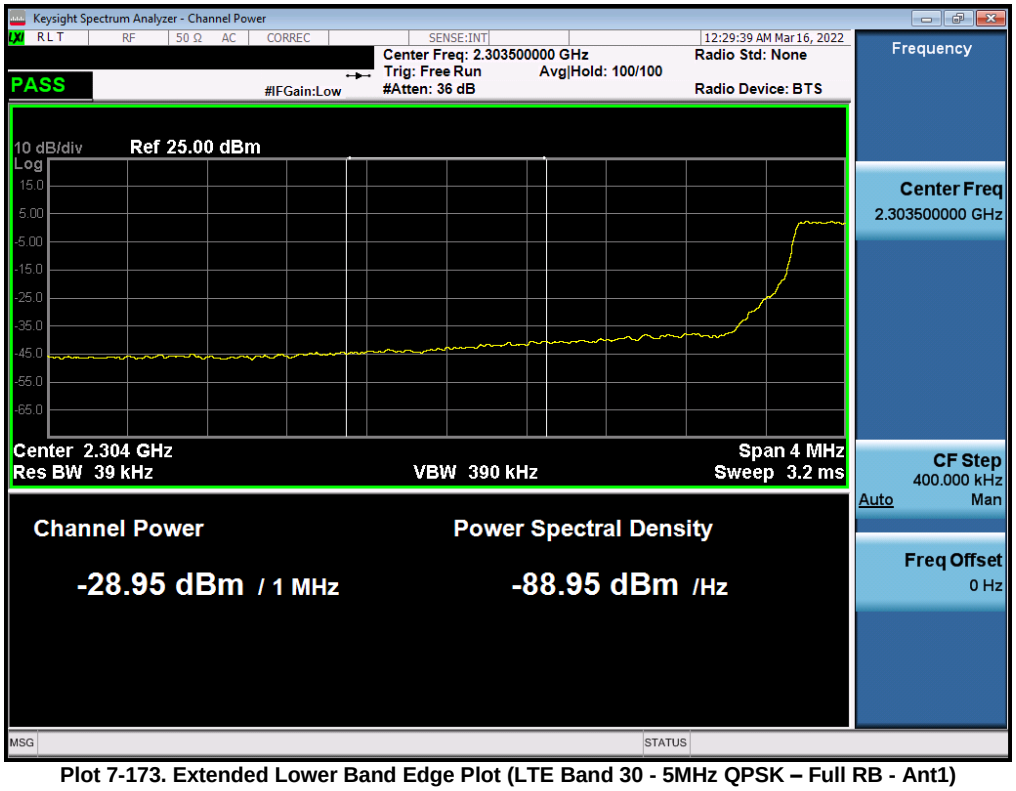
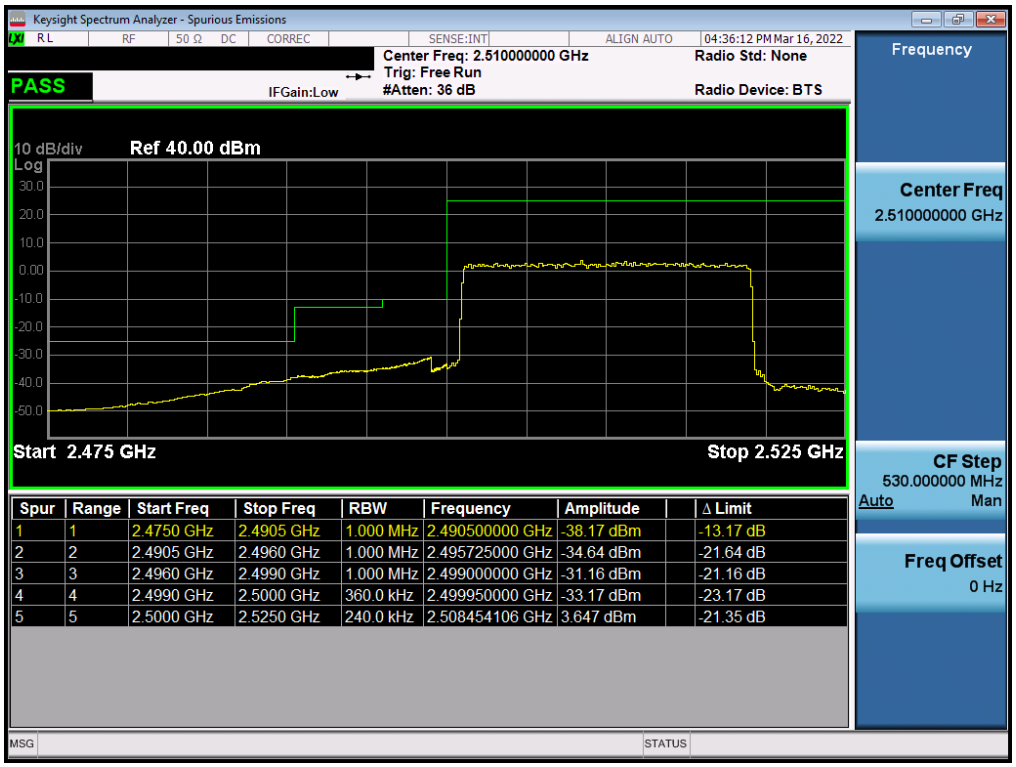


Plot 7-173. Extended Lower Band Edge Plot (LTE Band 30 - 5MHz QPSK – Full RB - Ant1)

Plot 7-174. Upper Band Edge Plot (LTE Band 30 - 5MHz QPSK – Full RB - Ant1)

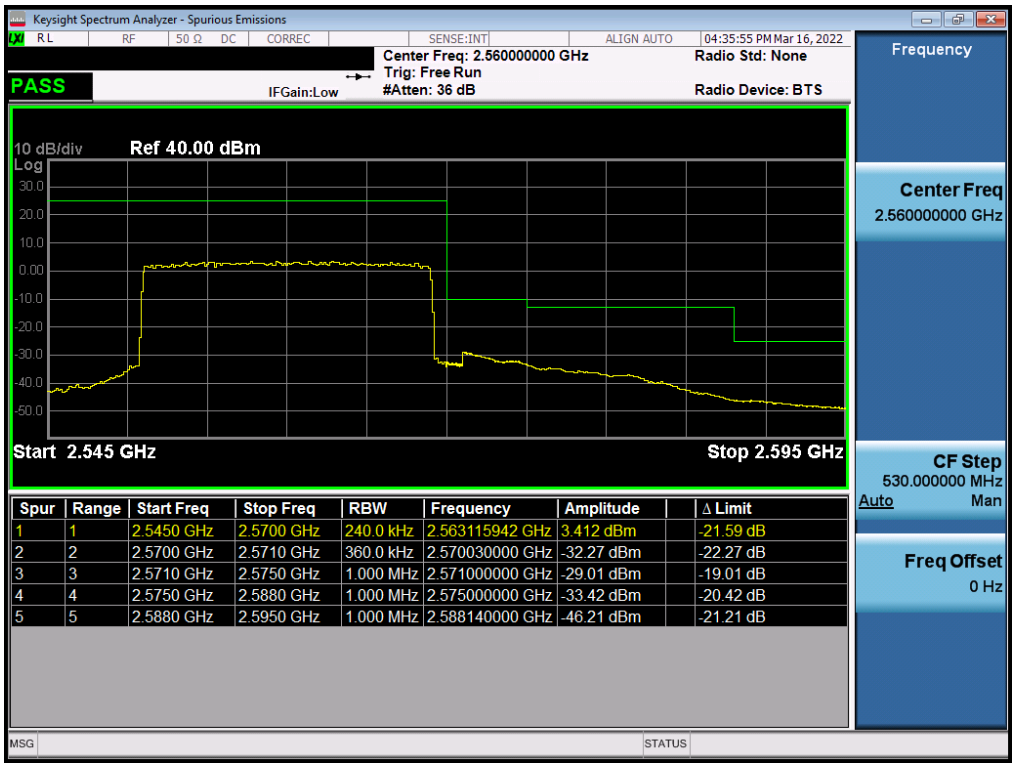
Plot 7-175. Extended Upper Band Edge Plot (LTE Band 30 - 5MHz QPSK – Full RB - Ant1)

LTE Band 7 – Ant1



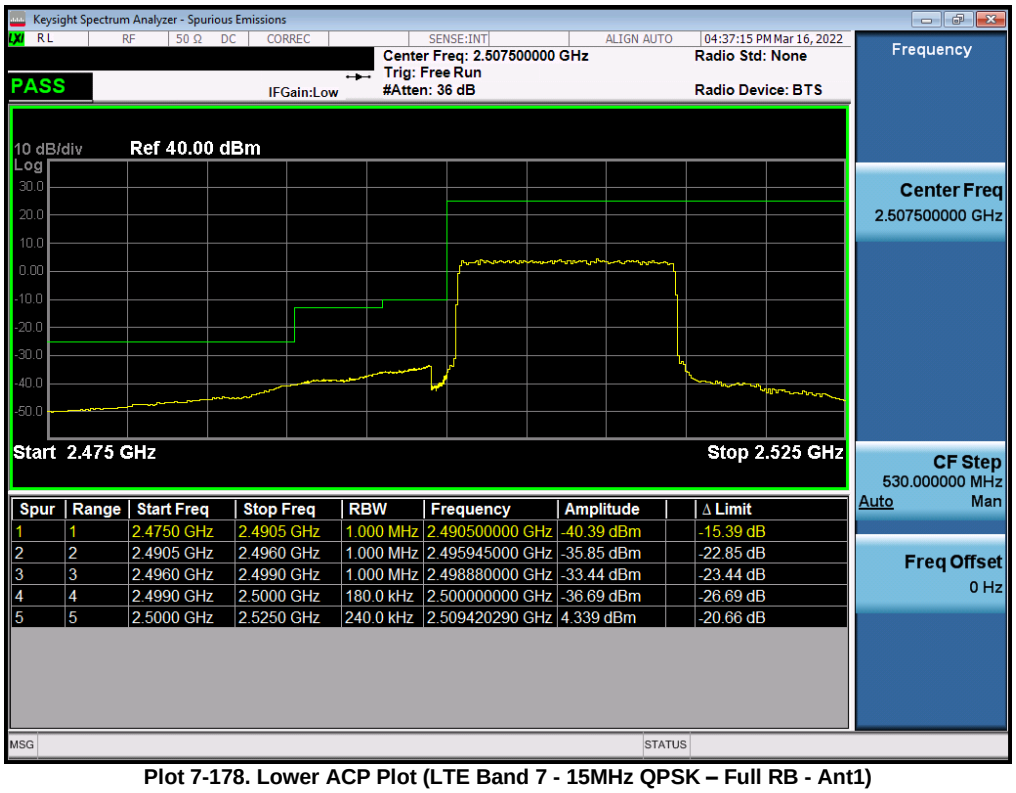
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4905 GHz	1.000 MHz	2.490500000 GHz	-38.17 dBm	-13.17 dB
2	2	2.4905 GHz	2.4960 GHz	1.000 MHz	2.495725000 GHz	-34.64 dBm	-21.64 dB
3	3	2.4960 GHz	2.4990 GHz	1.000 MHz	2.499000000 GHz	-31.16 dBm	-21.16 dB
4	4	2.4990 GHz	2.5000 GHz	360.0 kHz	2.499950000 GHz	-33.17 dBm	-23.17 dB
5	5	2.5000 GHz	2.5250 GHz	240.0 kHz	2.508454106 GHz	3.647 dBm	-21.35 dB

Plot 7-176. Lower ACP Plot (LTE Band 7 - 20MHz QPSK – Full RB - Ant1)



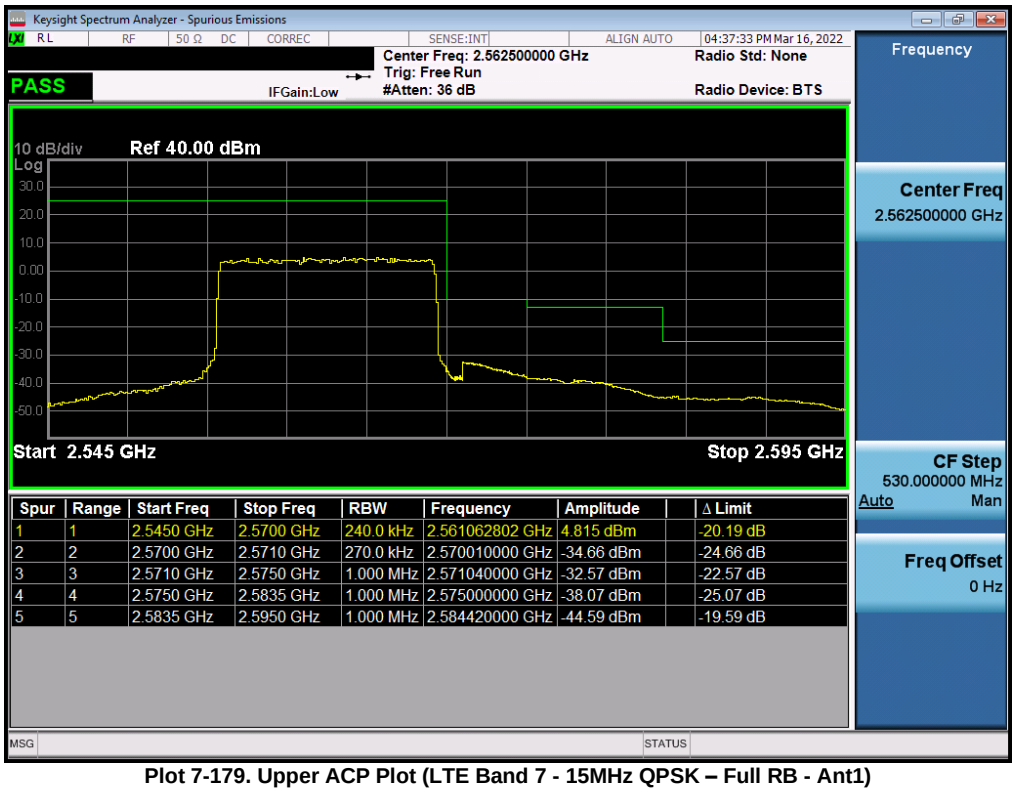
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5450 GHz	2.5700 GHz	240.0 kHz	2.563115942 GHz	3.412 dBm	-21.59 dB
2	2	2.5700 GHz	2.5710 GHz	360.0 kHz	2.570030000 GHz	-32.27 dBm	-22.27 dB
3	3	2.5710 GHz	2.5750 GHz	1.000 MHz	2.571000000 GHz	-29.01 dBm	-19.01 dB
4	4	2.5750 GHz	2.5880 GHz	1.000 MHz	2.575000000 GHz	-33.42 dBm	-20.42 dB
5	5	2.5880 GHz	2.5950 GHz	1.000 MHz	2.588140000 GHz	-46.21 dBm	-21.21 dB

Plot 7-177. Upper ACP Plot (LTE Band 7 - 20MHz QPSK – Full RB - Ant1)



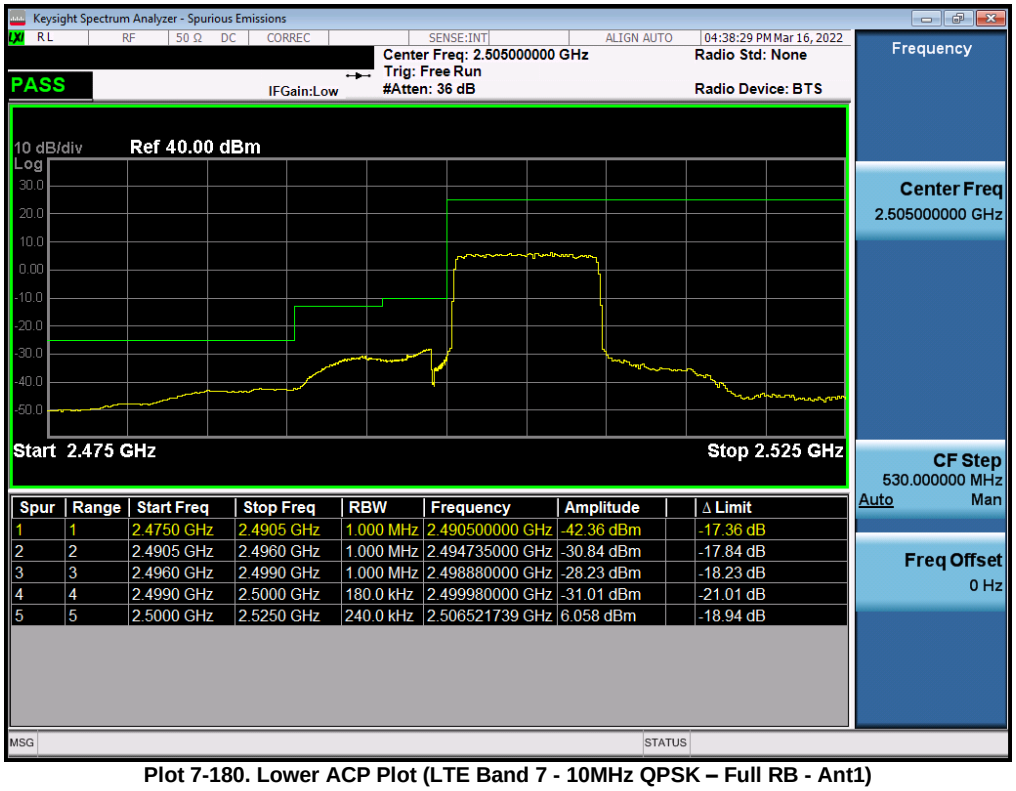
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4905 GHz	1.000 MHz	2.490500000 GHz	-40.39 dBm	-15.39 dB
2	2	2.4905 GHz	2.4960 GHz	1.000 MHz	2.495945000 GHz	-35.85 dBm	-22.85 dB
3	3	2.4960 GHz	2.4990 GHz	1.000 MHz	2.498880000 GHz	-33.44 dBm	-23.44 dB
4	4	2.4990 GHz	2.5000 GHz	180.0 kHz	2.500000000 GHz	-36.69 dBm	-26.69 dB
5	5	2.5000 GHz	2.5250 GHz	240.0 kHz	2.509420290 GHz	4.339 dBm	-20.66 dB

Plot 7-178. Lower ACP Plot (LTE Band 7 - 15MHz QPSK – Full RB - Ant1)



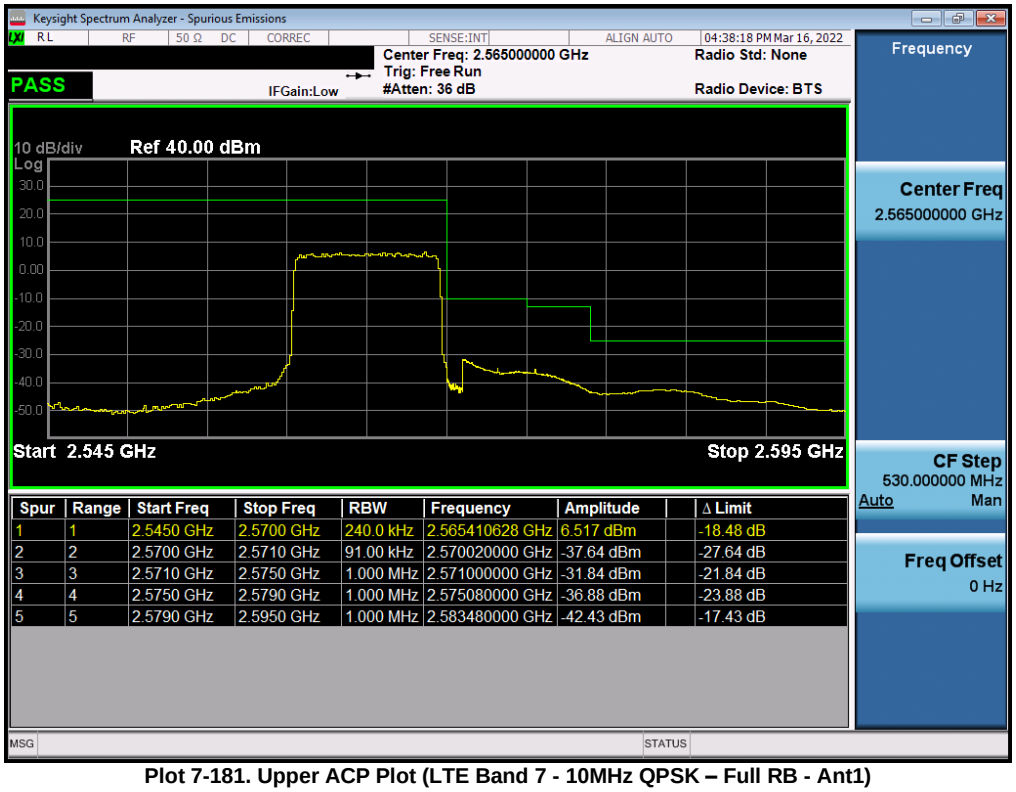
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5450 GHz	2.5700 GHz	240.0 kHz	2.561062802 GHz	4.815 dBm	-20.19 dB
2	2	2.5700 GHz	2.5710 GHz	270.0 kHz	2.570010000 GHz	-34.66 dBm	-24.66 dB
3	3	2.5710 GHz	2.5750 GHz	1.000 MHz	2.571040000 GHz	-32.57 dBm	-22.57 dB
4	4	2.5750 GHz	2.5835 GHz	1.000 MHz	2.575000000 GHz	-38.07 dBm	-25.07 dB
5	5	2.5835 GHz	2.5950 GHz	1.000 MHz	2.584420000 GHz	-44.59 dBm	-19.59 dB

Plot 7-179. Upper ACP Plot (LTE Band 7 - 15MHz QPSK – Full RB - Ant1)



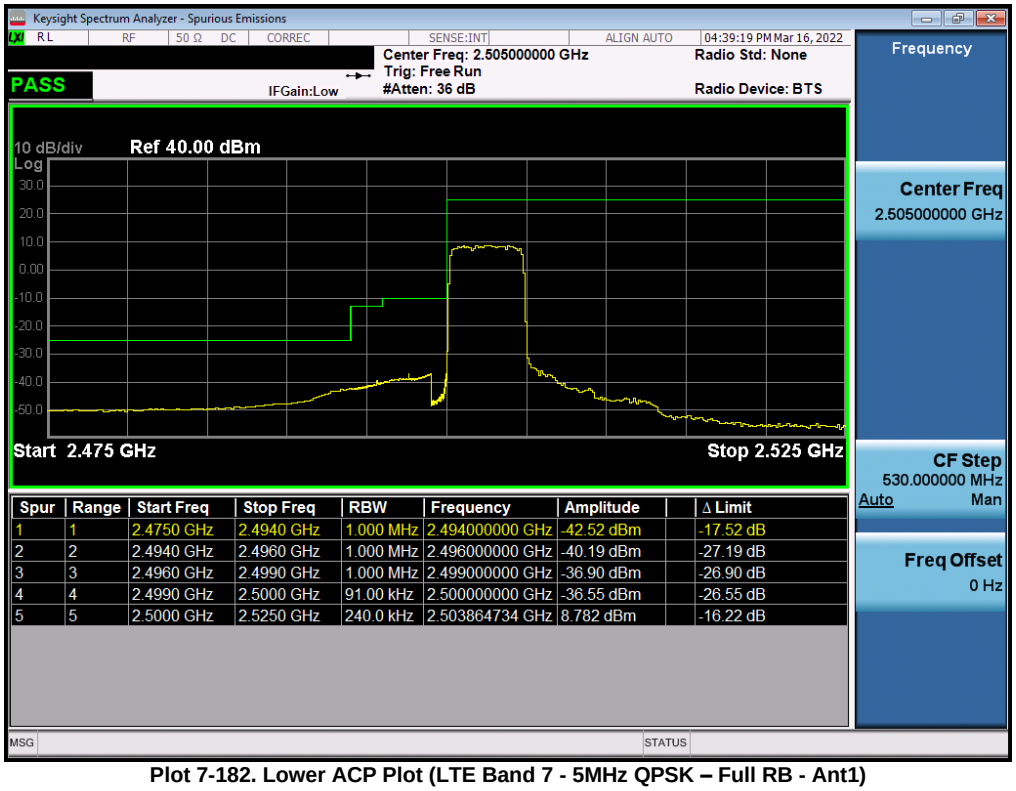
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4905 GHz	1.000 MHz	2.490500000 GHz	-42.36 dBm	-17.36 dB
2	2	2.4905 GHz	2.4960 GHz	1.000 MHz	2.494735000 GHz	-30.84 dBm	-17.84 dB
3	3	2.4960 GHz	2.4990 GHz	1.000 MHz	2.498880000 GHz	-28.23 dBm	-18.23 dB
4	4	2.4990 GHz	2.5000 GHz	180.0 kHz	2.499980000 GHz	-31.01 dBm	-21.01 dB
5	5	2.5000 GHz	2.5250 GHz	240.0 kHz	2.506521739 GHz	6.058 dBm	-18.94 dB

Plot 7-180. Lower ACP Plot (LTE Band 7 - 10MHz QPSK – Full RB - Ant1)



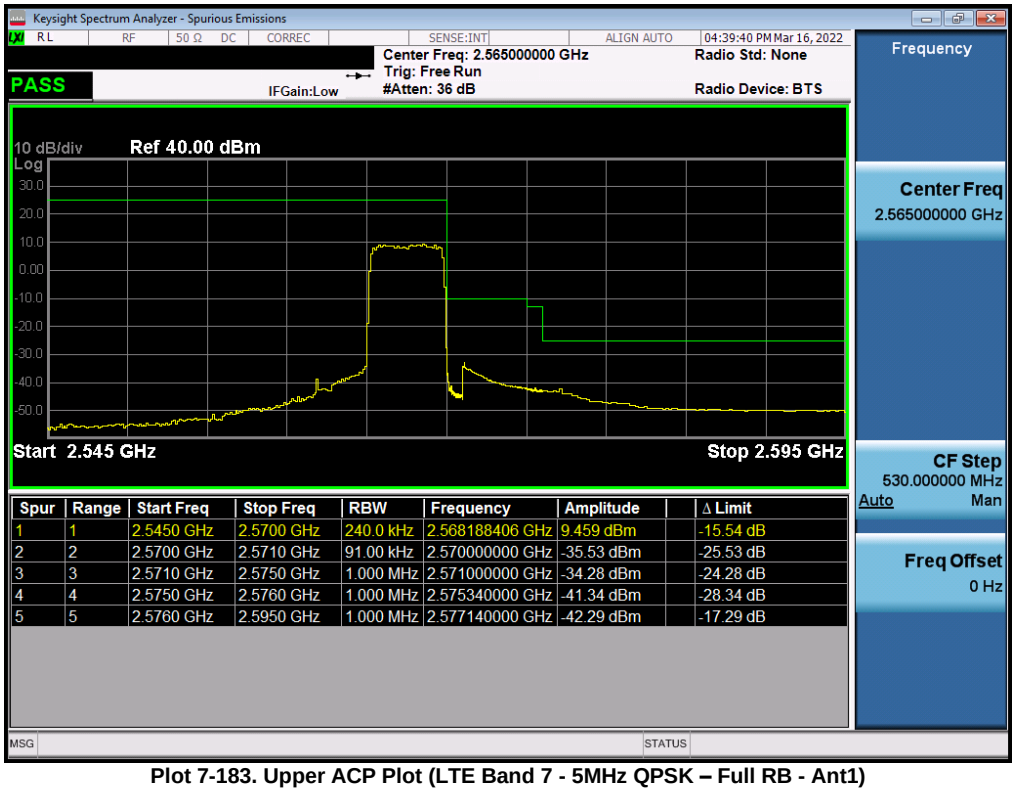
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5450 GHz	2.5700 GHz	240.0 kHz	2.565410628 GHz	6.517 dBm	-18.48 dB
2	2	2.5700 GHz	2.5710 GHz	91.00 kHz	2.570020000 GHz	-37.64 dBm	-27.64 dB
3	3	2.5710 GHz	2.5750 GHz	1.000 MHz	2.571000000 GHz	-31.84 dBm	-21.84 dB
4	4	2.5750 GHz	2.5790 GHz	1.000 MHz	2.575080000 GHz	-36.88 dBm	-23.88 dB
5	5	2.5790 GHz	2.5950 GHz	1.000 MHz	2.583480000 GHz	-42.43 dBm	-17.43 dB

Plot 7-181. Upper ACP Plot (LTE Band 7 - 10MHz QPSK – Full RB - Ant1)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4940 GHz	1.000 MHz	2.494000000 GHz	-42.52 dBm	-17.52 dB
2	2	2.4940 GHz	2.4960 GHz	1.000 MHz	2.496000000 GHz	-40.19 dBm	-27.19 dB
3	3	2.4960 GHz	2.4990 GHz	1.000 MHz	2.499000000 GHz	-36.90 dBm	-26.90 dB
4	4	2.4990 GHz	2.5000 GHz	91.00 kHz	2.500000000 GHz	-36.55 dBm	-26.55 dB
5	5	2.5000 GHz	2.5250 GHz	240.0 kHz	2.503864734 GHz	8.782 dBm	-16.22 dB

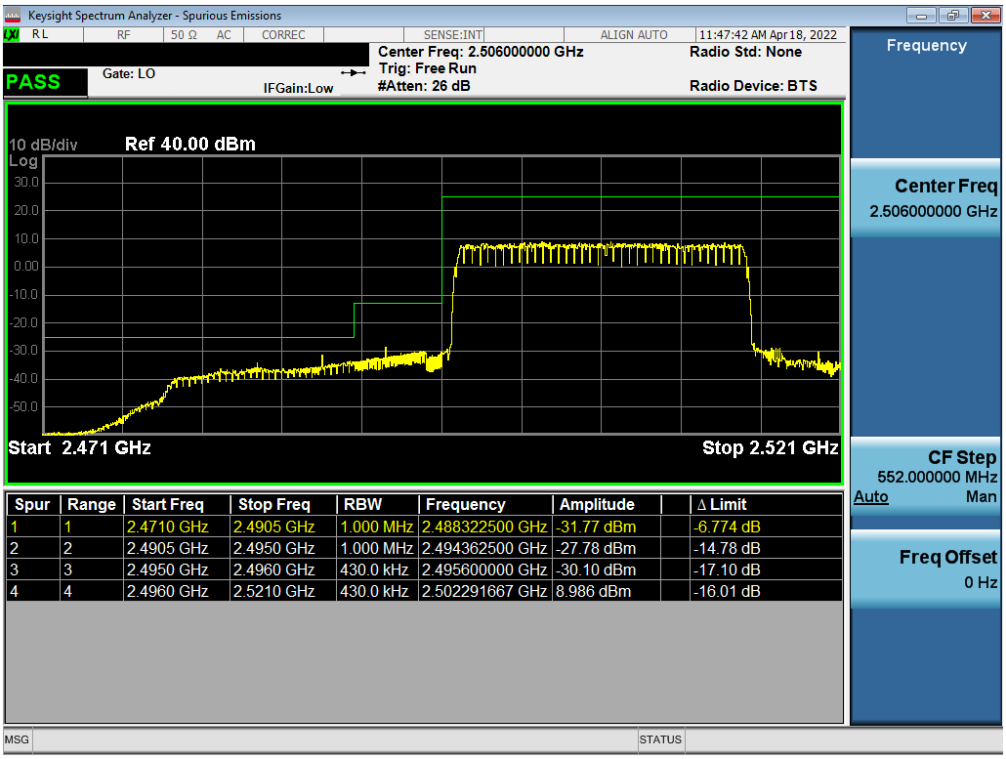
Plot 7-182. Lower ACP Plot (LTE Band 7 - 5MHz QPSK – Full RB - Ant1)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5450 GHz	2.5700 GHz	240.0 kHz	2.568188406 GHz	9.459 dBm	-15.54 dB
2	2	2.5700 GHz	2.5710 GHz	91.00 kHz	2.570000000 GHz	-35.53 dBm	-25.53 dB
3	3	2.5710 GHz	2.5750 GHz	1.000 MHz	2.571000000 GHz	-34.28 dBm	-24.28 dB
4	4	2.5750 GHz	2.5760 GHz	1.000 MHz	2.575340000 GHz	-41.34 dBm	-28.34 dB
5	5	2.5760 GHz	2.5950 GHz	1.000 MHz	2.577140000 GHz	-42.29 dBm	-17.29 dB

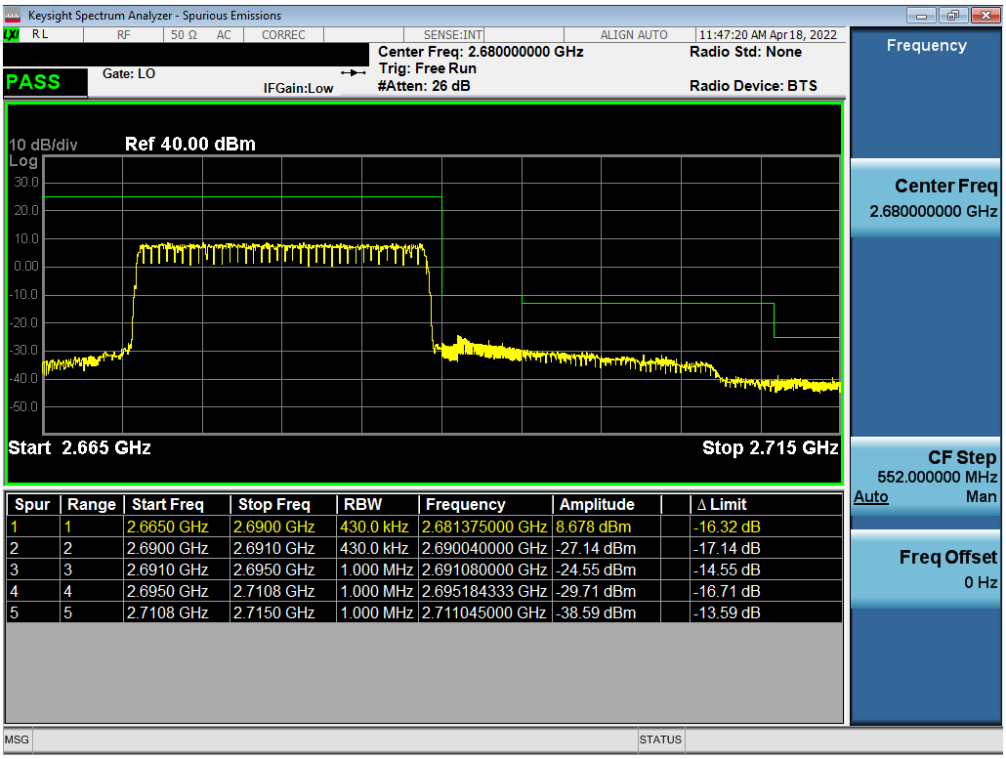
Plot 7-183. Upper ACP Plot (LTE Band 7 - 5MHz QPSK – Full RB - Ant1)

LTE Band 41(PC2) – Ant1



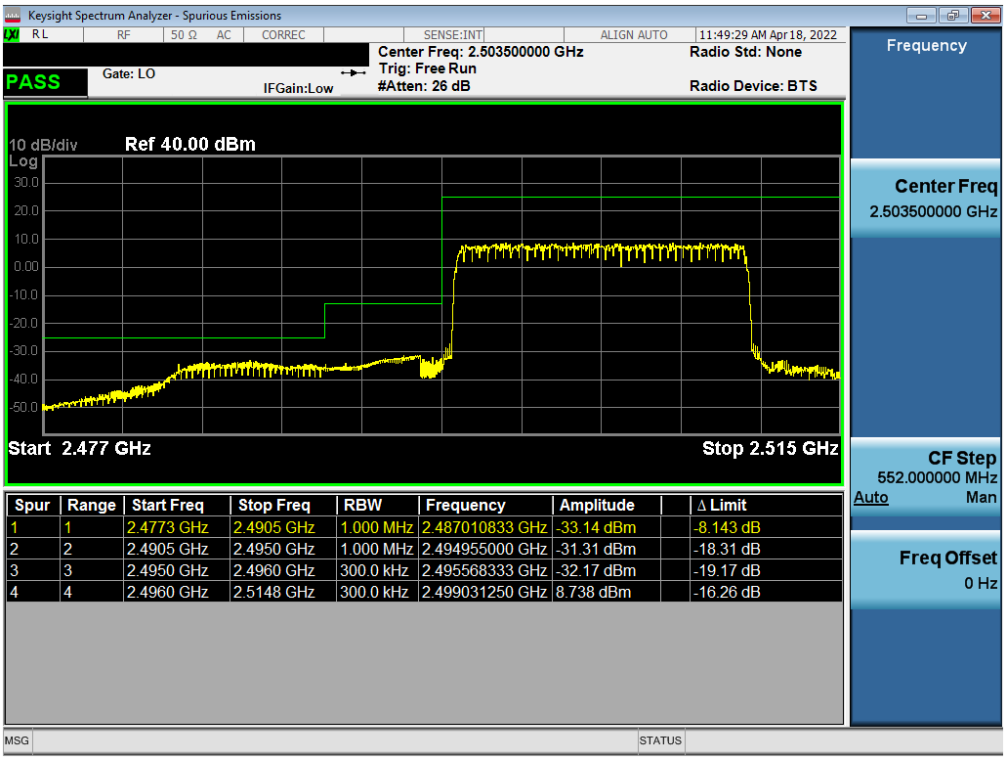
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4710 GHz	2.4905 GHz	1.000 MHz	2.488322500 GHz	-31.77 dBm	-6.774 dB
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.494362500 GHz	-27.78 dBm	-14.78 dB
3	3	2.4950 GHz	2.4960 GHz	430.0 kHz	2.495600000 GHz	-30.10 dBm	-17.10 dB
4	4	2.4960 GHz	2.5210 GHz	430.0 kHz	2.502291667 GHz	8.986 dBm	-16.01 dB

Plot 7-184. Lower ACP Plot (LTE Band 41(PC2) - 20MHz QPSK – Full RB - Ant1)



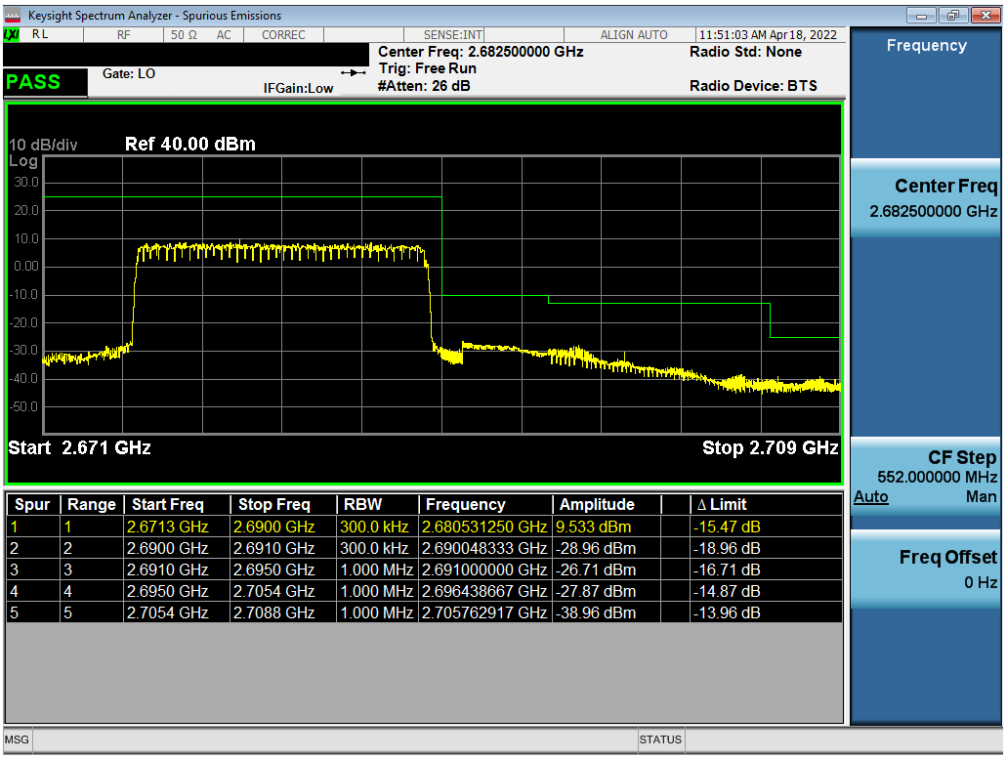
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.6650 GHz	2.6900 GHz	430.0 kHz	2.681375000 GHz	8.678 dBm	-16.32 dB
2	2	2.6900 GHz	2.6910 GHz	430.0 kHz	2.690040000 GHz	-27.14 dBm	-17.14 dB
3	3	2.6910 GHz	2.6950 GHz	1.000 MHz	2.691080000 GHz	-24.55 dBm	-14.55 dB
4	4	2.6950 GHz	2.7108 GHz	1.000 MHz	2.695184333 GHz	-29.71 dBm	-16.71 dB
5	5	2.7108 GHz	2.7150 GHz	1.000 MHz	2.711045000 GHz	-38.59 dBm	-13.59 dB

Plot 7-185. Upper ACP Plot (LTE Band 41(PC2) - 20MHz QPSK – Full RB - Ant1)



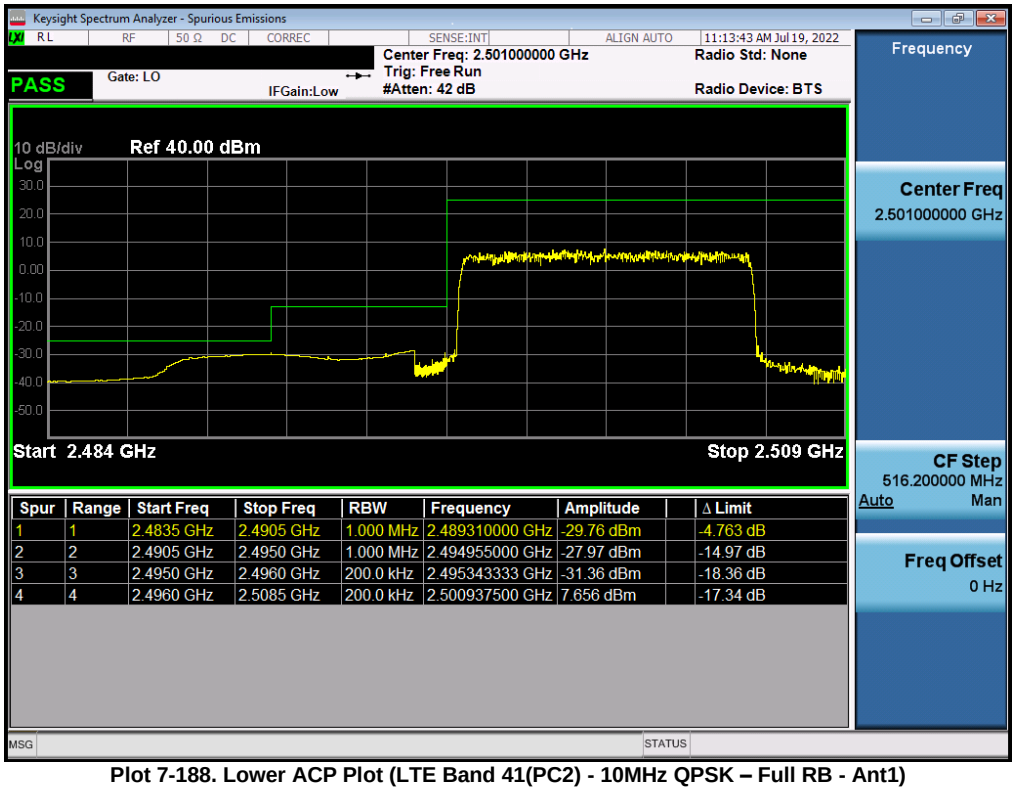
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4773 GHz	2.4905 GHz	1.000 MHz	2.487010833 GHz	-33.14 dBm	-8.143 dB
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.494955000 GHz	-31.31 dBm	-18.31 dB
3	3	2.4950 GHz	2.4960 GHz	300.0 kHz	2.495568333 GHz	-32.17 dBm	-19.17 dB
4	4	2.4960 GHz	2.5148 GHz	300.0 kHz	2.499031250 GHz	8.738 dBm	-16.26 dB

Plot 7-186. Lower ACP Plot (LTE Band 41(PC2) - 15MHz QPSK – Full RB - Ant1)



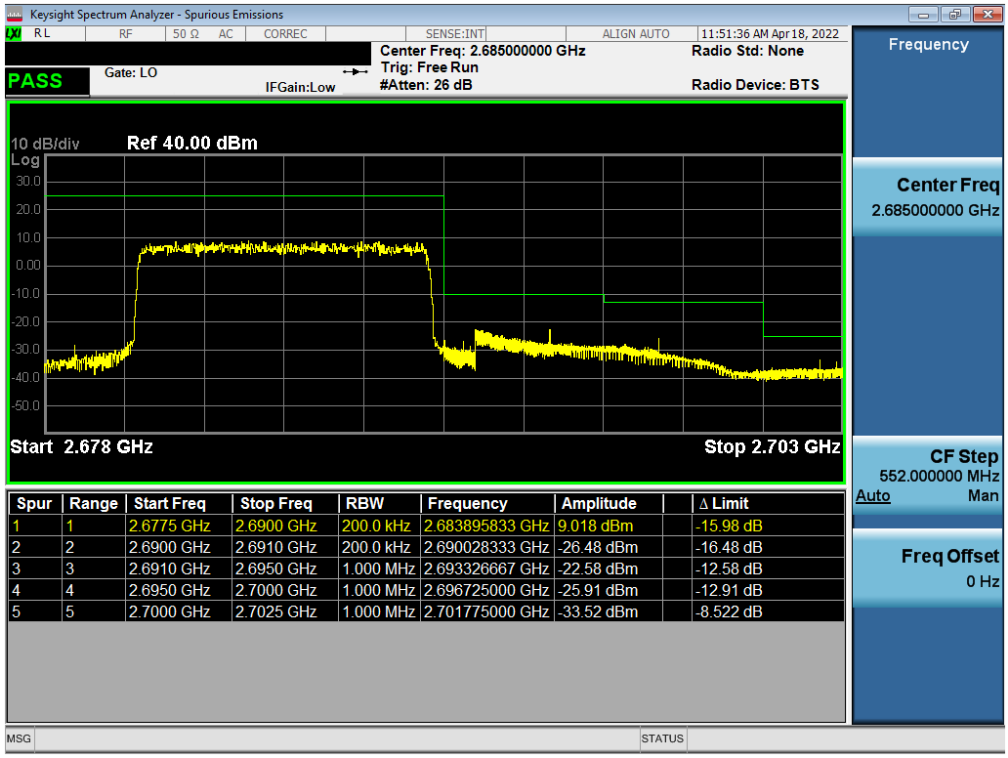
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.6713 GHz	2.6900 GHz	300.0 kHz	2.680531250 GHz	9.533 dBm	-15.47 dB
2	2	2.6900 GHz	2.6910 GHz	300.0 kHz	2.690048333 GHz	-28.96 dBm	-18.96 dB
3	3	2.6910 GHz	2.6950 GHz	1.000 MHz	2.691000000 GHz	-26.71 dBm	-16.71 dB
4	4	2.6950 GHz	2.7054 GHz	1.000 MHz	2.696438667 GHz	-27.87 dBm	-14.87 dB
5	5	2.7054 GHz	2.7088 GHz	1.000 MHz	2.705762917 GHz	-38.96 dBm	-13.96 dB

Plot 7-187. Upper ACP Plot (LTE Band 41(PC2) - 15MHz QPSK – Full RB - Ant1)



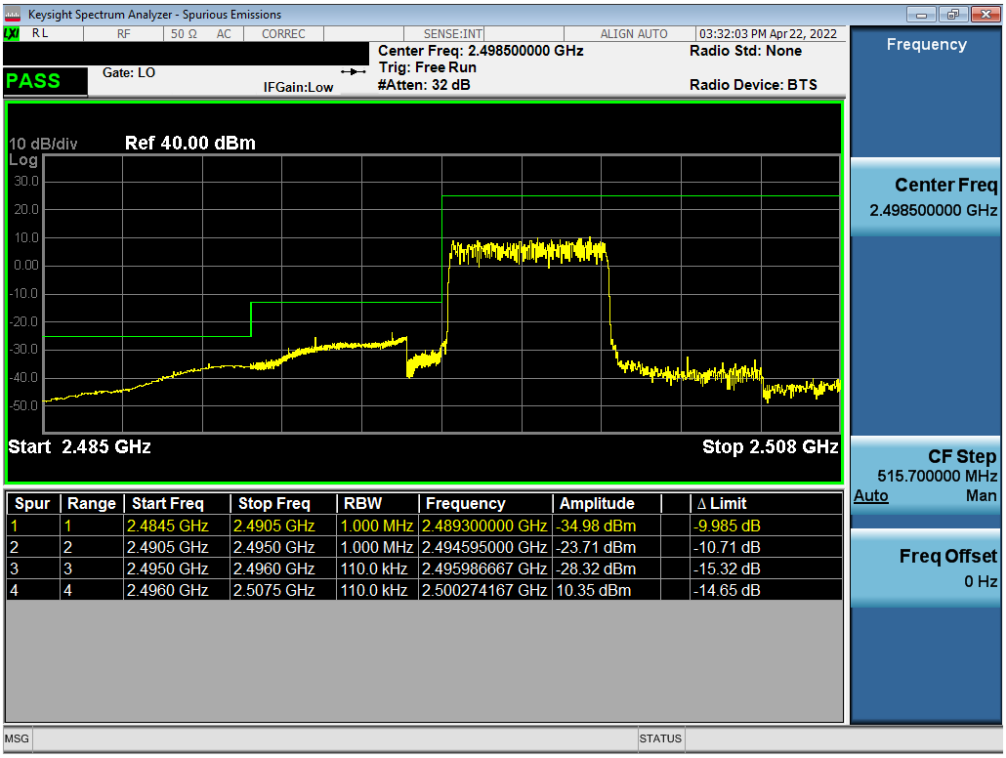
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4835 GHz	2.4905 GHz	1.000 MHz	2.489310000 GHz	-29.76 dBm	-4.763 dB
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.494955000 GHz	-27.97 dBm	-14.97 dB
3	3	2.4950 GHz	2.4960 GHz	200.0 kHz	2.495343333 GHz	-31.36 dBm	-18.36 dB
4	4	2.4960 GHz	2.5085 GHz	200.0 kHz	2.500937500 GHz	7.656 dBm	-17.34 dB

Plot 7-188. Lower ACP Plot (LTE Band 41(PC2) - 10MHz QPSK – Full RB - Ant1)



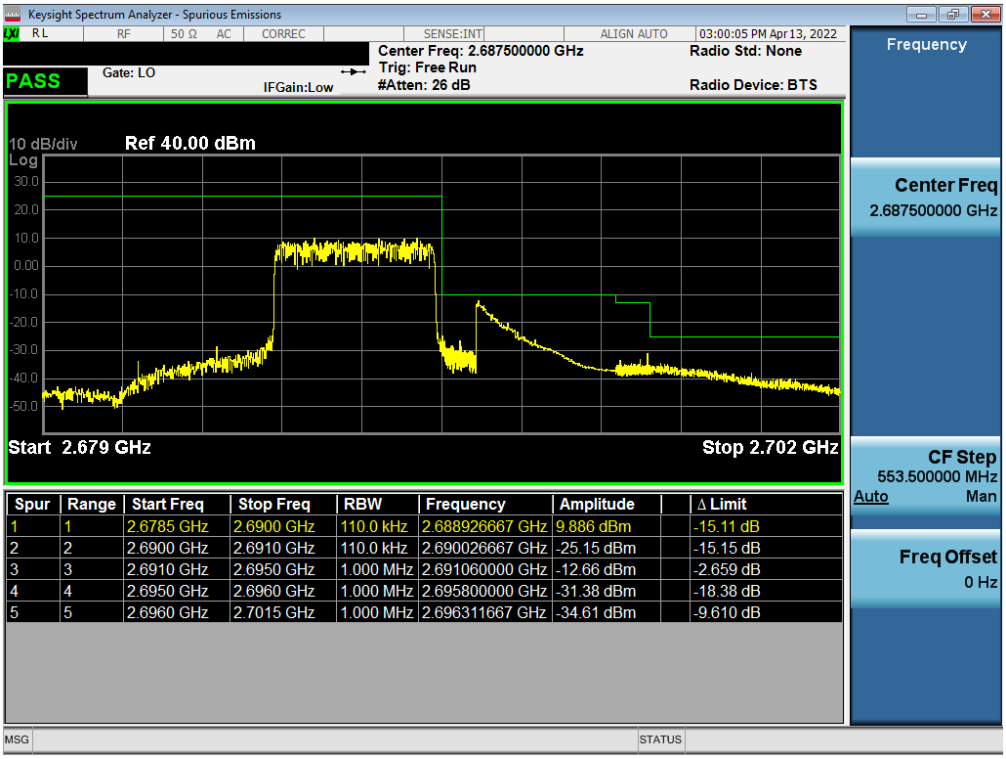
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.6775 GHz	2.6900 GHz	200.0 kHz	2.683895833 GHz	9.018 dBm	-15.98 dB
2	2	2.6900 GHz	2.6910 GHz	200.0 kHz	2.690028333 GHz	-26.48 dBm	-16.48 dB
3	3	2.6910 GHz	2.6950 GHz	1.000 MHz	2.693326667 GHz	-22.58 dBm	-12.58 dB
4	4	2.6950 GHz	2.7000 GHz	1.000 MHz	2.696725000 GHz	-25.91 dBm	-12.91 dB
5	5	2.7000 GHz	2.7025 GHz	1.000 MHz	2.701775000 GHz	-33.52 dBm	-8.522 dB

Plot 7-189. Upper ACP Plot (LTE Band 41(PC2) - 10MHz QPSK – Full RB - Ant1)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4845 GHz	2.4905 GHz	1.000 MHz	2.489300000 GHz	-34.98 dBm	-9.985 dB
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.494595000 GHz	-23.71 dBm	-10.71 dB
3	3	2.4950 GHz	2.4960 GHz	110.0 kHz	2.495986667 GHz	-28.32 dBm	-15.32 dB
4	4	2.4960 GHz	2.5075 GHz	110.0 kHz	2.500274167 GHz	10.35 dBm	-14.65 dB

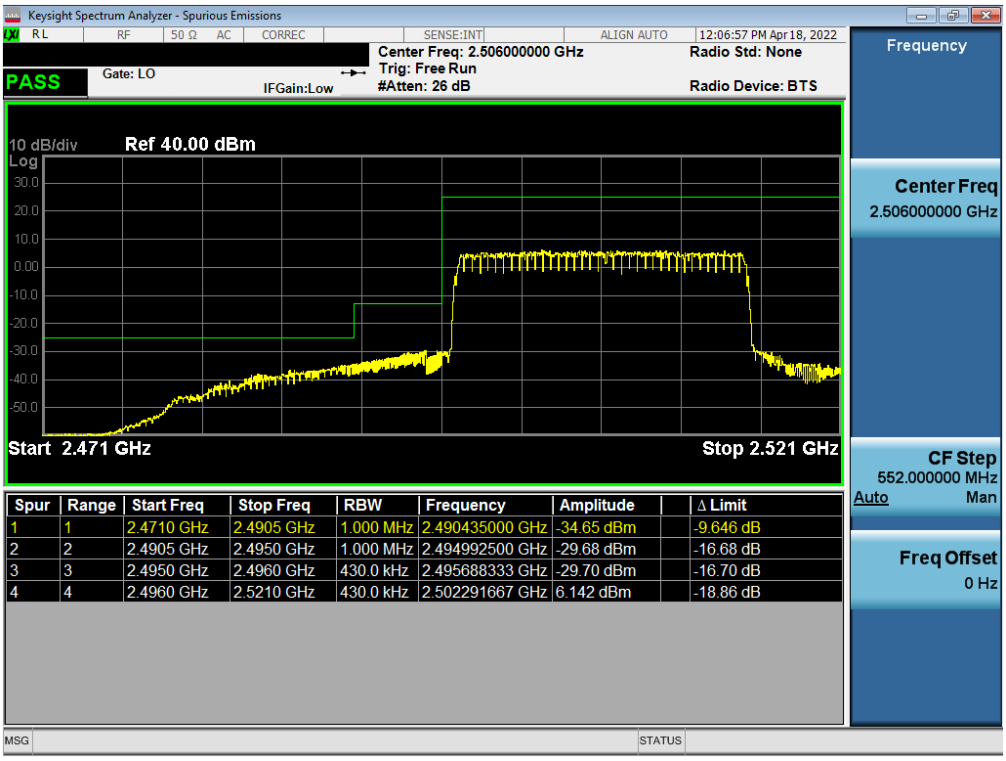
Plot 7-190. Lower ACP Plot (LTE Band 41(PC2) - 5MHz QPSK – Full RB - Ant1)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.6785 GHz	2.6900 GHz	110.0 kHz	2.688926667 GHz	9.886 dBm	-15.11 dB
2	2	2.6900 GHz	2.6910 GHz	110.0 kHz	2.690026667 GHz	-25.15 dBm	-15.15 dB
3	3	2.6910 GHz	2.6950 GHz	1.000 MHz	2.691060000 GHz	-12.66 dBm	-2.659 dB
4	4	2.6950 GHz	2.6960 GHz	1.000 MHz	2.695800000 GHz	-31.38 dBm	-18.38 dB
5	5	2.6960 GHz	2.7015 GHz	1.000 MHz	2.696311667 GHz	-34.61 dBm	-9.610 dB

Plot 7-191. Upper ACP Plot (LTE Band 41(PC2) - 5MHz QPSK – Full RB - Ant1)

LTE Band 41(PC3) – Ant1

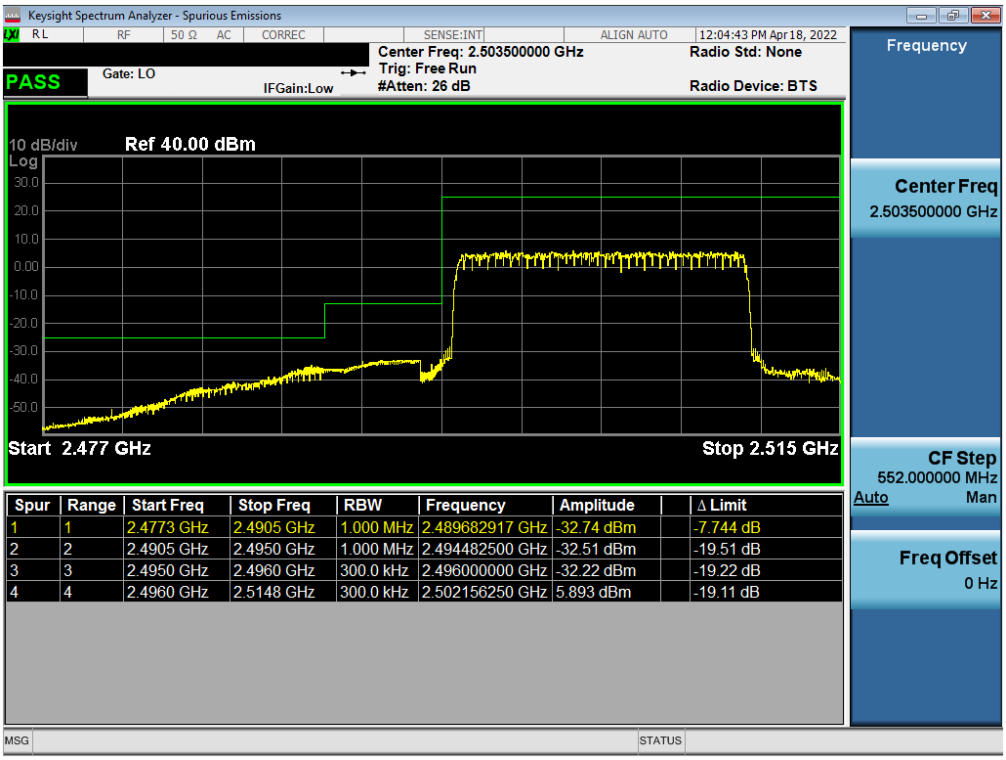


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4710 GHz	2.4905 GHz	1.000 MHz	2.490435000 GHz	-34.65 dBm	-9.646 dB
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.494992500 GHz	-29.68 dBm	-16.68 dB
3	3	2.4950 GHz	2.4960 GHz	430.0 kHz	2.495688333 GHz	-29.70 dBm	-16.70 dB
4	4	2.4960 GHz	2.5210 GHz	430.0 kHz	2.502291667 GHz	6.142 dBm	-18.86 dB

Plot 7-192. Lower ACP Plot (LTE Band 41(PC3) - 20MHz QPSK – Full RB - Ant1)

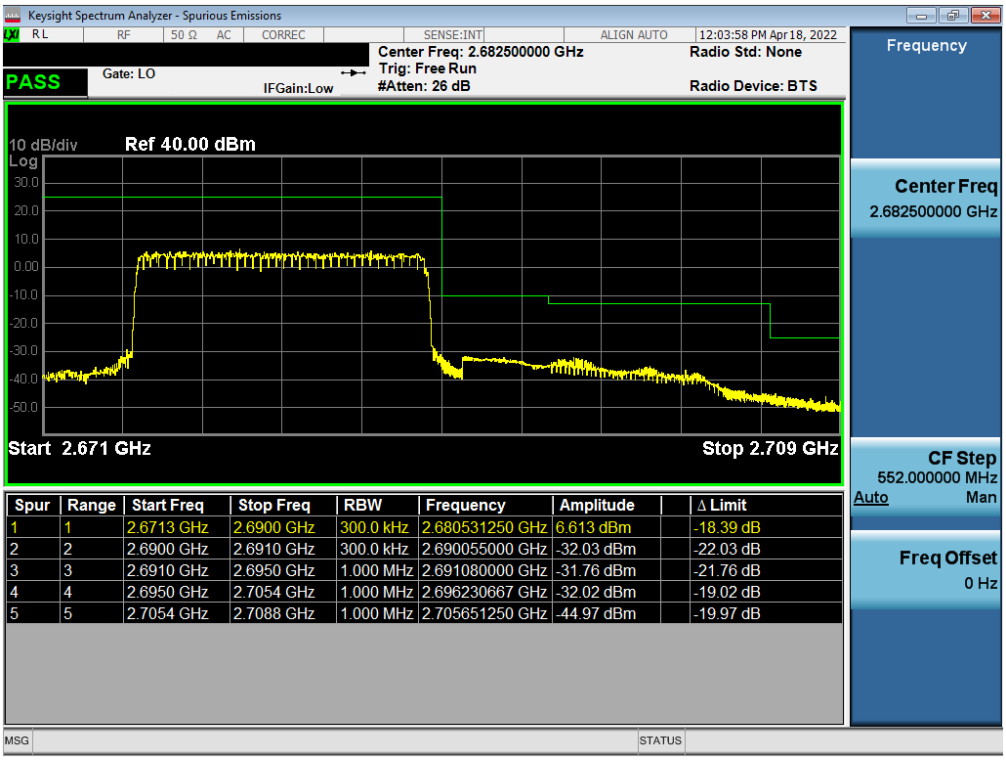
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.6650 GHz	2.6900 GHz	430.0 kHz	2.679750000 GHz	6.076 dBm	-18.92 dB
2	2	2.6900 GHz	2.6910 GHz	430.0 kHz	2.690138333 GHz	-29.54 dBm	-19.54 dB
3	3	2.6910 GHz	2.6950 GHz	1.000 MHz	2.691000000 GHz	-27.95 dBm	-17.95 dB
4	4	2.6950 GHz	2.7108 GHz	1.000 MHz	2.695342333 GHz	-33.15 dBm	-20.15 dB
5	5	2.7108 GHz	2.7150 GHz	1.000 MHz	2.710982000 GHz	-46.98 dBm	-21.98 dB

Plot 7-193. Upper ACP Plot (LTE Band 41(PC3) - 20MHz QPSK – Full RB - Ant1)



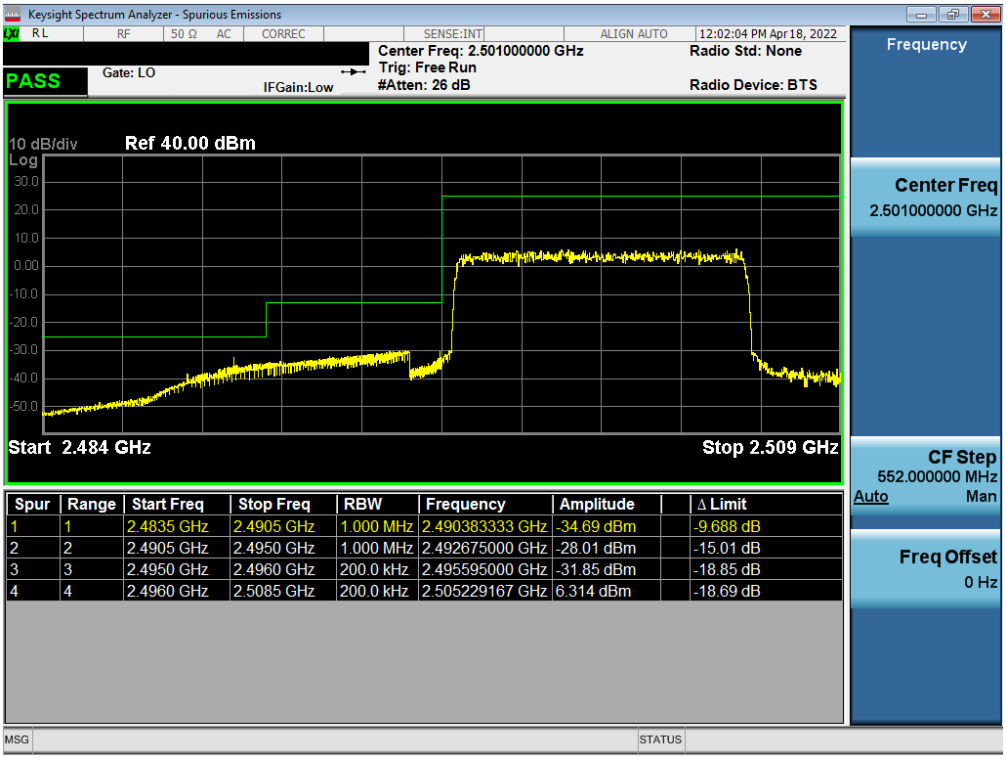
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4773 GHz	2.4905 GHz	1.000 MHz	2.489682917 GHz	-32.74 dBm	-7.744 dB
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.494482500 GHz	-32.51 dBm	-19.51 dB
3	3	2.4950 GHz	2.4960 GHz	300.0 kHz	2.496000000 GHz	-32.22 dBm	-19.22 dB
4	4	2.4960 GHz	2.5148 GHz	300.0 kHz	2.502156250 GHz	5.893 dBm	-19.11 dB

Plot 7-194. Lower ACP Plot (LTE Band 41(PC3) - 15MHz QPSK – Full RB - Ant1)



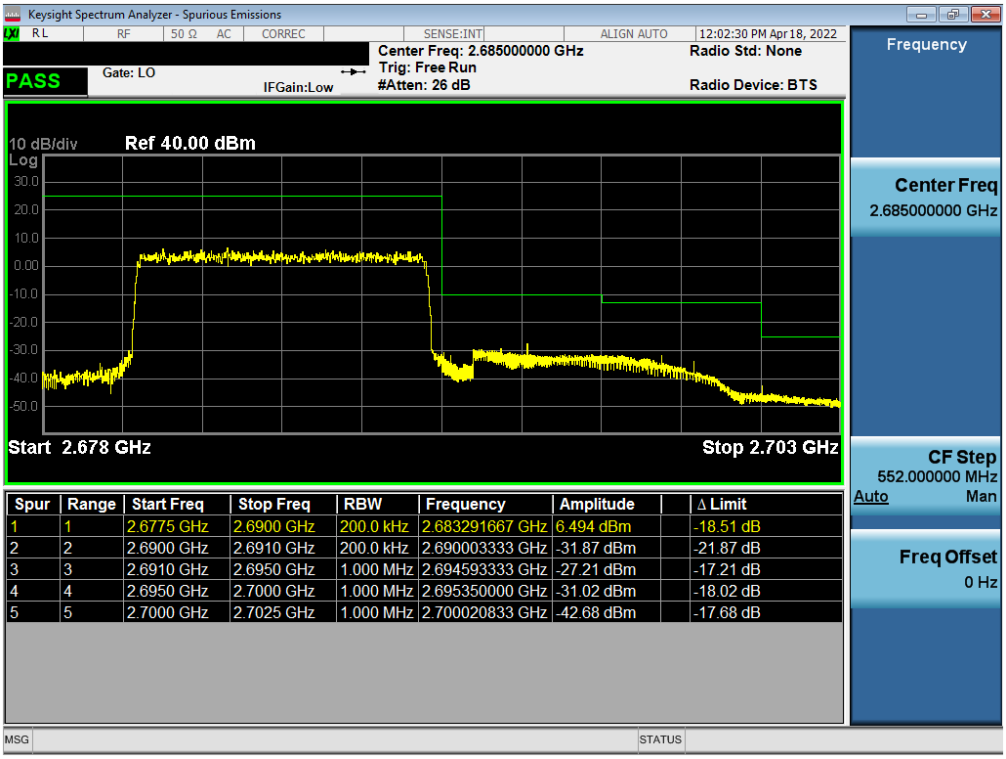
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.6713 GHz	2.6900 GHz	300.0 kHz	2.680531250 GHz	6.613 dBm	-18.39 dB
2	2	2.6900 GHz	2.6910 GHz	300.0 kHz	2.690055000 GHz	-32.03 dBm	-22.03 dB
3	3	2.6910 GHz	2.6950 GHz	1.000 MHz	2.691080000 GHz	-31.76 dBm	-21.76 dB
4	4	2.6950 GHz	2.7054 GHz	1.000 MHz	2.696230667 GHz	-32.02 dBm	-19.02 dB
5	5	2.7054 GHz	2.7088 GHz	1.000 MHz	2.705651250 GHz	-44.97 dBm	-19.97 dB

Plot 7-195. Upper ACP Plot (LTE Band 41(PC3) - 15MHz QPSK – Full RB - Ant1)



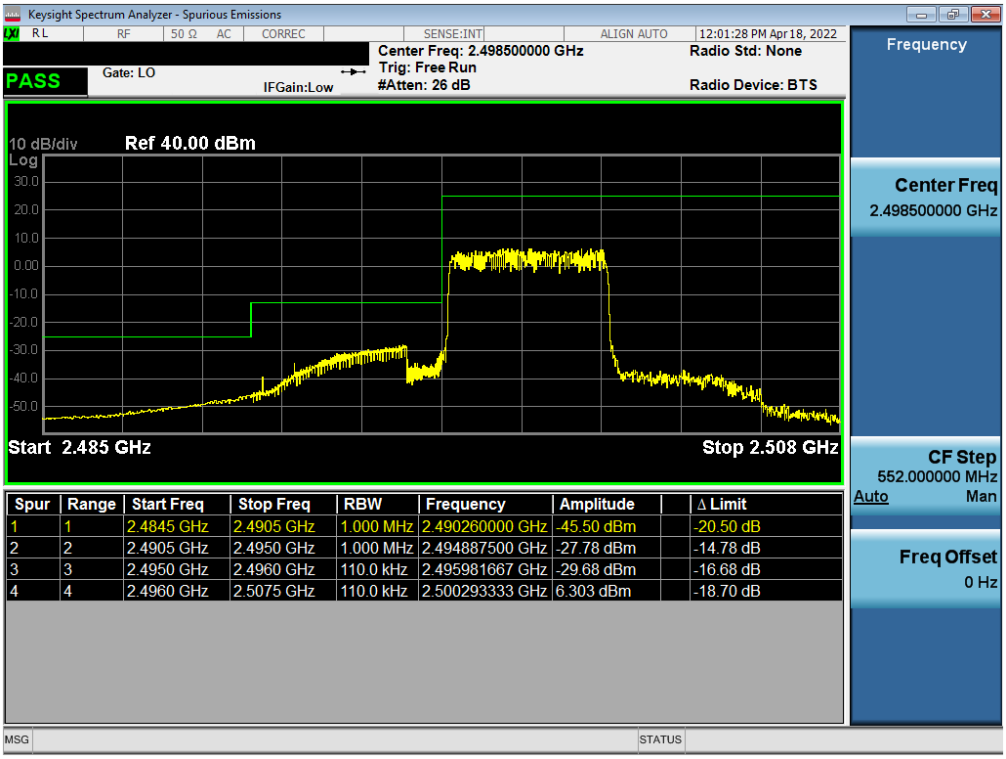
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4835 GHz	2.4905 GHz	1.000 MHz	2.490383333 GHz	-34.69 dBm	-9.688 dB
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.492675000 GHz	-28.01 dBm	-15.01 dB
3	3	2.4950 GHz	2.4960 GHz	200.0 kHz	2.495595000 GHz	-31.85 dBm	-18.85 dB
4	4	2.4960 GHz	2.5085 GHz	200.0 kHz	2.505229167 GHz	6.314 dBm	-18.69 dB

Plot 7-196. Lower ACP Plot (LTE Band 41(PC3) - 10MHz QPSK – Full RB - Ant1)



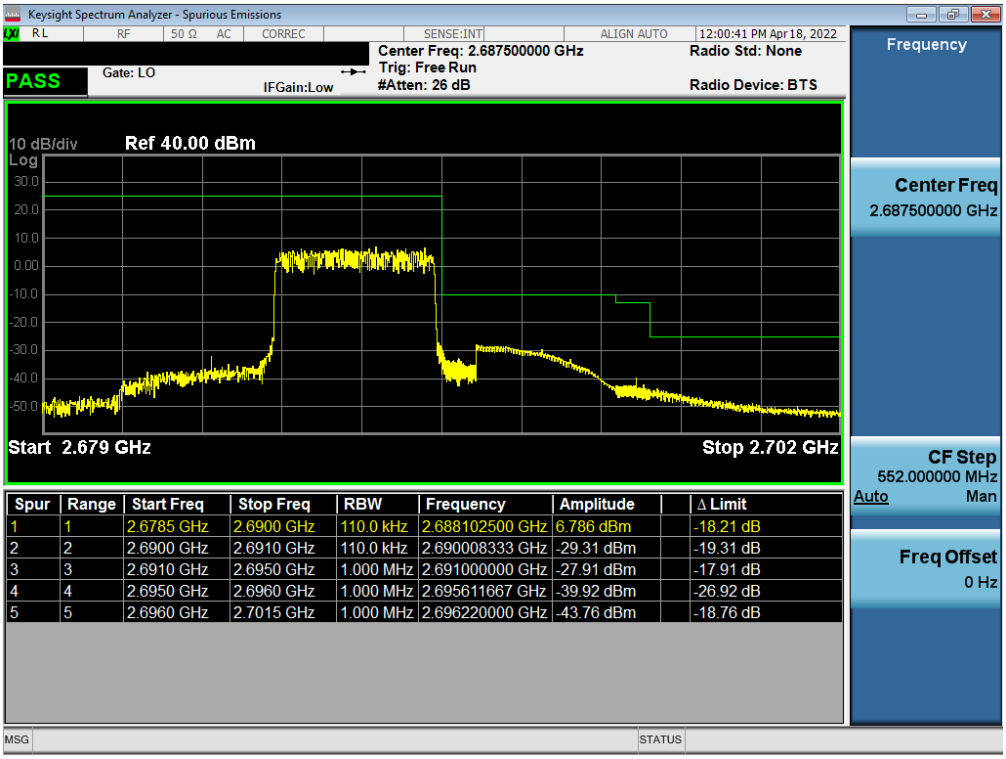
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.6775 GHz	2.6900 GHz	200.0 kHz	2.683291667 GHz	6.494 dBm	-18.51 dB
2	2	2.6900 GHz	2.6910 GHz	200.0 kHz	2.690003333 GHz	-31.87 dBm	-21.87 dB
3	3	2.6910 GHz	2.6950 GHz	1.000 MHz	2.694593333 GHz	-27.21 dBm	-17.21 dB
4	4	2.6950 GHz	2.7000 GHz	1.000 MHz	2.695350000 GHz	-31.02 dBm	-18.02 dB
5	5	2.7000 GHz	2.7025 GHz	1.000 MHz	2.700020833 GHz	-42.68 dBm	-17.68 dB

Plot 7-197. Upper ACP Plot (LTE Band 41(PC3) - 10MHz QPSK – Full RB - Ant1)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4845 GHz	2.4905 GHz	1.000 MHz	2.490260000 GHz	-45.50 dBm	-20.50 dB
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.494887500 GHz	-27.78 dBm	-14.78 dB
3	3	2.4950 GHz	2.4960 GHz	110.0 kHz	2.495981667 GHz	-29.68 dBm	-16.68 dB
4	4	2.4960 GHz	2.5075 GHz	110.0 kHz	2.500293333 GHz	6.303 dBm	-18.70 dB

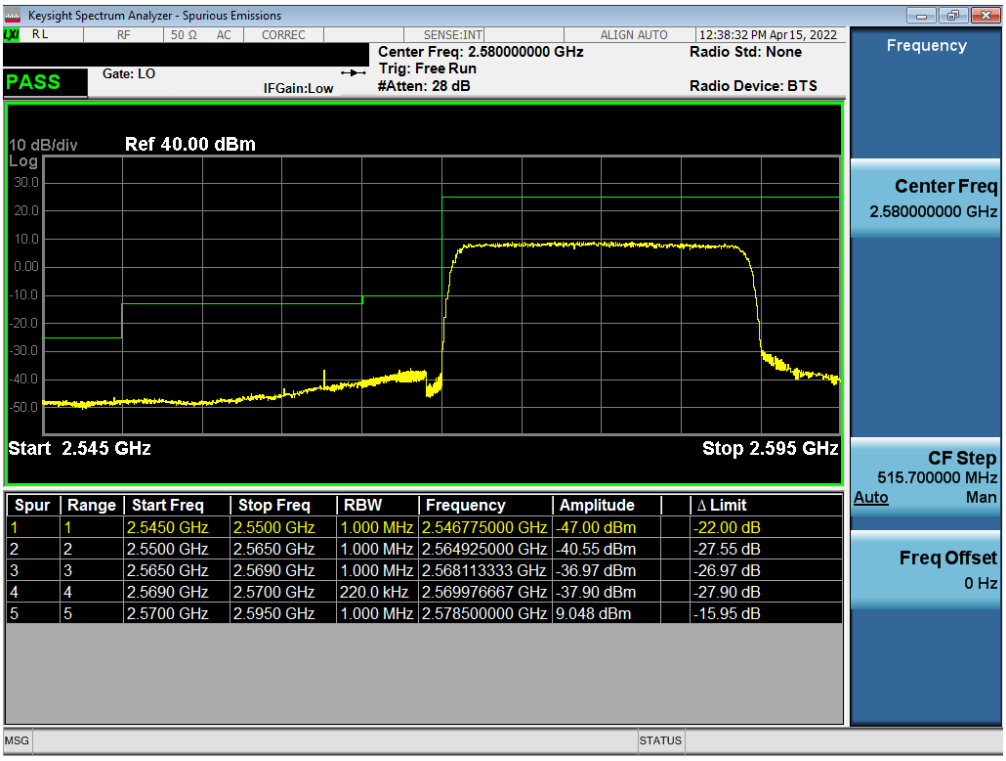
Plot 7-198. Lower ACP Plot (LTE Band 41(PC3) - 5MHz QPSK – Full RB - Ant1)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.6785 GHz	2.6900 GHz	110.0 kHz	2.688102500 GHz	6.786 dBm	-18.21 dB
2	2	2.6900 GHz	2.6910 GHz	110.0 kHz	2.690008333 GHz	-29.31 dBm	-19.31 dB
3	3	2.6910 GHz	2.6950 GHz	1.000 MHz	2.691000000 GHz	-27.91 dBm	-17.91 dB
4	4	2.6950 GHz	2.6960 GHz	1.000 MHz	2.695611667 GHz	-39.92 dBm	-26.92 dB
5	5	2.6960 GHz	2.7015 GHz	1.000 MHz	2.696220000 GHz	-43.76 dBm	-18.76 dB

Plot 7-199. Upper ACP Plot (LTE Band 41(PC3) - 5MHz QPSK – Full RB - Ant1)

LTE Band 38 – Ant1

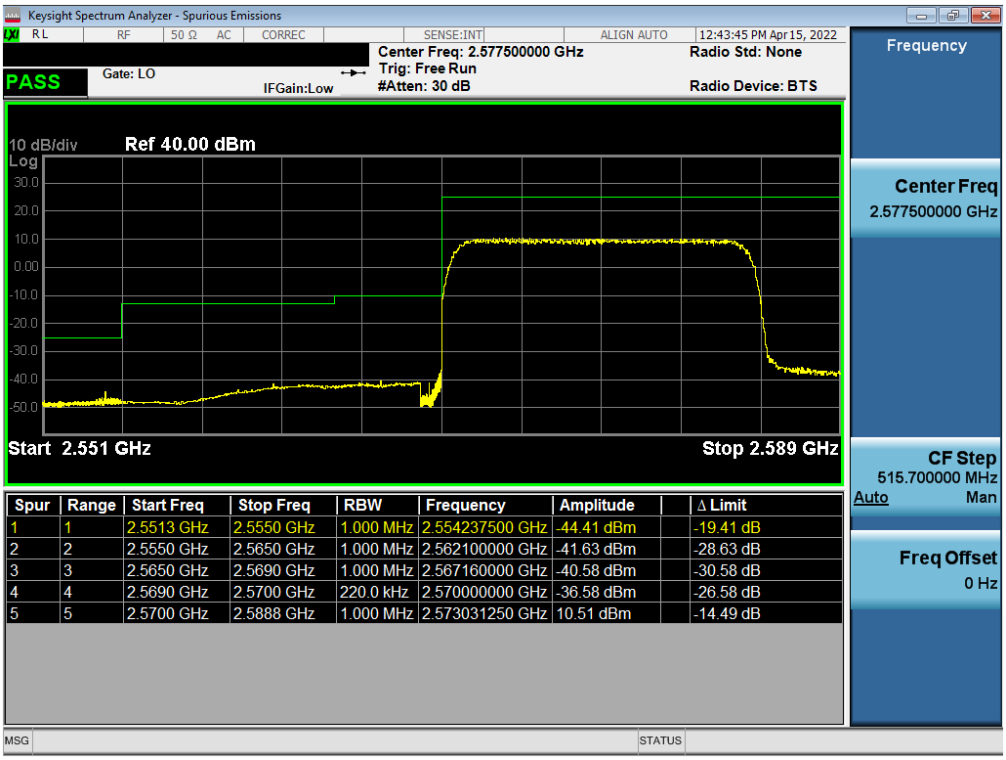


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5450 GHz	2.5500 GHz	1.000 MHz	2.546775000 GHz	-47.00 dBm	-22.00 dB
2	2	2.5500 GHz	2.5650 GHz	1.000 MHz	2.564925000 GHz	-40.55 dBm	-27.55 dB
3	3	2.5650 GHz	2.5690 GHz	1.000 MHz	2.568113333 GHz	-36.97 dBm	-26.97 dB
4	4	2.5690 GHz	2.5700 GHz	220.0 kHz	2.569976667 GHz	-37.90 dBm	-27.90 dB
5	5	2.5700 GHz	2.5950 GHz	1.000 MHz	2.578500000 GHz	9.048 dBm	-15.95 dB

Plot 7-200. Lower ACP Plot (LTE Band 38 - 20MHz QPSK – Full RB - Ant1)

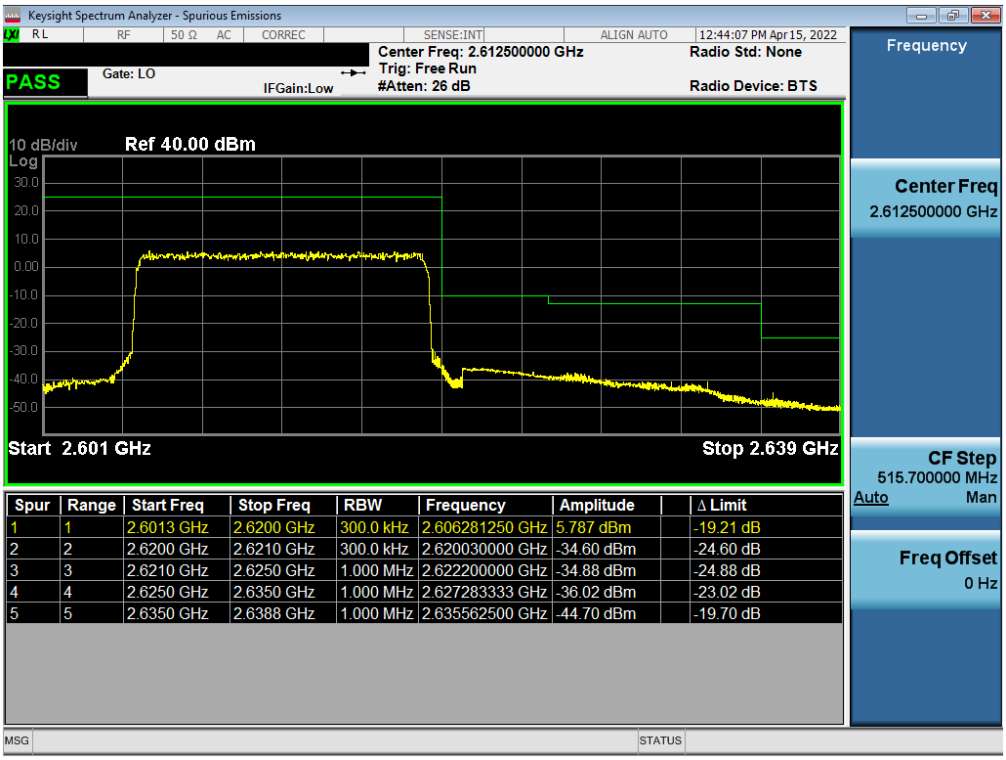
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5950 GHz	2.6200 GHz	430.0 kHz	2.613416667 GHz	6.157 dBm	-18.84 dB
2	2	2.6200 GHz	2.6210 GHz	430.0 kHz	2.620003333 GHz	-33.26 dBm	-23.26 dB
3	3	2.6210 GHz	2.6250 GHz	1.000 MHz	2.621473333 GHz	-30.66 dBm	-20.66 dB
4	4	2.6250 GHz	2.6400 GHz	1.000 MHz	2.625825000 GHz	-36.38 dBm	-23.38 dB
5	5	2.6400 GHz	2.6450 GHz	1.000 MHz	2.640150000 GHz	-47.06 dBm	-22.06 dB

Plot 7-201. Upper ACP Plot (LTE Band 38 - 20MHz QPSK – Full RB - Ant1)



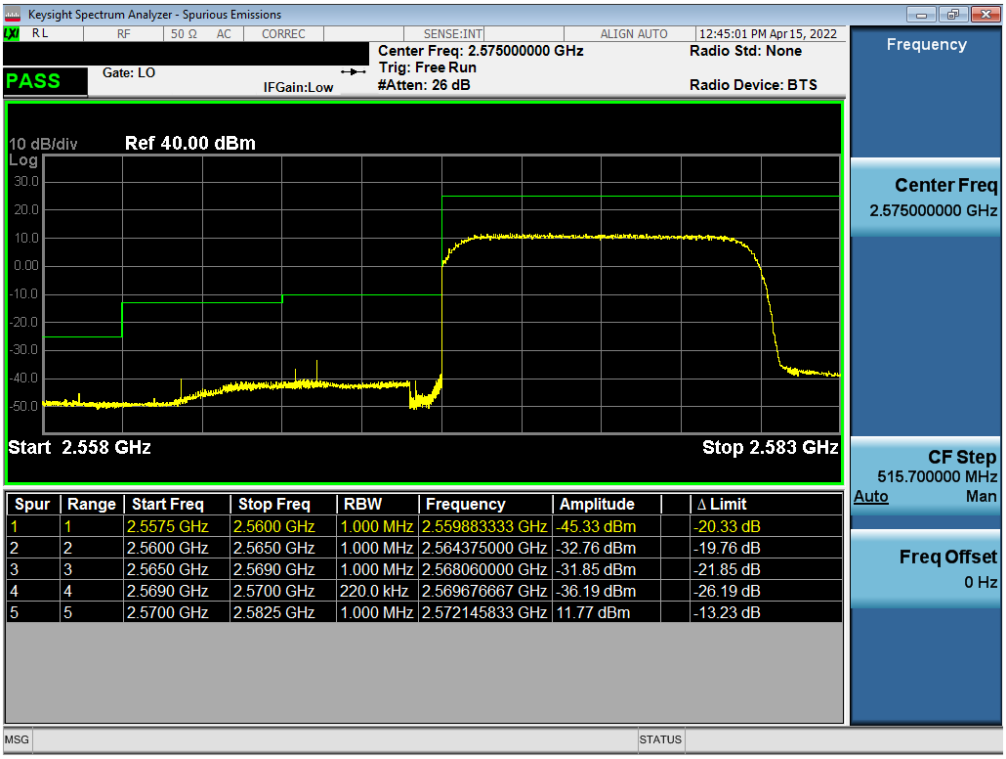
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5513 GHz	2.5550 GHz	1.000 MHz	2.554237500 GHz	-44.41 dBm	-19.41 dB
2	2	2.5550 GHz	2.5650 GHz	1.000 MHz	2.562100000 GHz	-41.63 dBm	-28.63 dB
3	3	2.5650 GHz	2.5690 GHz	1.000 MHz	2.567160000 GHz	-40.58 dBm	-30.58 dB
4	4	2.5690 GHz	2.5700 GHz	220.0 kHz	2.570000000 GHz	-36.58 dBm	-26.58 dB
5	5	2.5700 GHz	2.5888 GHz	1.000 MHz	2.573031250 GHz	10.51 dBm	-14.49 dB

Plot 7-202. Lower ACP Plot (LTE Band 38 - 15MHz QPSK – Full RB - Ant1)



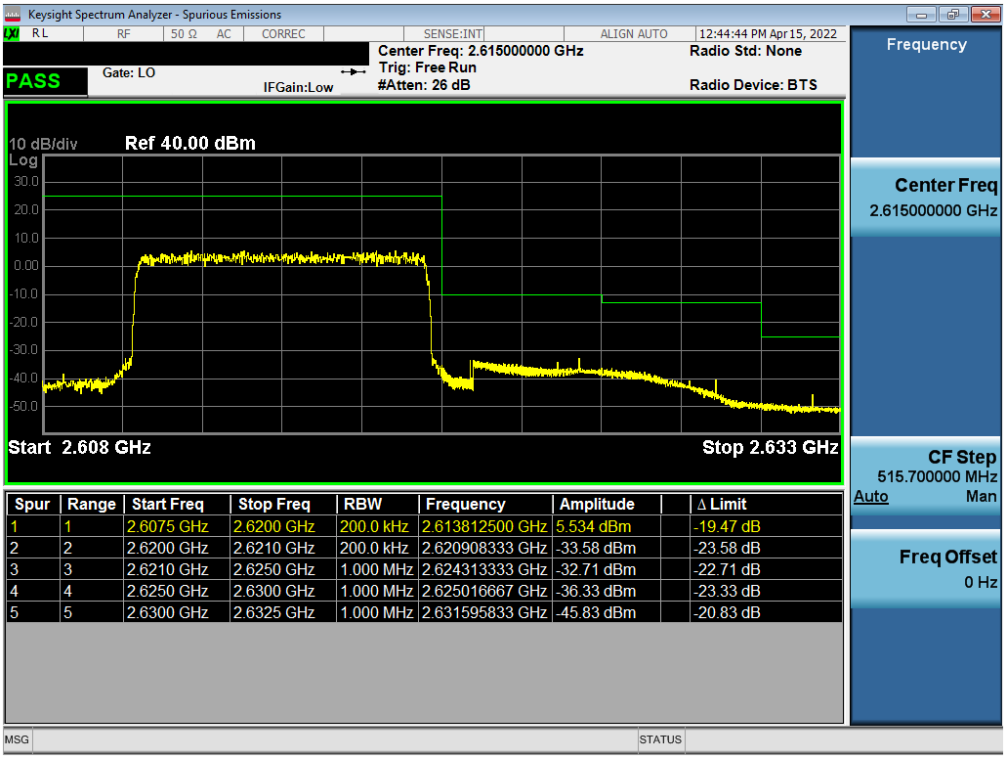
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.6013 GHz	2.6200 GHz	300.0 kHz	2.606281250 GHz	5.787 dBm	-19.21 dB
2	2	2.6200 GHz	2.6210 GHz	300.0 kHz	2.620030000 GHz	-34.60 dBm	-24.60 dB
3	3	2.6210 GHz	2.6250 GHz	1.000 MHz	2.622200000 GHz	-34.88 dBm	-24.88 dB
4	4	2.6250 GHz	2.6350 GHz	1.000 MHz	2.627283333 GHz	-36.02 dBm	-23.02 dB
5	5	2.6350 GHz	2.6388 GHz	1.000 MHz	2.635562500 GHz	-44.70 dBm	-19.70 dB

Plot 7-203. Upper ACP Plot (LTE Band 38 - 15MHz QPSK – Full RB - Ant1)



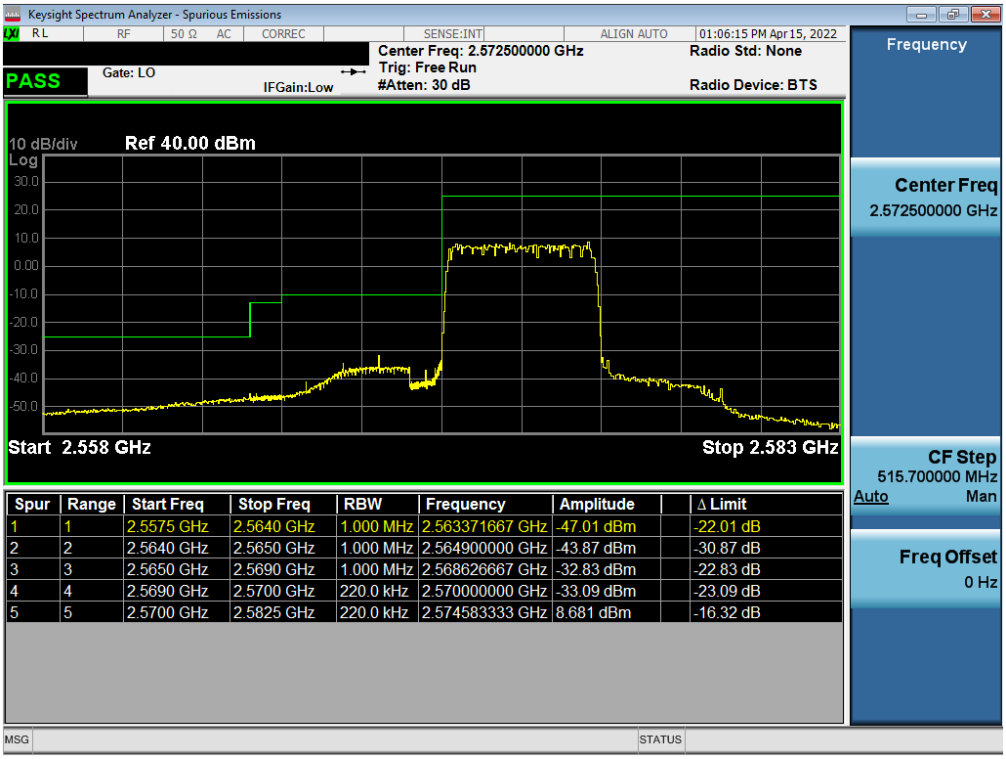
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5575 GHz	2.5600 GHz	1.000 MHz	2.559883333 GHz	-45.33 dBm	-20.33 dB
2	2	2.5600 GHz	2.5650 GHz	1.000 MHz	2.564375000 GHz	-32.76 dBm	-19.76 dB
3	3	2.5650 GHz	2.5690 GHz	1.000 MHz	2.568060000 GHz	-31.85 dBm	-21.85 dB
4	4	2.5690 GHz	2.5700 GHz	220.0 kHz	2.569676667 GHz	-36.19 dBm	-26.19 dB
5	5	2.5700 GHz	2.5825 GHz	1.000 MHz	2.572145833 GHz	11.77 dBm	-13.23 dB

Plot 7-204. Lower ACP Plot (LTE Band 38 - 10MHz QPSK – Full RB - Ant1)



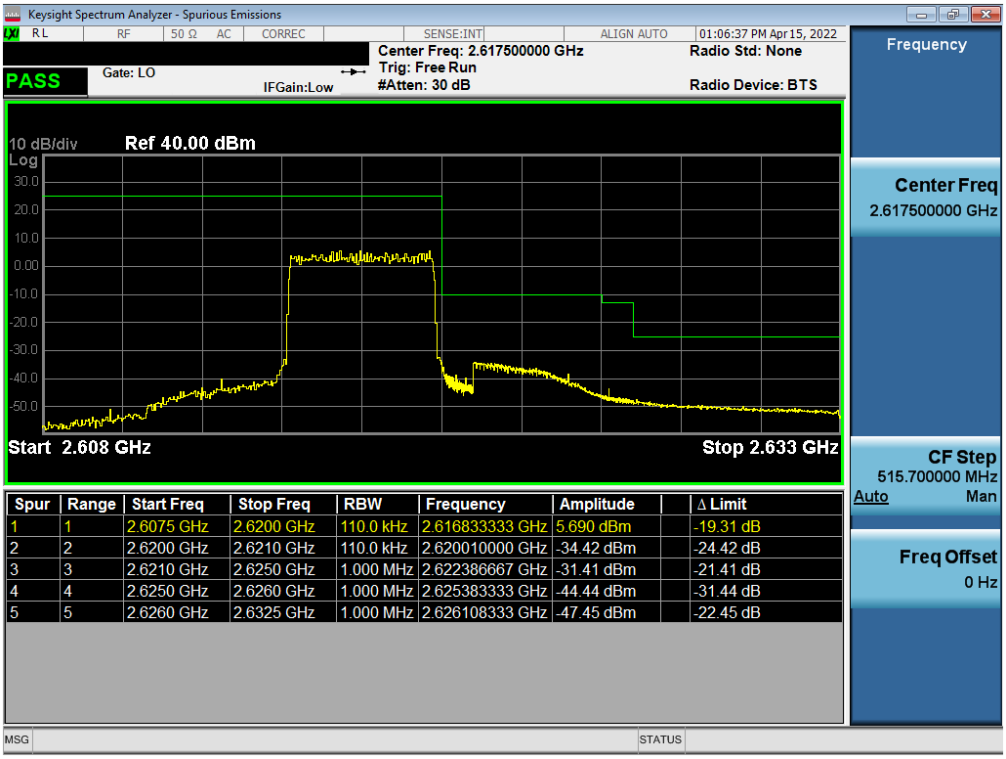
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.6075 GHz	2.6200 GHz	200.0 kHz	2.613812500 GHz	5.534 dBm	-19.47 dB
2	2	2.6200 GHz	2.6210 GHz	200.0 kHz	2.620908333 GHz	-33.58 dBm	-23.58 dB
3	3	2.6210 GHz	2.6250 GHz	1.000 MHz	2.624313333 GHz	-32.71 dBm	-22.71 dB
4	4	2.6250 GHz	2.6300 GHz	1.000 MHz	2.625016667 GHz	-36.33 dBm	-23.33 dB
5	5	2.6300 GHz	2.6325 GHz	1.000 MHz	2.631595833 GHz	-45.83 dBm	-20.83 dB

Plot 7-205. Upper ACP Plot (LTE Band 38 - 10MHz QPSK – Full RB - Ant1)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5575 GHz	2.5640 GHz	1.000 MHz	2.563371667 GHz	-47.01 dBm	-22.01 dB
2	2	2.5640 GHz	2.5650 GHz	1.000 MHz	2.564900000 GHz	-43.87 dBm	-30.87 dB
3	3	2.5650 GHz	2.5690 GHz	1.000 MHz	2.568626667 GHz	-32.83 dBm	-22.83 dB
4	4	2.5690 GHz	2.5700 GHz	220.0 kHz	2.570000000 GHz	-33.09 dBm	-23.09 dB
5	5	2.5700 GHz	2.5825 GHz	220.0 kHz	2.574583333 GHz	8.681 dBm	-16.32 dB

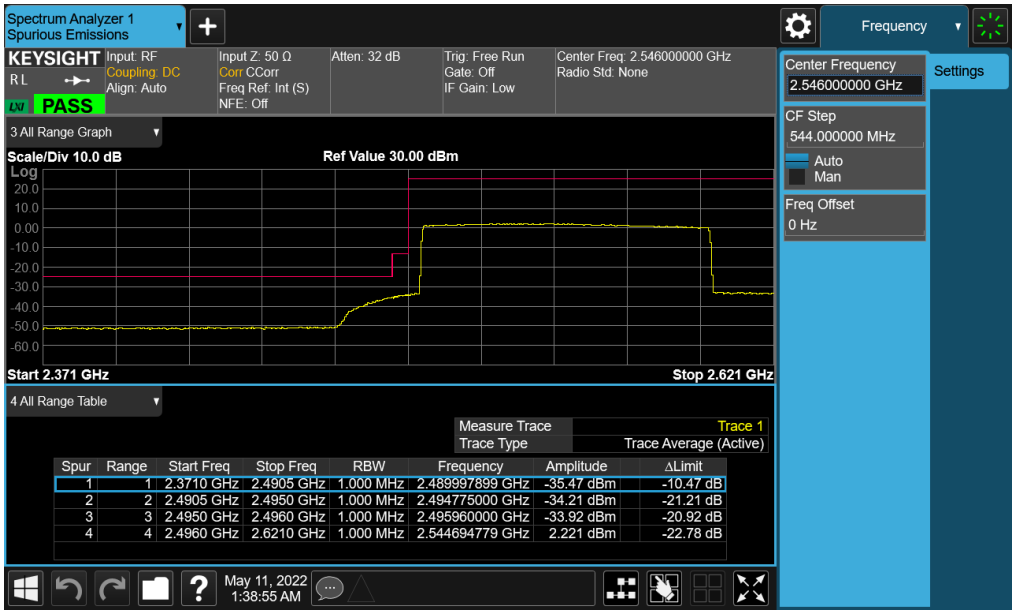
Plot 7-206. Lower ACP Plot (LTE Band 38 - 5MHz QPSK – Full RB - Ant1)



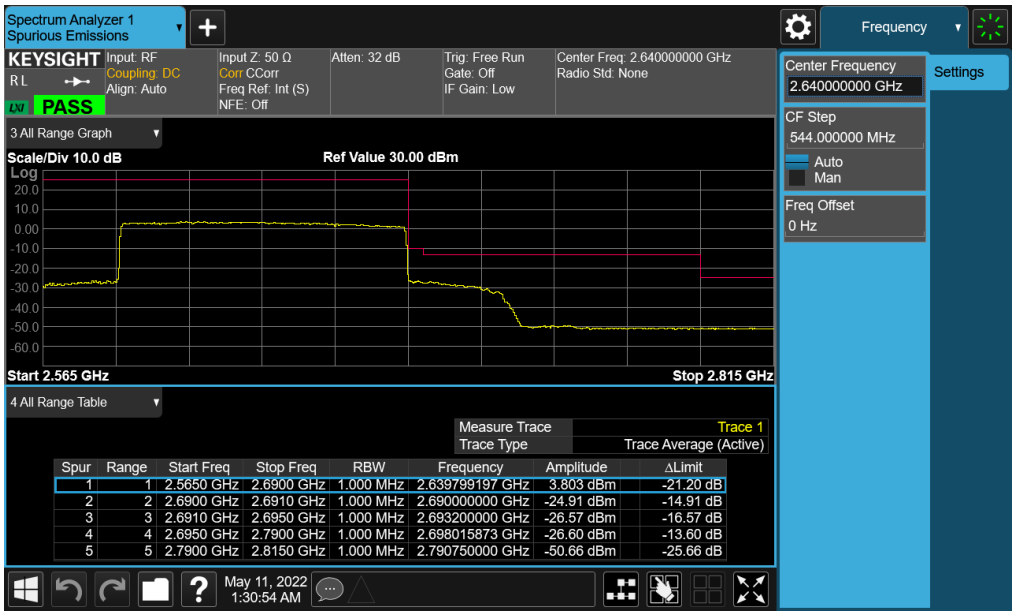
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.6075 GHz	2.6200 GHz	110.0 kHz	2.616833333 GHz	5.690 dBm	-19.31 dB
2	2	2.6200 GHz	2.6210 GHz	110.0 kHz	2.620010000 GHz	-34.42 dBm	-24.42 dB
3	3	2.6210 GHz	2.6250 GHz	1.000 MHz	2.622386667 GHz	-31.41 dBm	-21.41 dB
4	4	2.6250 GHz	2.6260 GHz	1.000 MHz	2.625383333 GHz	-44.44 dBm	-31.44 dB
5	5	2.6260 GHz	2.6325 GHz	1.000 MHz	2.626108333 GHz	-47.45 dBm	-22.45 dB

Plot 7-207. Upper ACP Plot (LTE Band 38 - 5MHz QPSK – Full RB - Ant1)

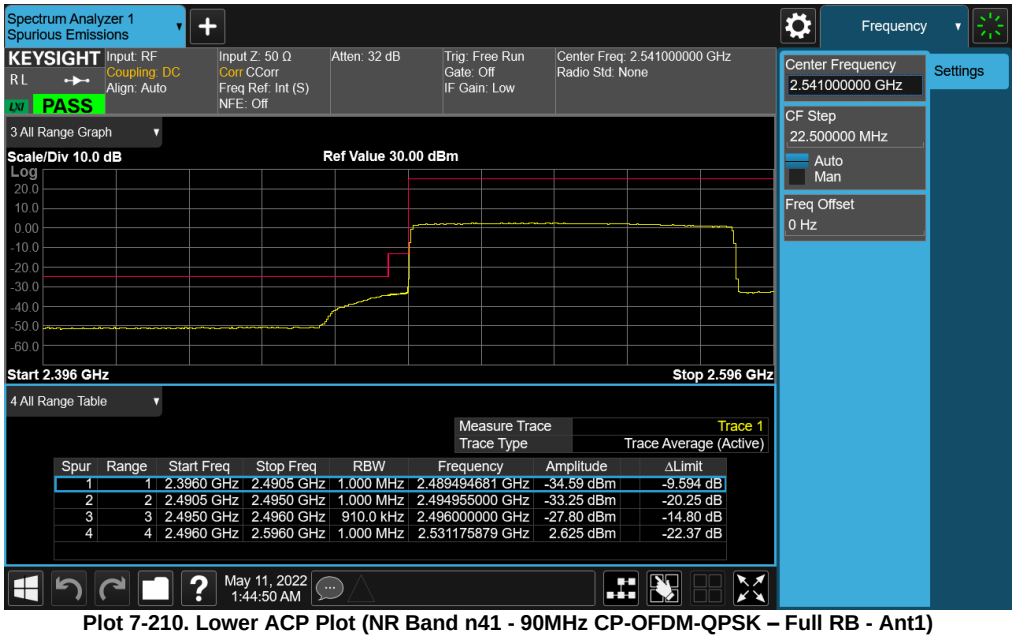
NR Band n41 – Ant1



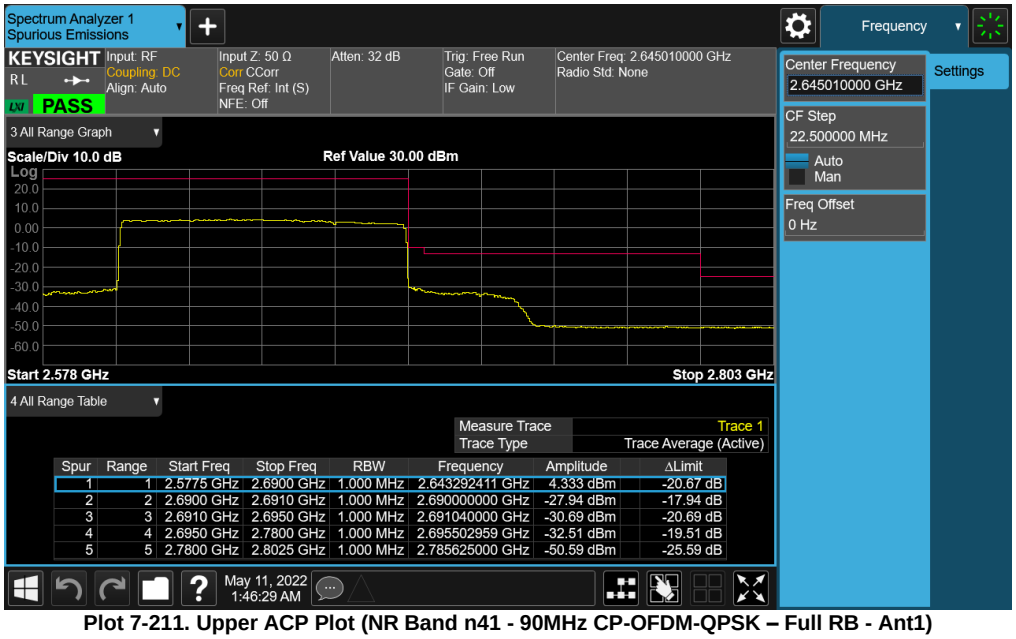
Plot 7-208. Lower ACP Plot (NR Band n41 - 100MHz CP-OFDM-QPSK – Full RB - Ant1)



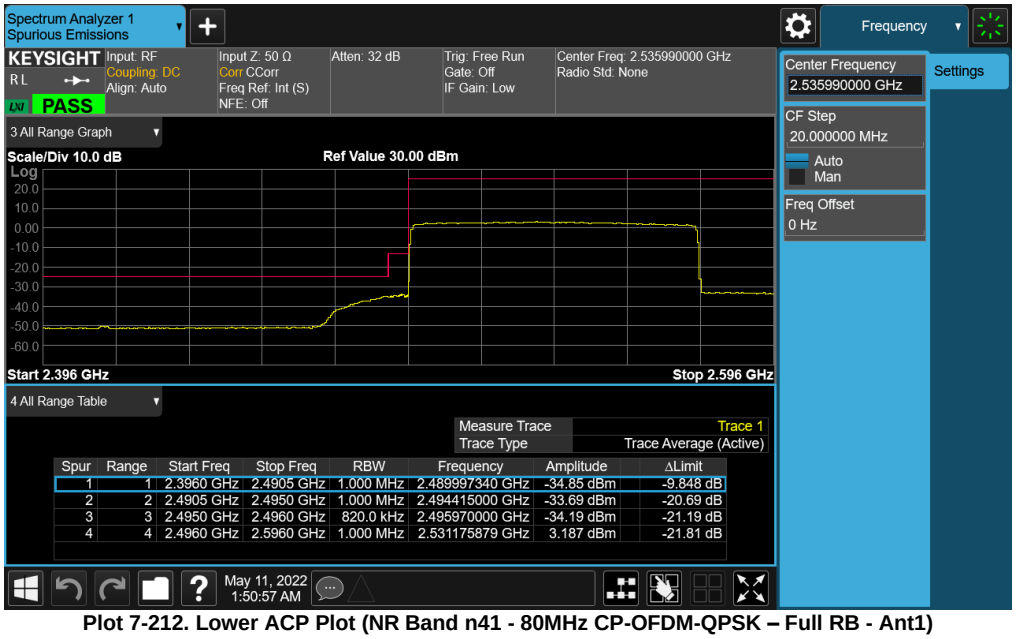
Plot 7-209. Upper ACP Plot (NR Band n41 - 100MHz CP-OFDM-QPSK – Full RB - Ant1)



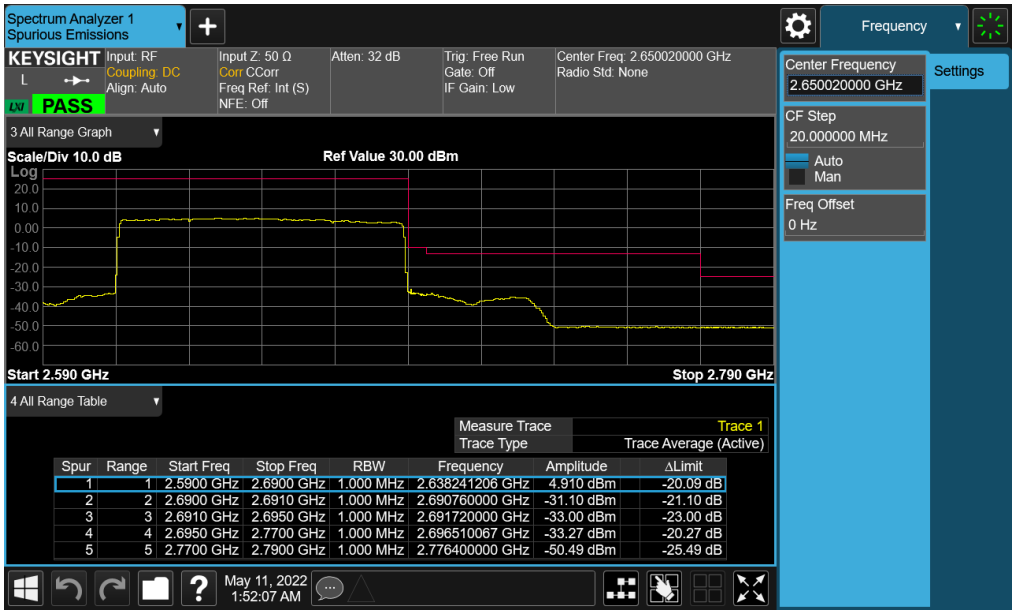
Plot 7-210. Lower ACP Plot (NR Band n41 - 90MHz CP-OFDM-QPSK – Full RB - Ant1)



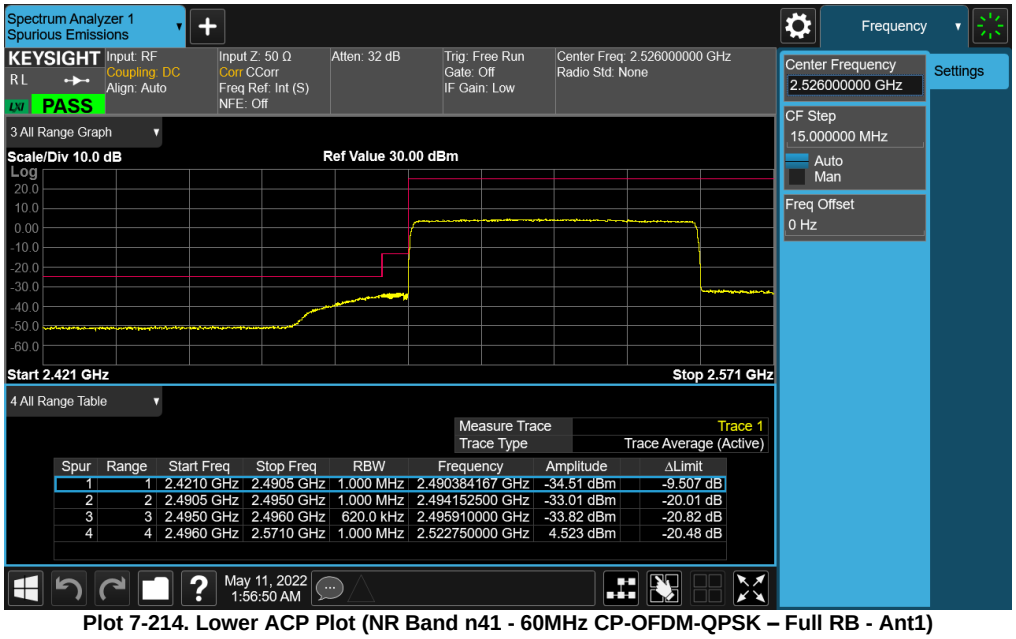
Plot 7-211. Upper ACP Plot (NR Band n41 - 90MHz CP-OFDM-QPSK – Full RB - Ant1)



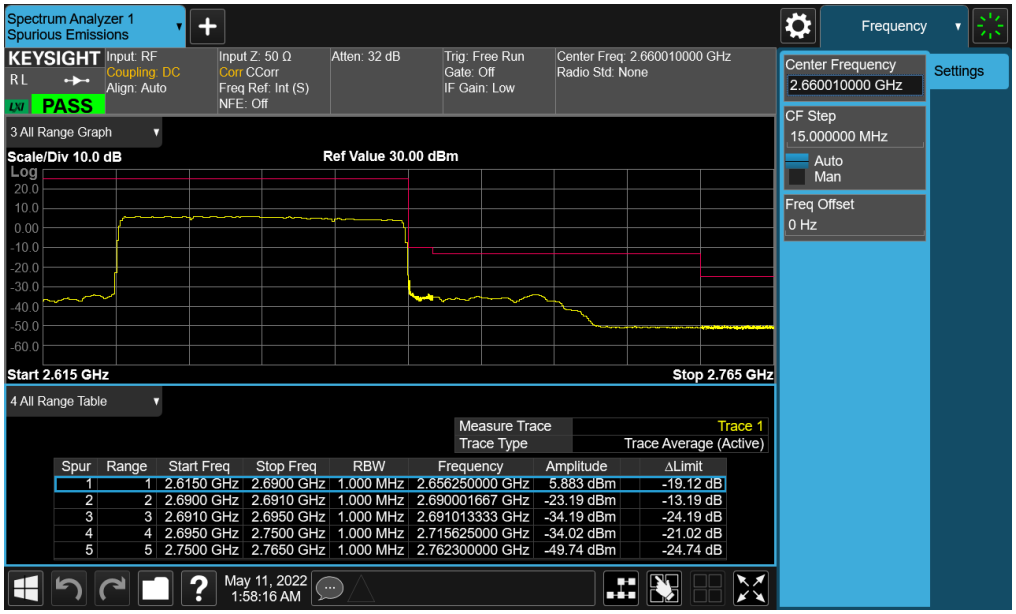
Plot 7-212. Lower ACP Plot (NR Band n41 - 80MHz CP-OFDM-QPSK – Full RB - Ant1)



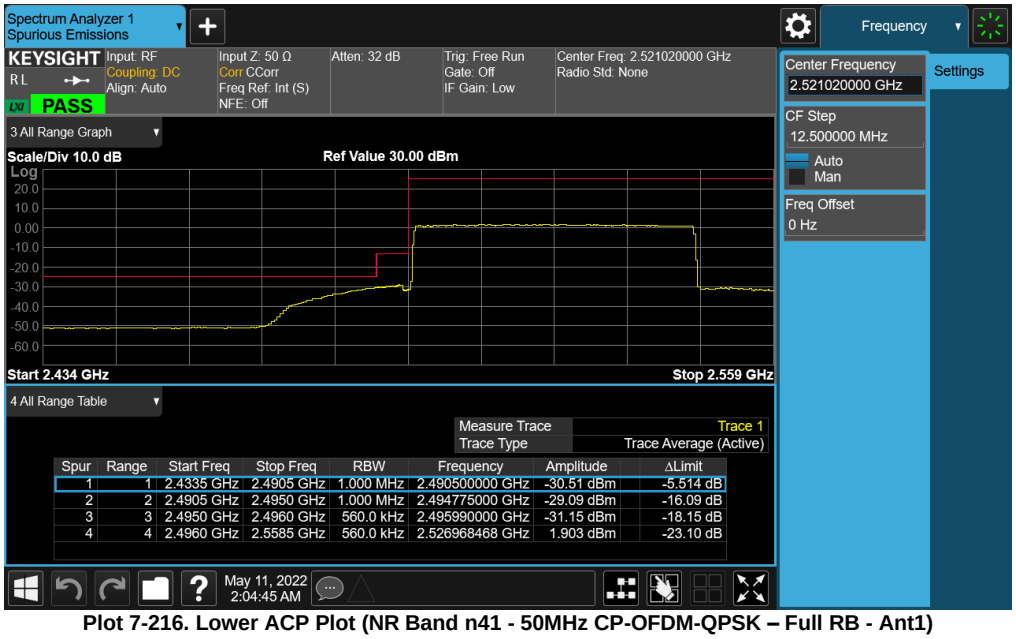
Plot 7-213. Upper ACP Plot (NR Band n41 - 80MHz CP-OFDM-QPSK – Full RB - Ant1)



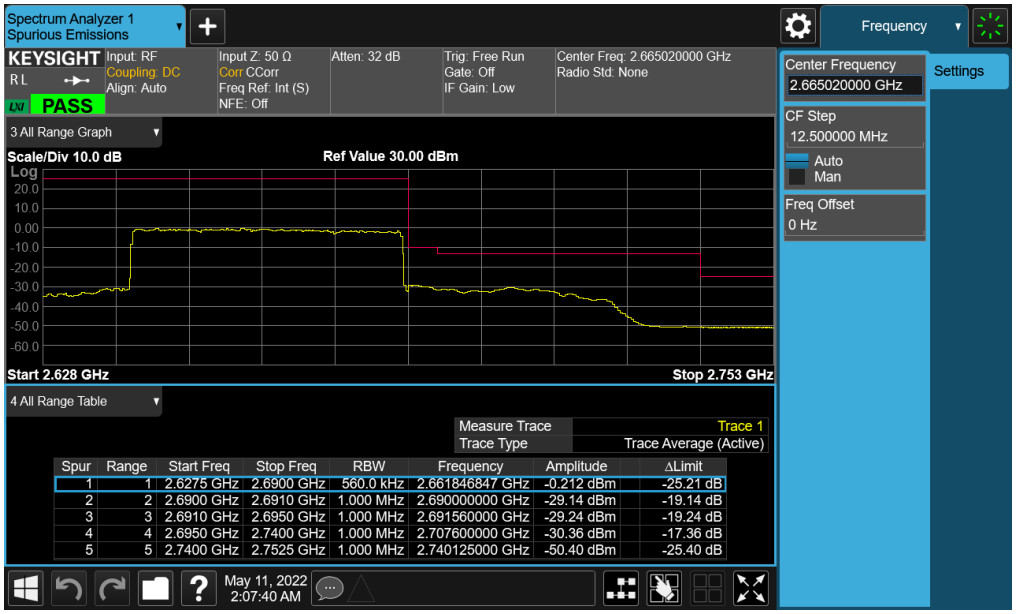
Plot 7-214. Lower ACP Plot (NR Band n41 - 60MHz CP-OFDM-QPSK – Full RB - Ant1)



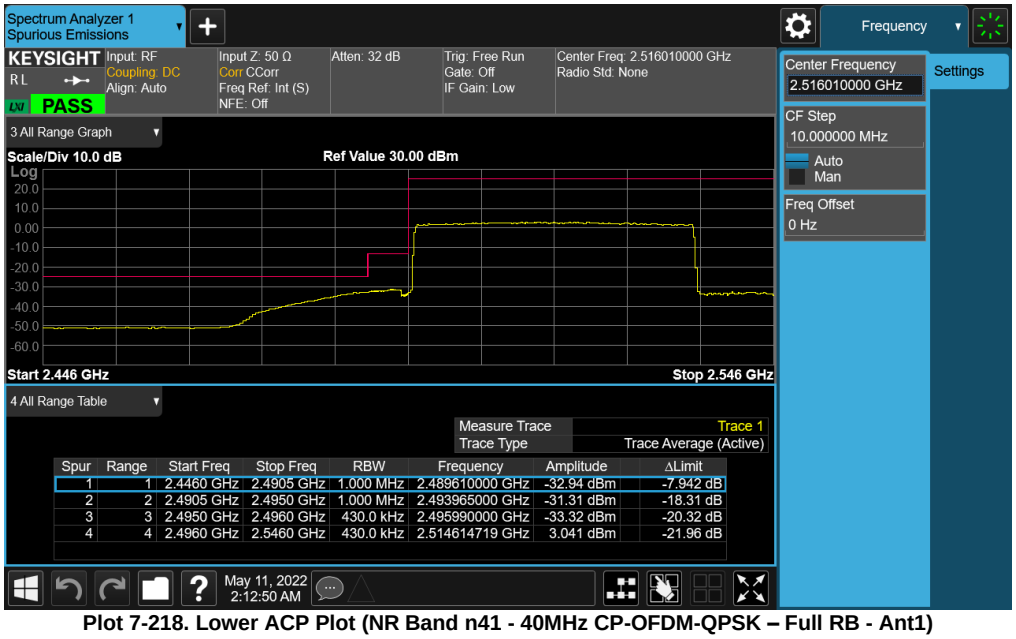
Plot 7-215. Upper ACP Plot (NR Band n41 - 60MHz CP-OFDM-QPSK – Full RB - Ant1)



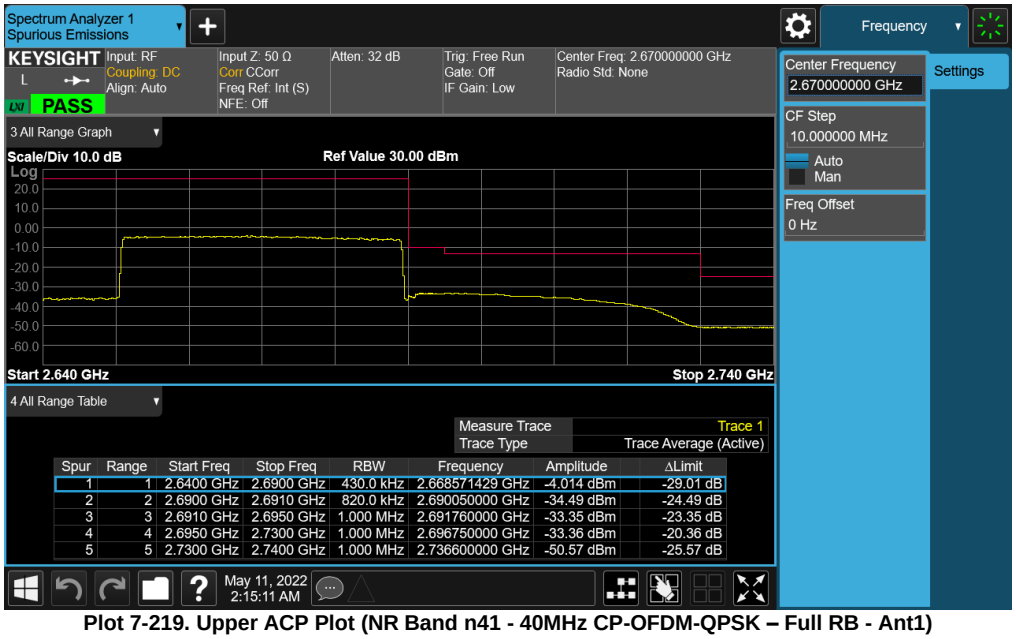
Plot 7-216. Lower ACP Plot (NR Band n41 - 50MHz CP-OFDM-QPSK – Full RB - Ant1)



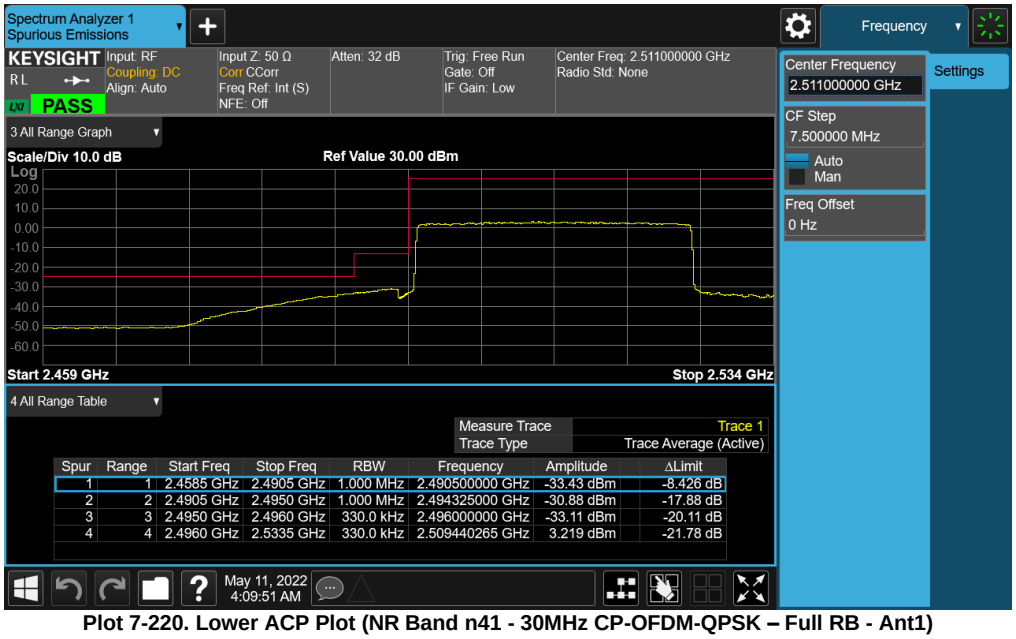
Plot 7-217. Upper ACP Plot (NR Band n41 - 50MHz CP-OFDM-QPSK – Full RB - Ant1)



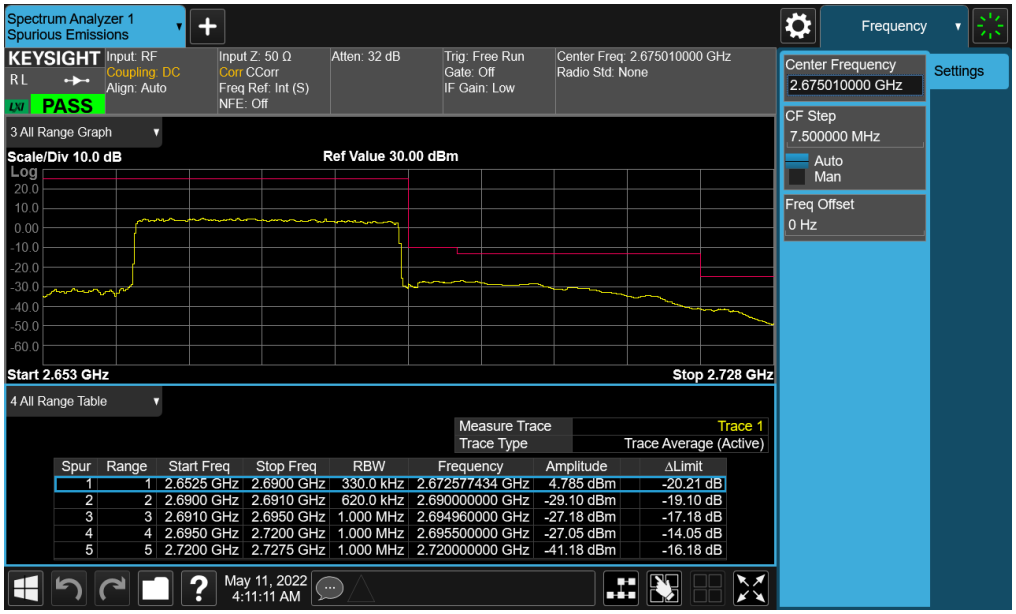
Plot 7-218. Lower ACP Plot (NR Band n41 - 40MHz CP-OFDM-QPSK – Full RB - Ant1)



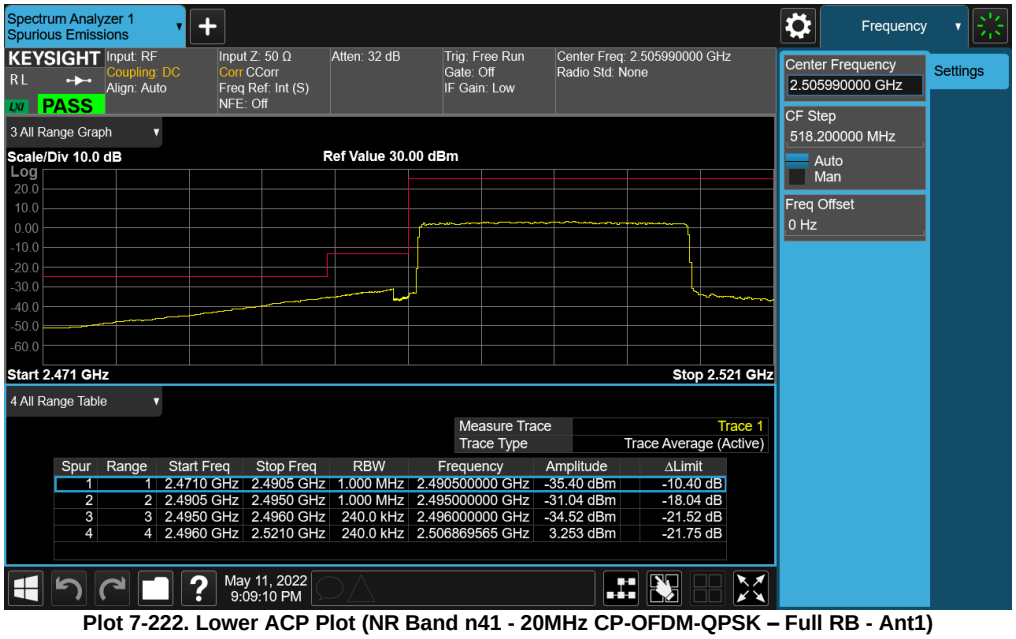
Plot 7-219. Upper ACP Plot (NR Band n41 - 40MHz CP-OFDM-QPSK – Full RB - Ant1)



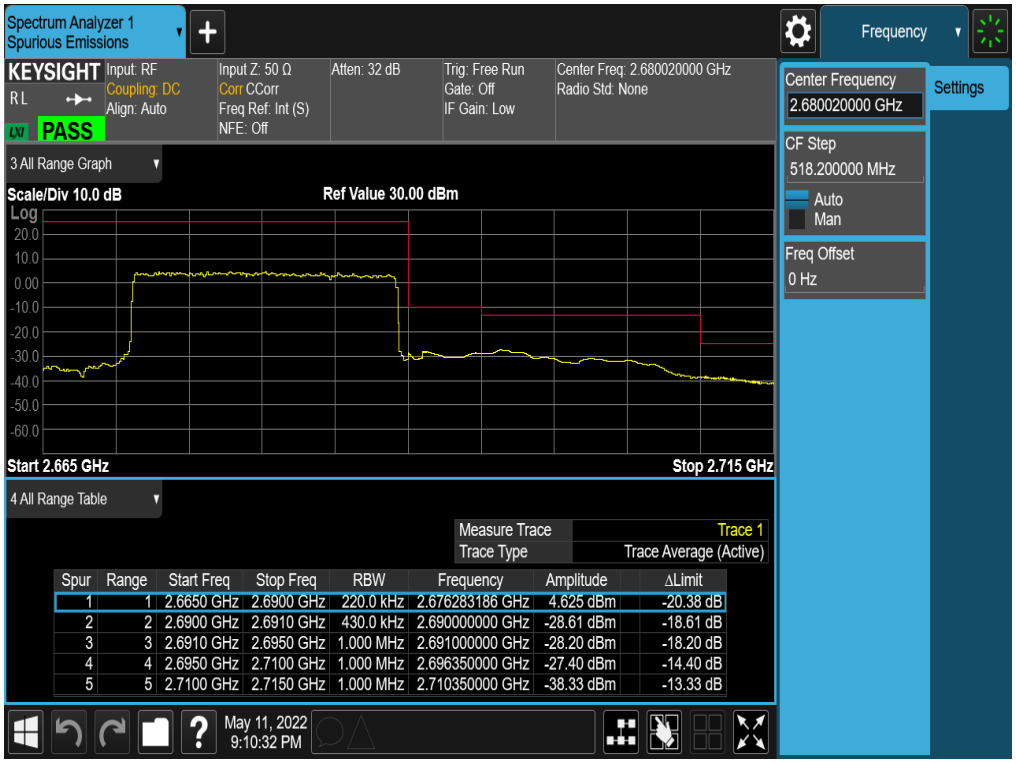
Plot 7-220. Lower ACP Plot (NR Band n41 - 30MHz CP-OFDM-QPSK – Full RB - Ant1)



Plot 7-221. Upper ACP Plot (NR Band n41 - 30MHz CP-OFDM-QPSK – Full RB - Ant1)

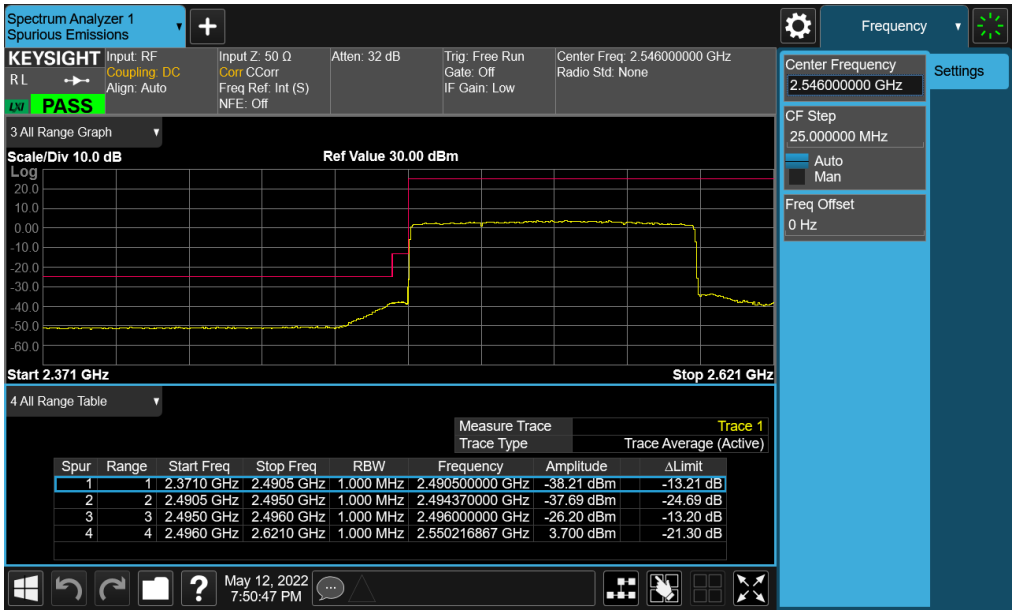


Plot 7-222. Lower ACP Plot (NR Band n41 - 20MHz CP-OFDM-QPSK – Full RB - Ant1)

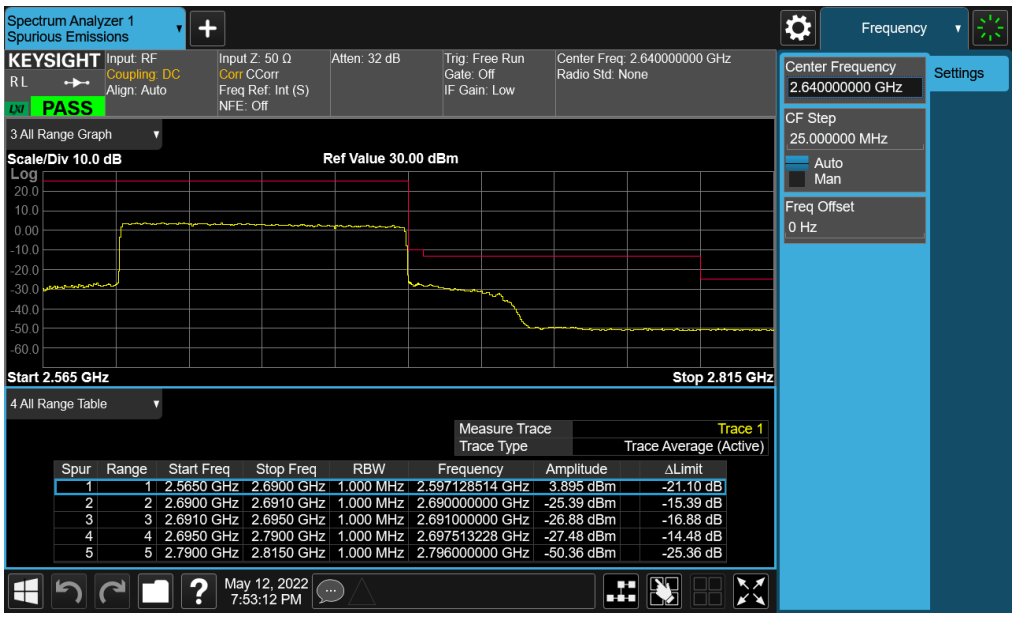


Plot 7-223. Upper ACP Plot (NR Band n41 - 20MHz CP-OFDM-QPSK – Full RB - Ant1)

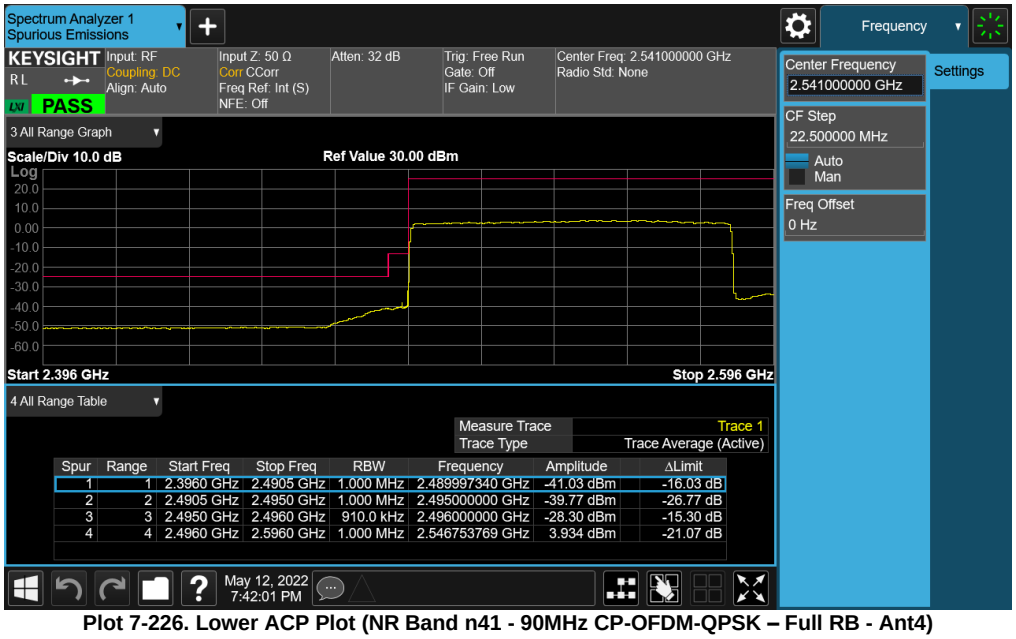
NR Band n41 – Ant4



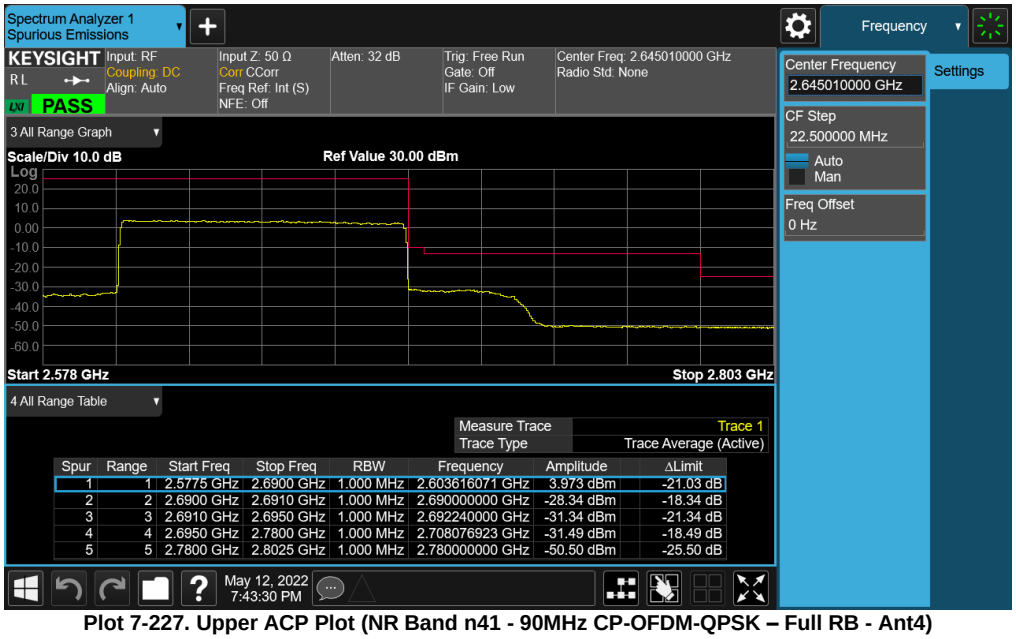
Plot 7-224. Lower ACP Plot (NR Band n41 - 100MHz CP-OFDM-QPSK – Full RB - Ant4)



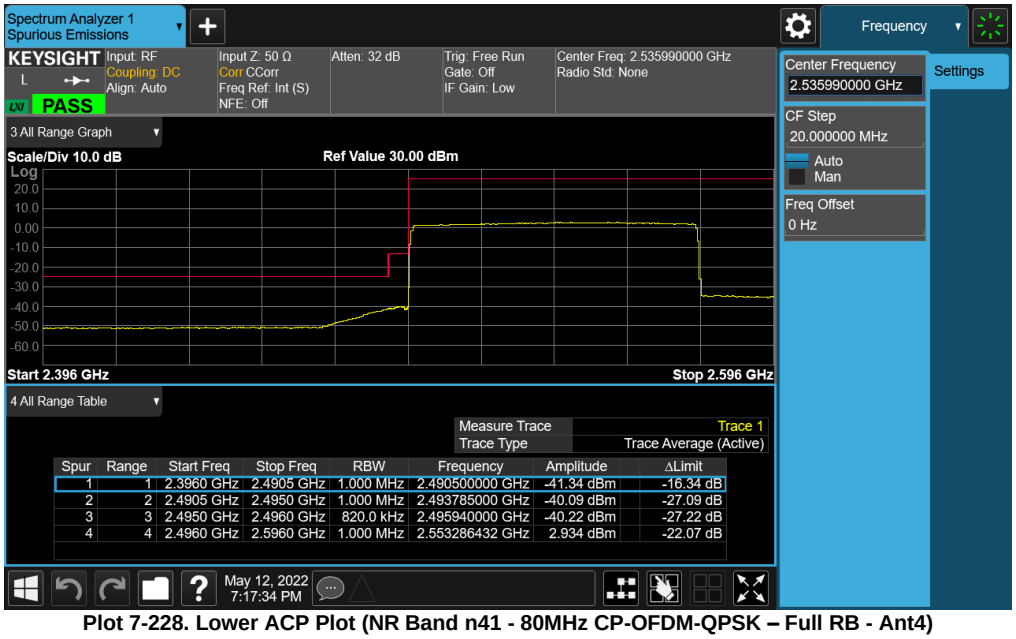
Plot 7-225. Upper ACP Plot (NR Band n41 - 100MHz CP-OFDM-QPSK – Full RB - Ant4)



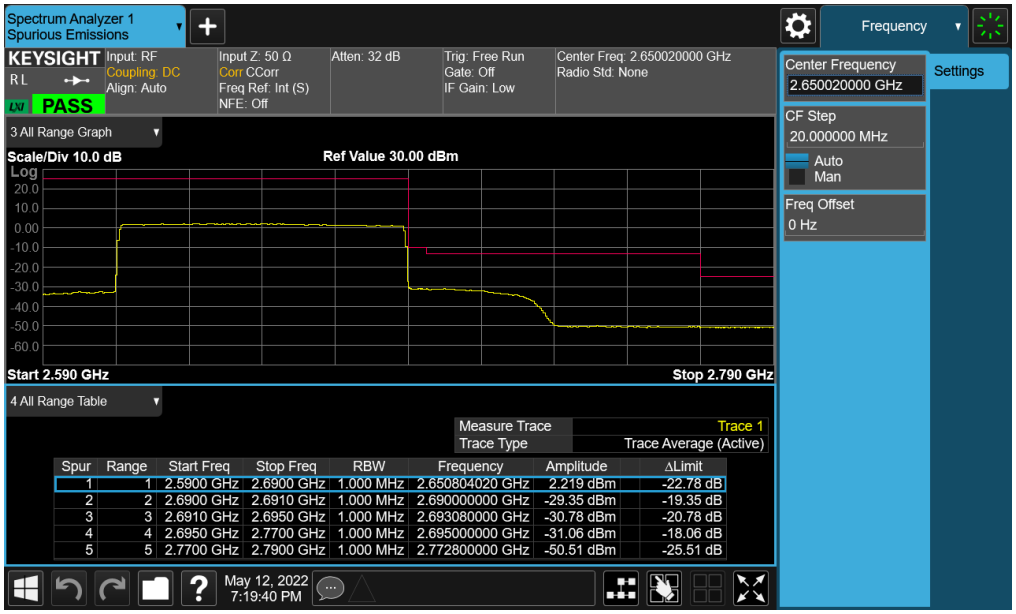
Plot 7-226. Lower ACP Plot (NR Band n41 - 90MHz CP-OFDM-QPSK – Full RB - Ant4)



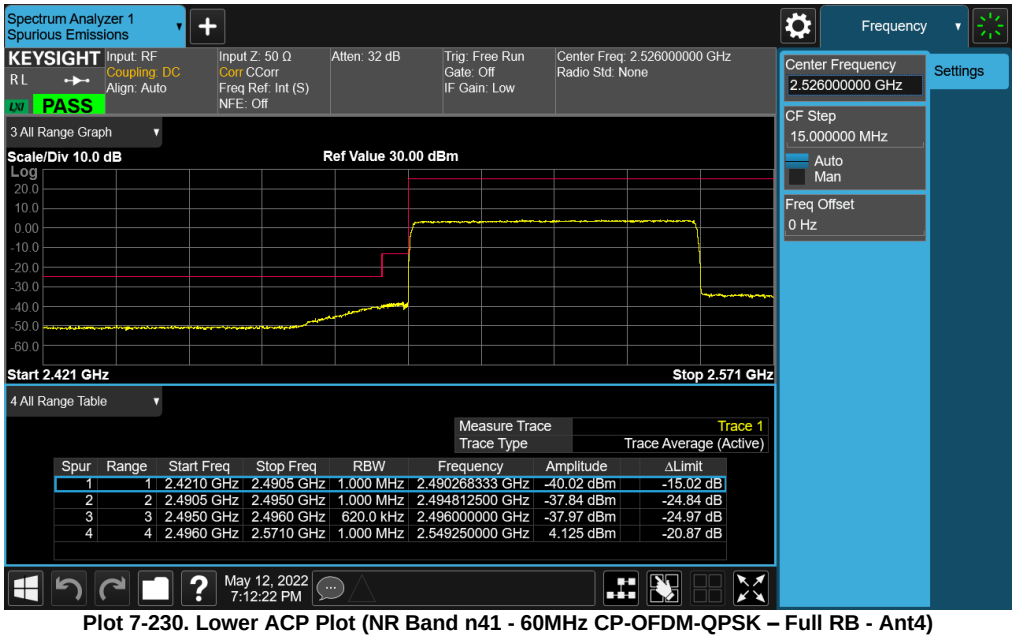
Plot 7-227. Upper ACP Plot (NR Band n41 - 90MHz CP-OFDM-QPSK – Full RB - Ant4)



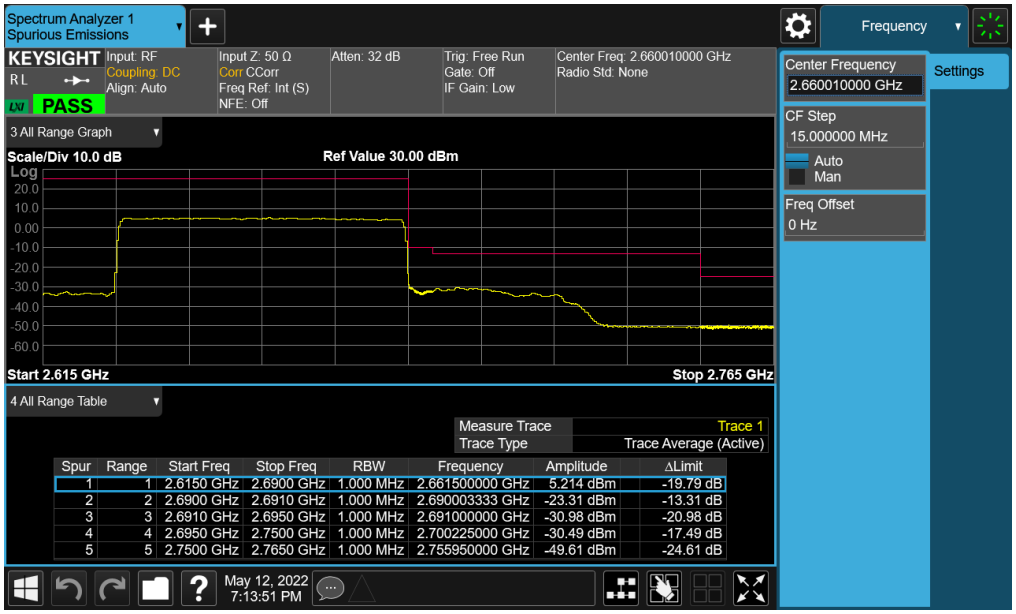
Plot 7-228. Lower ACP Plot (NR Band n41 - 80MHz CP-OFDM-QPSK – Full RB - Ant4)



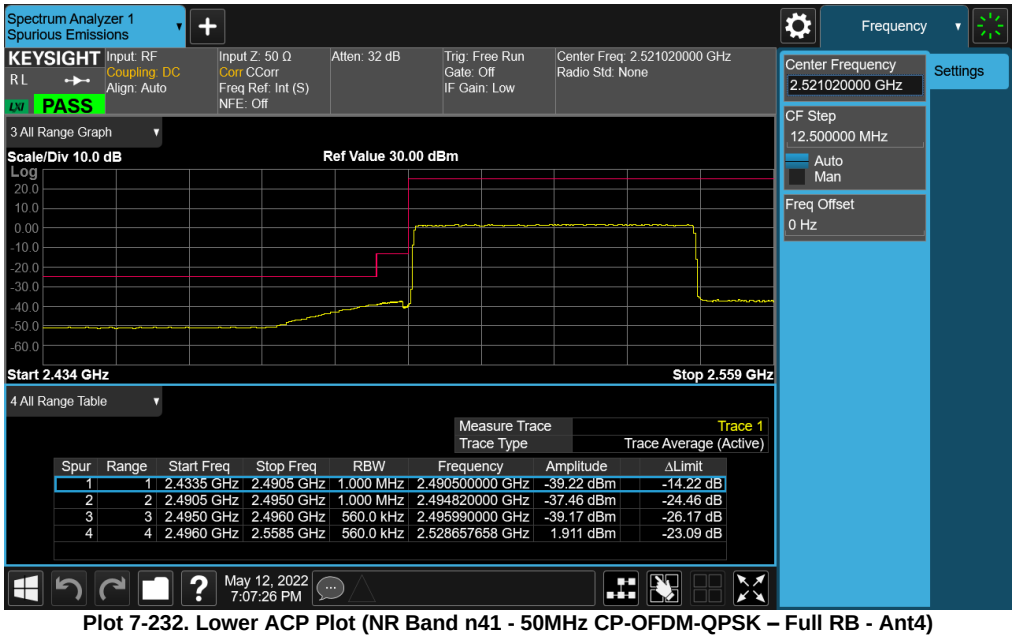
Plot 7-229. Upper ACP Plot (NR Band n41 - 80MHz CP-OFDM-QPSK – Full RB - Ant4)



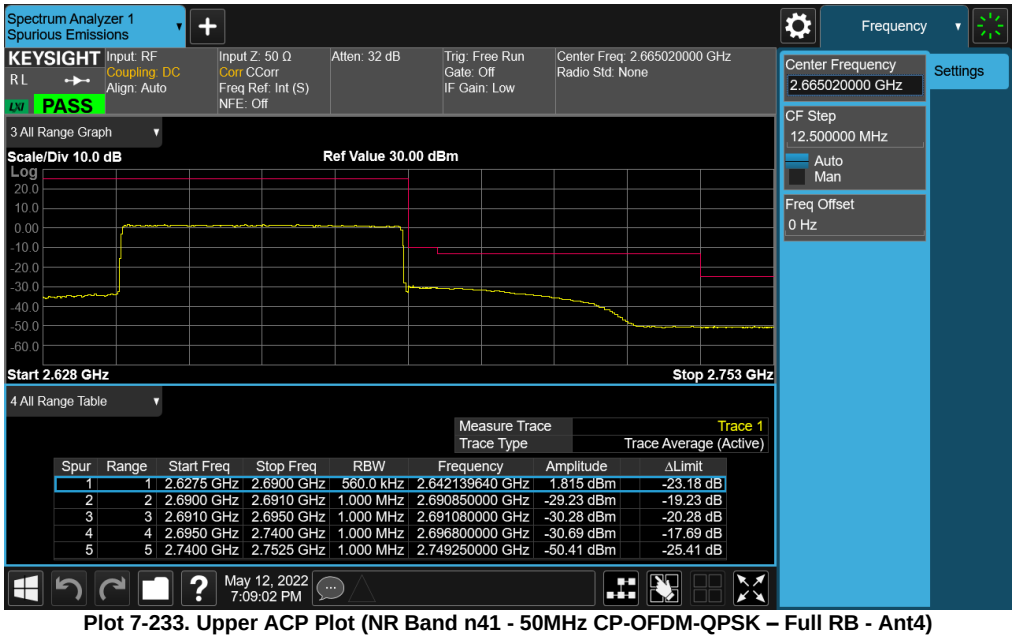
Plot 7-230. Lower ACP Plot (NR Band n41 - 60MHz CP-OFDM-QPSK – Full RB - Ant4)



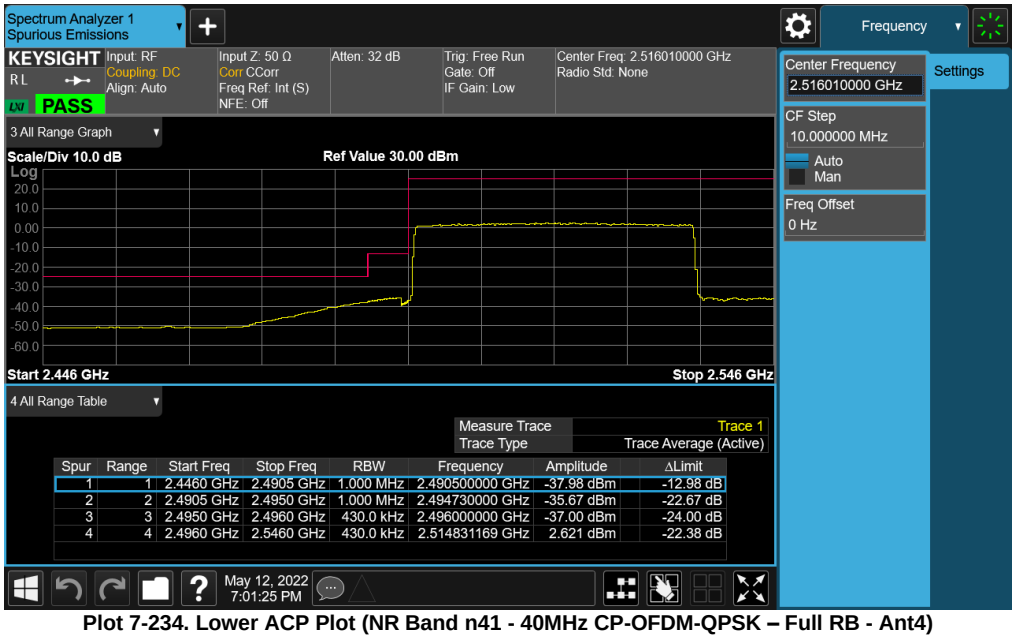
Plot 7-231. Upper ACP Plot (NR Band n41 - 60MHz CP-OFDM-QPSK – Full RB - Ant4)



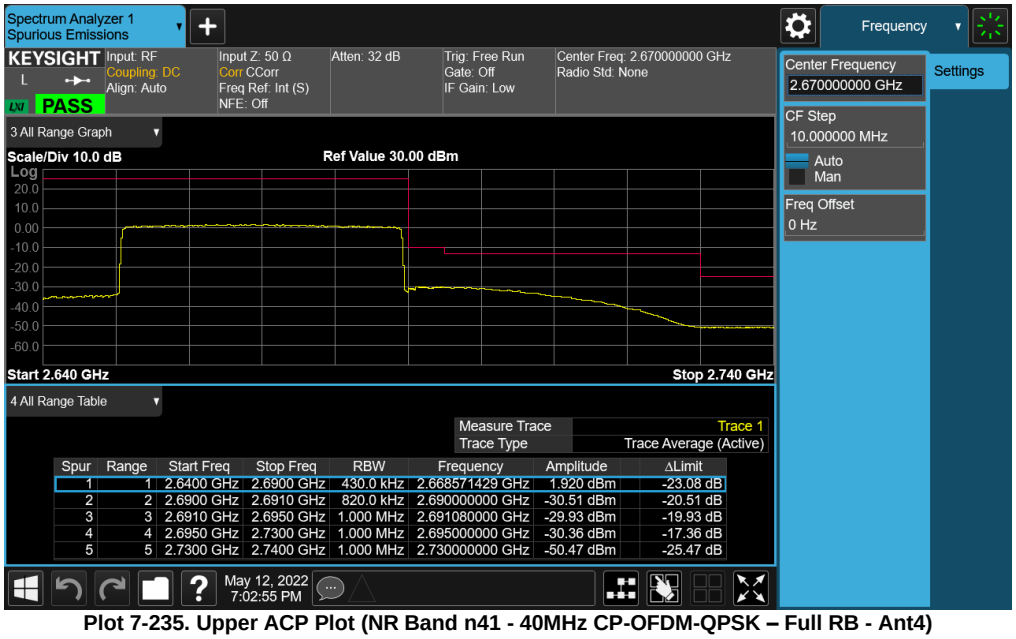
Plot 7-232. Lower ACP Plot (NR Band n41 - 50MHz CP-OFDM-QPSK – Full RB - Ant4)



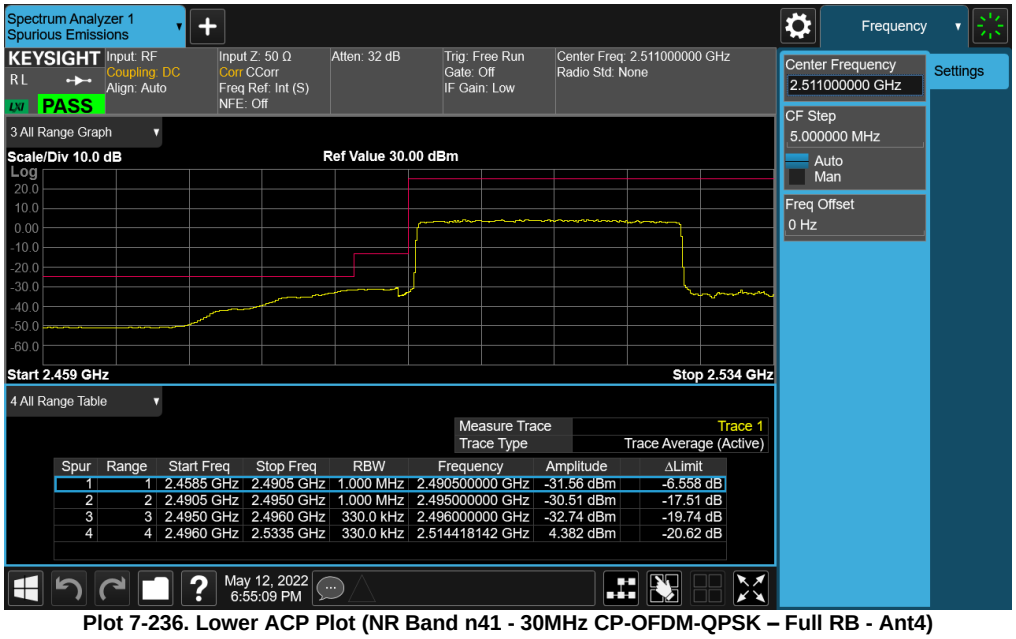
Plot 7-233. Upper ACP Plot (NR Band n41 - 50MHz CP-OFDM-QPSK – Full RB - Ant4)



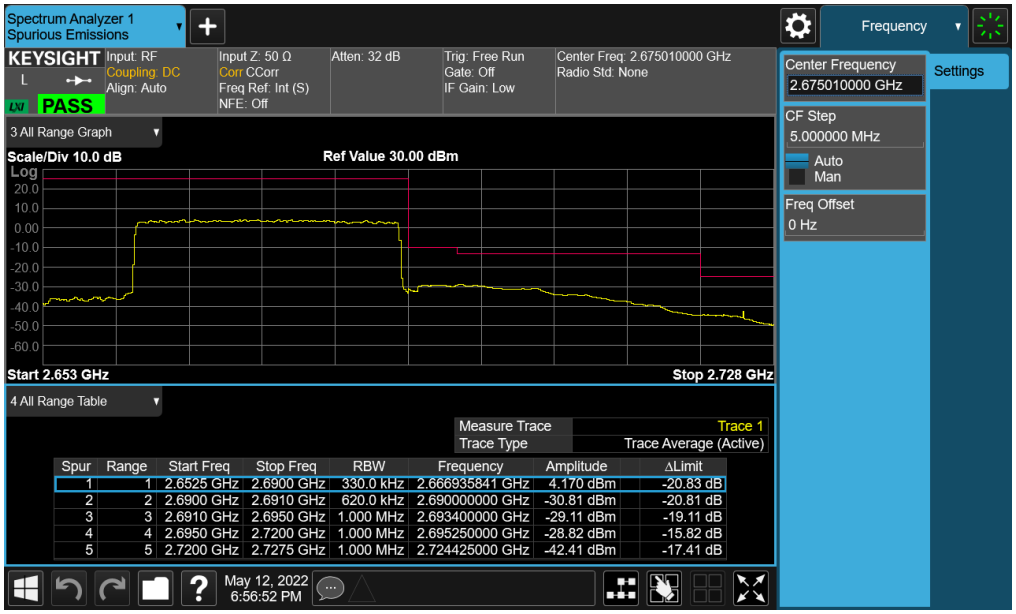
Plot 7-234. Lower ACP Plot (NR Band n41 - 40MHz CP-OFDM-QPSK – Full RB - Ant4)



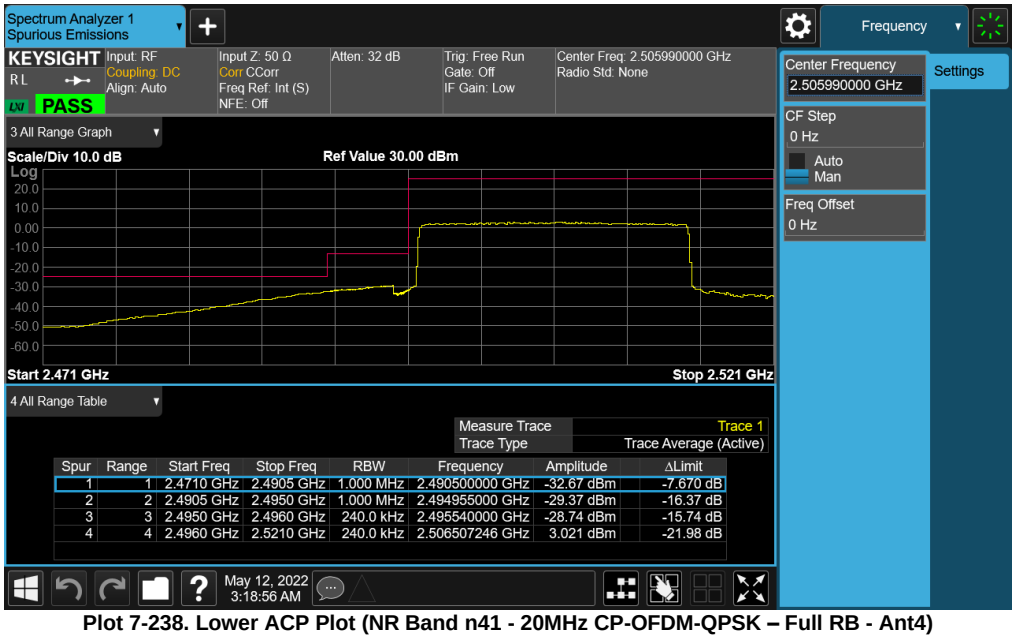
Plot 7-235. Upper ACP Plot (NR Band n41 - 40MHz CP-OFDM-QPSK – Full RB - Ant4)



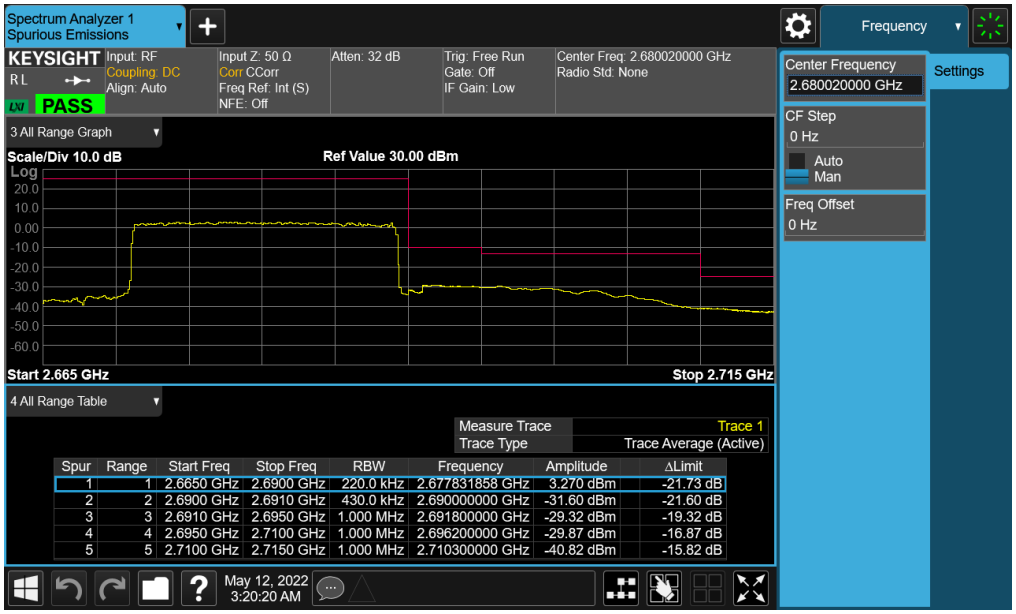
Plot 7-236. Lower ACP Plot (NR Band n41 - 30MHz CP-OFDM-QPSK – Full RB - Ant4)



Plot 7-237. Upper ACP Plot (NR Band n41 - 30MHz CP-OFDM-QPSK – Full RB - Ant4)

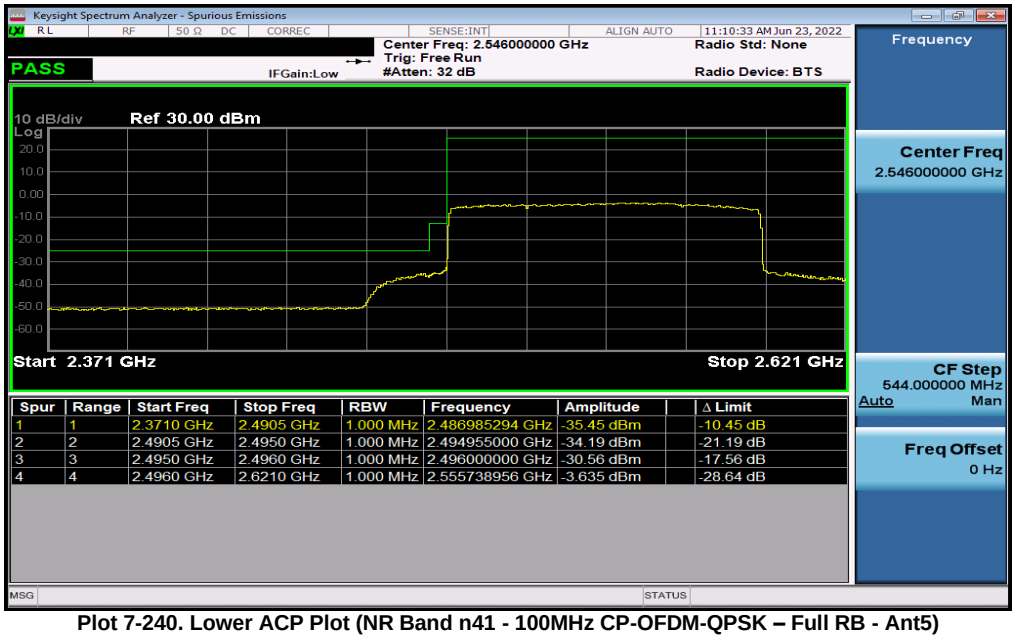


Plot 7-238. Lower ACP Plot (NR Band n41 - 20MHz CP-OFDM-QPSK – Full RB - Ant4)



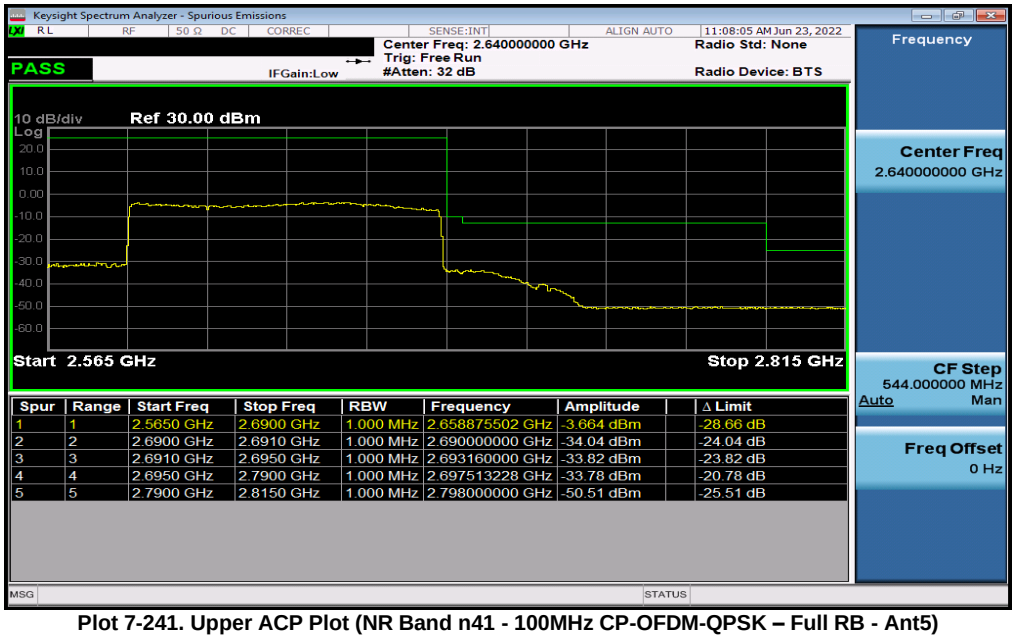
Plot 7-239. Upper ACP Plot (NR Band n41 - 20MHz CP-OFDM-QPSK – Full RB - Ant4)

NR Band n41 – Ant5



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.3710 GHz	2.4905 GHz	1.000 MHz	2.486985294 GHz	-35.45 dBm	-10.45 dB
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.494955000 GHz	-34.19 dBm	-21.19 dB
3	3	2.4950 GHz	2.4960 GHz	1.000 MHz	2.496000000 GHz	-30.56 dBm	-17.56 dB
4	4	2.4960 GHz	2.6210 GHz	1.000 MHz	2.555738956 GHz	-3.635 dBm	-28.64 dB

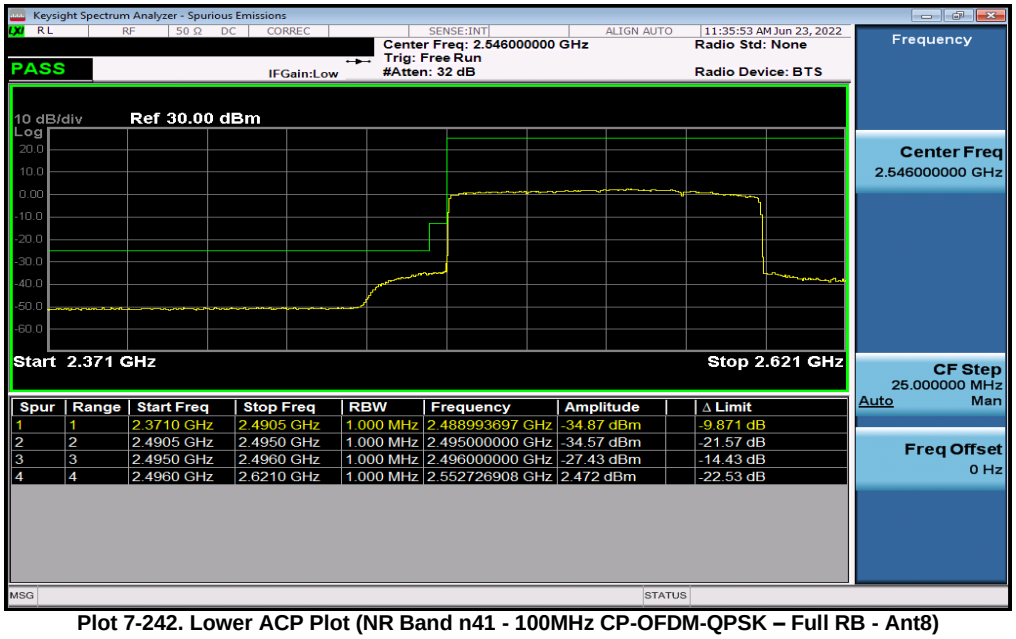
Plot 7-240. Lower ACP Plot (NR Band n41 - 100MHz CP-OFDM-QPSK – Full RB - Ant5)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5650 GHz	2.6900 GHz	1.000 MHz	2.658875502 GHz	-3.664 dBm	-28.66 dB
2	2	2.6900 GHz	2.6910 GHz	1.000 MHz	2.690000000 GHz	-34.04 dBm	-24.04 dB
3	3	2.6910 GHz	2.6950 GHz	1.000 MHz	2.693160000 GHz	-33.82 dBm	-23.82 dB
4	4	2.6950 GHz	2.7900 GHz	1.000 MHz	2.697513228 GHz	-33.78 dBm	-20.78 dB
5	5	2.7900 GHz	2.8150 GHz	1.000 MHz	2.798000000 GHz	-50.51 dBm	-25.51 dB

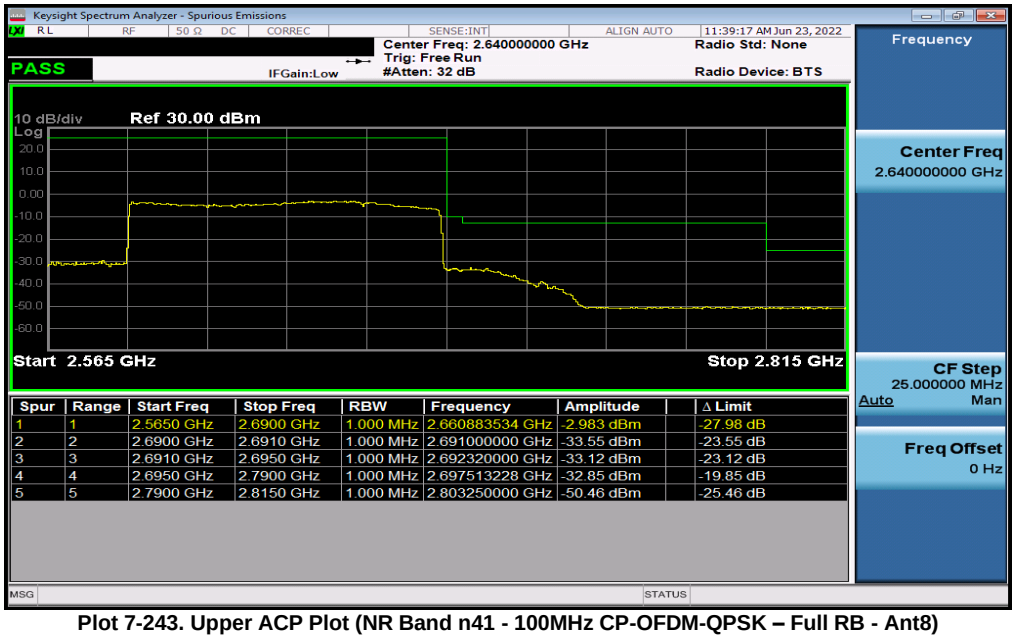
Plot 7-241. Upper ACP Plot (NR Band n41 - 100MHz CP-OFDM-QPSK – Full RB - Ant5)

NR Band n41 – Ant8



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.3710 GHz	2.4905 GHz	1.000 MHz	2.488993697 GHz	-34.87 dBm	-9.871 dB
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.495000000 GHz	-34.57 dBm	-21.57 dB
3	3	2.4950 GHz	2.4960 GHz	1.000 MHz	2.496000000 GHz	-27.43 dBm	-14.43 dB
4	4	2.4960 GHz	2.6210 GHz	1.000 MHz	2.552726908 GHz	2.472 dBm	-22.53 dB

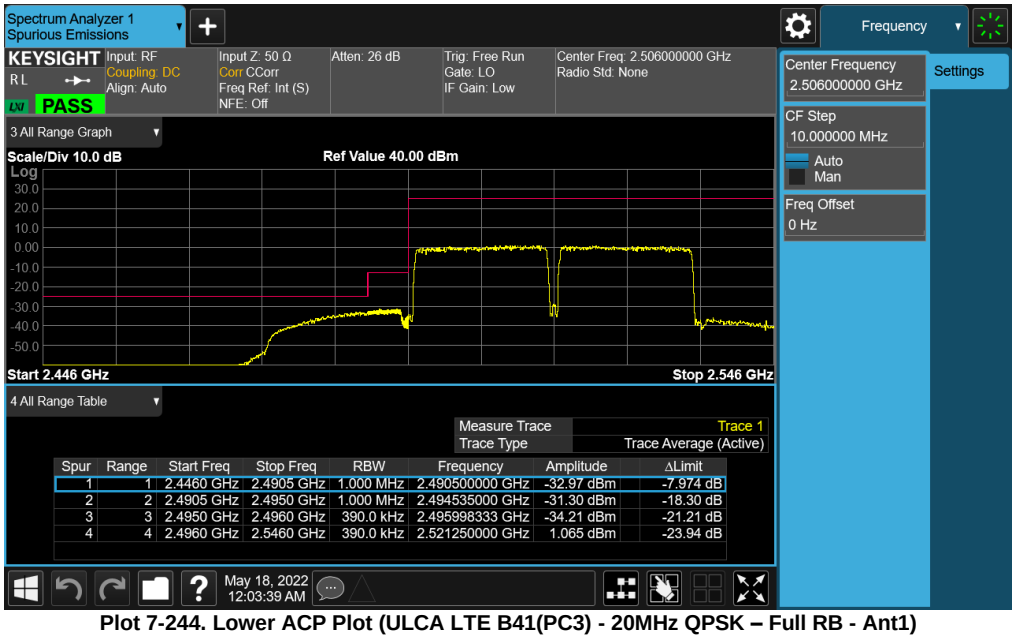
Plot 7-242. Lower ACP Plot (NR Band n41 - 100MHz CP-OFDM-QPSK – Full RB - Ant8)



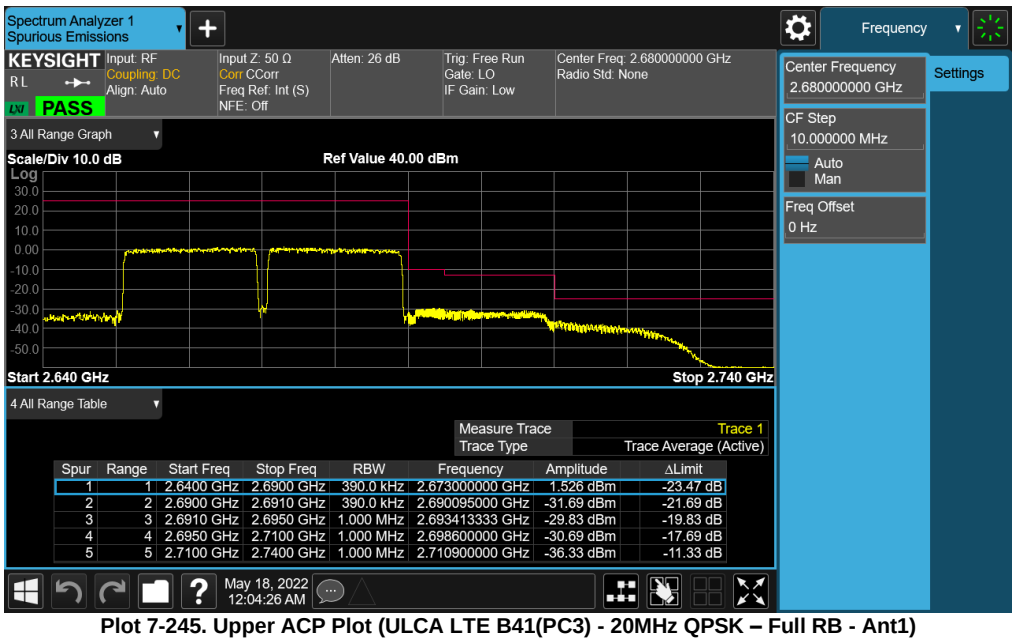
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5650 GHz	2.6900 GHz	1.000 MHz	2.660883534 GHz	-2.983 dBm	-27.98 dB
2	2	2.6900 GHz	2.6910 GHz	1.000 MHz	2.691000000 GHz	-33.55 dBm	-23.55 dB
3	3	2.6910 GHz	2.6950 GHz	1.000 MHz	2.692320000 GHz	-33.12 dBm	-23.12 dB
4	4	2.6950 GHz	2.7900 GHz	1.000 MHz	2.697513228 GHz	-32.85 dBm	-19.85 dB
5	5	2.7900 GHz	2.8150 GHz	1.000 MHz	2.803250000 GHz	-50.46 dBm	-25.46 dB

Plot 7-243. Upper ACP Plot (NR Band n41 - 100MHz CP-OFDM-QPSK – Full RB - Ant8)

ULCA - LTE Band 41(PC3) – Ant1

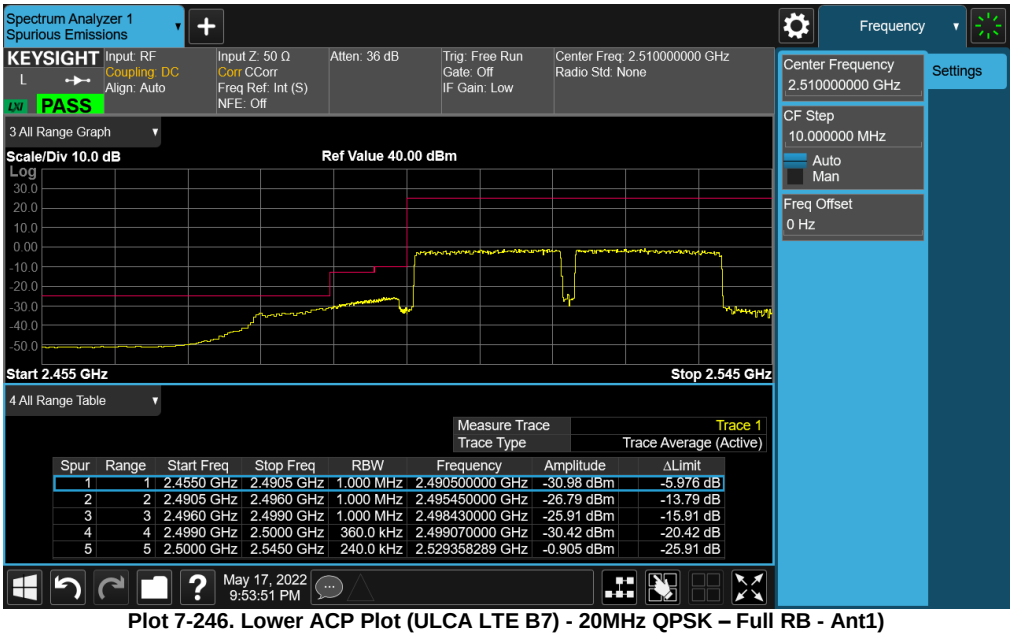


Plot 7-244. Lower ACP Plot (ULCA LTE B41(PC3) - 20MHz QPSK – Full RB - Ant1)

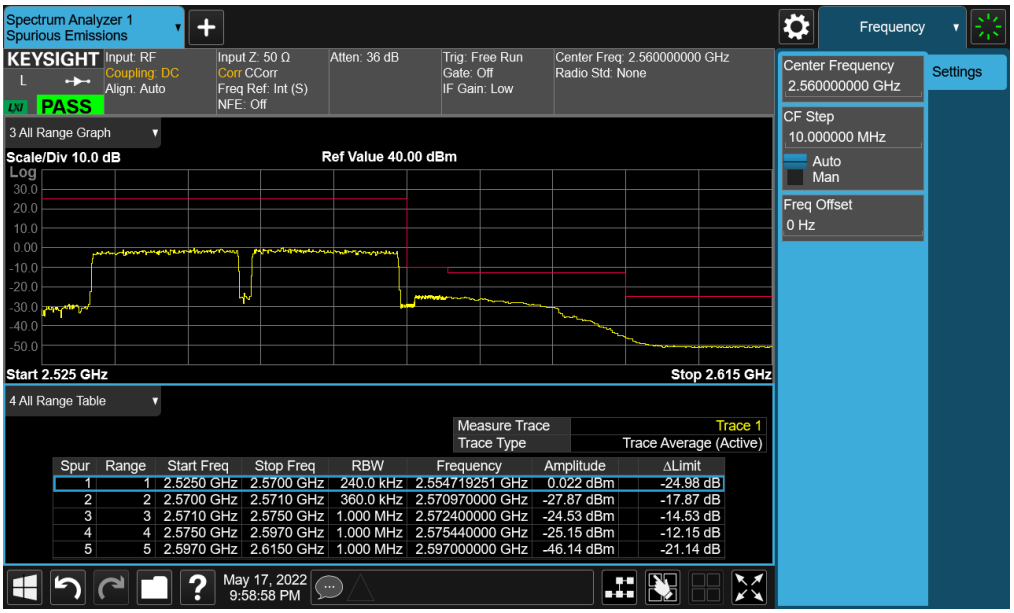


Plot 7-245. Upper ACP Plot (ULCA LTE B41(PC3) - 20MHz QPSK – Full RB - Ant1)

ULCA - LTE Band 7 – Ant1



Plot 7-246. Lower ACP Plot (ULCA LTE B7) - 20MHz QPSK – Full RB - Ant1)



Plot 7-247. Upper ACP Plot (ULCA LTE B7)- 20MHz QPSK – Full RB - Ant1)

7.6 Radiated Power (EIRP)

Test Overview

Equivalent Isotropic Radiated Power (EIRP) measurements are performed using the substitution method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS average measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

Test Procedures Used

ANSI C63.26-2015 – Section 5.2.4.4

Test Settings

1. Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation. For signals with burst transmission, the signal analyzer's "time domain power" measurement capability is used
2. RBW = 1 – 5% of the expected OBW, not to exceed 1MHz
3. VBW ≥ 3 x RBW
4. Span = 1.5 times the OBW
5. No. of sweep points ≥ 2 x span / RBW
6. Detector = RMS
7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto". Trigger is set to enable triggering only on full power bursts with the sweep time set less than or equal to the transmission burst duration.
8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation. For signals with burst transmission, the "gating" function was enabled to ensure that measurements are performed during times in which the transmitter is operating at its maximum power.
9. Trace mode = trace averaging (RMS) over 100 sweeps
10. The trace was allowed to stabilize.

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

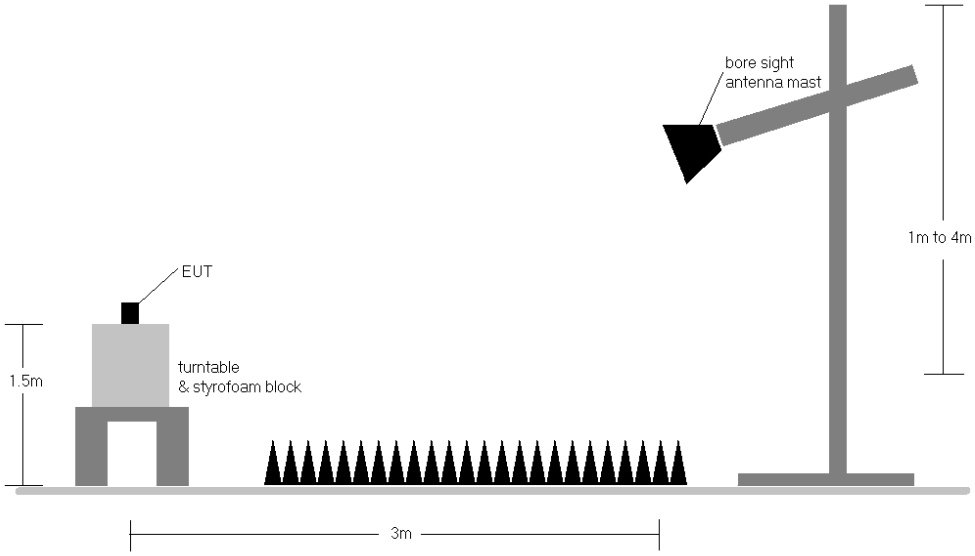


Figure 7-5. Radiated Test Setup >1GHz

Test Notes

1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst-case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.

2) This unit was tested with its standard battery.

3) For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
10 MHz	QPSK	2310.0	H	166	309	10.55	1 / 0	12.43	**22.98**	0.198	23.98	-1.00
	16-QAM	2310.0	H	166	309	10.55	1 / 0	11.90	22.45	0.176	23.98	-1.53
5 MHz	QPSK	2307.5	H	166	309	10.52	1 / 24	12.40	**22.92**	0.196	23.98	-1.06
	QPSK	2310.0	H	166	309	10.55	1 / 12	12.17	22.71	0.187	23.98	-1.27
	QPSK	2312.5	H	166	309	10.56	1 / 12	12.27	22.83	0.192	23.98	-1.15
	16-QAM	2312.5	H	166	309	10.56	1 / 12	11.98	22.54	0.180	23.98	-1.44
10 MHz	Opposite Pol.	2310.0	V	349	109	10.37	1/25	12.22	22.59	0.182	23.98	-1.39

Table 7-13. EIRP Data (LTE Band 30 – Ant1)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
20 MHz	QPSK	2510.0	H	157	68	9.51	1 / 0	16.94	26.45	0.441	33.01	-6.56
	QPSK	2535.0	H	156	68	9.40	1 / 50	17.12	26.52	0.449	33.01	-6.49
	QPSK	2560.0	H	175	76	9.43	1 / 99	17.13	**26.56**	0.453	33.01	-6.45
	16-QAM	2560.0	H	175	76	9.43	1 / 99	16.48	25.91	0.390	33.01	-7.10
15 MHz	QPSK	2507.5	H	157	68	9.50	1 / 0	16.91	26.42	0.438	33.01	-6.59
	QPSK	2535.0	H	156	68	9.40	1 / 74	17.19	**26.59**	0.456	33.01	-6.42
	QPSK	2562.5	H	175	76	9.43	1 / 0	17.15	26.57	0.454	33.01	-6.44
	16-QAM	2562.5	H	175	76	9.43	1 / 0	16.68	26.10	0.407	33.01	-6.91
10 MHz	QPSK	2505.0	H	157	68	9.50	1 / 25	16.81	26.31	0.428	33.01	-6.70
	QPSK	2535.0	H	156	68	9.40	1 / 49	17.15	**26.55**	0.452	33.01	-6.46
	QPSK	2565.0	H	175	76	9.42	1 / 25	17.07	26.49	0.446	33.01	-6.52
	16-QAM	2535.0	H	156	68	9.40	1 / 49	16.64	26.05	0.402	33.01	-6.96
5 MHz	QPSK	2502.5	H	157	68	9.49	1 / 0	16.94	26.44	0.440	33.01	-6.57
	QPSK	2535.0	H	156	68	9.40	1 / 24	17.20	26.60	0.457	33.01	-6.41
	QPSK	2567.5	H	175	76	9.42	1 / 24	17.20	**26.62**	0.459	33.01	-6.39
	16-QAM	2567.5	H	175	76	9.42	1 / 24	16.66	26.08	0.405	33.01	-6.93
20 MHz	Opposite Pol.	2560.0	V	358	110	9.49	1 / 50	16.27	25.76	0.377	33.01	-7.25

Table 7-14. EIRP Data (LTE Band 7 – Ant1)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
20 MHz	QPSK	2506.0	H	120	125	9.50	1 / 99	18.46	**27.96**	0.625	33.01	-5.05
	QPSK	2593.0	H	115	125	9.49	1 / 50	17.94	27.43	0.553	33.01	-5.58
	QPSK	2680.0	H	169	123	9.87	1 / 0	16.51	26.38	0.435	33.01	-6.63
	16-QAM	2506.0	H	120	125	9.50	1 / 99	17.91	27.41	0.551	33.01	-5.60
15 MHz	QPSK	2503.5	H	120	125	9.54	1 / 74	18.51	**28.05**	0.639	33.01	-4.96
	QPSK	2593.0	H	115	125	9.46	1 / 74	18.01	27.47	0.559	33.01	-5.54
	QPSK	2682.5	H	169	123	9.51	1 / 74	17.67	27.19	0.523	33.01	-5.82
	16-QAM	2682.5	H	169	123	9.51	1 / 74	16.01	25.53	0.357	33.01	-7.48
10 MHz	QPSK	2501.0	H	120	125	9.55	1/49	19.04	**28.58**	0.722	33.01	-4.43
	QPSK	2593.0	H	115	125	9.46	1/49	18.66	28.12	0.648	33.01	-4.89
	QPSK	2685.0	H	169	123	9.52	1/49	17.79	27.31	0.539	33.01	-5.70
	16-QAM	2685.0	H	169	123	9.52	1/49	15.96	25.48	0.353	33.01	-7.53
5 MHz	QPSK	2498.5	H	120	125	9.53	1/0	18.50	**28.03**	0.636	33.01	-4.98
	QPSK	2593.0	H	115	125	9.46	1/0	17.43	26.89	0.488	33.01	-6.12
	QPSK	2687.5	H	169	123	9.52	1/0	16.53	26.05	0.403	33.01	-6.96
	16-QAM	2498.5	H	120	125	9.53	1/0	17.57	27.10	0.513	33.01	-5.91
20 MHz	Opposite Pol.	2506.0	V	369	248	9.54	1 / 99	17.11	26.65	0.463	33.01	-6.36

Table 7-15. EIRP Data (LTE Band 41(PC2) – Ant1)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
20 MHz	QPSK	2506.0	H	111	125	9.50	1 / 0	15.25	24.75	0.299	33.01	-8.26
	QPSK	2593.0	H	121	125	9.49	1 / 50	16.36	**25.85**	0.385	33.01	-7.16
	QPSK	2680.0	H	102	127	9.87	1 / 0	15.11	24.98	0.315	33.01	-8.03
	16-QAM	2593.0	H	121	125	9.49	1 / 50	14.39	23.88	0.244	33.01	-9.13
15 MHz	QPSK	2503.5	H	111	125	9.50	1 / 37	15.24	24.74	0.298	33.01	-8.27
	QPSK	2593.0	H	121	125	9.49	1 / 74	16.00	**25.49**	0.354	33.01	-7.52
	QPSK	2682.5	H	102	127	9.87	1 / 0	14.62	24.48	0.281	33.01	-8.53
	16-QAM	2593.0	H	121	125	9.49	1 / 74	14.31	23.80	0.240	33.01	-9.21
10 MHz	QPSK	2501.0	H	111	125	9.49	1 / 0	15.01	24.50	0.282	33.01	-8.51
	QPSK	2593.0	H	121	125	9.49	1 / 0	16.06	**25.55**	0.359	33.01	-7.46
	QPSK	2685.0	H	102	127	9.86	1 / 0	14.62	24.48	0.281	33.01	-8.53
	16-QAM	2593.0	H	121	125	9.49	1 / 0	14.34	23.83	0.242	33.01	-9.18
5 MHz	QPSK	2498.5	H	111	125	9.49	1 / 12	14.94	24.43	0.277	33.01	-8.58
	QPSK	2593.0	H	121	125	9.49	1 / 12	15.96	**25.45**	0.351	33.01	-7.56
	QPSK	2687.5	H	102	127	9.86	1 / 12	14.64	24.49	0.281	33.01	-8.52
	16-QAM	2593.0	H	121	125	9.49	1 / 12	14.21	23.70	0.234	33.01	-9.31
20 MHz	Opposite Pol.	2593.0	V	331	93	9.46	1 / 0	14.68	24.14	0.259	33.01	-8.87

Table 7-16. EIRP Data (LTE Band 41(PC3)/38 – Ant1)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
100 MHz	π/2 BPSK	2546.0	V	310	91	9.40	1 / 68	14.73	**24.13**	0.259	33.01	-8.88
	π/2 BPSK	2593.0	V	346	95	9.46	1 / 68	13.31	22.77	0.189	33.01	-10.24
	π/2 BPSK	2640.0	V	298	96	9.50	1 / 136	13.77	23.27	0.212	33.01	-9.74
	QPSK	2546.0	V	310	91	9.40	1 / 68	14.48	23.88	0.244	33.01	-9.13
	QPSK	2593.0	V	346	95	9.46	1 / 68	13.11	22.57	0.181	33.01	-10.44
	QPSK	2640.0	V	298	96	9.50	1 / 136	13.30	22.80	0.191	33.01	-10.21
	16-QAM	2546.0	V	310	91	9.40	1 / 68	13.35	22.75	0.188	33.01	-10.26
90 MHz	π/2 BPSK	2541.0	V	310	91	9.46	1 / 122	14.66	**24.11**	0.258	33.01	-8.90
	π/2 BPSK	2593.0	V	346	95	9.46	1 / 183	13.26	22.73	0.187	33.01	-10.29
	π/2 BPSK	2645.0	V	298	96	9.51	1 / 122	14.14	23.65	0.232	33.01	-9.36
	QPSK	2541.0	V	310	91	9.46	1 / 122	14.44	23.90	0.245	33.01	-9.11
	QPSK	2593.0	V	346	95	9.46	1 / 183	12.96	22.43	0.175	33.01	-10.58
	QPSK	2645.0	V	298	96	9.51	1 / 122	13.78	23.29	0.213	33.01	-9.72
	16-QAM	2541.0	V	310	91	9.46	1 / 122	13.39	22.85	0.193	33.01	-10.16
80 MHz	π/2 BPSK	2536.0	V	310	91	9.49	1 / 108	14.62	**24.11**	0.258	33.01	-8.90
	π/2 BPSK	2593.0	V	346	95	9.46	1 / 54	13.36	22.82	0.191	33.01	-10.19
	π/2 BPSK	2650.0	V	298	96	9.52	1 / 108	13.71	23.23	0.210	33.01	-9.78
	QPSK	2536.0	V	310	91	9.49	1 / 108	14.39	23.87	0.244	33.01	-9.14
	QPSK	2593.0	V	346	95	9.46	1 / 54	13.15	22.62	0.183	33.01	-10.40
	QPSK	2650.0	V	298	96	9.52	1 / 108	13.34	22.85	0.193	33.01	-10.16
	16-QAM	2536.0	V	310	91	9.49	1 / 108	13.42	22.90	0.195	33.01	-10.11
60 MHz	π/2 BPSK	2526.0	V	310	91	9.52	1 / 121	14.65	**24.16**	0.261	33.01	-8.85
	π/2 BPSK	2593.0	V	346	95	9.46	1 / 121	13.24	22.71	0.186	33.01	-10.30
	π/2 BPSK	2660.0	V	298	96	9.50	1 / 40	14.08	23.58	0.228	33.01	-9.43
	QPSK	2526.0	V	310	91	9.52	1 / 121	14.45	23.96	0.249	33.01	-9.05
	QPSK	2593.0	V	346	95	9.46	1 / 121	13.03	22.49	0.178	33.01	-10.52
	QPSK	2660.0	V	298	96	9.50	1 / 40	13.14	22.64	0.184	33.01	-10.37
	16-QAM	2526.0	V	310	91	9.52	1 / 121	13.42	22.94	0.197	33.01	-10.07
50 MHz	π/2 BPSK	2521.0	V	310	91	9.51	1 / 33	14.70	**24.21**	0.264	33.01	-8.80
	π/2 BPSK	2593.0	V	346	95	9.46	1 / 33	13.21	22.67	0.185	33.01	-10.34
	π/2 BPSK	2665.0	V	298	96	9.51	1 / 33	13.66	23.17	0.207	33.01	-9.85
	QPSK	2521.0	V	310	91	9.51	1 / 33	14.51	24.03	0.253	33.01	-8.98
	QPSK	2593.0	V	346	95	9.46	1 / 33	13.16	22.62	0.183	33.01	-10.39
	QPSK	2665.0	V	298	96	9.51	1 / 33	13.23	22.74	0.188	33.01	-10.27
	16-QAM	2521.0	V	310	91	9.51	1 / 33	13.46	22.97	0.198	33.01	-10.04
40 MHz	π/2 BPSK	2516.0	V	310	91	9.52	1 / 26	14.50	**24.02**	0.252	33.01	-8.99
	π/2 BPSK	2593.0	V	346	95	9.46	1 / 26	13.05	22.51	0.178	33.01	-10.50
	π/2 BPSK	2670.0	V	298	96	9.52	1 / 26	14.05	23.57	0.227	33.01	-9.44
	QPSK	2516.0	V	310	91	9.52	1 / 26	14.31	23.83	0.242	33.01	-9.18
	QPSK	2593.0	V	346	95	9.46	1 / 26	12.87	22.33	0.171	33.01	-10.68
	QPSK	2670.0	V	298	96	9.52	1 / 26	13.76	23.28	0.213	33.01	-9.73
	16-QAM	2670.0	V	298	96	9.52	1 / 26	13.64	23.16	0.207	33.01	-9.85
30 MHz	π/2 BPSK	2511.0	V	310	91	9.54	1 / 19	14.39	**23.93**	0.247	33.01	-9.08
	π/2 BPSK	2593.0	V	346	95	9.46	1 / 19	13.02	22.48	0.177	33.01	-10.53
	π/2 BPSK	2675.0	V	298	96	9.52	1 / 19	13.89	23.41	0.219	33.01	-9.60
	QPSK	2511.0	V	310	91	9.54	1 / 19	14.12	23.66	0.232	33.01	-9.35
	QPSK	2593.0	V	346	95	9.46	1 / 19	13.00	22.46	0.176	33.01	-10.55
	QPSK	2675.0	V	298	96	9.52	1 / 19	13.65	23.16	0.207	33.01	-9.85
	16-QAM	2675.0	V	298	96	9.52	1 / 19	13.46	22.97	0.198	33.01	-10.04
20 MHz	π/2 BPSK	2506.0	V	310	91	9.54	1 / 13	14.64	**24.19**	0.262	33.01	-8.82
	π/2 BPSK	2593.0	V	346	95	9.46	1 / 13	13.35	22.81	0.191	33.01	-10.20
	π/2 BPSK	2680.0	V	298	96	9.51	1 / 13	14.04	23.55	0.226	33.01	-9.46
	QPSK	2506.0	V	310	91	9.54	1 / 13	14.42	23.96	0.249	33.01	-9.05
	QPSK	2593.0	V	346	95	9.46	1 / 13	13.28	22.74	0.188	33.01	-10.27
	QPSK	2680.0	V	298	96	9.51	1 / 13	13.59	23.10	0.204	33.01	-9.91
	16-QAM	2506.0	V	310	91	9.54	1 / 13	13.47	23.02	0.200	33.01	-9.99
100 MHz	QPSK (CP-OFDM)	2546.0	V	314	95	9.40	1 / 68	12.61	22.01	0.159	33.01	-11.00
	QPSK (Opposite Pol.)	2546.0	H	104	74	9.38	1 / 68	14.40	23.78	0.239	33.01	-9.23

Table 7-17. EIRP Data (NR Band n41 – Ant1)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
100 MHz	π/2 BPSK	2546.0	H	146	234	9.38	1 / 68	13.13	22.51	0.178	33.01	-10.50
	π/2 BPSK	2593.0	H	140	233	9.49	1 / 204	12.71	22.20	0.166	33.01	-10.81
	π/2 BPSK	2640.0	H	133	234	9.89	1 / 68	13.63	**23.52**	0.225	33.01	-9.49
	QPSK	2546.0	H	146	234	9.38	1 / 68	12.60	21.98	0.158	33.01	-11.03
	QPSK	2593.0	H	140	233	9.49	1 / 204	11.78	21.27	0.134	33.01	-11.74
	QPSK	2640.0	H	133	234	9.89	1 / 204	13.11	23.00	0.200	33.01	-10.01
	16-QAM	2640.0	H	133	234	9.89	1 / 204	13.02	22.91	0.196	33.01	-10.10
90 MHz	π/2 BPSK	2541.0	H	146	234	9.39	1 / 122	13.17	22.56	0.180	33.01	-10.45
	π/2 BPSK	2593.0	H	140	233	9.49	1 / 61	12.26	21.75	0.150	33.01	-11.26
	π/2 BPSK	2645.0	H	133	234	9.91	1 / 61	13.60	**23.51**	0.225	33.01	-9.50
	QPSK	2541.0	H	146	234	9.39	1 / 122	12.58	21.96	0.157	33.01	-11.05
	QPSK	2593.0	H	140	233	9.49	1 / 61	11.36	20.85	0.122	33.01	-12.16
	QPSK	2645.0	H	133	234	9.91	1 / 61	12.88	22.79	0.190	33.01	-10.22
	16-QAM	2645.0	H	133	234	9.91	1 / 61	12.63	22.54	0.179	33.01	-10.47
80 MHz	π/2 BPSK	2536.0	H	146	234	9.40	1 / 162	13.14	22.54	0.180	33.01	-10.47
	π/2 BPSK	2593.0	H	140	233	9.49	1 / 54	12.37	21.86	0.153	33.01	-11.15
	π/2 BPSK	2650.0	H	133	234	9.93	1 / 162	13.64	**23.57**	0.228	33.01	-9.44
	QPSK	2536.0	H	146	234	9.40	1 / 162	12.63	22.03	0.159	33.01	-10.98
	QPSK	2593.0	H	140	233	9.49	1 / 54	11.35	20.84	0.121	33.01	-12.17
	QPSK	2650.0	H	133	234	9.93	1 / 162	12.91	22.84	0.193	33.01	-10.17
	16-QAM	2650.0	H	133	234	9.93	1 / 162	12.68	22.61	0.183	33.01	-10.40
60 MHz	π/2 BPSK	2526.0	H	146	234	9.43	1 / 40	13.03	22.46	0.176	33.01	-10.55
	π/2 BPSK	2593.0	H	140	233	9.49	1 / 40	12.36	21.85	0.153	33.01	-11.16
	π/2 BPSK	2660.0	H	133	234	9.85	1 / 40	13.59	**23.44**	0.221	33.01	-9.57
	QPSK	2526.0	H	146	234	9.43	1 / 40	12.58	22.01	0.159	33.01	-11.00
	QPSK	2593.0	H	140	233	9.49	1 / 40	11.42	20.91	0.123	33.01	-12.10
	QPSK	2660.0	H	133	234	9.85	1 / 40	13.00	22.85	0.193	33.01	-10.16
	16-QAM	2660.0	H	133	234	9.85	1 / 40	12.77	22.62	0.183	33.01	-10.39
50 MHz	π/2 BPSK	2521.0	H	146	234	9.45	1 / 99	13.09	22.54	0.180	33.01	-10.47
	π/2 BPSK	2593.0	H	140	233	9.49	1 / 33	12.31	21.80	0.151	33.01	-11.21
	π/2 BPSK	2665.0	H	133	234	9.84	1 / 33	13.61	**23.45**	0.221	33.01	-9.56
	QPSK	2521.0	H	146	234	9.45	1 / 99	12.54	21.99	0.158	33.01	-11.02
	QPSK	2593.0	H	140	233	9.49	1 / 33	11.34	20.83	0.121	33.01	-12.18
	QPSK	2665.0	H	133	234	9.84	1 / 33	12.94	22.78	0.190	33.01	-10.23
	16-QAM	2665.0	H	133	234	9.84	1 / 33	12.86	22.70	0.186	33.01	-10.31
40 MHz	π/2 BPSK	2516.0	H	146	234	9.48	1 / 26	13.34	22.81	0.191	33.01	-10.20
	π/2 BPSK	2593.0	H	140	233	9.49	1 / 26	12.67	22.16	0.164	33.01	-10.85
	π/2 BPSK	2670.0	H	133	234	9.82	1 / 26	13.90	**23.72**	0.235	33.01	-9.29
	QPSK	2516.0	H	146	234	9.48	1 / 26	12.92	22.39	0.173	33.01	-10.62
	QPSK	2593.0	H	140	233	9.49	1 / 26	11.62	21.11	0.129	33.01	-11.90
	QPSK	2670.0	H	133	234	9.82	1 / 26	13.35	23.17	0.208	33.01	-9.84
	16-QAM	2670.0	H	133	234	9.82	1 / 26	12.14	21.96	0.157	33.01	-11.05
30 MHz	π/2 BPSK	2511.0	H	146	234	9.50	1 / 19	13.11	22.62	0.183	33.01	-10.39
	π/2 BPSK	2593.0	H	140	233	9.49	1 / 19	12.30	21.79	0.151	33.01	-11.22
	π/2 BPSK	2675.0	H	133	234	9.85	1 / 19	13.59	**23.43**	0.221	33.01	-9.58
	QPSK	2511.0	H	146	234	9.50	1 / 19	12.51	22.01	0.159	33.01	-11.00
	QPSK	2593.0	H	140	233	9.49	1 / 19	11.49	20.98	0.125	33.01	-12.03
	QPSK	2675.0	H	133	234	9.85	1 / 19	13.08	22.93	0.196	33.01	-10.08
	16-QAM	2675.0	H	133	234	9.85	1 / 19	11.82	21.66	0.147	33.01	-11.35
20 MHz	π/2 BPSK	2506.0	H	146	234	9.50	1 / 13	12.75	22.25	0.168	33.01	-10.76
	π/2 BPSK	2593.0	H	140	233	9.49	1 / 37	11.98	21.47	0.140	33.01	-11.54
	π/2 BPSK	2680.0	H	133	234	9.87	1 / 13	13.11	**22.98**	0.198	33.01	-10.03
	QPSK	2506.0	H	146	234	9.50	1 / 13	12.22	21.72	0.149	33.01	-11.29
	QPSK	2593.0	H	140	233	9.49	1 / 37	11.20	20.69	0.117	33.01	-12.32
	QPSK	2680.0	H	133	234	9.87	1 / 13	12.55	22.42	0.175	33.01	-10.59
	16-QAM	2680.0	H	133	234	9.87	1 / 13	11.01	20.88	0.122	33.01	-12.13
100 MHz	QPSK (CP-OFDM)	2640.0	H	102	241	9.89	1 / 204	9.29	19.18	0.083	33.01	-13.83
	QPSK (Opposite Pol.)	2640.0	V	324	101	9.50	1 / 68	9.25	18.75	0.075	33.01	-14.26

Table 7-18. EIRP Data (NR Band n41 – Ant4)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
100 MHz	π/2 BPSK	2550.0	H	124	133	9.37	1 / 136	8.99	**18.36**	0.069	33.01	-14.65
	π/2 BPSK	2593.0	H	123	140	9.49	1 / 68	8.74	18.23	0.067	33.01	-14.78
	π/2 BPSK	2640.0	H	144	126	9.89	1 / 68	7.43	17.32	0.054	33.01	-15.69
	QPSK	2550.0	H	124	133	9.37	1 / 136	8.82	18.19	0.066	33.01	-14.82
	QPSK	2593.0	H	123	140	9.49	1 / 68	8.35	17.84	0.061	33.01	-15.17
	QPSK	2640.0	H	144	126	9.89	1 / 68	7.22	17.11	0.051	33.01	-15.90
	16-QAM	2550.0	H	124	133	9.37	1 / 136	7.88	17.25	0.053	33.01	-15.76
100 MHz	QPSK (CP-OFDM)	2550.0	H	140	126	9.37	1 / 136	6.51	15.88	0.039	33.01	-17.13
	QPSK (Opposite Pol.)	2550.0	V	105	88	9.35	1 / 136	7.27	16.62	0.046	33.01	-16.39

Table 7-19. EIRP Data (NR Band n41 – Ant5)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
100 MHz	π/2 BPSK	2550.0	V	115	260	9.37	1 / 136	5.45	14.82	0.030	33.01	-18.19
	π/2 BPSK	2593.0	V	114	267	9.49	1 / 136	5.19	14.68	0.029	33.01	-18.33
	π/2 BPSK	2640.0	V	110	267	9.89	1 / 136	5.04	**14.93**	0.031	33.01	-18.08
	QPSK	2550.0	V	115	260	9.37	1 / 136	5.27	14.64	0.029	33.01	-18.37
	QPSK	2593.0	V	114	267	9.49	1 / 136	5.11	14.60	0.029	33.01	-18.41
	QPSK	2640.0	V	110	267	9.89	1 / 136	5.01	14.90	0.031	33.01	-18.11
	16-QAM	2640.0	V	110	267	9.89	1 / 136	4.18	14.07	0.026	33.01	-18.94
100 MHz	QPSK (CP-OFDM)	2640.0	V	121	250	9.89	1 / 136	4.50	14.39	0.027	33.01	-18.62
	QPSK (Opposite Pol.)	2640.0	H	121	48	9.35	1 / 136	4.54	13.89	0.024	33.01	-19.12

Table 7-20. EIRP Data (NR Band n41 – Ant8)

7.7 Radiated Spurious Emissions Measurements

Test Overview

Radiated spurious emissions measurements are performed using the field strength conversion method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using hybrid (biconical/log) antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

Test Procedures Used

ANSI C63.26-2015 – Section 5.5.4

Test Settings

1. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
2. VBW ≥ 3 x RBW
3. Span = 1.5 times the OBW
4. No. of sweep points ≥ 2 x span / RBW
5. Detector = RMS
6. Trace mode = Average (Max Hold for pulsed emissions)
7. The trace was allowed to stabilize

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

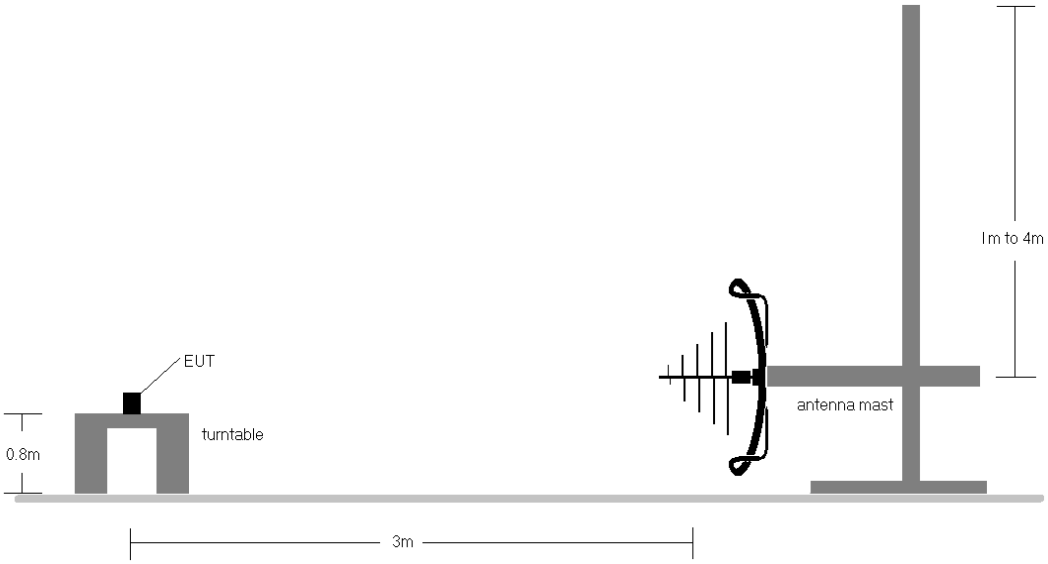


Figure 7-6. Test Instrument & Measurement Setup < 1GHz

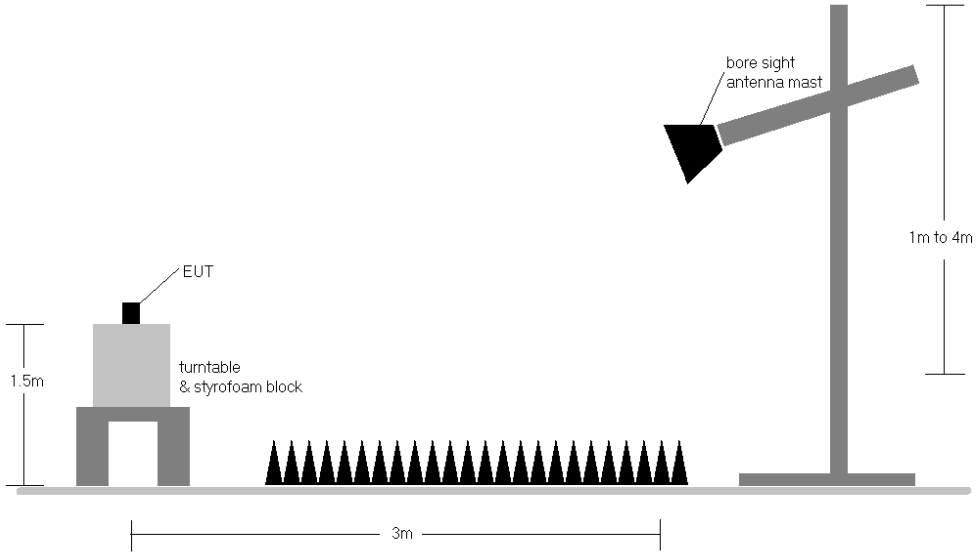


Figure 7-7. Test Instrument & Measurement Setup >1 GHz

Test Notes

1) Field strengths are calculated using the Measurement quantity conversions in ANSI C63.26-2015 Section 5.2.7:
   a) E(dBµV/m) = Measured amplitude level (dBm) + 107 + Cable Loss (dB) + Antenna Factor (dB/m)
   b) EIRP (dBm) = E(dBµV/m) + 20logD – 104.8; where D is the measurement distance in meters.

2) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst-case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.

3) This unit was tested with its standard battery.

4) The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.

5) Emissions below 18GHz were measured at a 3-meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.

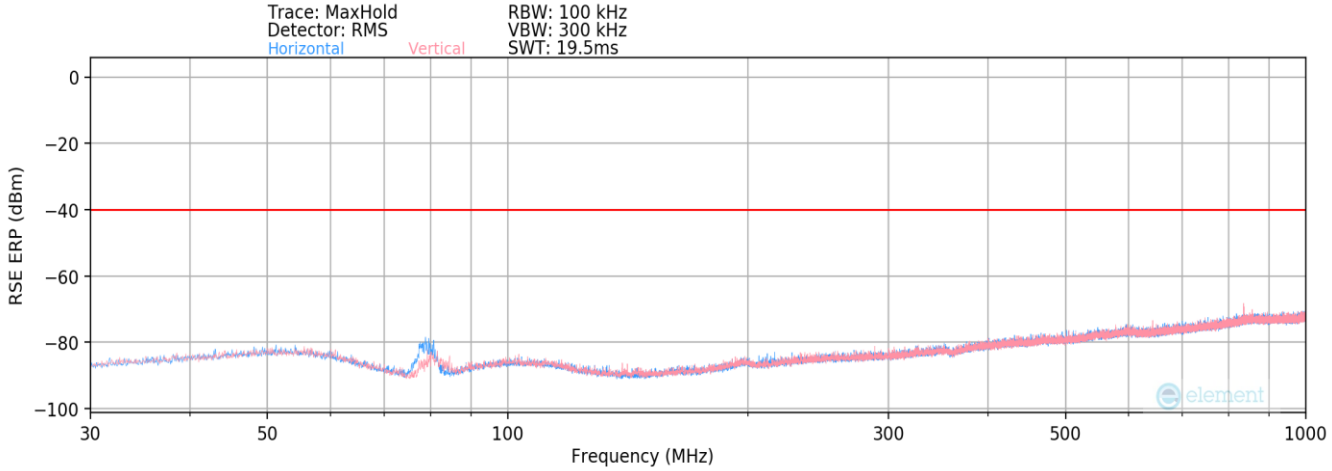
6) The "-" shown in the following RSE tables are used to denote a noise floor measurement.

7) ULCA spurious emissions measurements were evaluated for the two contiguous channels using various combinations of RB size, RB offset, modulation, and channel bandwidth. Channel bandwidth data is shown in the tables below based only on the channel bandwidths that were supported in this device.

8) For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

9) Spurious emissions shown in this section are measured while operating in EN-DC mode with Sub 6GHz NR carrier as well as an LTE carrier (anchor). Spurious emissions from the NR carrier device, is subject to the rules under which the NR carrier operates. Spurious emissions caused by the LTE carrier must meet the requirements of the rules under which the LTE carrier operates.

LTE Band 30 – Ant1

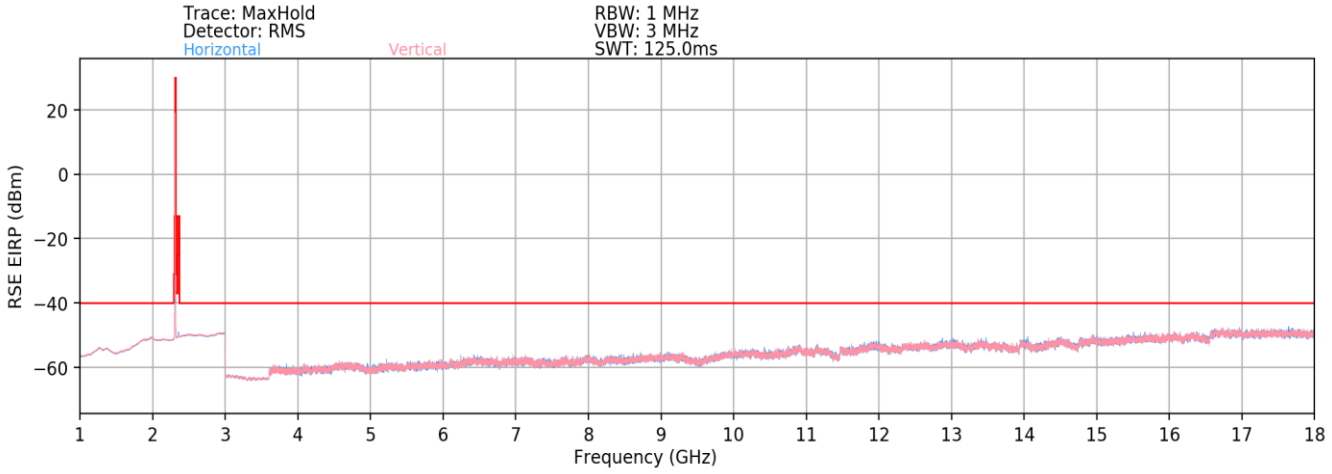


Plot 7-248. Radiated Spurious Plot Below 1GHz (LTE Band 30 – Ant1)

Bandwidth (MHz):	10
Frequency (MHz):	2310.0
RB / Offset:	1 / 25
Detector / Trace Mode:	RMS / Average
RBW / VBW:	100kHz / 300kHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
80.00	H	291	239	-80.79	-21.49	4.72	-92.69	-40.00	-52.69
150.00	H	-	-	-89.38	-19.85	-2.23	-99.64	-40.00	-59.64
300.00	H	-	-	-90.14	-14.21	2.65	-94.75	-40.00	-54.75
500.00	H	-	-	-90.07	-9.69	7.24	-90.17	-40.00	-50.17
835.00	H	-	-	-90.46	-4.41	12.13	-85.27	-40.00	-45.27

Table 7-21. Radiated Spurious Data (LTE Band 30 – Ant1)



Plot 7-249. Radiated Spurious Plot Above 1GHz (LTE Band 30 – Ant1)