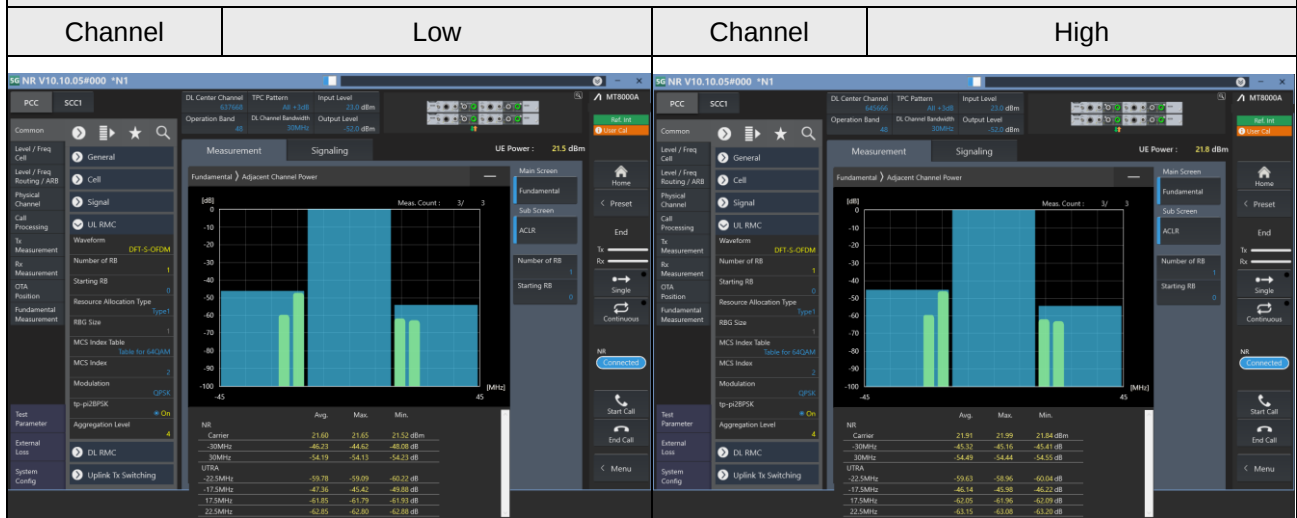
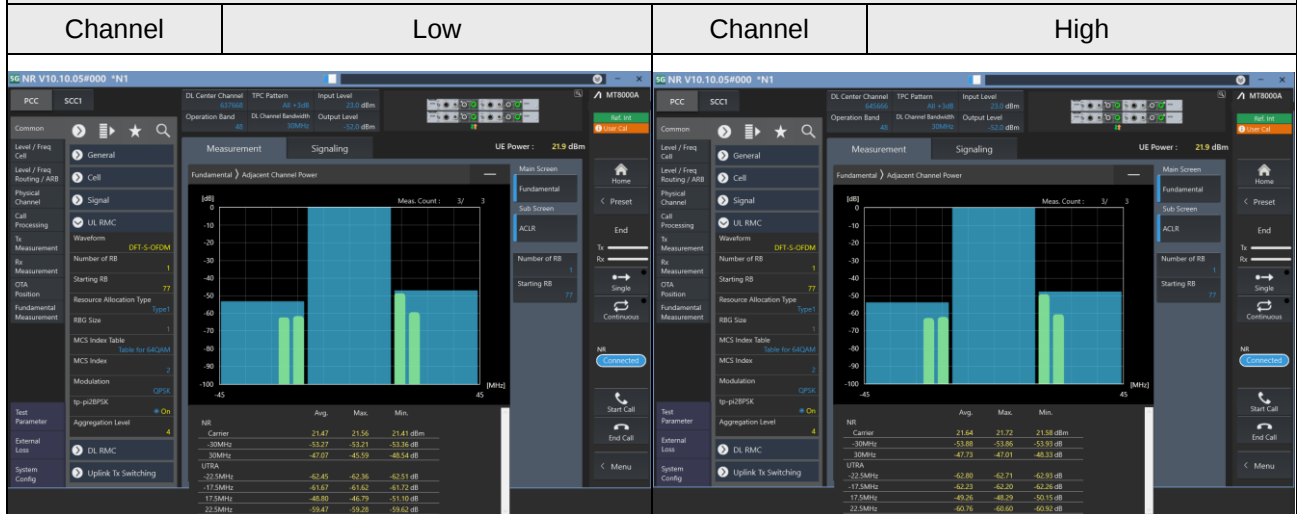


NR n48_30M_DFT-s-OFDM QPSK Spectrum Plot

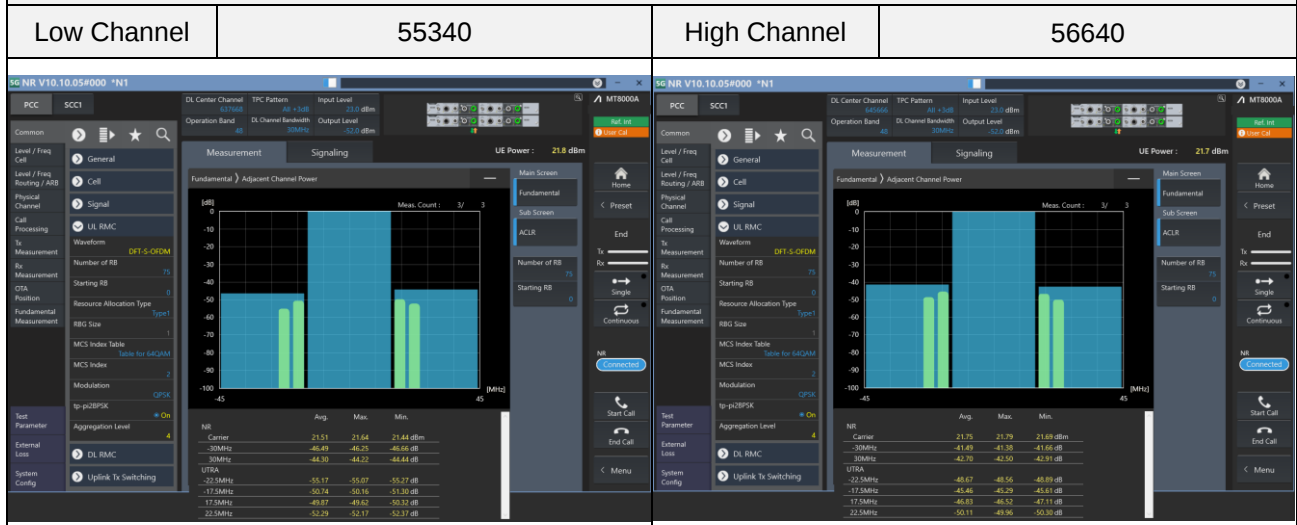
Edge 1RB Left

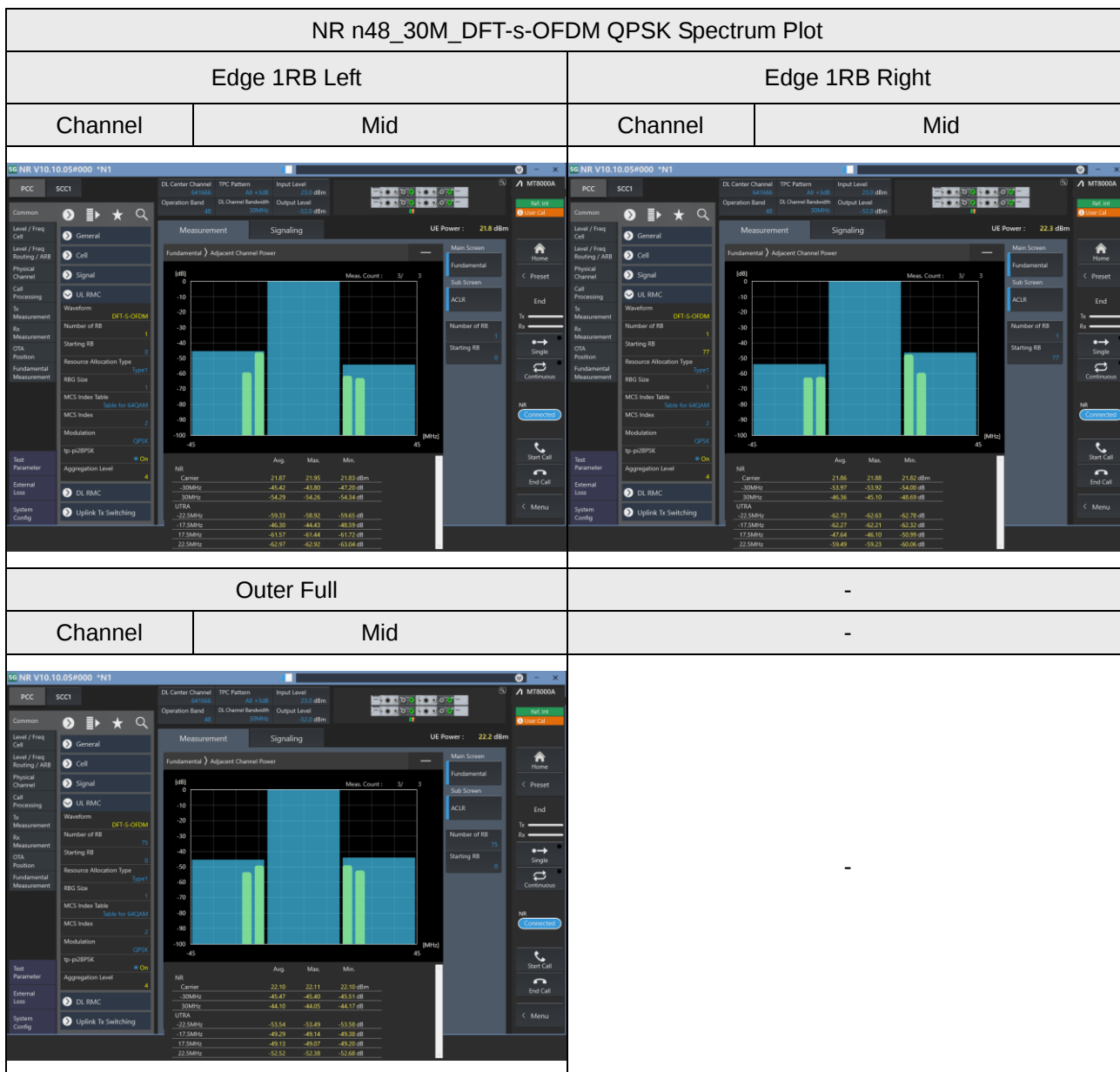


Edge 1RB Right



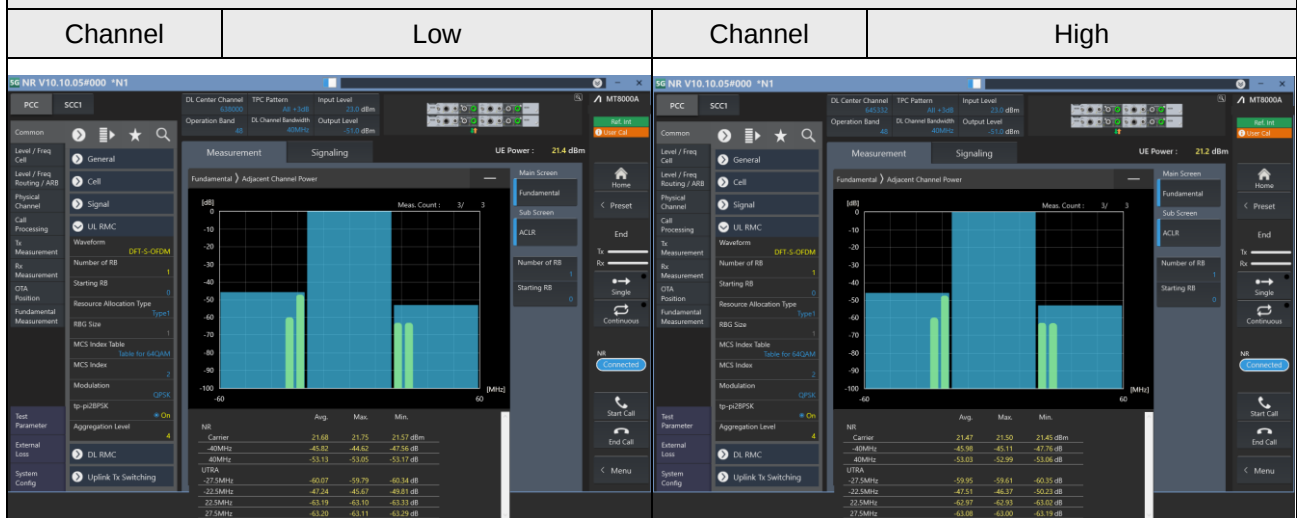
Outer Full



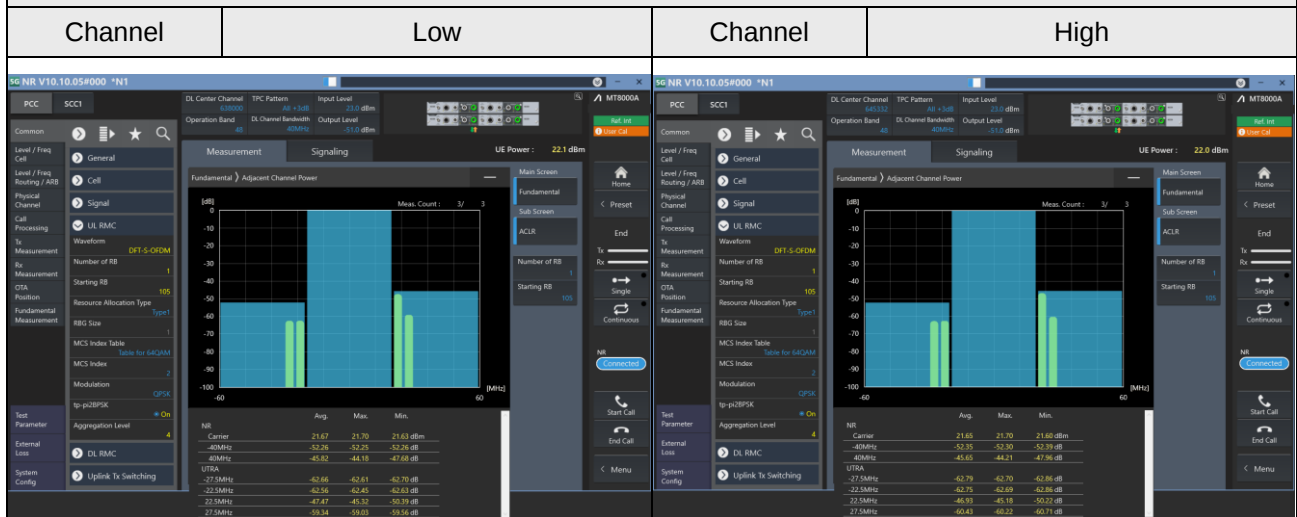


NR n48_40M_DFT-s-OFDM QPSK Spectrum Plot

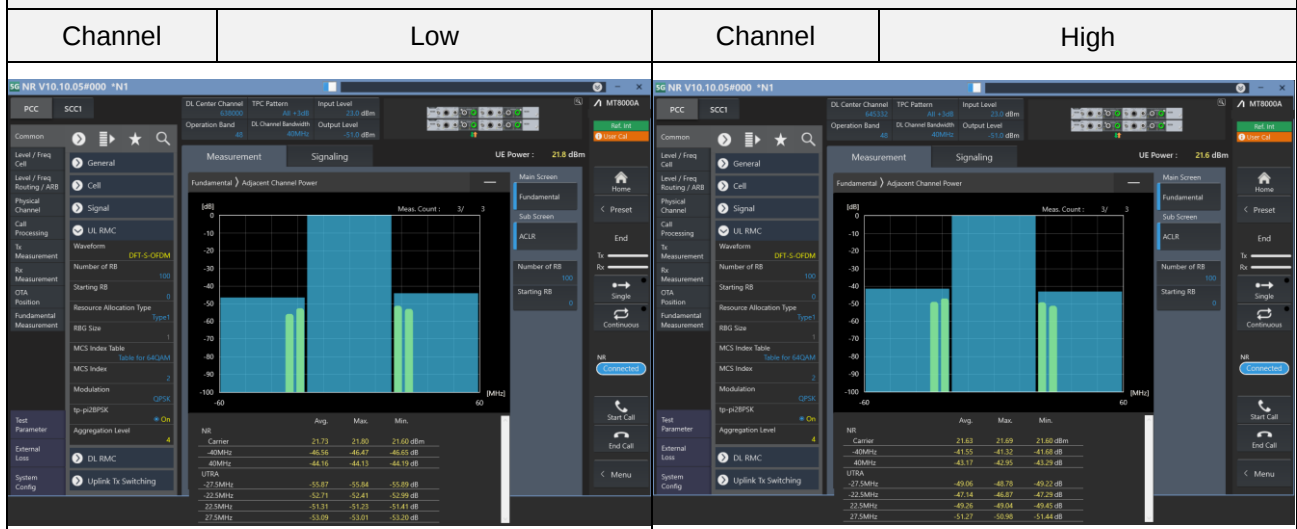
Edge 1RB Left

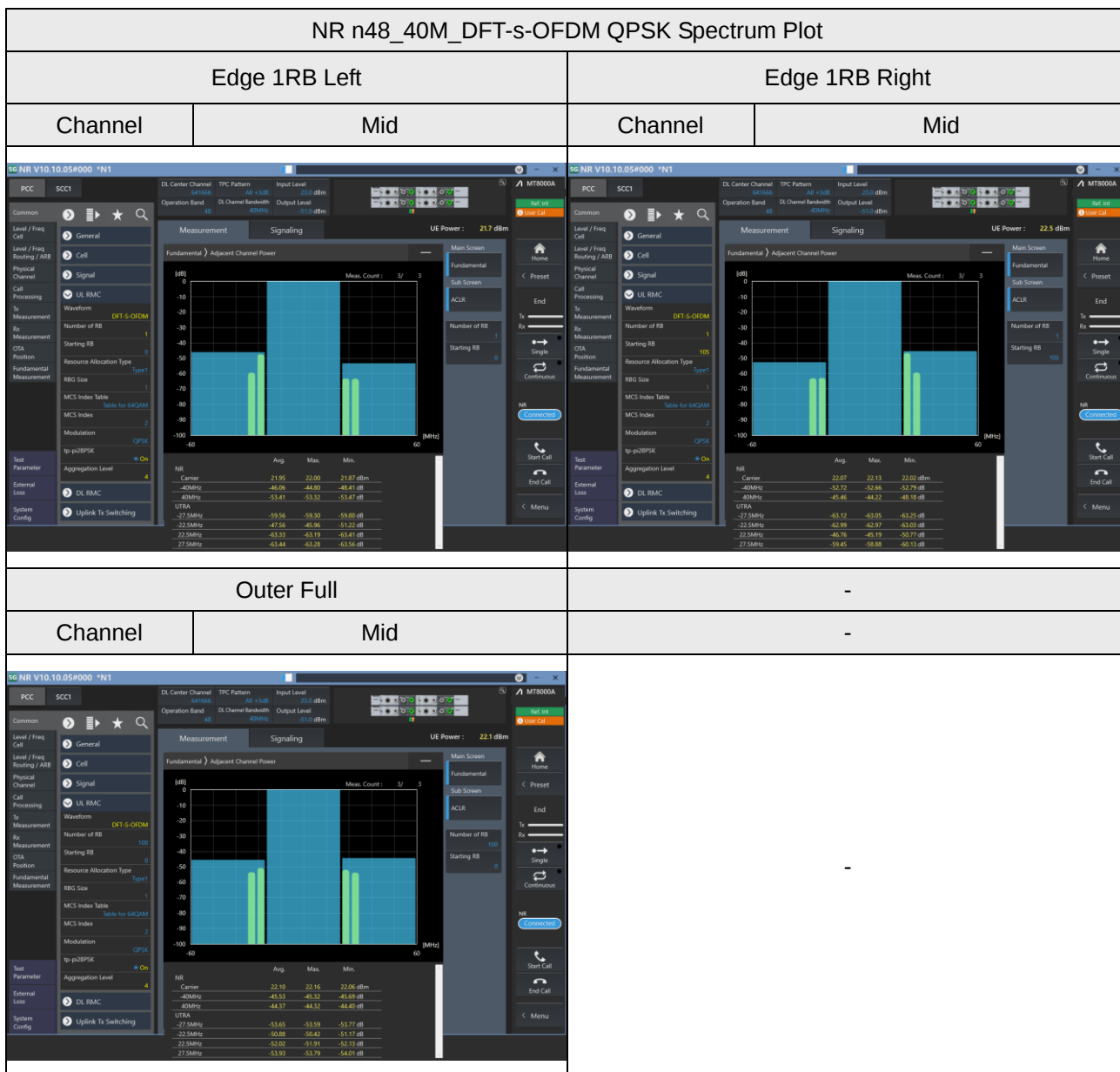


Edge 1RB Right



Outer Full





APPENDIX H - FREQUENCY STABILITY

Test Mode:	LTE Band 48_20MHz
------------	-------------------

Frequency error versus temperature and supply voltage								
Temperature (°C)	Lowest channel Frequency error(MHz)	Highest channel Frequency error(MHz)	Reference point:-13dBm		Frequency calculation value (MHz) Limit:The resulting frequencies must remain within the band		Verdict	worst ppm
			f _L (MHz)	f _H (MHz)	Lowest channel limit:3550MHz	Highest channel limit:3700MHz		Record only
50	0.00001823	0.00001934	3550.130000	3699.890000	3550.129982	3699.890019	Pass	0.0052
40	0.00002124	-0.00001946			3550.129979	3699.889981	Pass	0.0060
30	0.00001348	0.00002451			3550.129987	3699.890025	Pass	0.0066
20	-0.00001829	0.00001764			3550.130018	3699.890018	Pass	-0.0051
10	0.00002159	-0.00001477			3550.129978	3699.889985	Pass	0.0061
0	0.00001335	0.00002443			3550.129987	3699.890024	Pass	0.0066
-10	-0.00001345	-0.00002144			3550.130013	3699.889979	Pass	-0.0058
-20	-0.00002143	0.00001956			3550.130021	3699.890020	Pass	-0.0060
-30	0.00001732	-0.00000475			3550.129983	3699.889995	Pass	0.0049
Minimum voltage	-0.00001844	-0.00000673			3550.130018	3699.889993	Pass	-0.0052
Maximum voltage	-0.00001144	0.00001732			3550.130011	3699.890017	Pass	0.0047
Nominal voltage	0.000001575	-0.00002246			3550.129998	3699.889978	Pass	-0.0061

Note: Nominal voltage= 3.8V, Maximum voltage= 4.2V, Minimum voltage= 3.5V.

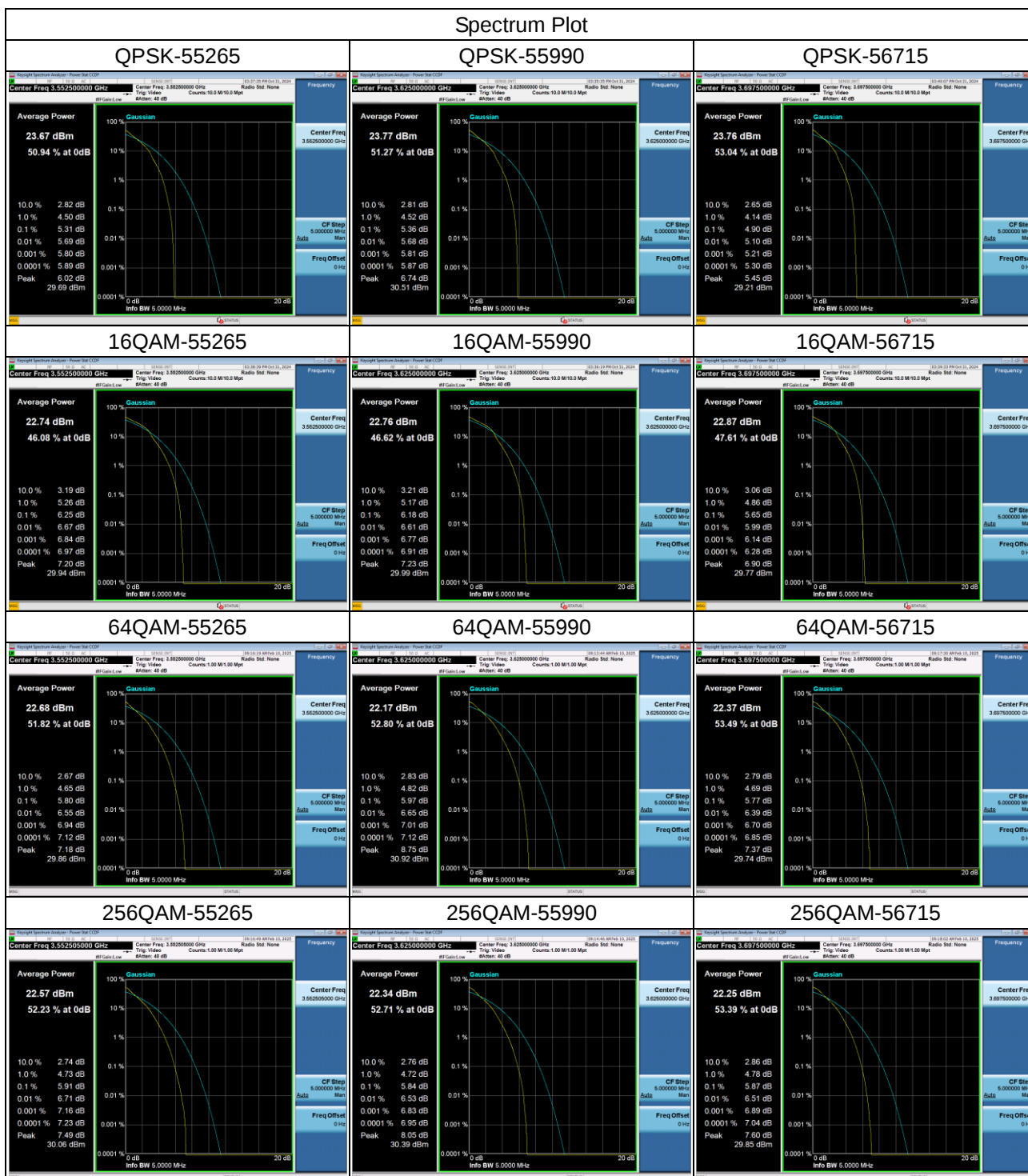
Test Mode:	5G NR n48
------------	-----------

Frequency error versus temperature and supply voltage								
Temperature (°C)	Lowest channel Frequency error(MHz)	Highest channel Frequency error(MHz)	Reference point:-13dBm		Frequency calculation value (MHz) Limit:The resulting frequencies must remain within the band		Verdict	worst ppm
			f _L (MHz)	f _H (MHz)	Lowest channel limit:3550MHz	Highest channel limit:3700MHz		Record only
50	0.00001821	0.00001934	3550.130000	3699.890000	3550.129982	3699.890019	Pass	0.0052
40	0.00002124	-0.00001746			3550.129979	3699.889983	Pass	0.0060
30	0.00001148	0.00002451			3550.129989	3699.890025	Pass	0.0066
20	-0.00001829	0.00001745			3550.130018	3699.890017	Pass	-0.0051
10	0.00002159	-0.00001477			3550.129978	3699.889985	Pass	0.0061
0	0.00001335	0.00002433			3550.129987	3699.890024	Pass	0.0066
-10	-0.00001345	-0.00002144			3550.130013	3699.889979	Pass	-0.0058
-20	-0.00002143	0.00001956			3550.130021	3699.890020	Pass	-0.0060
-30	0.00001732	-0.00000485			3550.129983	3699.889995	Pass	0.0049
Minimum voltage	-0.00001844	-0.00000633			3550.130018	3699.889994	Pass	-0.0052
Maximum voltage	-0.00001214	0.00001732			3550.130012	3699.890017	Pass	0.0047
Nominal voltage	0.000001355	-0.00002446			3550.129999	3699.889976	Pass	-0.0066

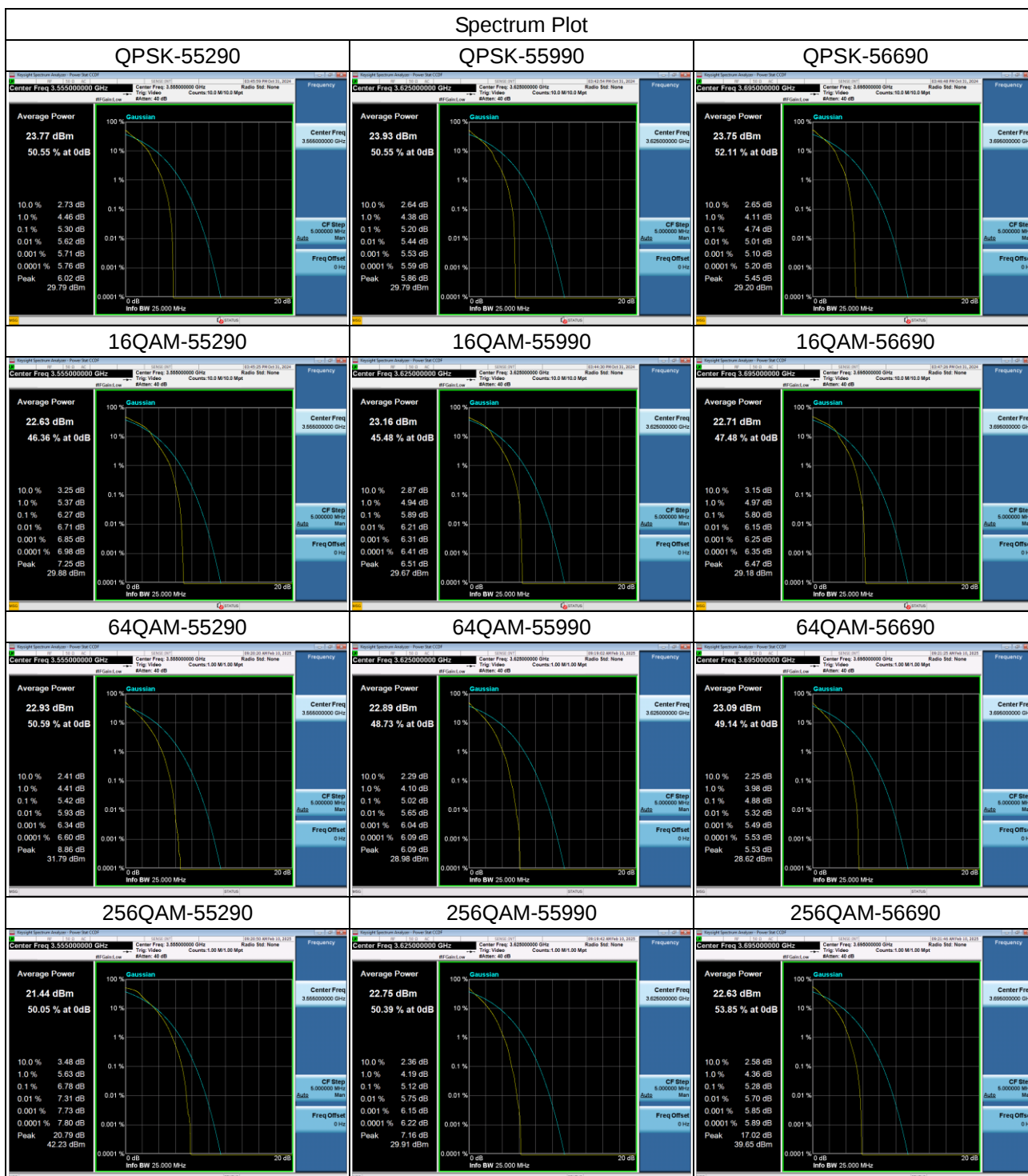
Note: Nominal voltage= 3.8V, Maximum voltage= 4.2V, Minimum voltage= 3.5V.

APPENDIX I - PEAK TO AVERAGE RATIO

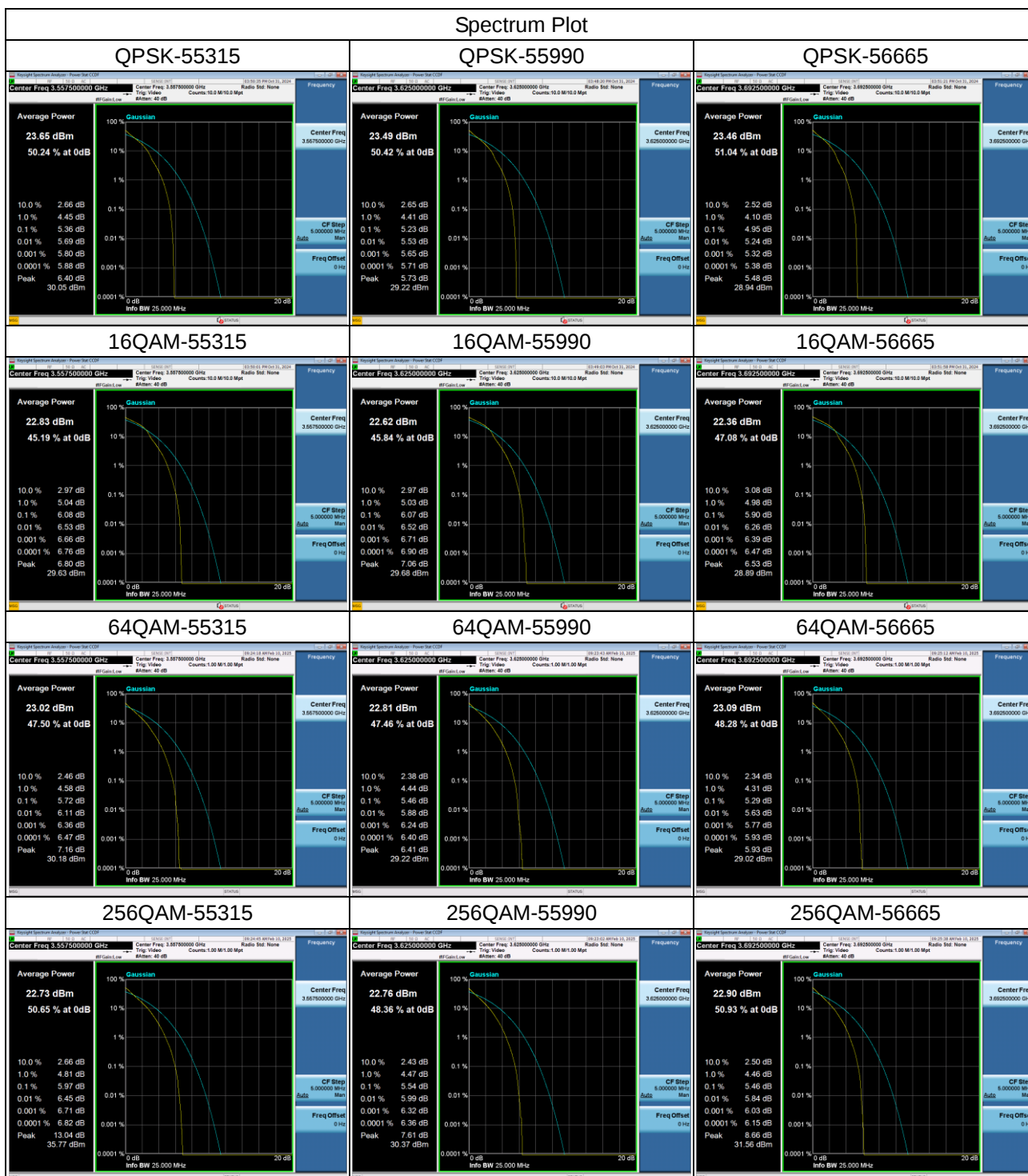
LTE Band 48_5MHz							
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				Max. Limit (dB)	Result
		QPSK	16QAM	64QAM	256QAM		
55265	3552.5	5.31	6.25	5.80	5.91	13	Pass
55990	3625.0	5.36	6.18	5.97	5.84	13	Pass
56715	3697.5	4.90	5.65	5.77	5.87	13	Pass



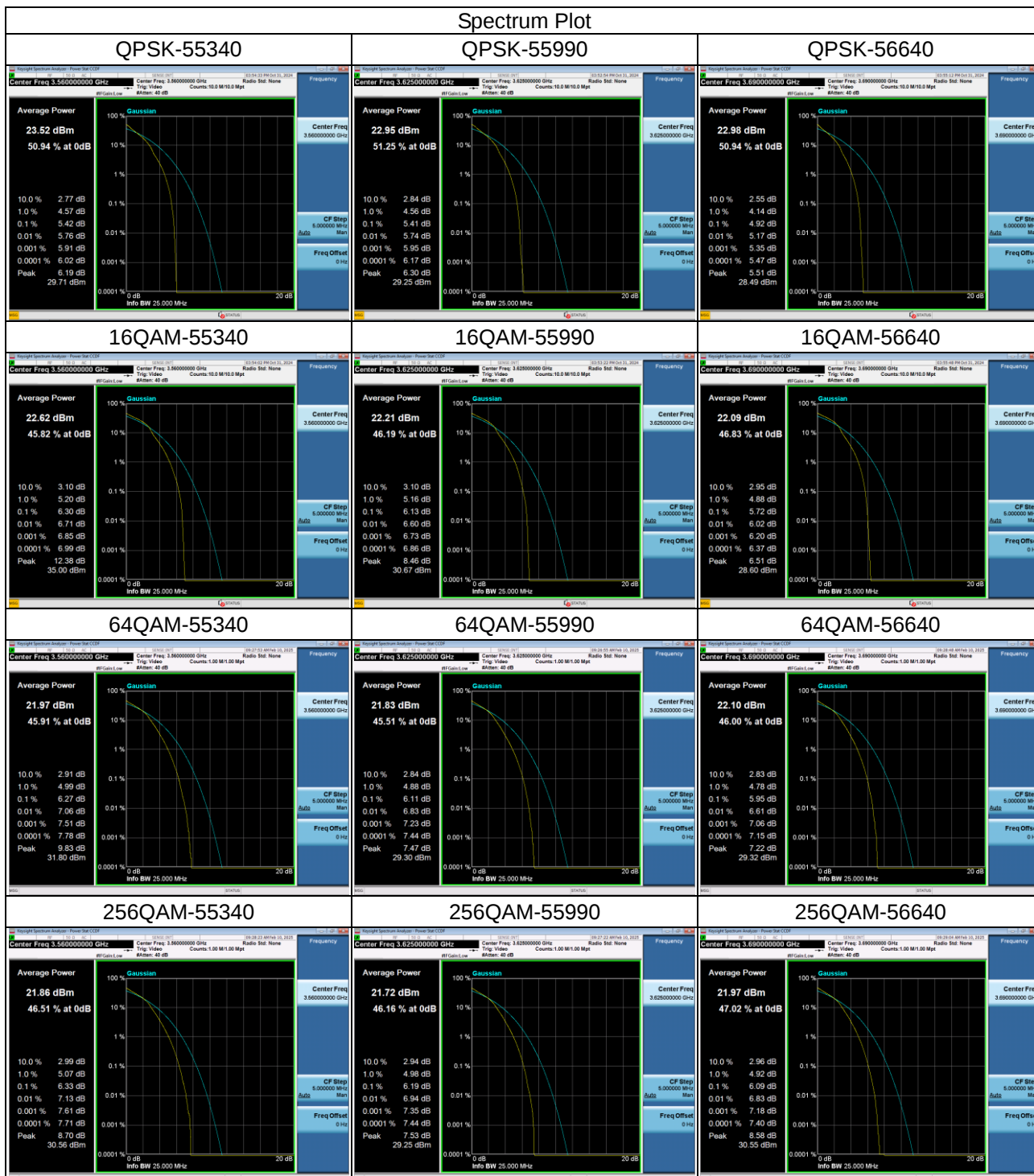
LTE Band 48_10MHz							
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				Max. Limit (dB)	Result
		QPSK	16QAM	64QAM	256QAM		
55290	3555.0	5.30	6.27	5.42	6.78	13	Pass
55990	3625.0	5.20	5.89	5.02	5.12	13	Pass
56690	3695.0	4.74	5.80	4.88	5.28	13	Pass



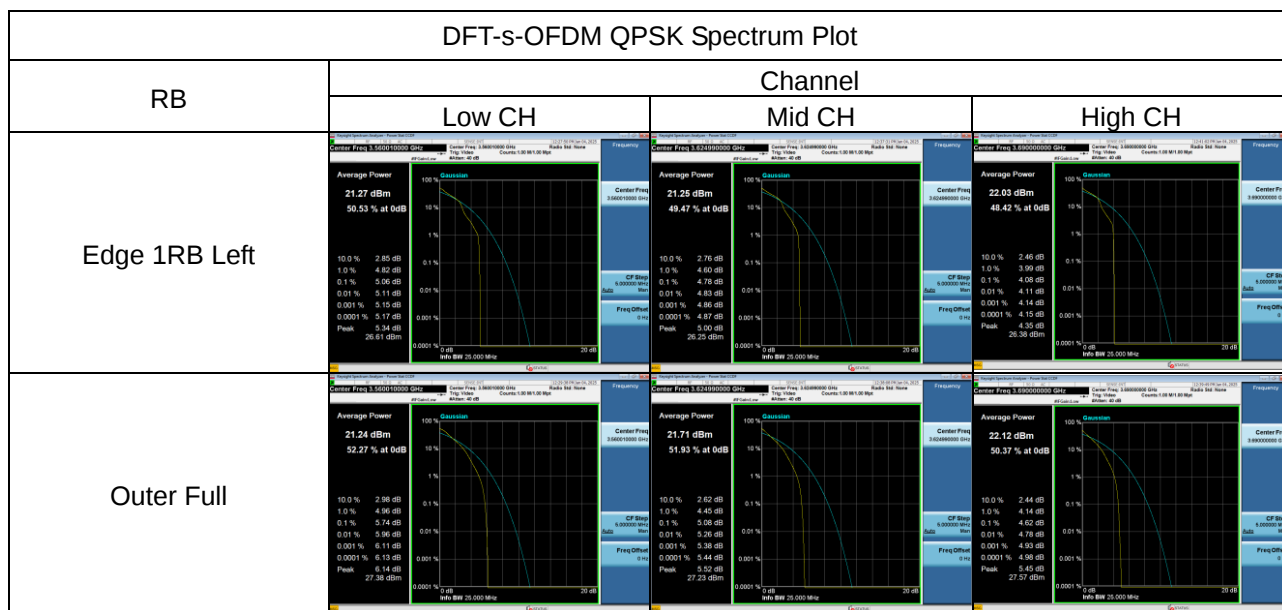
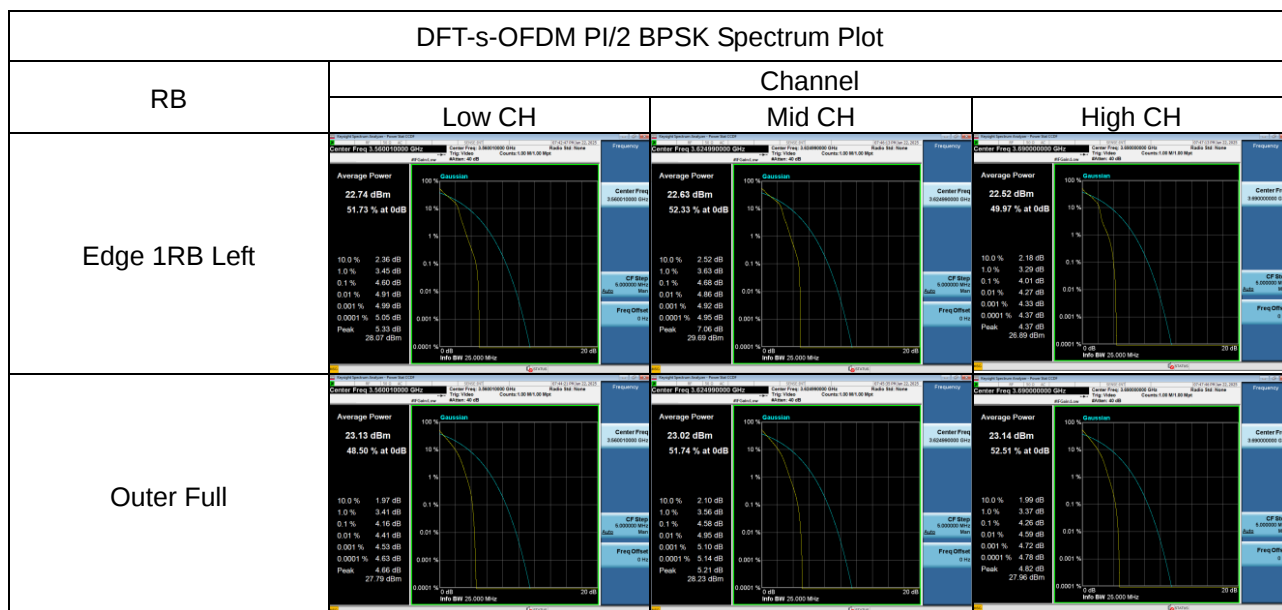
LTE Band 48_15MHz							
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				Max. Limit (dB)	Result
		QPSK	16QAM	64QAM	256QAM		
55315	3557.5	5.36	6.08	5.72	5.97	13	Pass
55990	3625.0	5.23	6.07	5.46	5.54	13	Pass
56665	3692.5	4.95	5.90	5.29	5.46	13	Pass



LTE Band 48_20MHz							
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				Max. Limit (dB)	Result
		QPSK	16QAM	64QAM	256QAM		
55340	3560.0	5.42	6.30	6.27	6.33	13	Pass
55990	3625.0	5.41	6.13	6.11	6.19	13	Pass
56640	3690.0	4.92	5.72	5.95	6.09	13	Pass



NR n48_20MHz						
Channel	Peak To Average Ratio (dB)				Max. Limit (dB)	Result
	DFT-s-OFDM PI/2 BPSK		DFT-s-OFDM QPSK			
	Edge 1RB Left	Outer Full	Edge 1RB Left	Outer Full		
Low CH	4.60	4.16	5.06	5.74	13	Pass
Mid CH	4.68	4.58	4.78	5.08	13	Pass
High CH	4.01	4.26	4.08	4.62	13	Pass



End of Test Report