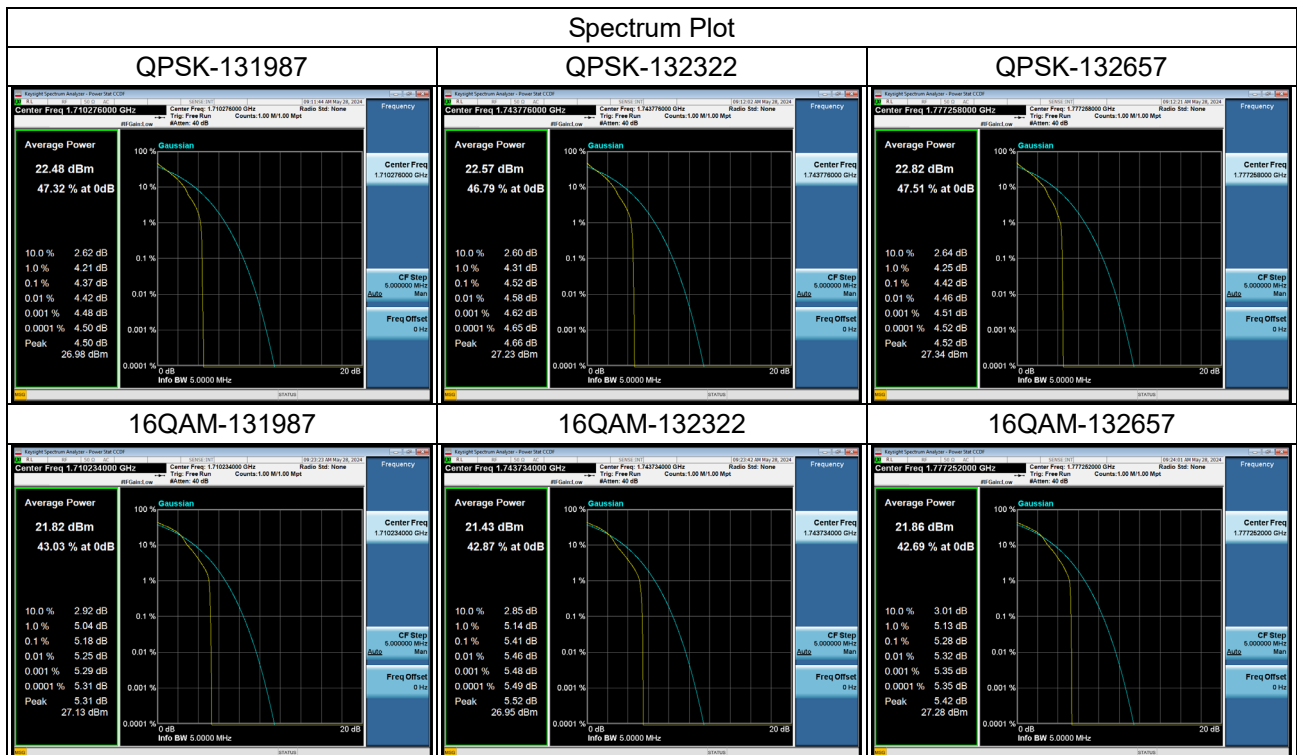
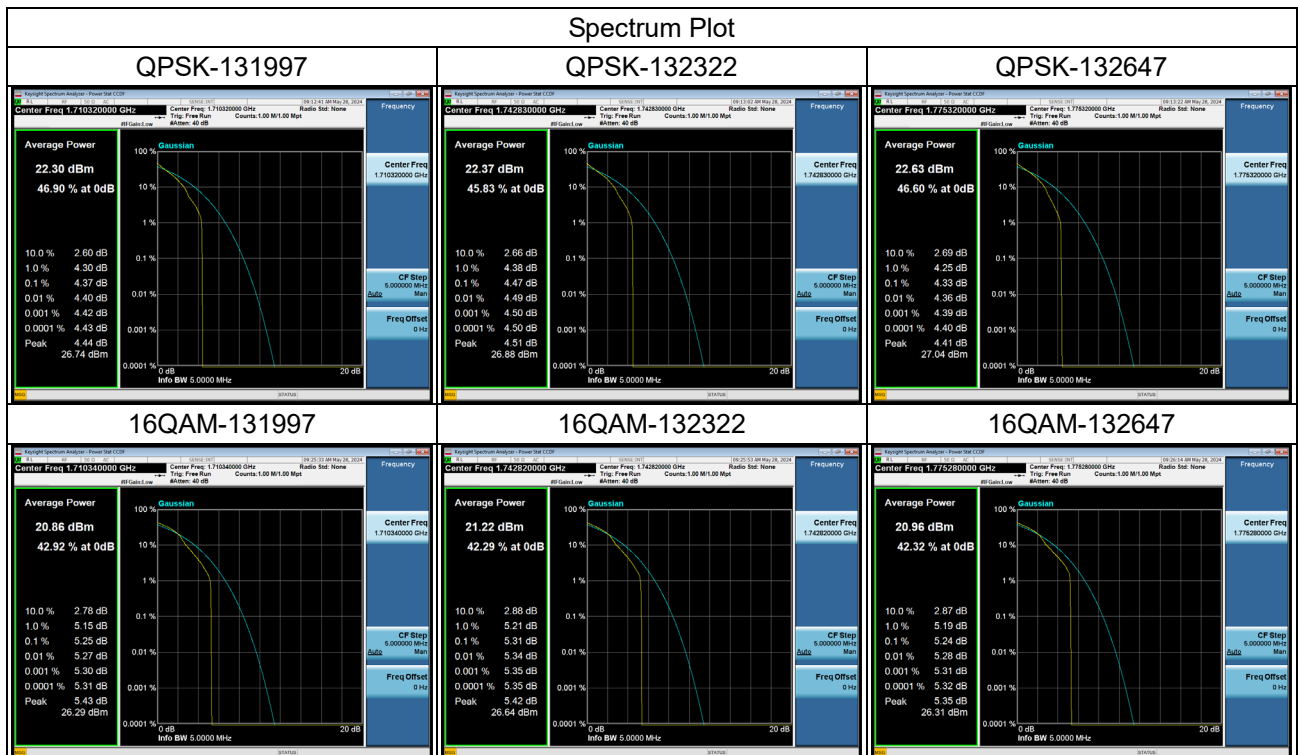


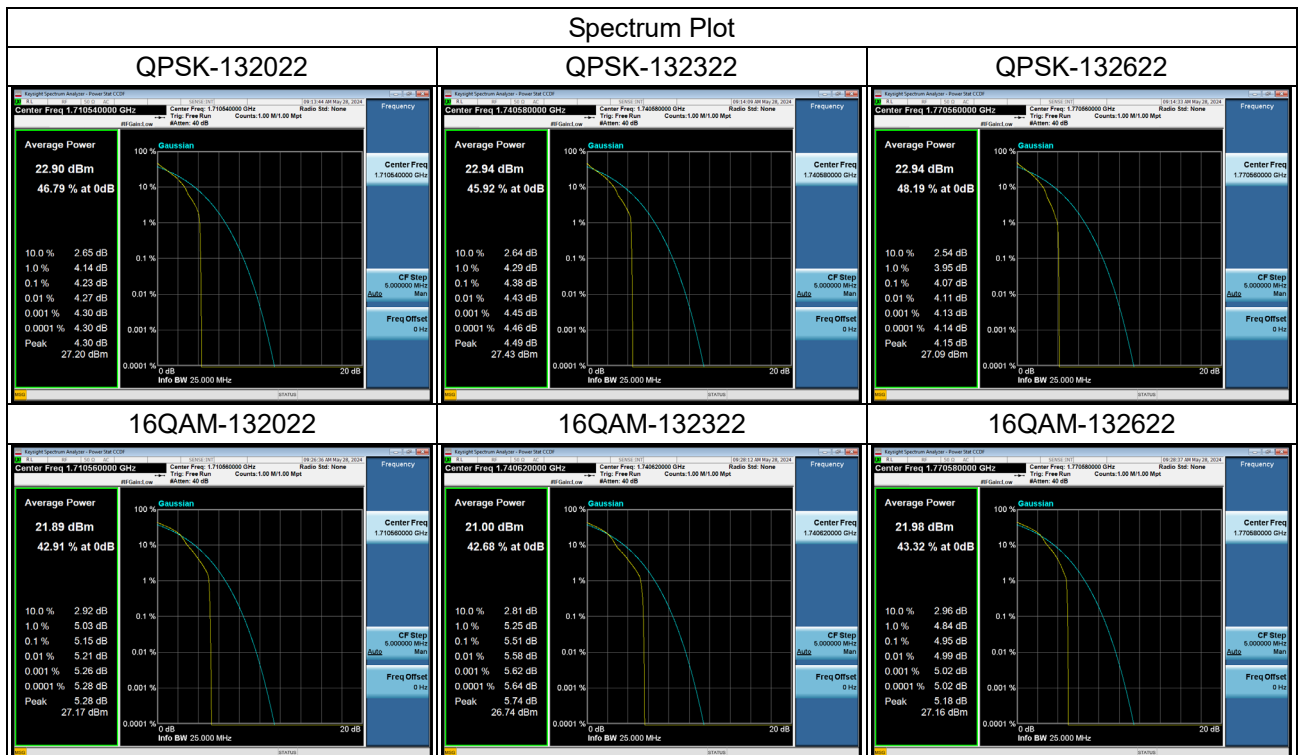
LTE Band 66_3MHz					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK	16QAM		
131987	1711.5	4.37	5.18	13	Pass
132322	1745	4.52	5.41	13	Pass
132657	1778.5	4.52	5.28	13	Pass



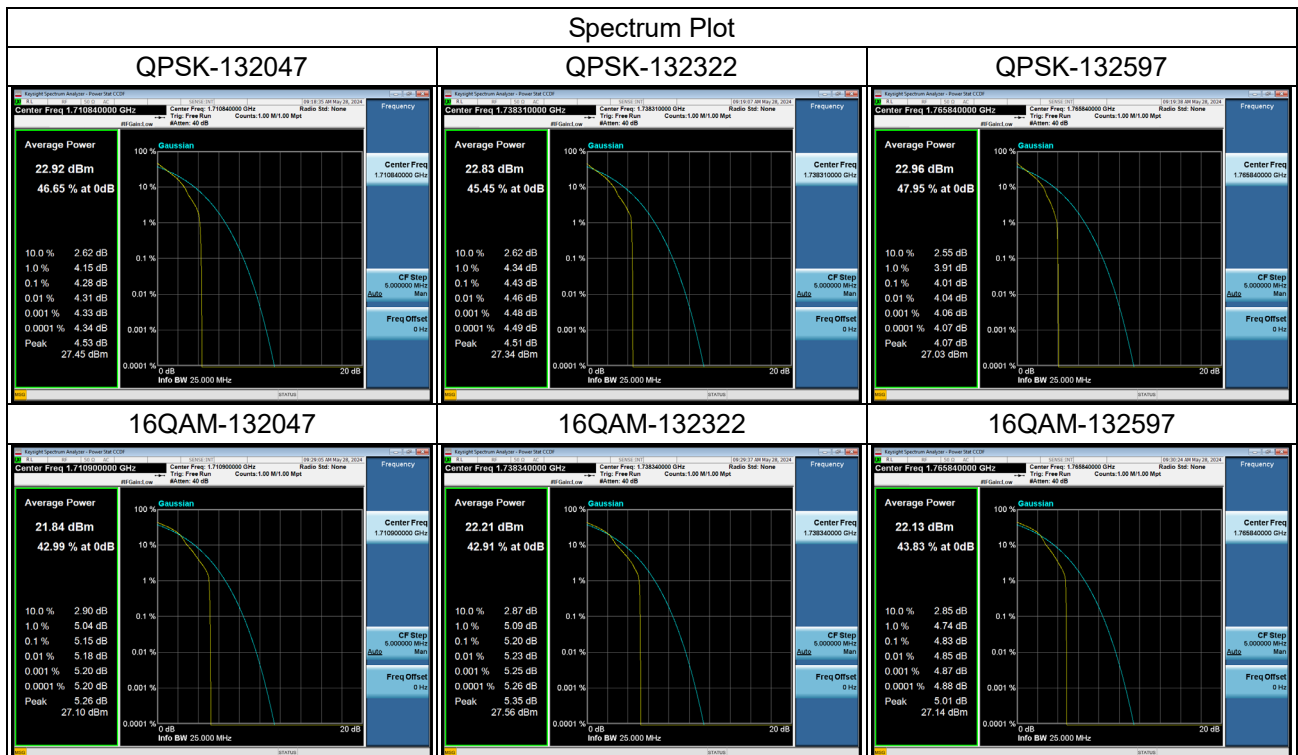
LTE Band 66_5MHz					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK	16QAM		
131997	1712.5	4.37	5.25	13	Pass
132322	1745	4.47	5.31	13	Pass
132647	1777.5	4.33	5.24	13	Pass



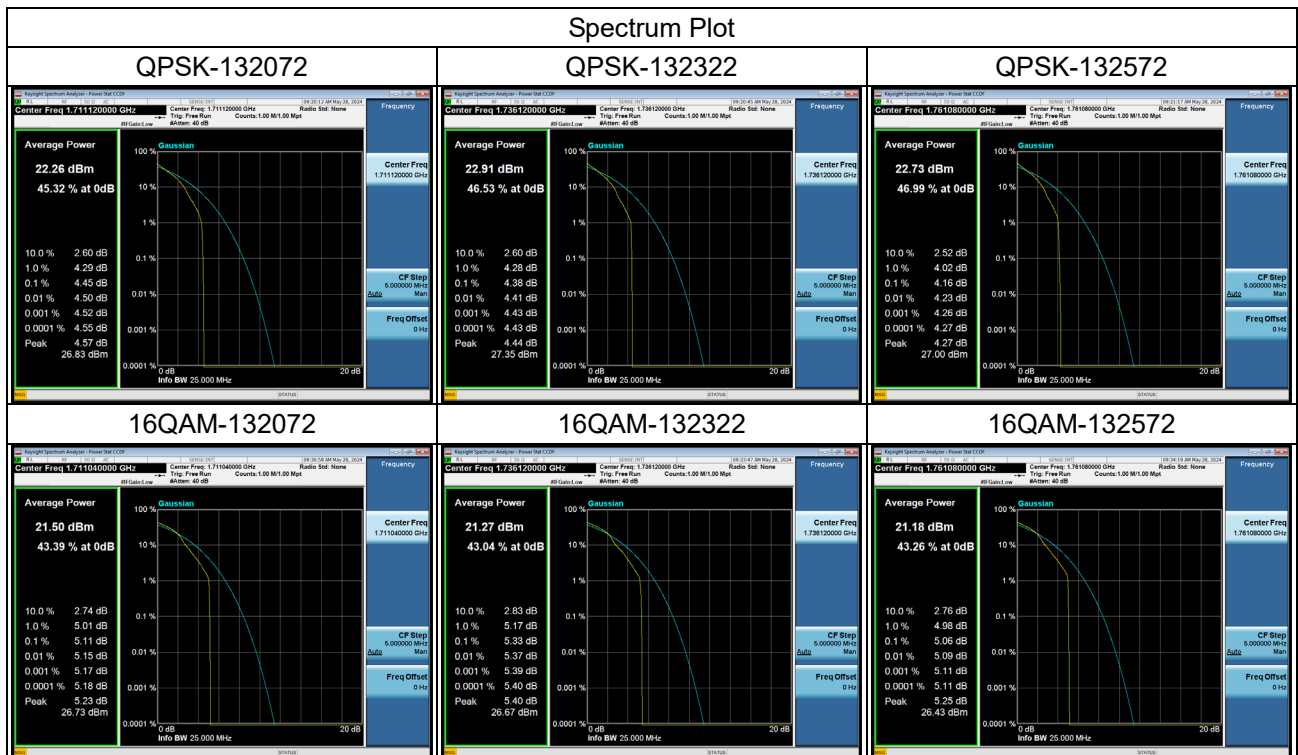
LTE Band 66_10MHz					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK	16QAM		
132022	1715	4.23	5.15	13	Pass
132322	1745	4.38	5.51	13	Pass
132622	1775	4.07	4.95	13	Pass



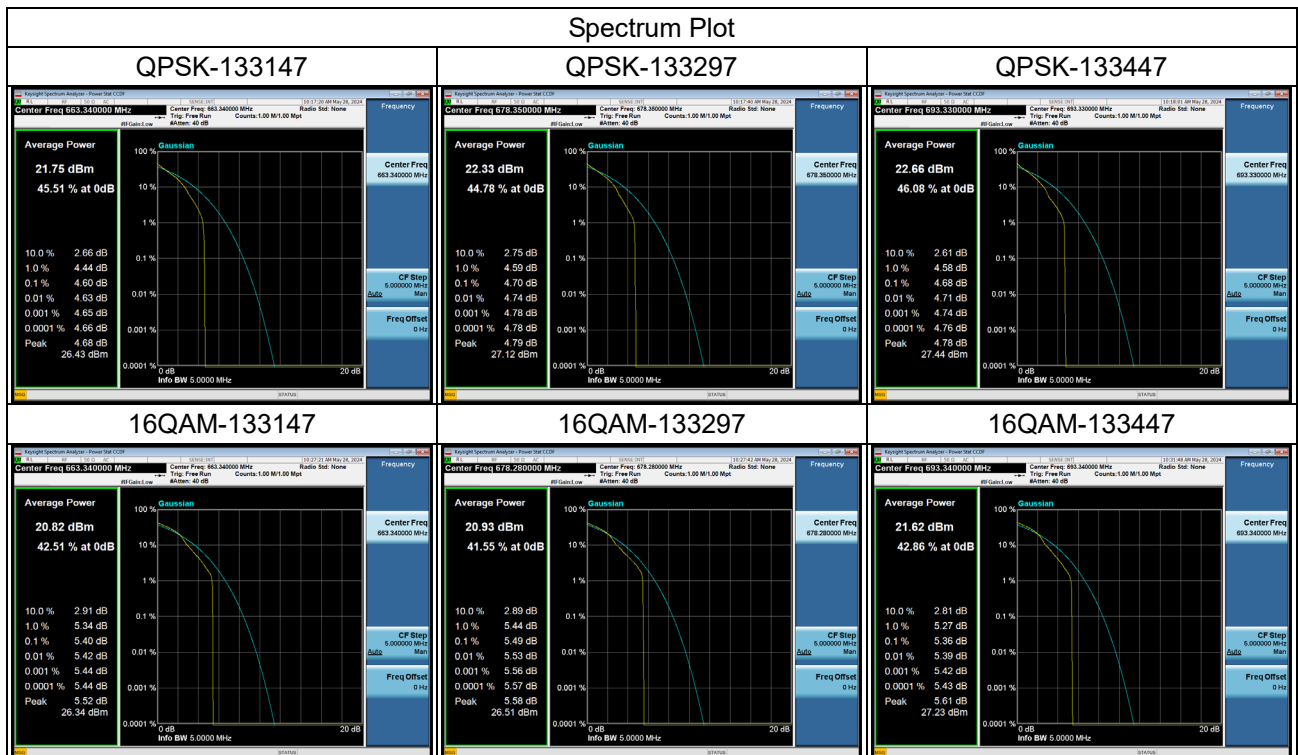
LTE Band 66_15MHz					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK	16QAM		
132047	1717.5	4.28	5.15	13	Pass
132322	1745	4.43	5.20	13	Pass
132597	1772.5	4.01	4.83	13	Pass



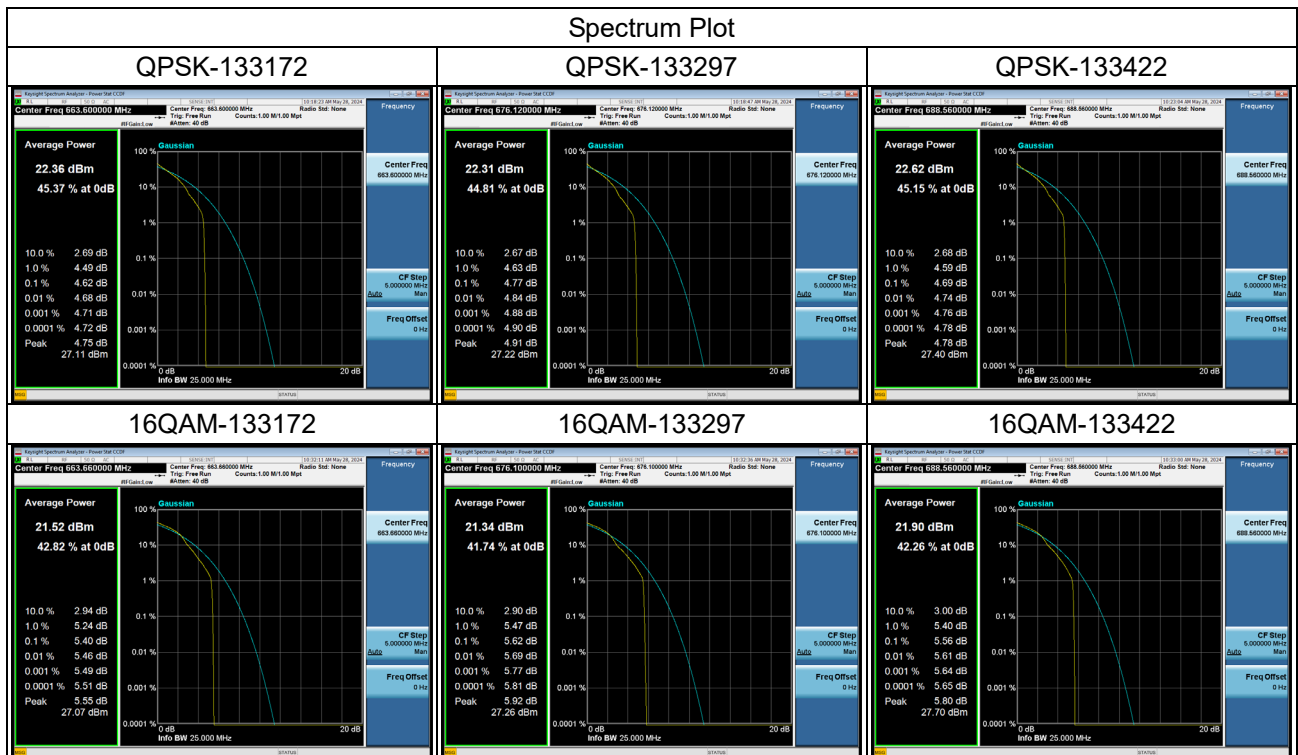
LTE Band 66_20MHz					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK	16QAM		
132072	1720	4.45	5.11	13	Pass
132322	1745	4.38	5.33	13	Pass
132572	1770	4.16	5.06	13	Pass



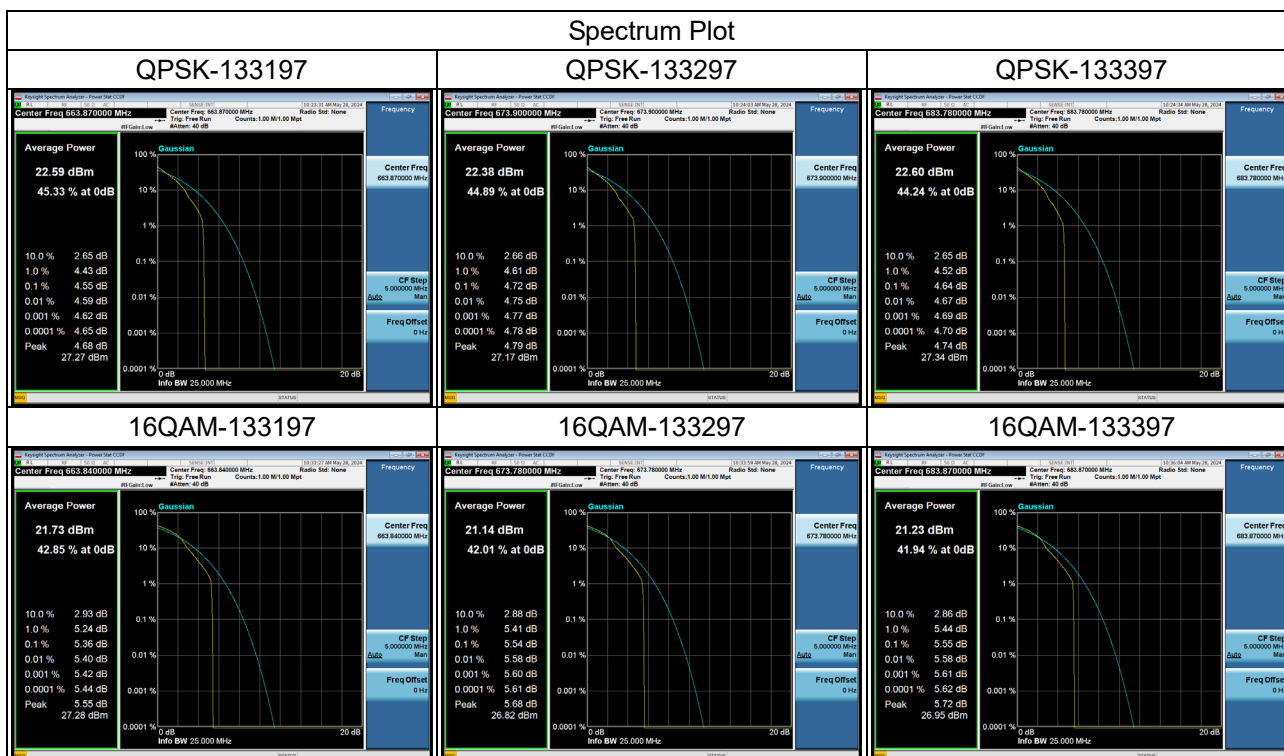
LTE Band 71_5MHz					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK	16QAM		
133147	665.5	4.60	5.40	13	Pass
133297	680.5	4.70	5.49	13	Pass
133447	695.5	4.68	5.36	13	Pass



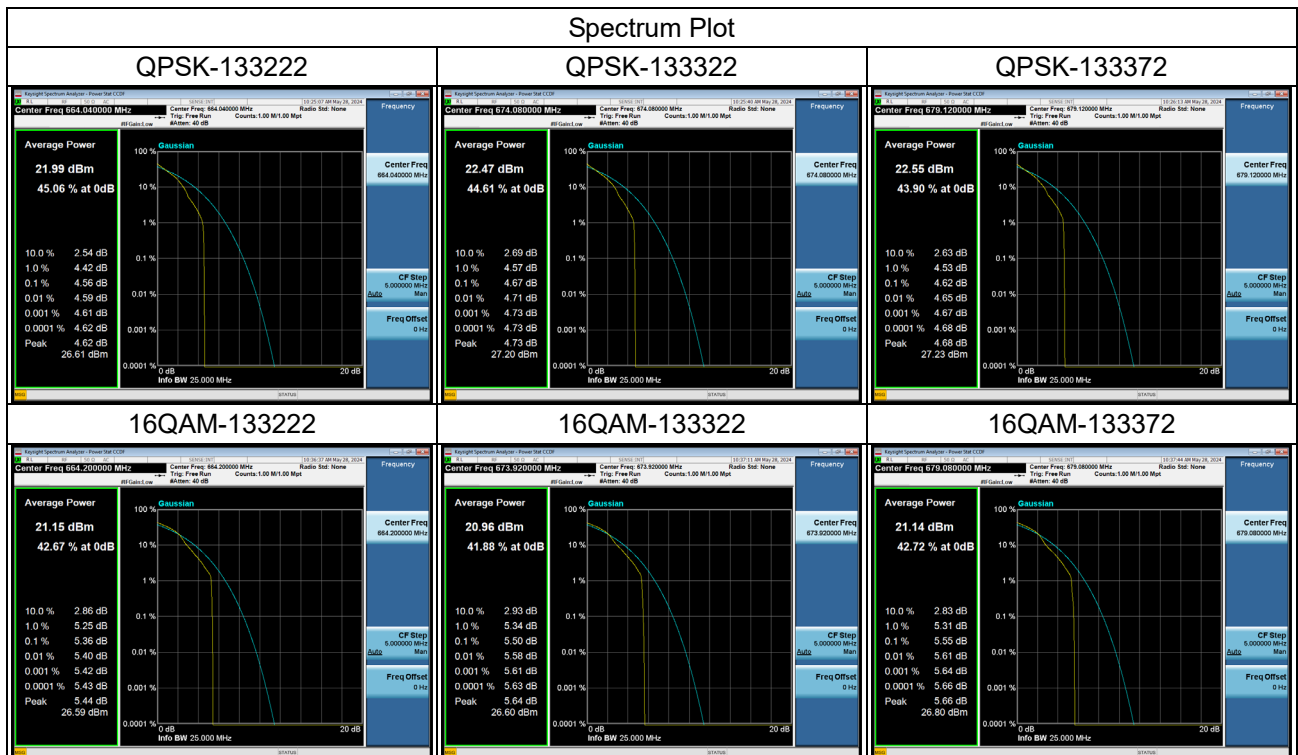
LTE Band 71_10MHz					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK	16QAM		
133172	668	4.62	5.40	13	Pass
133297	680.5	4.77	5.62	13	Pass
133422	693	4.69	5.56	13	Pass



LTE Band 71_15MHz					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK	16QAM		
133197	670.5	4.55	5.36	13	Pass
133297	680.5	4.72	5.54	13	Pass
133397	690.5	4.64	5.55	13	Pass



LTE Band 71_20MHz					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK	16QAM		
133222	673	4.56	5.36	13	Pass
133322	683	4.67	5.50	13	Pass
133372	688	4.62	5.55	13	Pass



APPENDIX I - FREQUENCY STABILITY

Test Mode	WCDMA Band IV
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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:1710MHz	Highest channel limit:1755MHz		Record only
50	0.00001585	0.00001639	1710.36 0000	1754.93 0000	1710.359984	1754.930016	Pass	0.0094
40	0.00001668	0.00001797			1710.359983	1754.930018	Pass	0.0103
30	0.00001332	0.00001758			1710.359987	1754.930018	Pass	0.0100
20	0.00002152	0.00002388			1710.359978	1754.930024	Pass	0.0136
10	0.00002138	0.00002157			1710.359979	1754.930022	Pass	0.0125
0	0.00001852	0.00002041			1710.359981	1754.930020	Pass	0.0116
-10	0.00002112	0.00002301			1710.359979	1754.930023	Pass	0.0131
-20	0.00001885	0.00002284			1710.359981	1754.930023	Pass	0.0130
-30	0.00001782	0.00002139			1710.359982	1754.930021	Pass	0.0122
Minimum voltage	0.00002145	0.00002237			1710.359979	1754.930022	Pass	0.0128
Maximum voltage	0.00002045	0.00002193			1710.359980	1754.930022	Pass	0.0125
Nominal voltage	0.00002135	0.00002281			1710.359979	1754.930023	Pass	0.0130

Note: Nominal voltage= 3.8V, Maximum voltage= 4.35V, Minimum voltage= 3.5V.

Test Mode	LTE Band 4_20MHz
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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:1710MHz	Highest channel limit:1755MHz		Record only
50	0.00000941	-0.00000531	1710.420000	1754.590000	1710.419991	1754.589995	Pass	0.0055
40	-0.0000173	-0.00000886			1710.420017	1754.589991	Pass	-0.0101
30	0.00000218	0.00000026			1710.419998	1754.590000	Pass	0.0013
20	0.00001657	-0.00000169			1710.419983	1754.589998	Pass	0.0096
10	0.00000798	0.00000078			1710.419992	1754.590008	Pass	0.0046
0	0.00001081	0.00000136			1710.419989	1754.590001	Pass	0.0063
-10	0.00001149	-0.00000502			1710.419989	1754.589995	Pass	0.0067
-20	-0.0000109	-0.00000754			1710.420011	1754.589992	Pass	-0.0063
-30	0.00001865	-0.00000132			1710.419981	1754.589999	Pass	0.0108
Minimum voltage	0.00001423	0.00000052			1710.419986	1754.590005	Pass	0.0083
Maximum voltage	-0.00001032	-0.00000468			1710.420010	1754.589995	Pass	-0.0060
Nominal voltage	0.00000574	0.00000295			1710.419994	1754.590003	Pass	0.0033

Note: Nominal voltage= 3.8V, Maximum voltage= 4.35V, Minimum voltage= 3.5V.

Test Mode	LTE Band 7_20MHz
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Frequency error versus temperature and supply voltage								
Temperature (°C)	Lowest channel Frequency error(MHz)	Highest channel Frequency error(MHz)	Reference point:-10dBm		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:2500MHz	Highest channel limit:2570MHz		Record only
50	0.00000474	0.00000744	2500.41	2569.27	2500.409995	2569.270007	Pass	0.0029
40	-0.00001719	0.00001491			2500.410017	2569.270015	Pass	-0.0068
30	0.00000551	-0.0000138			2500.409994	2569.269986	Pass	-0.0054
20	0.00000174	0.00001			2500.409998	2569.270010	Pass	0.0039
10	0.00000485	0.0000148			2500.409995	2569.270015	Pass	0.0058
0	0.00000384	0.00001663			2500.409996	2569.270017	Pass	0.0065
-10	-0.0000072	0.00000387			2500.410007	2569.270004	Pass	-0.0029
-20	0.00000184	0.00000102			2500.409998	2569.270001	Pass	0.0007
-30	0.00000551	0.00001495			2500.409994	2569.270015	Pass	0.0058
Minimum voltage	0.00000793	0.00000385			2500.409992	2569.270004	Pass	0.0032
Maximum voltage	0.00000777	-0.00000742			2500.409992	2569.269993	Pass	0.0031
Nominal voltage	0.00000567	0.00000834			2500.409994	2569.270008	Pass	0.0033

Note: Nominal voltage= 3.8V, Maximum voltage= 4.35V, Minimum voltage= 3.5V.

Test Mode	LTE Band 12_CH23095_10MHz
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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:699MHz	Highest channel limit:716MHz		Record only
50	0.00000822	-0.00000516	699.250000	715.910000	699.249992	715.909995	Pass	0.0117
40	0.00000859	-0.00000322			699.249991	715.909997	Pass	0.0122
30	0.00001242	-0.00000842			699.249988	715.909992	Pass	0.0176
20	-0.00000641	-0.00000546			699.250006	715.909995	Pass	-0.0091
10	0.0000092	-0.00000338			699.249991	715.909997	Pass	0.0131
0	-0.0000011	-0.00000401			699.250001	715.909996	Pass	-0.0056
-10	0.00000612	-0.00000707			699.249994	715.909993	Pass	-0.0099
-20	0.00000172	0.00000939			699.249998	715.910009	Pass	0.0132
-30	0.00000321	-0.00000322			699.249997	715.909997	Pass	0.0046
Minimum voltage	-0.00000472	-0.00000742			699.250005	715.909993	Pass	-0.0104
Maximum voltage	0.00000309	0.00001531			699.249997	715.910015	Pass	0.0215
Nominal voltage	-0.00000485	-0.00000415			699.250005	715.909996	Pass	-0.0069

Note: Nominal voltage= 3.8V, Maximum voltage= 4.35V, Minimum voltage= 3.5V.

Test Mode	LTE Band 13_10MHz
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Frequency error versus temperature and supply voltage							
Temperature (°C)	Mid 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:2305MHz	Highest channel limit:2315MHz		Record only
50	-0.00000334	777.830000	786.150000	777.830003	786.149997	Pass	-0.0043
40	-0.00000129			777.830001	786.149999	Pass	-0.0016
30	-0.00000748			777.830007	786.149993	Pass	-0.0096
20	-0.00001045			777.830010	786.149990	Pass	-0.0134
10	-0.00000252			777.830003	786.149997	Pass	-0.0032
0	0.00000139			777.829999	786.150001	Pass	0.0018
-10	0.00000238			777.829998	786.150002	Pass	0.0030
-20	-0.00000475			777.830005	786.149995	Pass	-0.0061
-30	-0.00000211			777.830002	786.149998	Pass	-0.0027
Minimum voltage	-0.00000615			777.830006	786.149994	Pass	-0.0079
Maximum voltage	-0.00000372			777.830004	786.149996	Pass	-0.0048
Nominal voltage	0.00000798			777.829992	786.150008	Pass	0.0102

Note: Nominal voltage= 3.8V, Maximum voltage= 4.35V, Minimum voltage= 3.5V.

Test Mode	LTE Band 17_10MHz
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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:704MHz	Highest channel limit:716MHz		Record only
50	-0.00001255	0.00000277	704.640000	715.180000	704.640013	715.180003	Pass	-0.0177
40	-0.00001321	0.00000079			704.640013	715.180001	Pass	-0.0186
30	0.00000108	0.00000497			704.639999	715.180005	Pass	0.0070
20	-0.00001136	0.00000214			704.640011	715.180002	Pass	-0.0160
10	-0.00000346	-0.00000066			704.640003	715.179993	Pass	-0.0093
0	-0.00000395	0.00000098			704.640004	715.180010	Pass	0.0138
-10	-0.00001303	-0.00000055			704.640013	715.179995	Pass	-0.0184
-20	0.000000598	-0.00000265			704.639994	715.179997	Pass	0.0084
-30	-0.00000206	0.00000084			704.640002	715.180001	Pass	-0.0029
Minimum voltage	-0.00000804	0.00000276			704.640008	715.180003	Pass	-0.0113
Maximum voltage	0.0000008	-0.00000285			704.639992	715.179997	Pass	0.0113
Nominal voltage	-0.00000163	-0.000000955			704.640002	715.179990	Pass	-0.0134

Note: Nominal voltage= 3.8V, Maximum voltage= 4.35V, Minimum voltage= 3.5V.

Test Mode	LTE Band 38_20MHz
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Frequency error versus temperature and supply voltage								
Temperature (°C)	Lowest channel Frequency error(MHz)	Highest channel Frequency error(MHz)	Reference point:-10dBm		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:2570MHz	Highest channel limit:2620MHz		Record only
50	0.00001065	0.00000942	2570.270000	2619.550000	2570.269989	2619.550009	Pass	0.0041
40	0.00002177	0.0000128			2570.269978	2619.550013	Pass	0.0084
30	0.00002156	-0.00002029			2570.269978	2619.549980	Pass	0.0084
20	0.00001811	0.0000177			2570.269982	2619.550018	Pass	0.0070
10	0.00002189	0.00001478			2570.269978	2619.550015	Pass	0.0085
0	0.00001813	0.00000706			2570.269982	2619.550007	Pass	0.0070
-10	0.0000216	-0.0000155			2570.269978	2619.549985	Pass	0.0084
-20	0.00001904	0.00000949			2570.269981	2619.550009	Pass	0.0074
-30	0.00002037	0.0000067			2570.269980	2619.550007	Pass	0.0079
Minimum voltage	0.00002306	0.00001339			2570.269977	2619.550013	Pass	0.0089
Maximum voltage	0.00001741	0.00000671			2570.269983	2619.550007	Pass	0.0067
Nominal voltage	0.0000196	0.00000907			2570.269980	2619.550009	Pass	0.0076

Note: Nominal voltage= 3.8V, Maximum voltage= 4.35V, Minimum voltage= 3.5V.

Test Mode	LTE Band 41_20MHz
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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:2496MHz	Highest channel limit:2690MHz		Record only
50	-0.00004683	0.00002033	2496.160000	2689.720000	2496.160047	2689.720020	Pass	-0.0187
40	-0.00004279	0.00001963			2496.160043	2689.720020	Pass	-0.0171
30	0.00002203	0.00002463			2496.159978	2689.720025	Pass	0.0092
20	0.00001981	0.00002305			2496.159980	2689.720023	Pass	0.0086
10	0.00001489	0.00003352			2496.159985	2689.720034	Pass	0.0125
0	0.00001775	0.00002176			2496.159982	2689.720022	Pass	0.0081
-10	0.00001654	0.00002306			2496.159983	2689.720023	Pass	0.0086
-20	0.00001791	0.00002476			2496.159982	2689.720025	Pass	0.0092
-30	0.00001934	0.00004077			2496.159981	2689.720041	Pass	0.0152
Minimum voltage	0.00001293	0.00003572			2496.159987	2689.720036	Pass	0.0133
Maximum voltage	0.00001544	0.00001797			2496.159985	2689.720018	Pass	0.0067
Nominal voltage	0.00001638	0.00002436			2496.159984	2689.720024	Pass	0.0091

Note: Nominal voltage= 3.8V, Maximum voltage= 4.35V, Minimum voltage= 3.5V.

Test Mode	LTE Band 66_20MHz
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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:1710MHz	Highest channel limit:1780MHz		Record only
50	0.00000801	0.00000947	1710.020000	1779.830000	1710.019992	1779.830009	Pass	0.0054
40	0.00000184	-0.00000916			1710.019998	1779.829991	Pass	-0.0052
30	0.00000328	0.00000425			1710.019997	1779.830004	Pass	0.0024
20	-0.00000819	0.00000793			1710.020008	1779.830008	Pass	-0.0048
10	0.00000139	-0.00000416			1710.019999	1779.829996	Pass	-0.0024
0	0.00000305	0.000004			1710.019997	1779.830004	Pass	0.0023
-10	-0.00000339	-0.00000169			1710.020003	1779.829998	Pass	-0.0020
-20	-0.00000135	0.00000934			1710.020001	1779.830009	Pass	0.0053
-30	0.00000747	-0.00000055			1710.019993	1779.829999	Pass	0.0043
Minimum voltage	-0.00000811	-0.00000203			1710.020008	1779.829998	Pass	-0.0047
Maximum voltage	-0.00000179	0.00000759			1710.020002	1779.830008	Pass	0.0043
Nominal voltage	0.00000555	-0.00000046			1710.019994	1779.830000	Pass	0.0032

Note: Nominal voltage= 3.8V, Maximum voltage= 4.35V, Minimum voltage= 3.5V.

Test Mode	LTE Band 71_20MHz
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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:663MHz	Highest channel limit:698MHz		Record only
50	0.00000349	-0.00000121	663.730000	697.160000	663.729997	697.159999	Pass	0.0052
40	0.00000962	-0.00000177			663.729990	697.159998	Pass	0.0143
30	-0.0000135	-0.00000108			663.730014	697.159999	Pass	-0.0201
20	-0.000006	0.00000855			663.730006	697.160009	Pass	0.0124
10	-0.00000621	0.00000205			663.730006	697.160002	Pass	-0.0092
0	-0.0000154	0.00000406			663.730015	697.160004	Pass	-0.0229
-10	0.00001097	-0.00001044			663.729989	697.159990	Pass	0.0163
-20	-0.00001025	-0.00000886			663.730010	697.159991	Pass	-0.0152
-30	-0.00000133	0.00001325			663.730001	697.160013	Pass	0.0193
Minimum voltage	-0.00001384	-0.00000842			663.730014	697.159992	Pass	-0.0206
Maximum voltage	-0.00000637	-0.00000312			663.730006	697.159997	Pass	-0.0095
Nominal voltage	0.00000431	-0.00000609			663.729996	697.159994	Pass	-0.0089

Note: Nominal voltage= 3.8V, Maximum voltage= 4.35V, Minimum voltage= 3.5V.

End of Test Report