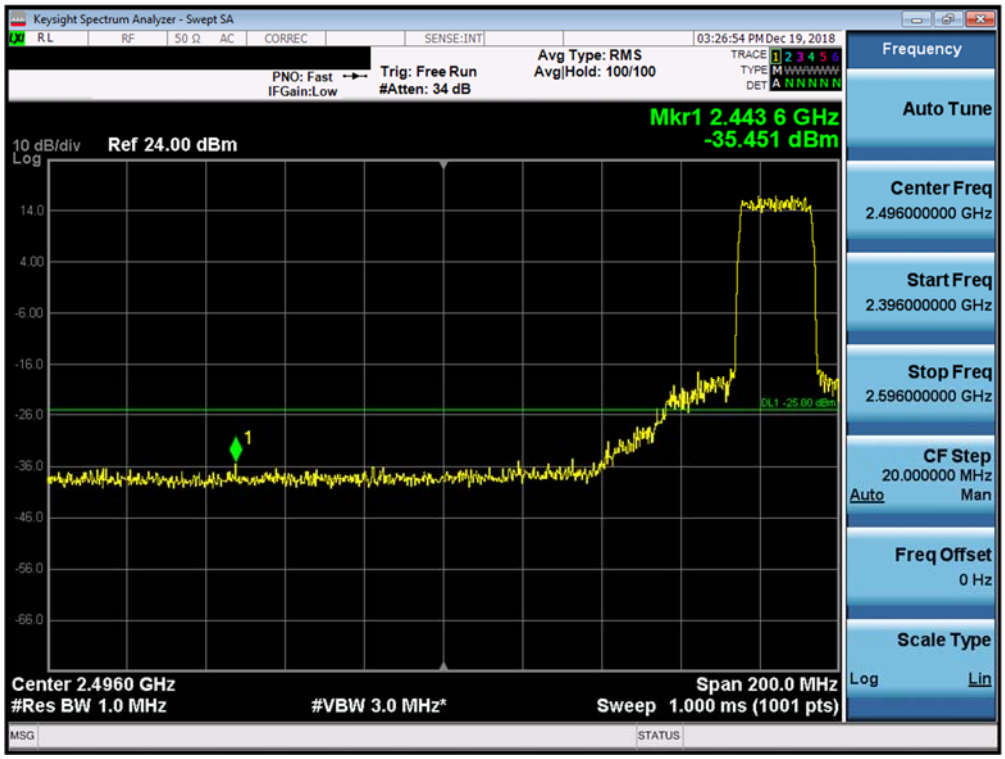
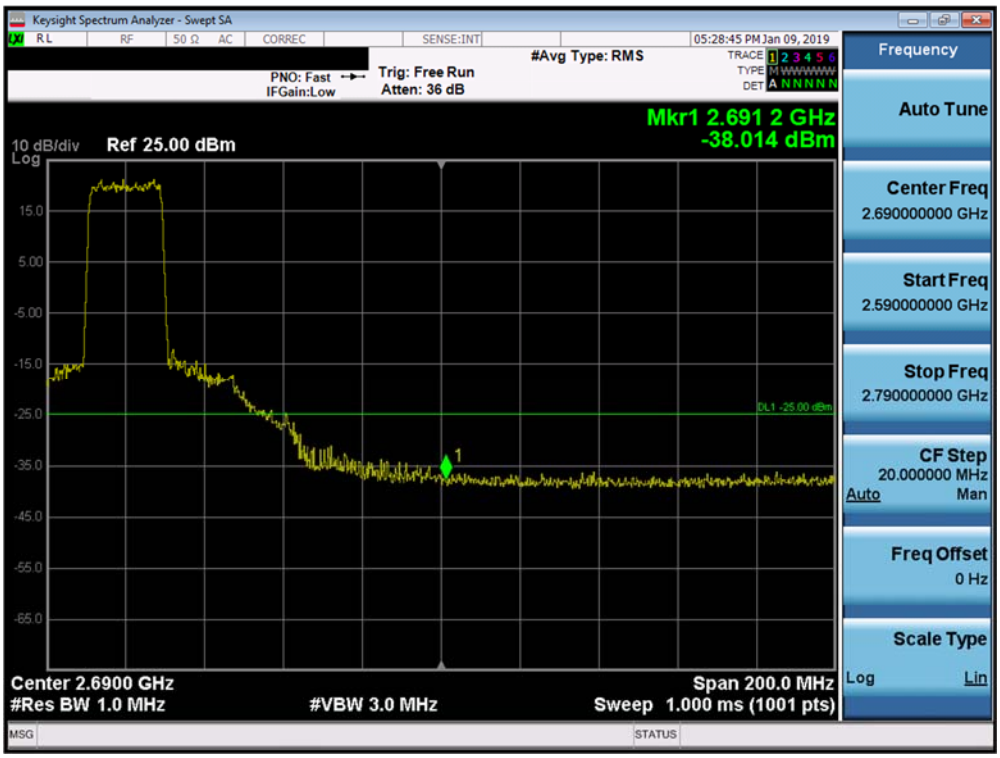


Plot 7-355. Lower Band Edge Plot (Band 38 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-356. Upper Band Edge Plot (Band 38 - 20.0MHz QPSK - Full RB Configuration)

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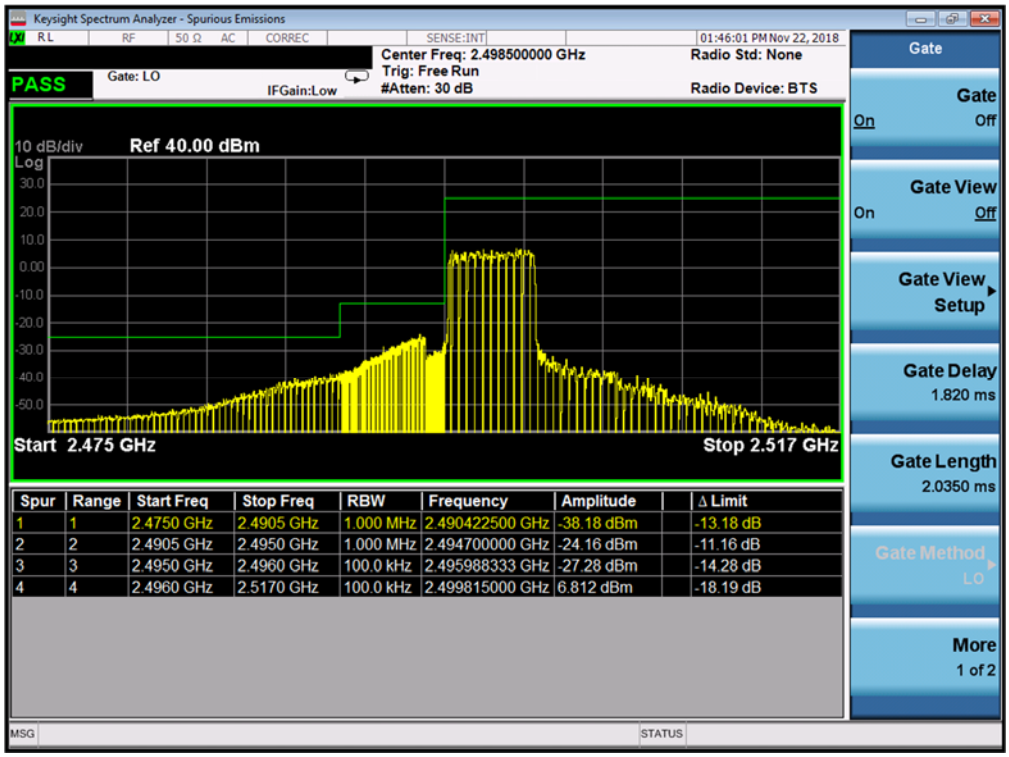
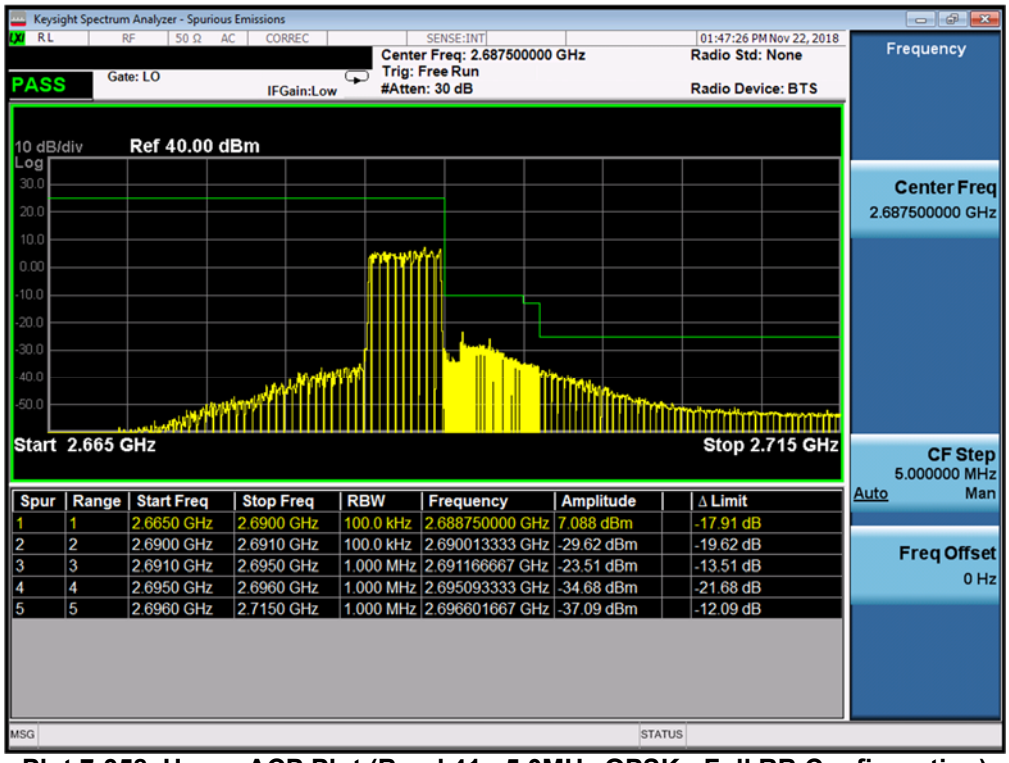
Band 41



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4905 GHz	1.000 MHz	2.490422500 GHz	-38.18 dBm	-13.18 dB
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.494700000 GHz	-24.16 dBm	-11.16 dB
3	3	2.4950 GHz	2.4960 GHz	100.0 kHz	2.495988333 GHz	-27.28 dBm	-14.28 dB
4	4	2.4960 GHz	2.5170 GHz	100.0 kHz	2.499815000 GHz	6.812 dBm	-18.19 dB

Plot 7-357. Lower ACP Plot at 2496 MHz (Band 41 - 5.0MHz QPSK - Full RB Configuration)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.6650 GHz	2.6900 GHz	100.0 kHz	2.688750000 GHz	7.088 dBm	-17.91 dB
2	2	2.6900 GHz	2.6910 GHz	100.0 kHz	2.690013333 GHz	-29.62 dBm	-19.62 dB
3	3	2.6910 GHz	2.6950 GHz	1.000 MHz	2.691166667 GHz	-23.51 dBm	-13.51 dB
4	4	2.6950 GHz	2.6960 GHz	1.000 MHz	2.695093333 GHz	-34.68 dBm	-21.68 dB
5	5	2.6960 GHz	2.7150 GHz	1.000 MHz	2.696601667 GHz	-37.09 dBm	-12.09 dB

Plot 7-358. Upper ACP Plot (Band 41 - 5.0MHz QPSK - Full RB Configuration)

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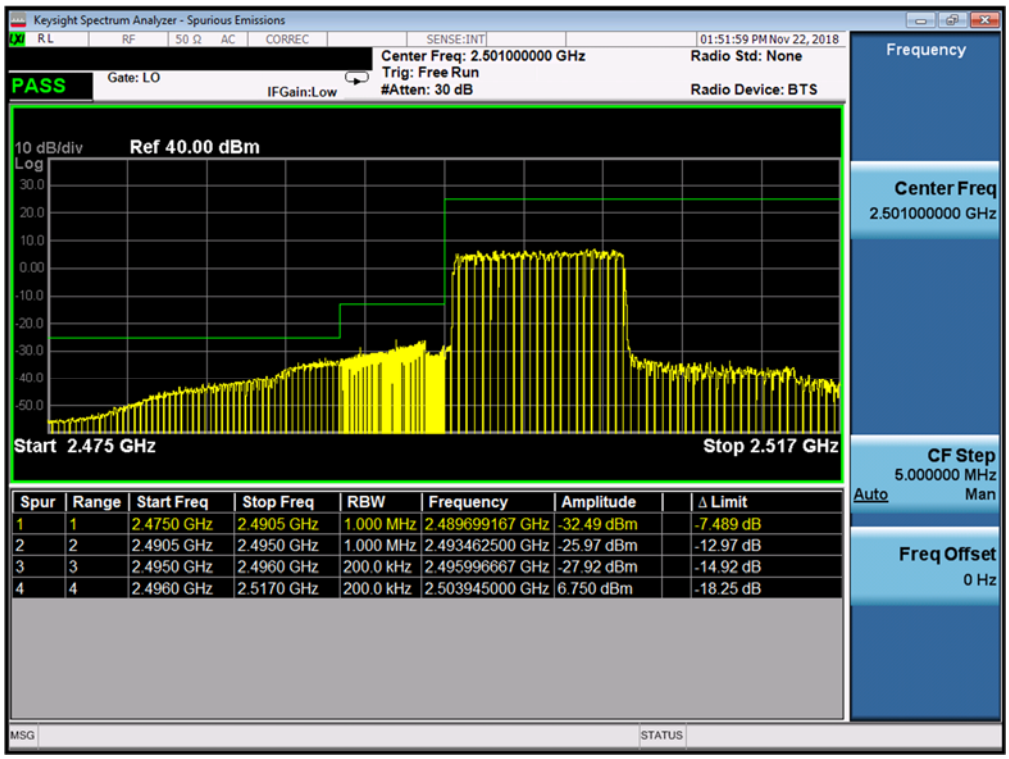
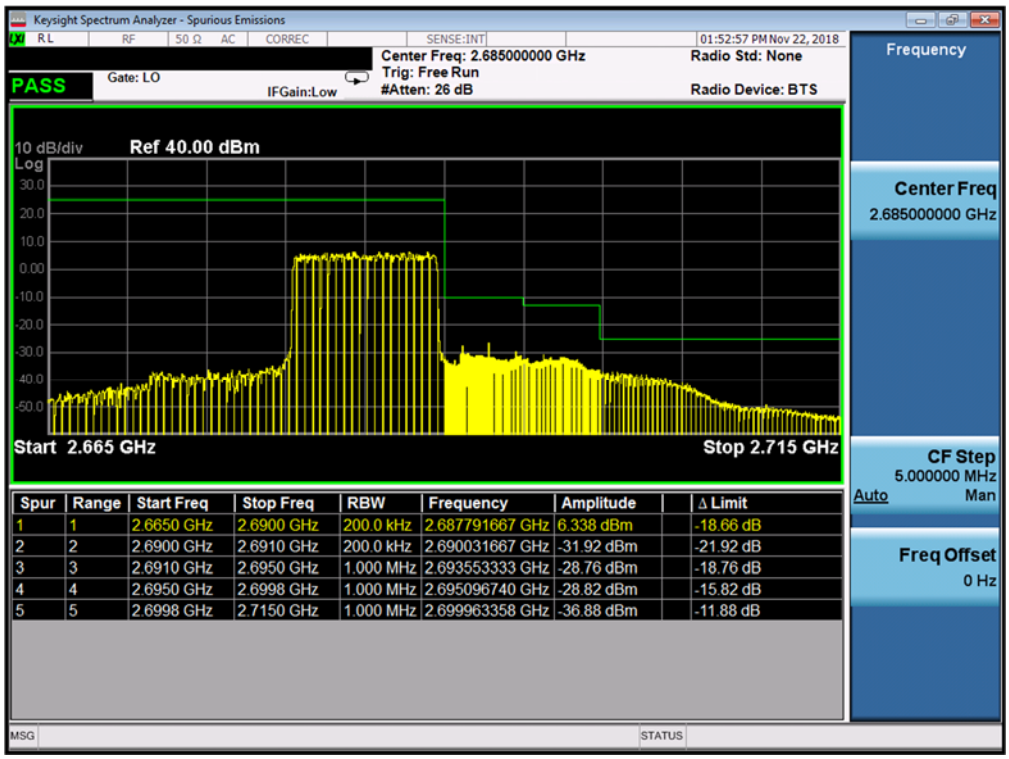


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4905 GHz	1.000 MHz	2.489699167 GHz	-32.49 dBm	-7.489 dB
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.493462500 GHz	-25.97 dBm	-12.97 dB
3	3	2.4950 GHz	2.4960 GHz	200.0 kHz	2.495996667 GHz	-27.92 dBm	-14.92 dB
4	4	2.4960 GHz	2.5170 GHz	200.0 kHz	2.503945000 GHz	6.750 dBm	-18.25 dB

Plot 7-359. Lower ACP Plot at 2496 MHz (Band 41 - 10.0MHz QPSK - Full RB Configuration)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.6650 GHz	2.6900 GHz	200.0 kHz	2.687791667 GHz	6.338 dBm	-18.66 dB
2	2	2.6900 GHz	2.6910 GHz	200.0 kHz	2.690031667 GHz	-31.92 dBm	-21.92 dB
3	3	2.6910 GHz	2.6950 GHz	1.000 MHz	2.693553333 GHz	-28.76 dBm	-18.76 dB
4	4	2.6950 GHz	2.6998 GHz	1.000 MHz	2.695096740 GHz	-28.82 dBm	-15.82 dB
5	5	2.6998 GHz	2.7150 GHz	1.000 MHz	2.699963358 GHz	-36.88 dBm	-11.88 dB

Plot 7-360. Upper ACP Plot (Band 41 - 10.0MHz QPSK - Full RB Configuration)

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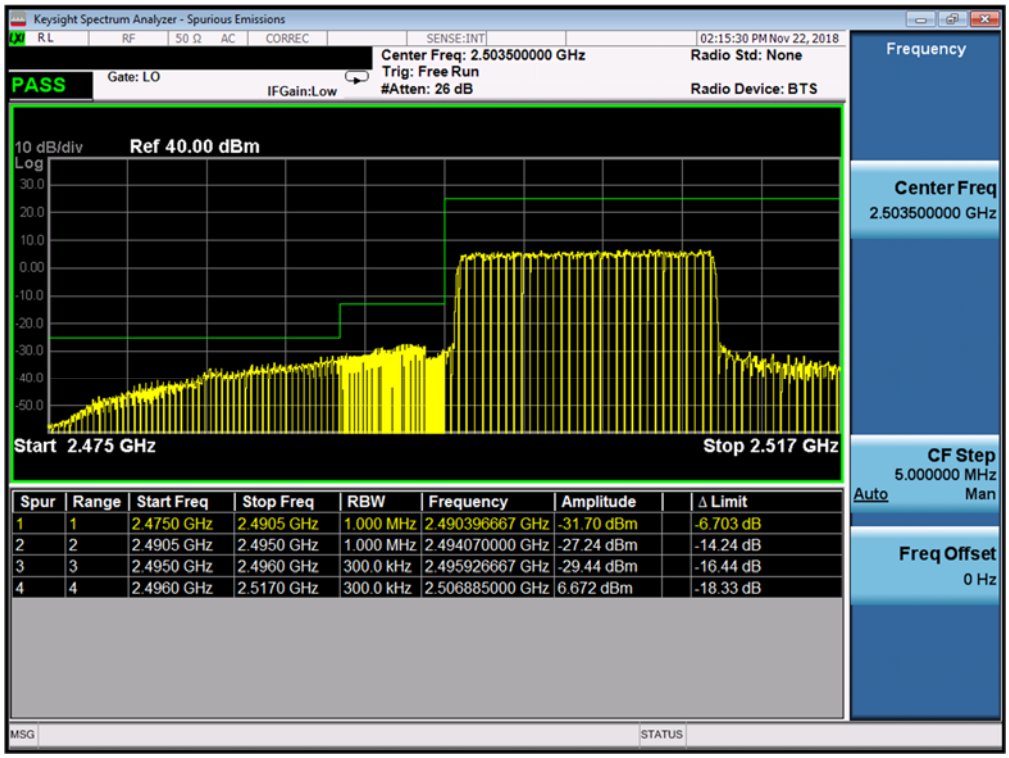
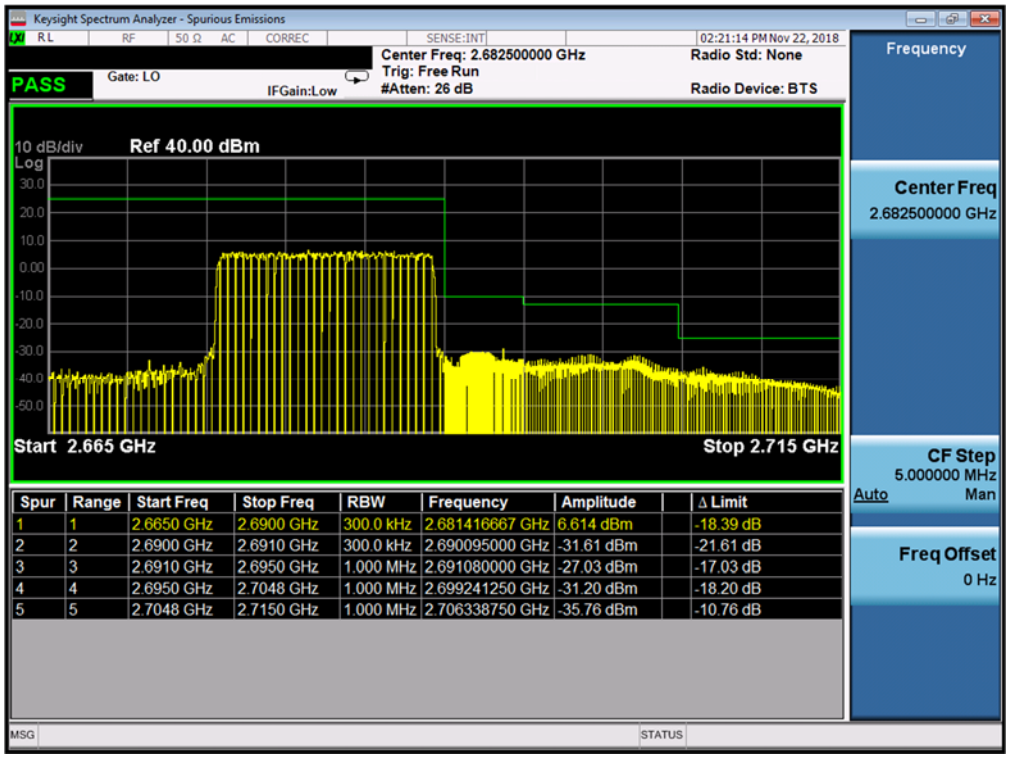


Plot 7-361. Lower ACP Plot at 2496 MHz (Band 41 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-362. Upper ACP Plot (Band 41 - 15.0MHz QPSK - Full RB Configuration)

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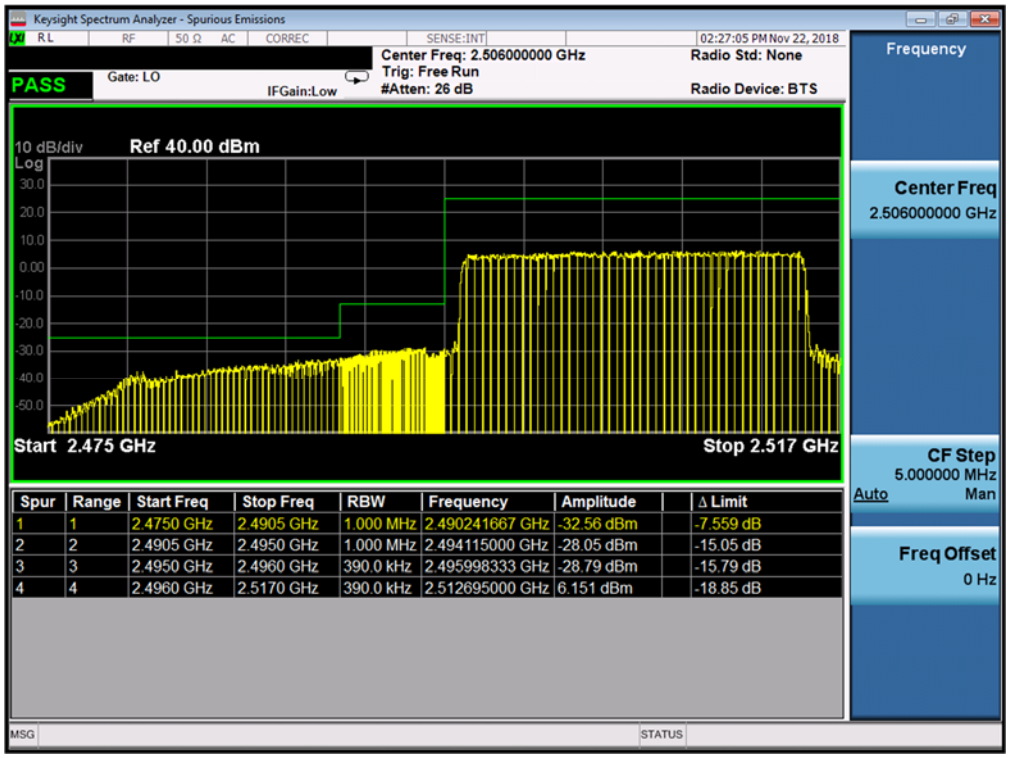
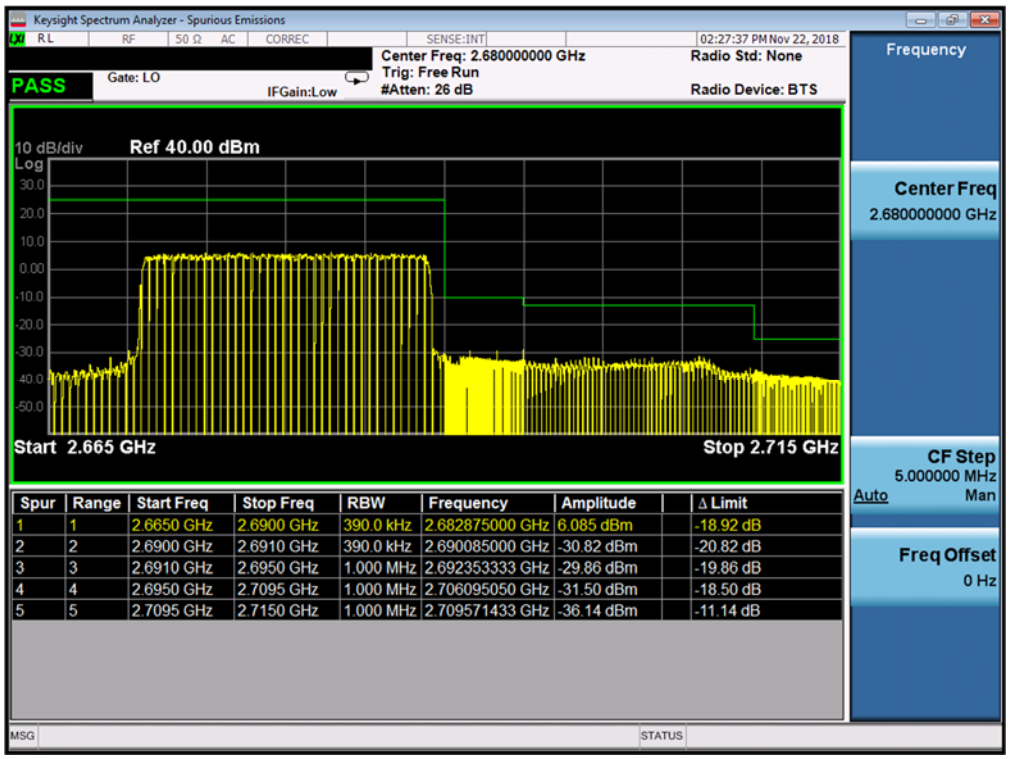


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4905 GHz	1.000 MHz	2.490241667 GHz	-32.56 dBm	-7.559 dB
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.494115000 GHz	-28.05 dBm	-15.05 dB
3	3	2.4950 GHz	2.4960 GHz	390.0 kHz	2.495998333 GHz	-28.79 dBm	-15.79 dB
4	4	2.4960 GHz	2.5170 GHz	390.0 kHz	2.512695000 GHz	6.151 dBm	-18.85 dB

Plot 7-363. Lower ACP Plot at 2496 MHz (Band 41 - 20.0MHz QPSK - Full RB Configuration)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.6650 GHz	2.6900 GHz	390.0 kHz	2.682875000 GHz	6.085 dBm	-18.92 dB
2	2	2.6900 GHz	2.6910 GHz	390.0 kHz	2.690085000 GHz	-30.82 dBm	-20.82 dB
3	3	2.6910 GHz	2.6950 GHz	1.000 MHz	2.692353333 GHz	-29.86 dBm	-19.86 dB
4	4	2.6950 GHz	2.7095 GHz	1.000 MHz	2.706095050 GHz	-31.50 dBm	-18.50 dB
5	5	2.7095 GHz	2.7150 GHz	1.000 MHz	2.709571433 GHz	-36.14 dBm	-11.14 dB

Plot 7-364. Upper ACP Plot (Band 41 - 20.0MHz QPSK - Full RB Configuration)

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7.5 Peak-Average Ratio

Test Overview

A peak to average ratio measurement is performed at the conducted port of the EUT. The spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level.

Test Procedure Used

KDB 971168 D01 v03r01 – Section 5.7.1

Test Settings

1. The signal analyzer's CCDF measurement profile is enabled
2. Frequency = carrier center frequency
3. Measurement BW ≥ OBW or specified reference bandwidth
4. The signal analyzer was set to collect one million samples to generate the CCDF curve
5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power

Test Setup

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

Figure 7-4. Test Instrument & Measurement Setup

Test Notes

None.

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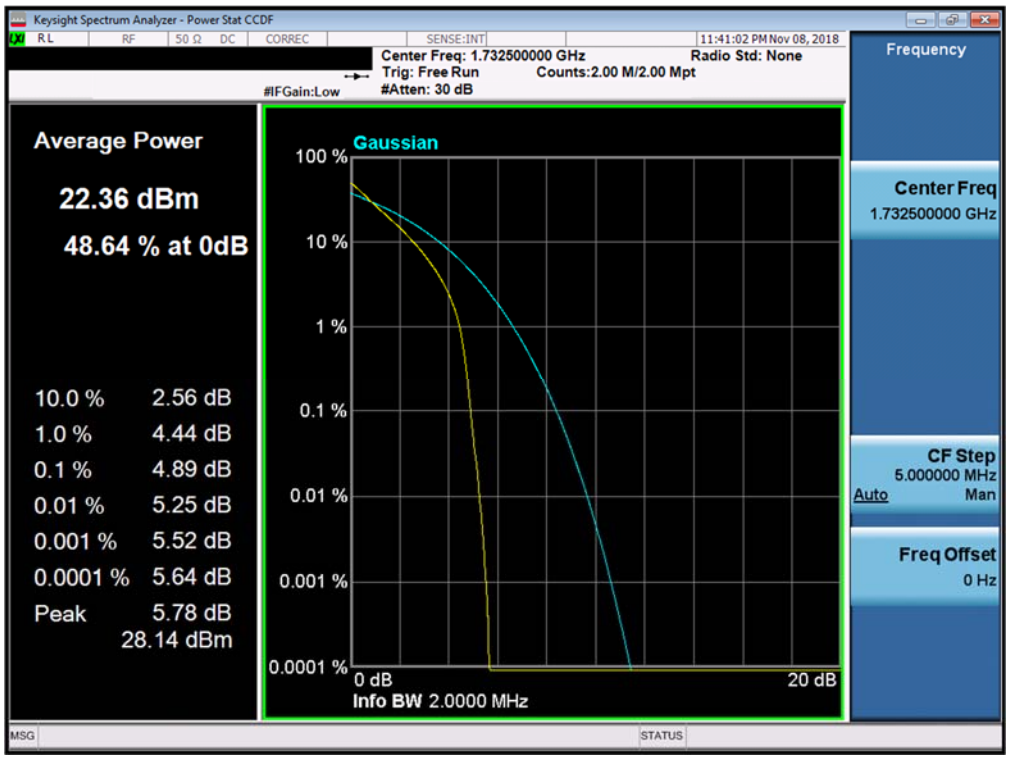
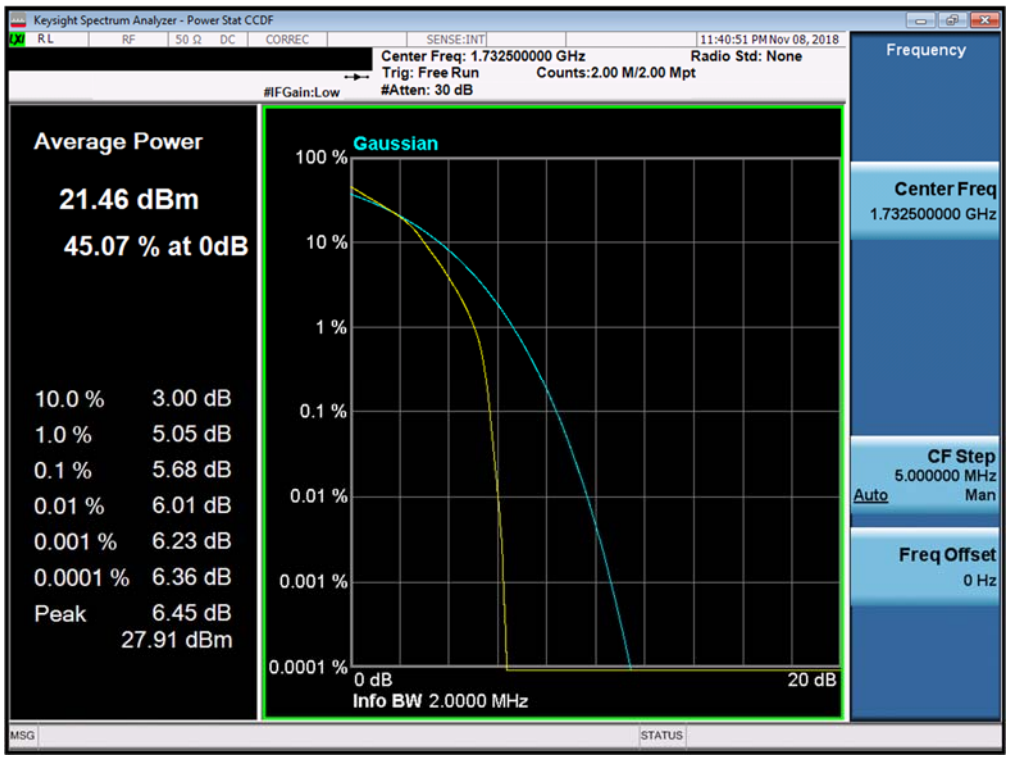
Band 66/4



Plot 7-365. PAR Plot (Band 66/4 - 1.4MHz QPSK - Full RB Configuration)



Plot 7-366. PAR Plot (Band 66/4 - 1.4MHz 16-QAM - Full RB Configuration)

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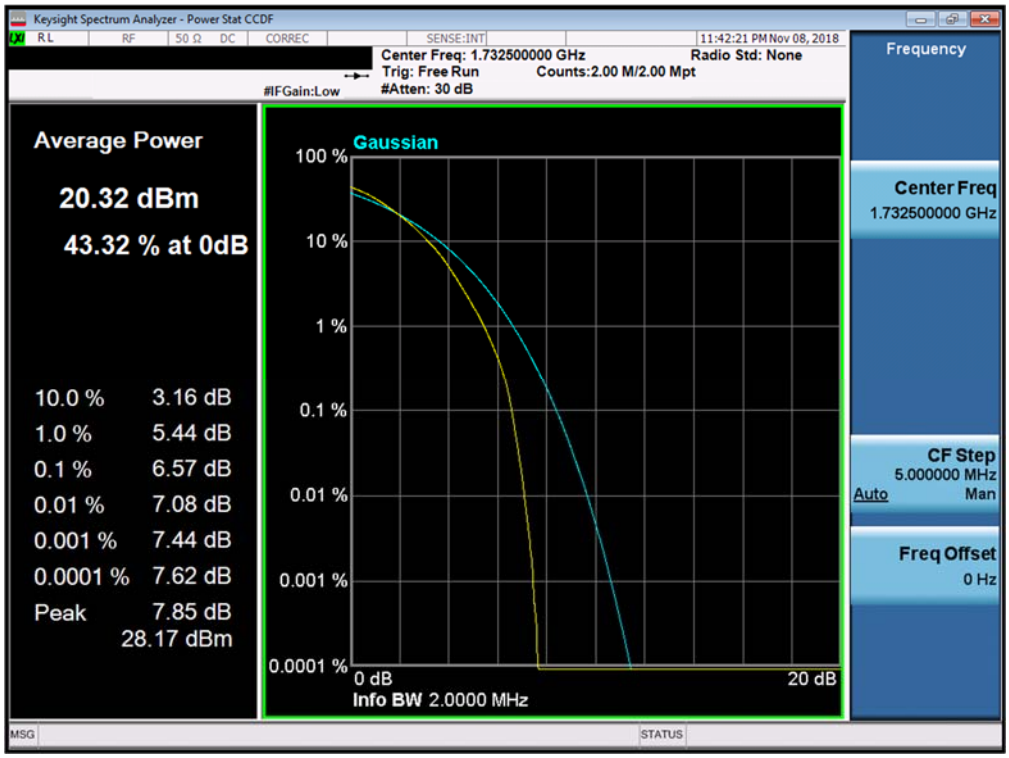
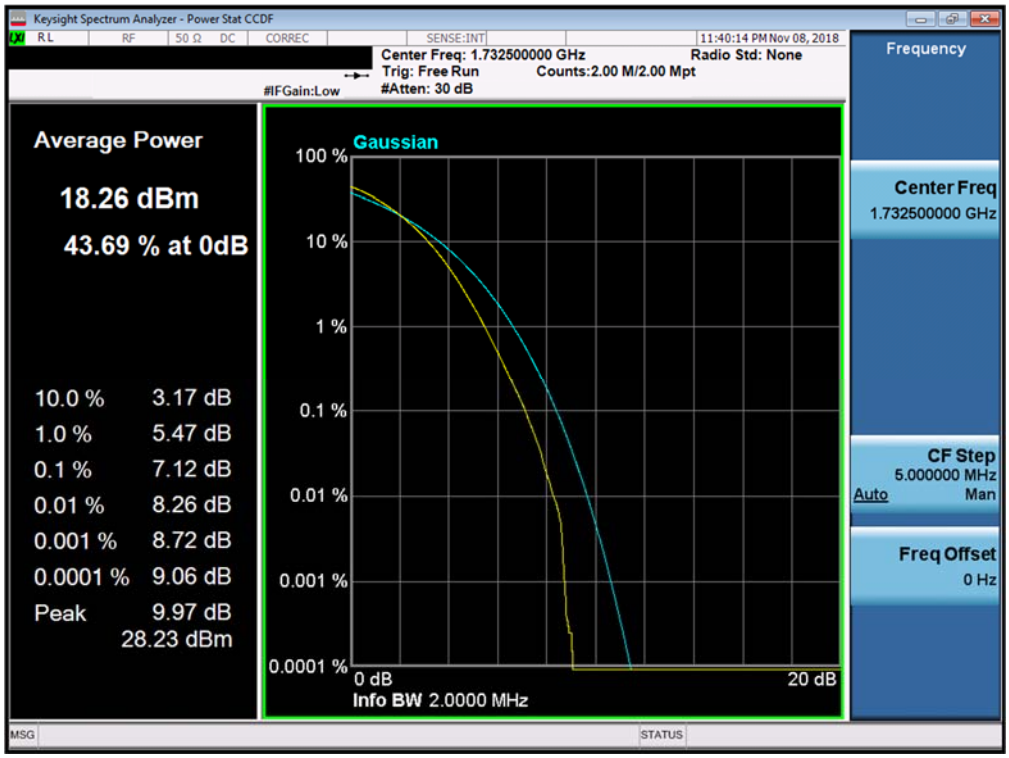


Plot 7-367. PAR Plot (Band 66/4 - 1.4MHz 64-QAM - Full RB Configuration)



Plot 7-368. PAR Plot (Band 66/4 - 1.4MHz 256-QAM - Full RB Configuration)

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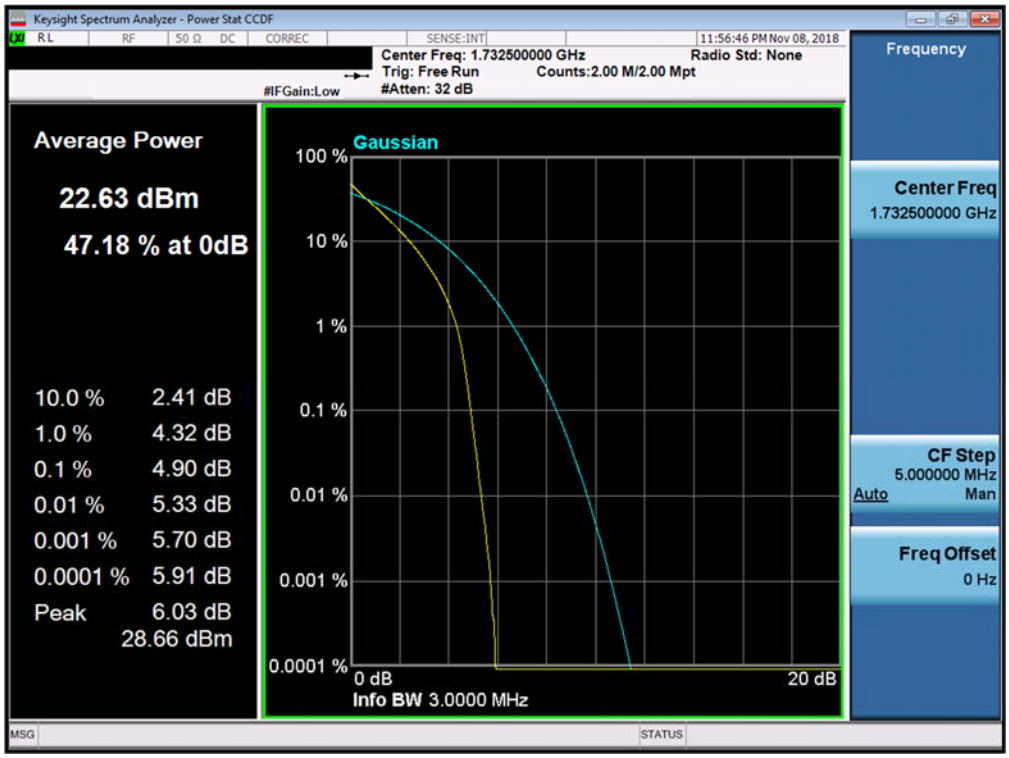
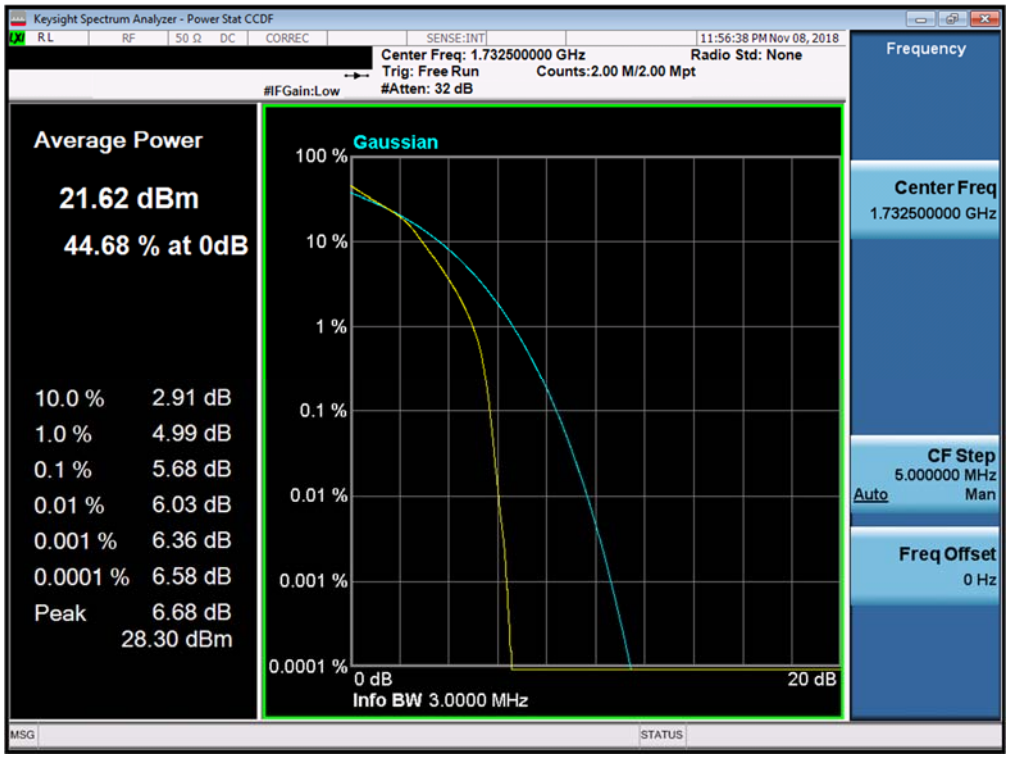


Plot 7-369. PAR Plot (Band 66/4 - 3.0MHz QPSK - Full RB Configuration)



Plot 7-370. PAR Plot (Band 66/4 - 3.0MHz 16-QAM - Full RB Configuration)

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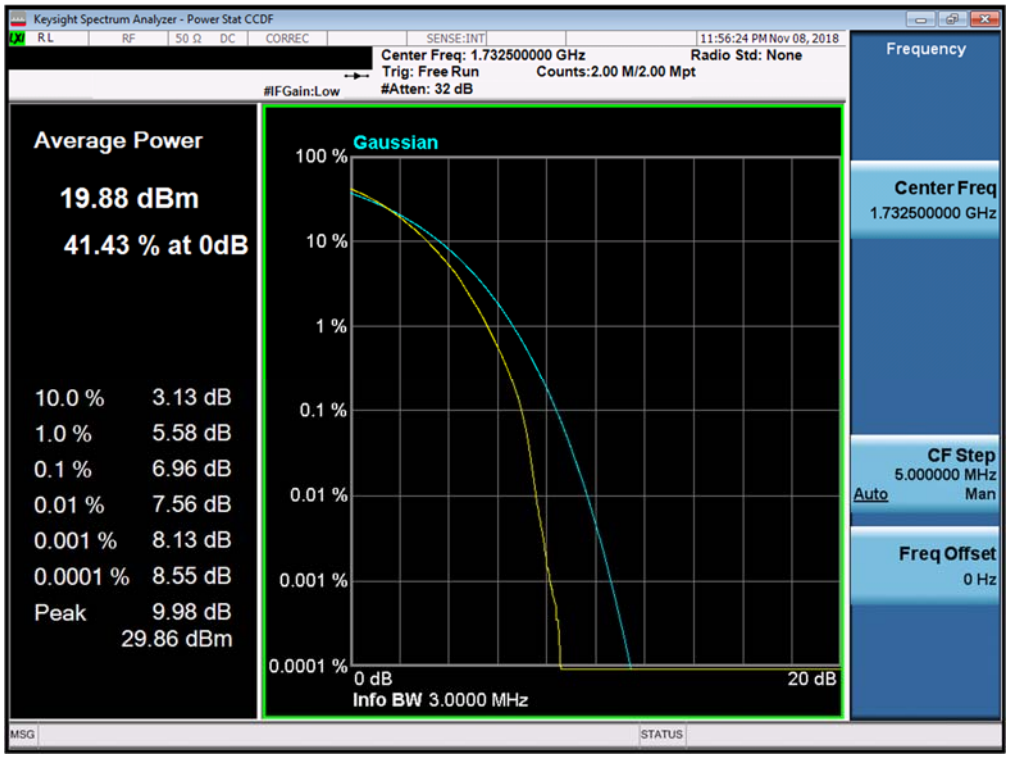
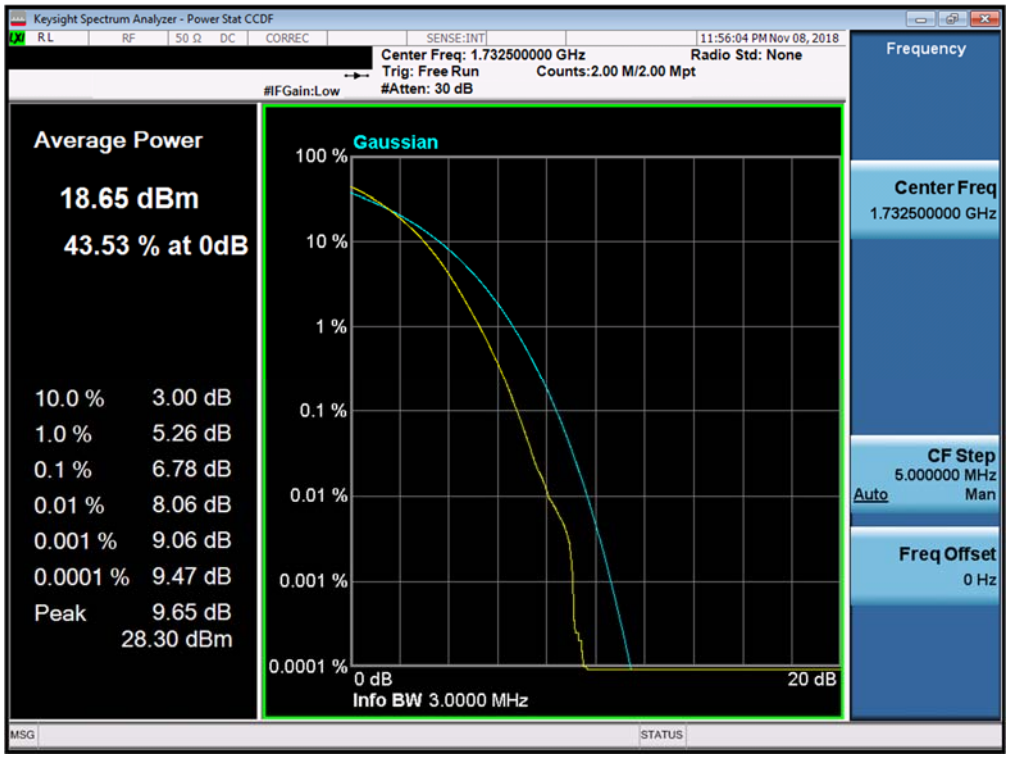


Plot 7-371. PAR Plot (Band 66/4 - 3.0MHz 64-QAM - Full RB Configuration)



Plot 7-372. PAR Plot (Band 66/4 - 3.0MHz 256-QAM - Full RB Configuration)

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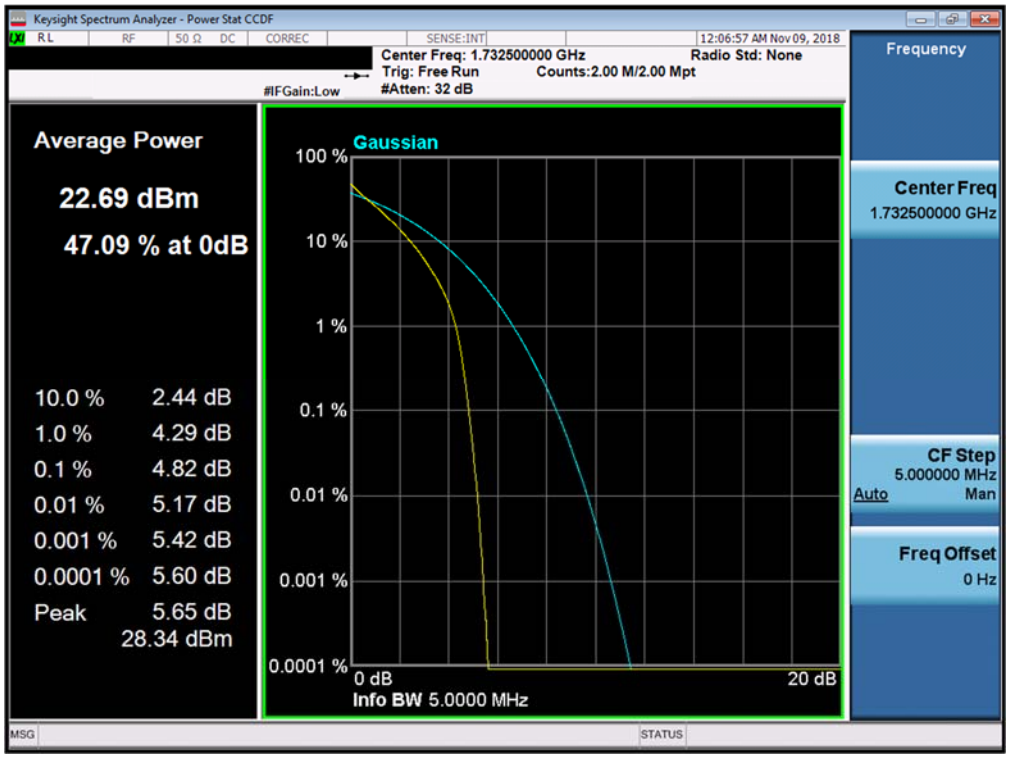
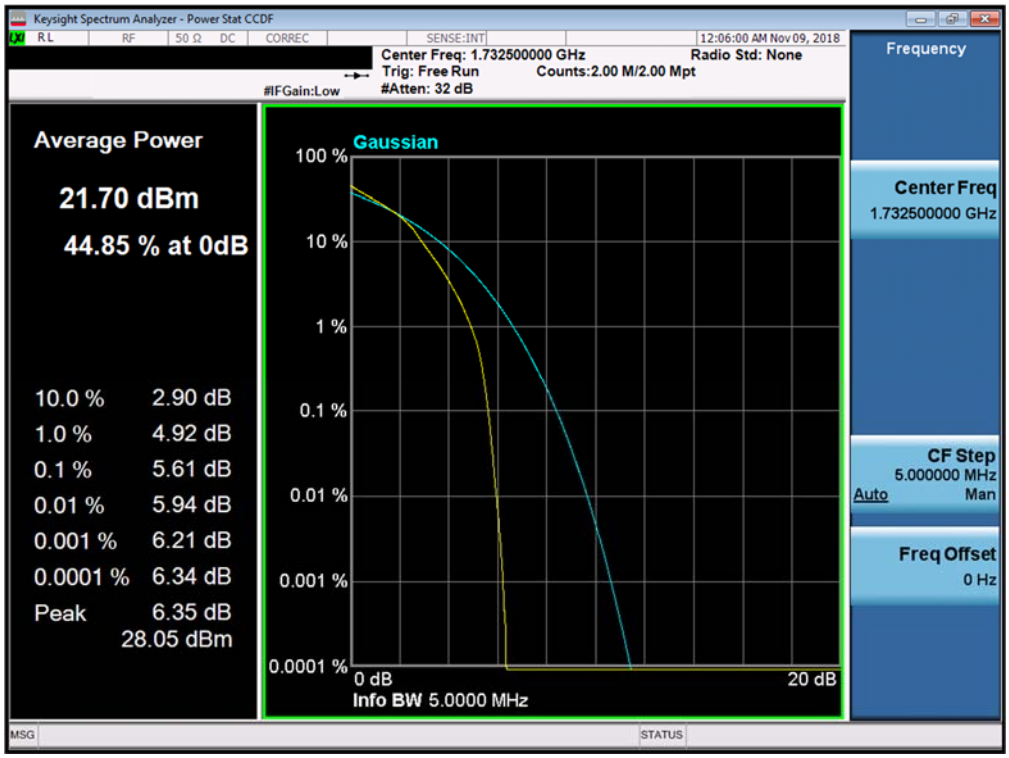


Plot 7-373. PAR Plot (Band 66/4 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-374. PAR Plot (Band 66/4 - 5.0MHz 16-QAM - Full RB Configuration)

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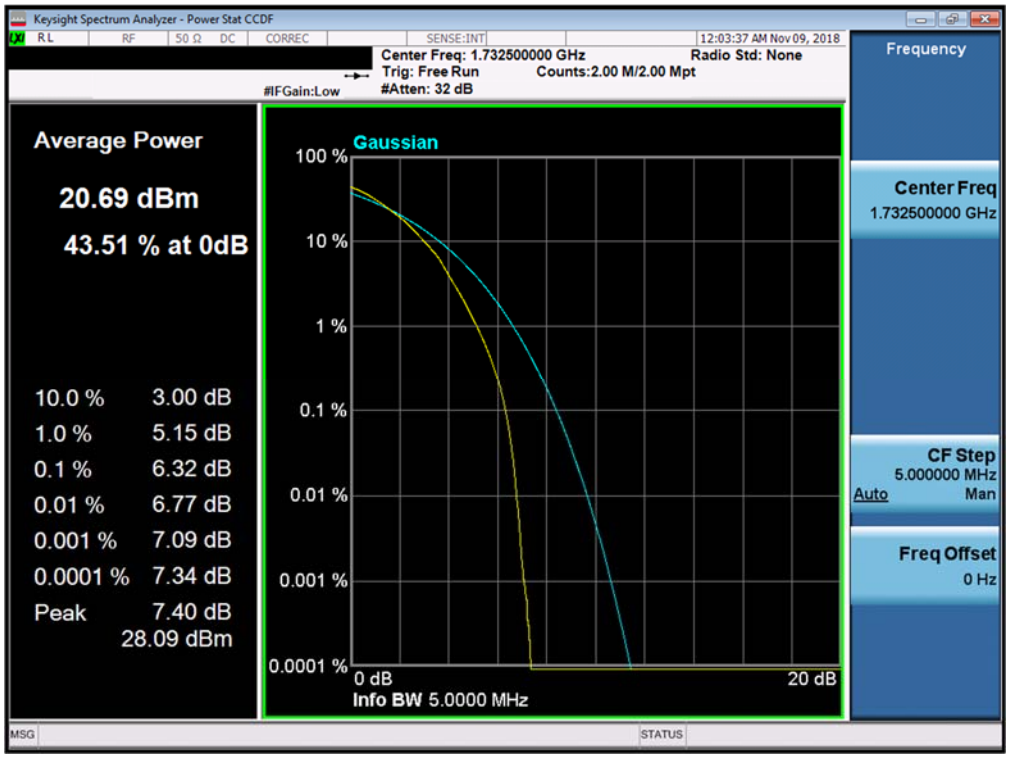
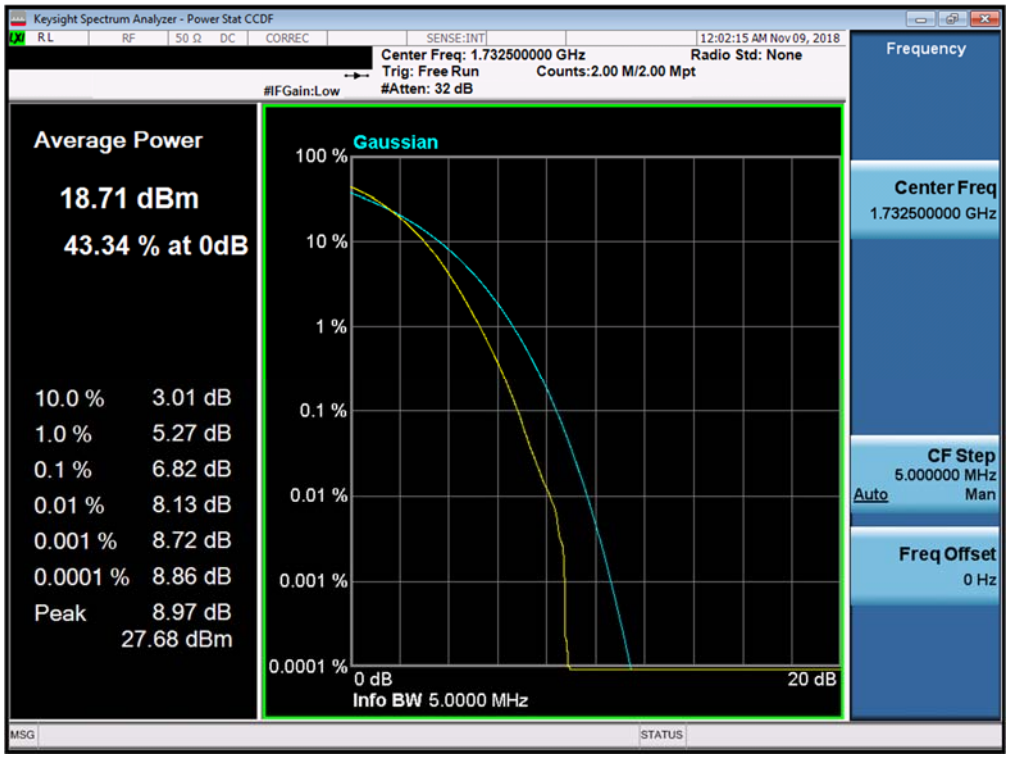


Plot 7-375. PAR Plot (Band 66/4 - 5.0MHz 64-QAM - Full RB Configuration)



Plot 7-376. PAR Plot (Band 66/4 - 5.0MHz 256-QAM - Full RB Configuration)

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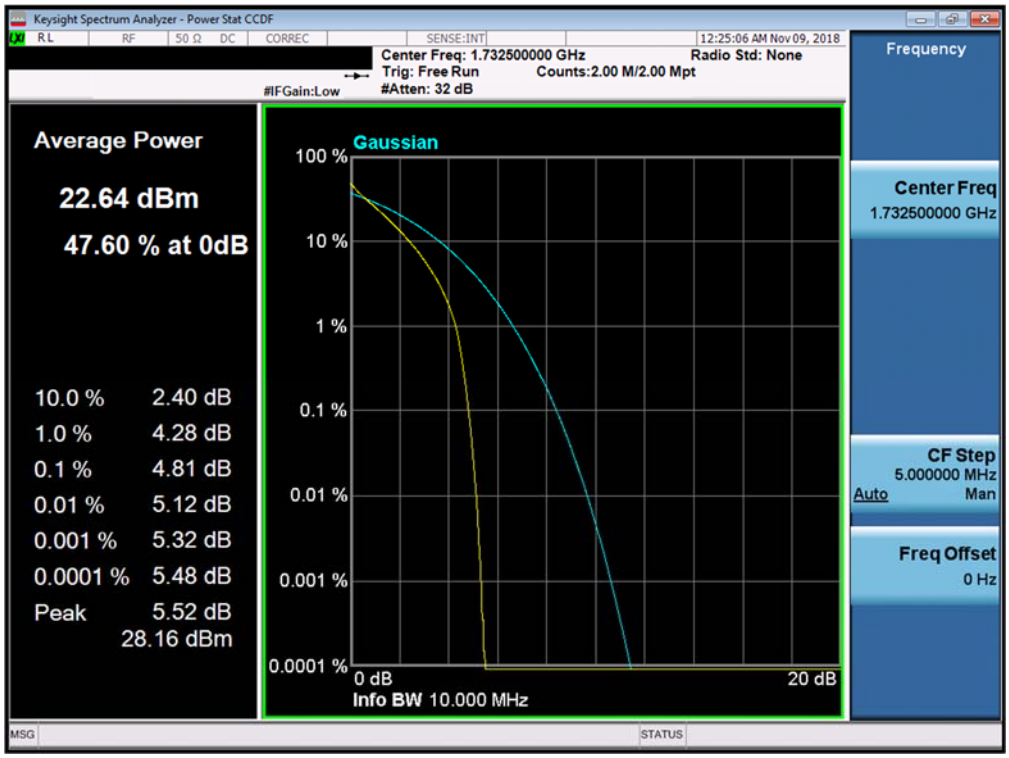
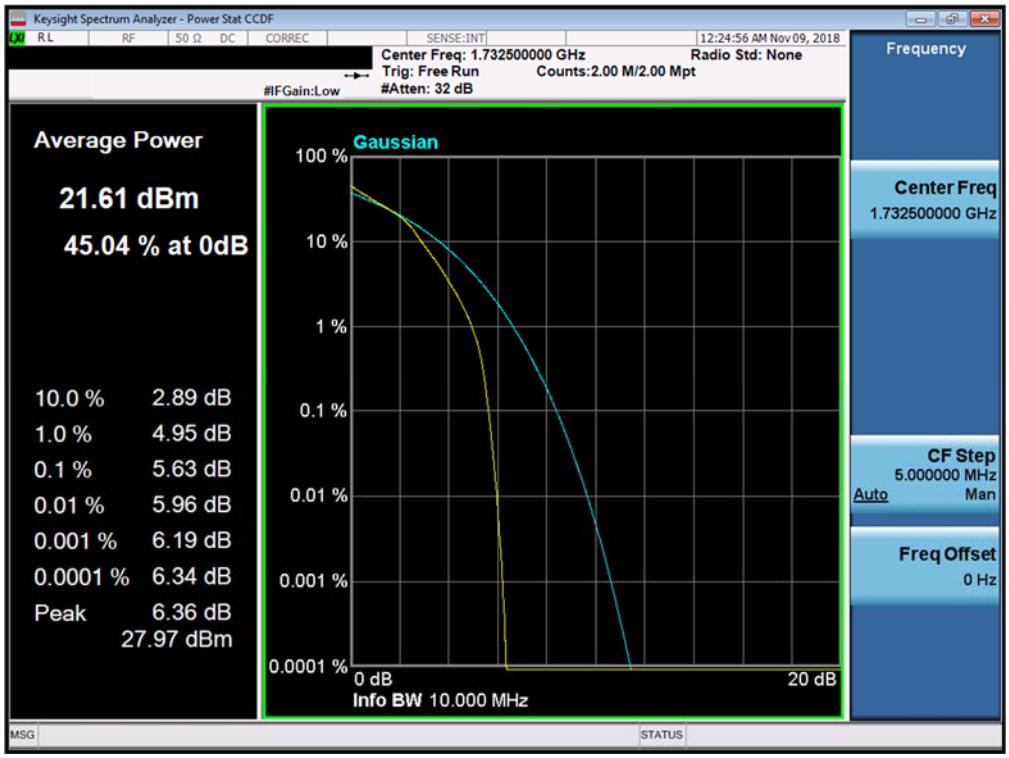


Plot 7-377. PAR Plot (Band 66/4 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-378. PAR Plot (Band 66/4 - 10.0MHz 16-QAM - Full RB Configuration)

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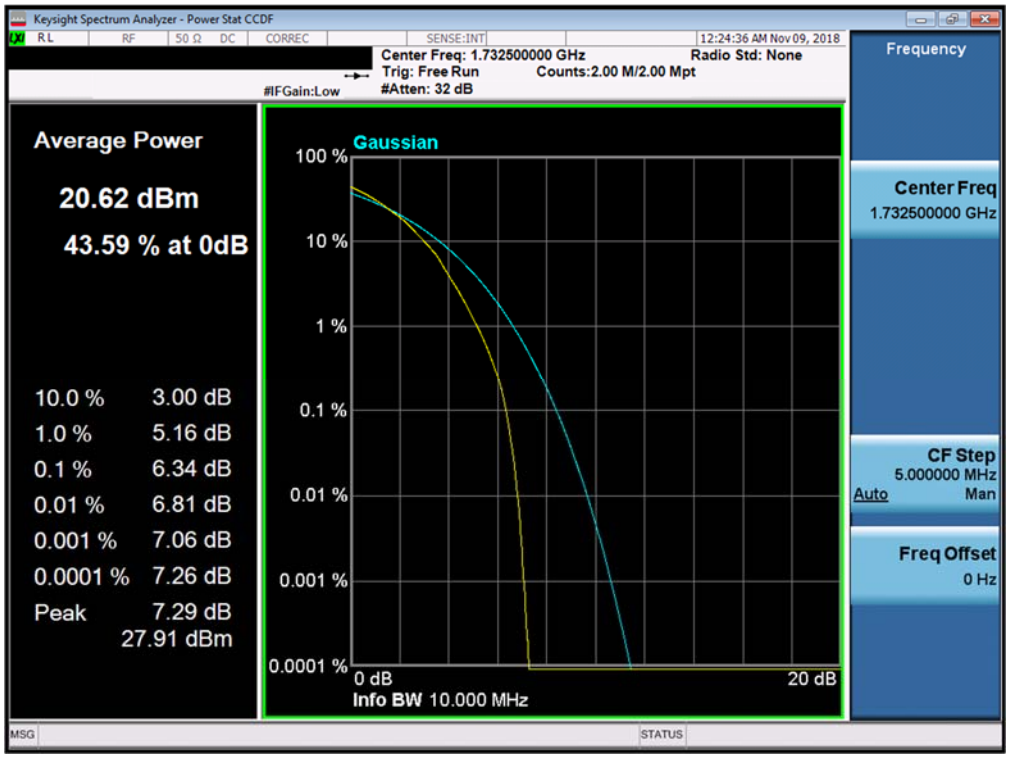
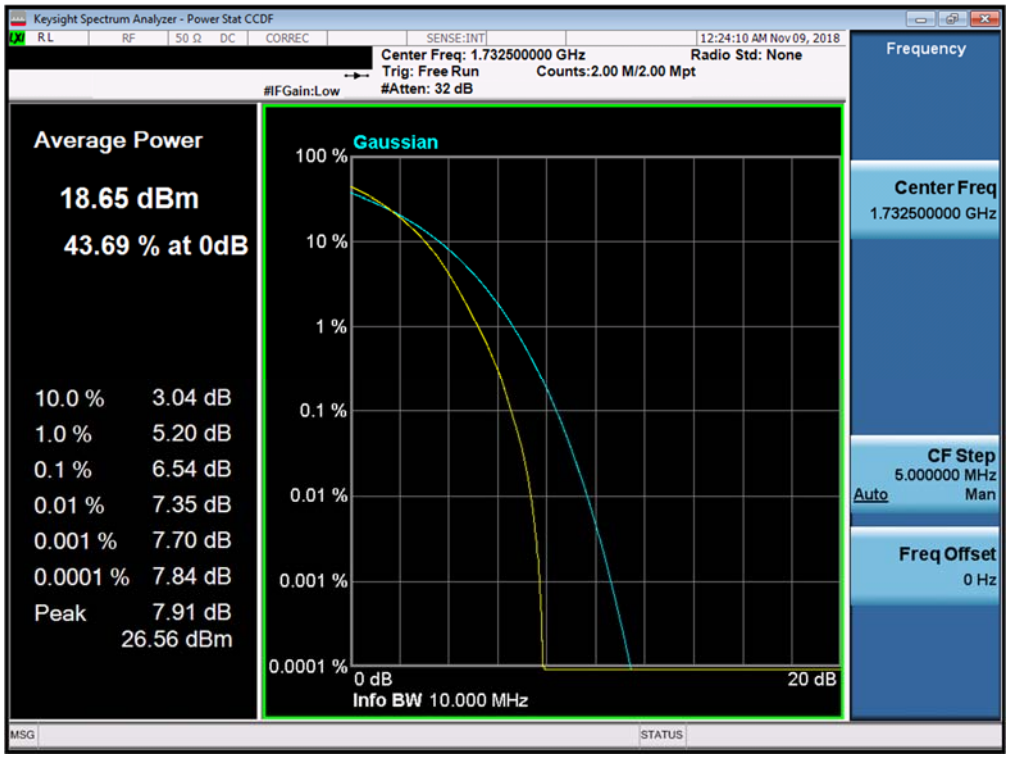


Plot 7-379. PAR Plot (Band 66/4 - 10.0MHz 64-QAM - Full RB Configuration)



Plot 7-380. PAR Plot (Band 66/4 - 10.0MHz 256-QAM - Full RB Configuration)

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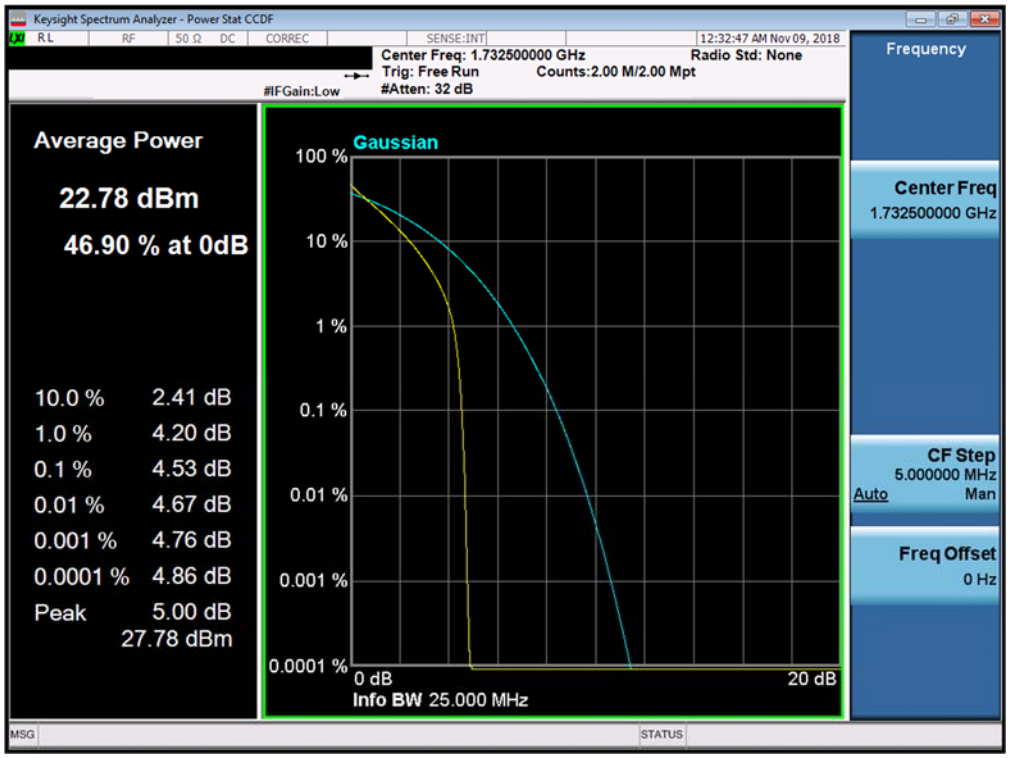
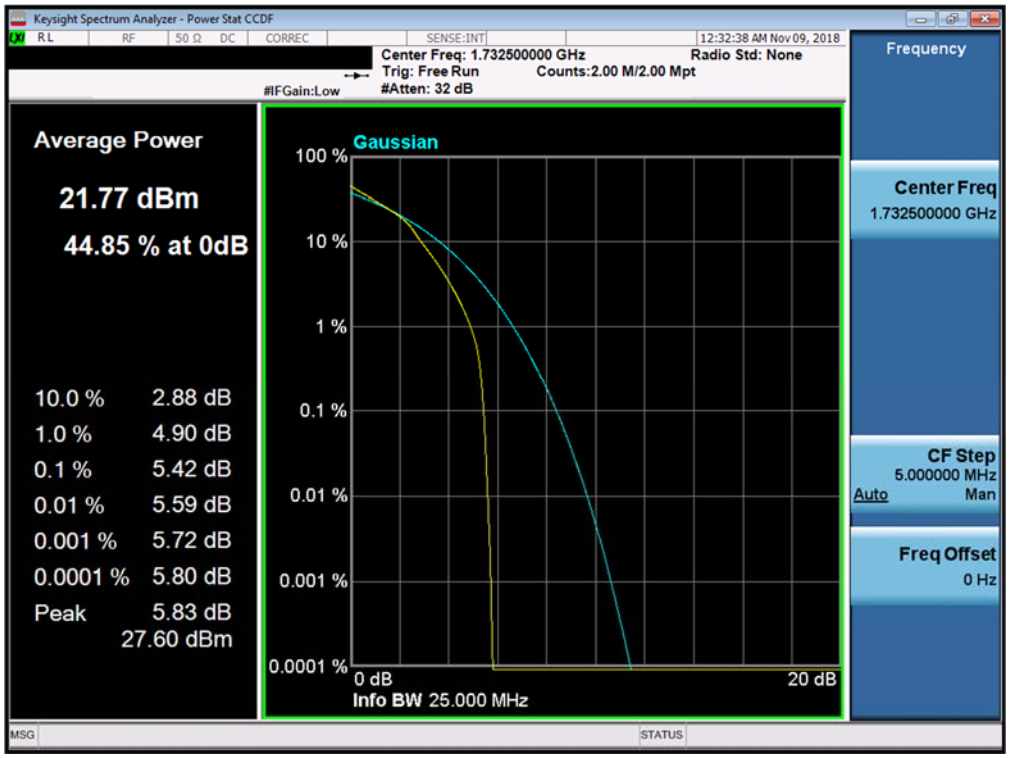


Plot 7-381. PAR Plot (Band 66/4 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-382. PAR Plot (Band 66/4 - 15.0MHz 16-QAM - Full RB Configuration)

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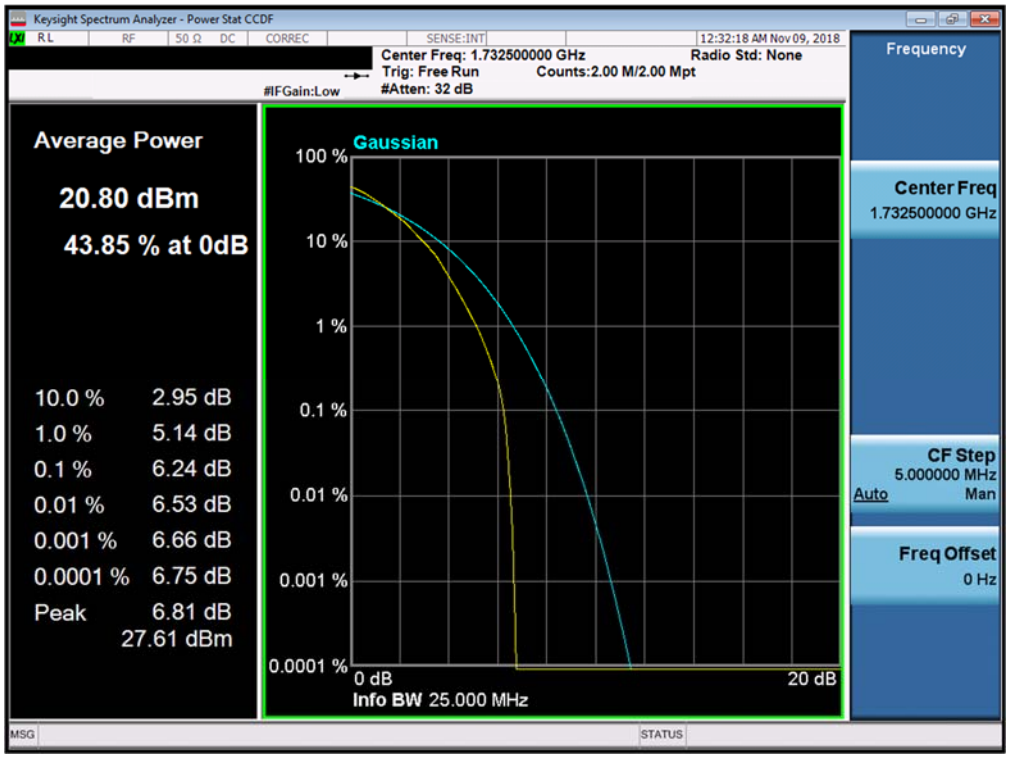
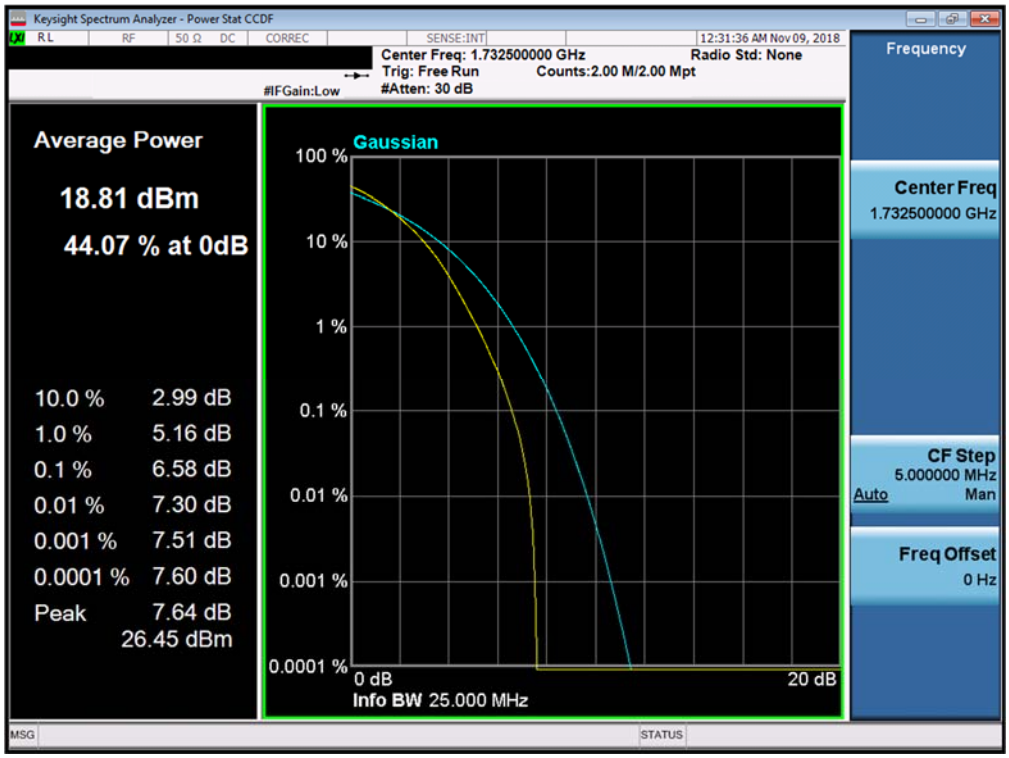


Plot 7-383. PAR Plot (Band 66/4 - 15.0MHz 64-QAM - Full RB Configuration)



Plot 7-384. PAR Plot (Band 66/4 - 15.0MHz 256-QAM - Full RB Configuration)

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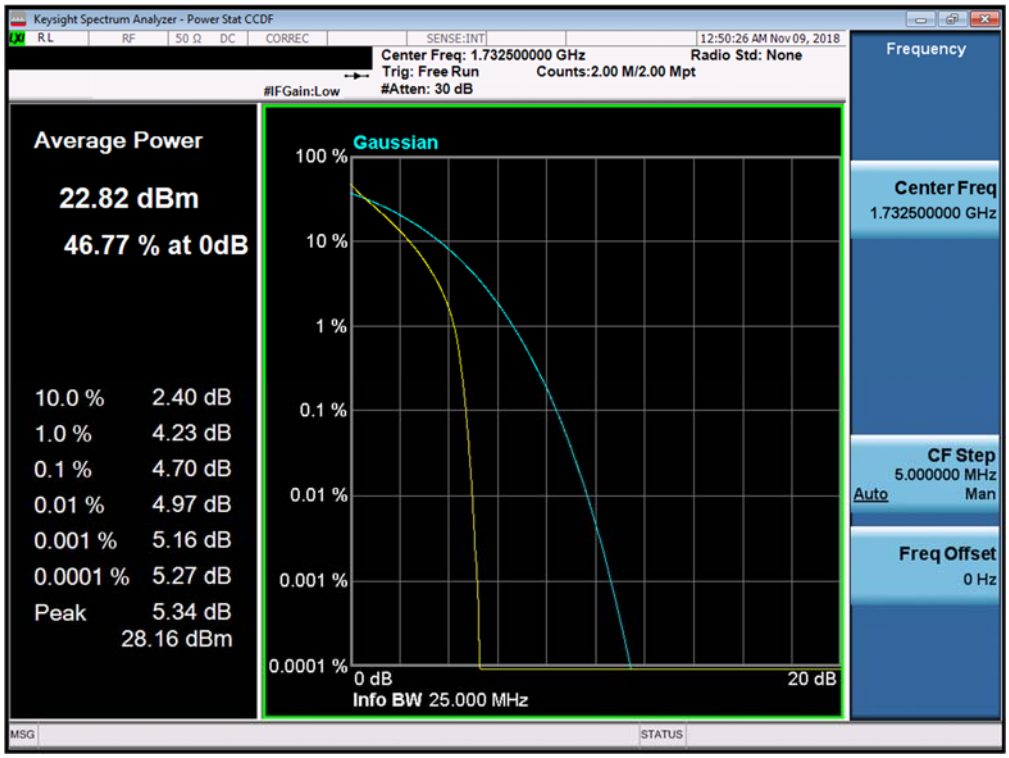
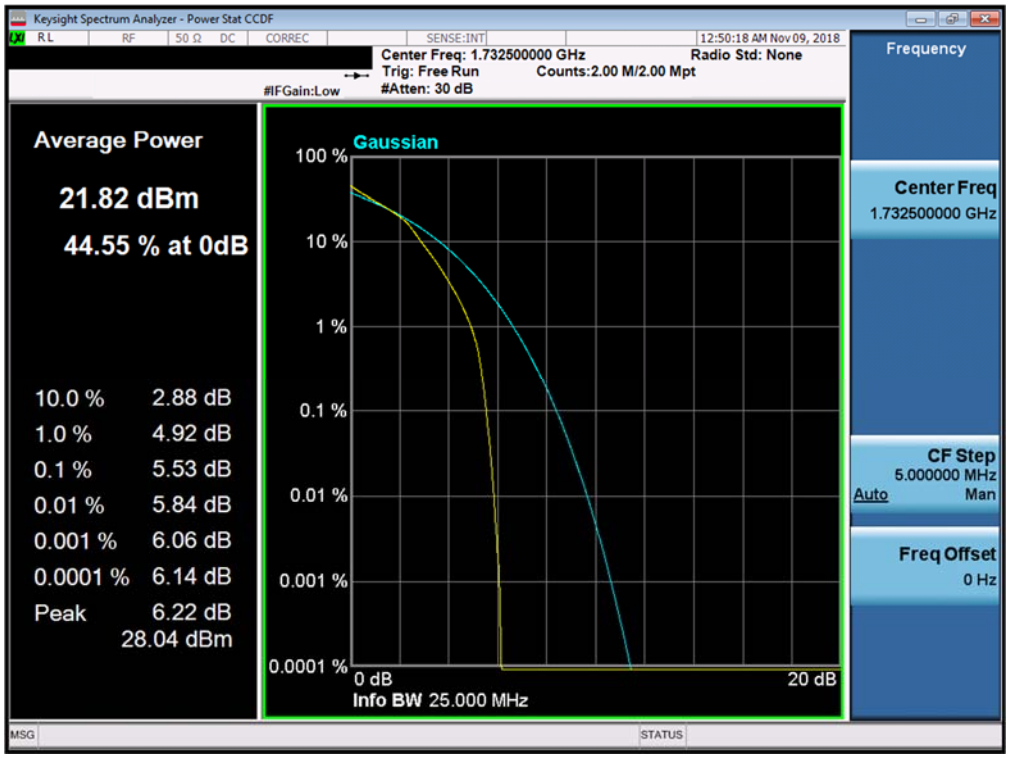


Plot 7-385. PAR Plot (Band 66/4 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-386. PAR Plot (Band 66/4 - 20.0MHz 16-QAM - Full RB Configuration)

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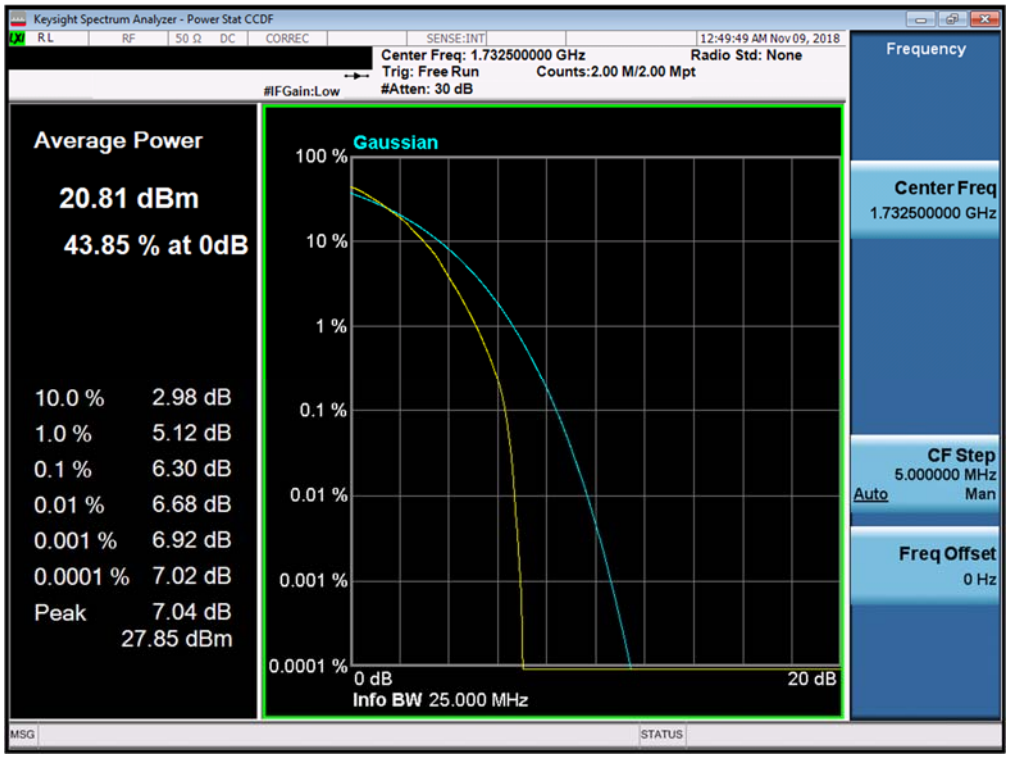
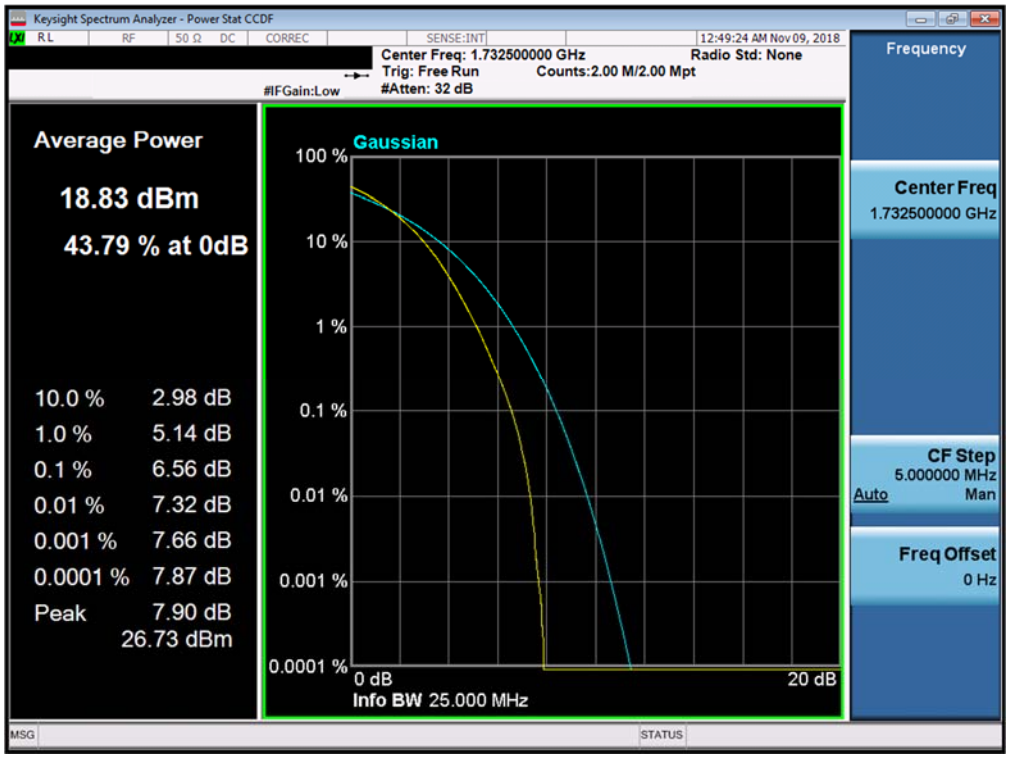


Plot 7-387. PAR Plot (Band 66/4 - 20.0MHz 64-QAM - Full RB Configuration)



Plot 7-388. PAR Plot (Band 66/4 - 20.0MHz 256-QAM - Full RB Configuration)

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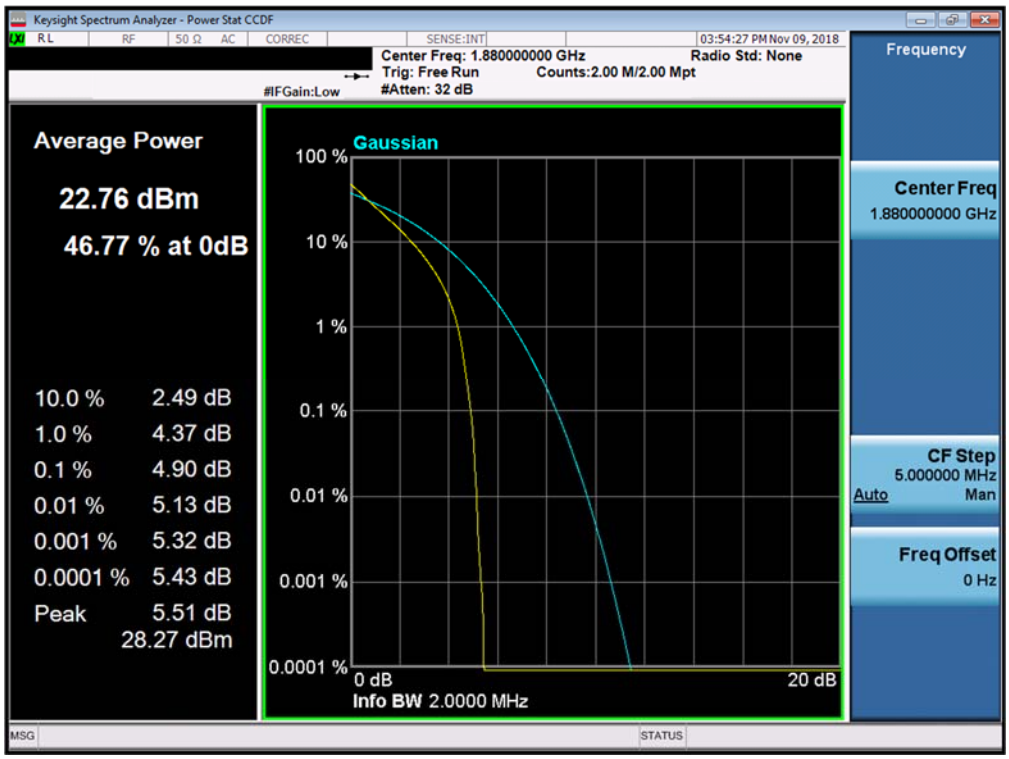
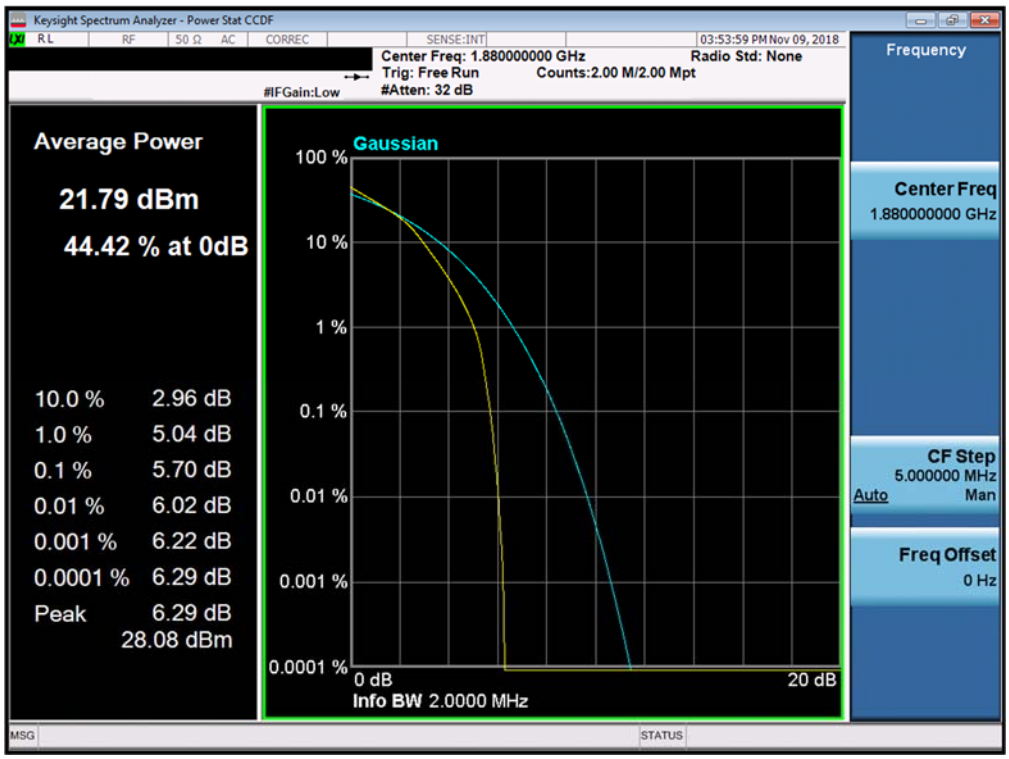
Band 25/2



Plot 7-389. PAR Plot (Band 25/2 - 1.4MHz QPSK - Full RB Configuration)



Plot 7-390. PAR Plot (Band 25/2 - 1.4MHz 16-QAM - Full RB Configuration)

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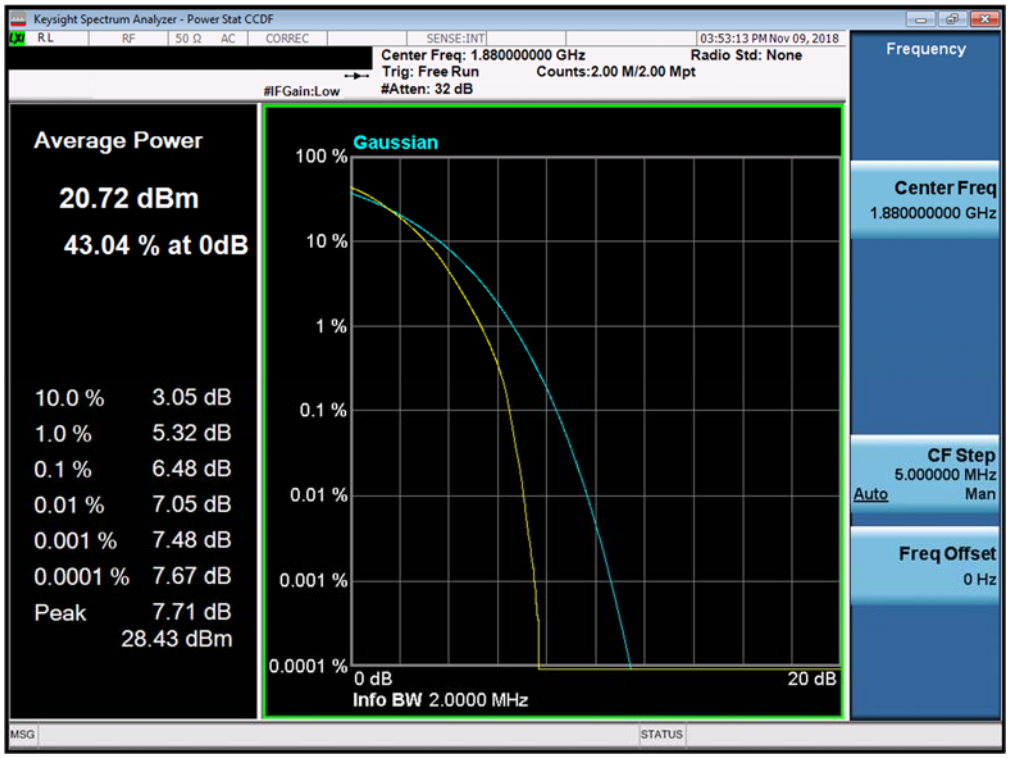
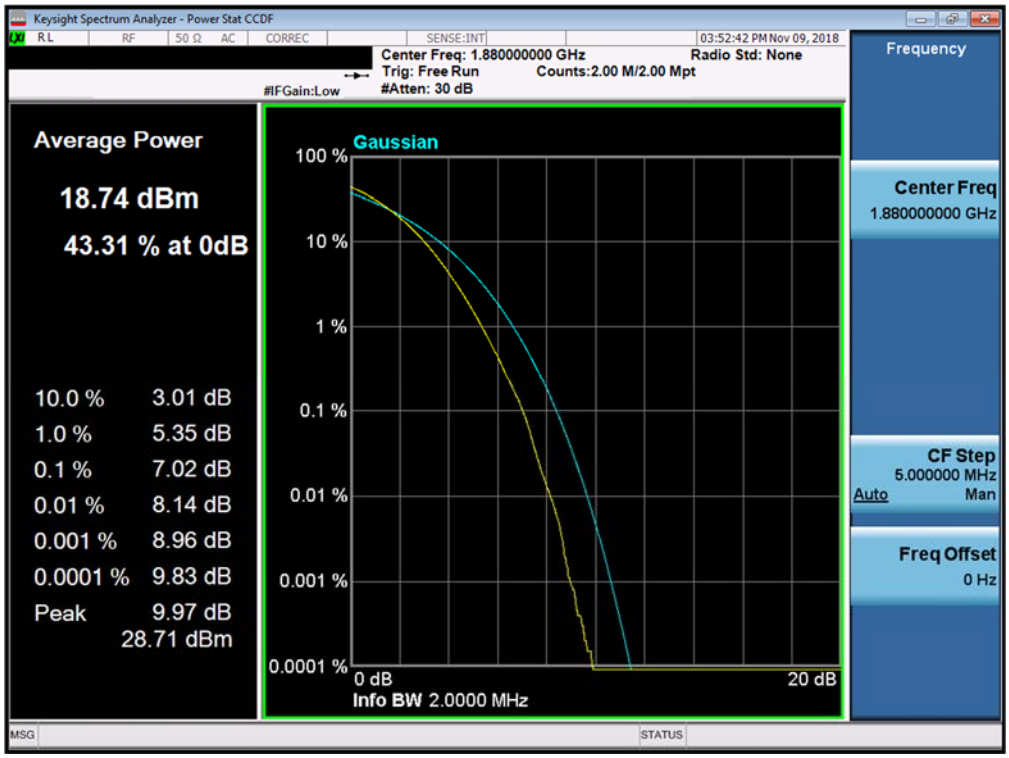


Plot 7-391. PAR Plot (Band 25/2 - 1.4MHz 64-QAM - Full RB Configuration)



Plot 7-392. PAR Plot (Band 25/2 - 1.4MHz 256-QAM - Full RB Configuration)

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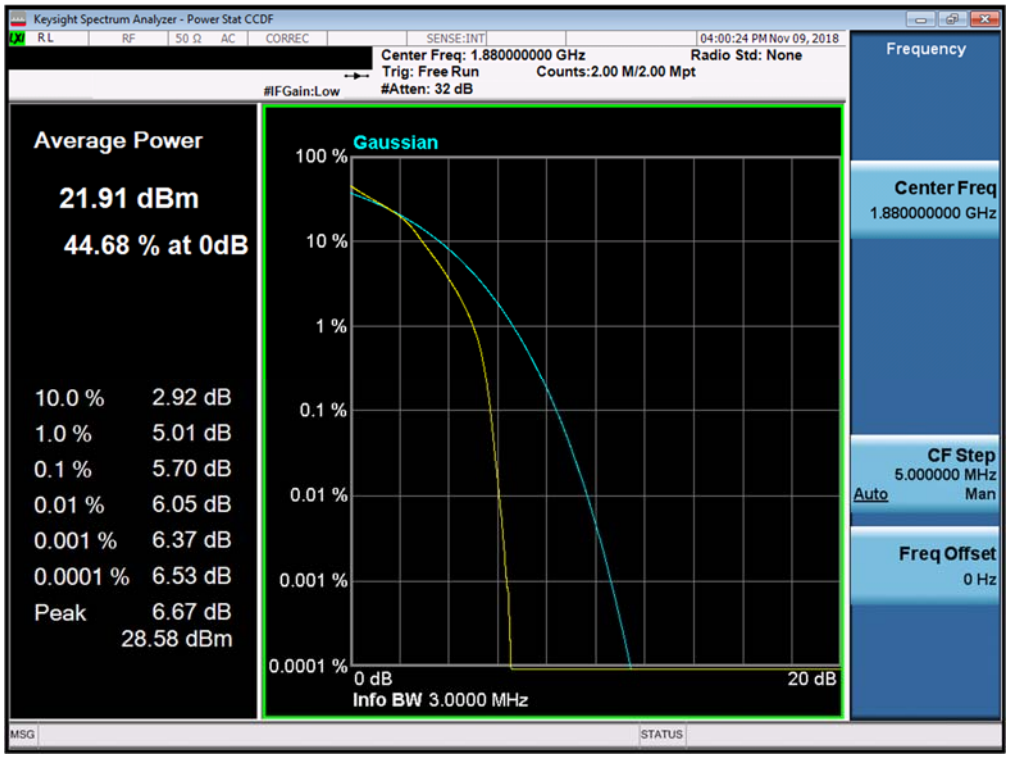
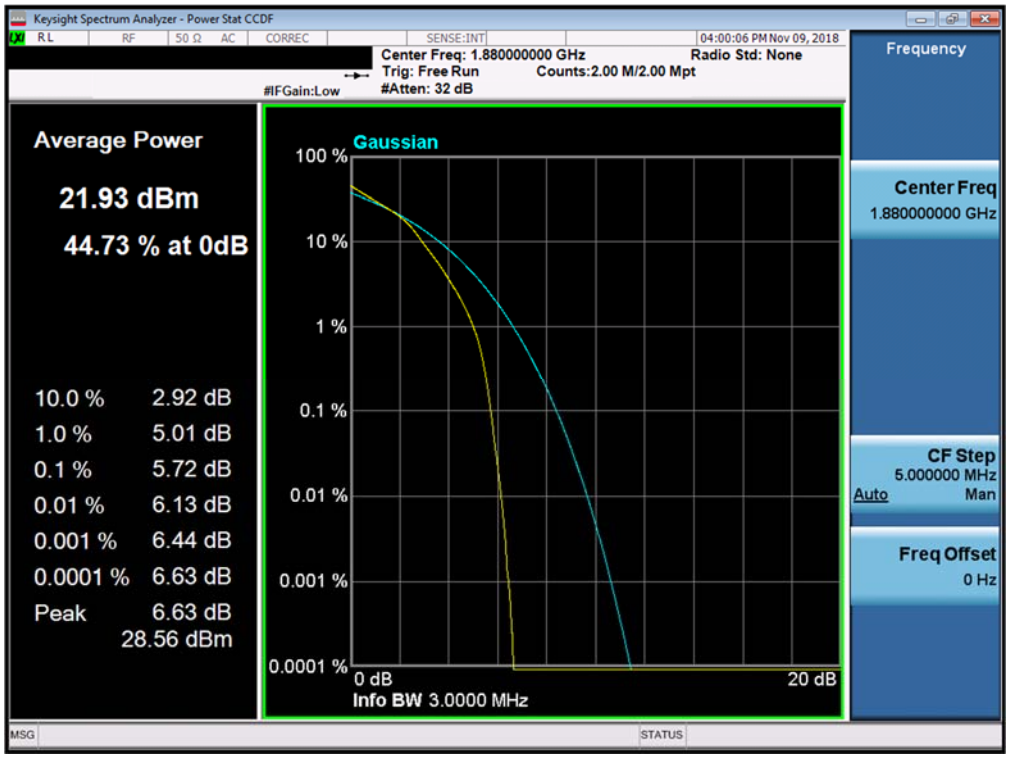


Plot 7-393. PAR Plot (Band 25/2 - 3.0MHz QPSK - Full RB Configuration)



Plot 7-394. PAR Plot (Band 25/2 - 3.0MHz 16-QAM - Full RB Configuration)

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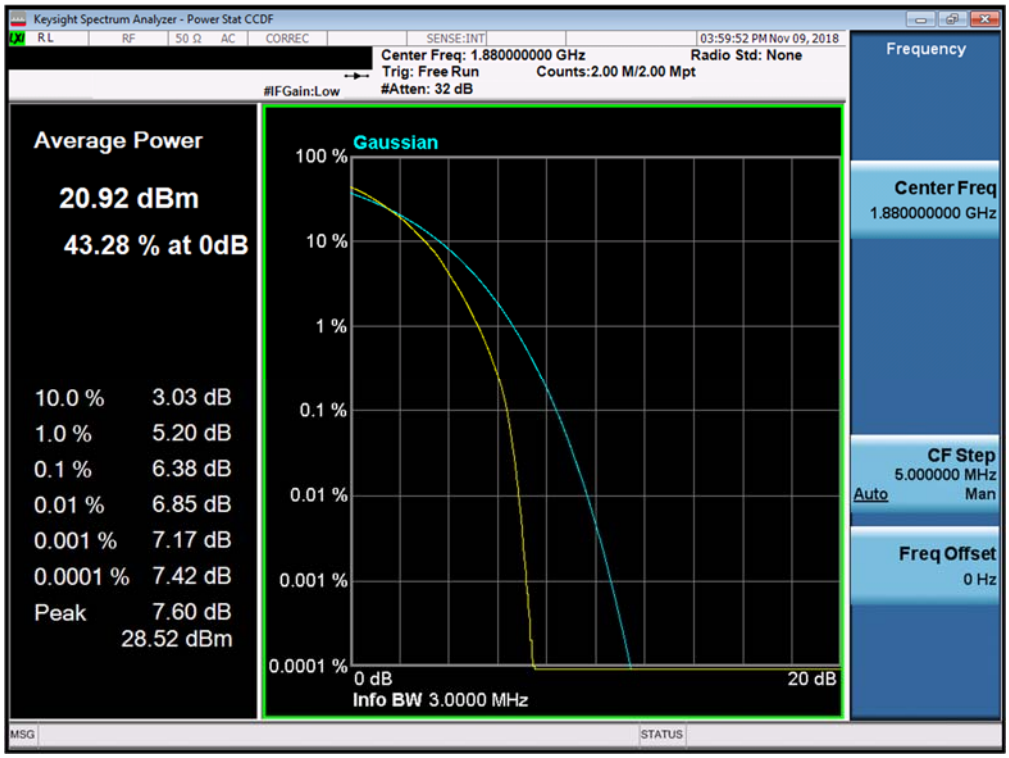
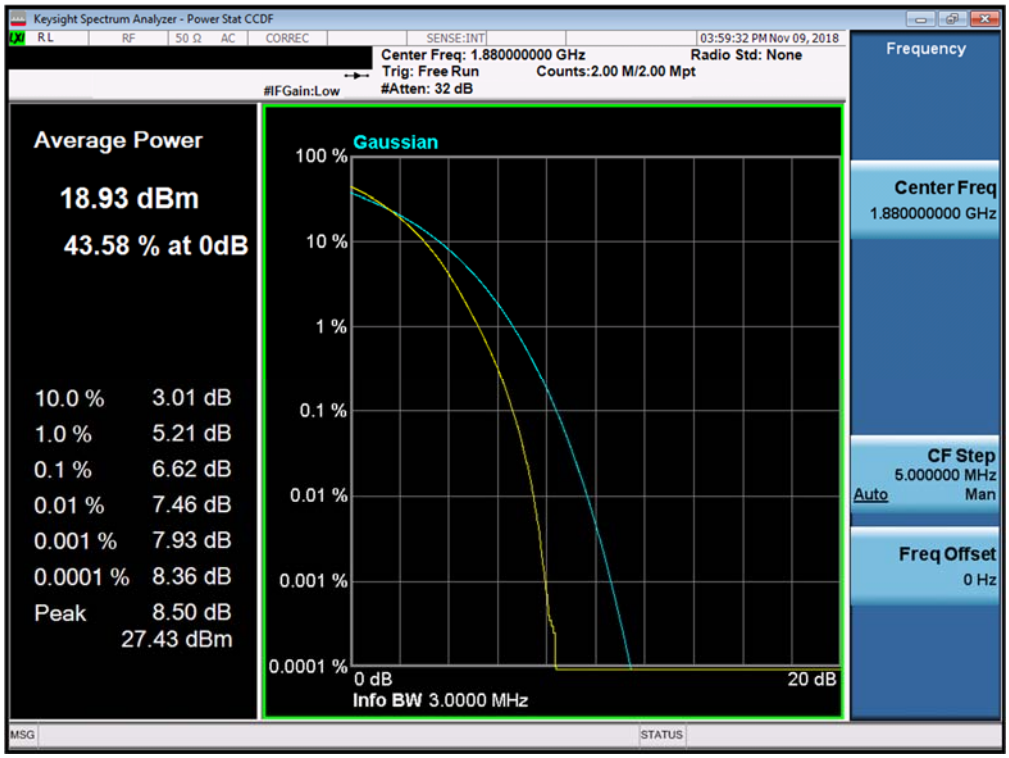


Plot 7-395. PAR Plot (Band 25/2 - 3.0MHz 64-QAM - Full RB Configuration)



Plot 7-396. PAR Plot (Band 25/2 - 3.0MHz 256-QAM - Full RB Configuration)

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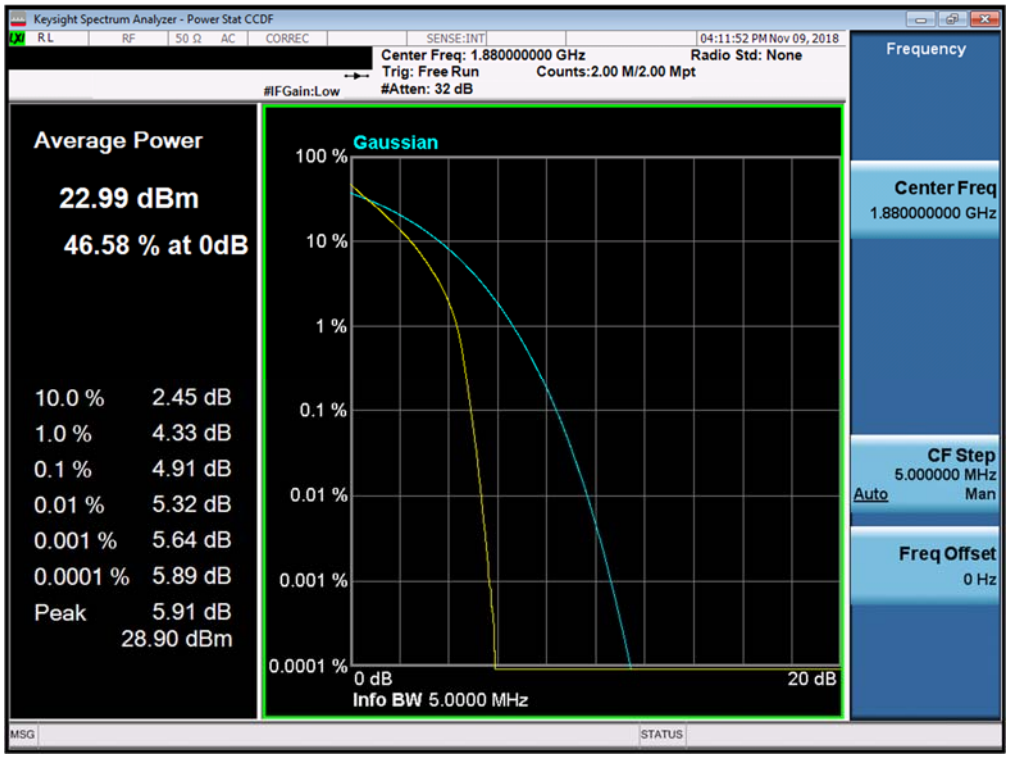
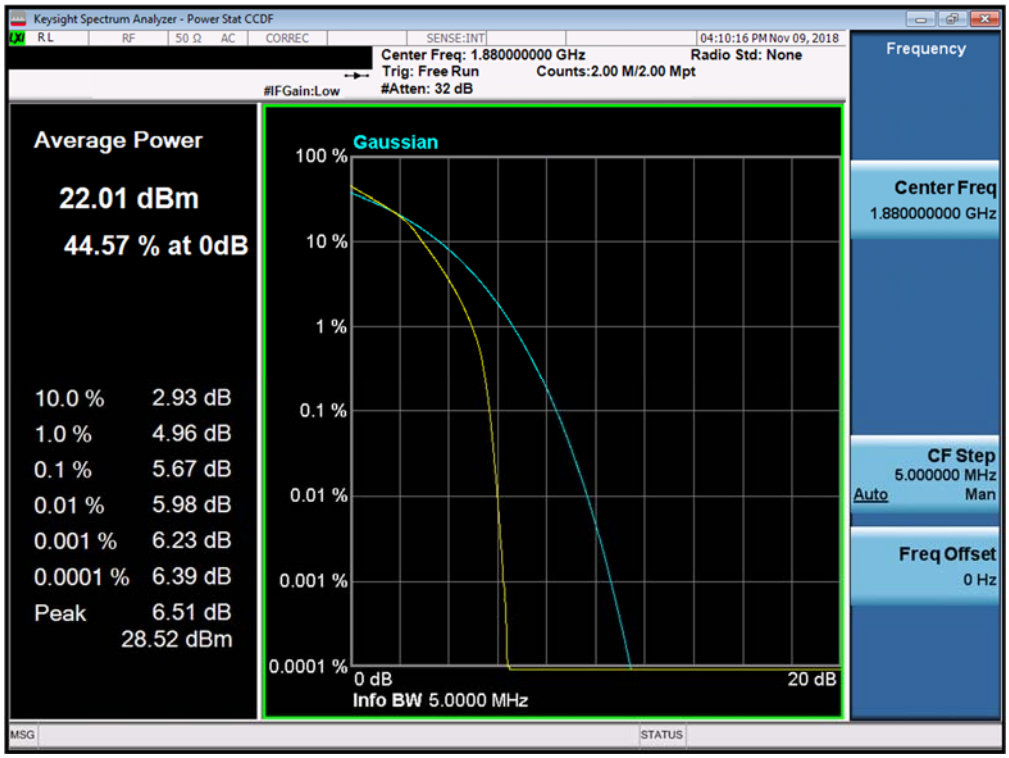


Plot 7-397. PAR Plot (Band 25/2 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-398. PAR Plot (Band 25/2 - 5.0MHz 16-QAM - Full RB Configuration)

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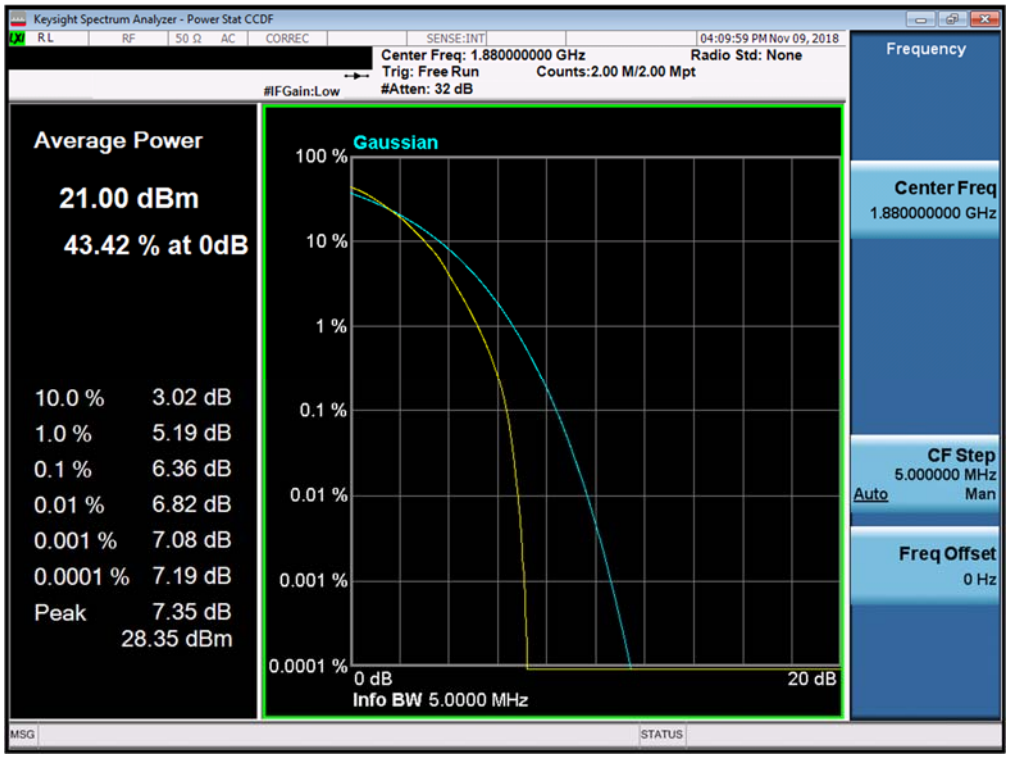
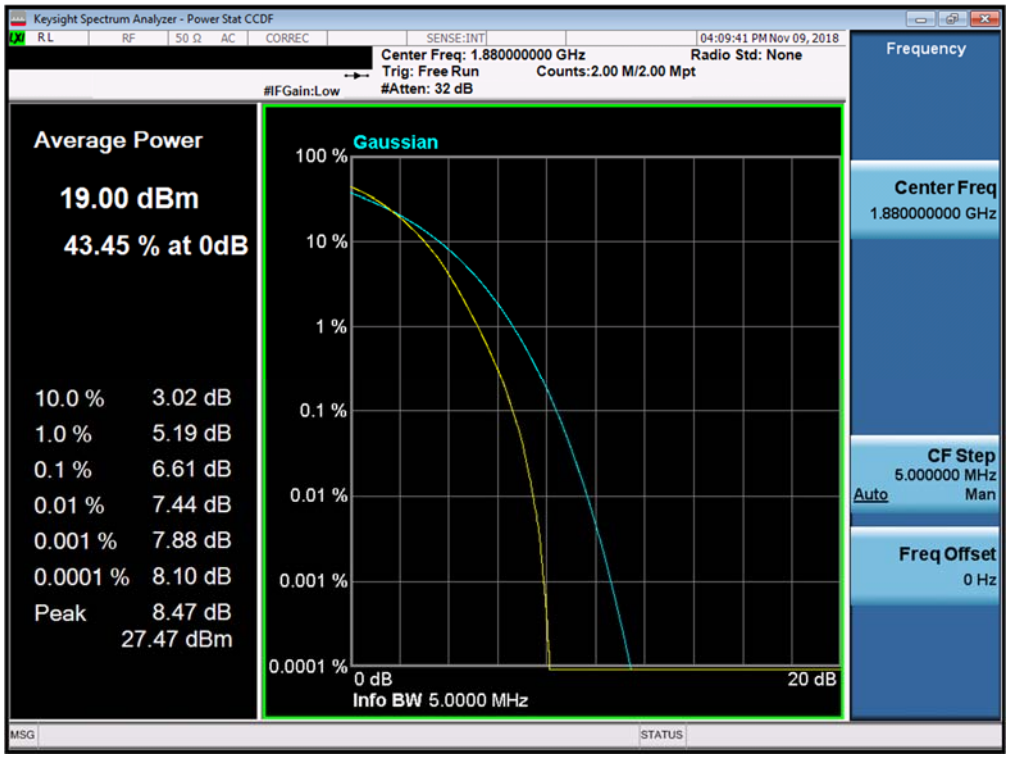


Plot 7-399. PAR Plot (Band 25/2 - 5.0MHz 64-QAM - Full RB Configuration)



Plot 7-400. PAR Plot (Band 25/2 - 5.0MHz 256-QAM - Full RB Configuration)

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