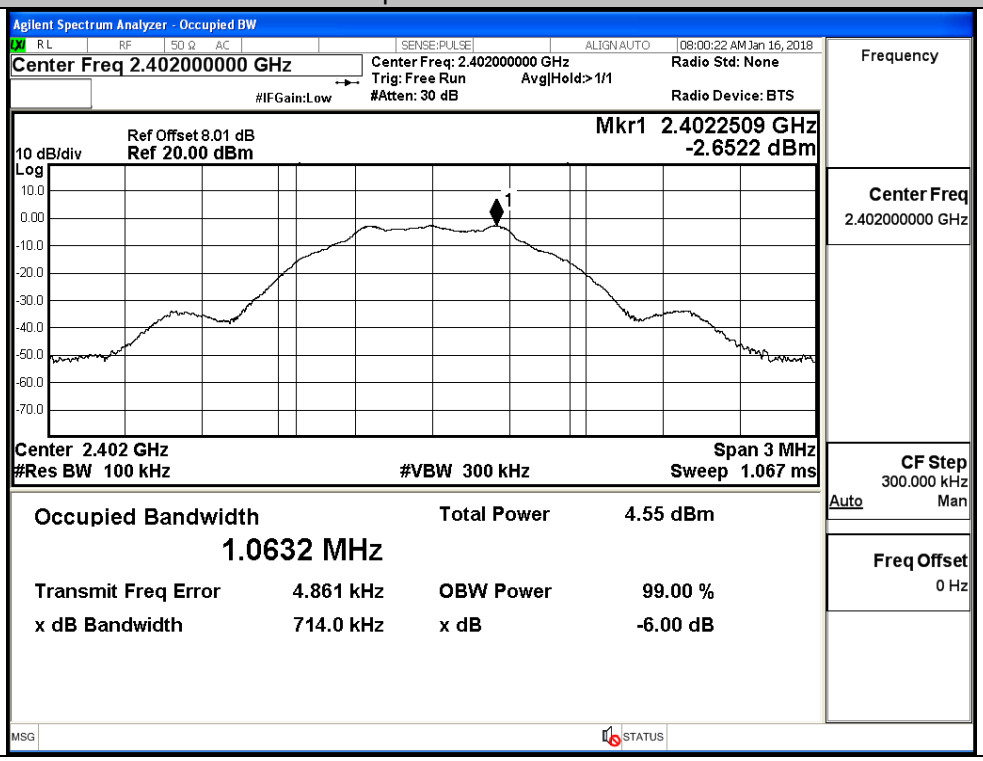
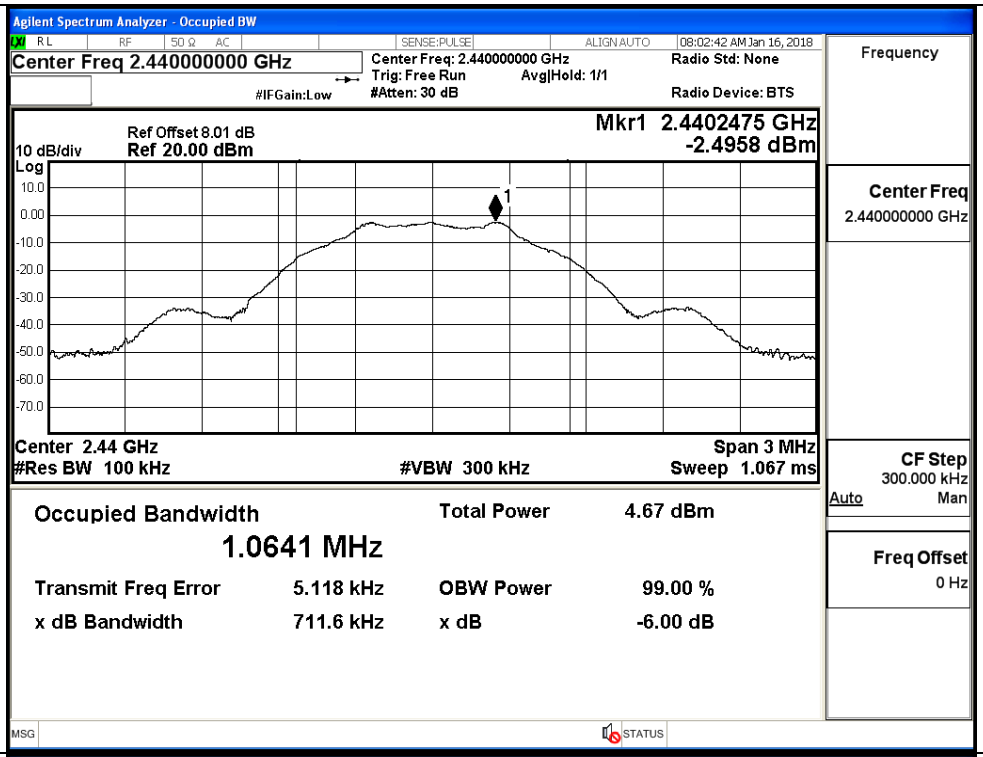
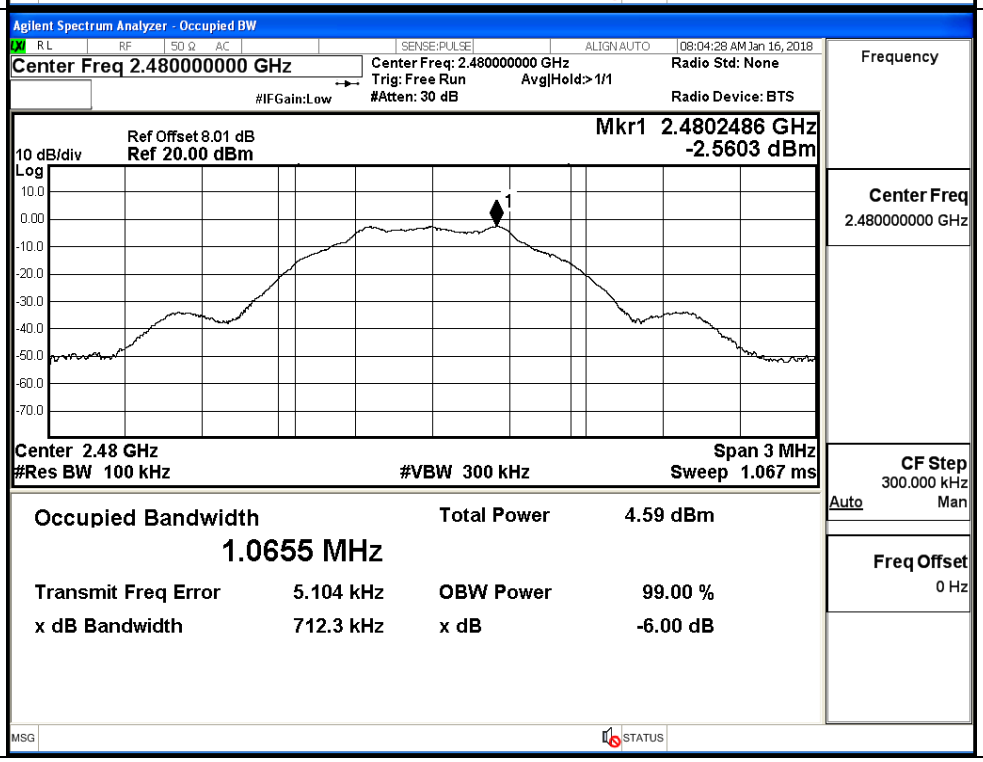
1: 6dB Bandwidth

Test Result

Mode	Channel	6dB Bandwidth [MHz]	Verdict
BLE	LCH	0.7140	PASS
BLE	MCH	0.7116	PASS
BLE	HCH	0.7123	PASS

Test Graphs

Graphs	
LCH	

MCH		
HCH		

Agilent Spectrum Analyzer - Occupied BW
RL RF 50 Ω AC SENSE:PULSE ALIGN AUTO 08:02:42 AM Jan 16, 2018
Center Freq 2.440000000 GHz
Center Freq: 2.440000000 GHz
Trig: Free Run Avg|Hold: 1/1
#IFGain:Low #Atten: 30 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 8.01 dB
10 dB/div Ref 20.00 dBm
Log
Mkr1 2.4402475 GHz
-2.4958 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 2.44 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 3 MHz
Sweep 1.067 ms
Occupied Bandwidth
1.0641 MHz
Total Power 4.67 dBm
Transmit Freq Error 5.118 kHz
OBW Power 99.00 %
x dB Bandwidth 711.6 kHz
x dB -6.00 dB
Center Freq
2.440000000 GHz
CF Step
300.000 kHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

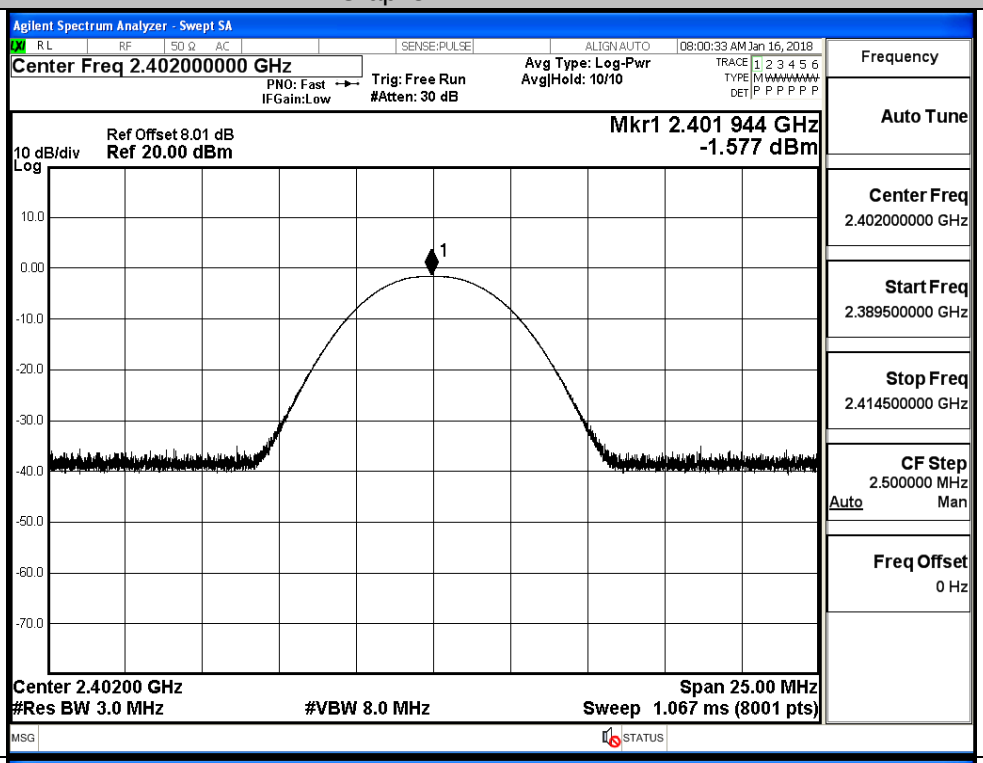
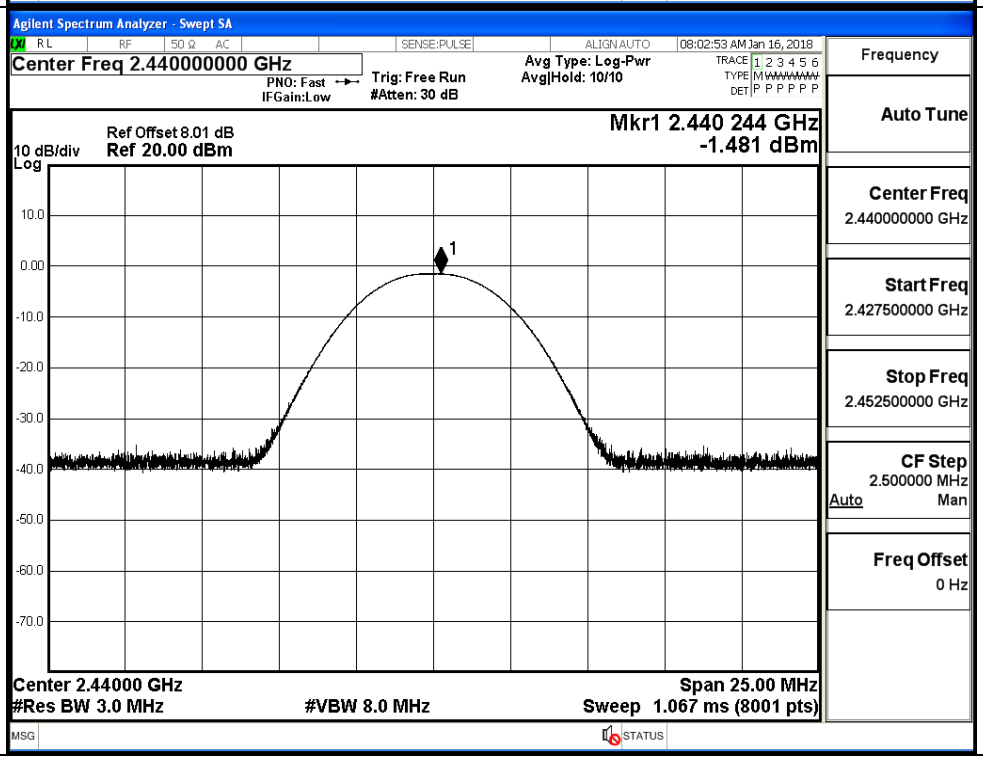
Agilent Spectrum Analyzer - Occupied BW
RL RF 50 Ω AC SENSE:PULSE ALIGN AUTO 08:04:28 AM Jan 16, 2018
Center Freq 2.480000000 GHz
Center Freq: 2.480000000 GHz
Trig: Free Run Avg|Hold:>1/1
#IFGain:Low #Atten: 30 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 8.01 dB
10 dB/div Ref 20.00 dBm
Log
Mkr1 2.4802486 GHz
-2.5603 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 2.48 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 3 MHz
Sweep 1.067 ms
Occupied Bandwidth
1.0655 MHz
Total Power 4.59 dBm
Transmit Freq Error 5.104 kHz
OBW Power 99.00 %
x dB Bandwidth 712.3 kHz
x dB -6.00 dB
Center Freq
2.480000000 GHz
CF Step
300.000 kHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

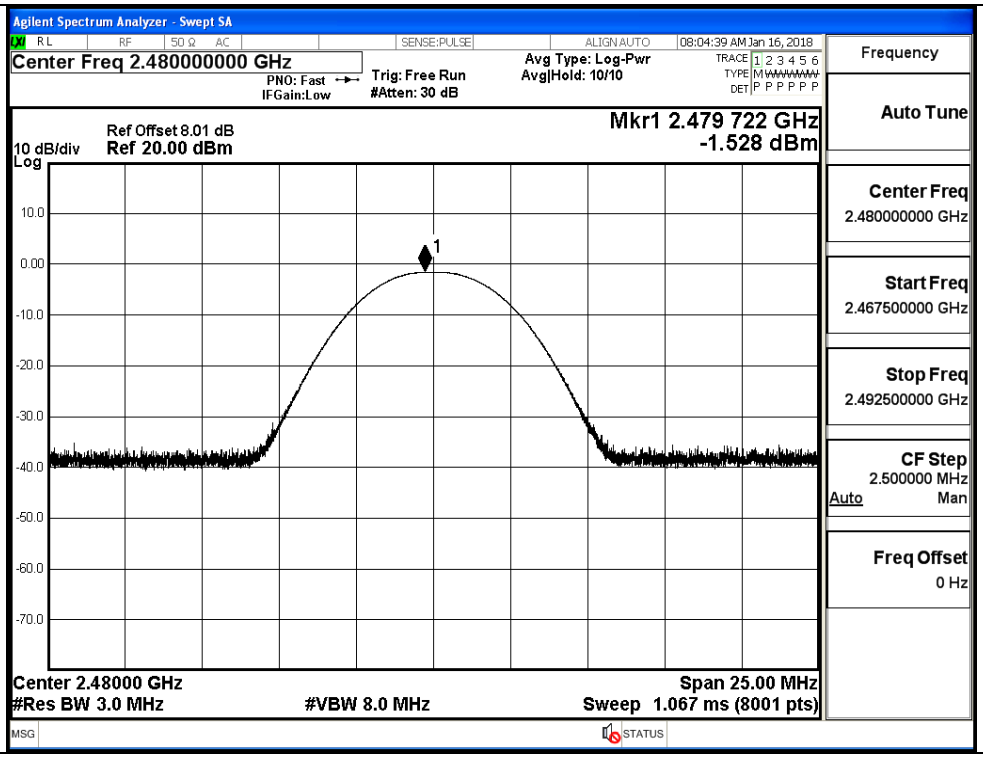
2: Conducted Peak Output Power

Test Result

Mode	Channel	Conduct Peak Power[dBm]	Verdict
BLE	LCH	-1.577	PASS
BLE	MCH	-1.481	PASS
BLE	HCH	-1.528	PASS

Test Graphs

Graphs		
LCH		
MCH		

HCH		

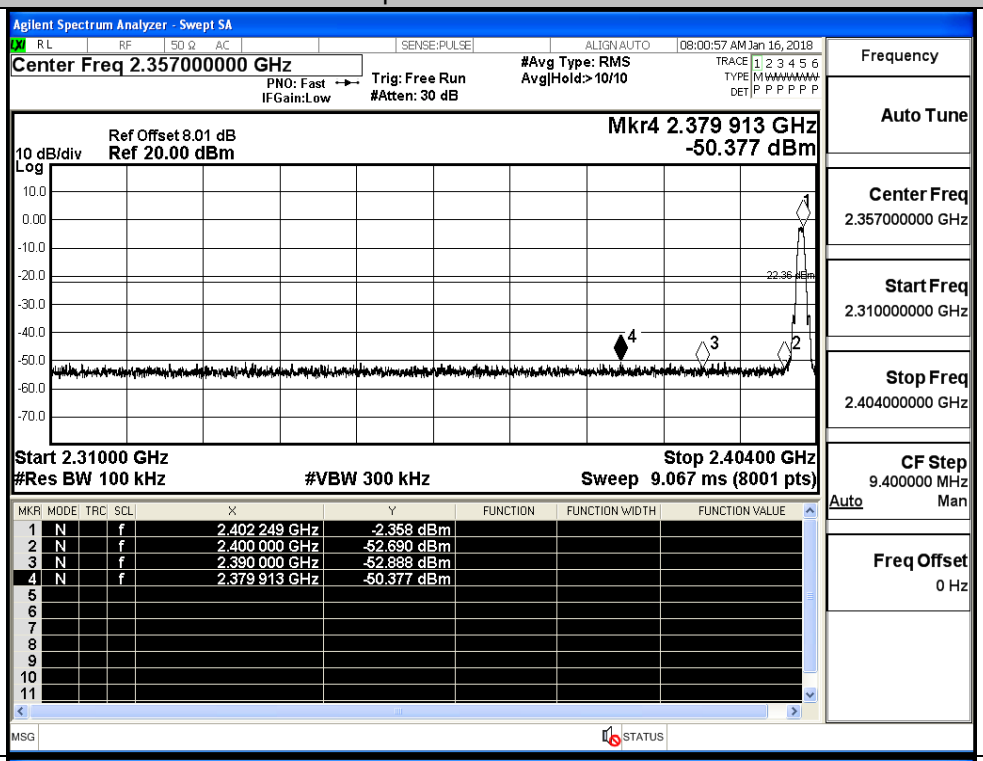
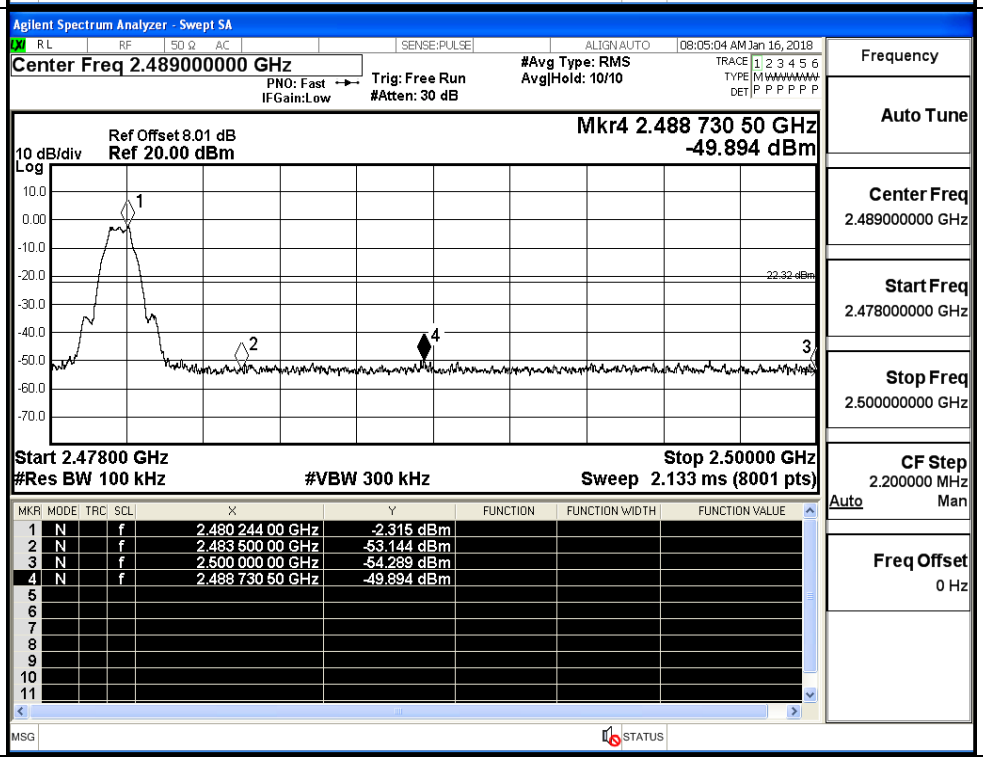
Agilent Spectrum Analyzer - Swept SA
Center Freq 2.480000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
08:04:39 AM Jan 16, 2018
Ref Offset 8.01 dB
10 dB/div
Log
Ref 20.00 dBm
Mkr1 2.479 722 GHz
-1.528 dBm
Center 2.48000 GHz
#Res BW 3.0 MHz
#VBW 8.0 MHz
Span 25.00 MHz
Sweep 1.067 ms (8001 pts)
Frequency
Auto Tune
Center Freq
2.480000000 GHz
Start Freq
2.467500000 GHz
Stop Freq
2.492500000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

3: Band-edge for RF Conducted Emissions

Result Table

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BLE	LCH	-2.358	-50.377	-22.36	PASS
BLE	HCH	-2.315	-49.894	-22.32	PASS

Test Graphs

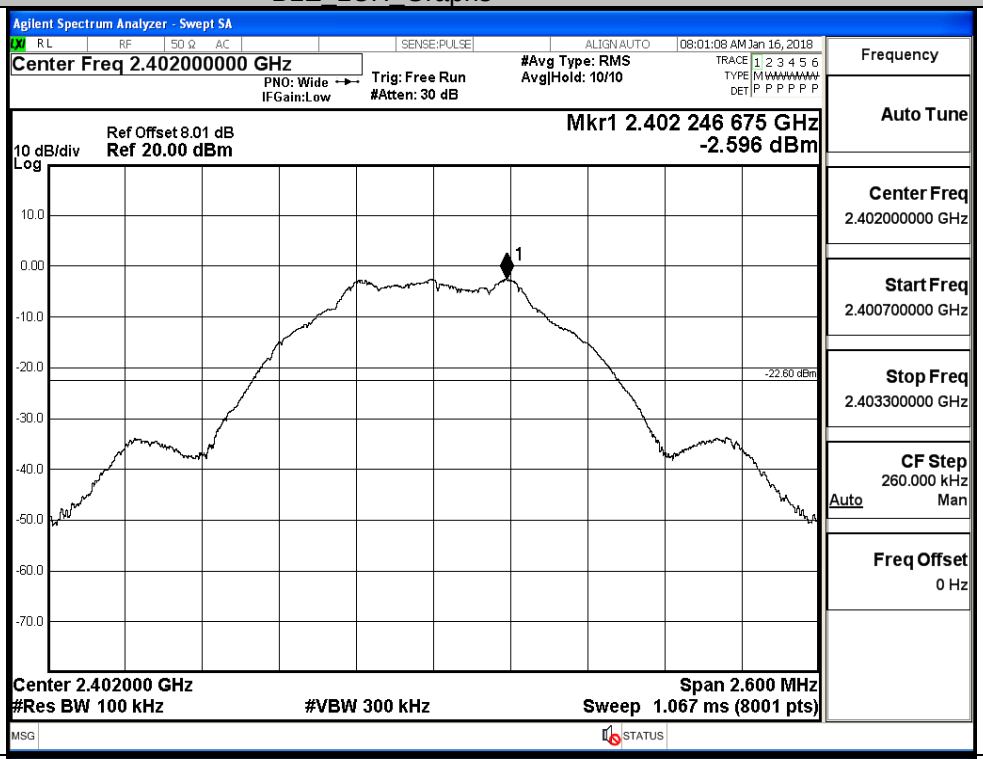
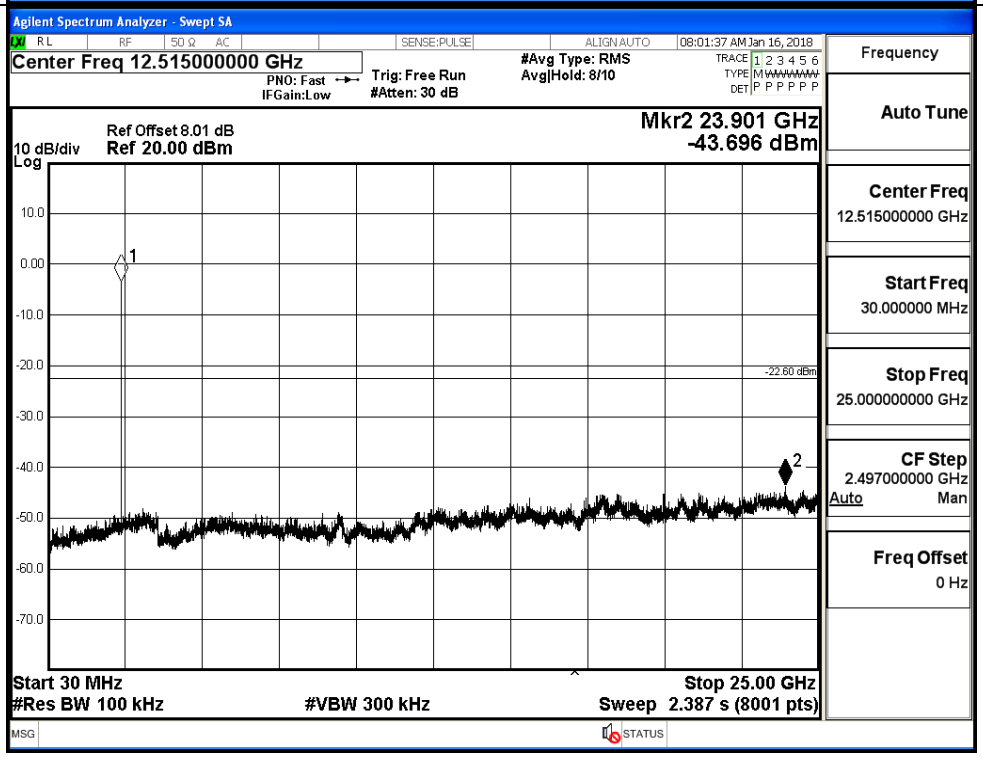
Graphs		
LCH		
HCH		

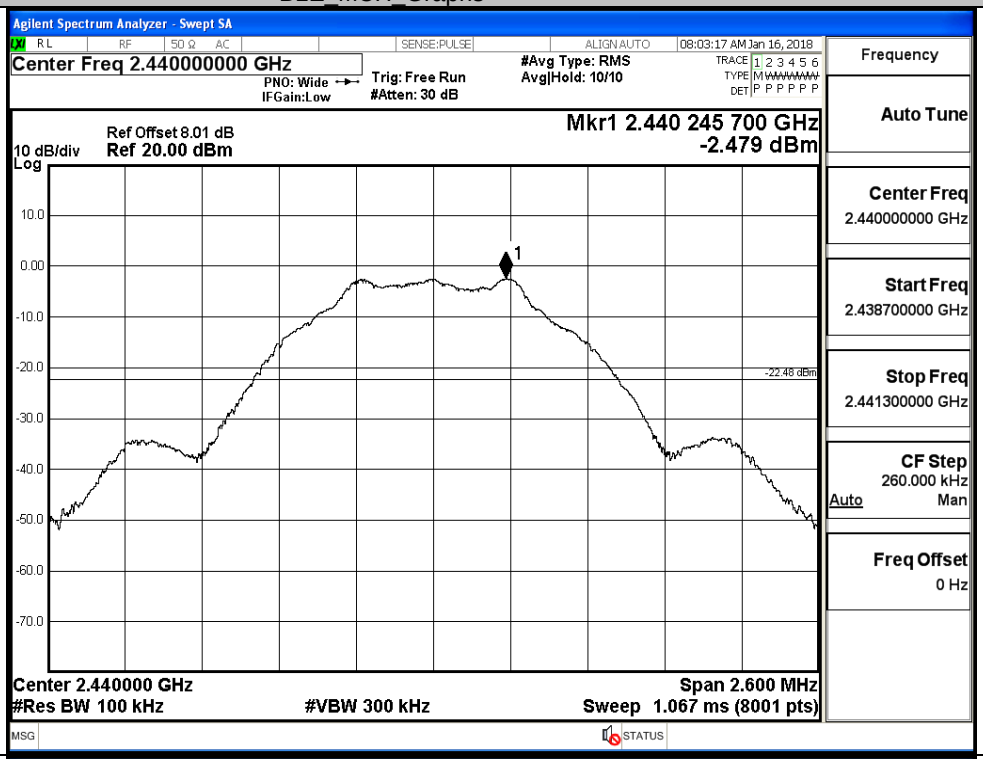
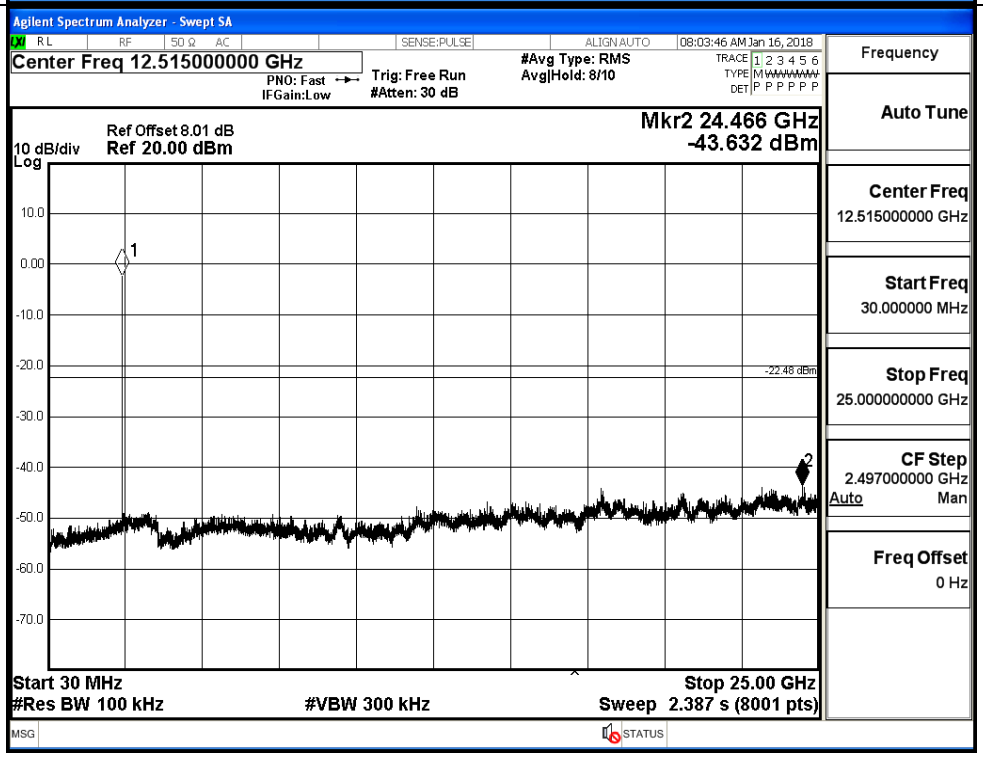
4: RF Conducted Spurious Emissions

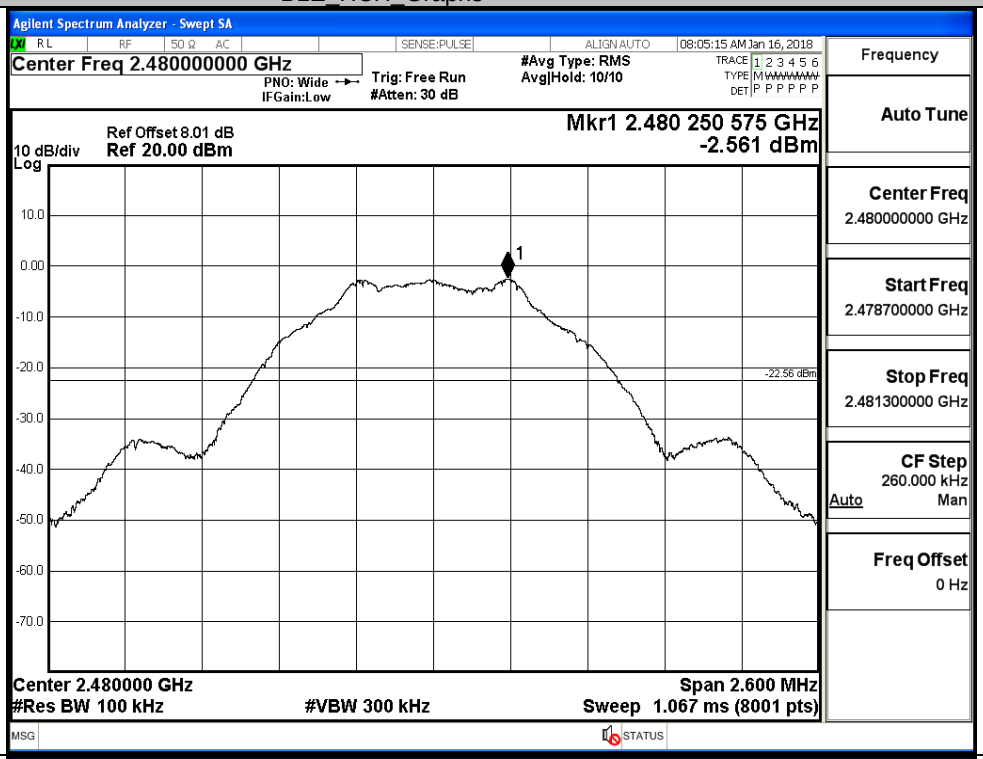
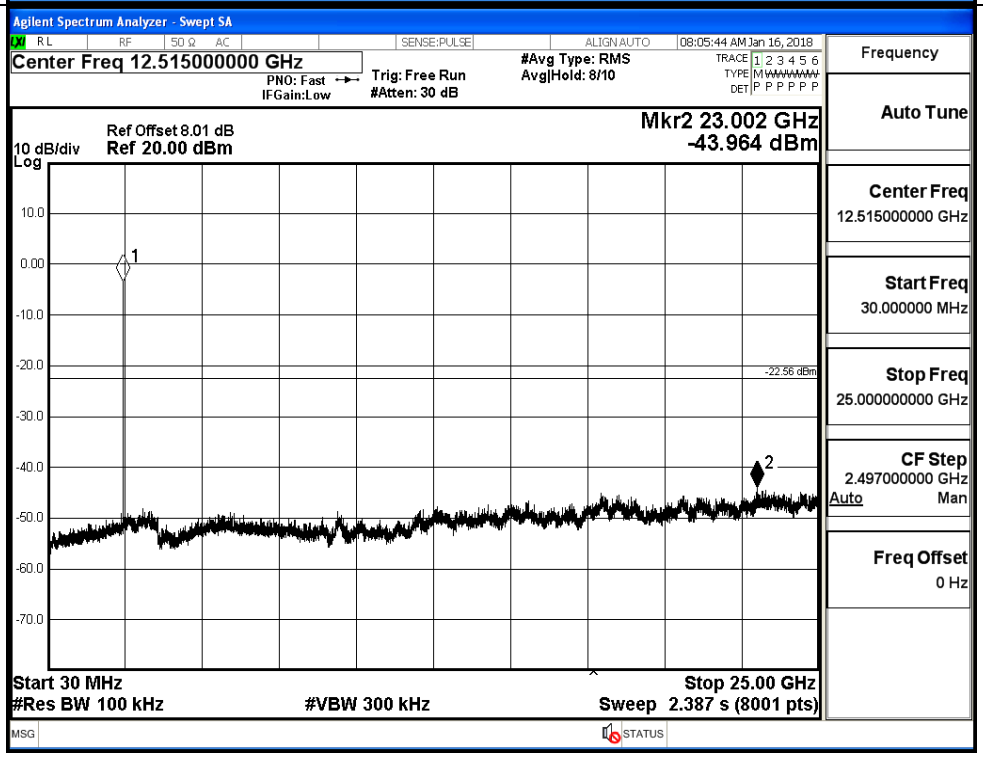
Result Table

Mode	Channel	Pref [dBm]	Puw[dBm]	Verdict
BLE	LCH	-2.596	<Limit	PASS
BLE	MCH	-2.479	<Limit	PASS
BLE	HCH	-2.561	<Limit	PASS

Test Graphs

BLE_LCH_Graphs	
Pref/BLE/LCH	
Puw/BLE/LCH	

BLE_MCH_Graphs	
Pref/BLE/MCH	
Puw/BLE/MCH	

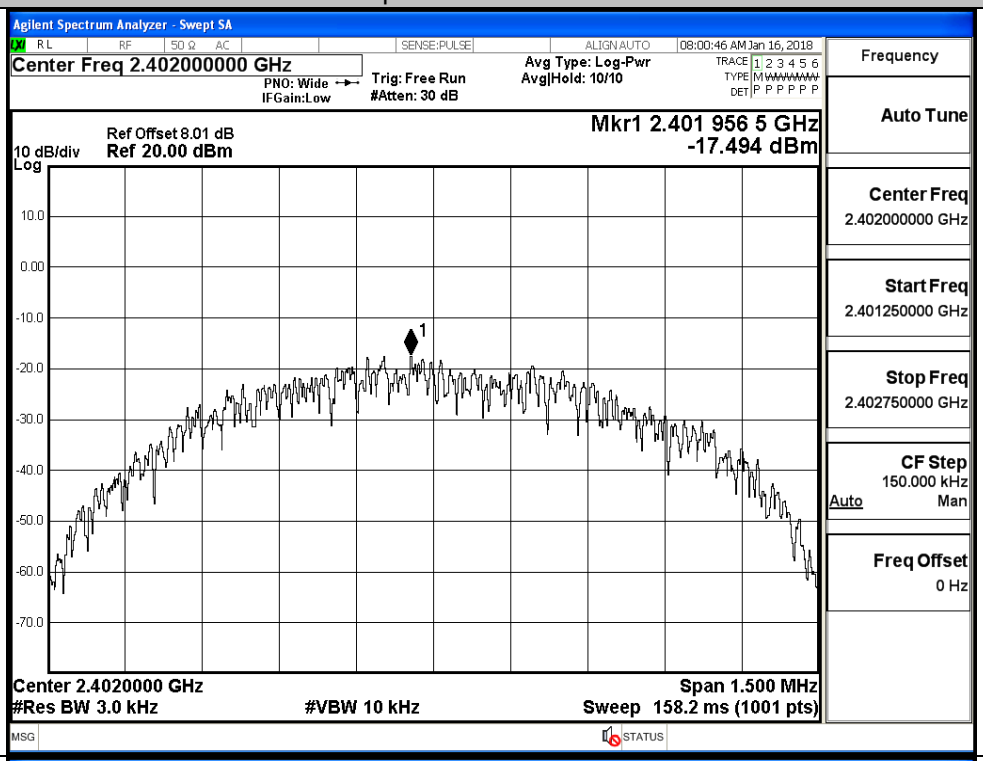
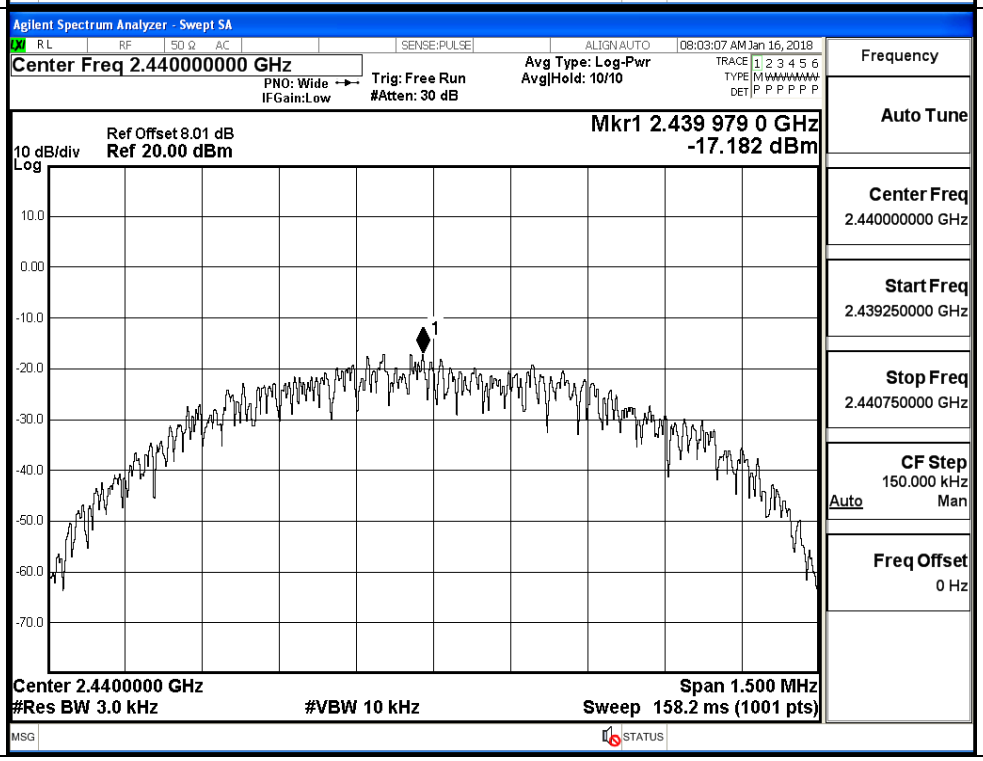
BLE_HCH_Graphs	
Pref/BLE/HCH	
Puw/BLE/HCH	

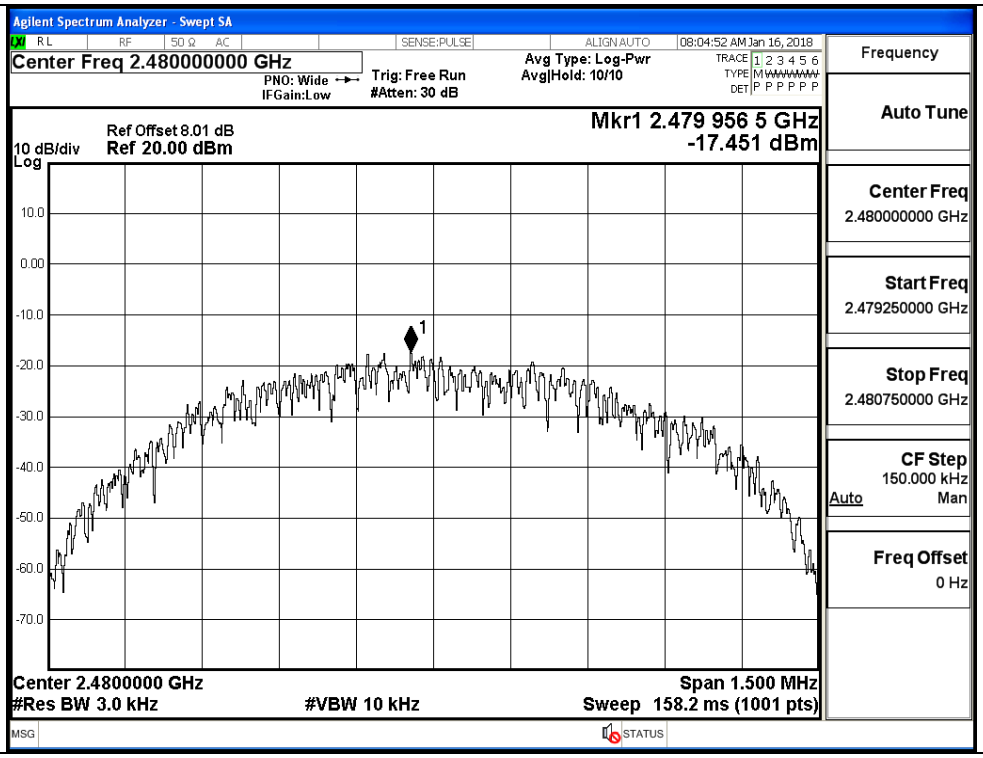
5: Power Spectral Density

Result Table

Mode	Channel	PSD [dBm/3KHz]	Verdict
BLE	LCH	-17.494	PASS
BLE	MCH	-17.182	PASS
BLE	HCH	-17.451	PASS

Test Graphs

Graphs		
LCH		
MCH		

HCH		

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.480000000 GHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
08:04:52 AM Jan 16, 2018
Ref Offset 8.01 dB
10 dB/div
Log
Ref 20.00 dBm
Mkr1 2.479 956 5 GHz
-17.451 dBm
Center 2.4800000 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
Span 1.500 MHz
Sweep 158.2 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.480000000 GHz
Start Freq
2.479250000 GHz
Stop Freq
2.480750000 GHz
CF Step
150.000 kHz
Auto
Man
Freq Offset
0 Hz

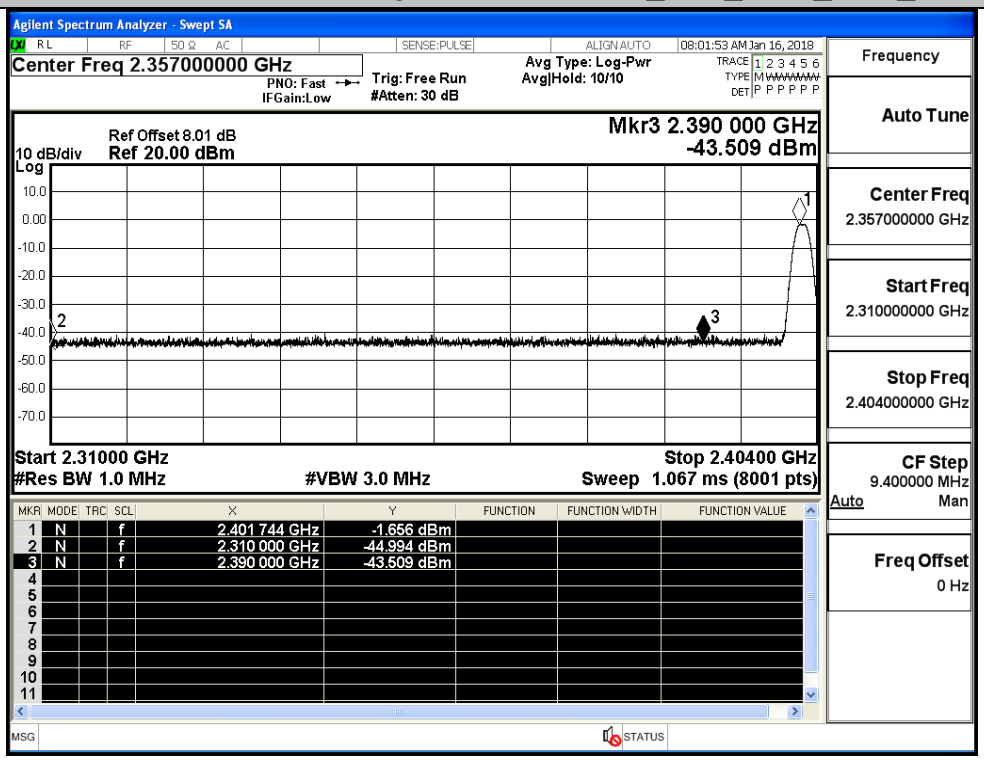
6: Restrict-band band-edge measurements

Result Table

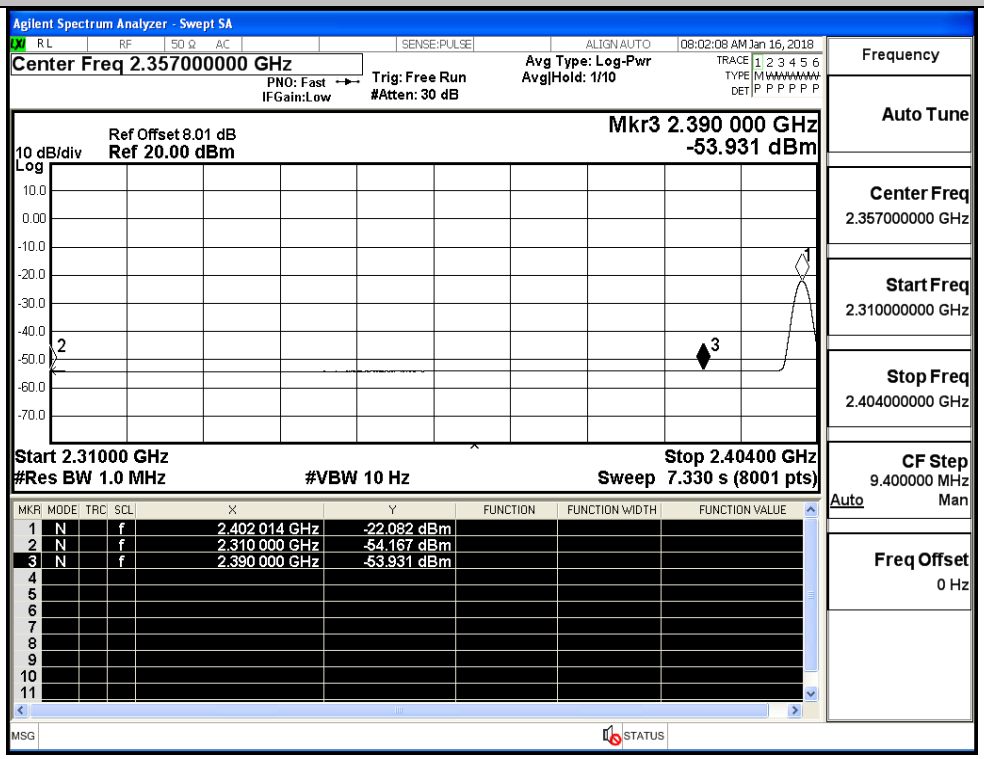
Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verd · ·
BLE	2402	Ant1	2310.0	-44.99	2	0	50.26	PEAK	74	PASS
BLE	2402	Ant1	2310.0	-54.17	2	0	41.09	AV	54	PASS
BLE	2402	Ant1	2390.0	-43.51	2	0	51.75	PEAK	74	PASS
BLE	2402	Ant1	2390.0	-53.93	2	0	41.33	AV	54	PASS
BLE	2480	Ant1	2483.5	-43.85	2	0	51.41	PEAK	74	PASS
BLE	2480	Ant1	2483.5	-53.70	2	0	41.55	AV	54	PASS
BLE	2480	Ant1	2500.0	-43.13	2	0	52.13	PEAK	74	PASS
BLE	2480	Ant1	2500.0	-53.55	2	0	41.71	AV	54	PASS

Test Graphs

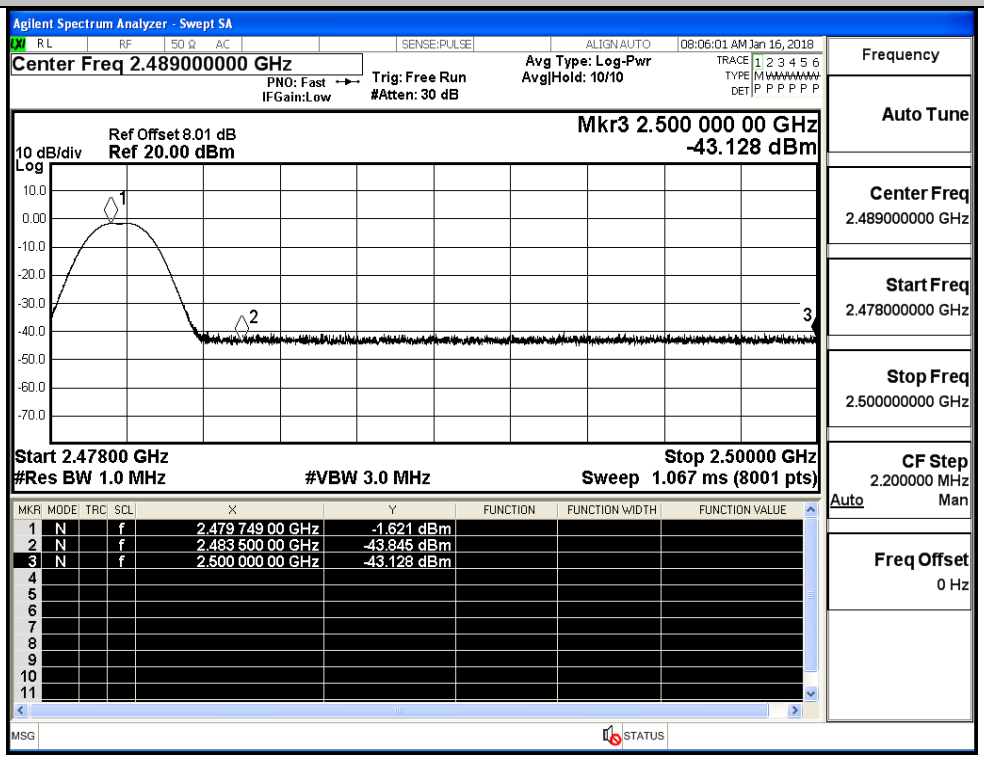
Restrict-band band-edge measurements_BLE_2402_Ant1_PEAK



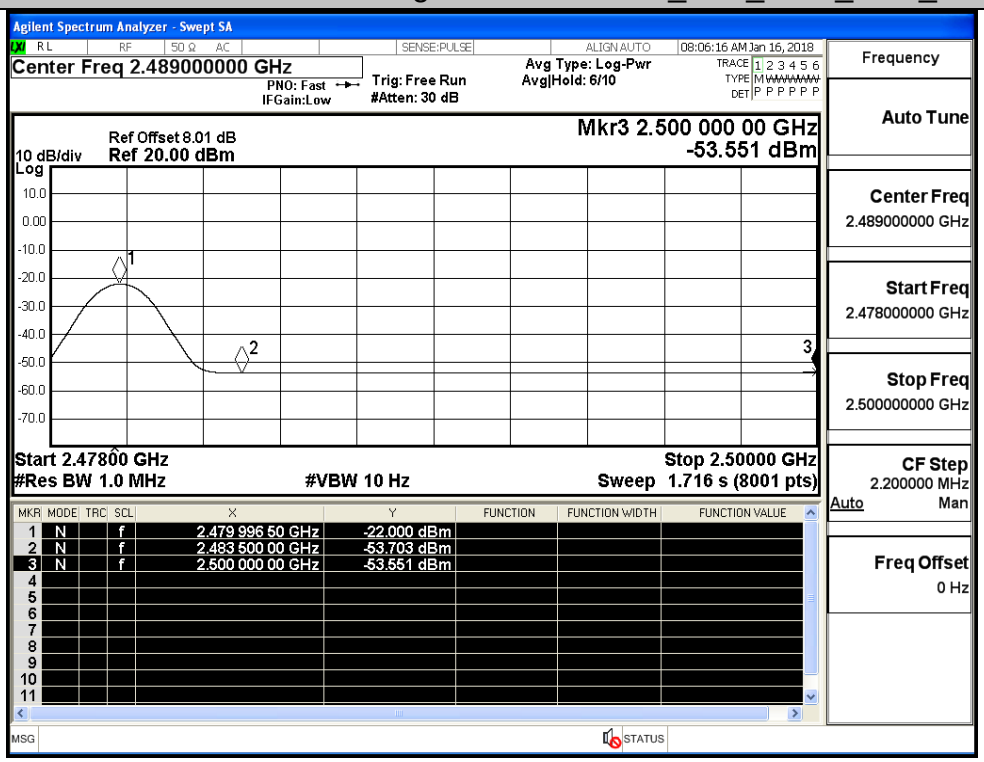
Restrict-band band-edge measurements_BLE_2402_Ant1_AV



Restrict-band band-edge measurements_BLE_2480_Ant1_PEAK



Restrict-band band-edge measurements_BLE_2480_Ant1_AV



7:Duty Cycle

Result Table

Test Mode	Test	Ant	Duty Cycle[%]	Verdict
BLE	2440	Ant1	100	PASS

Test Graphs