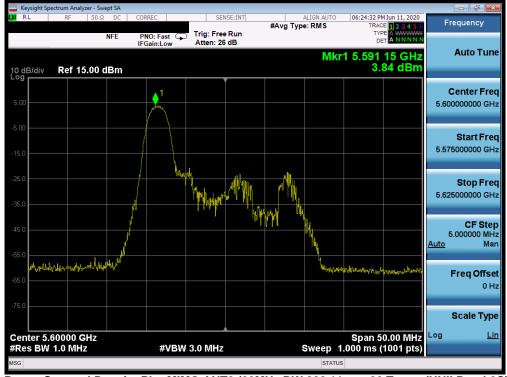




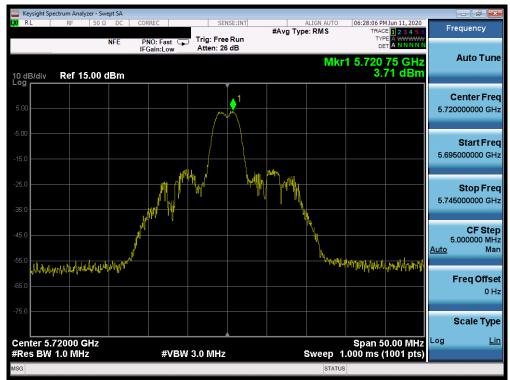
Plot 7-283. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 100)



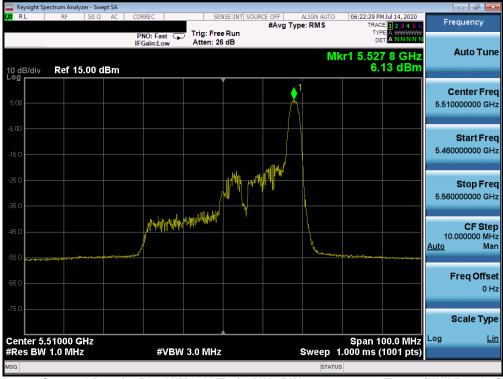
Plot 7-284. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 120)

FCC ID: A3LSMN981W	PCTEST*	MEASUREMENT REPORT (CERTIFICATION)	AMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dags 200 of 200
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset		Page 200 of 296
© 2020 PCTEST				V 9.0 02/01/2019





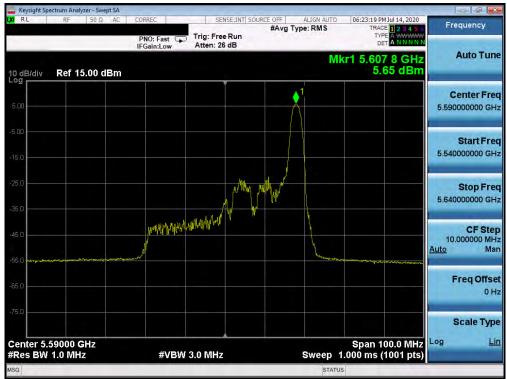
Plot 7-285. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 144)



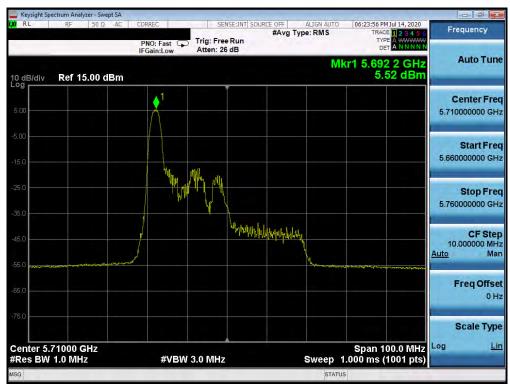
Plot 7-286. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMN981W	PCTEST Novel to be part at (§	MEASUREMENT REPORT (CERTIFICATION)	UNE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogg 204 of 200
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset		Page 201 of 296
© 2020 PCTEST				V 9.0 02/01/2019





Plot 7-287. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 118)



Plot 7-288. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 142)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 202 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	raye 202 01 290
@ 2020 DCTEST			V 0 0 02/01/2010





Plot 7-289. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 106)



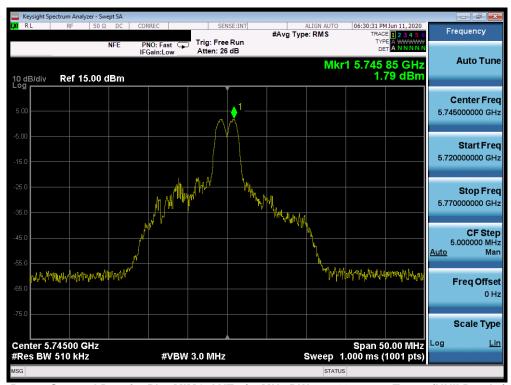
Plot 7-290. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 122)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 203 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 203 01 290





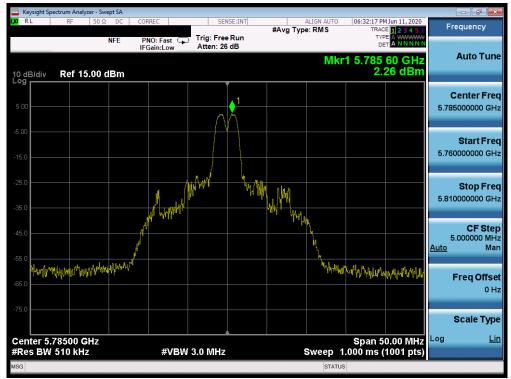
Plot 7-291. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 138)



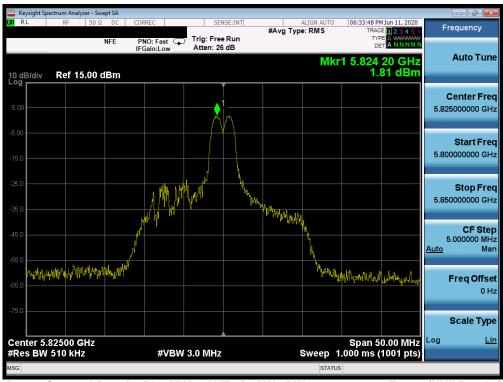
Plot 7-292. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 149)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 204 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 204 01 290





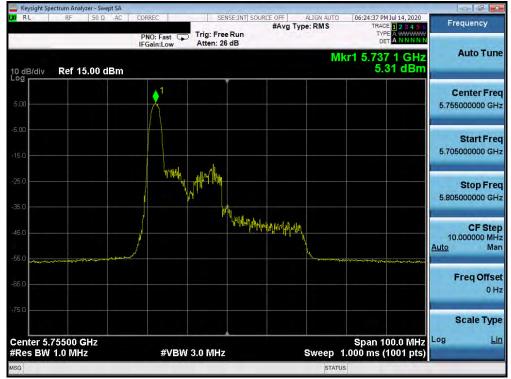
Plot 7-293. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 157)



Plot 7-294. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 165)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 205 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 205 01 290





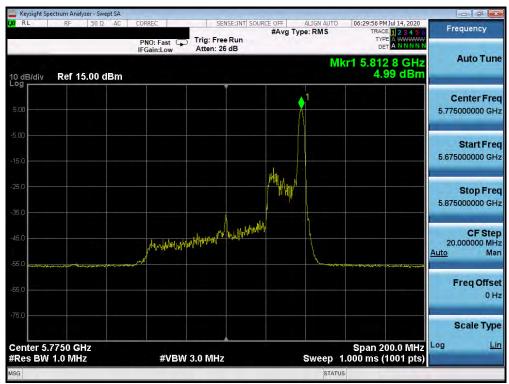
Plot 7-295. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 151)



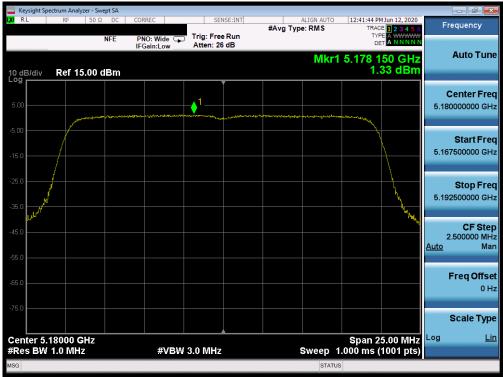
Plot 7-296. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 159)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 206 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 200 01 290





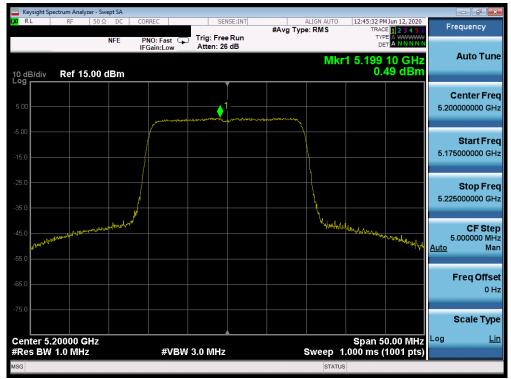
Plot 7-297. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 155)



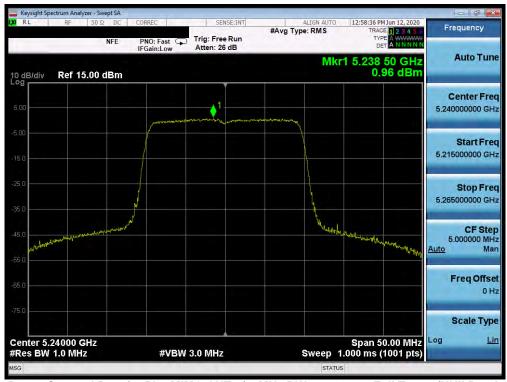
Plot 7-298. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 36)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 207 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 207 01 290





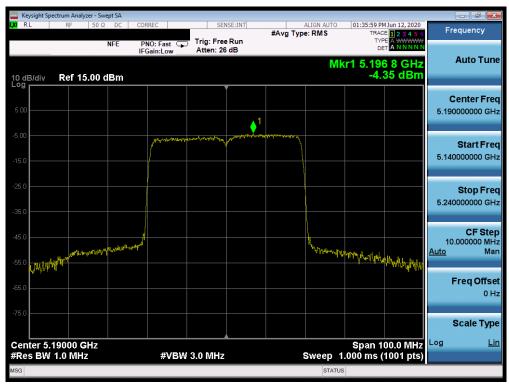
Plot 7-299. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 40)



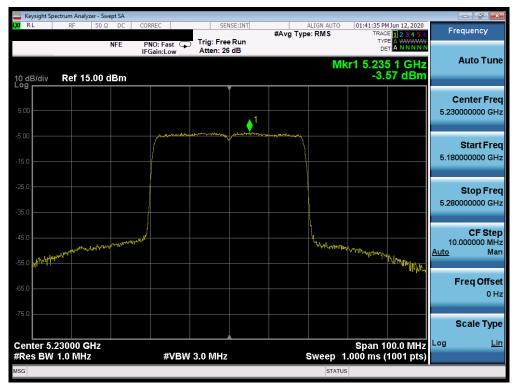
Plot 7-300. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 48)

FCC ID: A3LSMN981W	PCTEST Road to be part of §	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 208 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 208 01 296
@ 2020 DCTEST			V 0 0 02/01/2010





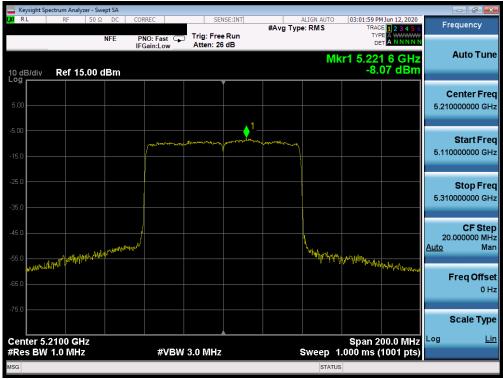
Plot 7-301. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 38)



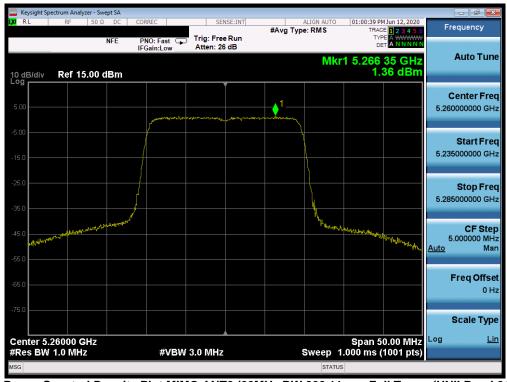
Plot 7-302. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 46)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 209 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 209 01 290





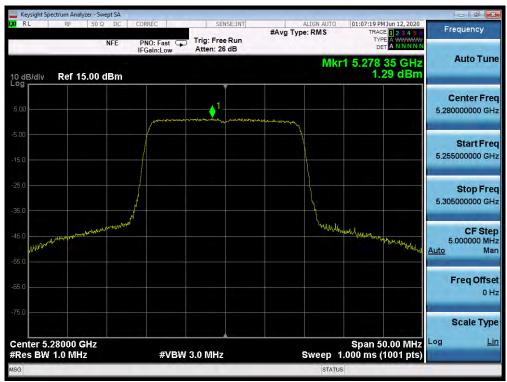
Plot 7-303. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 42)



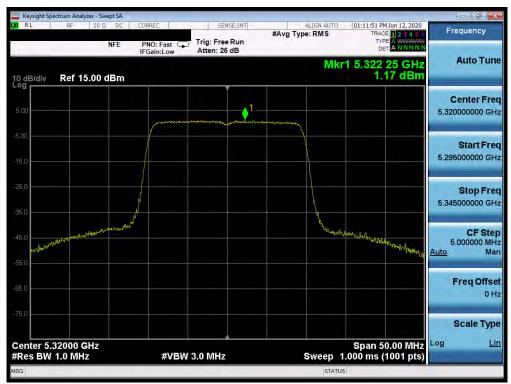
Plot 7-304. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 52)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 210 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 210 of 296





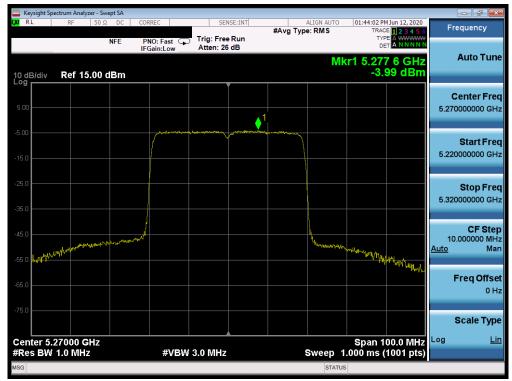
Plot 7-305. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 56)



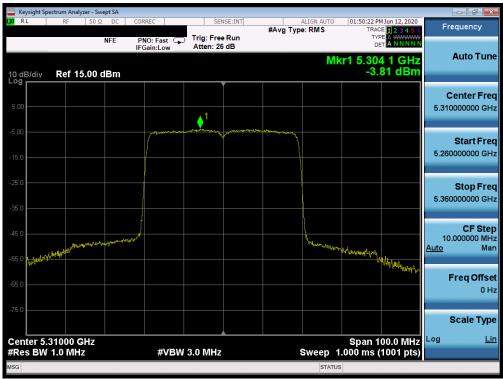
Plot 7-306. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 64)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 211 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 211 01 290





Plot 7-307. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 54)



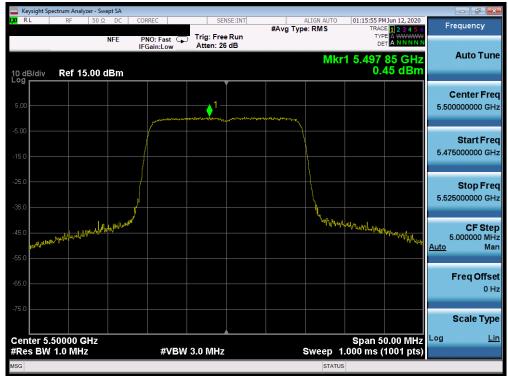
Plot 7-308. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 62)

FCC ID: A3LSMN981W	PCTEST*	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 212 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 212 01 290
© 2020 PCTEST			V 9.0 02/01/2019





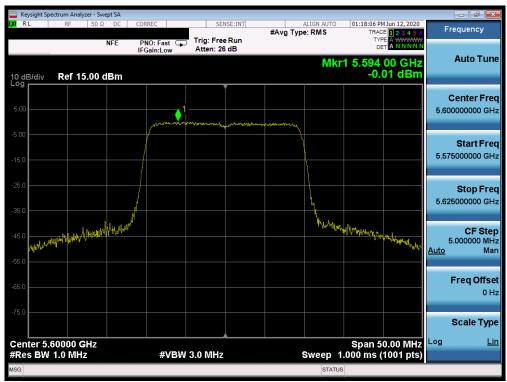
Plot 7-309. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 58)



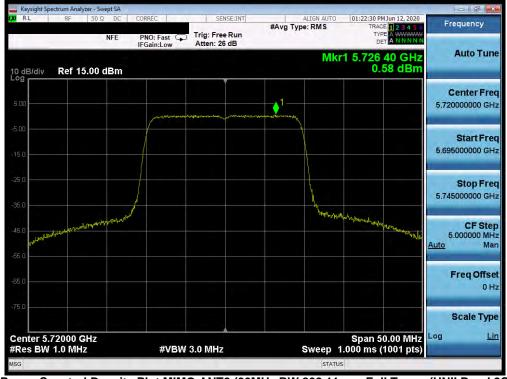
Plot 7-310. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 100)

FCC ID: A3LSMN981W	PCTEST*	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Do an 242 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 213 of 296
© 2020 PCTEST			V 9.0 02/01/2019





Plot 7-311. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 120)



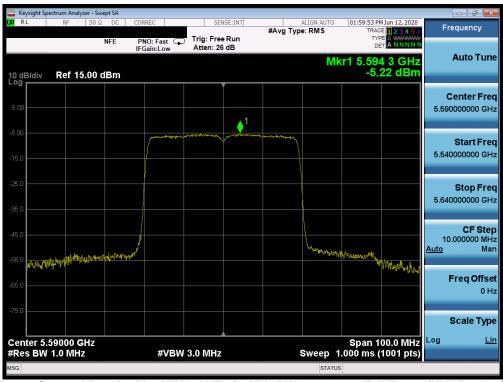
Plot 7-312. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 144)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 214 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset		Page 214 of 296
© 2020 DCTEST				V 0 0 02/01/2010





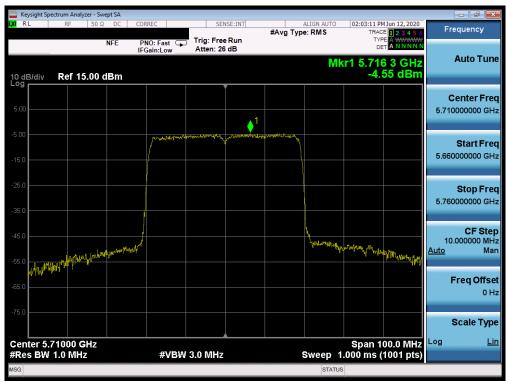
Plot 7-313. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 102)



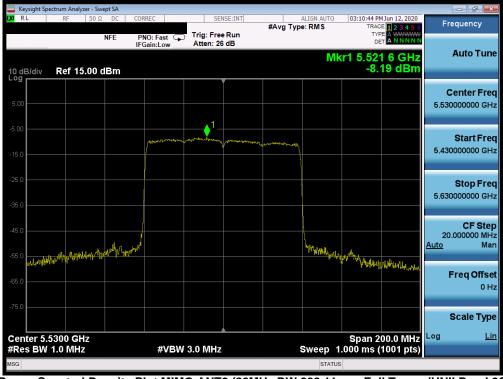
Plot 7-314. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 118)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 215 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 215 of 296





Plot 7-315. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 142)



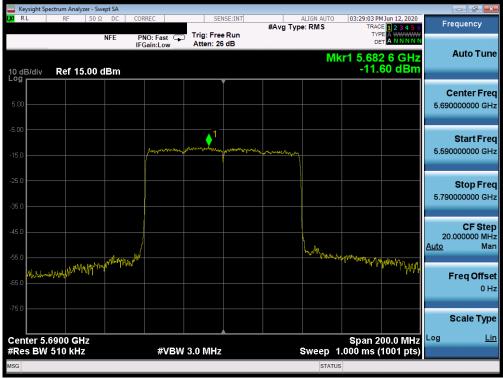
Plot 7-316. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 106)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 216 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 210 01 290





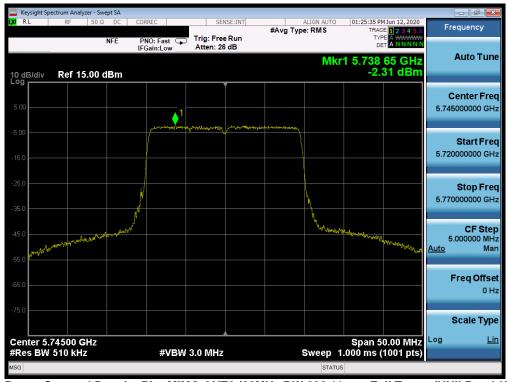
Plot 7-317. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 122)



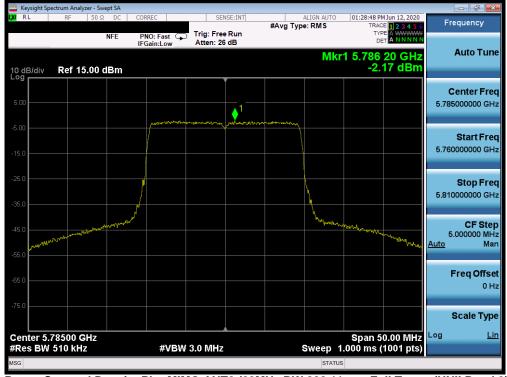
Plot 7-318. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 138)

FCC ID: A3LSMN981W	PCTEST Now to be part at 1	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 247 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 217 of 296
© 2020 PCTEST			V 9.0 02/01/2019





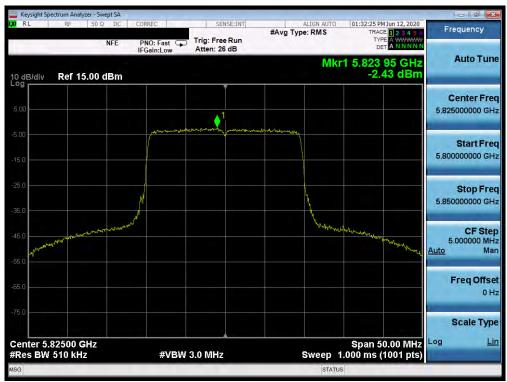
Plot 7-319. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 149)



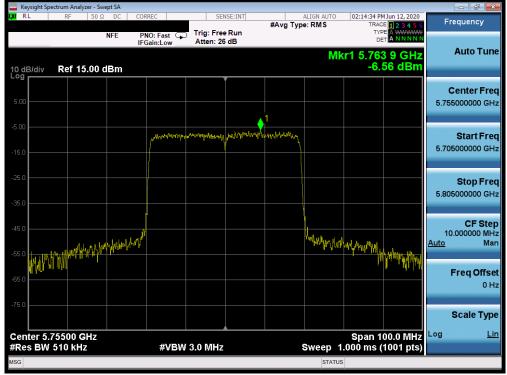
Plot 7-320. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 157)

FCC ID: A3LSMN981W	PCTEST'	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 218 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 210 01 290





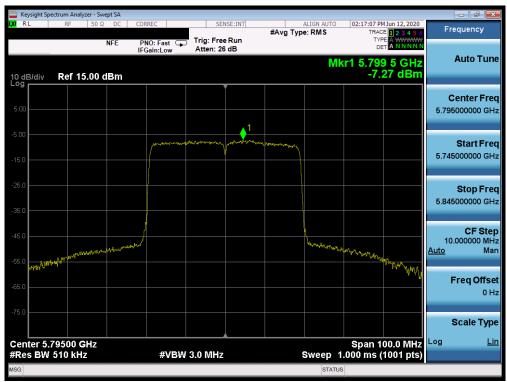
Plot 7-321. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 165)



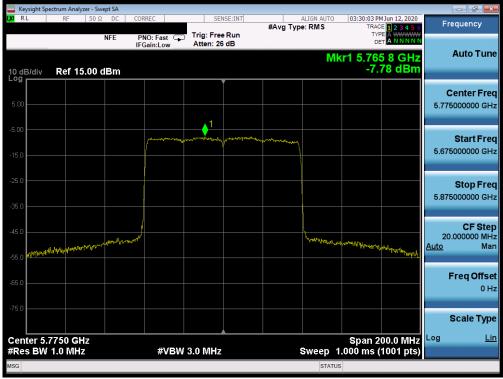
Plot 7-322. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 151)

FCC ID: A3LSMN981W	PCTEST Now to be part at 1	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 240 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 219 of 296
© 2020 PCTEST			V 9.0 02/01/2019





Plot 7-323. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 159)



Plot 7-324. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 155)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 220 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 220 01 290



7.6 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.

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 7-30 per Section 15.209 and RSS-Gen (8.9).

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

Table 7-73. 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)
- 5. Number of measurement points = 1001 (Number of points must be \geq 2 x span/RBW)
- 6. Averaging type = power (RMS)
- 7. Sweep time = auto couple
- 8. Trace was averaged over 100 sweeps

FCC ID: A3LSMN981W	PCTEST'	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 221 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 221 01 290



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

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

Test Setup

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

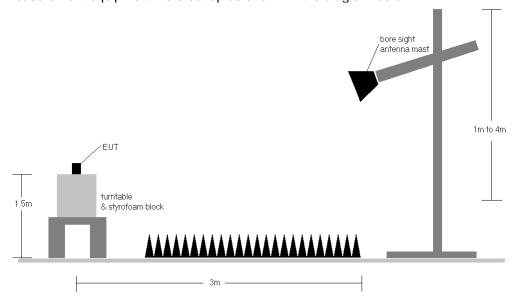


Figure 7-5. Test Instrument & Measurement Setup

FCC ID: A3LSMN981W	PCTEST'	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 222 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 222 01 290



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 7-30.
- 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 7-30. 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

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

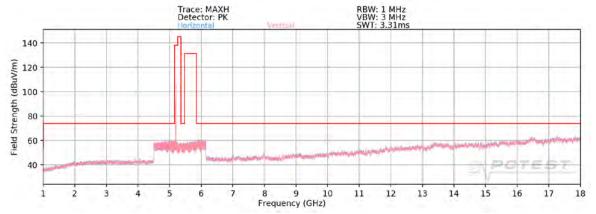
Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

FCC ID: A3LSMN981W	PCTEST*	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogo 222 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset		Page 223 of 296
© 2020 PCTEST	•			V 9.0 02/01/2019

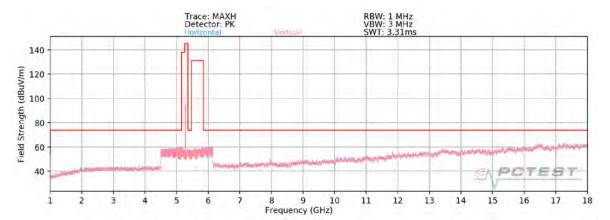


7.6.1 SISO Antenna-1 Radiated Spurious Emission Measurements

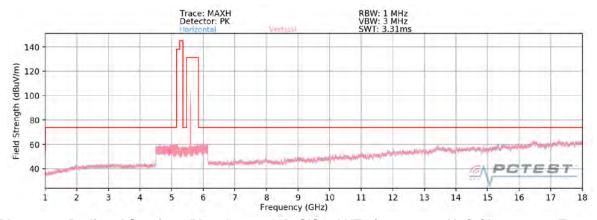
26 Tones



Plot 7-325. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U1 Ch. 40 - 26 Tones)



Plot 7-326. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U2A Ch. 56 - 26 Tones)



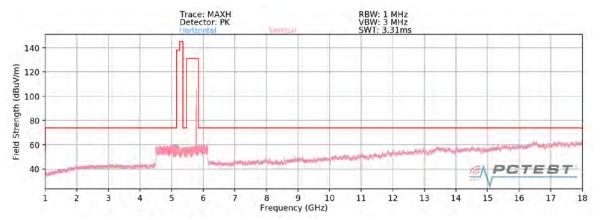
Plot 7-327. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2C Ch. 120 – 26 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 224 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 224 01 290

© 2020 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



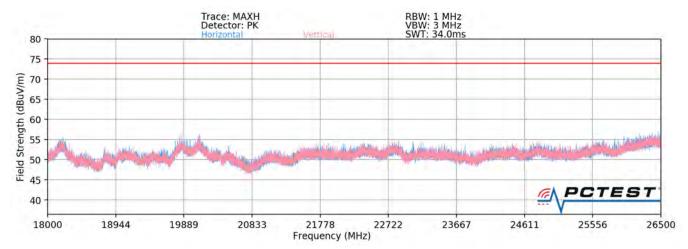


Plot 7-328. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U3 Ch. 157 – 26 Tones)

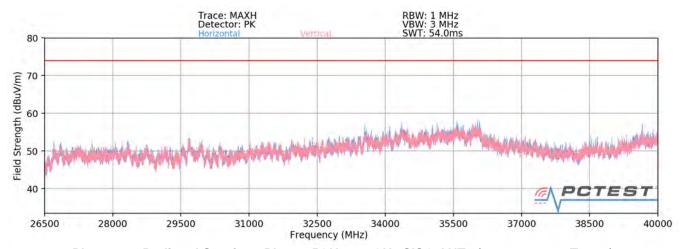
FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 225 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 225 01 290



SISO Antenna-1 Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-329. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11ax - 26 Tones)



Plot 7-330. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT1 (802.11ax - 26 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 226 of 296	
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 220 01 290	



SISO Antenna-1 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: 54

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	V	-	-	-63.04	15.32	0.00	59.28	68.20	-8.92
*	15540.00	Average	V	-	-	-83.11	23.01	0.00	46.90	53.98	-7.08
*	15540.00	Peak	V	-	-	-72.31	23.01	0.00	57.70	73.98	-16.28
*	20720.00	Average	V	-	-	-80.13	17.88	-9.54	35.21	53.98	-18.77
*	20720.00	Peak	V	-	-	-68.31	17.88	-9.54	47.03	73.98	-26.95
	25900.00	Peak	V	-	=	-67.43	20.40	-9.54	50.43	68.20	-17.77

Table 7-74. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5200MHz

	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	V	-	-	-62.89	15.03	0.00	59.14	68.20	-9.06
*	15600.00	Average	V	-	-	-82.23	23.03	0.00	47.80	53.98	-6.18
*	15600.00	Peak	V	-	-	-70.91	23.03	0.00	59.12	73.98	-14.86
*	20800.00	Average	V	-	-	-80.21	18.08	-9.54	35.33	53.98	-18.65
*	20800.00	Peak	V	-	-	-68.09	18.08	-9.54	47.45	73.98	-26.53
	26000.00	Peak	V	-	-	-67.21	20.68	-9.54	50.92	68.20	-17.28

Table 7-75. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: A3LSMN981W	PCTEST Nov. I lo be part of @	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogg 227 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset		Page 227 of 296
© 2020 PCTEST				V 9.0 02/01/2019



Worst Case Transfer Rate: MCS0

RU Index: 54

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]
I	10480.00	Peak	V	-	-	-62.27	15.33	0.00	60.06	68.20	-8.14
*	15720.00	Average	V	-	-	-81.19	22.50	0.00	48.31	53.98	-5.67
*	15720.00	Peak	V	-	-	-71.11	22.50	0.00	58.39	73.98	-15.59
*	20960.00	Average	V	-	-	-79.85	18.46	-9.54	36.07	53.98	-17.91
*	20960.00	Peak	V	-	-	-68.54	18.46	-9.54	47.38	73.98	-26.60
Ī	26200.00	Peak	V	-	-	-67.56	20.96	-9.54	50.86	68.20	-17.34

Table 7-76. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5260MHz

	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	V	-	-	-62.97	15.82	0.00	59.85	68.20	-8.35
*	15780.00	Average	V	-	-	-81.17	21.52	0.00	47.35	53.98	-6.63
*	15780.00	Peak	V	-	-	-71.44	21.52	0.00	57.08	73.98	-16.90
*	21040.00	Average	V	-	-	-79.83	18.64	-9.54	36.26	53.98	-17.72
*	21040.00	Peak	V	-	-	-67.79	18.64	-9.54	48.30	73.98	-25.68
	26300.00	Peak	V	-	-	-67.25	21.23	-9.54	51.44	68.20	-16.76

Table 7-77. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 228 of 296	
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 220 01 290	



Worst Case Transfer Rate: MCS0

RU Index: 54

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]
ſ	10560.00	Peak	V	-	-	-63.16	15.89	0.00	59.73	68.20	-8.47
*	15840.00	Average	V	-	-	-82.21	23.98	0.00	48.77	53.98	-5.21
*	15840.00	Peak	V	-	-	-71.87	23.98	0.00	59.11	73.98	-14.87
*	21120.00	Average	V	-	-	-79.97	18.80	-9.54	36.29	53.98	-17.69
*	21120.00	Peak	V	-	-	-68.89	18.80	-9.54	47.37	73.98	-26.61
ſ	26400.00	Peak	V	-	-	-67.26	21.49	-9.54	51.68	68.20	-16.52

Table 7-78. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5320MHz

	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	V		-	-73.27	15.91	0.00	49.64	53.98	-4.34
*	10640.00	Peak	V	-	-	-63.31	15.91	0.00	59.60	73.98	-14.38
*	15960.00	Average	V	-	-	-82.03	23.32	0.00	48.29	53.98	-5.69
*	15960.00	Peak	V		-	-71.77	23.32	0.00	58.55	73.98	-15.43
*	21280.00	Average	V	-		-80.00	18.76	-9.54	36.22	53.98	-17.76
*	21280.00	Peak	V	-	-	-68.05	18.76	-9.54	48.17	73.98	-25.81
	26600.00	Peak	V	-	-	-51.94	6.35	-9.54	51.86	68.20	-16.34

Table 7-79. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 229 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 229 01 290



Worst Case Transfer Rate: MCS0

RU Index: 54

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	V	-	ı	-74.23	16.31	0.00	49.08	53.98	-4.90
*	11000.00	Peak	V	-	-	-65.23	16.31	0.00	58.08	73.98	-15.90
	16500.00	Peak	V	-	•	-71.42	25.00	0.00	60.58	68.20	-7.62
	22000.00	Peak	V	-	ı	-67.56	19.37	-9.54	49.27	68.20	-18.93
	27500.00	Peak	V	-	-	-50.12	5.07	-9.54	52.41	68.20	-15.79

Table 7-80. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5600MHz

	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	V	-		-75.20	17.23	0.00	49.03	53.98	-4.95
*	11200.00	Peak	V	-	-	-64.73	17.23	0.00	59.50	73.98	-14.48
	16800.00	Peak	V	-	-	-72.11	24.47	0.00	59.36	68.20	-8.84
*	22400.00	Average	V	-	-	-79.93	19.81	-9.54	37.34	53.98	-16.64
*	22400.00	Peak	V	-	-	-68.75	19.81	-9.54	48.52	73.98	-25.46
	28000.00	Peak	V	-		-52.04	5.83	-9.54	51.24	68.20	-16.96

Table 7-81. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 230 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 230 01 290



Worst Case Transfer Rate: MCS0

RU Index: 54

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	V	-	-	-75.09	17.32	0.00	49.23	53.98	-4.75
*	11440.00	Peak	V	-	-	-65.72	17.32	0.00	58.60	73.98	-15.38
	17160.00	Peak	V	-	-	-72.87	24.41	0.00	58.54	68.20	-9.66
*	22880.00	Average	V	-	-	-79.47	19.64	-9.54	37.63	53.98	-16.35
*	22880.00	Peak	V	-	-	-67.52	19.64	-9.54	49.58	73.98	-24.40
ĺ	28600.00	Peak	V	-	-	-51.14	5.12	-9.54	51.43	68.20	-16.77

Table 7-82. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5745MHz

	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	V	-	-	-75.03	17.85	0.00	49.82	53.98	-4.16
*	11490.00	Peak	V	-	-	-64.43	17.85	0.00	60.42	73.98	-13.56
	17235.00	Peak	V	-	-	-71.84	25.91	0.00	61.07	68.20	-7.13
*	22980.00	Average	V	-	-	-79.77	19.39	-9.54	37.08	53.98	-16.90
*	22980.00	Peak	V	-	-	-68.17	19.39	-9.54	48.68	73.98	-25.30
	28725.00	Peak	V	-	-	-50.93	6.24	-9.54	52.77	68.20	-15.43

Table 7-83. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: A3LSMN981W	PCTEST You to be part of §	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 231 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 231 01 290



Worst Case Transfer Rate: MCS0

RU Index: 54

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	V	-	-	-75.05	17.02	0.00	48.97	53.98	-5.01
*	11570.00	Peak	V	-	•	-64.42	17.02	0.00	59.60	73.98	-14.38
	17355.00	Peak	V	-	-	-71.84	25.50	0.00	60.66	68.20	-7.54
	23140.00	Peak	V	-	•	-68.28	19.78	-9.54	48.95	68.20	-19.25
	28925.00	Peak	V	-	-	-53.64	5.18	-9.54	49.00	68.20	-19.20

Table 7-84. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5825MHz

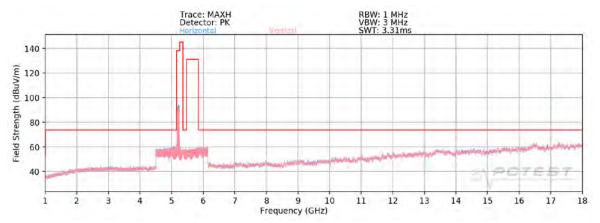
	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11650.00	Average	V	-	-	-75.22	17.90	0.00	49.68	53.98	-4.30
*	11650.00	Peak	V	-	ı	-64.30	17.90	0.00	60.60	73.98	-13.38
	17475.00	Peak	٧	-	i	-71.35	27.13	0.00	62.78	68.20	-5.42
	23300.00	Peak	V	-	-	-67.43	20.06	-9.54	50.09	68.20	-18.11
	29125.00	Peak	V	-	-	-50.50	4.94	-9.54	51.90	68.20	-16.30

Table 7-85. Radiated Measurements SISO ANT1 (26 Tones)

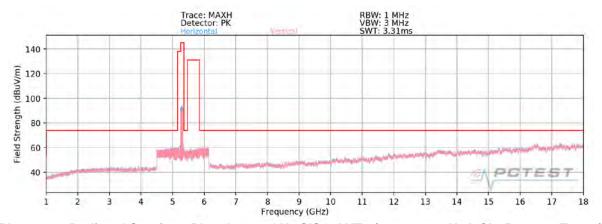
FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 232 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 232 01 290



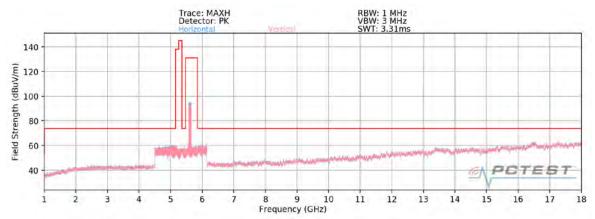
242 Tones



Plot 7-331. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U1 Ch. 40 - 242 Tones)



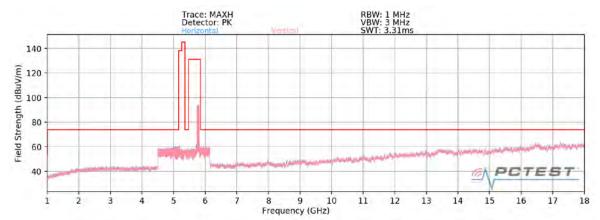
Plot 7-332. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2A Ch. 56 – 242 Tones)



Plot 7-333. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2C Ch. 120 – 242 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 233 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 233 01 290



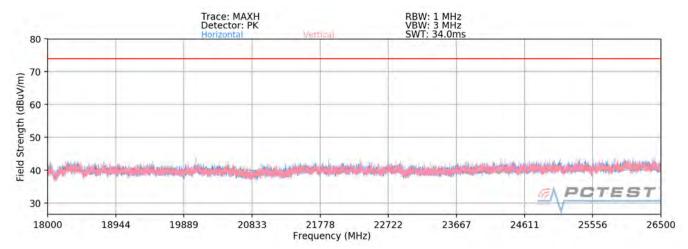


Plot 7-334. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U3 Ch. 157 – 242 Tones)

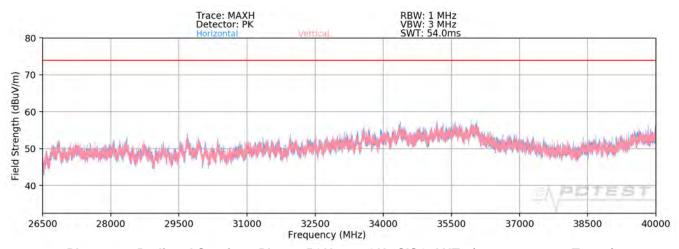
FCC ID: A3LSMN981W	PCTEST You to be part of §	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 224 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 234 of 296



SISO Antenna-1 Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-335. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11ax - 242 Tones)



Plot 7-336. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT1 (802.11ax - 242 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 235 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	



SISO Antenna-1 Radiated Spurious Emission Measurements (242 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: 61

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	V	112	241	-65.48	15.32	0.00	56.84	68.20	-11.36
*	15540.00	Average	V	134	238	-85.81	23.01	0.00	44.20	53.98	-9.78
*	15540.00	Peak	V	134	238	-67.07	23.01	0.00	62.94	73.98	-11.04
*	20720.00	Average	V	-	-	-80.10	17.88	-9.54	35.24	53.98	-18.74
*	20720.00	Peak	V	-	-	-68.86	17.88	-9.54	46.48	73.98	-27.50
	25900.00	Peak	V	-	-	-67.64	20.40	-9.54	50.22	68.20	-17.98

Table 7-86. Radiated Measurements SISO ANT1 (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: 5200MHz

	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	V	-	-	-68.02	15.03	0.00	54.01	68.20	-14.19
*	15600.00	Average	V	-	-	-81.02	23.03	0.00	49.01	53.98	-4.97
*	15600.00	Peak	V	-	-	-69.34	23.03	0.00	60.69	73.98	-13.29
*	20800.00	Average	V	-	-	-80.26	18.08	-9.54	35.28	53.98	-18.70
*	20800.00	Peak	V	-	-	-68.59	18.08	-9.54	46.95	73.98	-27.03
	26000.00	Peak	V	-	-	-67.24	20.68	-9.54	50.89	68.20	-17.31

Table 7-87. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMN981W	PCTEST Nov. I lo be part of @	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 226 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 236 of 296
© 2020 PCTEST		<u> </u>	V 9.0 02/01/2019



Worst Case Transfer Rate: MCS0

RU Index: 61

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	V	-	-	-67.13	15.33	0.00	55.20	68.20	-13.00
*	15720.00	Average	V	-	-	-80.25	22.50	0.00	49.25	53.98	-4.73
*	15720.00	Peak	V	-	-	-68.98	22.50	0.00	60.52	73.98	-13.46
*	20960.00	Average	V	-	-	-79.82	18.46	-9.54	36.10	53.98	-17.88
*	20960.00	Peak	V	-	-	-68.79	18.46	-9.54	47.13	73.98	-26.85
	26200.00	Peak	V	-	-	-66.76	20.96	-9.54	51.66	68.20	-16.54

Table 7-88. Radiated Measurements SISO ANT1 (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

	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	V	-	-	-67.65	15.82	0.00	55.17	68.20	-13.03
*	15780.00	Average	V	-	-	-79.22	21.52	0.00	49.30	53.98	-4.68
*	15780.00	Peak	V	-	-	-66.87	21.52	0.00	61.65	73.98	-12.33
*	21040.00	Average	V	-	-	-79.70	18.64	-9.54	36.39	53.98	-17.59
*	21040.00	Peak	V	-	=	-68.62	18.64	-9.54	47.47	73.98	-26.51
	26300.00	Peak	V	-	-	-66.68	21.23	-9.54	52.01	68.20	-16.19

Table 7-89. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 237 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 237 01 290



Worst Case Transfer Rate: MCS0

RU Index: 61

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]
ĺ	10560.00	Peak	V	-	-	-67.39	15.89	0.00	55.50	68.20	-12.70
*	15840.00	Average	V	-	-	-81.21	23.98	0.00	49.77	53.98	-4.21
*	15840.00	Peak	V	-	-	-68.24	23.98	0.00	62.74	73.98	-11.24
*	21120.00	Average	V	-	-	-79.91	18.80	-9.54	36.35	53.98	-17.63
*	21120.00	Peak	V	-	-	-68.61	18.80	-9.54	47.65	73.98	-26.33
Ī	26400.00	Peak	V	-	-	-67.37	21.49	-9.54	51.57	68.20	-16.63

Table 7-90. Radiated Measurements SISO ANT1 (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: 5320MHz

	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	V	-	-	-73.37	15.91	0.00	49.54	53.98	-4.44
*	10640.00	Peak	V	-	-	-63.20	15.91	0.00	59.71	73.98	-14.27
*	15960.00	Average	V	-	-	-84.19	23.32	0.00	46.13	53.98	-7.85
*	15960.00	Peak	V	-	-	-72.42	23.32	0.00	57.90	73.98	-16.08
*	21280.00	Average	V	-	-	-79.98	18.76	-9.54	36.24	53.98	-17.74
*	21280.00	Peak	V	-	-	-68.83	18.76	-9.54	47.39	73.98	-26.59
	26600.00	Peak	V	-	-	-52.82	6.35	-9.54	50.98	68.20	-17.22

Table 7-91. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 238 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 230 01 290



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	V	-	-	-74.21	16.31	0.00	49.10	53.98	-4.88
*	11000.00	Peak	V	-	•	-64.22	16.31	0.00	59.09	73.98	-14.89
	16500.00	Peak	٧	-	ı	-71.55	25.00	0.00	60.45	68.20	-7.75
	22000.00	Peak	V	-	•	-67.81	19.37	-9.54	49.02	68.20	-19.18
	27500.00	Peak	V	-	-	-51.02	5.07	-9.54	51.51	68.20	-16.69

Table 7-92. Radiated Measurements SISO ANT1 (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

	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	V	-	-	-75.16	17.23	0.00	49.07	53.98	-4.91
*	11200.00	Peak	V	-	-	-65.16	17.23	0.00	59.07	73.98	-14.91
	16800.00	Peak	V	-	-	-71.81	24.47	0.00	59.66	68.20	-8.54
*	22400.00	Average	V	-	-	-79.86	19.81	-9.54	37.41	53.98	-16.57
*	22400.00	Peak	V	-	-	-68.26	19.81	-9.54	49.01	73.98	-24.97
	28000.00	Peak	V	-	-	-51.70	5.83	-9.54	51.58	68.20	-16.62

Table 7-93. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 239 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 239 01 290



Worst Case Transfer Rate: MCS0

RU Index: 61

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	V	-	-	-75.23	17.32	0.00	49.09	53.98	-4.89
*	11440.00	Peak	V	-	-	-65.72	17.32	0.00	58.60	73.98	-15.38
	17160.00	Peak	V	-	-	-72.01	24.41	0.00	59.40	68.20	-8.80
*	22880.00	Average	V	-	-	-79.44	19.64	-9.54	37.66	53.98	-16.32
*	22880.00	Peak	V	-	-	-68.14	19.64	-9.54	48.96	73.98	-25.02
	28600.00	Peak	V	-	-	-51.26	5.12	-9.54	51.31	68.20	-16.89

Table 7-94. Radiated Measurements SISO ANT1 (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

	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	V	-	-	-76.41	17.85	0.00	48.44	53.98	-5.54
*	11490.00	Peak	V	-	-	-66.72	17.85	0.00	58.13	73.98	-15.85
	17235.00	Peak	V	-	-	-71.85	25.91	0.00	61.06	68.20	-7.14
*	22980.00	Average	V	-	-	-79.81	19.39	-9.54	37.04	53.98	-16.94
*	22980.00	Peak	V	-	-	-68.22	19.39	-9.54	48.63	73.98	-25.35
	28725.00	Peak	V	-	-	-49.87	6.24	-9.54	53.83	68.20	-14.37

Table 7-95. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMN981W	PCTEST Note to be part of §	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dags 240 of 200
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 240 of 296
© 2020 PCTEST			V 9.0 02/01/2019



Worst Case Transfer Rate: MCS0

RU Index: 61

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	V	-	-	-75.89	17.02	0.00	48.13	53.98	-5.85
*	11570.00	Peak	V	-	-	-65.11	17.02	0.00	58.91	73.98	-15.07
	17355.00	Peak	V	-	-	-72.22	25.50	0.00	60.28	68.20	-7.92
	23140.00	Peak	V	-	-	-68.16	19.78	-9.54	49.07	68.20	-19.13
	28925.00	Peak	V	-	-	-53.64	5.18	-9.54	49.00	68.20	-19.20

Table 7-96. Radiated Measurements SISO ANT1 (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

	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	V	-	-	-75.32	17.90	0.00	49.58	53.98	-4.40
*	11650.00	Peak	V	-	ı	-65.40	17.90	0.00	59.50	73.98	-14.48
	17475.00	Peak	V	-	-	-72.10	27.13	0.00	62.03	68.20	-6.17
	23300.00	Peak	V	-	-	-66.92	20.06	-9.54	50.60	68.20	-17.60
	29125.00	Peak	V	-	-	-50.09	4.94	-9.54	52.31	68.20	-15.89

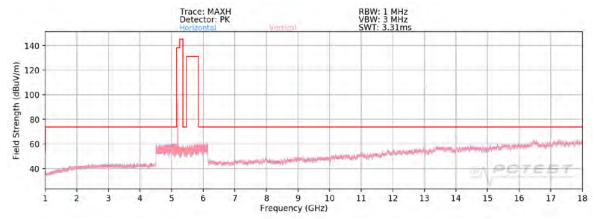
Table 7-97. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 241 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 241 01 290

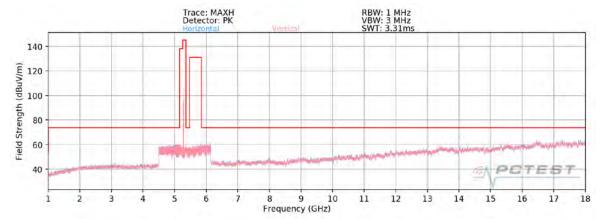


7.6.2 SISO Antenna-2 Radiated Spurious Emission Measurements

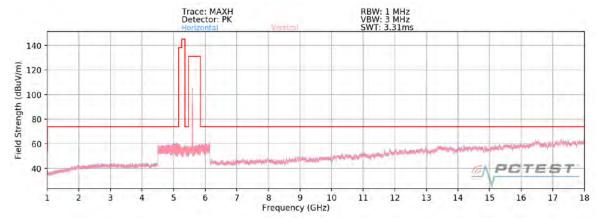
26 Tones



Plot 7-337. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U1 Ch. 40 – 26 Tones)



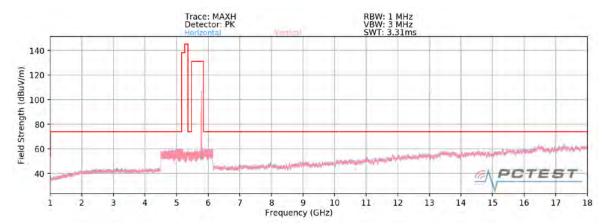
Plot 7-338. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax - U2A Ch. 56 - 26 Tones)



Plot 7-339. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2C Ch. 120 – 26 Tones)

FCC ID: A3LSMN981W	PCTEST Now to be part of §	MEASUREMENT REPORT (CERTIFICATION)	MSUNE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Daga 242 of 200
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset		Page 242 of 296
© 2020 PCTEST				V 9.0 02/01/2019



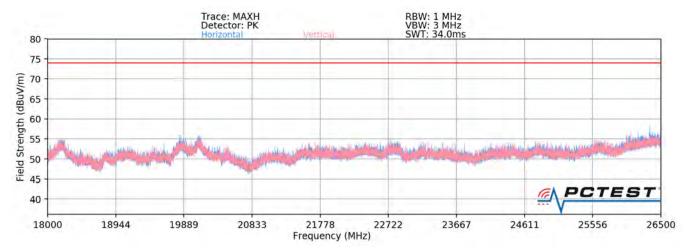


Plot 7-340. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax - U3 Ch. 157 - 26 Tones)

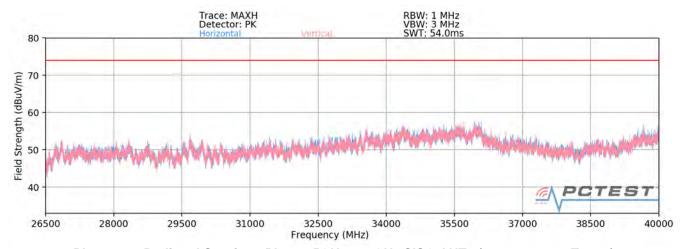
FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 243 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 243 01 290



SISO Antenna-2 Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-341. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT2 (802.11ax - 26 Tones)



Plot 7-342. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT2 (802.11ax - 26 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 244 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 244 01 290



SISO Antenna-2 Radiated Spurious Emission Measurements

§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: 54

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	-	-	-63.20	15.32	0.00	59.12	68.20	-9.08
*	15540.00	Average	Н	-	-	-82.19	23.01	0.00	47.82	53.98	-6.16
*	15540.00	Peak	Н	-	-	-72.18	23.01	0.00	57.83	73.98	-16.15
*	20720.00	Average	Н	-	-	-80.06	17.88	-9.54	35.28	53.98	-18.70
*	20720.00	Peak	Н	-	=	-68.12	17.88	-9.54	47.22	73.98	-26.76
	25900.00	Peak	Н	-	-	-68.06	20.40	-9.54	49.80	68.20	-18.40

Table 7-98. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5200MHz

,	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	-	-	-62.98	15.03	0.00	59.05	68.20	-9.15
*	15600.00	Average	Н	-	-	-83.18	23.03	0.00	46.85	53.98	-7.13
*	15600.00	Peak	Н	-	-	-72.86	23.03	0.00	57.17	73.98	-16.81
*	20800.00	Average	Н	-	-	-80.21	18.08	-9.54	35.33	53.98	-18.65
*	20800.00	Peak	Н	-	-	-68.25	18.08	-9.54	47.29	73.98	-26.69
	26000.00	Peak	Н	-	-	-66.22	20.68	-9.54	51.91	68.20	-16.29

Table 7-99. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 245 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 245 01 290



Worst Case Transfer Rate: MCS0

RU Index: 54

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]
ĺ	10480.00	Peak	Н	-	-	-62.34	15.33	0.00	59.99	68.20	-8.21
*	15720.00	Average	Н	-	-	-83.18	22.50	0.00	46.32	53.98	-7.66
*	15720.00	Peak	Н	-	-	-72.19	22.50	0.00	57.31	73.98	-16.67
*	20960.00	Average	Н	-	-	-79.81	18.46	-9.54	36.11	53.98	-17.87
*	20960.00	Peak	Н	-	-	-68.16	18.46	-9.54	47.76	73.98	-26.22
ĺ	26200.00	Peak	Н	-	-	-67.45	20.96	-9.54	50.97	68.20	-17.23

Table 7-100. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5260MHz

	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	-	-	-62.54	15.82	0.00	60.28	68.20	-7.92
*	15780.00	Average	Н	-	-	-82.17	21.52	0.00	46.35	53.98	-7.63
*	15780.00	Peak	Н	-	-	-72.94	21.52	0.00	55.58	73.98	-18.40
*	21040.00	Average	Н	-	-	-79.75	18.64	-9.54	36.34	53.98	-17.64
*	21040.00	Peak	Н	-	-	-68.11	18.64	-9.54	47.98	73.98	-26.00
	26300.00	Peak	Н	-	-	-67.12	21.23	-9.54	51.57	68.20	-16.63

Table 7-101. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 246 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 240 01 290



Worst Case Transfer Rate: MCS0

RU Index: 54

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	-	-	-63.01	15.89	0.00	59.88	68.20	-8.32
*	15840.00	Average	Н	-	-	-83.15	23.98	0.00	47.83	53.98	-6.15
*	15840.00	Peak	Н	-	-	-72.65	23.98	0.00	58.33	73.98	-15.65
*	21120.00	Average	Н	-	-	-79.86	18.80	-9.54	36.40	53.98	-17.58
*	21120.00	Peak	Н	-	-	-68.08	18.80	-9.54	48.18	73.98	-25.80
	26400.00	Peak	Н	-	-	-67.35	21.49	-9.54	51.59	68.20	-16.61

Table 7-102. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5320MHz

	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	-		-73.27	15.91	0.00	49.64	53.98	-4.34
*	10640.00	Peak	Н	-	-	-62.97	15.91	0.00	59.94	73.98	-14.04
*	15960.00	Average	Н	-	-	-83.06	23.32	0.00	47.26	53.98	-6.72
*	15960.00	Peak	Н	-	-	-72.99	23.32	0.00	57.33	73.98	-16.65
*	21280.00	Average	Н	-	-	-79.92	18.76	-9.54	36.30	53.98	-17.68
*	21280.00	Peak	Н	-	-	-67.92	18.76	-9.54	48.30	73.98	-25.68
	26600.00	Peak	Н	-	-	-52.35	6.35	-9.54	51.45	68.20	-16.75

Table 7-103. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 247 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 247 01 290



Worst Case Transfer Rate: MCS0

RU Index: 54

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	-	-	-74.08	16.31	0.00	49.23	53.98	-4.75
*	11000.00	Peak	Н	-	-	-62.76	16.31	0.00	60.55	73.98	-13.43
	16500.00	Peak	Н	-	1	-71.86	25.00	0.00	60.14	68.20	-8.06
	22000.00	Peak	Н	-	ı	-67.90	19.37	-9.54	48.93	68.20	-19.27
	27500.00	Peak	Н	-	1	-51.17	5.07	-9.54	51.36	68.20	-16.84

Table 7-104. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5600MHz

	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	-	-	-75.20	17.23	0.00	49.03	53.98	-4.95
*	11200.00	Peak	Н	-	-	-64.03	17.23	0.00	60.20	73.98	-13.78
	16800.00	Peak	Н	-	-	-71.71	24.47	0.00	59.76	68.20	-8.44
*	22400.00	Average	Н	-	-	-79.96	19.81	-9.54	37.31	53.98	-16.67
*	22400.00	Peak	Н	-	-	-67.80	19.81	-9.54	49.47	73.98	-24.51
	28000.00	Peak	Н	-	-	-51.62	5.83	-9.54	51.66	68.20	-16.54

Table 7-105. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 248 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 240 01 290



Worst Case Transfer Rate: MCS0

RU Index: 54

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	-	-	-74.98	17.32	0.00	49.34	53.98	-4.64
*	11440.00	Peak	Н	-	-	-64.28	17.32	0.00	60.04	73.98	-13.94
ĺ	17160.00	Peak	Н	-	-	-72.11	24.41	0.00	59.30	68.20	-8.90
*	22880.00	Average	Н	-	-	-79.40	19.64	-9.54	37.70	53.98	-16.28
*	22880.00	Peak	Н	-	-	-67.66	19.64	-9.54	49.44	73.98	-24.54
ĺ	28600.00	Peak	Н	-	-	-50.79	5.12	-9.54	51.78	68.20	-16.42

Table 7-106. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5745MHz

	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	-	-	-74.98	17.85	0.00	49.87	53.98	-4.11
*	11490.00	Peak	Н	-	-	-63.65	17.85	0.00	61.20	73.98	-12.78
	17235.00	Peak	Н	-	-	-73.07	25.91	0.00	59.84	68.20	-8.36
*	22980.00	Average	Н	-	-	-79.75	19.39	-9.54	37.10	53.98	-16.88
*	22980.00	Peak	Н	-	-	-68.17	19.39	-9.54	48.68	73.98	-25.30
	28725.00	Peak	Н	-	-	-50.47	6.24	-9.54	53.23	68.20	-14.97

Table 7-107. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 249 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 249 01 290



Worst Case Transfer Rate: MCS0

RU Index: 54

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	-	-	-75.05	17.02	0.00	48.97	53.98	-5.01
*	11570.00	Peak	Н	-	-	-64.95	17.02	0.00	59.07	73.98	-14.91
	17355.00	Peak	Н	-	-	-73.22	25.50	0.00	59.28	68.20	-8.92
	23140.00	Peak	Н	-	-	-68.50	19.78	-9.54	48.73	68.20	-19.47
	28925.00	Peak	Н	-	-	-53.36	5.18	-9.54	49.28	68.20	-18.92

Table 7-108. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5825MHz

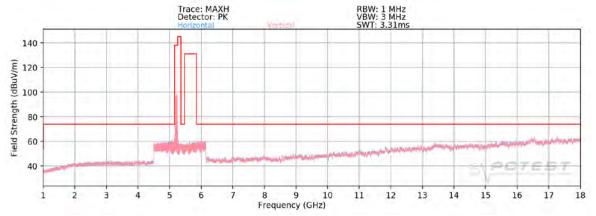
	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11650.00	Average	Н	-		-75.19	17.90	0.00	49.71	53.98	-4.27
*	11650.00	Peak	Н	-	-	-65.27	17.90	0.00	59.63	73.98	-14.35
	17475.00	Peak	Н	-	-	-71.37	27.13	0.00	62.76	68.20	-5.44
	23300.00	Peak	Н	-	-	-67.69	20.06	-9.54	49.83	68.20	-18.37
	29125.00	Peak	Н	-		-50.55	4.94	-9.54	51.85	68.20	-16.35

Table 7-109. Radiated Measurements SISO ANT2 (26 Tones)

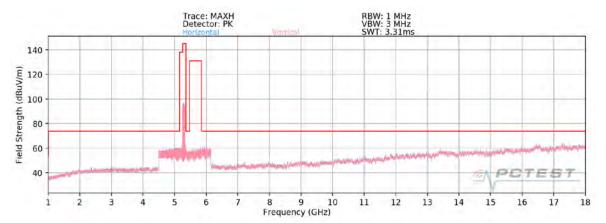
FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 250 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 250 01 290



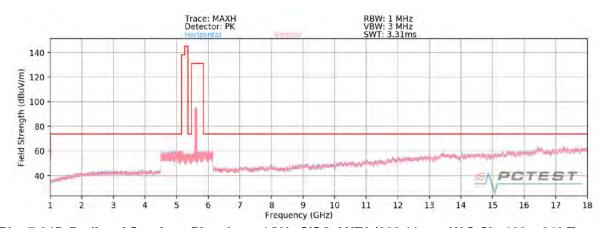
242 Tones



Plot 7-343. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax - U1 Ch. 40 - 242 Tones)



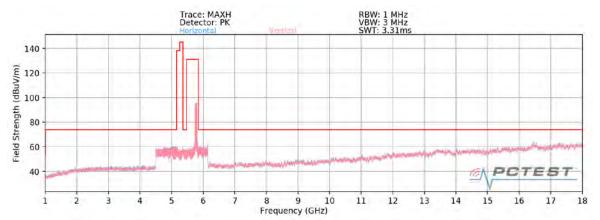
Plot 7-344. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2A Ch. 56 – 242 Tones)



Plot 7-345. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2C Ch. 120 – 242 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 251 of 296	
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 251 01 290	



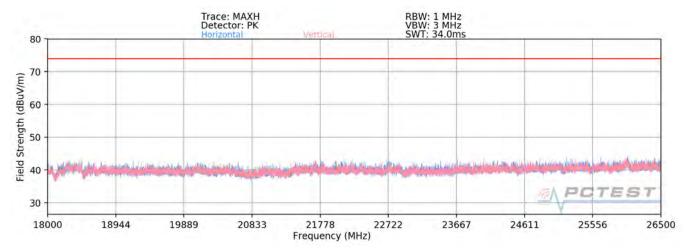


Plot 7-346. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U3 Ch. 157 – 242 Tones)

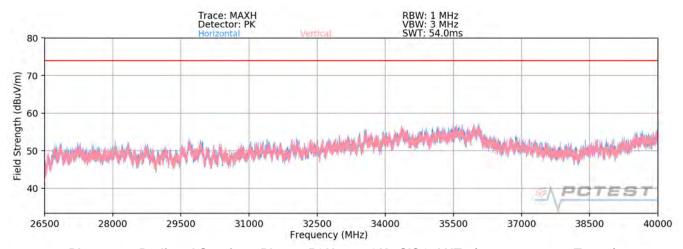
FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 252 of 200
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 252 of 296
© 2020 PCTEST			V 9.0 02/01/2019



SISO Antenna-2 Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-347. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT2 (802.11ax - 242 Tones)



Plot 7-348. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT2 (802.11ax - 242 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 253 of 296	
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 255 01 290	



SISO Antenna-2 Radiated Spurious Emission Measurements

§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: 61

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	-	-	-63.04	15.32	0.00	59.28	68.20	-8.92
*	15540.00	Average	Н	-	-	-82.12	23.01	0.00	47.89	53.98	-6.09
*	15540.00	Peak	Н	-	-	-72.00	23.01	0.00	58.01	73.98	-15.97
*	20720.00	Average	Н	-	-	-80.18	17.88	-9.54	35.16	53.98	-18.82
*	20720.00	Peak	Н	-	=	-68.70	17.88	-9.54	46.64	73.98	-27.34
	25900.00	Peak	Н	-	=	-69.03	20.40	-9.54	48.83	68.20	-19.37

Table 7-110. Radiated Measurements SISO ANT2 (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: 5200MHz

	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	-		-62.97	15.03	0.00	59.06	68.20	-9.14
*	15600.00	Average	Н	-	-	-82.15	23.03	0.00	47.88	53.98	-6.10
*	15600.00	Peak	Н	-	-	-72.02	23.03	0.00	58.01	73.98	-15.97
*	20800.00	Average	Н	-	-	-80.04	18.08	-9.54	35.50	53.98	-18.48
*	20800.00	Peak	Н	-	-	-69.03	18.08	-9.54	46.51	73.98	-27.47
	26000.00	Peak	Н	-	-	-66.31	20.68	-9.54	51.82	68.20	-16.38

Table 7-111. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 254 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 254 01 290



Worst Case Transfer Rate: MCS0

RU Index: 61

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	-	-	-62.69	15.33	0.00	59.64	68.20	-8.56
*	15720.00	Average	Н	-	-	-82.19	22.50	0.00	47.31	53.98	-6.67
*	15720.00	Peak	Н	-	-	-72.14	22.50	0.00	57.36	73.98	-16.62
*	20960.00	Average	Н	-	-	-79.75	18.46	-9.54	36.17	53.98	-17.81
*	20960.00	Peak	Н	-	-	-68.47	18.46	-9.54	47.45	73.98	-26.53
	26200.00	Peak	Н	-	-	-67.15	20.96	-9.54	51.27	68.20	-16.93

Table 7-112. Radiated Measurements SISO ANT2 (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

	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	-	-	-62.21	15.82	0.00	60.61	68.20	-7.59
*	15780.00	Average	Н	-	-	-82.22	21.52	0.00	46.30	53.98	-7.68
*	15780.00	Peak	Н	-	-	-72.84	21.52	0.00	55.68	73.98	-18.30
*	21040.00	Average	Н	-	-	-79.75	18.64	-9.54	36.34	53.98	-17.64
*	21040.00	Peak	Н	-	-	-68.28	18.64	-9.54	47.81	73.98	-26.17
	26300.00	Peak	Н	-	-	-67.15	21.23	-9.54	51.54	68.20	-16.66

Table 7-113. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 255 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 255 01 290



Worst Case Transfer Rate: MCS0

RU Index: 61

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]
ĺ	10560.00	Peak	Н	-	-	-63.62	15.89	0.00	59.27	68.20	-8.93
*	15840.00	Average	Н	-	-	-82.31	23.98	0.00	48.67	53.98	-5.31
*	15840.00	Peak	Н	-	-	-72.11	23.98	0.00	58.87	73.98	-15.11
*	21120.00	Average	Н	-	-	-79.83	18.80	-9.54	36.43	53.98	-17.55
*	21120.00	Peak	Н	-	=	-68.67	18.80	-9.54	47.59	73.98	-26.39
Ī	26400.00	Peak	Н	-	-	-66.66	21.49	-9.54	52.28	68.20	-15.92

Table 7-114. Radiated Measurements SISO ANT2 (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: 5320MHz

	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	-	-	-82.28	15.91	0.00	40.63	53.98	-13.35
*	10640.00	Peak	Н	-	-	-73.33	15.91	0.00	49.58	73.98	-24.40
*	15960.00	Average	Н	-	-	-82.16	23.32	0.00	48.16	53.98	-5.82
*	15960.00	Peak	Н	-	-	-71.11	23.32	0.00	59.21	73.98	-14.77
*	21280.00	Average	Н	-	-	-79.97	18.76	-9.54	36.25	53.98	-17.73
*	21280.00	Peak	Н	-	-	-68.51	18.76	-9.54	47.71	73.98	-26.27
Ī	26600.00	Peak	Н	-	-	-52.51	6.35	-9.54	51.29	68.20	-16.91

Table 7-115. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 256 of 206	
M2005050082-10-R1.A3L 5/5 - 7/7/2020		Portable Handset	Page 256 of 296	



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	-	-	-82.16	16.31	0.00	41.15	53.98	-12.83
*	11000.00	Peak	Н	-	•	-72.00	16.31	0.00	51.31	73.98	-22.67
	16500.00	Peak	Н	-	ı	-72.44	25.00	0.00	59.56	68.20	-8.64
	22000.00	Peak	Н	-	-	-68.34	19.37	-9.54	48.49	68.20	-19.71
	27500.00	Peak	Н	-	-	-50.32	5.07	-9.54	52.21	68.20	-15.99

Table 7-116. Radiated Measurements SISO ANT2 (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

	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]
*	11200.00	Average	Н	-	-	-82.21	17.23	0.00	42.02	53.98
*	11200.00	Peak	Н	-	-	-72.68	17.23	0.00	51.55	73.98
	16800.00	Peak	Н	-	-	-71.67	24.47	0.00	59.80	68.20
*	22400.00	Average	Н	-	-	-80.01	19.81	-9.54	37.26	53.98
*	22400.00	Peak	Н	-	-	-68.73	19.81	-9.54	48.54	73.98
	28000.00	Peak	Н	-		-51.91	5.83	-9.54	51.37	68.20

Table 7-117. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 257 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 257 01 290



Worst Case Transfer Rate: MCS0

RU Index: 61

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	-	-	-78.05	17.32	0.00	46.27	53.98	-7.71
*	11440.00	Peak	Н	-	-	-64.27	17.32	0.00	60.05	73.98	-13.93
	17160.00	Peak	Н	-	-	-70.22	24.41	0.00	61.19	68.20	-7.01
*	22880.00	Average	Н	-	-	-79.44	19.64	-9.54	37.66	53.98	-16.32
*	22880.00	Peak	Н	-	-	-67.95	19.64	-9.54	49.15	73.98	-24.83
	28600.00	Peak	Н	-	-	-51.17	5.12	-9.54	51.40	68.20	-16.80

Table 7-118. Radiated Measurements SISO ANT2 (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

	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	-	-	-78.64	17.85	0.00	46.21	53.98	-7.77
*	11490.00	Peak	Н	-	-	-64.21	17.85	0.00	60.64	73.98	-13.34
	17235.00	Peak	Н	-	-	-82.57	25.91	0.00	50.34	68.20	-17.86
*	22980.00	Average	Н	-	-	-79.76	19.39	-9.54	37.09	53.98	-16.89
*	22980.00	Peak	Н	-	-	-68.02	19.39	-9.54	48.83	73.98	-25.15
	28725.00	Peak	Н	-	-	-50.94	6.24	-9.54	52.76	68.20	-15.44

Table 7-119. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 258 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 236 01 296



Worst Case Transfer Rate: MCS0

RU Index: 61

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	-	-	-78.64	17.02	0.00	45.38	53.98	-8.60
*	11570.00	Peak	Н	-	-	-64.33	17.02	0.00	59.69	73.98	-14.29
	17355.00	Peak	Н	-	-	-71.13	25.50	0.00	61.37	68.20	-6.83
	23140.00	Peak	Н	-	-	-68.17	19.78	-9.54	49.06	68.20	-19.14
	28925.00	Peak	Н	-	-	-53.71	5.18	-9.54	48.93	68.20	-19.27

Table 7-120. Radiated Measurements SISO ANT2 (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

	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	-	-	-78.51	17.90	0.00	46.39	53.98	-7.59
*	11650.00	Peak	Н	-	-	-63.25	17.90	0.00	61.65	73.98	-12.33
	17475.00	Peak	Н	-	-	-68.24	27.13	0.00	65.89	68.20	-2.31
	23300.00	Peak	Н	-	-	-68.48	20.06	-9.54	49.04	68.20	-19.16
	29125.00	Peak	Н	-	-	-49.97	4.94	-9.54	52.43	68.20	-15.77

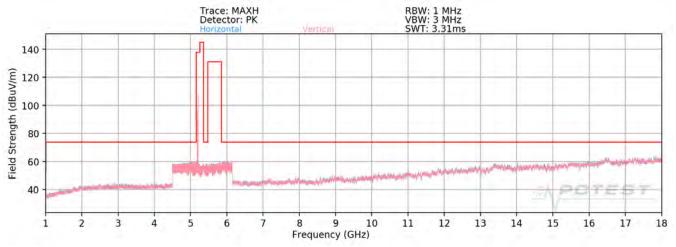
Table 7-121. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 259 of 296
M2005050082-10-R1.A3L 5/5 - 7/7/2020		Portable Handset	Fage 259 01 290

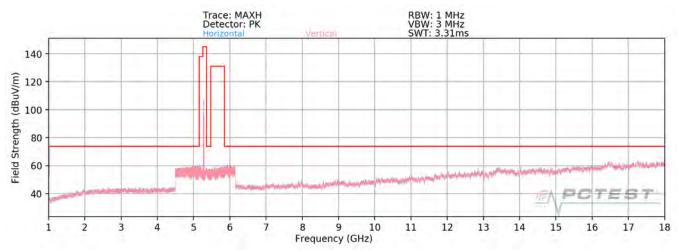


7.6.3 MIMO Radiated Spurious Emission Measurements

26 Tones



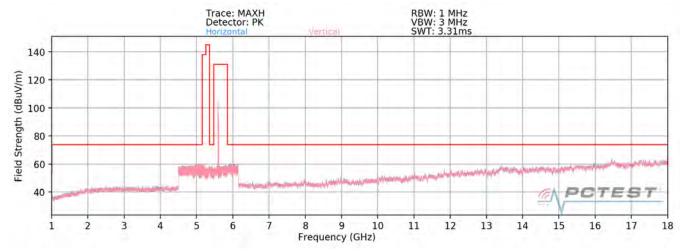
Plot 7-349. Radiated Spurious Plot above 1GHz MIMO (802.11ax - U1 Ch. 40 - 26 Tones)



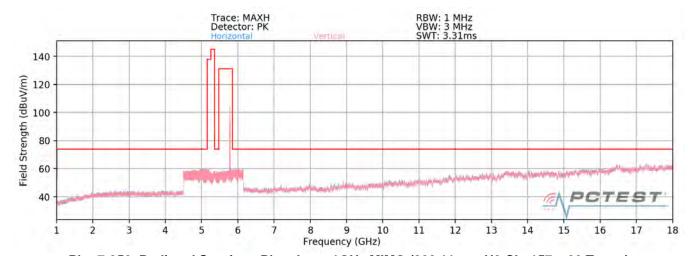
Plot 7-350. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2A Ch. 56 – 26 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 260 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 200 01 290





Plot 7-351. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2C Ch. 120 – 26 Tones)

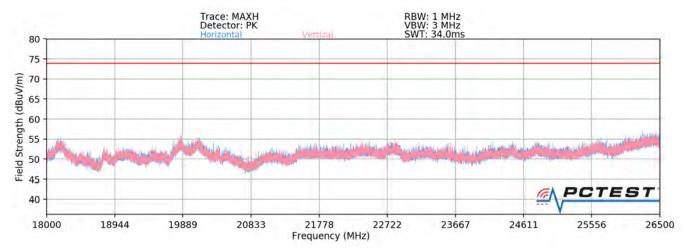


Plot 7-352. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U3 Ch. 157 – 26 Tones)

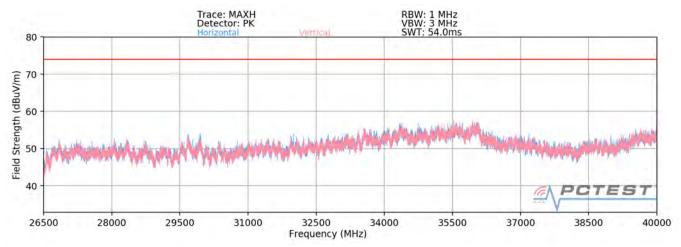
FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 261 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 201 01 290



MIMO Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-353. Radiated Spurious Plot 18GHz - 26.5GHz MIMO (802.11ax - 26 Tones)



Plot 7-354. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11ax - 26 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 262 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 202 01 290



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: 54

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]
ĺ	10360.00	Peak	Н	-	-	-69.84	15.32	0.00	52.48	68.20	-15.72
*	15540.00	Average	Н	-	-	-81.24	23.01	0.00	48.77	53.98	-5.21
*	15540.00	Peak	Н	-	-	-70.82	23.01	0.00	59.19	73.98	-14.79
*	20720.00	Average	Н	-	-	-79.95	17.88	-9.54	35.39	53.98	-18.59
*	20720.00	Peak	Н	-	-	-67.82	17.88	-9.54	47.52	73.98	-26.46
	25900.00	Peak	Н	-	-	-67.78	20.40	-9.54	50.08	68.20	-18.12

Table 7-122. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5200MHz

	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	-	-	-69.81	15.03	0.00	52.22	68.20	-15.98
*	15600.00	Average	Н	-	-	-81.45	23.03	0.00	48.58	53.98	-5.40
*	15600.00	Peak	Н	-	-	-71.02	23.03	0.00	59.01	73.98	-14.97
*	20800.00	Average	Н	-	-	-80.25	18.08	-9.54	35.29	53.98	-18.69
*	20800.00	Peak	Н	-	-	-68.91	18.08	-9.54	46.63	73.98	-27.35
	26000.00	Peak	Н	-	-	-66.42	20.68	-9.54	51.71	68.20	-16.49

Table 7-123. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMN981W	PCTEST Now to be part of §	MEASUREMENT REPORT (CERTIFICATION)	NE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dogg 262 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset		Page 263 of 296
© 2020 PCTEST				V 9.0 02/01/2019



Worst Case Transfer Rate: MCS0

RU Index: 54

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	-	-	-69.90	15.33	0.00	52.43	68.20	-15.77
*	15720.00	Average	Н	-	-	-82.14	22.50	0.00	47.36	53.98	-6.62
*	15720.00	Peak	Н	-	-	-71.88	22.50	0.00	57.62	73.98	-16.36
*	20960.00	Average	Н	-	-	-79.81	18.46	-9.54	36.11	53.98	-17.87
*	20960.00	Peak	Н	-	-	-68.15	18.46	-9.54	47.77	73.98	-26.21
	26200.00	Peak	Н	-	-	-66.87	20.96	-9.54	51.55	68.20	-16.65

Table 7-124. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5260MHz

	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	-	-	-69.46	15.82	0.00	53.36	68.20	-14.84
*	15780.00	Average	Н	-	-	-81.41	21.52	0.00	47.11	53.98	-6.87
*	15780.00	Peak	Н	-	-	-71.71	21.52	0.00	56.81	73.98	-17.17
*	21040.00	Average	Н	-	-	-79.60	18.64	-9.54	36.49	53.98	-17.49
*	21040.00	Peak	Н	-	-	-67.94	18.64	-9.54	48.15	73.98	-25.83
	26300.00	Peak	Н	-	-	-66.78	21.23	-9.54	51.91	68.20	-16.29

Table 7-125. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 264 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 204 01 290



Worst Case Transfer Rate: MCS0

RU Index: 54

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		-	-70.29	15.89	0.00	52.60	68.20	-15.60
*	15840.00	Average	Н	-	-	-81.90	23.98	0.00	49.08	53.98	-4.90
*	15840.00	Peak	Н	-	-	-71.86	23.98	0.00	59.12	73.98	-14.86
*	21120.00	Average	Н	-	-	-80.05	18.80	-9.54	36.21	53.98	-17.77
*	21120.00	Peak	Н	-	-	-68.27	18.80	-9.54	47.99	73.98	-25.99
	26400.00	Peak	Н	-	-	-67.37	21.49	-9.54	51.57	68.20	-16.63

Table 7-126. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5320MHz

	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	-		-81.53	15.91	0.00	41.38	53.98	-12.60
*	10640.00	Peak	Н	-	-	-70.68	15.91	0.00	52.23	73.98	-21.75
*	15960.00	Average	Н	-	-	-81.95	23.32	0.00	48.37	53.98	-5.61
*	15960.00	Peak	Н	-	-	-71.43	23.32	0.00	58.89	73.98	-15.09
*	21280.00	Average	Н	-	-	-79.97	18.76	-9.54	36.25	53.98	-17.73
*	21280.00	Peak	Н	-	-	-67.87	18.76	-9.54	48.35	73.98	-25.63
	26600.00	Peak	Н	-	-	-52.39	6.35	-9.54	51.41	68.20	-16.79

Table 7-127. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 265 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 200 01 290



Worst Case Transfer Rate: MCS0

RU Index: 54

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	-	-	-81.25	16.31	0.00	42.06	53.98	-11.92
*	11000.00	Peak	Н	-	-	-70.11	16.31	0.00	53.20	73.98	-20.78
	16500.00	Peak	Н	-	•	-71.25	25.00	0.00	60.75	68.20	-7.45
	22000.00	Peak	Н	-	ı	-68.17	19.37	-9.54	48.66	68.20	-19.54
ĺ	27500.00	Peak	Н	-	-	-50.52	5.07	-9.54	52.01	68.20	-16.19

Table 7-128. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5600MHz

	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	-	-	-81.03	17.23	0.00	43.20	53.98	-10.78
*	11200.00	Peak	Н	-	-	-70.54	17.23	0.00	53.69	73.98	-20.29
	16800.00	Peak	Н	-	-	-71.25	24.47	0.00	60.22	68.20	-7.98
*	22400.00	Average	Н	-	-	-79.96	19.81	-9.54	37.31	53.98	-16.67
*	22400.00	Peak	Н	-	-	-67.64	19.81	-9.54	49.63	73.98	-24.35
	28000.00	Peak	Н	-	-	-51.58	5.83	-9.54	51.70	68.20	-16.50

Table 7-129. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 266 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 200 01 290



Worst Case Transfer Rate: MCS0

RU Index: 54

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	-		-81.15	17.32	0.00	43.17	53.98	-10.81
*	11440.00	Peak	Н	-	-	-69.81	17.32	0.00	54.51	73.98	-19.47
	17160.00	Peak	Н	-	-	-71.05	24.41	0.00	60.36	68.20	-7.84
*	22880.00	Average	Н	-	-	-79.46	19.64	-9.54	37.64	53.98	-16.34
*	22880.00	Peak	Н	-	-	-67.60	19.64	-9.54	49.50	73.98	-24.48
	28600.00	Peak	Н	-	-	-51.22	5.12	-9.54	51.35	68.20	-16.85

Table 7-130. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5745MHz

	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	-	-	-81.51	17.85	0.00	43.34	53.98	-10.64
*	11490.00	Peak	Н	-	-	-69.99	17.85	0.00	54.86	73.98	-19.12
	17235.00	Peak	Н	-	-	-70.14	25.91	0.00	62.77	68.20	-5.43
*	22980.00	Average	Н	-	-	-79.76	19.39	-9.54	37.09	53.98	-16.89
*	22980.00	Peak	Н	-	-	-68.36	19.39	-9.54	48.49	73.98	-25.49
	28725.00	Peak	Н	-	-	-51.36	6.24	-9.54	52.34	68.20	-15.86

Table 7-131. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 267 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 207 01 290



Worst Case Transfer Rate: MCS0

RU Index: 54

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	-	-	-80.94	17.02	0.00	43.08	53.98	-10.90
*	11570.00	Peak	Н	-	-	-69.49	17.02	0.00	54.53	73.98	-19.45
	17355.00	Peak	Н	-	•	-71.73	25.50	0.00	60.77	68.20	-7.43
	23140.00	Peak	Н	-	-	-67.73	19.78	-9.54	49.50	68.20	-18.70
	28925.00	Peak	Н	-	•	-53.46	5.18	-9.54	49.18	68.20	-19.02

Table 7-132. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 54

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5825MHz

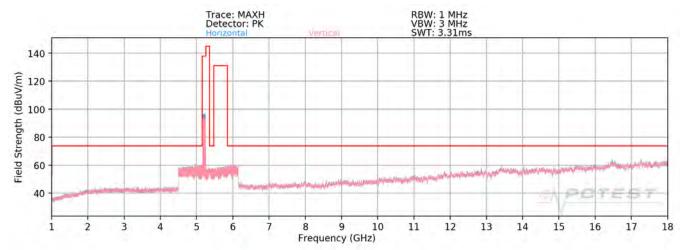
	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11650.00	Average	Н	-	•	-81.37	17.90	0.00	43.53	53.98	-10.45
*	11650.00	Peak	Н	-	-	-69.29	17.90	0.00	55.61	73.98	-18.37
	17475.00	Peak	Н	-	-	-71.49	27.13	0.00	62.64	68.20	-5.56
	23300.00	Peak	Н	-	•	-67.91	20.06	-9.54	49.61	68.20	-18.59
	29125.00	Peak	Н	-	-	-50.10	4.94	-9.54	52.30	68.20	-15.90

Table 7-133. Radiated Measurements MIMO (26 Tones)

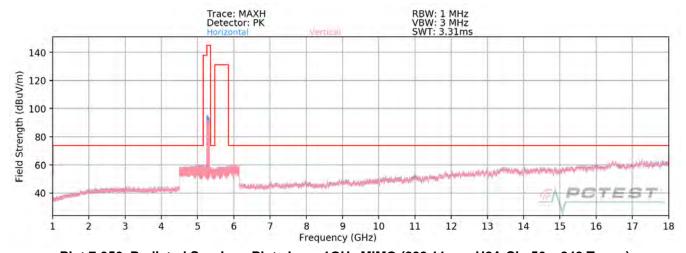
FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 268 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 200 01 290



242 Tones



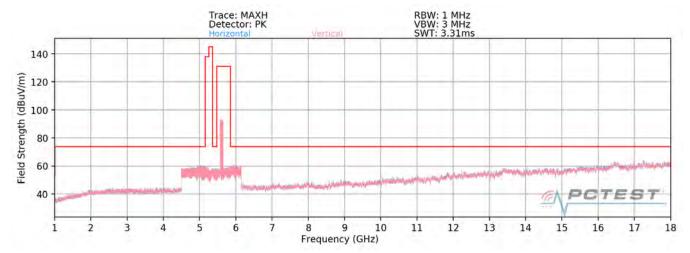
Plot 7-355. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U1 Ch. 40 – 242 Tones)



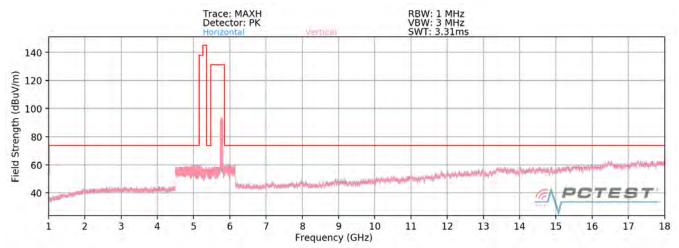
Plot 7-356. Radiated Spurious Plot above 1GHz MIMO (802.11ax - U2A Ch. 56 - 242 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 269 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 209 01 290





Plot 7-357. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2C Ch. 120 – 242 Tones)

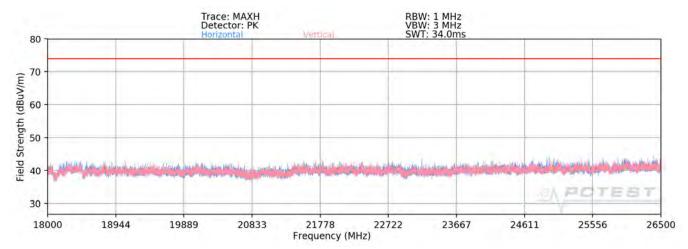


Plot 7-358. Radiated Spurious Plot above 1GHz MIMO (802.11ax - U3 Ch. 157 - 242 Tones)

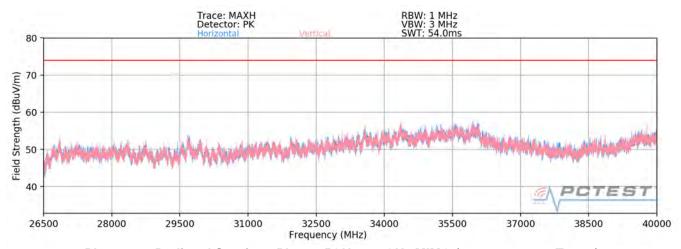
FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 270 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 270 01 290



MIMO Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-359. Radiated Spurious Plot 18GHz - 26.5GHz MIMO (802.11ax - 242 Tones)



Plot 7-360. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11ax - 242 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 271 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 271 of 296



MIMO Radiated Spurious Emission Measurements (242 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: 61

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]
ĺ	10360.00	Peak	Н	-	-	-70.52	15.32	0.00	51.80	68.20	-16.40
*	15540.00	Average	Н	-	-	-81.72	23.01	0.00	48.29	53.98	-5.69
*	15540.00	Peak	Н	-	-	-70.30	23.01	0.00	59.71	73.98	-14.27
*	20720.00	Average	Н	-	-	-80.13	17.88	-9.54	35.21	53.98	-18.77
*	20720.00	Peak	Н	-	-	-68.73	17.88	-9.54	46.61	73.98	-27.37
	25900.00	Peak	Н	-	-	-67.75	20.40	-9.54	50.11	68.20	-18.09

Table 7-134. 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: 5200MHz

	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	-	-	-70.39	15.03	0.00	51.64	68.20	-16.56
*	15600.00	Average	Н	-	-	-81.47	23.03	0.00	48.56	53.98	-5.42
*	15600.00	Peak	Н	-	-	-71.31	23.03	0.00	58.72	73.98	-15.26
*	20800.00	Average	Н	-	-	-80.25	18.08	-9.54	35.29	53.98	-18.69
*	20800.00	Peak	Н	-	-	-69.20	18.08	-9.54	46.34	73.98	-27.64
ĺ	26000.00	Peak	Н	-	-	-66.96	20.68	-9.54	51.17	68.20	-17.03

Table 7-135. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMN981W	PCTEST*	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Do an 272 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 272 of 296
© 2020 PCTEST			V 9.0 02/01/2019



Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

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	-		-70.03	15.33	0.00	52.30	68.20	-15.90
*	15720.00	Average	Н	-	-	-82.05	22.50	0.00	47.45	53.98	-6.53
*	15720.00	Peak	Н	-	-	-71.55	22.50	0.00	57.95	73.98	-16.03
*	20960.00	Average	Н	-	-	-79.93	18.46	-9.54	35.99	53.98	-17.99
*	20960.00	Peak	Н	-	-	-68.65	18.46	-9.54	47.27	73.98	-26.71
	26200.00	Peak	Н	-	-	-67.31	20.96	-9.54	51.11	68.20	-17.09

Table 7-136. 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

	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	-	-	-70.80	15.82	0.00	52.02	68.20	-16.18
*	15780.00	Average	Н	-	-	-81.94	21.52	0.00	46.58	53.98	-7.40
*	15780.00	Peak	Н	-	-	-71.41	21.52	0.00	57.11	73.98	-16.87
*	21040.00	Average	Н	-	-	-79.69	18.64	-9.54	36.40	53.98	-17.58
*	21040.00	Peak	Н	-	-	-67.76	18.64	-9.54	48.33	73.98	-25.65
	26300.00	Peak	Н	-	-	-66.56	21.23	-9.54	52.13	68.20	-16.07

Table 7-137. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 273 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 273 01 290



Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

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	-	-	-71.03	15.89	0.00	51.86	68.20	-16.34
*	15840.00	Average	Н	-	-	-82.03	23.98	0.00	48.95	53.98	-5.03
*	15840.00	Peak	Н	-	-	-71.80	23.98	0.00	59.18	73.98	-14.80
*	21120.00	Average	Н	-	-	-80.03	18.80	-9.54	36.23	53.98	-17.75
*	21120.00	Peak	Н	-	-	-68.40	18.80	-9.54	47.86	73.98	-26.12
	26400.00	Peak	Н	-	-	-67.30	21.49	-9.54	51.64	68.20	-16.56

Table 7-138. 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: 5320MHz

	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	-		-81.35	15.91	0.00	41.56	53.98	-12.42
*	10640.00	Peak	Н	-	-	-71.29	15.91	0.00	51.62	73.98	-22.36
*	15960.00	Average	Н	-	-	-81.69	23.32	0.00	48.63	53.98	-5.35
*	15960.00	Peak	Н	-	-	-70.46	23.32	0.00	59.86	73.98	-14.12
*	21280.00	Average	Н	-	-	-79.86	18.76	-9.54	36.36	53.98	-17.62
*	21280.00	Peak	Н	-	-	-67.50	18.76	-9.54	48.72	73.98	-25.26
	26600.00	Peak	Н	-		-52.10	6.35	-9.54	51.70	68.20	-16.50

Table 7-139. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMN981W		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 274 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 274 01 290



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	-	-	-81.25	16.31	0.00	42.06	53.98	-11.92
*	11000.00	Peak	Н	-		-70.25	16.31	0.00	53.06	73.98	-20.92
	16500.00	Peak	Н	-	-	-70.79	25.00	0.00	61.21	68.20	-6.99
	22000.00	Peak	Н	-	-	-67.85	19.37	-9.54	48.98	68.20	-19.22
ĺ	27500.00	Peak	Н	-	-	-50.63	5.07	-9.54	51.90	68.20	-16.30

Table 7-140. 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

	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		-	-81.15	17.23	0.00	43.08	53.98	-10.90
*	11200.00	Peak	Н		-	-70.35	17.23	0.00	53.88	73.98	-20.10
	16800.00	Peak	Н	-	-	-70.26	24.47	0.00	61.21	68.20	-6.99
*	22400.00	Average	Н	-	-	-79.85	19.81	-9.54	37.42	53.98	-16.56
*	22400.00	Peak	Н	-	-	-68.55	19.81	-9.54	48.72	73.98	-25.26
ĺ	28000.00	Peak	Н	-	-	-51.93	5.83	-9.54	51.35	68.20	-16.85

Table 7-141. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMN981W	PCTEST'	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 275 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 275 01 290



Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5700MHz

Channel: 140

	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	-	-	-81.37	17.32	0.00	42.95	53.98	-11.03
*	11440.00	Peak	Н	-	-	-70.92	17.32	0.00	53.40	73.98	-20.58
	17160.00	Peak	Н	-	-	-67.51	24.41	0.00	63.90	68.20	-4.30
*	22880.00	Average	Н	-	-	-79.26	19.64	-9.54	37.84	53.98	-16.14
*	22880.00	Peak	Н	-	=	-67.35	19.64	-9.54	49.75	73.98	-24.23
	28600.00	Peak	Н	-	-	-51.55	5.12	-9.54	51.02	68.20	-17.18

Table 7-142. 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

	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	-	-	-79.34	17.85	0.00	45.51	53.98	-8.47
*	11490.00	Peak	Н	-	-	-68.94	17.85	0.00	55.91	73.98	-18.07
	17235.00	Peak	Н	-	-	-67.10	25.91	0.00	65.81	68.20	-2.39
*	22980.00	Average	Н	-	-	-79.74	19.39	-9.54	37.11	53.98	-16.87
*	22980.00	Peak	Н	-	-	-68.51	19.39	-9.54	48.34	73.98	-25.64
	28725.00	Peak	Н	-	-	-50.89	6.24	-9.54	52.81	68.20	-15.39

Table 7-143. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMN981W	PCTEST You to be part of §	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: Test Dates:		EUT Type:	Page 276 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 276 01 296



Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

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	-	-	-79.19	17.02	0.00	44.83	53.98	-9.15
*	11570.00	Peak	Н	-	-	-68.11	17.02	0.00	55.91	73.98	-18.07
	17355.00	Peak	Н	-	•	-68.14	25.50	0.00	64.36	68.20	-3.84
	23140.00	Peak	Н	-	ı	-68.38	19.78	-9.54	48.85	68.20	-19.35
ĺ	28925.00	Peak	Н	-	-	-53.19	5.18	-9.54	49.45	68.20	-18.75

Table 7-144. 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

	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	-	-	-78.29	17.90	0.00	46.61	53.98	-7.37
*	11650.00	Peak	Н	-	-	-68.07	17.90	0.00	56.83	73.98	-17.15
	17475.00	Peak	Н	-	-	-68.96	27.13	0.00	65.17	68.20	-3.03
	23300.00	Peak	Н	-	•	-68.23	20.06	-9.54	49.29	68.20	-18.91
	29125.00	Peak	Н	-	ı	-50.33	4.94	-9.54	52.07	68.20	-16.13

Table 7-145. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMN981W	PCTEST You to be part of §	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: Test Dates:		EUT Type:	Page 277 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 277 01 290



7.6.4 SISO Antenna-1 Radiated Band Edge Measurements (20MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]; RSS-Gen [8.9]

242 Tones

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

MCS0

61

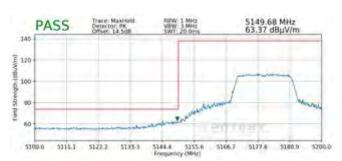
3 Meters

5180MHz

36



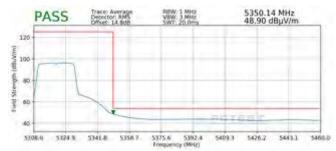
Plot 7-361. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 1 – 242 Tones)



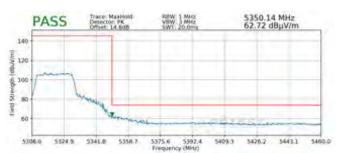
Plot 7-362. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 1 – 242 Tones)

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

802.11ax
MCS0
61
3 Meters
5320MHz
64



Plot 7-363. Radiated Upper Band Edge Plot SISO ANT1 (Average – UNII Band 2A – 242 Tones)



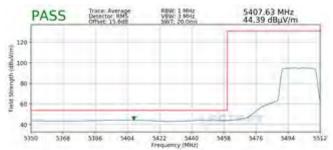
Plot 7-364. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 2A – 242 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 278 of 296	
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	raye 210 01 290	

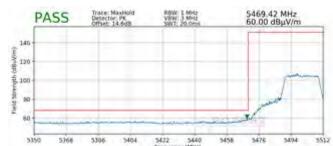


Worst Case Mode:
Worst Case Transfer Rate:
RU Index:
Distance of Measurements:
Operating Frequency:
Channel:

802.11ax
MCS0
61
3 Meters
5500MHz
100



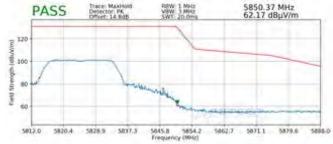
Plot 7-365. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 2C – 242 Tones)



Plot 7-366. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 2C – 242 Tones)

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

802.11ax
MCS0
61
3 Meters
5825MHz
165



Plot 7-367. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 3 – 242 Tones)

FCC ID: A3LSMN981W	PCTEST Now! to be part of @	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Do 22 270 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 279 of 296
© 2020 PCTEST		<u> </u>	V 9.0 02/01/2019

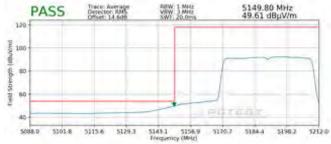


7.6.5 SISO Antenna-1 Radiated Band Edge Measurements (40MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

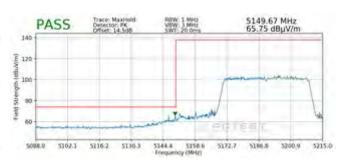
484 Tones

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

802.11ax
MCS0
65
3 Meters
5190MHz
38

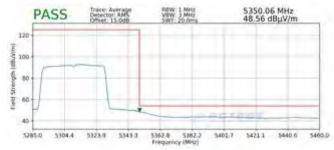


Plot 7-368. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 1 – 484 Tones)

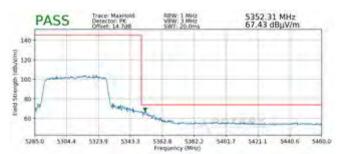


Plot 7-369. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 1 – 484 Tones)

Worst Case Mode: 802.11ax
Worst Case Transfer Rate: MCS0
RU Index: 65
Distance of Measurements: 3 Meters
Operating Frequency: 5310MHz
Channel: 62



Plot 7-370. Radiated Upper Band Edge Plot SISO ANT1 (Average – UNII Band 2A – 484 Tones)



Plot 7-371. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 2A – 484 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 280 of 296	
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	raye 200 01 290	



Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

MCS0

65

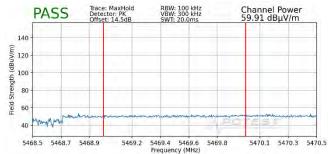
3 Meters

5510MHz

102



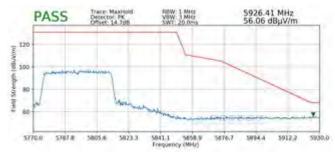
Plot 7-372. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 2C – 484 Tones)



Plot 7-373. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 2C – 484 Tones)

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

802.11ax
MCS0
65
3 Meters
5795MHz
159



Plot 7-374. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 3 – 484 Tones)

FCC ID: A3LSMN981W	PCTEST Novel to be part at (§	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Down 204 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 281 of 296
© 2020 PCTEST			V 9.0 02/01/2019



7.6.6 SISO Antenna-1 Radiated Band Edge Measurements (80MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

996 Tones

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

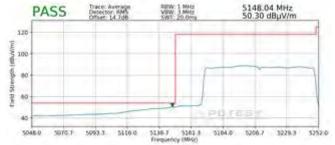
MCS0

67

3 Meters

5210MHz

42



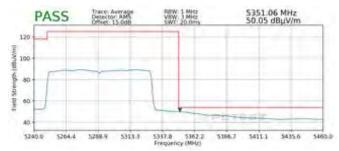
Plot 7-375. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 1 – 996 Tones)



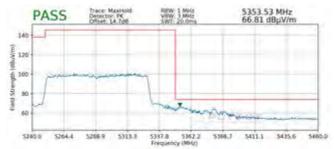
Plot 7-376. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 1 – 996 Tones)

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

802.11ax
MCS0
67
3 Meters
5290MHz
58



Plot 7-377. Radiated Upper Band Edge Plot SISO ANT1 (Average – UNII Band 2A – 996 Tones)



Plot 7-378. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 2A – 996 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 202 of 206	
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 282 of 296	



Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

MCS0

67

3 Meters

5530MHz

106



Plot 7-379. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 2C – 996 Tones)



Plot 7-380. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 2C – 996 Tones)

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

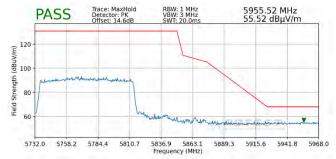
MCS0

67

3 Meters

5775MHz

155



Plot 7-381. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 3 – 996 Tones)

FCC ID: A3LSMN981W	PCTEST Now to be part of 1	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 202 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 283 of 296
© 2020 PCTEST			V 9.0 02/01/2019

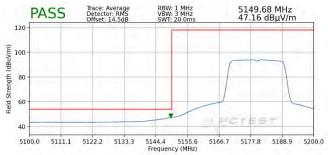


7.6.7 SISO Antenna-2 Radiated Band Edge Measurements (20MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

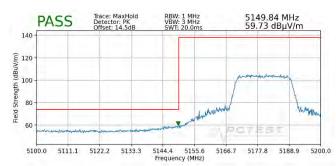
242 Tones

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

802.11ax
MCS0
61
3 Meters
5180MHz
36



Plot 7-382. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 1 – 242 Tones)



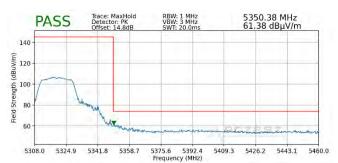
Plot 7-383. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 1 – 242 Tones)

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

802.11ax
MCS0
61
3 Meters
5320MHz
64



Plot 7-384. Radiated Upper Band Edge Plot SISO ANT2 (Average – UNII Band 2A – 242 Tones)



Plot 7-385. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 2A – 242 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 284 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 204 01 290



Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

802.11ax

MCS0

61

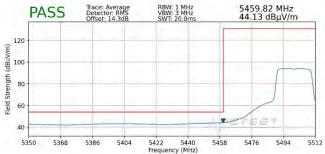
3 Meters

Operating Frequency: 3 Meters

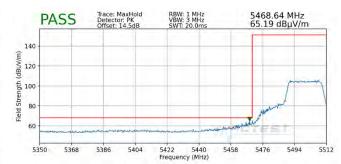
Channel: 3 Meters

5500MHz

100



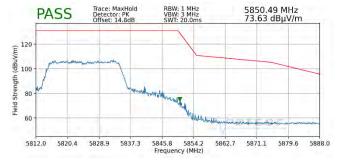
Plot 7-386. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 2C – 242 Tones)



Plot 7-387. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 2C – 242 Tones)

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

802.11ax
MCS0
61
3 Meters
5825MHz
165



Plot 7-388. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 3 – 242 Tones)

FCC ID: A3LSMN981W	PCTEST Novel to be part at (§	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Do as 205 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 285 of 296
© 2020 PCTEST			V 9.0 02/01/2019

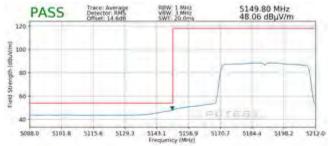


7.6.8 SISO Antenna-2 Radiated Band Edge Measurements (40MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

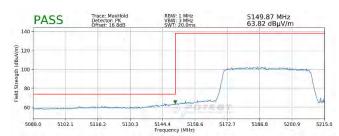
484 Tones

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

802.11ax
MCS0
65
3 Meters
5190MHz
38

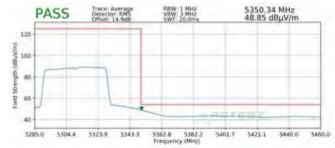


Plot 7-389. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 1 – 484 Tones)

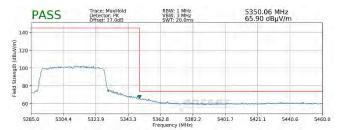


Plot 7-390. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 1 – 484 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	65
Distance of Measurements:	3 Meters
Operating Frequency:	5310MHz
Channel:	62



Plot 7-391. Radiated Upper Band Edge Plot SISO ANT2 (Average – UNII Band 2A – 484 Tones)



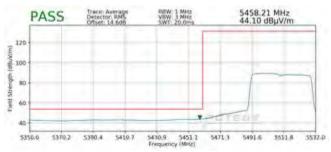
Plot 7-392. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 2A – 484 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 286 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 200 01 290



Worst Case Mode: 802.11ax
Worst Case Transfer Rate: MCS0
RU Index: 65
Distance of Measurements: 3 Meters

Distance of Measurements: 3 Meters
Operating Frequency: 5510MHz
Channel: 102



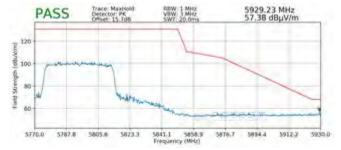
PASS Trace: Marked Detector) Fee WW 3 MHz S465.21 MHz 65.74 dBµV/m 65.74 dBµV/m 65.74 dBµV/m 65.74 dBµV/m 65.74 dBµV/m 65.74 dBµV/m 66.74 dBµV/m 66.

Plot 7-393. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 2C – 484 Tones)

Plot 7-394. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 2C – 484 Tones)

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

802.11ax
MCS0
65
3 Meters
5795MHz
159



Plot 7-395. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 3 – 484 Tones)

FCC ID: A3LSMN981W	PCTEST'	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 287 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 207 01 290



7.6.9 SISO Antenna-2 Radiated Band Edge Measurements (80MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

996 Tones

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

MCS0

67

3 Meters

5210MHz

42



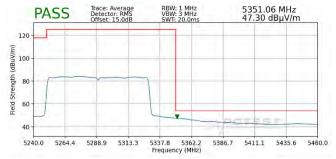
Plot 7-396. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 1 – 996 Tones)



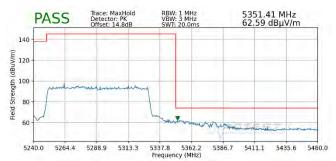
Plot 7-397. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 1 – 996 Tones)

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

802.11ax
MCS0
67
3 Meters
5290MHz
58



Plot 7-398. Radiated Upper Band Edge Plot SISO ANT2 (Average – UNII Band 2A – 996 Tones)



Plot 7-399. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 2A – 996 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 288 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 200 01 290

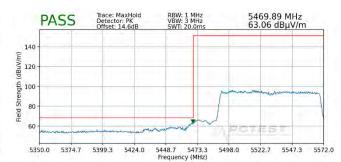


Worst Case Mode:
Worst Case Transfer Rate:
RU Index:
Distance of Measurements:
Operating Frequency:
Channel:

802.11ax
MCS0
67
3 Meters
5530MHz
106



Plot 7-400. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 2C – 996 Tones)



Plot 7-401. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 2C – 996 Tones)

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:
Operating Frequency:

Channel:

802.11ax

MCS0

67

3 Meters

5775MHz

155



Plot 7-402. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 3 – 996 Tones)

FCC ID: A3LSMN981W	PCTEST Now to be part of 1	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 200 of 200
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 289 of 296
© 2020 PCTEST			V 9.0 02/01/2019



7.6.10 MIMO Radiated Band Edge Measurements (20MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

242 Tones

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

MCS0

61

3 Meters

5180MHz

36



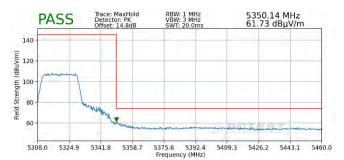
PASS Trace: MaxHold Detector: PK Offset: 14.4dB SW: 3 MH2 SW: 3 M

Plot 7-403. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 242 Tones)

Plot 7-404. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 242 Tones)

Worst Case Mode: 802.11ax
Worst Case Transfer Rate: MCS0
RU Index: 61
Distance of Measurements: 3 Meters
Operating Frequency: 5320MHz
Channel: 64





Plot 7-405. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A – 242 Tones)

Plot 7-406. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A – 242 Tones)

FCC ID: A3LSMN981W	PCTEST'	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 290 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 290 01 290

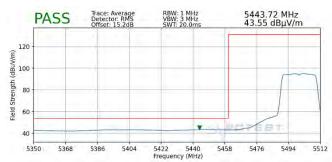


Channel:

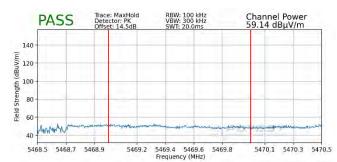
Worst Case Mode:
Worst Case Transfer Rate:
RU Index:
Distance of Measurements:
Operating Frequency:

802.11ax
MCS0
61
3 Meters
5500MHz

100



Plot 7-407. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 242 Tones)



Plot 7-408. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C – 242 Tones)

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

MCS0

61

3 Meters

5825MHz

165



Plot 7-409. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3 – 242 Tones)

FCC ID: A3LSMN981W	PCTEST Novel to be part at (§	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Down 204 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 291 of 296
© 2020 PCTEST		<u> </u>	V 9.0 02/01/2019



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

484 Tones

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

MCS0

65

3 Meters

5190MHz

38



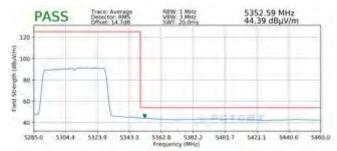
Plot 7-410. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 484 Tones)



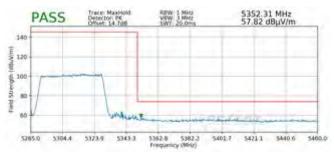
Plot 7-411. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 484 Tones)

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

802.11ax
MCS0
65
3 Meters
5310MHz
62



Plot 7-412. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A – 484 Tones)



Plot 7-413. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A – 484 Tones)

FCC ID: A3LSMN981W	PCTEST'	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 292 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 292 01 290

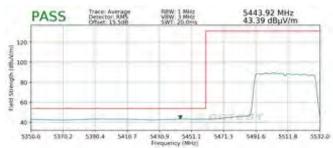


Channel:

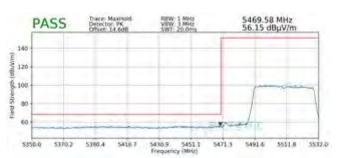
Worst Case Mode:
Worst Case Transfer Rate:
RU Index:
Distance of Measurements:
Operating Frequency:

802.11ax
MCS0
65
3 Meters
5510MHz

102



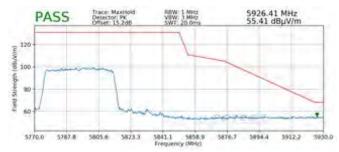
Plot 7-414. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 484 Tones)



Plot 7-415. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C – 484 Tones)

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

802.11ax
MCS0
65
3 Meters
5795MHz
159



Plot 7-416. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3 – 484 Tones)

FCC ID: A3LSMN981W	PCTEST Nov. I lo be part of @	MEASUREMENT REPORT (CERTIFICATION)	SUNE	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:		Dags 202 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset		Page 293 of 296
© 2020 PCTEST				V 9.0 02/01/2019



7.6.12 MIMO Radiated Band Edge Measurements (80MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

996 Tones

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

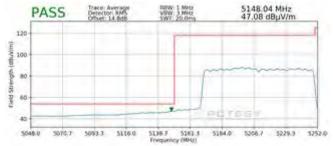
MCS0

67

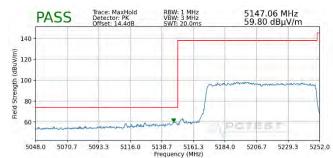
3 Meters

5210MHz

42



Plot 7-417. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 996 Tones)



Plot 7-418. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 996 Tones)

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

MCS0

67

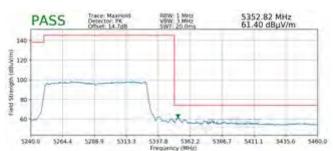
3 Meters

5290MHz

58



Plot 7-419. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A – 996 Tones)



Plot 7-420. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A – 996 Tones)

FCC ID: A3LSMN981W	PCTEST'	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 294 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 294 01 290



Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

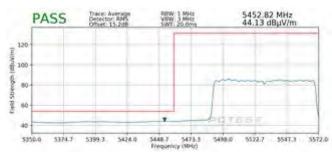
MCS0

67

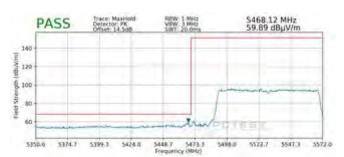
3 Meters

5530MHz

106



Plot 7-421. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 996 Tones)



Plot 7-422. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C – 996 Tones)

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

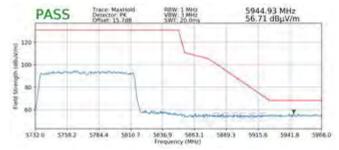
MCS0

67

3 Meters

5775MHz

155



Plot 7-423. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3 – 996 Tones)

FCC ID: A3LSMN981W	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 295 of 296
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Fage 295 01 290



8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSMN981W** is in compliance with Part 15 Subpart E (15.407) of the FCC Rules.

FCC ID: A3LSMN981W	PCTEST'	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 206 of 206
1M2005050082-10-R1.A3L	5/5 - 7/7/2020	Portable Handset	Page 296 of 296