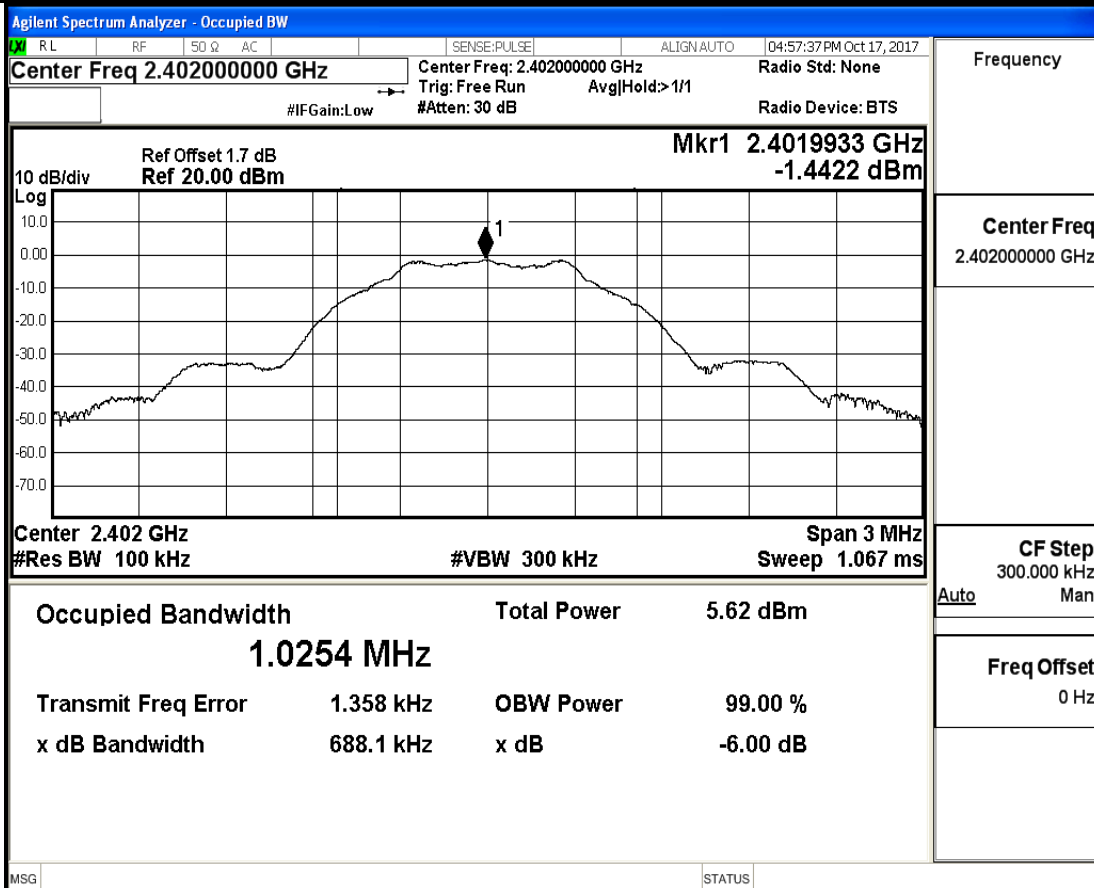


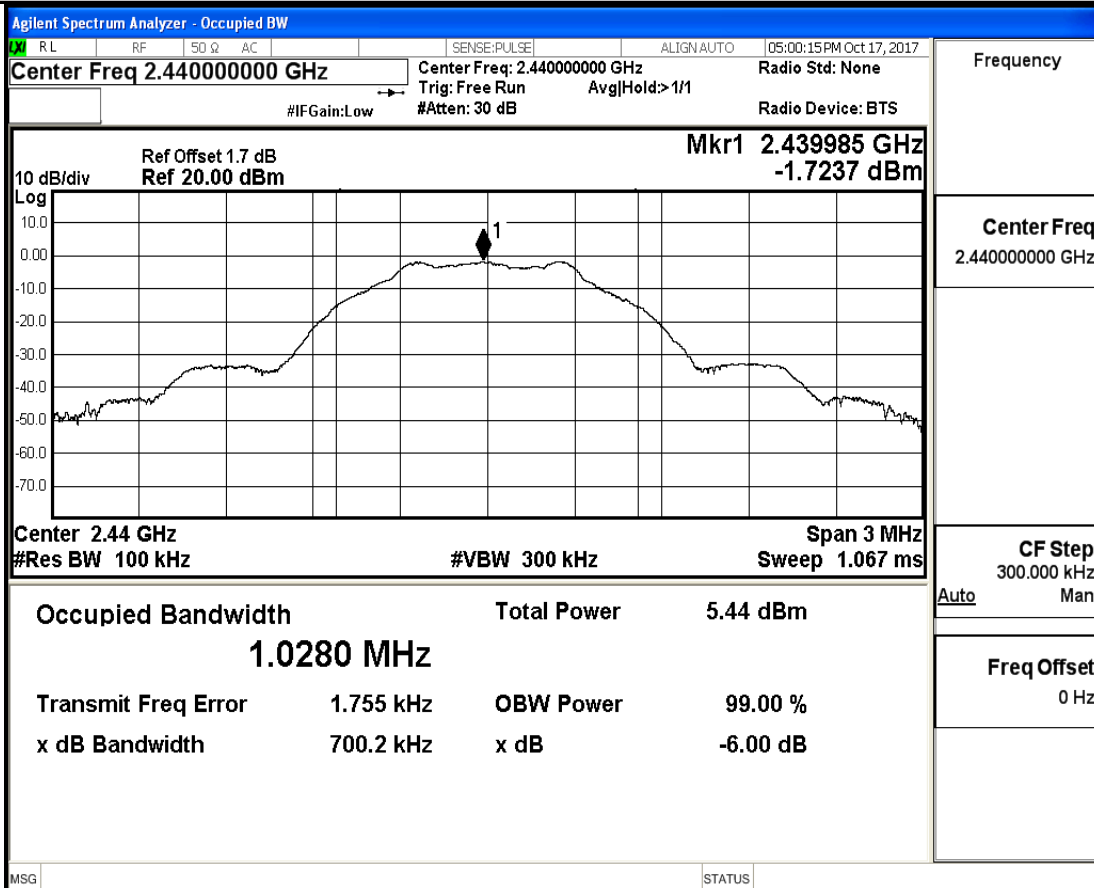
1.6dB Bandwidth

Test Mode	Test Channel	EBW[MHz]	Limit	Verdict
BLE	2402	0.6881	0.5	PASS
BLE	2440	0.7002	0.5	PASS
BLE	2480	0.6898	0.5	PASS

6dB Bandwidth_BLE_2402



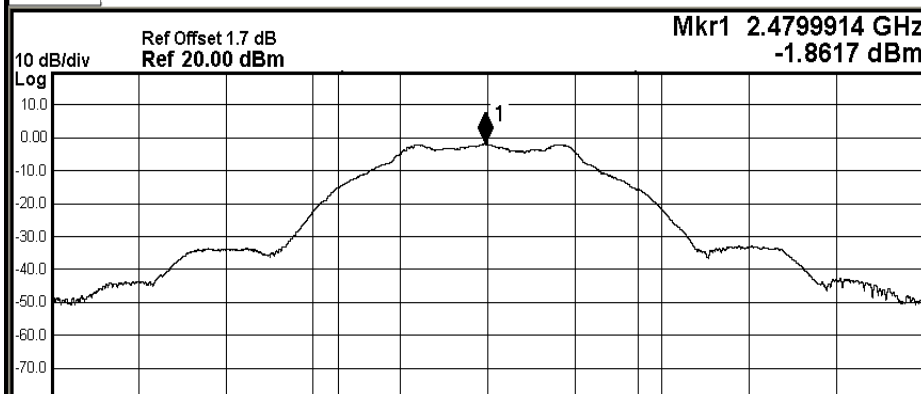
6dB Bandwidth_BLE_2440



6dB Bandwidth_BLE_2480

Agilent Spectrum Analyzer - Occupied BW

☒ RL RF 50 Ω AC SENSE:PULSE ALIGN:AUTO 05:01:33 PM Oct 17, 2017
Center Freq 2.480000000 GHz Center Freq: 2.480000000 GHz Radio Std: None
 #IFGain:Low Trig: Free Run Avg|Hold> 1/1 Radio Device: BTS
 #Atten: 30 dB



Center 2.48 GHz Span 3 MHz
 #Res BW 100 kHz #VBW 300 kHz Sweep 1.067 ms

Occupied Bandwidth		Total Power	
1.0291 MHz		5.19 dBm	
Transmit Freq Error	1.989 kHz	OBW Power	99.00 %
x dB Bandwidth	689.8 kHz	x dB	-6.00 dB

Frequency

Center Freq
 2.480000000 GHz

CF Step
 300.000 kHz
 Auto Man

Freq Offset
 0 Hz

MSG

STATUS

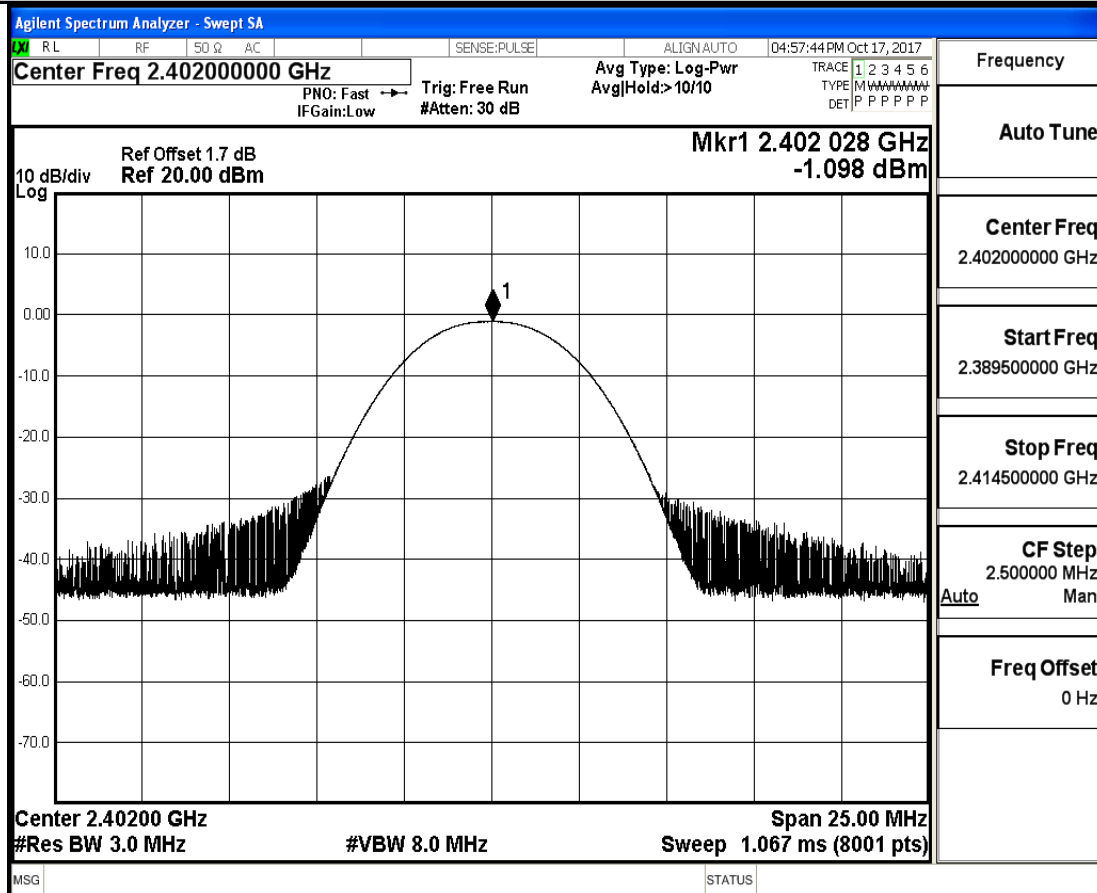
2.Occupied Bandwidth

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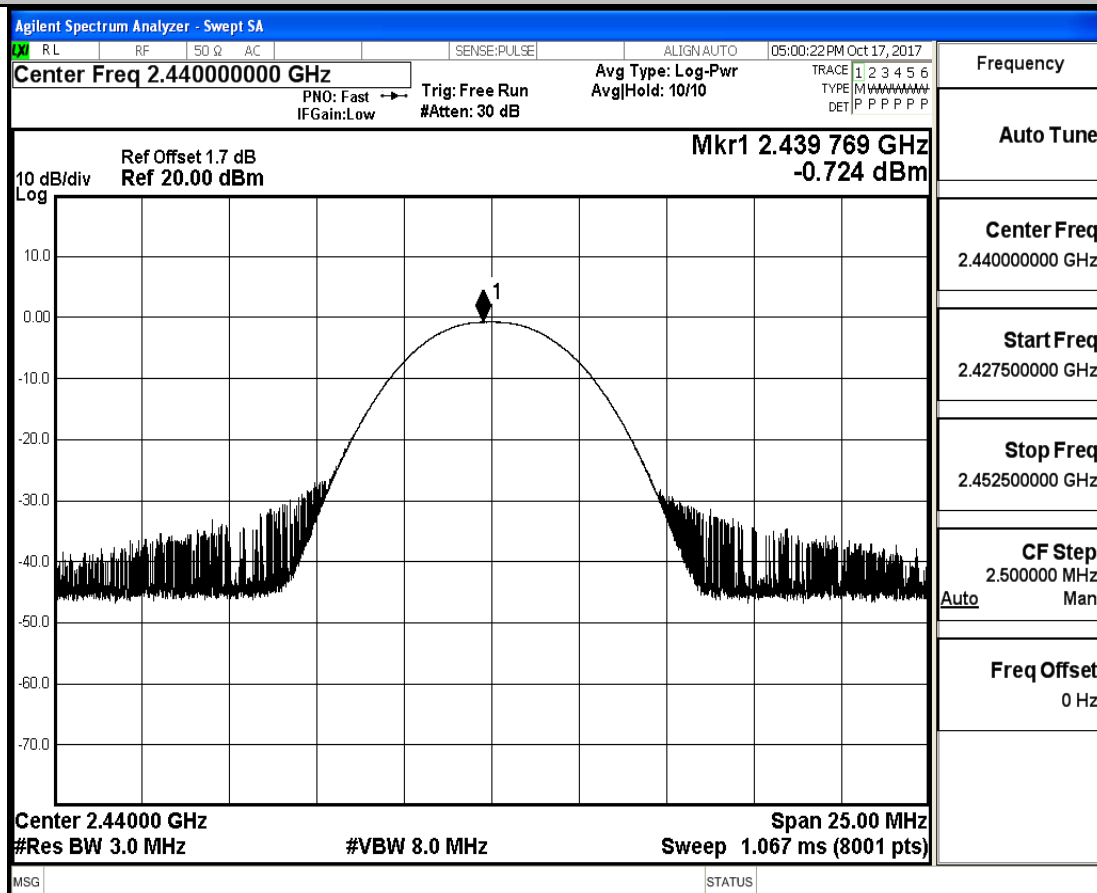
3.Maximum peak conducted output power

Test Mode	Test Channel	Power[dBm]	Limit[dBm]	Verdict
BLE	2402	-1.098	30	PASS
BLE	2440	-0.724	30	PASS
BLE	2480	-0.985	30	PASS

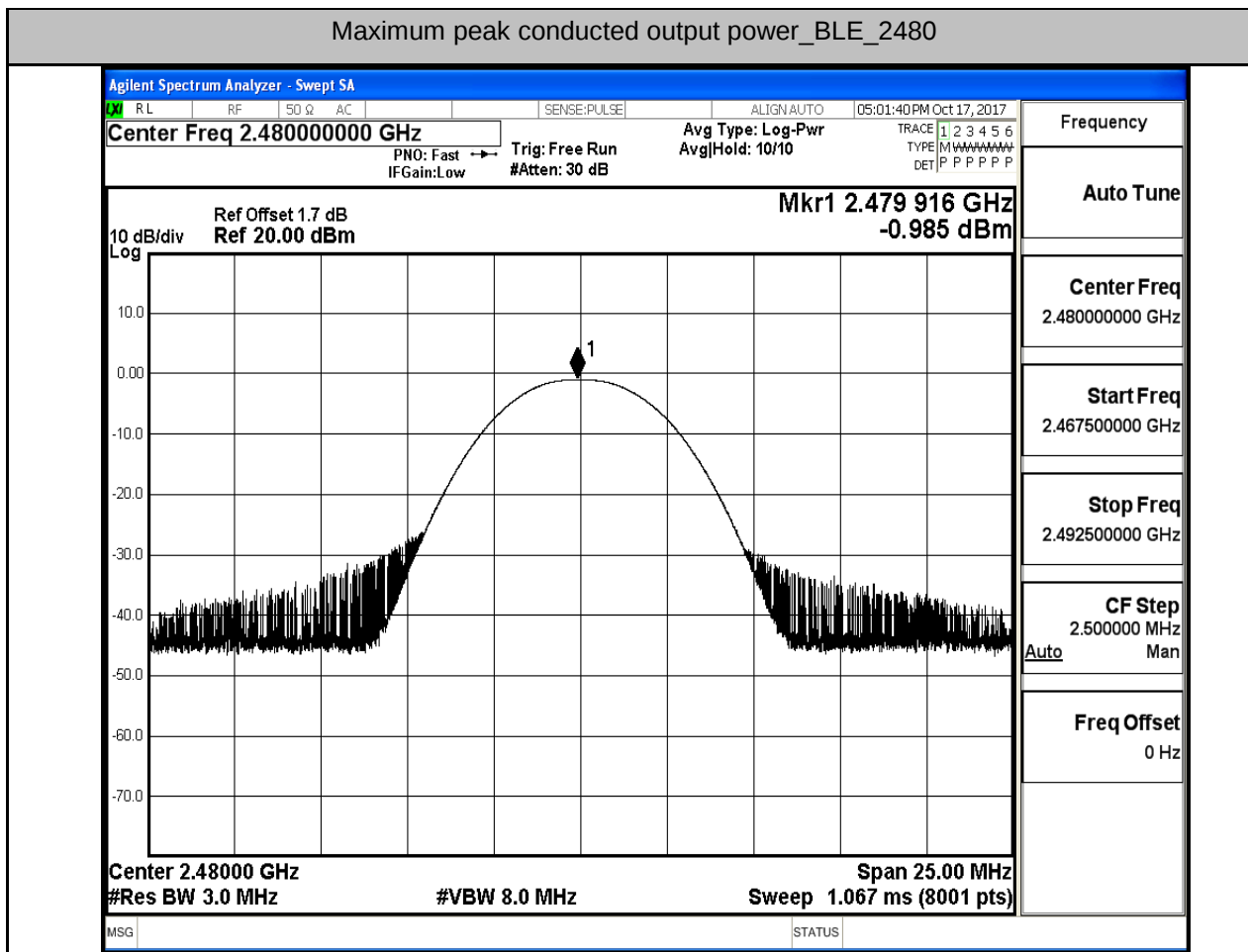
Maximum peak conducted output power_BLE_2402



Maximum peak conducted output power_BLE_2440



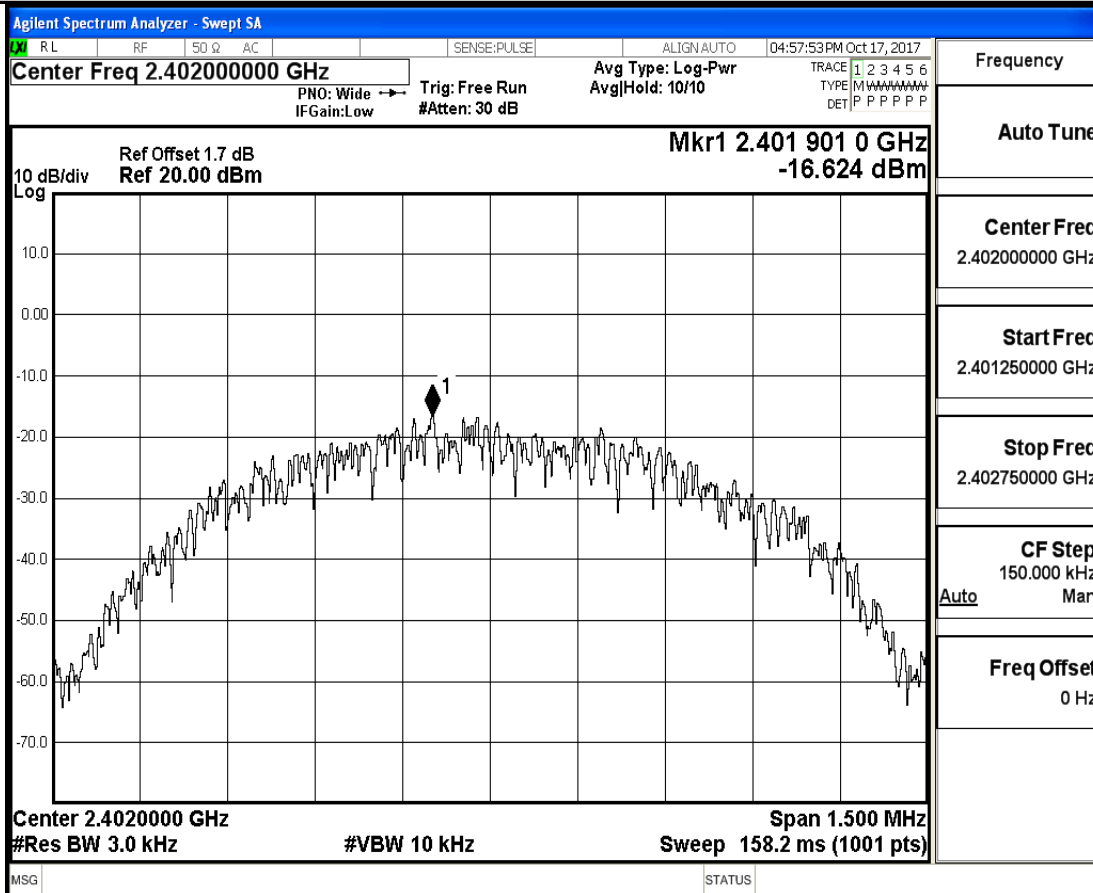
Maximum peak conducted output power_BLE_2480



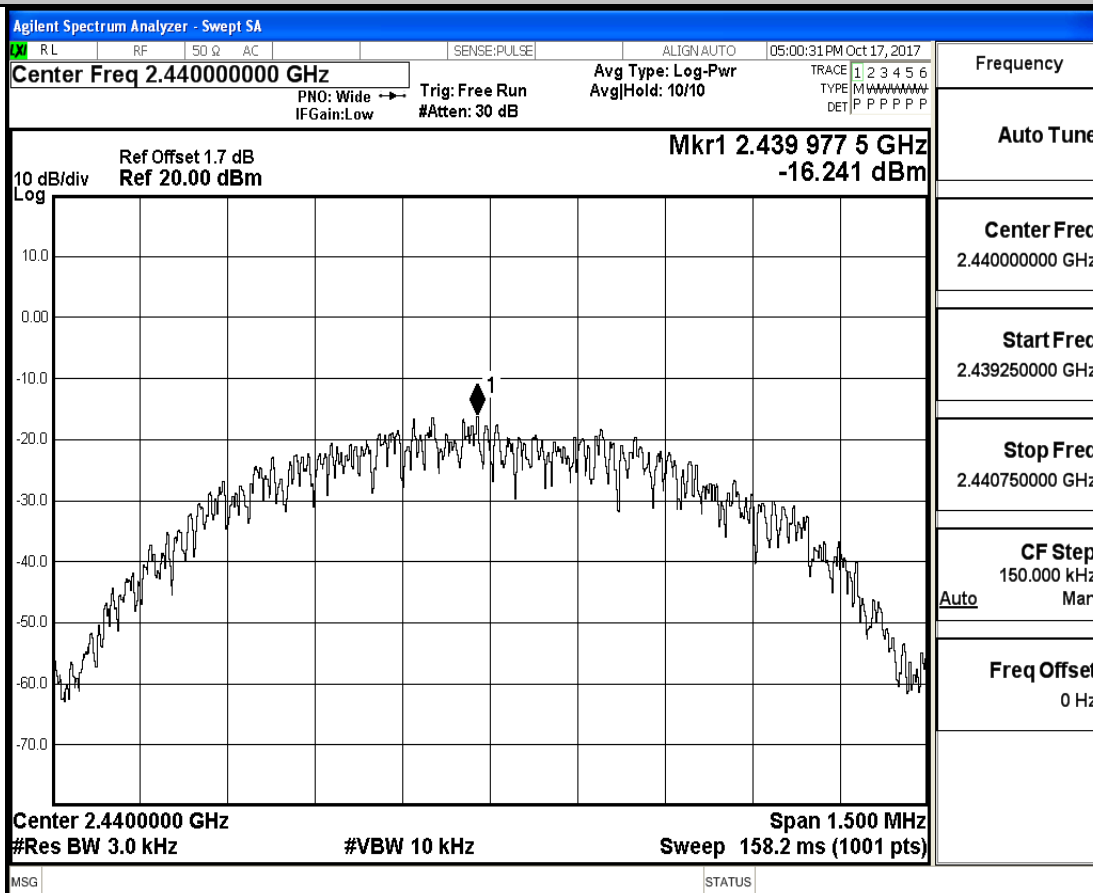
4.Maximum Peak power spectral density

Test Mode	Test Channel	PSD[dBm/MHz]	Limit[dBm/MHz]	Verdict
BLE	2402	-16.624	8.00	PASS
BLE	2440	-16.241	8.00	PASS
BLE	2480	-16.642	8.00	PASS

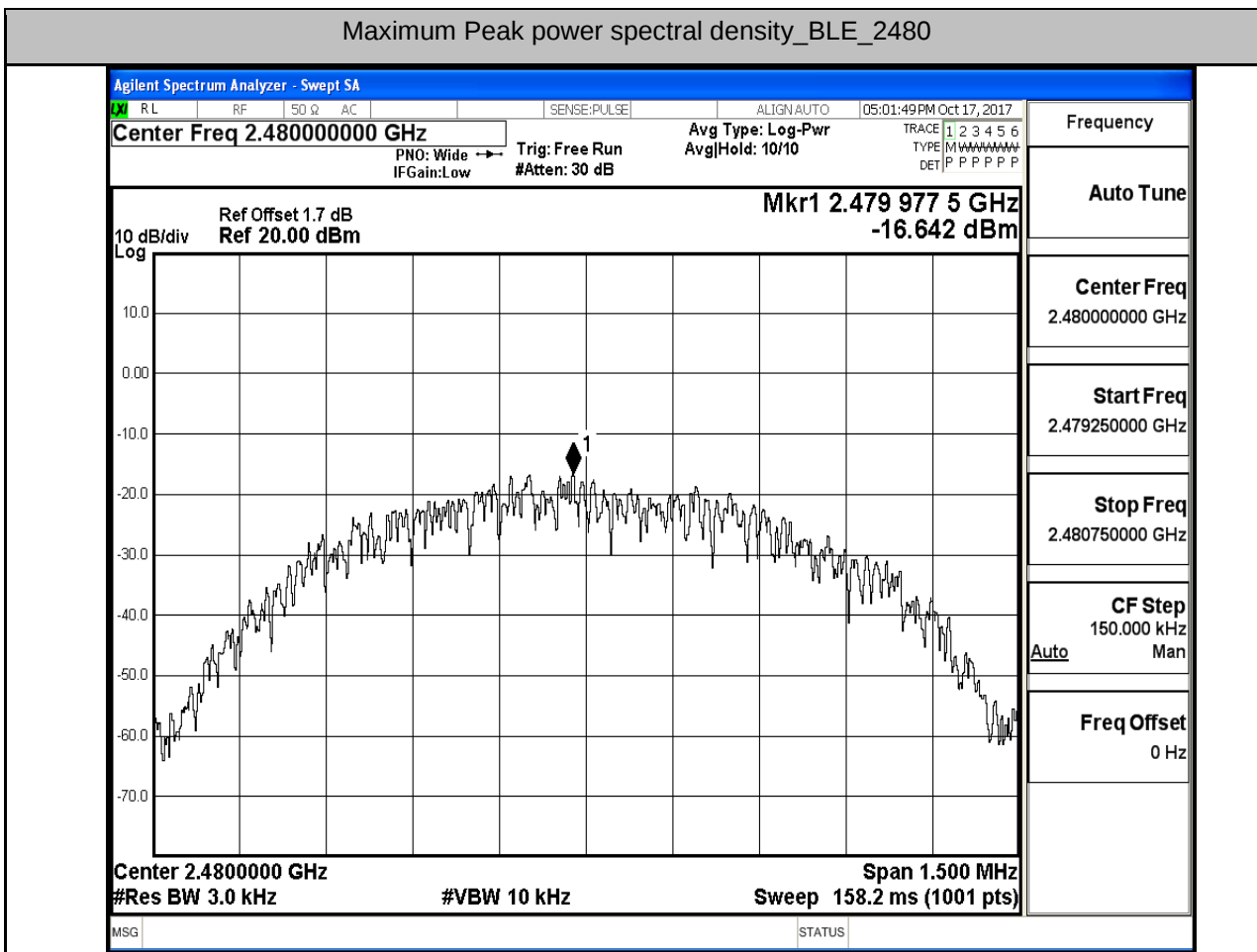
Maximum Peak power spectral density_BLE_2402



Maximum Peak power spectral density_BLE_2440



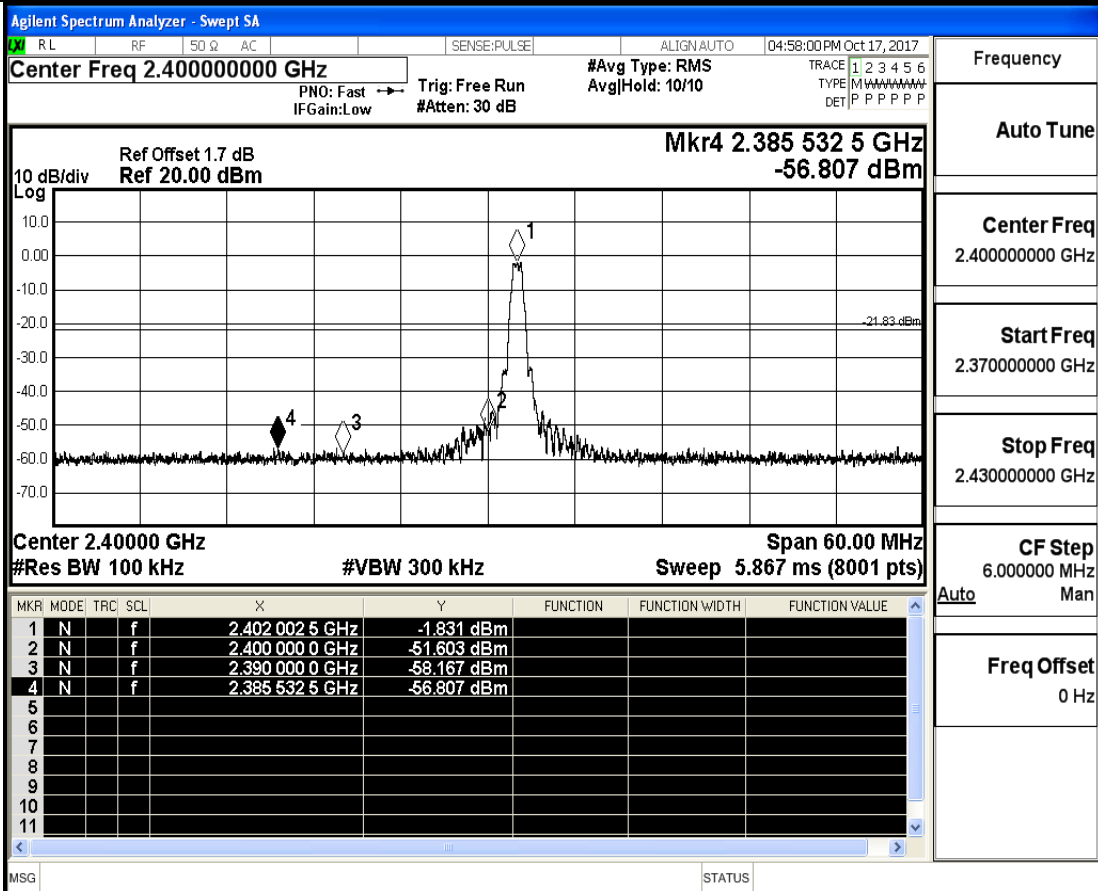
Maximum Peak power spectral density_BLE_2480



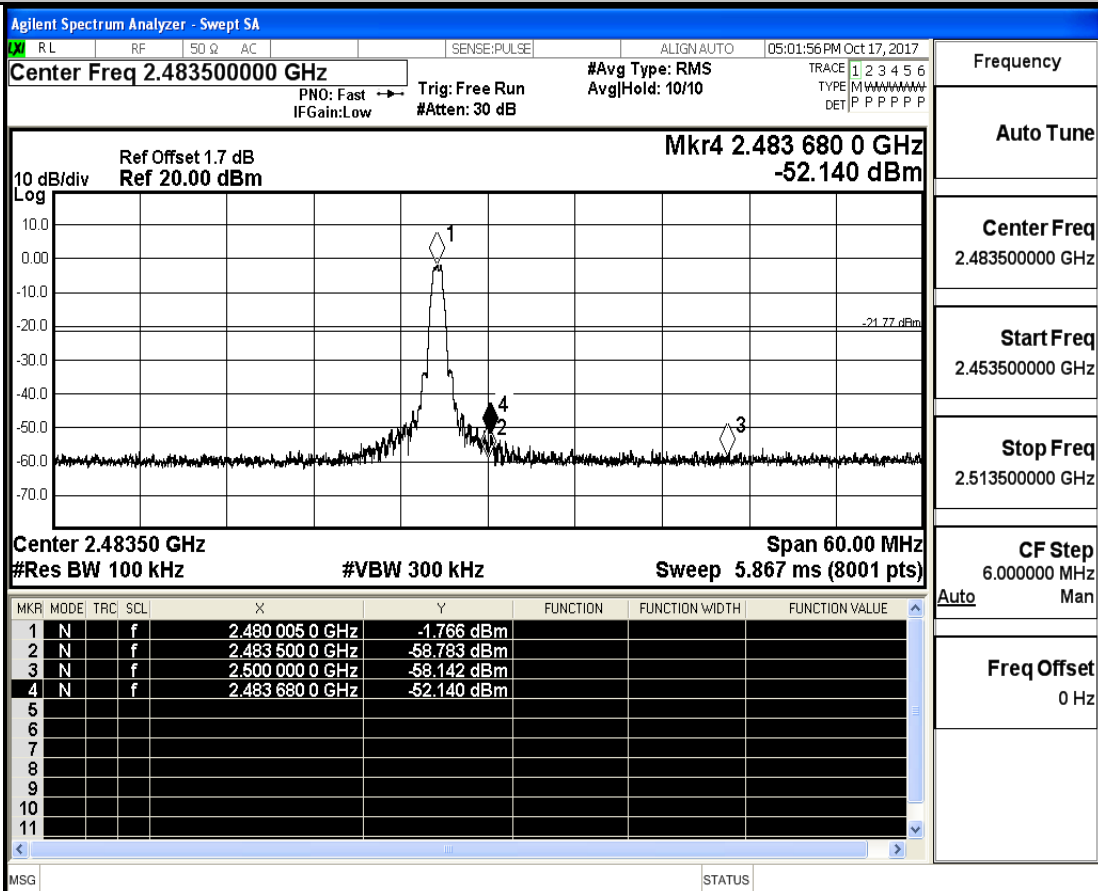
5.Band-edge for RF Conducted Emissions

Test Mode	Test Channel	Carrier Power[dBm]	Max. Spurious Level [dBm]	Limit [dBm]	Verdict
BLE	2402	-1.831	-56.807	-21.83	PASS
BLE	2480	-1.766	-52.140	-21.77	PASS

Band-edge for RF Conducted Emissions_BLE_2402



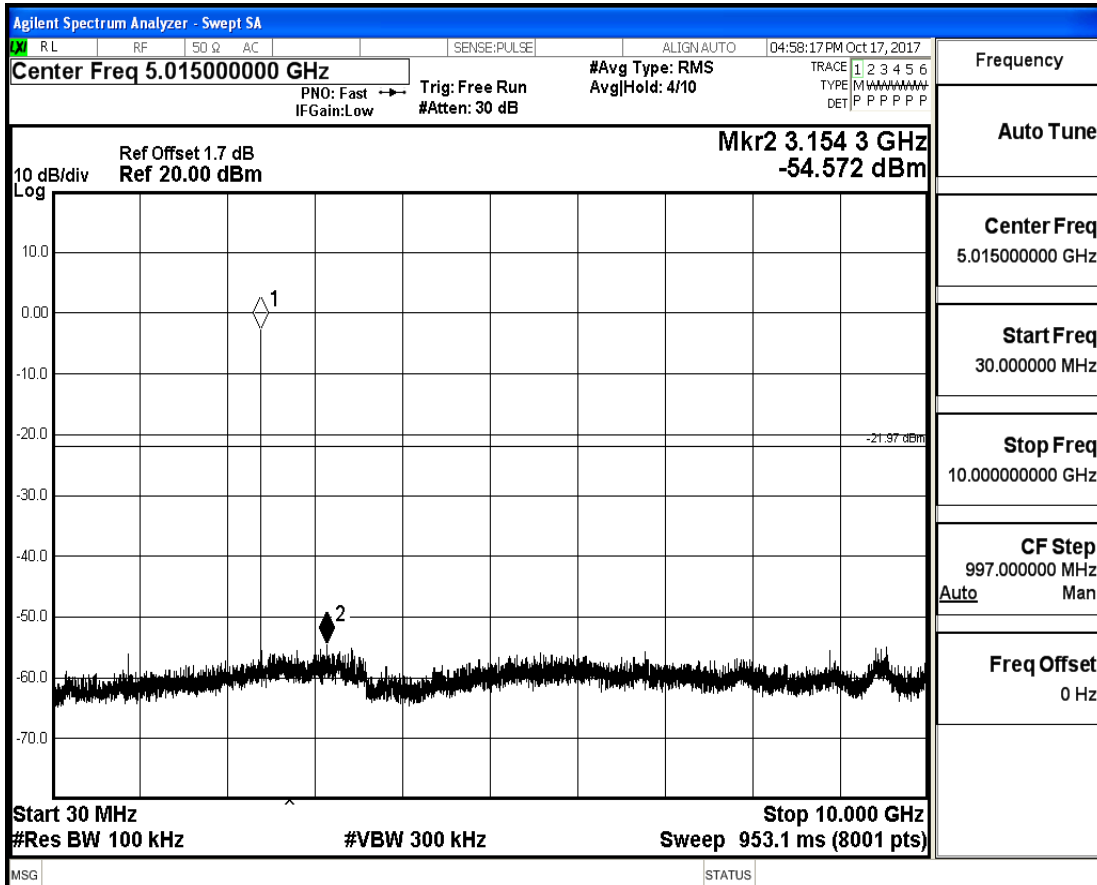
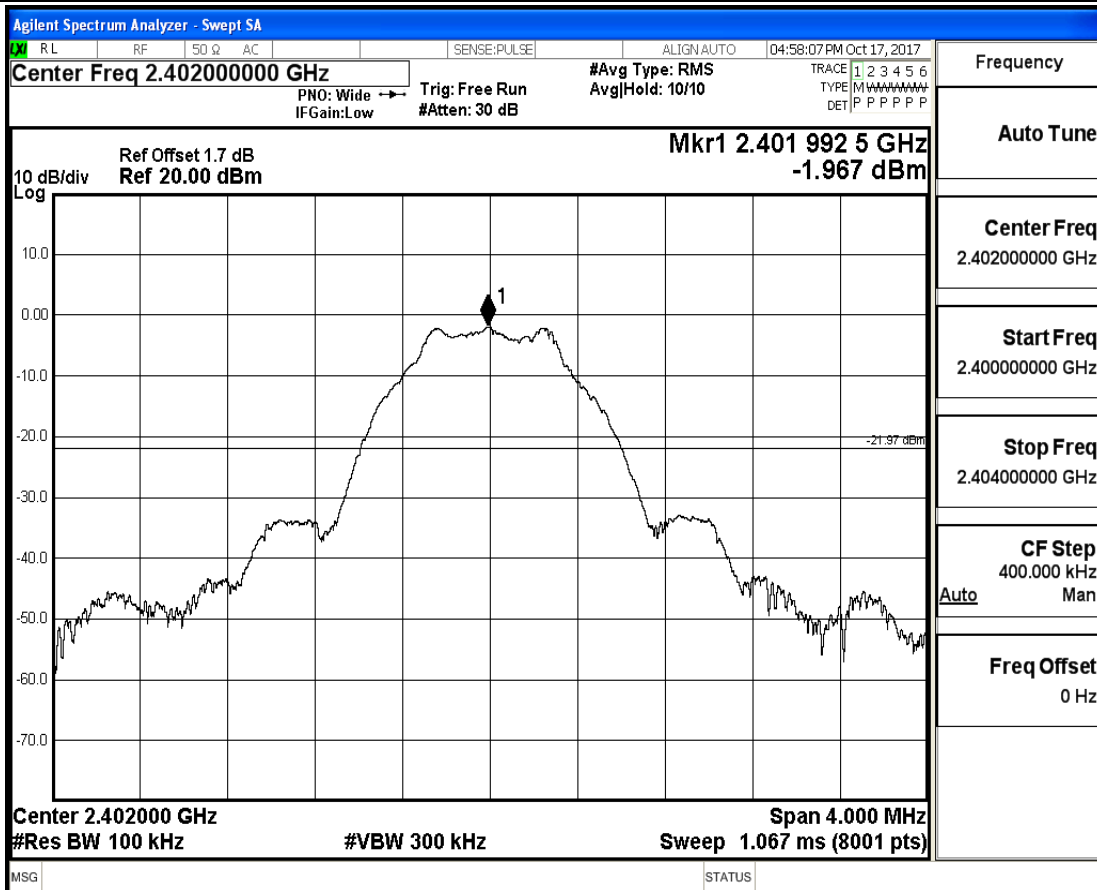
Band-edge for RF Conducted Emissions_BLE_2480

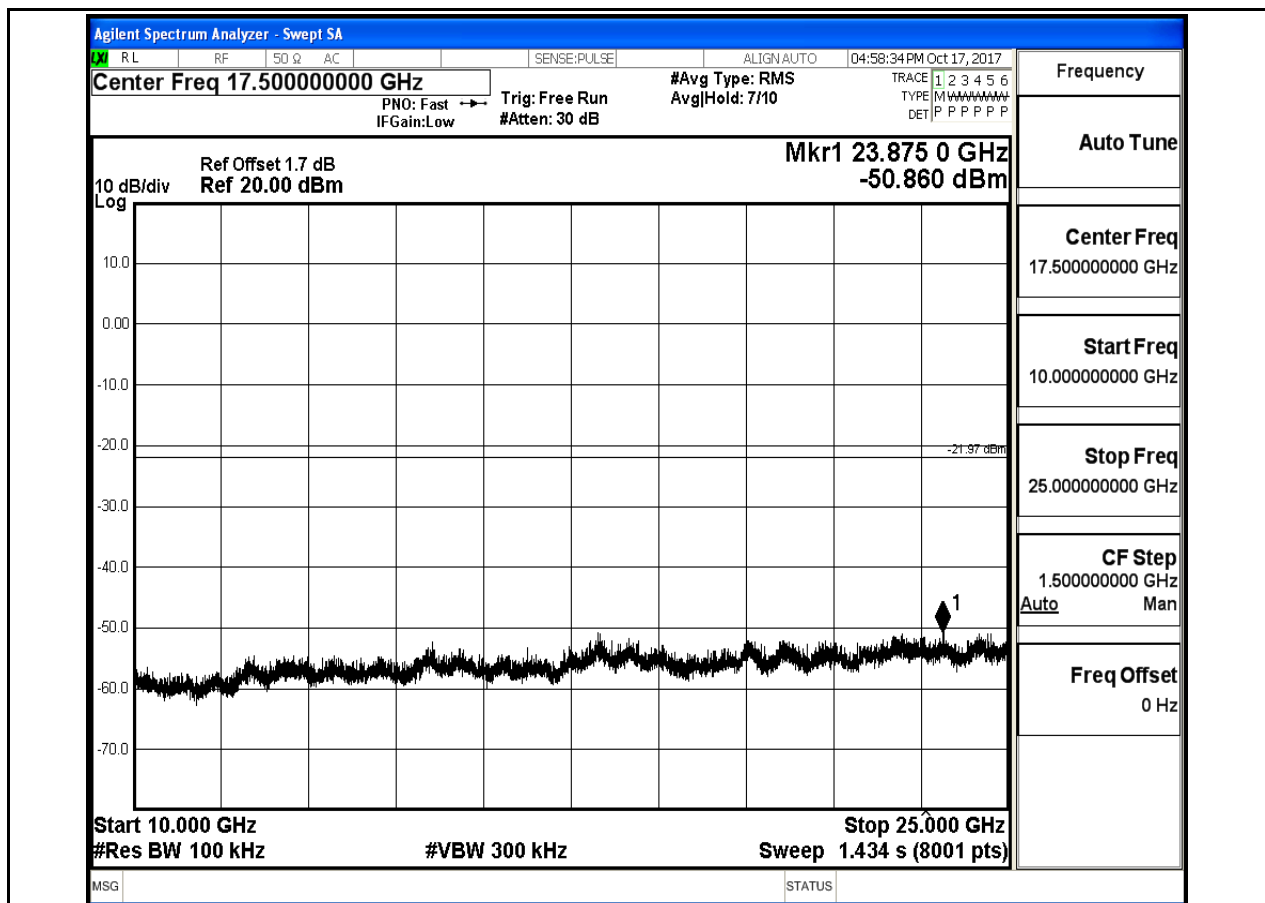


6.RF Conducted Spurious Emissions

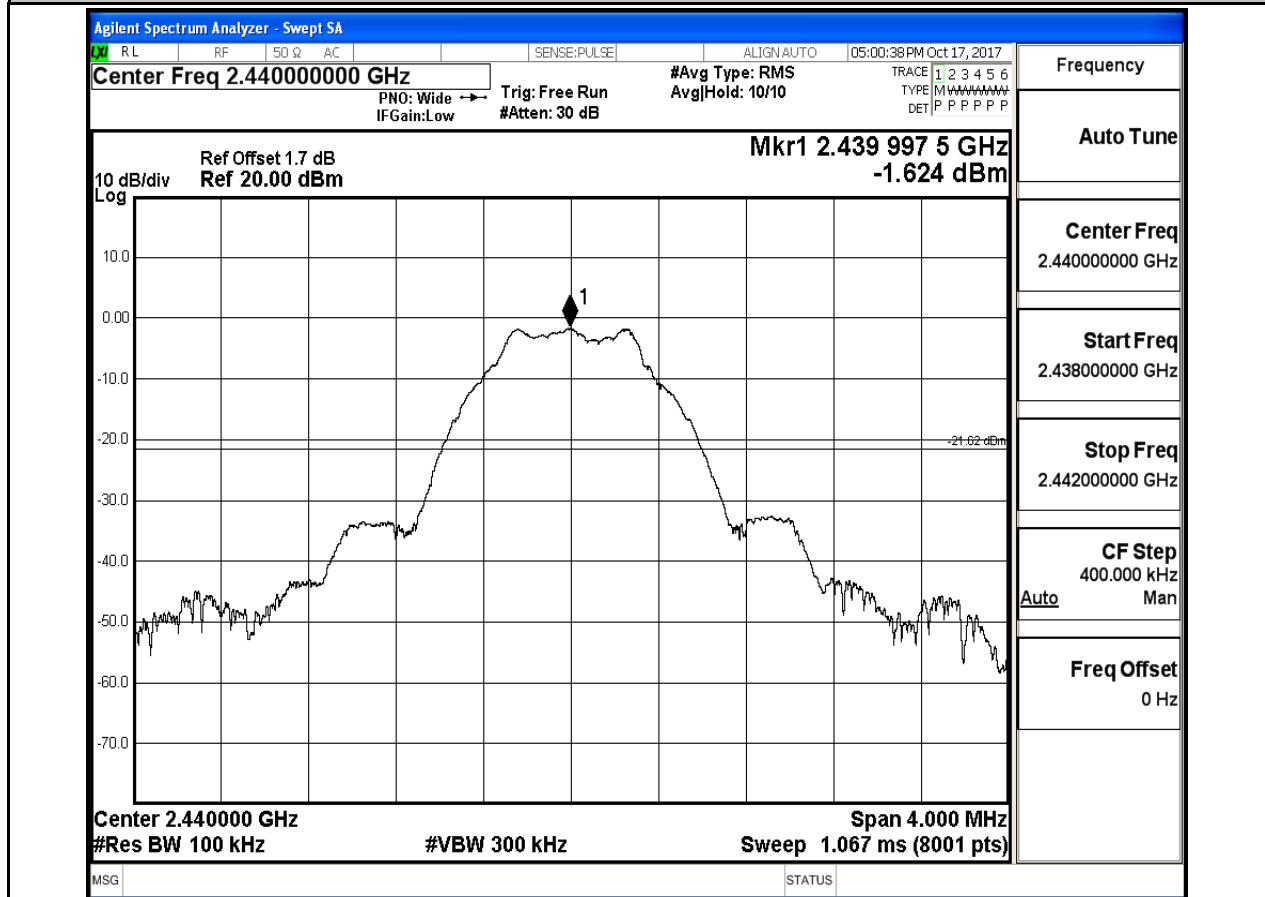
Test Mode	Test Channel	StartFre [MHz]	StopFre [MHz]	RBW [kHz]	VBW [kHz]	Pref[dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BLE	2402	30	10000	100	300	-1.967	-54.572	<-21.967	PASS
BLE	2402	10000	25000	100	300	-1.967	-50.860	<-21.967	PASS
BLE	2440	30	10000	100	300	-1.624	-54.569	<-21.624	PASS
BLE	2440	10000	25000	100	300	-1.624	-50.403	<-21.624	PASS
BLE	2480	30	10000	100	300	-1.869	-54.887	<-21.869	PASS
BLE	2480	10000	25000	100	300	-1.869	-50.490	<-21.869	PASS

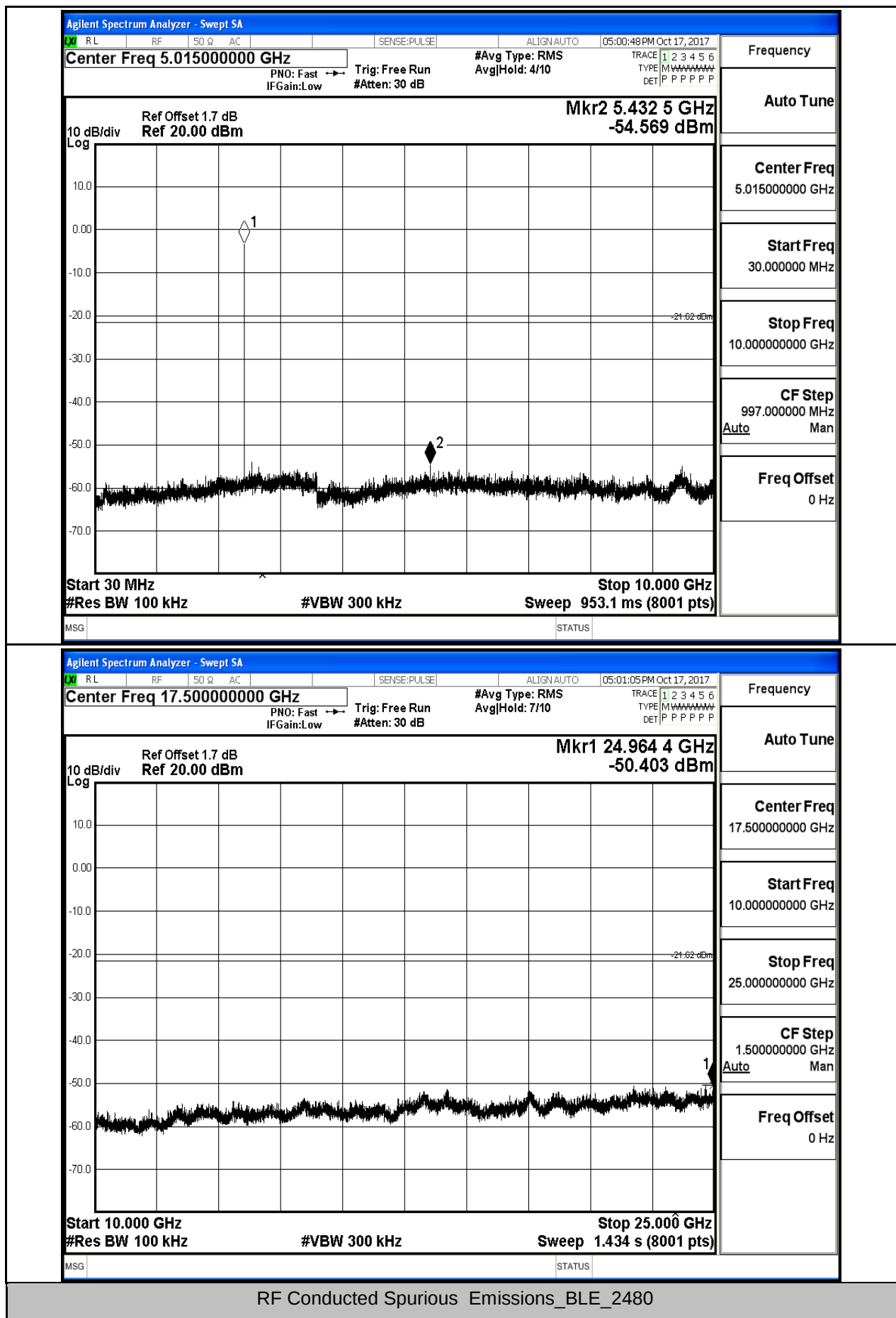
RF Conducted Spurious Emissions_BLE_2402





RF Conducted Spurious Emissions_BLE_2440





Frequency

Auto Tune

Center Freq
17.500000000 GHz

Start Freq
10.000000000 GHz

Stop Freq
25.000000000 GHz

CF Step
1.500000000 GHz
Auto Man

Freq Offset
0 Hz

Ref Offset 1.7 dB

Ref 20.00 dBm

Mkr1 24.964 4 GHz

-50.403 dBm

10 dB/div

Log

1

-21.62 dBm

Start 10.000 GHz

#Res BW 100 kHz

#VBW 300 kHz

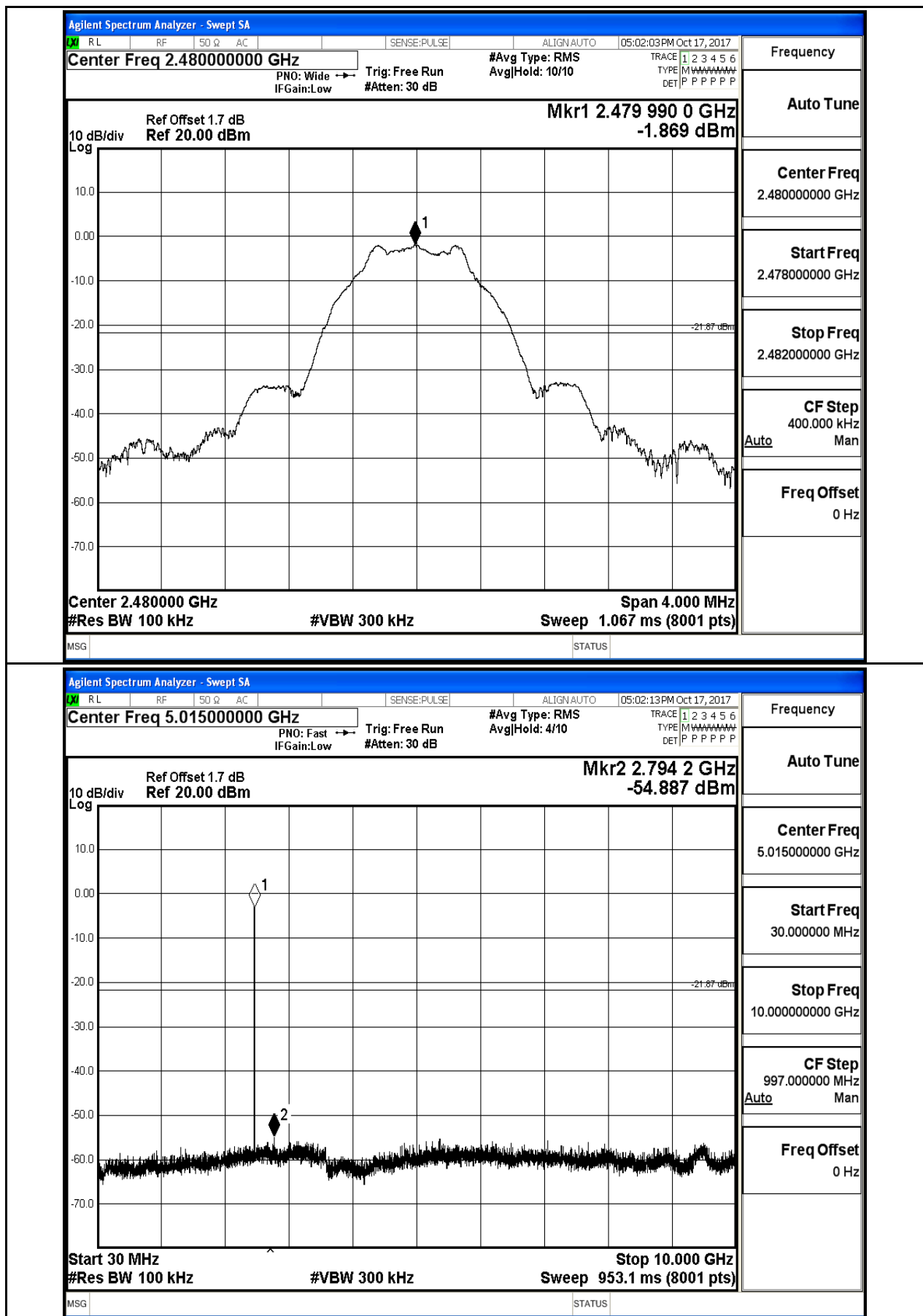
Stop 25.000 GHz

Sweep 1.434 s (8001 pts)

MSG

STATUS

RF Conducted Spurious Emissions_BLE_2480



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:PULSE ALIGN: AUTO 05:02:13 PM Oct 17, 2017

Center Freq 5.015000000 GHz

PNO: Fast Trg: Free Run #Avg Type: RMS AvgHold: 4/10

IFGain:Low #Atten: 30 dB

TRACE 1 2 3 4 5 6

TYPE M W W W W W W W

DET P P P P P P

Frequency

Auto Tune

Center Freq
5.015000000 GHz

Start Freq
30.000000 MHz

Stop Freq
10.000000000 GHz

CF Step
997.000000 MHz

Auto Man

Freq Offset
0 Hz

Ref Offset 1.7 dB

Ref 20.00 dBm

Mkr2 2.794 2 GHz

-54.887 dBm

10 dB/div Log

Start 30 MHz

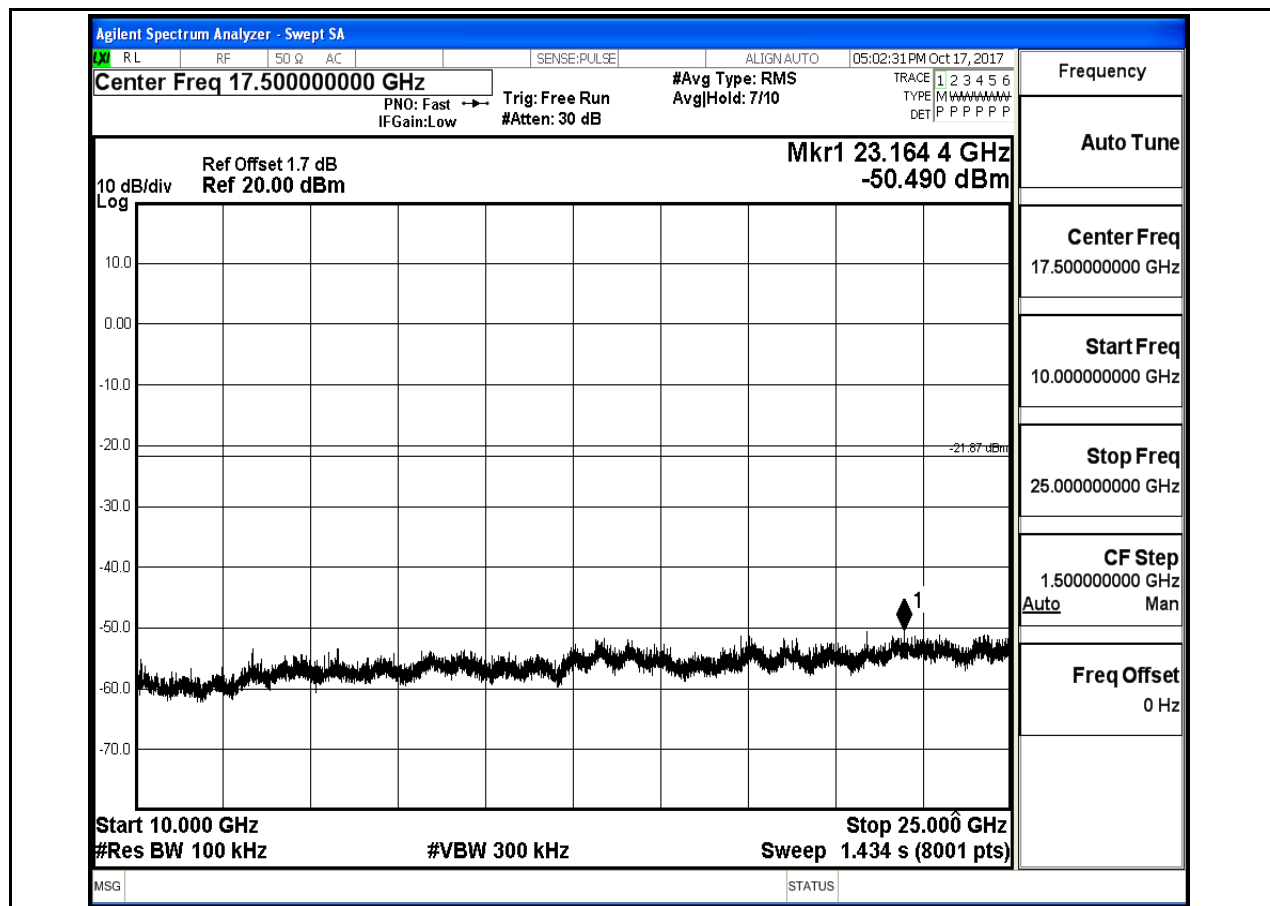
#Res BW 100 kHz

#VBW 300 kHz

Stop 10.000 GHz

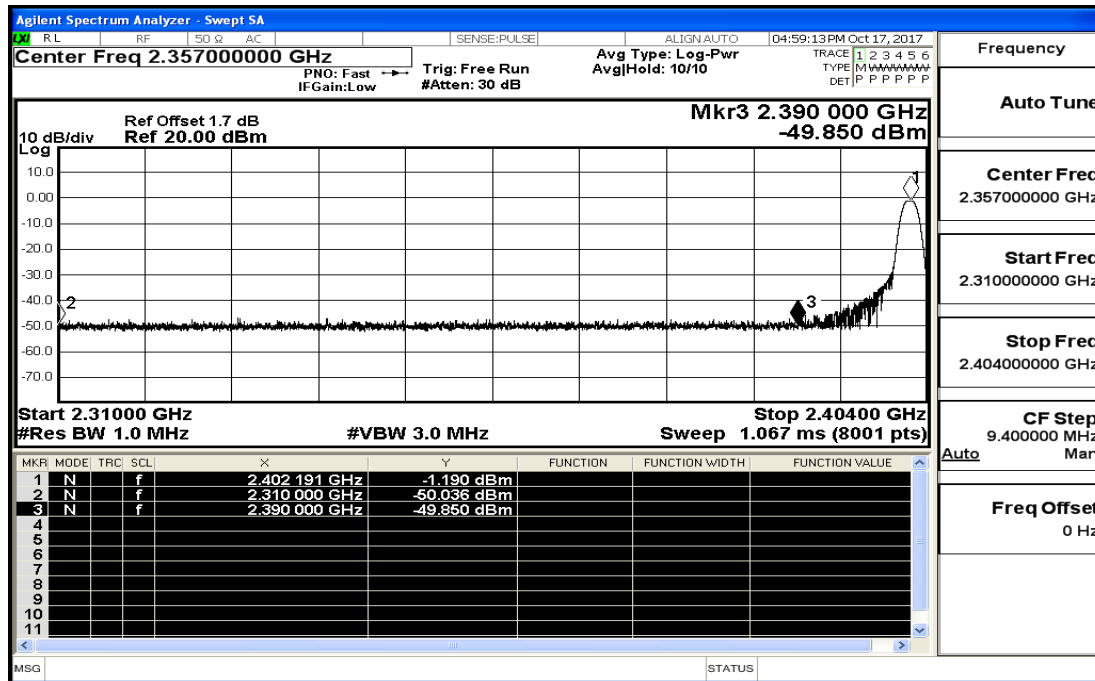
Sweep 953.1 ms (8001 pts)

MSG STATUS

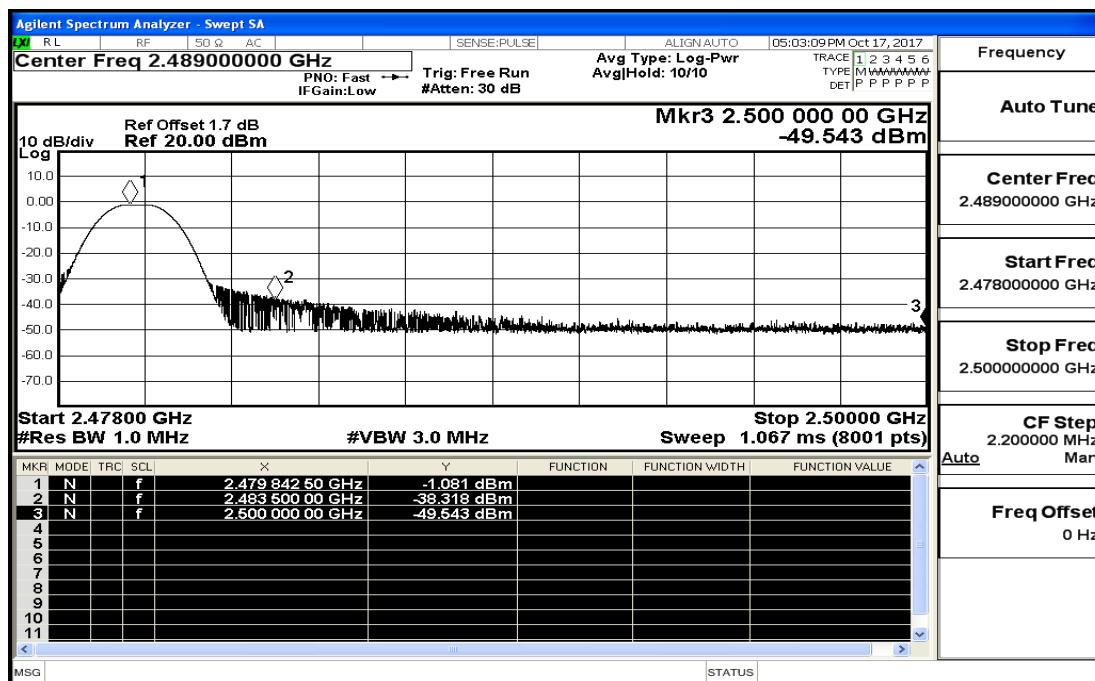


7.Restrict-band band-edge measurements

Test Mode	Test Channel	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
BLE	2402	2310.0	-50.04	2.0	0	47.22	PEAK	74	PASS
BLE	2402	2390.0	-49.85	2.0	0	47.41	PEAK	74	PASS
BLE	2480	2483.5	-38.32	2.0	0	58.94	PEAK	74	PASS
BLE	2480	2500.0	-49.54	2.0	0	47.72	PEAK	74	PASS



Restrict-band band-edge measurements_BLE_2402_PEAK



Restrict-band band-edge measurements_BLE_2480_PEAK

