APPENDIX E: TEST SEQUENCES

1. Test sequence is generated based on below parameters of the DUT:
   a. Measured maximum power (P_{max})
   b. Measured Tx_power_at_SAR_design_target (P_{limit})
   c. Setup time to make SAR ramining be full
   d. Do test according to test sequence
2. Test Sequence A Waveform:

   Based on the parameters above, the test sequence A is generated with one or two levels where one of the levels is maximum power level (Pmax) which is applied at least for 100s. Based on the second level this test sequence is sub-categorized into four different sequences used
   (a) Test Sequence A.i where after Pmax, a second level of Plimit is requested till the end of the test
   (b) Test Sequence A.ii where after Pmax, a second level of Pmax-3dB is requested till the end of the test
   (c) Test Sequence A.iii where after Pmax, a second level of Plimit-3dB is requested till the end of the test
   (d) Test Sequence A.iv where only Pmax is requested till the end of the test
3. Test Sequence B Waveform:

Based on the parameters above, the Test Type B is generated with pre-defined power levels, which is described in Table E-1:

Table E-1
Test Sequence B

Time duration (second)	Power level (dB)
15	Plimit - 5
20	Plimit
20	Plimit + 5
10	Plimit – 6
20	Pmax
15	Plimit
15	Plimit -7
20	Pmax
10	Plimit-5
15	Plimit
10	Plimit-6
20	Plimit + 5
10	Plimit – 4
15	Plimit
10	Plimit – 6
20	Pmax
15	Plimit-8
15	Plimit
20	Pmax
10	Plimit – 9
20	Plimit + 5
20	Plimit
15	Plimit – 5

The Test Sequence 2 waveform is shown in Figure E-1.

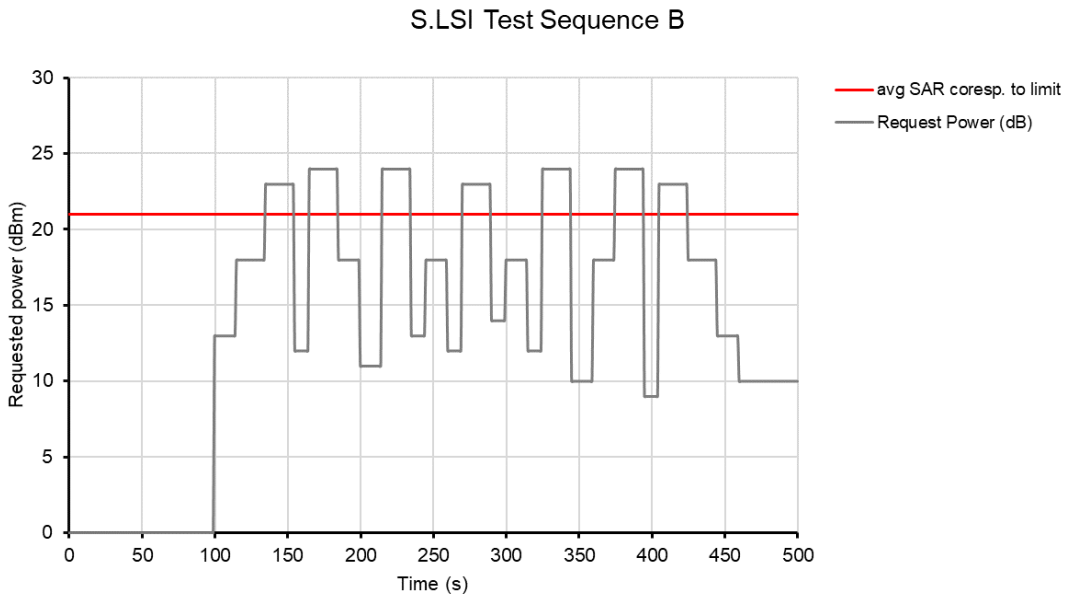

Figure E-1
Test sequence 2 waveform

4. Test sequence for WLAN Radios:

Since WLAN radios do not have closed loop power control, average Tx power level of WLAN radios is indirectly varied by transmitting at varying duty cycles (i.e., varying UL data rates). Test sequence #1 described previously can be converted into duty cycle at Pmax, i.e., duty cycle for an arbitrary Tx power level = (Tx power level / Pmax).

Table E-2 Test Sequence 1 for WLAN radio

Time duration (seconds)	Duty cycle (%)
80	100%
120	50%

NOTE: Test sequence #2 is not achievable due to current test capability. Therefore, in the interim, it is exempt.