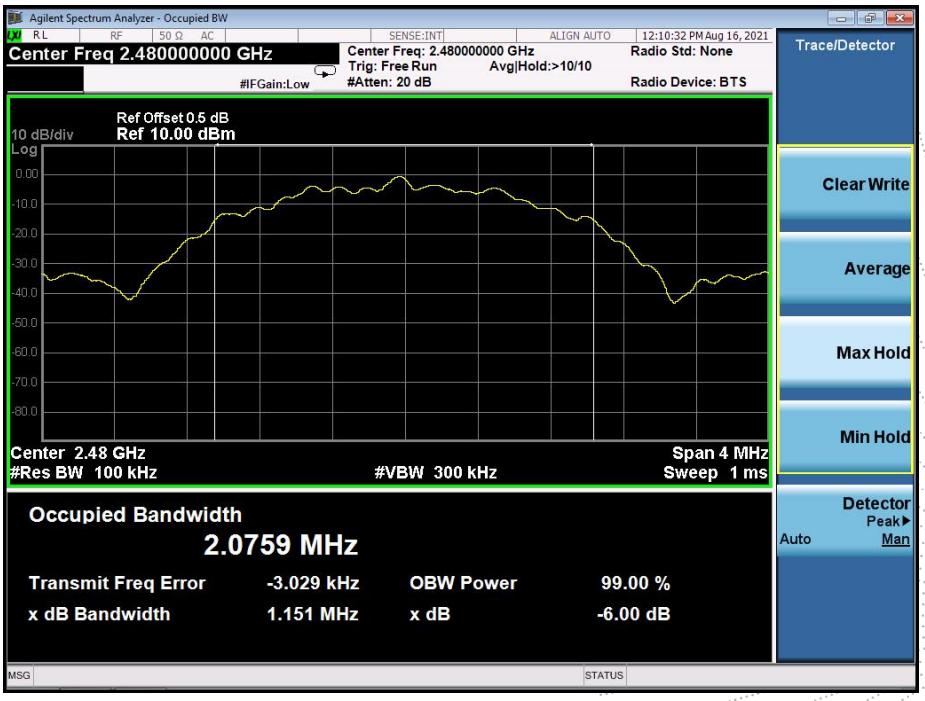
CH 20

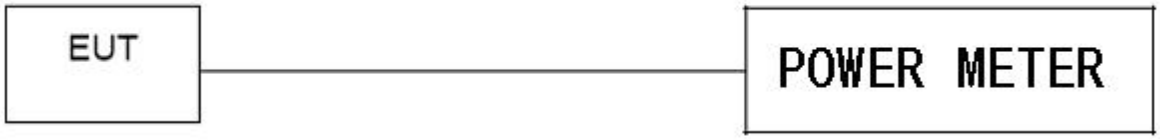

Agilent Spectrum Analyzer - Occupied BW
Center Freq 2.440000000 GHz
Center Freq: 2.440000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 20 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
12:11:22 PM Aug 16, 2021
Trace/Detector
Ref Offset 0.5 dB
10 dB/div
Ref 10.00 dBm
Log
Center 2.44 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 4 MHz
Sweep 1 ms
Occupied Bandwidth
2.0692 MHz
Transmit Freq Error -4.493 kHz
OBW Power 99.00 %
x dB Bandwidth 1.146 MHz
x dB -6.00 dB
Clear Write
Average
Max Hold
Min Hold
Detector
Peak
Auto
Man
MSG
STATUS

CH 40


Agilent Spectrum Analyzer - Occupied BW
Center Freq 2.480000000 GHz
Center Freq: 2.480000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 20 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
12:10:32 PM Aug 16, 2021
Trace/Detector
Ref Offset 0.5 dB
10 dB/div
Ref 10.00 dBm
Log
Center 2.48 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 4 MHz
Sweep 1 ms
Occupied Bandwidth
2.0759 MHz
Transmit Freq Error -3.029 kHz
OBW Power 99.00 %
x dB Bandwidth 1.151 MHz
x dB -6.00 dB
Clear Write
Average
Max Hold
Min Hold
Detector
Peak
Auto
Man
MSG
STATUS

11. PEAK OUTPUT POWER TEST

11.1 Block Diagram Of Test Setup



11.2 Limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Peak Output Power	1 watt or 30dBm	2400-2483.5	PASS

11.3 Test procedure

a. The EUT was directly connected to the Power meter

11.4 EUT operating Conditions

The EUT tested system was configured as the statements of 4.6 Unless otherwise a special operating condition is specified in the follows during the testing.

Note: Power Spectral Density(dBm)=Reading+Cable Loss

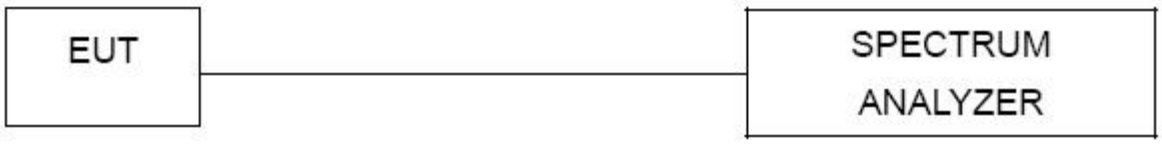
11.5 Test Result

Temperature：	26℃	Relative Humidity：	54%
Test Mode ：	GFSK	Test Voltage ：	DC 3.7V

Test Mode	Frequency	Maximum Conducted Output Power(PK)	Conducted Output Power Limit
	(MHz)	(dBm)	dBm
GFSK 1Mbps (Left)	2402	-2.684	30
	2440	-0.912	30
	2480	-0.553	30
GFSK 2Mbps (Left)	2402	-2.573	30
	2440	-1.075	30
	2480	-0.444	30
GFSK 1Mbps (Right)	2402	-2.864	30
	2440	-0.876	30
	2480	-0.560	30
GFSK 2Mbps (Right)	2402	-2.827	30
	2440	-0.886	30
	2480	-0.670	30

12. 100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE

12.1 Block Diagram Of Test Setup



12.2 Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

12.3 Test procedure

Using the following spectrum analyzer setting:

a) Set the RBW = 100KHz.

b) Set the VBW = 300KHz.

c) Sweep time = auto couple.

d) Detector function = peak.

e) Trace mode = max hold.

f) Allow trace to fully stabilize..

12.4 EUT operating Conditions

The EUT tested system was configured as the statements of 4.6 Unless otherwise a special operating condition is specified in the follows during the testing.

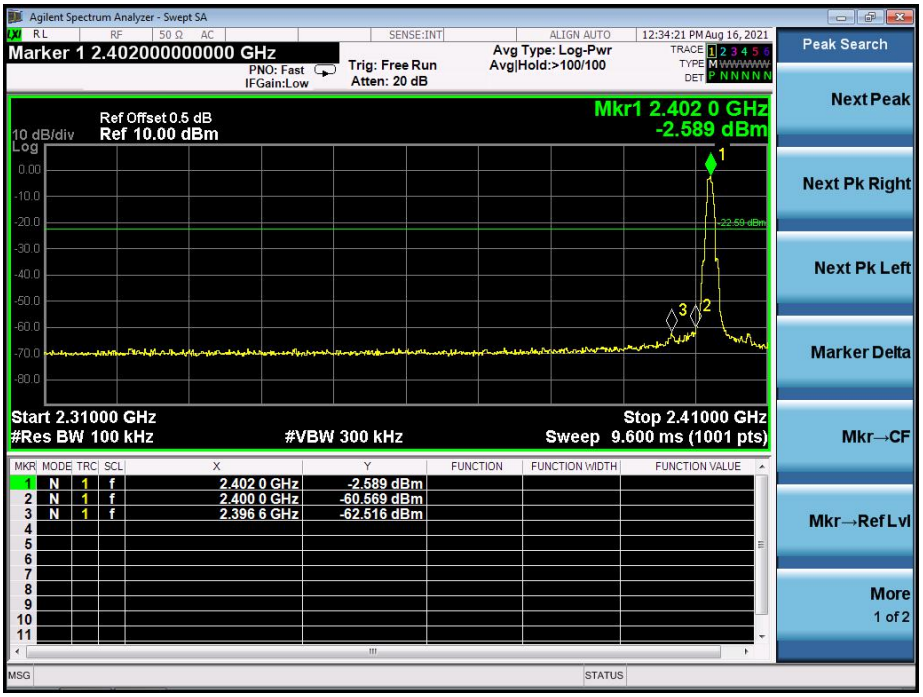
Note: Power Spectral Density(dBm)=Reading+Cable Loss

12.5 Test Result

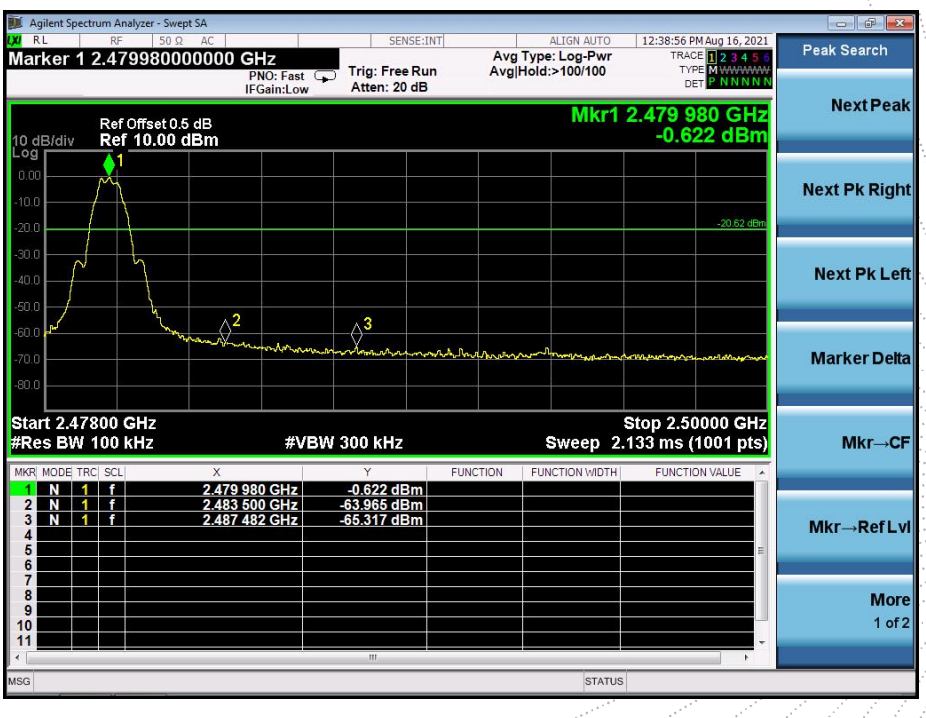
Temperature：	26℃	Relative Humidity：	54%
Test Mode ：	GFSK	Test Voltage ：	DC 3.7V

Left

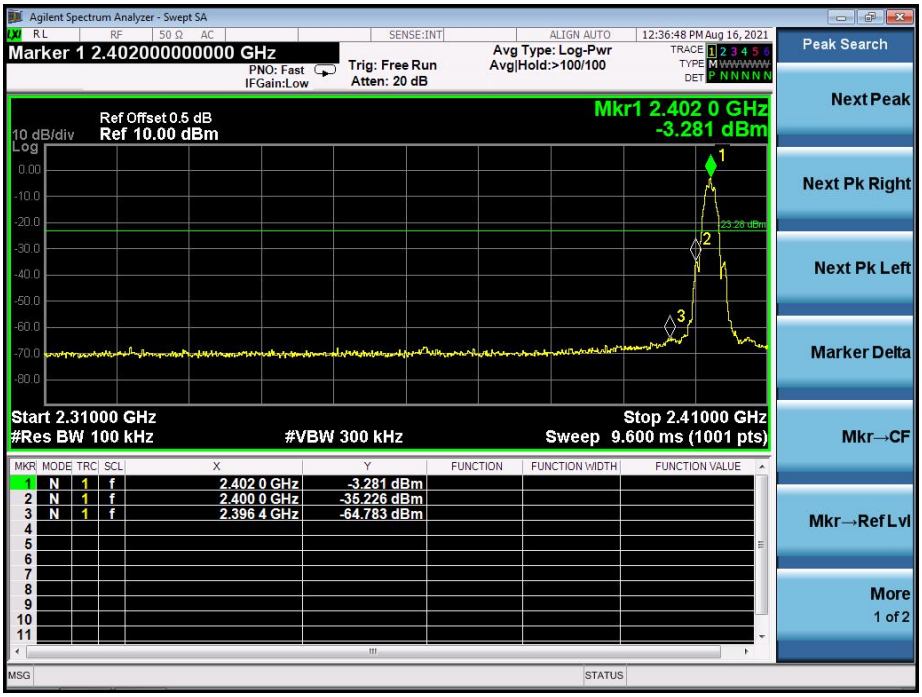
GFSK 1Mbps: Band Edge, Left Side



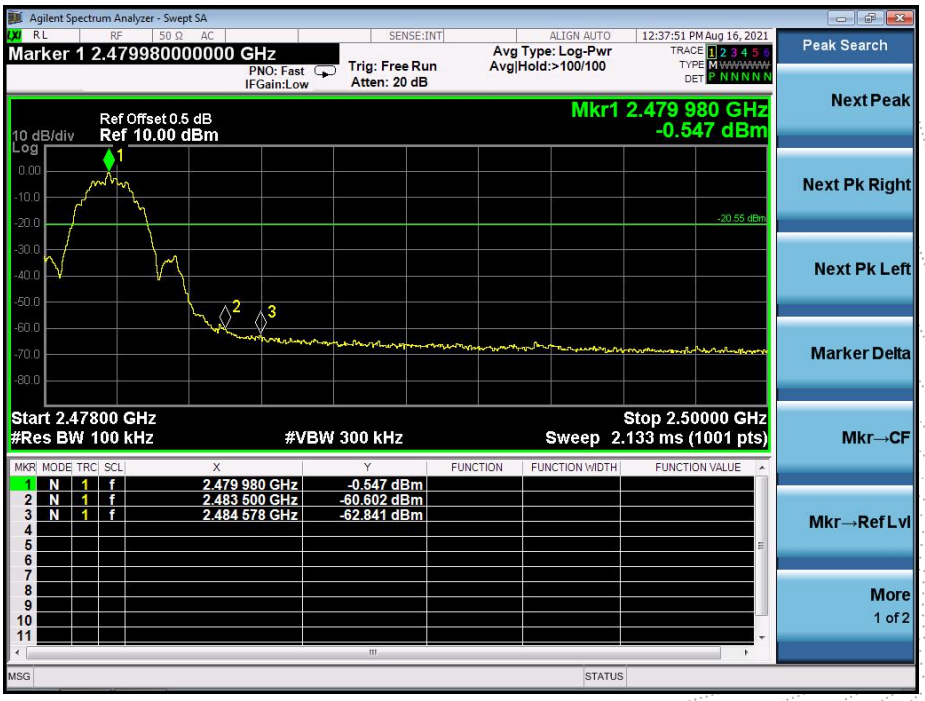
GFSK 1Mbps: Band Edge, Right Side



GFSK 2Mbps: Band Edge, Left Side

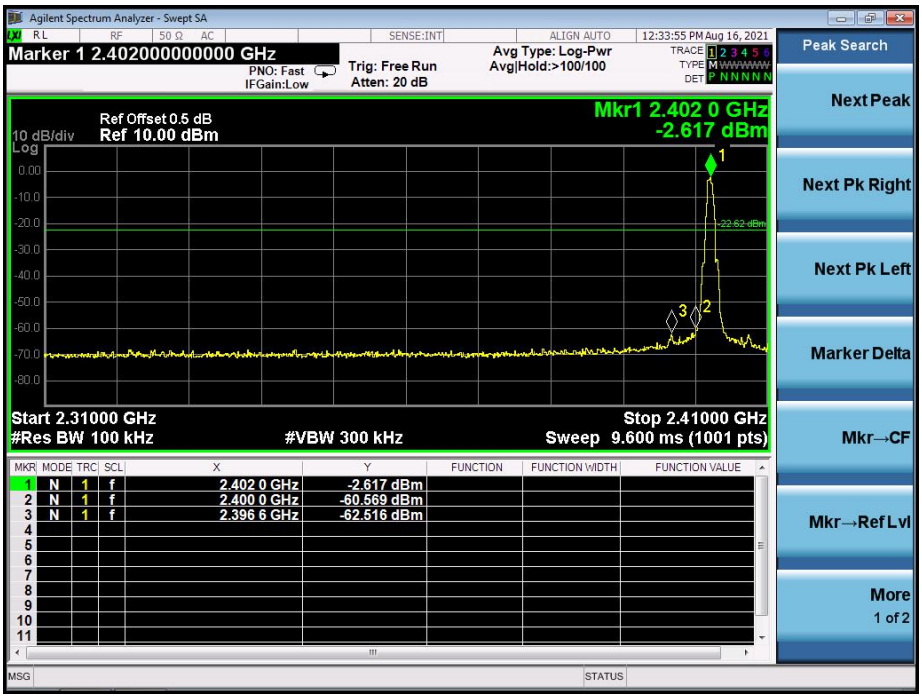


GFSK 2Mbps: Band Edge, Right Side

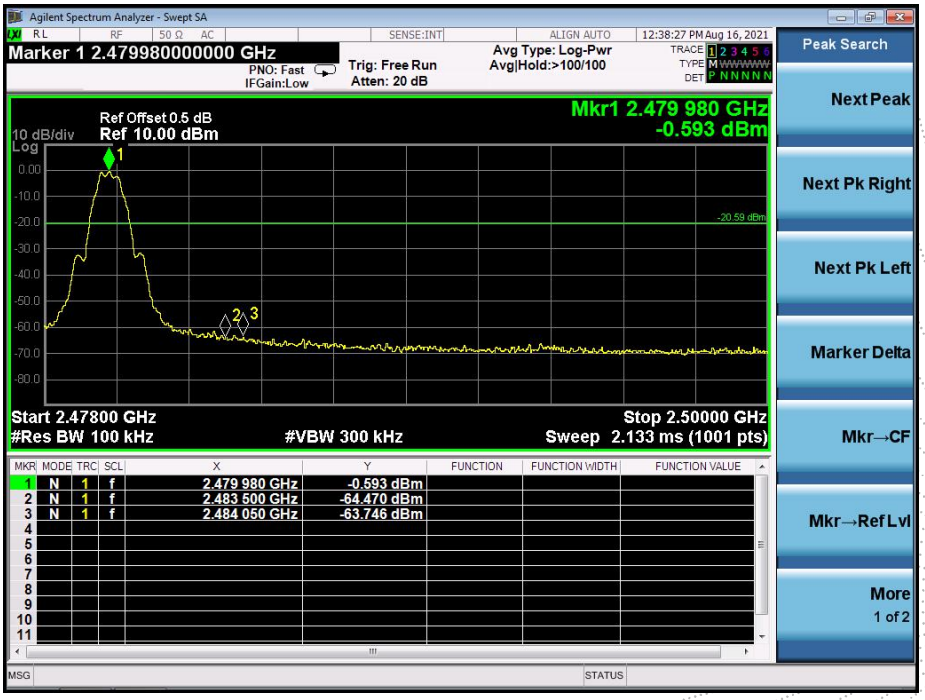


Right

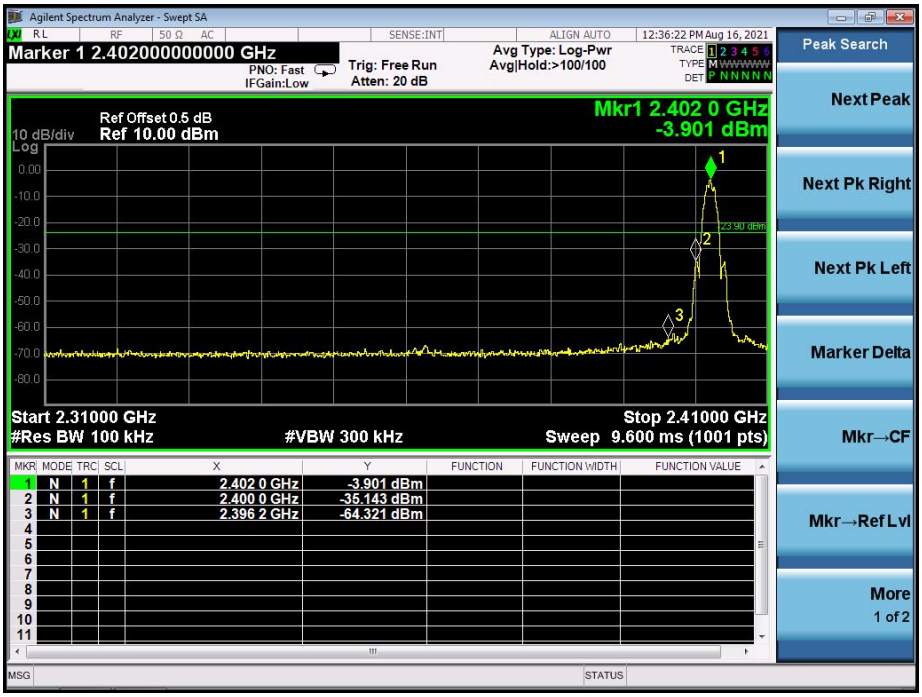
GFSK 1Mbps: Band Edge, Left Side



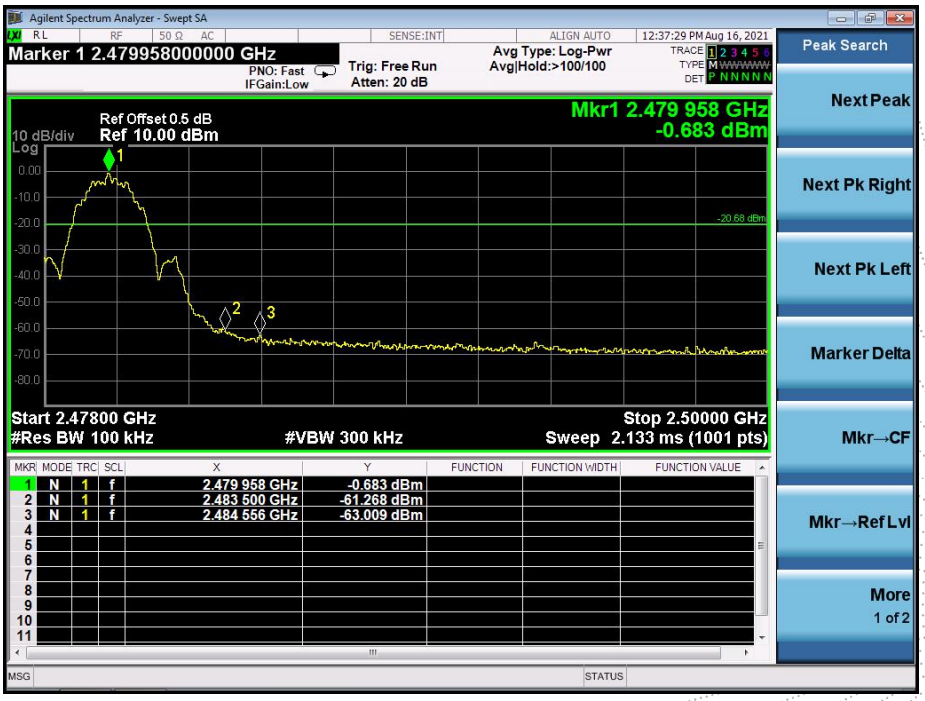
GFSK 1Mbps: Band Edge, Right Side



GFSK 2Mbps: Band Edge, Left Side



GFSK 2Mbps: Band Edge, Right Side

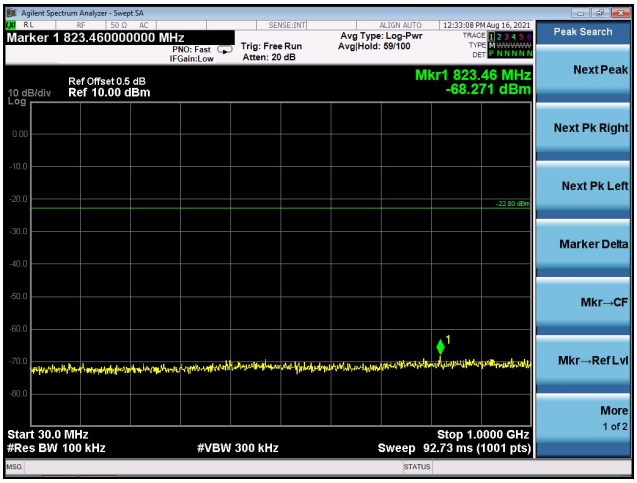


Left

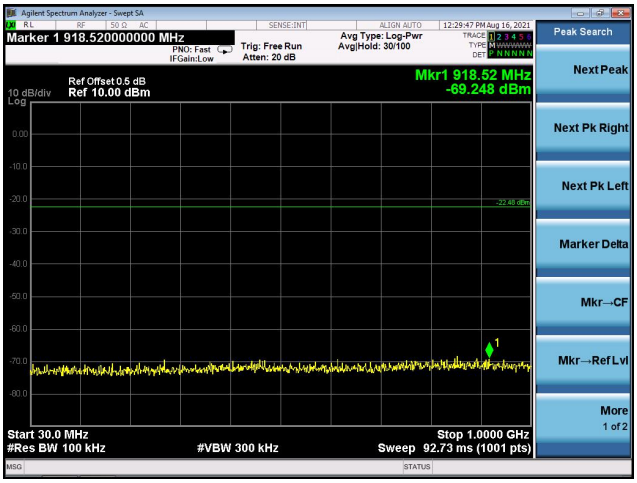
CONDUCTED EMISSION MEASUREMENT

GFSK 1Mbps

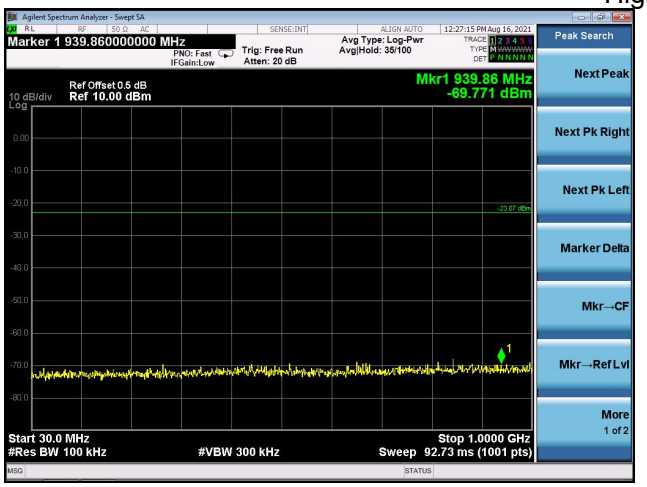
Low Channel 2402MHz



Middle Channel 2440MHz

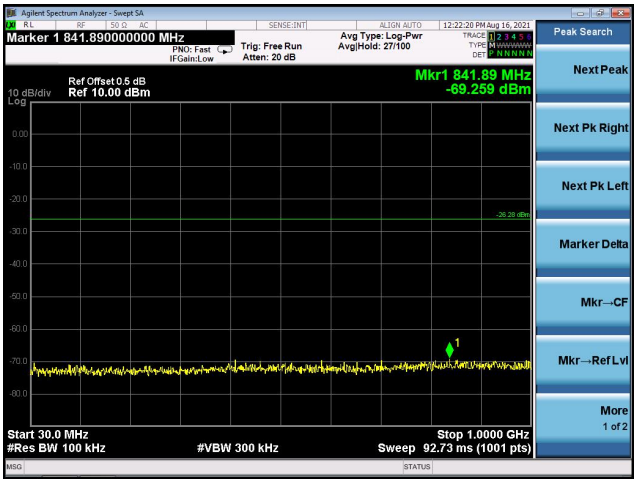


High Channel 2480MHz

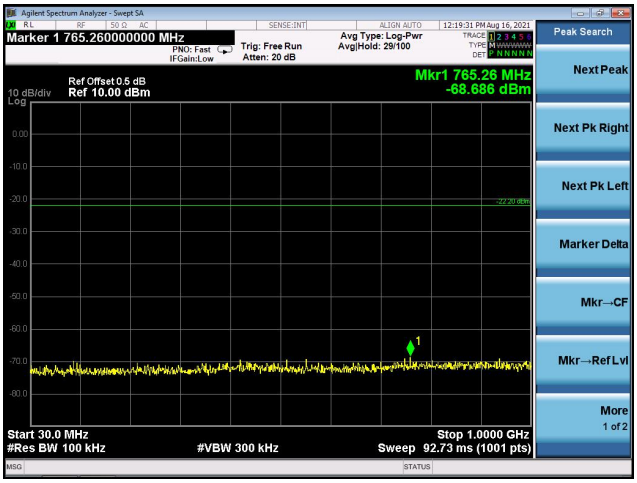


GFSK 2Mbps

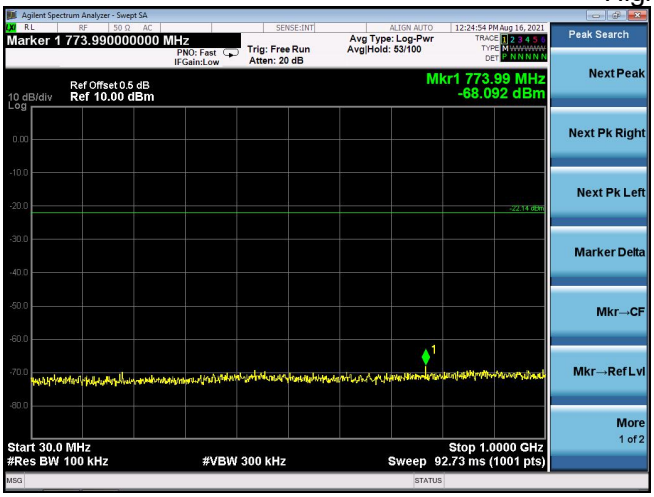
Low Channel 2402MHz



Middle Channel 2440MHz



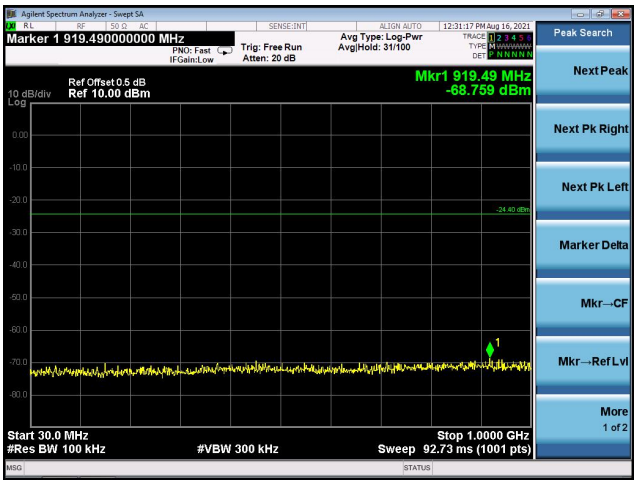
High Channel 2480MHz



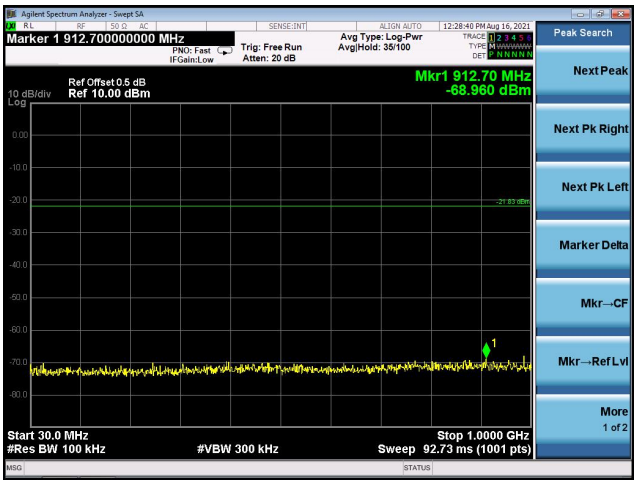
Right

GFSK 1Mbps

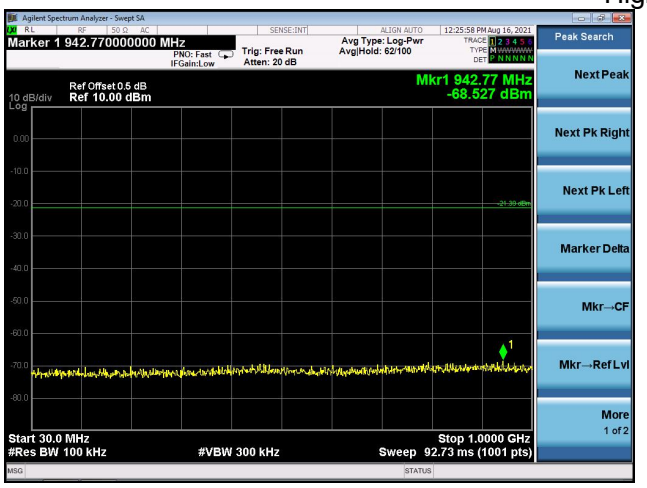
Low Channel 2402MHz



Middle Channel 2440MHz

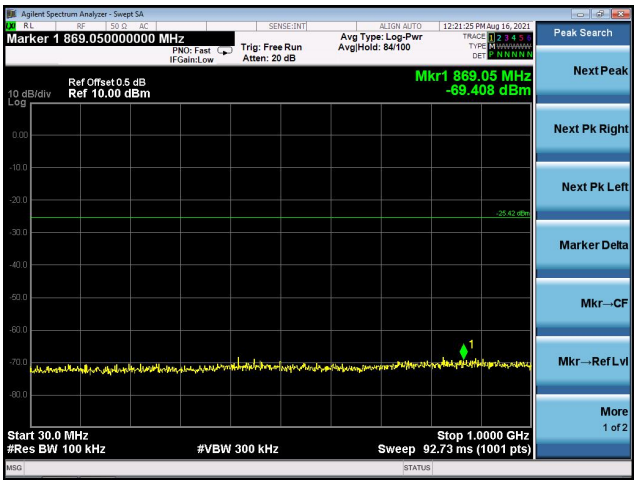


High Channel 2480MHz

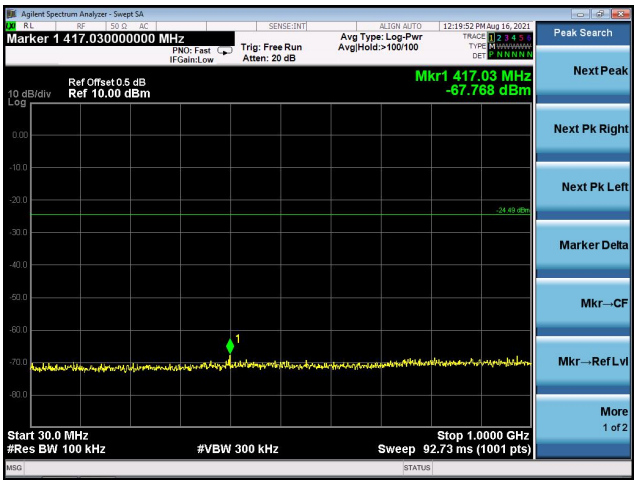


GFSK 2Mbps

Low Channel 2402MHz



Middle Channel 2440MHz



High Channel 2480MHz