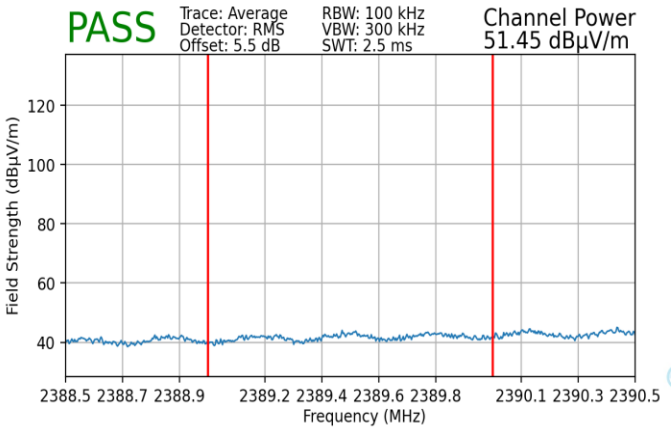
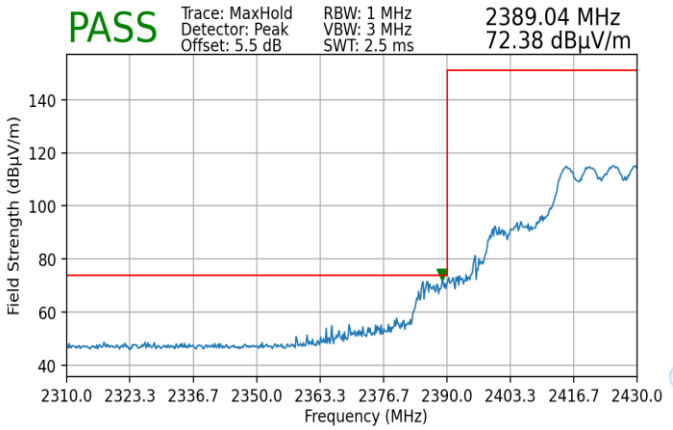
Worst Case Mode:	802.11g
Worst Case Transfer Rate:	6Mbps
Distance of Measurements:	3 Meters
Operating Frequency:	2422MHz
Channel:	3

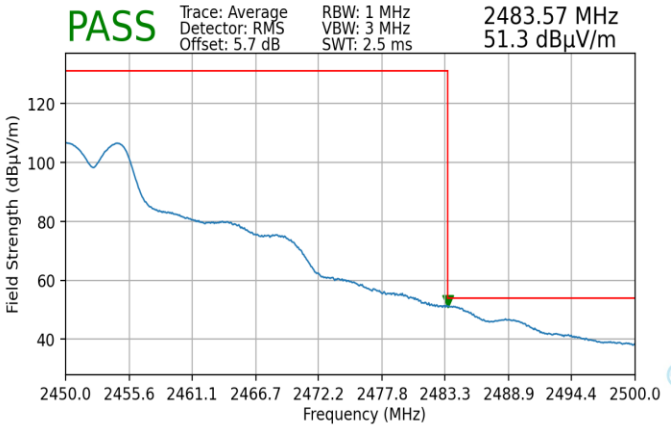


Plot 7-234. Radiated Restricted Lower Band Edge Measurement MIMO (Average)

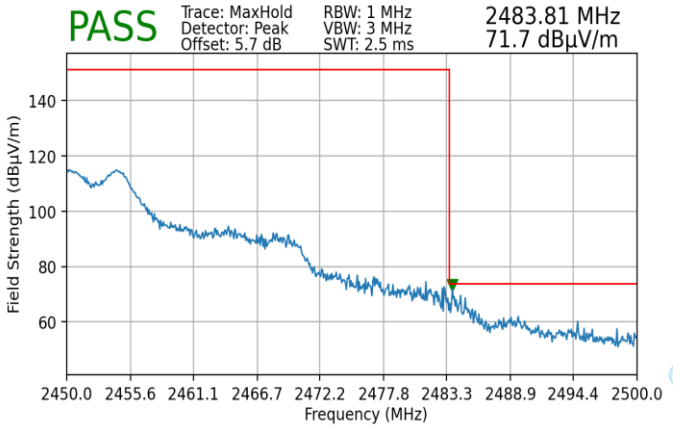


Plot 7-235. Radiated Restricted Lower Band Edge Measurement MIMO (Peak)

Worst Case Mode:	802.11g
Worst Case Transfer Rate:	6Mbps
Distance of Measurements:	3 Meters
Operating Frequency:	2447MHz
Channel:	8

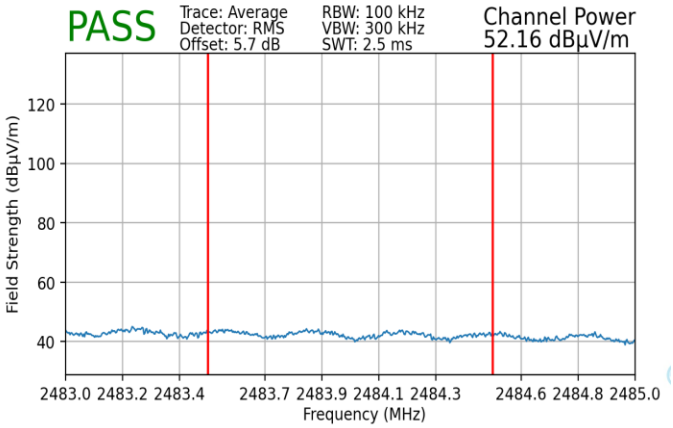


Plot 7-236. Radiated Restricted Upper Band Edge Measurement MIMO (Average)

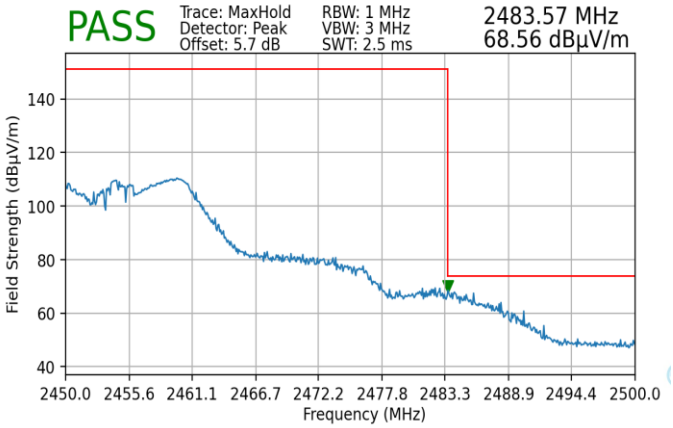


Plot 7-237. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

Worst Case Mode:	802.11ac
Worst Case Transfer Rate:	MSC0
Distance of Measurements:	3 Meters
Operating Frequency:	2452MHz
Channel:	9

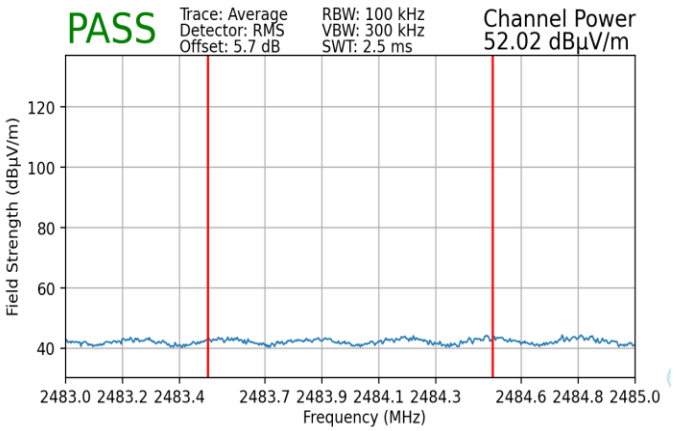


Plot 7-238. Radiated Restricted Upper Band Edge Measurement MIMO (Average)

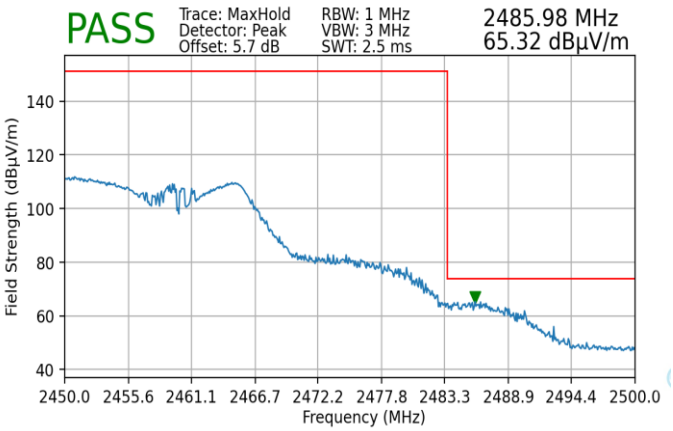


Plot 7-239. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

Worst Case Mode:	802.11ac
Worst Case Transfer Rate:	MSC0
Distance of Measurements:	3 Meters
Operating Frequency:	2457MHz
Channel:	10

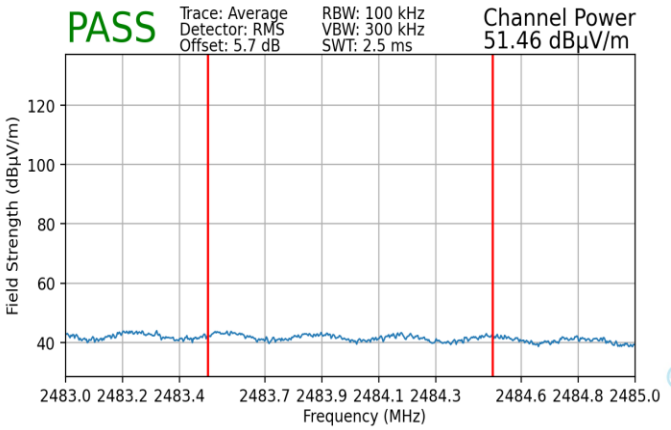


Plot 7-240. Radiated Restricted Upper Band Edge Measurement MIMO (Average)

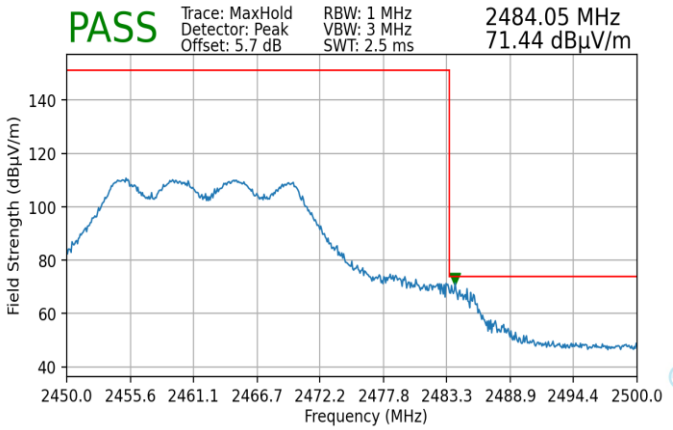


Plot 7-241. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

Worst Case Mode:	802.11g
Worst Case Transfer Rate:	6Mbps
Distance of Measurements:	3 Meters
Operating Frequency:	2462MHz
Channel:	11

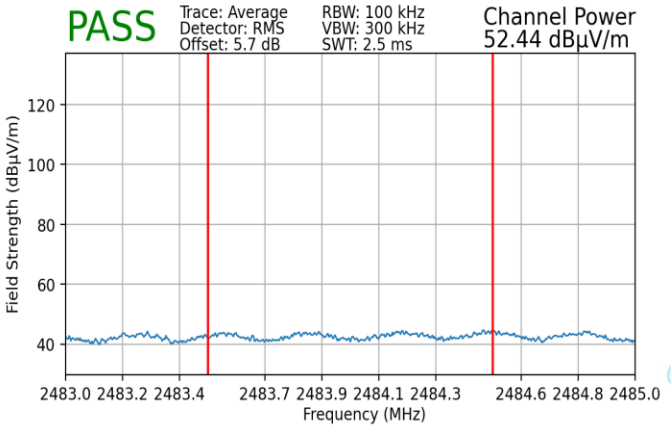


Plot 7-242. Radiated Restricted Upper Band Edge Measurement MIMO (Average)

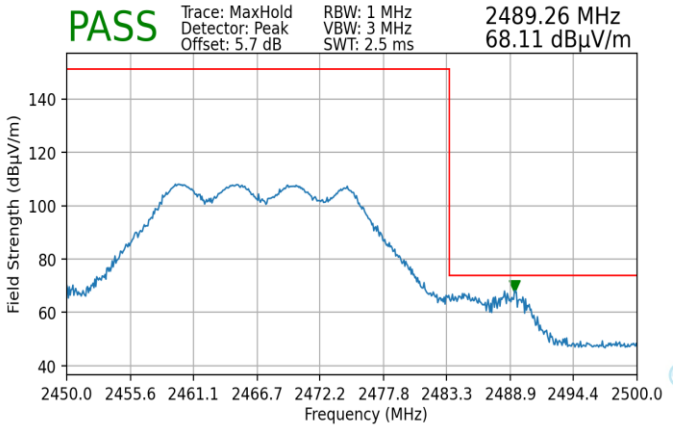


Plot 7-243. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

Worst Case Mode:	802.11g
Worst Case Transfer Rate:	6Mbps
Distance of Measurements:	3 Meters
Operating Frequency:	2467MHz
Channel:	12

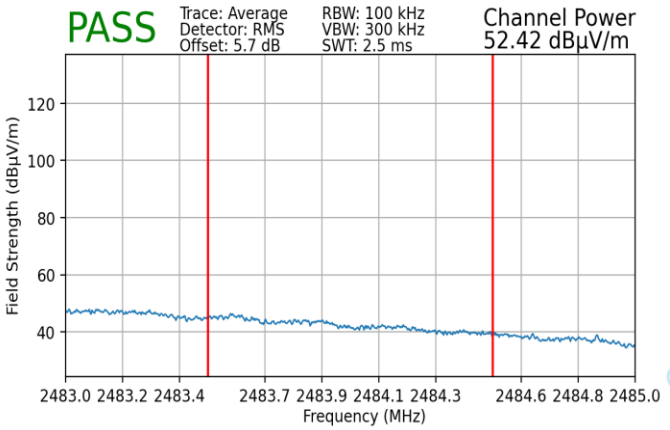


Plot 7-244. Radiated Restricted Upper Band Edge Measurement MIMO (Average)

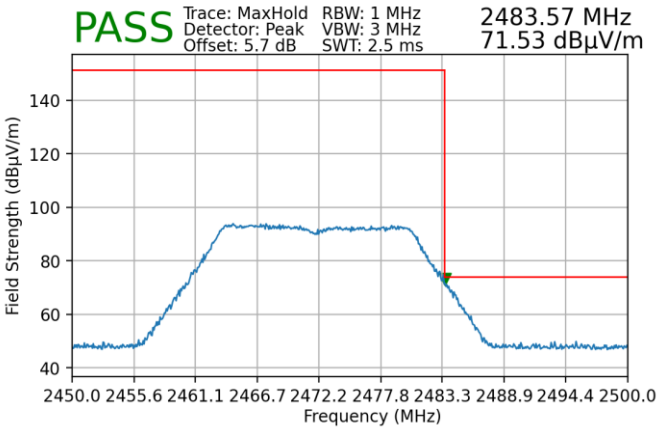


Plot 7-245. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

Worst Case Mode:	802.11n
Worst Case Transfer Rate:	MCS8
Distance of Measurements:	3 Meters
Operating Frequency:	2472MHz
Channel:	13



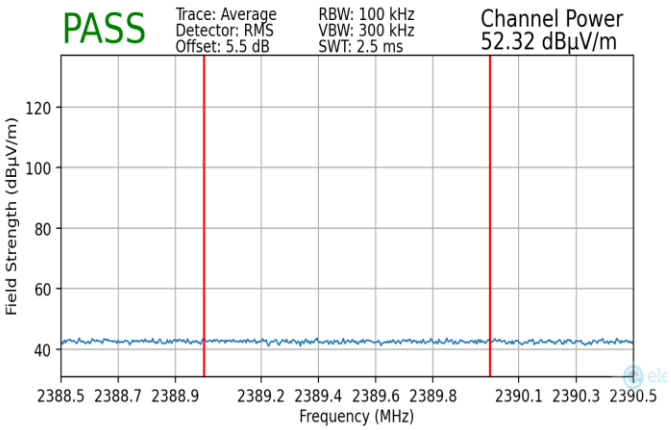
Plot 7-246. Radiated Restricted Upper Band Edge Measurement MIMO (Average)



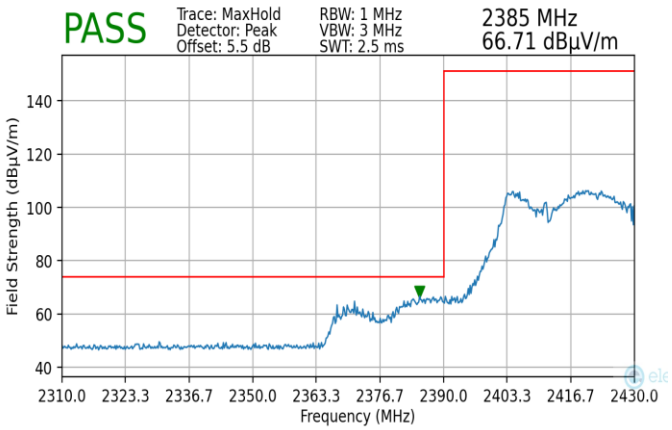
Plot 7-247. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

7.7.4 MIMO Radiated Restricted Band Edge Measurements – 40MHz

Worst Case Mode:	802.11be
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	2422MHz
Channel:	3

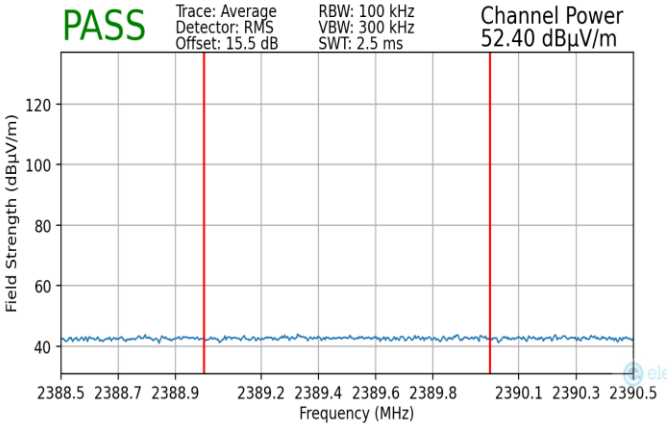


Plot 7-248. Radiated Restricted Lower Band Edge Measurement MIMO (Average)

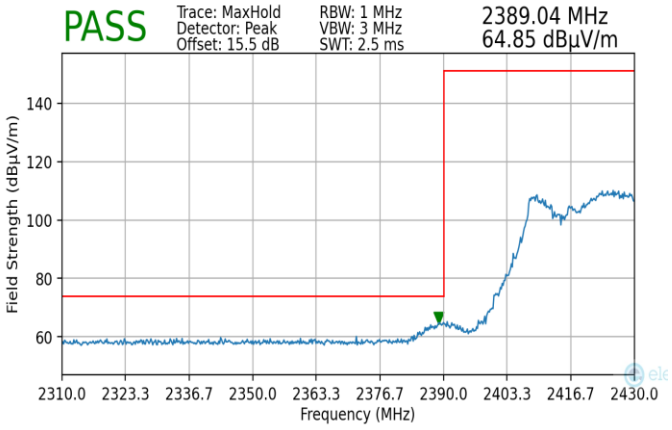


Plot 7-249. Radiated Restricted Lower Band Edge Measurement MIMO (Peak)

Worst Case Mode:	802.11be
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	2427MHz
Channel:	4

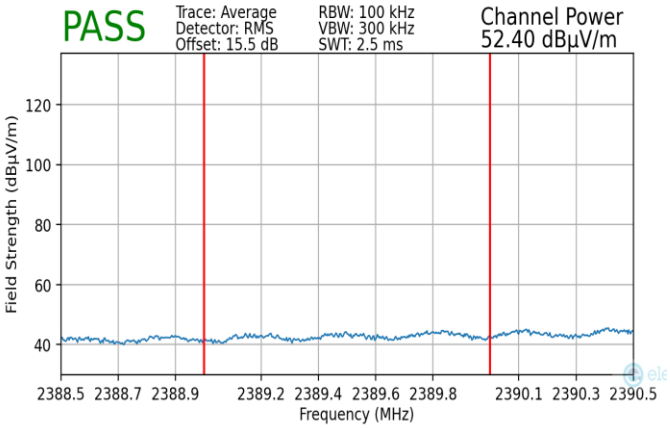


Plot 7-250. Radiated Restricted Lower Band Edge Measurement MIMO (Average)

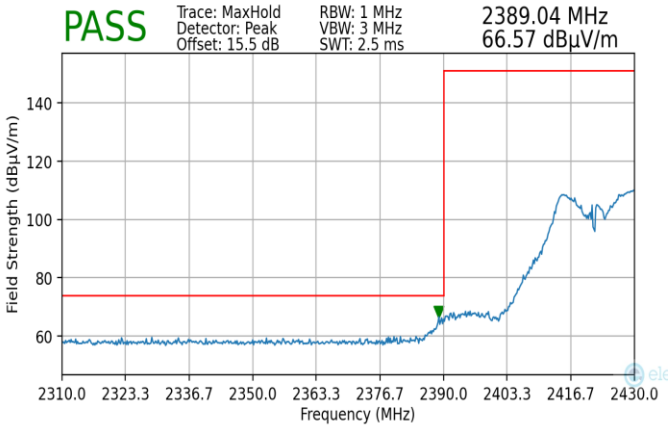


Plot 7-251. Radiated Restricted Lower Band Edge Measurement MIMO (Peak)

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

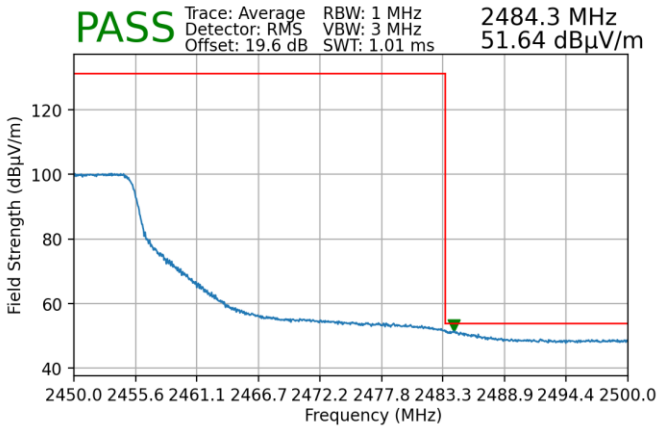


Plot 7-252. Radiated Restricted Lower Band Edge Measurement MIMO (Average)

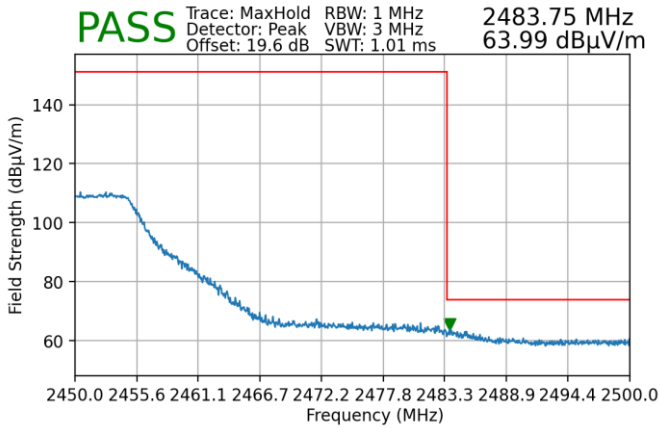


Plot 7-253. Radiated Restricted Lower Band Edge Measurement MIMO (Peak)

Worst Case Mode:	802.11n
Worst Case Transfer Rate:	MCS8
Distance of Measurements:	3 Meters
Operating Frequency:	2442MHz
Channel:	6

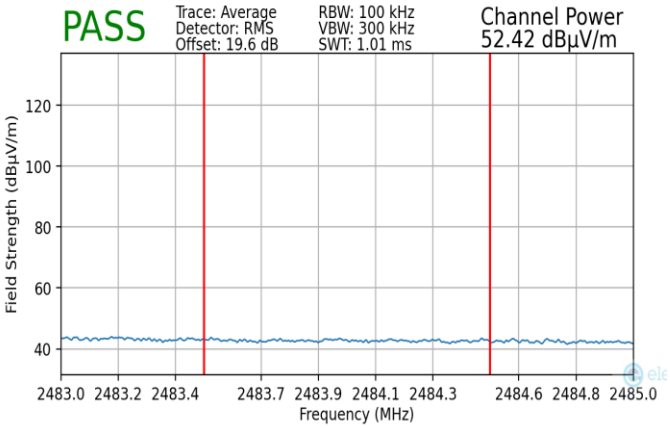


Plot 7-254. Radiated Restricted Upper Band Edge Measurement MIMO (Average)

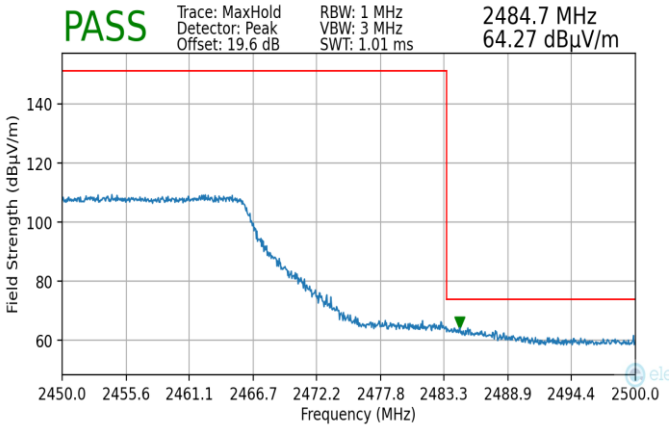


Plot 7-255. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

Worst Case Mode:	802.11be
Worst Case Transfer Rate:	MSC0
Distance of Measurements:	3 Meters
Operating Frequency:	2447MHz
Channel:	8

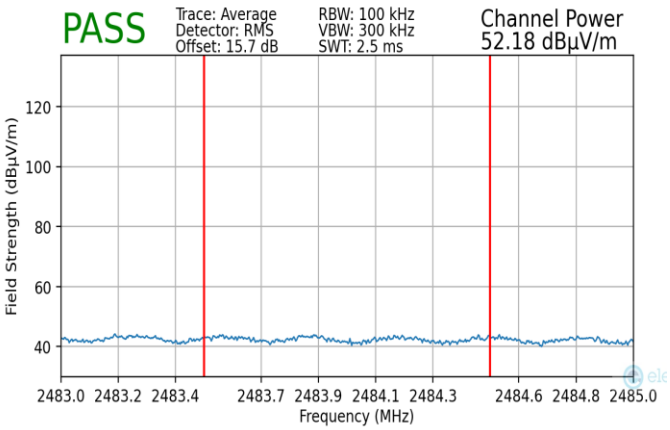


Plot 7-256. Radiated Restricted Upper Band Edge Measurement MIMO (Average)

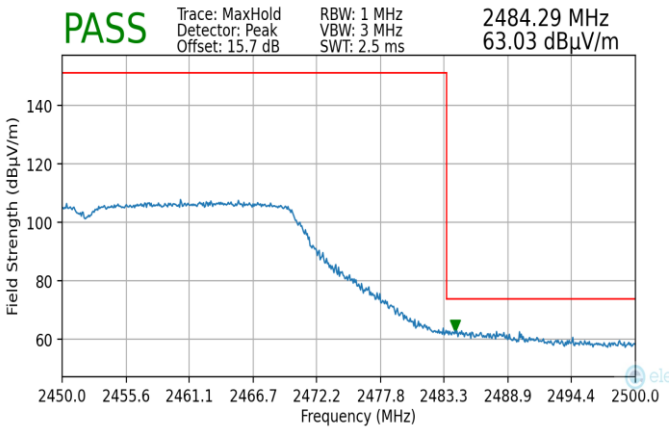


Plot 7-257. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

Worst Case Mode:	802.11n
Worst Case Transfer Rate:	MSC8
Distance of Measurements:	3 Meters
Operating Frequency:	2452MHz
Channel:	9

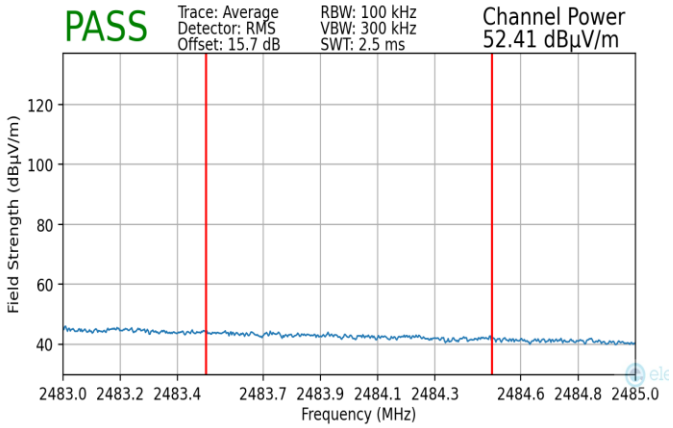


Plot 7-258. Radiated Restricted Upper Band Edge Measurement MIMO (Average)

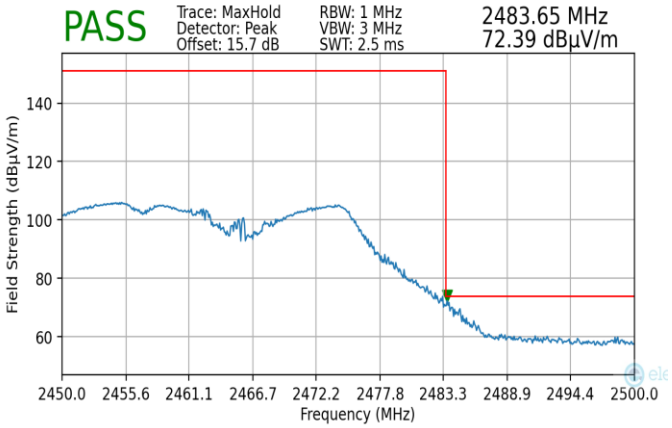


Plot 7-259. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

Worst Case	
Mode:	802.11ac
Worst Case Transfer Rate:	MSC0
Distance of Measurements:	3 Meters
Operating Frequency:	2457MHz
Channel:	10

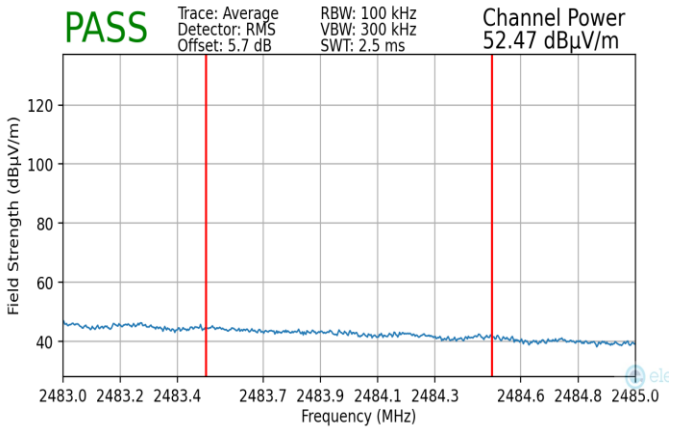


Plot 7-260. Radiated Restricted Upper Band Edge Measurement MIMO (Average)

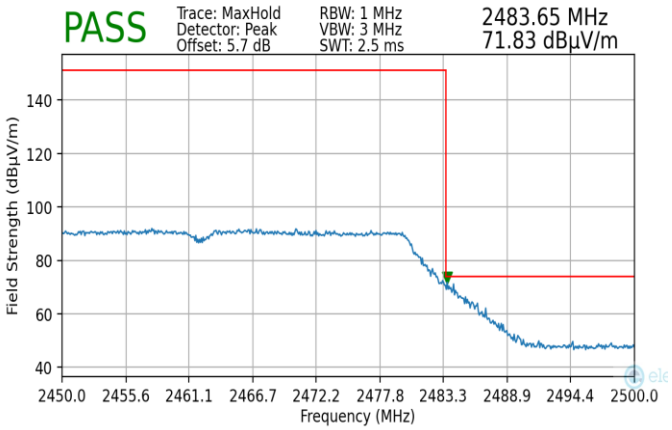


Plot 7-261. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

Worst Case Mode:	802.11n
Worst Case Transfer Rate:	MCS8
Distance of Measurements:	3 Meters
Operating Frequency:	2462MHz
Channel:	11



Plot 7-262. Radiated Restricted Upper Band Edge Measurement MIMO (Average)



Plot 7-263. Radiated Restricted Upper Band Edge Measurement MIMO (Peak)

7.8 Line-Conducted Test Data

Test Overview and Limit

All AC line conducted spurious emissions are measured with a receiver connected to a grounded LISN 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 conducted spurious emissions. Only the conducted emissions of the configuration that produced the worst case emissions are reported in this section.

All conducted emissions must not exceed the limits shown in the table below per §15.207 and RSS-Gen (8.8).

Frequency of emission (MHz)	Conducted Limit (dBμV)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56*	56 to 46*
0.5 – 5	56	46
5 – 30	60	50

Table 7-24. Conducted Limits

*Decreases with the logarithm of the frequency.

Test Procedures Used

ANSI C63.10-2013, Section 6.2

Test Settings

Quasi-Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the spurious emission of interest
2. RBW = 9kHz (for emissions from 150kHz – 30MHz)
3. Detector = quasi-peak
4. Sweep time = auto couple
5. Trace mode = max hold
6. Trace was allowed to stabilize

Average Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the spurious emission of interest
2. RBW = 9kHz (for emissions from 150kHz – 30MHz)
3. Detector = RMS
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.

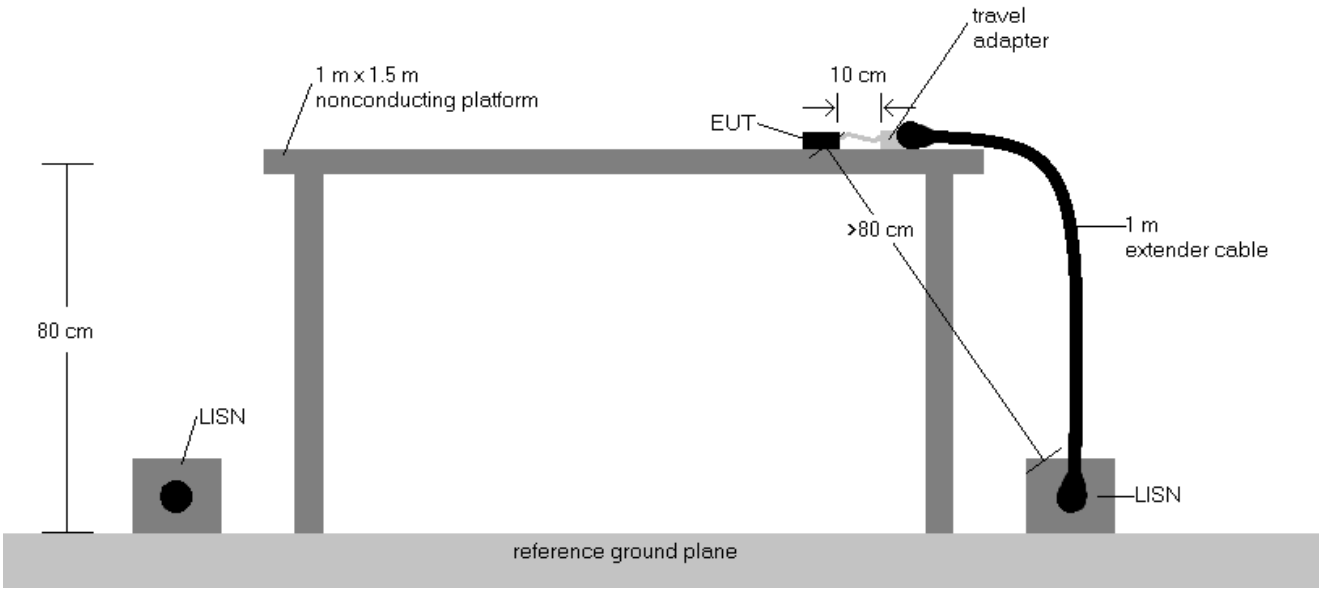
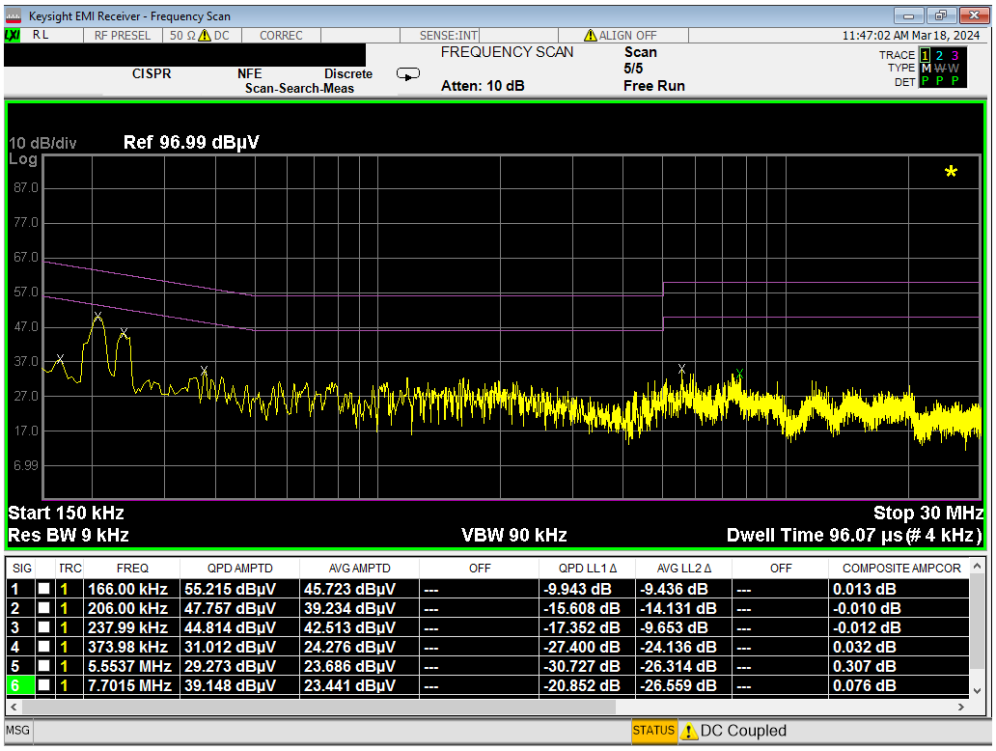


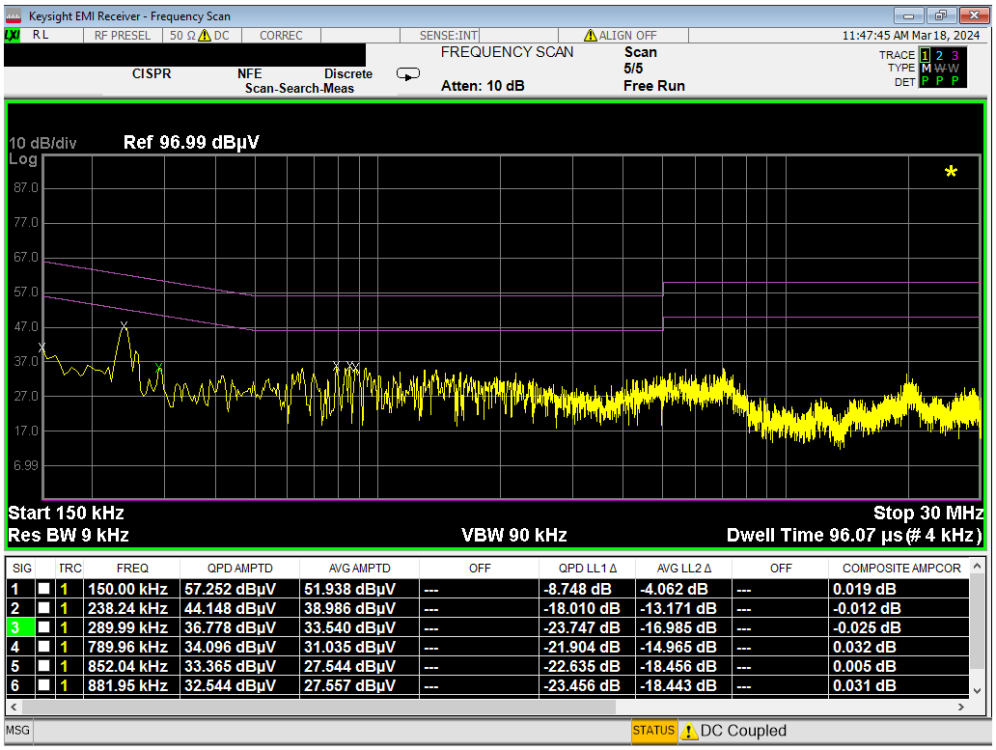
Figure 7-9. Test Instrument & Measurement Setup

Test Notes

1. All modes of operation were investigated and the worst-case emissions are reported using mid channel. The emissions found were not affected by the choice of channel used during testing.
2. The limit for an intentional radiator from 150kHz to 30MHz are specified in Part 15.207 and RSS-Gen(8.8).
3. Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
4. QP\\AV Level (dBμV) = QP\\AV Analyzer\\Receiver Level (dBμV) + Corr. (dB)
5. Margin (dB) = QP\\AV Limit (dBμV) - QP\\AV Level (dBμV)
6. Traces shown in plot are made using a peak detector.
7. Deviations to the Specifications: None.



Plot 7-264. Line Conducted Plot with 802.11b (L1)



Plot 7-265. Line Conducted Plot with 802.11b (N)

8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Microsoft Corporation Portable Computing Device FCC ID: C3K2077 / IC: 3048A-2077** is in compliance with Part 15 Subpart C (15.247) of the FCC Rules and with RSS-247 of the Innovation, Science and Economic Development Canada rules.