

Appendix A

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

Product Name: Shenzhen SEI Robotics Co., Ltd.

Trade Mark: eSTREAM4K

Test Model: IPA1104HDW- 01-400-05T-TiVo

FCC ID: 2AOVU-IPA1104HDW

IC: 25669-IPA1104HDW

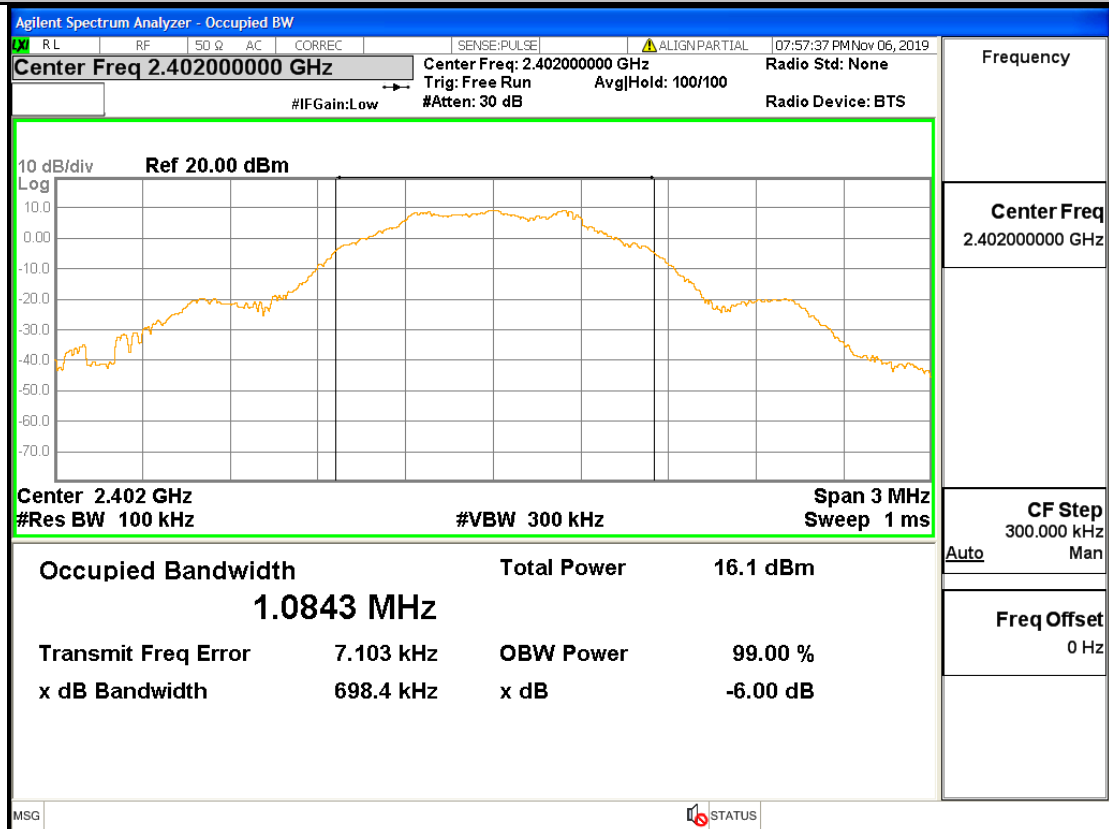
Environmental Conditions

Temperature:	23.7° C
Relative Humidity:	60%
ATM Pressure:	100.0 kPa
Test Engineer:	Gary Qian
Supervised by:	Eden Hu

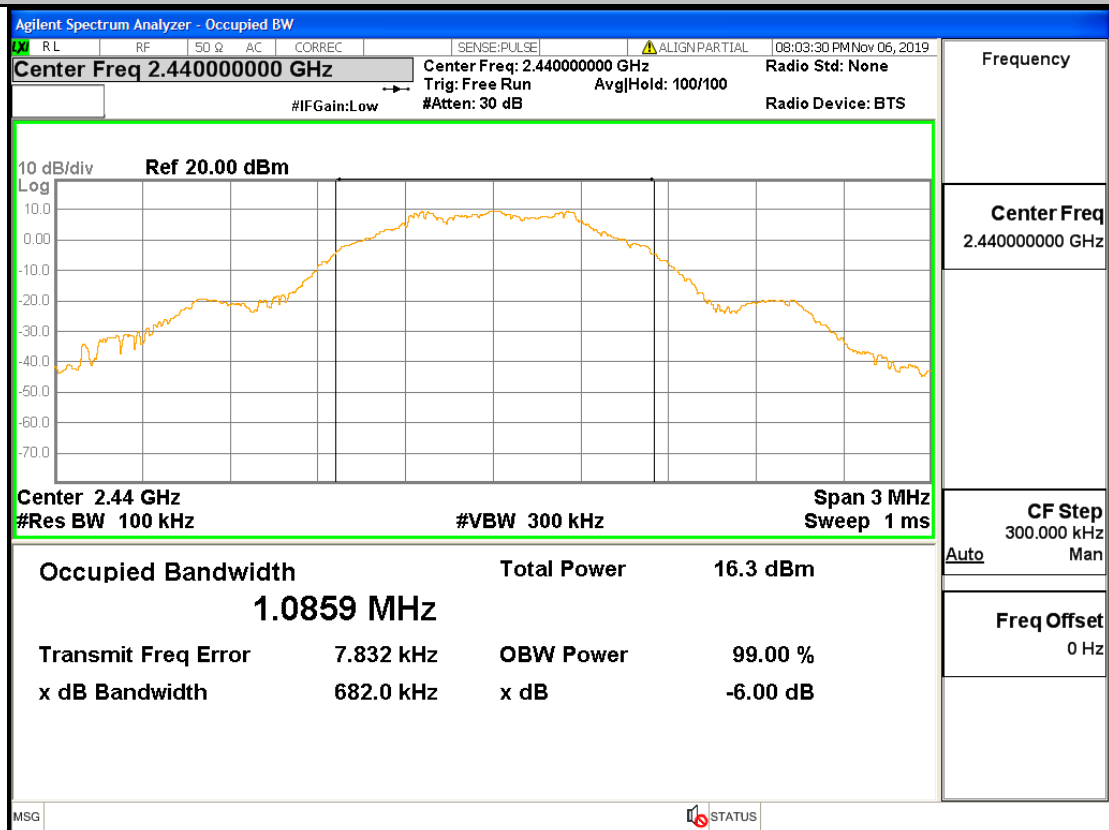
A.1. 6dB Bandwidth

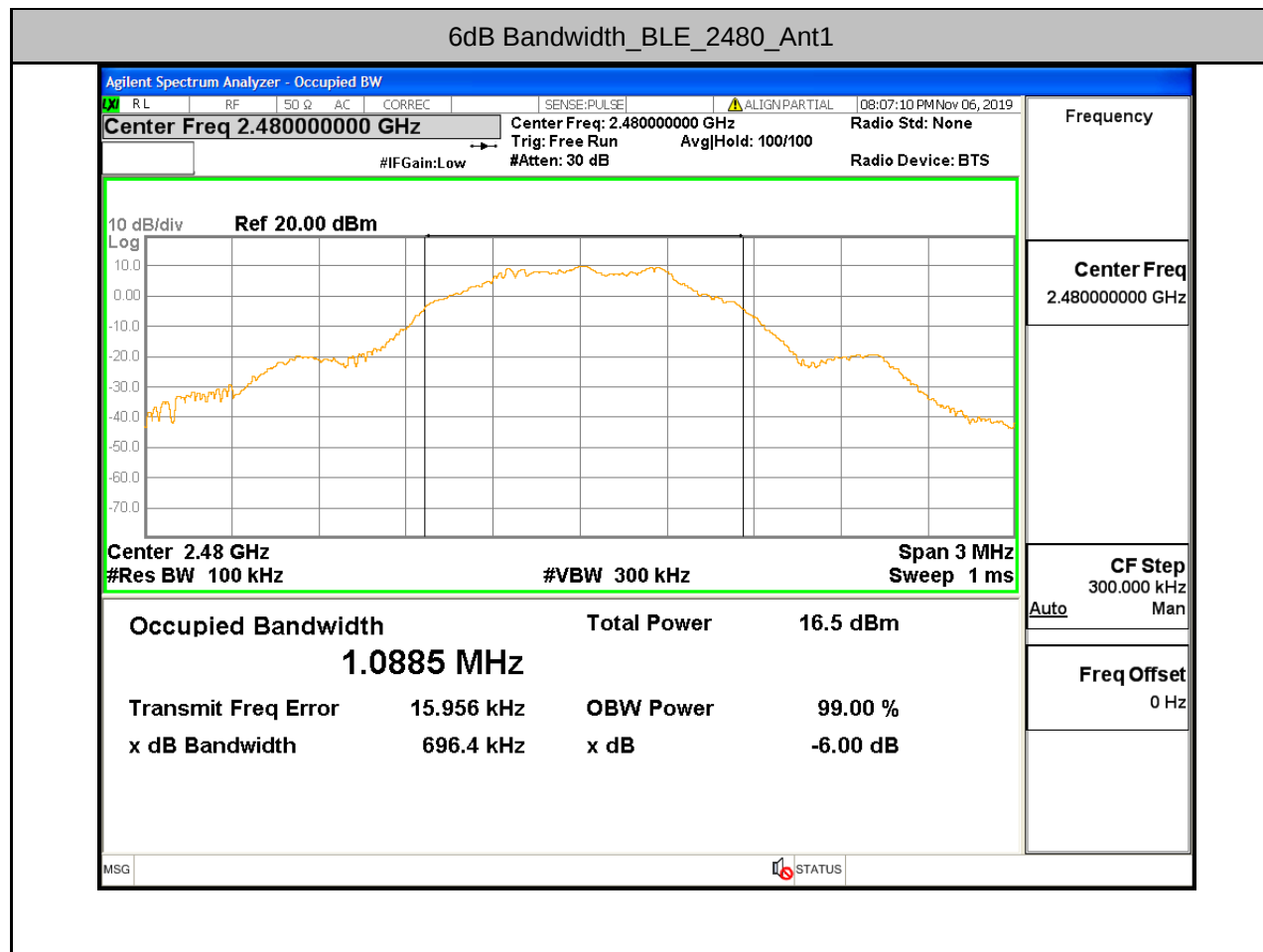
Test Mode	Test	Ant	EBW[MHz]	Limit	Verdict
BLE	2402	Ant1	0.698	0.5	PASS
BLE	2440	Ant1	0.682	0.5	PASS
BLE	2480	Ant1	0.696	0.5	PASS

6dB Bandwidth_BLE_2402_Ant1



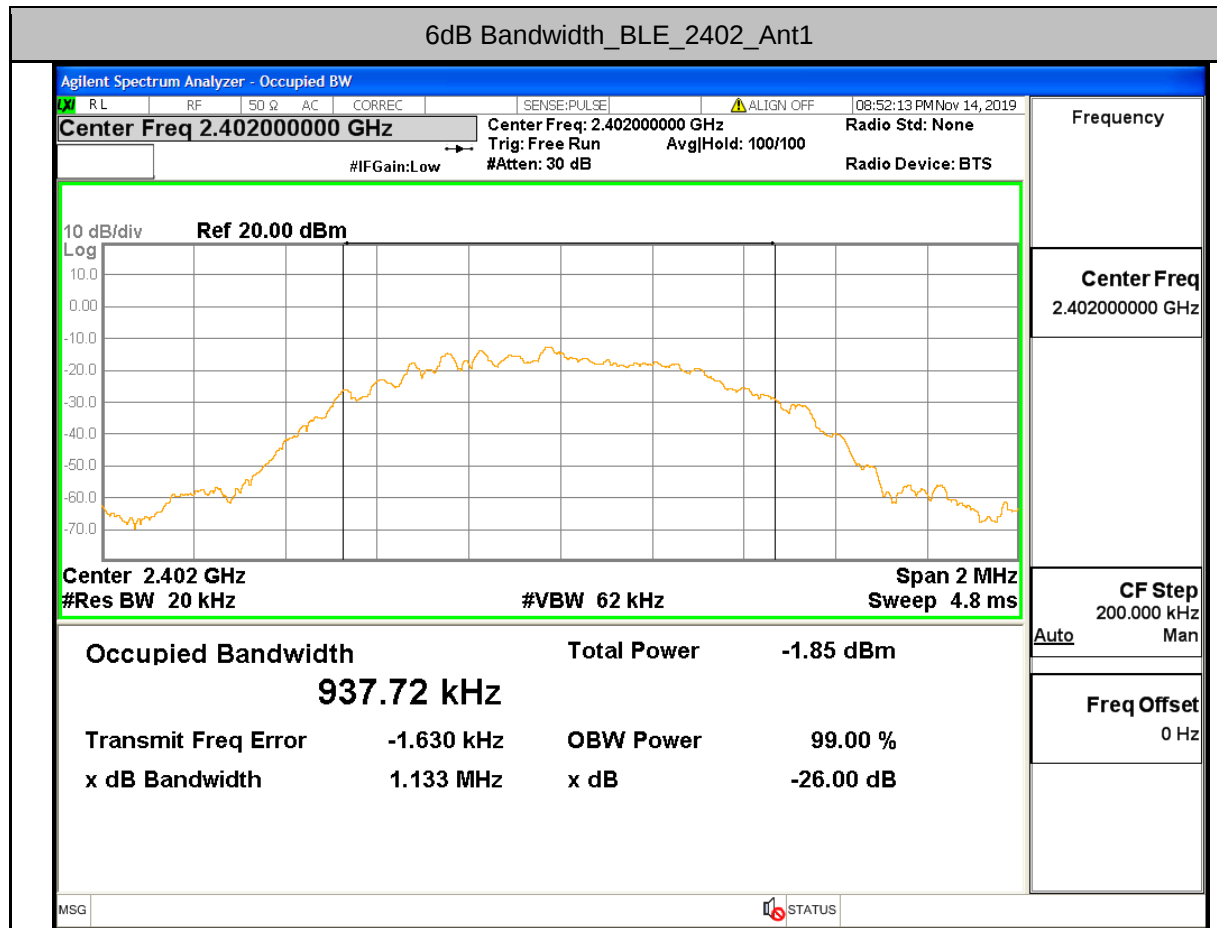
6dB Bandwidth_BLE_2440_Ant1



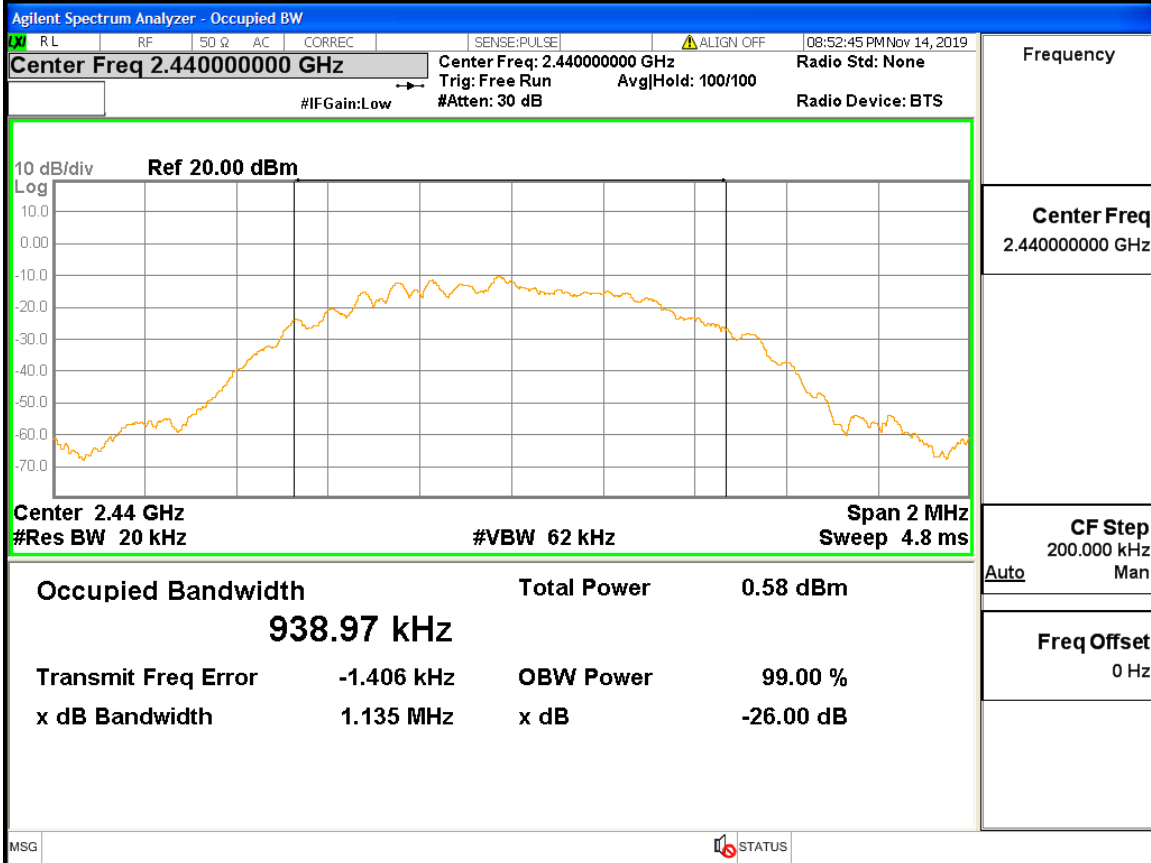


A.2. Occupied Bandwidth

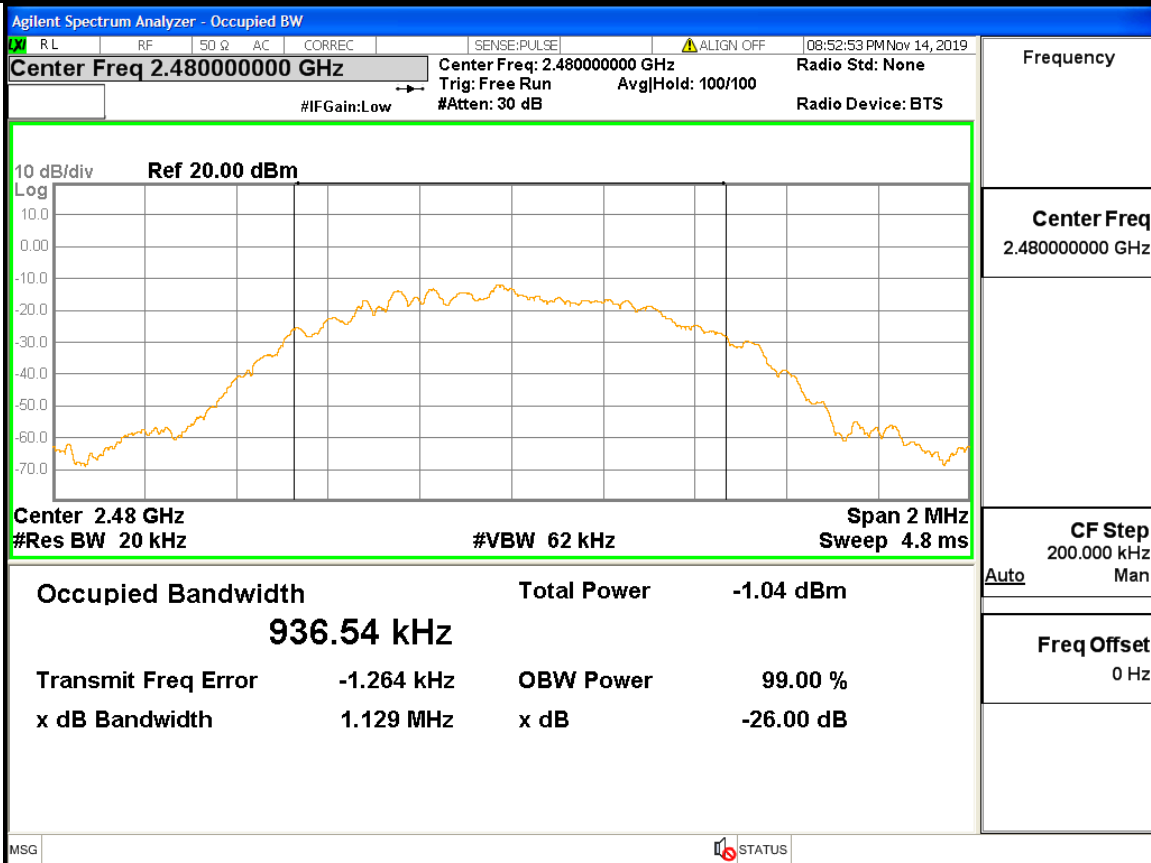
Test Mode	Test Channel	Ant	OBW[MHz]	Limit[MHz]	Verdict
BLE	2402	Ant1	0.938	No limit	PASS
BLE	2440	Ant1	0.939	No limit	PASS
BLE	2480	Ant1	0.936	No limit	PASS



6dB Bandwidth_BLE_2440_Ant1



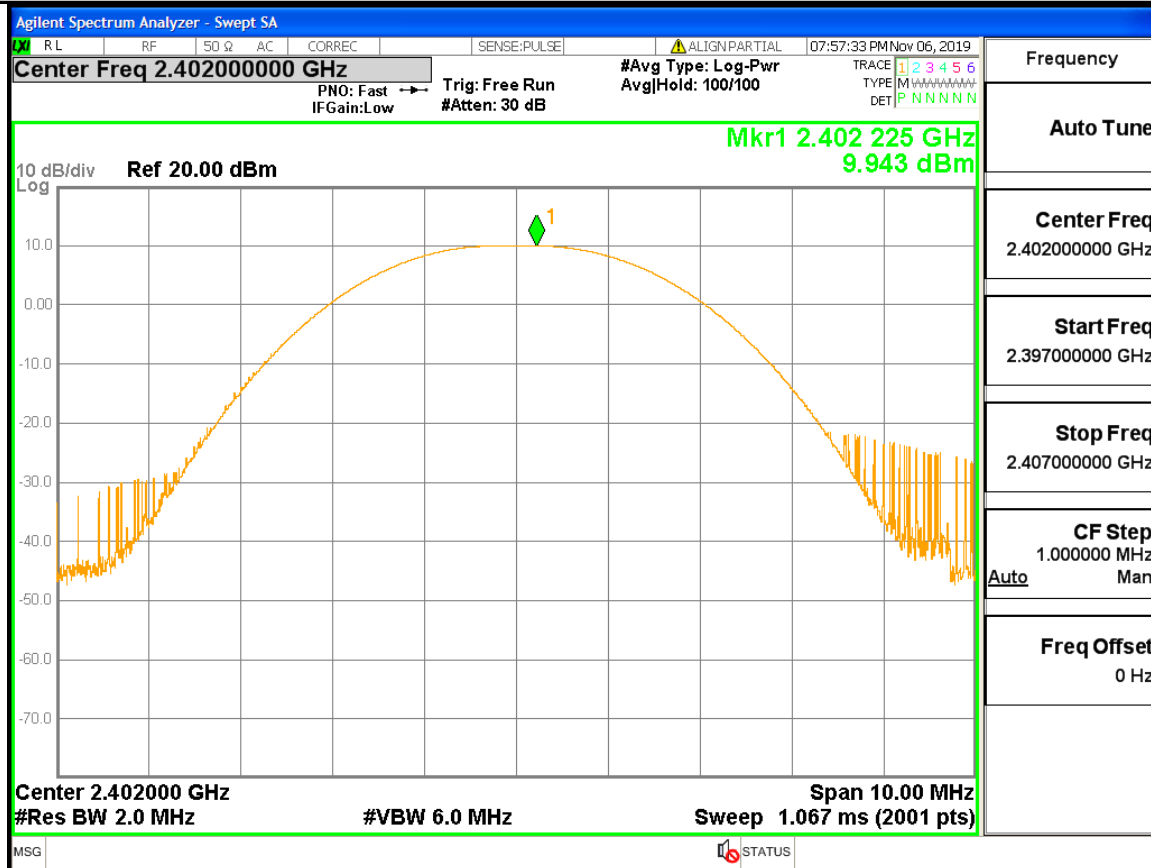
6dB Bandwidth_BLE_2480_Ant1



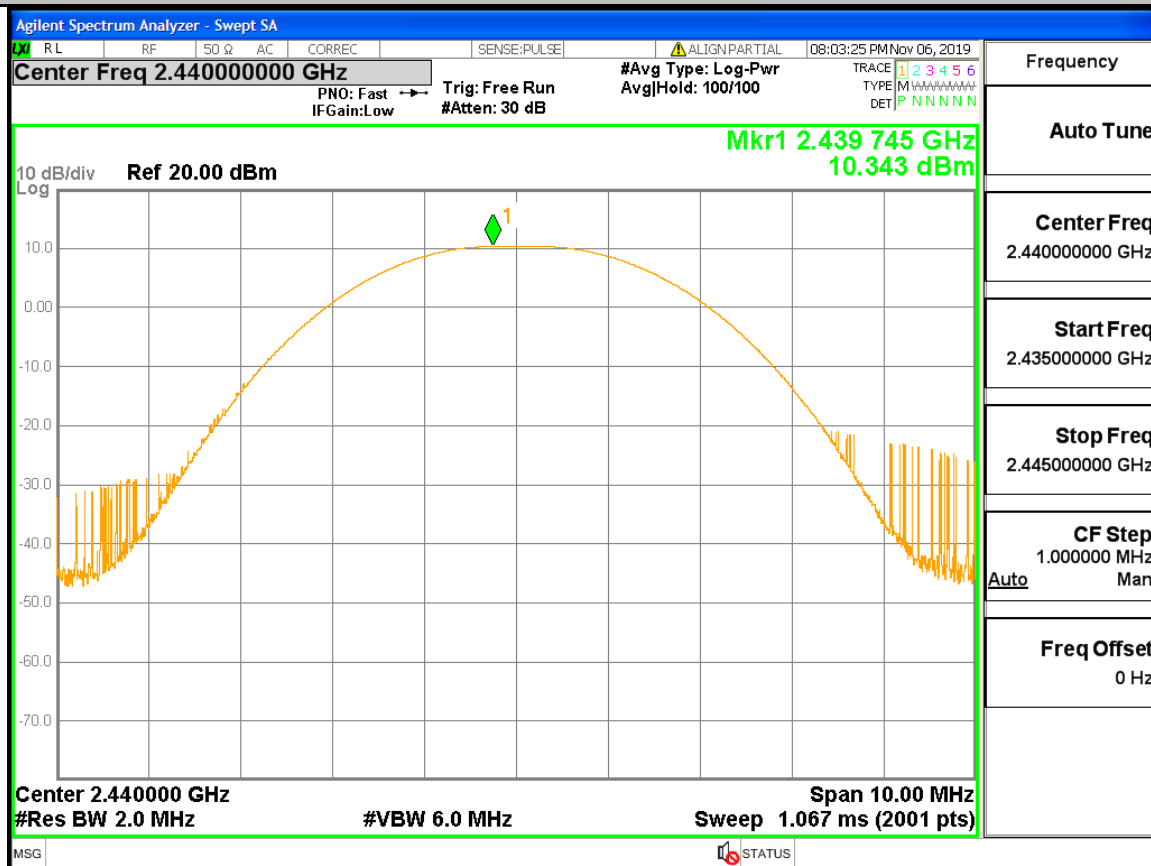
A.3. Maximum peak conducted output power

Test Mode	Test Channel	Ant	Power[dBm]	Limit[dBm]	Verdict
BLE	2402	Ant1	9.943	30	PASS
BLE	2440	Ant1	10.343	30	PASS
BLE	2480	Ant1	10.473	30	PASS

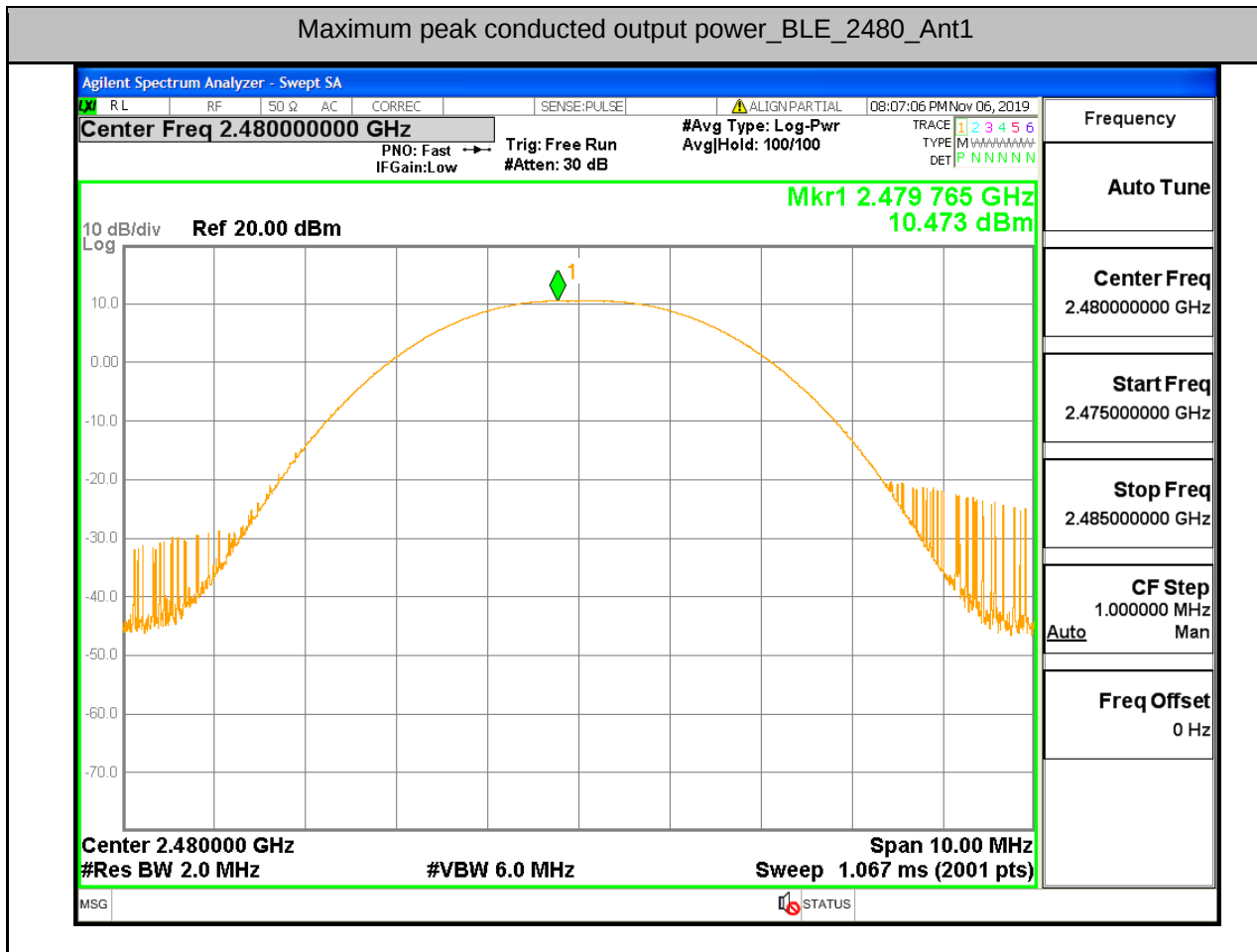
Maximum peak conducted output power_BLE_2402_Ant1



Maximum peak conducted output power_BLE_2440_Ant1



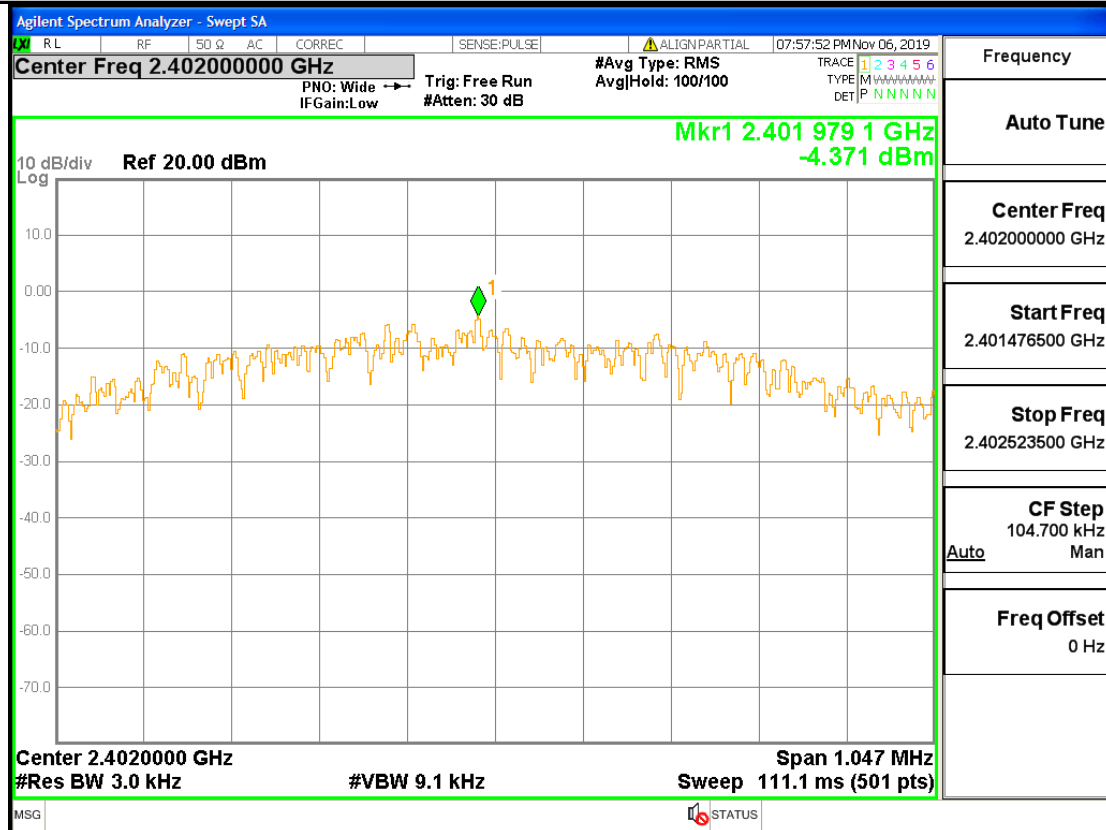
Maximum peak conducted output power_BLE_2480_Ant1



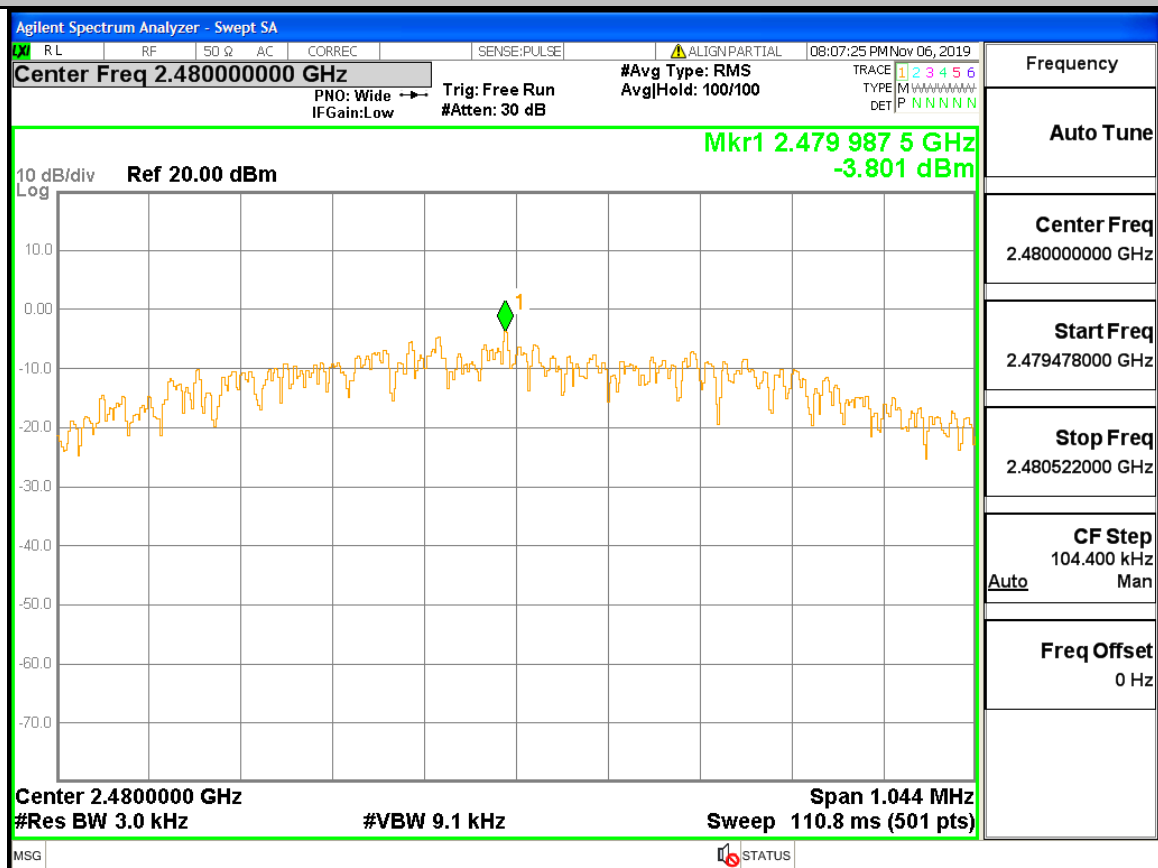
A.4. Maximum Peak power spectral density

Test Mode	Test Channel	Ant	PSD[dBm/3KHz]	Limit[dBm/3KHz]	Verdict
BLE	2402	Ant1	-4.371	8.00	PASS
BLE	2440	Ant1	-3.999	8.00	PASS
BLE	2480	Ant1	-3.801	8.00	PASS

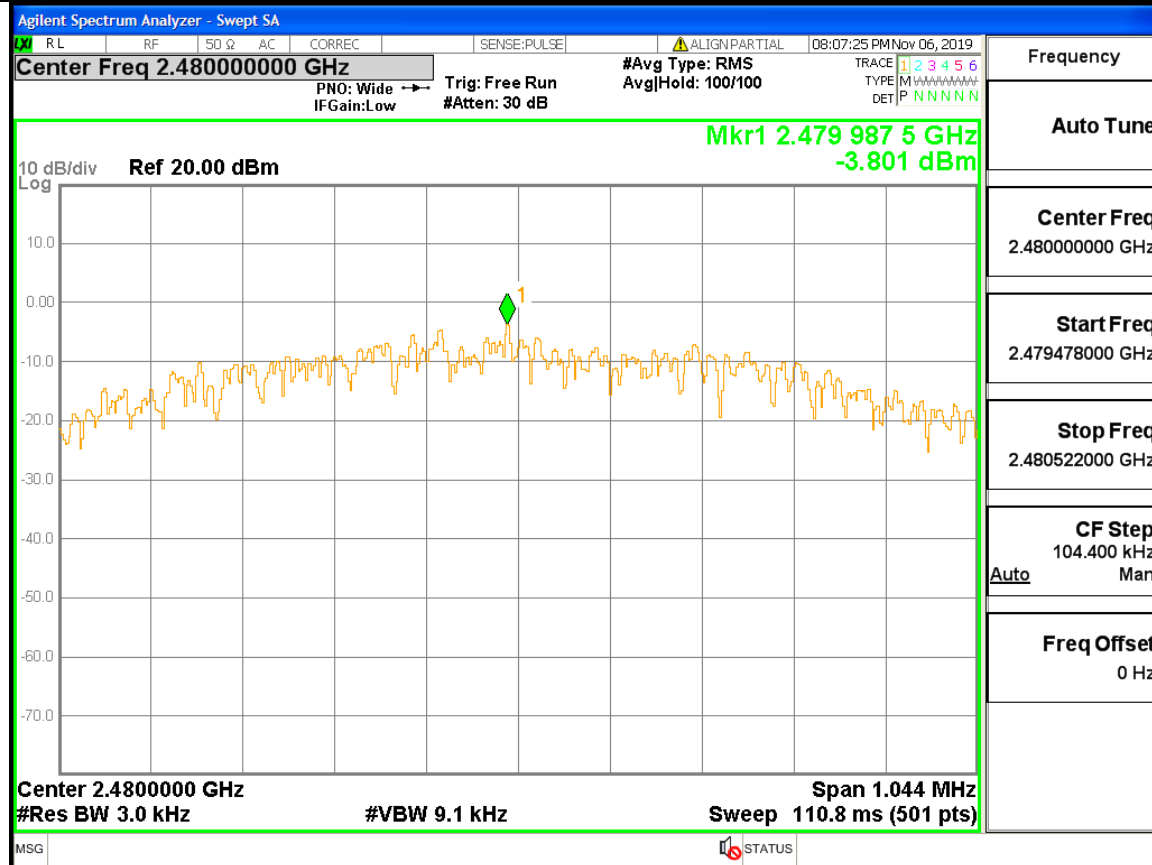
Maximum Peak power spectral density_BLE_2402_Ant1



Maximum Peak power spectral density_BLE_2440_Ant1



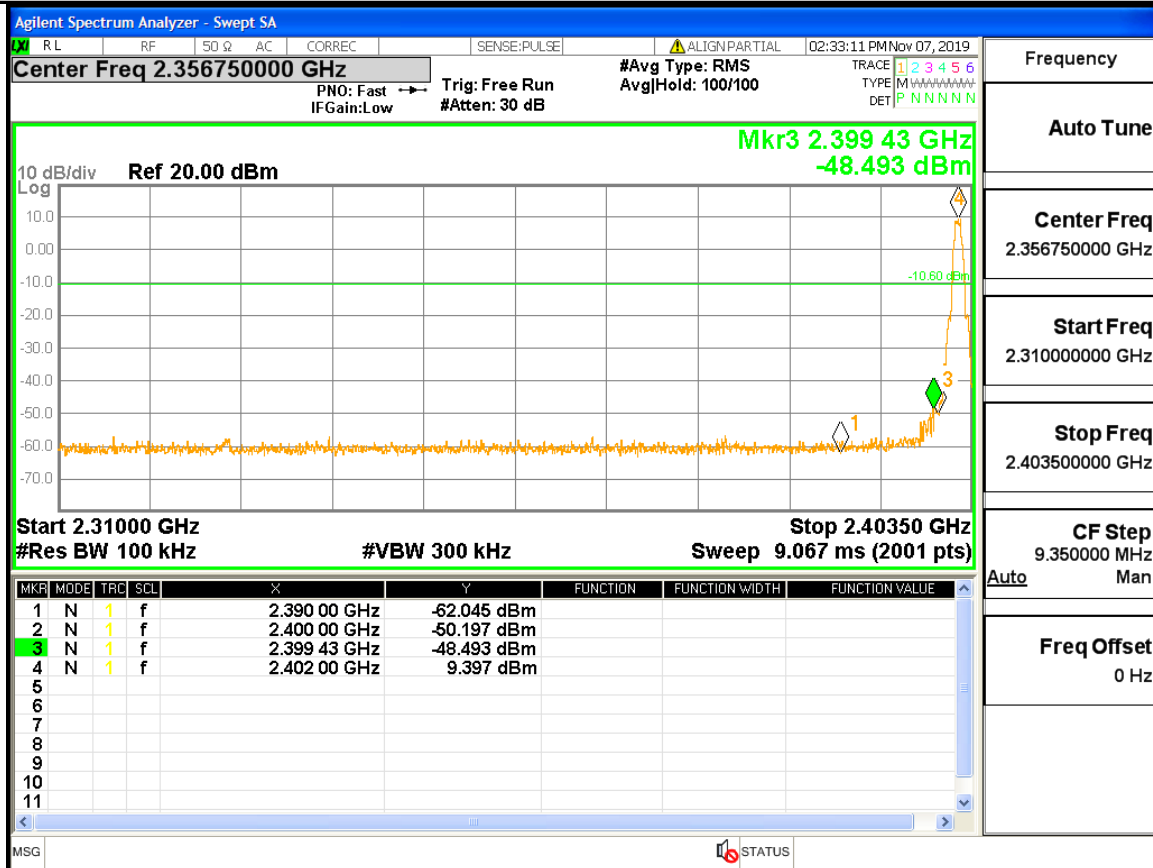
Maximum Peak power spectral density_BLE_2480_Ant1



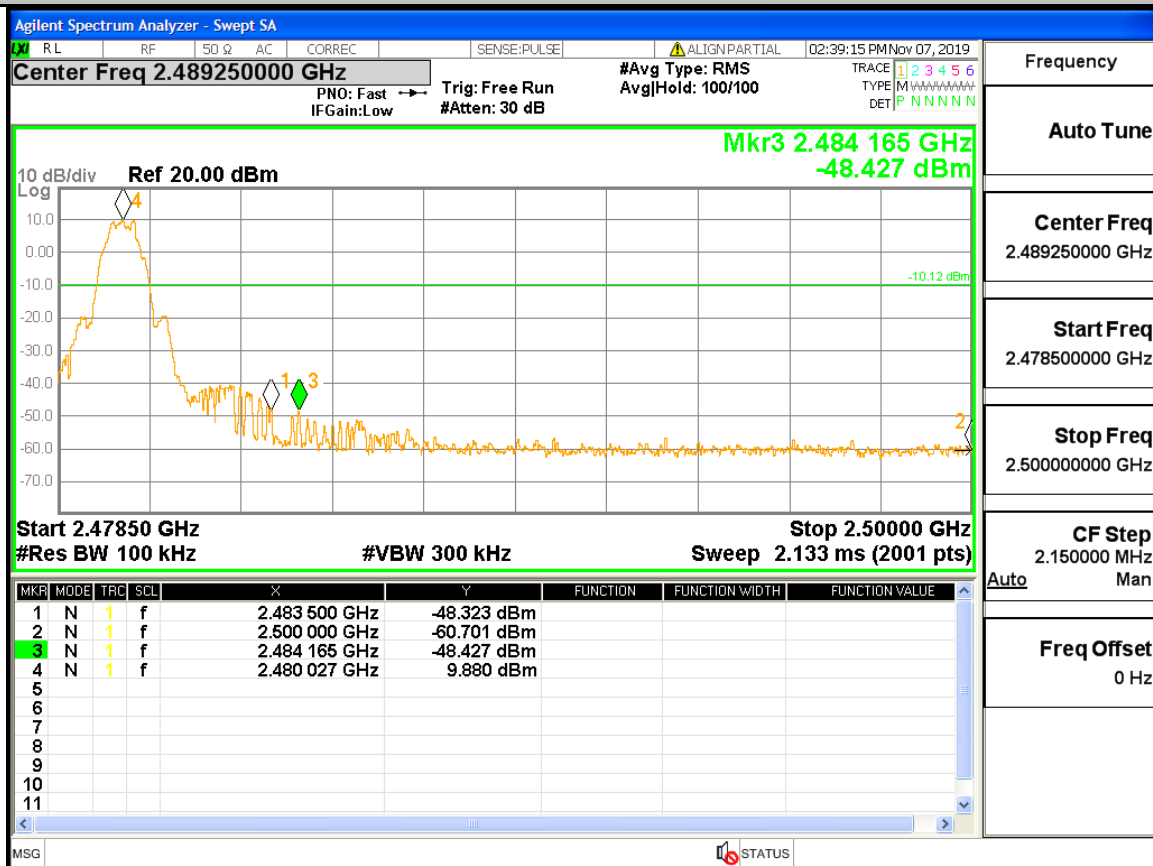
A.5. Band-edge for RF Conducted Emissions

Type	Carrier Frequency(MHz)	Frequency(MHz)	Carrier Frequency Power [dBm]	Bandedge Peak(dBm)	Upper limit(dBm)	Conclusion
BLE	2402	2399.433	9.397	-48.493	-10.603	Pass
BLE	2480	2483.5	9.880	-48.323	-10.12	Pass

Band-edge for RF Conducted Emissions_BLE_2402_Ant1

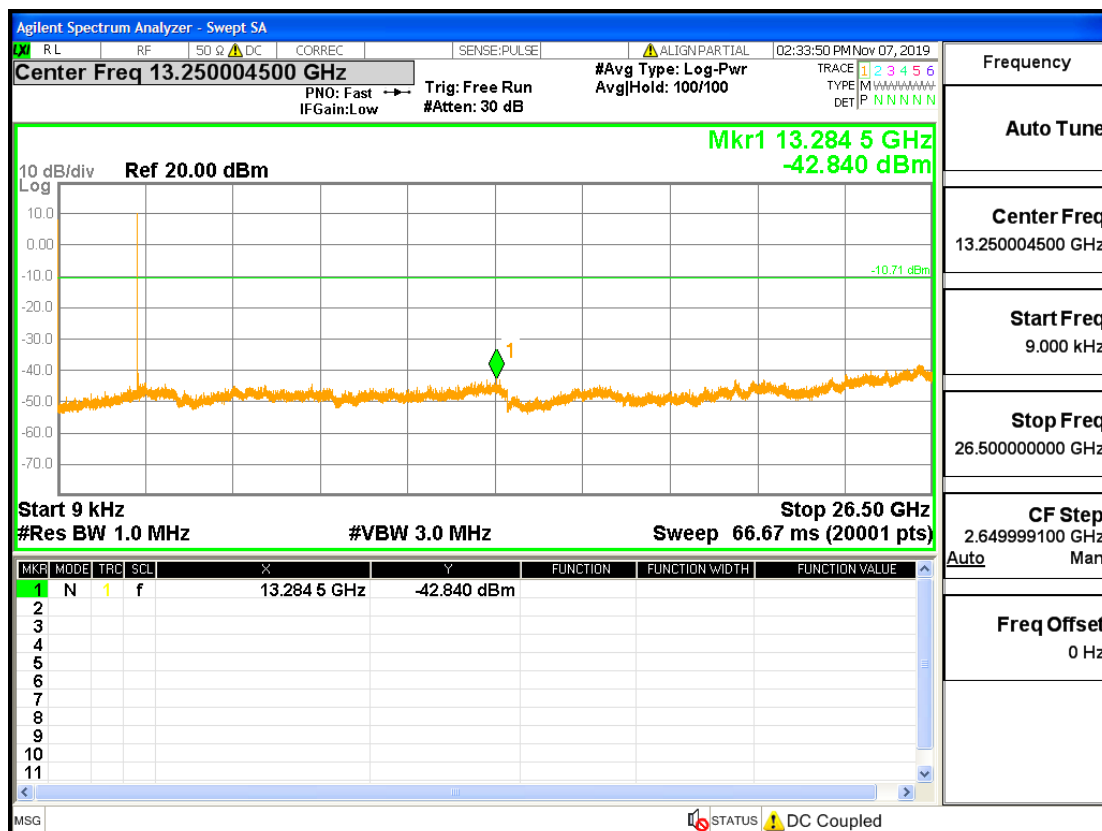
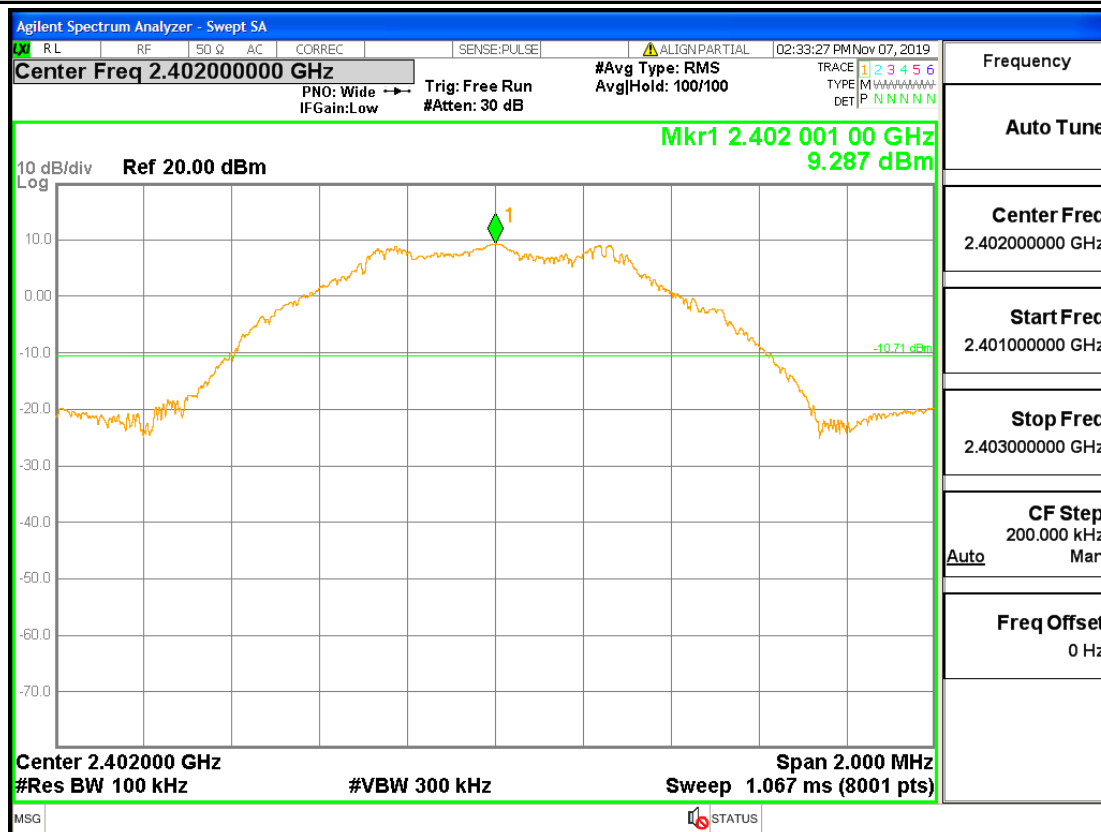


Band-edge for RF Conducted Emissions_BLE_2480_Ant1

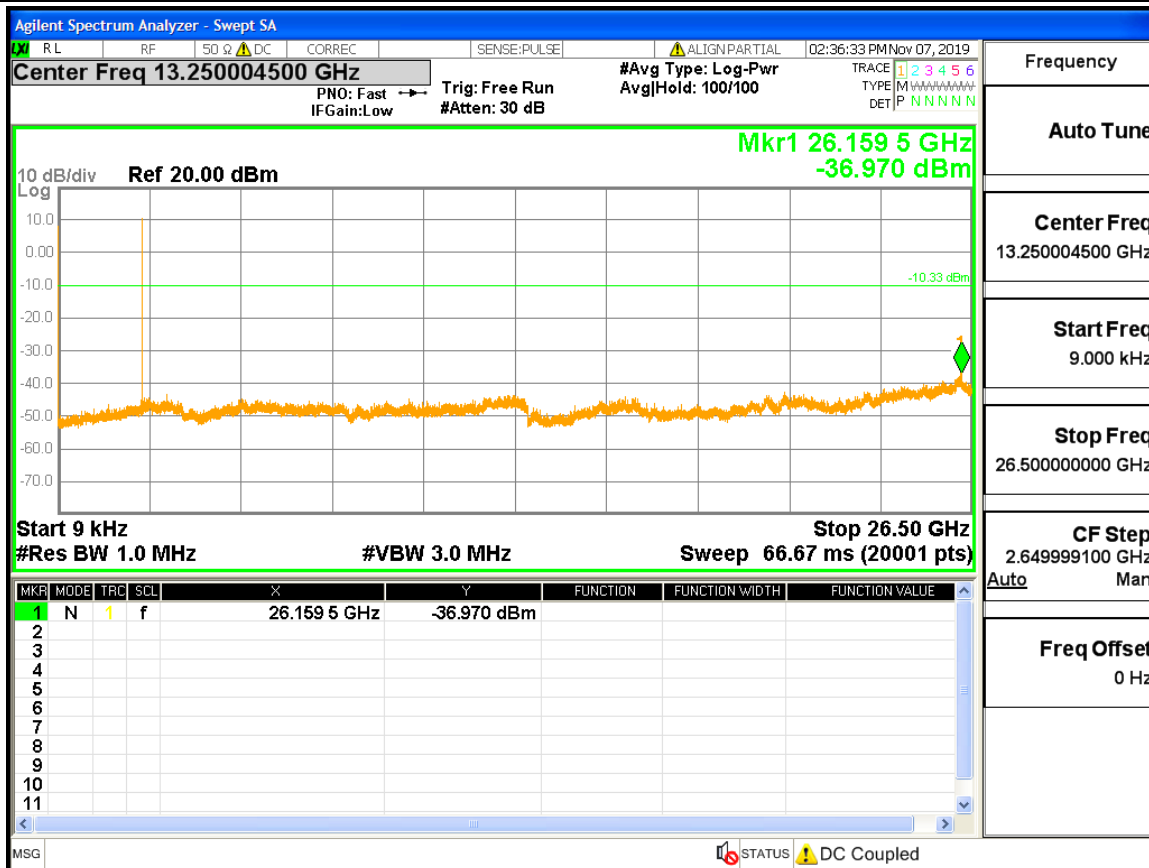
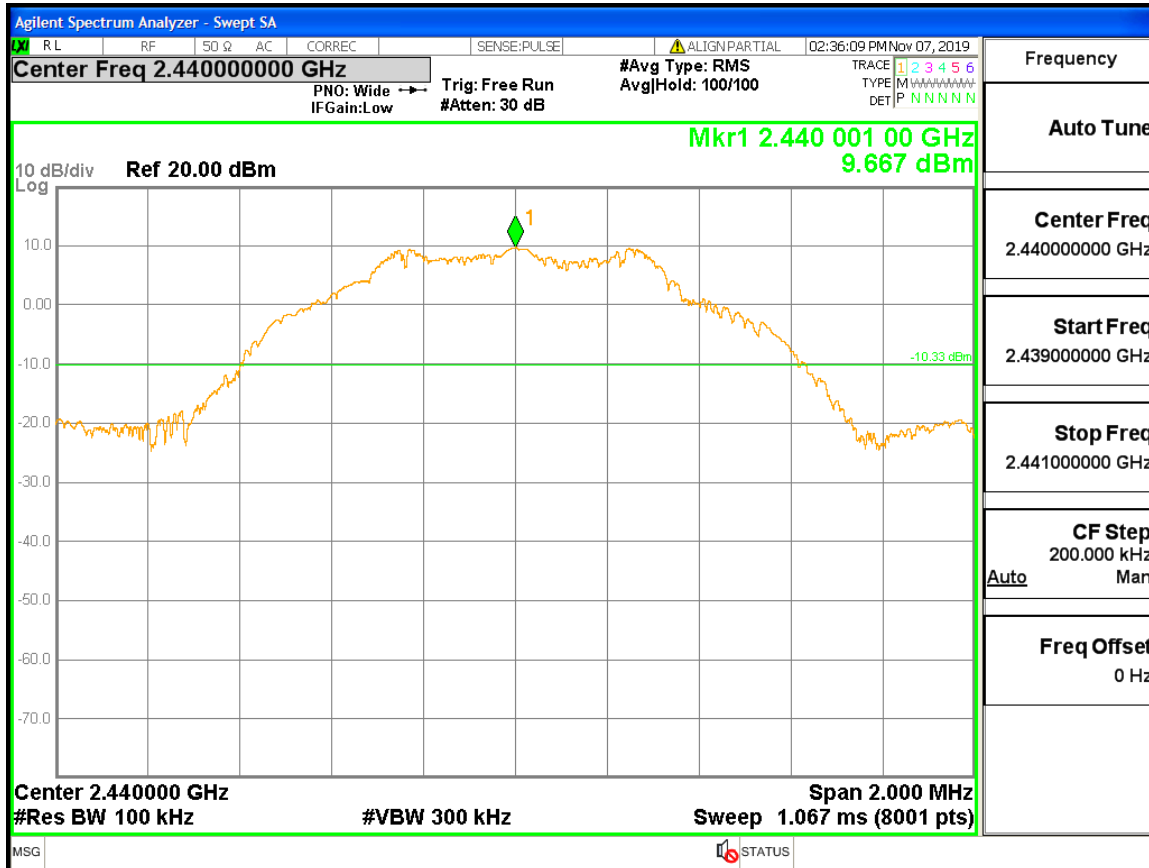


A.6.RF Conducted Spurious Emissions

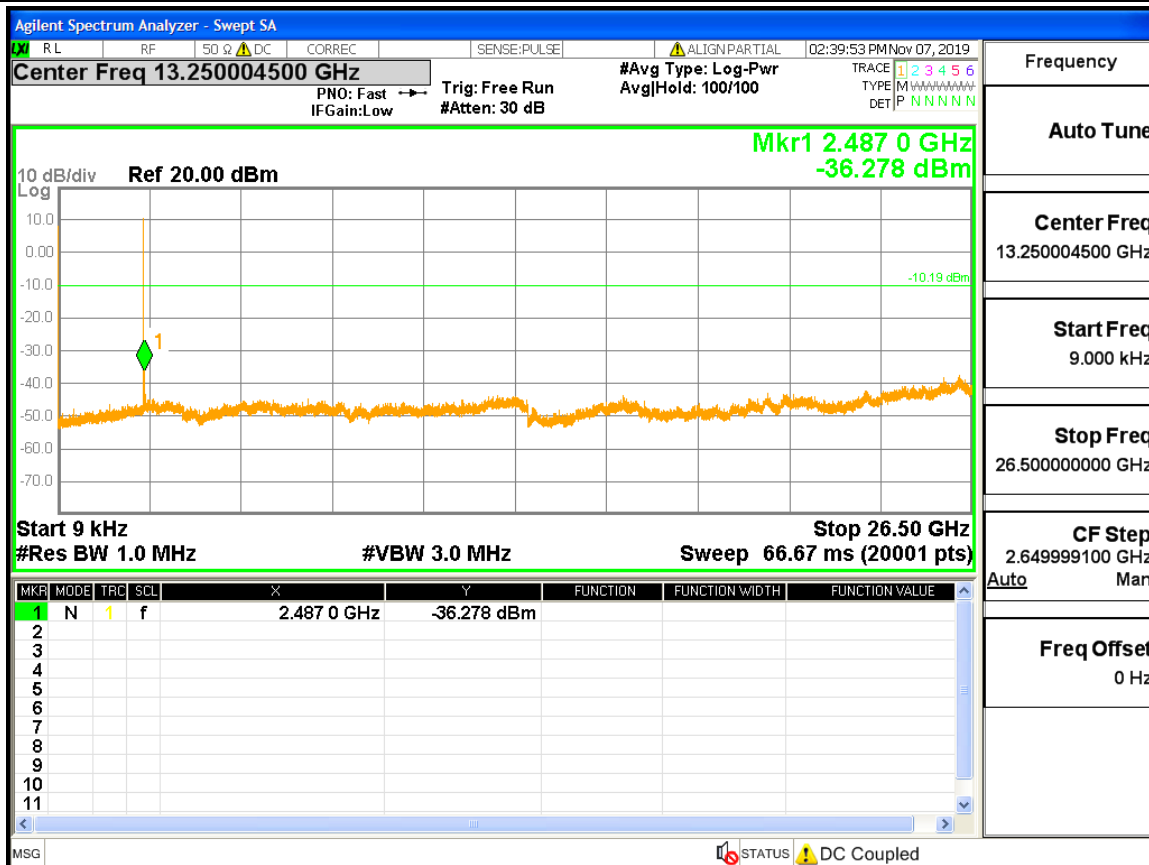
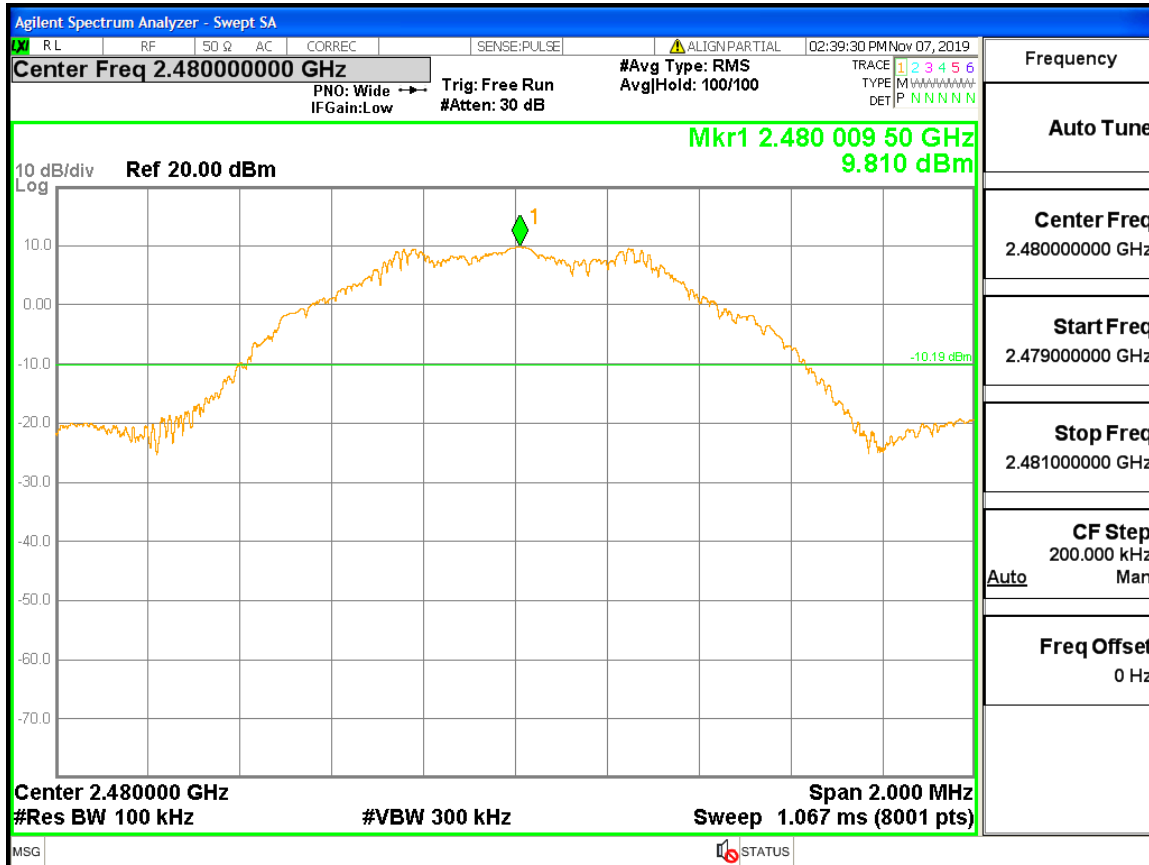
RF Conducted Spurious Emissions_BLE_2402_Ant1



RF Conducted Spurious Emissions_BLE_2440_Ant1



RF Conducted Spurious Emissions_BLE_2480_Ant1

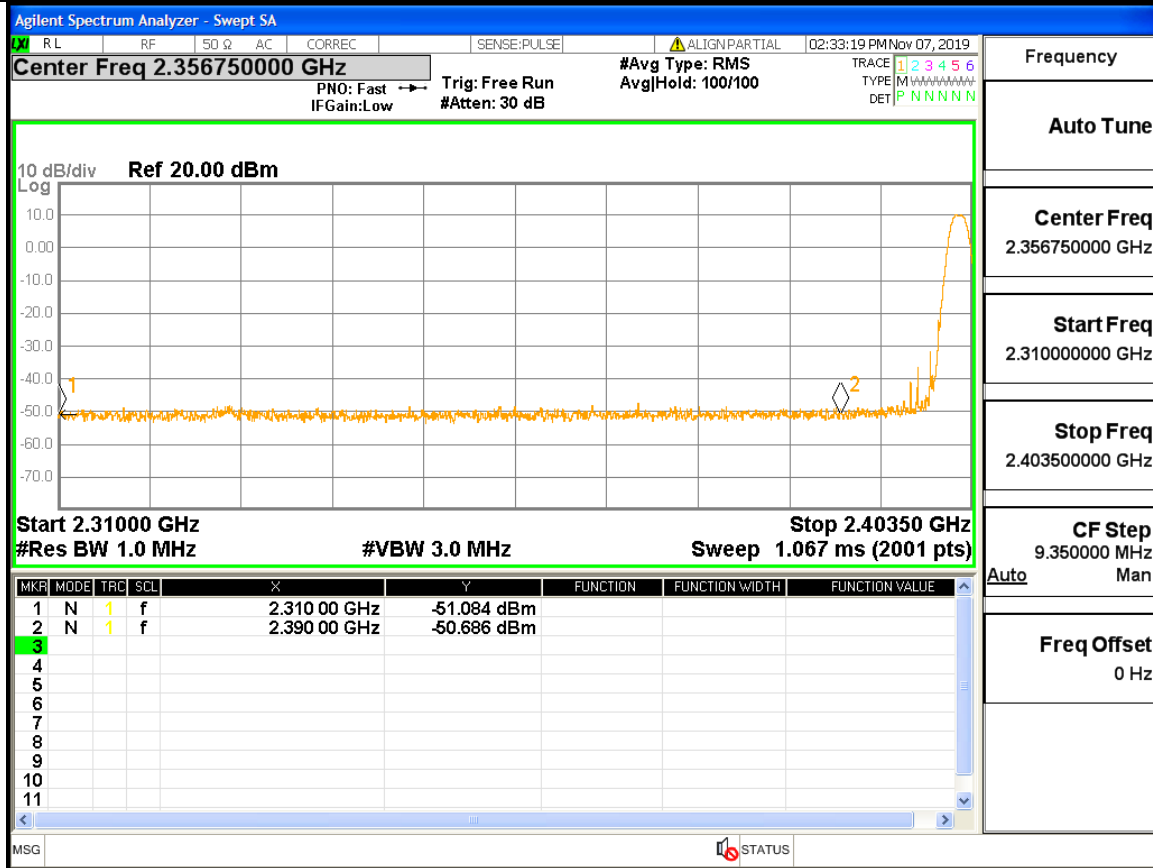


A.7. Restrict-band band-edge measurements

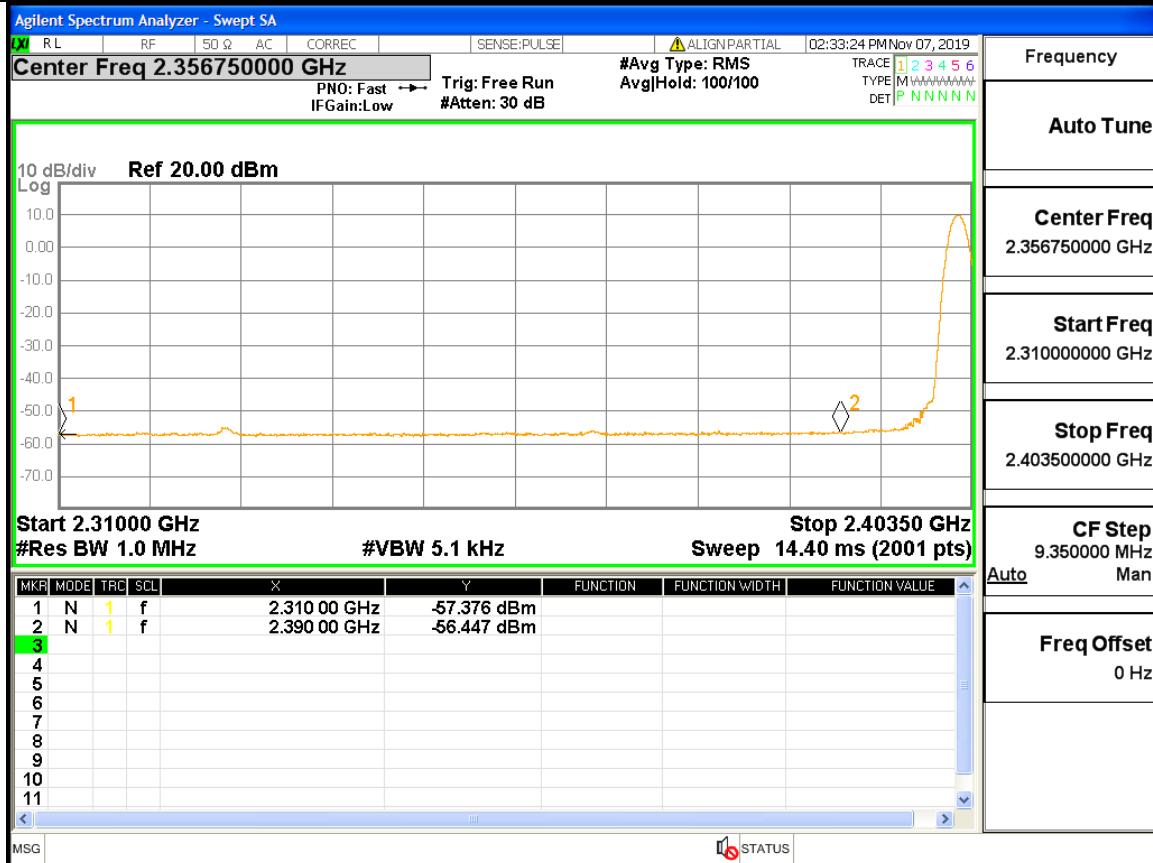
Type	Carrier Frequency (MHz)	Frequency(MHz)	Gain	Ground Factor	Peak Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
BLE	2402	2390	2.5	0.0	-50.69	47.01	74	Pass
BLE	2480	2483.585	2.5	0.0	-27.007	70.693	74	Pass

Type	Carrier Frequency (MHz)	Frequency(MHz)	Gain	Ground Factor	Average Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
BLE	2402	2390	2.5	0.0	-56.45	41.25	54	Pass
BLE	2480	2483.585	2.5	0.0	-43.84	53.86	54	Pass

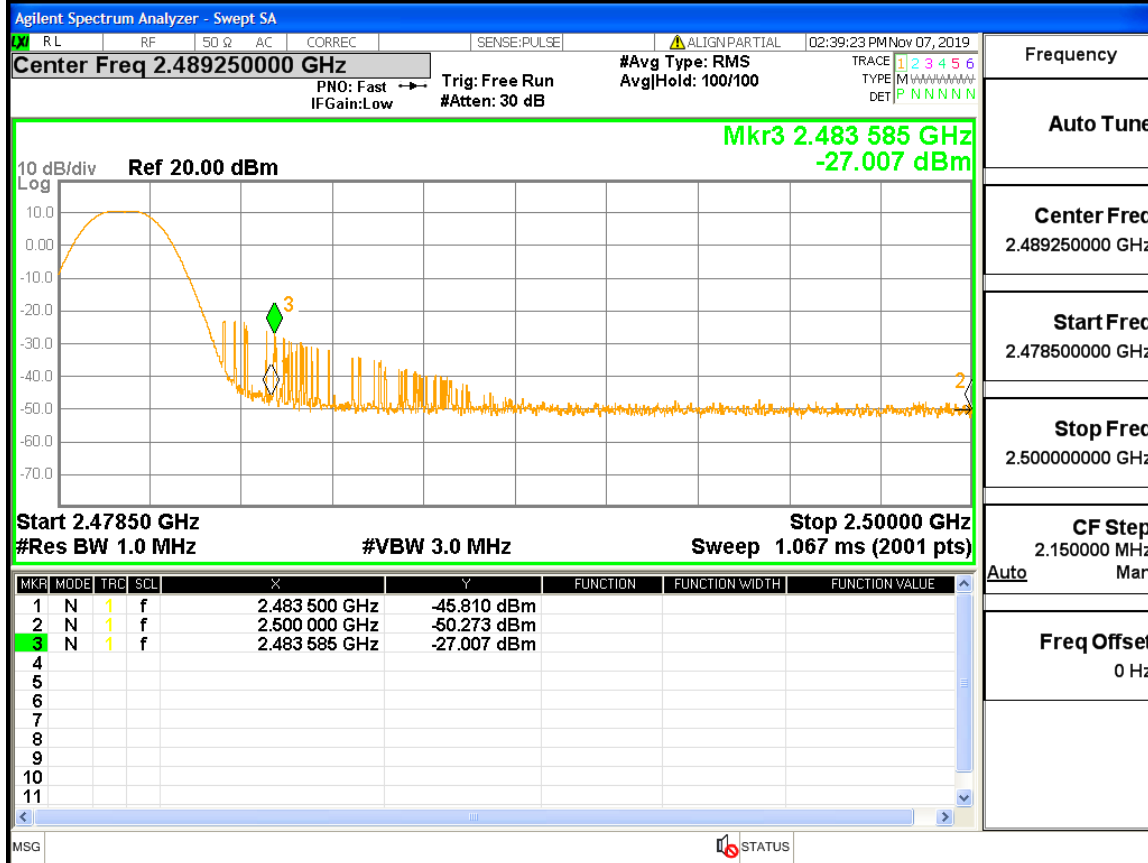
Restrict-band band-edge measurements_BLE_2402_Ant1_PEAK



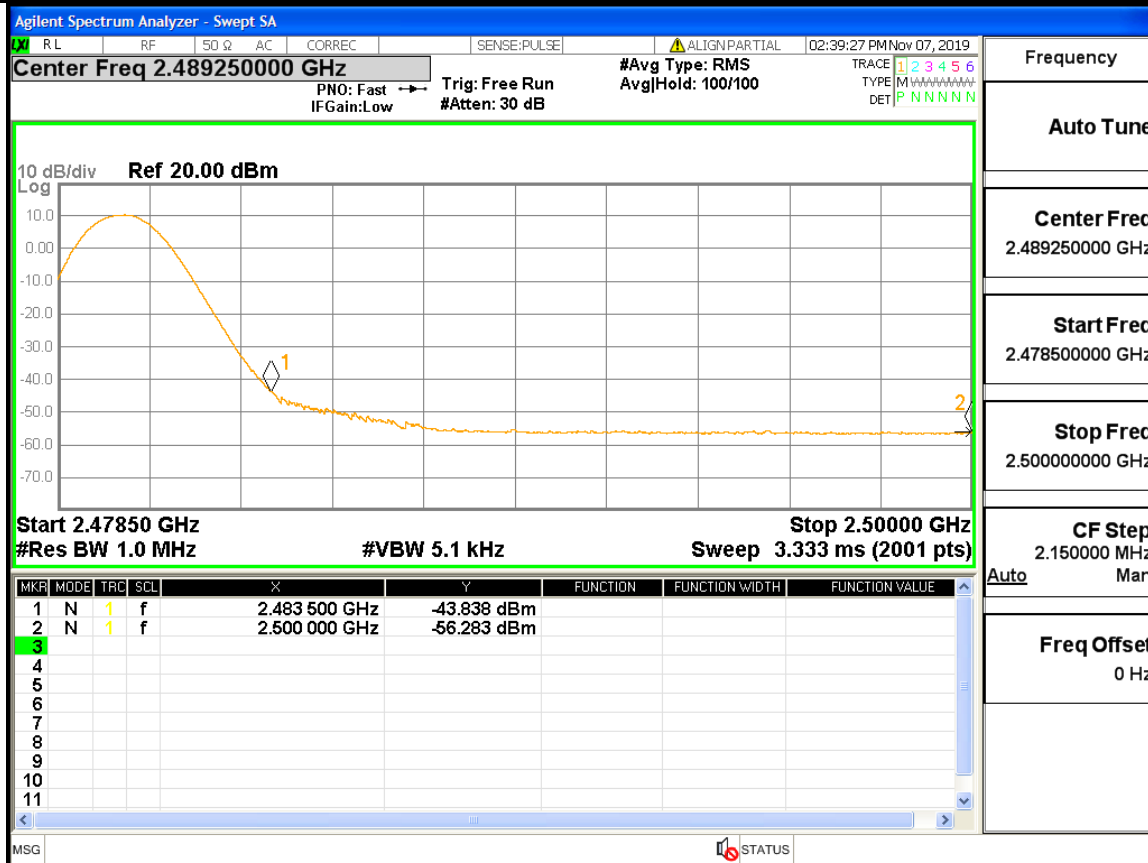
Restrict-band band-edge measurements_BLE_2402_Ant1_AV



Restrict-band band-edge measurements_BLE_2480_Ant1_PEAK



Restrict-band band-edge measurements_BLE_2480_Ant1_AV



A.8. Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
BLE	2440	Ant1	64.43	PASS

