

Plot 7-368. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 118)



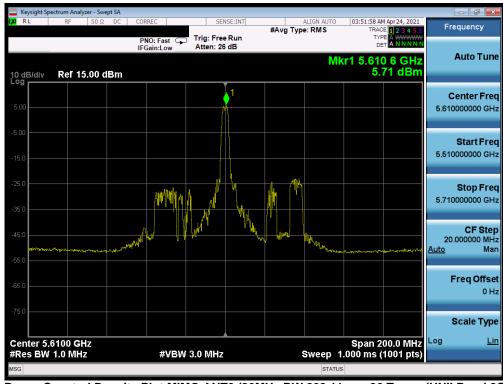
Plot 7-369. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 142)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		De 20 054 of 440
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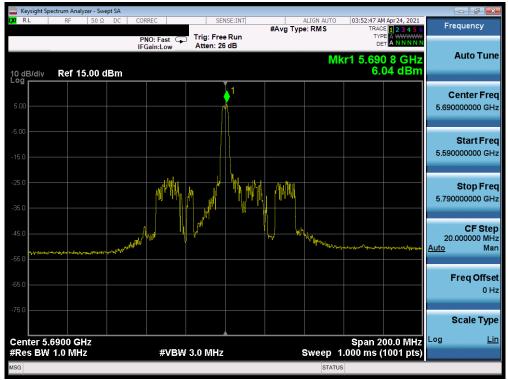
Plot 7-370. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 106)



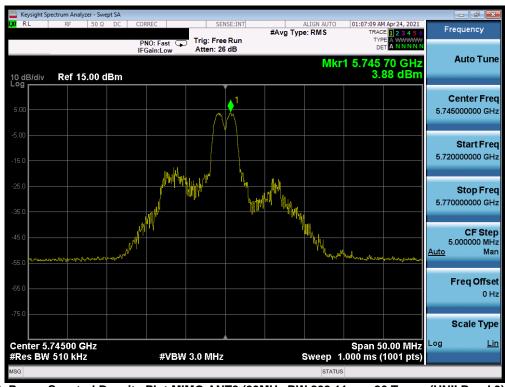
Plot 7-371. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMF711B	Provid to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 055 of 140
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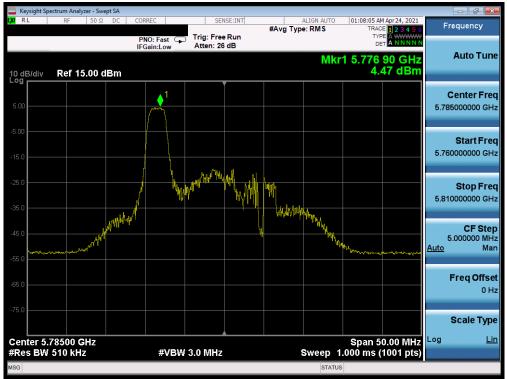
Plot 7-372. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 138)



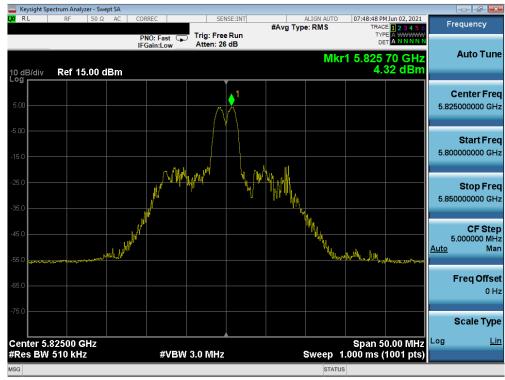
Plot 7-373. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 149)

FCC ID: A3LSMF711B	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 256 of 412
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Plot 7-374. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 157)



Plot 7-375. Power Spectral Density Plot MIMO ANT2 (20 MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 165)

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 257 of 442
1M2104130035-13.A3L	04/12/2021 - 06/04/2021	Portable Handset		Page 257 of 413
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Plot 7-376. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 151)



Plot 7-377. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 159)

FCC ID: A3LSMF711B	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 259 of 412
1M2104130035-13.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 258 of 413
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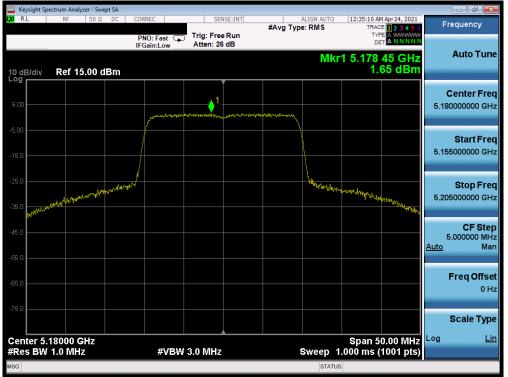


Plot 7-378. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 155)

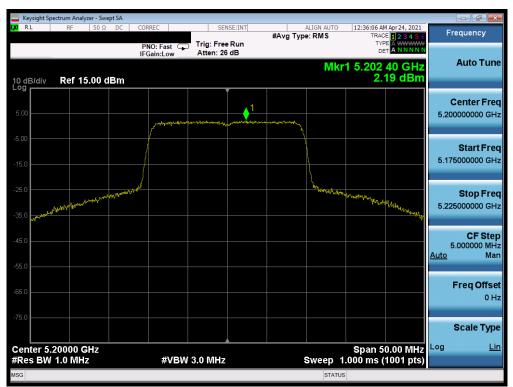
FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Page 259 of 413
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## MIMO Antenna-1 Power Spectral Density Measurements (Full Tones) – N



Plot 7-379. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 36)



Plot 7-380. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 40)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 260 of 442
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Keysight Spectrum Analyzer - Swept SA				
💢 RL RF 50Ω AC		#Avg Type	E: RMS TRAC	<sup>4 Jun 02, 2021</sup> <sup>E</sup> ■ 2 3 4 5 6 Frequency
10 dB/div Ref 15.00 dBm	PNO: Fast Trig: Free IFGain:Low Atten: 26		Mkr1 5.247	Auto Tune
5.00	province and a second s	1		Center Freq 5.240000000 GHz
-15.0				Start Freq 5.215000000 GHz
-25.0			marken and and and and and and and and and an	5.265000000 GHz
-45.0				CF Step 5.00000 MHz <u>Auto</u> Man
-65.0				Freq Offset 0 Hz
-75.0				Scale Type
Center 5.24000 GHz #Res BW 1.0 MHz	#VBW 3.0 MHz		Span 5)  ) Sweep   1.000 ms	0.00 MHz Log Lin 1001 pts)
MSG			STATUS	

Plot 7-381. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 48)



Plot 7-382. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 38)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	N: Test Dates: EUT Type:			Daga 264 of 412
1M2104130035-13.A3L	04/12/2021 - 06/04/2021	Portable Handset		Page 261 of 413
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Keysight Spectrum Analyzer - Swept SA					
LX RL RF 50Ω AC	CORREC	SENSE:INT	ALIGN AUTO #Avg Type: RMS	08:11:30 PM Jun 02, 2021 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast 😱 IFGain:Low	Trig: Free Run Atten: 26 dB		DET A NNNN	
10 dB/div Ref 15.00 dBm			M	r1 5.233 1 GHz -0.69 dBm	Auto Tune
5.00		1	marana		Center Freq 5.230000000 GHz
-15.0					Start Freq 5.180000000 GHz
-25.0	sourced		Jay manufacture	man white and the second second	<b>Stop Freq</b> 5.280000000 GHz
-45.0					CF Step 10.000000 MHz <u>Auto</u> Man
-65.0					<b>Freq Offset</b> 0 Hz
-75.0					Scale Type
Center 5.23000 GHz #Res BW 1.0 MHz	#VBW	3.0 MHz	Sween 1	Span 100.0 MHz .000 ms (1001 pts)	Log <u>Lin</u>
MSG	#VDVV		STATUS		

Plot 7-383. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 46)



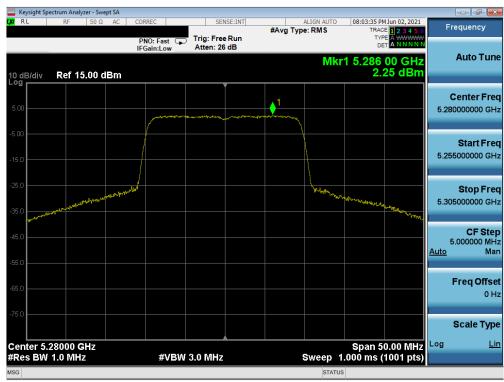
Plot 7-384. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 42)

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dama 000 of 110
1M2104130035-13.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 262 of 413
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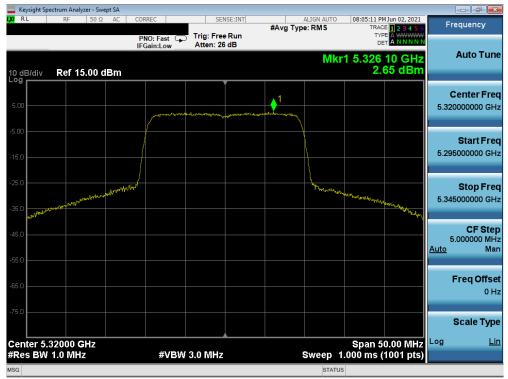
Plot 7-385. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 52)



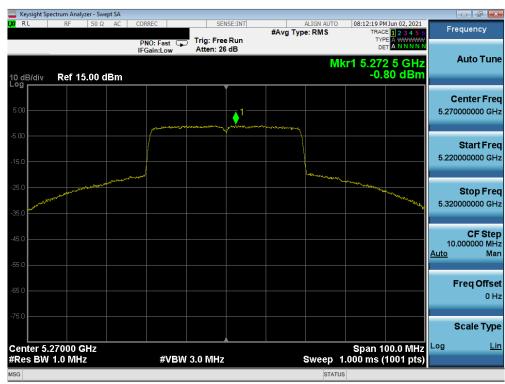
Plot 7-386. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 56)

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dega 262 of 442
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Plot 7-387. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 64)



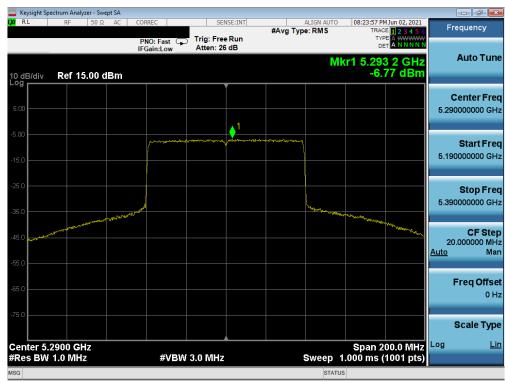
Plot 7-388. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 54)

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager			
Test Report S/N:	Test Dates:	EUT Type:	Dega 204 of 442			
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🔤 Keysight Spectrum Ana									
L <mark>XI</mark> RL RF	50 Ω AC	CORREC		ISE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	1 Jun 02, 2021 E 1 2 3 4 5 6	Frequency
10 dB/div Ref 1	5.00 dBm	PNO: Fast G	Trig: Free Atten: 26			Mk	DE	5 0 GHz 79 dBm	Auto Tune
5.00		morrow	and a second	1-					Center Freq 5.310000000 GHz
-15.0									Start Freq 5.260000000 GHz
-25.0	an and the second second second	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				Mary Marcard	- AVE-UPVAMA	and more thank	<b>Stop Freq</b> 5.36000000 GHz
-45.0								-Uner	CF Step 10.000000 MHz <u>Auto</u> Man
-65.0									<b>Freq Offset</b> 0 Hz
-75.0									Scale Type
Center 5.31000 ( #Res BW 1.0 MH		#VBW	3.0 MHz			Sweep 1	5 Span .000 m <u>s (</u>	00.0 MHz 1001 pts)	Log <u>Lin</u>
MSG						STATUS			

Plot 7-389. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 62)



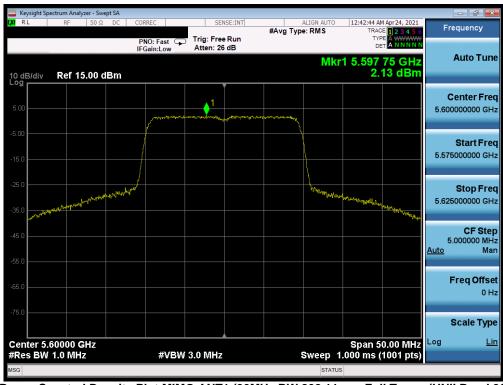
Plot 7-390. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 58)

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager			
Test Report S/N:	Test Dates:	EUT Type:	Dage 205 of 442			
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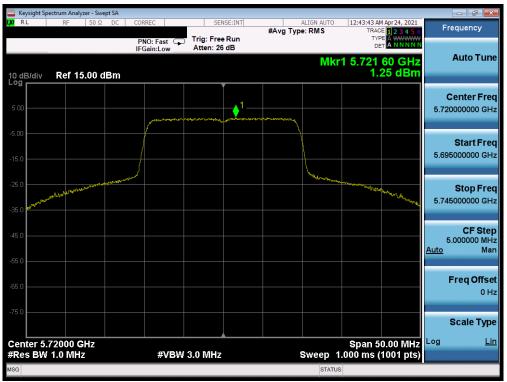
Plot 7-391. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 100)



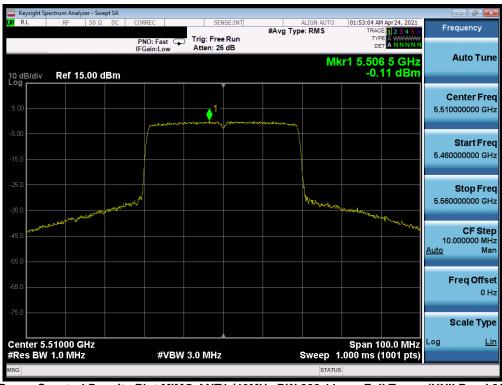
Plot 7-392. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 120)

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager			
Test Report S/N:	Test Dates:	EUT Type:	Dama 000 of 110			
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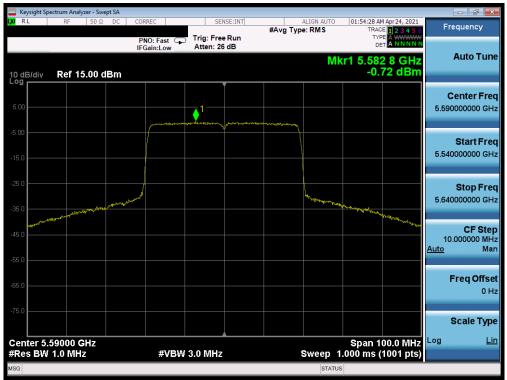
Plot 7-393. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 144)



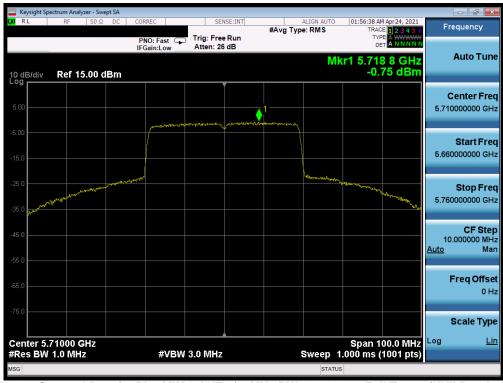
Plot 7-394. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 102)

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager			
Test Report S/N:	Test Dates:	EUT Type:	D 007			
1M2104130035-13.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 267 of 413			
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Plot 7-395. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 118)



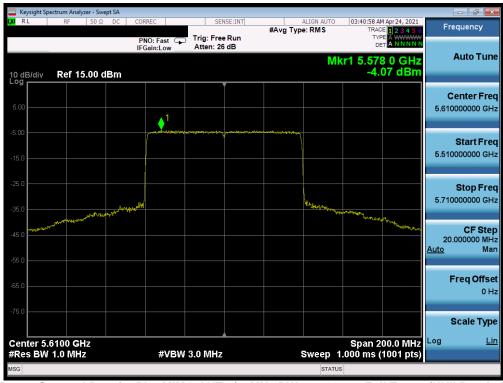
Plot 7-396. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 142)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager			
Test Report S/N:	Test Dates:	EUT Type:	Dama 000 of 110			
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Plot 7-397. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 106)



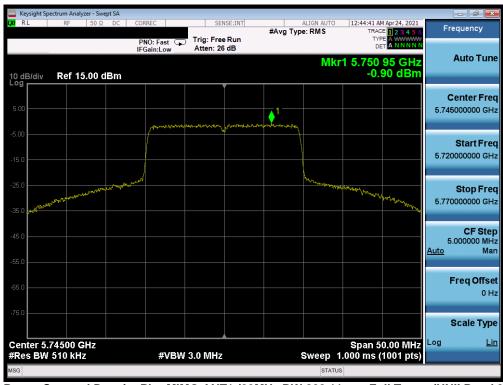
Plot 7-398. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 122)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager			
Test Report S/N:	Test Dates:	EUT Type:	Dama 000 of 110			
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		trum Anal											
<b>lxi</b> Rl		RF	50 Ω	DC	CORREC		SEN	ISE:INT	#Avg Typ	ALIGN AUTO		M Apr 24, 2021	Frequency
					PNO: Fa		Trig: Free Atten: 26				TY	PE A WWWWW ET A N N N N N	
					IF Galli.L	UW	/	ub		M	kr1 5.71	9 0 GHz	Auto Tune
10 dE Log r	3/div	Ref 1	5.00 d	Bm							-3.	64 dBm	
LVy													Center Fred
5.00													5.69000000 GHz
5 00								. Li como de la Maria	↓ 1				
-5.00													Start Fred
-15.0													5.59000000 GHz
-25.0										ł			Stop Fred
-35.0				تعليانيان.	w					happener	and the second second		5.79000000 GHz
-55.0		mon	North March	<b>₩</b>							" May	and manufactures	
-45.0	North Car												CF Step 20.000000 MHz
													<u>Auto</u> Mar
-55.0													
-65.0													Freq Offset
													0 Hz
-75.0													Coole Trme
													Scale Type
		900 G								_	Span 2	00.0 MHz	Log <u>Lir</u>
	S BW 1	1.0 MH	Z		#	ABM	3.0 MHz					(1001 pts)	
MSG										STATU	s		

Plot 7-399. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 138)



Plot 7-400. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 149)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		De ac 070 ef 140	
1M2104130035-13.A3L	04/12/2021 - 06/04/2021	Portable Handset		Page 270 of 413	
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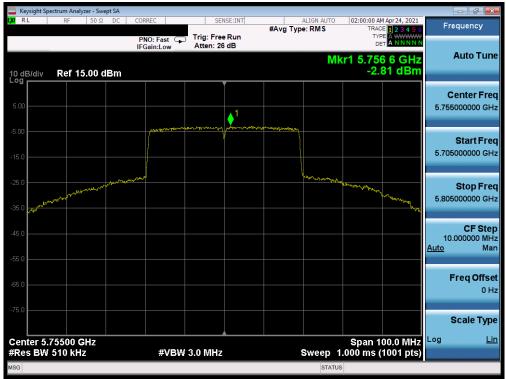
Plot 7-401. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 157)



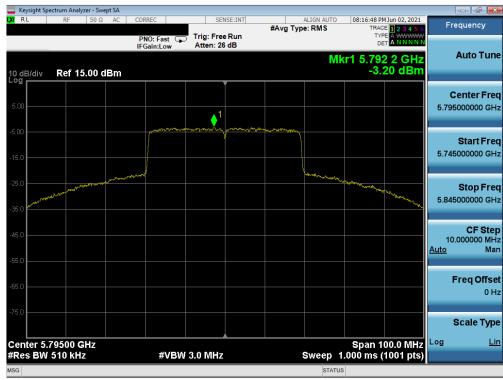
Plot 7-402. Power Spectral Density Plot MIMO ANT1 (20 MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 165)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 071 of 410
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Plot 7-403. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 151)



Plot 7-404. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 159)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dega 272 of 442
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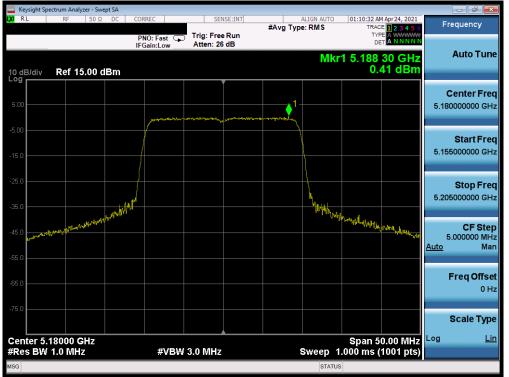


Plot 7-405. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 155)

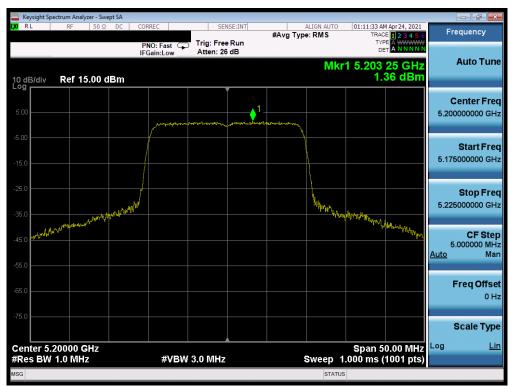
FCC ID: A3LSMF711B	PCTEST* Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 272 of 412
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## MIMO Antenna-2 Power Spectral Density Measurements (Full Tones) - N



Plot 7-406. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 36)



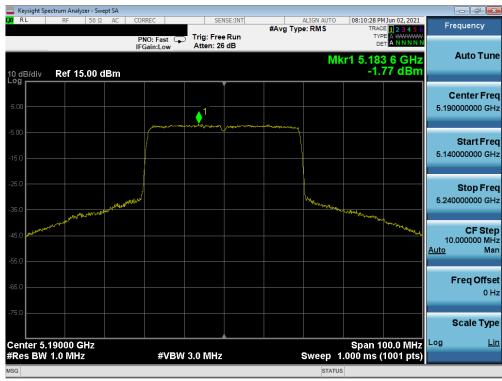
Plot 7-407. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 40)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 274 of 412
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Keysight Spectrum Analyzer - Swept SA						- ē ×
LXI RE 50Ω AC	CORREC	SENSE	#Avg Typ		54:37 PM Jun 02, 2021 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast 😱 IFGain:Low	Trig: Free R Atten: 26 d			DET A WWWWW	
10 dB/div Ref 15.00 dBm				Mkr1 5.	236 20 GHz 2.93 dBm	Auto Tune
5.00	- Analogo -	1	manan mananan and	<u> </u>		Center Freq 5.240000000 GHz
-5.00						Start Freq 5.215000000 GHz
-25.0	N <sup>d</sup>			newerman	Muncher and a construction of the construction	<b>Stop Freq</b> 5.265000000 GHz
-45.0					- Conference of the second sec	<b>CF Step</b> 5.000000 MHz <u>Auto</u> Man
-65.0						<b>Freq Offset</b> 0 Hz
-75.0						Scale Type
Center 5.24000 GHz #Res BW 1.0 MHz	#VBW	3.0 MHz		Sweep 1.000	oan 50.00 MHz ms (1001 pts)	Log <u>Lin</u>
MSG	<i>"•</i> Dv•			STATUS	nio (1001 pts)	

Plot 7-408. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 48)



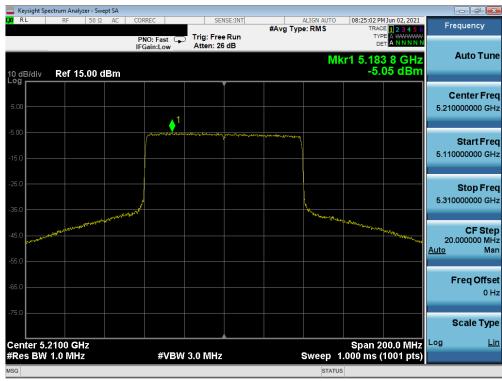
Plot 7-409. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 38)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dana 075 at 140
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🔤 Keysight Spectrum Analyzer - Swept SA	
X         RF         50 Ω         AC         CORREC         SENSE:INT         ALIGN AUTO         08:11:06 PM Jun 02, 2021           #Avg Type: RMS         TRACE         2 3 4 5	Frequency
PNO: Fast Trig: Free Run TYPE A WWWWW IFGain:Low Atten: 26 dB DET A NNNN	
Mkr1 5.224 2 GH	Auto Tune
10 dB/div Ref 15.00 dBm 0.38 dBm	
	Center Freq
5.00	5.230000000 GHz
and the second sec	
-5.00	Start Freq
-15.0	5.180000000 GHz
25.0	Stop Freq
-35.0	5.280000000 GHz
-35.0	
-45.0	CF Step 10.000000 MHz
55 Q	<u>Auto</u> Man
-55.0	
-65.0	Freq Offset 0 Hz
	0 H2
-75.0	Scale Type
Center 5.23000 GHz Span 100.0 MHz Span 100.0 MHz #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 1.000 ms (1001 pts	Log <u>Lin</u>
**C* D* 1.0 min2 ** U* 3.0 min2 Sweep 1.000 ms (100 ms	

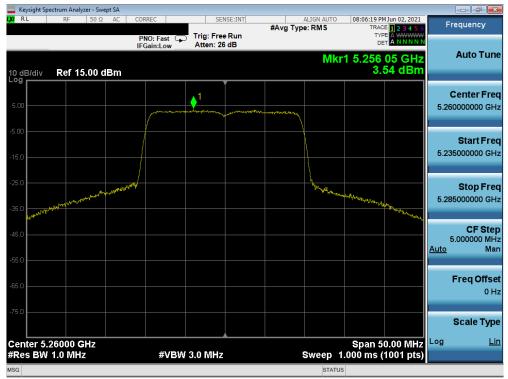
Plot 7-410. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 46)



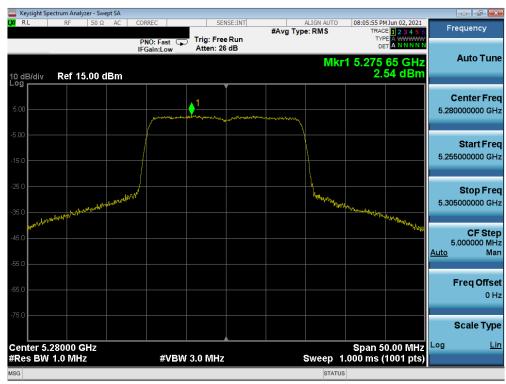
Plot 7-411. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 42)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 276 of 412
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Plot 7-412. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 52)



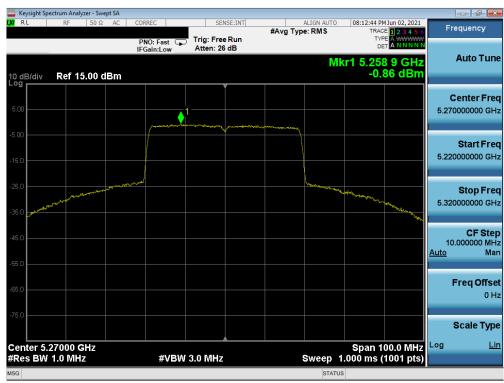
Plot 7-413. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 56)

FCC ID: A3LSMF711B	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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1M2104130035-13.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 277 of 413
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Mail         RF         50 Ω         AC         CORREC         SENSE:INT         ALIGN AUTO         08:04:49 PM Jun 02, 2021         Frequence           PNO: Fast         PNO: Fast         Trig: Free Run         Atten: 26 dB         Trig: Sense: 10.00 GHz         Atten: 26 dB         Atten: 27.00 GHz         Atten: 26 dB         Atten: 27.00 GHz         Atten
PNO: Fast         Agent         Der ANNNN           IFGain:Low         Atten: 26 dB         Der ANNNN           Mkr1 5.316 00 GHz         Auto 1           10 dB/div         Ref 15.00 dBm         3.71 dBm
10 dB/div Ref 15.00 dBm 3.71 dBm
5.00 <b>Center</b> 5.320000000
-5.00 Start -15.0 Start
-25 0 -36 0
-45.0
-65.0 Freq O
-75.0 Scale*
Center 5.32000 GHz Span 50.00 MHz Log #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 1.000 ms (1001 pts)

Plot 7-414. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 64)



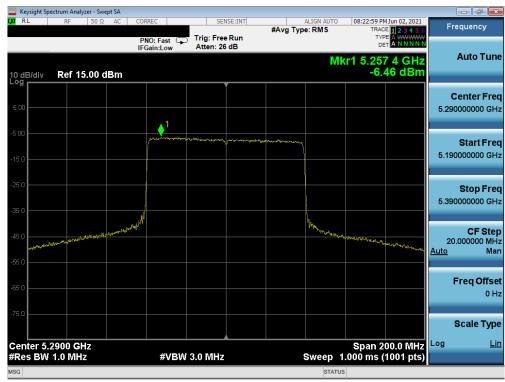
Plot 7-415. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 54)

FCC ID: A3LSMF711B	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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	ight Spect	rum Analyzer - S									- 6 ×
LXI RL		RF 50 9	Ω AC CO	DRREC	SEI	ISE:INT	#Avg Typ	ALIGN AUTO		4 Jun 02, 2021	Frequency
			l	PNO: Fast 📮 FGain:Low	Trig: Free Atten: 26				TYP		
10 dB/ Log 🗖	/div	Ref 15.00	dBm					Mk	r1 5.30 -0.	3 6 GHz 35 dBm	Auto Tune
5.00 -				provention	1-	por gamenta	-				Center Freq 5.310000000 GHz
-5.00 -											<b>Start Freq</b> 5.260000000 GHz
-25.0	Mar Margaret	way the man share and	and the constant of the	/				hilly by hundren on	and with many walkers	the open of the low of	<b>Stop Freq</b> 5.36000000 GHz
-45.0											CF Step 10.000000 MHz <u>Auto</u> Man
-65.0											<b>Freq Offset</b> 0 Hz
-75.0											Scale Type
		000 GHz							Span 1	00.0 MHz	Log <u>Lin</u>
#Res	BW 1	.0 MHz		#VBV	/ 3.0 MHz			Sweep 1	.000 ms (	1001 pts)	
MSG								STATUS	5		

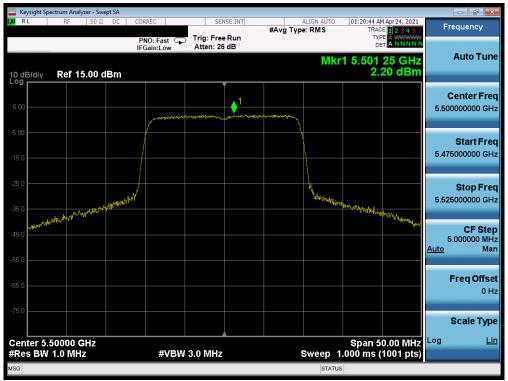
Plot 7-416. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 62)



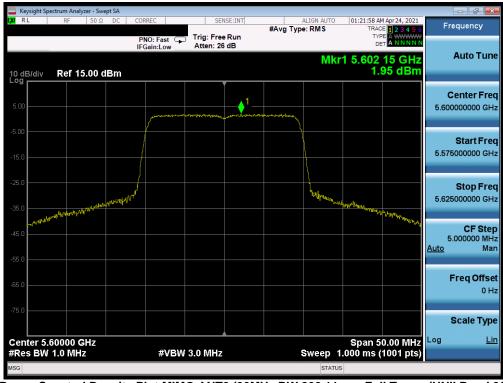
Plot 7-417. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 270 of 412
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Plot 7-418. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 100)



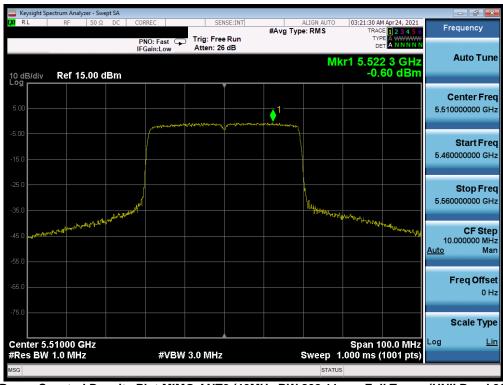
Plot 7-419. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 120)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager			
Test Report S/N:	Test Dates:	EUT Type:	Dega 200 of 442			
1M2104130035-13.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 280 of 413			
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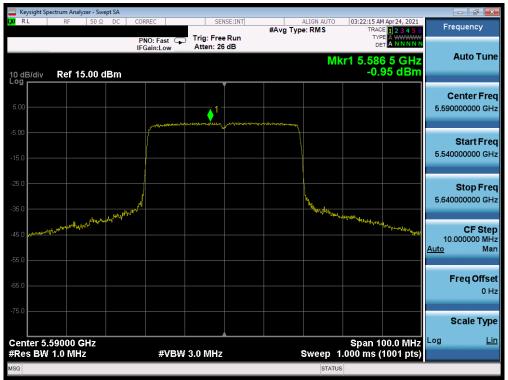
Plot 7-420. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 144)



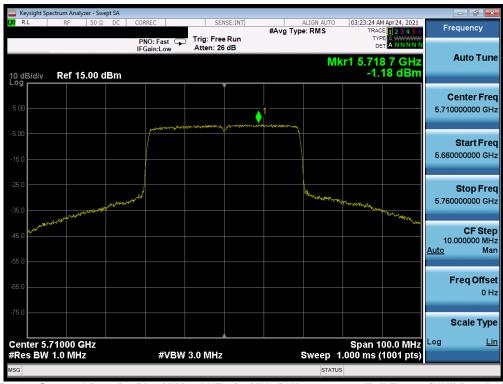
Plot 7-421. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 102)

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dama 004 of 440
1M2104130035-13.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 281 of 413
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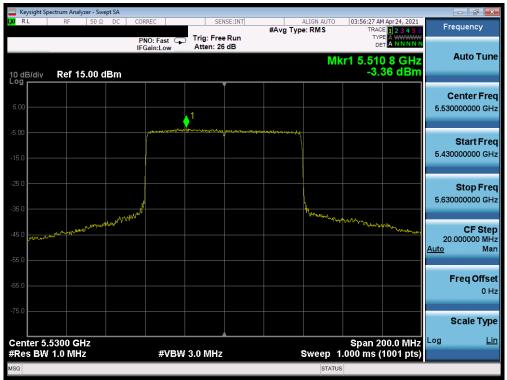
Plot 7-422. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 118)



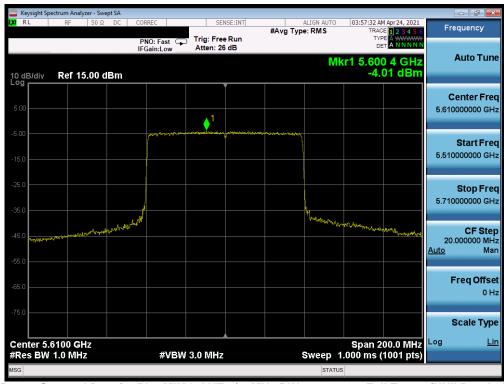
Plot 7-423. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 142)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 292 of 412
1M2104130035-13.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 282 of 413
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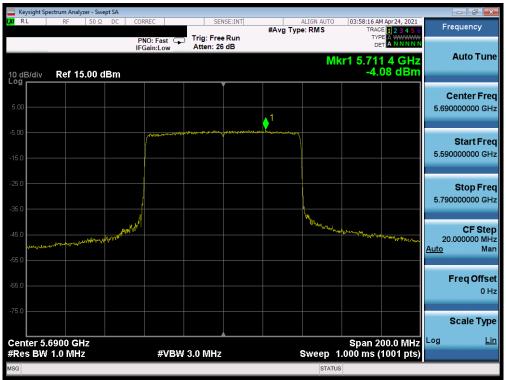
Plot 7-424. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 106)



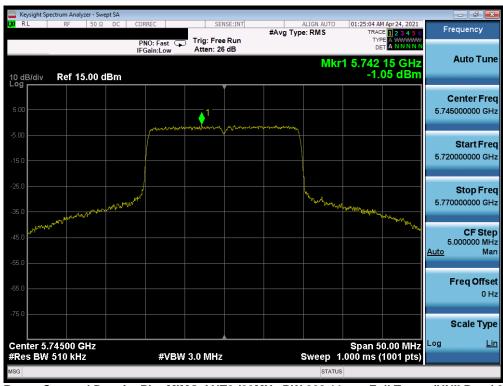
Plot 7-425. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 122)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by:     Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dago 202 of 412
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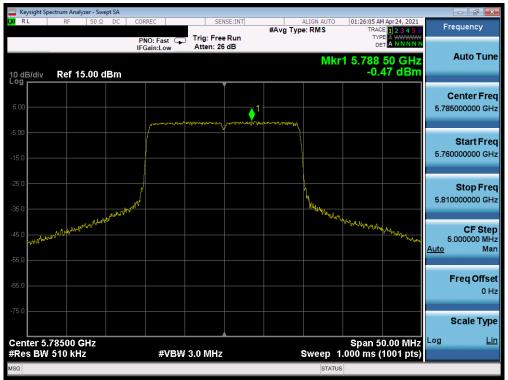
Plot 7-426. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 138)



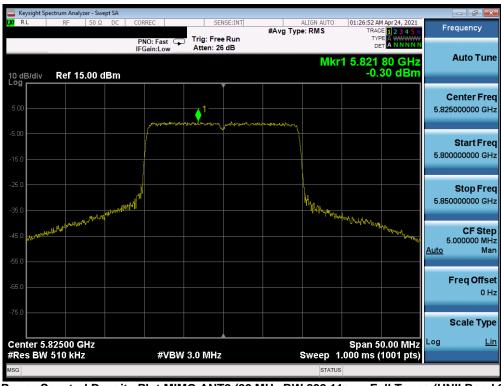
Plot 7-427. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 149)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dama 004 of 440
1M2104130035-13.A3L	04/12/2021 - 06/04/2021	Portable Handset		Page 284 of 413
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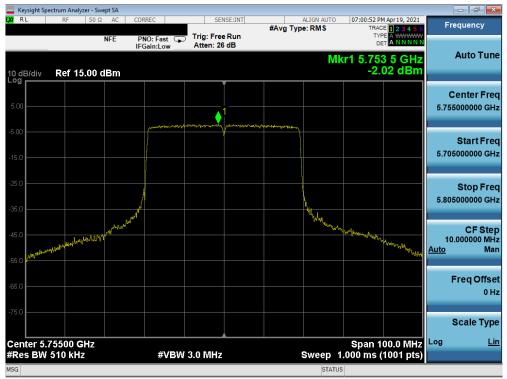
Plot 7-428. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 157)



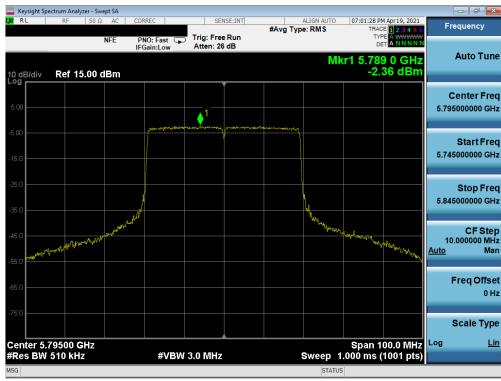
Plot 7-429. Power Spectral Density Plot MIMO ANT2 (20 MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 165)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		De 20 005 of 140
1M2104130035-13.A3L	04/12/2021 - 06/04/2021	Portable Handset		Page 285 of 413
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Plot 7-430. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 151)



Plot 7-431. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 159)

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 200 of 412
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Plot 7-432. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 155)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 207 of 442
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	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
	5180	36	ax (20MHz)	26T	MCS0	5.38	5.27	8.34	11.00	-2.66
_	5200	40	ax (20MHz)	26T	MCS0	5.66	4.74	8.24	11.00	-2.76
1 pr	5240	48	ax (20MHz)	26T	MCS0	6.64	5.90	9.30	11.00	-1.70
Band	5190	38	ax (40MHz)	26T	MCS0	6.90	5.81	9.40	11.00	-1.60
	5230	46	ax (40MHz)	26T	MCS0	7.84	6.17	10.09	11.00	-0.91
	5210	42	ax (80MHz)	26T	MCS0	5.94	7.31	9.69	11.00	-1.31
	5260	52	ax (20MHz)	26T	MCS0	7.05	5.94	9.54	11.00	-1.46
٩	5280	56	ax (20MHz)	26T	MCS0	6.92	6.04	9.51	11.00	-1.49
Band 2A	5320	64	ax (20MHz)	26T	MCS0	7.51	6.25	9.94	11.00	-1.06
gan	5270	54	ax (40MHz)	26T	MCS0	7.65	6.36	10.06	11.00	-0.94
	5310	62	ax (40MHz)	26T	MCS0	7.33	6.13	9.78	11.00	-1.22
	5290	58	ax (80MHz)	26T	MCS0	6.33	4.99	8.72	11.00	-2.28
	5500	100	ax (20MHz)	26T	MCS0	6.74	6.47	9.62	11.00	-1.38
	5600	120	ax (20MHz)	26T	MCS0	5.63	5.63	8.64	11.00	-2.36
	5720	144	ax (20MHz)	26T	MCS0	7.30	6.28	9.83	11.00	-1.17
2C	5510	102	ax (40MHz)	26T	MCS0	7.34	6.51	9.96	11.00	-1.04
Band	5590	118	ax (40MHz)	26T	MCS0	7.65	6.51	10.13	11.00	-0.87
Ba	5710	142	ax (40MHz)	26T	MCS0	8.06	6.03	10.17	11.00	-0.83
	5530	106	ax (80MHz)	26T	MCS0	7.21	6.51	9.88	11.00	-1.12
	5610	122	ax (80MHz)	26T	MCS0	7.47	6.17	9.88	11.00	-1.12
	5690	138	ax (80MHz)	26T	MCS0	6.33	7.12	9.75	11.00	-1.25

 Table 7-90. Bands 1, 2A, 2C MIMO Conducted Power Spectral Density Measurements MIMO (26 Tones)

	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Permissible	Margin [dB]
	5745	149	ax (20MHz)	26T	MCS0	5.64	3.62	7.75	30.00	-22.25
	5785	157	ax (20MHz)	26T	MCS0	4.55	4.79	7.68	30.00	-22.32
	5825	165	ax (20MHz)	26T	MCS0	4.89	5.09	8.00	30.00	-22.00
Band	5755	151	ax (40MHz)	26T	MCS0	5.53	6.76	9.20	30.00	-20.80
	5795	159	ax (40MHz)	26T	MCS0	4.48	5.92	8.27	30.00	-21.73
	5775	155	ax (80MHz)	26T	MCS0	5.51	5.16	8.35	30.00	-21.65

Table 7-91. Band 3 MIMO Conducted Power Spectral Density Measurements MIMO (26 Tones)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: Test Dates:		EUT Type:	Dama 000 of 440
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## Summed MIMO Power Spectral Density Measurements (Full Tones) – Q

	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
	5180	36	ax (20MHz)	242T	MCS0	2.29	1.97	5.14	11.00	-5.86
	5200	40	ax (20MHz)	242T	MCS0	2.17	2.03	5.11	11.00	-5.89
pd 1	5240	48	ax (20MHz)	242T	MCS0	2.89	2.23	5.58	11.00	-5.42
Band 1	5190	38	ax (40MHz)	484T	MCS0	0.36	-1.44	2.56	11.00	-8.44
	5230	46	ax (40MHz)	484T	MCS0	1.49	-0.63	3.57	11.00	-7.43
	5210	42	ax (80MHz)	996T	MCS0	-3.36	-4.73	-0.98	11.00	-11.98
	5260	52	ax (20MHz)	242T	MCS0	3.60	2.27	6.00	11.00	-5.00
⊲	5280	56	ax (20MHz)	242T	MCS0	3.64	2.17	5.98	11.00	-5.02
d 2	5320	64	ax (20MHz)	242T	MCS0	3.61	2.35	6.04	11.00	-4.96
Band 2A	5270	54	ax (40MHz)	484T	MCS0	-0.87	-0.22	2.48	11.00	-8.52
	5310	62	ax (40MHz)	484T	MCS0	-1.22	-1.59	1.61	11.00	-9.39
	5290	58	ax (80MHz)	996T	MCS0	-6.36	-5.51	-2.90	11.00	-13.90
	5500	100	ax (20MHz)	242T	MCS0	3.13	3.25	6.20	11.00	-4.80
	5600	120	ax (20MHz)	242T	MCS0	2.27	2.79	5.55	11.00	-5.45
	5720	144	ax (20MHz)	242T	MCS0	3.39	2.52	5.99	11.00	-5.01
SC	5510	102	ax (40MHz)	484T	MCS0	0.14	-0.05	3.06	11.00	-7.94
Band 2C	5590	118	ax (40MHz)	484T	MCS0	0.79	0.03	3.44	11.00	-7.56
Ba	5710	142	ax (40MHz)	484T	MCS0	0.27	1.24	3.79	11.00	-7.21
	5530	106	ax (80MHz)	996T	MCS0	-3.29	-3.79	-0.52	11.00	-11.52
	5610	122	ax (80MHz)	996T	MCS0	-3.10	-4.38	-0.68	11.00	-11.68
	5690	138	ax (80MHz)	996T	MCS0	-1.62	-0.41	2.04	11.00	-8.96

Table 7-92. Bands 1, 2A, 2C MIMO Conducted Power Spectral Density Measurements MIMO (Full Tones)

	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	IdBmi	Max Permissible Power Density [dBm/500kHz]	
	5745	149	ax (20MHz)	242T	MCS0	2.03	0.07	4.17	30.00	-25.83
	5785	157	ax (20MHz)	242T	MCS0	0.60	0.69	3.66	30.00	-26.34
	5825	165	ax (20MHz)	242T	MCS0	0.92	1.35	4.15	30.00	-25.85
Band	5755	151	ax (40MHz)	484T	MCS0	-1.87	0.29	2.35	30.00	-27.65
	5795	159	ax (40MHz)	484T	MCS0	-1.61	-0.84	1.80	30.00	-28.20
	5775	155	ax (80MHz)	996T	MCS0	-3.49	-3.50	-0.48	30.00	-30.48

Table 7-93. Band 3 MIMO Conducted Power Spectral Density Measurements MIMO (Full Tones) Note:

## Sample MIMO Calculation:

Assuming the average conducted power spectral density was measured to be 5.88 dBm for Antenna-1 and 6.27 dBm for Antenna-2.

Antenna 1 + Antenna 2 = MIMO

(5.88 dBm + 6.27 dBm) = (3.87 mW + 4.24 mW) = 8.11mW = 9.09 dBm

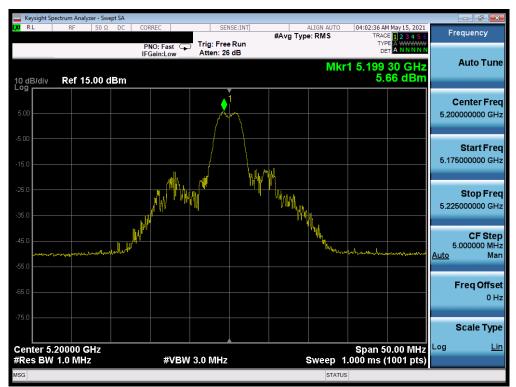
FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 289 of 413
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## MIMO Antenna-1 Power Spectral Density Measurements (26 Tones) – Q



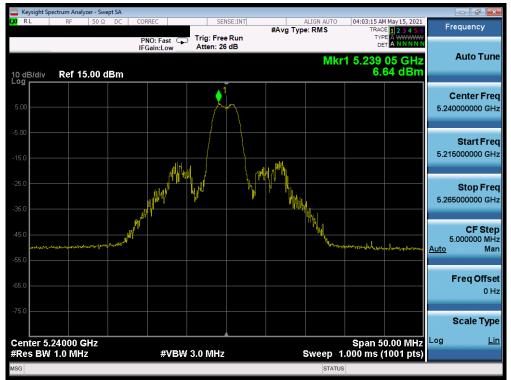
Plot 7-433. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 36)



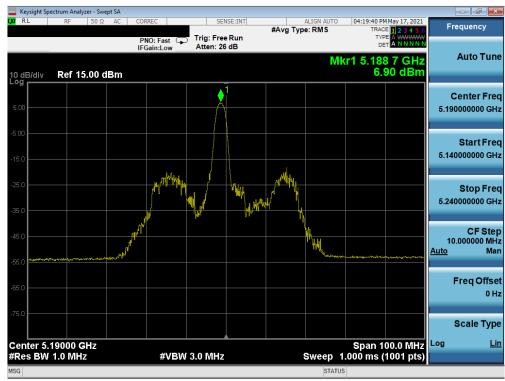
Plot 7-434. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 40)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Plot 7-435. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 48)



Plot 7-436. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 38)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 201 of 112
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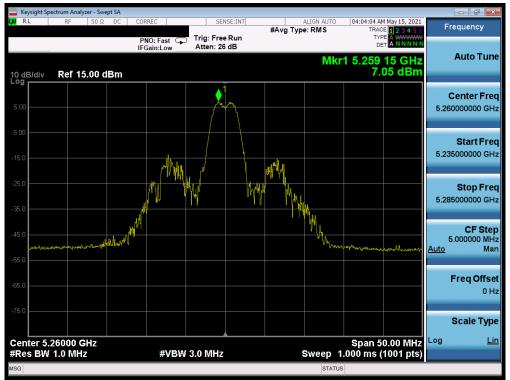
Plot 7-437. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 46)



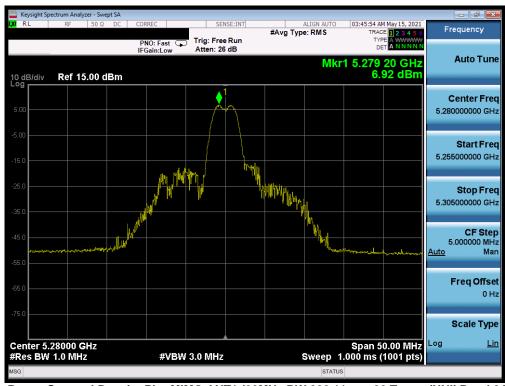
Plot 7-438. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 42)

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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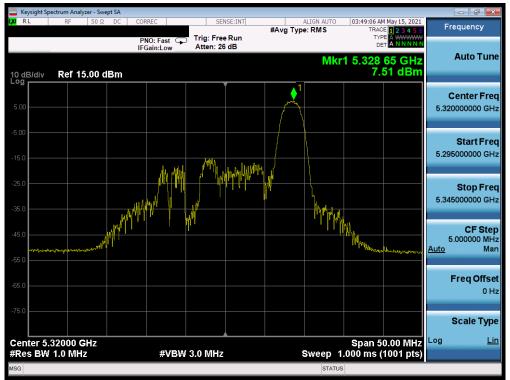
Plot 7-439. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 52)



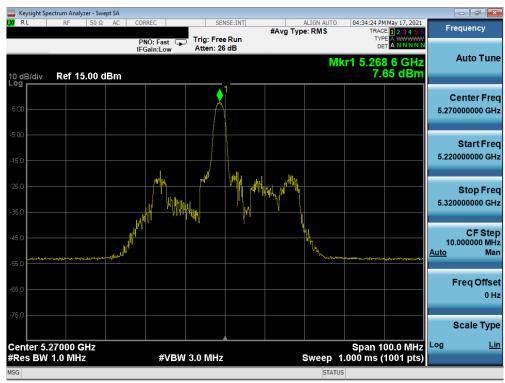
Plot 7-440. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 56)

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-441. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 64)



Plot 7-442. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 54)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 204 of 412
1M2104130035-13.A3L	04/12/2021 - 06/04/2021	Portable Handset		Page 294 of 413
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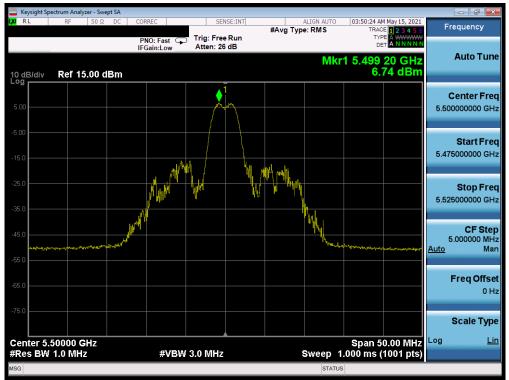
Plot 7-443. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 62)



Plot 7-444. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMF711B	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dama 005 of 440
1M2104130035-13.A3L	04/12/2021 - 06/04/2021	Portable Handset	Page 295 of 413
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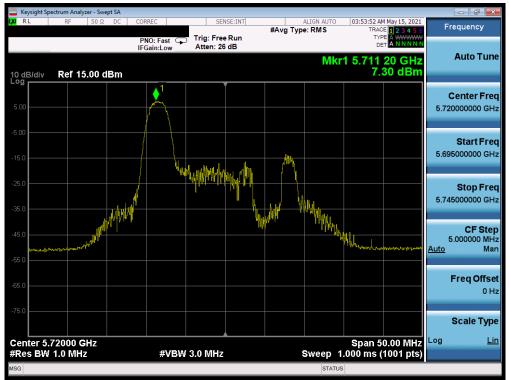
Plot 7-445. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 100)



Plot 7-446. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		De 20 000 of 140
1M2104130035-13.A3L	04/12/2021 - 06/04/2021	Portable Handset		Page 296 of 413
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Plot 7-447. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 144)



Plot 7-448. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 207 of 412
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Plot 7-449. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 118)



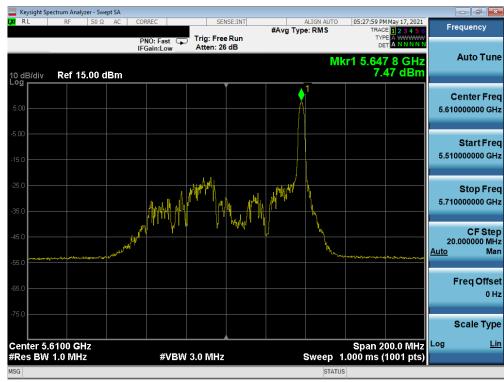
Plot 7-450. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 142)

FCC ID: A3LSMF711B	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dama 000 of 440
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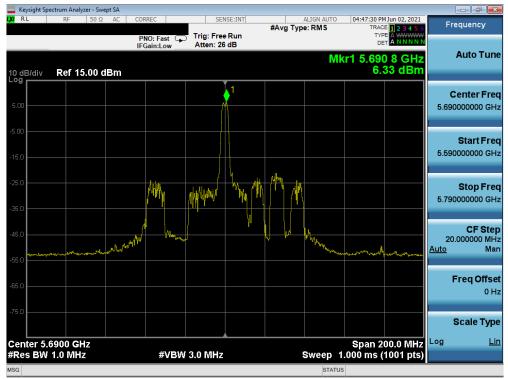
Plot 7-451. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 106)



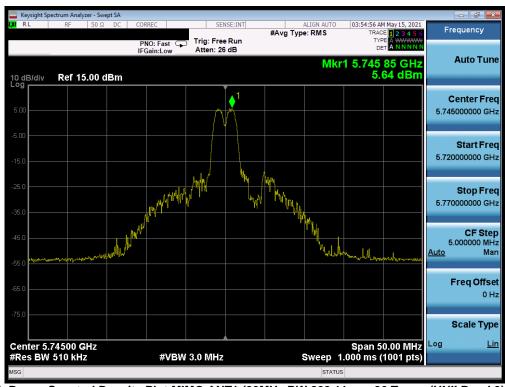
Plot 7-452. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 200 of (112
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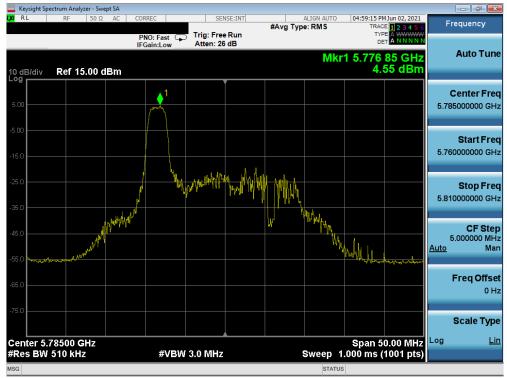
Plot 7-453. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 138)



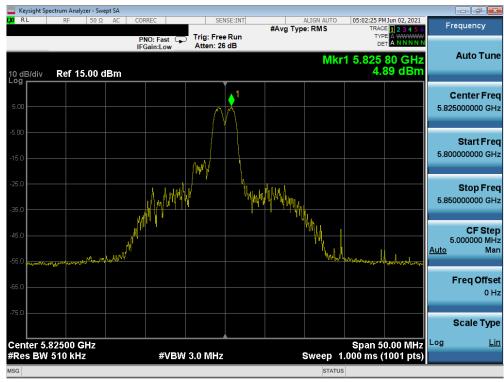
Plot 7-454. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 149)

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-455. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 157)



Plot 7-456. Power Spectral Density Plot MIMO ANT1 (20 MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 165)

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 201 of 112
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Plot 7-457. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 151)



Plot 7-458. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 159)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 202 of (12)
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Plot 7-459. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 155)

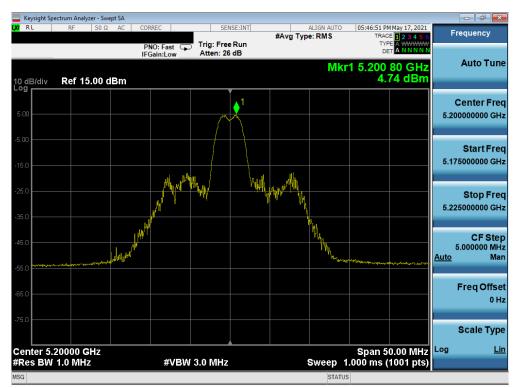
FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 202 of 442
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## MIMO Antenna-2 Power Spectral Density Measurements (26 Tones) – Q



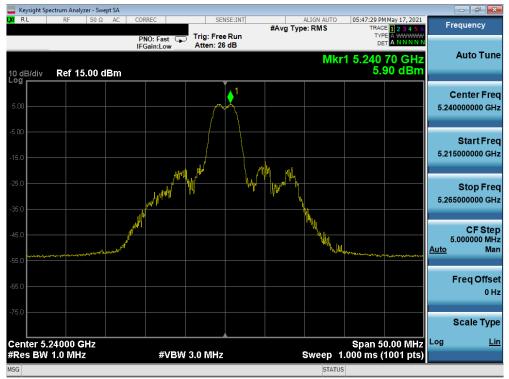
Plot 7-460. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 36)



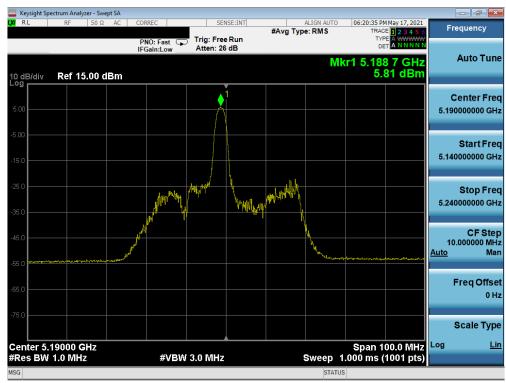
Plot 7-461. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 40)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 204 of 412
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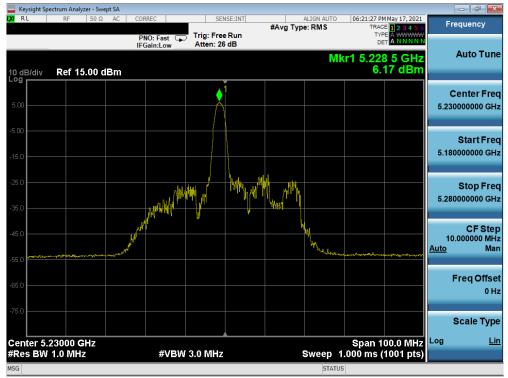
Plot 7-462. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 48)



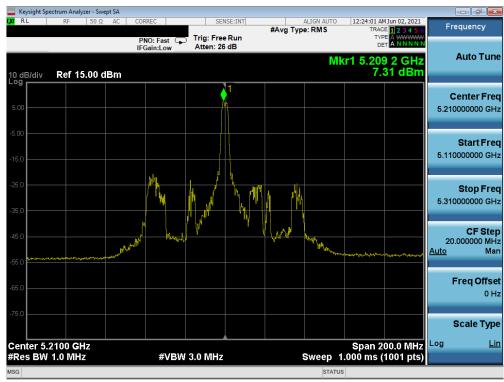
Plot 7-463. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 38)

FCC ID: A3LSMF711B	PCTEST Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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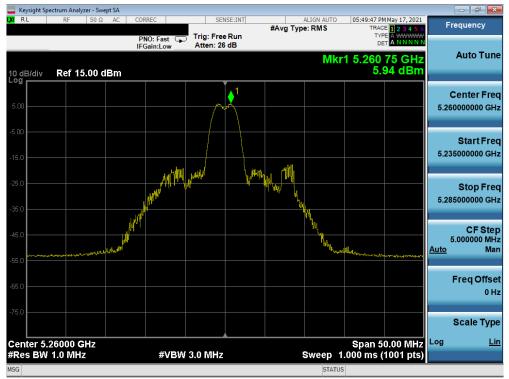
Plot 7-464. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 46)



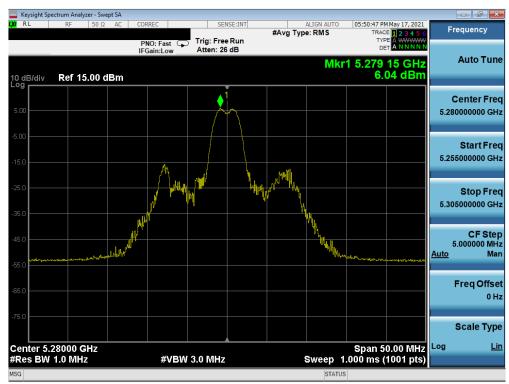
Plot 7-465. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 42)

FCC ID: A3LSMF711B	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-466. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 52)



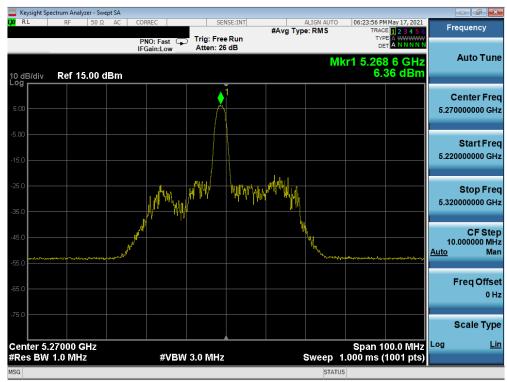
Plot 7-467. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 56)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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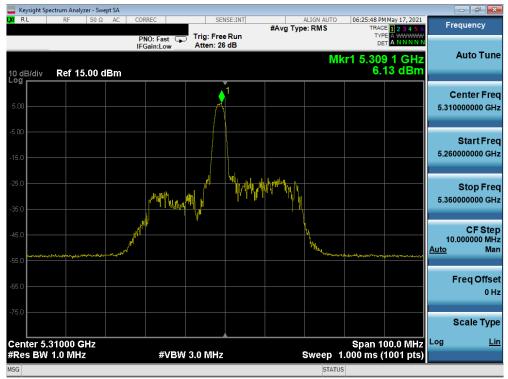
Plot 7-468. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 64)



Plot 7-469. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 54)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dage 200 of 412
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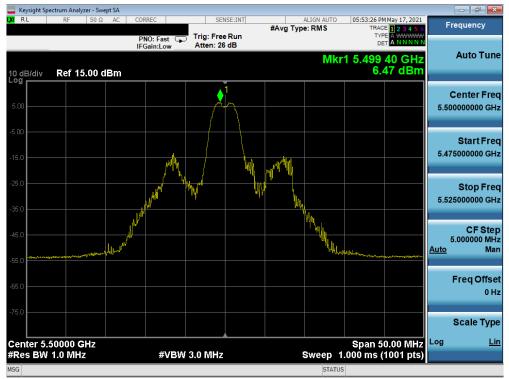
Plot 7-470. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 62)



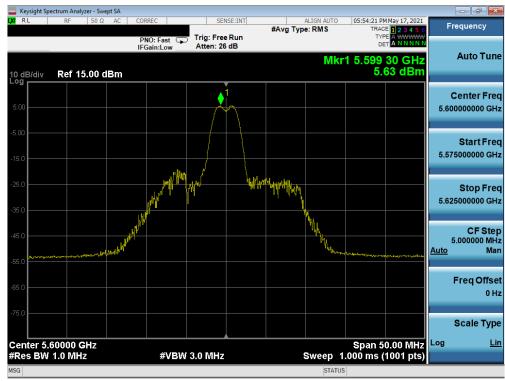
Plot 7-471. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 200 of (112
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Plot 7-472. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 100)



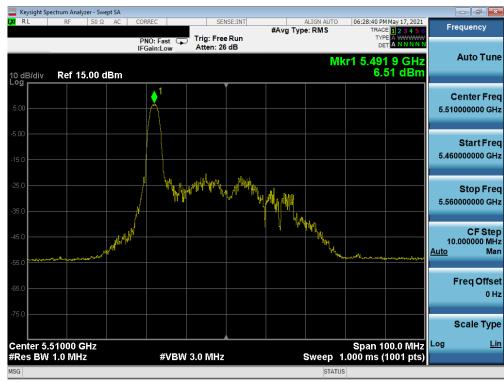
Plot 7-473. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 210 of 112
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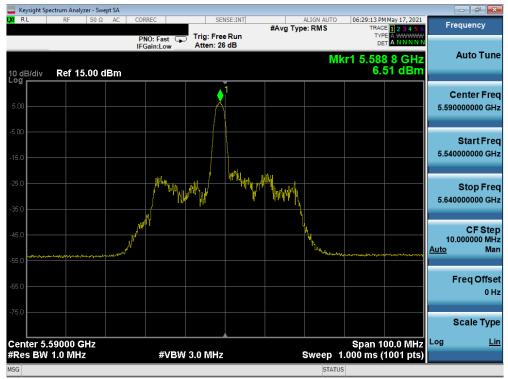
Plot 7-474. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 144)



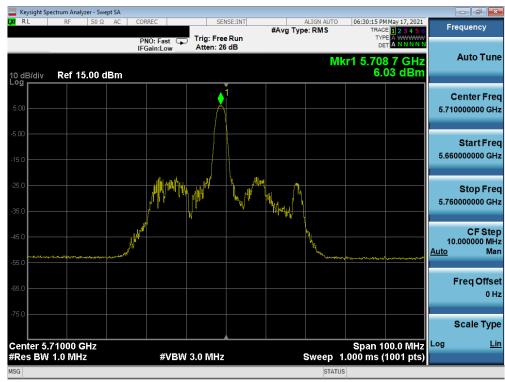
Plot 7-475. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Plot 7-476. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 118)



Plot 7-477. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 142)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Plot 7-478. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 106)



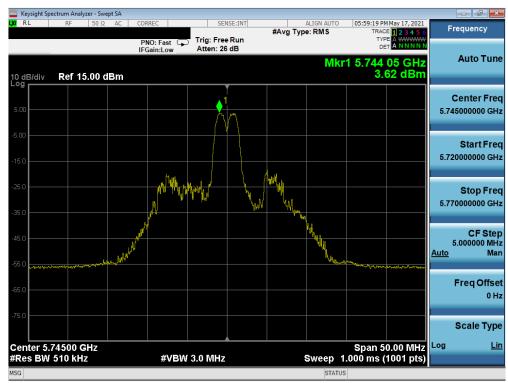
Plot 7-479. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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10 dB/div Log	Ref 15.00 c	dBm						7.	12 dBm	
					1					Center Freq
5.00				^	<u> </u>					5.69000000 GHz
-5.00					ļ					Start Freq
-15.0										5.590000000 GHz
-25.0			while the state	1 Martin M	- North	set i alter				Stop Freq
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-65.0										Freq Offset
										0 Hz
-75.0										
										Scale Type
Center 5.6								Span 2	00.0 MHz	Log <u>Lin</u>
#Res BW ′	1.0 MHz		#VBW	3.0 MHz			Sweep	1.000 ms (	1001 pts)	
MSG							STATU	JS		

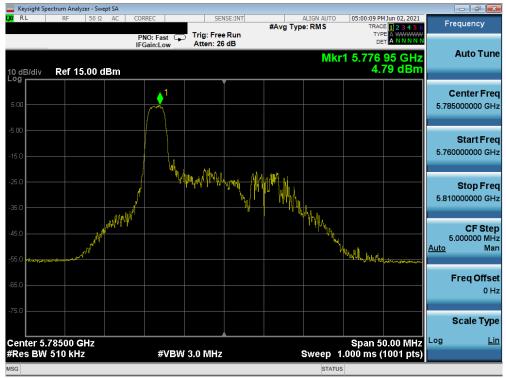
Plot 7-480. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 138)



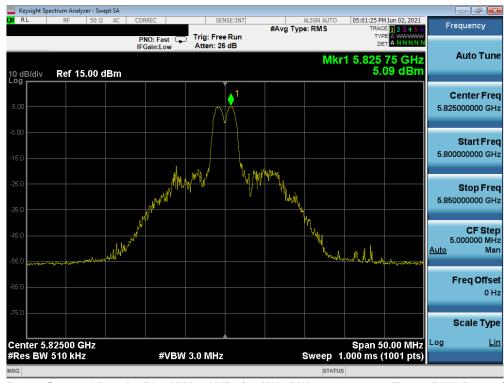
Plot 7-481. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 149)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N: Test Dates:		EUT Type:		Dama 044 of 440
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Plot 7-482. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 157)



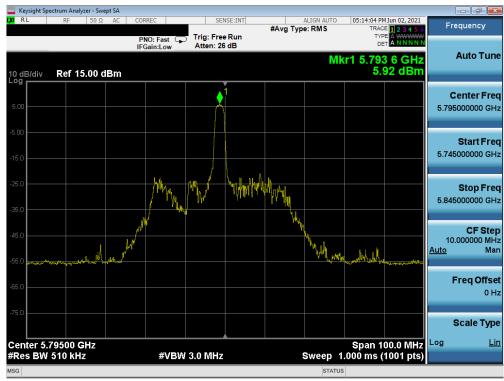
Plot 7-483. Power Spectral Density Plot MIMO ANT2 (20 MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 165)

FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Plot 7-484. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 151)



Plot 7-485. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 159)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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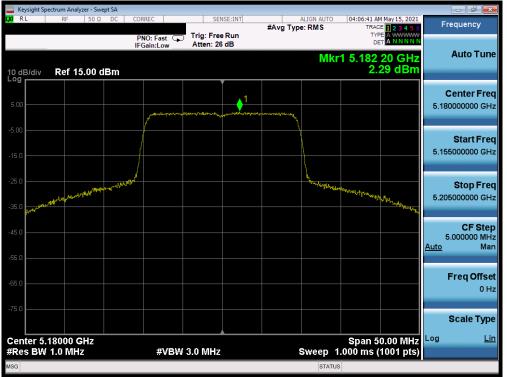


Plot 7-486. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 155)

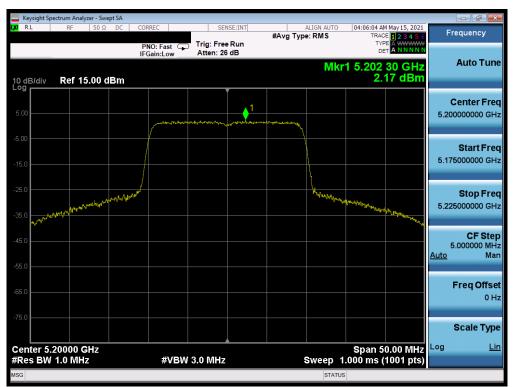
FCC ID: A3LSMF711B	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 217 of 412
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## MIMO Antenna-1 Power Spectral Density Measurements (Full Tones) – Q



Plot 7-487. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 36)



Plot 7-488. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 40)

FCC ID: A3LSMF711B	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dega 210 of 412
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