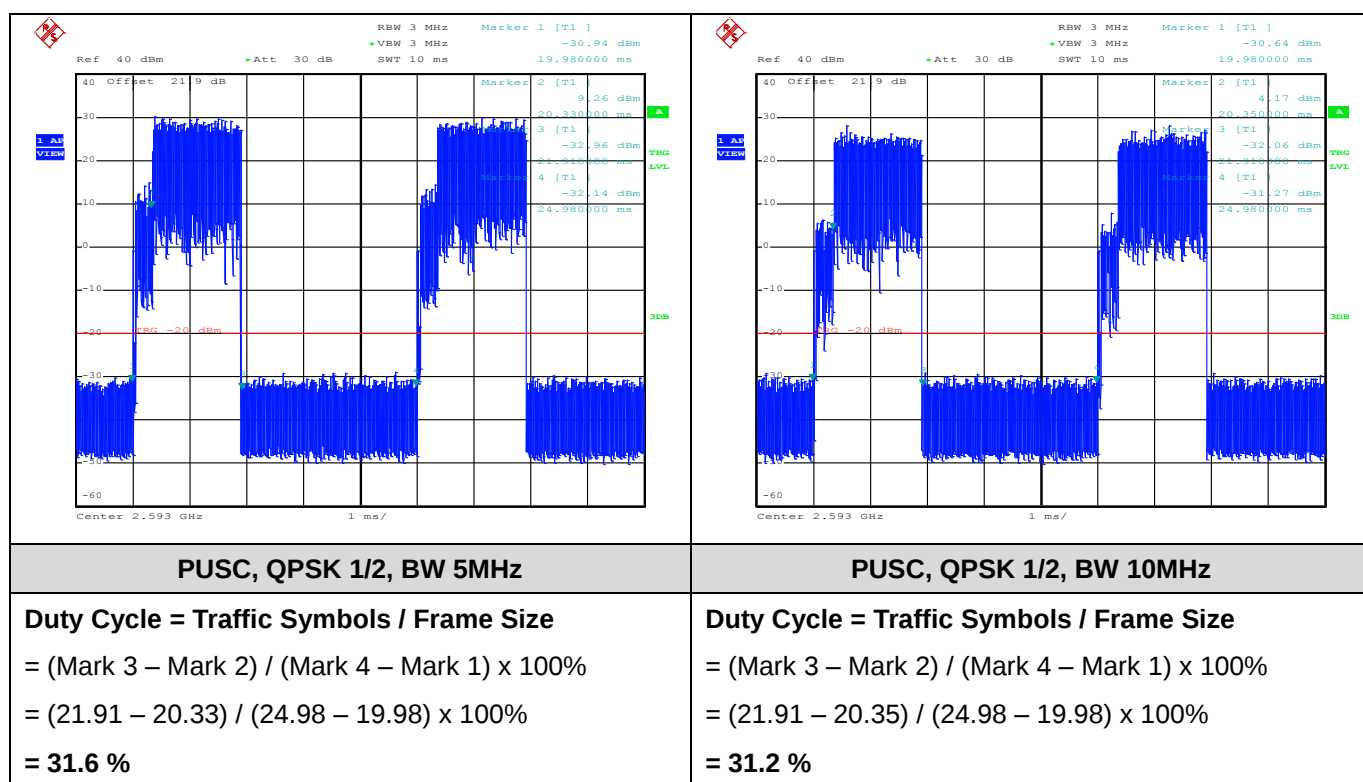


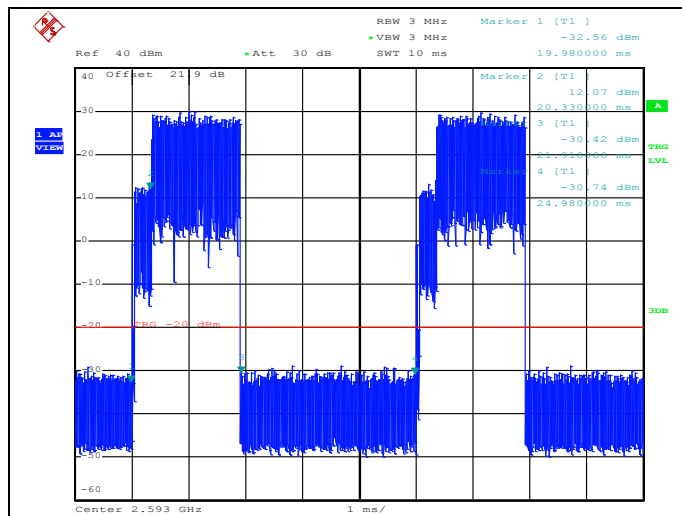
## Appendix E. Plots of Duty Cycle

The plot below shows the waveform characteristics of the signal used in the SAR measurement. The pulse duration corresponds to a DL:UL symbol ratio of 29:18 and control symbols are not active.

The time vector plots are shown as below. The plot A is used to get the frame length of test signal and the plot B is used to get the time of UL data symbols. Since there was no energy in the control symbols, the effective power is only across 15 data symbols. The calculation of duty cycle is as below:

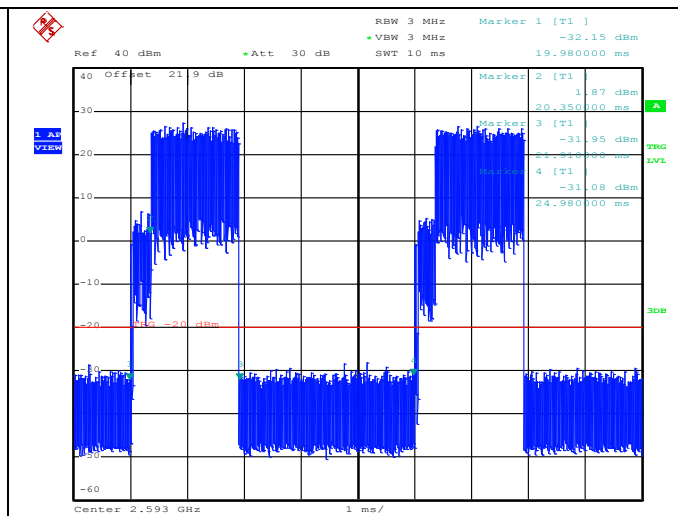
**Duty Cycle = 15 data symbols UL time / Frame Length x 100 %**





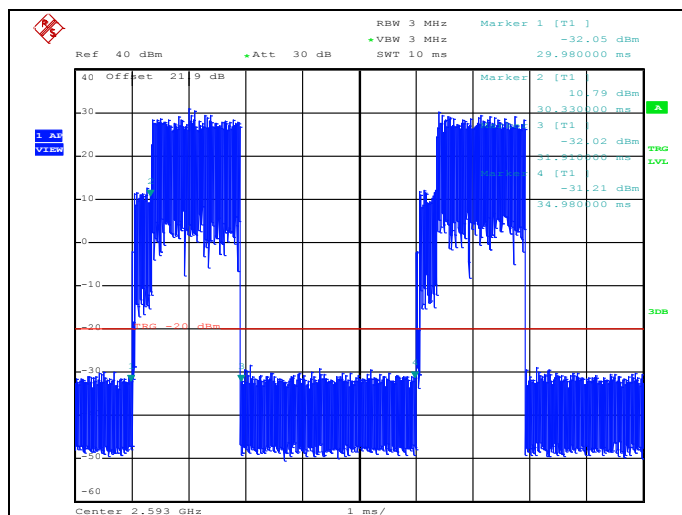
### PUSC, QPSK 3/4, BW 5MHz

Duty Cycle = Traffic Symbols / Frame Size  
= (Mark 3 – Mark 2) / (Mark 4 – Mark 1) x 100%  
= (21.91 – 20.33) / (24.98 – 19.98) x 100%  
= **31.6 %**



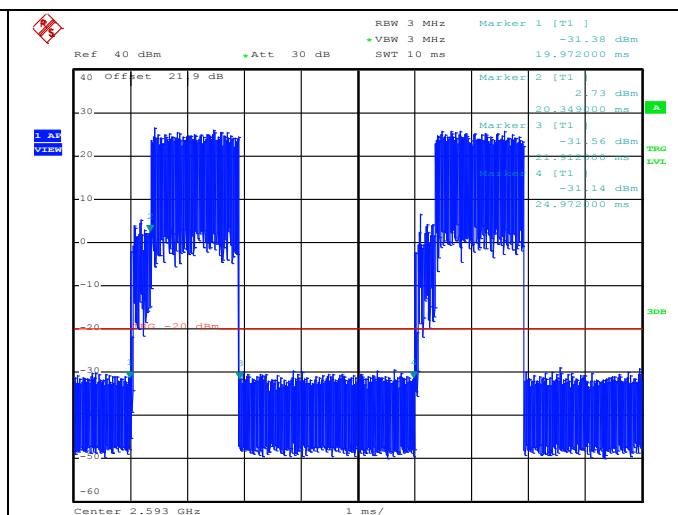
### PUSC, QPSK 3/4, BW 10MHz

Duty Cycle = Traffic Symbols / Frame Size  
= (Mark 3 – Mark 2) / (Mark 4 – Mark 1) x 100%  
= (21.91 – 20.35) / (24.98 – 19.98) x 100%  
= **31.2 %**



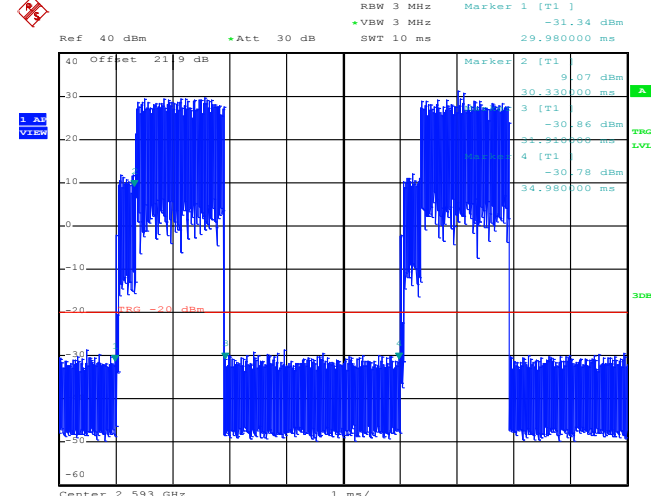
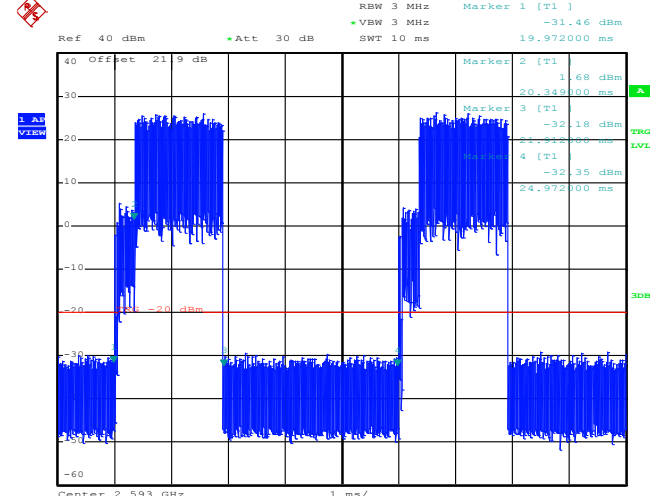
### PUSC, 16QAM 1/2, BW 5MHz

Duty Cycle = Traffic Symbols / Frame Size  
= (Mark 3 – Mark 2) / (Mark 4 – Mark 1) x 100%  
= (31.91 – 30.33) / (34.98 – 29.98) x 100%  
= **31.6 %**



### PUSC, 16QAM 1/2, BW 10MHz

Duty Cycle = Traffic Symbols / Frame Size  
= (Mark 3 – Mark 2) / (Mark 4 – Mark 1) x 100%  
= (21.912 – 20.349) / (24.972 – 19.972) x 100%  
= **31.3 %**

|                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>Ref 40 dBm Att 30 dB RBW 3 MHz Marker 1 [T1] -31.34 dBm<br/>VBW 3 MHz SWT 10 ms 29.980000 ms<br/>Center 2.593 GHz 1 ms/</p>                                      |  <p>Ref 40 dBm Att 30 dB RBW 3 MHz Marker 1 [T1] -31.46 dBm<br/>VBW 3 MHz SWT 10 ms 19.972000 ms<br/>Center 2.593 GHz 1 ms/</p>                                          |
| <p><b>PUSC, 16QAM 3/4, BW 5MHz</b></p> <p><b>Duty Cycle = Traffic Symbols / Frame Size</b><br/>           = (Mark 3 – Mark 2) / (Mark 4 – Mark 1) x 100%<br/>           = (31.91 – 30.33) / (34.98 – 29.98) x 100%<br/>           = <b>31.6 %</b></p> | <p><b>PUSC, 16QAM 3/4, BW 10MHz</b></p> <p><b>Duty Cycle = Traffic Symbols / Frame Size</b><br/>           = (Mark 3 – Mark 2) / (Mark 4 – Mark 1) x 100%<br/>           = (21.912 – 20.349) / (24.972 – 19.972) x 100%<br/>           = <b>31.3 %</b></p> |