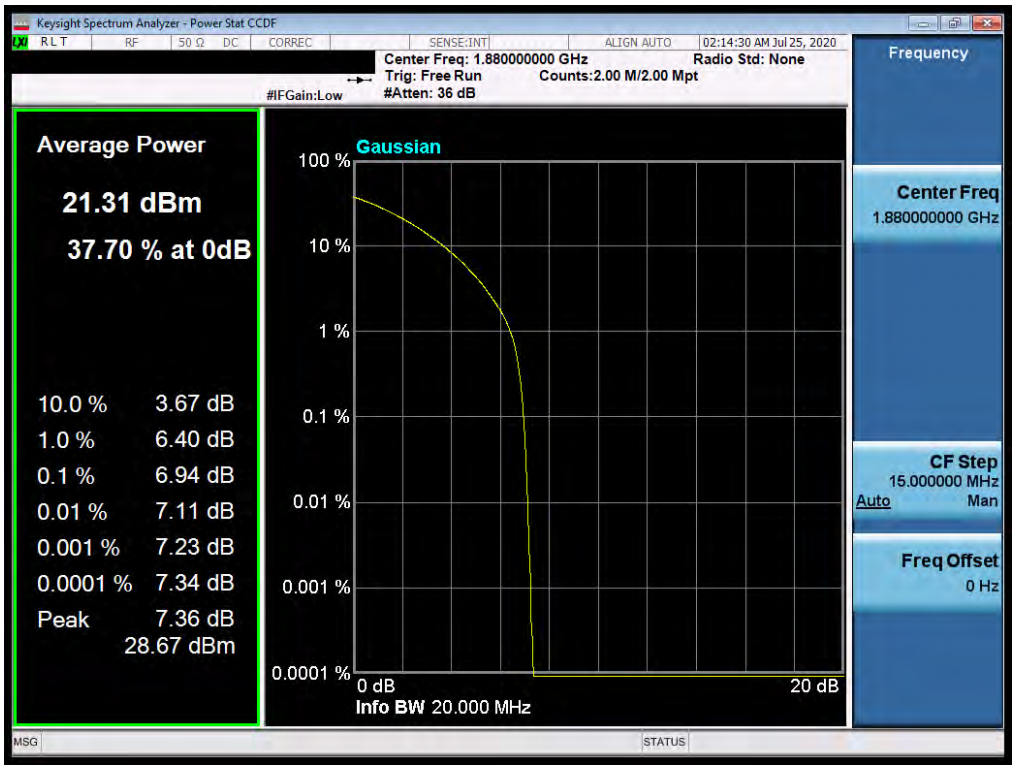
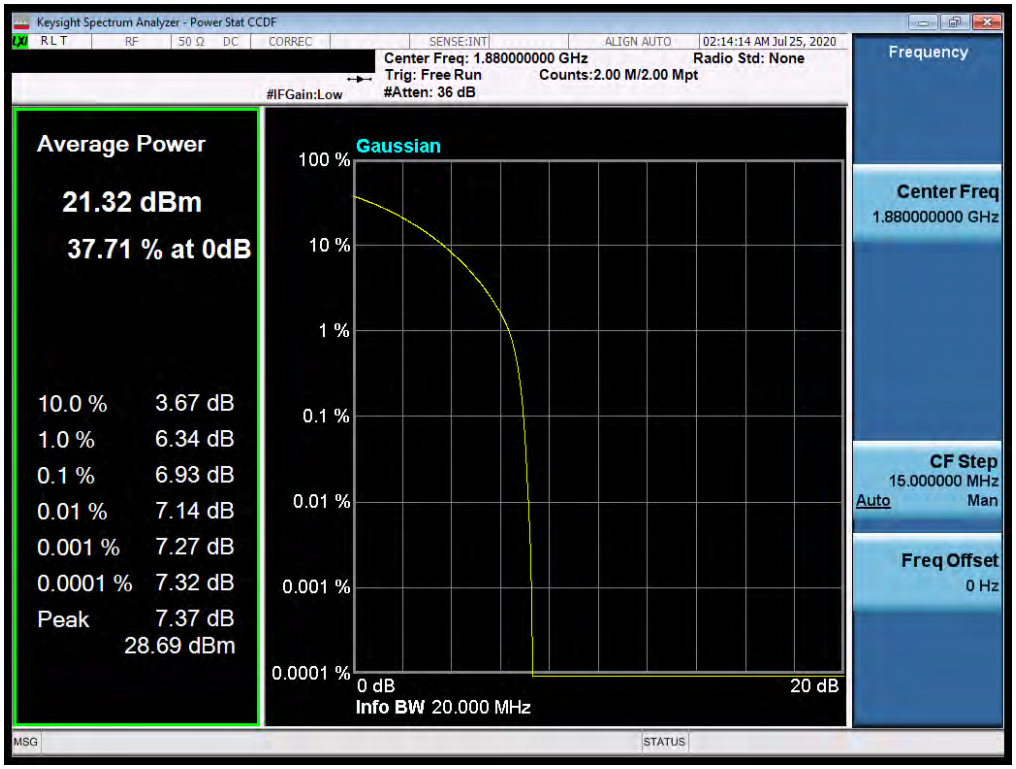
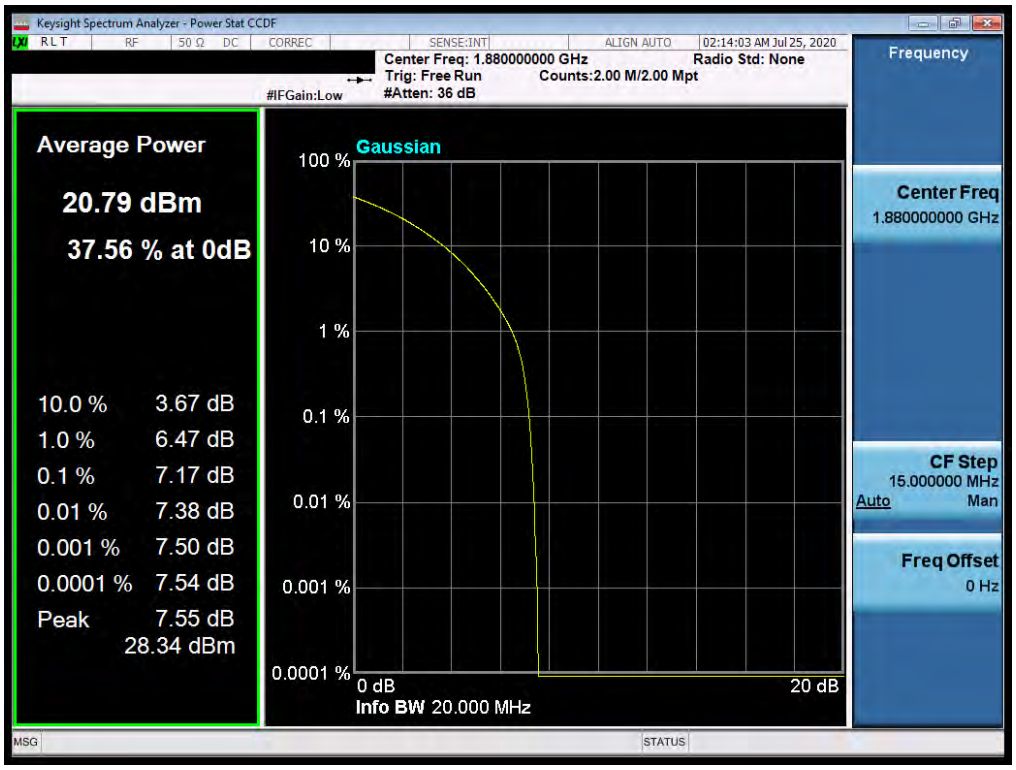


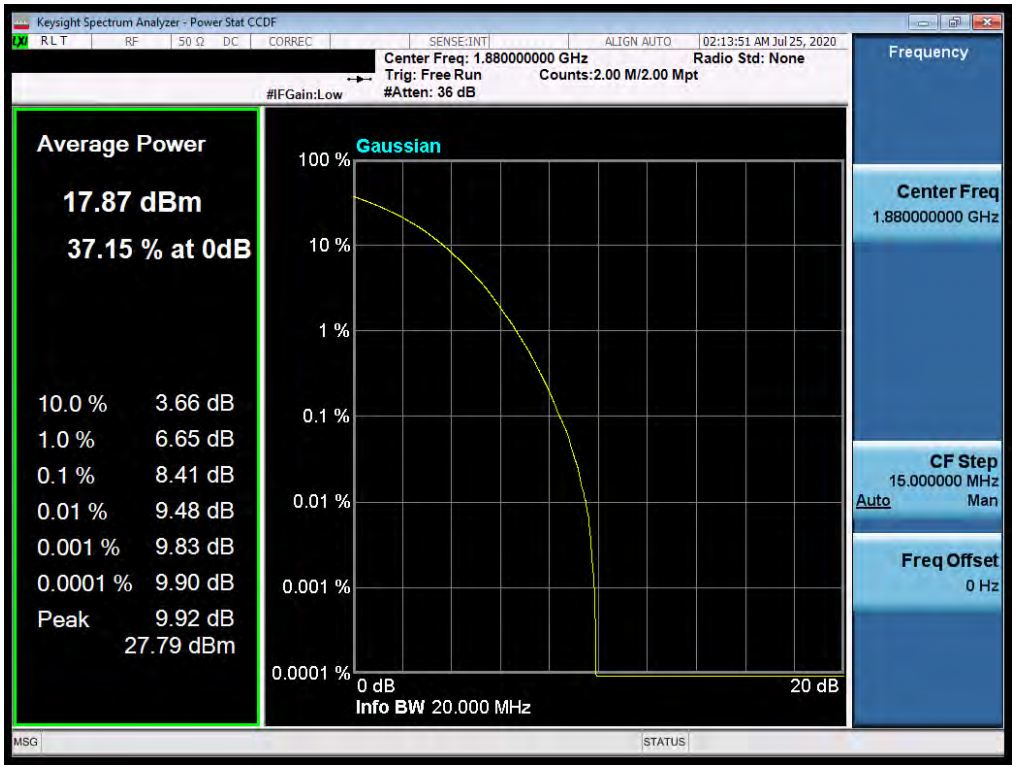
Plot 7-624. PAR Plot (NR Band n25/2 - 20.0MHz CP-OFDM-CP-OFDM QPSK - Full RB)



Plot 7-625. PAR Plot (NR Band n25/2 - 20.0MHz CP-OFDM-CP-OFDM 16-QAM - Full RB)

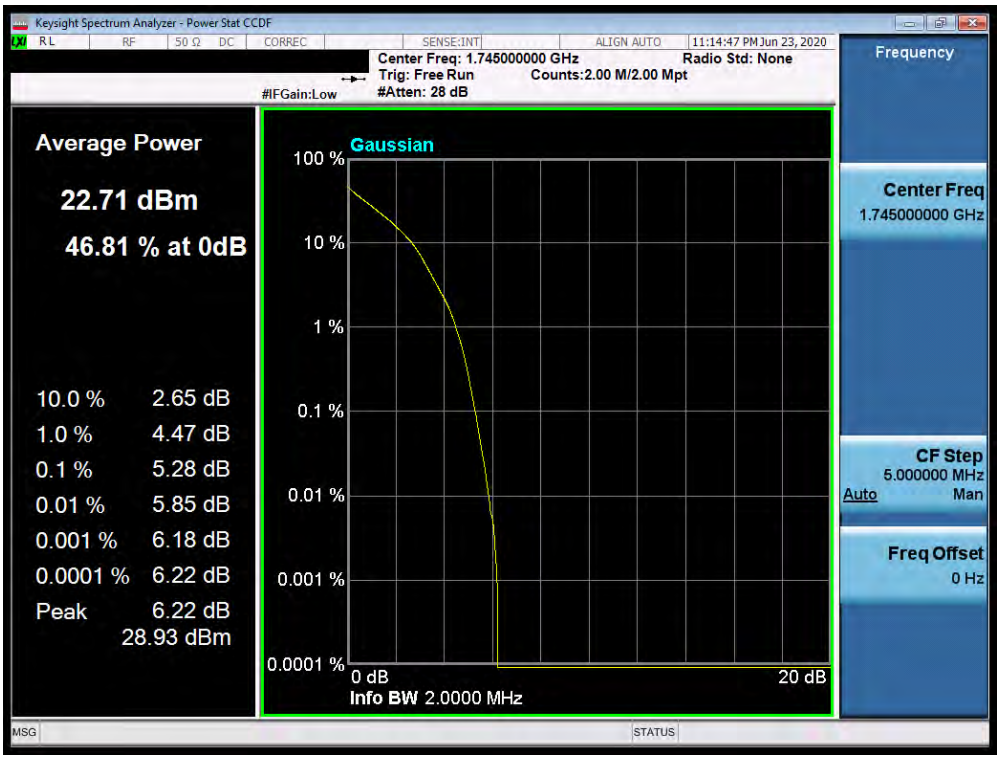


Plot 7-626. PAR Plot (NR Band n25/2 - 20.0MHz CP-OFDM-CP-OFDM 64-QAM - Full RB)

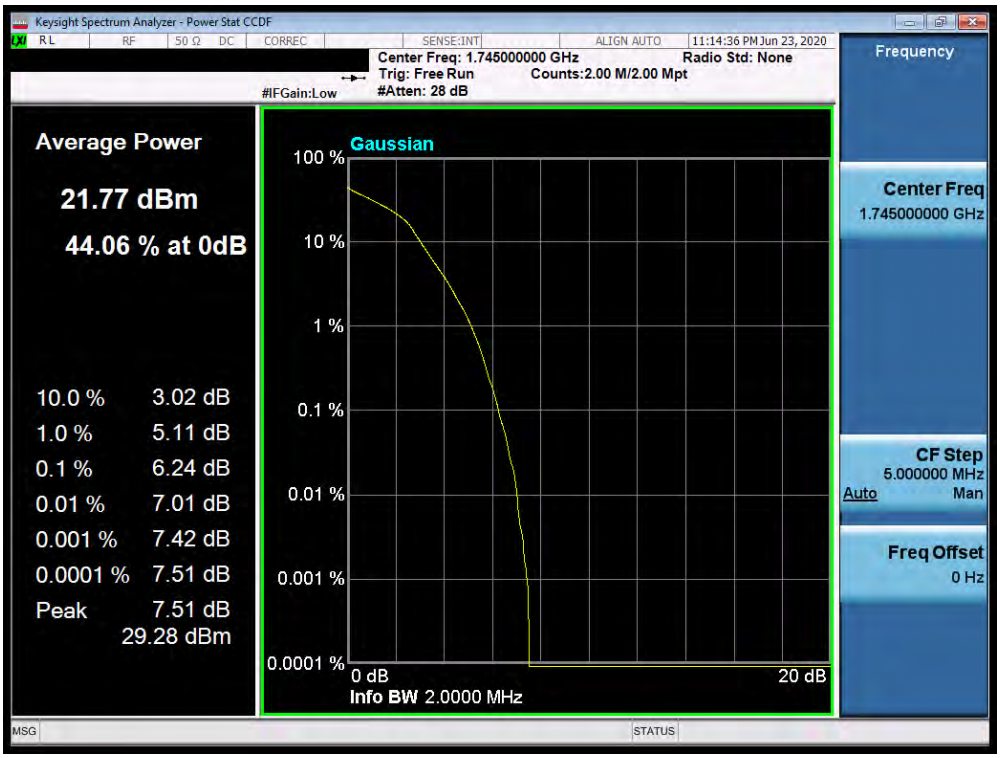


Plot 7-627. PAR Plot (NR Band n25/2 - 20.0MHz CP-OFDM-CP-OFDM 256-QAM - Full RB)

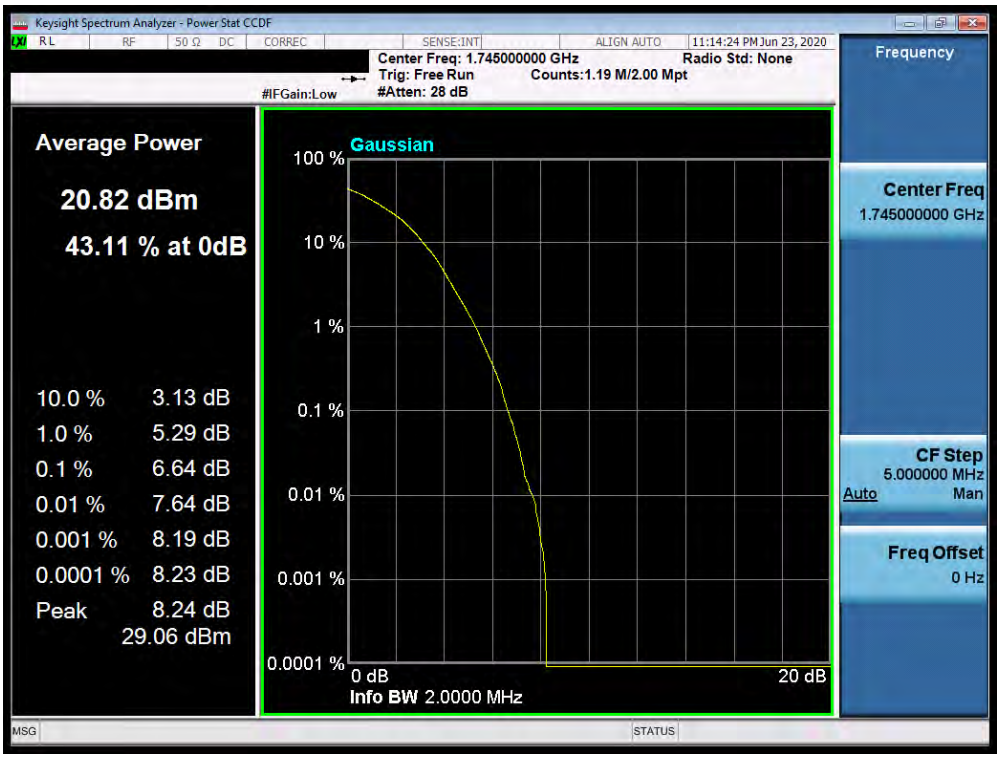
Band 66/4



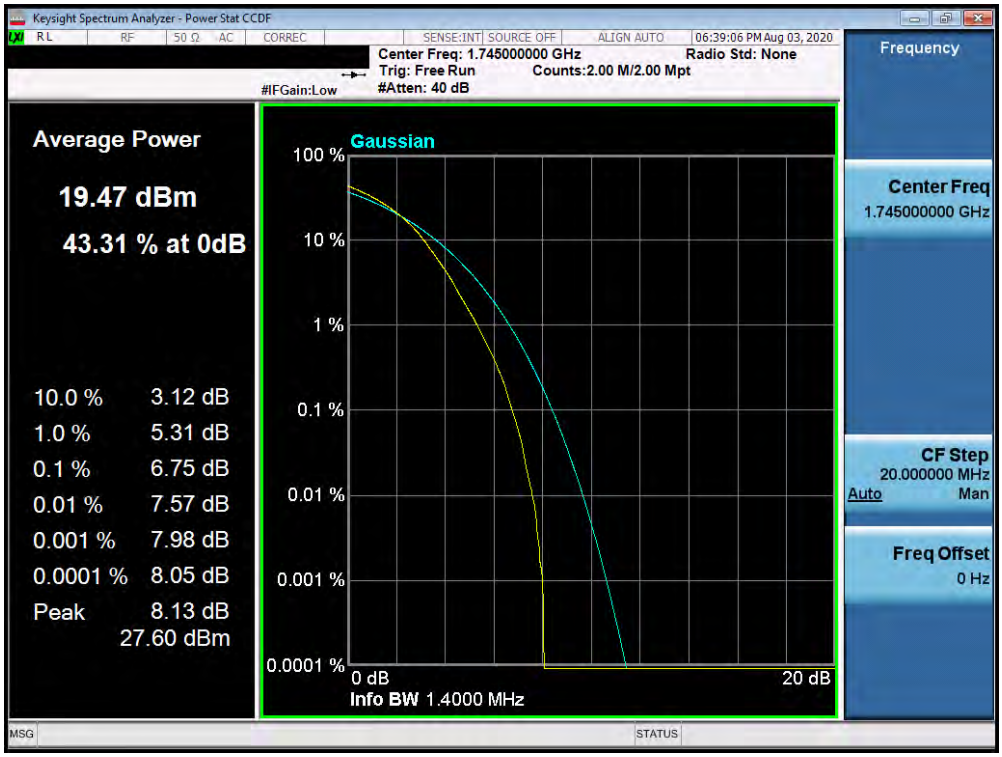
Plot 7-628. PAR Plot (Band 66/4 - 1.4MHz QPSK - Full RB Configuration)



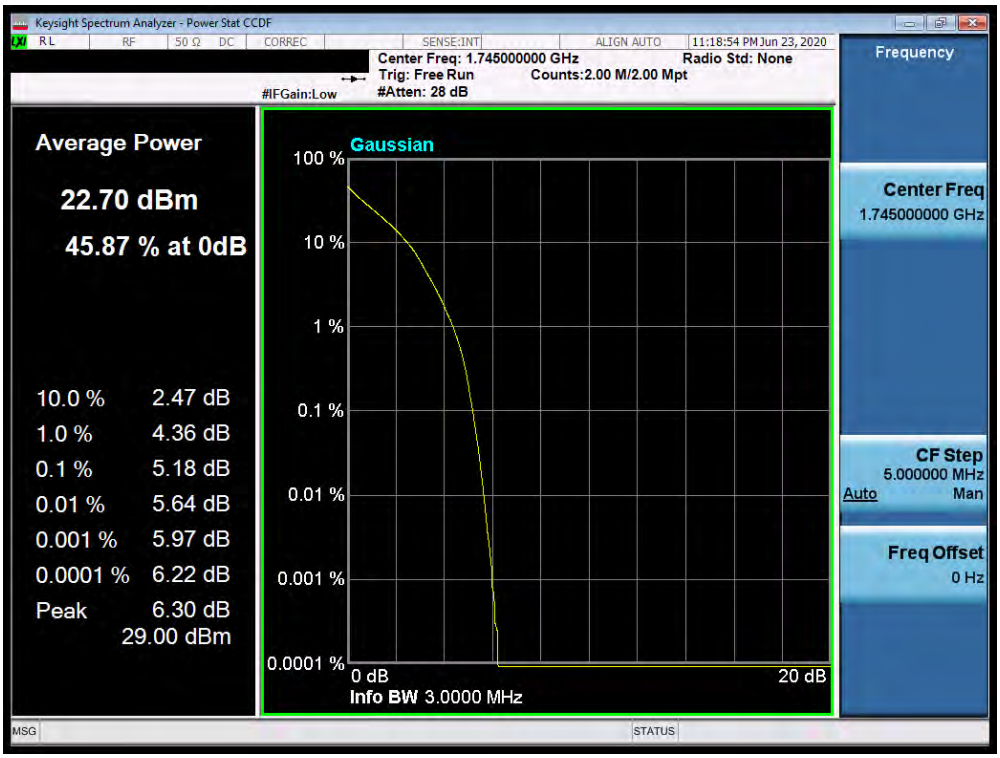
Plot 7-629. PAR Plot (Band 66/4 - 1.4MHz 16-QAM - Full RB Configuration)



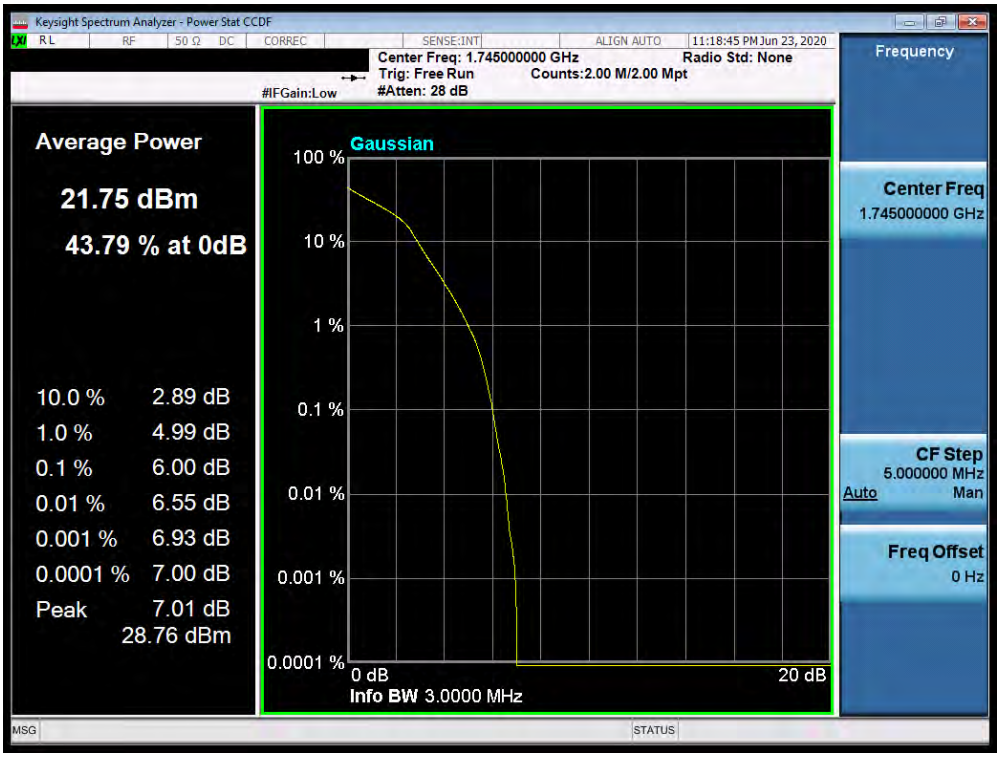
Plot 7-630. PAR Plot (Band 66/4 - 1.4MHz 64-QAM - Full RB Configuration)



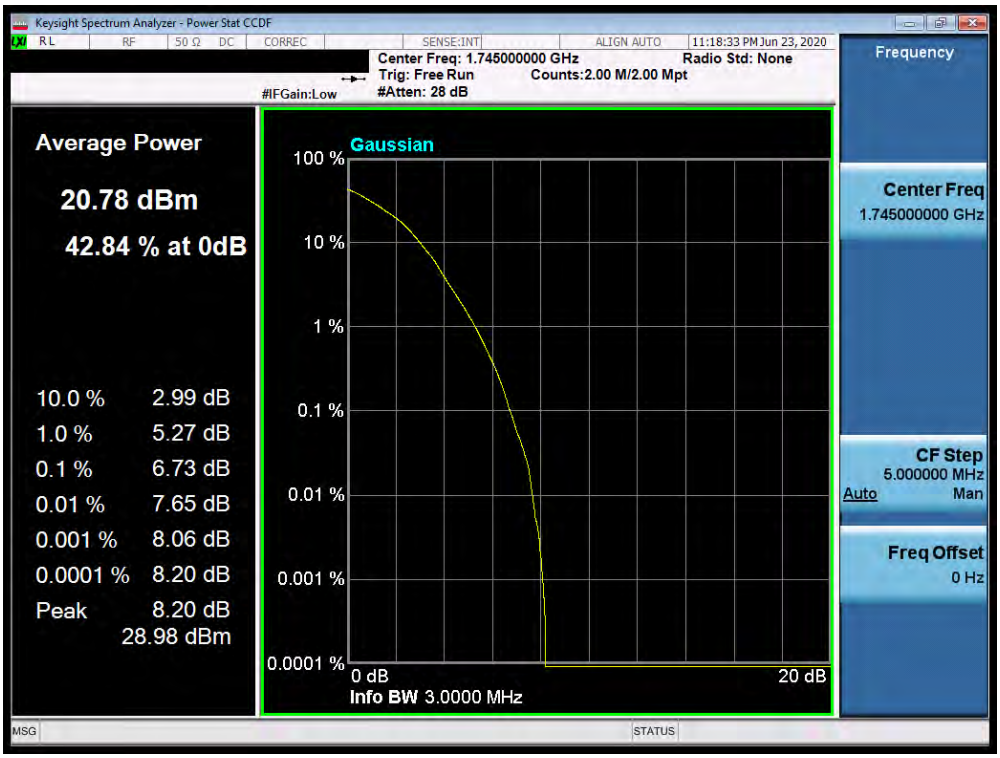
Plot 7-631. PAR Plot (Band 66/4 - 1.4MHz 256-QAM - Full RB Configuration)



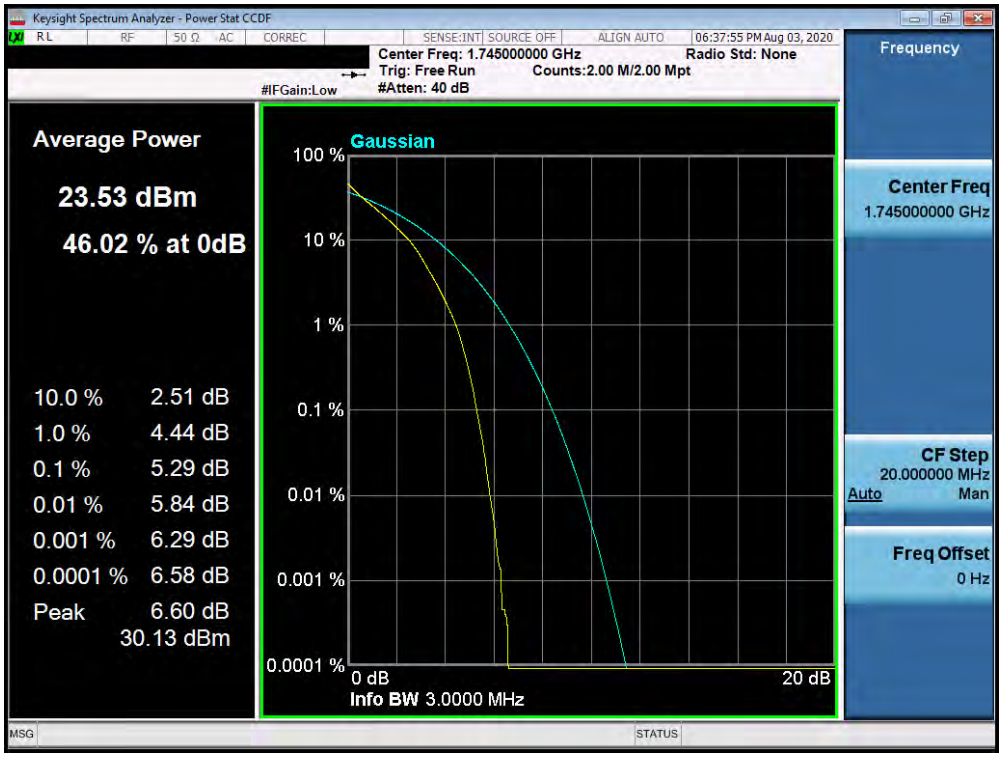
Plot 7-632. PAR Plot (Band 66/4 - 3.0MHz QPSK - Full RB Configuration)



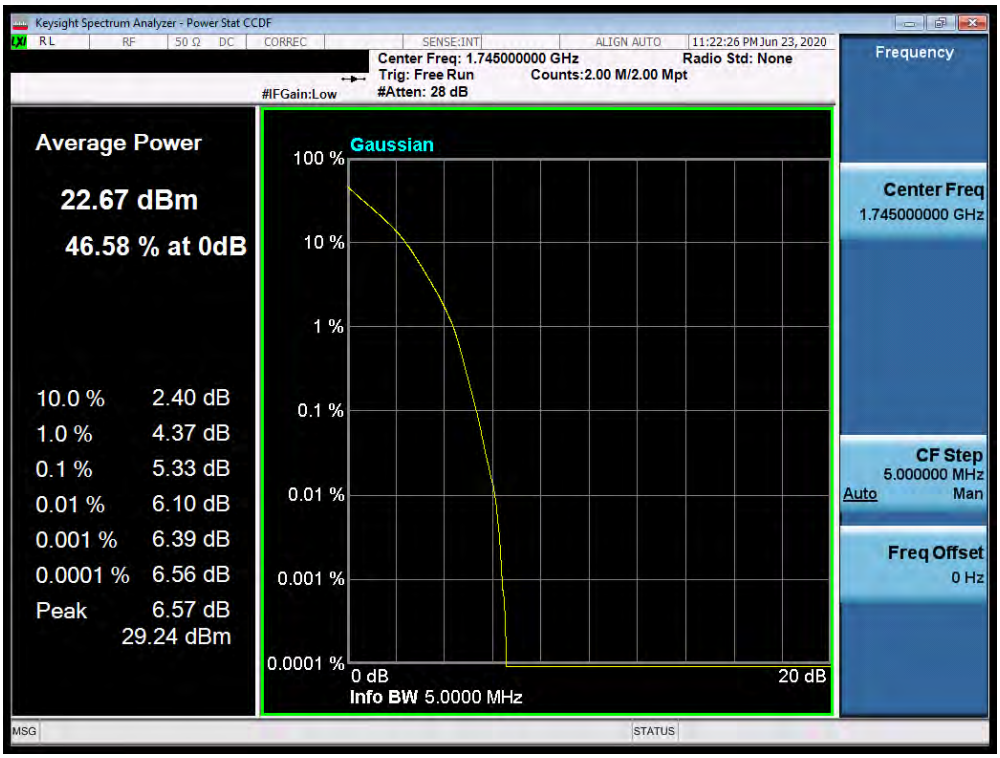
Plot 7-633. PAR Plot (Band 66/4 - 3.0MHz 16-QAM - Full RB Configuration)



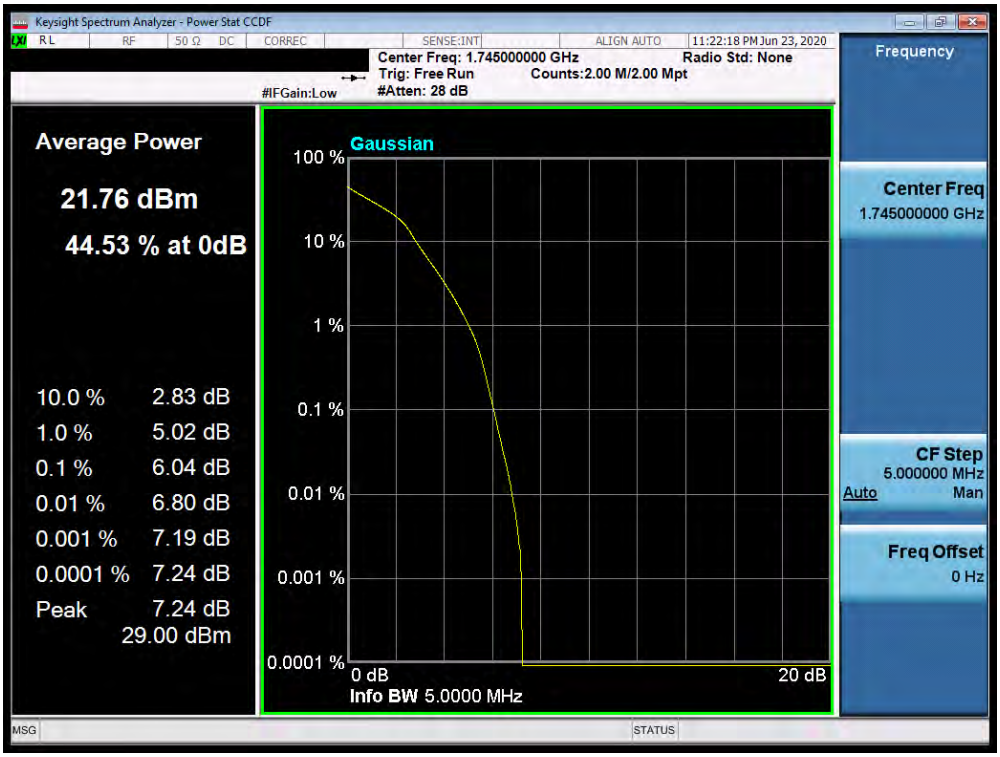
Plot 7-634. PAR Plot (Band 66/4 - 3.0MHz 64-QAM - Full RB Configuration)



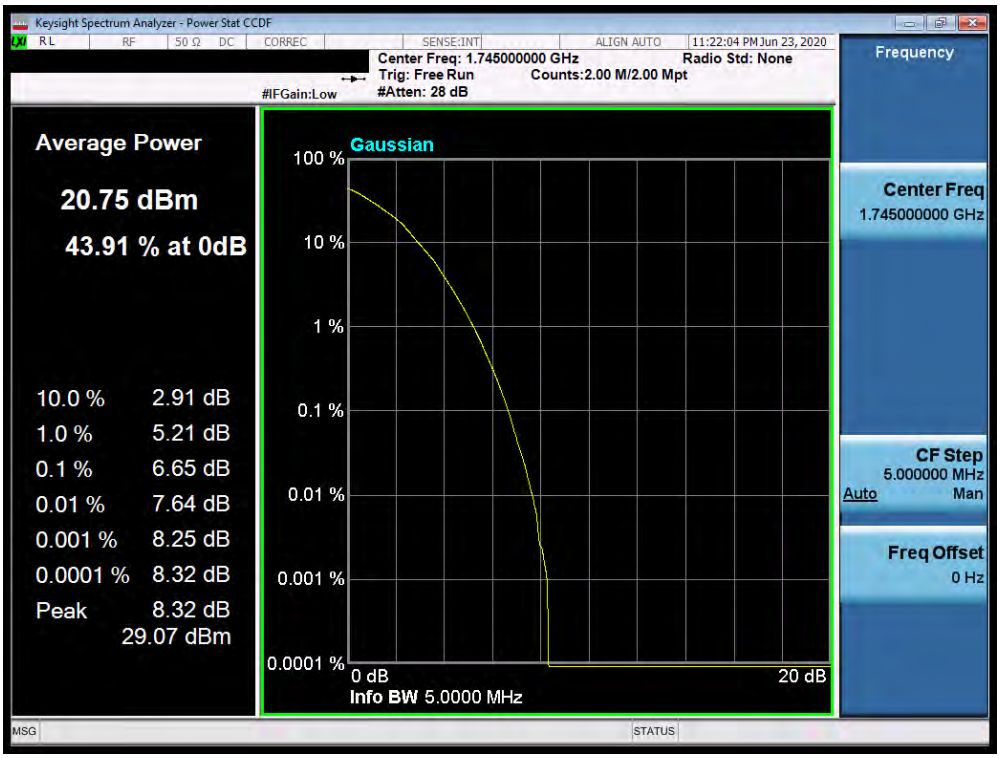
Plot 7-635. PAR Plot (Band 66/4 - 3.0MHz 256-QAM - Full RB Configuration)



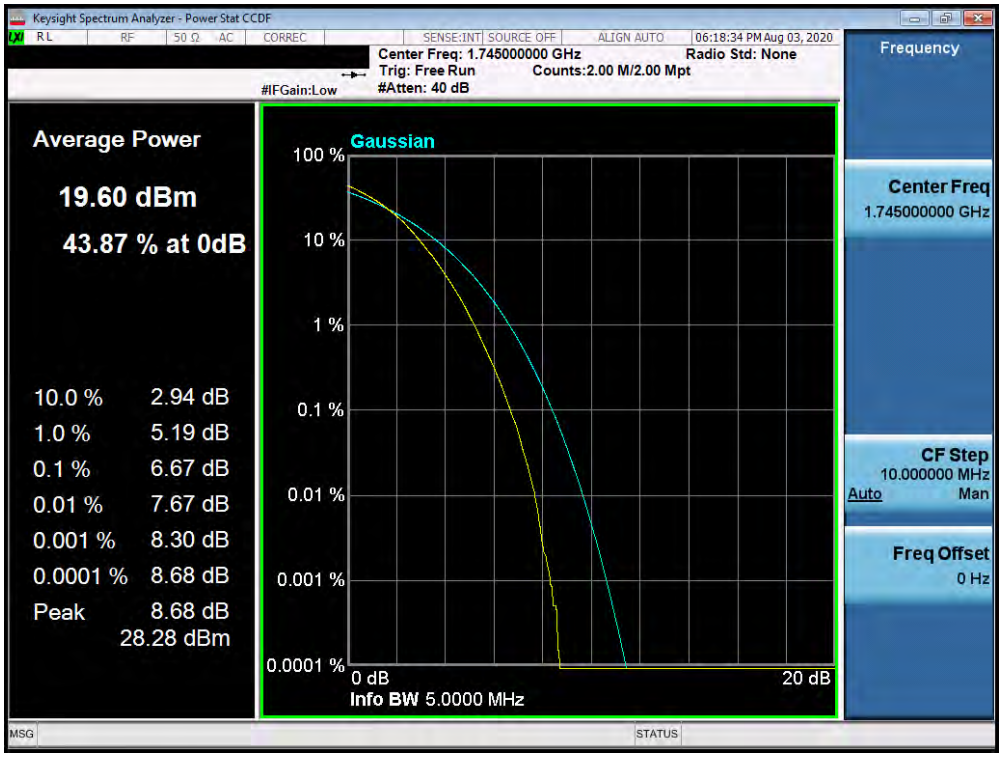
Plot 7-636. PAR Plot (Band 66/4 - 5.0MHz QPSK - Full RB Configuration)



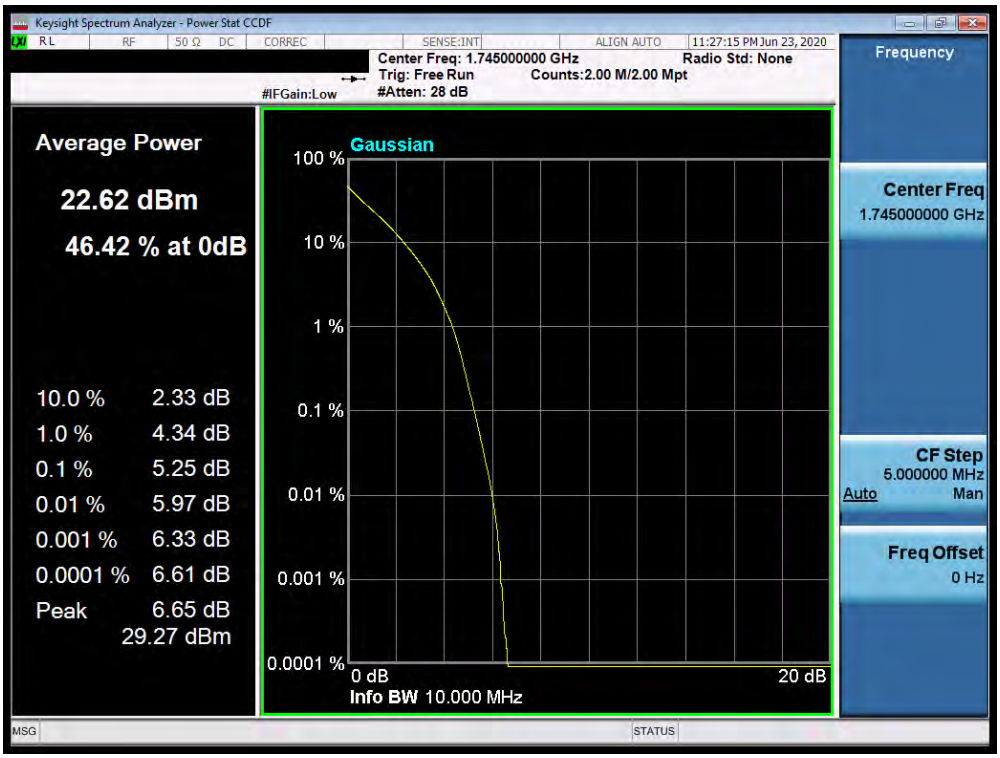
Plot 7-637. PAR Plot (Band 66/4 - 5.0MHz 16-QAM - Full RB Configuration)



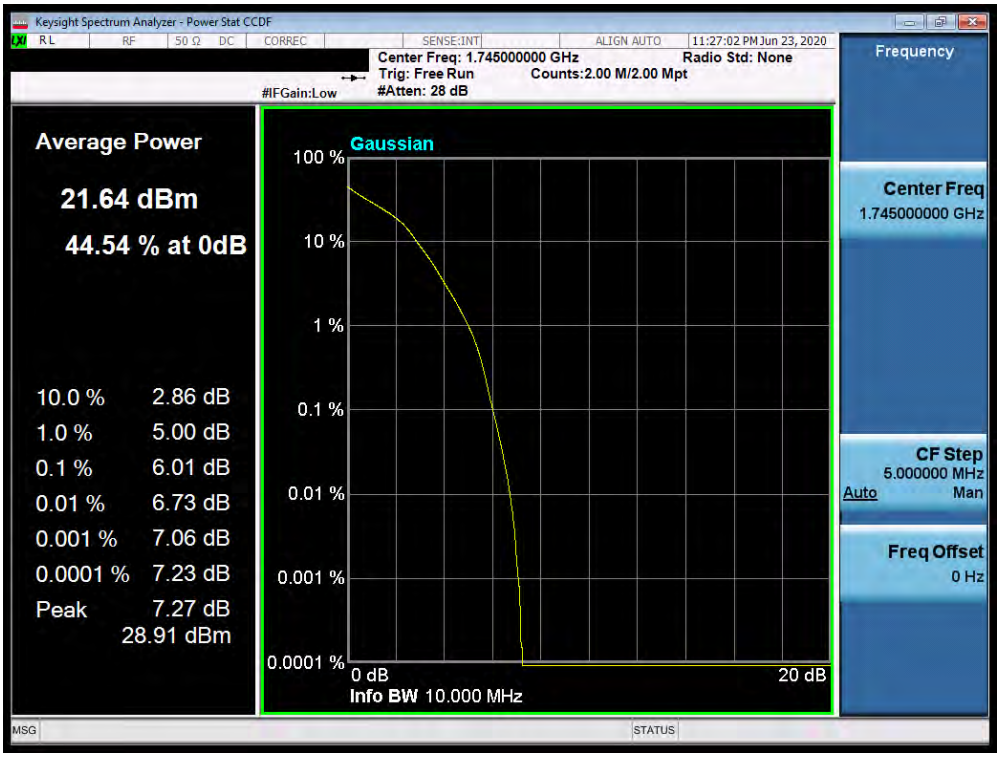
Plot 7-638. PAR Plot (Band 66/4 - 5.0MHz 64-QAM - Full RB Configuration)



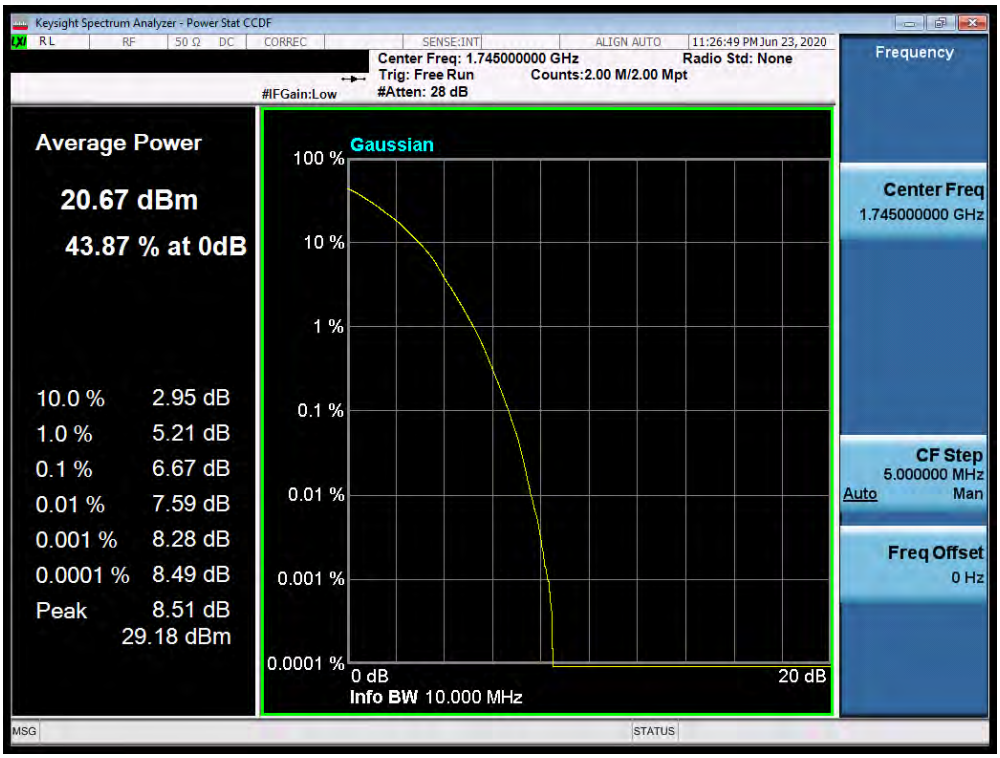
Plot 7-639. PAR Plot (Band 66/4 - 5.0MHz 256-QAM - Full RB Configuration)



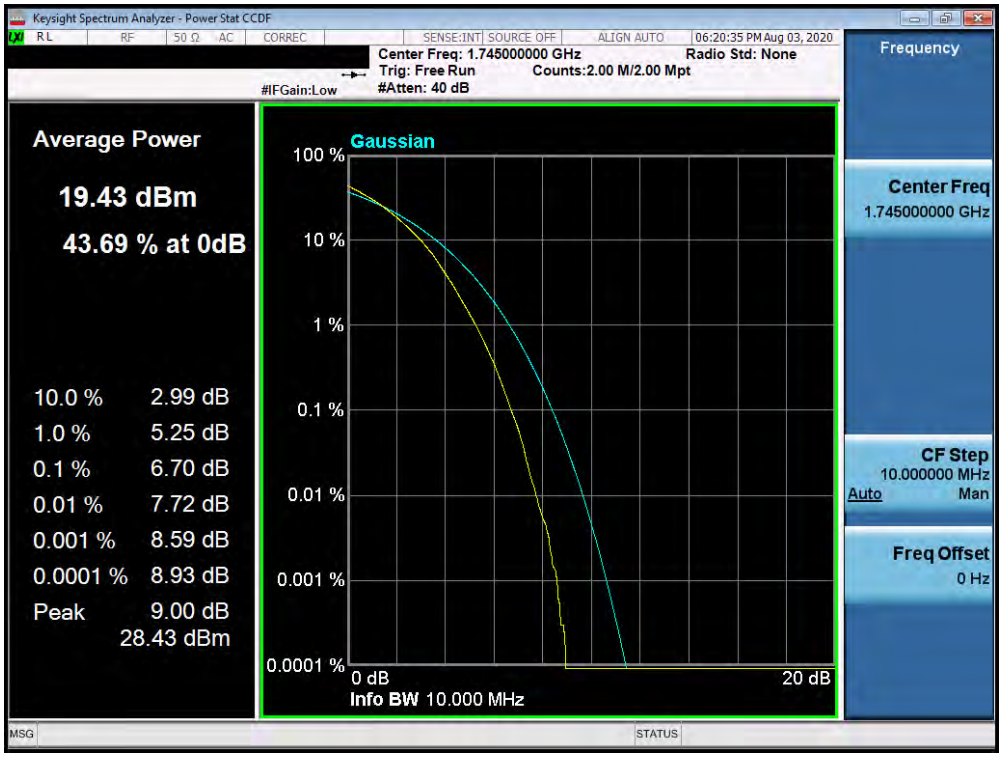
Plot 7-640. PAR Plot (Band 66/4 - 10.0MHz QPSK - Full RB Configuration)



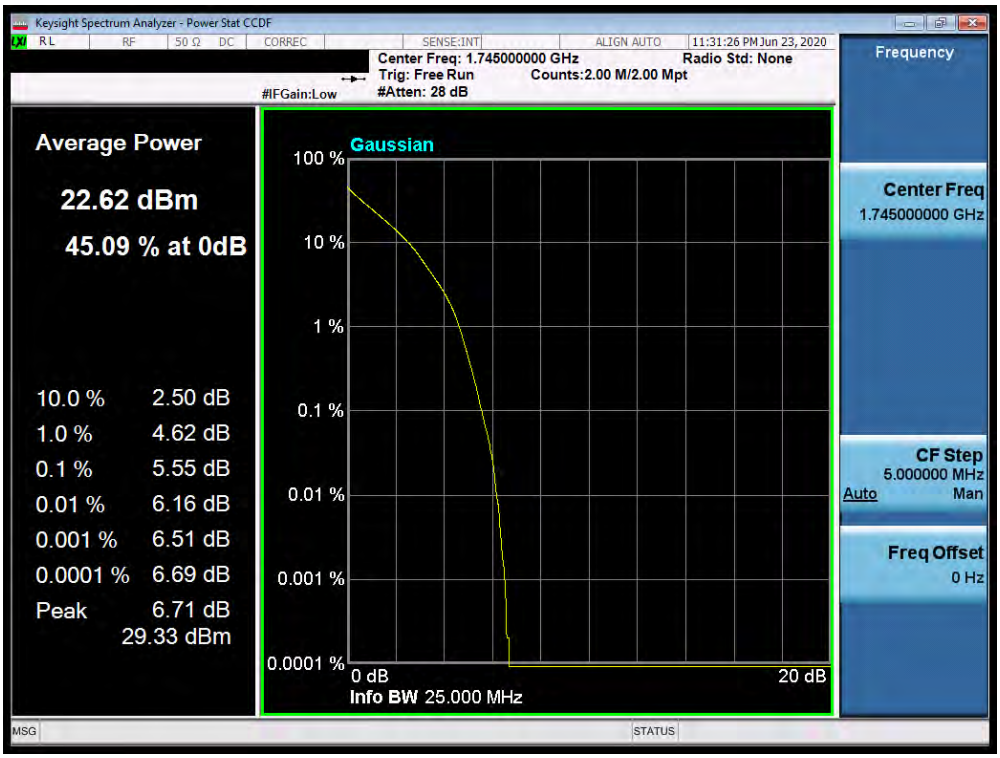
Plot 7-641. PAR Plot (Band 66/4 - 10.0MHz 16-QAM - Full RB Configuration)



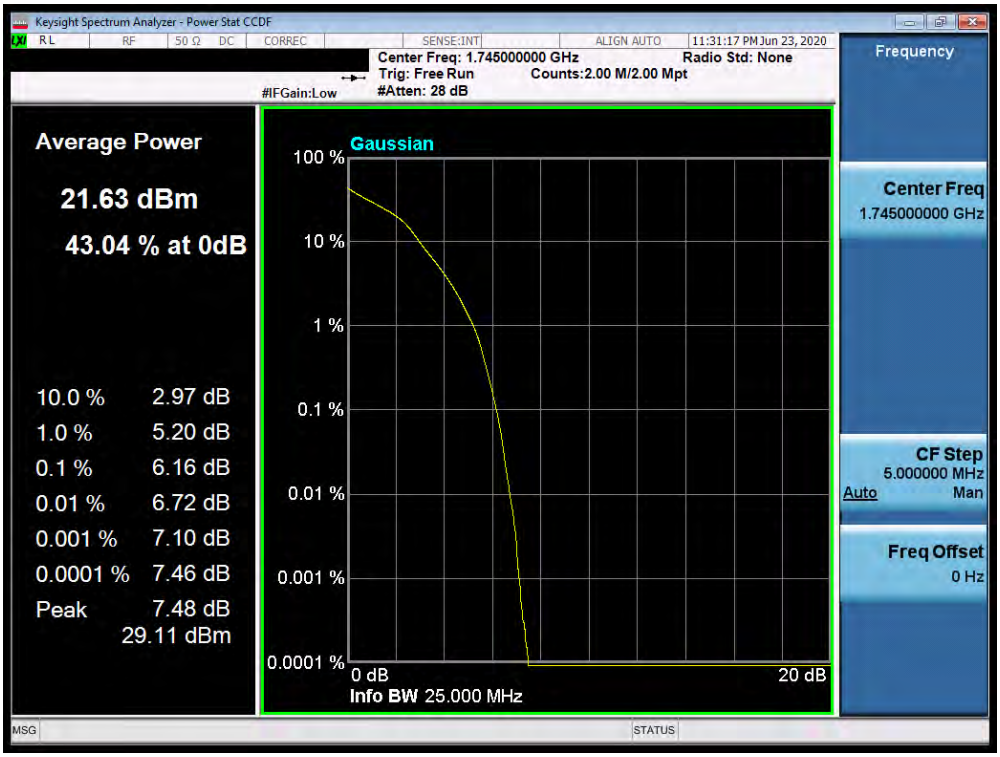
Plot 7-642. PAR Plot (Band 66/4 - 10.0MHz 64-QAM - Full RB Configuration)



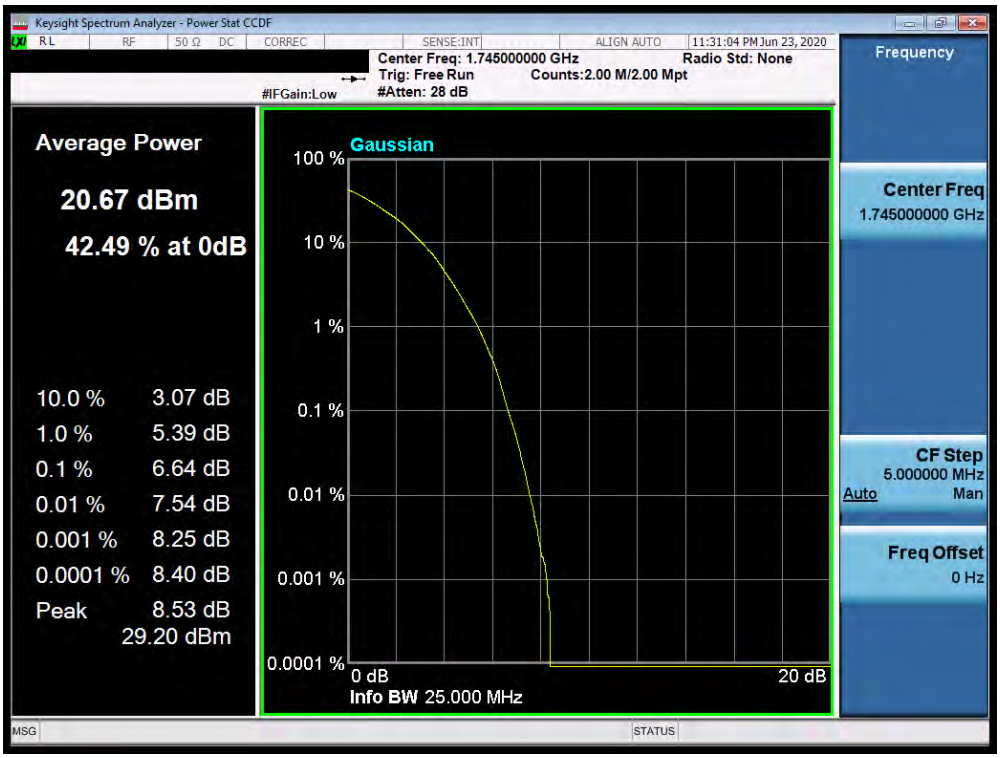
Plot 7-643. PAR Plot (Band 66/4 - 10.0MHz 256-QAM - Full RB Configuration)



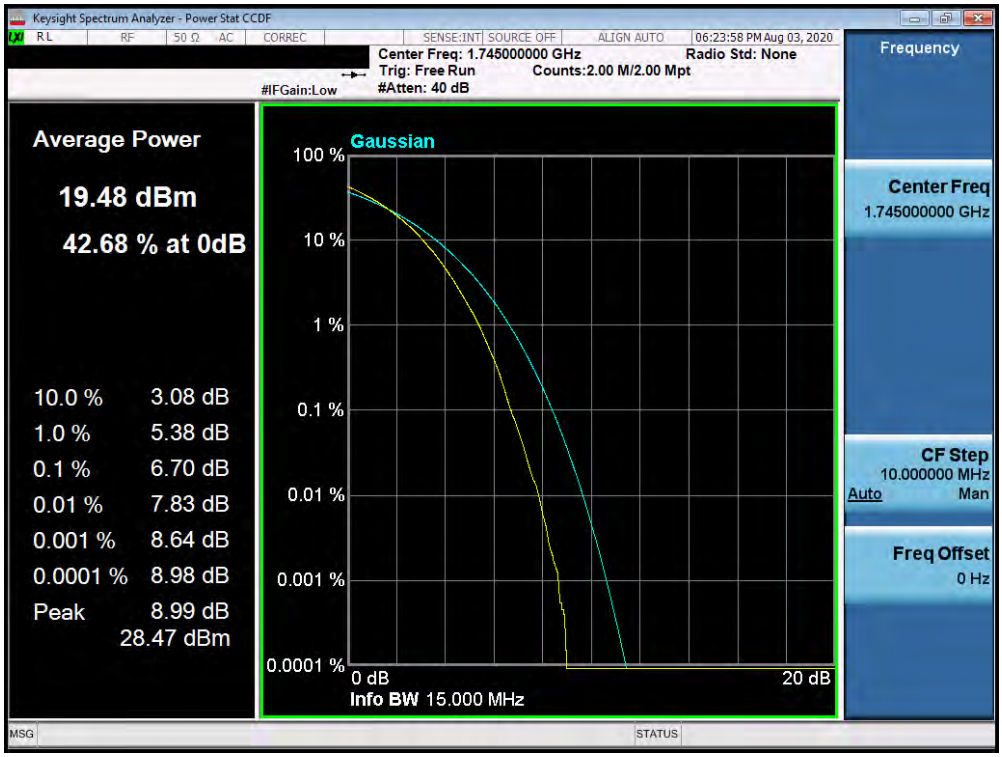
Plot 7-644. PAR Plot (Band 66/4 - 15.0MHz QPSK - Full RB Configuration)



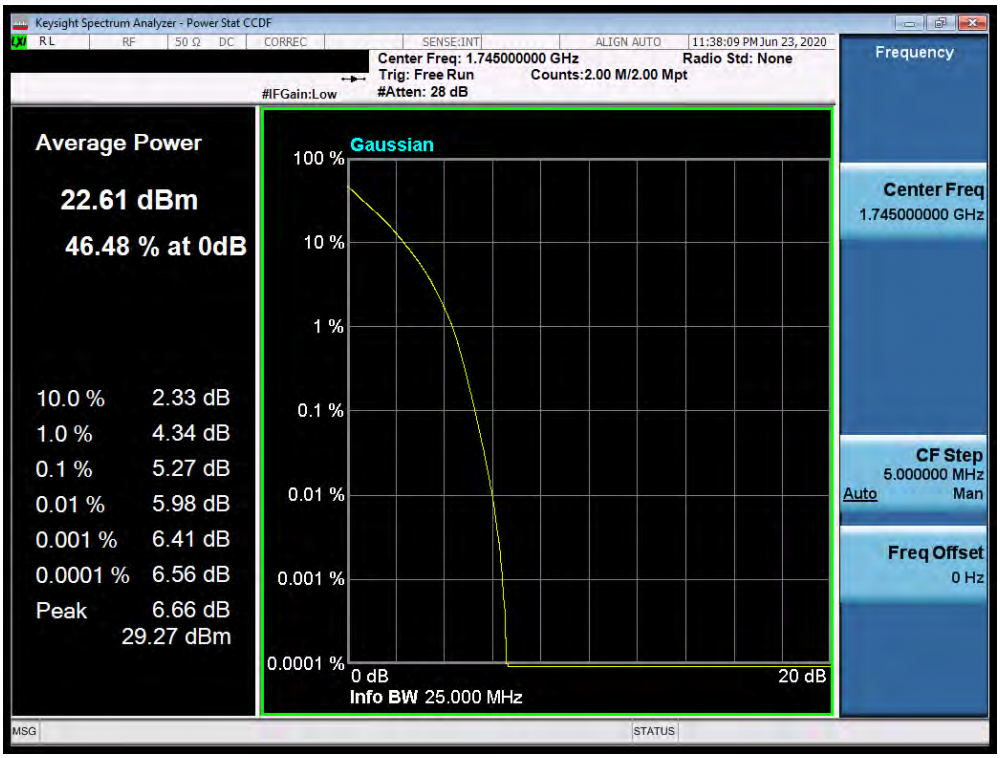
Plot 7-645. PAR Plot (Band 66/4 - 15.0MHz 16-QAM - Full RB Configuration)



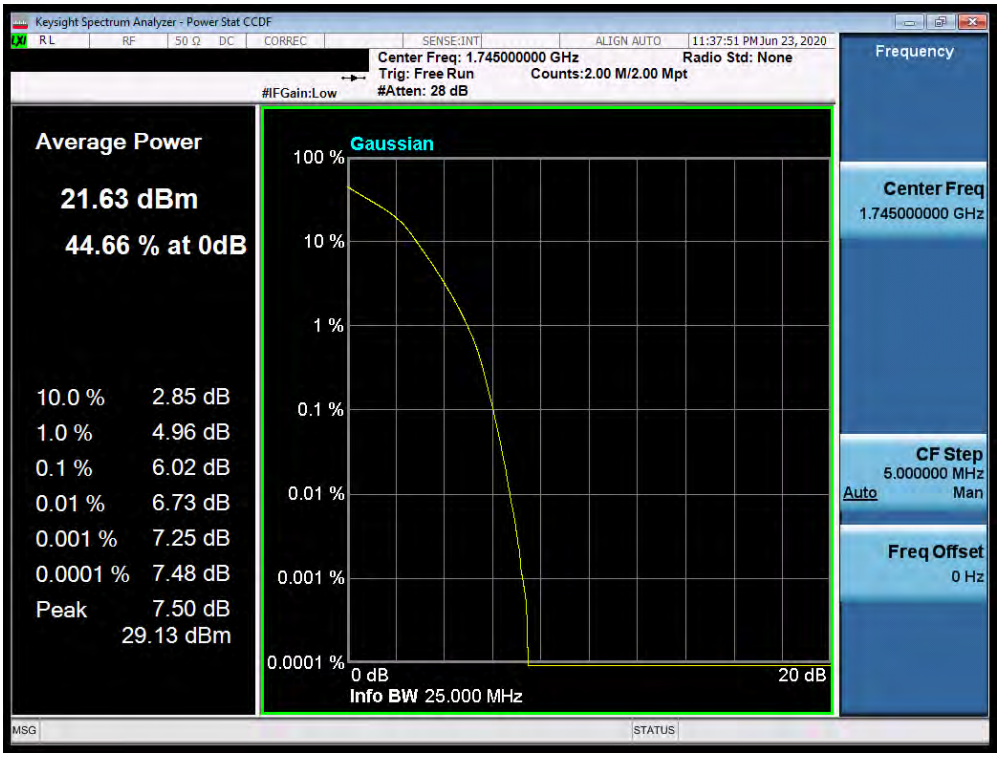
Plot 7-646. PAR Plot (Band 66/4 - 15.0MHz 64-QAM - Full RB Configuration)



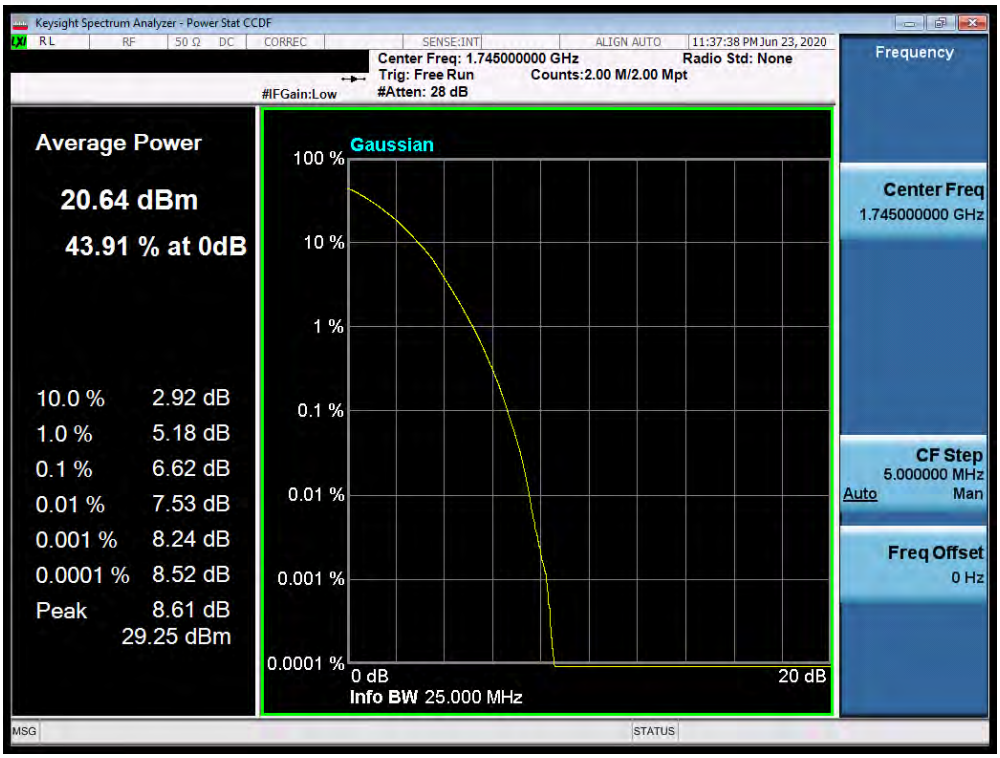
Plot 7-647. PAR Plot (Band 66/4 - 15.0MHz 256-QAM - Full RB Configuration)



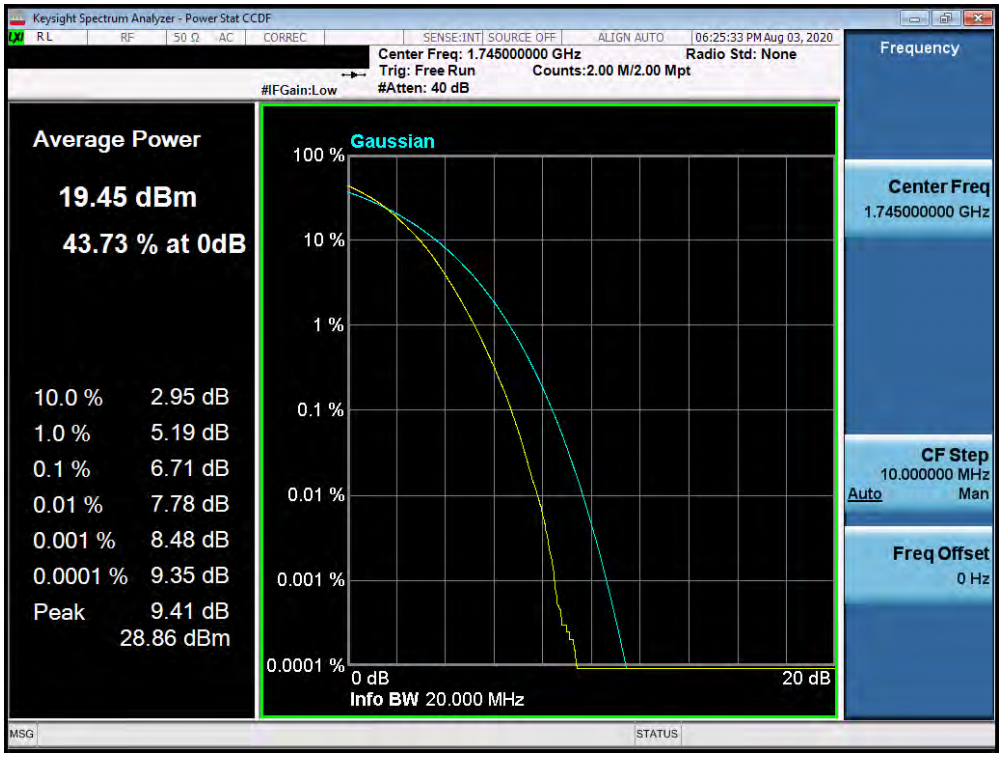
Plot 7-648. PAR Plot (Band 66/4 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-649. PAR Plot (Band 66/4 - 20.0MHz 16-QAM - Full RB Configuration)

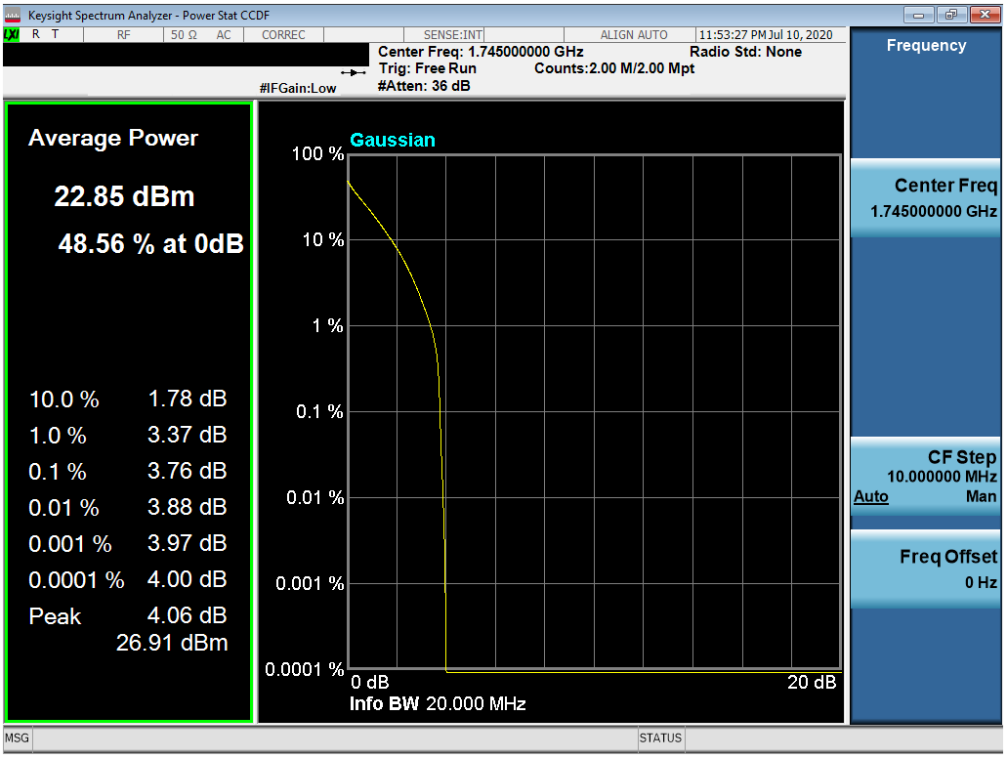


Plot 7-650. PAR Plot (Band 66/4 - 20.0MHz 64-QAM - Full RB Configuration)

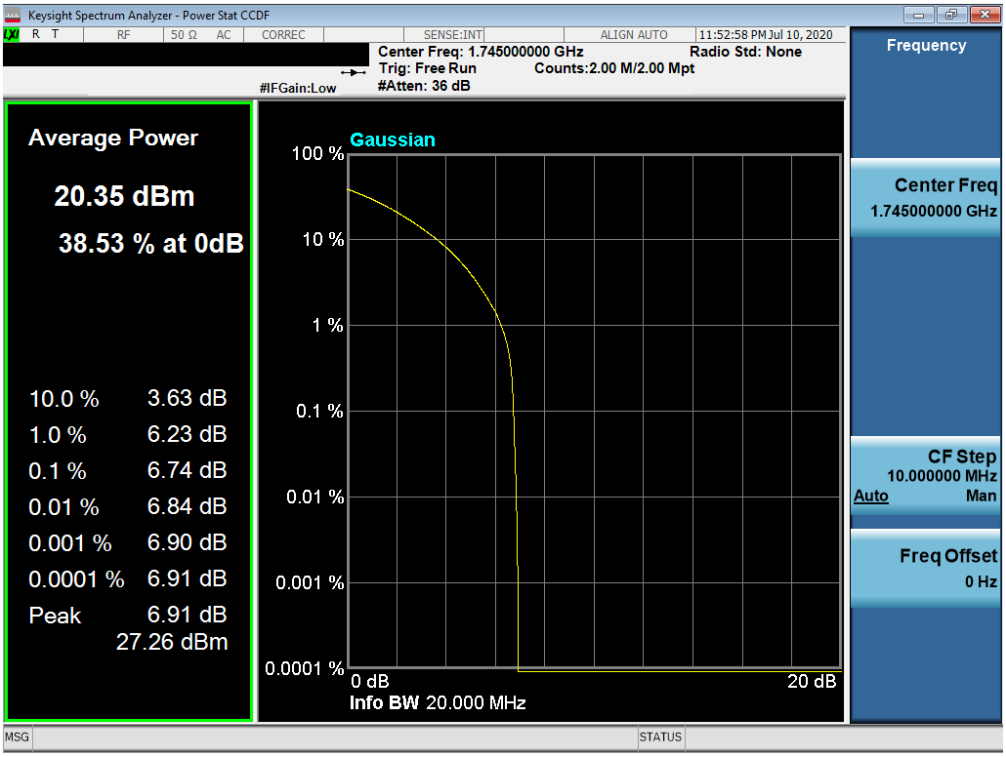


Plot 7-651. PAR Plot (Band 66/4 - 20.0MHz 256-QAM - Full RB Configuration)

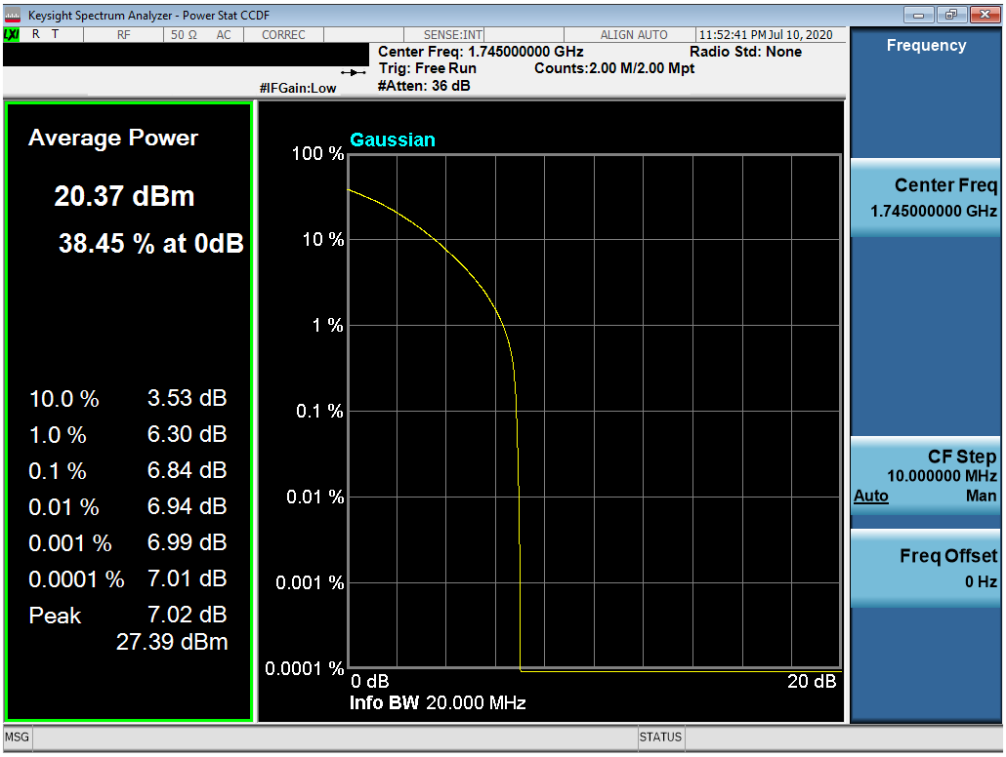
NR Band n66



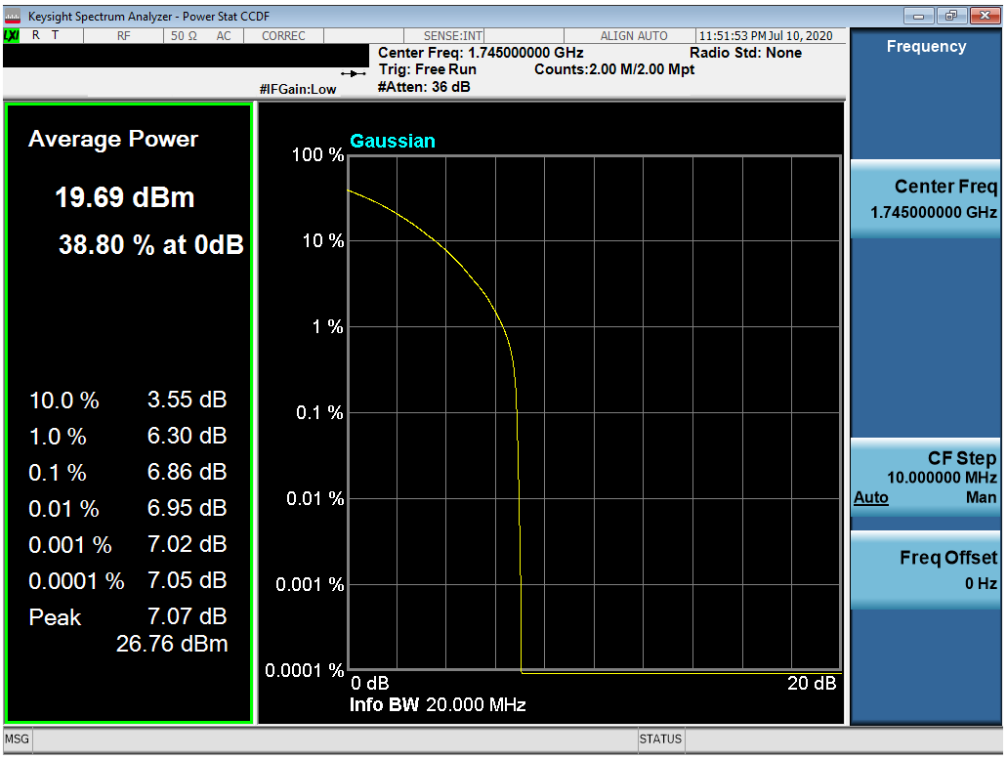
Plot 7-652. PAR Plot (NR Band n66 - 5.0MHz DFT-s-OFDM BPSK - Full RB)



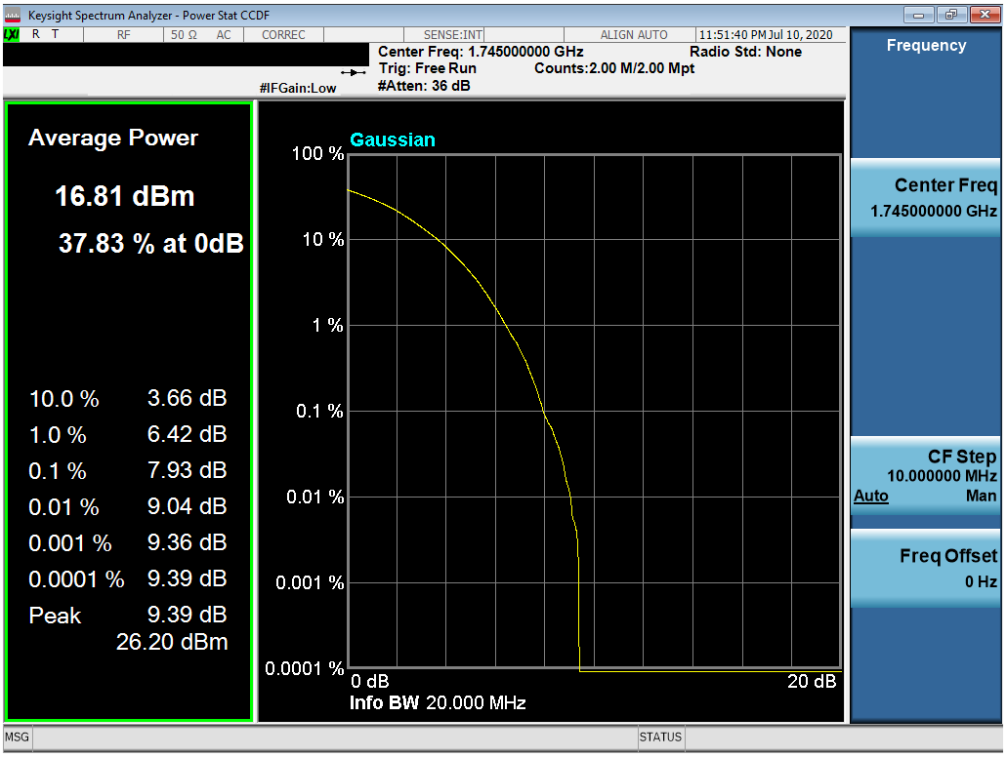
Plot 7-653. PAR Plot (NR Band n66 - 5.0MHz CP-OFDM-CP-OFDM QPSK - Full RB)



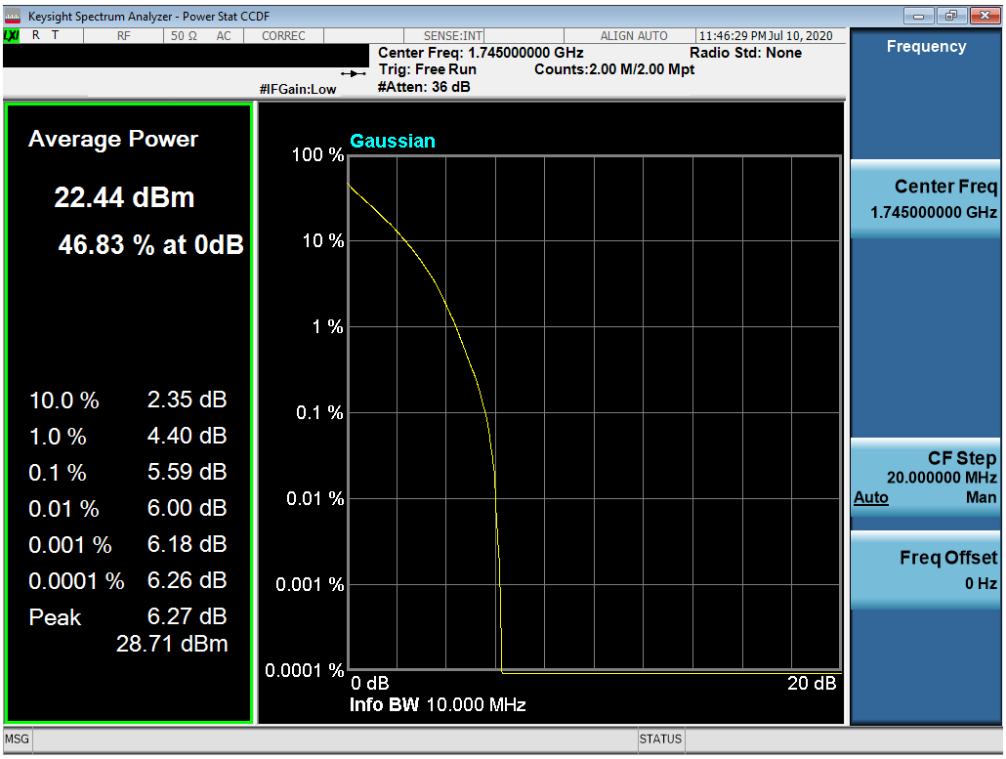
Plot 7-654. PAR Plot (NR Band n66 - 5.0MHz CP-OFDM-CP-OFDM 16-QAM - Full RB)



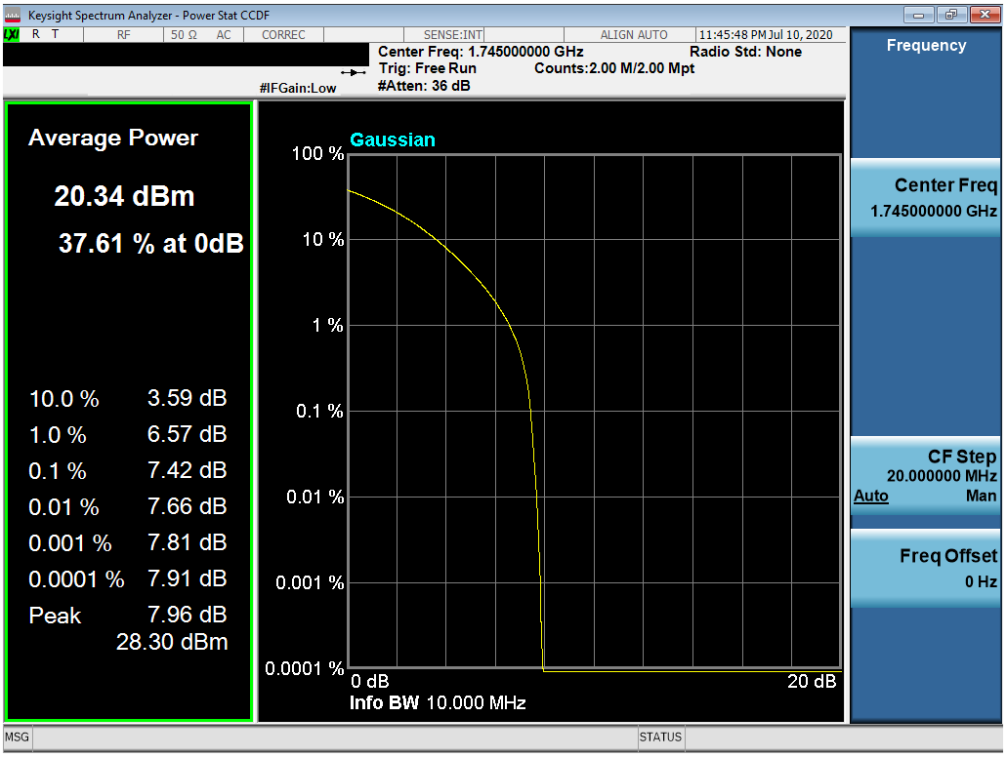
Plot 7-655. PAR Plot (NR Band n66 - 5.0MHz CP-OFDM-CP-OFDM 64-QAM - Full RB)



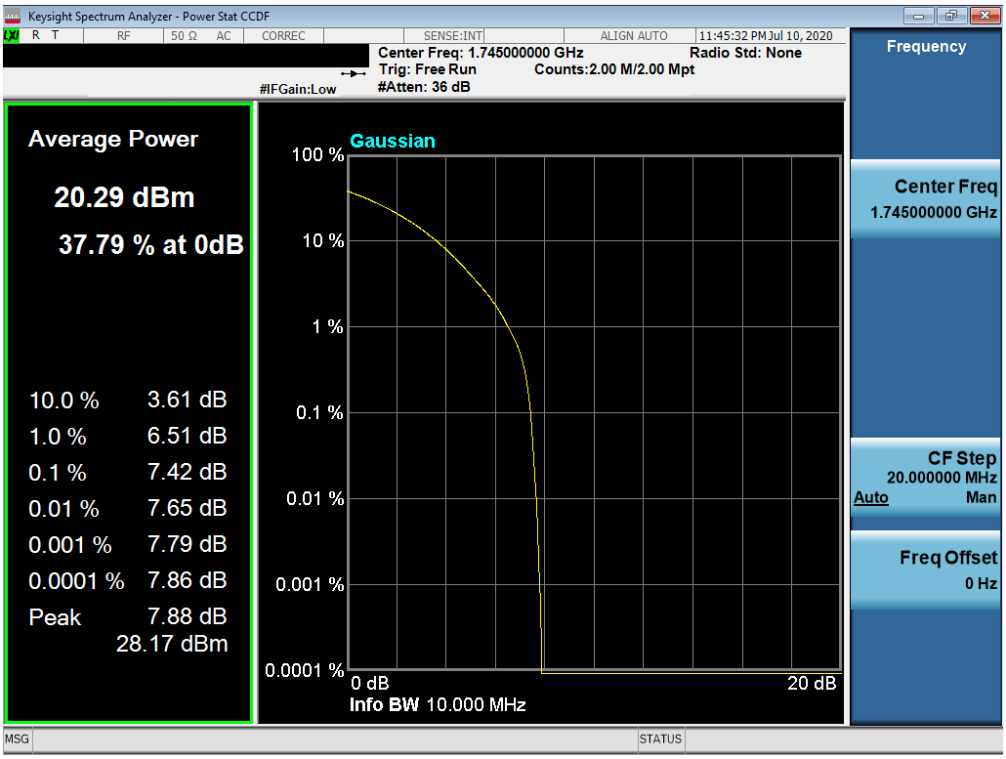
Plot 7-656. PAR Plot (NR Band n66 - 5.0MHz CP-OFDM-CP-OFDM 256-QAM - Full RB)



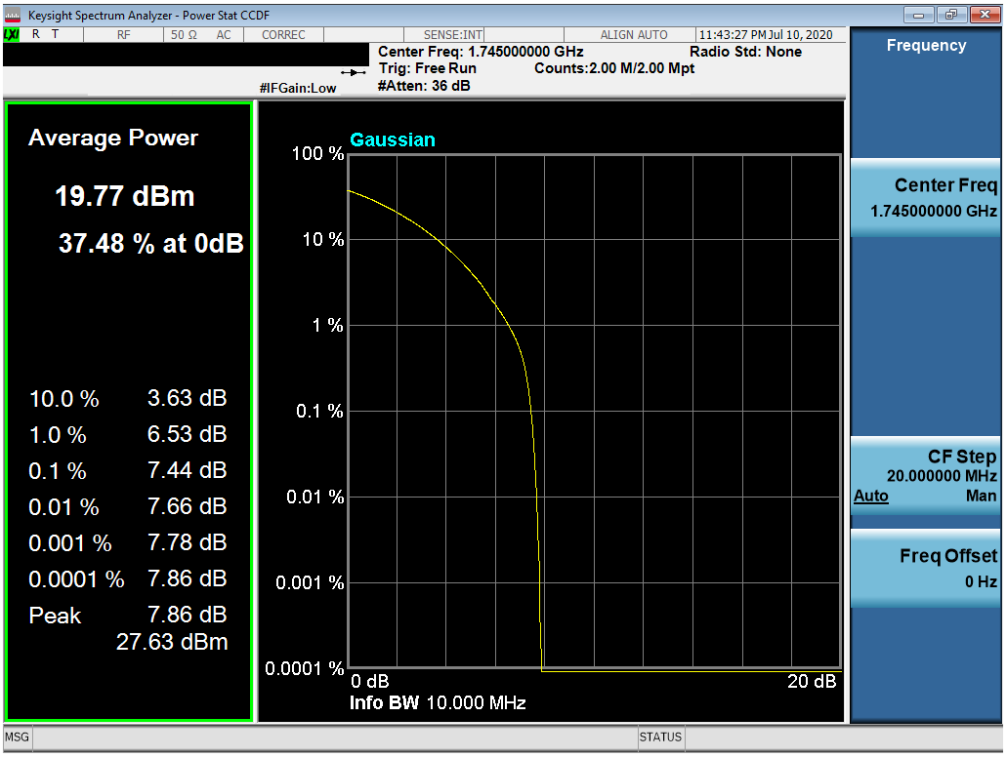
Plot 7-657. PAR Plot (NR Band n66 - 10.0MHz DFT-s-OFDM BPSK - Full RB)



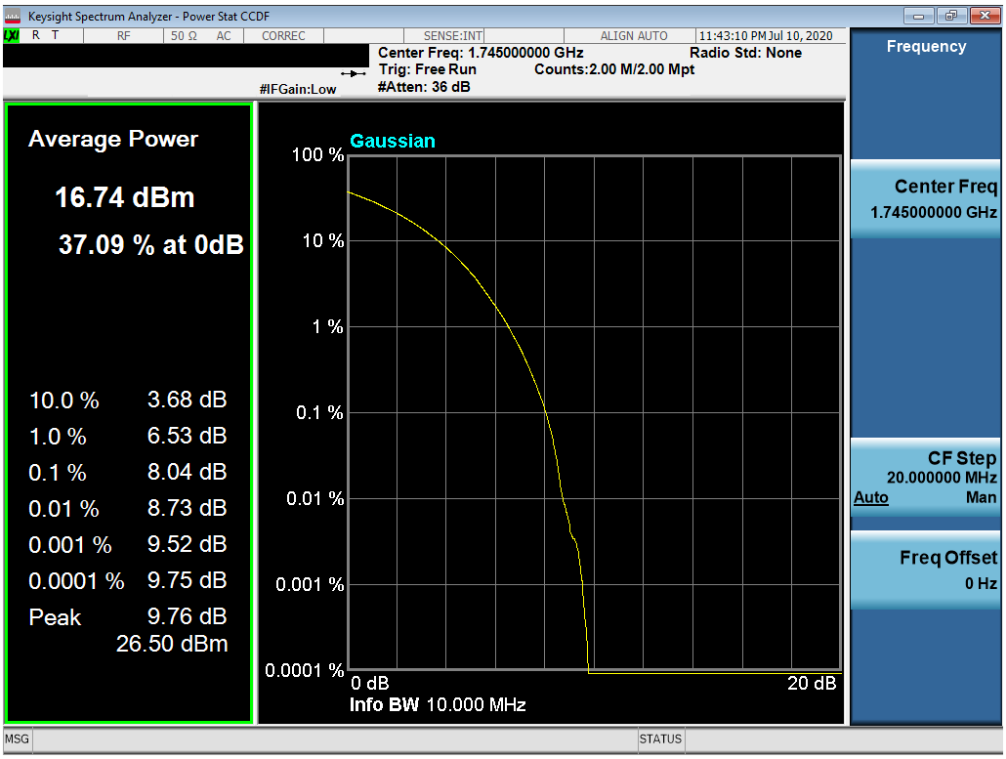
Plot 7-658. PAR Plot (NR Band n66 - 10.0MHz CP-OFDM-CP-OFDM QPSK - Full RB)



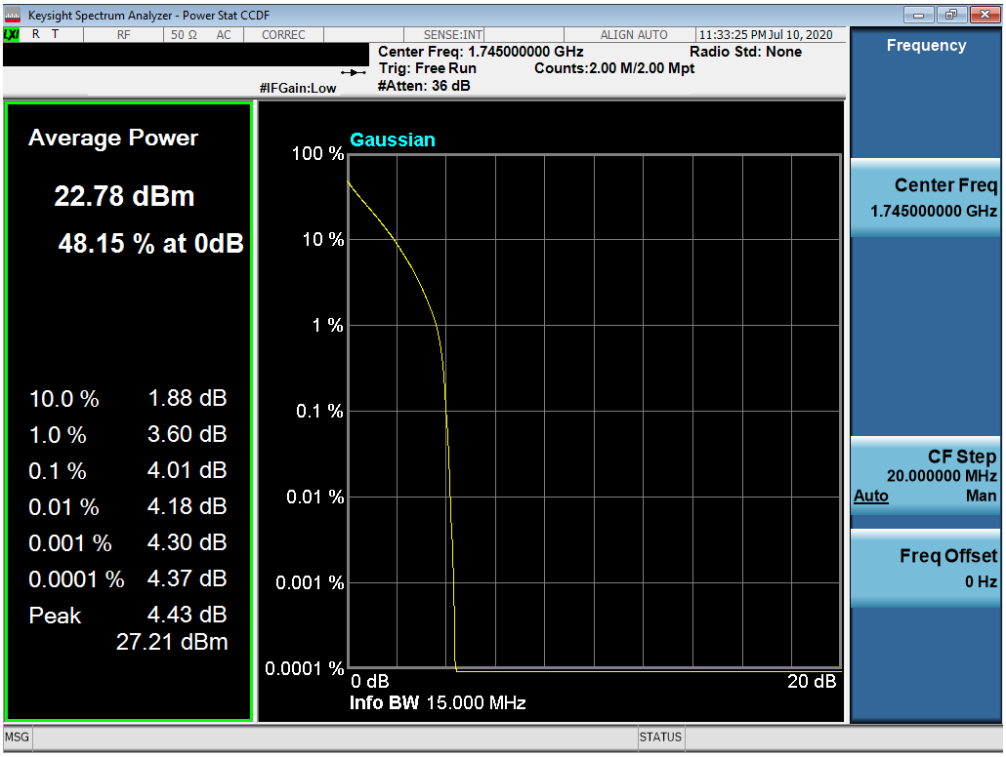
Plot 7-659. PAR Plot (NR Band n66 - 10.0MHz CP-OFDM-CP-OFDM 16-QAM - Full RB)



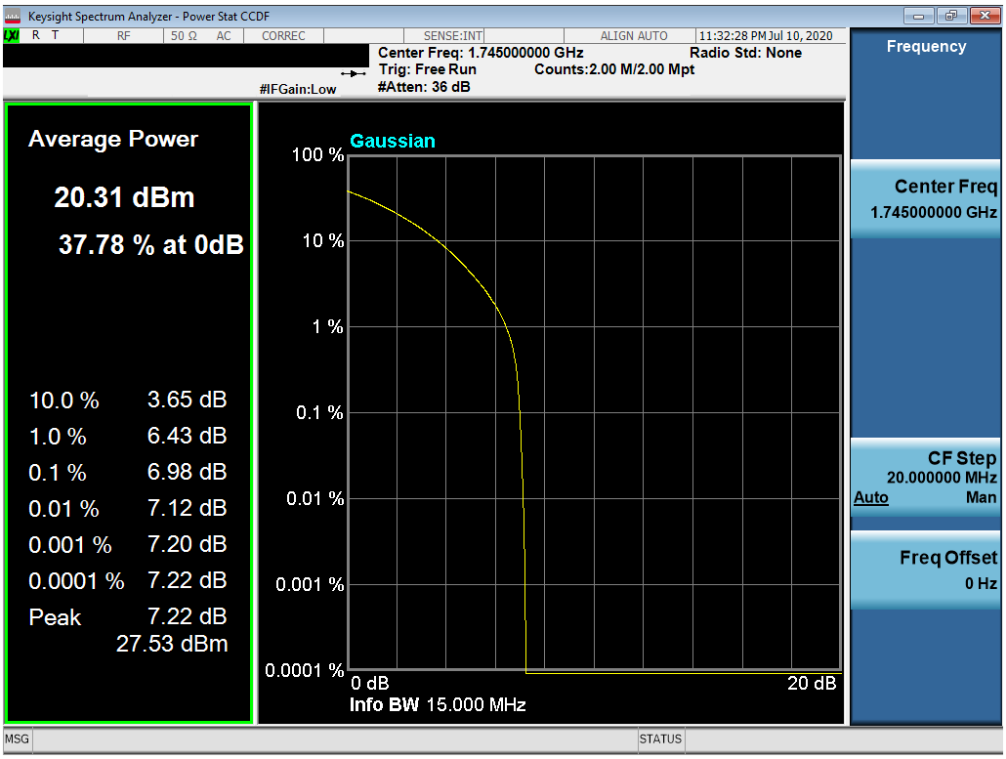
Plot 7-660. PAR Plot (NR Band n66 - 10.0MHz CP-OFDM-CP-OFDM 64-QAM - Full RB)



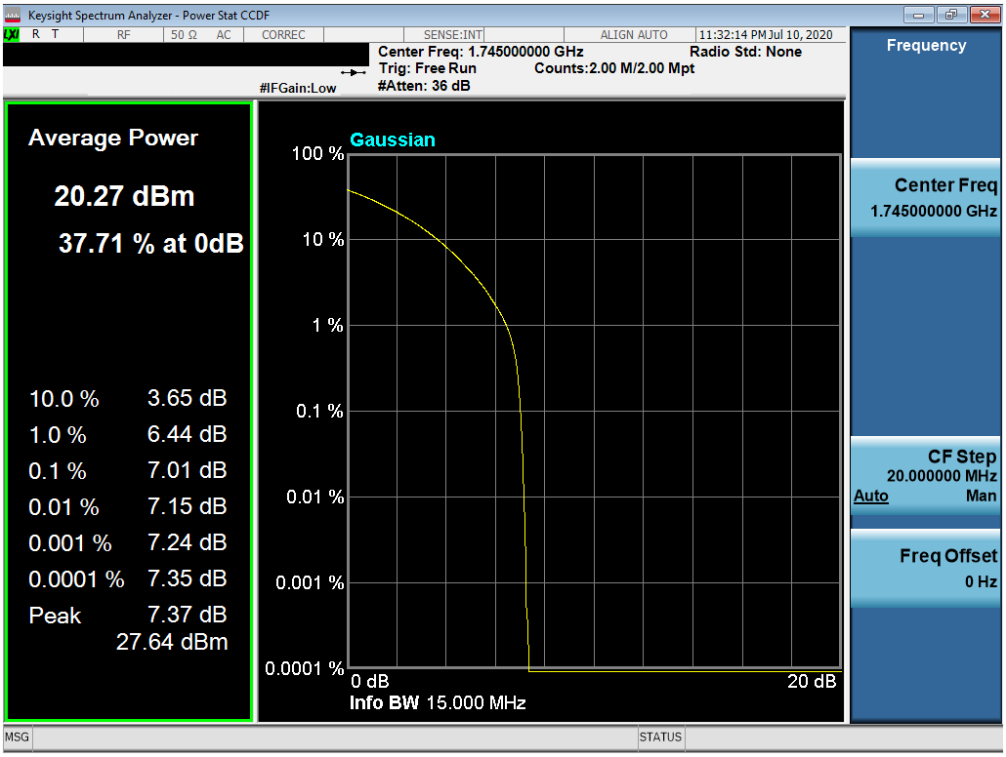
Plot 7-661. PAR Plot (NR Band n66 - 10.0MHz CP-OFDM-CP-OFDM 256-QAM - Full RB)



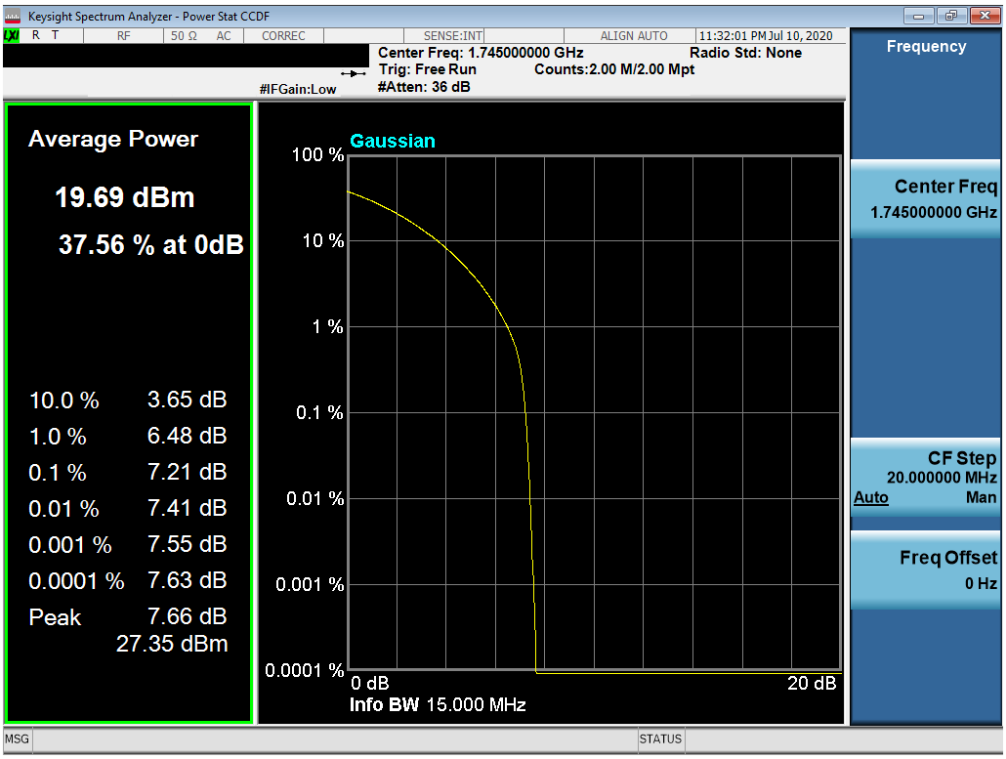
Plot 7-662. PAR Plot (NR Band n66 - 15.0MHz DFT-s-OFDM BPSK - Full RB)



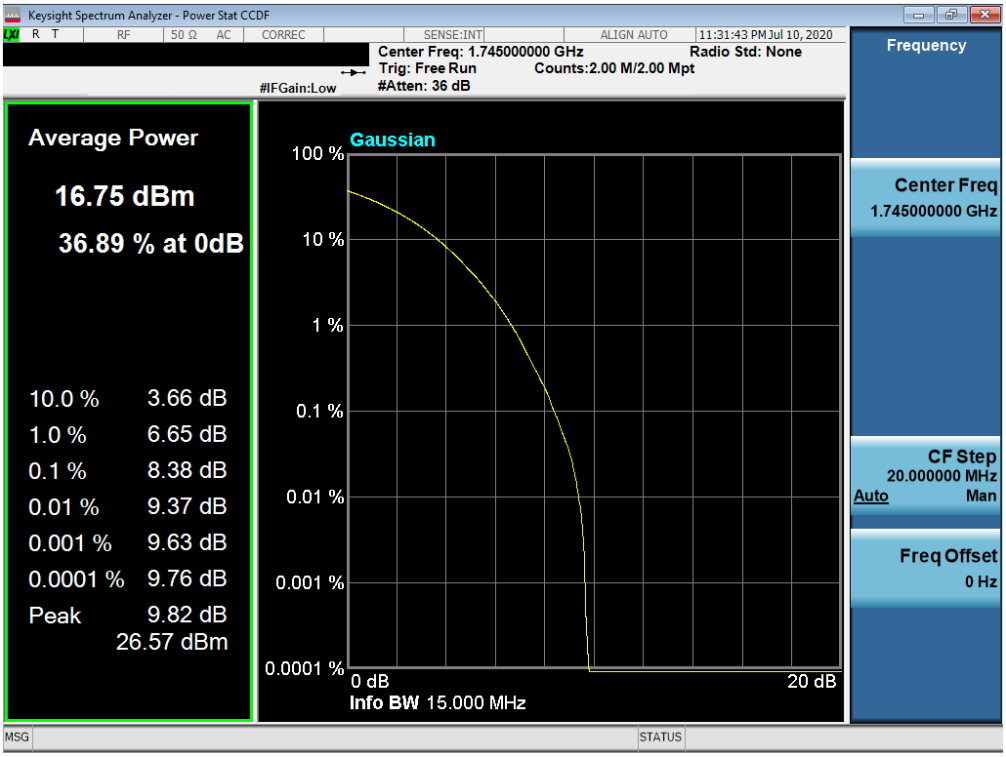
Plot 7-663. PAR Plot (NR Band n66 - 15.0MHz CP-OFDM-CP-OFDM QPSK - Full RB)



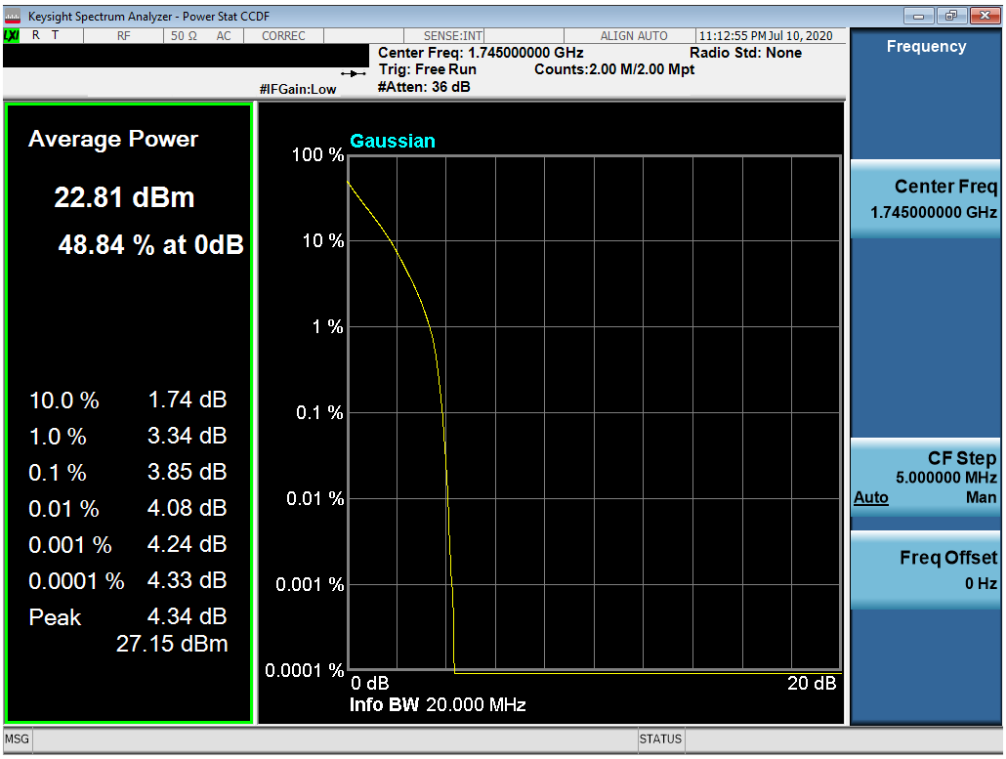
Plot 7-664. PAR Plot (NR Band n66 - 15.0MHz CP-OFDM-CP-OFDM 16-QAM - Full RB)



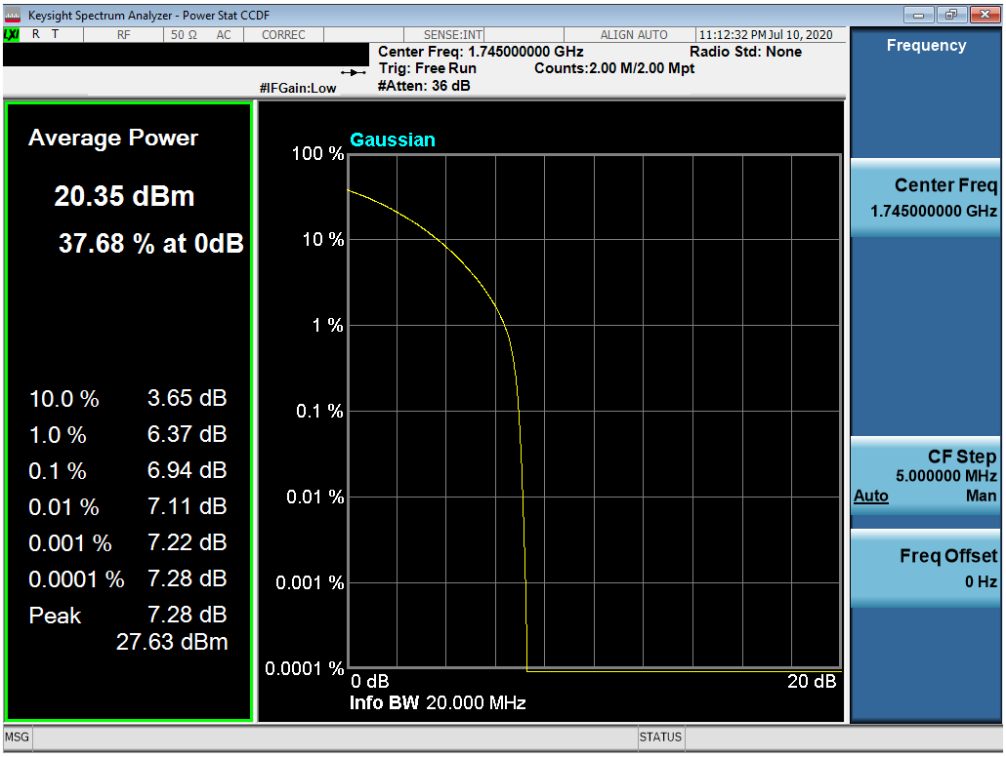
Plot 7-665. PAR Plot (NR Band n66 - 15.0MHz CP-OFDM-CP-OFDM 64-QAM - Full RB)



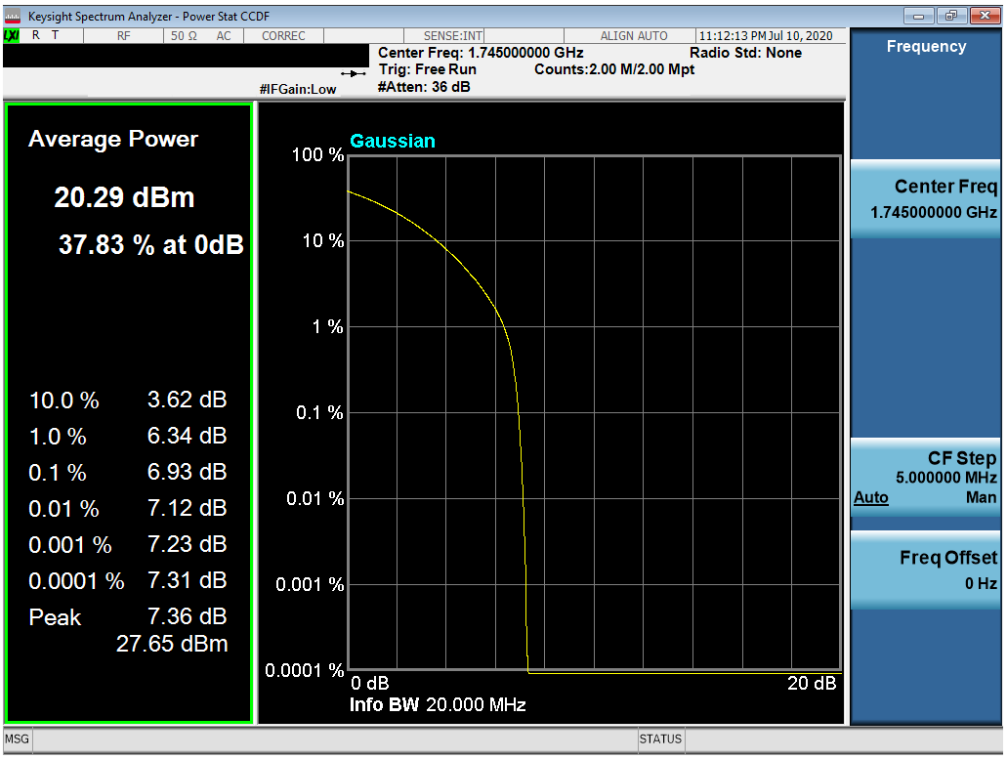
Plot 7-666. PAR Plot (NR Band n66 - 15.0MHz CP-OFDM-CP-OFDM 256-QAM - Full RB)



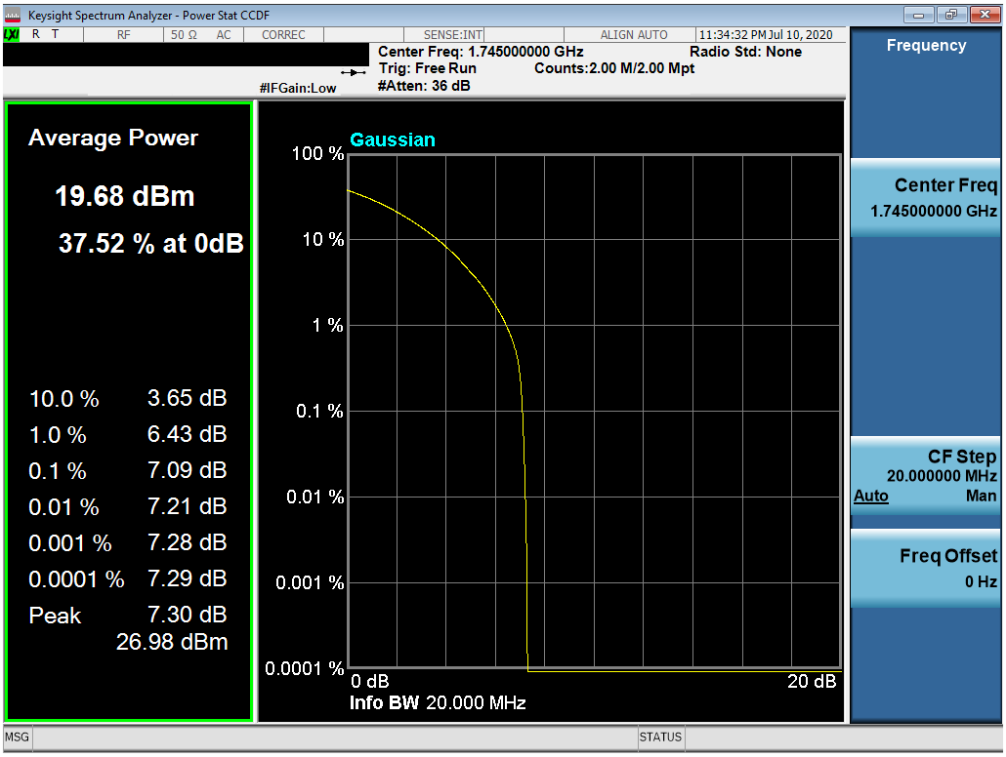
Plot 7-667. PAR Plot (NR Band n66 - 20.0MHz DFT-s-OFDM BPSK - Full RB)



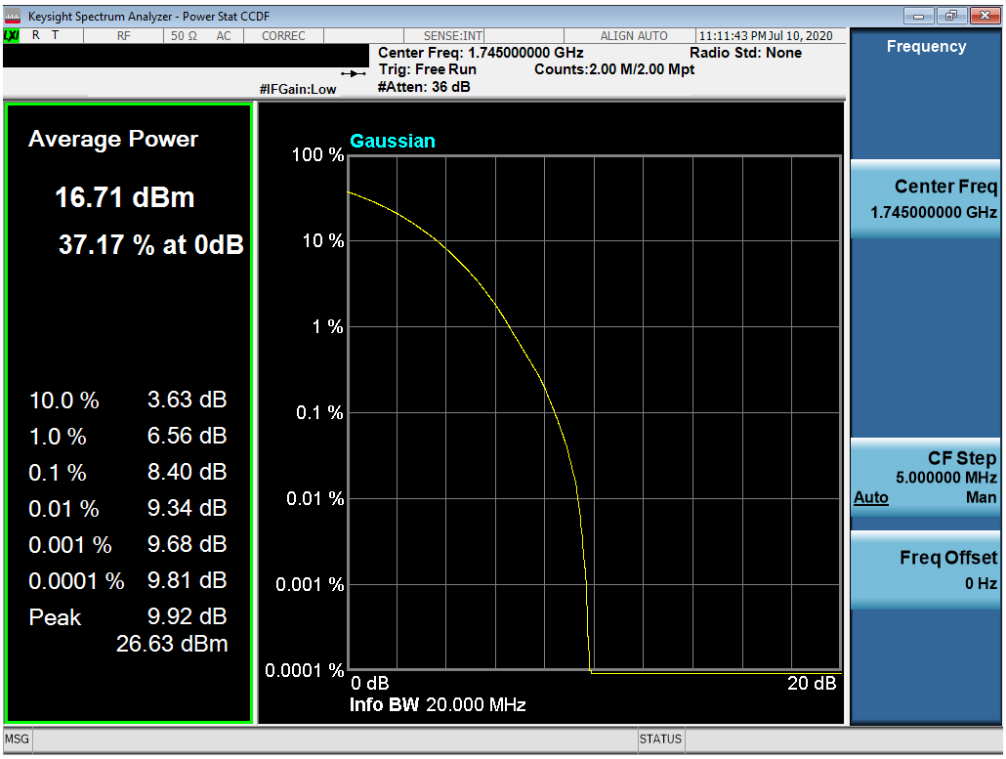
Plot 7-668. PAR Plot (NR Band n66 - 20.0MHz CP-OFDM-CP-OFDM QPSK - Full RB)



Plot 7-669. PAR Plot (NR Band n66 - 20.0MHz CP-OFDM-CP-OFDM 16-QAM - Full RB)



Plot 7-670. PAR Plot (NR Band n66 - 20.0MHz CP-OFDM-CP-OFDM 64-QAM - Full RB)



Plot 7-671. PAR Plot (NR Band n66 - 20.0MHz CP-OFDM-CP-OFDM 256-QAM - Full RB)

7.6 Uplink Carrier Aggregation

§27.53(m)

Test Overview

The EUT is set up to transmit two contiguous LTE channels. The power level of both carriers and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates 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.

For Band 38/the minimum permissible attenuation level of any spurious emission is 55 + 10 $log_{10}(P_{[Watts]})$.

Test Procedure Used

KDB 971168 D01 v03r01 – Section 6.0

Test Settings

1. Start frequency was set to 30MHz and stop frequency was set to at least 10 * the fundamental frequency (separated into at least two plots per channel)
2. Detector = RMS
3. Trace mode = trace average for continuous emissions, max hold for pulse emissions
4. Sweep time = auto couple
5. The trace was allowed to stabilize
6. Please see test notes below for RBW and VBW settings

Test Setup

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

Figure 7-5. Test Instrument & Measurement Setup

Test Notes

1. Conducted power and 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. The worst case (highest) powers were found while operating with QPSK modulation with both carriers set to transmit using 1RB.

2. Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for frequencies less than 1 GHz and 1 MHz or greater for frequencies greater than 1 GHz. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

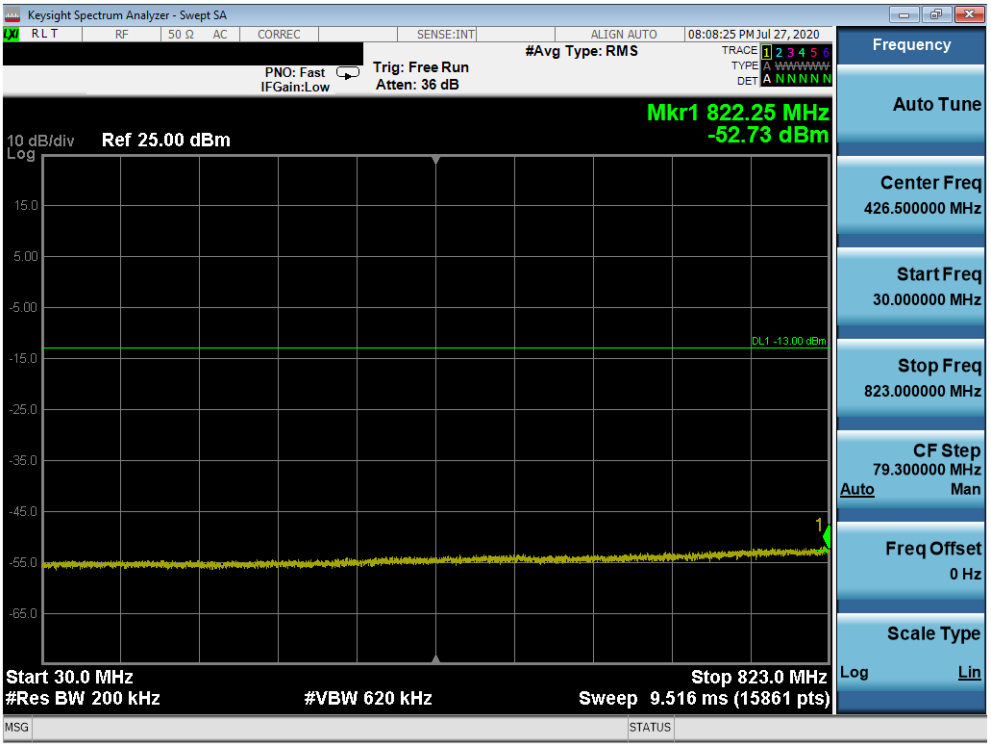
Uplink CA Configuration 5B

Power State	PCC							SCC							Power
	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	ULCA Tx.Power (dBm)
Max	LTE B5	10	20450	829	QPSK	1	49	LTE B5	10	20549	838.9	QPSK	1	0	25.04
Max	LTE B5	10	20525	836.5	QPSK	1	49	LTE B5	5	20597	843.7	QPSK	1	0	24.97
Max	LTE B5	10	20600	844	QPSK	1	0	LTE B5	10	20501	834.1	QPSK	1	49	25.11

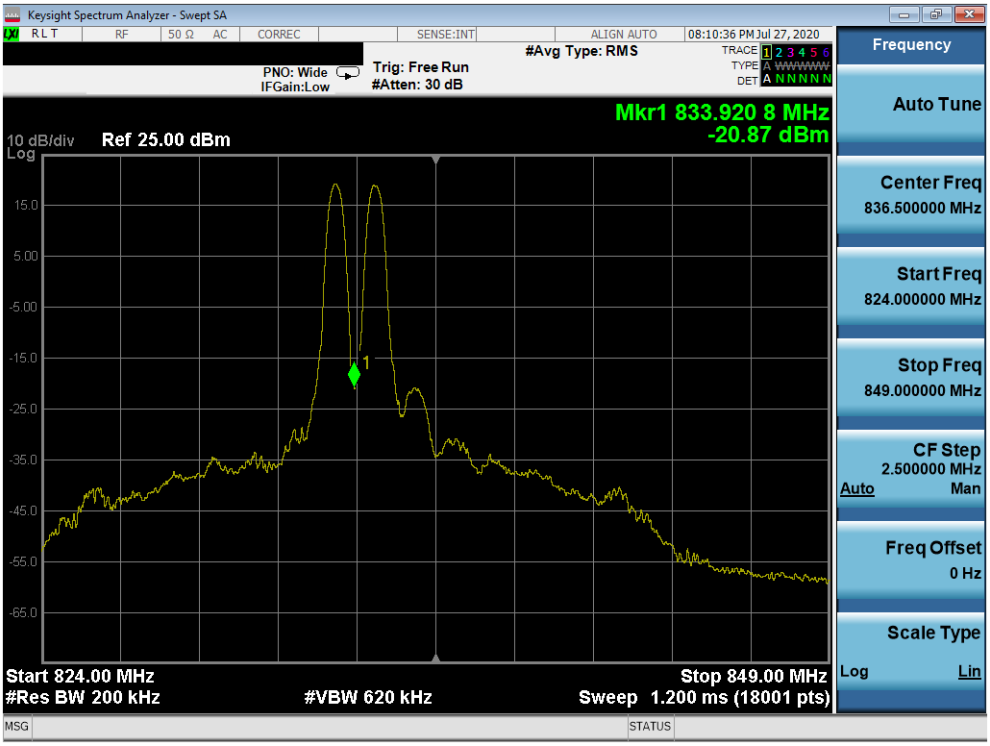
Table 7-3. Conducted Powers (B5 – PCC/SCC: RB Size 1)

Power State	PCC							SCC							Power
	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	ULCA Tx.Power (dBm)
Max	LTE B5	10	20600	844	QPSK	50	0	LTE B5	10	20699	853.9	QPSK	50	0	23.25
Max	LTE B5	10	20600	844	16-QAM	50	0	LTE B5	10	20699	853.9	16-QAM	50	0	22.21
Max	LTE B5	10	20600	844	64-QAM	50	0	LTE B5	10	20699	853.9	64-QAM	50	0	21.47
Max	LTE B5	10	20600	844	256-QAM	50	0	LTE B5	10	20699	853.9	256-QAM	50	0	20.17

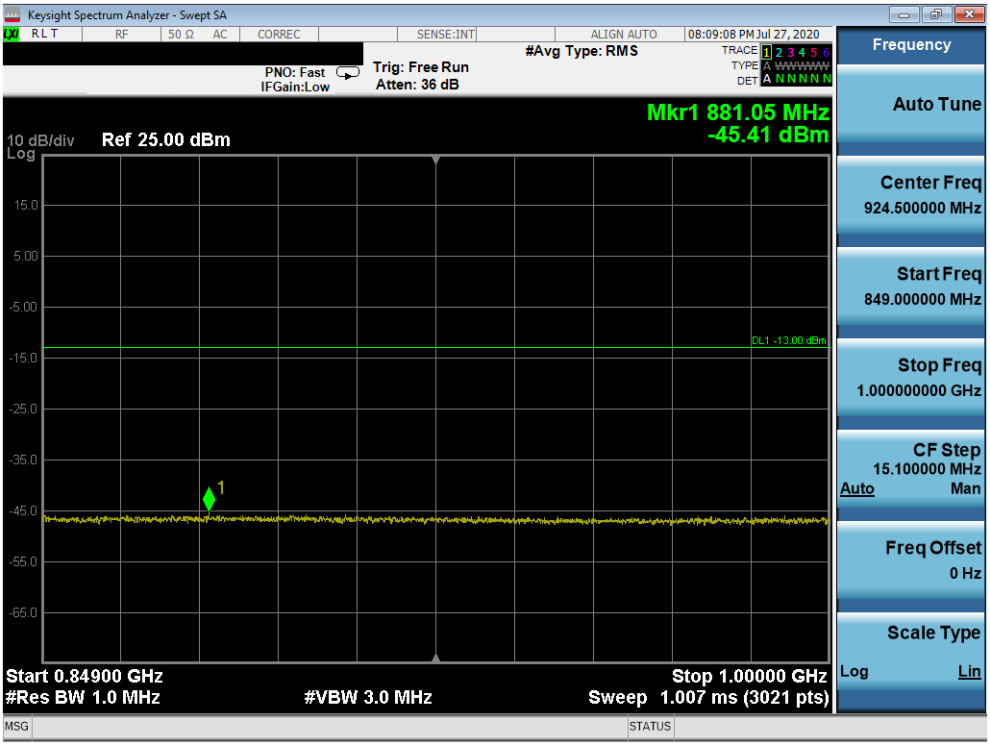
Table 7-4. Conducted Powers (B5 with Various Modulations for 10MHz Channel Bandwidth)



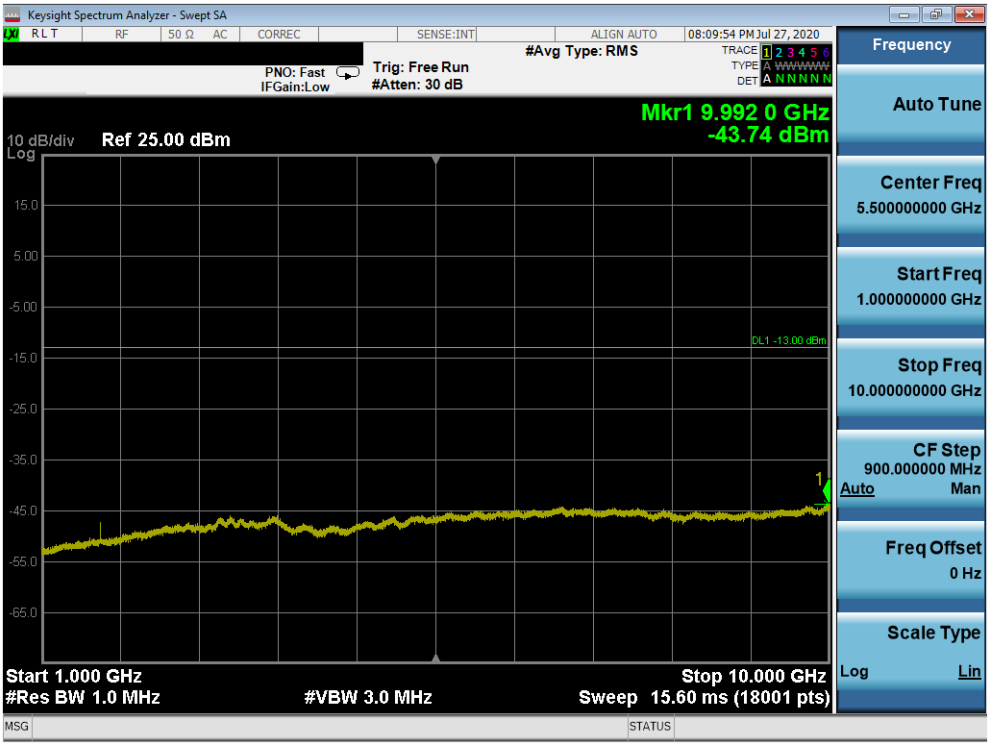
Plot 7-672. Conducted Spurious Plot (Band 5 – 10.0MHz QPSK – PCC 1/49 SCC 1/0 – Low Channel)



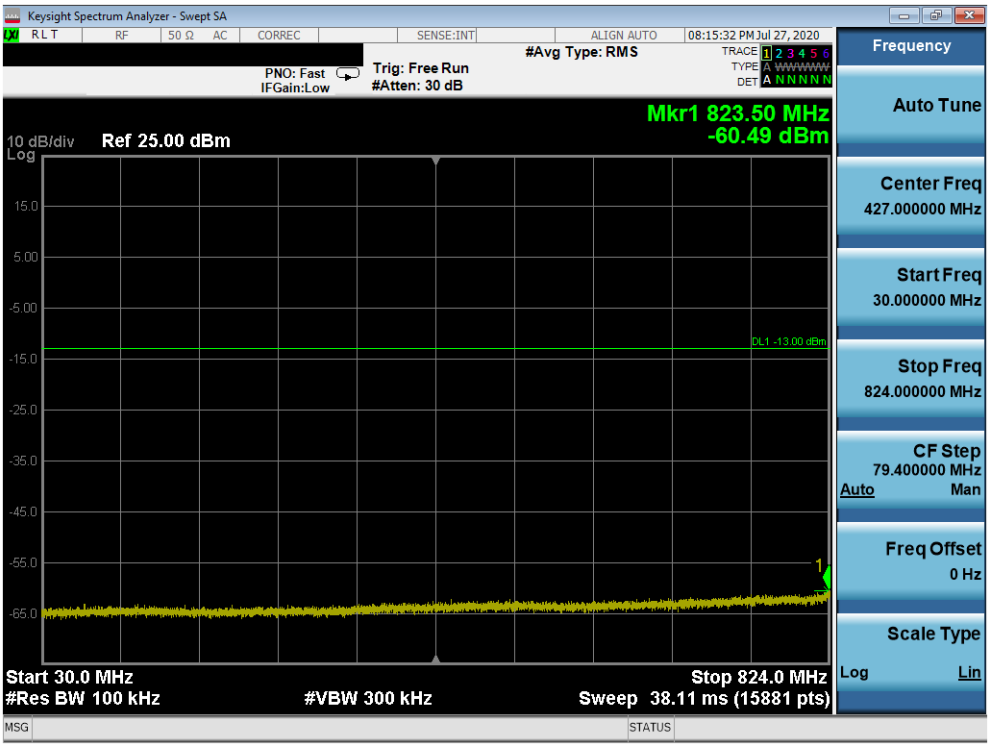
Plot 7-673. Conducted Spurious Plot (Band 5 – 10.0MHz QPSK – PCC 1/49 SCC 1/0 – Low Channel)



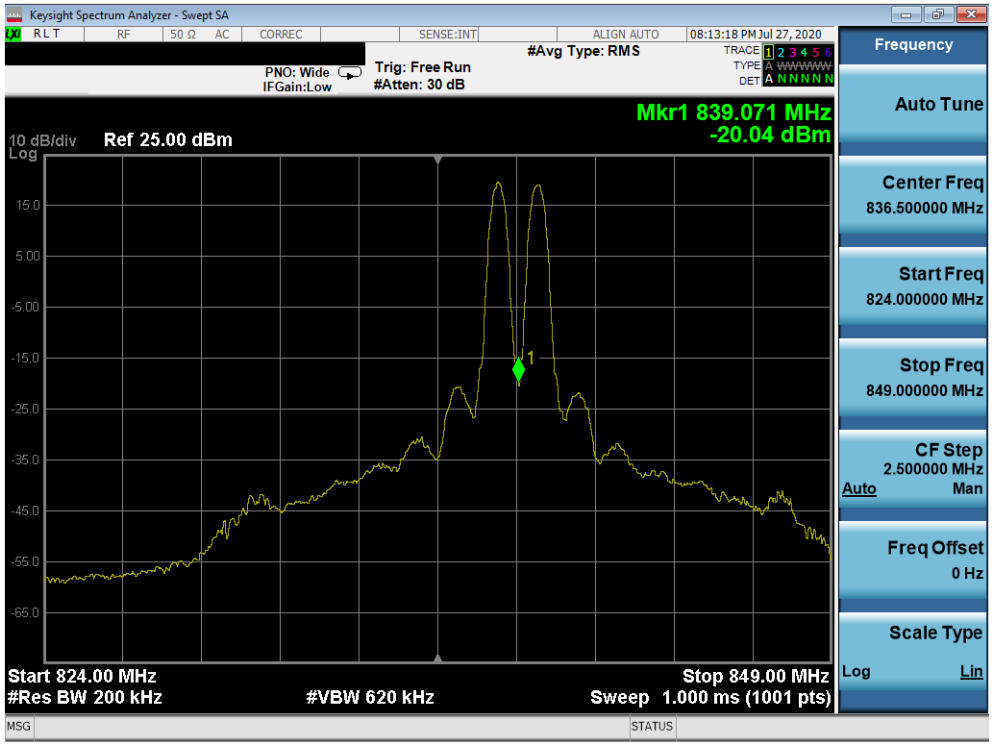
Plot 7-674. Conducted Spurious Plot (Band 5 – 10.0MHz QPSK – PCC 1/49 SCC 1/0 – Low Channel)



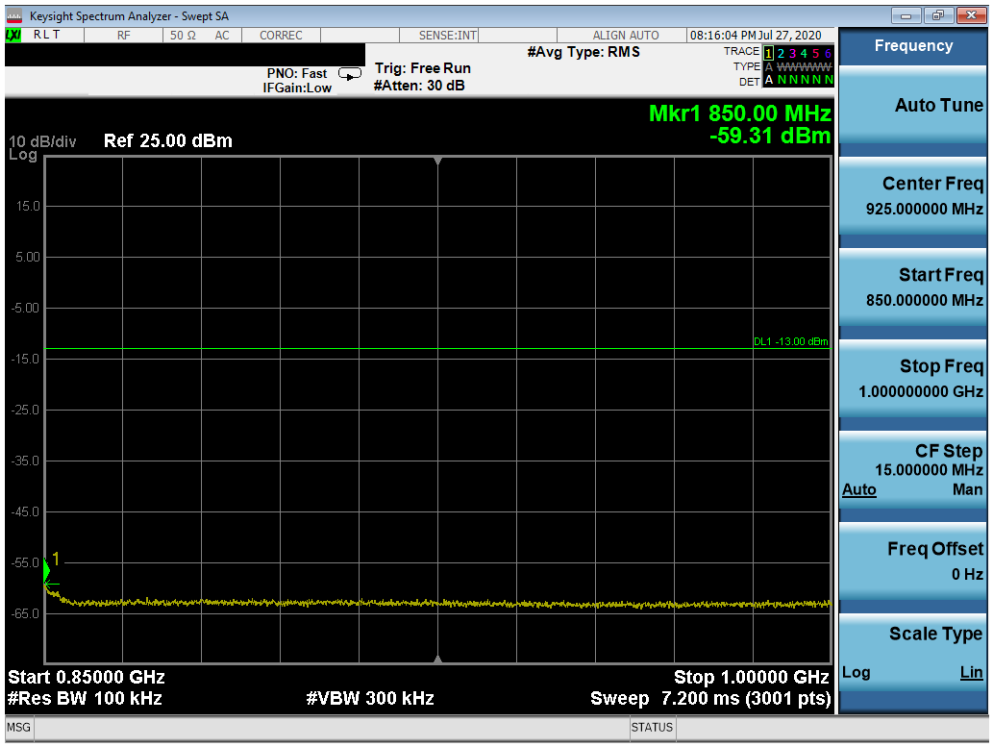
Plot 7-675. Conducted Spurious Plot (Band 5 – 10.0MHz QPSK – PCC 1/49 SCC 1/0 – Low Channel)



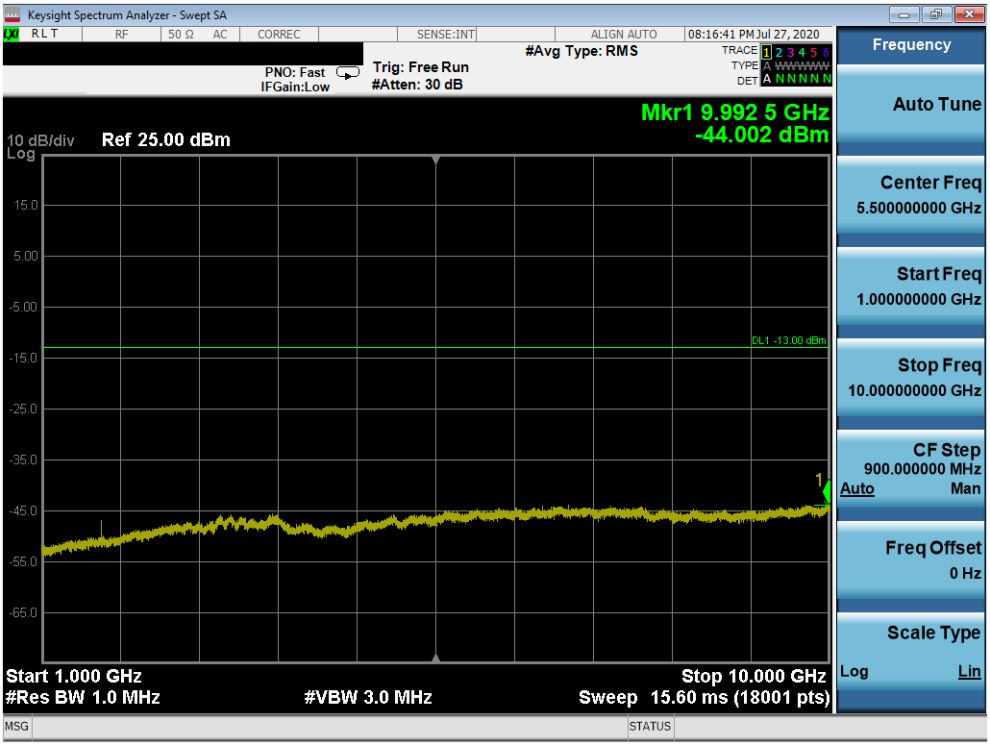
Plot 7-676. Conducted Spurious Plot (Band 5 – 10.0MHz QPSK – PCC 1/0 SCC 1/49 – High Channel)



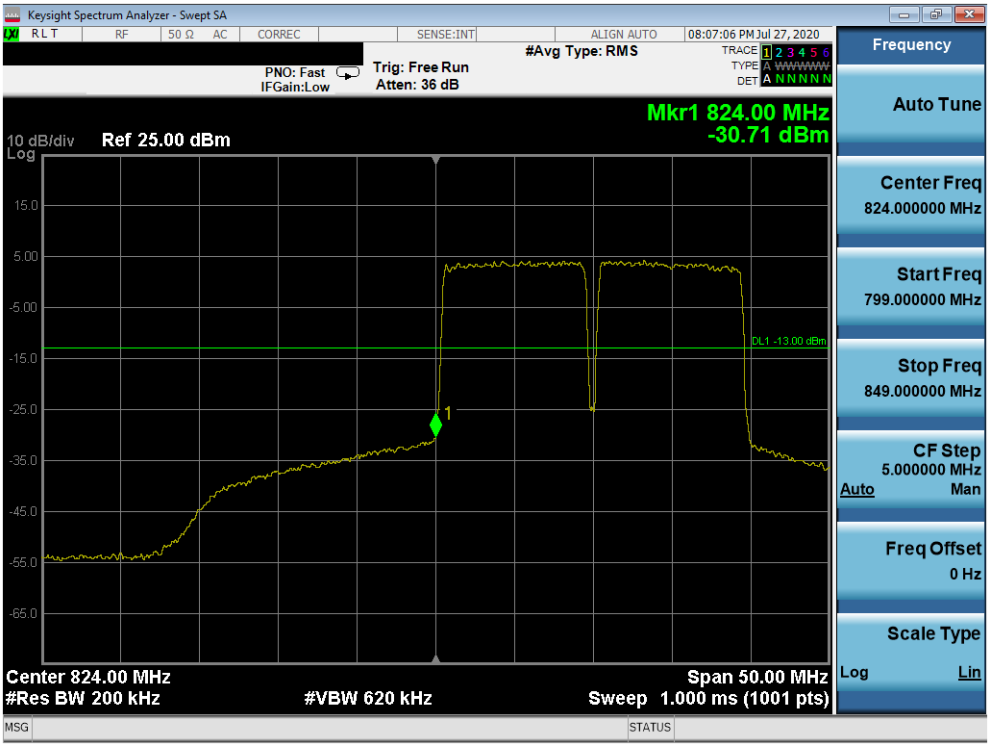
Plot 7-677. Conducted Spurious Plot (Band 5 – 10.0MHz QPSK – PCC 1/0 SCC 1/49 – High Channel)



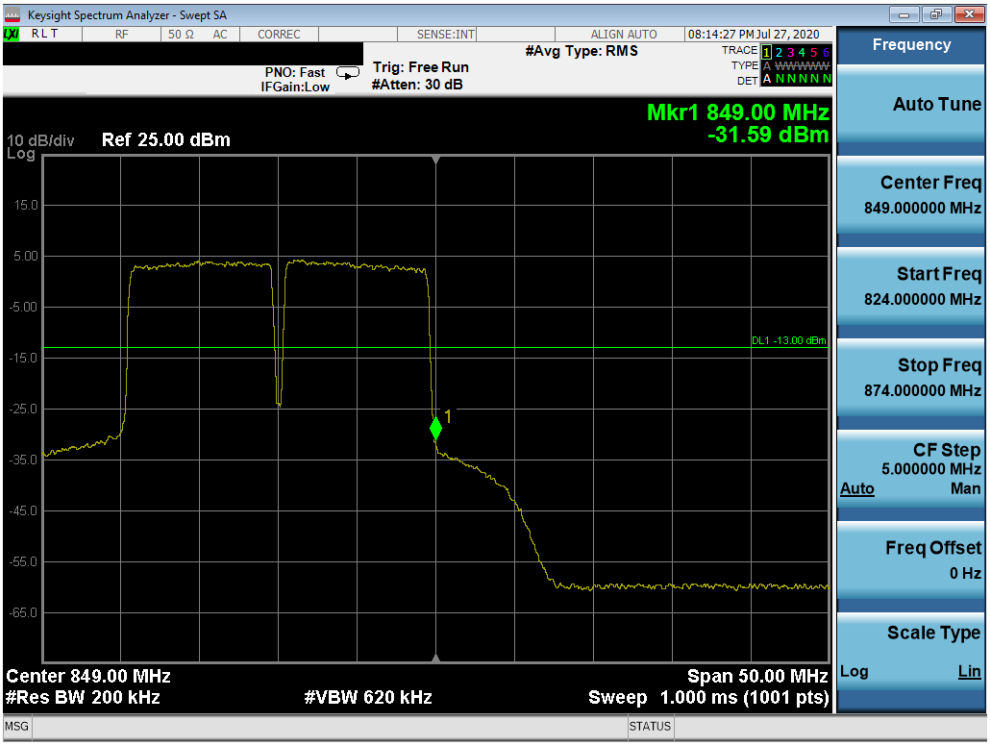
Plot 7-678. Conducted Spurious Plot (Band 5 – 10.0MHz QPSK – PCC 1/0 SCC 1/49 – High Channel)



Plot 7-679. Conducted Spurious Plot (Band 5 – 10.0MHz QPSK – PCC 1/0 SCC 1/49 – High Channel)



Plot 7-680. Lower Band Edge Plot (Band 5 QPSK – PCC:10 MHz SCC:10 MHz – Full RB)



Plot 7-681. Upper Band Edge Plot (Band 5 QPSK – PCC:10 MHz SCC:10 MHz – Full RB)

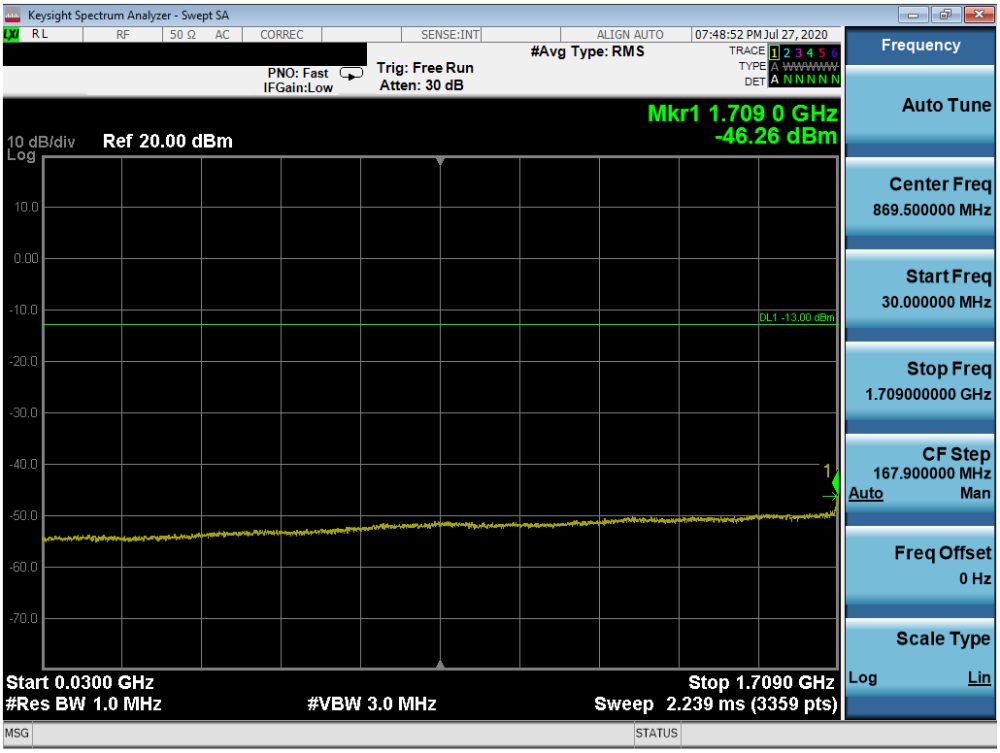
Uplink CA Configuration 66B/C

Power State	PCC							SCC							Power
	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	ULCA Tx.Power (dBm)
Max	LTE B66	20	132072	1720	QPSK	1	99	LTE B66	20	132270	1739.8	QPSK	1	0	21.16
Max	LTE B66	20	132322	1745	QPSK	1	99	LTE B66	20	132520	1764.8	QPSK	1	0	21.97
Max	LTE B66	20	132572	1770	QPSK	1	0	LTE B66	20	132374	1750.2	QPSK	1	99	21.42

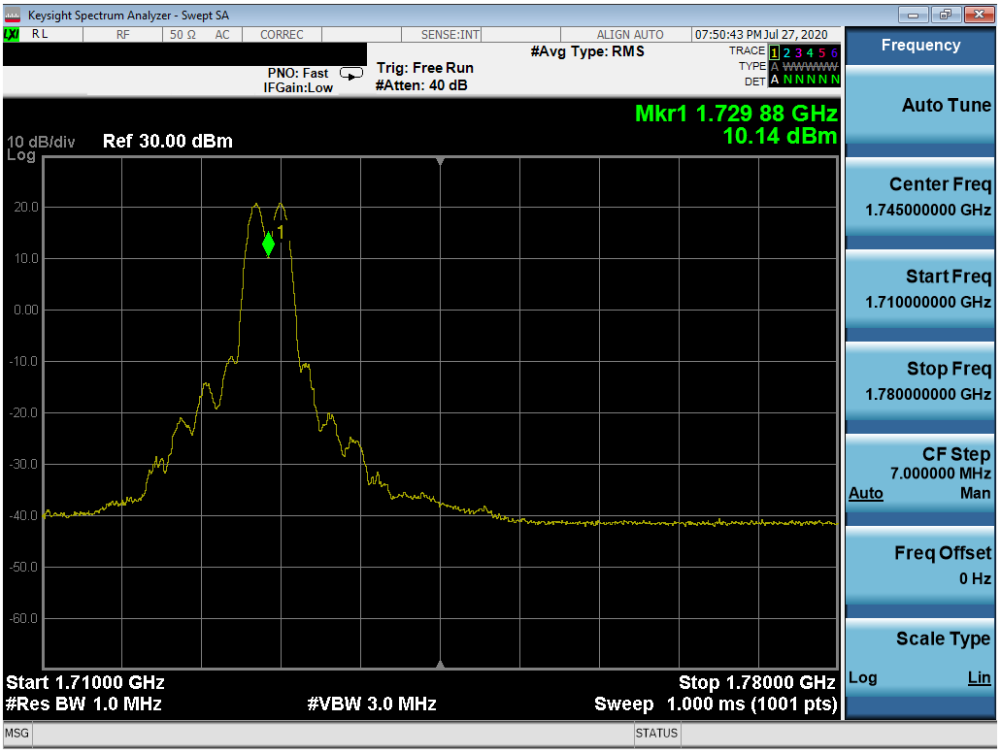
Table 7-5. Conducted Powers (B66 – 20MHz + 20MHz Channel Bandwidth – PCC/SCC: RB Size 1)

Power State	PCC							SCC							Power
	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	ULCA Tx.Power (dBm)
Max	LTE B66	20	132322	1745	QPSK	100	0	LTE B66	20	132520	1764.8	QPSK	100	0	19.14
Max	LTE B66	20	132322	1745	16-QAM	100	0	LTE B66	20	132520	1764.8	16-QAM	100	0	18.06
Max	LTE B66	20	132322	1745	64-QAM	100	0	LTE B66	20	132520	1764.8	64-QAM	100	0	17.64
Max	LTE B66	20	132322	1745	256-QAM	100	0	LTE B66	20	132520	1764.8	256-QAM	100	0	16.08

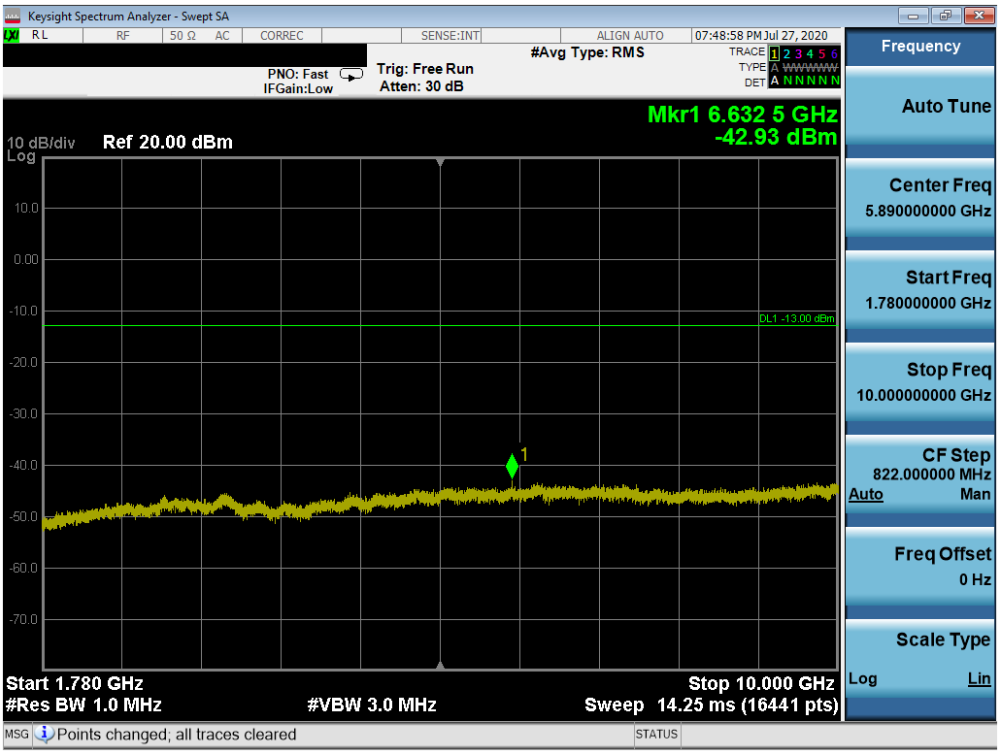
Table 7-6. Conducted Powers (B66 with Various Combinations for 20MHz + 20MHz Channel Bandwidth)



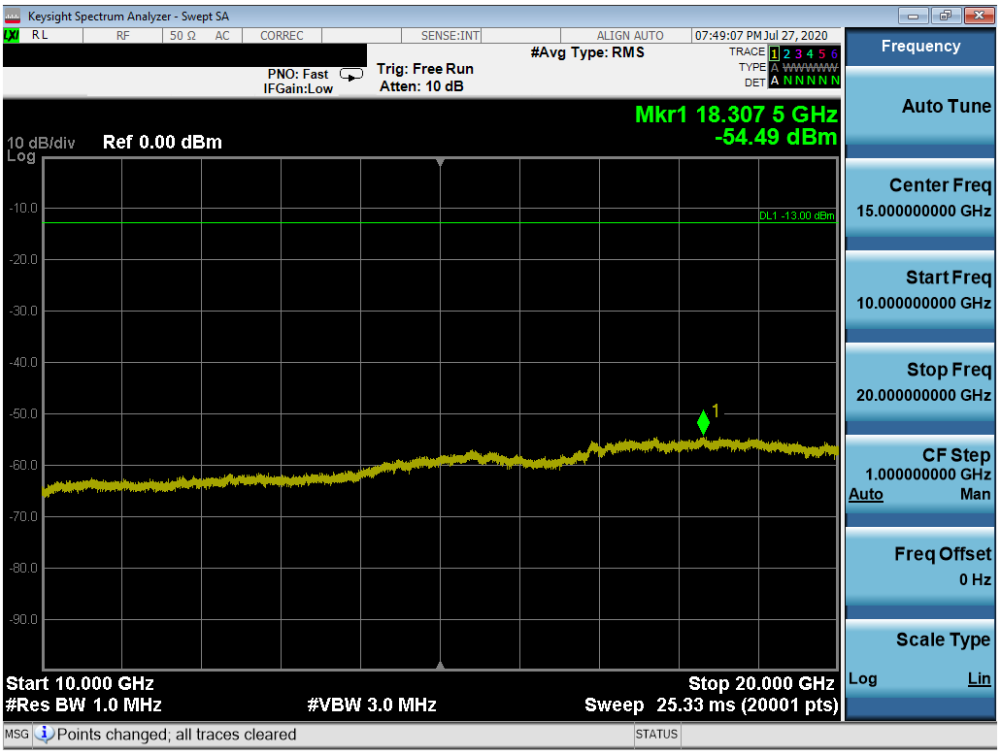
Plot 7-682. Conducted Spurious Plot (Band 66 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Low Channel)



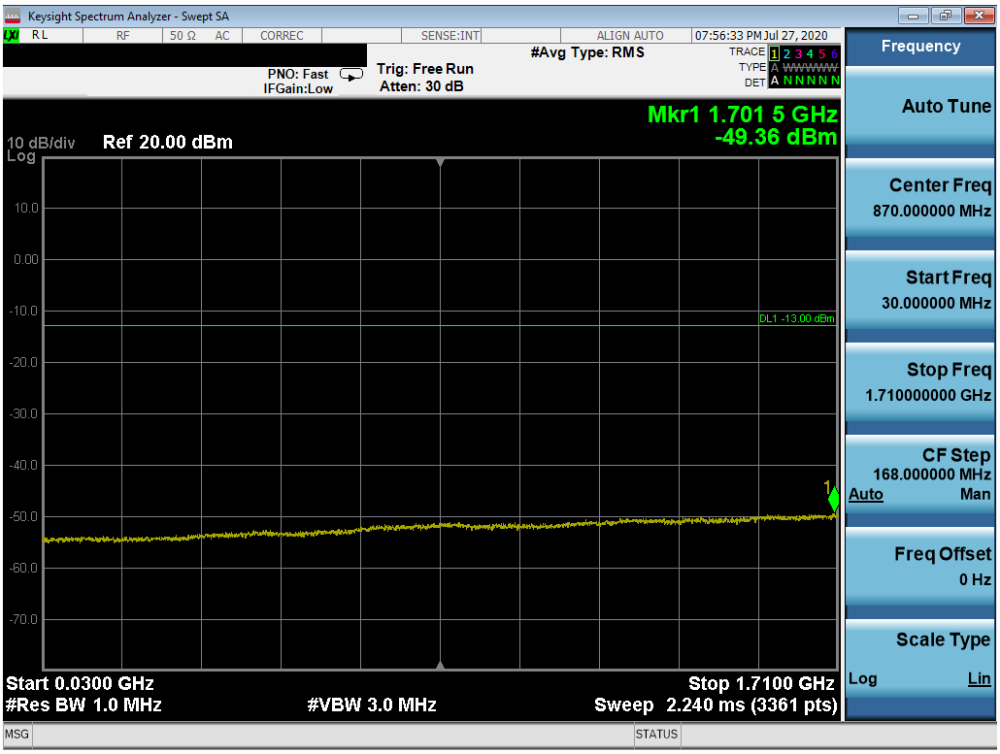
Plot 7-683. Conducted Spurious Plot (Band 66 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Low Channel)



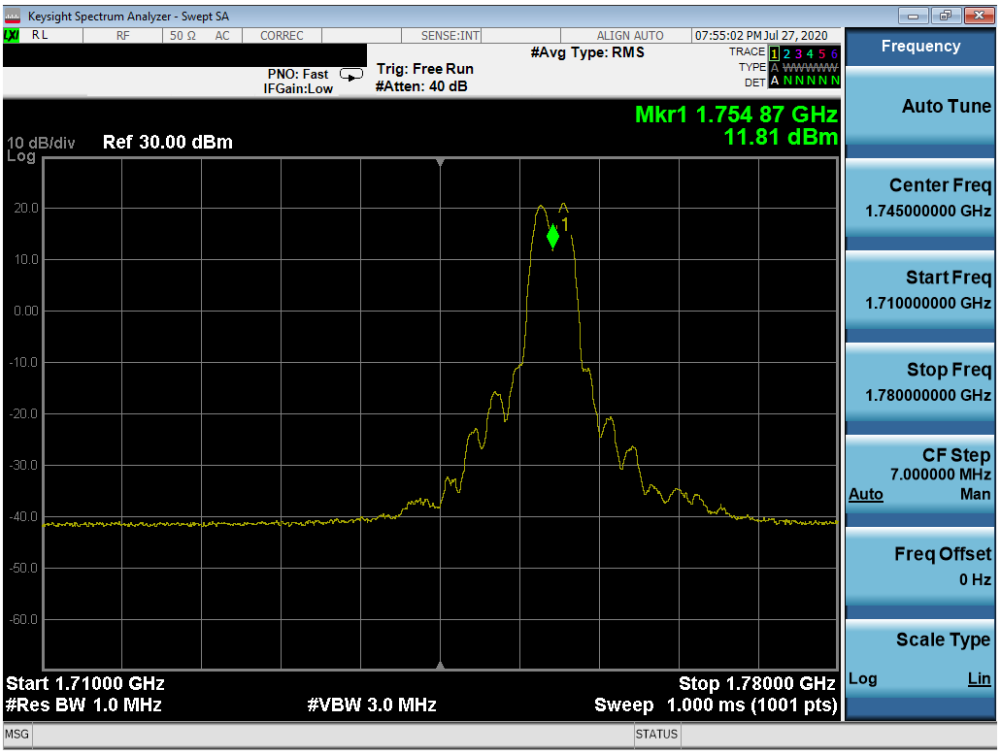
Plot 7-684. Conducted Spurious Plot (Band 66 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Low Channel)



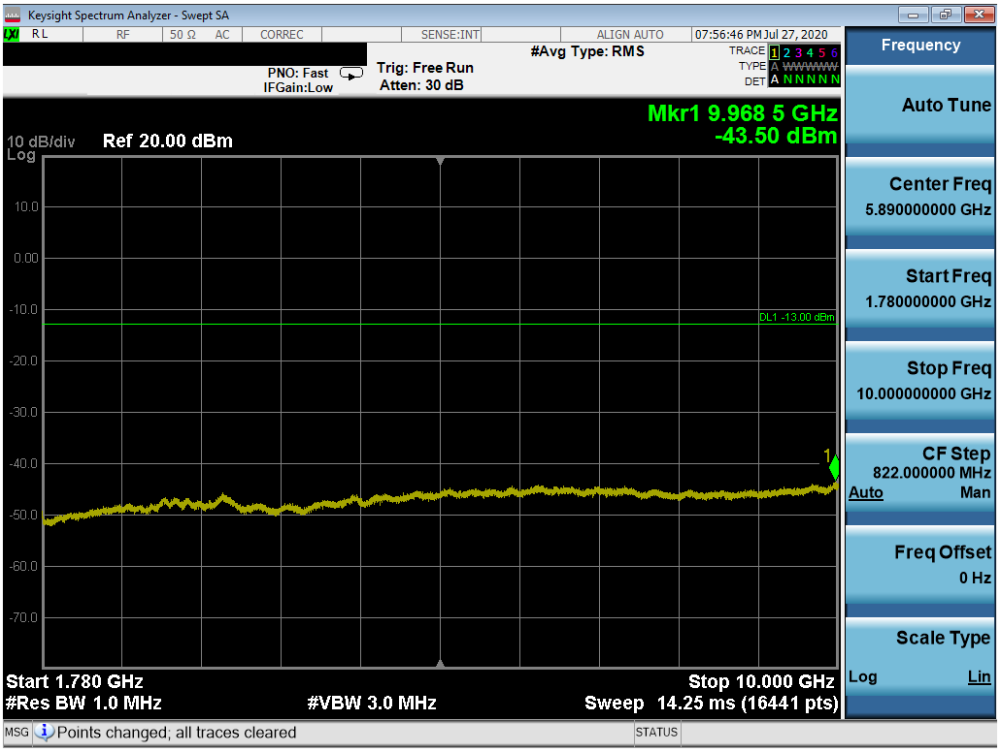
Plot 7-685. Conducted Spurious Plot (Band 66 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Low Channel)



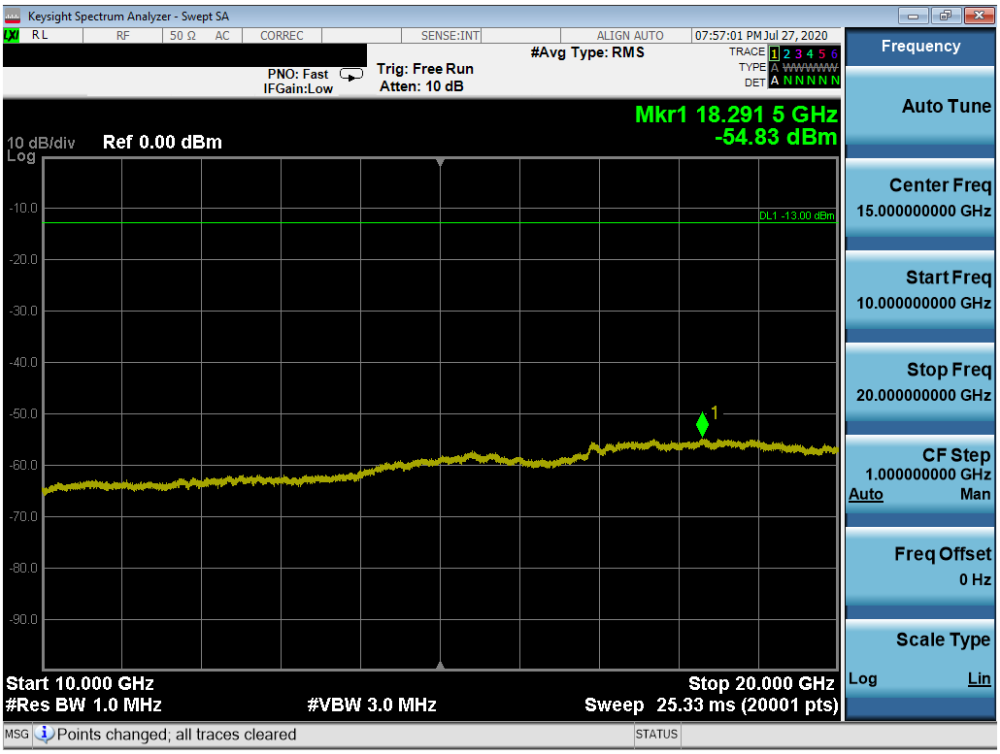
Plot 7-686. Conducted Spurious Plot (Band 66 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)



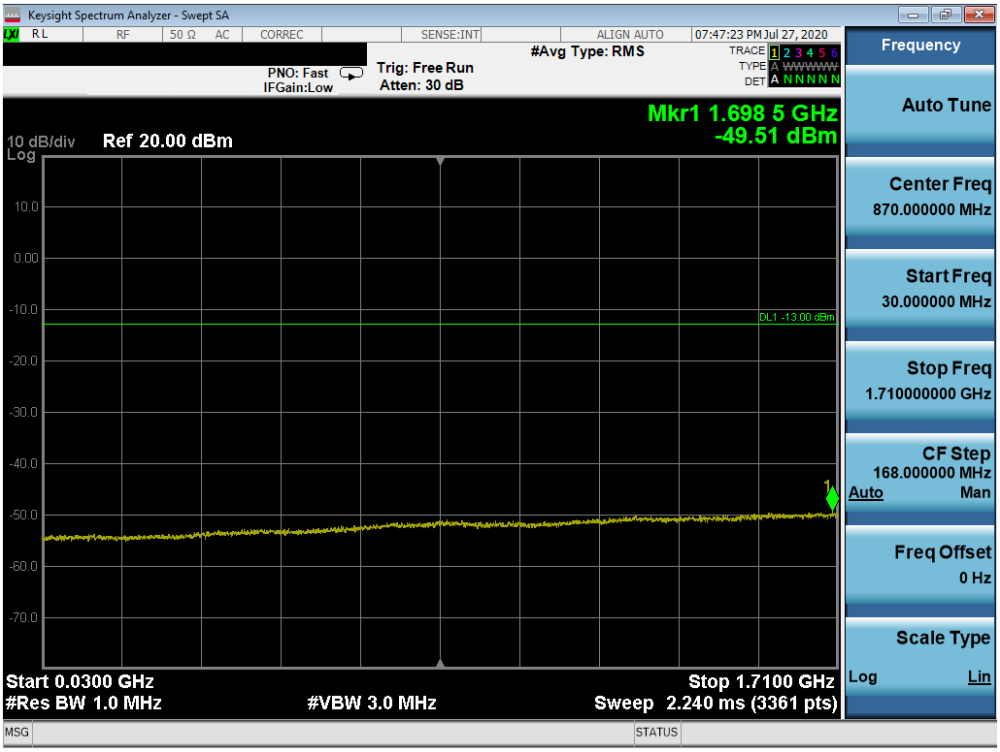
Plot 7-687. Conducted Spurious Plot (Band 66 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)



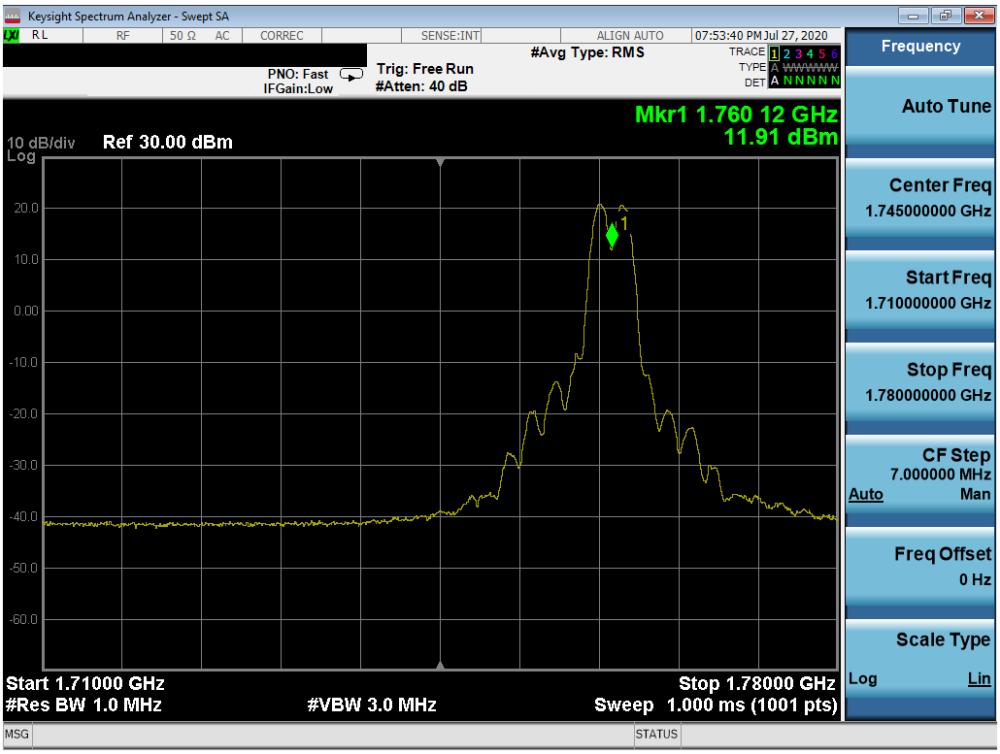
Plot 7-688. Conducted Spurious Plot (Band 66 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)



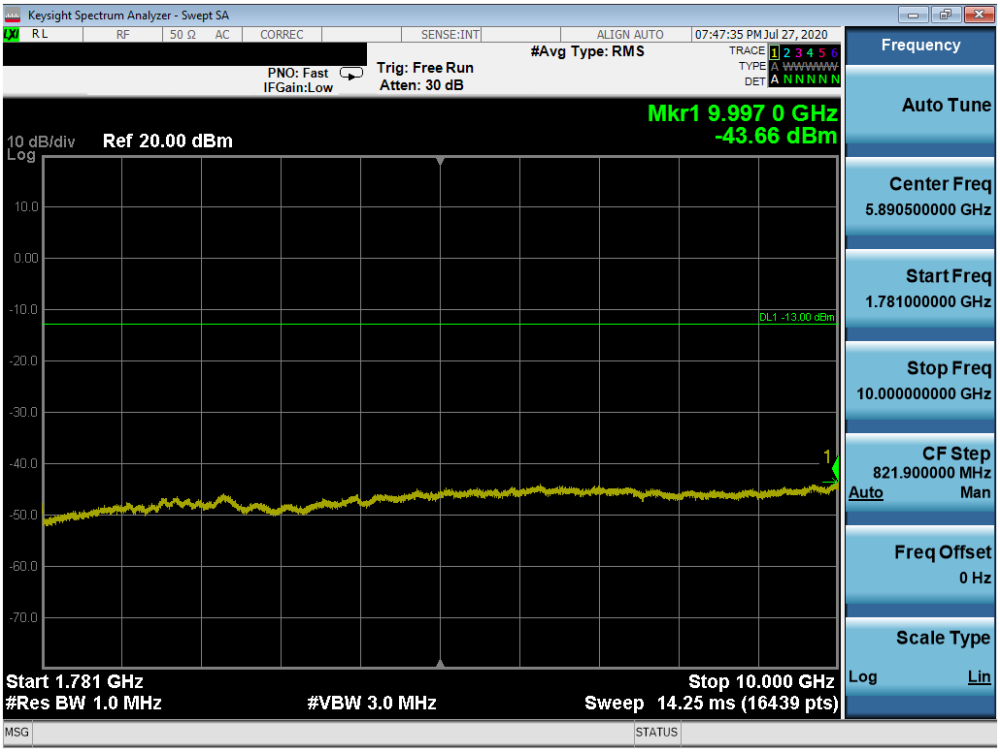
Plot 7-689. Conducted Spurious Plot (Band 66 – 20.0MHz QPSK – PCC 1/99 SCC 1/0 – Mid Channel)



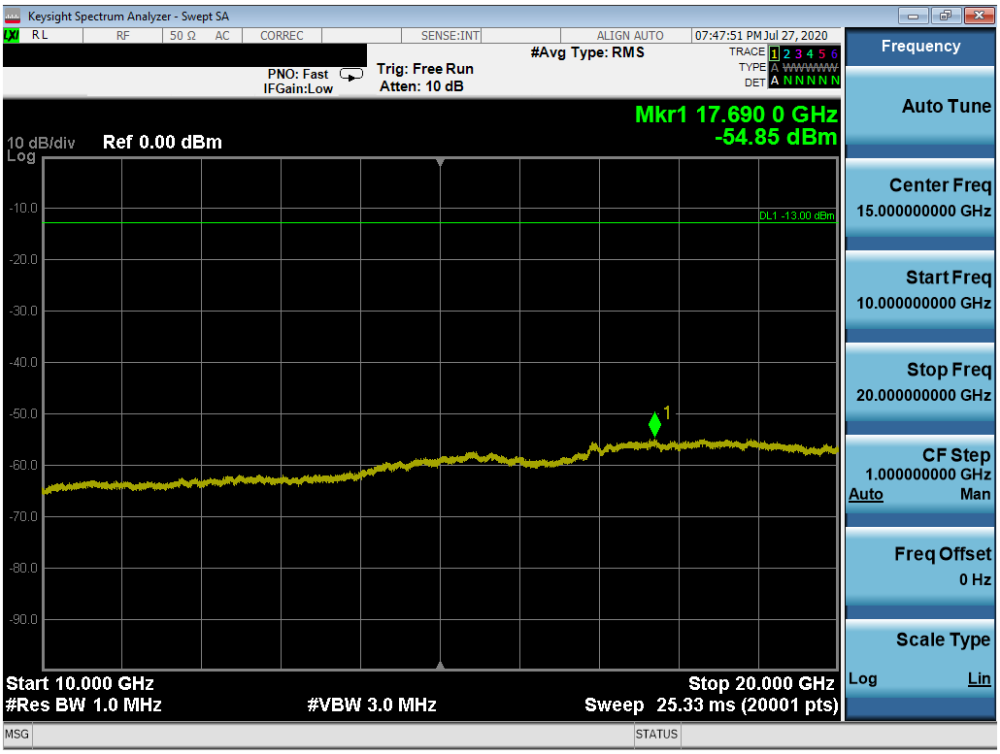
Plot 7-690. Conducted Spurious Plot (Band 66 – 20.0MHz QPSK – PCC 1/0 SCC 1/99 – High Channel)



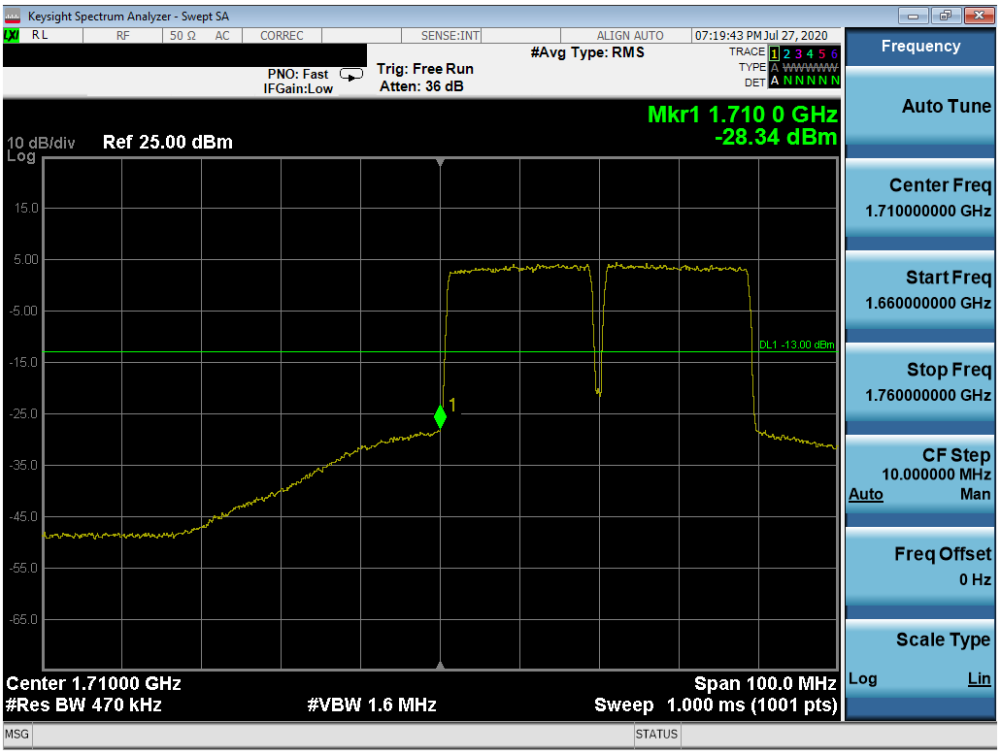
Plot 7-691. Conducted Spurious Plot (Band 66 – 20.0MHz QPSK – PCC 1/0 SCC 1/99 – High Channel)



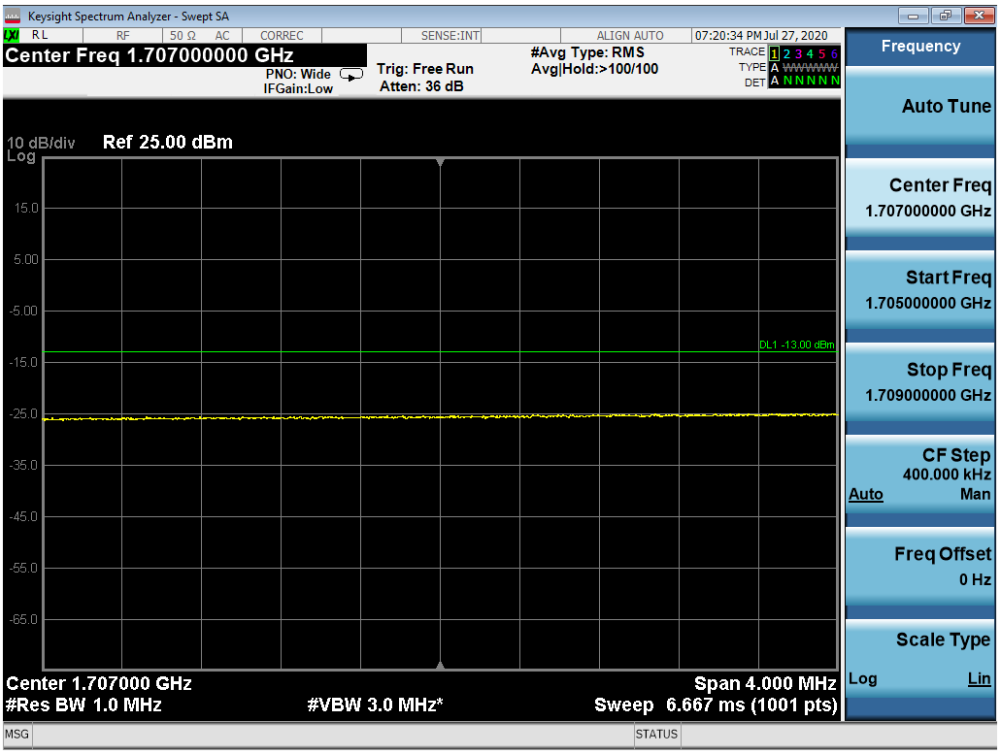
Plot 7-692. Conducted Spurious Plot (Band 66 – 20.0MHz QPSK – PCC 1/0 SCC 1/99 – High Channel)



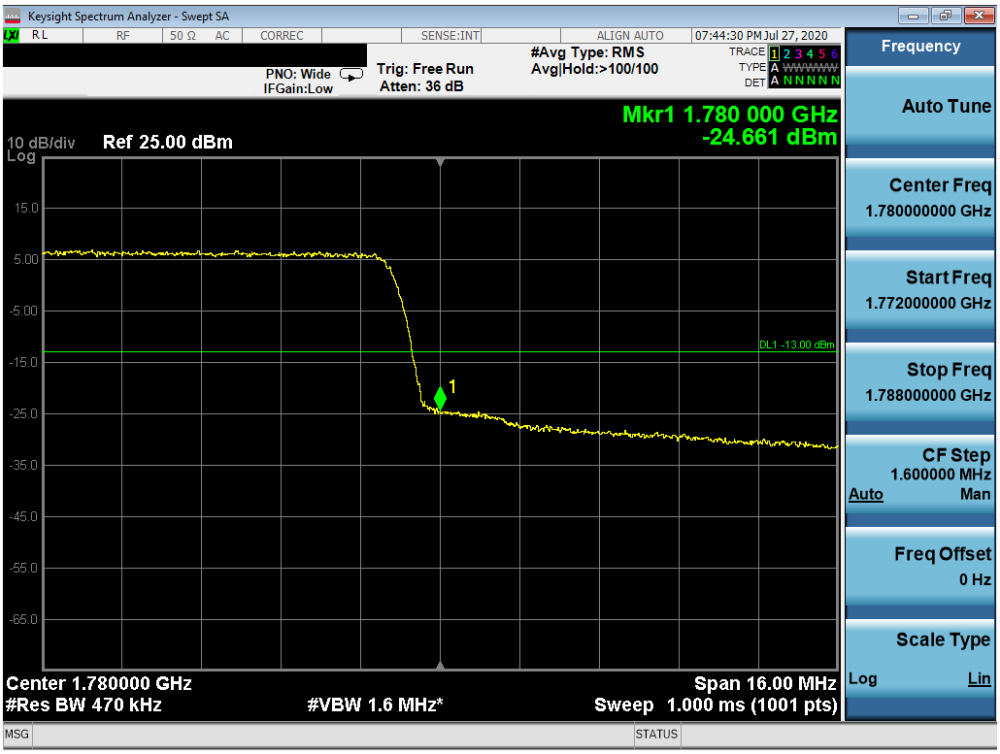
Plot 7-693. Conducted Spurious Plot (Band 66 – 20.0MHz QPSK – PCC 1/0 SCC 1/99 – High Channel)



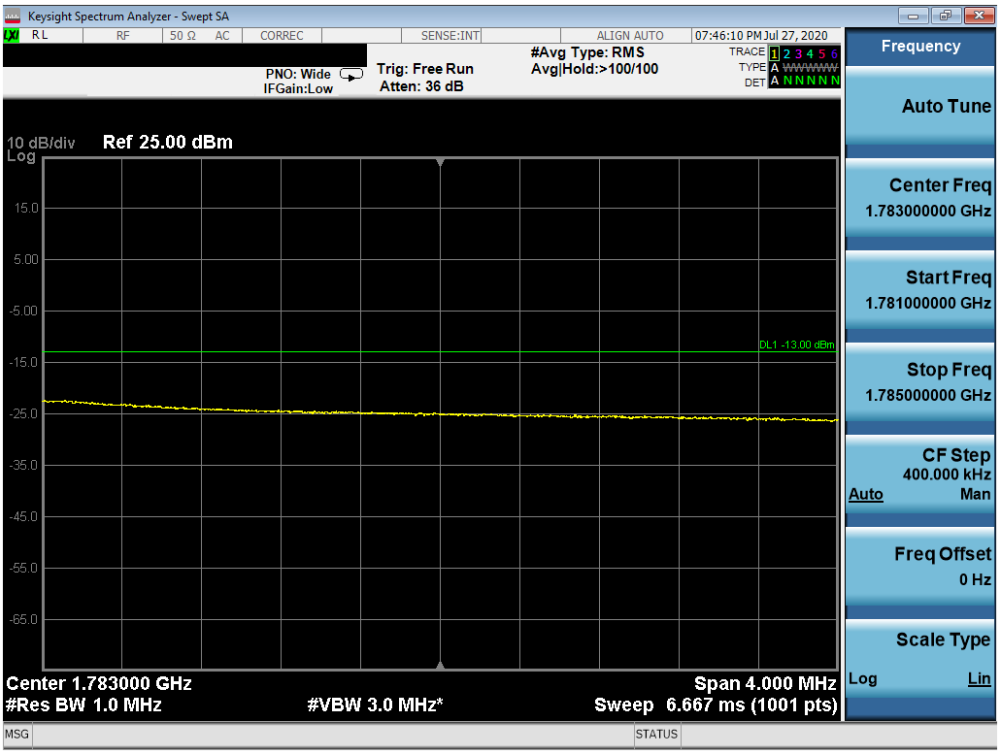
Plot 7-694. Lower Band Edge Plot (Band 66 QPSK – PCC:20 MHz SCC:20 MHz – Full RB)



Plot 7-695. Extended Lower Band Edge Plot (Band 66 QPSK – PCC:20 MHz SCC:20 MHz – Full RB)



Plot 7-696. Upper Band Edge Plot (Band 66 QPSK – PCC:20 MHz SCC:20 MHz – Full RB)



Plot 7-697. Extended Upper Band Edge Plot (Band 66 QPSK – PCC:20 MHz SCC:20 MHz – Full RB)

Uplink CA Configuration 41C

Power State	PCC							SCC							Power
	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	ULCA Tx.Power (dBm)
Max	LTE B41	20	39750	2506	QPSK	1	99	LTE B41	20	39948	2525.8	QPSK	1	0	24.11
Max	LTE B41	20	40620	2593	QPSK	1	99	LTE B41	20	40818	2612.8	QPSK	1	0	23.69
Max	LTE B41	20	41490	2680	QPSK	1	0	LTE B41	20	41292	2660.2	QPSK	1	99	23.98

Table 7-7. Conducted Powers (B41 – Left Carrier: RB Size 1 Offset Max Right Carrier: RB Size 1 Offset 0)

Power State	PCC							SCC							Power
	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	ULCA Tx.Power (dBm)
Max	LTE B41	20	39750	2506	QPSK	100	0	LTE B41	20	39948	2525.8	QPSK	100	0	21.99
Max	LTE B41	20	39750	2506	16-QAM	100	0	LTE B41	20	39948	2525.8	16-QAM	100	0	20.92
Max	LTE B41	20	39750	2506	64-QAM	100	0	LTE B41	20	39948	2525.8	64-QAM	100	0	20.21
Max	LTE B41	20	39750	2506	256-QAM	100	0	LTE B41	20	39948	2525.8	256-QAM	100	0	18.94

Table 7-8. Conducted Powers (B41 with Various Combinations for 20MHz Channel Bandwidth)

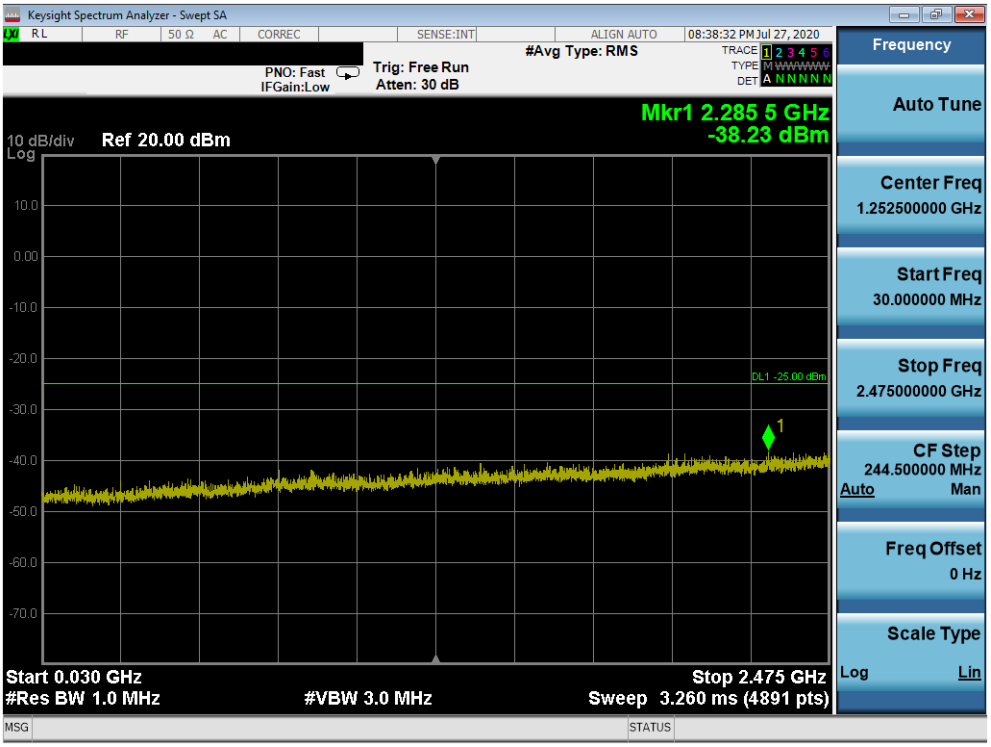


Table 7-698. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – Left Carrier 1/99 Right Carrier 1/0 – Low Channel)

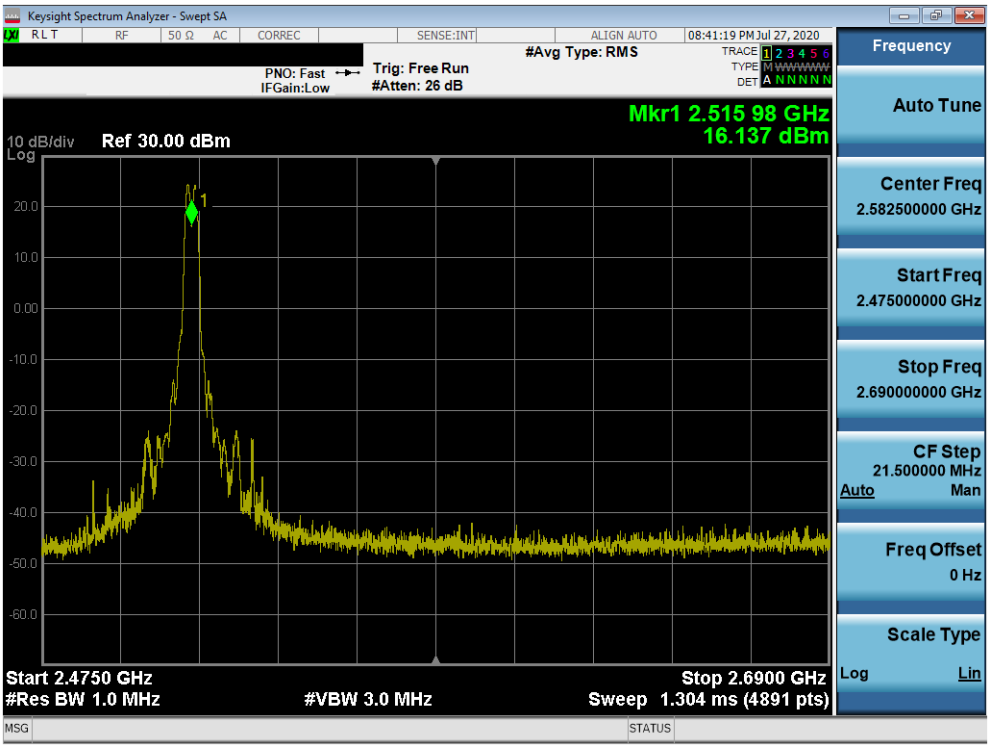


Table 7-699. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – Left Carrier 1/99 Right Carrier 1/0 – Low Channel)

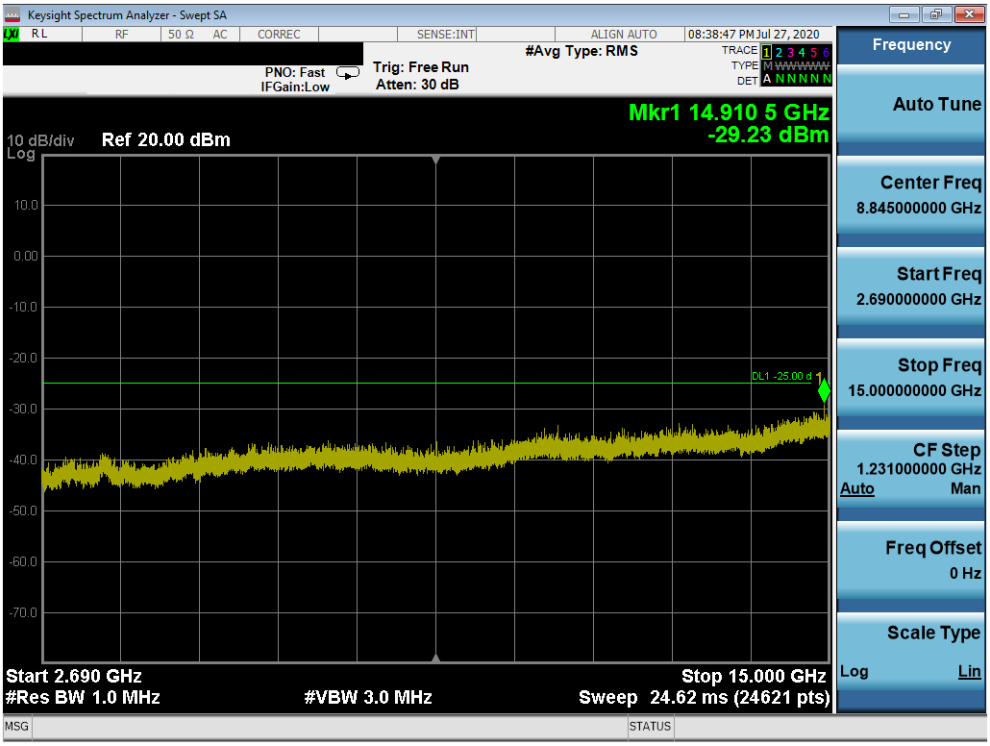


Table 7-700. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – Left Carrier 1/99 Right Carrier 1/0 – Low Channel)

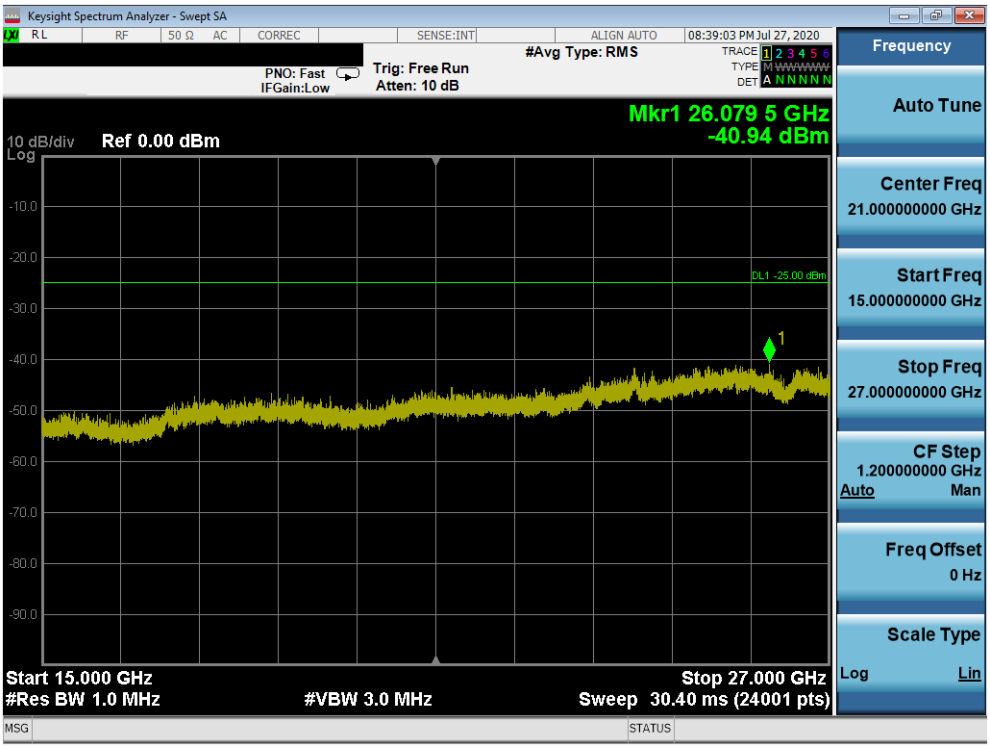


Table 7-701. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – Left Carrier 1/99 Right Carrier 1/0 – Low Channel)

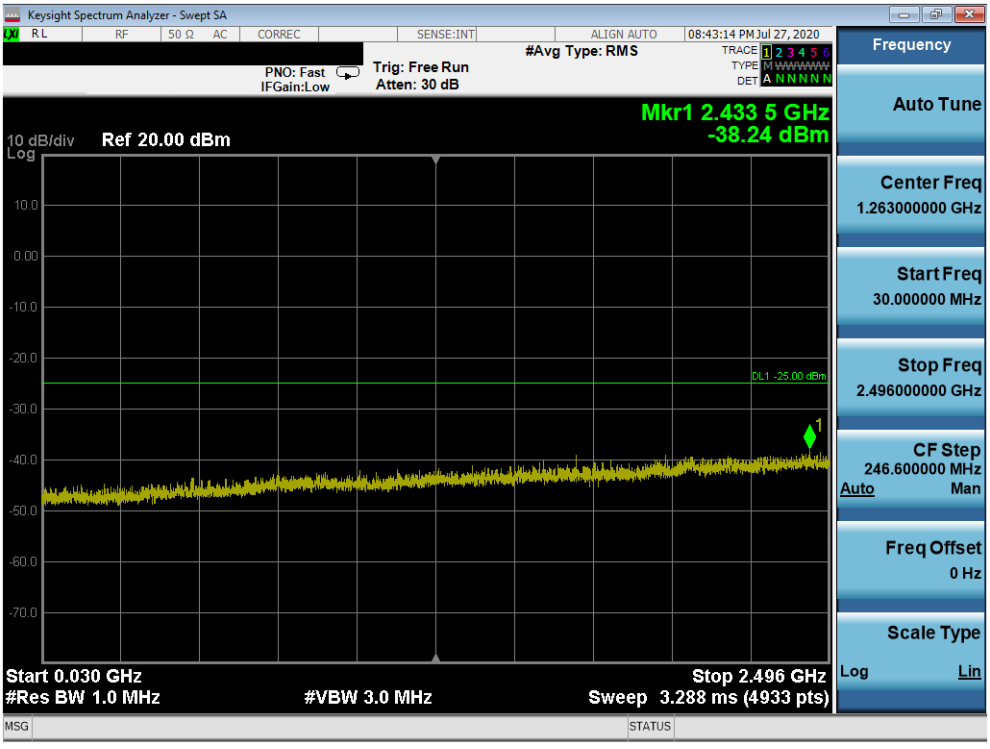


Table 7-702. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – Left Carrier 1/99 Right Carrier 1/0 – Mid Channel)

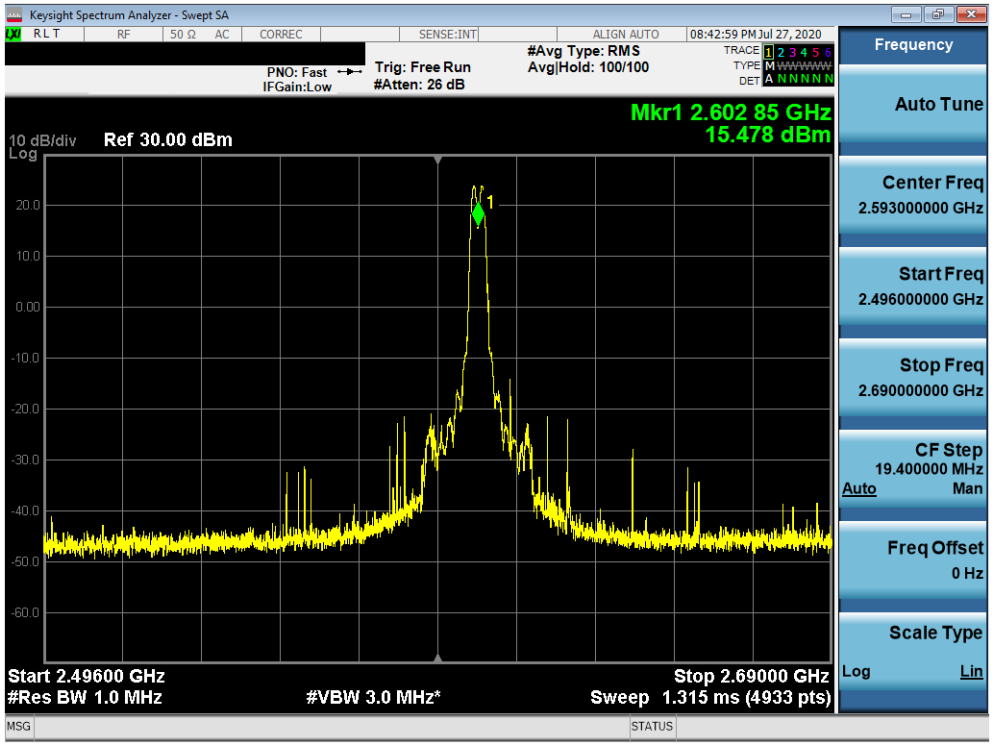


Table 7-703. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – Left Carrier 1/99 Right Carrier 1/0 – Mid Channel)

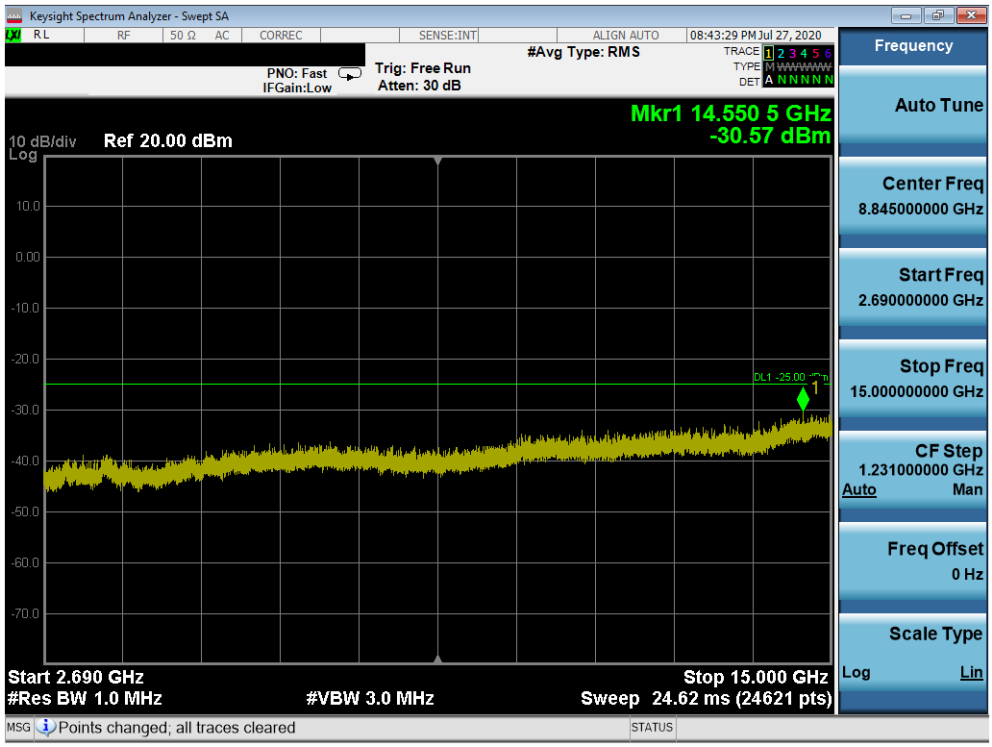


Table 7-704. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – Left Carrier 1/99 Right Carrier 1/0 – Mid Channel)

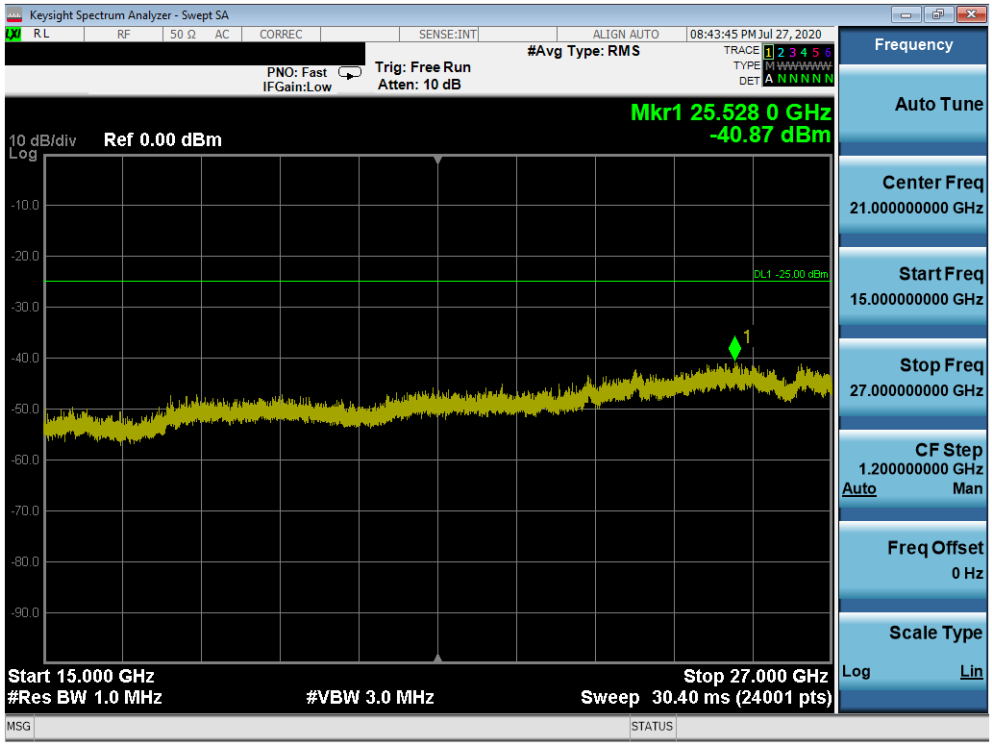


Table 7-705. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – Left Carrier 1/99 Right Carrier 1/0 – Mid Channel)

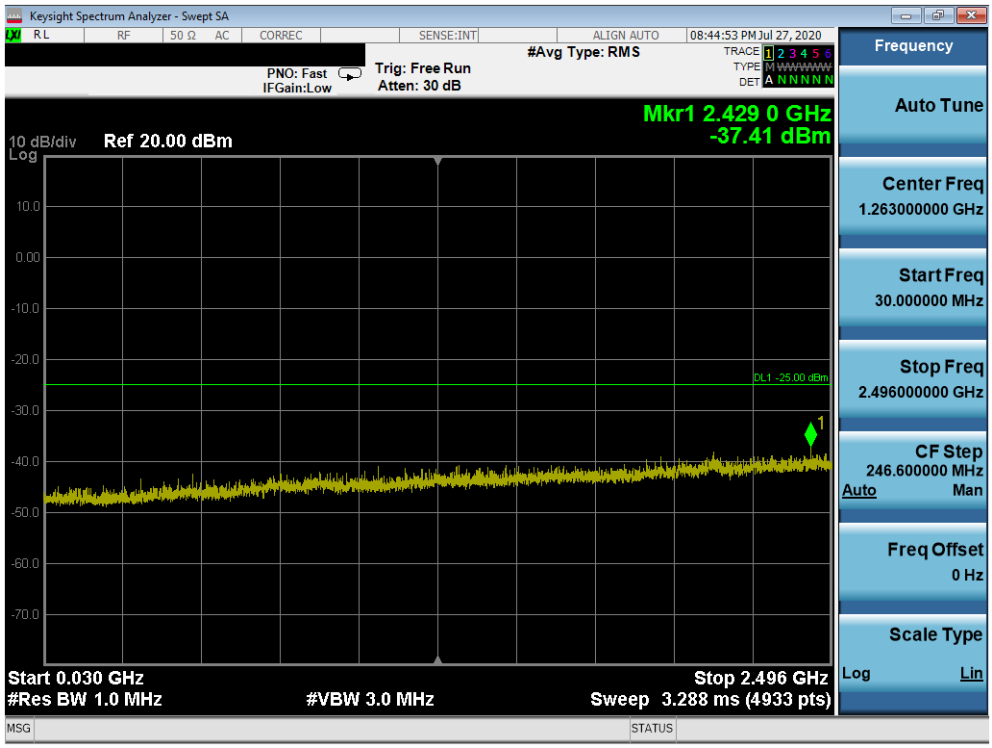


Table 7-706. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – Left Carrier 1/99 Right Carrier 1/0 – High Channel)

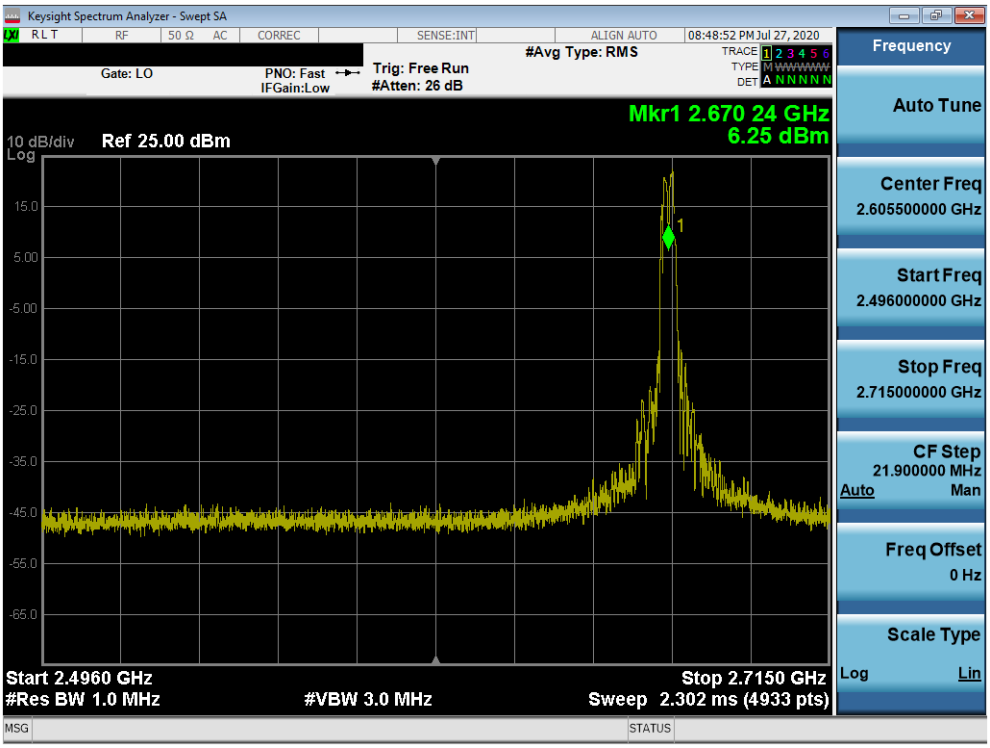


Table 7-707. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – Left Carrier 1/99 Right Carrier 1/0 – High Channel)

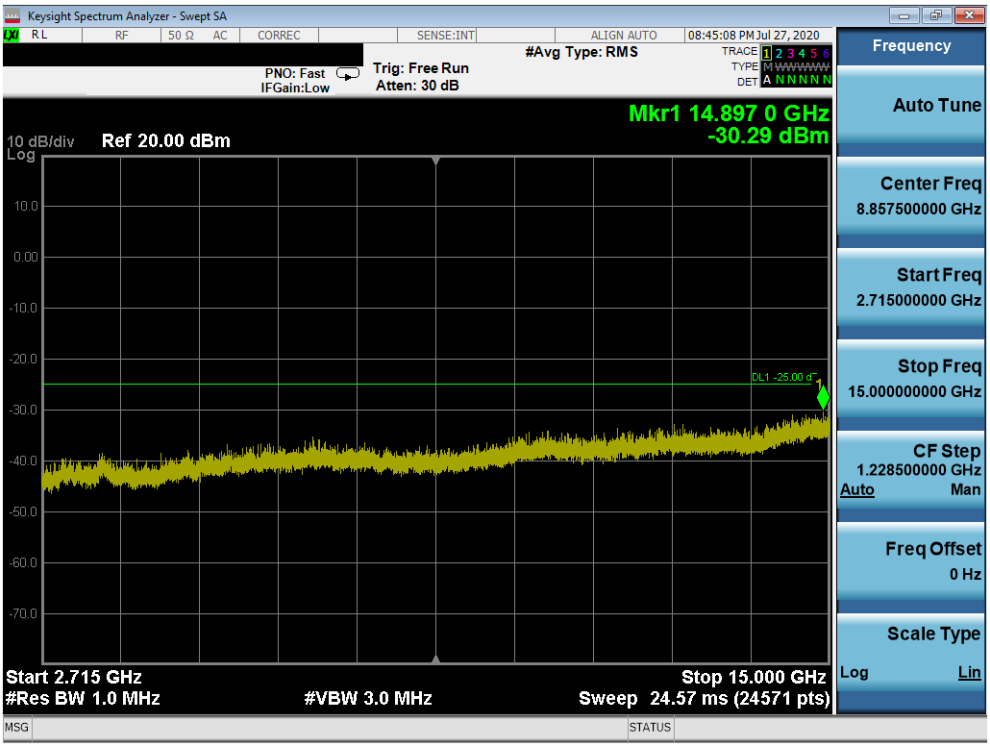


Table 7-708. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – Left Carrier 1/99 Right Carrier 1/0 – High Channel)

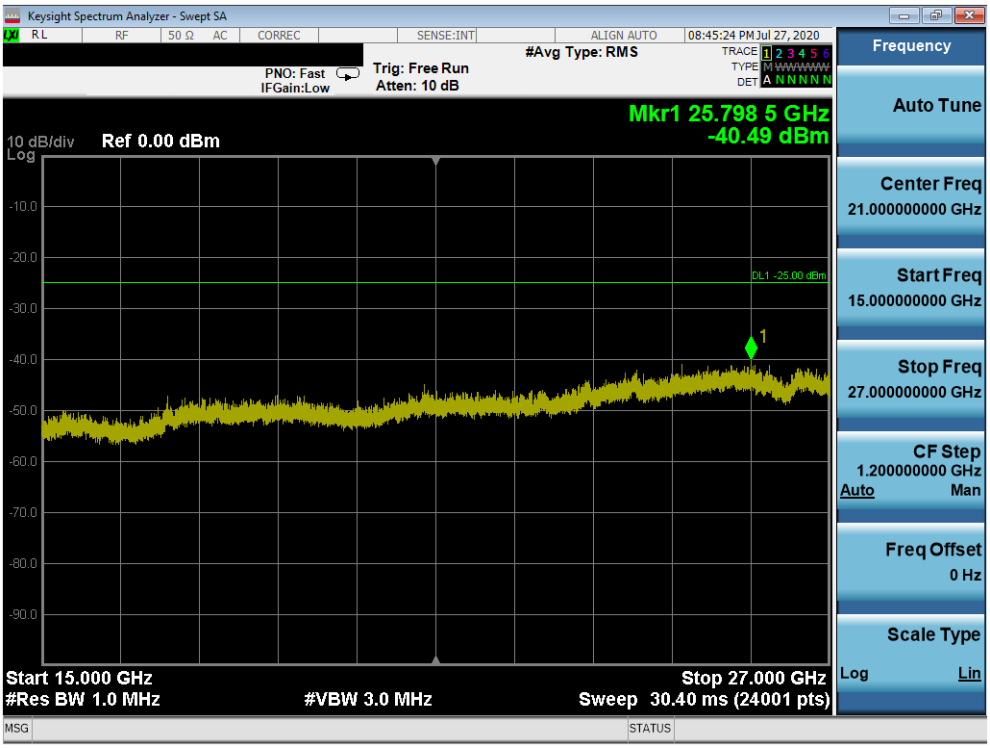
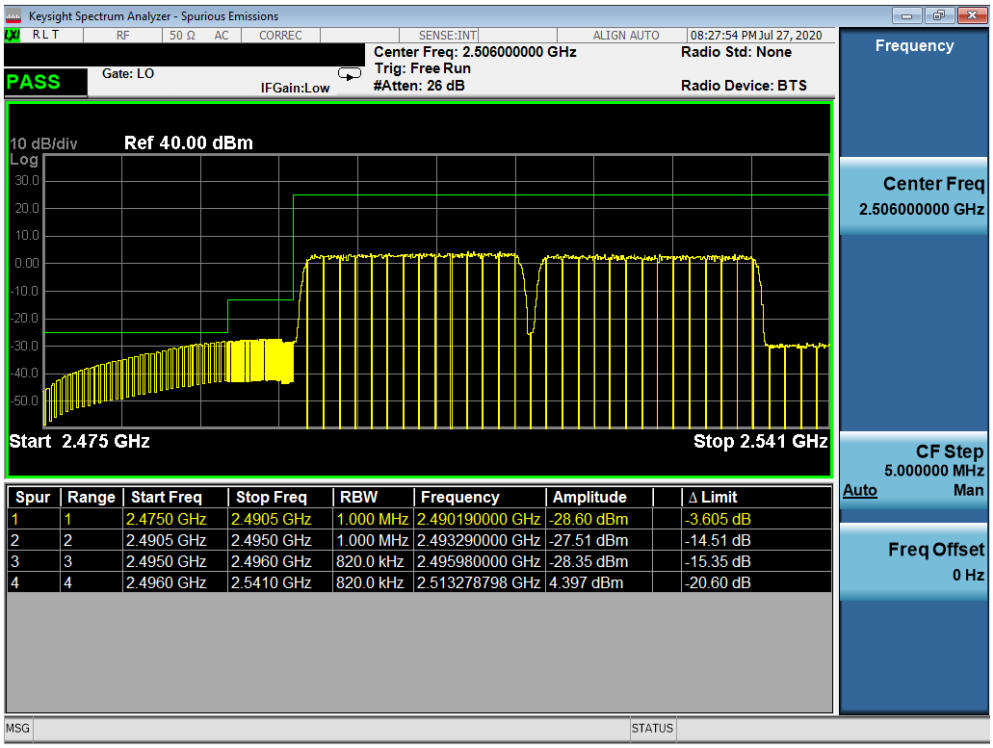
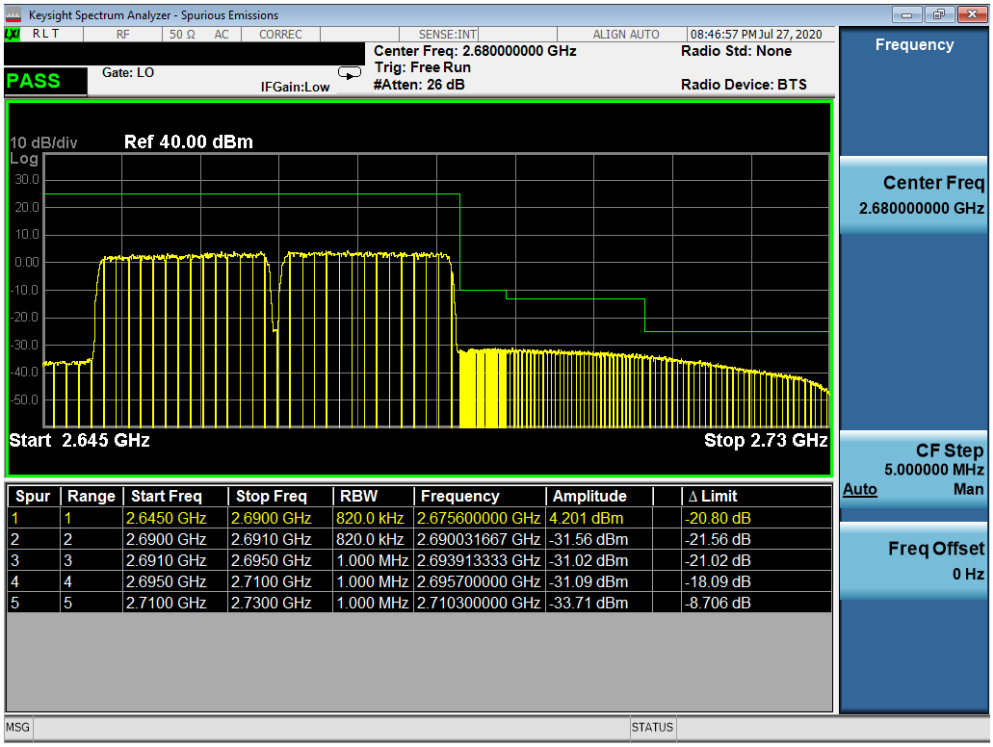


Table 7-709. Conducted Spurious Plot (Band 41 – 20.0MHz QPSK – Left Carrier 1/99 Right Carrier 1/0 – High Channel)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4905 GHz	1.000 MHz	2.490190000 GHz	-28.60 dBm	-3.605 dB
2	2	2.4905 GHz	2.4950 GHz	1.000 MHz	2.493290000 GHz	-27.51 dBm	-14.51 dB
3	3	2.4950 GHz	2.4960 GHz	820.0 kHz	2.495980000 GHz	-28.35 dBm	-15.35 dB
4	4	2.4960 GHz	2.5410 GHz	820.0 kHz	2.513278798 GHz	4.397 dBm	-20.60 dB

Table 7-710. Lower ACP Plot (Band 41 QPSK – Left Carrier:20 MHz Right Carrier:20 MHz – Full RB)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.6450 GHz	2.6900 GHz	820.0 kHz	2.675600000 GHz	4.201 dBm	-20.80 dB
2	2	2.6900 GHz	2.6910 GHz	820.0 kHz	2.690031667 GHz	-31.56 dBm	-21.56 dB
3	3	2.6910 GHz	2.6950 GHz	1.000 MHz	2.693913333 GHz	-31.02 dBm	-21.02 dB
4	4	2.6950 GHz	2.7100 GHz	1.000 MHz	2.695700000 GHz	-31.09 dBm	-18.09 dB
5	5	2.7100 GHz	2.7300 GHz	1.000 MHz	2.710300000 GHz	-33.71 dBm	-8.706 dB

Table 7-711. Upper ACP Plot (Band 41 QPSK – Left Carrier:20 MHz Right Carrier:20 MHz – Full RB)

7.7 Radiated Power (ERP/EIRP)

Test Overview

Effective Radiated Power (ERP) and Equivalent Isotropic Radiated Power (EIRP) measurements are performed using the substitution method described in ANSI/TIA-603-E-2016 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically and horizontally polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

Test Procedures Used

KDB 971168 D01 v03r01 – Section 5.2.1

ANSI/TIA-603-E-2016 – Section 2.2.17

Test Settings

1. Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation.
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".
8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation.
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.

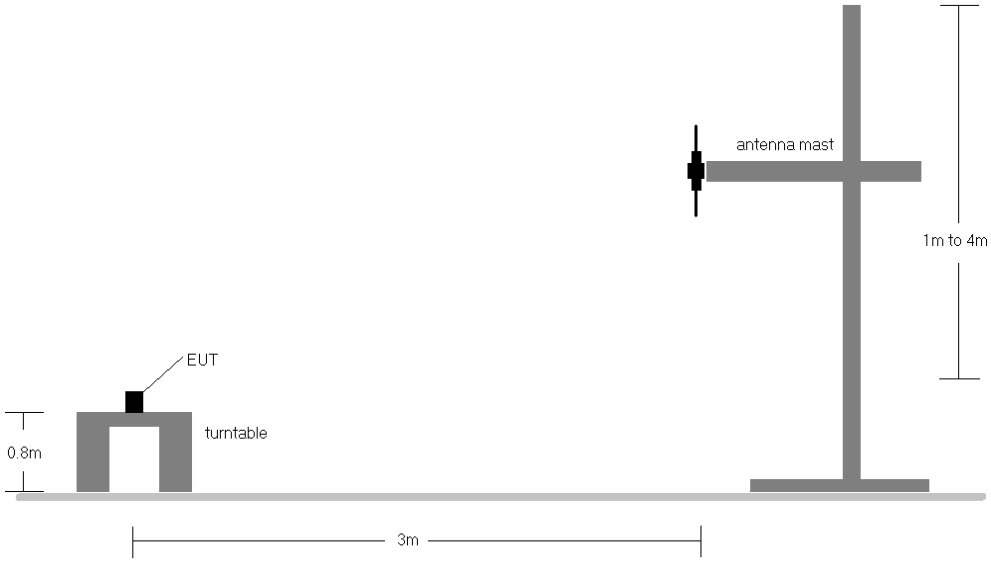


Figure 7-6. Radiated Test Setup <1GHz

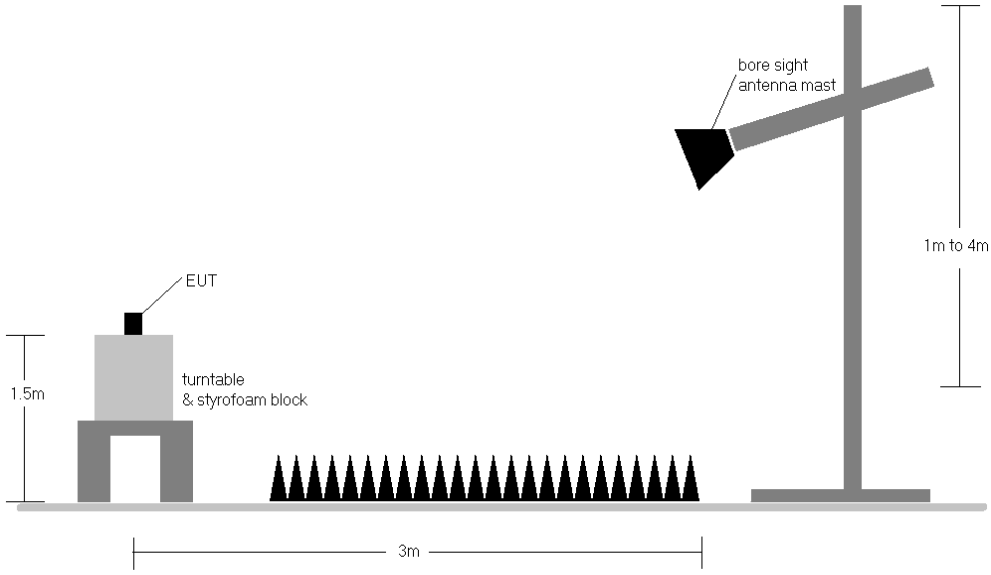


Figure 7-7. Radiated Test Setup >1GHz

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.

7.7.1 Antenna-0 Radiated Power (ERP/EIRP)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
20 MHz	QPSK	673.0	V	277.0	122.0	4.09	1 / 99	15.07	17.01	0.050	34.77	-17.76
		680.5	V	288.0	117.0	4.24	1 / 0	15.46	**17.55**	0.057	34.77	-17.22
		688.0	V	265.0	108.0	4.48	1 / 0	14.49	16.82	0.048	34.77	-17.95
	16-QAM	680.5	V	288.0	117.0	4.24	1 / 0	14.75	**16.84**	0.048	34.77	-17.94
	64-QAM	680.5	V	288.0	117.0	4.24	1 / 0	14.15	**16.24**	0.042	34.77	-18.54
	256-QAM	680.5	V	288.0	117.0	4.24	1 / 0	10.67	**12.76**	0.019	34.77	-22.02
15 MHz	QPSK	670.5	V	277.0	122.0	3.96	1 / 0	14.90	16.71	0.047	34.77	-18.06
		680.5	V	288.0	117.0	4.24	1 / 0	15.19	**17.28**	0.053	34.77	-17.49
		690.5	V	265.0	108.0	4.41	1 / 0	14.18	16.44	0.044	34.77	-18.33
	16-QAM	680.5	V	288.0	117.0	4.24	1 / 0	14.32	**16.41**	0.044	34.77	-18.37
	64-QAM	680.5	V	288.0	117.0	4.24	1 / 0	13.79	**15.88**	0.039	34.77	-18.90
	256-QAM	680.5	V	288.0	117.0	4.24	1 / 0	10.42	**12.51**	0.018	34.77	-22.27
10 MHz	QPSK	668.0	V	277.0	122.0	3.82	1 / 0	15.21	16.89	0.049	34.77	-17.88
		680.5	V	288.0	117.0	4.24	1 / 25	15.16	**17.25**	0.053	34.77	-17.52
		693.0	V	265.0	108.0	4.44	1 / 0	14.31	16.60	0.046	34.77	-18.17
	16-QAM	680.5	V	288.0	117.0	4.24	1 / 25	14.28	**16.37**	0.043	34.77	-18.41
	64-QAM	680.5	V	288.0	117.0	4.24	1 / 25	13.87	**15.96**	0.039	34.77	-18.82
	256-QAM	680.5	V	288.0	117.0	4.24	1 / 25	10.43	**12.52**	0.018	34.77	-22.26
5 MHz	QPSK	665.5	V	277.0	122.0	3.79	1 / 12	15.22	16.86	0.049	34.77	-17.91
		680.5	V	288.0	117.0	4.24	1 / 12	15.16	**17.25**	0.053	34.77	-17.52
		695.5	V	265.0	108.0	4.58	1 / 12	14.26	16.68	0.047	34.77	-18.09
	16-QAM	680.5	V	288.0	117.0	4.24	1 / 12	14.39	**16.48**	0.044	34.77	-18.30
	64-QAM	680.5	V	288.0	117.0	4.24	1 / 12	13.75	**15.84**	0.038	34.77	-18.94
	256-QAM	680.5	V	288.0	117.0	4.24	1 / 12	10.45	**12.54**	0.018	34.77	-22.24
	Opposite Pol.	680.5	H	191.0	327.0	3.19	1 / 0	15.08	16.12	0.041	34.77	-18.65
	WCP	680.5	V	210.0	226.0	4.24	1 / 0	13.94	16.03	0.040	34.77	-18.75

Table 7-9. ERP Data (Band 71)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
20 MHz	π/2 BPSK	673.0	H	322.0	321.0	3.09	1 / 50	16.72	17.66	0.058	34.77	-17.11
		680.5	H	297.0	325.0	3.19	1 / 50	17.58	**18.62**	0.073	34.77	-16.16
		688.0	H	307.0	322.0	3.28	1 / 50	16.14	17.27	0.053	34.77	-17.50
	QPSK	673.0	H	322.0	321.0	3.09	1 / 50	16.63	17.57	0.057	34.77	-17.20
		680.5	H	297.0	325.0	3.19	1 / 50	17.62	**18.66**	0.073	34.77	-16.12
		688.0	H	307.0	322.0	3.28	1 / 99	16.61	17.74	0.059	34.77	-17.03
	16-QAM	680.5	H	297.0	325.0	3.19	1 / 50	16.79	**17.83**	0.061	34.77	-16.95
	64-QAM	680.5	H	297.0	325.0	3.19	1 / 50	15.63	**16.67**	0.046	34.77	-18.11
	256-QAM	680.5	H	297.0	325.0	3.19	1 / 50	13.29	**14.33**	0.027	34.77	-20.45
15 MHz	π/2 BPSK	670.5	H	322.0	321.0	3.06	1 / 40	16.67	17.58	0.057	34.77	-17.19
		680.5	H	297.0	325.0	3.19	1 / 40	17.47	**18.51**	0.071	34.77	-16.27
		690.5	H	307.0	322.0	3.31	1 / 40	16.10	17.26	0.053	34.77	-17.51
	QPSK	670.5	H	322.0	321.0	3.06	1 / 40	16.57	17.48	0.056	34.77	-17.29
		680.5	H	297.0	325.0	3.19	1 / 40	17.64	**18.68**	0.074	34.77	-16.10
		690.5	H	307.0	322.0	3.31	1 / 40	16.61	17.77	0.060	34.77	-17.00
	16-QAM	680.5	H	297.0	325.0	3.19	1 / 40	16.81	**17.85**	0.061	34.77	-16.93
	64-QAM	680.5	H	297.0	325.0	3.19	1 / 40	15.65	**16.69**	0.047	34.77	-18.09
	256-QAM	680.5	H	297.0	325.0	3.19	1 / 40	13.31	**14.35**	0.027	34.77	-20.43
10 MHz	π/2 BPSK	668.0	H	322.0	321.0	3.02	1 / 26	15.73	16.61	0.046	34.77	-18.16
		680.5	H	297.0	325.0	3.19	1 / 26	17.32	**18.36**	0.068	34.77	-16.42
		693.0	H	307.0	322.0	3.34	1 / 26	15.68	16.87	0.049	34.77	-17.90
	QPSK	668.0	H	322.0	321.0	3.02	1 / 26	16.50	17.38	0.055	34.77	-17.39
		680.5	H	297.0	325.0	3.19	1 / 26	17.33	**18.37**	0.069	34.77	-16.41
		693.0	H	307.0	322.0	3.34	1 / 26	16.04	17.23	0.053	34.77	-17.54
	16-QAM	680.5	H	297.0	325.0	3.19	1 / 26	16.74	**17.78**	0.060	34.77	-17.00
	64-QAM	680.5	H	297.0	325.0	3.19	1 / 26	15.68	**16.72**	0.047	34.77	-18.06
	256-QAM	680.5	H	297.0	325.0	3.19	1 / 26	13.31	**14.35**	0.027	34.77	-20.43
5 MHz	π/2 BPSK	665.5	H	322.0	321.0	2.99	1 / 18	16.01	16.85	0.048	34.77	-17.92
		680.5	H	297.0	325.0	3.19	1 / 18	16.92	**17.96**	0.062	34.77	-16.82
		695.5	H	307.0	322.0	3.38	1 / 18	15.80	17.02	0.050	34.77	-17.75
	QPSK	665.5	H	322.0	321.0	2.99	1 / 18	15.92	16.76	0.047	34.77	-18.01
		680.5	H	297.0	325.0	3.19	1 / 18	17.04	**18.08**	0.064	34.77	-16.70
		695.5	H	307.0	322.0	3.38	1 / 18	16.29	17.51	0.056	34.77	-17.26
	16-QAM	680.5	H	297.0	325.0	3.19	1 / 18	16.30	**17.34**	0.054	34.77	-17.44
	64-QAM	680.5	H	297.0	325.0	3.19	1 / 18	15.47	**16.51**	0.045	34.77	-18.27
	256-QAM	680.5	H	297.0	325.0	3.19	1 / 18	13.35	14.39	0.027	34.77	-20.39
	QPSK (CP-OFDM)	680.5	H	297.0	325.0	3.19	1 / 50	15.56	**16.60**	0.046	34.77	-18.18
	QPSK (Opposite Pol.)	680.5	V	174.0	306.0	3.19	1 / 50	16.84	17.88	0.061	34.77	-16.90
	QPSK (WCP)	680.5	V	184.0	222.0	3.19	1 / 50	15.73	16.77	0.047	34.77	-18.01

Table 7-10. ERP Data (Band n71)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
10 MHz	QPSK	704.0	V	386.0	70.0	4.58	1 / 49	14.32	16.75	0.047	34.77	-18.02
		707.5	V	395.0	57.0	4.62	1 / 49	14.80	**17.27**	0.053	34.77	-17.50
		711.0	V	168.0	139.0	4.67	1 / 49	13.15	15.67	0.037	34.77	-19.10
	16-QAM	707.5	V	395.0	57.0	4.62	1 / 49	13.72	**16.19**	0.042	34.77	-18.58
	64-QAM	707.5	V	395.0	57.0	4.62	1 / 49	12.57	**15.04**	0.032	34.77	-19.73
	256-QAM	707.5	V	395.0	57.0	4.62	1 / 49	11.14	**13.61**	0.023	34.77	-21.16
5 MHz	QPSK	701.5	V	386.0	70.0	4.60	1 / 12	13.83	16.28	0.042	34.77	-18.49
		707.5	V	395.0	57.0	4.62	1 / 24	14.55	**17.02**	0.050	34.77	-17.75
		713.5	V	168.0	139.0	4.70	1 / 24	12.91	15.46	0.035	34.77	-19.31
	16-QAM	707.5	V	395.0	57.0	4.62	1 / 24	13.93	**16.40**	0.044	34.77	-18.37
	64-QAM	707.5	V	395.0	57.0	4.62	1 / 24	12.17	**14.64**	0.029	34.77	-20.13
	256-QAM	713.5	V	168.0	139.0	4.70	1 / 24	10.64	**13.19**	0.021	34.77	-21.58
3 MHz	QPSK	700.5	V	386.0	70.0	4.59	1 / 14	13.88	16.32	0.043	34.77	-18.45
		707.5	V	395.0	57.0	4.62	1 / 14	14.45	**16.92**	0.049	34.77	-17.85
		714.5	V	168.0	139.0	4.71	1 / 14	12.85	15.41	0.035	34.77	-19.36
	16-QAM	707.5	V	395.0	57.0	4.62	1 / 14	14.04	**16.51**	0.045	34.77	-18.26
	64-QAM	707.5	V	395.0	57.0	4.62	1 / 14	12.14	**14.61**	0.029	34.77	-20.16
	256-QAM	707.5	V	395.0	57.0	4.62	1 / 14	10.61	**13.08**	0.020	34.77	-21.69
1.4 MHz	QPSK	699.7	V	386.0	70.0	4.56	1 / 5	13.83	16.24	0.042	34.77	-18.53
		707.5	V	395.0	57.0	4.62	1 / 5	14.40	**16.87**	0.049	34.77	-17.90
		715.3	V	168.0	139.0	4.72	1 / 2	12.77	15.34	0.034	34.77	-19.43
	16-QAM	707.5	V	395.0	57.0	4.62	1 / 5	13.71	**16.18**	0.042	34.77	-18.59
	64-QAM	707.5	V	395.0	57.0	4.62	1 / 5	12.09	**14.56**	0.029	34.77	-20.21
	256-QAM	715.3	V	168.0	139.0	4.72	1 / 2	10.46	**13.03**	0.020	34.77	-21.74
	Opposite Pol.	707.5	H	201.0	333.0	4.62	1 / 49	12.97	15.44	0.035	34.77	-19.33
	WCP	707.5	V	224.0	167.0	4.62	1 / 49	12.12	14.59	0.029	34.77	-20.18

Table 7-11. ERP Data (Band 12)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
10 MHz	QPSK	782.0	V	240.0	14.0	5.79	1 / 49	14.98	**18.62**	0.073	34.77	-16.15
	16-QAM	782.0	V	240.0	14.0	5.79	1 / 49	14.34	**17.98**	0.063	34.77	-16.79
	64-QAM	782.0	V	240.0	14.0	5.79	1 / 49	13.24	**16.88**	0.049	34.77	-17.89
	256-QAM	782.0	V	240.0	14.0	5.79	1 / 49	9.87	**13.51**	0.022	34.77	-21.26
5 MHz	QPSK	779.5	V	240.0	14.0	5.77	1 / 24	14.81	18.43	0.070	34.77	-16.35
		782.0	V	240.0	14.0	5.79	1 / 24	14.85	18.49	0.071	34.77	-16.28
		784.5	V	240.0	14.0	5.82	1 / 24	15.26	**18.93**	0.078	34.77	-15.84
	16-QAM	784.5	V	240.0	14.0	5.82	1 / 24	14.65	**18.32**	0.068	34.77	-16.45
	64-QAM	784.5	V	240.0	14.0	5.82	1 / 24	13.38	**17.05**	0.051	34.77	-17.72
	256-QAM	784.5	V	240.0	14.0	5.82	1 / 24	9.99	**13.66**	0.023	34.77	-21.11
	Opposite Pol.	784.5	H	211.0	300.0	5.79	1 / 24	14.56	18.20	0.066	34.77	-16.57
	WCP	784.5	V	244.0	56.0	5.79	1 / 24	14.44	18.08	0.064	34.77	-16.69

Table 7-12. ERP Data (Band 13)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
15MHz (Band 26 only)	QPSK	831.5	V	195.0	59.0	6.43	1 / 0	12.95	17.23	0.053	38.45	-21.22	19.38	0.087	40.61	-21.23
		836.5	V	186.0	61.0	6.38	1 / 0	13.26	**17.49**	0.056	38.45	-20.96	**19.64**	0.092	40.61	-20.97
		841.5	V	201.0	57.0	6.43	1 / 37	12.84	17.12	0.052	38.45	-21.33	19.27	0.085	40.61	-21.34
	16-QAM	836.5	V	186.0	61.0	6.38	1 / 0	12.32	**16.55**	0.045	38.45	-21.90	**18.70**	0.074	40.61	-21.91
	64-QAM	836.5	V	186.0	61.0	6.38	1 / 0	11.42	**15.65**	0.037	38.45	-22.80	**17.80**	0.060	40.61	-22.81
	256-QAM	836.5	V	186.0	61.0	6.38	1 / 0	9.20	**13.43**	0.022	38.45	-25.02	**15.58**	0.036	40.61	-25.03
10 MHz	QPSK	829.0	V	195.0	59.0	6.43	1 / 49	12.86	17.14	0.052	38.45	-21.31	19.29	0.085	40.61	-21.32
		836.5	V	186.0	61.0	6.38	1 / 0	13.03	**17.26**	0.053	38.45	-21.19	**19.41**	0.087	40.61	-21.20
		844.0	V	201.0	57.0	6.43	1 / 0	12.70	16.98	0.050	38.45	-21.47	19.13	0.082	40.61	-21.48
	16-QAM	836.5	V	186.0	61.0	6.38	1 / 0	12.77	**17.00**	0.050	38.45	-21.45	**19.15**	0.082	40.61	-21.46
	64-QAM	836.5	V	186.0	61.0	6.38	1 / 0	11.40	**15.63**	0.037	38.45	-22.82	**17.78**	0.060	40.61	-22.83
	256-QAM	836.5	V	186.0	61.0	6.38	1 / 0	9.22	**13.45**	0.022	38.45	-25.00	**15.60**	0.036	40.61	-25.01
5 MHz	QPSK	826.5	V	195.0	59.0	6.43	1 / 12	12.83	17.11	0.051	38.45	-21.34	19.26	0.084	40.61	-21.35
		836.5	V	186.0	61.0	6.38	1 / 12	13.12	**17.35**	0.054	38.45	-21.10	**19.50**	0.089	40.61	-21.11
		846.5	V	201.0	57.0	6.43	1 / 0	12.60	16.88	0.049	38.45	-21.57	19.03	0.080	40.61	-21.58
	16-QAM	836.5	V	186.0	61.0	6.38	1 / 12	12.75	**16.98**	0.050	38.45	-21.47	**19.13**	0.082	40.61	-21.48
	64-QAM	836.5	V	186.0	61.0	6.38	1 / 12	11.49	**15.72**	0.037	38.45	-22.73	**17.87**	0.061	40.61	-22.74
	256-QAM	836.5	V	186.0	61.0	6.38	1 / 12	9.33	**13.56**	0.023	38.45	-24.89	**15.71**	0.037	40.61	-24.90
3 MHz	QPSK	825.5	V	195.0	59.0	6.43	1 / 14	12.73	17.01	0.050	38.45	-21.44	19.16	0.082	40.61	-21.45
		836.5	V	186.0	61.0	6.38	1 / 14	13.13	**17.36**	0.054	38.45	-21.09	**19.51**	0.089	40.61	-21.10
		847.5	V	201.0	57.0	6.43	1 / 0	12.72	17.00	0.050	38.45	-21.45	19.15	0.082	40.61	-21.46
	16-QAM	836.5	V	186.0	61.0	6.38	1 / 14	12.71	**16.94**	0.049	38.45	-21.51	**19.09**	0.081	40.61	-21.52
	64-QAM	836.5	V	186.0	61.0	6.38	1 / 14	11.48	**15.71**	0.037	38.45	-22.74	**17.86**	0.061	40.61	-22.75
	256-QAM	836.5	V	186.0	61.0	6.38	1 / 14	9.15	**13.38**	0.022	38.45	-25.07	**15.53**	0.036	40.61	-25.08
1.4 MHz	QPSK	824.7	V	195.0	59.0	6.43	1 / 2	12.59	16.87	0.049	38.45	-21.58	19.02	0.080	40.61	-21.59
		836.5	V	186.0	61.0	6.38	1 / 2	13.15	**17.38**	0.055	38.45	-21.07	**19.53**	0.090	40.61	-21.08
		848.3	V	201.0	57.0	6.43	1 / 2	12.63	16.91	0.049	38.45	-21.54	19.06	0.081	40.61	-21.55
	16-QAM	836.5	V	186.0	61.0	6.38	1 / 2	12.69	**16.92**	0.049	38.45	-21.53	**19.07**	0.081	40.61	-21.54
	64-QAM	836.5	V	186.0	61.0	6.38	1 / 2	11.49	**15.72**	0.037	38.45	-22.73	**17.87**	0.061	40.61	-22.74
	256-QAM	836.5	V	186.0	61.0	6.38	1 / 2	9.18	**13.41**	0.022	38.45	-25.04	**15.56**	0.036	40.61	-25.05
	Opposite Pol.	836.5	H	214.0	62.0	6.38	1 / 0	10.70	17.08	0.051	38.45	-21.37	19.23	0.084	40.61	-21.38
	WCP	836.5	V	132.0	213.0	6.38	1 / 0	7.40	13.78	0.024	38.45	-24.67	15.93	0.039	40.61	-24.68

Table 7-13. ERP Data (Band 5/26)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
20 MHz	π/2 BPSK	834.0	H	220.0	336.0	6.75	1 / 50	14.74	19.34	0.086	38.45	-19.11
		836.5	H	221.0	346.0	6.68	1 / 50	14.68	19.21	0.083	38.45	-19.24
		839.0	H	225.0	340.0	6.70	1 / 0	15.06	**19.61**	0.091	38.45	-18.84
	QPSK	834.0	H	220.0	336.0	6.75	1 / 50	14.85	19.45	0.088	38.45	-19.00
		836.5	H	221.0	346.0	6.68	1 / 50	14.78	19.31	0.085	38.45	-19.14
		839.0	H	225.0	340.0	6.70	1 / 50	15.30	**19.85**	0.097	38.45	-18.60
	16-QAM	839.0	H	225.0	340.0	6.70	1 / 50	14.50	**19.05**	0.080	38.45	-19.40
	64-QAM	834.0	H	220.0	336.0	6.75	1 / 50	13.23	**17.83**	0.061	38.45	-20.62
	256-QAM	839.0	H	225.0	340.0	6.70	1 / 50	10.40	**14.95**	0.031	38.45	-23.50
15 MHz	π/2 BPSK	831.5	H	220.0	336.0	6.75	1 / 39	14.68	19.28	0.085	38.45	-19.17
		836.5	H	221.0	346.0	6.68	1 / 39	14.51	19.04	0.080	38.45	-19.41
		841.5	H	225.0	340.0	6.70	1 / 20	14.97	**19.52**	0.090	38.45	-18.93
	QPSK	831.5	H	220.0	336.0	6.75	1 / 39	14.92	19.52	0.090	38.45	-18.93
		836.5	H	221.0	346.0	6.68	1 / 39	14.74	19.27	0.085	38.45	-19.18
		841.5	H	225.0	340.0	6.70	1 / 20	15.27	**19.82**	0.096	38.45	-18.63
	16-QAM	841.5	H	225.0	340.0	6.70	1 / 20	14.38	**18.93**	0.078	38.45	-19.52
	64-QAM	831.5	H	220.0	336.0	6.75	1 / 39	12.92	**17.52**	0.056	38.45	-20.93
	256-QAM	841.5	H	225.0	340.0	6.70	1 / 20	12.17	**16.72**	0.047	38.45	-21.73
10 MHz	π/2 BPSK	829.0	H	220.0	336.0	6.75	1 / 26	14.81	19.41	0.087	38.45	-19.04
		836.5	H	221.0	346.0	6.68	1 / 26	14.64	19.17	0.083	38.45	-19.28
		844.0	H	225.0	340.0	6.70	1 / 13	15.10	**19.65**	0.092	38.45	-18.80
	QPSK	829.0	H	220.0	336.0	6.75	1 / 26	14.02	18.62	0.073	38.45	-19.83
		836.5	H	221.0	346.0	6.68	1 / 26	14.68	19.21	0.083	38.45	-19.24
		844.0	H	225.0	340.0	6.70	1 / 13	15.26	**19.81**	0.096	38.45	-18.64
	16-QAM	844.0	H	225.0	340.0	6.70	1 / 13	14.69	**19.24**	0.084	38.45	-19.21
	64-QAM	829.0	H	220.0	336.0	6.75	1 / 26	12.88	**17.48**	0.056	38.45	-20.97
	256-QAM	844.0	H	225.0	340.0	6.70	1 / 13	11.08	**15.63**	0.037	38.45	-22.82
5 MHz	π/2 BPSK	829.0	H	220.0	336.0	6.75	1 / 6	14.76	19.36	0.086	38.45	-19.09
		836.5	H	221.0	346.0	6.68	1 / 6	14.51	19.04	0.080	38.45	-19.41
		844.0	H	225.0	340.0	6.70	1 / 6	15.10	**19.65**	0.092	38.45	-18.80
	QPSK	829.0	H	220.0	336.0	6.75	1 / 6	14.95	19.55	0.090	38.45	-18.90
		836.5	H	221.0	346.0	6.68	1 / 6	14.85	19.38	0.087	38.45	-19.07
		844.0	H	225.0	340.0	6.70	1 / 6	15.30	**19.85**	0.097	38.45	-18.60
	16-QAM	844.0	H	225.0	340.0	6.70	1 / 6	14.55	**19.10**	0.081	38.45	-19.35
	64-QAM	829.0	H	220.0	336.0	6.75	1 / 6	13.06	**17.66**	0.058	38.45	-20.79
	256-QAM	844.0	H	225.0	340.0	6.70	1 / 6	10.93	**15.48**	0.035	38.45	-22.97
	QPSK (CP-OFDM)	839.0	H	225.0	340.0	6.70	1 / 50	11.53	**18.23**	0.067	38.45	-20.22
	QPSK (Opposite Pol.)	839.0	V	165.0	222.0	6.70	1 / 50	12.42	19.12	0.082	38.45	-19.33
	QPSK (WCP)	839.0	V	142.0	249.0	6.70	1 / 50	12.04	18.74	0.075	38.45	-19.71

Table 7-14. ERP Data (Band n5)

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	1720.0	H	141.0	151.0	9.41	1 / 50	13.51	22.92	0.196	30.00	-7.08
		1745.0	H	135.0	165.0	9.26	1 / 50	13.13	22.39	0.173	30.00	-7.61
		1770.0	H	171.0	169.0	9.27	1 / 99	13.67	**22.94**	0.197	30.00	-7.06
	16-QAM	1720.0	H	141.0	151.0	9.41	1 / 50	12.59	**22.00**	0.159	30.00	-8.00
	64-QAM	1770.0	H	171.0	169.0	9.27	1 / 99	12.05	**21.32**	0.135	30.00	-8.68
	256-QAM	1770.0	H	171.0	169.0	9.27	1 / 99	10.64	**19.91**	0.098	30.00	-10.09
15 MHz	QPSK	1717.5	H	141.0	151.0	9.43	1 / 36	13.33	**22.76**	0.189	30.00	-7.24
		1745.0	H	135.0	165.0	9.26	1 / 36	12.73	21.99	0.158	30.00	-8.01
		1772.5	H	171.0	169.0	9.27	1 / 36	13.17	22.44	0.175	30.00	-7.56
	16-QAM	1717.5	H	141.0	151.0	9.43	1 / 36	12.04	**21.47**	0.140	30.00	-8.53
	64-QAM	1772.5	H	171.0	169.0	9.27	1 / 36	11.59	**20.86**	0.122	30.00	-9.14
	256-QAM	1772.5	H	171.0	169.0	9.27	1 / 36	10.29	**19.56**	0.090	30.00	-10.44
10 MHz	QPSK	1715.0	H	141.0	151.0	9.44	1 / 25	13.46	**22.90**	0.195	30.00	-7.10
		1745.0	H	135.0	165.0	9.26	1 / 25	12.86	22.12	0.163	30.00	-7.88
		1775.0	H	171.0	169.0	9.28	1 / 25	13.36	22.64	0.184	30.00	-7.36
	16-QAM	1715.0	H	141.0	151.0	9.44	1 / 25	12.31	**21.75**	0.150	30.00	-8.25
	64-QAM	1775.0	H	171.0	169.0	9.28	1 / 25	11.55	**20.83**	0.121	30.00	-9.17
	256-QAM	1775.0	H	171.0	169.0	9.28	1 / 25	10.37	**19.65**	0.092	30.00	-10.35
5 MHz	QPSK	1712.5	H	141.0	151.0	9.46	1 / 12	13.34	**22.80**	0.191	30.00	-7.20
		1745.0	H	135.0	165.0	9.26	1 / 12	12.86	22.12	0.163	30.00	-7.88
		1777.5	H	171.0	169.0	9.28	1 / 12	13.22	22.50	0.178	30.00	-7.50
	16-QAM	1712.5	H	141.0	151.0	9.46	1 / 12	11.94	**21.40**	0.138	30.00	-8.60
	64-QAM	1777.5	H	171.0	169.0	9.28	1 / 12	11.59	**20.87**	0.122	30.00	-9.13
	256-QAM	1777.5	H	171.0	169.0	9.28	1 / 12	10.34	**19.62**	0.092	30.00	-10.38
3 MHz	QPSK	1711.5	H	141.0	151.0	9.47	1 / 0	13.31	**22.77**	0.189	30.00	-7.23
		1745.0	H	135.0	165.0	9.26	1 / 7	12.80	22.06	0.161	30.00	-7.94
		1778.5	H	171.0	169.0	9.28	1 / 7	13.20	22.49	0.177	30.00	-7.51
	16-QAM	1711.5	H	141.0	151.0	9.47	1 / 0	12.02	**21.48**	0.141	30.00	-8.52
	64-QAM	1778.5	H	171.0	169.0	9.28	1 / 7	11.80	**21.09**	0.128	30.00	-8.91
	256-QAM	1778.5	H	171.0	169.0	9.28	1 / 7	10.40	**19.69**	0.093	30.00	-10.31
1.4 MHz	QPSK	1710.7	H	141.0	151.0	9.47	1 / 2	13.29	**22.76**	0.189	30.00	-7.24
		1745.0	H	135.0	165.0	9.26	1 / 2	12.74	22.00	0.159	30.00	-8.00
		1779.3	H	171.0	169.0	9.29	1 / 2	13.17	22.46	0.176	30.00	-7.54
	16-QAM	1710.7	H	141.0	151.0	9.47	1 / 2	12.00	**21.47**	0.140	30.00	-8.53
	64-QAM	1779.3	H	171.0	169.0	9.29	1 / 2	11.56	**20.85**	0.122	30.00	-9.15
	256-QAM	1779.3	H	171.0	169.0	9.29	1 / 2	10.38	**19.67**	0.093	30.00	-10.33
	Opposite Pol.	1770.0	V	104.0	1.0	9.26	1 / 50	10.87	20.13	0.103	30.00	-9.87
	WCP	1770.0	H	116.0	221.0	9.26	1 / 50	12.44	21.70	0.148	30.00	-8.30

Table 7-15. EIRP Data (Band 66/4)

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	π/2 BPSK	1720.0	H	185.0	140.0	9.41	1 / 50	14.05	23.46	0.222	30.00	-6.54
		1745.0	H	177.0	146.0	9.26	1 / 50	14.32	**23.58**	0.228	30.00	-6.42
		1770.0	H	126.0	130.0	9.27	1 / 50	14.28	23.55	0.226	30.00	-6.45
	QPSK	1720.0	H	185.0	140.0	9.41	1 / 50	14.06	23.47	0.223	30.00	-6.53
		1745.0	H	177.0	146.0	9.26	1 / 50	14.43	**23.69**	0.234	30.00	-6.31
		1770.0	H	126.0	130.0	9.27	1 / 50	14.36	23.63	0.231	30.00	-6.37
	16-QAM	1745.0	H	177.0	146.0	9.26	1 / 50	13.41	**22.67**	0.185	30.00	-7.33
	64-QAM	1745.0	H	177.0	146.0	9.26	1 / 50	12.34	**21.60**	0.145	30.00	-8.40
	256-QAM	1745.0	H	177.0	146.0	9.26	1 / 50	9.91	**19.17**	0.083	30.00	-10.83
15 MHz	π/2 BPSK	1717.5	H	185.0	140.0	9.43	1 / 77	13.79	23.22	0.210	30.00	-6.78
		1745.0	H	177.0	146.0	9.26	1 / 77	14.34	**23.60**	0.229	30.00	-6.40
		1772.5	H	126.0	130.0	9.27	1 / 1	14.27	23.54	0.226	30.00	-6.46
	QPSK	1717.5	H	185.0	140.0	9.43	1 / 77	13.87	23.30	0.214	30.00	-6.70
		1745.0	H	177.0	146.0	9.26	1 / 77	14.40	**23.66**	0.232	30.00	-6.34
		1772.5	H	126.0	130.0	9.27	1 / 1	14.29	23.56	0.227	30.00	-6.44
	16-QAM	1745.0	H	177.0	146.0	9.26	1 / 77	13.56	**22.82**	0.191	30.00	-7.18
	64-QAM	1745.0	H	177.0	146.0	9.26	1 / 77	12.16	**21.42**	0.139	30.00	-8.58
	256-QAM	1745.0	H	177.0	146.0	9.26	1 / 77	9.80	**19.06**	0.081	30.00	-10.94
10 MHz	π/2 BPSK	1715.0	H	185.0	140.0	9.44	1 / 26	13.93	23.37	0.217	30.00	-6.63
		1745.0	H	177.0	146.0	9.26	1 / 26	14.35	**23.61**	0.230	30.00	-6.39
		1775.0	H	126.0	130.0	9.28	1 / 26	14.27	23.55	0.226	30.00	-6.45
	QPSK	1715.0	H	185.0	140.0	9.44	1 / 26	13.90	23.34	0.216	30.00	-6.66
		1745.0	H	177.0	146.0	9.26	1 / 26	14.44	**23.70**	0.234	30.00	-6.30
		1775.0	H	126.0	130.0	9.28	1 / 26	14.36	23.64	0.231	30.00	-6.36
	16-QAM	1745.0	H	177.0	146.0	9.26	1 / 26	13.66	**22.92**	0.196	30.00	-7.08
	64-QAM	1745.0	H	177.0	146.0	9.26	1 / 26	12.34	**21.60**	0.145	30.00	-8.40
	256-QAM	1745.0	H	177.0	146.0	9.26	1 / 26	9.65	**18.91**	0.078	30.00	-11.09
5 MHz	π/2 BPSK	1712.5	H	185.0	140.0	9.46	1 / 13	13.84	23.30	0.214	30.00	-6.70
		1745.0	H	177.0	146.0	9.26	1 / 0	14.31	**23.57**	0.228	30.00	-6.43
		1777.5	H	126.0	130.0	9.28	1 / 0	14.19	23.47	0.222	30.00	-6.53
	QPSK	1712.5	H	185.0	140.0	9.46	1 / 13	13.83	23.29	0.213	30.00	-6.71
		1745.0	H	177.0	146.0	9.26	1 / 0	14.32	23.58	0.228	30.00	-6.42
		1777.5	H	126.0	130.0	9.28	1 / 0	14.31	**23.59**	0.228	30.00	-6.41
	16-QAM	1745.0	H	177.0	146.0	9.26	1 / 0	13.60	**22.86**	0.193	30.00	-7.14
	64-QAM	1745.0	H	177.0	146.0	9.26	1 / 0	12.32	**21.58**	0.144	30.00	-8.42
	256-QAM	1745.0	H	177.0	146.0	9.26	1 / 0	10.00	19.26	0.084	30.00	-10.74
	QPSK (CP-OFDM)	1745.0	H	241.0	166.0	9.26	1 / 50	11.88	**21.14**	0.130	30.00	-8.86
	QPSK (Opposite Pol.)	1745.0	V	177.0	146.0	9.26	1 / 50	12.99	22.25	0.168	30.00	-7.75
	QPSK (WCP)	1745.0	H	140.0	249.0	9.26	1 / 50	12.79	22.05	0.160	30.00	-7.95

Table 7-16. EIRP Data (Band n66)

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	1860.0	H	107.0	35.0	9.64	1 / 0	12.73	22.37	0.173	33.01	-10.64
		1882.5	H	107.0	31.0	9.96	1 / 99	12.65	22.61	0.182	33.01	-10.40
		1905.0	H	101.0	38.0	10.24	1 / 99	13.16	**23.40**	0.219	33.01	-9.61
	16-QAM	1882.5	H	107.0	31.0	9.96	1 / 99	11.83	**21.79**	0.151	33.01	-11.22
	64-QAM	1882.5	H	107.0	31.0	9.96	1 / 99	11.02	**20.98**	0.125	33.01	-12.03
	256-QAM	1882.5	H	107.0	31.0	9.96	1 / 99	9.07	**19.03**	0.080	33.01	-13.98
15 MHz	QPSK	1857.5	H	107.0	35.0	9.61	1 / 25	12.88	22.48	0.177	33.01	-10.53
		1882.5	H	107.0	31.0	9.96	1 / 25	12.64	22.60	0.182	33.01	-10.41
		1907.5	H	101.0	38.0	10.26	1 / 49	13.17	**23.43**	0.220	33.01	-9.58
	16-QAM	1882.5	H	107.0	31.0	9.96	1 / 25	11.76	21.72	0.149	33.01	-11.29
	64-QAM	1882.5	H	107.0	31.0	9.96	1 / 25	10.68	**20.64**	0.116	33.01	-12.37
	256-QAM	1882.5	H	107.0	31.0	9.96	1 / 25	8.81	**18.77**	0.075	33.01	-14.24
10 MHz	QPSK	1855.0	H	107.0	35.0	9.57	1 / 25	12.90	22.47	0.177	33.01	-10.54
		1882.5	H	107.0	31.0	9.96	1 / 25	12.54	22.50	0.178	33.01	-10.51
		1910.0	H	101.0	38.0	10.28	1 / 49	12.91	**23.19**	0.209	33.01	-9.82
	16-QAM	1855.0	H	107.0	35.0	9.57	1 / 25	12.34	**21.91**	0.155	33.01	-11.10
	64-QAM	1855.0	H	107.0	35.0	9.57	1 / 25	11.13	**20.70**	0.118	33.01	-12.31
	256-QAM	1882.5	H	107.0	31.0	9.96	1 / 25	8.70	**18.66**	0.073	33.01	-14.35
5 MHz	QPSK	1852.5	H	107.0	35.0	9.54	1 / 12	12.83	22.36	0.172	33.01	-10.65
		1882.5	H	107.0	31.0	9.96	1 / 12	12.63	22.59	0.182	33.01	-10.42
		1912.5	H	101.0	38.0	10.30	1 / 24	13.06	**23.36**	0.217	33.01	-9.65
	16-QAM	1882.5	H	107.0	31.0	9.96	1 / 12	11.82	**21.78**	0.151	33.01	-11.23
	64-QAM	1882.5	H	107.0	31.0	9.96	1 / 12	10.68	**20.64**	0.116	33.01	-12.37
	256-QAM	1882.5	H	107.0	31.0	9.96	1 / 12	8.99	**18.95**	0.079	33.01	-14.06
3 MHz	QPSK	1851.5	H	107.0	35.0	9.52	1 / 14	12.89	22.41	0.174	33.01	-10.60
		1882.5	H	107.0	31.0	9.96	1 / 14	12.74	22.70	0.186	33.01	-10.31
		1913.5	H	101.0	38.0	10.31	1 / 14	13.11	**23.42**	0.220	33.01	-9.59
	16-QAM	1851.5	H	107.0	35.0	9.52	1 / 14	12.34	**21.86**	0.154	33.01	-11.15
	64-QAM	1851.5	H	107.0	35.0	9.52	1 / 14	11.07	**20.59**	0.115	33.01	-12.42
	256-QAM	1882.5	H	107.0	31.0	9.96	1 / 14	9.29	**19.25**	0.084	33.01	-13.76
1.4 MHz	QPSK	1850.7	H	107.0	35.0	9.51	1 / 2	12.83	22.34	0.172	33.01	-10.67
		1882.5	H	107.0	31.0	9.96	1 / 2	12.64	22.60	0.182	33.01	-10.41
		1914.3	H	101.0	38.0	10.32	1 / 2	13.14	**23.45**	0.221	33.01	-9.56
	16-QAM	1850.7	H	107.0	35.0	9.51	1 / 2	12.37	**21.88**	0.154	33.01	-11.13
	64-QAM	1882.5	H	107.0	31.0	9.96	1 / 2	10.79	**20.75**	0.119	33.01	-12.26
	256-QAM	1882.5	H	107.0	31.0	9.96	1 / 2	9.17	**19.13**	0.082	33.01	-13.88

Table 7-17. EIRP Data (Band 25/2)

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	π/2 BPSK	1860.0	H	141.0	319.0	9.64	1 / 1	15.33	24.97	0.314	33.01	-8.04
		1880.0	H	152.0	325.0	9.93	1 / 1	14.14	24.07	0.255	33.01	-8.94
		1900.0	H	141.0	320.0	10.20	1 / 1	14.80	**25.00**	0.317	33.01	-8.01
	QPSK	1860.0	H	141.0	319.0	9.64	1 / 50	14.42	24.06	0.255	33.01	-8.95
		1880.0	H	152.0	325.0	9.93	1 / 1	14.87	24.80	0.302	33.01	-8.21
		1900.0	H	141.0	320.0	10.20	1 / 1	14.63	**24.83**	0.304	33.01	-8.18
	16-QAM	1900.0	H	141.0	320.0	10.20	1 / 1	13.35	**23.55**	0.227	33.01	-9.46
	64-QAM	1900.0	H	141.0	320.0	10.20	1 / 1	11.96	**22.16**	0.165	33.01	-10.85
	256-QAM	1900.0	H	141.0	320.0	10.20	1 / 1	10.05	**20.25**	0.106	33.01	-12.76
15 MHz	π/2 BPSK	1857.5	H	141.0	319.0	9.61	1 / 1	15.15	24.76	0.299	33.01	-8.25
		1880.0	H	152.0	325.0	9.93	1 / 73	14.11	24.04	0.253	33.01	-8.97
		1902.5	H	141.0	320.0	10.22	1 / 1	14.60	**24.82**	0.304	33.01	-8.19
	QPSK	1857.5	H	141.0	319.0	9.61	1 / 73	13.32	22.93	0.196	33.01	-10.08
		1880.0	H	152.0	325.0	9.93	1 / 73	14.82	24.75	0.298	33.01	-8.26
		1902.5	H	141.0	320.0	10.22	1 / 1	14.93	**25.15**	0.327	33.01	-7.86
	16-QAM	1880.0	H	152.0	325.0	9.93	1 / 73	12.54	**22.47**	0.176	33.01	-10.54
	64-QAM	1880.0	H	152.0	325.0	9.93	1 / 73	11.26	**21.18**	0.131	33.01	-11.83
	256-QAM	1880.0	H	152.0	325.0	9.93	1 / 73	9.19	**19.11**	0.082	33.01	-13.90
10 MHz	π/2 BPSK	1855.0	H	141.0	319.0	9.57	1 / 1	15.12	24.70	0.295	33.01	-8.31
		1880.0	H	152.0	325.0	9.93	1 / 25	14.05	23.97	0.250	33.01	-9.04
		1905.0	H	141.0	320.0	10.24	1 / 1	14.59	**24.83**	0.304	33.01	-8.18
	QPSK	1855.0	H	141.0	319.0	9.57	1 / 48	14.42	24.00	0.251	33.01	-9.01
		1880.0	H	152.0	325.0	9.93	1 / 25	14.81	24.74	0.298	33.01	-8.27
		1905.0	H	141.0	320.0	10.24	1 / 1	14.77	**25.01**	0.317	33.01	-8.00
	16-QAM	1880.0	H	152.0	325.0	9.93	1 / 25	12.72	**22.65**	0.184	33.01	-10.36
	64-QAM	1880.0	H	152.0	325.0	9.93	1 / 25	11.30	**21.22**	0.133	33.01	-11.79
	256-QAM	1880.0	H	152.0	325.0	9.93	1 / 25	9.12	**19.05**	0.080	33.01	-13.96
5 MHz	π/2 BPSK	1852.5	H	141.0	319.0	9.54	1 / 1	15.13	24.67	0.293	33.01	-8.34
		1880.0	H	152.0	325.0	9.93	1 / 1	14.01	23.94	0.248	33.01	-9.07
		1907.5	H	141.0	320.0	10.26	1 / 1	14.46	**24.72**	0.297	33.01	-8.29
	QPSK	1852.5	H	141.0	319.0	9.54	1 / 1	14.35	23.88	0.245	33.01	-9.13
		1880.0	H	152.0	325.0	9.93	1 / 1	14.73	24.65	0.292	33.01	-8.36
		1907.5	H	141.0	320.0	10.26	1 / 12	14.40	**24.66**	0.293	33.01	-8.35
	16-QAM	1880.0	H	152.0	325.0	9.93	1 / 1	12.57	**22.49**	0.178	33.01	-10.52
	64-QAM	1880.0	H	152.0	325.0	9.93	1 / 1	11.34	**21.26**	0.134	33.01	-11.75
	256-QAM	1880.0	H	152.0	325.0	9.93	1 / 1	9.37	19.30	0.085	33.01	-13.72
	QPSK (CP-OFDM)	1900.0	H	141.0	320.0	9.93	1 / 1	12.00	**21.93**	0.156	33.01	-11.08
	QPSK (Opposite Pol.)	1900.0	V	224.0	116.0	9.93	1 / 1	12.26	22.19	0.165	33.01	-10.82

Table 7-18. EIRP Data (Band n25/2)

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	102.0	152.0	10.34	1 / 25	12.49	**22.83**	0.192	23.98	-1.15
	16-QAM	2310.0	H	102.0	152.0	10.34	1 / 25	11.70	**22.04**	0.160	23.98	-1.94
	64-QAM	2310.0	H	102.0	152.0	10.34	1 / 25	10.67	**21.01**	0.126	23.98	-2.97
	256-QAM	2310.0	H	102.0	152.0	10.34	1 / 25	8.78	**19.12**	0.082	23.98	-4.86
5 MHz	QPSK	2307.5	H	102.0	152.0	10.33	1 / 0	12.47	**22.81**	0.191	23.98	-1.17
		2310.0	H	102.0	152.0	10.34	1 / 0	12.46	22.80	0.190	23.98	-1.18
		2312.5	H	102.0	152.0	10.34	1 / 0	12.42	22.76	0.189	23.98	-1.22
	16-QAM	2310.0	H	102.0	152.0	10.34	1 / 0	12.16	**22.50**	0.178	23.98	-1.48
	64-QAM	2310.0	H	102.0	152.0	10.34	1 / 0	10.65	**20.99**	0.125	23.98	-2.99
	256-QAM	2310.0	H	102.0	152.0	10.34	1 / 0	9.05	**19.39**	0.087	23.98	-4.59
	Opposite Pol.	2310.0	V	152.0	221.0	10.34	1 / 25	10.92	21.26	0.134	23.98	-2.72
	WCP	2310.0	V	156.0	249.0	10.34	1 / 25	10.74	21.08	0.128	23.98	-2.90

Table 7-19. EIRP Data (Band 30)

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	101.0	143.0	9.45	1 / 99	14.72	**24.17**	0.261	33.01	-8.84
		2535.0	H	145.0	157.0	9.42	1 / 50	14.09	23.51	0.225	33.01	-9.50
		2560.0	H	116.0	158.0	9.45	1 / 99	14.28	23.73	0.236	33.01	-9.28
	16-QAM	2510.0	H	101.0	143.0	9.45	1 / 99	13.81	**23.26**	0.212	33.01	-9.75
	64-QAM	2510.0	H	101.0	143.0	9.45	1 / 99	12.88	**22.33**	0.171	33.01	-10.68
	256-QAM	2510.0	H	101.0	143.0	9.45	1 / 99	11.38	**20.83**	0.121	33.01	-12.18
15 MHz	QPSK	2507.5	H	101.0	143.0	9.45	1 / 74	14.65	**24.10**	0.257	33.01	-8.91
		2535.0	H	145.0	157.0	9.42	1 / 74	14.21	23.63	0.231	33.01	-9.38
		2562.5	H	116.0	158.0	9.46	1 / 0	14.25	23.71	0.235	33.01	-9.30
	16-QAM	2507.5	H	101.0	143.0	9.45	1 / 74	13.67	**23.12**	0.205	33.01	-9.89
	64-QAM	2507.5	H	101.0	143.0	9.45	1 / 74	12.59	**22.04**	0.160	33.01	-10.97
	256-QAM	2507.5	H	101.0	143.0	9.45	1 / 74	11.33	**20.78**	0.120	33.01	-12.23
10 MHz	QPSK	2505.0	H	101.0	143.0	9.45	1 / 0	14.66	**24.11**	0.258	33.01	-8.90
		2535.0	H	145.0	157.0	9.42	1 / 0	14.08	23.50	0.224	33.01	-9.51
		2565.0	H	116.0	158.0	9.47	1 / 0	13.96	23.43	0.220	33.01	-9.58
	16-QAM	2505.0	H	101.0	143.0	9.45	1 / 0	13.67	**23.12**	0.205	33.01	-9.89
	64-QAM	2505.0	H	101.0	143.0	9.45	1 / 0	12.57	**22.02**	0.159	33.01	-10.99
	256-QAM	2505.0	H	101.0	143.0	9.45	1 / 0	11.35	**20.80**	0.120	33.01	-12.21
5 MHz	QPSK	2502.5	H	101.0	143.0	9.46	1 / 0	14.74	**24.20**	0.263	33.01	-8.81
		2535.0	H	145.0	157.0	9.42	1 /12	14.11	23.53	0.226	33.01	-9.48
		2567.5	H	116.0	158.0	9.48	1 / 0	14.18	23.66	0.232	33.01	-9.35
	16-QAM	2502.5	H	101.0	143.0	9.46	1 / 0	13.77	**23.23**	0.210	33.01	-9.78
	64-QAM	2502.5	H	101.0	143.0	9.46	1 / 0	12.80	**22.26**	0.168	33.01	-10.75
	256-QAM	2502.5	H	101.0	143.0	9.46	1 / 0	11.27	**20.73**	0.118	33.01	-12.28
	Opposite Pol.	2510.0	V	147.0	251.0	9.45	1 / 99	14.41	23.86	0.243	33.01	-9.15
	WCP	2510.0	H	201.0	211.0	9.45	1 / 99	13.94	23.39	0.218	33.01	-9.62

Table 7-20. EIRP Data (Band 7)

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	152.0	149.0	9.42	1 / 50	16.33	25.75	0.376	33.01	-7.26
		2593.0	H	144.0	150.0	9.59	1 / 50	17.99	**27.58**	0.573	33.01	-5.43
		2680.0	H	137.0	142.0	9.71	1 / 50	17.13	26.84	0.483	33.01	-6.17
	16-QAM	2593.0	H	144.0	150.0	9.58	1 / 50	17.56	**27.14**	0.518	33.01	-5.87
	64-QAM	2593.0	H	144.0	150.0	9.45	1 / 50	15.87	**25.32**	0.341	33.01	-7.69
	256-QAM	2593.0	H	144.0	150.0	9.58	1 / 50	13.42	**23.00**	0.200	33.01	-10.01
15 MHz	QPSK	2503.5	H	152.0	149.0	9.42	1 / 0	16.23	25.65	0.368	33.01	-7.36
		2593.0	H	144.0	150.0	9.59	1 / 36	17.84	**27.43**	0.553	33.01	-5.58
		2682.5	H	137.0	142.0	9.71	1 / 36	17.07	26.78	0.477	33.01	-6.23
	16-QAM	2593.0	H	144.0	150.0	9.58	1 / 36	17.56	**27.14**	0.518	33.01	-5.87
	64-QAM	2593.0	H	144.0	150.0	9.45	1 / 36	15.37	**24.82**	0.304	33.01	-8.19
	256-QAM	2593.0	H	144.0	150.0	9.58	1 / 36	12.95	**22.53**	0.179	33.01	-10.48
10 MHz	QPSK	2501.0	H	152.0	149.0	9.42	1 / 0	16.30	25.72	0.374	33.01	-7.29
		2593.0	H	144.0	150.0	9.59	1 / 25	17.97	**27.56**	0.570	33.01	-5.45
		2685.0	H	137.0	142.0	9.71	1 / 25	17.04	26.75	0.473	33.01	-6.26
	16-QAM	2593.0	H	144.0	150.0	9.58	1 / 25	17.72	**27.30**	0.537	33.01	-5.71
	64-QAM	2593.0	H	144.0	150.0	9.45	1 / 25	15.40	**24.85**	0.306	33.01	-8.16
	256-QAM	2593.0	H	144.0	150.0	9.58	1 / 25	13.06	**22.64**	0.184	33.01	-10.37
5 MHz	QPSK	2498.5	H	152.0	149.0	9.42	1 / 0	16.29	25.71	0.373	33.01	-7.30
		2593.0	H	144.0	150.0	9.59	1 / 0	17.97	**27.56**	0.570	33.01	-5.45
		2687.5	H	137.0	142.0	9.71	1 / 0	17.09	26.80	0.479	33.01	-6.21
	16-QAM	2593.0	H	144.0	150.0	9.58	1 / 0	17.66	**27.24**	0.530	33.01	-5.77
	64-QAM	2593.0	H	144.0	150.0	9.45	1 / 0	15.48	**24.93**	0.311	33.01	-8.08
	256-QAM	2593.0	H	144.0	150.0	9.58	1 / 0	13.00	**22.58**	0.181	33.01	-10.43
	Opposite Pol.	2593.0	V	229.0	317.0	9.58	1 / 50	16.95	26.53	0.450	33.01	-6.48
	WCP	2593.0	V	166.0	214.0	9.58	1 / 50	16.19	25.77	0.378	33.01	-7.24

Table 7-21. EIRP Data (Band 41 PC2)

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	134.0	324.0	9.41	1 / 0	9.78	19.19	0.083	33.01	-13.82
		2593.0	H	107.0	315.0	9.59	1 / 0	10.67	20.26	0.106	33.01	-12.75
		2640.0	H	136.0	311.0	9.68	1 / 0	10.59	**20.27**	0.106	33.01	-12.74
	QPSK	2546.0	H	134.0	324.0	9.41	1 / 0	9.90	19.31	0.085	33.01	-13.70
		2593.0	H	107.0	315.0	9.59	1 / 0	10.79	20.38	0.109	33.01	-12.63
		2640.0	H	136.0	311.0	9.68	1 / 0	11.14	**20.82**	0.121	33.01	-12.19
	16-QAM	2640.0	H	136.0	311.0	9.68	1 / 0	9.89	**19.57**	0.091	33.01	-13.44
	64-QAM	2640.0	H	136.0	311.0	9.68	1 / 0	8.66	**18.34**	0.068	33.01	-14.67
	256-QAM	2640.0	H	136.0	311.0	9.68	1 / 0	6.96	**16.64**	0.046	33.01	-16.37
90 MHz	π/2 BPSK	2541.0	H	134.0	324.0	9.41	1 / 1	9.85	19.26	0.084	33.01	-13.75
		2593.0	H	107.0	315.0	9.59	1 / 123	10.76	20.35	0.108	33.01	-12.66
		2645.0	H	136.0	311.0	9.69	1 / 123	10.82	**20.51**	0.112	33.01	-12.50
	QPSK	2541.0	H	134.0	324.0	9.41	1 / 1	9.91	19.32	0.085	33.01	-13.69
		2593.0	H	107.0	315.0	9.59	1 / 123	10.94	20.53	0.113	33.01	-12.48
		2645.0	H	136.0	311.0	9.69	1 / 123	11.18	**20.87**	0.122	33.01	-12.14
	16-QAM	2645.0	H	136.0	311.0	9.69	1 / 123	9.93	**19.62**	0.092	33.01	-13.39
	64-QAM	2645.0	H	136.0	311.0	9.69	1 / 123	8.70	**18.39**	0.069	33.01	-14.62
	256-QAM	2645.0	H	136.0	311.0	9.69	1 / 123	7.00	**16.69**	0.047	33.01	-16.32
80 MHz	π/2 BPSK	2536.0	H	134.0	324.0	9.41	1 / 109	9.59	19.00	0.079	33.01	-14.01
		2593.0	H	107.0	315.0	9.59	1 / 109	10.28	19.87	0.097	33.01	-13.14
		2650.0	H	136.0	311.0	9.69	1 / 109	10.64	**20.34**	0.108	33.01	-12.67
	QPSK	2536.0	H	134.0	324.0	9.41	1 / 109	9.71	19.12	0.082	33.01	-13.89
		2593.0	H	107.0	315.0	9.59	1 / 109	10.72	20.31	0.107	33.01	-12.70
		2650.0	H	136.0	311.0	9.69	1 / 109	11.12	**20.82**	0.121	33.01	-12.19
	16-QAM	2650.0	H	136.0	311.0	9.69	1 / 109	9.87	**19.57**	0.091	33.01	-13.44
	64-QAM	2650.0	H	136.0	311.0	9.69	1 / 109	8.64	**18.34**	0.068	33.01	-14.67
	256-QAM	2650.0	H	136.0	311.0	9.69	1 / 109	6.94	**16.64**	0.046	33.01	-16.37
60 MHz	π/2 BPSK	2526.0	H	134.0	324.0	9.42	1 / 160	9.54	18.96	0.079	33.01	-14.05
		2593.0	H	107.0	315.0	9.59	1 / 81	10.98	**20.57**	0.114	33.01	-12.44
		2660.0	H	136.0	311.0	9.70	1 / 81	10.74	20.44	0.111	33.01	-12.57
	QPSK	2526.0	H	134.0	324.0	9.42	1 / 160	10.02	19.44	0.088	33.01	-13.57
		2593.0	H	107.0	315.0	9.59	1 / 81	10.88	20.47	0.111	33.01	-12.54
		2660.0	H	136.0	311.0	9.70	1 / 81	10.89	**20.59**	0.115	33.01	-12.42
	16-QAM	2660.0	H	136.0	311.0	9.70	1 / 81	9.64	**19.34**	0.086	33.01	-13.67
	64-QAM	2593.0	H	107.0	315.0	9.59	1 / 81	8.55	**18.14**	0.065	33.01	-14.87
	256-QAM	2660.0	H	136.0	311.0	9.70	1 / 81	6.71	**16.41**	0.044	33.01	-16.60
50 MHz	π/2 BPSK	2521.0	H	134.0	324.0	9.42	1 / 67	9.84	19.26	0.084	33.01	-13.75
		2593.0	H	107.0	315.0	9.59	1 / 67	11.00	**20.59**	0.114	33.01	-12.42
		2665.0	H	136.0	311.0	9.70	1 / 67	10.76	20.46	0.111	33.01	-12.55
	QPSK	2521.0	H	134.0	324.0	9.42	1 / 67	9.96	19.38	0.087	33.01	-13.63
		2593.0	H	107.0	315.0	9.59	1 / 67	10.83	20.42	0.110	33.01	-12.59
		2665.0	H	136.0	311.0	9.70	1 / 67	11.19	**20.89**	0.123	33.01	-12.12
	16-QAM	2665.0	H	136.0	311.0	9.70	1 / 67	9.94	**19.64**	0.092	33.01	-13.37
	64-QAM	2665.0	H	136.0	311.0	9.70	1 / 67	8.71	**18.41**	0.069	33.01	-14.60
	256-QAM	2665.0	H	136.0	311.0	9.70	1 / 67	7.01	**16.71**	0.047	33.01	-16.30
40 MHz	π/2 BPSK	2516.0	H	134.0	324.0	9.42	1 / 0	10.11	19.53	0.090	33.01	-13.48
		2593.0	H	107.0	315.0	9.59	1 / 53	11.00	20.59	0.114	33.01	-12.42
		2670.0	H	136.0	311.0	9.71	1 / 104	10.88	**20.59**	0.115	33.01	-12.42
	QPSK	2516.0	H	134.0	324.0	9.42	1 / 0	10.40	19.82	0.096	33.01	-13.19
		2593.0	H	107.0	315.0	9.59	1 / 53	11.30	20.89	0.123	33.01	-12.12
		2670.0	H	136.0	311.0	9.71	1 / 104	11.42	**21.13**	0.130	33.01	-11.88
	16-QAM	2670.0	H	136.0	311.0	9.71	1 / 104	10.17	**19.88**	0.097	33.01	-13.13
	64-QAM	2670.0	H	136.0	311.0	9.71	1 / 104	8.94	**18.65**	0.073	33.01	-14.36
	256-QAM	2670.0	H	136.0	311.0	9.71	1 / 104	7.24	**16.95**	0.050	33.01	-16.06
20 MHz	π/2 BPSK	2506.0	H	134.0	324.0	9.42	1 / 26	9.90	19.32	0.085	33.01	-13.69
		2593.0	H	107.0	315.0	9.59	1 / 26	10.95	**20.54**	0.113	33.01	-12.47
		2680.0	H	136.0	311.0	9.71	1 / 1	10.73	20.44	0.111	33.01	-12.57
	QPSK	2506.0	H	134.0	324.0	9.42	1 / 26	9.92	19.34	0.086	33.01	-13.67
		2593.0	H	107.0	315.0	9.59	1 / 26	10.88	20.47	0.111	33.01	-12.54
		2680.0	H	136.0	311.0	9.71	1 / 1	11.26	**20.97**	0.125	33.01	-12.04
	16-QAM	2680.0	H	136.0	311.0	9.71	1 / 1	10.01	**19.72**	0.094	33.01	-13.29
	64-QAM	2680.0	H	136.0	311.0	9.71	1 / 1	8.78	**18.49**	0.071	33.01	-14.52
	256-QAM	2680.0	H	136.0	311.0	9.71	1 / 1	7.08	**16.79**	0.048	33.01	-16.22
	QPSK (CP-OFDM)	2640.0	H	136.0	311.0	9.59	1 / 0	9.74	19.33	0.086	33.01	-13.68
	QPSK (Opposite Pol.)	2640.0	V	142.0	252.0	9.59	1 / 0	8.32	17.91	0.062	33.01	-15.10
	QPSK (WCP)	2640.0	H	136.0	311.0	9.59	1 / 0	11.11	20.70	0.117	33.01	-12.31

Table 7-22. EIRP Data (Band n41)

7.7.2 Antenna-1 Radiated Power (ERP/EIRP)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
10 MHz	QPSK	782.0	H	163.0	294.0	5.79	1 / 25	12.70	**16.34**	0.043	34.77	-18.43
	16-QAM	782.0	H	163.0	294.0	5.79	1 / 25	11.73	**15.37**	0.034	34.77	-19.40
	64-QAM	782.0	H	163.0	294.0	5.79	1 / 25	11.06	**14.70**	0.030	34.77	-20.07
	256-QAM	782.0	H	163.0	294.0	5.79	1 / 25	8.73	**12.37**	0.017	34.77	-22.40
5 MHz	QPSK	779.5	H	163.0	294.0	5.79	1 / 12	12.25	15.89	0.039	34.77	-18.88
		782.0	H	163.0	294.0	5.79	1 / 12	12.69	16.33	0.043	34.77	-18.44
		784.5	H	163.0	294.0	5.79	1 / 12	12.62	16.26	0.042	34.77	-18.51
	16-QAM	784.5	H	163.0	294.0	5.79	1 / 12	12.53	16.17	0.041	34.77	-18.60
	64-QAM	784.5	H	163.0	294.0	5.79	1 / 12	11.26	14.90	0.031	34.77	-19.87
	256-QAM	784.5	H	163.0	294.0	5.79	1 / 12	7.87	11.51	0.014	34.77	-23.26
	Opposite Pol.	782.0	V	207.0	116.0	5.79	1 / 25	12.35	15.99	0.040	34.77	-18.78
	WCP	782.0	V	244.0	56.0	5.79	1 / 25	11.52	15.16	0.033	34.77	-19.61

Table 7-23. EIRP Data (Band 13)

7.8 Radiated Spurious Emissions Measurements

Test Overview

Radiated spurious emissions measurements are performed using the substitution method described in ANSI/TIA-603-E-2016 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically and horizontally polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas.

Test Procedures Used

KDB 971168 D01 v03r01 – Section 5.8

ANSI/TIA-603-E-2016 – Section 2.2.12

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.

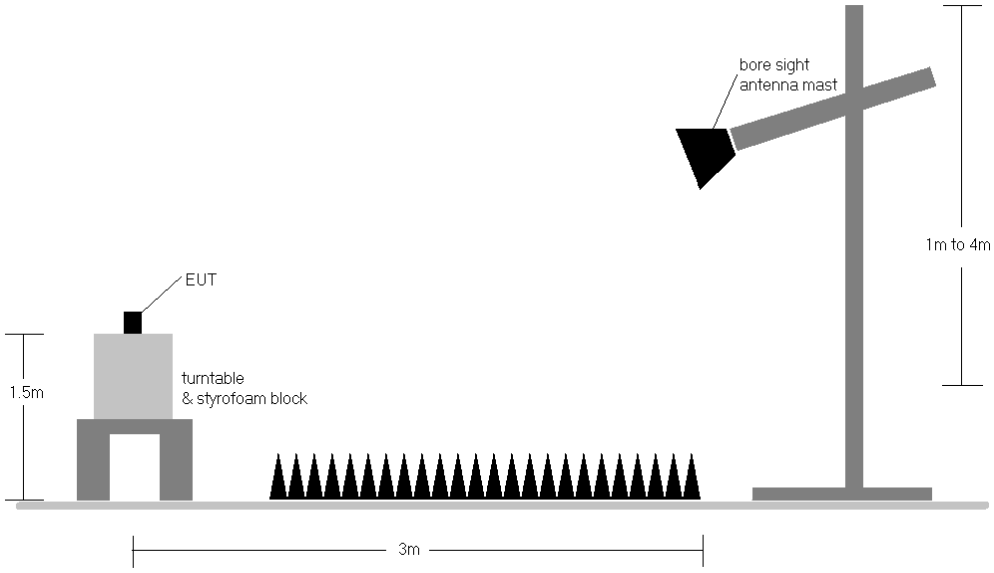


Figure 7-8. Test Instrument & Measurement Setup

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.

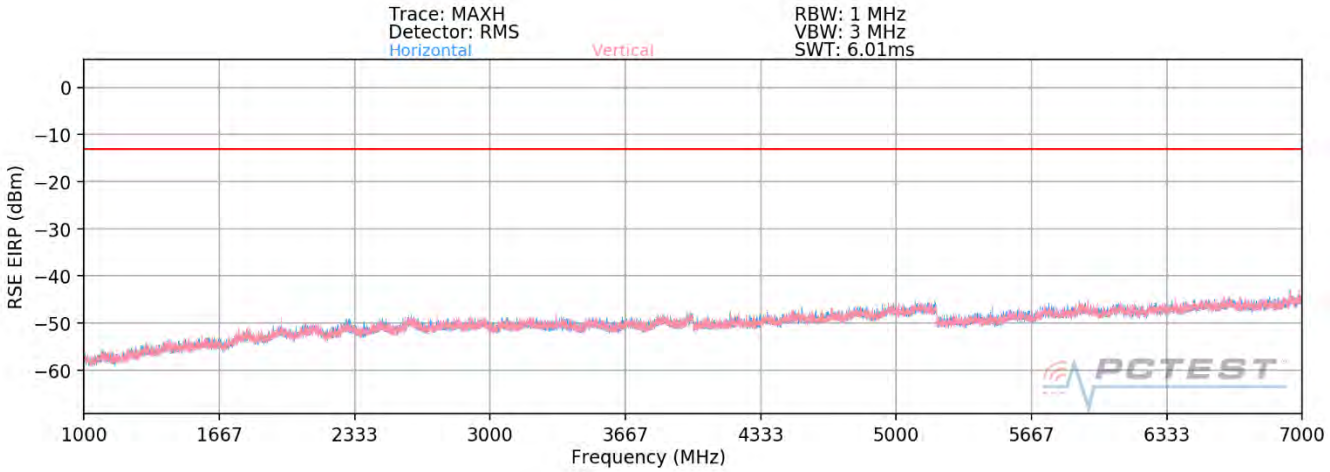
3) The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.

4) 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.

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

7.8.1 Antenna-0 Radiated Spurious Emissions Measurements

Band 71



Plot 7-712. Radiated Spurious Plot above 1GHz (Band 71)

OPERATING FREQUENCY:	673.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1346.00	V	-	-	-57.23	2.91	-54.32	-41.3
2019.00	V	-	-	-55.00	2.82	-52.18	-39.2

Table 7-24. Radiated Spurious Data (Band 71 – Low Channel)

OPERATING FREQUENCY:	680.50	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1361.00	V	-	-	-57.18	2.88	-54.31	-41.3
2041.50	V	-	-	-55.62	2.73	-52.89	-39.9
2722.00	V	-	-	-54.57	4.63	-49.95	-36.9

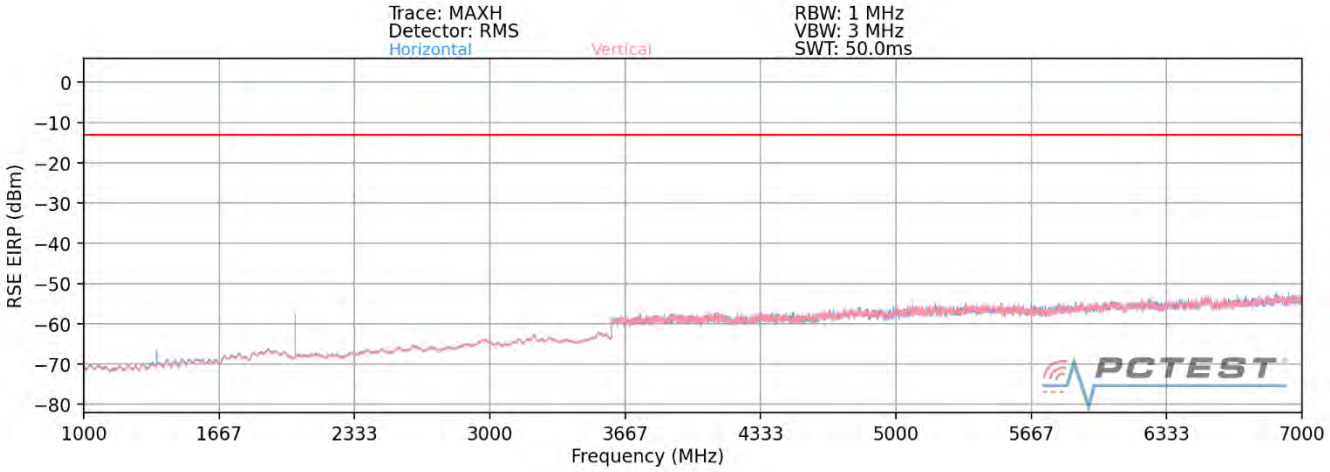
Table 7-25. Radiated Spurious Data (Band 71 – Mid Channel)

OPERATING FREQUENCY:	688.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

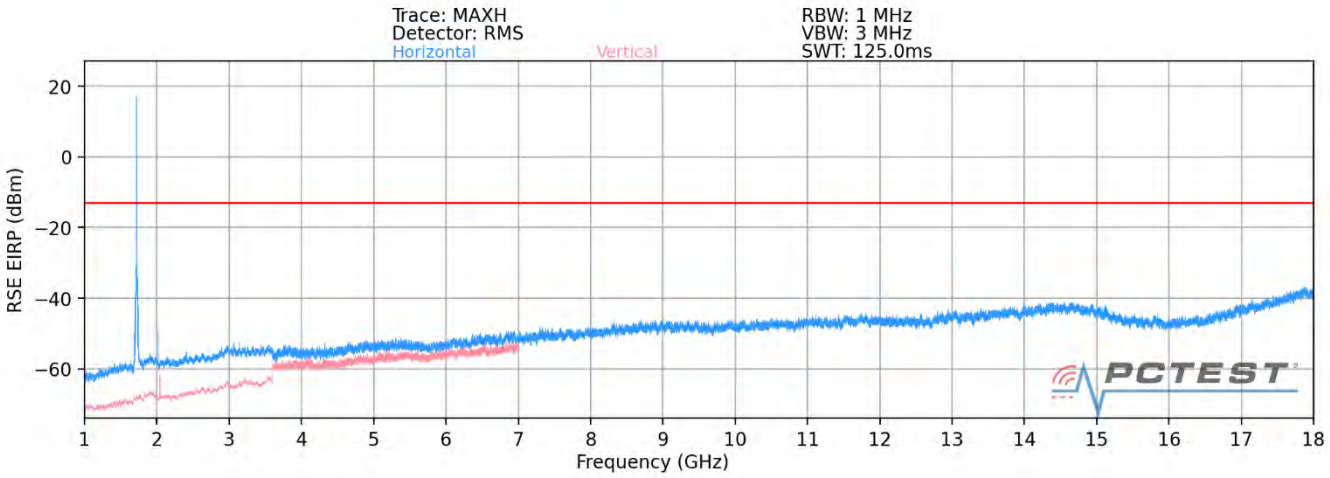
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1376.00	V	-	-	-56.86	2.64	-54.21	-41.2
2064.00	V	-	-	-52.73	2.82	-49.91	-36.9
2752.00	V	-	-	-54.31	4.60	-49.71	-36.7

Table 7-26. Radiated Spurious Data (Band 71 – High Channel)

Band n71



Plot 7-713. Radiated Spurious Plot above 1GHz (n71)



Plot 7-714. Radiated Spurious Plot above 1GHz (n71 + B2)

Bandwidth (MHz):	20
Frequency (MHz):	673.0
RB / Offset:	1 / 53
Mode:	SA

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1346.0	H	164	316	-69.21	-3.60	34.19	-61.07	-13.00	-48.07
2019.0	H	151	305	-69.43	-2.00	35.57	-59.68	-13.00	-46.68
2692.0	H	-	-	-73.41	-0.59	33.00	-62.25	-13.00	-49.25
3365.0	H	-	-	-74.37	1.94	34.57	-60.69	-13.00	-47.69
4038.0	H	-	-	-74.60	3.31	35.71	-59.55	-13.00	-46.55

Table 7-27. Radiated Spurious Data (n71 – Low Channel)

Bandwidth (MHz):	20
Frequency (MHz):	680.5
RB / Offset:	1 / 53
Mode:	SA

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1361.0	H	121	129	-72.25	-4.61	30.14	-65.12	-13.00	-52.12
2041.5	H	125	122	-62.49	-1.40	43.11	-52.15	-13.00	-39.15
2722.0	H	-	-	-74.27	-0.64	32.09	-63.17	-13.00	-50.17
3402.5	H	-	-	-74.87	1.91	34.04	-61.22	-13.00	-48.22
4083.0	H	-	-	-74.46	3.53	36.07	-59.18	-13.00	-46.18

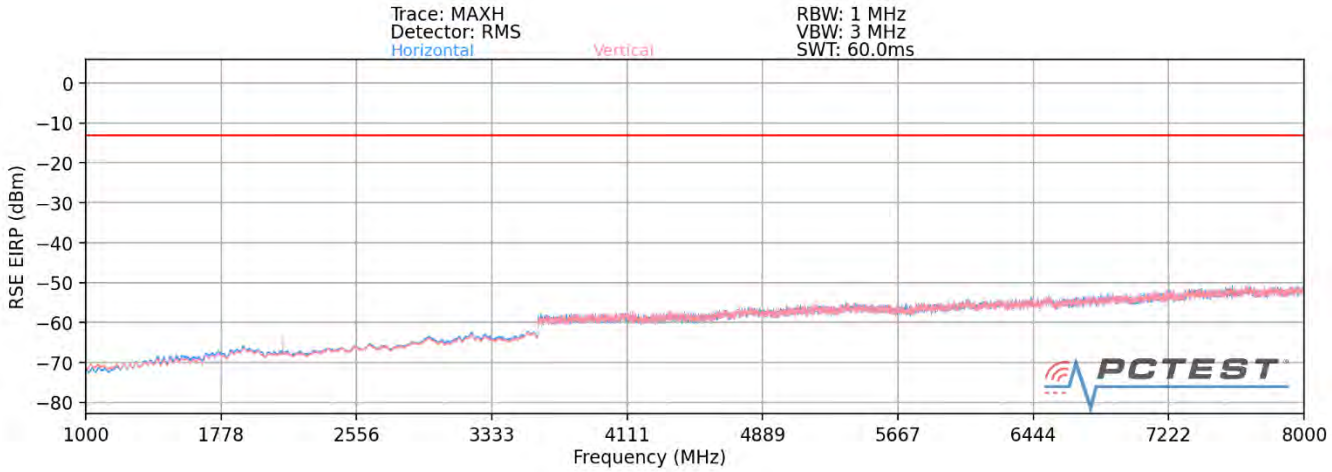
Table 7-28. Radiated Spurious Data (n71 – Mid Channel)

Bandwidth (MHz):	20
Frequency (MHz):	688.0
RB / Offset:	1 / 53
Mode:	SA

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1376.0	H	120	125	-70.58	-3.53	32.89	-62.37	-13.00	-49.37
2064.0	H	115	122	-71.89	-2.09	33.02	-62.24	-13.00	-49.24
2752.0	H	-	-	-74.47	-0.94	31.59	-63.67	-13.00	-50.67
3440.0	H	-	-	-75.35	1.65	33.30	-61.96	-13.00	-48.96
4128.0	H	-	-	-74.60	3.05	35.45	-59.81	-13.00	-46.81

Table 7-29. Radiated Spurious Data (n71 – High Channel)

Band 12



Plot 7-715. Radiated Spurious Plot above 1GHz (Band 12)

OPERATING FREQUENCY:	704.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	10.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1408.00	H	400	370	-59.13	2.30	-56.83	-43.8
2112.00	H	398	249	-56.63	3.12	-53.51	-40.5
2816.00	H	-	-	-58.39	4.82	-53.57	-40.6
3520.00	H	-	-	-59.07	6.48	-52.59	-39.6

Table 7-30. Radiated Spurious Data (Band 12 – Low Channel)

OPERATING FREQUENCY:	707.50	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	10.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1415.00	H	171	42	-60.69	2.39	-58.30	-45.3
2122.50	H	370	233	-53.67	3.14	-50.53	-37.5
2830.00	H	-	-	-59.37	4.87	-54.51	-41.5
3537.50	H	-	-	-60.43	6.45	-53.98	-41.0

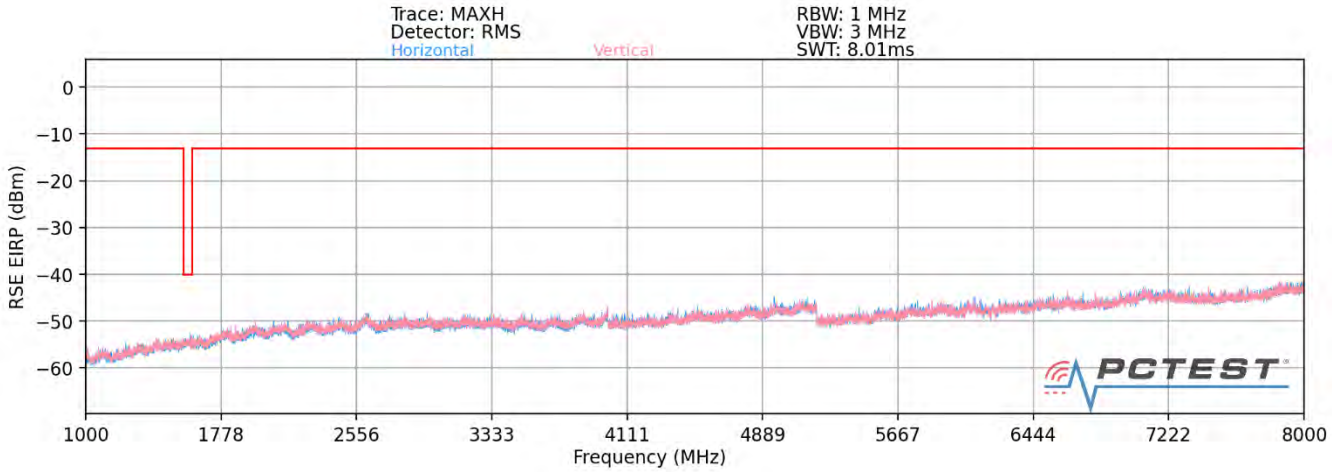
Table 7-31. Radiated Spurious Data (Band 12 – Mid Channel)

OPERATING FREQUENCY:	711.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	10.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1422.00	H	-	-	-61.23	2.53	-58.71	-45.7
2133.00	H	367	44	-53.16	3.11	-50.05	-37.1
2844.00	H	-	-	-58.61	4.91	-53.70	-40.7
3555.00	H	-	-	-59.42	6.46	-52.97	-40.0

Table 7-32. Radiated Spurious Data (Band 12 – High Channel)

Band 13



Plot 7-716. Radiated Spurious Plot above 1GHz (Band 13)

OPERATING FREQUENCY:	782.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	5.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
2346.00	V	398	213	-53.88	3.64	-50.24	-37.2
3128.00	V	-	-	-55.17	5.73	-49.43	-36.4
3910.00	V	-	-	-56.21	7.25	-48.96	-36.0

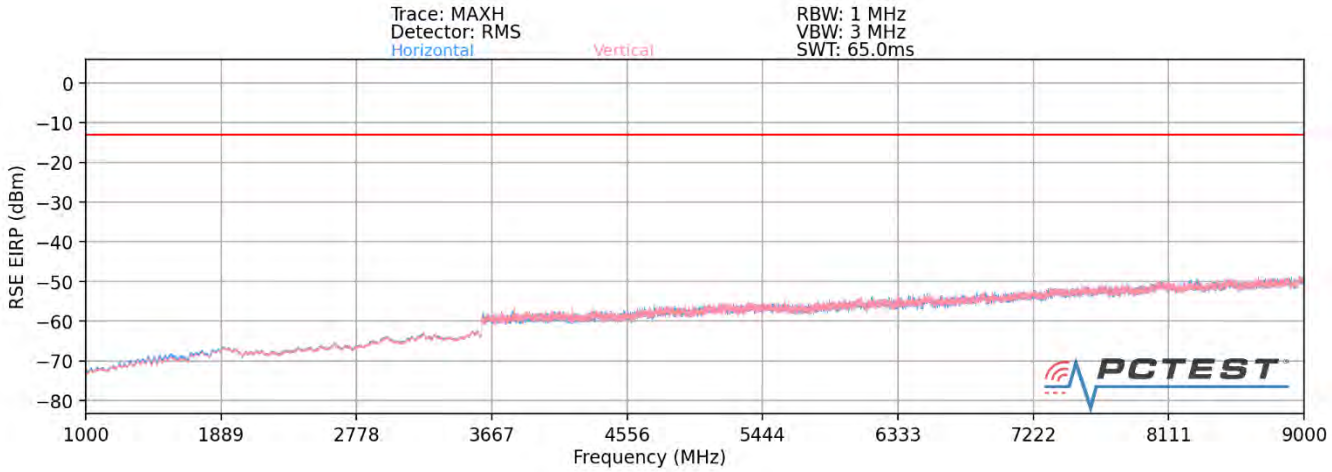
Table 7-33. Radiated Spurious Data (Band 13 – Mid Channel)

MODULATION SIGNAL:	QPSK	
BANDWIDTH:	5.00	MHz
DISTANCE:	3	meters
NARROWBAND EMISSION LIMIT:	-50	dBm
WIDEBAND EMISSION LIMIT:	-40	dBm/MHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1564.00	V	373	199	-55.79	2.93	-52.86	-12.9

Table 7-34. Radiated Spurious Data (Band 13 – 1559-1610MHz Band)

Band 5/26



Plot 7-717. Radiated Spurious Plot above 1GHz (Band 26/5)

OPERATING FREQUENCY:	829.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	10.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1658.00	V	275	97	-69.77	8.98	-60.79	-47.8
2487.00	V	397	291	-68.01	9.76	-58.25	-45.2
3316.00	V	-	-	-70.97	9.62	-61.35	-48.3

Table 7-35. Radiated Spurious Data (Band 26/5 – Low Channel)

OPERATING FREQUENCY:	836.50	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	10.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1673.00	V	261	125	-69.45	8.98	-60.47	-47.5
2509.50	V	159	259	-64.64	9.78	-54.86	-41.9
3346.00	V	-	-	-65.47	9.63	-55.84	-42.8
4182.50	V	-	-	-71.68	10.37	-61.31	-48.3

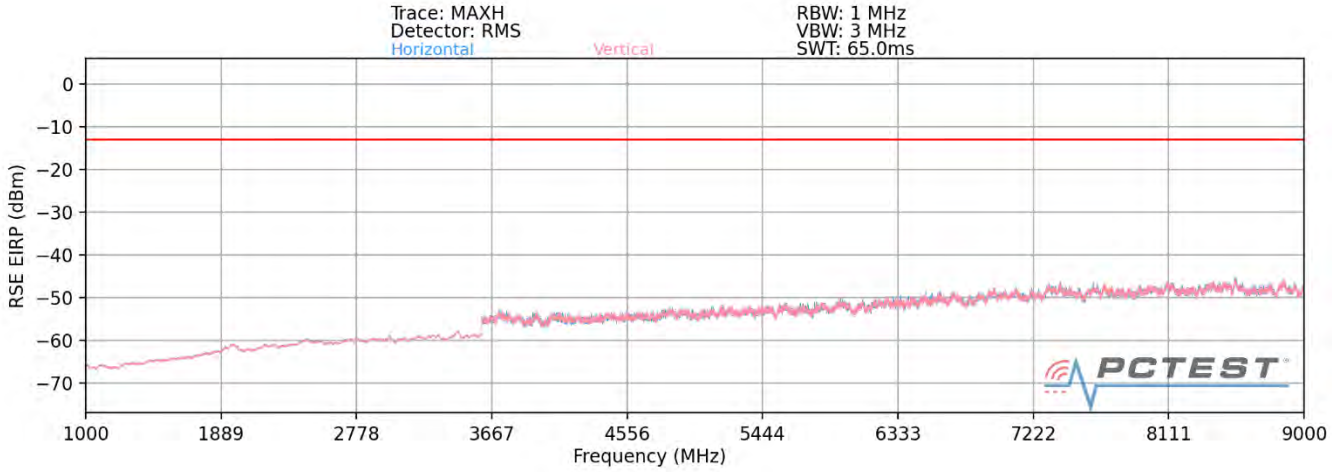
Table 7-36. Radiated Spurious Data (Band 26/5 – Mid Channel)

OPERATING FREQUENCY:	844.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	10.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

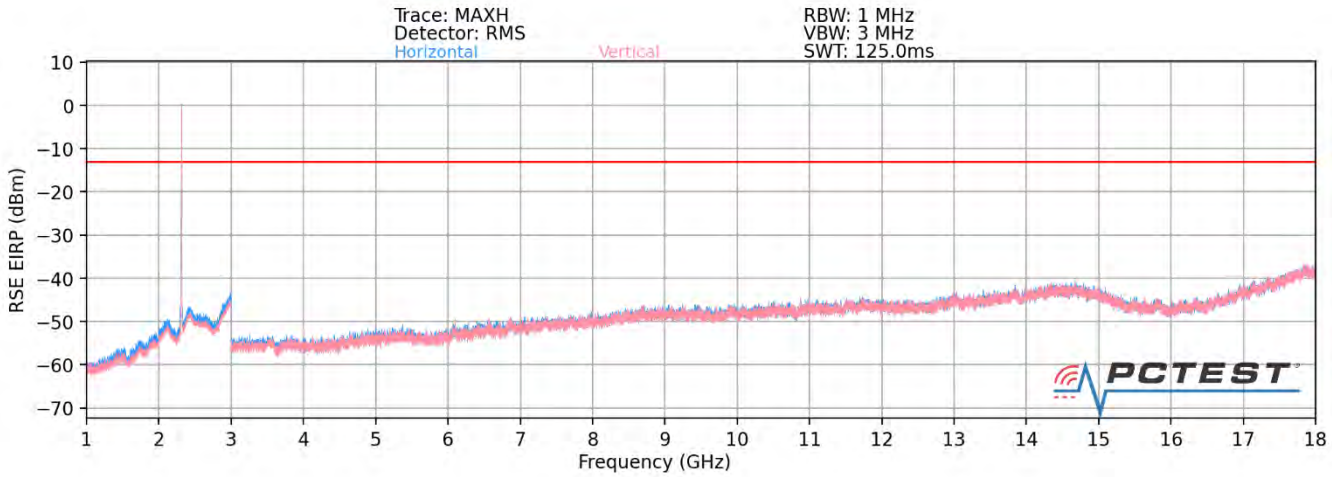
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1688.00	V	351	97	-69.05	8.98	-60.07	-47.1
2532.00	V	112	323	-64.96	9.78	-55.18	-42.2
3376.00	V	-	-	-65.85	9.70	-56.15	-43.2
4220.00	V	-	-	-72.03	10.47	-61.56	-48.6
5064.00	V	-	-	-70.27	10.83	-59.44	-46.4

Table 7-37. Radiated Spurious Data (Band 26/5 – High Channel)

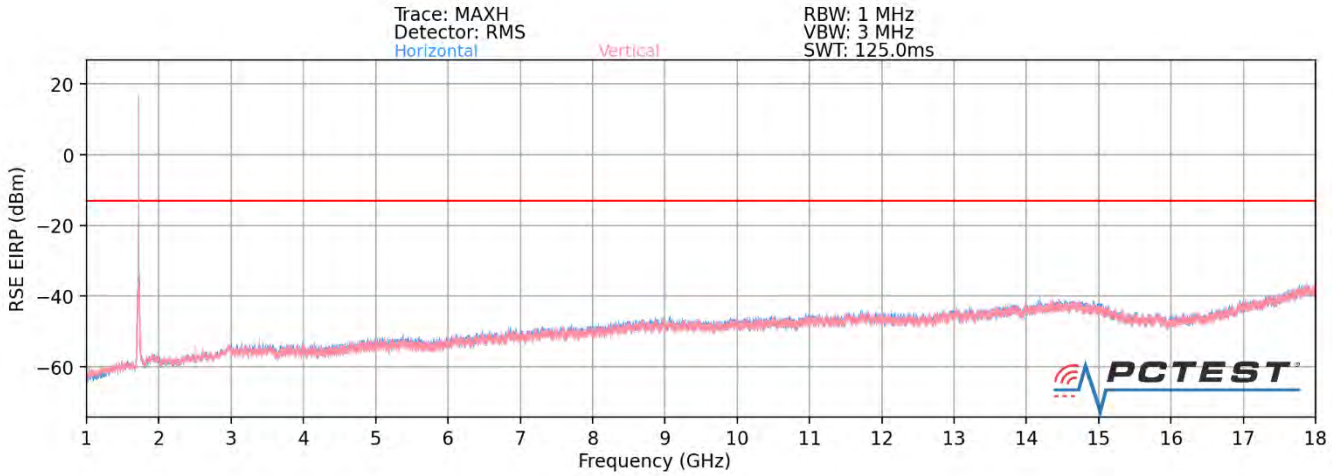
Band n5 (30/66 Anchors)



Plot 7-718. Radiated Spurious Plot above 1GHz (Band n5)



Plot 7-719. Radiated Spurious Plot above 1GHz (EN-DC Band n5 + B30)



Plot 7-720. Radiated Spurious Plot above 1GHz (EN-DC Band n5 + B66)

Bandwidth (MHz):	20
Frequency (MHz):	834.0
RB / Offset:	1 / 50
Mode:	Standalone

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1668.0	V	-	-	-72.99	-3.89	30.12	-65.14	-13.00	-52.14
2502.0	V	-	-	-74.32	-1.83	30.85	-64.41	-13.00	-51.41
3336.0	V	-	-	-75.62	1.97	33.35	-61.91	-13.00	-48.91

Table 7-38. Radiated Spurious Data (Band n5 – Low Channel)

Bandwidth (MHz):	20
Frequency (MHz):	836.5
RB / Offset:	1 / 50
Mode:	SA

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1673.0	V	-	-	-74.19	-3.56	29.25	-66.00	-13.00	-53.00
2509.5	V	-	-	-73.82	-1.74	31.44	-63.81	-13.00	-50.81
3346.0	V	-	-	-74.99	1.99	34.00	-61.26	-13.00	-48.26

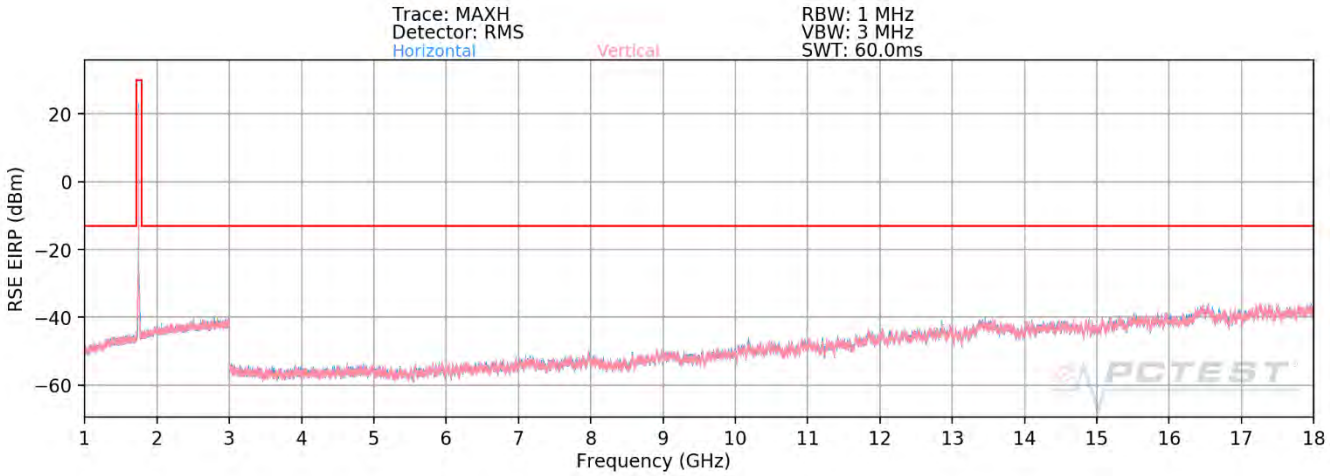
Table 7-39. Radiated Spurious Data (Band n5 – Mid Channel)

Bandwidth (MHz):	20
Frequency (MHz):	839.0
RB / Offset:	1 / 50
Mode:	SA

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1678.0	V	-	-	-73.96	-3.22	29.82	-65.44	-13.00	-52.44
2517.0	V	-	-	-74.10	-1.59	31.31	-63.95	-13.00	-50.95
3356.0	V	-	-	-75.34	2.13	33.79	-61.47	-13.00	-48.47

Table 7-40. Radiated Spurious Data (Band n5 – High Channel)

Band 66/4



Plot 7-721. Radiated Spurious Plot above 1GHz (Band 66/4)

OPERATING FREQUENCY:	1720.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3440.00	H	-	-	-71.74	9.87	-61.87	-48.9
5160.00	H	-	-	-68.39	10.74	-57.65	-44.7
6880.00	H	-	-	-66.86	11.71	-55.15	-42.1

Table 7-41. Radiated Spurious Data (Band 66/4 – Low Channel)

OPERATING FREQUENCY:	1745.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3490.00	H	-	-	-70.35	9.94	-60.41	-47.4
5235.00	H	-	-	-68.27	10.76	-57.51	-44.5
6980.00	H	-	-	-66.52	11.85	-54.66	-41.7

Table 7-42. Radiated Spurious Data (Band 66/4 – Mid Channel)

OPERATING FREQUENCY:	1770.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3540.00	H	-	-	-69.08	9.92	-59.15	-46.2
5310.00	H	-	-	-68.68	10.72	-57.96	-45.0
7080.00	H	-	-	-65.85	11.82	-54.03	-41.0

Table 7-43. Radiated Spurious Data (Band 66/4 – High Channel)