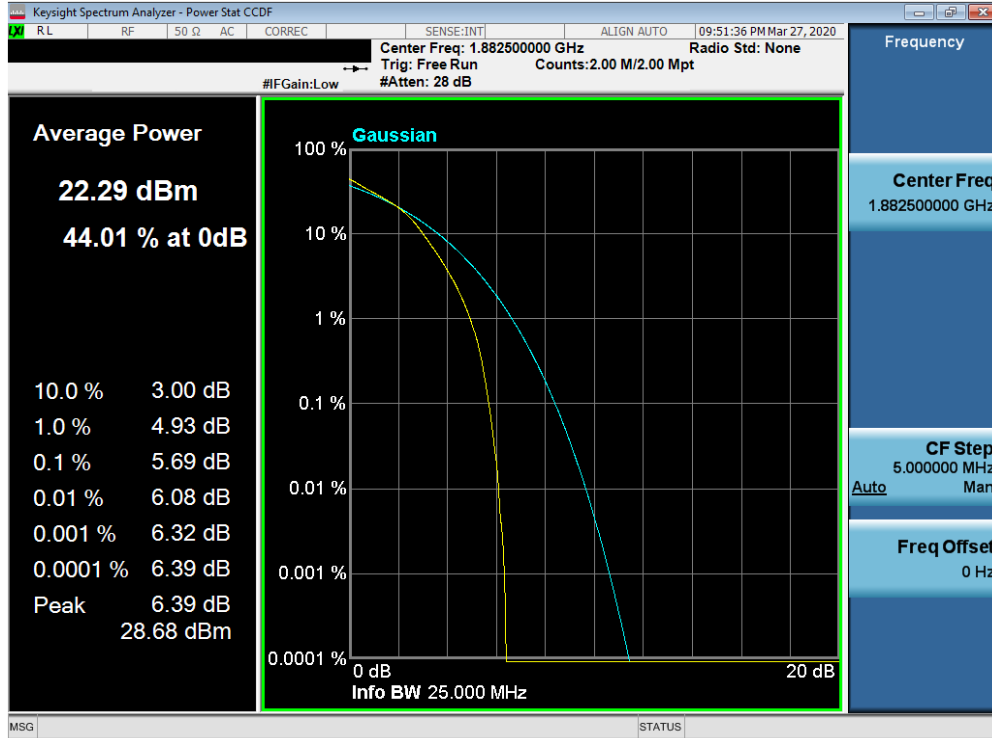
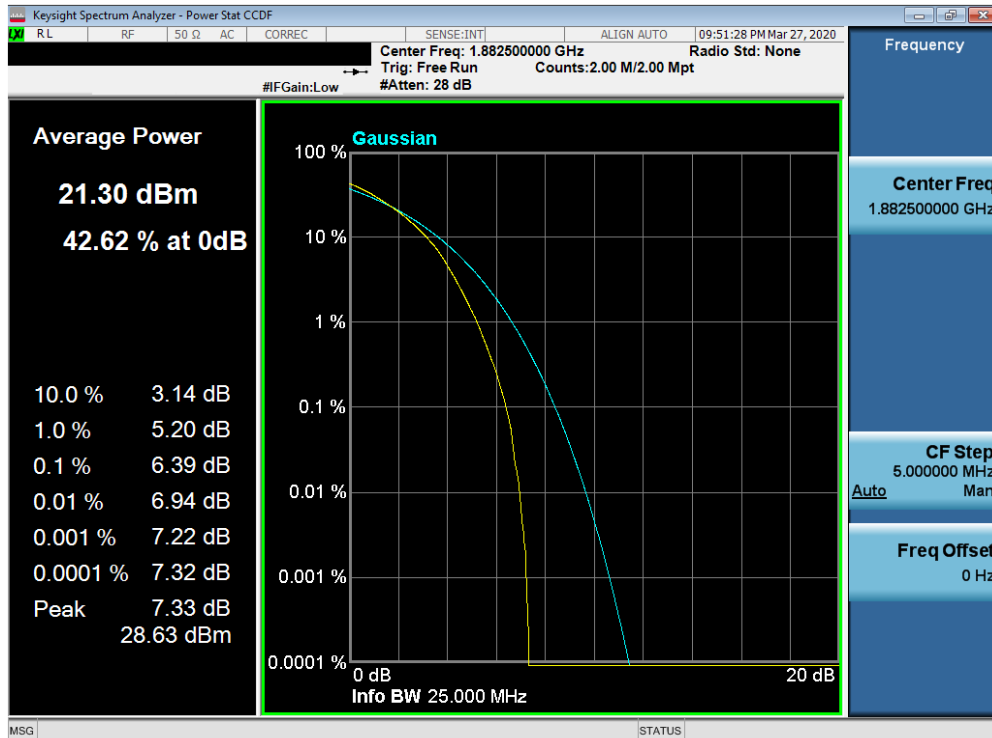




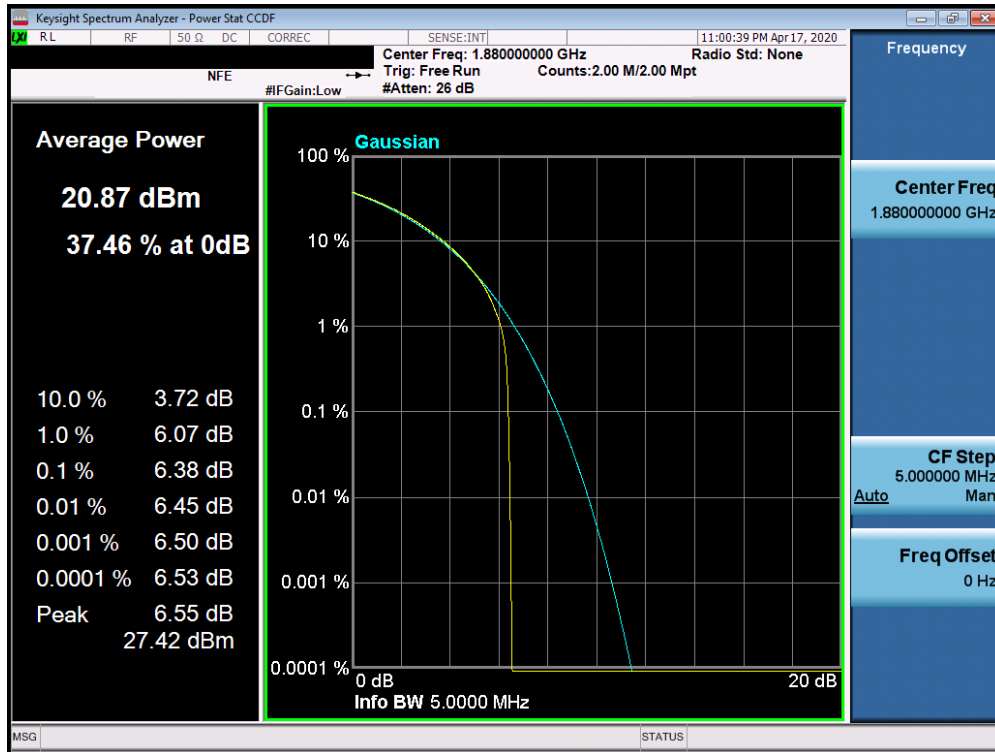
Plot 7-579. PAR Plot (Band 25/2 - 20.0MHz 16-QAM - Full RB Configuration)



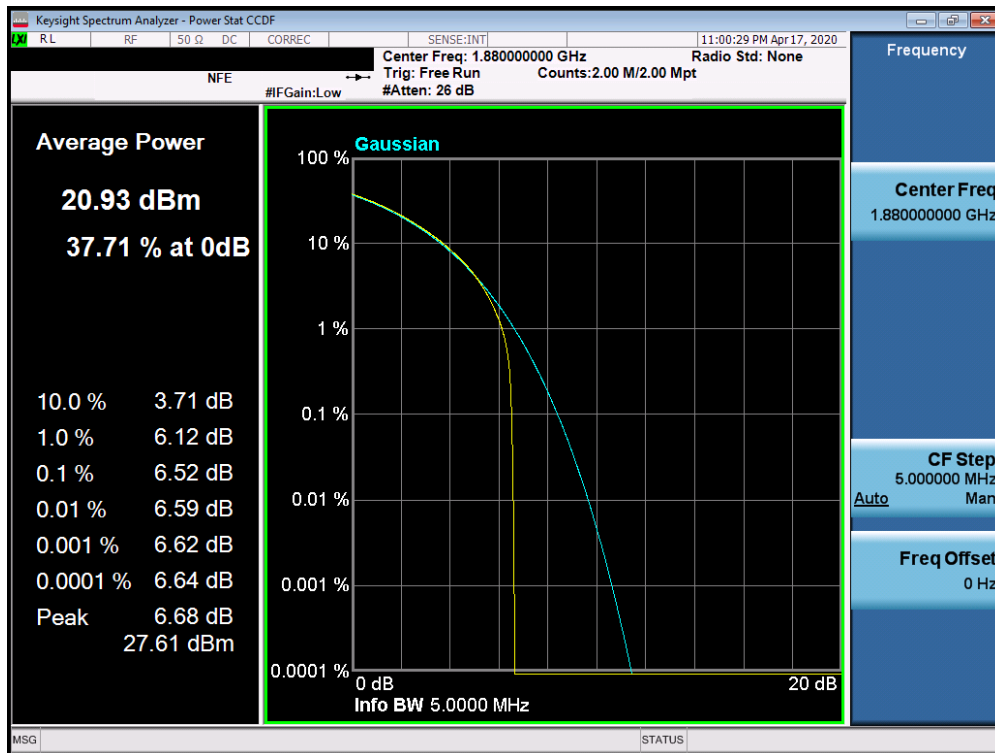
Plot 7-580. PAR Plot (Band 25/2 - 20.0MHz 64-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 320 of 420

NR Band n2

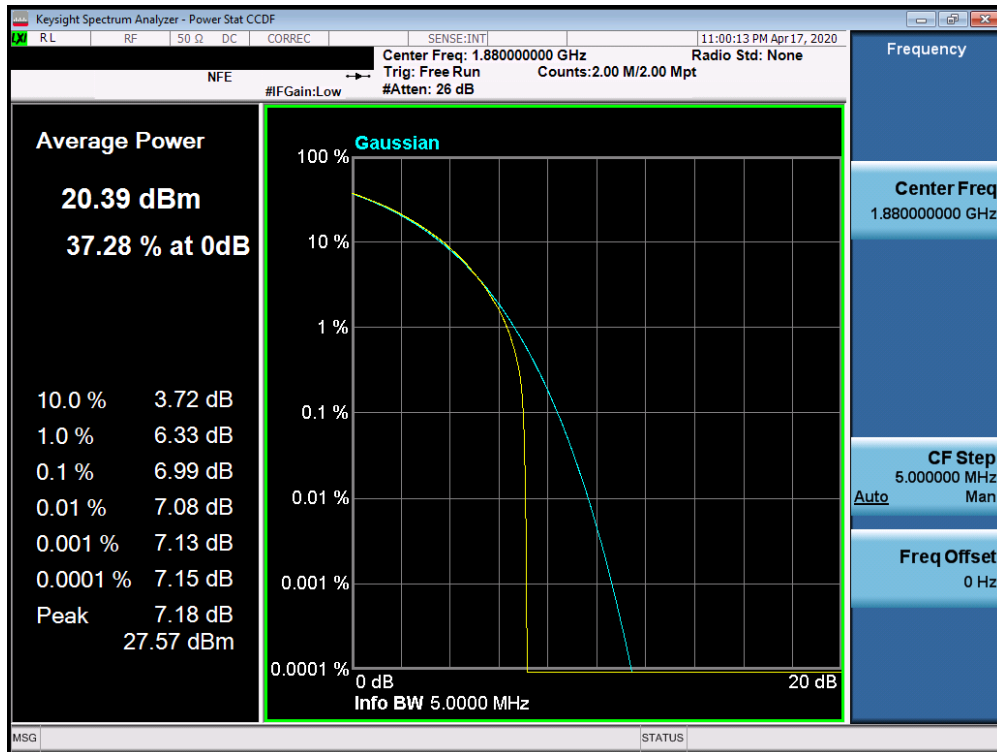


Plot 7-581. PAR Plot (Band n2 - 5.0MHz QPSK - Full RB Configuration)

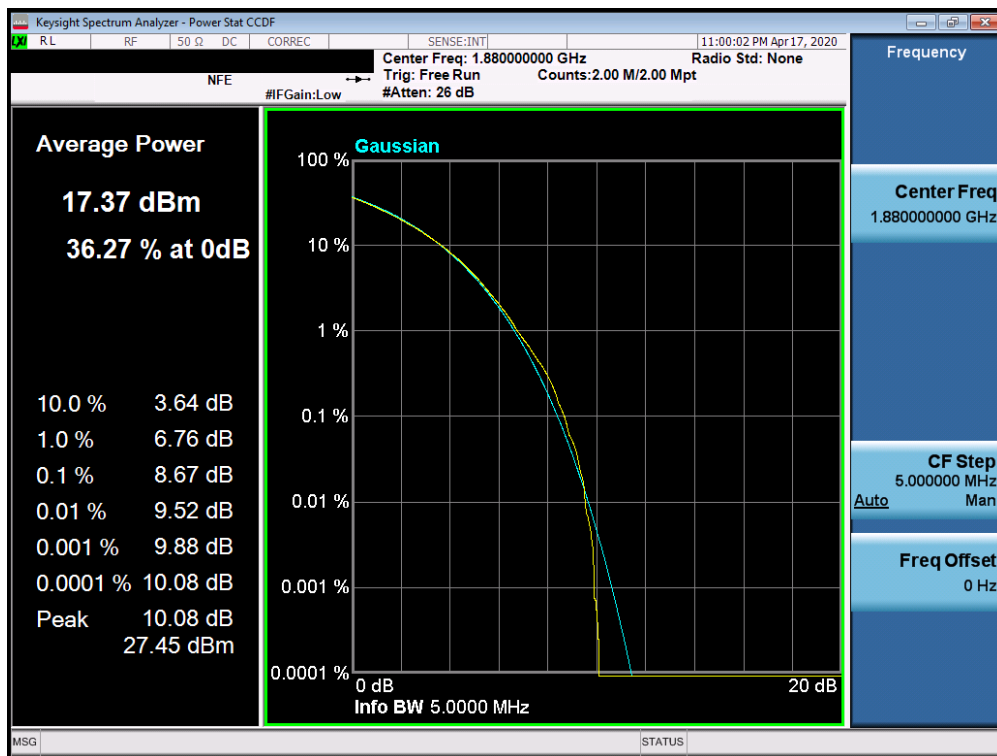


Plot 7-582. PAR Plot (Band n2 - 5.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 321 of 420

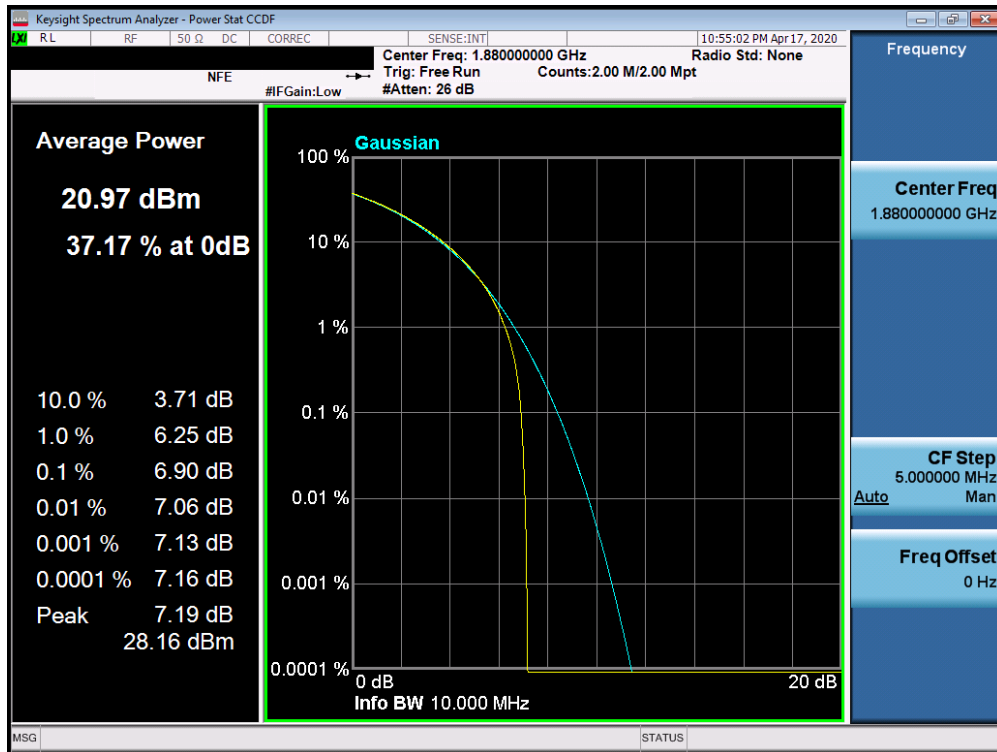


Plot 7-583. PAR Plot (Band n2 - 5.0MHz 64-QAM - Full RB Configuration)

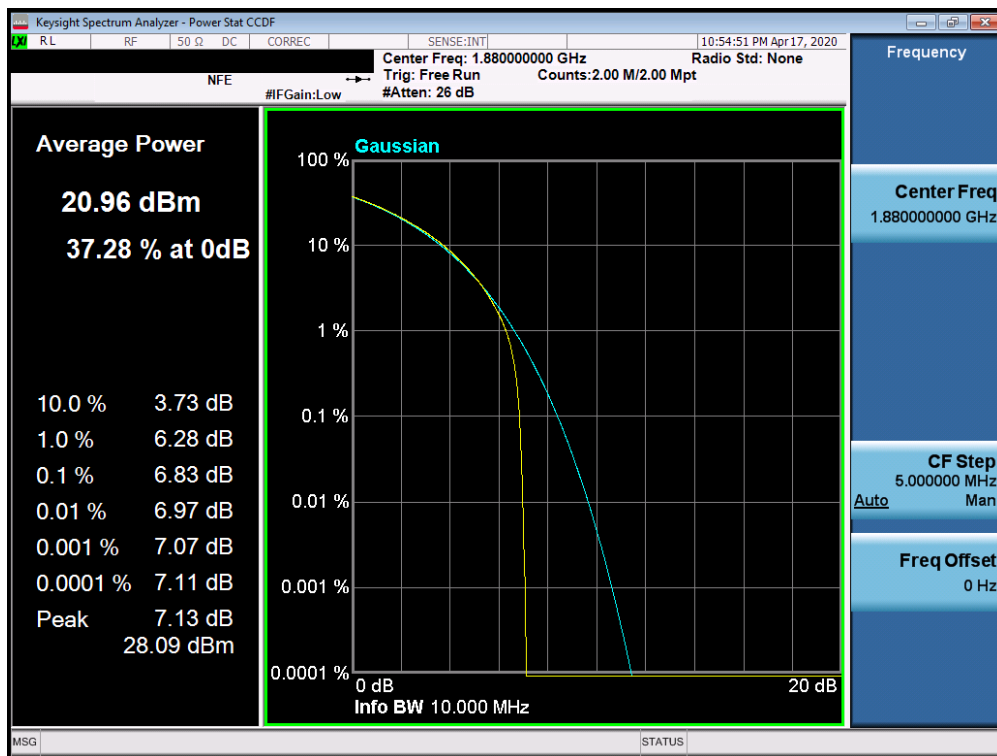


Plot 7-584. PAR Plot (Band n2 - 5.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 322 of 420

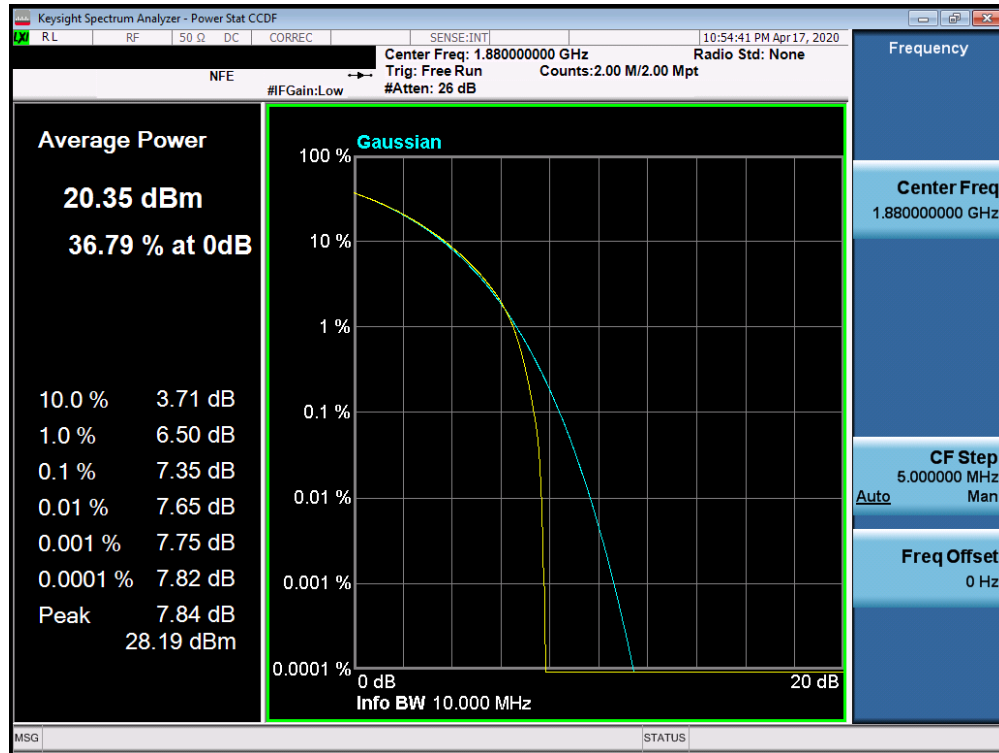


Plot 7-585. PAR Plot (Band n2 - 10.0MHz QPSK - Full RB Configuration)

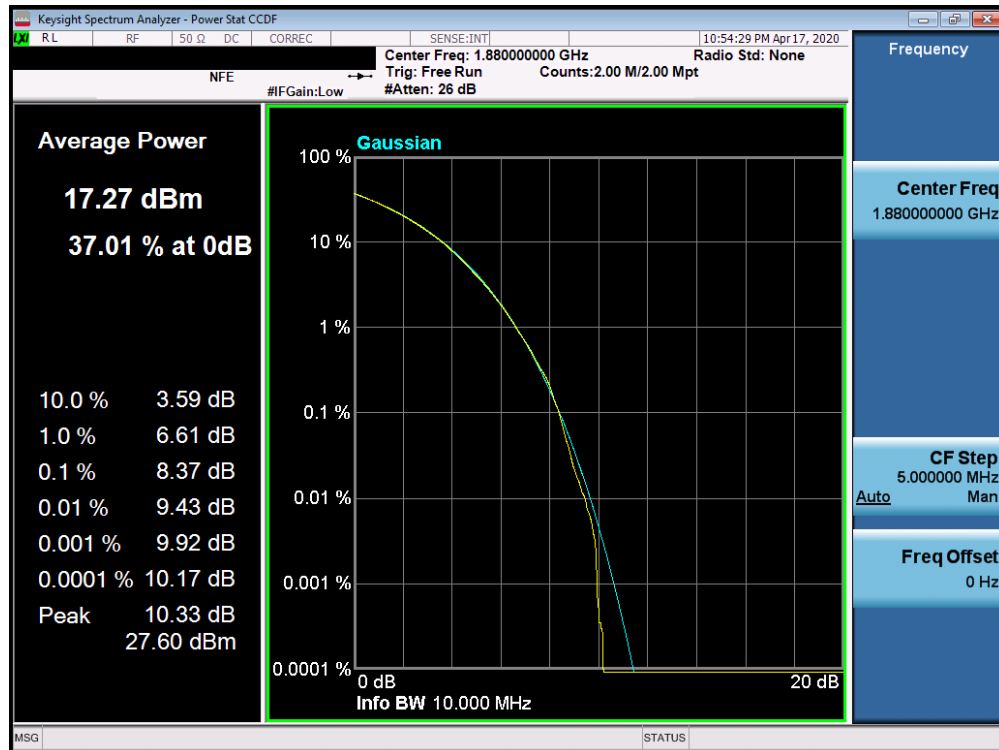


Plot 7-586. PAR Plot (Band n2 - 10.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 323 of 420

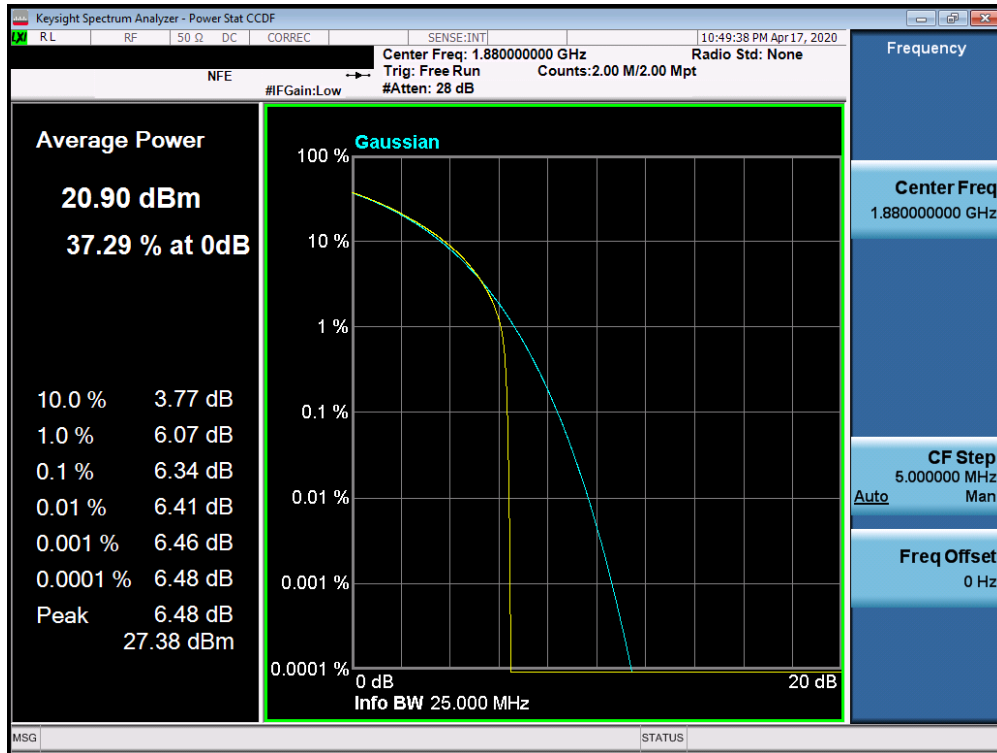


Plot 7-587. PAR Plot (Band n2 - 10.0MHz 64-QAM - Full RB Configuration)

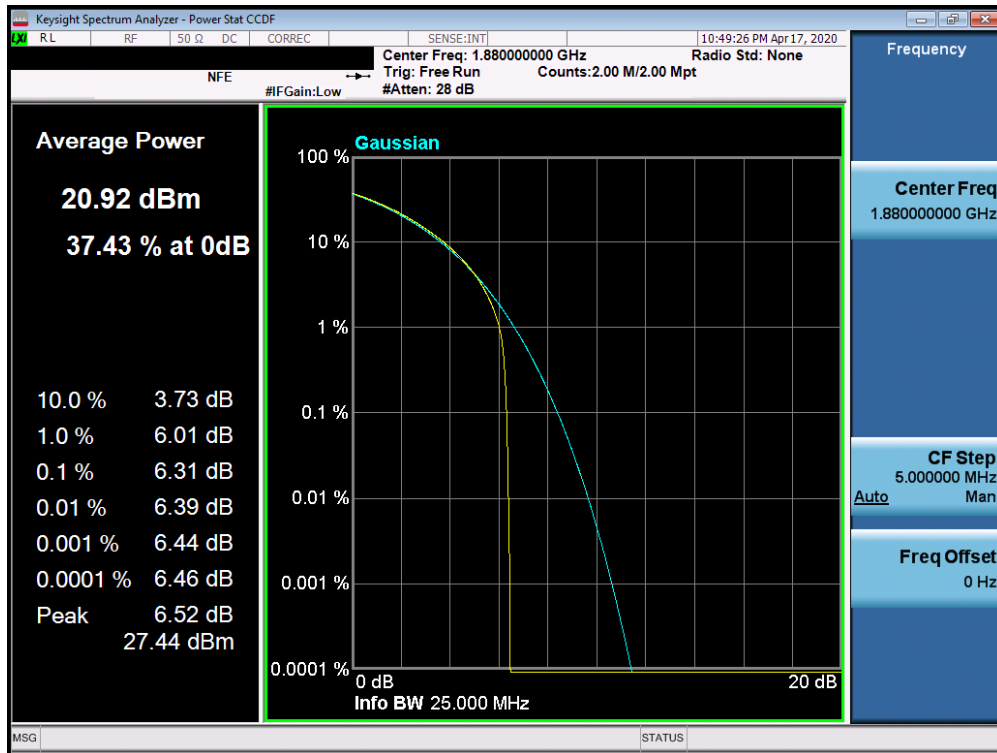


Plot 7-588. PAR Plot (Band n2 - 10.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 324 of 420

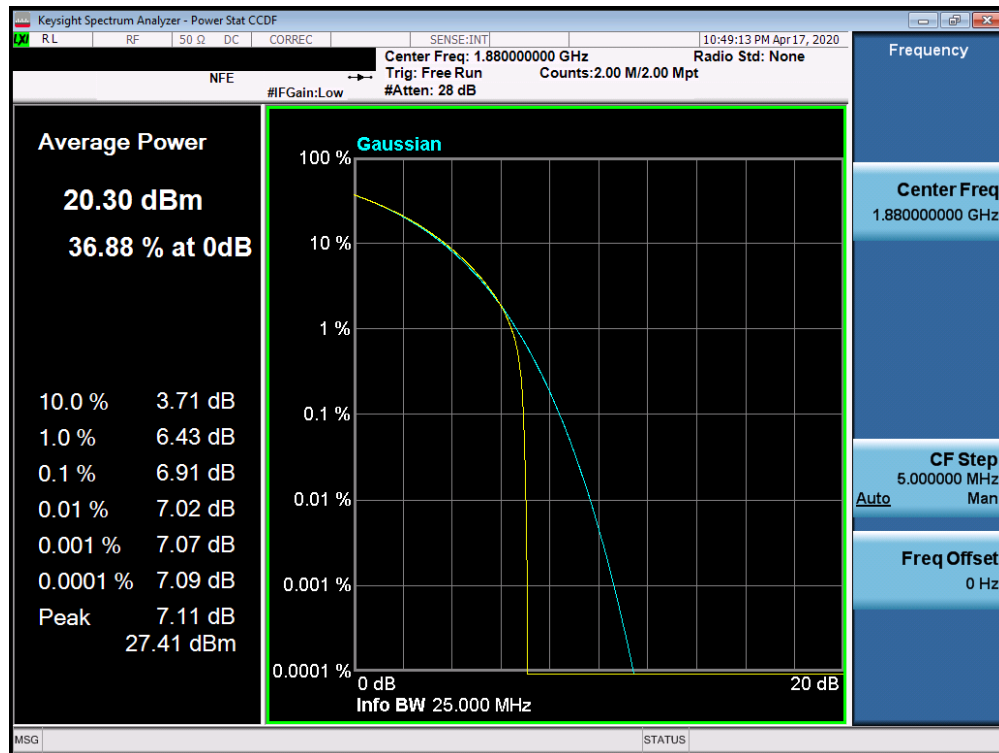


Plot 7-589. PAR Plot (Band n2 - 15.0MHz QPSK - Full RB Configuration)

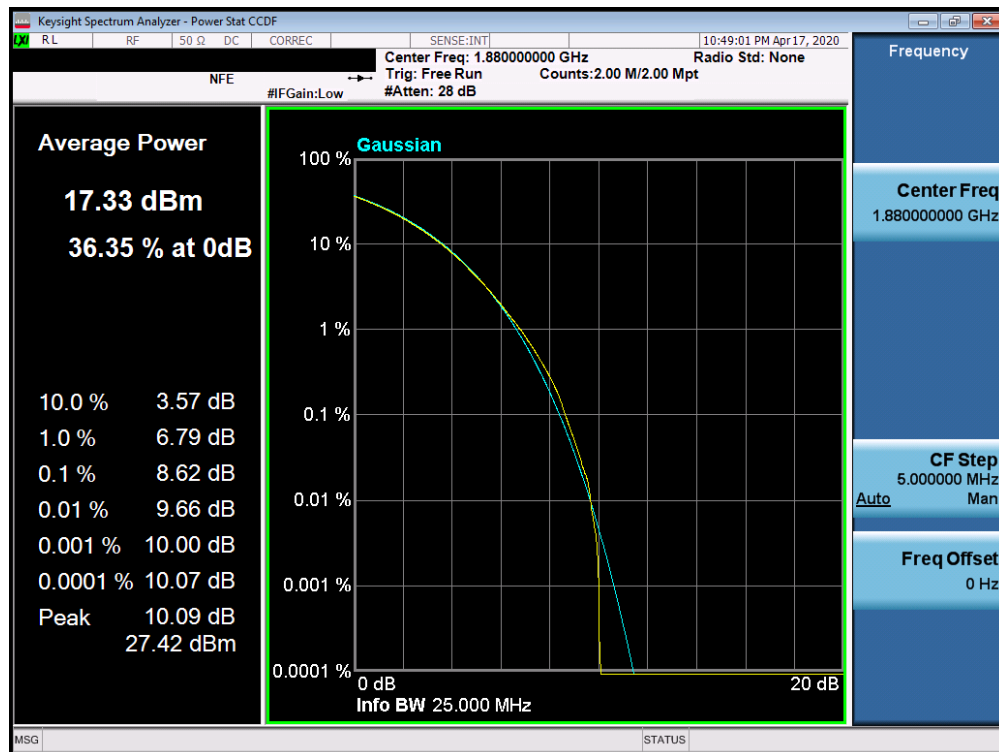


Plot 7-590. PAR Plot (Band n2 - 15.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 325 of 420

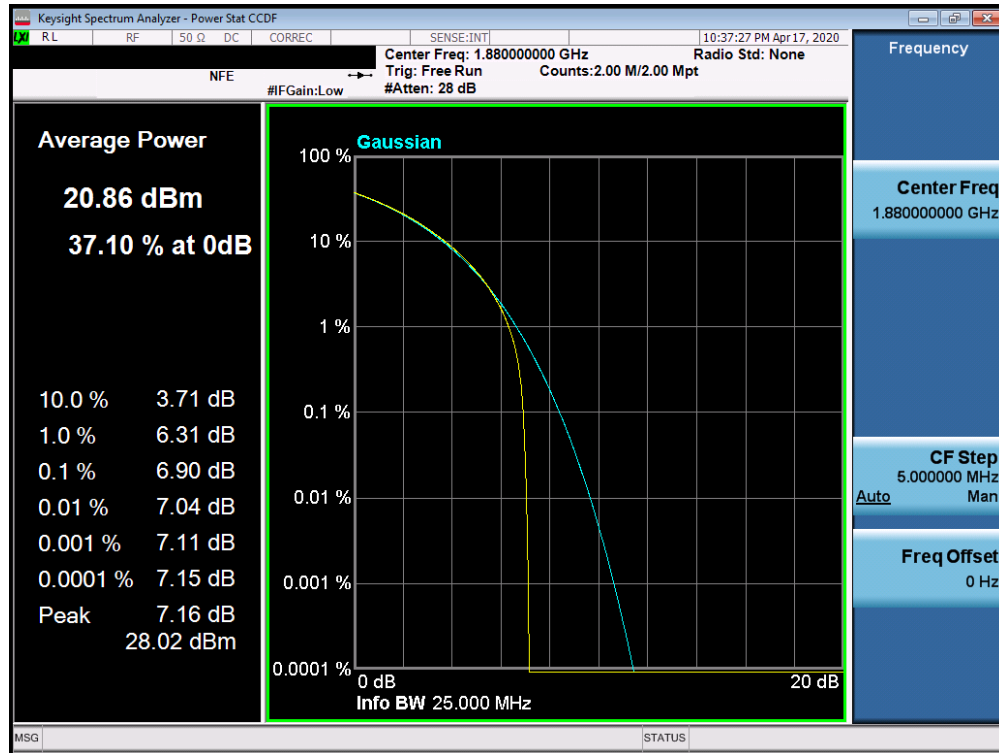


Plot 7-591. PAR Plot (Band n2 - 15.0MHz 64-QAM - Full RB Configuration)

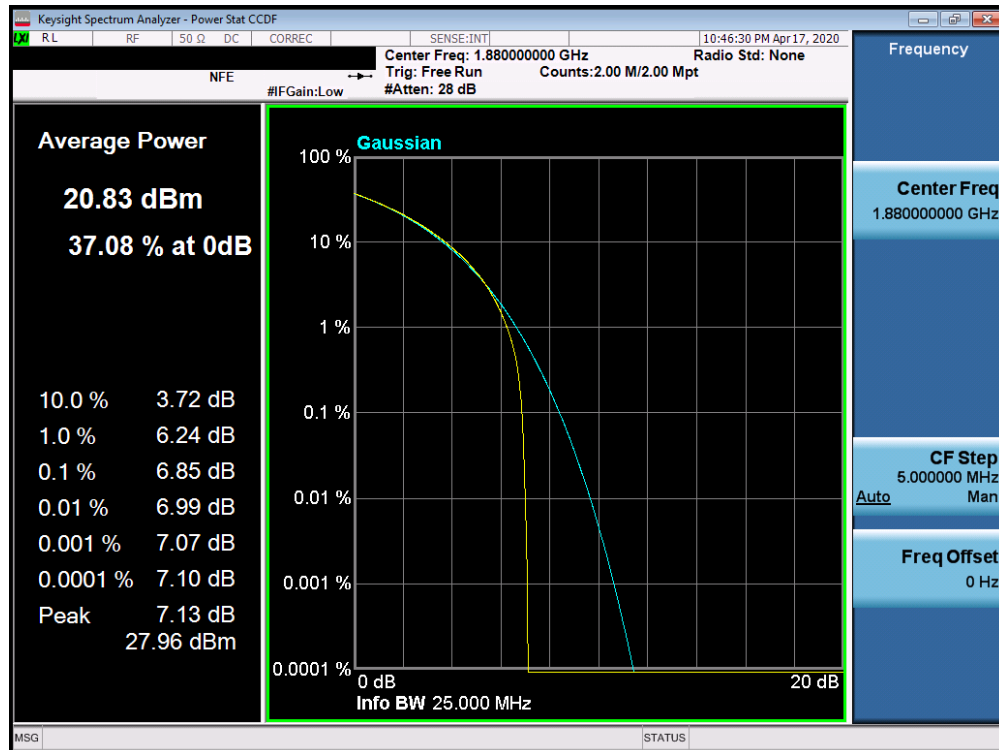


Plot 7-592. PAR Plot (Band n2 - 15.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 326 of 420

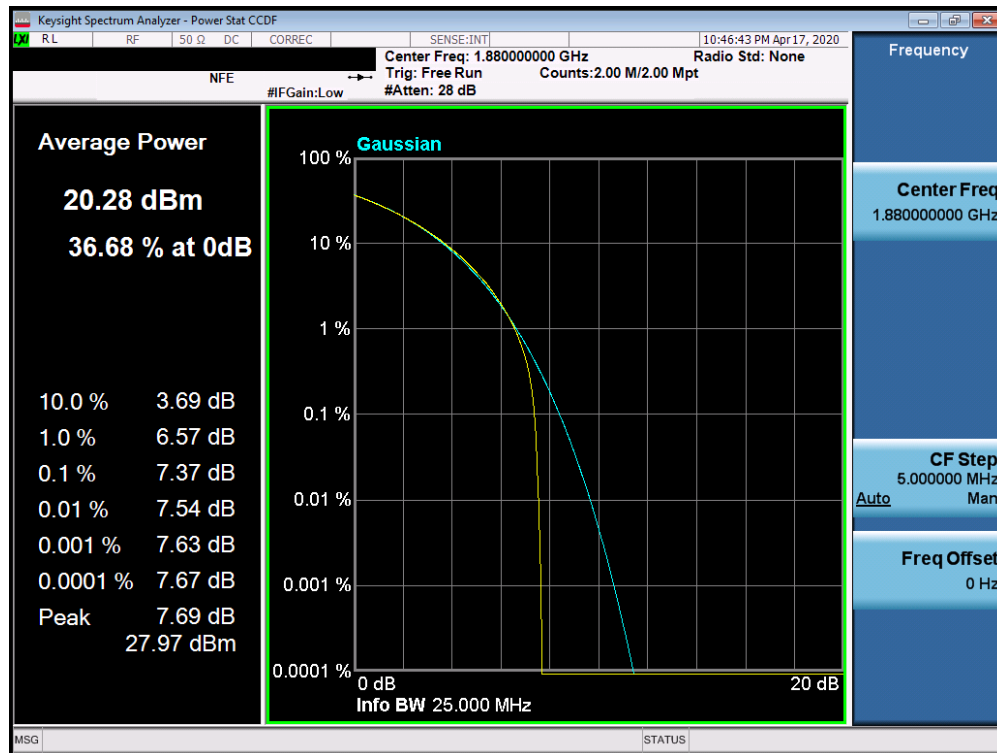


Plot 7-593. PAR Plot (Band n2 - 20.0MHz QPSK - Full RB Configuration)

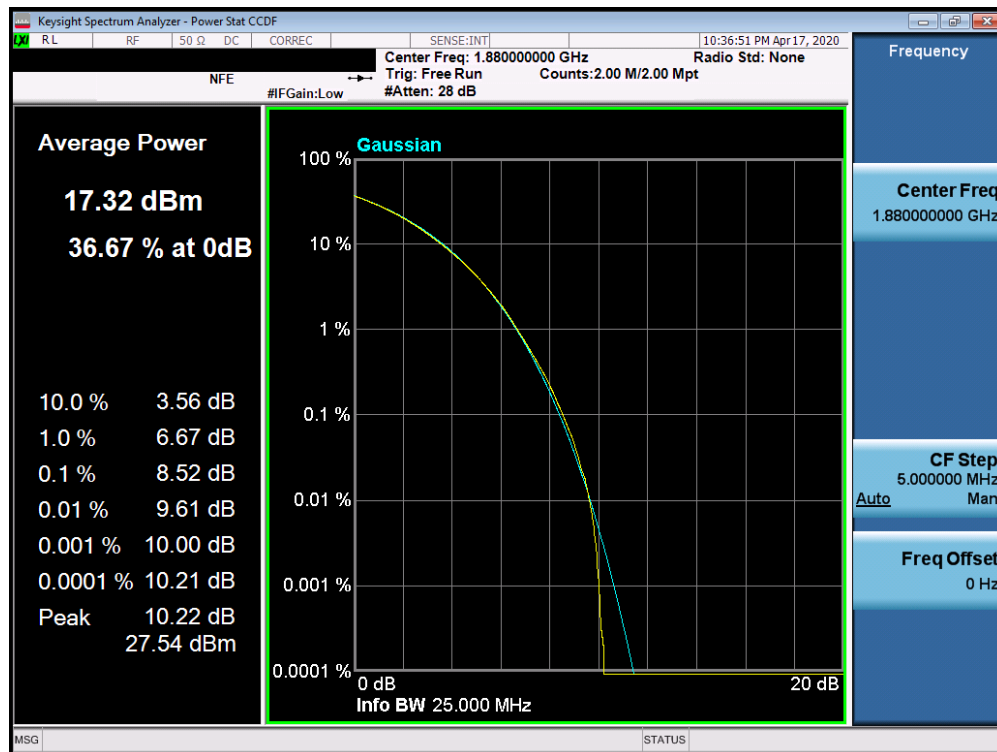


Plot 7-594. PAR Plot (Band n2 - 20.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 327 of 420



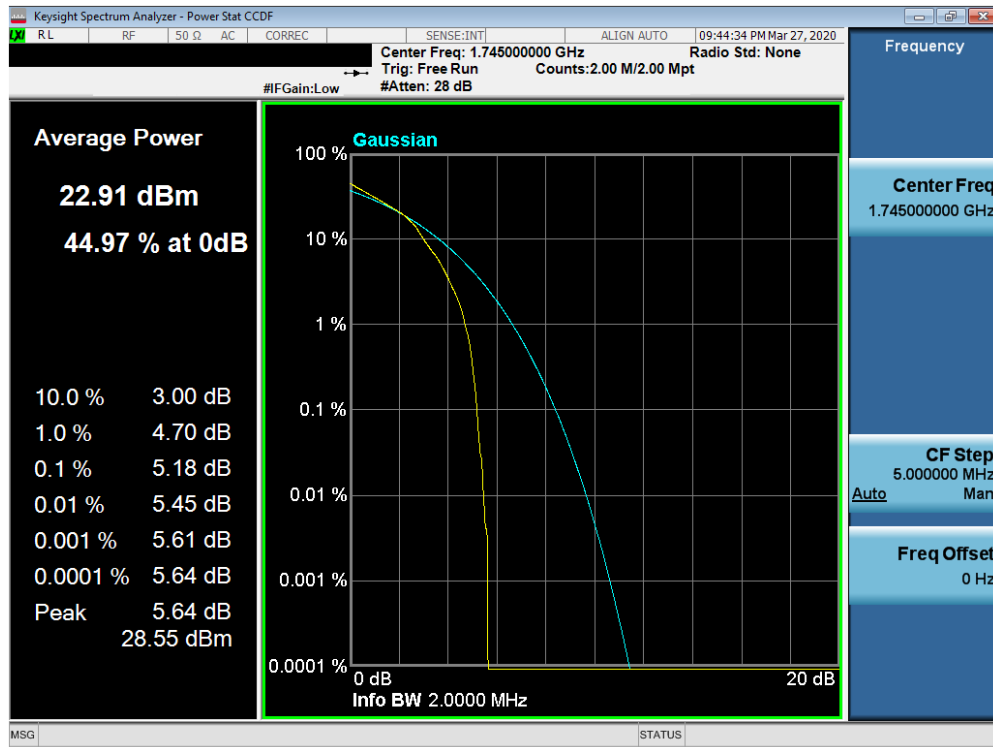
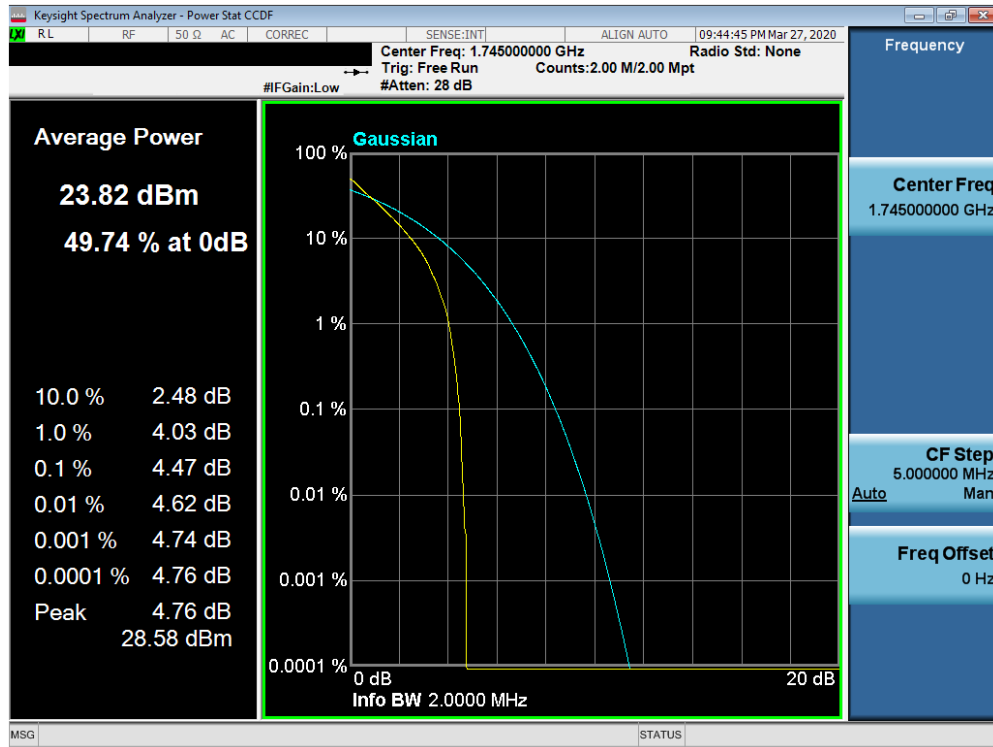
Plot 7-595. PAR Plot (Band n2 - 20.0MHz 64-QAM - Full RB Configuration)



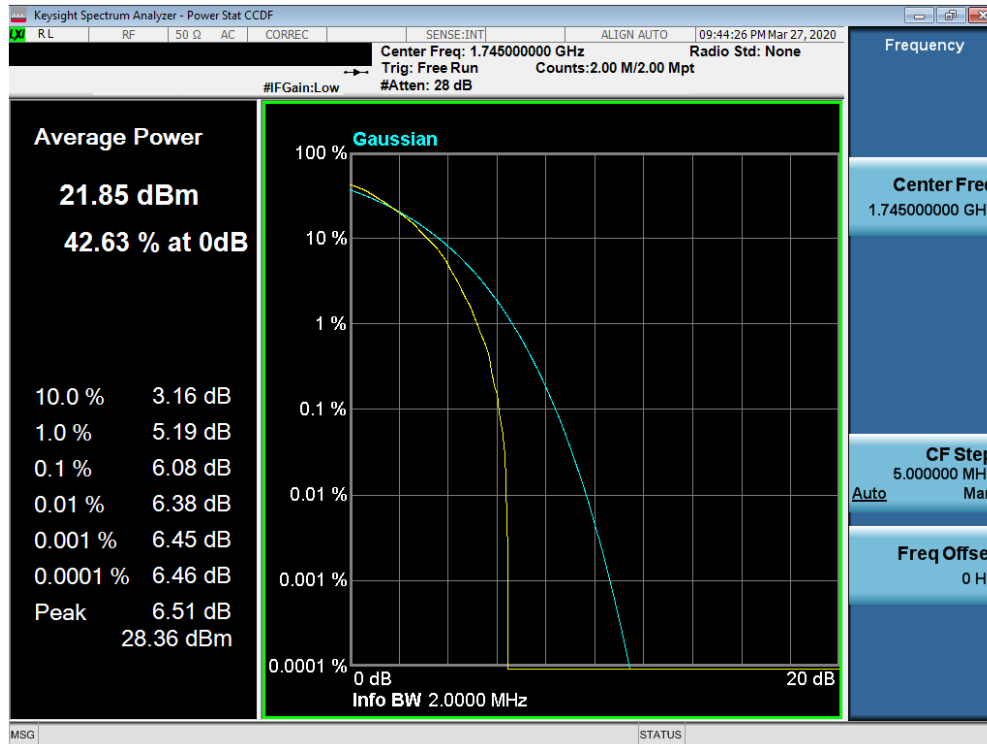
Plot 7-596. PAR Plot (Band n2 - 20.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 328 of 420

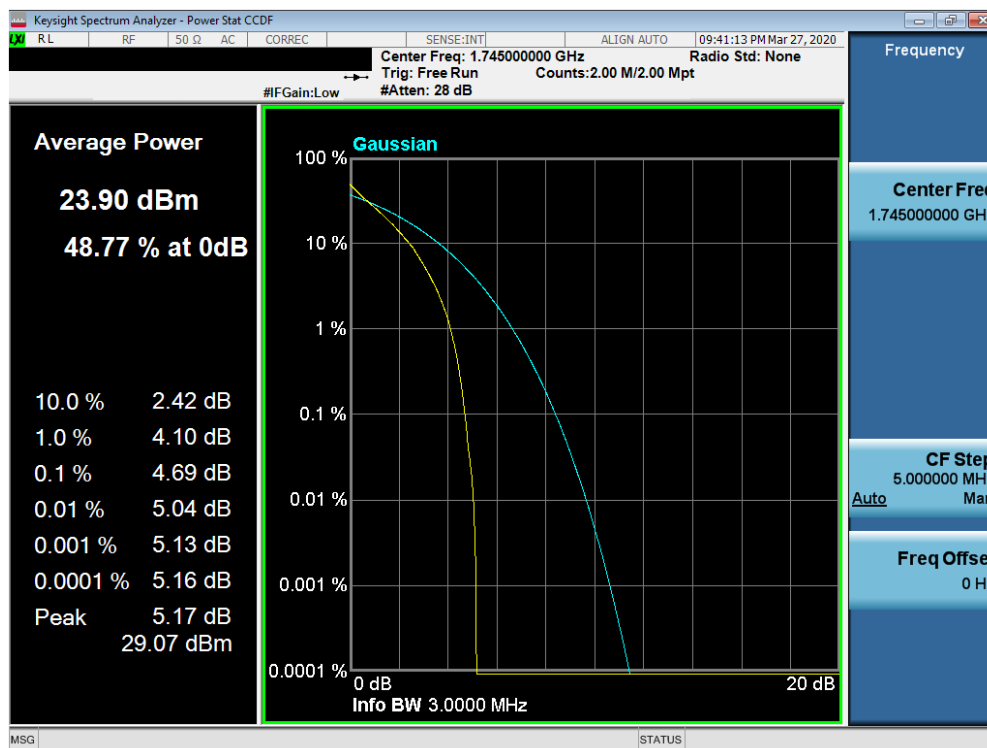
Band 66/4



FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 329 of 420

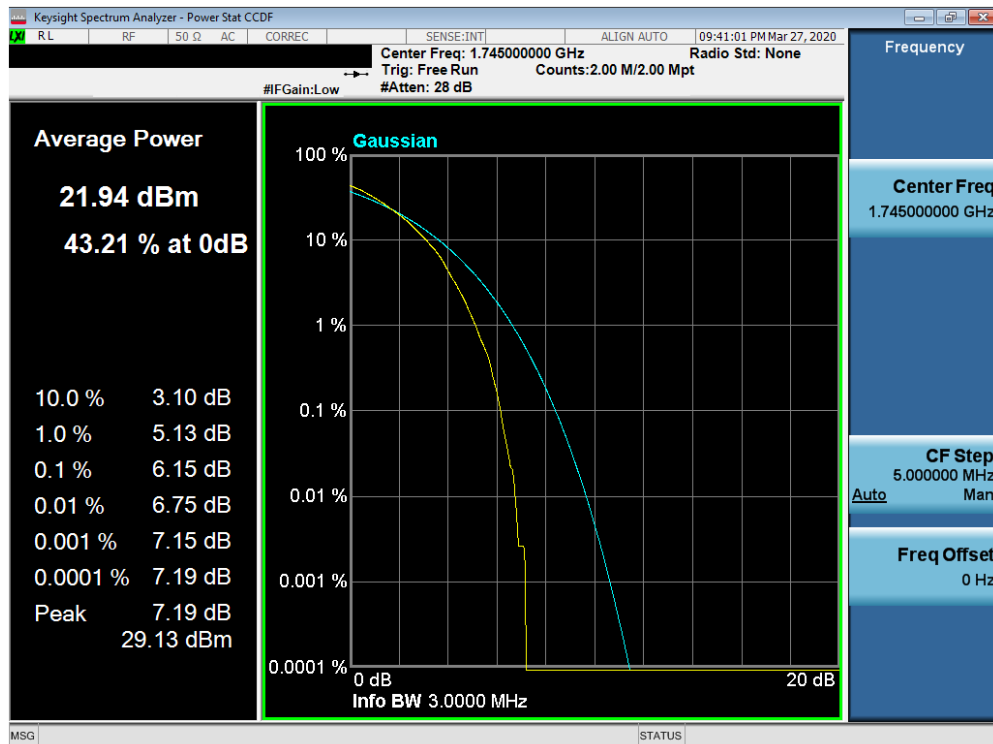
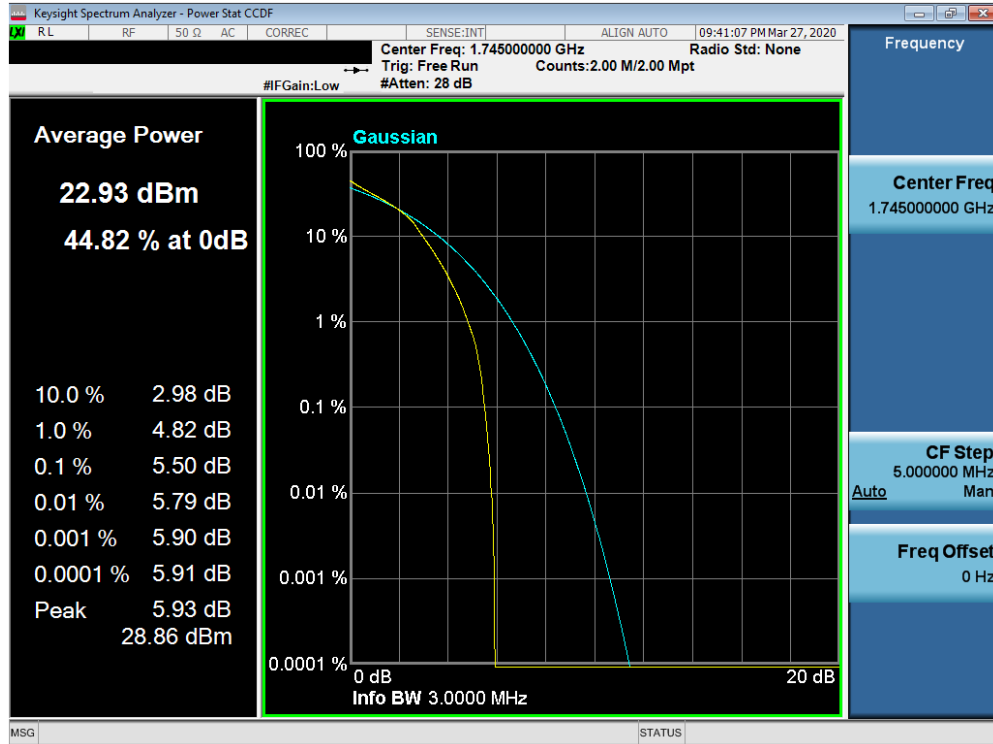


Plot 7-599. PAR Plot (Band 66/4 - 1.4MHz 64-QAM - Full RB Configuration)

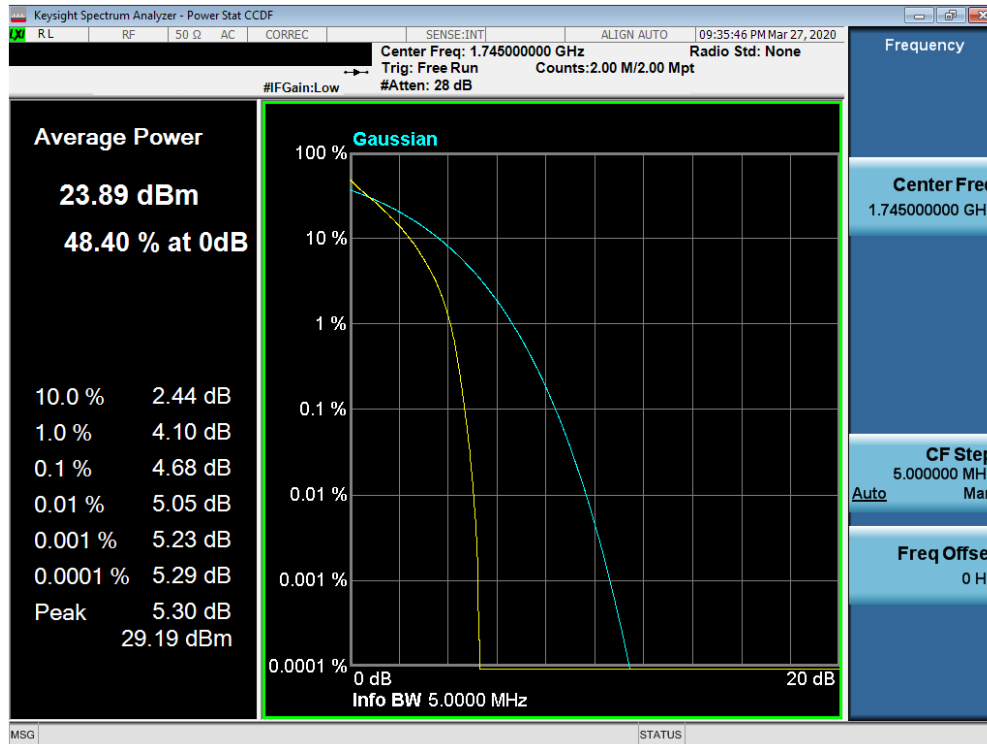


Plot 7-600. PAR Plot (Band 66/4 - 3.0MHz QPSK - Full RB Configuration)

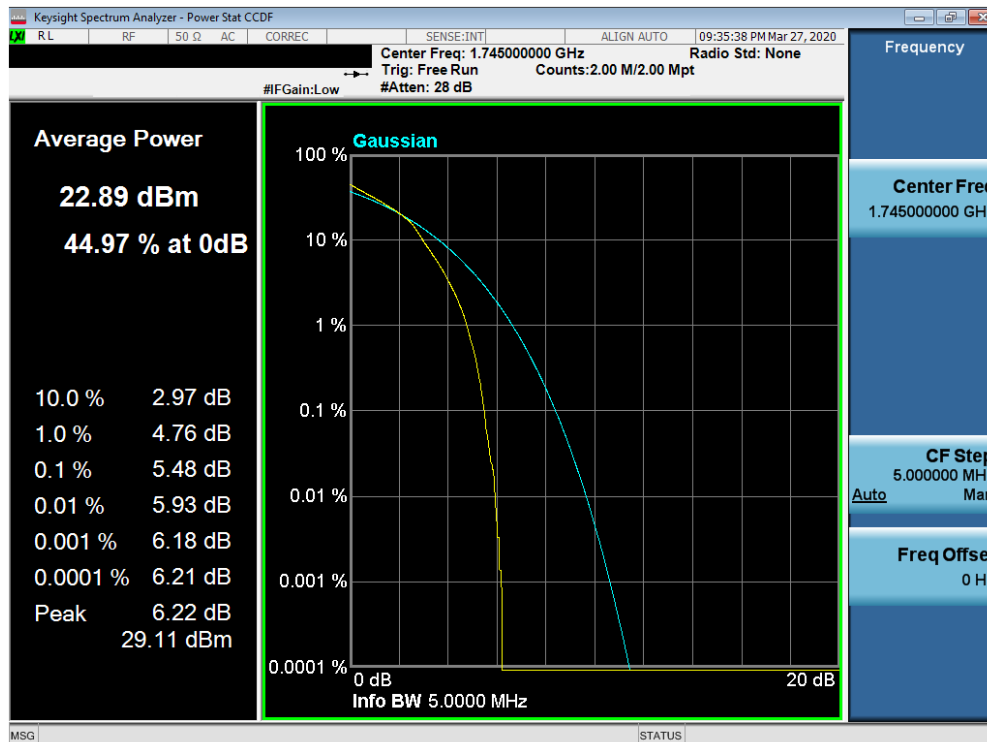
FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 330 of 420



FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 331 of 420

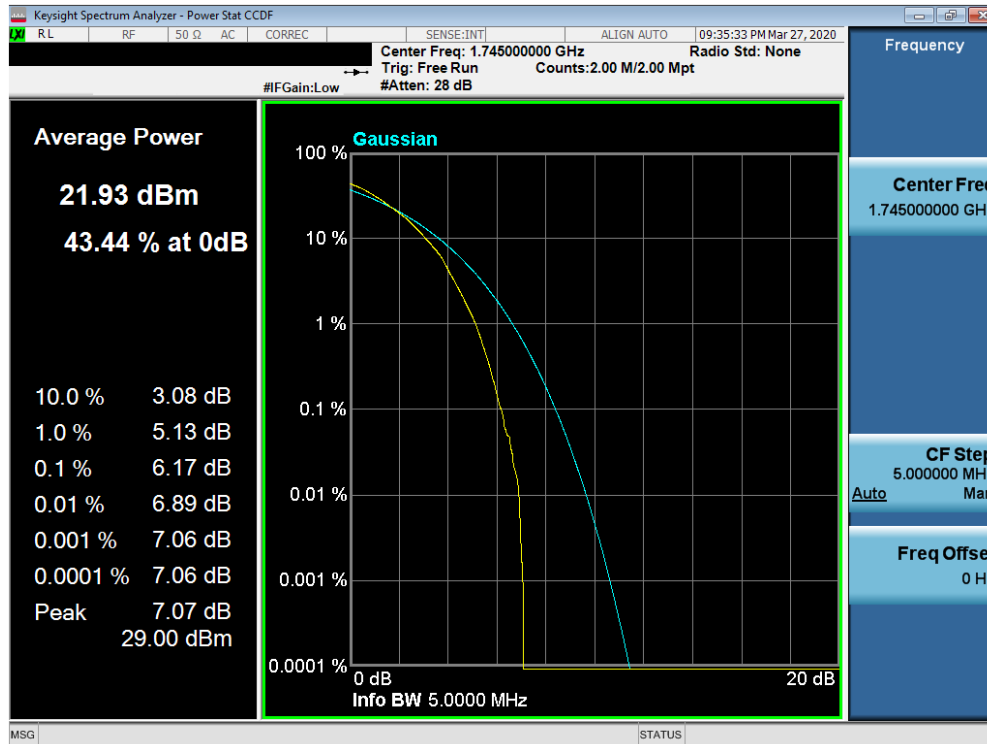


Plot 7-603. PAR Plot (Band 66/4 - 5.0MHz QPSK - Full RB Configuration)

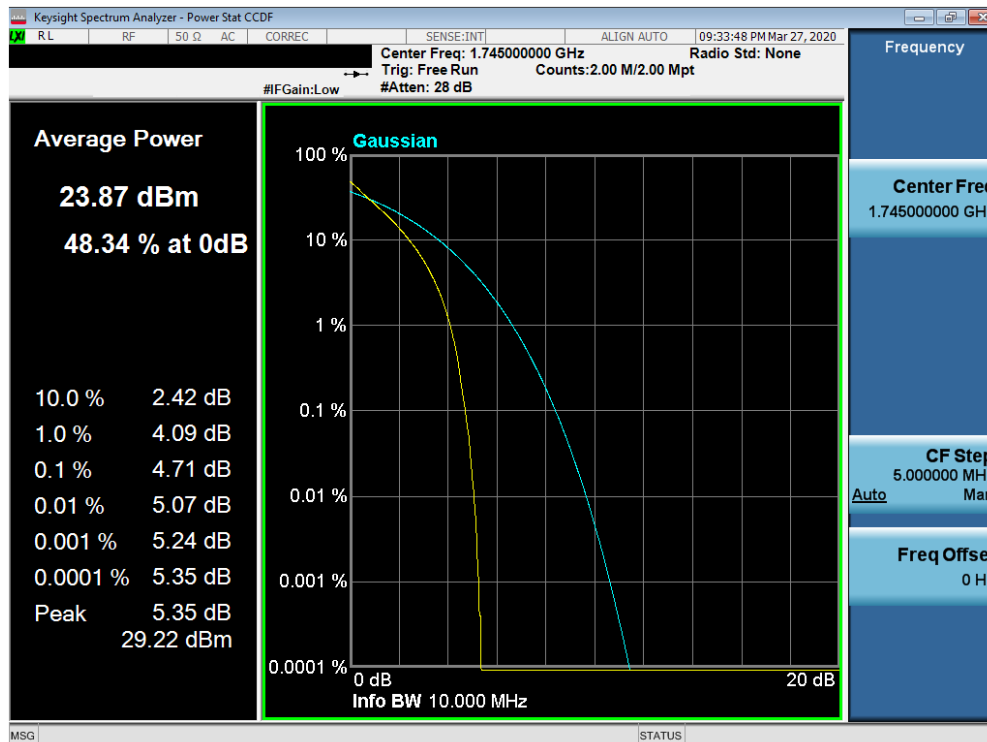


Plot 7-604. PAR Plot (Band 66/4 - 5.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 332 of 420

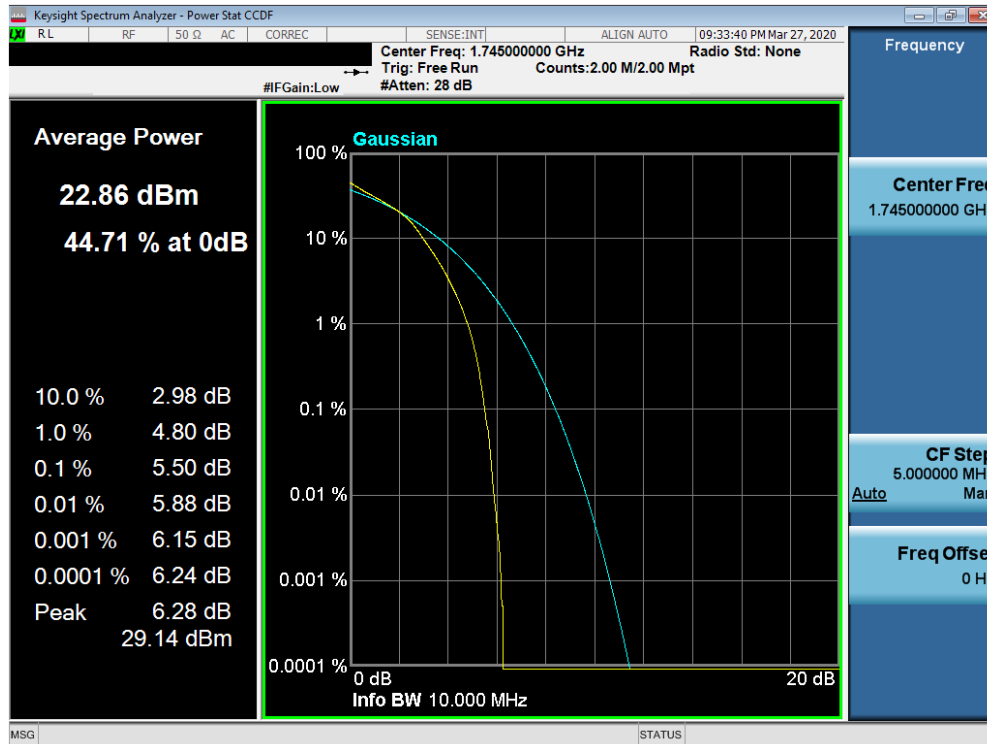


Plot 7-605. PAR Plot (Band 66/4 - 5.0MHz 64-QAM - Full RB Configuration)

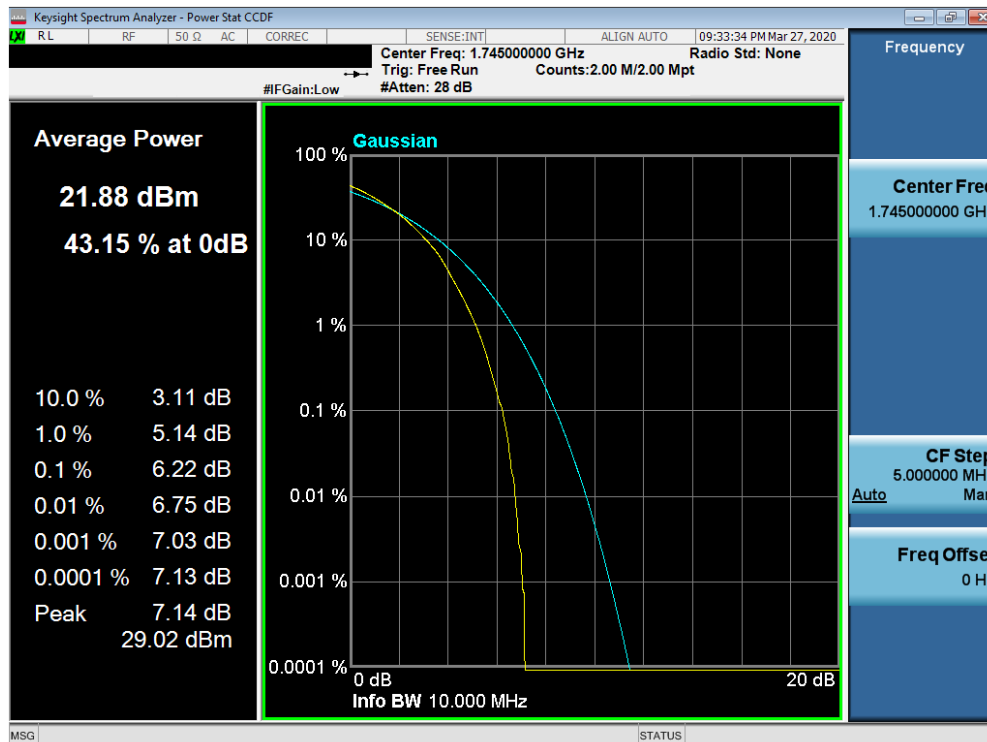


Plot 7-606. PAR Plot (Band 66/4 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 333 of 420

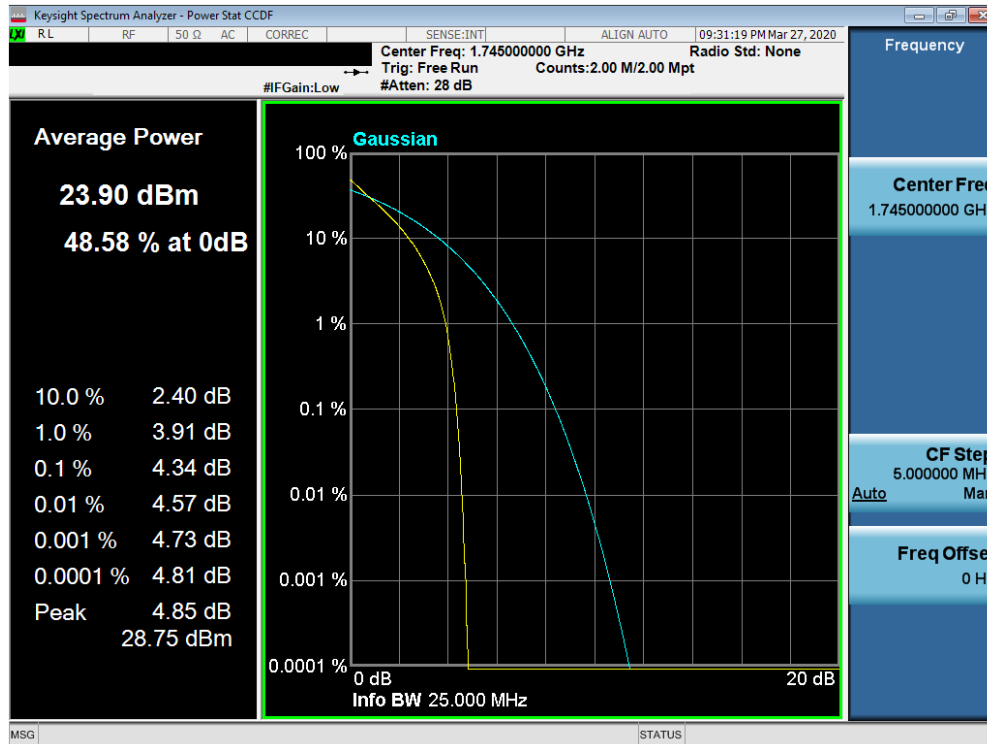


Plot 7-607. PAR Plot (Band 66/4 - 10.0MHz 16-QAM - Full RB Configuration)

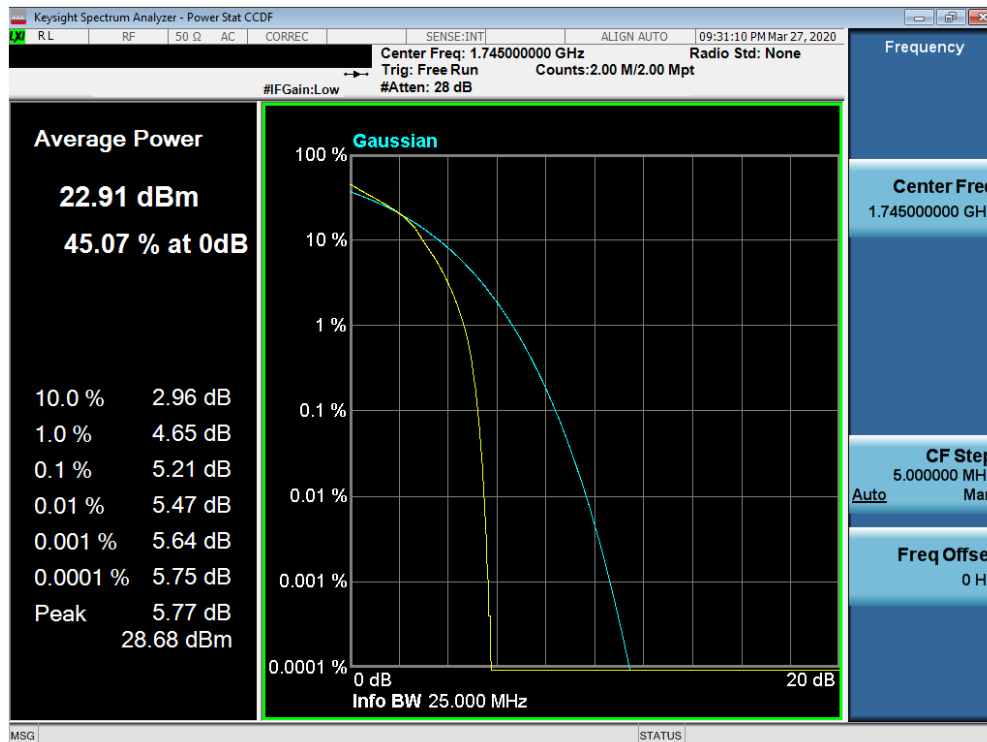


Plot 7-608. PAR Plot (Band 66/4 - 10.0MHz 64-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 334 of 420

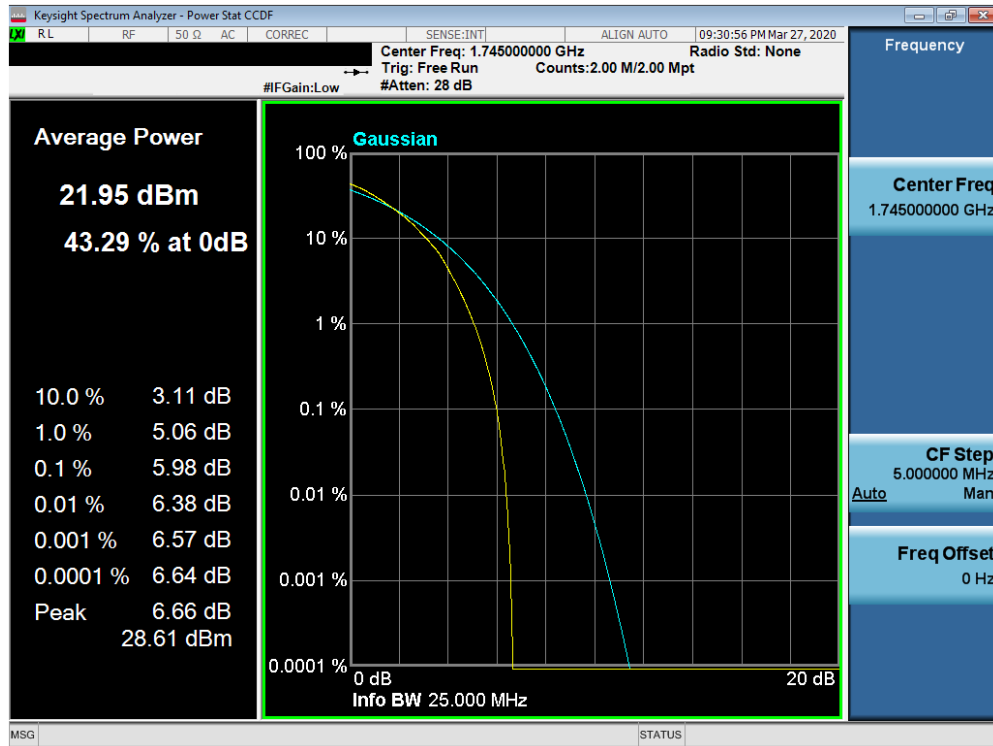


Plot 7-609. PAR Plot (Band 66/4 - 15.0MHz QPSK - Full RB Configuration)

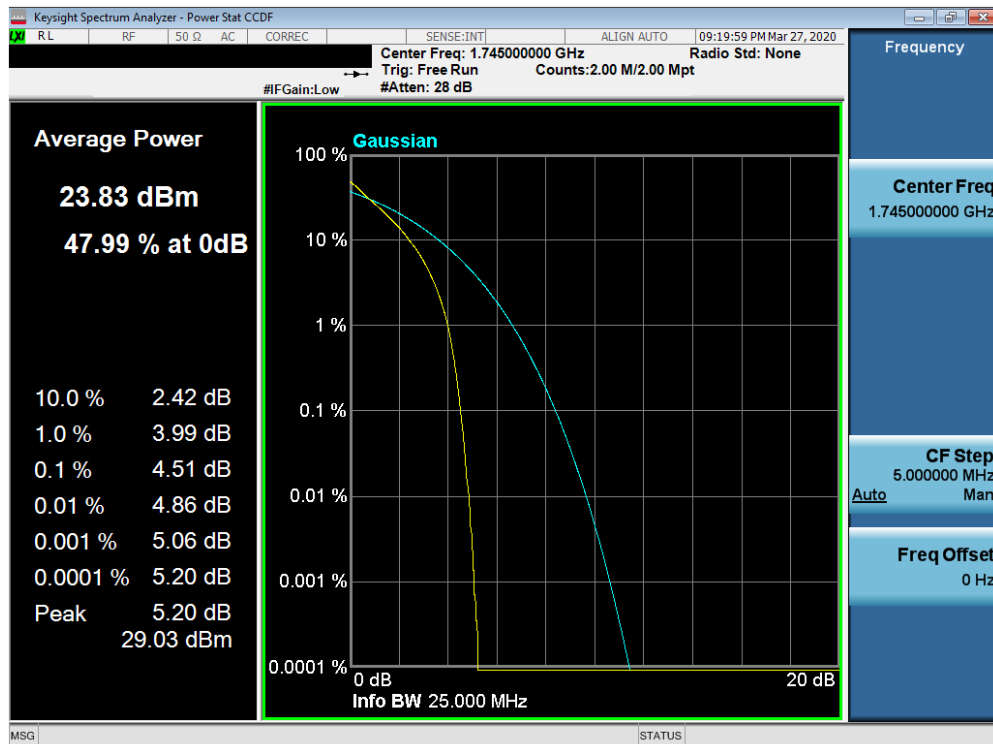


Plot 7-610. PAR Plot (Band 66/4 - 15.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 335 of 420

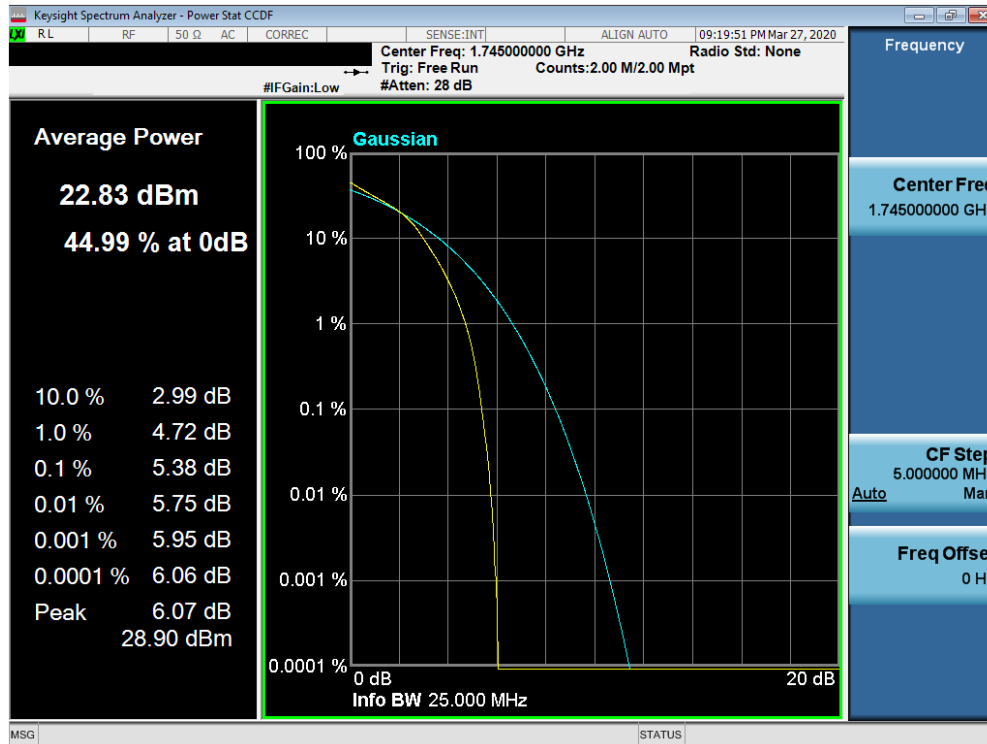


Plot 7-611. PAR Plot (Band 66/4 - 15.0MHz 64-QAM - Full RB Configuration)

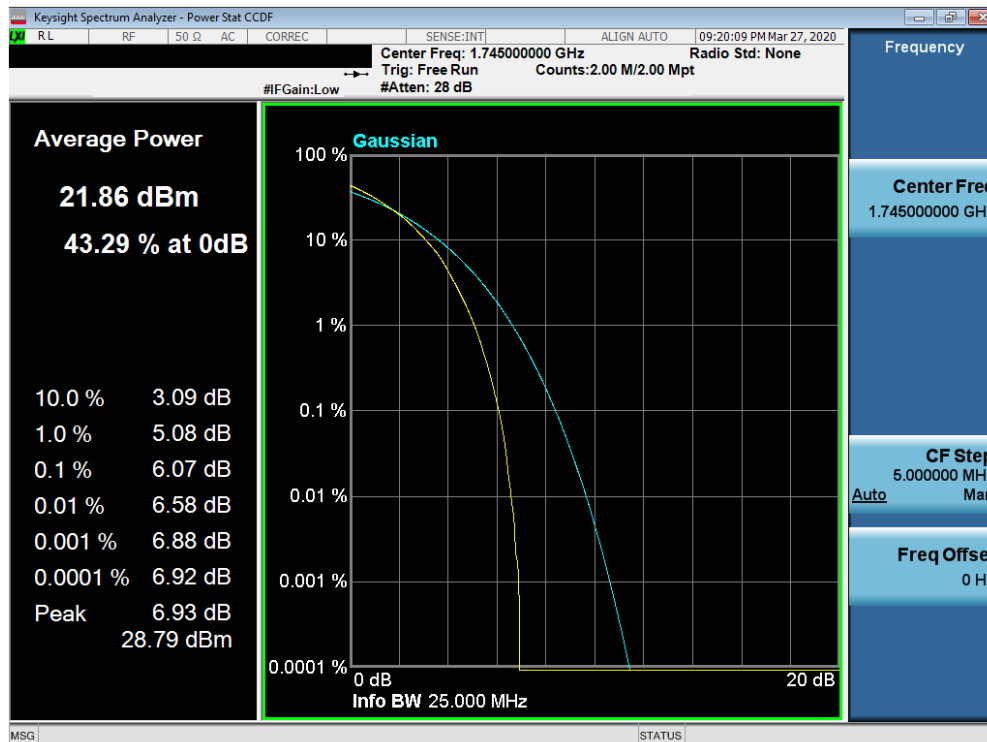


Plot 7-612. PAR Plot (Band 66/4 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 336 of 420



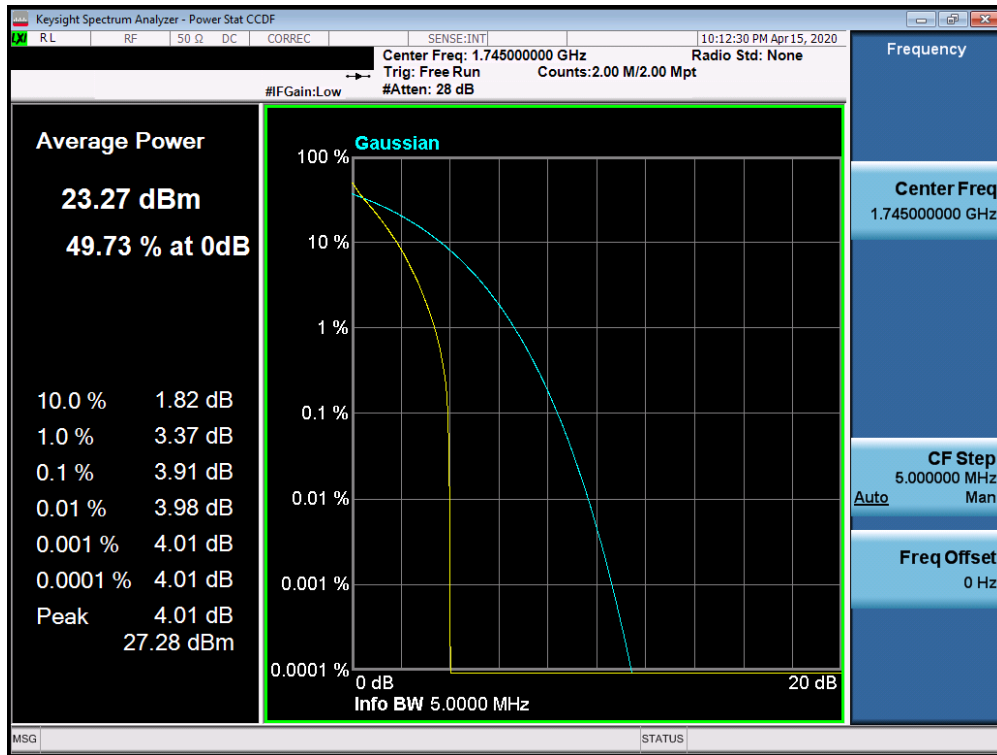
Plot 7-613. PAR Plot (Band 66/4 - 20.0MHz 16-QAM - Full RB Configuration)



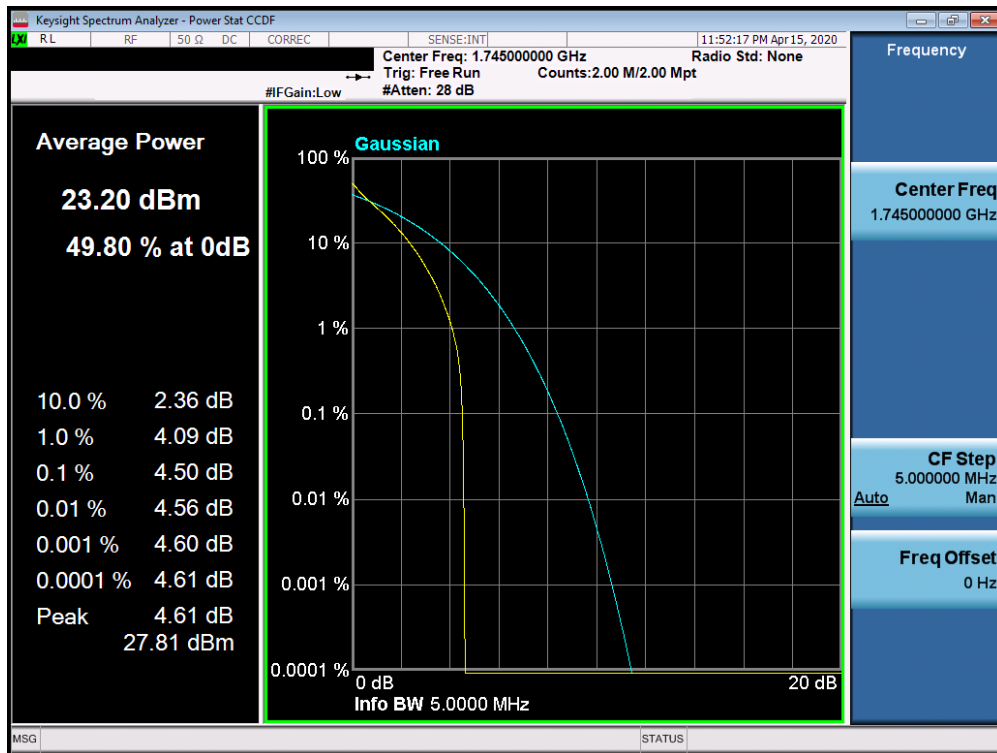
Plot 7-614. PAR Plot (Band 66/4 - 20.0MHz 64-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 337 of 420

NR Band n66

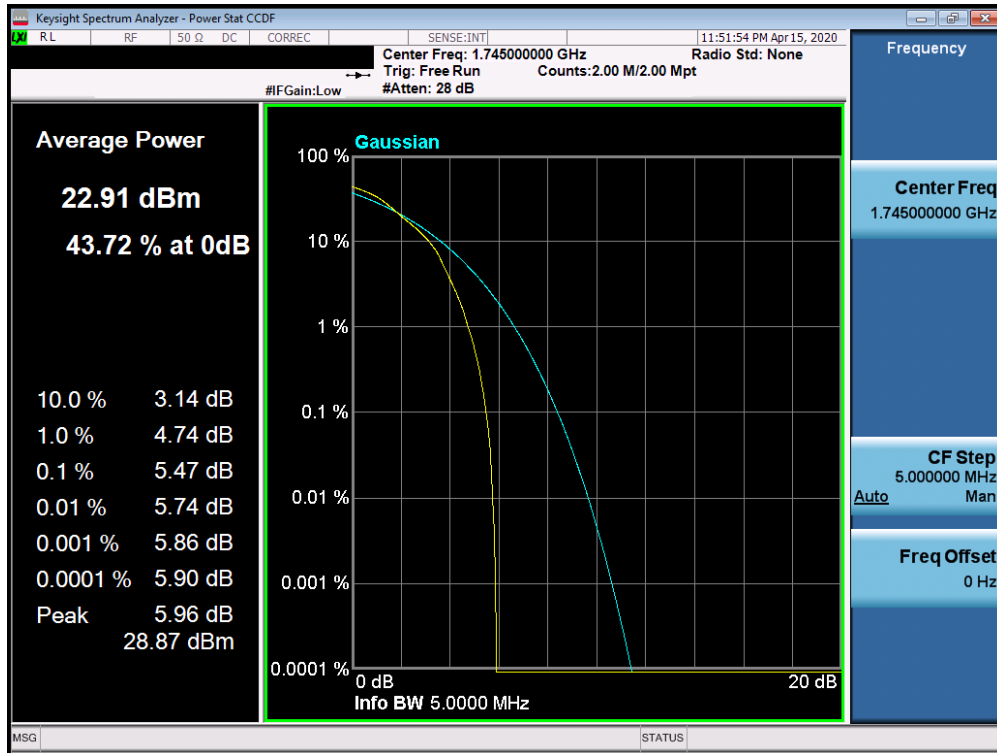


Plot 7-615. PAR Plot (n66 - 5.0MHz DFT-s-OFDM BPSK - Full RB Configuration)

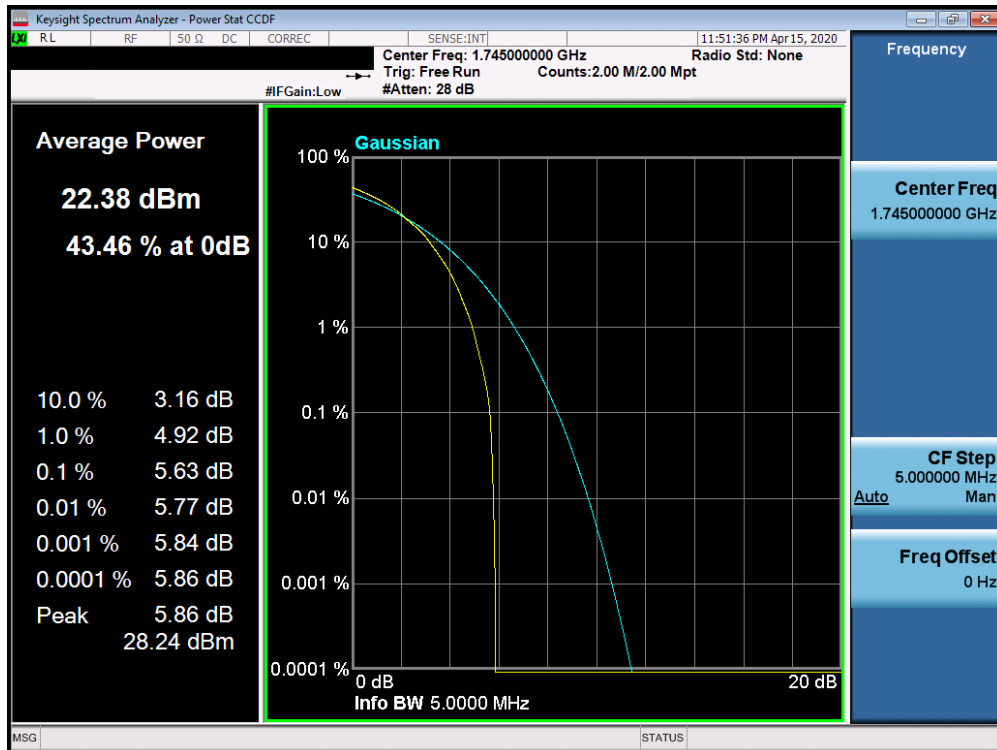


Plot 7-616. PAR Plot (n66 - 5.0MHz CP-OFDM-QPSK - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 338 of 420

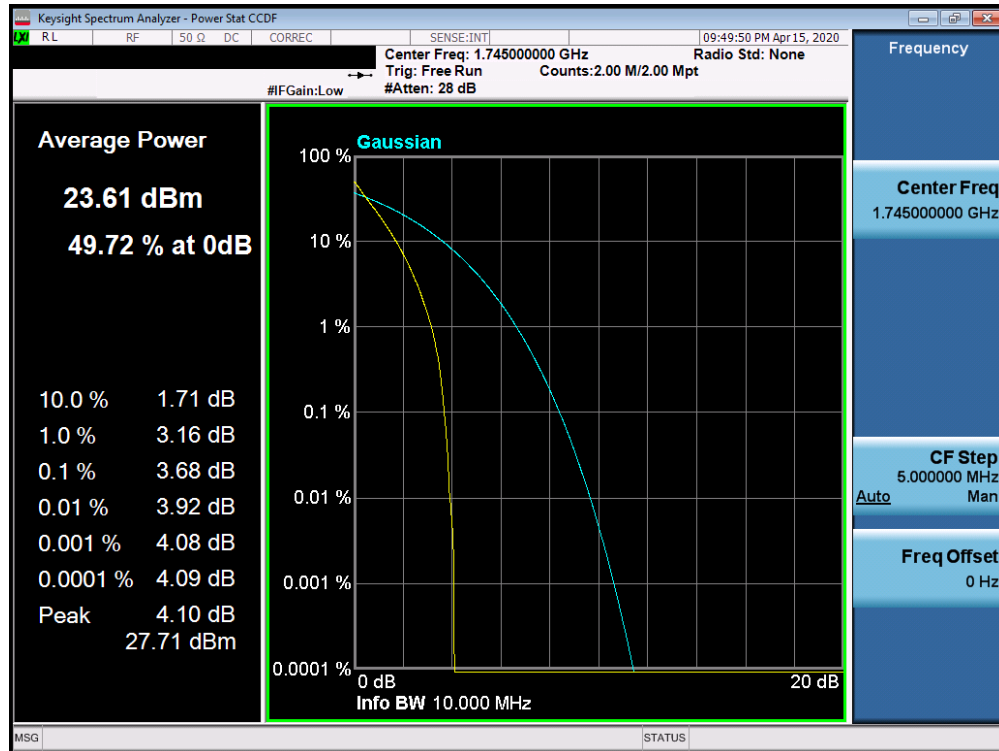


Plot 7-617. PAR Plot (n66 - 5.0MHz CP-OFDM-16-QAM - Full RB Configuration)

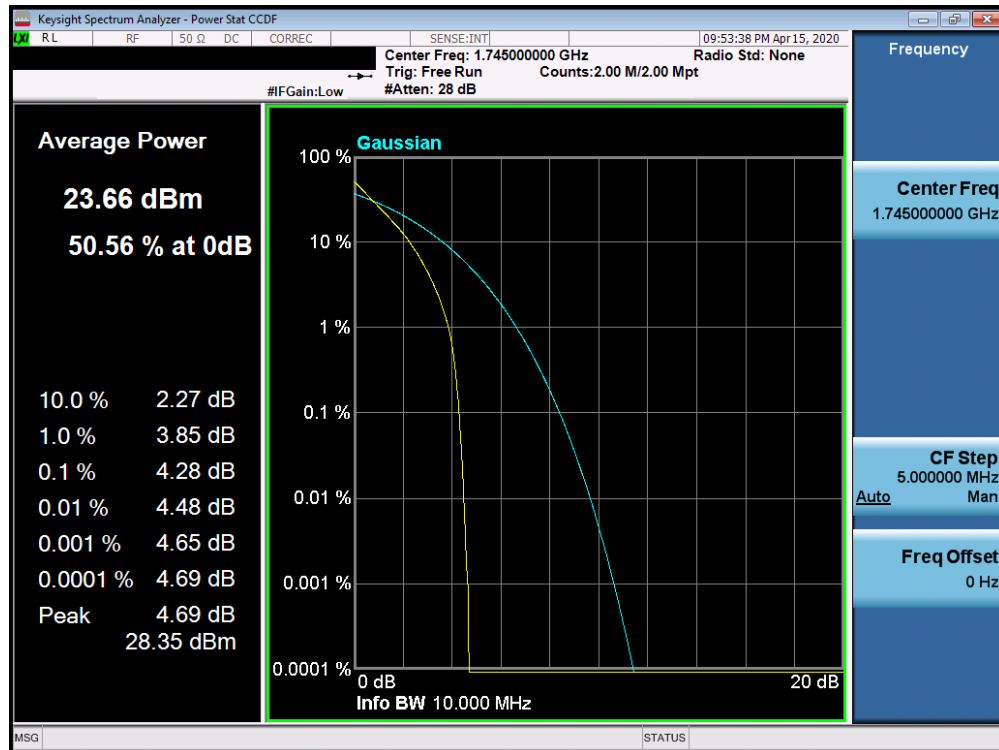


Plot 7-618. PAR Plot (n66 - 5.0MHz CP-OFDM-64-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 339 of 420

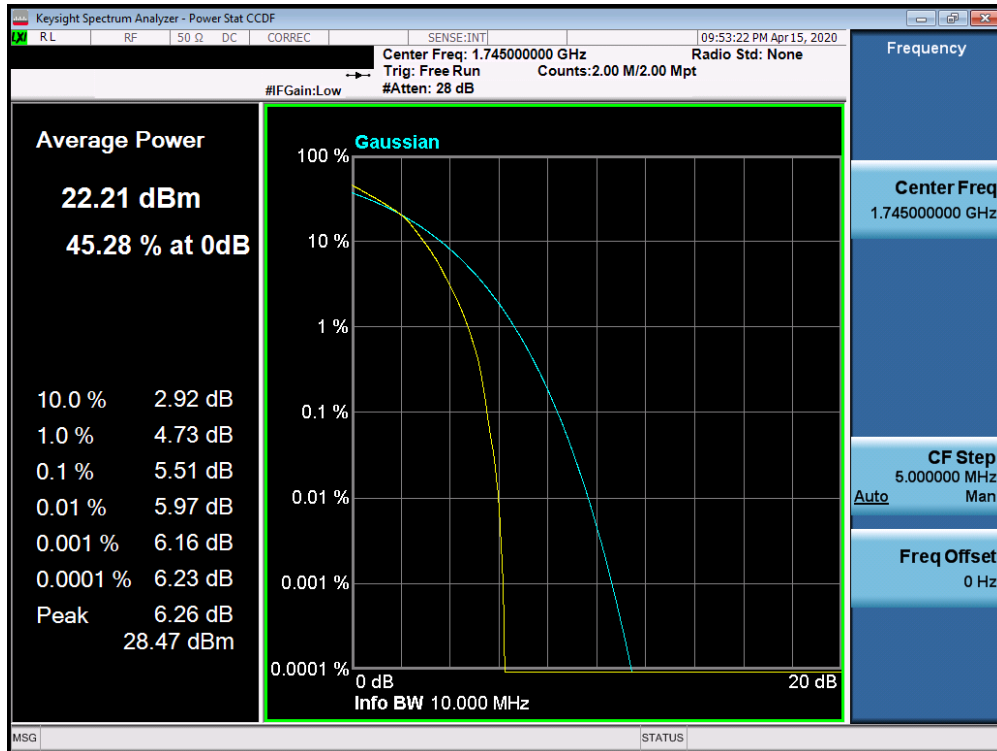


Plot 7-619. PAR Plot (n66 - 10.0MHz DFT-s-OFDM BPSK - Full RB Configuration)

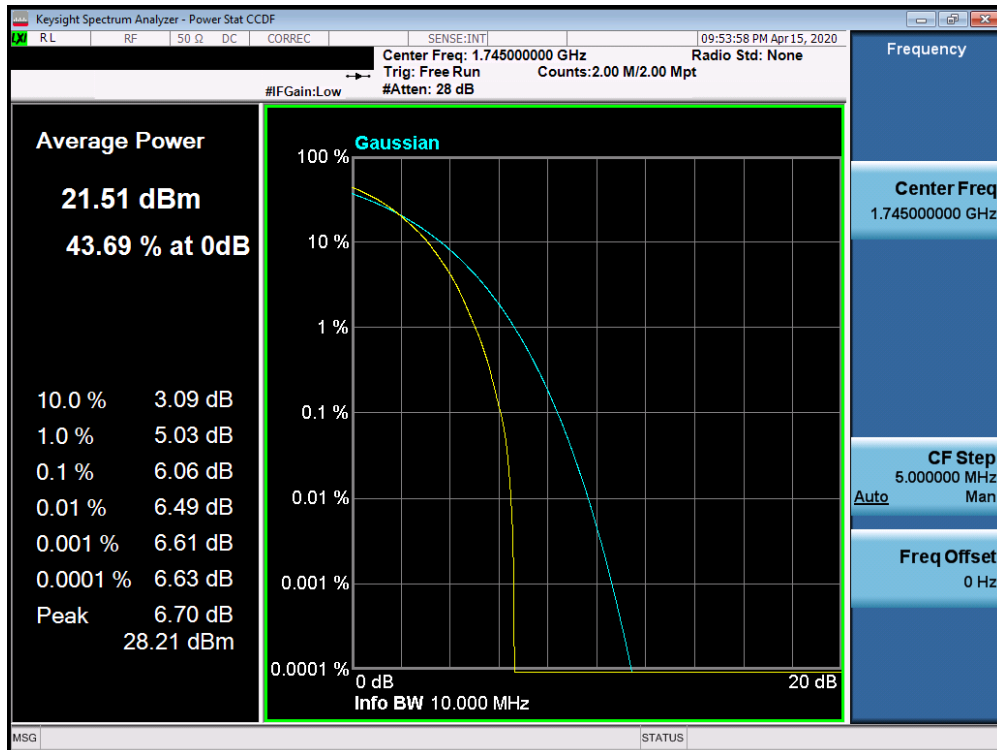


Plot 7-620. PAR Plot (n66 - 10.0MHz CP-OFDM-QPSK - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 340 of 420

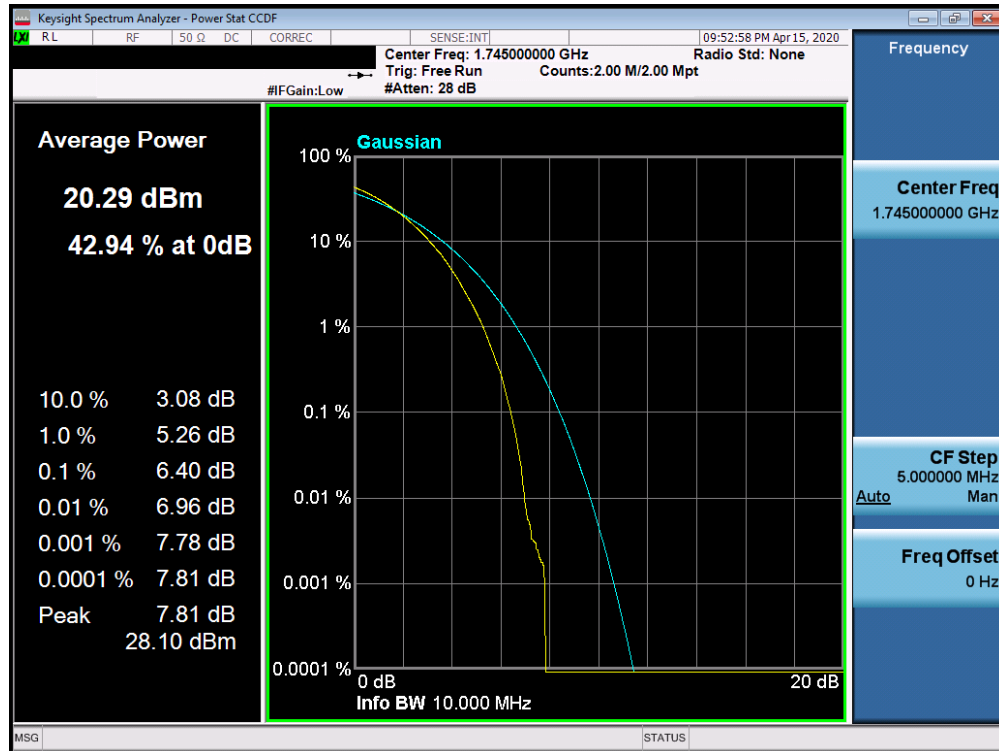


Plot 7-621. PAR Plot (n66 - 10.0MHz CP-OFDM-16-QAM - Full RB Configuration)

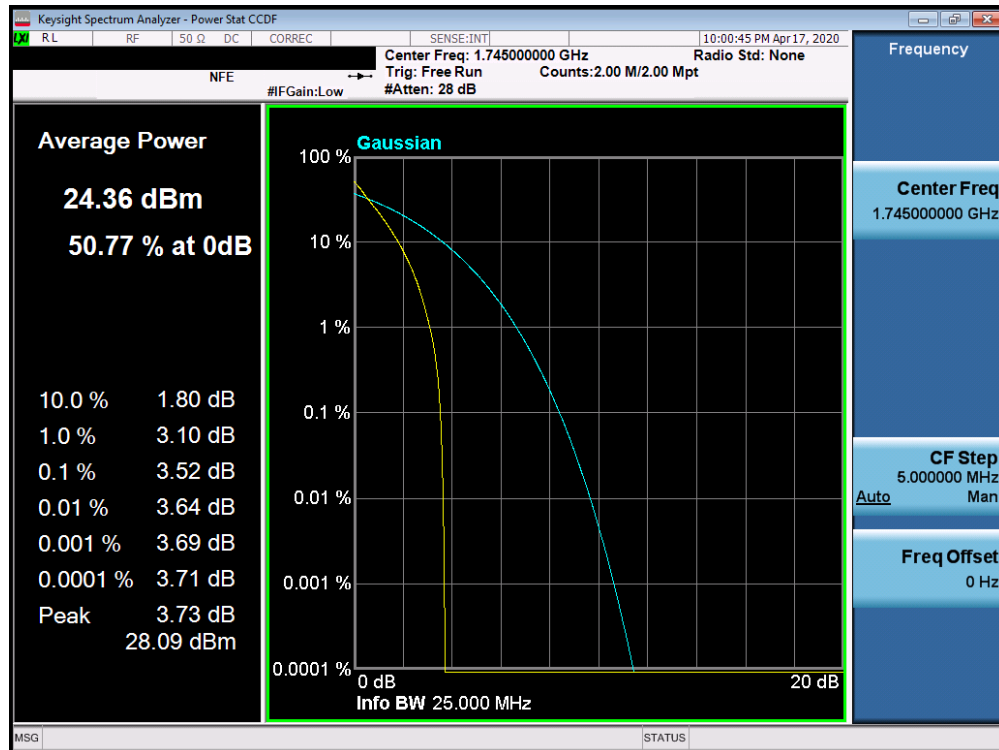


Plot 7-622. PAR Plot (n66 - 10.0MHz CP-OFDM-64-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 341 of 420

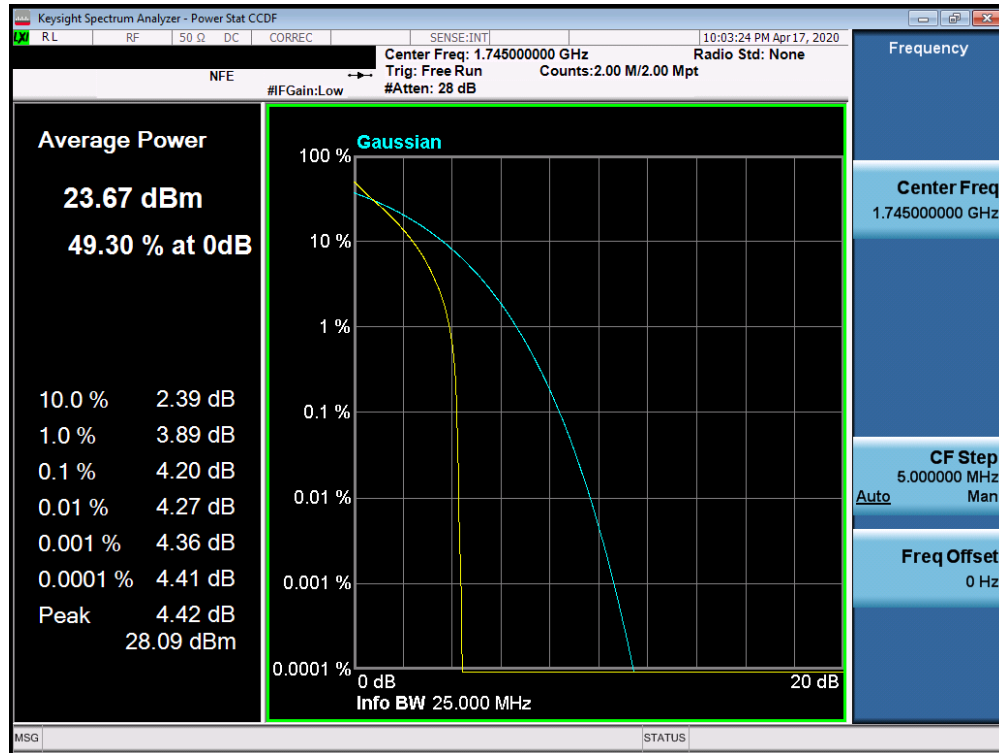


Plot 7-623. PAR Plot (n66 - 10.0MHz CP-OFDM-256-QAM - Full RB Configuration)

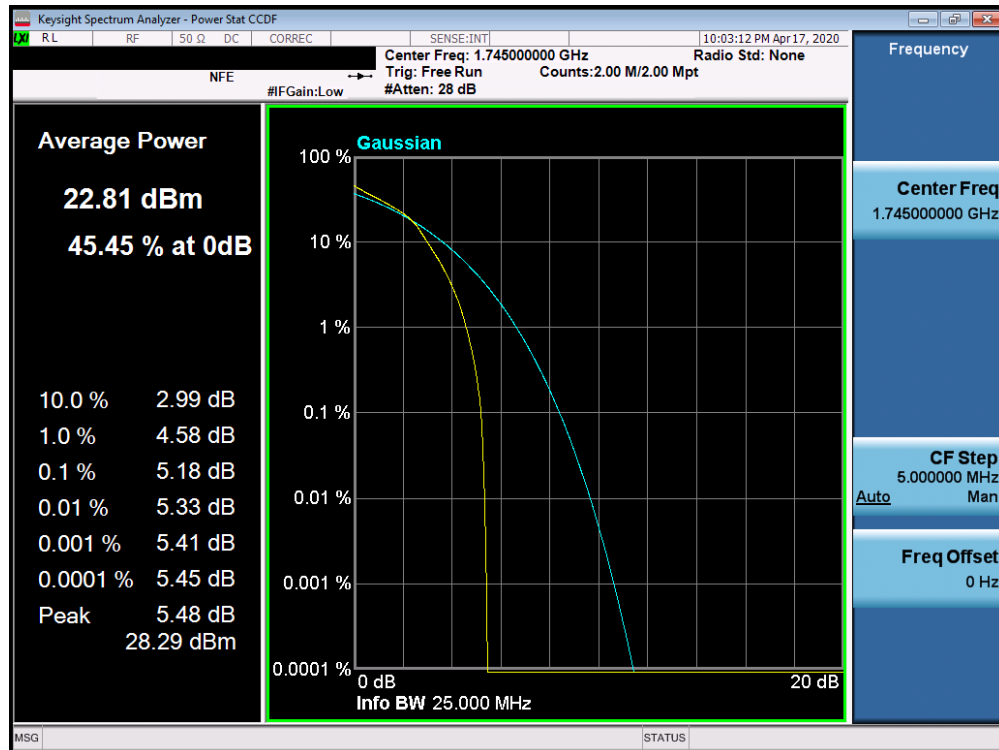


Plot 7-624. PAR Plot (n66 - 15.0MHz DFT-s-OFDM BPSK - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 342 of 420

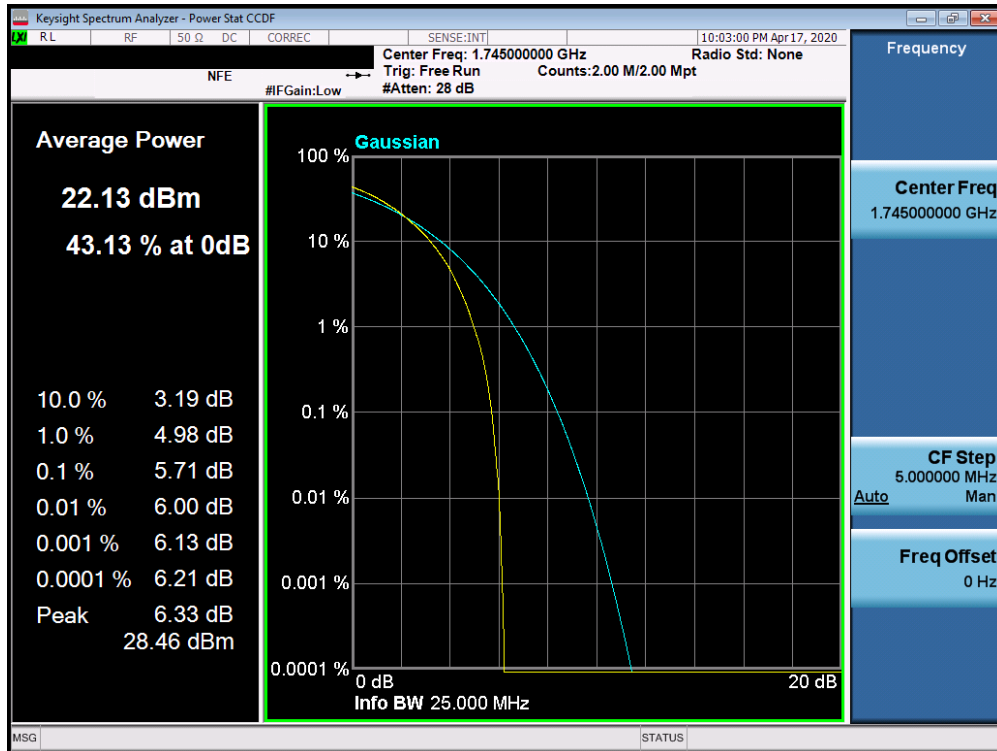


Plot 7-625. PAR Plot (n66 - 15.0MHz CP-OFDM-QPSK - Full RB Configuration)

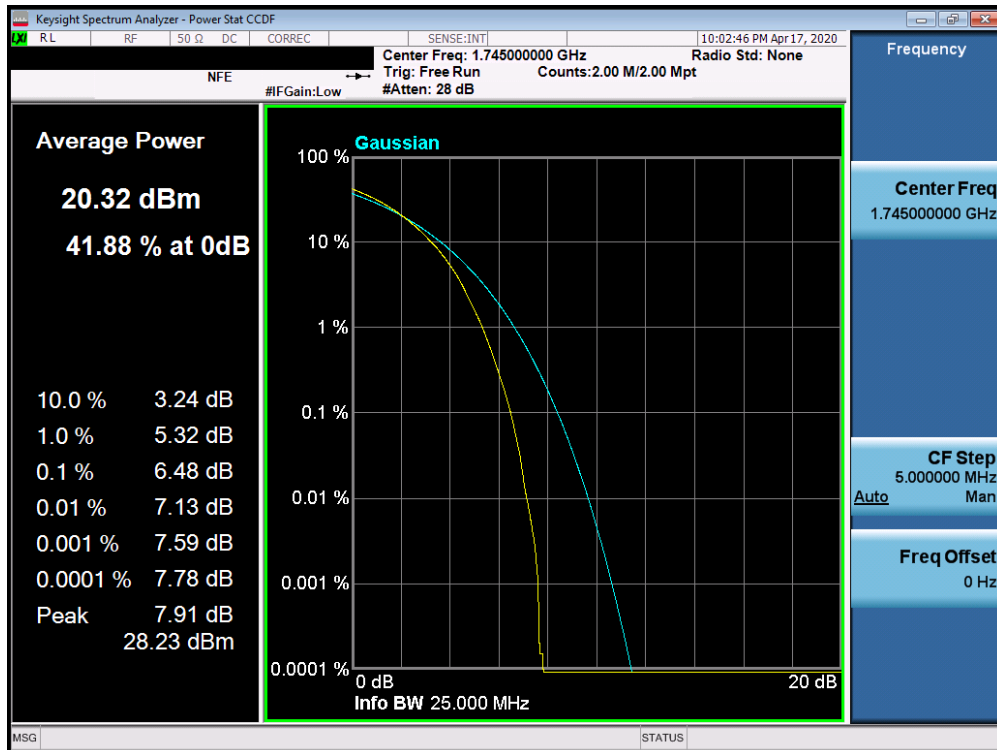


Plot 7-626. PAR Plot (n66 - 15.0MHz CP-OFDM-16-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 343 of 420

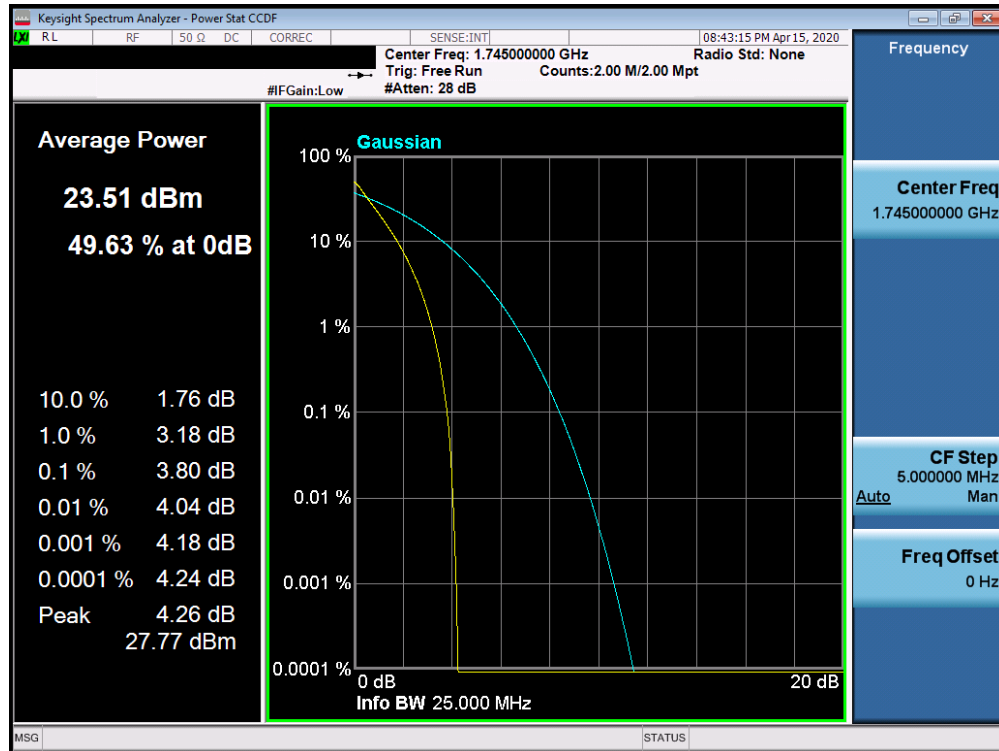


Plot 7-627. PAR Plot (n66 - 15.0MHz CP-OFDM-64-QAM - Full RB Configuration)

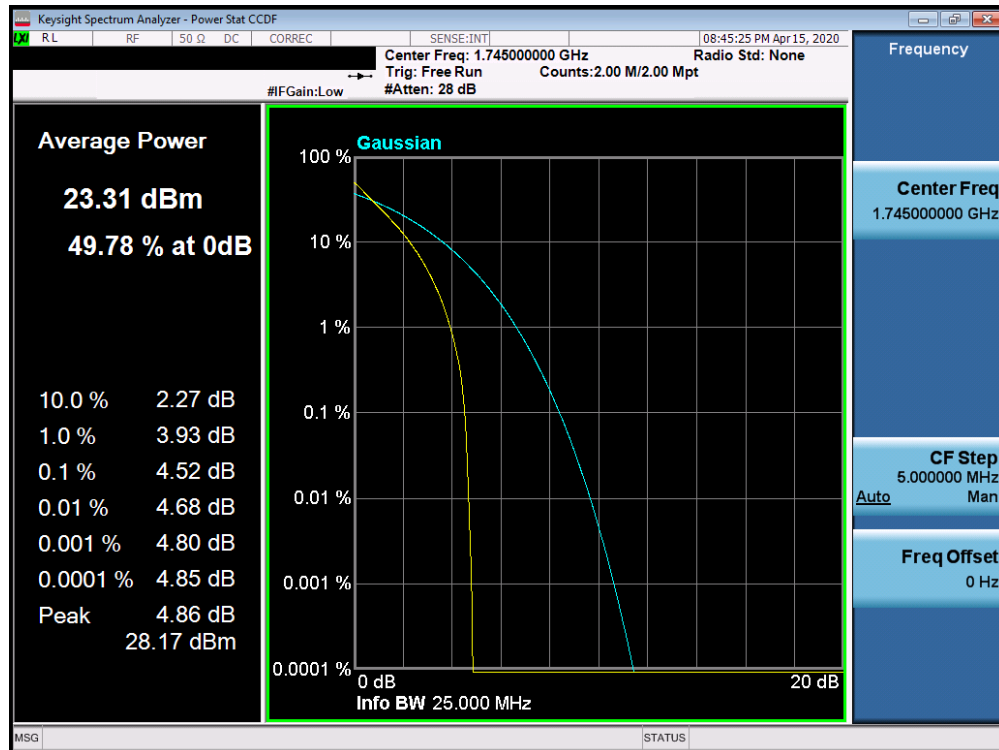


Plot 7-628. PAR Plot (n66 - 15.0MHz CP-OFDM-256-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 344 of 420

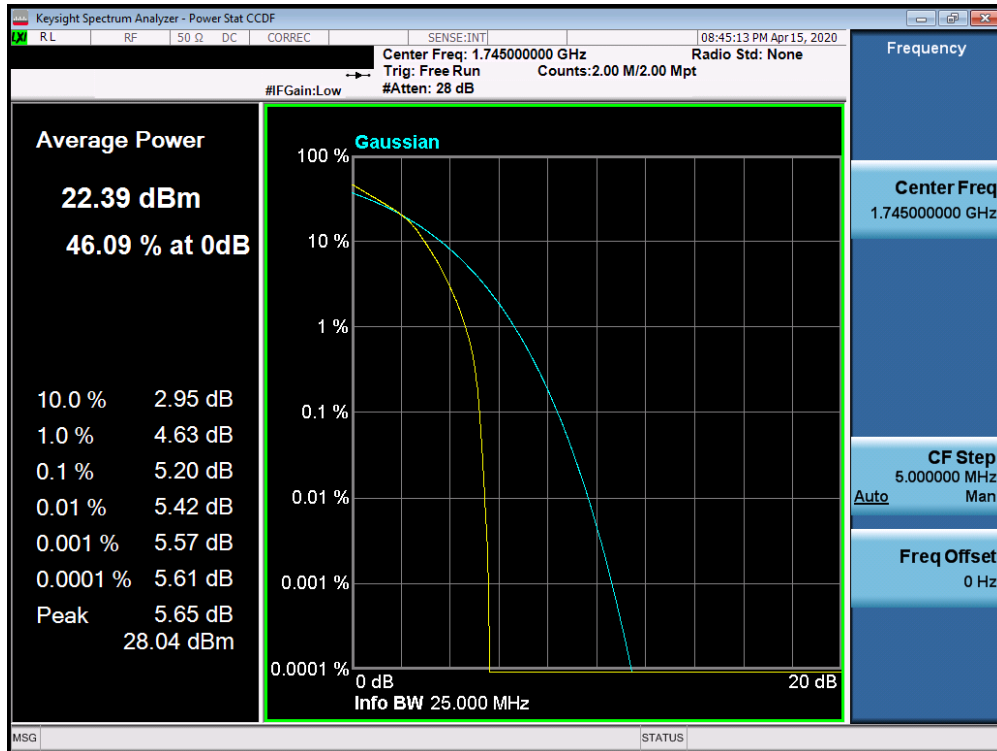


Plot 7-629. PAR Plot (n66 - 20.0MHz DFT-s-OFDM BPSK - Full RB Configuration)

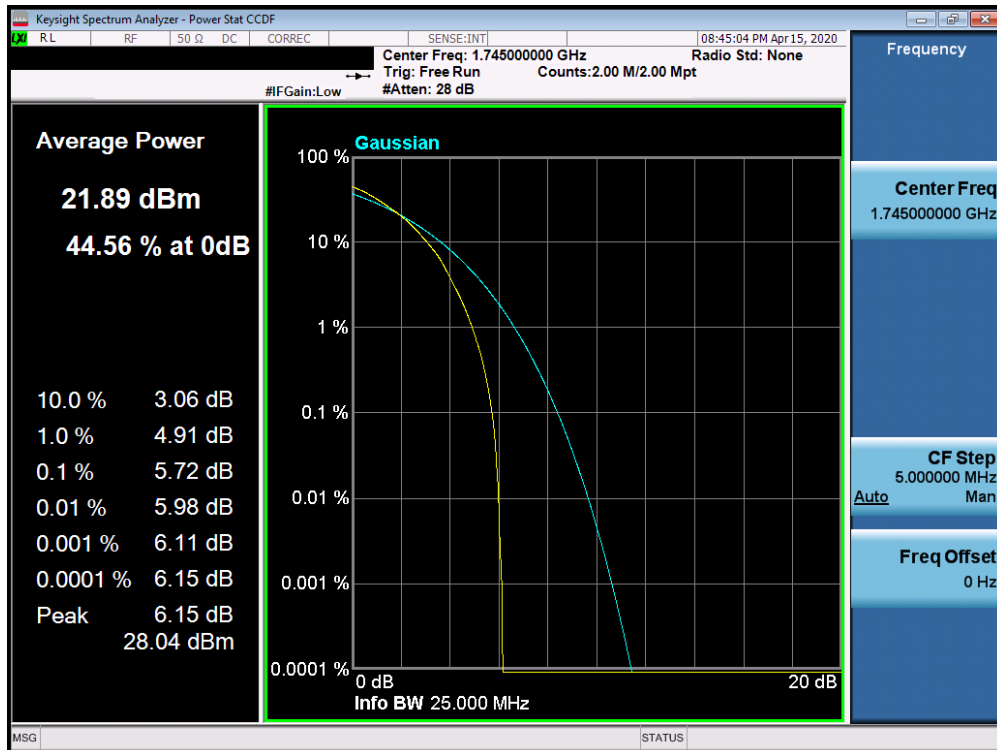


Plot 7-630. PAR Plot (n66 - 20.0MHz CP-OFDM-QPSK - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 345 of 420

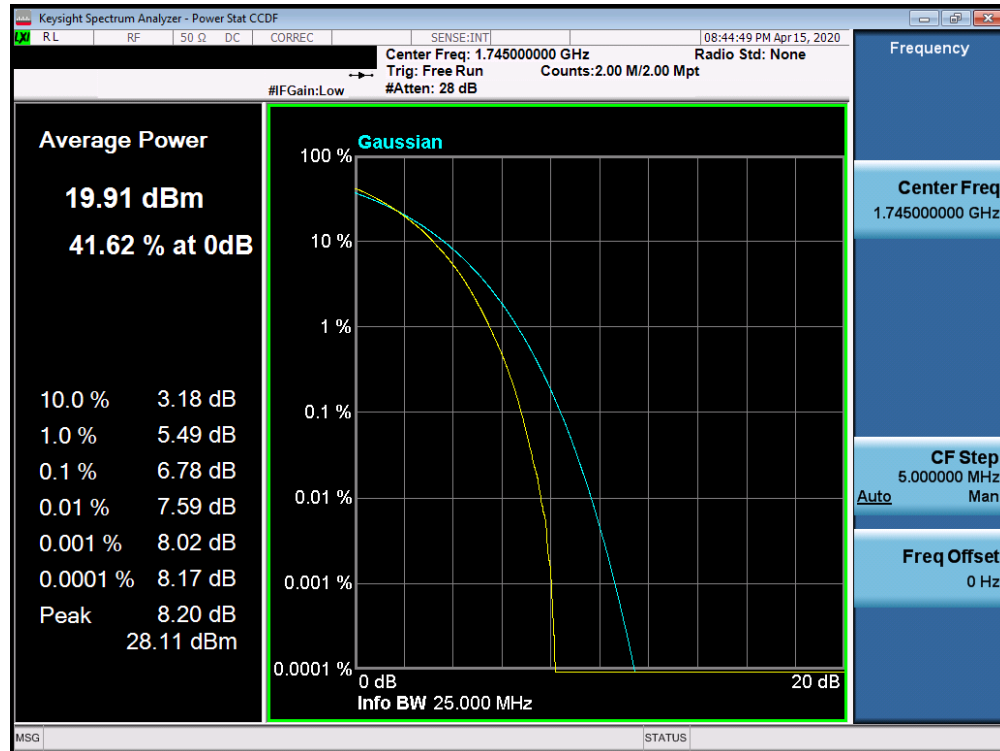


Plot 7-631. PAR Plot (n66 - 20.0MHz CP-OFDM-16-QAM - Full RB Configuration)



Plot 7-632. PAR Plot (n66 - 20.0MHz CP-OFDM-64-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 346 of 420



Plot 7-633. PAR Plot (n66 - 20.0MHz CP-OFDM-256-QAM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 347 of 420

7.6 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. For signals with burst transmission, the signal analyzer's "time domain power" measurement capability is used
2. RBW = 1 – 5% of the expected OBW, not to exceed 1MHz
3. VBW $\geq 3 \times$ RBW
4. Span = 1.5 times the OBW
5. No. of sweep points $\geq 2 \times$ span / RBW
6. Detector = RMS
7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto". Trigger is set to enable triggering only on full power bursts with the sweep time set less than or equal to the transmission burst duration
8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation. For signals with burst transmission, the "gating" function was enabled to ensure that measurements are performed during times in which the transmitter is operating at its maximum power
9. Trace mode = trace averaging (RMS) over 100 sweeps
10. The trace was allowed to stabilize

FCC ID: A3LSMA716U	 PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Test Setup

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

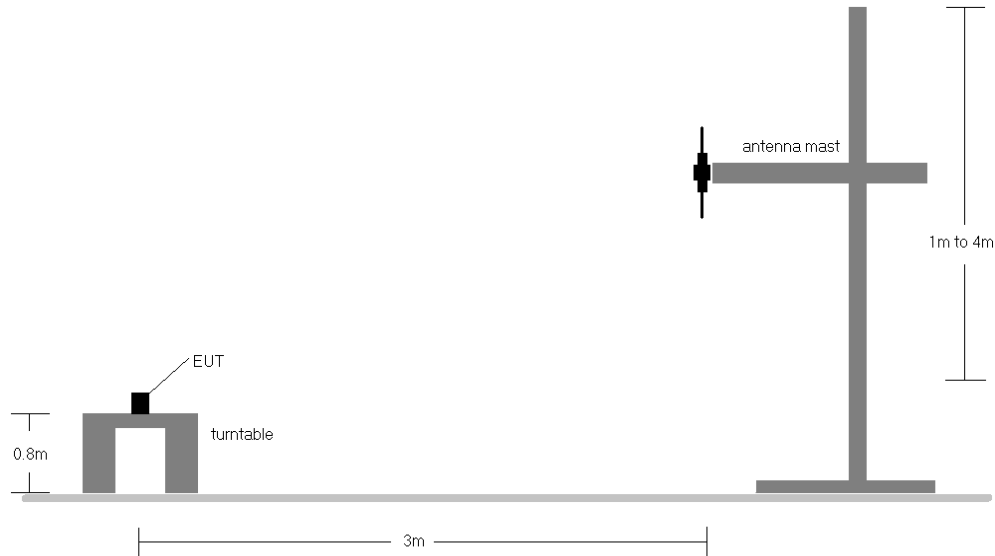


Figure 7-5. Radiated Test Setup <1GHz

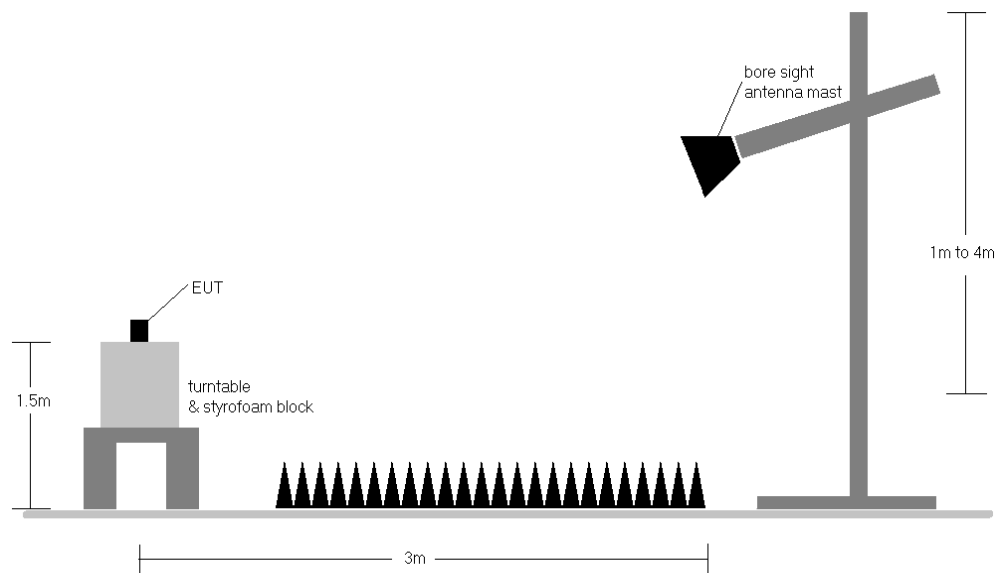


Figure 7-6. Radiated Test Setup >1GHz

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.

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
665.50	5	QPSK	V	171	241	1 / 24	17.61	3.79	19.25	0.084	34.77	-15.52
680.50	5	QPSK	V	186	344	1 / 12	17.96	4.24	20.05	0.101	34.77	-14.73
695.50	5	QPSK	V	186	241	1 / 0	18.07	4.58	20.50	0.112	34.77	-14.28
695.50	5	16-QAM	V	186	241	1 / 0	17.23	4.58	19.66	0.092	34.77	-15.12
695.50	5	64-QAM	V	186	241	1 / 0	15.14	4.58	17.57	0.057	34.77	-17.21
668.00	10	QPSK	V	170	245	1 / 49	17.54	3.82	19.21	0.083	34.77	-15.56
680.50	10	QPSK	V	185	340	1 / 25	18.17	4.24	20.26	0.106	34.77	-14.52
693.00	10	QPSK	V	183	237	1 / 0	17.89	4.44	20.18	0.104	34.77	-14.59
680.50	10	16-QAM	V	185	340	1 / 25	17.73	4.24	19.82	0.096	34.77	-14.96
680.50	10	64-QAM	V	185	340	1 / 25	16.28	4.24	18.37	0.069	34.77	-16.41
670.50	15	QPSK	V	168	242	1 / 74	17.79	3.96	19.60	0.091	34.77	-15.17
680.50	15	QPSK	V	182	238	1 / 36	17.98	4.24	20.07	0.102	34.77	-14.71
690.50	15	QPSK	V	180	242	1 / 0	17.81	4.41	20.07	0.102	34.77	-14.70
690.50	15	16-QAM	V	180	242	1 / 0	17.24	4.41	19.50	0.089	34.77	-15.27
690.50	15	64-QAM	V	180	242	1 / 0	15.47	4.41	17.73	0.059	34.77	-17.04
673.00	20	QPSK	V	171	240	1 / 99	17.69	4.09	19.63	0.092	34.77	-15.14
680.50	20	QPSK	V	186	235	1 / 50	17.88	4.24	19.97	0.099	34.77	-14.81
688.00	20	QPSK	V	182	245	1 / 0	17.71	4.48	20.04	0.101	34.77	-14.73
688.00	20	16-QAM	V	182	245	1 / 0	16.89	4.48	19.22	0.084	34.77	-15.55
688.00	20	64-QAM	V	182	245	1 / 0	15.47	4.48	17.80	0.060	34.77	-16.97
695.50	5	QPSK	H	122	275	1 / 99	15.08	3.19	16.12	0.041	34.77	-18.65

Table 7-3. ERP Data (Band 71)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 350 of 420

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
665.50	5	QPSK	V	181	307	1 / 23	15.20	3.79	16.84	0.048	34.77	-17.93
680.50	5	QPSK	V	198	294	1 / 23	15.10	4.24	17.19	0.052	34.77	-17.59
695.50	5	QPSK	V	194	301	1 / 13	14.78	4.58	17.21	0.053	34.77	-17.57
695.50	5	16-QAM	V	194	301	1 / 13	13.19	4.58	15.62	0.036	34.77	-19.16
695.50	5	64-QAM	V	194	301	1 / 13	12.53	4.58	14.96	0.031	34.77	-19.82
695.50	5	256-QAM	V	194	301	1 / 13	10.27	4.58	12.70	0.019	34.77	-22.08
695.50	5	BPSK	V	194	301	1 / 13	14.63	4.58	17.06	0.051	34.77	-17.72
668.00	10	QPSK	V	174	305	1 / 50	15.25	3.82	16.93	0.049	34.77	-17.85
680.50	10	QPSK	V	195	291	1 / 50	15.00	4.24	17.09	0.051	34.77	-17.69
693.00	10	QPSK	V	192	306	1 / 26	14.75	4.44	17.04	0.051	34.77	-17.73
693.00	10	16-QAM	V	192	306	1 / 26	13.33	4.44	15.62	0.037	34.77	-19.15
693.00	10	64-QAM	V	192	306	1 / 26	12.71	4.44	15.00	0.032	34.77	-19.77
693.00	10	256-QAM	V	192	306	1 / 26	10.74	4.44	13.03	0.020	34.77	-21.74
693.00	10	BPSK	V	192	306	1 / 26	14.79	4.44	17.08	0.051	34.77	-17.69
670.50	15	QPSK	V	180	302	1 / 77	16.17	3.96	17.98	0.063	34.77	-16.79
680.50	15	QPSK	V	191	294	1 / 77	14.92	4.24	17.01	0.050	34.77	-17.77
690.50	15	QPSK	V	189	301	1 / 40	15.22	4.41	17.48	0.056	34.77	-17.29
670.50	15	16-QAM	V	180	302	1 / 77	14.47	3.96	16.28	0.042	34.77	-18.49
670.50	15	64-QAM	V	180	302	1 / 77	12.79	3.96	14.60	0.029	34.77	-20.17
670.50	15	256-QAM	V	180	302	1 / 77	11.69	3.96	13.50	0.022	34.77	-21.27
670.50	15	BPSK	V	180	302	1 / 77	15.98	3.96	17.79	0.060	34.77	-16.98
673.00	20	QPSK	V	182	301	1 / 104	16.01	4.09	17.95	0.062	34.77	-16.82
680.50	20	QPSK	V	196	291	1 / 104	14.76	4.24	16.85	0.048	34.77	-17.93
688.00	20	QPSK	V	185	306	1 / 53	15.06	4.48	17.39	0.055	34.77	-17.38
673.00	20	16-QAM	V	182	301	1 / 104	14.85	4.09	16.79	0.048	34.77	-17.98
673.00	20	64-QAM	V	182	301	1 / 104	12.79	4.09	14.73	0.030	34.77	-20.04
673.00	20	256-QAM	V	182	301	1 / 104	11.69	4.09	13.63	0.023	34.77	-21.14
673.00	20	BPSK	V	182	301	1 / 104	15.78	4.09	17.72	0.059	34.77	-17.05
670.50	15	QPSK	H	139	276	1 / 1	14.79	3.09	15.73	0.037	34.77	-19.04
670.50	15 (CP-OFDM)	QPSK	V	188	286	1 / 53	14.87	4.00	16.72	0.047	34.77	-18.05

Table 7-4. ERP Data (n71)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 351 of 420

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
699.70	1.4	QPSK	V	190	301	1 / 0	17.70	4.56	20.11	0.103	34.77	-14.66	22.26	0.168	36.99	-14.73
707.50	1.4	QPSK	V	178	306	1 / 0	17.00	4.62	19.47	0.089	34.77	-15.30	21.62	0.145	36.99	-15.37
715.30	1.4	QPSK	V	181	309	1 / 0	15.85	4.72	18.42	0.069	34.77	-16.35	20.57	0.114	36.99	-16.42
699.70	1.4	16-QAM	V	190	301	1 / 0	17.31	4.56	19.72	0.094	34.77	-15.05	21.87	0.154	36.99	-15.12
699.70	1.4	64-QAM	V	190	301	1 / 0	15.60	4.56	18.01	0.063	34.77	-16.76	20.16	0.104	36.99	-16.83
700.50	3	QPSK	V	188	298	1 / 0	17.67	4.59	20.11	0.103	34.77	-14.66	22.26	0.168	36.99	-14.73
707.50	3	QPSK	V	181	305	1 / 0	17.04	4.62	19.51	0.089	34.77	-15.26	21.66	0.147	36.99	-15.33
714.50	3	QPSK	V	179	308	1 / 0	15.78	4.71	18.34	0.068	34.77	-16.43	20.49	0.112	36.99	-16.50
700.50	3	16-QAM	V	188	298	1 / 0	17.05	4.59	19.49	0.089	34.77	-15.28	21.64	0.146	36.99	-15.35
700.50	3	64-QAM	V	188	298	1 / 0	16.11	4.59	18.55	0.072	34.77	-16.22	20.70	0.117	36.99	-16.29
701.50	5	QPSK	V	191	295	1 / 0	17.78	4.60	20.23	0.105	34.77	-14.54	22.38	0.173	36.99	-14.61
707.50	5	QPSK	V	176	307	1 / 0	17.05	4.62	19.52	0.090	34.77	-15.25	21.67	0.147	36.99	-15.32
713.50	5	QPSK	V	176	310	1 / 0	15.65	4.70	18.20	0.066	34.77	-16.57	20.35	0.108	36.99	-16.64
701.50	5	16-QAM	V	191	295	1 / 0	17.01	4.60	19.46	0.088	34.77	-15.31	21.61	0.145	36.99	-15.38
701.50	5	64-QAM	V	191	295	1 / 0	15.98	4.60	18.43	0.070	34.77	-16.34	20.58	0.114	36.99	-16.41
704.00	10	QPSK	V	179	300	1 / 0	18.36	4.58	20.79	0.120	34.77	-13.98	22.94	0.197	36.99	-14.05
707.50	10	QPSK	V	177	293	1 / 0	17.85	4.62	20.32	0.108	34.77	-14.45	22.47	0.177	36.99	-14.52
711.00	10	QPSK	V	194	299	1 / 0	16.93	4.67	19.45	0.088	34.77	-15.32	21.60	0.144	36.99	-15.39
704.00	10	16-QAM	V	179	300	1 / 0	17.57	4.58	20.00	0.100	34.77	-14.77	22.15	0.164	36.99	-14.84
704.00	10	64-QAM	V	179	300	1 / 0	16.41	4.58	18.84	0.077	34.77	-15.93	20.99	0.126	36.99	-16.00
704.00	10	QPSK	H	122	288	1 / 49	16.45	3.58	17.88	0.061	34.77	-16.89	20.03	0.101	36.99	-16.96

Table 7-5. ERP Data (Band 12)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
779.50	5	QPSK	H	230	283	1 / 0	15.65	5.82	19.32	0.085	34.77	-15.46	21.47	0.140	36.99	-15.52
782.00	5	QPSK	H	243	285	1 / 0	15.41	5.89	19.15	0.082	34.77	-15.62	21.30	0.135	36.99	-15.69
784.50	5	QPSK	H	239	276	1 / 0	15.29	5.92	19.06	0.081	34.77	-15.71	21.21	0.132	36.99	-15.78
779.50	5	16-QAM	H	230	283	1 / 0	14.79	5.82	18.46	0.070	34.77	-16.32	20.61	0.115	36.99	-16.38
779.50	5	64-QAM	H	230	283	1 / 0	13.63	5.82	17.30	0.054	34.77	-17.48	19.45	0.088	36.99	-17.54
782.00	10	QPSK	H	235	271	1 / 0	15.71	5.89	19.45	0.088	34.77	-15.32	21.60	0.145	36.99	-15.39
782.00	10	16-QAM	H	235	271	1 / 0	14.88	5.89	18.62	0.073	34.77	-16.15	20.77	0.119	36.99	-16.22
782.00	10	64-QAM	H	235	271	1 / 0	13.88	5.89	17.62	0.058	34.77	-17.15	19.77	0.095	36.99	-17.22
782.00	10	QPSK	V	148	298	1 / 49	14.75	5.89	18.49	0.071	34.77	-16.28	20.64	0.116	36.99	-16.35

Table 7-6. ERP Data (Band 13)

FCC ID: A3LSMA716U	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset	Page 352 of 420

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
824.70	1.4	QPSK	V	141	243	1 / 0	14.15	6.36	18.36	0.068	38.45	-20.10	20.51	0.112	40.61	-20.10
836.50	1.4	QPSK	V	133	241	1 / 0	13.47	6.38	17.70	0.059	38.45	-20.75	19.85	0.097	40.61	-20.76
848.30	1.4	QPSK	V	131	237	1 / 5	13.18	6.50	17.53	0.057	38.45	-20.92	19.68	0.093	40.61	-20.93
824.70	1.4	16-QAM	V	141	243	1 / 0	12.91	6.36	17.12	0.051	38.45	-21.34	19.27	0.084	40.61	-21.34
824.70	1.4	64-QAM	V	141	243	1 / 0	12.17	6.36	16.38	0.043	38.45	-22.08	18.53	0.071	40.61	-22.08
825.50	3	QPSK	V	139	241	1 / 0	13.90	6.36	18.11	0.065	38.45	-20.34	20.26	0.106	40.61	-20.34
836.50	3	QPSK	V	131	246	1 / 0	13.42	6.38	17.65	0.058	38.45	-20.80	19.80	0.095	40.61	-20.81
847.50	3	QPSK	V	134	239	1 / 14	13.07	6.49	17.41	0.055	38.45	-21.04	19.56	0.090	40.61	-21.04
825.50	3	16-QAM	V	139	241	1 / 0	13.49	6.36	17.70	0.059	38.45	-20.75	19.85	0.097	40.61	-20.75
825.50	3	64-QAM	V	139	241	1 / 0	11.82	6.36	16.03	0.040	38.45	-22.42	18.18	0.066	40.61	-22.42
826.50	5	QPSK	V	137	246	1 / 0	13.98	6.37	18.20	0.066	38.45	-20.25	20.35	0.108	40.61	-20.25
836.50	5	QPSK	V	132	241	1 / 0	13.27	6.38	17.50	0.056	38.45	-20.95	19.65	0.092	40.61	-20.96
846.50	5	QPSK	V	130	237	1 / 24	13.15	6.48	17.48	0.056	38.45	-20.97	19.63	0.092	40.61	-20.98
826.50	5	16-QAM	V	137	246	1 / 0	13.56	6.37	17.78	0.060	38.45	-20.67	19.93	0.098	40.61	-20.67
826.50	5	64-QAM	V	137	246	1 / 0	12.08	6.37	16.30	0.043	38.45	-22.15	18.45	0.070	40.61	-22.15
829.00	10	QPSK	V	134	241	1 / 0	14.19	6.40	18.44	0.070	38.45	-20.01	20.59	0.115	40.61	-20.02
836.50	10	QPSK	V	138	246	1 / 0	13.32	6.38	17.55	0.057	38.45	-20.90	19.70	0.093	40.61	-20.91
844.00	10	QPSK	V	133	240	1 / 49	13.10	6.46	17.41	0.055	38.45	-21.04	19.56	0.090	40.61	-21.05
829.00	10	16-QAM	V	134	241	1 / 0	13.29	6.40	17.54	0.057	38.45	-20.91	19.69	0.093	40.61	-20.92
829.00	10	64-QAM	V	134	241	1 / 0	12.39	6.40	16.64	0.046	38.45	-21.81	18.79	0.076	40.61	-21.82
829.00	10	QPSK	H	203	280	1 / 37	12.42	6.73	17.00	0.050	38.45	-21.45	19.15	0.082	40.61	-21.46

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

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
831.50	15	QPSK	V	137	245	1 / 0	14.23	6.43	18.51	0.071	38.45	-19.94	20.66	0.116	40.61	-19.95
836.50	15	QPSK	V	139	233	1 / 0	13.13	6.38	17.36	0.054	38.45	-21.09	19.51	0.089	40.61	-21.10
841.50	15	QPSK	V	145	232	1 / 74	13.01	6.43	17.29	0.054	38.45	-21.16	19.44	0.088	40.61	-21.17
831.50	15	16-QAM	V	137	245	1 / 0	13.49	6.43	17.77	0.060	38.45	-20.68	19.92	0.098	40.61	-20.69
831.50	15	64-QAM	V	137	245	1 / 0	12.19	6.43	16.47	0.044	38.45	-21.98	18.62	0.073	40.61	-21.99

Table 7-8. ERP Data (Band 26)

FCC ID: A3LSMA716U	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset	Page 353 of 420

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
826.50	5	QPSK	V	151	250	1 / 23	10.29	6.37	14.51	0.028	38.45	-23.94	16.66	0.046	40.61	-23.95
836.50	5	QPSK	V	147	242	1 / 23	10.23	6.38	14.46	0.028	38.45	-23.99	16.61	0.046	40.61	-24.00
846.50	5	QPSK	V	132	239	1 / 23	10.31	6.48	14.65	0.029	38.45	-23.81	16.80	0.048	40.61	-23.81
848.30	5	16-QAM	V	132	239	1 / 23	9.30	6.50	13.65	0.023	38.45	-24.80	15.80	0.038	40.61	-24.80
848.30	5	64-QAM	V	132	239	1 / 23	6.37	6.50	10.72	0.012	38.45	-27.73	12.87	0.019	40.61	-27.74
848.30	5	256-QAM	V	132	239	1 / 23	4.09	6.50	8.44	0.007	38.45	-30.01	10.59	0.011	40.61	-30.02
848.30	5	BPSK	V	132	239	1 / 23	9.74	6.50	14.09	0.026	38.45	-24.36	16.24	0.042	40.61	-24.36
829.00	10	QPSK	V	146	253	1 / 50	10.55	6.40	14.80	0.030	38.45	-23.65	16.95	0.050	40.61	-23.66
836.50	10	QPSK	V	143	247	1 / 50	10.31	6.38	14.54	0.028	38.45	-23.91	16.69	0.047	40.61	-23.92
844.00	10	QPSK	V	137	234	1 / 50	9.02	6.46	13.33	0.022	38.45	-25.12	15.48	0.035	40.61	-25.13
825.50	10	16-QAM	V	146	253	1 / 50	9.40	6.36	13.61	0.023	38.45	-24.84	15.76	0.038	40.61	-24.84
825.50	10	64-QAM	V	146	253	1 / 50	7.79	6.36	12.00	0.016	38.45	-26.45	14.15	0.026	40.61	-26.45
825.50	10	256-QAM	V	146	253	1 / 50	5.70	6.36	9.91	0.010	38.45	-28.54	12.06	0.016	40.61	-28.54
825.50	10	BPSK	V	146	253	1 / 50	9.96	6.36	14.17	0.026	38.45	-24.28	16.32	0.043	40.61	-24.28
831.50	15	QPSK	V	144	251	1 / 77	10.52	6.43	14.80	0.030	38.45	-23.65	16.95	0.050	40.61	-23.66
836.50	15	QPSK	V	141	250	1 / 77	10.28	6.38	14.51	0.028	38.45	-23.94	16.66	0.046	40.61	-23.95
841.50	15	QPSK	V	134	241	1 / 77	8.99	6.43	13.27	0.021	38.45	-25.18	15.42	0.035	40.61	-25.19
831.50	15	16-QAM	V	144	251	1 / 77	9.42	6.43	13.70	0.023	38.45	-24.75	15.85	0.038	40.61	-24.76
831.50	15	64-QAM	V	144	251	1 / 77	7.79	6.43	12.07	0.016	38.45	-26.38	14.22	0.026	40.61	-26.39
831.50	15	256-QAM	V	144	251	1 / 77	5.70	6.43	9.98	0.010	38.45	-28.47	12.13	0.016	40.61	-28.48
831.50	15	BPSK	V	144	251	1 / 77	9.95	6.43	14.23	0.026	38.45	-24.22	16.38	0.043	40.61	-24.23
834.00	20	QPSK	V	146	249	1 / 104	10.15	6.35	14.35	0.027	38.45	-24.10	16.50	0.045	40.61	-24.10
836.50	20	QPSK	V	143	253	1 / 104	9.91	6.38	14.14	0.026	38.45	-24.31	16.29	0.043	40.61	-24.32
839.00	20	QPSK	V	138	246	1 / 104	8.62	6.40	12.87	0.019	38.45	-25.58	15.02	0.032	40.61	-25.58
834.00	20	16-QAM	V	146	249	1 / 104	9.22	6.35	13.42	0.022	38.45	-25.03	15.57	0.036	40.61	-25.03
834.00	20	64-QAM	V	146	249	1 / 104	8.29	6.35	12.49	0.018	38.45	-25.96	14.64	0.029	40.61	-25.96
834.00	20	256-QAM	V	146	249	1 / 104	6.20	6.35	10.40	0.011	38.45	-28.05	12.55	0.018	40.61	-28.05
834.00	20	BPSK	V	146	249	1 / 104	10.00	6.35	14.20	0.026	38.45	-24.25	16.35	0.043	40.61	-24.25
829.00	10	QPSK	H	219	309	1 / 104	6.64	6.75	11.24	0.013	38.45	-27.21	13.39	0.022	40.61	-27.22
829.00	10 (CP-OFDM)	QPSK	V	147	261	1 / 53	7.85	6.35	12.05	0.016	38.45	-26.40	14.20	0.026	40.61	-26.40

Table 7-9. ERP Data (n5)

FCC ID: A3LSMA716U	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset	Page 354 of 420

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1710.70	1.4	QPSK	V	118	204	1 / 5	12.88	9.38	22.26	0.168	30.00	-7.74
1745.00	1.4	QPSK	V	101	201	1 / 2	14.13	9.14	23.27	0.212	30.00	-6.73
1779.30	1.4	QPSK	V	127	218	1 / 2	12.39	9.20	21.59	0.144	30.00	-8.41
1745.00	1.4	16-QAM	V	101	201	1 / 2	13.48	9.14	22.62	0.183	30.00	-7.38
1745.00	1.4	64-QAM	V	101	201	1 / 2	12.18	9.14	21.32	0.135	30.00	-8.68
1711.50	3	QPSK	V	125	202	1 / 14	12.75	9.37	22.12	0.163	30.00	-7.88
1745.00	3	QPSK	V	104	207	1 / 7	14.12	9.14	23.26	0.212	30.00	-6.74
1778.50	3	QPSK	V	130	221	1 / 7	12.27	9.20	21.47	0.140	30.00	-8.53
1745.00	3	16-QAM	V	104	207	1 / 7	13.71	9.14	22.85	0.193	30.00	-7.15
1745.00	3	64-QAM	V	104	207	1 / 7	12.14	9.14	21.28	0.134	30.00	-8.72
1712.50	5	QPSK	V	122	208	1 / 24	12.59	9.37	21.96	0.157	30.00	-8.04
1745.00	5	QPSK	V	101	210	1 / 12	14.19	9.14	23.33	0.215	30.00	-6.67
1777.50	5	QPSK	V	127	224	1 / 12	12.36	9.19	21.55	0.143	30.00	-8.45
1745.00	5	16-QAM	V	101	210	1 / 12	13.26	9.14	22.40	0.174	30.00	-7.60
1745.00	5	64-QAM	V	101	210	1 / 12	12.81	9.14	21.95	0.157	30.00	-8.05
1715.00	10	QPSK	V	120	211	1 / 49	12.42	9.35	21.77	0.150	30.00	-8.23
1745.00	10	QPSK	V	105	213	1 / 25	14.12	9.14	23.26	0.212	30.00	-6.74
1775.00	10	QPSK	V	125	220	1 / 25	12.44	9.18	21.62	0.145	30.00	-8.38
1745.00	10	16-QAM	V	105	213	1 / 25	13.52	9.14	22.66	0.184	30.00	-7.34
1745.00	10	64-QAM	V	105	213	1 / 25	12.31	9.14	21.45	0.140	30.00	-8.55
1717.50	15	QPSK	V	118	214	1 / 74	12.67	9.33	22.00	0.158	30.00	-8.00
1745.00	15	QPSK	V	103	211	1 / 36	14.34	9.14	23.48	0.223	30.00	-6.52
1772.50	15	QPSK	V	120	218	1 / 36	12.49	9.18	21.67	0.147	30.00	-8.33
1745.00	15	16-QAM	V	103	211	1 / 36	13.33	9.14	22.47	0.177	30.00	-7.53
1745.00	15	64-QAM	V	103	211	1 / 36	12.74	9.14	21.88	0.154	30.00	-8.12
1720.00	20	QPSK	V	115	211	1 / 99	12.83	9.31	22.14	0.164	30.00	-7.86
1745.00	20	QPSK	V	100	209	1 / 50	14.33	9.14	23.47	0.222	30.00	-6.53
1770.00	20	QPSK	V	119	215	1 / 50	12.28	9.17	21.45	0.140	30.00	-8.55
1745.00	20	16-QAM	V	100	209	1 / 50	13.68	9.14	22.82	0.191	30.00	-7.18
1745.00	20	64-QAM	V	100	209	1 / 50	12.56	9.14	21.70	0.148	30.00	-8.30
1745.00	15	QPSK	H	128	190	1 / 36	13.63	9.26	22.89	0.195	30.00	-7.11

Table 7-10. EIRP Data (Band 66/4)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 355 of 420

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1712.50	5	QPSK	V	127	319	1 / 13	10.50	9.37	19.87	0.097	30.00	-10.13
1745.00	5	QPSK	V	122	329	1 / 1	10.92	9.14	20.06	0.101	30.00	-9.94
1777.50	5	QPSK	V	131	324	1 / 1	12.75	9.19	21.94	0.156	30.00	-8.06
1777.50	5	16-QAM	V	131	324	1 / 1	11.71	9.19	20.90	0.123	30.00	-9.10
1777.50	5	64-QAM	V	131	324	1 / 1	10.29	9.19	19.48	0.089	30.00	-10.52
1777.50	5	256-QAM	V	131	324	1 / 1	8.12	9.19	17.31	0.054	30.00	-12.69
1777.50	5	BPSK	V	131	324	1 / 1	12.39	9.19	21.58	0.144	30.00	-8.42
1715.00	10	QPSK	V	131	321	1 / 26	10.80	9.35	20.15	0.103	30.00	-9.85
1745.00	10	QPSK	V	118	332	1 / 1	11.11	9.14	20.25	0.106	30.00	-9.75
1775.00	10	QPSK	V	135	322	1 / 1	13.17	9.18	22.35	0.172	30.00	-7.65
1775.00	10	16-QAM	V	135	322	1 / 1	11.66	9.18	20.84	0.121	30.00	-9.16
1775.00	10	64-QAM	V	135	322	1 / 1	10.24	9.18	19.42	0.088	30.00	-10.58
1775.00	10	256-QAM	V	135	322	1 / 1	8.07	9.18	17.25	0.053	30.00	-12.75
1775.00	10	BPSK	V	135	322	1 / 1	12.47	9.18	21.65	0.146	30.00	-8.35
1717.50	15	QPSK	V	128	324	1 / 40	10.38	9.33	19.71	0.094	30.00	-10.29
1745.00	15	QPSK	V	115	335	1 / 1	11.03	9.14	20.17	0.104	30.00	-9.83
1772.50	15	QPSK	V	132	327	1 / 1	12.83	9.18	22.01	0.159	30.00	-7.99
1772.50	15	16-QAM	V	132	327	1 / 1	11.82	9.18	21.00	0.126	30.00	-9.00
1772.50	15	64-QAM	V	132	327	1 / 1	10.40	9.18	19.58	0.091	30.00	-10.42
1772.50	15	256-QAM	V	132	327	1 / 1	8.23	9.18	17.41	0.055	30.00	-12.59
1772.50	15	BPSK	V	132	327	1 / 1	12.48	9.18	21.66	0.146	30.00	-8.34
1720.00	20	QPSK	V	124	328	1 / 53	10.65	9.31	19.96	0.099	30.00	-10.04
1745.00	20	QPSK	V	109	339	1 / 53	11.13	9.14	20.27	0.106	30.00	-9.73
1770.00	20	QPSK	V	135	330	1 / 53	12.52	9.17	21.69	0.148	30.00	-8.31
1770.00	20	16-QAM	V	135	330	1 / 53	11.42	9.17	20.59	0.115	30.00	-9.41
1770.00	20	64-QAM	V	135	330	1 / 53	10.00	9.17	19.17	0.083	30.00	-10.83
1770.00	20	256-QAM	V	135	330	1 / 53	7.83	9.17	17.00	0.050	30.00	-13.00
1770.00	20	BPSK	V	135	330	1 / 53	12.42	9.17	21.59	0.144	30.00	-8.41
1775.00	10	QPSK	H	136	6	1 / 53	11.83	9.27	21.10	0.129	30.00	-8.90
1775.00	10 (CP-OFDM)	QPSK	V	100	347	1 / 53	10.14	9.17	19.31	0.085	30.00	-10.69

Table 7-11. EIRP Data (n66)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 356 of 420

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1850.70	1.4	QPSK	H	161	9	1 / 5	13.77	9.51	23.28	0.213	33.01	-9.73
1882.50	1.4	QPSK	H	164	7	1 / 0	13.30	9.96	23.26	0.212	33.01	-9.75
1914.30	1.4	QPSK	H	148	12	1 / 0	12.72	10.32	23.04	0.201	33.01	-9.97
1850.70	1.4	16-QAM	H	161	9	1 / 5	12.54	9.51	22.05	0.160	33.01	-10.96
1850.70	1.4	64-QAM	H	161	9	1 / 5	11.90	9.51	21.41	0.138	33.01	-11.60
1851.50	3	QPSK	H	157	11	1 / 14	11.90	9.52	21.42	0.139	33.01	-11.59
1882.50	3	QPSK	H	163	13	1 / 0	13.37	9.96	23.33	0.215	33.01	-9.68
1913.50	3	QPSK	H	151	7	1 / 0	12.77	10.31	23.08	0.203	33.01	-9.93
1882.50	3	16-QAM	H	163	13	1 / 0	12.47	9.96	22.43	0.175	33.01	-10.58
1882.50	3	64-QAM	H	163	13	1 / 0	11.72	9.96	21.68	0.147	33.01	-11.33
1852.50	5	QPSK	H	161	13	1 / 24	13.92	9.54	23.46	0.222	33.01	-9.55
1882.50	5	QPSK	H	162	11	1 / 0	13.36	9.96	23.32	0.215	33.01	-9.69
1912.50	5	QPSK	H	154	9	1 / 0	12.78	10.30	23.08	0.203	33.01	-9.93
1852.50	5	16-QAM	H	161	13	1 / 24	13.28	9.54	22.82	0.191	33.01	-10.19
1852.50	5	64-QAM	H	161	13	1 / 24	12.04	9.54	21.58	0.144	33.01	-11.43
1855.00	10	QPSK	H	157	11	1 / 49	13.72	9.57	23.29	0.213	33.01	-9.72
1882.50	10	QPSK	H	160	7	1 / 0	13.41	9.96	23.37	0.217	33.01	-9.64
1910.00	10	QPSK	H	152	13	1 / 0	12.74	10.28	23.02	0.201	33.01	-9.99
1882.50	10	16-QAM	H	160	7	1 / 0	12.55	9.96	22.51	0.178	33.01	-10.50
1882.50	10	64-QAM	H	160	7	1 / 0	11.62	9.96	21.58	0.144	33.01	-11.43
1857.50	15	QPSK	H	160	9	1 / 74	13.73	9.61	23.34	0.216	33.01	-9.67
1882.50	15	QPSK	H	157	6	1 / 0	13.39	9.96	23.35	0.216	33.01	-9.66
1907.50	15	QPSK	H	149	13	1 / 0	12.84	10.26	23.10	0.204	33.01	-9.91
1882.50	15	16-QAM	H	157	6	1 / 0	12.33	9.96	22.29	0.169	33.01	-10.72
1882.50	15	64-QAM	H	157	6	1 / 0	11.68	9.96	21.64	0.146	33.01	-11.37
1860.00	20	QPSK	H	158	10	1 / 99	13.90	9.64	23.54	0.226	33.01	-9.47
1882.50	20	QPSK	H	160	4	1 / 0	13.71	9.96	23.67	0.233	33.01	-9.34
1905.00	20	QPSK	H	145	11	1 / 0	13.12	10.24	23.36	0.217	33.01	-9.65
1882.50	20	16-QAM	H	160	4	1 / 0	12.95	9.96	22.91	0.195	33.01	-10.10
1882.50	20	64-QAM	H	160	4	1 / 0	11.88	9.96	21.84	0.153	33.01	-11.17
1882.50	20	QPSK	V	185	322	1 / 0	11.86	10.15	22.01	0.159	33.01	-11.00

Table 7-12. EIRP Data (Band 25/2)

FCC ID: A3LSMA716U	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset	Page 357 of 420

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1852.50	5	QPSK	V	150	326	1 / 0	14.28	9.92	24.20	0.263	33.01	-8.81
1880.00	5	QPSK	V	134	334	1 / 0	13.55	10.13	23.68	0.234	33.01	-9.33
1907.50	5	QPSK	V	155	333	1 / 13	12.50	10.33	22.83	0.192	33.01	-10.18
1852.50	5	16-QAM	V	150	326	1 / 0	13.33	9.92	23.25	0.211	33.01	-9.76
1852.50	5	64-QAM	V	150	326	1 / 0	12.56	9.92	22.48	0.177	33.01	-10.53
1852.50	5	256-QAM	V	150	326	1 / 0	10.15	9.92	20.07	0.102	33.01	-12.94
1852.50	5	BPSK	V	150	326	1 / 0	13.86	9.92	23.78	0.239	33.01	-9.23
1855.00	10	QPSK	V	152	321	1 / 0	14.35	9.94	24.29	0.269	33.01	-8.72
1880.00	10	QPSK	V	131	338	1 / 0	13.79	10.13	23.92	0.247	33.01	-9.09
1905.00	10	QPSK	V	152	331	1 / 26	12.46	10.31	22.77	0.189	33.01	-10.24
1855.00	10	16-QAM	V	152	321	1 / 0	13.02	9.94	22.96	0.198	33.01	-10.05
1855.00	10	64-QAM	V	152	321	1 / 0	12.25	9.94	22.19	0.166	33.01	-10.82
1855.00	10	256-QAM	V	152	321	1 / 0	9.84	9.94	19.78	0.095	33.01	-13.23
1855.00	10	BPSK	V	152	321	1 / 0	14.08	9.94	24.02	0.252	33.01	-8.99
1857.50	15	QPSK	V	151	328	1 / 0	13.95	9.96	23.91	0.246	33.01	-9.10
1880.00	15	QPSK	V	136	341	1 / 0	13.57	10.13	23.70	0.235	33.01	-9.31
1902.50	15	QPSK	V	157	335	1 / 40	12.08	10.30	22.38	0.173	33.01	-10.63
1857.50	15	16-QAM	V	151	328	1 / 0	13.05	9.96	23.01	0.200	33.01	-10.00
1857.50	15	64-QAM	V	151	328	1 / 0	11.93	9.96	21.89	0.154	33.01	-11.12
1857.50	15	256-QAM	V	151	328	1 / 0	10.54	9.96	20.50	0.112	33.01	-12.51
1857.50	15	BPSK	V	151	328	1 / 0	13.92	9.96	23.88	0.244	33.01	-9.13
1860.00	20	QPSK	V	145	331	1 / 1	14.22	9.98	24.20	0.263	33.01	-8.81
1880.00	20	QPSK	V	133	345	1 / 1	13.84	10.13	23.97	0.250	33.01	-9.04
1900.00	20	QPSK	V	153	338	1 / 53	13.36	10.29	23.65	0.232	33.01	-9.36
1860.00	20	16-QAM	V	145	331	1 / 1	13.33	9.98	23.31	0.214	33.01	-9.70
1860.00	20	64-QAM	V	145	331	1 / 1	12.56	9.98	22.54	0.179	33.01	-10.47
1860.00	20	256-QAM	V	145	331	1 / 1	10.15	9.98	20.13	0.103	33.01	-12.88
1860.00	20	BPSK	V	145	331	1 / 1	14.16	9.98	24.14	0.259	33.01	-8.87
1855.00	10	QPSK	H	115	358	1 / 104	13.69	9.64	23.33	0.215	33.01	-9.68
1855.00	10 (CP-OFDM)	QPSK	V	146	331	1 / 1	12.71	9.98	22.69	0.186	33.01	-10.32

Table 7-13. EIRP Data (n2)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 358 of 420

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
2307.50	5	QPSK	H	145	235	1 / 24	12.40	10.33	22.73	0.188	23.98	-1.24
2312.50	5	QPSK	H	147	242	1 / 12	12.38	10.34	22.72	0.187	23.98	-1.26
2307.50	5	16-QAM	H	145	235	1 / 24	11.64	10.33	21.97	0.158	23.98	-2.00
2307.50	5	64-QAM	H	145	235	1 / 24	10.56	10.33	20.89	0.123	23.98	-3.08
2310.00	10	QPSK	H	147	236	1 / 25	12.52	10.34	22.86	0.193	23.98	-1.12
2310.00	10	16-QAM	H	147	236	1 / 25	11.61	10.34	21.95	0.157	23.98	-2.03
2310.00	10	64-QAM	H	147	236	1 / 25	10.85	10.34	21.19	0.131	23.98	-2.79
2310.00	10	QPSK	V	103	268	1 / 25	11.55	10.25	21.80	0.151	23.98	-2.18

Table 7-14. EIRP Data (Band 30)

FCC ID: A3LSMA716U	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 359 of 420

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
2502.50	5	QPSK	H	124	51	1 / 24	9.80	9.46	19.26	0.084	33.01	-13.75
2535.00	5	QPSK	H	106	53	1 / 24	10.70	9.42	20.12	0.103	33.01	-12.89
2567.50	5	QPSK	H	104	46	1 / 0	10.53	9.48	20.01	0.100	33.01	-13.00
2535.00	5	16-QAM	H	106	53	1 / 24	10.00	9.42	19.42	0.088	33.01	-13.59
2535.00	5	64-QAM	H	106	53	1 / 24	9.00	9.42	18.42	0.070	33.01	-14.59
2505.00	10	QPSK	H	122	55	1 / 49	9.68	9.45	19.13	0.082	33.01	-13.88
2535.00	10	QPSK	H	104	51	1 / 49	10.66	9.42	20.08	0.102	33.01	-12.93
2565.00	10	QPSK	H	101	48	1 / 0	10.45	9.47	19.92	0.098	33.01	-13.09
2535.00	10	16-QAM	H	104	51	1 / 49	10.10	9.42	19.52	0.090	33.01	-13.49
2535.00	10	64-QAM	H	104	51	1 / 49	9.13	9.42	18.55	0.072	33.01	-14.46
2507.50	15	QPSK	H	120	52	1 / 74	9.75	9.45	19.20	0.083	33.01	-13.81
2535.00	15	QPSK	H	106	53	1 / 74	10.69	9.42	20.11	0.103	33.01	-12.90
2562.50	15	QPSK	H	103	51	1 / 0	10.56	9.46	20.02	0.100	33.01	-12.99
2535.00	15	16-QAM	H	106	53	1 / 74	10.21	9.42	19.63	0.092	33.01	-13.38
2535.00	15	64-QAM	H	106	53	1 / 74	9.21	9.42	18.63	0.073	33.01	-14.38
2510.00	20	QPSK	H	118	51	1 / 99	9.47	9.45	18.92	0.078	33.01	-14.09
2535.00	20	QPSK	H	104	51	1 / 99	10.51	9.42	19.93	0.099	33.01	-13.08
2560.00	20	QPSK	H	104	50	1 / 0	10.27	9.45	19.72	0.094	33.01	-13.29
2535.00	20	16-QAM	H	104	51	1 / 99	9.75	9.42	19.17	0.083	33.01	-13.84
2535.00	20	64-QAM	H	104	51	1 / 99	8.75	9.42	18.17	0.066	33.01	-14.84
2535.00	5	QPSK	V	115	89	1 / 24	9.28	9.42	18.70	0.074	33.01	-14.31

Table 7-15. EIRP Data (Band 7)

FCC ID: A3LSMA716U	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset	Page 360 of 420

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
2498.50	5	QPSK	H	113	210	1 / 12	15.47	9.46	24.93	0.311	33.01	-8.08
2593.00	5	QPSK	H	161	44	1 / 12	13.96	9.58	23.54	0.226	33.01	-9.47
2687.50	5	QPSK	H	104	49	1 / 12	14.26	9.85	24.11	0.257	33.01	-8.90
2498.50	5	16-QAM	H	113	210	1 / 12	14.34	9.46	23.80	0.240	33.01	-9.21
2498.50	5	64-QAM	H	113	210	1 / 12	14.02	9.46	23.48	0.223	33.01	-9.53
2501.00	10	QPSK	H	111	216	1 / 25	15.46	9.46	24.92	0.310	33.01	-8.09
2593.00	10	QPSK	H	165	40	1 / 25	14.01	9.58	23.59	0.229	33.01	-9.42
2685.00	10	QPSK	H	101	46	1 / 25	14.35	9.85	24.20	0.263	33.01	-8.81
2501.00	10	16-QAM	H	111	216	1 / 25	14.26	9.46	23.72	0.235	33.01	-9.29
2501.00	10	64-QAM	H	111	216	1 / 25	14.00	9.46	23.46	0.222	33.01	-9.55
2503.50	15	QPSK	H	113	211	1 / 36	15.56	9.45	25.01	0.317	33.01	-8.00
2593.00	15	QPSK	H	168	44	1 / 36	14.03	9.58	23.61	0.230	33.01	-9.40
2682.50	15	QPSK	H	105	41	1 / 36	14.41	9.86	24.27	0.267	33.01	-8.74
2503.50	15	16-QAM	H	113	211	1 / 36	14.10	9.45	23.55	0.227	33.01	-9.46
2503.50	15	64-QAM	H	113	211	1 / 36	13.88	9.45	23.33	0.216	33.01	-9.68
2506.00	20	QPSK	H	110	215	1 / 50	15.28	9.45	24.73	0.297	33.01	-8.28
2593.00	20	QPSK	H	171	42	1 / 50	13.89	9.58	23.47	0.222	33.01	-9.54
2680.00	20	QPSK	H	102	47	1 / 50	13.95	9.86	23.81	0.241	33.01	-9.20
2506.00	20	16-QAM	H	110	215	1 / 50	14.02	9.45	23.47	0.222	33.01	-9.54
2506.00	20	64-QAM	H	110	215	1 / 50	13.53	9.45	22.98	0.199	33.01	-10.03

Table 7-16. EIRP Data (Band 41 – PC2)

FCC ID: A3LSMA716U	 MEASUREMENT REPORT (CERTIFICATION) 	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset
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Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
2498.50	5	QPSK	H	125	71	1 / 12	9.24	9.46	18.70	0.074	33.01	-14.31
2593.00	5	QPSK	H	104	45	1 / 12	10.64	9.58	20.22	0.105	33.01	-12.79
2687.50	5	QPSK	H	109	49	1 / 12	9.05	9.85	18.90	0.078	33.01	-14.11
2593.00	5	16-QAM	H	104	45	1 / 12	9.61	9.58	19.19	0.083	33.01	-13.82
2593.00	5	64-QAM	H	104	45	1 / 12	9.52	9.58	19.10	0.081	33.01	-13.91
2501.00	10	QPSK	H	123	74	1 / 25	9.25	9.46	18.71	0.074	33.01	-14.30
2593.00	10	QPSK	H	107	48	1 / 25	10.67	9.58	20.25	0.106	33.01	-12.76
2685.00	10	QPSK	H	113	49	1 / 25	8.96	9.85	18.81	0.076	33.01	-14.20
2593.00	10	16-QAM	H	107	48	1 / 25	10.05	9.58	19.63	0.092	33.01	-13.38
2593.00	10	64-QAM	H	107	48	1 / 25	9.28	9.58	18.86	0.077	33.01	-14.15
2503.50	15	QPSK	H	121	72	1 / 36	9.18	9.45	18.63	0.073	33.01	-14.38
2593.00	15	QPSK	H	105	51	1 / 36	10.58	9.58	20.16	0.104	33.01	-12.85
2682.50	15	QPSK	H	116	52	1 / 36	9.00	9.86	18.86	0.077	33.01	-14.15
2593.00	15	16-QAM	H	105	51	1 / 36	10.00	9.58	19.58	0.091	33.01	-13.43
2593.00	15	64-QAM	H	105	51	1 / 36	9.45	9.58	19.03	0.080	33.01	-13.98
2506.00	20	QPSK	H	118	70	1 / 50	8.94	9.45	18.39	0.069	33.01	-14.62
2593.00	20	QPSK	H	103	55	1 / 50	10.56	9.58	20.14	0.103	33.01	-12.87
2680.00	20	QPSK	H	118	56	1 / 50	8.90	9.86	18.76	0.075	33.01	-14.25
2593.00	20	16-QAM	H	103	55	1 / 50	9.95	9.58	19.53	0.090	33.01	-13.48
2593.00	20	64-QAM	H	103	55	1 / 50	9.45	9.58	19.03	0.080	33.01	-13.98
2593.00	10	QPSK	V	148	7	1 / 25	8.04	9.58	17.62	0.058	33.01	-15.39

Table 7-17. EIRP Data (Band 41 – PC3)

FCC ID: A3LSMA716U	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset	Page 362 of 420

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
2506.02	20	QPSK	H	113	320	1 / 26	12.87	9.42	22.30	0.170	33.01	-10.71
2592.99	20	QPSK	H	109	315	1 / 26	12.81	9.55	22.36	0.172	33.01	-10.65
2679.99	20	QPSK	H	106	323	1 / 26	12.88	9.83	22.72	0.187	33.01	-10.29
2679.99	20	16-QAM	H	106	323	1 / 26	11.67	9.83	21.51	0.141	33.01	-11.50
2679.99	20	64-QAM	H	106	323	1 / 26	10.56	9.83	20.40	0.110	33.01	-12.61
2679.99	20	256-QAM	H	106	323	1 / 26	8.95	9.83	18.79	0.076	33.01	-14.22
2679.99	20	BPSK	H	106	323	1 / 26	12.46	9.83	22.30	0.170	33.01	-10.71
2516.02	40	QPSK	H	110	317	1 / 53	12.83	9.41	22.25	0.168	33.01	-10.76
2592.99	40	QPSK	H	107	309	1 / 53	12.73	9.55	22.28	0.169	33.01	-10.73
2670.00	40	QPSK	H	103	318	1 / 53	12.78	9.86	22.64	0.184	33.01	-10.37
2670.00	40	16-QAM	H	103	318	1 / 53	11.82	9.86	21.68	0.147	33.01	-11.33
2670.00	40	64-QAM	H	103	318	1 / 53	10.71	9.86	20.57	0.114	33.01	-12.44
2670.00	40	256-QAM	H	103	318	1 / 53	9.10	9.86	18.96	0.079	33.01	-14.05
2670.00	40	BPSK	H	103	318	1 / 53	12.52	9.86	22.38	0.173	33.01	-10.63
2521.01	50	QPSK	H	108	320	1 / 67	12.85	9.41	22.26	0.168	33.01	-10.75
2592.99	50	QPSK	H	111	312	1 / 67	13.02	9.55	22.57	0.181	33.01	-10.44
2664.99	50	QPSK	H	105	322	1 / 67	12.84	9.87	22.71	0.187	33.01	-10.30
2664.99	50	16-QAM	H	105	322	1 / 67	11.73	9.87	21.60	0.145	33.01	-11.41
2664.99	50	64-QAM	H	105	322	1 / 67	9.46	9.87	19.33	0.086	33.01	-13.68
2664.99	50	256-QAM	H	105	322	1 / 67	7.85	9.87	17.72	0.059	33.01	-15.29
2664.99	50	BPSK	H	105	322	1 / 67	12.41	9.87	22.28	0.169	33.01	-10.73

Table 7-18. EIRP Data (n41)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 363 of 420

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
2526.00	60	QPSK	H	115	322	1 / 81	13.44	9.43	22.87	0.194	33.01	-10.14
2592.99	60	QPSK	H	106	318	1 / 81	13.17	9.58	22.75	0.188	33.01	-10.26
2659.98	60	QPSK	H	103	321	1 / 81	13.01	9.91	22.92	0.196	33.01	-10.09
2659.98	60	16-QAM	H	103	321	1 / 81	12.02	9.91	21.93	0.156	33.01	-11.08
2659.98	60	64-QAM	H	103	321	1 / 81	10.91	9.91	20.82	0.121	33.01	-12.19
2659.98	60	256-QAM	H	103	321	1 / 81	9.30	9.91	19.21	0.083	33.01	-13.80
2659.98	60	BPSK	H	103	321	1 / 81	12.59	9.91	22.50	0.178	33.01	-10.51
2536.02	80	QPSK	H	112	319	1 / 109	13.15	9.42	22.57	0.181	33.01	-10.44
2592.99	80	QPSK	H	104	322	1 / 109	14.29	9.58	23.87	0.244	33.01	-9.14
2649.99	80	QPSK	H	101	326	1 / 109	12.98	9.93	22.92	0.196	33.01	-10.09
2592.99	80	16-QAM	H	104	322	1 / 109	13.29	9.58	22.87	0.194	33.01	-10.14
2592.99	80	64-QAM	H	104	322	1 / 109	12.18	9.58	21.76	0.150	33.01	-11.25
2592.99	80	256-QAM	H	104	322	1 / 109	10.24	9.58	19.82	0.096	33.01	-13.19
2592.99	80	BPSK	H	104	322	1 / 109	14.40	9.58	23.98	0.250	33.01	-9.03
2541.00	90	QPSK	H	114	321	1 / 123	13.44	9.42	22.86	0.193	33.01	-10.15
2592.99	90	QPSK	H	103	326	1 / 123	14.16	9.58	23.74	0.237	33.01	-9.27
2644.98	90	QPSK	H	102	320	1 / 123	12.88	9.90	22.78	0.190	33.01	-10.23
2592.99	90	16-QAM	H	103	326	1 / 123	13.14	9.58	22.72	0.187	33.01	-10.29
2592.99	90	64-QAM	H	103	326	1 / 123	11.87	9.58	21.45	0.140	33.01	-11.56
2592.99	90	256-QAM	H	103	326	1 / 123	10.04	9.58	19.62	0.092	33.01	-13.39
2592.99	90	BPSK	H	103	326	1 / 123	14.06	9.58	23.64	0.231	33.01	-9.37
2546.01	100	QPSK	H	116	324	1 / 137	14.04	9.41	23.45	0.222	33.01	-9.56
2592.99	100	QPSK	H	106	319	1 / 137	13.20	9.58	22.78	0.190	33.01	-10.23
2640.00	100	QPSK	H	105	315	1 / 137	13.12	9.87	22.99	0.199	33.01	-10.02
2546.01	100	16-QAM	H	116	324	1 / 137	13.67	9.41	23.08	0.203	33.01	-9.93
2546.01	100	64-QAM	H	116	324	1 / 137	12.83	9.41	22.24	0.168	33.01	-10.77
2546.01	100	256-QAM	H	116	324	1 / 137	10.81	9.41	20.22	0.105	33.01	-12.79
2546.01	100	BPSK	H	116	324	1 / 137	13.98	9.41	23.39	0.218	33.01	-9.62
2592.99	80	BPSK	V	102	144	1 / 109	14.53	9.41	23.94	0.248	33.01	-9.07
2592.99	80 (CP-OFDM)	BPSK	H	116	317	1 / 109	13.64	9.41	23.05	0.202	33.01	-9.96

Table 7-19. EIRP Data (n41 – Continued)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 364 of 420

7.7 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 $\geq 3 \times$ RBW
3. Span = 1.5 times the OBW
4. No. of sweep points $\geq 2 \times$ span / RBW
5. Detector = RMS
6. Trace mode = Average (Max Hold for pulsed emissions)
7. The trace was allowed to stabilize

FCC ID: A3LSMA716U	 PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Test Setup

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

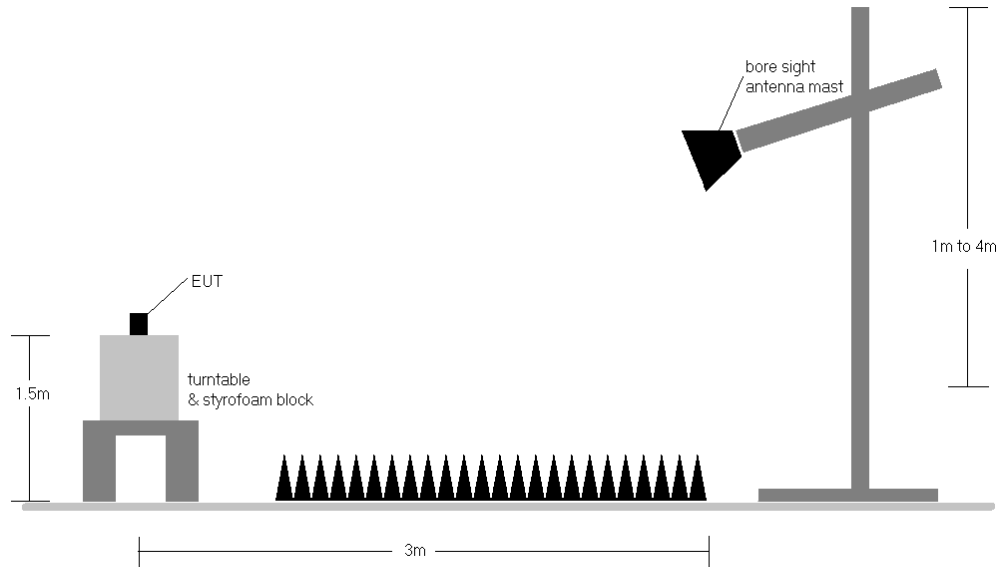


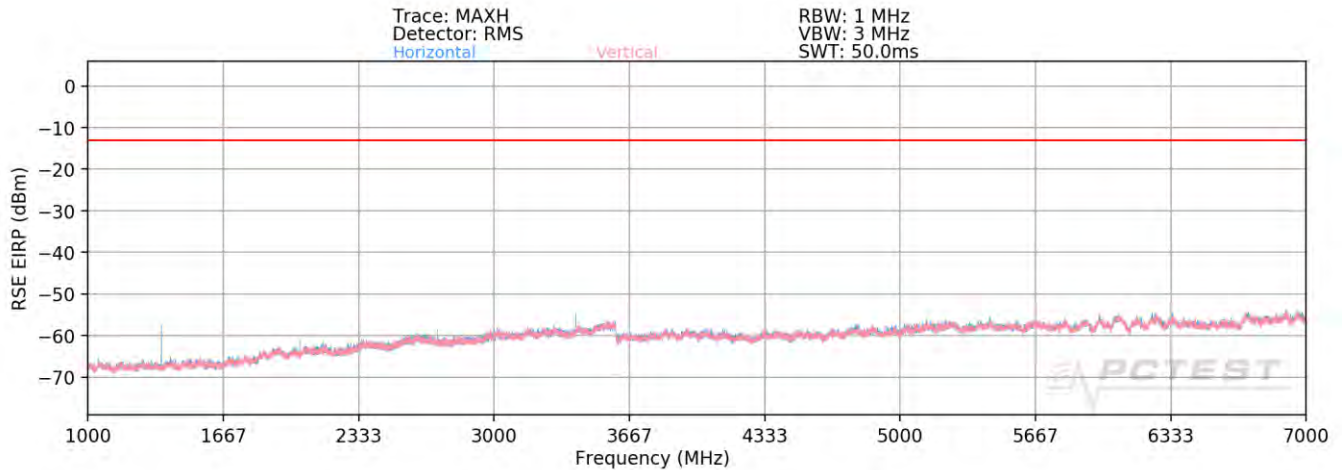
Figure 7-7. Test Instrument & Measurement Setup

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.

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Band 71



Plot 7-634. 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	H	204	328	-56.73	2.91	-53.82	-40.8
2019.00	H	205	316	-62.76	2.82	-59.94	-46.9
2692.00	H	208	320	-60.45	4.53	-55.92	-42.9
3365.00	H	208	106	-61.54	6.10	-55.44	-42.4
4038.00	H	-	-	-67.12	7.45	-59.66	-46.7
4711.00	H	-	-	-68.50	8.47	-60.03	-47.0

Table 7-20. Radiated Spurious Data (Band 71 – Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 367 of 420

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	H	236	316	-56.93	2.88	-54.05	-41.1
2041.50	H	241	321	-63.34	2.73	-60.61	-47.6
2722.00	H	224	319	-59.74	4.63	-55.11	-42.1
3402.50	H	218	316	-58.16	6.26	-51.90	-38.9
4083.00	H	-	-	-68.21	7.55	-60.66	-47.7
4763.50	H	-	-	-67.90	8.46	-59.44	-46.4

Table 7-21. Radiated Spurious Data (Band 71 – Mid Channel)

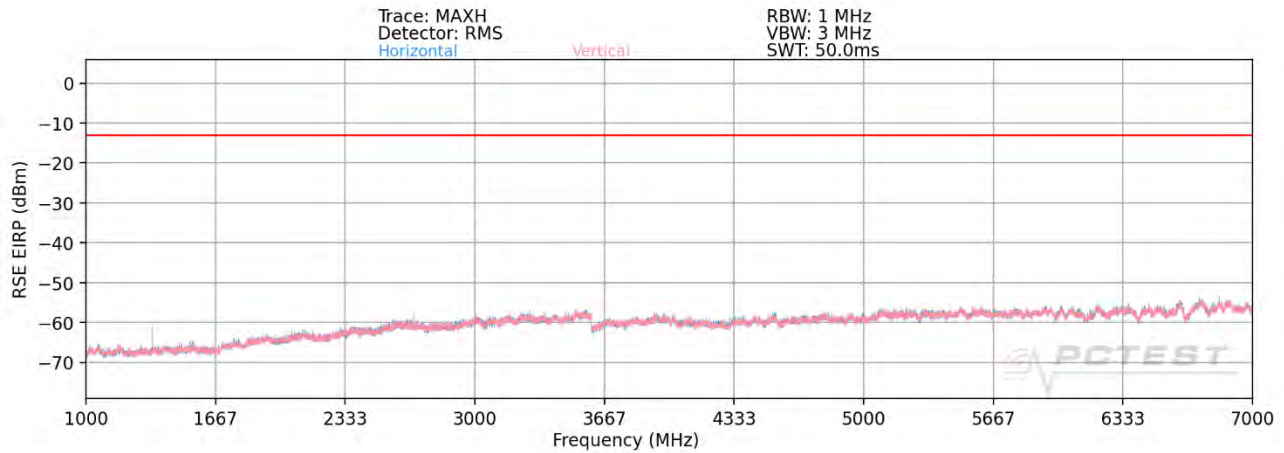
OPERATING FREQUENCY: 688.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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	H	219	321	-58.54	2.64	-55.90	-42.9
2064.00	H	219	308	-61.01	2.82	-58.18	-45.2
2752.00	H	232	320	-60.66	4.60	-56.06	-43.1
3440.00	H	234	313	-57.29	6.28	-51.01	-38.0
4128.00	H	-	-	-67.90	7.70	-60.20	-47.2
4816.00	H	-	-	-67.40	8.52	-58.88	-45.9

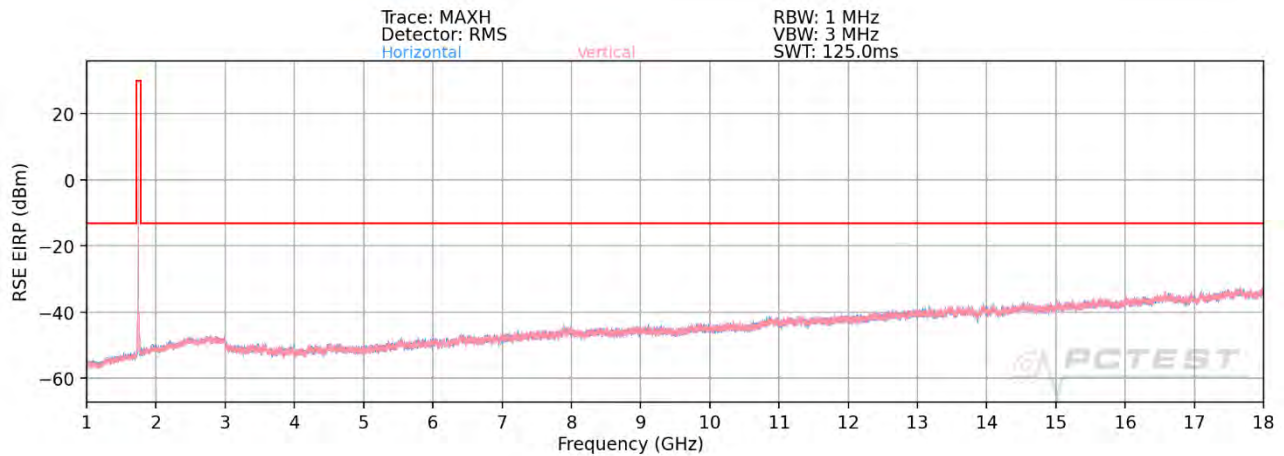
Table 7-22. Radiated Spurious Data (Band 71 – High Channel)

FCC ID: A3LSMA716U	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 368 of 420

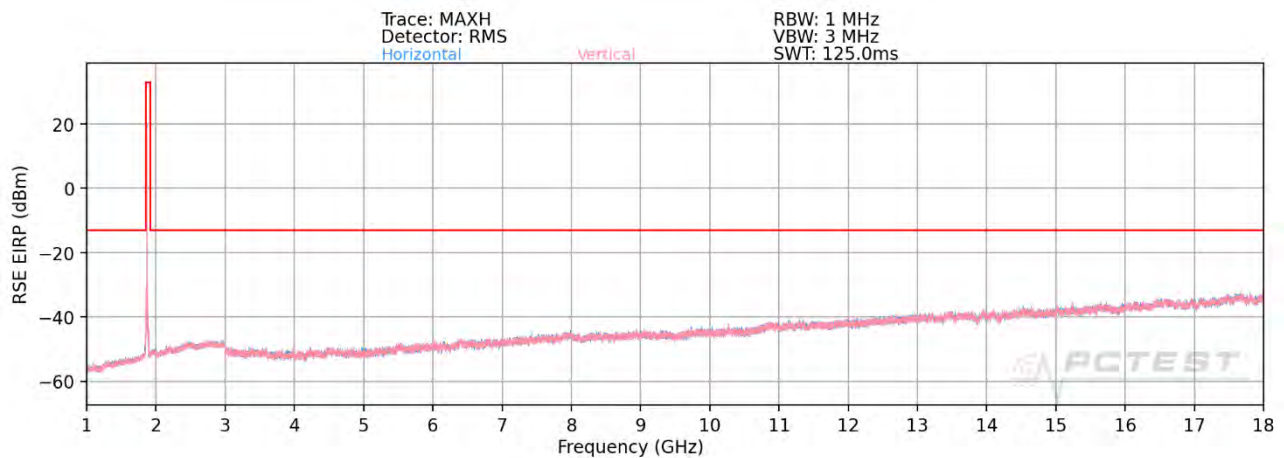
n71



Plot 7-635. Radiated Spurious Plot above 1GHz (n71)



Plot 7-636. Radiated Spurious Plot above 1GHz (n71 + Anchor B66 EN-DC)



Plot 7-637. Radiated Spurious Plot above 1GHz (n71 + Anchor B2 EN-DC)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 369 of 420

OPERATING FREQUENCY: 670.50 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 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]
1341.00	V	124	54	-71.39	7.47	-63.92	-50.9
2011.50	V	141	348	-76.44	8.69	-67.75	-54.7
2682.00	V	114	353	-70.50	9.99	-60.51	-47.5
3352.50	V	111	352	-72.37	9.65	-62.73	-49.7
4023.00	V	367	63	-72.98	9.79	-63.19	-50.2
4693.50	V	-	-	-75.78	10.96	-64.82	-51.8
5364.00	V	-	-	-73.99	10.72	-63.26	-50.3

Table 7-23. Radiated Spurious Data (n71 – Low Channel)

OPERATING FREQUENCY: 680.50 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 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	119	71	-69.31	7.51	-61.79	-48.8
2041.50	V	112	332	-74.31	8.79	-65.52	-52.5
2722.00	V	157	357	-69.65	10.11	-59.54	-46.5
3402.50	V	112	356	-70.48	9.83	-60.65	-47.6
4083.00	V	397	76	-73.10	10.08	-63.01	-50.0
4763.50	V	-	-	-74.84	11.01	-63.82	-50.8
5444.00	V	-	-	-73.39	10.78	-62.61	-49.6

Table 7-24. Radiated Spurious Data (n71 – Mid Channel)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 370 of 420

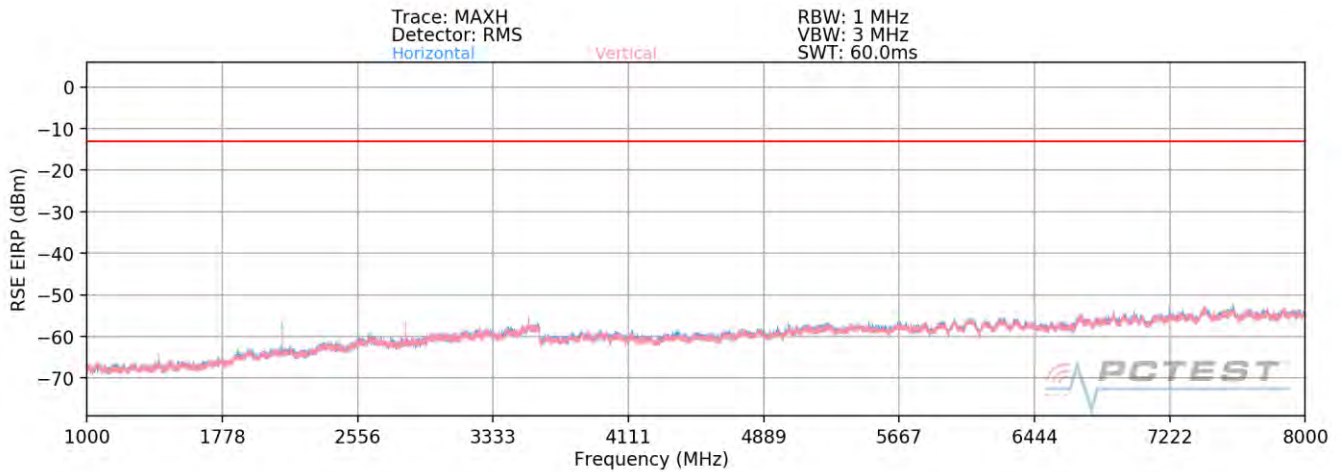
OPERATING FREQUENCY: 690.50 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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]
1381.00	V	136	326	-73.26	7.49	-65.77	-52.8
2071.50	V	116	357	-76.11	8.84	-67.27	-54.3
2762.00	V	112	354	-74.82	10.19	-64.63	-51.6
3452.50	V	112	359	-72.09	9.89	-62.20	-49.2
4143.00	V	382	77	-74.86	10.24	-64.62	-51.6
4833.50	V	-	-	-75.46	10.88	-64.58	-51.6
5524.00	V	-	-	-74.66	10.92	-63.74	-50.7

Table 7-25. Radiated Spurious Data (n71 – High Channel)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 371 of 420

Band 12



Plot 7-638. 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	371	226	-64.49	2.30	-62.19	-49.2
2112.00	H	366	214	-56.34	3.12	-53.22	-40.2
2816.00	H	354	222	-58.52	4.82	-53.69	-40.7
3520.00	H	-	-	-68.02	6.48	-61.54	-48.5
4224.00	H	-	-	-68.31	7.89	-60.42	-47.4

Table 7-26. Radiated Spurious Data (Band 12 – Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 372 of 420

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	364	214	-62.92	2.39	-60.52	-47.5
2122.50	H	370	203	-53.76	3.14	-50.61	-37.6
2830.00	H	356	106	-57.19	4.87	-52.32	-39.3
3537.50	H	-	-	-62.03	6.45	-55.57	-42.6
4245.00	H	-	-	-68.42	7.98	-60.45	-47.4

Table 7-27. Radiated Spurious Data (Band 12 – Mid Channel)

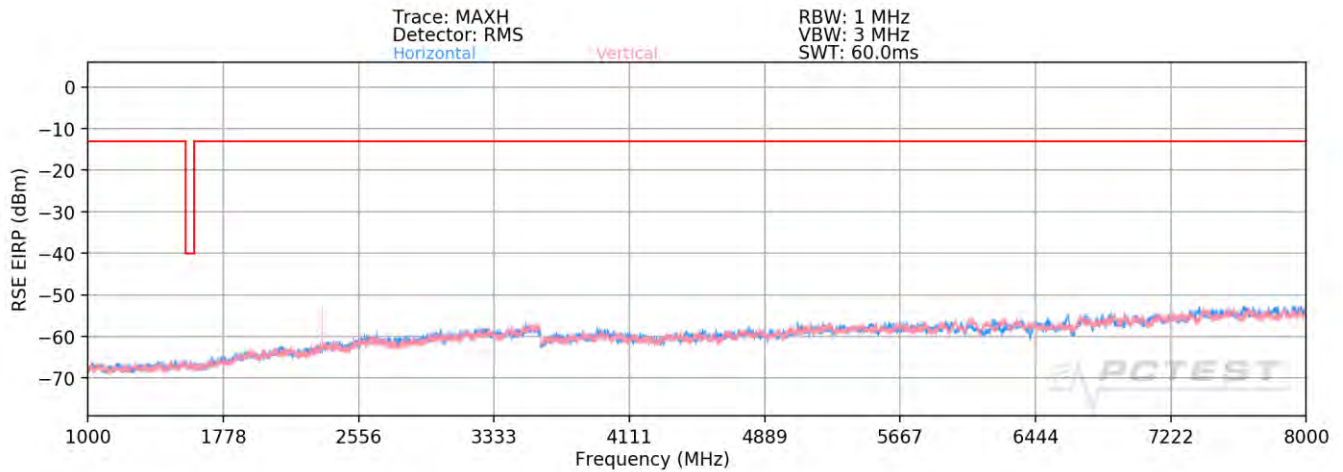
OPERATING FREQUENCY: 711.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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	373	213	-63.77	2.53	-61.24	-48.2
2133.00	H	368	211	-55.67	3.11	-52.56	-39.6
2844.00	H	369	223	-57.13	4.91	-52.22	-39.2
3555.00	H	373	213	-58.66	6.46	-52.20	-39.2
4266.00	H	-	-	-68.75	8.00	-60.75	-47.7
4977.00	H	-	-	-67.32	8.71	-58.61	-45.6

Table 7-28. Radiated Spurious Data (Band 12 – High Channel)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 373 of 420

Band 13



Plot 7-639. Radiated Spurious Plot above 1GHz (Band 13)

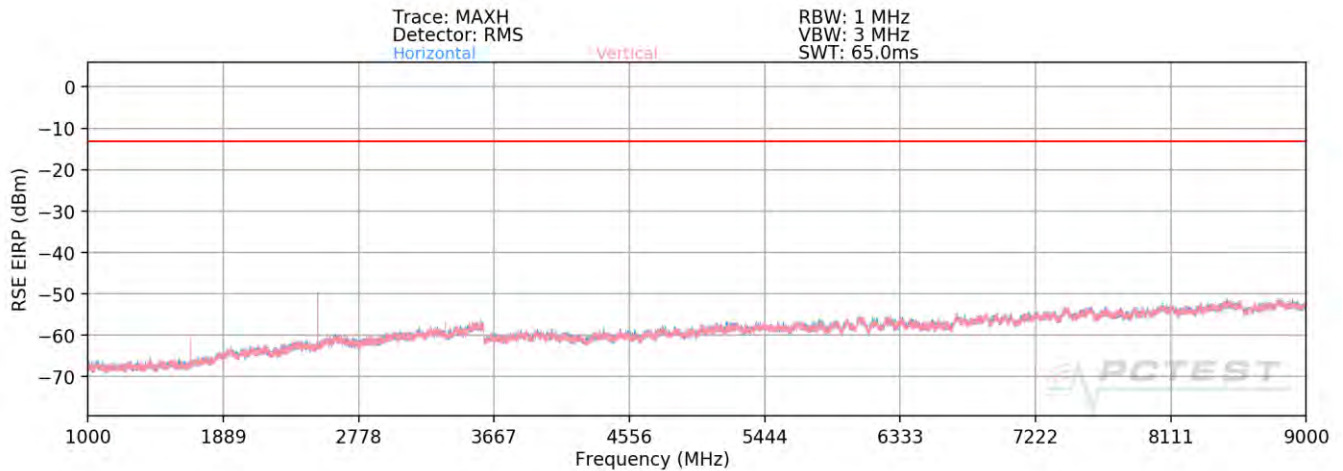
OPERATING FREQUENCY: 782.00 MHz
MODULATION SIGNAL: QPSK
BANDWIDTH: 10.0 MHz
DISTANCE: 3 meters
LIMIT: -13 dBm

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]
2346.00	H	136	71	-54.74	3.64	-51.11	-38.1
3128.00	H	-	-	-64.05	5.73	-58.32	-45.3
3910.00	H	-	-	-69.39	7.25	-62.14	-49.1

Table 7-29. Radiated Spurious Data (Band 13 – Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 374 of 420

Band 26/5



Plot 7-640. Radiated Spurious Plot above 1GHz (Band 26)

OPERATING FREQUENCY: 831.50 MHz
MODULATION SIGNAL: QPSK
BANDWIDTH: 15.0 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]
1663.00	V	161	253	-60.28	3.12	-57.16	-44.2
2494.50	V	172	252	-61.14	3.87	-57.27	-44.3
3326.00	V	-	-	-68.95	6.02	-62.93	-49.9
4157.50	V	398	41	-67.63	7.79	-59.84	-46.8
4989.00	V	-	-	-68.81	8.71	-60.10	-47.1

Table 7-30. Radiated Spurious Data (Band 26 – Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 375 of 420

OPERATING FREQUENCY: 836.50 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 15.0 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	147	252	-59.84	3.10	-56.74	-43.7
2509.50	V	157	239	-60.39	4.02	-56.38	-43.4
3346.00	V	160	248	-58.93	6.03	-52.91	-39.9
4182.50	V	-	-	-69.38	7.79	-61.59	-48.6
5019.00	V	-	-	-68.75	8.78	-59.97	-47.0

Table 7-31. Radiated Spurious Data (Band 26 – Mid Channel)

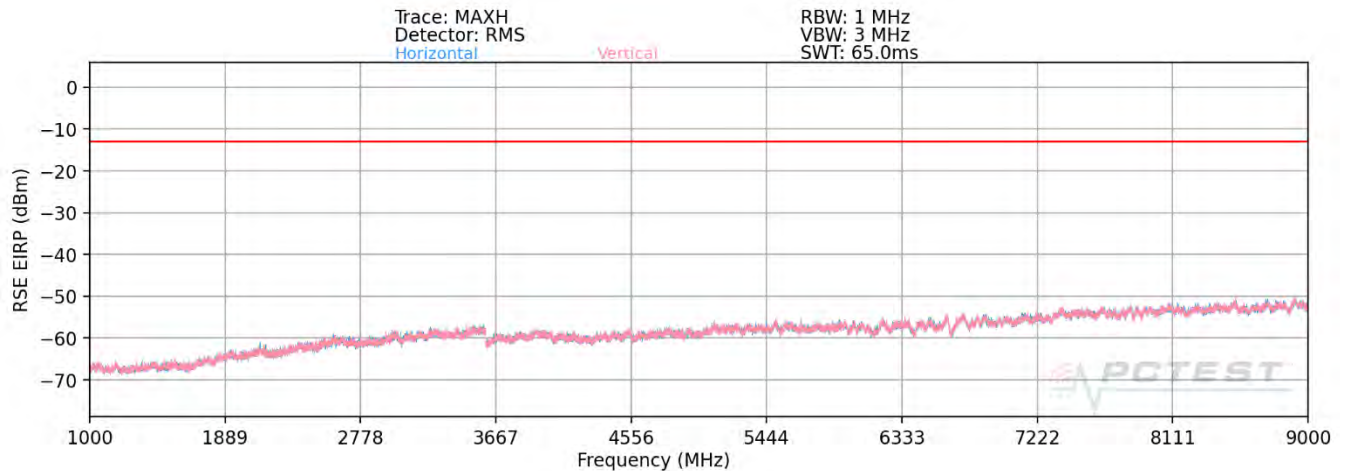
OPERATING FREQUENCY: 841.50 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 15.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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]
1683.00	V	114	254	-61.34	3.15	-58.19	-45.2
2524.50	V	129	243	-57.16	4.07	-53.08	-40.1
3366.00	V	118	241	-59.72	6.10	-53.62	-40.6
4207.50	V	-	-	-69.12	7.82	-61.30	-48.3
5049.00	V	-	-	-69.39	8.89	-60.50	-47.5

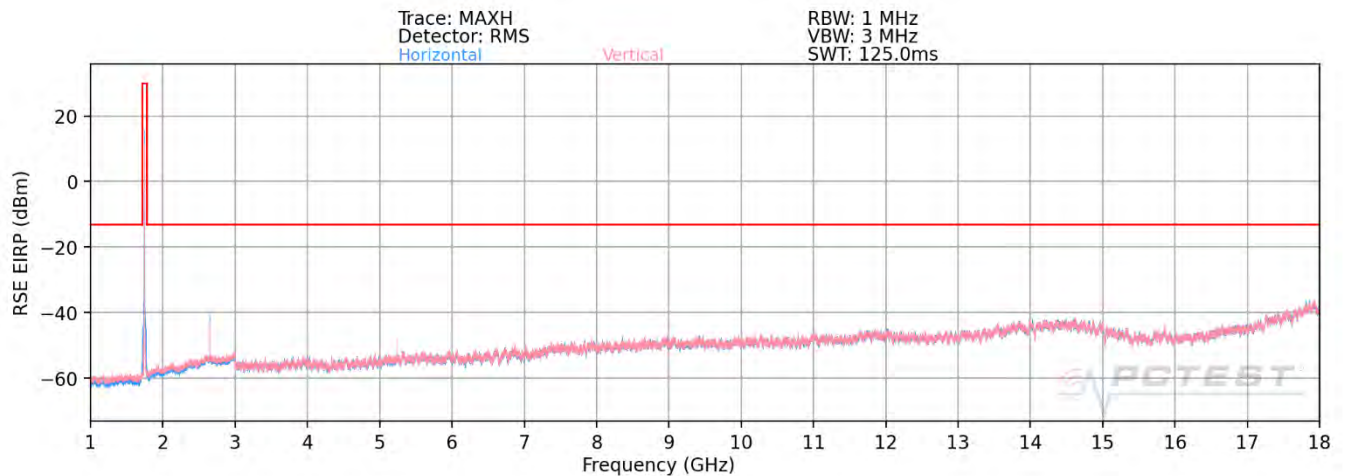
Table 7-32. Radiated Spurious Data (Band 26 – High Channel)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 376 of 420

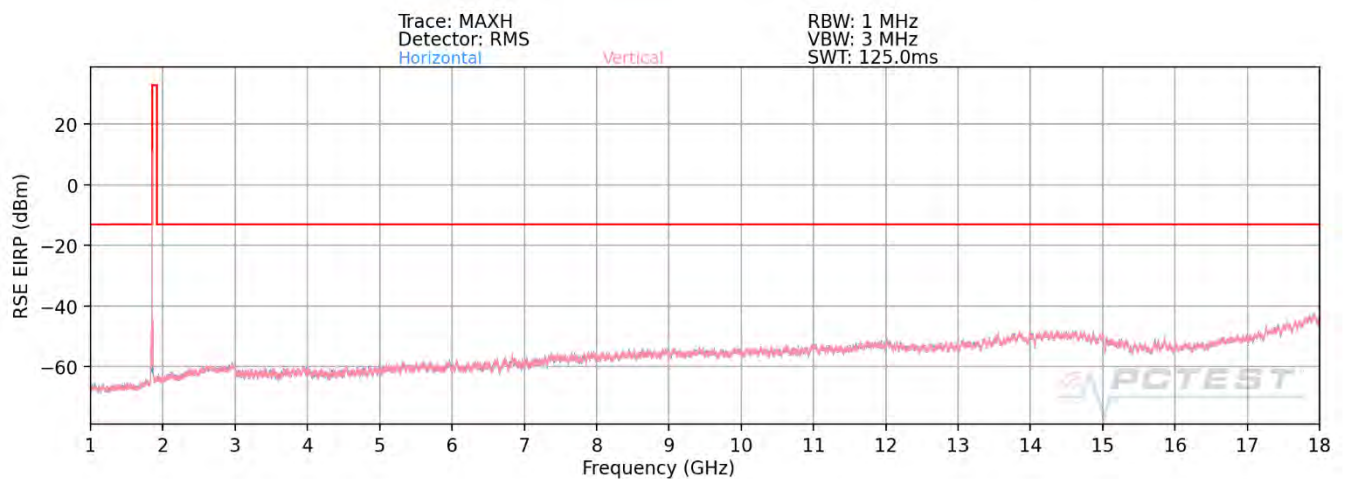
n5



Plot 7-641. Radiated Spurious Plot above 1GHz (n5)

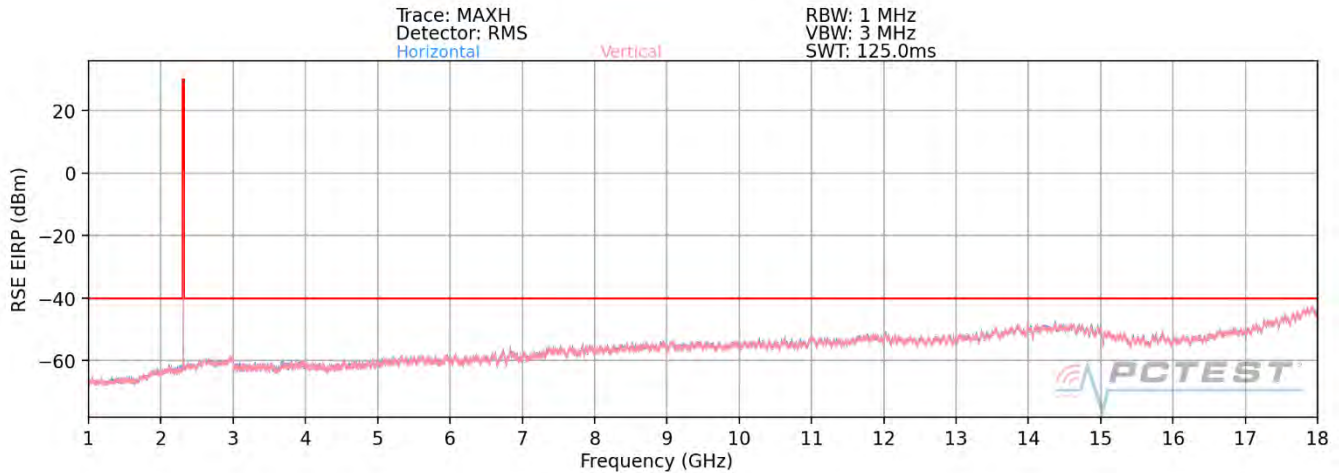


Plot 7-642. Radiated Spurious Plot above 1GHz (n5 + Anchor B66 EN-DC)



Plot 7-643. Radiated Spurious Plot above 1GHz (n5 + Anchor B2 EN-DC)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 377 of 420



Plot 7-644. Radiated Spurious Plot above 1GHz (n5 + Anchor B30 EN-DC)

OPERATING FREQUENCY: 829.00 MHz
MODULATION SIGNAL: QPSK (DFT-s-OFDM)
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	H	111	323	-76.43	8.98	-67.45	-54.4
2487.00	H	166	137	-70.49	9.78	-60.71	-47.7
3316.00	H	-	-	-77.63	9.63	-68.01	-55.0
4145.00	H	-	-	-76.97	10.33	-66.64	-53.6

Table 7-33. Radiated Spurious Data (n5 – Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 378 of 420

OPERATING FREQUENCY: 836.50 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 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	H	143	250	-78.37	8.98	-69.39	-56.4
2509.50	H	135	136	-73.83	9.78	-64.04	-51.0
3346.00	H	-	-	-77.15	9.63	-67.52	-54.5
4182.50	H	-	-	-76.99	10.37	-66.61	-53.6

Table 7-34. Radiated Spurious Data (n5 – Mid Channel)

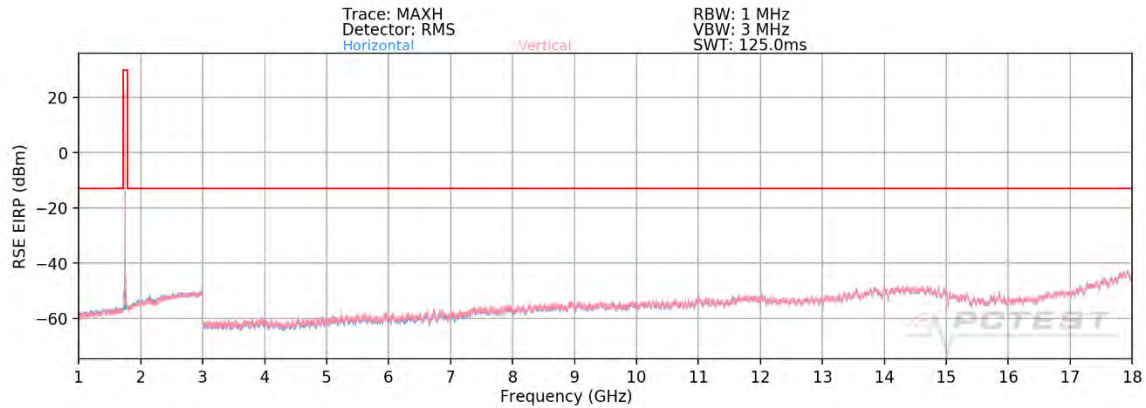
OPERATING FREQUENCY: 844.00 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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	H	150	240	-75.30	8.98	-66.32	-53.3
2532.00	H	142	139	-68.45	9.78	-58.67	-45.7
3376.00	H	-	-	-76.88	9.66	-67.22	-54.2
4220.00	H	-	-	-77.09	10.42	-66.67	-53.7

Table 7-35. Radiated Spurious Data (n5 – High Channel)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 379 of 420

Band 66/4



Plot 7-645. 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	395	19	-73.25	9.87	-63.38	-50.4
5160.00	H	400	74	-53.02	10.74	-42.28	-29.3
6880.00	H	-	-	-70.80	11.71	-59.09	-46.1
8600.00	H	-	-	-67.91	11.11	-56.80	-43.8

Table 7-36. Radiated Spurious Data (Band 66/4 – Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 380 of 420

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	-	-	-73.49	9.94	-63.55	-50.6
5235.00	H	400	75	-65.08	10.76	-54.32	-41.3
6980.00	H	-	-	-72.01	11.85	-60.15	-47.2
8725.00	H	-	-	-67.32	11.03	-56.29	-43.3

Table 7-37. Radiated Spurious Data (Band 66/4 – Mid Channel)

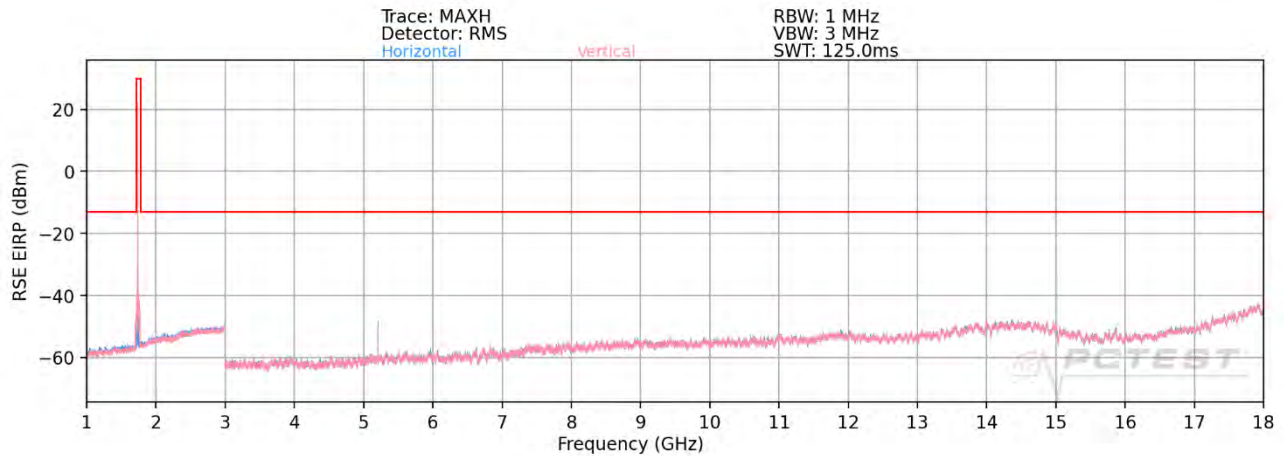
OPERATING FREQUENCY: 1770.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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	-	-	-73.00	9.92	-63.07	-50.1
5310.00	H	400	68	-69.50	10.72	-58.79	-45.8
7080.00	H	-	-	-72.16	11.82	-60.34	-47.3
8850.00	H	-	-	-67.67	11.02	-56.64	-43.6

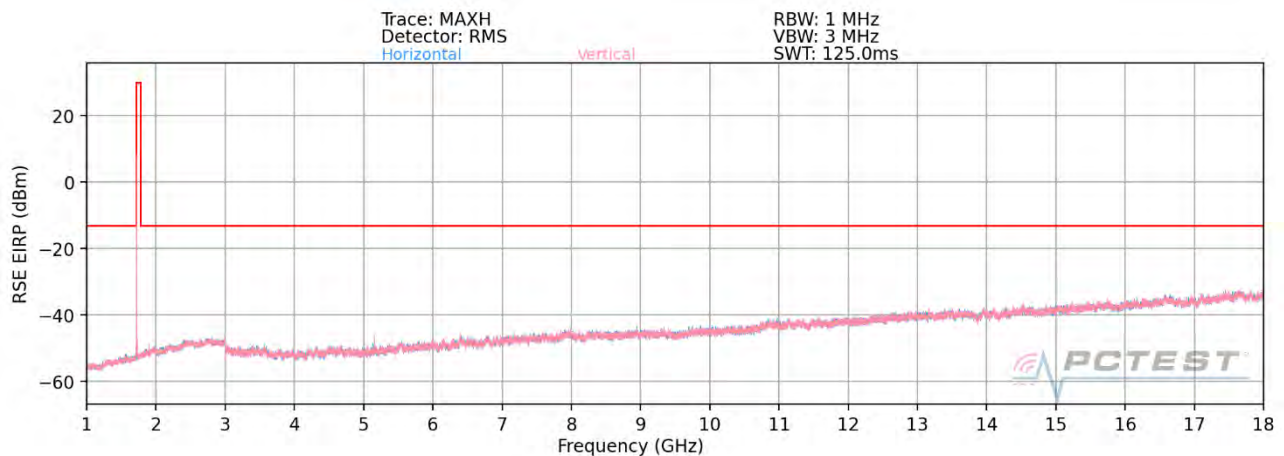
Table 7-38. Radiated Spurious Data (Band 66/4 – High Channel)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 381 of 420

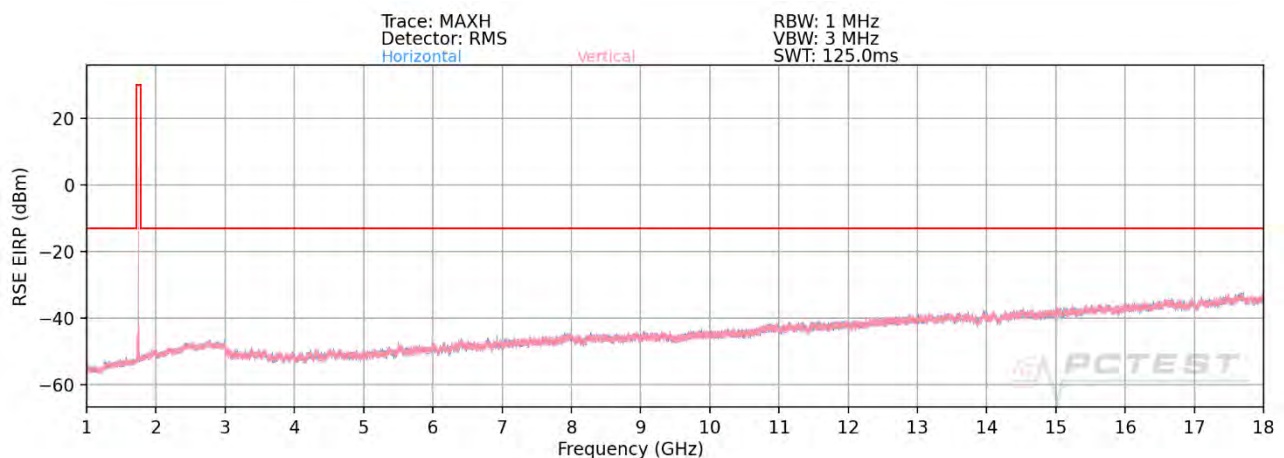
n66



Plot 7-646. Radiated Spurious Plot above 1GHz (n66)



Plot 7-647. Radiated Spurious Plot above 1GHz (n66 + Anchor B12 EN-DC)



Plot 7-648. Radiated Spurious Plot above 1GHz (n66 + Anchor B5 EN-DC)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 382 of 420

OPERATING FREQUENCY: 1715.00 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 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]
3430.00	H	238	62	-67.65	6.28	-61.37	-48.4
5145.00	H	252	68	-49.32	8.98	-40.34	-27.3
6860.00	H	-	-	-70.41	9.42	-60.99	-48.0
8575.00	H	-	-	-68.74	9.62	-59.12	-46.1

Table 7-39. Radiated Spurious Data (n66 – Low Channel)

OPERATING FREQUENCY: 1745.00 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 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]
3490.00	H	-	-	-68.42	6.47	-61.95	-49.0
5235.00	H	269	63	-59.06	8.97	-50.09	-37.1
6980.00	H	-	-	-69.35	9.23	-60.13	-47.1
8725.00	H	-	-	-67.47	9.59	-57.88	-44.9

Table 7-40. Radiated Spurious Data (n66 – Mid Channel)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 383 of 420

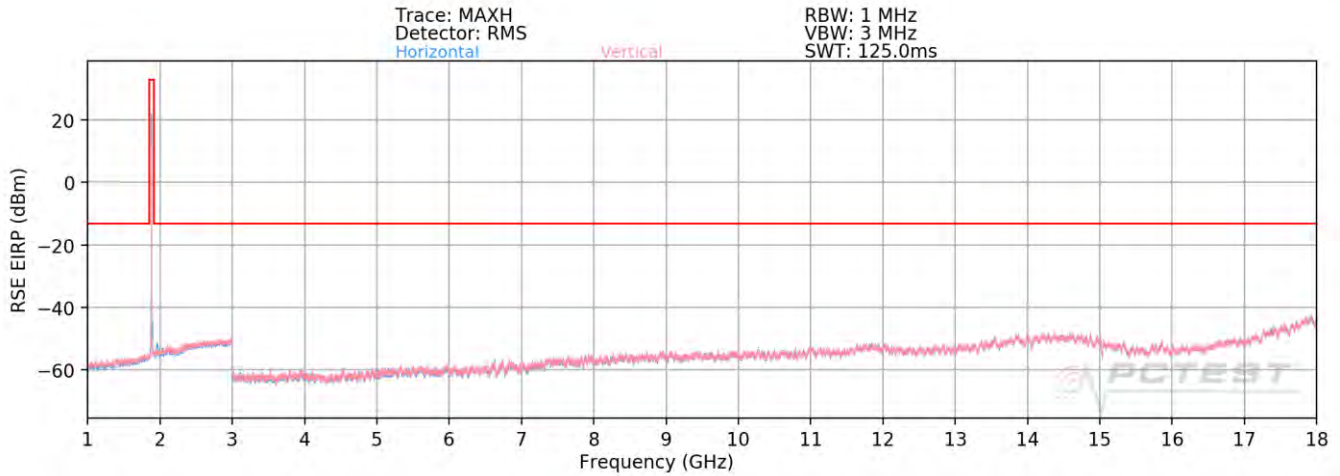
OPERATING FREQUENCY: 1775.00 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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]
3550.00	H	-	-	-68.51	6.45	-62.06	-49.1
5325.00	H	268	72	-70.21	9.09	-61.12	-48.1
7100.00	H	-	-	-69.44	9.17	-60.27	-47.3
8875.00	H	-	-	-67.48	9.57	-57.91	-44.9

Table 7-41. Radiated Spurious Data (n66 – High Channel)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 384 of 420

Band 25/2



Plot 7-649. Radiated Spurious Plot above 1GHz (Band 25/2)

OPERATING FREQUENCY: 1860.00 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]
3720.00	H	400	153	-71.83	9.54	-62.29	-49.3
5580.00	H	177	5	-71.69	11.02	-60.68	-47.7
7440.00	H	-	-	-69.33	11.01	-58.31	-45.3
9300.00	H	-	-	-68.27	11.64	-56.63	-43.6

Table 7-42. Radiated Spurious Data (Band 25/2 – Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 385 of 420

OPERATING FREQUENCY: 1882.50 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]
3765.00	H	400	144	-72.68	9.39	-63.30	-50.3
5647.50	H	-	-	-72.70	11.22	-61.47	-48.5
7530.00	H	-	-	-69.17	11.16	-58.00	-45.0

Table 7-43. Radiated Spurious Data (Band 25/2 – Mid Channel)

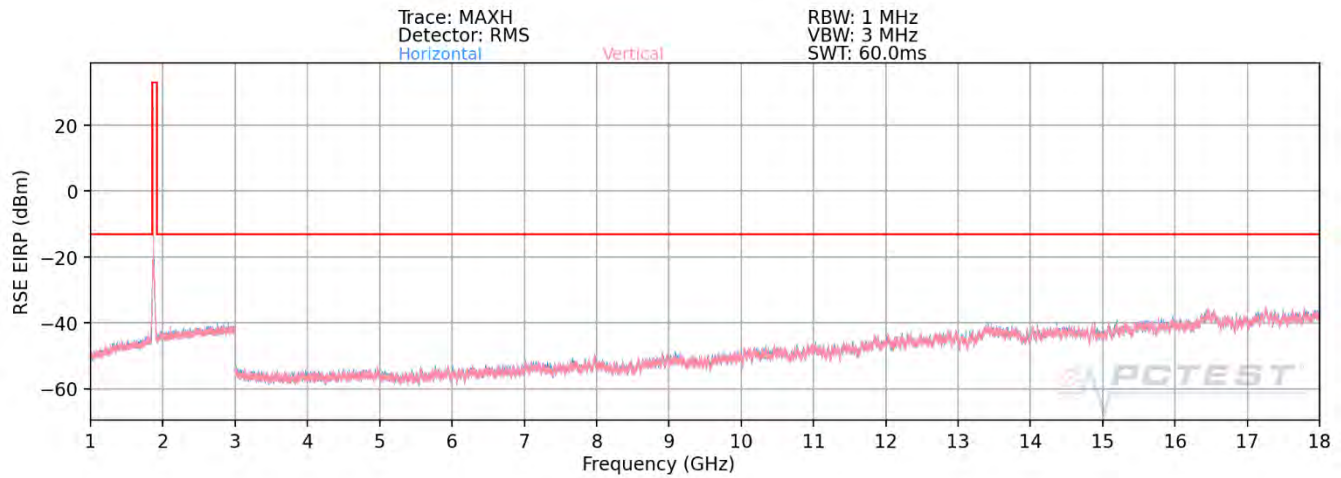
OPERATING FREQUENCY: 1905.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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]
3810.00	H	380	140	-70.52	9.32	-61.19	-48.2
5715.00	H	-	-	-72.57	11.38	-61.19	-48.2
7620.00	H	-	-	-69.95	11.32	-58.64	-45.6

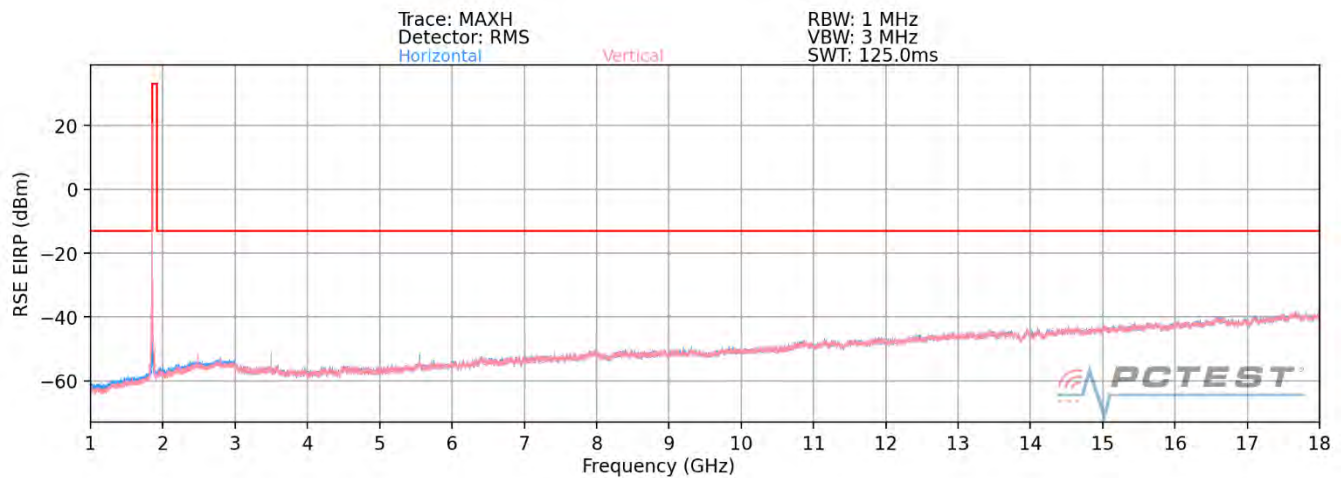
Table 7-44. Radiated Spurious Data (Band 25/2 – High Channel)

FCC ID: A3LSMA716U	 PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 386 of 420

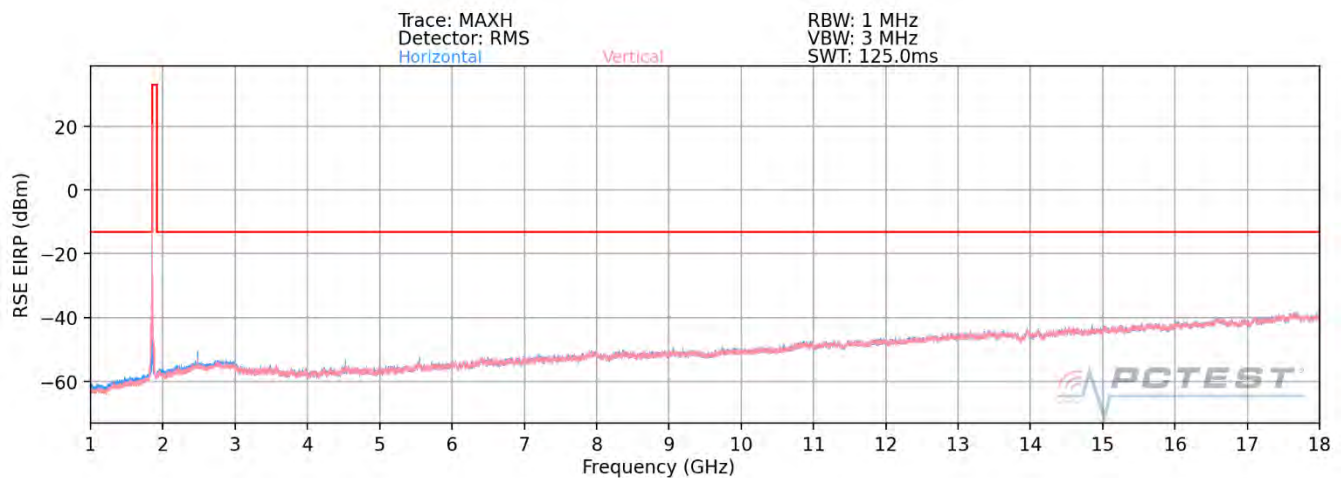
n2



Plot 7-650. Radiated Spurious Plot above 1GHz (n2)



Plot 7-651. Radiated Spurious Plot above 1GHz (n2 + Anchor B5 EN-DC)



Plot 7-652. Radiated Spurious Plot above 1GHz (n2 + Anchor B12 EN-DC)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 387 of 420

OPERATING FREQUENCY: 1855.00 MHz

MODULATION SIGNAL: QPSK (DFT-s-OFDM)

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]
3710.00	V	-	-	-68.77	6.90	-61.87	-48.9
5565.00	V	101	317	-67.73	9.06	-58.66	-45.7
7420.00	V	-	-	-68.61	9.26	-59.34	-46.3
9275.00	V	-	-	-66.60	9.40	-57.20	-44.2

Table 7-45. Radiated Spurious Data (n2 – Low Channel)

OPERATING FREQUENCY: 1880.00 MHz

MODULATION SIGNAL: QPSK (DFT-s-OFDM)

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]
3760.00	V	-	-	-69.02	6.93	-62.09	-49.1
5640.00	V	102	296	-68.93	9.15	-59.78	-46.8
7520.00	V	-	-	-69.06	9.31	-59.75	-46.7
9400.00	V	-	-	-66.83	9.49	-57.34	-44.3

Table 7-46. Radiated Spurious Data (n2 – Mid Channel)

FCC ID: A3LSMA716U	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 388 of 420

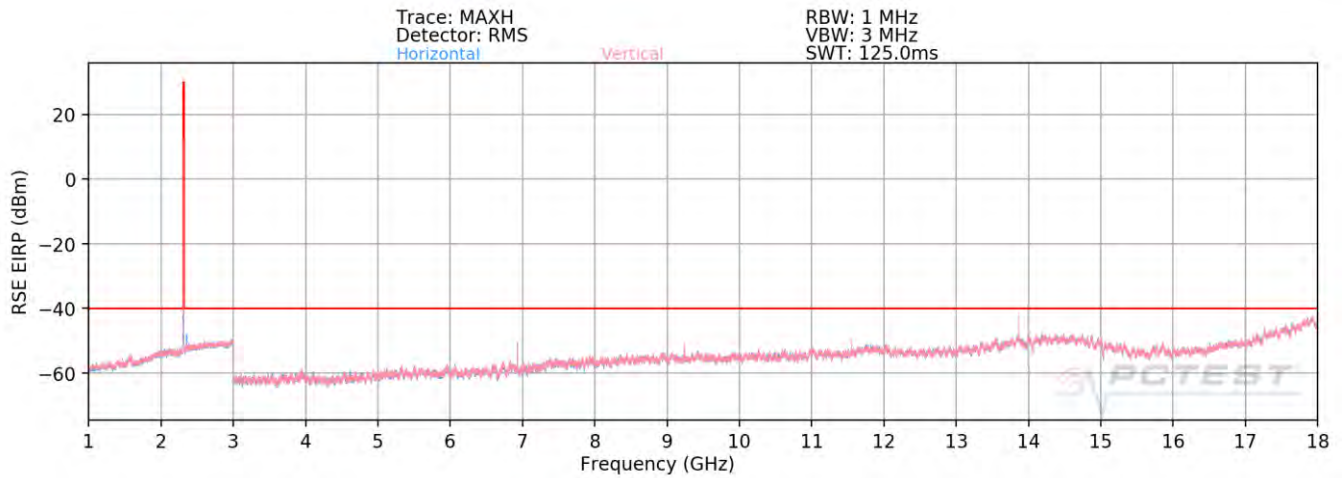
OPERATING FREQUENCY: 1905.00 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

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]
3810.00	V	114	309	-68.42	7.02	-61.40	-48.4
5715.00	V	101	310	-70.01	9.05	-60.96	-48.0
7620.00	V	-	-	-68.14	9.25	-58.89	-45.9
9525.00	V	-	-	-66.26	9.48	-56.78	-43.8

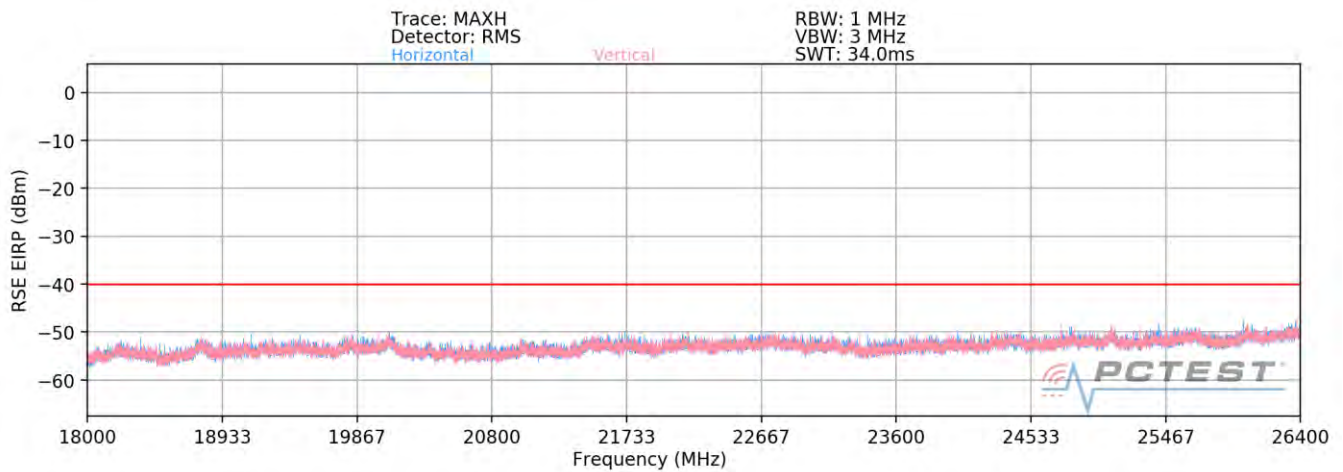
Table 7-47. Radiated Spurious Data (n2 – High Channel)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 389 of 420

Band 30



Plot 7-653. Radiated Spurious Plot 1GHz - 18GHz (Band 30)



Plot 7-654. Radiated Spurious Plot 18GHz - 26.5GHz (Band 30)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 390 of 420

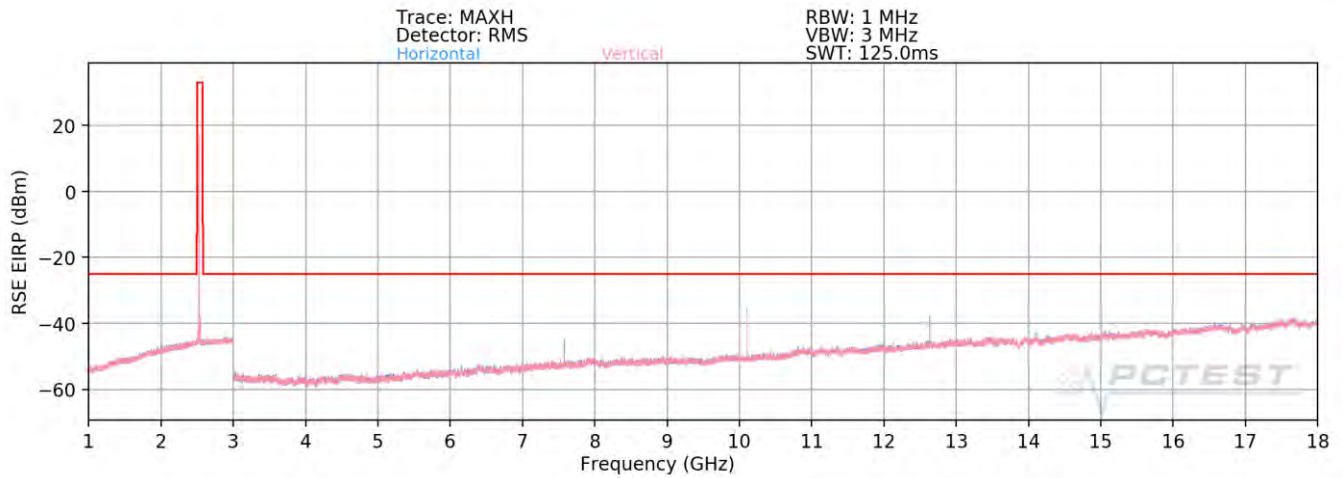
OPERATING FREQUENCY: 2310.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 10.0 MHz
 DISTANCE: 3 meters
 LIMIT: -40 dBm

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]
4620.00	V	109	109	-67.49	8.26	-59.23	-19.2
6930.00	V	100	341	-55.23	8.72	-46.51	-6.5
9240.00	V	101	308	-61.24	9.49	-51.75	-11.7
11550.00	V	275	206	-54.61	9.19	-45.42	-5.4
13860.00	V	101	117	-55.18	9.00	-46.18	-6.2
16170.00	V	-	-	-55.74	7.99	-47.75	-7.7

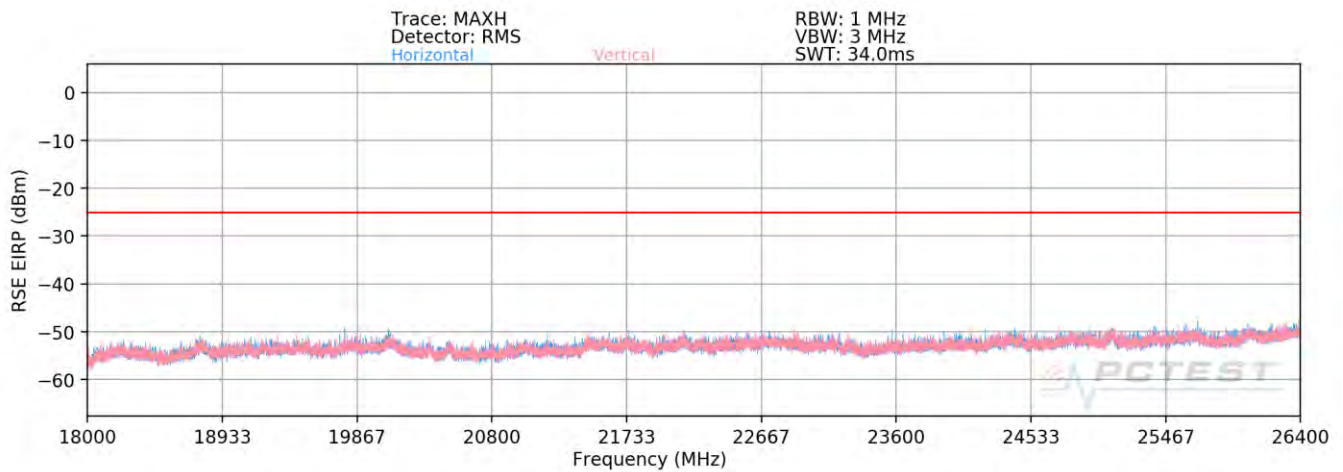
Table 7-48. Radiated Spurious Data (Band 30 – Mid Channel)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 391 of 420

Band 7



Plot 7-655. Radiated Spurious Plot 1GHz - 18GHz (Band 7)



Plot 7-656. Radiated Spurious Plot 18GHz - 26.5GHz (Band 7)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 392 of 420

OPERATING FREQUENCY: 2510.00 MHz
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -25 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]
5020.00	V	400	350	-63.99	8.56	-55.43	-30.4
7530.00	V	101	306	-52.39	8.46	-43.93	-18.9
10040.00	V	101	170	-46.74	9.85	-36.89	-11.9
12550.00	V	101	2	-50.00	9.06	-40.94	-15.9
15060.00	V	100	352	-54.69	8.74	-45.95	-20.9
17570.00	V	-	-	-53.74	7.63	-46.11	-21.1

Table 7-49. Radiated Spurious Data (Band 7 – Low Channel)

OPERATING FREQUENCY: 2535.00 MHz
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -25 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]
5070.00	V	388	352	-67.97	8.60	-59.37	-34.4
7605.00	V	107	305	-51.28	8.48	-42.80	-17.8
10140.00	V	101	174	-43.51	9.78	-33.73	-8.7
12675.00	V	100	1	-47.55	9.08	-38.48	-13.5
15210.00	V	100	354	-53.87	8.47	-45.40	-20.4
17745.00	V	-	-	-54.63	7.68	-46.95	-22.0

Table 7-50. Radiated Spurious Data (Band 7 – Mid Channel)

FCC ID: A3LSMA716U	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 393 of 420

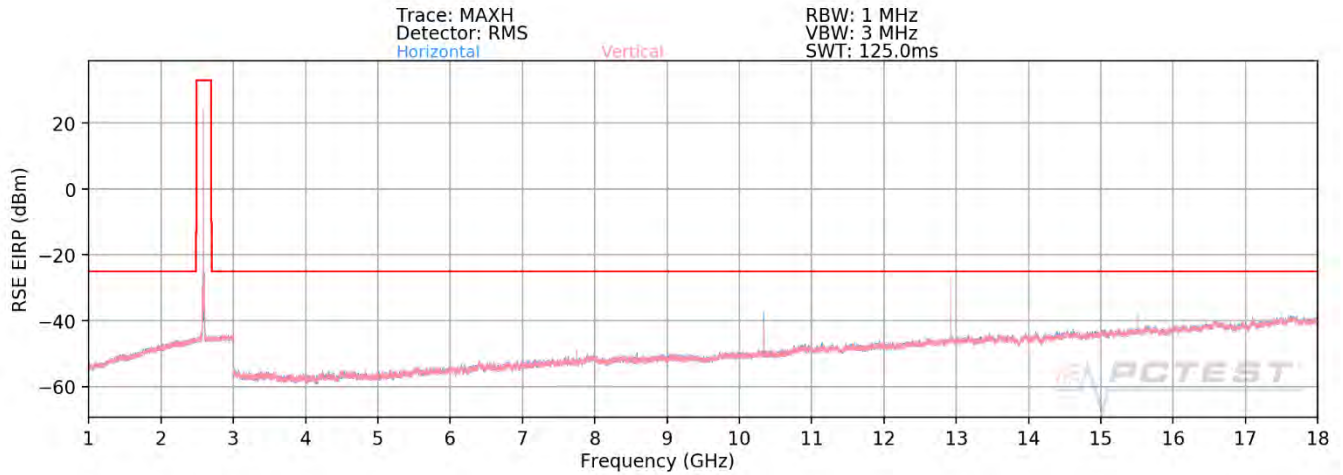
OPERATING FREQUENCY: 2560.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

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]
5120.00	V	397	347	-69.21	8.66	-60.55	-35.6
7680.00	V	107	308	-50.35	8.58	-41.77	-16.8
10240.00	V	104	174	-41.87	9.65	-32.21	-7.2
12800.00	V	101	357	-48.42	9.07	-39.35	-14.3
15360.00	V	101	352	-49.71	8.46	-41.25	-16.3
17920.00	V	-	-	-53.91	7.46	-46.45	-21.4

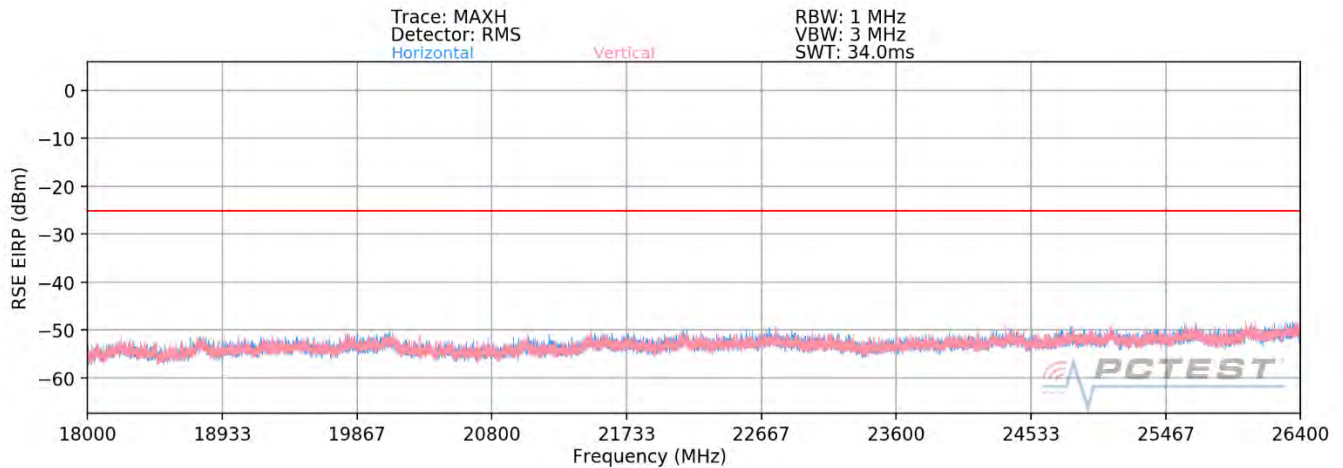
Table 7-51. Radiated Spurious Data (Band 7 – High Channel)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 394 of 420

Band 41 (PC2)



Plot 7-657. Radiated Spurious Plot 1GHz - 18GHz (Band 41 (PC2))



Plot 7-658. Radiated Spurious Plot 18GHz - 26.5GHz (Band 41 (PC2))

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 395 of 420

OPERATING FREQUENCY: 2506.00 MHz
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -25 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]
5012.00	V	100	64	-61.16	8.56	-52.59	-27.6
7518.00	V	102	49	-50.88	8.49	-42.39	-17.4
10024.00	V	276	324	-44.99	9.85	-35.14	-10.1
12530.00	V	107	48	-38.88	9.07	-29.82	-4.8
15036.00	V	275	74	-45.73	8.77	-36.96	-12.0
17542.00	V	-	-	-51.62	7.64	-43.98	-19.0

Table 7-52. Radiated Spurious Data (Band 41 (PC2) – Low Channel)

OPERATING FREQUENCY: 2593.00 MHz
MODULATION SIGNAL: QPSK
BANDWIDTH: 20.0 MHz
DISTANCE: 3 meters
LIMIT: -25 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]
5186.00	V	101	351	-61.87	8.70	-53.17	-28.2
7779.00	V	118	13	-55.09	8.69	-46.40	-21.4
10372.00	V	102	261	-45.71	9.62	-36.09	-11.1
12965.00	V	102	63	-37.60	8.99	-28.61	-3.6
15558.00	V	169	360	-49.22	8.32	-40.90	-15.9

Table 7-53. Radiated Spurious Data (Band 41(PC2) – Mid Channel)

FCC ID: A3LSMA716U	 MEASUREMENT REPORT (CERTIFICATION) 	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset
		Page 396 of 420

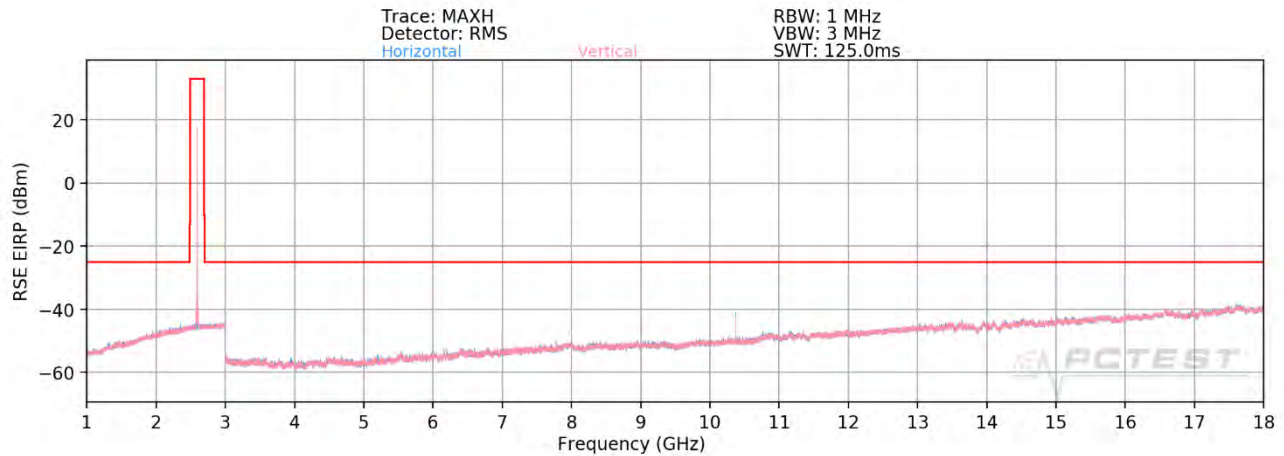
OPERATING FREQUENCY: 2680.00 MHz
 MODULATION SIGNAL: QPSK
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

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]
5360.00	V	153	281	-62.77	8.70	-54.07	-29.1
8040.00	V	104	84	-49.29	8.95	-40.34	-15.3
10720.00	V	102	258	-44.19	9.32	-34.86	-9.9
13400.00	V	101	61	-39.12	8.77	-30.35	-5.4
16080.00	V	344	359	-54.17	8.01	-46.16	-21.2

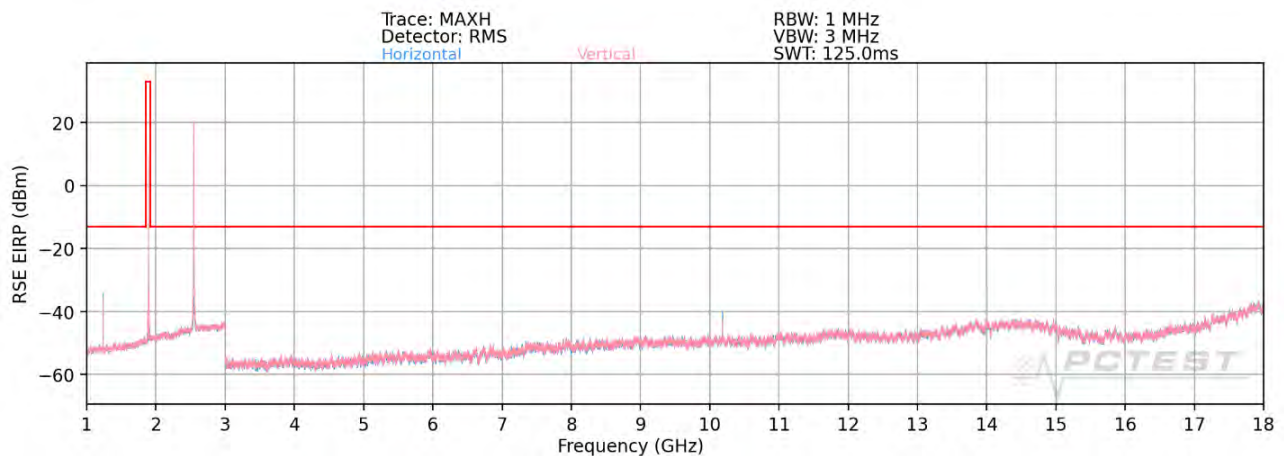
Table 7-54. Radiated Spurious Data (Band 41 (PC2) – High Channel)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 397 of 420

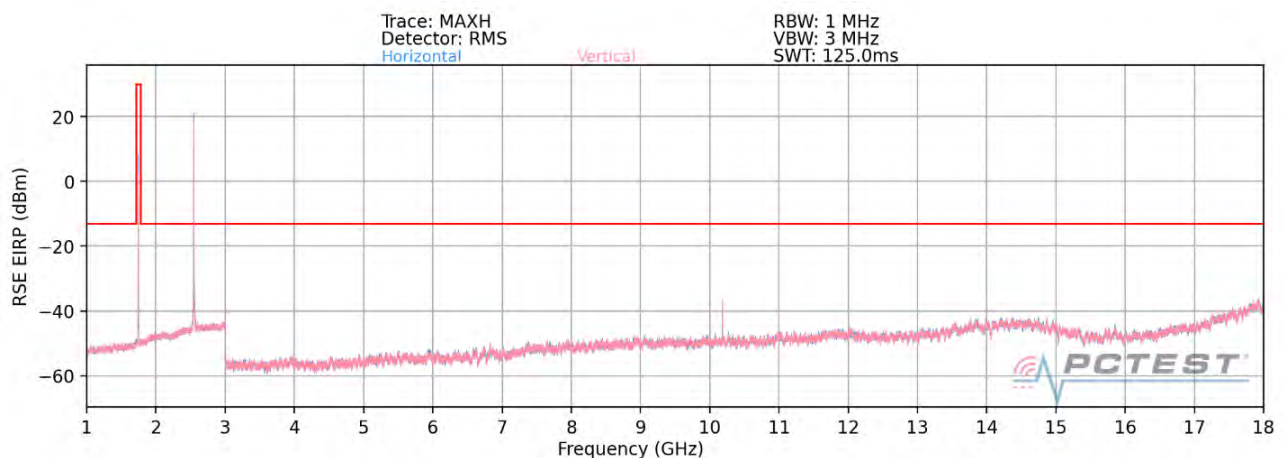
n41



Plot 7-659. Radiated Spurious Plot 1GHz - 18GHz (n41)

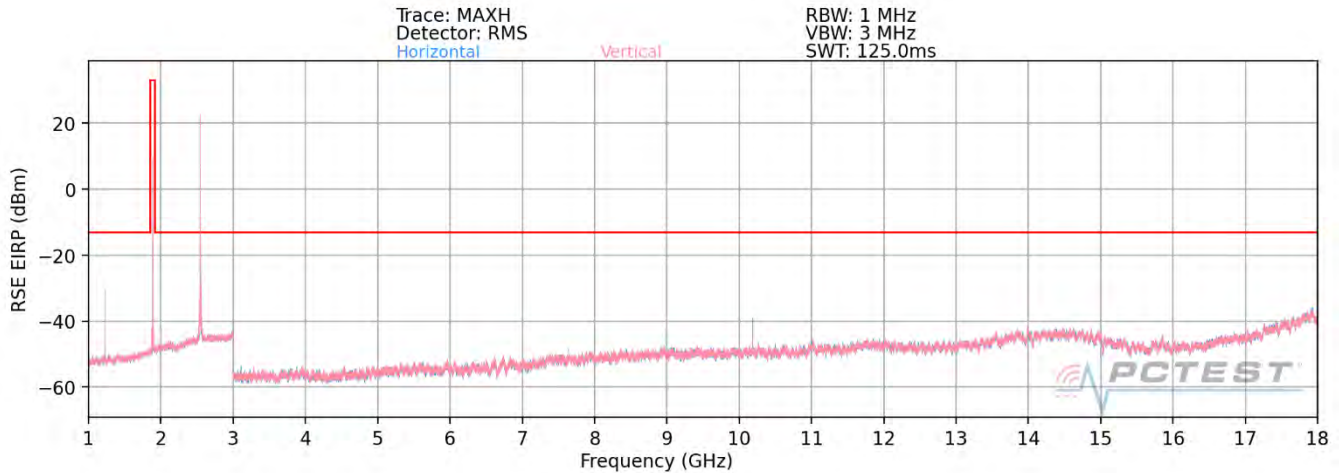


Plot 7-660. Radiated Spurious Plot above 1GHz (n41 + Anchor B25 EN-DC)



Plot 7-661. Radiated Spurious Plot above 1GHz (n41 + Anchor B66 EN-DC)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 398 of 420



Plot 7-662. Radiated Spurious Plot above 1GHz (n41 + Anchor B2 EN-DC)

OPERATING FREQUENCY: 2546.01 MHz

MODULATION SIGNAL: BPSK

BANDWIDTH: 80.0 MHz

DISTANCE: 3 meters

LIMIT: -25 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]
5092.02	V	101	197	-66.88	8.64	-58.24	-33.2
7638.03	V	107	69	-60.49	8.54	-51.95	-26.9
10184.04	V	109	182	-51.22	9.75	-41.47	-16.5
12730.05	V	-	-	-62.26	9.12	-53.14	-28.1
15276.06	V	-	-	-58.95	8.38	-50.56	-25.6

Table 7-55. Radiated Spurious Data (n41– Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 399 of 420

OPERATING FREQUENCY: 2592.99 MHz
 MODULATION SIGNAL: BPSK
 BANDWIDTH: 80.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 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]
5185.98	V	322	223	-67.53	8.70	-58.83	-33.8
7778.97	V	102	59	-60.02	8.69	-51.34	-26.3
10371.96	V	100	182	-50.91	9.62	-41.29	-16.3
12964.95	V	-	-	-61.59	8.99	-52.60	-27.6
15557.94	V	-	-	-58.46	8.32	-50.14	-25.1

Table 7-56. Radiated Spurious Data (n41 – Mid Channel)

OPERATING FREQUENCY: 2649.99 MHz
 MODULATION SIGNAL: BPSK
 BANDWIDTH: 80.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 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]
5299.98	V	115	223	-67.29	8.73	-58.56	-33.6
7949.97	V	106	58	-56.58	8.77	-47.81	-22.8
10599.96	V	100	184	-53.30	9.50	-43.81	-18.8
13249.95	V	-	-	-61.18	9.10	-52.08	-27.1
15899.94	V	-	-	-58.26	8.19	-50.06	-25.1

Table 7-57. Radiated Spurious Data (n41 – High Channel)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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7.8 Frequency Stability / Temperature Variation

Test Overview and Limit

Frequency stability testing is performed in accordance with the guidelines of ANSI/TIA-603-E-2016. The frequency stability of the transmitter is measured by:

- a.) **Temperature:** The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.
- b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

For Part 22, the frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ (± 2.5 ppm) of the center frequency. For Part 24, Part 27, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Procedure Used

ANSI/TIA-603-E-2016

Test Settings

1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).
2. The equipment is turned on in a "standby" condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

Test Setup

The EUT was connected via an RF cable to a spectrum analyzer with the EUT placed inside an environmental chamber.

Test Notes

None

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 71 Frequency Stability Measurements

OPERATING FREQUENCY: 707,500,000 Hz
 CHANNEL: 23790
 REFERENCE VOLTAGE: 4.26 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.26	- 30	707,499,823	-177	-0.0000250
100 %		- 20	707,500,094	94	0.0000133
100 %		- 10	707,500,022	22	0.0000031
100 %		0	707,499,907	-93	-0.0000131
100 %		+ 10	707,500,044	44	0.0000062
100 %		+ 20	707,499,687	-313	-0.0000442
100 %		+ 30	707,500,010	10	0.0000014
100 %		+ 40	707,500,064	64	0.0000090
100 %		+ 50	707,500,224	224	0.0000317
BATT. ENDPOINT	3.63	+ 20	707,500,149	149	0.0000211

Table 7-58. Frequency Stability Data (Band 71)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset	Page 402 of 420	

Band 71 Frequency Stability Measurements

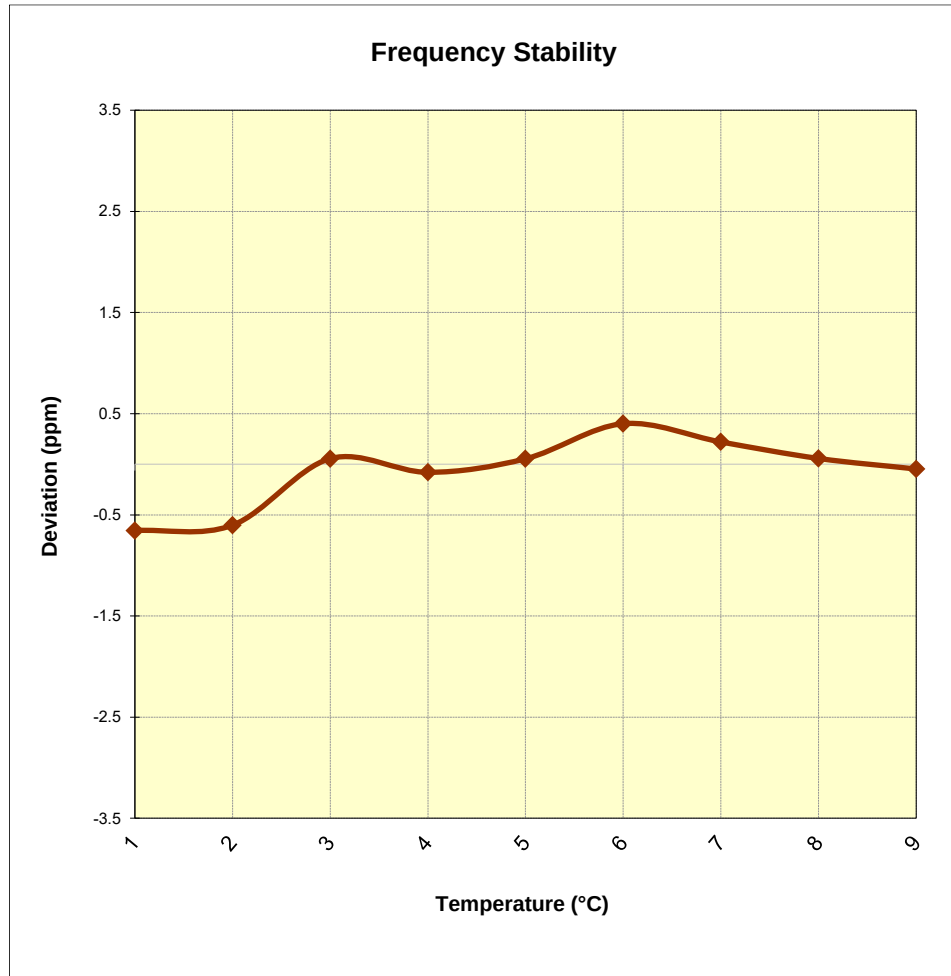


Figure 7-8. Frequency Stability Graph (Band 71)

FCC ID: A3LSMA716U	 Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 403 of 420

Band 12 Frequency Stability Measurements

OPERATING FREQUENCY: 707,500,000 Hz
 CHANNEL: 23790
 REFERENCE VOLTAGE: 4.26 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.26	- 30	707,499,823	-177	-0.0000250
100 %		- 20	707,500,094	94	0.0000133
100 %		- 10	707,500,022	22	0.0000031
100 %		0	707,499,907	-93	-0.0000131
100 %		+ 10	707,500,044	44	0.0000062
100 %		+ 20	707,499,687	-313	-0.0000442
100 %		+ 30	707,500,010	10	0.0000014
100 %		+ 40	707,500,064	64	0.0000090
100 %		+ 50	707,500,224	224	0.0000317
BATT. ENDPOINT	3.63	+ 20	707,500,149	149	0.0000211

Table 7-59. Frequency Stability Data (Band 12)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset	Page 404 of 420	

Band 12 Frequency Stability Measurements

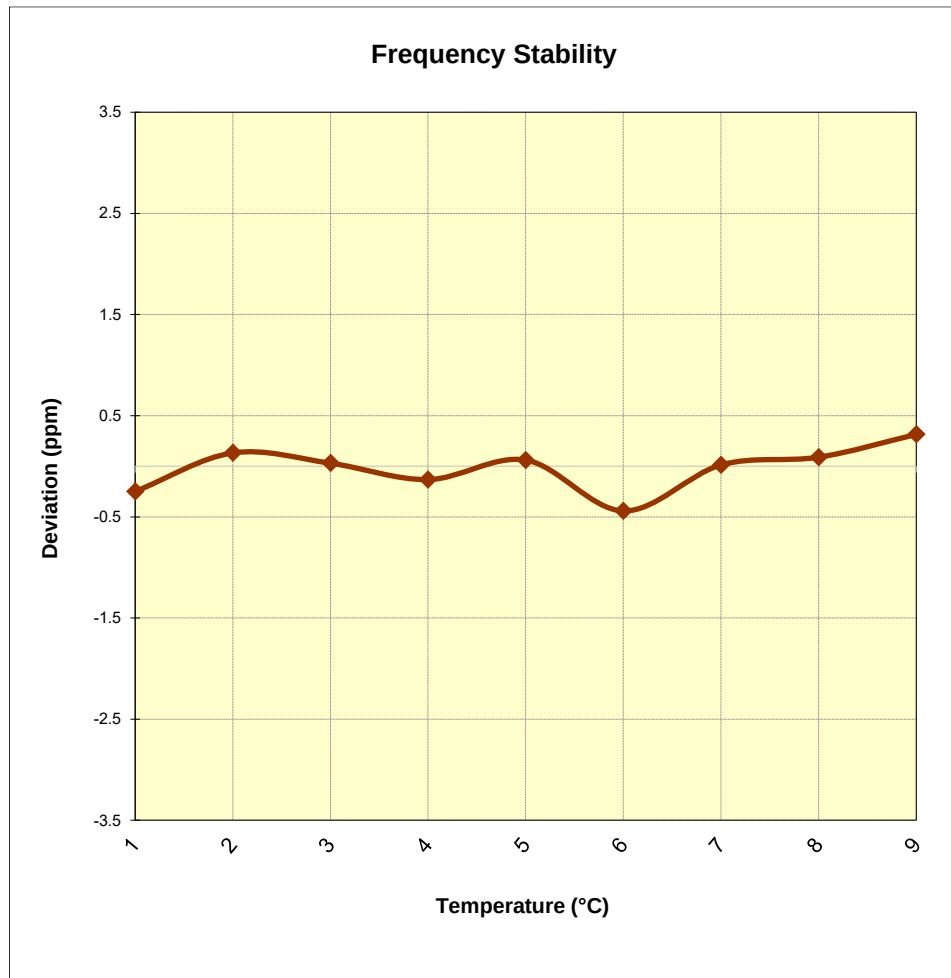


Figure 7-9. Frequency Stability Graph (Band 12)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Band 13 Frequency Stability Measurements

OPERATING FREQUENCY: 782,000,000 Hz
 CHANNEL: 23230
 REFERENCE VOLTAGE: 4.26 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.26	- 30	781,999,813	-187	-0.0000239
100 %		- 20	782,000,166	166	0.0000212
100 %		- 10	782,000,000	0	0.0000000
100 %		0	782,000,151	151	0.0000193
100 %		+ 10	782,000,183	183	0.0000234
100 %		+ 20	782,000,199	199	0.0000254
100 %		+ 30	781,999,997	-3	-0.0000004
100 %		+ 40	781,999,732	-268	-0.0000343
100 %		+ 50	782,000,252	252	0.0000322
BATT. ENDPOINT	3.63	+ 20	781,999,923	-77	-0.0000098

Table 7-60. Frequency Stability Data (Band 13)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset	Page 406 of 420	

Band 13 Frequency Stability Measurements

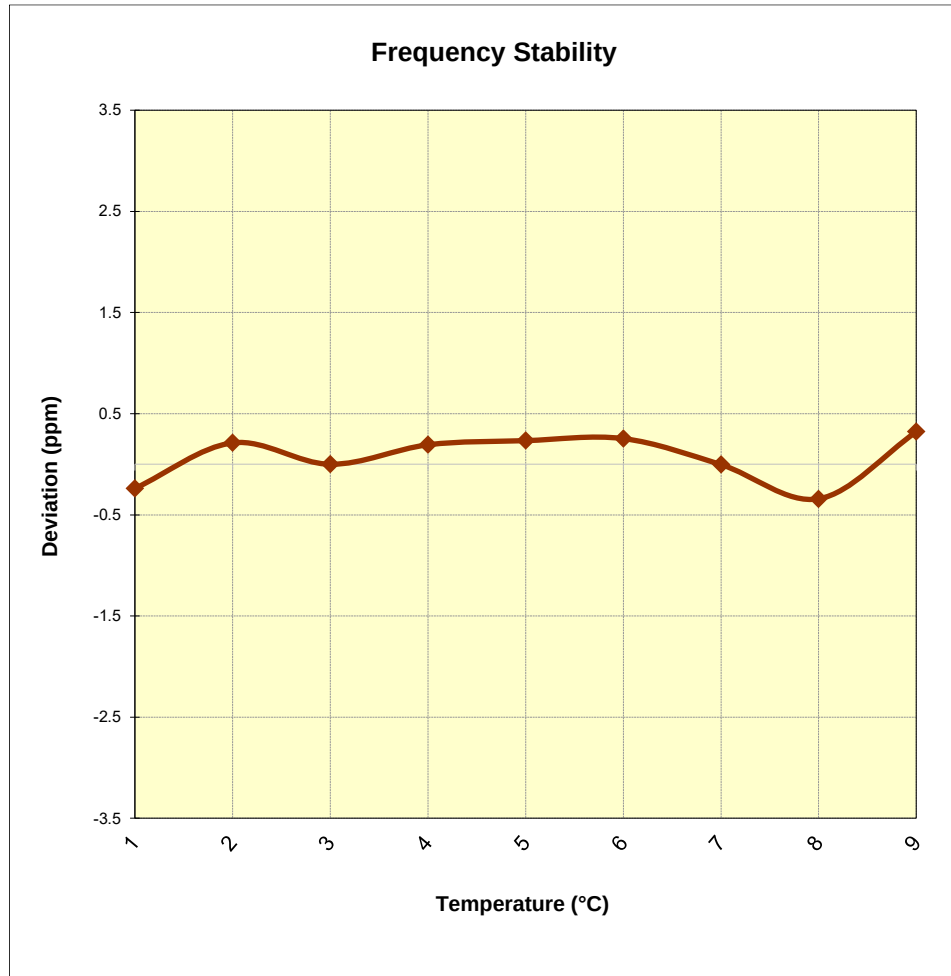


Figure 7-10. Frequency Stability Graph (Band 13)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Band 26 Frequency Stability Measurements

OPERATING FREQUENCY: 831,500,000 Hz
 CHANNEL: 26865
 REFERENCE VOLTAGE: 4.26 VDC
 DEVIATION LIMIT: ± 0.00025 % or 2.5 ppm

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.26	- 30	831,499,855	-145	-0.0000174
100 %		- 20	831,499,992	-8	-0.0000010
100 %		- 10	831,500,144	144	0.0000173
100 %		0	831,500,377	377	0.0000453
100 %		+ 10	831,499,945	-55	-0.0000066
100 %		+ 20	831,499,983	-17	-0.0000020
100 %		+ 30	831,500,213	213	0.0000256
100 %		+ 40	831,499,589	-411	-0.0000494
100 %		+ 50	831,499,933	-67	-0.0000081
BATT. ENDPOINT	3.63	+ 20	831,499,851	-149	-0.0000179

Table 7-61. Frequency Stability Data (Band 26)

FCC ID: A3LSMA716U	 MEASUREMENT REPORT (CERTIFICATION) 		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset	Page 408 of 420

Band 26 Frequency Stability Measurements

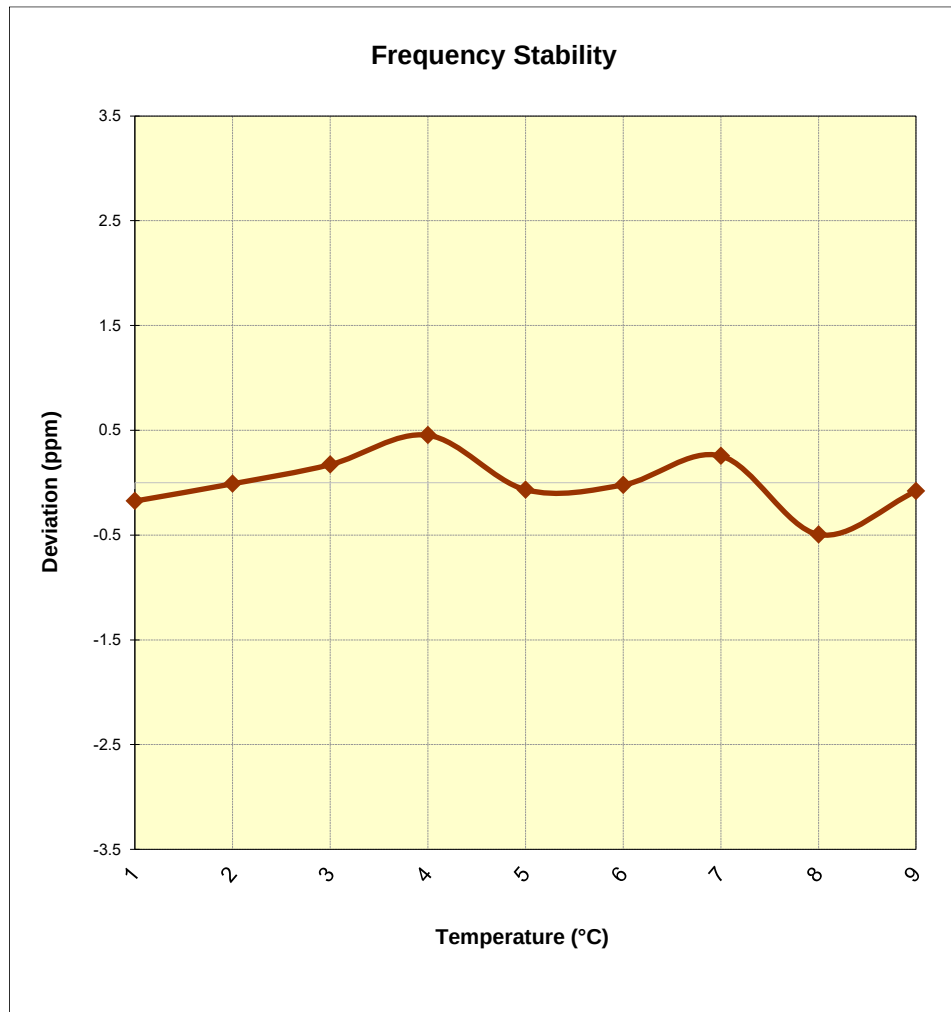


Figure 7-11. Frequency Stability Graph (Band 26)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 409 of 420

Band 66 Frequency Stability Measurements

OPERATING FREQUENCY: 1,745,000,000 Hz
 CHANNEL: 132322
 REFERENCE VOLTAGE: 4.26 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.26	- 30	1,744,999,939	-61	-0.0000035
100 %		- 20	1,744,999,749	-251	-0.0000144
100 %		- 10	1,745,000,119	119	0.0000068
100 %		0	1,745,000,093	93	0.0000053
100 %		+ 10	1,744,999,987	-13	-0.0000007
100 %		+ 20	1,745,000,137	137	0.0000079
100 %		+ 30	1,745,000,042	42	0.0000024
100 %		+ 40	1,744,999,820	-180	-0.0000103
100 %		+ 50	1,744,999,868	-132	-0.0000076
BATT. ENDPOINT	3.63	+ 20	1,745,000,136	136	0.0000078

Table 7-62. Frequency Stability Data (Band 66)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: A3LSMA716U	 MEASUREMENT REPORT (CERTIFICATION) 		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset	Page 410 of 420

Band 66 Frequency Stability Measurements

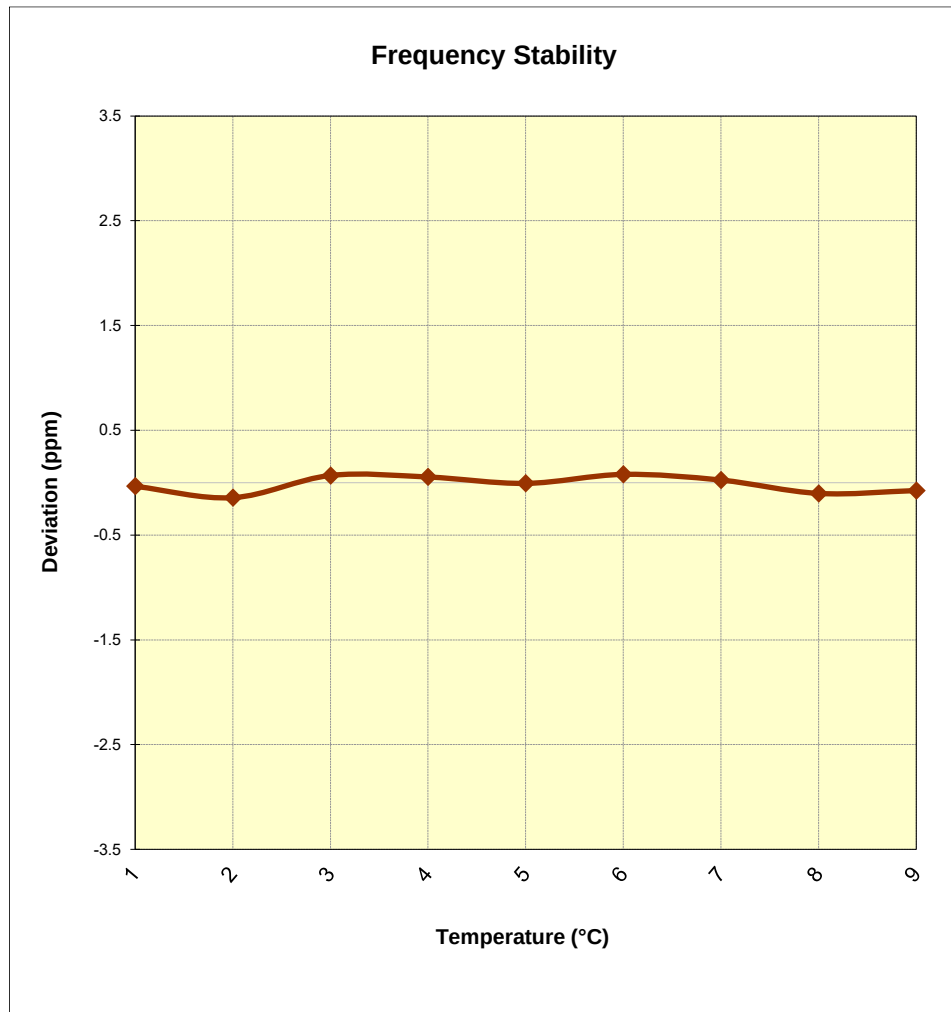


Figure 7-12. Frequency Stability Graph (Band 66)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Band 25 Frequency Stability Measurements

OPERATING FREQUENCY: 1,882,500,000 Hz
 CHANNEL: 26365
 REFERENCE VOLTAGE: 4.26 VDC
 DEVIATION LIMIT: ± 0.00025 % or 2.5 ppm

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.26	- 30	1,882,499,843	-157	-0.0000083
100 %		- 20	1,882,499,902	-98	-0.0000052
100 %		- 10	1,882,499,987	-13	-0.0000007
100 %		0	1,882,500,184	184	0.0000098
100 %		+ 10	1,882,500,035	35	0.0000019
100 %		+ 20	1,882,500,003	3	0.0000002
100 %		+ 30	1,882,500,295	295	0.0000157
100 %		+ 40	1,882,500,126	126	0.0000067
100 %		+ 50	1,882,499,900	-100	-0.0000053
BATT. ENDPOINT	3.63	+ 20	1,882,500,057	57	0.0000030

Table 7-63. Frequency Stability Data (Band 25)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 412 of 420

Band 25 Frequency Stability Measurements

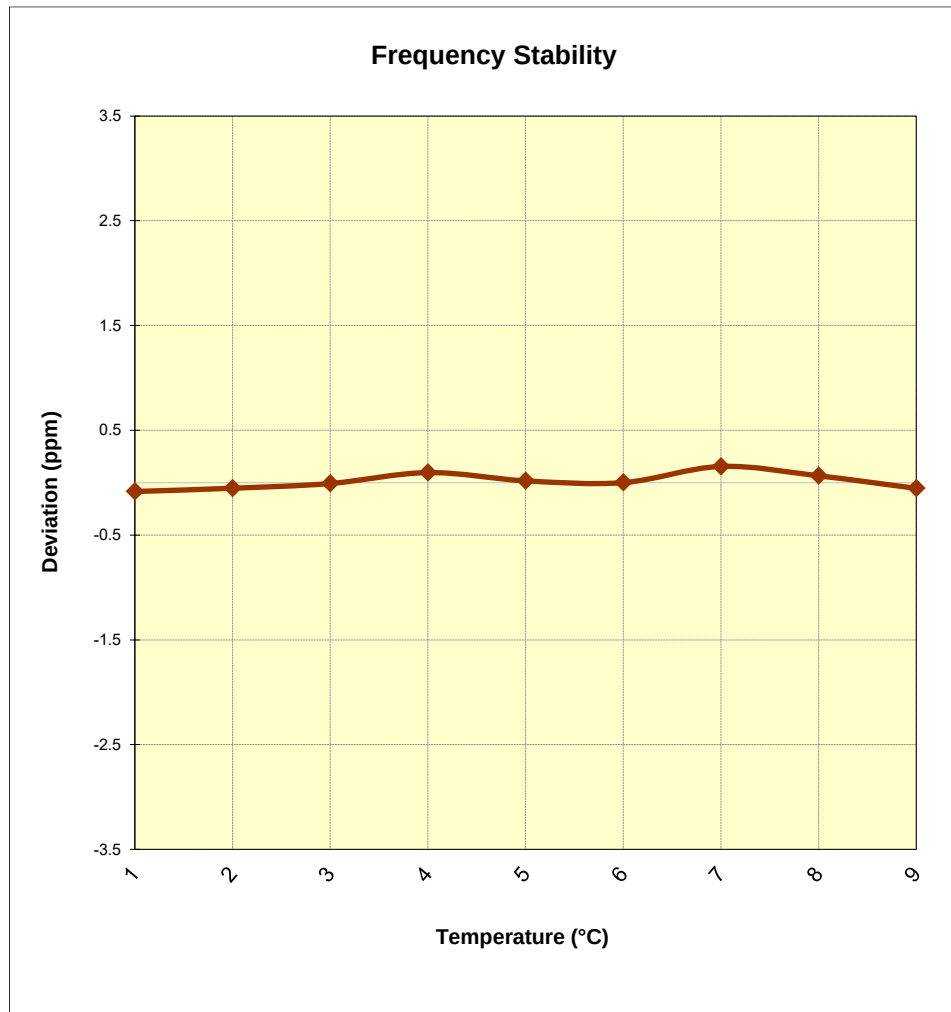


Figure 7-13. Frequency Stability Graph (Band 25)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 413 of 420

Band 30 Frequency Stability Measurements

OPERATING FREQUENCY: 2,310,000,000 Hz
 CHANNEL: 27710
 REFERENCE VOLTAGE: 4.26 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.26	- 30	2,310,000,015	15	0.0000006
100 %		- 20	2,310,000,142	142	0.0000061
100 %		- 10	2,309,999,848	-152	-0.0000066
100 %		0	2,309,999,790	-210	-0.0000091
100 %		+ 10	2,309,999,968	-32	-0.0000014
100 %		+ 20	2,309,999,876	-124	-0.0000054
100 %		+ 30	2,309,999,985	-15	-0.0000006
100 %		+ 40	2,309,999,961	-39	-0.0000017
100 %		+ 50	2,310,000,341	341	0.0000148
BATT. ENDPOINT	3.63	+ 20	2,310,000,018	18	0.0000008

Table 7-64. Frequency Stability Data (Band 30)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset	Page 414 of 420	

Band 30 Frequency Stability Measurements

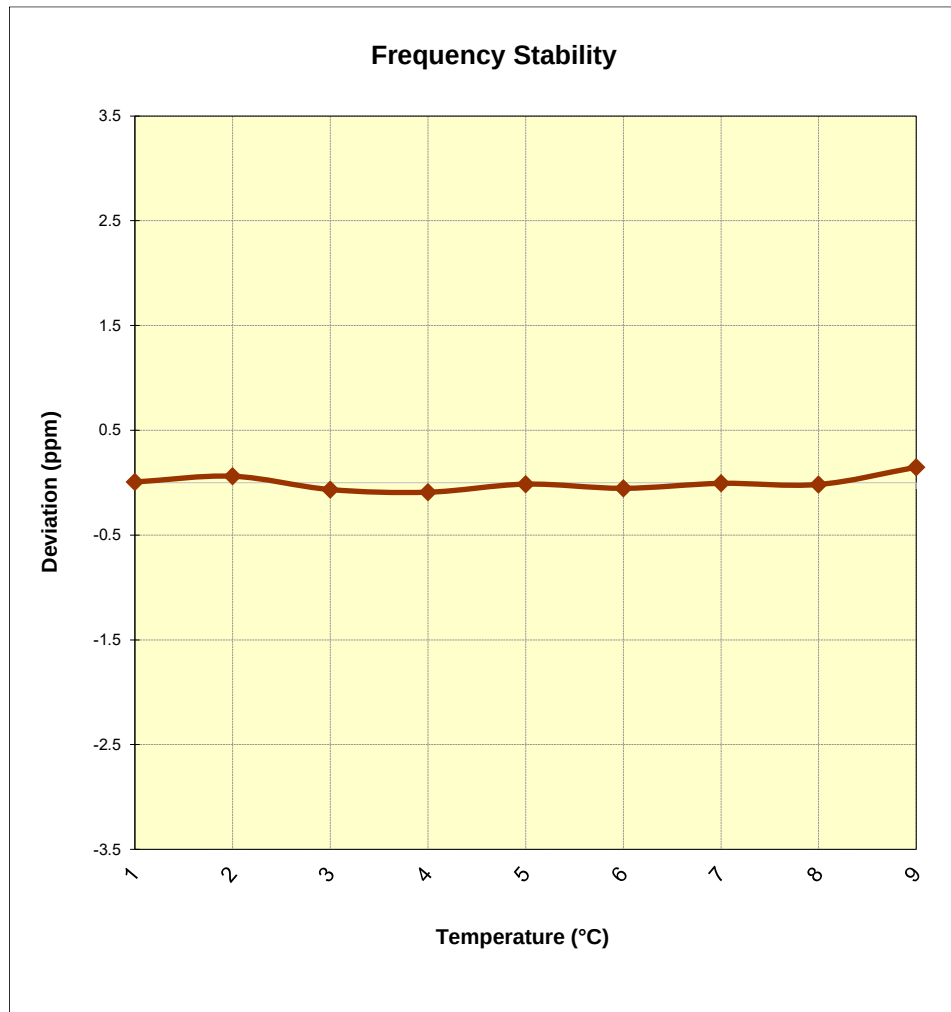


Figure 7-14. Frequency Stability Graph (Band 30)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 415 of 420

Band 7 Frequency Stability Measurements

OPERATING FREQUENCY: 2,535,000,000 Hz
 CHANNEL: 21100
 REFERENCE VOLTAGE: 4.26 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.26	- 30	2,535,000,067	67	0.0000026
100 %		- 20	2,535,000,221	221	0.0000087
100 %		- 10	2,535,000,003	3	0.0000001
100 %		0	2,534,999,999	-1	0.0000000
100 %		+ 10	2,534,999,864	-136	-0.0000054
100 %		+ 20	2,535,000,001	1	0.0000000
100 %		+ 30	2,534,999,775	-225	-0.0000089
100 %		+ 40	2,535,000,170	170	0.0000067
100 %		+ 50	2,535,000,198	198	0.0000078
BATT. ENDPOINT	3.63	+ 20	2,534,999,872	-128	-0.0000050

Table 7-65. Frequency Stability Data (Band 7)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: A3LSMA716U	 MEASUREMENT REPORT (CERTIFICATION) 		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset	Page 416 of 420

Band 7 Frequency Stability Measurements

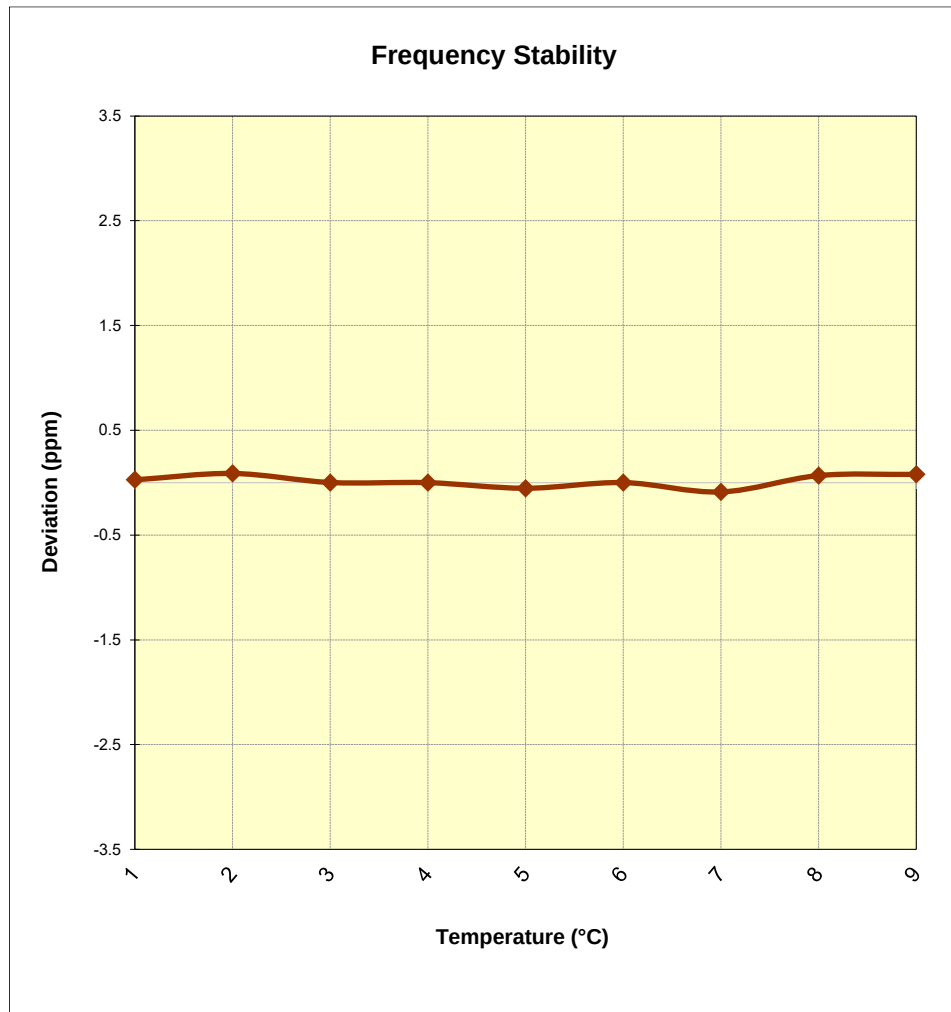


Figure 7-15. Frequency Stability Graph (Band 7)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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Band 41 Frequency Stability Measurements

OPERATING FREQUENCY: 2,593,000,000 Hz
CHANNEL: 40620
REFERENCE VOLTAGE: 4.26 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.26	- 30	2,593,000,003	3	0.0000001
100 %		- 20	2,593,000,337	337	0.0000130
100 %		- 10	2,592,999,693	-307	-0.0000118
100 %		0	2,592,999,732	-268	-0.0000103
100 %		+ 10	2,592,999,946	-54	-0.0000021
100 %		+ 20	2,592,999,953	-47	-0.0000018
100 %		+ 30	2,592,999,622	-378	-0.0000146
100 %		+ 40	2,592,999,870	-130	-0.0000050
100 %		+ 50	2,593,000,326	326	0.0000126
BATT. ENDPOINT	3.63	+ 20	2,592,999,876	-124	-0.0000048

Table 7-66. Frequency Stability Data (Band 41)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Band 41 Frequency Stability Measurements

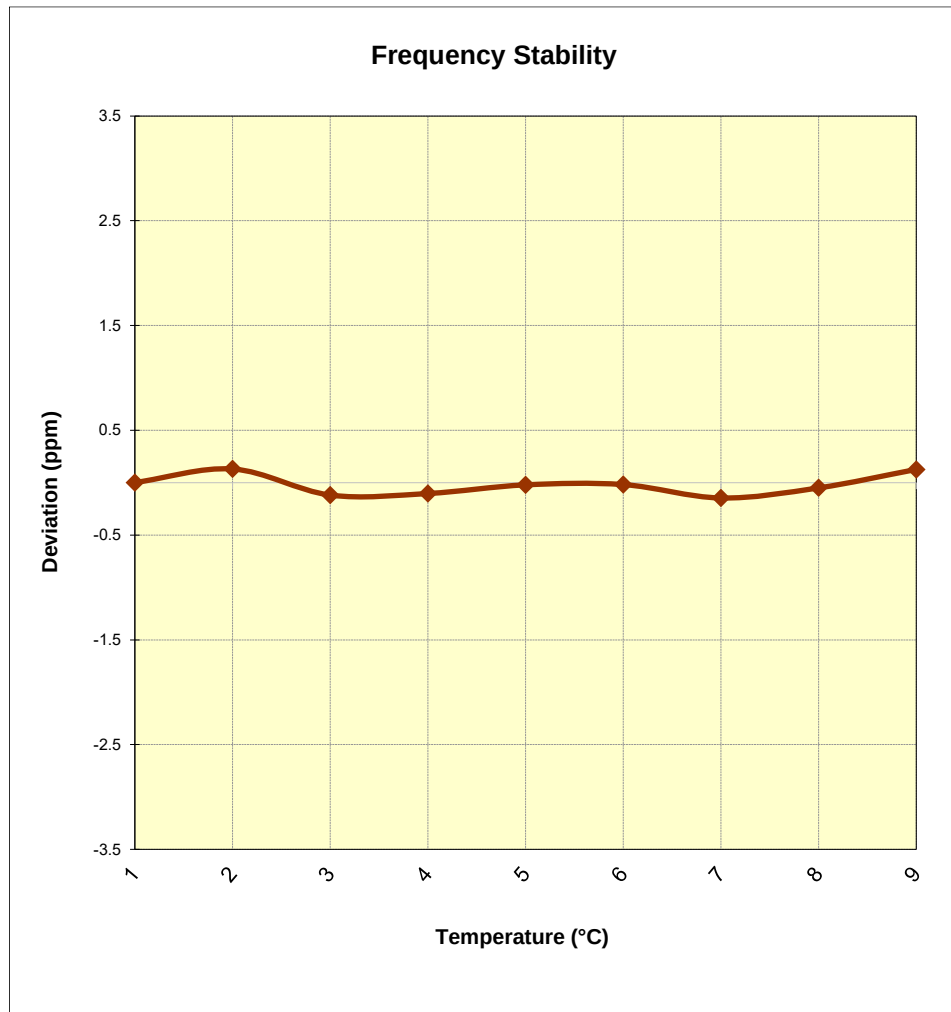


Figure 7-16. Frequency Stability Graph (Band 41)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
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8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSMA716U** complies with all the requirements of Part 22, 24, & 27 of the FCC Rules for LTE and Sub 6GHz NR operation only.

FCC ID: A3LSMA716U	 PCTEST [®] Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 420 of 420