

## Appendix F: Frequency Stability for NSA

### Test Result

#### Frequency Error VS. Voltage

Voltage										
Band	SC S	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation (Hz)	Deviation (ppm)	Verdict
DC_5A_n 41A	30	5+20	DFT-Q PSK	M+L	Outer_ Full	VN	NT	-0.30	0.00	PAS S
DC_5A_n 41A	30	5+20	CP-QP SK	M+L	Outer_ Full	VN	NT	-5.46	0.00	PAS S
DC_5A_n 41A	30	5+20	DFT-Q PSK	M+M	Outer_ Full	VN	NT	-5.07	0.00	PAS S
DC_5A_n 41A	30	5+20	CP-QP SK	M+M	Outer_ Full	VN	NT	-7.61	0.00	PAS S
DC_5A_n 41A	30	5+20	DFT-Q PSK	M+H	Outer_ Full	VN	NT	-9.58	0.00	PAS S
DC_5A_n 41A	30	5+20	CP-QP SK	M+H	Outer_ Full	VN	NT	-11.18	0.00	PAS S
DC_5A_n 41A	30	5+40	DFT-Q PSK	M+L	Outer_ Full	VN	NT	-2.60	0.00	PAS S
DC_5A_n 41A	30	5+40	CP-QP SK	M+L	Outer_ Full	VN	NT	-7.82	0.00	PAS S
DC_5A_n 41A	30	5+40	DFT-Q PSK	M+M	Outer_ Full	VN	NT	-5.05	0.00	PAS S
DC_5A_n 41A	30	5+40	CP-QP SK	M+M	Outer_ Full	VN	NT	-9.36	0.00	PAS S
DC_5A_n 41A	30	5+40	DFT-Q PSK	M+H	Outer_ Full	VN	NT	-6.19	0.00	PAS S
DC_5A_n 41A	30	5+40	CP-QP SK	M+H	Outer_ Full	VN	NT	-6.15	0.00	PAS S
DC_5A_n 41A	30	5+60	DFT-Q PSK	M+L	Outer_ Full	VN	NT	-8.85	0.00	PAS S
DC_5A_n 41A	30	5+60	CP-QP SK	M+L	Outer_ Full	VN	NT	-3.84	0.00	PAS S
DC_5A_n 41A	30	5+60	DFT-Q PSK	M+M	Outer_ Full	VN	NT	-12.66	0.00	PAS S
DC_5A_n 41A	30	5+60	CP-QP SK	M+M	Outer_ Full	VN	NT	-1.16	0.00	PAS S

DC_5A_n 41A	30	5+60	DFT-Q PSK	M+H	Outer_ Full	VN	NT	-1.49	0.00	PAS S
DC_5A_n 41A	30	5+60	CP-QP SK	M+H	Outer_ Full	VN	NT	-4.34	0.00	PAS S
DC_5A_n 41A	30	5+100	DFT-Q PSK	M+L	Outer_ Full	VN	NT	0.80	0.00	PAS S
DC_5A_n 41A	30	5+100	CP-QP SK	M+L	Outer_ Full	VN	NT	-12.07	0.00	PAS S
DC_5A_n 41A	30	5+100	DFT-Q PSK	M+M	Outer_ Full	VN	NT	-11.23	0.00	PAS S
DC_5A_n 41A	30	5+100	CP-QP SK	M+M	Outer_ Full	VN	NT	-5.10	0.00	PAS S
DC_5A_n 41A	30	5+100	DFT-Q PSK	M+H	Outer_ Full	VN	NT	-0.97	0.00	PAS S
DC_5A_n 41A	30	5+100	CP-QP SK	M+H	Outer_ Full	VN	NT	-6.52	0.00	PAS S

**Frequency Error VS. Temperature**

Voltage										
Band	SC S	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation (Hz)	Deviation (ppm)	Verdict
DC_5A_n 41A	30	5+20	DFT-Q PSK	M+L	Outer_ Full	NV	TN	-9.93678 4	-0.003 965	PAS S
DC_5A_n 41A	30	5+20	CP-QP SK	M+L	Outer_ Full	NV	TN	-9.16910 2	-0.003 659	PAS S
DC_5A_n 41A	30	5+20	DFT-Q PSK	M+M	Outer_ Full	NV	TN	-6.15738 0	-0.002 375	PAS S
DC_5A_n 41A	30	5+20	CP-QP SK	M+M	Outer_ Full	NV	TN	-6.14876 1	-0.002 371	PAS S
DC_5A_n 41A	30	5+20	DFT-Q PSK	M+H	Outer_ Full	NV	TN	-3.52703 0	-0.001 316	PAS S
DC_5A_n 41A	30	5+20	CP-QP SK	M+H	Outer_ Full	NV	TN	-6.85653 2	-0.002 558	PAS S
DC_5A_n 41A	30	5+40	DFT-Q PSK	M+L	Outer_ Full	NV	TN	-6.05230 9	-0.002 406	PAS S
DC_5A_n 41A	30	5+40	CP-QP SK	M+L	Outer_ Full	NV	TN	-11.3177 90	-0.004 498	PAS S
DC_5A_n 41A	30	5+40	DFT-Q PSK	M+M	Outer_ Full	NV	TN	-14.7150 11	-0.005 675	PAS S
DC_5A_n 41A	30	5+40	CP-QP SK	M+M	Outer_ Full	NV	TN	-18.1412 41	-0.006 996	PAS S
DC_5A_n 41A	30	5+40	DFT-Q PSK	M+H	Outer_ Full	NV	TN	-7.19362 4	-0.002 694	PAS S
DC_5A_n 41A	30	5+40	CP-QP SK	M+H	Outer_ Full	NV	TN	-3.79659 0	-0.001 422	PAS S
DC_5A_n 41A	30	5+60	DFT-Q PSK	M+L	Outer_ Full	NV	TN	-8.82446 2	-0.003 493	PAS S
DC_5A_n 41A	30	5+60	CP-QP SK	M+L	Outer_ Full	NV	TN	-13.2727 57	-0.005 254	PAS S
DC_5A_n 41A	30	5+60	DFT-Q PSK	M+M	Outer_ Full	NV	TN	-8.96677 0	-0.003 458	PAS S
DC_5A_n 41A	30	5+60	CP-QP SK	M+M	Outer_ Full	NV	TN	-9.96020 7	-0.003 841	PAS S
DC_5A_n 41A	30	5+60	DFT-Q PSK	M+H	Outer_ Full	NV	TN	-2.95526 0	-0.001 111	PAS S
DC_5A_n 41A	30	5+60	CP-QP SK	M+H	Outer_ Full	NV	TN	-7.57465 1	-0.002 848	PAS S

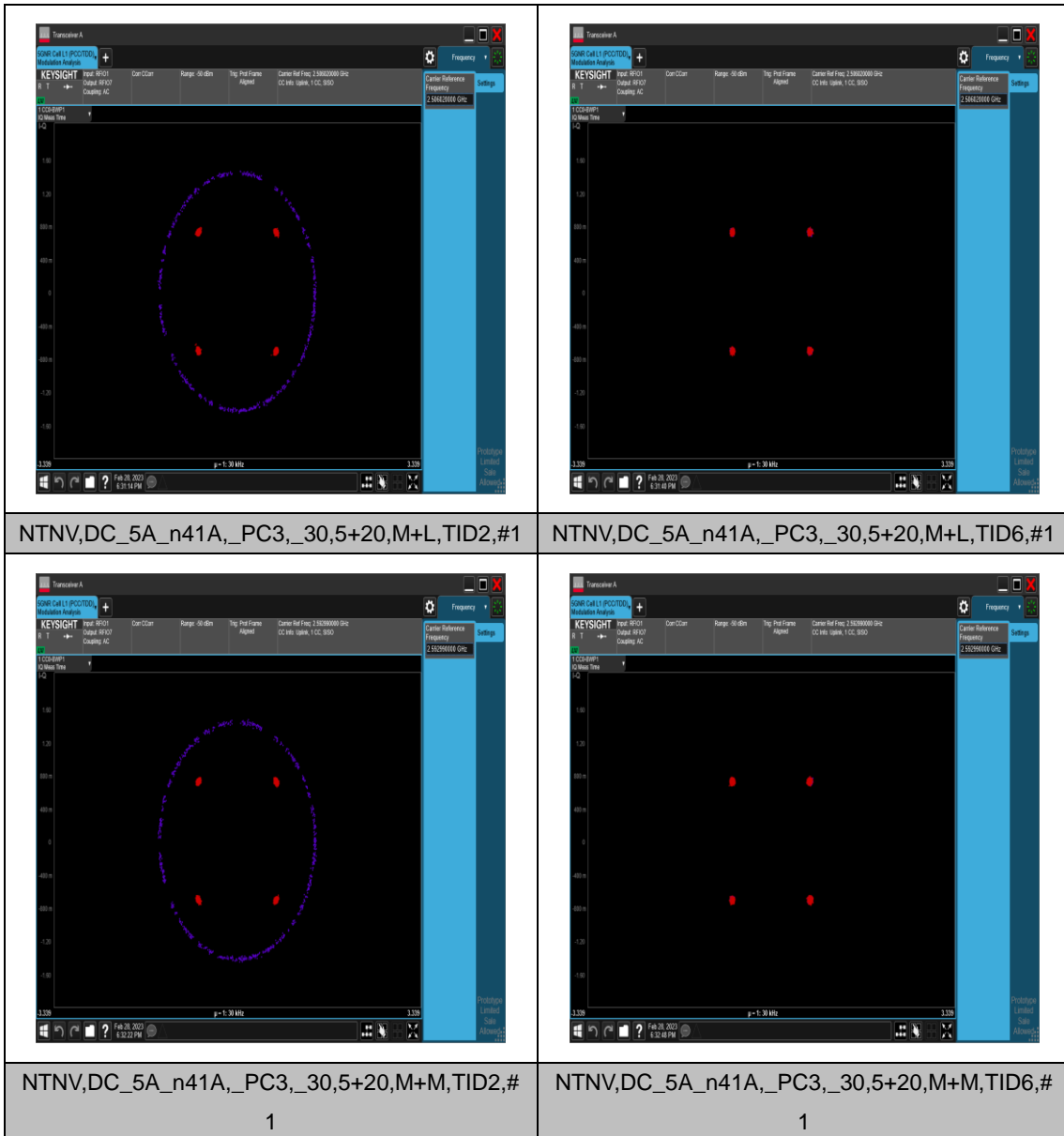
DC_5A_n 41A	30	5+100	DFT-Q PSK	M+L	Outer_ Full	NV	TN	-10.3819 66	-0.004 078	PAS S
DC_5A_n 41A	30	5+100	CP-QP SK	M+L	Outer_ Full	NV	TN	-11.2070 70	-0.004 402	PAS S
DC_5A_n 41A	30	5+100	DFT-Q PSK	M+M	Outer_ Full	NV	TN	-3.49892 6	-0.001 349	PAS S
DC_5A_n 41A	30	5+100	CP-QP SK	M+M	Outer_ Full	NV	TN	-13.7463 83	-0.005 301	PAS S
DC_5A_n 41A	30	5+100	DFT-Q PSK	M+H	Outer_ Full	NV	TN	-6.02456 2	-0.002 282	PAS S
DC_5A_n 41A	30	5+100	CP-QP SK	M+H	Outer_ Full	NV	TN	2.423249	0.0009 18	PAS S

## Appendix F: Modulation characteristics for NSA

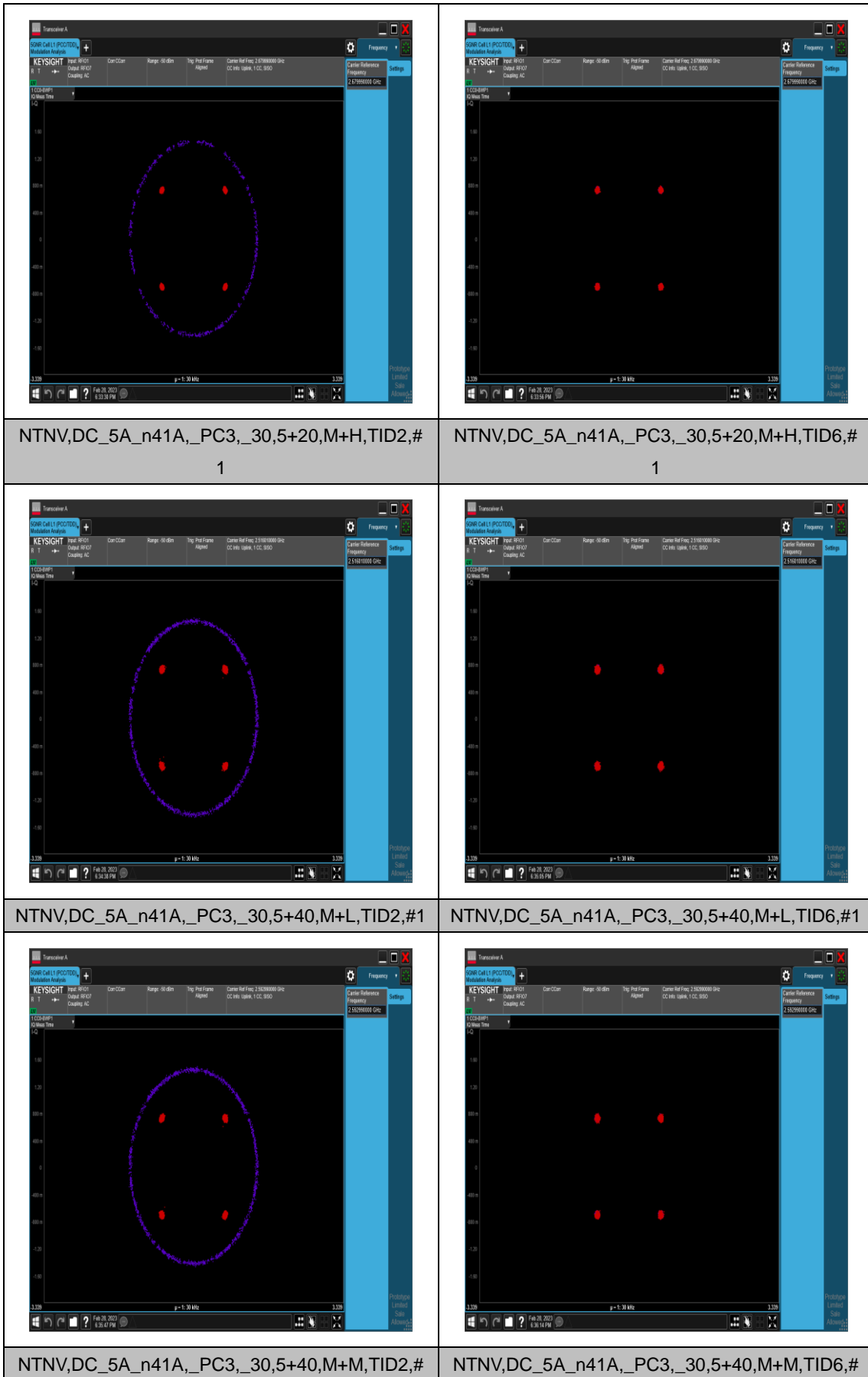
### Test Result

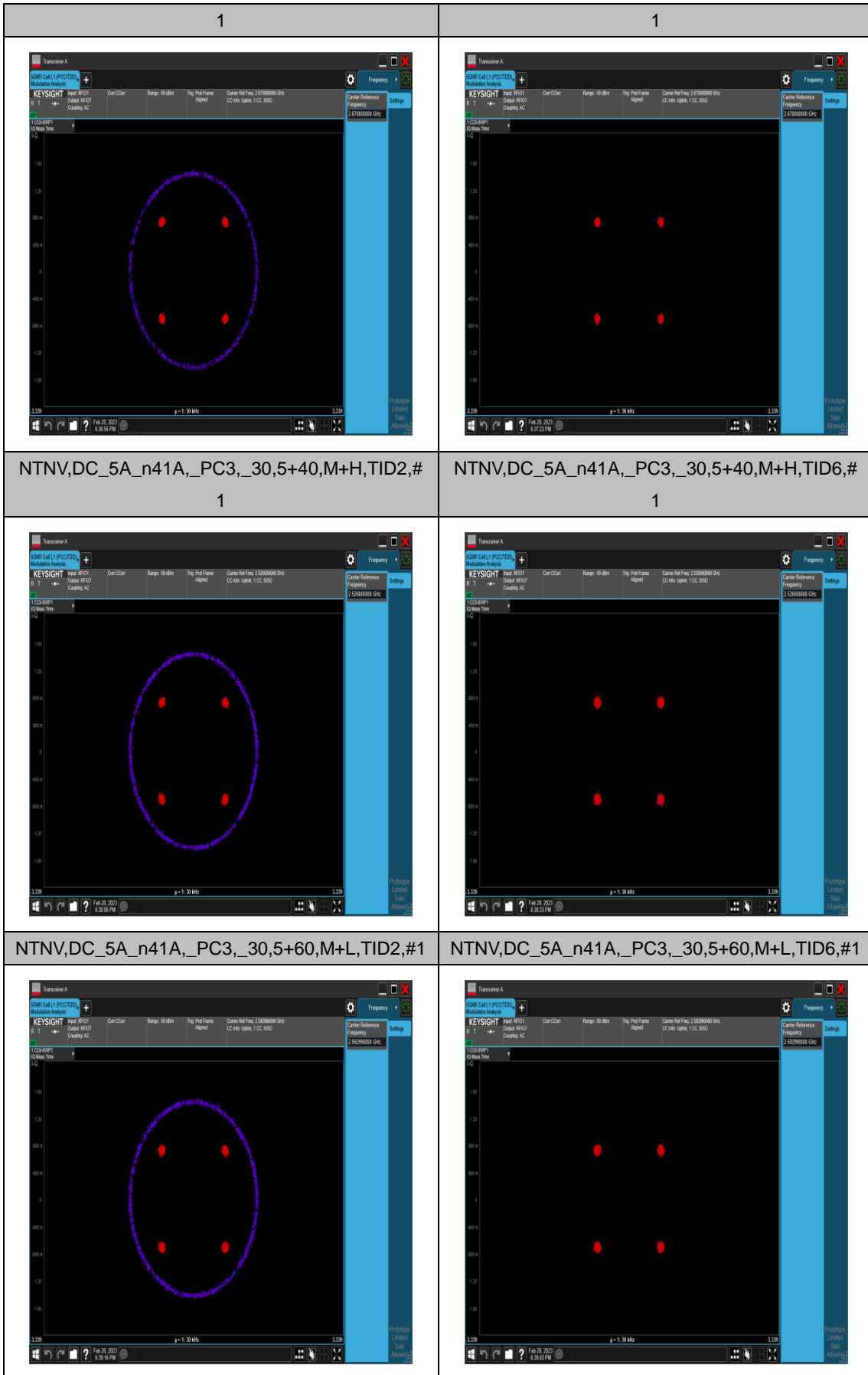
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Verdict
DC_5A_n41A	30	5+20	DFT-QPSK	M+L	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+20	CP-QPSK	M+L	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+20	DFT-QPSK	M+M	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+20	CP-QPSK	M+M	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+20	DFT-QPSK	M+H	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+20	CP-QPSK	M+H	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+40	DFT-QPSK	M+L	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+40	CP-QPSK	M+L	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+40	DFT-QPSK	M+M	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+40	CP-QPSK	M+M	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+40	DFT-QPSK	M+H	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+40	CP-QPSK	M+H	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+60	DFT-QPSK	M+L	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+60	CP-QPSK	M+L	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+60	DFT-QPSK	M+M	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+60	CP-QPSK	M+M	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+60	DFT-QPSK	M+H	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+60	CP-QPSK	M+H	Outer_Full	see graph	PASS

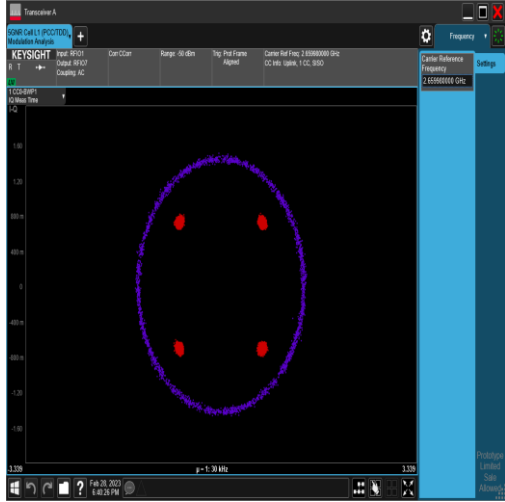
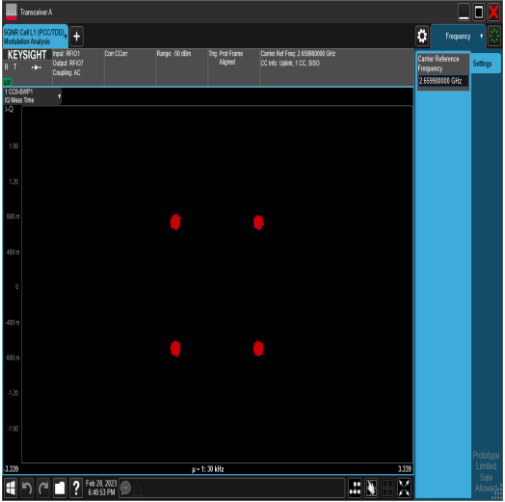
### Test Graphs









NTNV,DC_5A_n41A,_PC3,_30,5+60,M+M,TID2,# 1	NTNV,DC_5A_n41A,_PC3,_30,5+60,M+M,TID6,# 1
 <p>The screenshot shows the Keysight software interface. The main plot area displays a circular plot with four red dots arranged in a square pattern. A purple dashed line outlines the circle. The plot is centered at 1.000000 GHz. The axes range from -1.00 to 1.00 on the x-axis and -1.00 to 1.00 on the y-axis. The software interface includes various control panels and a status bar at the bottom.</p>	 <p>The screenshot shows the Keysight software interface. The main plot area displays a circular plot with four red dots arranged in a square pattern. The plot is centered at 1.000000 GHz. The axes range from -1.00 to 1.00 on the x-axis and -1.00 to 1.00 on the y-axis. The software interface includes various control panels and a status bar at the bottom.</p>
NTNV,DC_5A_n41A,_PC3,_30,5+60,M+H,TID2,# 1	NTNV,DC_5A_n41A,_PC3,_30,5+60,M+H,TID6,# 1