

**Appendix  
for  
n38A  
(2570-2620)**

## Catalogue

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## 1. Effective Isotropic Radiated Power

### 1.1. Test Results @ Ant1 (Antenna Gain=-4.50dBi)

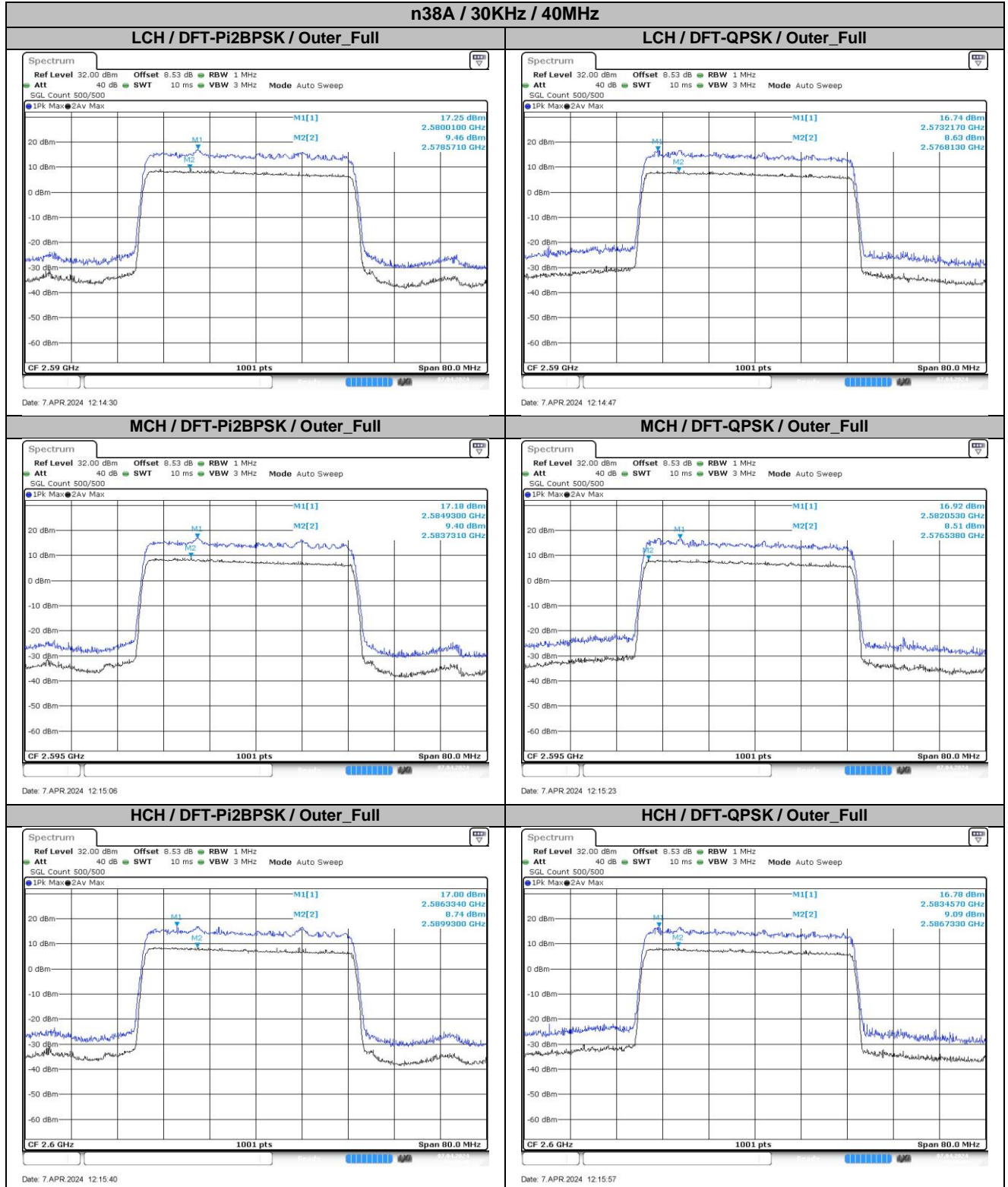
SCS	Bandwidth	Channel	Modulation	Conducted Result (dBm)			Max EIRP (dBm)	Limit (dBm)	Verdict
				Inner_1RB_Left	Inner_1RB_Right	Inner_Full			
30KHz	20MHz	LCH	DFT-Pi2BPSK	22.81	23.30	23.15	18.80	33.00	Pass
30KHz	20MHz	LCH	DFT-QPSK	23.33	23.14	23.16	18.83	33.00	Pass
30KHz	20MHz	LCH	DFT-16QAM	22.63	22.55	22.35	18.13	33.00	Pass
30KHz	20MHz	LCH	DFT-64QAM	20.24	20.15	20.71	16.21	33.00	Pass
30KHz	20MHz	LCH	DFT-256QAM	18.88	18.80	18.58	14.38	33.00	Pass
30KHz	20MHz	LCH	CP-QPSK	21.91	21.75	21.86	17.41	33.00	Pass
30KHz	20MHz	MCH	DFT-Pi2BPSK	23.18	23.22	23.19	18.72	33.00	Pass
30KHz	20MHz	MCH	DFT-QPSK	23.18	23.25	23.16	18.75	33.00	Pass
30KHz	20MHz	MCH	DFT-16QAM	22.16	22.12	22.29	17.79	33.00	Pass
30KHz	20MHz	MCH	DFT-64QAM	20.75	20.74	20.82	16.32	33.00	Pass
30KHz	20MHz	MCH	DFT-256QAM	18.76	18.86	18.74	14.36	33.00	Pass
30KHz	20MHz	MCH	CP-QPSK	21.89	21.79	21.93	17.43	33.00	Pass
30KHz	20MHz	HCH	DFT-Pi2BPSK	23.07	23.00	23.15	18.65	33.00	Pass
30KHz	20MHz	HCH	DFT-QPSK	23.09	23.22	23.16	18.72	33.00	Pass
30KHz	20MHz	HCH	DFT-16QAM	22.29	22.16	22.22	17.79	33.00	Pass
30KHz	20MHz	HCH	DFT-64QAM	21.23	21.06	20.73	16.73	33.00	Pass
30KHz	20MHz	HCH	DFT-256QAM	18.91	18.80	18.65	14.41	33.00	Pass
30KHz	20MHz	HCH	CP-QPSK	21.99	21.64	21.67	17.49	33.00	Pass
30KHz	30MHz	LCH	DFT-Pi2BPSK	23.30	23.21	23.20	18.80	33.00	Pass
30KHz	30MHz	LCH	DFT-QPSK	23.39	23.40	23.15	18.90	33.00	Pass
30KHz	30MHz	LCH	DFT-16QAM	22.32	22.37	22.30	17.87	33.00	Pass
30KHz	30MHz	LCH	DFT-64QAM	21.04	20.99	20.82	16.54	33.00	Pass
30KHz	30MHz	LCH	DFT-256QAM	18.88	18.77	18.73	14.38	33.00	Pass
30KHz	30MHz	LCH	CP-QPSK	21.79	21.71	21.73	17.29	33.00	Pass
30KHz	30MHz	MCH	DFT-Pi2BPSK	23.25	23.14	23.23	18.75	33.00	Pass
30KHz	30MHz	MCH	DFT-QPSK	23.34	23.25	23.16	18.84	33.00	Pass
30KHz	30MHz	MCH	DFT-16QAM	22.28	22.24	22.35	17.85	33.00	Pass
30KHz	30MHz	MCH	DFT-64QAM	21.30	21.23	20.83	16.80	33.00	Pass
30KHz	30MHz	MCH	DFT-256QAM	19.20	19.17	18.76	14.70	33.00	Pass
30KHz	30MHz	MCH	CP-QPSK	21.77	21.68	21.89	17.39	33.00	Pass
30KHz	30MHz	HCH	DFT-Pi2BPSK	23.28	23.17	23.21	18.78	33.00	Pass
30KHz	30MHz	HCH	DFT-QPSK	23.30	23.20	23.18	18.80	33.00	Pass
30KHz	30MHz	HCH	DFT-16QAM	22.27	22.11	22.35	17.85	33.00	Pass
30KHz	30MHz	HCH	DFT-64QAM	20.90	20.78	20.87	16.40	33.00	Pass
30KHz	30MHz	HCH	DFT-256QAM	19.24	19.10	18.76	14.74	33.00	Pass
30KHz	30MHz	HCH	CP-QPSK	22.25	21.88	21.84	17.75	33.00	Pass
30KHz	40MHz	LCH	DFT-Pi2BPSK	23.45	23.24	23.24	18.95	33.00	Pass
30KHz	40MHz	LCH	DFT-QPSK	23.38	23.20	23.15	18.88	33.00	Pass
30KHz	40MHz	LCH	DFT-16QAM	22.60	22.55	22.28	18.10	33.00	Pass
30KHz	40MHz	LCH	DFT-64QAM	20.61	20.49	20.84	16.34	33.00	Pass
30KHz	40MHz	LCH	DFT-256QAM	18.75	18.66	18.75	14.25	33.00	Pass
30KHz	40MHz	LCH	CP-QPSK	21.77	21.71	21.86	17.36	33.00	Pass
30KHz	40MHz	MCH	DFT-Pi2BPSK	23.40	23.21	23.16	18.90	33.00	Pass
30KHz	40MHz	MCH	DFT-QPSK	23.40	23.18	23.23	18.90	33.00	Pass
30KHz	40MHz	MCH	DFT-16QAM	22.34	22.16	22.32	17.84	33.00	Pass
30KHz	40MHz	MCH	DFT-64QAM	21.11	20.92	20.80	16.61	33.00	Pass
30KHz	40MHz	MCH	DFT-256QAM	19.16	19.02	18.82	14.66	33.00	Pass
30KHz	40MHz	MCH	CP-QPSK	21.86	21.70	21.75	17.36	33.00	Pass
30KHz	40MHz	HCH	DFT-Pi2BPSK	23.40	23.14	23.22	18.90	33.00	Pass
30KHz	40MHz	HCH	DFT-QPSK	23.43	23.18	23.16	18.93	33.00	Pass
30KHz	40MHz	HCH	DFT-16QAM	22.39	22.09	22.36	17.89	33.00	Pass
30KHz	40MHz	HCH	DFT-64QAM	21.32	21.08	20.84	16.82	33.00	Pass
30KHz	40MHz	HCH	DFT-256QAM	18.52	18.33	18.77	14.27	33.00	Pass
30KHz	40MHz	HCH	CP-QPSK	21.97	21.83	21.88	17.47	33.00	Pass

## 2. Peak-to-Average Ratio

### 2.1. Test Results

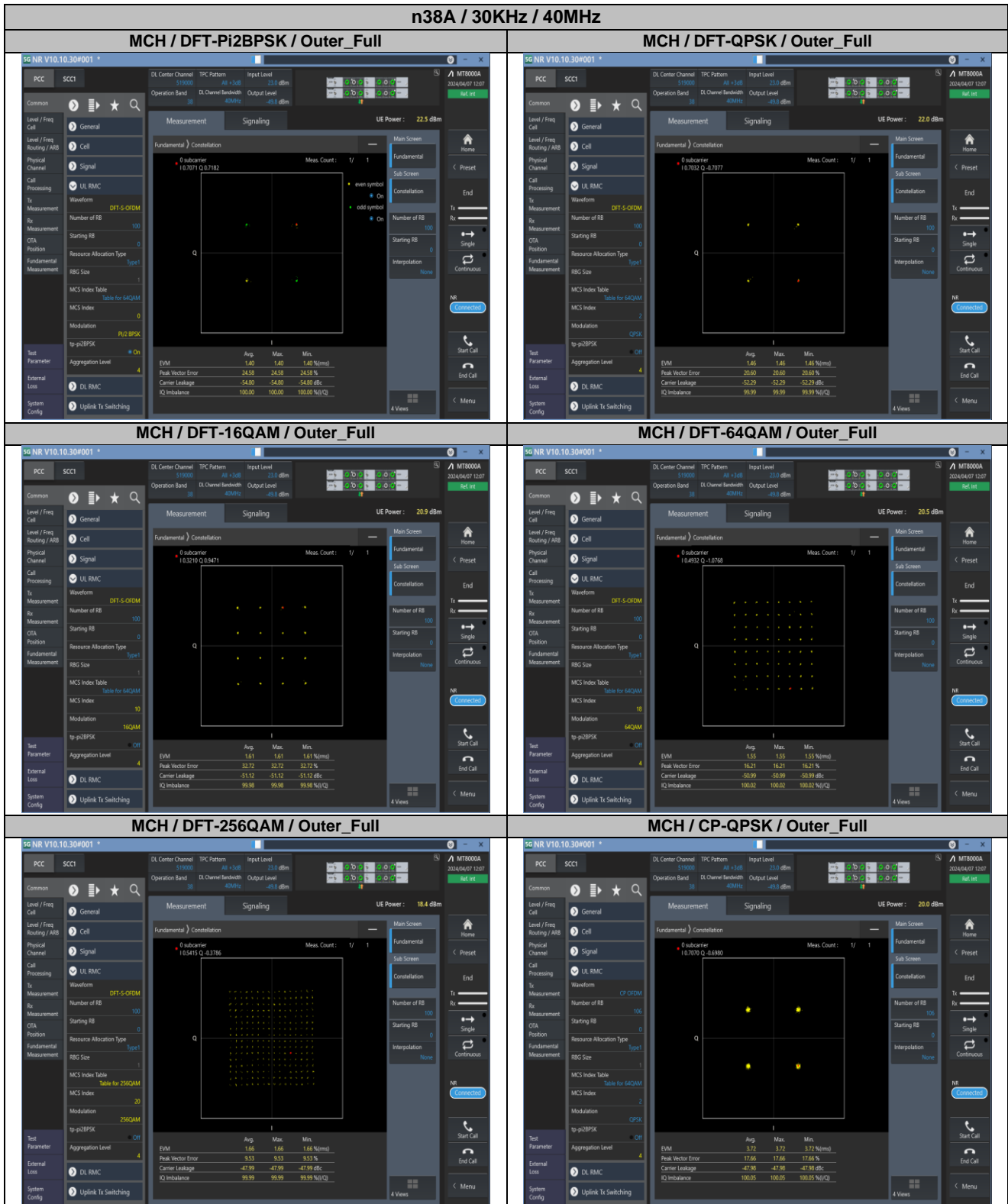
SCS	Bandwidth	Channel	Modulation	Result (dB)		Limit (dB)	Verdict
				DFT-Pi2BPSK	DFT-QPSK		
30KHz	40MHz	LCH	Outer_Full	7.79	8.11	13.00	Pass
30KHz	40MHz	MCH	Outer_Full	7.77	8.41	13.00	Pass
30KHz	40MHz	HCH	Outer_Full	8.26	7.69	13.00	Pass

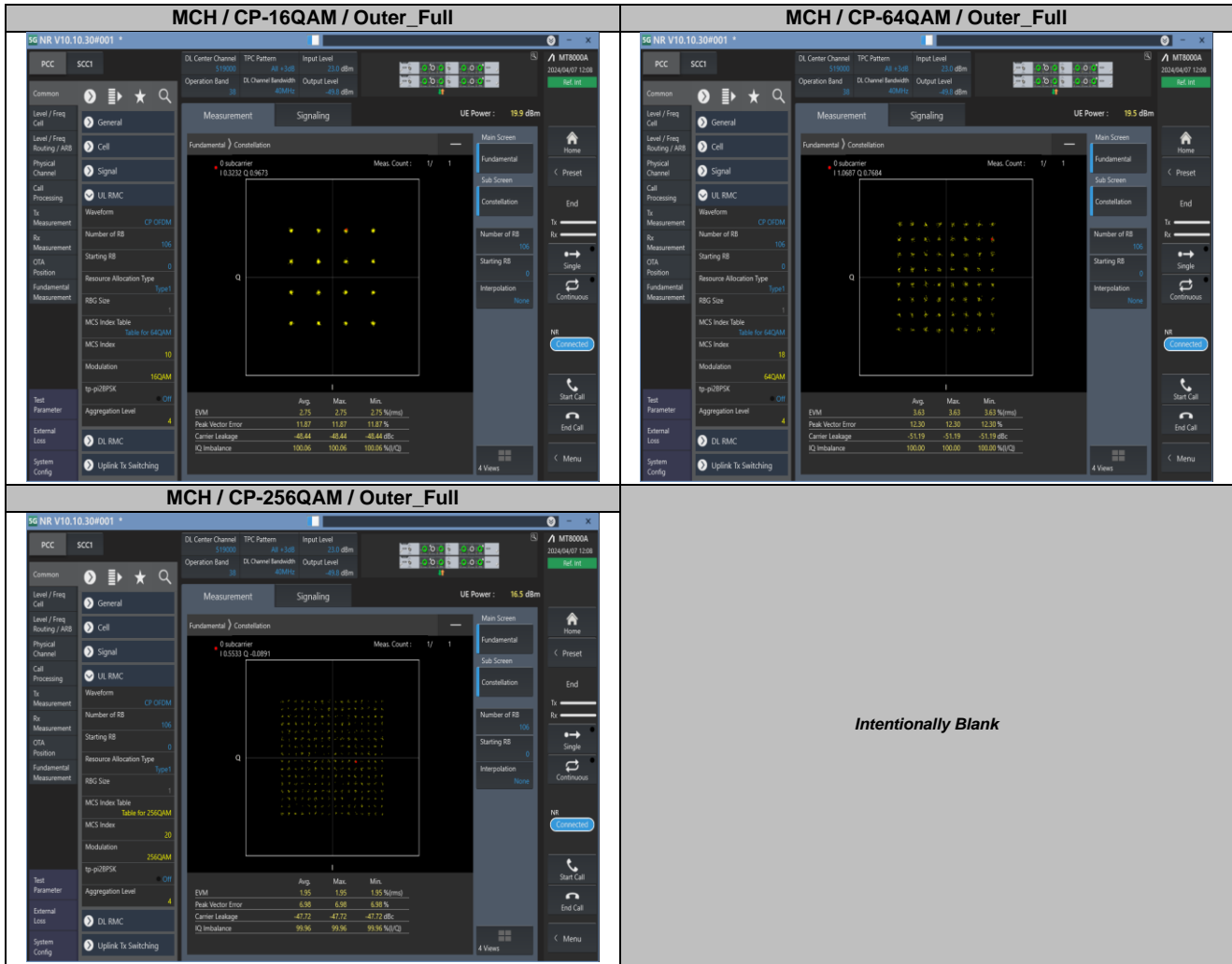
### 2.2. Test Plots



### 3. Modulation Characteristics

#### 3.1. Test Plots



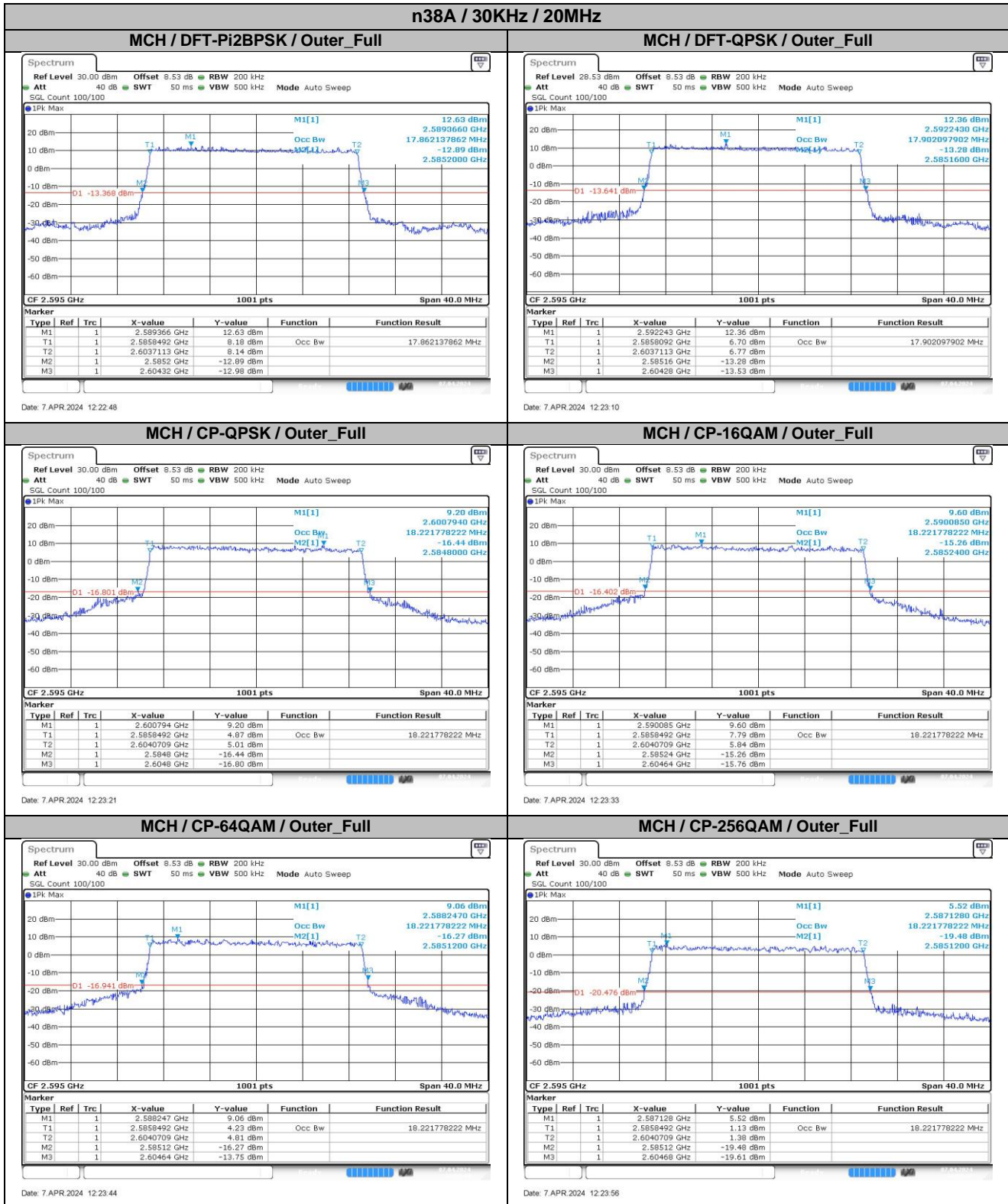


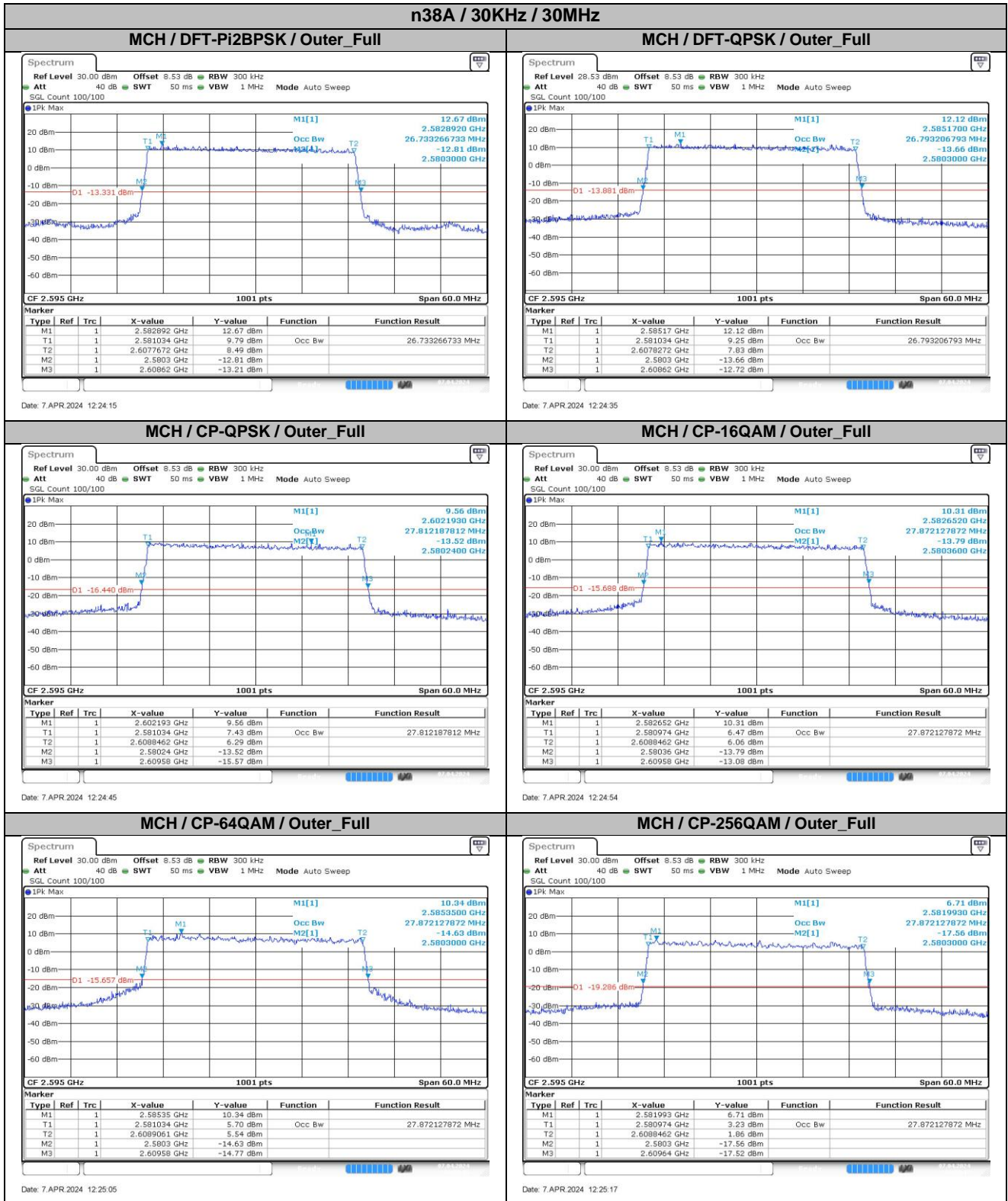
### 4. 99% Occupied Bandwidth & 26dB Emission Bandwidth

#### 4.1. Test Results

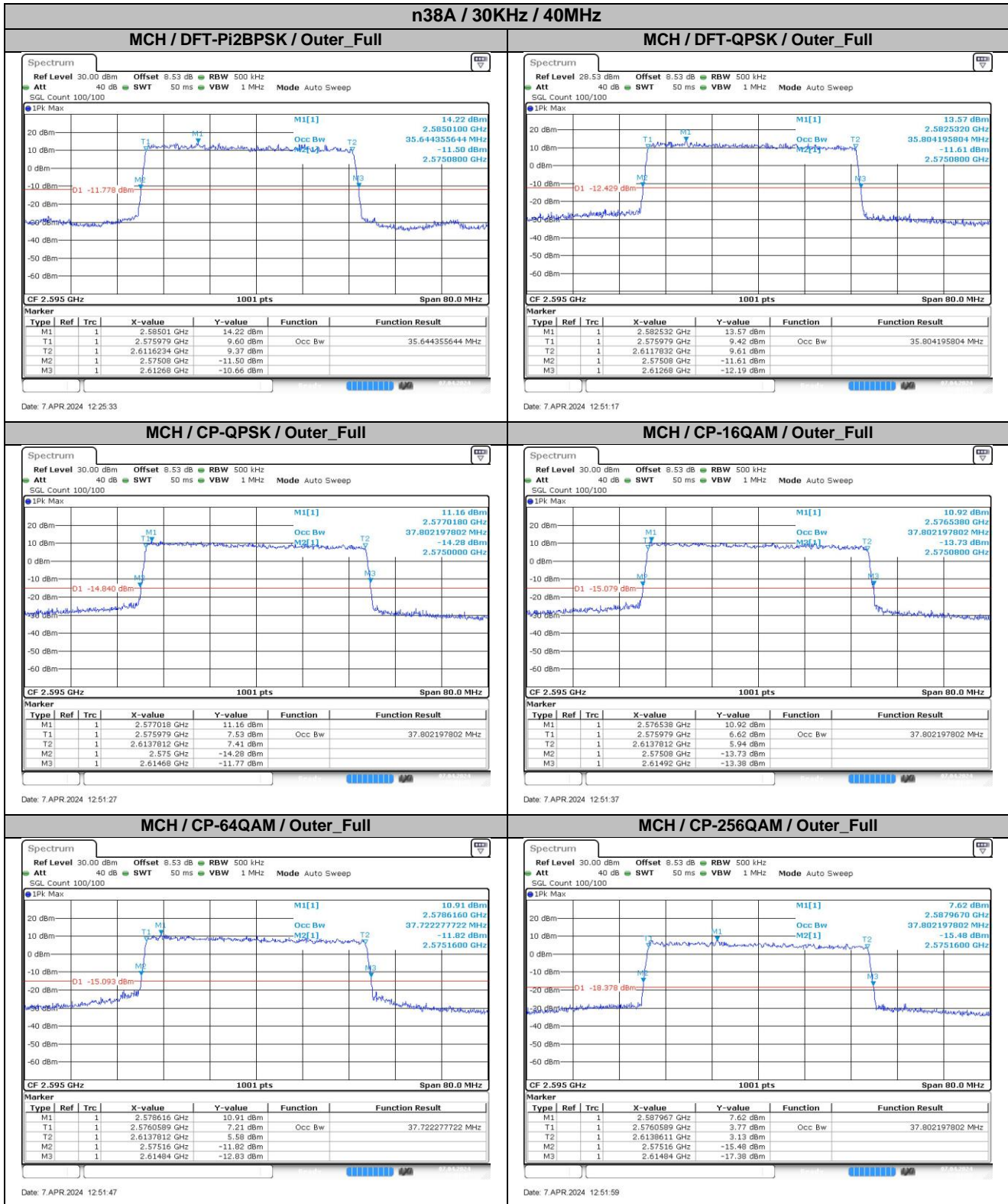
SCS	Bandwidth	Modulation	RB Config	99% Occupied Bandwidth (MHz)	26dB Emission Bandwidth (MHz)	Verdict
30KHz	20MHz	DFT-Pi2BPSK	Outer_Full	17.86	19.12	Pass
30KHz	20MHz	DFT-QPSK	Outer_Full	17.90	19.12	Pass
30KHz	20MHz	CP-QPSK	Outer_Full	18.22	20.00	Pass
30KHz	20MHz	CP-16QAM	Outer_Full	18.22	19.40	Pass
30KHz	20MHz	CP-64QAM	Outer_Full	18.22	19.52	Pass
30KHz	20MHz	CP-256QAM	Outer_Full	18.22	19.56	Pass
30KHz	30MHz	DFT-Pi2BPSK	Outer_Full	26.73	28.32	Pass
30KHz	30MHz	DFT-QPSK	Outer_Full	26.79	28.32	Pass
30KHz	30MHz	CP-QPSK	Outer_Full	27.81	29.34	Pass
30KHz	30MHz	CP-16QAM	Outer_Full	27.87	29.22	Pass
30KHz	30MHz	CP-64QAM	Outer_Full	27.87	29.28	Pass
30KHz	30MHz	CP-256QAM	Outer_Full	27.87	29.34	Pass
30KHz	40MHz	DFT-Pi2BPSK	Outer_Full	35.64	37.60	Pass
30KHz	40MHz	DFT-QPSK	Outer_Full	35.80	37.60	Pass
30KHz	40MHz	CP-QPSK	Outer_Full	37.80	39.68	Pass
30KHz	40MHz	CP-16QAM	Outer_Full	37.80	39.84	Pass
30KHz	40MHz	CP-64QAM	Outer_Full	37.72	39.68	Pass
30KHz	40MHz	CP-256QAM	Outer_Full	37.80	39.68	Pass

4.2. Test Plots



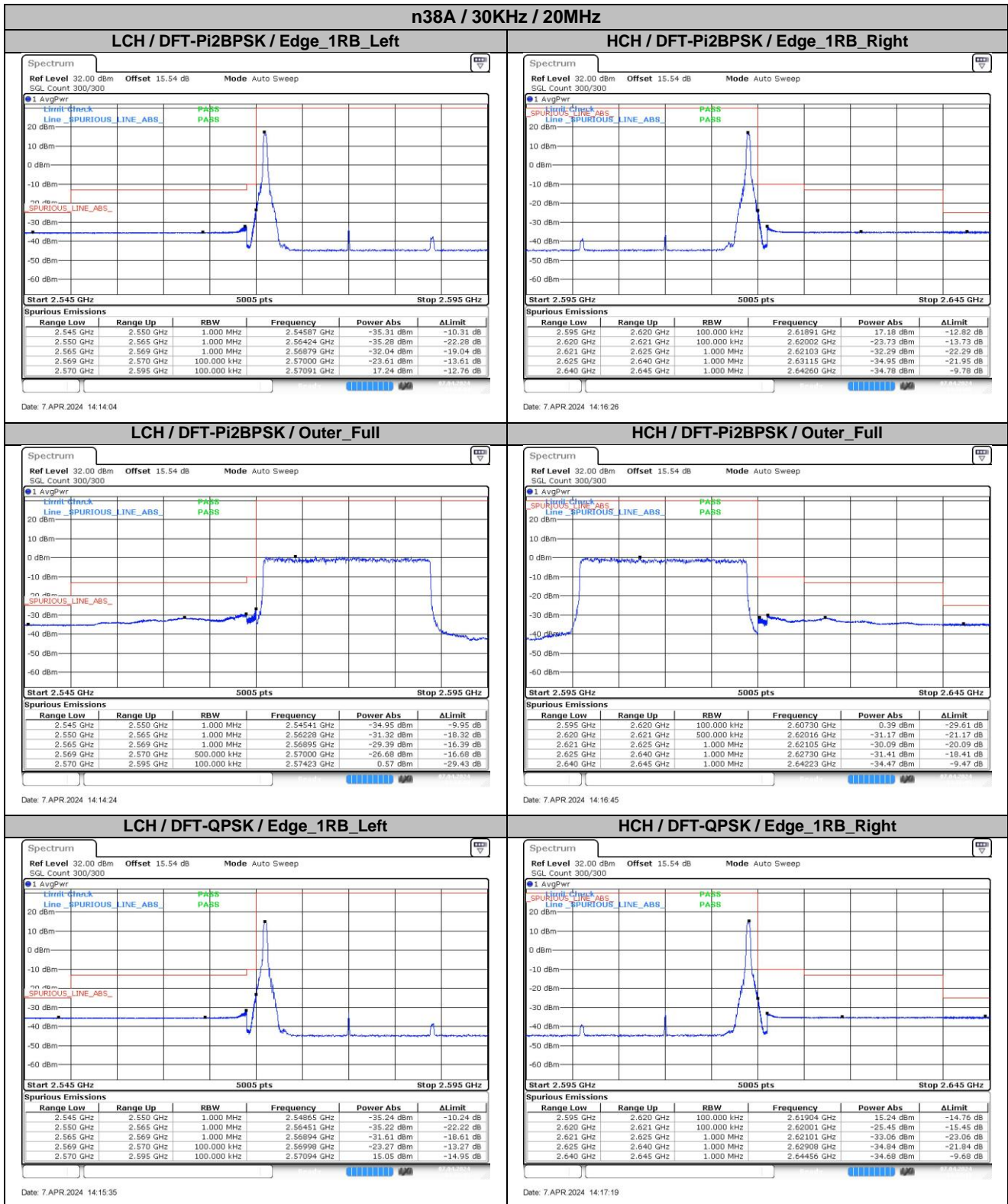


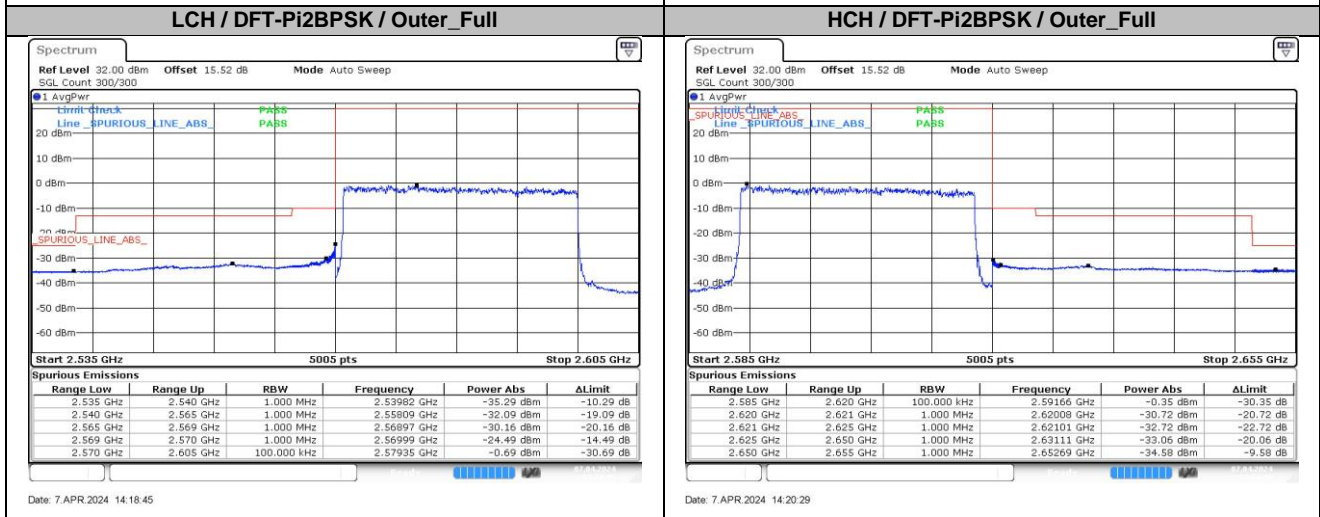
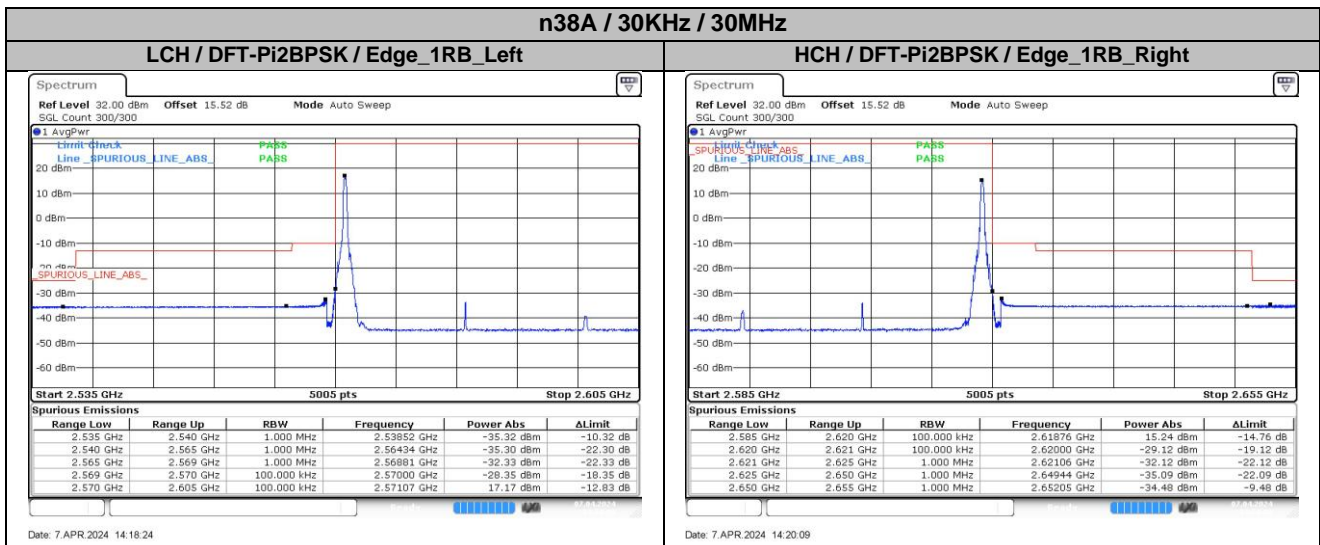
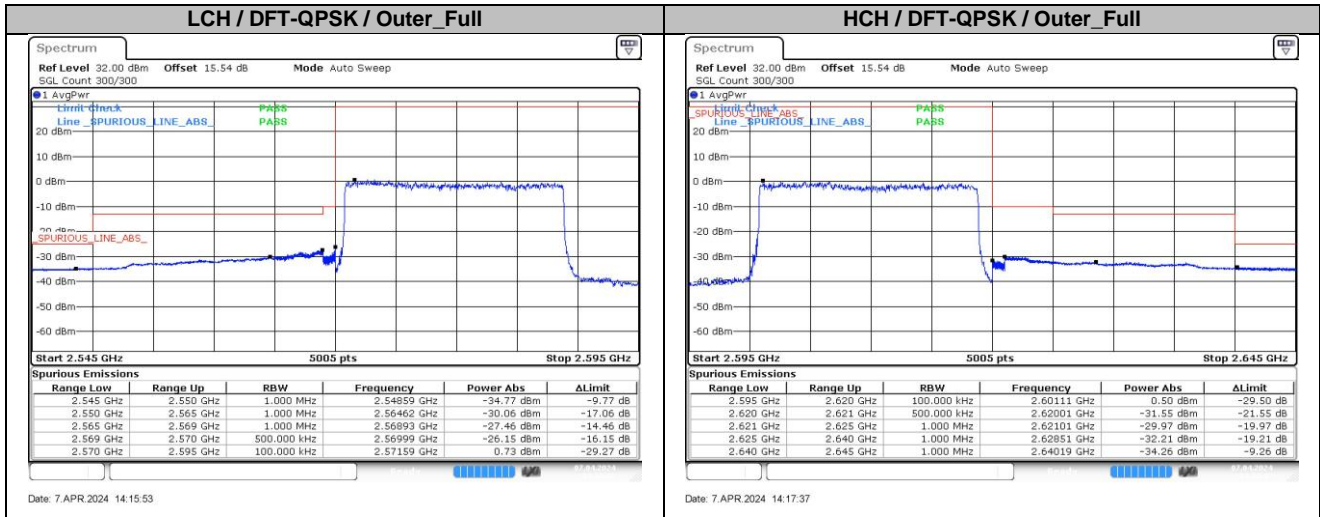


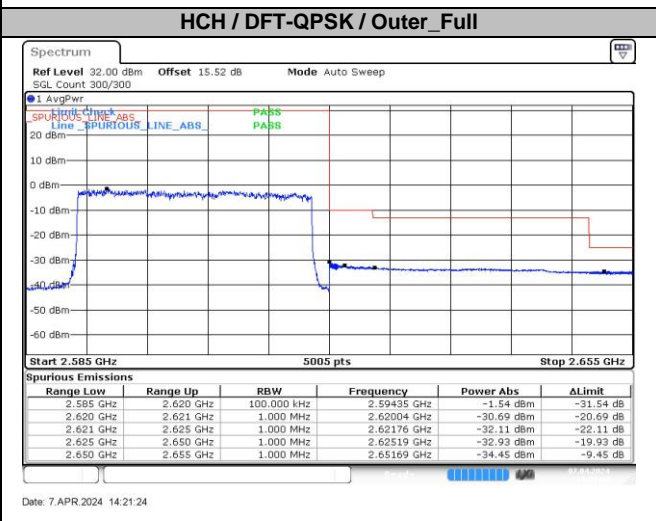
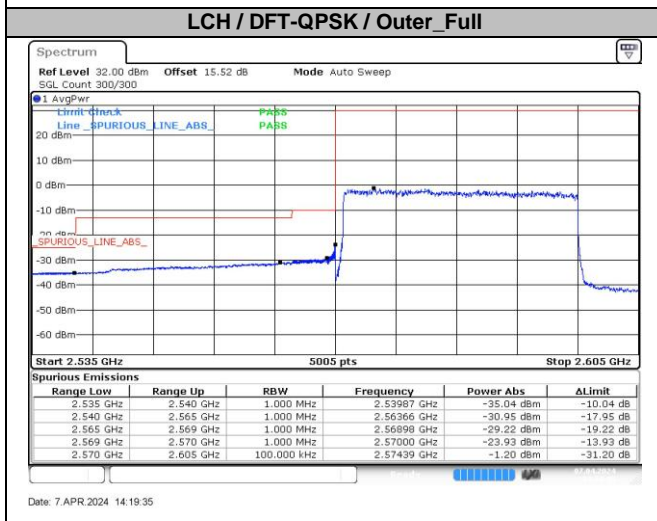
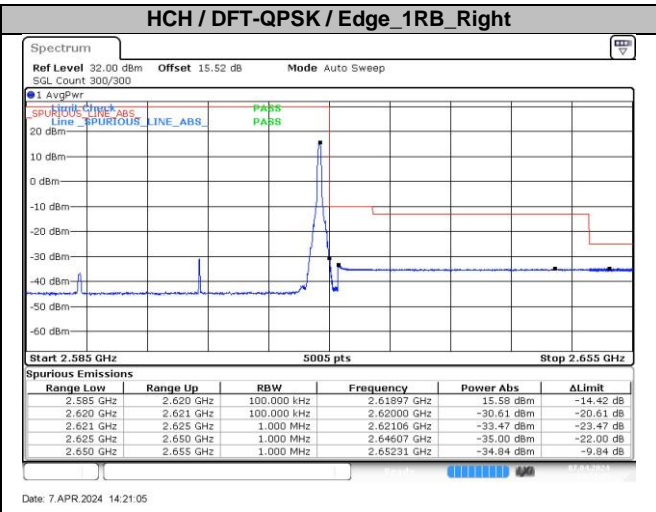
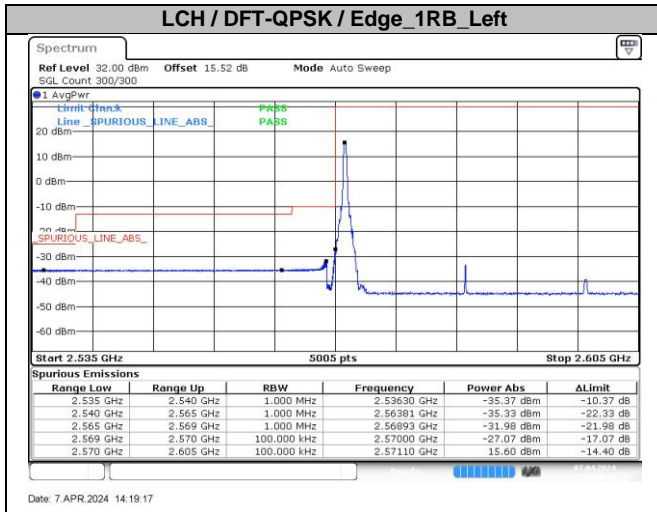


### 5. Conducted Band Edges

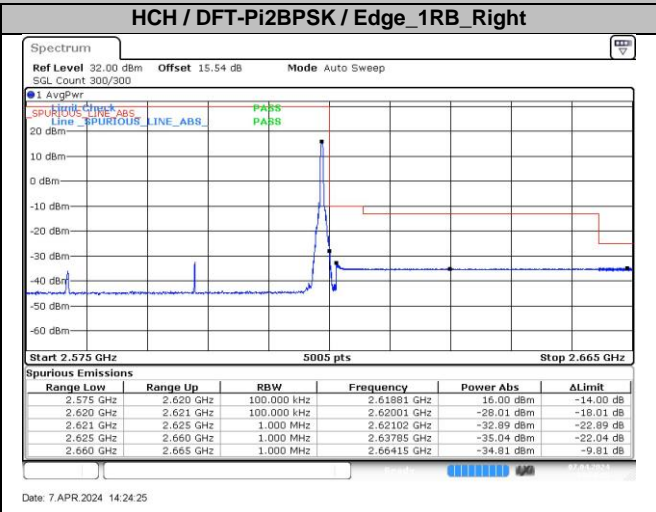
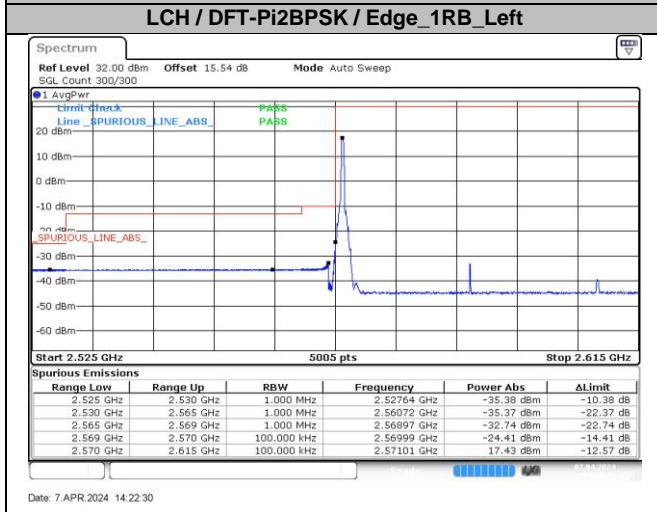
#### 5.1. Test Plots



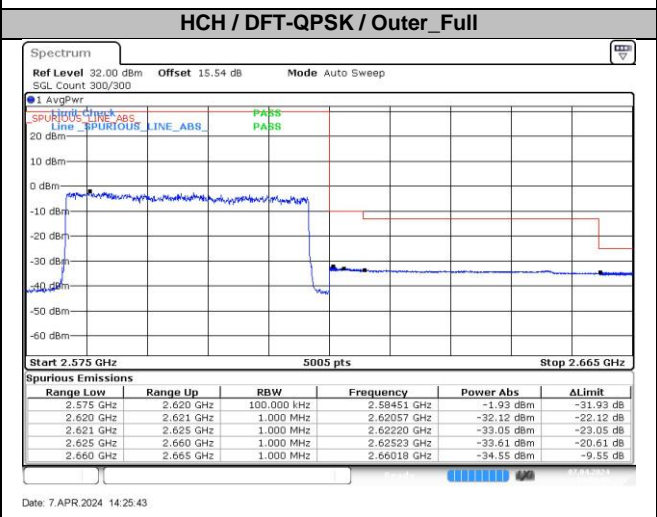
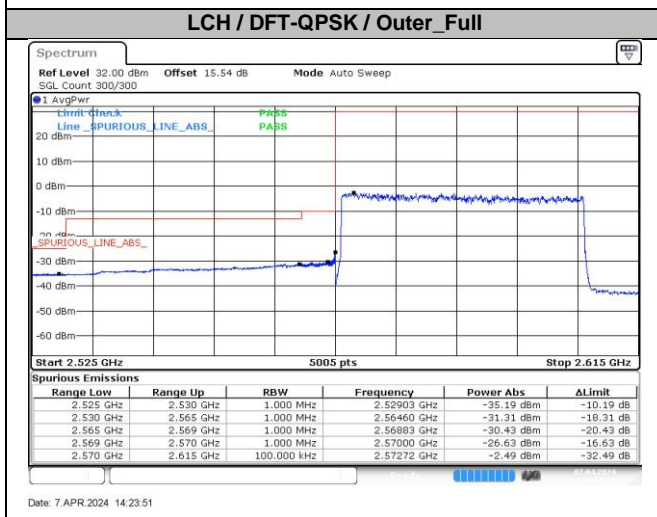
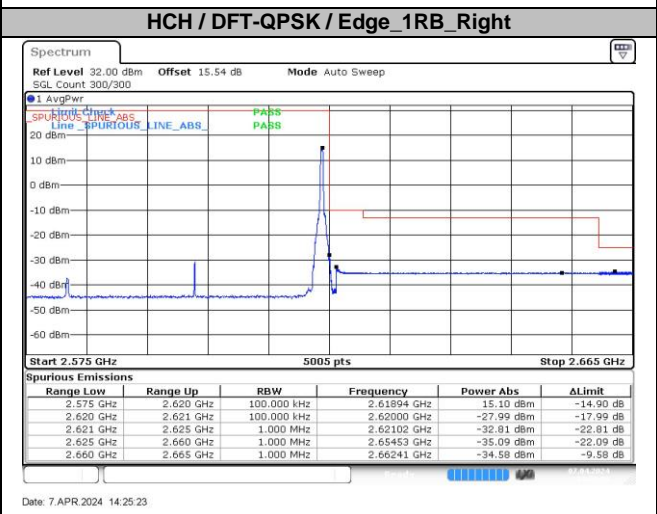
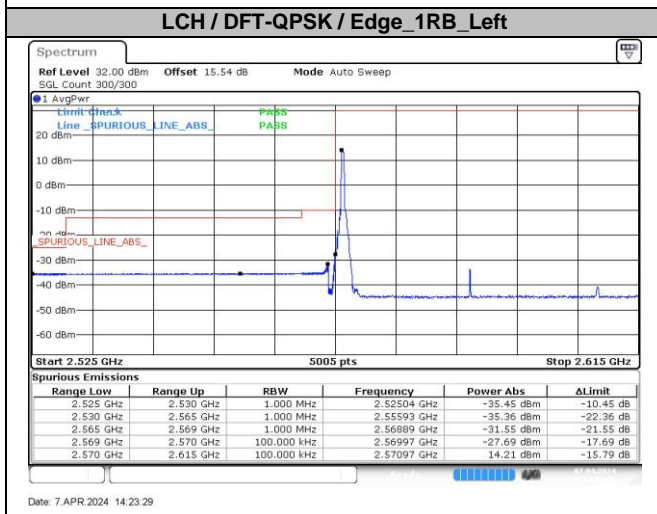
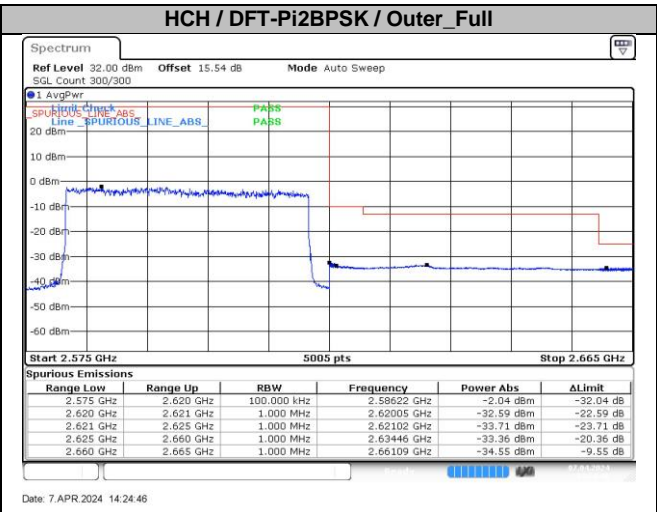
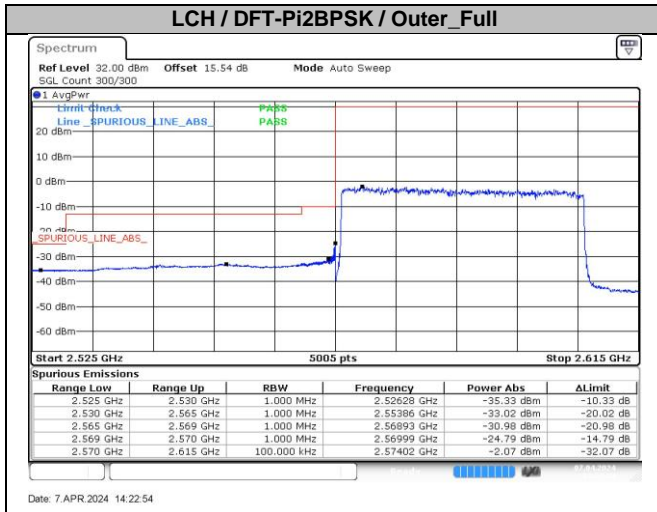




## n38A / 30kHz / 40MHz

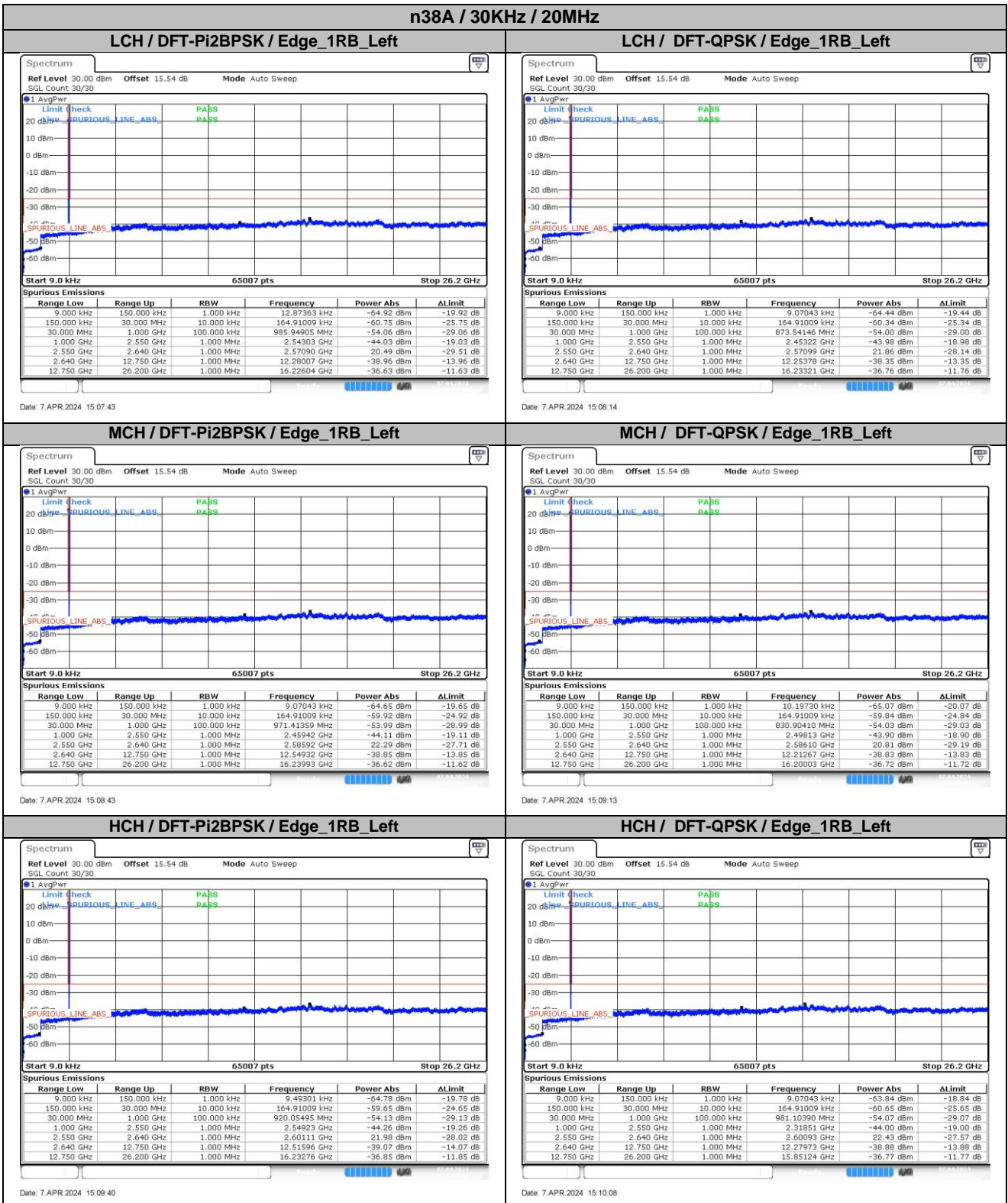


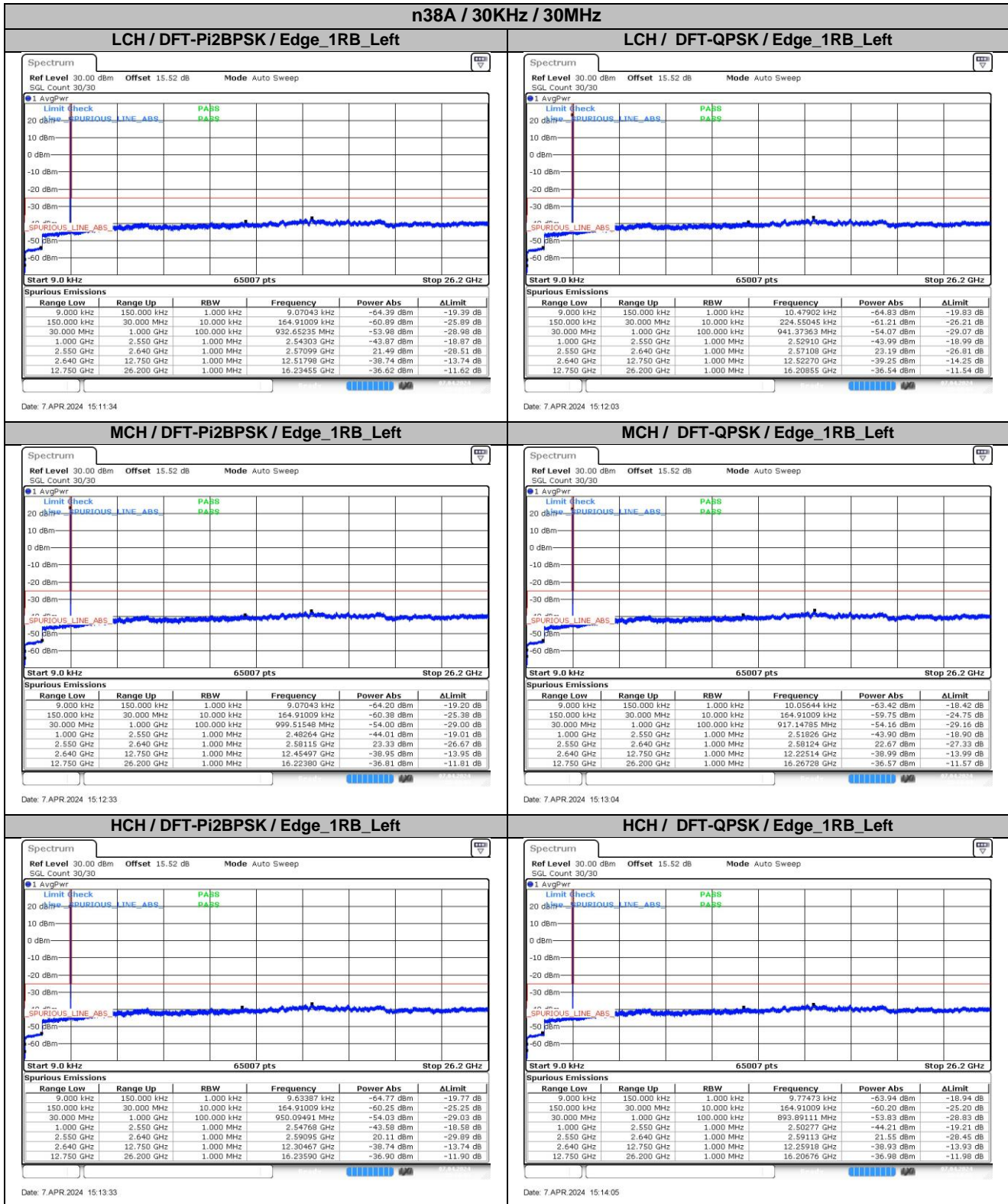


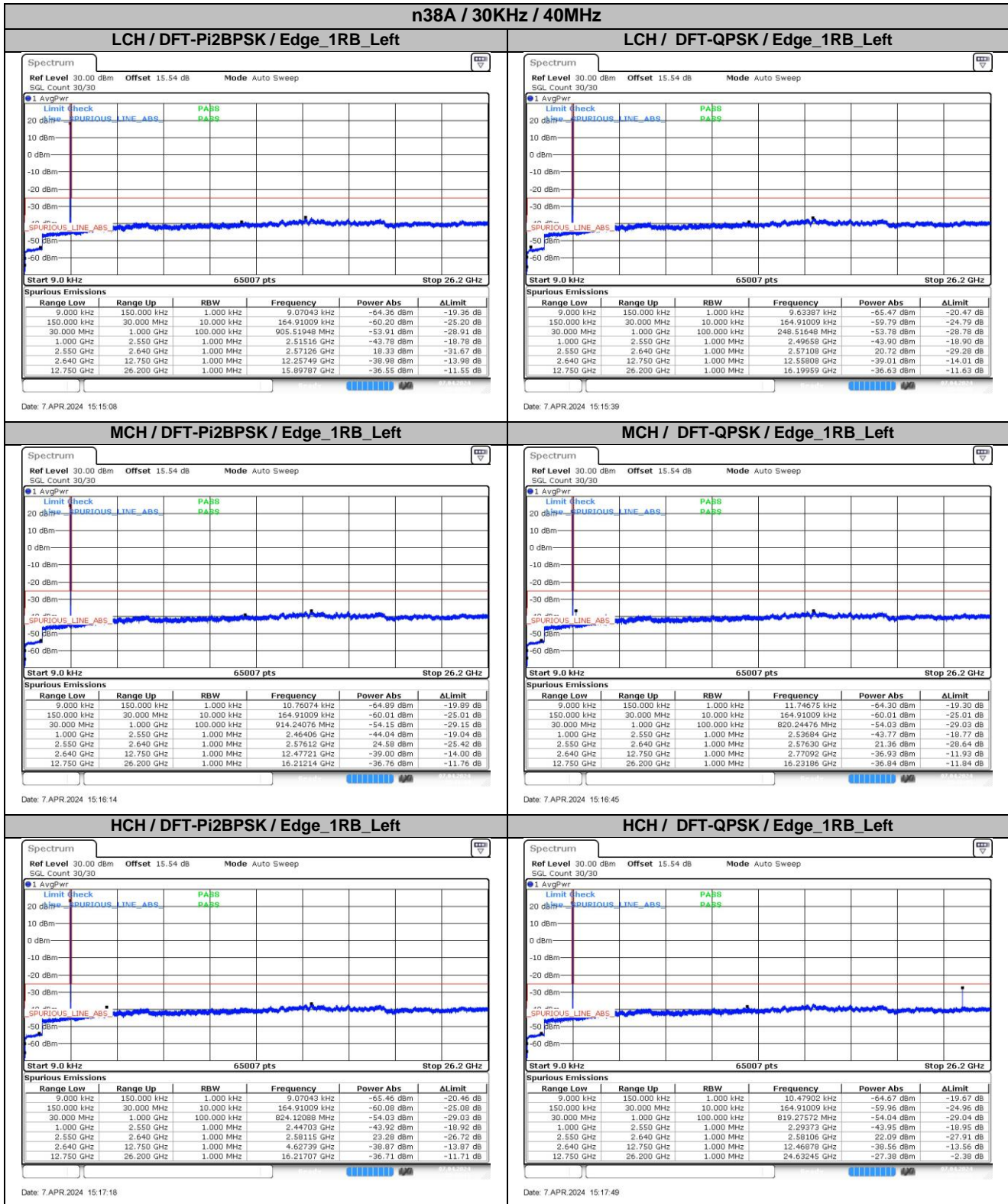


## 6. Conducted Spurious Emission

### 6.1. Test Plots









## 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	-5.60	-0.002158	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	NT	NV	-14.10	-0.005434	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	NT	HV	-5.60	-0.002158	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	-5.00	-0.001927	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	-20°C	NV	-9.90	-0.003815	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	-10°C	NV	-2.50	-0.000963	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	0°C	NV	-2.20	-0.000848	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	10°C	NV	-7.00	-0.002697	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	20°C	NV	-12.10	-0.004663	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	30°C	NV	-10.00	-0.003854	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	40°C	NV	-8.60	-0.003314	Pass
30KHz	40MHz	MCH	Outer_Full	DFT-QPSK	50°C	NV	-5.80	-0.002235	Pass

The End