

Japan Test Report

Equipment : Advanced Running Watch
Model No. : A04162
Brand Name : GARMIN
Applicant : Garmin Corp.
Address : No.68, Zhangshu 2nd Rd., Xizhi Dist., New
Taipei City 221, Taiwan (R.O.C)
Standard : Article 2 Paragraph 1 Item 19
Received Date : Jan. 04, 2021
Tested Date : Mar. 04 ~ Mar. 05, 2021

Measurement was conducted by the following test method:
the test method of Ordinance Concerning Technical Regulations Conformity Certification
etc. of Specified Radio Equipment in Annex 1, the Ministry of Internal Affairs and
Communications notification in Annex "43" of Article 88, Paragraph 1 and ARIB STD-T66.

We, International Certification Corporation, would like to declare that the tested sample has
been evaluated and in compliance with the requirement of the above standards. The test
results contained in this report refer exclusively to the product. It may be duplicated
completely for legal use with the approval of the applicant. It shall not be reproduced except
in full without the written approval of our laboratory.

Reviewed by:


James Fan / Assistant Manager

Approved by:


Gary Chang / Manager

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Release Record

Report No.	Version	Description	Issued Date
JR110401AE	Rev. 01	Initial issue	Mar. 09, 2021

Summary of Test Results

Ref. Std. Clause	Description	Result
3.2(2)(3)	Antenna Power	Pass
3.2(4)	Frequency Tolerance	Pass
3.2(6)	Transmitter Spurious Emission	Pass
3.2(7)	Occupied Bandwidth	Pass
3.3(1)	Receiver Emission	Pass
3.4.1	Interference prevention function	Pass

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

Power Type	5Vdc from host 3.8Vdc from battery
Type(s) of Modulation / Technology	GFSK = 1Mbps
Frequency Range (MHz)	2402 ~ 2480 MHz
Total Channel Number	40
HW Version	105-04162-00
SW Version	2.0

1.1.2 Accessories

No.	Equipment	Description
1	Battery	Brand: GARMIN Model: 361-00140-01 Rating: 3.8Vdc, 158mAh
2	USB cable	Brand: GARMIN Model: 320-01069-10 Power line: 0.52m non-shielded without core

1.1.3 Antenna Details

Ant. No.	Type	Connector	Antenna Gain (dBi)
1	PIFA	No	-6.17

Note: Please refer to antenna report for more details about antenna pattern and other information.

1.1.4 Antenna Power

Operating Mode	Rated Power (mW)	Measured Conducted Power (mW)	Radiated Power (mW)
BT-LE	1.00	1.072	0.259

1.1.5 Channel List

Frequency band (MHz)				2400~2483.5			
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
37	2402	9	2422	18	2442	28	2462
0	2404	10	2424	19	2444	29	2464
1	2406	38	2426	20	2446	30	2466
2	2408	11	2428	21	2448	31	2468
3	2410	12	2430	22	2450	32	2470
4	2412	13	2432	23	2452	33	2472
5	2414	14	2434	24	2454	34	2474
6	2416	15	2436	25	2456	35	2476
7	2418	16	2438	26	2458	36	2478
8	2420	17	2440	27	2460	39	2480

1.1.6 Test Tool and Power Index

Test Tool
BLE test mode, Version: 0.23

Power Index			
Modulation Mode	Test Frequency (MHz)		
	2402	2440	2480
BT-LE	Default	Default	Default

1.1.7 Test Voltage

Test Voltage	☒ Vnom (3.8 Vdc)	☒ Vmax (4.35 Vdc)	☒ Vmin (3.4 Vdc)
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1.1.8 Protection Method for High Frequency and Modulation Section

Protected Method	Description
Glue Case	RF and Modulation components are covered within case of EUT and this case used Glue to prohibit anybody to open this case. Then use the glue to compress tightly and protect the outer cover is not opened easily. The glue will be damaged and calibration function will be broken that causes measured value will be incorrect if the cover was opened.

1.2 Test Equipment and Calibration Data

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101486	Feb. 23, 2021	Feb. 22, 2022
Power Meter	Anritsu	ML2495A	1241002	Nov. 04, 2020	Nov. 03, 2021
Power Sensor	Anritsu	MA2411B	1207366	Nov. 04, 2020	Nov. 03, 2021
DC POWER SOURCE	GW INSTEK	GPC-6030D	GES855395	Nov. 09, 2020	Nov. 08, 2021
Measurement Software	-	SENSE-T66_FS	V5.10.7	NA	NA
Note 1: Calibration Interval of instruments listed above is one year. Note 2: Above instruments are calibrated by Electronics Testing Center					

1.3 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

Article 2 Paragraph 1 Item 19

1.4 Deviation from Test Standard and Measurement Procedure

None

1.5 Measurement Uncertainty

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor ($k=2$)).

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	± 34.139 Hz
Conducted power	± 0.808 dB
Frequency error	$\pm 1 \times 10^{-9}$
TX Conducted emission	± 2.680 dB
RX Conducted emission	± 3.034 dB

2 Test Configuration

2.1 Testing Location and Conditions

Test Site	Site Category	Ambient Condition	Tested By
TH01-WS	OVEN Room	26°C / 63%	Alex Huang

2.2 Testing Facility

Test Laboratory	International Certification Corporation
Test Site	TH01-WS
Address of Test Site	No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

2.3 Supporting Units

N/A

2.4 The Worst Test Modes and Channel Details

Test item	Mode	Test Frequency (MHz)
Antenna Power Frequency Tolerance Occupied Bandwidth Transmitter Spurious Emission Interference prevention function Receiver Spurious Emissions	BT-LE(1Mbps) BT-LE(2Mbps)	2402 / 2440 / 2480

3 Transmitter Test Results

3.1 Antenna Power

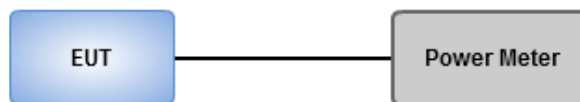
3.1.1 Limit of Antenna Power

Mode	Limit	Tolerance
1) FH, FH+DS, FH+OFDM	3 mW / MHz	+20 % , -80 %
2) OFDM(Narrow- bandwidht), DS	10 mW / MHz	
3) Other than 1) & 2)	10mW	
4) OFDM (Wide-band)	5 mW / MHz	

3.1.2 Test Procedures

Measure the total power by Power Meter

3.1.3 Test Setup



3.1.4 Test Result of Maximum Transmit Power

Refer to Appendix A1, A2

3.2 Frequency Tolerance

3.2.1 Limit of Frequency Tolerance

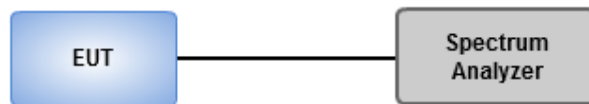
Frequency tolerance shall be +/- 50ppm.

3.2.2 Test Procedures

1. Set Span = 500kHz, RBW = 1kHz, VBW = 3kHz, Sweep time = Auto, detector = Peak.
2. Use Peak search function to find the max peak value and record this value (RF).
3. Calculate frequency tolerance by below formula
$$FT(ppm) = \{ (RF) - (MF) / (MF) \} \times 1000000$$

(FT: Frequency Tolerance, RF: Reading Frequency, MF: Measurement Frequency.)

3.2.3 Test Setup



3.2.4 Test Result of Frequency Tolerance

Refer to Appendix B

3.3 Occupied Bandwidth

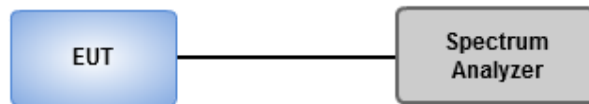
3.3.1 Limit of Occupied Bandwidth

Mode	Limit (MHz)
FH	83.5
FH+DS	83.5
FH+OFDM	83.5
OFDM(Narrow- bandwidht), DS	26
Others	26
OFDM (Wide-band)	38

3.3.2 Test Procedures

1. Set Span = 40MHz, RBW = VBW = 300kHz, detector = Peak, Sweep time = Auto.
2. Enable OBW function of spectrum analyzer to measure OBW and capture test plot.

3.3.3 Test Setup



3.3.4 Test Result of Occupied Bandwidth

Refer to Appendix C

3.4 Transmitter Spurious Emissions

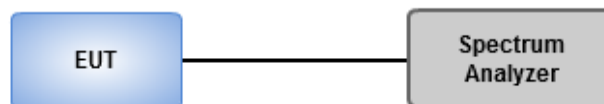
3.4.1 Limit of Transmitter Spurious Emissions

Item	Limits
Tx Spurious Emission	$\leq 2.5 \mu\text{W}$ ($2387\text{MHz} > f$; $2496.5\text{MHz} < f$).
	$\leq 25 \mu\text{W}$. ($2387\text{MHz} \leq f < 2400\text{MHz}$) and ($2483.5\text{MHz} < f \leq 2496.5\text{MHz}$).

3.4.2 Test Procedures

1. Set EUT to transmit at rated power and channel to perform test.
2. Set RBW = VBW = 1MHz, Detector type = Peak, Sweep time = Auto.
3. Following above setting of spectrum analyzer to measure spurious emission of 30~12500 MHz.

3.4.3 Test Setup



3.4.4 Test Result of Transmitter Spurious Emissions

Refer to Appendix D

3.5 Interference Prevention Function

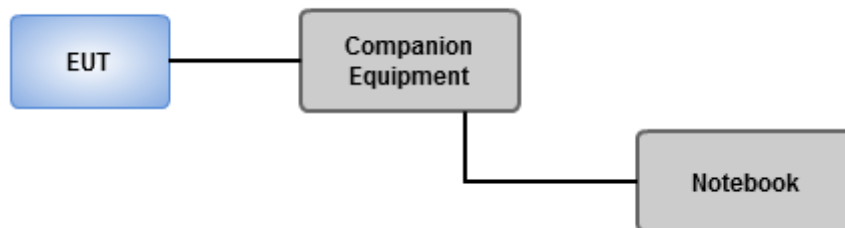
3.5.1 Limit of Interference Prevention Function

Limits
The identification code shall be 48 bits long

3.5.2 Test Procedures

1. Set EUT under operating mode and link up with companion equipment
2. Check communication status between EUT and companion equipment is normal
3. Confirm the MAC address of EUT

3.5.3 Test Setup



3.5.4 Test Result of Interference Prevention Function

Refer to Appendix E

4 Receiver Test Results

4.1 Receiver Spurious Emissions

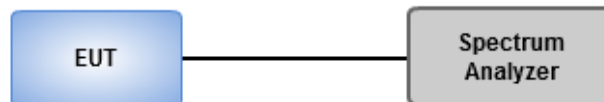
4.1.1 Limit of Receiver Spurious Emissions

Item	Limits
Rx Spurious Emission	$\leq 4\text{nW}$ ($f < 1\text{GHz}$).
	$\leq 20\text{nW}$ ($1\text{GHz} \leq f$).

4.1.2 Test Procedures

1. Set EUT under receiving condition to perform test
2. Set RBW = VBW = 100kHz, detector = Peak, Sweep time = Auto for emission measurement below 1GHz.
3. Set RBW = VBW=1MHz, detector = Peak, Sweep time = Auto for emission measurement above 1GHz.

4.1.3 Test Setup



4.1.4 Test Result of Receiver Spurious Emissions

Refer to Appendix F

5 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website <http://www.icertifi.com.tw>.

Linkou

Tel: 886-2-2601-1640

No.30-2, Ding Fwu Tsuen, Lin Kou
District, New Taipei City, Taiwan
(R.O.C.)

Kwei Shan

Tel: 886-3-271-8666

No.3-1, Lane 6, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)

Kwei Shan Site II

Tel: 886-3-271-8640

No.14-1, Lane 19, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 333, Taiwan (R.O.C.)

If you have any suggestion, please feel free to contact us as below information

Tel: 886-3-271-8666

Fax: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

==END==

Summary

Mode	Power (dBm)	Power (mW)	EIRP (dBm)	EIRP (mW)
2.4-2.4835GHz	-	-	-	-
BT-LE(1Mbps)	0.30	1.072	-5.87	0.259

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power (mW)	Power Lim. (mW)	EIRP (dBm)	EIRP (mW)	EIRP Lim. (mW)
BT-LE(1Mbps)	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	-6.17	0.29	1.069	10	-5.88	0.258	16.368
2402MHz_TnomVmin	Pass	-6.17	0.28	1.067	10	-5.89	0.258	16.368
2402MHz_TnomVmax	Pass	-6.17	0.30	1.072	10	-5.87	0.259	16.368
2440MHz_TnomVnom	Pass	-6.17	-0.04	0.991	10	-6.21	0.239	16.368
2440MHz_TnomVmin	Pass	-6.17	-0.04	0.991	10	-6.21	0.239	16.368
2440MHz_TnomVmax	Pass	-6.17	-0.03	0.993	10	-6.20	0.240	16.368
2480MHz_TnomVnom	Pass	-6.17	-0.46	0.899	10	-6.63	0.217	16.368
2480MHz_TnomVmin	Pass	-6.17	-0.47	0.897	10	-6.64	0.217	16.368
2480MHz_TnomVmax	Pass	-6.17	-0.45	0.902	10	-6.62	0.218	16.368

Summary

Mode	Result	Power (dBm)	Power (mW)	Declare (mW)	Tolerance (%)	Limit+ (%)	Limit- (%)
2.4-2.4835GHz	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	0.30	1.072	1.00	7.20	20	-80

Result

Mode	Result	Power (dBm)	Power (mW)	Declare (mW)	Tolerance (%)	Limit+ (%)	Limit- (%)
BT-LE(1Mbps)	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	0.29	1.069	1.00	6.90	20	-80
2402MHz_TnomVmin	Pass	0.28	1.067	1.00	6.70	20	-80
2402MHz_TnomVmax	Pass	0.30	1.072	1.00	7.20	20	-80
2440MHz_TnomVnom	Pass	-0.04	0.991	1.00	-0.90	20	-80
2440MHz_TnomVmin	Pass	-0.04	0.991	1.00	-0.90	20	-80
2440MHz_TnomVmax	Pass	-0.03	0.993	1.00	-0.70	20	-80
2480MHz_TnomVnom	Pass	-0.46	0.899	1.00	-10.10	20	-80
2480MHz_TnomVmin	Pass	-0.47	0.897	1.00	-10.30	20	-80
2480MHz_TnomVmax	Pass	-0.45	0.902	1.00	-9.80	20	-80

Summary

Mode	Result	Ch (Hz)	Center (Hz)	ppm	Limit (ppm)	Port	Remark
2.4-2.4835GHz	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.402G	2.40203443G	14.3356	±50	1	-

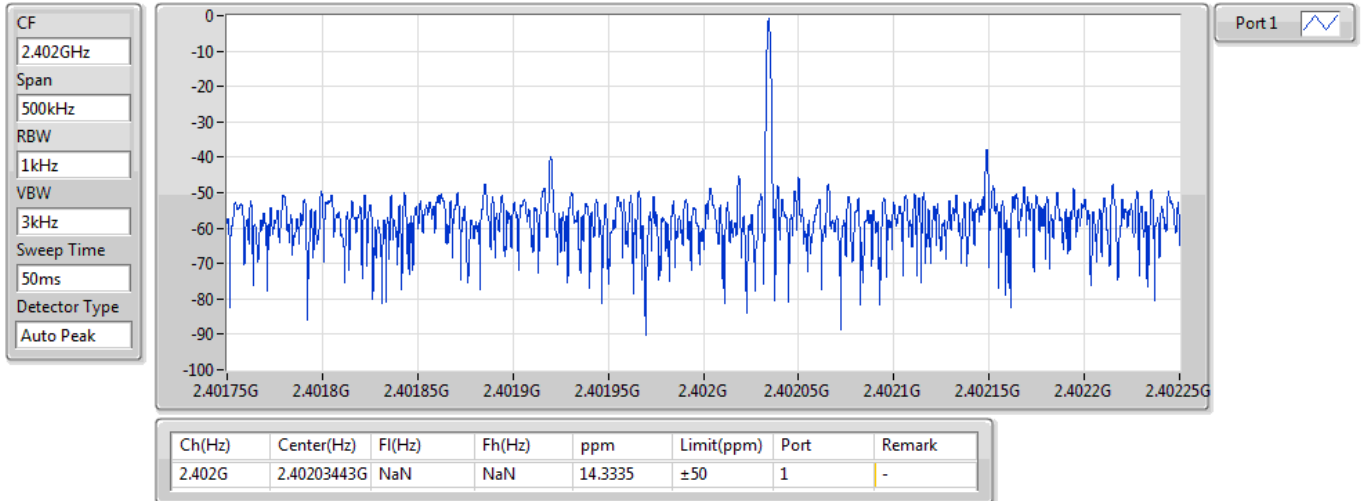
Result

Mode	Result	Ch (Hz)	Center (Hz)	ppm	Limit (ppm)	Port	Remark
BT-LE(1Mbps)	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402G	2.40203443G	14.3335	±50	1	-
2402MHz_TnomVmin	Pass	2.402G	2.40203443G	14.3343	±50	1	-
2402MHz_TnomVmax	Pass	2.402G	2.40203443G	14.3356	±50	1	-
2440MHz_TnomVnom	Pass	2.44G	2.44003494G	14.3189	±50	1	-
2440MHz_TnomVmin	Pass	2.44G	2.44003495G	14.3217	±50	1	-
2440MHz_TnomVmax	Pass	2.44G	2.44003495G	14.3225	±50	1	-
2480MHz_TnomVnom	Pass	2.48G	2.48003555G	14.3335	±50	1	-
2480MHz_TnomVmin	Pass	2.48G	2.48003555G	14.3343	±50	1	-
2480MHz_TnomVmax	Pass	2.48G	2.48003555G	14.3351	±50	1	-

BT-LE(1Mbps)

Freq. Stability

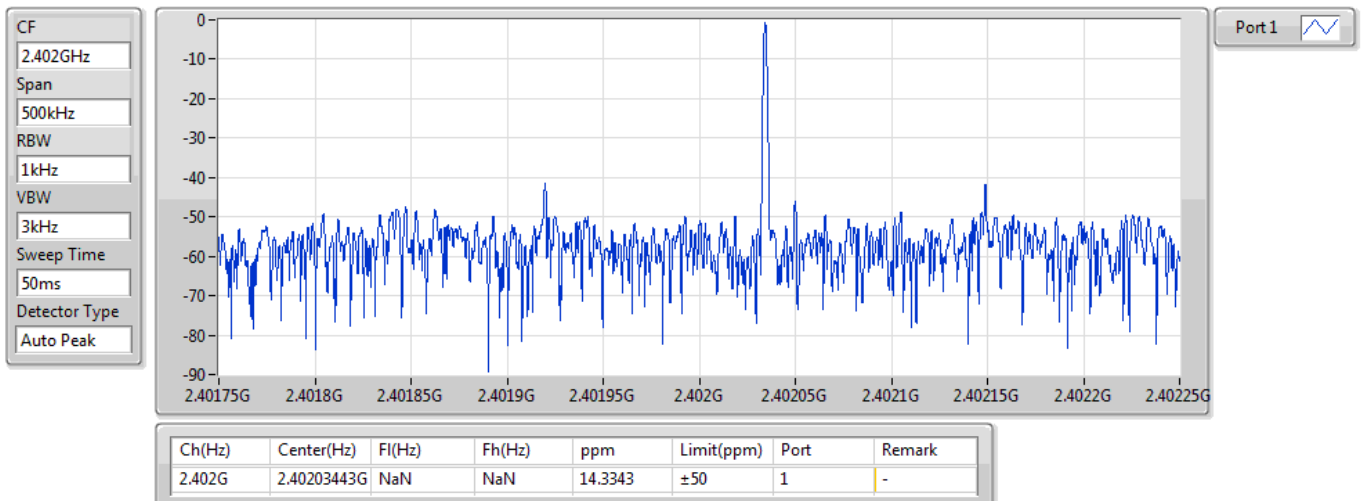
2402MHz_TnomVnom



BT-LE(1Mbps)

Freq. Stability

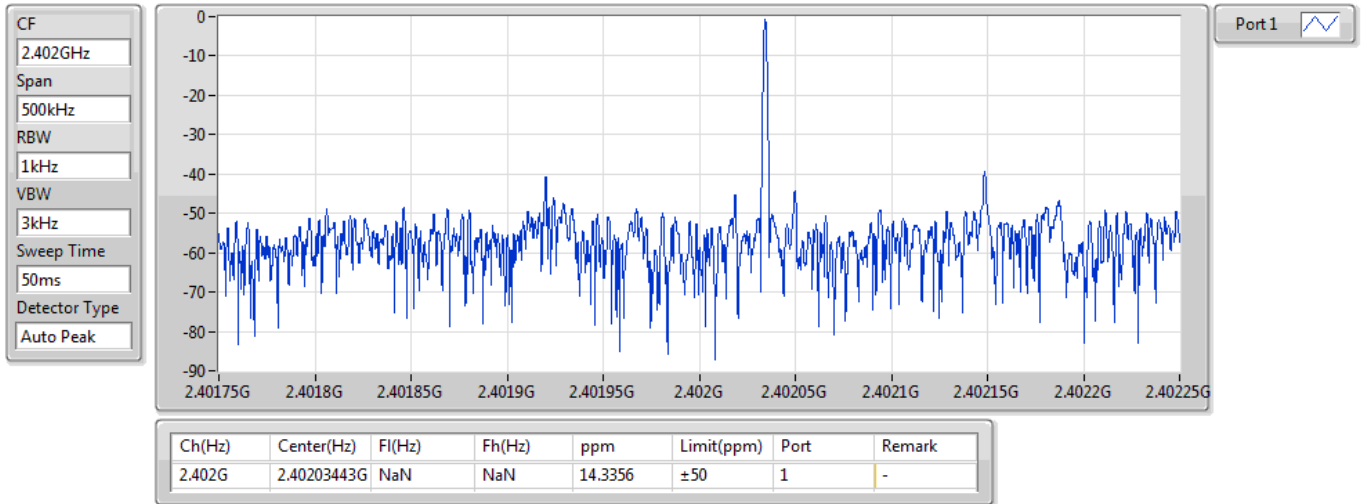
2402MHz_TnomVmin



BT-LE(1Mbps)

Freq. Stability

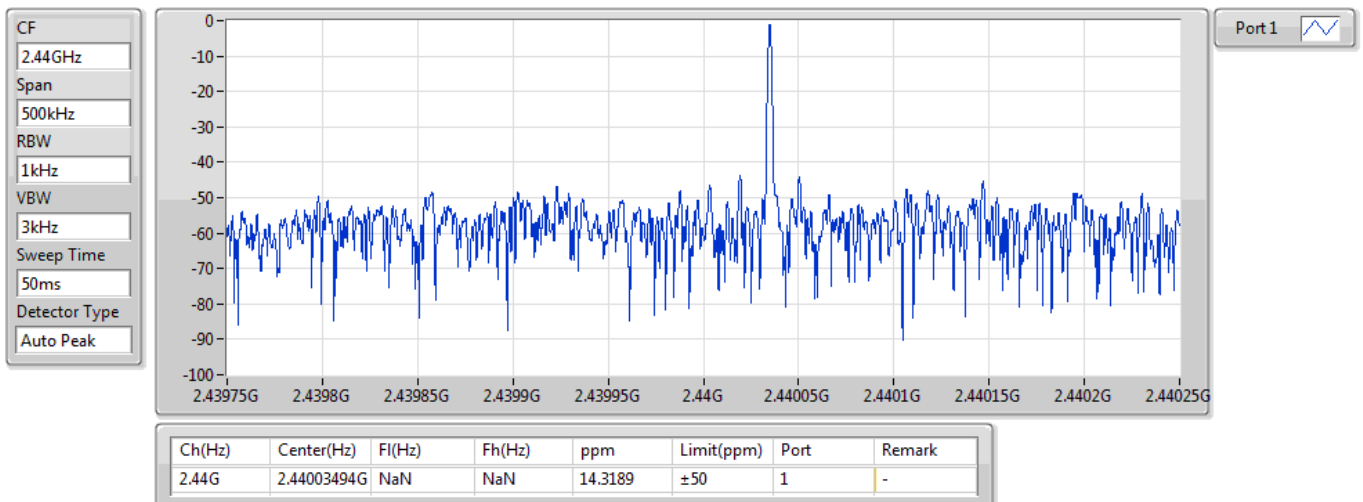
2402MHz_TnomVmax



BT-LE(1Mbps)

Freq. Stability

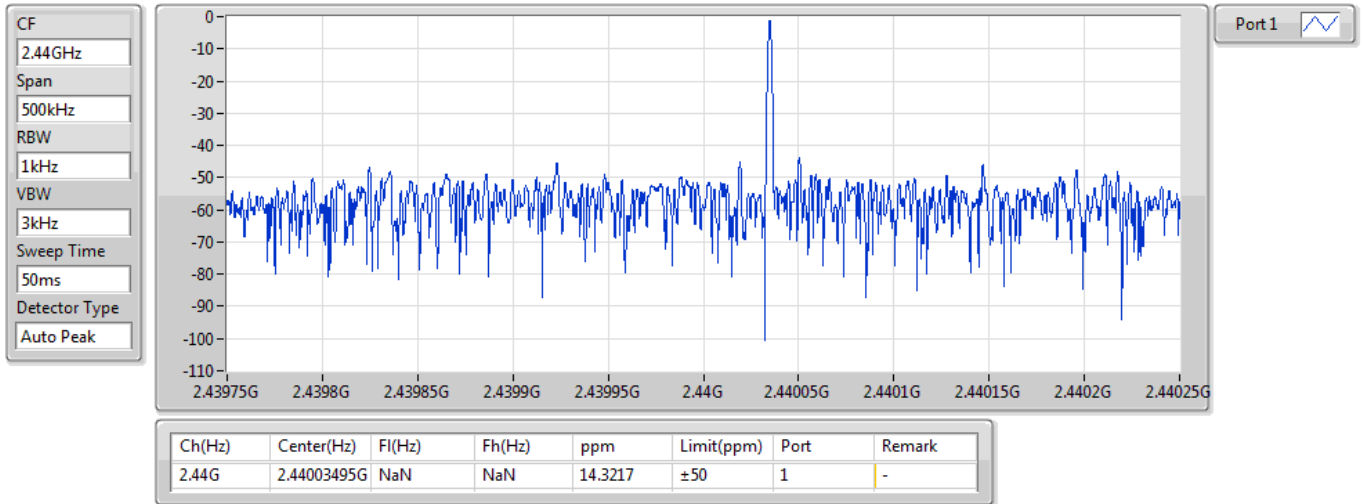
2440MHz_TnomVnom



BT-LE(1Mbps)

Freq. Stability

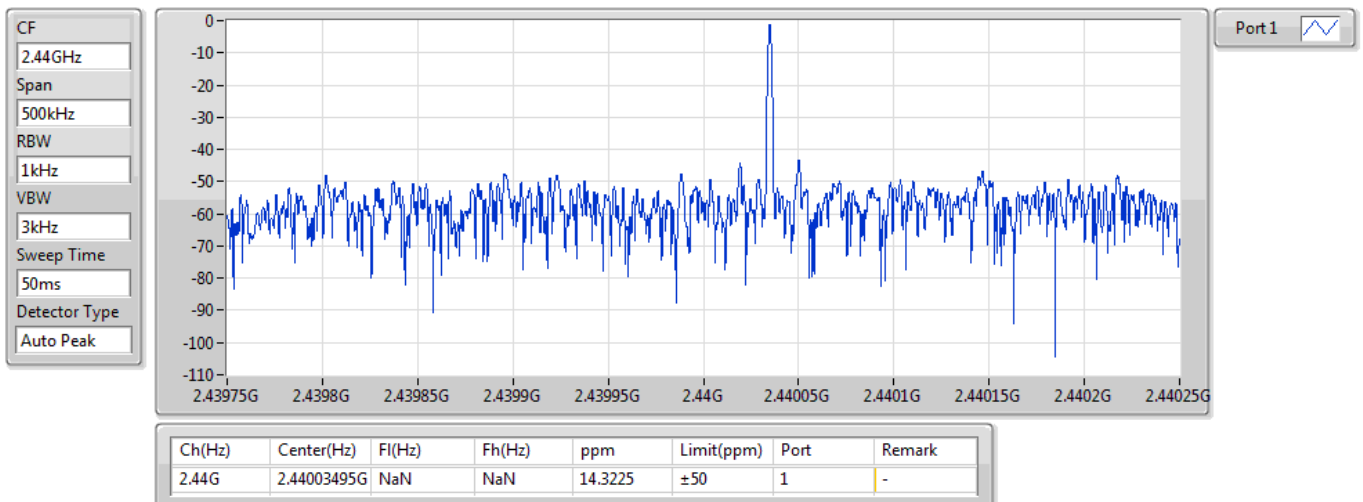
2440MHz_TnomVmin



BT-LE(1Mbps)

Freq. Stability

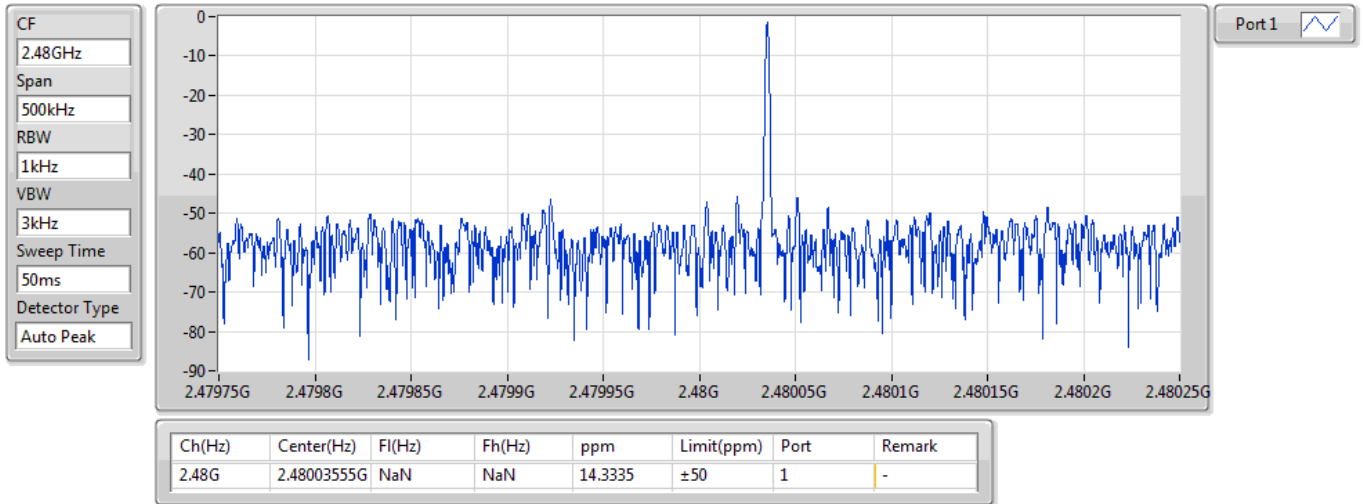
2440MHz_TnomVmax



BT-LE(1Mbps)

Freq. Stability

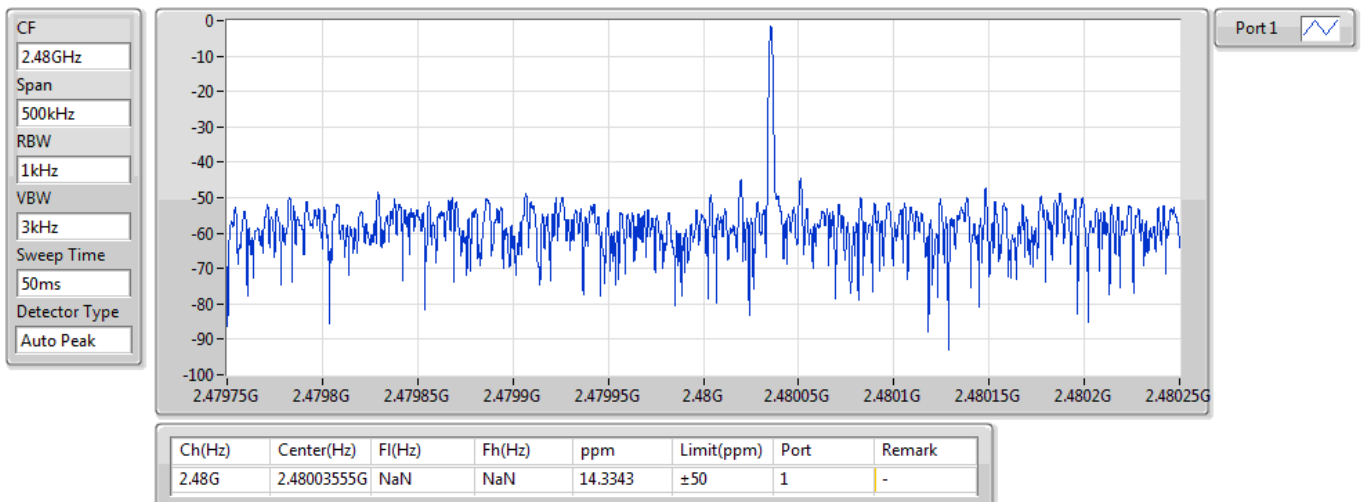
2480MHz_TnomVnom



BT-LE(1Mbps)

Freq. Stability

2480MHz_TnomVmin

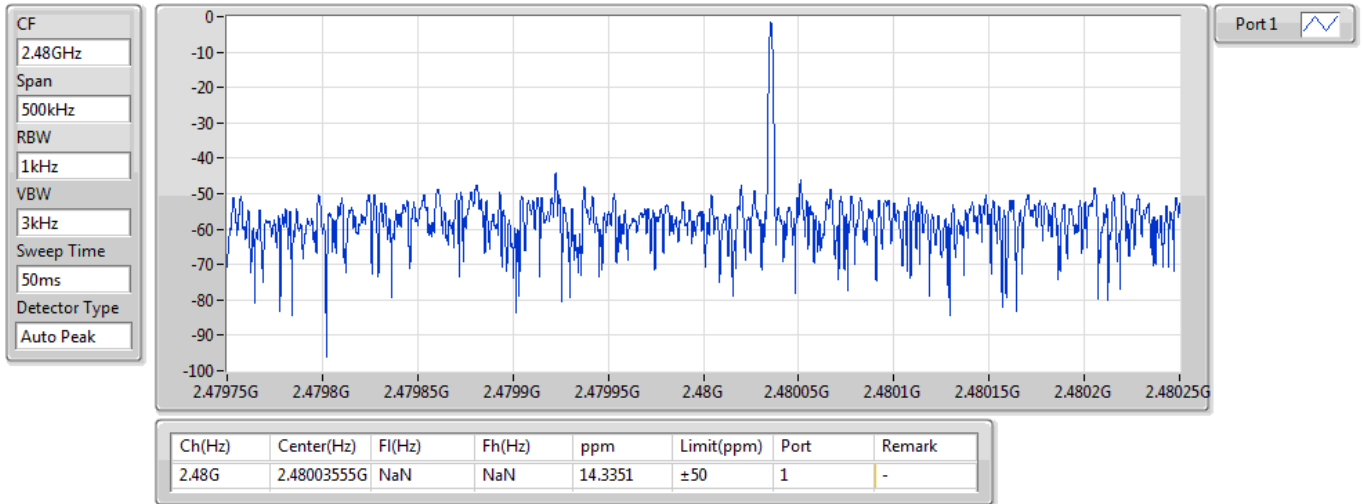




BT-LE(1Mbps)

Freq. Stability

2480MHz_TnomVmax



**Summary**

Mode	Max-OBW (Hz)	ITU-Code	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-
BT-LE(1Mbps)	1.28M	1M28F1D	1.276M

Max-OBW = Maximum 99% occupied bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

Result

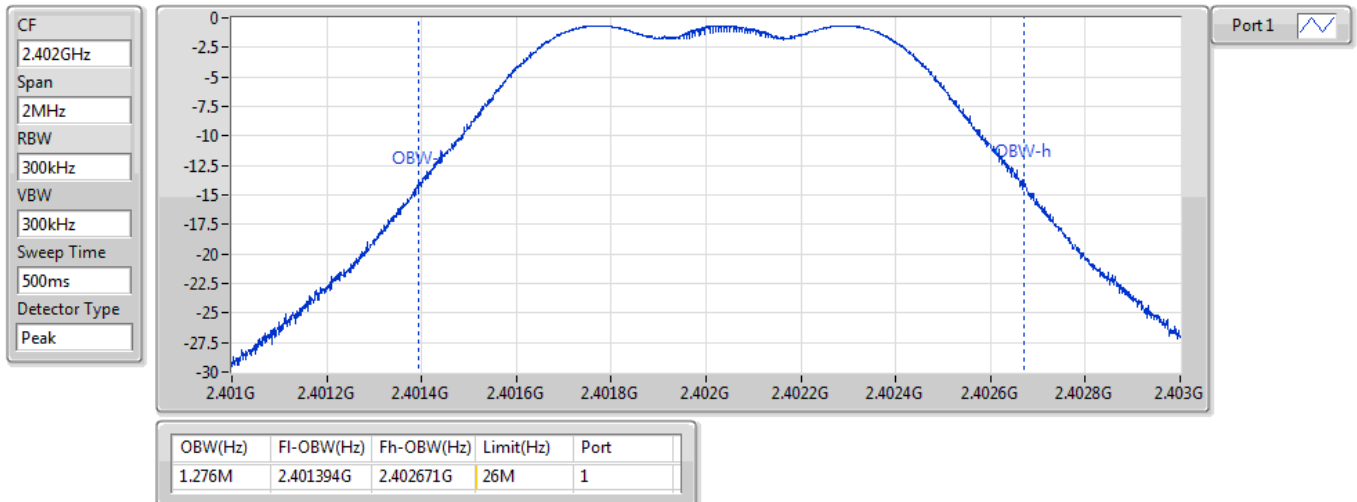
Mode	Result	Limit (Hz)	P1-OBW (Hz)
BT-LE(1Mbps)	-	-	-
2402MHz_TnomVnom	Pass	26M	1.276M
2402MHz_TnomVmin	Pass	26M	1.276M
2402MHz_TnomVmax	Pass	26M	1.276M
2440MHz_TnomVnom	Pass	26M	1.276M
2440MHz_TnomVmin	Pass	26M	1.276M
2440MHz_TnomVmax	Pass	26M	1.276M
2480MHz_TnomVnom	Pass	26M	1.28M
2480MHz_TnomVmin	Pass	26M	1.28M
2480MHz_TnomVmax	Pass	26M	1.28M

P1-OBW = Port 1 99% occupied bandwidth;

BT-LE(1Mbps)

OBW

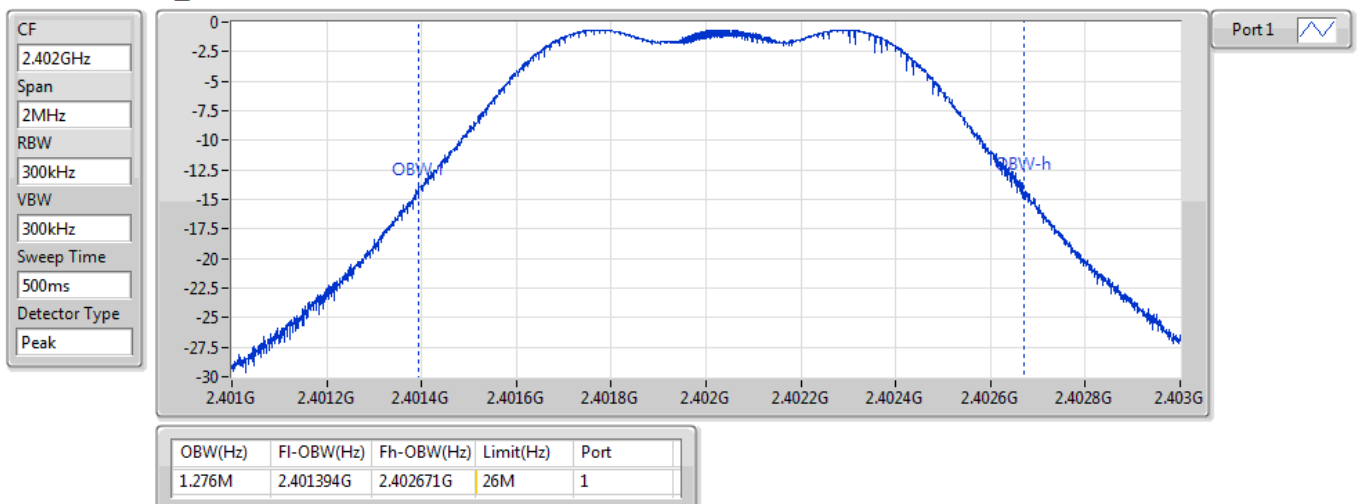
2402MHz_TnomVnom



BT-LE(1Mbps)

OBW

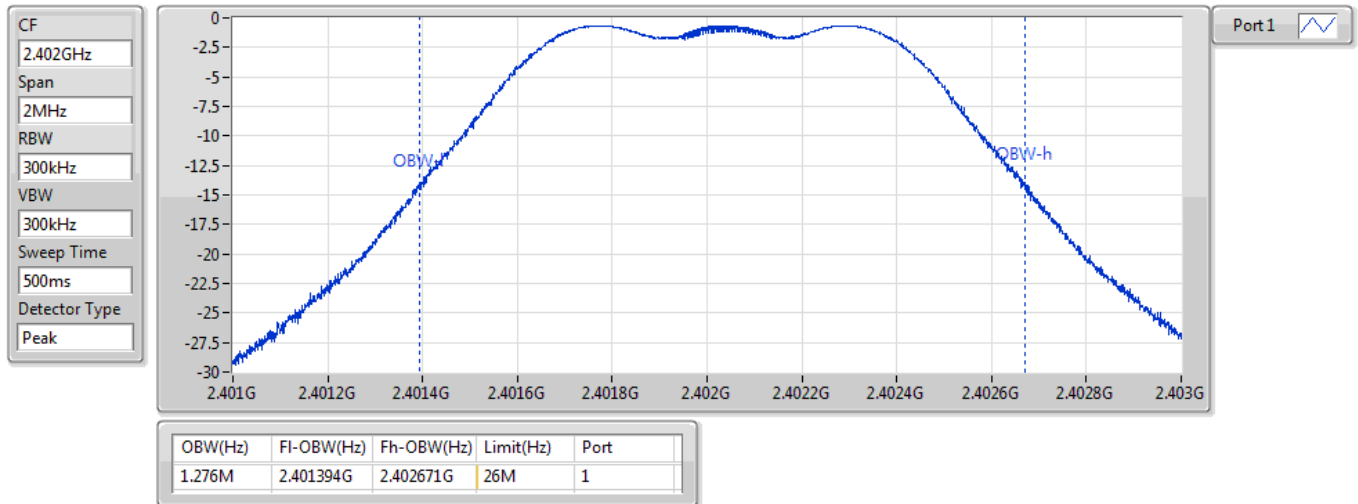
2402MHz_TnomVmin



BT-LE(1Mbps)

OBW

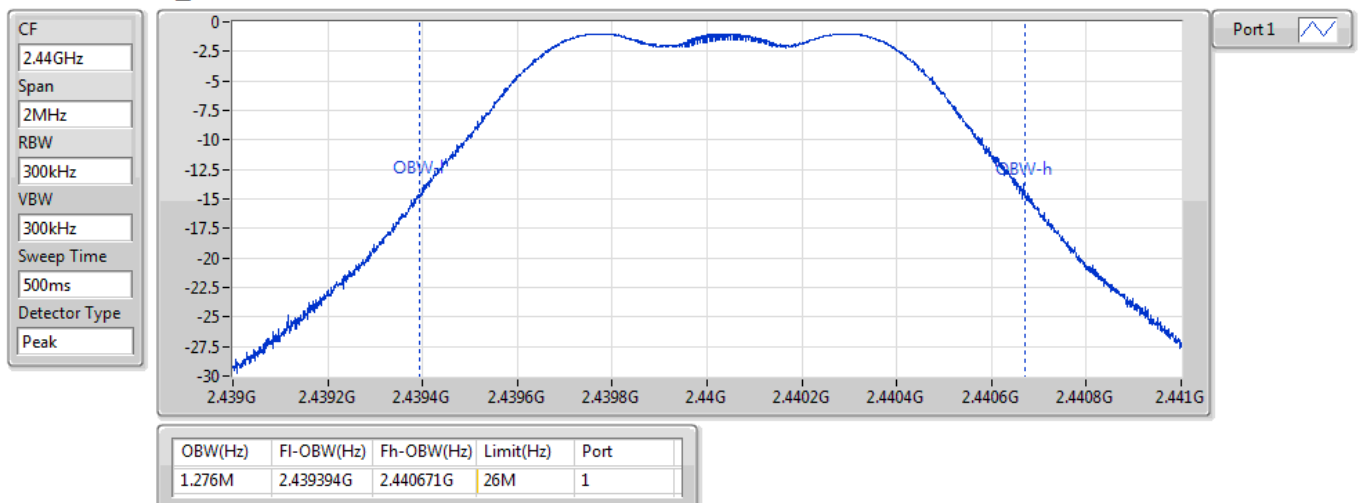
2402MHz_TnomVmax



BT-LE(1Mbps)

OBW

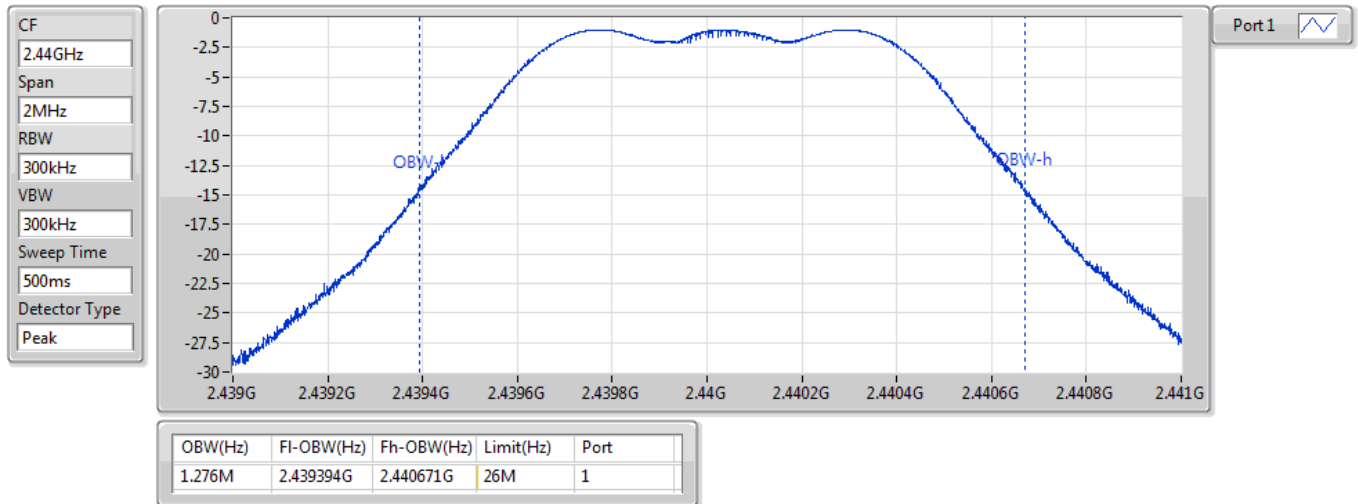
2440MHz_TnomVnom



BT-LE(1Mbps)

OBW

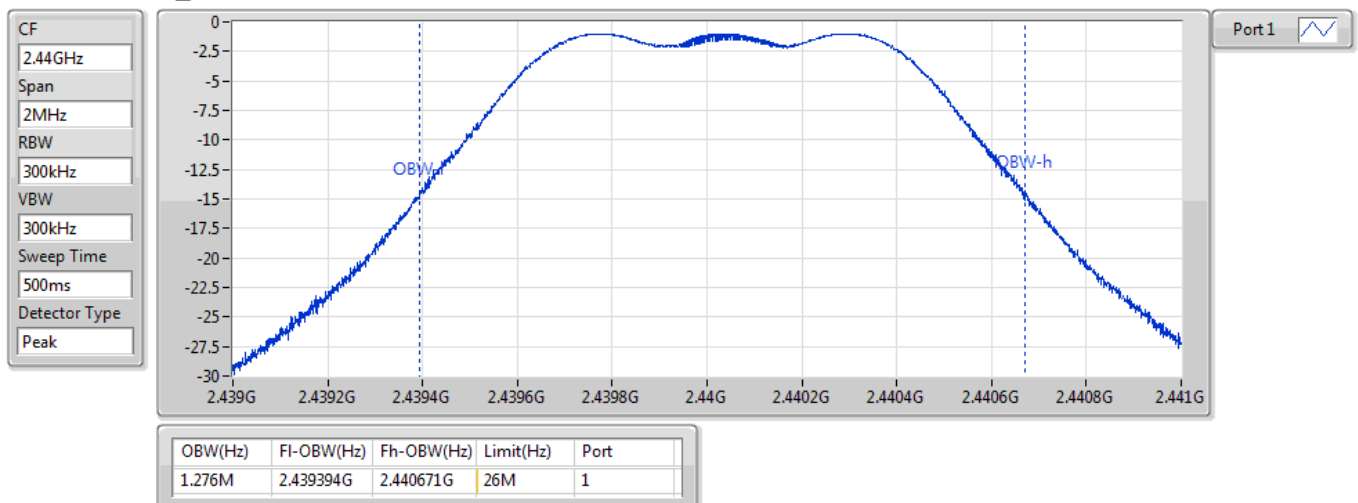
2440MHz_TnomVmin



BT-LE(1Mbps)

OBW

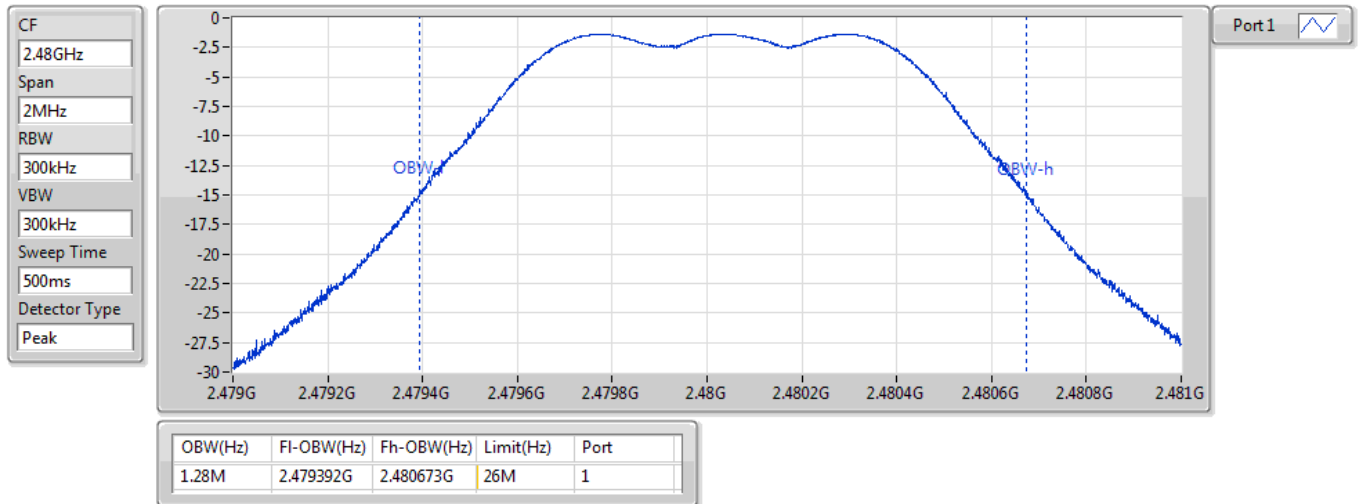
2440MHz_TnomVmax



BT-LE(1Mbps)

OBW

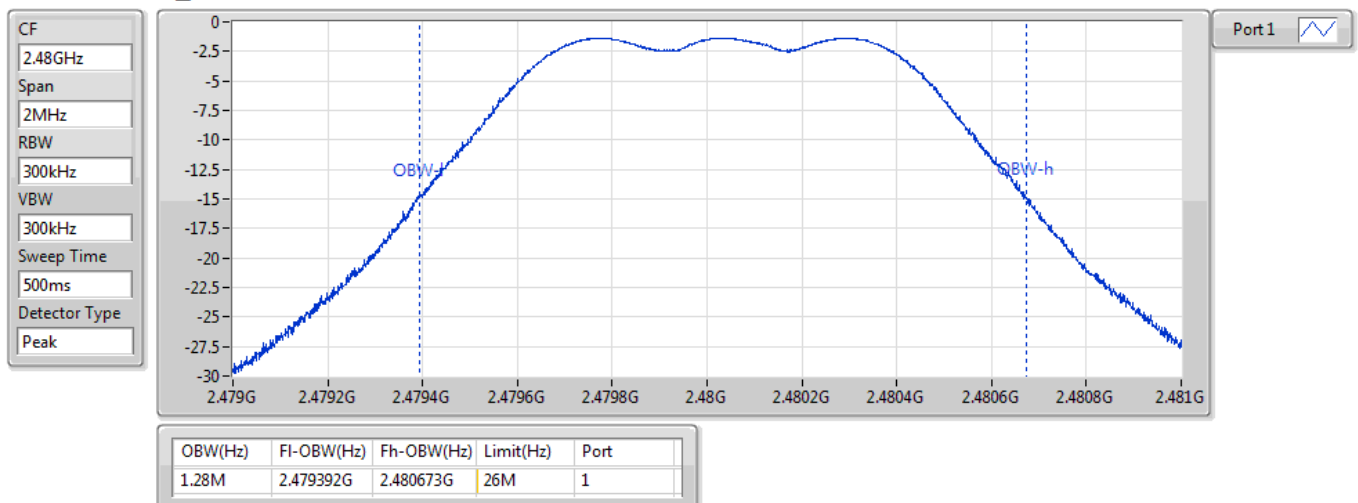
2480MHz_TnomVnom



BT-LE(1Mbps)

OBW

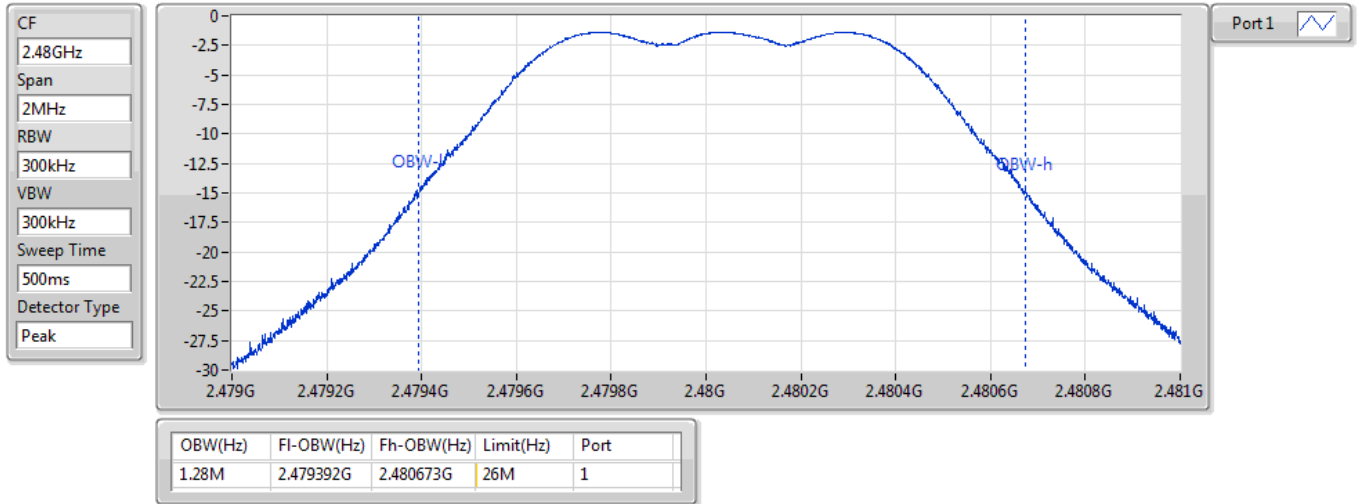
2480MHz_TnomVmin



BT-LE(1Mbps)

OBW

2480MHz_TnomVmax



Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	Freq (Hz)	Psum (dBm/MHz)	Psum (uW/MHz)	Limit (dBm/MHz)	Limit (uW/MHz)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.4965G	12.5G	1M	10.71312G	-45.18	0.03034	-26.02	2.5

Result

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	Freq (Hz)	Psum (dBm/MHz)	Psum (uW/MHz)	Limit (dBm/MHz)	Limit (uW/MHz)
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	30M	2.387G	1M	2.38229G	-53.52	0.00445	-26.02	2.5
2402MHz_TnomVnom	Pass	2.387G	2.4G	1M	2.4G	-37.87	0.16331	-16.02	25
2402MHz_TnomVnom	Pass	2.4835G	2.4965G	1M	2.48982G	-53.65	0.00432	-16.02	25
2402MHz_TnomVnom	Pass	2.4965G	12.5G	1M	12.0611G	-45.25	0.02985	-26.02	2.5
2402MHz_TnomVmin	Pass	30M	2.387G	1M	2.34693G	-53.15	0.00484	-26.02	2.5
2402MHz_TnomVmin	Pass	2.387G	2.4G	1M	2.4G	-38.04	0.15704	-16.02	25
2402MHz_TnomVmin	Pass	2.4835G	2.4965G	1M	2.48969G	-53.63	0.00434	-16.02	25
2402MHz_TnomVmin	Pass	2.4965G	12.5G	1M	12.46624G	-45.20	0.0302	-26.02	2.5
2402MHz_TnomVmax	Pass	30M	2.387G	1M	2.387G	-53.23	0.00475	-26.02	2.5
2402MHz_TnomVmax	Pass	2.387G	2.4G	1M	2.4G	-37.88	0.16293	-16.02	25
2402MHz_TnomVmax	Pass	2.4835G	2.4965G	1M	2.4899G	-53.59	0.00438	-16.02	25
2402MHz_TnomVmax	Pass	2.4965G	12.5G	1M	12.04609G	-45.28	0.02965	-26.02	2.5
2440MHz_TnomVnom	Pass	30M	2.387G	1M	2.38464G	-53.38	0.00459	-26.02	2.5
2440MHz_TnomVnom	Pass	2.387G	2.4G	1M	2.39199G	-54.03	0.00395	-16.02	25
2440MHz_TnomVnom	Pass	2.4835G	2.4965G	1M	2.49595G	-53.53	0.00444	-16.02	25
2440MHz_TnomVnom	Pass	2.4965G	12.5G	1M	12.47499G	-45.37	0.02904	-26.02	2.5
2440MHz_TnomVmin	Pass	30M	2.387G	1M	2.35989G	-53.78	0.00419	-26.02	2.5
2440MHz_TnomVmin	Pass	2.387G	2.4G	1M	2.39243G	-54.05	0.00394	-16.02	25
2440MHz_TnomVmin	Pass	2.4835G	2.4965G	1M	2.49593G	-53.54	0.00443	-16.02	25
2440MHz_TnomVmin	Pass	2.4965G	12.5G	1M	10.71312G	-45.18	0.03034	-26.02	2.5
2440MHz_TnomVmax	Pass	30M	2.387G	1M	2.31275G	-53.73	0.00424	-26.02	2.5
2440MHz_TnomVmax	Pass	2.387G	2.4G	1M	2.39176G	-54.01	0.00397	-16.02	25
2440MHz_TnomVmax	Pass	2.4835G	2.4965G	1M	2.4959G	-53.48	0.00449	-16.02	25
2440MHz_TnomVmax	Pass	2.4965G	12.5G	1M	12.09611G	-45.22	0.03006	-26.02	2.5
2480MHz_TnomVnom	Pass	30M	2.387G	1M	2.38582G	-53.66	0.00431	-26.02	2.5
2480MHz_TnomVnom	Pass	2.387G	2.4G	1M	2.39189G	-53.99	0.00399	-16.02	25
2480MHz_TnomVnom	Pass	2.4835G	2.4965G	1M	2.48353G	-52.78	0.00527	-16.02	25
2480MHz_TnomVnom	Pass	2.4965G	12.5G	1M	12.10736G	-45.39	0.02891	-26.02	2.5



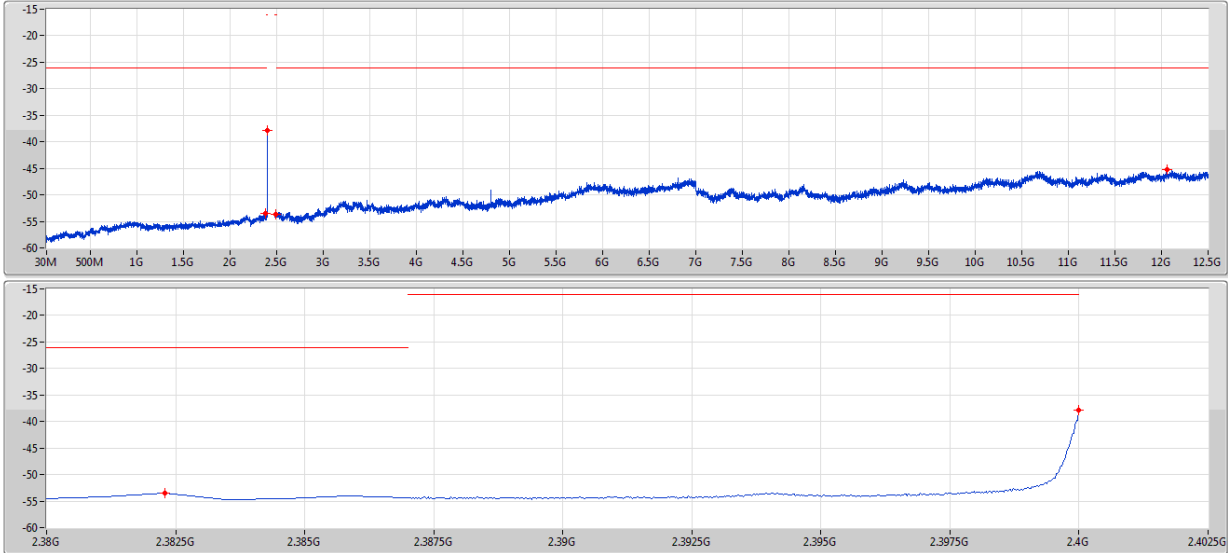
Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	Freq (Hz)	Psum (dBm/MHz)	Psum (uW/MHz)	Limit (dBm/MHz)	Limit (uW/MHz)
2480MHz_TnomVmin	Pass	30M	2.387G	1M	1.75768G	-50.36	0.0092	-26.02	2.5
2480MHz_TnomVmin	Pass	2.387G	2.4G	1M	2.39178G	-54.05	0.00394	-16.02	25
2480MHz_TnomVmin	Pass	2.4835G	2.4965G	1M	2.48358G	-52.86	0.00518	-16.02	25
2480MHz_TnomVmin	Pass	2.4965G	12.5G	1M	10.62059G	-45.26	0.02979	-26.02	2.5
2480MHz_TnomVmax	Pass	30M	2.387G	1M	1.75768G	-52.19	0.00604	-26.02	2.5
2480MHz_TnomVmax	Pass	2.387G	2.4G	1M	2.39191G	-53.98	0.004	-16.02	25
2480MHz_TnomVmax	Pass	2.4835G	2.4965G	1M	2.48355G	-52.73	0.00533	-16.02	25
2480MHz_TnomVmax	Pass	2.4965G	12.5G	1M	12.49875G	-45.34	0.02924	-26.02	2.5



BT-LE(1Mbps)

CSE-TX-DTS

2402MHz_TnomVnom

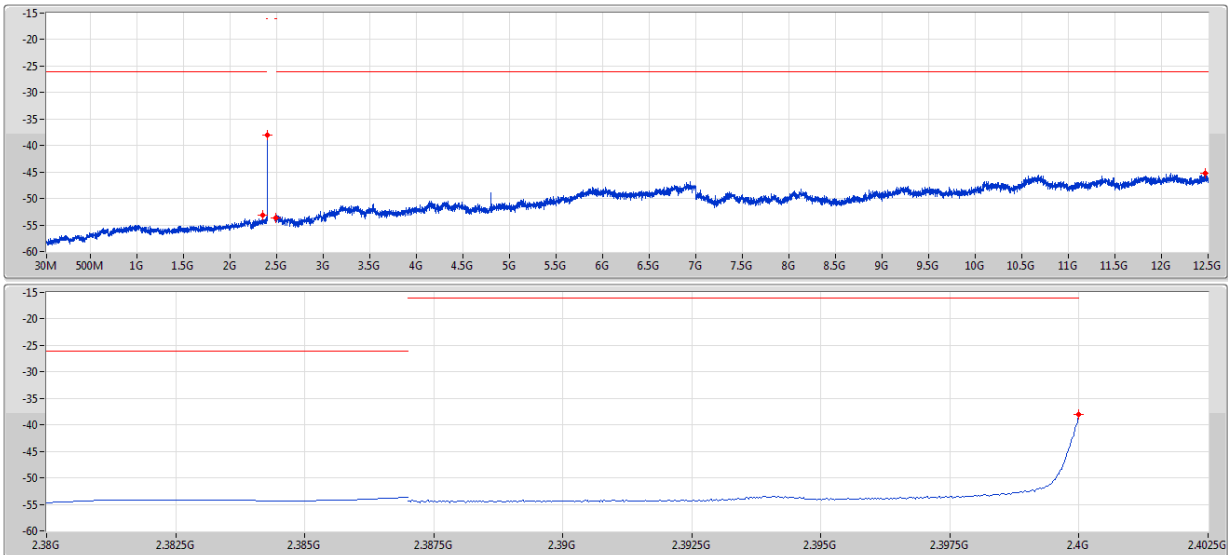


F-Start(Hz)	F-Stop(Hz)	Freq(Hz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)
30M	2.387G	2.38229G	-53.52	-26.02	-27.50	-53.52
2.387G	2.4G	2.4G	-37.87	-16.02	-21.85	-37.87
2.4835G	2.4965G	2.48982G	-53.65	-16.02	-37.63	-53.65
2.4965G	12.5G	12.0611G	-45.25	-26.02	-19.23	-45.25

BT-LE(1Mbps)

CSE-TX-DTS

2402MHz_TnomVmin



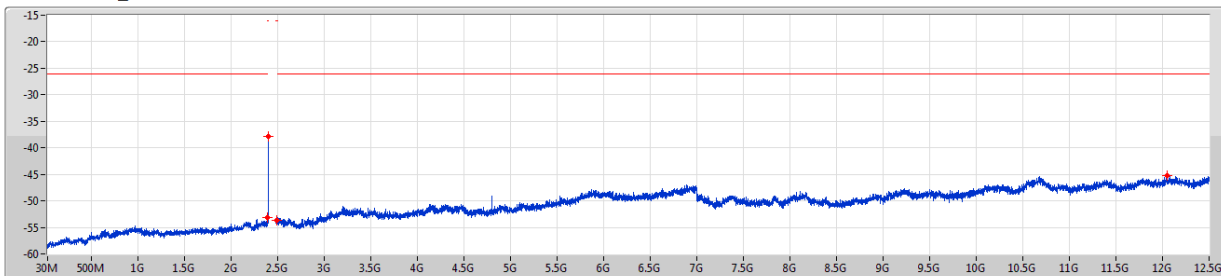
F-Start(Hz)	F-Stop(Hz)	Freq(Hz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)
30M	2.387G	2.34693G	-53.15	-26.02	-27.13	-53.15
2.387G	2.4G	2.4G	-38.04	-16.02	-22.02	-38.04
2.4835G	2.4965G	2.48969G	-53.63	-16.02	-37.61	-53.63
2.4965G	12.5G	12.46624G	-45.20	-26.02	-19.18	-45.20



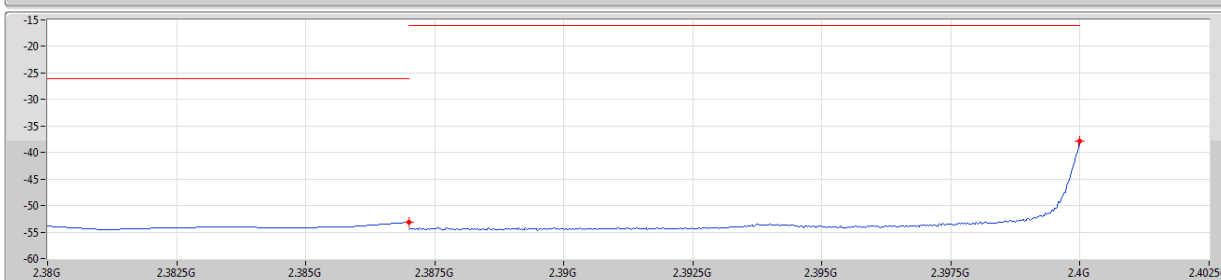
BT-LE(1Mbps)

CSE-TX-DTS

2402MHz_TnomVmax



Limit
Port1

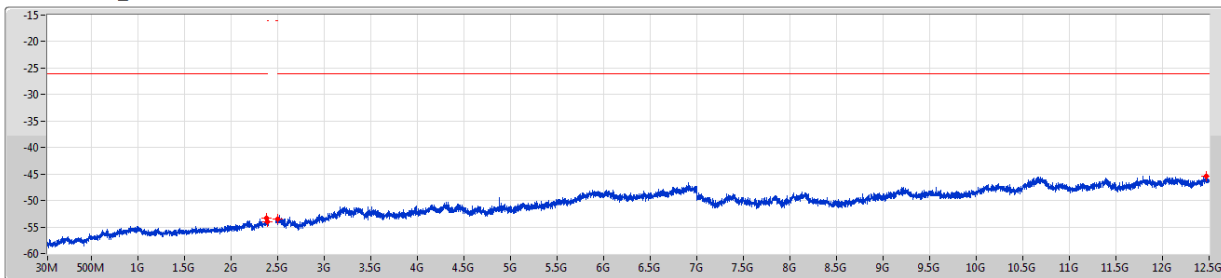


F-Start(Hz)	F-Stop(Hz)	Freq(Hz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)
30M	2.387G	2.387G	-53.23	-26.02	-27.21	-53.23
2.387G	2.4G	2.4G	-37.88	-16.02	-21.86	-37.88
2.4835G	2.4965G	2.4899G	-53.59	-16.02	-37.57	-53.59
2.4965G	12.5G	12.04609G	-45.28	-26.02	-19.26	-45.28

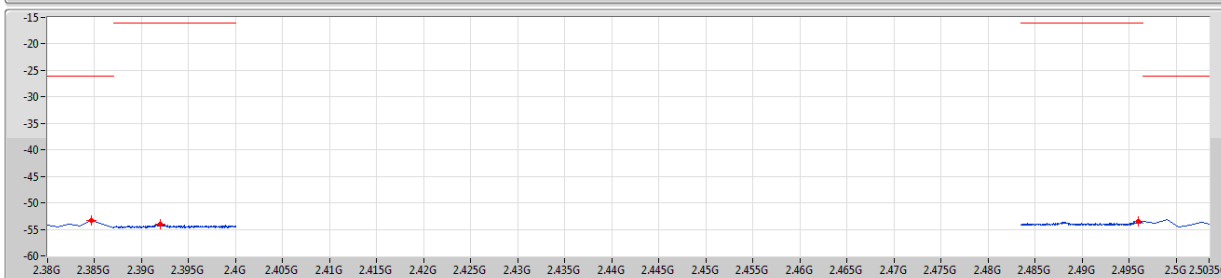
BT-LE(1Mbps)

CSE-TX-DTS

2440MHz_TnomVnom



Limit
Port1

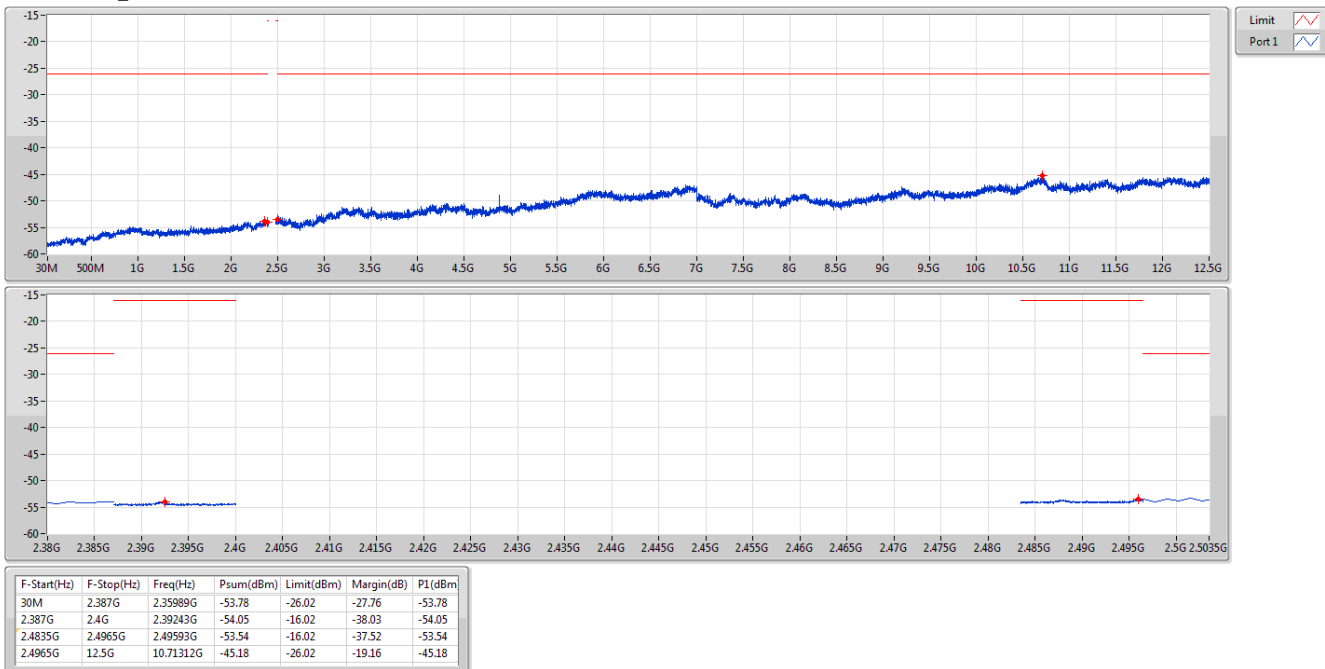


F-Start(Hz)	F-Stop(Hz)	Freq(Hz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)
30M	2.387G	2.38464G	-53.38	-26.02	-27.36	-53.38
2.387G	2.4G	2.39199G	-54.03	-16.02	-38.01	-54.03
2.4835G	2.4965G	2.49595G	-53.53	-16.02	-37.51	-53.53
2.4965G	12.5G	12.47499G	-45.37	-26.02	-19.35	-45.37

BT-LE(1Mbps)

CSE-TX-DTS

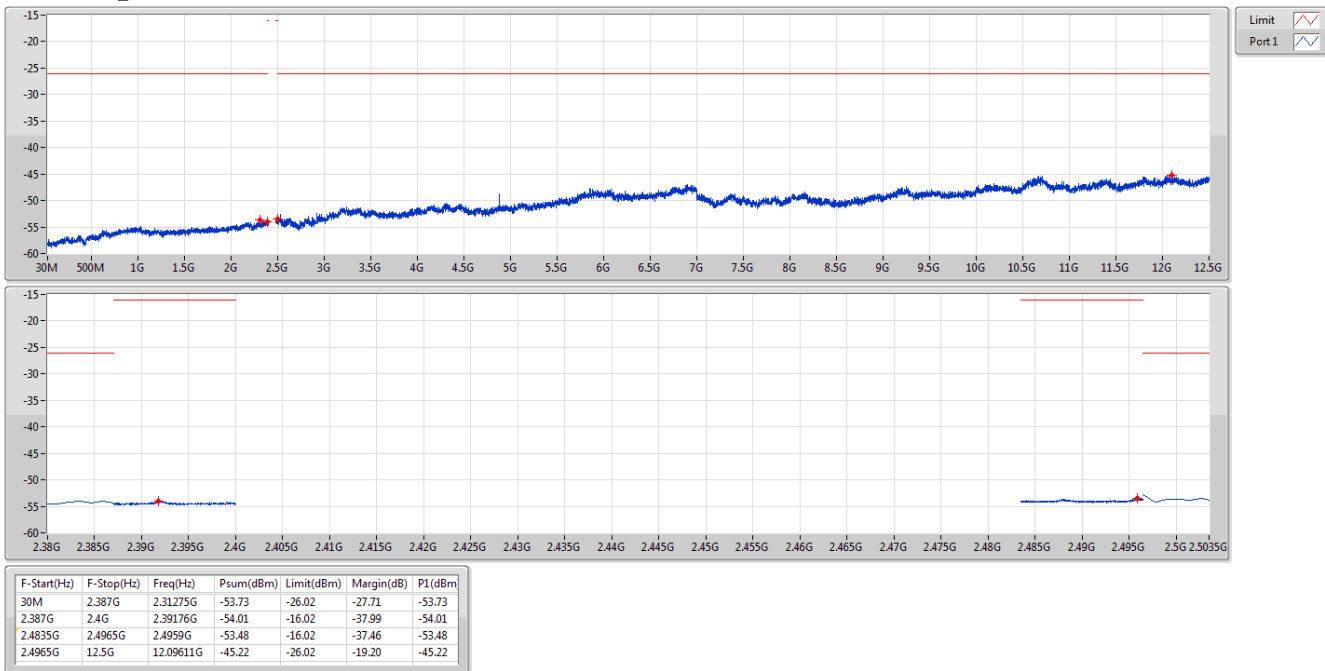
2440MHz_TnomVmin



BT-LE(1Mbps)

CSE-TX-DTS

2440MHz_TnomVmax

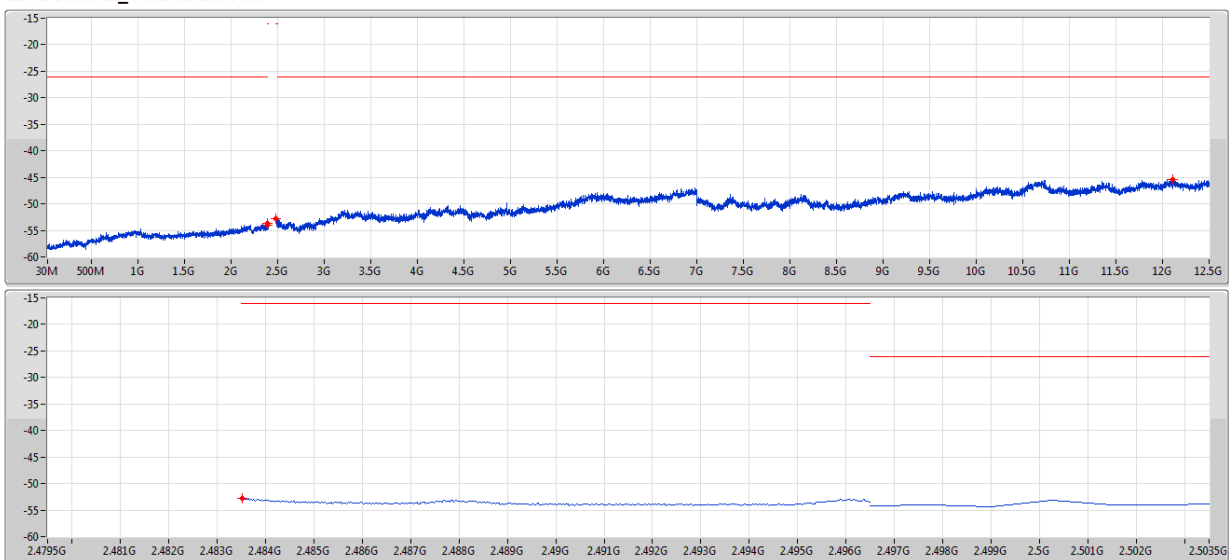




BT-LE(1Mbps)

CSE-TX-DTS

2480MHz_TnomVnom

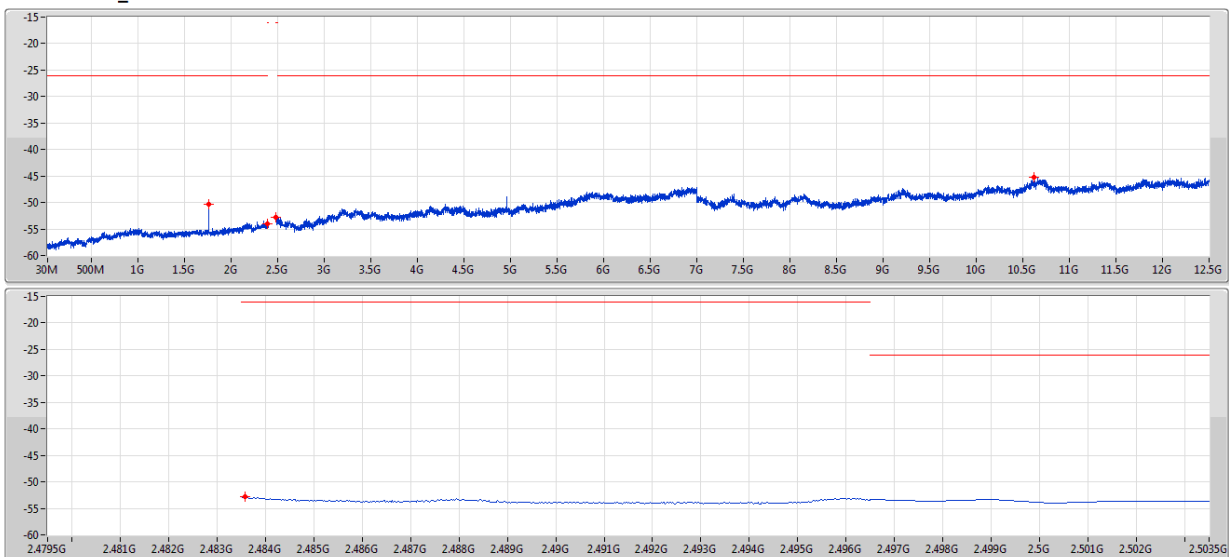


F-Start(Hz)	F-Stop(Hz)	Freq(Hz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)
30M	2.387G	2.38582G	-53.66	-26.02	-27.64	-53.66
2.387G	2.4G	2.39189G	-53.99	-16.02	-37.97	-53.99
2.4835G	2.4965G	2.48353G	-52.78	-16.02	-36.76	-52.78
2.4965G	12.5G	12.10736G	-45.39	-26.02	-19.37	-45.39

BT-LE(1Mbps)

CSE-TX-DTS

2480MHz_TnomVmin



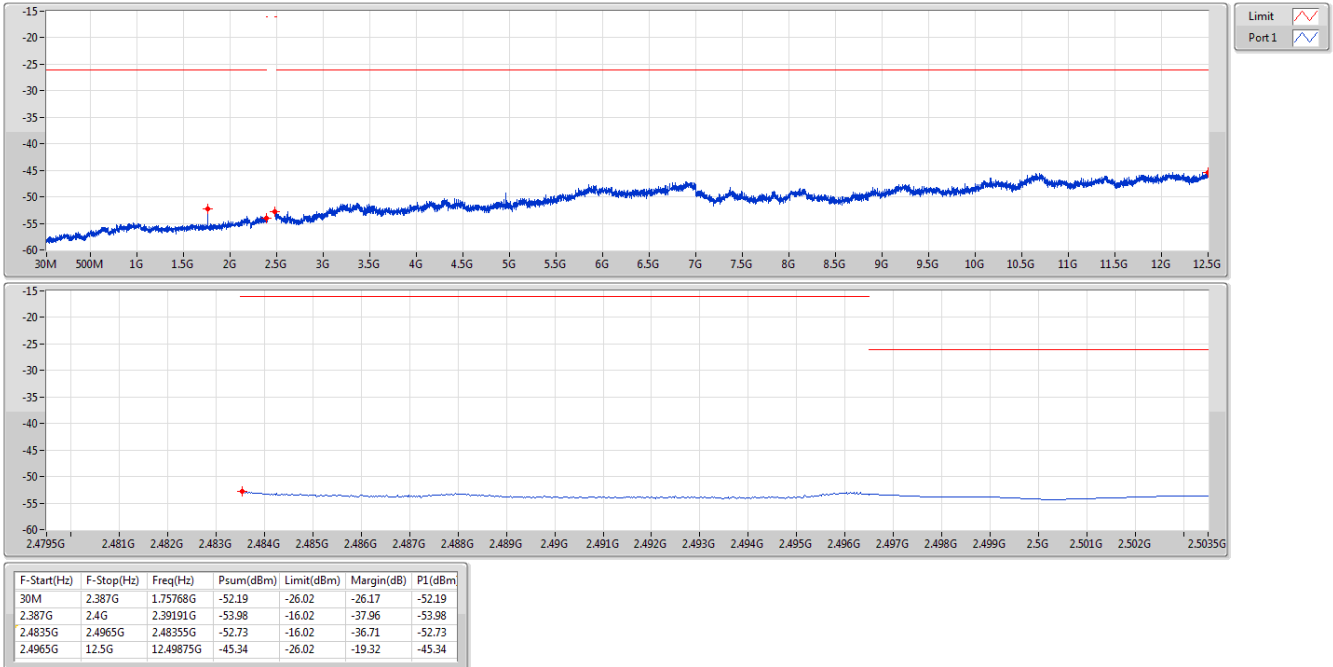
F-Start(Hz)	F-Stop(Hz)	Freq(Hz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)
30M	2.387G	1.75768G	-50.36	-26.02	-24.34	-50.36
2.387G	2.4G	2.39178G	-54.05	-16.02	-38.03	-54.05
2.4835G	2.4965G	2.48358G	-52.86	-16.02	-36.84	-52.86
2.4965G	12.5G	10.62059G	-45.26	-26.02	-19.24	-45.26



BT-LE(1Mbps)

CSE-TX-DTS

2480MHz_TnomVmax



**Summary**

Mode	Result	MAC (ID Length)	ID Limit	Function
2.4-2.4835GHz	-	-	-	-
BT-LE(1Mbps)	Pass	48 bits	48 bits	Good

Result

Mode	Result	MAC (ID Length)	ID Limit	Function
BT-LE(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	48 bits	48 bits	Good
2402MHz_TnomVmin	Pass	48 bits	48 bits	Good
2402MHz_TnomVmax	Pass	48 bits	48 bits	Good
2440MHz_TnomVnom	Pass	48 bits	48 bits	Good
2440MHz_TnomVmin	Pass	48 bits	48 bits	Good
2440MHz_TnomVmax	Pass	48 bits	48 bits	Good
2480MHz_TnomVnom	Pass	48 bits	48 bits	Good
2480MHz_TnomVmin	Pass	48 bits	48 bits	Good
2480MHz_TnomVmax	Pass	48 bits	48 bits	Good

Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	Freq (Hz)	Psum (dBm)	Psum (nW)	Limit (dBm)	Limit (nW)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	1G	12.5G	1M	10.52488G	-64.37	0.36559	-46.99	20

Result

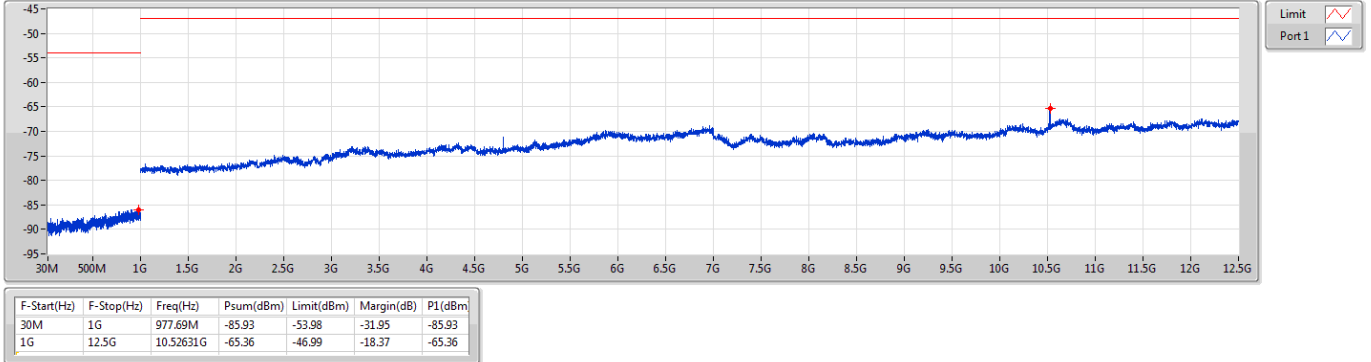
Mode	Result	F-Start (Hz)	F-Stop (Hz)	RBW (Hz)	Freq (Hz)	Psum (dBm)	Psum (nW)	Limit (dBm)	Limit (nW)
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	30M	1G	100k	977.69M	-85.93	0.00255	-53.98	4
2402MHz_TnomVnom	Pass	1G	12.5G	1M	10.52631G	-65.36	0.29107	-46.99	20
2402MHz_TnomVmin	Pass	30M	1G	100k	958.78M	-85.68	0.0027	-53.98	4
2402MHz_TnomVmin	Pass	1G	12.5G	1M	10.52488G	-64.37	0.36559	-46.99	20
2402MHz_TnomVmax	Pass	30M	1G	100k	921.43M	-85.85	0.0026	-53.98	4
2402MHz_TnomVmax	Pass	1G	12.5G	1M	12.19956G	-67.24	0.1888	-46.99	20
2440MHz_TnomVnom	Pass	30M	1G	100k	938.89M	-85.85	0.0026	-53.98	4
2440MHz_TnomVnom	Pass	1G	12.5G	1M	10.67869G	-67.08	0.19588	-46.99	20
2440MHz_TnomVmin	Pass	30M	1G	100k	986.91M	-85.04	0.00313	-53.98	4
2440MHz_TnomVmin	Pass	1G	12.5G	1M	10.66144G	-66.92	0.20324	-46.99	20
2440MHz_TnomVmax	Pass	30M	1G	100k	982.54M	-85.91	0.00256	-53.98	4
2440MHz_TnomVmax	Pass	1G	12.5G	1M	10.52488G	-64.86	0.32659	-46.99	20
2480MHz_TnomVnom	Pass	30M	1G	100k	916.58M	-85.80	0.00263	-53.98	4
2480MHz_TnomVnom	Pass	1G	12.5G	1M	10.66G	-67.06	0.19679	-46.99	20
2480MHz_TnomVmin	Pass	30M	1G	100k	867.11M	-85.87	0.00259	-53.98	4
2480MHz_TnomVmin	Pass	1G	12.5G	1M	10.71031G	-67.21	0.19011	-46.99	20
2480MHz_TnomVmax	Pass	30M	1G	100k	960.23M	-85.65	0.00272	-53.98	4
2480MHz_TnomVmax	Pass	1G	12.5G	1M	10.66G	-67.08	0.19588	-46.99	20



BT-LE(1Mbps)

CSE-RX-DTS

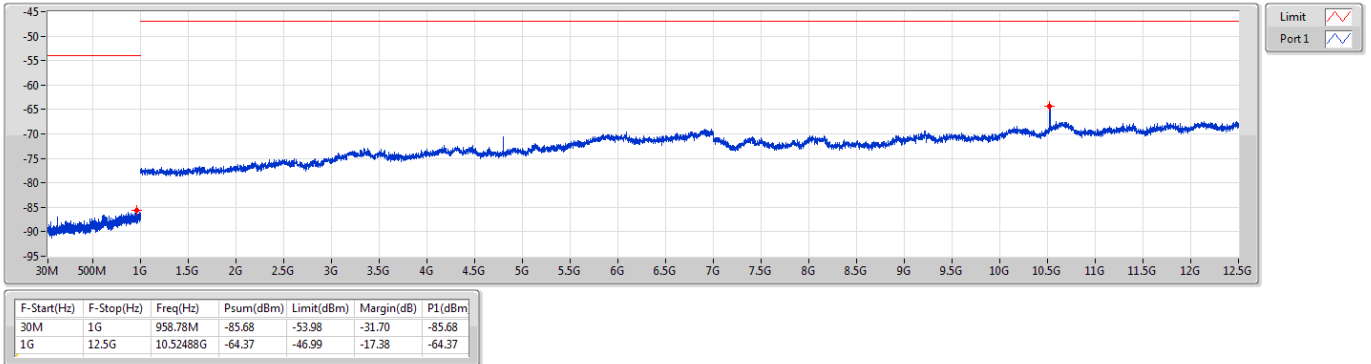
2402MHz_TnomVnom



BT-LE(1Mbps)

CSE-RX-DTS

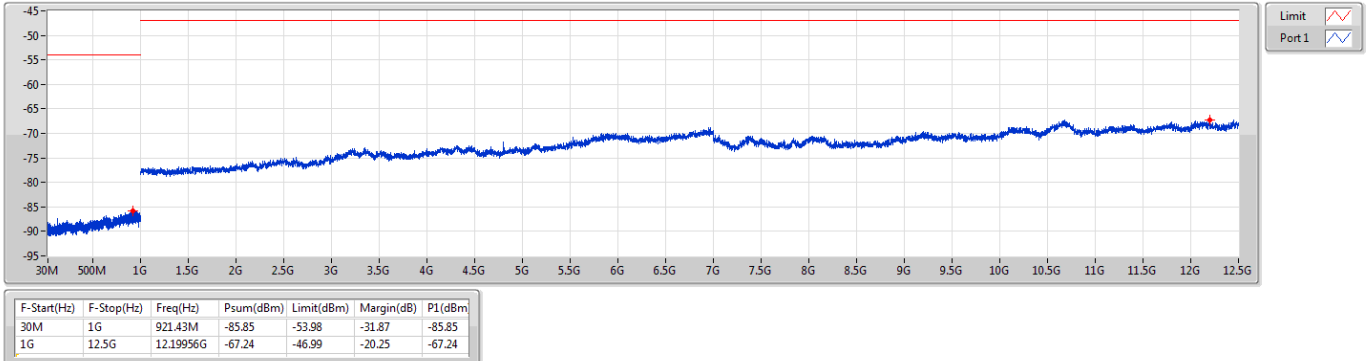
2402MHz_TnomVmin



BT-LE(1Mbps)

CSE-RX-DTS

2402MHz_TnomVmax

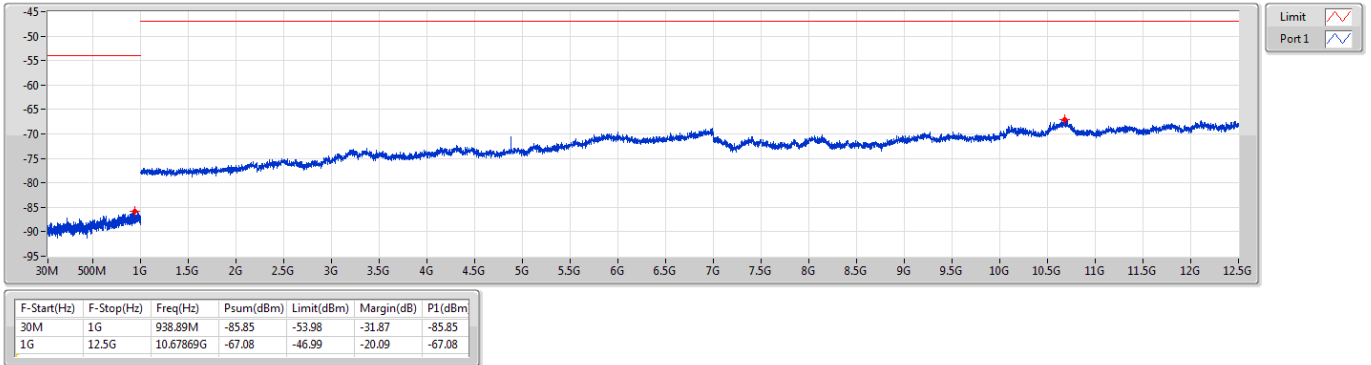




BT-LE(1Mbps)

CSE-RX-DTS

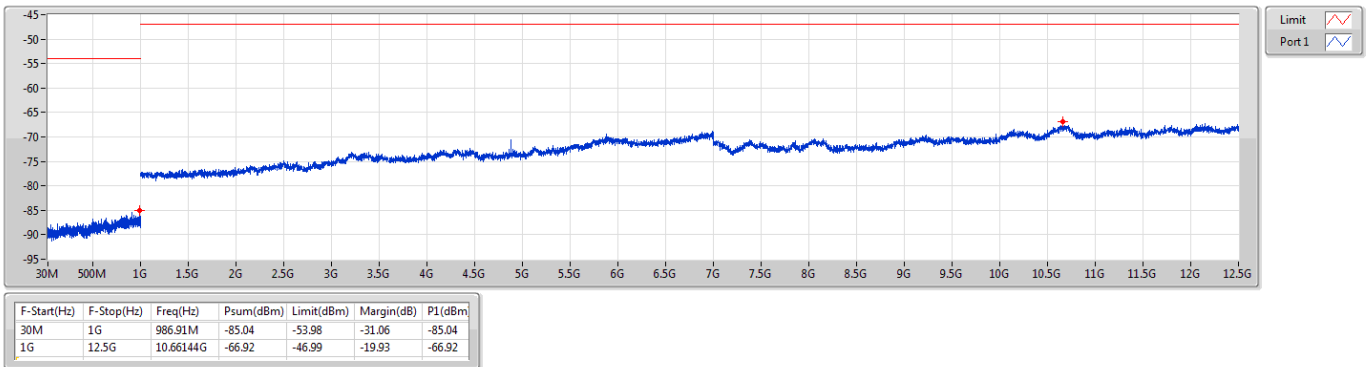
2440MHz_TnomVnom



BT-LE(1Mbps)

CSE-RX-DTS

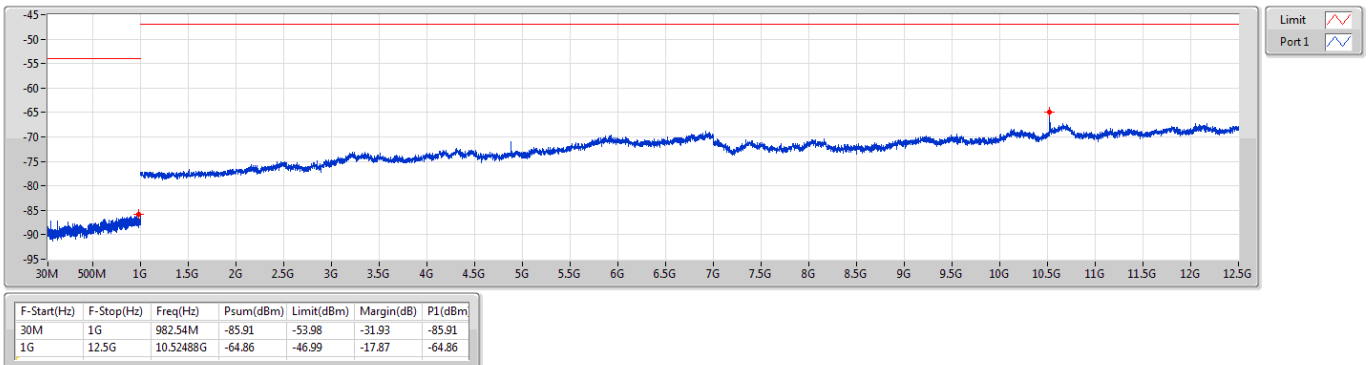
2440MHz_TnomVmin



BT-LE(1Mbps)

CSE-RX-DTS

2440MHz_TnomVmax

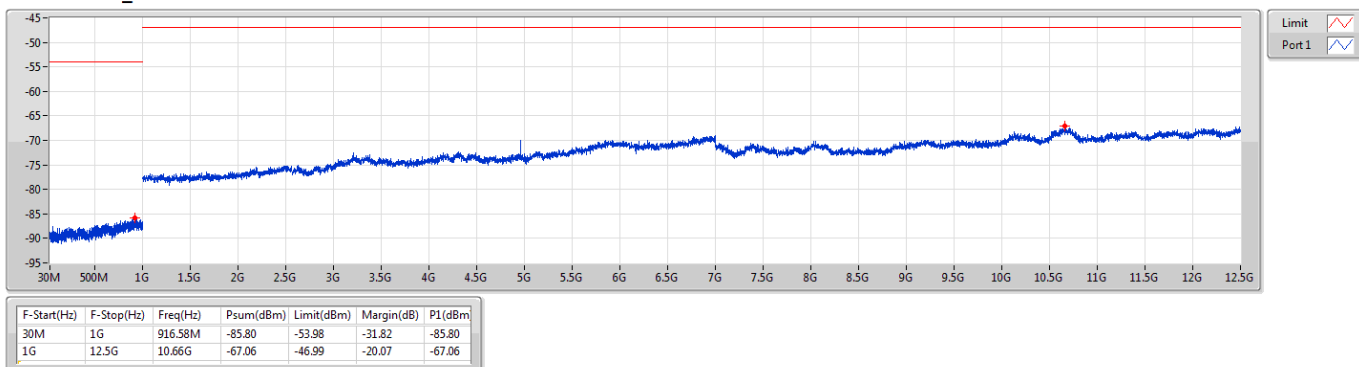




BT-LE(1Mbps)

CSE-RX-DTS

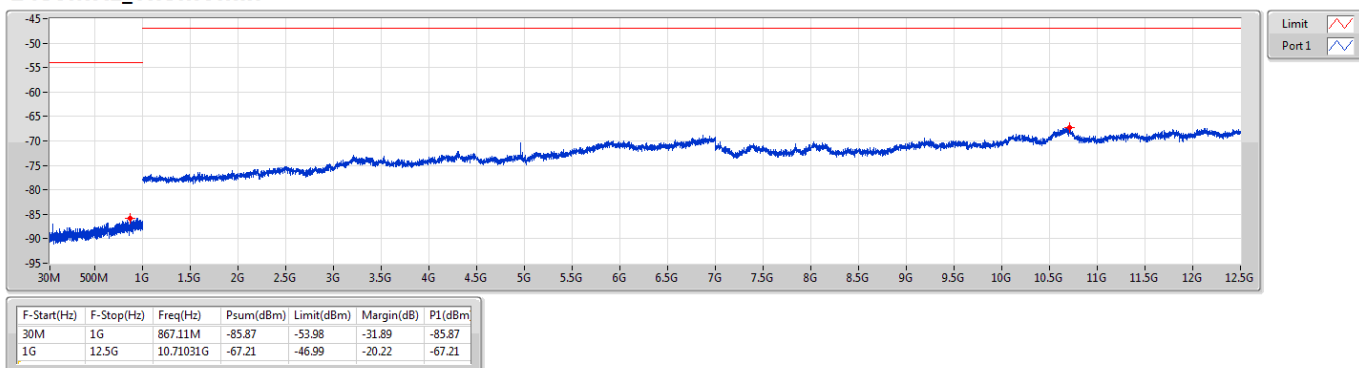
2480MHz_TnomVnom



BT-LE(1Mbps)

CSE-RX-DTS

2480MHz_TnomVmin



BT-LE(1Mbps)

CSE-RX-DTS

2480MHz_TnomVmax

