2BPSK / Edge_1RB_Right



Date: 18 DEC 2023 22:41:56

LCH / DFT-Pi2BPSK / Outer_Full



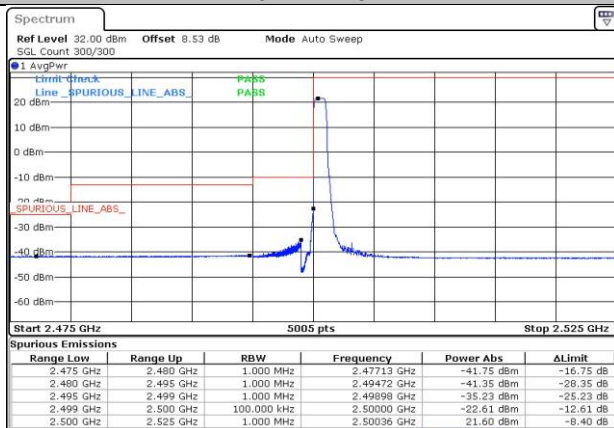
Date: 18 DEC 2023 22:39:38

HCH / DFT-Pi2BPSK / Outer_Full



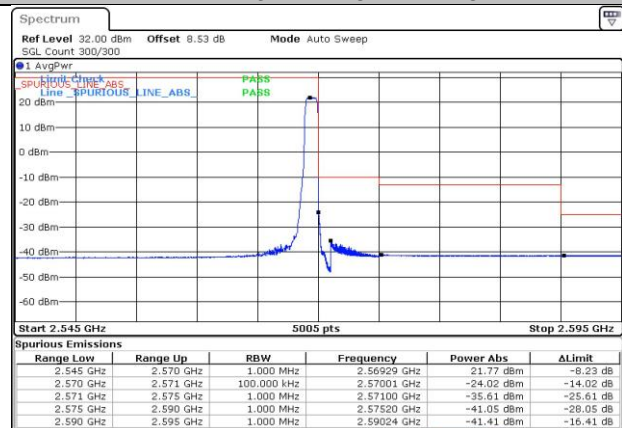
Date: 18 DEC 2023 22:42:43

LCH / DFT-QPSK / Edge_1RB_Left



Date: 18 DEC 2023 22:40:10

HCH / DFT-QPSK / Edge_1RB_Right



Date: 18 DEC 2023 22:43:37