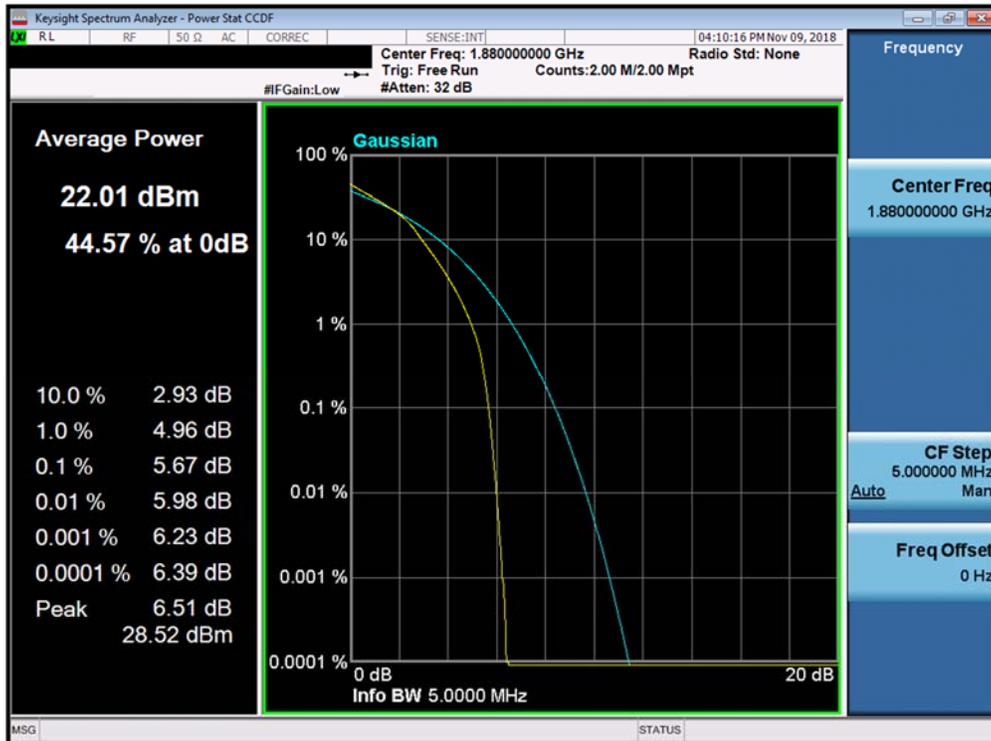
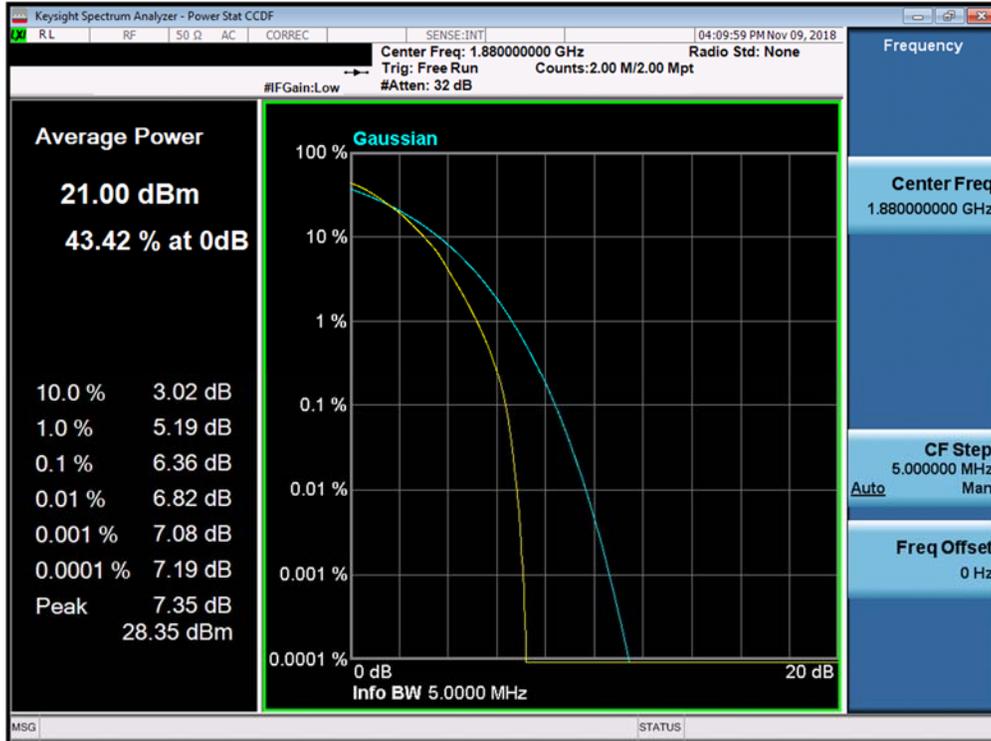


Plot 7-397. PAR Plot (Band 25/2 - 5.0MHz QPSK - Full RB Configuration)

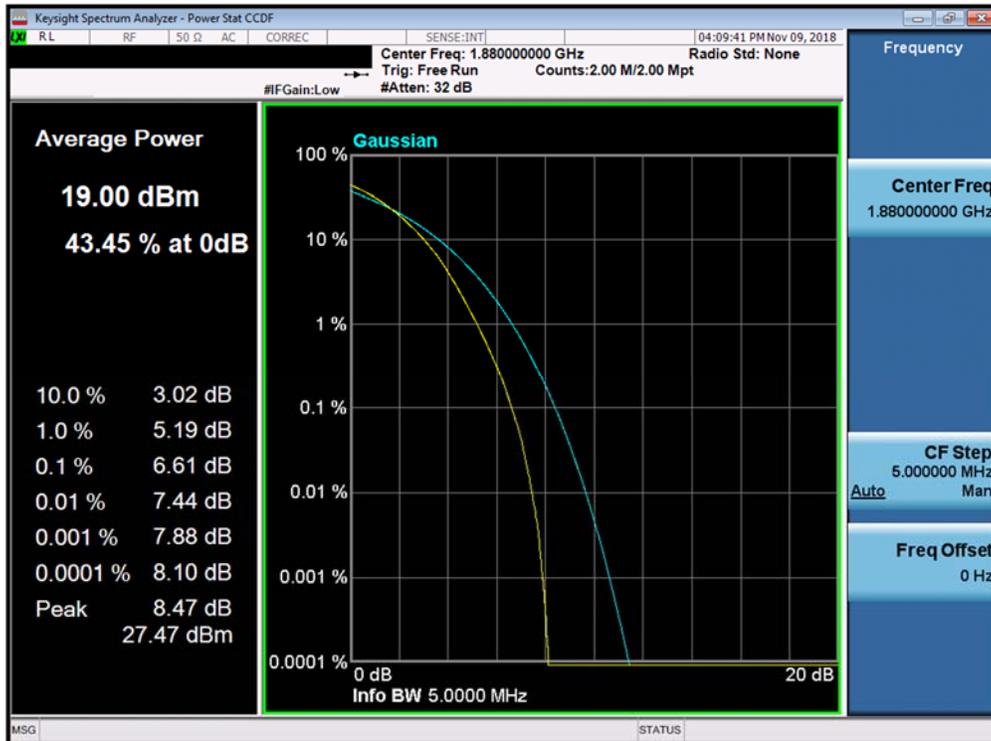


Plot 7-398. PAR Plot (Band 25/2 - 5.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 226 of 359

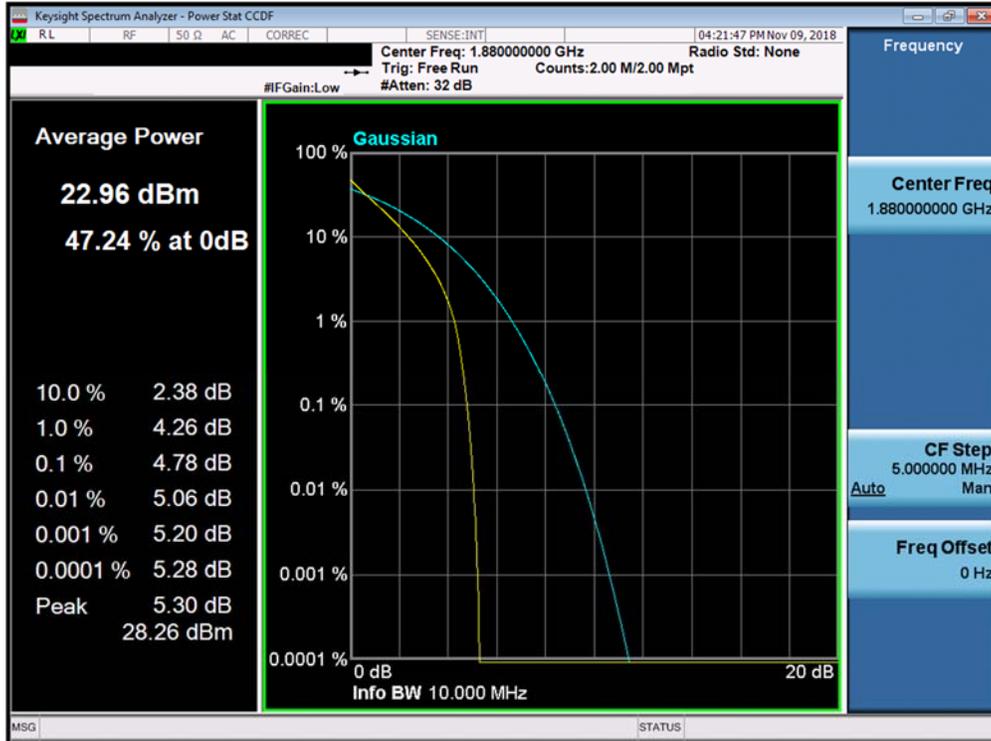


Plot 7-399. PAR Plot (Band 25/2 - 5.0MHz 64-QAM - Full RB Configuration)

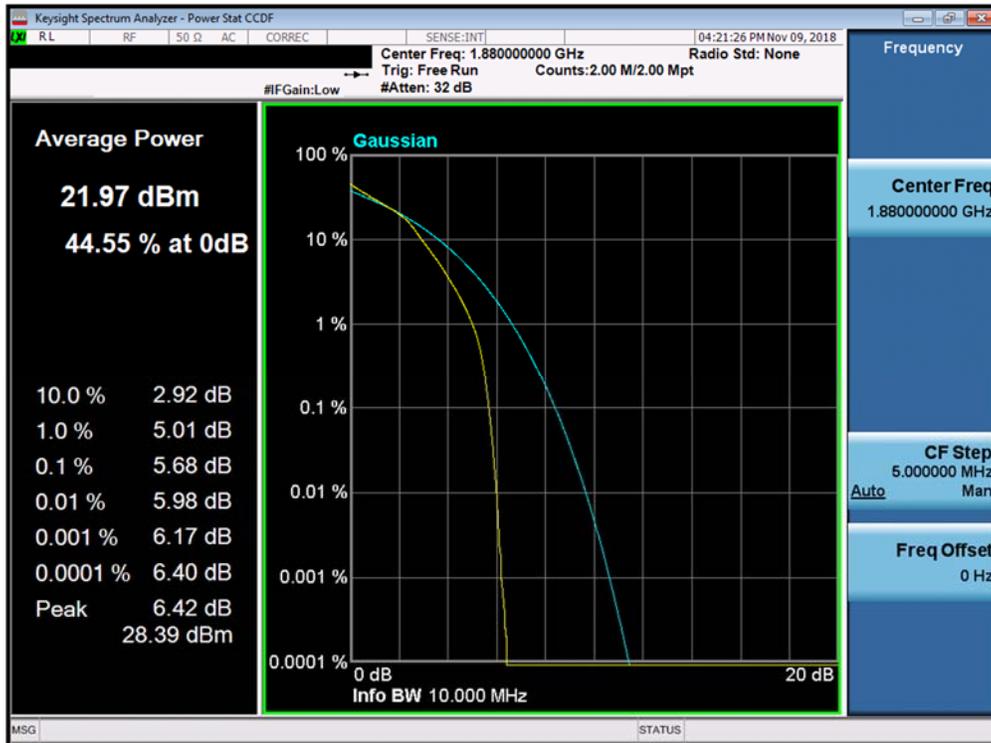


Plot 7-400. PAR Plot (Band 25/2 - 5.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 227 of 359

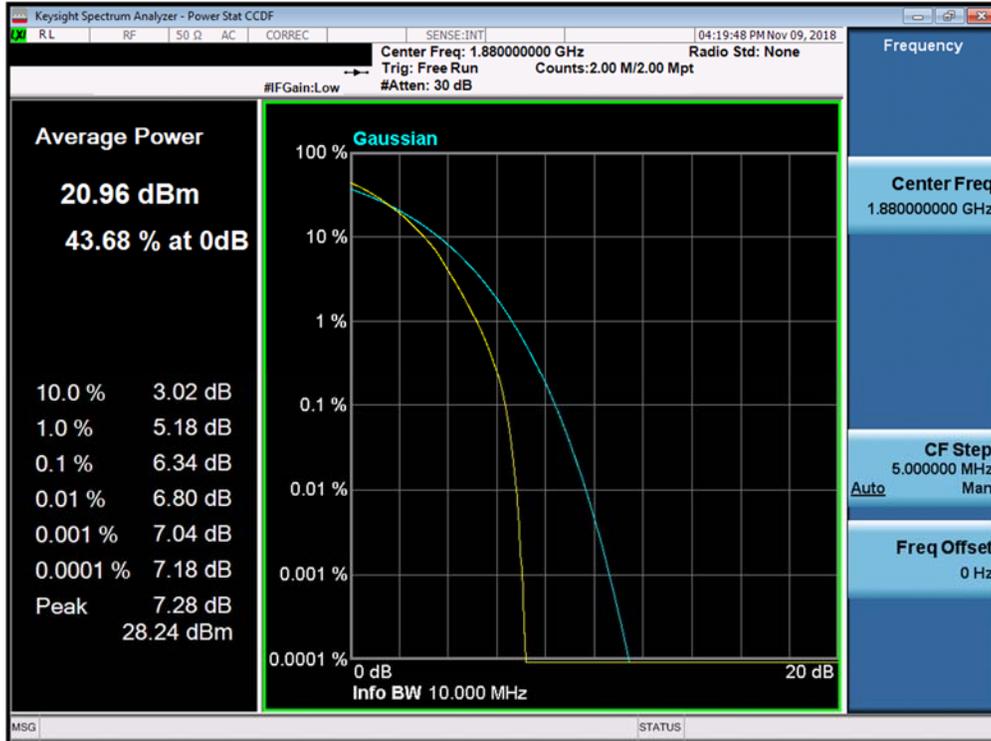


Plot 7-401. PAR Plot (Band 25/2 - 10.0MHz QPSK - Full RB Configuration)

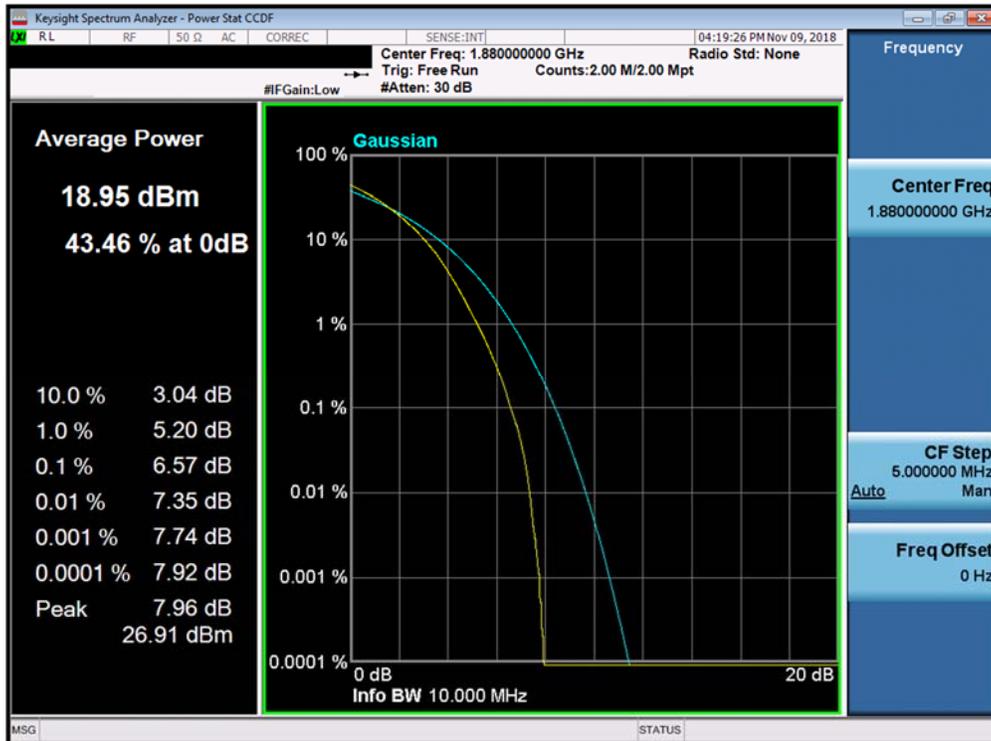


Plot 7-402. PAR Plot (Band 25/2 - 10.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 228 of 359

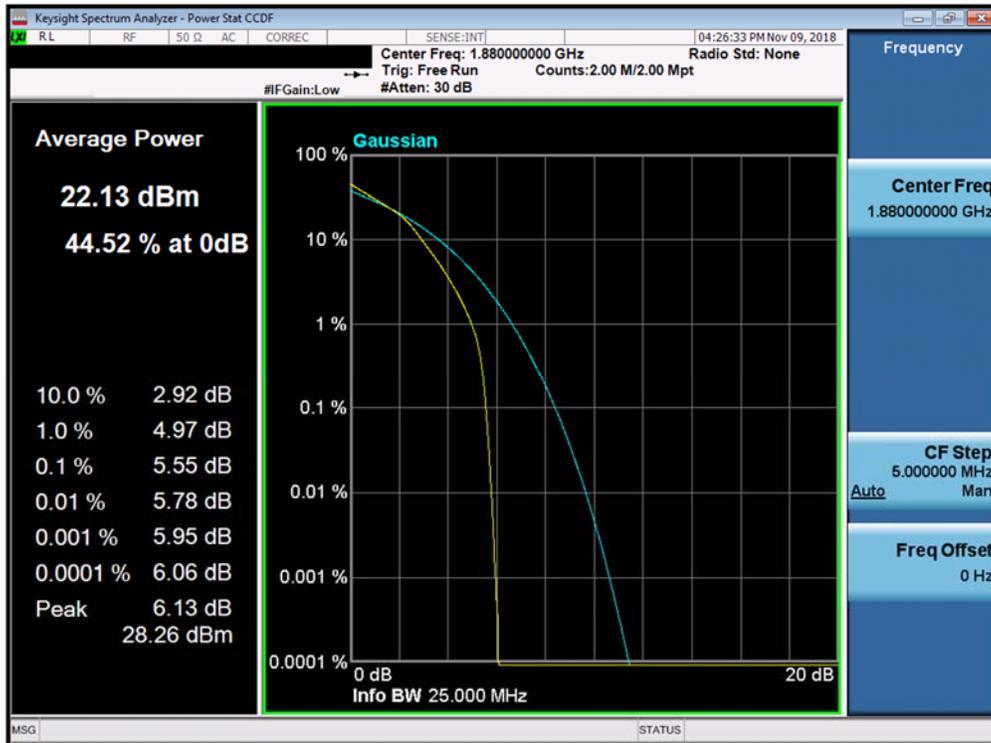
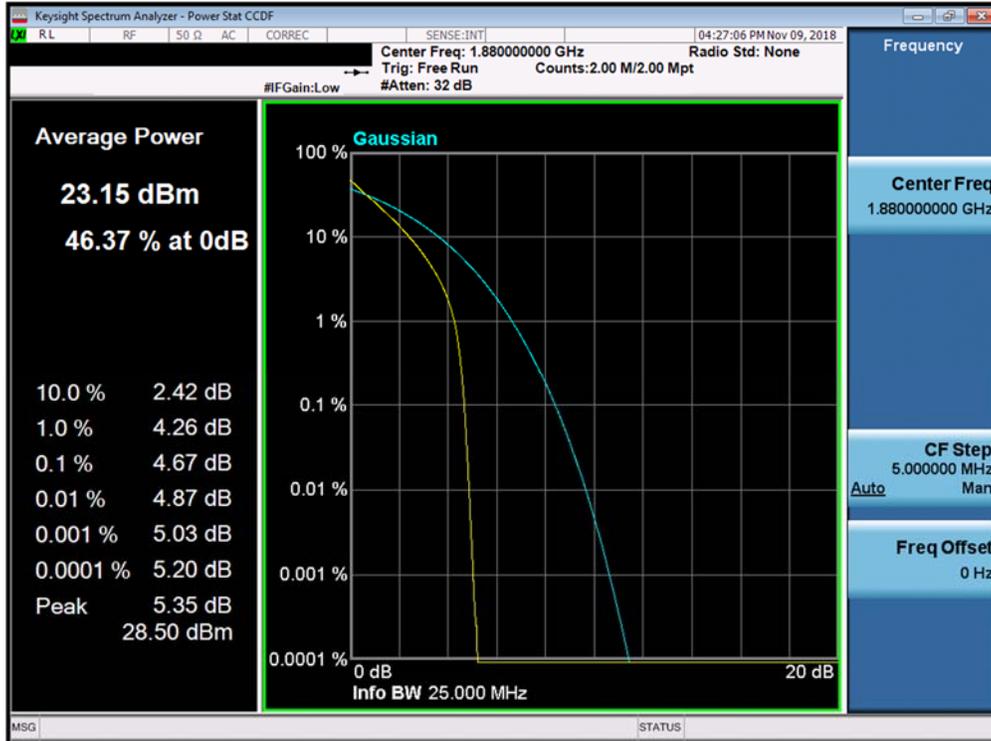


Plot 7-403. PAR Plot (Band 25/2 - 10.0MHz 64-QAM - Full RB Configuration)

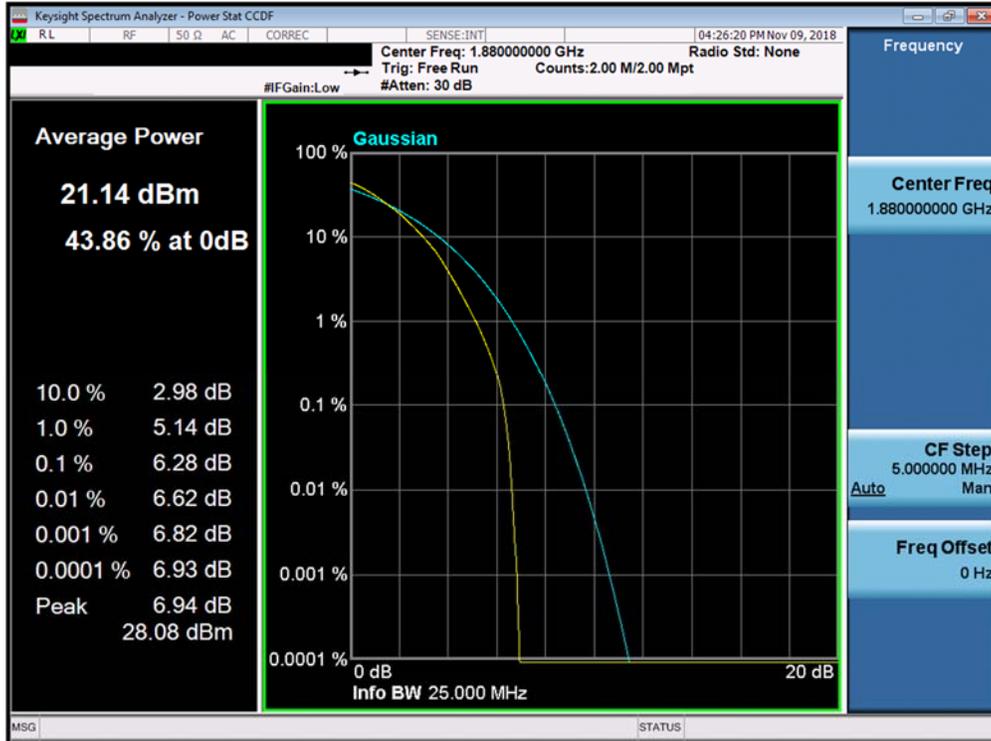


Plot 7-404. PAR Plot (Band 25/2 - 10.0MHz 256-QAM - Full RB Configuration)

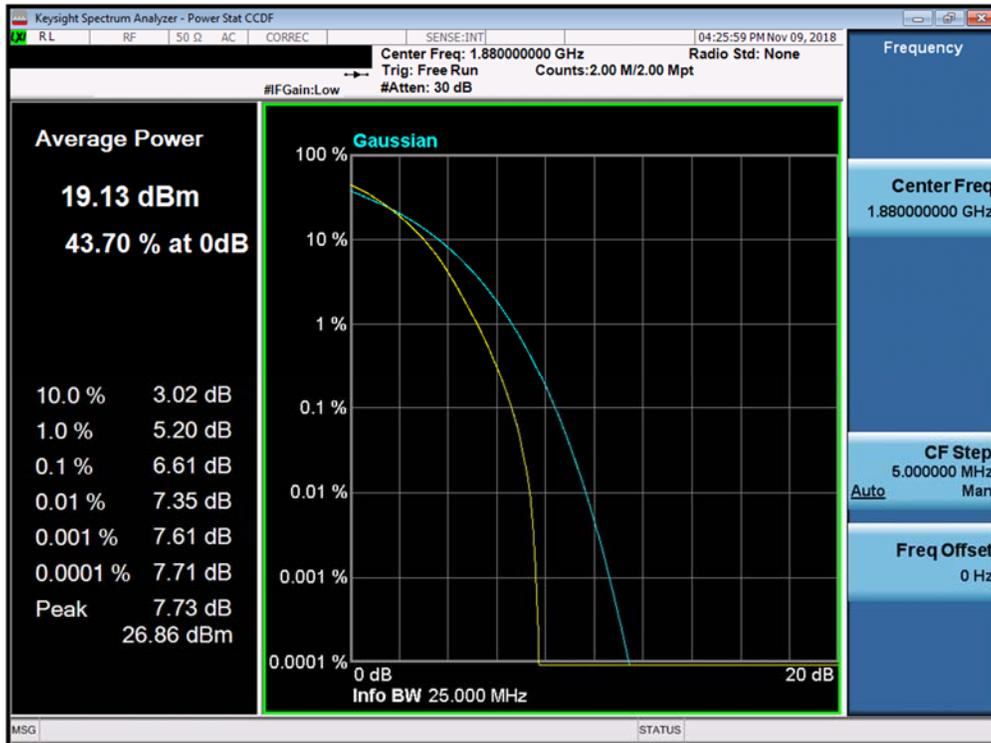
FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 229 of 359



FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 230 of 359

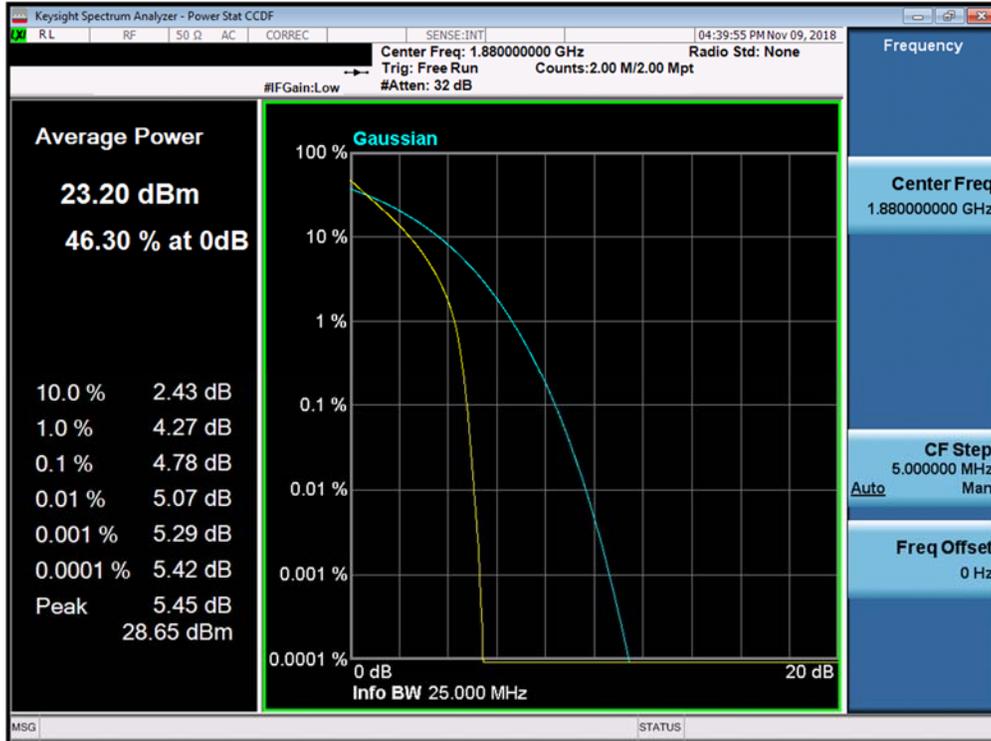


Plot 7-407. PAR Plot (Band 25/2 - 15.0MHz 64-QAM - Full RB Configuration)

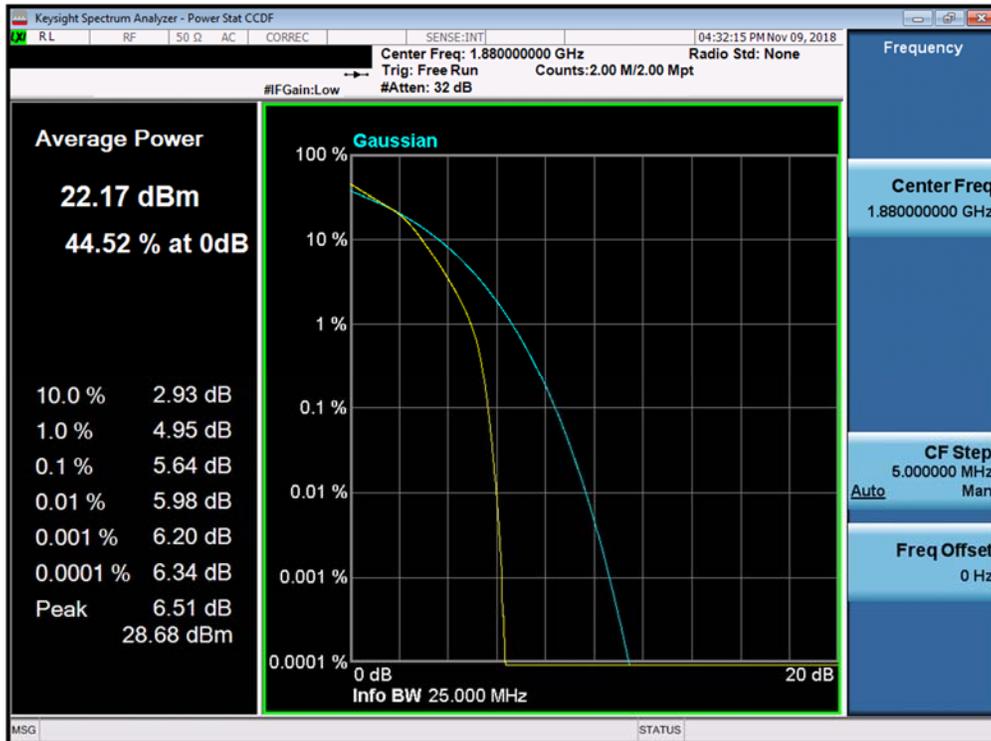


Plot 7-408. PAR Plot (Band 25/2 - 15.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 231 of 359

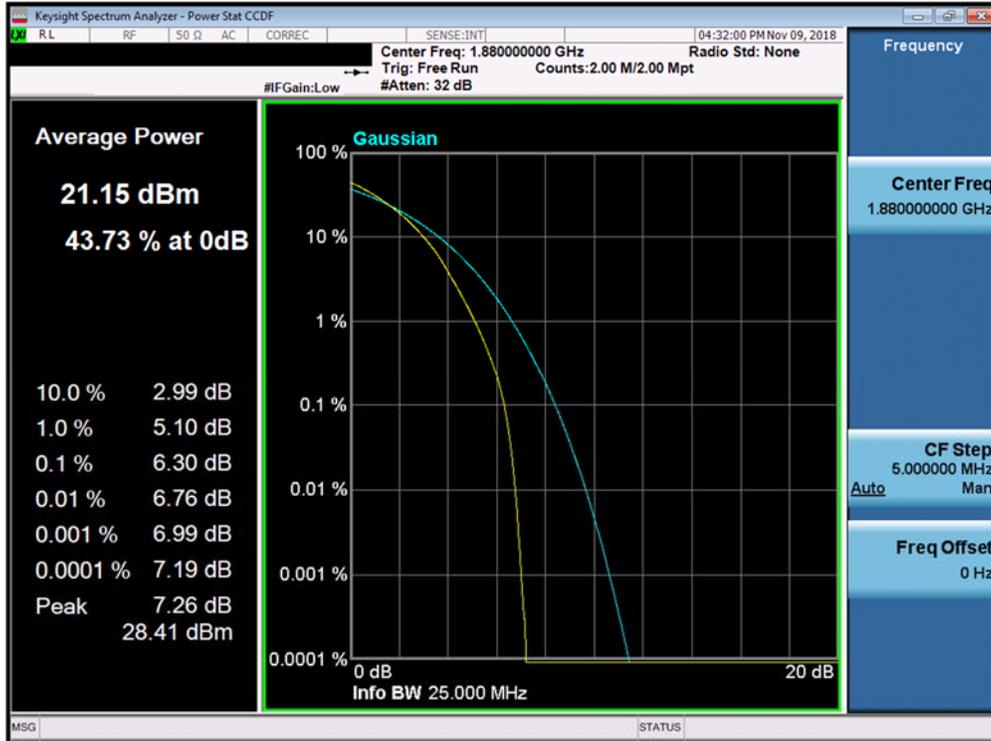


Plot 7-409. PAR Plot (Band 25/2 - 20.0MHz QPSK - Full RB Configuration)

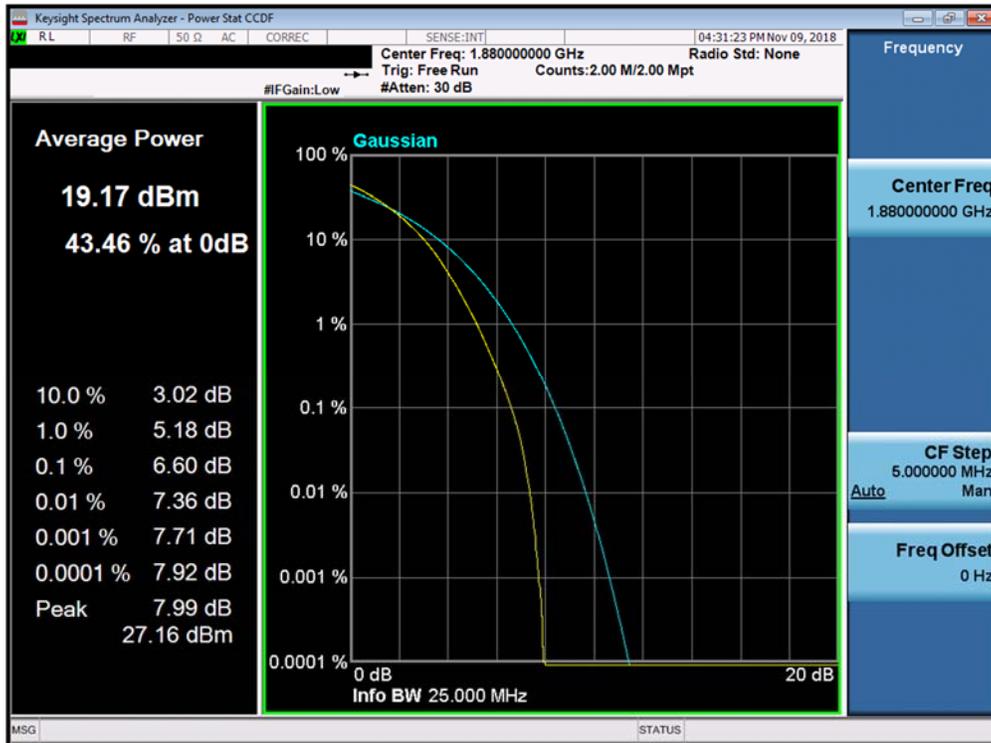


Plot 7-410. PAR Plot (Band 25/2 - 20.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 232 of 359



Plot 7-411. PAR Plot (Band 25/2 - 20.0MHz 64-QAM - Full RB Configuration)



Plot 7-412. PAR Plot (Band 25/2 - 20.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 233 of 359

7.6 Additional Maximum Power Reduction (A-MPR) §2.1046

Test Overview

A-MPR is implemented in this device when operating at Power Class 2 in LTE Band 41 per the A-MPR specification in 3GPP TS 36.101. The conducted powers are shown herein to cover the different A-MPR levels specified in the standard. Measurement equipment was set up with triggering/gating on the spectrum analyzer such that powers were measured only during the on-time of the signal.

Test Procedure Used

KDB 971168 D01 v03r01 – Section 5.2.2

Test Settings

1. Span = 2 x OBW to 3 x OBW
2. RBW = 1% to 5% of the OBW
3. Number of measurement points in sweep $\geq 2 \times \text{span} / \text{RBW}$
4. Sweep = auto-couple (less than transmission burst duration)
5. Detector = RMS (power)
6. Trigger was set to enable power measurements only on full power bursts
7. Trace was allowed to stabilize
8. Spectrum analyzer's "Channel Power" function was used to compute the power by integrating the spectrum across the OBW of the signal

Test Setup

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

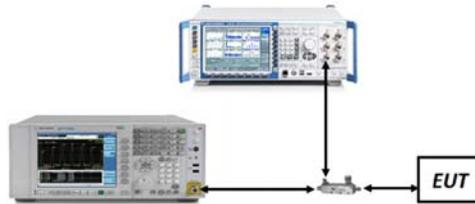


Figure 7-5. Test Instrument & Measurement Setup

Test Notes

None.

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 234 of 359

Test Case	NS	MCC	MNC	Channel BW [MHz]	Channel Frequency [MHz]	Modulation	RB Size	RB Offset	MPR [dB]	A-MPR [dB]	Measured Power [dBm]
1	01	312	530	5	2498.5	QPSK	1	0	0	≤ 3	23.81
						16-QAM			≤ 1		23.11
						64-QAM			≤ 2		22.34
						256-QAM			≤ 4		20.27
2				5	2498.5	QPSK	1	9	0	0	26.89
						16-QAM			≤ 1		26.18
						64-QAM			≤ 2		25.46
						256-QAM			≤ 4		23.90
3				10	2501	QPSK	1	0	0	≤ 5	26.79
						16-QAM			≤ 1		25.98
						64-QAM			≤ 2		24.85
						256-QAM			≤ 4		22.87
4				10	2501	QPSK	20	0	0	≤ 2	23.81
						16-QAM			≤ 1		22.83
						64-QAM			≤ 2		21.83
						256-QAM			≤ 4		19.58
5				10	2501	QPSK	50	0	0	≤ 3	22.70
	16-QAM	≤ 1	21.73								
	64-QAM	≤ 2	20.83								
	256-QAM	≤ 4	18.69								
6	10	2501	QPSK	25	20	0	≤ 1	24.75			
			16-QAM			≤ 1		23.81			
			64-QAM			≤ 2		22.73			
			256-QAM			≤ 4		20.64			
7	10	2501	QPSK	1	36	0	0	26.79			
			16-QAM			≤ 1		25.99			
			64-QAM			≤ 2		24.86			
			256-QAM			≤ 4		22.72			
8	15	2503.5	QPSK	1	0	0	≤ 5	26.82			
			16-QAM			≤ 1		26.24			
			64-QAM			≤ 2		24.88			
			256-QAM			≤ 4		22.68			
9	15	2503.5	QPSK	20	0	0	≤ 2	24.05			
			16-QAM			≤ 1		22.93			
			64-QAM			≤ 2		22.05			
			256-QAM			≤ 4		20.09			
10	15	2503.5	QPSK	75	0	0	≤ 4	22.07			
			16-QAM			≤ 1		20.93			
			64-QAM			≤ 2		19.90			
			256-QAM			≤ 4		17.68			
11	15	2503.5	QPSK	50	15	0	≤ 3	22.88			
			16-QAM			≤ 1		21.86			
			64-QAM			≤ 2		20.88			
			256-QAM			≤ 4		18.67			
12	15	2503.5	QPSK	1	60	0	0	26.94			
			16-QAM			≤ 1		26.01			
			64-QAM			≤ 2		24.91			
			256-QAM			≤ 4		22.65			
13	20	2506	QPSK	1	0	0	≤ 5	26.91			
			16-QAM			≤ 1		26.34			
			64-QAM			≤ 2		25.64			
			256-QAM			≤ 4		23.37			
14	20	2506	QPSK	20	0	0	≤ 2	24.08			
			16-QAM			≤ 1		23.12			
			64-QAM			≤ 2		22.05			
			256-QAM			≤ 4		19.87			
15	20	2506	QPSK	100	0	0	≤ 4	22.95			
			16-QAM			≤ 1		21.86			
			64-QAM			≤ 2		20.94			
			256-QAM			≤ 4		19.95			
16	20	2506	QPSK	75	24	0	≤ 3	17.67			
			16-QAM			≤ 1		21.85			
			64-QAM			≤ 2		20.89			
			256-QAM			≤ 4		18.67			
17	20	2506	QPSK	1	77	0	0	26.93			
			16-QAM			≤ 1		26.29			
			64-QAM			≤ 2		25.53			
			256-QAM			≤ 4		23.28			
18	01	311	490	5	2498.5	QPSK	1	0	0	≤ 3	23.79
						16-QAM			≤ 1		23.15
						64-QAM			≤ 2		21.84
						256-QAM			≤ 4		19.60
19	01	001	01	5	2498.5	QPSK	1	0	0	0	26.87
						16-QAM			≤ 1		26.33
						64-QAM			≤ 2		25.24
						256-QAM			≤ 4		23.08

Table 7-3. A-MPR Conducted Power Measurements

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset	Page 235 of 359	

7.7 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 41, the minimum permissible attenuation level of any spurious emission is $55 + 10\log_{10}(P_{[Watts]})$.

For Band 5 and 66, the minimum permissible attenuation level of any spurious emission is $43 + 10\log_{10}(P_{[Watts]})$.

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.

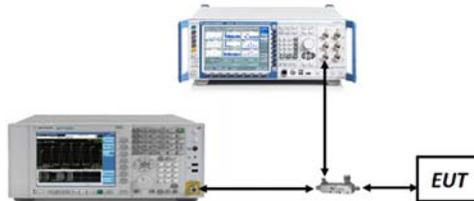


Figure 7-6. Test Instrument & Measurement Setup

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset	Page 236 of 359	

Test Notes

1. Uplink carrier aggregation is only supported in this EUT while operating in Power Class 2 and 3.
2. 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, as shown in Table 7-4, 7-6, 7-8, and 7-10 below, with both carriers set to transmit using 1RB.
3. 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.

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset	Page 237 of 359	

Uplink CA Configuration 5B

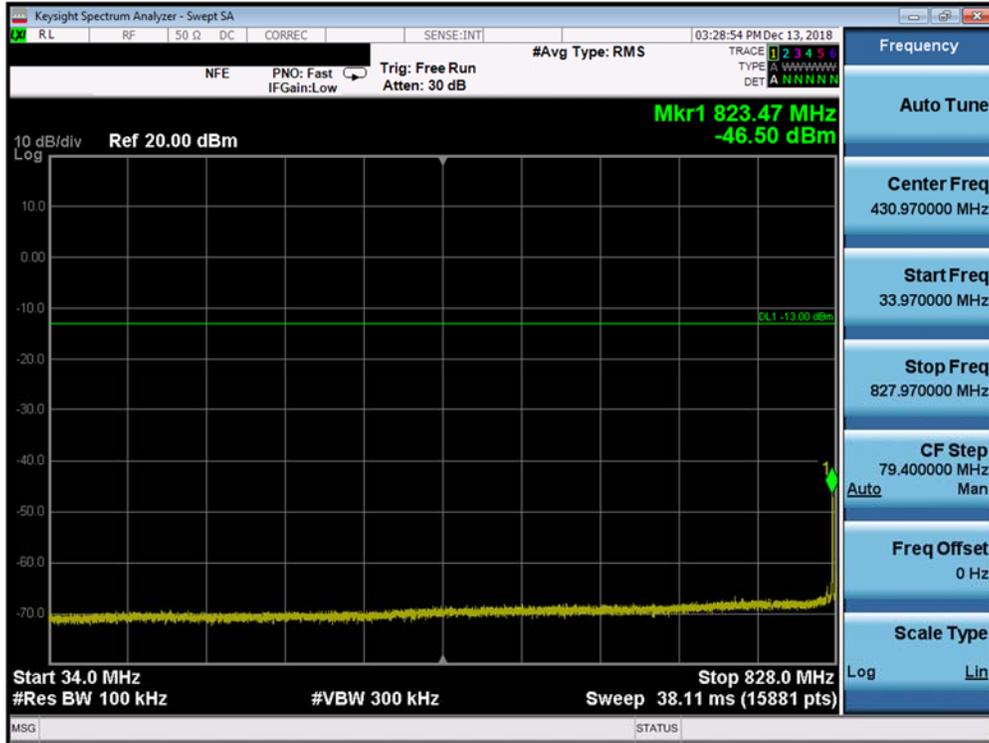
Power State	PCC							SCC							Power ULCA Tx.Power (dBm)
	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	
Max	LTE B5	3	20415	825.5	QPSK	1	14	LTE B5	5	20454	829.4	QPSK	1	0	23.81
Max	LTE B5	5	20425	826.5	QPSK	1	24	LTE B5	3	20464	830.4	QPSK	1	0	23.89
Max	LTE B5	5	20525	836.5	QPSK	1	24	LTE B5	10	20597	843.7	QPSK	1	0	23.27
Max	LTE B5	10	20525	836.5	QPSK	1	49	LTE B5	5	20597	843.7	QPSK	1	0	23.28
Max	LTE B5	10	20525	836.5	QPSK	1	49	LTE B5	10	20624	846.4	QPSK	1	0	24.02
Max	LTE B5	3	20525	836.5	QPSK	1	14	LTE B5	5	20564	840.4	QPSK	1	0	24.32
Max	LTE B5	5	20525	836.5	QPSK	1	24	LTE B5	3	20564	840.4	QPSK	1	0	23.71
Max	LTE B5	5	20525	836.5	QPSK	1	24	LTE B5	10	20597	843.7	QPSK	1	0	23.84
Max	LTE B5	10	20525	836.5	QPSK	1	49	LTE B5	5	20597	843.7	QPSK	1	0	23.77
Max	LTE B5	10	20525	836.5	QPSK	1	49	LTE B5	10	20624	846.4	QPSK	1	0	23.90
Max	LTE B5	3	20635	847.5	QPSK	1	0	LTE B5	5	20596	843.6	QPSK	1	24	23.73
Max	LTE B5	5	20625	846.5	QPSK	1	0	LTE B5	3	20586	842.6	QPSK	1	14	23.99
Max	LTE B5	5	20625	846.5	QPSK	1	0	LTE B5	10	20553	839.3	QPSK	1	49	23.34
Max	LTE B5	10	20600	844	QPSK	1	0	LTE B5	5	20528	836.8	QPSK	1	24	23.53
Max	LTE B5	10	20600	844	QPSK	1	0	LTE B5	10	20501	834.1	QPSK	1	49	24.21

Table 7-4. Conducted Powers (B5 – with Various Combinations of PCC: RB Size 1, SCC: RB Size 1)

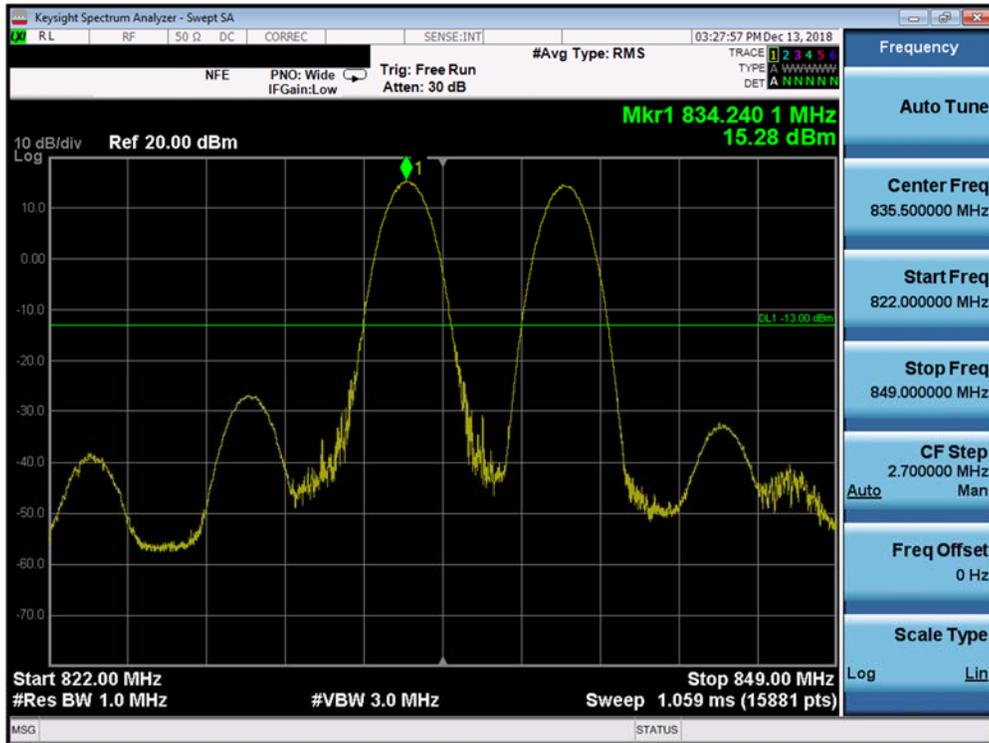
Power State	PCC							SCC							Power ULCA Tx.Power (dBm)
	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	
Max	LTE B5	10	20450	829	QPSK	1	49	LTE B5	10	20549	838.9	QPSK	1	49	16.51
Max	LTE B5	10	20450	829	QPSK	1	0	LTE B5	10	20549	838.9	QPSK	1	49	16.00
Max	LTE B5	10	20450	829	QPSK	1	25	LTE B5	10	20549	838.9	QPSK	1	25	16.52
Max	LTE B5	10	20450	829	QPSK	1	49	LTE B5	10	20549	838.9	QPSK	1	0	25.67
Max	LTE B5	10	20450	829	QPSK	50	0	LTE B5	10	20549	838.9	QPSK	50	0	24.52
Max	LTE B5	10	20450	829	16-QAM	50	0	LTE B5	10	20549	838.9	16-QAM	50	0	23.55
Max	LTE B5	10	20450	829	64-QAM	50	0	LTE B5	10	20549	838.9	64-QAM	50	0	22.53
Max	LTE B5	10	20450	829	256-QAM	50	0	LTE B5	10	20549	838.9	256-QAM	50	0	21.23

Table 7-5. Conducted Powers (B5 with Various Combinations for 10+10MHz Channel Bandwidth)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset	Page 238 of 359	

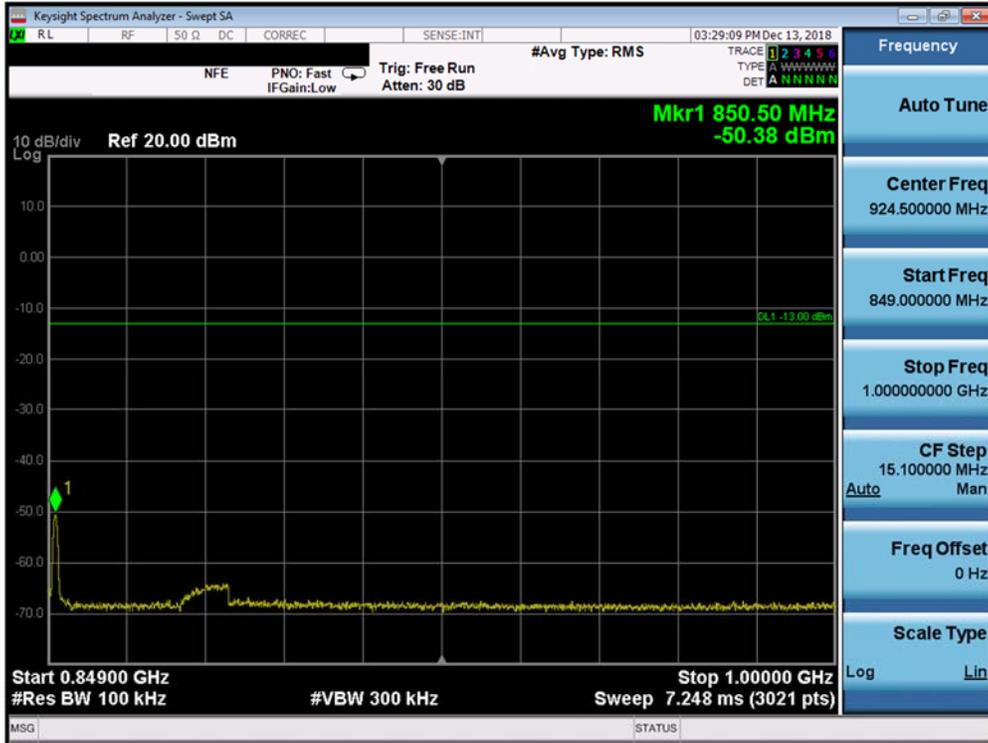


Plot 7-413. Conducted Spurious Plot (Band 5 – QPSK – 3MHz PCC 1/14, 5MHz SCC 1/0 – Mid Channel)

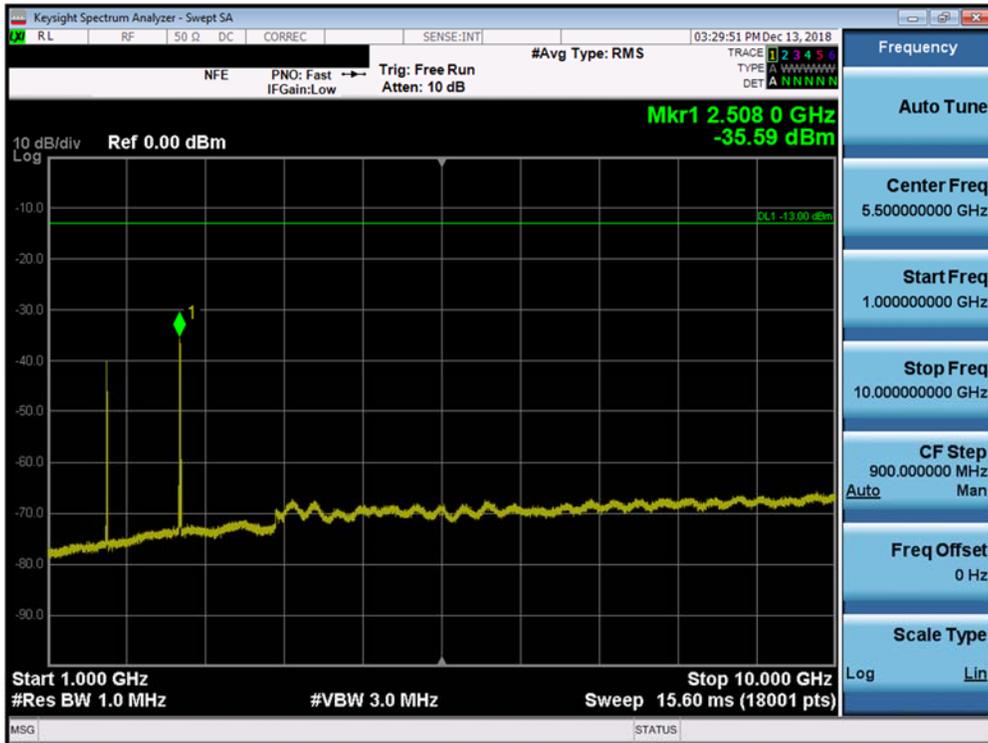


Plot 7-414. Conducted Spurious Plot (Band 5 – QPSK – 3MHz PCC 1/14, 5MHz SCC 1/0 – Mid Channel)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 239 of 359

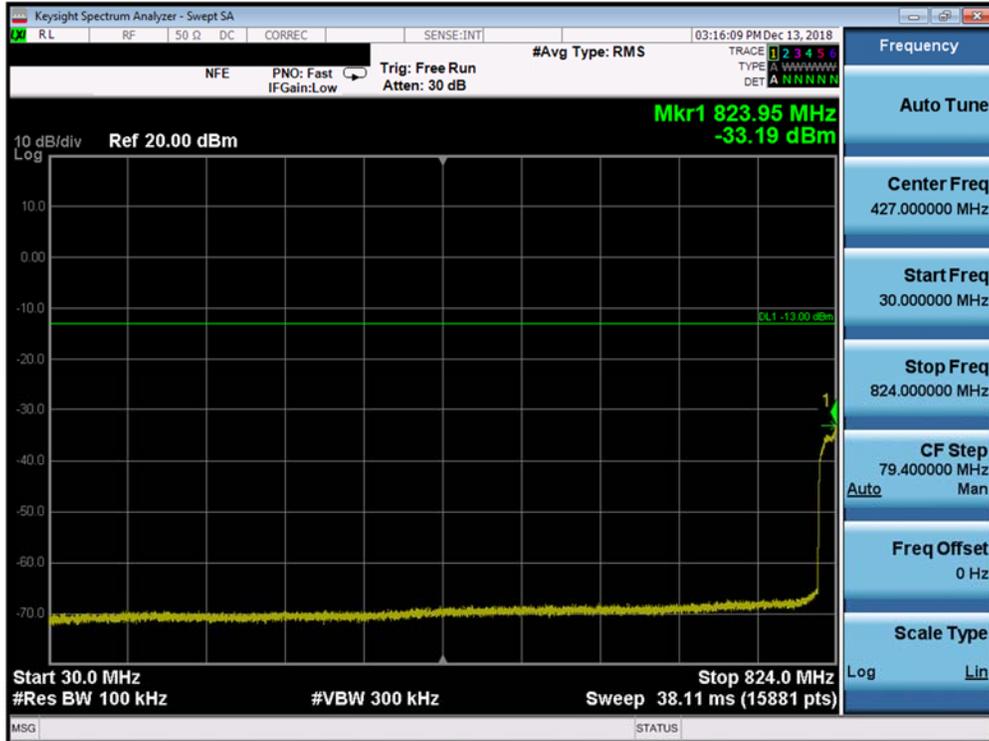


Plot 7-415. Conducted Spurious Plot (Band 5 –QPSK – 3MHz PCC 1/14, 5MHz SCC 1/0 – Mid Channel)

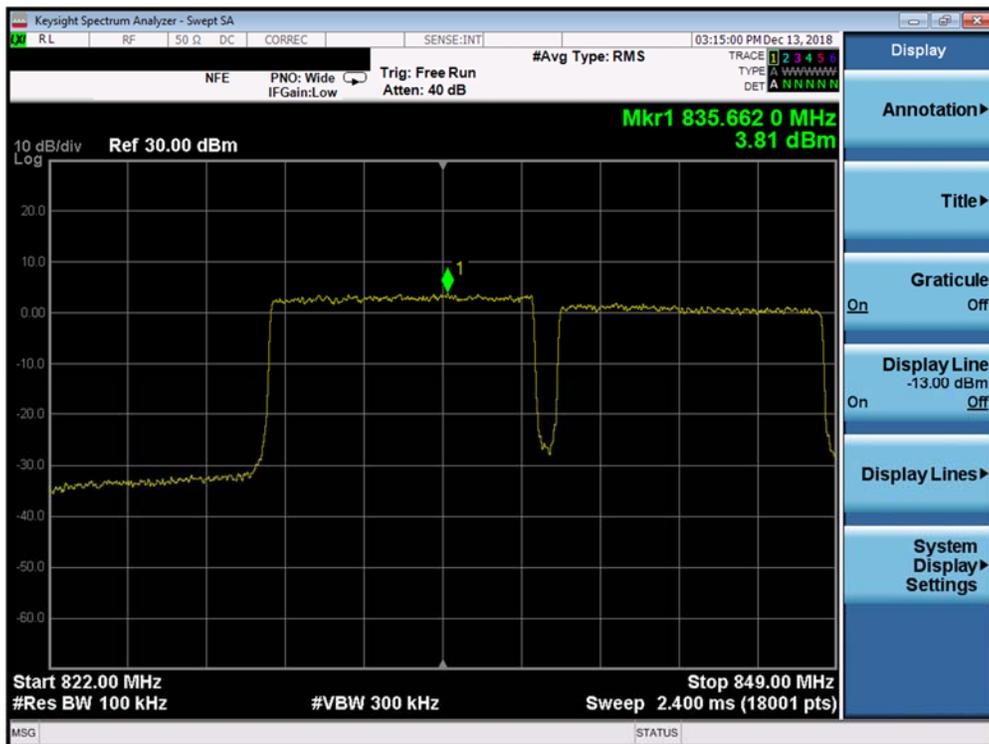


Plot 7-416. Conducted Spurious Plot (Band 5 –QPSK – 3MHz PCC 1/14, 5MHz SCC 1/0 – Mid Channel)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 240 of 359

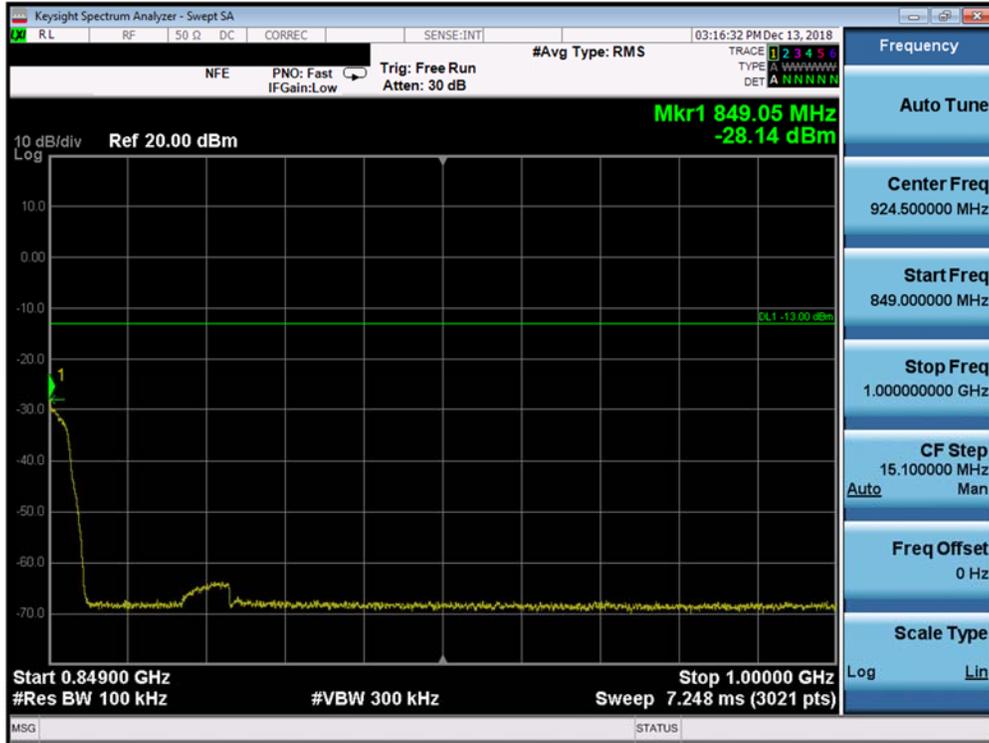


Plot 7-417. Conducted Spurious Plot (Band 5 – QPSK – 10MHz PCC 50/0, 10MHz SCC 50/0 – Mid Channel)

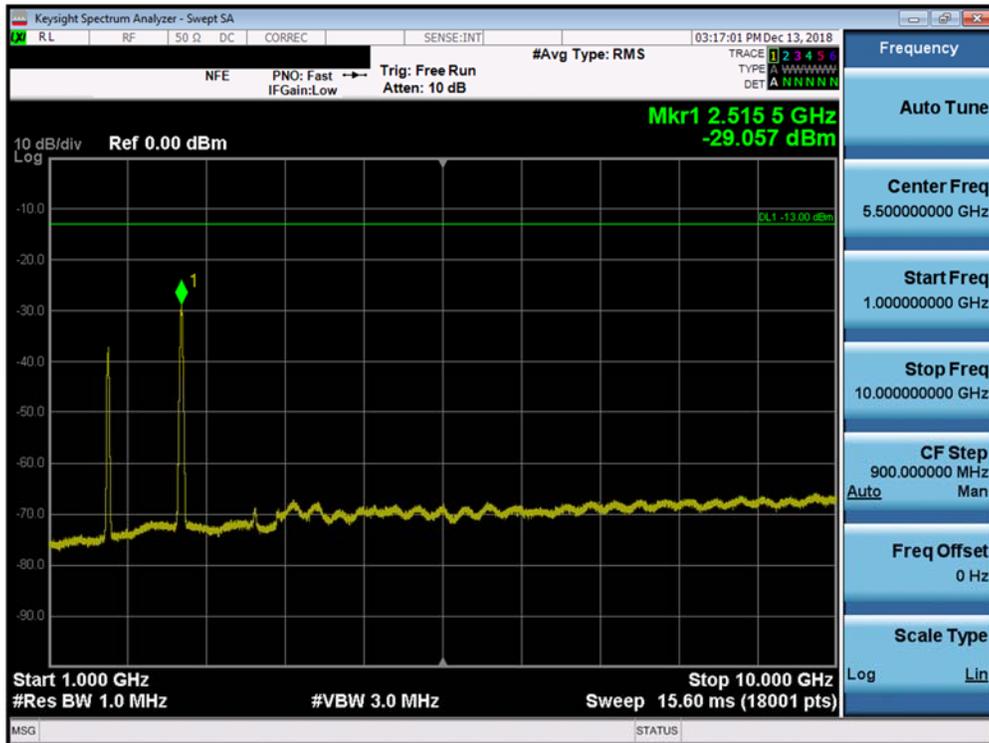


Plot 7-418. Conducted Spurious Plot (Band 5 – QPSK – 10MHz PCC 50/0, 10MHz SCC 50/0 – Mid Channel)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 241 of 359

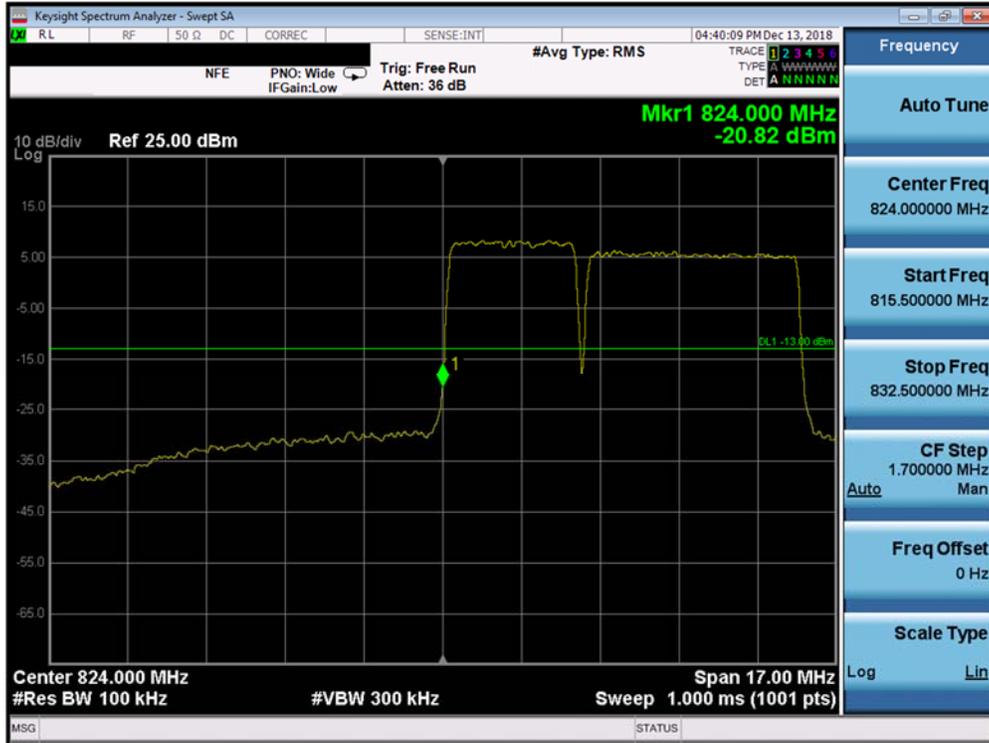


Plot 7-419. Conducted Spurious Plot (Band 5 – QPSK – 10MHz PCC 50/0, 10MHz SCC 50/0 – Mid Channel)

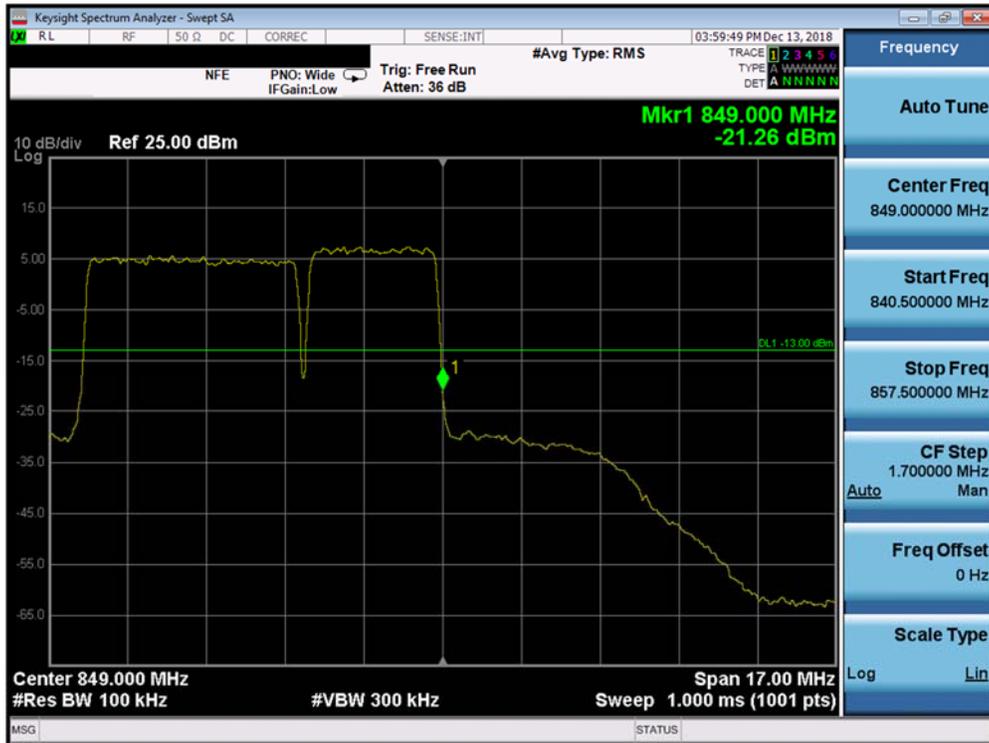


Plot 7-420. Conducted Spurious Plot (Band 5 – QPSK – 10MHz PCC 50/0, 10MHz SCC 50/0 – Mid Channel)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 242 of 359

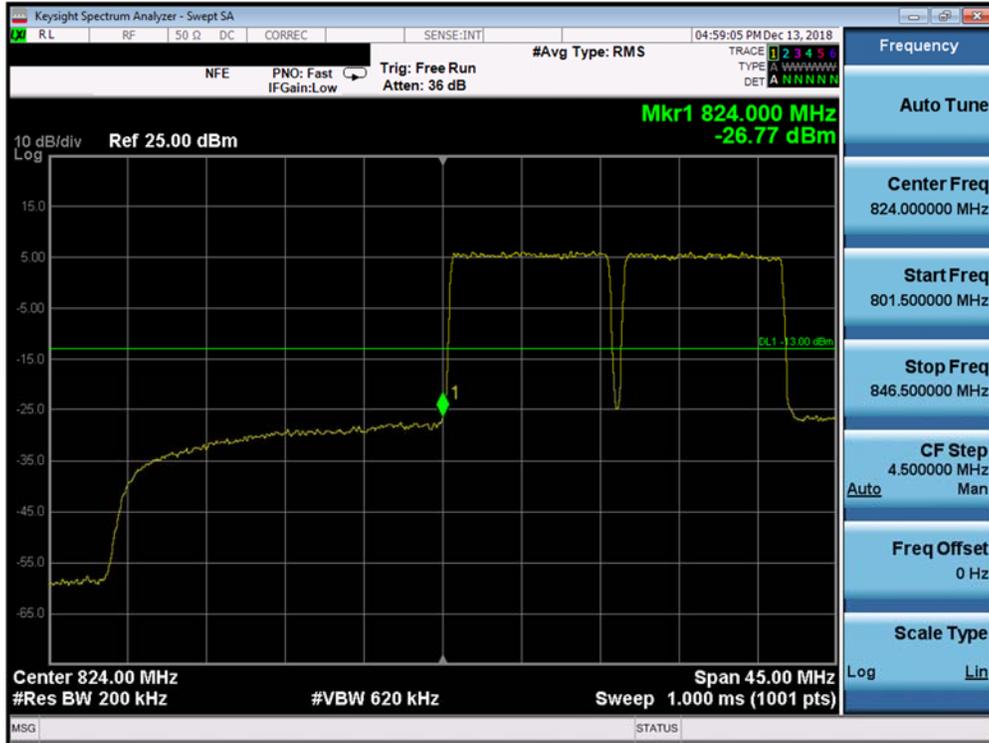


Plot 7-421. Lower Band Edge Plot (Band 5 QPSK – PCC:3 MHz SCC:5 MHz – Full RB)

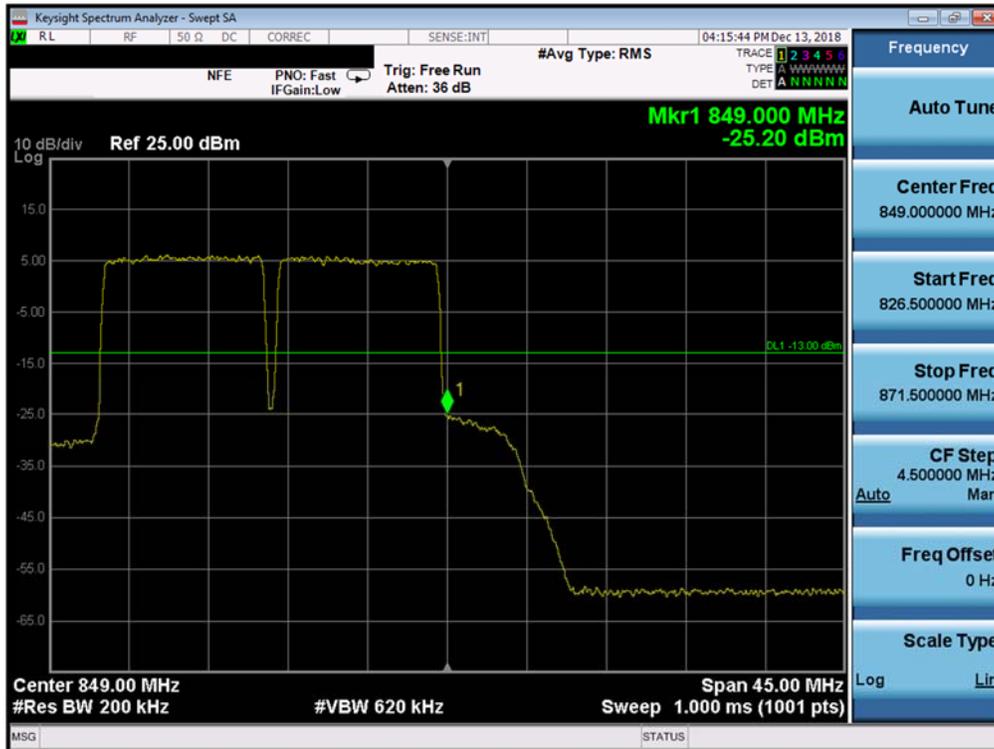


Plot 7-422. Upper Band Edge Plot (Band 5 QPSK – PCC:3 MHz SCC:5 MHz – Full RB)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 243 of 359



Plot 7-423. Lower Band Edge Plot (Band 5 QPSK – PCC:10 MHz SCC:10 MHz – Full RB)



Plot 7-424. Upper Band Edge Plot (Band 5 QPSK – PCC:10 MHz SCC:10 MHz – Full RB)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 244 of 359

Uplink CA Configuration 66B

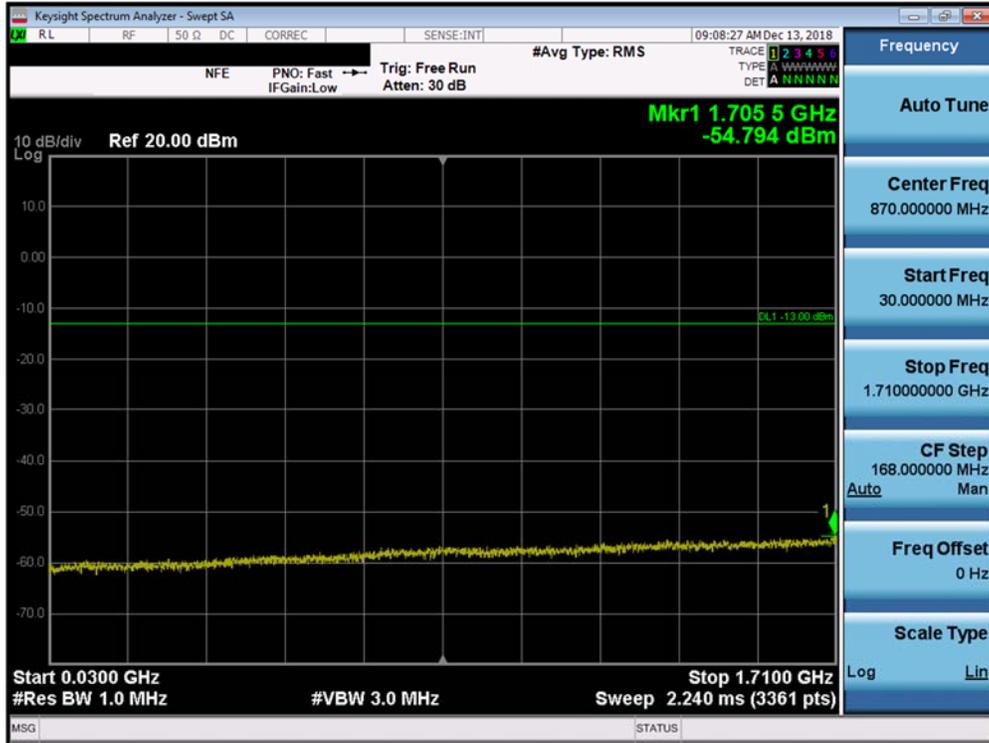
Power State	PCC							SCC							Power
	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	ULCA Tx.Power (dBm)
Max	LTE B66	5	131997	1712.5	QPSK	1	24	LTE B66	10	132069	1719.7	QPSK	1	0	23.32
Max	LTE B66	5	131997	1712.5	QPSK	1	24	LTE B66	15	132090	1721.8	QPSK	1	0	24.35
Max	LTE B66	10	132022	1715	QPSK	1	49	LTE B66	5	132094	1722.2	QPSK	1	0	23.22
Max	LTE B66	10	132022	1715	QPSK	1	49	LTE B66	10	132121	1724.9	QPSK	1	0	24.13
Max	LTE B66	15	132047	1717.5	QPSK	1	74	LTE B66	5	132140	1726.8	QPSK	1	0	24.07
Max	LTE B66	5	132322	1745	QPSK	1	24	LTE B66	10	132394	1752.2	QPSK	1	0	24.98
Max	LTE B66	5	132322	1745	QPSK	1	24	LTE B66	15	132415	1754.3	QPSK	1	0	23.35
Max	LTE B66	10	132322	1745	QPSK	1	49	LTE B66	5	132394	1752.2	QPSK	1	0	24.97
Max	LTE B66	10	132322	1745	QPSK	1	49	LTE B66	10	132421	1754.9	QPSK	1	0	24.35
Max	LTE B66	15	132322	1745	QPSK	1	74	LTE B66	5	132415	1754.3	QPSK	1	0	24.33
Max	LTE B66	5	132647	1777.5	QPSK	1	0	LTE B66	10	132575	1770.3	QPSK	1	49	24.57
Max	LTE B66	5	132647	1777.5	QPSK	1	0	LTE B66	15	132554	1768.2	QPSK	1	74	24.38
Max	LTE B66	10	132622	1775	QPSK	1	0	LTE B66	5	132550	1767.8	QPSK	1	24	24.76
Max	LTE B66	10	132622	1775	QPSK	1	0	LTE B66	10	132523	1765.1	QPSK	1	49	24.91
Max	LTE B66	15	132597	1772.5	QPSK	1	0	LTE B66	5	132504	1763.2	QPSK	1	24	25.00

Table 7-6. Conducted Powers (B66 – With Various Combinations of PCC: RB Size 1, SCC: RB Size 1)

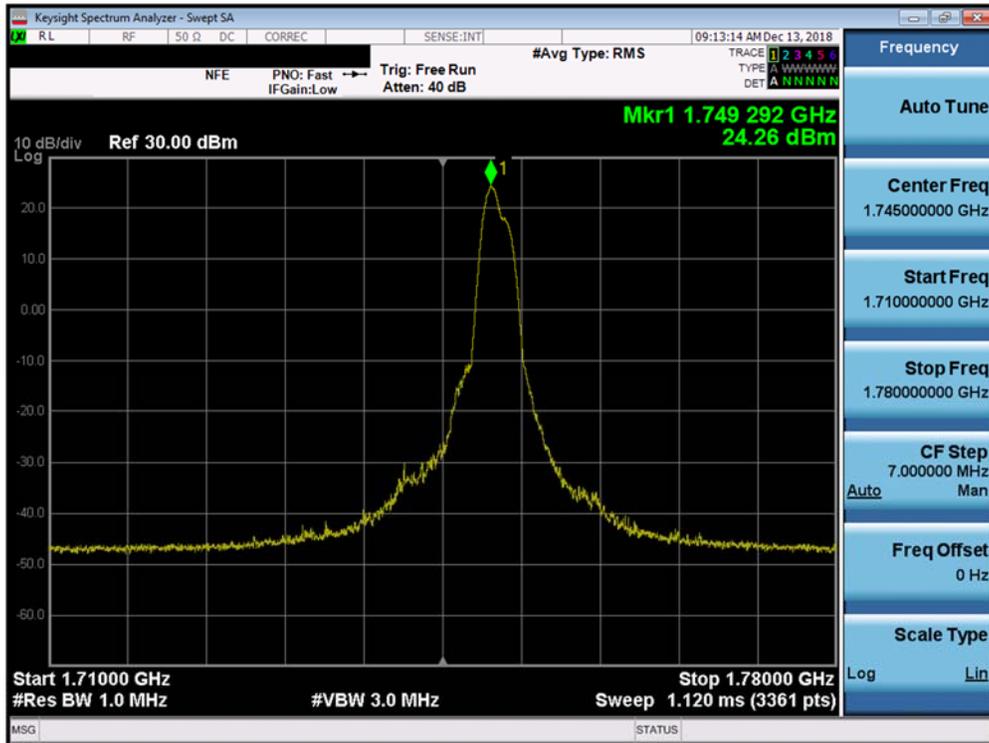
Power State	PCC							SCC							Power
	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	ULCA Tx.Power (dBm)
Max	LTE B66	10	132022	1715	QPSK	1	0	LTE B66	10	132121	1724.9	QPSK	1	0	15.16
Max	LTE B66	10	132022	1715	QPSK	1	49	LTE B66	10	132121	1724.9	QPSK	1	49	15.40
Max	LTE B66	10	132022	1715	QPSK	1	0	LTE B66	10	132121	1724.9	QPSK	1	49	14.97
Max	LTE B66	10	132022	1715	QPSK	1	24	LTE B66	10	132121	1724.9	QPSK	1	24	15.38
Max	LTE B66	10	132022	1715	QPSK	1	49	LTE B66	10	132121	1724.9	QPSK	1	0	24.70
Max	LTE B66	10	132022	1715	QPSK	50	0	LTE B66	10	132121	1724.9	QPSK	50	0	23.74
Max	LTE B66	10	132022	1715	16-QAM	50	0	LTE B66	10	132121	1724.9	16-QAM	50	0	22.68
Max	LTE B66	10	132022	1715	64-QAM	50	0	LTE B66	10	132121	1724.9	64-QAM	50	0	22.69
Max	LTE B66	10	132022	1715	256-QAM	50	0	LTE B66	10	132121	1724.9	256-QAM	50	0	19.88

Table 7-7. Conducted Powers (B66 with Various Combinations for 10+10MHz Channel Bandwidth)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset	Page 245 of 359	

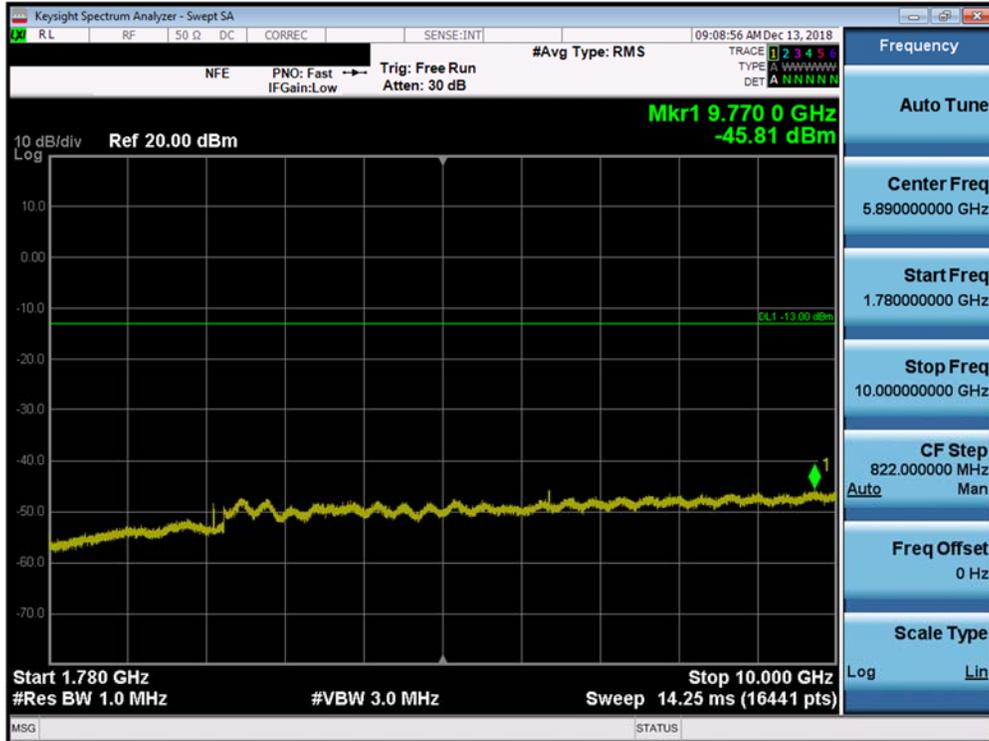


Plot 7-425. Conducted Spurious Plot (Band 66 – QPSK – 15MHz PCC 1/74, 5MHz SCC 1/0 – Mid Channel)

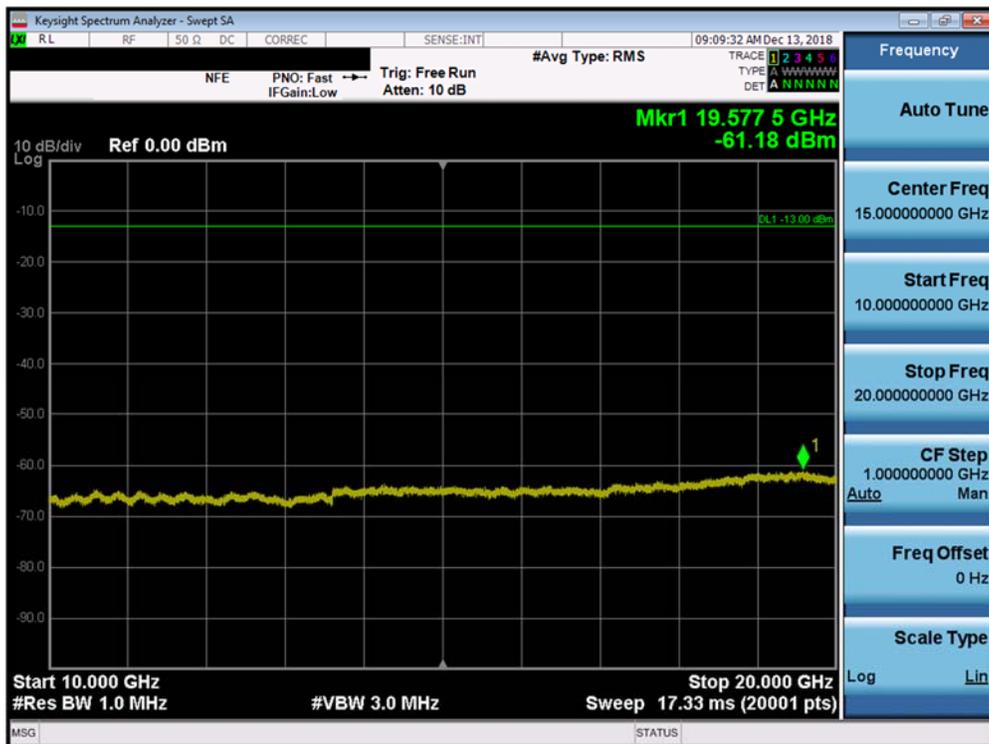


Plot 7-426. Conducted Spurious Plot (Band 66 –QPSK – 15MHz PCC 1/74, 5MHz SCC 1/0 – Mid Channel)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 246 of 359

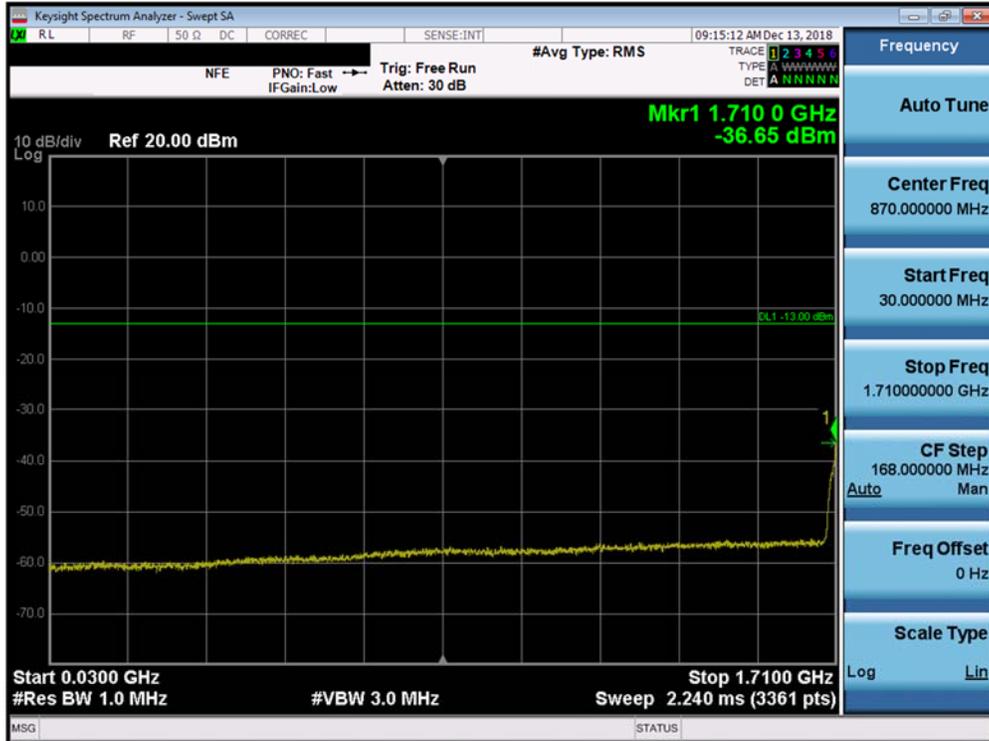


Plot 7-427. Conducted Spurious Plot Band 66 – QPSK – 15MHz PCC 1/74, 5MHz SCC 1/0 – Mid Channel)

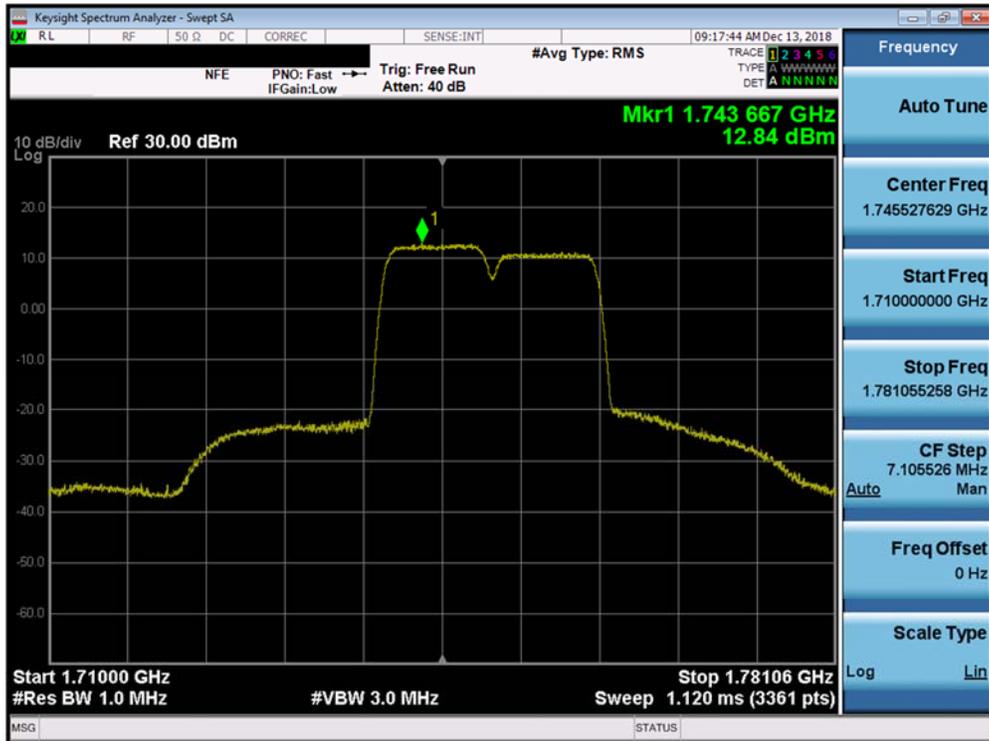


Plot 7-428. Conducted Spurious Plot Band 66 – QPSK – 15MHz PCC 1/74, 5MHz SCC 1/0 – Mid Channel)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 247 of 359

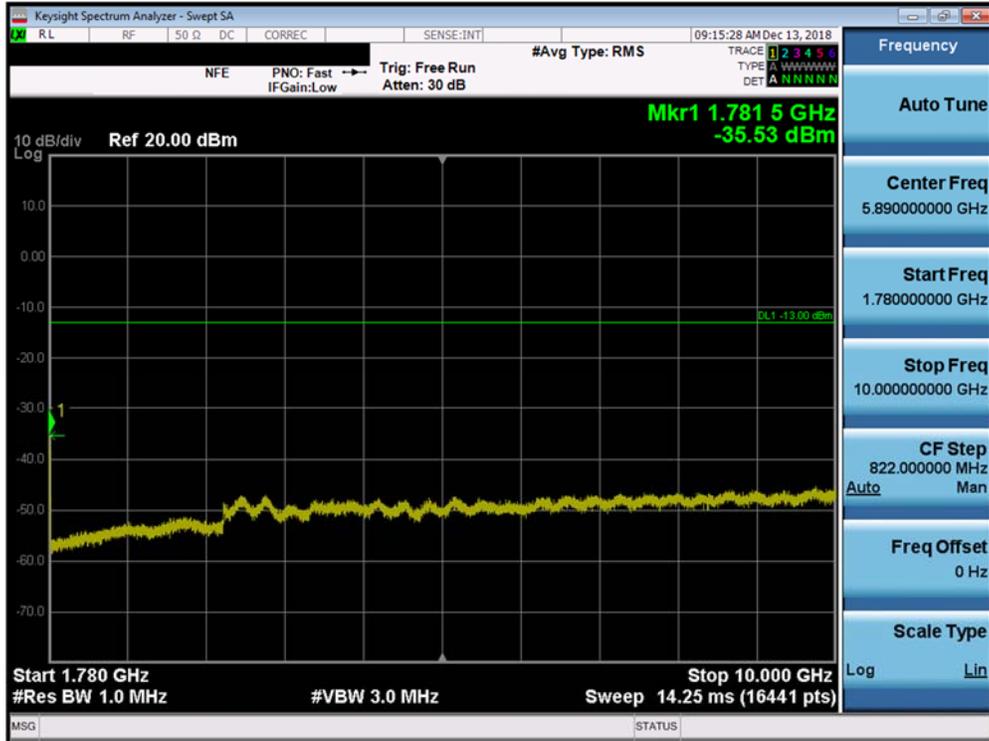


Plot 7-429. Conducted Spurious Plot (Band 66 –QPSK – 10MHz PCC 50/0, 10MHz SCC 50/0 – Mid Channel)

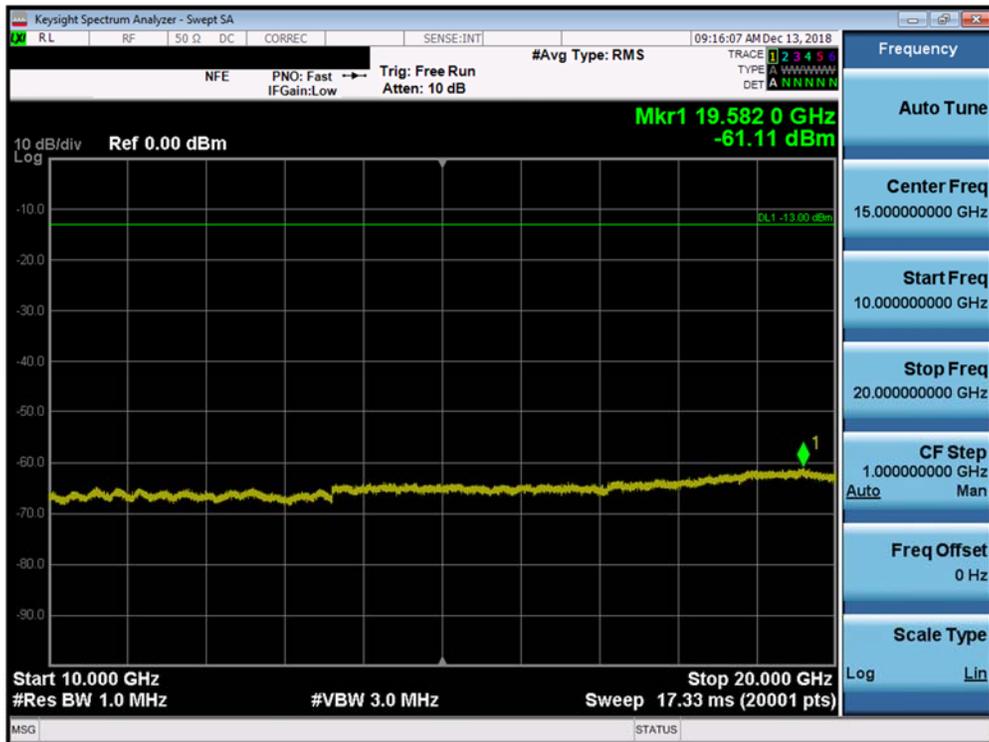


Plot 7-430. Conducted Spurious Plot (Band 66 –QPSK – 10MHz PCC 50/0, 10MHz SCC 50/0 – Mid Channel)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 248 of 359

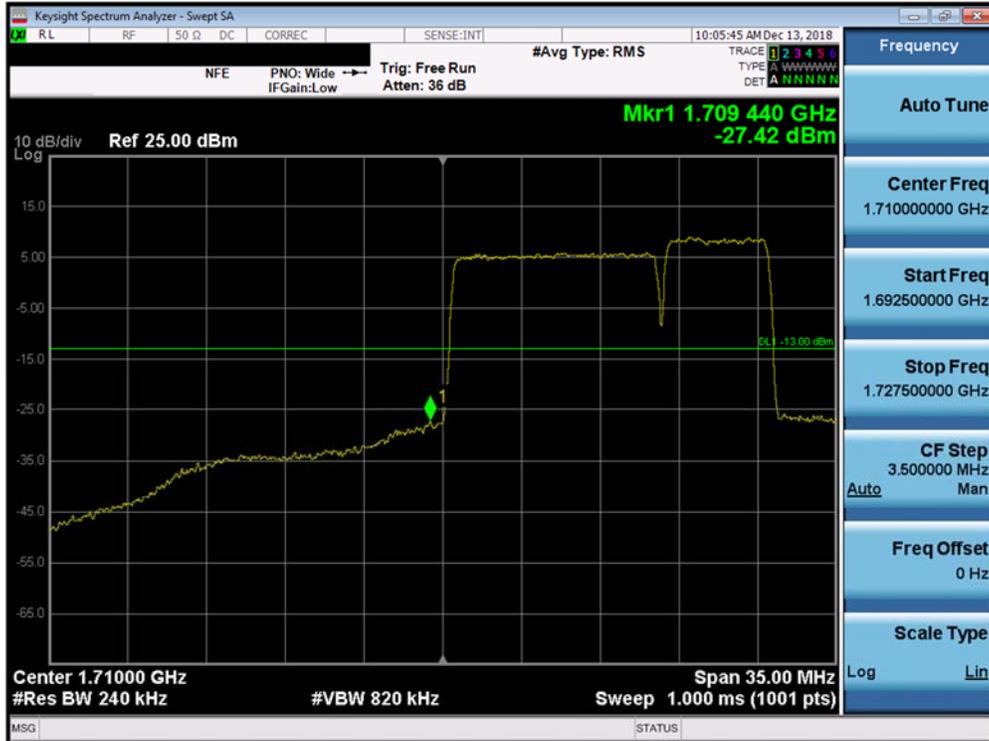


Plot 7-431. Conducted Spurious Plot (Band 66 –QPSK – 10MHz PCC 50/0, 10MHz SCC 50/0 – Mid Channel)

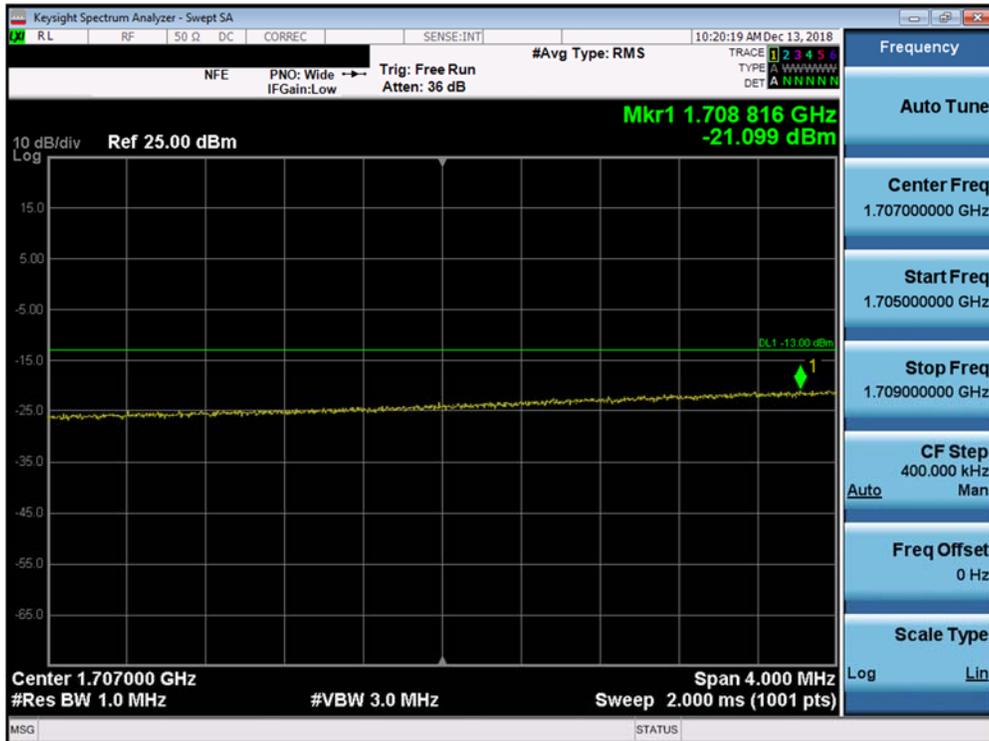


Plot 7-432. Conducted Spurious Plot (Band 66 –QPSK – 10MHz PCC 50/0, 10MHz SCC 50/0 – Mid Channel)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 249 of 359



Plot 7-433. Lower Band Edge Plot (Band 66 QPSK – PCC:15 MHz SCC:5 MHz – Full RB)

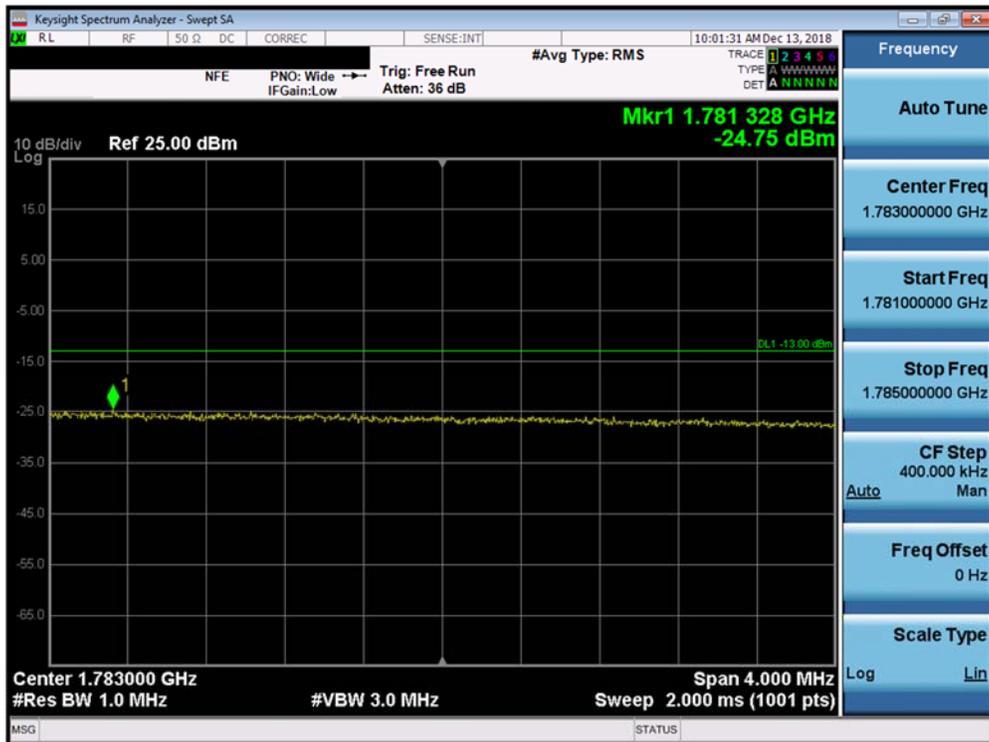


Plot 7-434. Extended Lower Band Edge Plot (Band 66 QPSK – PCC:15 MHz SCC:5 MHz – Full RB)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 250 of 359

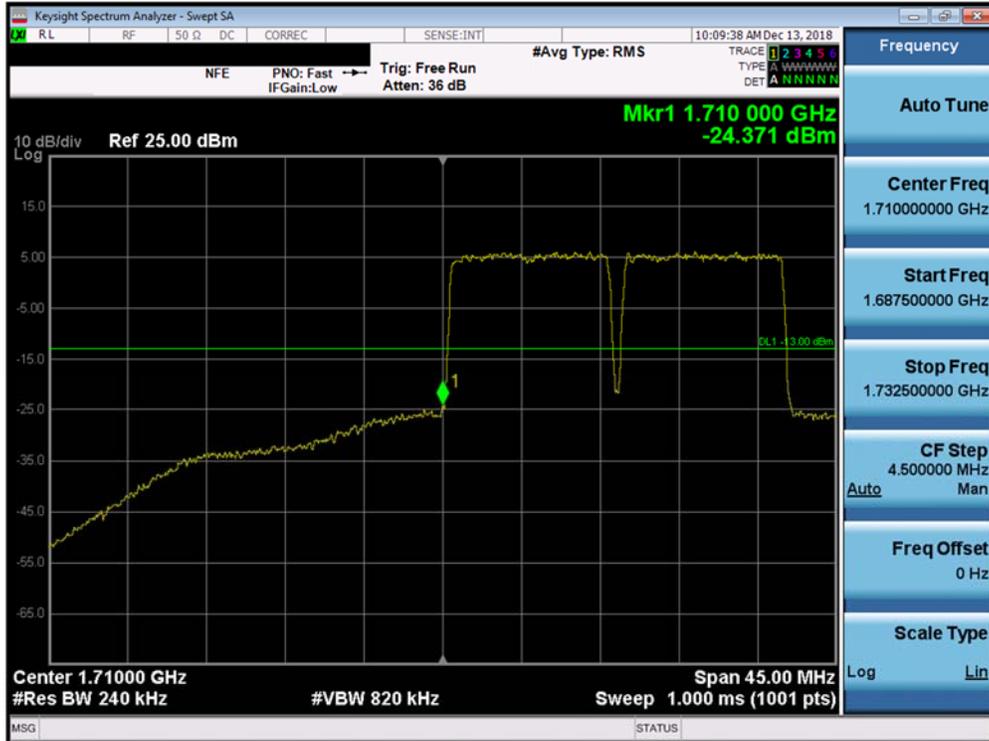


Plot 7-435. Upper Band Edge Plot (Band 66 QPSK – PCC:15 MHz SCC:5 MHz – Full RB)

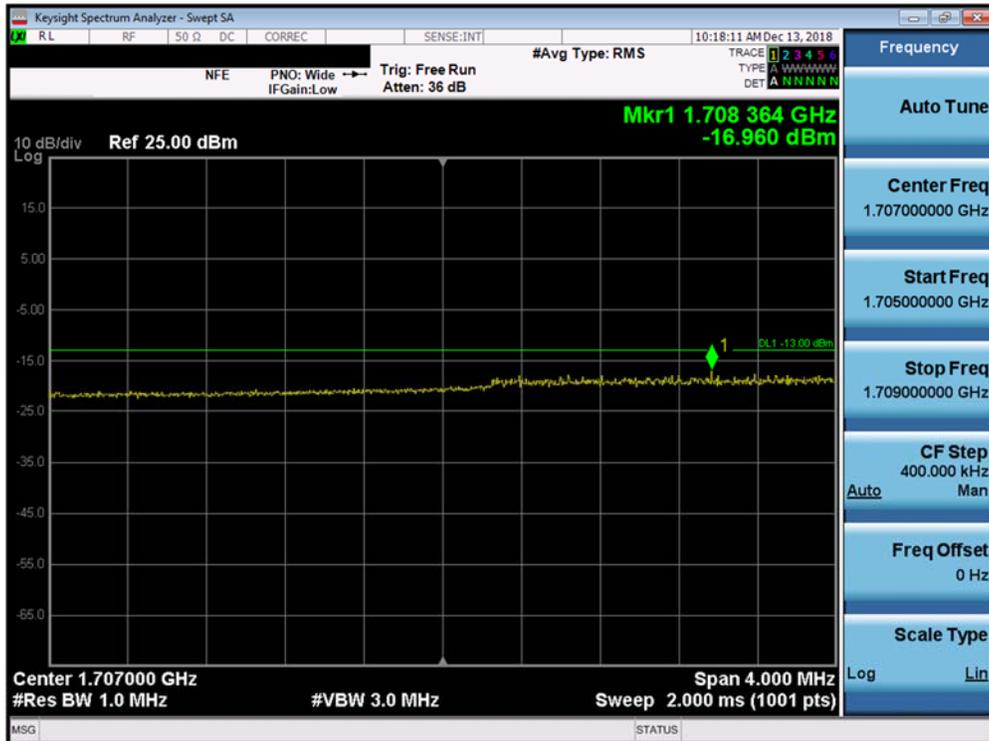


Plot 7-436. Extended Upper Band Edge Plot (Band 66 QPSK – PCC:15 MHz SCC:5 MHz – Full RB)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 251 of 359



Plot 7-437. Lower Band Edge Plot (Band 66 QPSK – PCC:10 MHz SCC:10 MHz – Full RB)

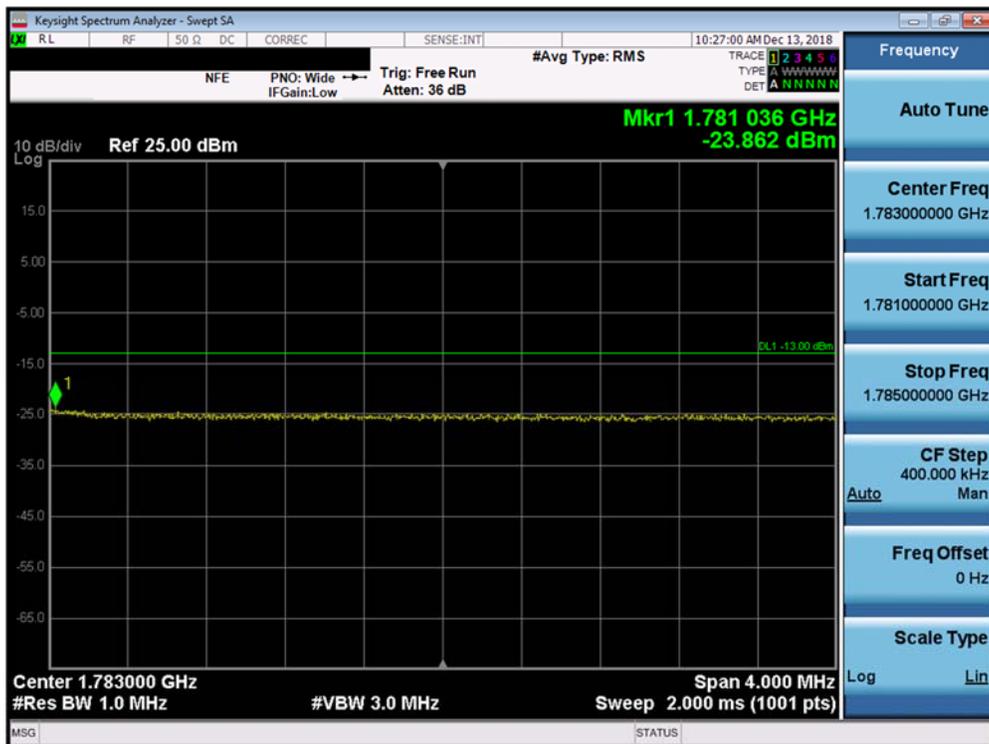


Plot 7-438. Extended Lower Band Edge Plot (Band 66 QPSK – PCC:10 MHz SCC:10 MHz – Full RB)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 252 of 359



Plot 7-439. Upper Band Edge Plot (Band 66 QPSK – PCC:10 MHz SCC:10 MHz – Full RB)



Plot 7-440. Extended Upper Band Edge Plot (Band 66 QPSK – PCC:10 MHz SCC:10 MHz – Full RB)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 253 of 359

Uplink CA Configuration 66C

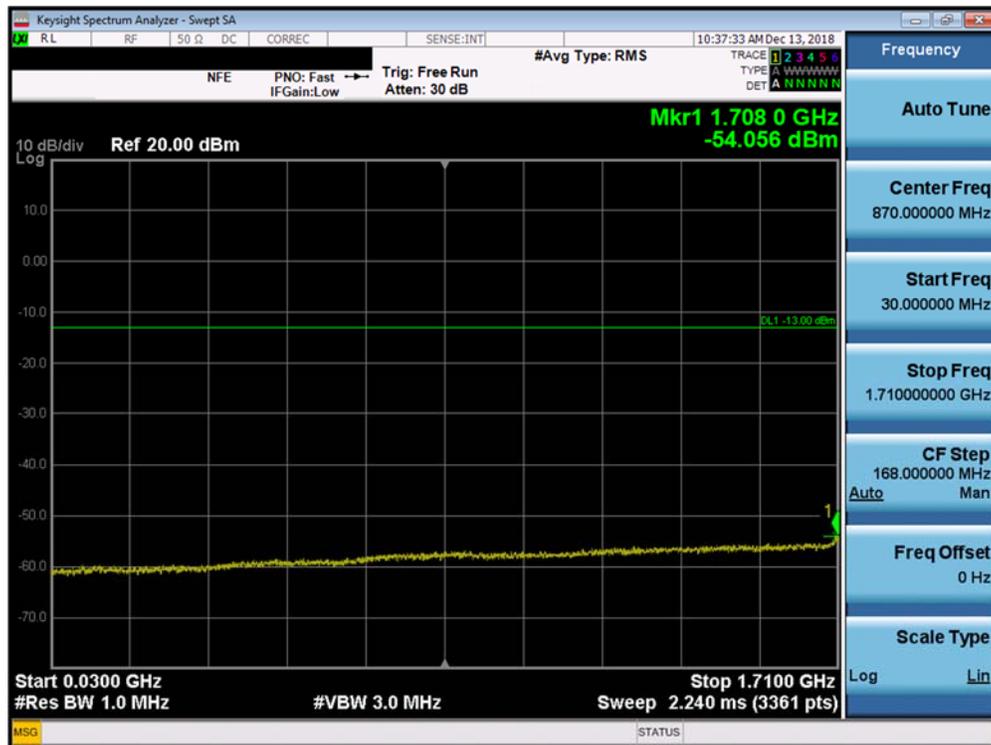
Power State	PCC							SCC							Power ULCA Tx.Power (dBm)
	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	
Max	LTE B66	5	131997	1712.5	QPSK	1	24	LTE B66	20	132114	1724.2	QPSK	1	0	23.72
Max	LTE B66	10	132022	1715	QPSK	1	49	LTE B66	15	132142	1727	QPSK	1	0	24.84
Max	LTE B66	10	132022	1715	QPSK	1	49	LTE B66	20	132166	1729.4	QPSK	1	0	24.93
Max	LTE B66	15	132047	1717.5	QPSK	1	74	LTE B66	10	132167	1729.5	QPSK	1	0	24.79
Max	LTE B66	15	132047	1717.5	QPSK	1	74	LTE B66	15	132197	1732.5	QPSK	1	0	24.89
Max	LTE B66	15	132047	1717.5	QPSK	1	74	LTE B66	20	132218	1734.6	QPSK	1	0	24.87
Max	LTE B66	20	132072	1720	QPSK	1	99	LTE B66	5	132189	1731.7	QPSK	1	0	24.43
Max	LTE B66	20	132072	1720	QPSK	1	99	LTE B66	10	132216	1734.4	QPSK	1	0	24.00
Max	LTE B66	20	132072	1720	QPSK	1	99	LTE B66	15	132243	1737.1	QPSK	1	0	23.95
Max	LTE B66	20	132072	1720	QPSK	1	99	LTE B66	20	132270	1739.8	QPSK	1	0	24.03
Max	LTE B66	5	132322	1745	QPSK	1	24	LTE B66	20	132439	1756.7	QPSK	1	0	23.40
Max	LTE B66	10	132322	1745	QPSK	1	49	LTE B66	15	132442	1757	QPSK	1	0	24.21
Max	LTE B66	10	132322	1745	QPSK	1	49	LTE B66	20	132466	1759.4	QPSK	1	0	24.30
Max	LTE B66	15	132322	1745	QPSK	1	74	LTE B66	10	132442	1757	QPSK	1	0	23.12
Max	LTE B66	15	132322	1745	QPSK	1	74	LTE B66	15	132472	1760	QPSK	1	0	23.34
Max	LTE B66	15	132322	1745	QPSK	1	74	LTE B66	20	132493	1762.1	QPSK	1	0	23.57
Max	LTE B66	20	132322	1745	QPSK	1	99	LTE B66	5	132439	1756.7	QPSK	1	0	24.67
Max	LTE B66	20	132322	1745	QPSK	1	99	LTE B66	10	132466	1759.4	QPSK	1	0	24.38
Max	LTE B66	20	132322	1745	QPSK	1	99	LTE B66	15	132493	1762.1	QPSK	1	0	23.34
Max	LTE B66	20	132322	1745	QPSK	1	99	LTE B66	20	132520	1764.8	QPSK	1	0	23.37
Max	LTE B66	5	132647	1777.5	QPSK	1	0	LTE B66	20	132530	1765.8	QPSK	1	99	22.99
Max	LTE B66	10	132622	1775	QPSK	1	0	LTE B66	15	132502	1763	QPSK	1	74	22.87
Max	LTE B66	10	132622	1775	QPSK	1	0	LTE B66	20	132478	1760.6	QPSK	1	99	23.49
Max	LTE B66	15	132597	1772.5	QPSK	1	0	LTE B66	10	132477	1760.5	QPSK	1	49	22.67
Max	LTE B66	15	132597	1772.5	QPSK	1	0	LTE B66	15	132447	1757.5	QPSK	1	74	23.69
Max	LTE B66	15	132597	1772.5	QPSK	1	0	LTE B66	20	132426	1755.4	QPSK	1	99	23.87
Max	LTE B66	20	132572	1770	QPSK	1	0	LTE B66	5	132455	1758.3	QPSK	1	24	24.89
Max	LTE B66	20	132572	1770	QPSK	1	0	LTE B66	10	132428	1755.6	QPSK	1	49	24.22
Max	LTE B66	20	132572	1770	QPSK	1	0	LTE B66	15	132401	1752.9	QPSK	1	74	22.23
Max	LTE B66	20	132572	1770	QPSK	1	0	LTE B66	20	132374	1750.2	QPSK	1	99	22.26

Table 7-8. Conducted Powers (B66 – Various Combinations of PCC: RB Size 1, SCC: RB Size 1)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset	Page 254 of 359	

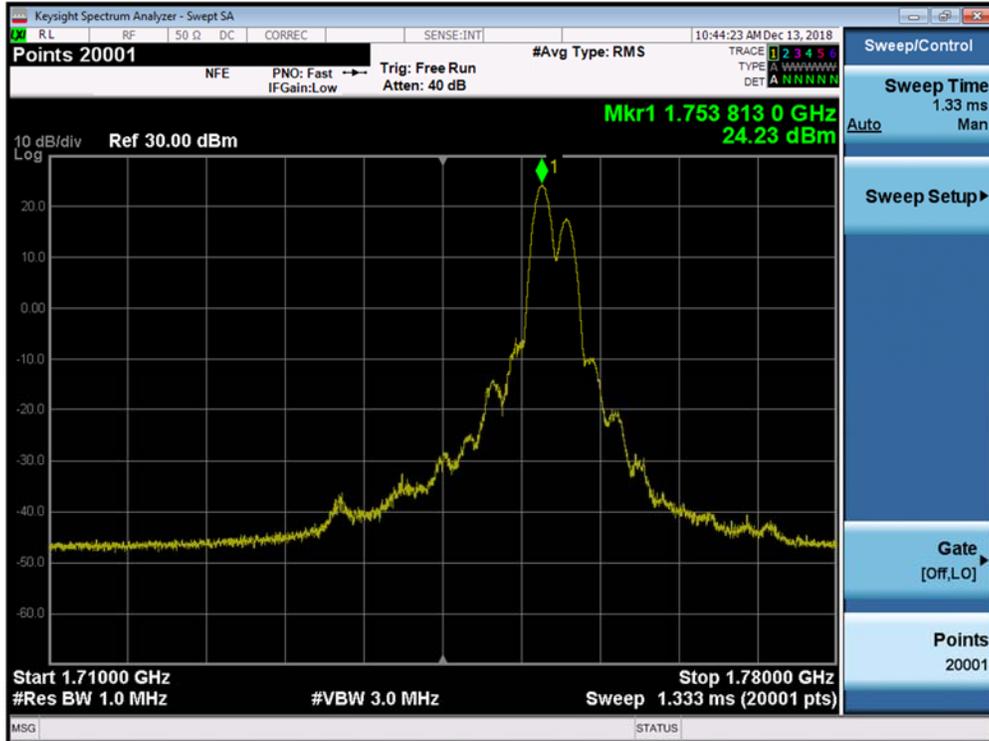
Power State	PCC							SCC							Power ULCA Tx.Power (dBm)
	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL Offset	
Max	LTE B66	20	132072	1720	QPSK	1	0	LTE B66	20	132270	1739.8	QPSK	1	0	22.66
Max	LTE B66	20	132072	1720	QPSK	1	99	LTE B66	20	132270	1739.8	QPSK	1	99	22.97
Max	LTE B66	20	132072	1720	QPSK	1	0	LTE B66	20	132270	1739.8	QPSK	1	99	20.20
Max	LTE B66	20	132072	1720	QPSK	1	50	LTE B66	20	132270	1739.8	QPSK	1	50	22.51
Max	LTE B66	20	132072	1720	QPSK	1	99	LTE B66	20	132270	1739.8	QPSK	1	0	24.89
Max	LTE B66	20	132072	1720	QPSK	100	0	LTE B66	20	132270	1739.8	QPSK	100	0	23.53
Max	LTE B66	20	132072	1720	16-QAM	100	0	LTE B66	20	132270	1739.8	16-QAM	100	0	23.60
Max	LTE B66	20	132072	1720	64-QAM	100	0	LTE B66	20	132270	1739.8	64-QAM	100	0	22.38
Max	LTE B66	20	132072	1720	256-QAM	100	0	LTE B66	20	132270	1739.8	256-QAM	100	0	20.01

Table 7-9. Conducted Powers (B66 with Various Combinations for 20+20MHz Channel Bandwidth)

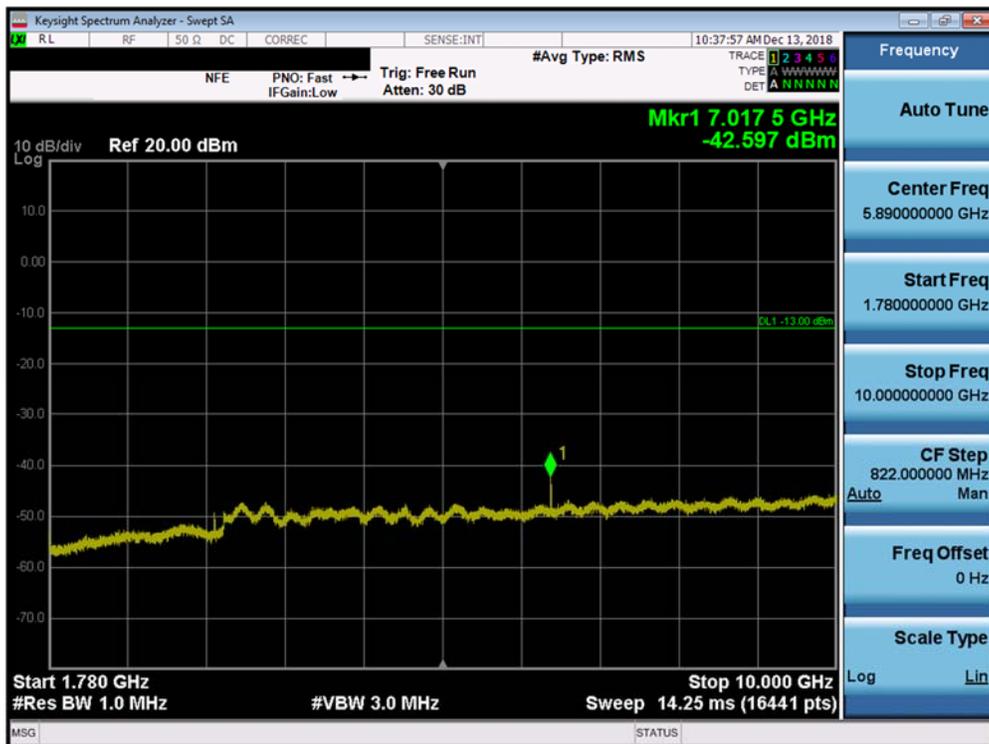


Plot 7-441. Conducted Spurious Plot (Band 66 –QPSK – 20.0MHz PCC 1/99, 20.0MHz SCC 1/0 – Mid Channel)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 255 of 359

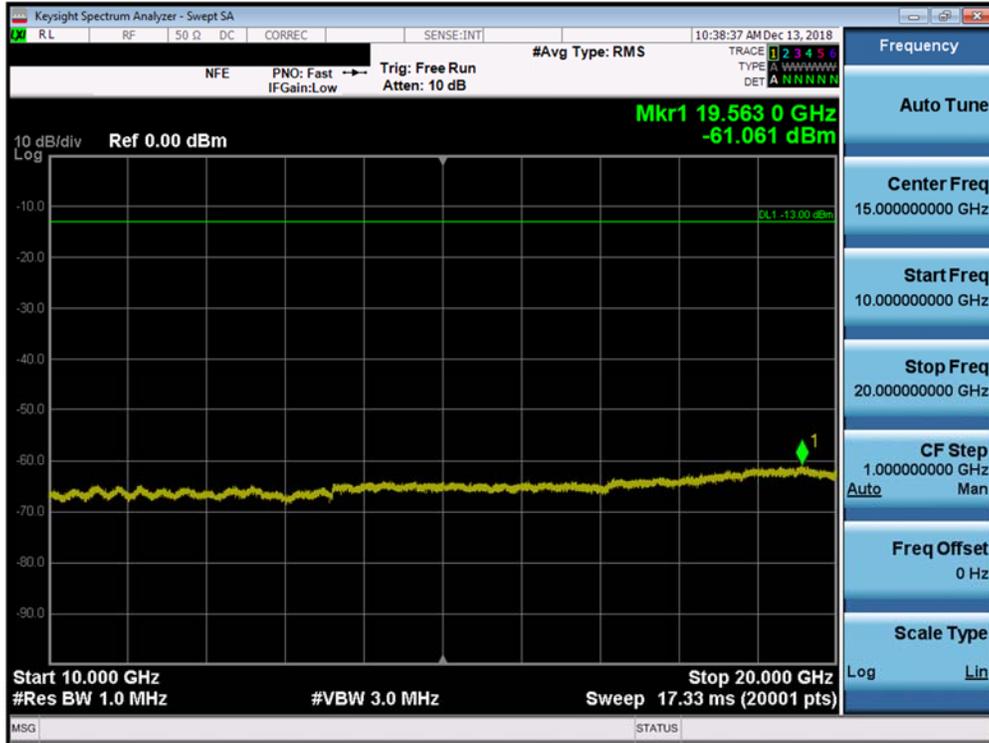


Plot 7-442. Conducted Spurious Plot (Band 66 –QPSK – 20.0MHz PCC 1/99, 20.0MHz SCC 1/0 – Mid Channel)

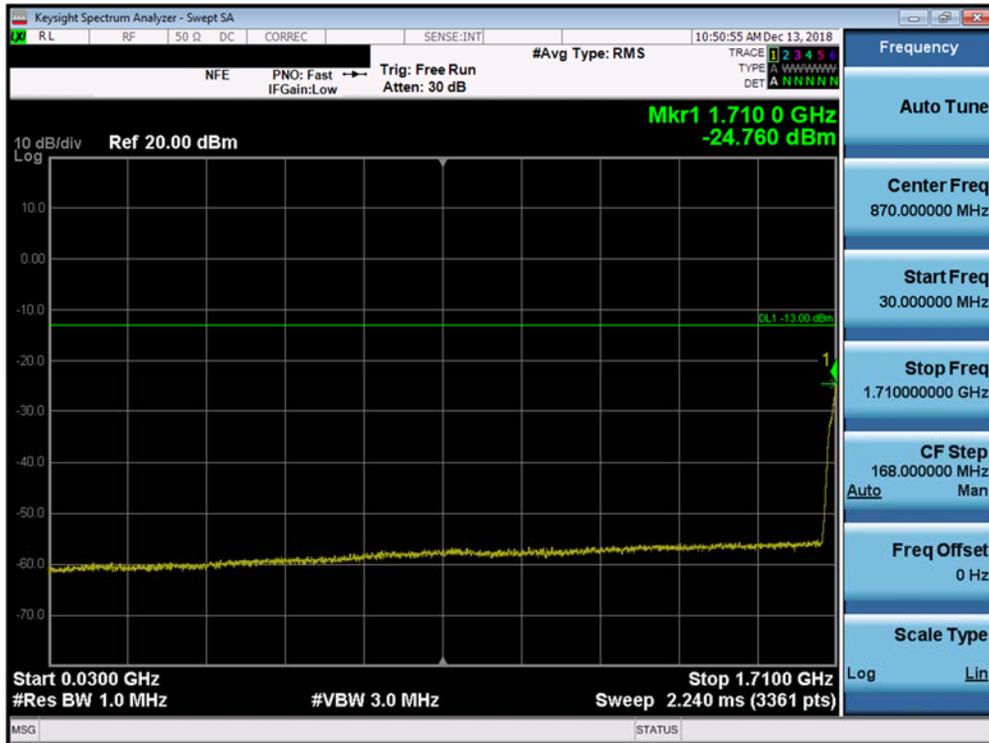


Plot 7-443. Conducted Spurious Plot (Band 66 –QPSK – 20.0MHz PCC 1/99, 20.0MHz SCC 1/0 – Mid Channel)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 256 of 359

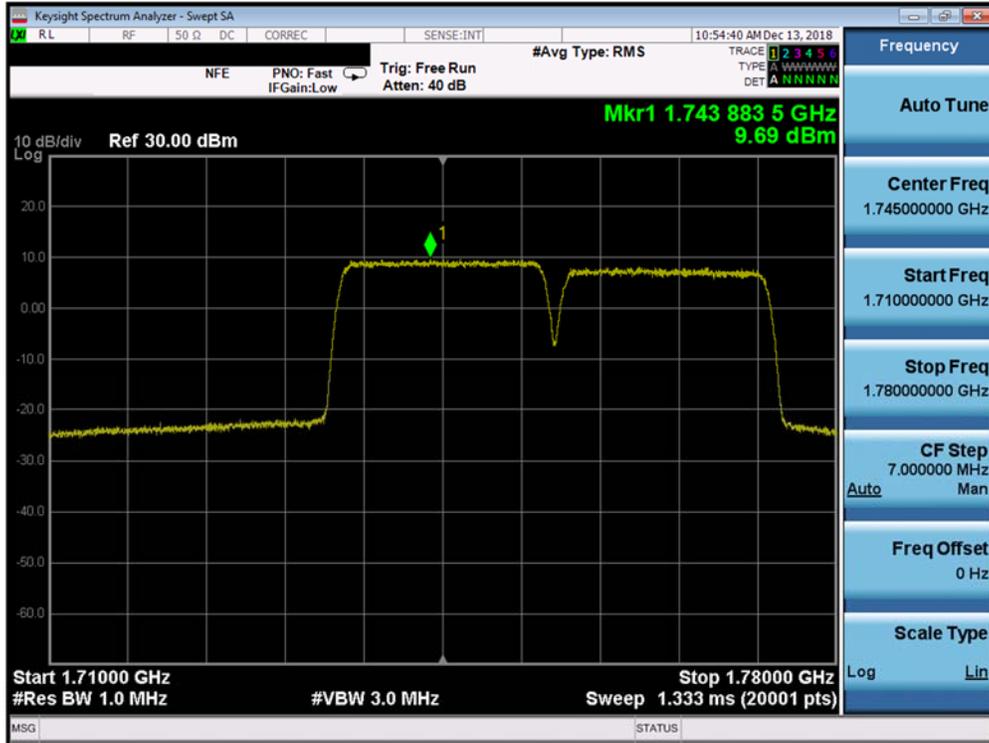


Plot 7-444. Conducted Spurious Plot (Band 66 –QPSK – 20.0MHz PCC 1/99, 20.0MHz SCC 1/0 – Mid Channel)

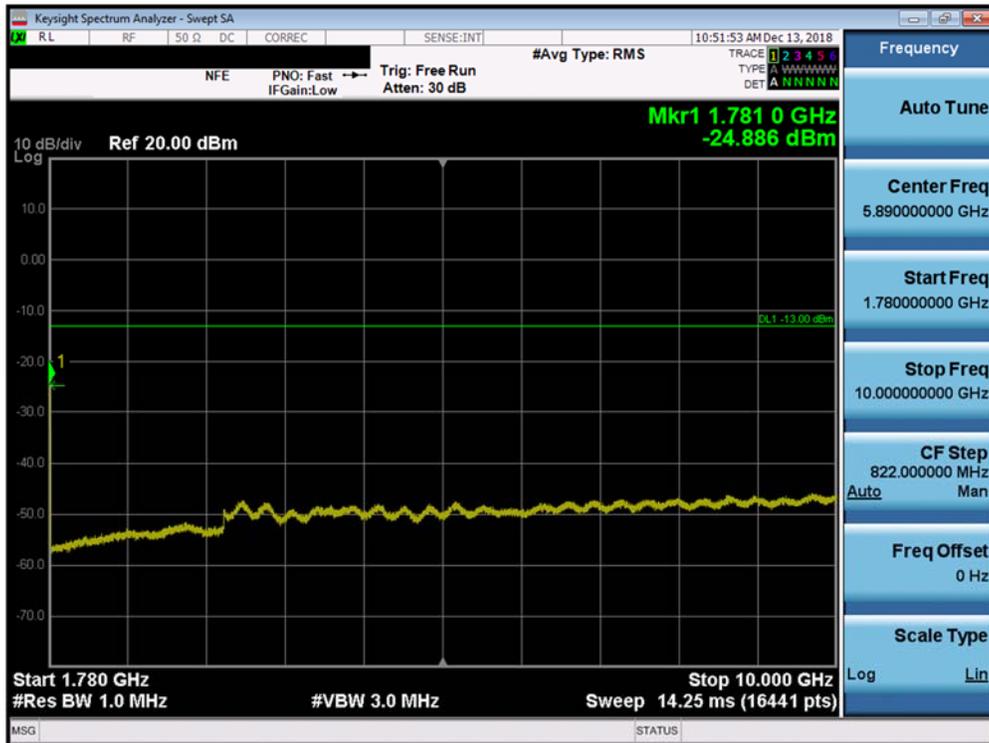


Plot 7-445. Conducted Spurious Plot (Band 66 –QPSK – 20.0MHz PCC 100/0, 20.0MHz SCC 100/0 – Mid Channel)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 257 of 359



Plot 7-446. Conducted Spurious Plot (Band 66 –QPSK – 20.0MHz PCC 100/0, 20.0MHz SCC 100/0 – Mid Channel)



Plot 7-447. Conducted Spurious Plot (Band 66 –QPSK – 20.0MHz PCC 100/0, 20.0MHz SCC 100/0 – Mid Channel)

FCC ID: A3LSMG975U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1810250197-03.A3L	Test Dates: 10/31/2018-1/09/2019	EUT Type: Portable Handset		Page 258 of 359