

	RF 50 Ω DC CORREC #IFGain:Low		SENSE:IVI Center Freq: 2.535000000 GHz Trig: Free Run Avg Hold: 100/100 #Atten: 36 dB		Trace/Detector
10 dB/div Ref 40.00 dBm					Clear Write
10.0 0.00 10.0 20.0					Average
000 000 <mark>0000-000-000-000-000-000-000-000-00</mark>	W		Vilina nu l	na thatalan have	Max Hold
Center 2.535 GHz Res BW 360 kHz Occupied Bandwidth		#VBW 1.1 MHz Total Power	28.	Span 37.5 MH Sweep 1 m 9 dBm	
	487 MH -3.429 k 14.86 M	IZ Hz % of OBW P	ower 9	9.00 % .00 dB	Detecto Peak Auto <u>Mar</u>
5G			STAT	JS	

Plot 7-139. Occupied Bandwidth Plot (Band 7 - 15.0MHz 64-QAM - Full RB Configuration)



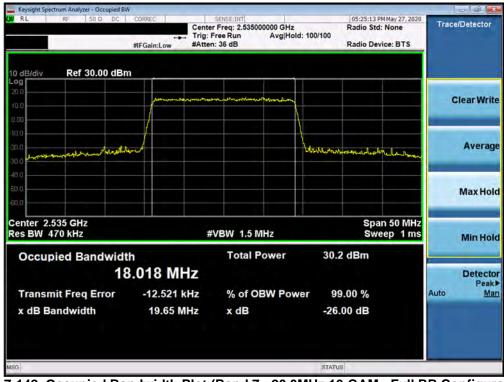
Plot 7-140. Occupied Bandwidth Plot (Band 7 - 15.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Predd Johne part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 07 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	2020 Portable Handset		Page 87 of 357
© 2020 PCTEST		•		V 9.0 02/01/2019



RL RF 50Ω DC	•+• T	SENSE:IMT Center Freq: 2.535000000 GHz Trig: Free Run Avg Hold: 100/100 #Atten: 36 dB		Radio Device: BTS	Trace/Detector
10 dB/div Ref 30.00 dBm					
10.0 0.00		hanna mhanistraintean an shi			Clear Write
10.0 20.0 30.0	and the second s		Munch	anna dhungahthanstr	Average
10.0 57.0 50.0					Max Hole
Center 2.535 GHz Res BW 470 kHz		#VBW 1.5 MH	l⊥	Span 50 MH Sweep 1 m	
	Occupied Bandwidth 17.980 MHz			.9 dBm	Detecto
Transmit Freq Error x dB Bandwidth	1.430 kHz 19.54 MHz			99.00 % 6.00 dB	Auto <u>Mar</u>
G			STAT	าบร	_

Plot 7-141. Occupied Bandwidth Plot (Band 7 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-142. Occupied Bandwidth Plot (Band 7 - 20.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Presid (sibe part of (s)	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNC	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 99 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 88 of 357
© 2020 PCTEST	•	·		V 9.0 02/01/2019



Keysight Spectrum Analyzer - Occupied BW	CORREC	SENSE:INT		05:25:20 F	M May 27, 2020	0 0 8
	#IFGain:Low	Center Freq: 2.5350	000000 GHz Avg Hold: 100	Radio Std	: None	Trace/Detector
10 dB/div Ref 30.00 dBm	·					
20.0 10.0	from	n and an and an	munun			Clear Write
10.0 0.0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	~		hort	hahrmohan	marian	Average
0.0 c 						Max Hold
enter 2.535 GHz es BW 470 kHz		#VBW 1.51	MHz		in 50 MHz eep 1 ms	Min Hole
Occupied Bandwidtl 17	h .985 MH		Power	28.9 dBm		Detecto
Transmit Freq Error x dB Bandwidth	2.850 k 19.63 M		DBW Power	99.00 % -26.00 dB		Peak≯ Auto <u>Man</u>
SG				STATUS		

Plot 7-143. Occupied Bandwidth Plot (Band 7 - 20.0MHz 64-QAM - Full RB Configuration)



Plot 7-144. Occupied Bandwidth Plot (Band 7 - 20.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Predd Johne part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dege 90 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	20 Portable Handset		Page 89 of 357
© 2020 PCTEST		•		V 9.0 02/01/2019



Band 41



Plot 7-145. Occupied Bandwidth Plot (Band 41 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-146. Occupied Bandwidth Plot (Band 41 - 5.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Produl Voltes pert of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dage 00 of 257	
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 90 of 357	
© 2020 PCTEST	•	•		V 9.0 02/01/2019	

2020 PCTEST



Keysight Spectrum Analyzer - Occupied BW		Sector Sector		and the second second	0 Ø 🛪
RL RF 50 Q DC	#IFGain:Low #Atter			io Std: None	Trace/Detector
10 dB/div Ref 30.00 dBm		mmmmm			Clear Write
-10.0 -20.0 -30.0	ward and a second se		humm	mm	Average
40 0					Max Hold
Center 2.593 GHz Res BW 120 kHz		VBW 390 kHz Total Power	29.4 dB	pan 12.5 MHz Sweep 1 ms	Min Hold
	n 5 206 MHz -305 Hz 4.939 MHz	% of OBW Power		%	Detector Peak Auto <u>Mar</u>
SG			STATUS		-

Plot 7-147. Occupied Bandwidth Plot (Band 41 - 5.0MHz 64-QAM - Full RB Configuration)



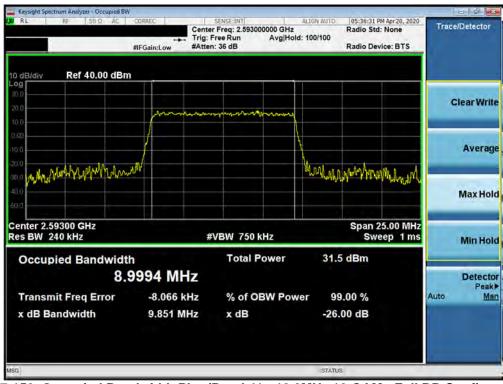
Plot 7-148. Occupied Bandwidth Plot (Band 41 - 5.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Prod/she part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 91 of 357
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		
© 2020 PCTEST	*	•		V 9.0 02/01/2019



Keysight Spectrum Analyzer - Occupied BW		l				8 8 *
RL RF SoΩ AC	#IFGain:Low	SENSE:INT Center Freq: 2.5930000 Trig: Free Run #Atten: 36 dB	ALIGN AUTO 00 GHz Avg Hold: 100/100	Radio Std Radio Dev		Trace/Detector
10 dB/div Ref 40.00 dBm Log 200		m	homme			ClearWrite
			Herrini	hundlim	Ъ. г.).	Average
30.0 Даци тул чл. с фор рузу 40.0 80.0				MANN TRAVE	Jan KUMM	Max Hold
Center 2.59300 GHz Res BW 240 kHz		#VBW 750 kH		Swe	25.00 MHz eep 1 ms	Min Hold
Occupied Bandwidth Total Power 32.5 dBm 9.0063 MHz Transmit Freg Error -4.428 kHz % of OBW Power 99.00 %						Detector Peak⊁ Auto Man
x dB Bandwidth	9.794 MH			00 dB		
MSG			STATU	s		

Plot 7-149. Occupied Bandwidth Plot (Band 41 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-150. Occupied Bandwidth Plot (Band 41 - 10.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Proid to be part of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 02 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 92 of 357
© 2020 PCTEST	•		V 9.0 02/01/2019



Keysight Spectrum Analyzer - Occupied BW						- 6 ×	
	CORREC #	SENSE:INT Center Freq: 2.59300 Trig: Free Run #Atten: 36 dB	00000 GHz Avg Hold: 100/100	04:37:40 PM Radio Std: 1 Radio Devic	lone	Trace/Detector	
10 dB/div Ref 30.00 dBm							
200	mont	minanter	m			Clear Write	
0.00]					_	
10.0			1				
20.0	N. C.		Thomas	minnen	human	Average	
40,0							
50,0						Max Hold	
ş0,0							
Center 2.593 GHz Res BW 240 kHz		#VBW 750 k	(Hz		25 MHz p 1 ms	Min Hold	
Occupied Bandwidth		Total P	Total Power 29.4				
	608 MH	Iz				Detector	
Transmit Freq Error	-3.080 k	Hz % of O	BW Power 9	9.00 %	P	Peak Mar	
x dB Bandwidth	9.865 M	Hz x dB	-26	.00 dB			
SG			STAT	US		_	

Plot 7-151. Occupied Bandwidth Plot (Band 41 - 10.0MHz 64-QAM - Full RB Configuration)



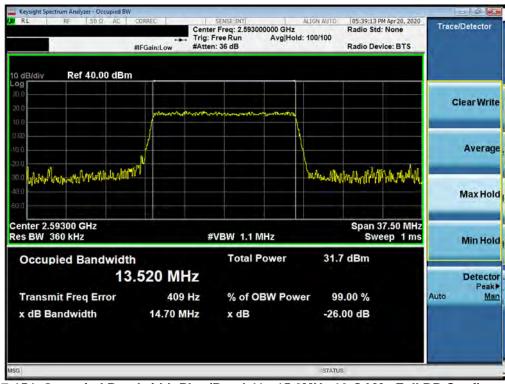
Plot 7-152. Occupied Bandwidth Plot (Band 41 - 10.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Predljobe pert of @	MEASUREMENT REPORT (CERTIFICATION)	SUNC	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 00 at 057
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 93 of 357
© 2020 PCTEST	•			V 9.0 02/01/2019



RL RF 58Ω AC	Trig	SENSE:INT Inter Freq: 2.593000000 GHz g: Free Run Avg Hol ten: 36 dB	ALIGN AUTO	05:39:02 Pl Radio Std: Radio Dev		Trace/Det	ector
10 dB/div Ref 40.00 dBm						Clea	r Write
100 000 						A	verage
-200 300	uM		WAYNA	Marchiteland	alleveler	Ма	x Hold
Center 2.59300 GHz Res BW 360 kHz		#VBW 1.1 MHz		Swe	7.50 MHz sep 1 ms	Mi	n Hold
	.515 MHz	Total Power		dBm			etector Peak►
Transmit Freq Error x dB Bandwidth	7.086 kHz 14.73 MHz	% of OBW Pow x dB		.00 % 00 dB		Auto	<u>Man</u>
MSG			STATUS				

Plot 7-153. Occupied Bandwidth Plot (Band 41 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-154. Occupied Bandwidth Plot (Band 41 - 15.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Proof lotte part of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 04 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 94 of 357
© 2020 PCTEST			V 9.0 02/01/2019



Keysight Spectrum Analyzer - Occupied BW		1. Anno 1990				6 6 8
RL RF [50Ω AC]	#IFGain:Low	SENSE:INT Center Freq: 2.593000 Trig: Free Run #Atten: 36 dB	ALIGN AUTO 0000 GHz Avg Hold: 100/100	Radio Dev		Trace/Detector
10 dB/div Ref 30.00 dBm Log 200	/~~~~	Jana Mana Mana Mana Mana Mana Mana Mana				ClearWrite
-10.0 -20.0 -20.0 -20.0 -20.0 -40.0	od		Warnah	VMUNPYAL	Mustan	Average
-40.0 -20.0 						Max Hold
Center 2.59300 GHz Res BW 360 kHz		#VBW 1.1 M		Swe	7.50 MHz eep 1 ms	Min Hold
Occupied Bandwidth 13	.521 MF	Total Po IZ	ower 30.7	dBm		Detector
Transmit Freq Error x dB Bandwidth	1.542 k 14.79 M			0.00 % 00 dB		Auto <u>Man</u>
MSG			STATU	5		4

Plot 7-155. Occupied Bandwidth Plot (Band 41 - 15.0MHz 64-QAM - Full RB Configuration)



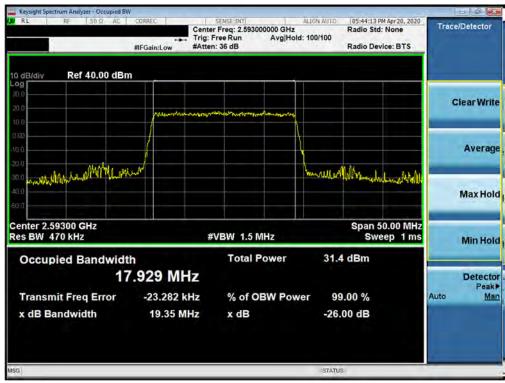
Plot 7-156. Occupied Bandwidth Plot (Band 41 - 15.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Predd Johne part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage OF of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 95 of 357
© 2020 PCTEST		•		V 9.0 02/01/2019



Keysight Spectrum Analyzer - Occupied BW Keysight Spectrum Analyzer - Occupied BW	ORREC	SENSE:INT	ALIGN A	05-44-03.0	M Apr 20, 2020	B 8
	IFGain:Low	Center Freq: 2.59300		Radio Std	: None	Trace/Detector
10 dB/div Ref 40.00 dBm	millions	and and a second of the	arming			Clear Write
1000 1000 -2000				and Divisin to a	for a l	Average
30.0 				and Alberta	"Wheelton	Max Hold
Center 2.59300 GHz Res BW 470 kHz		#VBW 1.5 M Total P			0.00 MHz eep 1 ms	Min Hold
Occupied Bandwidth 17. Transmit Freq Error x dB Bandwidth	942 MH -10.922 k 19.53 M	HZ KHz % of Ol	BW Power	99.00 % -26.00 dB		Detecto Peak) Auto <u>Mar</u>
ASG I			\$	TATUS		

Plot 7-157. Occupied Bandwidth Plot (Band 41 - 20.0MHz QPSK - Full RB Configuration)



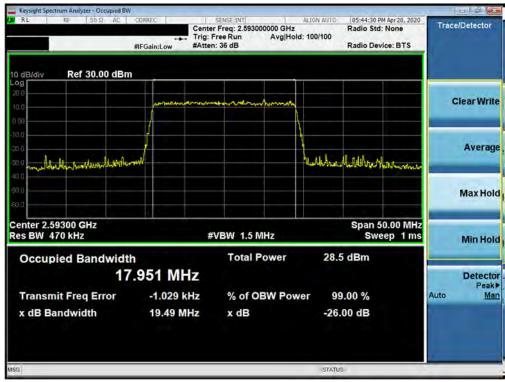
Plot 7-158. Occupied Bandwidth Plot (Band 41 - 20.0MHz 16-QAM - Full RB Configuration)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 06 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 96 of 357
© 2020 PCTEST			V 9.0 02/01/2019



Keysight Spectrum Analyzer - Occupied BV RL RF 50 Ω AC	CORREC	SENSE:INT	ALIGN AUTO	05:44:21 PM Apr 20	2020
	#IFGain:Low	Center Freq: 2.593000		Radio Std: None Radio Device: B1	Trace/Detector
10 dB/div Ref 40.00 dBn Log 30 0 20 0	n				Clear Write
10.0					Average
30.0			linkaph	ward Harph Ma	Max Hold
Center 2.59300 GHz Res BW 470 kHz		#VBW 1.5 M		Span 50.00 Sweep 1	
Occupied Bandwidt	h 7.970 MH	Total Po 1 Z	ower 30.1	6 dBm	Detector Peak
Transmit Freq Error x dB Bandwidth	-11.677 k 19.63 M			9.00 % .00 dB	Auto <u>Man</u>
MSG			STATU	s	

Plot 7-159. Occupied Bandwidth Plot (Band 41 - 20.0MHz 64-QAM - Full RB Configuration)



Plot 7-160. Occupied Bandwidth Plot (Band 41 - 20.0MHz 256-QAM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Prod Jobe part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dege 07 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 97 of 357
© 2020 PCTEST		·		V 9.0 02/01/2019



NR Band n41



Plot 7-161. Occupied Bandwidth Plot (n41 20MHz BPSK-DFT-s-OFDM - Full RB Configuration)



Plot 7-162. Occupied Bandwidth Plot (n41 20MHz QPSK-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Prest/size pert of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSONC	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 00 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 98 of 357
© 2020 PCTEST				V 9 0 02/01/2019



RLT RF 50 Q DC	Trig: I	SENSE:INT r Freq: 2.593020000 GHz Free Run Avg Hc n: 10 dB	ALIGN AUTO	03:30:57 PM Jun 23, 2020 Radio Std: None Radio Device: BTS	Trace/Detector
dB/div Ref 10.00 dBn	n				
20 CC 1.0 1.0	Juni	m			Clear Write
	-J		freed	······································	Average
0 0 					Max Hole
nter 2.59302 GHz s BW 470 kHz	#	VBW 1.5 MHz		Span 50.00 MHz Sweep 1 ms	Min Hole
Occupied Bandwidt 17	h 7.902 MHz	Total Power	11.	7 dBm	Detecto
Transmit Freq Error x dB Bandwidth	-403.24 kHz 19.28 MHz	% of OBW Por x dB		9.00 % .00 dB	Auto <u>Mar</u>
			STATU	15	

Plot 7-163. Occupied Bandwidth Plot (n41 20MHz 16QAM-CP-OFDM - Full RB Configuration)



Plot 7-164. Occupied Bandwidth Plot (n41 20MHz 64QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Presidio la partici a	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 00 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 99 of 357
© 2020 PCTEST			V 9.0 02/01/2019



RLT RF 50 Ω DC	Center Trig: F	SENSE:INT r Freq: 2.593020000 GH Free Run Avg h n; 10 dB	ALIGN AUTO Iz Iold: 100/100	Radio Std		Trace/Detector
dB/div Ref 15.00 dBr	m					
a 10 10 10		-				Clear Write
			Lumana	- Autor		Averag
						Max Hol
nter 2.59302 GHz s BW 470 kHz		VBW 1.5 MHz		Sw	50.00 MHz eep 1 ms	Min Hol
	th 7.918 MHz -386.46 kHz	Total Power % of OBW Po		0 dBm 9.00 %		Detecto Peak Auto Ma
x dB Bandwidth	19.20 MHz	x dB		.00 dB		
			STATL	15		

Plot 7-165. Occupied Bandwidth Plot (n41 20MHz 256QAM-CP-OFDM- Full RB Configuration)



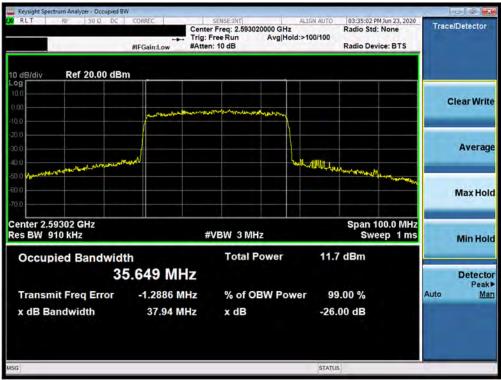
Plot 7-166. Occupied Bandwidth Plot (n41 40MHz BPSK-DFT-s-OFDM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Preddjobe pert of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 100 of 357
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		
0 2020 PCTEST V 9.0 02/01/2019				





Plot 7-167. Occupied Bandwidth Plot (n41 40MHz QPSK-CP-OFDM - Full RB Configuration)



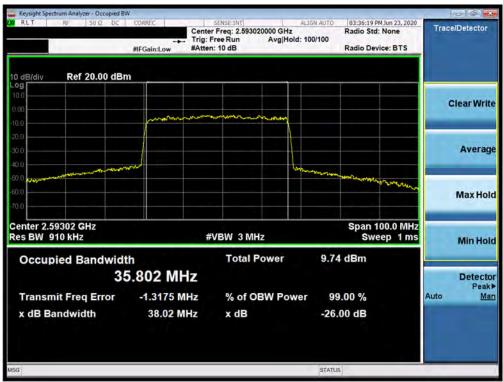
Plot 7-168. Occupied Bandwidth Plot (n41 40MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Proof Joine partial	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 101 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 101 of 357
© 2020 PCTEST			V 9.0 02/01/2019



Keysight Spectrum Analyzer - Occupied B RLT RF 50 Ω DC		SENSE:INT AL	LIGN AUTO 03:35:47 PM	1Jun 23, 2020
	#IFGain:Low #Atten	Free Run Avg Hold: 1 n; 10 dB	Radio Std:	None Trace/Detector
0 dB/div Ref 20.00 dBr	n	minin		Clear Writ
0.0	~		~~~~~	Averag
				MaxHol
enter 2.59302 GHz es BW 910 kHz		VBW 3 MHz Total Power		00.0 MHz ep 1 ms Min Hol
Occupied Bandwidt 3 Transmit Freq Error x dB Bandwidth	т 5.586 MHz -1.2923 MHz 37.97 MHz	% of OBW Power		Detecto Peak Auto <u>Ma</u>
3			STATUS	

Plot 7-169. Occupied Bandwidth Plot (n41 40MHz 64QAM-CP-OFDM- Full RB Configuration)



Plot 7-170. Occupied Bandwidth Plot (n41 40MHz 256QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Proof lotte part of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 102 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 102 of 357
© 2020 PCTEST			V 9.0 02/01/2019



Keysight Spectrum Analyzer - Occupied B R. T RF 50 Ω AC	CORREC	SENSE:INT	ALIGN AUTO	11:07:02 AM Jul 12, 2020	
(C. T. W. 5031 AC	Center Trig: F	r Freq: 2.593020000 GHz	d: 100/100	Radio Std: None Radio Device: BTS	Trace/Detector
0 dB/div Ref 40.00 dBr	n				
0.0	m	m			Clear Write
0.0 100 0.0					Averag
	sl.~		hand and a second	m	Max Hole
enter 2.59302 GHz es BW 1.2 MHz	#	VBW 4 MHz		Span 125.0 MH Sweep 1 ms	
Occupied Bandwid	th 5.800 MHz	Total Power	33.2	2 dBm	Detecto
Transmit Freq Error x dB Bandwidth	-1.0770 MHz 48.61 MHz	% of OBW Pow x dB		0.00 % 00 dB	Peak Auto <u>Ma</u>
G			STATU	5	

Plot 7-171. Occupied Bandwidth Plot (n41 50MHz BPSK-DFT-s-OFDM - Full RB Configuration)



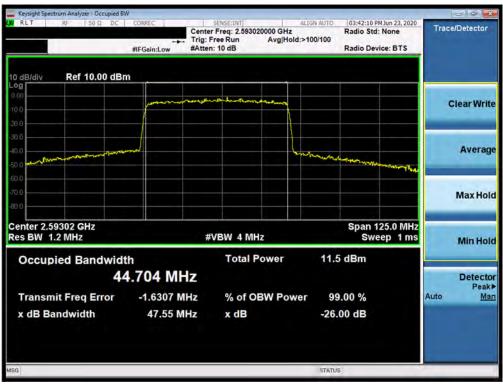
Plot 7-172. Occupied Bandwidth Plot (n41 50MHz QPSK-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Proid to be part of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 102 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 103 of 357
© 2020 PCTEST			V 9.0 02/01/2019



Keysight Spectrum Analyzer - Occupied BW						- 6 - 8
RLT RF 50 Q DC	#IFGain:Low #Atter	SENSE:INT r Freq: 2.593020000 C Free Run Avg h: 10 dB	ALIGN AUTO SHz Hold: 100/100	Radio Device	one	race/Detector
10 dB/div Ref 10.00 dBm	1	and and the state	~			Clear Write
-20.0 -30.0 -40.0 -50.0			have	and a start of the	Annother	Average
-60.0 -70.0 -80.0						Max Hold
Center 2.59302 GHz Res BW 1.2 MHz		VBW 4 MHz Total Powe	r 12	Span 125 Sweep .0 dBm	.0 MHz 0 1 ms	Min Hold
Occupied Bandwidt 44 Transmit Freq Error x dB Bandwidth	H. 821 MHz -1.6487 MHz 47.69 MHz	% of OBW F	Power 9	9.00 % 5.00 dB	Aut	Detector Peak≽ o <u>Man</u>
MSG			STAT	US		

Plot 7-173. Occupied Bandwidth Plot (n41 50MHz 16QAM-CP-OFDM - Full RB Configuration)



Plot 7-174. Occupied Bandwidth Plot (n41 50MHz 64QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Pred Joine part of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dega 104 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 104 of 357
© 2020 PCTEST			V 9.0 02/01/2019





Plot 7-175. Occupied Bandwidth Plot (n41 50MHz 256QAM-CP-OFDM- Full RB Configuration)



Plot 7-176. Occupied Bandwidth Plot (n41 60MHz BPSK-DFT-s-OFDM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Predljobe pert of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSONE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	D	
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 105 of 357
0 2020 PCTEST V 9.0 02/01/2019				



Keysight Spectrum Analyzer - Occupied BV					08 ×
KIRL RE 50 Q DC	#IFGain:Low #Atten	SENSE:INT] rr Freq: 2.593020000 GHz Free Run Avg Ho n: 22 dB	ALIGN AUTO	03:00:02 PM Jul 01, Radio Std: None Radio Device: B1	Trace/Detector
0 dB/div Ref 30.00 dBn	n	w~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~		ClearWrite
800			hama	······································	Average
40.0 50.0 50.0					Max Hold
Center 2.59302 GHz tes BW 1.5 MHz		VBW 5 MHz		Span 150.0 Sweep 1	
Occupied Bandwidt 57 Transmit Freq Error x dB Bandwidth	h 7.771 MHz 145.58 kHz 61.48 MHz	Total Power % of OBW Pow x dB	wer 99	3 dBm 0.00 % 00 dB	Detecto Peak) Auto <u>Mar</u>
SG			STATU	5	

Plot 7-177. Occupied Bandwidth Plot (n41 60MHz QPSK-CP-OFDM - Full RB Configuration)



Plot 7-178. Occupied Bandwidth Plot (n41 60MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Preddjote pert of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSONS	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dawa 400 at 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 106 of 357
© 2020 PCTEST	*	·		V 9.0 02/01/2019





Plot 7-179. Occupied Bandwidth Plot (n41 60MHz 64QAM-CP-OFDM- Full RB Configuration)



Plot 7-180. Occupied Bandwidth Plot (n41 60MHz 256QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Prod Jobe part of @	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset	Page 107 of 357
© 2020 PCTEST			V 9.0 02/01/2019



Keysight Spectrum Analyzer - Occupied BV R. T. RF 50 Ω AC	CORREC	SENSE:INT AL er Freq: 2.593020000 GHz Free Run Avg Hold: 1	IGN AUTO 11:03:58 AM Jul 12, 2020 Radio Std: None 00/100	Trace/Detector
		en: 28 dB	Radio Device: BTS	
dB/div Ref 40.00 dBn	n	1		
3,0	- martin	mm		Clear Write
20				
10				Average
and				
1.0				Max Hole
enter 2.5930 GHz es BW 1.8 MHz		#VBW 6 MHz	Span 200.0 MH Sweep 1 m	
Occupied Bandwidt	h	Total Power	33.4 dBm	Minition
77	7.094 MHz			Detecto
Transmit Freq Error	-333.19 kHz	% of OBW Power	99.00 %	Auto <u>Mar</u>
x dB Bandwidth	81.64 MHz	x dB	-26.00 dB	
			STATUS	

Plot 7-181. Occupied Bandwidth Plot (n41 80MHz BPSK-DFT-s-OFDM - Full RB Configuration)



Plot 7-182. Occupied Bandwidth Plot (n41 80MHz QPSK-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST"	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 100 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 108 of 357
© 2020 PCTEST			V 9.0 02/01/2019



Keysight Spectrum Analyzer - Occupied BW			- Contraction of the		- 3 ×
XIRL RE SOQ DC	#IFGain:Low #Atten	SENSE:INT er Freq: 2.593020000 GH: Free Run Avg He n: 22 dB	ALIGN AUTO z old: 100/100	02:52:15 PMJul 01, 2020 Radio Std: None Radio Device: BTS	Trace/Detector
10 dB/div Ref 30.00 dBm	man	monne	.		Clear Write
10.0 20.0 30.0			human	man and a second and a second and a second and a second a	Average
40 0 50 0 50 0					Max Hold
Center 2.5930 GHz Res BW 1.8 MHz Occupied Bandwidtl		∜BW 6 MHz Total Power	30	Span 200.0 MHz Sweep 1 ms 4 dBm	Min Hold
	n 7.528 MHz 165.06 kHz 81.90 MHz	% of OBW Po x dB	wer 99	9.00 % .00 dB	Detecto Peaki Auto <u>Ma</u> r
SG			STATU	/5	

Plot 7-183. Occupied Bandwidth Plot (n41 80MHz 16QAM-CP-OFDM - Full RB Configuration)



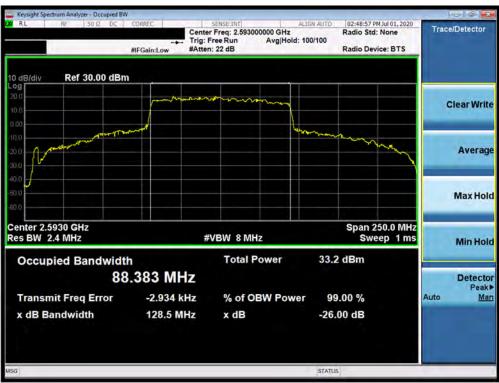
Plot 7-184. Occupied Bandwidth Plot (n41 80MHz 64QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST"	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 100 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 109 of 357
© 2020 PCTEST			V 9.0 02/01/2019



RL RF 50Ω DC	Trig:	sense:INT er Freq: 2.593020000 GHz Free Run Avg Ho n; 22 dB	ALIGN AUTO	02:56:43 PM Jul 01, 20 Radio Std: None Radio Device: BTS	Trace/Detector
dB/div Ref 30.00 dBm			-		
.d	promission	man man			Clear Writ
D			mannon	- Marian and ano	Averag
					Max Hol
nter 2.5930 GHz s BW 1.8 MHz	#	VBW 6 MHz		Span 200.0 Mi Sweep 1 n	
Dccupied Bandwidtl 77	^h .402 MHz	Total Power	26.6	i dBm	Detecto
Transmit Freq Error x dB Bandwidth	109.59 kHz 81.94 MHz	% of OBW Po x dB		0.00 % 00 dB	Auto <u>Ma</u>
			STATUS	5	

Plot 7-185. Occupied Bandwidth Plot (n41 80MHz 256QAM-CP-OFDM- Full RB Configuration)



Plot 7-186. Occupied Bandwidth Plot (n41 90MHz BPSK-DFT-s-OFDM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Preed to be part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 440 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 110 of 357
© 2020 PCTEST	•	·		V 9.0 02/01/2019





Plot 7-187. Occupied Bandwidth Plot (n41 90MHz QPSK-CP-OFDM - Full RB Configuration)



Plot 7-188. Occupied Bandwidth Plot (n41 90MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Prod/softe part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSONS	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dege 111 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 111 of 357
© 2020 PCTEST	*	·		V 9.0 02/01/2019





Plot 7-189. Occupied Bandwidth Plot (n41 90MHz 64QAM-CP-OFDM- Full RB Configuration)



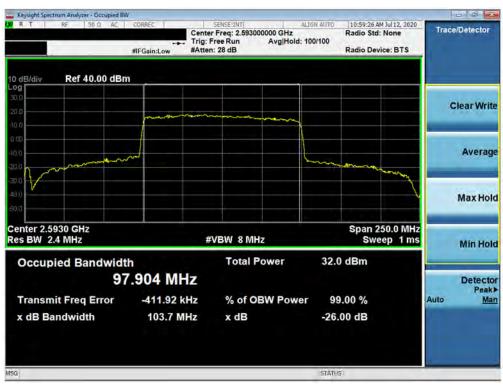
Plot 7-190. Occupied Bandwidth Plot (n41 90MHz 256QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Predljobe pert of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 112 of 357
© 2020 PCTEST	•			V 9.0 02/01/2019



R T RF 50 Ω AC	Trig: F	SENSE:INT ALL r Freq: 2,593000000 GHz Free Run Avg Hold: 10 n: 28 dB	GN AUTO 10:58:11 AM Jul 12, 20 Radio Std: None 00/100 Radio Device: BTS	Trace/Detector
dB/div Ref 40.00 dBr	n			Clear Write
			~~	Average
				Max Hold
enter 2.5930 GHz s BW 2.4 MHz		VBW 8 MHz	Span 250.0 M Sweep 11	
Occupied Bandwidt 96 Transmit Freq Error x dB Bandwidth	5 .221 MHz -919.64 kHz 102.3 MHz	Total Power % of OBW Power x dB	33.5 dBm 99.00 % -26.00 dB	Detecto Peaki Auto <u>Mar</u>
			STATUS	

Plot 7-191. Occupied Bandwidth Plot (n41 100MHz BPSK-DFT-s-OFDM - Full RB Configuration)



Plot 7-192. Occupied Bandwidth Plot (n41 100MHz QPSK-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Prod/softe part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSONS	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 112 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 113 of 357
© 2020 PCTEST	*			V 9.0 02/01/2019



Keysight Spectrum Analyzer - Occupied BV R. T RF 50 Q AC	CORREC	SENSE:INTI	ALTON AUTO 10:59:42 A	M Jul 12, 2020	6 8 💌
	Cente Trig: I	r Freq: 2.593000000 GHz Free Run Avg Hold: 1: 28 dB	Radio Std	: None	Trace/Detector
0 dB/div Ref 40.00 dBr	n			_	
50.0 20.0					Clear Write
0.0	purement				
					Average
ua mananta da				my	_
0.0					Max Hol
enter 2.5930 GHz es BW 2.4 MHz		VBW 8 MHz		250.0 MHz	
				eep 1 ms	Min Hol
Occupied Bandwidt 97	th 7.230 MHz	Total Power	31.8 dBm		Detecto
Transmit Freq Error	-403.96 kHz	% of OBW Powe	99.00 %	Au	
x dB Bandwidth	103.4 MHz	x dB	-26.00 dB		
G			STATUS	4	

Plot 7-193. Occupied Bandwidth Plot (n41 100MHz 16QAM-CP-OFDM - Full RB Configuration)



Plot 7-194. Occupied Bandwidth Plot (n41 100MHz 64QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Predljobe pert of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		D
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 114 of 357
© 2020 PCTEST	•			V 9.0 02/01/2019



Keysight Spectrum Analyzer - Occupied BV R T RF 50 Q AC	CORREC	SENSE:INT	ALIGN AUTO	11:00:14 AM Ju Radio Std: No		Trace/Detector
		Free Run Avg Hol 1: 28 dB	d: 100/100	Radio Device	BTS	
0 dB/div Ref 30.00 dBn	n					Clear Write
	~		lamo			Average
0.0						Max Hold
enter 2.5930 GHz es BW 2.4 MHz		VBW 8 MHz			0.0 MHz 5 1 ms	Min Hole
	.545 MHz	Total Power		4 dBm		Detecto Peaki
Transmit Freq Error x dB Bandwidth	-263.53 kHz 103.2 MHz	% of OBW Pow x dB		9.00 % .00 dB	A	uto <u>Mar</u>
5G			STĂTU	IS		

Plot 7-195. Occupied Bandwidth Plot (n41 100MHz 256QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMN981W	PCTEST Prodd Jorbe part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 115 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 115 of 357
© 2020 PCTEST	•	·		V 9.0 02/01/2019



7.3 Spurious and Harmonic Emissions at Antenna Terminal

Test Overview

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

The minimum permissible attenuation level of any spurious emission is $43 + 10 \log_{10}(P_{[Watts]})$, where P is the transmitter power in Watts.

For Band 30, the minimum permissible attenuation level of any spurious emission <2288MHz and >2365MHz is 70 + 10 log10(P[Watts]).

For Band 7, the minimum permissible attenuation level of any spurious emission is 55 + 10 log₁₀(P_[Watts]).

Test Procedure Used

KDB 971168 D01 v03r01 - Section 6.0

Test Settings

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

Test Setup

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



Figure 7-2. Test Instrument & Measurement Setup

Test Notes

Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for frequencies less than 1 GHz and 1 MHz or greater for frequencies greater than 1 GHz. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

FCC ID: A3LSMN981W	PCTEST Prest/site pet d	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 116 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 116 of 357
© 2020 PCTEST	•			V 9 0 02/01/2019



Band 71

RL	ectrum Analyzer - SA		CORREC	SENSE:INT		ALIGN AUTO	02-16-13 PM	Jun 01, 2020	00
	1.503	NFE	PNO: Fast	Trig: Free Run Atten: 30 dB	#Avg Typ		TRAC		Frequency
0 dB/div	Ref 20.00	dBm				Μ	kr1 662. -50.9	00 MHz 95 dBm	Auto Tur
10.0									Center Fro 346.000000 Mi
10.00								DL1 -13 00 dBm	Start Fr 30,000000 M
80.0									Stop Fr 662.000000 M
ia a								1	CF St 63.200000 M Auto N
0,0									Freq Offe 0
70.0	Democratic Management	بأور وبالمطلاطين	din te dikatirara	ar allow Hugoward be				the local data and	Scale Ty
start 30.0 Res BW	MHz			300 kHz			Stop 60 .34 ms (1	62.0 MHz 2641 pts)	Log
SG						STATUS	3	-	

Plot 7-196. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

RL RF 50 Q DC	CORREC	SENSE:INT	ALIGN AUTO	02:16:20 PM Jun 01, 2020	
NFE	PNO: Fast	Trig: Free Run Atten: 30 dB	#Avg Type: RMS	TRACE 2 3 4 5 5 TYPE A WWWW DET A NNNNN	Frequency
0 dB/div Ref 20.00 dBm			M	kr1 857.65 MHz -70.62 dBm	Auto Tun
ιο φ					Center Fre 849.000000 MH
1.00 				0L1 -13 00 dBm	Start Fre 698,000000 MH
800					Stop Fre 1.000000000 GH
10 0					CF Ste 30.200000 Mi <u>Auto</u> Mi
50.0		. 1			Freq Offs 0 F
10 0 Martin dijerod muslima ali alimitati	datalish ah ya fan an	en binning printered	an instalation of the selection of the	وبالجسجرة فبالماد بالزنبا والمساح	Scale Typ
tart 0.6980 GHz Res BW 100 kHz		300 kHz	Sweep	Stop 1.0000 GHz 14.50 ms (6041 pts)	Log L

Plot 7-197. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMN981W	PCTEST Proof Jaine particle	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 117 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 117 of 357
© 2020 PCTEST			V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept					- 6 *
α RL RF 50 Ω	PNO: Fast	SENSE:INT Trig: Free Run #Atten: 28 dB	ALIGN AUTO #Avg Type: RMS	12:00:54 PM Jul 12, 2020 TRACE 1 2 3 4 5 0 TYPE A WANNIN DET A NNNNN	Attenuation Mech Atten
o dB/div Ref 0.00 dBn			M	r1 9.982 0 GHz -45.50 dBm	28 dE Auto <u>Mar</u>
10.0				DL1 -13.00 ctEm	
20,0					
30,0					
40,0				1	Mech Atten Step
50.0.	m				2dB 10d
30,0					
20					Max Mixer Ly
0.0					-10.00 dBr
Start 1.000 GHz				Stop 10.000 GHz	Max Mixer Lvi Rules⊁ Normal
Res BW 1.0 MHz	#VBW	3.0 MHz		.60 ms (18001 pts)	
SG			STATUS		

Plot 7-198. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-199. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Proof Jobe part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSONC	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 119 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 118 of 357
© 2020 PCTEST				V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept SA	CORREC	SENSE:INT	ALIGN AUTO	02:10:24 PM Jun 01, 2020	- 6 ×
NFE	PNO: Fast 😱 IFGain:Low	Trig: Free Run Atten: 30 dB	#Avg Type: RMS	TRACE 2 3 4 5 TYPE A WWWW DET A NNNN	Frequency
0 dB/div Ref 20.00 dBm			Μ	kr1 941.65 MHz -70.45 dBm	Auto Tun
10.0					Center Fre 849.000000 MH
0.00 10.0				0L1 -13 00 dBm	Start Fre 698,000000 MH
n o					Stop Fre 1.00000000 GF
10.0					CF Ste 30.200000 MH Auto Ma
30.0				1	Freq Offs 0 F
za a Maleidam dala waning tai alata da	inner and the state of the stat	(houly applications)	konstantiska konstantiska karia		Scale Typ
Start 0.6980 GHz ≉Res BW 100 kHz	#VBW :	300 kHz	Sweep	Stop 1.0000 GHz 4.50 ms (6041 pts)	
sc 🤳 Points changed: all trace	s cleared		STATU	S	





Plot 7-201. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Preid Joine part of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dama 440 at 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset	Page 119 of 357
© 2020 PCTEST		·	V 9.0 02/01/2019



- @ X	the second se		-		Keysight Spectrum Analyzer - Swep
Frequency Auto Tune	02:23:13 PM Jun 01, 2020 TRACE 2 2 3 4 5 0 TYPE A WWWW DET A NNNNN	#Avg Type: RMS	SENSE:INT Trig: Free Run Atten: 30 dB	Ω DC CORREC NFE PNO: Fast IFGain:Low	XIRL RF 50Ω
	kr1 661.10 MHz -55.83 dBm	М		dBm	10 dB/div Ref 20.00 dE
Center Free 346.500000 MH					10.0
Start Free 30,000000 MH;	0L1 -13 00 dEm				10.0
Stop Fred 663.000000 MH:					20.0 30.0
CF Step 63.300000 MH; Auto Mar					40.0
Freq Offse 0 Ha					£0 0
Scale Type	pater march 188 ath a build on the market	kili, al inder klasseber l	the strength of the second standing	المراجعة والمراجع المراجع والمراجع المراجع المراجع المراجع	start 30.0 MHz
	0.38 ms (12661 pts)	Sweep 30	300 kHz	#VBW	#Res BW 100 kHz

Plot 7-202. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-203. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981W	PCTEST Predd Jote part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSONC	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dogo 100 of 257	
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 120 of 357	
© 2020 PCTEST	•	·		V 9.0 02/01/2019	



Keysight Spectrum Analyzer - Swept SA					06 *
RL RE 50 Ω AC	PNO: Fast	SENSE:INT Trig: Free Run #Atten: 28 dB	#Avg Type: RMS	12:01:56 PM Jul 12, 2020 TRACE 1 2 3 4 5 5 TYPE A WANNER DET A NNNNN	Frequency
o dB/div Ref 0.00 dBm			M	r1 9.966 0 GHz -45.41 dBm	Auto Tune
00				DC,1 -13.00 dBm	Center Fred 5.50000000 GHz
ao a					Start Fred 1.000000000 GH
10.0 20.0					Stop Fred 10.000000000 GH
30.0					CF Step 900.000000 MH <u>Auto</u> Mar
80.0					Freq Offse 0 H
tart 1.000 GHz				0100 10.000 0112	Scale Type Log <u>Lir</u>
Res BW 1.0 MHz	#VBW :	3.0 MHz	Sweep 15	.60 ms (18001 pts)	1

Plot 7-204. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

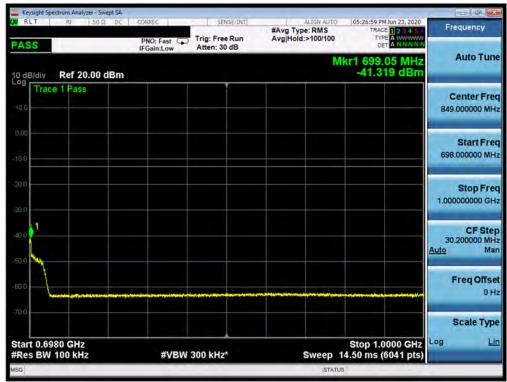
FCC ID: A3LSMN981W	PCTEST Predljobe pert of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNS	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dega 101 of 257	
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 121 of 357	
© 2020 PCTEST	·	·		V 9.0 02/01/2019	



NR Band n71

RLT RF 50 Ω		SENSE:INT	ALIGN AUTO	05:26:42 PM Jun 23, 2020	Frequency
ASS	PNO: Fast IFGain:Low	Trig: Free Run Atten: 30 dB	#Avg Type: RMS	TYPE A WWWWW DET A NNNNN	
dB/div Ref 20.00 d	Bm		М	kr1 662.95 MHz -30.91 dBm	Auto Tun
Trace 1 Pass					Center Fre 346.500000 MH
.00					Start Fre 30.000000 Mi
1.0				1	Stop Fr 663.000000 M
					CF St 63.300000 M <u>Auto</u> M
0.0	****	adarderi generangen di seri seri seri se	and the second state of th	hisanaturayun ita ingenun isgunuh	Freq Offs 0
art 30.0 MHz				Stop 663.0 MHz	Scale Typ
Res BW 100 kHz	#VBW	300 kHz	Sweep 30	.38 ms (12661 pts)	

Plot 7-205. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)



Plot 7-206. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

FCC ID: A3LSMN981W	PCTEST Produl to The part of @	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 100 of 257	
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 122 of 357	
© 2020 PCTEST	·		V 9.0 02/01/2019	





Plot 7-207. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)



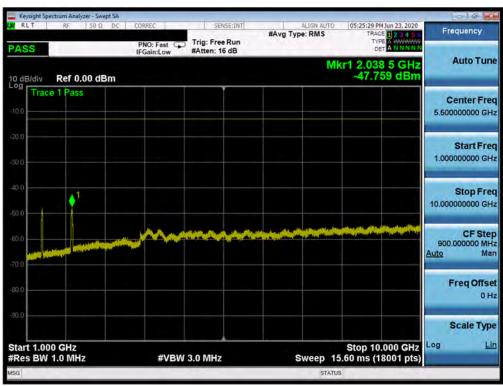
Plot 7-208. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Preddjobe pert of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 400 at 057
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 123 of 357
© 2020 PCTEST		•		V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept SA RLT RF 50 Q DC		SENSE:INT	ALIGN AUTO	05:25:09 PM Jun 23, 2020	
	PNO: Fast	Trig: Free Run	#Avg Type: RMS Avg Hold:>100/100	TRACE 1 2 3 4 5 6	Frequency
ASS	IFGain:Low	Atten: 30 dB		DETANNNN	Auto Tun
0 dB/div Ref 20.00 dBm	1.		M	kr1 698.15 MHz -38.739 dBm	
Trace 1 Pass					Center Free
10.0					849.000000 MH
.00					Start Free
10.0					698.000000 MH
200					Stop Fre
0.0					1.000000000 GH
10.0					CF Ste 30,200000 MH
0.0					Auto Ma
0.0					Freq Offse
0.0	*******	and a second	an gʻun di larting si darlar Galandagan i Bouten	inentriskejospanistanski kepatriospa	0 H
					Scale Typ
tart 0.6980 GHz Res BW 100 kHz	#VBW	300 kHz*	Sweep 1	Stop 1.0000 GHz 4.50 ms (6041 pts)	Log <u>Li</u> r
SG			STATUS		14 H

Plot 7-209. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)



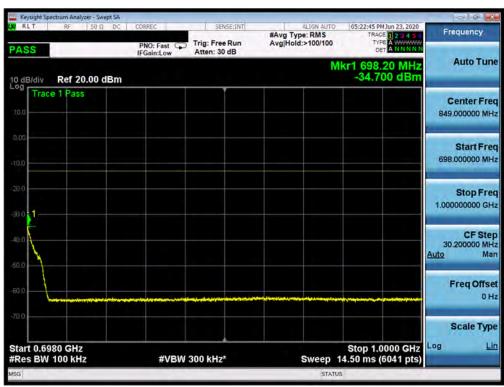
Plot 7-210. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Proid Joine part of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 124 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 124 of 357
© 2020 PCTEST			V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept SA RLT RF 50 \Overline{O} DC	CORREC	SENSE:INT	ALIGN AUTO	05-00-01-01-00-00-0000	- 6 -
ASS	PNO: Fast	Trig: Free Run	#Avg Type: RMS	05:22:34 PM Jun 23, 2020 TRACE 1 2 3 4 5 TYPE A WWWWW DET A NNNNN	Frequency
dB/div Ref 20.00 dBm	IFGain:Low	Atten: 30 dB	N	lkr1 662.60 MHz -47.53 dBm	Auto Tun
Trace 1 Pass					Center Fre 346.500000 MH
0.0					Start Fre 30.000000 MH
0.0					Stop Fre 663.000000 MH
a.o				1	CF Ste 63,300000 MH Auto Ma
0.0 	n an	n Theorem is a state of the state	dage and rescal dation of an and a state of the state of the factor		Freq Offs 0 F
tart 30.0 MHz				Stop 663.0 MHz	Scale Typ
Res BW 100 kHz	#VBW	300 kHz	Sweep 3	0.38 ms (12661 pts)	

Plot 7-211. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)



Plot 7-212. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

FCC ID: A3LSMN981W	PCTEST Preid Joise part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSONS	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 405 af 057
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 125 of 357
© 2020 PCTEST	•	•		V 9.0 02/01/2019





Plot 7-213. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

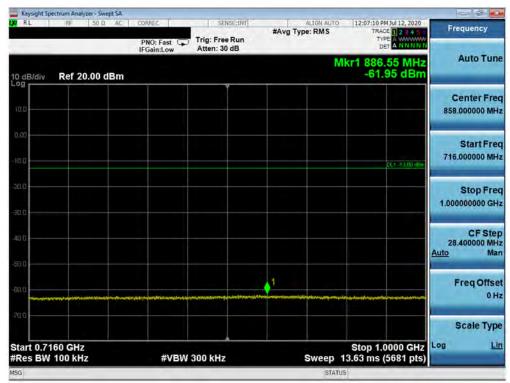
FCC ID: A3LSMN981W	PCTEST Predljobe pert of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNC	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 100 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 126 of 357
© 2020 PCTEST		•		V 9.0 02/01/2019



Band 12

PNO: Fast Trig: Free Run IFGain:Low Atten: 30 dB	#Avg Type: RMS TRACE 2 2 3 4 5 1 TYPE A DET ANNNIN	Frequency
	Mkr1 697.90 MHz -53.13 dBm	Auto Tune
		Center Free 363.950000 MH
	0(1-13:00 dim	Start Fre 30.000000 MH
		Stop Fre 697.900000 MH
	1	CF Ste 66.790000 MH Auto Ma
Mentiopers (his a transfer of a state of a st		Freq Offse 0 H
	OLOD COLUMNIE	Scale Typ Log <u>Li</u>
	#VBW 300 kHz	Mkr1 697.90 MHz _53.13 dBm

Plot 7-214. Conducted Spurious Plot (Band 12 - 10MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-215. Conducted Spurious Plot (Band 12 - 10MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMN981W	PCTEST Prood Joine part of @	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 107 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 127 of 357
© 2020 PCTEST	•		V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept SA		and the second sec		- 6 ×
XURL RF 50Ω AC	CORREC SENSE:INT PNO: Fast Trig: Free Run IFGain:Low #Atten: 26 dB	ALIGN ALTO #Avg Type: RMS	12:07:22 PM Jul 12, 2020 TRACE 2 3 4 5 6 TYPE A WWWWW DET A NN N N N	Frequency
10 dB/div Ref 10.00 dBm		M	kr1 9.959 5 GHz -46.96 dBm	Auto Tune
i0,00				Center Freq 5.50000000 GHz
-10.0			DL1 -13.00 dBm	Start Freq 1.000000000 GHz
-30.0				Stop Freq 10.000000000 GHz
50 0 90 0		ingua janaga di kaja tingi kata ya kana kata kaja		CF Step 900.000000 MH: <u>Auto</u> Mar
70 D				Freq Offse 0 Hi
800 Start 1.000 GHz #Res BW 1.0 MHz	#VBW 3.0 MHz	Sweep 1	Stop 10.000 GHz 5.60 ms (18001 pts)	Scale Type Log <u>Lir</u>
ISG		STAT		

Plot 7-216. Conducted Spurious Plot (Band 12 - 10MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-217. Conducted Spurious Plot (Band 12 - 10MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Proid Jobe part of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dama 400 of 057
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 128 of 357
© 2020 PCTEST			V 9.0 02/01/2019



RL RF 50 Ω AC	CORREC SENSE:INT	ALIGN AUTO	12:05:31 PM Jul 12, 2020	Provide State
	PNO: Fast Trig: Free Run IFGain:Low Atten: 30 dB	#Avg Type: RMS	TRACE 1 2 3 4 5 5 TYPE A WWWWW DET A NNNNN	Frequency
dB/div Ref 20.00 dBm		M	lkr1 872.65 MHz -61.98 dBm	Auto Tune
0.0				Center Fred 858.000000 MH;
0.0			041 -13.00 gBm	Start Free 716.000000 MH
a.a				Stop Free 1.000000000 GH
aa ao				CF Step 28.400000 MH Auto Mar
3.0 magazingan dan salah di bingkapatengka si maka		1 Normanistani ingisi generiya yakatu seliyan		Freq Offse 0 H
tart 0.7160 GHz Res BW 100 kHz	#VBW 300 kHz	Sweep	Stop 1.0000 GHz 13.63 ms (5681 pts)	Scale Type Log <u>Lir</u>

Plot 7-218. Conducted Spurious Plot (Band 12 - 10MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



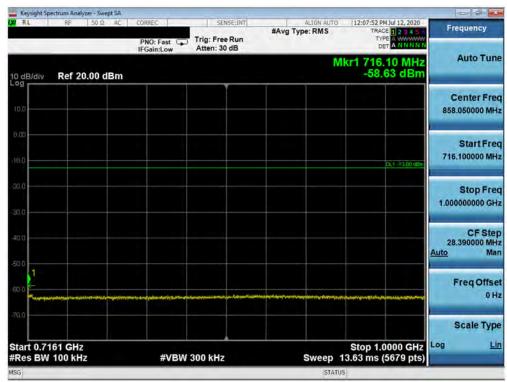
Plot 7-219. Conducted Spurious Plot (Band 12 - 10MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Pred John pert of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNC	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 400 at 057
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 129 of 357
© 2020 PCTEST	•	·		V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept SA RL RF 50 Ω AC	L constant L constant such	hitch area			
RL RF 50 Ω AC	CORREC SENSE:INT PNO: Fast PNO: Fast Atten: 30 dB	ALIGN ALITO #Avg Type: RMS	12:07:45 PM Jul 12, 2020 TRACE 1 2 3 4 5 5 TYPE A WWWWW DET A NNNNN	Frequency Auto Tune	
Mkr1 697.60 MHz 0 dB/div Ref 20.00 dBm -58.91 dBm					
0.0				Center Free 364.000000 MH	
00			CL1 -13.00 rtBm	Start Free 30.000000 MH	
10				Stop Fre 698.000000 MH	
				CF Ste 66.800000 MH Auto Ma	
	ndere ensistensi dan generala ensistensi dan den generalare	Nya Ny hatiy ny konstruin Adri ang Kalay	1	Freq Offse 0 H	
art 30.0 MHz Res BW 100 kHz	#VBW 300 kHz	Sweep 3	Stop 698.0 MHz 2.06 ms (13361 pts)	Scale Type Log Li	
5		STATU			

Plot 7-220. Conducted Spurious Plot (Band 12 - 10MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-221. Conducted Spurious Plot (Band 12 - 10MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981W	PCTEST Prest/site pert of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 120 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset	Page 130 of 357
© 2020 PCTEST	-		V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept SA					0 8 ×
RL RF 50 Ω AC		rig: Free Run Atten: 26 dB	ALIGN ALITO #Avg Type: RMS	12:08:04 PM Jul 12, 2020 TRACE 2 2 4 5 6 TYPE A WAYNOW DET A NN N N	Frequency
dB/div Ref 10.00 dBm			Mi	kr1 9.762 5 GHz -47.07 dBm	Auto Tune
					Center Free 5.50000000 GH
a.a				DL1-13.00 (Bm	Start Free 1.000000000 GH
					Stop Fre 10.000000000 GH
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				CF Ste 900.000000 MH <u>Auto</u> Ma
30					Freq Offse 0 H
art 1.000 GHz Res BW 1.0 MHz	#VBW 3.			Stop 10.000 GHz 5.60 ms (18001 pts)	Scale Type

Plot 7-222. Conducted Spurious Plot (Band 12 - 10MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981W	PCTEST Prod Jobe part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 101 of 057
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 131 of 357
© 2020 PCTEST	·			V 9.0 02/01/2019



# Band 13

RL RL	RF 50 Ω D		SENSE:INT	ALIGN AUTO	02:58:27 PM Jun 01, 2020	
	NFE			#Avg Type: RMS	TRACE 2 2 3 4 5 6 TYPE A WWWW DET A NNNNN	Frequency
0 dB/div	Ref 20.00 dBr	n		N	lkr1 777.00 MHz -29.08 dBm	Auto Tun
io.p						Center Fre 403.500000 MH
10.00 10.00					CL1 -13 00 dBm	Start Fre 30.000000 MH
30.0					1	Stop Fre 777.000000 MH
ια G 50.0						CF Ste 74.700000 MH Auto Ma
50.0						Freq Offs 0 F
		hadila di akara kita parisilar	mintel d in Alimited	erdeilostosllostoslus estilos		Scale Typ
start 30.0 Res BW		#VBW	300 kHz	Sweep 3	Stop 777.0 MHz 5.86 ms (14941 pts)	Log <u>L</u>

Plot 7-223. Conducted Spurious Plot (Band 13 - 10.0MHz QPSK - RB Size 1, RB Offset 0)

RL RF 50 Q DC	CORREC	SENSE:INT	ALIGN AUTO	02:58:34 PM Jun 01, 2020	
NE NFE	PNO: Fast	Trig: Free Run Atten: 30 dB	#Avg Type: RMS	TRACE 2 2 3 4 5 N TYPE A WWWW DET A NNNNN	Frequency
dB/div Ref 20.00 dBm			М	kr1 787.00 MHz -61.88 dBm	Auto Tun
10					Center Fre 893.500000 MH
a				0L1 -13 00 dBm	Start Fre 787.000000 MH
0					Stop Fre 1.000000000 GH
0					CF Ste 21.300000 MH Auto Ma
0					Freq Offse 0 H
· House of the manufacture in t	and the second states of the second	เส้าไม่เหตุมารถให้การระบบไม	wateringtonialistandalistation	etatrin hall ; see have restricted and	Scale Typ
art 0.7870 GHz les BW 100 kHz	#VBW	300 kHz	Sweep 1	Stop 1.0000 GHz 0.22 ms (4261 pts)	Log <u>Li</u>

Plot 7-224. Conducted Spurious Plot (Band 13 - 10.0MHz QPSK - RB Size 1, RB Offset 0)

FCC ID: A3LSMN981W	PCTEST Prood (s/be part of @	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 122 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 132 of 357
© 2020 PCTEST			V 9.0 02/01/2019



Keysight Spectrum Analyzer - S RL RF 50	R AC	CORREC	SENSE:INT	ALIGN AUTO	12:16:01 PM Jul 12, 2020	- 6 -
AL NC 30	AC MC	PNO: Fast	Trig: Free Run #Atten: 28 dB	#Avg Type: RMS	TRACE 2 2 4 5 TYPE A WINNIN N	Frequency
dB/div Ref 10.00	dBm			M	kr1 9.964 5 GHz -45.23 dBm	Auto Tun
1.00						Center Free 5.50000000 GH
0,0 0,0					DL1 -13.00 dBm	Start Free 1.000000000 GH
0.0 0.0						Stop Fre 10.000000000 GH
		~~~				CF Ste 900.000000 MH <u>Auto</u> Ma
a.a						Freq Offse 0 H
tart 1.000 GHz						Scale Type Log <u>Li</u>
Res BW 1.0 MHz		#VBW	3.0 MHz	Sweep 15	5.60 ms (18001 pts)	

Plot 7-225. Conducted Spurious Plot (Band 13 - 10.0MHz QPSK - RB Size 1, RB Offset 0)

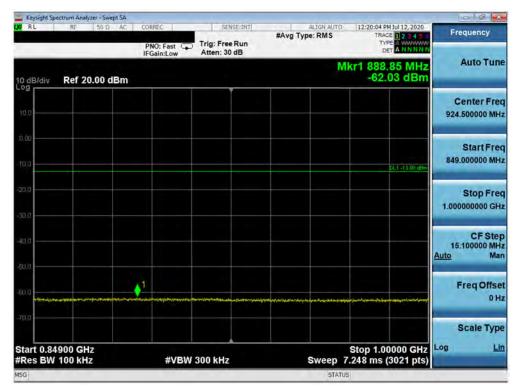
FCC ID: A3LSMN981W	PCTEST Preid Joine part of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 122 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset	Page 133 of 357
© 2020 PCTEST	-	·	V 9.0 02/01/2019



Band 5

RL	RF 50 Ω AC	CORREC	SENSE:INT	ALIGN AUTO	12:19:53 PM Jul 12, 2020	Frequency
		PNO: Fast IFGain:Low	Trig: Free Run Atten: 30 dB	#Avg Type: RMS	TYPE A WWWWWW	
0 dB/div	Ref 20.00 dBm			M	lkr1 822.95 MHz -55.35 dBm	Auto Tune
10.0						Center Free 426.500000 MH
1.00					DL1 -13.00 dBm	Start Free 30.000000 MH
0,0 0,0						Stop Fre 823.000000 MH
ia,a						CF Stej 79.300000 MH <u>Auto</u> Ma
20 20	aya fi wa ta dina a afa sa		annin a franciska fra fan fan fan fan fan fan fan fan fan fa	hannaninga cahaga panganga ngangiyaki disari		Freq Offse 0 H
'a a						Scale Type
tart 30.0 I Res BW 1		#VBW	300 kHz	Sween 3	Stop 823.0 MHz 8.06 ms (15861 pts)	Log <u>Lir</u>
G G		#VDVV		SWEEP STATU		

Plot 7-226. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



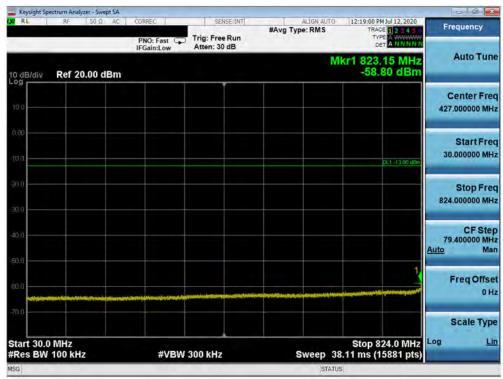
Plot 7-227. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMN981W	PCTEST Produl to The part of @	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 124 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 134 of 357
© 2020 PCTEST	•		V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept RL RF 50 Ω		SENSE:INT	ALIGN AUTO	12:20:18 PM Jul 12, 2020	0 6 💌
NC NC 3032 1	PNO: Fast IFGain:Low	Trig: Free Run #Atten: 26 dB	#Avg Type: RMS	TRACE 2 2 3 4 5 TYPE A WWWW	Frequency
o dB/div Ref 0.00 dBn	n		M	47.09 dBm	Auto Tune
φα				DL1-13.00 d@m	Center Fred 5.50000000 GH
10.a 10.a					Start Free 1.000000000 GH
a.a				1	Stop Free 10.000000000 GH
	****				CF Stej 900.000000 MH <u>Auto</u> Ma
0.0					Freq Offse 0 H
tart 1.000 GHz Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep 15	Stop 10.000 GHz 5.60 ms (18001 pts)	Scale Type Log <u>Li</u> i
G			STATUS		

Plot 7-228. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-229. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Prod/she part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSONS	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 425 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 135 of 357
© 2020 PCTEST	*	·		V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept SA RL RF 50-Ω AC	connect contract	ALCOLOUR ALCOLO	12.10.00.000.00.00.000	0 6 0
KL RE 50.32 AC	PNO: Fast IFGain:Low Atten: 30 dB	#Avg Type: RMS	12:19:08 PM Jul 12, 2020 TRACE 2 2 3 4 5 TYPE A WARKING DET A N N N N N	Frequency
o dB/div Ref 20.00 dBm		N	lkr1 849.50 MHz -61.86 dBm	Auto Tun
10.0				Center Free 924.500000 MH
0,0			DL1 -13 00 c@m	Start Fre 849.000000 MH
80.0				Stop Fre 1.000000000 GH
10.a				CF Ste 15.100000 MH <u>Auto</u> Ma
50.0 1	^{te} rent negative getter i sect tet tet gedenen von stand tet geteren sek	warred brygenesses and an and an and a strategy and		Freq Offse 0 H
tart 0.84900 GHz Res BW 100 kHz	#VBW 300 kHz	Sweep	Stop 1.00000 GHz 7.248 ms (3021 pts)	Scale Type Log <u>Li</u>

Plot 7-230. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



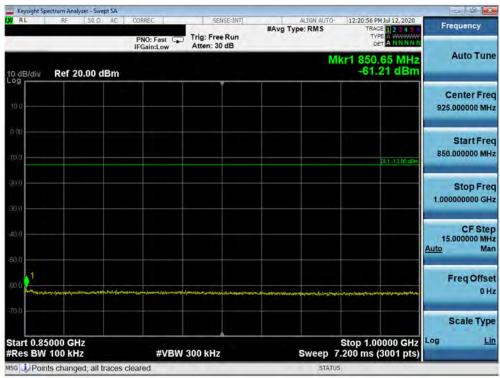
Plot 7-231. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Preddjote pert of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 400 af 057
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 136 of 357
© 2020 PCTEST		•		V 9.0 02/01/2019



RL RF 50 Ω		ALIGN AUTO	12:20:49 PM Jul 12, 2020	0 6 🕺
NE N. JULE	PNO: Fast IFGain:Low Atten: 30 dB	#Avg Type: RMS	TRACE 1 2 3 4 5 0 TYPE A WINNIN DET A NNNNN	
dB/div Ref 20.00 dB	m	M	kr1 821.15 MHz -60.98 dBm	Auto Tune
0.0				Center Fred 427.000000 MH
0,0			DL1 -13.00 dBm	Start Free 30.000000 MH
a.a a.a				Stop Fre 824.000000 MH
3.a				CF Stej 79.400000 MH <u>Auto</u> Ma
D.D.	kanneptensekter an geneter om en finde at hat det en en en sokste fore	ala na minana ina minana mana ana ana an	1	Freq Offse 0 H
tart 30.0 MHz Res BW 100 kHz	#VBW 300 kHz	Sween 3	Stop 824.0 MHz 8.11 ms (15881 pts)	Scale Type Log <u>Li</u> i
G		STATU		

Plot 7-232. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-233. Conducted Spurious Plot (Band5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981W	PCTEST Preddjote pert of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 407 of 057
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 137 of 357
© 2020 PCTEST	•	•		V 9.0 02/01/2019



	ectrum Analyzer - Swept SA		The section stand	in the second second	1	0 6
RL	RF 50 Ω AC	PNO: Fast	SENSE:INT Trig: Free Run #Atten: 26 dB	#Avg Type: RMS	12:21:12 PM Jul 12, 2020 TRACE 2 3 4 5 TVPE A MAXAMENT DET A NN N N N	Frequency
0 dB/div	Ref 0.00 dBm			M	47.46 dBm	Auto Tune
10.0					DL1 -13.00 dƏm	Center Fred 5.50000000 GH
20,0 30,0						Start Free 1.000000000 GH
40,0. 50.0.	1		A	na ana ang kang kang kang kang kang kang	1	Stop Fred 10.000000000 GH
30,0						CF Stej 900.000000 MH <u>Auto</u> Ma
60,0						Freq Offse 0 H
Start 1.00		#\/B\M	3.0 MHz	Sween 15	Stop 10.000 GHz 5.60 ms (18001 pts)	Scale Type Log <u>Lit</u>
SG	1.0 10112		0.0 10112	STATUS		

Plot 7-234. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981W	PCTEST Preid Joine part of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 129 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 138 of 357
© 2020 PCTEST	-		V 9.0 02/01/2019



Band 66/4

Keysight Spectrum Analyzer - Swept SA RL RF 50 Ω DC	CORREC	SENSE:INT		06:05:34 PM May 27, 2020	Frequency
	PNO: Fast 😱 IFGain:Low	Trig: Free Run Atten: 30 dB	#Avg Type: RMS	TRACE 1 2 3 4 5 6 TYPE A WWWW DET A NNNNN	
0 dB/div Ref 20.00 dBm			N	lkr1 1.709 0 GHz -29.14 dBm	Auto Tun
10.0					Center Fre 869.500000 MH
10.00				CL1 -13 00 dBm	Start Fre 30.000000 MH
no				1	Stop Fro 1.709000000 Gi
a o					CF Ste 167.900000 MI <u>Auto</u> M
a.a	g	and a second		in an the set of the s	Freq Offs 01
tart 0.0300 GHz				Stop 1.7090 GHz	Scale Typ Log <u>L</u>
Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep	2.239 ms (3359 pts)	

Plot 7-235. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-236. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMN981W	PCTEST Proof Joine pert of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 120 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 139 of 357
© 2020 PCTEST	•	•		V 9.0 02/01/2019



- @ X	to all an off the back		- Anna anna anna	trum Analyzer - Swept SA	
Frequency	06:06:04 PM May 27, 2020 TRACE 2 3 4 5 0 TYPE A WARNING DET A NNNNN	#Avg Type: RMS	Trig: Free Run Atten: 10 dB	RF 50 Ω DC CORREC PNO: Fast IFGain:Low	RL
Auto Tune	1 19.576 5 GHz -55.68 dBm	Mk		Ref 0.00 dBm	10 dB/div
Center Freq 15.000000000 GHz	DL1 -13,00 d6m				-100
Start Freq 10.000000000 GHz					-20.0
Stop Freq 20.000000000 GHz					-40.0
CF Step 1.000000000 GHz Auto Man					£0.0
Freq Offset 0 Hz					80.0
Scale Type	Stop 20 000 SH				Start 10.00
	7.33 ms (20001 pts)	Sweep 1	3.0 MHz		#Res BW 1

Plot 7-237. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



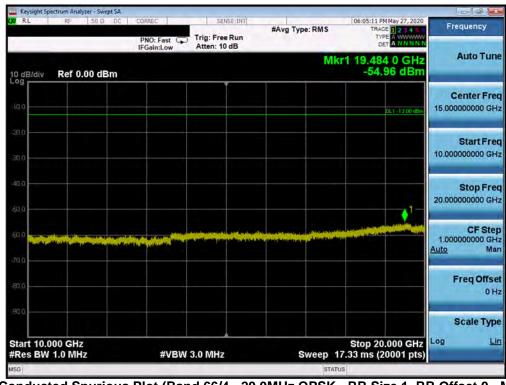
Plot 7-238. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Prod Jobe part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 440 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 140 of 357
© 2020 PCTEST				V 9.0 02/01/2019





Plot 7-239. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



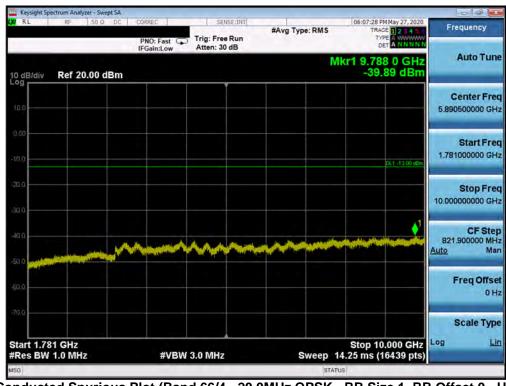
Plot 7-240. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Prod/softe part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSONS	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 141 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 141 of 357
© 2020 PCTEST	*			V 9.0 02/01/2019



- @ X	ten Count of the		-	Analyzer - Swept SA	
Frequency	06:07:21 PM May 27, 2020 TRACE 2 3 4 5 6 TYPE A WARMAN DET A NINNNN	#Avg Type: RMS	SENSE:INT Trig: Free Run Atten: 30 dB	F 50 Ω DC CORREC PNO: Fast G IFGain:Low	CXI RL
Auto Tune	kr1 1.694 0 GHz -49.52 dBm	М		f 20.00 dBm	10 dB/div
Center Freq 870.000000 MHz					100
Start Freq 30.000000 MHz	0L1 -13 00 dBm				0.00 -10.0
Stop Freq 1.710000000 GHz					-20.0
CF Step 168.000000 MHz Auto Man					-40,0
Freq Offsel 0 Hz		ingen ander angen og en nægen og en nægen og en ser en	alen en fan fan en f		-50.0 -60.0
Scale Type Log <u>Lin</u>	Stop 1.7100 GHz 2.240 ms (3361 pts)	Sweep	3.0 MHz		.70 0 Start 0.0300 #Res BW 1.
		STAT			MSG

Plot 7-241. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-242. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981W	PCTEST Pred John pert of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 440 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 142 of 357
© 2020 PCTEST	•			V 9.0 02/01/2019



IO: Fast ain:Low Atten: 10 dB	#Avg Type: RMS	06:07:37 PM May 27, 2020 TRACE 2 3 4 5 0 TYPE A WANNIN DET A NNNNN	Frequency
am:Low Attent to db		DET A NIN NIN	
	IV	lkr1 19.565 0 GHz -55.17 dBm	Auto Tune
		DL1 -13,00 dBm	Center Freq 15.000000000 GHz
			Start Freq 10.000000000 GHz
			Stop Freq 20.000000000 GHz
			CF Step 1.000000000 GH: <u>Auto</u> Mar
			Freq Offse 0 Ha
		Stop 20.000 GHz	Scale Type Log <u>Lin</u>
	#VBW 3.0 MHz	#VBW 3.0 MHz Sweep	СП 20.000 GHz

Plot 7-243. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981W	PCTEST Provid Joster part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 142 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 143 of 357
© 2020 PCTEST				V 9.0 02/01/2019



NR Band n66

Keysight Spectrum Analyzer - Swept			
R T RF 50 Q	PNO: Fast Trig: Free Run IFGain:Low #Atten: 26 dB	ALIGN AUTO 06:21:28 PM May 13, 2020 #Avg Type: RMS TRACE 1245 Type Det A NUMMER	Frequency
10 dB/div Ref 0.00 dBn	n	Mkr1 1.709 0 GHz -49.88 dBm	Auto Tun
-10.0			Center Fre 870.000000 MH
30.0			Start Fre 30.000000 Mi
40.0		1	Stop Fro 1.710000000 G
50.0 	an manana kanana kan		CF Sto 168.000000 M <u>Auto</u> M
80.0			Freq Offs 0
Start 0.0300 GHz #Res BW 1.0 MHz	#VBW 3.0 MHz	Stop 1.7100 GHz Sweep 2.240 ms (3361 pts)	Scale Typ
ASG		STATUS	

Plot 7-244. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)



Plot 7-245. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

FCC ID: A3LSMN981W	PCTEST Preed to be part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 144 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 144 of 357
© 2020 PCTEST		·		V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept		-	and the	and the second second second	
PASS	PNO: Fast	SENSE:INT Trig: Free Run Atten: 10 dB	ALIGN AUTO #Avg Type: RMS	06:22:18 PM May 13, 2020 TRACE 2 3 4 5 0 TYPE A WWWWW DET A NNNNN	Frequency
10 dB/div Ref 0.00 dBr	n		Mki	1 18.971 0 GHz -54.588 dBm	Auto Tune
-10.0					Center Freq 15.00000000 GHz
-30.0					Start Freq 10.000000000 GHz
-40.0				1	Stop Freq 20.000000000 GHz
-50 0					CF Step 1.00000000 GHz Auto Man
-83.0					Freq Offset 0 Hz
-90.0					Scale Type
Start 10.000 GHz #Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep 17	Stop 20.000 GHz 7.33 ms (20001 pts)	Log <u>Lin</u>
MSG			STATU	S	

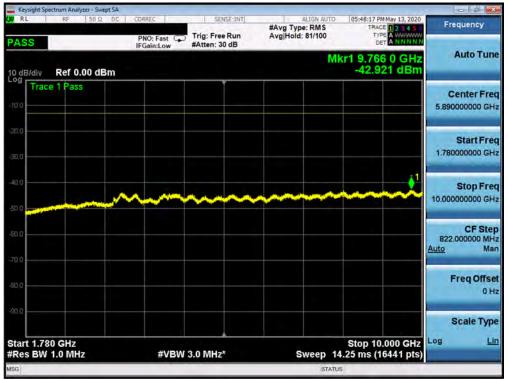
Plot 7-246. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)



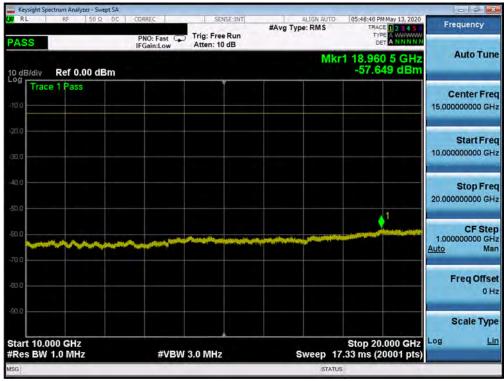
Plot 7-247. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Prood Joine part of (8)	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 145 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset	Page 145 of 357
© 2020 PCTEST			V 9.0 02/01/2019





Plot 7-248. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)



Plot 7-249. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Dreid Jate part of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 146 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 146 of 357
© 2020 PCTEST	-	·		V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept		- I - Carlo - I -	and the second s		0 6 ×
PASS	PNO: Fast	SENSE:INT Trig: Free Run #Atten: 26 dB	#Avg Type: RMS	06:18:54 PM May 13, 2020 TRACE 2 3 4 5 0 TYPE A	Frequency
10 dB/div Ref 0.00 dBn			M	kr1 1.670 5 GHz -53.84 dBm	Auto Tune
-10.0					Center Freq 870.000000 MHz
30.0					Start Freq 30.000000 MHz
-40.0					Stop Fred 1.710000000 GH:
£0 0			<u></u>		CF Step 168.000000 MH: Auto Mar
80.0					Freq Offse 0 H:
Start 0.0300 GHz #Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep 2	Stop 1.7100 GHz 2.240 ms (3361 pts)	Scale Type
MSG			STATU		

Plot 7-250. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)



Plot 7-251. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

FCC ID: A3LSMN981W	PCTEST Proof Joine part of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	De se 447 ef 057
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset	Page 147 of 357
© 2020 PCTEST			V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept		-	and the		0 8 ×
R T RF S0 Q	PNO: Fast	SENSE:INT Trig: Free Run Atten: 10 dB	#Avg Type: RMS	06:19:47 PM May 13, 2020 TRACE 23450 TYPE A	Frequency
10 dB/div Ref 0.00 dBn			Mkr	1 19.868 5 GHz -54.286 dBm	Auto Tune
-10.0					Center Freq 15.000000000 GHz
30.0					Start Freq 10.000000000 GHz
40.0					Stop Fred 20.000000000 GHz
					CF Step 1.00000000 GH <u>Auto</u> Mar
ο ο ο					Freq Offse 0 H:
Start 10.000 GHz #Res BW 1.0 MHz	#VBW :	3.0 MHz	Sweep 17	Stop 20.000 GHz .33 ms (20001 pts)	Scale Type
ASG			STATUS		

Plot 7-252. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

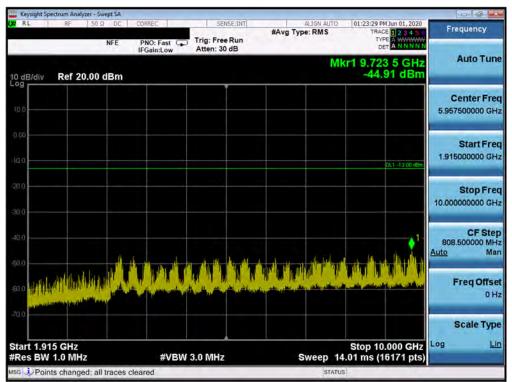
FCC ID: A3LSMN981W	PCTEST Pred Johe part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 149 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 148 of 357
© 2020 PCTEST	•	•		V 9.0 02/01/2019



Band 25/2

Frequency	01:23:20 PM Jun 01, 2020	ALIGN AUTO	SENSE:INT	CORREC	50 Ω DC	RL R
	TRACE 2 3 4 5 6 TYPE A WWWWW DET A NNNNN	#Avg Type: RMS	Trig: Free Run Atten: 30 dB	PNO: Fast 😱 IFGain:Low	NFE	
Auto Tun	r1 1.849 0 GHz -33.12 dBm	Mk			20.00 dBm	dB/div Re
Center Fre 939.500000 MH						0.0
Start Fre 30.000000 MH	DL1 -13.00 aBm					00 10
Stop Fre 1.849000000 GH	1					o.a
CF Ste 181.900000 MH Luto Ma						ο.α ο.α
Freq Offso 0 H	ารให้เราร่างการให้เรารูสุรสารแกรงเหลื	ووجعا بالمحصورة والمقالة والمتعامل والمعرفة	ر الاراد المراجع الم	:Litesqueensites	anteraria	0.0
Scale Typ	Stop 1.8490 GHz .425 ms (3639 pts)		3.0 MHz		łz	tart 0.0300 (Res BW 1.0

Plot 7-253. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



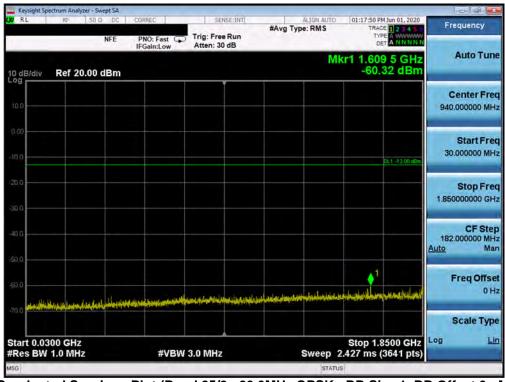
Plot 7-254. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMN981W	PCTEST Preed to be part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNC	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 140 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 149 of 357
© 2020 PCTEST	•	·		V 9.0 02/01/2019



Keysight Spectrum Analyzer -					- 6 ×
X RL RF 50	Ω DC CORREC NFE PNO: Fast IFGain:Low	SENSE:INT Trig: Free Run Atten: 10 dB	#Avg Type: RMS	01:23:40 PM Jun 01, 2020 TRACE 2 3 4 5 0 TYPE A WARMAN DET A NNNNN	Frequency
10 dB/div Ref 0.00			Mkr	1 19.614 5 GHz -57.92 dBm	Auto Tune
-10.0				DL1-13,00 dBm	Center Fred 15.000000000 GHz
20.0 30.0					Start Free 10.000000000 GH:
40.0 \$8,0					Stop Free 20.000000000 GH;
εσ.σ 7α.ο	la po politika, kata dinak katika			ath) we the strange of h	CF Step 1.000000000 GH Auto Mar
80 0 10 10 10 10 10 10 10 10 10 10 10 10	and other and a state	nisian ata mana da	والمتعام والمراجع والمراجع والمراجع	and the state of the	Freq Offse 0 Ha
\$0.0					Scale Type
Start 10.000 GHz #Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep 17	Stop 20.000 GHz .33 ms (20001 pts)	Log <u>Lir</u>
sc 🦆 Points changed; a	Il traces cleared		STATUS	5	

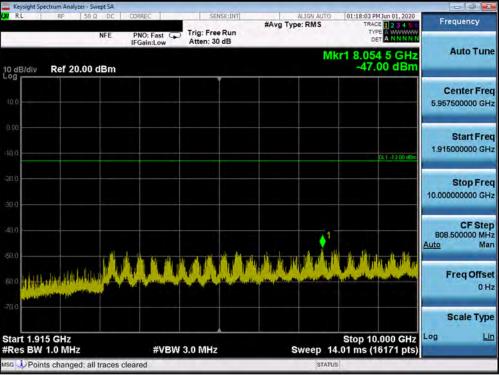
Plot 7-255. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



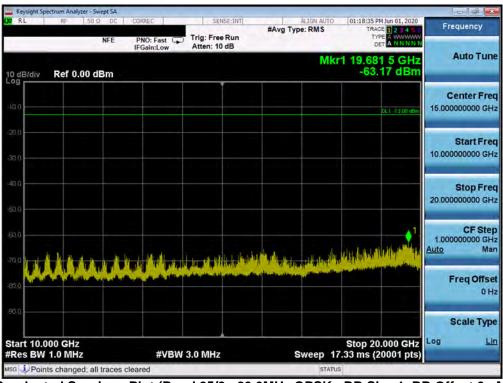
Plot 7-256. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Presidio la partici a	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 150 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 150 of 357
© 2020 PCTEST			V 9.0 02/01/2019





Plot 7-257. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



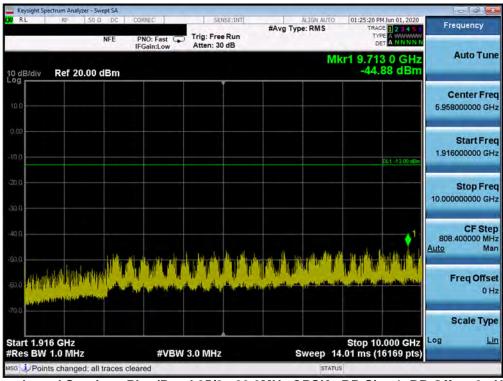
Plot 7-258. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Dread Joine part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 151 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 151 of 357
© 2020 PCTEST		•		V 9.0 02/01/2019



- @ X		-	-		Keysight Spectrum Analyzer - Swep
Frequency	01:25:12 PM Jun 01, 2020 TRACE 1 2 3 4 5 0 TYPE A WHAT	#Avg Type: RMS	SENSE:INT Trig: Free Run Atten: 30 dB	NFE PNO: Fast IFGain:Low	
Auto Tune	cr1 1.778 5 GHz -61.93 dBm	М			0 dB/div Ref 20.00 dB
Center Freq 940.000000 MHz					10.0
Start Freq 30.000000 MHz	CL1 -13 00 dBm				ià a
Stop Freq 1.850000000 GHz					30.0
CF Step 182.000000 MHz <u>Auto</u> Man					40.0
Freq Offset 0 Hz	Anticethographypathintistic	เราะเป็นแปลเป็นและเป็นแปลเป็นและได้เป็น	hungelen witherstein and	ر. مەرىپىلىدىغىرىيە ئىلىدى بىرىپ	200 200 200 attribute and attribute
Scale Type Log <u>Lin</u>	Stop 1.8500 GHz 2.427 ms (3641 pts)	Sweep	3.0 MHz		70 0 Start 0.0300 GHz Res BW 1.0 MHz
		STATU			SG

Plot 7-259. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-260. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981W	PCTEST Pred John pert of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 450 cf 057
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 152 of 357
© 2020 PCTEST	•			V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept SA		and the second second second		- @ ×
NFE F	NO: Fast C Trig: Free Run	ALIGN AUTO 01 #Avg Type: RMS	25:29 PM Jun 01, 2020 TRACE 2 3 4 5 0 TYPE A WANNEN	Frequency
10 dB/div Ref 0.00 dBm	Gain:Low Atten: 10 dB	Mkr1 1	9.457 5 GHz -59.06 dBm	Auto Tune
-100			DL1 -13,00 dBm	Center Fred 15.000000000 GH;
20 0				Start Free 10.000000000 GH
40.0				Stop Fre 20.000000000 GH
20.0 70.0 11. 14. 14. 1 1. 14. 14. 14. 14. 14. 14. 14. 14. 14. 14. 14. 14. 14. 14. 14.	vertregen p _{el} ternition in	nin in the state of the state o	helong and a start	CF Step 1.000000000 GH: <u>Auto</u> Mar
so o an ann ait dh' ann an deanna an air	a a dar ala ante da altera da altera da ante da	the Long and the set of the set of the set of the set of the set	and and the state of the same	Freq Offse 0 H
Start 10.000 GHz		St	op 20.000 Gil2	Scale Type
#Res BW 1.0 MHz	#VBW 3.0 MHz	Sweep 17.33	ms (20001 pts)	1

Plot 7-261. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

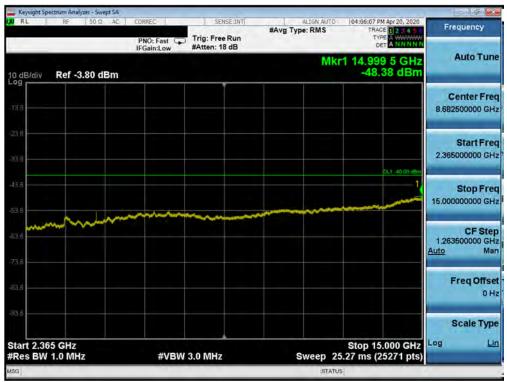
FCC ID: A3LSMN981W	PCTEST Preed to be part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 152 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 153 of 357
© 2020 PCTEST	·	·		V 9.0 02/01/2019



Band 30

X/RL RF 58Ω AC	PNO: Fast	SENSE:INT Trig: Free Run Atten: 30 dB	#Avg Type: RMS	04:05:27 PM Apr 20, 2020 TRACE 1 2 3 4 TYPE A WWWAWW DET A N N N N	Frequency
10 dB/div Ref 20.00 dBm			N	Akr1 2.282 5 GHz -46.93 dBm	Auto Tune
10.0					Center Fre 1.159000000 GH
10,0					Start Fre 30.000000 MH
20.0					Stop Fre 2.288000000 GH
40.0				CL1-4900 @m 1	CF Ste 225.800000 MH Auto Ma
50.0					Freq Offse 0 H
F00 Start 0.030 GHz #Res BW 1.0 MHz	#VBM	3.0 MHz	Swaan	Stop 2.288 GHz 3.011 ms (4517 pts)	Scale Typ

Plot 7-262. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-263. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 154 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 154 of 357
© 2020 PCTEST			V 9.0 02/01/2019





Plot 7-264. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

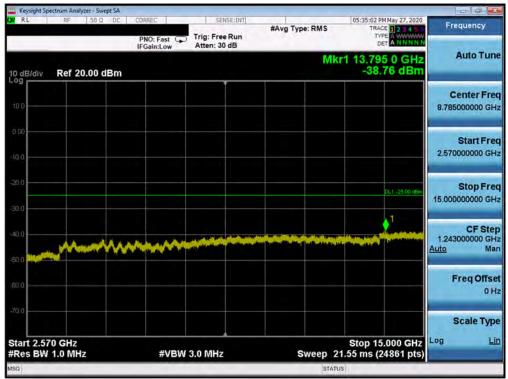
FCC ID: A3LSMN981W	PCTEST Predljobe pert of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 155 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 155 of 357
© 2020 PCTEST	·	•		V 9.0 02/01/2019



Band 7

Keysight Spectrum Analyzer - Swept SA RL RF 50 Ω DC	CORREC	SENSE:INT		05:34:53 PM May 27, 2020	
C	PNO: Fast	Trig: Free Run Atten: 30 dB	#Avg Type: RMS	TRACE 2 3 4 5 6 TYPE A WWWWW DET A NNNNN	Frequency
0 dB/div Ref 20.00 dBm			Mk	r1 2.466 5 GHz -47.33 dBm	Auto Tur
10.0					Center Fre 1.252500000 GR
0.00					Start Fr 30.000000 M
20 0 Sù 0				0L1 -25 00 dBm	Stop Fr 2.475000000 G
4α a					CF St 244.500000 M Auto N
60.0	an fair an				Freq Offs 0
70.0 Start 0.030 GHz #Res BW 1.0 MHz	#VBW 3		Sween-2	Stop 2.475 GHz 260 ms (4891 pts)	Scale Ty
ISG	#VDVV		STATUS		

Plot 7-265. Conducted Spurious Plot (Band 7 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



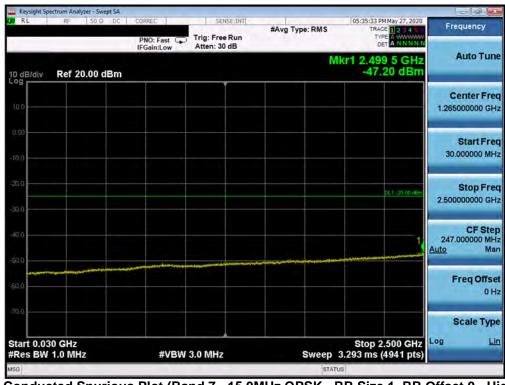
Plot 7-266. Conducted Spurious Plot (Band 7 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMN981W	PCTEST"	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 156 of 257	
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset	Page 156 of 357	
© 2020 PCTEST			V 9.0 02/01/2019	



0 0 2			-	n Analyzer - Swept SA	
Frequency	05:35:15 PM May 27, 2020 TRACE 2 3 4 5 0 TYPE A WANNIN DET A NNNNN	#Avg Type: RMS	SENSE:INT Trig: Free Run Atten: 10 dB	RF 50 Ω DC CORREC PNO: Fast IFGain:Low	UXU RL
z Auto Tun	r1 26.587 5 GHz -51.51 dBm	Mk		ef 0.00 dBm	10 dB/div R
Center Fre 21.000000000 GH					-100
Start Fre 15.000000000 GH	DL1 -25 00 dBm				-20 0 -30 0
Stop Fre 27.000000000 GH	≬ 1				40.0 50.0
CF Ste 1.20000000 GH <u>Auto</u> Ma					80.0 - 11 - 12 - 1
Freq Offse 0 H					80.0
Scale Typ	Stop 27.000 GHz 0.80 ms (24001 pts)	Sivoar 2	3.0 MHz		Start 15.000 #Res BW 1.0
2		Sweep 2	5.0 10112	#VBW	#Res DW 1.0

Plot 7-267. Conducted Spurious Plot (Band 7 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



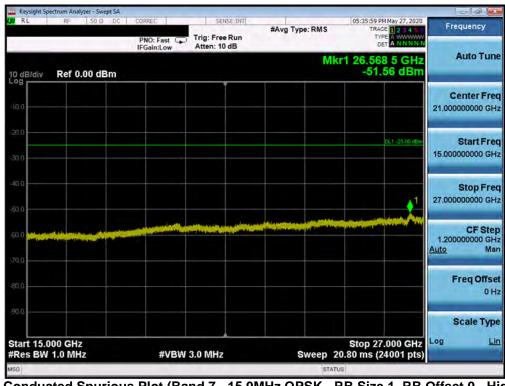
Plot 7-268. Conducted Spurious Plot (Band 7 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981W	PCTEST Predd Johne pert of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNC	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dogo 157 of 257	
1M2005050082-03.A3L	5/5 - 7/15/2020	2020 Portable Handset		Page 157 of 357	
© 2020 PCTEST		•		V 9.0 02/01/2019	



- @ X	ton and the second				Keysight Spectrum Analyzer - Si
Frequency	05:35:45 PM May 27, 2020 TRACE 2 3 4 5 0 TYPE A VMWWW DET A NNNNN	#Avg Type: RMS	SENSE:INT Trig: Free Run Atten: 30 dB	50 Ω DC CORREC PNO: Fast IFGain:Low	X RL RF 50
Auto Tune	r1 14.343 0 GHz -38.82 dBm	Mk			10 dB/div Ref 20.00
Center Fred 8.797500000 GHz					100
Start Fred 2.595000000 GH2					οφό -iασ
Stop Fred 15.00000000 GH2	DL1 -25.00 dBn				-20.0
CF Step 1.240500000 GHz Auto Mar	Landing and the state of the		-	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	-40.0
Freq Offsel 0 Ha					£0.0
Scale Type Log <u>Lir</u>	Stop 15.000 GHz 1.50 ms (24811 pts)	Sweep 2	3.0 MHz	#VBW	.70 0 Start 2.595 GHz #Res BW 1.0 MHz
_		STAT			MSG

Plot 7-269. Conducted Spurious Plot (Band 7 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



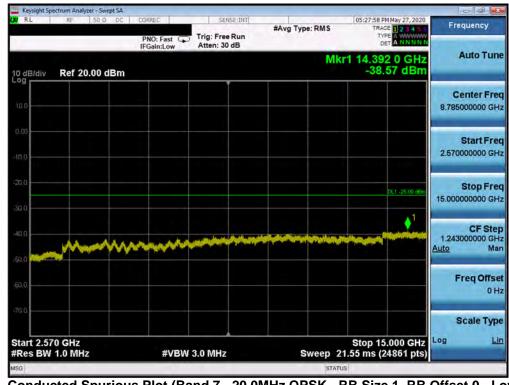
Plot 7-270. Conducted Spurious Plot (Band 7 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981W	PCTEST Predljobe pert of B	MEASUREMENT REPORT (CERTIFICATION)	SAMSONC	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 159 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset		Page 158 of 357
© 2020 PCTEST				V 9.0 02/01/2019



- @ ×	to all he will have be		a second second second	Spectrum Analyzer - Swept SA	
Frequency	05:27:48 PM May 27, 2020 TRACE 2 3 4 5 0 TYPE A W100000 DET A NNNNN	#Avg Type: RMS	Trig: Free Run Atten: 30 dB	RF 50 Ω DC CORREC PNO: Fast C IFGain:Low	RL
Auto Tune	kr1 2.420 0 GHz -47.45 dBm	М			10 dB/div
Center Freq 1.252500000 GHz					10.0
Start Freq 30.000000 MHz					0.00 +10.0
Stop Freq 2.475000000 GHz	DL1 -25 00 dBin				-20.0
CF Step 244.500000 MHz Auto Mar	<u>,</u>				-40,0
Freq Offset 0 Hz					-60 0
Scale Type Log <u>Lin</u>	Stop 2.475 GHz 3.260 ms (4891 pts)	Sweep	W 3.0 MHz		Start 0.030
		STAT			MSG

Plot 7-271. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-272. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMN981W	PCTEST Prod/she part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 450 cf 057
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 159 of 357
© 2020 PCTEST	*	·		V 9.0 02/01/2019



- @ ×	The second second		-	um Analyzer - Swept SA	
Frequency	05:28:12 PM May 27, 2020 TRACE 2 3 4 5 0 TYPE A WAYNOW DET A NNNNN	#Avg Type: RMS	SENSE:INT Trig: Free Run Atten: 10 dB	RF 50 Ω DC CORREC PNO: Fast IFGain:Low	XI RL
Auto Tune	r1 26.602 0 GHz -50.93 dBm	Mk		Ref 0.00 dBm	10 dB/div R
Center Fred 21.000000000 GH					-iao
Start Fred 15.00000000 GH:	DL1 -25 00 dbm				20 0
Stop Free 27.000000000 GH;	∳ ¹				40.0 50.0
CF Step 1.200000000 GH Auto Mar					60.0 70.0
Freq Offse 0 Ha					80.0
Scale Type Log <u>Lir</u>	Stop 27.000 GHz 0.80 ms (24001 pts)	Sween 2	3.0 MHz		Start 15.000 #Res BW 1.0
		STAT			MSG

Plot 7-273. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



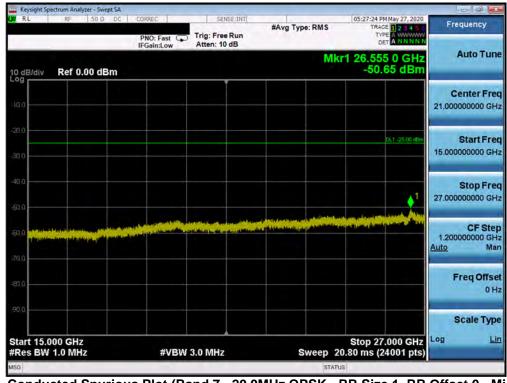
Plot 7-274. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Preid Joine part of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 160 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 160 of 357
© 2020 PCTEST			V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept SA RL RF 50 Ω DC	CORREC	SENSE:INT		05:27:15 PM May 27, 202	
KE A JUST DE		Trig: Free Run Atten: 30 dB	#Avg Type: RMS	TRACE 1 2 3 4 5 TYPE A WWWW DET A NNNN	Frequency
0 dB/div Ref 20.00 dBm			Mk	r1 14.249 0 GH -39.08 dBn	z Auto Tune n
i00					Center Free 8.785000000 GH
0.00					Start Fre 2.570000000 GH
20.0				DL1 -25 00 dB	Stop Fre 15.00000000 GH
	······			*1	CF Ste 1.243000000 GH Auto Ma
30.0					Freq Offso 0 H
700 Start 2.570 GHz #Res BW 1.0 MHz	#VBW 3	3.0 MHz	Sweep 2	Stop 15.000 GH 1.55 ms (24861 pts	Scale Typ

Plot 7-275. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



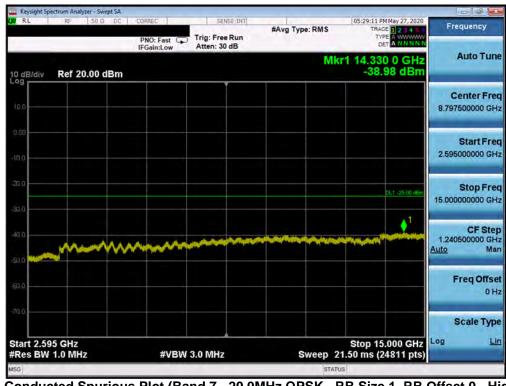
Plot 7-276. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Prod/she part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSONS	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		B 404 (057
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 161 of 357
© 2020 PCTEST	*	·		V 9.0 02/01/2019



- @ X	to a recent to a recent			ectrum Analyzer - Swept SA	
Frequency	05:28:58 PM May 27, 2020 TRACE 2 2 3 4 5 0 TYPE A WISHING DET A NNNNN	#Avg Type: RMS	SENSE:INT Trig: Free Run Atten: 30 dB	RF 50 Ω DC CORREC	RL
Auto Tune	kr1 2.493 5 GHz -47.33 dBm	М		Ref 20.00 dBm	10 dB/div
Center Freq 1.265000000 GHz					10.0
Start Freq 30.000000 MHz					-ia a
Stop Freq 2.500000000 GHz	DL1 -25 00 dBm				-20.0
CF Step 247.000000 MHz <u>Auto</u> Man	1.				-40,0
Freq Offset 0 Hz				******	-60 0
Scale Type Log <u>Lin</u>	Stop 2.500 GHz 3.293 ms (4941 pts)	Sweep	3.0 MHz		.70.0 Start 0.030 #Res BW 1
		STATU			MSG

Plot 7-277. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-278. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	SAMSONS	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 400 at 057
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 162 of 357
© 2020 PCTEST				V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept S				the second second second	- @ ×
20 RL RF 50 Ω D	PNO: Fast	SENSE:INT	#Avg Type: RMS	05:29:24 PM May 27, 2020 TRACE 2 3 4 5 0 TYPE A WARNIN DET A NNNNN	Frequency
10 dB/div Ref 0.00 dBm			М	kr1 26.553 5 GHz -51.00 dBm	Auto Tune
10.0					Center Fred 21.000000000 GHz
30.0				DL1 -25 00 dBm	Start Free 15.000000000 GH:
40 0 50.0					Stop Free 27.000000000 GH
					CF Ste 1.200000000 GH Auto Ma
30.0					Freq Offse 0 H
90 0 Start 15.000 GHz #Res BW 1.0 MHz	#VBW 3	0 MHz	Sween	Stop 27.000 GHz 20.80 ms (24001 pts)	Scale Type Log <u>Li</u> i
SG				TUS	

Plot 7-279. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

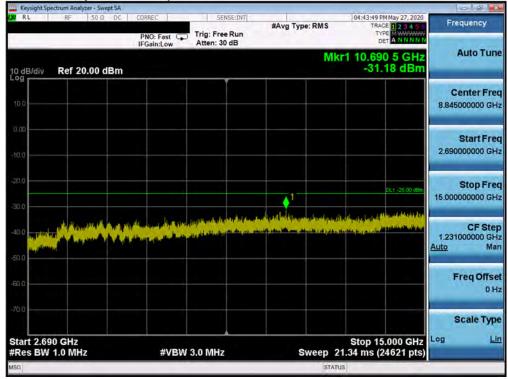
FCC ID: A3LSMN981W	PCTEST Proid Joine part of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 162 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 163 of 357
© 2020 PCTEST			V 9.0 02/01/2019



Band 41

Keysight Spectrum Analyzer - Swe		craine and				- 6 -
KL R- 50Ω	PNO: Fast	SENSE:INT	#Avg Type: RMS	TYPE	2 3 4 5 0 A NNNNN	Frequency
10 dB/div Ref 20.00 d	IFGain:Low	Atten: 30 dB	Π	/kr1 2.163		Auto Tun
10.0						Center Fre 1.252500000 GH
:10.0						Start Fre 30.000000 Mi
30.0					1 -25.00 dBm	Stop Fr 2.475000000 G
40.0	and the second	alayayityitadada ministaga	a in the second is in the second s		en de la constante	CF Sto 244.500000 M Auto M
60.0						Freq Offs 0
70.0 Start 0.030 GHz #Res BW 1.0 MHz	#VBW :	3 0 MHz	Sween	Stop 2.4 3.260 ms (48	75 GHz	Scale Ty
ISG			STA		or pro/	

Plot 7-280. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



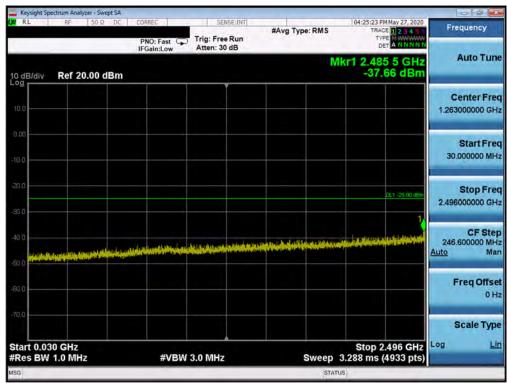
Plot 7-281. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMN981W	PCTEST Presidio la particita	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dege 164 of 257
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	Page 164 of 357
© 2020 PCTEST	-		V 9.0 02/01/2019



Keysight Spectrum Analyzer - Swept SA	An Annual I and the Annual Annual			- 6 ×	
α RL RF 50Ω DC	PNO: Fast Trig: Free Run IEGain:Low Atten: 10 dB	#Avg Type: RMS	04:44:01 PM May 27, 2020 TRACE 2 3 4 5 6 TYPE M WWWWW DET A N N N N	Frequency	
IO dB/div Ref 0.00 dBm	in dameon	Mk	r1 26.592 5 GHz -43.36 dBm	Auto Tune	
10.0				Center Fred 21.000000000 GH:	
30.0			DL1 -25.00 @m	Start Free 15.000000000 GH	
40.0	Weiter an anna an thàin an Anna an Alaiste	-	1	Stop Free 27.000000000 GH	
olifyrnol y felyn ywedd y bry ywedd y briffyr 60 o <mark>allifyrau diw di gyfrei Blwyn, ann dw ff</mark>				CF Ste 1.200000000 GH <u>Auto</u> Ma	
90.0				Freq Offse 0 H	
3000 Start 15.000 GHz #Res BW 1.0 MHz	#VBW 3.0 MHz	Sweep 2	Stop 27.000 GHz 0.80 ms (24001 pts)	Scale Type	
ISG		STAT			

Plot 7-282. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



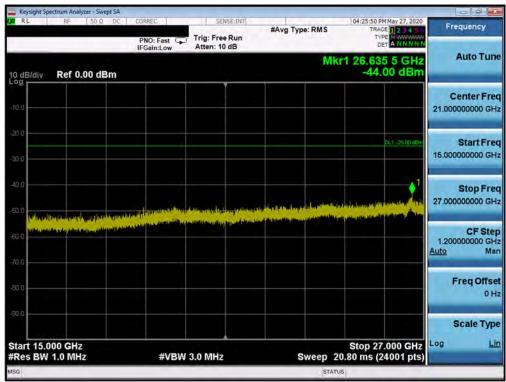
Plot 7-283. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Prod Jobe part of @	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 105 of 257
1M2005050082-03.A3L	5/5 - 7/15/2020	Portable Handset	Page 165 of 357
© 2020 PCTEST			V 9.0 02/01/2019



	Analyzer - Swept SA		-		and and the states	- 0 ×
XI RL RI	F 50 Ω DC	PNO: Fast	SENSE:INT Trig: Free Run Atten: 30 dB	#Avg Type: RMS	04:25:30 PM May 27, 2020 TRACE 1 2 3 4 5 5 TYPE MWWWWW DET A N N N N N	Frequency
10 dB/div Re	f 20.00 dBm	IF Gall.LOW		Mk	r1 14.929 0 GHz -30.84 dBm	Auto Tune
10.0						Center Fred 8.845000000 GHz
10.00						Start Free 2.690000000 GH:
30.0					011-25/00 89-1	Stop Free 15.000000000 GH
40.0			inner an Der Stander and Stand Stand	gan (and gell ^a th All Anna an Anna (a' gan gel a dha anna a Bhunnan a' an Alago Ang bag an	na la company par pla plany sin la la far dal 19 miliones provensi di second dal provensi 19 miliones provensi di second dal provensi	CF Step 1.231000000 GH Auto Mar
60.0						Freq Offse 0 H
5tart 2.690 GI		#VBW	3.0 MHz	Sweep 2	Stop 15.000 GHz 1.34 ms (24621 pts)	Scale Type Log <u>Lit</u>
ISG				STAT		

Plot 7-284. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



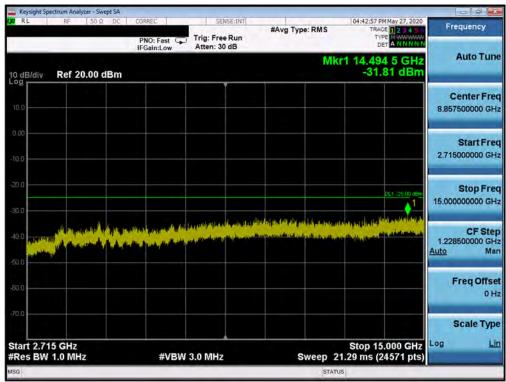
Plot 7-285. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981W	PCTEST Prod/she part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		D
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset		Page 166 of 357
© 2020 PCTEST	•			V 9.0 02/01/2019



- 0 ×	the second second			ctrum Analyzer - Swept SA	
Frequency	04:42:50 PM May 27, 2020 TRACE 2 3 4 5 6 TYPE MWWWWW DET A N N N N N	#Avg Type: RMS	SENSE:INT Trig: Free Run Atten: 30 dB	RF 56 Ω DC CORREC PNO: Fast IFGain:Low	XI RL
Auto Tune	kr1 2.484 0 GHz -38.37 dBm	M	Atten. oo ub	Ref 20.00 dBm	10 dB/div R
Center Freq 1.263000000 GHz					10.0
Start Freq 30.000000 MHz					-0.00
Stop Freq 2.49600000 GHz	DL1 -25.00 dBm				-20.0
CF Step 246.600000 MHz Auto Man	a se andre i stati al a factoria da se de se	an a	internet and support of the second	ngantantintintintation and an additionation	-40.0
Freq Offset 0 Hz					-60,0
Scale Type Log <u>Lin</u>	Stop 2.496 GHz 3.288 ms (4933 pts)	Sween	3.0 MHz		Start 0.030 (#Res BW 1.0
-		STATU			MSG

Plot 7-286. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 99 - High Channel)



Plot 7-287. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 99 – High Channel)

FCC ID: A3LSMN981W	PCTEST Proid Jobe part of B	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 167 of 357
1M2005050082-03.A3L	5/5 – 7/15/2020	Portable Handset	
© 2020 PCTEST V 9.0 02/01/2019			