

Appendix for n2A (1850-1910)

Catalogue

1. EFFECTIVE ISOTROPIC RADIATED POWER	3
1.1. TEST RESULTS @ ANT2 (ANTENNA GAIN=-1.70DBI).....	3
2. PEAK-TO-AVERAGE RATIO	5
2.1. TEST RESULTS	5
2.2. TEST PLOTS.....	5
3. MODULATION CHARACTERISTICS	6
3.1. TEST PLOTS.....	6
4. 99% OCCUPIED BANDWIDTH & 26DB EMISSION BANDWIDTH	7
4.1. TEST RESULTS	7
4.2. TEST PLOTS.....	8
5. CONDUCTED BAND EDGES	12
5.1. TEST PLOTS.....	12
6. CONDUCTED SPURIOUS EMISSION	17
6.1. TEST PLOTS.....	17
7. FREQUENCY STABILITY	21
7.1. TEST RESULTS	21

1. Effective Isotropic Radiated Power

1.1. Test Results @ Ant2 (Antenna Gain=-1.70dBi)

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	23.33	23.34	23.49	21.79	30.00	Pass
15KHz	5MHz	LCH	DFT-QPSK	23.45	23.23	23.45	21.75	30.00	Pass
15KHz	5MHz	LCH	DFT-16QAM	22.42	22.32	22.51	20.81	30.00	Pass
15KHz	5MHz	LCH	DFT-64QAM	21.15	20.99	21.05	19.45	30.00	Pass
15KHz	5MHz	LCH	DFT-256QAM	18.50	18.26	18.89	17.19	30.00	Pass
15KHz	5MHz	LCH	CP-QPSK	21.99	21.77	21.84	20.29	30.00	Pass
15KHz	5MHz	MCH	DFT-Pi2BPSK	23.12	23.07	23.09	21.42	30.00	Pass
15KHz	5MHz	MCH	DFT-QPSK	23.13	22.92	23.02	21.43	30.00	Pass
15KHz	5MHz	MCH	DFT-16QAM	22.06	22.02	22.21	20.51	30.00	Pass
15KHz	5MHz	MCH	DFT-64QAM	20.73	20.62	20.64	19.03	30.00	Pass
15KHz	5MHz	MCH	DFT-256QAM	18.08	17.95	18.52	16.82	30.00	Pass
15KHz	5MHz	MCH	CP-QPSK	21.53	21.46	21.57	19.87	30.00	Pass
15KHz	5MHz	HCH	DFT-Pi2BPSK	23.18	23.14	23.21	21.51	30.00	Pass
15KHz	5MHz	HCH	DFT-QPSK	23.11	23.04	23.10	21.41	30.00	Pass
15KHz	5MHz	HCH	DFT-16QAM	22.08	22.08	22.15	20.45	30.00	Pass
15KHz	5MHz	HCH	DFT-64QAM	20.73	20.71	20.60	19.03	30.00	Pass
15KHz	5MHz	HCH	DFT-256QAM	18.08	18.03	18.63	16.93	30.00	Pass
15KHz	5MHz	HCH	CP-QPSK	21.60	21.56	21.47	19.90	30.00	Pass
15KHz	10MHz	LCH	DFT-Pi2BPSK	23.43	23.24	23.48	21.78	30.00	Pass
15KHz	10MHz	LCH	DFT-QPSK	23.35	23.18	23.38	21.68	30.00	Pass
15KHz	10MHz	LCH	DFT-16QAM	22.44	22.35	22.38	20.74	30.00	Pass
15KHz	10MHz	LCH	DFT-64QAM	21.12	20.93	20.87	19.42	30.00	Pass
15KHz	10MHz	LCH	DFT-256QAM	18.44	18.26	18.78	17.08	30.00	Pass
15KHz	10MHz	LCH	CP-QPSK	21.86	21.75	21.77	20.16	30.00	Pass
15KHz	10MHz	MCH	DFT-Pi2BPSK	23.07	23.07	23.05	21.37	30.00	Pass
15KHz	10MHz	MCH	DFT-QPSK	22.97	22.93	23.07	21.37	30.00	Pass
15KHz	10MHz	MCH	DFT-16QAM	22.06	22.04	22.04	20.36	30.00	Pass
15KHz	10MHz	MCH	DFT-64QAM	20.73	20.70	20.53	19.03	30.00	Pass
15KHz	10MHz	MCH	DFT-256QAM	18.05	17.97	18.46	16.76	30.00	Pass
15KHz	10MHz	MCH	CP-QPSK	21.54	21.44	21.41	19.84	30.00	Pass
15KHz	10MHz	HCH	DFT-Pi2BPSK	23.02	23.15	23.11	21.45	30.00	Pass
15KHz	10MHz	HCH	DFT-QPSK	23.00	23.10	23.02	21.40	30.00	Pass
15KHz	10MHz	HCH	DFT-16QAM	21.99	22.08	22.04	20.38	30.00	Pass
15KHz	10MHz	HCH	DFT-64QAM	20.75	20.78	20.53	19.08	30.00	Pass
15KHz	10MHz	HCH	DFT-256QAM	17.98	18.13	18.52	16.82	30.00	Pass
15KHz	10MHz	HCH	CP-QPSK	21.42	21.51	21.50	19.81	30.00	Pass
15KHz	15MHz	LCH	DFT-Pi2BPSK	23.50	23.35	23.36	21.80	30.00	Pass
15KHz	15MHz	LCH	DFT-QPSK	23.43	23.23	23.46	21.76	30.00	Pass
15KHz	15MHz	LCH	DFT-16QAM	22.55	22.40	22.48	20.85	30.00	Pass
15KHz	15MHz	LCH	DFT-64QAM	21.18	20.96	20.93	19.48	30.00	Pass
15KHz	15MHz	LCH	DFT-256QAM	18.44	18.29	18.83	17.13	30.00	Pass
15KHz	15MHz	LCH	CP-QPSK	22.00	21.86	21.89	20.30	30.00	Pass
15KHz	15MHz	MCH	DFT-Pi2BPSK	23.27	23.18	23.20	21.57	30.00	Pass
15KHz	15MHz	MCH	DFT-QPSK	23.22	23.10	23.15	21.52	30.00	Pass
15KHz	15MHz	MCH	DFT-16QAM	22.31	22.28	22.15	20.61	30.00	Pass
15KHz	15MHz	MCH	DFT-64QAM	20.98	20.87	20.69	19.28	30.00	Pass
15KHz	15MHz	MCH	DFT-256QAM	18.22	18.12	18.67	16.97	30.00	Pass
15KHz	15MHz	MCH	CP-QPSK	21.75	21.68	21.58	20.05	30.00	Pass
15KHz	15MHz	HCH	DFT-Pi2BPSK	23.05	23.30	23.17	21.60	30.00	Pass
15KHz	15MHz	HCH	DFT-QPSK	23.08	23.16	23.14	21.46	30.00	Pass
15KHz	15MHz	HCH	DFT-16QAM	22.10	22.21	22.16	20.51	30.00	Pass
15KHz	15MHz	HCH	DFT-64QAM	20.86	20.86	20.65	19.16	30.00	Pass
15KHz	15MHz	HCH	DFT-256QAM	18.11	18.10	18.57	16.87	30.00	Pass
15KHz	15MHz	HCH	CP-QPSK	21.58	21.66	21.61	19.96	30.00	Pass
15KHz	20MHz	LCH	DFT-Pi2BPSK	23.50	23.26	23.43	21.80	30.00	Pass
15KHz	20MHz	LCH	DFT-QPSK	23.46	23.21	23.42	21.76	30.00	Pass
15KHz	20MHz	LCH	DFT-16QAM	22.51	22.34	22.39	20.81	30.00	Pass
15KHz	20MHz	LCH	DFT-64QAM	21.21	20.91	20.98	19.51	30.00	Pass

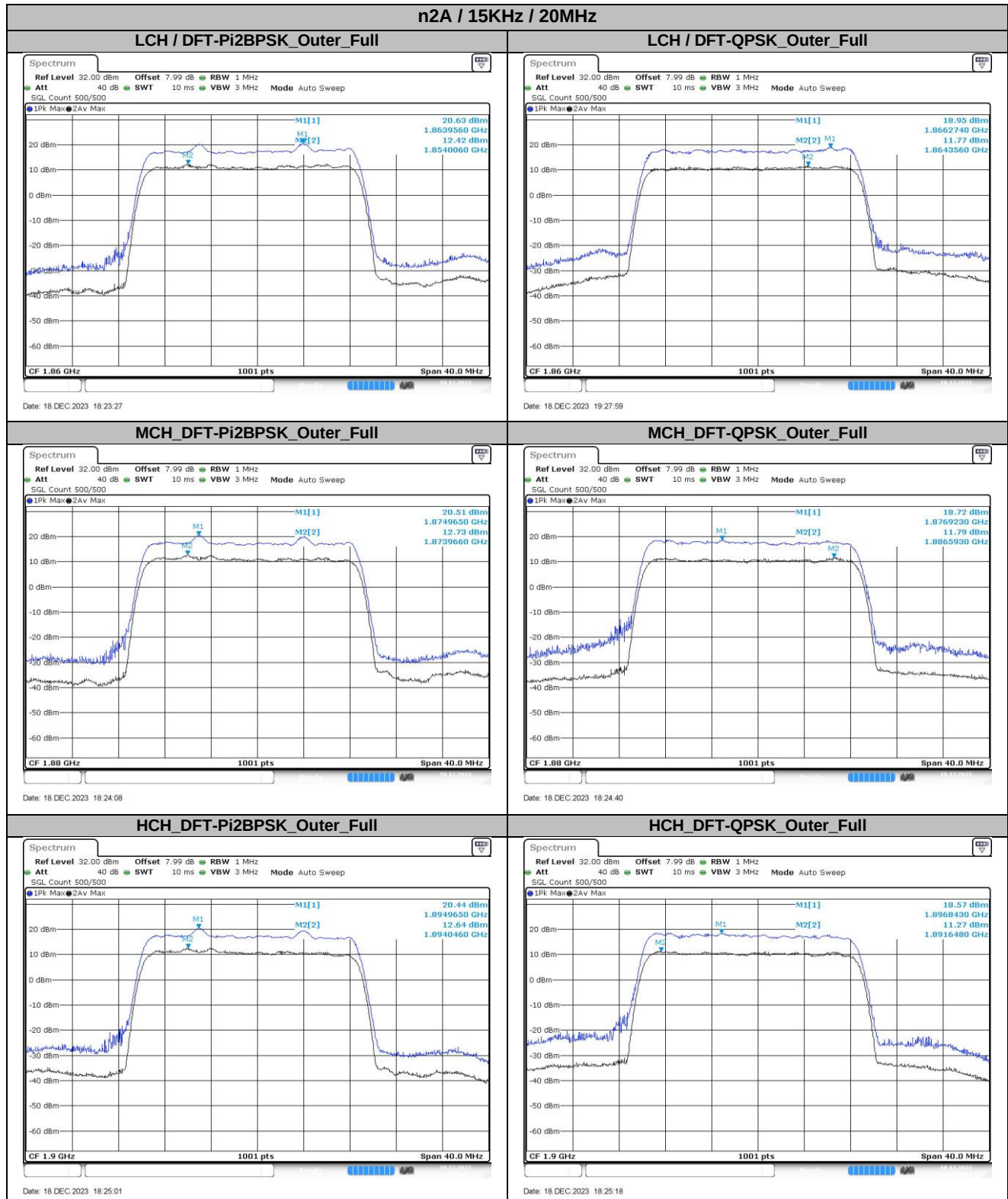
15KHz	20MHz	LCH	DFT-256QAM	18.51	18.25	18.89	17.19	30.00	Pass
15KHz	20MHz	LCH	CP-QPSK	22.03	21.72	21.84	20.33	30.00	Pass
15KHz	20MHz	MCH	DFT-Pi2BPSK	23.25	23.18	23.23	21.55	30.00	Pass
15KHz	20MHz	MCH	DFT-QPSK	23.17	23.11	23.19	21.49	30.00	Pass
15KHz	20MHz	MCH	DFT-16QAM	22.31	22.19	22.09	20.61	30.00	Pass
15KHz	20MHz	MCH	DFT-64QAM	20.94	20.84	20.66	19.24	30.00	Pass
15KHz	20MHz	MCH	DFT-256QAM	18.20	18.14	18.65	16.95	30.00	Pass
15KHz	20MHz	MCH	CP-QPSK	21.77	21.61	21.59	20.07	30.00	Pass
15KHz	20MHz	HCH	DFT-Pi2BPSK	23.12	23.26	23.11	21.56	30.00	Pass
15KHz	20MHz	HCH	DFT-QPSK	22.99	23.18	23.11	21.48	30.00	Pass
15KHz	20MHz	HCH	DFT-16QAM	22.16	22.13	22.08	20.46	30.00	Pass
15KHz	20MHz	HCH	DFT-64QAM	20.71	20.77	20.57	19.07	30.00	Pass
15KHz	20MHz	HCH	DFT-256QAM	18.15	18.14	18.60	16.90	30.00	Pass
15KHz	20MHz	HCH	CP-QPSK	21.66	21.65	21.59	19.96	30.00	Pass

2. Peak-to-Average Ratio

2.1. Test Results

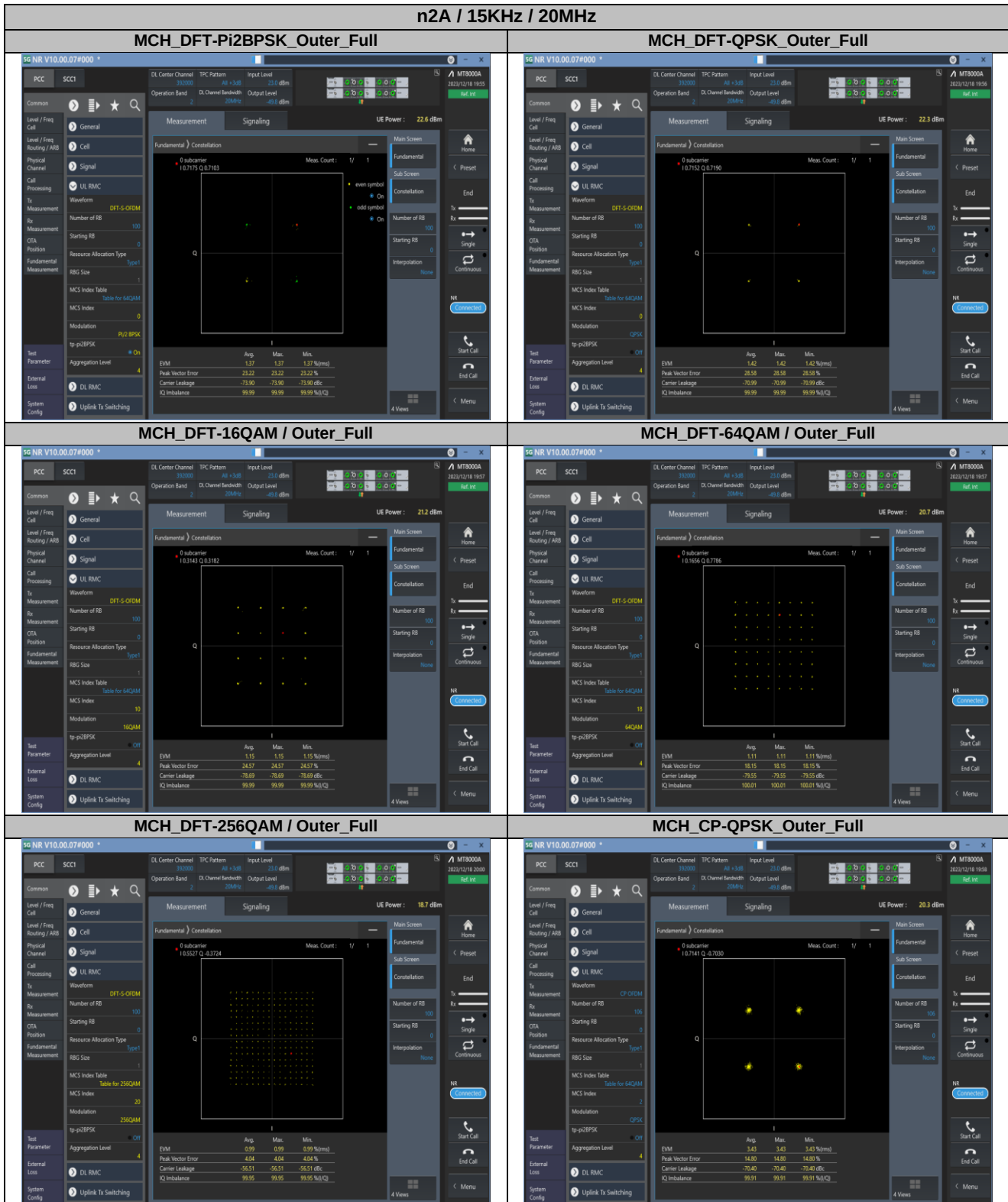
SCS	Bandwidth	Channel	Modulation	Result (dB)		Limit (dB)	Verdict
				DFT-Pi2BPSK	DFT-QPSK		
15KHz	20MHz	LCH	Outer_Full	8.21	7.18	13.00	Pass
15KHz	20MHz	MCH	Outer_Full	7.78	6.93	13.00	Pass
15KHz	20MHz	HCH	Outer_Full	7.80	7.30	13.00	Pass

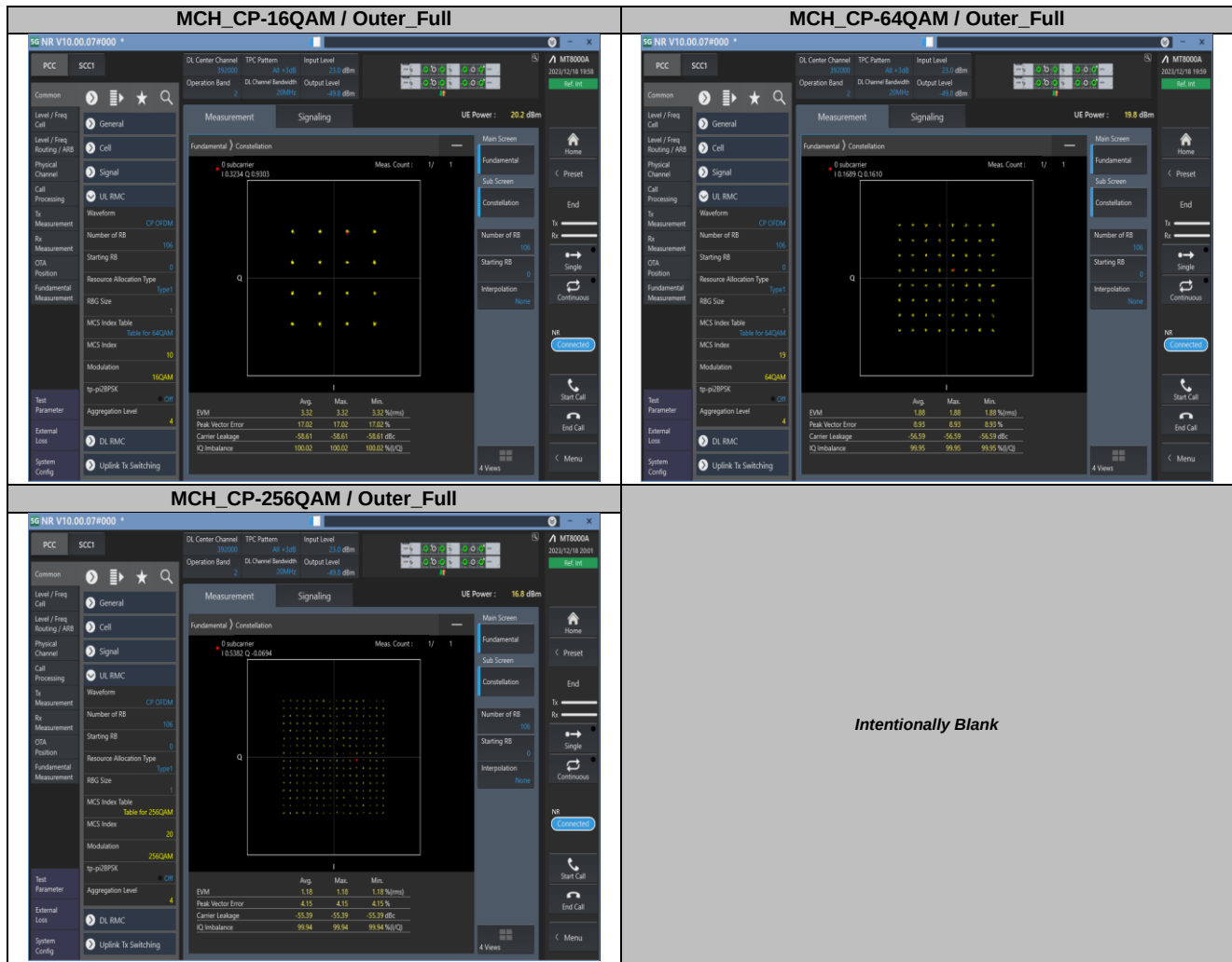
2.2. Test Plots



3. Modulation Characteristics

3.1. Test Plots





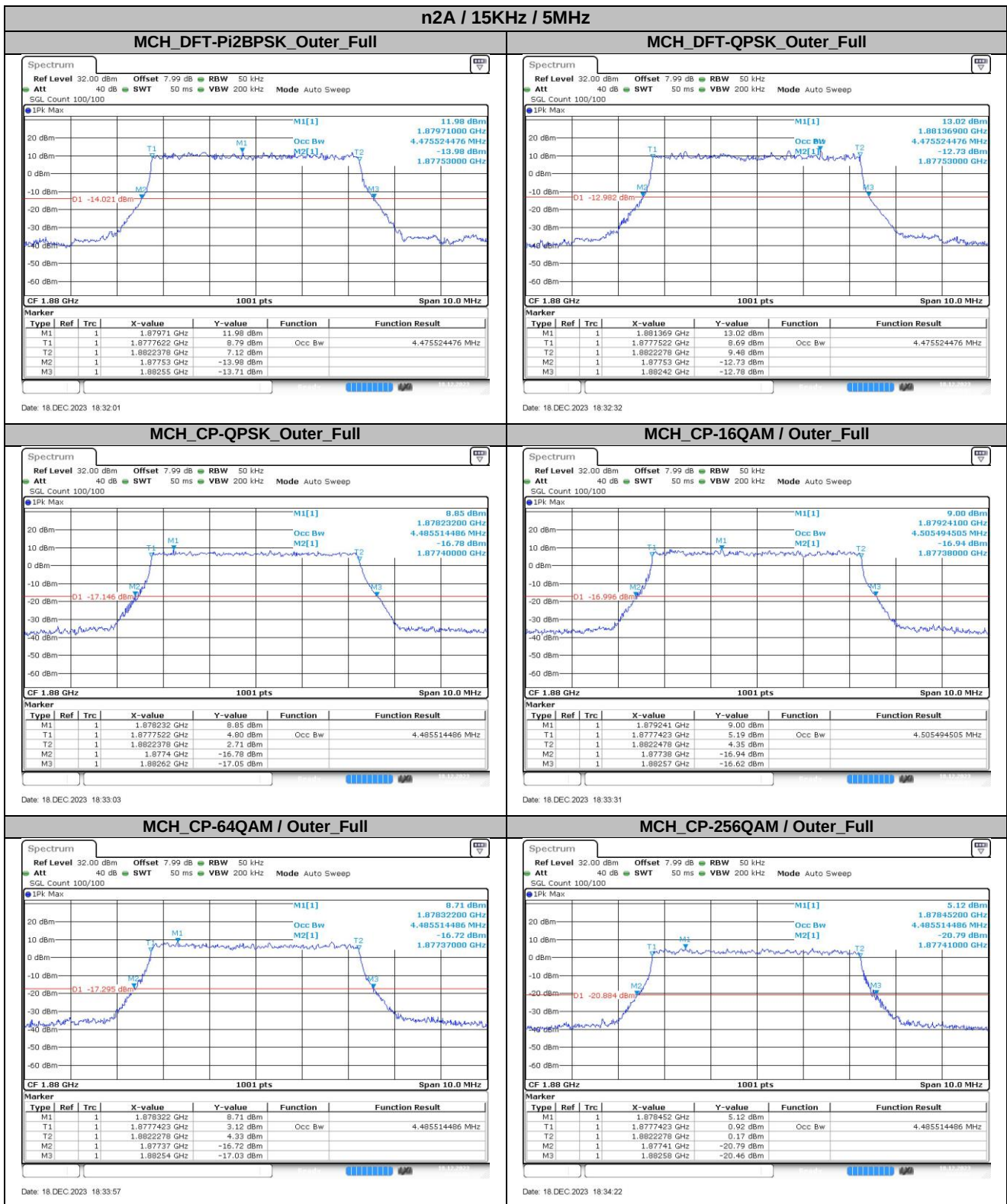
4. 99% Occupied Bandwidth & 26dB Emission Bandwidth

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	5.02	Pass
15KHz	5MHz	DFT-QPSK	Outer_Full	4.48	4.89	Pass
15KHz	5MHz	CP-QPSK	Outer_Full	4.49	5.22	Pass
15KHz	5MHz	CP-16QAM	Outer_Full	4.51	5.19	Pass
15KHz	5MHz	CP-64QAM	Outer_Full	4.49	5.17	Pass
15KHz	5MHz	CP-256QAM	Outer_Full	4.49	5.17	Pass
15KHz	10MHz	DFT-Pi2BPSK	Outer_Full	8.91	9.68	Pass
15KHz	10MHz	DFT-QPSK	Outer_Full	8.93	9.68	Pass
15KHz	10MHz	CP-QPSK	Outer_Full	9.29	10.14	Pass
15KHz	10MHz	CP-16QAM	Outer_Full	9.27	10.06	Pass
15KHz	10MHz	CP-64QAM	Outer_Full	9.27	10.06	Pass
15KHz	10MHz	CP-256QAM	Outer_Full	9.31	10.14	Pass
15KHz	15MHz	DFT-Pi2BPSK	Outer_Full	13.43	14.40	Pass
15KHz	15MHz	DFT-QPSK	Outer_Full	13.46	14.40	Pass
15KHz	15MHz	CP-QPSK	Outer_Full	14.12	15.09	Pass
15KHz	15MHz	CP-16QAM	Outer_Full	14.15	15.15	Pass
15KHz	15MHz	CP-64QAM	Outer_Full	14.18	15.15	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	20.04	Pass
15KHz	20MHz	CP-16QAM	Outer_Full	18.94	20.12	Pass

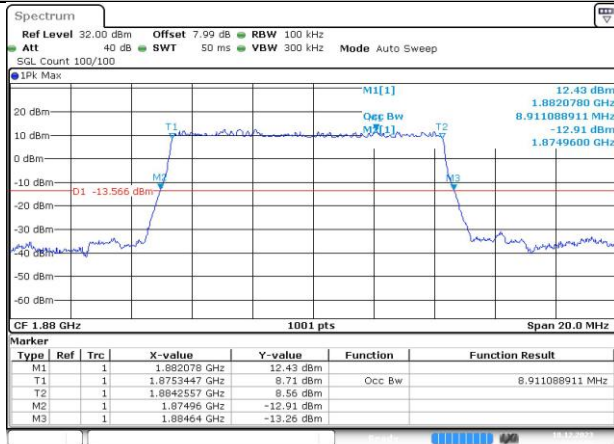
15KHz	20MHz	CP-64QAM	Outer_Full	18.90	19.92	Pass
15KHz	20MHz	CP-256QAM	Outer_Full	18.98	20.00	Pass

4.2. Test Plots



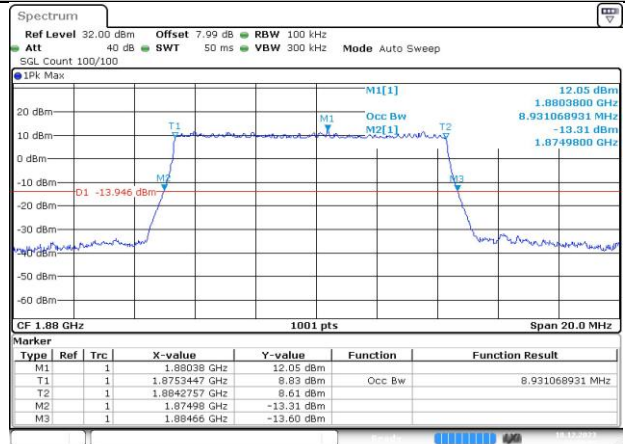
n2A / 15KHz / 10MHz

MCH_DFT-Pi2BPSK_Outer_Full



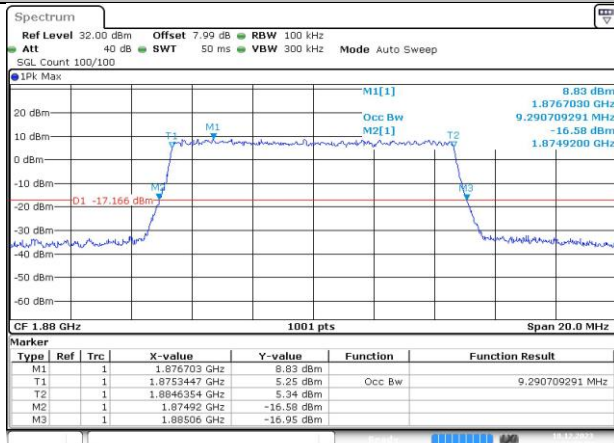
Date: 18 DEC 2023 18:34:56

MCH_DFT-QPSK_Outer_Full



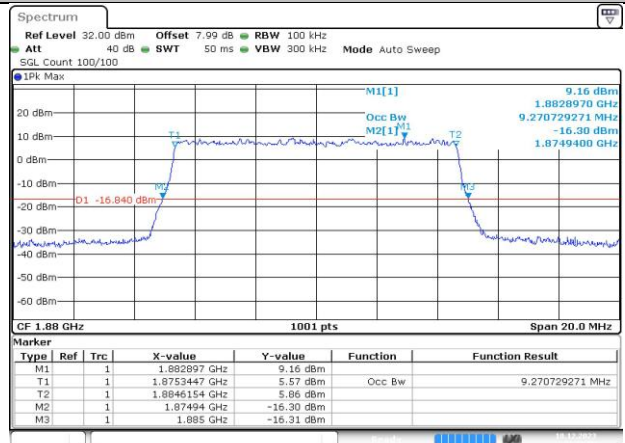
Date: 18 DEC 2023 18:35:16

MCH_CP-QPSK_Outer_Full



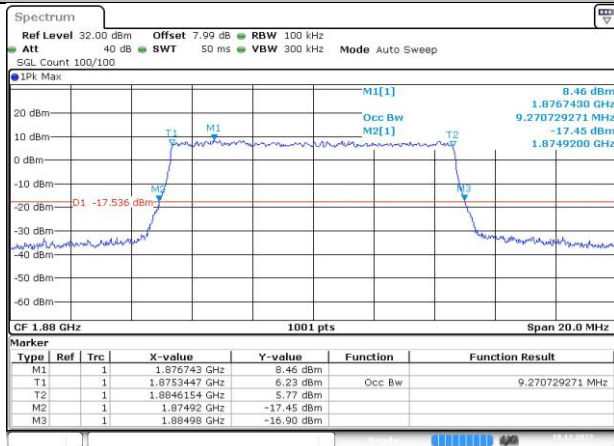
Date: 18 DEC 2023 18:35:36

MCH_CP-16QAM / Outer_Full



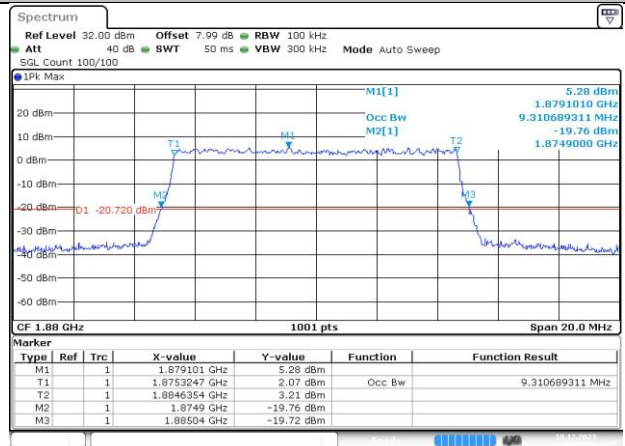
Date: 18 DEC 2023 18:35:55

MCH_CP-64QAM / Outer_Full



Date: 18 DEC 2023 18:36:13

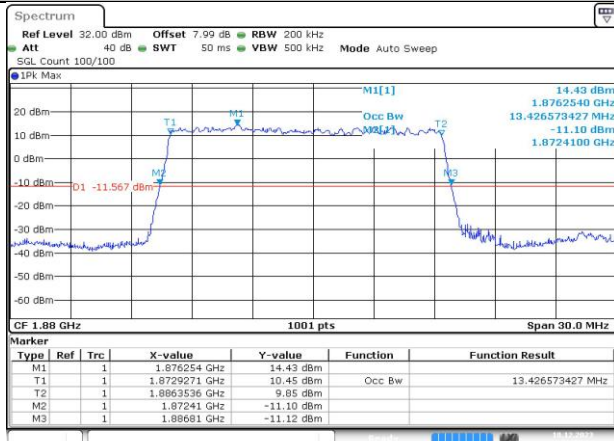
MCH_CP-256QAM / Outer_Full



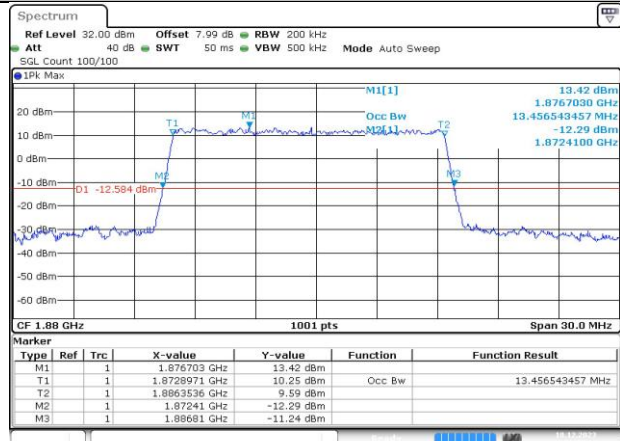
Date: 18 DEC 2023 18:36:31

n2A / 15KHz / 15MHz

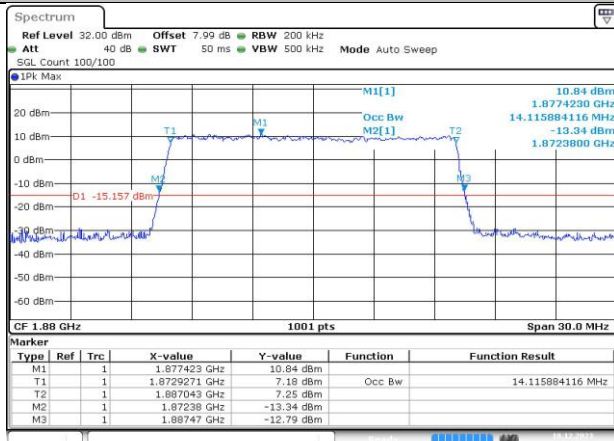
MCH_DFT-Pi2BPSK_Outer_Full



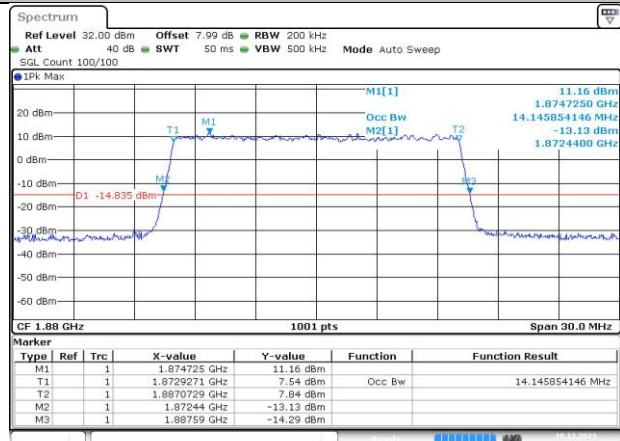
MCH_DFT-QPSK_Outer_Full



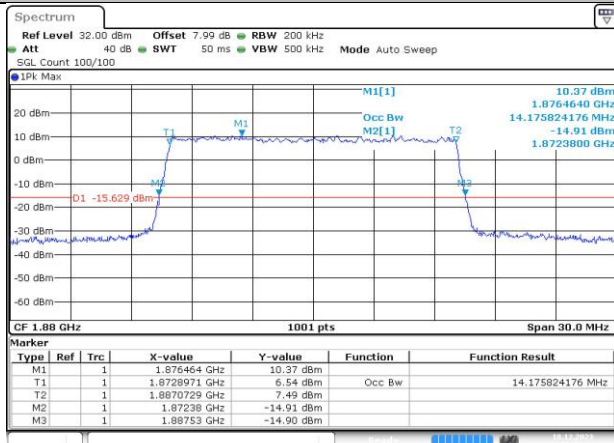
MCH_CP-QPSK_Outer_Full



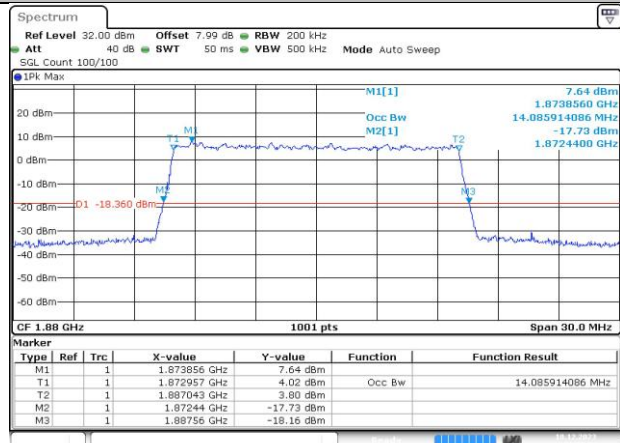
MCH_CP-16QAM / Outer_Full



MCH_CP-64QAM / Outer_Full

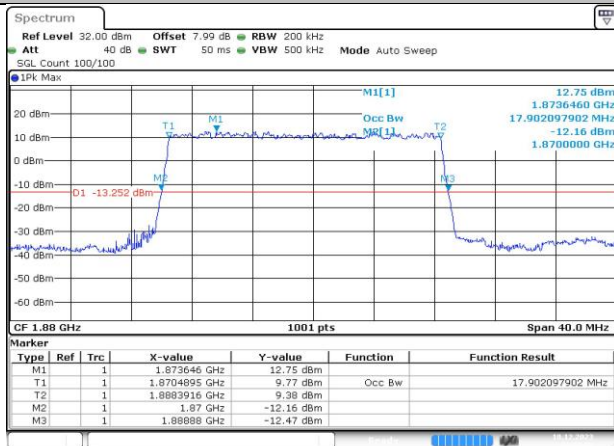


MCH_CP-256QAM / Outer_Full

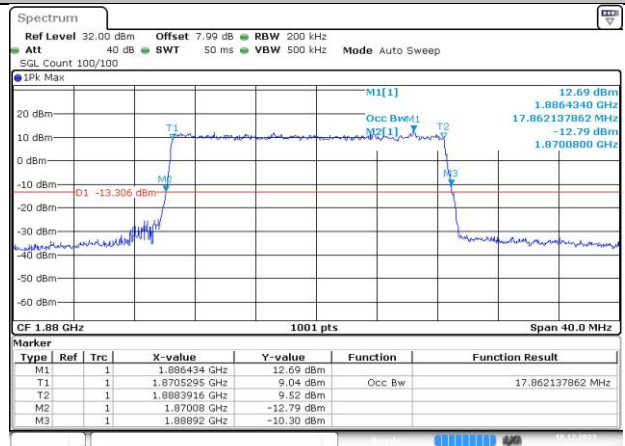


n2A / 15KHz / 20MHz

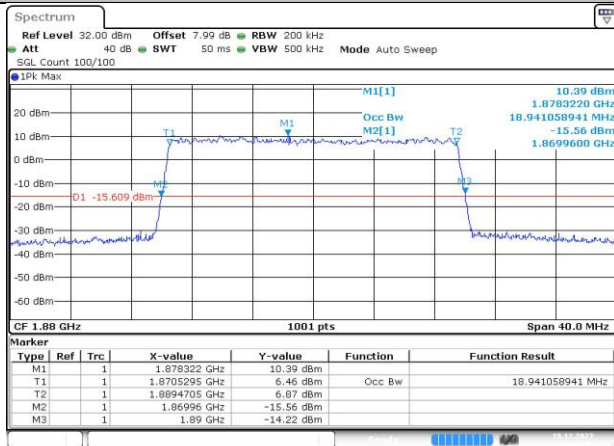
MCH_DFT-Pi2BPSK_Outer_Full



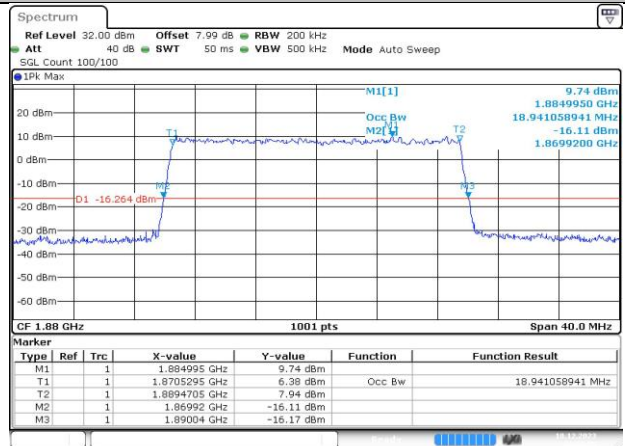
MCH_DFT-QPSK_Outer_Full



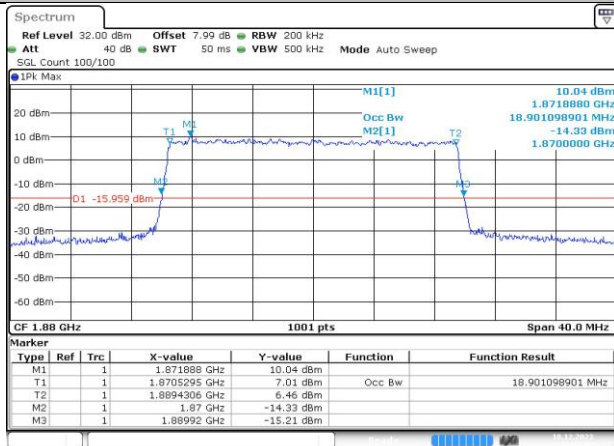
MCH_CP-QPSK_Outer_Full



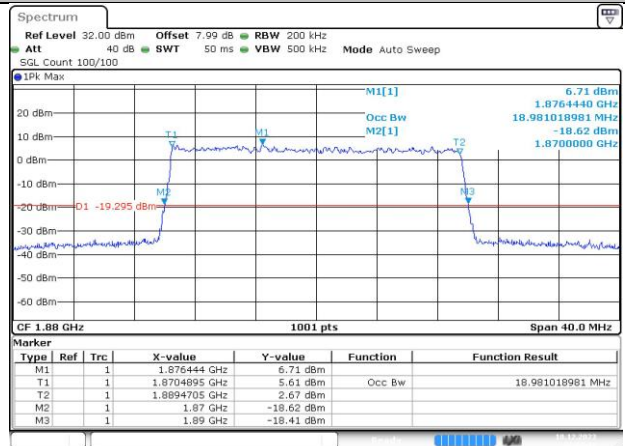
MCH_CP-16QAM / Outer_Full



MCH_CP-64QAM / Outer_Full

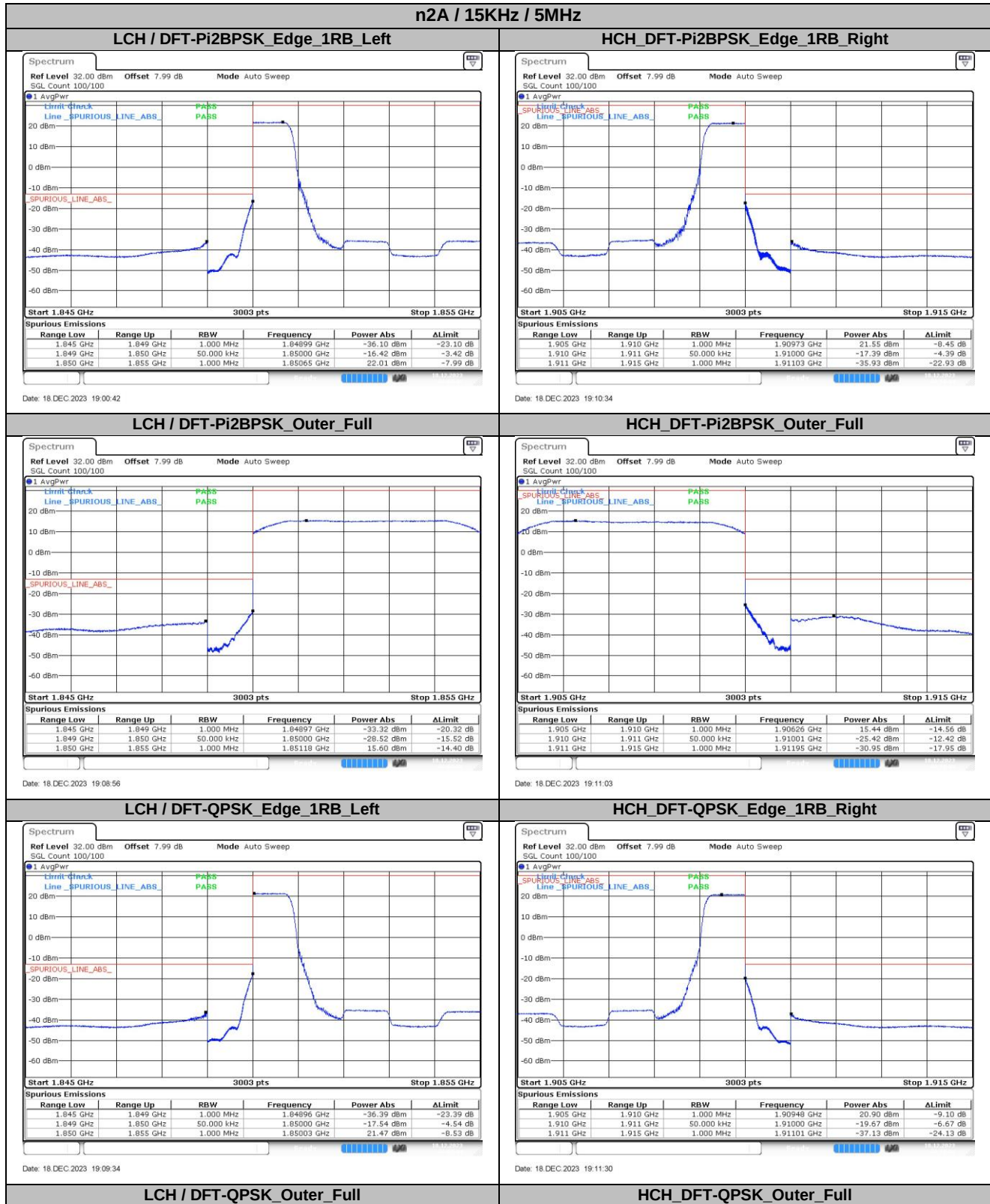


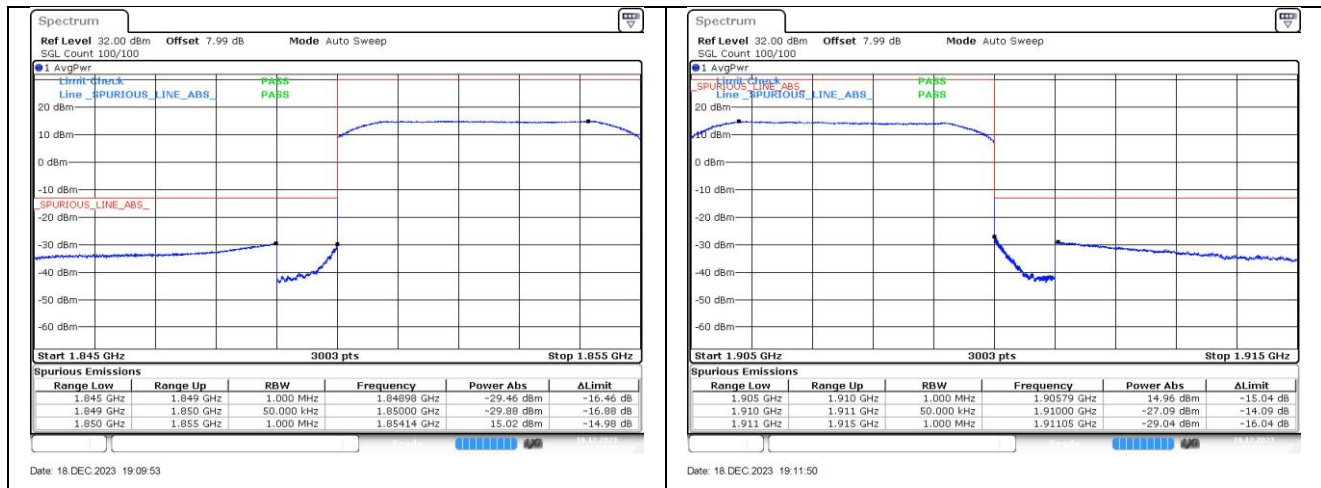
MCH_CP-256QAM / Outer_Full



5. Conducted Band Edges

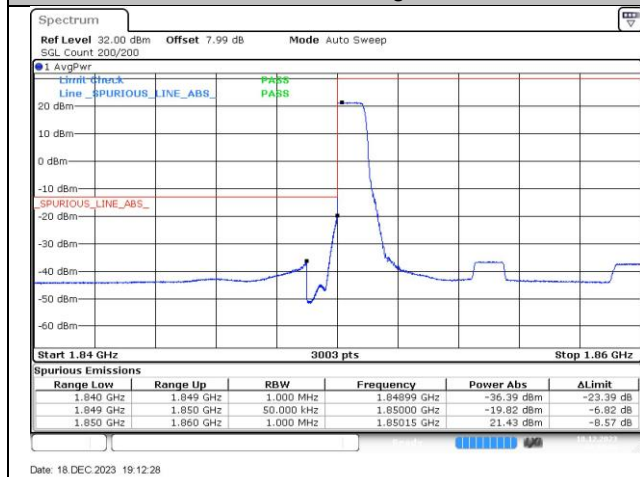
5.1. Test Plots



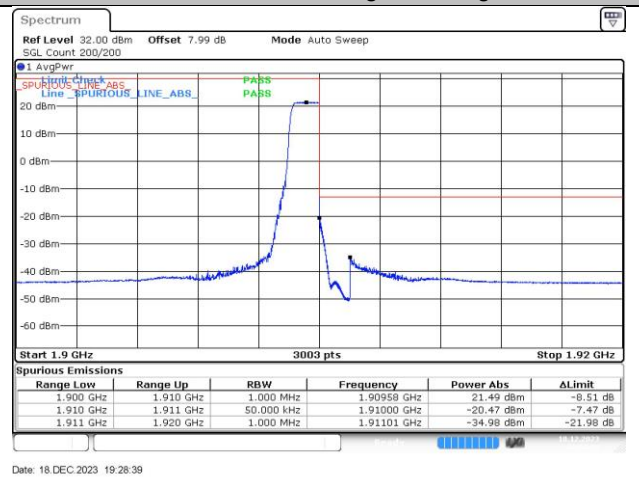


n2A / 15KHz / 10MHz

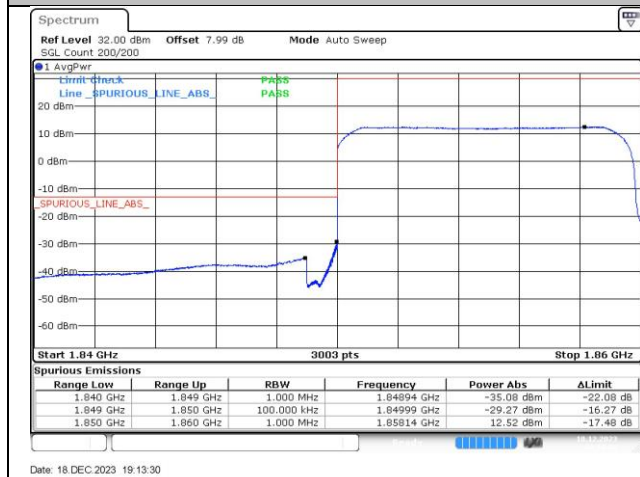
LCH / DFT-Pi2BPSK_Edge_1RB_Left



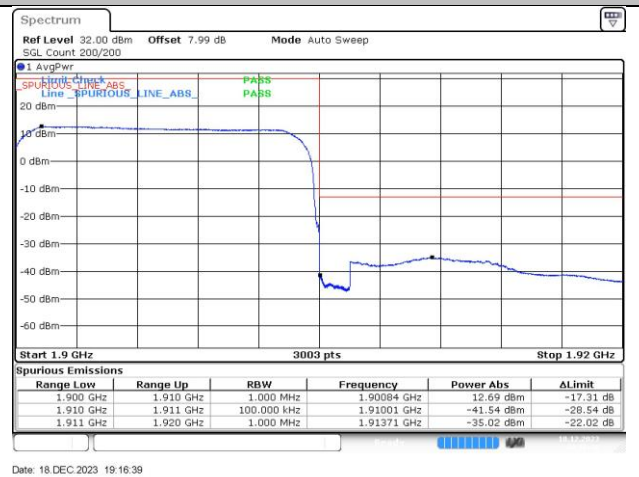
HCH_DFT-Pi2BPSK_Edge_1RB_Right

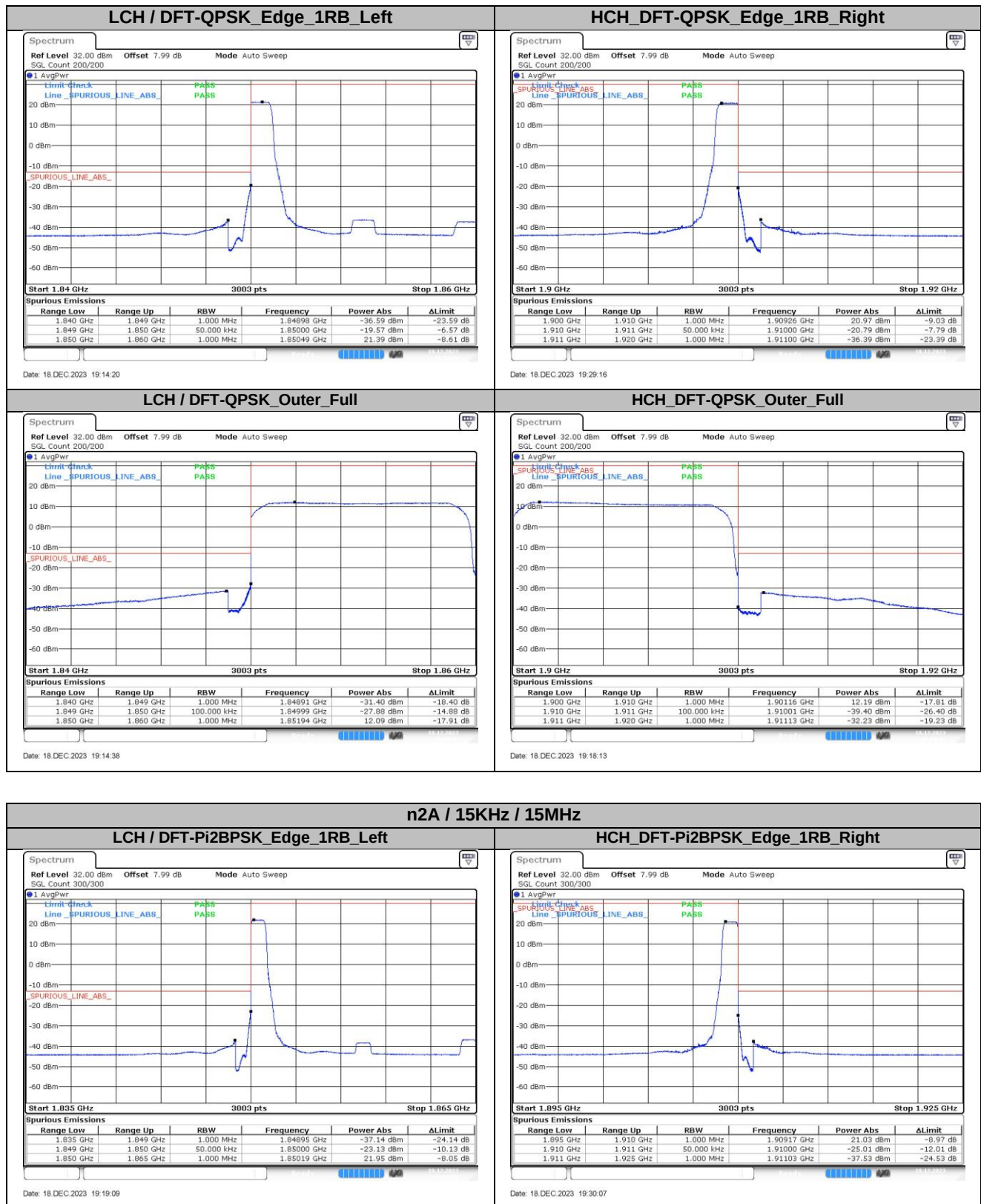


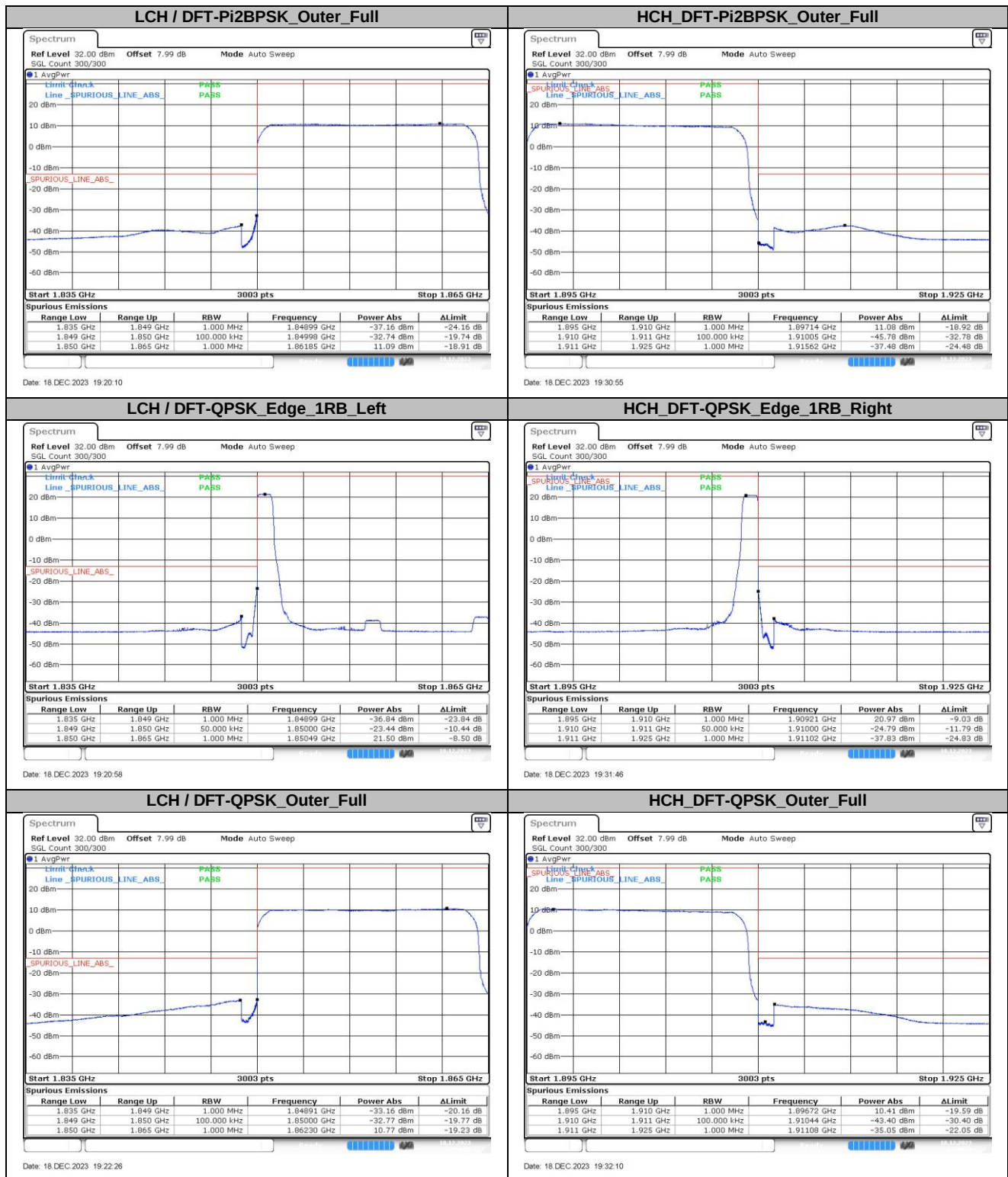
LCH / DFT-Pi2BPSK_Outer_Full



HCH_DFT-Pi2BPSK_Outer_Full

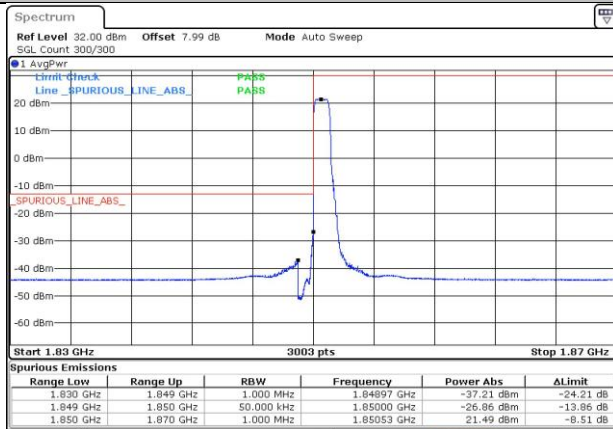






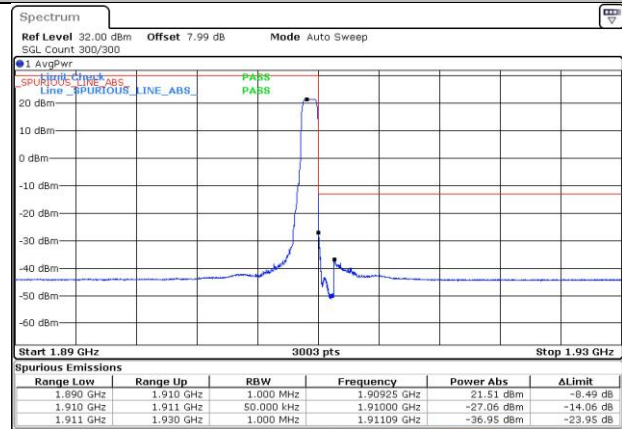
n2A / 15KHz / 20MHz

LCH / DFT-Pi2BPSK_Edge_1RB_Left



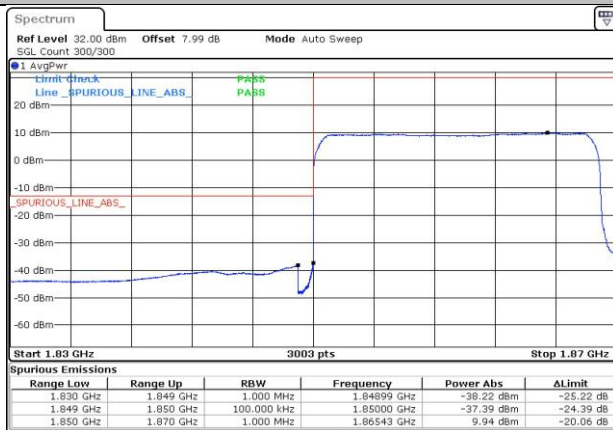
Date: 18 DEC 2023 19:33:57

HCH_DFT-Pi2BPSK_Edge_1RB_Right



Date: 18 DEC 2023 19:36:51

LCH / DFT-Pi2BPSK_Outer_Full



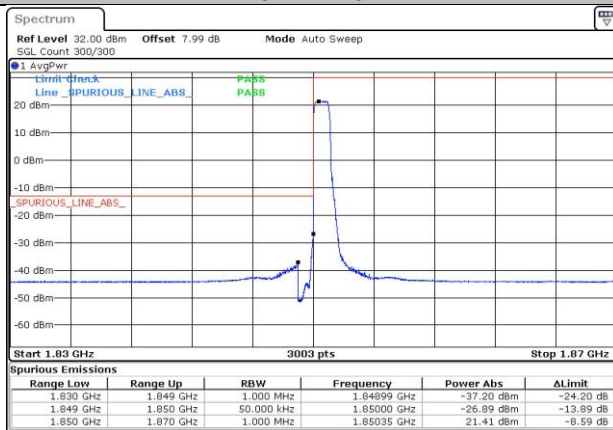
Date: 18 DEC 2023 19:34:39

HCH_DFT-Pi2BPSK_Outer_Full



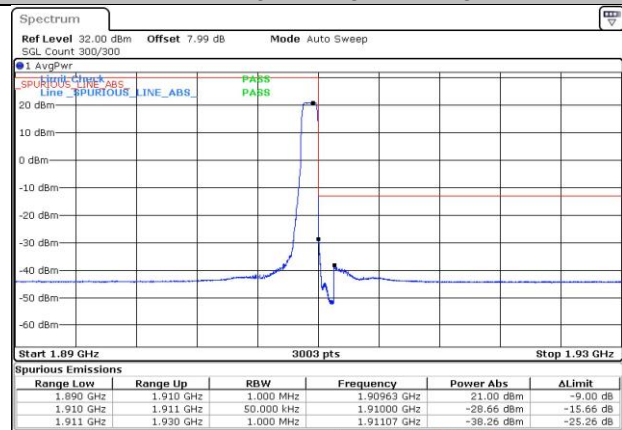
Date: 18 DEC 2023 19:37:22

LCH / DFT-QPSK_Edge_1RB_Left

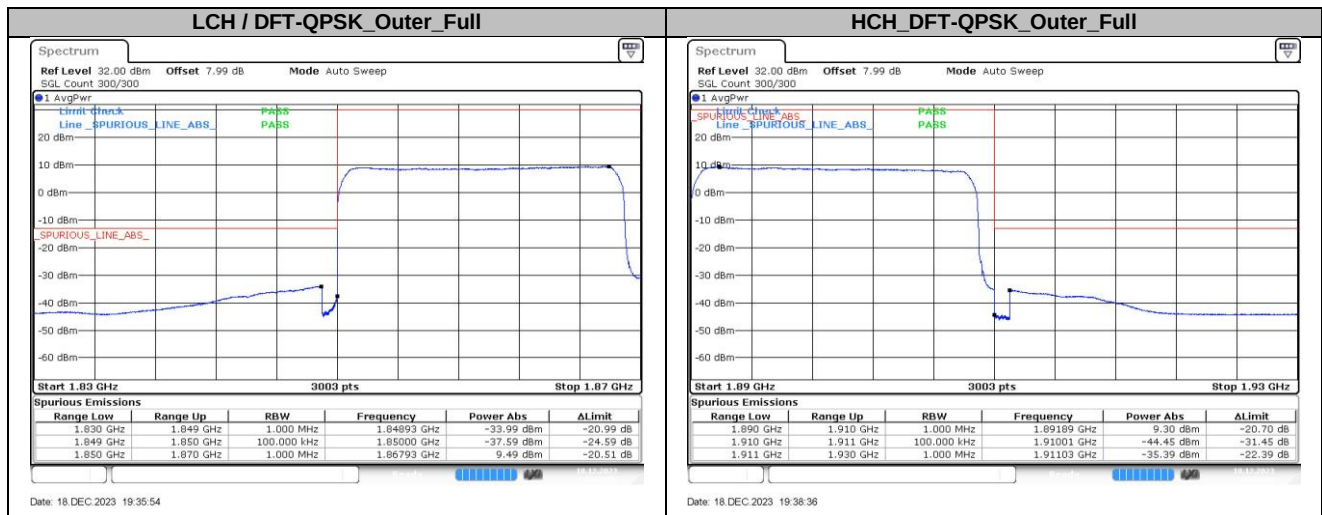


Date: 18 DEC 2023 19:35:29

HCH_DFT-QPSK_Edge_1RB_Right



Date: 18 DEC 2023 19:38:13



6. Conducted Spurious Emission

6.1. Test Plots

