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

Product Name: Shenzhen SEI Robotics Co., Ltd.
Trade Mark: SEI
Test Model: SN8BABH
FCC ID: 2AOVU-SN8BABX

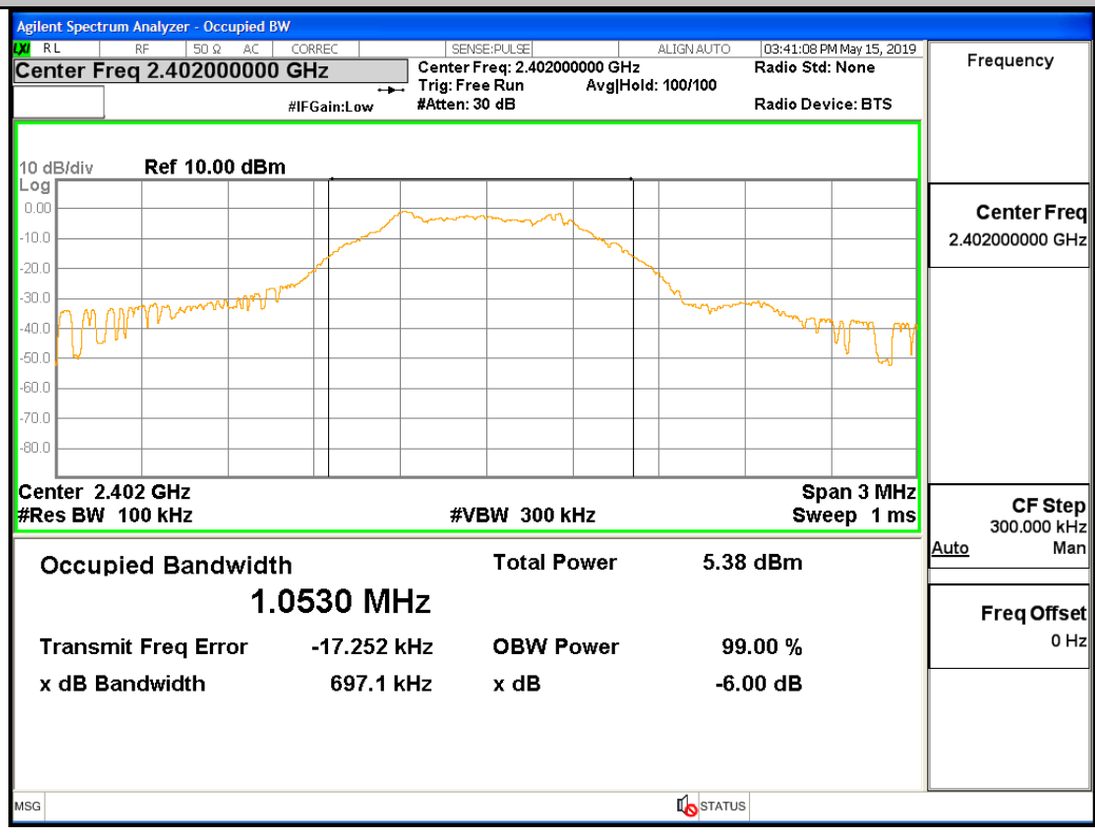
Environmental Conditions

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

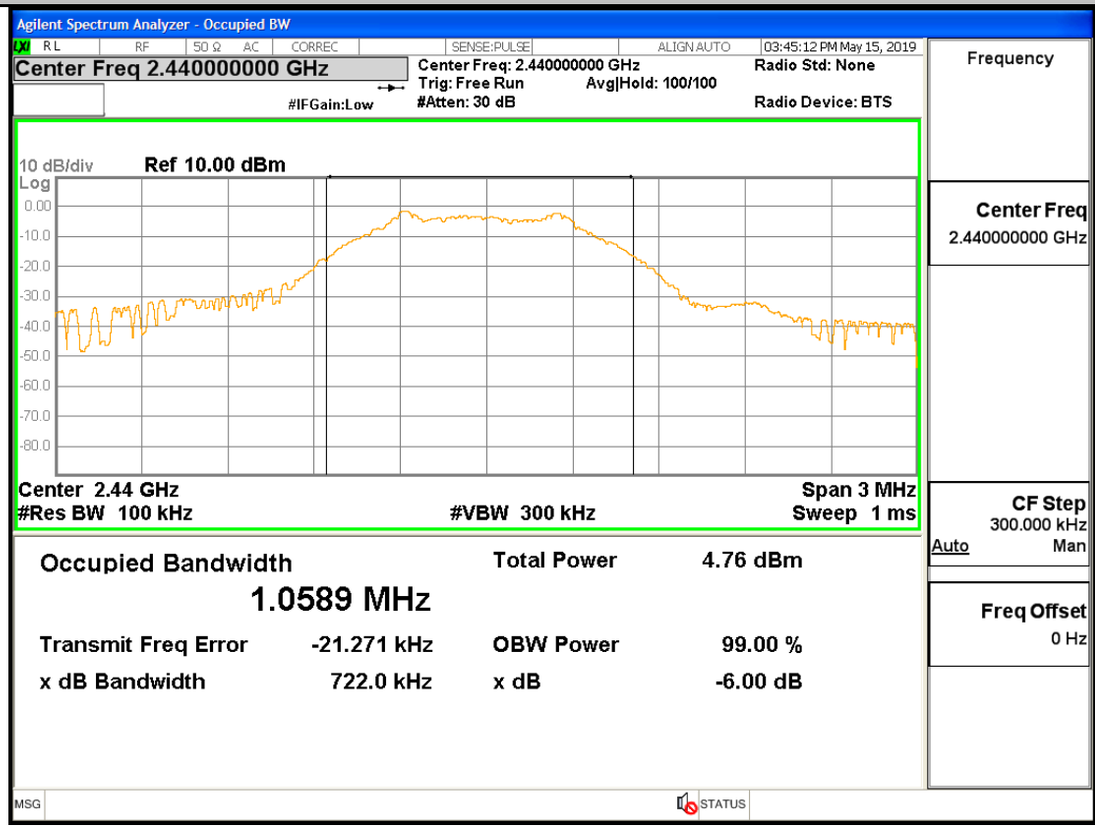
A.1. 6dB Bandwidth

Test Mode	Test Channel	Ant	EBW[MHz]	Limit	Verdict
BLE	2402	Ant1	0.697	0.5	PASS
BLE	2440	Ant1	0.722	0.5	PASS
BLE	2480	Ant1	0.710	0.5	PASS

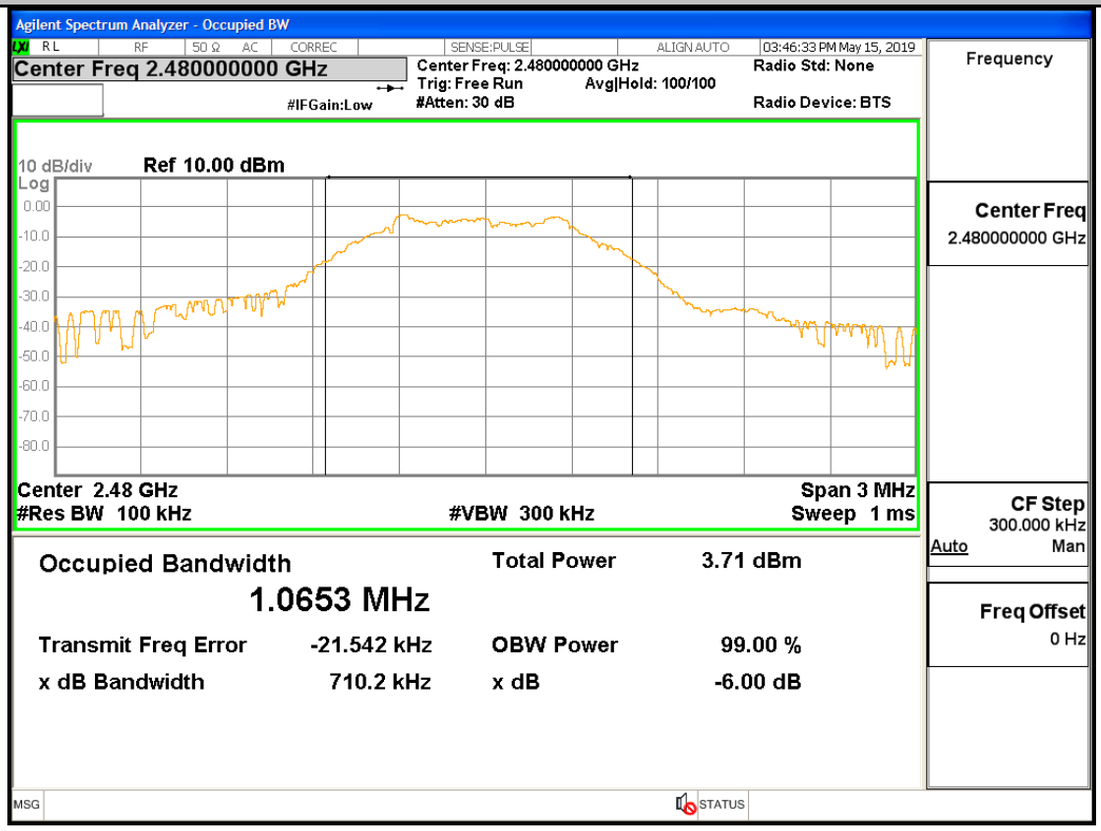
6dB Bandwidth_BLE_2402_Ant1



6dB Bandwidth_BLE_2440_Ant1



6dB Bandwidth_BLE_2480_Ant1



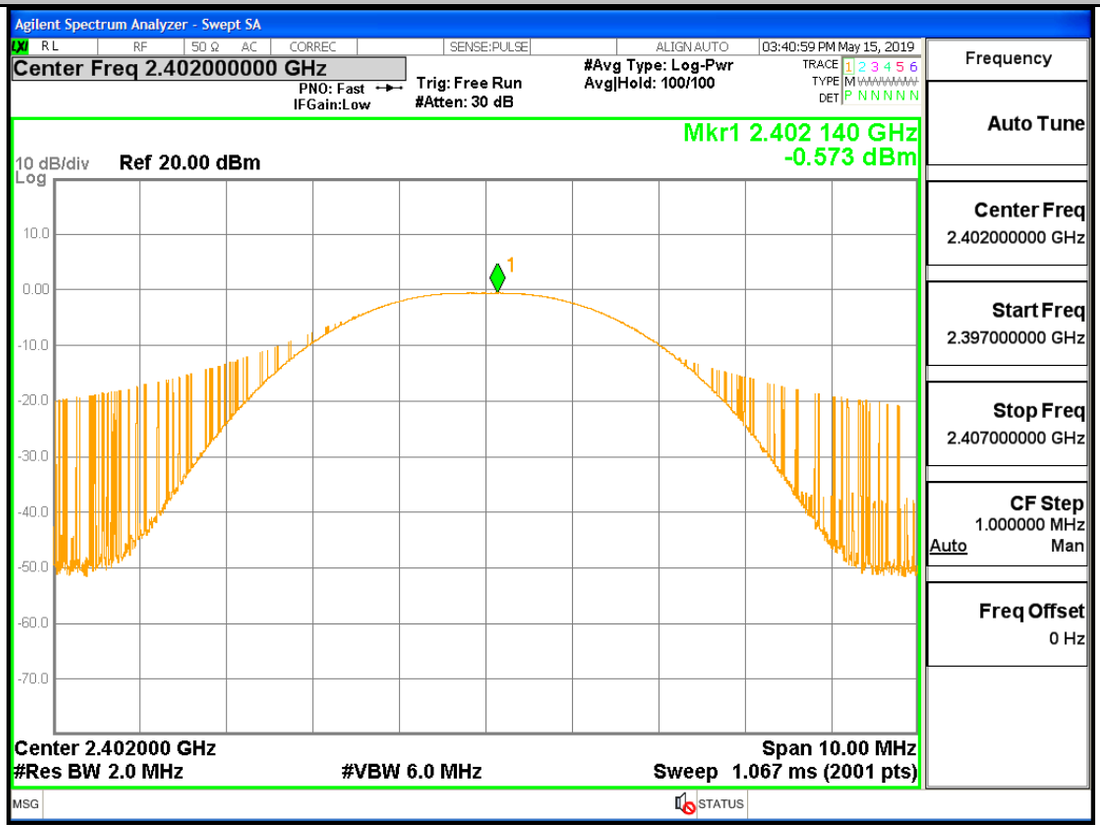
A.2. Occupied Bandwidth

Test Mode	Test Channel	Ant	OBW[MHz]	Limit[MHz]	Verdict

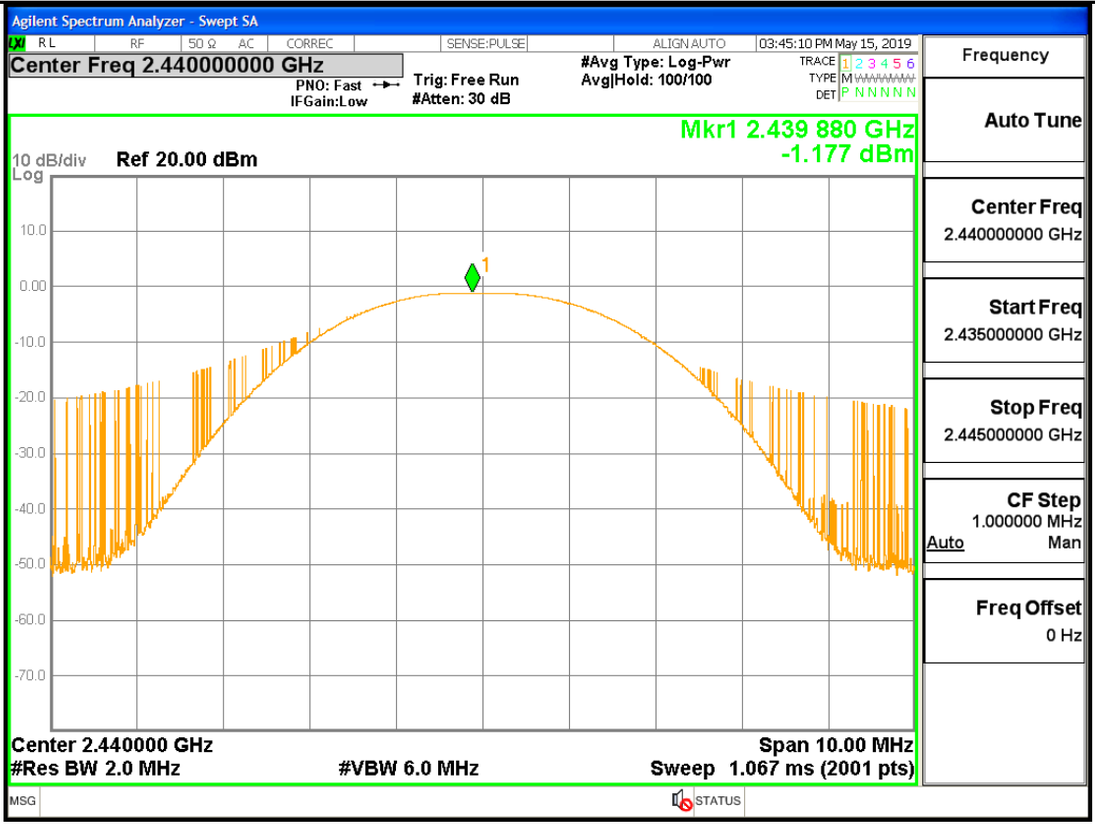
A.3. Maximum peak conducted output power

Test Mode	Test Channel	Ant	Power[dBm]	Limit[dBm]	Verdict
BLE	2402	Ant1	-0.573	30	PASS
BLE	2440	Ant1	-1.177	30	PASS
BLE	2480	Ant1	-2.214	30	PASS

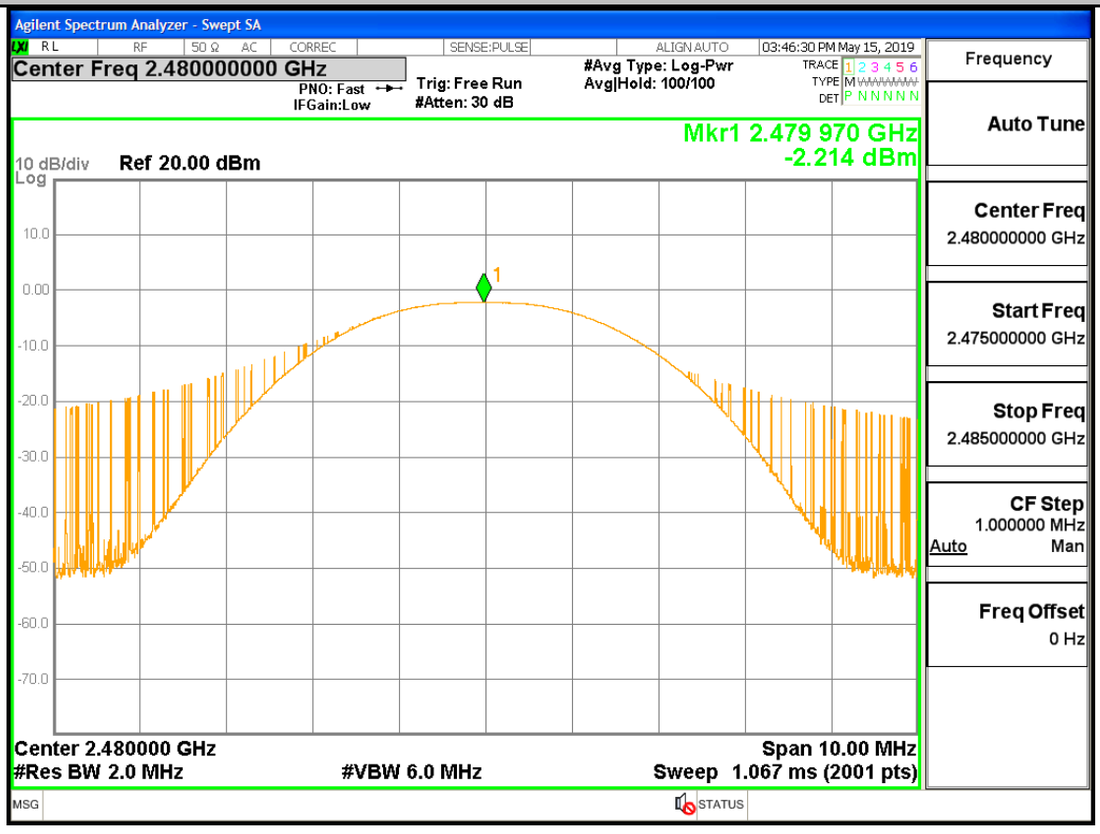
Maximum peak conducted output power_BLE_2402_Ant1



Maximum peak conducted output power_BLE_2440_Ant1



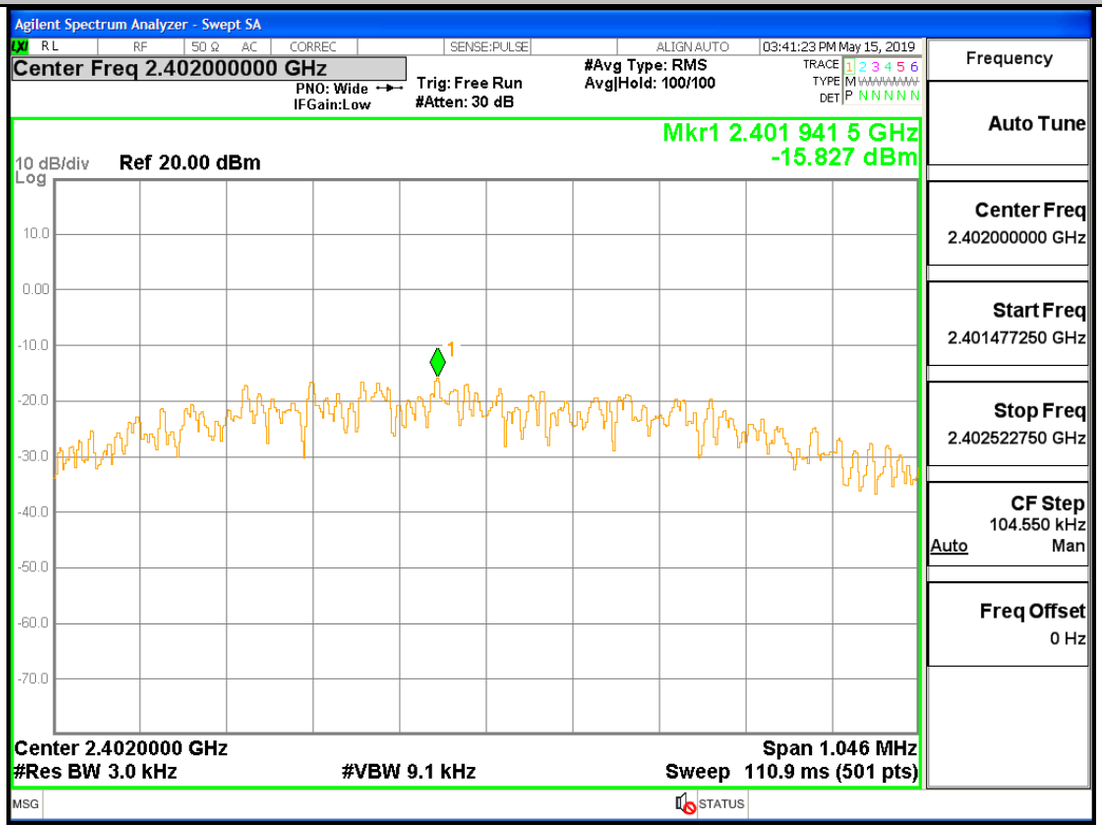
Maximum peak conducted output power_BLE_2480_Ant1



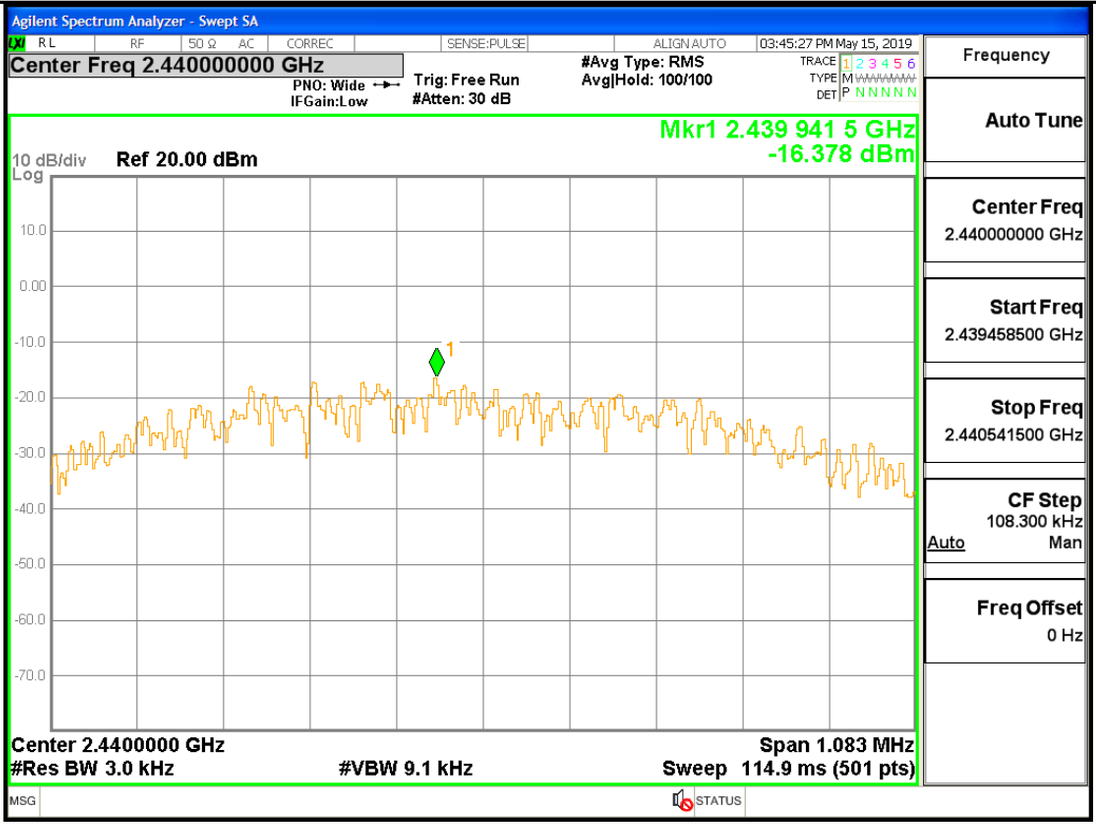
A.4. Maximum Peak power spectral density

Test Mode	Test Channel	Ant	PSD[dBm/3KHz]	Limit[dBm/3KHz]	Verdict
BLE	2402	Ant1	-15.827	8.00	PASS
BLE	2440	Ant1	-16.378	8.00	PASS
BLE	2480	Ant1	-17.492	8.00	PASS

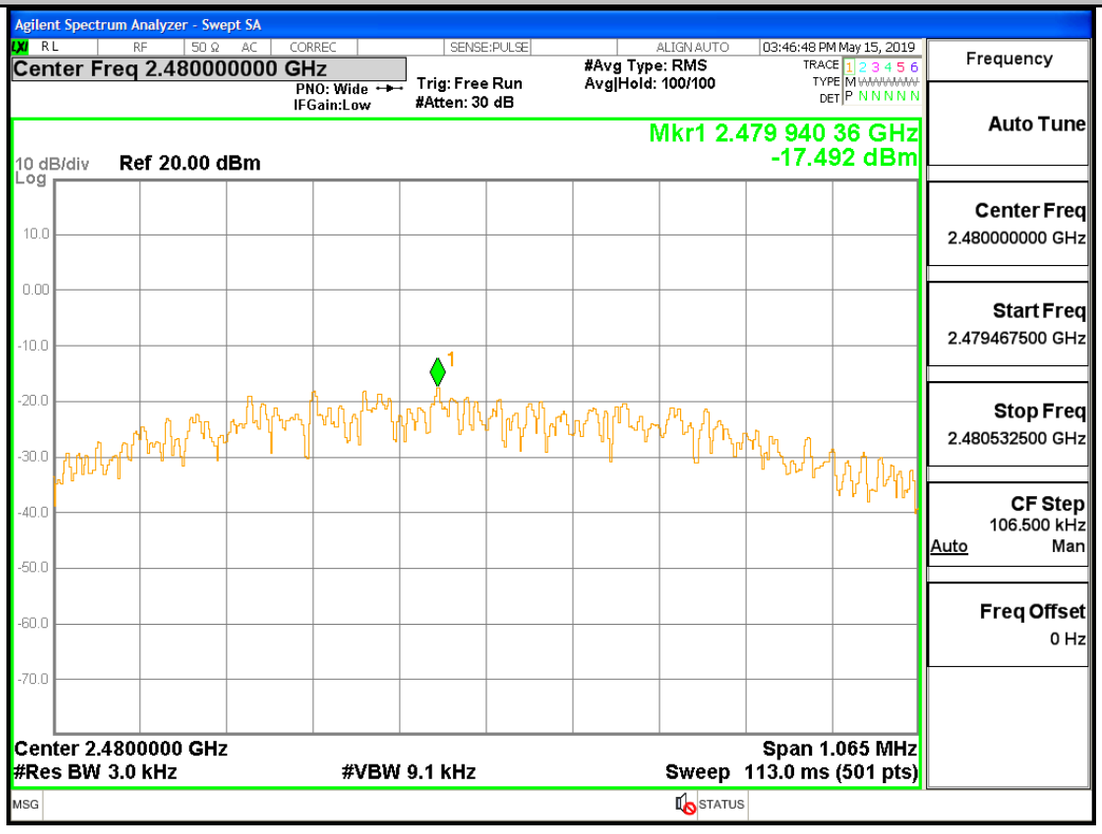
Maximum Peak power spectral density_BLE_2402_Ant1



Maximum Peak power spectral density_BLE_2440_Ant1



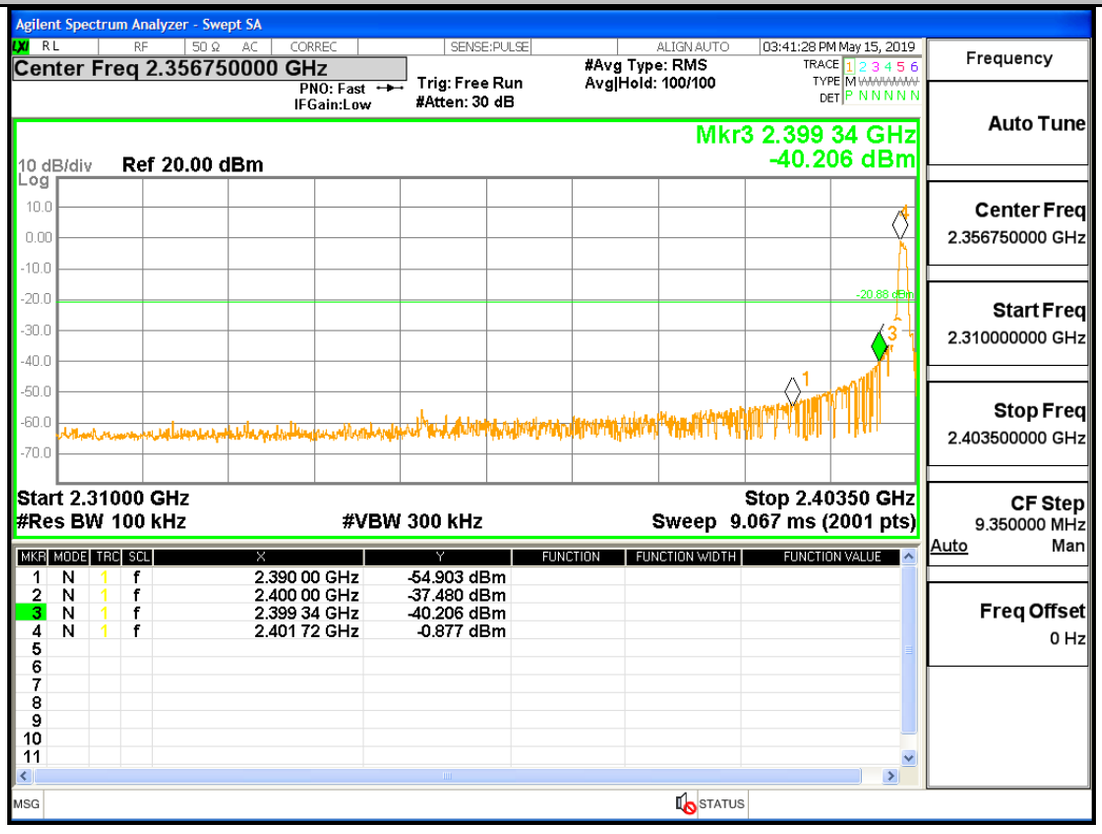
Maximum Peak power spectral density_BLE_2480_Ant1



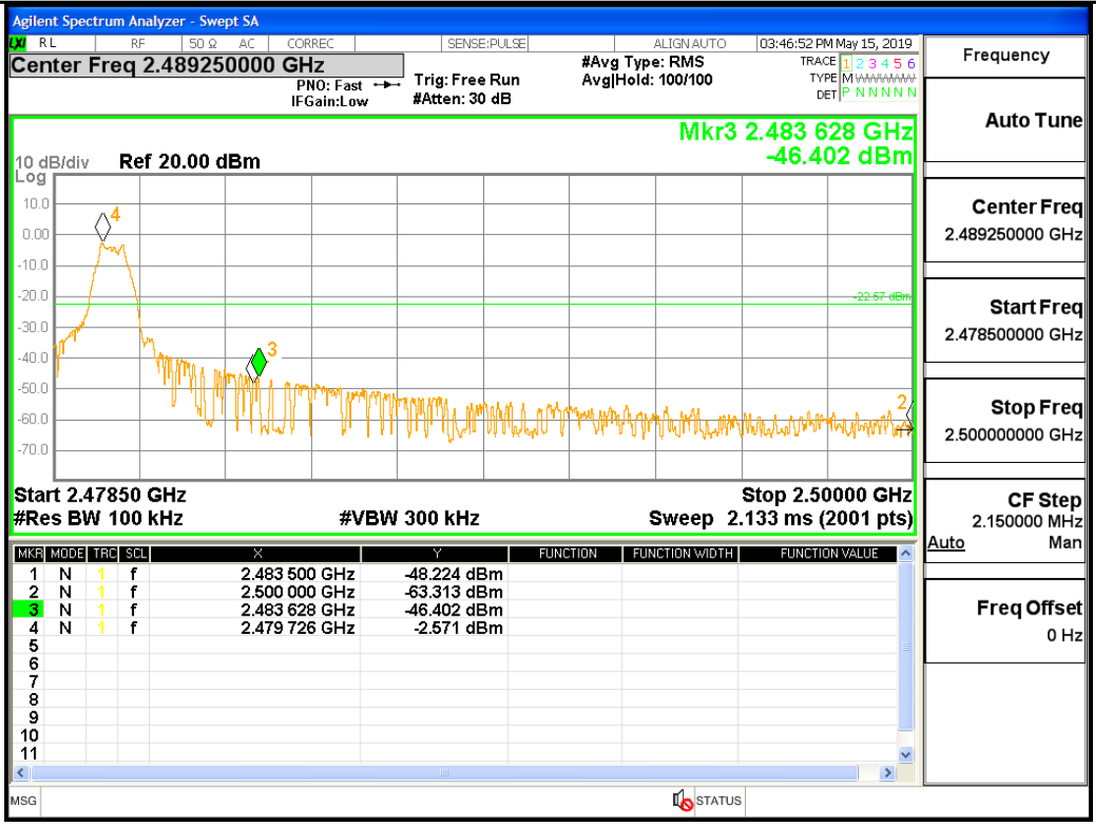
A.5. Band-edge for RF Conducted Emissions

Type	Carrier Frequency(MHz)	Frequency(MHz)	Carrier Frequency Power [dBm]	Bandedge Peak(dBm)	Upper limit(dBm)	Conclusion
BLE	2402	2400	-0.877	-37.48	-20.877	Pass
BLE	2480	2483.628	-2.571	-46.402	-22.571	Pass

Band-edge for RF Conducted Emissions_BLE_2402_Ant1

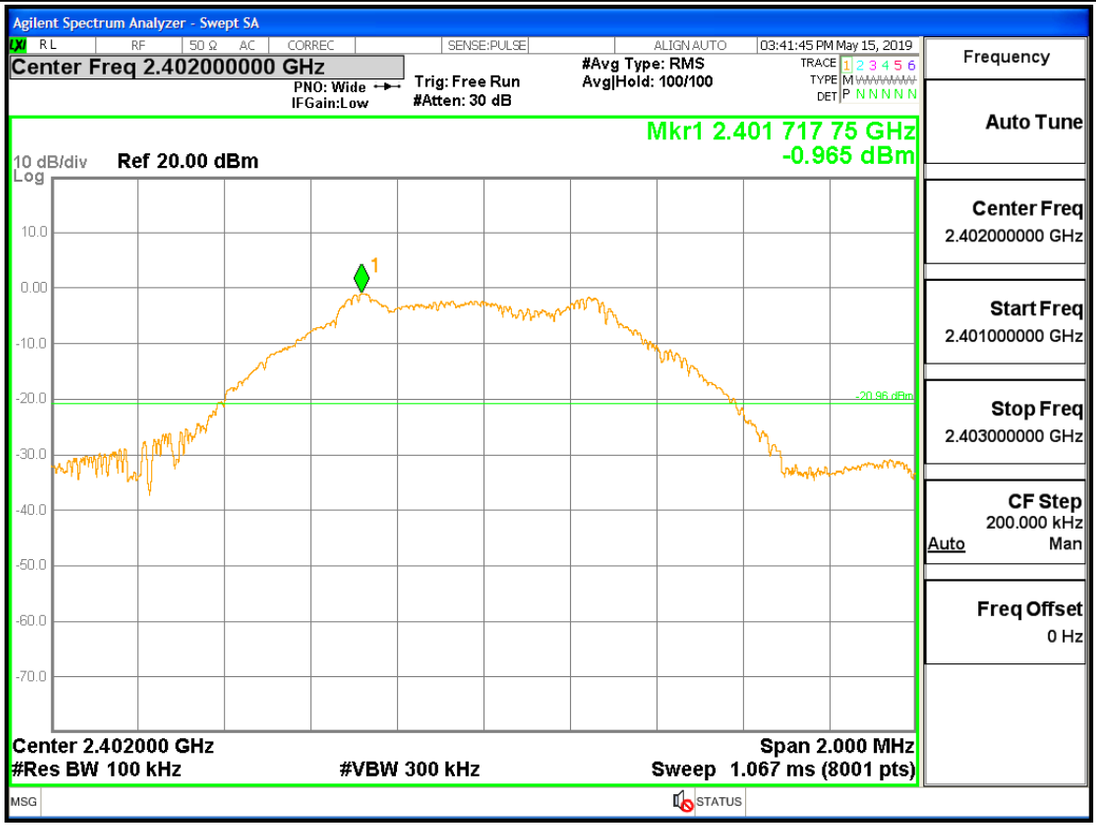


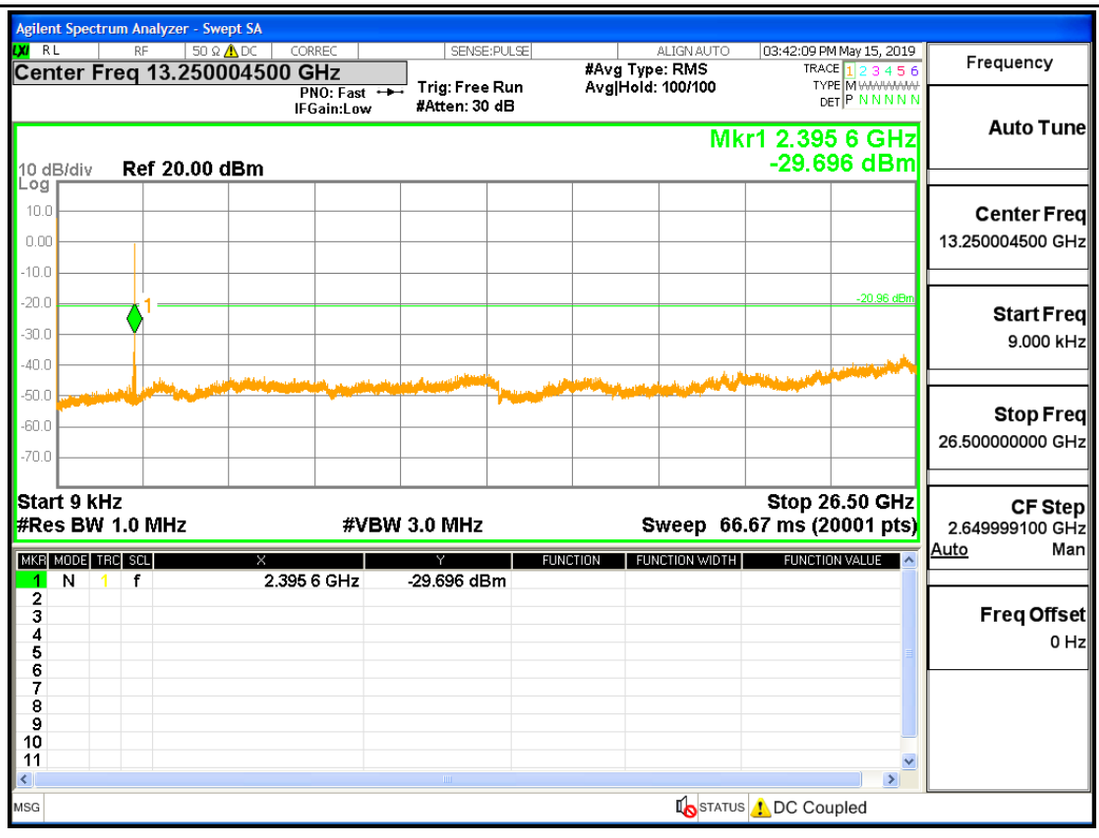
Band-edge for RF Conducted Emissions_BLE_2480_Ant1



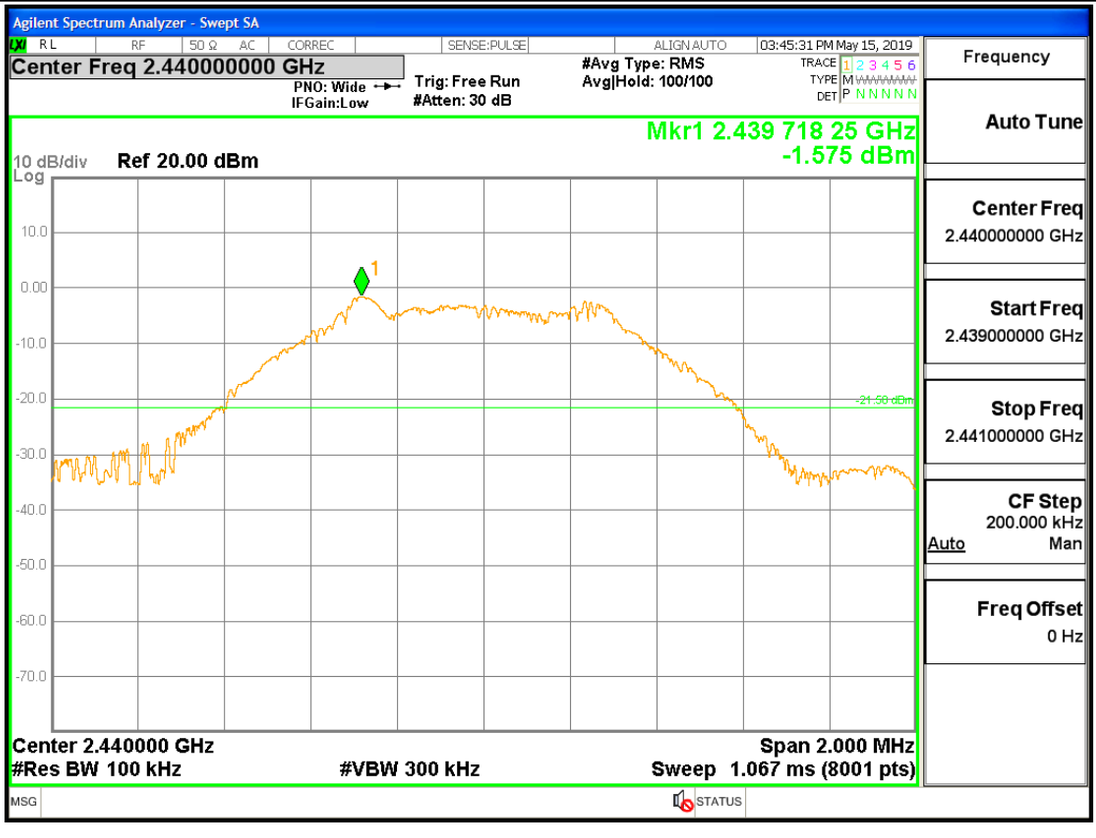
A.6. RF Conducted Spurious Emissions

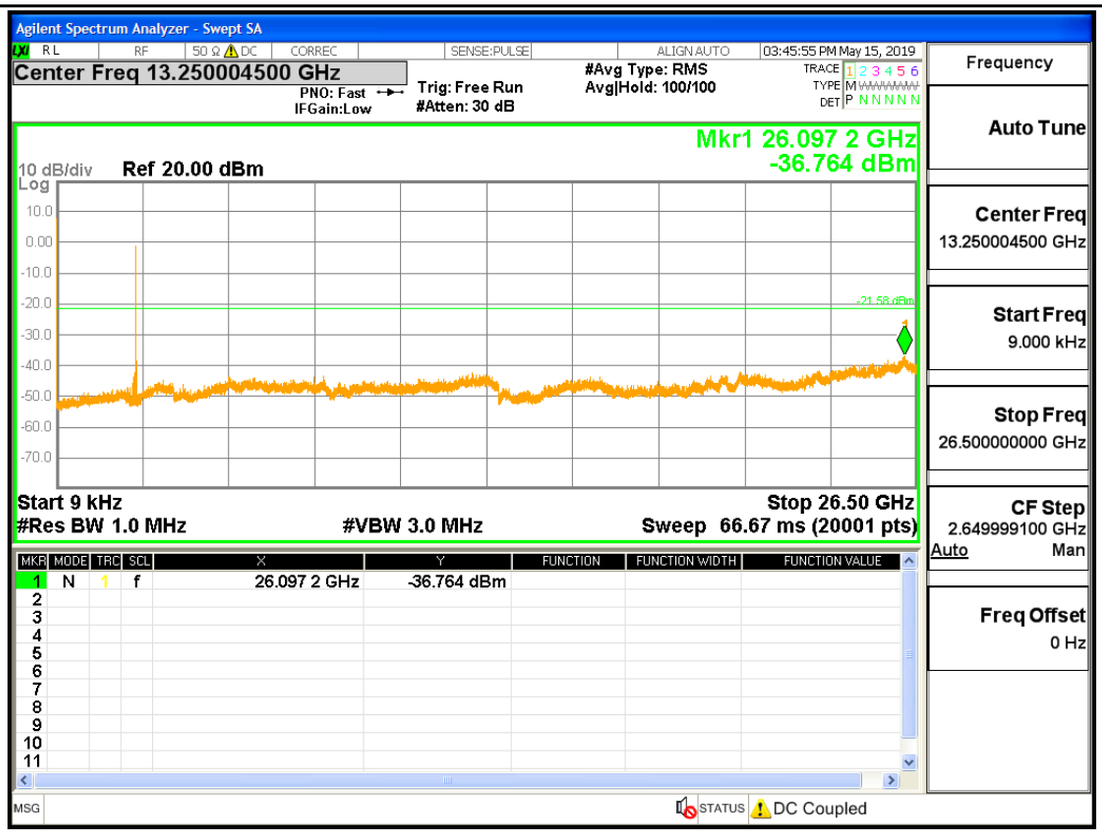
RF Conducted Spurious Emissions_BLE_2402_Ant1



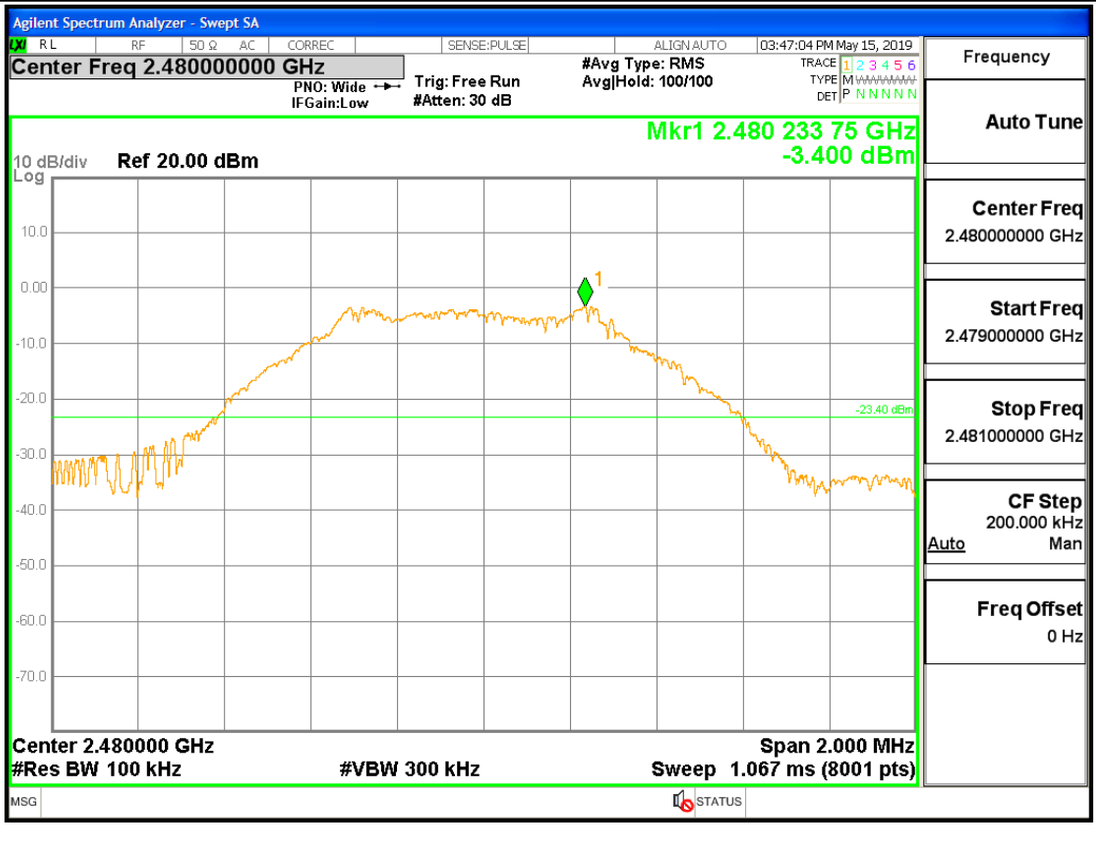


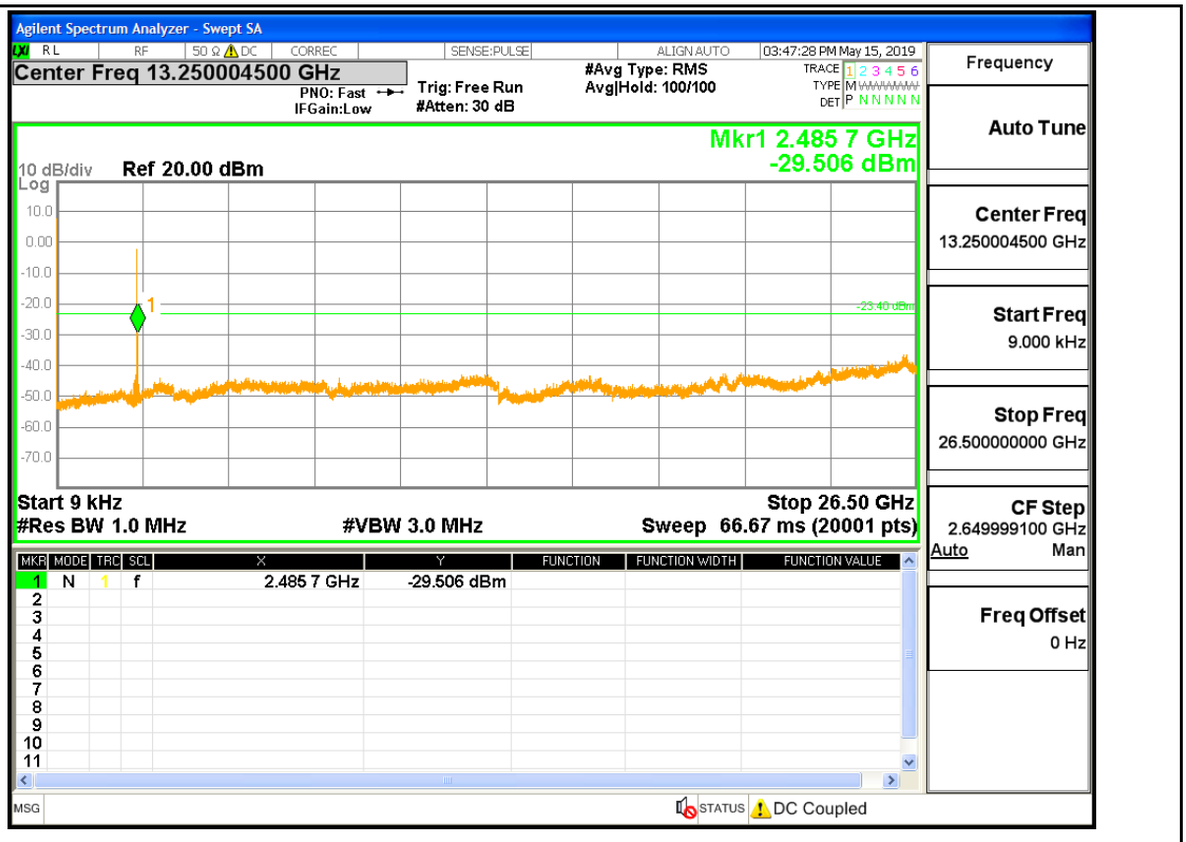
RF Conducted Spurious Emissions_BLE_2440_Ant1





RF Conducted Spurious Emissions_BLE_2480_Ant1



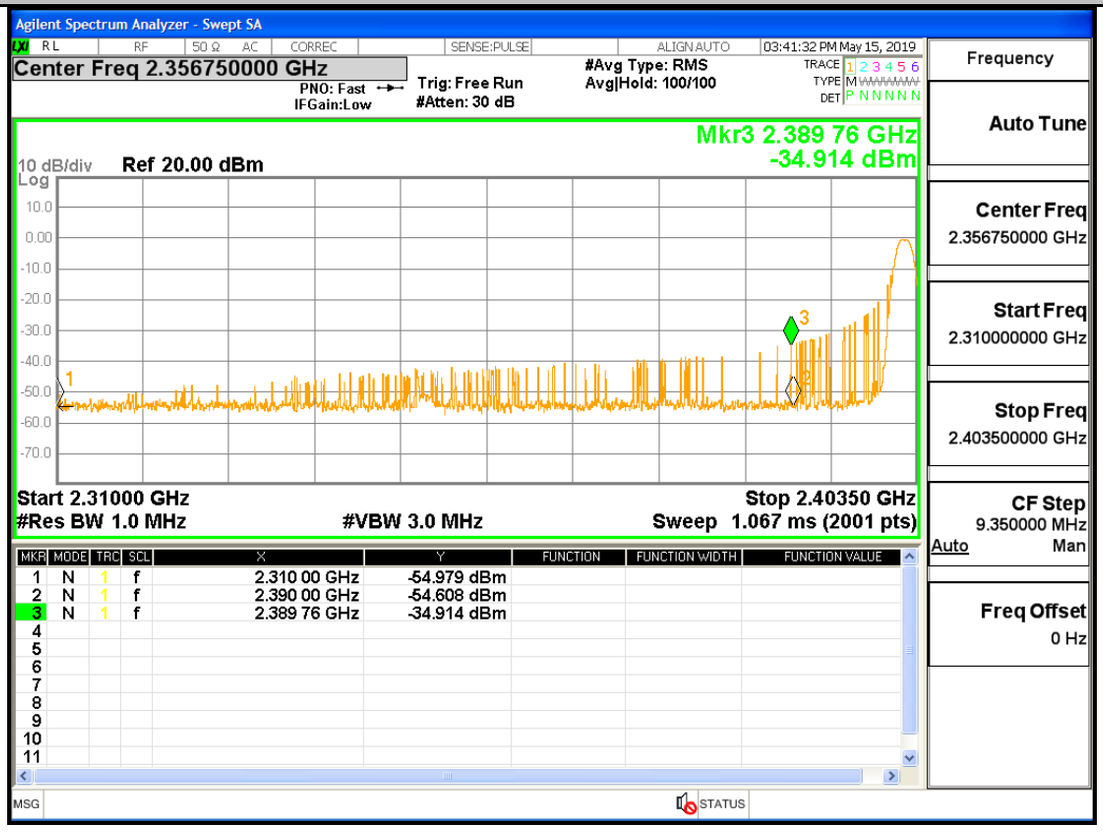

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
CORREC
SENSE:PULSE
ALIGN AUTO
03:47:28 PM May 15, 2019
Center Freq 13.250004500 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
Mkr1 2.485 7 GHz
-29.506 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-23.40 dBm
Start 9 kHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 26.50 GHz
Sweep 66.67 ms (20001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.485 7 GHz -29.506 dBm
Frequency
Auto Tune
Center Freq
13.250004500 GHz
Start Freq
9.000 kHz
Stop Freq
26.500000000 GHz
CF Step
2.649999100 GHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS
DC Coupled

A.7. Restrict-band band-edge measurements

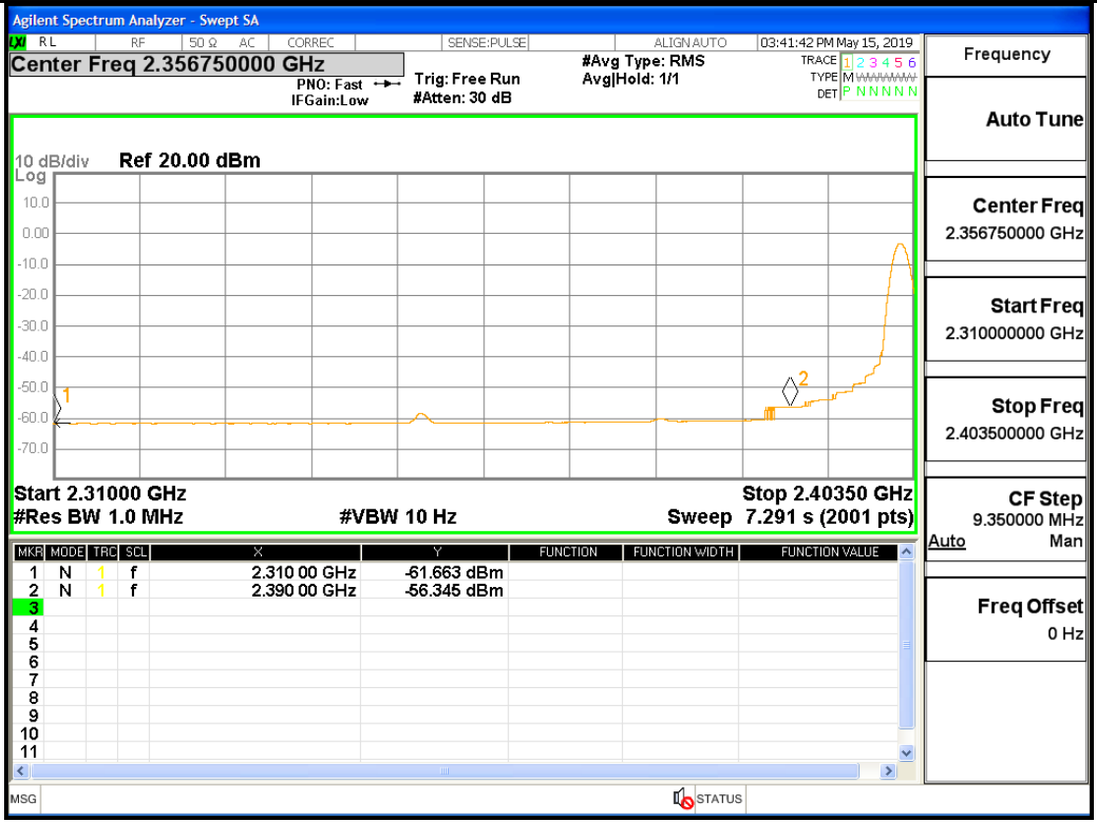
Type	Carrier Frequency (MHz)	Frequency(MHz)	Gain	Ground Factor	Peak Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
BLE	2402	2389.76	3.1	0	-34.91	63.39	74	Pass
BLE	2480	2483.70	3.1	0	-27.08	71.22	74	Pass

Type	Carrier Frequency (MHz)	Frequency(MHz)	Gain	Ground Factor	Average Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
BLE	2402	2390.00	2.00	0.00	-56.34	40.86	54	Pass
BLE	2480	2483.50	2.00	0.00	-50.69	46.51	54	Pass

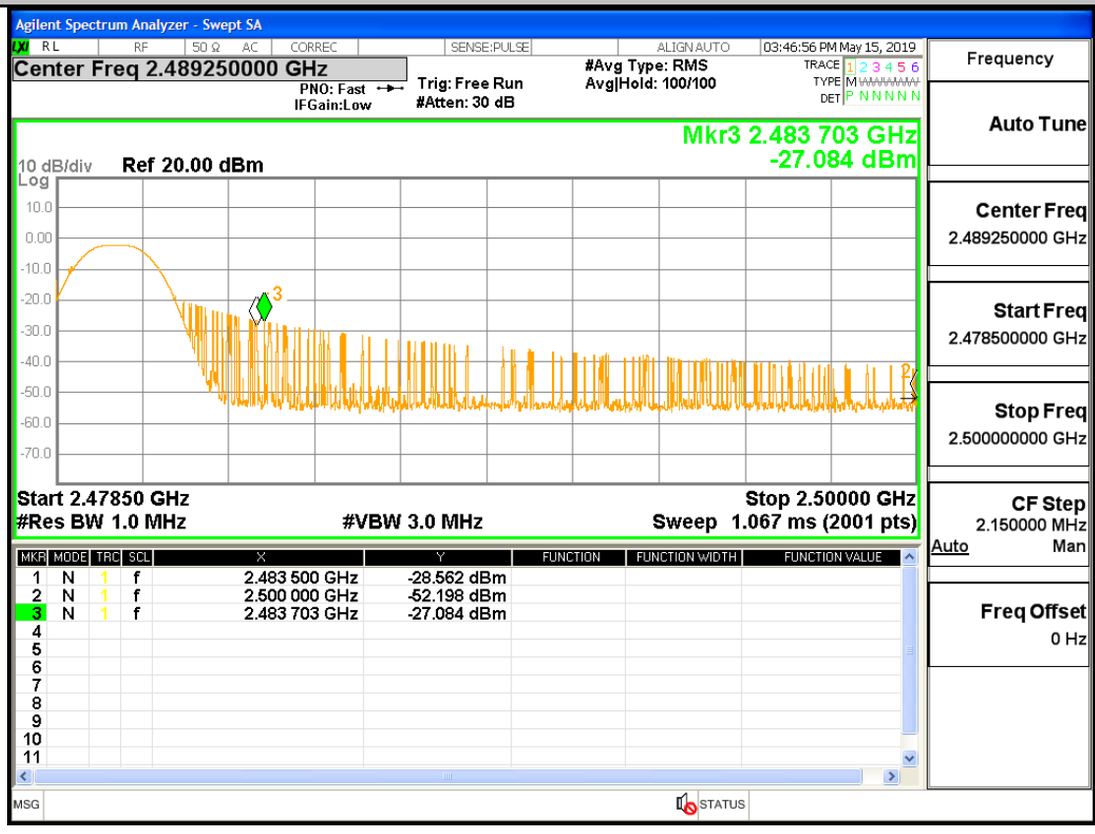
Restrict-band band-edge measurements_BLE_2402_Ant1_PEAK



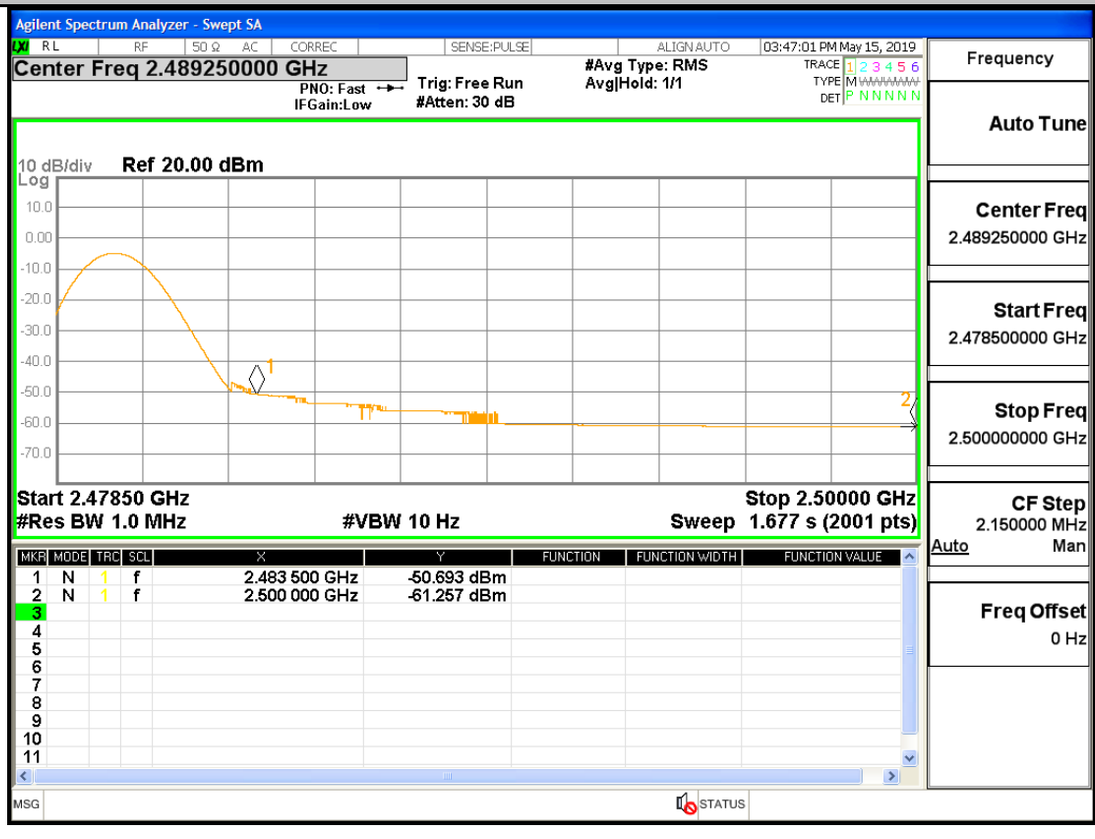
Restrict-band band-edge measurements_BLE_2402_Ant1_AV



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	64.55	PASS

Duty Cycle_BLE_2440_Ant1