











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	Н	-	-	-69.85	3.61	-66.24	-53.2
2487.00	Н	-	-	-67.72	4.25	-63.47	-50.5
3316.00	Н	105	237	-61.58	5.83	-55.75	-42.7
4145.00	Н	-	-	-69.37	7.66	-61.70	-48.7
4974.00	Н	-	-	-69.83	8.56	-61.27	-48.3

Table 7-19. Radiated Spurious Data (Band 26/5 – Low Channel - CLOSED)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dega 170 of 200	
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 179 of 206	
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OPERATING FREQUENCY:	83	6.50	MHz
MODULATION SIGNAL:	QPSK	_	
BANDWIDTH:	10.0	MHz	
DISTANCE:	3	meters	
LIMIT:	-13	dBm	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1673.00	Н	-	-	-69.84	3.62	-66.22	-53.2
2509.50	Н	-	-	-67.72	4.33	-63.39	-50.4
3346.00	Н	105	229	-57.21	5.92	-51.30	-38.3
4182.50	Н	-	-	-69.10	7.69	-61.41	-48.4
5019.00	Н	-	-	-70.09	8.56	-61.53	-48.5

Table 7-20. Radiated Spurious Data (Band 26/5 – Mid Channel - CLOSED)

844.00

MHz

OPERATING FREQUENCY:

MODULATION SIGNAL:	QPSK	_
BANDWIDTH:	10.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm
		-

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1688.00	Н	-	-	-69.54	3.63	-65.91	-52.9
2532.00	Н	-	-	-67.57	4.47	-63.10	-50.1
3376.00	Н	102	235	-58.98	6.05	-52.93	-39.9
4220.00	Н	-	-	-69.28	7.75	-61.53	-48.5
5064.00	Н	-	-	-69.63	8.59	-61.04	-48.0

Table 7-21. Radiated Spurious Data (Band 26/5 – High Channel - CLOSED)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dage 190 of 200	
1M1904220064-03.A3L	01/22 - 05/17/2019 Portable Handset			Page 180 of 206	
© 2019 PCTEST Engineering Labora	tory Inc			V 9 0 02/01/2019	



OPERATING FREQUENCY:	83	6.50 MHz
MODULATION SIGNAL:	QPSK	_
BANDWIDTH:	10.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1673.00	Н	134	341	-59.34	3.10	-56.24	-43.2
2509.50	Н	-	-	-58.43	4.02	-54.41	-41.4
3346.00	Н	149	55	-51.96	6.03	-45.93	-32.9
4182.50	Н	-	-	-59.41	0.00	-59.41	-46.4
5019.00	Н	-	-	-58.38	0.00	-58.38	-45.4

Table 7-22. Radiated Spurious Data with WCP (Band 26/5 – Mid Channel - CLOSED)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: Test Dates:		EUT Type:	Page 181 of 206	
1M1904220064-03.A3L	01/22 - 05/17/2019 Portable Handset			
© 2019 PCTEST Engineering Labora	tory, Inc.	·		V 9.0 02/01/2019







Plot 7-285	Radiated S	nurious P	lot above	1GHz /	(Band 6	6/4 - (	OPFN)
1 101 1 200.	nualated O	punousi			(Bana V	U -	<u> </u>

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dogo 182 of 200	
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 182 of 206	
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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	Н	209	95	-67.38	6.28	-61.10	-48.1
5160.00	Н	-	-	-69.49	8.98	-60.51	-47.5
6880.00	Н	192	353	-65.34	9.42	-55.92	-42.9
8600.00	Н	-	-	-64.89	9.62	-55.27	-42.3
10320.00	Н	-	-	-62.58	9.56	-53.01	-40.0

Table 7-23. Radiated Spurious Data (Band 66/4 – Low Channel - OPEN)

1745.00

MHz

OPERATING FREQUENCY:

MODULATION SIGNAL:

MODULATION SIGNAL.

BANDWIDTH: DISTANCE:

LIMIT:

QPSK 20.0 MHz 3 meters -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	Н	341	149	-68.27	6.47	-61.81	-48.8
5235.00	Н	-	-	-69.54	8.97	-60.58	-47.6
6980.00	Н	178	3	-66.49	9.23	-57.26	-44.3
8725.00	Н	-	-	-65.13	9.59	-55.53	-42.5
10470.00	Н	-	-	-62.08	9.43	-52.65	-39.6

Table 7-24. Radiated Spurious Data (Band 66/4 – Mid Channel - OPEN)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 192 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Fage 103 01 200
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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	Н	-	-	-67.88	6.45	-61.43	-48.4
5310.00	H	-	-	-69.87	9.09	-60.78	-47.8
7080.00	Н	224	7	-65.50	9.17	-56.33	-43.3
8850.00	Н	-	-	-64.44	9.57	-54.87	-41.9
10620.00	Н	-	-	-61.77	9.55	-52.22	-39.2

 Table 7-25. Radiated Spurious Data (Band 66/4 – High Channel - OPEN)

**QPSK** 

20.0

3

1770.00

MHz

meters

MHz

OPERATING FREQUENCY:

MODULATION SIGNAL:

BANDWIDTH:

DISTANCE:

LIMIT: <u>-13</u>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	Н	-	-	-67.88	6.45	-61.43	-48.4
5310.00	Н	-	-	-69.87	9.09	-60.78	-47.8
7080.00	Н	224	7	-65.50	9.17	-56.33	-43.3
8850.00	Н	-	-	-64.44	9.57	-54.87	-41.9
10620.00	Н	-	-	-61.77	9.55	-52.22	-39.2

Table 7-26. Radiated Spurious Data with WCP (Band 66/4 – High Channel - OPEN)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 194 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 164 01 206
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Plot 7-287. Radiated Spurious Plot above 1GHz (Band 25/2 - OPEN)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	NG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 195 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 185 01 206
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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	V	-	-	-68.50	6.90	-61.60	-48.6
5580.00	V	-	-	-69.37	9.06	-60.31	-47.3
7440.00	V	151	73	-66.17	9.26	-56.91	-43.9
9300.00	V	-	-	-63.28	9.40	-53.88	-40.9
11160.00	V	-	-	-62.13	9.46	-52.66	-39.7

 Table 7-27. Radiated Spurious Data (Band 25/2 – Low Channel - OPEN)

**QPSK** 

20.0

3

1882.50

MHz

meters

MHz

OPERATING FREQUENCY:

MODULATION SIGNAL:

BANDWIDTH:

DISTANCE:

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	V	327	294	-68.86	6.94	-61.91	-48.9
5647.50	V	-	-	-69.56	9.17	-60.40	-47.4
7530.00	V	259	23	-64.53	9.31	-55.22	-42.2
9412.50	V	-	-	-63.09	9.50	-53.59	-40.6
11295.00	V	-	-	-60.54	9.49	-51.05	-38.1

Table 7-28. Radiated Spurious Data (Band 25/2 – Mid Channel - OPEN)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 196 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 100 01 200
© 2019 PCTEST Engineering Labora		V 9.0 02/01/2019		





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	-	-	-68.46	7.07	-61.39	-48.4
5715.00	V	-	-	-69.28	9.04	-60.24	-47.2

Table 7-29. Radiated Spurious Data (Band 25/2 – High Channel - OPEN)

OPERATING FREQUENCY:	186	0.00	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	V	-	-	-58.51	6.90	-51.61	-38.6
5580.00	V	-	-	-60.37	9.06	-51.31	-38.3

Table 7-30. Radiated Spurious Data with WCP (Band 25/2 – Low Channel - OPEN)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 197 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 187 01 200
© 2019 PCTEST Engineering Labora	tory. Inc.	•		V 9.0 02/01/2019



## Band 41 PC3





Plot 7-289. Radiated Spurious Plot 1GHz - 18GHz (Band 41 PC3 - OPEN)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 199 of 200
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 100 01 200
© 2019 PCTEST Engineering Labora	tory. Inc.	•		V 9.0 02/01/2019



🔤 Key	sight Spect	rum Analyzer - S	Swept SA								
LXI L	_	RF 50	Ω DC	CORREC	SE Trim Fr	NSE:INT	#Avg Typ	ALIGN AUT	TO 03:21:57 A	M Apr 17, 2019	Frequency
10 dB	3/div	Ref 0.00	dBm	PNO: Fast IFGain:High	#Atten: 0	) dB	AvgiHold	:>100/10			Auto Tune
-10.0 -											Center Freq 22.250000000 GHz
-20.0 -30.0										DL1 -25.00 dBm	Start Freq 18.000000000 GHz
-40.0 + -50.0 +											<b>Stop Freq</b> 26.50000000 GHz
-60.0 -70.0	ingli de la colta Recta per colta a			n ga dada ya ga dada da	n f. Tera popular (new) films corrected Anti-angle popular (new) films and a		n sang di san ang di sang di s International di sang di		ele met finster ditter fikilieren en johne er er en egen er er egen er	n mikoraj je tilogij <sup>j</sup> erati 19. – "p. p. se stava sveta s	CF Step 850.000000 MHz <u>Auto</u> Man
-80.0 -											<b>Freq Offset</b> 0 Hz
											Scale Type
Start #Res	18.00 BW 1	0 GHz .0 MHz		#VI	3W 3.0 MH	2	8	weep	Stop 26 16.00 ms (3	.500 GHz 0001 pt <u>s)</u>	
MSG								ST/	ATUS		

Plot 7-290. Radiated Spurious Plot 18GHz - 26.5GHz (Band 41 PC3 - H - CLOSED)



Plot 7-291. Radiated Spurious Plot 18GHz - 26.5GHz (Band 41 PC3 - V - CLOSED)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	NE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 190 of 200
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 189 01 206
© 2019 PCTEST Engineering Labora	tory Inc			V 9 0 02/01/2019



🔤 Key	/sight Spectr	um Analyzer - S	wept SA								
LXI I		RF 50	Ω DC	CORREC	SEI		#Avg Typ	ALIGN AU	TO 03:23:38 A TRA	M Apr 17, 2019 CE 1 2 3 4 5 6 PE M MAAAAAAAA	Frequency
10 dE	3/div	Ref 0.00 c	dBm	PNO: Fast G IFGain:High	#Atten: 0	dB	Avginoia	100/10		et <mark>P NNNNN</mark>	Auto Tune
-10.0											Center Freq 22.250000000 GHz
-20.0										DL1 -25.00 dBm	<b>Start Freq</b> 18.000000000 GHz
-40.0 -50.0											<b>Stop Freq</b> 26.50000000 GHz
-60.0	alah Kenduktan Pananganan Pa	a pil ja kilon kaisaka ki				a dan sa bi sa Nganagan kana	i la jug dag ing kalin tang dag Mang dag ing kanalakan tang dag ing kanalakan tang dag ing kanalakan tang dag ing kanalakan tang dag ing kanala		and the second second day		CF Step 850.000000 MHz <u>Auto</u> Man
-80.0											<b>Freq Offset</b> 0 Hz
-90.0											Scale Type
star #Res	t 18.000 s BW 1.	0 MHz		#VB	N 3.0 MHz		s	weep	Stop 26 16.00 ms /:	500 GHz 30001 pts)	
MSG								ST	ATUS		

Plot 7-292. Radiated Spu	irious Plot 18GHz – 26.5GHz (	Band 41 PC3 – H - OPEN
--------------------------	-------------------------------	------------------------



Plot 7-293. Radiated Spurious Plot 18GHz – 26.5GHz (Band 41 PC3 – V - OPEN)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 100 of 200
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 190 01 200
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OPERATING FREQUENCY:	251	0.00 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	Н	312	203	-72.82	10.88	-61.94	-36.9
7530.00	Н	-	-	-69.32	11.13	-58.19	-33.2
10040.00	Н	-	-	-68.56	11.99	-56.57	-31.6

Table 7-31. Radiated Spurious Data (Band 41 PC3 – Low Channel - OPEN)

OPERATING FREQUENCY:	259	93.00	_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	Н	-	-	-73.05	10.74	-62.31	-37.3
7779.00	Н	-	-	-69.47	11.44	-58.03	-33.0

Table 7-32. Radiated Spurious Data (Band 41 PC3 – Mid Channel - OPEN)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 101 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset	Page 191 01 208
© 2019 PCTEST Engineering Labora	tory Inc		\/ 9 0 02/01/2019



OPERATING FREQUENCY:	268	0.00 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	Н	335	36	-71.54	10.70	-60.84	-35.8
8040.00	Н	-	-	-69.62	11.16	-58.46	-33.5
10720.00	Н	-	-	-69.35	12.59	-56.75	-31.8

Table 7-33. Radiated Spurious Data (Band 41 PC3 – High Channel - OPEN)

MHz

OPERATING FREQUENCY:

ERATING FREQUENCY:	268	80.00
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	Н	335	36	-71.54	10.70	-60.84	-35.8
8040.00	Н	-	-	-69.62	11.16	-58.46	-33.5
10720.00	Н	-	-	-69.35	12.59	-56.75	-31.8

Table 7-34. Radiated Spurious Data with WCP (Band 41 PC3 – High Channel - OPEN)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 102 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 192 01 206
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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  $\pm 0.00025\%$  ( $\pm 2.5$  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: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 102 of 200
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 193 01 206
© 2010 PCTEST Engineering Labora	tory Inc			V 9 0 02/01/2019



### **Band 12 Frequency Stability Measurements**

OPERATING FREQUENCY:	707,500,000	Hz
CHANNEL:	23790	
REFERENCE VOLTAGE:	4.27	VDC

VOLTAGE (%)	POWER (VDC)	<b>TEMP</b> (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.27	- 30	707,500,282	282	0.0000399
100 %		- 20	707,500,246	246	0.0000348
100 %		- 10	707,500,014	14	0.0000020
100 %		0	707,499,940	-60	-0.000085
100 %		+ 10	707,499,988	-12	-0.0000017
100 %		+ 20	707,499,918	-82	-0.0000116
100 %		+ 30	707,500,007	7	0.0000010
100 %		+ 40	707,499,769	-231	-0.0000327
100 %		+ 50	707,499,863	-137	-0.0000194
BATT. ENDPOINT	3.45	+ 20	707,500,196	196	0.0000277

Table 7-35. 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: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 104 of 200
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 194 01 206
© 2019 PCTEST Engineering Labora	tory. Inc.			V 9.0 02/01/2019







Figure 7-8. Frequency Stability Graph (Band 12)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 105 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 195 01 206
© 2019 PCTEST Engineering Labora	tory. Inc.			V 9.0 02/01/2019



### **Band 13 Frequency Stability Measurements**

OPERATING FREQUENCY:	782,000,000	Hz
CHANNEL:	23230	
REFERENCE VOLTAGE:	4.27	VDC

VOLTAGE (%)	POWER (VDC)	<b>TEMP</b> (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.27	- 30	781,999,848	-152	-0.0000194
100 %		- 20	782,000,201	201	0.0000257
100 %		- 10	782,000,136	136	0.0000174
100 %		0	781,999,833	-167	-0.0000214
100 %		+ 10	782,000,106	106	0.0000136
100 %		+ 20	781,999,981	-19	-0.0000024
100 %		+ 30	781,999,817	-183	-0.0000234
100 %		+ 40	781,999,727	-273	-0.0000349
100 %		+ 50	781,999,587	-413	-0.0000528
BATT. ENDPOINT	3.45	+ 20	781,999,970	-30	-0.000038

Table 7-36. 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: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 106 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 196 01 206
© 2019 PCTEST Engineering Labora	tory. Inc.			V 9.0 02/01/2019







Figure 7-9. Frequency Stability Graph (Band 13)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	AMSUNG	<b>Approved by:</b> Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 107 of 200
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 197 of 206
© 2019 PCTEST Engineering Labora	tory. Inc.	•		V 9.0 02/01/2019



# **Band 26/5 Frequency Stability Measurements**

OPERATING FREQUENCY:	831,500,000	_Hz
CHANNEL:	26865	_
REFERENCE VOLTAGE:	4.27	VDC
<b>DEVIATION LIMIT:</b>	± 0.00025 % or 2.5 ppm	

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.27	- 30	831,500,270	270	0.0000325
100 %		- 20	831,500,222	222	0.0000267
100 %		- 10	831,499,864	-136	-0.0000164
100 %		0	831,500,015	15	0.0000018
100 %		+ 10	831,499,857	-143	-0.0000172
100 %		+ 20	831,499,852	-148	-0.0000178
100 %		+ 30	831,500,042	42	0.0000051
100 %		+ 40	831,499,903	-97	-0.0000117
100 %		+ 50	831,499,991	-9	-0.0000011
BATT. ENDPOINT	3.45	+ 20	831,500,053	53	0.0000064

Table 7-37. Frequency Stability Data (Band 26/5)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 109 of 200
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 198 01 206
© 2019 PCTEST Engineering Labora	tory Inc			V 9 0 02/01/2019



## **Band 26/5 Frequency Stability Measurements**



Figure 7-10. Frequency Stability Graph (Band 26/5)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 100 of 200
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 199 01 206
© 2019 PCTEST Engineering Labora	tory. Inc.			V 9.0 02/01/2019



### **Band 66/4 Frequency Stability Measurements**

OPERATING FREQUENCY:	1,745,000,000	Hz
CHANNEL:	132322	_
REFERENCE VOLTAGE:	4.27	VDC

VOLTAGE (%)	POWER (VDC)	<b>TEMP</b> (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.27	- 30	1,745,000,067	67	0.000038
100 %		- 20	1,745,000,097	97	0.0000056
100 %		- 10	1,744,999,983	-17	-0.0000010
100 %		0	1,744,999,979	-21	-0.0000012
100 %		+ 10	1,745,000,347	347	0.0000199
100 %		+ 20	1,745,000,162	162	0.0000093
100 %		+ 30	1,744,999,932	-68	-0.0000039
100 %		+ 40	1,745,000,038	38	0.0000022
100 %		+ 50	1,744,999,786	-214	-0.0000123
BATT. ENDPOINT	3.45	+ 20	1,744,999,569	-431	-0.0000247

Table 7-38. Frequency Stability Data (Band 66/4)

#### 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: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dago 200 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 200 01 206
© 2019 PCTEST Engineering Labora	itory Inc			V 9 0 02/01/2019



## **Band 66/4 Frequency Stability Measurements**



Figure 7-11. Frequency Stability Graph (Band 66/4)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 201 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 201 01 206
© 2019 PCTEST Engineering Labora	tory. Inc.			V 9.0 02/01/2019



# **Band 25/2 Frequency Stability Measurements**

OPERATING FREQUENCY:	1,882,500,000	_Hz
CHANNEL:	26365	_
REFERENCE VOLTAGE:	4.27	VDC
<b>DEVIATION LIMIT:</b>	± 0.00025 % or 2.5 ppm	

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.27	- 30	1,882,499,839	-161	-0.0000086
100 %		- 20	1,882,499,897	-103	-0.0000055
100 %		- 10	1,882,500,056	56	0.0000030
100 %		0	1,882,500,181	181	0.0000096
100 %		+ 10	1,882,500,192	192	0.0000102
100 %		+ 20	1,882,499,955	-45	-0.0000024
100 %		+ 30	1,882,500,051	51	0.0000027
100 %		+ 40	1,882,500,067	67	0.0000036
100 %		+ 50	1,882,500,057	57	0.0000030
BATT. ENDPOINT	3.45	+ 20	1,882,499,962	-38	-0.0000020

Table 7-39. Frequency Stability Data (Band 25/2)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 202 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 202 01 206
© 2019 PCTEST Engineering Labora	tory. Inc.			V 9.0 02/01/2019



**Band 25/2 Frequency Stability Measurements** 



Figure 7-12. Frequency Stability Graph (Band 25/2)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 202 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 203 01 206
© 2019 PCTEST Engineering Labora	tory. Inc.			V 9.0 02/01/2019



### **Band 41 Frequency Stability Measurements**

OPERATING FREQUENCY: 2,593,000,000 Hz CHANNEL: 40620 REFERENCE VOLTAGE: 4.27 VDC

VOLTAGE (%)	POWER (VDC)	<b>ТЕМР</b> (°С)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.27	- 30	2,593,000,166	166	0.0000064
100 %		- 20	2,593,000,280	280	0.0000108
100 %		- 10	2,592,999,853	-147	-0.0000057
100 %		0	2,593,000,123	123	0.0000047
100 %		+ 10	2,592,999,808	-192	-0.0000074
100 %		+ 20	2,593,000,020	20	0.000008
100 %		+ 30	2,593,000,086	86	0.0000033
100 %		+ 40	2,592,999,929	-71	-0.0000027
100 %		+ 50	2,593,000,420	420	0.0000162
BATT. ENDPOINT	3.45	+ 20	2,592,999,779	-221	-0.0000085

 Table 7-40. 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: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 204 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 204 01 206
© 2019 PCTEST Engineering Labora	atory Inc			V 9 0 02/01/2019







Figure 7-13. Frequency Stability Graph (Band 41)

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 205 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 205 01 206
© 2019 PCTEST Engineering Labora	tory. Inc.			V 9.0 02/01/2019



## 8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSMF907B** complies with all the requirements of Part 22, 24, & 27 of the FCC Rules for LTE operation only.

FCC ID: A3LSMF907B		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 206 of 206
1M1904220064-03.A3L	01/22 - 05/17/2019	Portable Handset		Page 206 01 206
© 2019 PCTEST Engineering Labora	tory. Inc.			V 9.0 02/01/2019