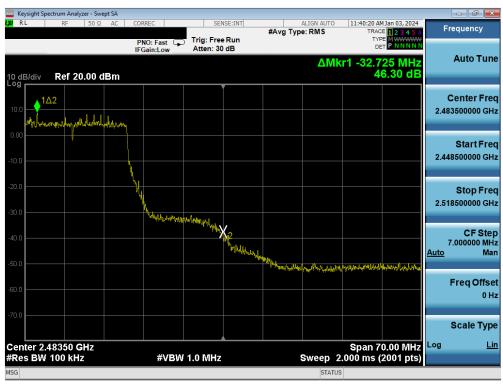


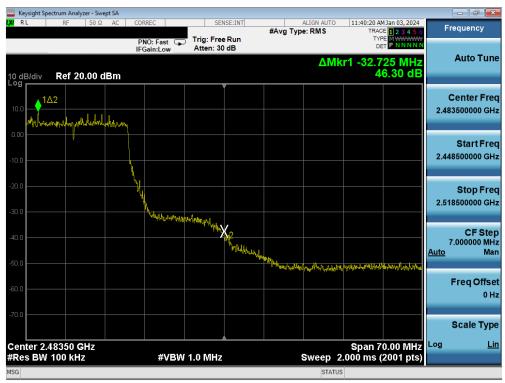
Plot 7-119. Band Edge Plot MIMO ANT2 (802.11be (2.4GHz) - Ch. 3)



Plot 7-120. Band Edge Plot MIMO ANT2 (802.11be (2.4GHz) - Ch. 10)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 90 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	rage 90 01 146





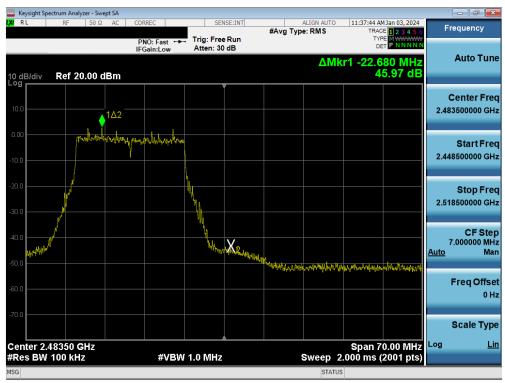
Plot 7-121. Band Edge Plot MIMO ANT2 (802.11be (2.4GHz) - Ch. 10)



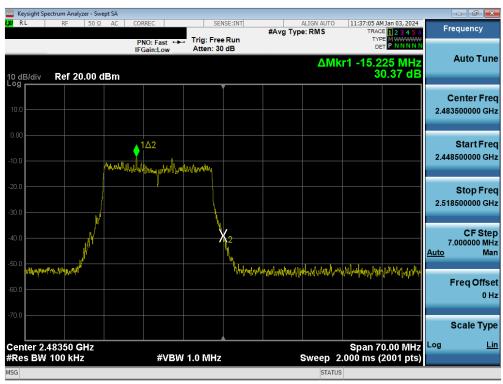
Plot 7-122. Band Edge Plot MIMO ANT2 (802.11be (2.4GHz) - Ch. 11)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 91 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	rage 91 01 146





Plot 7-123. Band Edge Plot MIMO ANT2 (802.11be (2.4GHz) - Ch. 12)



Plot 7-124. Band Edge Plot MIMO ANT2 (802.11be (2.4GHz) - Ch. 13)

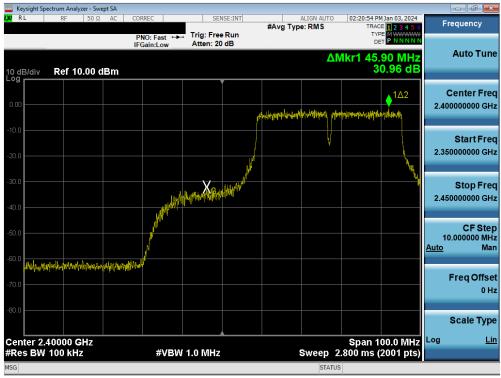
FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 92 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	raye 92 01 146



# 7.5.3 MIMO Conducted Band Edge Emissions - MIMO ANT1 - 40MHz



Plot 7-125. Band Edge Plot MIMO ANT1 (802.11n (2.4GHz) - Ch. 3)



Plot 7-126. Band Edge Plot MIMO ANT1 (802.11n (2.4GHz) - Ch. 4)

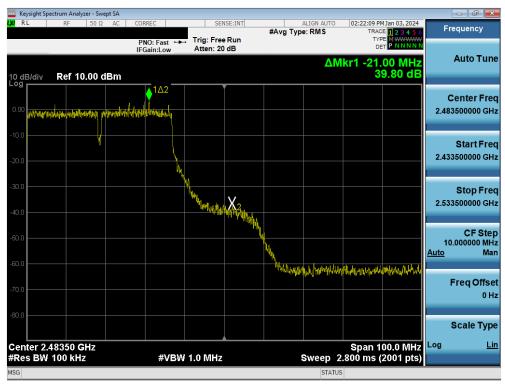
FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 93 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 93 01 146

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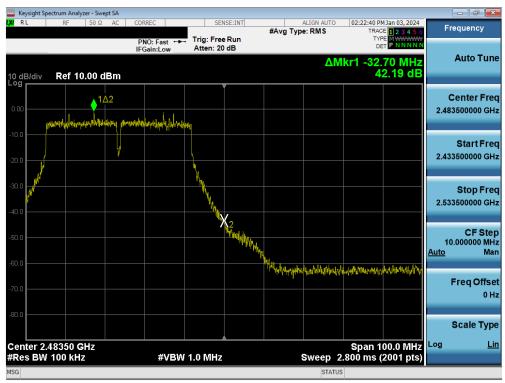
Plot 7-127. Band Edge Plot MIMO ANT1 (802.11n (2.4GHz) - Ch. 5)



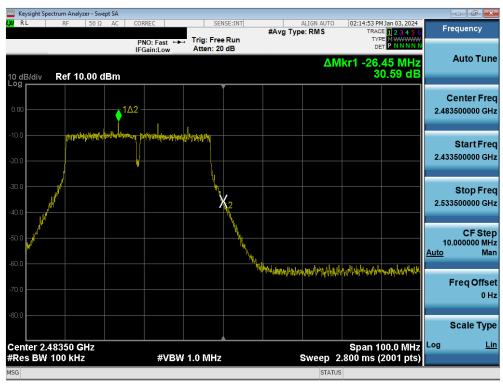
Plot 7-128. Band Edge Plot MIMO ANT1 (802.11n (2.4GHz) - Ch. 9)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 94 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	raye 94 01 146





Plot 7-129. Band Edge Plot MIMO ANT1 (802.11n (2.4GHz) - Ch. 10)



Plot 7-130. Band Edge Plot MIMO ANT1 (802.11n (2.4GHz) - Ch. 11)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 95 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	rage 90 01 146





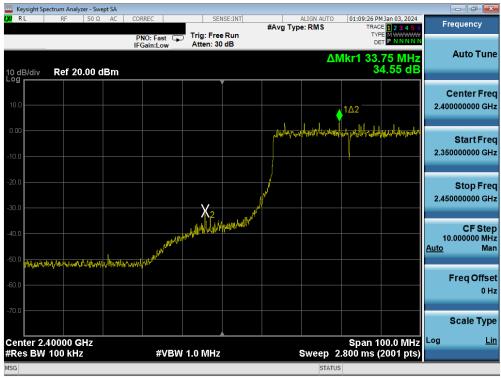
Plot 7-131. Band Edge Plot MIMO ANT1 (802.11be (2.4GHz) - Ch. 3)



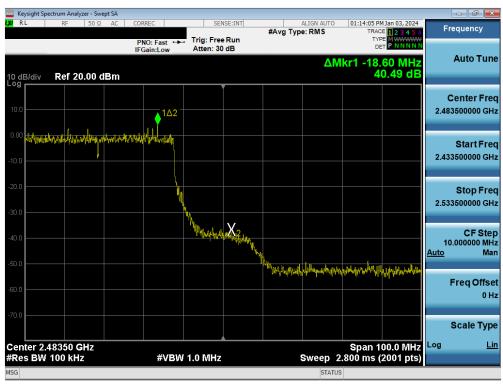
Plot 7-132. Band Edge Plot MIMO ANT1 (802.11be (2.4GHz) - Ch. 4)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 06 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Page 96 of 146
© 2024 ELEMENT			V11.1 08/28/2023





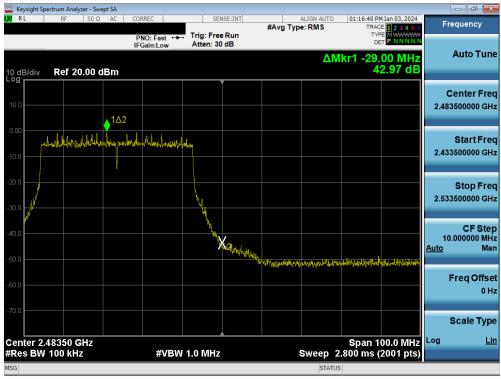
Plot 7-133. Band Edge Plot MIMO ANT1 (802.11be (2.4GHz) - Ch. 5)



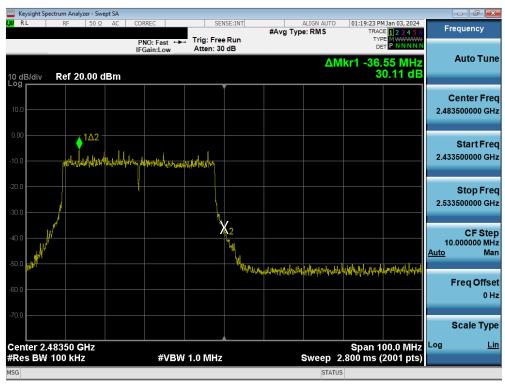
Plot 7-134. Band Edge Plot MIMO ANT1 (802.11be (2.4GHz) - Ch. 9)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 97 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 97 01 146





Plot 7-135. Band Edge Plot MIMO ANT1 (802.11be (2.4GHz) - Ch. 10)

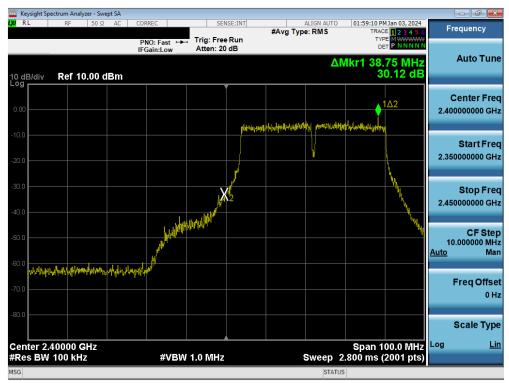


Plot 7-136. Band Edge Plot MIMO ANT1 (802.11be (2.4GHz) - Ch. 11)

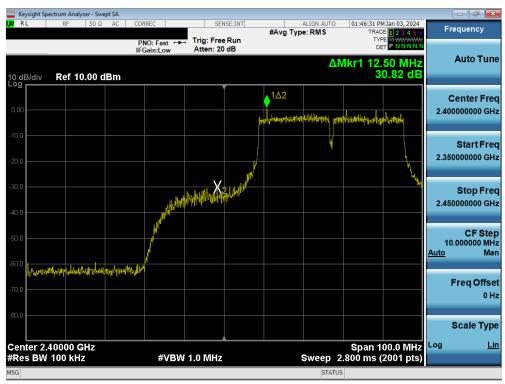
FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 98 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	raye 90 UI 140



# 7.5.4 MIMO Conducted Band Edge Emissions – MIMO ANT2 – 40MHz



Plot 7-137. Band Edge Plot MIMO ANT2 (802.11n (2.4GHz) - Ch. 3)



Plot 7-138. Band Edge Plot MIMO ANT2 (802.11n (2.4GHz) - Ch. 4)

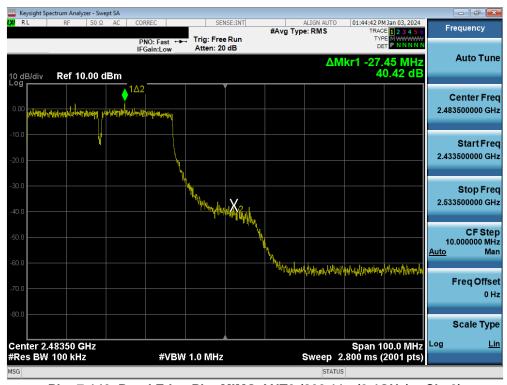
FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 99 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 99 01 146

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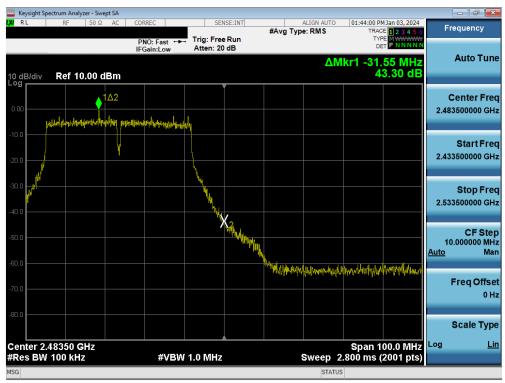
Plot 7-139. Band Edge Plot MIMO ANT2 (802.11n (2.4GHz) - Ch. 5)



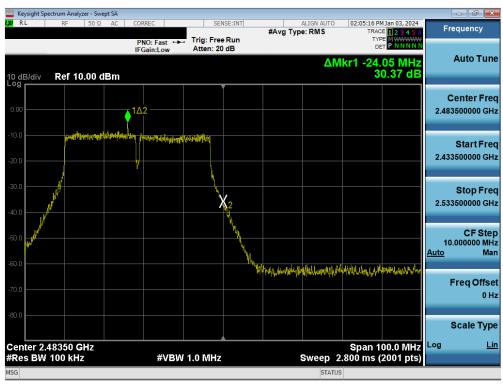
Plot 7-140. Band Edge Plot MIMO ANT2 (802.11n (2.4GHz) - Ch. 9)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 100 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	rage 100 01 140





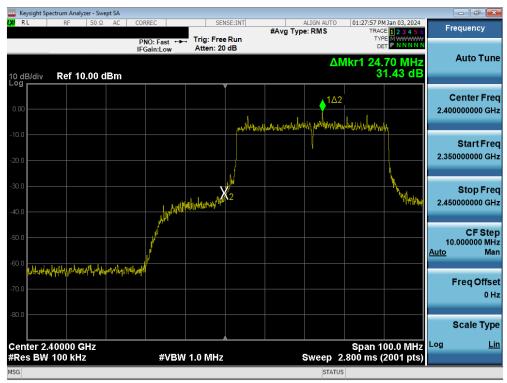
Plot 7-141. Band Edge Plot MIMO ANT2 (802.11n (2.4GHz) - Ch. 10)



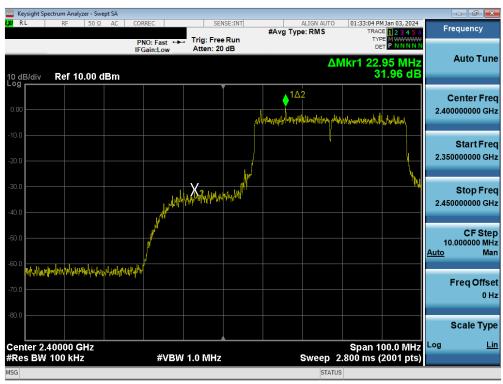
Plot 7-142. Band Edge Plot MIMO ANT2 (802.11n (2.4GHz) - Ch. 11)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 101 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 101 01 146





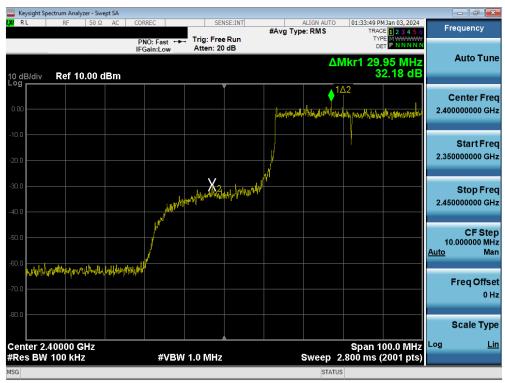
Plot 7-143. Band Edge Plot MIMO ANT2 (802.11be (2.4GHz) - Ch. 3)



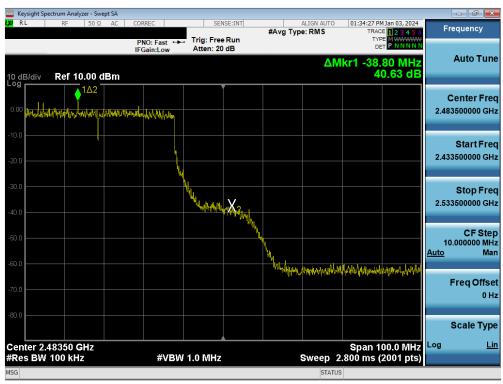
Plot 7-144. Band Edge Plot MIMO ANT2 (802.11be (2.4GHz) - Ch. 4)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 102 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 102 01 146





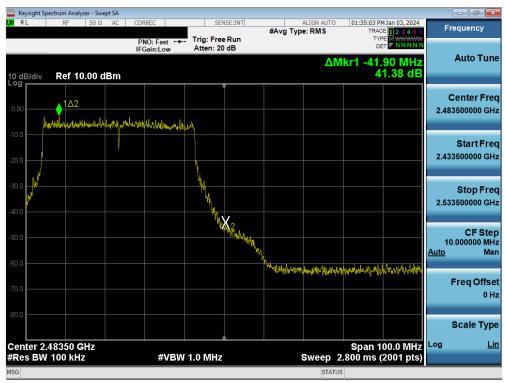
Plot 7-145. Band Edge Plot MIMO ANT2 (802.11be (2.4GHz) - Ch. 5)



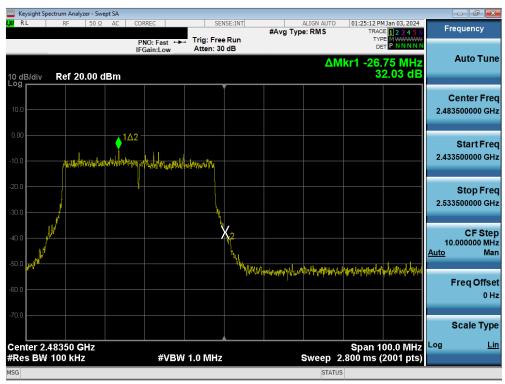
Plot 7-146. Band Edge Plot MIMO ANT2 (802.11be (2.4GHz) - Ch. 9)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 103 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 103 01 146





Plot 7-147. Band Edge Plot MIMO ANT2 (802.11be (2.4GHz) - Ch. 10)



Plot 7-148. Band Edge Plot MIMO ANT2 (802.11be (2.4GHz) - Ch. 11)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 104 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Page 104 01 146



# 7.6 Conducted Spurious Emissions

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

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst-case configuration. For the following out of band conducted spurious emissions plots, the EUT was investigated in all available data rates for "b", "g", "n", "ax", "be" modes. The worst-case spurious emissions for the 2.4GHz band were found while transmitting in "b" mode at 1 Mbps and are shown in the plots below.

The limit for out-of-band spurious emissions at the band edge is 30dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100kHz bandwidth per the procedure in Section 11.11.3 of ANSI C63.10-2013.

#### **Test Procedure Used**

ANSI C63.10-2013 – Section 11.11.3 ANSI C63.10-2013 – Section 14.3.3

#### **Test Settings**

- 1. Start frequency was set to 30MHz and stop frequency was set to 25GHz (separated into two plots per channel)
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = Peak
- 5. Trace mode = max hold
- 6. Sweep time = auto couple
- 7. The 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: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 105 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	rage 100 01 140

ELEMENT V11.1 08/28/2023



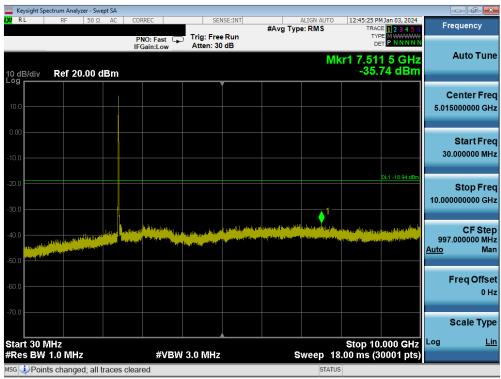
## **Test Notes**

- 1. RBW was set to 1MHz rather than 100kHz in order to increase the measurement speed.
- 2. The display line shown in the following plots denotes the limit at 30dB below the fundamental emission level measured in a 100kHz bandwidth. However, since the traces in the following plots are measured with a 1MHz RBW, the display line may not necessarily appear to be 30dB below the level of the fundamental in a 1MHz bandwidth.
- 3. For plots showing conducted spurious emissions near the limit, the frequencies were investigated with a reduced RBW to ensure that no emissions were present.
- 4. The conducted spurious emissions were measured to relative limits. Therefore, in accordance with ANSI C63.10-2013 Section 14.3.3, it was unnecessary to show compliance through the summation of test results of the individual outputs.

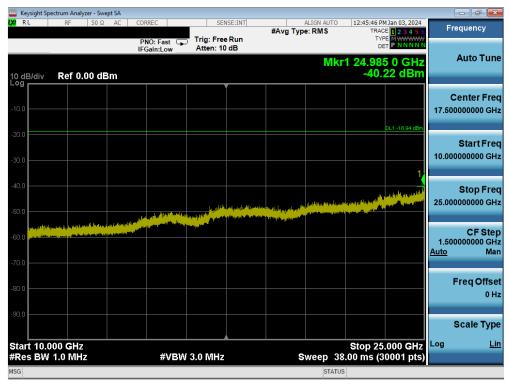
FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 106 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 100 01 146



# 7.6.1 MIMO Conducted Spurious Emissions MIMO ANT1 - 20MHz



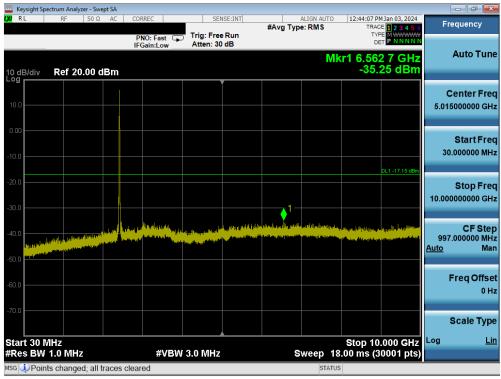
Plot 7-149. Conducted Spurious Plot MIMO ANT1 (802.11b - Ch. 1)



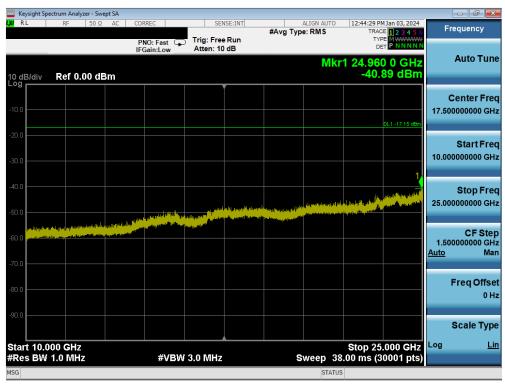
Plot 7-150. Conducted Spurious Plot MIMO ANT1 (802.11b - Ch. 1)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 107 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 107 01 146





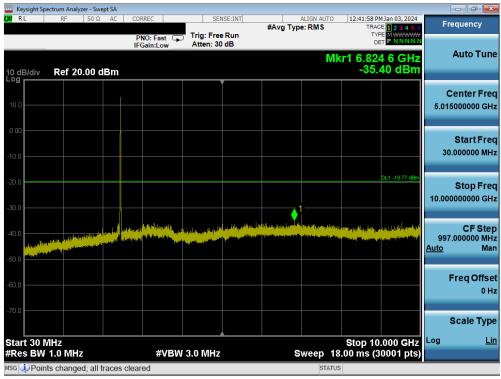
Plot 7-151. Conducted Spurious Plot MIMO ANT1 (802.11b - Ch. 6)



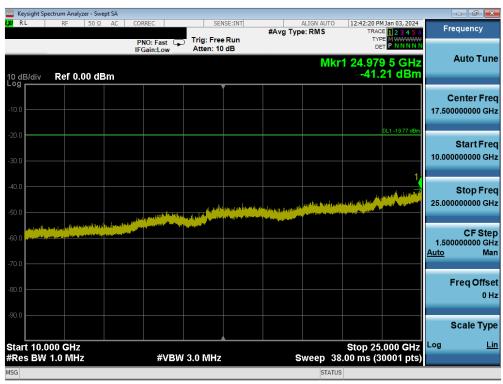
Plot 7-152. Conducted Spurious Plot MIMO ANT1 (802.11b - Ch. 6)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 108 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 100 01 146





Plot 7-153. Conducted Spurious Plot MIMO ANT1 (802.11b - Ch. 11)

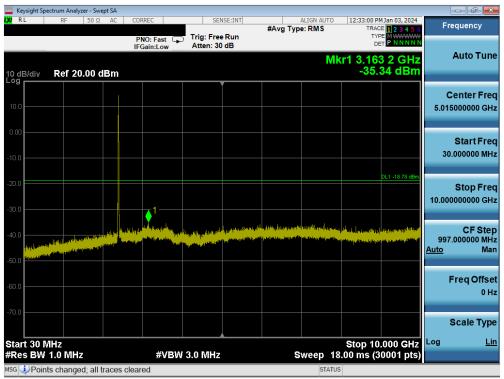


Plot 7-154. Conducted Spurious Plot MIMO ANT1 (802.11b - Ch. 11)

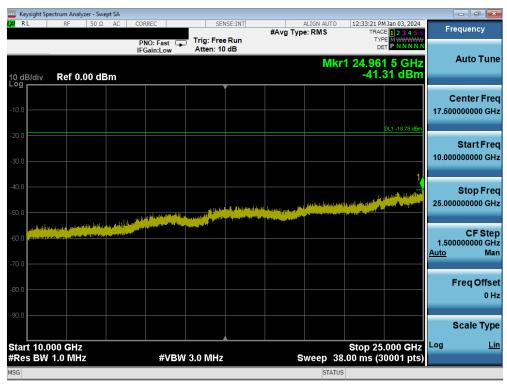
FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 109 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 109 01 146



# 7.6.2 MIMO Conducted Spurious Emissions MIMO ANT2 – 20MHz



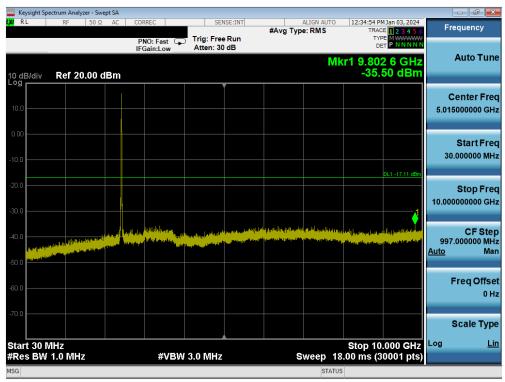
Plot 7-155. Conducted Spurious Plot MIMO ANT2 (802.11b - Ch. 1)



Plot 7-156. Conducted Spurious Plot MIMO ANT2 (802.11b - Ch. 1)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 110 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Page 110 01 146





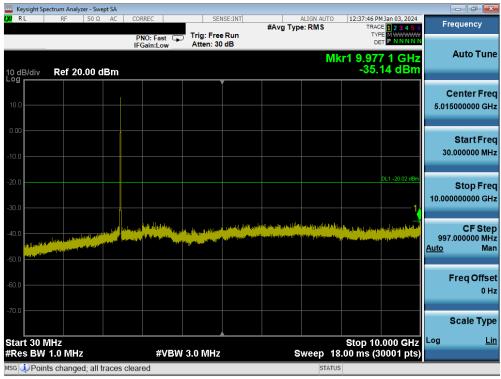
Plot 7-157. Conducted Spurious Plot MIMO ANT2 (802.11b - Ch. 6)



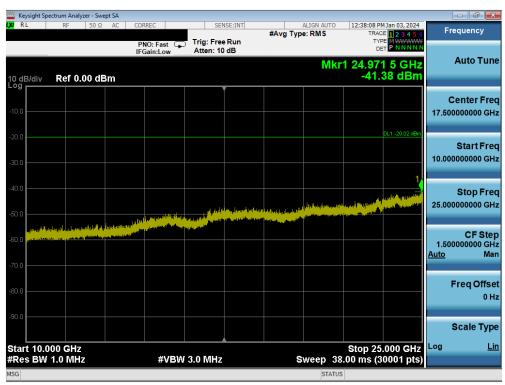
Plot 7-158. Conducted Spurious Plot MIMO ANT2 (802.11b - Ch. 6)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 111 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Page 111 01 146





Plot 7-159. Conducted Spurious Plot MIMO ANT2 (802.11b - Ch. 11)

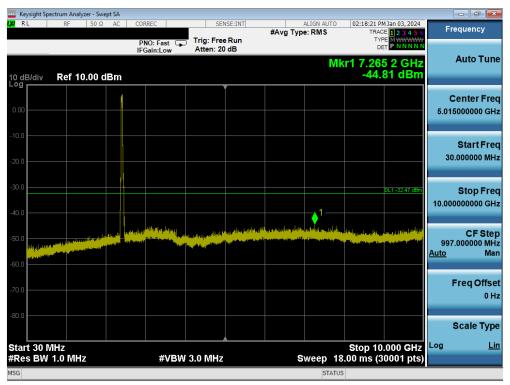


Plot 7-160. Conducted Spurious Plot MIMO ANT2 (802.11b - Ch. 11)

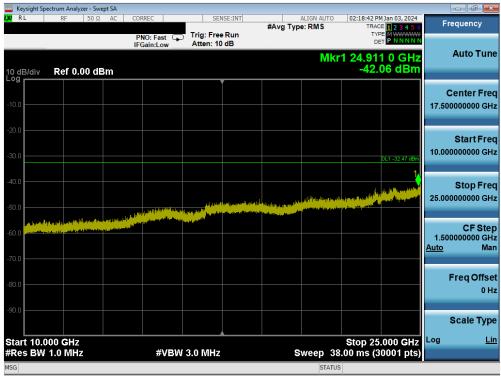
FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 112 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 112 01 146



# 7.6.3 MIMO Conducted Spurious Emissions MIMO ANT1 – 40MHz



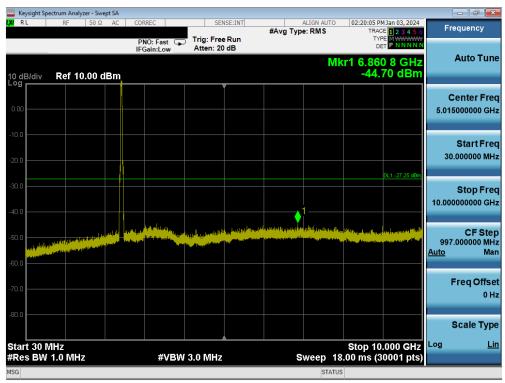
Plot 7-161. Conducted Spurious Plot MIMO ANT1 (802.11n - Ch. 3)



Plot 7-162. Conducted Spurious Plot MIMO ANT1 (802.11n - Ch. 3)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 113 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 113 01 146





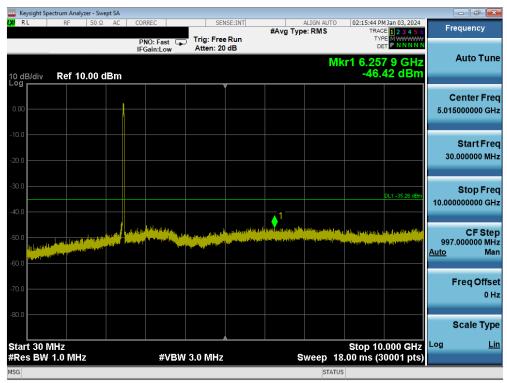
Plot 7-163. Conducted Spurious Plot MIMO ANT1 (802.11n - Ch. 6)



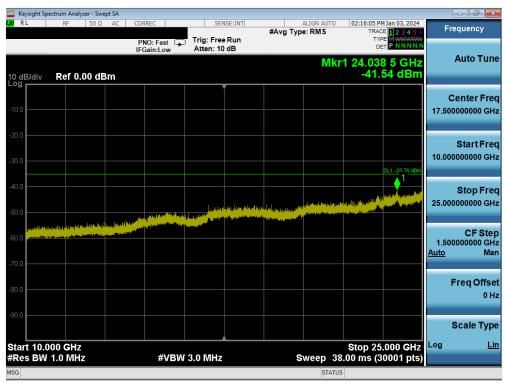
Plot 7-164. Conducted Spurious Plot MIMO ANT1 (802.11n - Ch. 6)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 114 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	raye 114 01 140





Plot 7-165. Conducted Spurious Plot MIMO ANT1 (802.11n - Ch. 11)

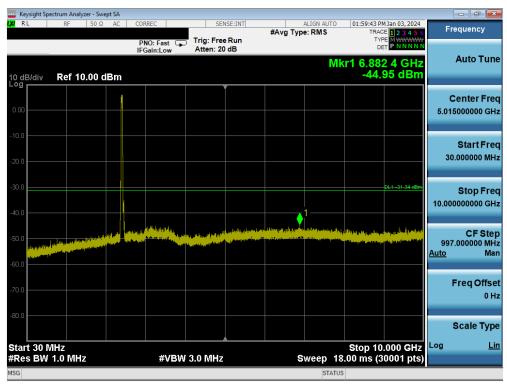


Plot 7-166. Conducted Spurious Plot MIMO ANT1 (802.11n - Ch. 11)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 115 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 115 01 146



# 7.6.4 MIMO Conducted Spurious Emissions MIMO ANT2 - 40MHz



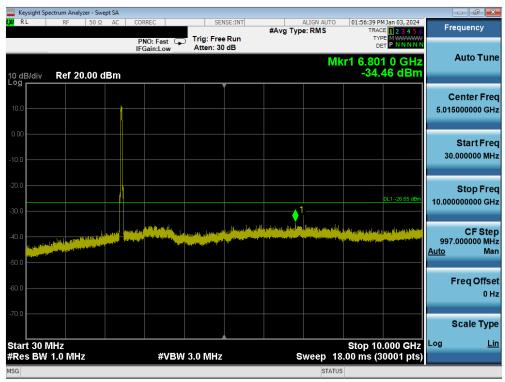
Plot 7-167. Conducted Spurious Plot MIMO ANT2 (802.11n - Ch. 3)



Plot 7-168. Conducted Spurious Plot MIMO ANT2 (802.11n - Ch. 3)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 116 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	rage 110 01 146





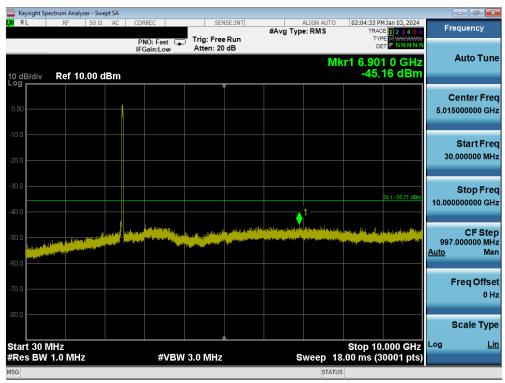
Plot 7-169. Conducted Spurious Plot MIMO ANT2 (802.11n - Ch. 6)



Plot 7-170. Conducted Spurious Plot MIMO ANT2 (802.11n - Ch. 6)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 117 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	rage 117 01 140





Plot 7-171. Conducted Spurious Plot MIMO ANT2 (802.11n - Ch. 11)



Plot 7-172. Conducted Spurious Plot MIMO ANT2 (802.11n - Ch. 11)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 118 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	rage 110 01 140



## 7.7 Radiated Emission Measurements

## **Test Overview and Limit**

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates and modes were investigated for radiated spurious emissions. Only the radiated emissions of the configuration that produced the worst-case emissions are reported in this section.

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

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

Table 7-19. Radiated Limits

#### **Test Procedures Used**

ANSI C63.10-2013 - Section 6.6.4.3

## <u>Test Settings – Above 1GHz</u>

## **Average Field Strength Measurements**

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- Detector = power average (RMS)
- 5. Number of measurement points = 1001 (Number of points must be > 2 x span\\RBW)
- 6. Sweep time = auto
- 7. Trace (RMS) averaging was performed over at least 100 traces

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 119 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 119 01 146



## **Peak Field Strength Measurements**

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

# <u>Test Settings – Below 1GHz</u>

# Quasi-Peak Field Strength Measurements

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

## **Test Setup**

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

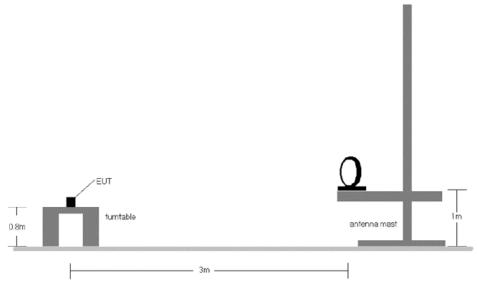


Figure 7-6. Radiated Test Setup < 30MHz

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 120 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Page 120 01 146



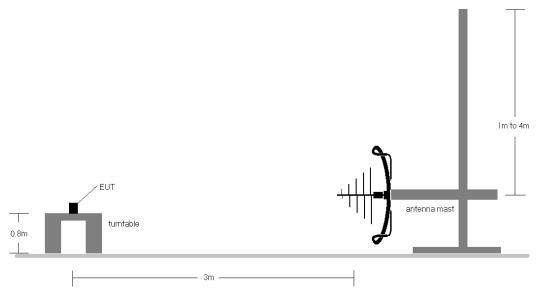


Figure 7-7. Radiated Test Setup < 1GHz

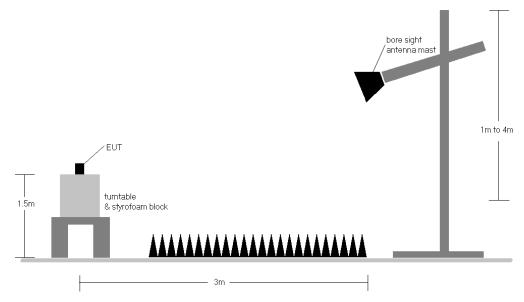


Figure 7-8. Radiated Test Setup > 1GHz

## **Test Notes**

- 1. The optional test procedures for antenna port conducted measurements of unwanted emissions per the guidance of ANSI C63.10-2013 Section 11.3 were not used to evaluate this device for compliance to radiated limits. All radiated spurious emissions levels were measured in a radiated test setup.
- 2. All emissions lying in restricted bands specified in §15.205 and Section 8.10 of RSS-Gen are below the limits shown in §15.209.

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 121 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 121 01 146



- 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. Emissions are investigated while operating on the center channel of the mode, band, and modulation that produced the worst-case results during the transmitter spurious emissions testing.
- 10. No spurious emissions were detected within 20dB of the limit below 30MHz.
- 11. The results recorded using the broadband antenna are known to correlate with the results obtained by using a tuned dipole with an acceptable degree of accuracy. The VSWR for the measurement antenna was found to be less than 2:1.
- 12. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. There were no emissions detected in the 30MHz 1GHz frequency range, as shown in the subsequent plots.

#### **Sample Calculations**

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

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

#### **Radiated Band Edge Measurement Offset**

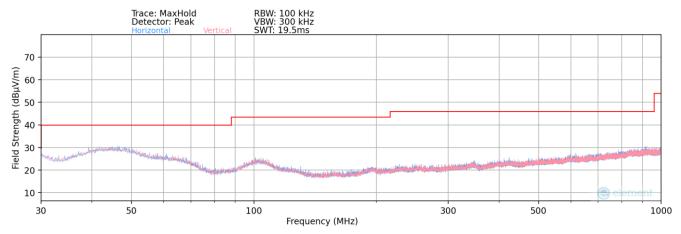
 The amplitude offset shown in the radiated restricted band edge plots in Section 7.7 was calculated using the formula:

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

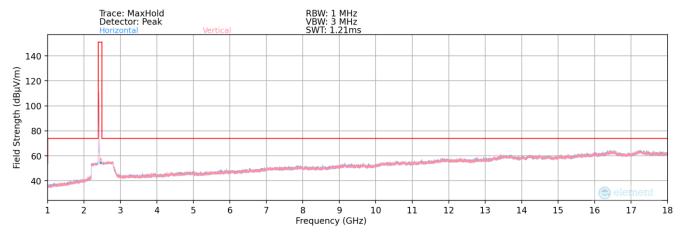
FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 122 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 122 01 146



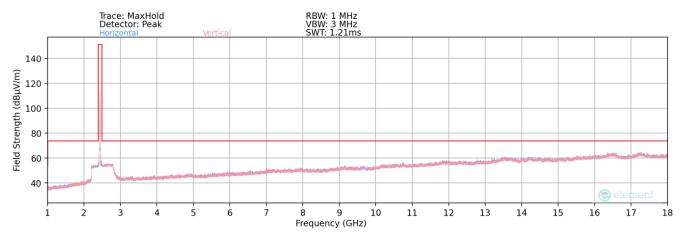
# 7.7.1 MIMO Radiated Spurious Emission Prescans



Plot 7-173. Radiated Spurious Plot below 1GHz MIMO



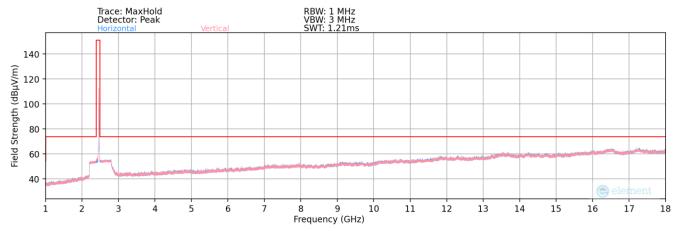
Plot 7-174. Radiated Spurious Plot above 1GHz MIMO (802.11b - Ch. 1)



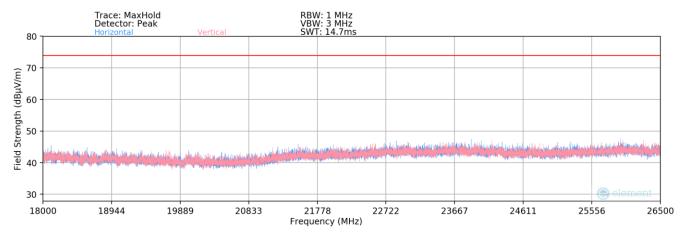
Plot 7-175. Radiated Spurious Plot above 1GHz MIMO (802.11b - Ch. 6)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 123 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	raye 123 01 140





Plot 7-176. Radiated Spurious Plot above 1GHz MIMO (802.11b - Ch. 11)



Plot 7-177. Radiated Spurious Plot above 18GHz MIMO

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 124 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 124 01 146



Worst Case Mode: 802.11b

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meters

Operating Frequency: 2412MHz

Channel: 1

**Antenna Turntable** Ant. Analyzer **Field AFCL** Margin Frequency Limit **Azimuth Detector** Pol. Height Level Strength [MHz] [dB/m] [dBµV/m] [dB] [dBµV/m] [H/V] [degree] [dBm] [cm] ٧ 4824.00 172 179 -80.62 9.43 35.81 53.98 -18.17 Avg ٧ 172 179 46.87 73.98 4824.00 Peak -69.56 9.43 -27.11 12060.00 -86.07 22.48 43.41 53.98 -10.57Avg 12060.00 ٧ -74.64 22.48 54.84 73.98 Peak -19.14

Table 7-20. Radiated Measurements MIMO

Worst Case Mode: 802.11b

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meters

Operating Frequency: 2437MHz

Channel: 6

Ant. **Antenna Turntable Field** Analyzer **AFCL** Limit **Frequency** Margin **Detector** Pol. Height Azimuth Level Strength [dB/m] [MHz] [dBµV/m] [dB] [dBµV/m] [H/V] [cm] [degree] [dBm] 4874.00 ٧ 35.85 -18.13 Avg 175 177 -80.89 9.74 53.98 4874.00 Peak V 175 177 -69.01 9.74 47.73 73.98 -26.25 7311.00 -83.21 15.50 39.29 53.98 -14.69 Avg V 7311.00 Peak -71.92 15.50 50.58 73.98 -23.40 ٧ 12185.00 Avg -86.72 23.13 43.41 53.98 -10.5712185.00 Peak -75.32 23.13 54.81 73.98 -19.17

**Table 7-21. Radiated Measurements MIMO** 

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 125 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 125 01 146



Worst Case Mode: 802.11b

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meters

Operating Frequency: 2462MHz

Channel: 11

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
4924.00	Avg	٧	176	164	-81.45	9.88	35.43	53.98	-18.55
4924.00	Peak	٧	176	164	-69.68	9.88	47.20	73.98	-26.78
7386.00	Avg	V	-	-	-83.62	15.45	38.83	53.98	-15.14
7386.00	Peak	V	-	-	-70.64	15.45	51.81	73.98	-22.16
12310.00	Avg	V	-	-	-87.34	23.67	43.33	53.98	-10.65
12310.00	Peak	V	-	-	-75.81	23.67	54.86	73.98	-19.12

Table 7-22. Radiated Measurements MIMO

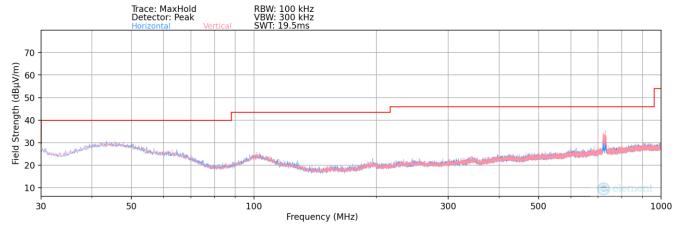
FCC ID: C3K2076 IC: 3048A-2076		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogg 100 of 140
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Page 126 of 146



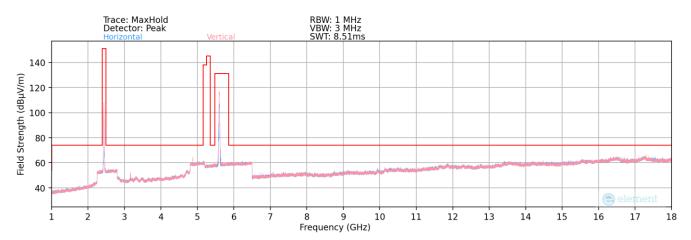
## 7.7.2 Simultaneous Tx Radiated Spurious Emissions Measurements

Description	2.4 GHz Emission	5 GHz Emission
Antenna	1, 2	1, 2
Channel	6	120
Operating Frequency (MHz)	2437	5600
Data Rate (Mbps)	1	6
Mode	802.11b	802.11a

Table 7-23. Simultaneous Transmission Config



Plot 7-178. Radiated Spurious Plot below 1GHz (2.4GHz - 5GHz)

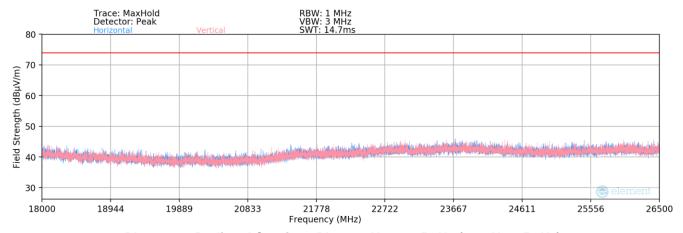


Plot 7-179. Radiated Spurious Plot above 1GHz (2.4GHz - 5GHz)

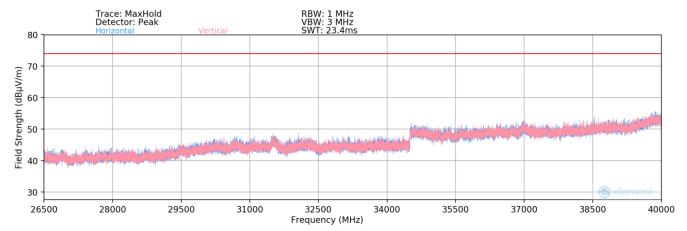
FCC ID: C3K2076 IC: 3048A-2076		Approved by: Technical Manager		
Test Report S/N:	Test Dates:	EUT Type:	Page 127 of 146	
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Page 127 01 146	

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Plot 7-180. Radiated Spurious Plot 18GHz - 26.5GHz (2.4GHz - 5GHz)



Plot 7-181. Radiated Spurious Plot above 26.5GHz (2.4GHz - 5GHz)

FCC ID: C3K2076 IC: 3048A-2076		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 128 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 128 01 146

© 2024 ELEMENT V11.1 08/28/2023



Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
726.00	Peak	V	-	-	-76.32	-2.92	27.76	46.02	-18.26
1711.00	Peak	V	-	-	-67.50	1.08	40.58	68.20	-27.62
3163.00	Peak	V	-	-	-68.22	7.41	46.19	68.20	-22.01
6326.00	Peak	V	-	-	-68.76	13.41	51.65	68.20	-16.55
8037.00	Average	V	-	-	-83.26	16.08	39.82	53.98	-14.16
8037.00	Peak	V	-	-	-71.37	16.08	51.71	73.98	-22.27
8763.00	Peak	V	-	-	-71.80	17.69	52.89	68.20	-15.31
10474.00	Peak	V	-	-	-72.29	21.25	55.96	68.20	-12.24
13637.00	Average	V	-	-	-83.97	25.43	48.46	53.98	-5.52
13637.00	Peak	V	-	-	-72.31	25.43	60.12	73.98	-13.86
19237.00	Average	V	-	-	-63.45	2.39	36.40	53.98	-17.58
19237.00	Peak	V	-	-	-53.16	2.39	46.69	73.98	-27.29

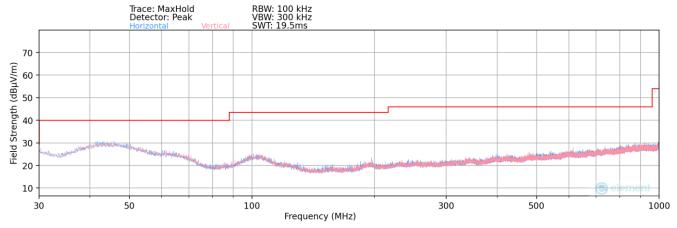
Table 7-24. Radiated Spurious Emission Measurements (2.4GHz - 5GHz)

FCC ID: C3K2076 IC: 3048A-2076		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 129 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	raye 129 01 140

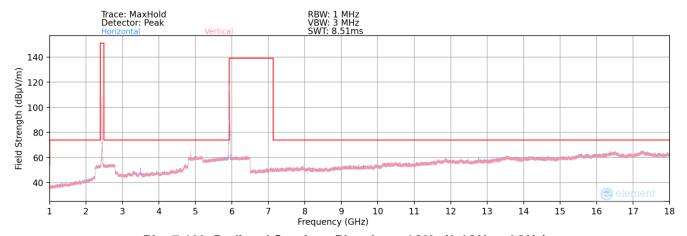


Description	2.4 GHz Emission	6 GHz Emission
Antenna	1, 2	1, 2
Channel	6	2
Operating Frequency (MHz)	2437	5935
Data Rate (Mbps)	1	6
Mode	802.11b	802.11a

Table 7-25. Simultaneous Transmission Config



Plot 7-182. Radiated Spurious Plot below 1GHz (2.4GHz - 6GHz)

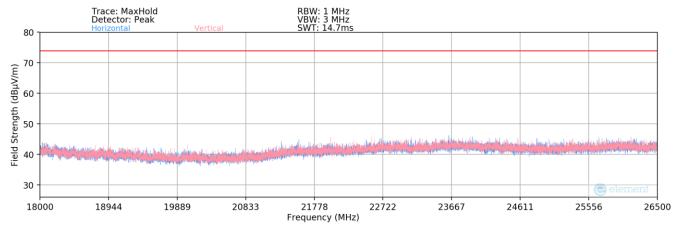


Plot 7-183. Radiated Spurious Plot above 1GHz (2.4GHz - 6GHz)

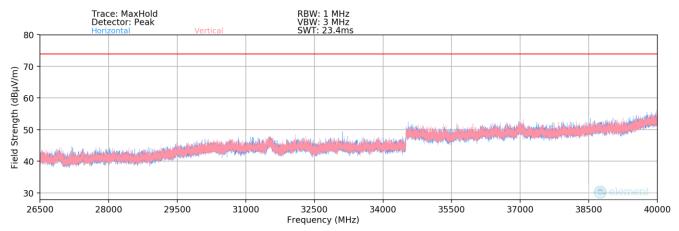
FCC ID: C3K2076 IC: 3048A-2076		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 130 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	raye 130 01 140

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Plot 7-184. Radiated Spurious Plot 18GHz - 26.5GHz (2.4GHz - 6GHz)



Plot 7-185. Radiated Spurious Plot above 26.5GHz (2.4GHz - 6GHz)

FCC ID: C3K2076 IC: 3048A-2076		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 131 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	raye isi 01 140

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Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
315.00	Peak	٧	-	-	-73.67	-10.75	22.58	46.02	-23.44
1061.00	Average	٧	-	-	-78.02	-3.09	25.89	53.98	-28.09
1061.00	Peak	V	-	-	-66.65	-3.09	37.26	73.98	-36.72
3498.00	Peak	V	-	-	-68.54	8.06	46.52	68.20	-21.68
6996.00	Peak	V	-	-	-71.05	14.37	50.32	68.20	-17.88
8372.00	Average	٧	-	-	-83.45	16.66	40.21	53.98	-13.77
8372.00	Peak	<b>V</b>	-	-	-72.03	16.66	51.63	73.98	-22.35
9433.00	Average	٧	-	-	-84.13	18.56	41.43	53.98	-12.55
9433.00	Peak	V	-	-	-72.94	18.56	52.62	73.98	-21.36
10809.00	Average	V	-	-	-84.09	20.66	43.57	53.98	-10.41
10809.00	Peak	V	-	-	-72.11	20.66	55.55	73.98	-18.43
20242.00	Average	V	-	-	-64.98	3.43	35.91	53.98	-18.07
20242.00	Peak	٧	-	-	-53.04	3.43	47.85	73.98	-26.13

Table 7-26. Radiated Spurious Emission Measurements (2.4GHz - 6GHz)

FCC ID: C3K2076 IC: 3048A-2076		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 132 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 132 01 146



## 7.7.3 MIMO Radiated Restricted Band Edge Measurements – 20MHz

The radiated restricted band edge measurements are measured with an EMI test receiver connected to the receive antenna while the EUT is transmitting.

Worst Case Mode:

Worst Case Transfer Rate:

Distance of Measurements:
Operating Frequency:

Channel:

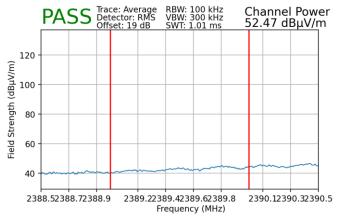
802.11g

6Mbps

3 Meters

2412MHz

1



Plot 7-186. Radiated Restricted Lower Band Edge Measurement MIMO (Average)

Worst Case Mode:

Worst Case Transfer Rate:

Distance of Measurements:

Operating Frequency:

Channel:

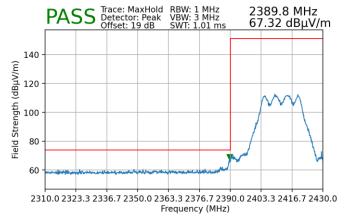
802.11ax

MCS0

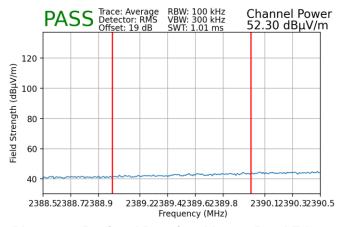
3 Meters

2417MHz

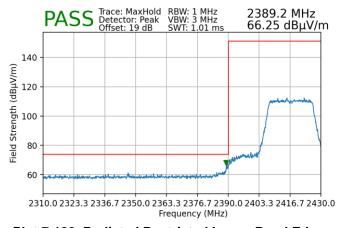
2



Plot 7-187. Radiated Restricted Lower Band Edge Measurement MIMO (Peak)



Plot 7-188. Radiated Restricted Lower Band Edge Measurement MIMO (Average)



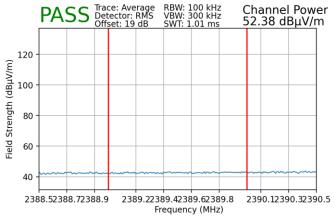
Plot 7-189. Radiated Restricted Lower Band Edge Measurement MIMO (Peak)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 122 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Page 133 of 146

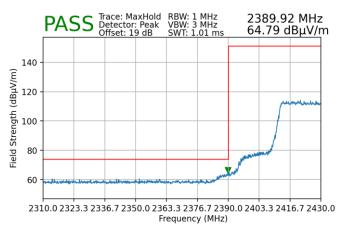


Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11ax
MCS0
3 Meters
2422MHz
3

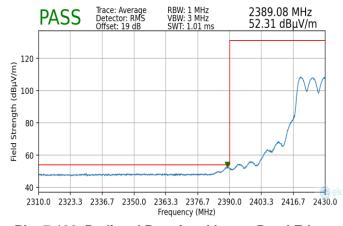


Plot 7-190. Radiated Restricted Lower Band Edge Measurement MIMO (Average)



Plot 7-191. Radiated Restricted Lower Band Edge Measurement MIMO (Peak)

Worst Case Mode: 802.11g
Worst Case Transfer Rate: 6Mbps
Distance of Measurements: 3 Meters
Operating Frequency: 2427MHz
Channel: 4



Plot 7-192. Radiated Restricted Lower Band Edge Measurement MIMO (Average)

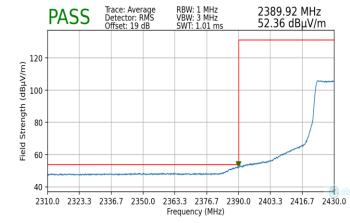


Plot 7-193. Radiated Restricted Lower Band Edge Measurement MIMO (Peak)

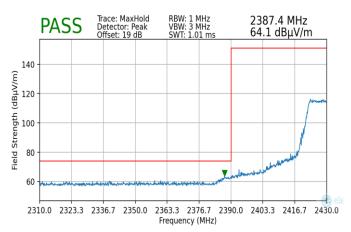
FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 134 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 134 01 146



Worst Case Mode: 802.11be
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 2432MHz
Channel: 5



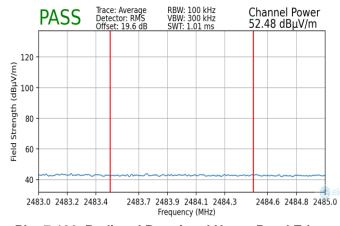
Plot 7-194. Radiated Restricted Lower Band Edge Measurement MIMO (Average)



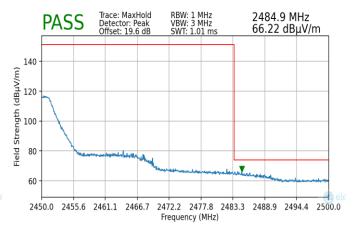
Plot 7-195. Radiated Restricted Lower Band Edge Measurement MIMO (Peak)

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

802.11ax
MCS0
3 Meters
2442MHz
7



Plot 7-196. Radiated Restricted Upper Band Edge Measurement MIMO (Average)



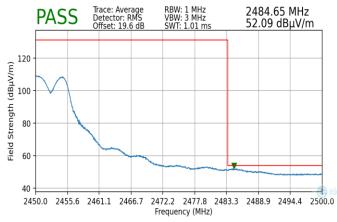
Plot 7-197. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 135 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	raye 133 01 140

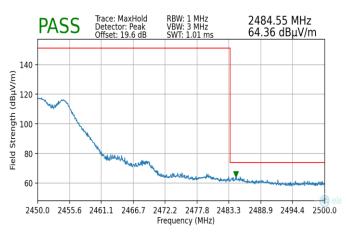


Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11g
6Mbps
3 Meters
2447MHz
8



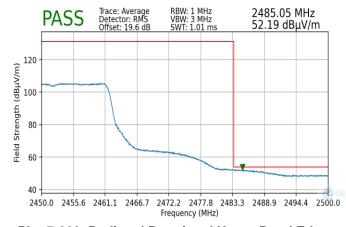
Plot 7-198. Radiated Restricted Upper Band Edge Measurement MIMO (Average)



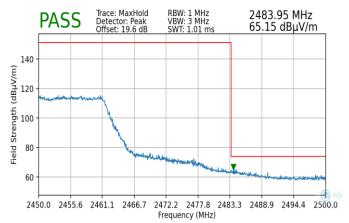
Plot 7-199. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

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

802.11ax
MCS0
3 Meters
2452MHz
9



Plot 7-200. Radiated Restricted Upper Band Edge Measurement MIMO (Average)



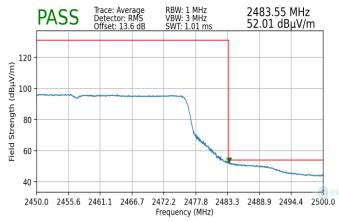
Plot 7-201. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 126 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Page 136 of 146

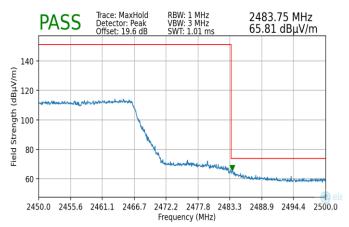


Worst Case Mode: 802.11ax
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 2457MHz
Channel: 10

802.11ax
MCS0
3 Meters
2457MHz
10



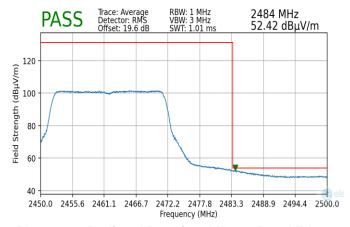
Plot 7-202. Radiated Restricted Upper Band Edge Measurement MIMO (Average)



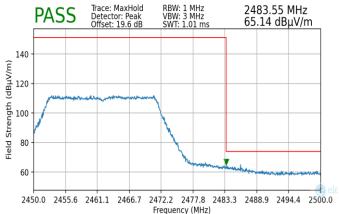
Plot 7-203. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

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

802.11ax
MCS0
3 Meters
2462MHz
11



Plot 7-204. Radiated Restricted Upper Band Edge Measurement MIMO (Average)



Plot 7-205. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 137 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 137 01 146

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Worst Case Mode:

Worst Case Transfer Rate:

Distance of Measurements:

Operating Frequency:

Channel:

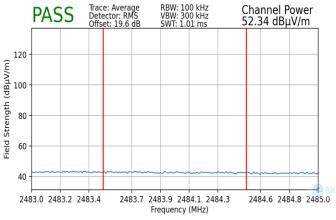
802.11ax

MCS0

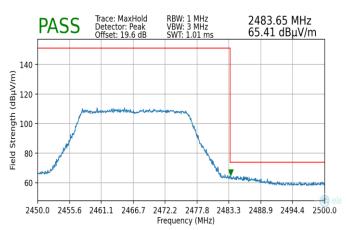
3 Meters

2467MHz

12



Plot 7-206. Radiated Restricted Upper Band Edge Measurement MIMO (Average)



Plot 7-207. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

Worst Case Mode:

Worst Case Transfer Rate:

Distance of Measurements:

Operating Frequency:

Channel:

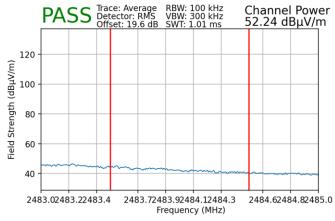
802.11ax

MCS0

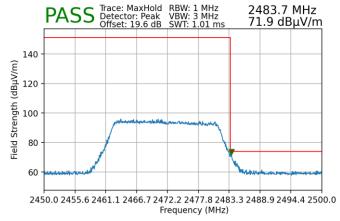
3 Meters

2472MHz

13



Plot 7-208. Radiated Restricted Upper Band Edge Measurement MIMO (Average)



Plot 7-209. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 129 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Page 138 of 146



## 7.7.4 MIMO Radiated Restricted Band Edge Measurements – 40MHz

The radiated restricted band edge measurements are measured with an EMI test receiver connected to the receive antenna while the EUT is transmitting.

Worst Case Mode:

Worst Case Transfer Rate:

Distance of Measurements:
Operating Frequency:

Channel:

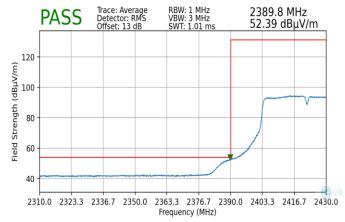
802.11ax

MCS0

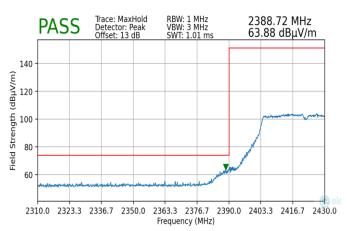
3 Meters

2422MHz

3

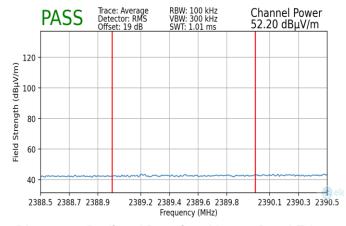


Plot 7-210. Radiated Restricted Lower Band Edge Measurement MIMO (Average)

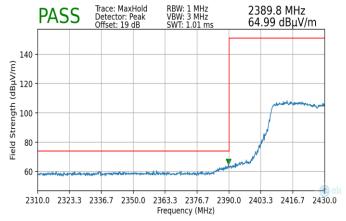


Plot 7-211. Radiated Restricted Lower Band Edge Measurement MIMO (Peak)

Worst Case Mode: 802.11g
Worst Case Transfer Rate: 6Mbps
Distance of Measurements: 3 Meters
Operating Frequency: 2427MHz
Channel: 4



Plot 7-212. Radiated Restricted Lower Band Edge Measurement MIMO (Average)



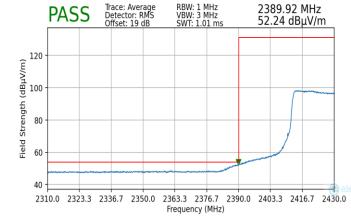
Plot 7-213. Radiated Restricted Lower Band Edge Measurement MIMO (Peak)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 120 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Page 139 of 146

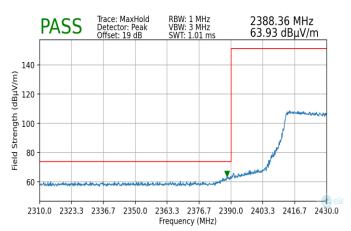


Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11be
MCS0
3 Meters
2432MHz
5



Plot 7-214. Radiated Restricted Lower Band Edge Measurement MIMO (Average)



Plot 7-215. Radiated Restricted Lower Band Edge Measurement MIMO (Peak)

Worst Case Mode:

Worst Case Transfer Rate:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

MCS0

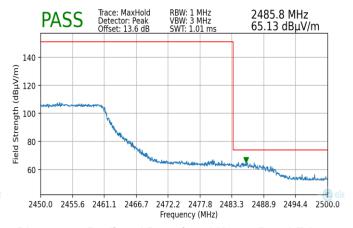
3 Meters

2442MHz

7



Plot 7-216. Radiated Restricted Upper Band Edge Measurement MIMO (Average)



Plot 7-217. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

FCC ID: C3K2076 IC: 3048A-2076	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 140 of 146
1M2312190129-07.C3K	01/03/2024 - 03/18/2024	Portable Computing Device	Fage 140 01 146