

Appendix A

RF Test Data for BT(BLE) (Conducted Measurement)

Product Name: BLUETOOTH MODULE

Trade Mark: N/A

Test Model: XLW-BLE003U

FCC ID: 2ATP5XLW-BLE003U

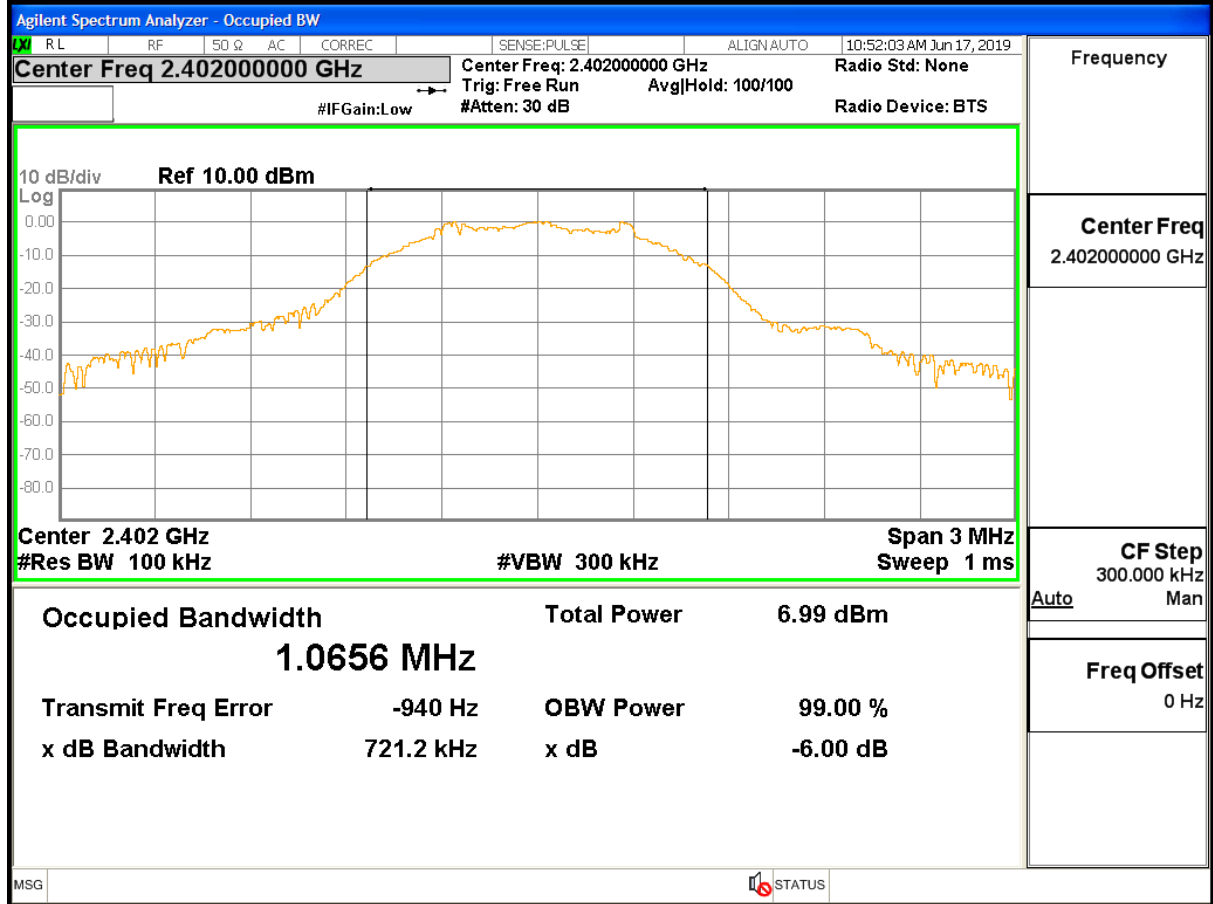
Environmental Conditions

Temperature:	24.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Gary Qian
Supervised by:	Eden Hu

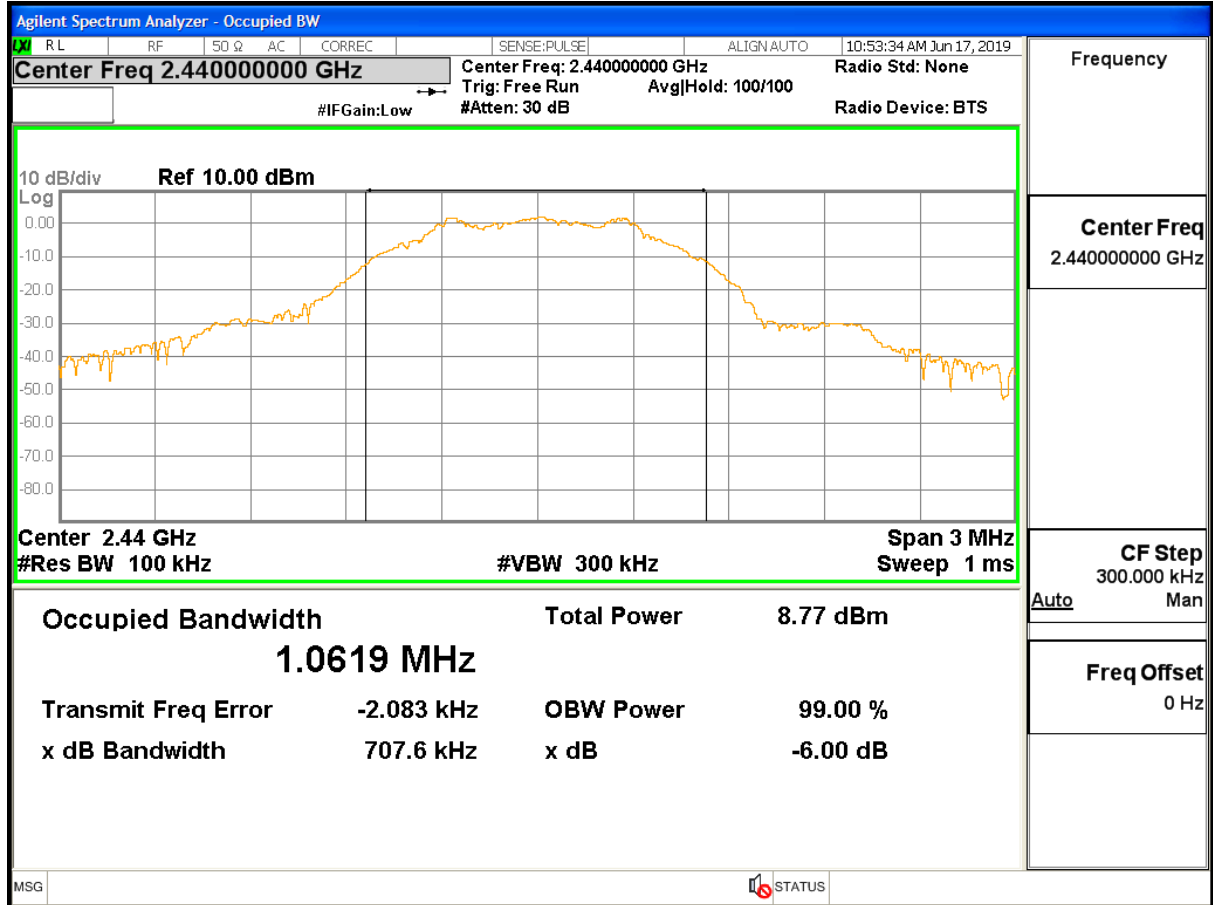
A.1. 6dB Bandwidth

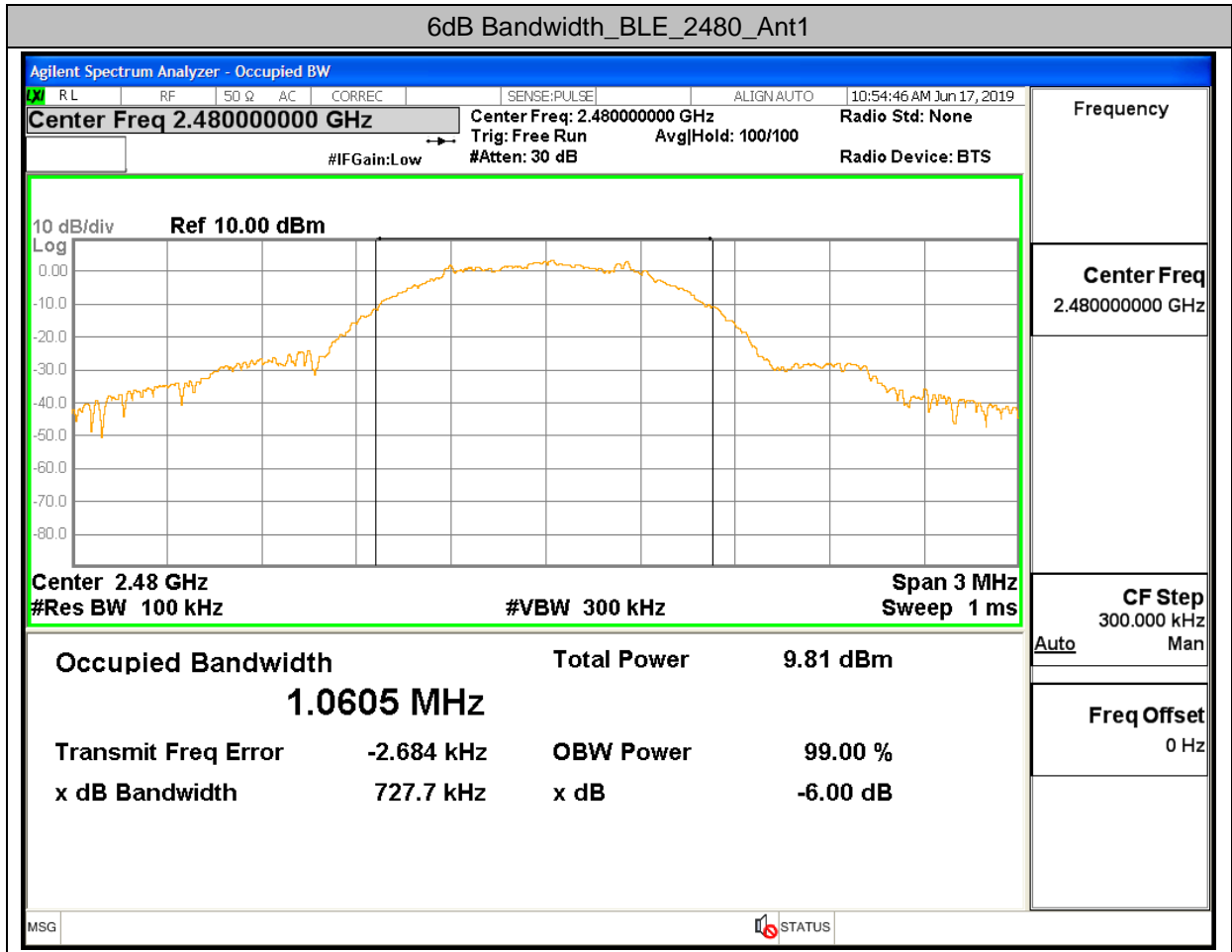
Test Mode	Test Channel	Ant	EBW[MHz]	Limit	Verdict
BLE	2402	Ant1	0.721	0.5	PASS
BLE	2440	Ant1	0.708	0.5	PASS
BLE	2480	Ant1	0.728	0.5	PASS

6dB Bandwidth_BLE_2402_Ant1



6dB Bandwidth_BLE_2440_Ant1





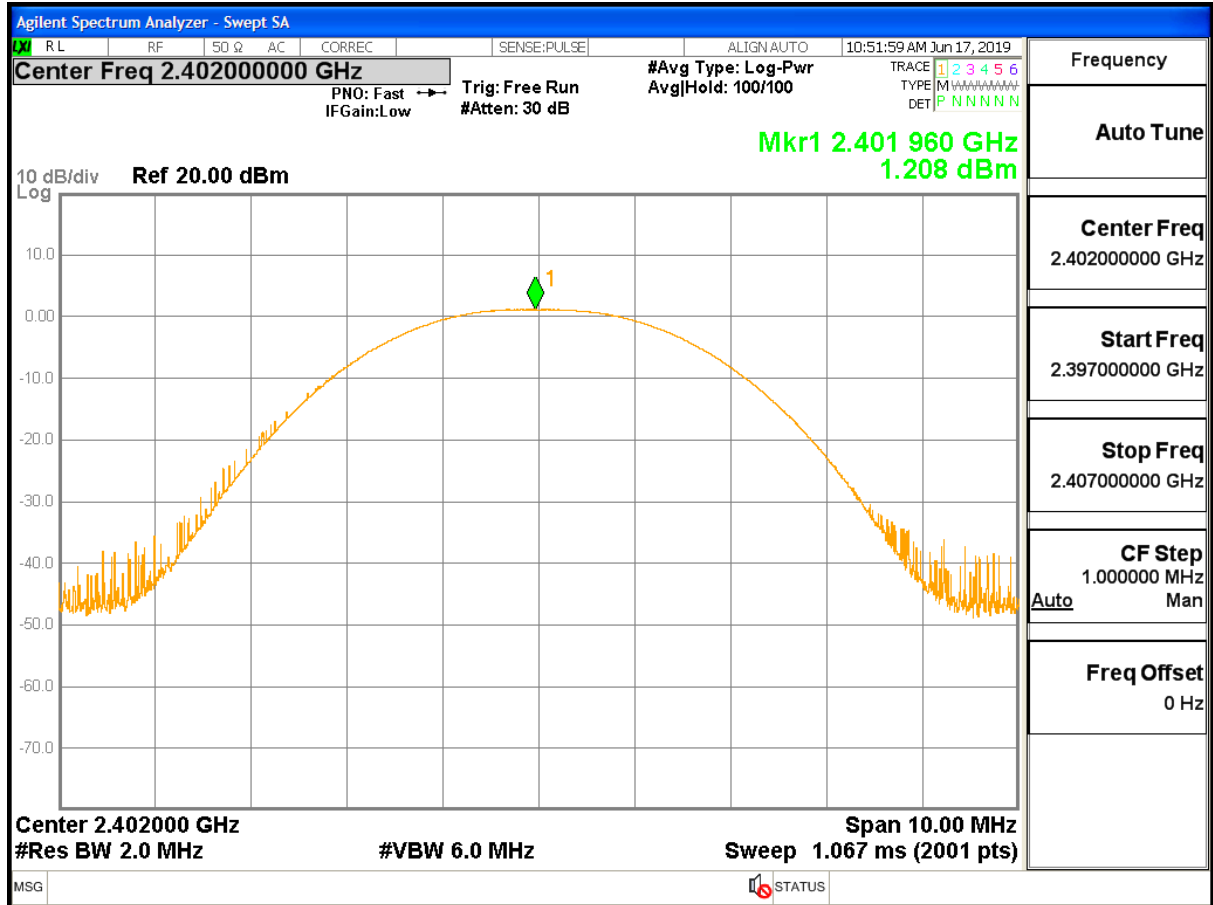
A.2. Occupied Bandwidth

Test Mode	Test Channel	Ant	OBW[MHz]	Limit[MHz]	Verdict
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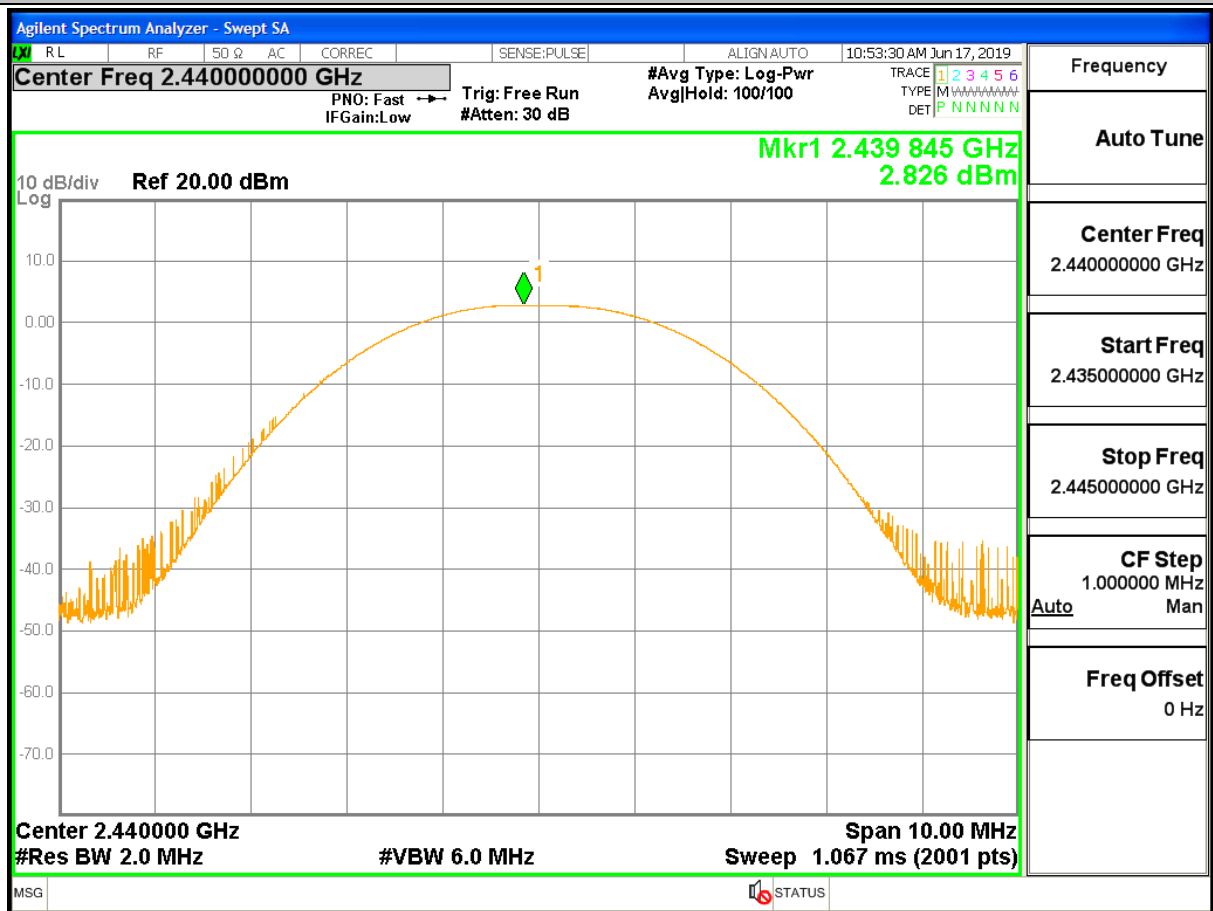
A.3. Maximum peak conducted output power

Test Mode	Test	Ant	Power[dBm]	Limit[dBm]	Verdict
BLE	2402	Ant1	1.208	30	PASS
BLE	2440	Ant1	2.826	30	PASS
BLE	2480	Ant1	4.079	30	PASS

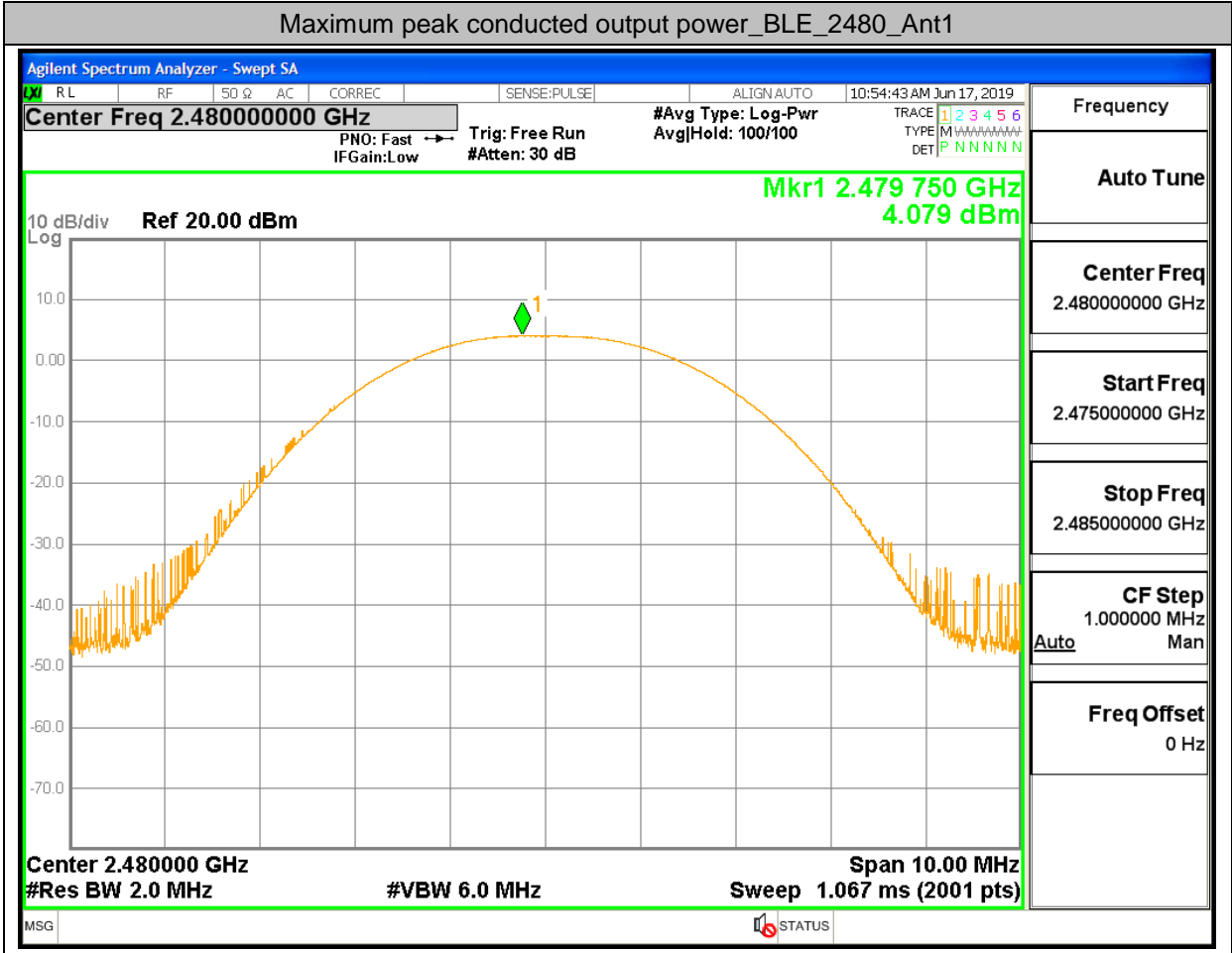
Maximum peak conducted output power_BLE_2402_Ant1



Maximum peak conducted output power_BLE_2440_Ant1



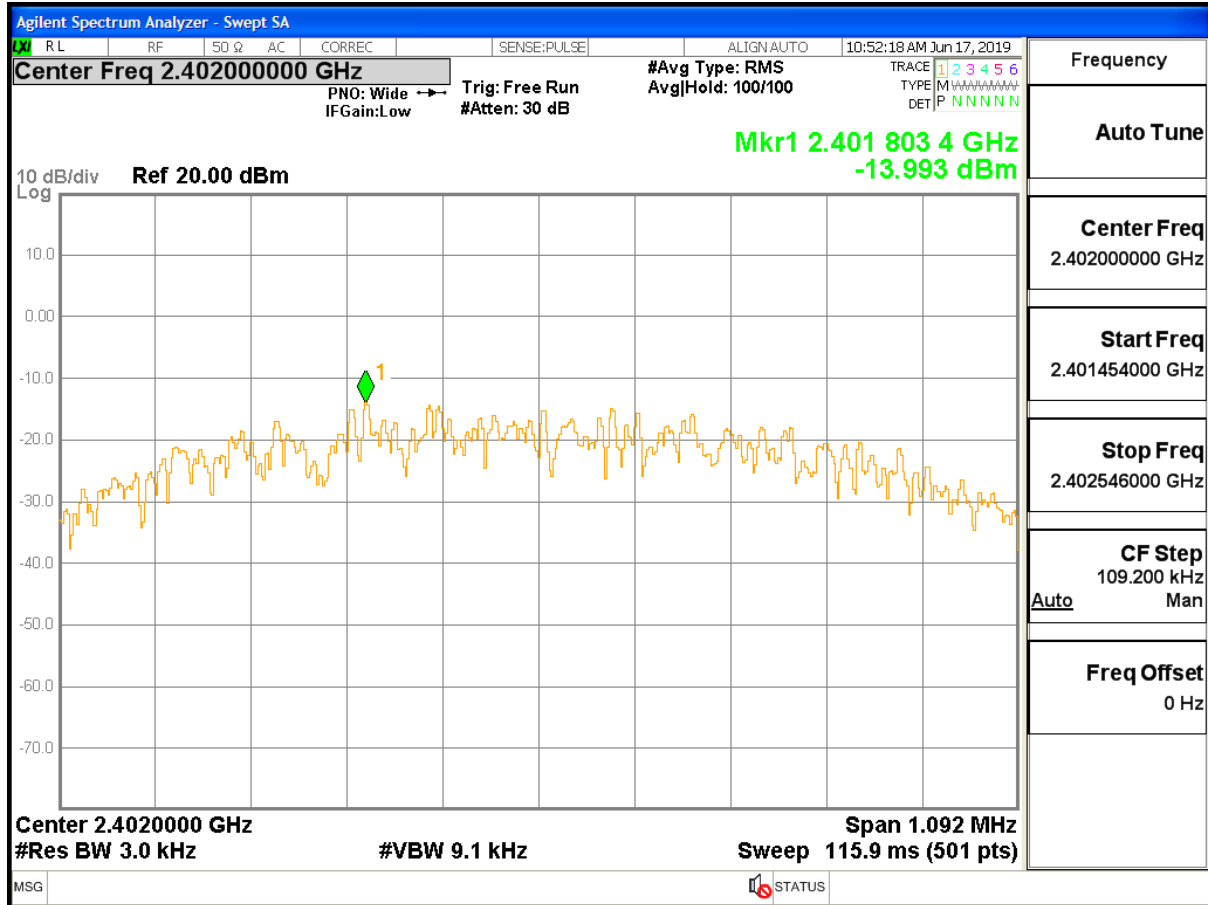
Maximum peak conducted output power_BLE_2480_Ant1



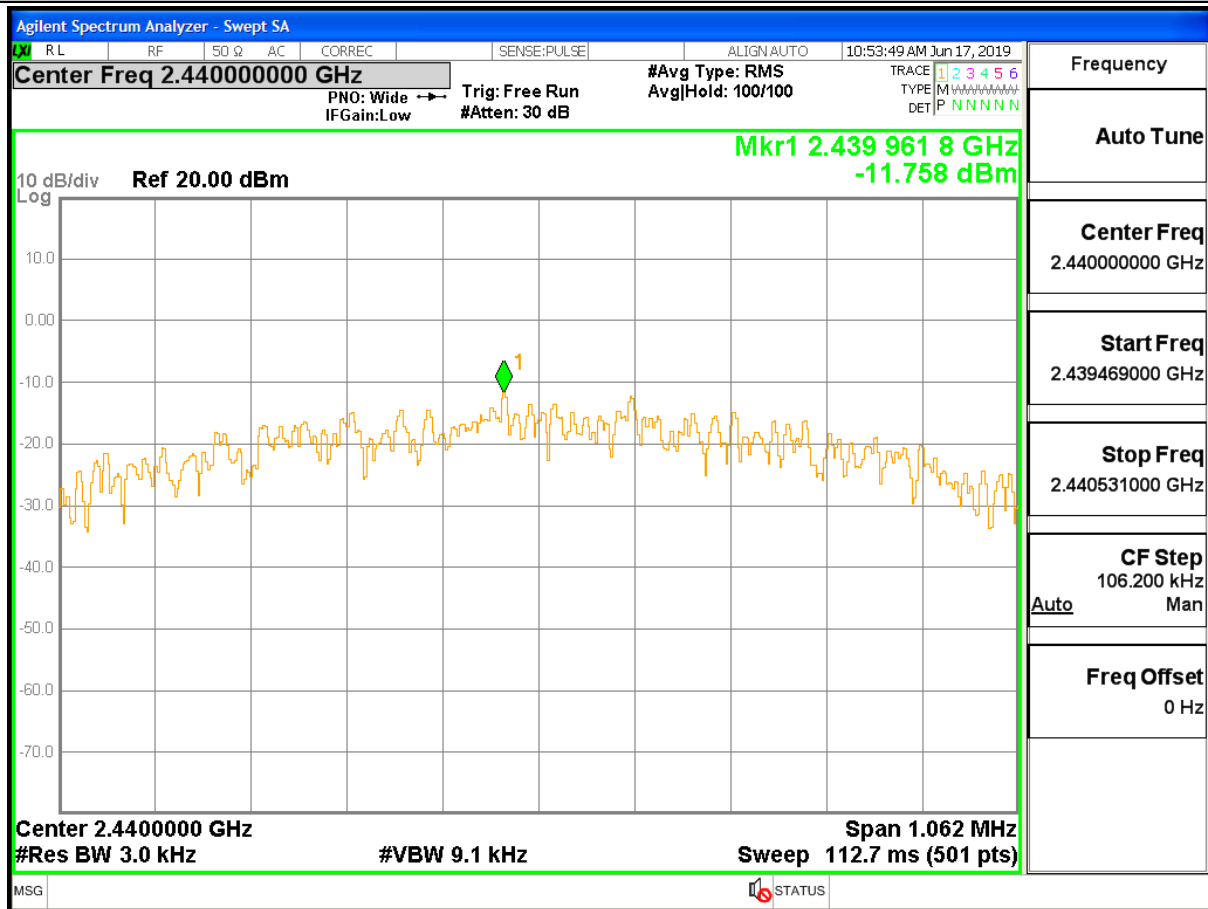
A.4. Maximum Peak power spectral density

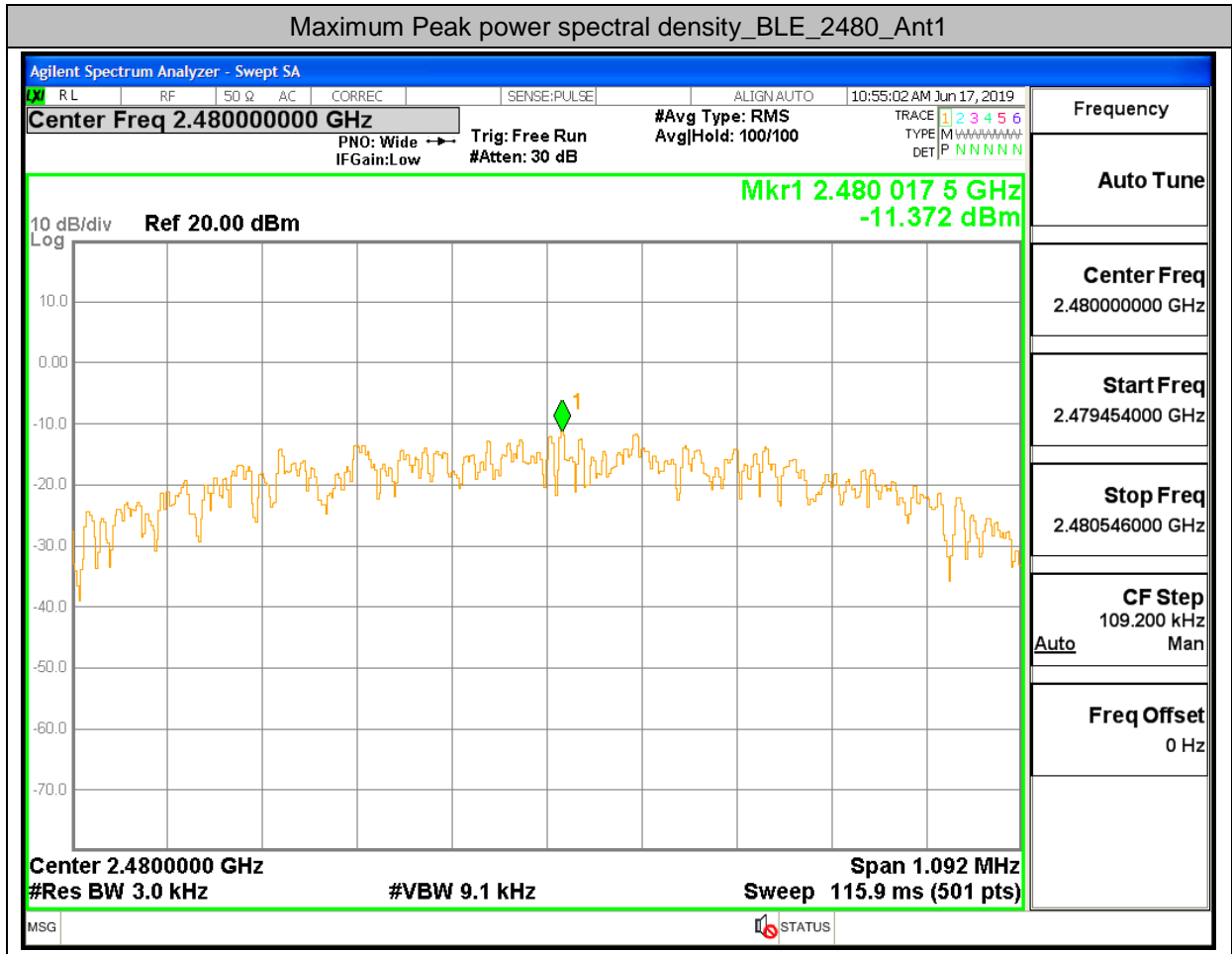
Test	Test	Ant	PSD[dBm/3KHz]	Limit[dBm/3KHz]	Verdict
BLE	2402	Ant1	-13.993	8.00	PASS
BLE	2440	Ant1	-11.758	8.00	PASS
BLE	2480	Ant1	-11.372	8.00	PASS

Maximum Peak power spectral density_BLE_2402_Ant1



Maximum Peak power spectral density_BLE_2440_Ant1

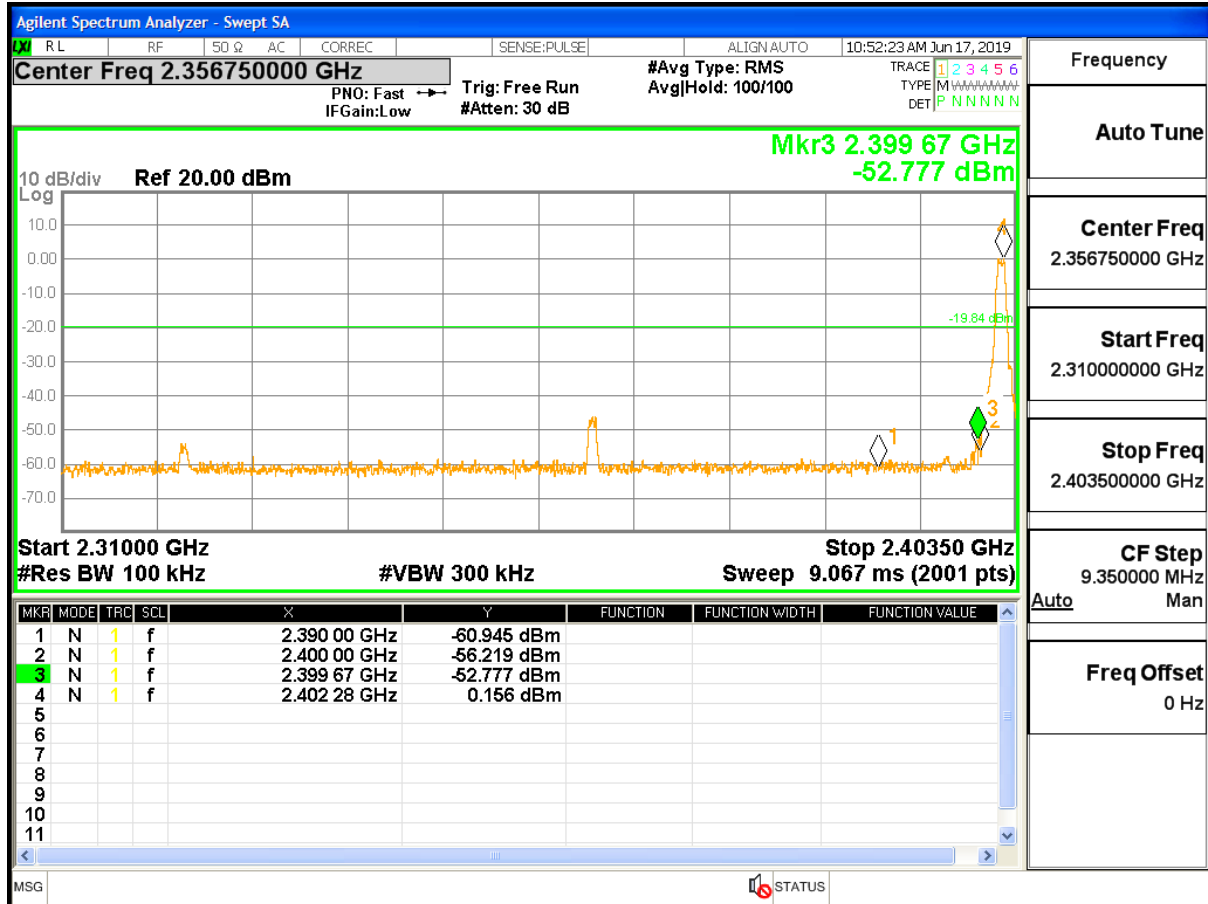




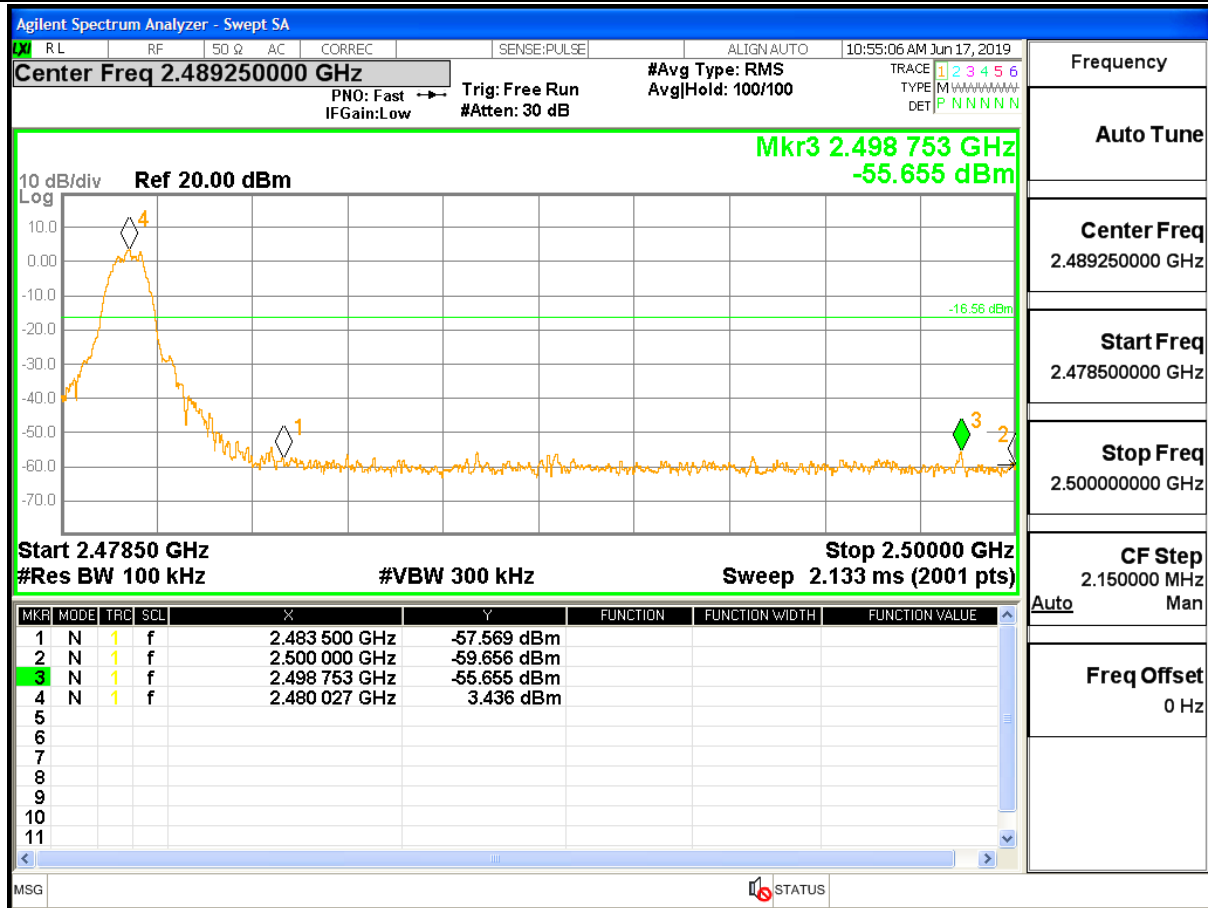
A.5. Band-edge for RF Conducted Emissions

Type	Carrier Frequency(MHz)	Frequency(MHz)	Carrier Frequency Power [dBm]	Bandedge Peak(dBm)	Upper limit(dBm)	Conclusion
BLE	2402	2399.667	0.156	-52.777	-19.844	Pass
BLE	2480	2498.753	3.436	-55.655	-16.564	Pass

Band-edge for RF Conducted Emissions_BLE_2402_Ant1

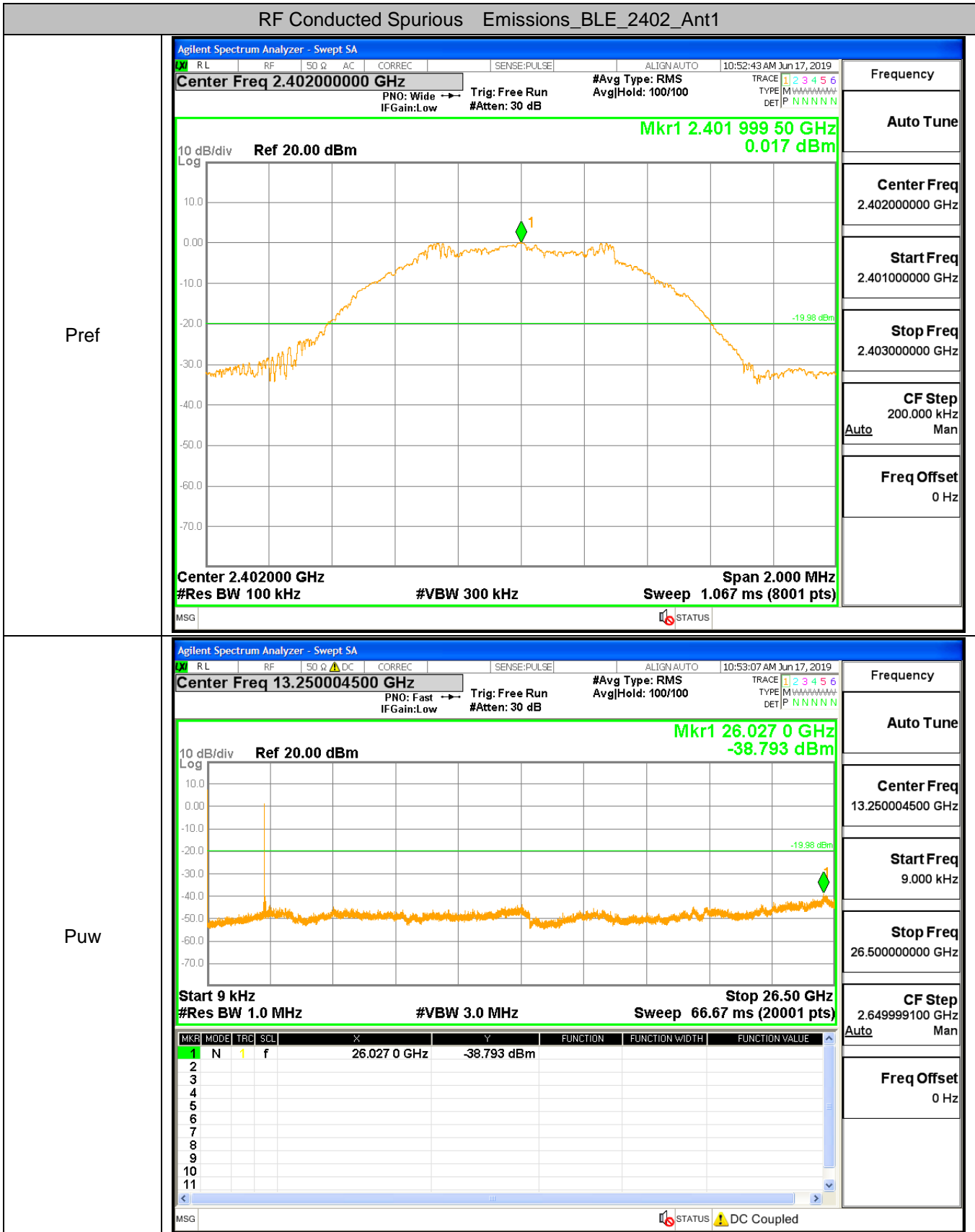


Band-edge for RF Conducted Emissions_BLE_2480_Ant1



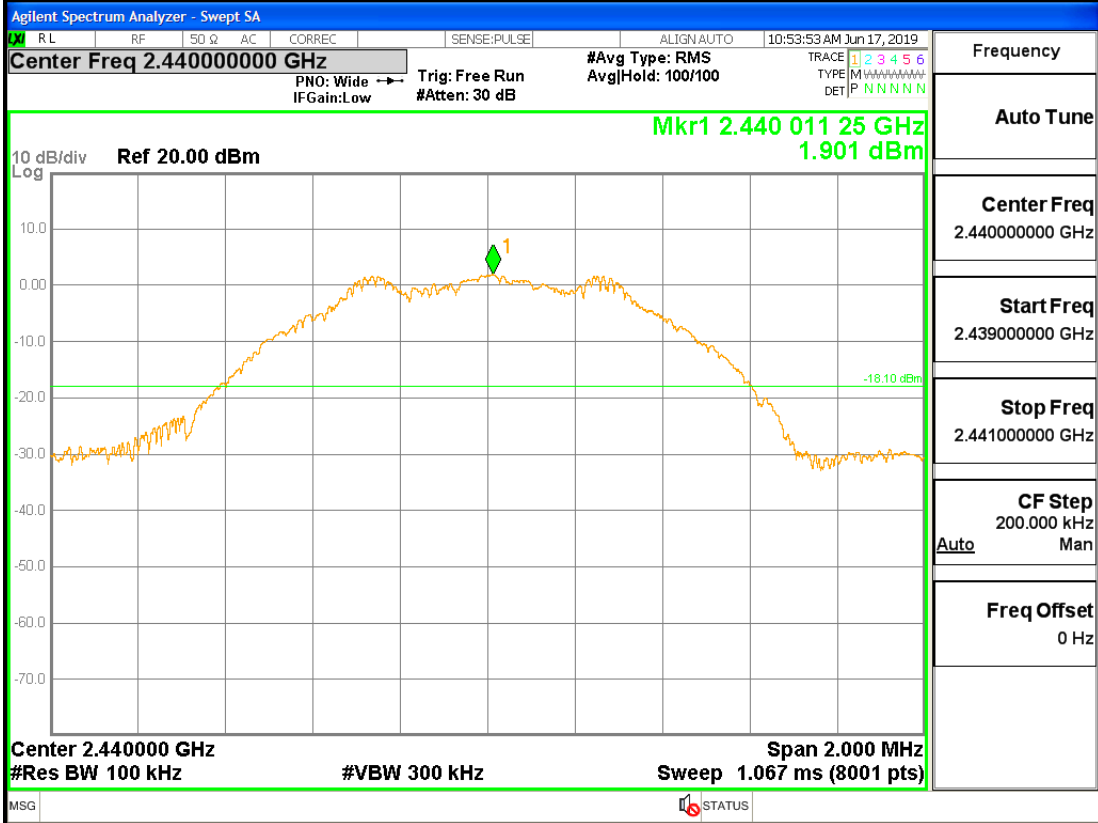
A.6. RF Conducted Spurious Emissions

RF Conducted Spurious Emissions_BLE_2402_Ant1

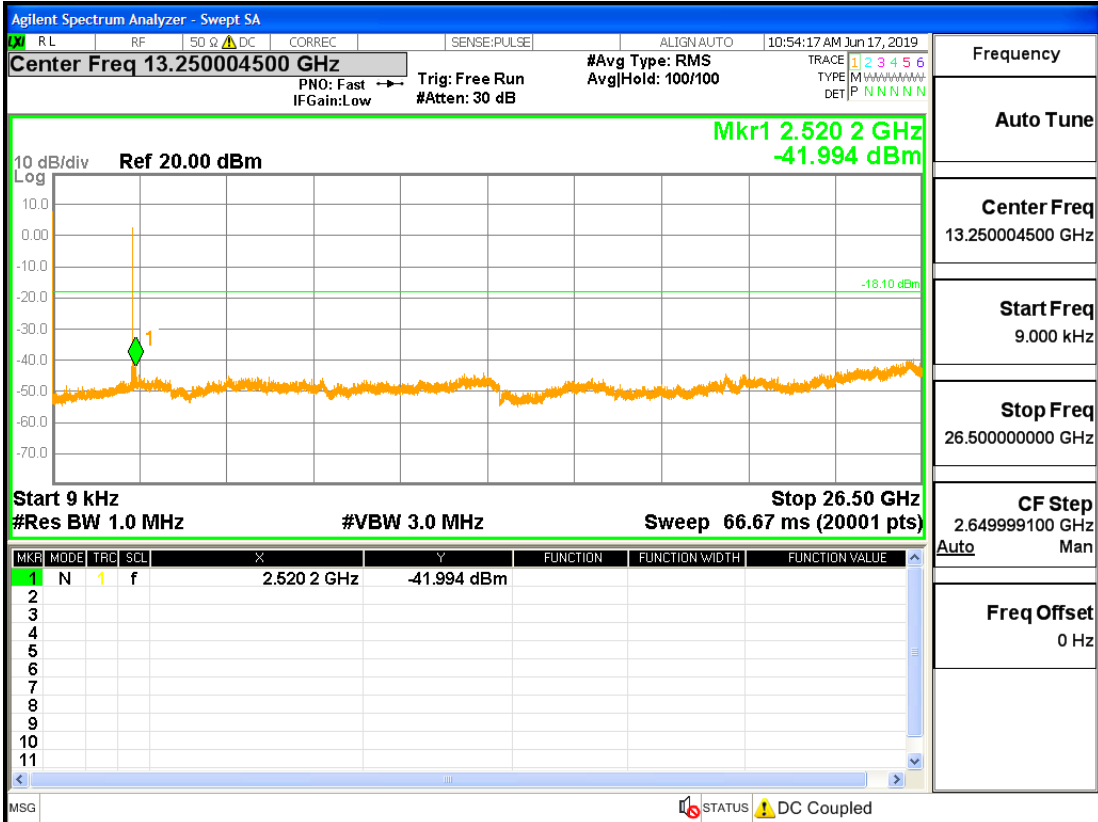


RF Conducted Spurious Emissions_BLE_2440_Ant1

Pref

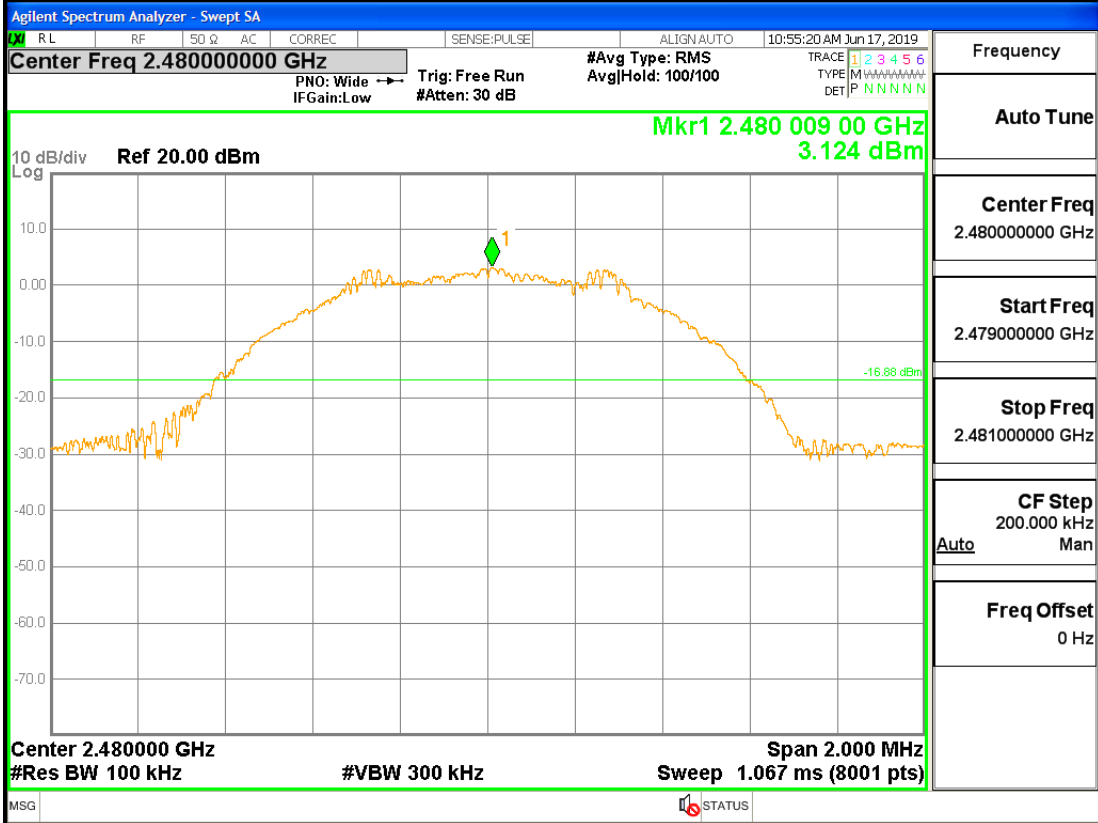


Puw

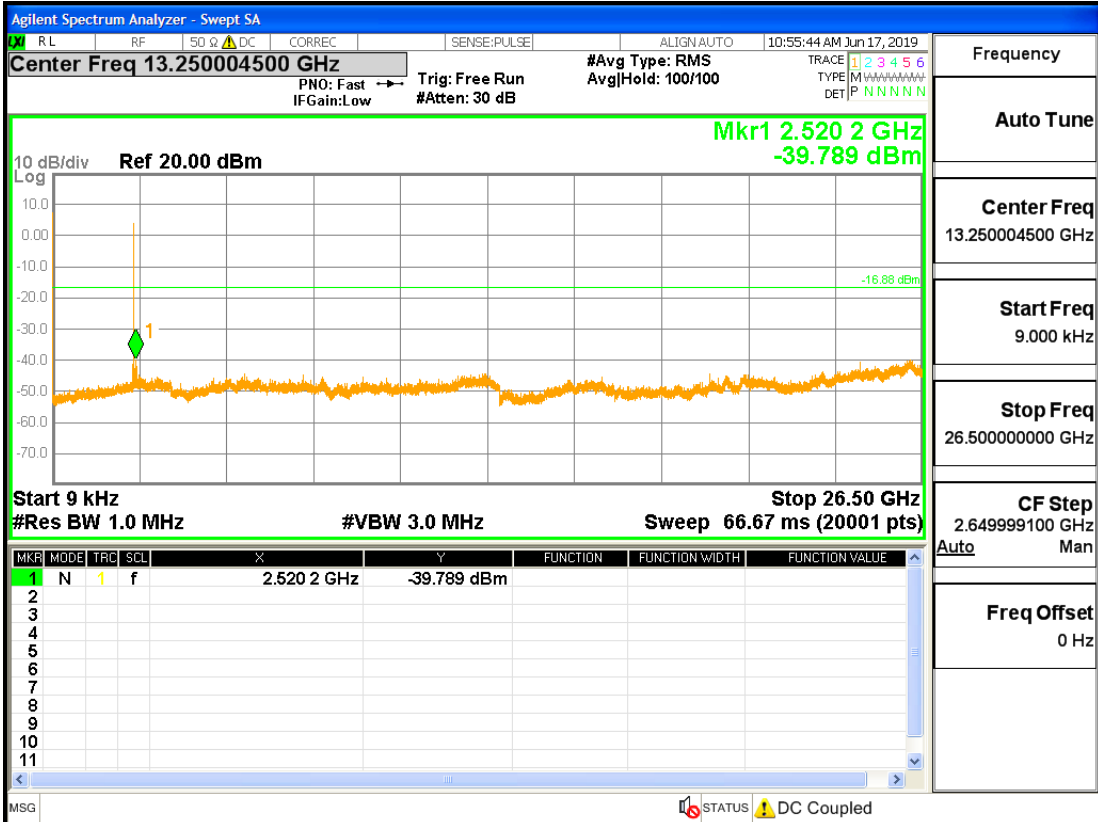


RF Conducted Spurious Emissions_BLE_2480_Ant1

Pref



Puw

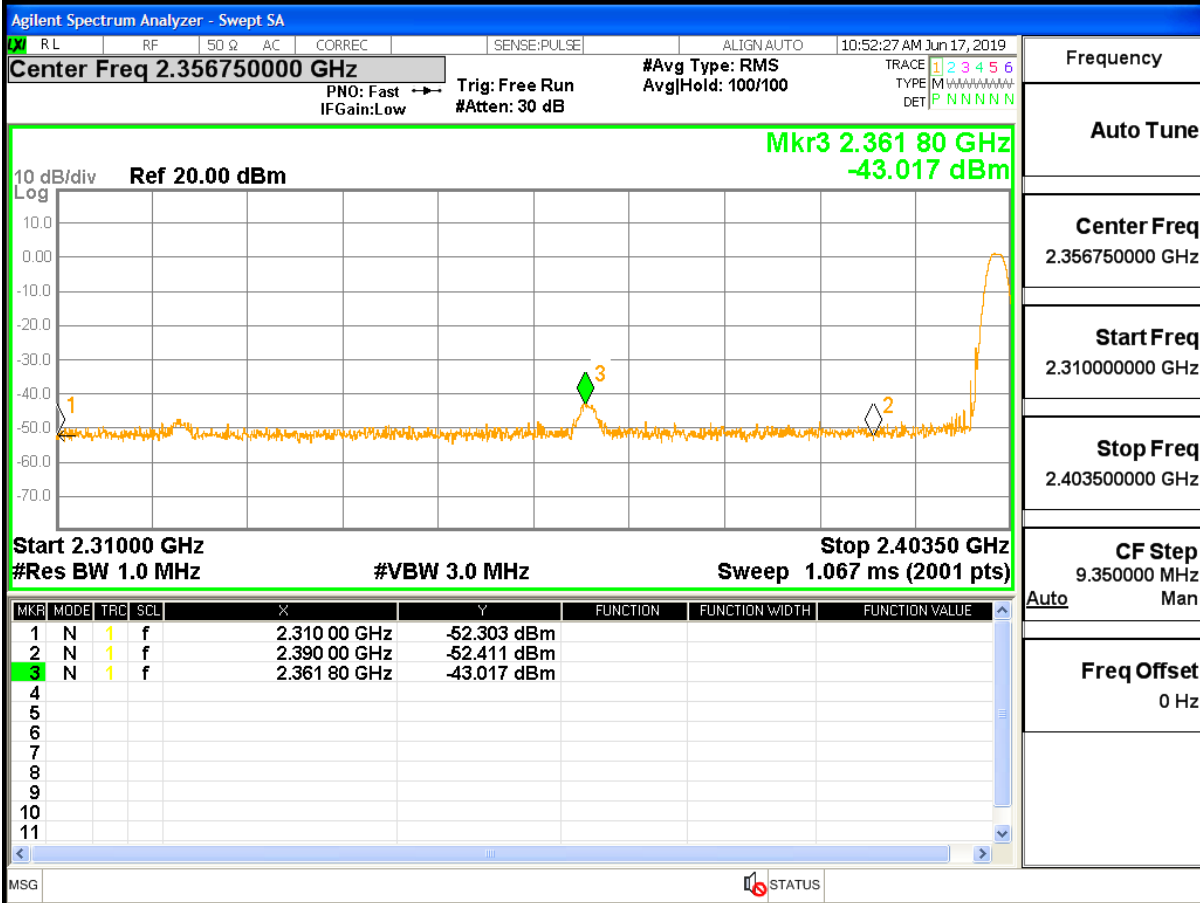


A.7. Restrict-band band-edge measurements

Type	Carrier Frequency (MHz)	Frequency(MHz)	Gain	Ground Factor	Peak Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
BLE	2402	2361.80	2.00	0.00	-43.02	54.18	74	Pass
BLE	2480	2483.67	2.00	0.00	-39.35	57.85	74	Pass

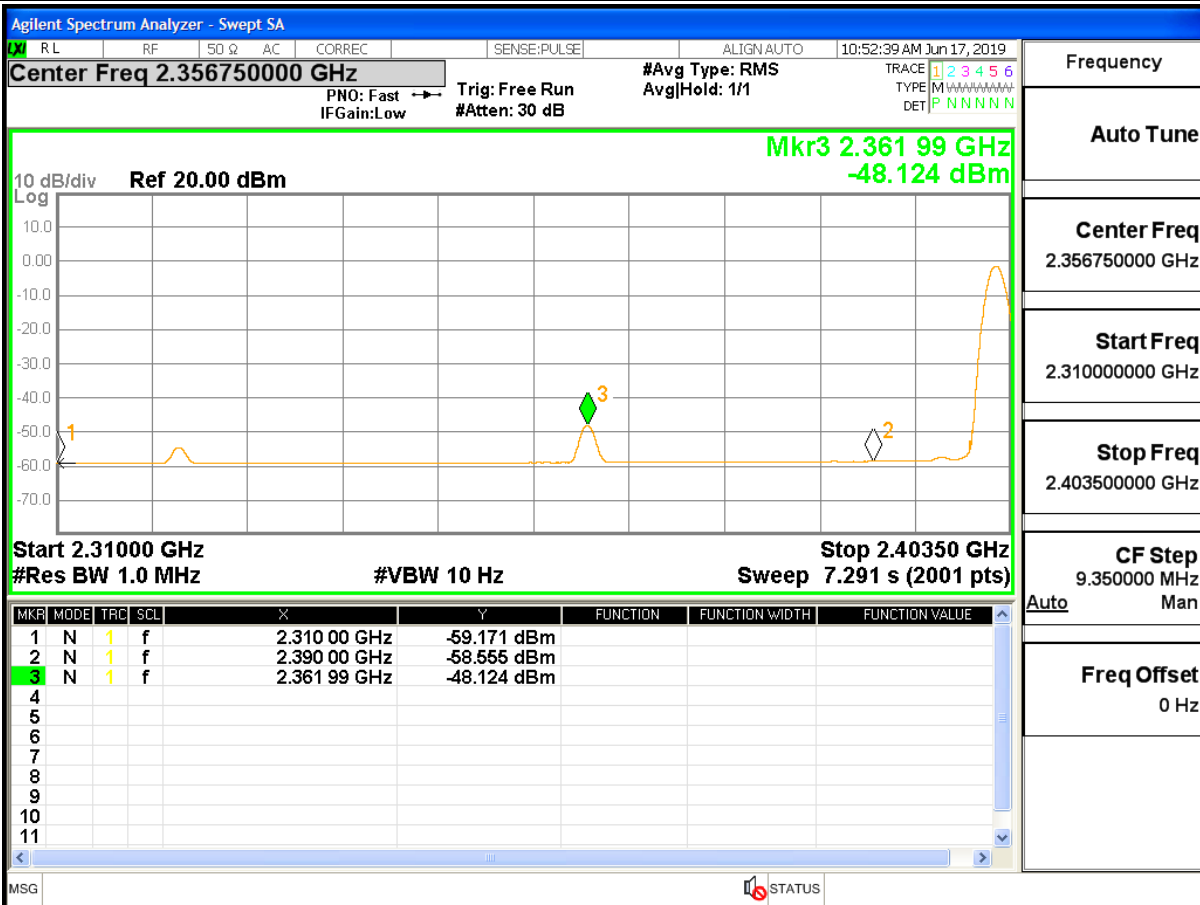
Type	Carrier Frequency (MHz)	Frequency(MHz)	Gain	Ground Factor	Average Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
BLE	2402	2361.99	2.00	0.00	-48.12	49.08	54	Pass
BLE	2480	2483.50	2.00	0.00	-54.21	42.99	54	Pass

Restrict-band band-edge measurements_BLE_2402_Ant1_PEAK



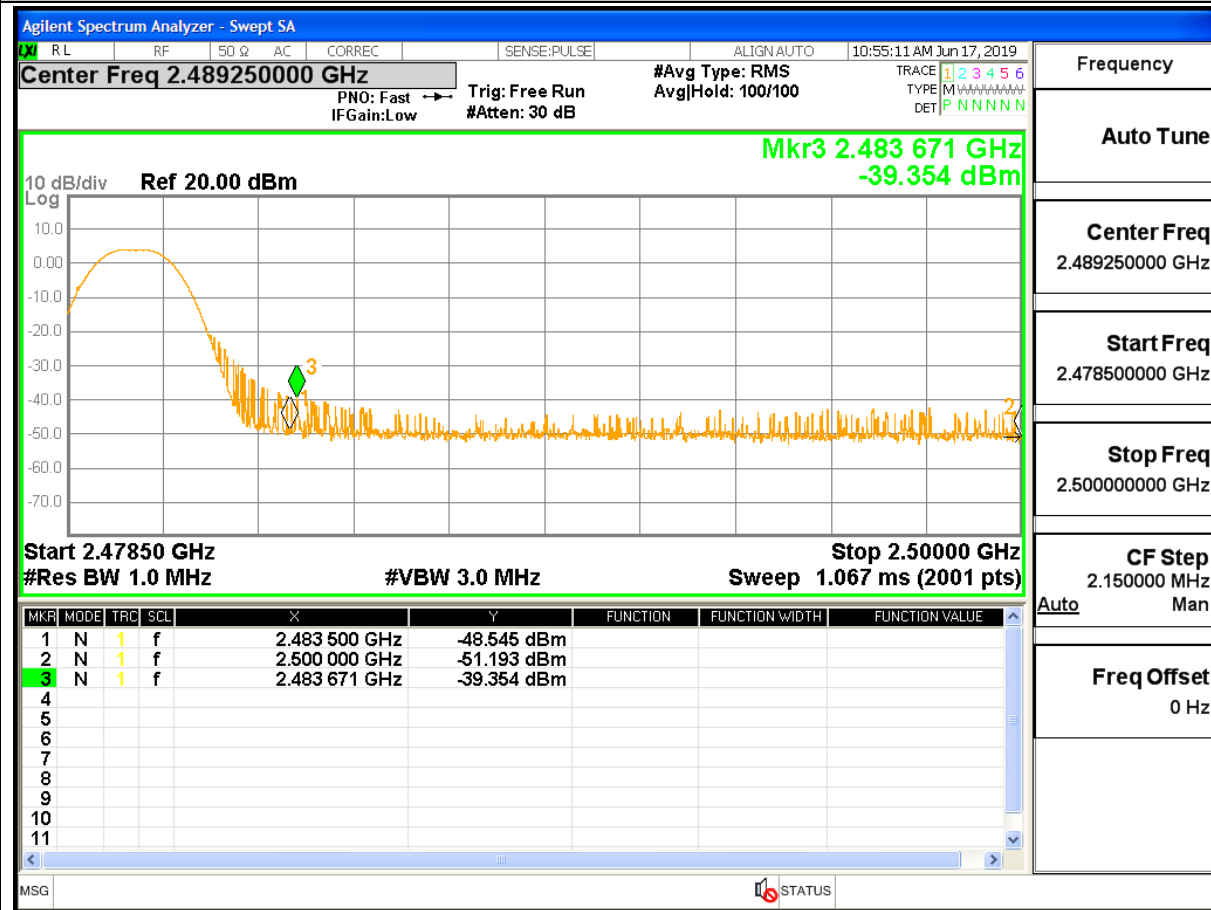
Frequency
Auto Tune
Center Freq 2.356750000 GHz
Start Freq 2.310000000 GHz
Stop Freq 2.403500000 GHz
CF Step 9.350000 MHz Auto Man
Freq Offset 0 Hz

Restrict-band band-edge measurements_BLE_2402_Ant1_AV



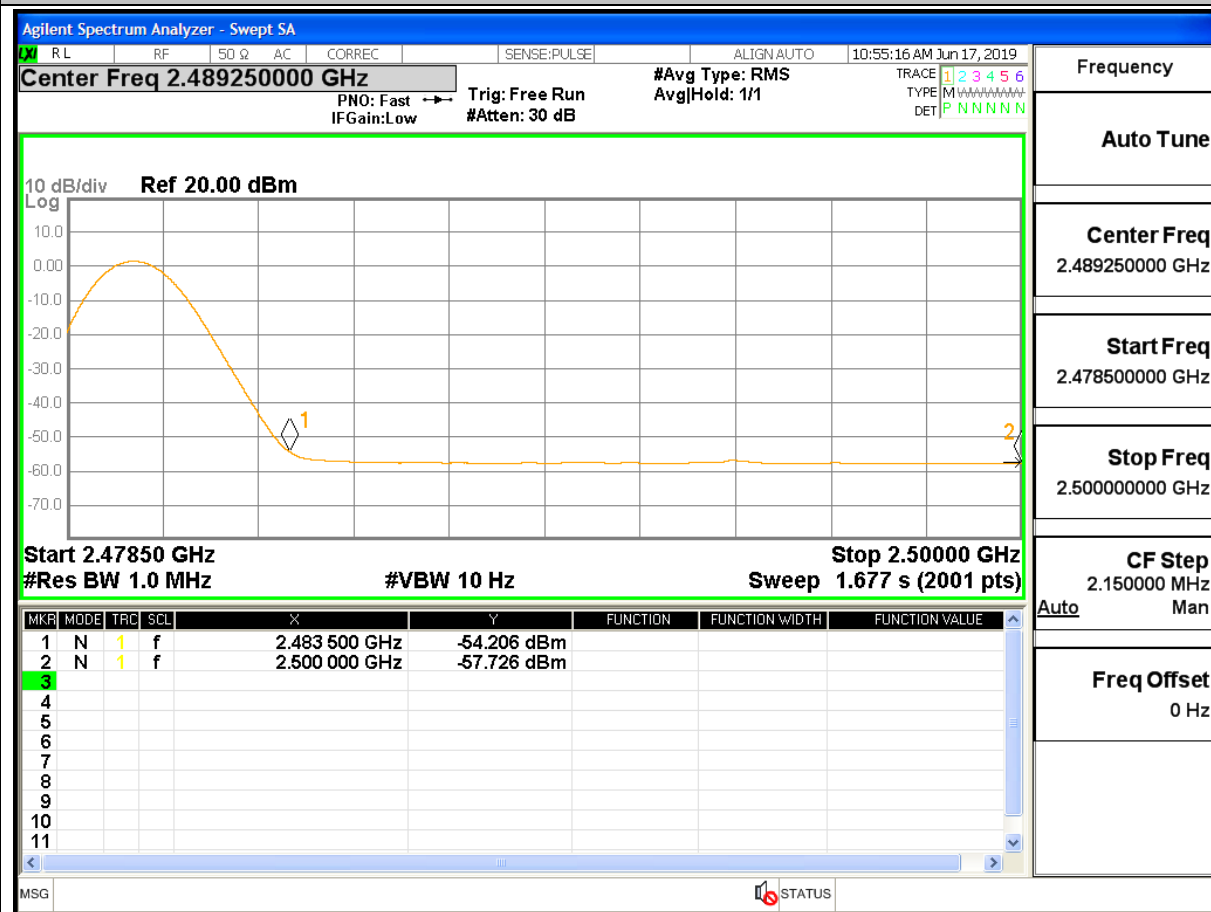
Frequency
Auto Tune
Center Freq 2.356750000 GHz
Start Freq 2.310000000 GHz
Stop Freq 2.403500000 GHz
CF Step 9.350000 MHz Auto Man
Freq Offset 0 Hz

Restrict-band band-edge measurements_BLE_2480_Ant1_PEAK



Frequency
Auto Tune
Center Freq 2.489250000 GHz
Start Freq 2.478500000 GHz
Stop Freq 2.500000000 GHz
CF Step 2.150000 MHz
Auto Man
Freq Offset 0 Hz

Restrict-band band-edge measurements_BLE_2480_Ant1_AV



Frequency
Auto Tune
Center Freq 2.489250000 GHz
Start Freq 2.478500000 GHz
Stop Freq 2.500000000 GHz
CF Step 2.150000 MHz
Auto Man
Freq Offset 0 Hz

A.8. Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
BLE	2440	Ant1	65.93	PASS

