

Appendix A

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

Product Name: JoneR Translator

Trade Mark: JoneR

Test Model: PH01

FCC ID: 2ARVJ-PH01

Environmental Conditions

Temperature:	22.9° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Gary Qian
Supervised by:	Eden Hu

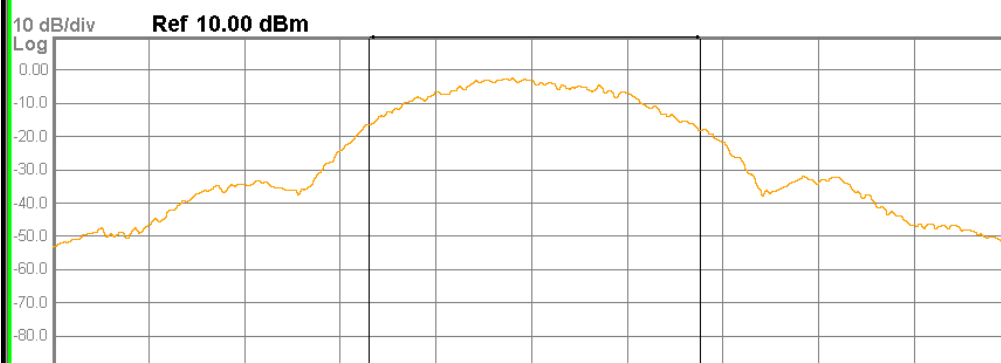
1.6dB Bandwidth

Test Mode	Test Channel	Ant	EBW[MHz]	Limit	Verdict
BLE	2402	Ant1	0.691	0.5	PASS
BLE	2440	Ant1	0.699	0.5	PASS
BLE	2480	Ant1	0.717	0.5	PASS

6dB Bandwidth_BLE_2402_Ant1

Agilent Spectrum Analyzer - Occupied BW

Center Freq 2.402000000 GHz
Trig: Free Run Avg|Hold: 100/100
#IFGain:Low #Atten: 30 dB
Radio Std: None
Radio Device: BTS



Center 2.402 GHz Span 3 MHz
#Res BW 100 kHz #VBW 300 kHz Sweep 1 ms

Occupied Bandwidth **1.0383 MHz** Total Power **3.68 dBm**

Transmit Freq Error 9.224 kHz OBW Power 99.00 %
x dB Bandwidth 690.9 kHz x dB -6.00 dB

Frequency

Center Freq
2.402000000 GHzCF Step
300.000 kHz
Auto ManFreq Offset
0 Hz

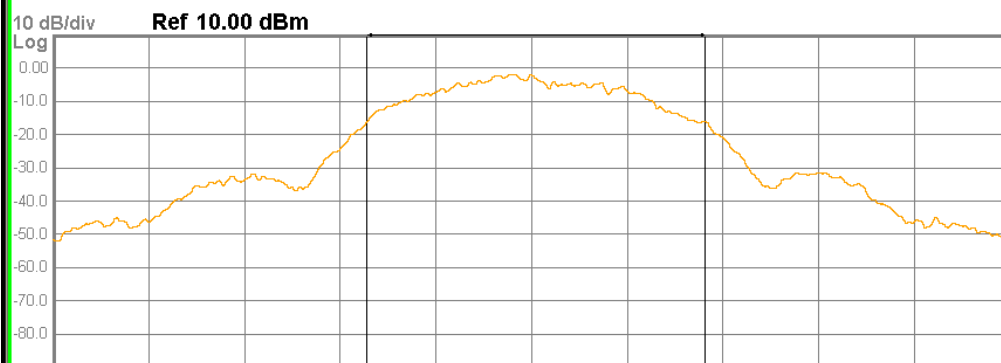
MSG

STATUS

6dB Bandwidth_BLE_2440_Ant1

Agilent Spectrum Analyzer - Occupied BW

Center Freq 2.440000000 GHz
Trig: Free Run Avg|Hold: 100/100
#IFGain:Low #Atten: 30 dB
Radio Std: None
Radio Device: BTS



Center 2.44 GHz Span 3 MHz
#Res BW 100 kHz #VBW 300 kHz Sweep 1 ms

Occupied Bandwidth **1.0549 MHz** Total Power **3.93 dBm**

Transmit Freq Error 14.845 kHz OBW Power 99.00 %
x dB Bandwidth 699.0 kHz x dB -6.00 dB

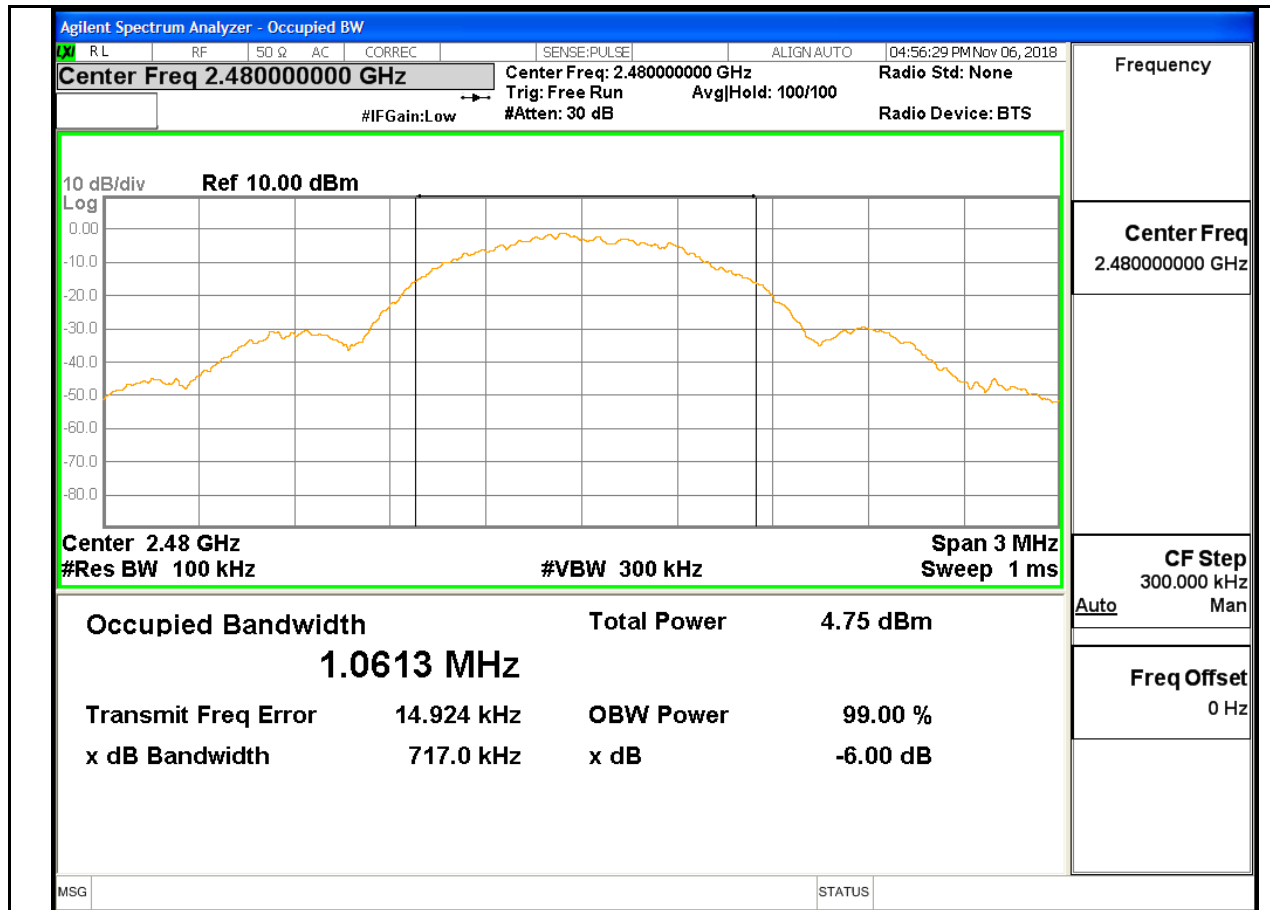
Frequency

Center Freq
2.440000000 GHzCF Step
300.000 kHz
Auto ManFreq Offset
0 Hz

MSG

STATUS

6dB Bandwidth_BLE_2480_Ant1



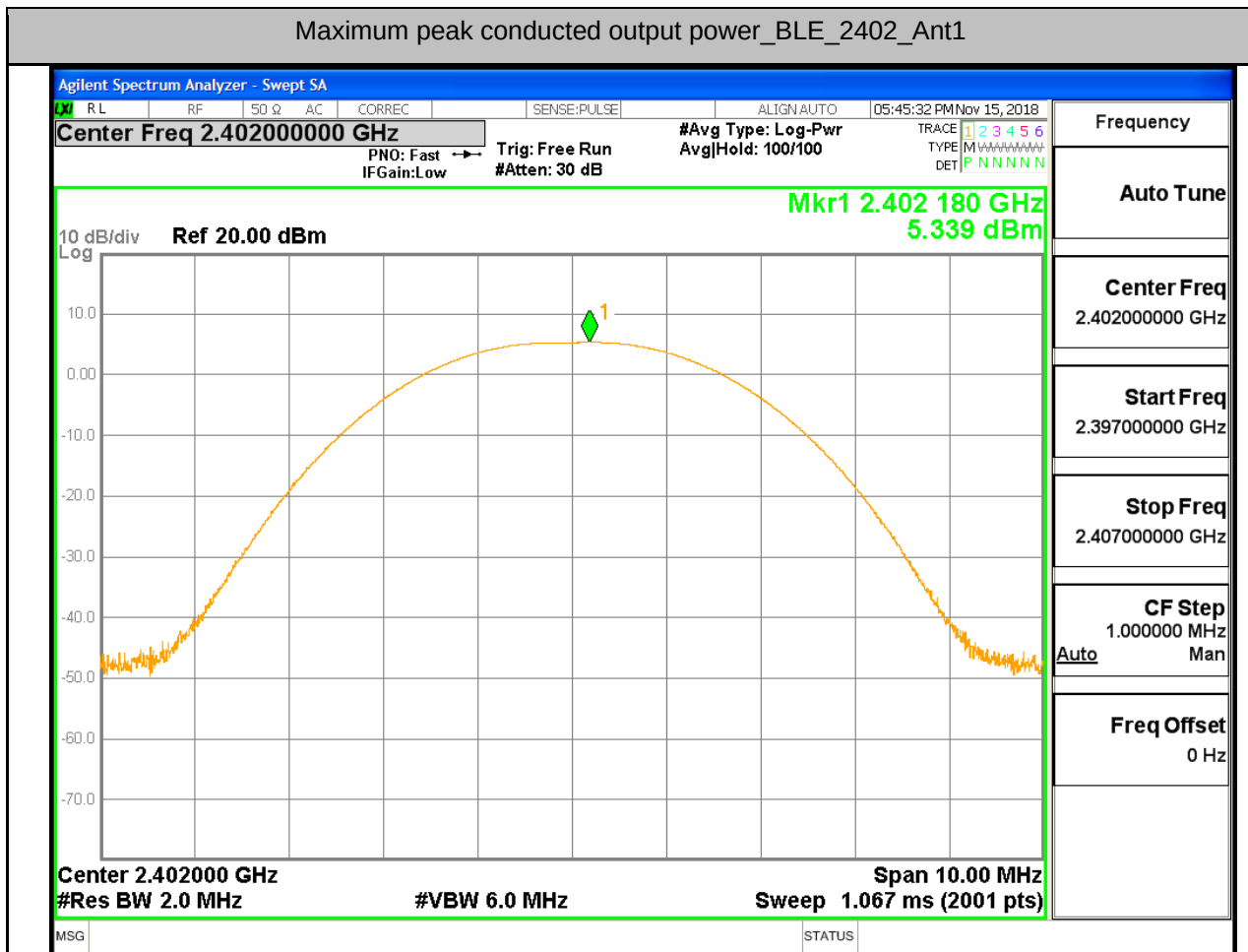
2.Occupied Bandwidth

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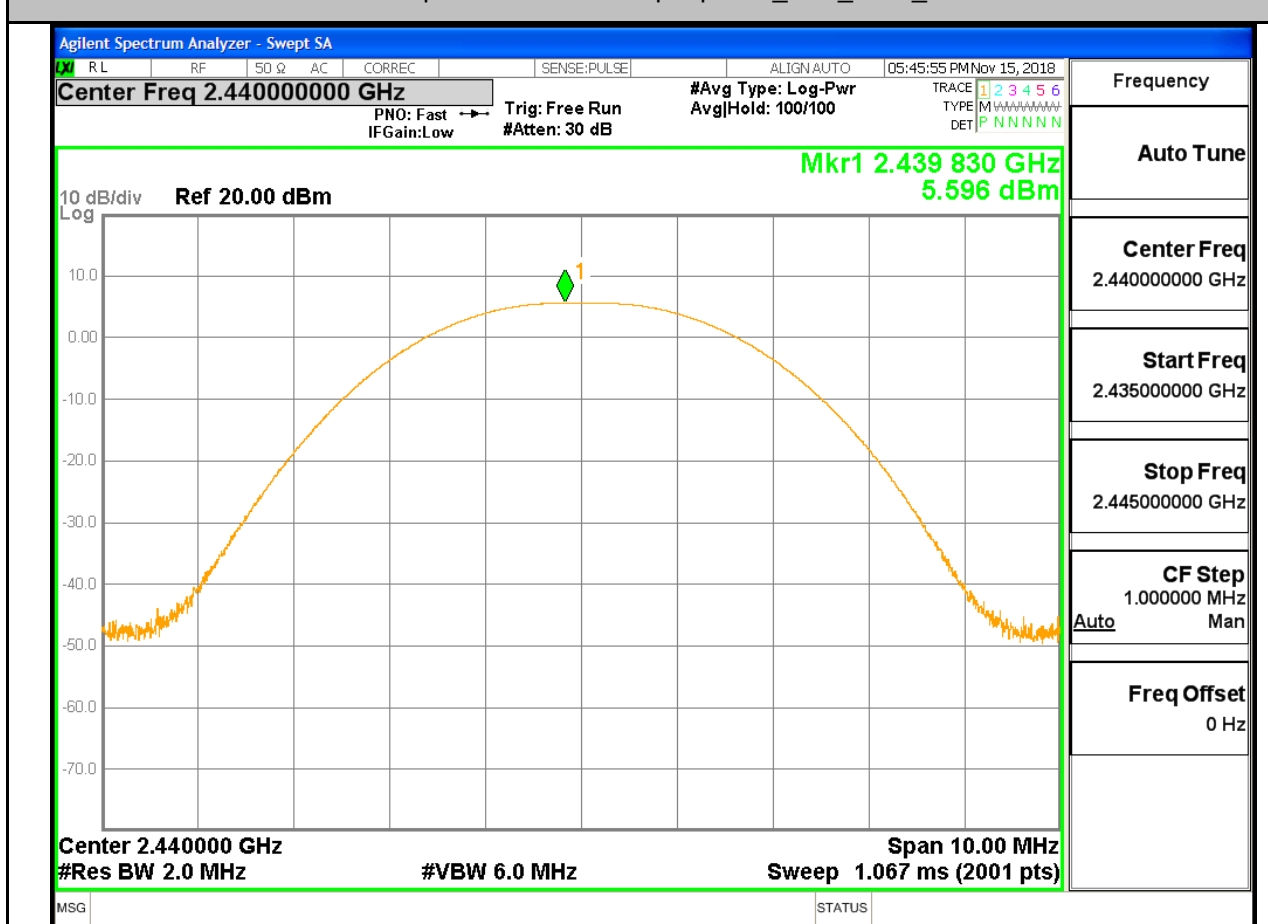
3.Maximum peak conducted output power

Test Mode	Test Channel	Ant	Power[dBm]	Limit[dBm]	Verdict
BLE	2402	Ant1	5.339	30	PASS
BLE	2440	Ant1	5.596	30	PASS
BLE	2480	Ant1	6.994	30	PASS

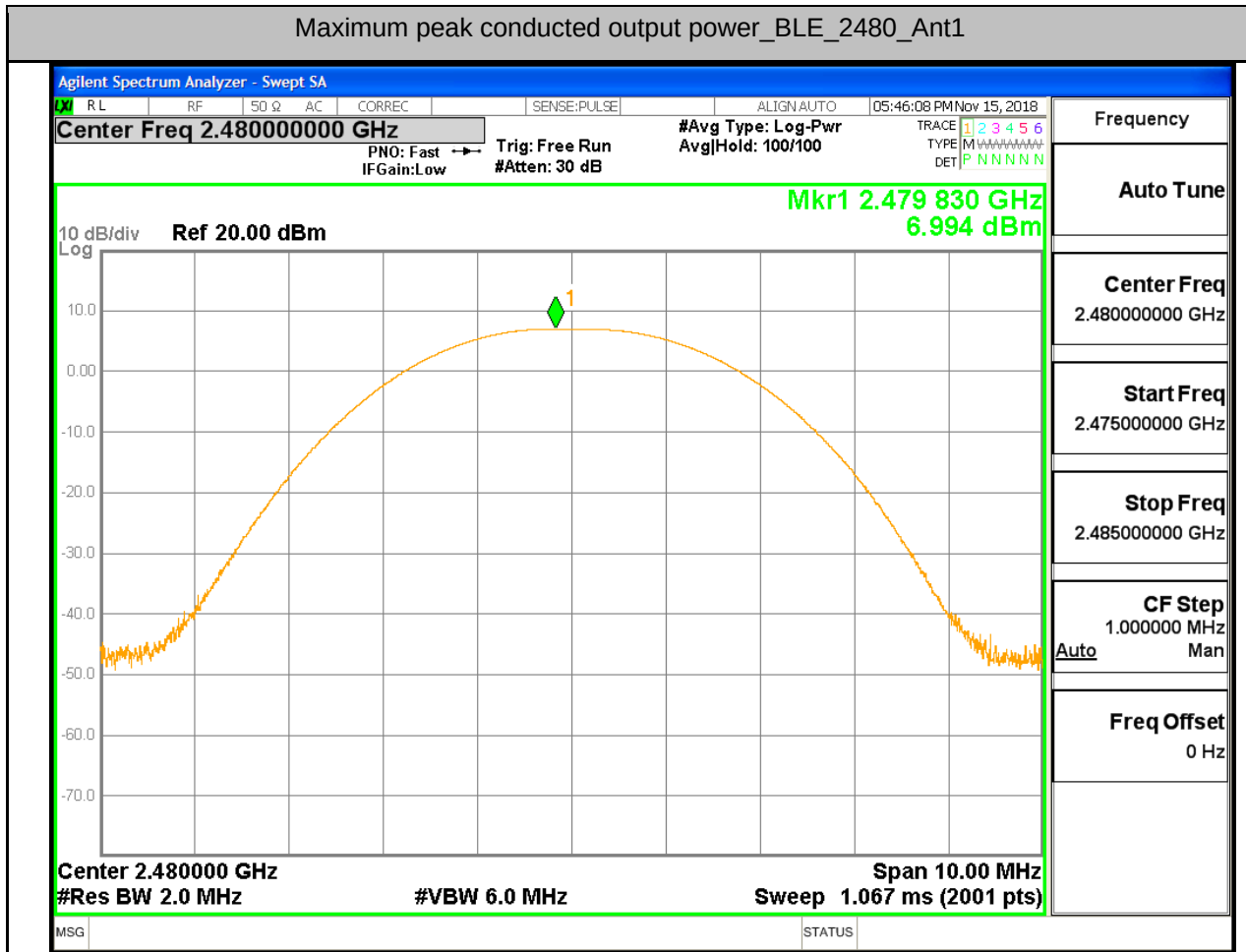
Maximum peak conducted output power_BLE_2402_Ant1



Maximum peak conducted output power_BLE_2440_Ant1



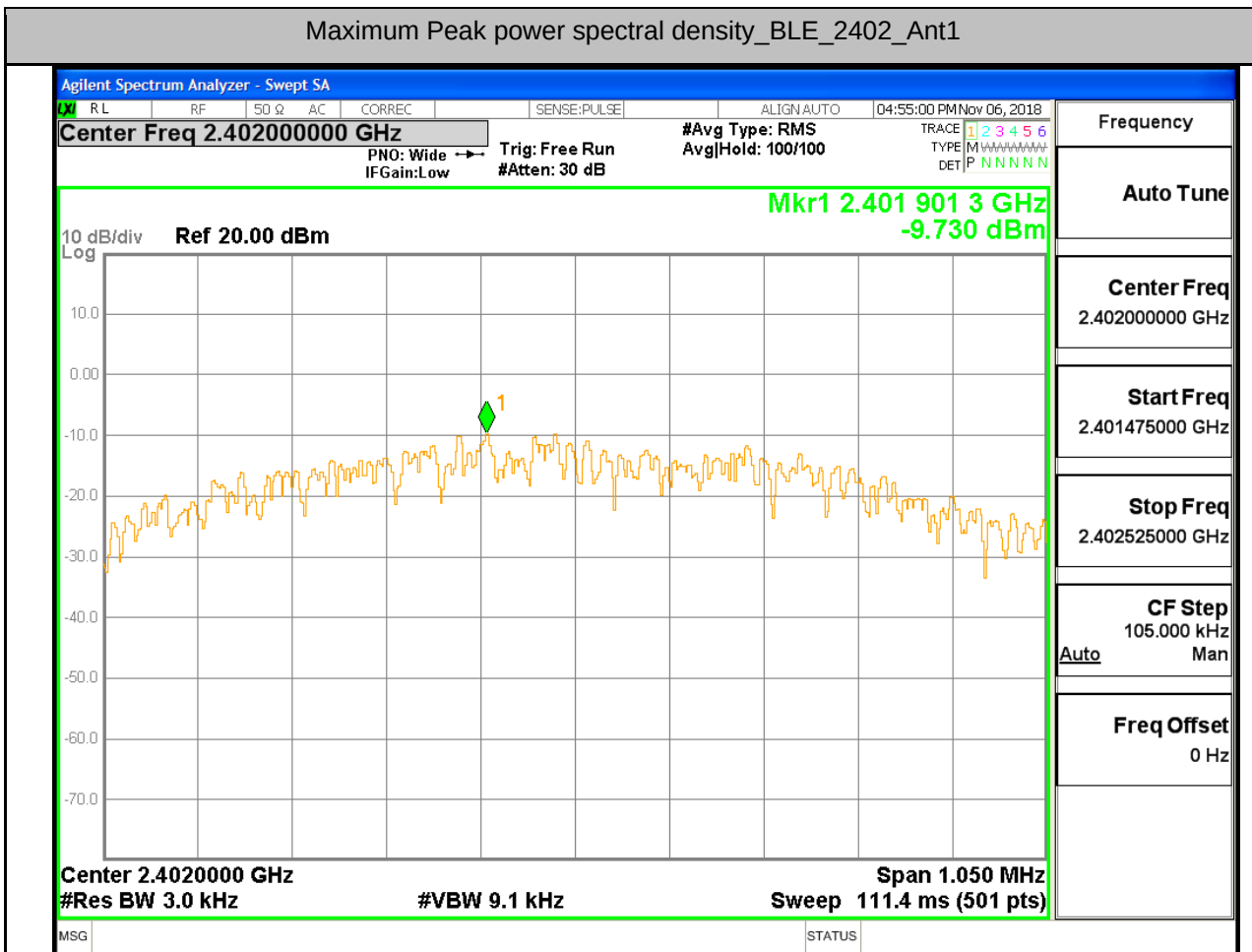
Maximum peak conducted output power_BLE_2480_Ant1



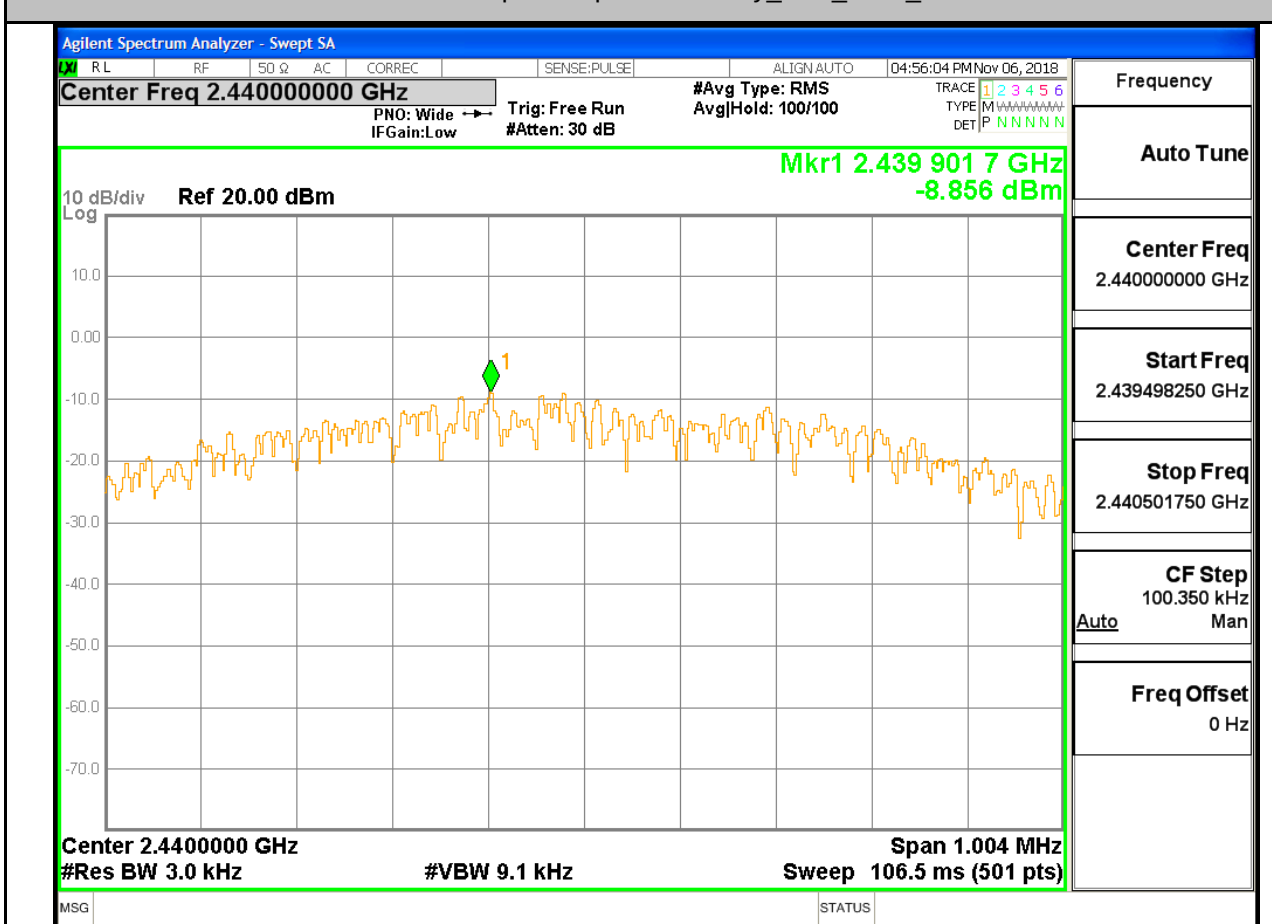
4.Maximum Peak power spectral density

Test Mode	Test Channel	Ant	PSD[dBm/3KHz]	Limit[dBm/3KHz]	Verdict
BLE	2402	Ant1	-9.730	8.00	PASS
BLE	2440	Ant1	-8.856	8.00	PASS
BLE	2480	Ant1	-8.018	8.00	PASS

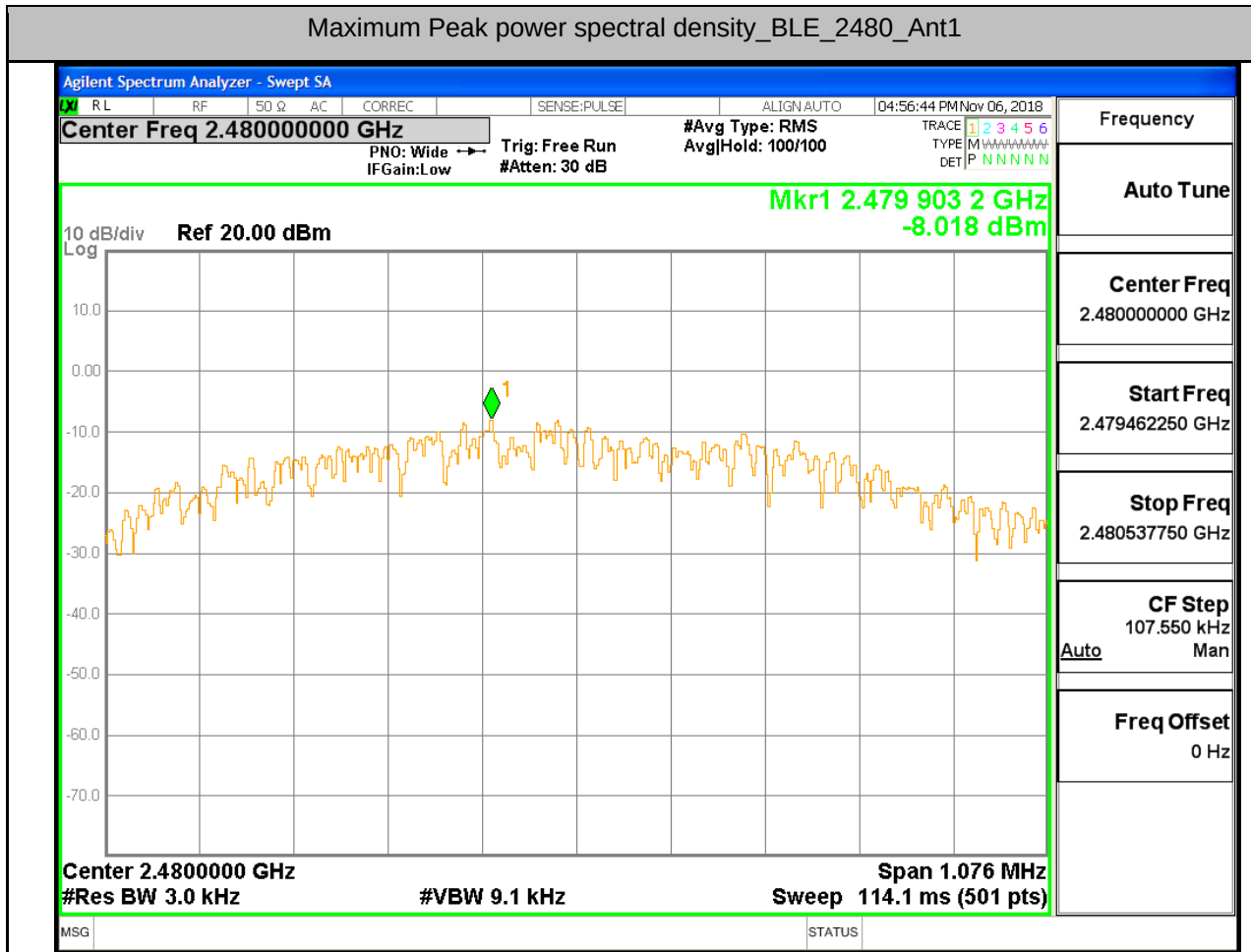
Maximum Peak power spectral density_BLE_2402_Ant1



Maximum Peak power spectral density_BLE_2440_Ant1



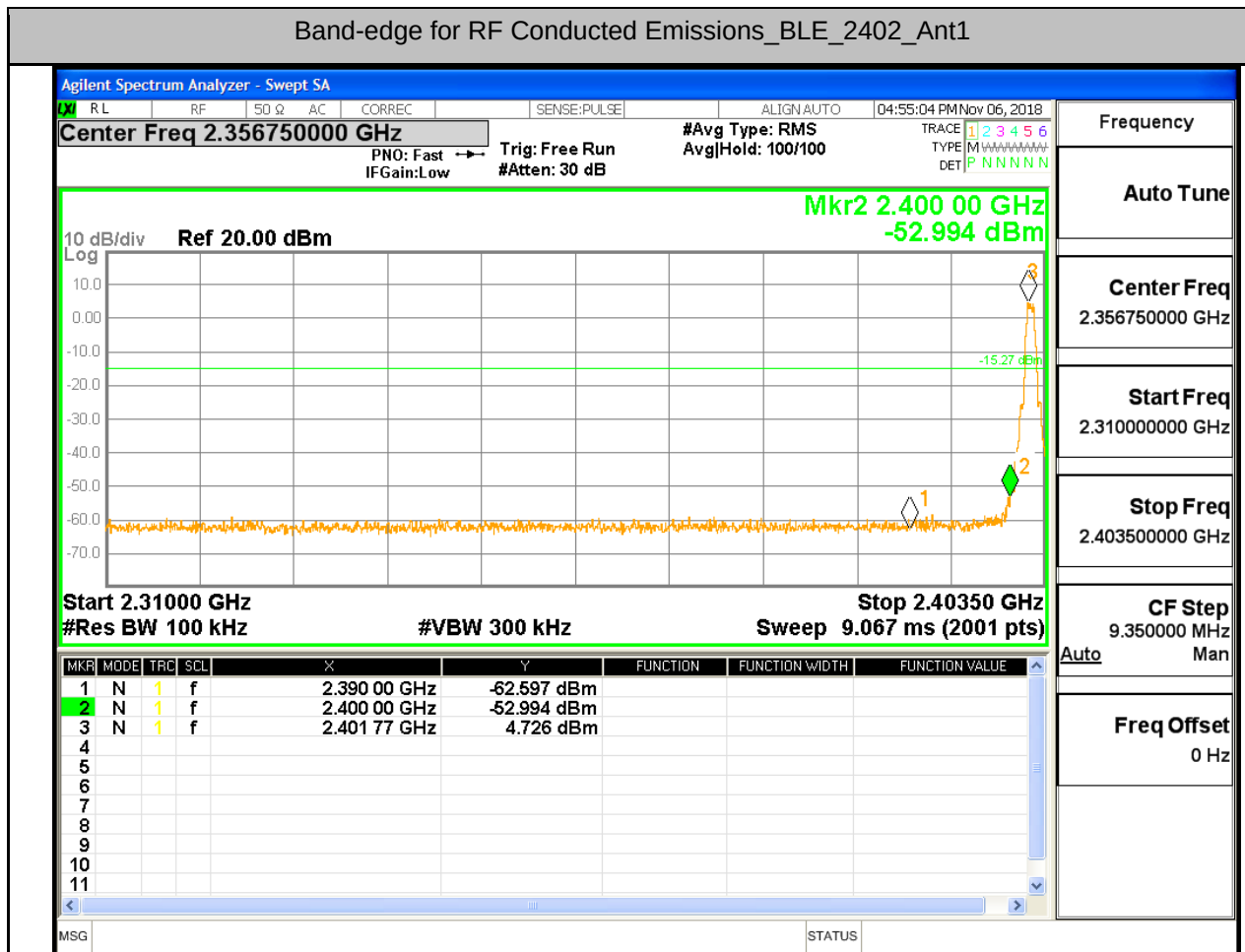
Maximum Peak power spectral density_BLE_2480_Ant1



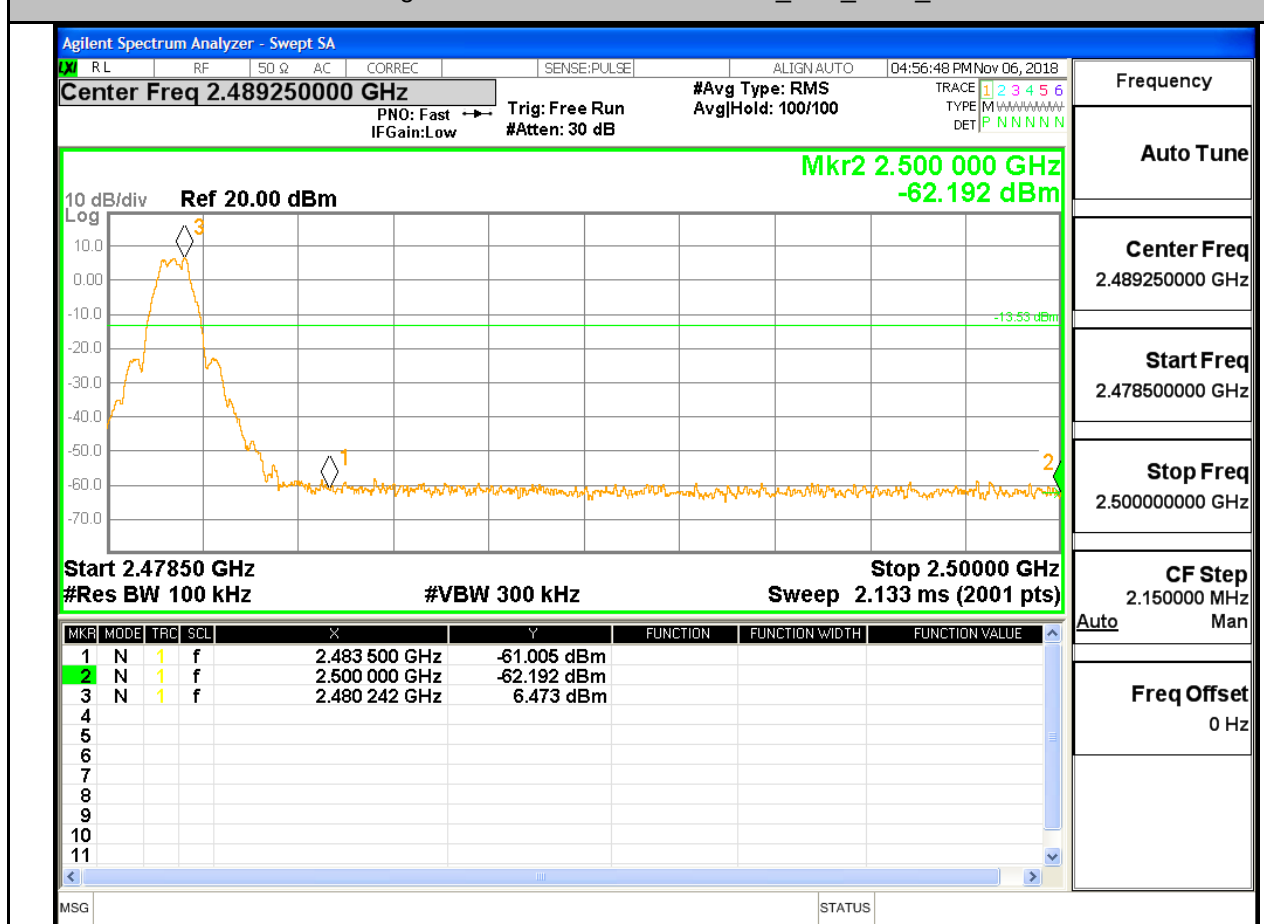
5.Band-edge for RF Conducted Emissions

Type	Carrier Frequency(MHz)	Frequency(MHz)	Carrier Frequency Power [dBm]	Bandedge Peak(dBm)	Upper limit(dBm)	Conclusion
BLE	2402	2390	4.726	-62.6	-15.274	Pass
BLE	2402	2400	4.726	-52.99	-15.274	Pass
BLE	2480	2483.5	6.473	-61	-13.527	Pass
BLE	2480	2500	6.473	-62.19	-13.527	Pass

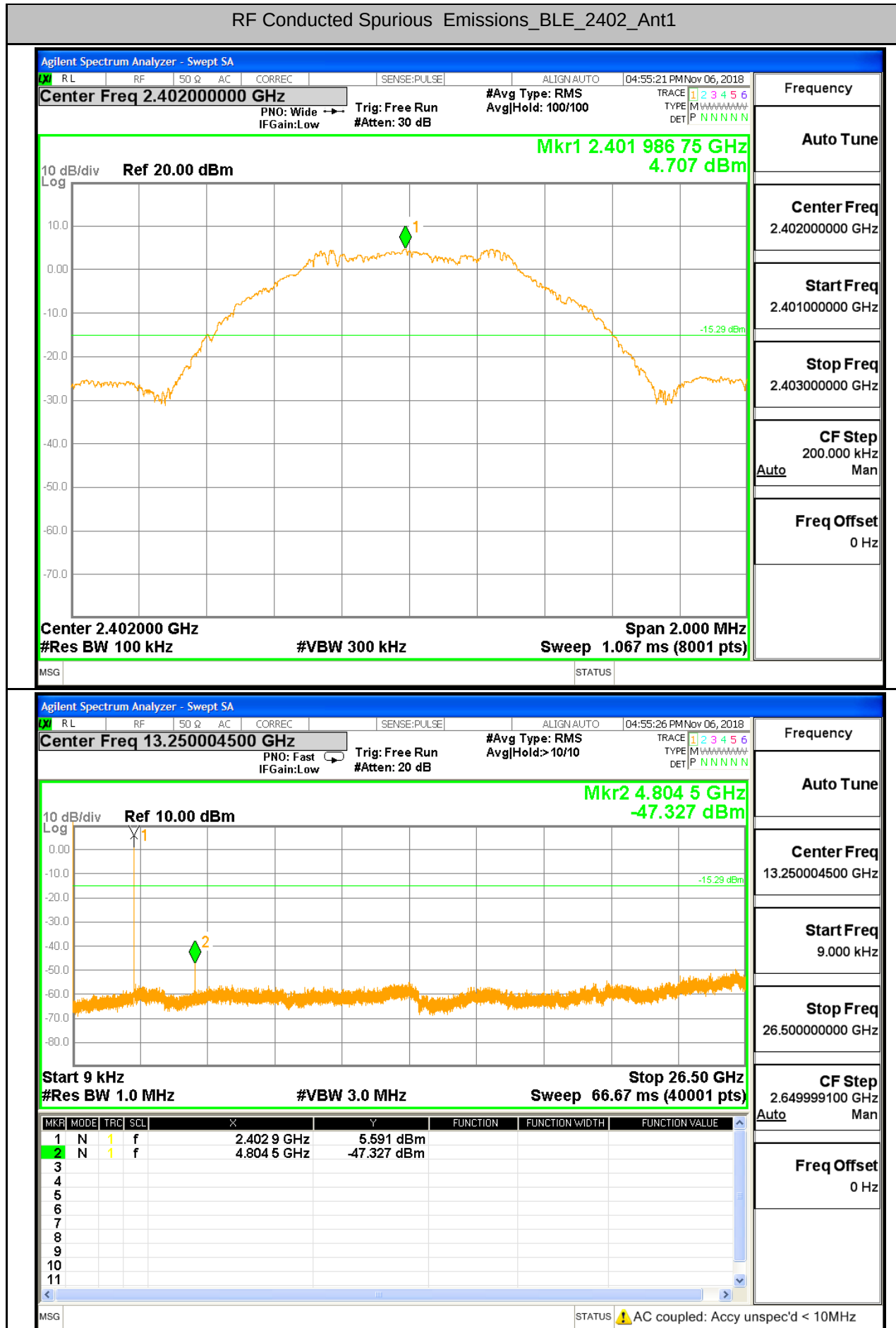
Band-edge for RF Conducted Emissions_BLE_2402_Ant1



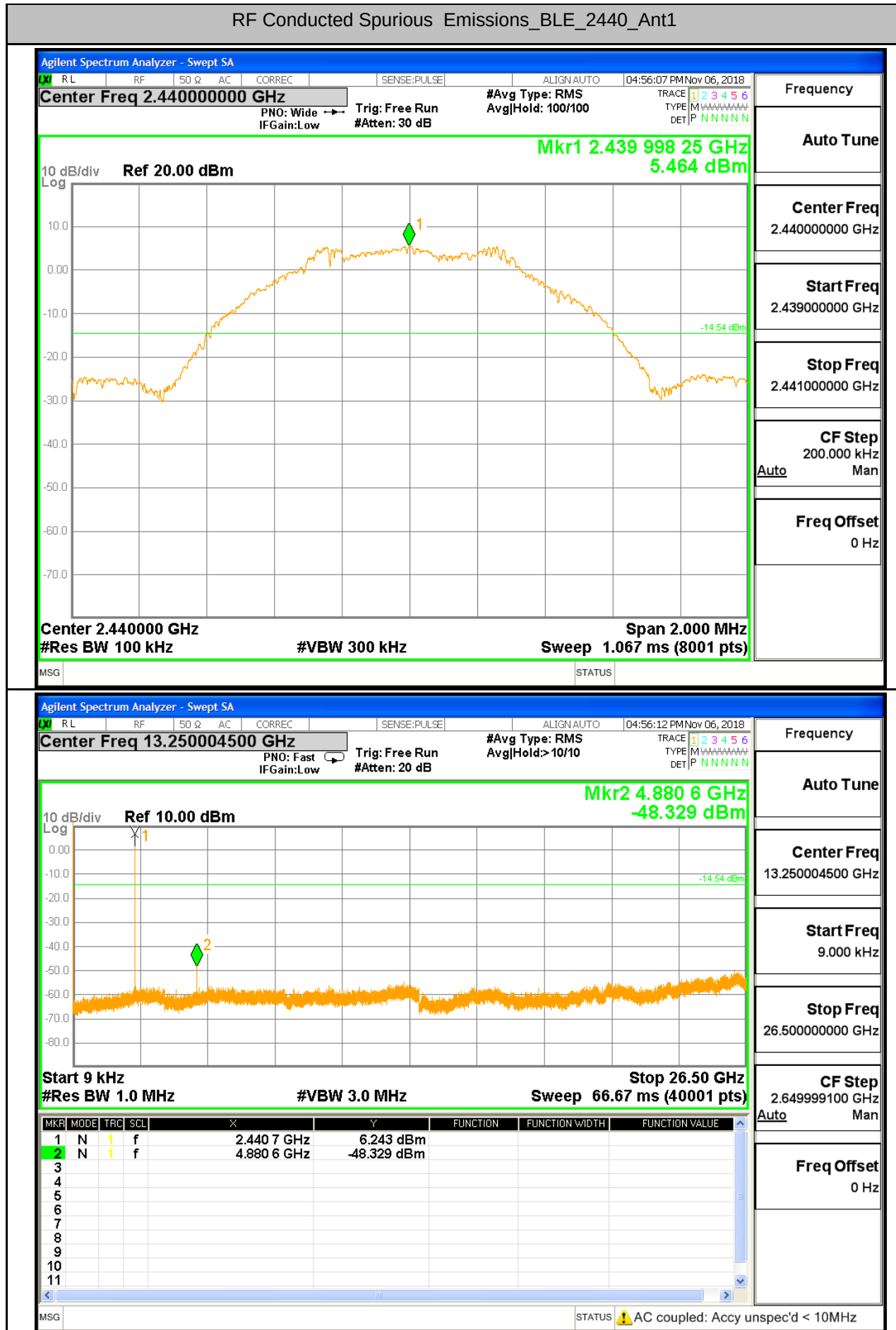
Band-edge for RF Conducted Emissions_BLE_2480_Ant1



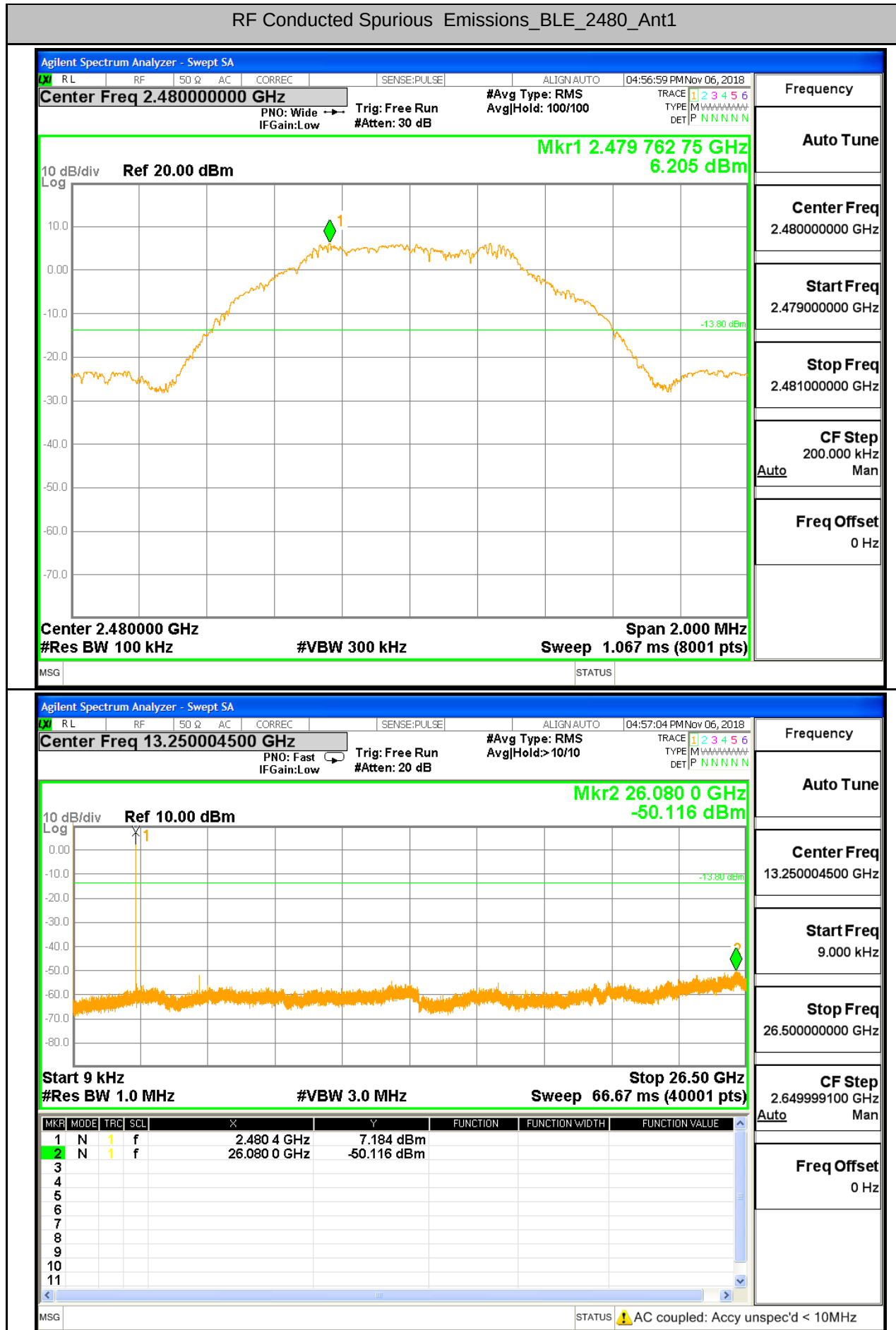
6.RF Conducted Spurious Emissions



RF Conducted Spurious Emissions_BLE_2440_Ant1



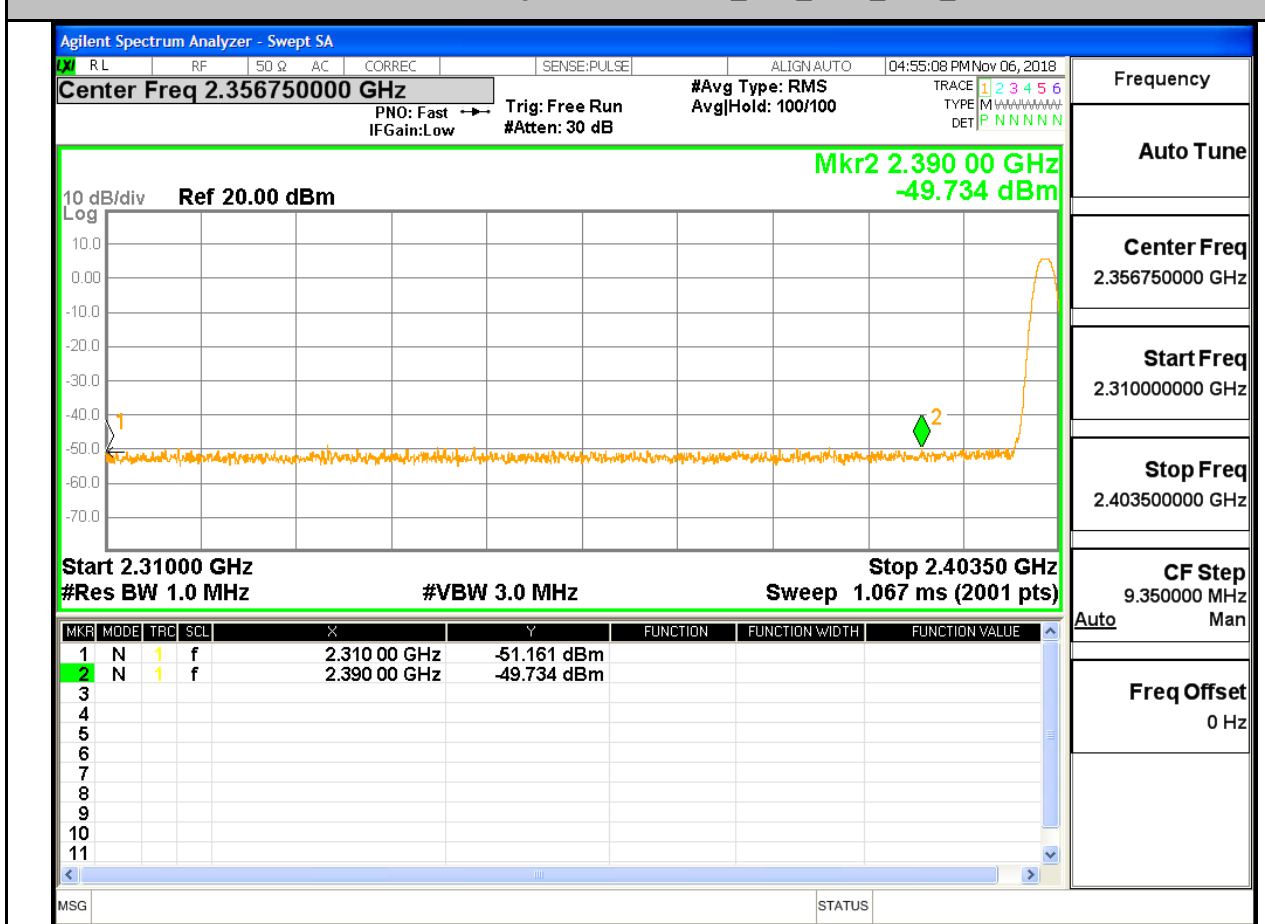
RF Conducted Spurious Emissions_BLE_2480_Ant1



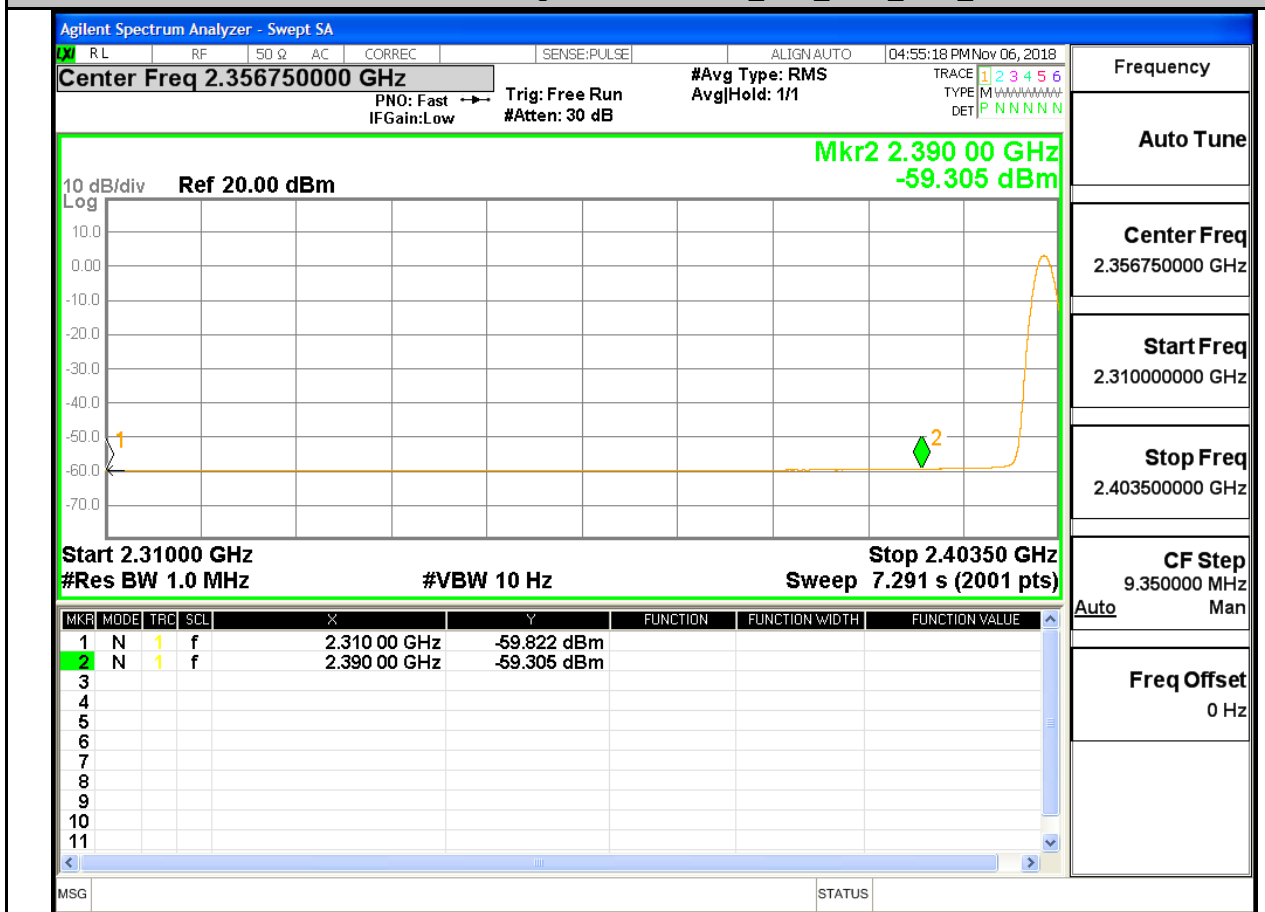
7.Restrict-band band-edge measurements

Type	Carrier Frequency (MHz)	Frequency (MHz)	Gain	Ground Factor	Peak Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Average Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
1DH5	2402	2310	2	0	-51.16	46.04	74	-59.82	37.38	54	Pass
1DH5	2402	2390	2	0	-49.73	47.47	74	-59.3	37.9	54	Pass
1DH5	2480	2483.5	2	0	-50.85	46.35	74	-53.57	43.63	54	Pass
1DH5	2480	2500	2	0	-50.97	46.23	74	-59.05	38.15	54	Pass

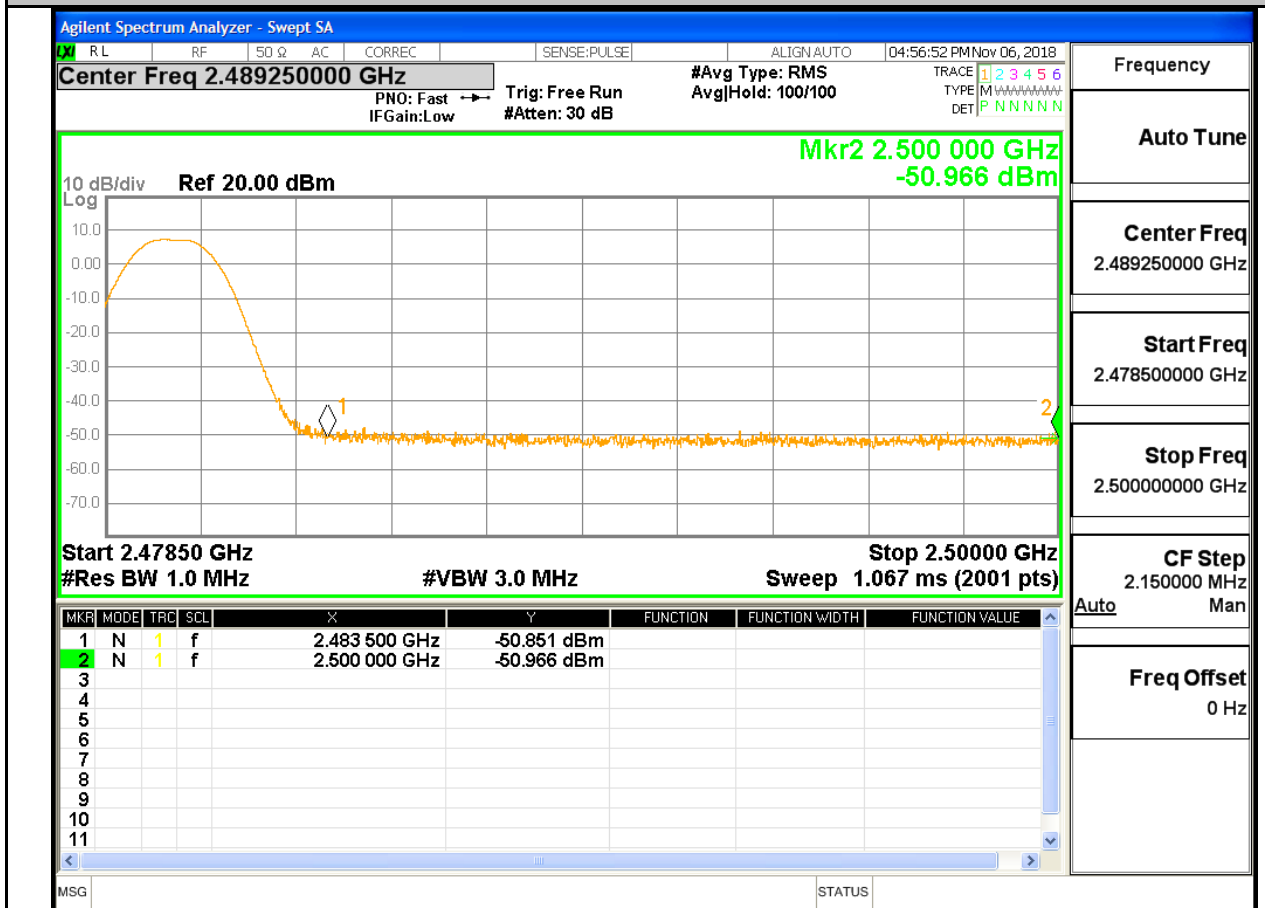
Restrict-band band-edge measurements_BLE_2402_Ant1_PEAK



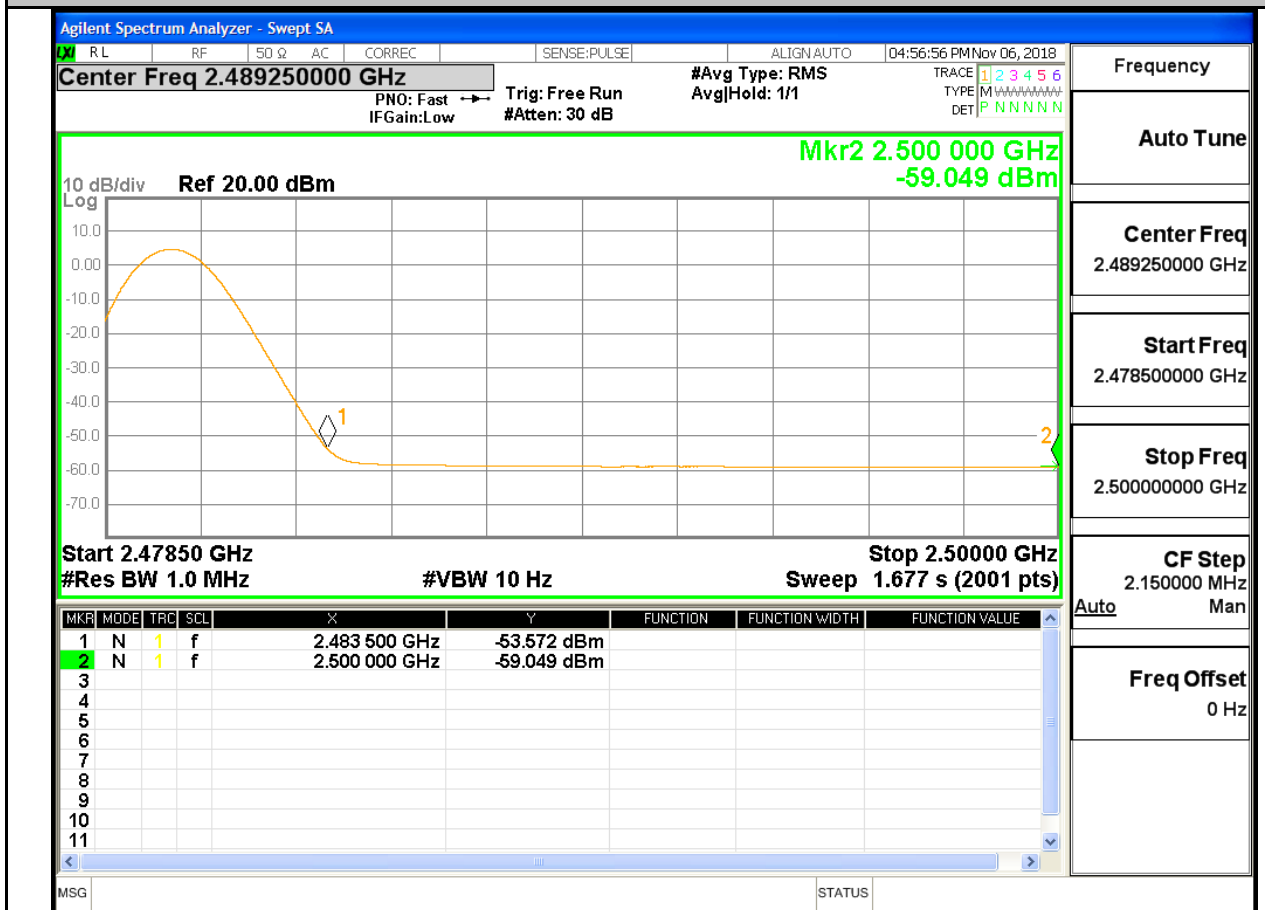
Restrict-band band-edge measurements_BLE_2402_Ant1_AV



Restrict-band band-edge measurements_BLE_2480_Ant1_PEAK



Restrict-band band-edge measurements_BLE_2480_Ant1_AV



8.Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
BLE	2440	Ant1	63.10	PASS

Duty Cycle_BLE_2440_Ant1

