



Part 15C

TEST REPORT

Product Name cdma2000 digital mobile phone

Model one touch 710C

FCC ID R5C710C

Client Huizhou TCL Mobile Communication Co.,Ltd

TA Technology (Shanghai) Co., Ltd.

TA Technology (Shanghai) Co., Ltd.

Test Report

Registration Num:428261

Report No.: RZA1110-1746RF01R2

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GENERAL SUMMARY

Product Name	cdma2000 digital mobile phone	Model	one touch 710C
FCC ID	R5C710C	Report No.	RZA1110-1746RF01R2
Client	Huizhou TCL Mobile Communication Co.,Ltd		
Manufacturer	Huizhou TCL Mobile Communication Co.,Ltd		
Reference Standard(s)	FCC CFR47 Part 15C (2010-12) Radio Frequency Devices 15.203 Antenna requirement 15.205 Restricted bands of operation; 15.207 Conducted limits; 15.209 Radiated emission limits; general requirements; 15.247 Operation within the bands 902-928 MHz,2400-2483.5 MHz, and 5725-5850MHz. ANSI C63.4 Methods of Measurement of Radio-Noise Emission from Low-Voltage Electrical and Electronic Equipment in the Range of 9 KHz to 40GHz. (2003) DA00-705 Filing and Frequency Measurement Guidelines For Frequency Hopping Spread Spectrum System.(2000)		
Conclusion	This portable wireless equipment has been measured in all cases requested by the relevant standards. Test results in Chapter 2 of this test report are below limits specified in the relevant standards. General Judgment: Pass (Stamp) Date of issue: November 7th,2011		
Comment	The test result only responds to the measured sample.		

Approved

by

杨伟中

Director

Revised by

徐凯

RF Manager

Performed by

王宇

RF Engineer

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1. General Information

1.1. Notes of the test report

TA Technology (Shanghai) Co., Ltd. guarantees the reliability of the data presented in this test report, which is the results of measurements and tests performed for the items under test on the date and under the conditions stated in this test report and is based on the knowledge and technical facilities available at TA Technology (Shanghai) Co., Ltd. at the time of execution of the test.

TA Technology (Shanghai) Co., Ltd. is liable to the client for the maintenance by its personnel of the confidentiality of all information related to the items under test and the results of the test. This report only refers to the item that has undergone the test.

This report standalone dose not constitute or imply by its own an approval of the product by the certification Bodies or competent Authorities. This report cannot be used partially or in full for publicity and/or promotional purposes without previous written approval of **TA Technology (Shanghai) Co., Ltd.** and the Accreditation Bodies, if it applies.

If the electrical report is inconsistent with the printed one, it should be subject to the latter.

1.2. Testing laboratory

Company: TA Technology (Shanghai) Co., Ltd.
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong
City: Shanghai
Post code: 201201
Country: P. R. China
Contact: Yang Weizhong
Telephone: +86-021-50791141/2/3
Fax: +86-021-50791141/2/3-8000
Website: <http://www.ta-shanghai.com>
E-mail: yangweizhong@ta-shanghai.com

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1.3. Applicant Information

Company: Huizhou TCL Mobile Communication Co.,Ltd
Address: NO.23 Zone, ZhongKai High-Technology Development Zone
City: /
Postal Code: /
Country: P.R.China
Contact: Jianjun Ji
Telephone: 86-755-33035352
Fax: 86-755-33313007

1.4. Manufacturer Information

Company: Huizhou TCL Mobile Communication Co.,Ltd
Address: NO.23 Zone, ZhongKai High-Technology Development Zone
City: /
Postal Code: /
Country: P.R.China
Telephone: 86-755-33035352
Fax: 86-755-33313007

1.5. Information of EUT

General information

Name of EUT:	cdma2000 digital mobile phone		
MEID:	A100000864E0D4		
Hardware Version:	V1.2		
Software Version:	710C_OMH_V1.5_5		
Antenna Type:	Internal Antenna		
Device Operating Configurations:			
Mode	Basic Rate	Enhanced Data Rate(EDR)	
Modulation Type:	Frequency Hopping Spread Spectrum (FHSS)		
	GFSK	π/4 DQPSK	8DQPSK
Packet Type:(Maximum Payload)	DH5	2DH5	3DH5
Max. Conducted Power	10.90 dBm		
Power Supply:	Battery or Adapter		
Rated Power Supply Voltage:	3.7 V		
Extreme Voltage:	Minimum: 3.4 V Maximum: 4.2 V		
Extreme Temperature:	Lowest: -10°C Highest: +55°C		
Operating Frequency Range(s)	2400 ~ 2483.5 MHz		

Auxiliary equipment details

AE1: Battery

Model: /

Manufacturer: BYD

S/N: CAB3120000C1

Equipment Under Test (EUT) is cdma2000 digital mobile phone. The EUT supports Bluetooth.

The sample under test was selected by the Client.

Components list please refer to documents of the manufacturer.

1.6. Test Date

The test is performed from October 25, 2011 to October 30, 2011.

2. Test Information

2.1. Summary of test results

Number	Summary of measurements of results	Clause in FCC rules	Verdict
1	Antenna requirement	15.203, 15.247(4)(i) (i)	PASS
2	Peak Power Output -Conducted	15.247(b)(1)	PASS
3	Occupied Bandwidth (20dB)	15.247(a)(1)	PASS
4	Frequency Separation	15.247(a)(1)	PASS
5	Time of Occupancy (Dwell Time)	15.247(a)(1)(iii)	PASS
6	Band Edge Compliance	15.247(d)	PASS
7	Spurious Radiated Emissions in the restricted band	15.247(d),15.205,15.209	PASS
8	Number of Hopping Frequency	15.247(a)(1)(iii)	PASS
9	Spurious RF Conducted Emissions	15.247(d)	PASS
10	Radiates Emission	15.247(d),15.205,15.209	PASS
11	AC Power Line Conducted Emission	15.207	PASS

2.2. Antenna requirement

Standard: 15.203, 15.247(4)(i) (i)

15.203 Antenna requirement.

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

15.247(4)(i) (i) Systems operating in the 2400–2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

Conclusions: The directional gains of antenna used for transmitting is 2dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement

2.3. Peak Power Output –Conducted

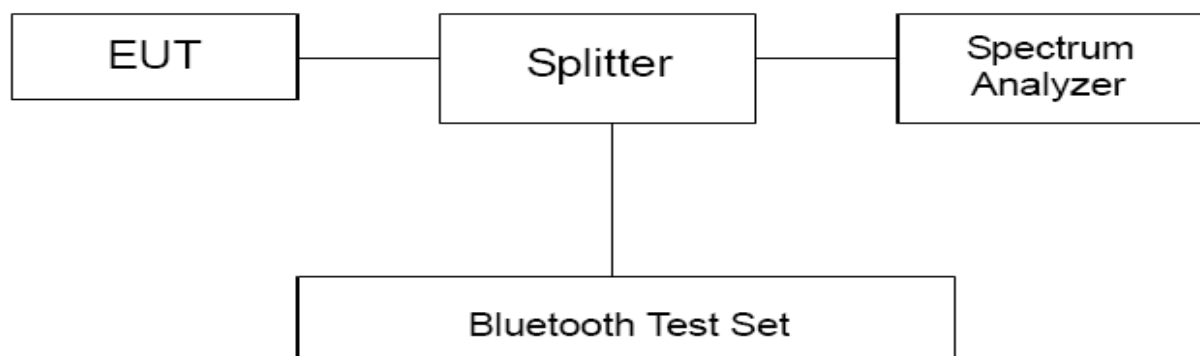
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

During the process of the testing, The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss. The EUT is controlled by the Bluetooth test set to ensure max power transmission with proper modulation. The peak detector is used. RBW is set to 1MHz, VBW is set to 3MHz. These measurements have been tested at following channels: 0, 39, and 78.

Test Setup



Limits

Rule Part 15.247 (b) (1) specifies that " For frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725–5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts."

Peak Output Power	$\leq 0.125W$ (21dBm)
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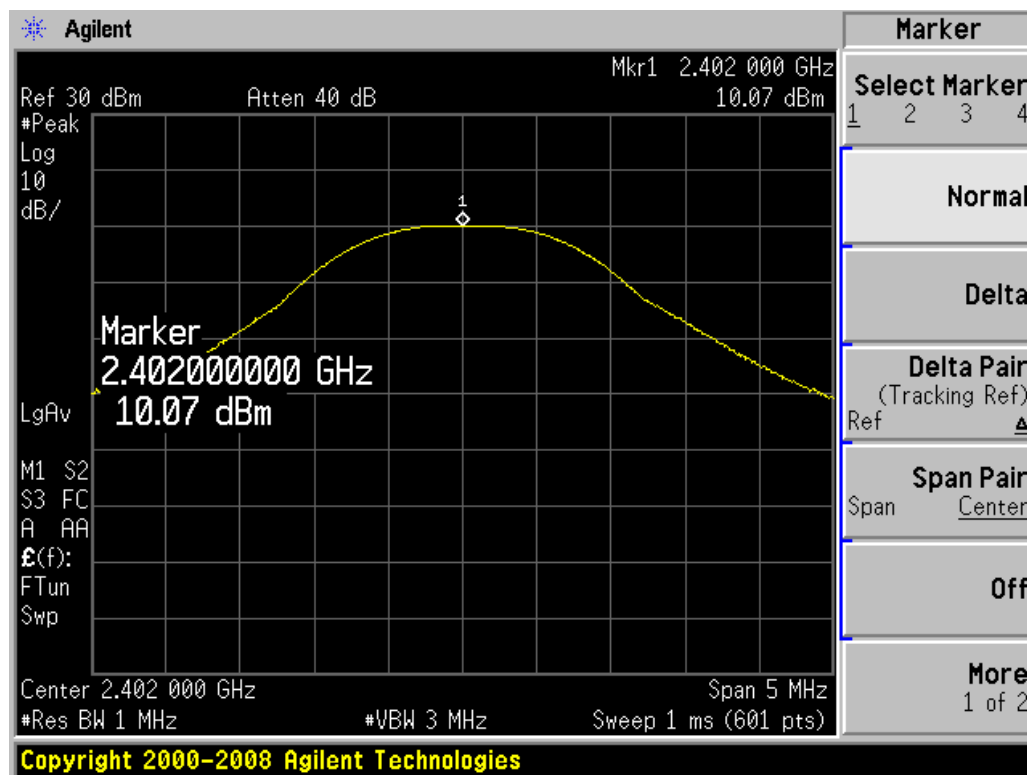
Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.44$ dB.

Test Results

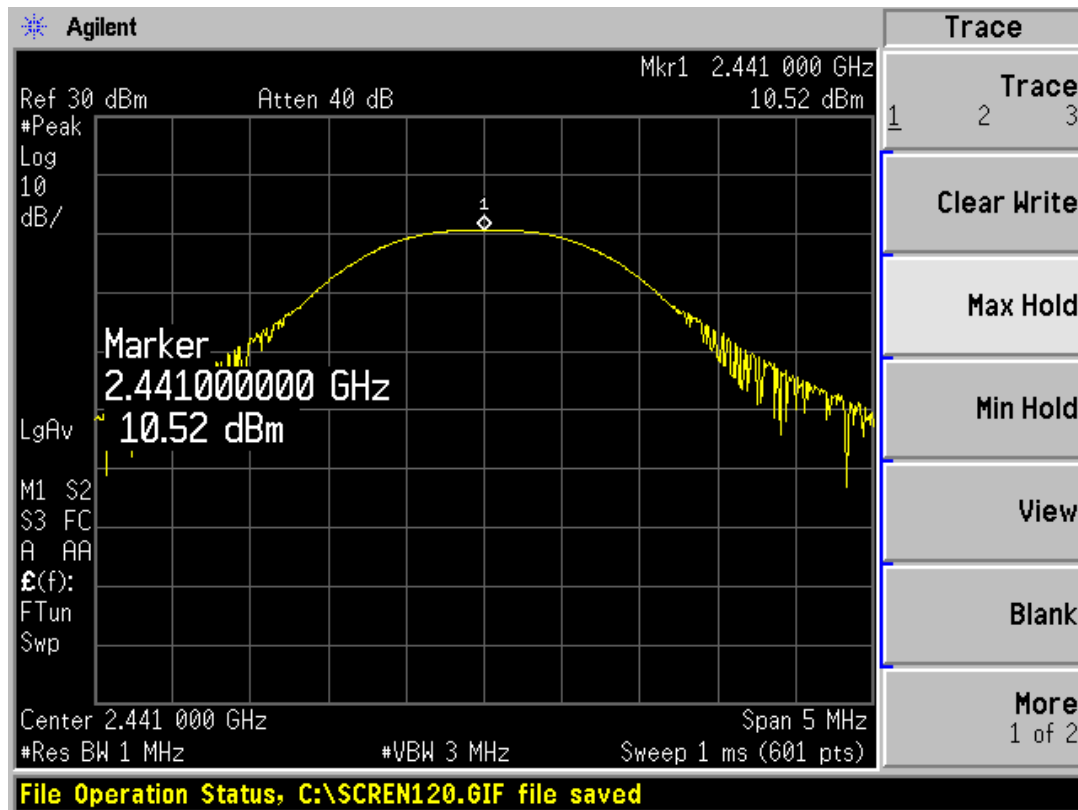
Channel	Frequency (MHz)	Peak Output Power (dBm)			Conclusion
		DH5	2DH5	3DH5	
0	2402	10.07	9.21	8.79	PASS
39	2441	10.52	9.62	9.23	PASS
78	2480	10.90	10.05	9.63	PASS

DH5



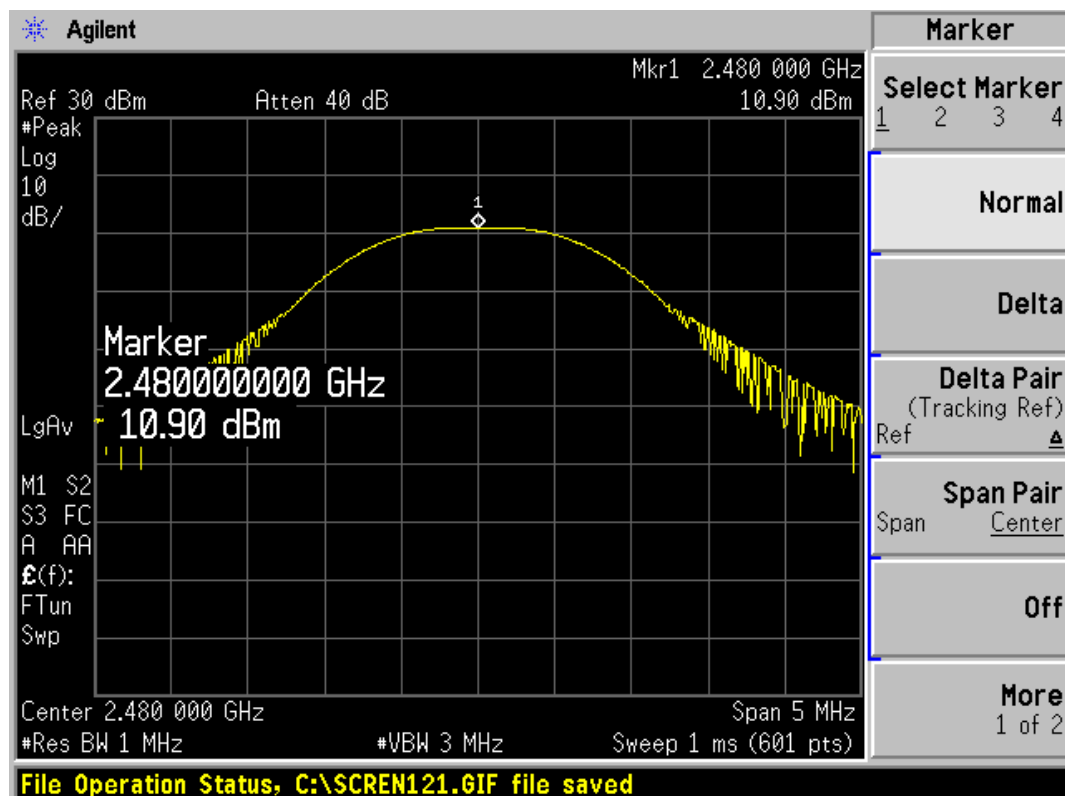
Carrier frequency (MHz): 2402

Channel No.:0



Carrier frequency (MHz): 2441

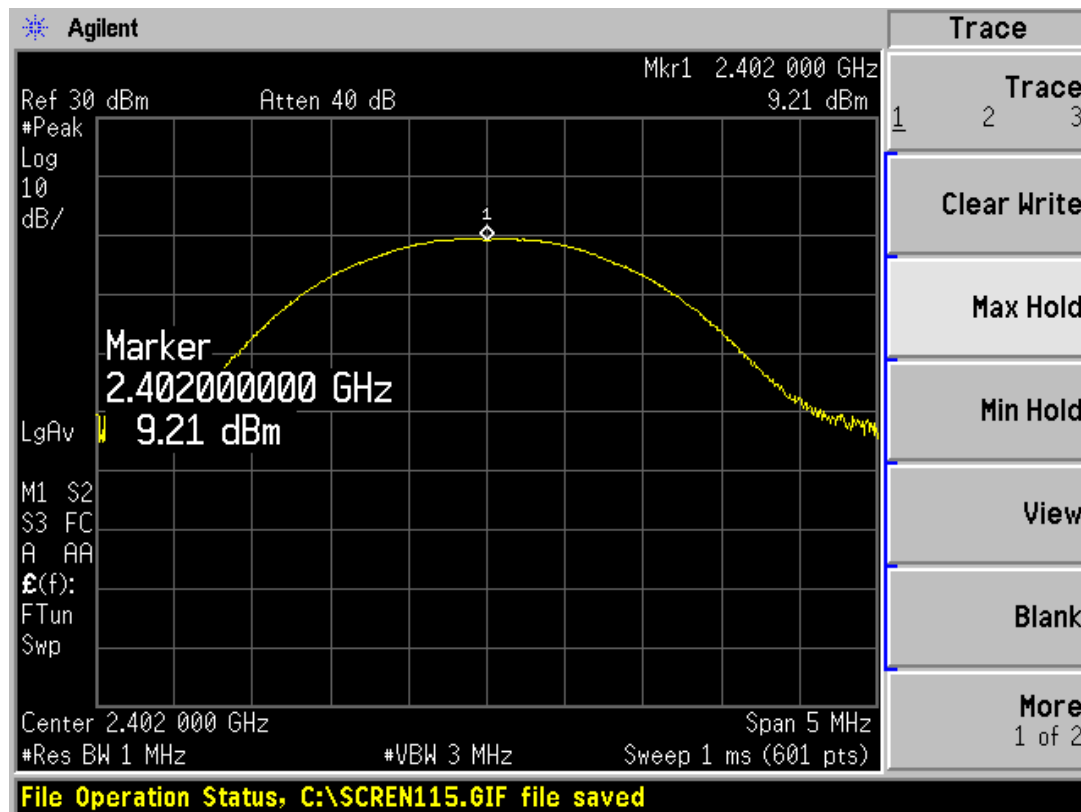
Channel No.:39



Carrier frequency (MHz): 2480

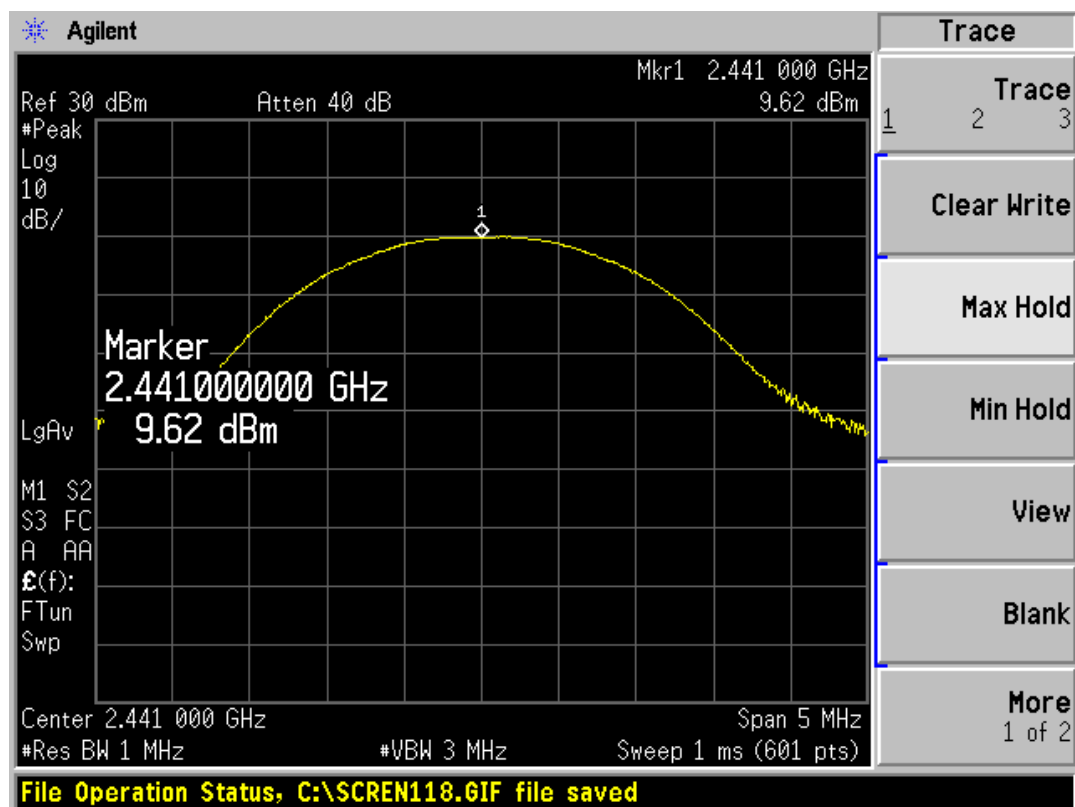
Channel No.:78

2DH5



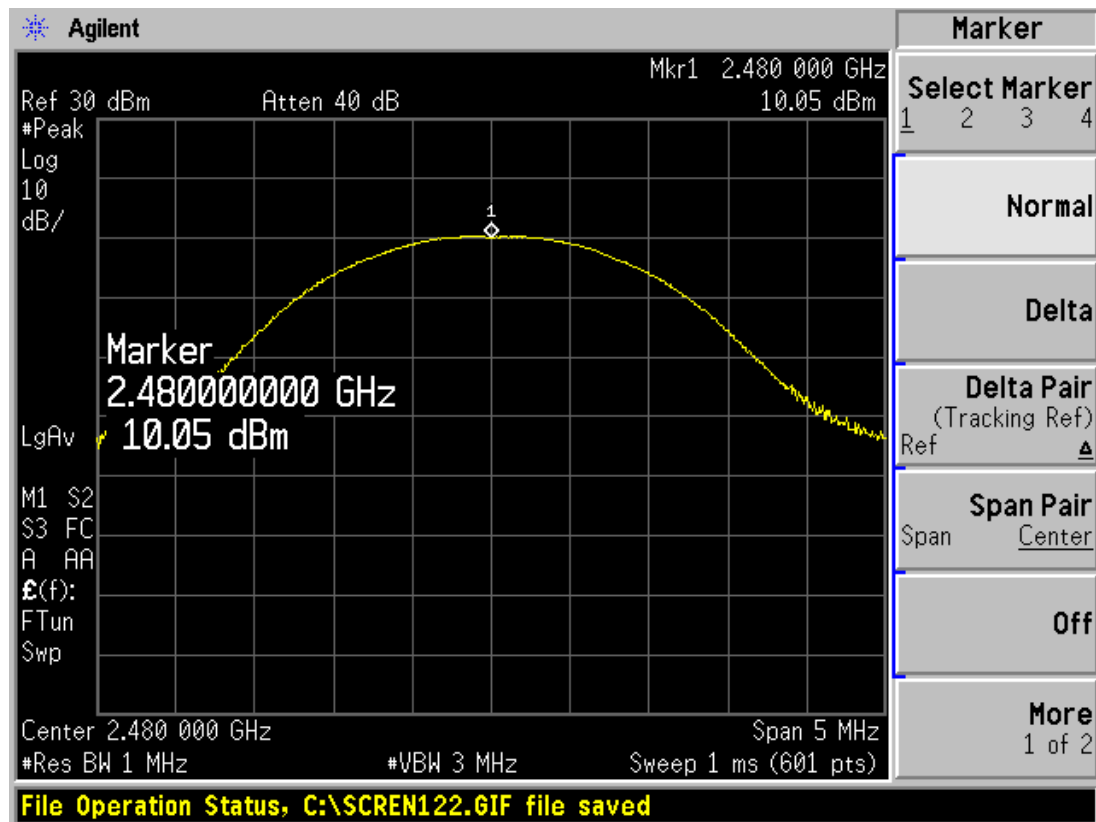
Carrier frequency (MHz): 2402

Channel No.:0



Carrier frequency (MHz): 2441

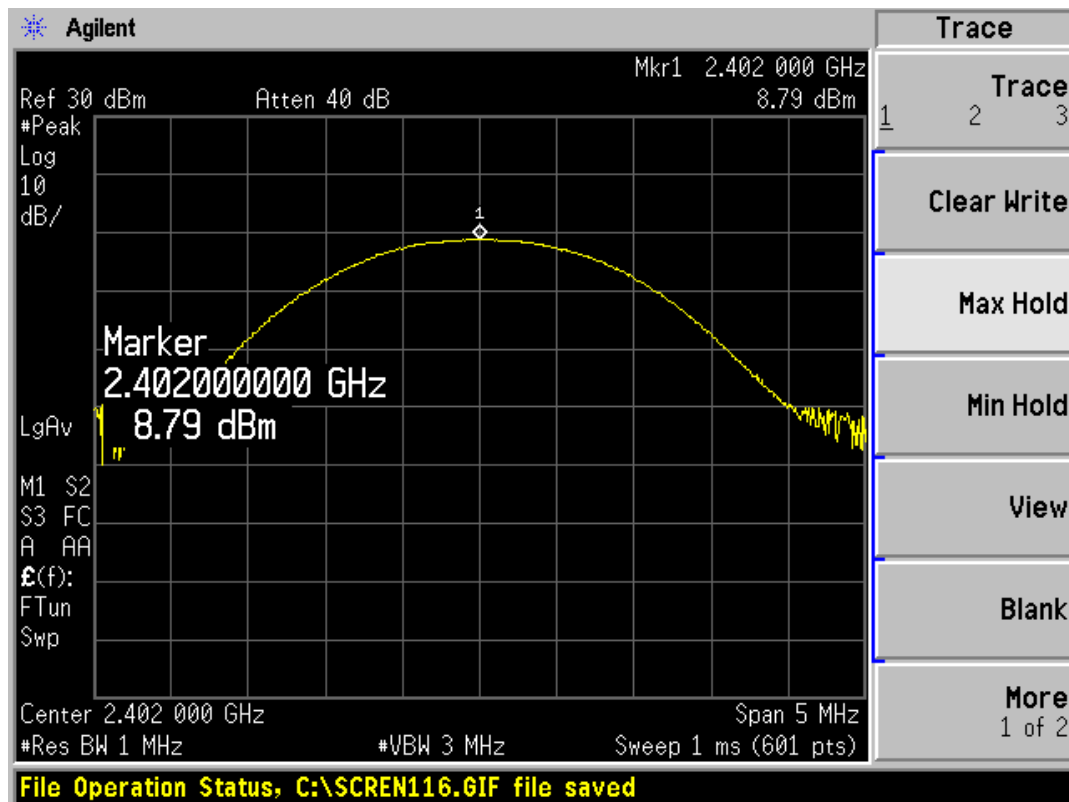
Channel No.:39



Carrier frequency (MHz): 2480

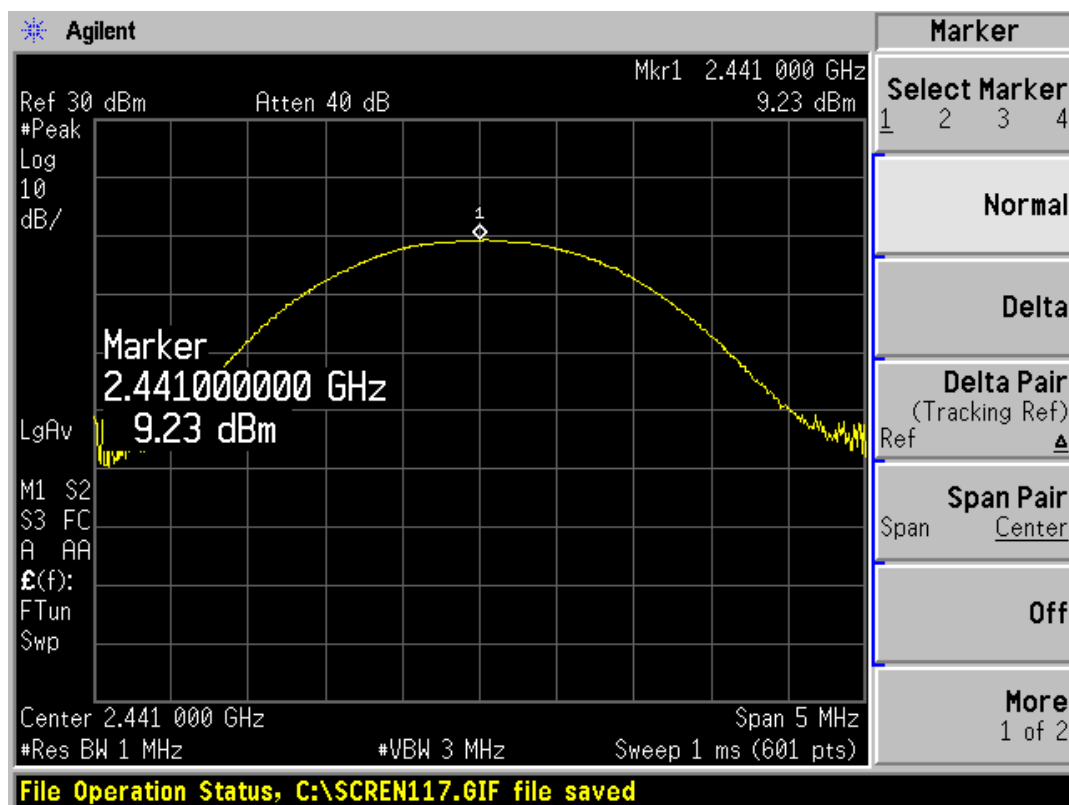
Channel No.:78

3DH5



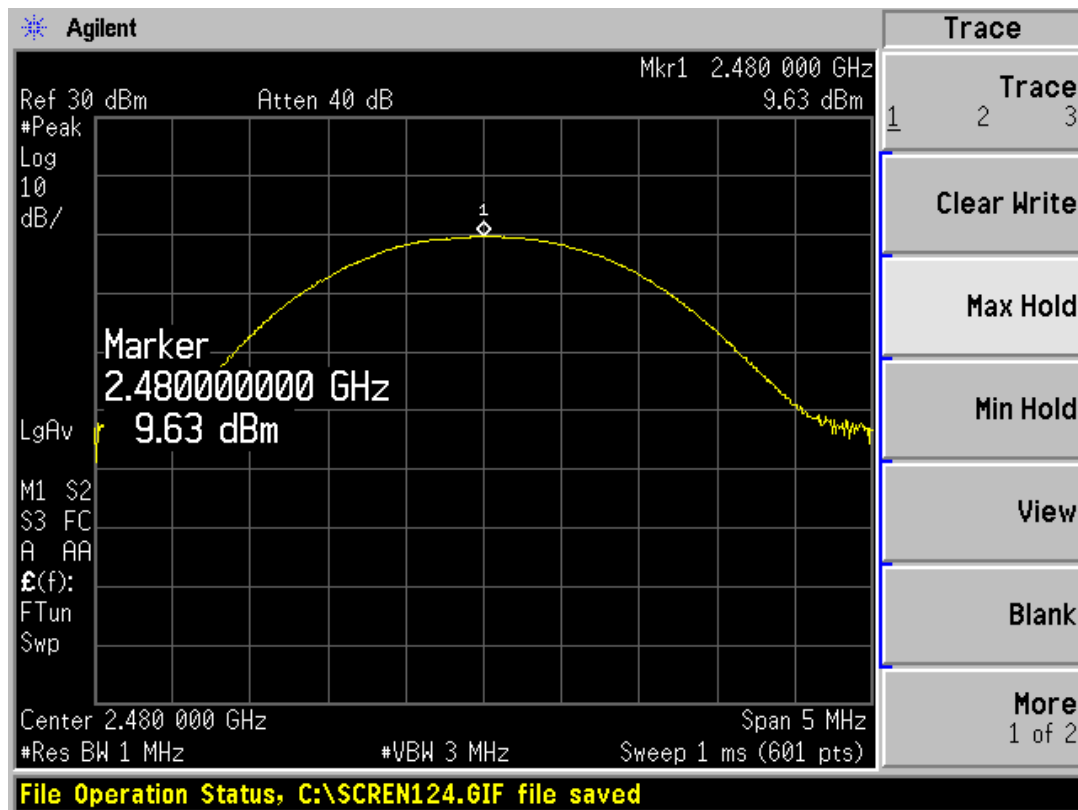
Carrier frequency (MHz): 2402

Channel No.:0



Carrier frequency (MHz): 2441

Channel No.:39



Carrier frequency (MHz): 2480

Channel No.:78

2.4. Occupied Bandwidth (20dB)

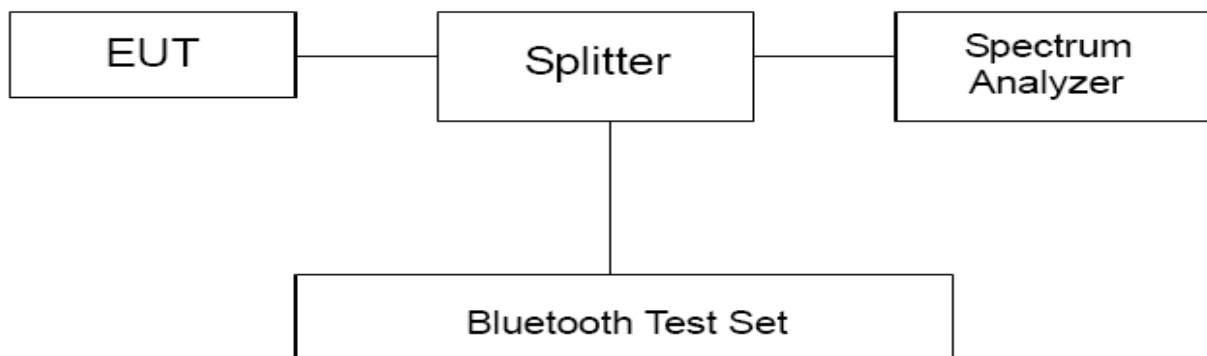
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss. The occupied bandwidth is measured using spectrum analyzer. RBW is set to 10kHz and VBW is set to 30kHz on spectrum analyzer. -20dB occupied bandwidths are recorded.

Test Setup



Limits

No specific occupied bandwidth requirements in part 15.247(a) (1).

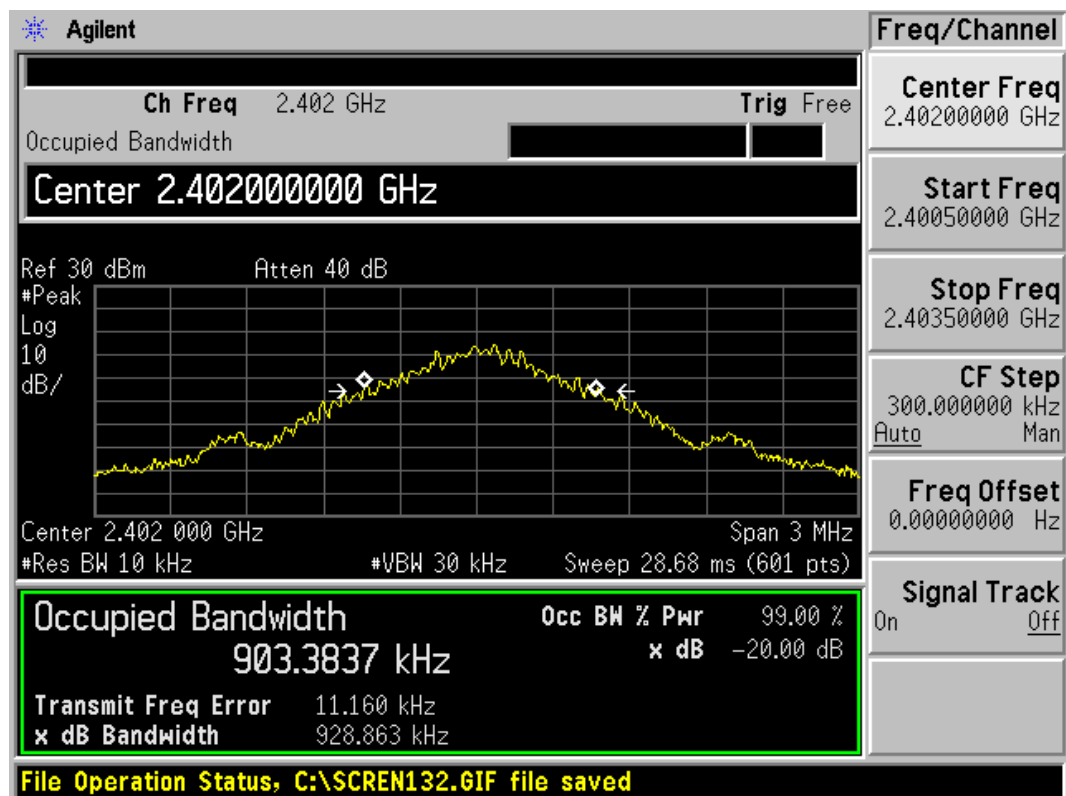
Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 936$ Hz.

Test Results

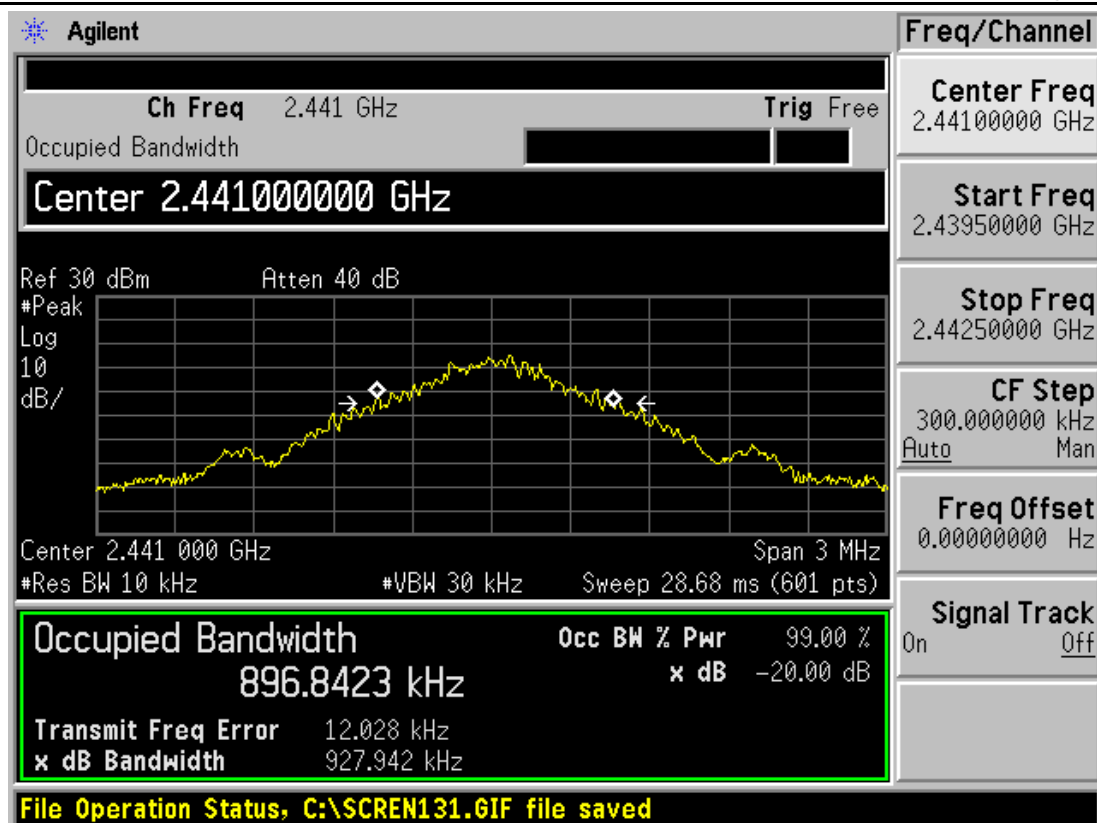
DH5

Channel	Frequency (MHz)	20dB Bandwidth (kHz)
0	2402	928.863
39	2441	927.942
78	2480	929.210



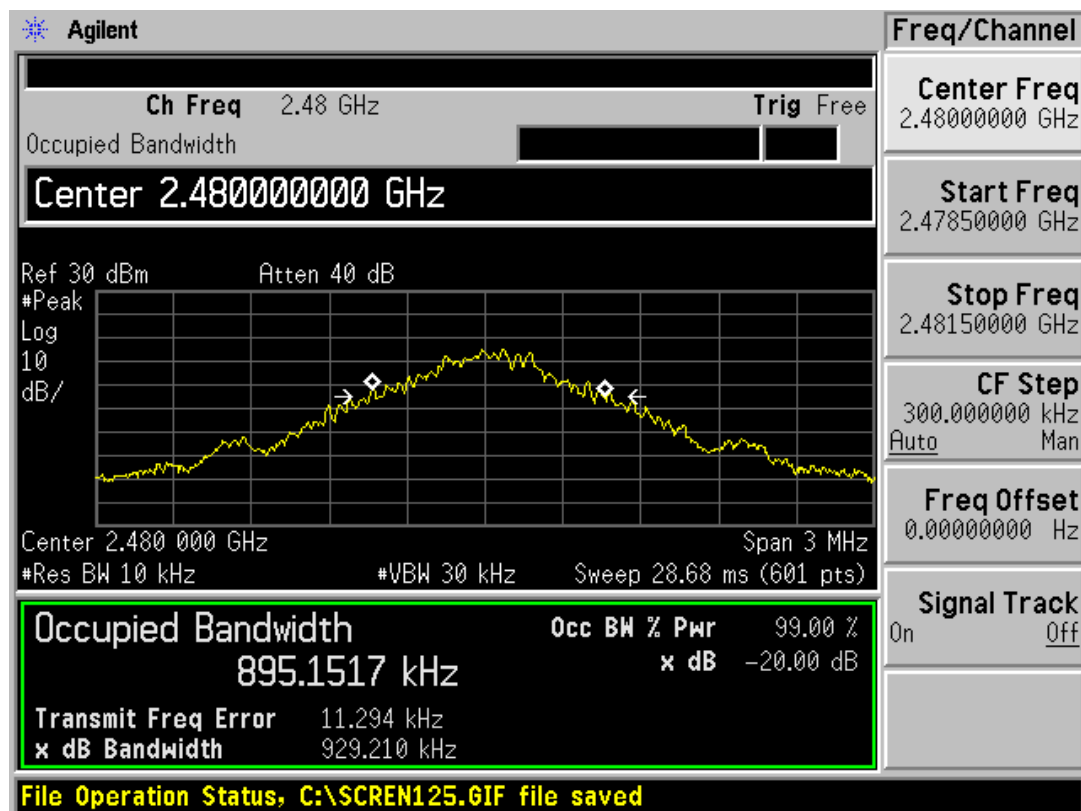
Carrier frequency (MHz): 2402

Channel No.:0



Carrier frequency (MHz): 2441

Channel No.:39



Carrier frequency (MHz): 2480

Channel No.:78

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Test Report

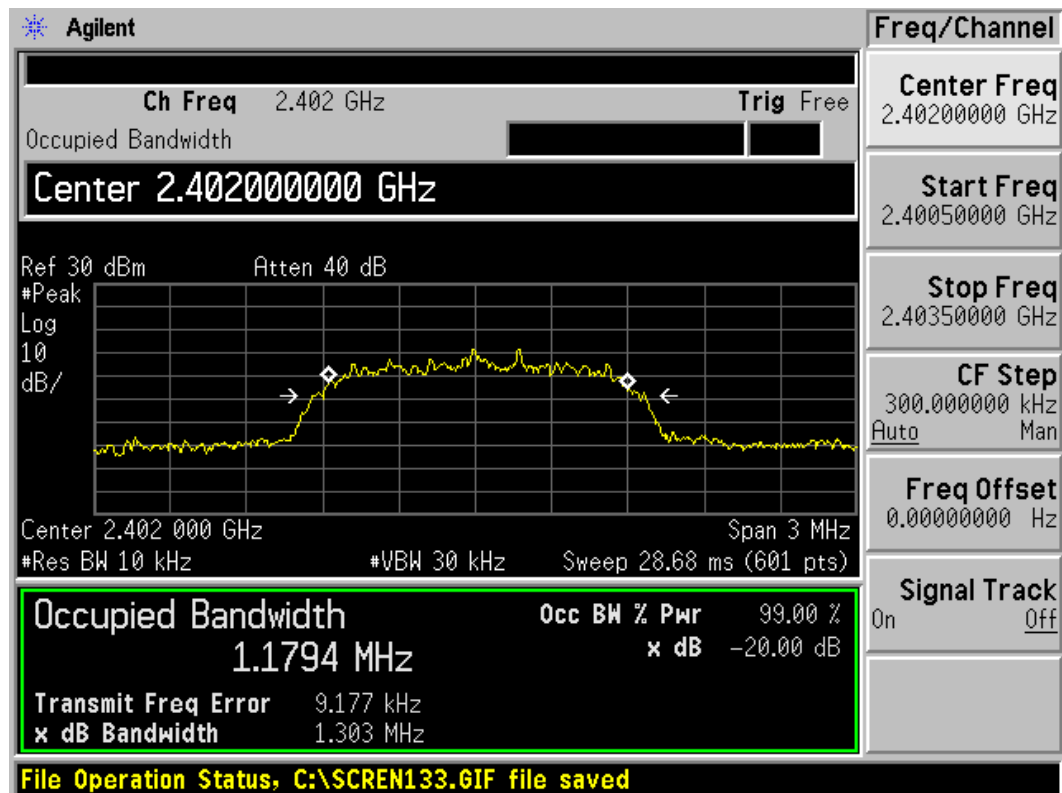
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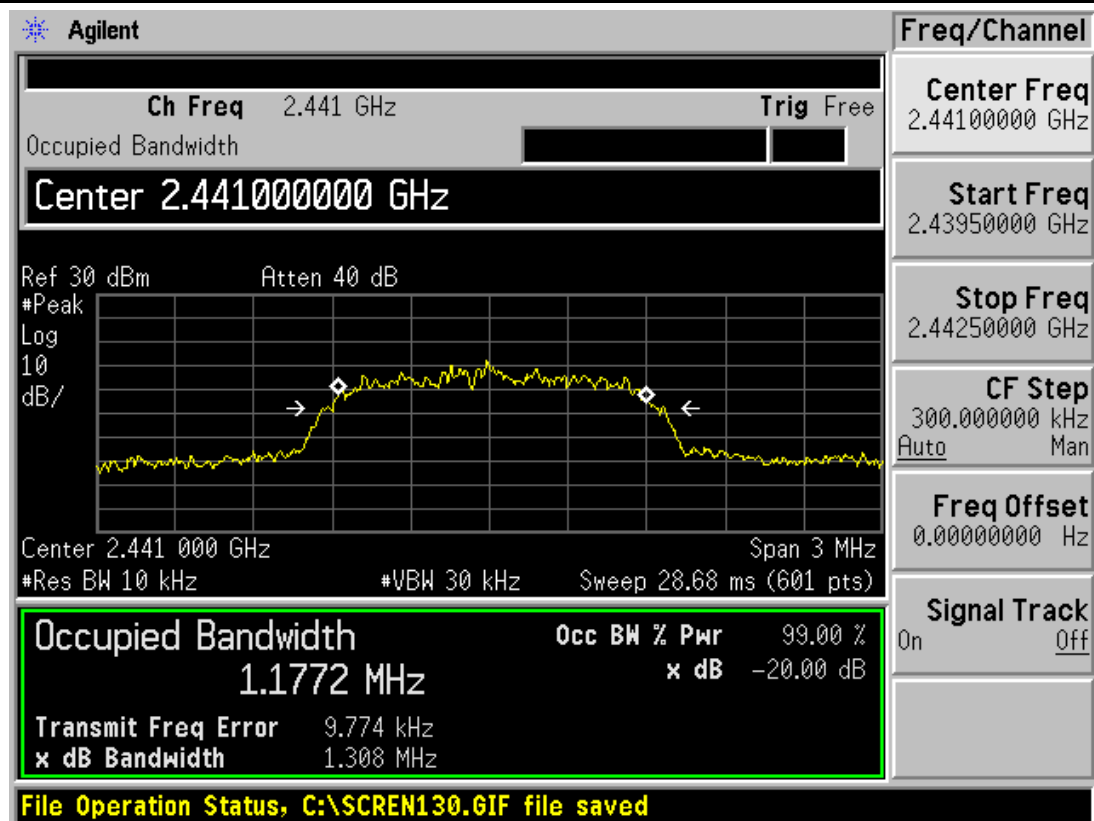
2DH5

Channel	Frequency (MHz)	20dB Bandwidth (MHz)
0	2402	1.303
39	2441	1.308
78	2480	1.306



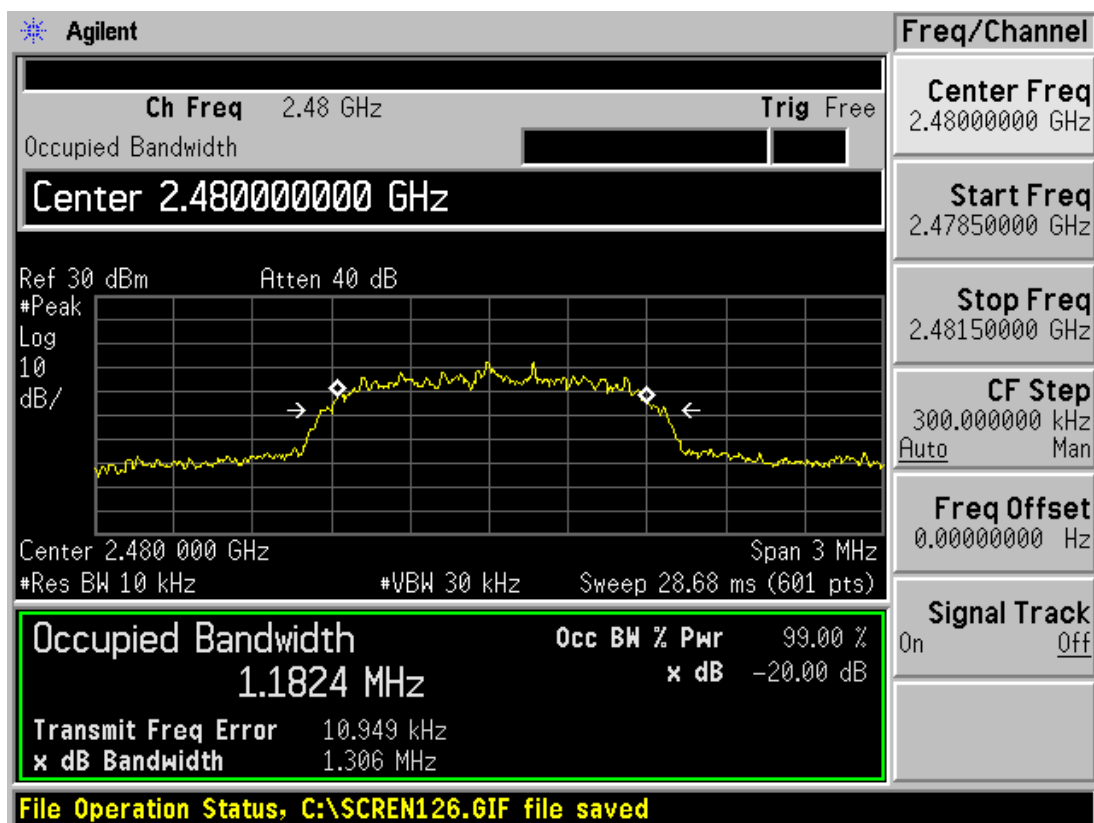
Carrier frequency (MHz): 2402

Channel No.:0



Carrier frequency (MHz): 2441

Channel No.:39



Carrier frequency (MHz): 2480

Channel No.:78

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Test Report

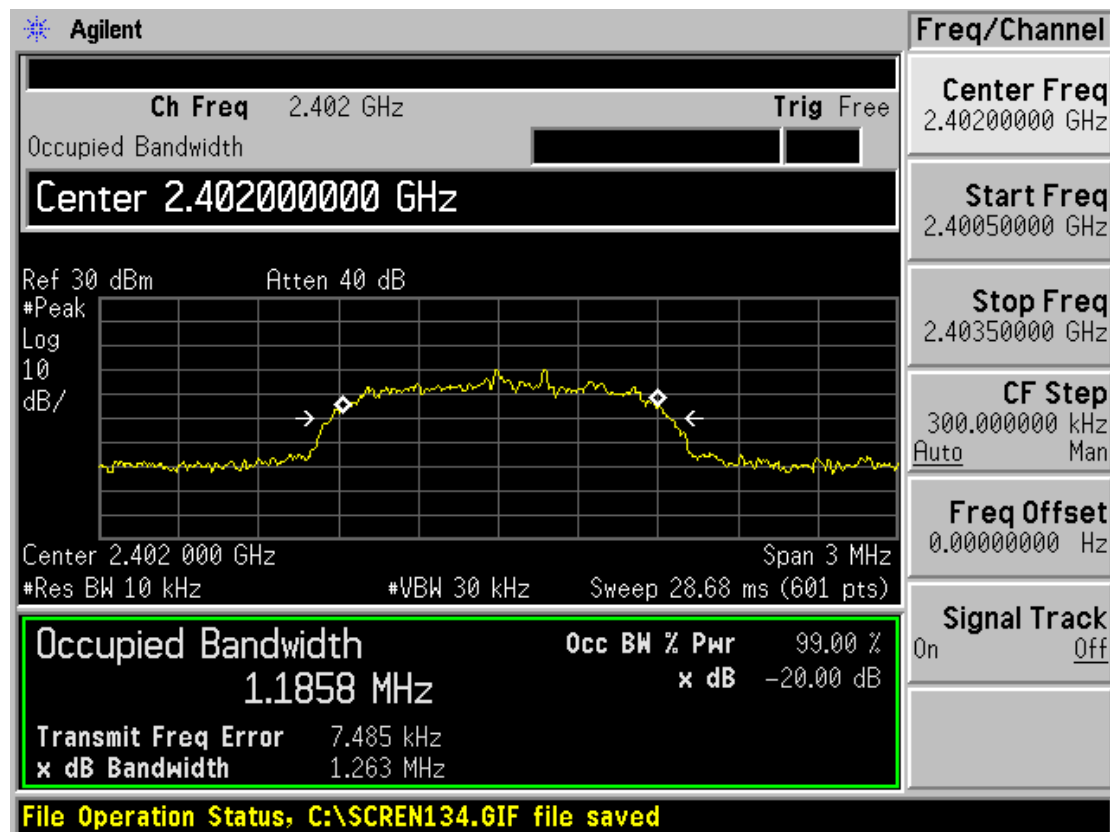
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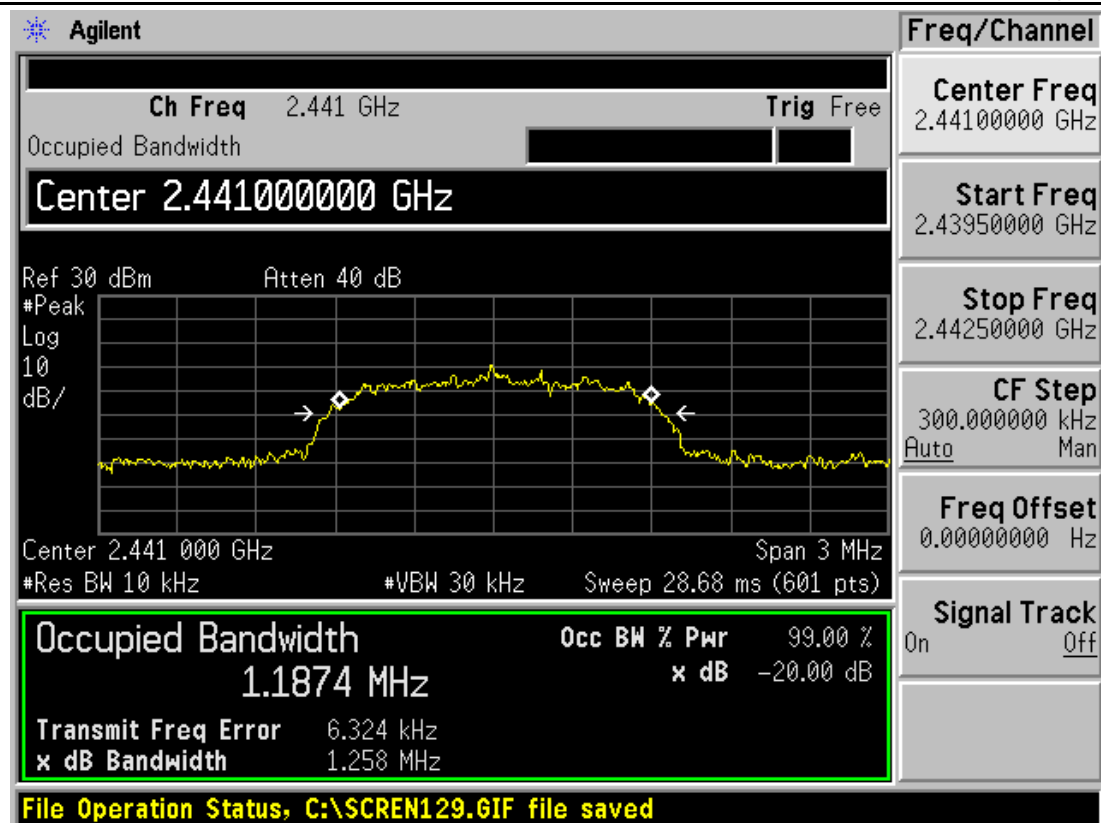
3DH5

Channel	Frequency (MHz)	20dB Bandwidth (MHz)
0	2402	1.263
39	2441	1.258
78	2480	1.277



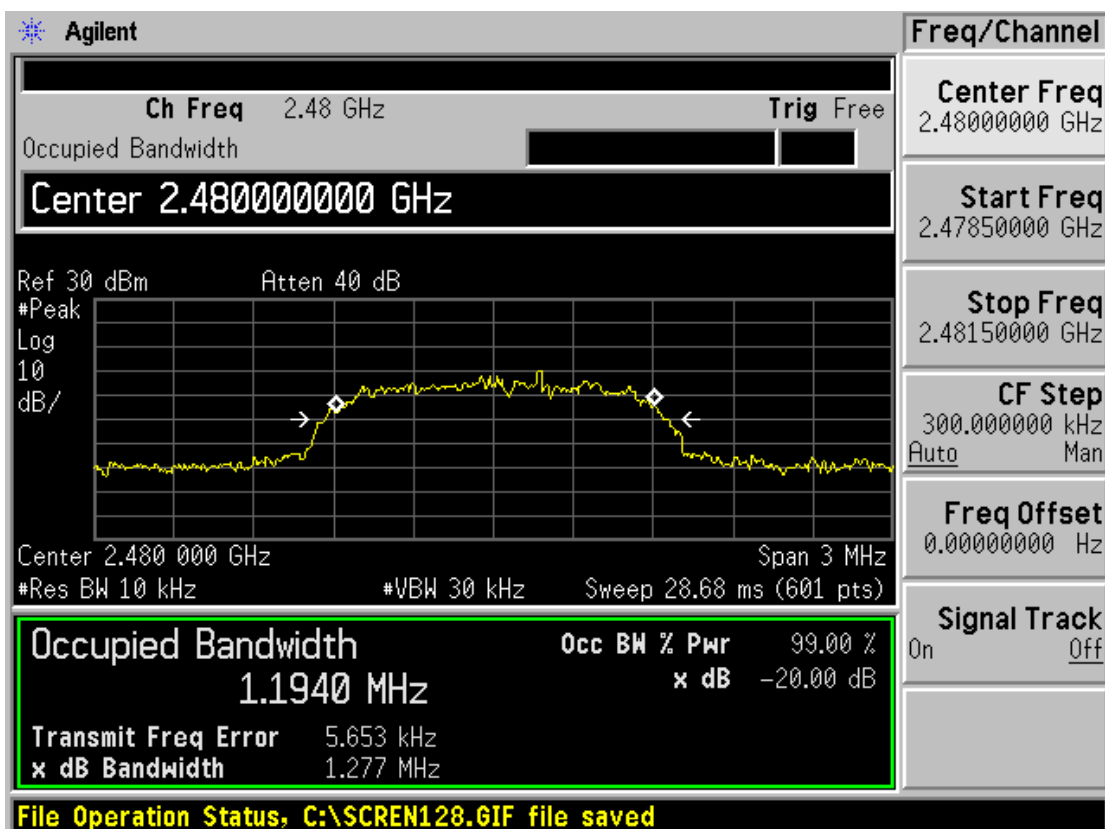
Carrier frequency (MHz): 2402

Channel No.:0



Carrier frequency (MHz): 2441

Channel No.:39



Carrier frequency (MHz): 2480

Channel No.:78

2.5. Frequency Separation

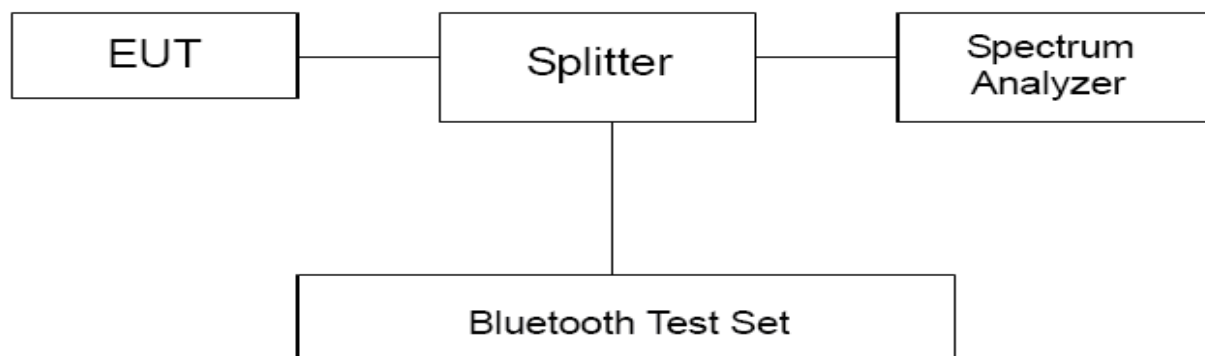
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The Equipment Under Test (EUT) was set up in a shielded room to perform the spurious emissions measurements. The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss. RBW is set to 300kHz and VBW is set to 3MHz on spectrum analyzer. Set EUT on Hopping on mode.

Test setup



Limits

Rule Part 15.247(a)(1) specifies that “Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400–2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. ”

Note: The value of two-thirds of 20 dB bandwidth is always greater than 25 kHz.

Measurement Uncertainty

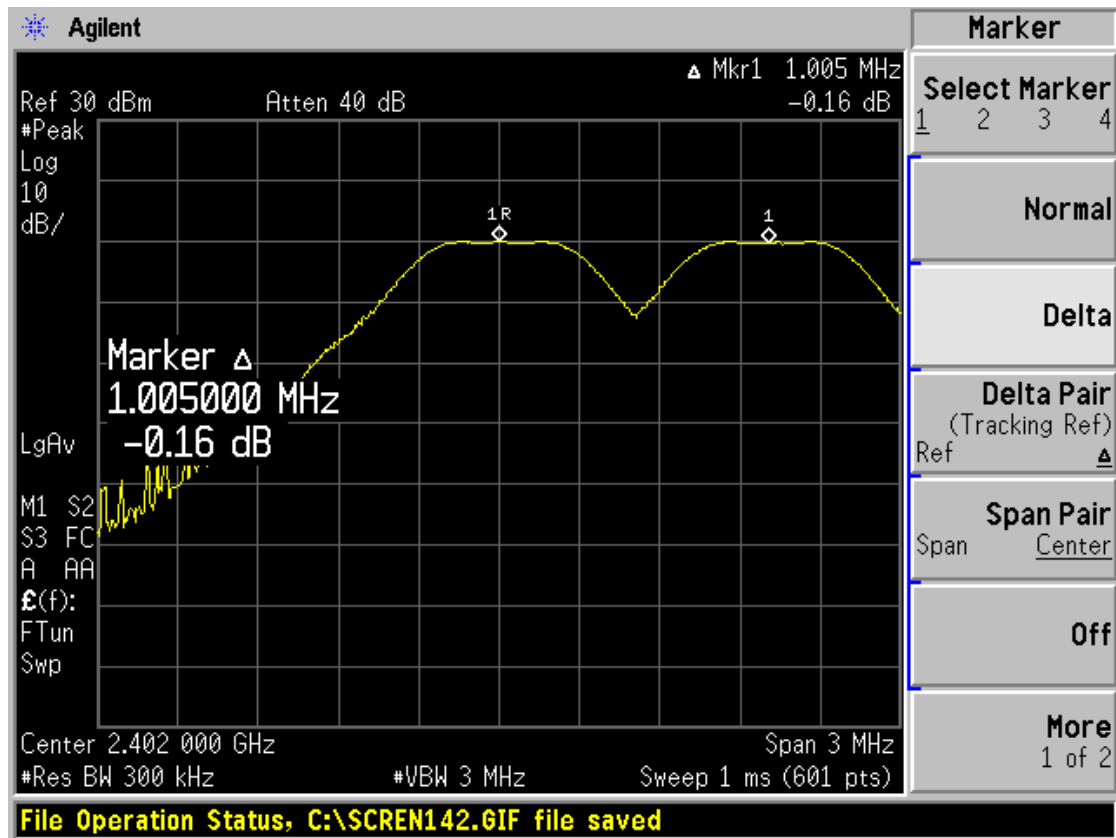
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 936$ Hz.

Test Results:

DH5

Carrier frequency (MHz)	Carrier frequency separation(kHz)	20dB Bandwidth (kHz)	Limit(kHz)	Conclusion
2402	1005	928.863	619.24	PASS
2441	1015	927.942	618.63	PASS
2480	1000	929.210	619.47	PASS

Note: The limit is two-thirds of 20 dB bandwidth.



Carrier frequency (MHz): 2402

Channel No.:0

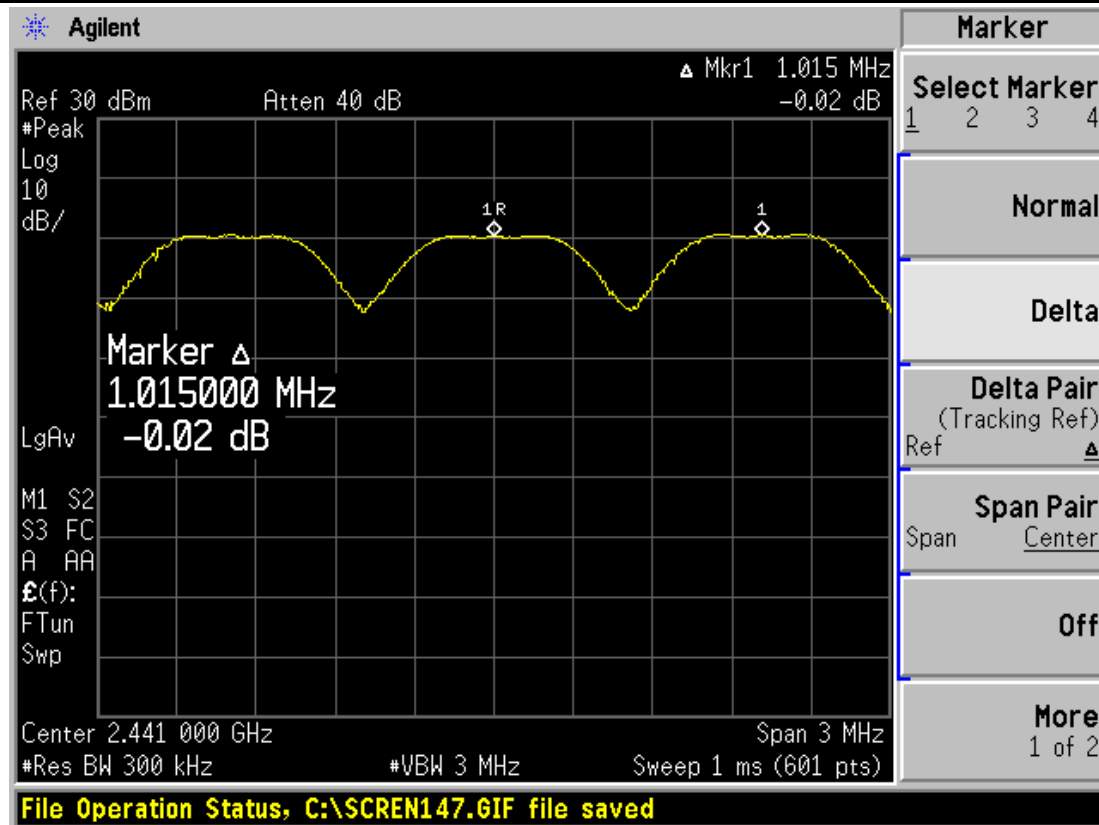
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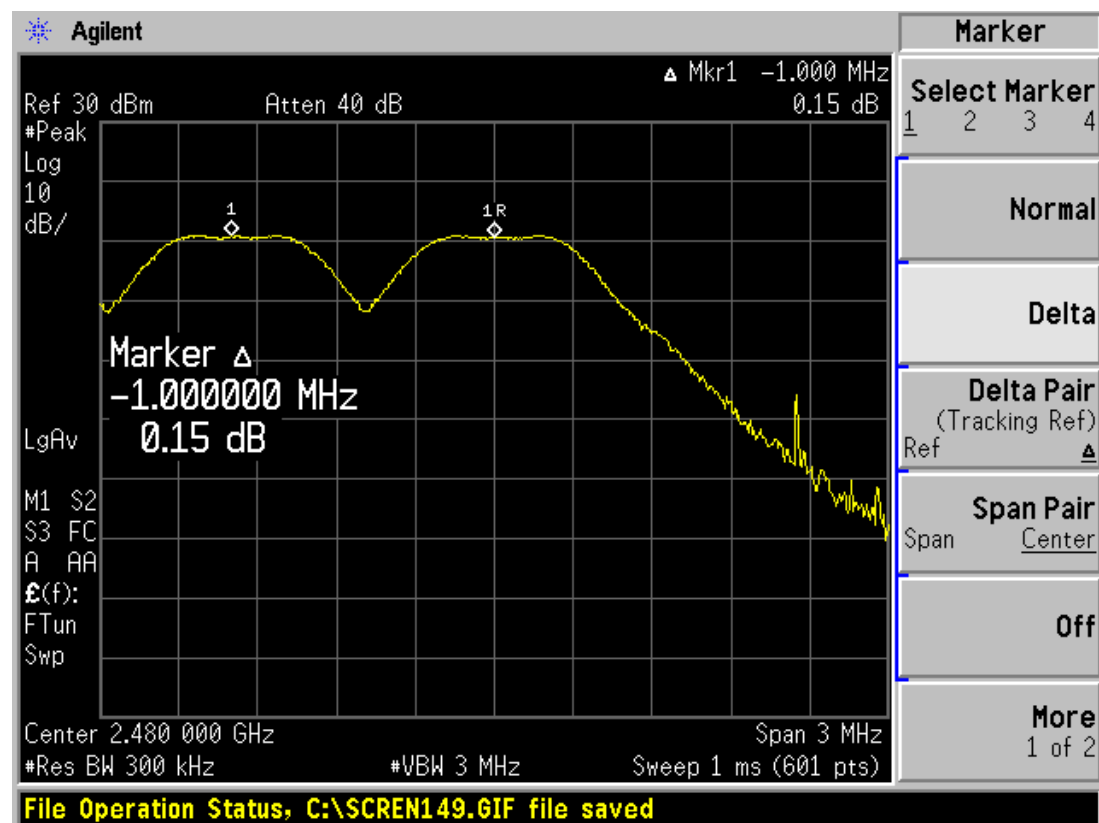
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Carrier frequency (MHz): 2441

Channel No.:39



Carrier frequency (MHz): 2480

Channel No.:78

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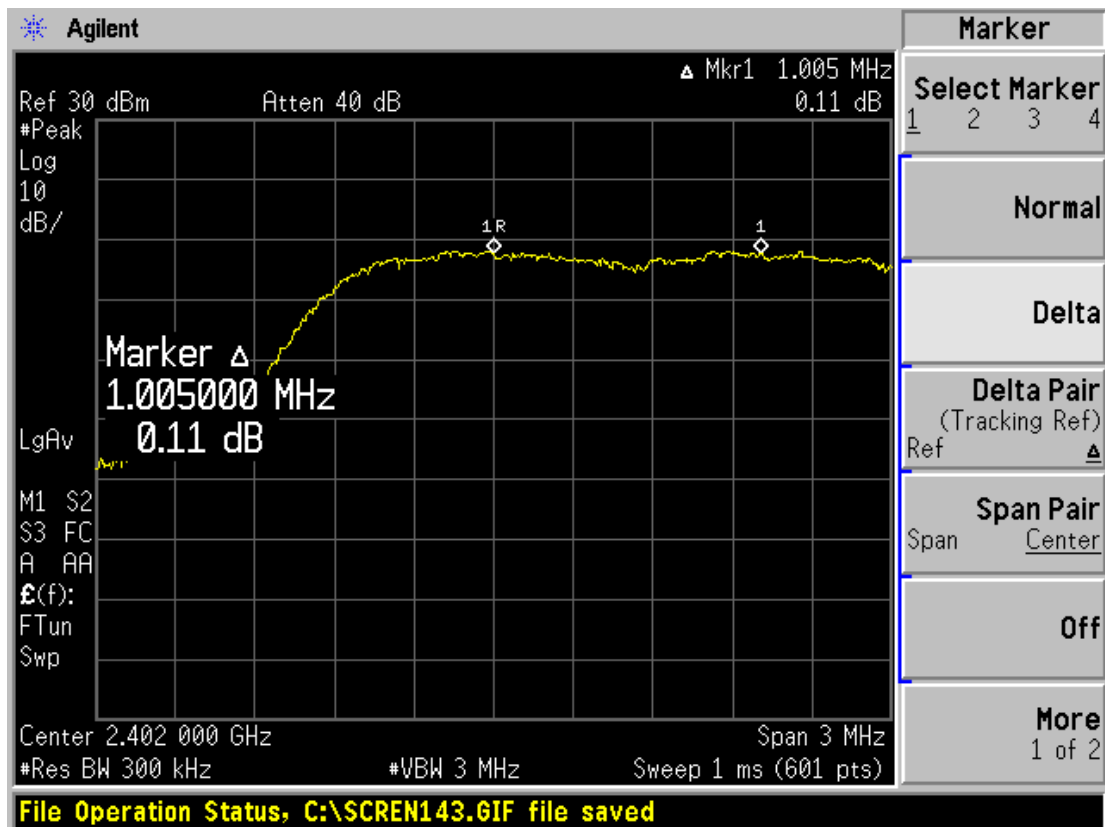
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2DH5

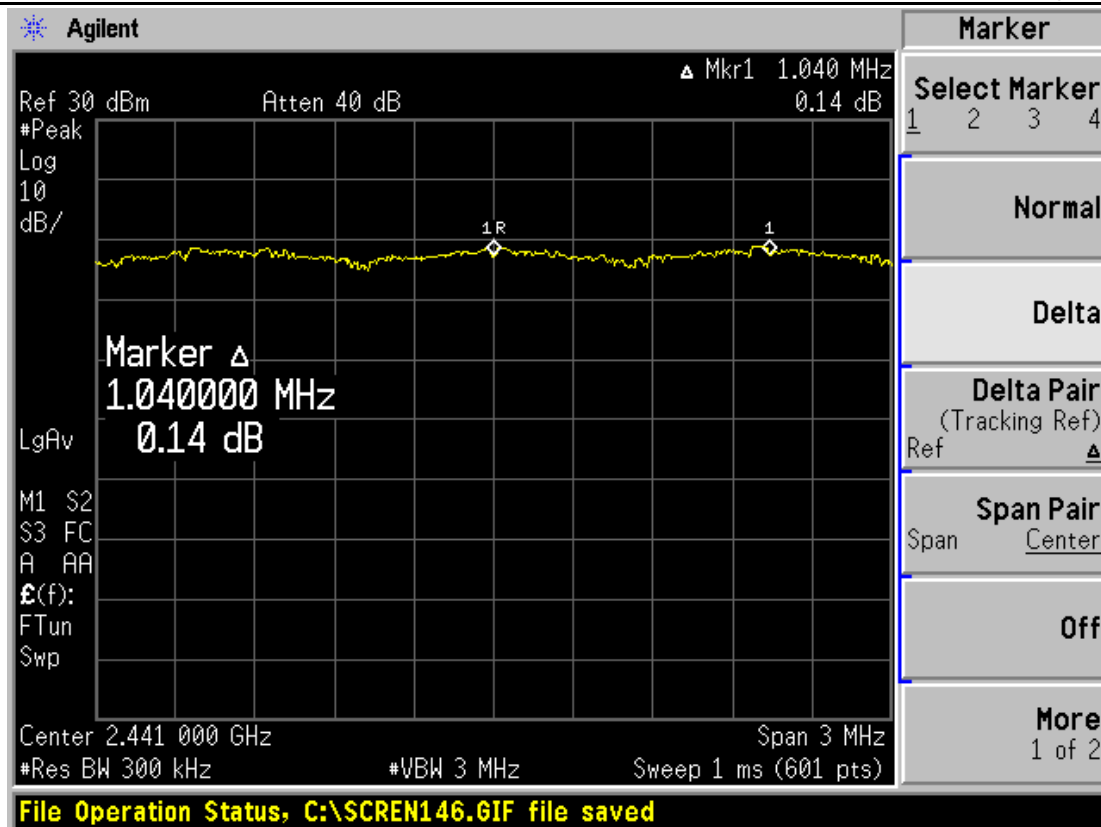
Carrier frequency (MHz)	Carrier frequency separation(kHz)	20dB Bandwidth (kHz)	Limit(kHz)	Conclusion
2402	1005	1303	868.67	PASS
2441	1040	1308	872	PASS
2480	1005	1306	870.67	PASS

Note: The limit is two-thirds of 20 dB bandwidth.



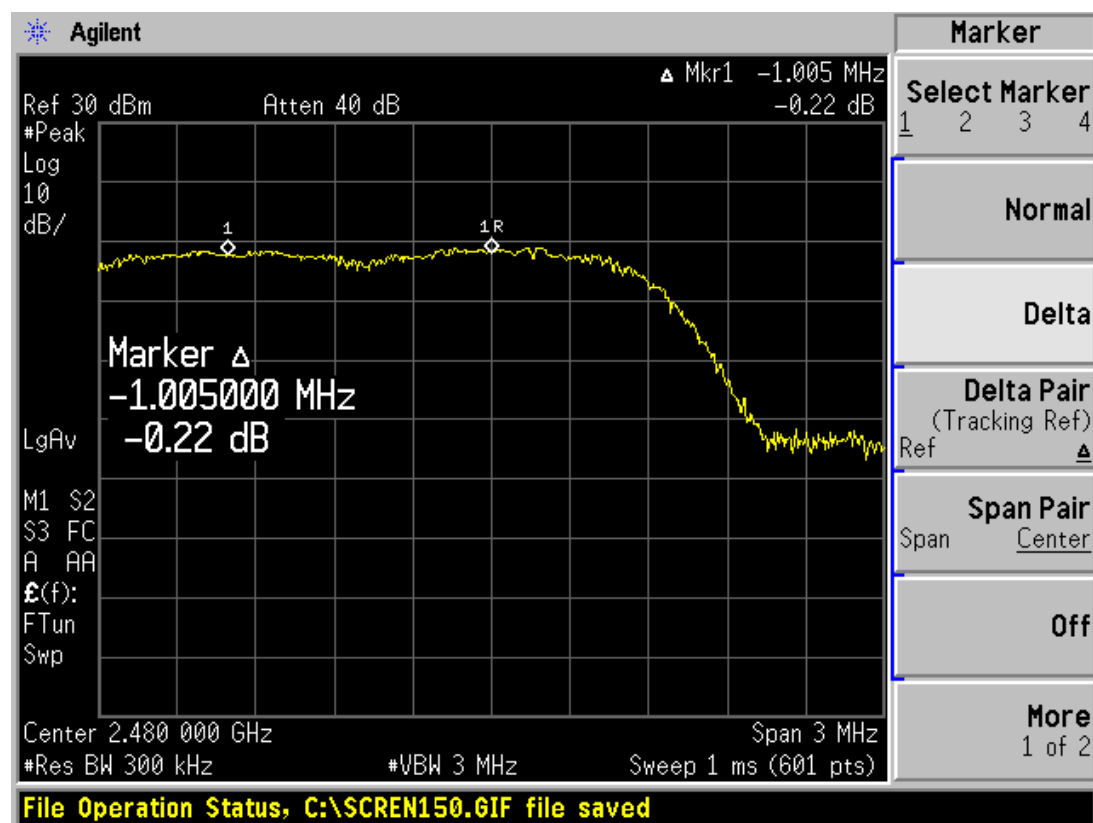
Carrier frequency (MHz): 2402

Channel No.:0



Carrier frequency (MHz): 2441

Channel No.:39



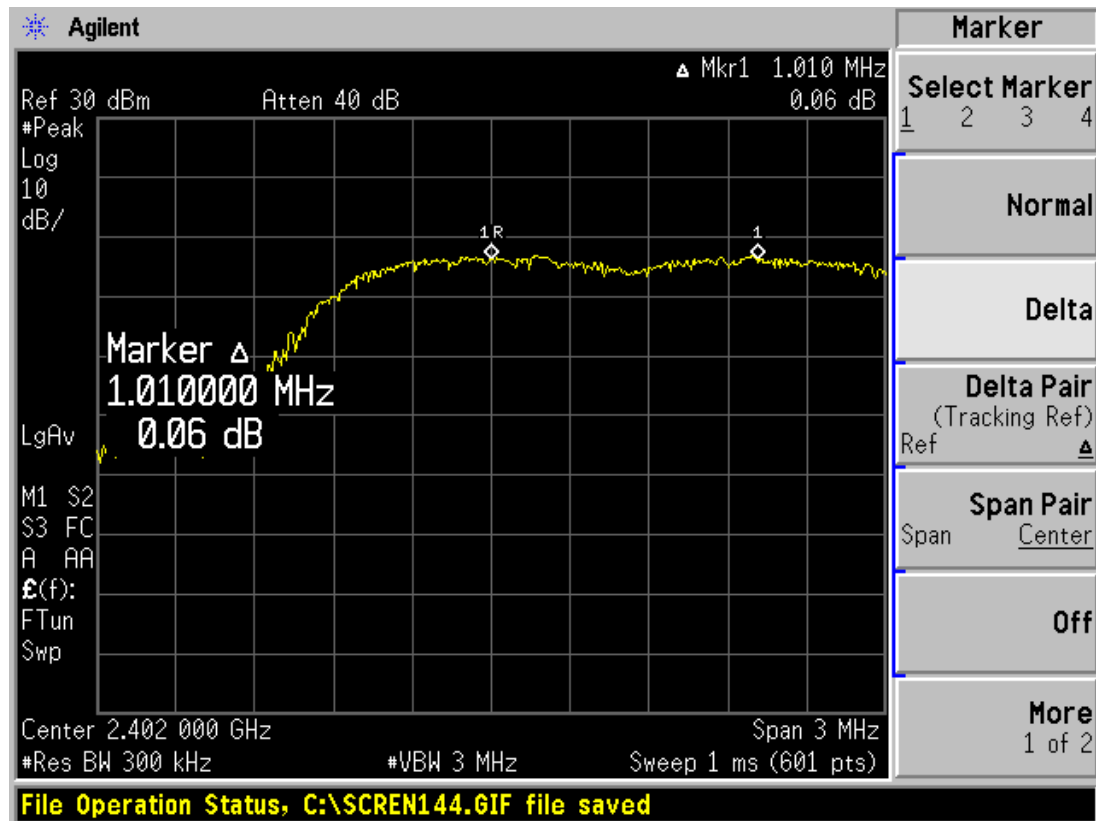
Carrier frequency (MHz): 2480

Channel No.:78

3DH5

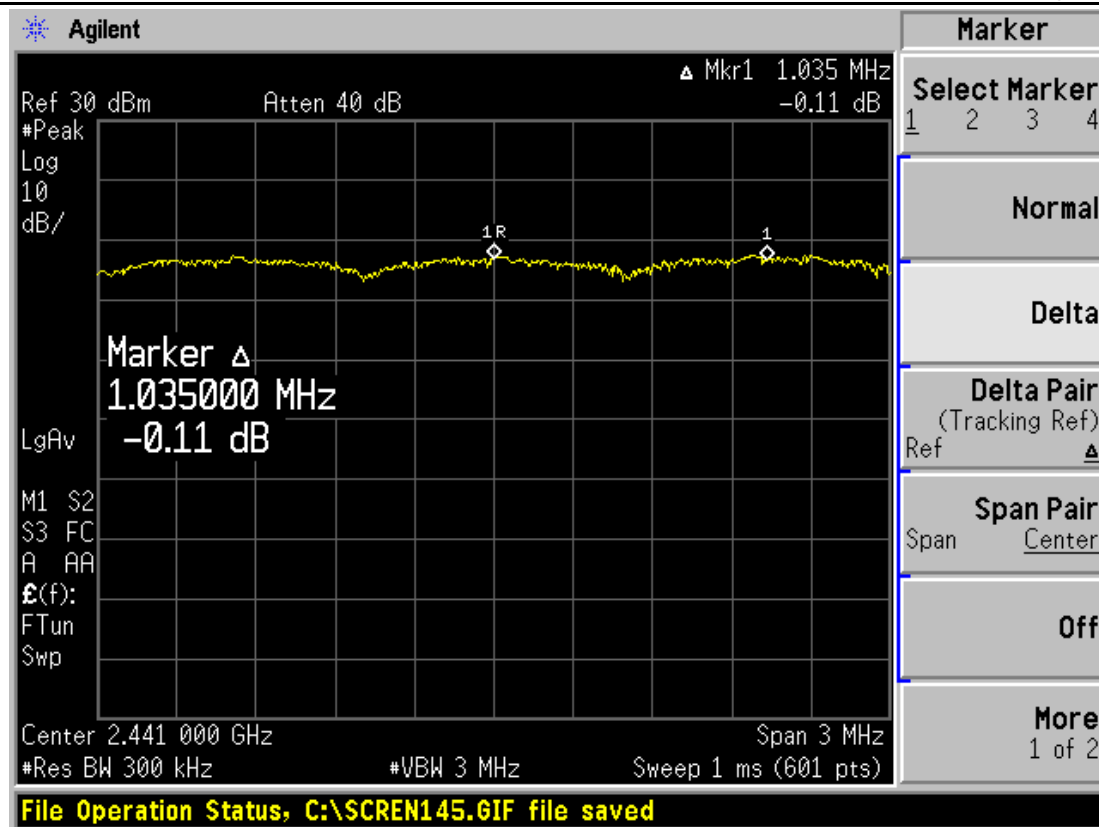
Carrier frequency (MHz)	Carrier frequency separation(kHz)	20dB Bandwidth (kHz)	Limit(kHz)	Conclusion
2402	1010	1263	842	PASS
2441	1035	1258	838.67	PASS
2480	1000	1277	851.33	PASS

Note: The limit is two-thirds of 20 dB bandwidth.



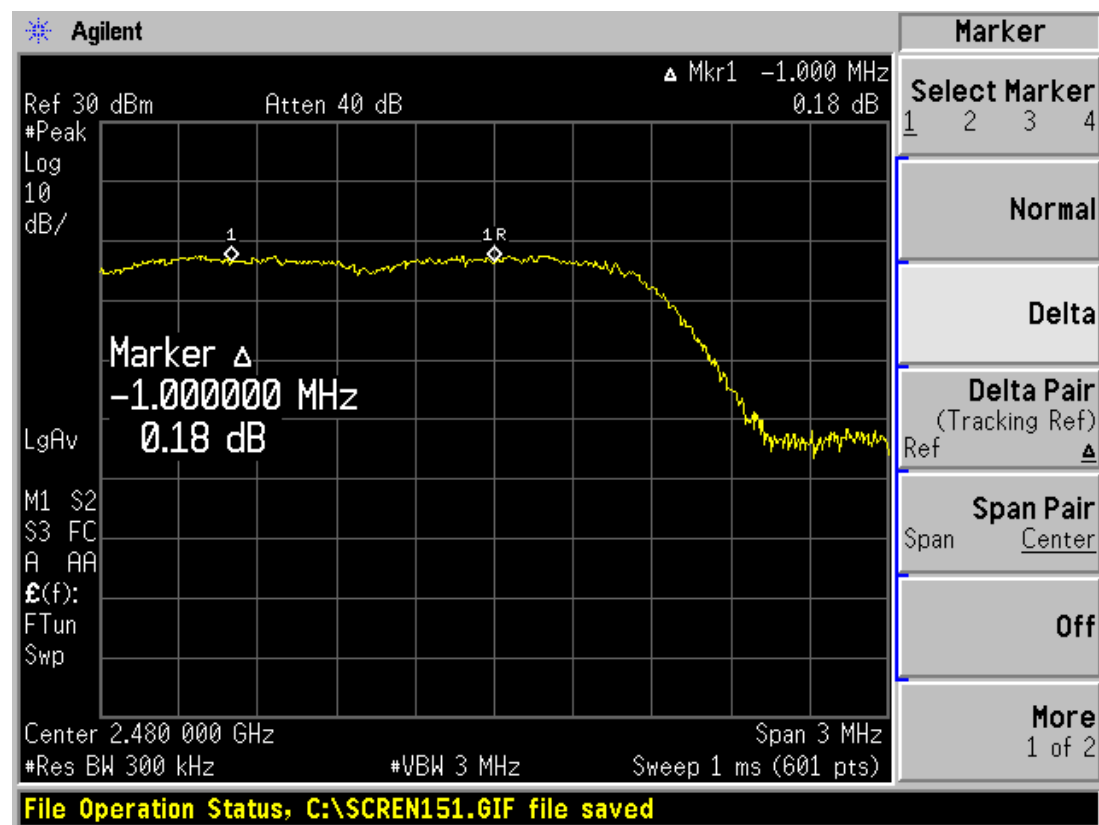
Carrier frequency (MHz): 2402

Channel No.:0



Carrier frequency (MHz): 2441

Channel No.:39



Carrier frequency (MHz): 2480

Channel No.:78

2.6. Time of Occupancy (Dwell Time)

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

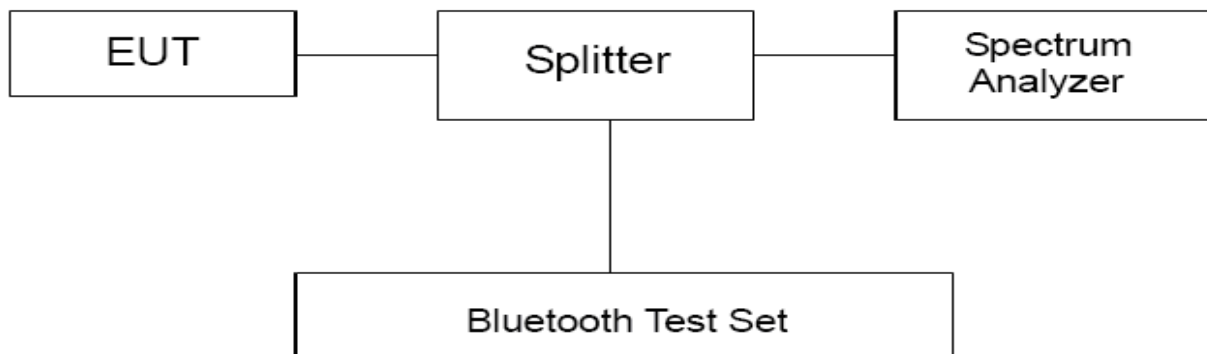
Methods of Measurement

The Equipment Under Test (EUT) was set up in a shielded room to perform the dwell time measurements. The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss. RBW is set to 3MHz and VBW is set to 3MHz on spectrum analyzer. The time slot length is measured of three different packet types, which are available in the Bluetooth technology. Those are DH1, DH3 and DH5 packets. The dwell time is calculated by:

Dwell time = time slot length * hop rate * 0.4s with:

- hop rate=1600 * 1/s for DH1 packet =1600
- hop rate=1600/3 * 1/s for DH3 packet =533.33
- hop rate=1600/5 * 1/s for DH5 packet =320

Test Setup



Limits

Rule Part 22.913(a) specifies that " Frequency hopping systems in the 2400–2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.."

Dwell time	$\leq 400\text{ms}$
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$.

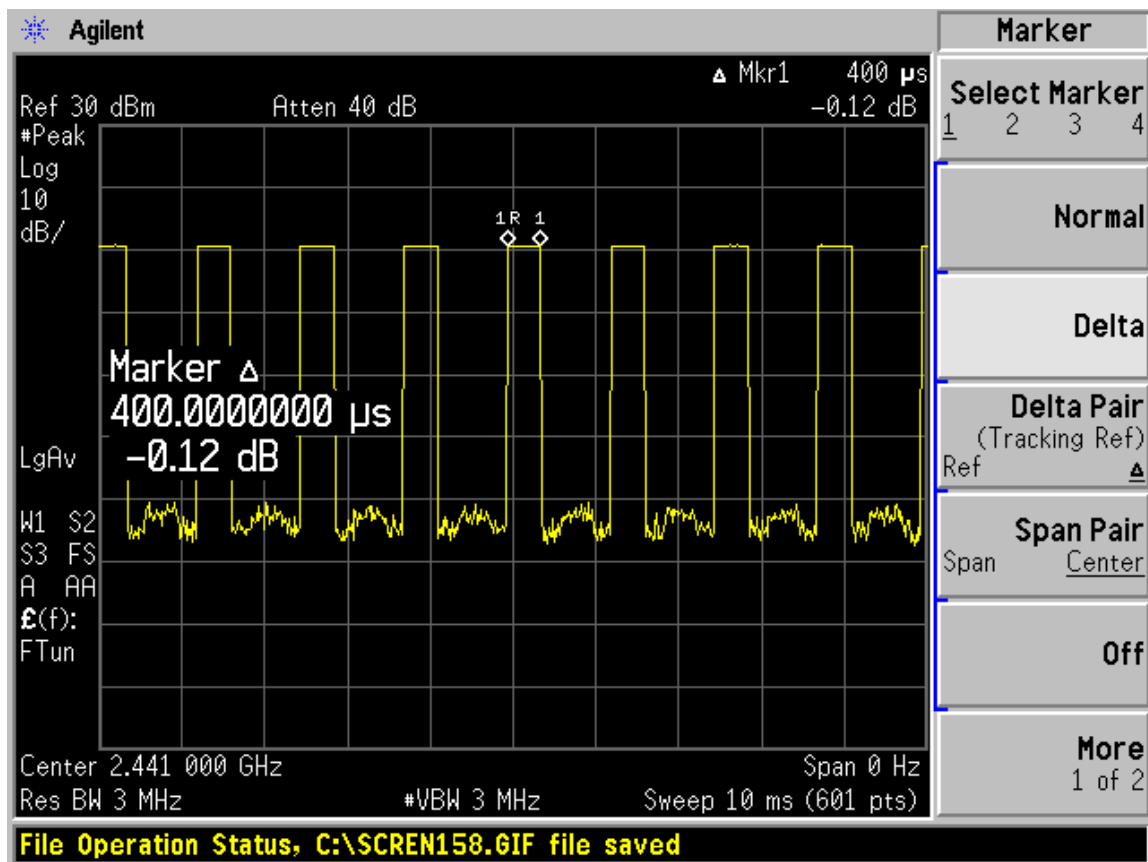
Requirements	Uncertainty	
Dwell Time	DH1	$U = 0.64\text{ms}$
	DH3	$U = 0.80\text{ms}$
	DH5	$U = 0.70\text{ms}$

Test Results:

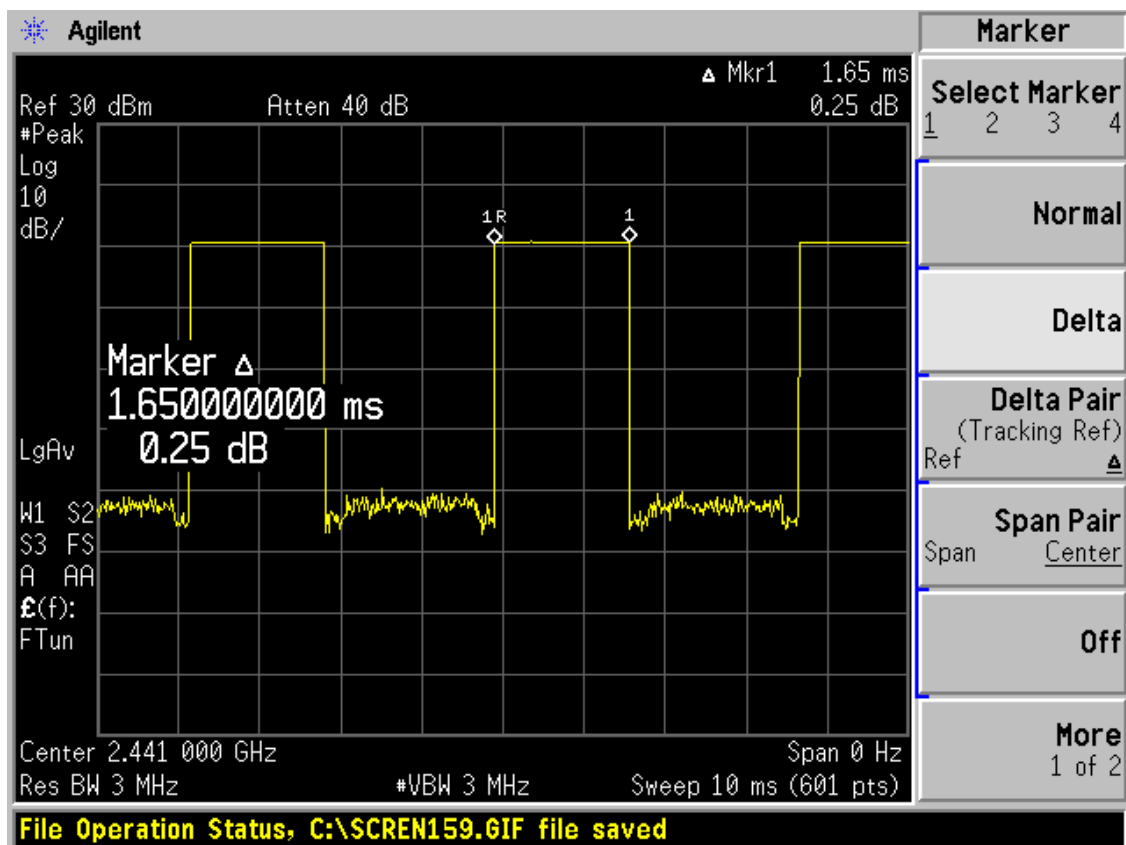
CH 39

Packet type	hop rate (1/s)	Time slot length(ms)	Dwell time (ms)	Limit (ms)	Conclusion
DH1	1600	0.4	256	400	PASS
DH3	533.33	1.65	352	400	PASS
DH5	320	2.9	371	400	PASS
2DH1	1600	0.4	256	400	PASS
2DH3	533.33	1.65	352	400	PASS
2DH5	320	2.9	371	400	PASS
3DH1	1600	0.4	256	400	PASS
3DH3	533.33	1.65	352	400	PASS
3DH5	320	2.9	371	400	PASS

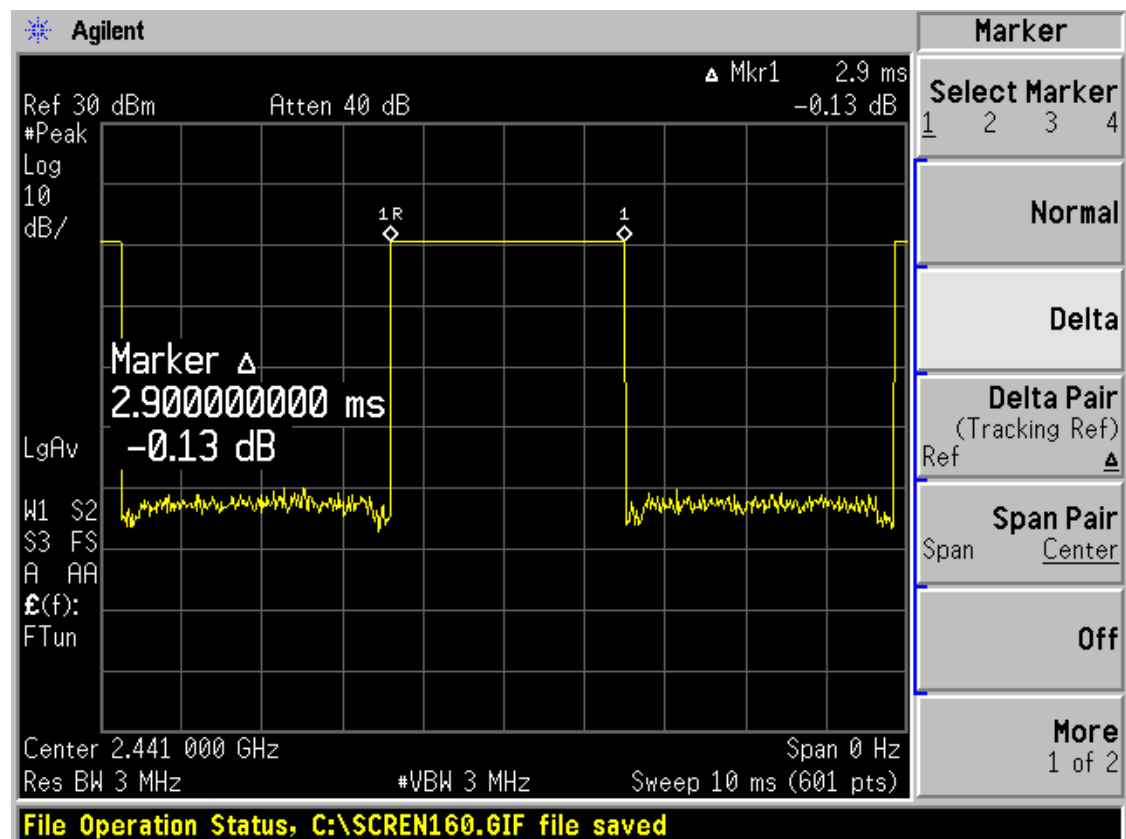
Note: Dwell time = time slot length * hop rate * 0.4s



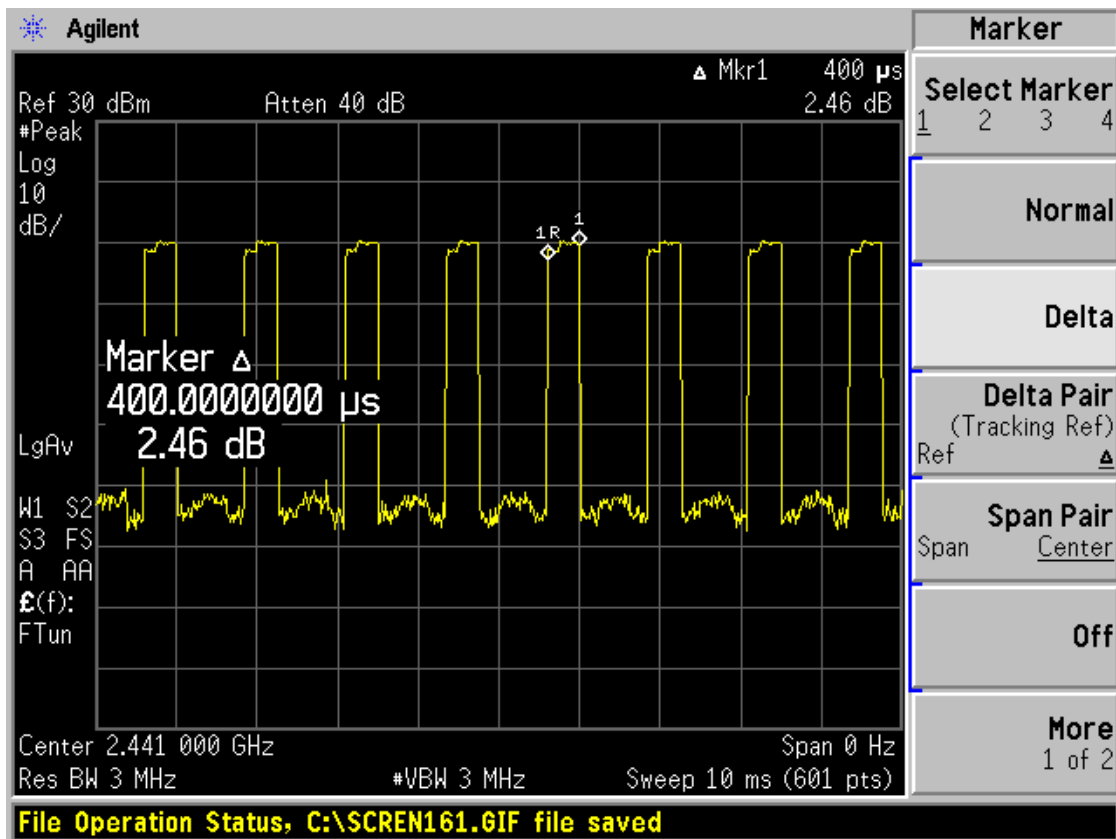
Carrier frequency (MHz): 2441,DH1



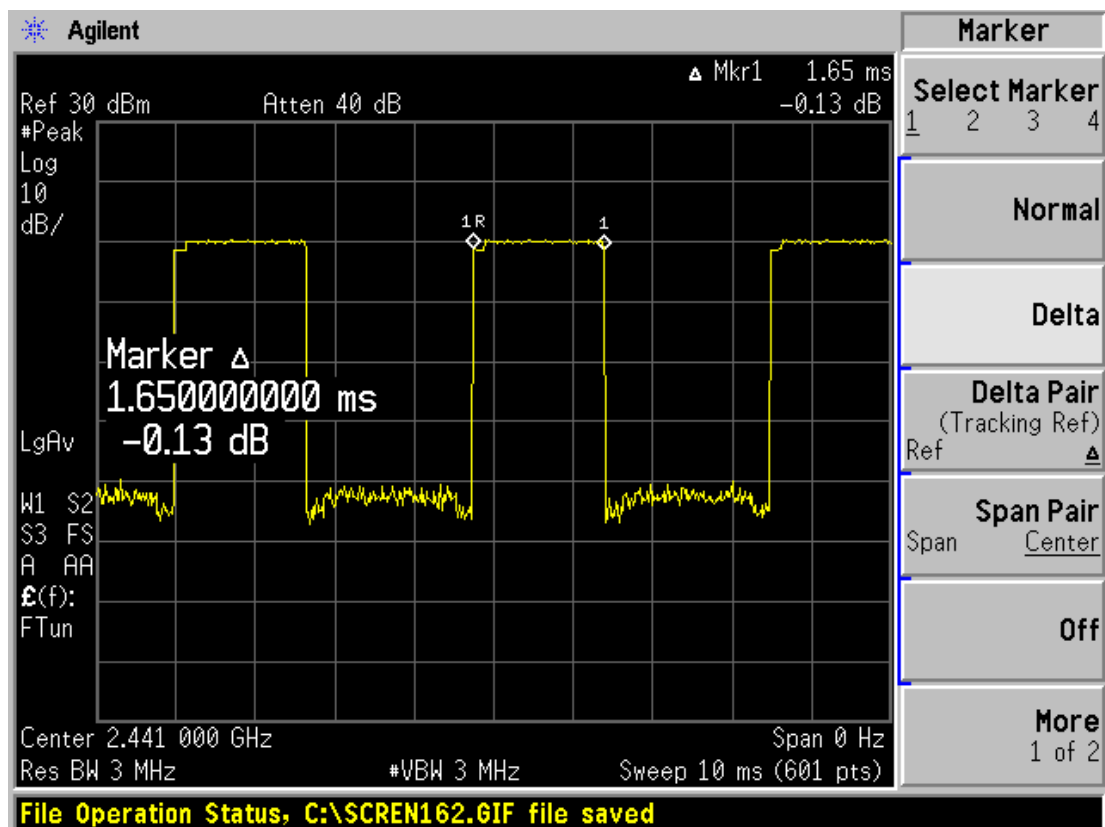
Carrier frequency (MHz): 2441,DH3



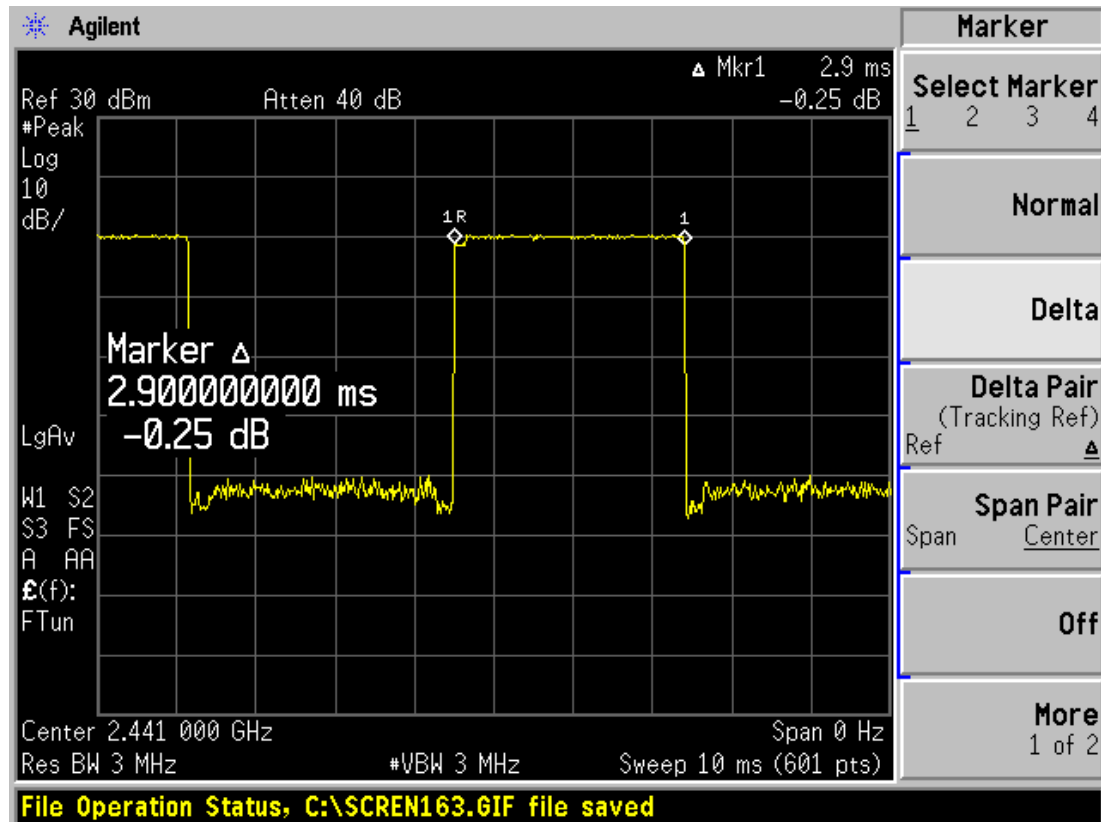
Carrier frequency (MHz): 2441,DH5



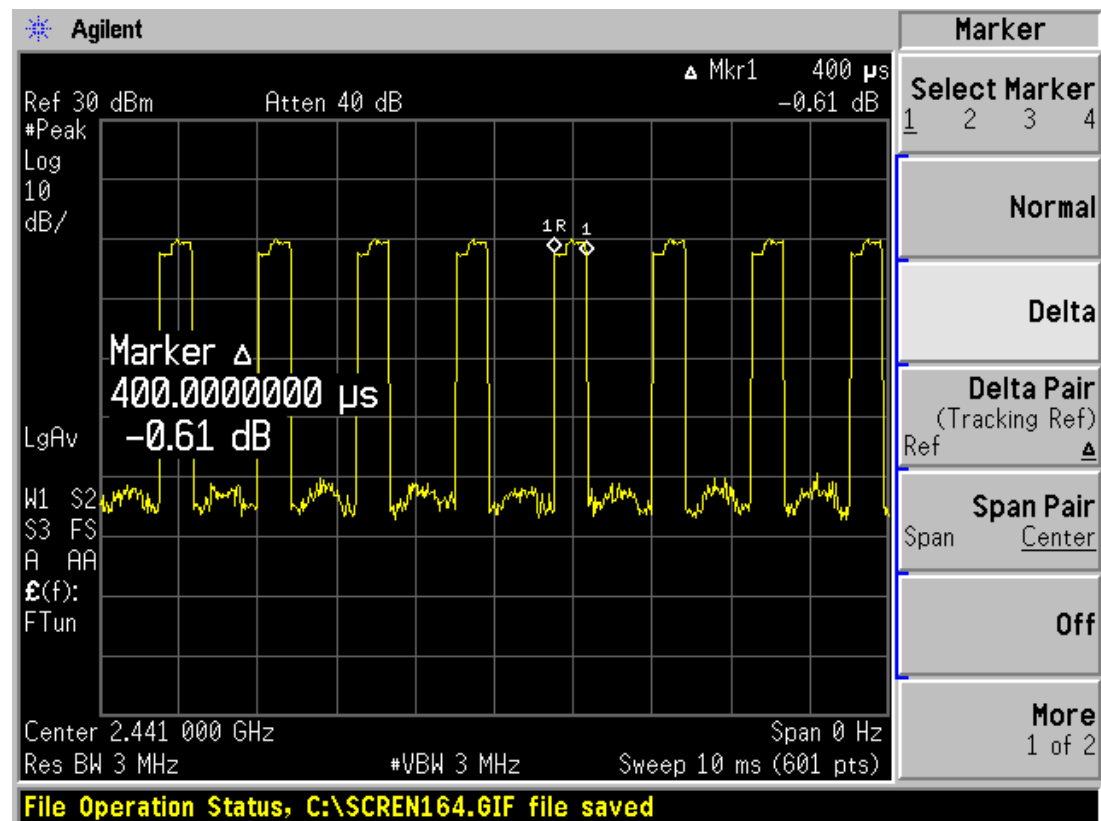
Carrier frequency (MHz): 2441,2DH1



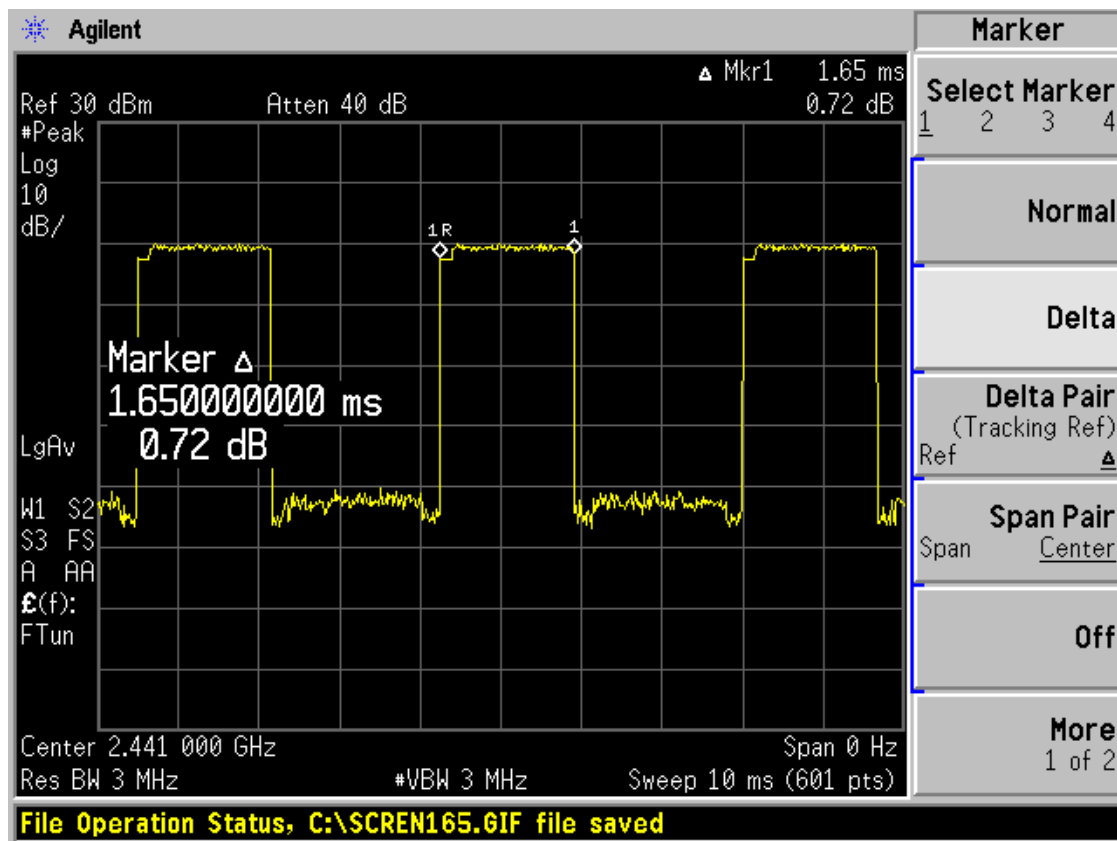
Carrier frequency (MHz): 2441,2DH3



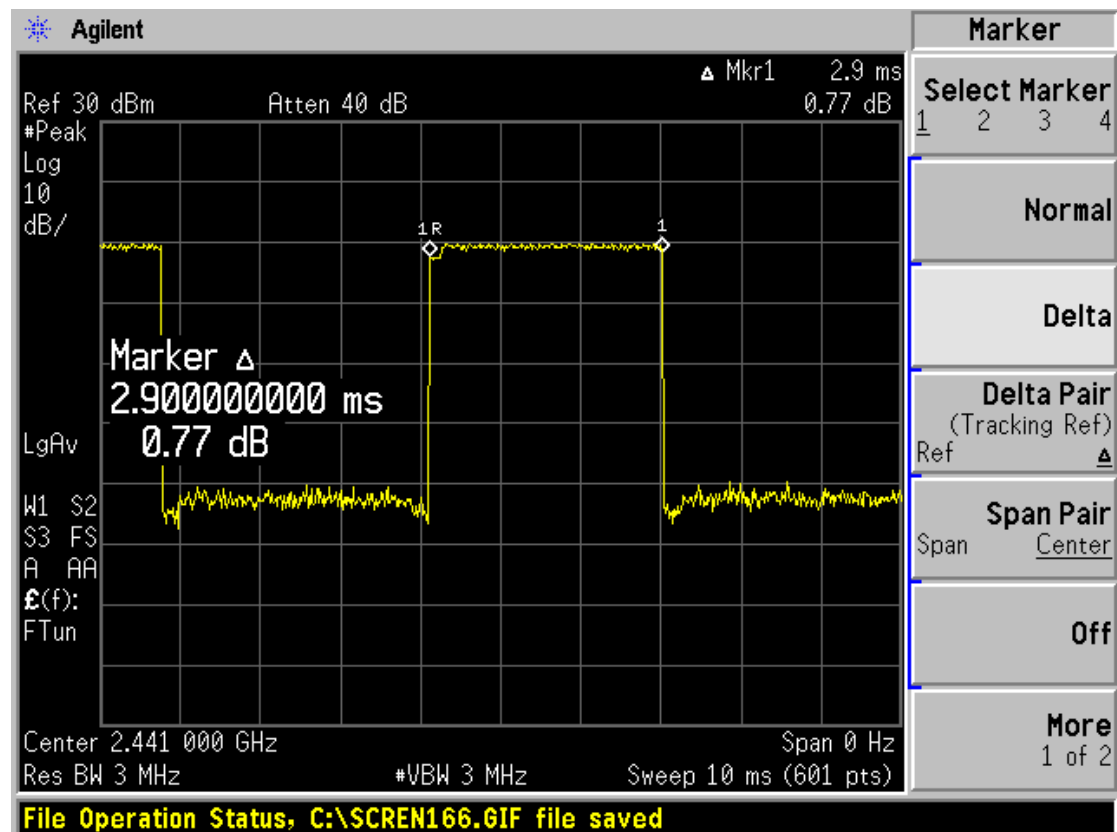
Carrier frequency (MHz): 2441,2DH5



Carrier frequency (MHz): 2441,3DH1



Carrier frequency (MHz): 2441,3DH3



Carrier frequency (MHz): 2441,3DH5

2.7. Band Edge Compliance

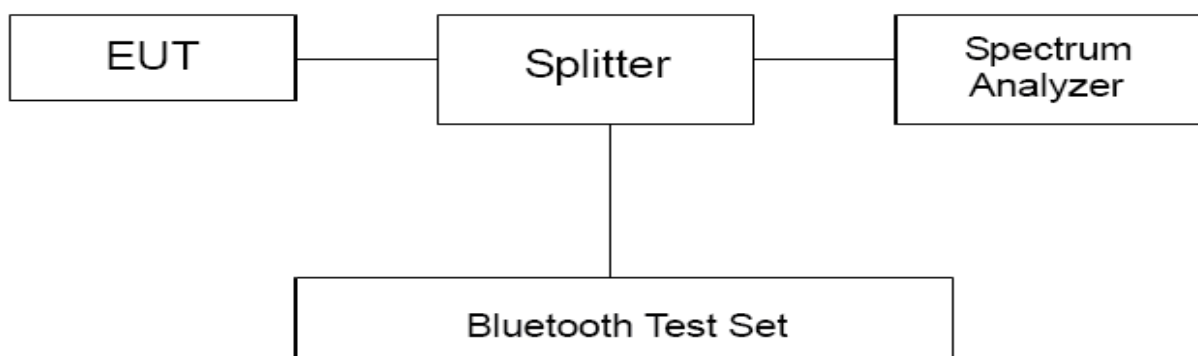
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The Equipment Under Test (EUT) was set up in a shielded room to perform the spurious emissions measurements. The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss. The band edge of the lowest and highest channels were measured. The peak detector is used. RBW is set to 1MHz and VBW is set to 3MHz on spectrum analyzer. Spectrum analyzer plots are included on the following pages. EUT test for Hopping On mode and Hopping Off mode.

Test Setup



Limits

Rule Part 15.247(d) specifies that “In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated 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, provided the transmitter demonstrates compliance with the peak conducted power limits.”

Limit	≥ 20 dB
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
2GHz-3GHz	1.407 dB

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Test Report

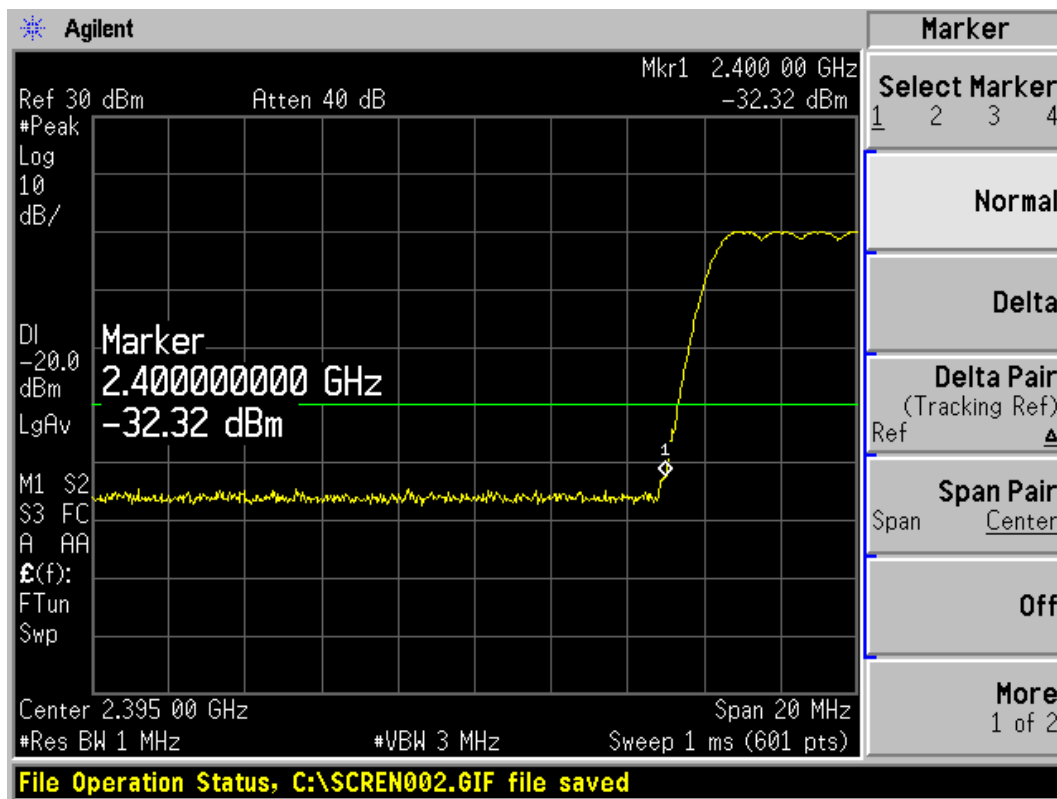
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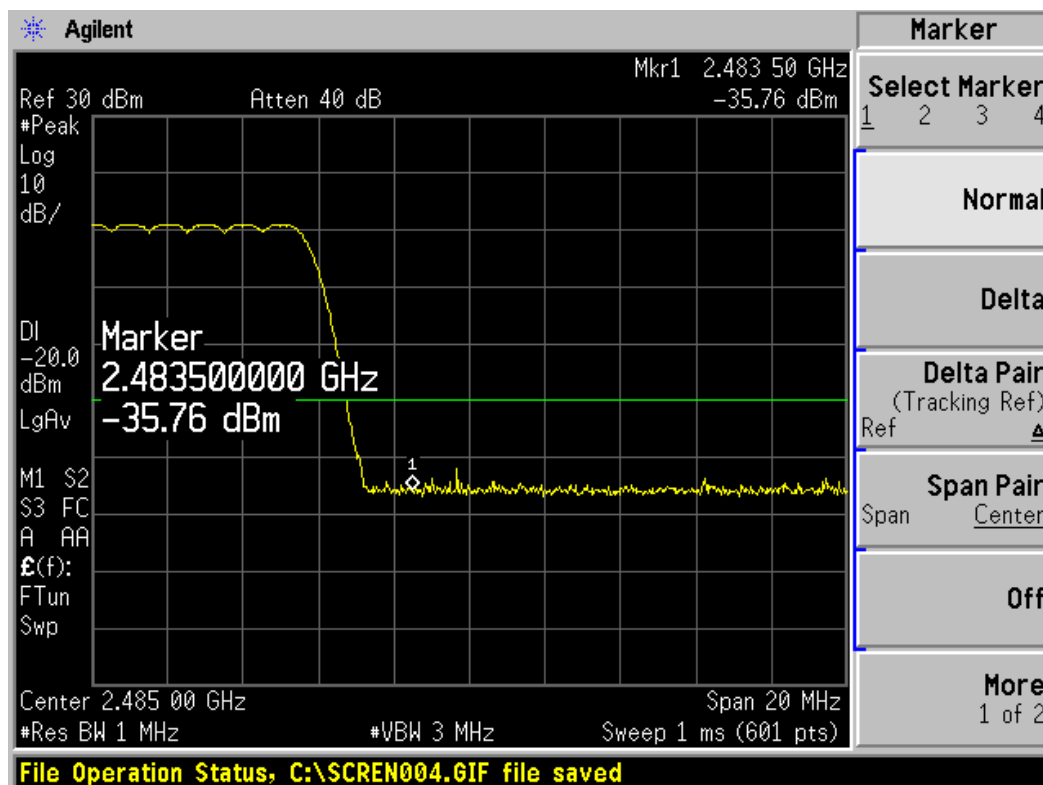
Test Results: PASS

Hopping On-DH5-



Carrier frequency (MHz): 2402

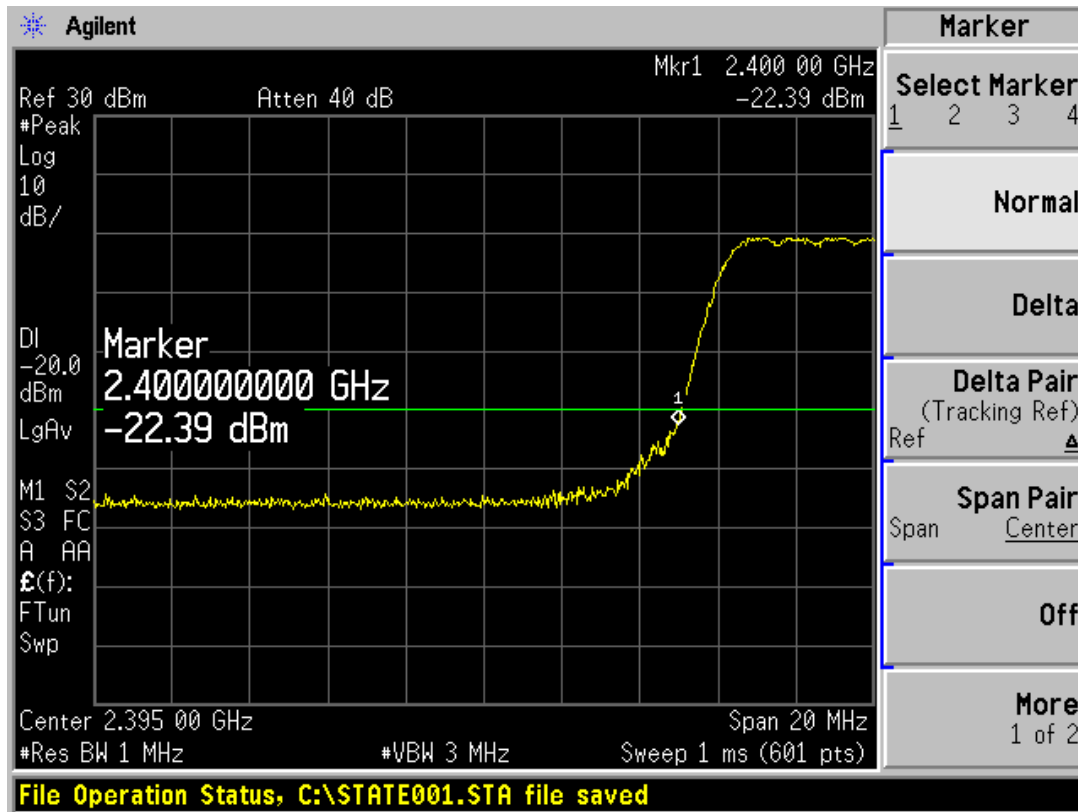
Channel No.:0



Carrier frequency (MHz): 2480

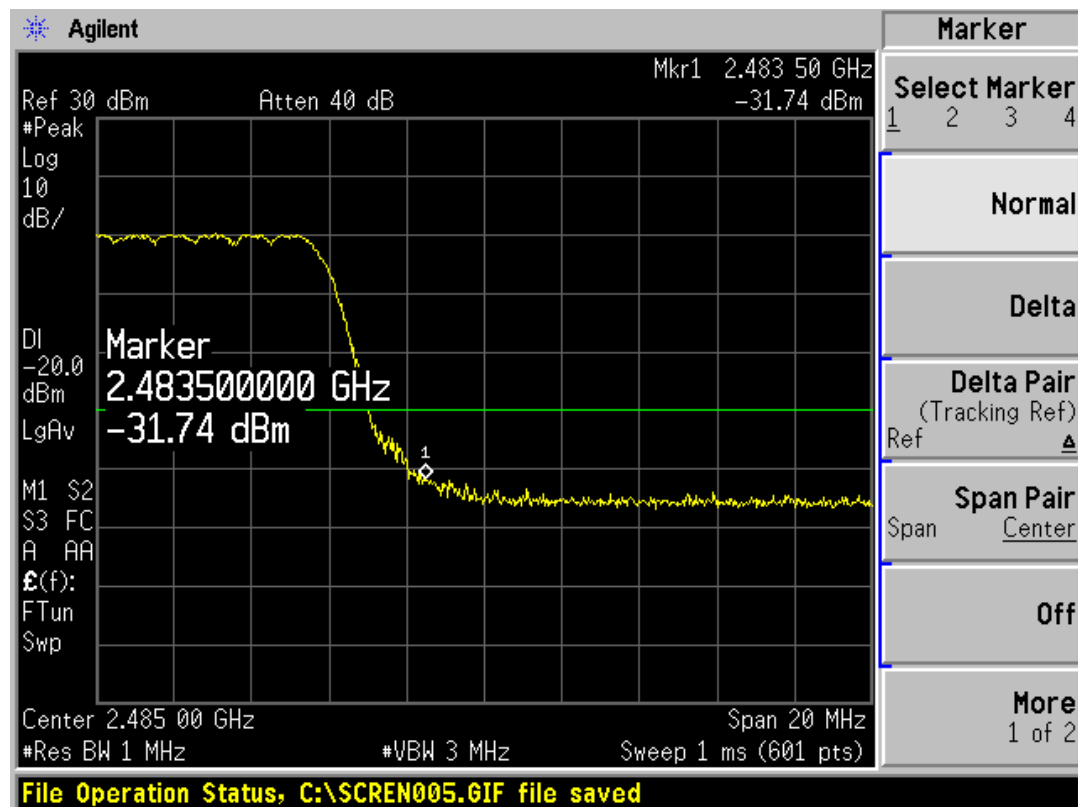
Channel No.:78

Hopping On-2DH5-



Carrier frequency (MHz): 2402

Channel No.:0



Carrier frequency (MHz): 2480

Channel No.:78

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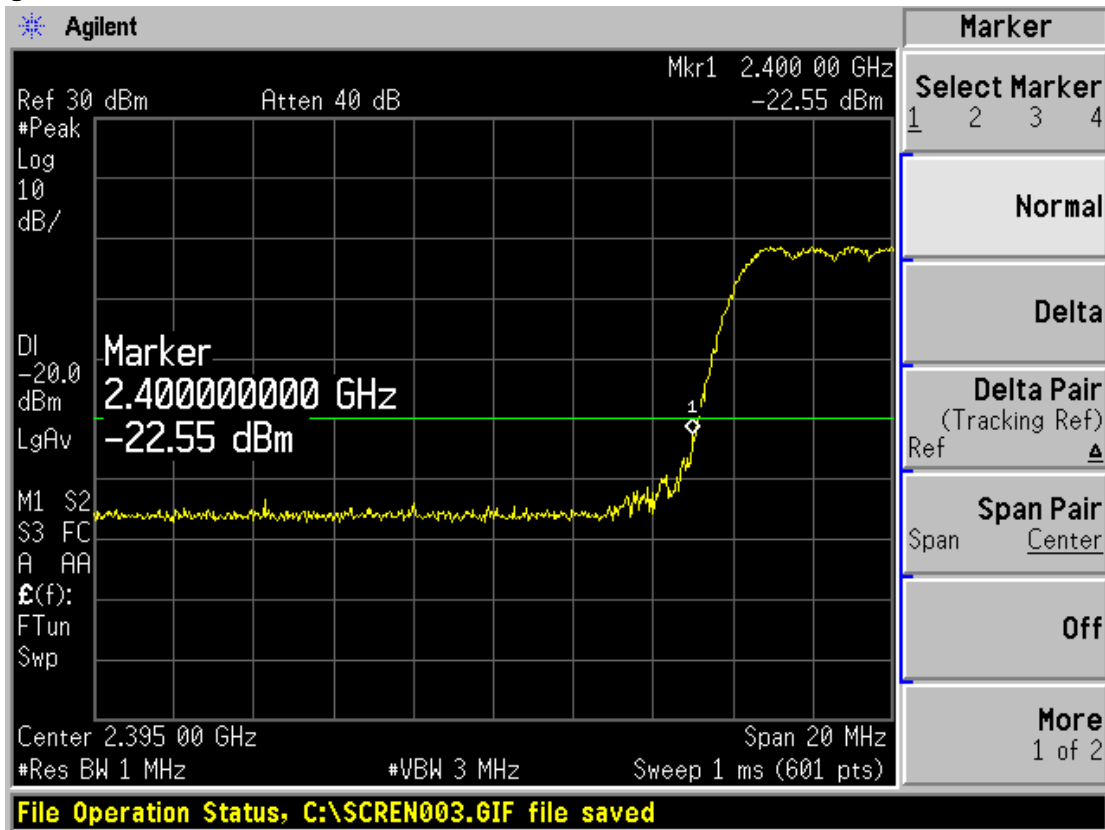
Test Report

Registration Num:428261

Report No.: RZA1110-1746RF01R2

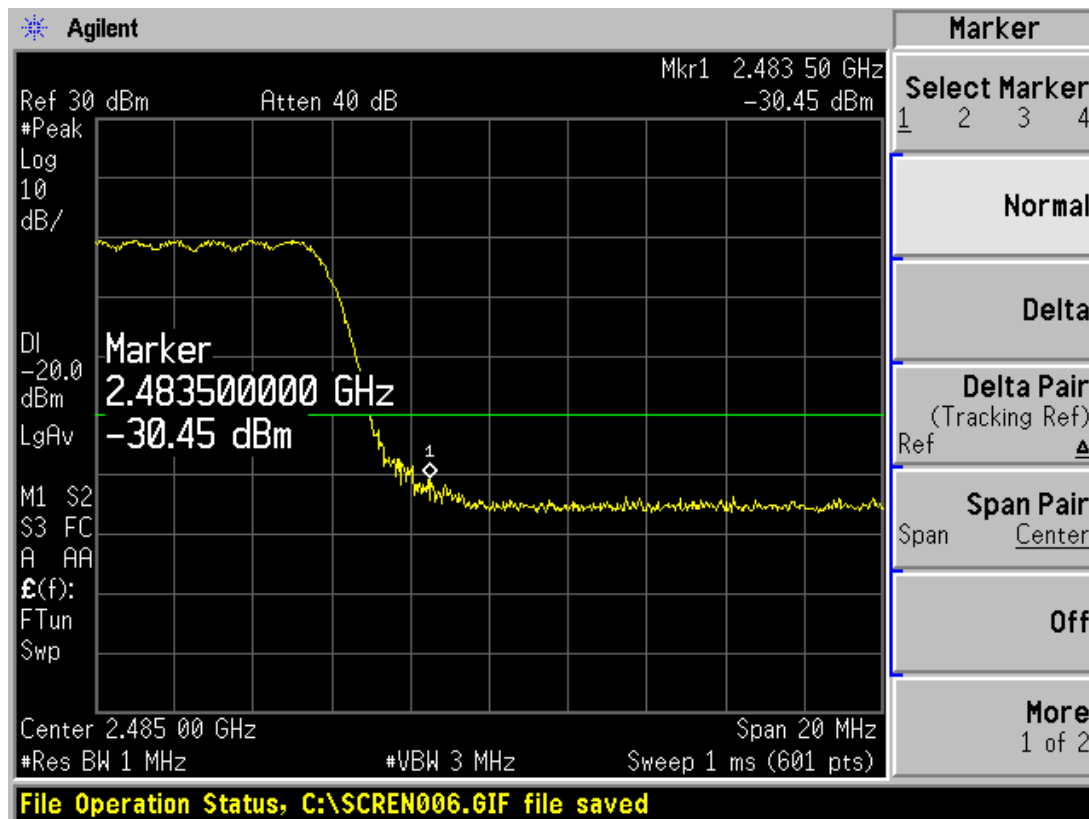
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Hopping On-3DH5



Carrier frequency (MHz): 2402

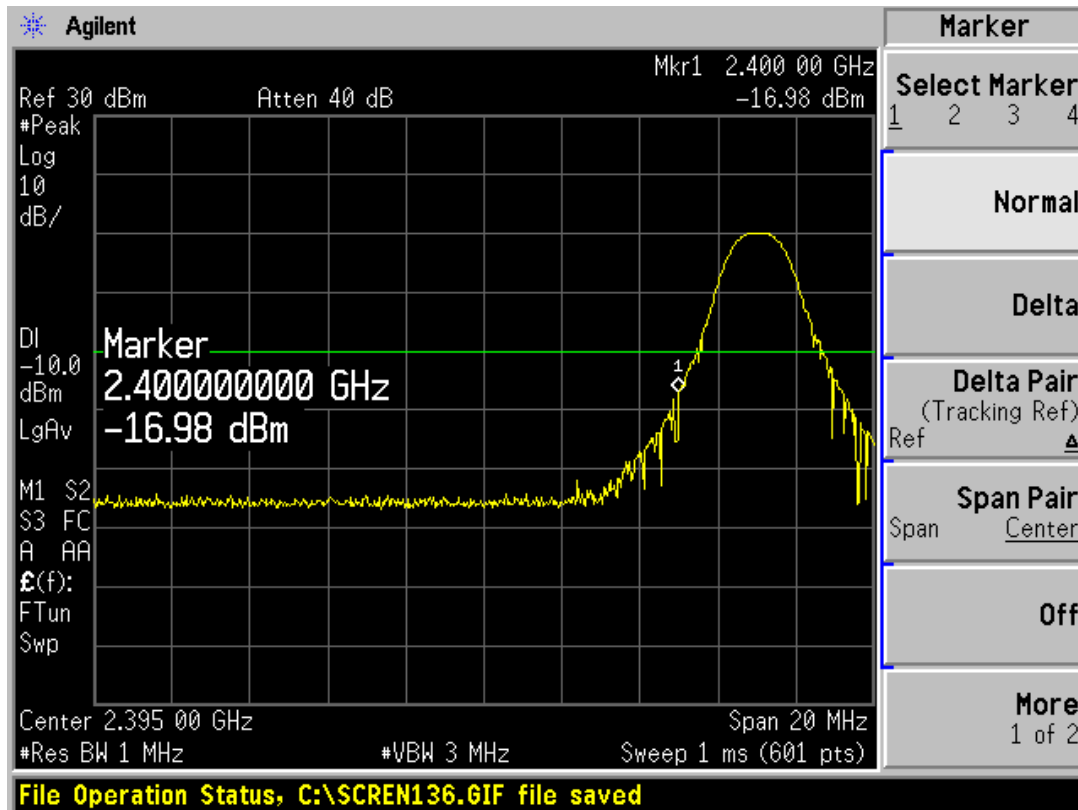
Channel No.:0



Carrier frequency (MHz): 2480

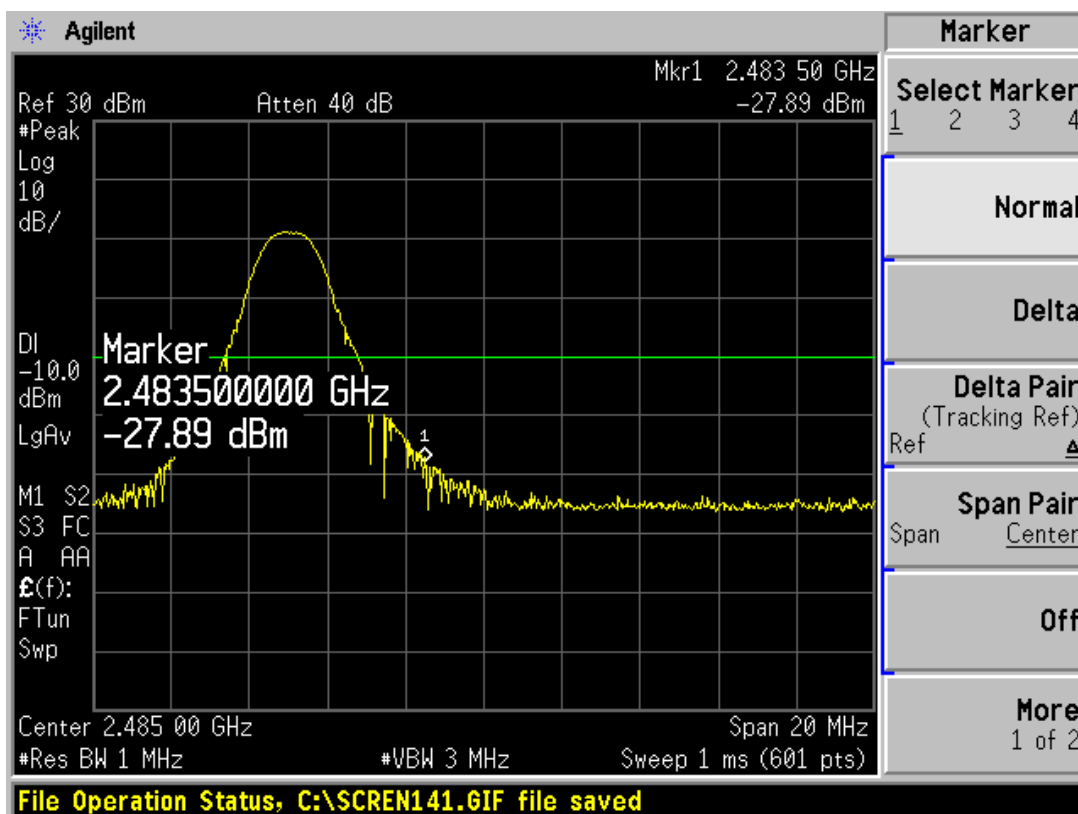
Channel No.:78

Hopping Off-DH5



Carrier frequency (MHz): 2402

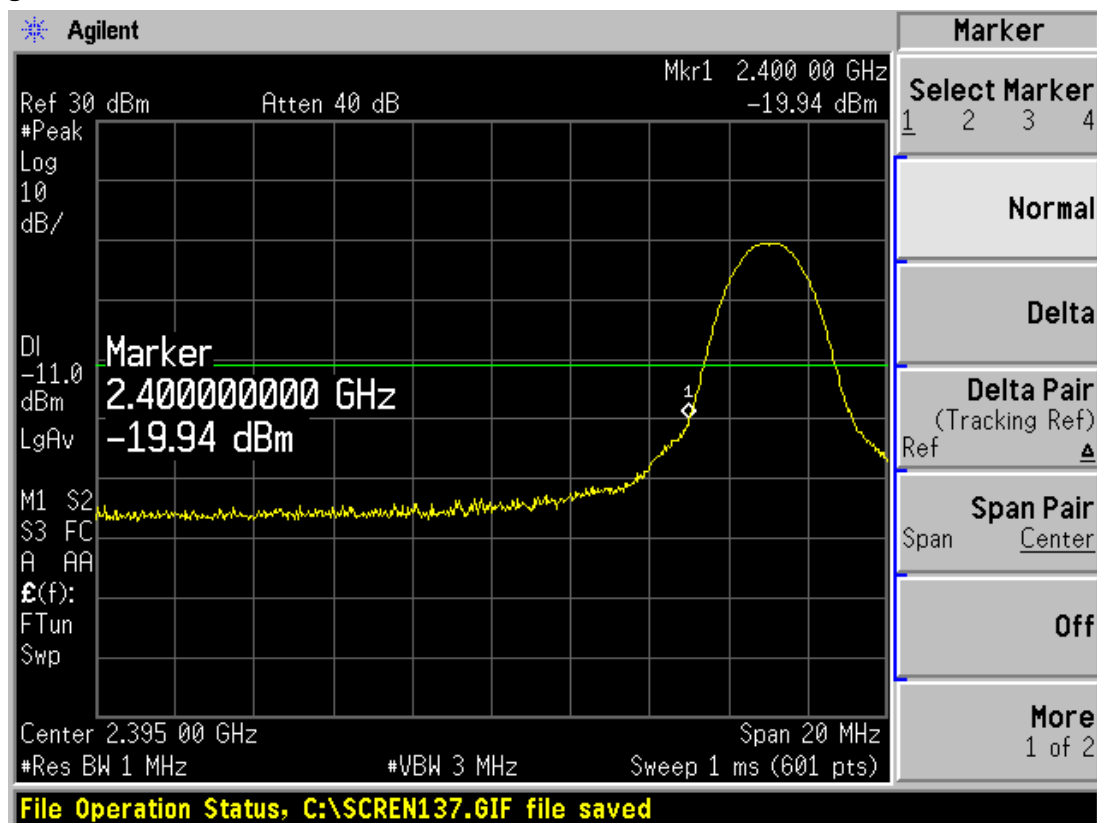
Channel No.:0



Carrier frequency (MHz): 2480

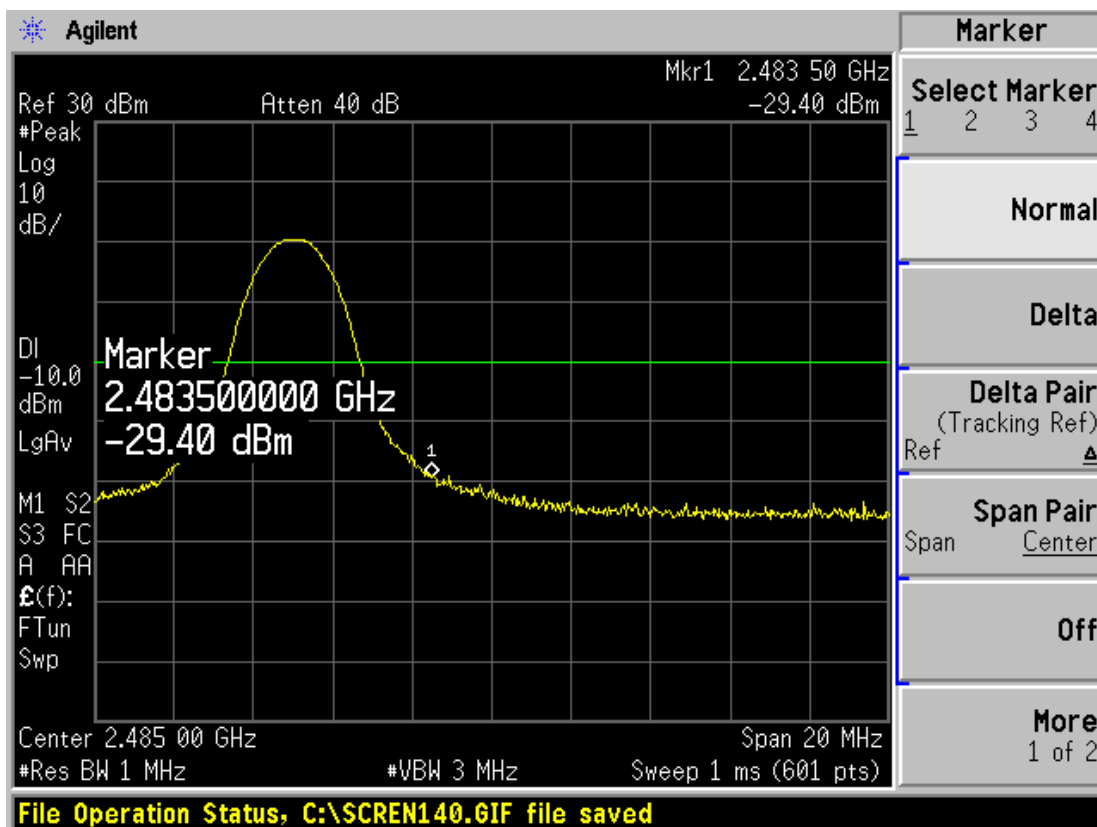
Channel No.:78

Hopping Off-2DH5



Carrier frequency (MHz): 2402

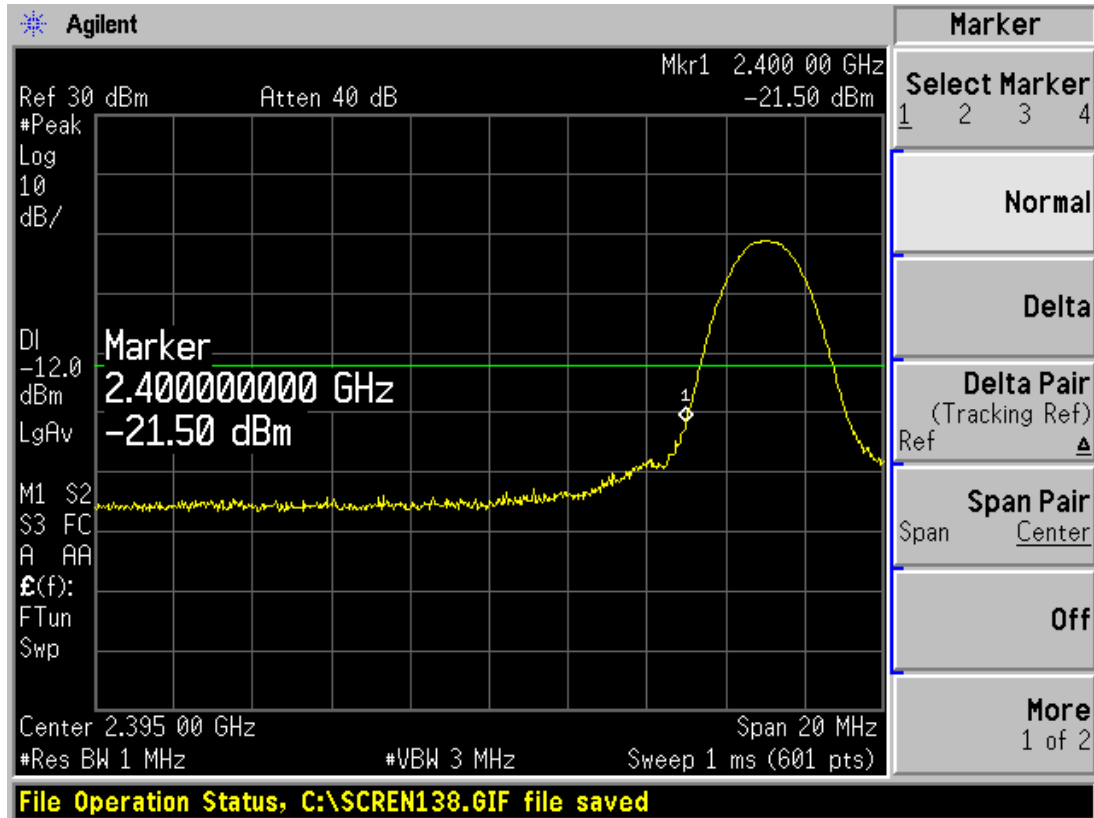
Channel No.:0



Carrier frequency (MHz): 2480

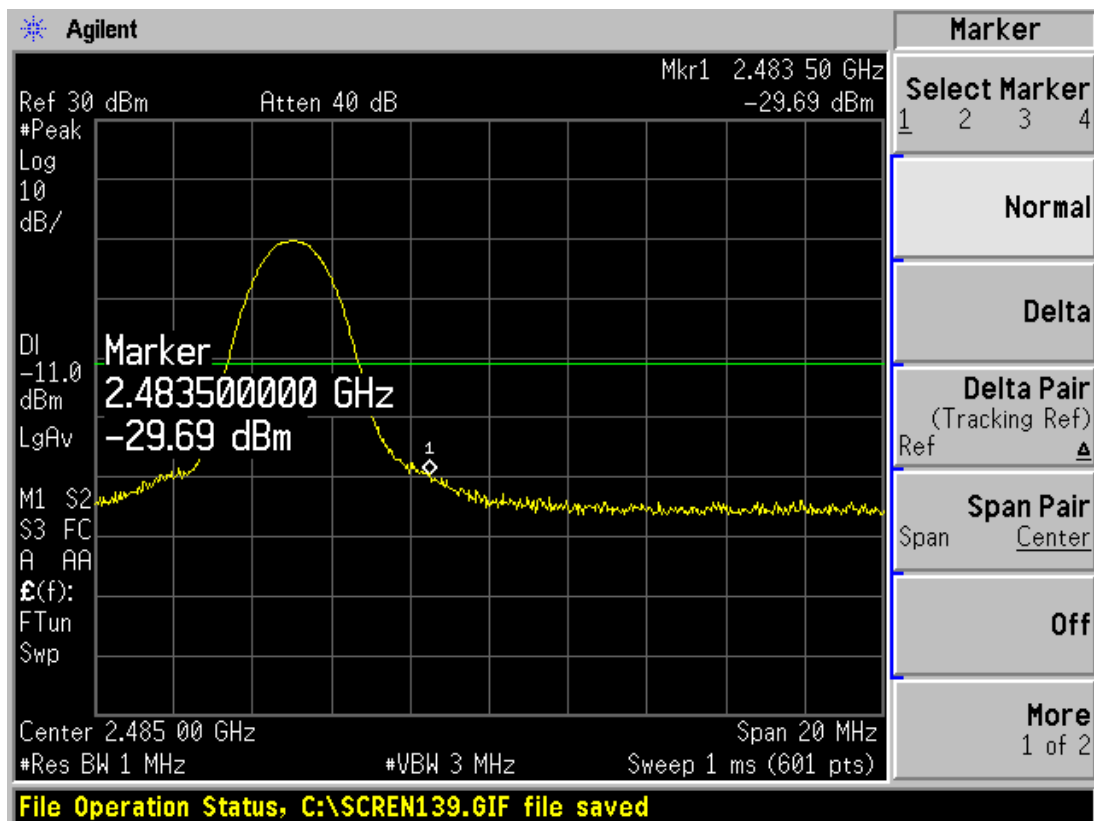
Channel No.:78

Hopping Off-3DH5



Carrier frequency (MHz): 2402

Channel No.:0



Carrier frequency (MHz): 2480

Channel No.:78

2.8. Spurious Radiated Emissions in the Restricted Band

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The turntable shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna. The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.

Set the spectrum analyzer in the following:

(a) PEAK: RBW=VBW=1MHz / Sweep=AUTO

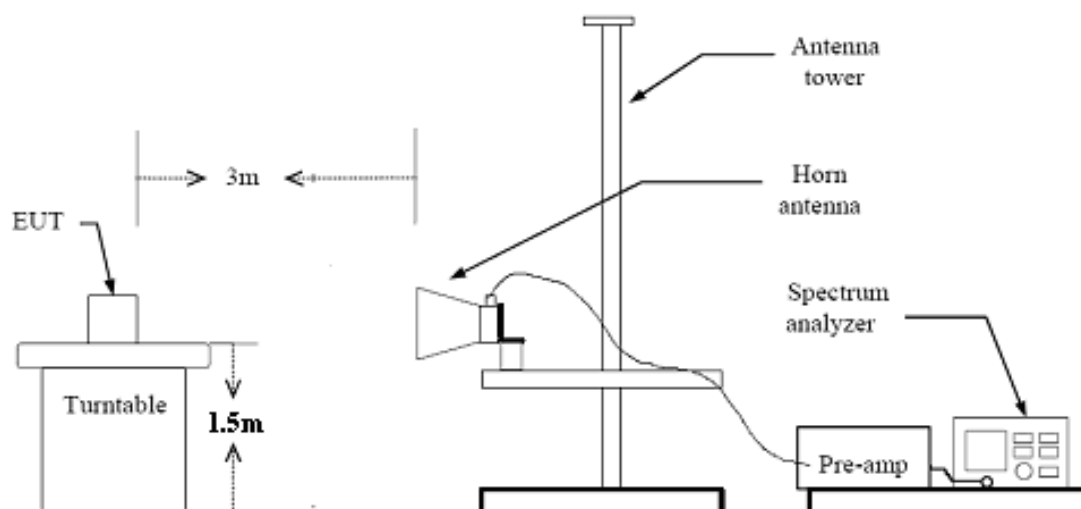
(b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO

This setting method can refer to **DA00-705**.

The field strength of spurious emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis) and docking mode. The worst emission was found in stand-up position (Z axis) and the worst case was recorded.

The test is in transmit mode.

Test setup



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Limits

Spurious Radiated Emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41			

Limit in restricted band

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above960	500	54

§15.35(b)

There is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

Peak Limit=74 dBuV/m

Average Limit=54 dBuV/m

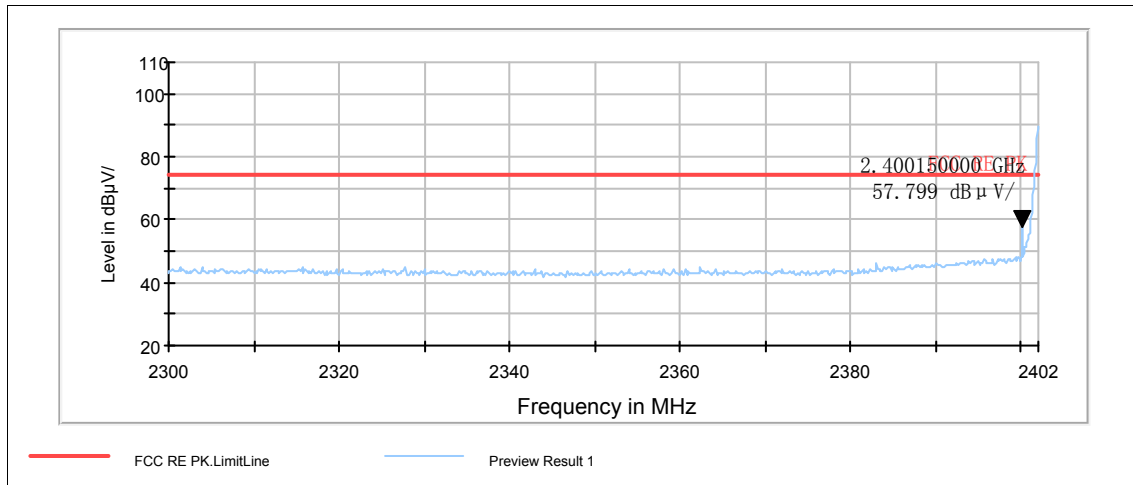
Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 3.55$ dB.

Test Results:

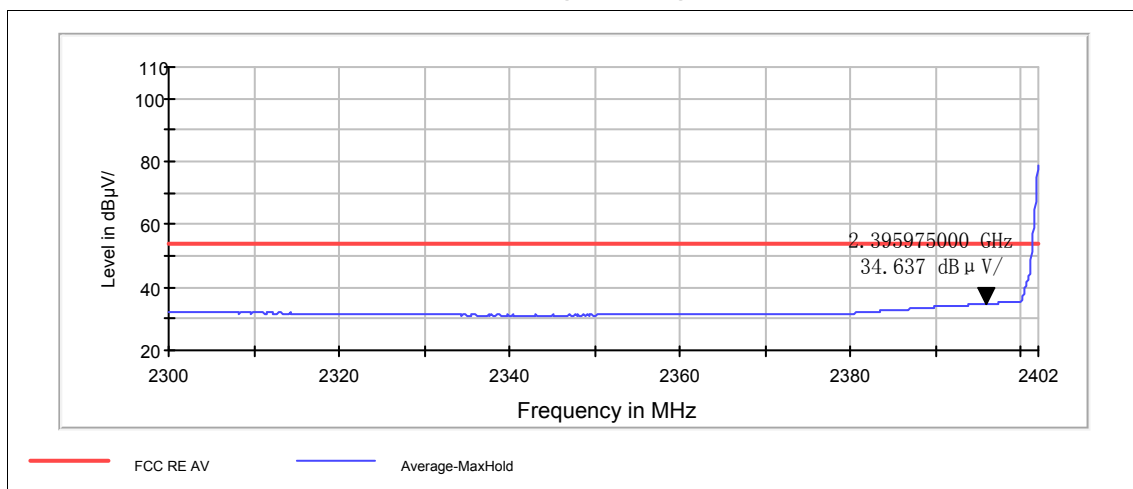
Basic Rate- Channel 0

lower band edge Peak-CH 0



Note: The signal beyond the limit is carrier

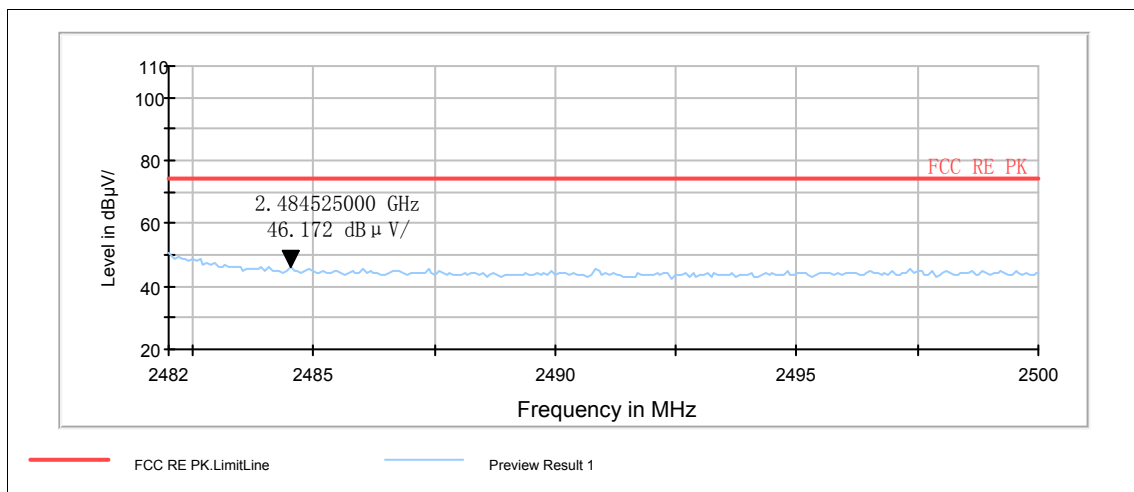
lower band edge average-CH 0



Note: The signal beyond the limit is carrier

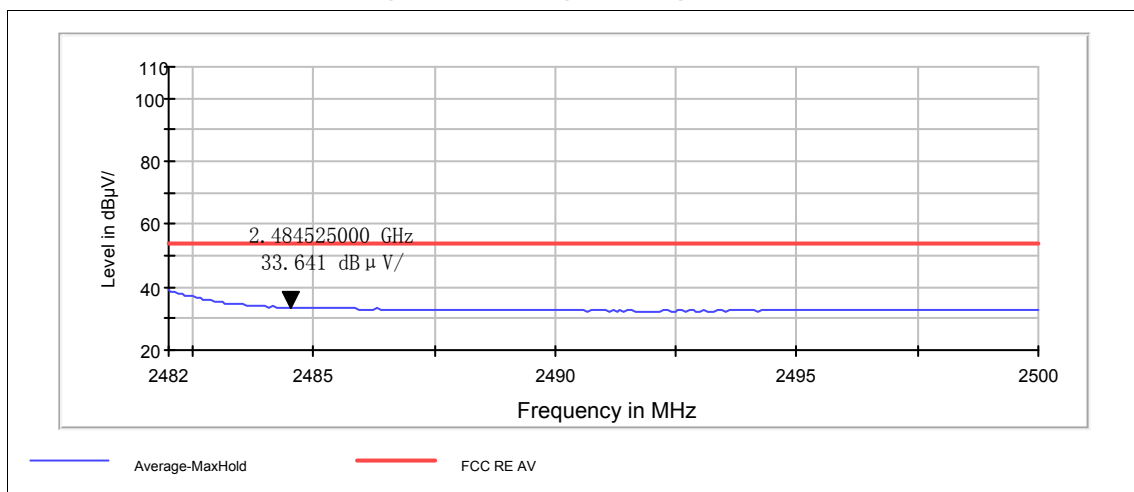
Basic Rate- Channel 78

Higher band edge Peak-CH 78



Note: The signal beyond the limit is carrier

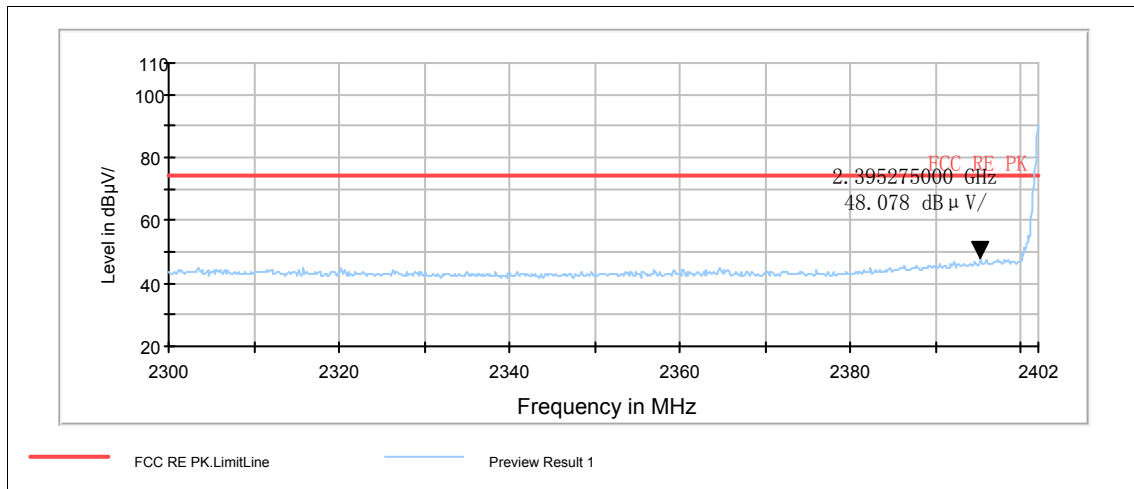
Higher band edge average-CH 78



Note: The signal beyond the limit is carrier

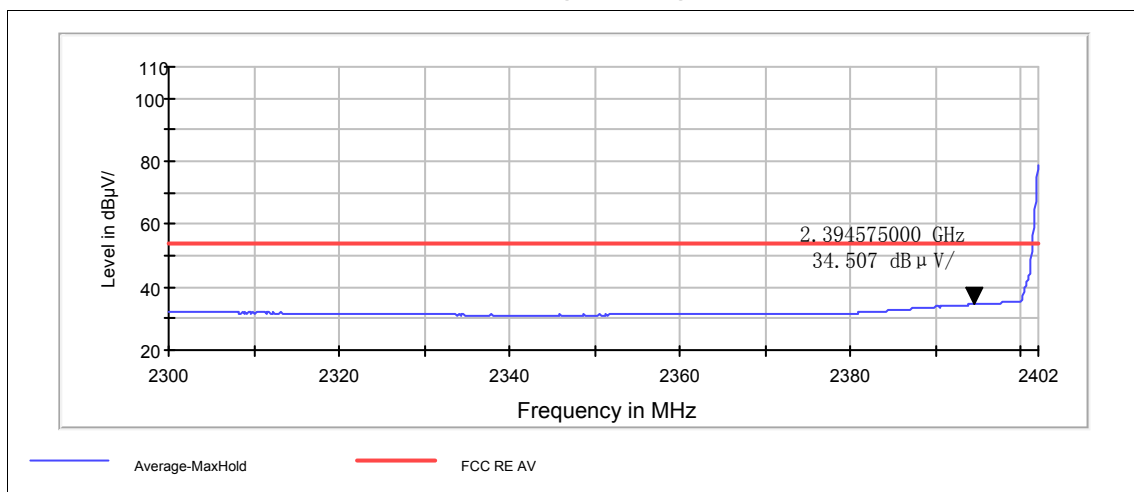
EDR- Channel 0

lower band edge Peak-CH 0



Note: The signal beyond the limit is carrier

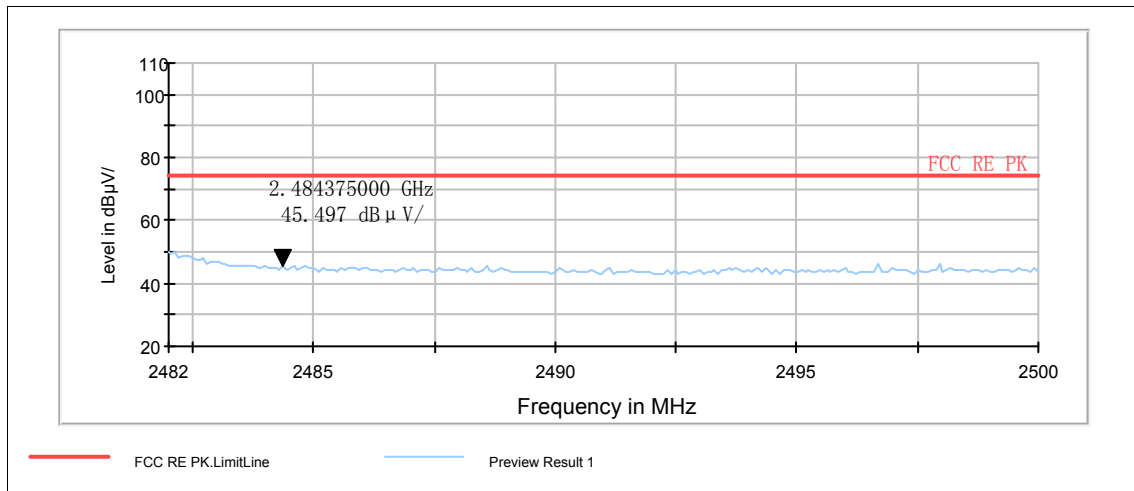
lower band edge average-CH 0



Note: The signal beyond the limit is carrier

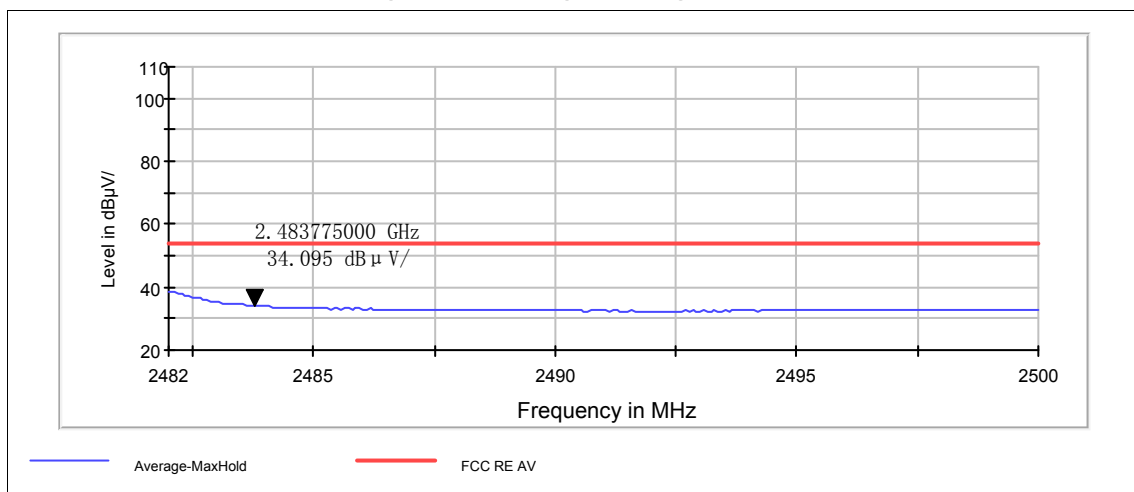
EDR- Channel 78

Higher band edge Peak-CH 78



Note: The signal beyond the limit is carrier

Higher band edge average-CH 78



Note: The signal beyond the limit is carrier

2.9. Number of hopping Frequency

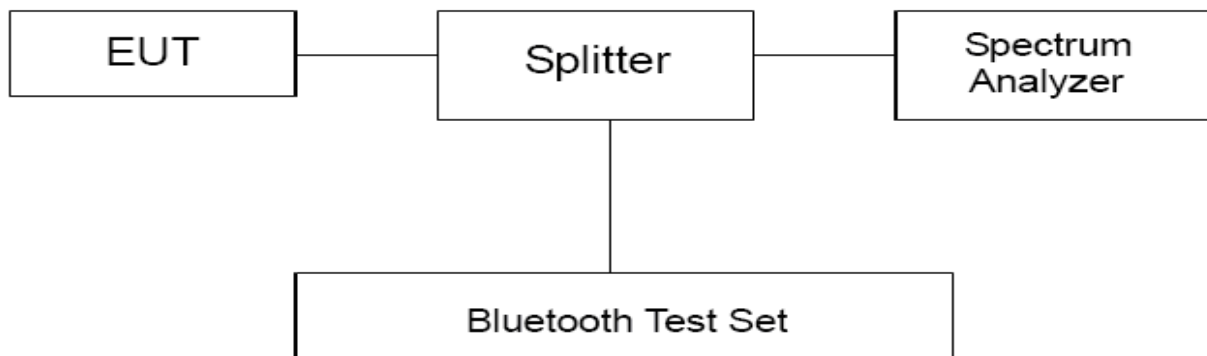
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The Equipment Under Test (EUT) was set up in a shielded room to perform the spurious emissions measurements. The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss. RBW is set to 300kHz and VBW is set to 300kHz on spectrum analyzer. Set EUT on Hopping on mode.

Test setup



Limits

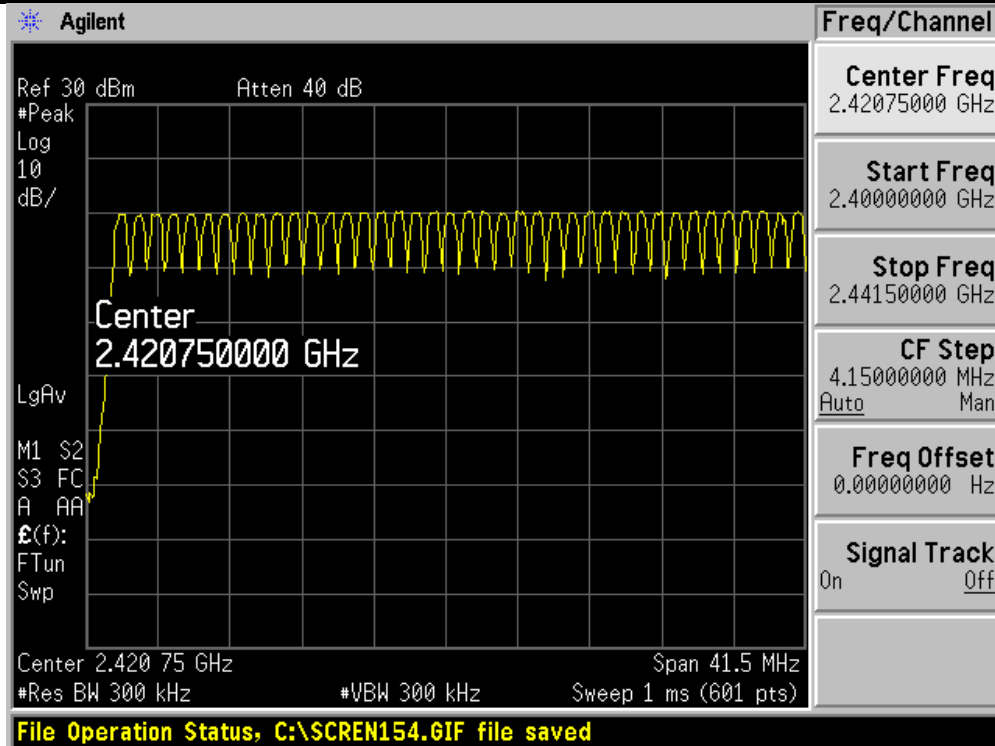
Rule Part 15.247(a) (1) (iii) specifies that "Frequency hopping systems in the 2400–2483.5 MHz band shall use at least 15 channels..".

Limits	≥ 75 channels
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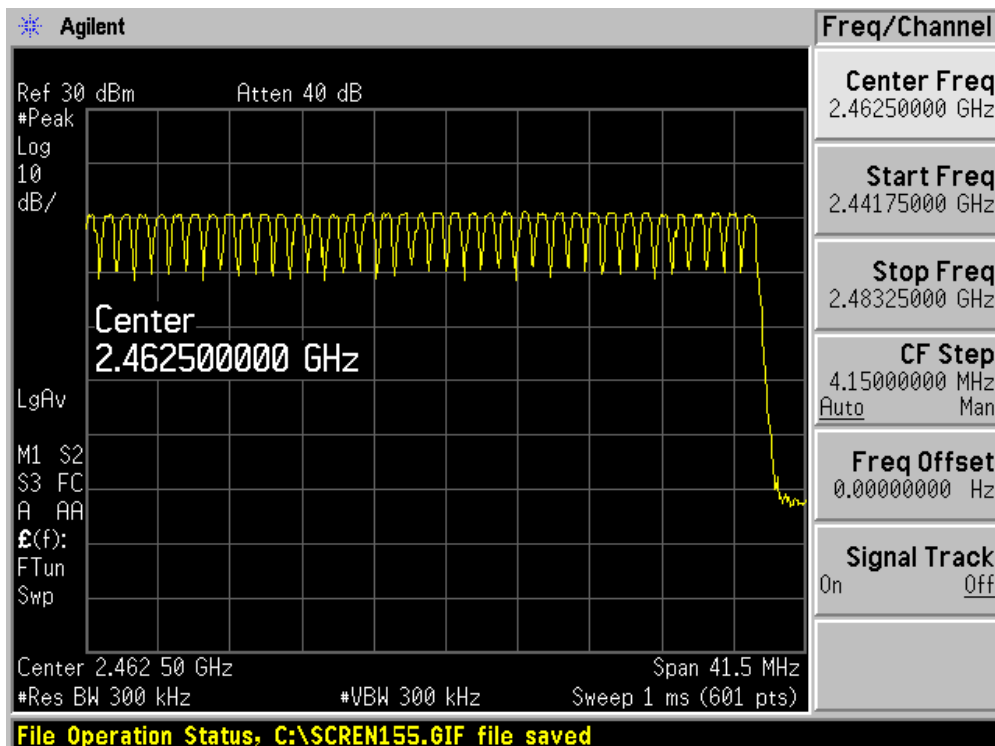
Test Results:

DH5

Number of hopping channels	conclusion
79	PASS



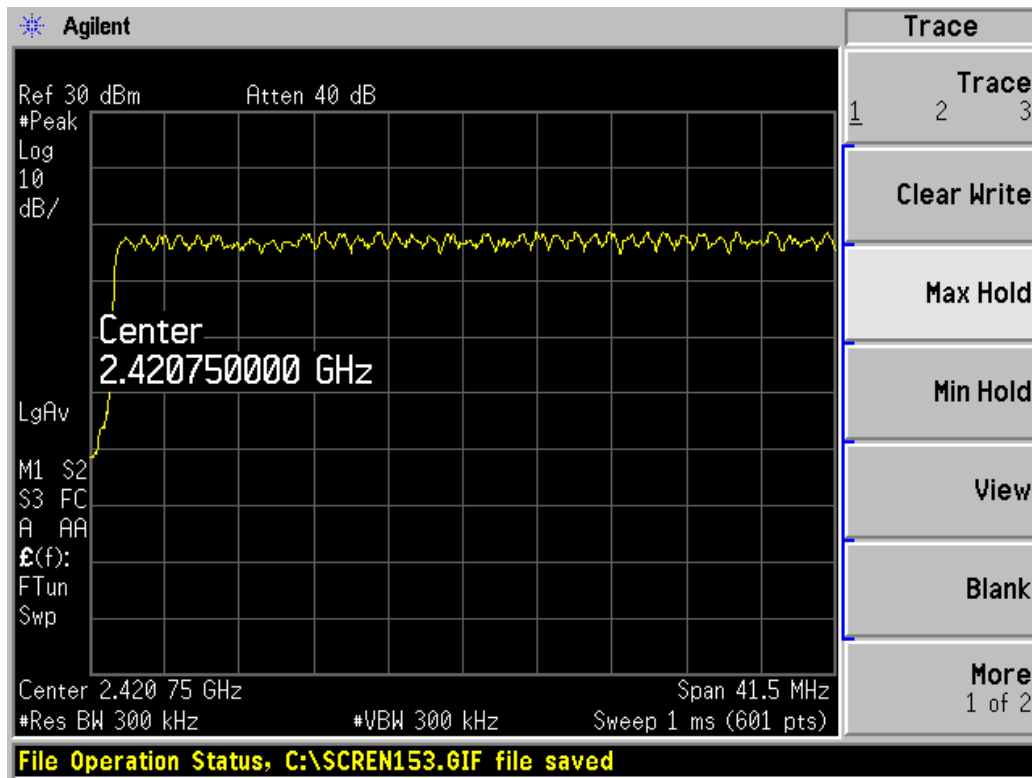
2400 MHz – 2441 MHz



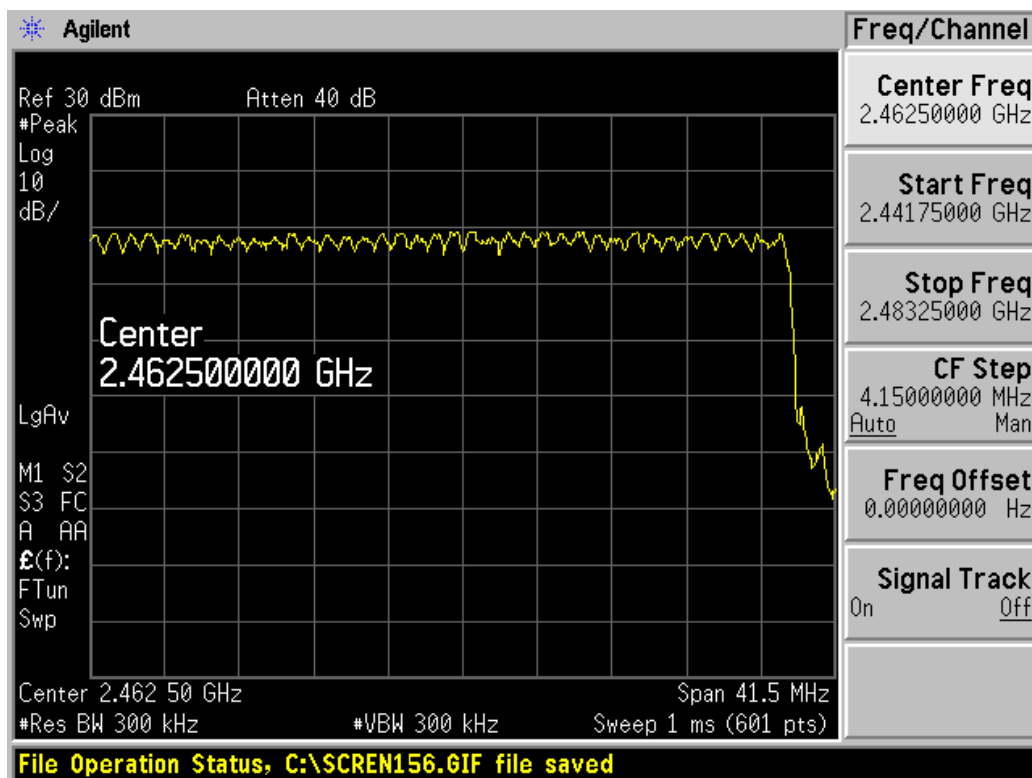
2441 MHz – 2483.5 MHz

2DH5

Number of hopping channels	conclusion
79	PASS



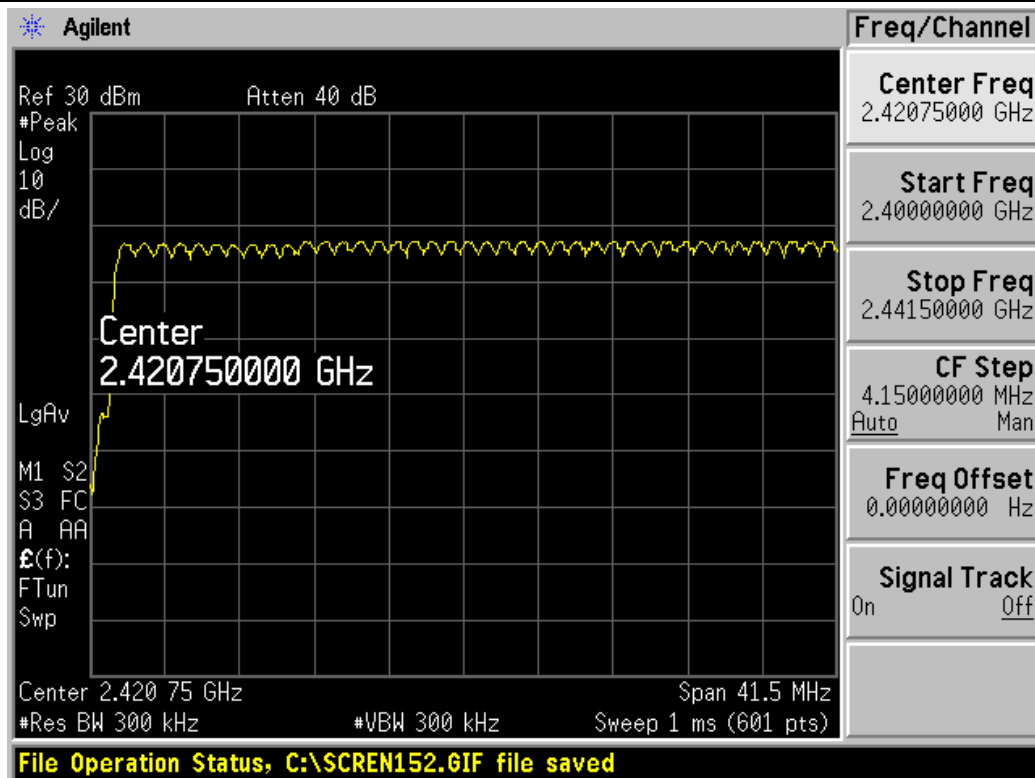
2400 MHz – 2441 MHz



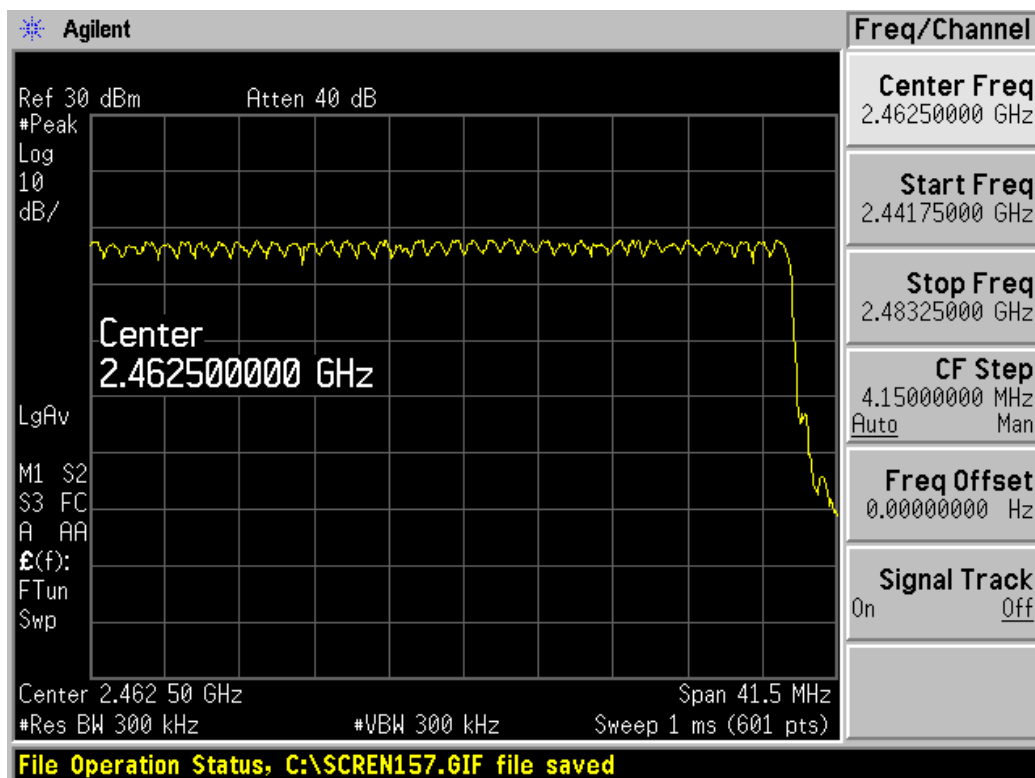
2441 MHz – 2483.5 MHz

3DH5

Number of hopping channels	conclusion
79	PASS



2400 MHz – 2441 MHz



2441 MHz – 2483.5 MHz

2.10. Spurious RF Conducted Emissions

Ambient condition

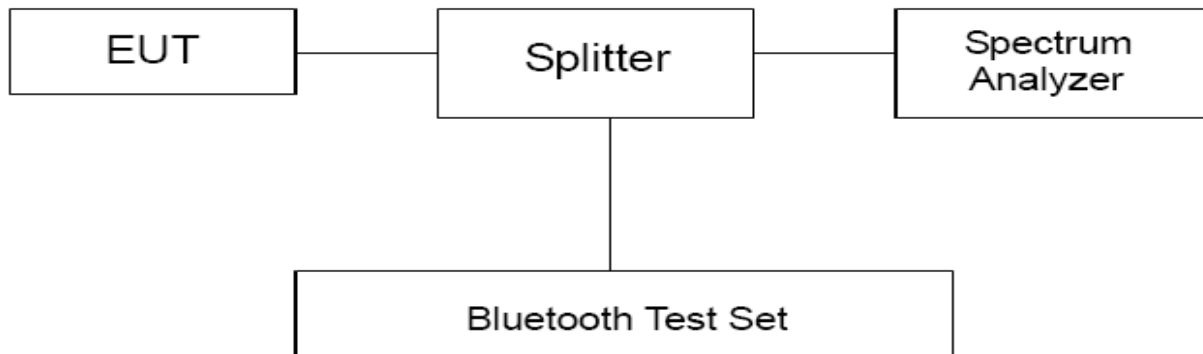
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss. The spectrum analyzer scans from 30MHz to 26GHz. The peak detector is used. RBW and VBW are set to 100 kHz, Sweep is set to ATUO.

The test is in transmit mode.

Test setup



Limits

Rule Part 15.247(d) specifies that "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."

Mode	Carrier frequency (MHz)	Reference value (dBm)	Limit
Basic Rate	2402	10.07	≤ -9.93
	2441	10.52	≤ -9.48
	2480	10.90	≤ -9.1
EDR	2402	8.79	≤ -11.21
	2441	9.23	≤ -10.77
	2480	9.63	≤ -10.37

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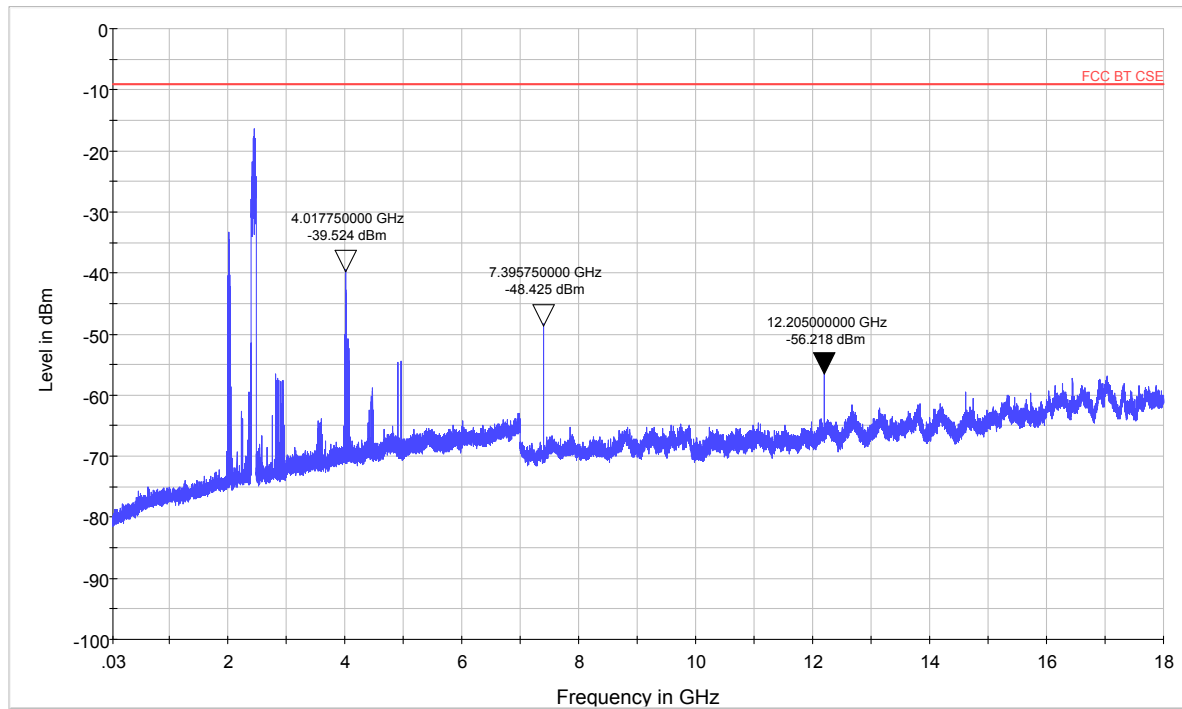
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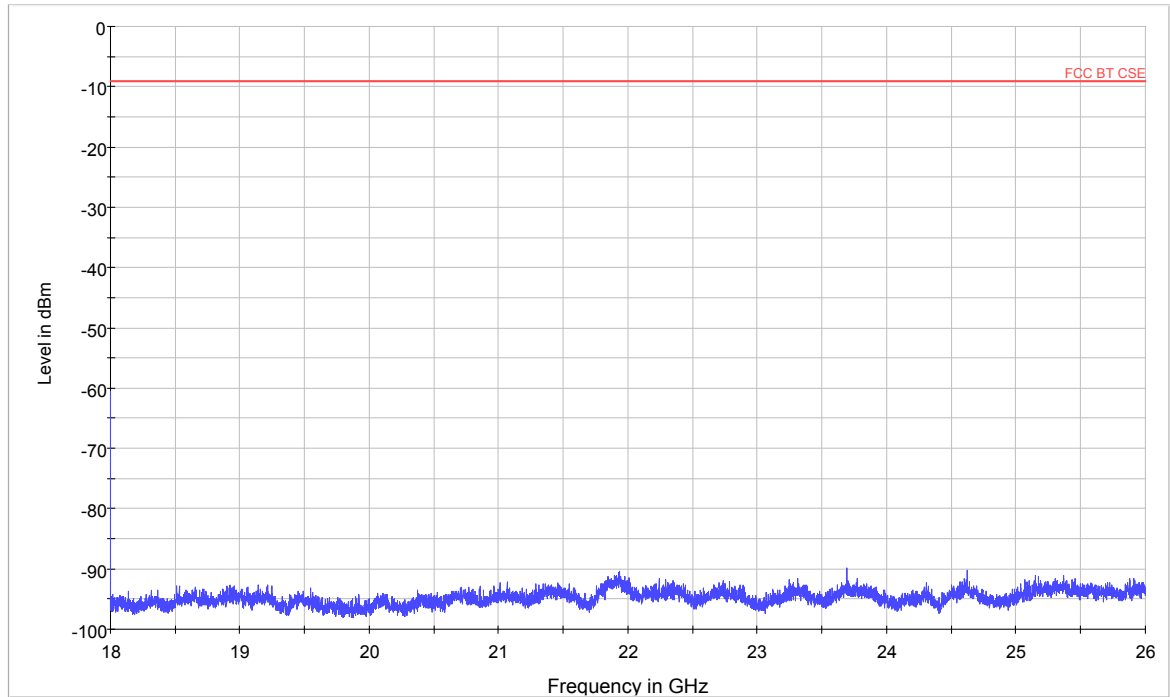
Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
100kHz-2GHz	0.684 dB
2GHz-26GHz	1.407 dB

Test Results:**Basic Rate-CH0:**

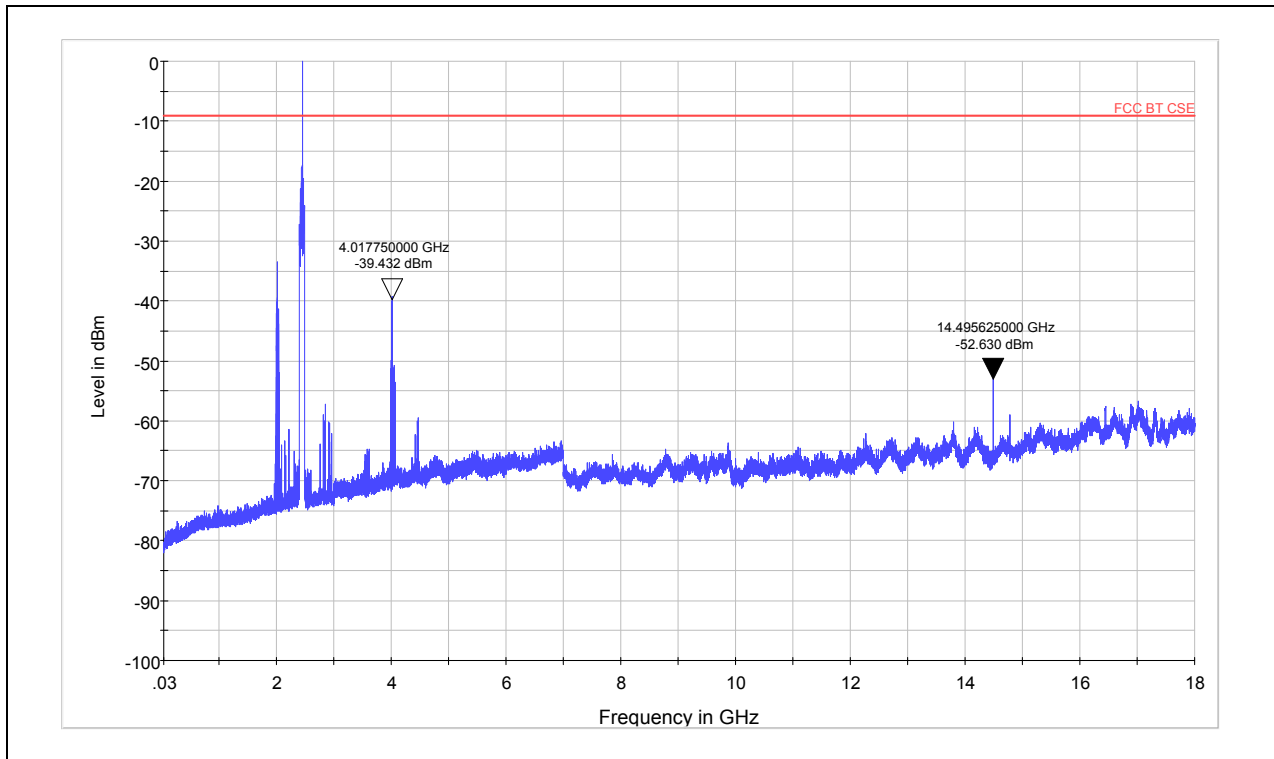
Note: The signal beyond the limit is carrier. Carrier frequency (MHz): 2402
Spurious RF conducted emissions from 30MHz to 18GHz



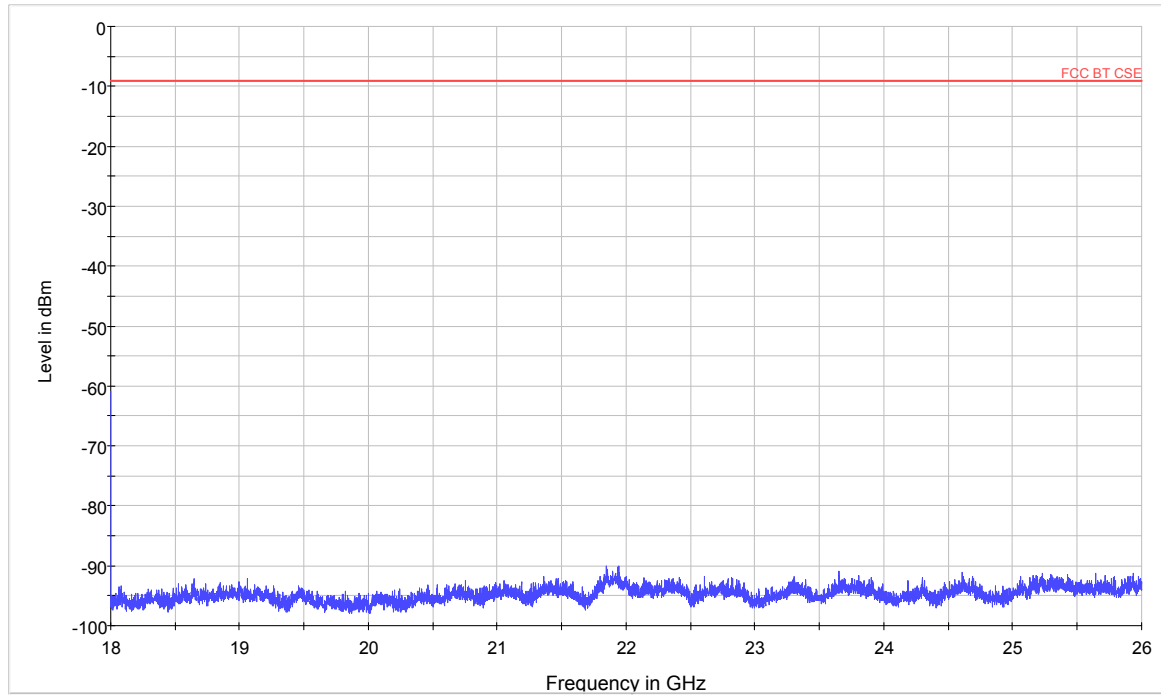
Spurious RF conducted emissions from 18GHz to 26GHz

Harmonic	TX ch.0 Frequency (MHz)	Level (dBm)	Limit (dBm)
2	4804	Nf	-9.93
3	7395.75	-48.425	-9.93
4	9608	Nf	-9.93
5	12205	-56.218	-9.93
6	14412	Nf	-9.93
7	16814	Nf	-9.93
8	19216	Nf	-9.93
9	21618	Nf	-9.93
10	24020	Nf	-9.93
Nf: noise floor			

Note: The other Spurious RF conducted emissions level is no more than noise floor.

Basic Rate-CH39:

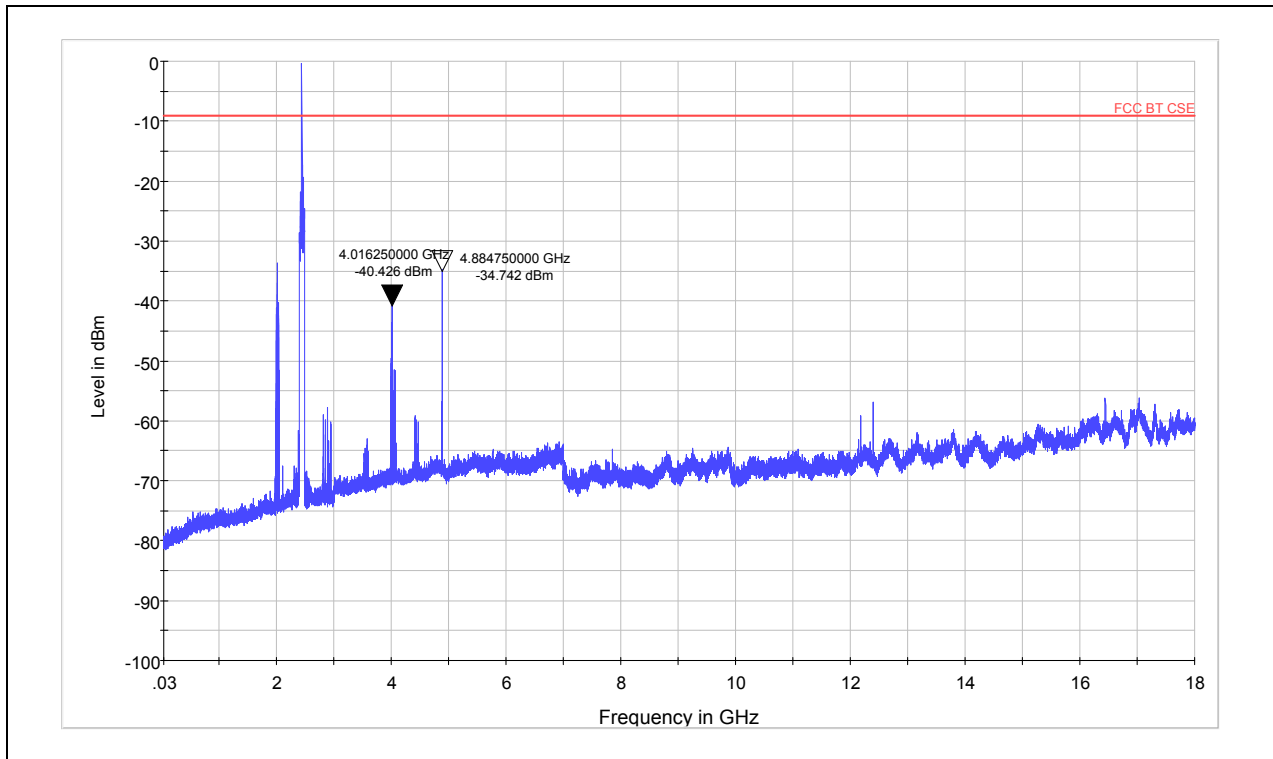
Note: The signal beyond the limit is carrier. Carrier frequency (MHz): 2441
Spurious RF conducted emissions from 30MHz to 18GHz



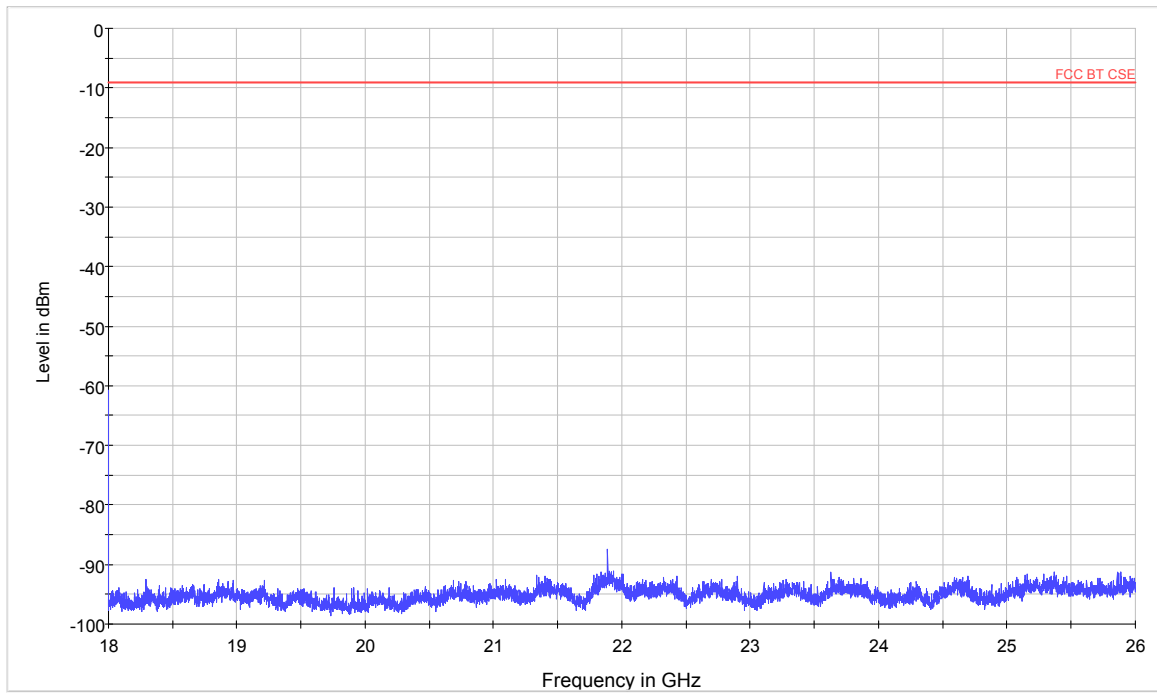
Spurious RF conducted emissions from 18GHz to 26GHz

Harmonic	TX ch.39 Frequency (MHz)	Level (dBm)	Limit (dBm)
2	4882	Nf	-9.48
3	7323	Nf	-9.48
4	9764	Nf	-9.48
5	12205	Nf	-9.48
6	14495.625	-52.630	-9.48
7	17087	Nf	-9.48
8	19528	Nf	-9.48
9	21969	Nf	-9.48
10	24410	Nf	-9.48
Nf: noise floor			

Note: The other Spurious RF conducted emissions level is no more than noise floor.

Basic Rate-CH78:

Note: The signal beyond the limit is carrier. Carrier frequency (MHz): 2480
Spurious RF conducted emissions from 30MHz to 18GHz

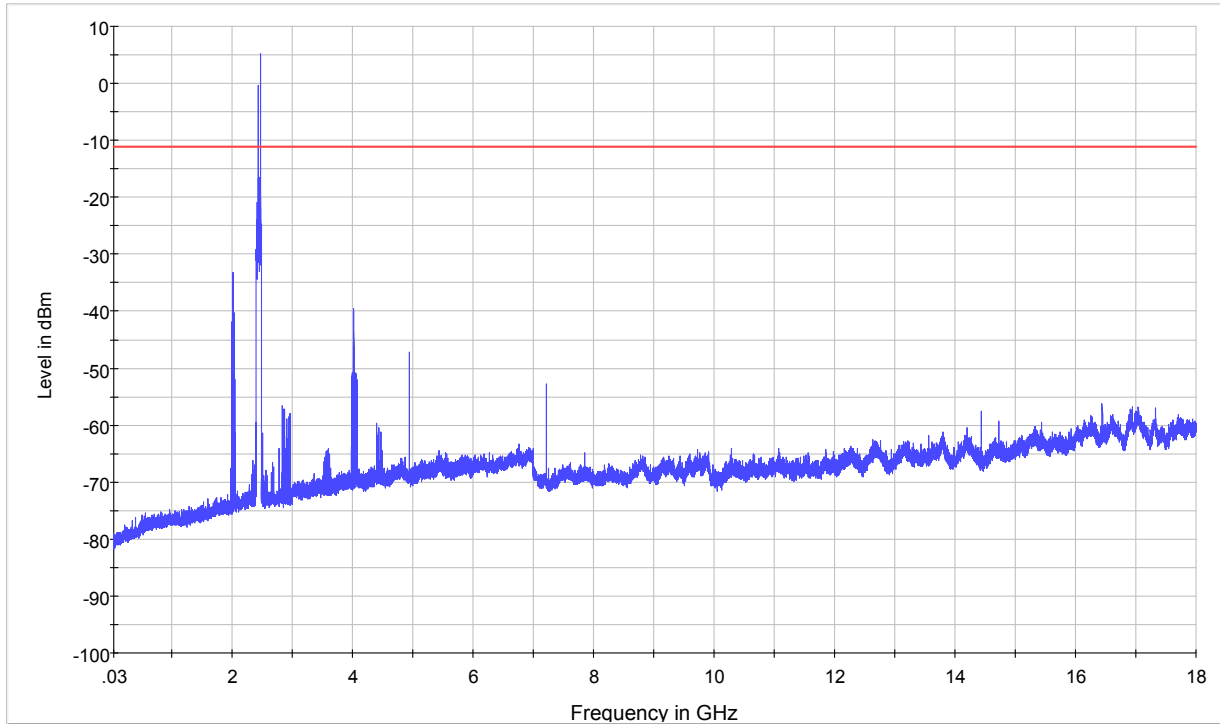


Spurious RF conducted emissions from 18GHz to 26GHz

Harmonic	TX ch.78 Frequency (MHz)	Level (dBm)	Limit (dBm)
2	4884.75	-34.742	-9.1
3	7440	Nf	-9.1
4	9920	Nf	-9.1
5	12400	Nf	-9.1
6	14880	Nf	-9.1
7	17360	Nf	-9.1
8	19840	Nf	-9.1
9	22320	Nf	-9.1
10	24800	Nf	-9.1
Nf: noise floor			

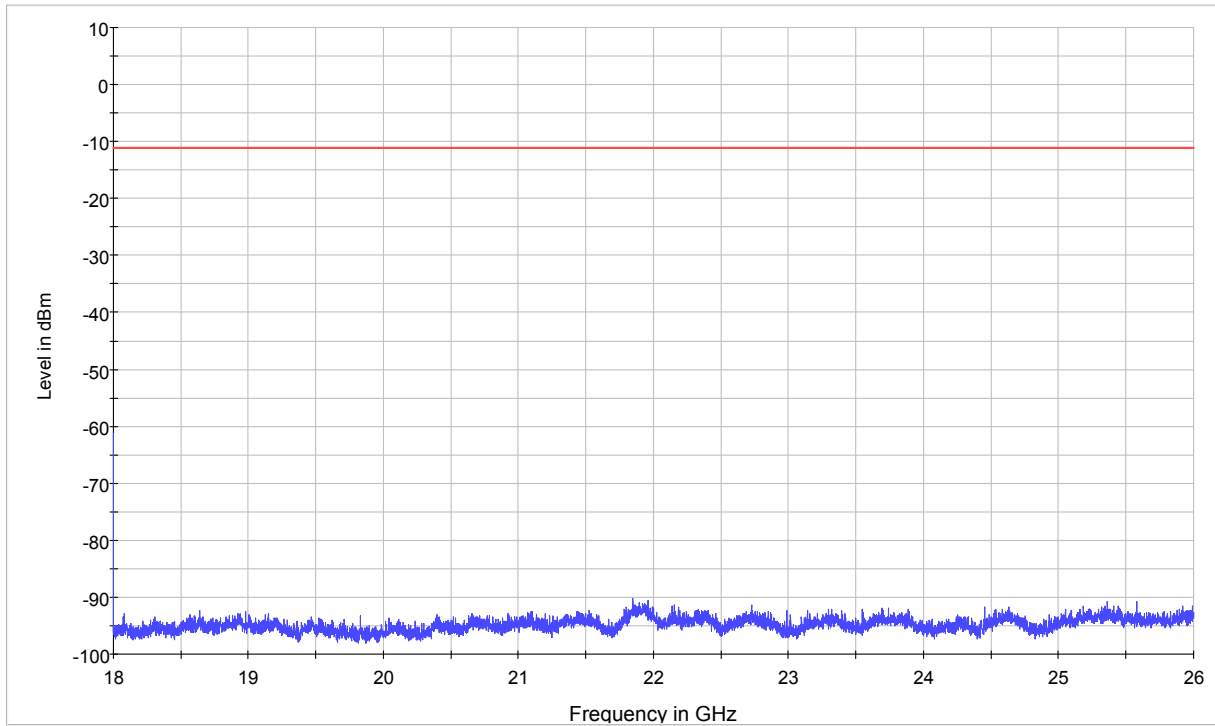
Note: The other Spurious RF conducted emissions level is no more than noise floor.

EDR-CH0:



Note: The signal beyond the limit is carrier. Carrier frequency (MHz): 2402

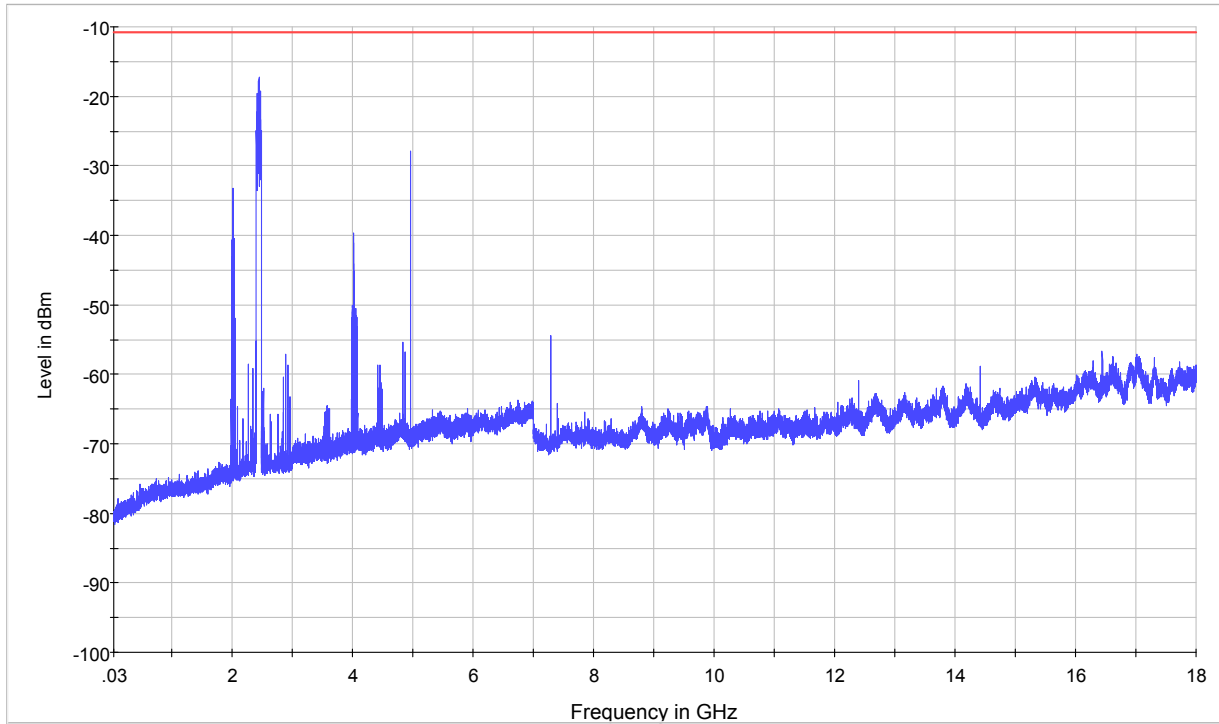
Spurious RF conducted emissions from 30MHz to 18GHz



Spurious RF conducted emissions from 18GHz to 26GHz

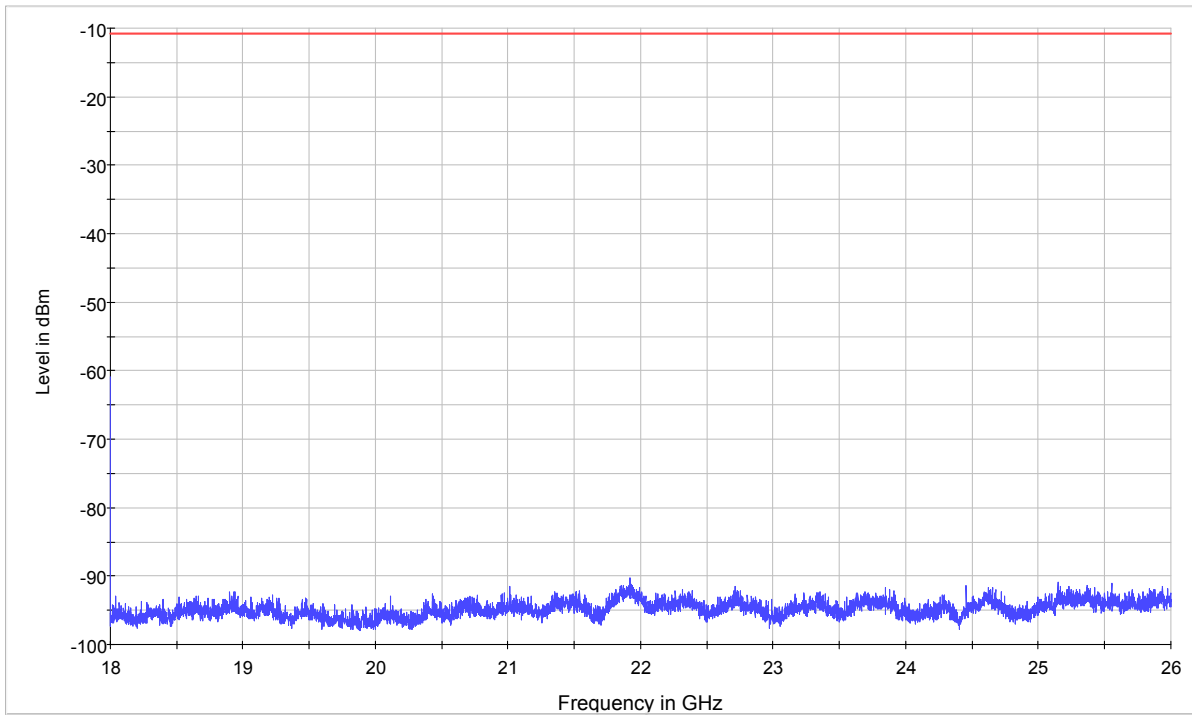
Harmonic	TX ch.0 Frequency (MHz)	Level (dBm)	Limit (dBm)
2	4804	Nf	-11.21
3	7206	Nf	-11.21
4	9608	Nf	-11.21
5	12010	Nf	-11.21
6	14412	Nf	-11.21
7	16814	Nf	-11.21
8	19216	Nf	-11.21
9	21618	Nf	-11.21
10	24020	Nf	-11.21
Nf: noise floor			

Note: The other Spurious RF conducted emissions level is no more than noise floor.

EDR-CH39:

Note: The signal beyond the limit is carrier. Carrier frequency (MHz): 2441

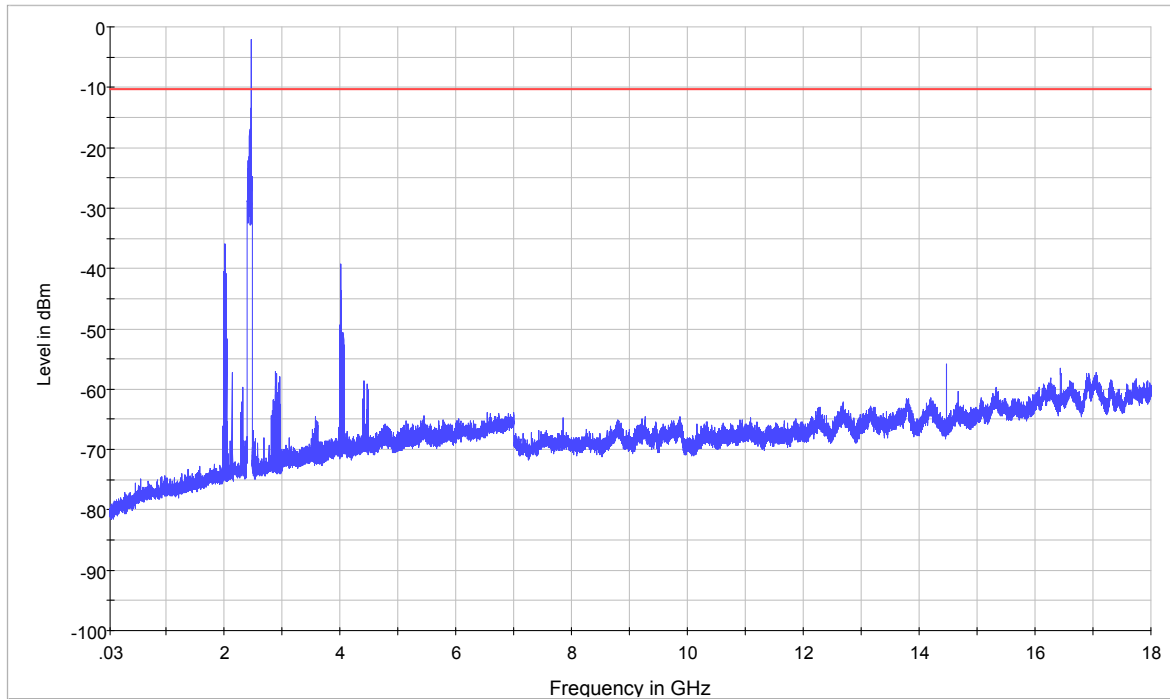
Spurious RF conducted emissions from 30MHz to 18GHz



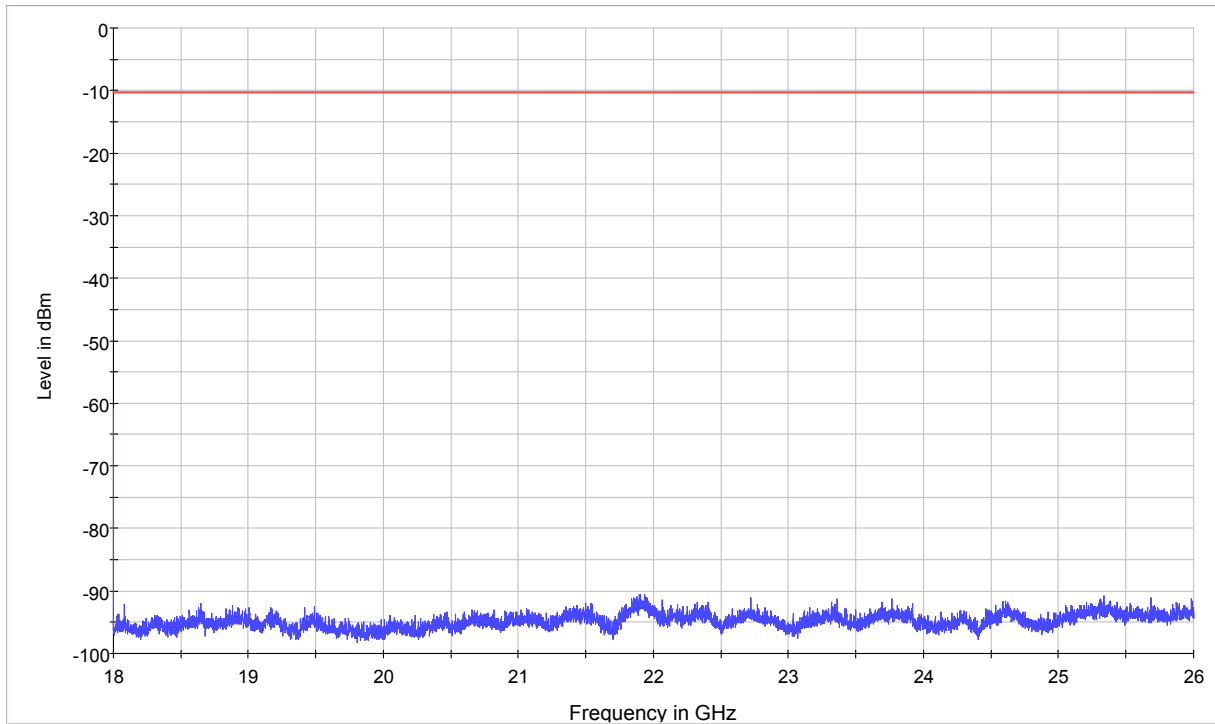
Spurious RF conducted emissions from 18GHz to 26GHz

Harmonic	TX ch.39 Frequency (MHz)	Level (dBm)	Limit (dBm)
2	4882	Nf	-10.77
3	7323	Nf	-10.77
4	9764	Nf	-10.77
5	12205	Nf	-10.77
6	14646	Nf	-10.77
7	17087	Nf	-10.77
8	19528	Nf	-10.77
9	21969	Nf	-10.77
10	24410	Nf	-10.77
Nf: noise floor			

Note: The other Spurious RF conducted emissions level is no more than noise floor.

EDR-CH78:

Note: The signal beyond the limit is carrier. Carrier frequency (MHz): 2480
Spurious RF conducted emissions from 30MHz to 18GHz



Spurious RF conducted emissions from 18GHz to 26GHz

Harmonic	TX ch.78 Frequency (MHz)	Level (dBm)	Limit (dBm)
2	4960	Nf	-10.37
3	7440	Nf	-10.37
4	9920	Nf	-10.37
5	12400	Nf	-10.37
6	14880	Nf	-10.37
7	17360	Nf	-10.37
8	19840	Nf	-10.37
9	22320	Nf	-10.37
10	24800	Nf	-10.37
Nf: noise floor			

Note: The other Spurious RF conducted emissions level is no more than noise floor.

2.11. Radiates Emission

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	102.5kPa

Method of Measurement

The test set-up was made in accordance to the general provisions of ANSI C63.4-2003. The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The radiated emissions measurements were made in a typical installation configuration. Sweep the whole frequency band through the range from 30MHz to 26GHz during the test, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turntable shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna. The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.

Set the spectrum analyzer in the following:

Below 1GHz:

RBW=100kHz / VBW=300kHz / Sweep=AUTO

Above 1GHz:

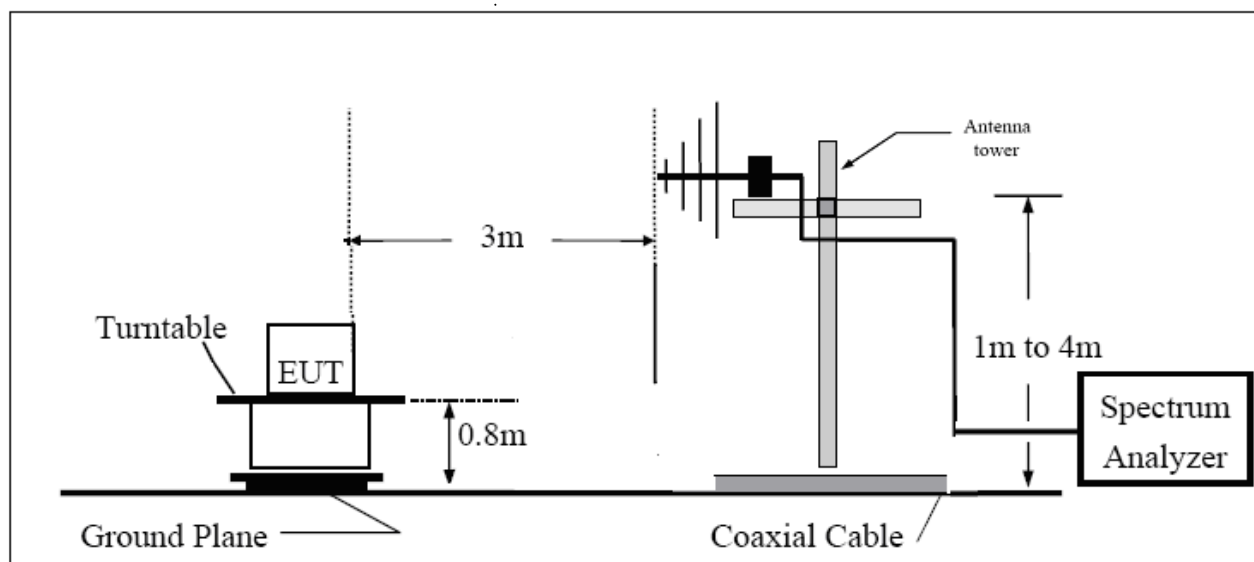
(a) PEAK: RBW=1MHz VBW=3MHz/ Sweep=AUTO

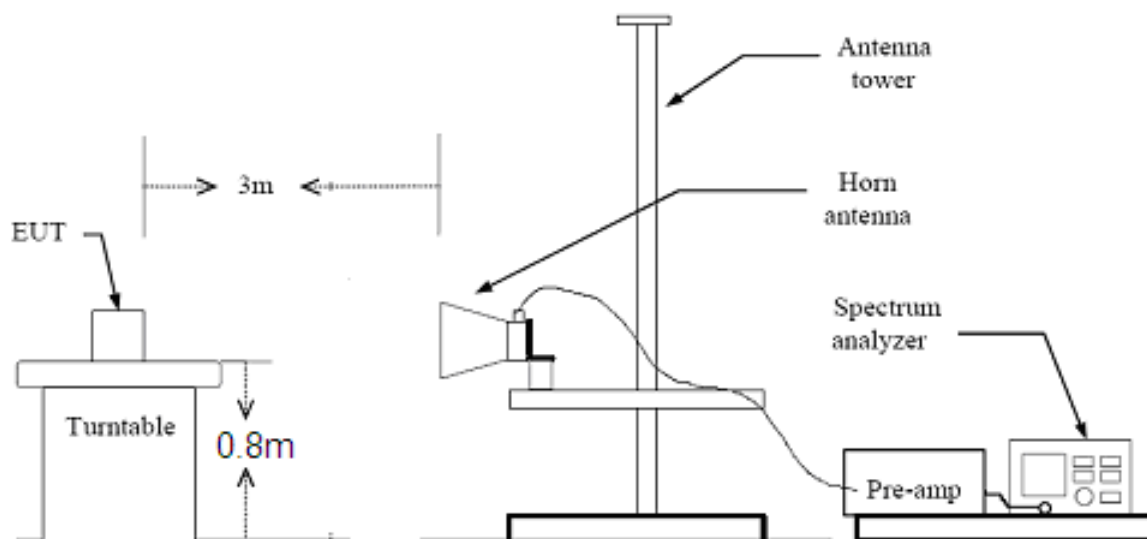
(b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO

The test is in transmit mode.

Test setup

Below 1GHz



Above 1GHz**Limits**

Rule Part 15.247(d) specifies that "In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c))."

Limit in restricted band

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

§15.35(b)

There is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

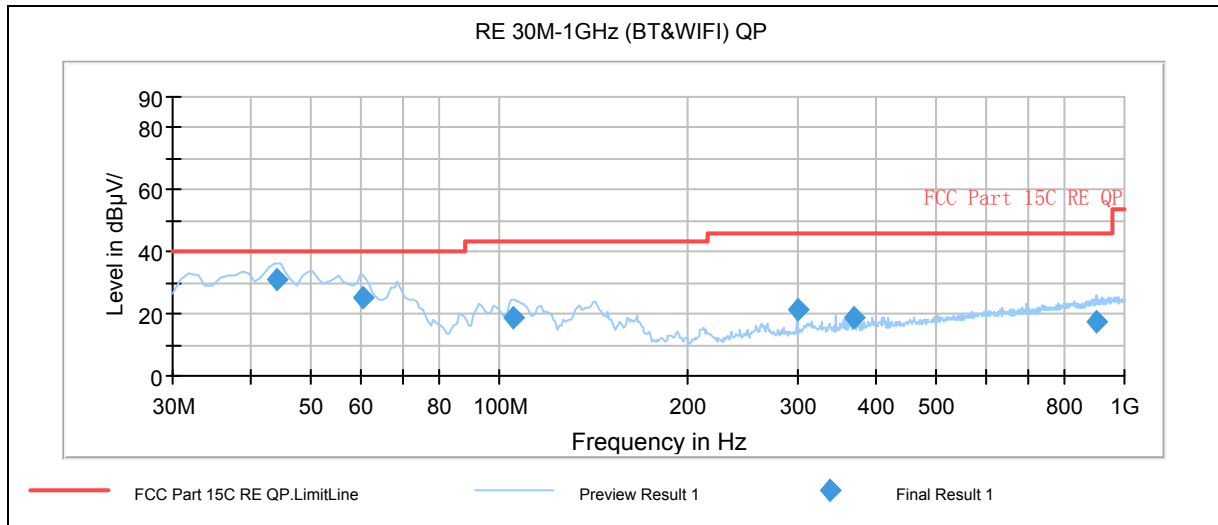
Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
30MHz-200MHz	4.19 dB
200MHz-1GHz	3.63 dB
1GHz – 6GHz	3.68 dB

Test result

Basic Rate-Channel 0



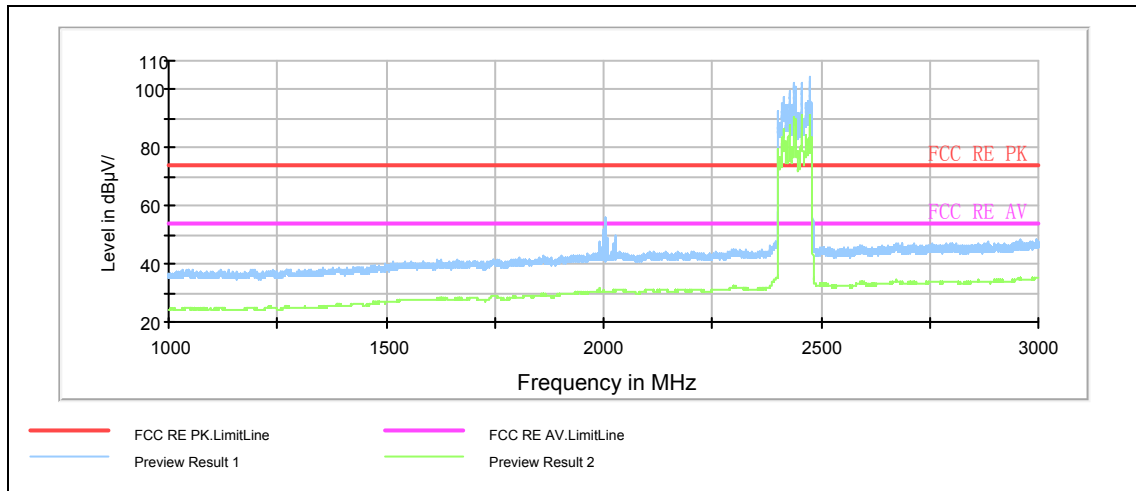
Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
44.180000	31.3	100.0	V	131.0	56	-24.7	8.7	40.0
60.670000	25.3	100.0	V	293.0	52.7	-27.4	14.7	40.0
105.290000	19.0	100.0	V	5.0	47.3	-28.3	24.5	43.5
300.020000	21.1	100.0	H	70.0	48.2	-27.1	24.9	46.0
368.650000	18.7	100.0	H	153.0	44.6	-25.9	27.3	46.0
902.800000	17.3	100.0	V	346.0	34.2	-16.9	28.7	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

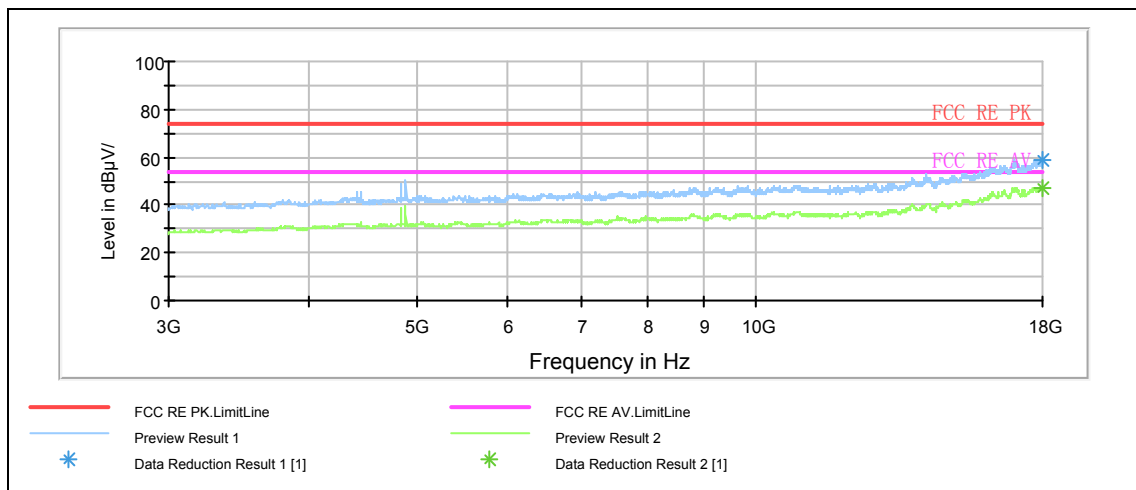
2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

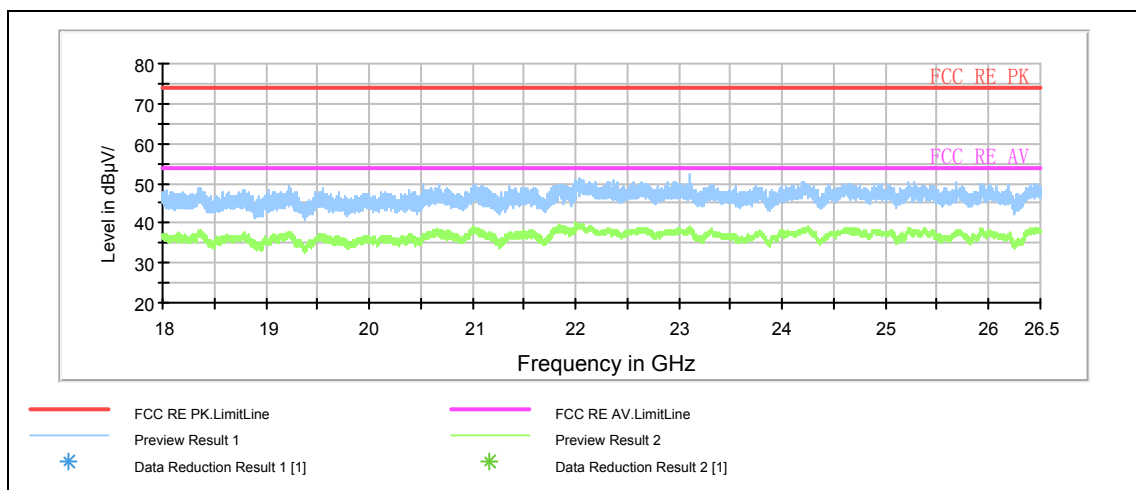


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

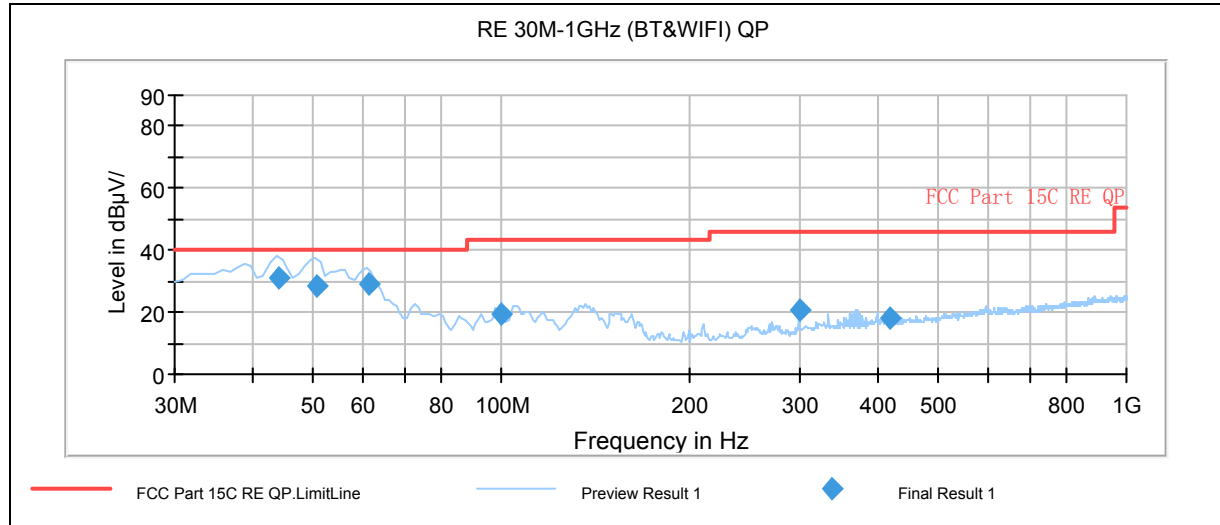


Radiates Emission from 3GHz to 18GHz



Radiates Emission from 18GHz to 26.5GHz

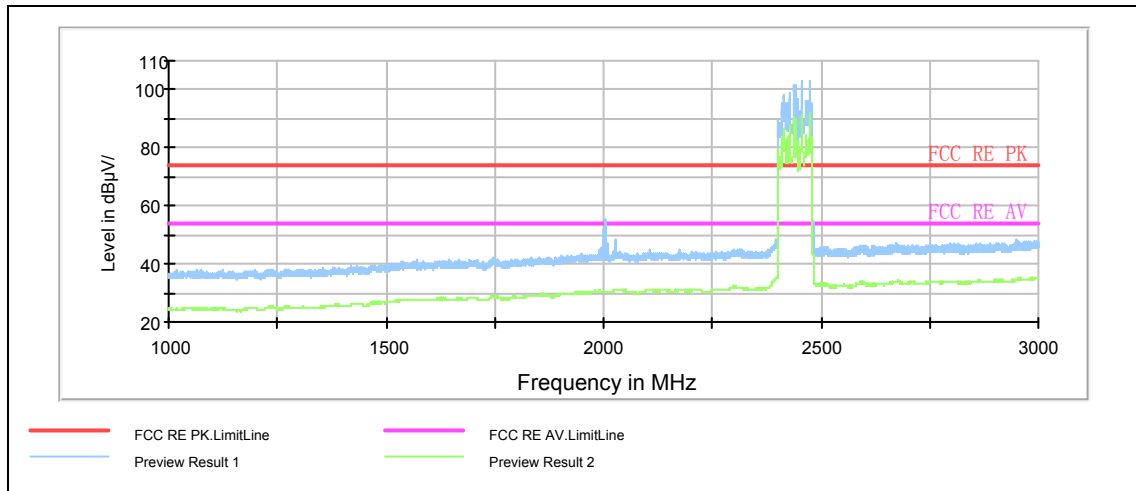
Basic Rate-Channel 39



Radiates Emission from 30MHz to 1GHz

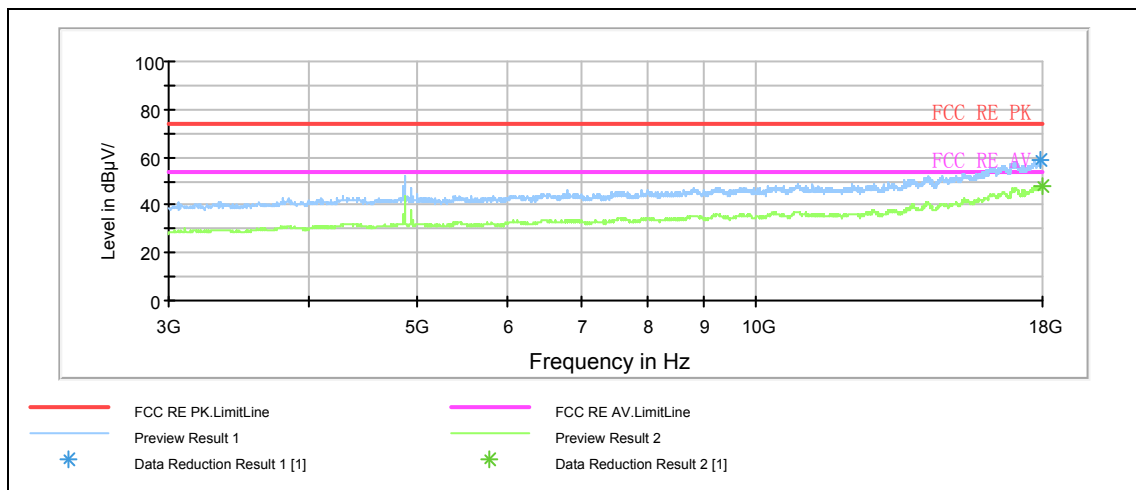
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
44.180000	31.1	120.0	V	103.0	55.8	-24.7	8.9	40.0
50.570000	28.5	100.0	V	120.0	54.2	-25.7	11.5	40.0
61.320000	29.1	121.0	V	282.0	56.8	-27.7	10.9	40.0
100.000000	19.3	100.0	V	77.0	47	-27.7	24.2	43.5
300.020000	20.9	100.0	V	23.0	48	-27.1	25.1	46.0
418.570000	18.1	100.0	H	139.0	42.9	-24.8	27.9	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor**2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)****3. Margin = Limit – Quasi-Peak**

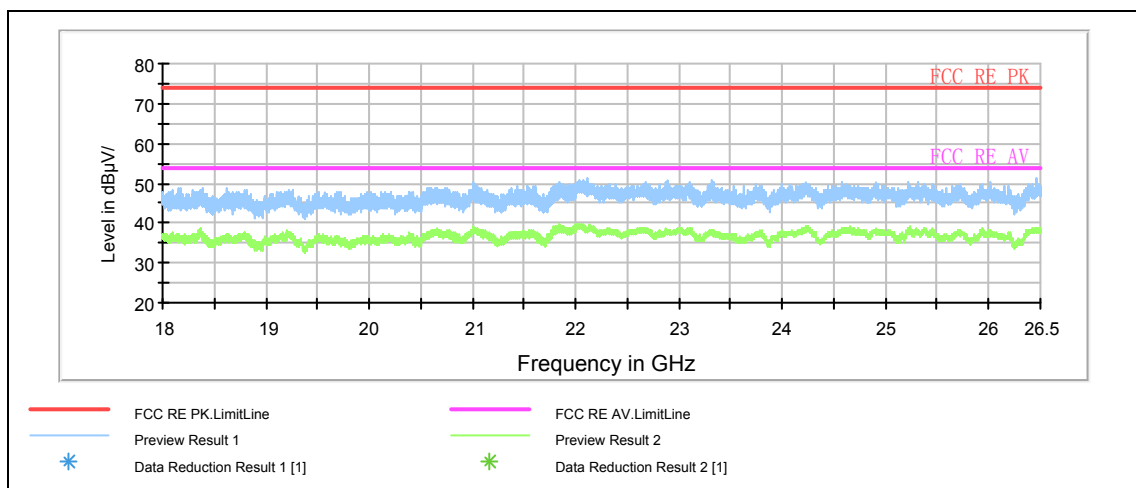


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

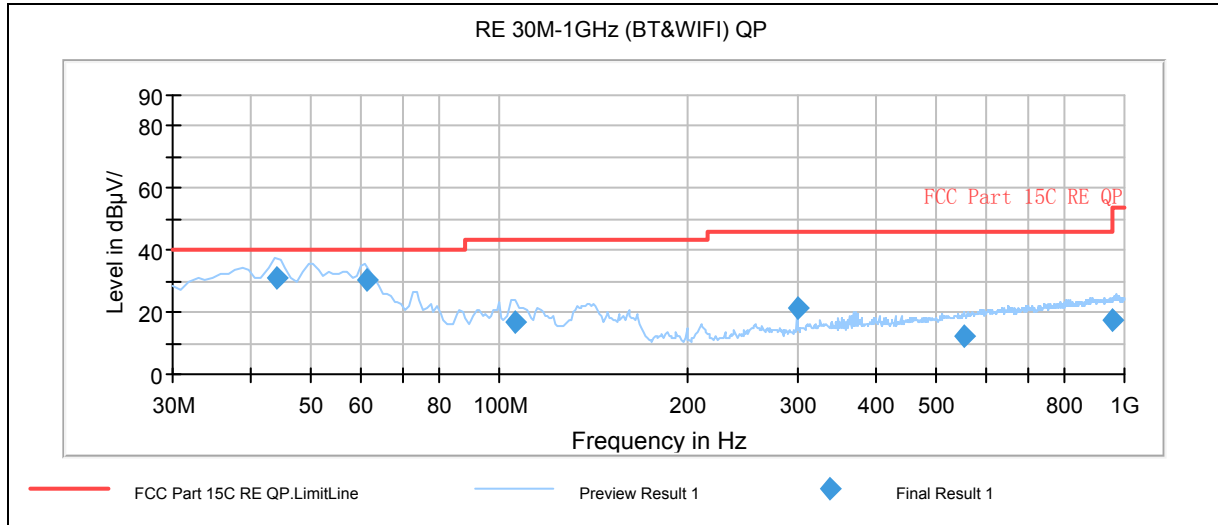


Radiates Emission from 3GHz to 18GHz



Radiates Emission from 18GHz to 26.5GHz

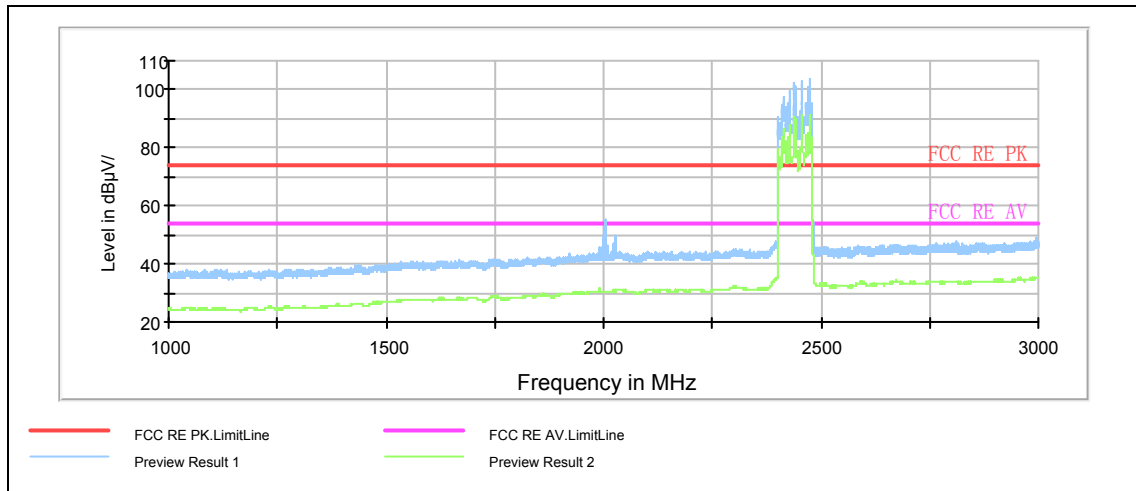
Basic Rate-Channel 78



Radiates Emission from 30MHz to 1GHz

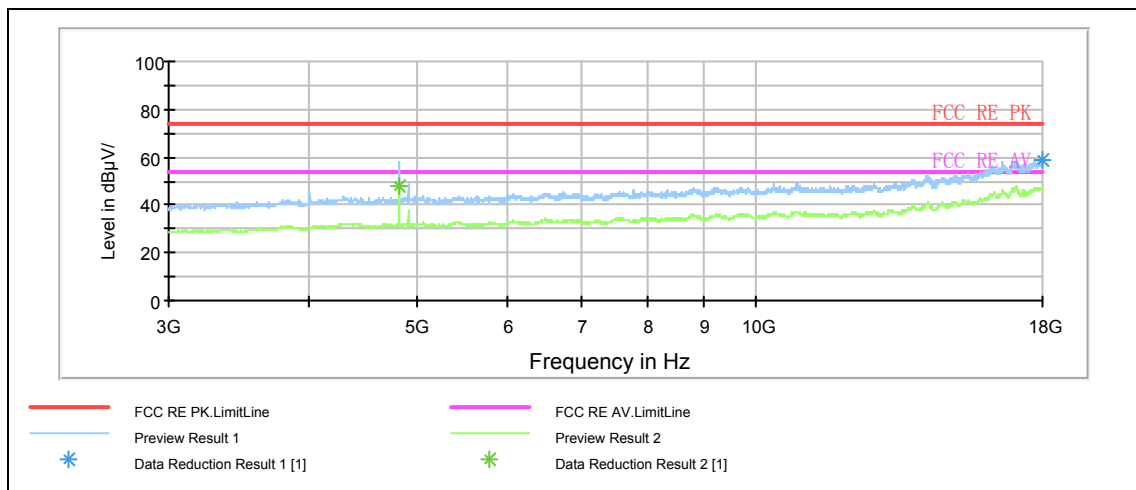
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
44.180000	31.0	100.0	V	177.0	55.7	-24.7	9.0	40.0
61.520000	30.4	120.0	V	299.0	58.2	-27.8	9.6	40.0
105.660000	16.7	100.0	V	12.0	45.1	-28.4	26.8	43.5
300.020000	21.1	100.0	V	43.0	48.2	-27.1	24.9	46.0
555.130000	12.4	195.0	H	94.0	34.2	-21.8	33.6	46.0
955.980000	17.6	100.0	H	183.0	33.9	-16.3	28.4	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor**2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)****3. Margin = Limit – Quasi-Peak**

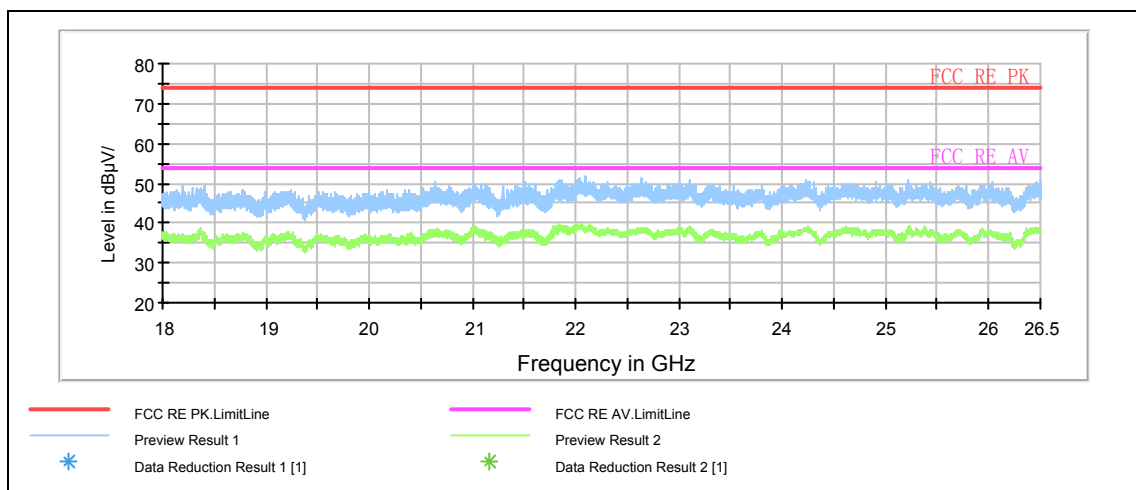


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

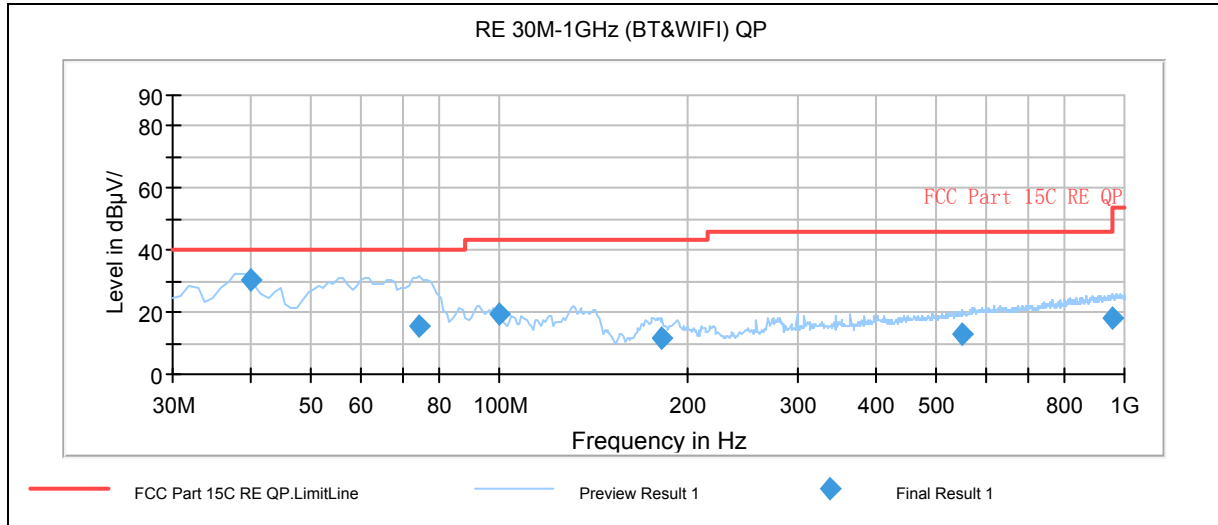


Radiates Emission from 3GHz to 18GHz



Radiates Emission from 18GHz to 26.5GHz

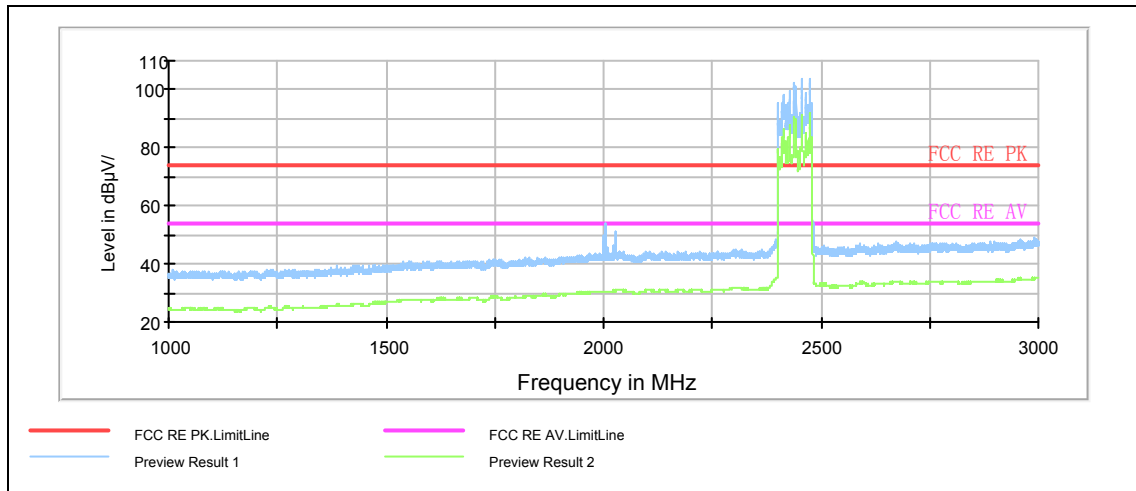
EDR-Channel 0



Radiates Emission from 30MHz to 1GHz

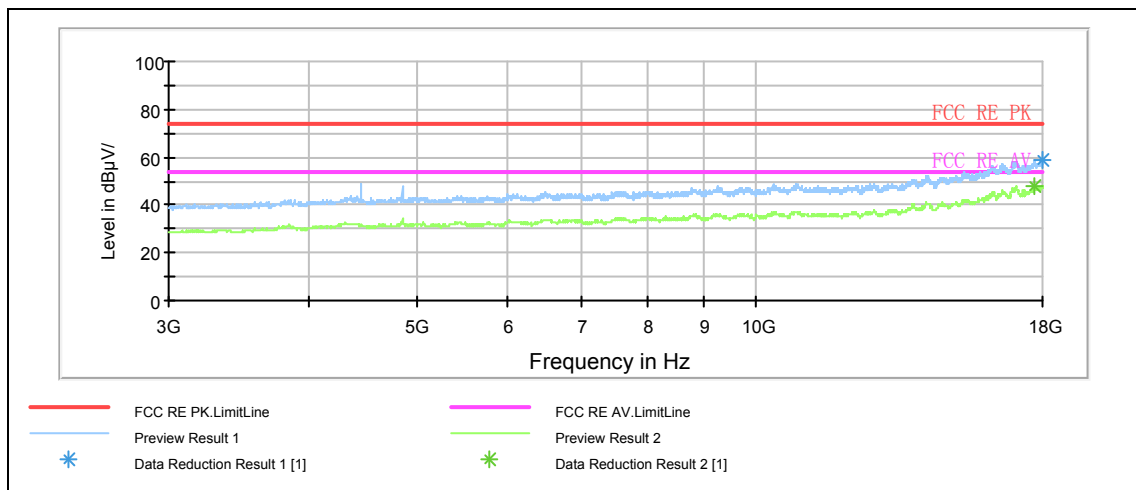
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
40.020000	30.7	120.0	V	262.0	54.7	-24.0	9.3	40.0
74.420000	15.4	200.0	V	139.0	47.4	-32.0	24.6	40.0
100.000000	19.3	100.0	V	50.0	47	-27.7	24.2	43.5
181.690000	11.6	100.0	V	242.0	42.8	-31.2	31.9	43.5
550.040000	12.9	121.0	V	203.0	34.9	-22.0	33.1	46.0
955.990000	18.2	121.0	V	223.0	34.5	-16.3	27.8	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor**2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)****3. Margin = Limit – Quasi-Peak**

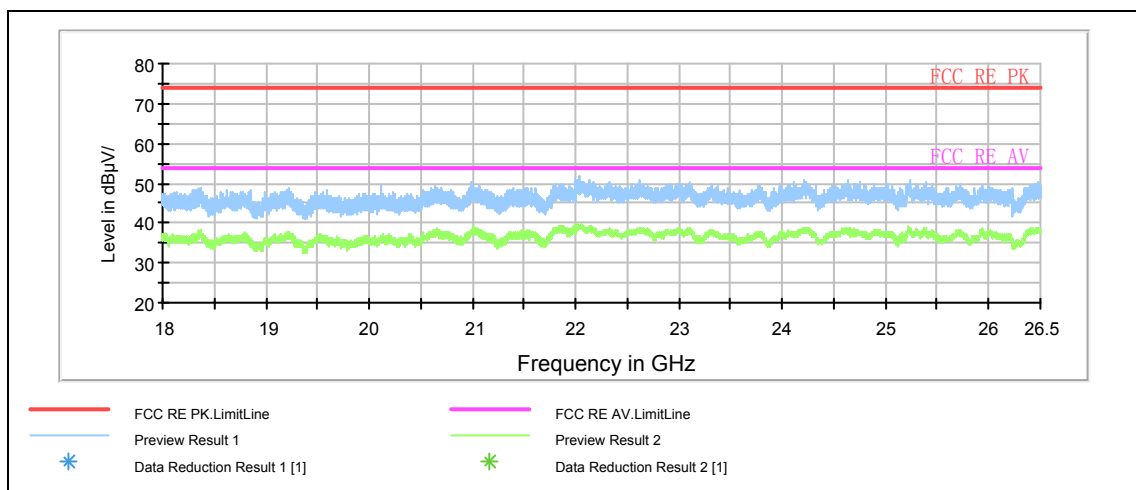


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

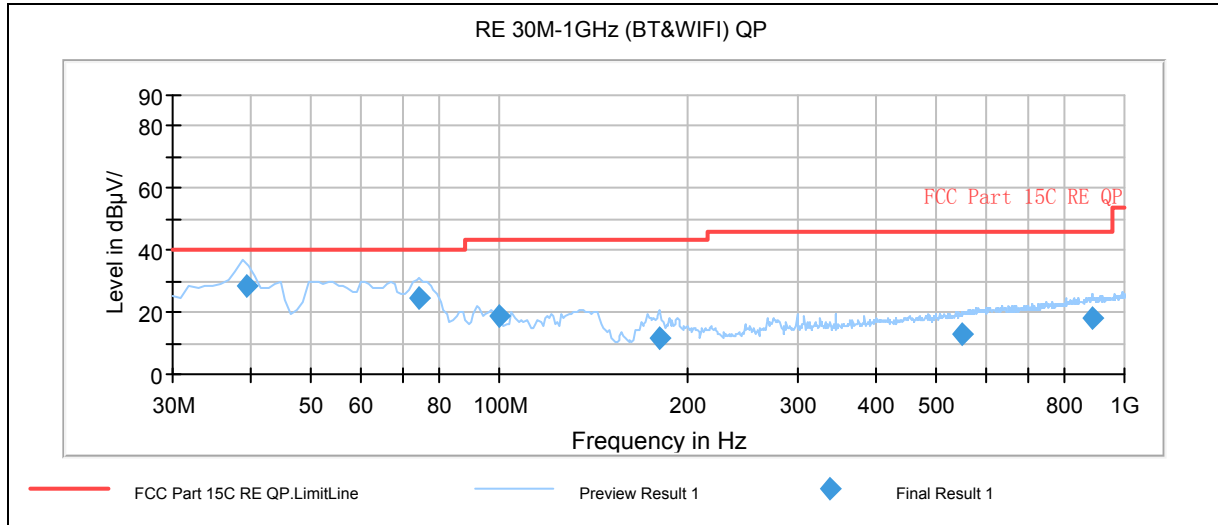


Radiates Emission from 3GHz to 18GHz



Radiates Emission from 18GHz to 26.5GHz

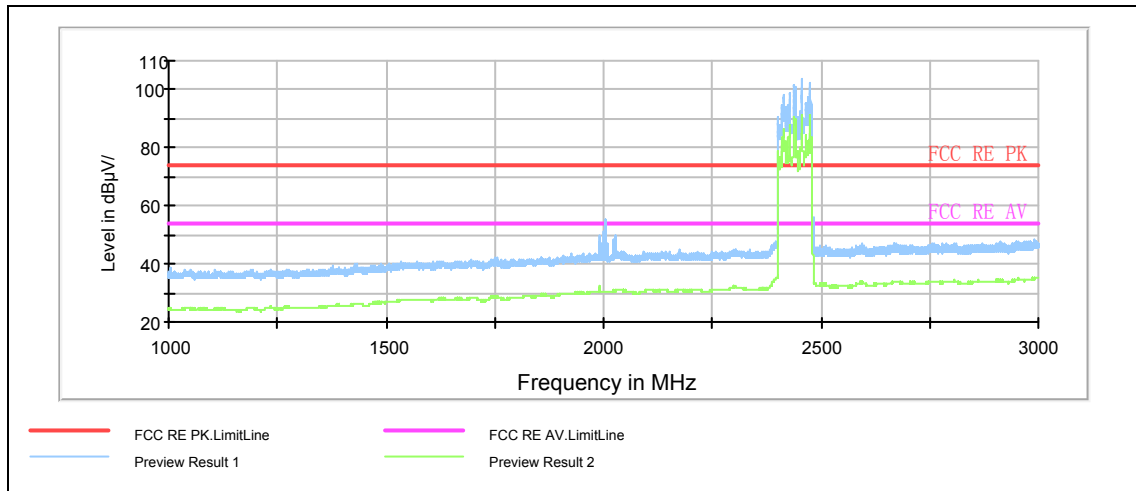
EDR-Channel 39



Radiates Emission from 30MHz to 1GHz

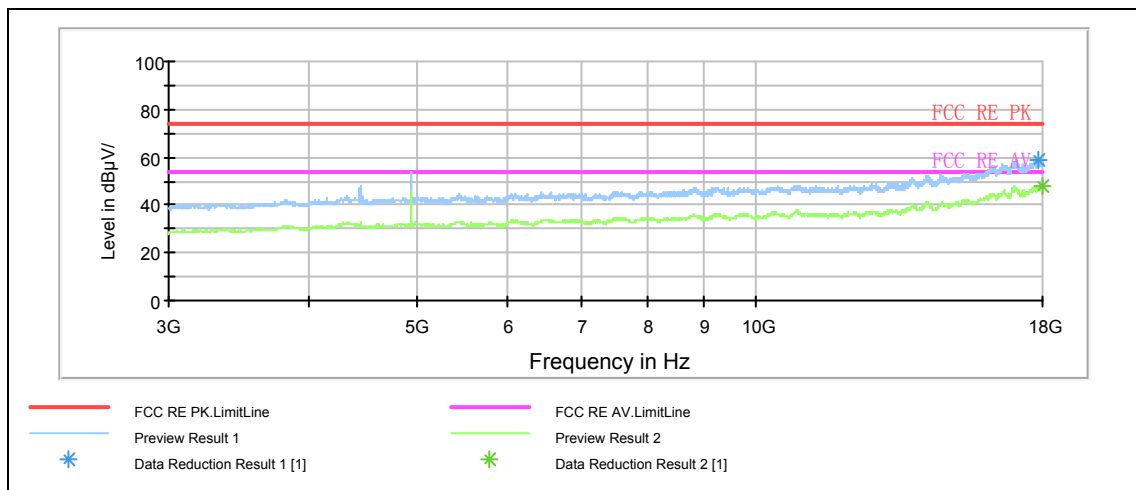
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
39.330000	28.4	121.0	V	270.0	52.5	-24.1	11.6	40.0
74.340000	24.6	100.0	V	134.0	56.6	-32.0	15.4	40.0
100.000000	18.9	100.0	V	92.0	46.6	-27.7	24.6	43.5
180.910000	11.7	100.0	V	250.0	43	-31.3	31.8	43.5
548.590000	12.8	125.0	H	268.0	34.8	-22.0	33.2	46.0
886.030000	17.9	225.0	H	287.0	34.8	-16.9	28.1	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor**2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)****3. Margin = Limit – Quasi-Peak**

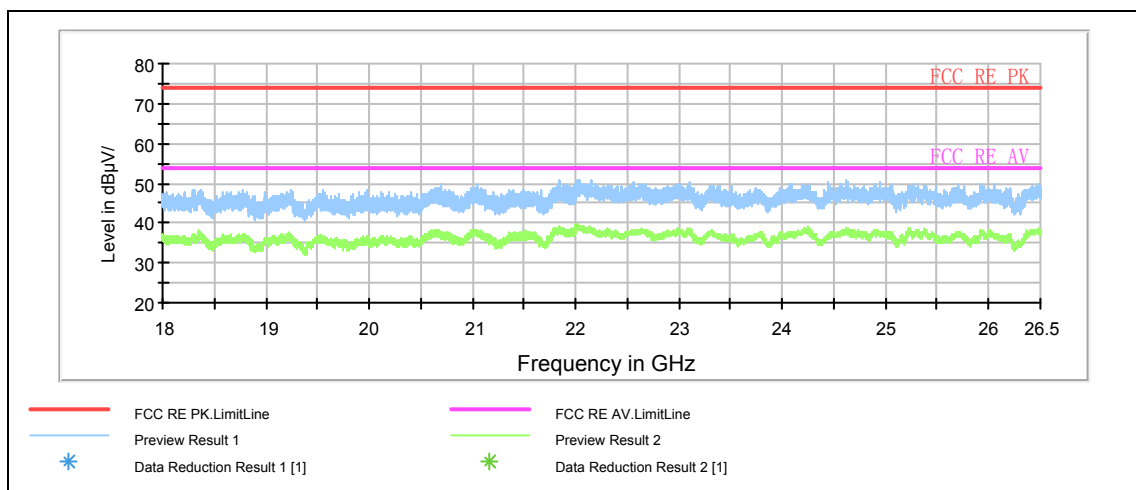


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

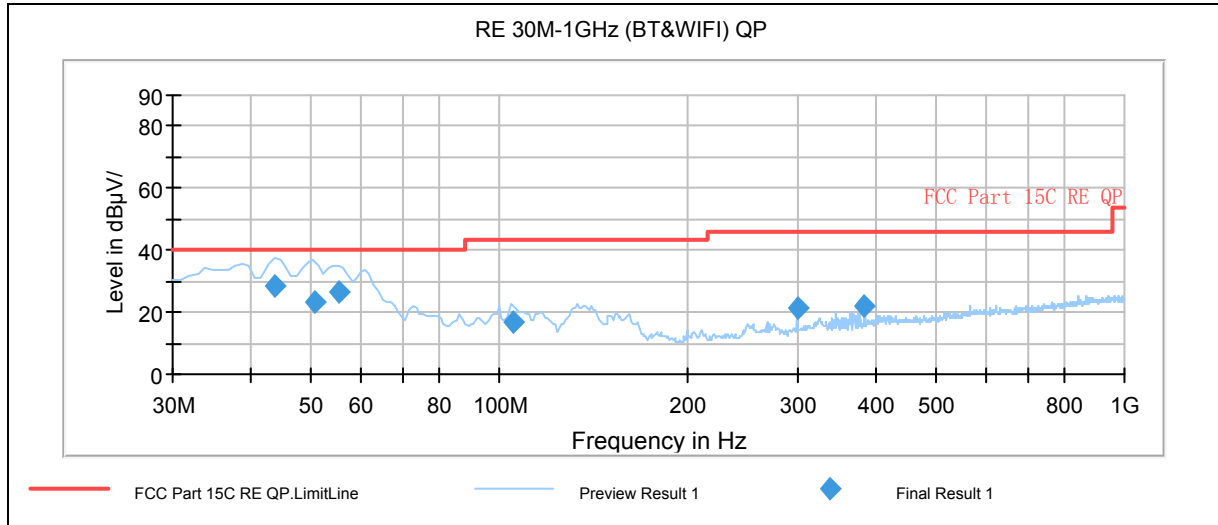


Radiates Emission from 3GHz to 18GHz



Radiates Emission from 18GHz to 26.5GHz

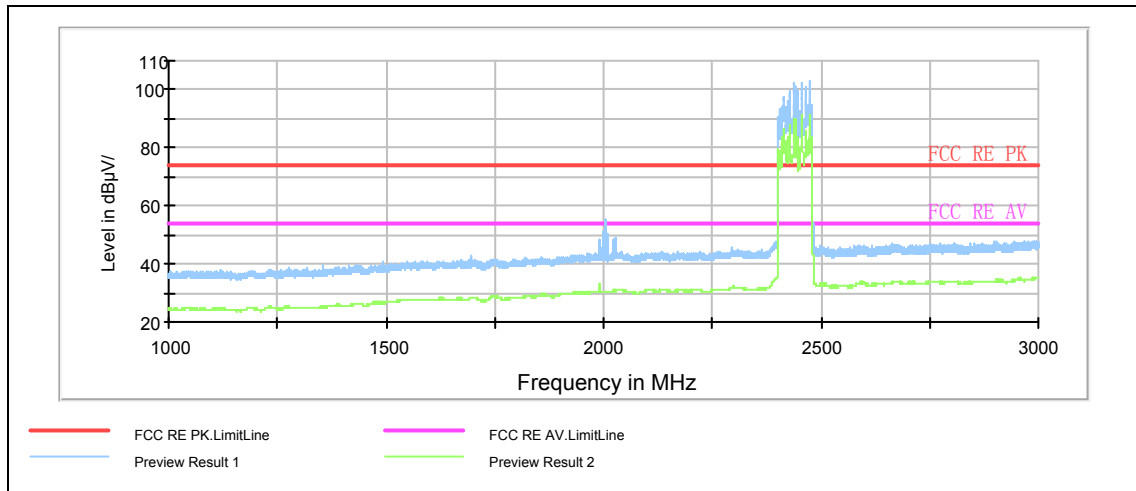
EDR-Channel 78



Radiates Emission from 30MHz to 1GHz

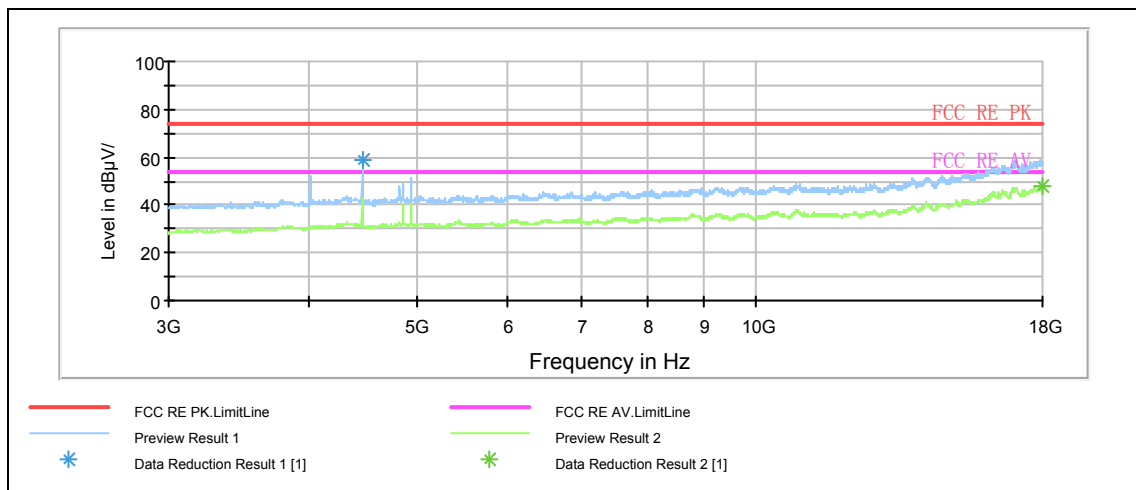
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
43.820000	28.5	100.0	V	126.0	53.1	-24.6	11.5	40.0
50.850000	23.6	100.0	V	74.0	49.3	-25.7	16.4	40.0
55.540000	26.5	225.0	V	132.0	53	-26.5	13.5	40.0
105.290000	16.6	100.0	V	5.0	44.9	-28.3	26.9	43.5
300.020000	21.3	100.0	V	37.0	48.4	-27.1	24.7	46.0
384.010000	22.2	100.0	H	144.0	47.5	-25.3	23.8	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor**2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)****3. Margin = Limit – Quasi-Peak**

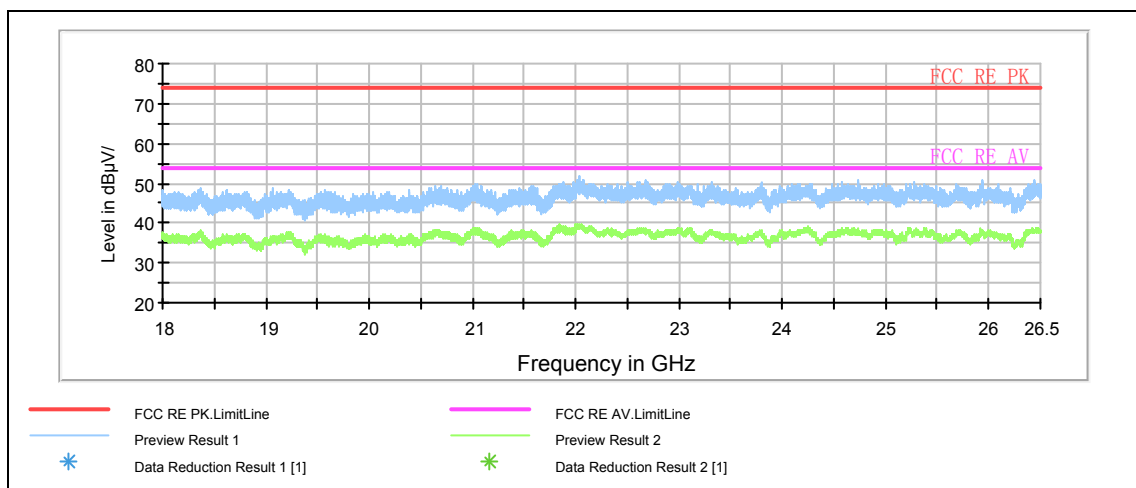


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



Radiates Emission from 3GHz to 18GHz



Radiates Emission from 18GHz to 26.5GHz

2.12. Conducted Emission

Ambient condition

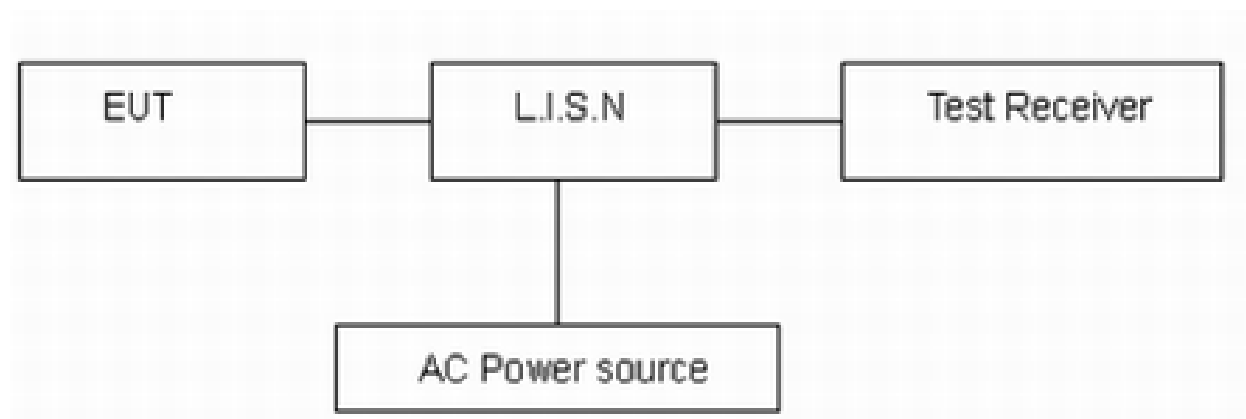
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

The EUT is placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.4-2003. Connect the AC power line of the EUT to the L.I.S.N. Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9kHz, VBW is set to 30kHz. The measurement result should include both L line and N line.

The test is in transmit mode.

Test Setup



Note: AC Power source is used to change the voltage from 220V/50Hz to 110V/60Hz.

Limits

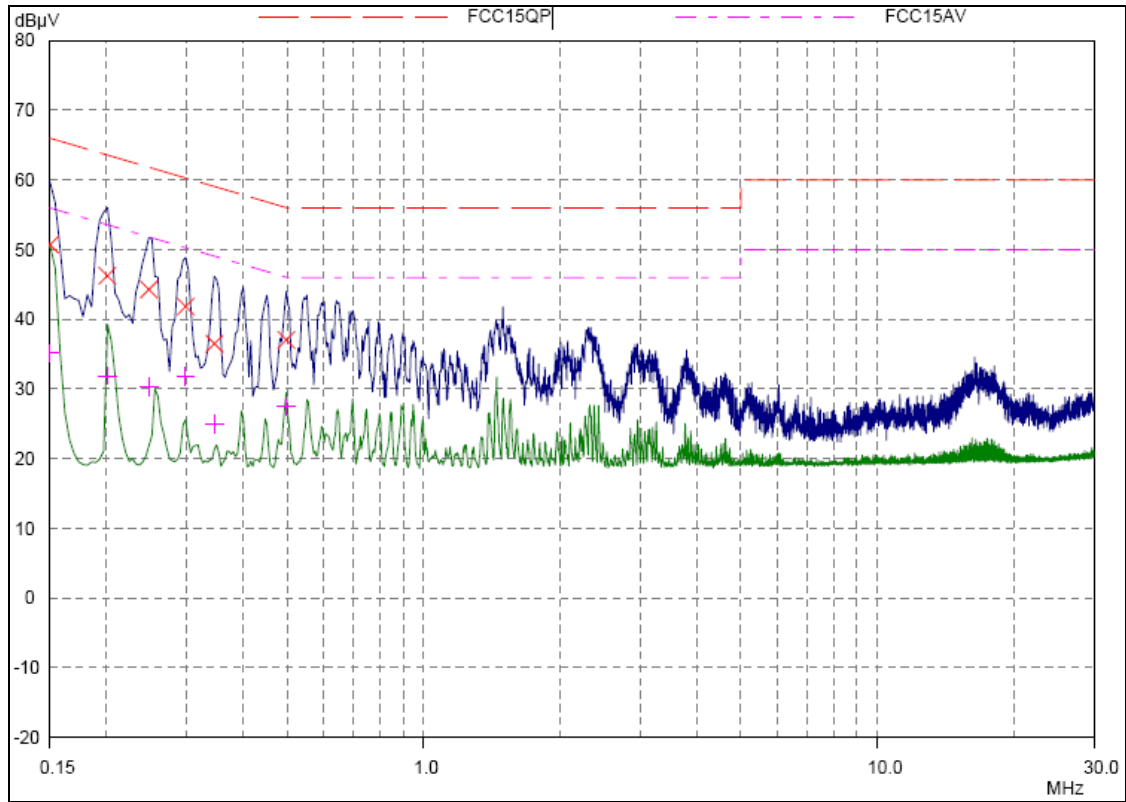
Frequency (MHz)	Conducted Limits(dB μ V)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46 *
0.5 - 5	56	46
5 - 30	60	50
*: Decreases with the logarithm of the frequency.		

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 2.69$ dB.

Test Results:

CH0

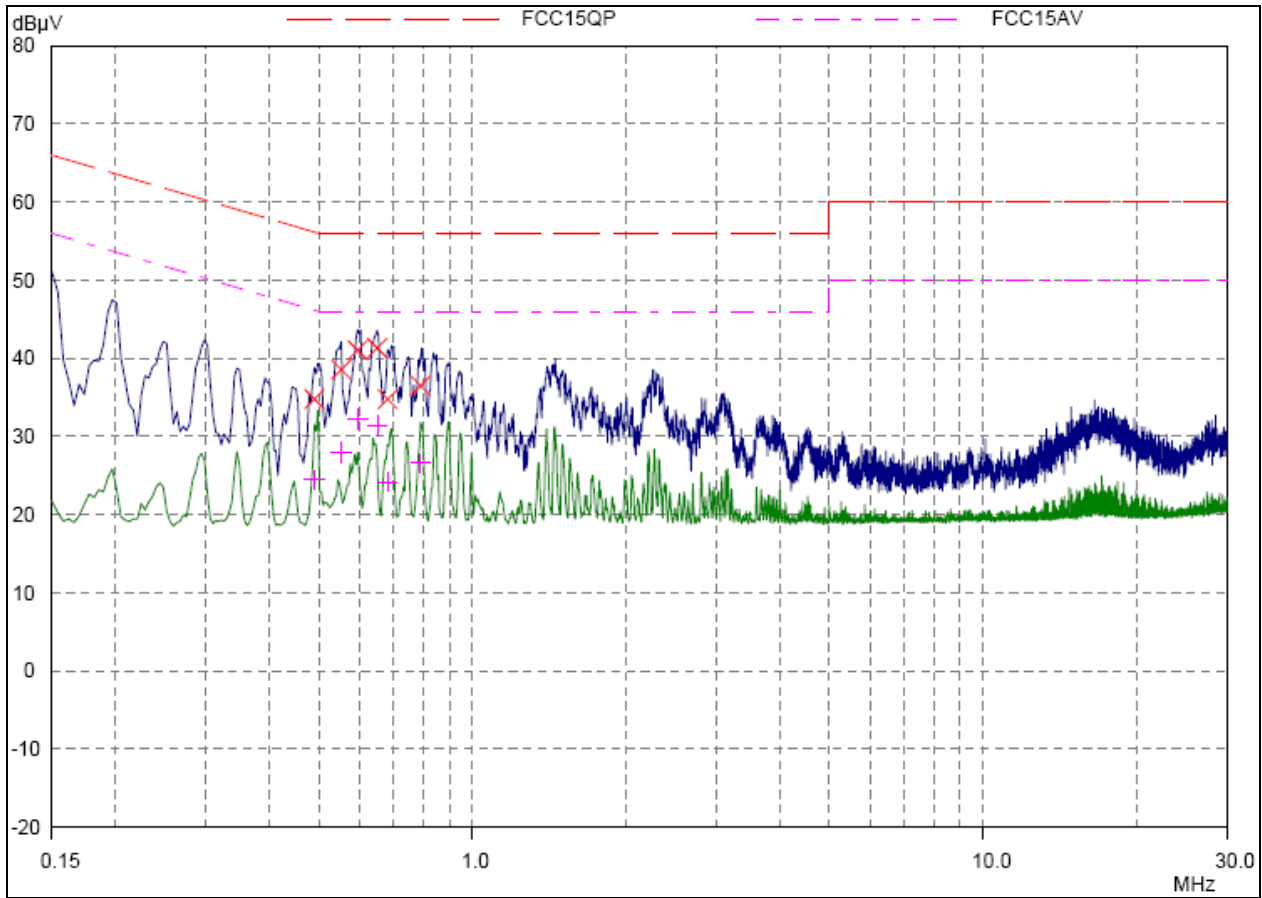


L Line

Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -
0.15	50.72	66.00	15.28	L1
0.20078	46.26	63.58	17.32	L1
0.24765	44.28	61.84	17.56	L1
0.29843	41.86	60.29	18.43	L1
0.34531	36.52	59.07	22.55	L1
0.49765	37.06	56.04	18.98	L1

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -
0.15	35.16	56.00	20.84	L1
0.20078	31.93	53.58	21.65	L1
0.24765	30.29	51.84	21.55	L1
0.29843	31.78	50.29	18.51	L1
0.34531	25.01	49.07	24.06	L1
0.49765	27.47	46.04	18.57	L1



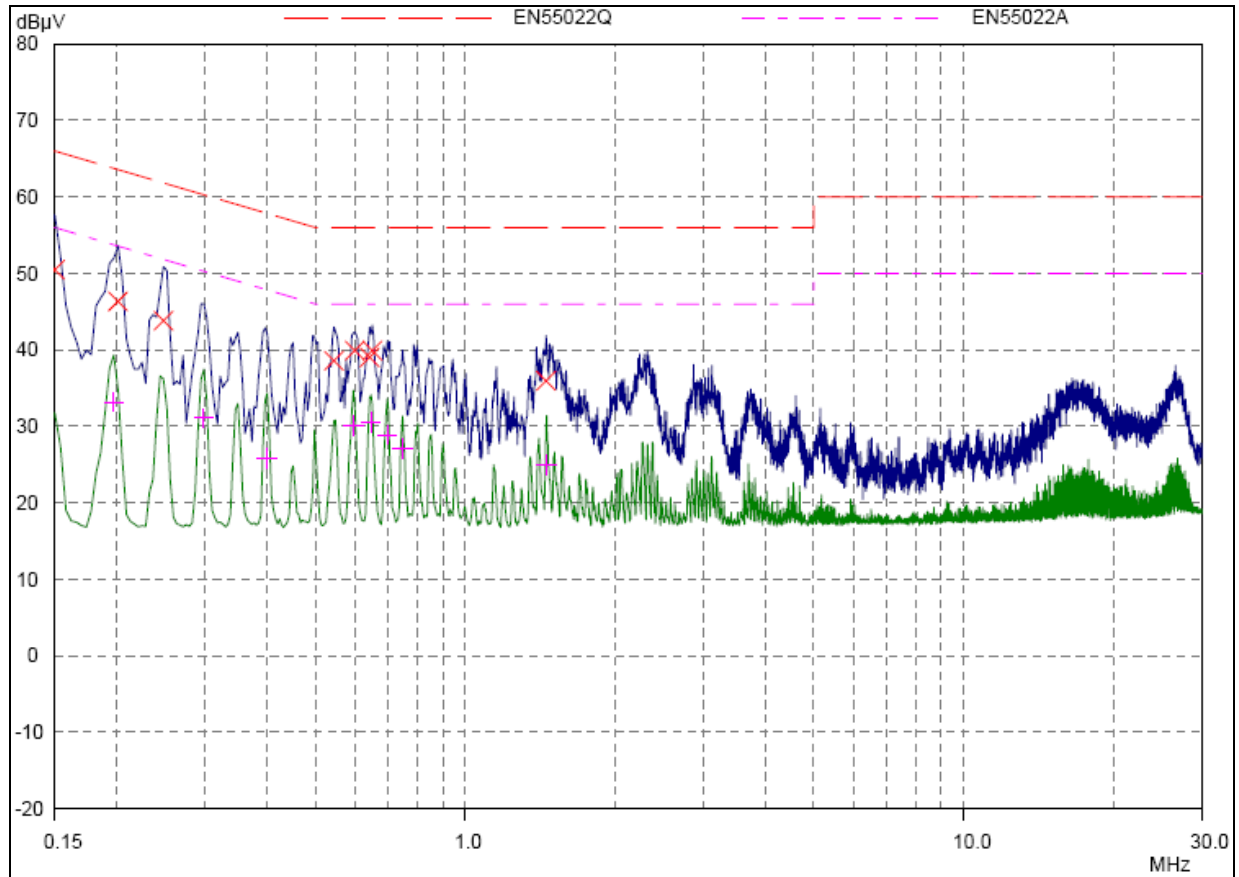
N Line

Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -
0.48984	34.80	56.17	21.37	N
0.55234	38.56	56.00	17.44	N
0.59531	41.04	56.00	14.96	N
0.65	41.32	56.00	14.68	N
0.68125	34.80	56.00	21.20	N
0.79062	36.50	56.00	19.50	N

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -
0.48984	24.44	46.17	21.73	N
0.55234	27.99	46.00	18.01	N
0.59531	32.21	46.00	13.79	N
0.65	31.41	46.00	14.59	N
0.68125	24.18	46.00	21.82	N
0.79062	26.59	46.00	19.41	N

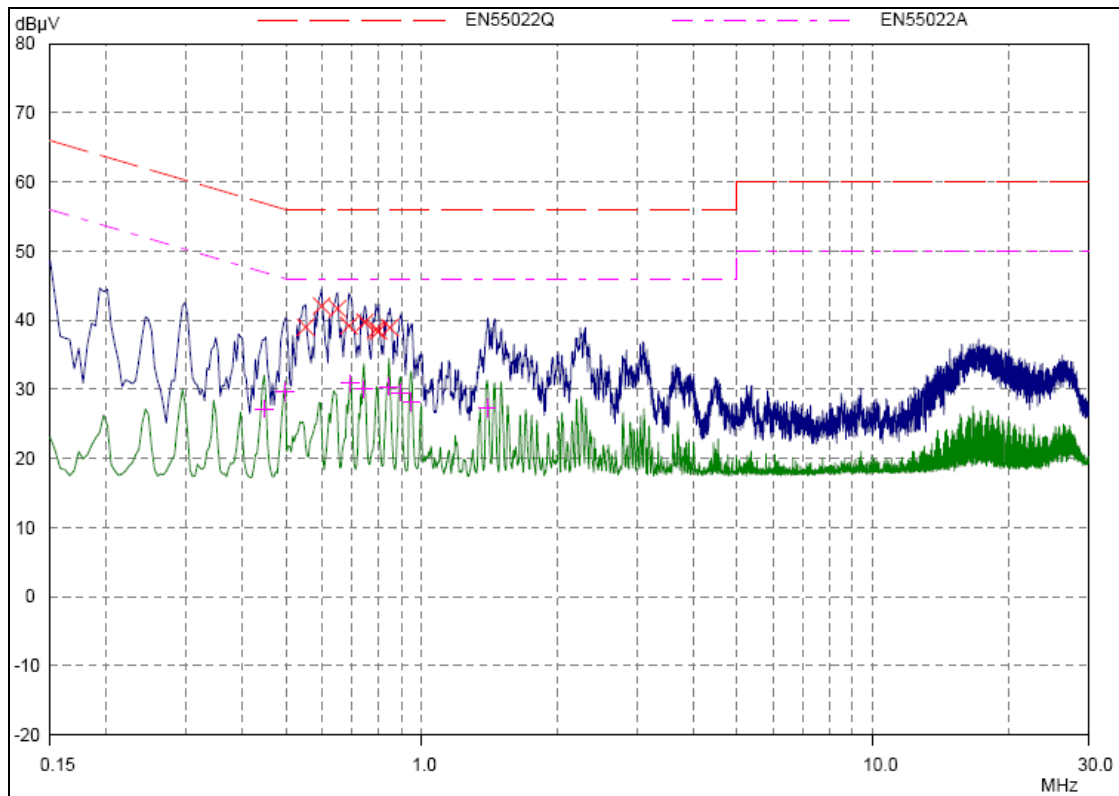
CH39



L Line

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -
0.15	50.48	66.00	15.52	L1
0.20078	46.34	63.58	17.24	L1
0.24765	43.84	61.84	18.00	L1
0.54453	38.60	56.00	17.40	L1
0.59921	39.92	56.00	16.08	L1
0.64218	39.04	56.00	16.96	L1
0.65	39.92	56.00	16.08	L1
1.45078	35.94	56.00	20.06	L1

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -
0.19687	33.18	53.74	20.56	L1
0.29843	31.11	50.29	19.18	L1
0.4	25.84	47.85	22.01	L1
0.59531	30.07	46.00	15.93	L1
0.64609	30.54	46.00	15.46	L1
0.69687	28.89	46.00	17.11	L1
0.74765	27.10	46.00	18.90	L1
1.45468	25.01	46.00	20.99	L1

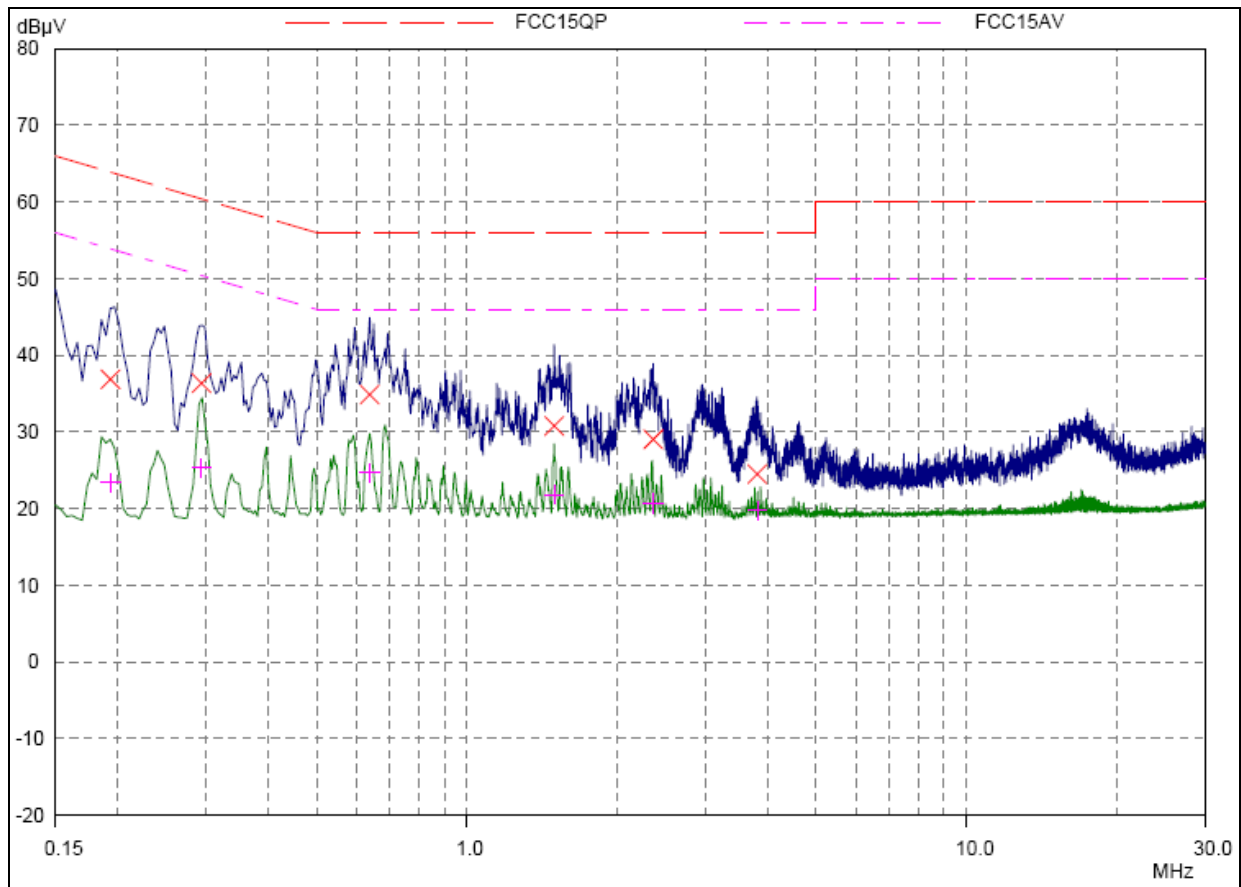


N Line

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -
0.55234	39.02	56.00	16.98	N
0.59921	42.08	56.00	13.92	N
0.65	41.68	56.00	14.32	N
0.68906	39.20	56.00	16.80	N
0.74765	39.72	56.00	16.28	N
0.79062	38.64	56.00	17.36	N
0.80234	38.46	56.00	17.54	N
0.84921	38.94	56.00	17.06	N

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -
0.44687	27.23	46.93	19.70	N
0.49765	29.71	46.04	16.33	N
0.69296	30.87	46.00	15.13	N
0.74375	30.03	46.00	15.97	N
0.84531	30.37	46.00	15.63	N
0.89609	29.57	46.00	16.43	N
0.94687	28.15	46.00	17.85	N
1.39609	27.35	46.00	18.65	N

CH78

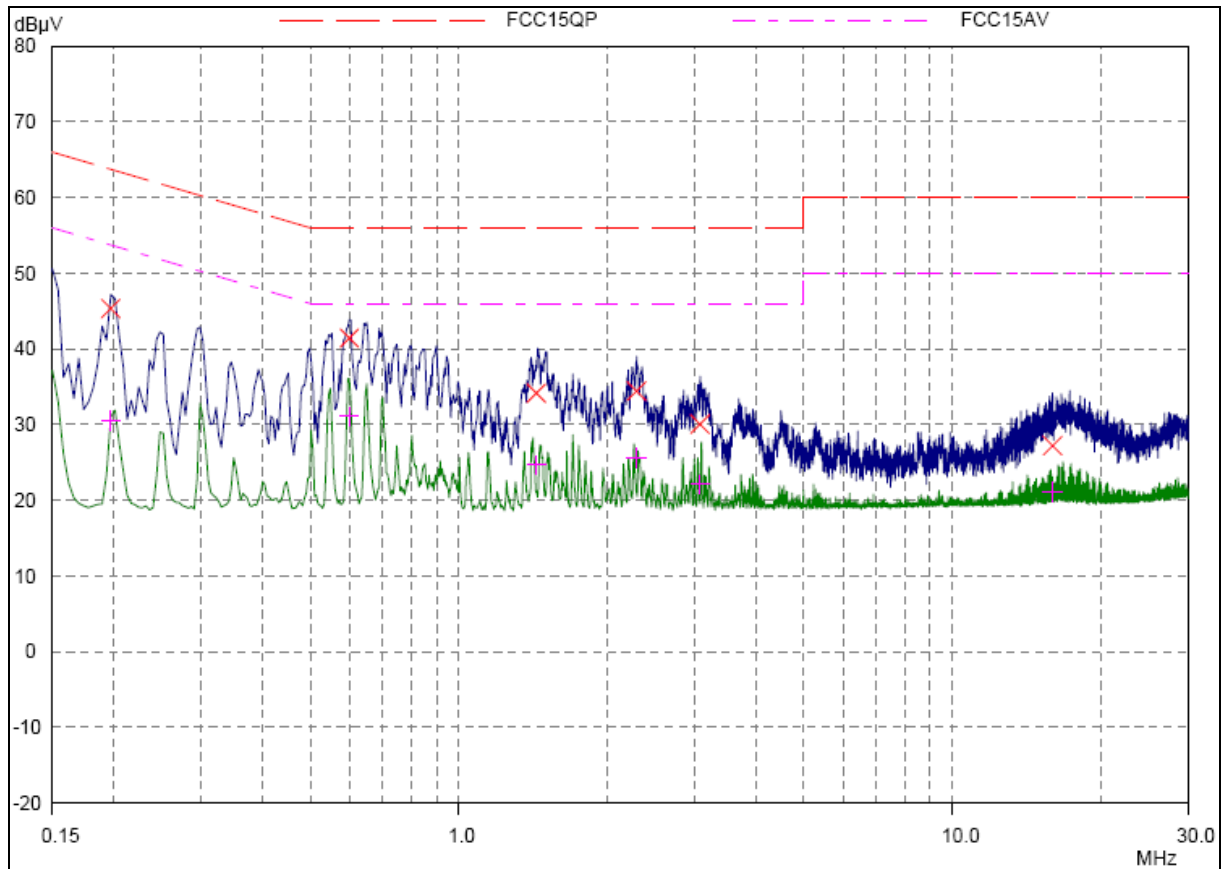


L Line

Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -
0.19296	36.90	63.91	27.01	L1
0.294	36.36	60.41	24.05	L1
0.638	34.88	56.00	21.12	L1
1.493	30.80	56.00	25.20	L1
2.357	29.05	56.00	26.95	L1
3.81	24.53	56.00	31.47	L1

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -
0.19296	23.41	53.91	30.50	L1
0.294	25.32	50.41	25.09	L1
0.638	24.69	46.00	21.31	L1
1.493	21.85	46.00	24.15	L1
2.357	20.69	46.00	25.31	L1
3.81	19.77	46.00	26.23	L1



N Line

Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -
0.1968	45.34	63.74	18.40	N
0.5992	41.44	56.00	14.56	N
1.4351	34.16	56.00	21.84	N
2.29	34.44	56.00	21.56	N
3.079	30.06	56.00	25.94	N
15.96	27.23	60.00	32.77	N

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -
0.1968	30.54	53.74	23.20	N
0.5992	31.11	46.00	14.89	N
1.4351	24.69	46.00	21.31	N
2.29	25.58	46.00	20.42	N
3.079	22.13	46.00	23.87	N
15.96	21.18	50.00	28.82	N

TA Technology (Shanghai) Co., Ltd.**Test Report**

Registration Num:428261

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3. Main Test Instruments

No.	Name	Type	Manufacturer	Serial Number	Calibration Date	Valid Period
01	BT Base Station Simulator	CBT	R&S	100271	2010-11-25	One year
02	EMI Test Receiver	ESCS30	R&S	100138	2011-01-17	One year
03	LISN	ENV216	R&S	101171	2010-04-16	Two years
04	EMI Test Receiver	ESCI	R&S	100948	2011-06-30	One year
05	TRILOG Broadband Antenna	VULB 9163	Schwarzbeck	391	2011-05-14	Two years
06	Double Ridged Waveguide Horn Antenna	HF907	R&S	100126	2011-07-01	Two years
07	Horn Antenna	3160-09	ETS	00102643	2011-05-20	Two years
08	PSG Analog Signal Generator	E8257D	Agilent	MY49281101	2011-06-29	One year
09	ESG Vector Signal Generator	E4438C	Agilent	MY49070900	2011-07-01	One year
10	Spectrum Analyzer	E4445A	Agilent	MY46181146	2011-06-07	One year
11	Power Splitter	SHX-GF2-2-13	Hua Xiang	10120101	NA	NA
12	MOB COMMS DC SUPPLY	66319D	Agilent	MY43004105	2011-06-30	One year
13	Power Sensor	E9304A	Agilent	MY50220022	2011-06-01	One year
14	Power Meter	E4418B	Agilent	MY50000623	2011-06-07	One year
15	Vibration table	ESS-050-120	dongling	D1007126	2010-08-23	Three years
16	Universal Radio Communication Tester	E5515C	Agilent	MY48367192	2011-06-04	One year

*****END OF REPORT BODY*****

ANNEX A: EUT Appearance and Test Setup

A.1 EUT Appearance



a: EUT



b: Battery

Picture 1 EUT

TA Technology (Shanghai) Co., Ltd.
Test Report

Registration Num:428261

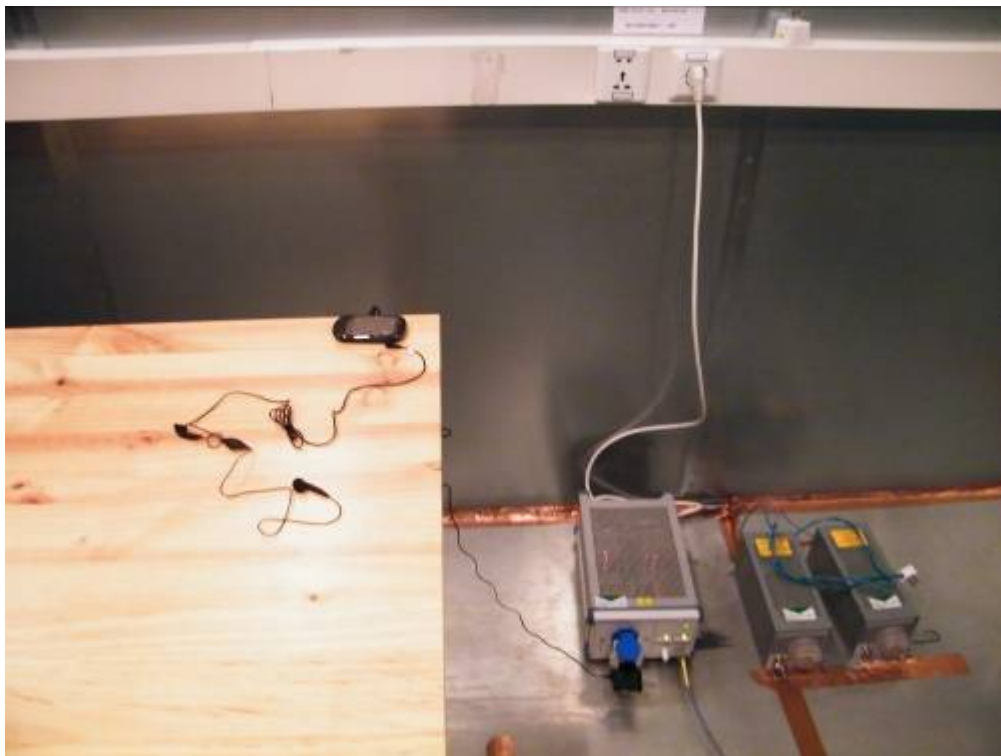
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A.2 Test Setup



Picture 2 Radiated Emission Test Setup



Picture 3 Conducted Emission Test Setup