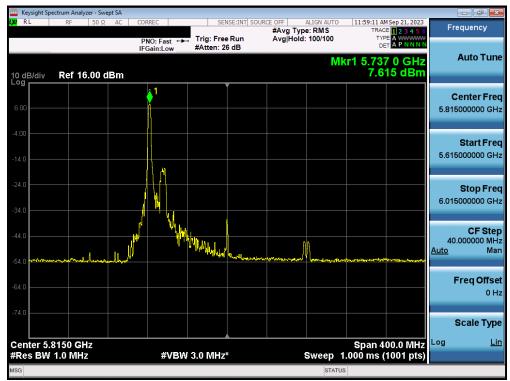




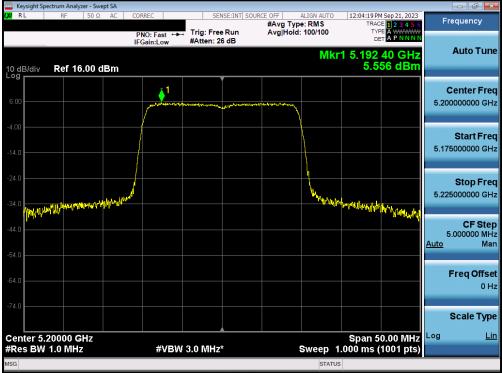
Plot 7-89. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be - 26 Tones (UNII Band 3/4) - Ch. 171)



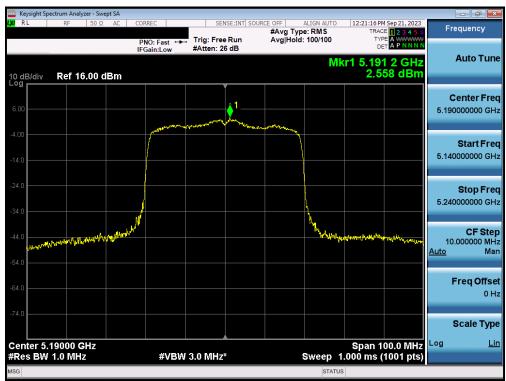
Plot 7-90. Power Spectral Density Plot MIMO ANT1 (160MHz(U) BW 802.11be - 26 Tones (UNII Band 3/4) - Ch. 163)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 95 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 85 of 166
© 2024 ELEMENT	-		V 11.0 07/06/2023





Plot 7-91. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be - 242 Tones (UNII Band 1) - Ch. 40)



Plot 7-92. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be - 484 Tones (UNII Band 1) - Ch. 38)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 96 of 166	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 86 of 166	
© 2024 ELEMENT	<u>.</u>		V 11.0 07/06/2023	





Plot 7-93. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be - 996 Tones (UNII Band 1) - Ch. 42)

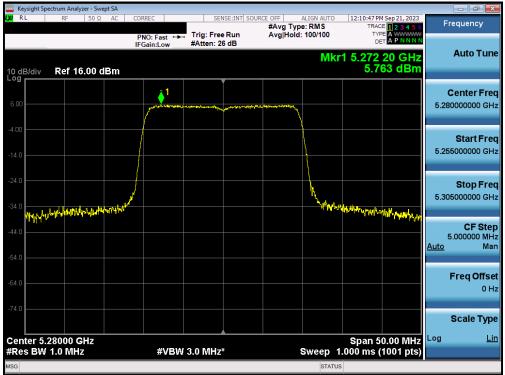


Plot 7-94. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11be - 2x996 Tones (UNII Band 1/2A) - Ch. 50)

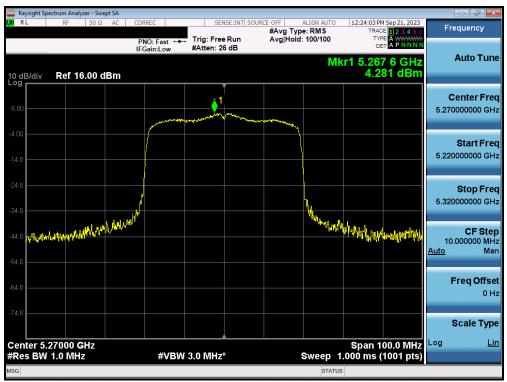
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 97 of 166	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 87 of 166	
© 2024 ELEMENT	•		V 11.0 07/06/2023	

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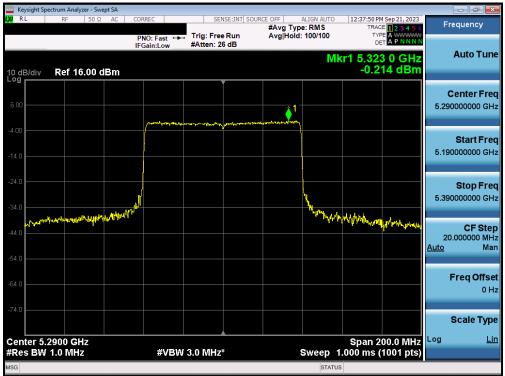
Plot 7-95. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be - 242 Tones (UNII Band 2A) - Ch. 56)



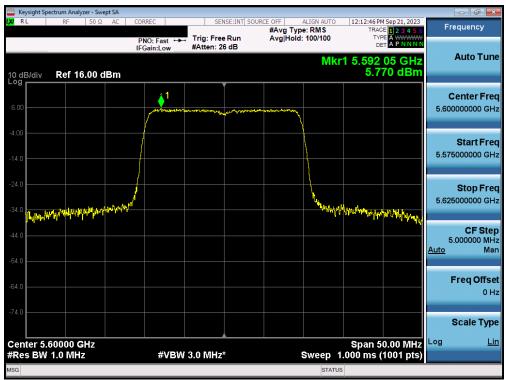
Plot 7-96. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be - 484 Tones (UNII Band 2A) - Ch. 54)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dege 99 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 88 of 166
© 2024 ELEMENT	V 11.0 07/06/2023		





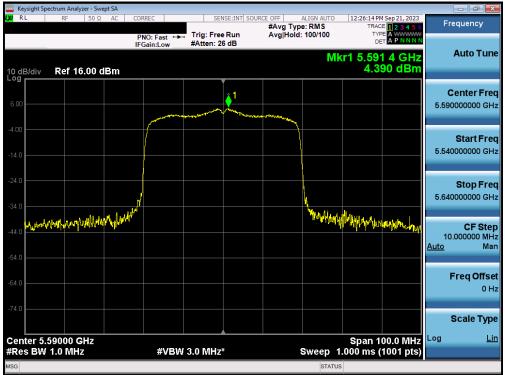
Plot 7-97. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be - 996 Tones (UNII Band 2A) - Ch. 58)



Plot 7-98. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be - 242 Tones (UNII Band 2C) - Ch. 120)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT	
Test Report S/N:	Test Dates:	EUT Type:	Dama 00 of 400
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 89 of 166
2024 ELEMENT			V 11.0 07/06/2023





Plot 7-99. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be - 484 Tones (UNII Band 2C) - Ch. 118)



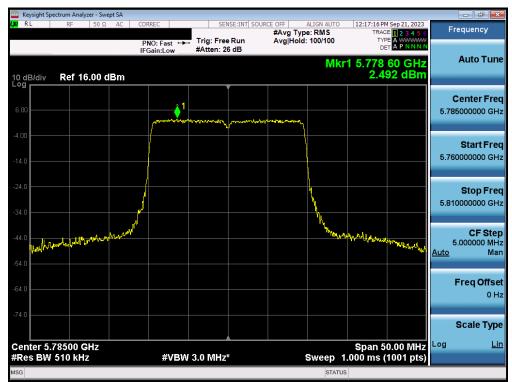
Plot 7-100. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be - 996 Tones (UNII Band 2C) - Ch. 122)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT	
Test Report S/N:	Test Dates:	EUT Type:	Dama 00 of 100
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 90 of 166
© 2024 ELEMENT			V 11.0 07/06/2023





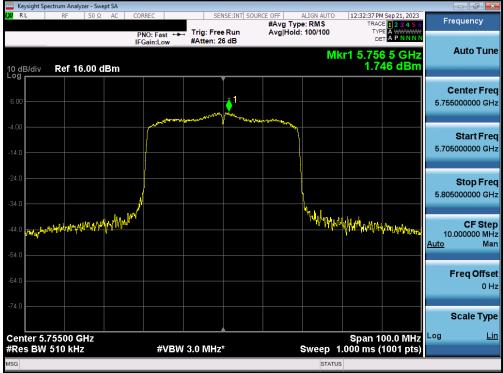
Plot 7-101. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11be - 2x996 Tones (UNII Band 2C) - Ch. 114)



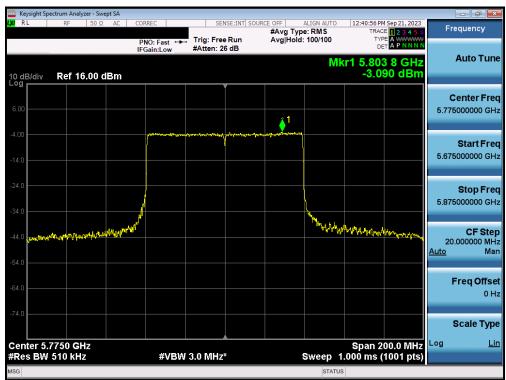
Plot 7-102. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be - 242 Tones (UNII Band 3) - Ch. 157)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 01 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 91 of 166
© 2024 ELEMENT	•		V 11.0 07/06/2023





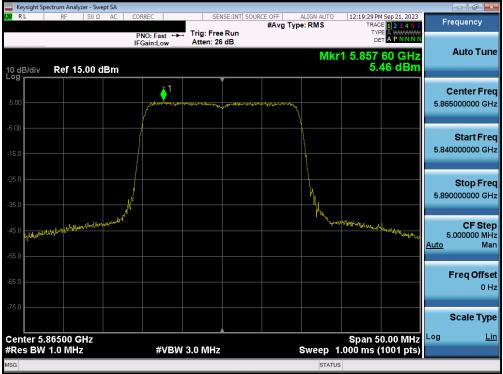
Plot 7-103. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be - 484 Tones (UNII Band 3) - Ch. 151)



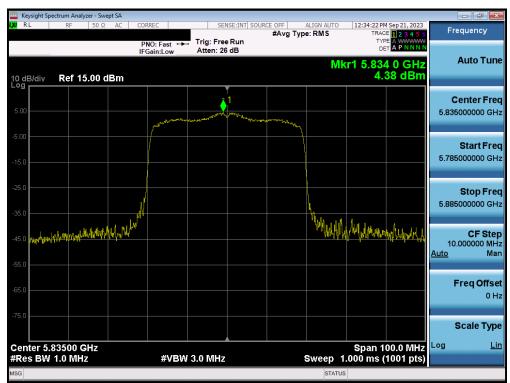
Plot 7-104. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be - 996 Tones (UNII Band 3) - Ch. 155)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 02 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 92 of 166
© 2024 ELEMENT		·	V 11.0 07/06/2023





Plot 7-105. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be - 242 Tones (UNII Band 4) - Ch. 173)



Plot 7-106. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be - 484 Tones (UNII Band 3/4) - Ch. 167)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 02 of 166	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 93 of 166	
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Plot 7-107. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 996 Tones (UNII Band 3/4) – Ch. 171)

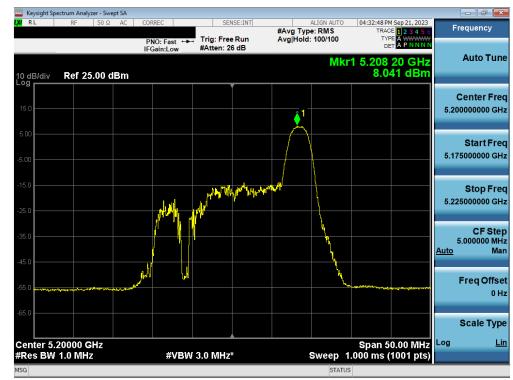


Plot 7-108. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11be - 996*2 Tones (UNII Band 3/4) - Ch. 163)

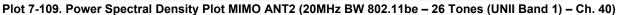
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 04 of 166	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 94 of 166	
© 2024 ELEMENT	-		V 11.0 07/06/2023	

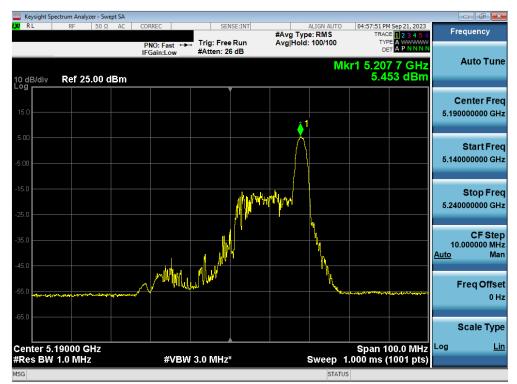
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7.5.2 MIMO Antenna-2 Power Spectral Density Measurements

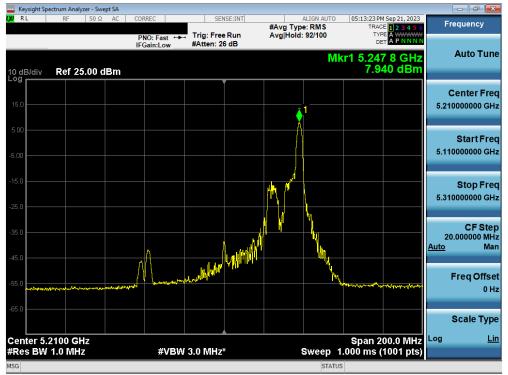




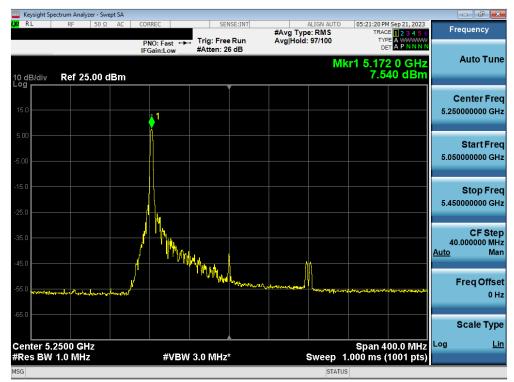
Plot 7-110. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11be - 26 Tones (UNII Band 1) - Ch. 38)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dama 05 of 400
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 95 of 166
© 2024 ELEMENT	· •		V 11 0 07/06/2023





Plot 7-111. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11be - 26 Tones (UNII Band 1) - Ch. 42)



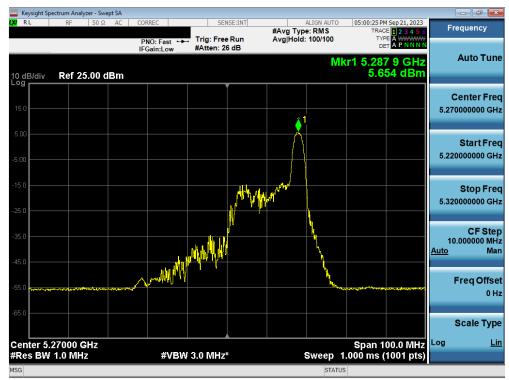
Plot 7-112. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11be - 26 Tones (UNII Band 1/2A) - Ch. 50)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT		
Test Report S/N:	Test Dates:	EUT Type:		
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 96 of 166	
© 2024 ELEMENT			V 11.0 07/06/2023	





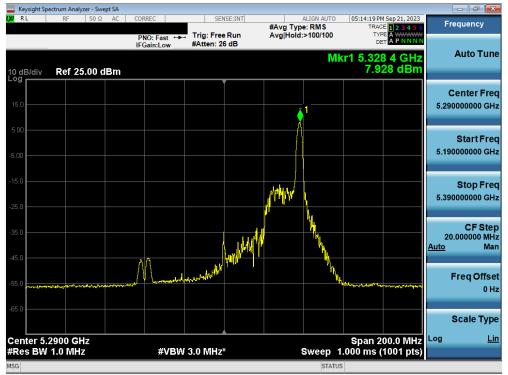
Plot 7-113. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11be - 26 Tones (UNII Band 2A) - Ch. 56)



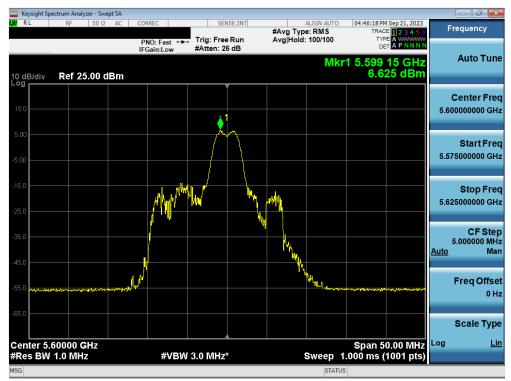
Plot 7-114. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11be - 26 Tones (UNII Band 2A) - Ch. 54)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 07 of 166	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 97 of 166	
© 2024 ELEMENT			V 11.0 07/06/2023	





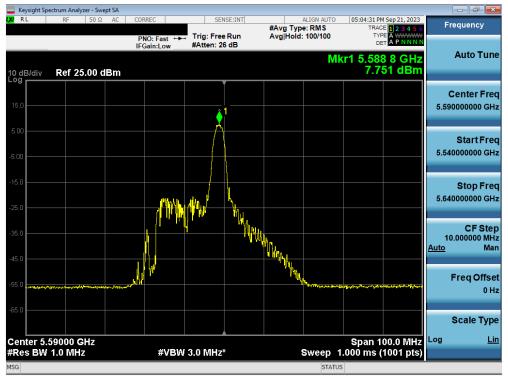
Plot 7-115. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11be - 26 Tones (UNII Band 2A) - Ch. 58)



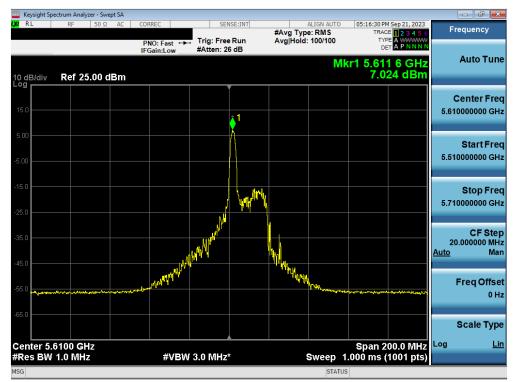
Plot 7-116. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11be - 26 Tones (UNII Band 2C) - Ch. 120)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT	
Test Report S/N:	Test Dates:	EUT Type:	De
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 98 of 166
2 2024 ELEMENT			V 11.0 07/06/2023





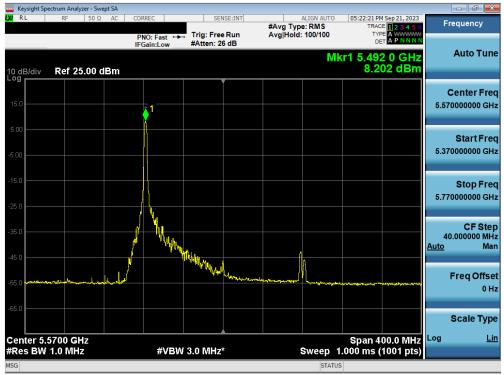
Plot 7-117. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11be - 26 Tones (UNII Band 2C) - Ch. 118)



Plot 7-118. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11be - 26 Tones (UNII Band 2C) - Ch. 122)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 00 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 99 of 166
© 2024 ELEMENT	V 11.0 07/06/2023		





Plot 7-119. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11be - 26 Tones (UNII Band 2C) - Ch. 114)



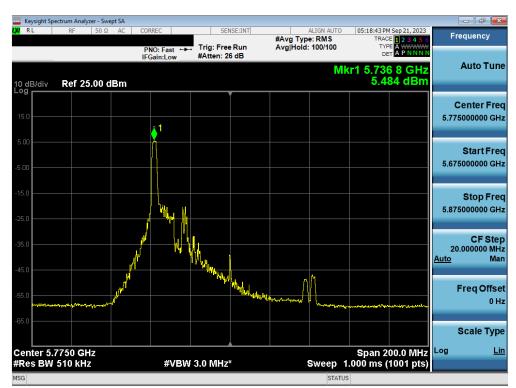
Plot 7-120. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11be - 26 Tones (UNII Band 3) - Ch. 157)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 100 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 100 of 166
2024 ELEMENT			V 11.0 07/06/2023





Plot 7-121. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11be - 26 Tones (UNII Band 3) - Ch. 151)



Plot 7-122. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11be – 26 Tones (UNII Band 3) – Ch. 155)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 101 of 166	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 101 of 166	
© 2024 ELEMENT			V 11.0 07/06/2023	





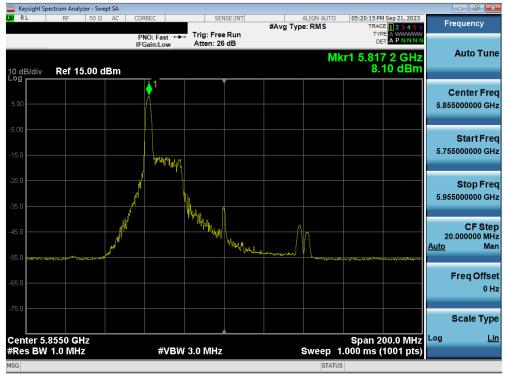
Plot 7-123. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11be - 26 Tones (UNII Band 4) - Ch. 173)



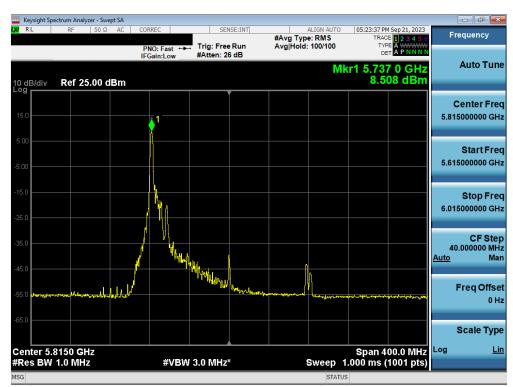
Plot 7-124. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11be - 26 Tones (UNII Band 3/4) - Ch. 167)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 102 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 102 of 166
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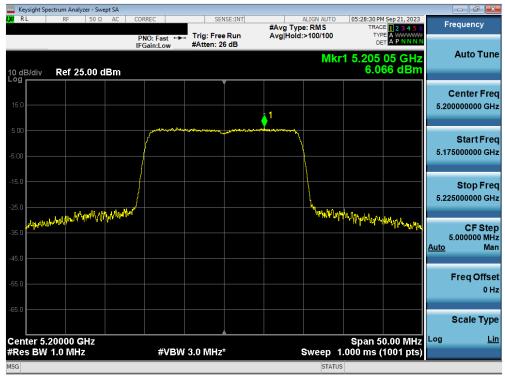
Plot 7-125. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11be – 26 Tones (UNII Band 3/4) – Ch. 171)



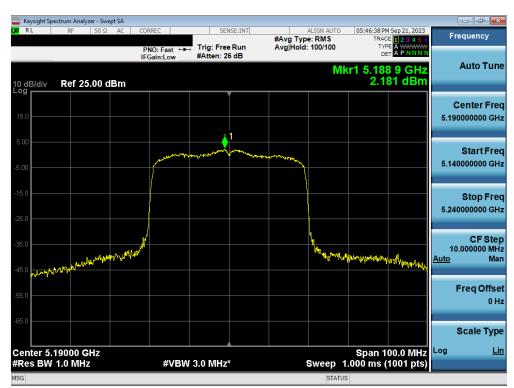
Plot 7-126. Power Spectral Density Plot MIMO ANT2 (160MHz(U) BW 802.11be - 26 Tones (UNII Band 3/4) - Ch. 163)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 102 of 166	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 103 of 166	
© 2024 ELEMENT	V 11.0 07/06/2023			





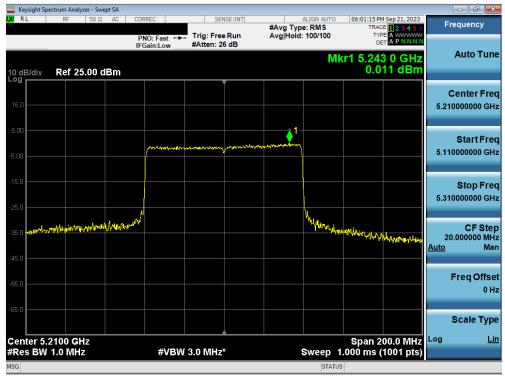
Plot 7-127. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11be - 242 Tones (UNII Band 1) - Ch. 40)



Plot 7-128. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11be – 484 Tones (UNII Band 1) – Ch. 38)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 104 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 104 of 166
2024 ELEMENT			V 11.0 07/06/2023





Plot 7-129. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11be - 996 Tones (UNII Band 1) - Ch. 42)



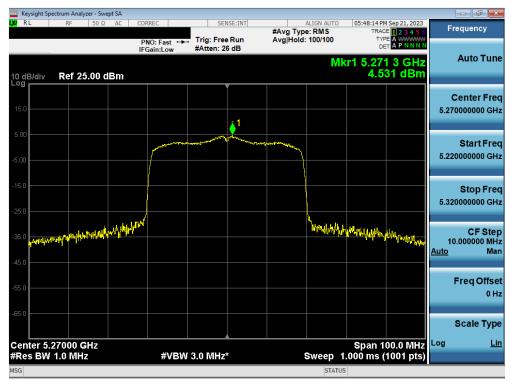
Plot 7-130. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11be - 2x996 Tones (UNII Band 1/2A) - Ch. 50)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 105 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 105 of 166
© 2024 ELEMENT			V 11.0 07/06/2023





Plot 7-131. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11be - 242 Tones (UNII Band 2A) - Ch. 56)



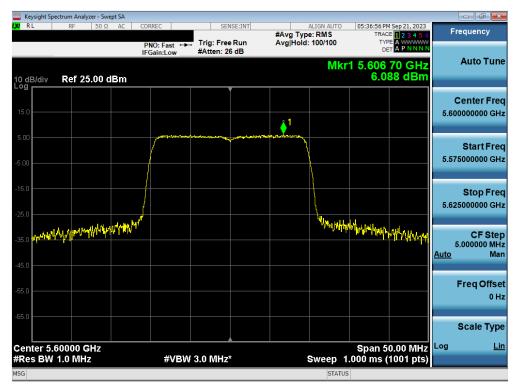
Plot 7-132. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11be – 484 Tones (UNII Band 2A) – Ch. 54)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT	
Test Report S/N:	Test Dates:	EUT Type:	Dama 400 af 400
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 106 of 166
2024 ELEMENT			V 11.0 07/06/2023





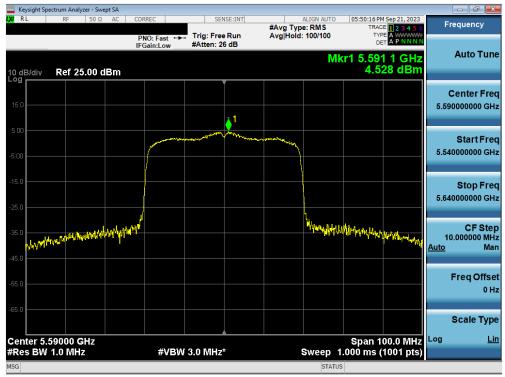
Plot 7-133. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11be - 996 Tones (UNII Band 2A) - Ch. 58)



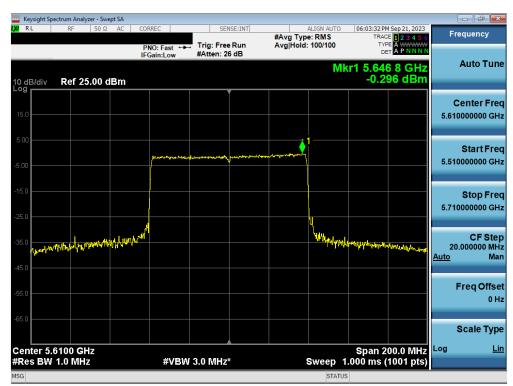
Plot 7-134. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11be - 242 Tones (UNII Band 2C) - Ch. 120)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 107 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 107 of 166
© 2024 ELEMENT	V 11.0 07/06/2023		





Plot 7-135. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11be - 484 Tones (UNII Band 2C) - Ch. 118)



Plot 7-136. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11be - 996 Tones (UNII Band 2C) - Ch. 122)

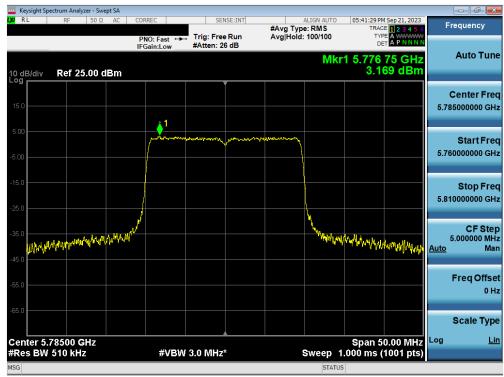
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 109 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 108 of 166
0 2024 ELEMENT			V 11.0 07/06/2023

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PNO: Fast Trig: Free Run #Avg Type: RMS Trace 2.83550 Frequency 10 dB/div Ref 25.00 dBm		ectrum Analyzer - Swe										×
PNO: Fast Trig: Free Run IFGain:Low AvgiHoid: 100/100 Trig: Free Run Auto Tune 0 dB/div Ref 25.00 dBm Center Freq 150 Start Freq 500 Start Freq<	L <mark>XI</mark> RL	RF 50 Ω	AC COI	RREC	SEN	ISE:INT					Frequency	,
Log Center Freq 150 Center Freq 500 Start Freq								: 100/100	TYF DE Ikr1 5.52		Auto Ti	une
150 Center Freq 500 Start Freq<	10 dB/div	Ref 25.00 d	lBm						-2.5	10 dBm		
500 500 500 500 500 500 500 500												
250 250 250 250 250 250 250 250					1	processo	n an manager					
40.00000 MHz 40.00000 MHz 40.00000 MHz 40.00000 MHz Auto Man Freq Offset 0 Hz Scale Type Center 5.5700 GHz #Res BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.000 ms (1001 pts)											-	
-55.0 -55.0 -65.0 -75.0 -75.0 -75.0 -7	-33.0 (MAR	neron on another bolly	Waysell March					way have	mature have	Mart Warmer Willing	40.000000	MHz
Center 5.5700 GHz #Res BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.000 ms (1001 pts)												
#Res BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.000 ms (1001 pts)												
				#VRM	(3 0 MHz	*		Sween	Span 4	00.0 MHz	Log	Lin
	MSG			# V D V V	- 5. Will 12					roorpisj		

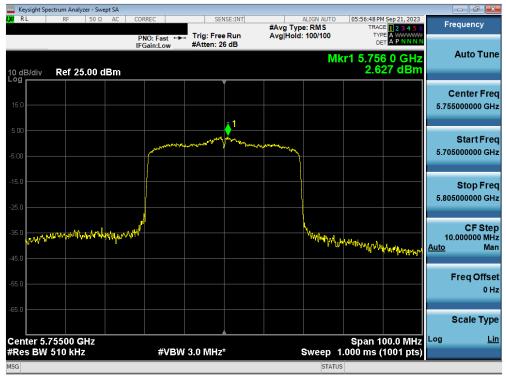
Plot 7-137. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11be - 2x996 Tones (UNII Band 2C) - Ch. 114)



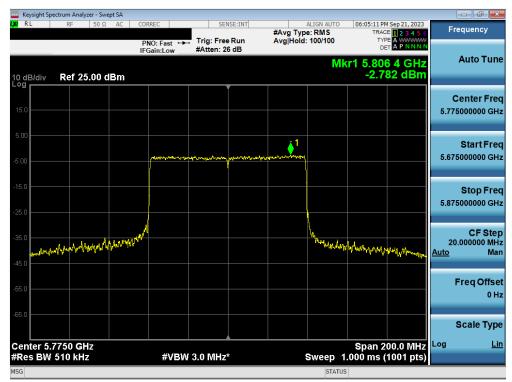
Plot 7-138. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11be – 242 Tones (UNII Band 3) – Ch. 157)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	Test Dates: EUT Type:	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 109 of 166
© 2024 ELEMENT			V 11.0 07/06/2023





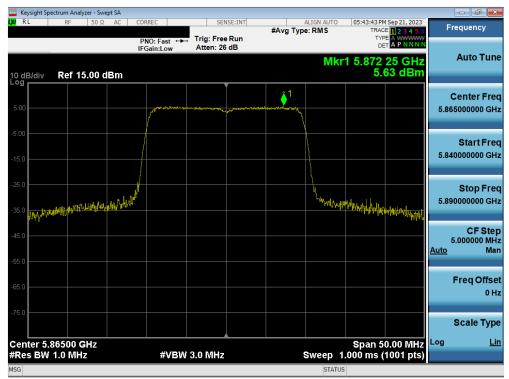
Plot 7-139. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11be - 484 Tones (UNII Band 3) - Ch. 151)



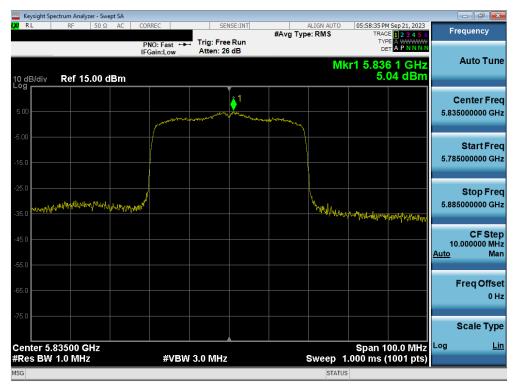
Plot 7-140. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11be - 996 Tones (UNII Band 3) - Ch. 155)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 110 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 110 of 166
© 2024 ELEMENT	-	•	V 11.0 07/06/2023





Plot 7-141. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11be - 242 Tones (UNII Band 4) - Ch. 173)



Plot 7-142. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11be - 484 Tones (UNII Band 3/4) - Ch. 167)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dega 111 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 111 of 166
© 2024 ELEMENT	•		V 11.0 07/06/2023





Plot 7-143. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11be - 996 Tones (UNII Band 3/4) - Ch. 171)



Plot 7-144. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11be - 996*2 Tones (UNII Band 3/4) - Ch. 163)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dama 440 af 400
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 112 of 166
© 2024 ELEMENT	•		V 11.0 07/06/2023



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

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 112 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 113 of 166
© 2024 ELEMENT	-		V 11.0 07/06/2023



7.6 Radiated Emission Measurements

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, 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 5.72GHz.

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

Frequency	Field Strength [μV/m]	Measured Distance [Meters]
0.009 – 0.490 MHz	2400\F (kHz)	300
0.490 – 1.705 MHz	24000\F (kHz)	30
1.705 – 30.00 MHz	30	30
30.00 – 88.00 MHz	100	3
88.00 – 216.0 MHz	150	3
216.0 – 960.0 MHz	200	3
Above 960.0 MHz	500	3

Table 7-45. Radiated Limits

Test Procedures Used

ANSI C63.10-2013 – Sections 12.7.7.2, 12.7.6, 12.7.5 (Radiated Spurious Emissions) ANSI C63.10-2013 – Section 12.7.4.4 (Band Edge Measurements)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	Test Dates: EUT Type:	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 114 of 166
© 2024 ELEMENT		•	V 11.0 07/06/2023



Test Settings – Above 1GHz

Average Field Strength Measurements (Method AD - Average Detection)

- 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)
- 5. Number of measurement points = 1001 (Number of points must be $\geq 2 \times \text{span}$)
- 6. Sweep time = auto
- 7. Trace (RMS) averaging was performed over at least 100 traces.

Peak Field Strength Measurements

- 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.

Test Settings – Below 1GHz

Quasi-Peak Field Strength Measurements

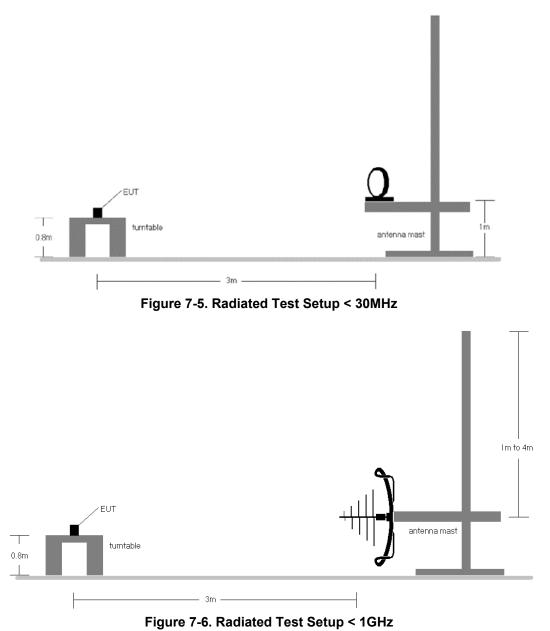
- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest.
- 2. RBW = 120kHz (for emissions from 30MHz 1GHz)
- 3. Detector = quasi-peak
- 4. Sweep time = auto couple
- 5. Trace mode = max hold
- 6. Trace was allowed to stabilize.

Test Setup

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

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dega 115 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 115 of 166
© 2024 ELEMENT		·	V 11.0 07/06/2023





FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 116 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 116 of 166
© 2024 ELEMENT			V 11.0 07/06/2023



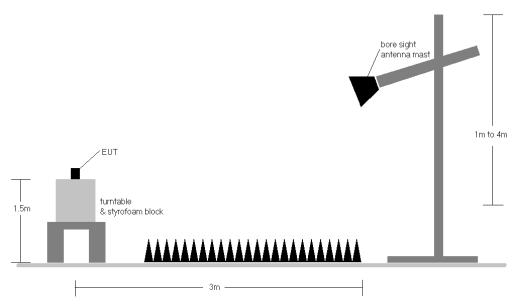


Figure 7-7. Radiated Test Setup > 1GHz

Test Notes

- All spurious emissions lying in restricted bands specified in §15.205 are below the limit shown in §15.209. All spurious emissions that do not lie in a restricted band are subject to an average limit of -27dBm/MHz. At 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.
- All spurious emissions that do not lie in a restricted band are subject to a peak limit not to exceed 20dB of the average limit [68.2dBµV/m]. If a peak measurement passes the average limit, it was determined no further investigation is necessary.
- 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.

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	De 117 -f 100
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 117 of 166
© 2024 ELEMENT	*		V 11.0 07/06/2023



- 9. In the case where a peak-detector measurement passed the given RMS limit it was determined sufficient to demonstrate compliance.
- 10. The results recorded using the broadband antenna are known to correlate with the results obtained by using a tuned dipole with an acceptable degree of accuracy. The VSWR for the measurement antenna was found to be less than 2:1.
- 11. 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

- Field Strength Level [dBμV/m] = Analyzer Level [dBm] + 107 + AFCL [dB/m]
- AFCL [dB/m] = Antenna Factor [dB/m] + Cable Loss [dB]
- Margin [dB] = Field Strength Level [dBμV/m] Limit [dBμV/m]

Radiated Band Edge Measurement Offset

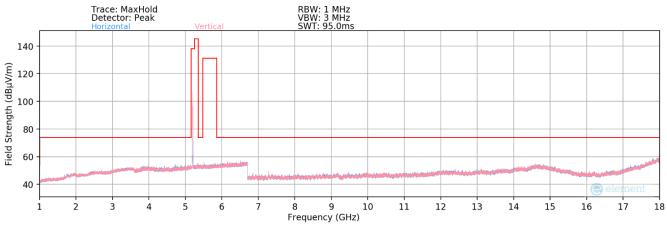
 The amplitude offset shown in the radiated restricted band edge plots in Section Radiated Spurious Emission Measurements – Above 1GHz was calculated using the formula:
 Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

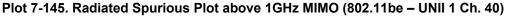
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 118 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	
© 2024 ELEMENT	•	•	V 11.0 07/06/2023

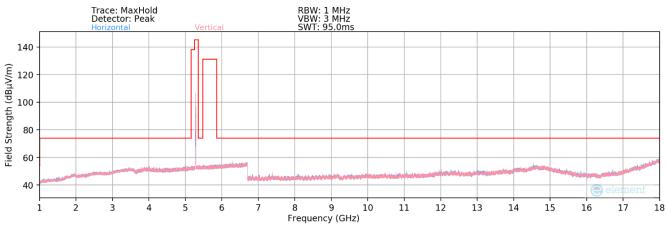
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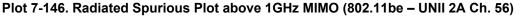


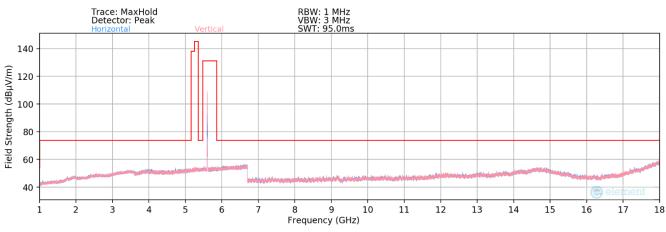
7.6.1 MIMO Radiated Spurious Emission Measurements (26 Tones)







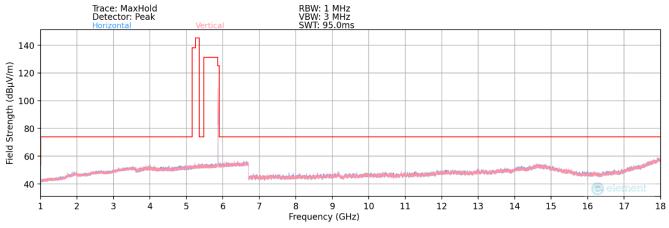




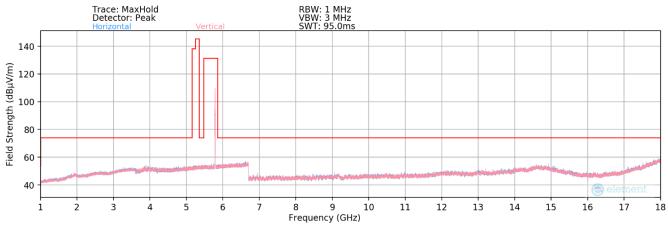
Plot 7-147. Radiated Spurious Plot above 1GHz MIMO (802.11ax -beNII 2C Ch. 120)

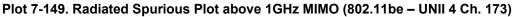
FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 119 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	
© 2024 ELEMENT		•	V 11.0 07/06/2023

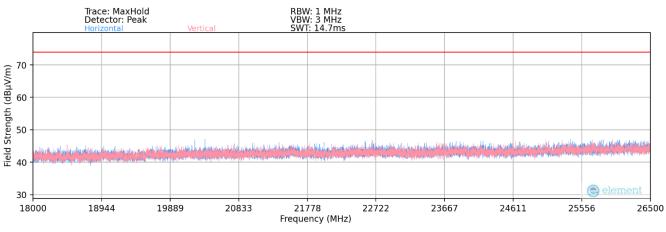








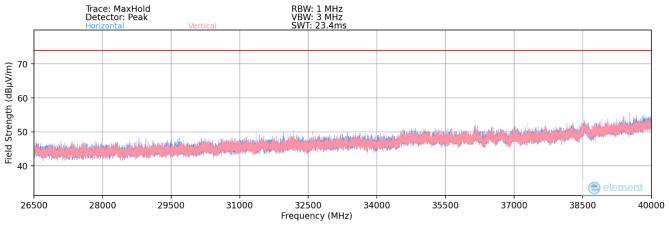






FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 120 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	
© 2024 ELEMENT	-		V 11.0 07/06/2023





Plot 7-151. Radiated Spurious Plot 26.5GHz - 40GHz (802.11be)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Dage 101 of 166		
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 121 of 166		
© 2024 ELEMENT		•	V 11.0 07/06/2023		



MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII 1

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

Restricted	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	-	-	-67.83	8.35	0.00	47.52	68.20	-20.68
*	15540.00	Average	Н	-	-	-77.77	10.01	0.00	39.24	53.98	-14.74
*	15540.00	Peak	Н	-	-	-65.44	10.01	0.00	51.57	73.98	-22.41
*	20720.00	Average	н	-	-	-66.49	3.50	-9.54	34.48	53.98	-19.50
*	20720.00	Peak	Н	-	-	-57.29	3.50	-9.54	43.67	73.98	-30.31
	25900.00	Peak	Н	-	-	-56.80	4.57	-9.54	45.24	68.20	-22.96

Table 7-46. Radiated Measurements MIMO (26 Tones)

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

Restricted	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	-	-	-66.88	8.75	0.00	48.87	68.20	-19.33
*	15600.00	Average	Н	-	-	-77.74	8.91	0.00	38.17	53.98	-15.81
*	15600.00	Peak	Н	-	-	-65.82	8.91	0.00	50.09	73.98	-23.89
*	20800.00	Average	Н	-	-	-66.45	3.60	-9.54	34.61	53.98	-19.37
*	20800.00	Peak	Н	-	-	-56.23	3.60	-9.54	44.83	73.98	-29.15
	26000.00	Peak	Н	-	-	-56.32	4.60	-9.54	45.74	68.20	-22.46

Table 7-47. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Dage 100 of 166		
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 122 of 166		
© 2024 ELEMENT	-	•	V 11.0 07/06/2023		



Worst Case Mode:	802.11be (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5240MHz
Channel:	48

Restricted	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	-	-	-65.34	8.11	0.00	49.77	68.20	-18.43
*	15720.00	Average	Н	-	-	-78.68	9.29	-9.54	28.07	53.98	-25.91
*	15720.00	Peak	Н	-	-	-65.91	9.29	-9.54	40.84	73.98	-33.14
	20960.00	Peak	Н	-	-	-56.50	3.61	-9.54	44.56	68.20	-23.64
	26200.00	Peak	Н	-	-	-56.72	4.72	-9.54	45.46	68.20	-22.74

Table 7-48. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Dage 102 of 166		
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 123 of 166		
© 2024 ELEMENT		•	V 11.0 07/06/2023		



MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII 2A

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

Restricted	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	-	-	-66.01	7.46	0.00	48.45	68.20	-19.75
*	15780.00	Average	Н	-	-	-78.68	8.86	0.00	37.18	53.98	-16.80
*	15780.00	Peak	Н	-	-	-66.20	8.86	0.00	49.66	73.98	-24.32
*	21040.00	Average	Н	-	-	-67.22	3.71	-9.54	33.95	53.98	-20.03
*	21040.00	Peak	Н	-	-	-57.16	3.71	-9.54	44.01	73.98	-29.97
	26300.00	Peak	Н	-	-	-56.61	4.64	-9.54	45.49	68.20	-22.71

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

Worst Case Mode:	8
Worst Case Transfer Rate:	Ν
RU Index:	4
Distance of Measurements:	1
Operating Frequency:	52
Channel:	5

	802.11be (20MHz BW)
	MCS0
	4
s:	1 & 3 Meters
	5280MHz
	56

Restricted	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	-	-	-66.10	7.75	0.00	48.65	68.20	-19.55
*	15840.00	Average	Н	-	-	-78.31	8.68	0.00	37.37	53.98	-16.61
*	15840.00	Peak	Н	-	-	-66.44	8.68	0.00	49.24	73.98	-24.74
*	21120.00	Average	Н	-	-	-66.51	3.83	-9.54	34.78	53.98	-19.20
*	21120.00	Peak	н	-	-	-56.41	3.83	-9.54	44.88	73.98	-29.10
	26400.00	Peak	Н	-	-	-56.28	4.68	-9.54	45.86	68.20	-22.34

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

FCC ID: A3LSMS928JPN		Approved by: Technical Manager		
Test Report S/N:	Test Dates:	EUT Type:	Dega 104 of 166	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 124 of 166	
© 2024 ELEMENT			V 11.0 07/06/2023	



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

Restricted	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	-	-	-78.32	-17.78	0.00	10.90	53.98	-43.08
*	10640.00	Peak	Н	-	-	-65.37	-17.78	0.00	23.85	73.98	-50.13
*	15960.00	Average	Н	-	-	-78.32	-13.60	0.00	15.08	53.98	-38.90
*	15960.00	Peak	Н	-	-	-66.13	-13.60	0.00	27.27	73.98	-46.71
*	21280.00	Average	Н	-	-	-66.31	3.95	-9.54	35.11	53.98	-18.87
*	21280.00	Peak	н	-	-	-56.78	3.95	-9.54	44.64	73.98	-29.34
	26600.00	Peak	Н	-	-	-56.09	4.51	-9.54	45.88	68.20	-22.32

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

FCC ID: A3LSMS928JPN		Approved by: Technical Manager		
Test Report S/N:	Test Dates:	EUT Type:	Dage 125 of 166	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 125 of 166	
© 2024 ELEMENT	-	•	V 11.0 07/06/2023	



MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII 2C

Worst Case Mode:	802.11be (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5500MHz
Channel:	100

Restricted	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	-	-	-78.40	7.81	0.00	36.41	53.98	-17.57
*	11000.00	Peak	Н	-	-	-65.67	7.81	-9.54	39.60	73.98	-34.38
	16500.00	Peak	Н	-	-	-65.88	8.23	-9.54	39.81	68.20	-28.39
	22000.00	Peak	н	-	-	-56.59	3.86	-9.54	44.73	68.20	-23.47
	27500.00	Peak	Н	-	-	-56.28	4.54	-9.54	45.72	68.20	-22.48

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

Worst Case Mode:
Worst Case Transfer Rate:

Distance of Measurements:

Operating Frequency:

RU Index:

Channel:

802.11be (20MHz BW)
MCS0
4
1 & 3 Meters
5600MHz
120

Restricted	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	-	-	-78.40	7.81	0.00	36.41	53.98	-17.57
*	11000.00	Peak	Н	-	-	-65.67	7.81	-9.54	39.60	73.98	-34.38
	16500.00	Peak	Н	-	-	-65.88	8.23	-9.54	39.81	68.20	-28.39
	22000.00	Peak	Н	-	-	-56.59	3.86	-9.54	44.73	68.20	-23.47
	27500.00	Peak	Н	-	-	-56.28	4.54	-9.54	45.72	68.20	-22.48

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

FCC ID: A3LSMS928JPN		Approved by: Technical Manager		
Test Report S/N:	Test Dates:	EUT Type:	Dega 106 of 166	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 126 of 166	
© 2024 ELEMENT	-	•	V 11.0 07/06/2023	



Worst Case Mode:	802.11be (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5720MHz
Channel:	144

Restricted	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	-	-	-78.71	8.25	0.00	36.54	53.98	-17.44
*	11440.00	Peak	Н	-	-	-66.51	8.25	0.00	48.74	73.98	-25.24
	17160.00	Peak	Н	-	-	-65.42	10.91	0.00	52.49	68.20	-15.71
*	22880.00	Average	Н	-	-	-66.17	4.09	-9.54	35.38	53.98	-18.60
*	22880.00	Peak	н	-	-	-56.52	4.09	-9.54	45.04	73.98	-28.94
	28600.00	Peak	Н	-	-	-56.68	5.30	-9.54	46.08	68.20	-22.12

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

FCC ID: A3LSMS928JPN		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 107 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 127 of 166
© 2024 ELEMENT	•	•	V 11.0 07/06/2023



MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII 3

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

Restricted	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	-	-	-78.51	7.98	0.00	36.47	53.98	-17.51
*	11490.00	Peak	Н	-	-	-66.44	7.98	0.00	48.54	73.98	-25.44
	17235.00	Peak	Н	-	-	-65.18	11.32	0.00	53.14	68.20	-15.06
*	22980.00	Average	Н	-	-	-66.05	4.00	-9.54	35.41	53.98	-18.57
*	22980.00	Peak	Н	-	-	-56.45	4.00	-9.54	45.01	73.98	-28.97
	28725.00	Peak	Н	-	-	-56.82	5.36	-9.54	46.01	68.20	-22.19

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

Worst Case Mode:
Worst Case Transfer Rate:
RU Index:
Distance of Measurements:
Operating Frequency:
Channel:

802.11be (20MHz BW)
MCS0
4
1 & 3 Meters
5785MHz
157

Restricted	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	-	-	-78.58	8.19	0.00	36.61	53.98	-17.37
*	11570.00	Peak	Н	-	-	-66.52	8.19	0.00	48.67	73.98	-25.31
	17355.00	Peak	Н	-	-	-65.68	12.44	0.00	53.76	68.20	-14.44
	23140.00	Peak	Н	-	-	-56.20	3.94	-9.54	45.20	68.20	-23.00
	28925.00	Peak	Н	-	-	-56.15	5.33	-9.54	46.64	68.20	-21.56

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

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Dego 100 of 166		
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 128 of 166		
© 2024 ELEMENT	-	·	V 11.0 07/06/2023		



Restricted	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	-	-	-78.40	8.38	0.00	36.98	53.98	-17.00
*	11650.00	Peak	Н	-	-	-66.30	8.38	0.00	49.08	73.98	-24.90
	17475.00	Peak	н	-	-	-66.02	13.29	0.00	54.27	68.20	-13.93
	23300.00	Peak	н	-	-	-56.32	4.04	-9.54	45.18	68.20	-23.02
	29125.00	Peak	н	-	-	-57.20	5.36	-9.54	45.62	68.20	-22.58

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

FCC ID: A3LSMS928JPN		Approved by: Technical Manager		
Test Report S/N:	Test Dates:	EUT Type:	Dage 100 of 166	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 129 of 166	
© 2024 ELEMENT			V 11.0 07/06/2023	



MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII 4

Worst Case Mode:	802.11be (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5845MHz
Channel:	169

Restricted	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	-	-	-78.47	8.92	0.00	37.45	53.98	-16.53
*	11690.00	Peak	Н	-	-	-66.34	8.92	0.00	49.58	73.98	-24.40
	17535.00	Peak	Н	-	-	-65.67	13.86	0.00	55.19	68.20	-13.01
	23380.00	Peak	Н	-	-	-56.43	3.89	-9.54	44.92	68.20	-23.28
	29225.00	Peak	Н	-	-	-56.62	5.50	-9.54	46.34	68.20	-21.86
	35070.00	Peak	Н	-	-	-57.26	8.14	-9.54	48.34	68.20	-19.86

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

Worst Case Mode: Worst Case Transfer Rate: RU Index: Distance of Measurements: Operating Frequency: Channel:

802.11be (20MHz BW) MCS0 4 1 & 3 Meters 5865MHz 173

Restricted	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	-	-	-79.17	9.28	0.00	37.11	53.98	-16.87
*	11730.00	Peak	Н	-	-	-67.34	9.28	0.00	48.94	73.98	-25.04
	17595.00	Peak	н	-	-	-65.25	14.27	0.00	56.02	68.20	-12.18
	23460.00	Peak	Н	-	-	-56.88	4.00	-9.54	44.57	68.20	-23.63
	29325.00	Peak	Н	-	-	-56.78	5.64	-9.54	46.32	68.20	-21.88
	35190.00	Peak	Н	-	-	-57.27	8.16	-9.54	48.35	68.20	-19.85

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

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Dama 400 af 400		
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 130 of 166		
© 2024 ELEMENT			V 11.0 07/06/2023		



Worst Case Mode:	802.11be (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5885MHz
Channel:	177

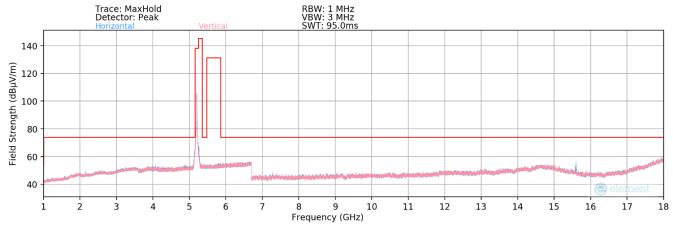
Restricted	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin (dB)
*	11770.00	Average	Н	-	-	-79.02	9.33	0.00	37.31	53.98	-16.67
*	11770.00	Peak	Н	-	-	-66.48	9.33	0.00	49.85	73.98	-24.13
	17655.00	Peak	Н	-	-	-64.71	14.53	0.00	56.82	68.20	-11.38
	23540.00	Peak	Н	-	-	-56.65	4.00	-9.54	44.82	68.20	-23.38
	29425.00	Peak	Н	-	-	-57.39	5.71	-9.54	45.78	68.20	-22.42
	35310.00	Peak	Н	-	-	-57.90	8.37	-9.54	47.93	68.20	-20.27

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

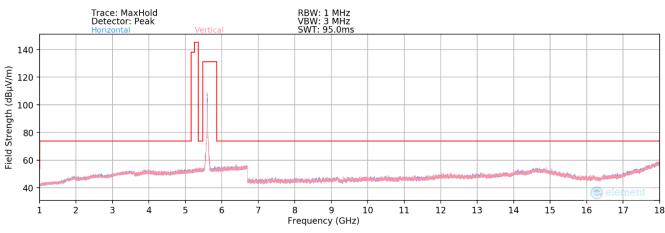
FCC ID: A3LSMS928JPN		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Dage 121 of 166		
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 131 of 166		
© 2024 ELEMENT			V 11.0 07/06/2023		

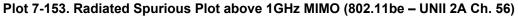


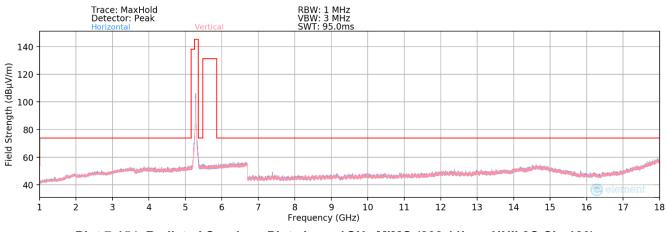
7.6.2 MIMO Radiated Spurious Emission Measurements (242 Tones)

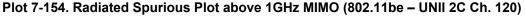






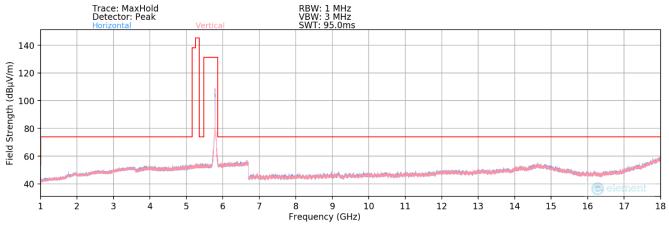


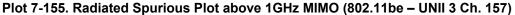


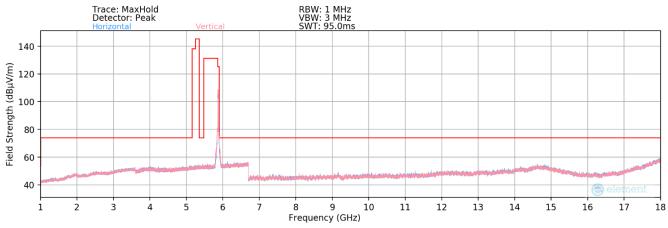


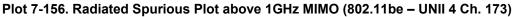
FCC ID: A3LSMS928JPN		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Dage 122 of 166		
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 132 of 166		
© 2024 ELEMENT	•		V 11.0 07/06/2023		

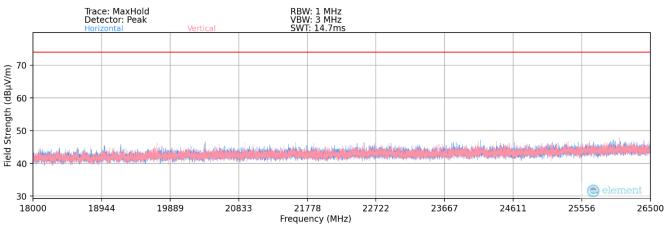








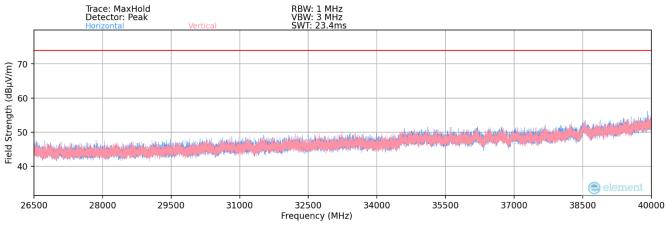






FCC ID: A3LSMS928JPN		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	st Dates: EUT Type:			
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 133 of 166		
© 2024 ELEMENT	•	·	V 11.0 07/06/2023		







FCC ID: A3LSMS928JPN		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Dage 124 of 166		
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 134 of 166		
© 2024 ELEMENT			V 11.0 07/06/2023		



MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII 1

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

Restricted	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	-	-	-66.49	8.35	0.00	48.86	68.20	-19.34
*	15540.00	Average	Н	145	48	-73.21	10.01	0.00	43.80	53.98	-10.18
*	15540.00	Peak	Н	145	48	-59.28	10.01	0.00	57.73	73.98	-16.25
*	20720.00	Average	н	-	-	-66.32	3.50	-9.54	34.64	53.98	-19.34
*	20720.00	Peak	Н	-	-	-56.93	3.50	-9.54	44.04	73.98	-29.94
	25900.00	Peak	Н	-	-	-57.17	4.57	-9.54	44.86	68.20	-23.34

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

Worst Case Mode:	802
Worst Case Transfer Rate:	MC
RU Index:	4
Distance of Measurements:	1&
Operating Frequency:	520
Channel:	40

802.11be (20MHz BW)
MCS0
4
1 & 3 Meters
5200MHz
40

Restricted	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	-	-	-66.46	8.75	0.00	49.29	68.20	-18.91
*	15600.00	Average	Н	131	45	-72.71	8.91	0.00	43.20	53.98	-10.78
*	15600.00	Peak	Н	131	45	-58.24	8.91	0.00	57.67	73.98	-16.31
*	20800.00	Average	Н	-	-	-66.09	3.60	-9.54	34.97	53.98	-19.01
*	20800.00	Peak	Н	-	-	-56.90	3.60	-9.54	44.16	73.98	-29.82
	26000.00	Peak	Н	-	-	-56.92	4.60	-9.54	45.14	68.20	-23.06

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

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Dage 125 of 166		
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 135 of 166		
© 2024 ELEMENT		•	V 11.0 07/06/2023		



Worst Case Mode:	802.11be (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5240MHz
Channel:	48

Restricted	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	-	-	-65.94	8.11	0.00	49.17	68.20	-19.03
*	15720.00	Average	Н	135	51	-74.37	9.29	0.00	41.92	53.98	-12.06
*	15720.00	Peak	Н	135	51	-60.70	9.29	0.00	55.59	73.98	-18.39
	20960.00	Peak	Н	-	-	-56.47	3.61	-9.54	44.60	68.20	-23.60
	26200.00	Peak	Н	-	-	-56.17	4.72	-9.54	46.01	68.20	-22.19

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

FCC ID: A3LSMS928JPN		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 126 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 136 of 166
© 2024 ELEMENT		•	V 11.0 07/06/2023



MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII 2A

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

Restricted	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	-	-	-66.17	7.46	0.00	48.29	68.20	-19.91
*	15780.00	Average	Н	148	47	-74.01	8.86	0.00	41.85	53.98	-12.13
*	15780.00	Peak	Н	148	47	-60.73	8.86	0.00	55.13	73.98	-18.85
*	21040.00	Average	Н	-	-	-67.42	3.71	-9.54	33.76	53.98	-20.22
*	21040.00	Peak	Н	-	-	-56.77	3.71	-9.54	44.40	73.98	-29.58
	26300.00	Peak	Н	-	-	-56.51	4.64	-9.54	45.59	68.20	-22.61

Table 7-64. Radiated Measurements MIMO (26 Tones)

Worst Case Mode:
Worst Case Transfer Rate:
RU Index:
Distance of Measurements:
Operating Frequency:
Channel:

802.11be (20MHz BW)
MCS0
4
1 & 3 Meters
5280MHz
56

Restricted	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	-	-	-66.06	7.75	0.00	48.69	68.20	-19.51
*	15840.00	Average	Н	143	48	-73.98	8.68	0.00	41.70	53.98	-12.28
*	15840.00	Peak	Н	143	48	-60.91	8.68	0.00	54.77	73.98	-19.21
*	21120.00	Average	Н	-	-	-66.42	3.83	-9.54	34.87	53.98	-19.11
*	21120.00	Peak	Н	-	-	-56.61	3.83	-9.54	44.68	73.98	-29.30
	26400.00	Peak	Н	-	-	-56.19	4.68	-9.54	45.95	68.20	-22.25

Table 7-65. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Dage 127 of 166		
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 137 of 166		
© 2024 ELEMENT		•	V 11.0 07/06/2023		



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

Restricted	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	-	-	-78.60	-17.78	0.00	10.62	53.98	-43.36
*	10640.00	Peak	Н	-	-	-66.23	-17.78	0.00	22.99	73.98	-50.99
*	15960.00	Average	Н	129	45	-74.08	-13.60	0.00	19.32	53.98	-34.66
*	15960.00	Peak	Н	129	45	-60.31	-13.60	0.00	33.09	73.98	-40.89
*	21280.00	Average	Н	-	-	-66.32	3.95	-9.54	35.09	53.98	-18.89
*	21280.00	Peak	н	-	-	-56.64	3.95	-9.54	44.78	73.98	-29.20
	26600.00	Peak	Н	-	-	-56.54	4.51	-9.54	45.43	68.20	-22.77

Table 7-66. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Dega 129 of 166		
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 138 of 166		
© 2024 ELEMENT		•	V 11.0 07/06/2023		



MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII 2C

Worst Case Mode:	802.11be (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5500MHz
Channel:	100

Restricted	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	-	-	-78.40	7.81	0.00	36.41	53.98	-17.57
*	11000.00	Peak	Н	-	-	-65.93	7.81	-9.54	39.34	73.98	-34.64
	16500.00	Peak	Н	135	16	-62.04	8.23	-9.54	43.65	68.20	-24.55
	22000.00	Peak	Н	-	-	-56.29	3.86	-9.54	45.03	68.20	-23.17
	27500.00	Peak	Н	-	-	-56.42	4.54	-9.54	45.58	68.20	-22.62

Table 7-67. Radiated Measurements MIMO (26 Tones)

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

Restricted	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	-	-	-78.59	8.05	0.00	36.46	53.98	-17.52
*	11200.00	Peak	Н	-	-	-65.87	8.05	0.00	49.18	73.98	-24.80
	16800.00	Peak	Н	125	38	-64.03	8.84	0.00	51.81	68.20	-16.39
*	22400.00	Average	Н	-	-	-66.97	3.86	-9.54	34.35	53.98	-19.63
*	22400.00	Peak	н	-	-	-58.42	3.86	-9.54	42.90	73.98	-31.08
	28000.00	Peak	Н	-	-	-58.96	4.90	-9.54	43.41	68.20	-24.79

Table 7-68. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Dage 120 of 166		
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 139 of 166		
© 2024 ELEMENT		•	V 11.0 07/06/2023		



Worst Case Mode:	802.11be (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5720MHz
Channel:	144

Restricted	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	-	-	-78.75	8.25	0.00	36.50	53.98	-17.48
*	11440.00	Peak	н	-	-	-66.58	8.25	0.00	48.67	73.98	-25.31
	17160.00	Peak	Н	-	-	-65.63	10.91	0.00	52.28	68.20	-15.92
*	22880.00	Average	Н	-	-	-66.13	4.09	-9.54	35.42	53.98	-18.56
*	22880.00	Peak	Н	-	-	-56.04	4.09	-9.54	45.51	73.98	-28.47
	28600.00	Peak	Н	-	-	-56.59	5.30	-9.54	46.18	68.20	-22.02

Table 7-69. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Degs 140 of 166		
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 140 of 166		
© 2024 ELEMENT	•		V 11.0 07/06/2023		



MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII 3

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

Restricted	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	-	-	-78.52	7.98	0.00	36.46	53.98	-17.52
*	11490.00	Peak	Н	-	-	-66.06	7.98	0.00	48.92	73.98	-25.06
	17235.00	Peak	Н	-	-	-65.23	11.32	0.00	53.09	68.20	-15.11
*	22980.00	Average	Н	-	-	-66.32	4.00	-9.54	35.15	53.98	-18.83
*	22980.00	Peak	Н	-	-	-56.21	4.00	-9.54	45.25	73.98	-28.73
	28725.00	Peak	Н	-	-	-56.58	5.36	-9.54	46.24	68.20	-21.96

Table 7-70. Radiated Measurements MIMO (26 Tones)

Worst Case Mode:	
Worst Case Transfer Rate:	
RU Index:	
Distance of Measurements:	
Operating Frequency:	!
Channel:	

802.11be (20MHz BW)
MCS0
4
1 & 3 Meters
5785MHz
157

Restricted	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	-	-	-78.57	8.19	0.00	36.62	53.98	-17.36
*	11570.00	Peak	Н	-	-	-65.66	8.19	0.00	49.53	73.98	-24.45
	17355.00	Peak	н	-	-	-65.59	12.44	0.00	53.85	68.20	-14.35
	23140.00	Peak	Н	-	-	-56.76	3.94	-9.54	44.64	68.20	-23.56
	28925.00	Peak	Н	-	-	-56.62	5.33	-9.54	46.17	68.20	-22.03

Table 7-71. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 111 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 141 of 166
© 2024 ELEMENT	-	•	V 11.0 07/06/2023



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

Restricted	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	-	-	-78.43	8.38	0.00	36.95	53.98	-17.03
*	11650.00	Peak	Н	-	-	-65.92	8.38	0.00	49.46	73.98	-24.52
	17475.00	Peak	Н	-	-	-66.01	13.29	0.00	54.28	68.20	-13.92
	23300.00	Peak	н	-	-	-66.20	4.04	-9.54	35.29	68.20	-32.91
	29125.00	Peak	Н	-	-	-57.07	5.36	-9.54	45.75	68.20	-22.45

Table 7-72. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 142 of 166
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 142 of 166
© 2024 ELEMENT			V 11.0 07/06/2023



MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII 4

Worst Case Mode:	802.11be (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5845MHz
Channel:	169

Restricted	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	-	-	-78.52	8.92	0.00	37.40	53.98	-16.58
*	11690.00	Peak	Н	-	-	-66.29	8.92	0.00	49.63	73.98	-24.35
	17535.00	Peak	Н	-	-	-65.80	13.86	0.00	55.06	68.20	-13.14
	23380.00	Peak	Н	-	-	-56.56	3.89	-9.54	44.79	68.20	-23.41
	29225.00	Peak	Н	-	-	-56.64	5.50	-9.54	46.32	68.20	-21.88
	35070.00	Peak	Н	-	-	-57.26	8.14	-9.54	48.34	68.20	-19.86

Table 7-73. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: Worst Case Transfer Rate: RU Index: Distance of Measurements: Operating Frequency: Channel:

802.11be (20MHz BW) MCS0 4 1 & 3 Meters 5865MHz 173

Restricted	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	-	-	-79.05	9.28	0.00	37.23	53.98	-16.75
*	11730.00	Peak	Н	-	-	-66.89	9.28	0.00	49.39	73.98	-24.59
	17595.00	Peak	н	-	-	-65.28	14.27	0.00	55.99	68.20	-12.21
	23460.00	Peak	Н	-	-	-56.73	4.00	-9.54	44.73	68.20	-23.47
	29325.00	Peak	Н	-	-	-56.89	5.64	-9.54	46.21	68.20	-21.99
	35190.00	Peak	Н	-	-	-57.39	8.16	-9.54	48.23	68.20	-19.97

Table 7-74. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS928JPN		MEASUREMENT REPORT		
Test Report S/N:	Test Dates:	EUT Type:	De 142	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 143 of 166	
© 2024 ELEMENT			V 11.0 07/06/2023	



Worst Case Mode:	802.11be (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	4
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5885MHz
Channel:	177

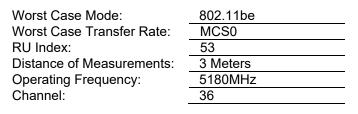
Restricted	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin (dB)
*	11770.00	Average	Н	-	-	-79.05	9.33	0.00	37.28	53.98	-16.70
*	11770.00	Peak	Н	-	-	-67.02	9.33	0.00	49.31	73.98	-24.67
	17655.00	Peak	Н	-	-	-64.79	14.53	0.00	56.74	68.20	-11.46
	23540.00	Peak	Н	-	-	-56.91	4.00	-9.54	44.55	68.20	-23.65
	29425.00	Peak	Н	-	-	-57.34	5.71	-9.54	45.83	68.20	-22.37
	35310.00	Peak	Н	-	-	-57.72	8.37	-9.54	48.11	68.20	-20.09

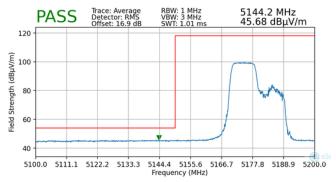
Table 7-75. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS928JPN		Approved by: Technical Manager		
Test Report S/N:	Test Dates:	EUT Type:	Dage 111 of 166	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 144 of 166	
© 2024 ELEMENT			V 11.0 07/06/2023	

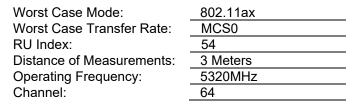


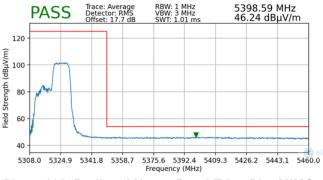
7.6.3 MIMO Radiated Band Edge Measurements (20MHz BW – Partial Tone – 106T)



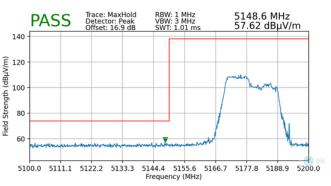


Plot 7-159. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 106 Tones)

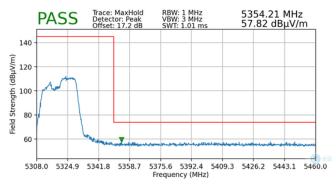








Plot 7-160. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 106 Tones)



Plot 7-162. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A – 106 Tones)

FCC ID: A3LSMS928JPN	MEASUREMENT REPORT		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dego 145 of 166	
1M2312110124-09.A3L	9/6/2023 - 11/06/2023	Portable Handset	Page 145 of 166	
© 2024 ELEMENT	-		V 11.0 07/06/2023	