

TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 31 of 94

(RTL8720DN) BLE Data plots

Figure 31: 6dB Bandwidth, 2402MHz, BLE-1Mbps



Figure 32: 6dB Bandwidth, 2440MHz, BLE-1Mbps



TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 32 of 94

Figure 33: 6dB Bandwidth, 2480MHz, BLE-1Mbps



Figure 34: 6dB Bandwidth, 2402MHz, BLE-2Mbps



TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 33 of 94

Figure 35: 6dB Bandwidth, 2440MHz, BLE-2Mbps



Figure 36: 6dB Bandwidth, 2480MHz, BLE-2Mbps



TEST REPORT

Report No.: SHE24030088-01AE

Date: 2024-04-16

Page 34 of 94

4.1.4 Maximum conducted output power spectral density

RESULT:

PASS

Test standard : FCC Part 15.247(e)

Requirement : ANSI C63.10-2013 clause 11.10.2,
KDB 558074 D01 v05r02, Clause 8.4

Kind of test site : Shielded room

Test setup

Test Channel : Low/Middle/High

Operation Mode : A.1.a

Ambient temperature : 21.2°C

Relative humidity : 50%

Table 7: Maximum conducted output power spectral density_(CC2642R1F) BLE1

Test Mode	Test Channel (MHz)	Measured Result (dBm/3kHz)	Limit (dBm/3kHz)
BLE-1Mbps	2402	-16.95	8
	2440	-14.86	
	2480	-17.93	
BLE-2Mbps	2402	-19.80	
	2440	-20.04	
	2480	-19.48	

Table 8: Maximum conducted output power spectral density_(CC2642R1F) BLE2

Test Mode	Test Channel (MHz)	Measured Result (dBm/3kHz)	Limit (dBm/3kHz)
BLE-1Mbps	2402	-14.96	8
	2440	-15.14	
	2480	-15.06	
BLE-2Mbps	2402	-17.23	
	2440	-17.49	
	2480	-17.77	

TEST REPORT

Report No.: SHE24030088-01AE

Date: 2024-04-16

Page 35 of 94

Table 9: Maximum conducted output power spectral density_(RTL8720DN) BLE

Test Mode	Test Channel (MHz)	Measured Result (dBm/3kHz)	Limit (dBm/3kHz)
BLE-1Mbps	2402	-11.97	8
	2440	-11.58	
	2480	-10.50	
BLE-2Mbps	2402	-14.05	
	2440	-13.13	
	2480	-13.39	

TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 36 of 94

(CC2642R1F) BLE1 Data plots

Figure 37: Power Spectral Density, 2402MHz, BLE-1Mbps

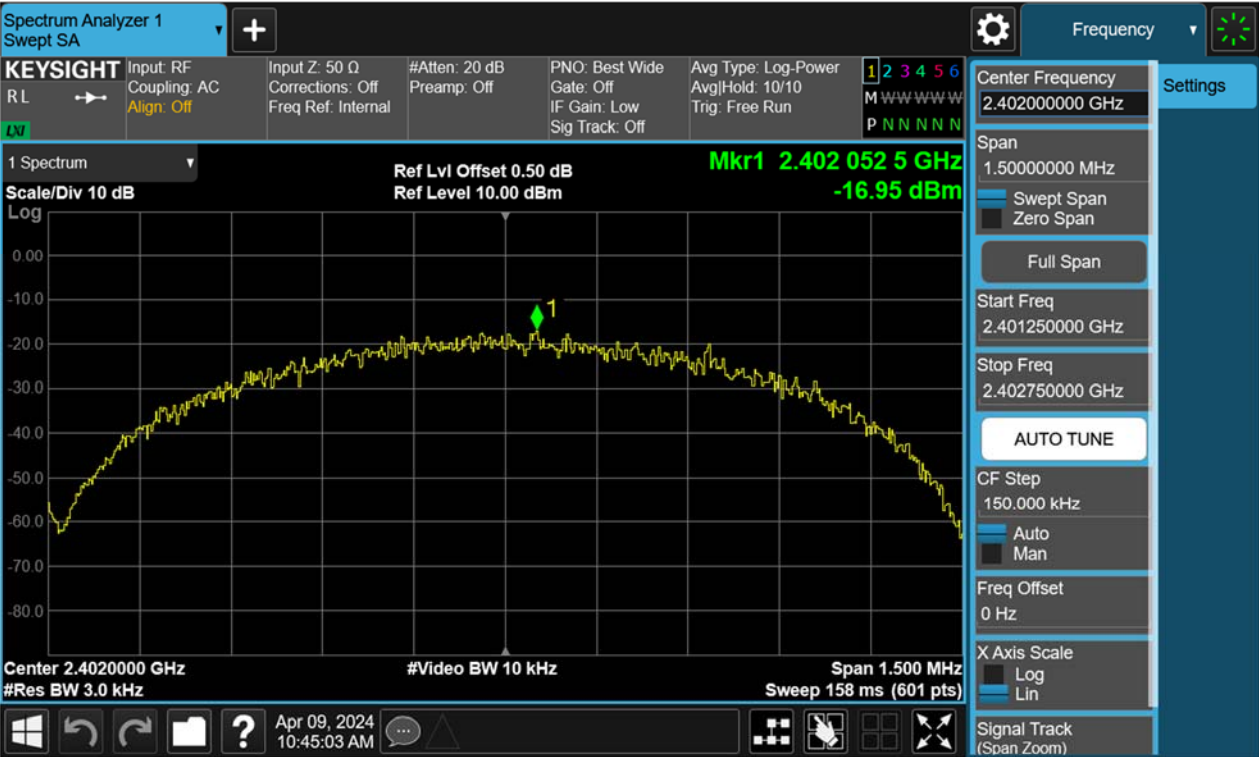


Figure 38: Power Spectral Density, 2440MHz, BLE-1Mbps



TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 37 of 94

Figure 39: Power Spectral Density, 2480MHz, BLE-1Mbps

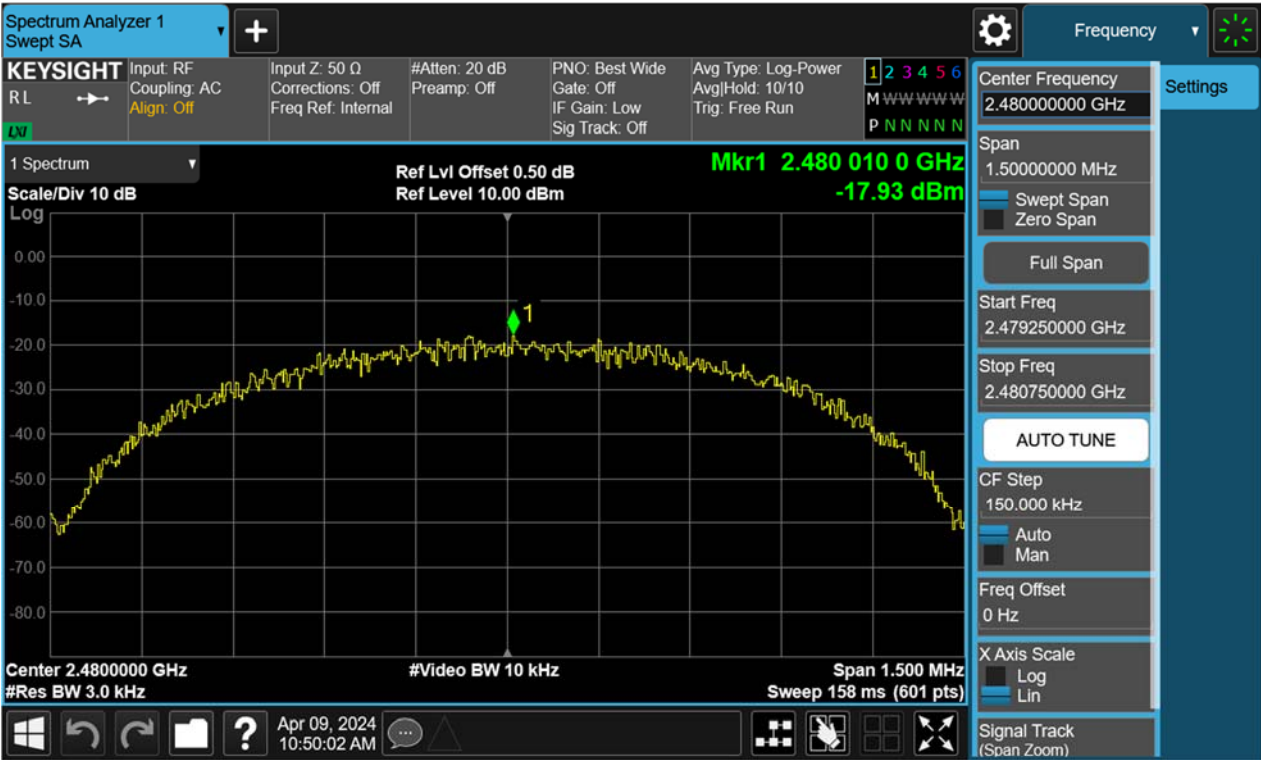


Figure 40: Power Spectral Density, 2402MHz, BLE-2Mbps



TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 38 of 94

Figure 41: Power Spectral Density, 2440MHz, BLE-2Mbps

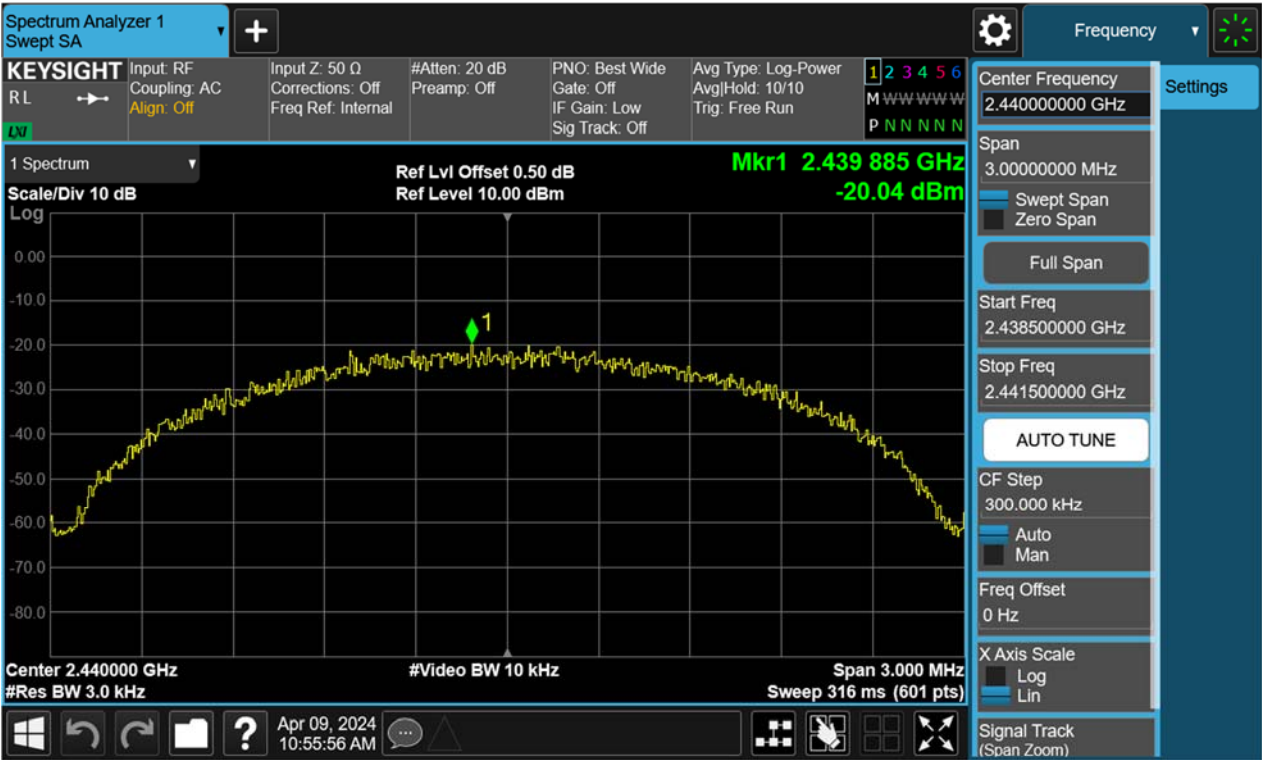


Figure 42: Power Spectral Density, 2480MHz, BLE-2Mbps



TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 39 of 94

(CC2642R1F) BLE2 Data plots

Figure 43: Power Spectral Density, 2402MHz, BLE-1Mbps

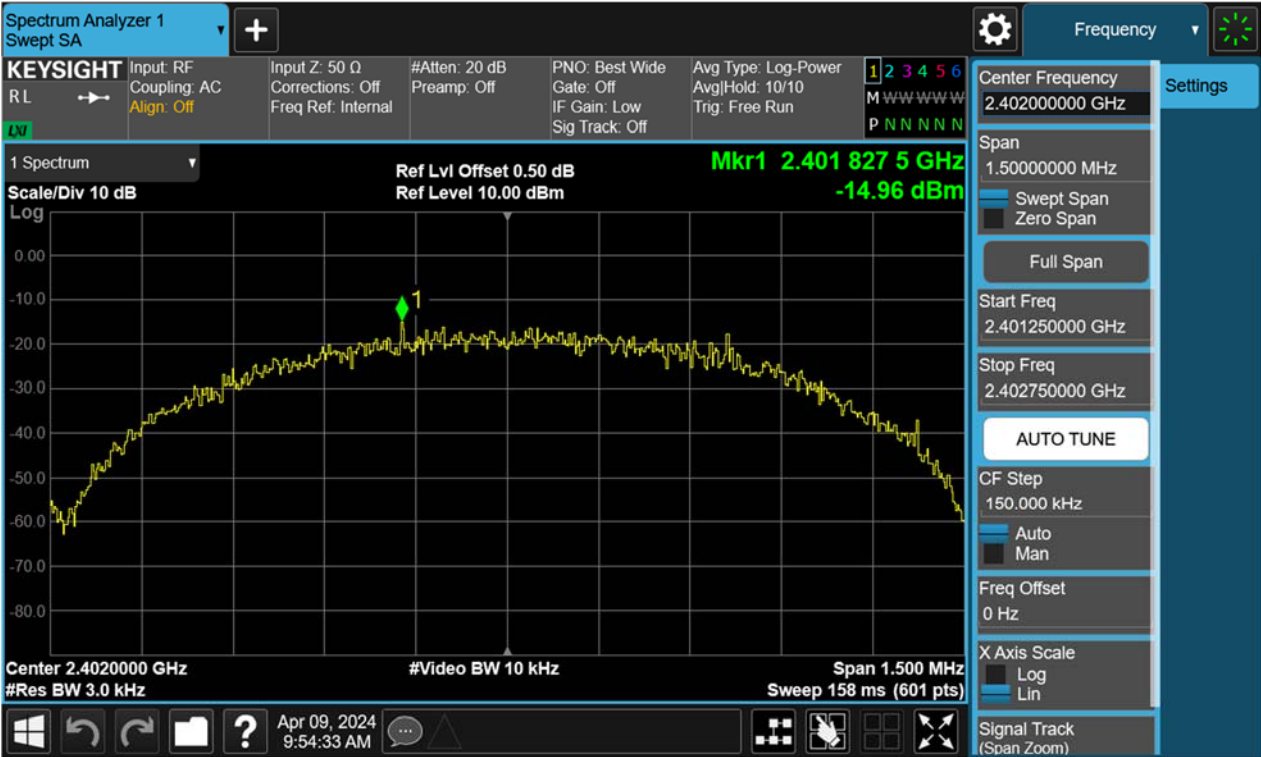
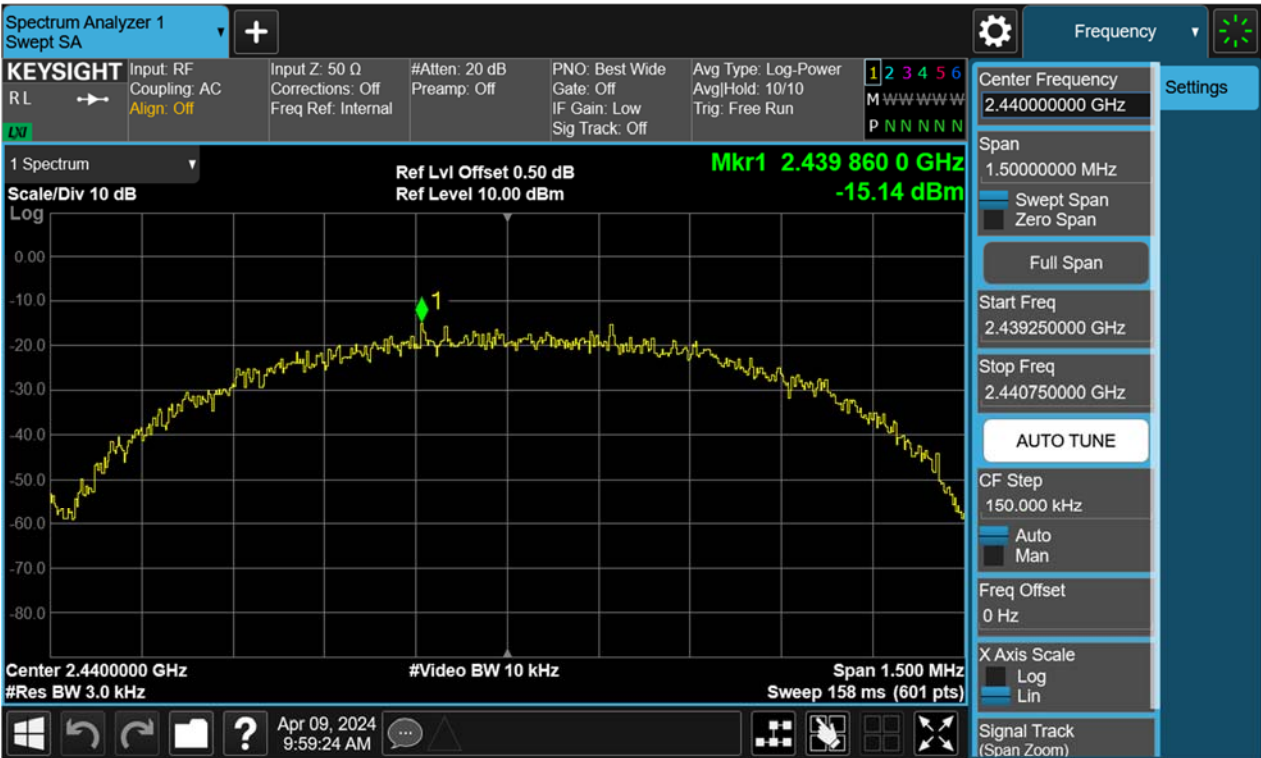


Figure 44: Power Spectral Density, 2440MHz, BLE-1Mbps



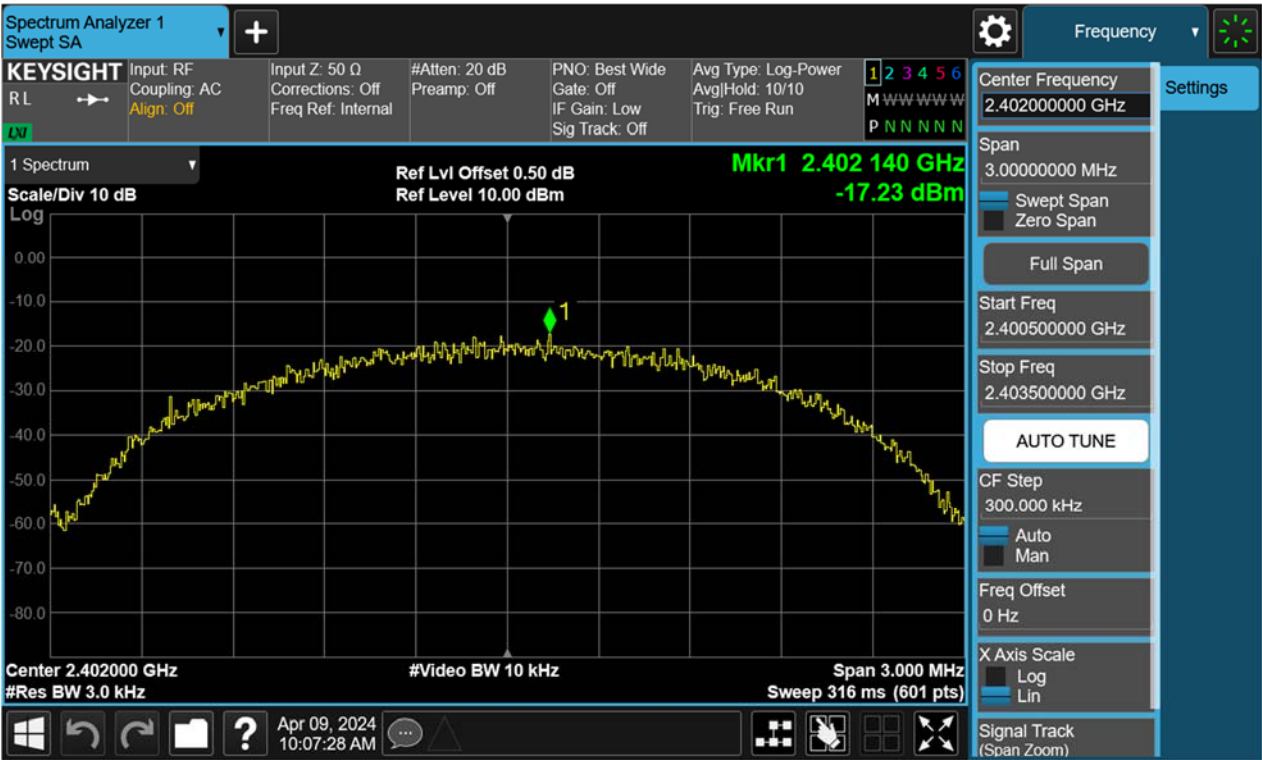
TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 40 of 94

Figure 45: Power Spectral Density, 2480MHz, BLE-1Mbps



Figure 46: Power Spectral Density, 2402MHz, BLE-2Mbps



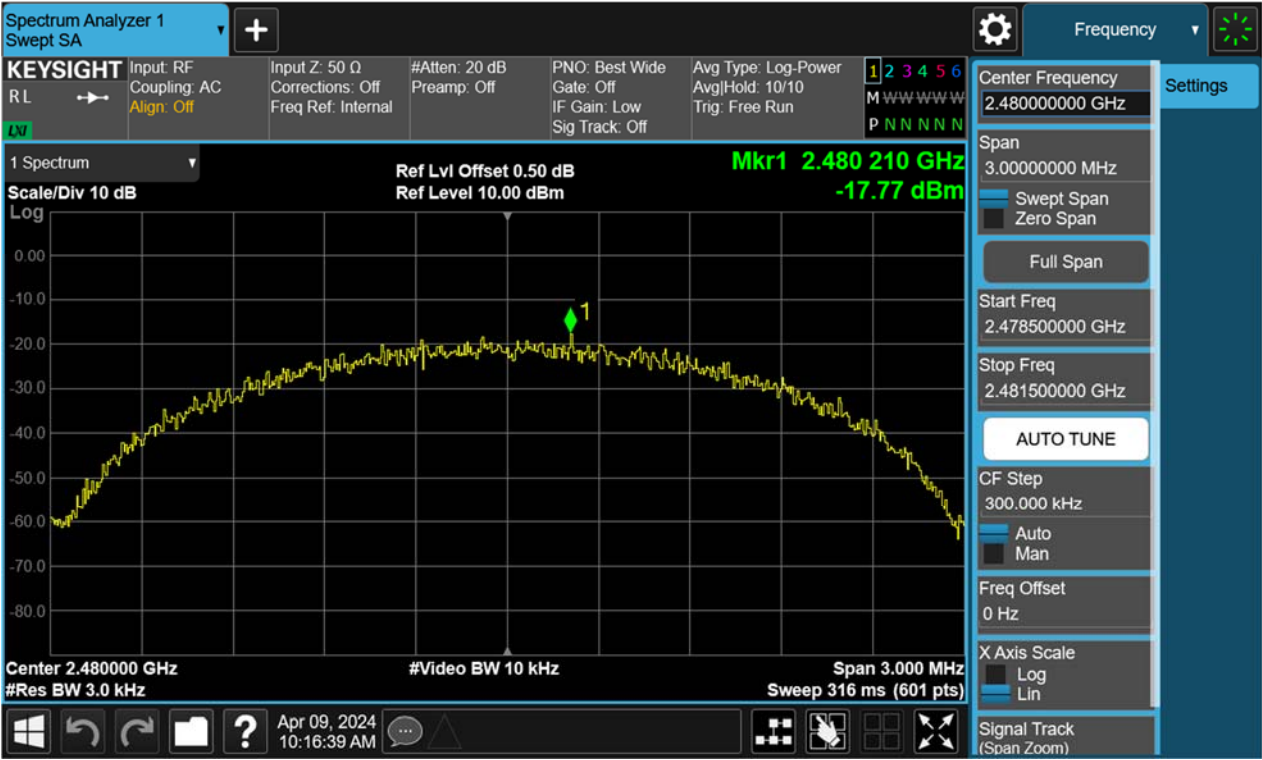
TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 41 of 94

Figure 47: Power Spectral Density, 2440MHz, BLE-2Mbps



Figure 48: Power Spectral Density, 2480MHz, BLE-2Mbps



TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 42 of 94

(RTL8720DN) BLE Data plots

Figure 49: Power Spectral Density, 2402MHz, BLE-1Mbps



Figure 50: Power Spectral Density, 2440MHz, BLE-1Mbps



TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 43 of 94

Figure 51: Power Spectral Density, 2480MHz, BLE-1Mbps



Figure 52: Power Spectral Density, 2402MHz, BLE-2Mbps



TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 44 of 94

Figure 53: Power Spectral Density, 2440MHz, BLE-2Mbps



Figure 54: Power Spectral Density, 2480MHz, BLE-2Mbps



TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 45 of 94

4.1.5 Conducted Spurious Emission & Authorized-band band-edge

RESULT: PASS

Test standard : FCC Part 15.247(d)
Requirement : ANSI C63.10-2013, Clause 11.11.1(a)
KDB 558074 D01 v05r02, Clause 8.5
Kind of test site : Shielded room

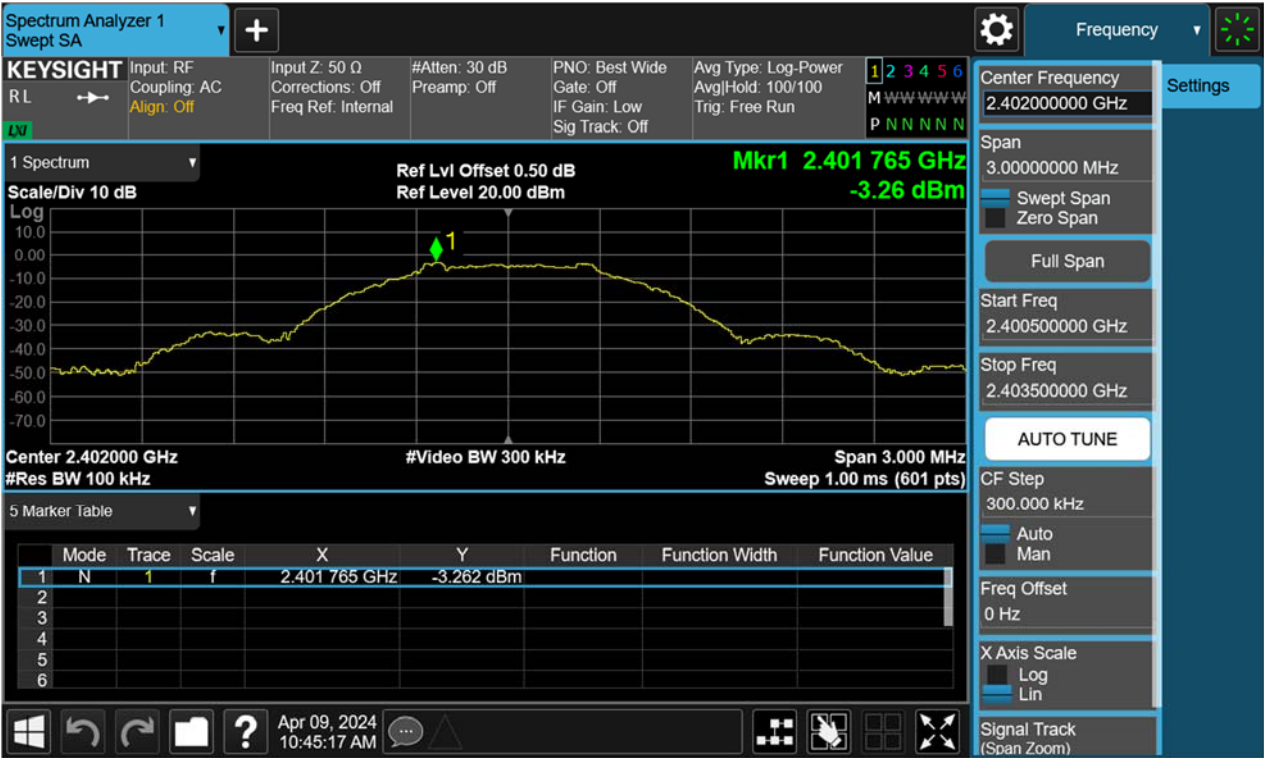
Test setup

Test Channel : Low/Middle/High for spurious, Low/High for Band Edge
Operation Mode : A.1.a
Ambient temperature : 21.2°C
Relative humidity : 50%

For details refer to following test plot.

(CC2642R1F) BLE1 Data plots

Figure 55: Conducted Spurious Emission & Authorized-band band-edge, 2402MHz, BLE-1Mbps Carrier Level



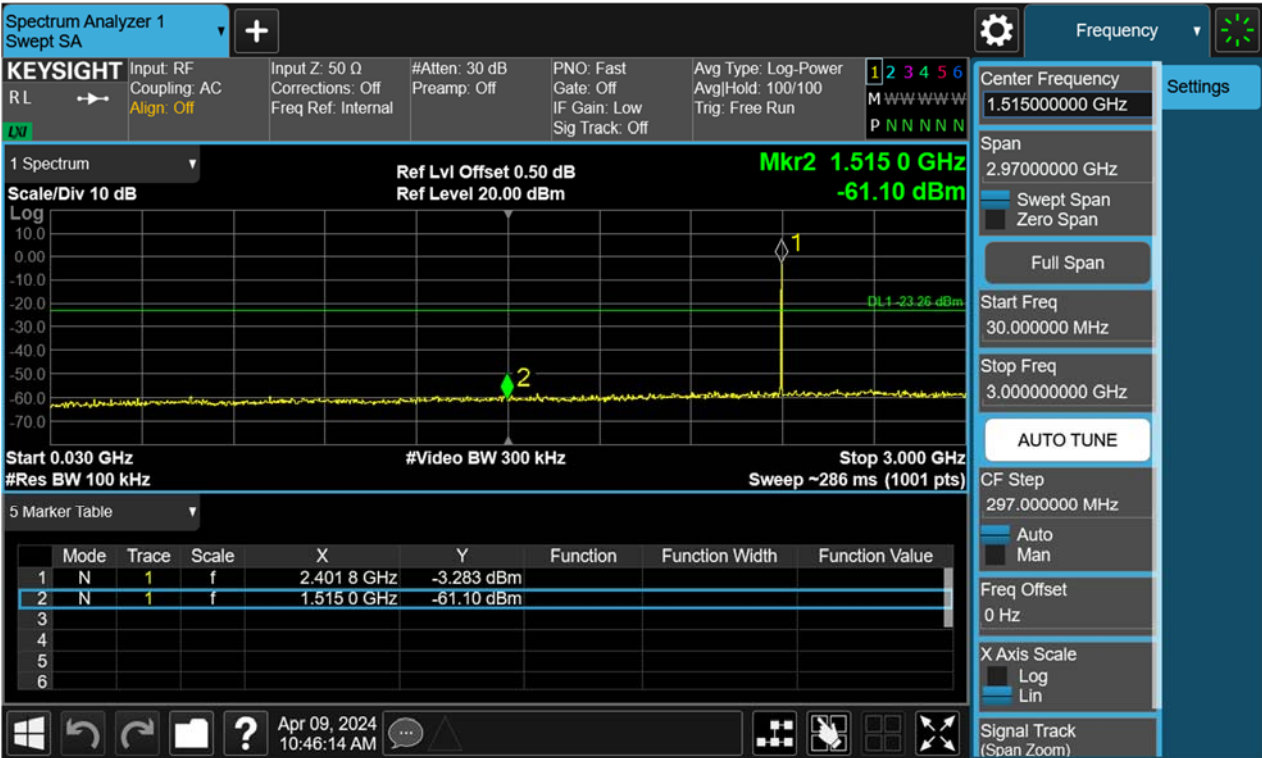
TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 46 of 94

Band Edge



Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 47 of 94

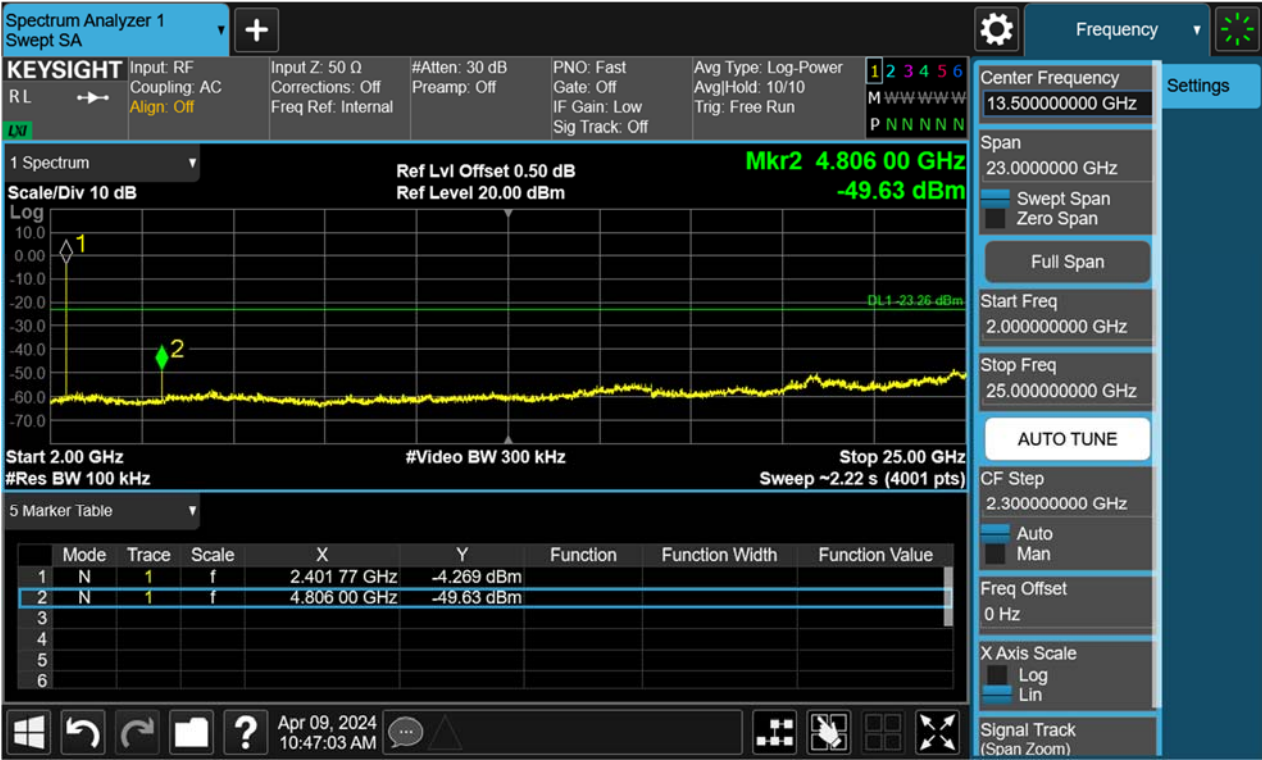
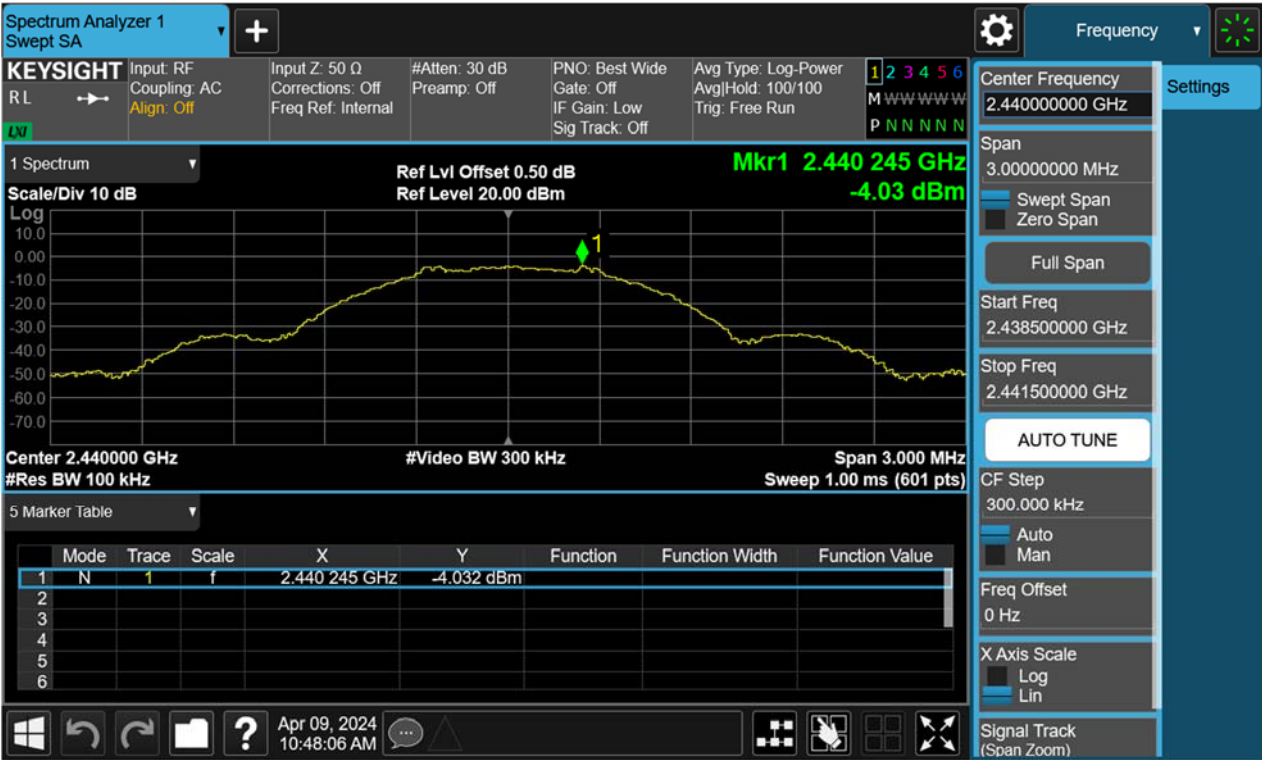


Figure 56: Conducted Spurious Emission & Authorized-band band-edge, 2440MHz, BLE-1Mbps Carrier Level



TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 48 of 94

Conducted spurious emissions 30MHz-25GHz

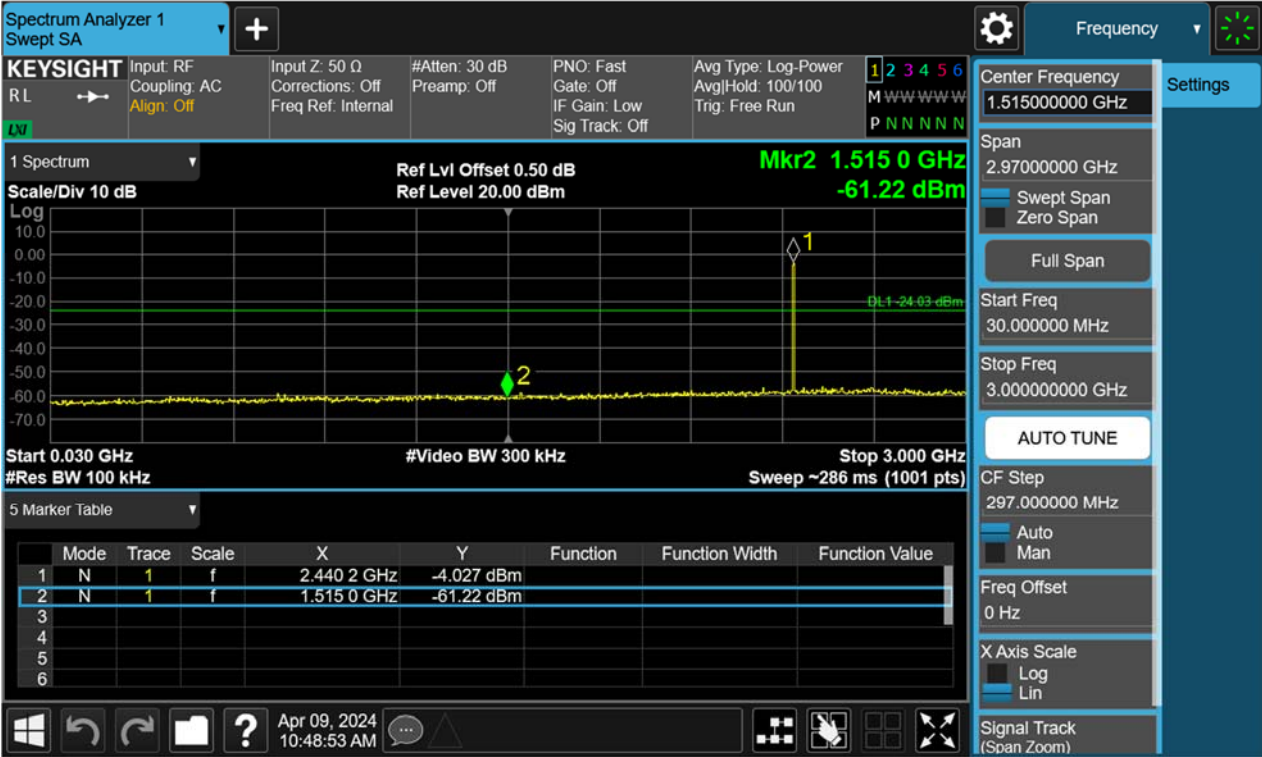
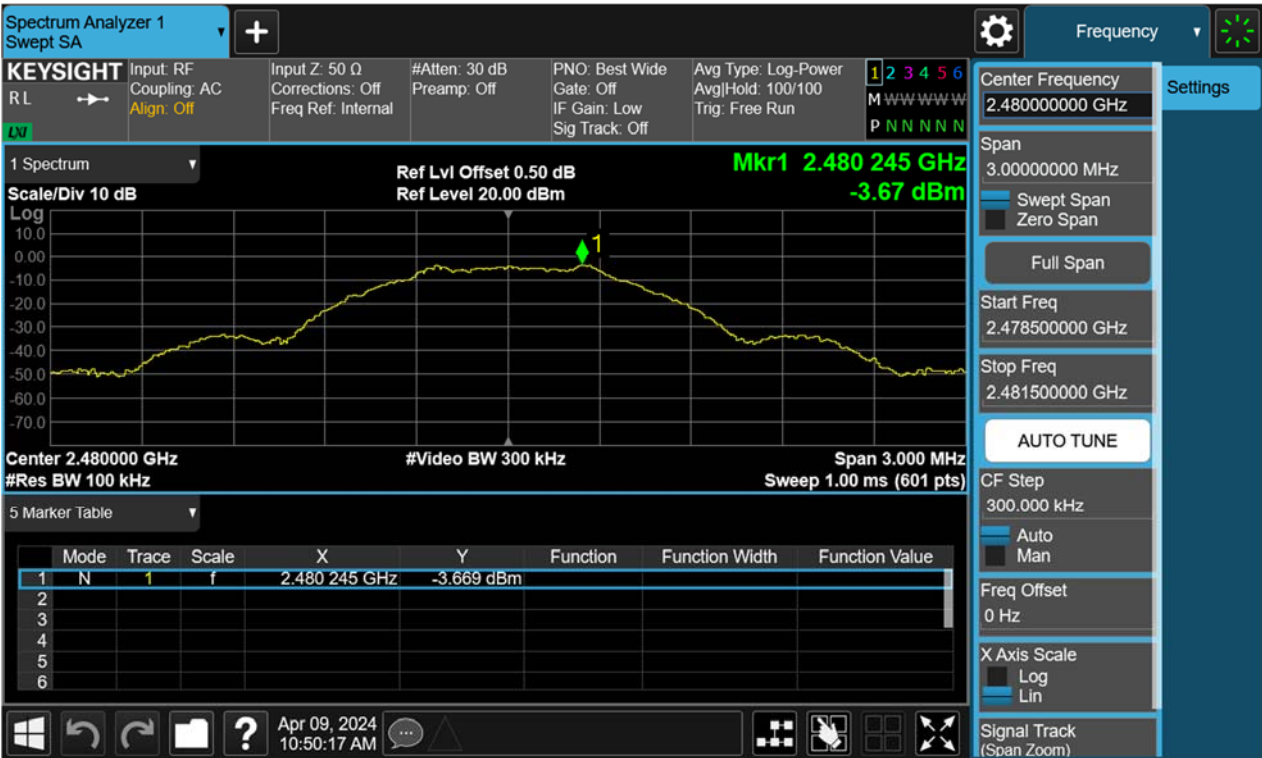


Figure 57: Conducted Spurious Emission & Authorized-band band-edge, 2480MHz, BLE-1Mbps Carrier Level



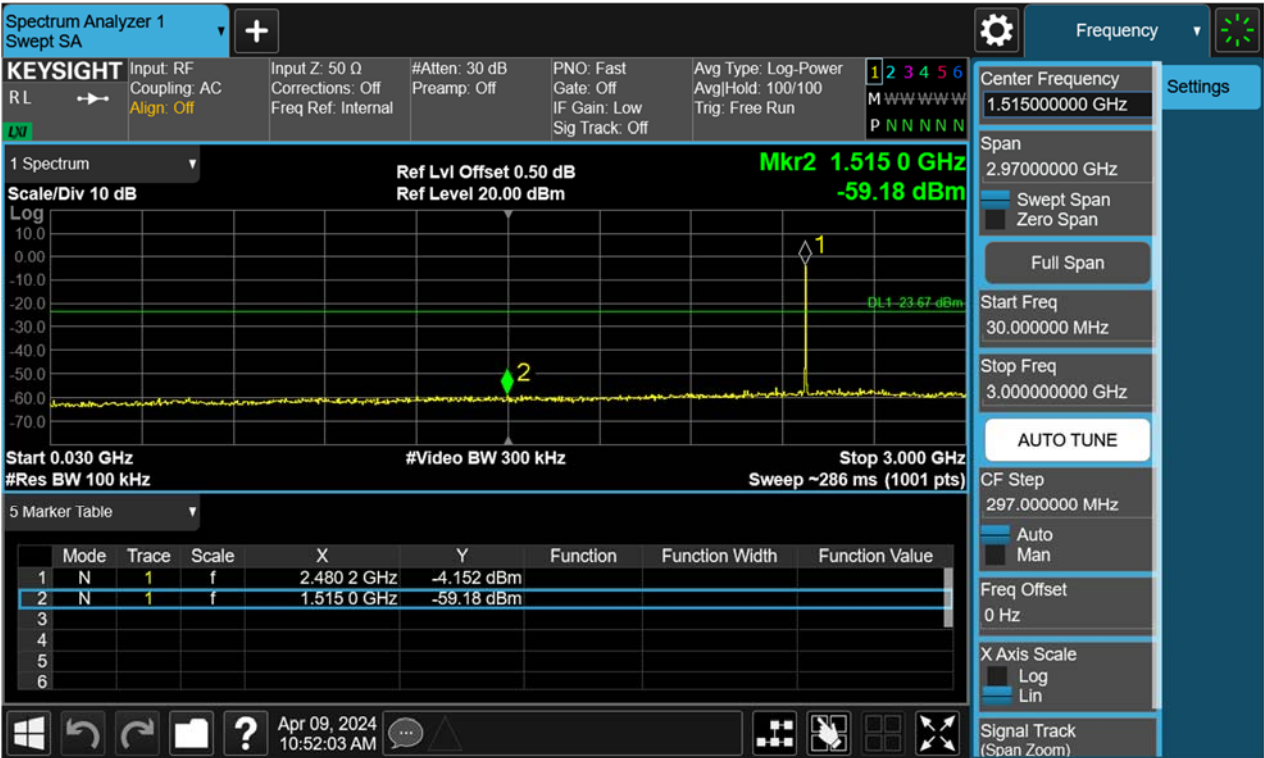
TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 49 of 94

Band Edge



Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE24030088-01AE Date: 2024-04-16 Page 50 of 94



Figure 58: Conducted Spurious Emission & Authorized-band band-edge, 2402MHz, BLE-2Mbps Carrier Level

