

**Appendix
for
DC_2A_n38A
(2570-2620)**

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1. Effective Isotropic Radiated Power

1.1. Test Results @ Ant4 (Antenna Gain=-0.30dBi)

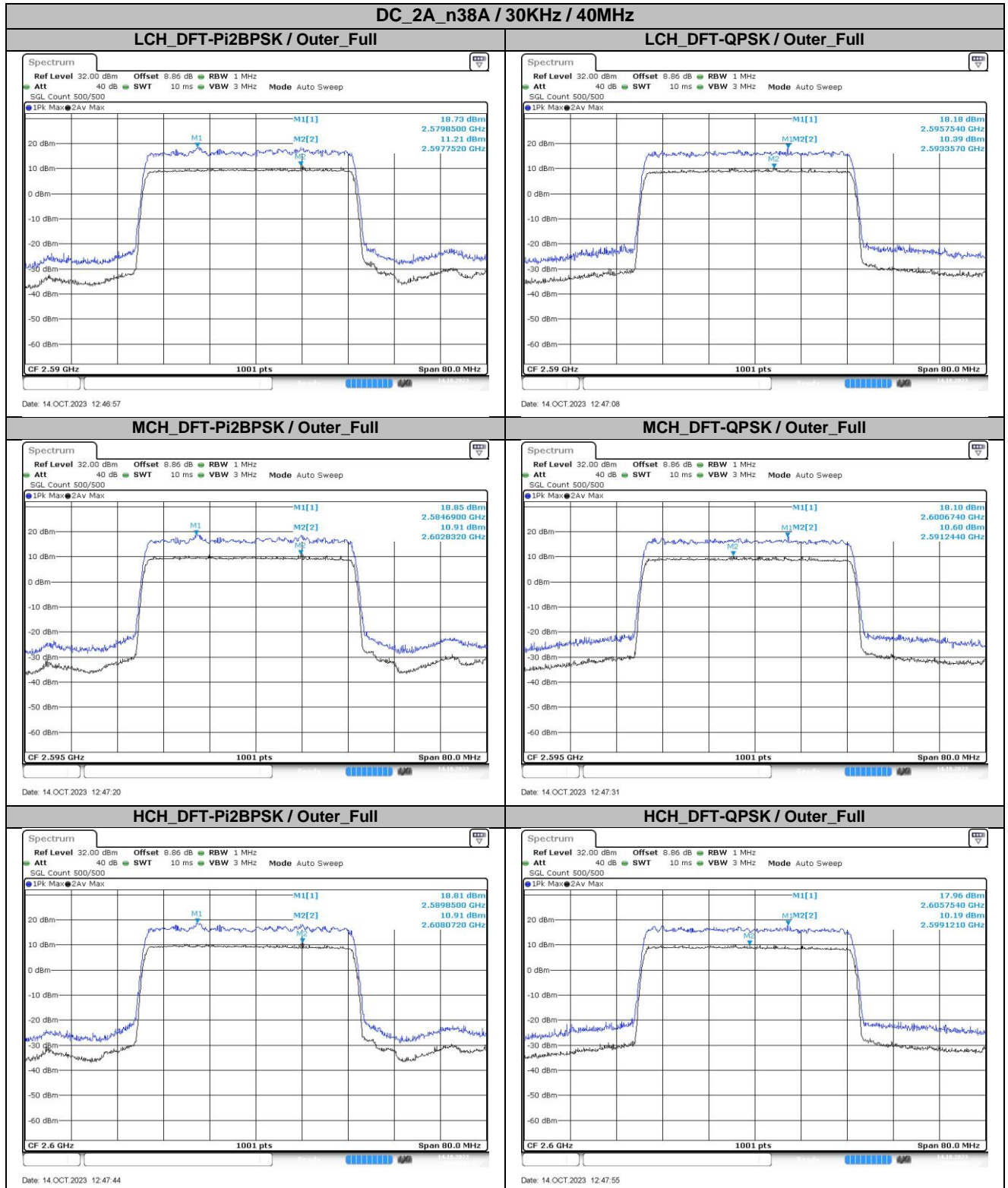
SCS	Bandwidth	Channel	Modulation	Conducted Result (dBm)			Max EIRP (dBm)	Limit (dBm)	Verdict
				Inner_1RB_Left	Inner_1RB_Right	Inner_Full			
30KHz	20MHz	LCH	DFT-Pi2BPSK	22.82	22.77	22.92	22.62	33.00	Pass
30KHz	20MHz	LCH	DFT-QPSK	22.90	22.86	22.95	22.65	33.00	Pass
30KHz	20MHz	LCH	DFT-16QAM	21.75	21.77	21.93	21.63	33.00	Pass
30KHz	20MHz	LCH	DFT-64QAM	20.24	20.41	20.44	20.14	33.00	Pass
30KHz	20MHz	LCH	DFT-256QAM	18.30	18.38	18.41	18.11	33.00	Pass
30KHz	20MHz	LCH	CP-QPSK	21.39	21.39	21.39	21.09	33.00	Pass
30KHz	20MHz	MCH	DFT-Pi2BPSK	22.98	23.22	23.09	22.92	33.00	Pass
30KHz	20MHz	MCH	DFT-QPSK	22.95	23.22	23.10	22.92	33.00	Pass
30KHz	20MHz	MCH	DFT-16QAM	21.90	22.23	22.10	21.93	33.00	Pass
30KHz	20MHz	MCH	DFT-64QAM	20.42	20.69	20.61	20.39	33.00	Pass
30KHz	20MHz	MCH	DFT-256QAM	18.42	18.66	18.60	18.36	33.00	Pass
30KHz	20MHz	MCH	CP-QPSK	21.46	21.81	21.57	21.51	33.00	Pass
30KHz	20MHz	HCH	DFT-Pi2BPSK	23.11	23.23	23.23	22.93	33.00	Pass
30KHz	20MHz	HCH	DFT-QPSK	23.09	23.23	23.20	22.93	33.00	Pass
30KHz	20MHz	HCH	DFT-16QAM	22.12	22.20	22.30	22.00	33.00	Pass
30KHz	20MHz	HCH	DFT-64QAM	20.58	20.75	20.75	20.45	33.00	Pass
30KHz	20MHz	HCH	DFT-256QAM	18.54	18.71	18.72	18.42	33.00	Pass
30KHz	20MHz	HCH	CP-QPSK	21.62	21.94	21.73	21.64	33.00	Pass
30KHz	30MHz	LCH	DFT-Pi2BPSK	22.96	23.26	23.04	22.96	33.00	Pass
30KHz	30MHz	LCH	DFT-QPSK	23.00	23.29	23.04	22.99	33.00	Pass
30KHz	30MHz	LCH	DFT-16QAM	22.02	22.27	22.00	21.97	33.00	Pass
30KHz	30MHz	LCH	DFT-64QAM	20.37	20.67	20.50	20.37	33.00	Pass
30KHz	30MHz	LCH	DFT-256QAM	18.45	18.73	18.53	18.43	33.00	Pass
30KHz	30MHz	LCH	CP-QPSK	21.59	21.82	21.57	21.52	33.00	Pass
30KHz	30MHz	MCH	DFT-Pi2BPSK	23.04	23.39	23.18	23.09	33.00	Pass
30KHz	30MHz	MCH	DFT-QPSK	23.10	23.42	23.21	23.12	33.00	Pass
30KHz	30MHz	MCH	DFT-16QAM	22.01	22.35	22.03	22.05	33.00	Pass
30KHz	30MHz	MCH	DFT-64QAM	20.49	20.86	20.54	20.56	33.00	Pass
30KHz	30MHz	MCH	DFT-256QAM	18.48	18.87	18.57	18.57	33.00	Pass
30KHz	30MHz	MCH	CP-QPSK	21.64	21.95	21.62	21.65	33.00	Pass
30KHz	30MHz	HCH	DFT-Pi2BPSK	23.14	23.40	23.17	23.10	33.00	Pass
30KHz	30MHz	HCH	DFT-QPSK	23.22	23.32	23.25	23.02	33.00	Pass
30KHz	30MHz	HCH	DFT-16QAM	22.12	22.35	22.20	22.05	33.00	Pass
30KHz	30MHz	HCH	DFT-64QAM	20.57	20.80	20.70	20.50	33.00	Pass
30KHz	30MHz	HCH	DFT-256QAM	18.57	18.78	18.75	18.48	33.00	Pass
30KHz	30MHz	HCH	CP-QPSK	21.67	21.85	21.74	21.55	33.00	Pass
30KHz	40MHz	LCH	DFT-Pi2BPSK	22.85	23.31	23.09	23.01	33.00	Pass
30KHz	40MHz	LCH	DFT-QPSK	22.96	23.34	23.07	23.04	33.00	Pass
30KHz	40MHz	LCH	DFT-16QAM	21.91	22.37	22.11	22.07	33.00	Pass
30KHz	40MHz	LCH	DFT-64QAM	20.42	20.72	20.58	20.42	33.00	Pass
30KHz	40MHz	LCH	DFT-256QAM	18.46	18.84	18.67	18.54	33.00	Pass
30KHz	40MHz	LCH	CP-QPSK	21.57	21.96	21.65	21.66	33.00	Pass
30KHz	40MHz	MCH	DFT-Pi2BPSK	22.97	23.37	23.22	23.07	33.00	Pass
30KHz	40MHz	MCH	DFT-QPSK	23.04	23.43	23.08	23.13	33.00	Pass
30KHz	40MHz	MCH	DFT-16QAM	21.92	22.38	22.08	22.08	33.00	Pass
30KHz	40MHz	MCH	DFT-64QAM	20.37	20.83	20.58	20.53	33.00	Pass
30KHz	40MHz	MCH	DFT-256QAM	18.50	18.95	18.66	18.65	33.00	Pass
30KHz	40MHz	MCH	CP-QPSK	21.57	21.90	21.61	21.60	33.00	Pass
30KHz	40MHz	HCH	DFT-Pi2BPSK	22.97	23.45	23.17	23.15	33.00	Pass
30KHz	40MHz	HCH	DFT-QPSK	22.96	23.48	23.20	23.18	33.00	Pass
30KHz	40MHz	HCH	DFT-16QAM	22.08	22.32	22.17	22.02	33.00	Pass
30KHz	40MHz	HCH	DFT-64QAM	20.41	20.69	20.63	20.39	33.00	Pass
30KHz	40MHz	HCH	DFT-256QAM	18.54	18.83	18.73	18.53	33.00	Pass
30KHz	40MHz	HCH	CP-QPSK	21.57	22.04	21.68	21.74	33.00	Pass

2. Peak-to-Average Ratio

2.1. Test Results

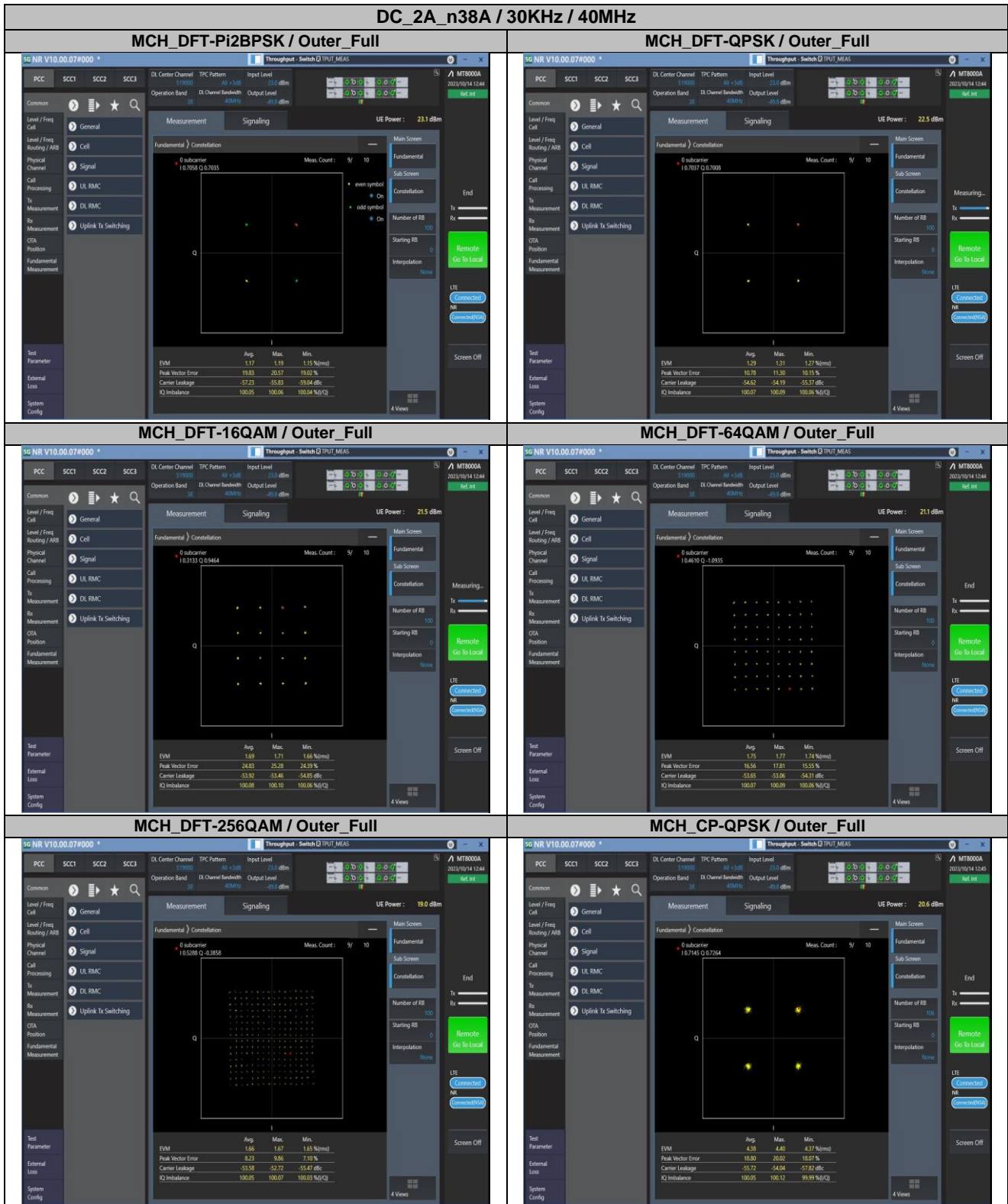
SCS	Bandwidth	Channel	Modulation	Result (dB)		Limit (dB)	Verdict
				DFT-Pi2BPSK	DFT-QPSK		
30KHz	40MHz	LCH	Outer_Full	7.52	7.78	13.00	Pass
30KHz	40MHz	MCH	Outer_Full	7.94	7.50	13.00	Pass
30KHz	40MHz	HCH	Outer_Full	7.90	7.77	13.00	Pass

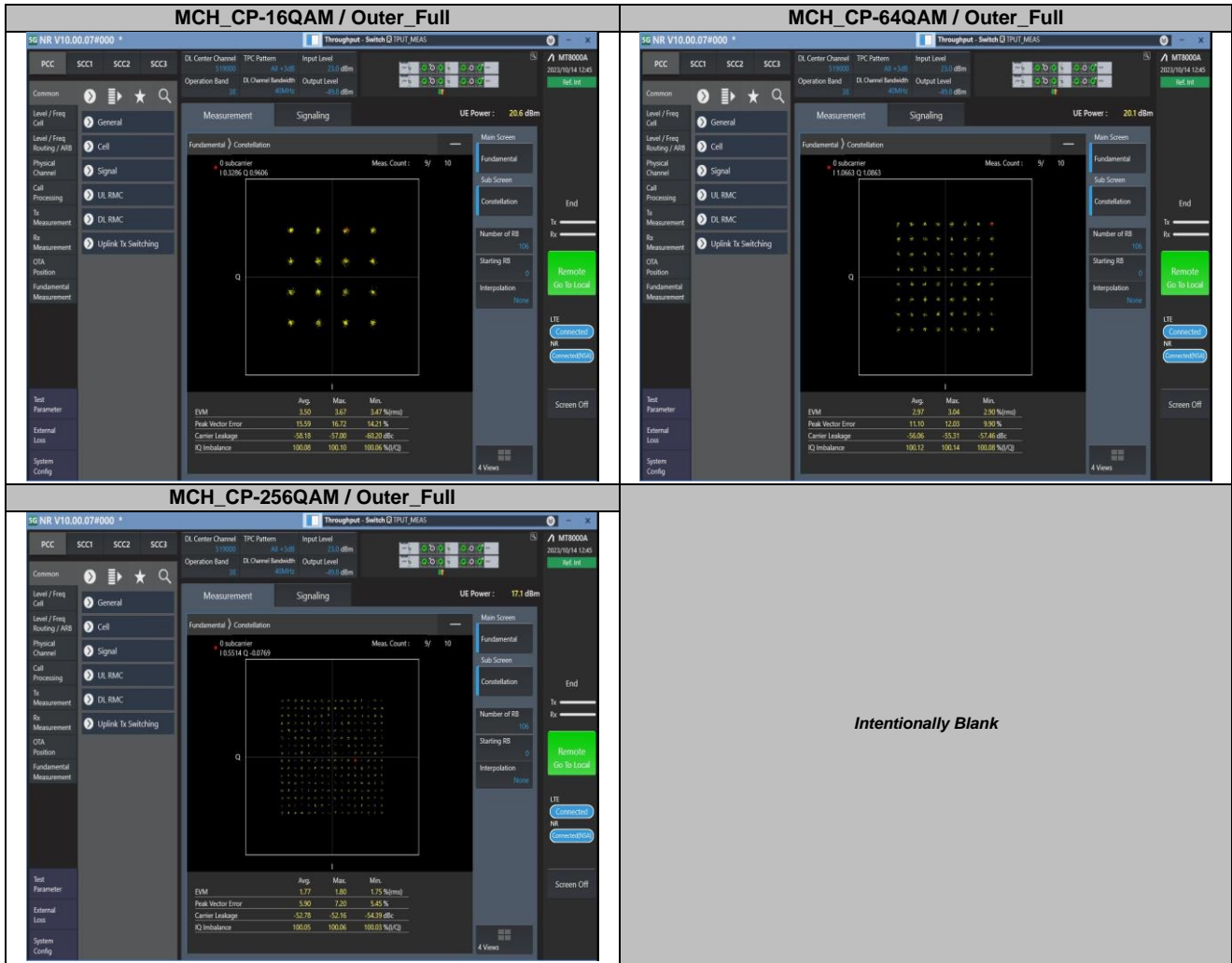
2.2. Test Plots



3. Modulation Characteristics

3.1. Test Plots



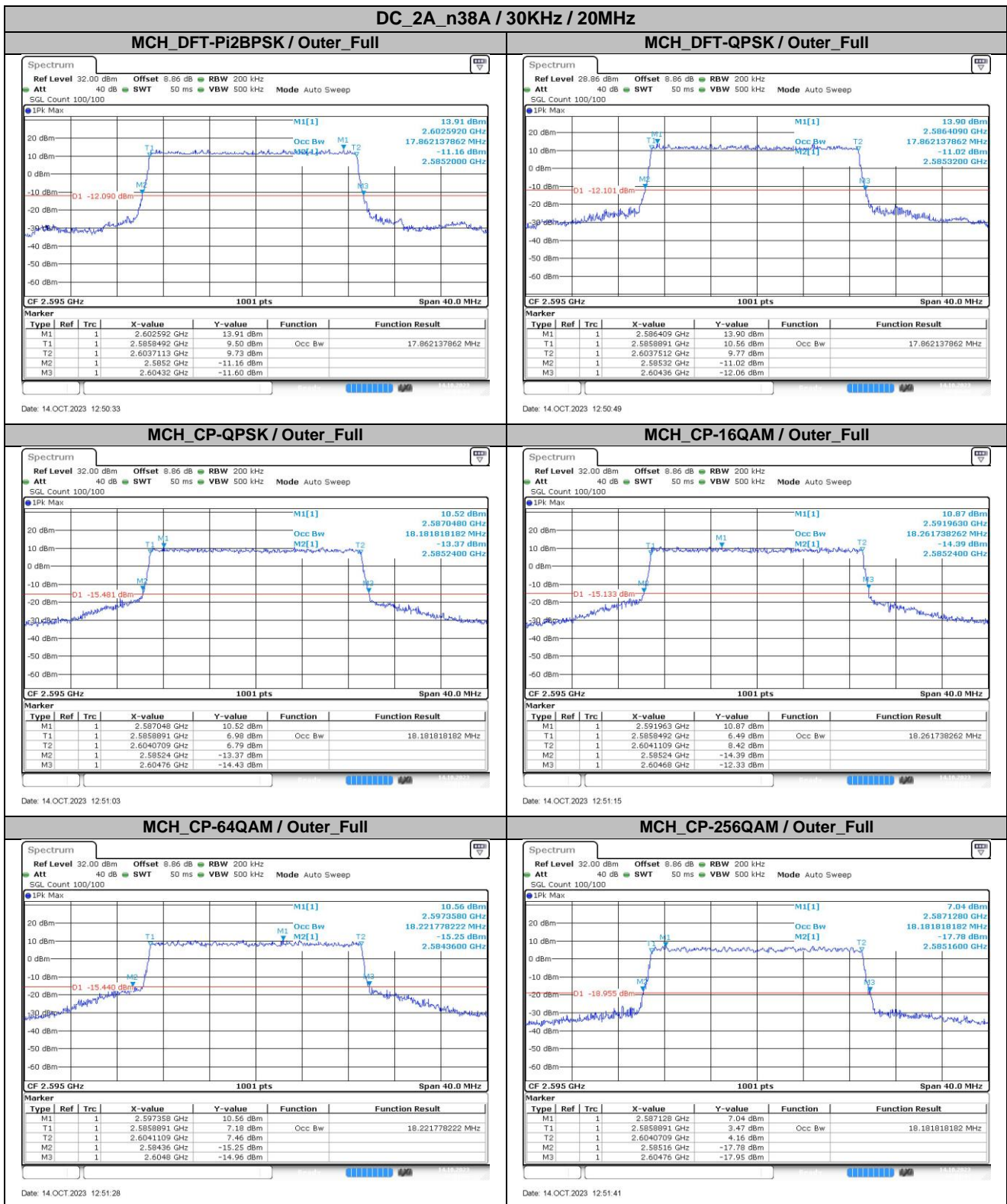


4. 99% Occupied Bandwidth & 26dB Emission Bandwidth

4.1. Test Results

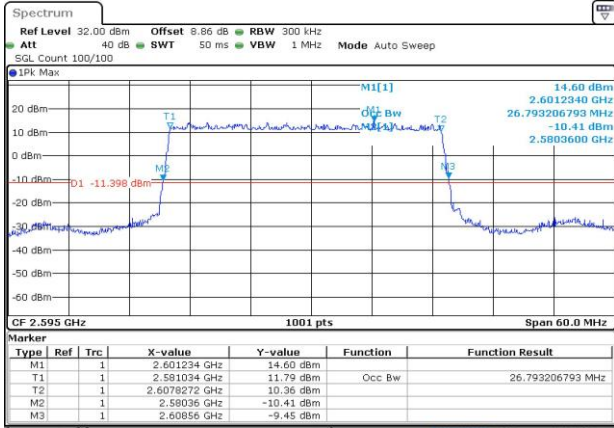
SCS	Bandwidth	Modulation	RB Config	99% Occupied Bandwidth (MHz)	26dB Emission Bandwidth (MHz)	Verdict
30KHz	20MHz	DFT-Pi2BPSK	Outer_Full	17.86	19.12	Pass
30KHz	20MHz	DFT-QPSK	Outer_Full	17.86	19.04	Pass
30KHz	20MHz	CP-QPSK	Outer_Full	18.18	19.52	Pass
30KHz	20MHz	CP-16QAM	Outer_Full	18.26	19.44	Pass
30KHz	20MHz	CP-64QAM	Outer_Full	18.22	20.44	Pass
30KHz	20MHz	CP-256QAM	Outer_Full	18.18	19.60	Pass
30KHz	30MHz	DFT-Pi2BPSK	Outer_Full	26.79	28.20	Pass
30KHz	30MHz	DFT-QPSK	Outer_Full	26.79	28.20	Pass
30KHz	30MHz	CP-QPSK	Outer_Full	27.81	29.52	Pass
30KHz	30MHz	CP-16QAM	Outer_Full	27.87	29.52	Pass
30KHz	30MHz	CP-64QAM	Outer_Full	27.75	29.28	Pass
30KHz	30MHz	CP-256QAM	Outer_Full	27.87	29.34	Pass
30KHz	40MHz	DFT-Pi2BPSK	Outer_Full	35.64	37.44	Pass
30KHz	40MHz	DFT-QPSK	Outer_Full	35.72	37.68	Pass
30KHz	40MHz	CP-QPSK	Outer_Full	37.72	39.76	Pass
30KHz	40MHz	CP-16QAM	Outer_Full	37.72	39.68	Pass
30KHz	40MHz	CP-64QAM	Outer_Full	37.88	39.84	Pass
30KHz	40MHz	CP-256QAM	Outer_Full	37.72	39.68	Pass

4.2. Test Plots



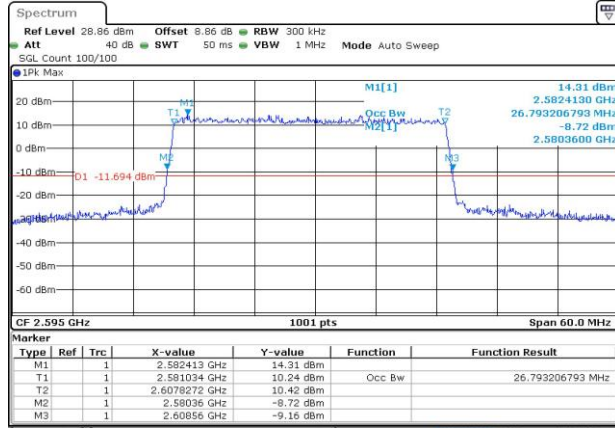
DC_2A_n38A / 30KHz / 30MHz

MCH_DFT-Pi2BPSK / Outer_Full



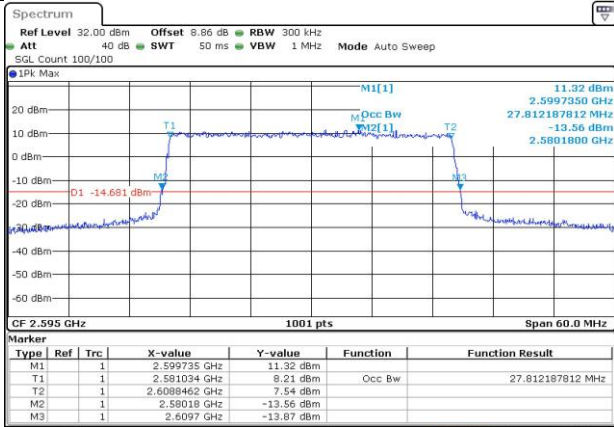
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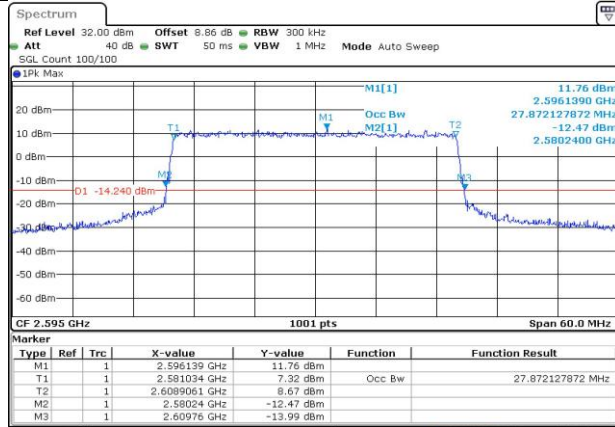
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MCH_CP-QPSK / Outer_Full



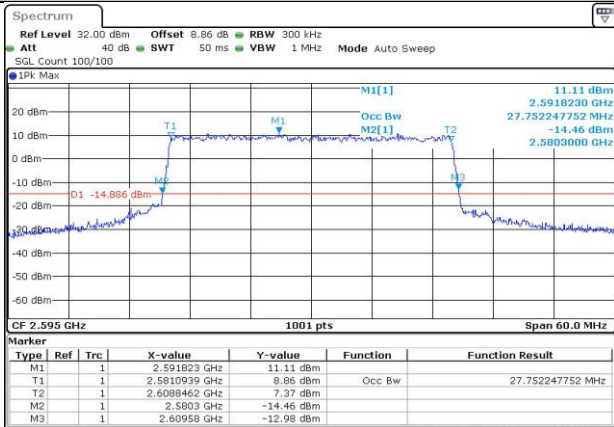
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MCH_CP-16QAM / Outer_Full



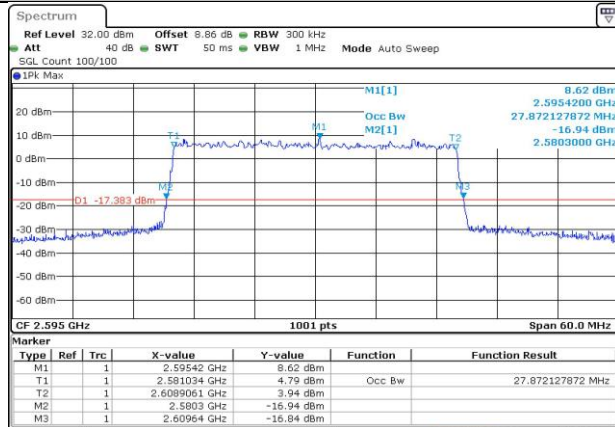
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MCH_CP-64QAM / Outer_Full



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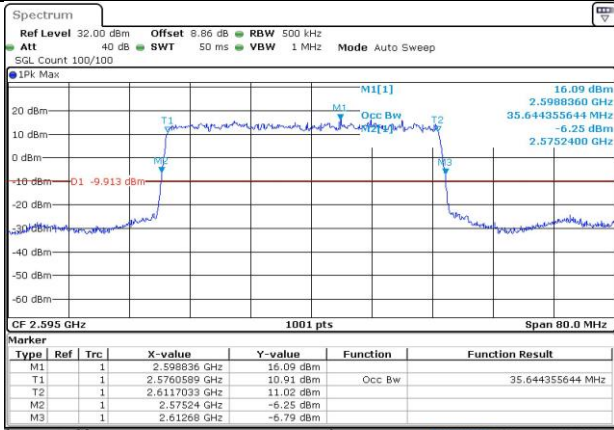
MCH_CP-256QAM / Outer_Full



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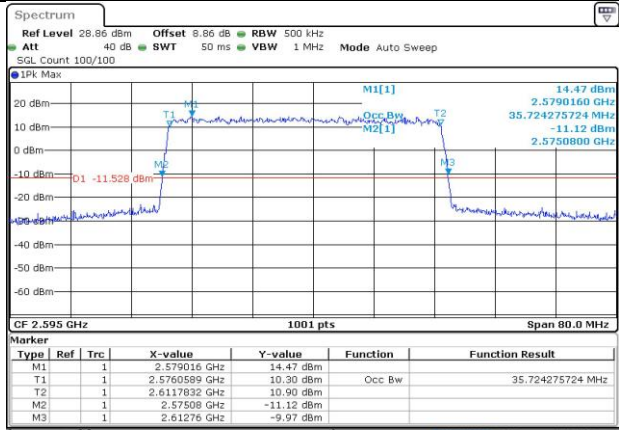
DC_2A_n38A / 30KHz / 40MHz

MCH_DFT-Pi2BPSK / Outer_Full



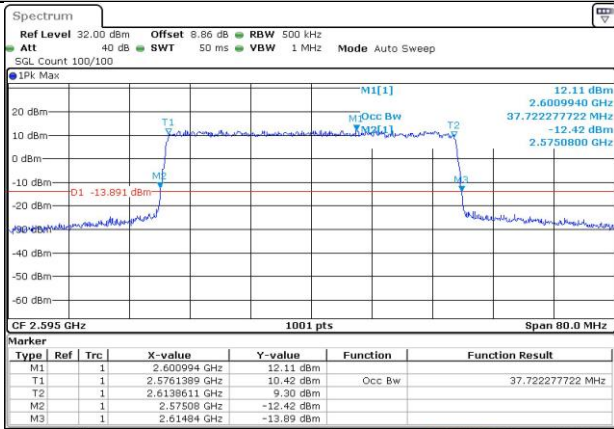
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MCH_DFT-QPSK / Outer_Full



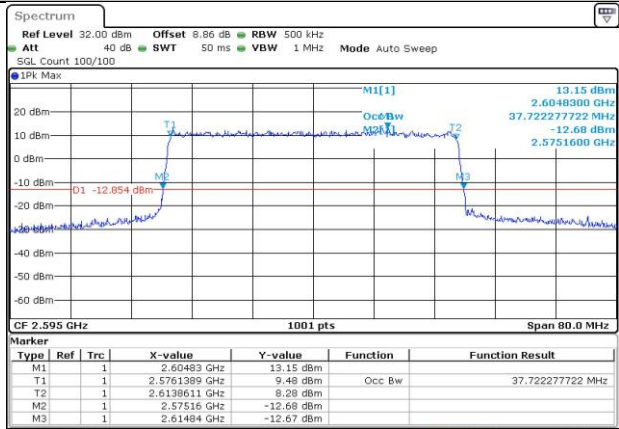
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MCH_CP-QPSK / Outer_Full



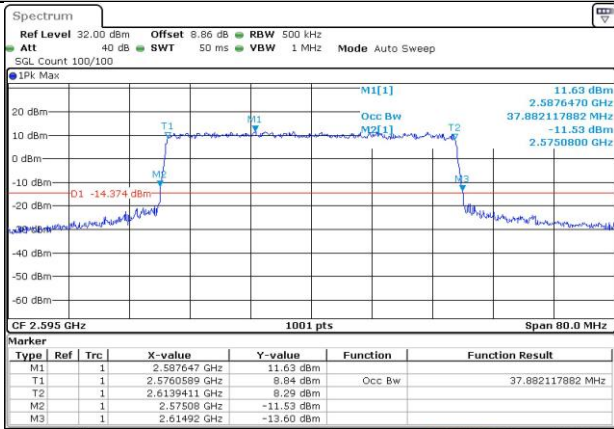
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MCH_CP-16QAM / Outer_Full



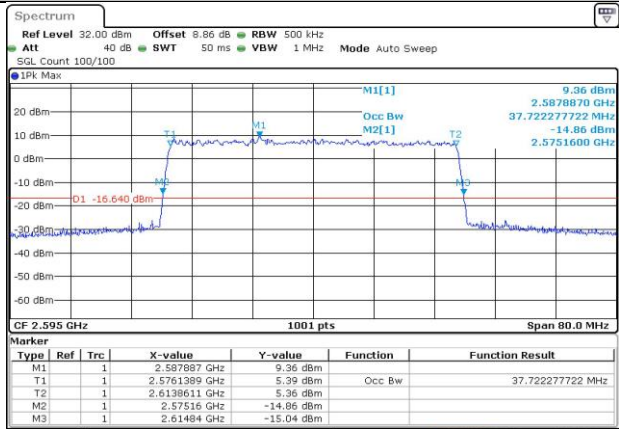
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MCH_CP-64QAM / Outer_Full



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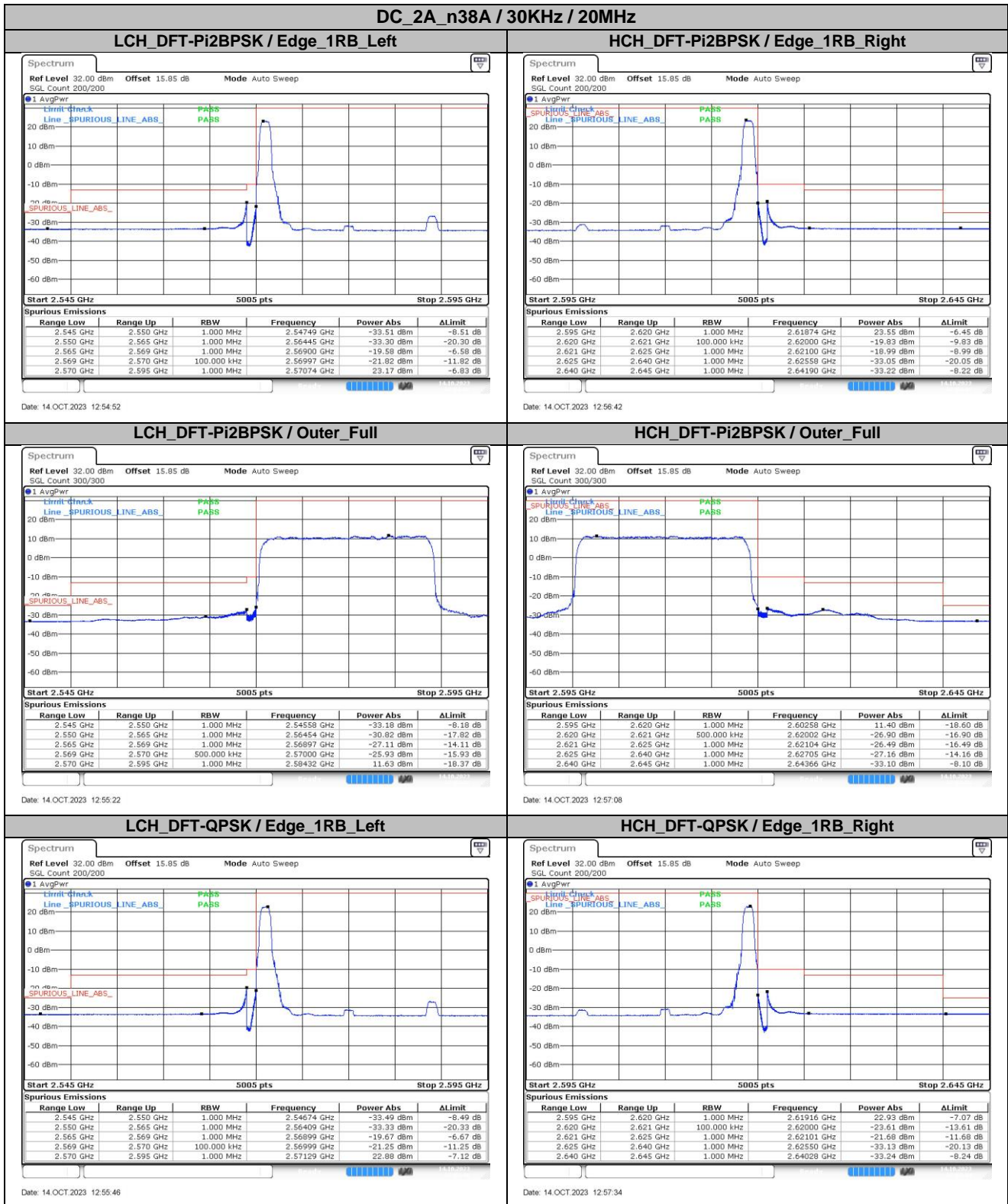
MCH_CP-256QAM / Outer_Full

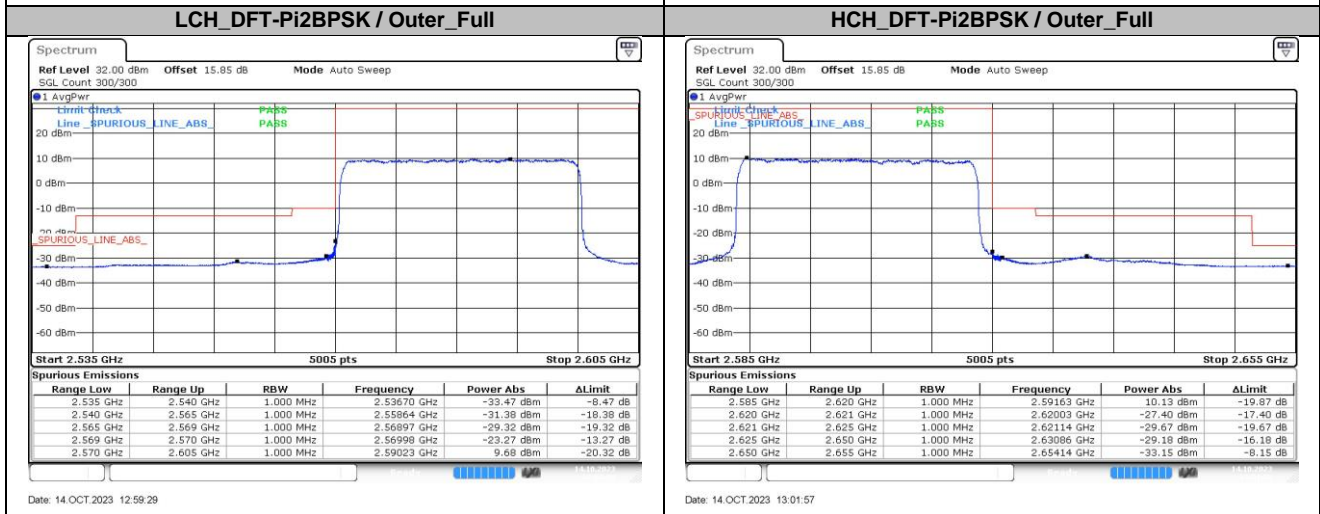
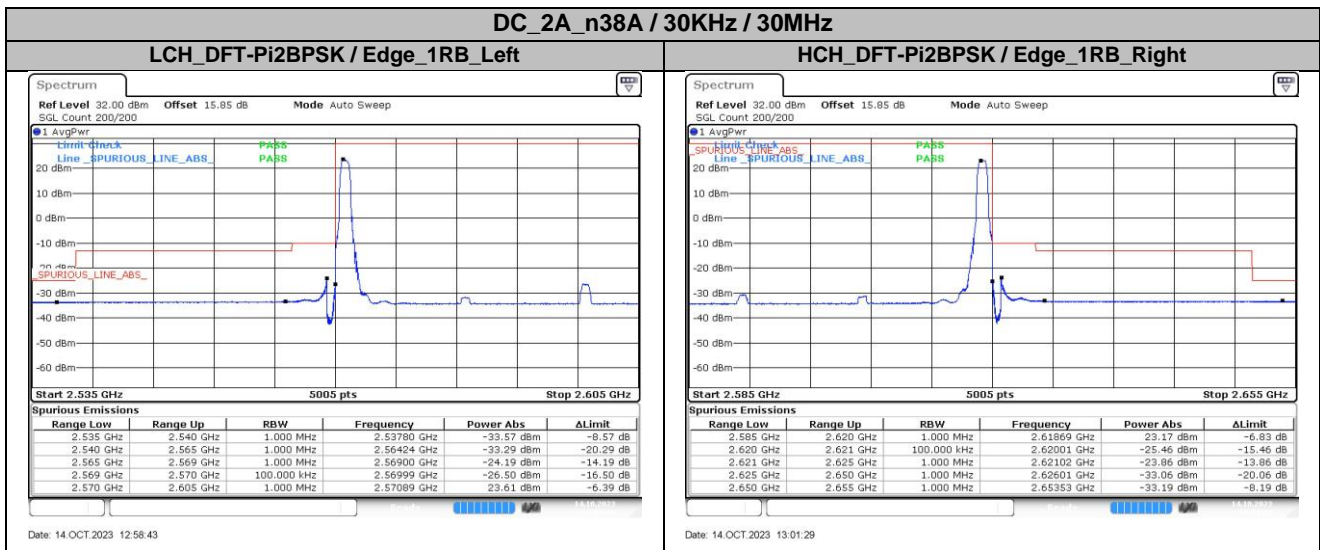
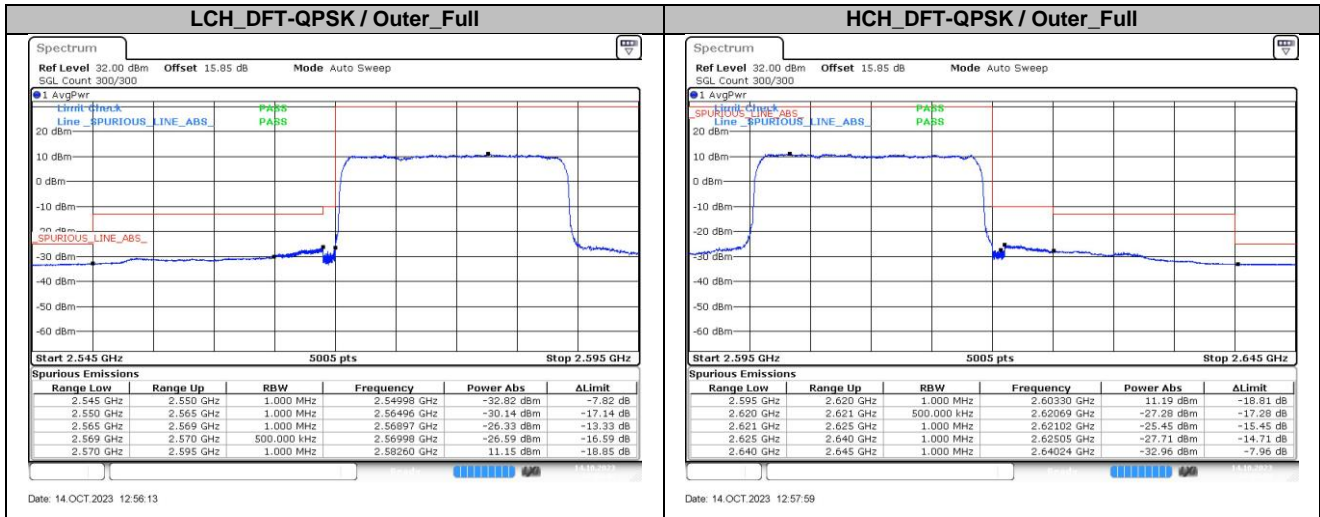


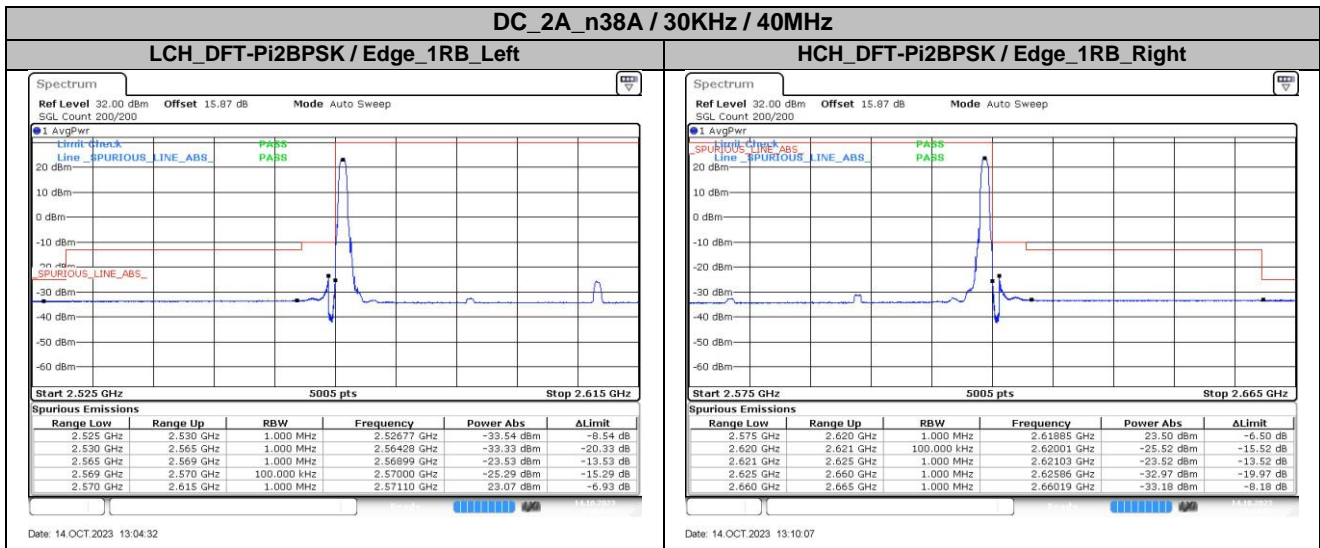
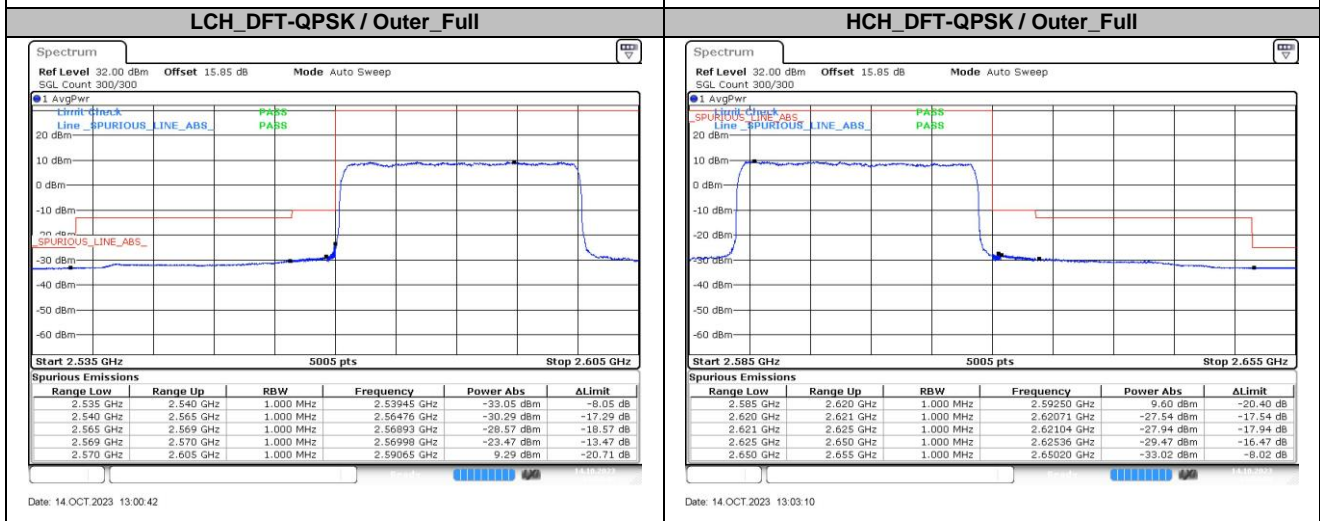
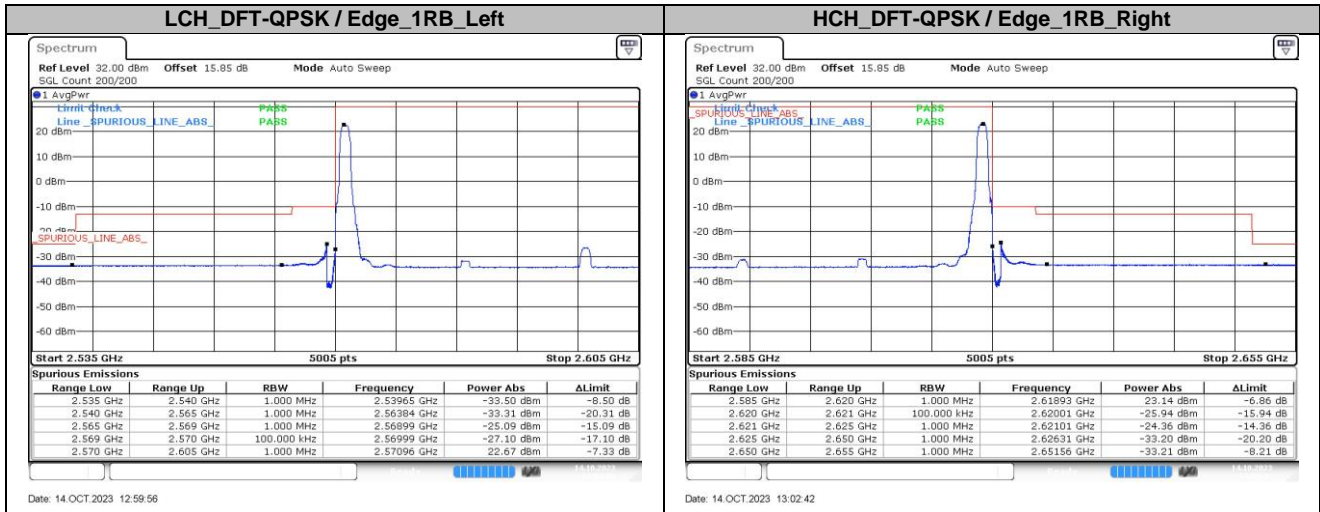
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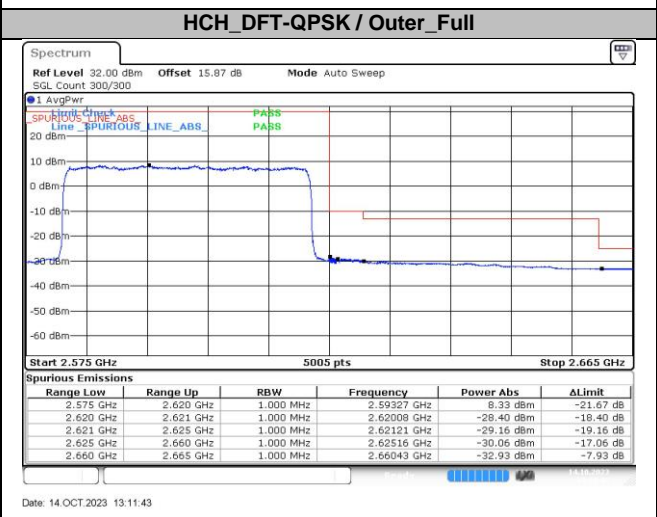
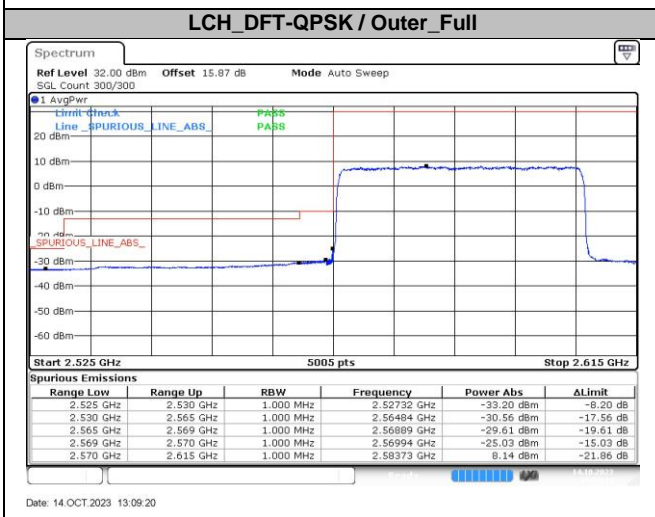
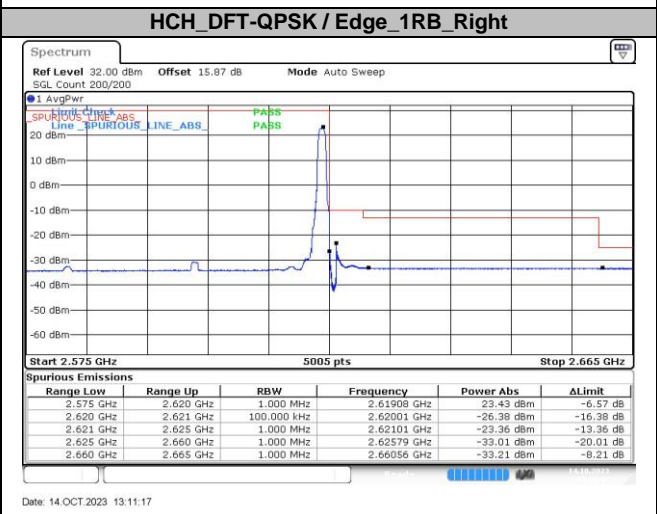
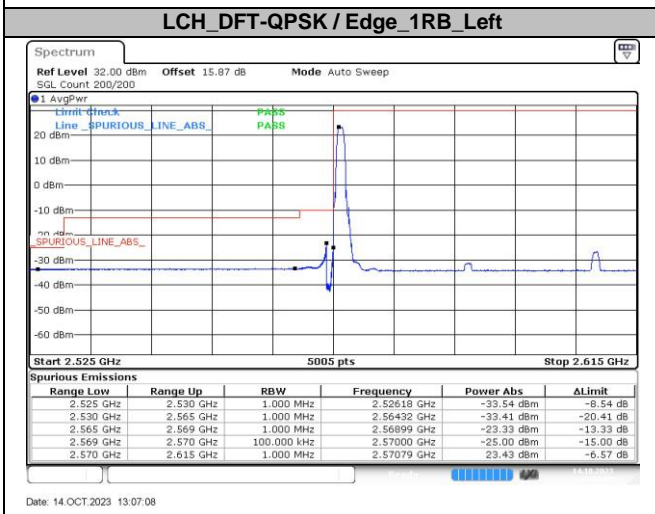
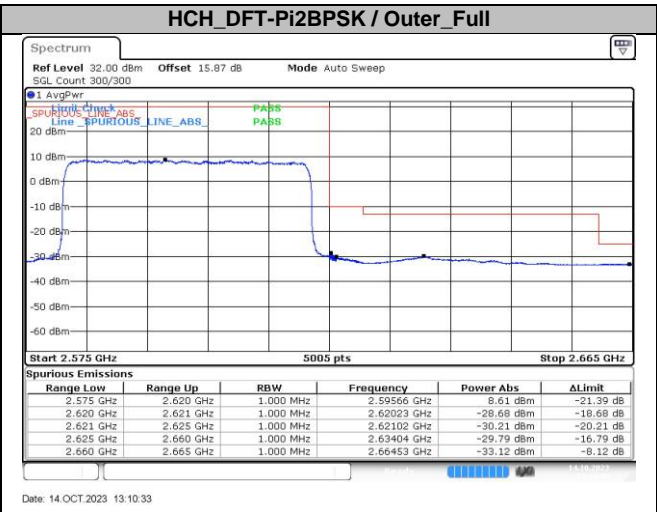
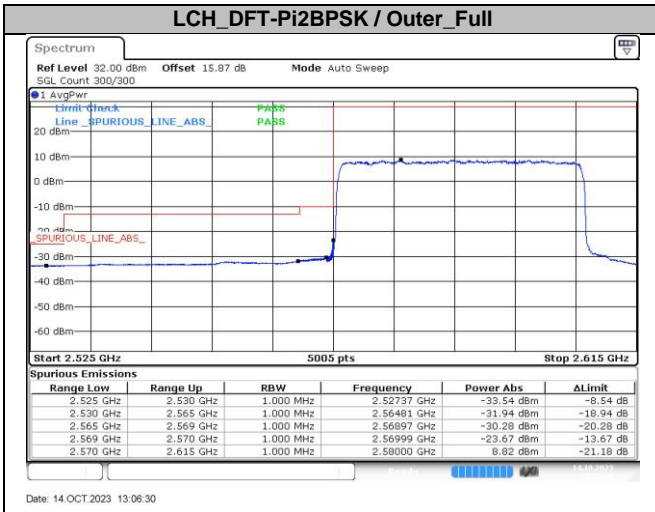
5. Conducted Band Edges

5.1. Test Plots



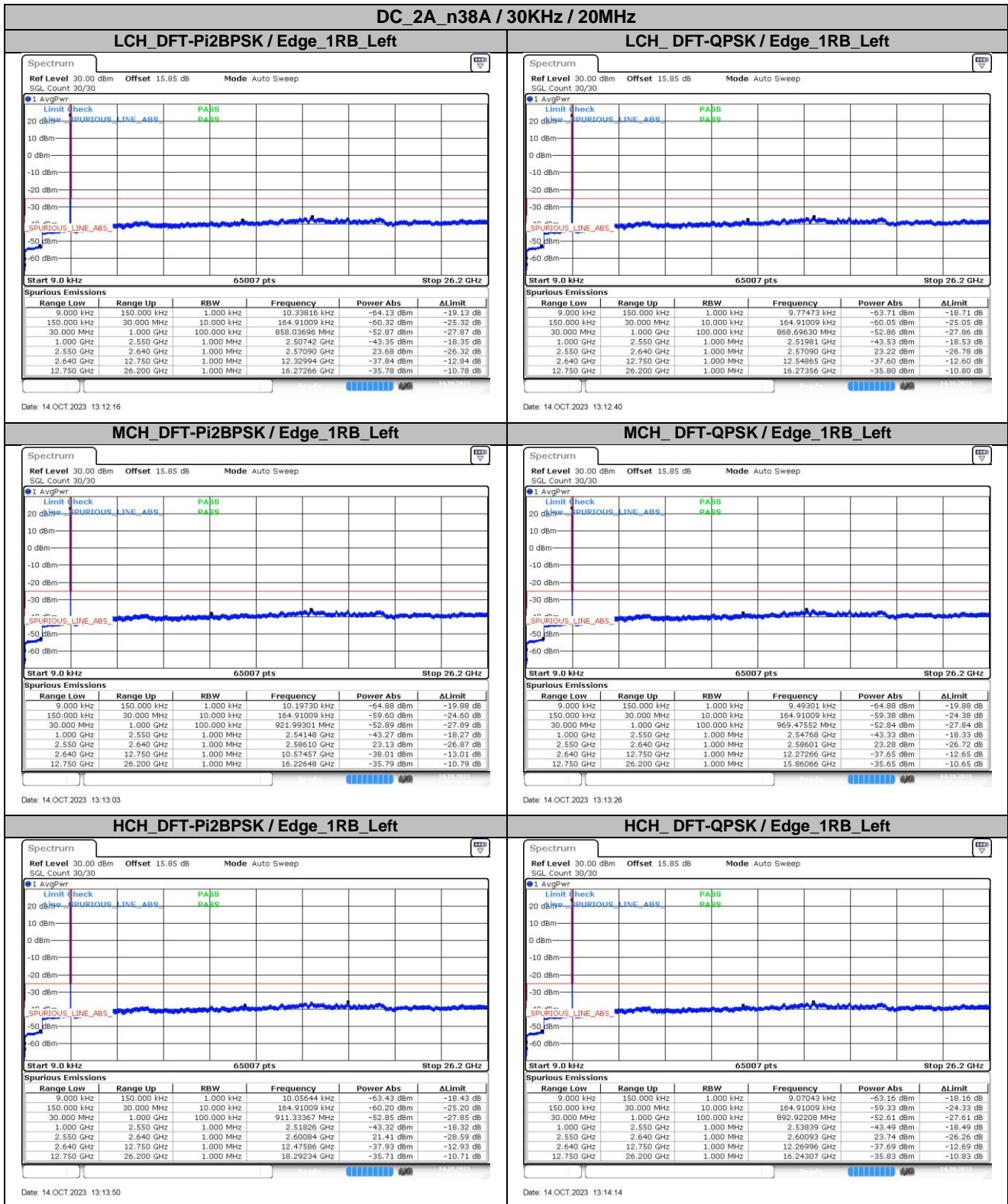


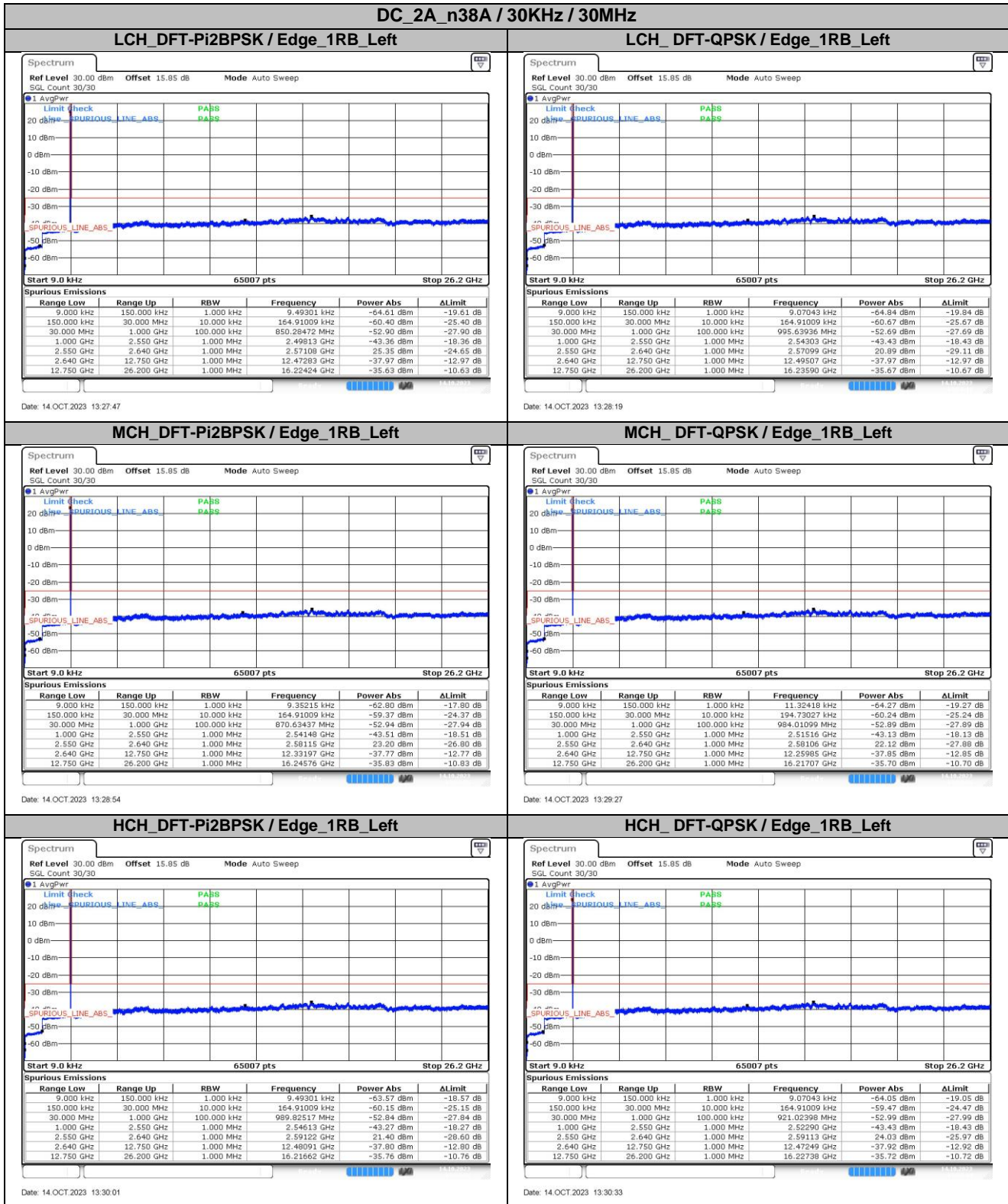




6. Conducted Spurious Emission

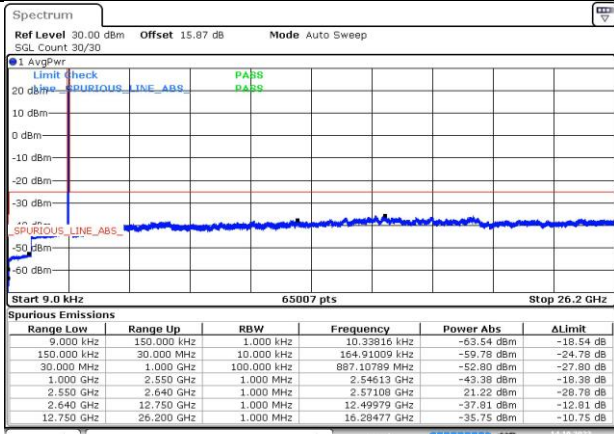
6.1. Test Plots





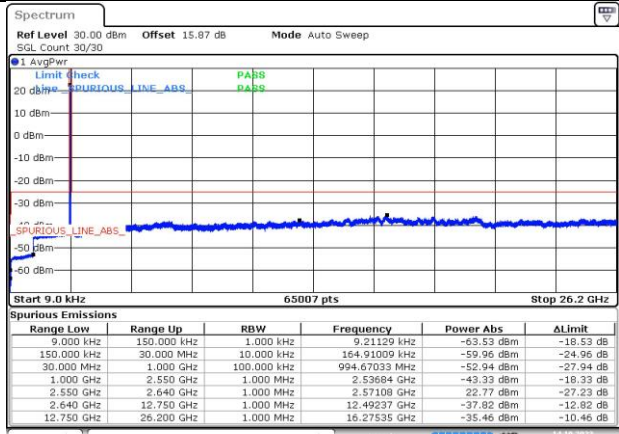
DC_2A_n38A / 30KHz / 40MHz

LCH_DFT-Pi2BPSK / Edge_1RB_Left



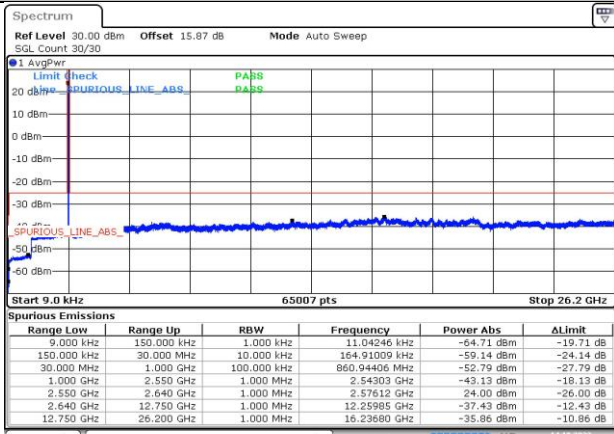
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LCH_DFT-QPSK / Edge_1RB_Left



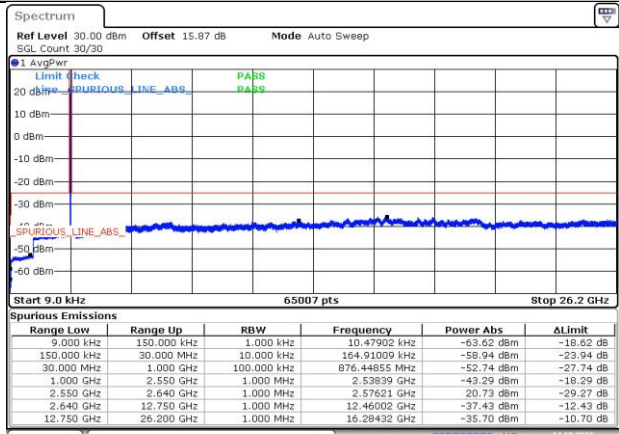
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MCH_DFT-Pi2BPSK / Edge_1RB_Left



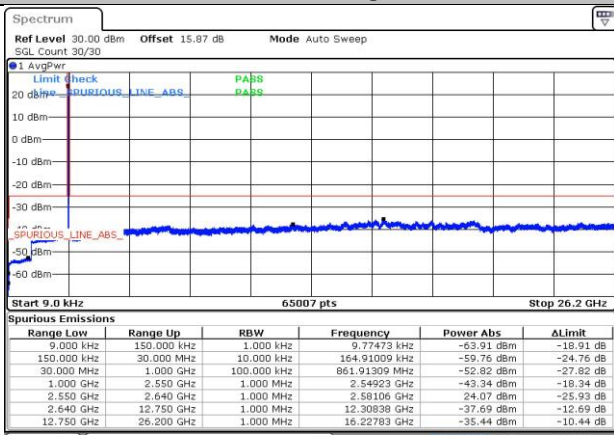
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MCH_DFT-QPSK / Edge_1RB_Left



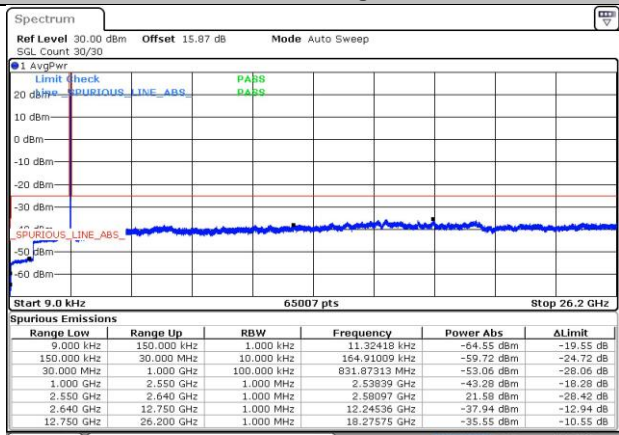
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HCH_DFT-Pi2BPSK / Edge_1RB_Left



Date: 14.OCT.2023 13:53:12

HCH_DFT-QPSK / Edge_1RB_Left



Date: 14.OCT.2023 13:53:33

7. Frequency Stability

7.1. Test Results

7.1.1. Frequency Error Vs Voltage

SCS	Bandwidth	Channel	RB Config	Modulation	Temperature	Voltage	Deviation Result		Verdict
							(Hz)	(ppm)	
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	NT	LV	7.70	0.002967	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	NT	NV	-10.50	-0.004046	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	NT	HV	-15.00	-0.005780	Pass

7.1.2. Frequency Error Vs Temperature

SCS	Bandwidth	Channel	RB Config	Modulation	Temperature	Voltage	Deviation Result		Verdict
							(Hz)	(ppm)	
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	-30°C	NV	-16.30	-0.006281	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	-20°C	NV	-10.40	-0.004008	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	-10°C	NV	7.30	0.002813	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	0°C	NV	-10.90	-0.004200	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	10°C	NV	-8.70	-0.003353	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	20°C	NV	-14.00	-0.005395	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	30°C	NV	-9.80	-0.003776	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	40°C	NV	7.00	0.002697	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	50°C	NV	-8.30	-0.003198	Pass

The End