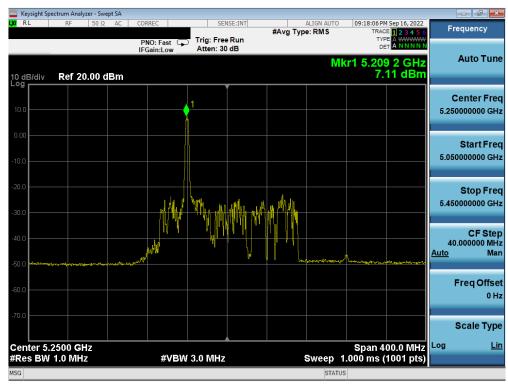




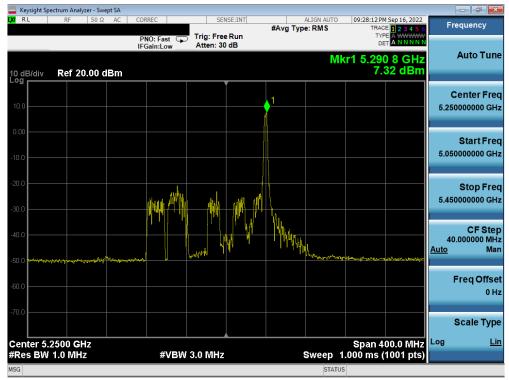
Plot 7-248. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 138)



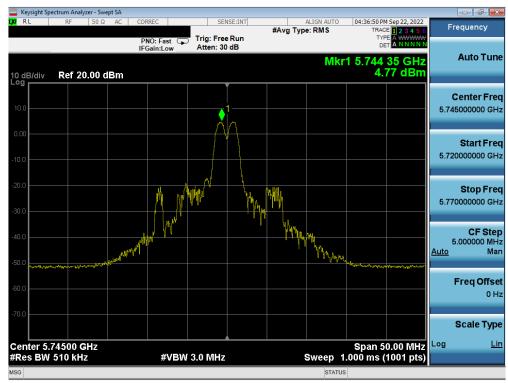
Plot 7-249. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 114)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dege 167 of 000
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Plot 7-250. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 114)



Plot 7-251. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 149)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 169 of 226
1M2209010097-14.A3L	09/02/2022-11/08/2022	Portable Handset	Page 168 of 236
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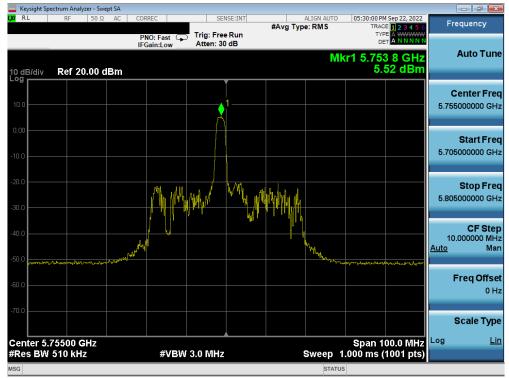
Plot 7-252. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 157)



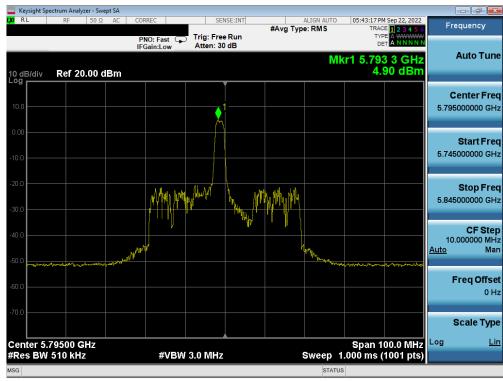
Plot 7-253. Power Spectral Density Plot MIMO ANT2 (20 MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 165)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 160 at 226
1M2209010097-14.A3L	09/02/2022-11/08/2022	Portable Handset	Page 169 of 236
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Plot 7-254. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 151)



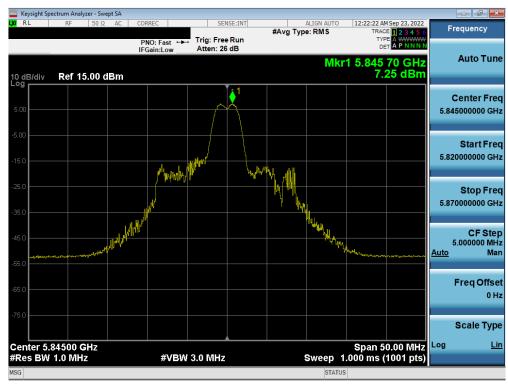
Plot 7-255. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 159)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 170 of 220	
1M2209010097-14.A3L	09/02/2022-11/08/2022	Portable Handset	Page 170 of 236	
	<u>.</u>	·	V 9.0 02/01/2019	





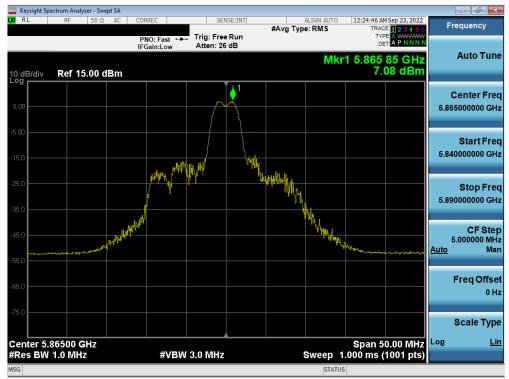
Plot 7-256. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 155)



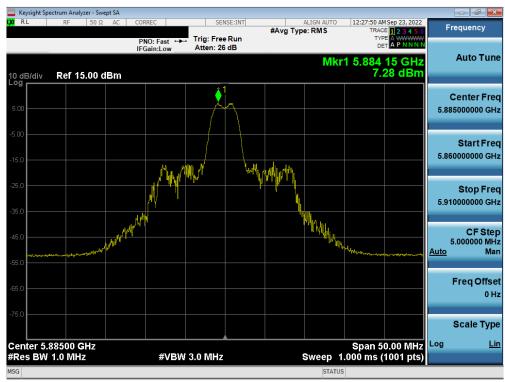
Plot 7-257. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 169)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 171 of 226	
1M2209010097-14.A3L	09/02/2022-11/08/2022	Portable Handset	Page 171 of 236	
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Plot 7-258. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 4) - Ch. 173)



Plot 7-259. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 4) - Ch. 177)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 170 of 000
1M2209010097-14.A3L	09/02/2022-11/08/2022	Portable Handset	Page 172 of 236
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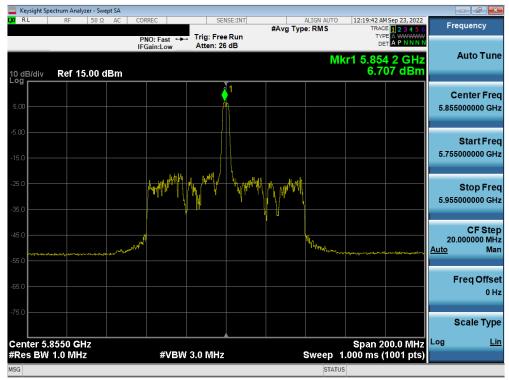
Plot 7-260. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 3/4) – Ch. 167)



Plot 7-261. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 4) – Ch. 175)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 172 of 226
1M2209010097-14.A3L	09/02/2022-11/08/2022	Portable Handset	Page 173 of 236
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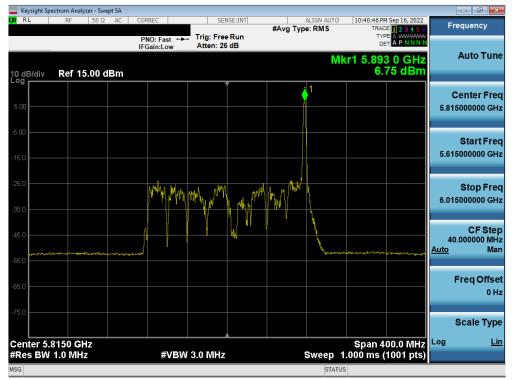
Plot 7-262. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 3/4) – Ch. 171)



Plot 7-263. Power Spectral Density Plot MIMO ANT2 (160MHz BW (L) 802.11ax – 26 Tones (UNII Band 3/4) – Ch. 163)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 174 of 226
1M2209010097-14.A3L	09/02/2022-11/08/2022	Portable Handset	Page 174 of 236
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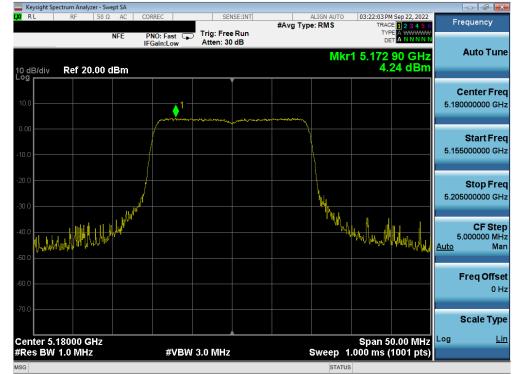




Plot 7-264. Power Spectral Density Plot MIMO ANT2 (160MHz BW (U) 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 163)

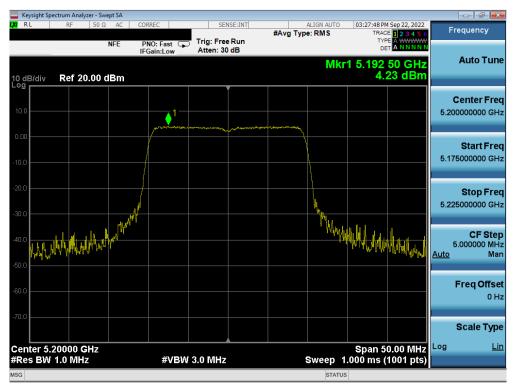
FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 175 of 000
1M2209010097-14.A3L	09/02/2022-11/08/2022	Portable Handset	Page 175 of 236
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## MIMO Antenna-2 Power Spectral Density Measurements (Full Tones)

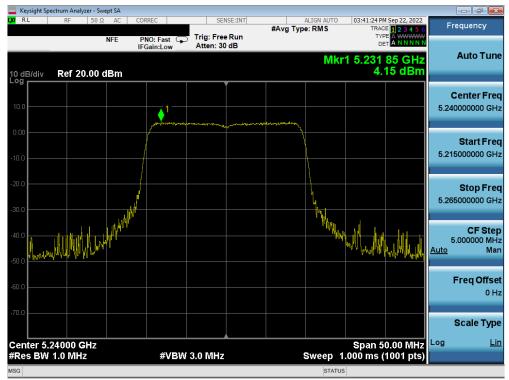
Plot 7-265. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 36)



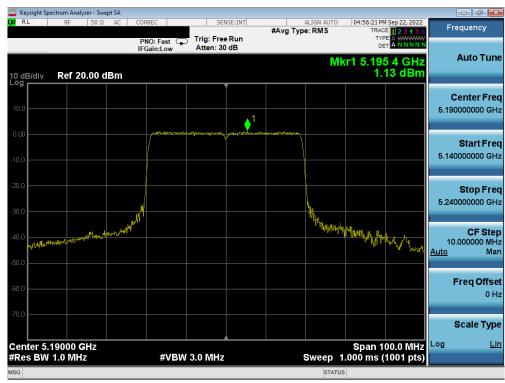
Plot 7-266. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 40)

FCC ID: A3LSMS916U	element	element MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Dage 176 of 226		
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Plot 7-267. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 48)



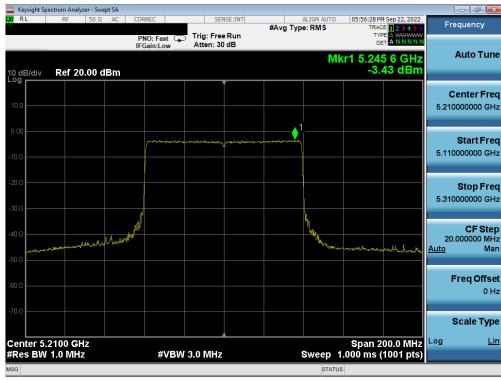
Plot 7-268. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 38)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dega 177 of 000	
1M2209010097-14.A3L	09/02/2022-11/08/2022	Portable Handset	Page 177 of 236	
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	ectrum Analyzer - Swep	it SA								_	- 6 💌
LXI RL	RF 50 Ω	AC COR	REC	SEN	SE:INT	#Ava T	ALIGN AUTO ype: RMS		E 1 2 3 4 5 6	Freq	uency
			NO: Fast 🖵 Gain:Low	Trig: Free Atten: 30				TYP DE			
10 dB/div Log	Ref 20.00 dl	3m					M	lkr1 5.219 0.9	93 GHz 97 dBm	A	uto Tune
10.0				1							<b>nter Freq</b> 00000 GHz
-10.0				₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩	/*************************************						Start Freq 00000 GHz
-20.0		,1 <sup>N</sup>									<b>Stop Freq</b> 00000 GHz
-40.0 Jhww	(hatten the standing	mitt					"Th <sub>runun</sub>	when you and the	wither pertitions	10.0 <u>Auto</u>	<b>CF Step</b> 00000 MHz Man
-60.0										Fr	e <b>q Offset</b> 0 Hz
-70.0											cale Type
	23000 GHz			0.0.141				Span 1	00.0 MHz	Log	Lin
#Res BW	1.0 MHz		#VBW	3.0 MHz			Sweep	1.000 ms (	1001 pts)		
MSG							STAT	US			

Plot 7-269. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 46)



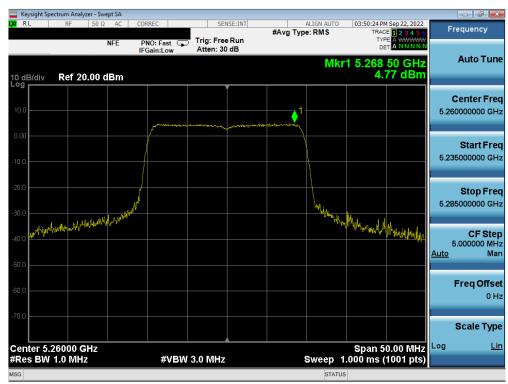
Plot 7-270. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 42)

FCC ID: A3LSMS916U	element	element MEASUREMENT REPORT (CERTIFICATION)		
Test Report S/N:	Test Dates:	EUT Type:	Dage 179 of 226	
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	ctrum Analyzer - Swept SA							
LXI RL	RF 50 Ω AC	CORREC	SENSE:		ALIGN AUTO Type: RMS	09:19:34 PM TRACE	Sep 16, 2022	Frequency
		PNO: Fast 🕞 IFGain:Low	Trig: Free Ru Atten: 30 dE	un –		TYPE		Auto Tune
10 dB/div Log	Ref 20.00 dBm					-4.8	4 dBm	
								Center Freq
10.0								5.250000000 GHz
0.00				And me the base				Start Freq
-10.0		Angeler and a second			where a			5.050000000 GHz
-20.0								Stop Freq
-30.0								5.450000000 GHz
-40.0								CF Step
-50.0	monghunder	mark			hynewyson	and south and the loop of	Thereased the star	40.000000 MHz <u>Auto</u> Man
-60.0								Freq Offset
								0 Hz
-70.0								Scale Type
Center 5.2	500 GHz					Span 40	NOV INTEL	Log <u>Lin</u>
#Res BW	1.0 MHz	#VBW	3.0 MHz		Sweep	1.000 ms (1	001 pts)	
MSG					STATU	JS		

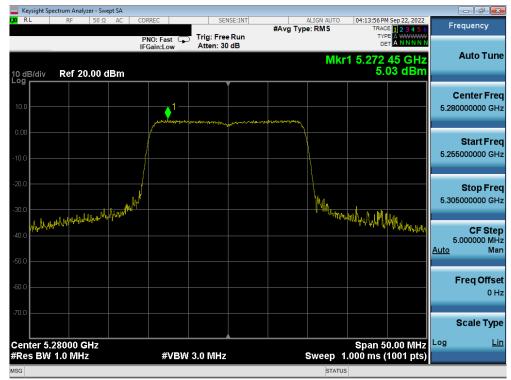
Plot 7-271. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax - Full Tones (UNII Band 1/2A) - Ch. 50)



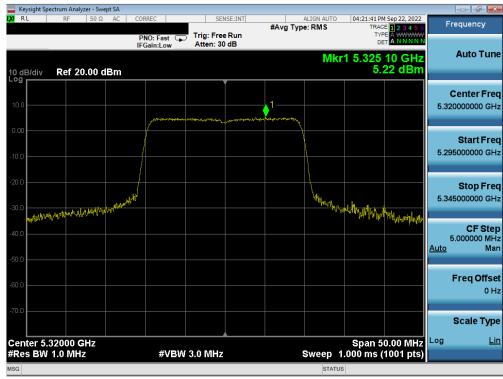
Plot 7-272. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 52)

FCC ID: A3LSMS916U	element	element MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Dega 170 of 000		
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•	<u>.</u>	·	V 9.0 02/01/2019		





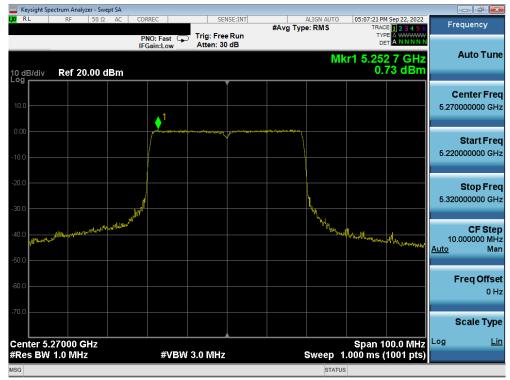
Plot 7-273. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 56)



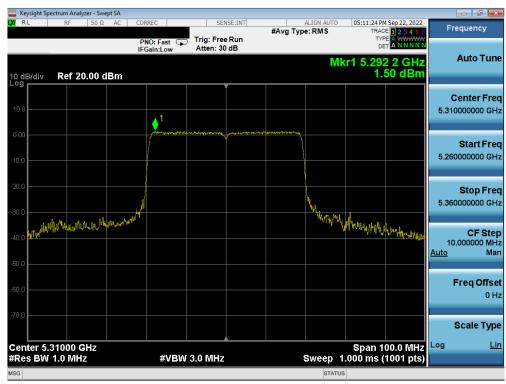
Plot 7-274. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 64)

FCC ID: A3LSMS916U	element	element MEASUREMENT REPORT (CERTIFICATION)		
Test Report S/N:	Test Dates:	EUT Type:	Dogo 100 of 000	
1M2209010097-14.A3L	09/02/2022-11/08/2022	Portable Handset	Page 180 of 236	
	<u>.</u>	·	V 9.0 02/01/2019	





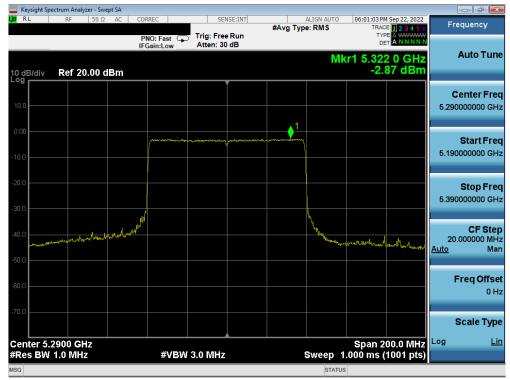
Plot 7-275. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 54)



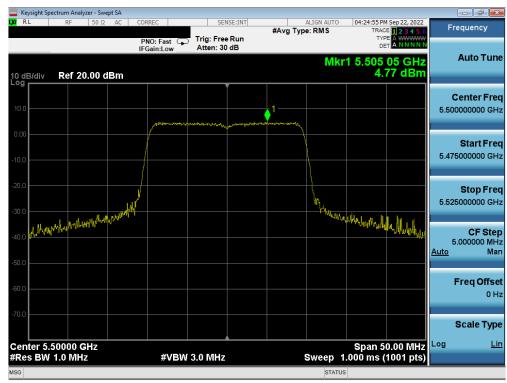
Plot 7-276. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 62)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dega 101 of 000
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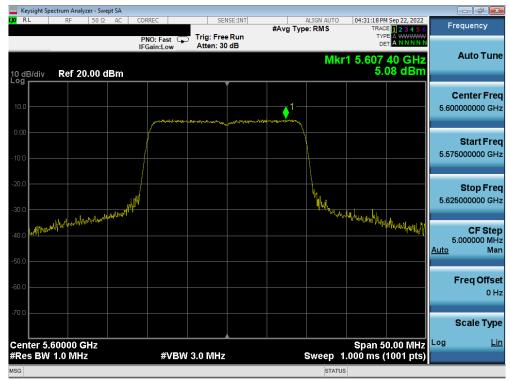
Plot 7-277. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 58)



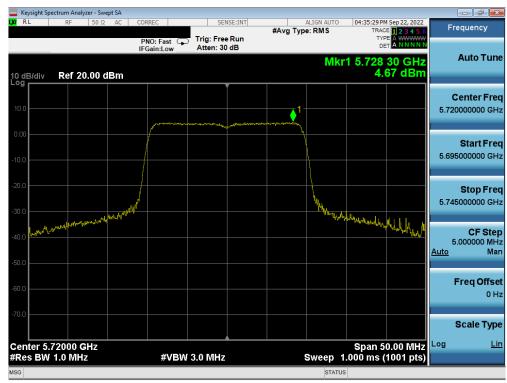
Plot 7-278. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 100)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 192 of 226
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Plot 7-279. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 120)



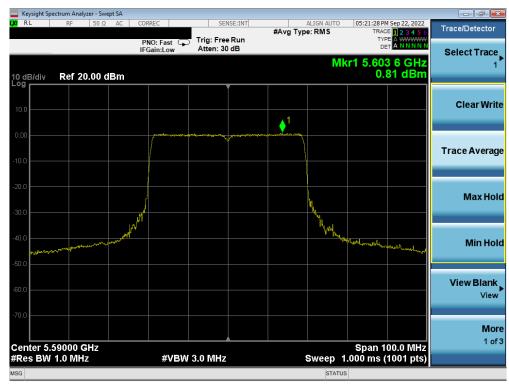
Plot 7-280. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 144)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 192 of 226
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	ectrum Analyzer - Swe	ept SA								-	- 6 ×
L <mark>XI</mark> RL	RF 50 Ω		REC		SE:INT	#Avg Ty	ALIGN AUTO	TRAC	I Sep 22, 2022 E 1 2 3 4 5 6 E A WWWWW	Free	quency
10 dB/div	Ref 20.00 d	IFC	NO: Fast 😱 Gain:Low	Trig: Free Atten: 30			Μ	DE kr1 5.52		A	uto Tune
10.0						↓ <sup>1</sup>					e <b>nter Freq</b> 00000 GHz
-10.0				an <del>nalla</del> e periodial de la constanta de la constant La constanta de la constanta de	and a second						Start Freq 00000 GHz
-20.0							h.				<b>Stop Freq</b> 00000 GHz
-40.0	warren and a source of the	ANII Antonia (Mariana)					"Mennes	Allyd Para againegol atomio	holeosofic test	10.0 <u>Auto</u>	CF Step 00000 MHz Mar
-60.0										Fi	r <b>eq Offse</b> 0 Hz
-70.0											cale Type
#Res BW	51000 GHz 1.0 MHz		#VBW	3.0 MHz			Sweep	Span 1 1.000 ms (	00.0 MHz 1001 pts)	Log	Lin
MSG							STAT	JS			

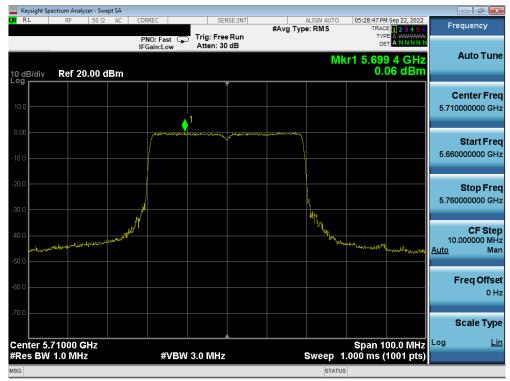
Plot 7-281. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 102)



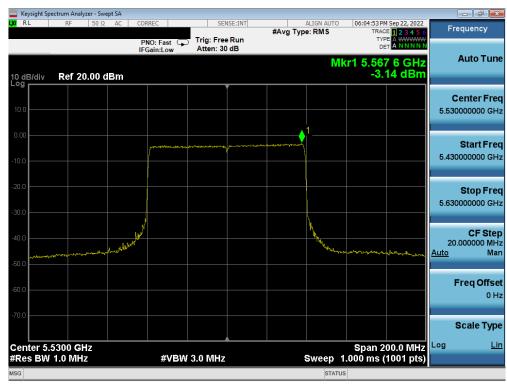
Plot 7-282. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 118)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dege 194 of 226
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Plot 7-283. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 142)



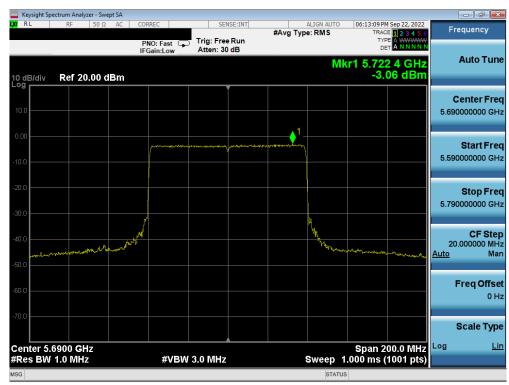
Plot 7-284. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 106)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 195 of 226
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	ctrum Analyzer - Swe	ept SA								_	
LXU RL	RF 50 Ω		RREC		ISE:INT	#Avg Typ	ALIGN AUTO e: RMS	TRAC	4 Sep 22, 2022 E 1 2 3 4 5 6 E A ****	Freq	luency
10 dB/div Log	Ref 20.00 d	IF	NO: Fast Gain:Low	Atten: 30			Μ	DE kr1 5.64		A	uto Tune
10.0							1				<b>nter Freq</b> 00000 GHz
-10.0				murranteraller	j-marketer	unger contraction of					Start Freq 00000 GHz
-20.0		J.					n,				<b>Stop Freq</b> 00000 GHz
-40.0 -50.0	ىرىمى»رىلەرىيىمۇلىرىيەرىي مەھمە <sup>ر</sup> ىلەرىيىمۇلىرىيەرىي	n hand a second					YAN WANNER	mar and a start	mould	20.0 <u>Auto</u>	<b>CF Step</b> 00000 MHz Man
-60.0										Fr	e <b>q Offset</b> 0 Hz
										So Log	cale Type
Center 5.6			40 (D)A	2.0 Mill-			Ower	Span 2	00.0 101112	Log	Lin
#Res BW	T.U WHZ		#VBW	3.0 MHz			sweep	1.000 ms (	1001 pts)		
MSG							STAT	US			

Plot 7-285. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 122)



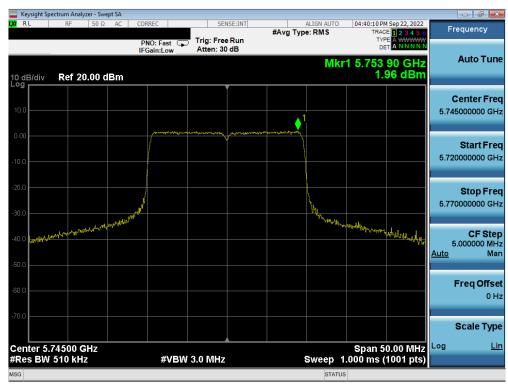
Plot 7-286. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 138)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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	trum Analyzer - Swept SA							
LXI RL	RF 50 Ω AC	CORREC	SENSE:INT	AI #Avg Type:	LIGN AUTO : RMS	09:21:34 PM TRACE	Sep 16, 2022  1 2 3 4 5 6 A WWWWW	Frequency
10 dB/div Log	Ref 20.00 dBm	PNO: Fast 🖵 IFGain:Low	Trig: Free Run Atten: 30 dB		M	oet (r1 5.602	ANNNN	Auto Tune
10.0								Center Freq 5.570000000 GHz
-10.0		pantonilyany	and a second second	-1				Start Freq 5.370000000 GHz
-20.0								Stop Freq 5.770000000 GHz
-40.0	Mileson Magnesian Magnesian Cale				haven	and the second	when the set of the set	CF Step 40.000000 MHz <u>Auto</u> Man
-60.0								Freq Offset 0 Hz
	700 011-					0		Scale Type
Center 5.5 #Res BW		#\/B\/	3.0 MHz		ween 1	span 40 1.000 ms (1		
		#0000	5.0 14112	3			oor pis)	
MSG					STATUS	5		

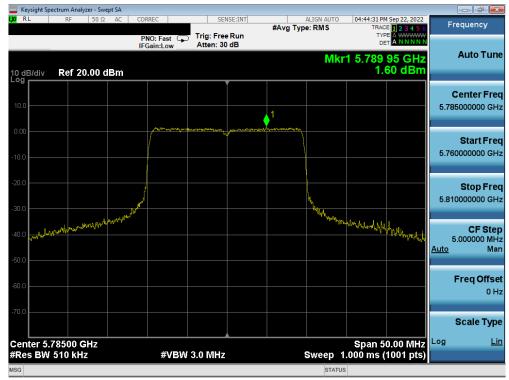
Plot 7-287. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 114)



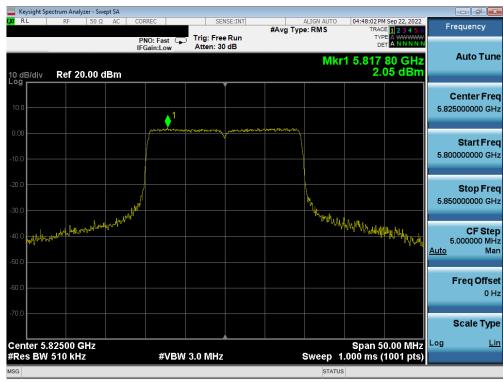
Plot 7-288. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 149)

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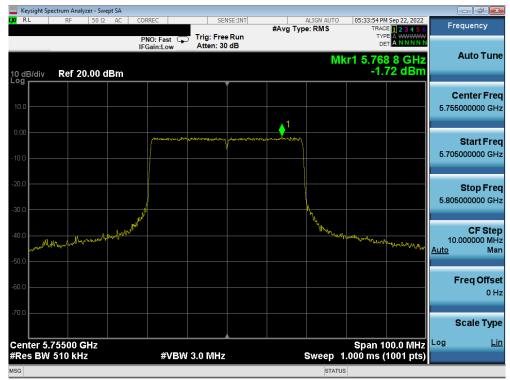
Plot 7-289. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 157)



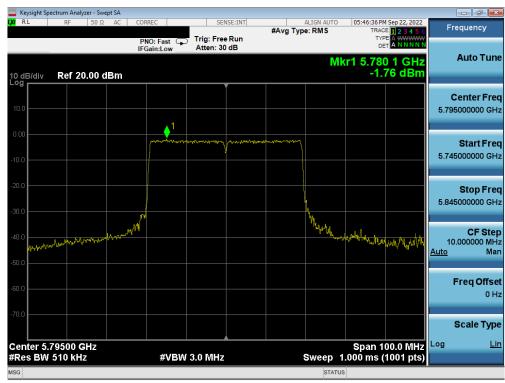
Plot 7-290. Power Spectral Density Plot MIMO ANT2 (20 MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 165)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-291. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 151)



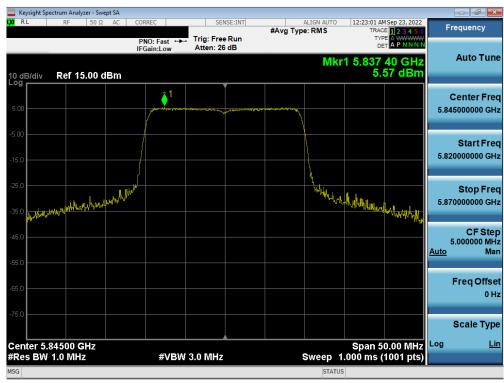
Plot 7-292. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 159)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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	ectrum Analyzer - Swe										
L <mark>XI</mark> RL	RF 50 Ω	AC COF	RREC	SEN	ISE:INT	#Avg Typ	ALIGN AUTO		E 1 2 3 4 5 6	Frequ	Jency
			NO: Fast 🖵 Gain:Low	Trig: Free Atten: 30				TYP		Au	uto Tune
10 dB/div <sup>Log</sup>	Ref 20.00 d	IBm						-6.	09 dBm		
10.0											n <b>ter Freq</b> 10000 GHz
-10.0			1 /*****************	avadoradories de	potentingettestand	V Alman Andre					t <b>art Freq</b> 10000 GHz
-20.0											<b>top Freq</b> 10000 GHz
-40.0	mous apresation	4 Marian					Man Marine	Marshan-allback	and a start and a start and a start and a start		<b>CF Step</b> 0000 MHz Man
-60.0										Fre	e <b>q Offset</b> 0 Hz
-70.0											ale Type
Center 5.				0.0.00			-	Span 2	21 111 2.00	Log	Lin
#Res BW	510 KHz		#VBW	3.0 MHz			Sweep	1.000 ms (	1001 pts)		
MSG							STAT	US			

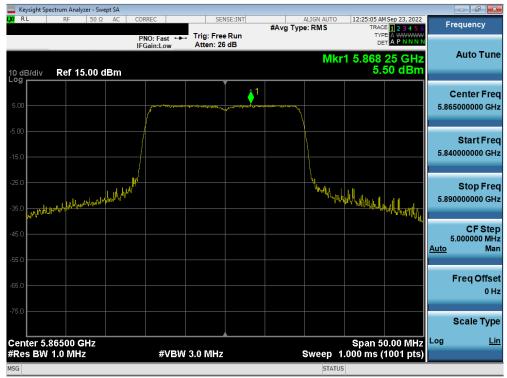
Plot 7-293. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 155)



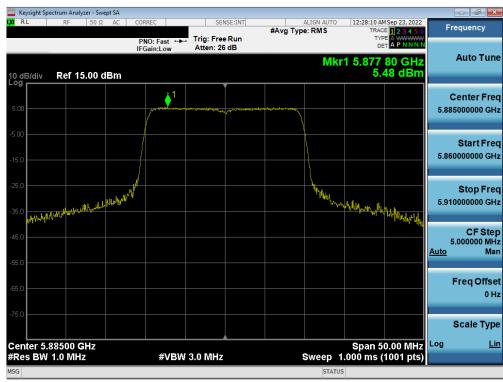
Plot 7-294. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 242 Tones (UNII Band 3/4) - Ch. 169)

FCC ID: A3LSMS916U	element	element MEASUREMENT REPORT (CERTIFICATION)	
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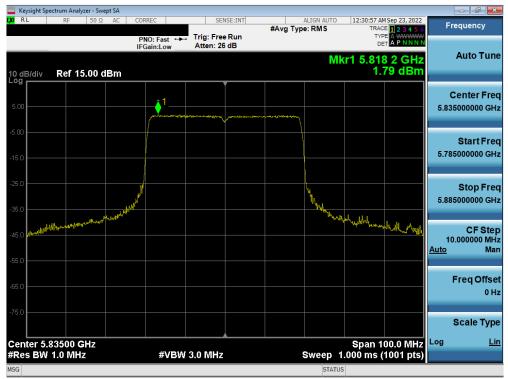
Plot 7-295. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 4) – Ch. 173)



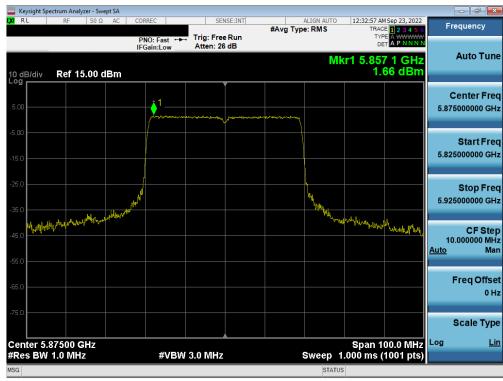
Plot 7-296. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 242 Tones (UNII Band 4) - Ch. 177)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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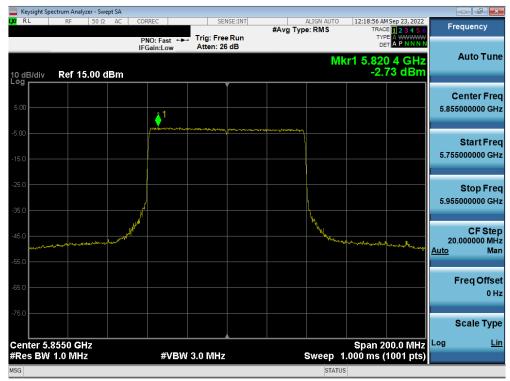
Plot 7-297. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 484 Tones (UNII Band 3/4) - Ch. 167)



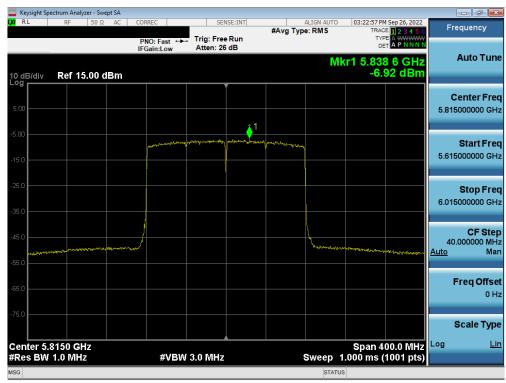
Plot 7-298. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 484 Tones (UNII Band 4) - Ch. 175)

FCC ID: A3LSMS916U	element	element MEASUREMENT REPORT (CERTIFICATION)	
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Plot 7-299. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 996 Tones (UNII Band 3/4) – Ch. 171)



Plot 7-300. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax – 996 Tones (UNII Band 3/4) – Ch. 163)

FCC ID: A3LSMS916U	element	element MEASUREMENT REPORT (CERTIFICATION)	
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#### Note:

Per ANSI C63.10-2013 Section 14.3.2.2 and KDB 662911 v02r01 Section E)2), the power spectral density at Antenna-1 and Antenna-2 were first measured separately with reduced Antenna-1 and Antenna-2 powers per manufacture's tune-up document. The measured values were then summed in linear power units then converted back to dBm.

#### Sample Directional Gain Calculation:

Assuming the antenna gain is -8.61 dBi for Antenna-1 and -7.68 dBi for Antenna-2.

Directional gain = 
$$10 \log[(10^{G_{1/20}} + 10^{G_{2/20}} + ... + 10^{G_{N/20}})^2 / N_{ANT}] dBi$$
  
=  $10 \log[(10^{-8.61/20} + 10^{-7.68/20} / 2] dBi$   
= (-5.12) dBi

#### 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

#### Sample e.i.r.p Power Spectral Density Calculation:

Assuming the average MIMO power density was calculated to be 9.09 dBm with directional gain of -5.12 dBi.

e.i.r.p. Power Spectral Density(dBm) = Power Spectral Density (dBm) + directional gain (dBi)

9.09 dBm + (-5.12) dBi = 3.97 dBm

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# Radiated Spurious Emission Measurements – Above 1GHz §15.407(b) §15.205 §15.209; RSS-Gen [8.9]

#### **Test Overview and Limit**

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, and at the appropriate frequencies. All channels, modes (e.g. 26 Tones, 52 Tones, 106 Tones, 242 Tones, 484 Tones and 996 Tones), and modulations/data rates were investigated among all UNII bands. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

For transmitters operating in the 5.15-5.25 GHz and 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of −27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

For transmitters operating in the 5.850 – 5.895 GHz band: all emissions at or above 5.895GHz shall not exceed an e.i.r.p. of -5dBm/MHz and shall decrease linearly up to an e.i.r.p. of -27dBm/MHz at or above 5.925GHz, and all emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27dBm/MHz at 5.65 GHz increasing linearly to 10dBm/MHz at 5.7GHz and from 5.7GHz increasing linearly to a level of 15.6dMb/MHz at 5.72GHz, and from 5.72GHz increasing linearly to a level of 27dBm/MHz at 5.725GHz.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR and Table 6 of RSS-Gen (8.10) must not exceed the limits shown in Table 7-48 per Section 15.209 and RSS-Gen (8.9).

Frequency	Field Strength [µV/m]	Measured Distance [Meters]	
Above 960.0 MHz	500	3	

Table 7-48. Radiated Limits

#### Test Procedures Used

ANSI C63.10-2013 – Sections 12.7.7.2, 12.7.6, 12.7.5 KDB 789033 D02 v02r01 – Section G

#### **Test Settings**

#### Average Measurements above 1GHz (Method AD)

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = power average (RMS)

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- 5. Number of measurement points = 1001 (Number of points must be  $\geq 2 \times \text{span/RBW}$ )
- 6. Averaging type = power (RMS)
- 7. Sweep time = auto couple
- 8. Trace was averaged over 100 sweeps

#### Peak Measurements above 1GHz

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = peak
- 5. Sweep time = auto couple
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

#### Peak Measurements below 1GHz

Analyzer center frequency was set to the frequency of the radiated spurious emission of interest Span was set greater than 1MHz RBW = 120kHz Detector = CISPR quasi-peak Sweep time = auto couple Trace was allowed to stabilize

#### Test Setup

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

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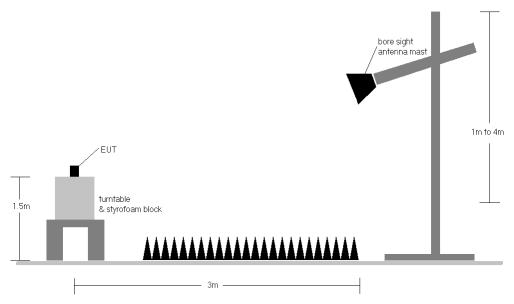


Figure 7-5. Test Instrument & Measurement Setup

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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#### Test Notes

- 1. All emissions that lie in the restricted bands (denoted by a \* next to the frequency) specified in §15.205 and Section 8.10 of RSS-Gen are below the limit shown in Table 7-48.
- 2. All spurious emissions lying in restricted bands specified in §15.205 and Section 8.10 of RSS-Gen are below the limit shown in Table 7-48. All spurious emissions that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBµV/m.
- 3. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
- 4. This unit was tested with its standard battery.
- 5. The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. Above 1 GHz, average and peak measurements were taken using linearly polarized horn antennas. The worst-case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
- 6. Emissions below 18GHz were measured at a 3 meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
- 7. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. Any emissions found to be within 20dB of the limit are fully investigated and the results are shown in this section.
- 8. The "-" shown in the following RSE tables are used to denote a noise floor measurement.
- 9. For radiated measurements, emissions were investigated for the fully-loaded RU configuration and for all of the partially-loaded RU configurations. Among all of the available partially-loaded RU configurations, only the configuration with the worst case emissions is reported.

#### Sample Calculations

#### **Determining Spurious Emissions Levels**

- $\circ$  Field Strength Level [dB<sub>µ</sub>V/m] = Analyzer Level [dBm] + 107 + AFCL [dB/m]
- AFCL [dB/m] = Antenna Factor [dB/m] + Cable Loss [dB]
- Margin [dB] = Field Strength Level  $[dB_{\mu}V/m]$  Limit  $[dB_{\mu}V/m]$

#### Radiated Band Edge Measurement Offset

• The amplitude offset shown in the radiated restricted band edge plots in Section 0 was calculated using the formula:

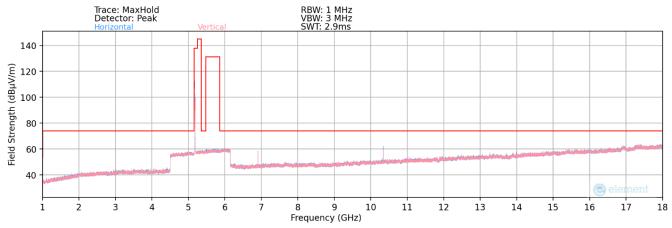
Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

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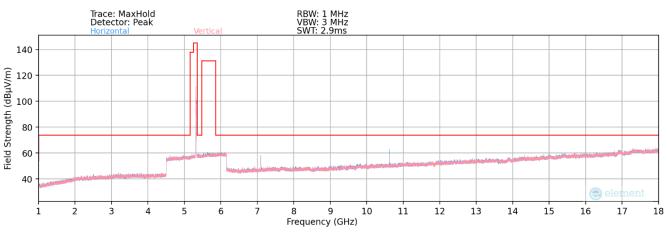


## 7.6.1 MIMO Radiated Spurious Emission Measurements

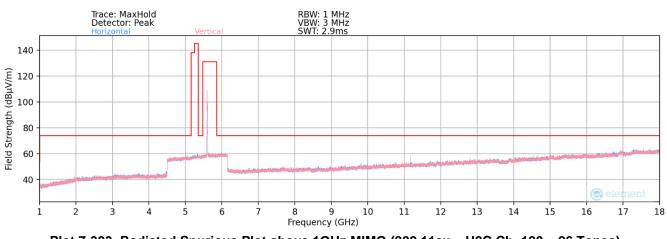
### 26 Tones



Plot 7-301. Radiated Spurious Plot above 1GHz MIMO (802.11ax - U1 Ch. 40 - 26 Tones)



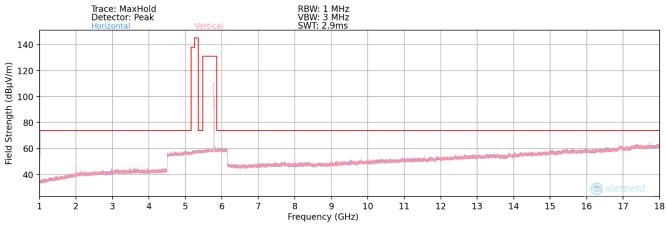




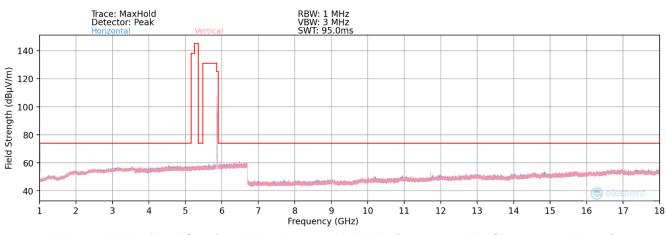
Plot 7-303. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2C Ch. 120 – 26 Tones)

FCC ID: A3LSMS916U	element)	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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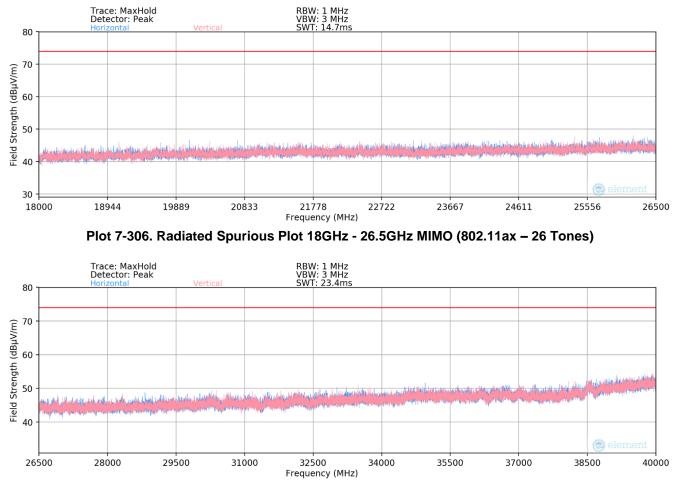


Plot 7-305. Radiated Spurious Plot above 1GHz MIMO (802.11ax - U4 Ch. 173 - 26 Tones)

FCC ID: A3LSMS916U	element	element MEASUREMENT REPORT (CERTIFICATION)		
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# MIMO Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-307. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11ax – 26 Tones)

FCC ID: A3LSMS916U	element	lement MEASUREMENT REPORT (CERTIFICATION)		
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#### MIMO Radiated Spurious Emission Measurements (26 Tones) §15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5180MHz
Channel:	36

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10360.00	Peak	Н	210	64	-53.01	8.74	0.00	62.73	68.20	-5.47
*	15540.00	Average	Н	-	-	-77.78	10.23	0.00	39.45	53.98	-14.53
*	15540.00	Peak	Н	-	-	-65.44	10.23	0.00	51.79	73.98	-22.19
*	20720.00	Average	Н	-	-	-66.82	3.37	-9.54	34.01	53.98	-19.97
*	20720.00	Peak	Н	-	-	-56.10	3.37	-9.54	44.73	73.98	-29.25
	25900.00	Peak	н	-	-	-55.87	4.84	-9.54	46.42	68.20	-21.78

Table 7-49. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: Worst Case Transfer Rate: RU Index: Distance of Measurements: Operating Frequency: Channel: 802.11ax (20MHz BW) MCS0 4 1 & 3 Meters 5200MHz 40

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10400.00	Peak	Н	240	53	-52.80	9.31	0.00	63.51	68.20	-4.69
*	15600.00	Average	Н	-	-	-77.71	9.27	0.00	38.56	53.98	-15.42
*	15600.00	Peak	Н	-	-	-65.02	9.27	0.00	51.25	73.98	-22.73
*	20800.00	Average	Н	-	-	-66.02	3.43	-9.54	34.86	53.98	-19.12
*	20800.00	Peak	Н	-	-	-55.14	3.43	-9.54	45.74	73.98	-28.24
	26000.00	Peak	Н	-	-	-55.23	4.89	-9.54	47.12	68.20	-21.08

Table 7-50. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
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Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5240MHz
Channel:	48

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10480.00	Peak	Н	233	47	-51.32	8.61	0.00	64.29	68.20	-3.91
*	15720.00	Average	н	-	-	-78.40	9.39	0.00	37.99	53.98	-15.99
*	15720.00	Peak	Н	-	-	-66.57	9.39	0.00	49.82	73.98	-24.16
*	20960.00	Average	Н	-	-	-67.09	3.50	-9.54	33.87	53.98	-20.11
*	20960.00	Peak	Н	-	-	-56.29	3.50	-9.54	44.67	73.98	-29.31
	26200.00	Peak	н	-	-	-55.03	4.72	-9.54	47.15	68.20	-21.05

# Table 7-51. Radiated Measurements MIMO (26 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5260MHz
Channel:	52

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10520.00	Peak	н	221	42	-52.09	7.91	0.00	62.82	68.20	-5.38
*	15780.00	Average	Н	-	-	-77.97	9.19	0.00	38.22	53.98	-15.76
*	15780.00	Peak	н	-	-	-65.61	9.19	0.00	50.58	73.98	-23.40
*	21040.00	Average	н	-	-	-66.83	3.56	-9.54	34.19	53.98	-19.79
*	21040.00	Peak	н	-	-	-56.50	3.56	-9.54	44.52	73.98	-29.46
	26300.00	Peak	Н	-	-	-56.33	4.68	-9.54	45.81	68.20	-22.39

Table 7-52. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5280MHz
Channel:	56

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10560.00	Peak	Н	216	34	-52.87	8.05	0.00	62.18	68.20	-6.02
*	15840.00	Average	Н	-	-	-78.06	9.10	0.00	38.04	53.98	-15.94
*	15840.00	Peak	Н	-	-	-66.03	9.10	0.00	50.07	73.98	-23.91
*	21120.00	Average	Н	-	-	-66.35	3.66	-9.54	34.77	53.98	-19.21
*	21120.00	Peak	н	-	-	-55.55	3.66	-9.54	45.57	73.98	-28.41
	26400.00	Peak	Н	-	-	-56.47	4.56	-9.54	45.54	68.20	-22.66

# Table 7-53. Radiated Measurements MIMO (26 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5320MHz
Channel:	64

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	10640.00	Average	Н	216	45	-66.72	8.17	0.00	48.45	53.98	-5.53
*	10640.00	Peak	Н	216	45	-52.11	8.17	0.00	63.06	73.98	-10.92
*	15960.00	Average	Н	-	-	-77.60	8.86	0.00	38.26	53.98	-15.72
*	15960.00	Peak	Н	-	-	-65.64	8.86	0.00	50.22	73.98	-23.76
*	21280.00	Average	Н	-	-	-66.65	3.77	-9.54	34.58	53.98	-19.40
*	21280.00	Peak	Н	-	-	-55.90	3.77	-9.54	45.33	73.98	-28.65
	26600.00	Peak	Н	-	-	-56.63	4.58	-9.54	45.41	68.20	-22.79

Table 7-54. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 204 of 226
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Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5500MHz
Channel:	100

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11000.00	Average	н	174	45	-65.51	8.07	0.00	49.56	53.98	-4.42
*	11000.00	Peak	Н	174	45	-51.12	8.07	0.00	63.95	73.98	-10.03
	16500.00	Peak	Н	-	-	-65.65	8.78	0.00	50.13	68.20	-18.07
	22000.00	Peak	Н	150	29	-55.85	3.80	-9.54	45.41	68.20	-22.79
	27500.00	Peak	Н	-	-	-55.07	4.79	-9.54	47.17	68.20	-21.03

#### Table 7-55. Radiated Measurements MIMO (26 Tones)

Worst Case Mode:	802.11ax (20MHz BW)				
Worst Case Transfer Rate:	MCS0				
RU Index:	4				
Distance of Measurements:	1 & 3 Meters				
Operating Frequency:	5600MHz				
Channel:	120				

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11200.00	Average	Н	199	28	-68.69	8.67	0.00	46.98	53.98	-7.00
*	11200.00	Peak	Н	199	28	-54.13	8.67	0.00	61.54	73.98	-12.44
	16800.00	Peak	Н	-	-	-65.80	9.37	0.00	50.57	68.20	-17.63
*	22400.00	Average	Н	150	29	-65.09	3.90	-9.54	36.27	53.98	-17.71
*	22400.00	Peak	Н	150	29	-55.77	3.90	-9.54	45.59	73.98	-28.39
	28000.00	Peak	Н	-	-	-56.26	5.18	-9.54	46.38	68.20	-21.82

Table 7-56. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 205 of 226
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Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5720MHz
Channel:	144

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11440.00	Average	Н	190	30	-71.55	8.63	0.00	44.08	53.98	-9.90
*	11440.00	Peak	Н	190	30	-57.25	8.63	0.00	58.38	73.98	-15.60
	17160.00	Peak	Н	-	-	-64.54	11.15	0.00	53.61	68.20	-14.59
*	22880.00	Average	Н	-	-	-65.74	3.82	-9.54	35.54	53.98	-18.44
*	22880.00	Peak	н	-	-	-56.39	3.82	-9.54	44.89	73.98	-29.09
	28600.00	Peak	н	-	-	-55.84	5.43	-9.54	47.05	68.20	-21.15

Table 7-57. Radiated Measurements MIMO (26 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5745MHz
Channel:	149

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11490.00	Average	Н	185	38	-72.73	8.37	0.00	42.64	53.98	-11.34
*	11490.00	Peak	Н	185	38	-58.04	8.37	0.00	57.33	73.98	-16.65
	17235.00	Peak	Н	-	-	-64.68	11.67	0.00	53.99	68.20	-14.21
*	22980.00	Average	Н	-	-	-66.67	3.76	-9.54	34.55	53.98	-19.43
*	22980.00	Peak	Н	-	-	-56.12	3.76	-9.54	45.10	73.98	-28.88
	28725.00	Peak	Н	-	-	-56.03	5.46	-9.54	46.89	68.20	-21.31

Table 7-58. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 206 of 226
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Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5785MHz
Channel:	157

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11570.00	Average	н	229	25	-71.76	8.50	0.00	43.74	53.98	-10.24
*	11570.00	Peak	Н	229	25	-57.47	8.50	0.00	58.03	73.98	-15.95
	17355.00	Peak	Н	-	-	-65.52	12.72	0.00	54.20	68.20	-14.00
	23140.00	Peak	Н	-	-	-56.38	3.80	-9.54	44.87	68.20	-23.33
	28925.00	Peak	н	-	-	-56.67	5.51	-9.54	46.30	68.20	-21.90

### Table 7-59. Radiated Measurements MIMO (26 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5825MHz
Channel:	165

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11650.00	Average	Н	199	30	-72.74	8.74	0.00	43.00	53.98	-10.98
*	11650.00	Peak	Н	199	30	-58.26	8.74	0.00	57.48	73.98	-16.50
	17475.00	Peak	Н	-	-	-65.78	13.55	0.00	54.77	68.20	-13.43
	23300.00	Peak	Н	-	-	-56.64	3.74	-9.54	44.55	68.20	-23.65
	29125.00	Peak	Н	-	-	-56.15	5.67	-9.54	46.97	68.20	-21.23

Table 7-60. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dega 207 of 226
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Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5845MHz
Channel:	169

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11690.00	Average	Н	185	45	-72.22	9.31	0.00	44.09	53.98	-9.89
*	11690.00	Peak	Н	185	45	-57.52	9.31	0.00	58.79	73.98	-15.19
	17535.00	Peak	Н	-	-	-65.13	14.18	0.00	56.05	68.20	-12.15
	23380.00	Peak	Н	-	-	-55.55	3.76	-9.54	55.21	68.20	-12.99
	29225.00	Peak	Н	-	-	-56.07	5.66	-9.54	56.59	68.20	-11.61
	35070.00	Peak	Н	-	-	-54.39	7.69	-9.54	60.30	68.20	-7.90

Table 7-61. Radiated Measurements MIMO (26 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5845MHz
Channel:	173

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11730.00	Average	Н	320	48	-73.18	9.22	0.00	43.04	53.98	-10.94
*	11730.00	Peak	Н	320	48	-59.27	9.22	0.00	56.95	73.98	-17.03
	17595.00	Peak	Н	-	-	-64.46	14.38	0.00	56.92	68.20	-11.28
	23460.00	Peak	Н	-	-	-55.82	3.76	-9.54	54.94	68.20	-13.26
	29325.00	Peak	Н	-	-	-55.32	5.90	-9.54	57.58	68.20	-10.62
	35190.00	Peak	Н	-	-	-54.12	7.78	-9.54	60.66	68.20	-7.54

Table 7-62. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS916U	element)	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 208 of 236
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Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5885MHz
Channel:	177
Operating Frequency:	5885MHz

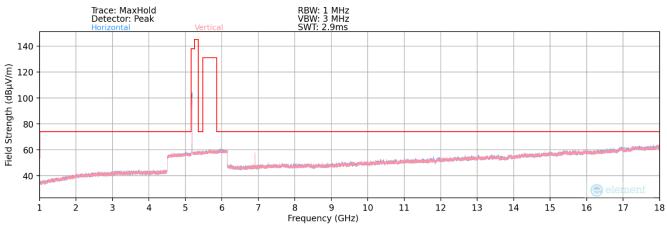
	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11770.00	Average	Н	214	41	-71.79	10.00	0.00	45.21	53.98	-8.77
*	11770.00	Peak	Н	214	41	-57.11	10.00	0.00	59.89	73.98	-14.09
	17655.00	Peak	Н	-	-	-64.52	14.79	0.00	57.27	68.20	-10.93
	23540.00	Peak	Н	-	-	-56.23	3.80	-9.54	54.57	68.20	-13.63
	29425.00	Peak	Н	-	-	-55.59	5.83	-9.54	57.24	68.20	-10.96
	35310.00	Peak	Н	-	-	-54.46	7.90	-9.54	60.44	68.20	-7.76

Table 7-63. Radiated Measurements MIMO (26 Tones)

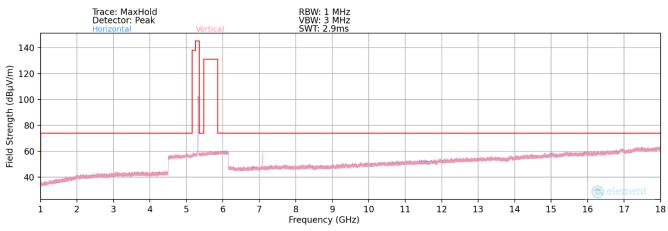
FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dega 200 of 226
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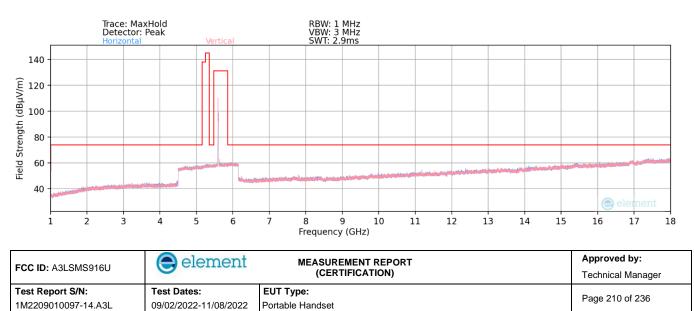
### 242 Tones



Plot 7-308. Radiated Spurious Plot above 1GHz MIMO (802.11ax - U1 Ch. 40 - 242 Tones)



Plot 7-309. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2A Ch. 56 – 242 Tones)

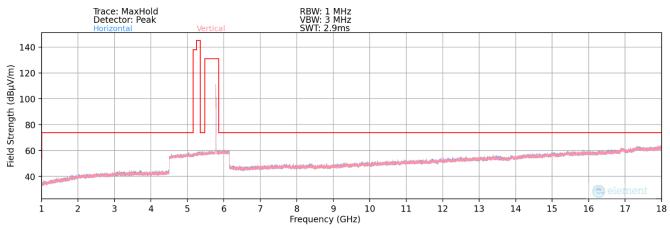


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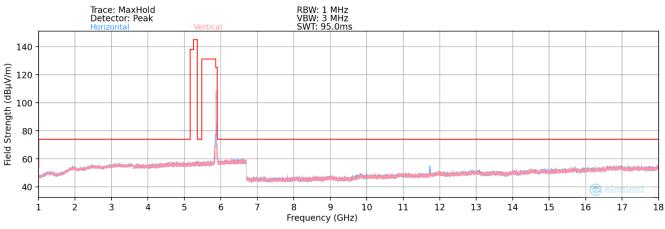
V 9.0 02/01/2019



#### Plot 7-310. Radiated Spurious Plot above 1GHz MIMO (802.11ax - U2C Ch. 120 - 242 Tones)





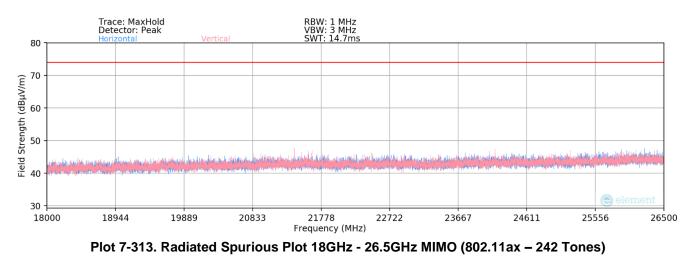


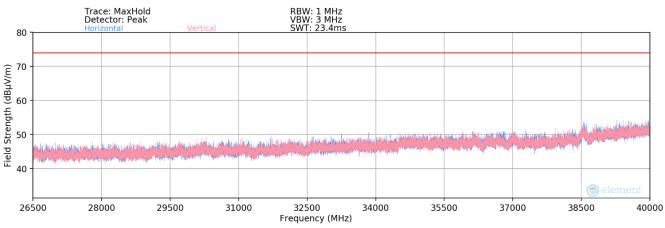
Plot 7-312. Radiated Spurious Plot above 1GHz MIMO (802.11ax - U3 Ch. 173 - 242 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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# MIMO Radiated Spurious Emissions Measurements (Above 18GHz)





Plot 7-314. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11ax - 242 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 212 of 226
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#### MIMO Radiated Spurious Emission Measurements (242 Tones) §15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

802.11ax (20MHz BW)
MCS0
61
1 & 3 Meters
5180MHz
36

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10360.00	Peak	Н	227	76	-50.85	8.74	0.00	64.89	68.20	-3.31
*	15540.00	Average	Н	236	95	-77.12	10.23	0.00	40.11	53.98	-13.87
*	15540.00	Peak	Н	236	95	-64.03	10.23	0.00	53.20	73.98	-20.78
*	20720.00	Average	Н	150	62	-66.58	3.37	-9.54	34.25	53.98	-19.73
*	20720.00	Peak	Н	150	62	-55.95	3.37	-9.54	44.88	73.98	-29.10
	25900.00	Peak	Н	-	-	-55.46	4.84	-9.54	46.83	68.20	-21.37

Table 7-64. Radiated Measurements MIMO (242 Tones)

Worst Case Mode: Worst Case Transfer Rate: RU Index: Distance of Measurements: Operating Frequency: Channel: 802.11ax (20MHz BW) MCS0 61 1 & 3 Meters 5200MHz 40

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10400.00	Peak	Н	223	63	-51.31	9.31	0.00	65.00	68.20	-3.20
*	15600.00	Average	Н	237	81	-76.37	9.27	0.00	39.90	53.98	-14.08
*	15600.00	Peak	Н	237	81	-62.46	9.27	0.00	53.81	73.98	-20.17
*	20800.00	Average	Н	-	-	-65.97	3.43	-9.54	34.91	53.98	-19.07
*	20800.00	Peak	Н	-	-	-56.05	3.43	-9.54	44.83	73.98	-29.15
	26000.00	Peak	Н	-	-	-55.63	4.89	-9.54	46.72	68.20	-21.48

Table 7-65. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 012 of 026	
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802.11ax (20MHz BW)				
MCS0				
61				
& 3 Meters				
240MHz				
8				

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10480.00	Peak	н	233	49	-50.87	8.61	0.00	64.74	68.20	-3.46
*	15720.00	Average	Н	-	-	-77.95	9.39	0.00	38.44	53.98	-15.54
*	15720.00	Peak	Н	-	-	-65.22	9.39	0.00	51.17	73.98	-22.81
*	20960.00	Average	Н	-	-	-67.14	3.50	-9.54	33.82	53.98	-20.16
*	20960.00	Peak	Н	-	-	-56.66	3.50	-9.54	44.30	73.98	-29.68
	26200.00	Peak	н	-	-	-55.12	4.72	-9.54	47.06	68.20	-21.14

#### Table 7-66. Radiated Measurements MIMO (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)					
Worst Case Transfer Rate:	MCS0					
RU Index:	61					
Distance of Measurements:	1 & 3 Meters					
Operating Frequency:	5260MHz					
Channel:	52					

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10520.00	Peak	Н	238	49	-50.80	7.91	0.00	64.11	68.20	-4.09
*	15780.00	Average	Н	133	78	-77.48	9.19	0.00	38.71	53.98	-15.27
*	15780.00	Peak	Н	133	78	-65.02	9.19	0.00	51.17	73.98	-22.81
*	21040.00	Average	Н	-	-	-66.75	3.56	-9.54	34.27	53.98	-19.71
*	21040.00	Peak	Н	-	-	-55.54	3.56	-9.54	45.48	73.98	-28.50
	26300.00	Peak	Н	-	-	-56.25	4.68	-9.54	45.89	68.20	-22.31

Table 7-67. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 214 of 226
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802.11ax (20MHz BW)				
MCS0				
61				
1 & 3 Meters				
5280MHz				
56				

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10560.00	Peak	н	227	55	-50.69	8.05	0.00	64.36	68.20	-3.84
*	15840.00	Average	Н	-	-	-78.14	9.10	0.00	37.96	53.98	-16.02
*	15840.00	Peak	Н	-	-	-66.19	9.10	0.00	49.91	73.98	-24.07
*	21120.00	Average	Н	-	-	-66.60	3.66	-9.54	34.52	53.98	-19.46
*	21120.00	Peak	Н	-	-	-55.56	3.66	-9.54	45.56	73.98	-28.42
	26400.00	Peak	Н	-	-	-55.97	4.56	-9.54	46.04	68.20	-22.16

#### Table 7-68. Radiated Measurements MIMO (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW) MCS0					
Worst Case Transfer Rate:						
RU Index:	61					
Distance of Measurements:	1 & 3 Meters					
Operating Frequency:	5320MHz					
Channel:	64					

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	10640.00	Average	Н	233	49	-64.26	8.17	0.00	50.91	53.98	-3.07
*	10640.00	Peak	Н	233	49	-50.15	8.17	0.00	65.02	73.98	-8.96
*	15960.00	Average	Н	-	-	-77.52	8.86	0.00	38.34	53.98	-15.64
*	15960.00	Peak	Н	-	-	-65.35	8.86	0.00	50.51	73.98	-23.47
*	21280.00	Average	Н	-	-	-66.85	3.77	-9.54	34.38	53.98	-19.60
*	21280.00	Peak	Н	-	-	-55.85	3.77	-9.54	45.38	73.98	-28.60
	26600.00	Peak	Н	-	-	-55.53	4.58	-9.54	46.51	68.20	-21.69

Table 7-69. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 015 of 000
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Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5500MHz
Channel:	100

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11000.00	Average	Н	212	33	-64.54	8.07	0.00	50.53	53.98	-3.45
*	11000.00	Peak	Н	212	33	-51.41	8.07	0.00	63.66	73.98	-10.32
	16500.00	Peak	Н	-	-	-64.58	8.78	0.00	51.20	68.20	-17.00
	22000.00	Peak	Н	150	30	-56.39	3.80	-9.54	44.87	68.20	-23.33
	27500.00	Peak	Н	-	-	-55.15	4.79	-9.54	47.09	68.20	-21.11

# Table 7-70. Radiated Measurements MIMO (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5600MHz
Channel:	120

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11200.00	Average	Н	203	37	-69.68	8.67	0.00	45.99	53.98	-7.99
*	11200.00	Peak	Н	203	37	-53.82	8.67	0.00	61.85	73.98	-12.13
	16800.00	Peak	н	-	-	-64.98	9.37	0.00	51.39	68.20	-16.81
*	22400.00	Average	Н	150	28	-64.80	3.90	-9.54	36.56	53.98	-17.42
*	22400.00	Peak	Н	150	28	-55.63	3.90	-9.54	45.73	73.98	-28.25
	28000.00	Peak	Н	-	-	-56.24	5.18	-9.54	46.40	68.20	-21.80

Table 7-71. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 216 of 226
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802.11ax (20MHz BW)
MCS0
61
1 & 3 Meters
5720MHz
144

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11440.00	Average	н	206	34	-70.78	8.63	0.00	44.85	53.98	-9.13
*	11440.00	Peak	Н	206	34	-53.85	8.63	0.00	61.78	73.98	-12.20
	17160.00	Peak	Н	-	-	-65.61	11.15	0.00	52.54	68.20	-15.66
*	22880.00	Average	Н	-	-	-66.31	3.82	-9.54	34.97	53.98	-19.01
*	22880.00	Peak	Н	-	-	-56.41	3.82	-9.54	44.87	73.98	-29.11
	28600.00	Peak	Н	-	-	-55.93	5.43	-9.54	46.96	68.20	-21.24

#### Table 7-72. Radiated Measurements MIMO (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5745MHz
Channel:	149

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin (dB)
*	11490.00	Average	Н	185	29	-72.06	8.37	0.00	43.31	53.98	-10.67
*	11490.00	Peak	Н	185	29	-55.29	8.37	0.00	60.08	73.98	-13.90
	17235.00	Peak	Н	-	-	-64.94	11.67	0.00	53.73	68.20	-14.47
*	22980.00	Average	Н	-	-	-66.69	3.76	-9.54	34.53	53.98	-19.45
*	22980.00	Peak	Н	-	-	-56.60	3.76	-9.54	44.62	73.98	-29.36
	28725.00	Peak	Н	-	-	-56.37	5.46	-9.54	46.55	68.20	-21.65

Table 7-73. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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802.11ax (20MHz BW)
MCS0
61
1 & 3 Meters
5785MHz
157

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11570.00	Average	н	205	32	-70.82	8.50	0.00	44.68	53.98	-9.30
*	11570.00	Peak	Н	205	32	-54.45	8.50	0.00	61.05	73.98	-12.93
	17355.00	Peak	н	-	-	-65.23	12.72	0.00	54.49	68.20	-13.71
	23140.00	Peak	Н	-	-	-56.31	3.80	-9.54	44.94	68.20	-23.26
	28925.00	Peak	н	-	-	-56.39	5.51	-9.54	46.58	68.20	-21.62

# Table 7-74. Radiated Measurements MIMO (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5825MHz
Channel:	165

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11650.00	Average	Н	197	44	-71.28	8.74	0.00	44.46	53.98	-9.52
*	11650.00	Peak	Н	197	44	-55.20	8.74	0.00	60.54	73.98	-13.44
	17475.00	Peak	н	-	-	-65.13	13.55	0.00	55.42	68.20	-12.78
	23300.00	Peak	Н	-	-	-56.60	3.74	-9.54	44.59	68.20	-23.61
	29125.00	Peak	Н	-	-	-55.58	5.67	-9.54	47.54	68.20	-20.66

Table 7-75. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5845MHz
Channel:	169

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11690.00	Average	Н	205	50	-70.85	9.31	0.00	45.46	53.98	-8.52
*	11690.00	Peak	Н	205	50	-55.24	9.31	0.00	61.07	73.98	-12.91
	17535.00	Peak	Н	-	-	-65.19	14.18	0.00	55.99	68.20	-12.21
	23380.00	Peak	Н	-	-	-55.72	3.76	-9.54	55.04	68.20	-13.16
	29225.00	Peak	Н	-	-	-55.75	5.66	-9.54	56.91	68.20	-11.29
	35070.00	Peak	Н	-	-	-54.46	7.69	-9.54	60.23	68.20	-7.97

Table 7-76. Radiated Measurements MIMO (242 Tones)

802.11ax (20MHz BW) MCS0 61 1 & 3 Meters 5865MHz 173

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11730.00	Average	Н	209	49	-71.83	9.22	0.00	44.39	53.98	-9.59
*	11730.00	Peak	Н	209	49	-56.83	9.22	0.00	59.39	73.98	-14.59
	17595.00	Peak	Н	-	-	-64.18	14.38	0.00	57.20	68.20	-11.00
	23460.00	Peak	Н	-	-	-55.85	3.76	-9.54	54.91	68.20	-13.29
	29325.00	Peak	Н	-	-	-54.76	5.90	-9.54	58.14	68.20	-10.06
	35190.00	Peak	Н	-	-	-54.58	7.78	-9.54	60.20	68.20	-8.00

Table 7-77. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
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Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5885MHz
Channel:	177

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11770.00	Average	Н	214	60	-70.40	10.00	0.00	46.60	53.98	-7.38
*	11770.00	Peak	Н	214	60	-55.81	10.00	0.00	61.19	73.98	-12.79
	17655.00	Peak	Н	-	-	-64.73	14.79	0.00	57.06	68.20	-11.14
	23540.00	Peak	Н	-	-	-56.35	3.80	-9.54	54.45	68.20	-13.75
	29425.00	Peak	Н	-	-	-55.96	5.83	-9.54	56.87	68.20	-11.33
	35310.00	Peak	Н	-	-	-54.19	7.90	-9.54	60.71	68.20	-7.49

Table 7-78. Radiated Measurements MIMO (242 Tones)

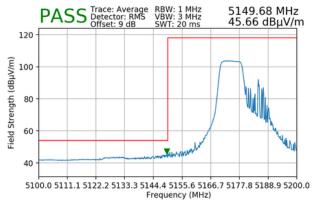
FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: Test Dates:		EUT Type:	Dogo 220 of 226
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#### 7.6.2 MIMO Radiated Band Edge Measurements (20MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

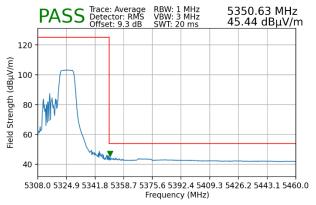
#### 106 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	53
Distance of Measurements:	3 Meters
Operating Frequency:	5180MHz
Channel:	36

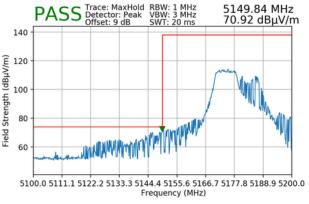


Plot 7-315. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 106 Tones)

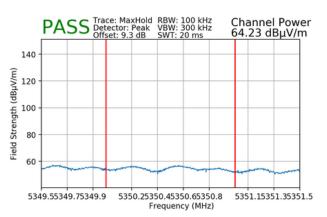
Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	54
Distance of Measurements:	3 Meters
Operating Frequency:	5320MHz
Channel:	64







Plot 7-316. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 106 Tones)



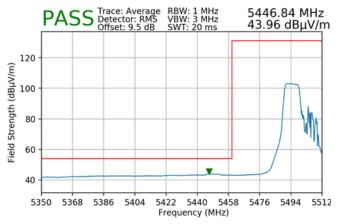


FCC ID: A3LSMS916U	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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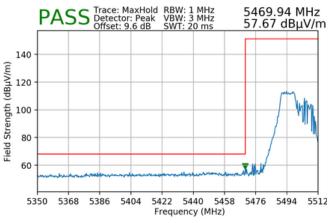
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Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	53
Distance of Measurements:	3 Meters
Operating Frequency:	5500MHz
Channel:	100



Plot 7-319. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 106 Tones)



Plot 7-320. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C – 106 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	54
Distance of Measurements:	3 Meters
Operating Frequency:	5825MHz
Channel:	165

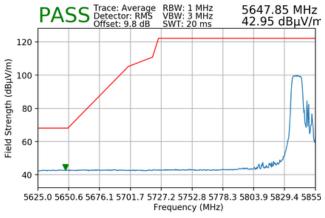




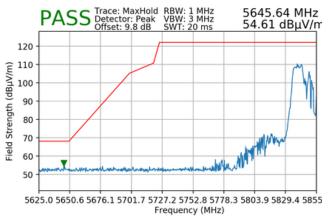
FCC ID: A3LSMS916U	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dega 222 of 226
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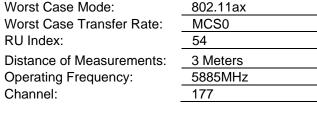
Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	53
Distance of Measurements:	3 Meters
Operating Frequency:	5845MHz
Channel:	169

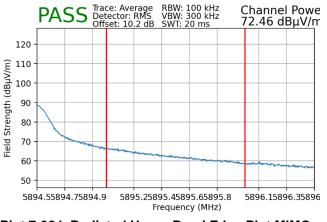


Plot 7-322. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 4 – 106 Tones)



Plot 7-323. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 4 – 106 Tones)









Plot 7-325. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 4 – 106 Tones)

FCC ID: A3LSMS916U	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode:

**RU Index:** 

Channel:

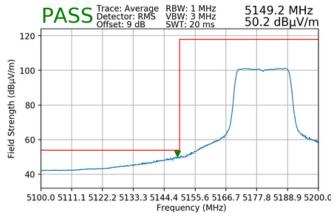
Worst Case Transfer Rate:

**Distance of Measurements:** 

**Operating Frequency:** 

### 242 Tones

Worst Case Mode:802.11axWorst Case Transfer Rate:MCS0RU Index:61Distance of Measurements:3 MetersOperating Frequency:5180MHzChannel:36



Plot 7-326. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 242 Tones)

802.11ax

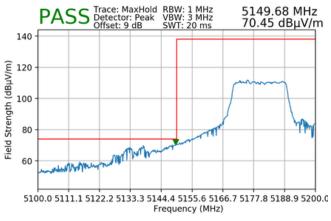
3 Meters

5320MHz

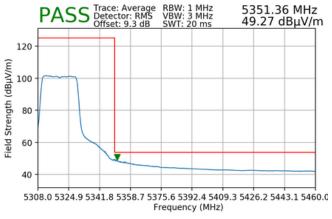
MCS0

61

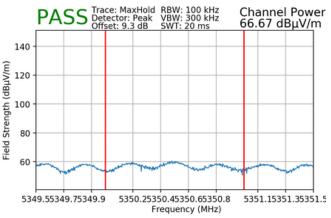
64



Plot 7-327. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 242 Tones)





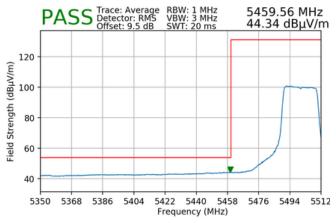




FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 224 of 226
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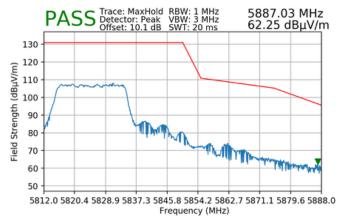


Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5500MHz
Channel:	100



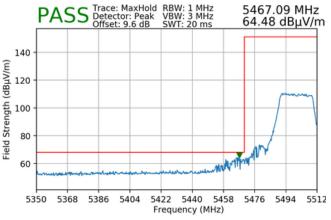
Plot 7-330. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 242 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5825MHz
Channel:	165
-	





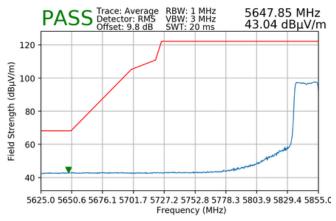
FCC ID: A3LSMS916U	element	element MEASUREMENT REPORT (CERTIFICATION)	
Test Report S/N:	Test Dates:	EUT Type:	Dage 225 of 226
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Plot 7-331. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C – 242 Tones)

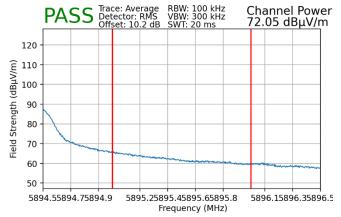


Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5845MHz
Channel:	169

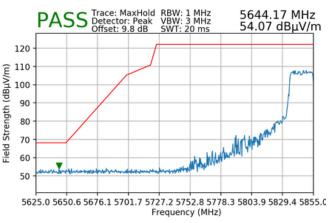


Plot 7-333. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 4 – 242 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5885MHz
Channel:	177







Plot 7-334. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 4 – 242 Tones)



Plot 7-336. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 4 – 242 Tones)

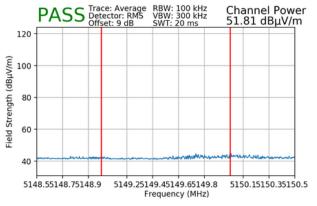
FCC ID: A3LSMS916U	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 226 of 226
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			V 0 0 02/01/2010



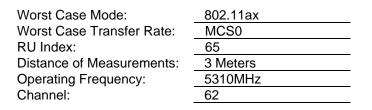
#### MIMO Radiated Band Edge Measurements (40MHz BW) 7.6.3 §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

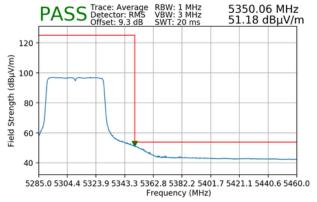
#### 484 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	65
Distance of Measurements:	3 Meters
Operating Frequency:	5190MHz
Channel:	38



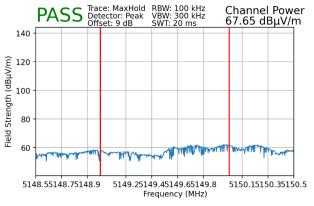




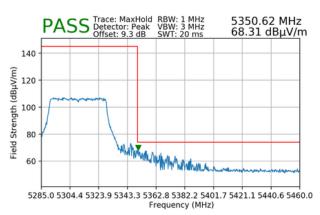




ct.info@element.com.



Plot 7-338. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 484 Tones)

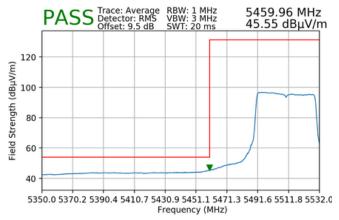


Plot 7-340. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A – 484 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 227 of 236
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			V 9.0 02/01/2019

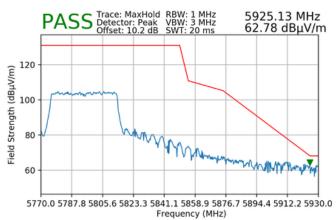


802.11ax
MCS0
65
3 Meters
5510MHz
102



Plot 7-341. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 484 Tones)

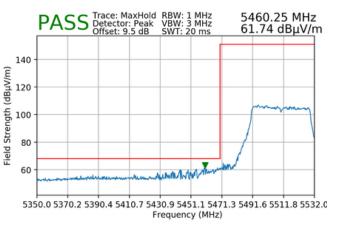
Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	65
Distance of Measurements:	3 Meters
Operating Frequency:	5795MHz
Channel:	159



Plot 7-343. Radiated Upper Band Edge Plot MIMO

(Peak – UNII Band 3 – 484 Tones)

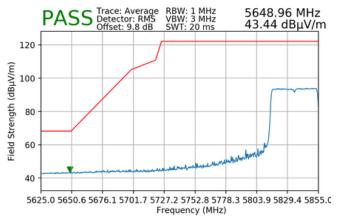
FCC ID: A3LSMS916U	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 200 of 200
1M2209010097-14.A3L	09/02/2022-11/08/2022	Portable Handset	Page 228 of 236
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Plot 7-342. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C – 484 Tones)

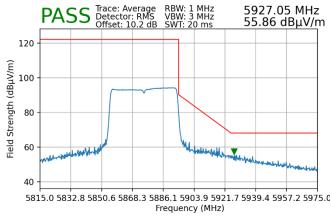


Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	65
Distance of Measurements:	3 Meters
Operating Frequency:	5835MHz
Channel:	167

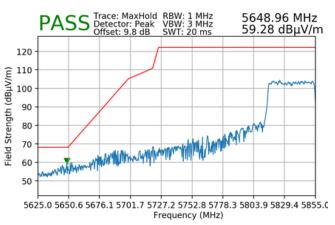


Plot 7-344. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 4 – 484 Tones)

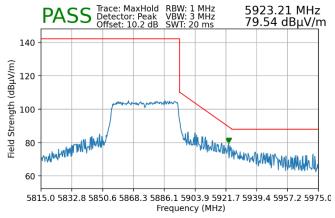
Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	65
Distance of Measurements:	3 Meters
Operating Frequency:	5875MHz
Channel:	175







Plot 7-345. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 4 – 484 Tones)



Plot 7-347. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 4 – 484 Tones)

FCC ID: A3LSMS916U	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 229 of 236
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			V 9.0 02/01/2019