



LTE B7_15 M_Conducted Spurious(10 G-26.5 G)_Mid_QPSK_1RB

F-TP22-03 (Rev. 06) Page 121 of 231





LTE B7_15 M_Conducted Spurious(10 G-26.5 G)_High_QPSK_1RB

F-TP22-03 (Rev. 06) Page 122 of 231

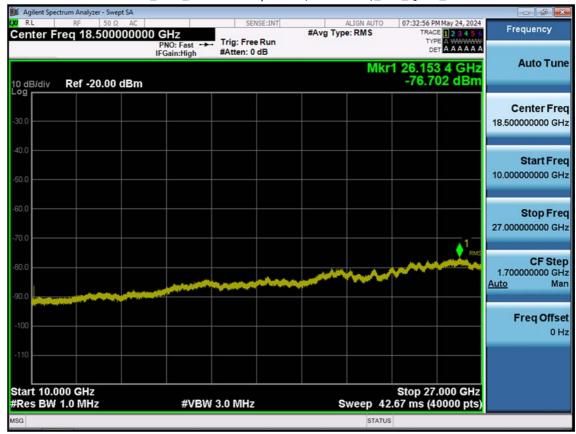




LTE B7_20 M_Conducted Spurious(10 G-26.5 G)_Low_QPSK_1RB

F-TP22-03 (Rev. 06) Page 123 of 231





LTE B7_20 M_Conducted Spurious(10 G-26.5 G)_Mid_QPSK_1RB

F-TP22-03 (Rev. 06) Page 124 of 231





LTE B7_20 M_Conducted Spurious(10 G-26.5 G)_High_QPSK_1RB

F-TP22-03 (Rev. 06) Page 125 of 231

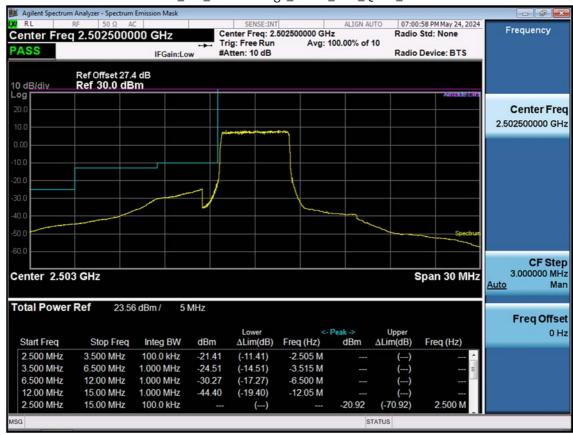




LTE B7_5 M_Channel Edge_Low_QPSK_1RB

F-TP22-03 (Rev. 06) Page 126 of 231

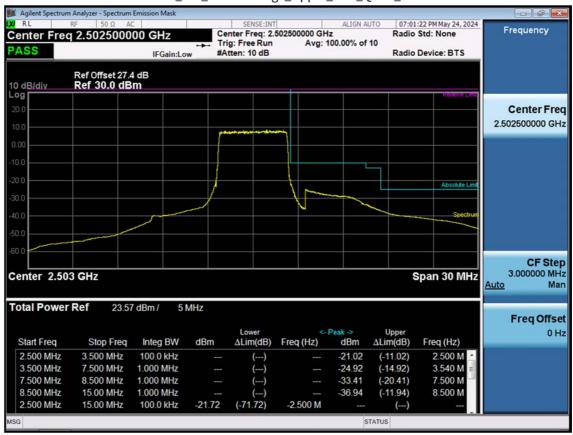




LTE B7_5 M_Channel Edge_Lower_Low_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 127 of 231

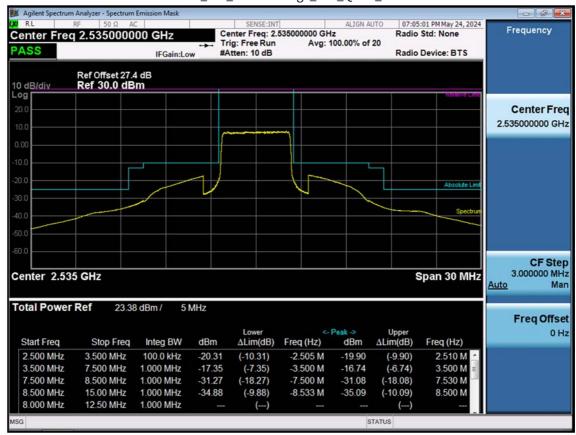




LTE B7_5 M_Channel Edge_Upper_Low_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 128 of 231

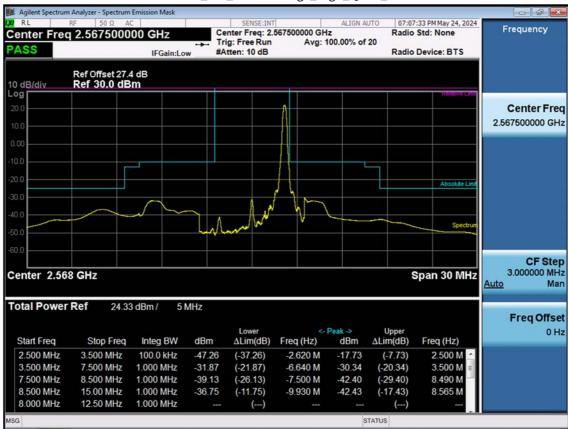




LTE B7_5 M_Channel Edge_Mid_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 129 of 231





LTE B7_5 M_Channel Edge_High_QPSK_1RB

F-TP22-03 (Rev. 06) Page 130 of 231





LTE B7_5 M_Channel Edge_High_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 131 of 231

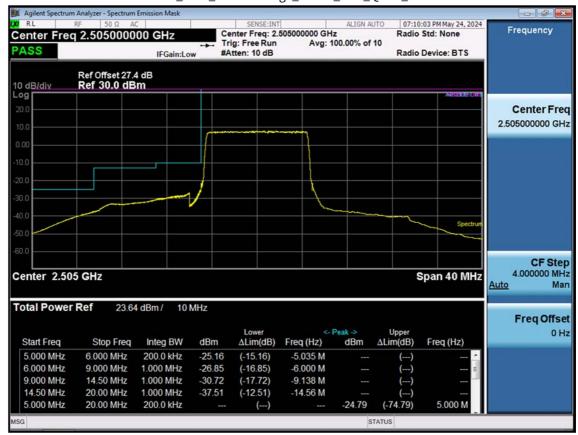




LTE B7_10 M_Channel Edge_Low_QPSK_1RB

F-TP22-03 (Rev. 06) Page 132 of 231

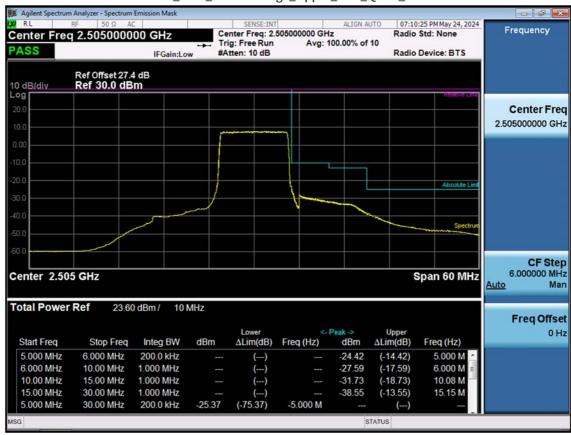




LTE B7_10 M_Channel Edge_Lower_Low_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 133 of 231





LTE B7_10 M_Channel Edge_Upper_Low_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 134 of 231

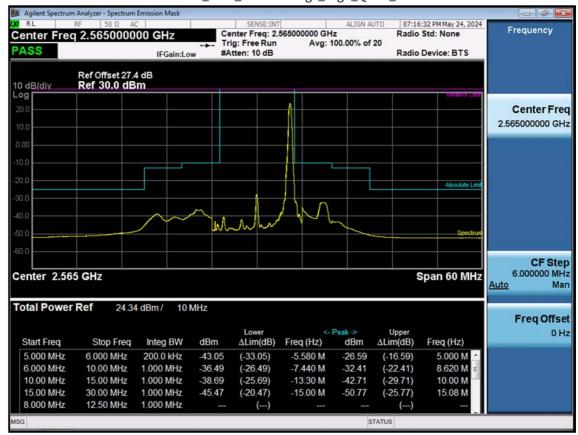




LTE B7_10 M_Channel Edge_Mid_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 135 of 231

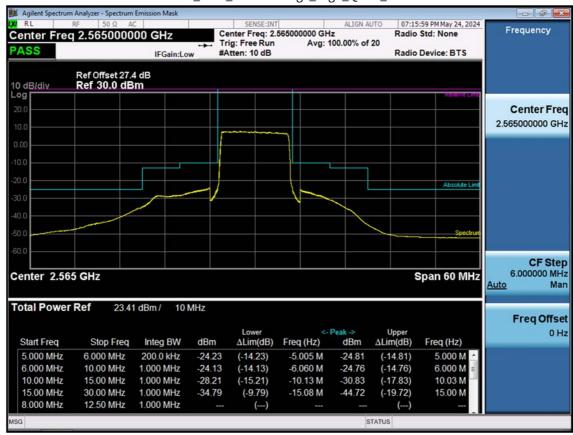




LTE B7_10 M_Channel Edge_High_QPSK_1RB

F-TP22-03 (Rev. 06) Page 136 of 231

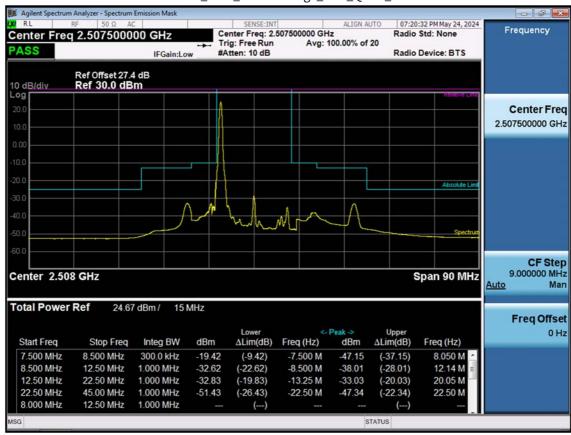




LTE B7_10 M_Channel Edge_High_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 137 of 231

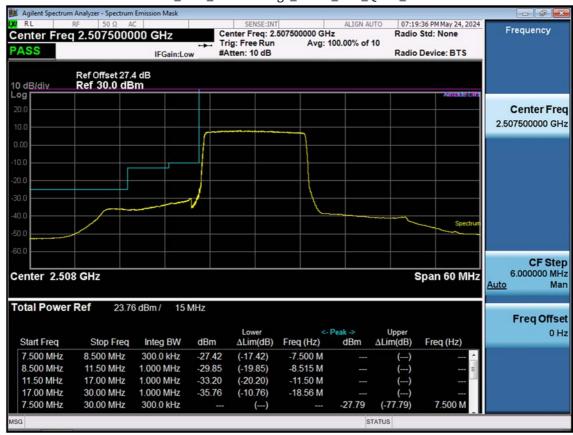




LTE B7_15 M_Channel Edge_Low_QPSK_1RB

F-TP22-03 (Rev. 06) Page 138 of 231

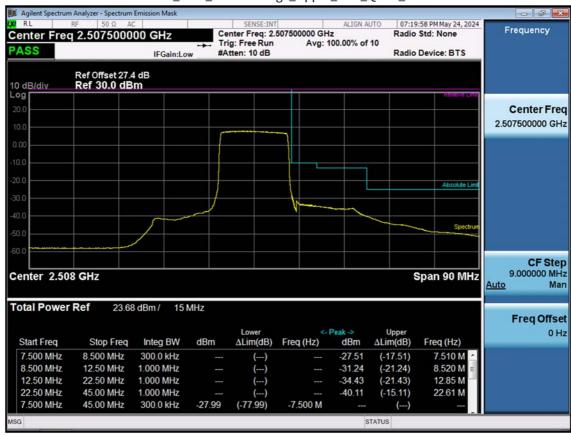




LTE B7_15 M_Channel Edge_Lower_Low_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 139 of 231

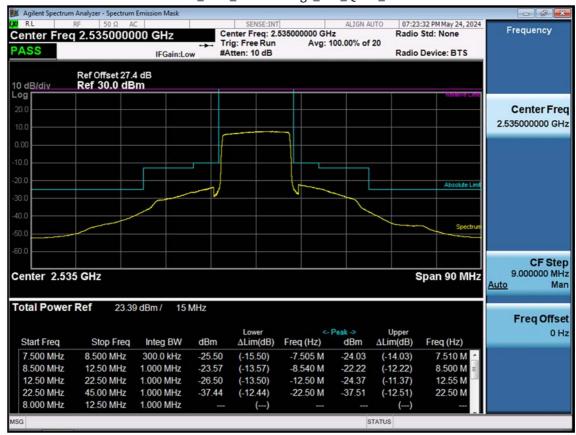




LTE B7_15 M_Channel Edge_Upper_Low_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 140 of 231

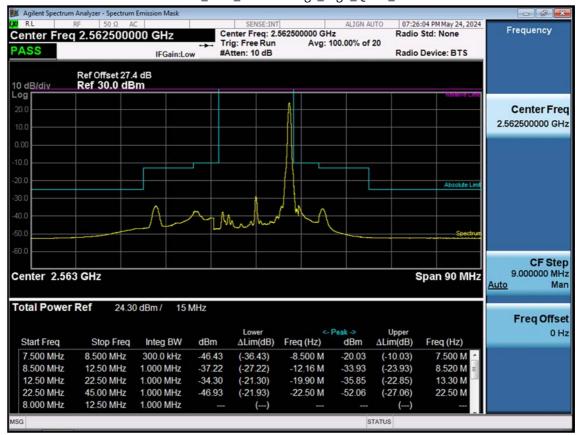




LTE B7_15 M_Channel Edge_Mid_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 141 of 231





LTE B7_15 M_Channel Edge_High_QPSK_1RB

F-TP22-03 (Rev. 06) Page 142 of 231





LTE B7_15 M_Channel Edge_High_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 143 of 231

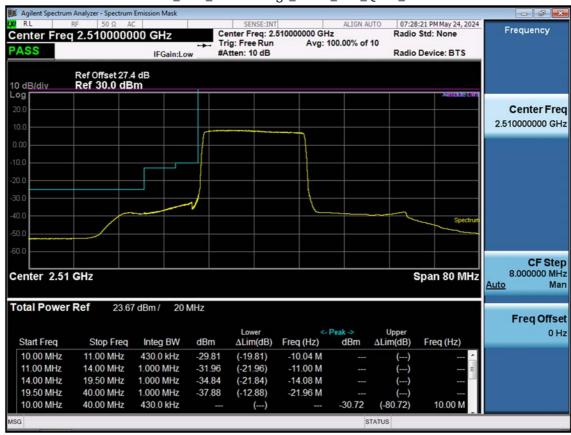




LTE B7_20 M_Channel Edge_Low_QPSK_1RB

F-TP22-03 (Rev. 06) Page 144 of 231





LTE B7_20 M_Channel Edge_Lower_Low_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 145 of 231





LTE B7_20 M_Channel Edge_Upper_Low_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 146 of 231

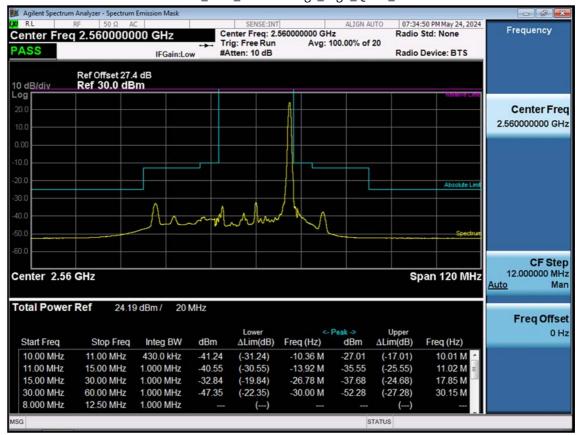




LTE B7_20 M_Channel Edge_Mid_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 147 of 231





LTE B7_20 M_Channel Edge_High_QPSK_1RB

F-TP22-03 (Rev. 06) Page 148 of 231





LTE B7_20 M_Channel Edge_High_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 149 of 231

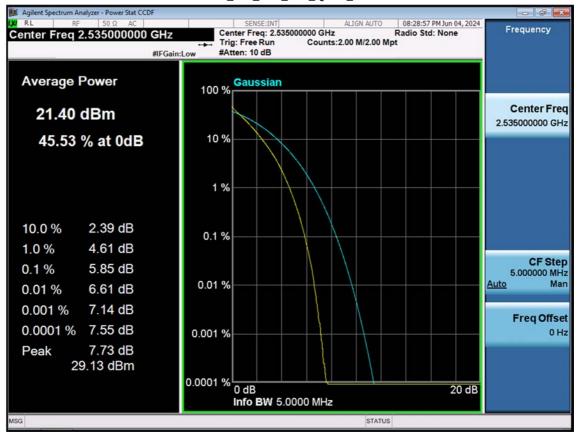


11. TEST PLOTS(Sub 5 Ant)

F-TP22-03 (Rev. 06) Page 150 of 231

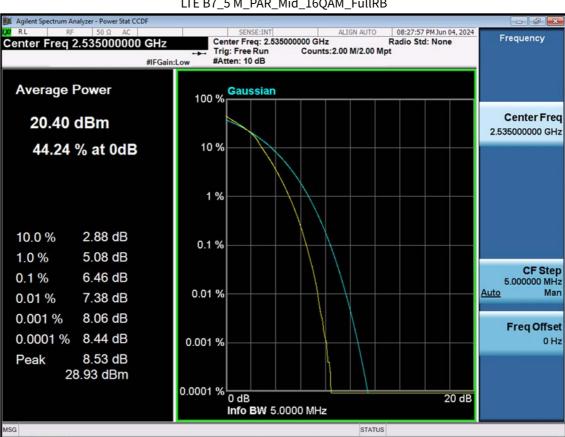


LTE B7_5 M_PAR_Mid_QPSK_FullRB



F-TP22-03 (Rev. 06) Page 151 of 231



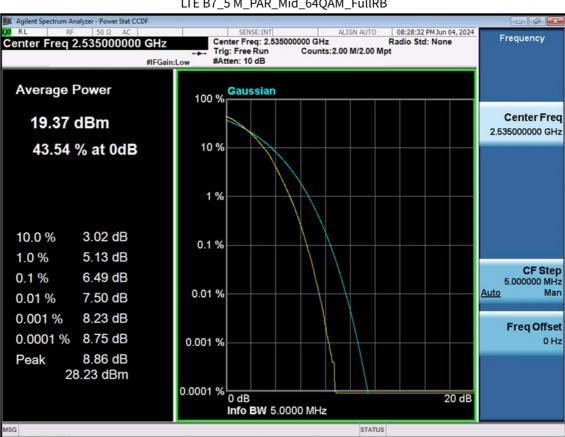


STATUS

LTE B7_5 M_PAR_Mid_16QAM_FullRB

F-TP22-03 (Rev. 06) Page 152 of 231



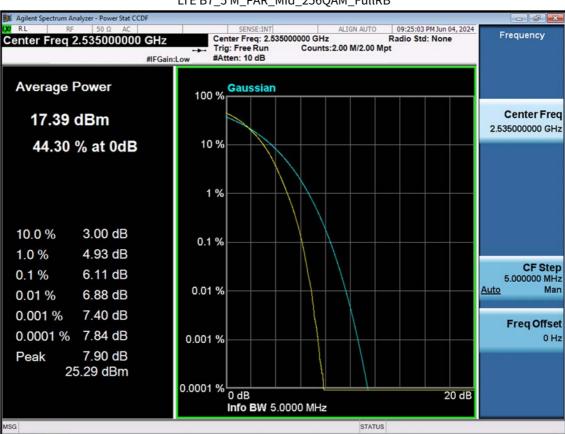


STATUS

LTE B7_5 M_PAR_Mid_64QAM_FullRB

F-TP22-03 (Rev. 06) Page 153 of 231



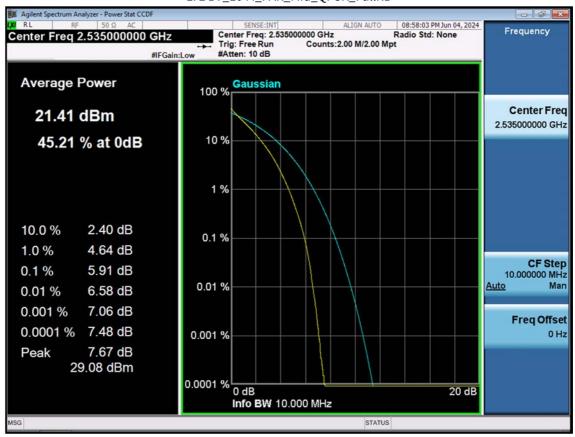


LTE B7_5 M_PAR_Mid_256QAM_FullRB

F-TP22-03 (Rev. 06) Page 154 of 231



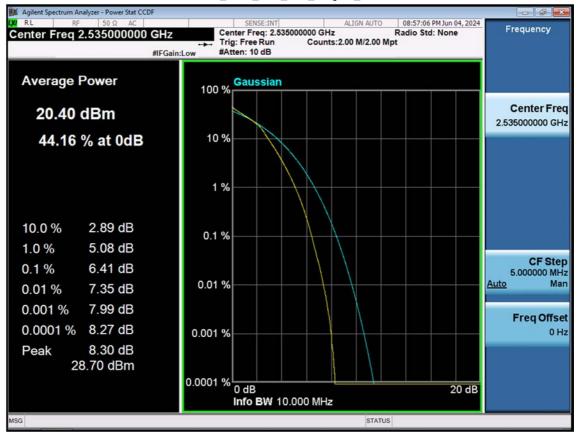
LTE B7_10 M_PAR_Mid_QPSK_FullRB



F-TP22-03 (Rev. 06) Page 155 of 231



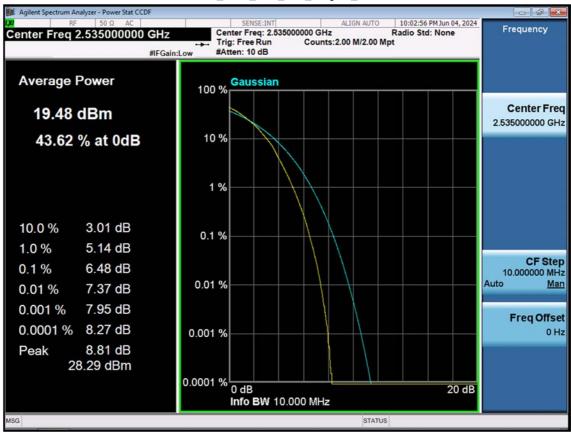
LTE B7_10 M_PAR_Mid_16QAM_FullRB



F-TP22-03 (Rev. 06) Page 156 of 231



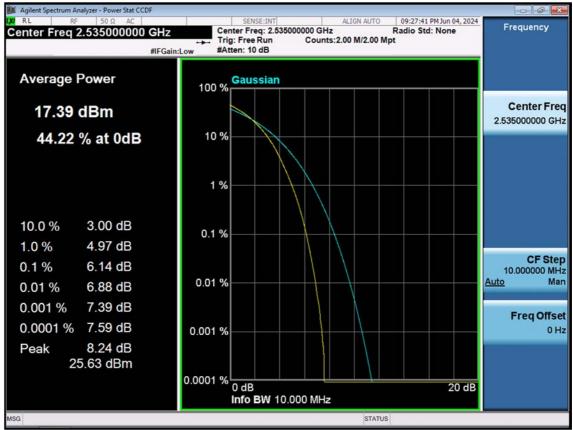
LTE B7_10 M_PAR_Mid_64QAM_FullRB



F-TP22-03 (Rev. 06) Page 157 of 231



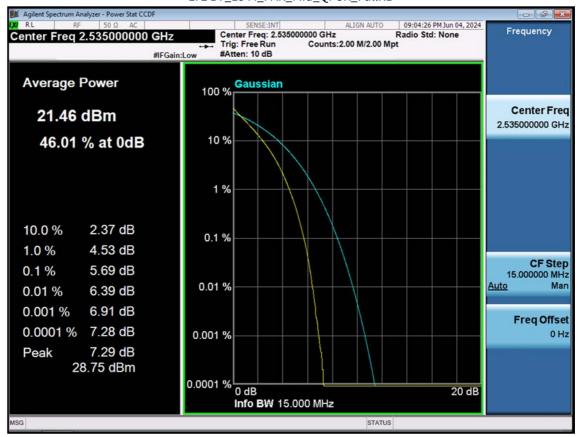
LTE B7_10 M_PAR_Mid_256QAM_FullRB



F-TP22-03 (Rev. 06) Page 158 of 231



LTE B7_15 M_PAR_Mid_QPSK_FullRB



F-TP22-03 (Rev. 06) Page 159 of 231

20 dB

STATUS



09:03:31 PM Jun 04, 2024 Radio Std: None Frequency Center Freq 2.535000000 GHz Counts:2.00 M/2.00 Mpt Average Power Gaussian 100 % Center Freq 20.43 dBm 2.535000000 GHz 10 % 44.46 % at 0dB 1 % 10.0 % 2.88 dB 0.1 % 1.0 % 5.04 dB CF Step 10.000000 MHz 0.1% 6.34 dB Auto Man 0.01 % 7.22 dB 0.01 % 7.83 dB 0.001 % Freq Offset 0.0001 % 8.18 dB 0.001 % Peak 8.23 dB 28.66 dBm 0.0001 % 0 dB Info BW 15.000 MHz

LTE B7_15 M_PAR_Mid_16QAM_FullRB

F-TP22-03 (Rev. 06) Page 160 of 231

20 dB

STATUS



10:03:32 PM Jun 04, 2024 Radio Std: None Frequency Center Freq 2.535000000 GHz Counts:2.00 M/2.00 Mpt Average Power Gaussian 100 % Center Freq 19.48 dBm 2.535000000 GHz 10 % 44.01 % at 0dB 1 % 10.0 % 2.99 dB 0.1 % 5.09 dB 1.0 % CF Step 15.000000 MHz 6.44 dB 0.1% Man 0.01 % 0.01 % 7.39 dB 8.08 dB 0.001 % Freq Offset 0.0001 % 8.28 dB 0.001 % Peak 8.57 dB 28.05 dBm 0.0001 % 0 dB Info BW 15.000 MHz

LTE B7_15 M_PAR_Mid_64QAM_FullRB

F-TP22-03 (Rev. 06) Page 161 of 231



09:29:57 PM Jun 04, 2024 Radio Std: None Frequency Center Freq 2.535000000 GHz Counts:2.00 M/2.00 Mpt Average Power Gaussian 100 % Center Freq 17.36 dBm 2.535000000 GHz 10 % 44.48 % at 0dB 1 % 10.0 % 3.00 dB 0.1 % 1.0 % 4.92 dB CF Step 15.000000 MHz 0.1% 6.11 dB Auto Man 0.01 % 0.01 % 6.90 dB 0.001 % 7.39 dB Freq Offset 0.0001 % 7.73 dB 0.001 % Peak 7.86 dB 25.22 dBm 0.0001 % 0 dB Info BW 15.000 MHz 20 dB

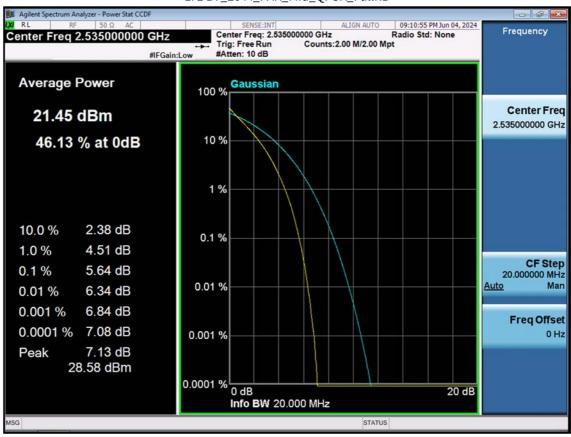
STATUS

LTE B7_15 M_PAR_Mid_256QAM_FullRB

F-TP22-03 (Rev. 06) Page 162 of 231



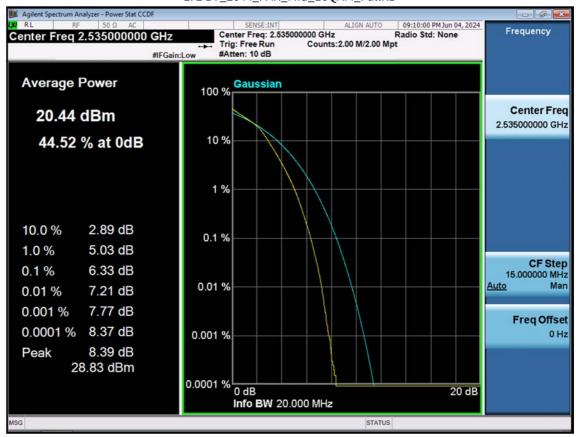
LTE B7_20 M_PAR_Mid_QPSK_FullRB



F-TP22-03 (Rev. 06) Page 163 of 231



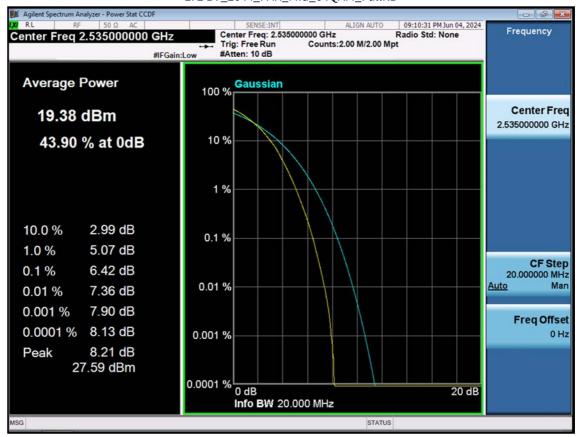
LTE B7_20 M_PAR_Mid_16QAM_FullRB



F-TP22-03 (Rev. 06) Page 164 of 231



LTE B7_20 M_PAR_Mid_64QAM_FullRB



F-TP22-03 (Rev. 06) Page 165 of 231

20 dB

STATUS



09:32:19 PM Jun 04, 2024 Radio Std: None Frequency Center Freq 2.535000000 GHz Counts:2.00 M/2.00 Mpt Average Power Gaussian 100 % Center Freq 17.48 dBm 2.535000000 GHz 10 % 44.35 % at 0dB 1 % 10.0 % 2.97 dB 0.1 % 1.0 % 4.89 dB CF Step 20.000000 MHz 0.1% 6.09 dB Auto Man 0.01 % 0.01 % 6.87 dB 0.001 % 7.39 dB Freq Offset 0.0001 % 7.77 dB 0.001 % Peak 7.84 dB 25.32 dBm 0.0001 % 0 dB Info BW 20.000 MHz

LTE B7_20 M_PAR_Mid_256QAM_FullRB

F-TP22-03 (Rev. 06) Page 166 of 231

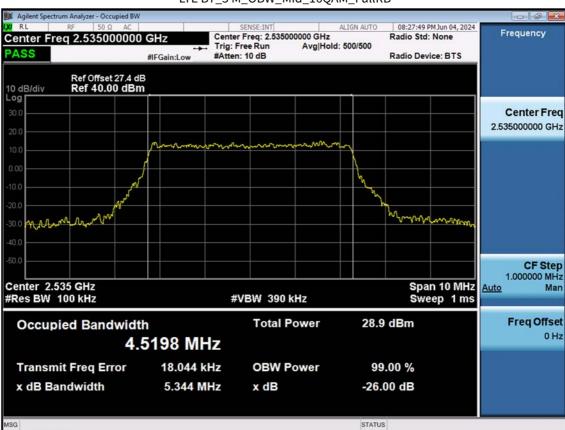


LTE B7_5 M_OBW_Mid_QPSK_FullRB 08:28:48 PM Jun 04, 2024 Radio Std: None Center Freq: 2.535000000 GHz Trig: Free Run Avg|Hol #Atten: 10 dB Frequency Center Freq 2.535000000 GHz Avg|Hold: 500/500 **PASS** Radio Device: BTS Ref Offset 27.4 dB Ref 40.00 dBm 10 dB/div Center Freq 2.535000000 GHz CF Step 1.000000 MHz Center 2.535 GHz #Res BW 100 kHz Span 10 MHz Auto Man **#VBW 390 kHz** Sweep 1 ms Freq Offset **Total Power** 29.9 dBm Occupied Bandwidth 0 Hz 4.5384 MHz 20.913 kHz **Transmit Freq Error OBW Power** 99.00 % x dB Bandwidth -26.00 dB 5.371 MHz x dB

STATUS

F-TP22-03 (Rev. 06) Page 167 of 231

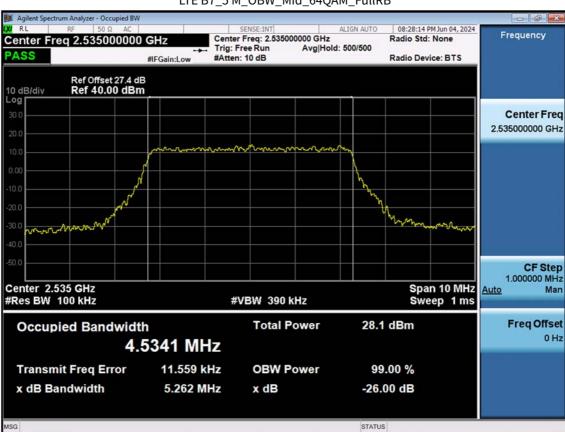




LTE B7_5 M_OBW_Mid_16QAM_FullRB

F-TP22-03 (Rev. 06) Page 168 of 231





LTE B7_5 M_OBW_Mid_64QAM_FullRB

F-TP22-03 (Rev. 06) Page 169 of 231

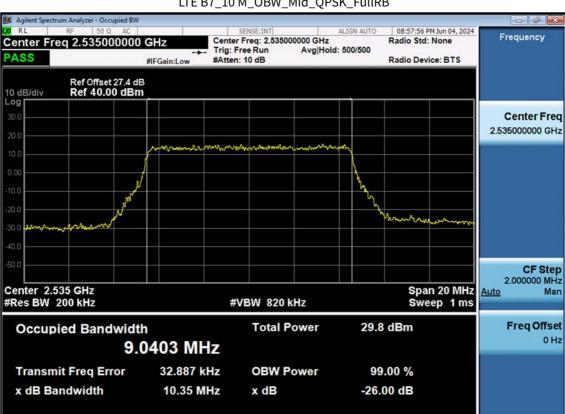


LTE B7_5 M_OBW_Mid_256QAM_FullRB 09:24:45 PM Jun 04, 2024 Radio Std: None Center Freq: 2.535000000 GHz Trig: Free Run Avg|Hole #Atten: 10 dB Frequency Center Freq 2.535000000 GHz Avg|Hold: 500/500 **PASS** Radio Device: BTS Ref Offset 27.4 dB Ref 40.00 dBm 10 dB/div Center Freq 2.535000000 GHz CF Step 1.000000 MHz Center 2.535 GHz #Res BW 100 kHz Span 10 MHz Auto Man **#VBW 390 kHz** Sweep 1 ms Freq Offset **Total Power** 25.9 dBm Occupied Bandwidth 0 Hz 4.5297 MHz 10.833 kHz **Transmit Freq Error OBW Power** 99.00 % x dB Bandwidth -26.00 dB 5.348 MHz x dB

STATUS

Page 170 of 231 F-TP22-03 (Rev. 06)





STATUS

LTE B7_10 M_OBW_Mid_QPSK_FullRB

Page 171 of 231 F-TP22-03 (Rev. 06)



x dB Bandwidth

08:56:59 PM Jun 04, 2024 Center Freq: 2.535000000 GHz Trig: Free Run Avg|Hol #Atten: 10 dB Frequency Center Freq 2.535000000 GHz Radio Std: None Avg|Hold: 500/500 **PASS** Radio Device: BTS Ref Offset 27.4 dB Ref 40.00 dBm 10 dB/div Center Freq 2.535000000 GHz meneral polyment which CF Step 2.000000 MHz Center 2.535 GHz #Res BW 200 kHz Span 20 MHz Auto Man **#VBW 820 kHz** Sweep 1 ms Freq Offset **Total Power** 28.9 dBm Occupied Bandwidth 0 Hz 9.0137 MHz 28.403 kHz **Transmit Freq Error OBW Power** 99.00 %

x dB

-26.00 dB

STATUS

10.48 MHz

LTE B7_10 M_OBW_Mid_16QAM_FullRB

F-TP22-03 (Rev. 06) Page 172 of 231



LTE B7_10 M_OBW_Mid_64QAM_FullRB 08:57:23 PM Jun 04, 2024 Radio Std: None Center Freq: 2.535000000 GHz Trig: Free Run Avg|Hol #Atten: 10 dB Frequency Center Freq 2.535000000 GHz Avg|Hold: 500/500 **PASS** Radio Device: BTS Ref Offset 27.4 dB Ref 40.00 dBm 10 dB/div Center Freq 2.535000000 GHz healtharm CF Step 2.000000 MHz Center 2.535 GHz #Res BW 200 kHz Span 20 MHz Auto Man **#VBW 820 kHz** Sweep 1 ms Freq Offset **Total Power** 28.9 dBm Occupied Bandwidth 0 Hz 9.0193 MHz 33.565 kHz **Transmit Freq Error OBW Power** 99.00 % x dB Bandwidth x dB -26.00 dB 10.28 MHz

STATUS

Page 173 of 231 F-TP22-03 (Rev. 06)



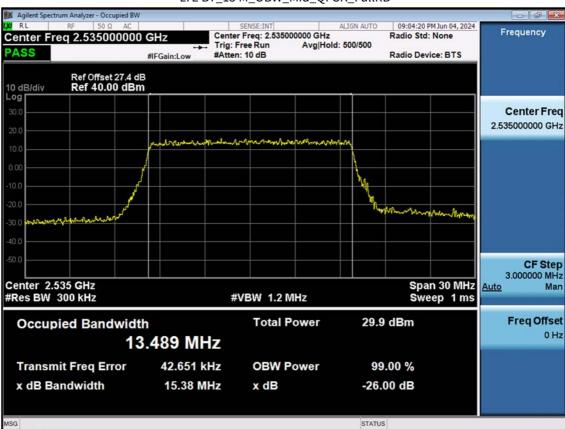
09:27:25 PM Jun 04, 2024 Radio Std: None Center Freq: 2.535000000 GHz Trig: Free Run Avg|Hol #Atten: 10 dB Frequency Center Freq 2.535000000 GHz Avg|Hold: 500/500 **PASS** Radio Device: BTS Ref Offset 27.4 dB Ref 40.00 dBm 10 dB/div Center Freq 2.535000000 GHz CF Step 2.000000 MHz Center 2.535 GHz #Res BW 200 kHz Span 20 MHz Auto Man **#VBW 820 kHz** Sweep 1 ms Freq Offset **Total Power** 26.0 dBm Occupied Bandwidth 0 Hz 9.0142 MHz 28.060 kHz **Transmit Freq Error OBW Power** 99.00 % x dB Bandwidth -26.00 dB 10.30 MHz x dB

STATUS

LTE B7_10 M_OBW_Mid_256QAM_FullRB

Page 174 of 231 F-TP22-03 (Rev. 06)





LTE B7_15 M_OBW_Mid_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 175 of 231



09:03:25 PM Jun 04, 2024 Radio Std: None Center Freq: 2.535000000 GHz Trig: Free Run Avg|Hol #Atten: 10 dB Frequency Center Freq 2.535000000 GHz Avg|Hold: 500/500 **PASS** Radio Device: BTS Ref Offset 27.4 dB Ref 40.00 dBm 10 dB/div Center Freq 2.535000000 GHz ruffey and will sprange me CF Step 3.000000 MHz Center 2.535 GHz #Res BW 300 kHz Span 30 MHz Auto Man **#VBW 1.2 MHz** Sweep 1 ms Freq Offset **Total Power** 29.1 dBm Occupied Bandwidth 0 Hz 13.501 MHz 39.810 kHz **Transmit Freq Error OBW Power** 99.00 % x dB Bandwidth -26.00 dB 15.30 MHz x dB

STATUS

LTE B7_15 M_OBW_Mid_16QAM_FullRB

F-TP22-03 (Rev. 06) Page 176 of 231



09:03:48 PM Jun 04, 2024 Radio Std: None Center Freq: 2.535000000 GHz Trig: Free Run Avg|Hol #Atten: 10 dB Frequency Center Freq 2.535000000 GHz Avg|Hold: 500/500 **PASS** Radio Device: BTS Ref Offset 27.4 dB Ref 40.00 dBm 10 dB/div Center Freq 2.535000000 GHz CF Step 3.000000 MHz Center 2.535 GHz #Res BW 300 kHz Span 30 MHz Auto Man **#VBW 1.2 MHz** Sweep 1 ms Freq Offset **Total Power** 29.0 dBm Occupied Bandwidth 0 Hz 13.458 MHz 44.825 kHz **Transmit Freq Error OBW Power** 99.00 % x dB Bandwidth 14.94 MHz x dB -26.00 dB

STATUS

LTE B7_15 M_OBW_Mid_64QAM_FullRB

F-TP22-03 (Rev. 06) Page 177 of 231



09:29:40 PM Jun 04, 2024 Radio Std: None Center Freq: 2.535000000 GHz Trig: Free Run Avg|Hol #Atten: 10 dB Frequency Center Freq 2.535000000 GHz Avg|Hold: 500/500 **PASS** Radio Device: BTS Ref Offset 27.4 dB Ref 40.00 dBm 10 dB/div Center Freq 2.535000000 GHz CF Step 3.000000 MHz Center 2.535 GHz Span 30 MHz Auto Man #Res BW 300 kHz **#VBW 1.2 MHz** Sweep 1 ms Freq Offset **Total Power** 25.9 dBm Occupied Bandwidth 0 Hz 13.445 MHz 46.297 kHz **Transmit Freq Error OBW Power** 99.00 % x dB Bandwidth 14.99 MHz -26.00 dB x dB

STATUS

LTE B7_15 M_OBW_Mid_256QAM_FullRB

Page 178 of 231 F-TP22-03 (Rev. 06)



09:10:49 PM Jun 04, 2024 Radio Std: None Center Freq: 2.535000000 GHz Trig: Free Run Avg|Hol #Atten: 10 dB Frequency Center Freq 2.535000000 GHz Avg|Hold: 500/500 **PASS** Radio Device: BTS Ref Offset 27.4 dB Ref 40.00 dBm 10 dB/div Center Freq 2.535000000 GHz CF Step 4.000000 MHz Center 2.535 GHz #Res BW 390 kHz Span 40 MHz Auto Man **#VBW 1.6 MHz** Sweep 1 ms Freq Offset **Total Power** 30.1 dBm Occupied Bandwidth 0 Hz 17.924 MHz 79.270 kHz **Transmit Freq Error OBW Power** 99.00 % x dB Bandwidth -26.00 dB 19.76 MHz x dB

STATUS

LTE B7_20 M_OBW_Mid_QPSK_FullRB

F-TP22-03 (Rev. 06) Page 179 of 231