FCC Test Report

Report No.: AGC01576150601FE03

FCC ID	:	Z7RBFU
APPLICATION PURPOSE	:	Original Equipment
PRODUCT DESIGNATION	:	FUSE
BRAND NAME	:	N/A
MODEL NAME	:	BFUSEBA
CLIENT	:	Braven LC
DATE OF ISSUE	:	June 27,2015
STANDARD(S)	:	FCC Part 15 Rules
REPORT VERSION	:	V1.0

Attestation of ***G***lobal ***C***ompliance (Shenzhen) Co., Ltd

Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	June 27,2015	Valid	Original Report

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1. VERIFICATION OF CONFORMITY

Applicant	Braven LC
Address	5255 N Edgewood, Suite 275Provo, UT 84604, USA
Manufacturer	Cyber Blue（HK）Limited
Address	Rm 703, 7/F, Fook Lee Commercial Centre Town Place, 33 Lockhart Road, Wanchai. HongKong
Product Designation	FUSE
Brand Name	N/A
Test Model	BFUSEBA
Date of test	June 24,2015&June 26,2015
Deviation	None
Condition of Test Sample	Normal
Report Template	AGCRT-US-BR/RF (2013-03-01)

We hereby certify that:
The above equipment was tested by Compliance Certification Service(Shenzhen) Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 (2009) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rules Part 15.247.

Prepared By	Time Huang	
	Time Huang	June 27,2015
Checked By	Forrest Lei	
	Forrest Lei	June 27,2015
Authorized By	Solger Zhang	
	Solger Zhang	June 27,2015

2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

The EUT is “FUSE” designed as a “Communication Device”. It is designed by way of utilizing the FHSS technology to achieve the system operation.

A major technical description of EUT is described as following

Operation Frequency	2.402 GHz to 2.480GHz
RF Output Power	3.31dBm(Max)
Bluetooth Version	V 4.0
Modulation	GFSK, π /4-DQPSK, 8DPSK
Number of channels	79
Hardware Version	BFUSEBA
Software Version	BFUSEBA
Antenna Designation	PCB Antenna
Antenna Gain	2dBi
Power Supply	DC3.7V by Battery
Note: The USB port only used for charging and can’t be used to transfer data with PC.	

2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency
2402~2480MHZ	0	2402MHZ
	1	2403MHZ
	:	:
	38	2440 MHZ
	39	2441 MHZ
	40	2442 MHZ
	:	:
	77	2479 MHZ
	78	2480 MHZ

2.3. RECEIVER INPUT BANDWIDTH

The input bandwidth of the receiver is 1.3MHZ,In every connection one Bluetooth device is the master and the other one is slave. The master determines the hopping sequence. The slave follows this sequence. Both devices shift between RX and TX time slot according to the clock of the master. Additionally the type of connection(e.g. single of multislot packet) is set up at the beginning of the connection. The master adapts its hopping frequency and its TX/RX timing according to the packet type of the connection. Also the slave of the connection will use these settings.

Repeating of a packet has no influence on the hopping sequence. The hopping sequence generated by the master of the connection will be followed in any case. That means, a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.

2.4. EXAMPLE OF A HOPPING SEQUENCY IN DATA MODE

Example of a 79 hopping sequence in data mode:
40,21,44,23,42,53,46,55,48,33,52,35,50,65,54,67
56,37,60,39,58,69,62,71,64,25,68,27,66,57,70,59
72,29,76,31,74,61,78,63,01,41,05,43,03,73,07,75
09,45,13,47,11,77,15,00,64,49,66,53,68,02,70,06
01, 51, 03, 55, 05, 04

2.5. EQUALLY AVERAGE USE OF FREQUENCIES AND BEHAVIOUR

The generation of the hopping sequence in connection mode depends essentially on two input values:
1. LAP/UAP of the master of the connection.
2. Internal master clock

The LAP(lower address part) are the 24 LSB's of the 48 BD_ADDRESS. The BD_ADDRESS is an unambiguous number of every Bluetooth unit. The UAP(upper address part) are the 24MSB's of the 48BD_ADDRESS

The internal clock of a Bluetooth unit is derived from a free running clock which is never adjusted and is never turned off. For ehavior zation with other units only offset are used. It has no relation to the time of the day. Its resolution is at least half the RX/TX slot length of 312.5us.The clock has a cycle of about one day(23h30).In most case it is implemented as 28 bit counter. For the deriving of the hopping sequence the entire. LAP(24 bits),4LSB's(4bits)(Input 1) and the 27MSB's of the clock(Input 2) are used. With this input values different mathematical procedures(permutations, additions, XOR-operations)are performed to generate te Sequence. This will be done at the beginning of every new transmission.

Regarding short transmissions the Bluetooth system has the following ehavior:

The first connection between the two devices is established, a hopping sequence was generated. For Transmitting the wanted data the complete hopping sequence was not used. The connection ended.

The second connection will be established. A new hopping sequence is generated. Due to the fact the Bluetooth clock has a different value, because the period between the two transmission is longer(and it Cannot be shorter) than the minimum resolution of the clock(312.5us).The hopping sequence will always Differ from the first one.

2.6. RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID: Z7RBFU** filing to comply with Section 15.247 of the FCC Part 15, Subpart C Rules.

2.7. TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in ANSI C63.4 (2009).
Radiated testing was performed at an antenna to EUT distance 3 meters.
Test has been referenced to the DA 00-705

2.8. SPECIAL ACCESSORIES

Refer to section 5.2.

2.9. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

3. MEASUREMENT UNCERTAINTY

Conducted measurement: +/- 2.75dB

Radiated measurement: +/- 3.2dB

4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Low channel TX
2	Middle channel TX
3	High channel TX
4	Normal Operating (BT)

Note:

1. Only the result of the worst case was recorded in the report, if no other cases.

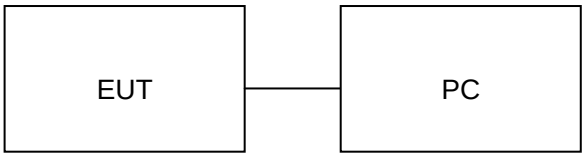
2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.

3 Normal Operating mode including four Bluetooth modules working at the same time.

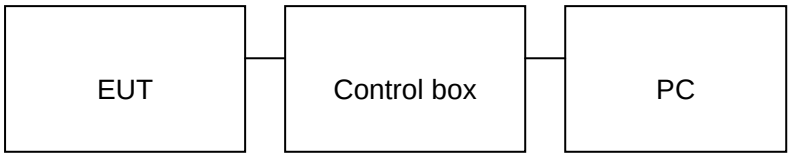
5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Configure 1: (Normal hopping)



Configure 2: (Control continuous TX)



5.2. EQUIPMENT USED IN EUT SYSTEM

Item	Equipment	Mfr/Brand	Model/Type No.	Remark
1	FUSE	N/A	BFUSEBA	EUT
2	Control box	N/A	N/A	A.E
3	PC	APPLE	A1465	A.E
4	IPOD	APPLE	A1367	A.E
5	PHONE	HUAWEI	P7	A.E
6	USB Cable 1	N/A	1.2m, unshielded	A.E
7	USB Cable 2	N/A	1.2m, unshielded	A.E
8	Audio Cable 1	N/A	0.5m, unshielded	A.E
9	Audio Cable 2	N/A	1m, unshielded	A.E
10	Earphone 1	plum	A13	A.E
11	Earphone 2	N/A	S1	A.E

5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.247	Peak Output Power	Compliant
§15.247	20 dB Bandwidth	Compliant
§15.247	Spurious Emission	Compliant
§15.209	Radiated Emission	Compliant
§15.247	Band Edges	Compliant
§15.207	Conduction Emission	Compliant
§15.247	Number of Hopping Frequency	Compliant
§15.247	Time of Occupancy	Compliant
§15.247	Frequency Separation	Compliant

6. TEST FACILITY

Site	Compliance Certification Service(Shenzhen) Inc.
Location	No.10-1 Mingkeda Logistics Park, No.18 Huanguan South RD. Guan lan Town,Baoan Distr
FCC Registration No.	441872
Description	The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2009.

ALL TEST EQUIPMENT LIST

Radiated Emission Test Site 966(2)					
Name of Equipment	**Manufacturer**	**Model Number**	**Serial Number**	**Last Calibration**	**Due Calibration**
PSA Series Spectrum Analyzer	Agilent	E4446A	US44300399	03/01/2015	03/01/2016
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100783	03/09/2015	03/08/2016
Amplifier	MITEQ	AM-1604-3000	1123808	03/18/2015	03/17/2016
High Noise Amplifier	Agilent	8449B	3008A01838	03/18/2015	03/17/2016
Board-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170-497	07/10/2014	07/09/2015
Bilog Antenna	SCHAFFNER	CBL6143	5082	03/01/2015	03/01/2016
Horn Antenna	SCHWARZBECK	BBHA9120	D286	03/01/2015	03/01/2016
Loop Antenna	COM-POWER	AL-130	121044	09/27/2014	09/26/2015
Turn Table	N/A	N/A	N/A	N.C.R	N.C.R
Controller	Sunol Sciences	SC104V	022310-1	N.C.R	N.C.R
Controller	CT	N/A	N/A	N.C.R	N.C.R
Temp. / Humidity Meter	Anymetre	JR913	N/A	02/28/2015	02/27/2016
Antenna Tower	SUNOL	TLT2	N/A	N.C.R	N.C.R
Test S/W	FARAD	LZ-RF / CCS-SZ-3A2			

Conducted Emission Test Site					
Name of Equipment	**Manufacturer**	**Model Number**	**Serial Number**	**Last Calibration**	**Due Calibration**
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100783	03/09/2015	03/08/2016
LISN(EUT)	ROHDE&SCHWARZ	ENV216	101543-WX	03/09/2015	03/08/2016
LISN	EMCO	3825/2	8901-1459	03/09/2015	03/08/2016
Temp. / Humidity Meter	VICTOR	HTC-1	N/A	03/04/2015	03/03/2016
Test S/W	FARAD	EZ-EMC/ CCS-3A1-CE			

7. PEAK OUTPUT POWER

7.1. MEASUREMENT PROCEDURE

For peak power test:

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on the top, middle and the bottom operation frequency individually.
3. RBW > the 20 dB bandwidth of the emission being measured, VBW ≥ RBW.
4. Record the maximum power from the Spectrum Analyzer.

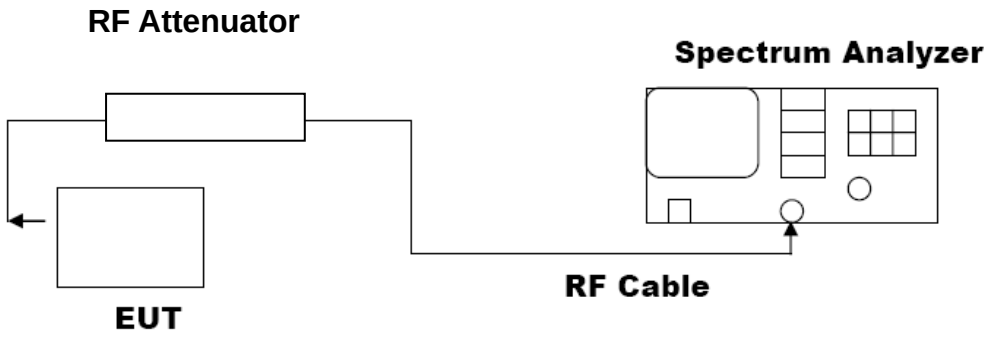
For average power test:

1. Connect EUT RF output port to power probe through an RF attenuator.
2. Connect the power probe to the PC.
3. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
4. Record the maximum power from the software.
5. The maximum peak power shall be less 125mW (21dBm).

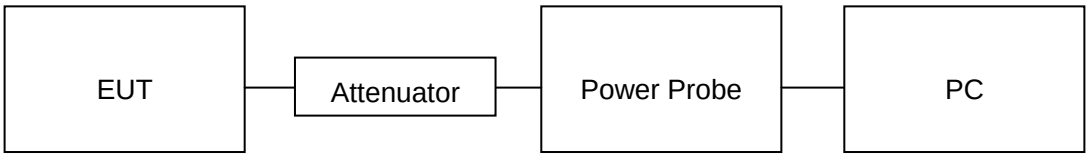
Note：The EUT was tested according to DA000705 for compliance to FCC 47CFR 15.247 requirements.

7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

PEAK POWER TEST SETUP



AVERAGE POWER SETUP

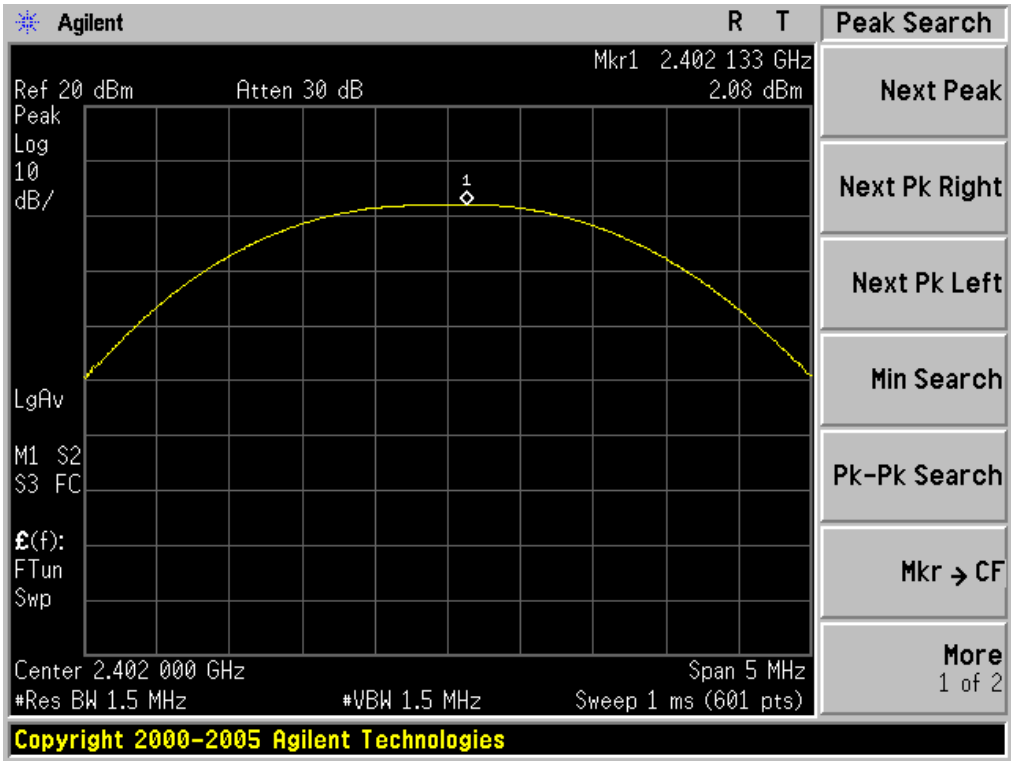


7.3. LIMITS AND MEASUREMENT RESULT

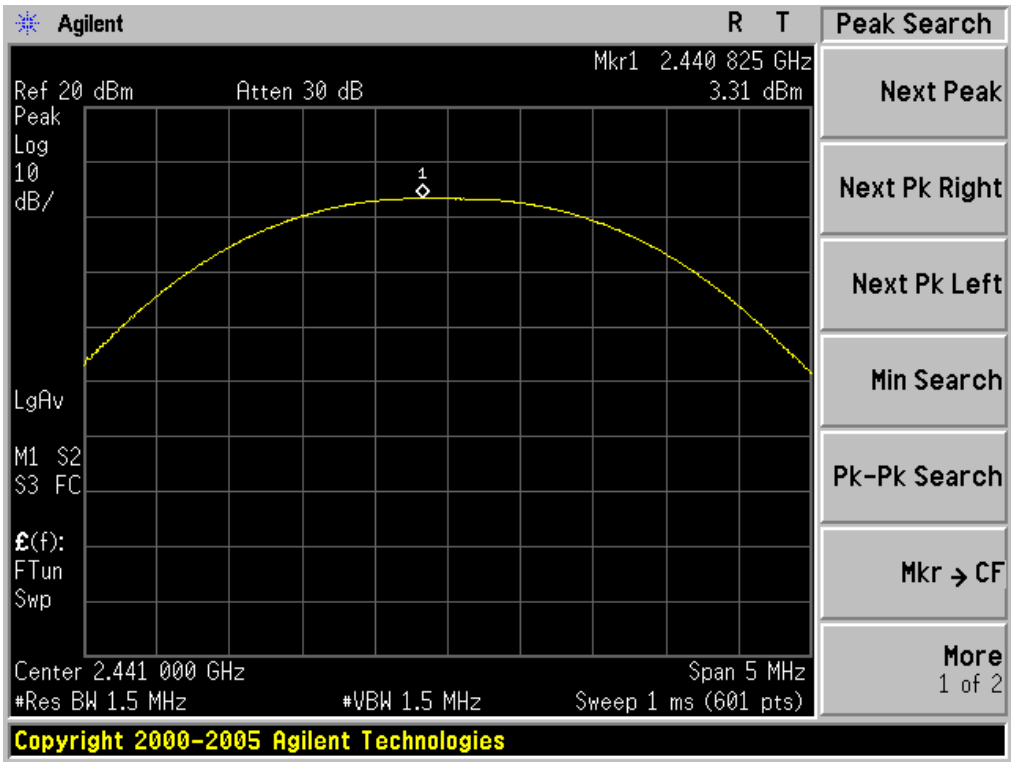
For CSR 1

PEAK OUTPUT POWER MEASUREMENT RESULT FOR GFSK MOUDULATION				
Frequency (GHz)	**Average Power (dBm)**	**Peak Power (dBm)**	**Applicable Limits (dBm)**	**Pass or Fail**
2.402	0.16	2.08	21	Pass
2.441	1.36	3.31	21	Pass
2.480	1.31	3.27	21	Pass

CH0



CH39


Agilent
R T
Peak Search
Mkr1 2.440 825 GHz
Ref 20 dBm
Atten 30 dB
3.31 dBm
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.441 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
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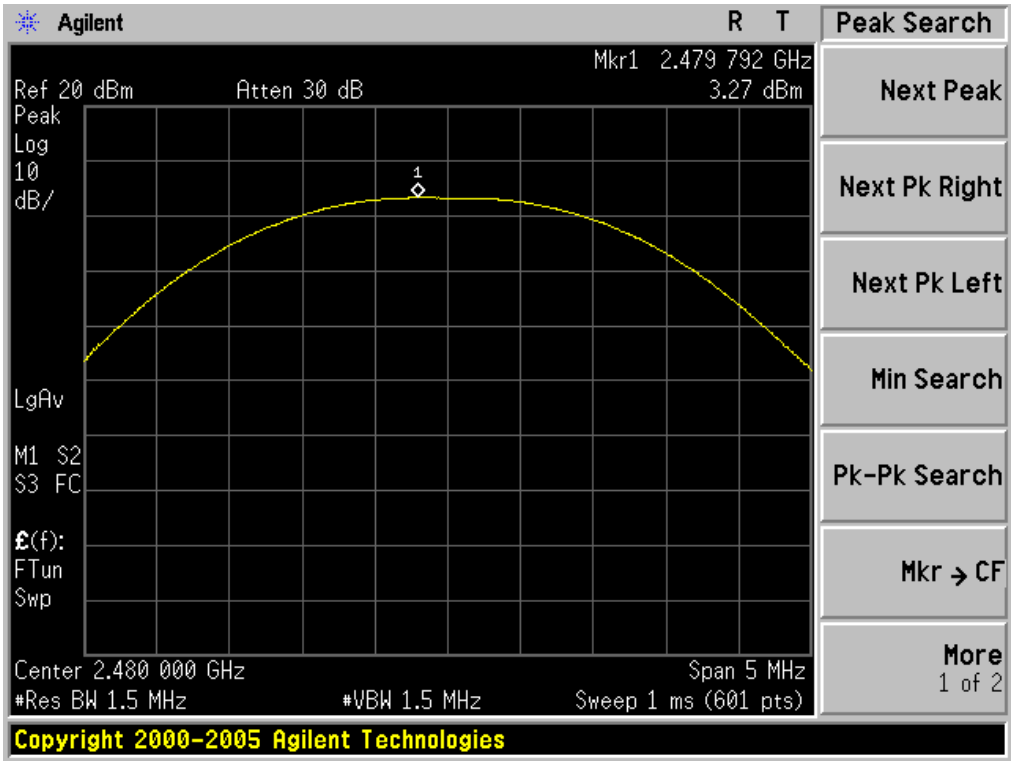
CH78


Agilent
R T
Peak Search
Mkr1 2.479 792 GHz
Ref 20 dBm
Atten 30 dB
3.27 dBm
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.480 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
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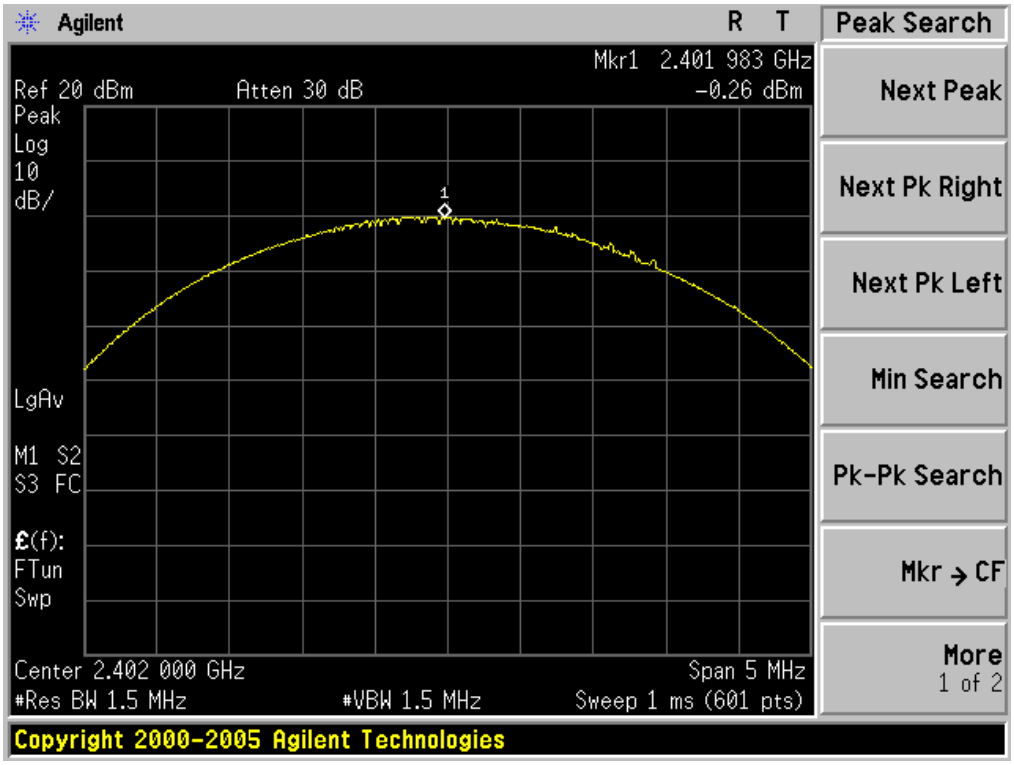
PEAK OUTPUT POWER MEASUREMENT RESULT FOR Π /4-DQPSK MODULATION				
Frequency (GHz)	**Average Power (dBm)**	**Peak Power (dBm)**	**Applicable Limits (dBm)**	**Pass or Fail**
2.402	-2.11	-0.26	21	Pass
2.441	0.38	2.32	21	Pass
2.480	0.46	2.42	21	Pass

CH0



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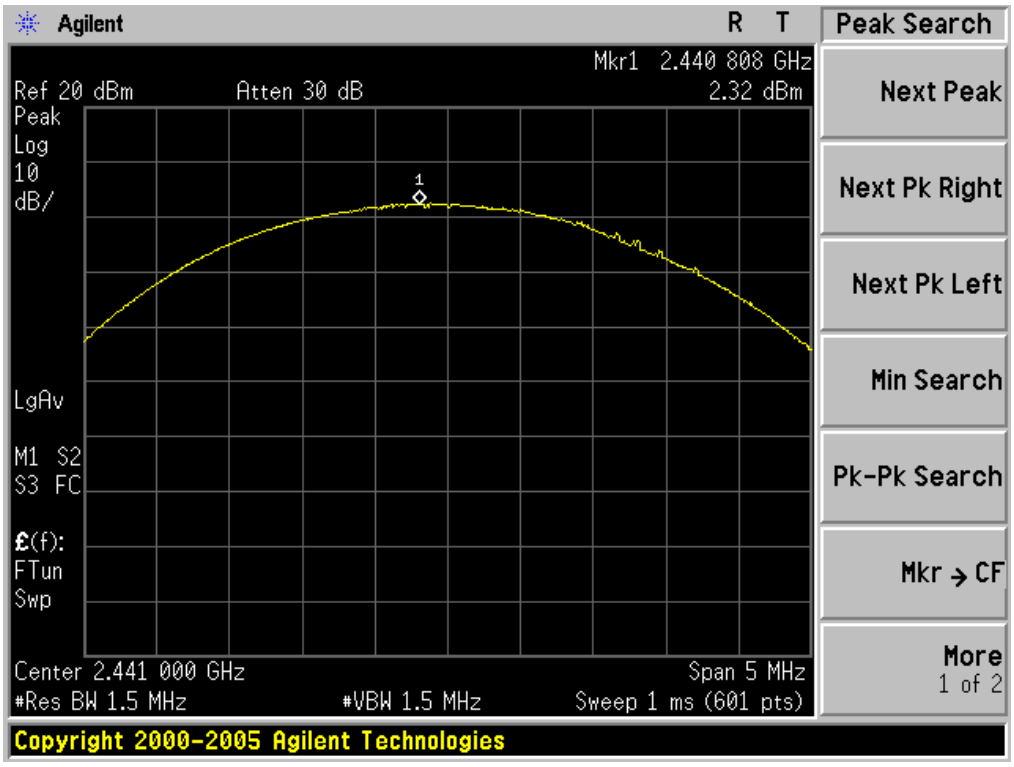
Agilent
R T
Peak Search
Mkr1 2.440 808 GHz
Ref 20 dBm
Atten 30 dB
2.32 dBm
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.441 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
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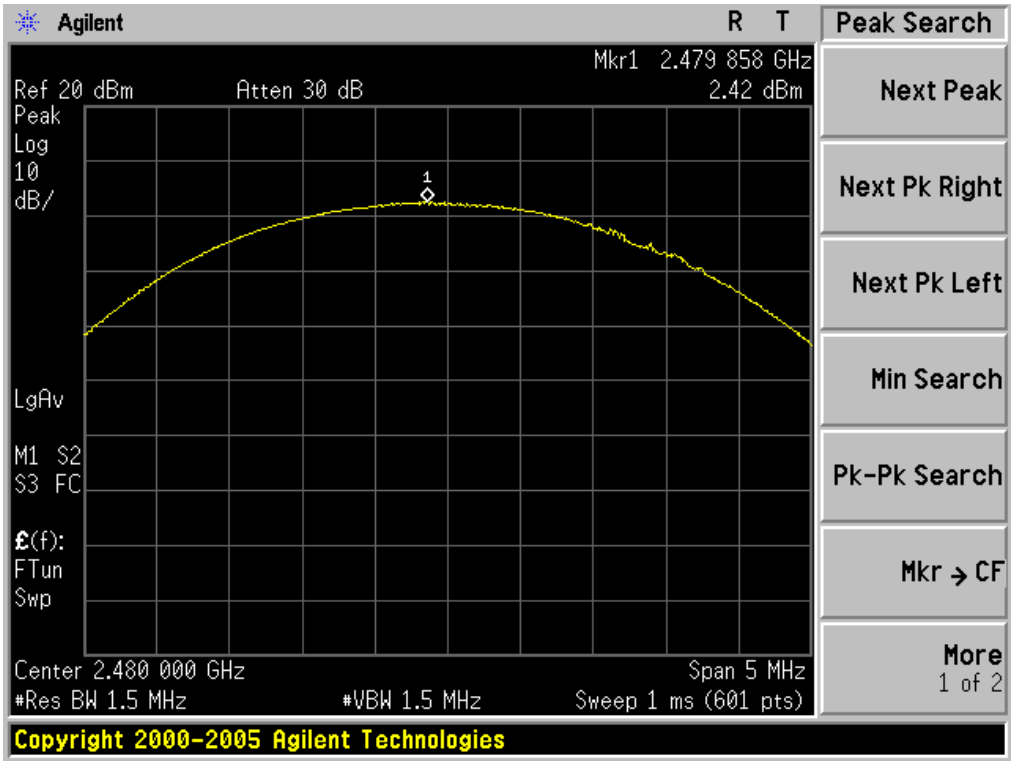
Agilent
R T
Peak Search
Mkr1 2.479 858 GHz
Ref 20 dBm
Atten 30 dB
2.42 dBm
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.480 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
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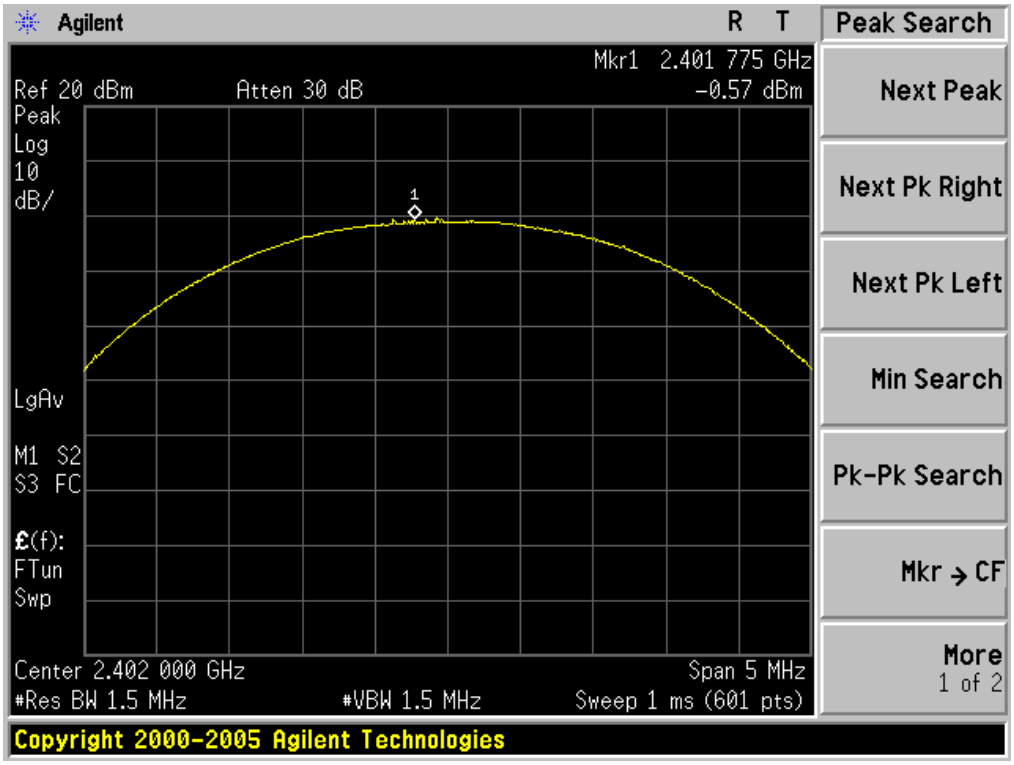
PEAK OUTPUT POWER MEASUREMENT RESULT FOR 8-DPSK MODULATION				
Frequency (GHz)	**Average Power (dBm)**	**Peak Power (dBm)**	**Applicable Limits (dBm)**	**Pass or Fail**
2.402	-2.52	-0.57	21	Pass
2.441	-0.14	1.70	21	Pass
2.480	0.24	2.15	21	Pass

CH0



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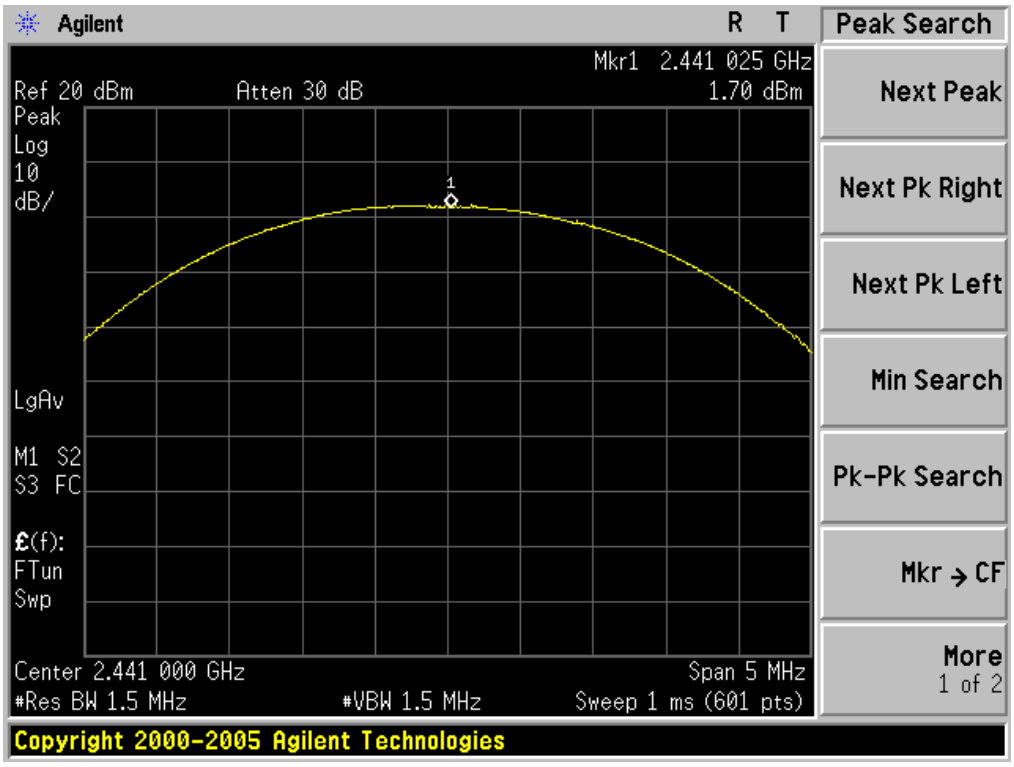
Agilent
R T
Peak Search
Mkr1 2.441 025 GHz
1.70 dBm
Ref 20 dBm
Atten 30 dB
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.441 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
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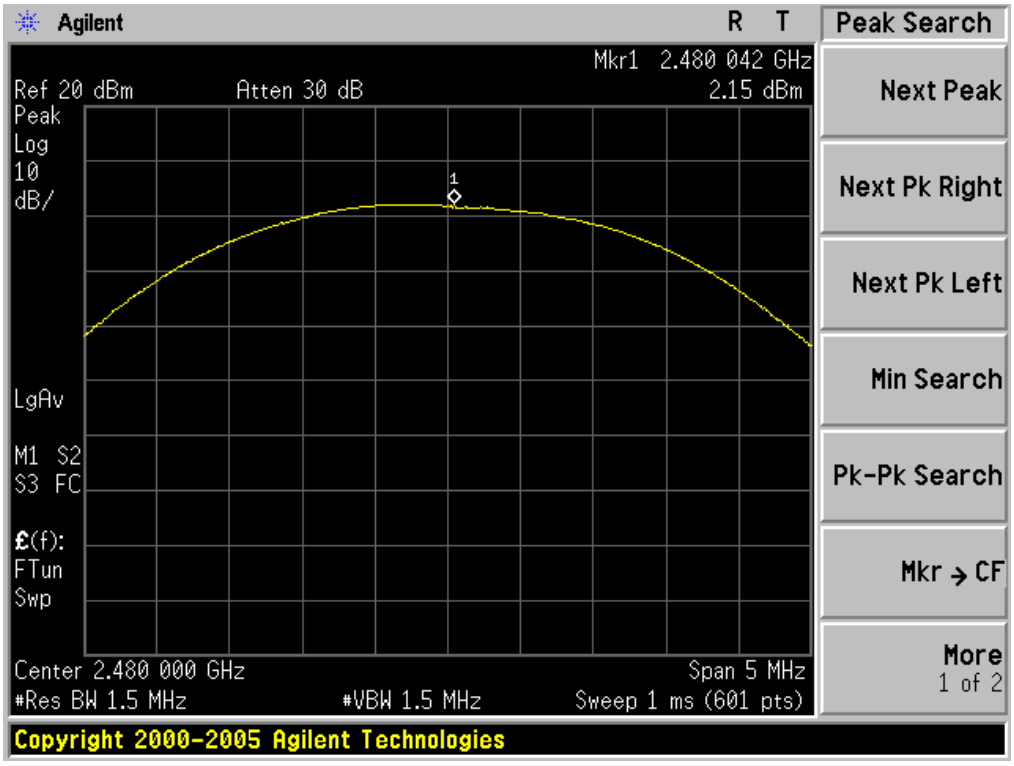
Agilent
R T
Peak Search
Mkr1 2.480 042 GHz
2.15 dBm
Ref 20 dBm
Atten 30 dB
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.480 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
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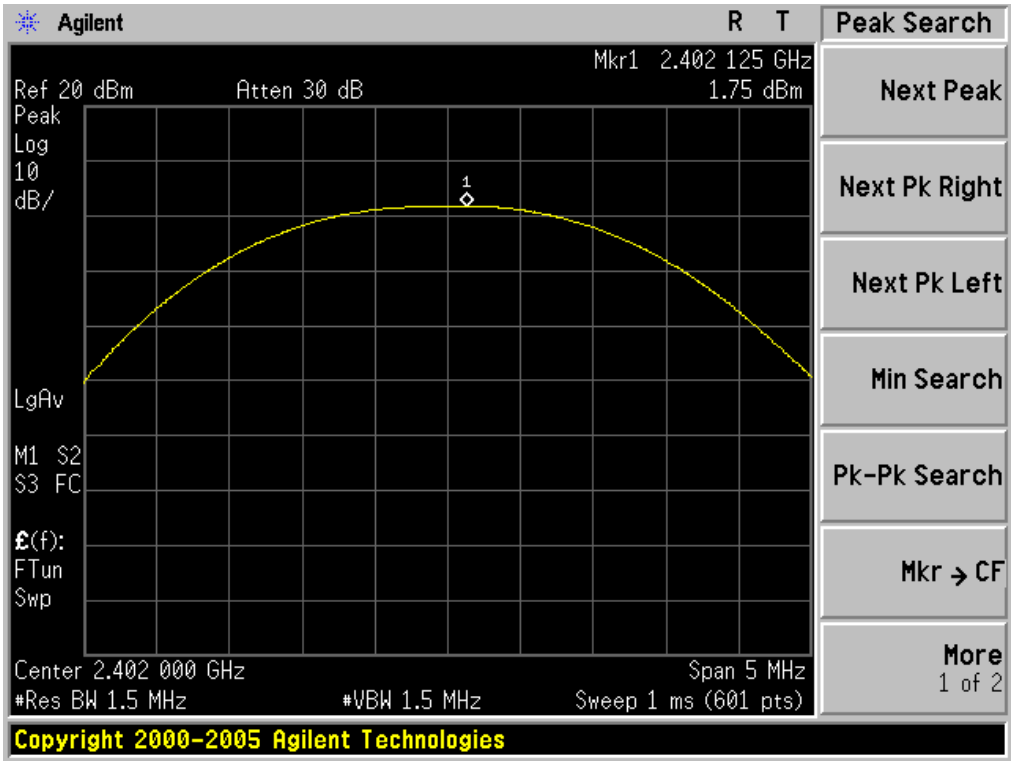
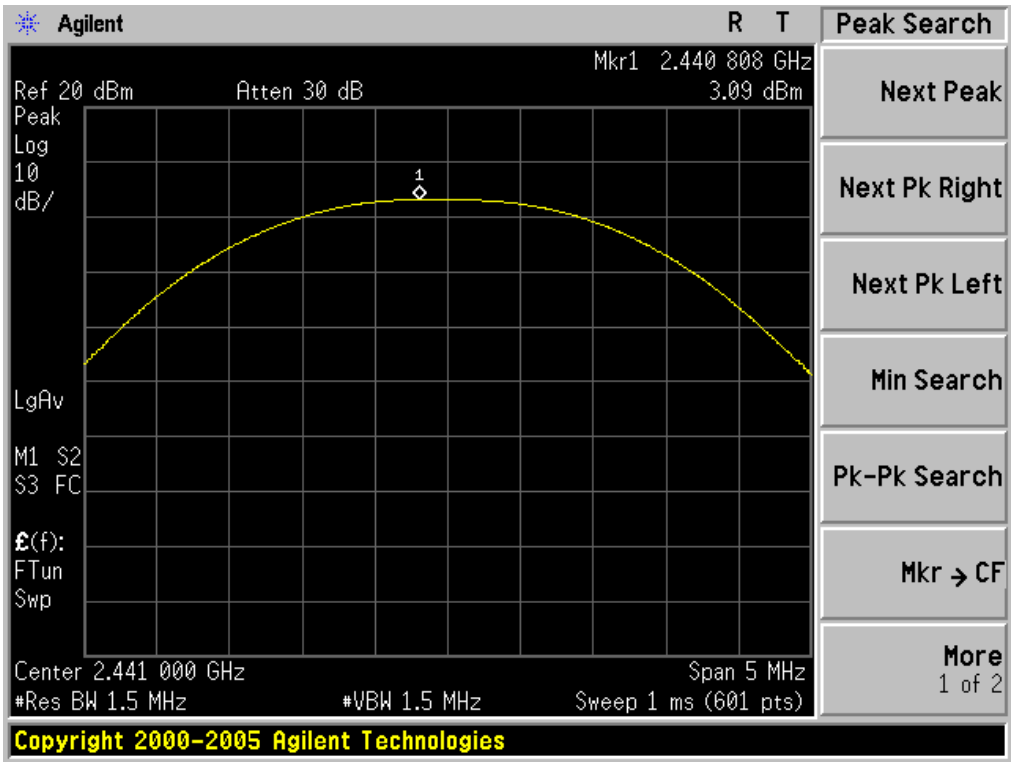
For CSR 2

PEAK OUTPUT POWER MEASUREMENT RESULT FOR GFSK MOUDULATION				
Frequency (GHz)	**Average Power (dBm)**	**Peak Power (dBm)**	**Applicable Limits (dBm)**	**Pass or Fail**
2.402	-0.17	1.75	21	Pass
2.441	1.14	3.09	21	Pass
2.480	1.05	3.01	21	Pass

CH0



CH39


Agilent
R T
Peak Search
Mkr1 2.440 808 GHz
3.09 dBm
Ref 20 dBm
Atten 30 dB
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.441 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
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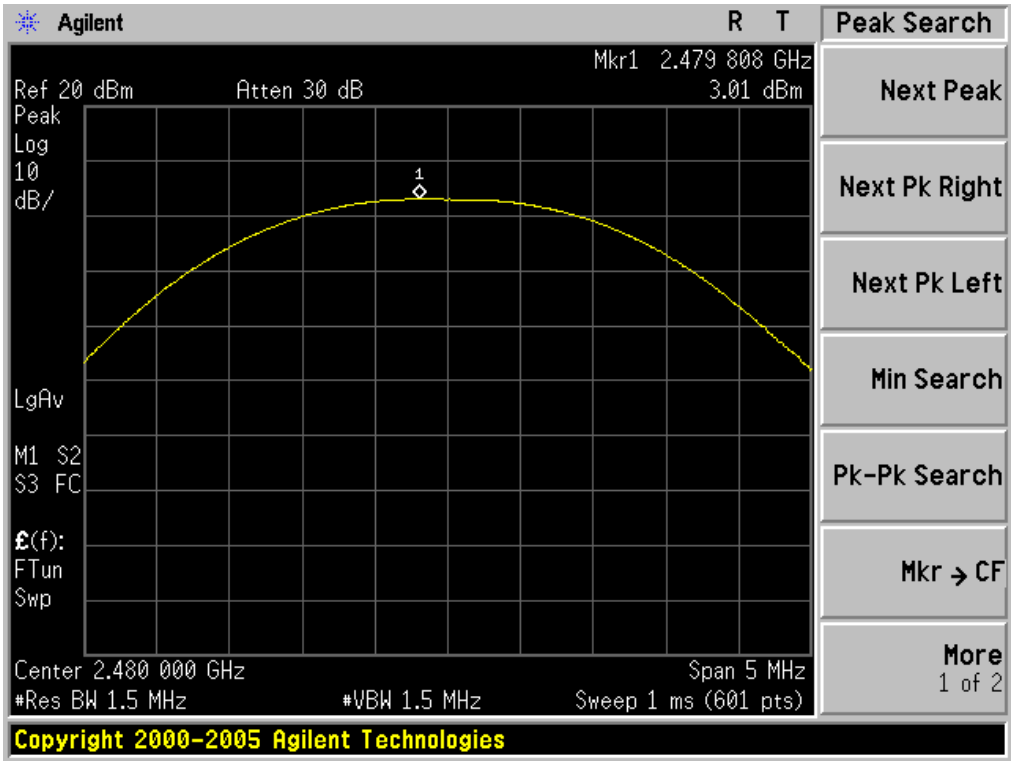
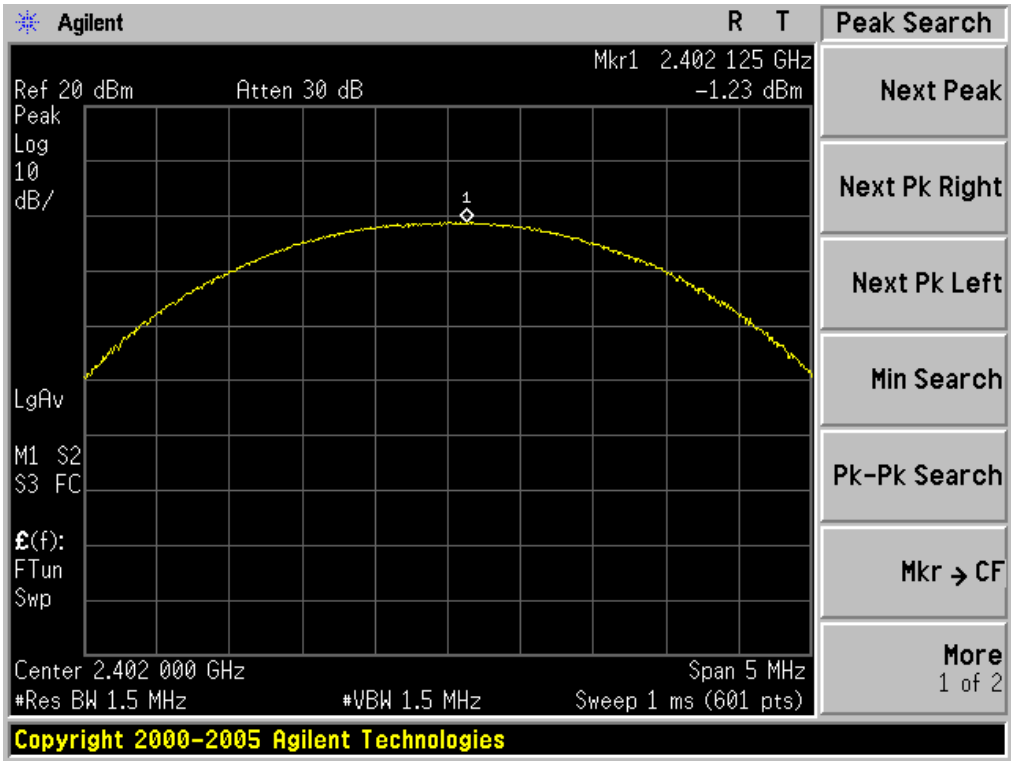

Agilent
R T
Peak Search
Mkr1 2.479 808 GHz
3.01 dBm
Ref 20 dBm
Atten 30 dB
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.480 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

PEAK OUTPUT POWER MEASUREMENT RESULT FOR Π /4-DQPSK MODULATION				
Frequency (GHz)	**Average Power (dBm)**	**Peak Power (dBm)**	**Applicable Limits (dBm)**	**Pass or Fail**
2.402	-3.08	-1.23	21	Pass
2.441	-0.14	1.80	21	Pass
2.480	-0.09	1.87	21	Pass

CH0



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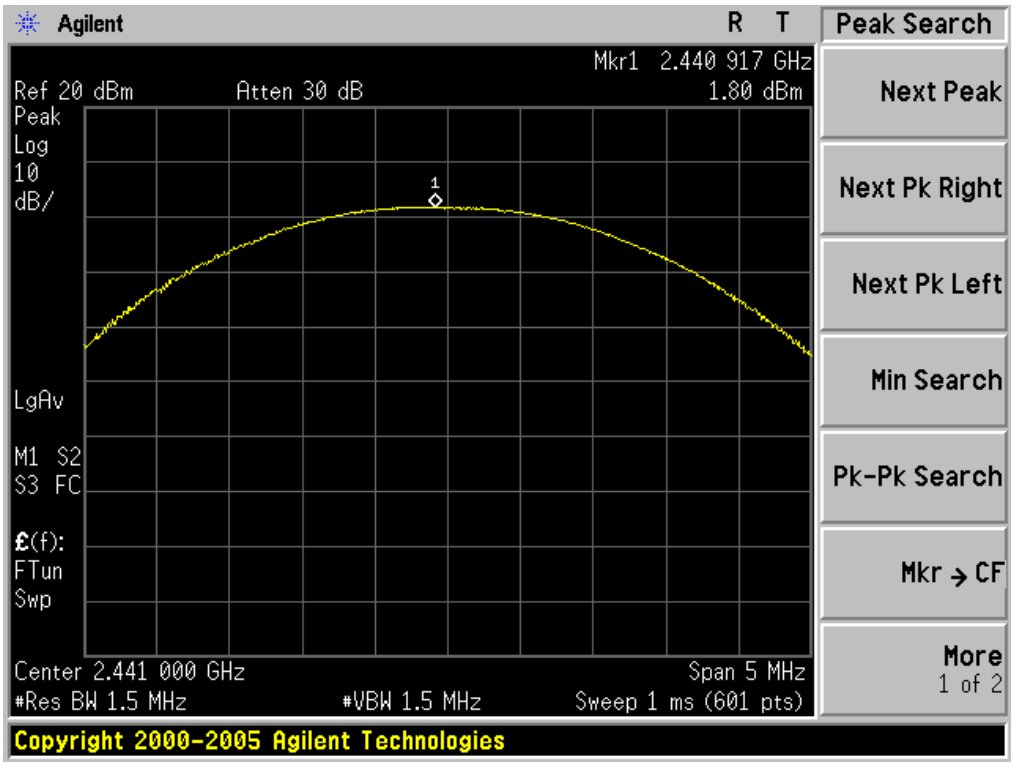
Agilent
R T
Peak Search
Mkr1 2.440 917 GHz
Ref 20 dBm
Atten 30 dB
1.80 dBm
Peak
Log
10
dB/
Next Peak
Next Pk Right
Next Pk Left
Min Search
LgAv
M1 S2
S3 FC
Pk-Pk Search
£(f):
FTun
Swp
Mkr → CF
More
1 of 2
Center 2.441 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
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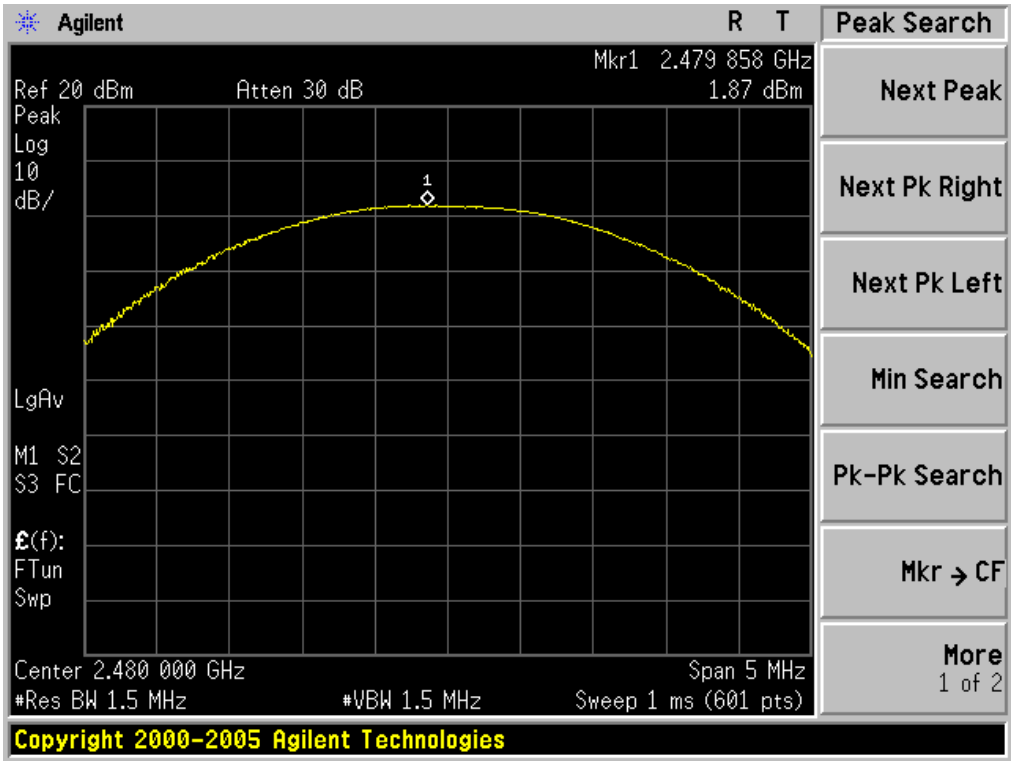
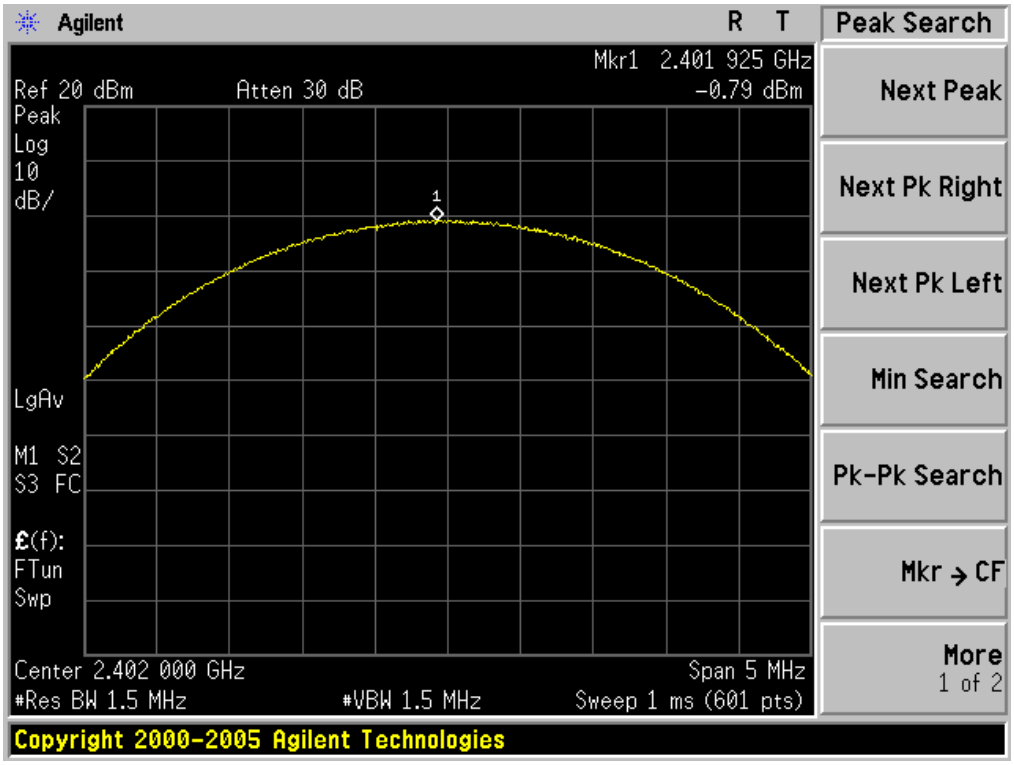
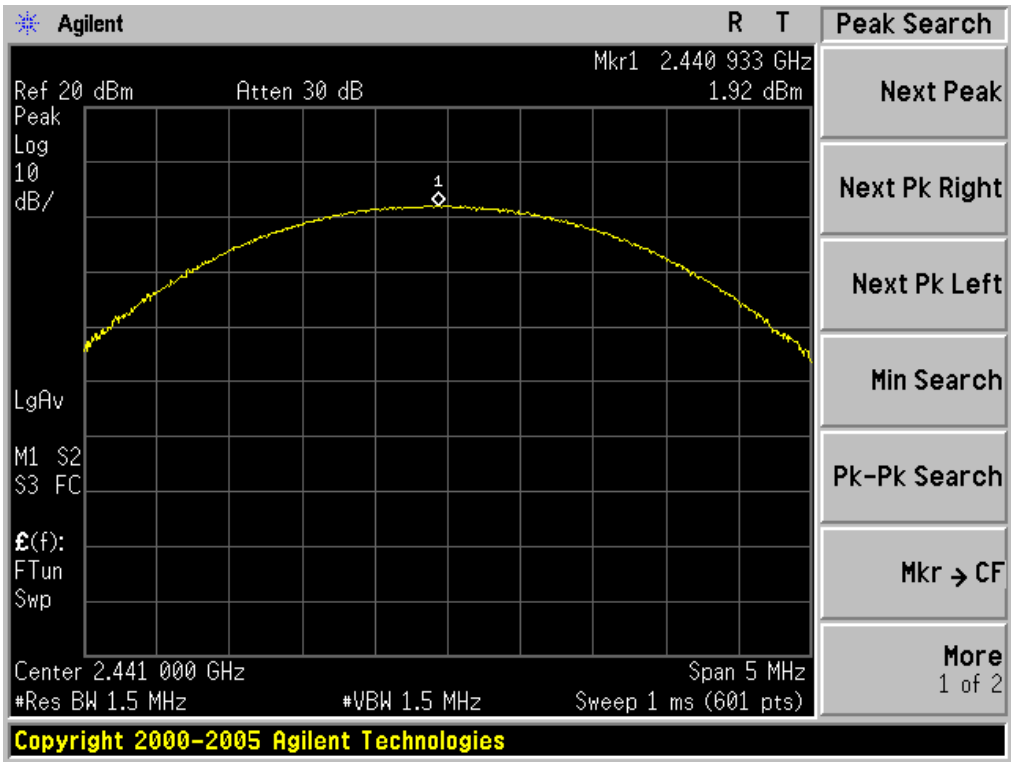

Agilent
R T
Peak Search
Mkr1 2.479 858 GHz
Ref 20 dBm
Atten 30 dB
1.87 dBm
Peak
Log
10
dB/
Next Peak
Next Pk Right
Next Pk Left
Min Search
LgAv
M1 S2
S3 FC
Pk-Pk Search
£(f):
FTun
Swp
Mkr → CF
More
1 of 2
Center 2.480 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

PEAK OUTPUT POWER MEASUREMENT RESULT FOR 8-DPSK MODULATION				
Frequency (GHz)	**Average Power (dBm)**	**Peak Power (dBm)**	**Applicable Limits (dBm)**	**Pass or Fail**
2.402	-2.74	-0.79	21	Pass
2.441	0.08	1.92	21	Pass
2.480	0.07	1.98	21	Pass

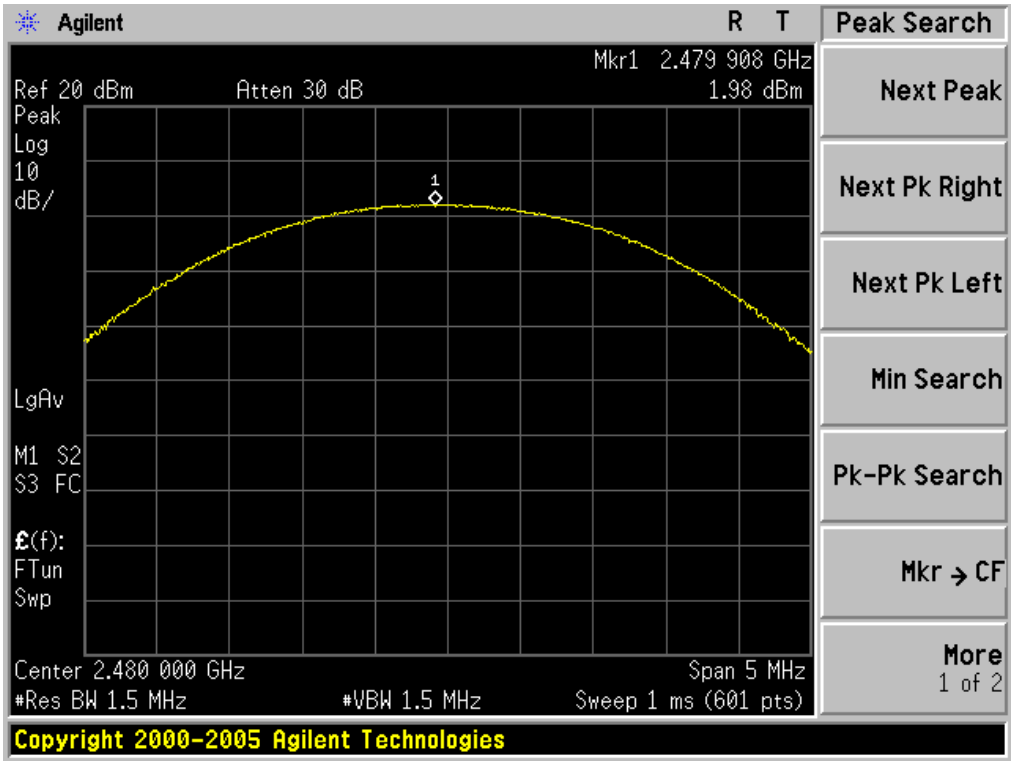
CH0



CH39


Agilent
R T
Peak Search
Mkr1 2.440 933 GHz
1.92 dBm
Ref 20 dBm
Atten 30 dB
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.441 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

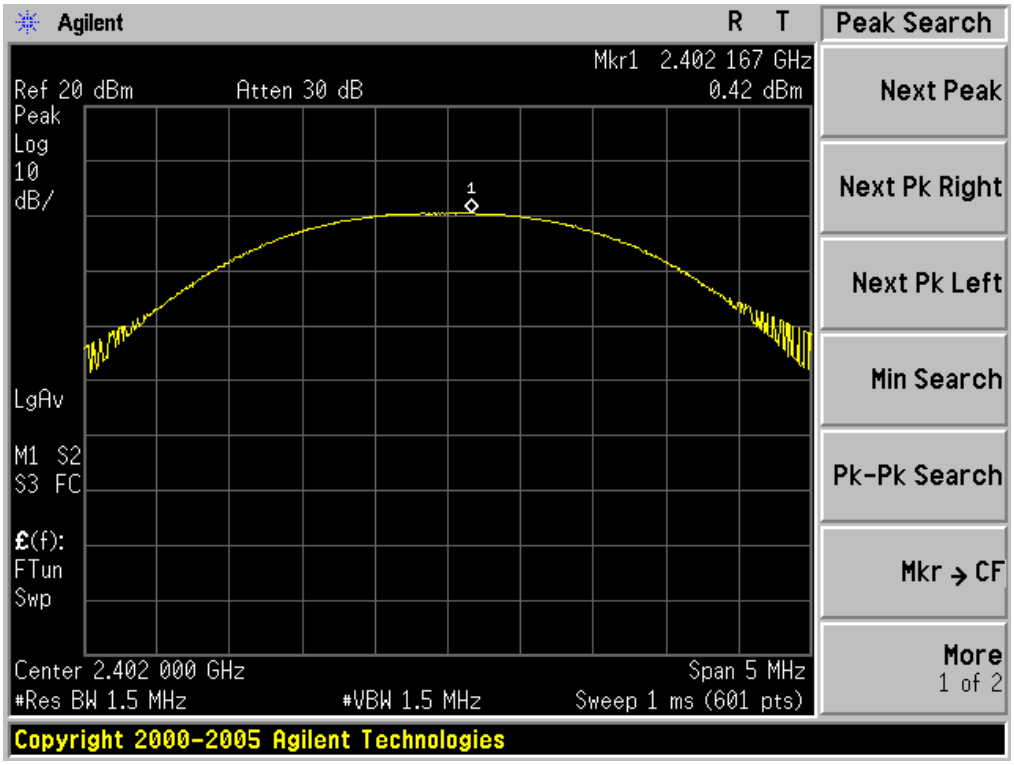
CH78


Agilent
R T
Peak Search
Mkr1 2.479 908 GHz
1.98 dBm
Ref 20 dBm
Atten 30 dB
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.480 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

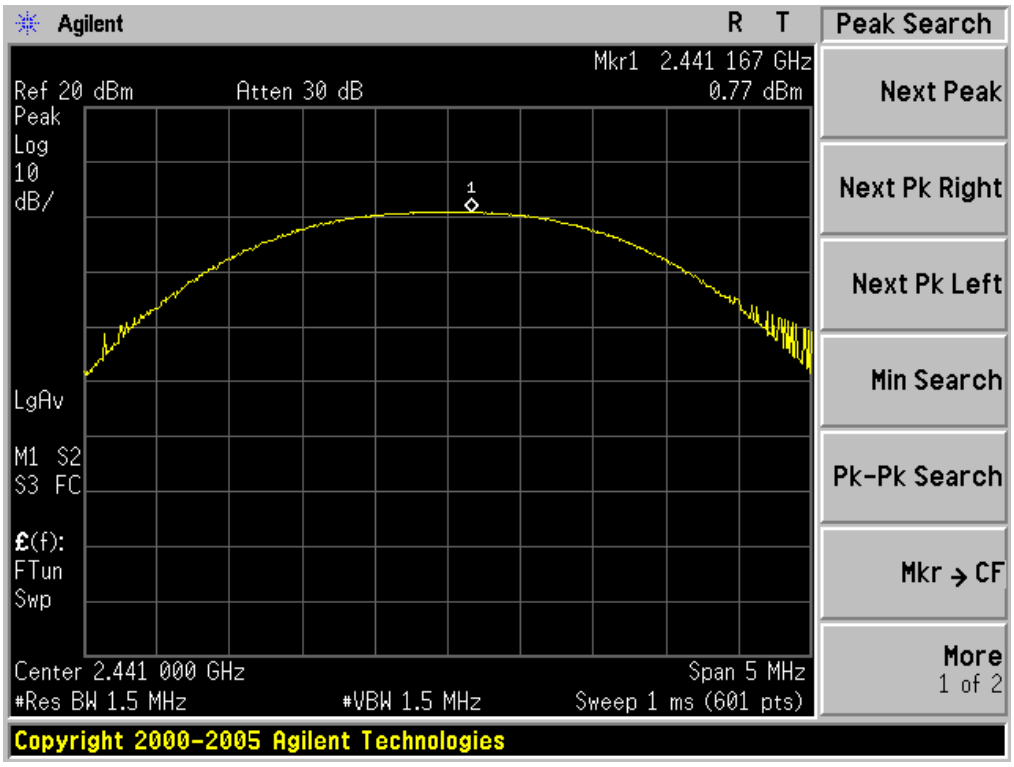
For iSSC 1

PEAK OUTPUT POWER MEASUREMENT RESULT FOR GFSK MOUDULATION				
Frequency (GHz)	**Average Power (dBm)**	**Peak Power (dBm)**	**Applicable Limits (dBm)**	**Pass or Fail**
2.402	-1.5	0.42	21	Pass
2.441	-1.18	0.77	21	Pass
2.480	-1.86	0.10	21	Pass

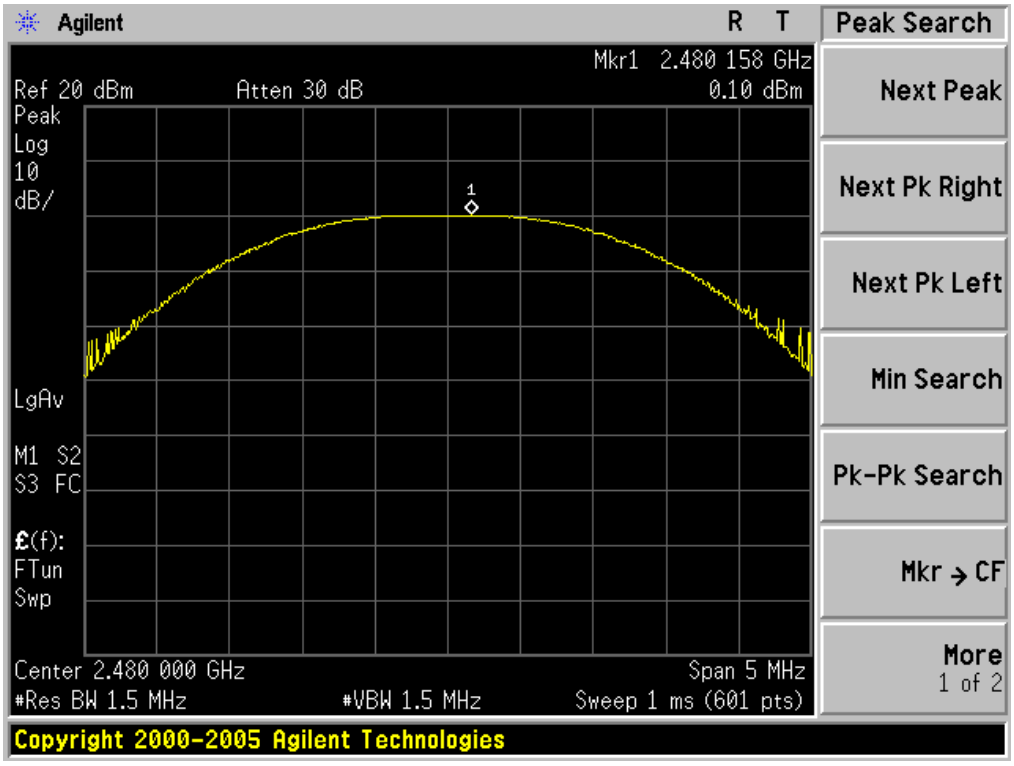
CH0



CH39

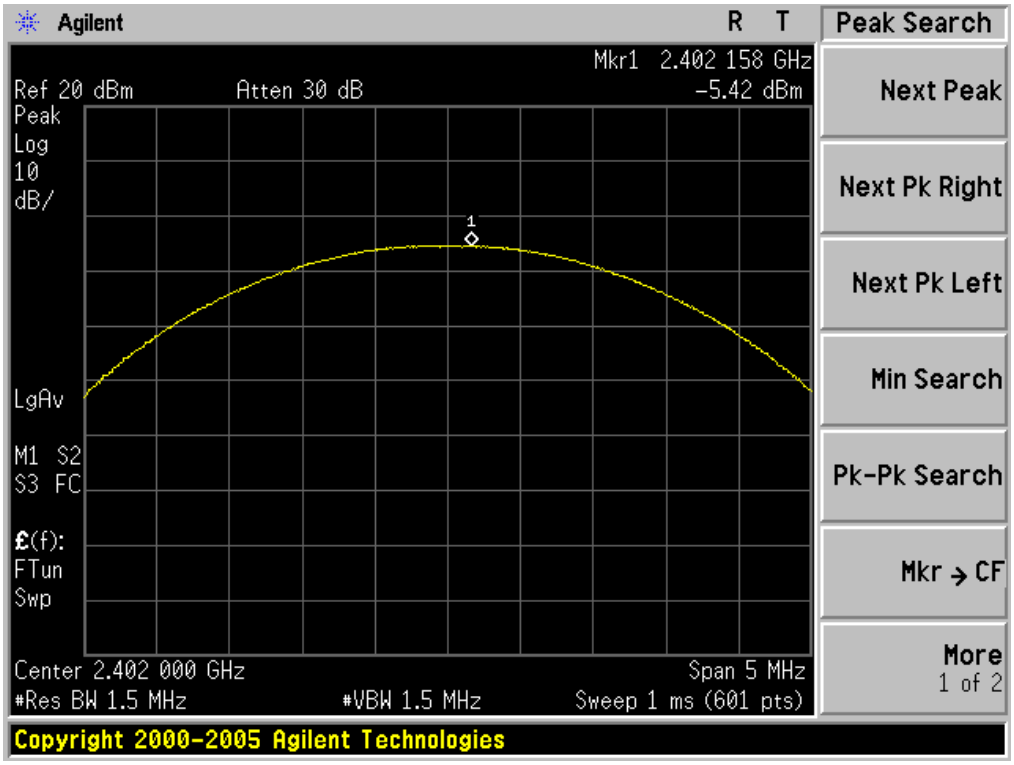

Agilent
R T
Peak Search
Mkr1 2.441 167 GHz
0.77 dBm
Ref 20 dBm
Atten 30 dB
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.441 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

CH78

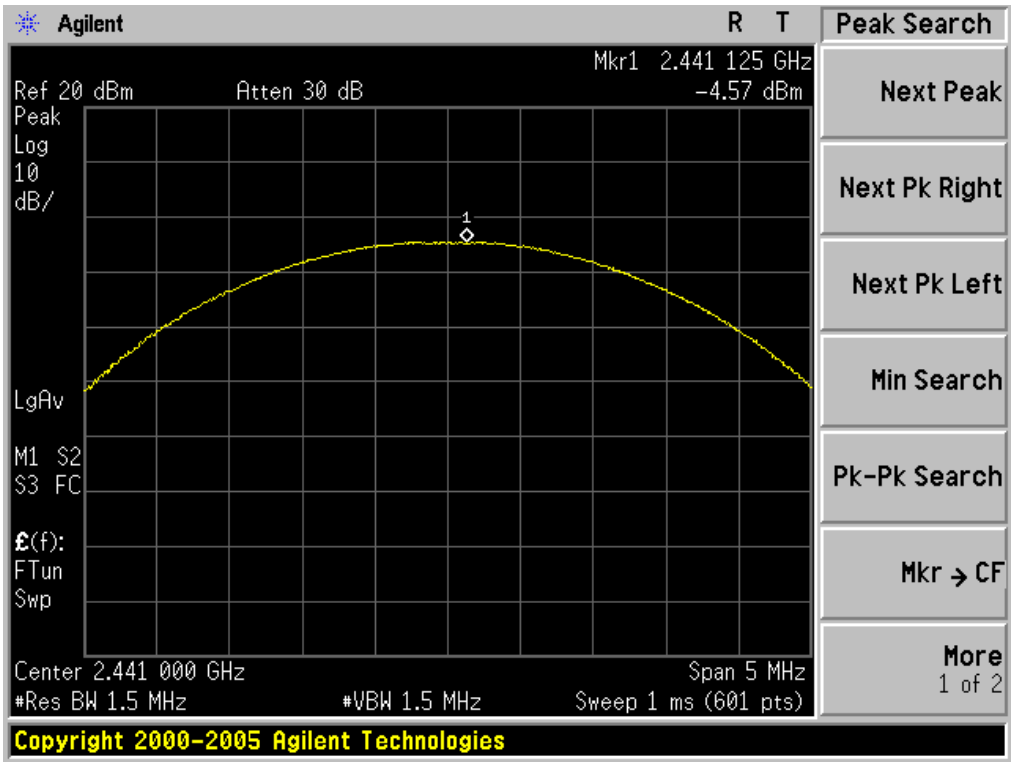

Agilent
R T
Peak Search
Mkr1 2.480 158 GHz
0.10 dBm
Ref 20 dBm
Atten 30 dB
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.480 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

PEAK OUTPUT POWER MEASUREMENT RESULT FOR Π /4-DQPSK MODULATION				
Frequency (GHz)	**Average Power (dBm)**	**Peak Power (dBm)**	**Applicable Limits (dBm)**	**Pass or Fail**
2.402	-7.27	-5.42	21	Pass
2.441	-6.51	-4.57	21	Pass
2.480	-6.46	-4.50	21	Pass

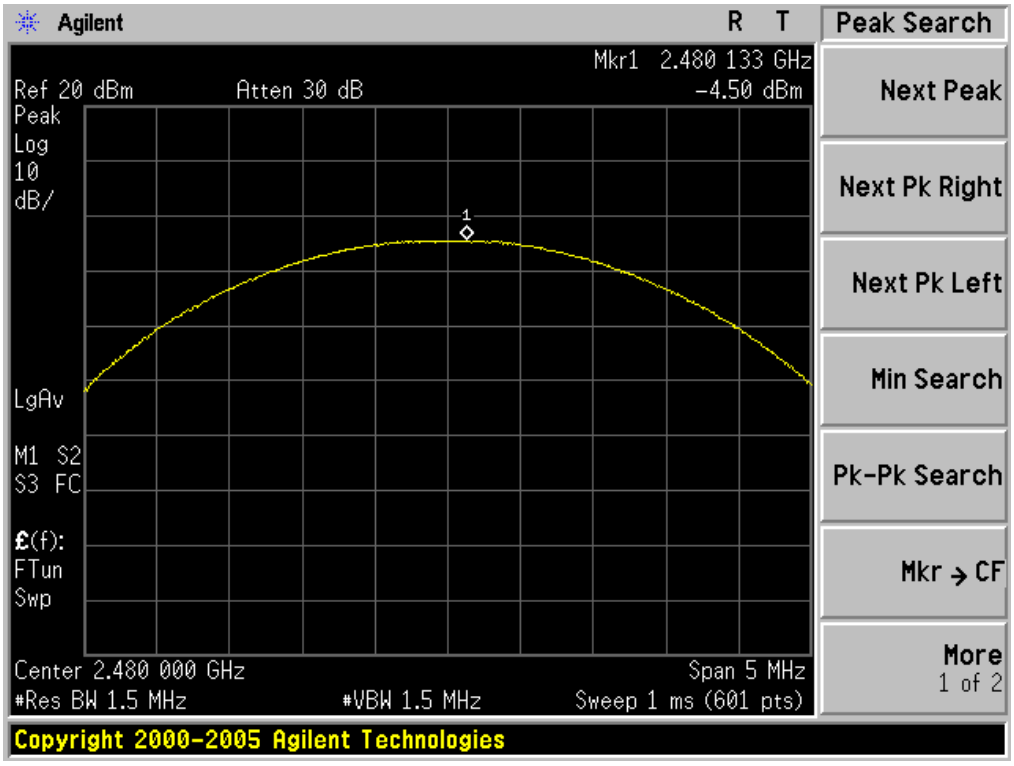
CH0



CH39

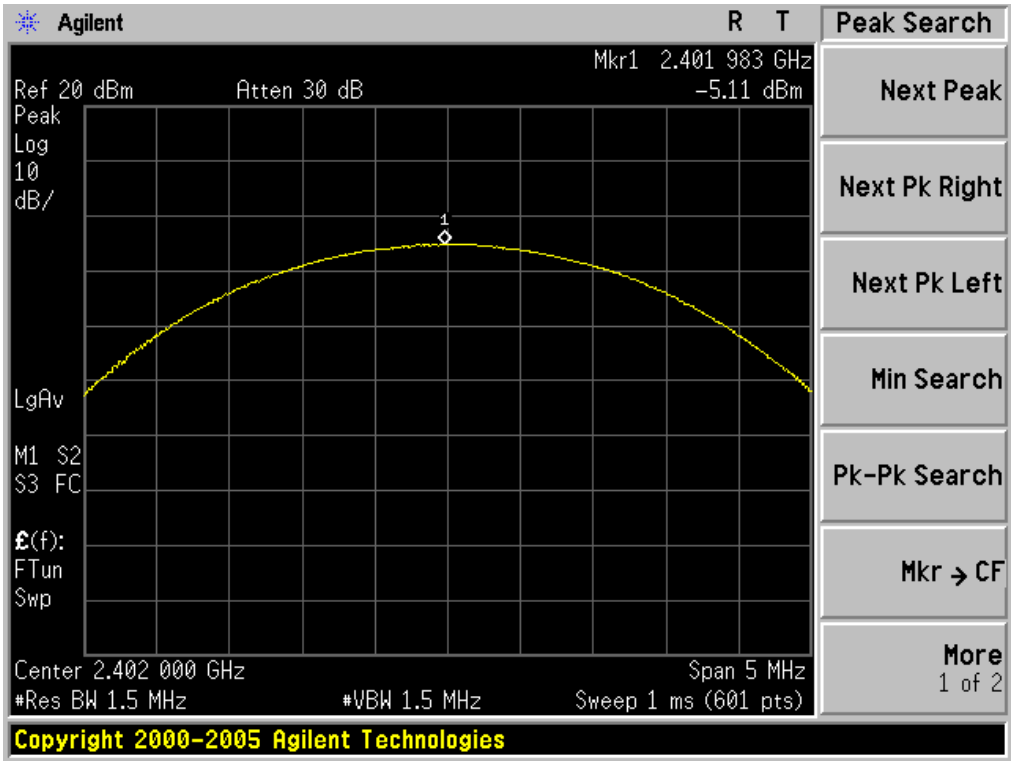

Agilent
R T
Peak Search
Mkr1 2.441 125 GHz
Ref 20 dBm
Atten 30 dB
-4.57 dBm
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.441 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

CH78

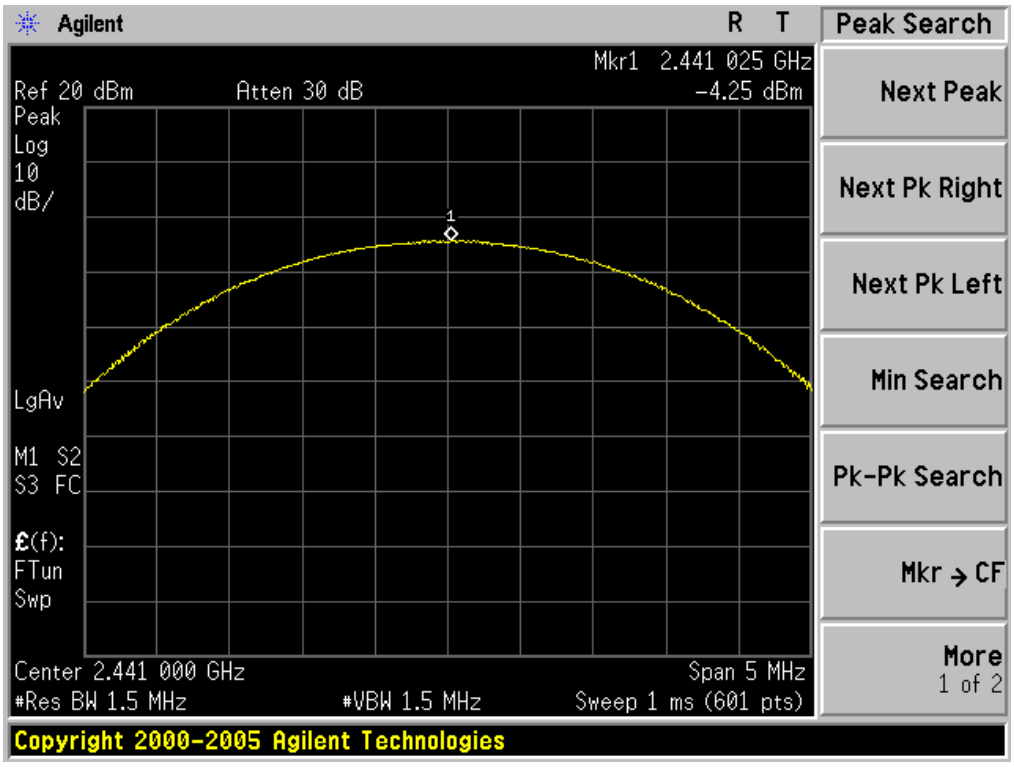

Agilent
R T
Peak Search
Mkr1 2.480 133 GHz
Ref 20 dBm
Atten 30 dB
-4.50 dBm
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.480 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

PEAK OUTPUT POWER MEASUREMENT RESULT FOR 8-DPSK MODULATION				
Frequency (GHz)	**Average Power (dBm)**	**Peak Power (dBm)**	**Applicable Limits (dBm)**	**Pass or Fail**
2.402	-7.06	-5.11	21	Pass
2.441	-6.09	-4.25	21	Pass
2.480	-6.15	-4.24	21	Pass

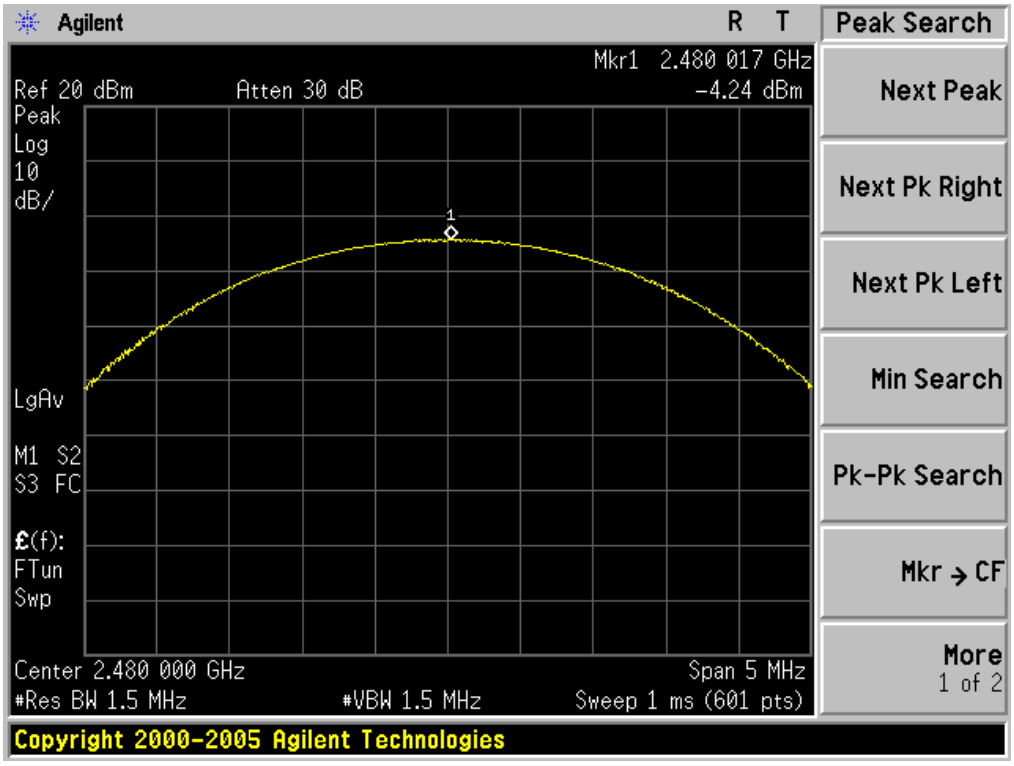
CH0



CH39


Agilent
R T
Peak Search
Mkr1 2.441 025 GHz
Ref 20 dBm
Atten 30 dB
-4.25 dBm
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.441 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

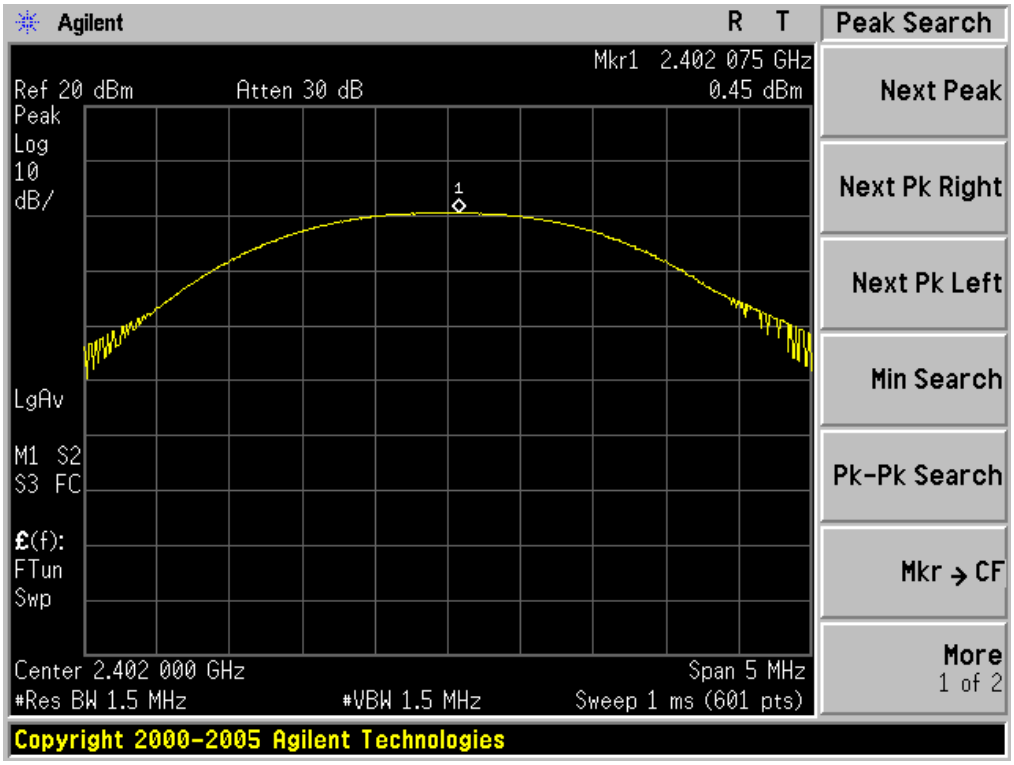
CH78


Agilent
R T
Peak Search
Mkr1 2.480 017 GHz
Ref 20 dBm
Atten 30 dB
-4.24 dBm
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.480 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

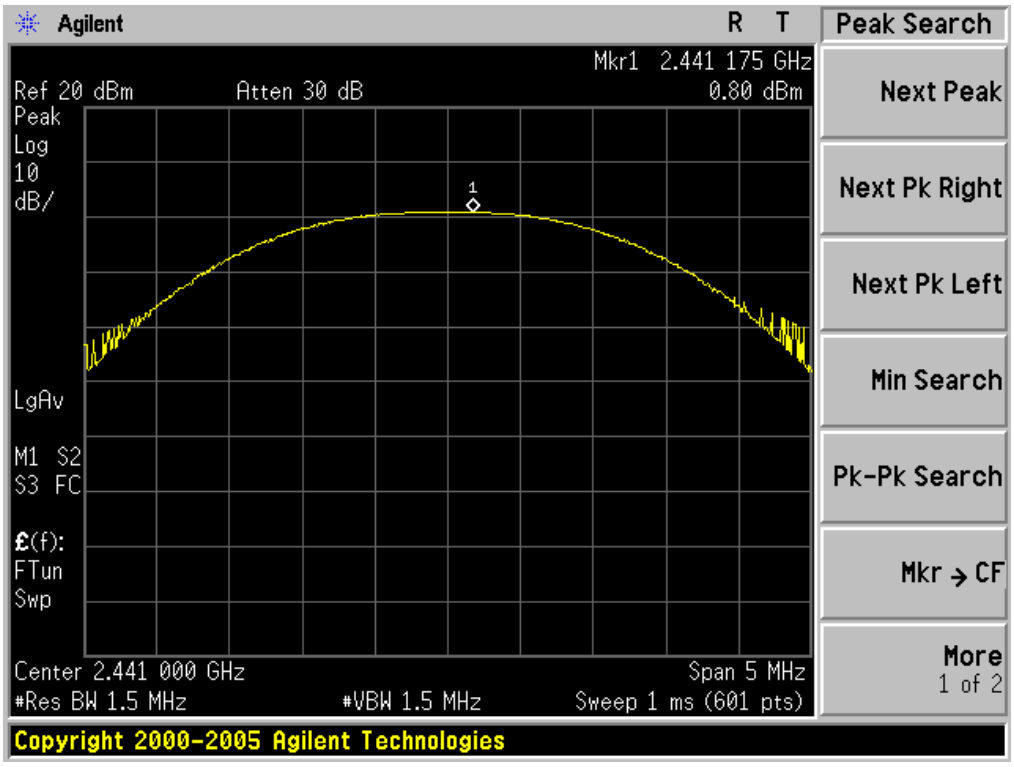
For iSSC 2

PEAK OUTPUT POWER MEASUREMENT RESULT FOR GFSK MOUDULATION				
Frequency (GHz)	**Average Power (dBm)**	**Peak Power (dBm)**	**Applicable Limits (dBm)**	**Pass or Fail**
2.402	-1.47	0.45	21	Pass
2.441	-1.15	0.80	21	Pass
2.480	-1.82	0.14	21	Pass

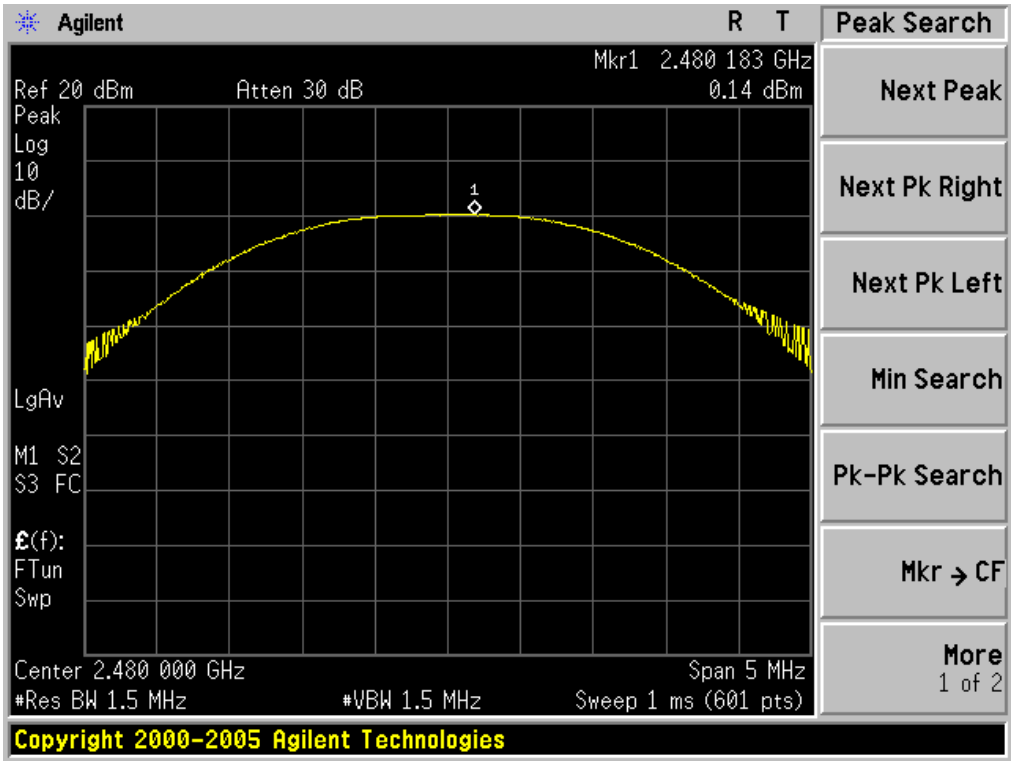
CH0



CH39

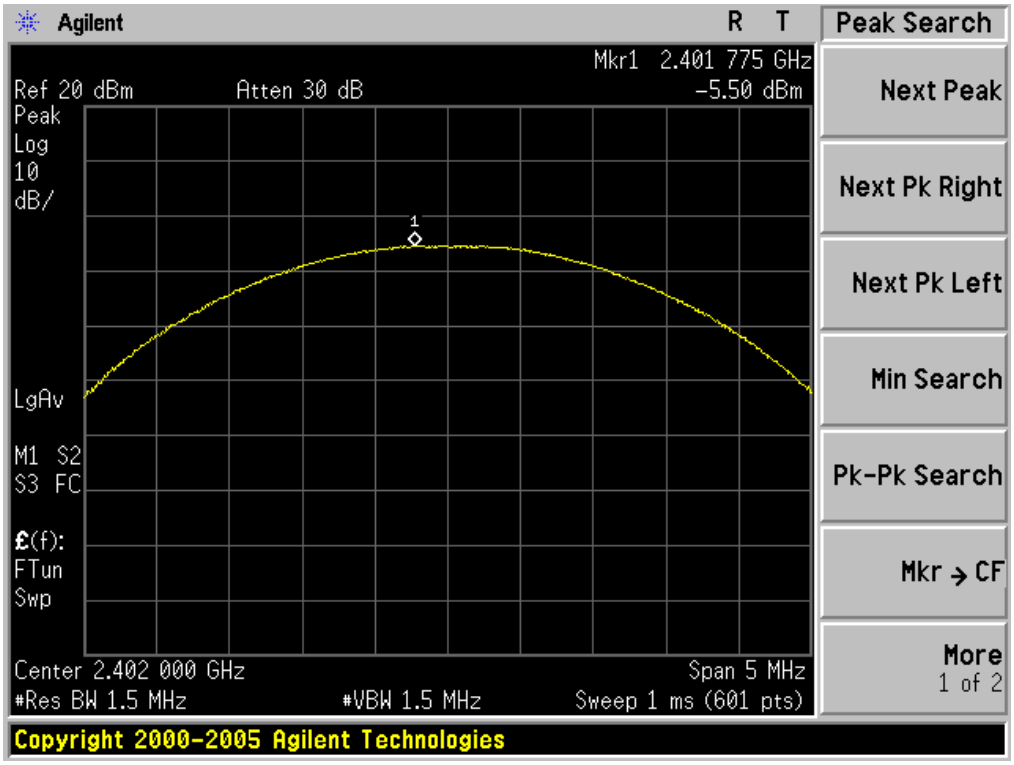

Agilent
R T
Peak Search
Mkr1 2.441 175 GHz
Ref 20 dBm
Atten 30 dB
0.80 dBm
Peak
Log
10
dB/
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 2.441 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

CH78

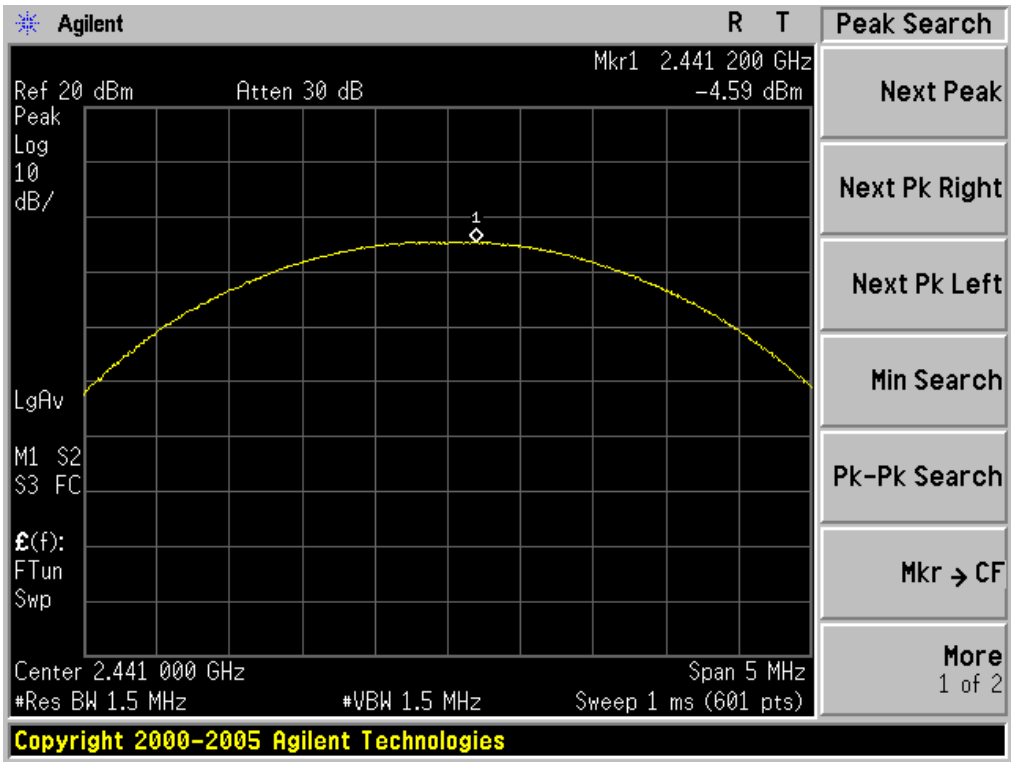

Agilent
R T
Peak Search
Mkr1 2.480 183 GHz
Ref 20 dBm
Atten 30 dB
0.14 dBm
Peak
Log
10
dB/
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 2.480 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

PEAK OUTPUT POWER MEASUREMENT RESULT FOR Π /4-DQPSK MODULATION				
Frequency (GHz)	**Average Power (dBm)**	**Peak Power (dBm)**	**Applicable Limits (dBm)**	**Pass or Fail**
2.402	-7.35	-5.50	21	Pass
2.441	-6.53	-4.59	21	Pass
2.480	-6.44	-4.48	21	Pass

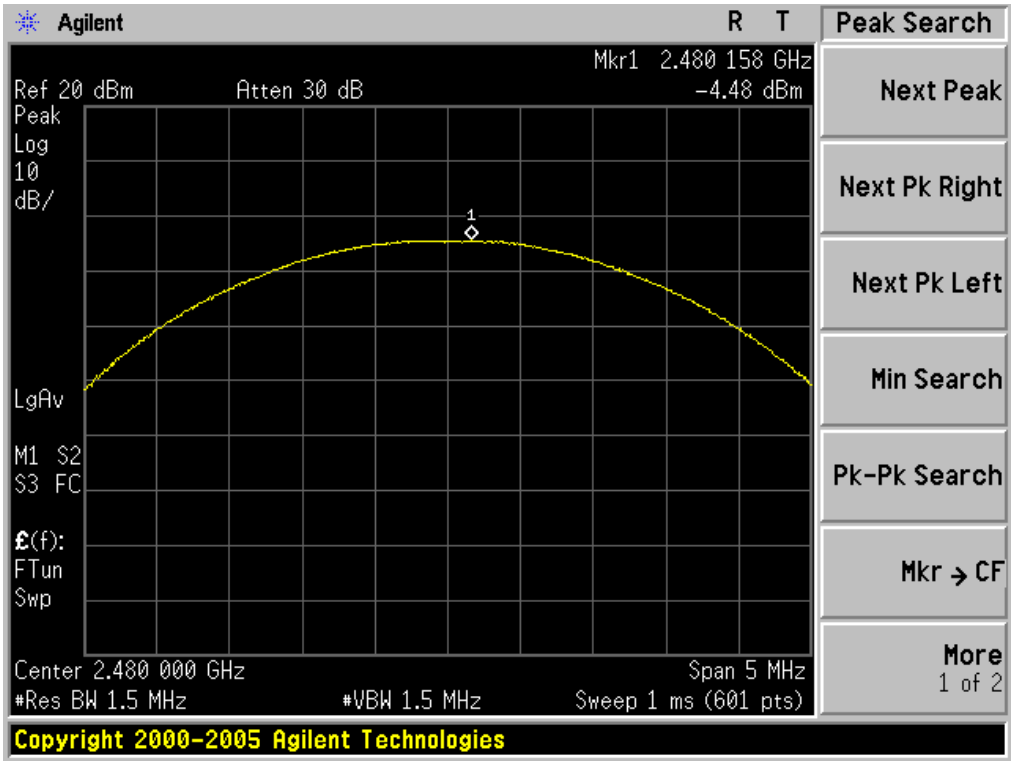
CH0



CH39

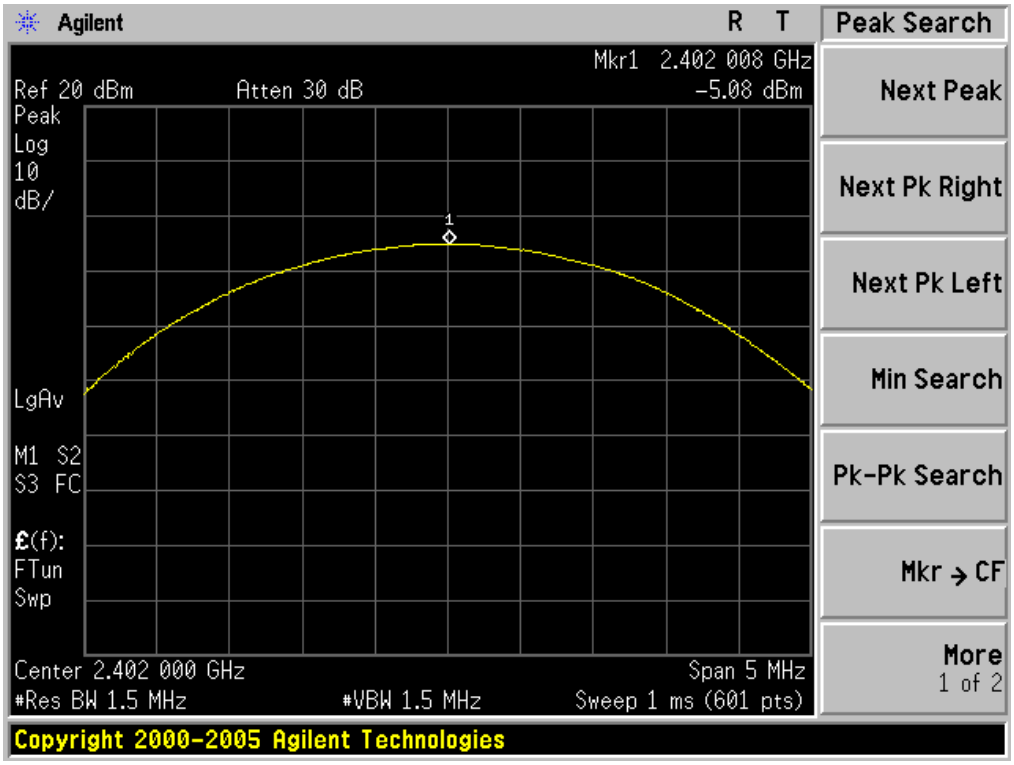

Agilent
R T
Peak Search
Mkr1 2.441 200 GHz
Ref 20 dBm
Atten 30 dB
-4.59 dBm
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.441 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

CH78

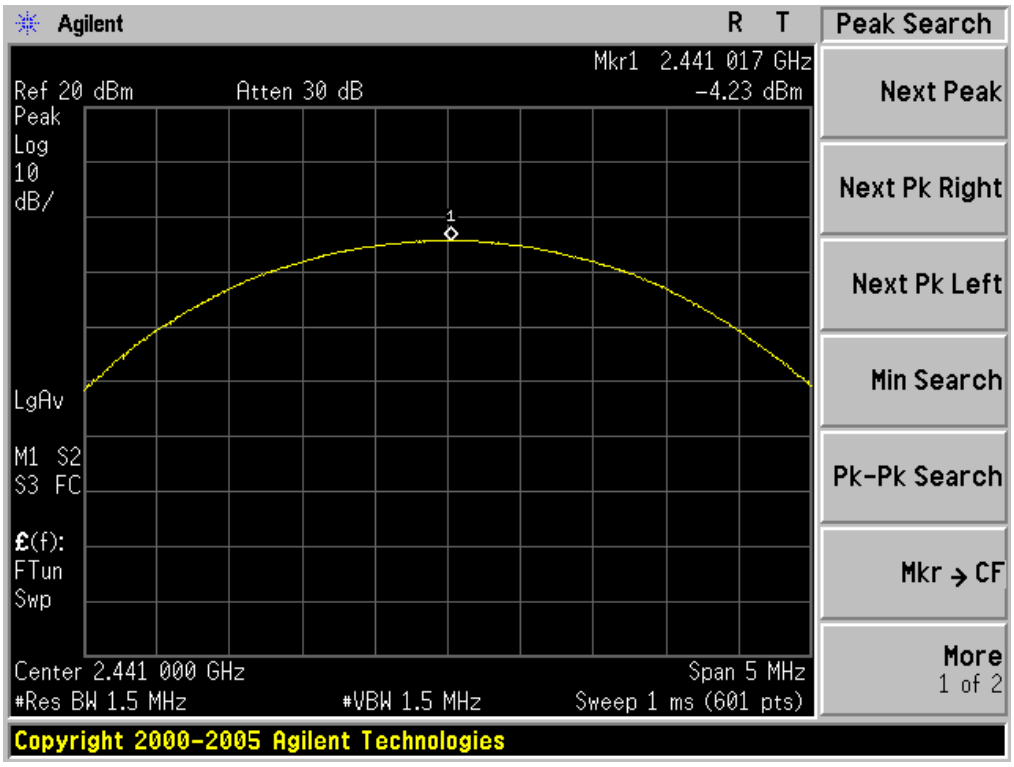

Agilent
R T
Peak Search
Mkr1 2.480 158 GHz
Ref 20 dBm
Atten 30 dB
-4.48 dBm
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.480 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

PEAK OUTPUT POWER MEASUREMENT RESULT FOR 8-DPSK MODULATION				
Frequency (GHz)	**Average Power (dBm)**	**Peak Power (dBm)**	**Applicable Limits (dBm)**	**Pass or Fail**
2.402	-7.03	-5.08	21	Pass
2.441	-6.07	-4.23	21	Pass
2.480	-6.08	-4.17	21	Pass

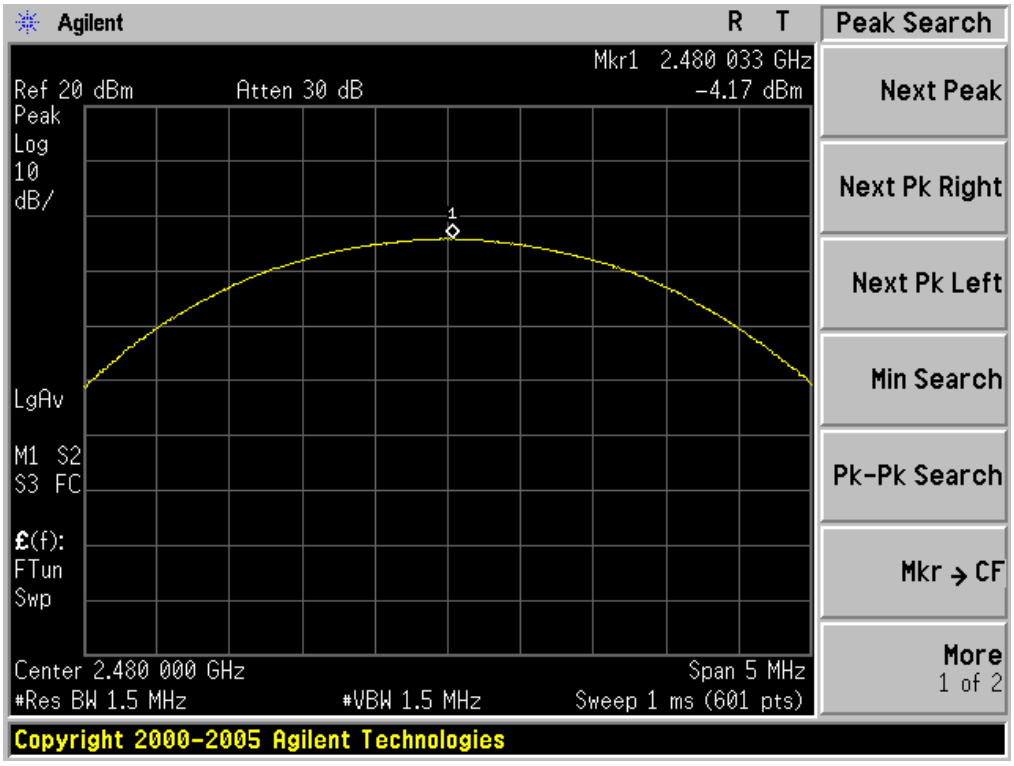
CH0



CH39


Agilent
R T
Peak Search
Mkr1 2.441 017 GHz
Ref 20 dBm
Atten 30 dB
-4.23 dBm
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.441 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

CH78

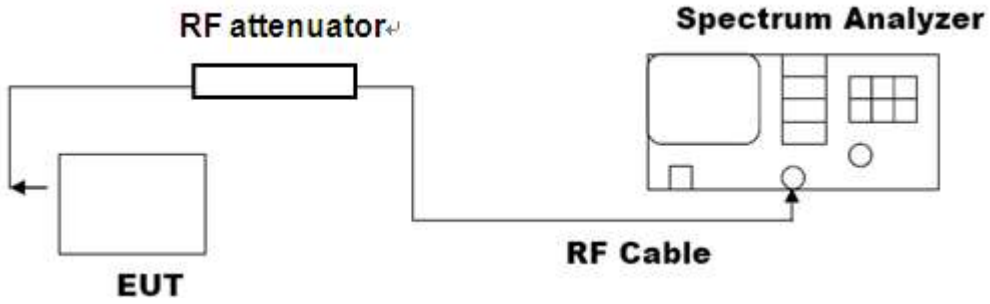

Agilent
R T
Peak Search
Mkr1 2.480 033 GHz
Ref 20 dBm
Atten 30 dB
-4.17 dBm
Peak
Log
10
dB/
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 2.480 000 GHz
Span 5 MHz
#Res BW 1.5 MHz
#VBW 1.5 MHz
Sweep 1 ms (601 pts)
Copyright 2000-2005 Agilent Technologies

8. 20DB BANDWIDTH

8.1. MEASUREMENT PROCEDURE

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2, Set the EUT Work on the top, the middle and the bottom operation frequency individually.
3. Set Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hoping channel
   RBW ≥ 1% of the 20 dB bandwidth, VBW ≥ RBW; Sweep = auto; Detector function = peak
4. Set SPA Trace 1 Max hold, then View.

8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

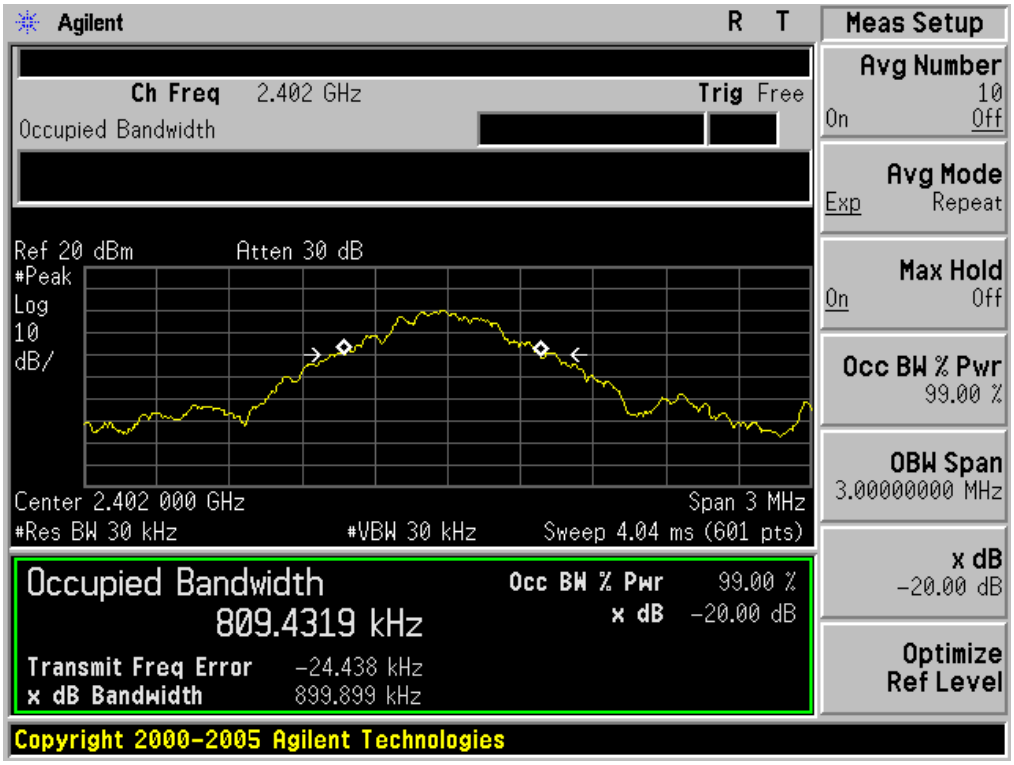


8.3. LIMITS AND MEASUREMENT RESULTS

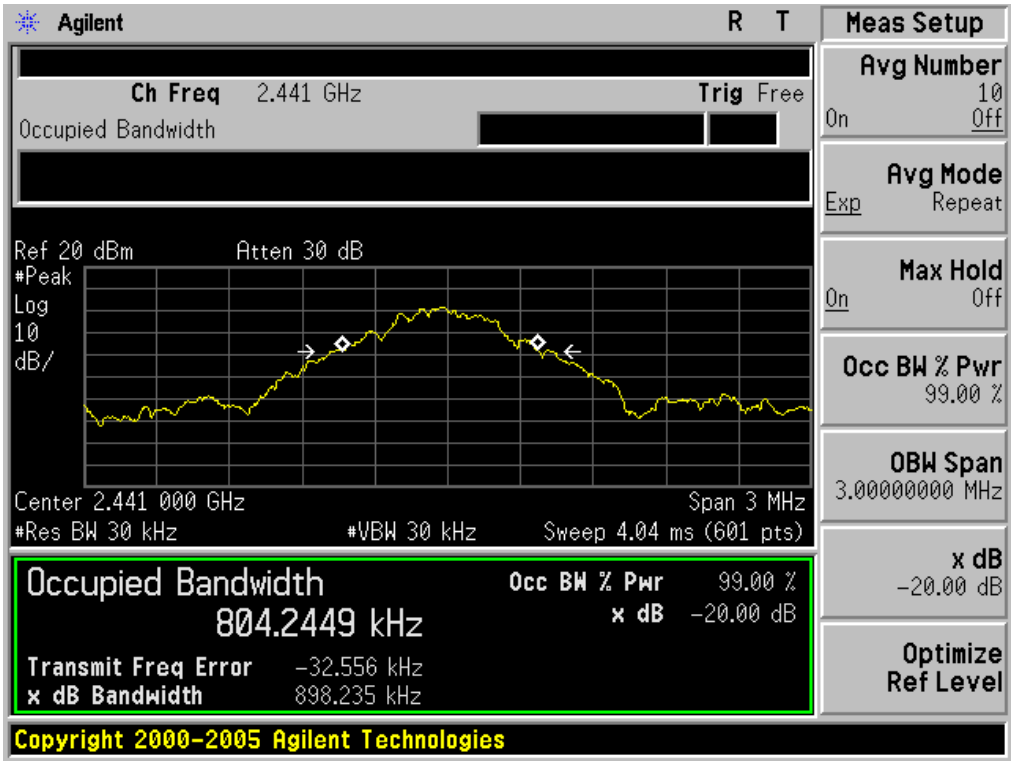
For CSR 1

BLUETOOTH 1MBPS LIMITS AND MEASUREMENT RESULT			
Applicable Limits	Measurement Result		
	Test Data (MHz)		Criteria
--	Low Channel	0.900	PASS
	Middle Channel	0.898	PASS
	High Channel	0.832	PASS

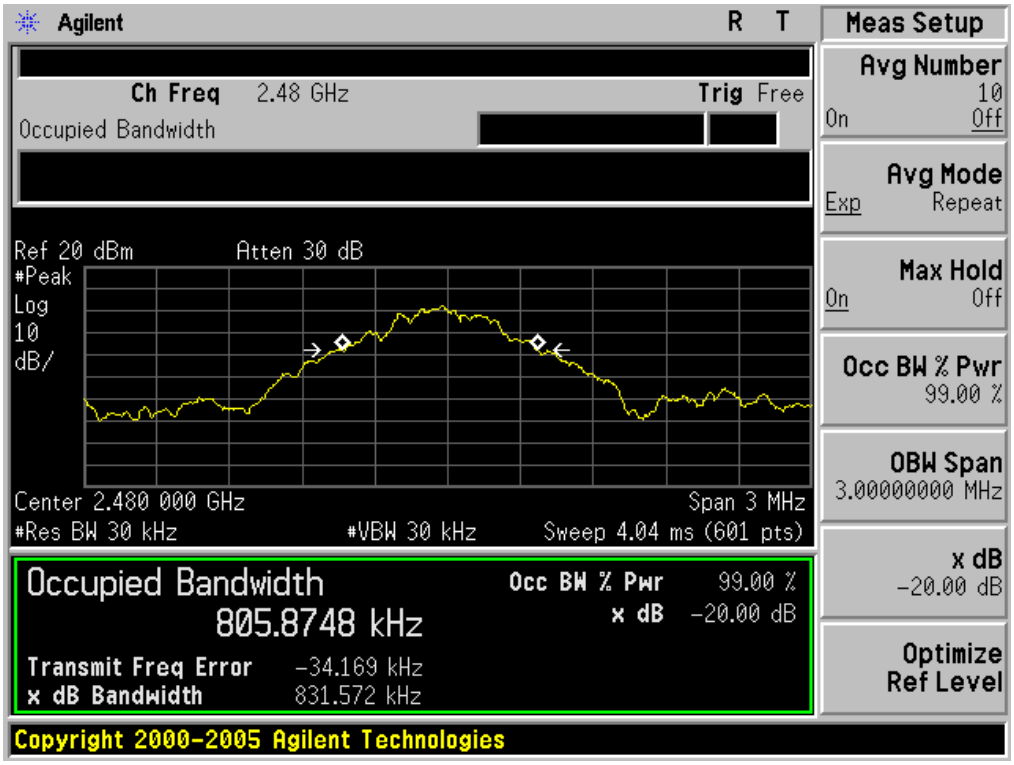
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

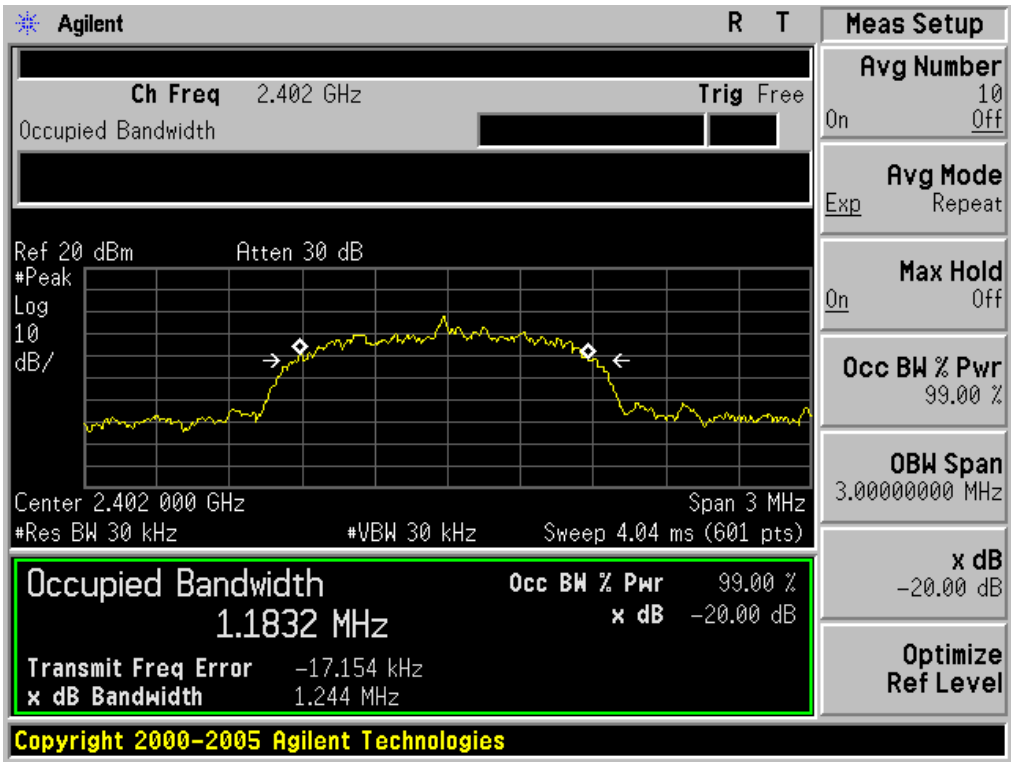


TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

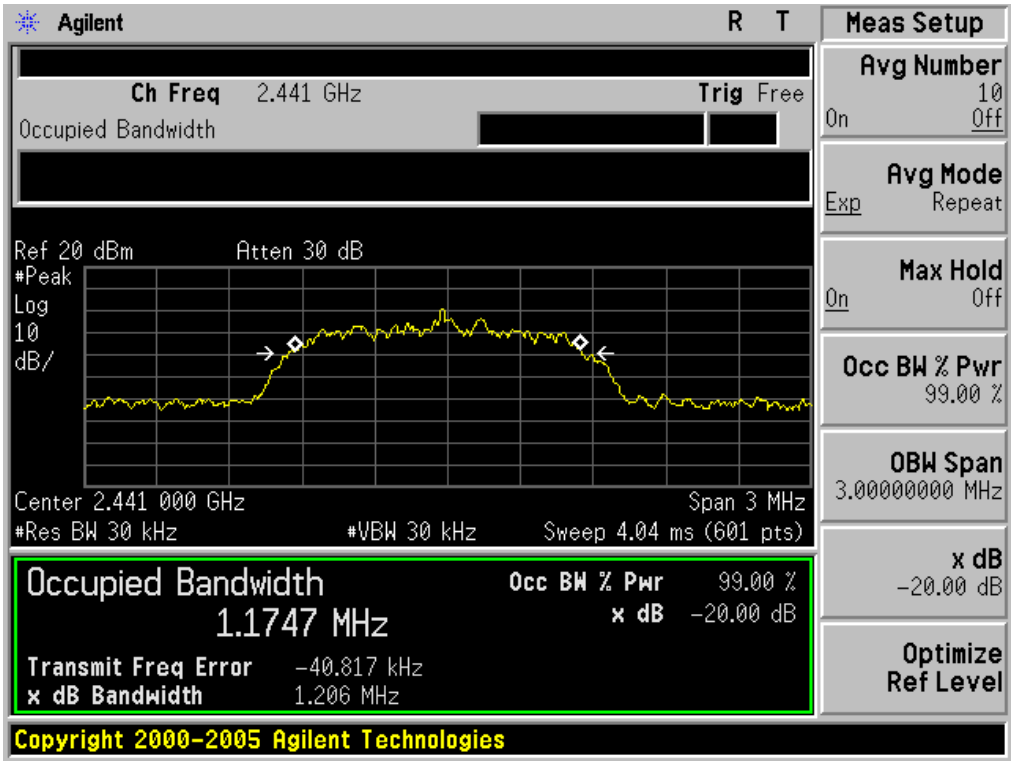


BLUETOOTH 2MBPS LIMITS AND MEASUREMENT RESUL			
Applicable Limits	**Measurement Result**		
	Test Data (MHz)		**Criteria**
N/A	Low Channel	1.244	PASS
	Middle Channel	1.206	PASS
	High Channel	1.310	PASS

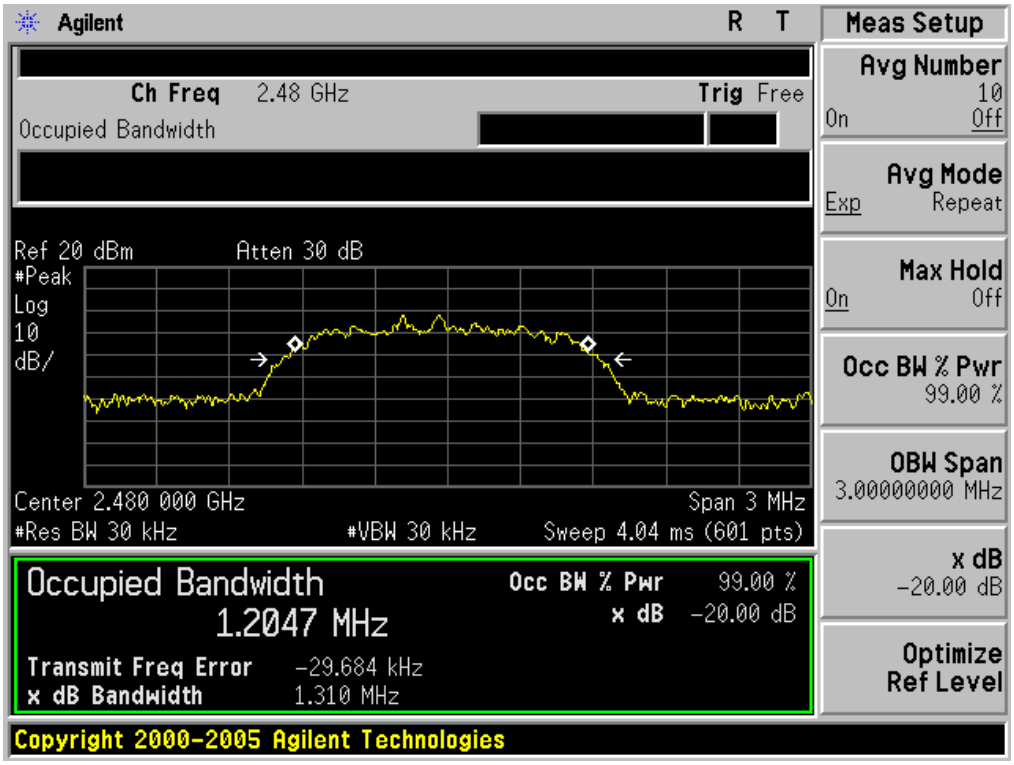
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

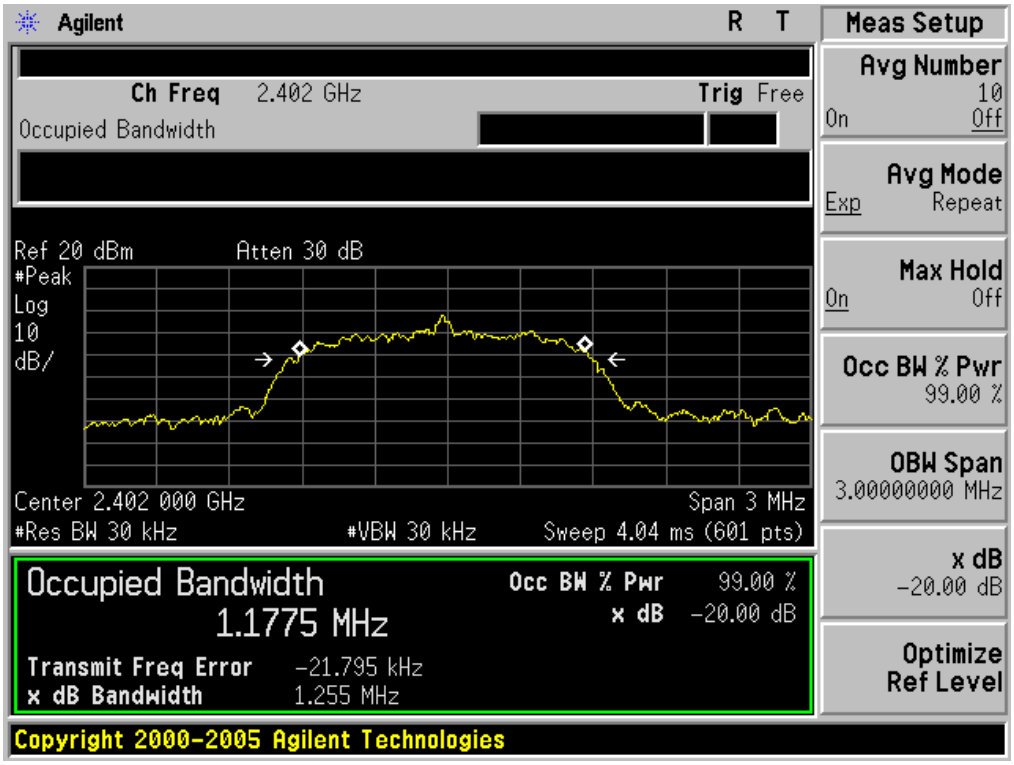


TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

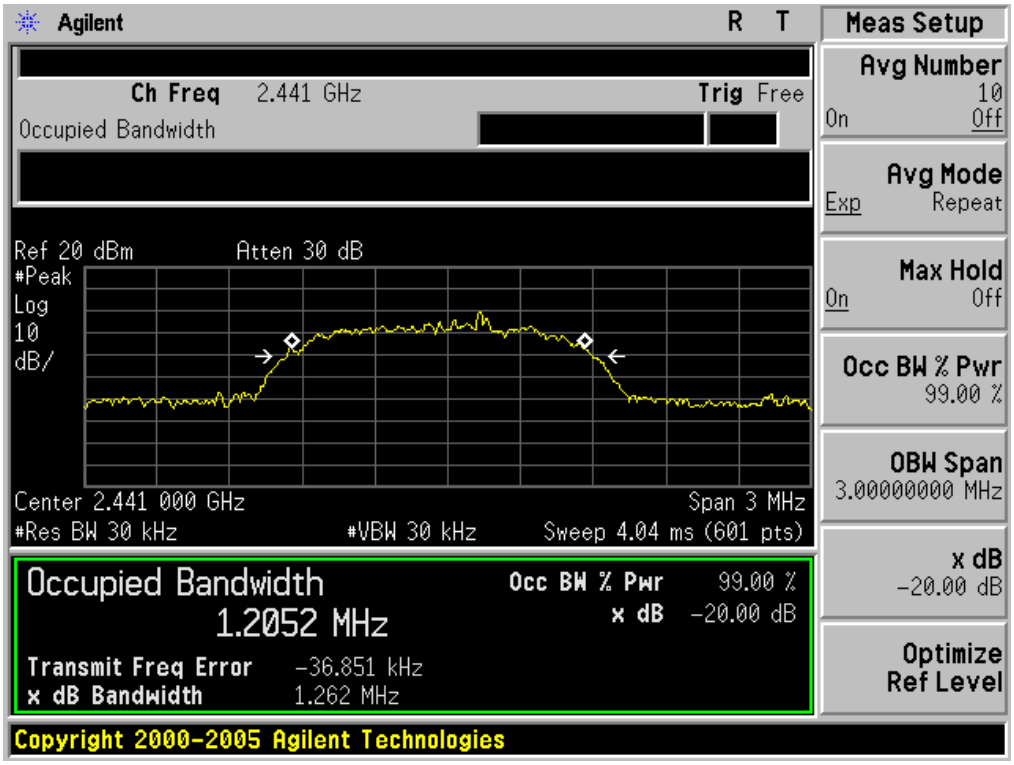


BLUETOOTH 3MBPS LIMITS AND MEASUREMENT RESUL			
Applicable Limits	**Measurement Result**		
	Test Data (MHz)		**Criteria**
N/A	Low Channel	1.255	PASS
	Middle Channel	1.262	PASS
	High Channel	1.299	PASS

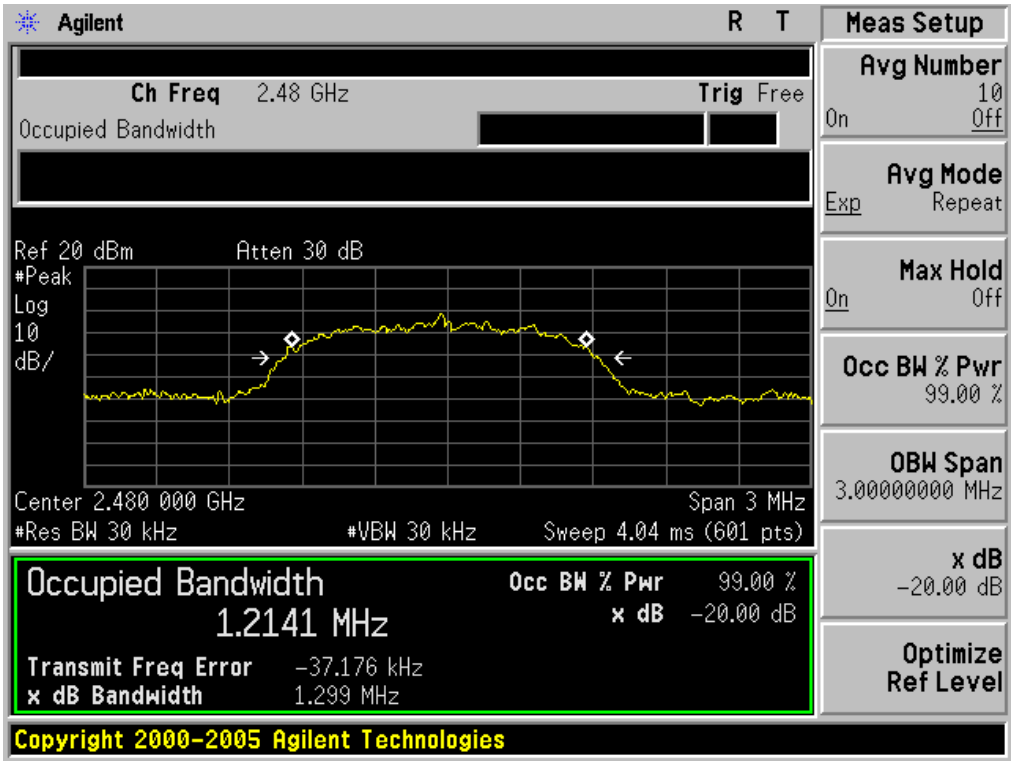
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



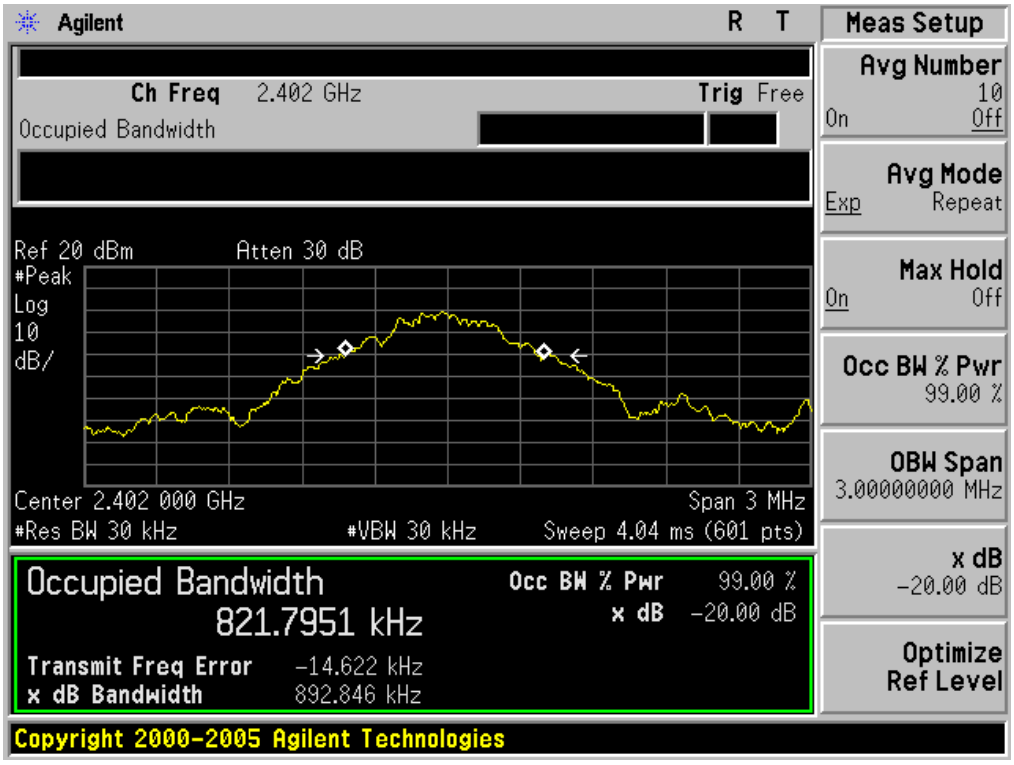
TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



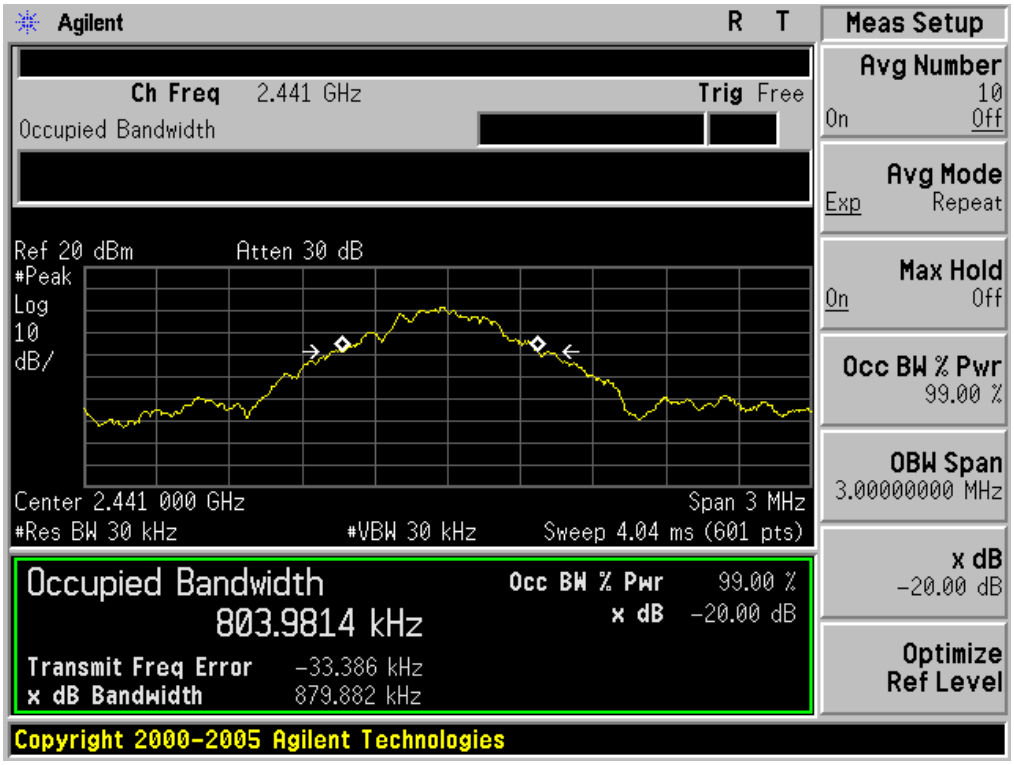
For CSR 2

BLUETOOTH 1MBPS LIMITS AND MEASUREMENT RESULT			
Applicable Limits	Measurement Result		
	Test Data (MHz)		Criteria
--	Low Channel	0.893	PASS
	Middle Channel	0.880	PASS
	High Channel	0.853	PASS

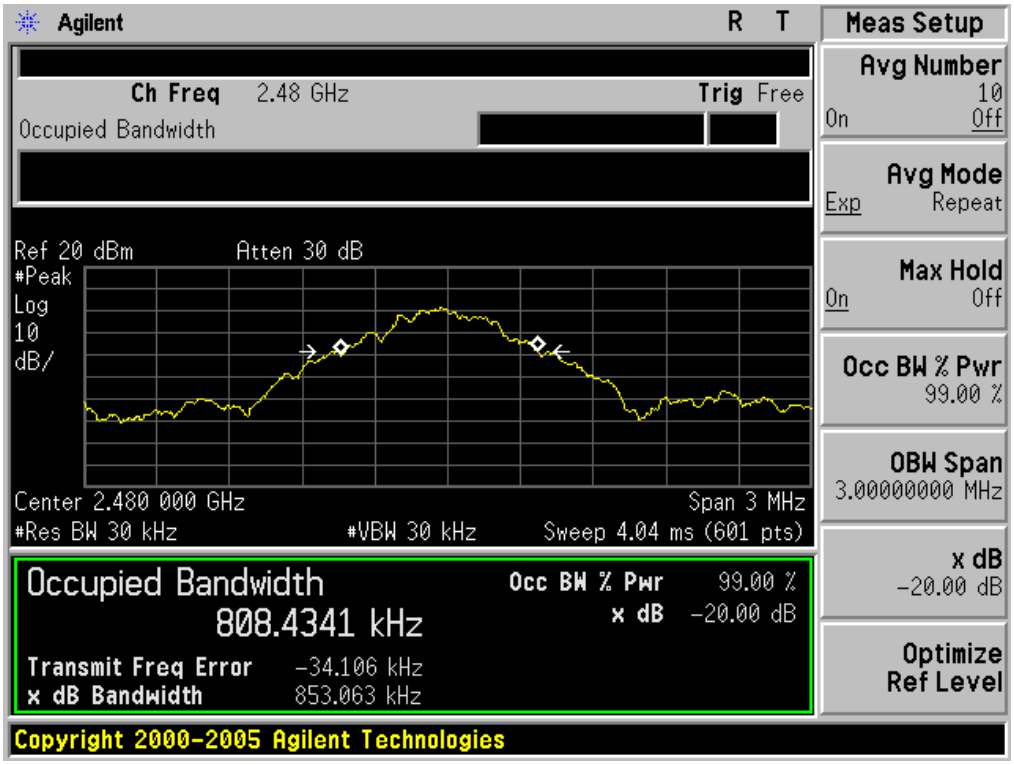
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

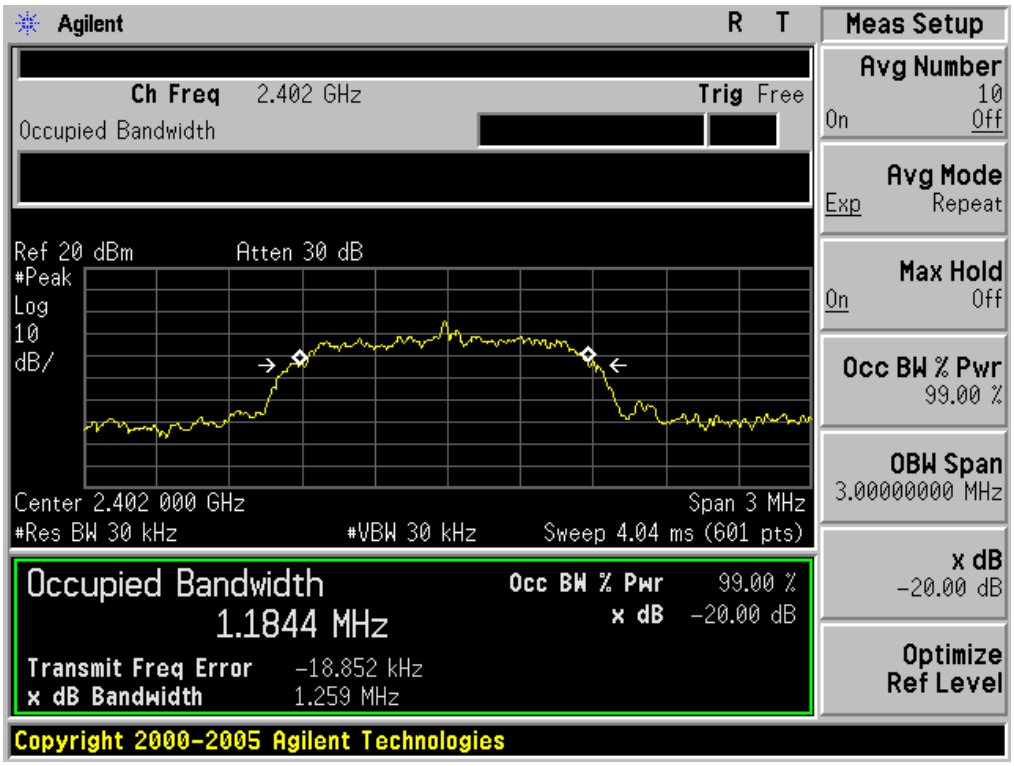


TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

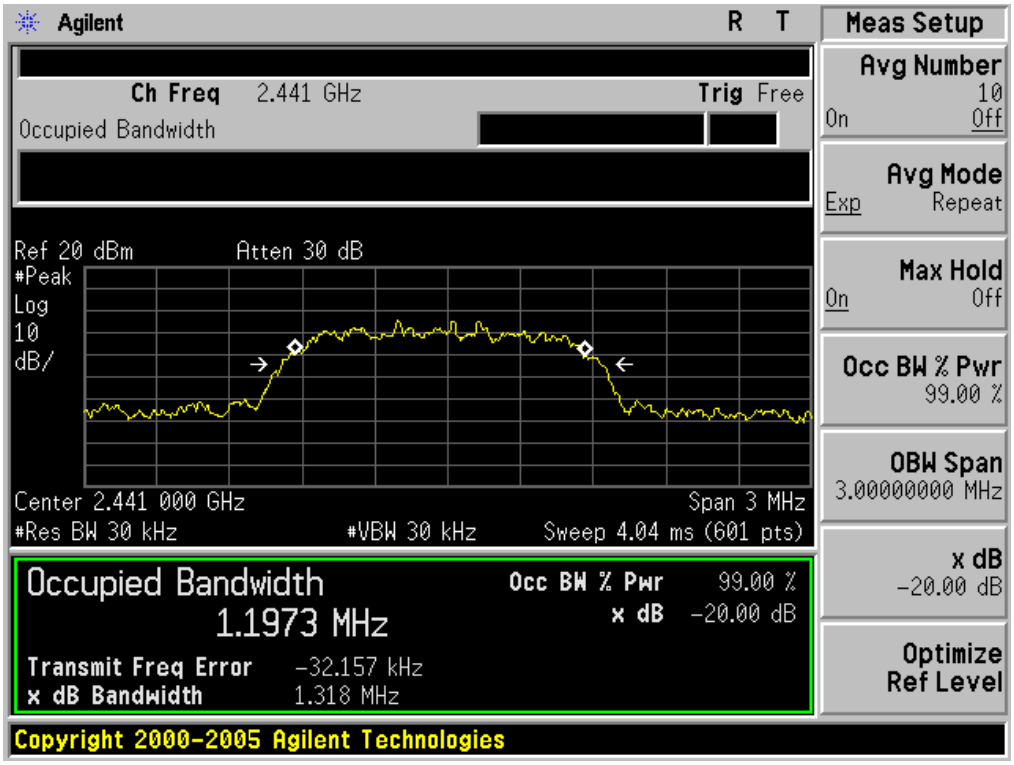


BLUETOOTH 2MBPS LIMITS AND MEASUREMENT RESUL			
Applicable Limits	**Measurement Result**		
	Test Data (MHz)		**Criteria**
N/A	Low Channel	1.259	PASS
	Middle Channel	1.318	PASS
	High Channel	1.223	PASS

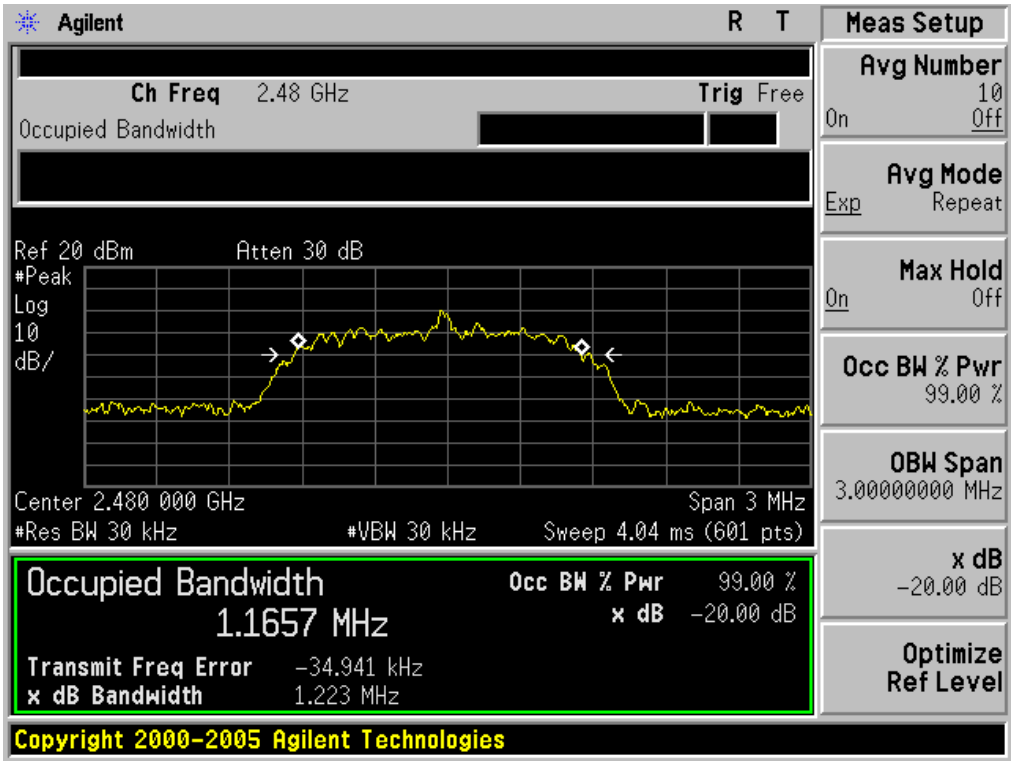
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

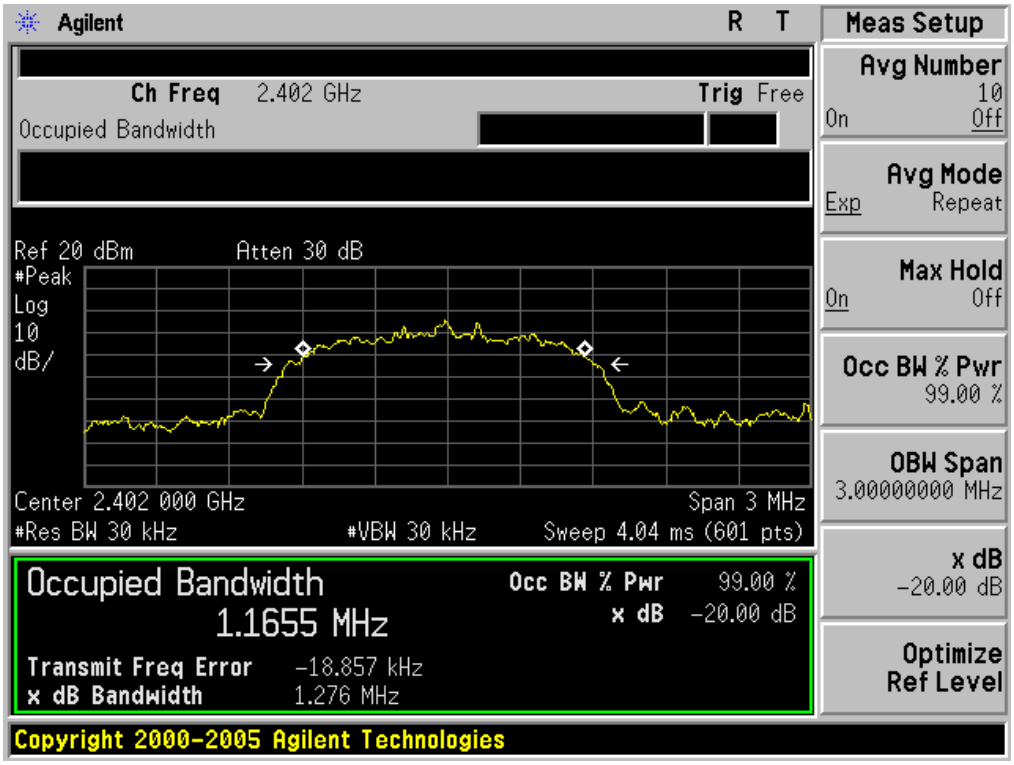


TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

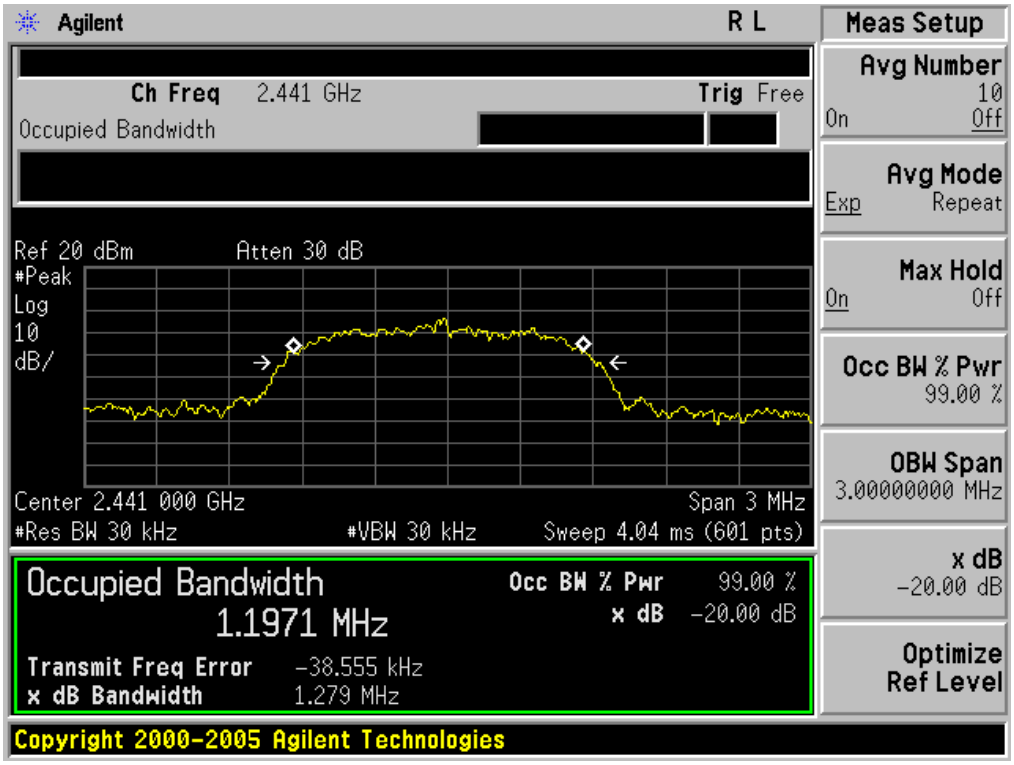


BLUETOOTH 3MBPS LIMITS AND MEASUREMENT RESUL			
Applicable Limits	**Measurement Result**		
	Test Data (MHz)		**Criteria**
N/A	Low Channel	1.276	PASS
	Middle Channel	1.279	PASS
	High Channel	1.268	PASS

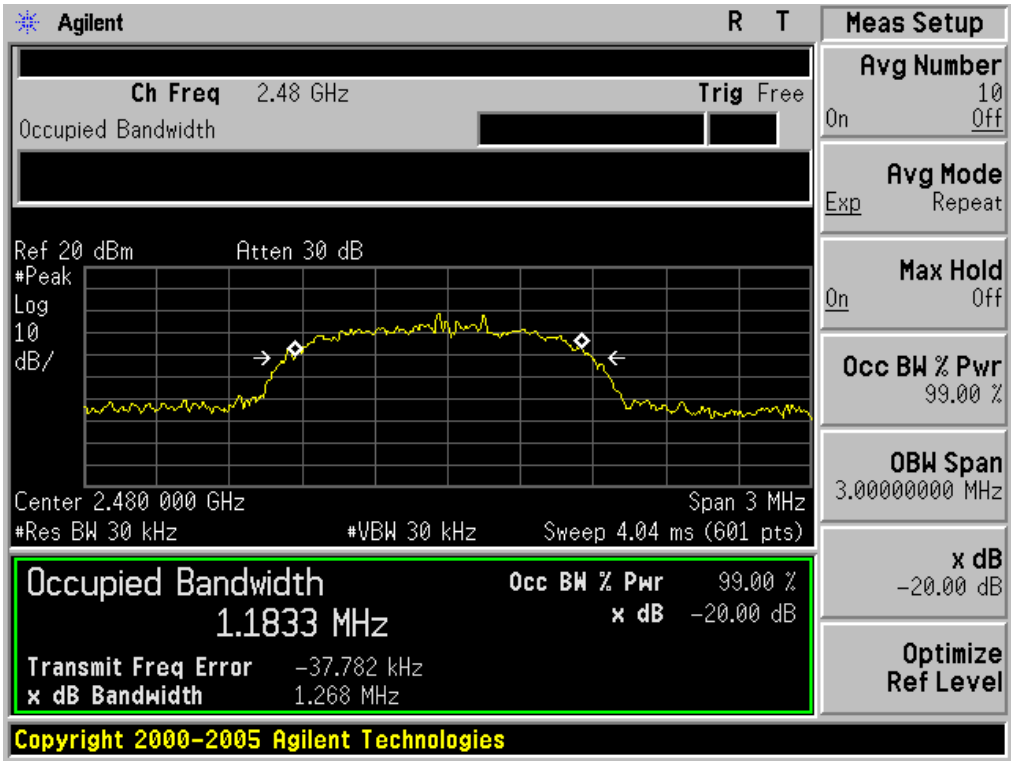
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



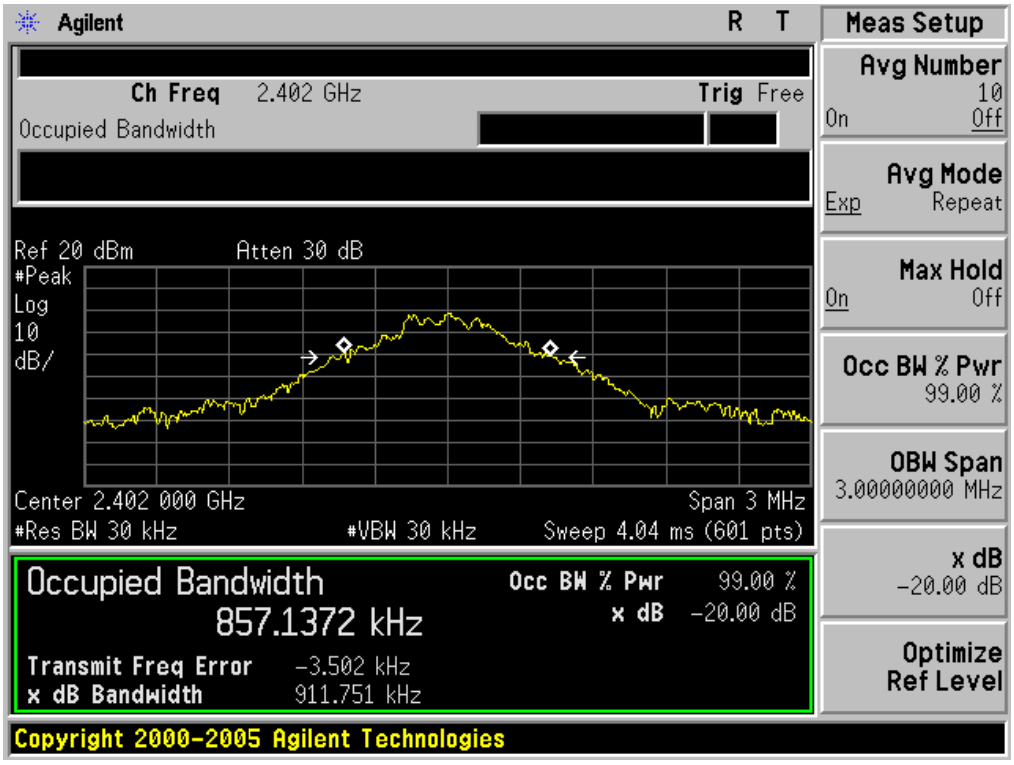
TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



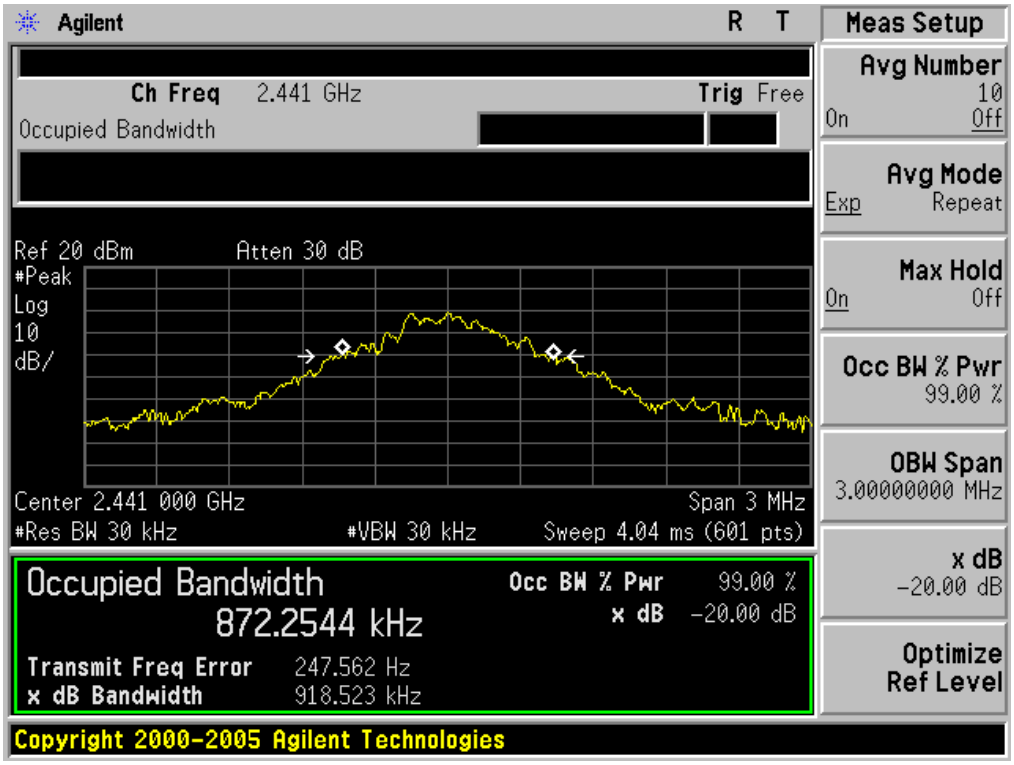
For iSSC 1

BLUETOOTH 1MBPS LIMITS AND MEASUREMENT RESULT			
Applicable Limits	Measurement Result		
	Test Data (MHz)		Criteria
--	Low Channel	0.912	PASS
	Middle Channel	0.919	PASS
	High Channel	1.005	PASS

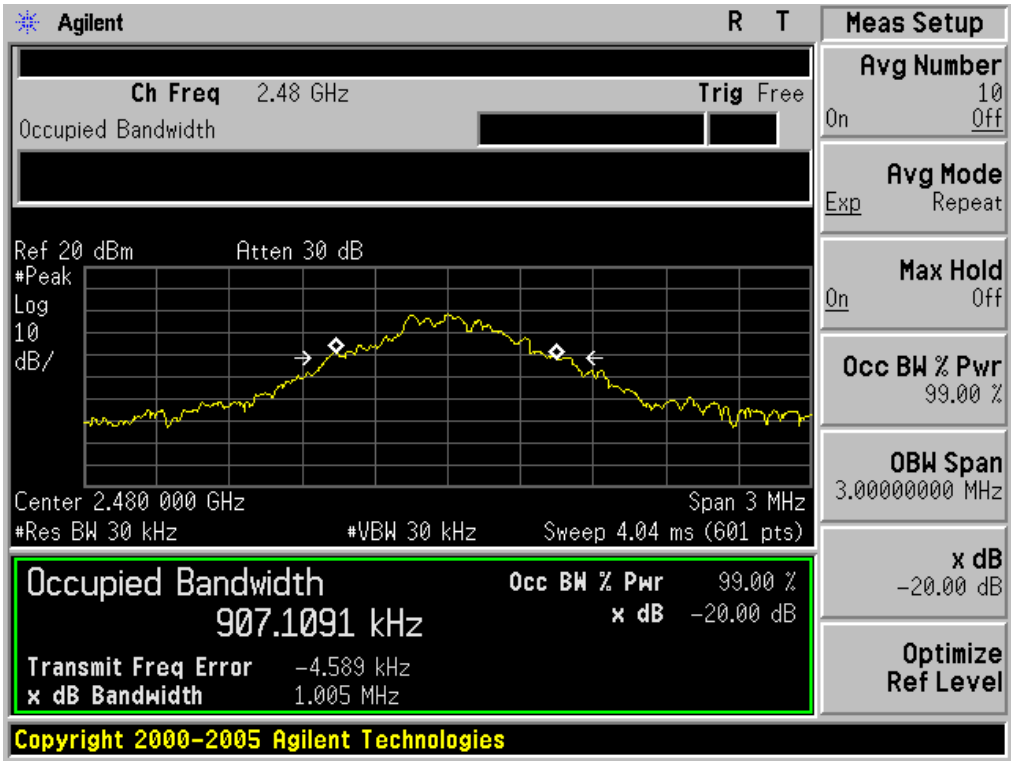
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

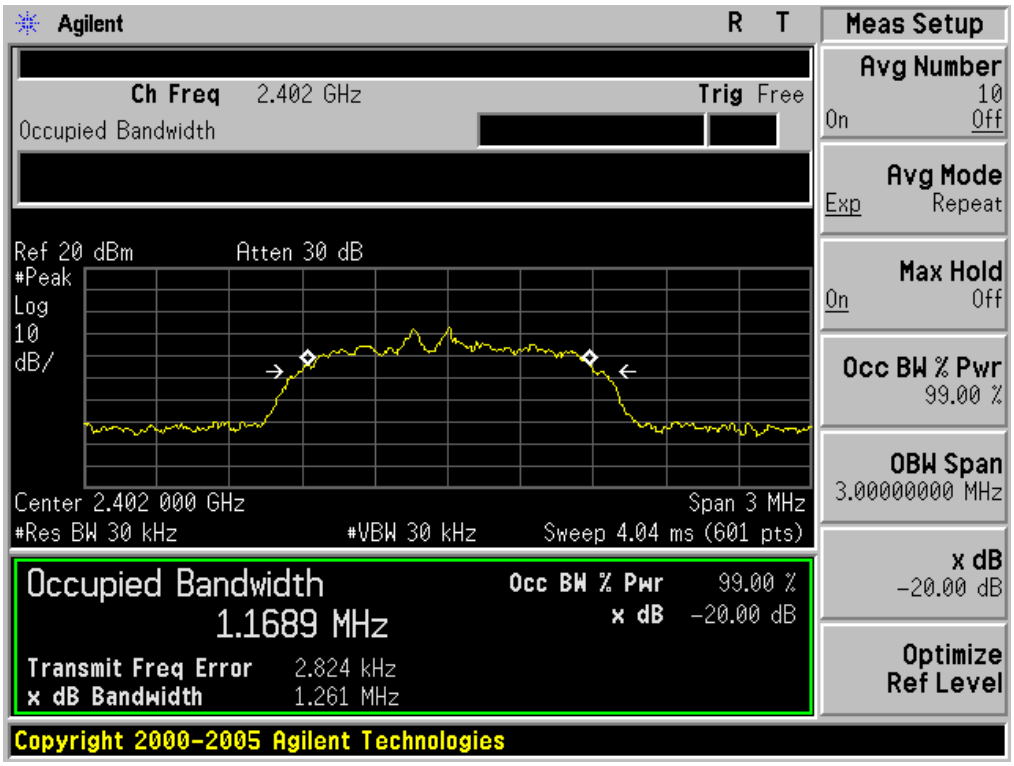


TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

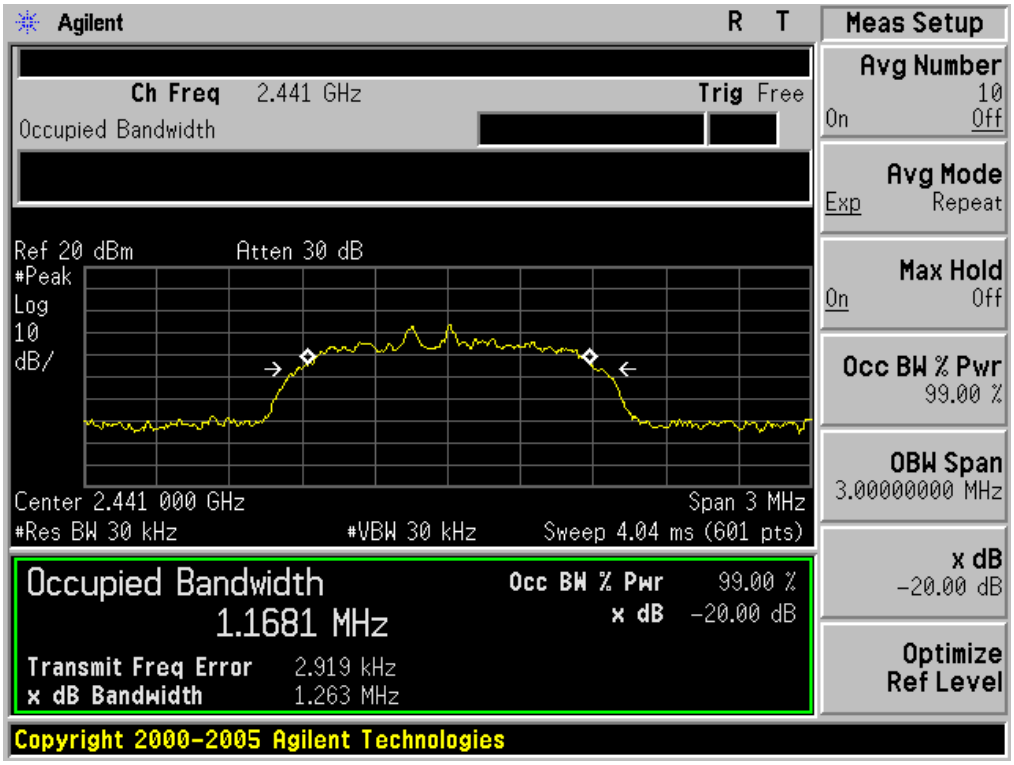


BLUETOOTH 2MBPS LIMITS AND MEASUREMENT RESUL			
Applicable Limits	**Measurement Result**		
	Test Data (MHz)		**Criteria**
N/A	Low Channel	1.261	PASS
	Middle Channel	1.263	PASS
	High Channel	1.270	PASS

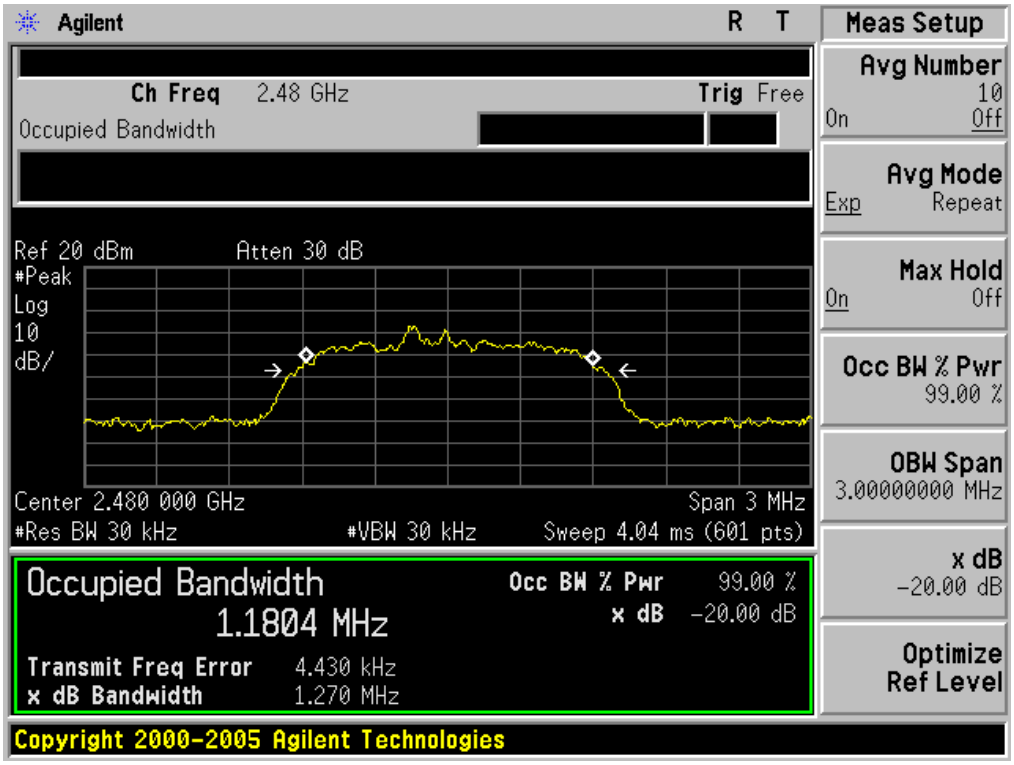
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

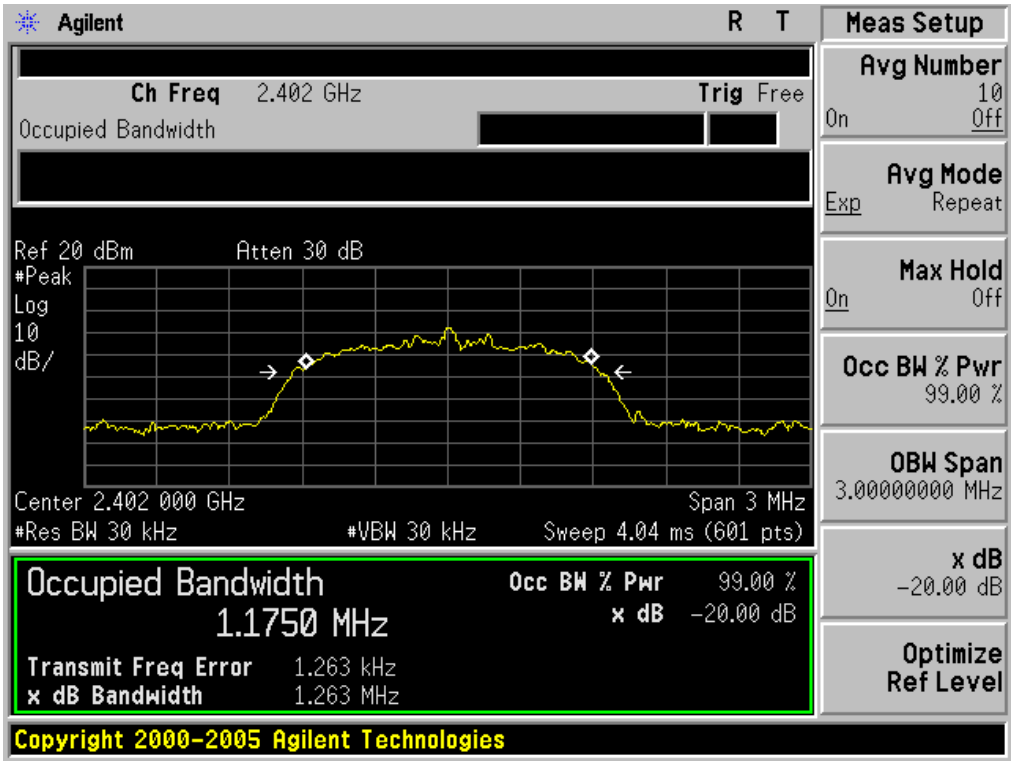


TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

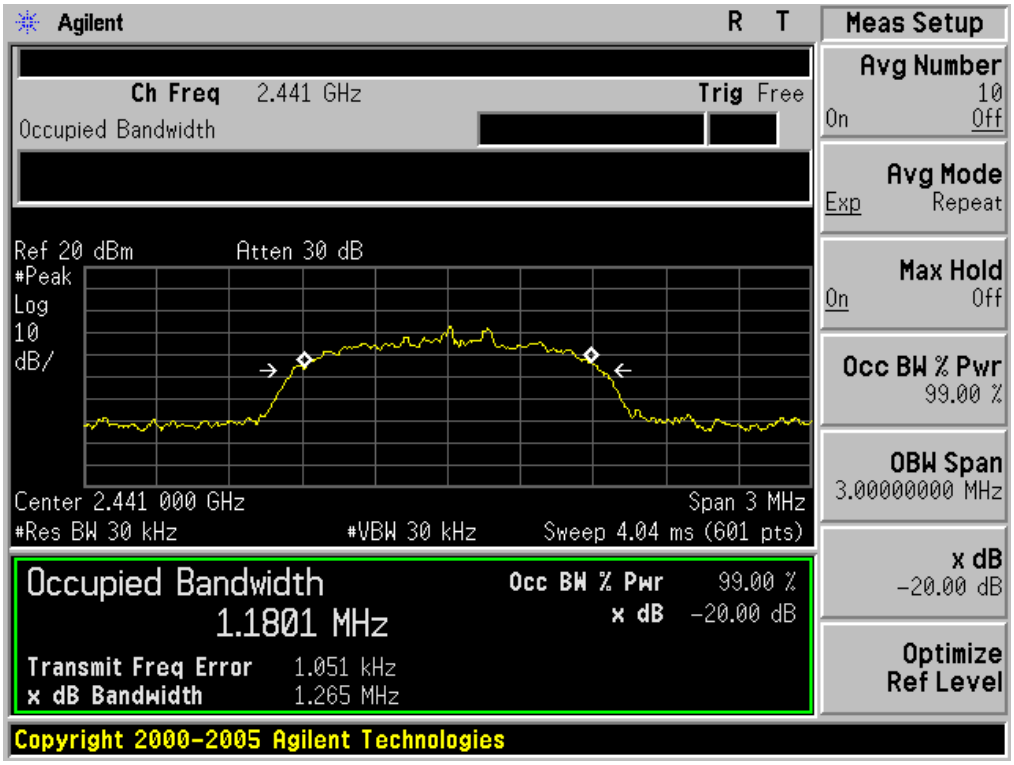


BLUETOOTH 3MBPS LIMITS AND MEASUREMENT RESUL			
Applicable Limits	**Measurement Result**		
	Test Data (MHz)		**Criteria**
N/A	Low Channel	1.263	PASS
	Middle Channel	1.265	PASS
	High Channel	1.266	PASS

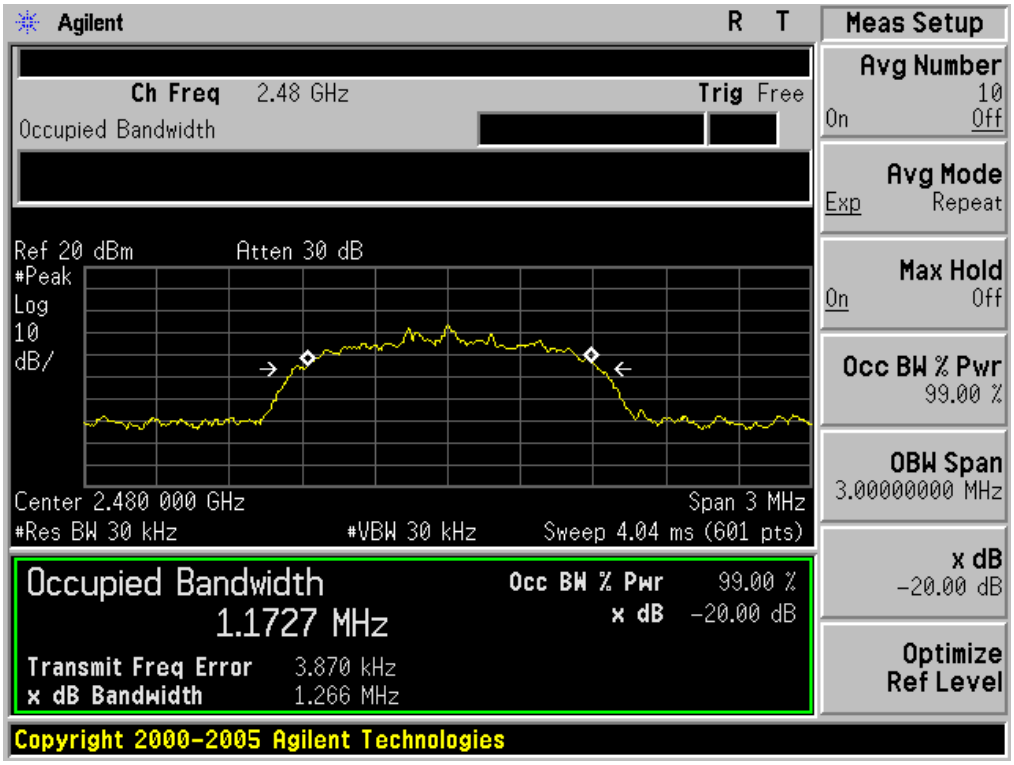
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



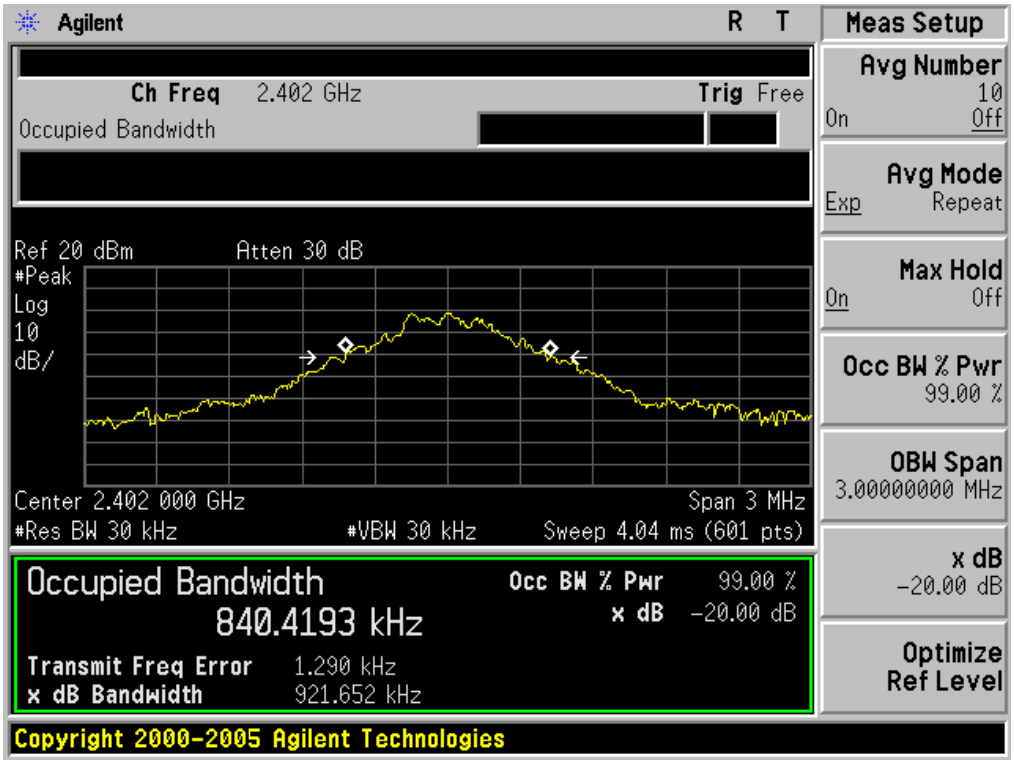
TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



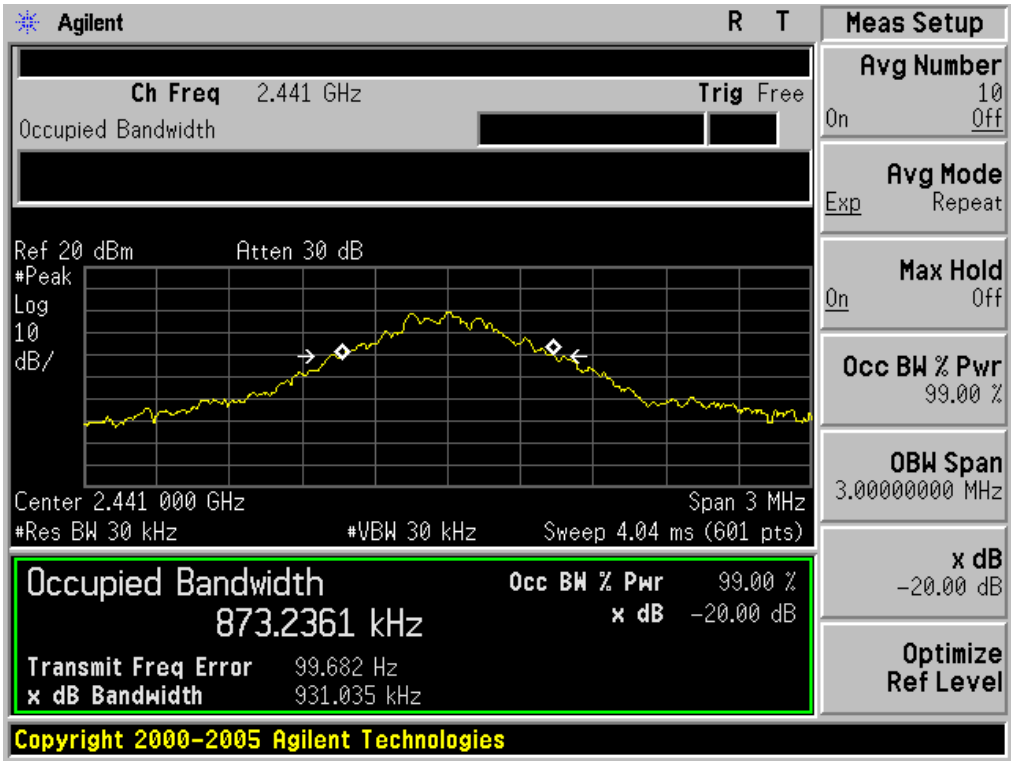
For iSSC 2

BLUETOOTH 1MBPS LIMITS AND MEASUREMENT RESULT			
Applicable Limits	Measurement Result		
	Test Data (MHz)		Criteria
--	Low Channel	0.922	PASS
	Middle Channel	0.931	PASS
	High Channel	1.003	PASS

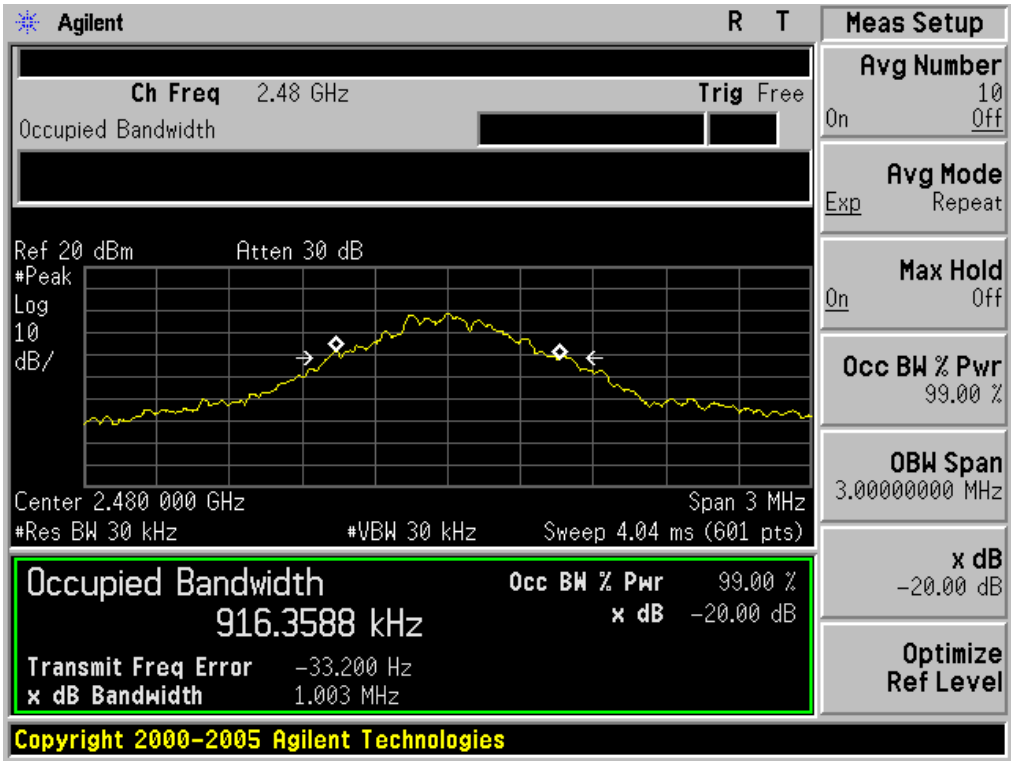
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

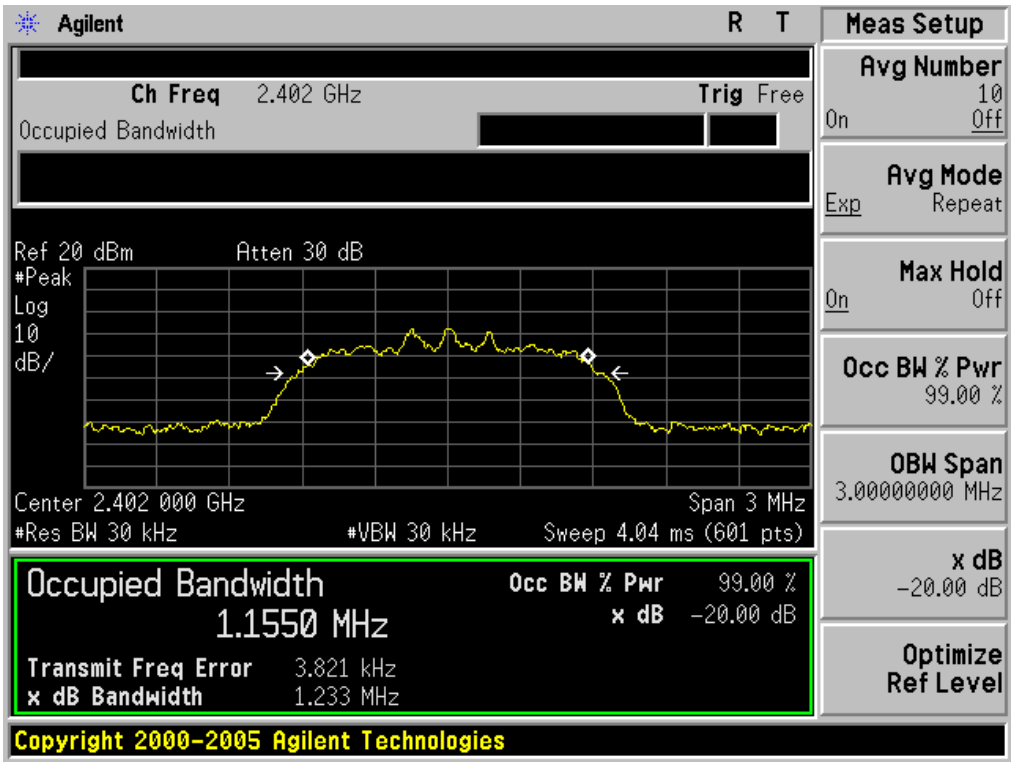


TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

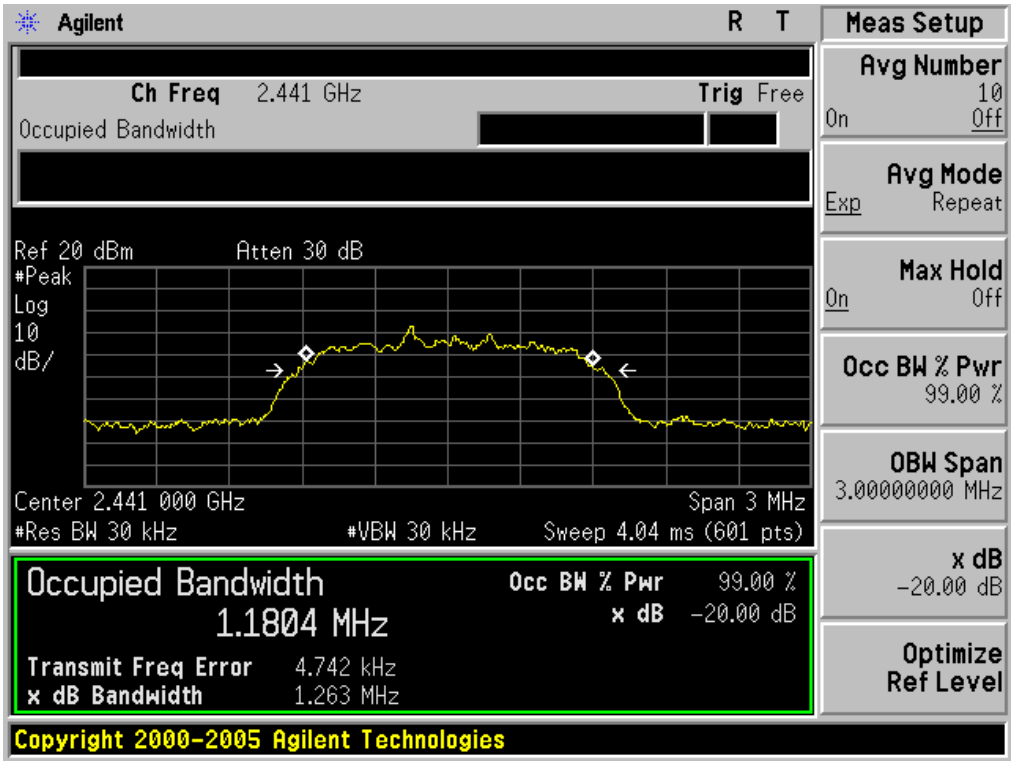


BLUETOOTH 2MBPS LIMITS AND MEASUREMENT RESUL			
Applicable Limits	**Measurement Result**		
	Test Data (MHz)		**Criteria**
N/A	Low Channel	1.233	PASS
	Middle Channel	1.263	PASS
	High Channel	1.260	PASS

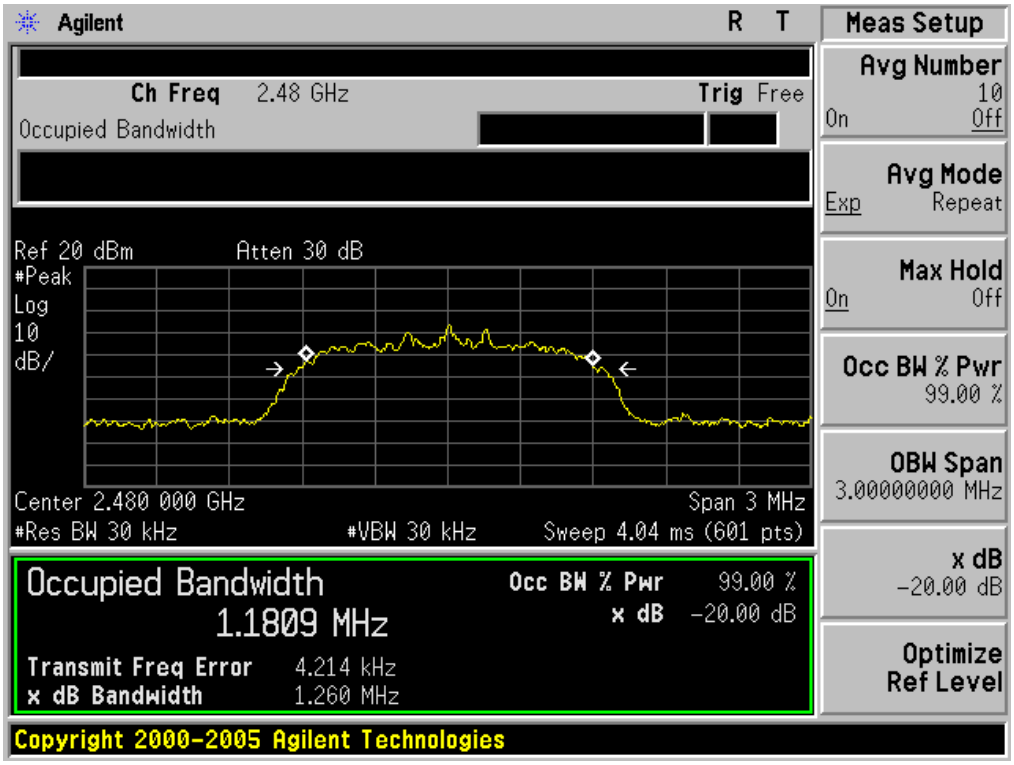
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

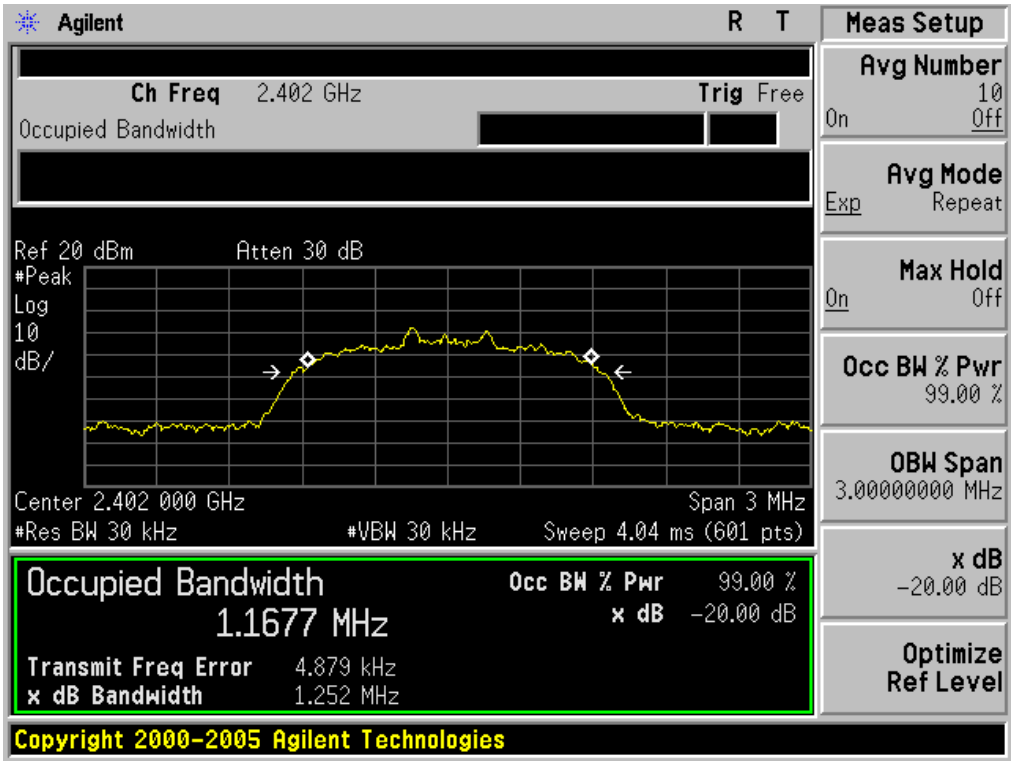


TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL

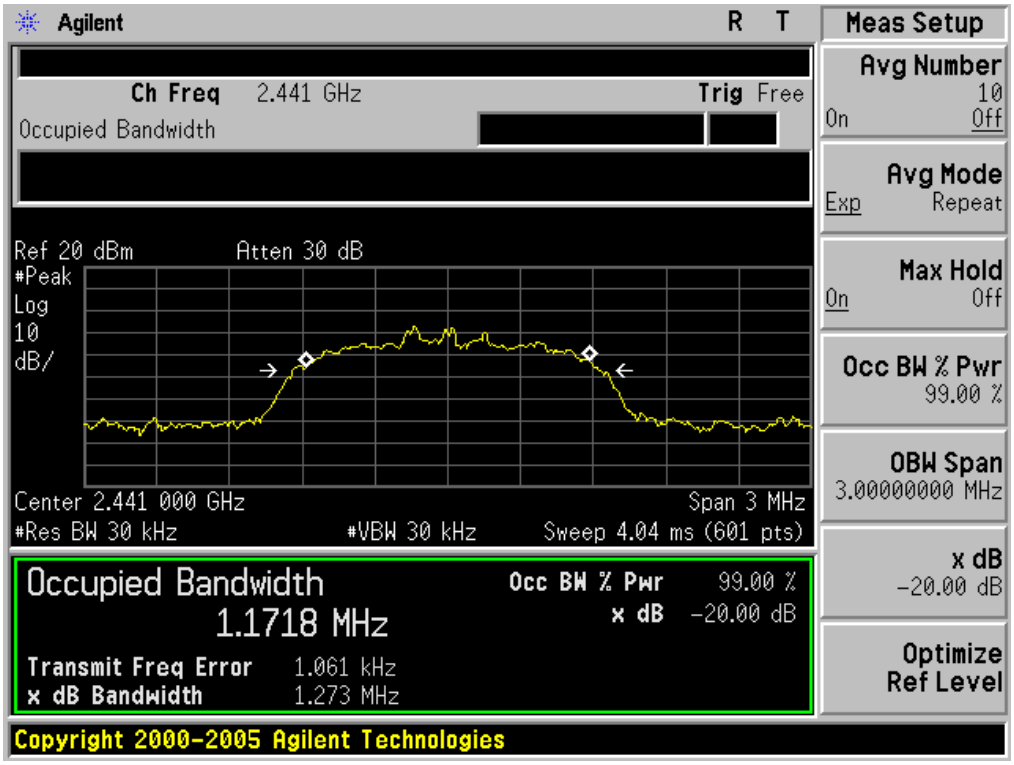


BLUETOOTH 3MBPS LIMITS AND MEASUREMENT RESUL			
Applicable Limits	**Measurement Result**		
	Test Data (MHz)		**Criteria**
N/A	Low Channel	1.252	PASS
	Middle Channel	1.273	PASS
	High Channel	1.301	PASS

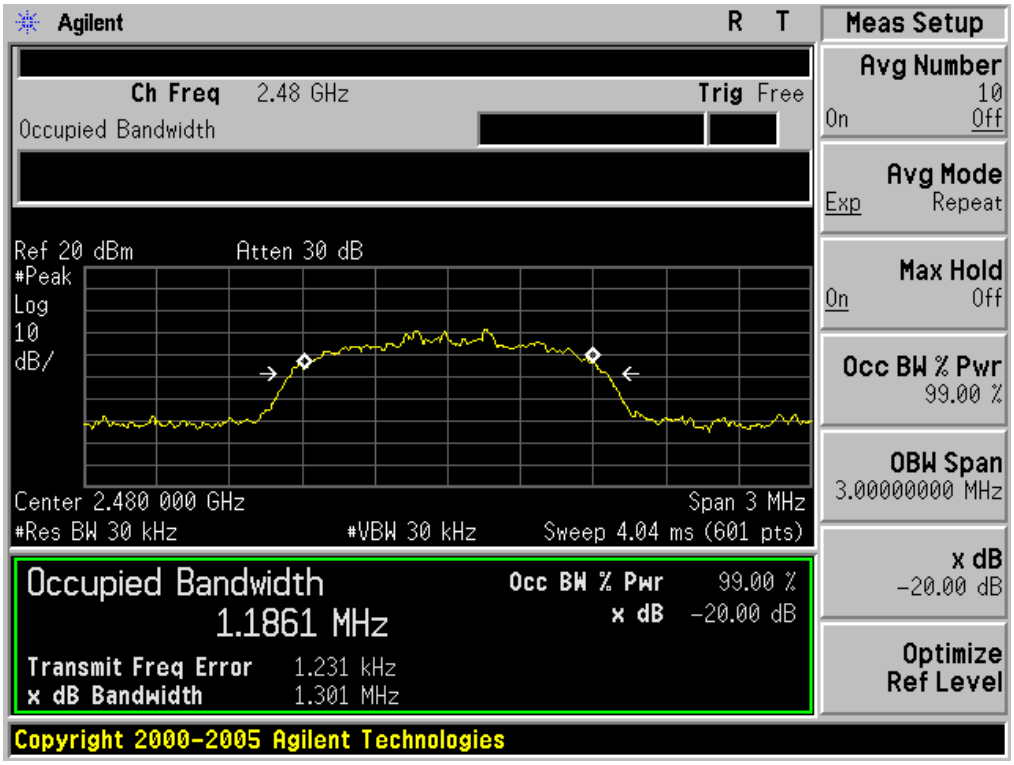
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



9. CONDUCTED SPURIOUS EMISSION

9.1. MEASUREMENT PROCEDURE

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on the top, the Middle and the bottom operation frequency individually.
3. Set the Span = wide enough to capture the peak level of the in-band emission and all spurious emissions from the lowest frequency generated in the EUT up through the 10th harmonic.
   RBW = 100 kHz; VBW ≥ RBW; Sweep = auto; Detector function = peak.
4. Set SPA Trace 1 Max hold, then View.

9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

The same as described in section 8.2

9.3. MEASUREMENT EQUIPMENT USED

The same as described in section 6

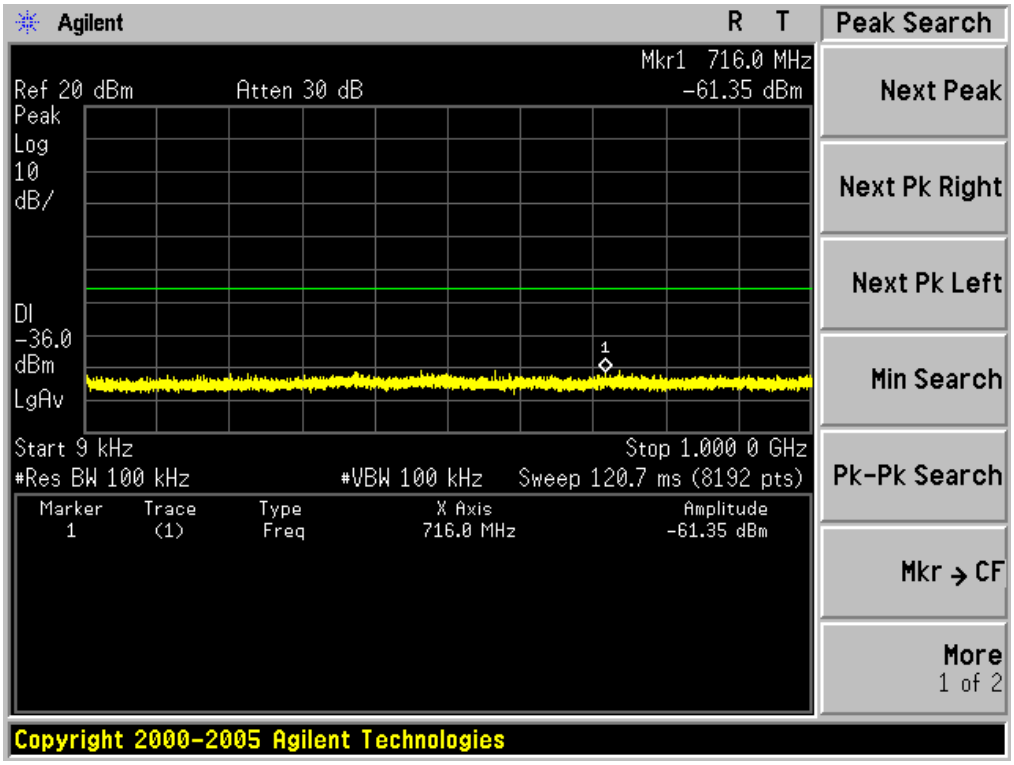
9.4. LIMITS AND MEASUREMENT RESULT

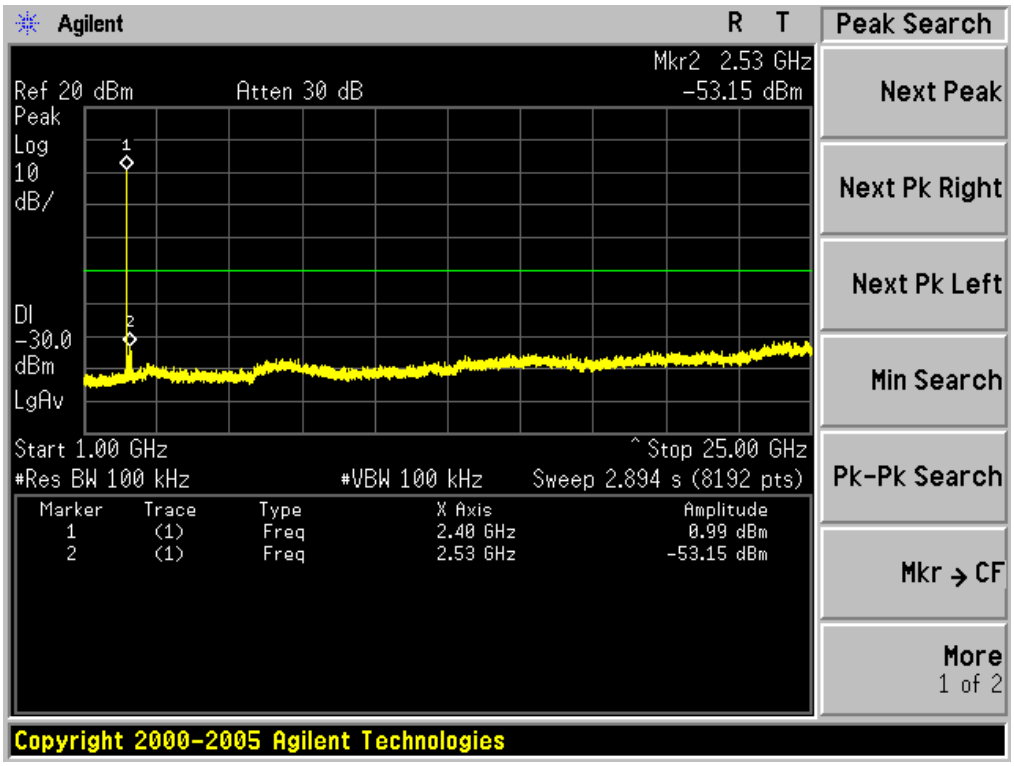
LIMITS AND MEASUREMENT RESULT		
Applicable Limits	**Measurement Result**	
	Test Data	**Criteria**
In any 100 KHz Bandwidth Outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produce by the intentional radiator shall be at least 20 dB below that in 100KHz bandwidth within the band that contains the highest level of the desired power. In addition, radiation 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))	At least -20dBc than the limit Specified on the BOTTOM Channel	PASS
	At least -20dBc than the limit Specified on the TOP Channel	PASS

For CSR 1

TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE

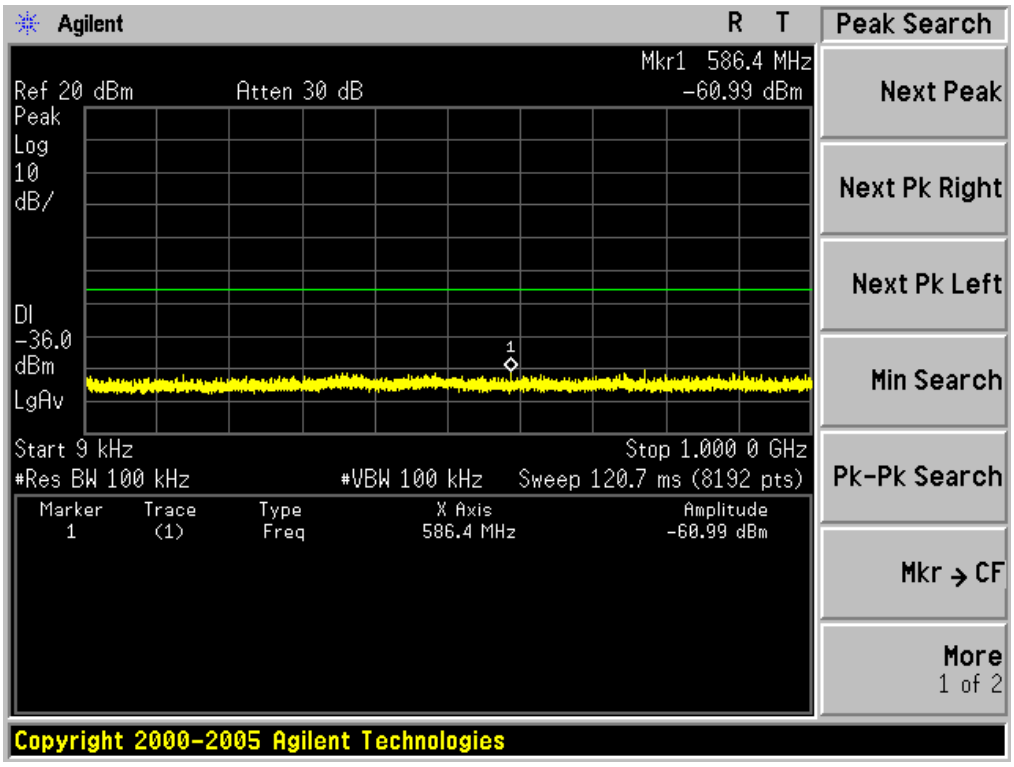
OF GFSK MODULATION IN LOW CHANNEL

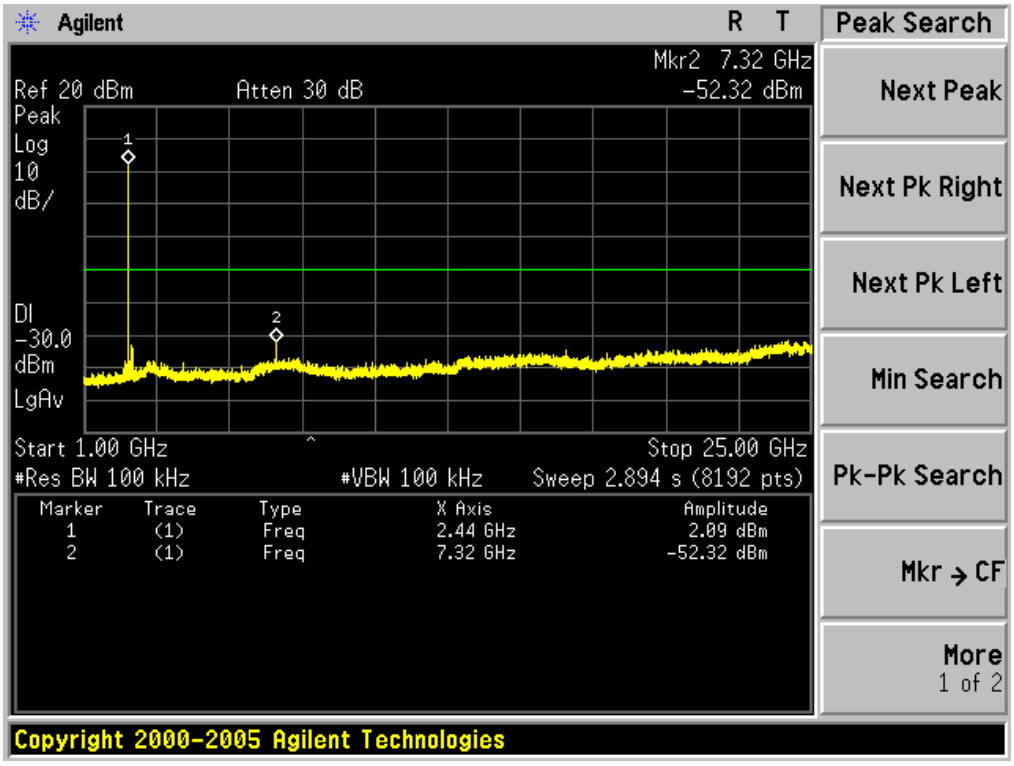




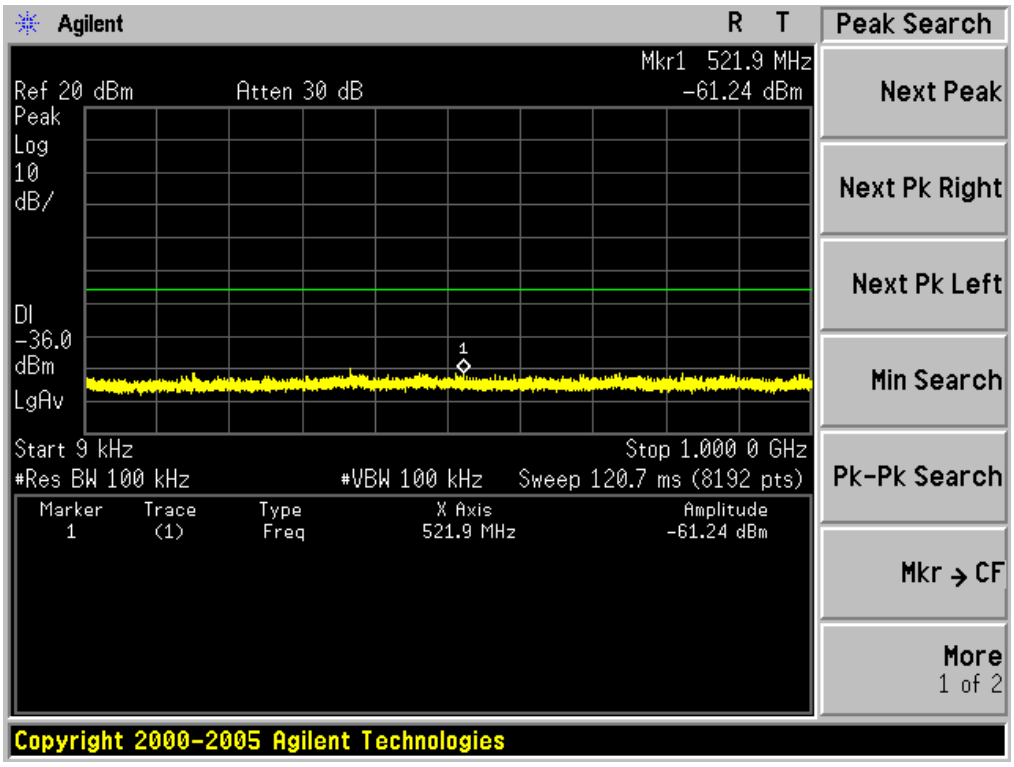
TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE

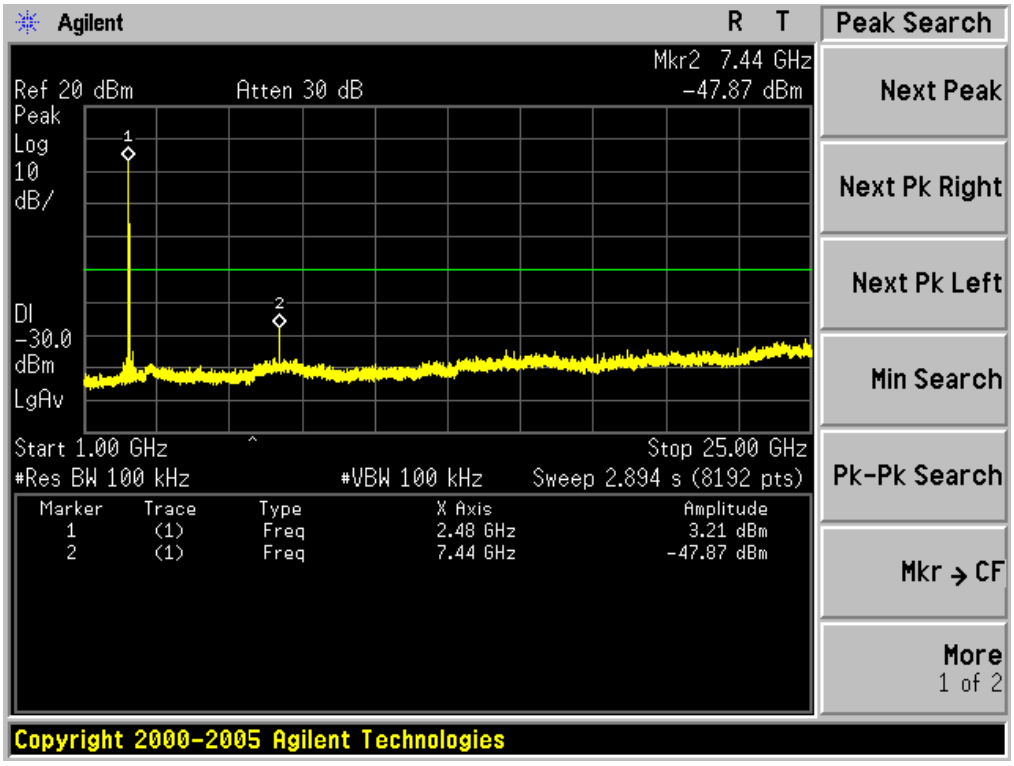
OF GFSK MODULATION IN MIDDLE CHANNEL





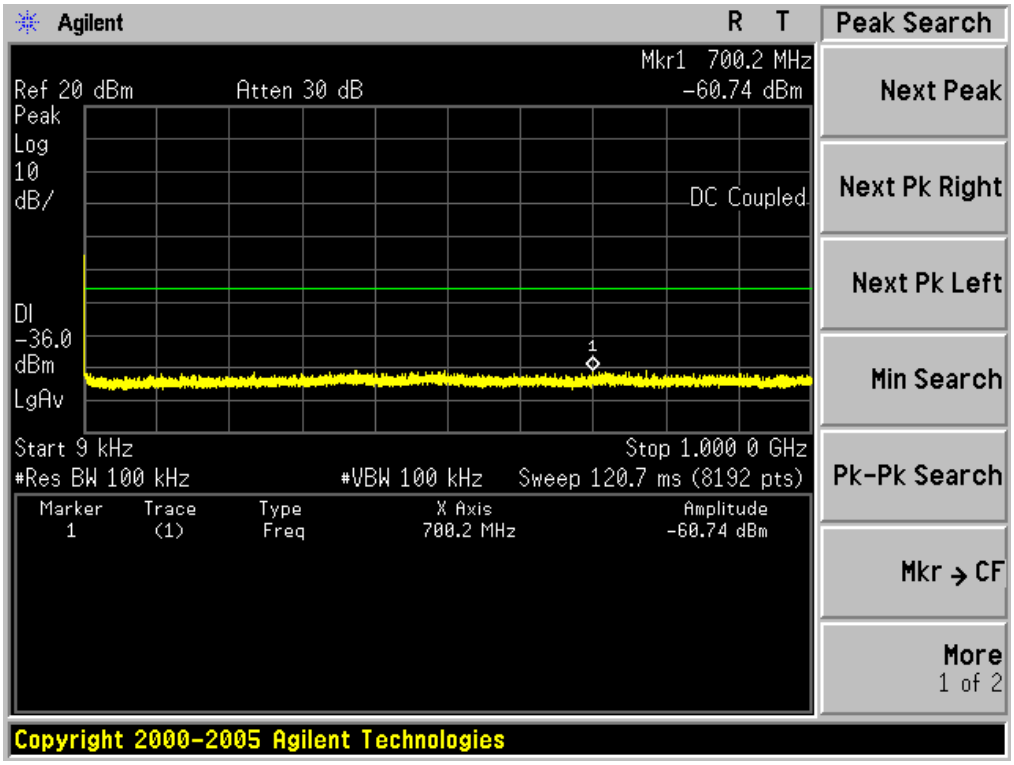
TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF GFSK MODULATION IN HIGH CHANNEL

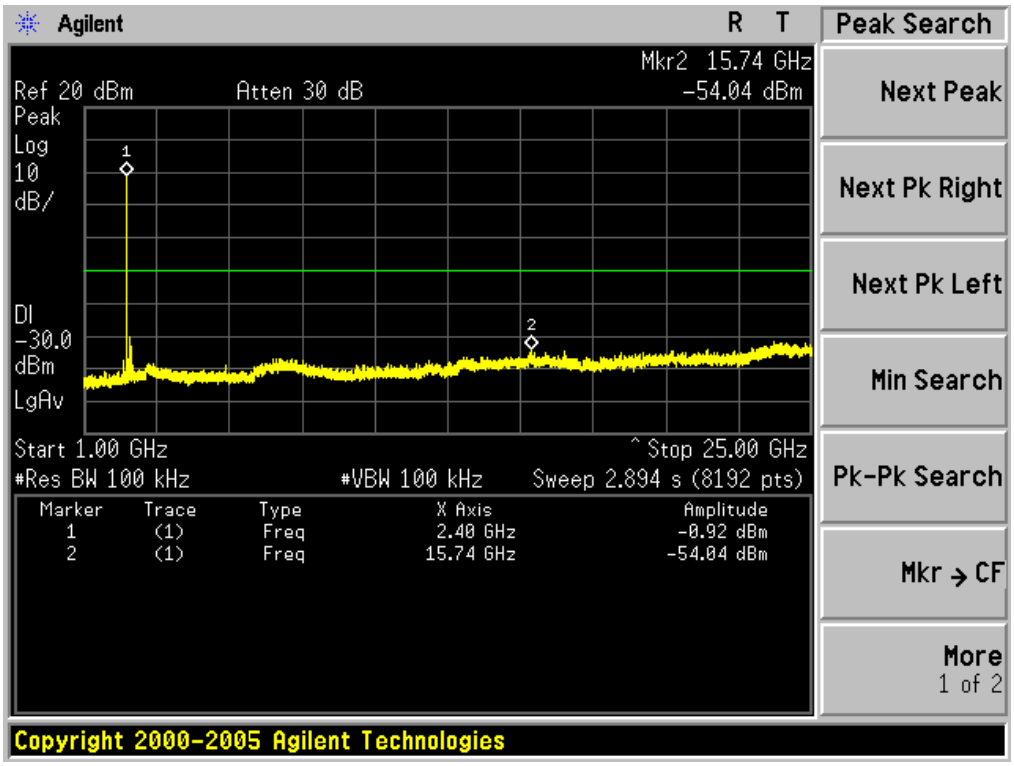




For CSR 2

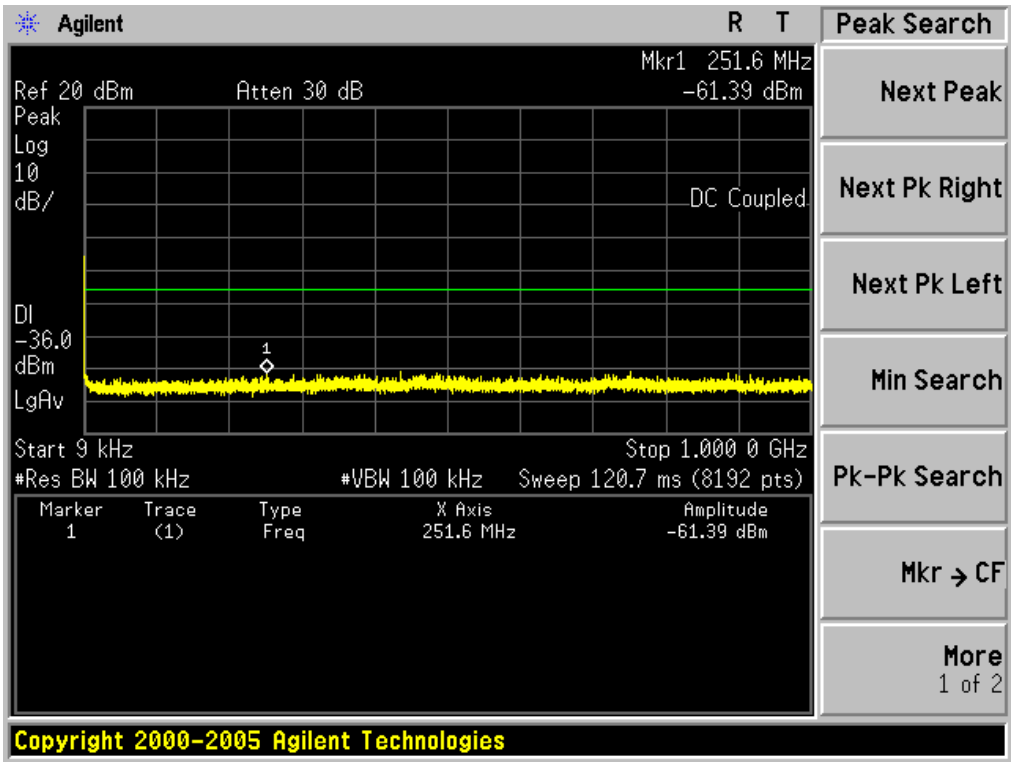
TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF GFSK MODULATION IN LOW CHANNEL

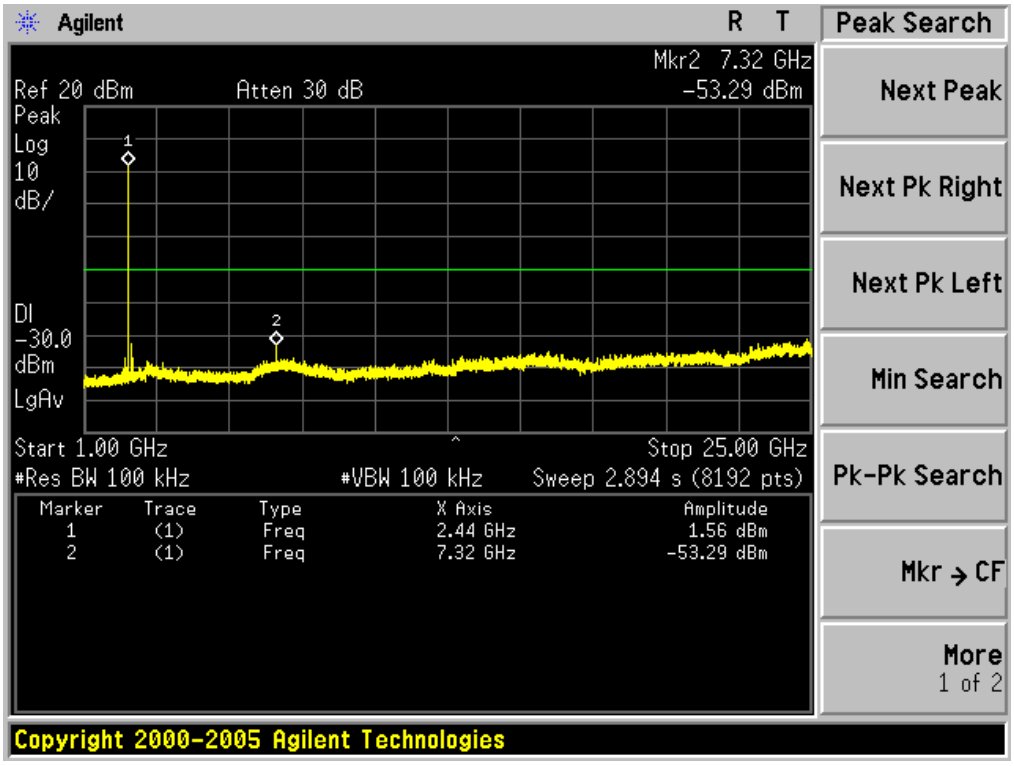




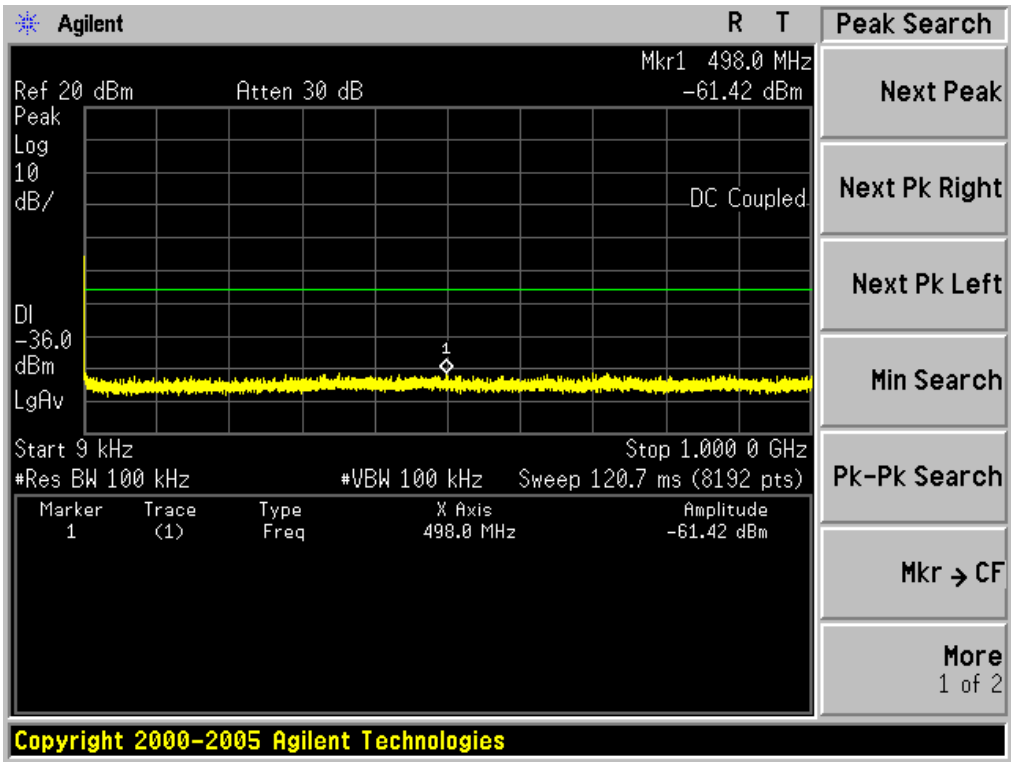
TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE

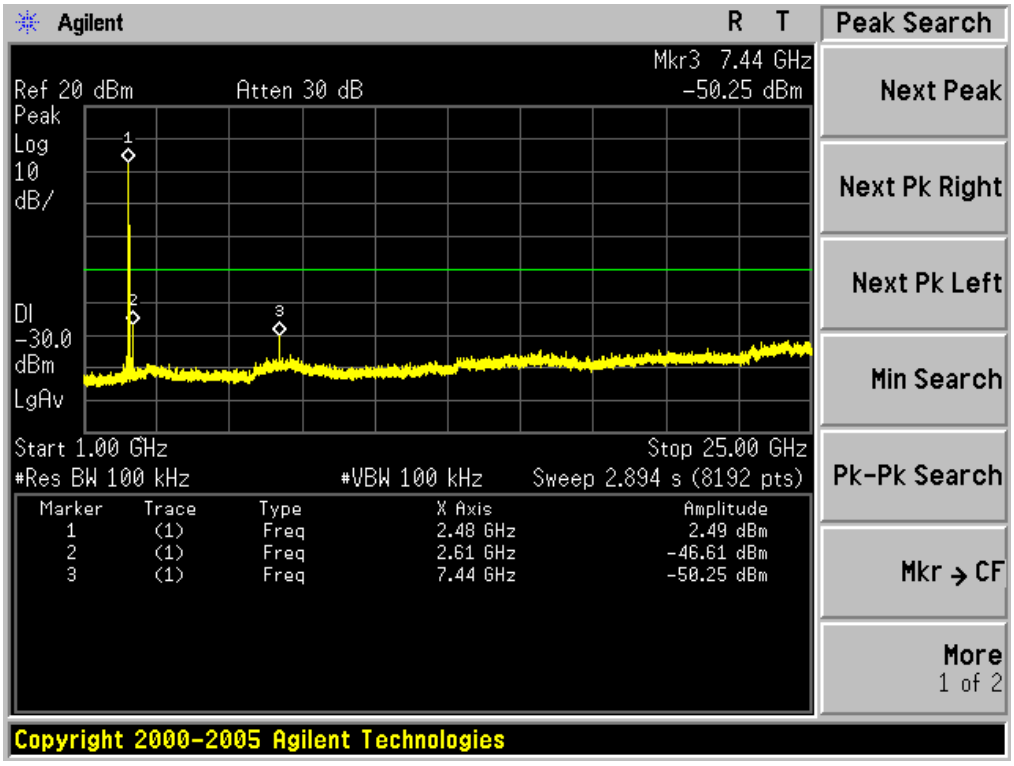
OF GFSK MODULATION IN MIDDLE CHANNEL





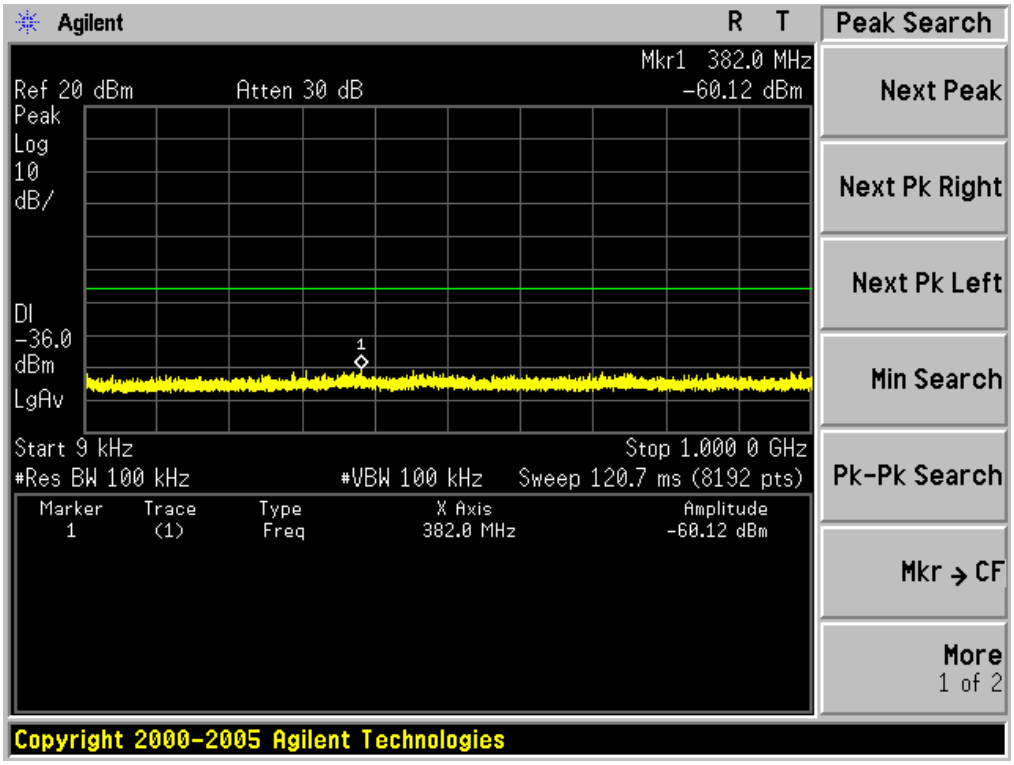
TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF GFSK MODULATION IN HIGH CHANNEL

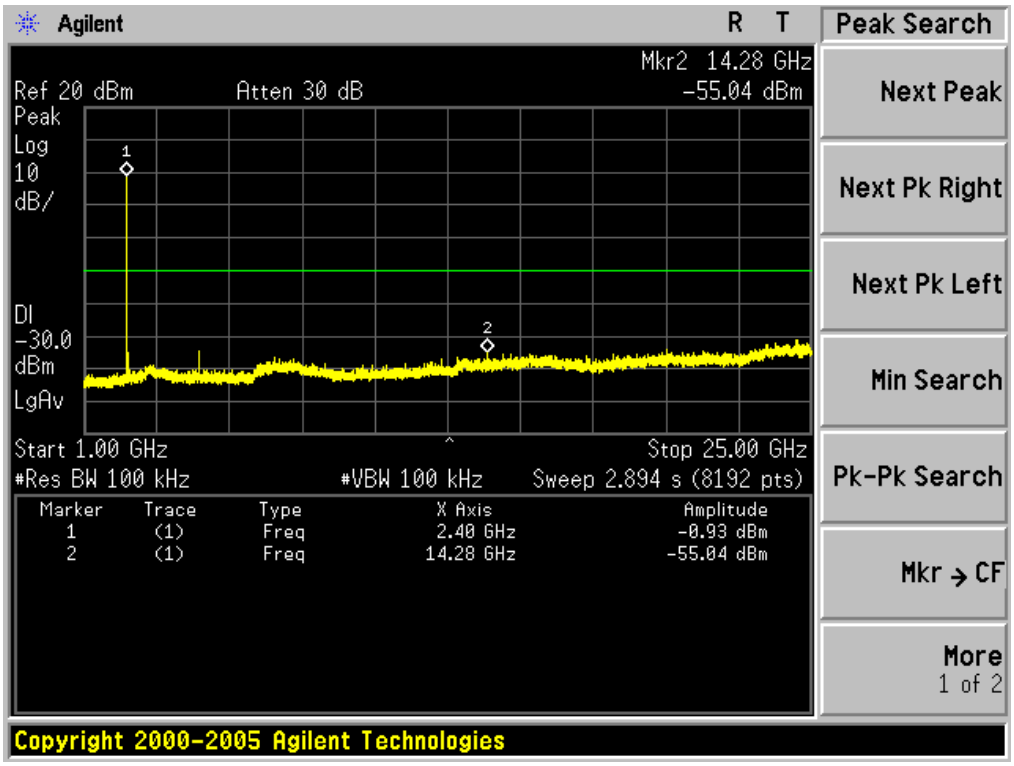




For iSSC 1

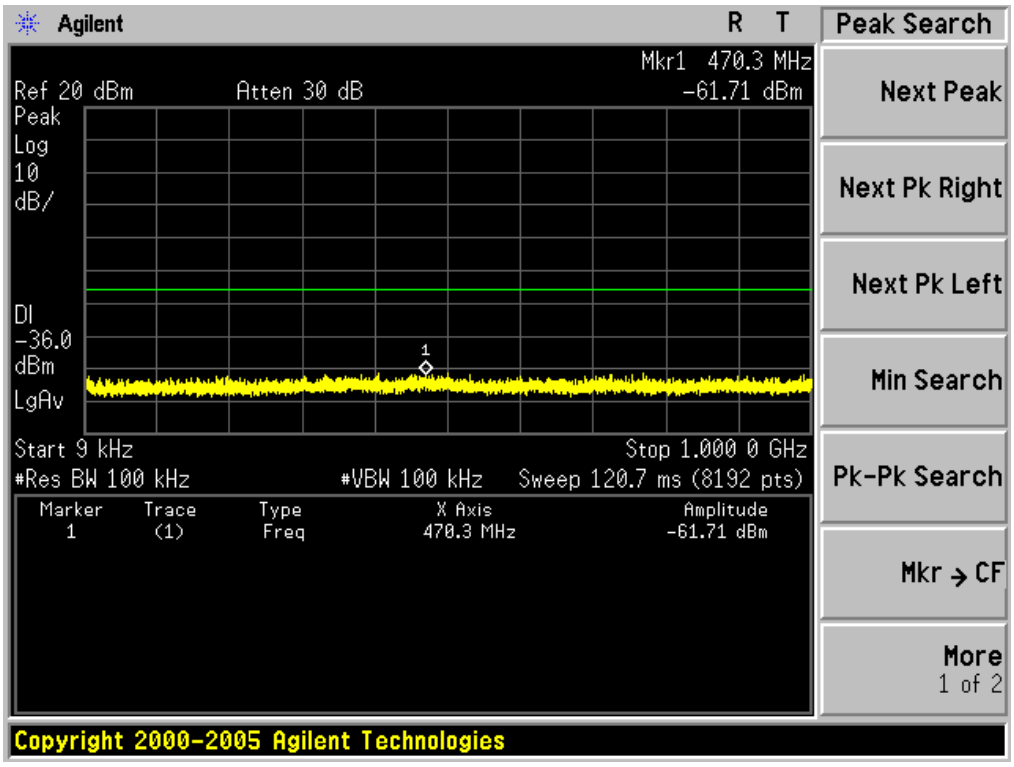
TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF GFSK MODULATION IN LOW CHANNEL

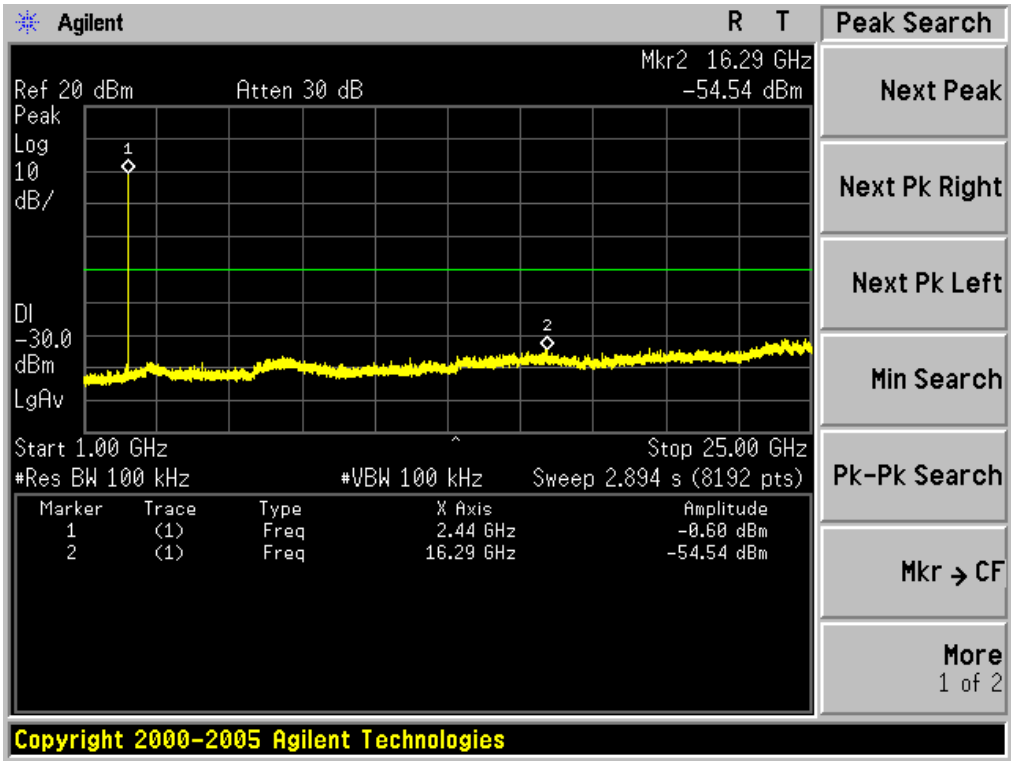




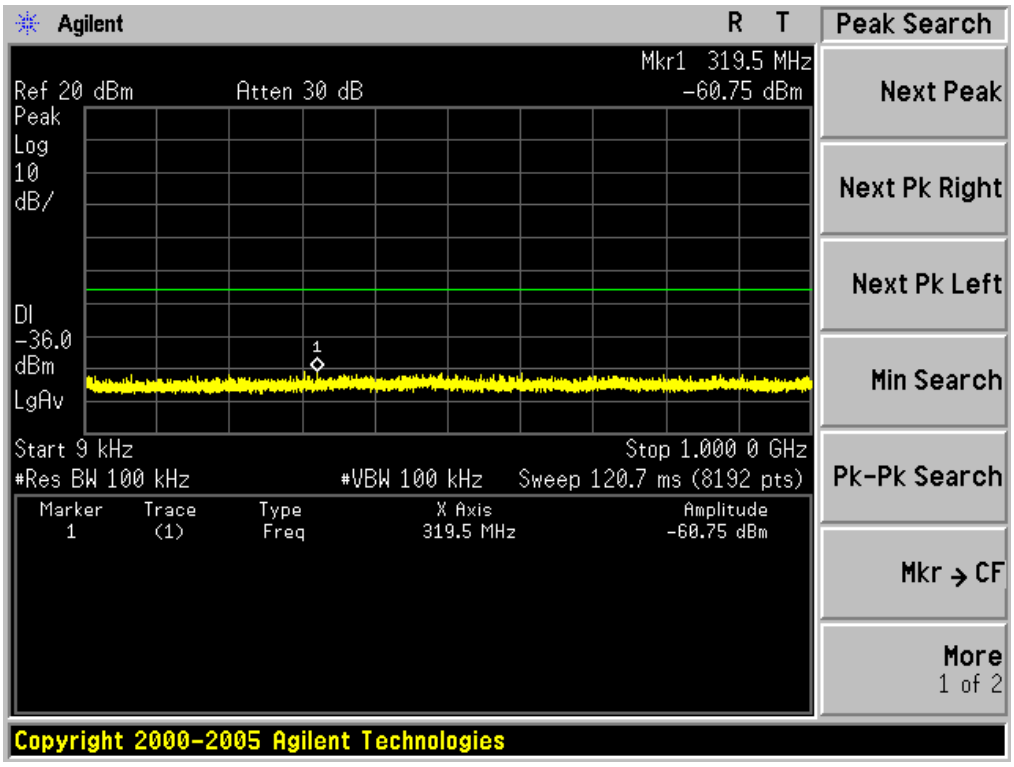
TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE

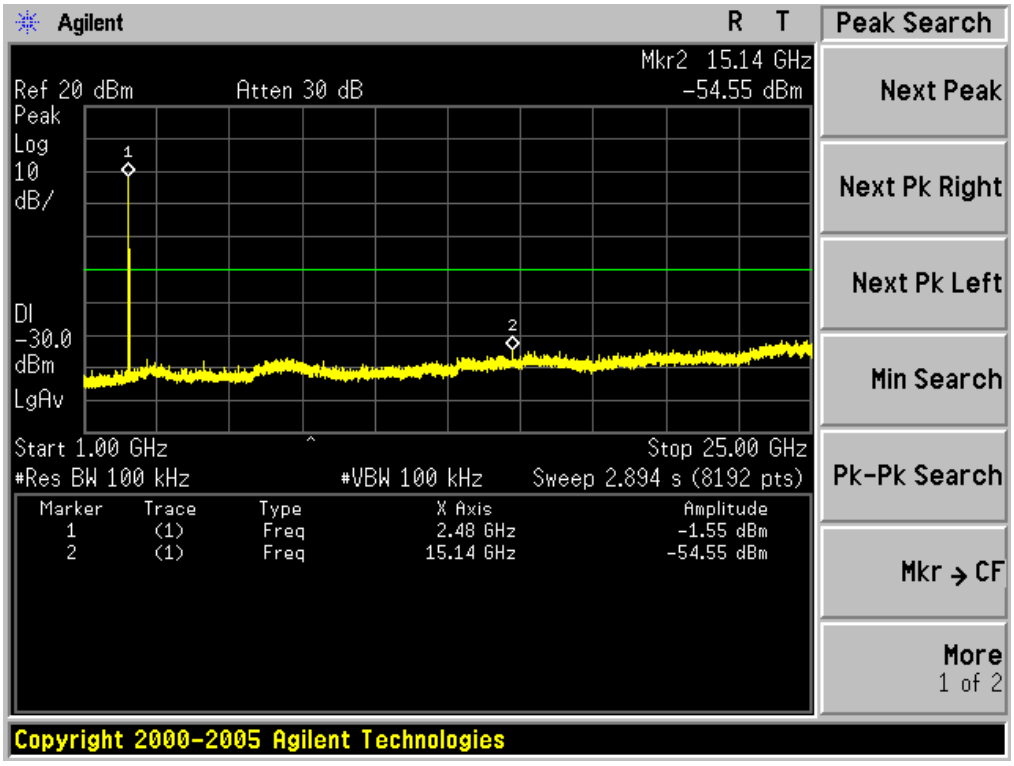
OF GFSK MODULATION IN MIDDLE CHANNEL





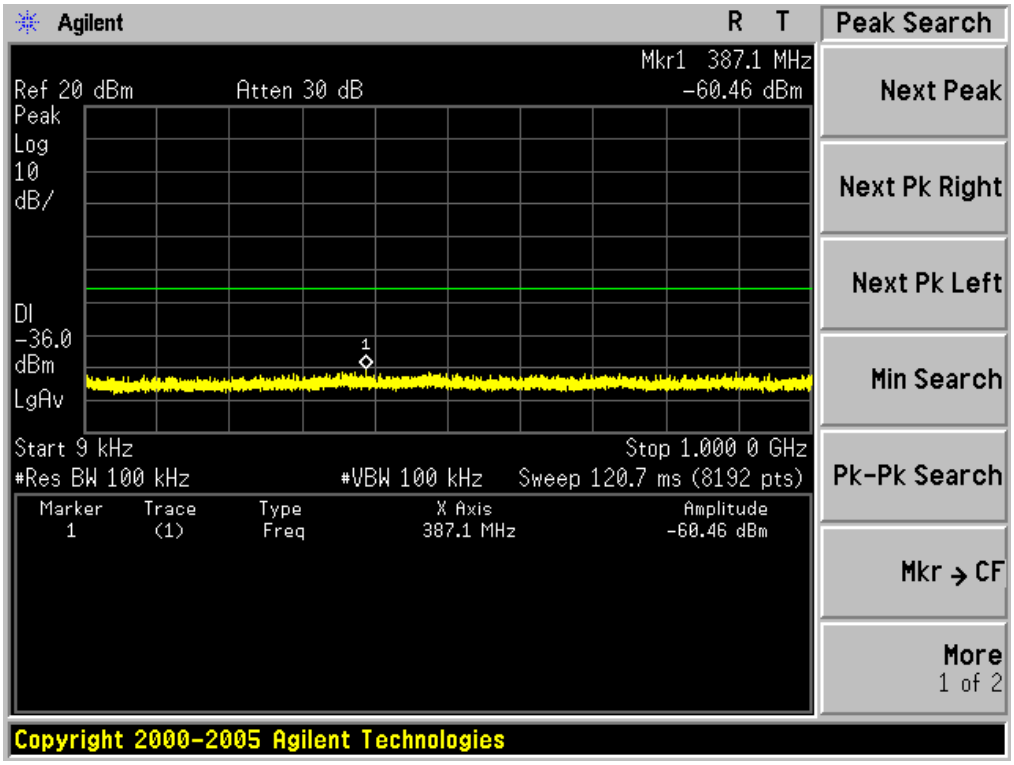
TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE
OF GFSK MODULATION IN HIGH CHANNEL

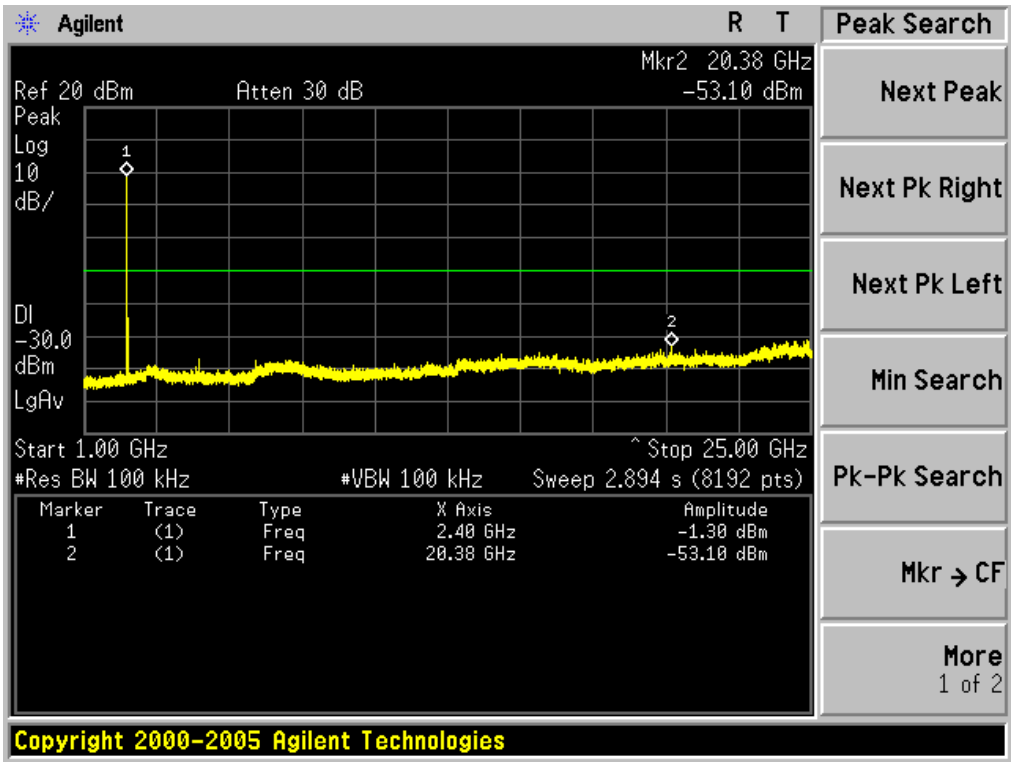




For iSSC 2

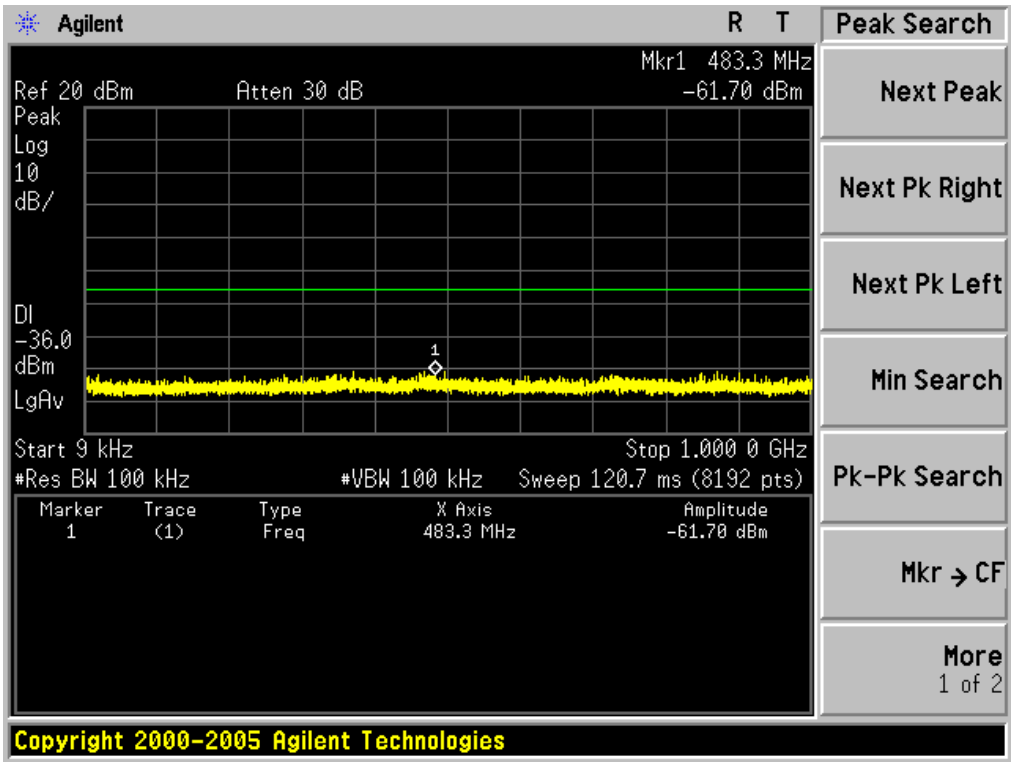
TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF GFSK MODULATION IN LOW CHANNEL

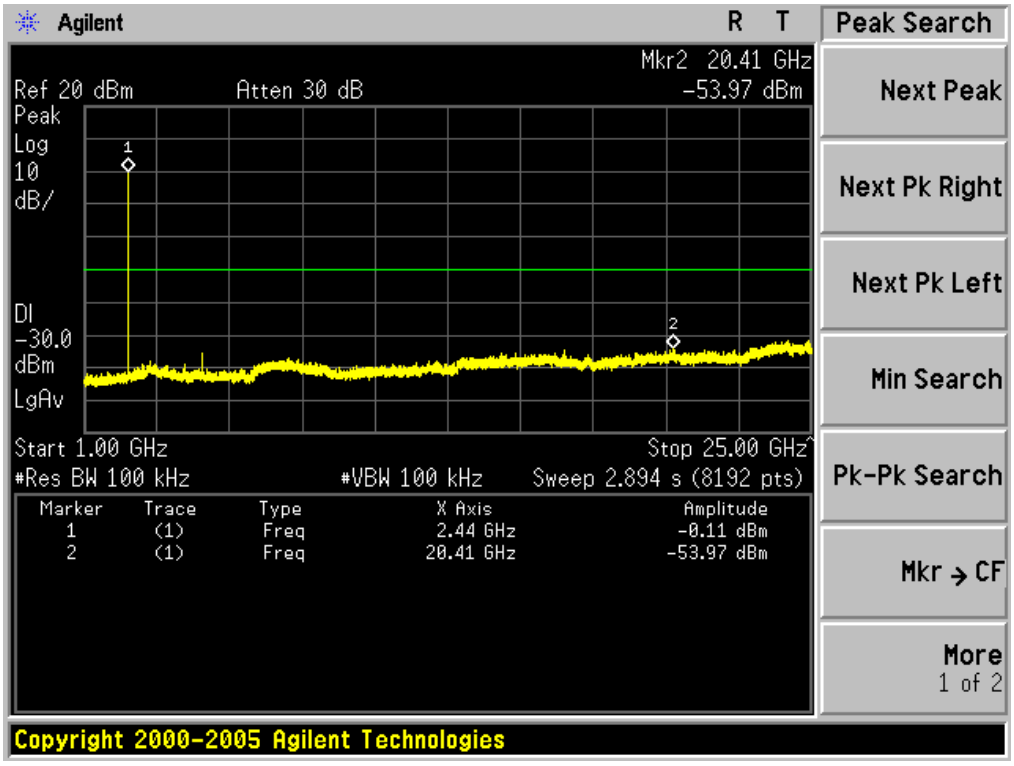




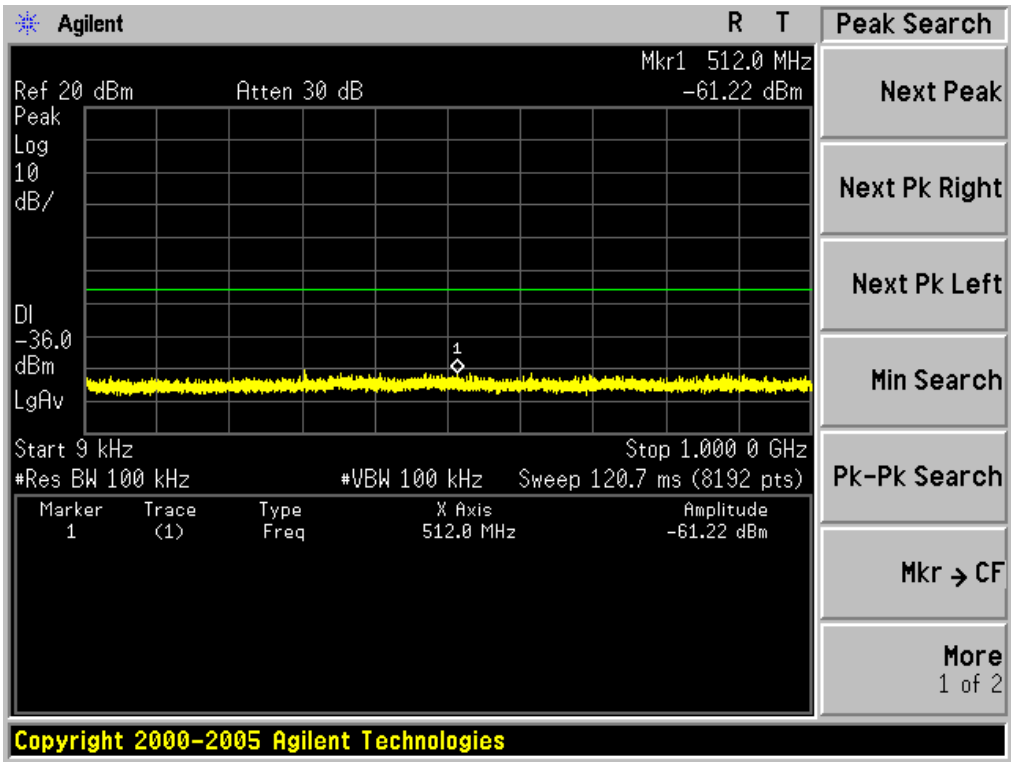
TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE

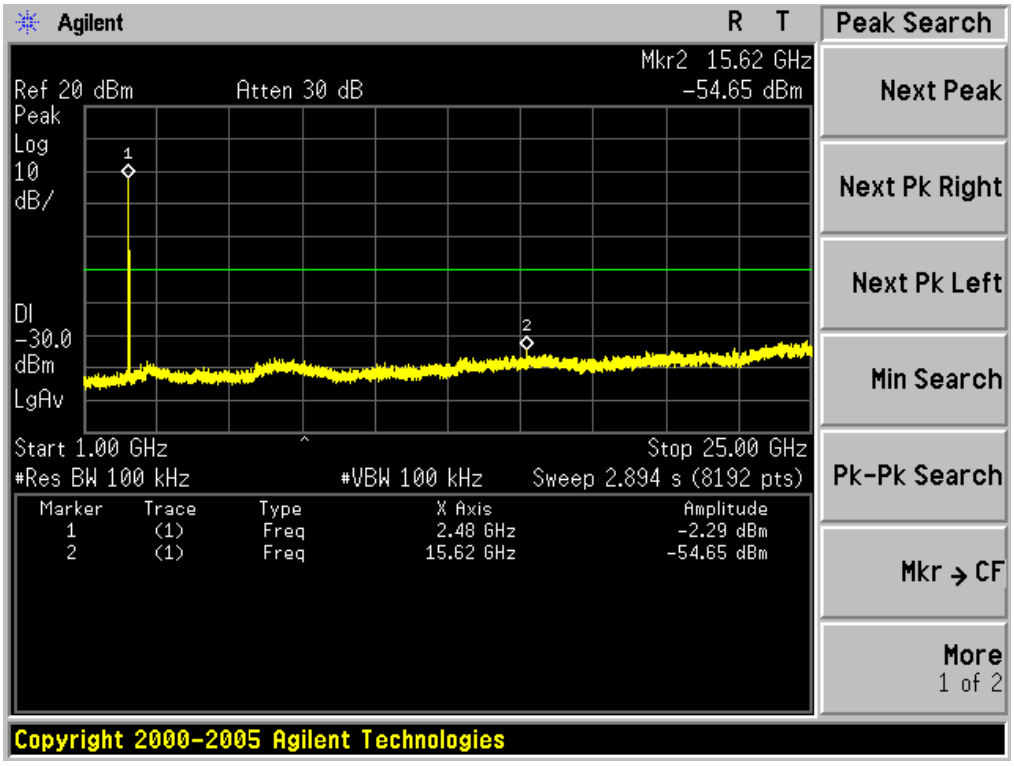
OF GFSK MODULATION IN MIDDLE CHANNEL





TEST PLOT OF OUT OF BAND EMISSIONS WITH THE WORST CASE OF GFSK MODULATION IN HIGH CHANNEL





10. RADIATED EMISSION

10.1. MEASUREMENT PROCEDURE

1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported for above 1GHz, and the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High - Low scan is not required in this case.

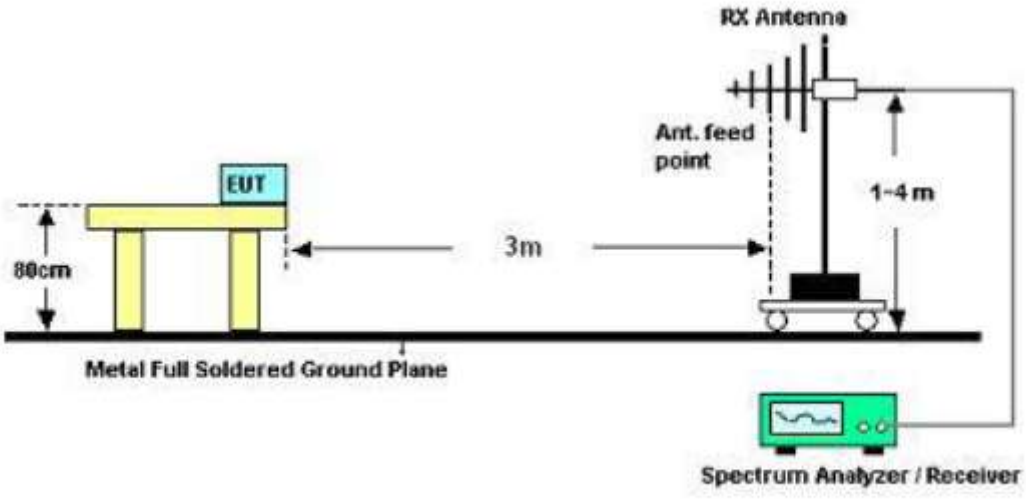
The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP
Start ~Stop Frequency	1GHz~26.5GHz 1MHz/1MHz for Peak, 1MHz/10Hz for Average

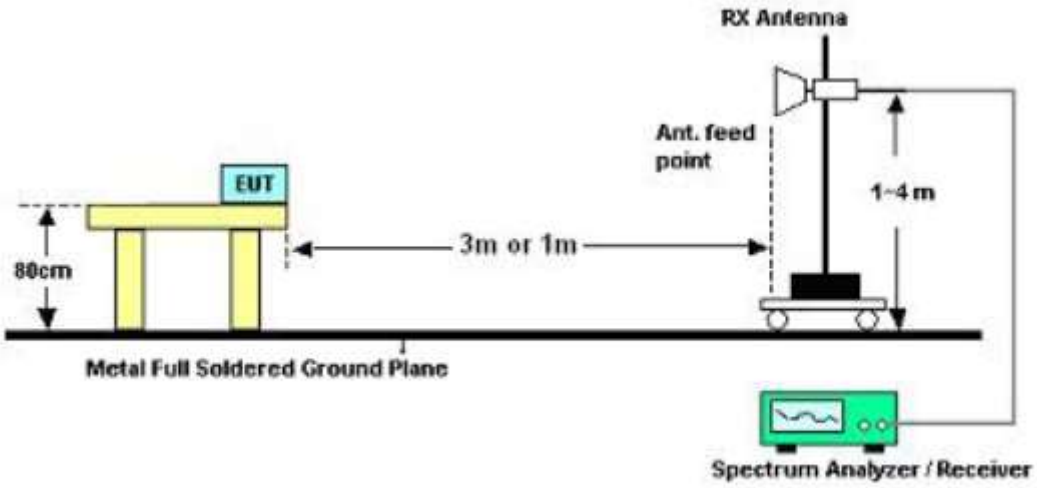
Receiver Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP

10.2. TEST SETUP

RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz



10.3. TEST RESULT (Worst Modulation: GFSK)

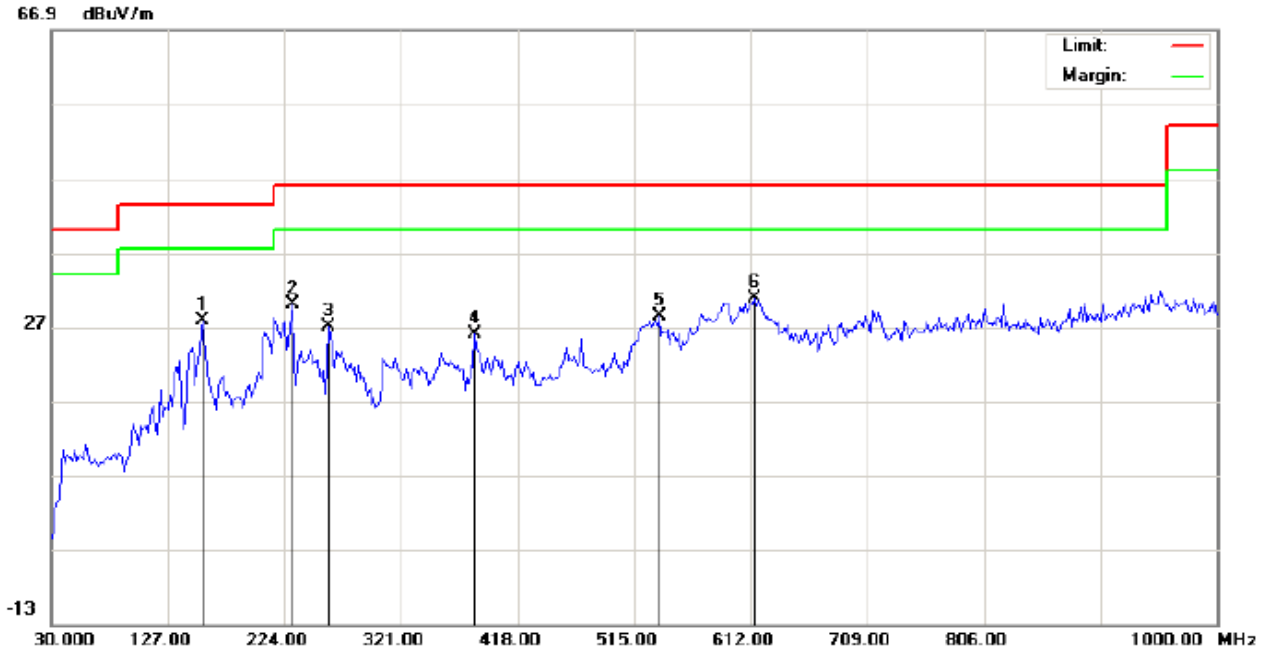
For CSR

RADIATED EMISSION BELOW 30MHZ

No emission found between lowest internal used/generated frequencies to 30MHz.

RADIATED EMISSION BELOW 1GHZ

RADIATED EMISSION TEST- (30MHZ-1GHZ)-LOW CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

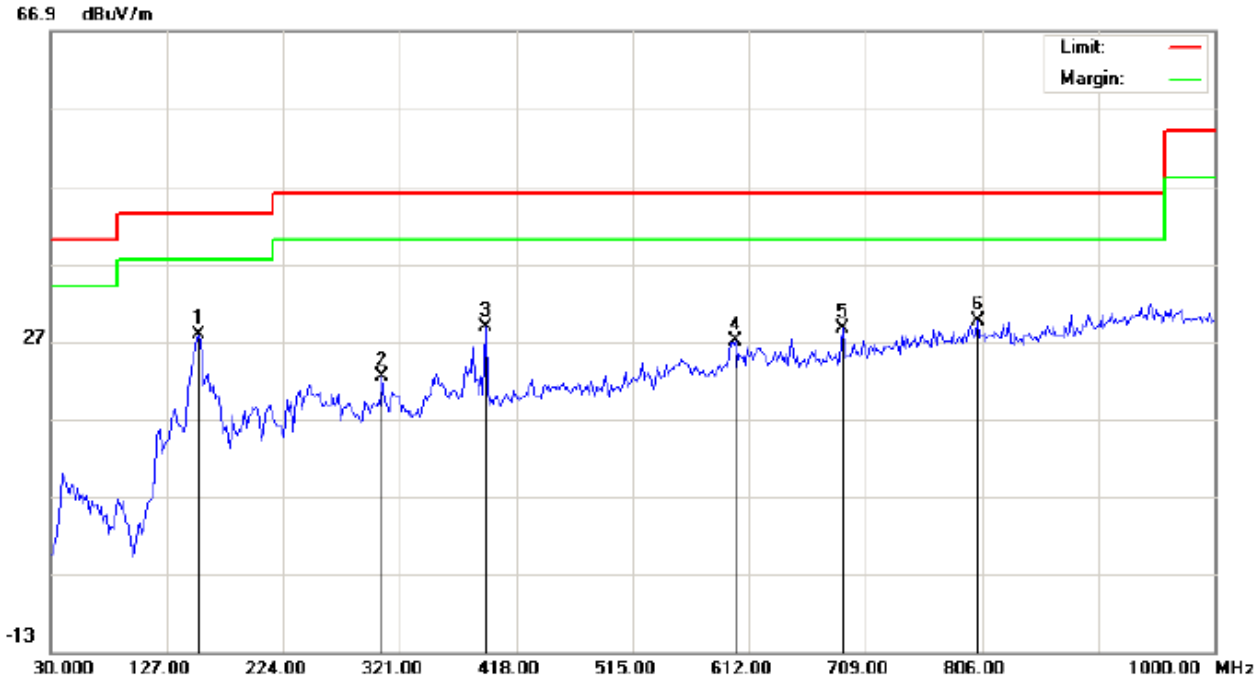
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 25.6
Humidity: 52.6 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		156.1000	12.53	15.30	27.83	43.50	-15.67	peak			
2		230.4667	16.76	13.16	29.92	46.00	-16.08	peak			
3		261.1833	12.68	14.24	26.92	46.00	-19.08	peak			
4		382.4333	6.97	18.95	25.92	46.00	-20.08	peak			
5		536.0167	6.34	22.10	28.44	46.00	-17.56	peak			
6	*	615.2333	6.98	23.77	30.75	46.00	-15.25	peak			

RESULT: PASS

RADIATED EMISSION TEST- (30MHZ-1GHZ)-LOW CHANNEL -VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 25.6
Humidity: 52.6 %

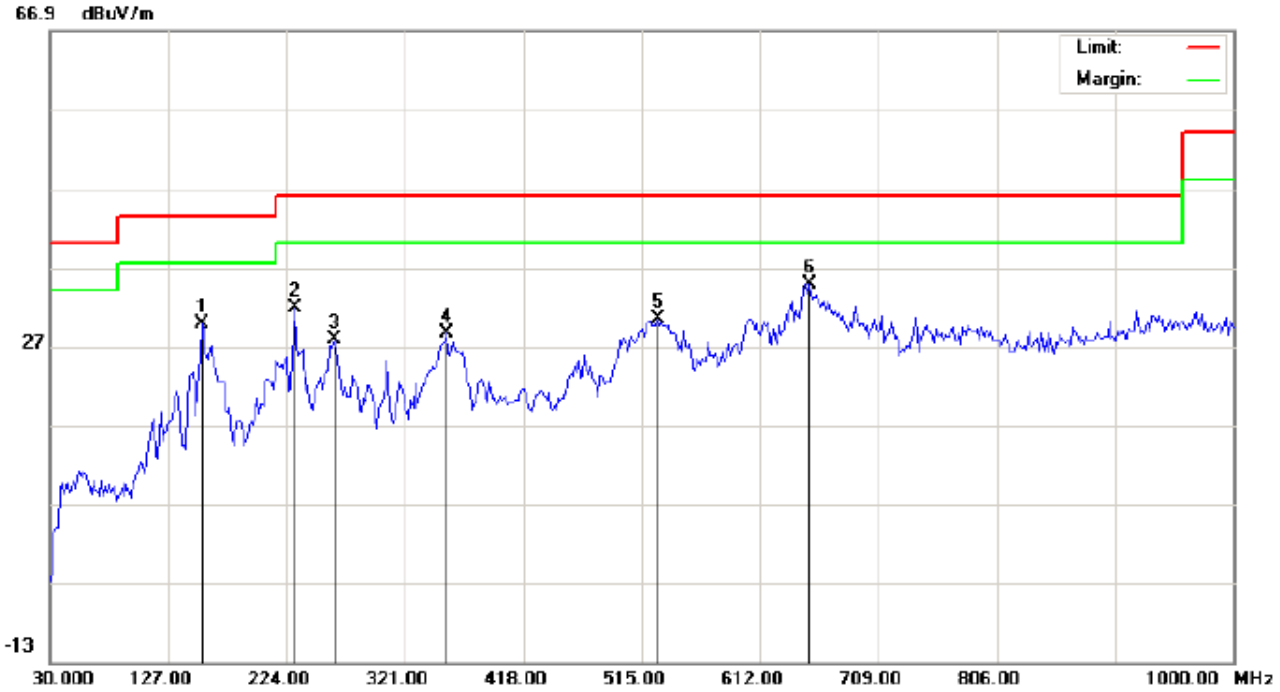
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	152.8667	12.48	15.28	27.76	43.50	-15.74	peak			
2		306.4500	6.59	15.84	22.43	46.00	-23.57	peak			
3		392.1333	9.79	19.02	28.81	46.00	-17.19	peak			
4		600.6833	4.34	22.75	27.09	46.00	-18.91	peak			
5		689.6000	3.72	24.91	28.63	46.00	-17.37	peak			
6		802.7667	2.19	27.32	29.51	46.00	-16.49	peak			

RESULT: PASS

Note: 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.

2. The “Factor” value can be calculated automatically by software of measurement system.

RADIATED EMISSION TEST- (30MHZ-1GHZ)-MIDDLE CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation
EUT: FUSE
M/N: BFUSEBA
Mode: Middle Channel TX
Note:

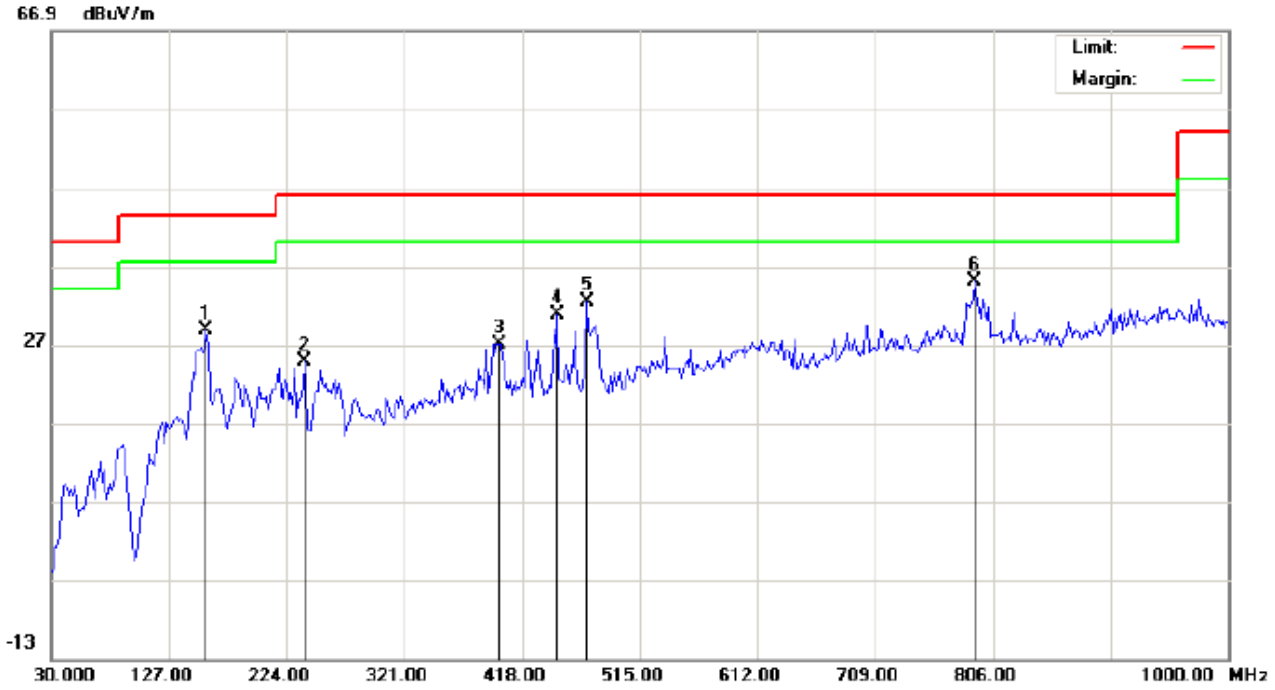
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 25.6
Humidity: 52.6 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		154.4833	14.59	15.29	29.88	43.50	-13.62	peak			
2		230.4667	18.57	13.16	31.73	46.00	-14.27	peak			
3		262.8000	13.52	14.29	27.81	46.00	-18.19	peak			
4		354.9500	9.83	18.77	28.60	46.00	-17.40	peak			
5		527.9333	8.53	21.88	30.41	46.00	-15.59	peak			
6	*	652.4167	10.84	23.91	34.75	46.00	-11.25	peak			

RESULT: PASS

RADIATED EMISSION TEST- (30MHZ-1GHZ)- MIDDLE CHANNEL -VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation
EUT: FUSE
M/N: BFUSEBA
Mode: Middle Channel TX
Note:

Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 25.6
Humidity: 52.6 %

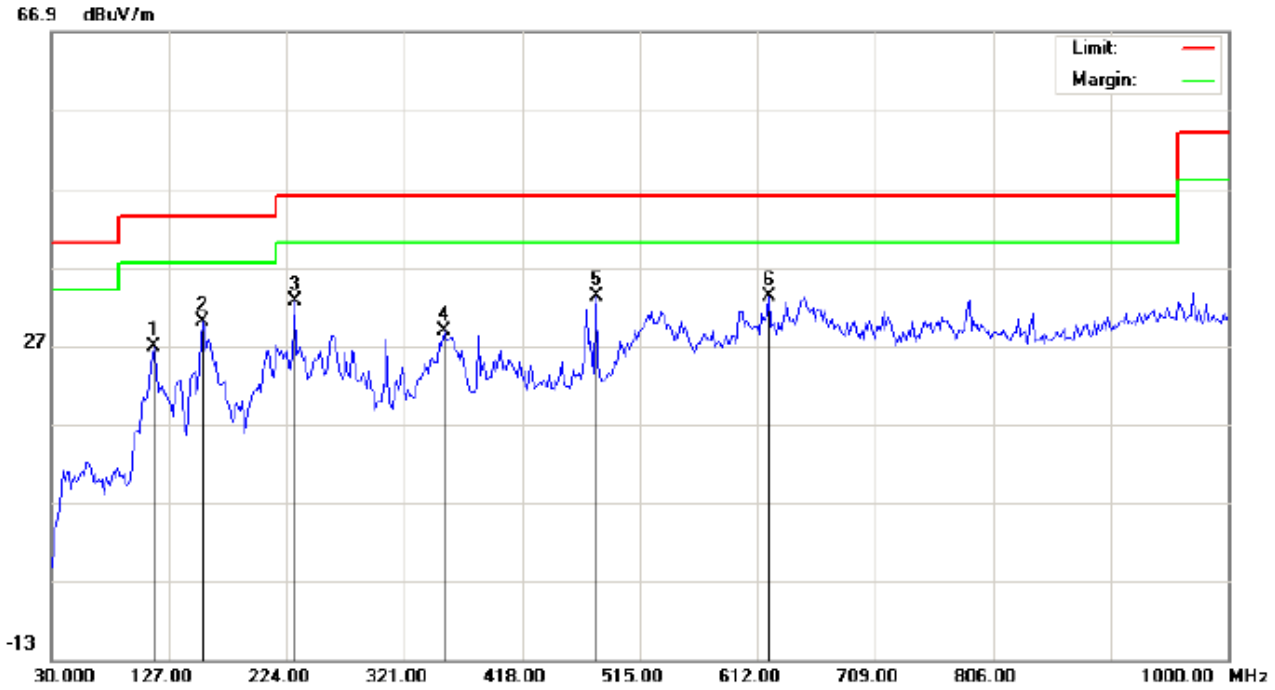
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		157.7167	13.40	15.32	28.72	43.50	-14.78	peak			
2		238.5500	11.95	12.78	24.73	46.00	-21.27	peak			
3		398.6000	7.93	19.06	26.99	46.00	-19.01	peak			
4		447.1000	10.38	20.50	30.88	46.00	-15.12	peak			
5		471.3500	11.61	20.82	32.43	46.00	-13.57	peak			
6	*	791.4500	7.74	27.20	34.94	46.00	-11.06	peak			

RESULT: PASS

Note: 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.

2. The “Factor” value can be calculated automatically by software of measurement system.

RADIATED EMISSION TEST- (30MHZ-1GHZ)-HIGH CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

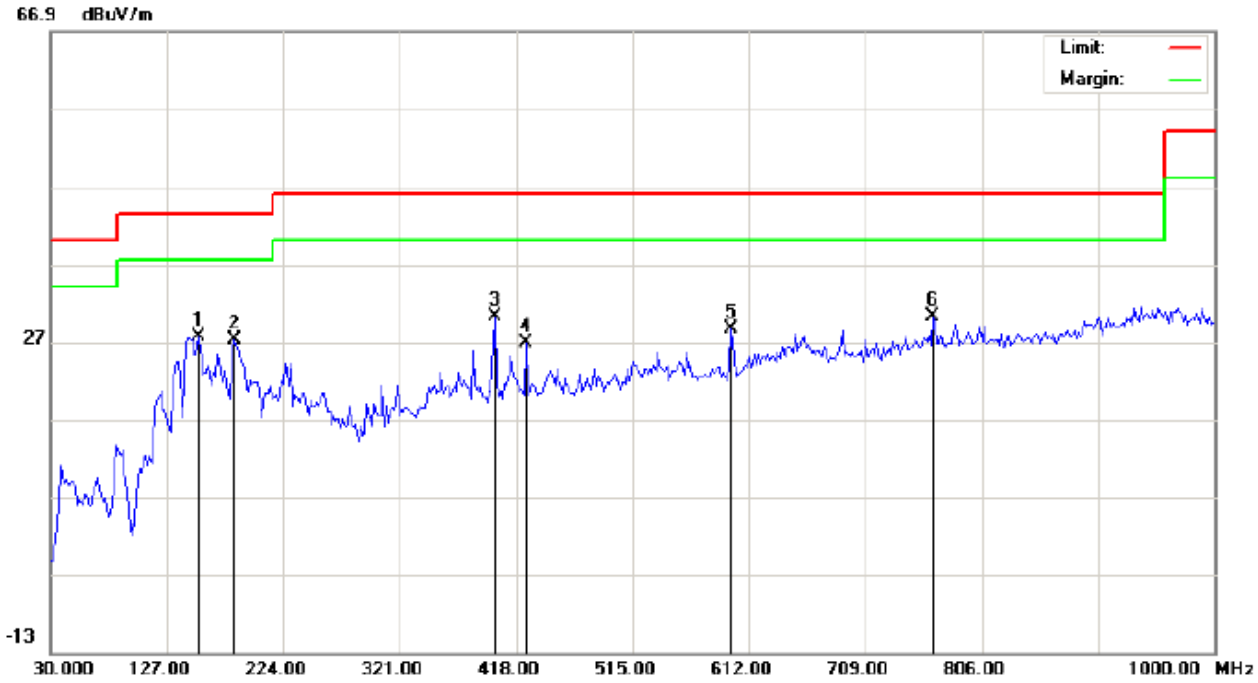
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 25.6
Humidity: 52.6 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		114.0667	15.39	11.45	26.84	43.50	-16.66	peak			
2		154.4833	14.72	15.29	30.01	43.50	-13.49	peak			
3		230.4667	19.40	13.16	32.56	46.00	-13.44	peak			
4		353.3333	9.96	18.76	28.72	46.00	-17.28	peak			
5		479.4333	12.29	20.91	33.20	46.00	-12.80	peak			
6	*	621.7000	9.52	23.78	33.30	46.00	-12.70	peak			

RESULT: PASS

RADIATED EMISSION TEST- (30MHZ-1GHZ)-HIGH CHANNEL -VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 25.6
Humidity: 52.6 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		152.8667	12.35	15.28	27.63	43.50	-15.87	peak			
2		183.5833	14.05	13.16	27.21	43.50	-16.29	peak			
3		400.2167	11.03	19.08	30.11	46.00	-15.89	peak			
4		426.0833	7.04	19.86	26.90	46.00	-19.10	peak			
5		597.4500	5.79	22.72	28.51	46.00	-17.49	peak			
6	*	765.5833	3.44	26.85	30.29	46.00	-15.71	peak			

RESULT: PASS

Note: 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.

2. The “Factor” value can be calculated automatically by software of measurement system.

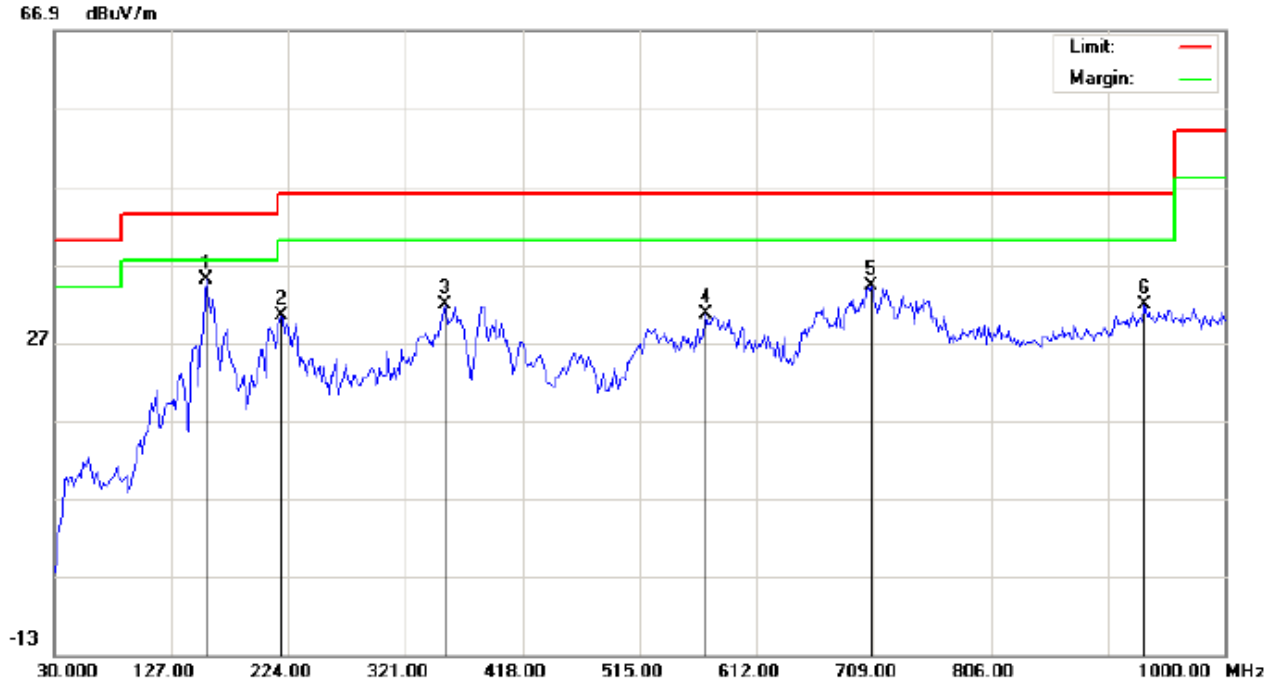
For iSSC

RADIATED EMISSION BELOW 30MHZ

No emission found between lowest internal used/generated frequencies to 30MHz.

RADIATED EMISSION BELOW 1GHZ

RADIATED EMISSION TEST- (30MHZ-1GHZ)-LOW CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

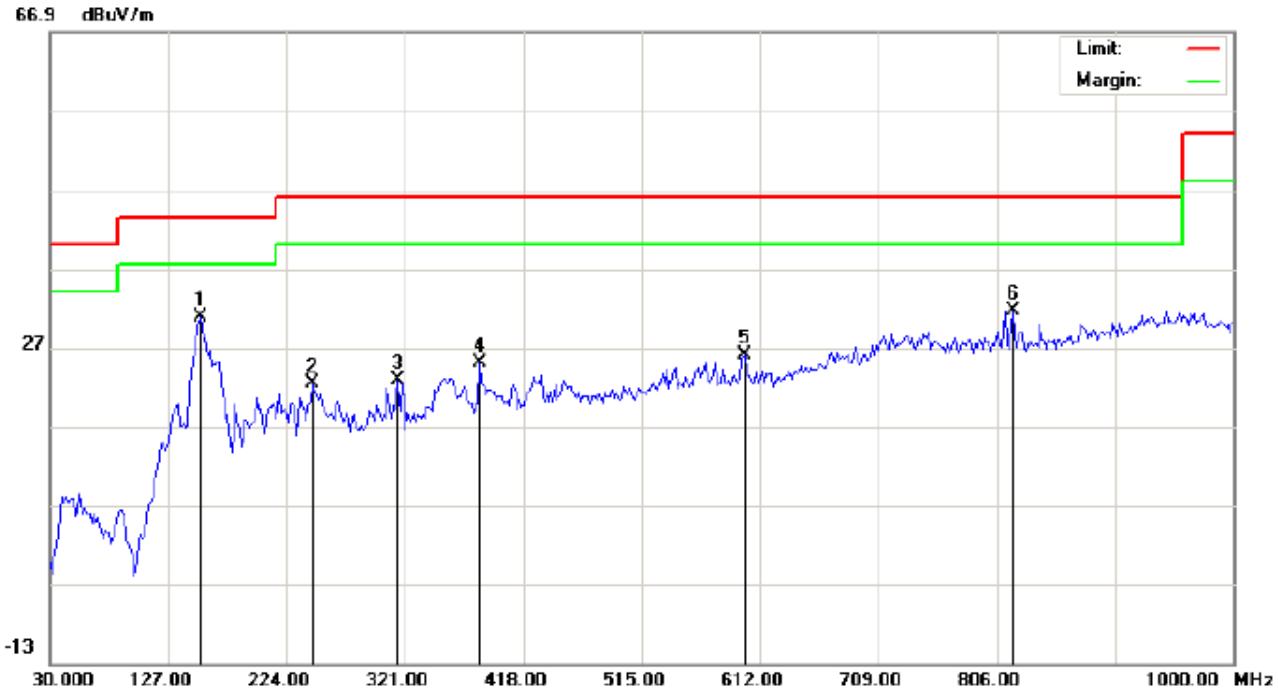
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 25.6
Humidity: 52.6 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	156.1000	19.70	15.30	35.00	43.50	-8.50	peak			
2		217.5333	17.81	12.67	30.48	46.00	-15.52	peak			
3		353.3333	12.98	18.76	31.74	46.00	-14.26	peak			
4		569.9667	7.65	22.98	30.63	46.00	-15.37	peak			
5		707.3833	8.72	25.40	34.12	46.00	-11.88	peak			
6		933.7167	2.31	29.55	31.86	46.00	-14.14	peak			

RESULT: PASS

RADIATED EMISSION TEST- (30MHZ-1GHZ)-LOW CHANNEL -VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 25.6
Humidity: 52.6 %

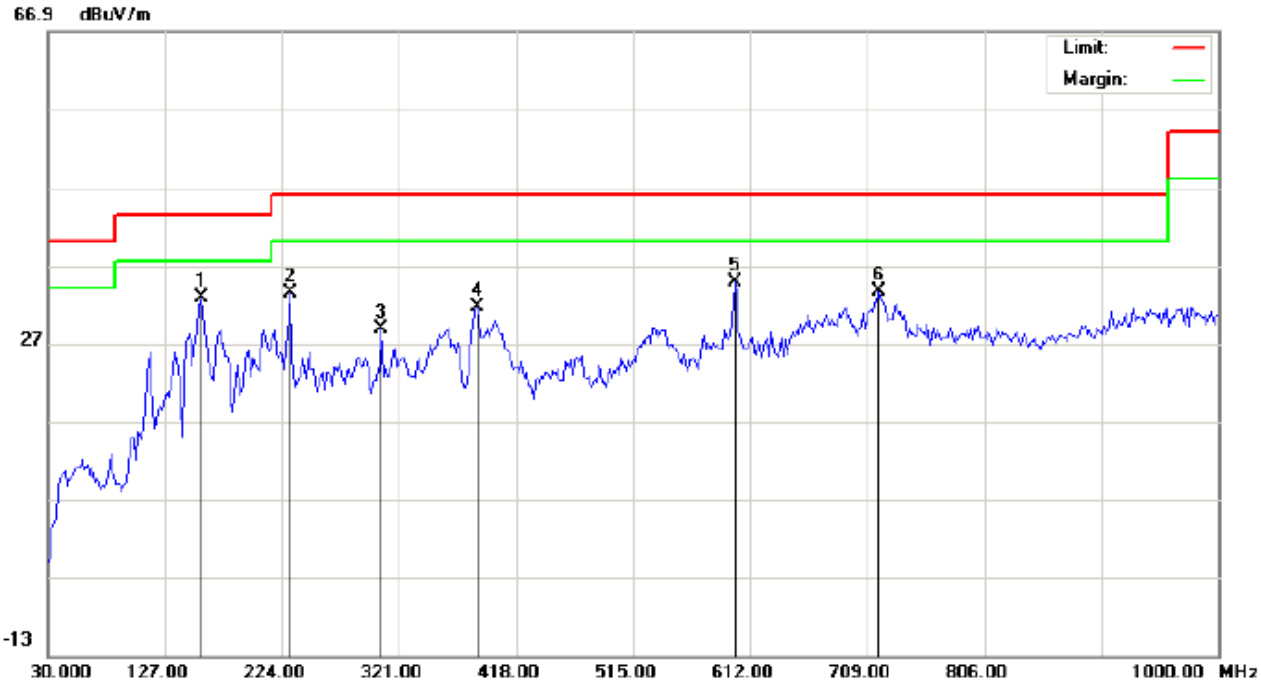
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	152.8667	15.62	15.28	30.90	43.50	-12.60	peak			
2		245.0167	9.01	13.41	22.42	46.00	-23.58	peak			
3		314.5333	6.36	16.38	22.74	46.00	-23.26	peak			
4		382.4333	6.13	18.95	25.08	46.00	-20.92	peak			
5		599.0667	3.34	22.73	26.07	46.00	-19.93	peak			
6		818.9333	4.37	27.32	31.69	46.00	-14.31	peak			

RESULT: PASS

Note: 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.

2. The “Factor” value can be calculated automatically by software of measurement system.

RADIATED EMISSION TEST- (30MHZ-1GHZ)-MIDDLE CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation
EUT: FUSE
M/N: BFUSEBA
Mode: Middle Channel TX
Note:

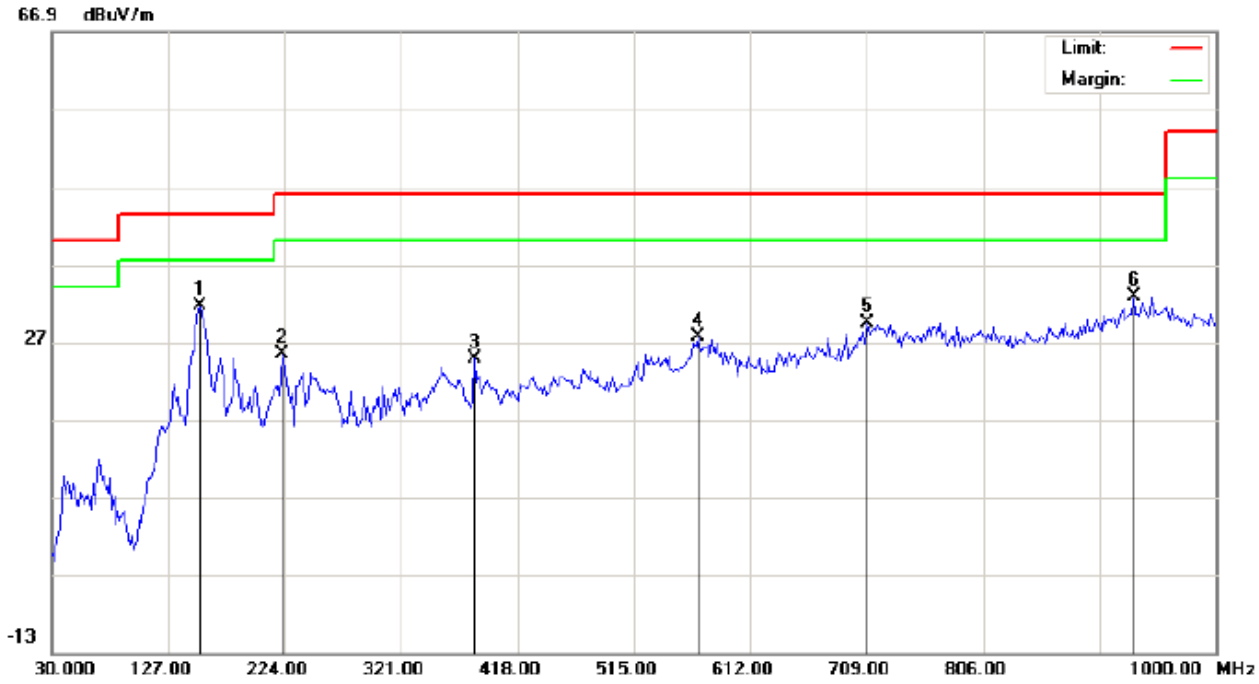
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 25.6
Humidity: 52.6 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	157.7167	17.48	15.32	32.80	43.50	-10.70	peak			
2		230.4667	20.18	13.16	33.34	46.00	-12.66	peak			
3		306.4500	12.99	15.84	28.83	46.00	-17.17	peak			
4		385.6667	12.63	18.98	31.61	46.00	-14.39	peak			
5		599.0667	11.07	23.71	34.78	46.00	-11.22	peak			
6		718.7000	7.85	25.73	33.58	46.00	-12.42	peak			

RESULT: PASS

RADIATED EMISSION TEST- (30MHZ-1GHZ)- MIDDLE CHANNEL -VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation
EUT: FUSE
M/N: BFUSEBA
Mode: Middle Channel TX
Note:

Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 25.6
Humidity: 52.6 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	152.8667	16.37	15.28	31.65	43.50	-11.85	peak			
2		222.3833	14.12	11.19	25.31	46.00	-20.69	peak			
3		382.4333	5.81	18.95	24.76	46.00	-21.24	peak			
4		568.3500	5.07	22.57	27.64	46.00	-18.36	peak			
5		709.0000	4.00	25.45	29.45	46.00	-16.55	peak			
6		932.1000	3.23	29.50	32.73	46.00	-13.27	peak			

RESULT: PASS

Note: 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.

2. The “Factor” value can be calculated automatically by software of measurement system.

RADIATED EMISSION TEST- (30MHZ-1GHZ)-HIGH CHANNEL-HORIZONTAL

Site: site #1
Limit: FCC Class B 3M Radiation
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

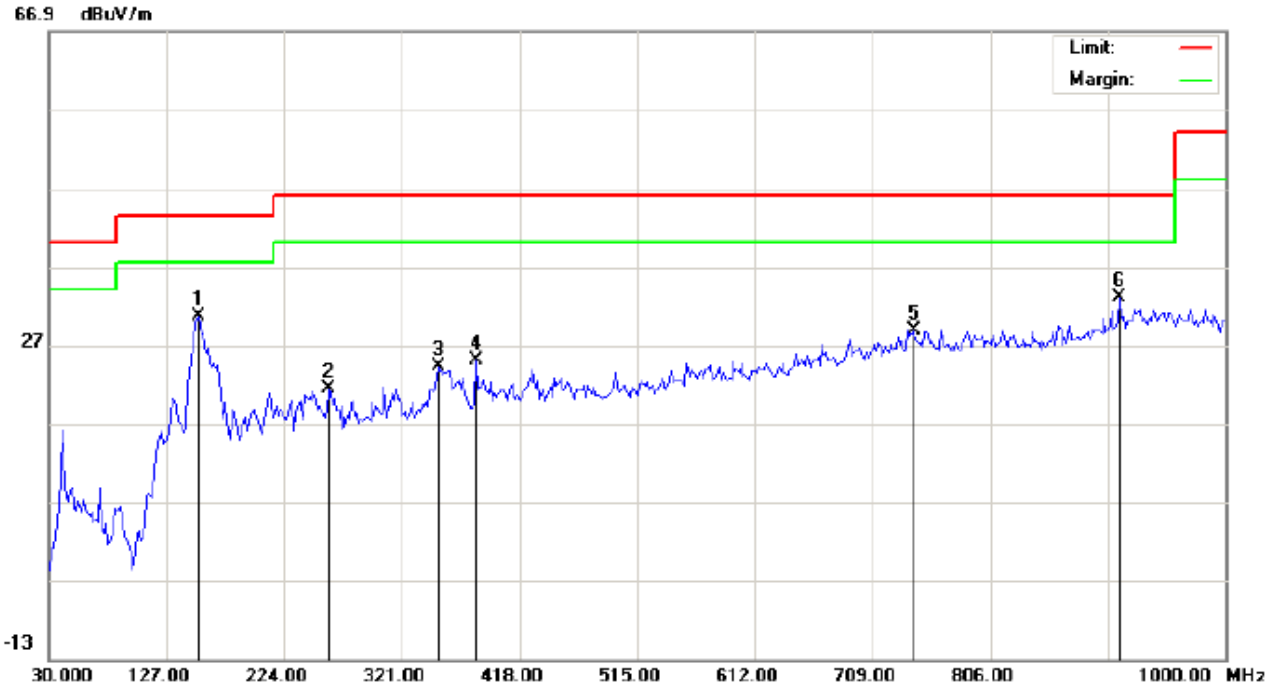
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 25.6
Humidity: 52.6 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	.	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	156.1000	18.82	15.30	34.12	43.50	-9.38	peak			
2		230.4667	17.45	13.16	30.61	46.00	-15.39	peak			
3		353.3333	13.07	18.76	31.83	46.00	-14.17	peak			
4		385.6667	11.55	18.98	30.53	46.00	-15.47	peak			
5		584.5167	8.88	23.34	32.22	46.00	-13.78	peak			
6		704.1500	6.94	25.31	32.25	46.00	-13.75	peak			

RESULT: PASS

RADIATED EMISSION TEST- (30MHZ-1GHZ)-HIGH CHANNEL -VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 25.6
Humidity: 52.6 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	152.8667	15.34	15.28	30.62	43.50	-12.88	peak			
2		261.1833	7.16	14.24	21.40	46.00	-24.60	peak			
3		351.7167	5.51	18.75	24.26	46.00	-21.74	peak			
4		382.4333	6.05	18.95	25.00	46.00	-21.00	peak			
5		742.9500	2.28	26.43	28.71	46.00	-17.29	peak			
6		912.7000	4.06	28.96	33.02	46.00	-12.98	peak			

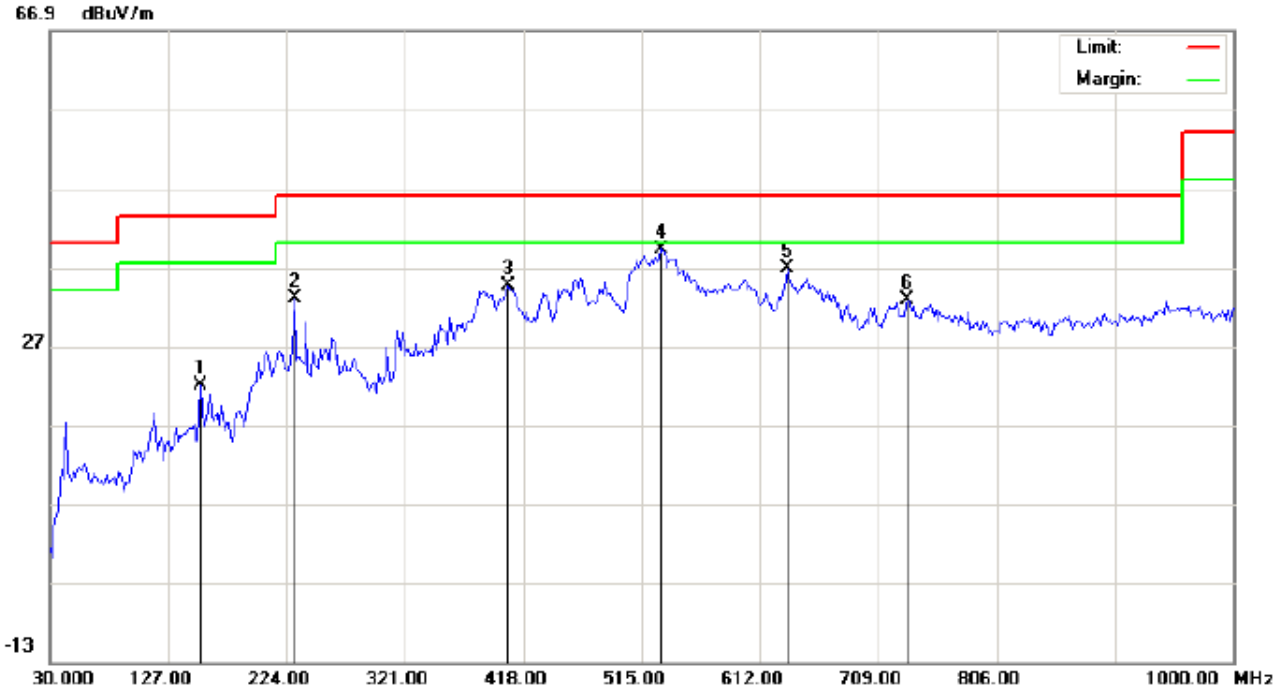
RESULT: PASS

Note: 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.

2. The “Factor” value can be calculated automatically by software of measurement system.

Radiated Emission Results of four modules working at the same time

RADIATED EMISSION BELOW 1GHZ– HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation
EUT: FUSE
M/N: BFUSEBA
Mode: BT Link with charging
Note:

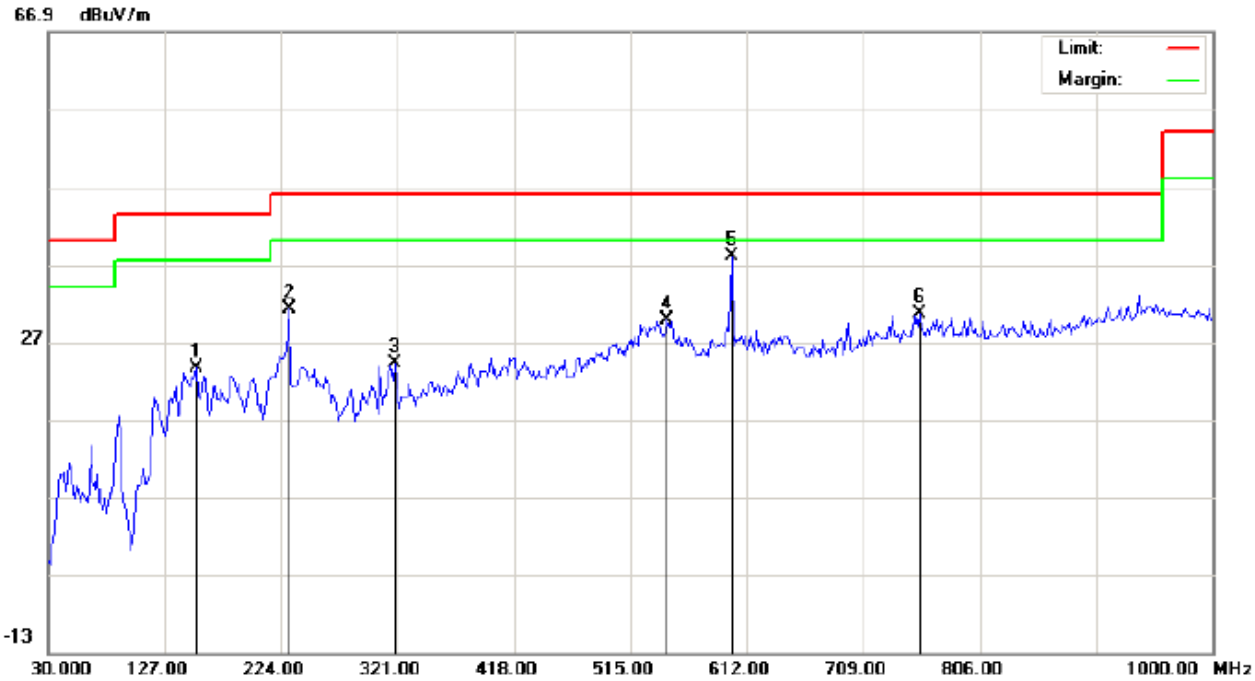
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 23.8
Humidity: 58.9 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		152.8667	6.70	15.28	21.98	43.50	-21.52	peak			
2		230.4667	19.86	13.16	33.02	46.00	-12.98	peak			
3		405.0667	15.36	19.22	34.58	46.00	-11.42	peak			
4	*	531.1667	17.33	21.97	39.30	46.00	-6.70	peak			
5		634.6332	13.06	23.81	36.87	46.00	-9.13	peak			
6		733.2500	6.61	26.15	32.76	46.00	-13.24	peak			

RESULT: PASS

RADIATED EMISSION BELOW 1GHZ– VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation
EUT: FUSE
M/N: BFUSEBA
Mode: BT Link with charging
Note:

Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 23.8
Humidity: 58.9 %

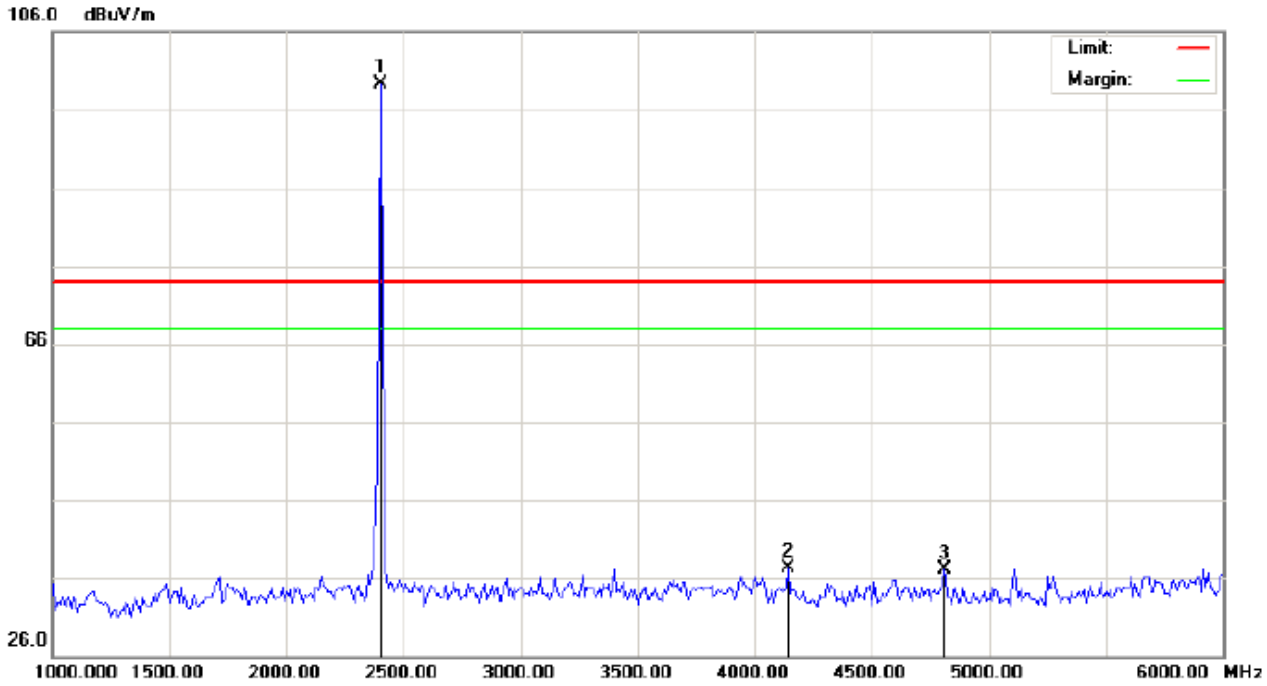
No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		152.8667	8.27	15.28	23.55	43.50	-19.95	peak			
2		230.4667	19.25	11.99	31.24	46.00	-14.76	peak			
3		319.3833	7.59	16.70	24.29	46.00	-21.71	peak			
4		545.7167	7.46	22.36	29.82	46.00	-16.18	peak			
5	*	599.0667	15.24	22.73	37.97	46.00	-8.03	peak			
6		755.8832	3.88	26.71	30.59	46.00	-15.41	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ

For CSR 1

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-LOW CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

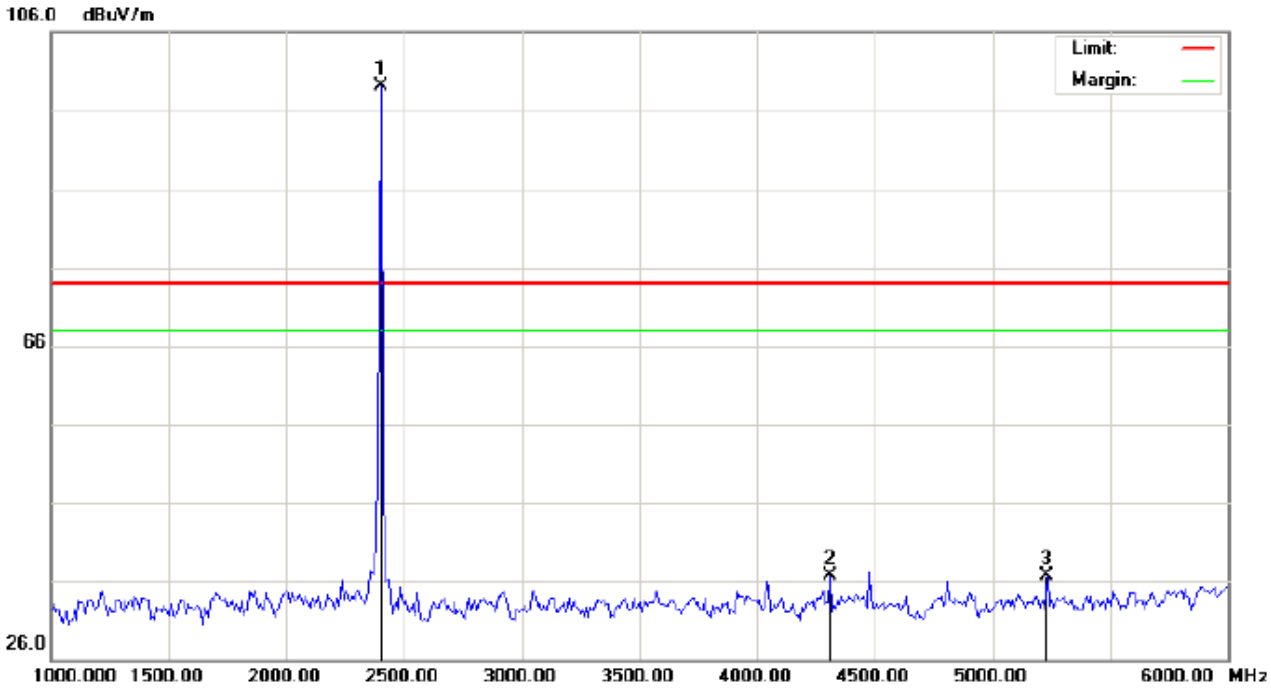
Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2402.000	89.07	10.32	99.39	74.00	25.39	peak			
2		4141.667	24.39	12.84	37.23	74.00	-36.77	peak			
3		4808.333	29.36	7.70	37.06	74.00	-36.94	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-LOW CHANNEL –VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

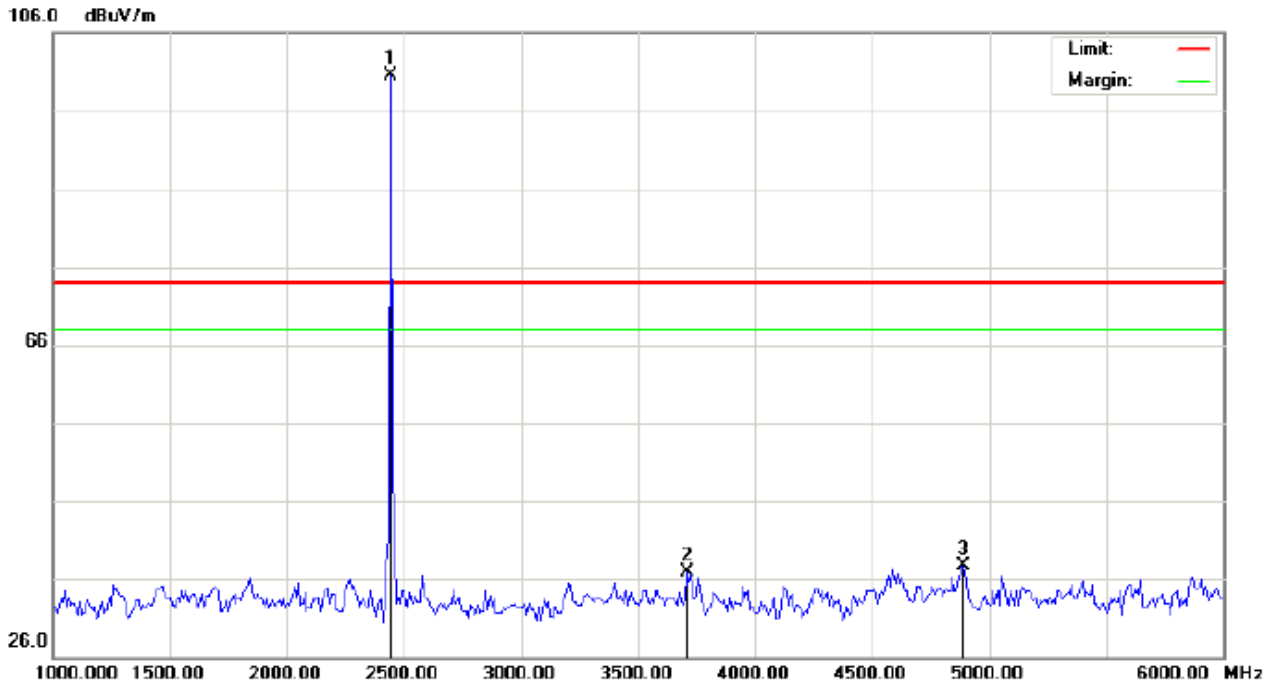
Polarization: *Vertical*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2402.000	88.83	10.32	99.15	74.00	25.15	peak			
2		4308.333	26.73	10.07	36.80	74.00	-37.20	peak			
3		5233.333	33.17	3.53	36.70	74.00	-37.30	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-MIDDLE CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Middle Channel TX
Note:

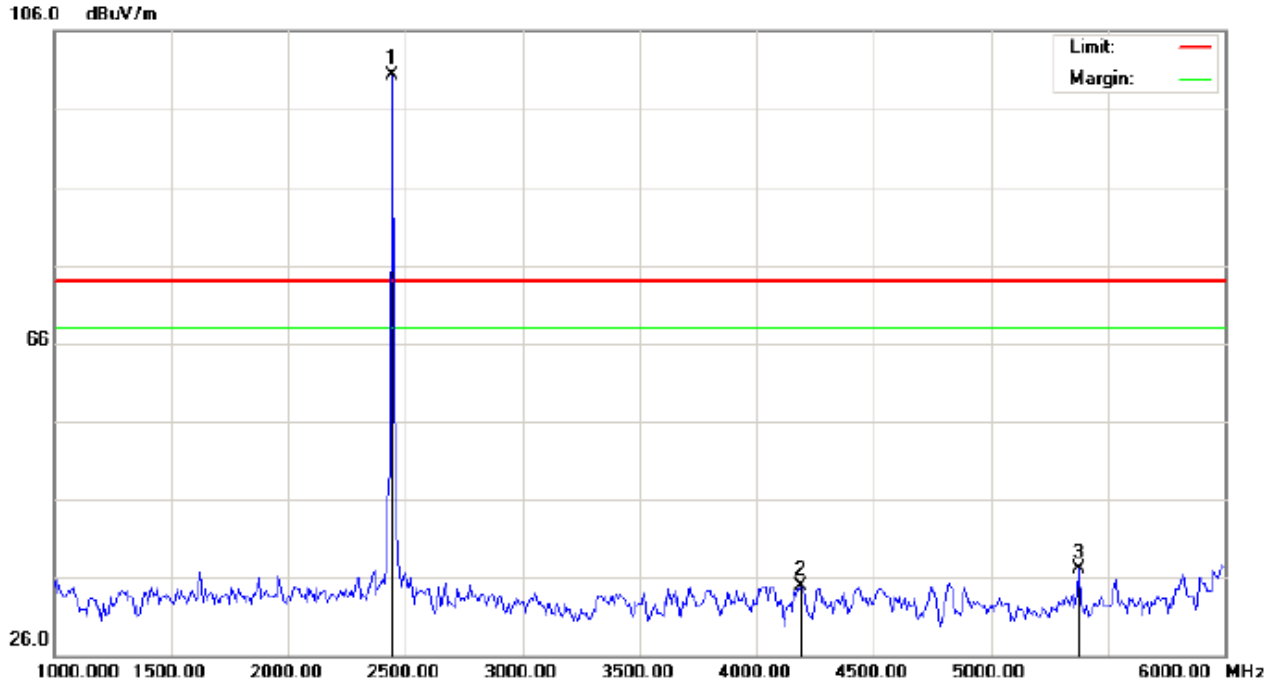
Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2441.000	90.11	10.36	100.47	74.00	26.47	peak			
2		3708.333	23.57	13.39	36.96	74.00	-37.04	peak			
3		4891.667	29.84	7.92	37.76	74.00	-36.24	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics) - MIDDLE CHANNEL –VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Middle Channel TX
Note:

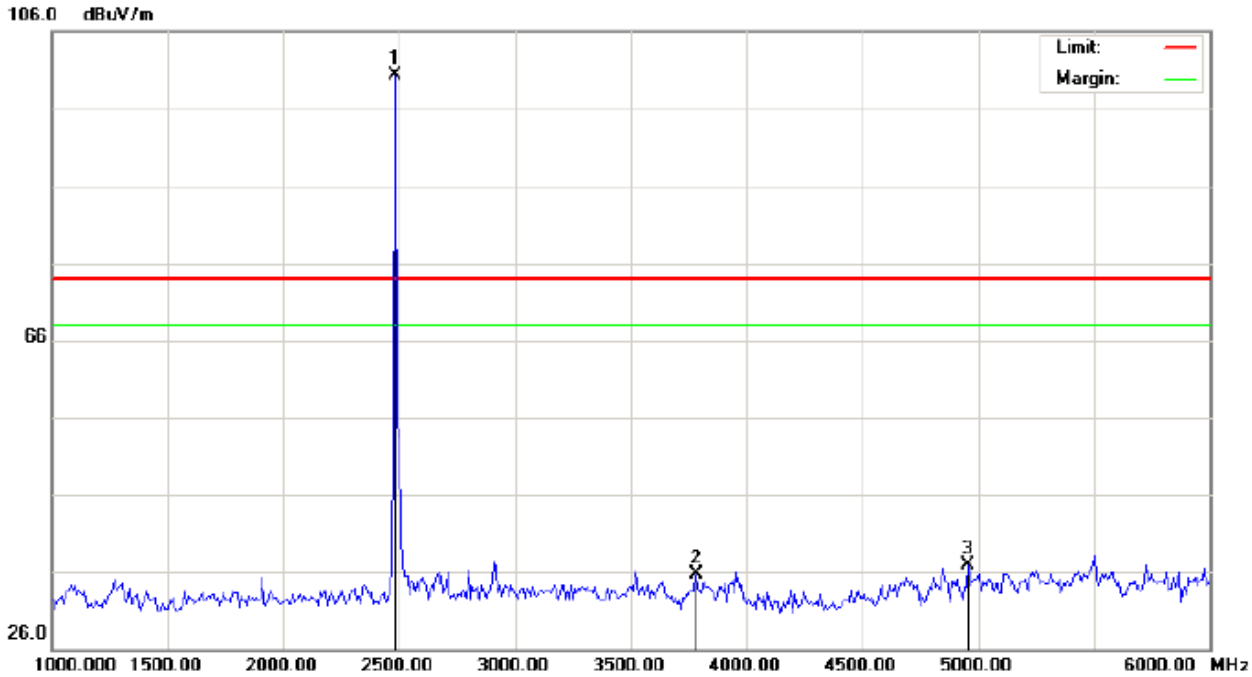
Polarization: *Vertical*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2441.000	89.91	10.36	100.27	74.00	26.27	peak			
2		4191.667	22.91	12.01	34.92	74.00	-39.08	peak			
3		5375.000	36.43	0.69	37.12	74.00	-36.88	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-HIGH CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

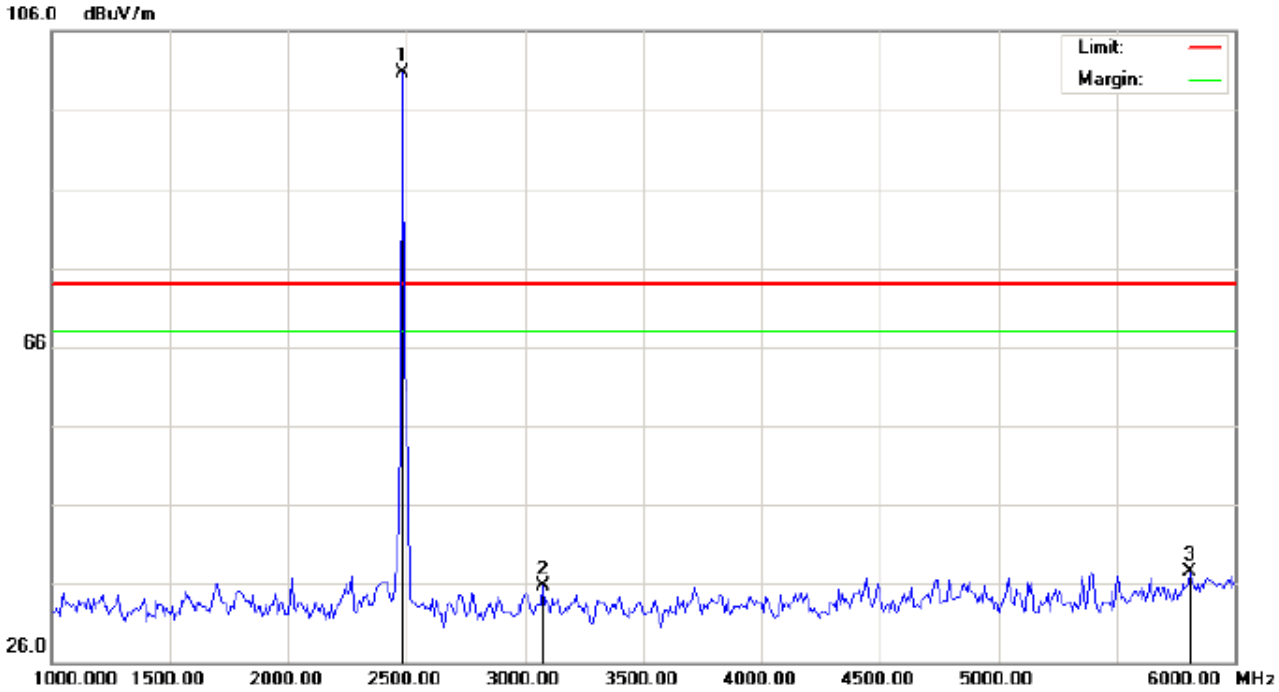
Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	89.89	10.41	100.30	74.00	26.30	peak			
2		3783.333	21.81	13.86	35.67	74.00	-38.33	peak			
3		4958.333	28.89	8.09	36.98	74.00	-37.02	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-HIGH CHANNEL –VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Vertical*
Power:
Distance:

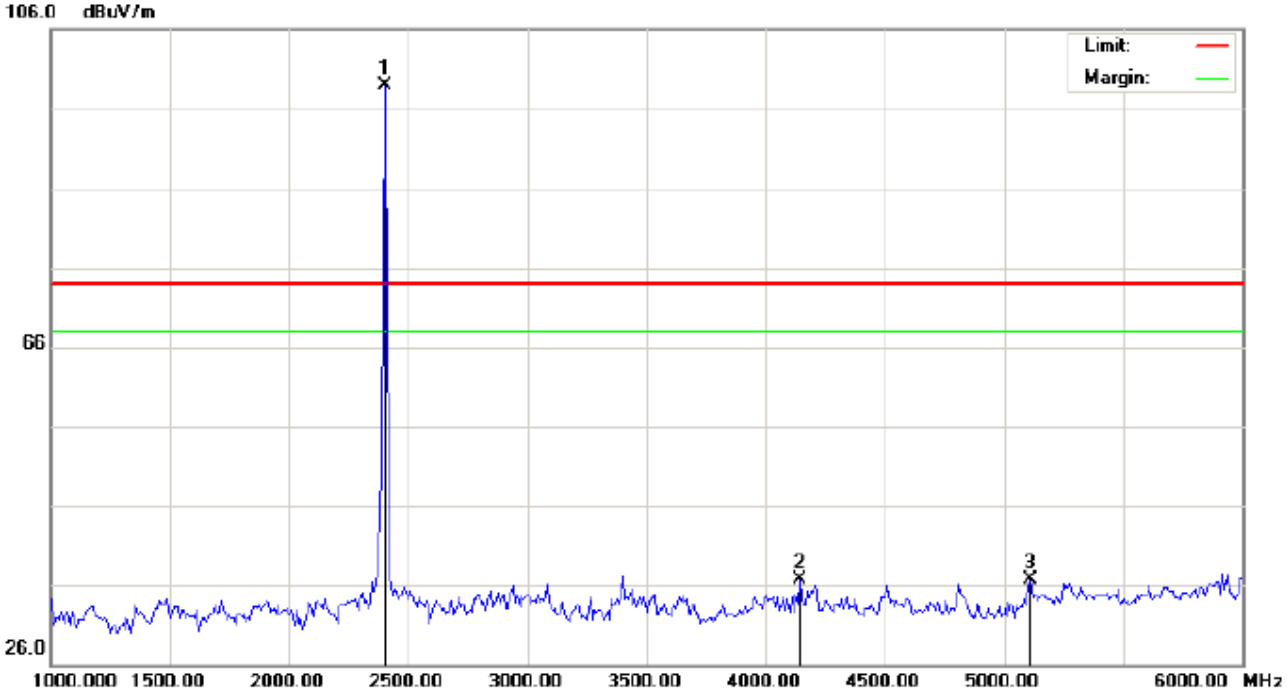
Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	90.26	10.41	100.67	74.00	26.67	peak			
2		3075.000	23.98	11.71	35.69	74.00	-38.31	peak			
3		5808.333	39.09	-1.67	37.42	74.00	-36.58	peak			

RESULT: PASS

For CSR 2

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-LOW CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

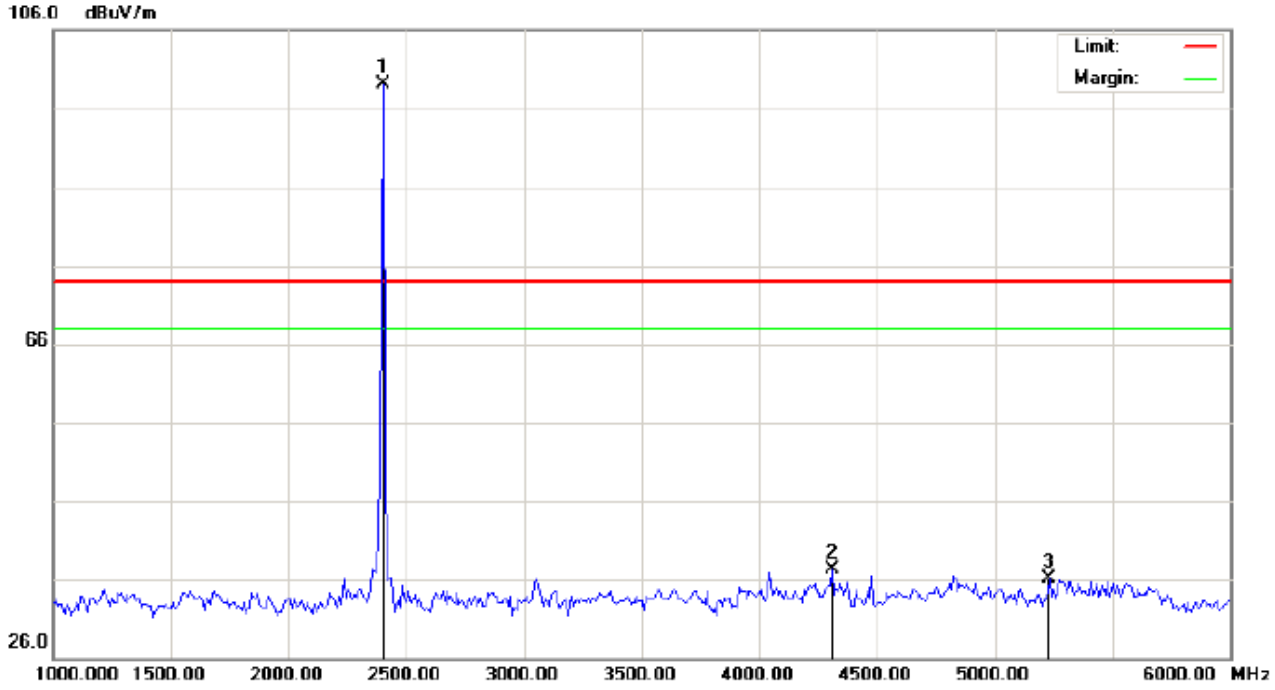
Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2402.000	88.57	10.32	98.89	74.00	24.89	peak			
2		4141.667	23.89	12.84	36.73	74.00	-37.27	peak			
3		5108.333	30.61	6.03	36.64	74.00	-37.36	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-LOW CHANNEL –VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

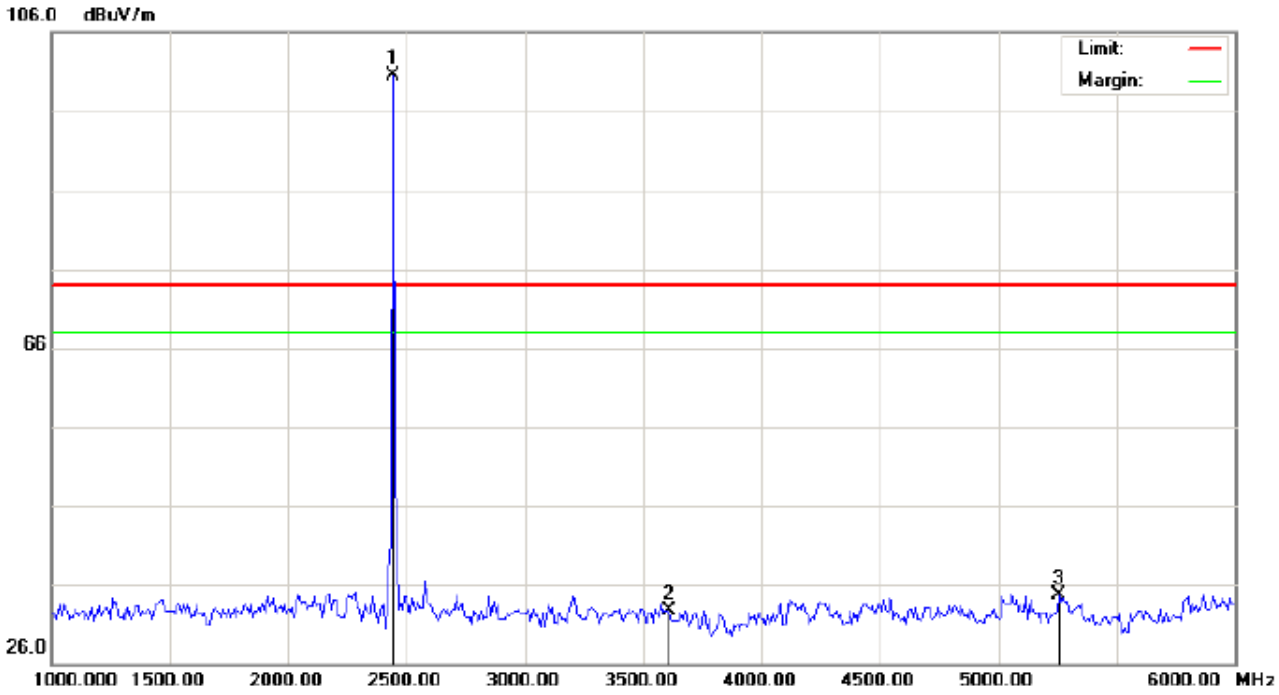
Polarization: *Vertical*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2402.000	88.70	10.32	99.02	74.00	25.02	peak			
2		4308.333	27.23	10.07	37.30	74.00	-36.70	peak			
3		5233.333	32.67	3.53	36.20	74.00	-37.80	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-MIDDLE CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Middle Channel TX
Note:

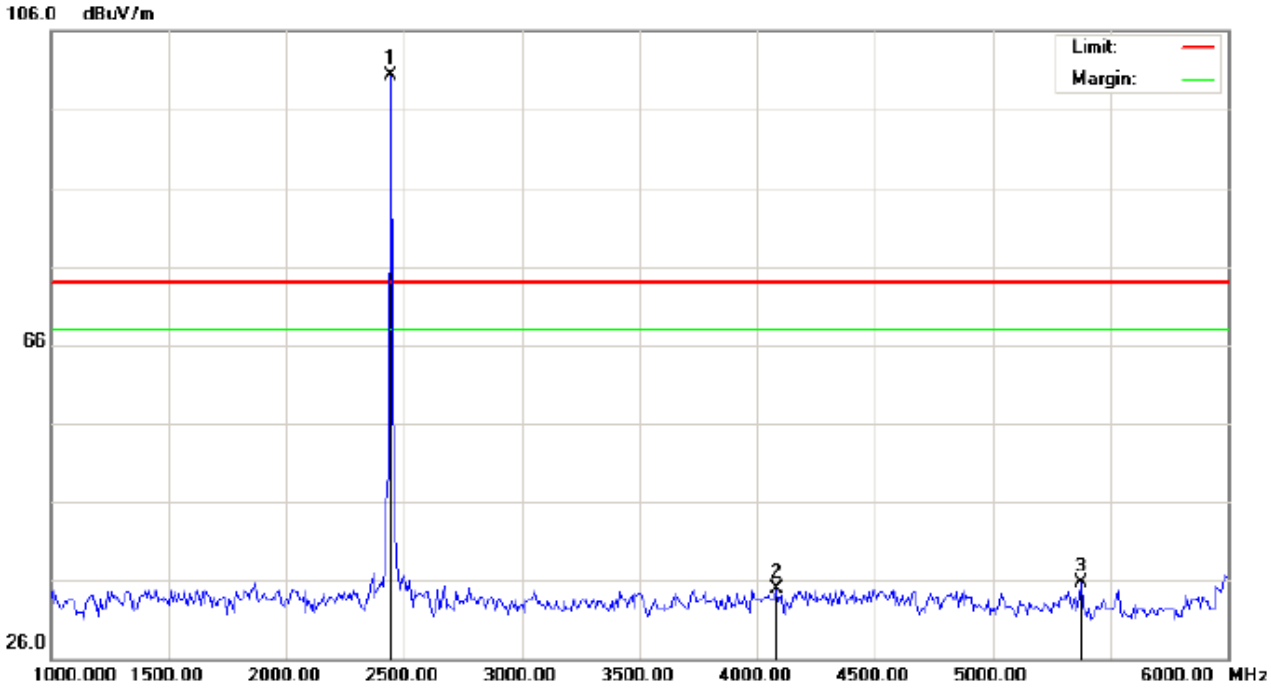
Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2441.000	90.06	10.36	100.42	74.00	26.42	peak			
2		3608.333	20.00	12.78	32.78	74.00	-41.22	peak			
3		5258.333	31.71	3.03	34.74	74.00	-39.26	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics) - MIDDLE CHANNEL –VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Middle Channel TX
Note:

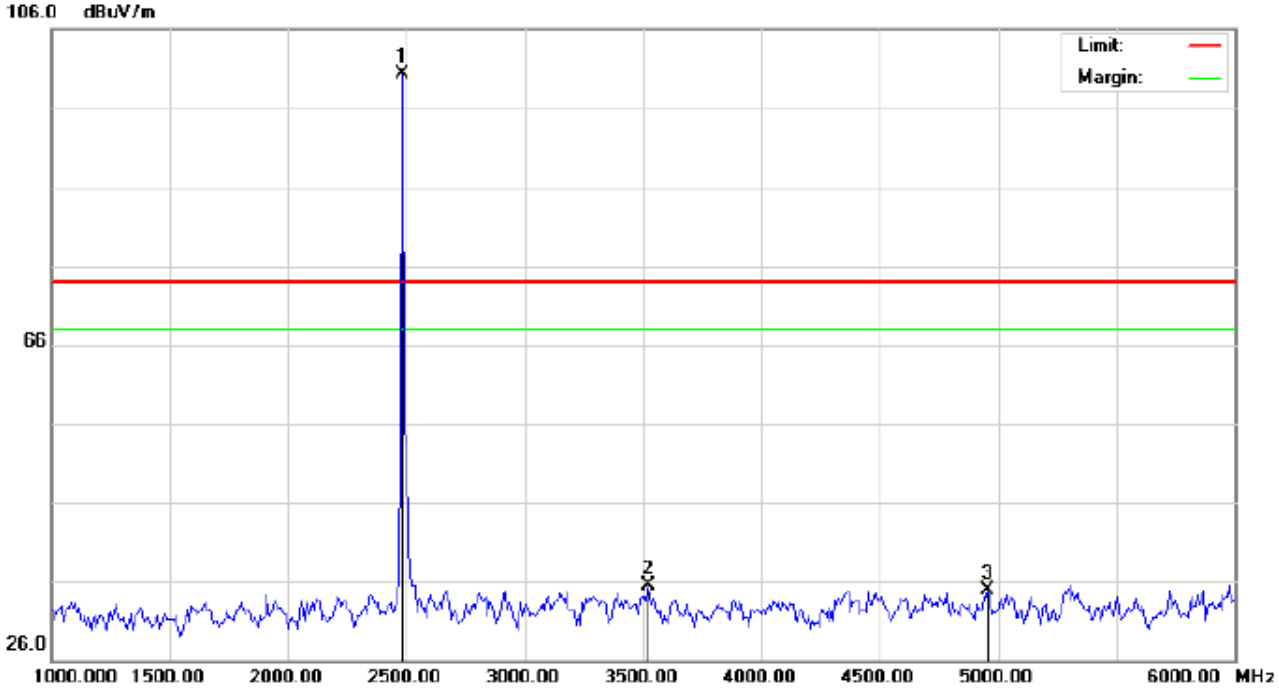
Polarization: *Vertical*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2441.000	89.85	10.36	100.21	74.00	26.21	peak			
2		4083.333	21.11	13.81	34.92	74.00	-39.08	peak			
3		5375.000	34.93	0.69	35.62	74.00	-38.38	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-HIGH CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

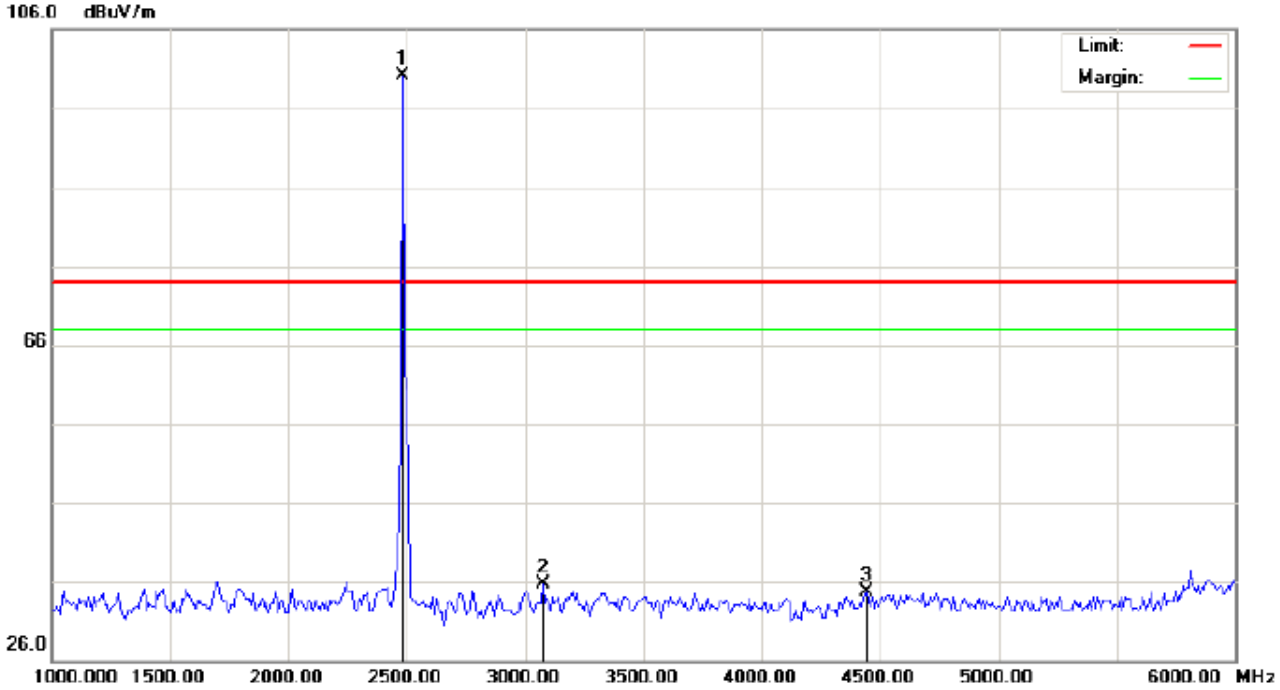
Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	89.82	10.41	100.23	74.00	26.23	peak			
2		3525.000	23.29	12.26	35.55	74.00	-38.45	peak			
3		4958.333	26.89	8.09	34.98	74.00	-39.02	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-HIGH CHANNEL –VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Vertical*
Power:
Distance:

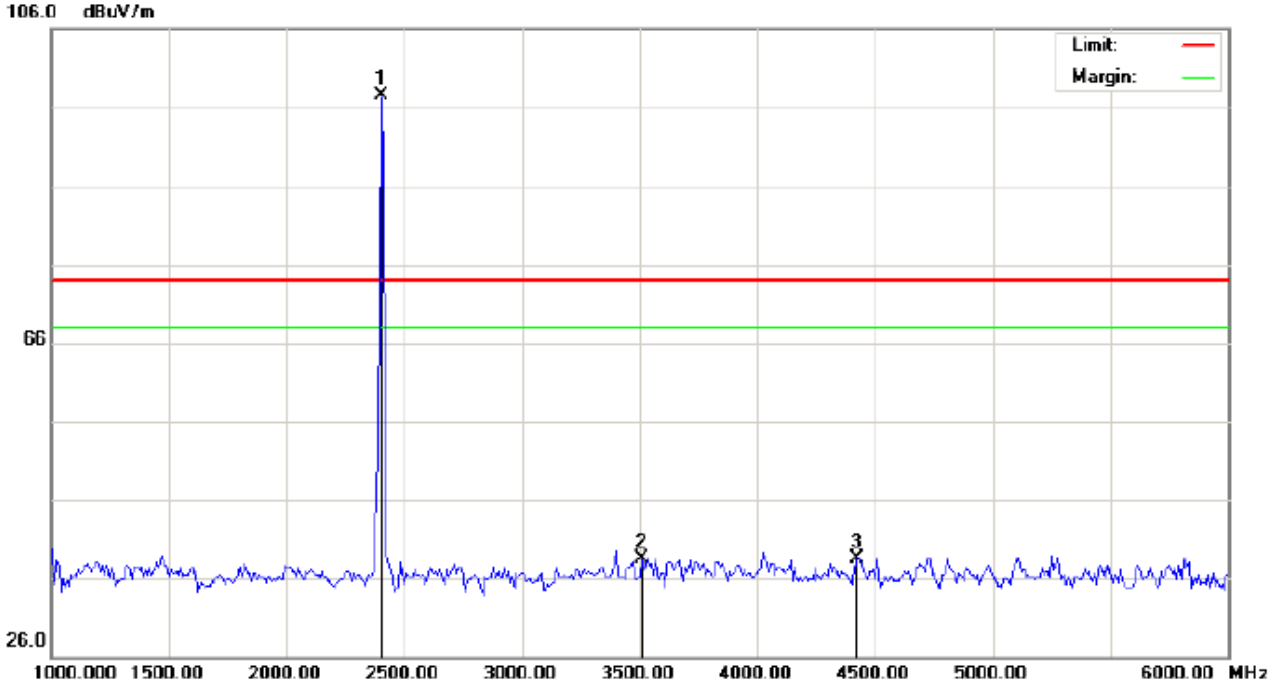
Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	89.78	10.41	100.19	74.00	26.19	peak			
2		3075.000	23.98	11.71	35.69	74.00	-38.31	peak			
3		4441.667	26.82	7.86	34.68	74.00	-39.32	peak			

RESULT: PASS

For iSSC 1

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-LOW CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

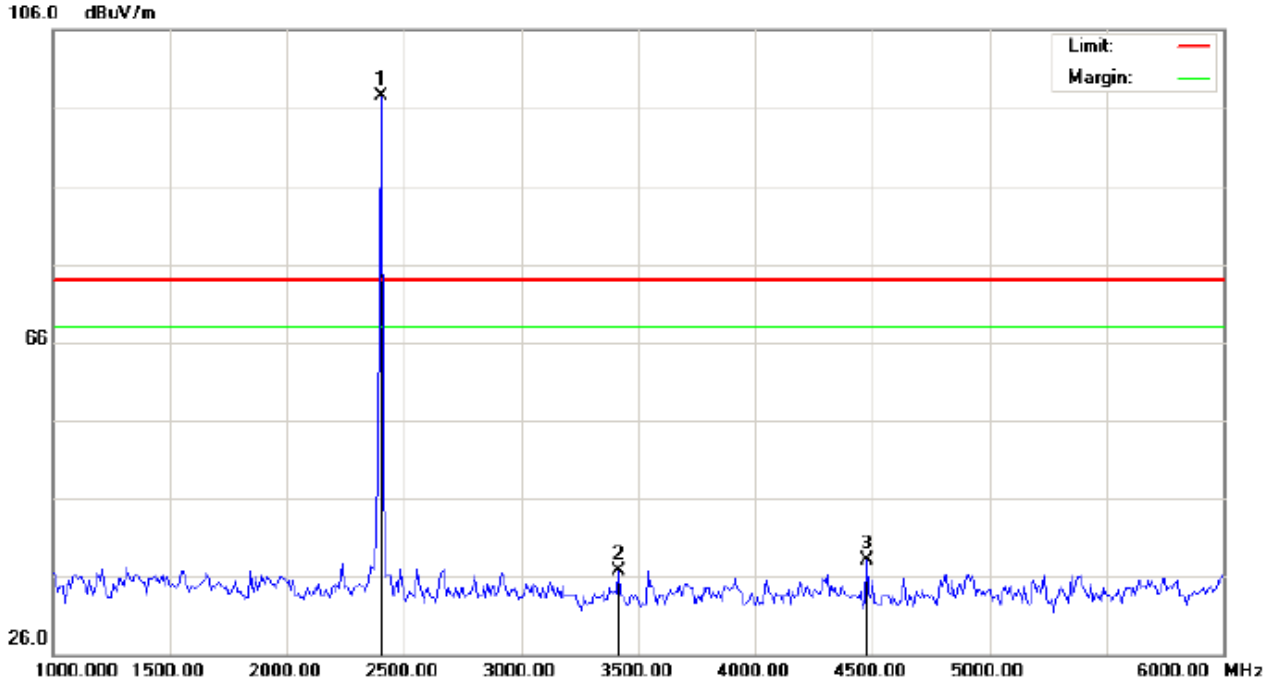
Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2402.000	87.13	10.32	97.45	74.00	23.45	peak			
2		3508.333	26.27	12.16	38.43	74.00	-35.57	peak			
3		4425.000	30.43	8.13	38.56	74.00	-35.44	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-LOW CHANNEL –VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

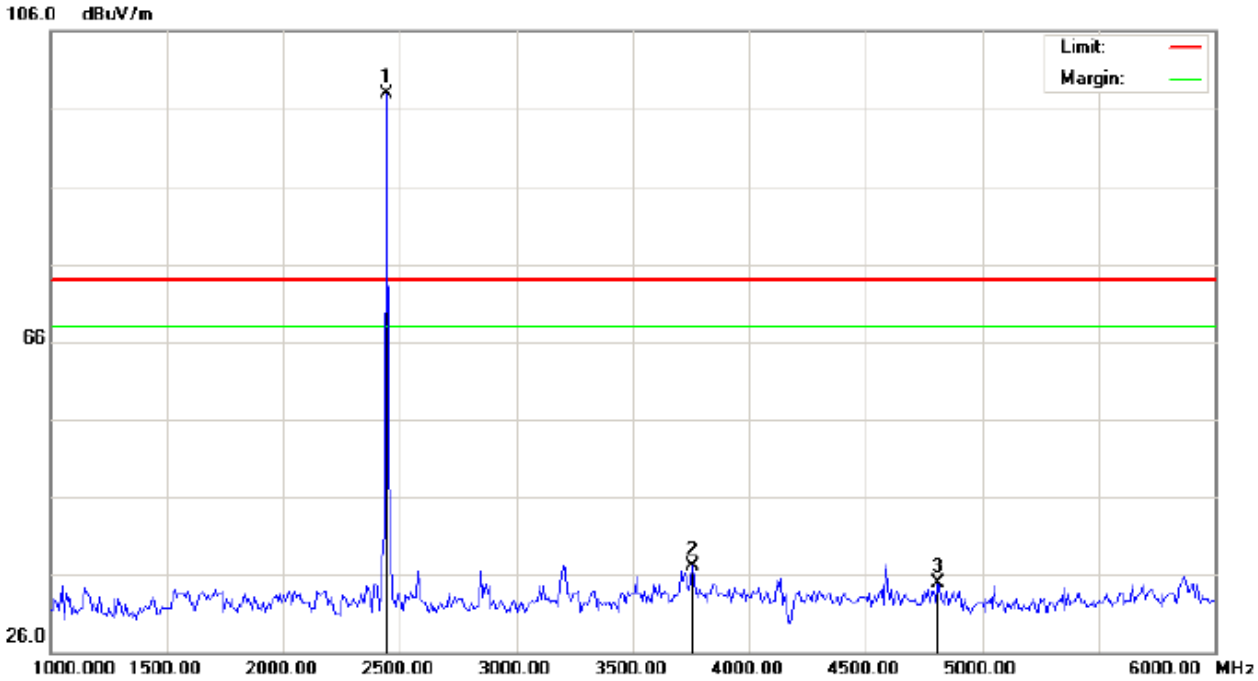
Polarization: *Vertical*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2402.000	87.20	10.32	97.52	74.00	23.52	peak			
2		3416.667	24.77	12.03	36.80	74.00	-37.20	peak			
3		4475.000	30.78	7.30	38.08	74.00	-35.92	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-MIDDLE CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Middle Channel TX
Note:

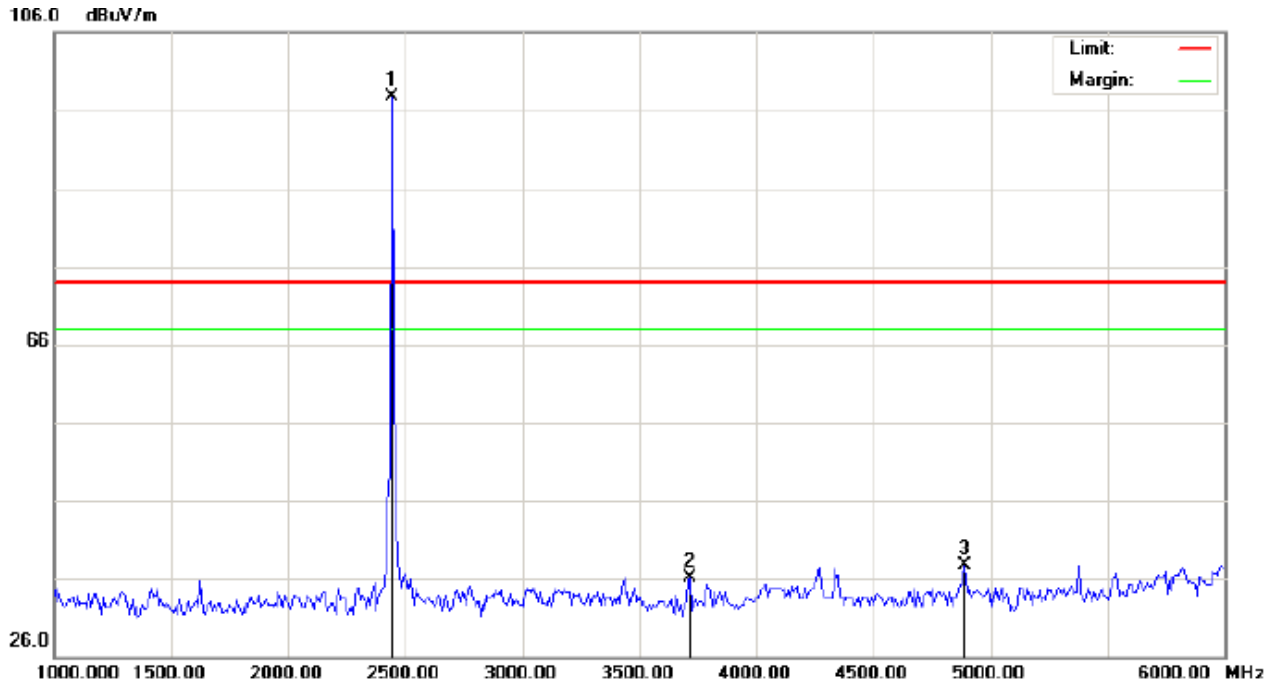
Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2441.000	87.61	10.36	97.97	74.00	23.97	peak			
2		3758.333	23.45	13.70	37.15	74.00	-36.85	peak			
3		4808.333	27.17	7.70	34.87	74.00	-39.13	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics) - MIDDLE CHANNEL –VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Middle Channel TX
Note:

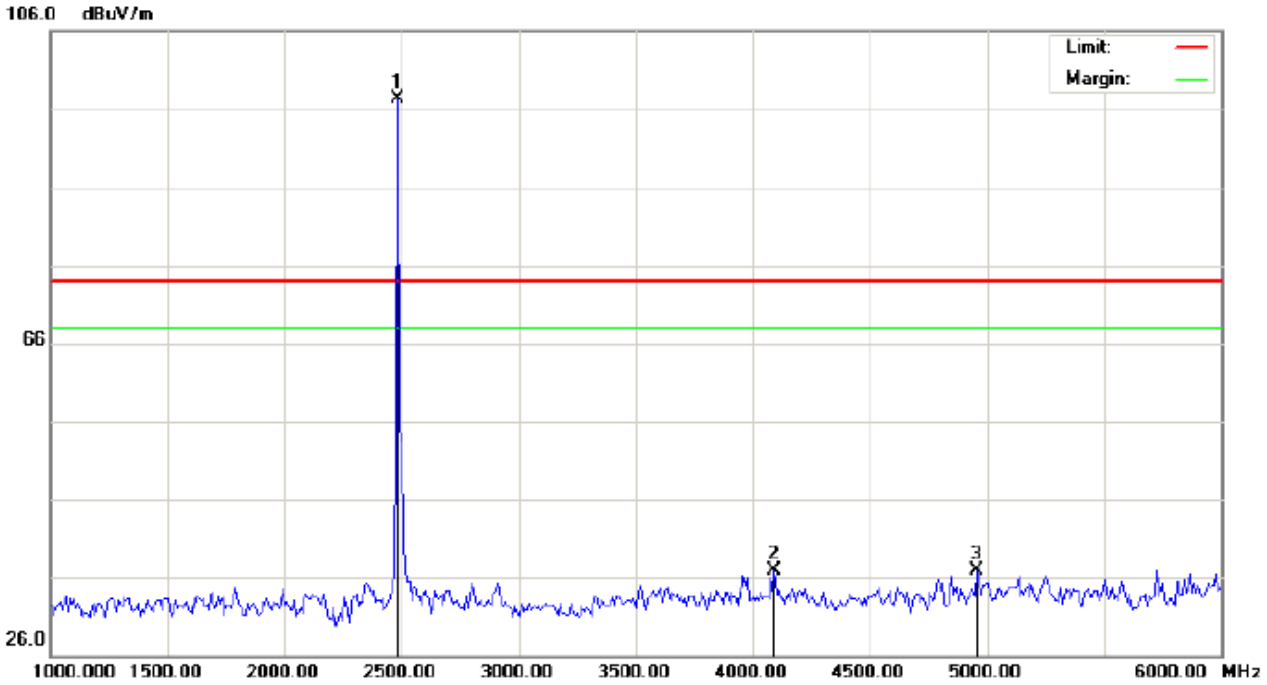
Polarization: *Vertical*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	.	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2441.000	87.41	10.36	97.77	74.00	23.77	peak			
2		3716.667	22.75	13.44	36.19	74.00	-37.81	peak			
3		4891.667	29.75	7.92	37.67	74.00	-36.33	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-HIGH CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

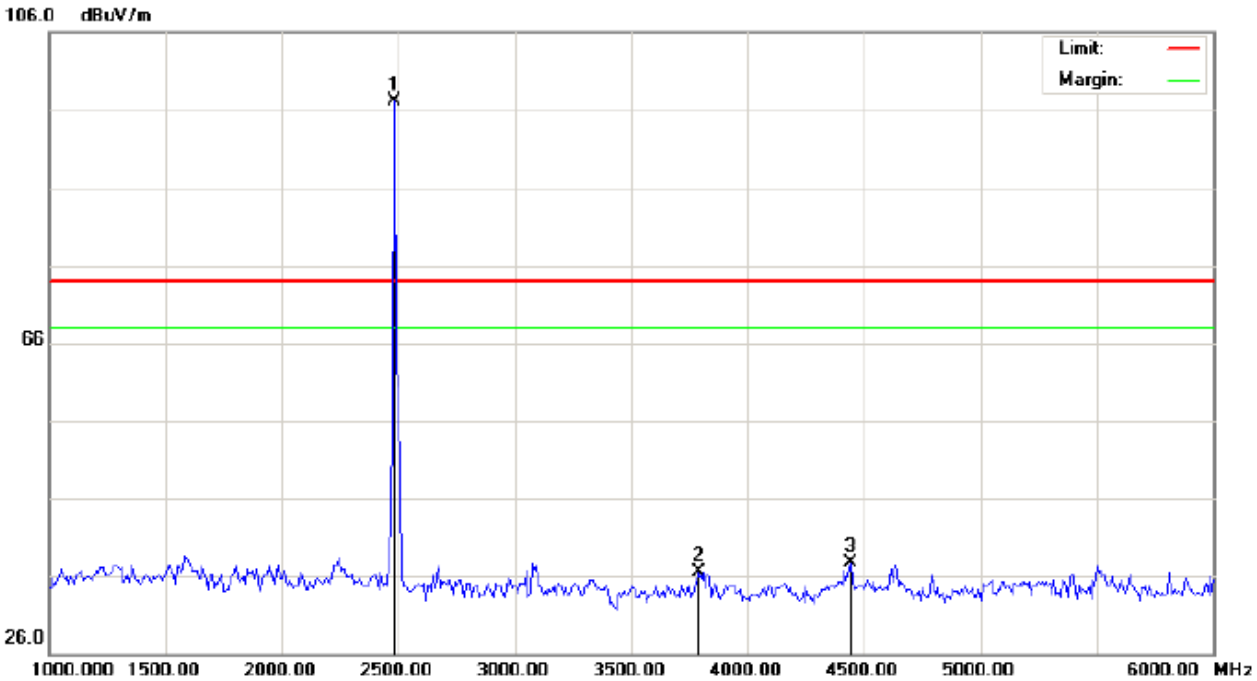
Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	86.89	10.41	97.30	74.00	23.30	peak			
2		4091.667	23.17	13.67	36.84	74.00	-37.16	peak			
3		4958.333	28.89	8.09	36.98	74.00	-37.02	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-HIGH CHANNEL –VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Vertical*
Power:
Distance:

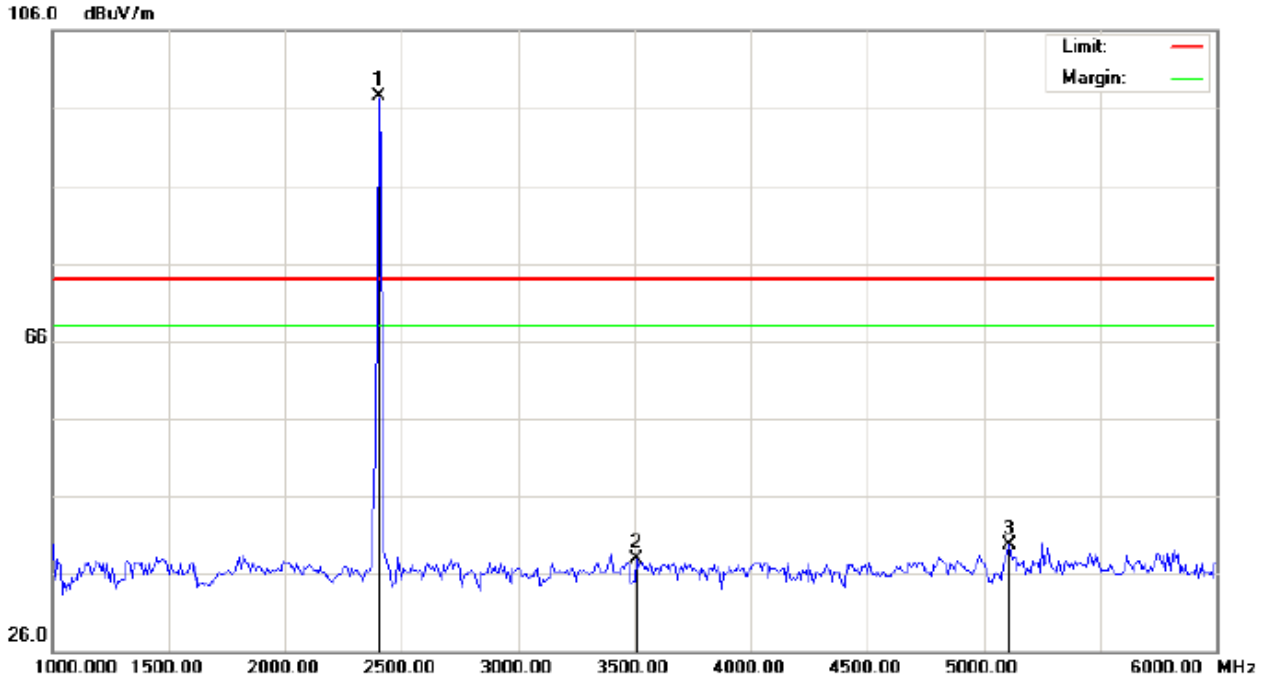
Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	86.76	10.41	97.17	74.00	23.17	peak			
2		3791.667	22.68	13.91	36.59	74.00	-37.41	peak			
3		4441.667	29.82	7.86	37.68	74.00	-36.32	peak			

RESULT: PASS

For iSSC 2

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-LOW CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

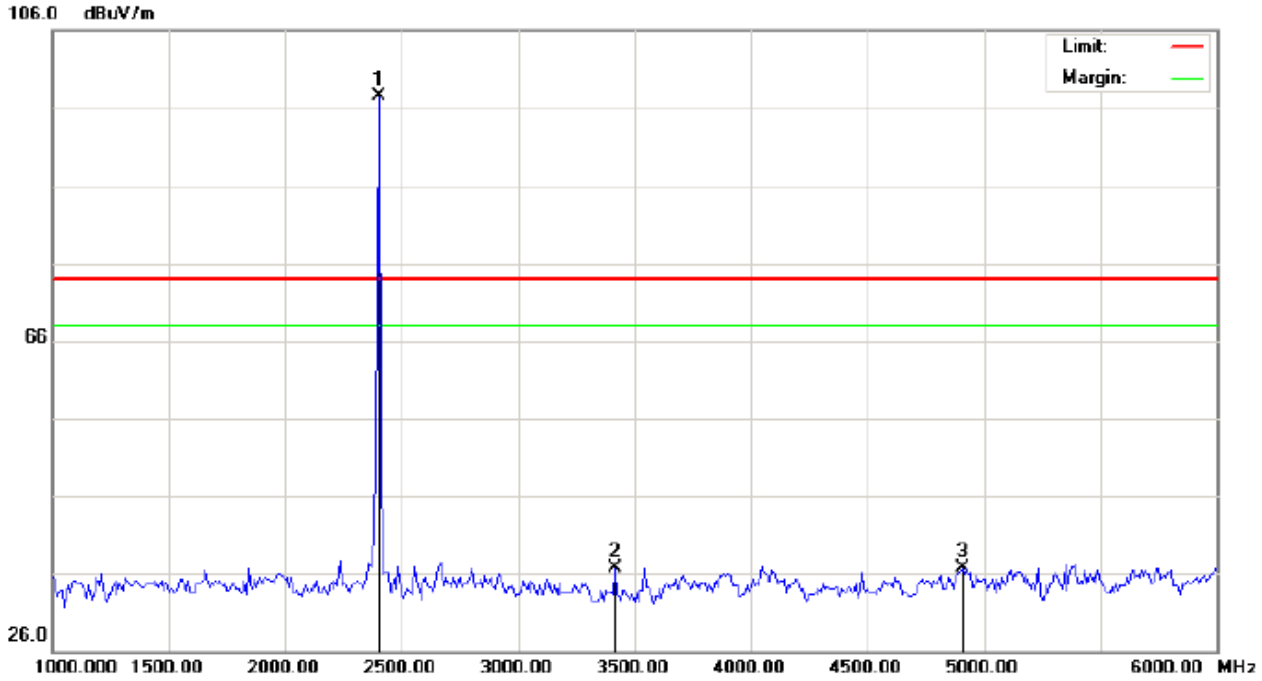
Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2402.000	87.13	10.32	97.45	74.00	23.45	peak			
2		3508.333	25.77	12.16	37.93	74.00	-36.07	peak			
3		5108.333	33.61	6.03	39.64	74.00	-34.36	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-LOW CHANNEL –VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

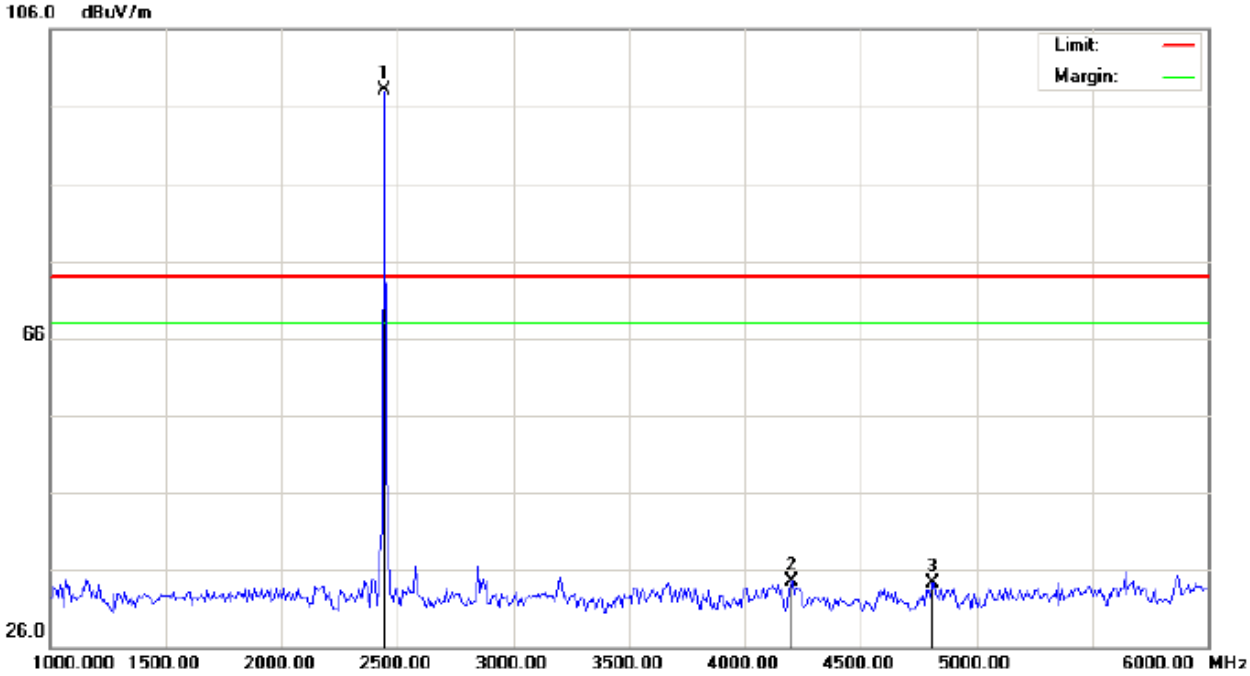
Polarization: *Vertical*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2402.000	87.25	10.32	97.57	74.00	23.57	peak			
2		3416.667	24.77	12.03	36.80	74.00	-37.20	peak			
3		4908.333	28.82	7.96	36.78	74.00	-37.22	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-MIDDLE CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Middle Channel TX
Note:

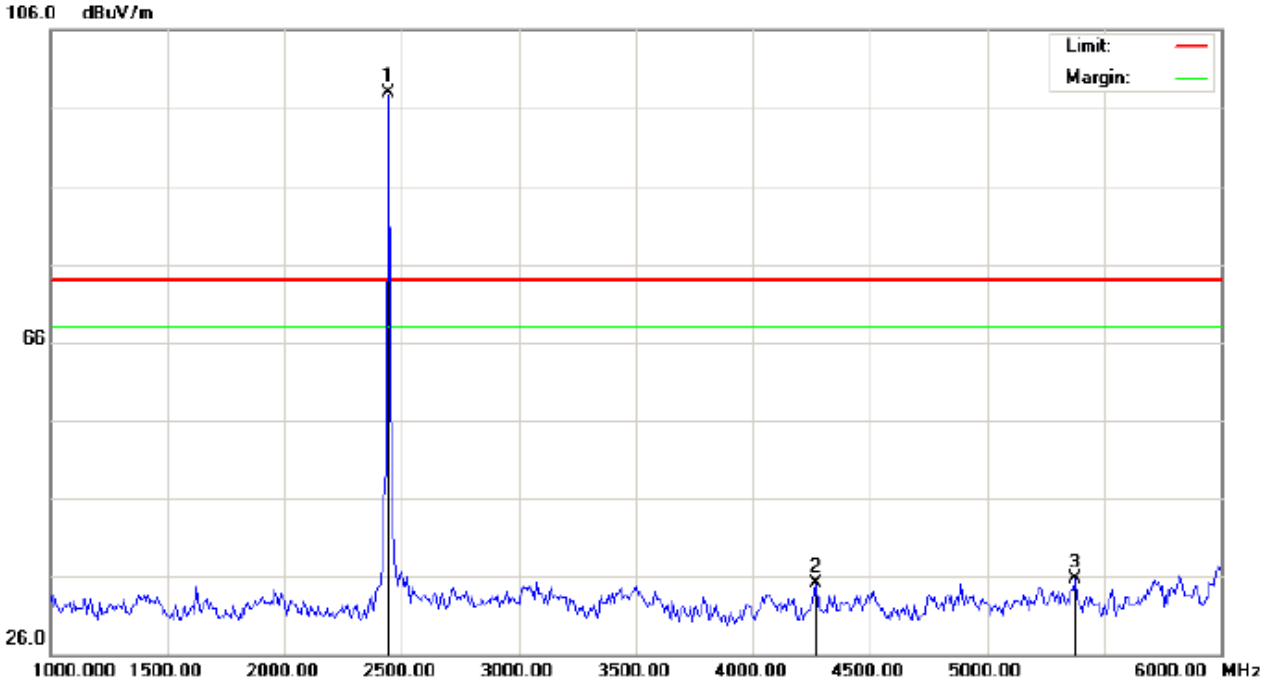
Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2441.000	87.65	10.36	98.01	74.00	24.01	peak			
2		4200.000	22.67	11.87	34.54	74.00	-39.46	peak			
3		4808.333	26.67	7.70	34.37	74.00	-39.63	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics) - MIDDLE CHANNEL –VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Middle Channel TX
Note:

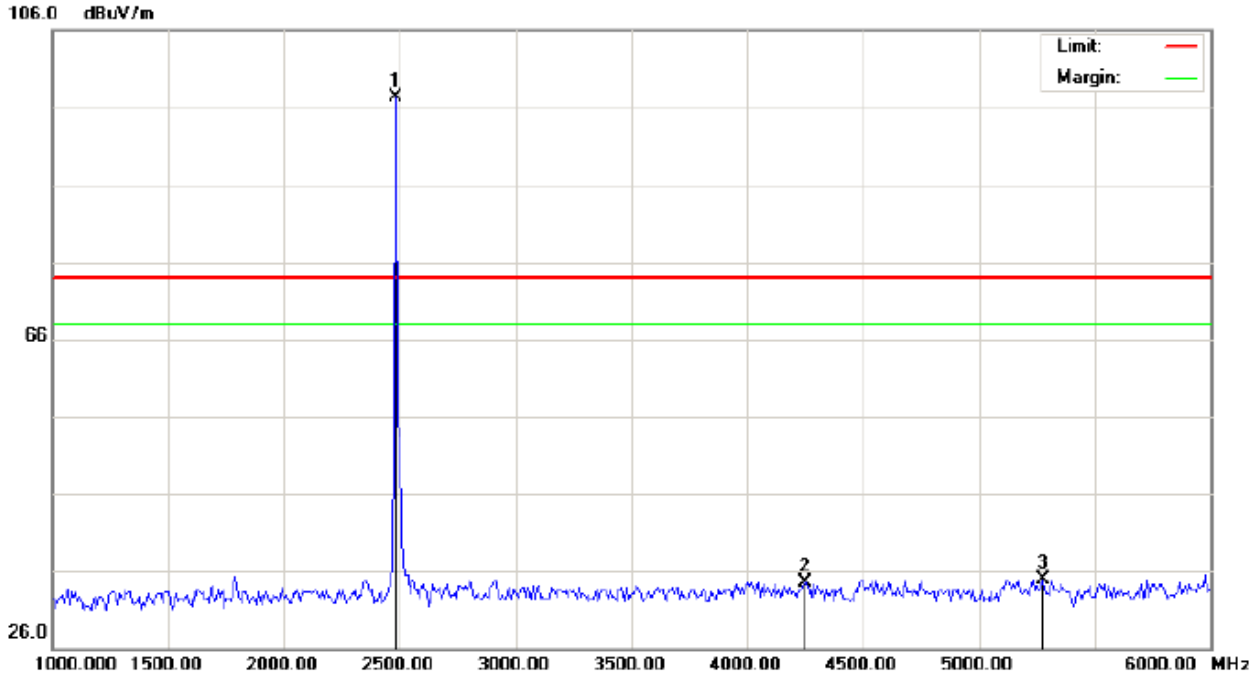
Polarization: *Vertical*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2441.000	87.47	10.36	97.83	74.00	23.83	peak			
2		4266.667	24.34	10.76	35.10	74.00	-38.90	peak			
3		5375.000	34.93	0.69	35.62	74.00	-38.38	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-HIGH CHANNEL-HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

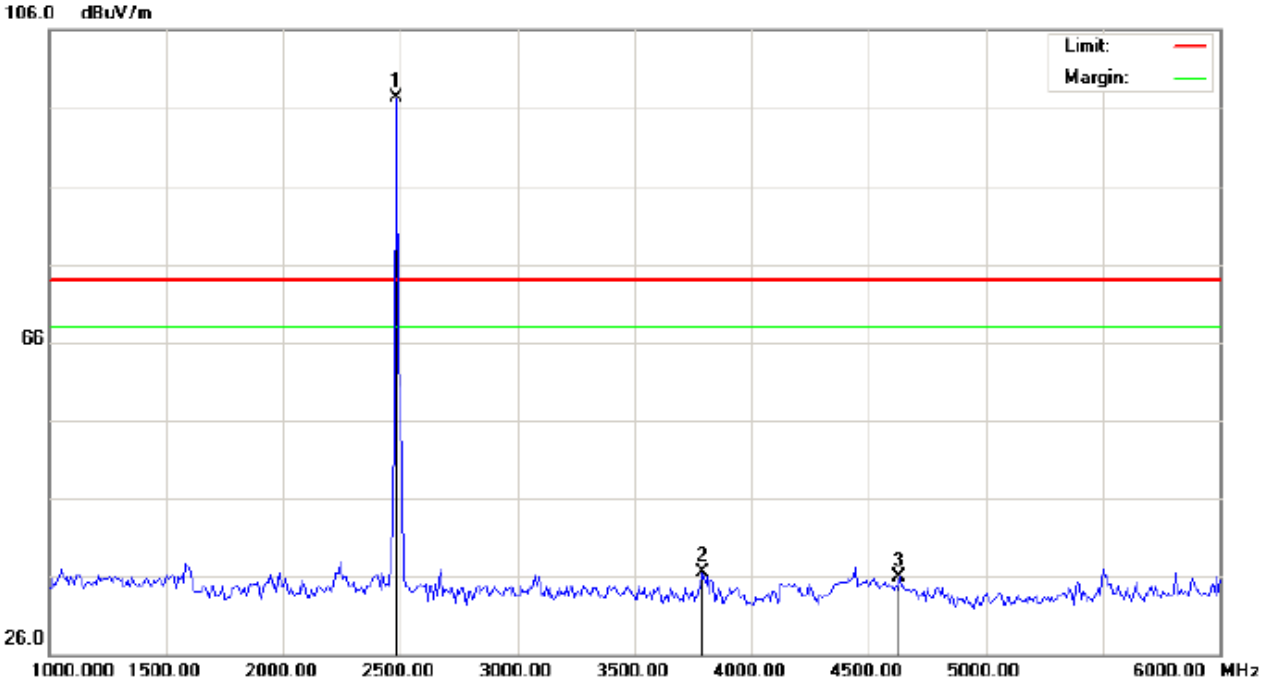
Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	86.92	10.41	97.33	74.00	23.33	peak			
2		4250.000	23.56	11.04	34.60	74.00	-39.40	peak			
3		5275.000	32.25	2.69	34.94	74.00	-39.06	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)-HIGH CHANNEL –VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Vertical*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	86.81	10.41	97.22	74.00	23.22	peak			
2		3791.667	22.68	13.91	36.59	74.00	-37.41	peak			
3		4633.333	28.70	7.24	35.94	74.00	-38.06	peak			

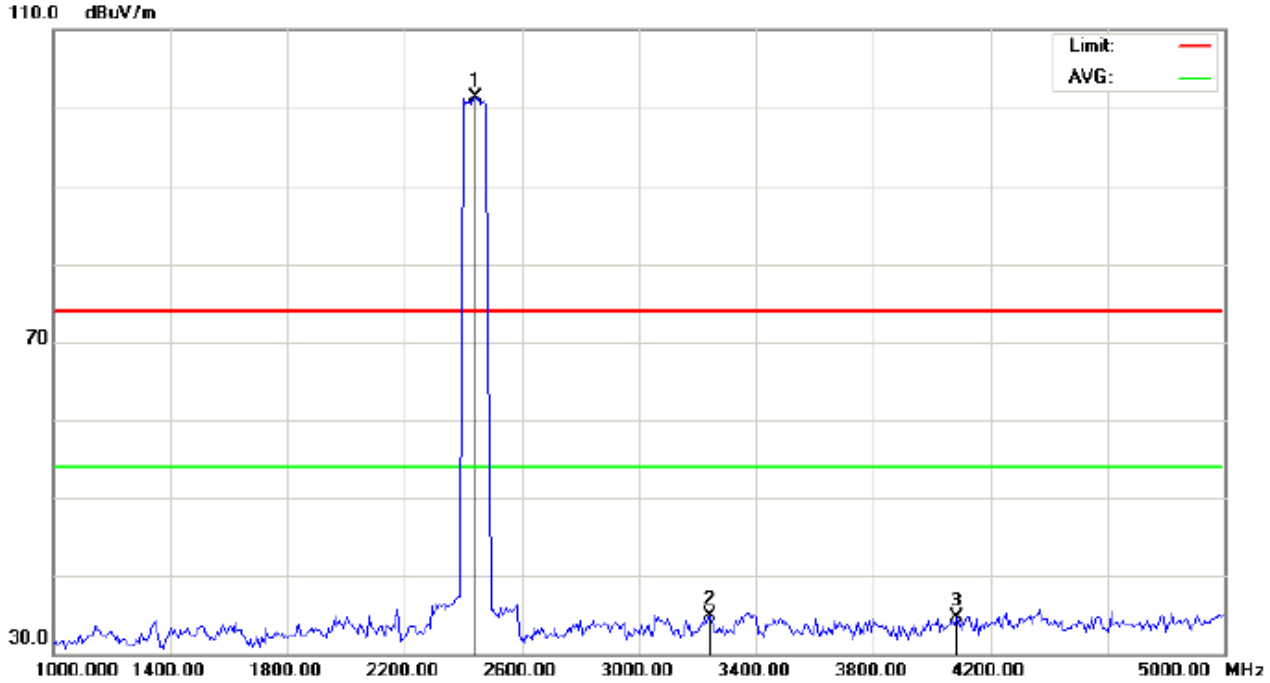
RESULT: PASS

Note: 6~25GHz at least have 20dB margin. No recording in the test report.

Factor=Antenna Factor+ Cable loss-Amplifier gain, Margin=Measurement-Limit.

The “Factor” value can be calculated automatically by software of measurement system.

RADIATED EMISSION ABOVE 1GHZ – HORIZONTAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: BT Link with charging
Note:

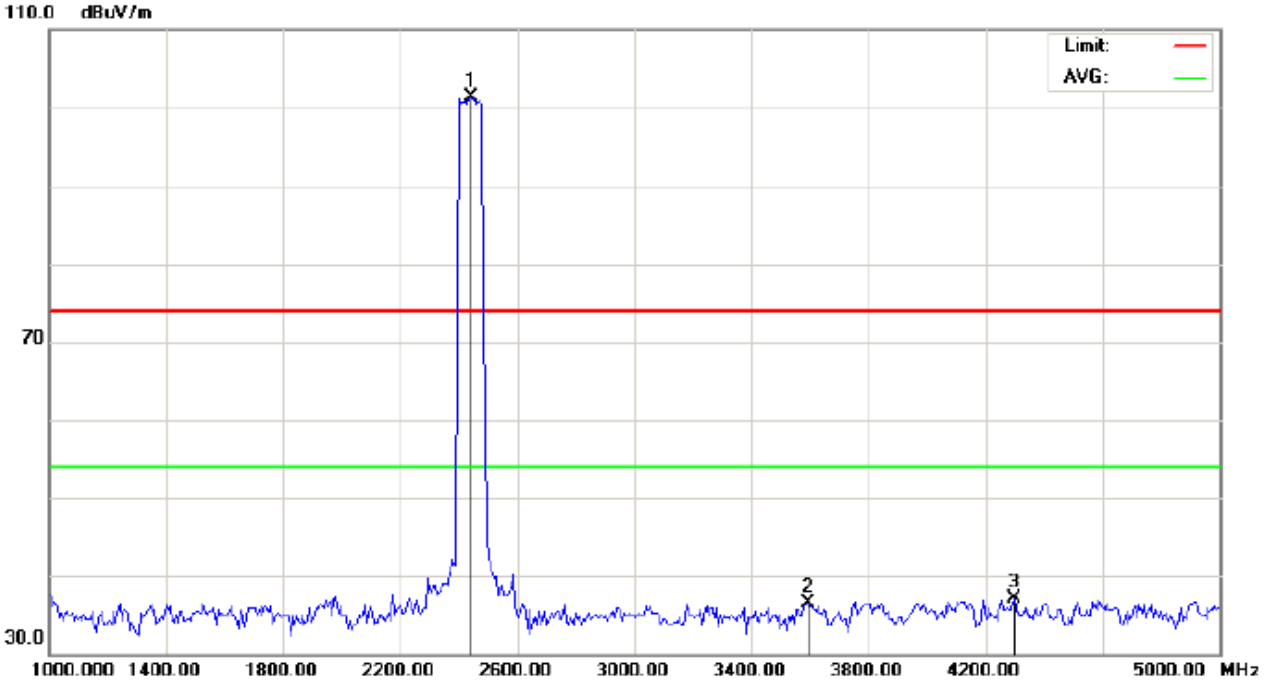
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 24.1
Humidity: 53.6 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	.	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2440.000	110.92	-9.64	101.28	74.00	27.28	peak			
2		3240.000	43.00	-8.13	34.87	74.00	-39.13	peak			
3		4086.667	39.21	-4.52	34.69	74.00	-39.31	peak			

RESULT: PASS

RADIATED EMISSION ABOVE 1GHZ - VERTICAL



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: BT Link with charging
Note:

Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 24.1
Humidity: 53.6 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2440.000	110.97	-9.64	101.33	74.00	27.33	peak			
2		3593.333	43.84	-7.31	36.53	74.00	-37.47	peak			
3		4300.000	40.81	-3.79	37.02	74.00	-36.98	peak			

RESULT: PASS

Note: Above test mode including four modules working at the same time.

11. BAND EDGE EMISSION

11.1. MEASUREMENT PROCEDURE

1. Set the EUT Work on the top, the bottom operation frequency individually.
2. Set SPA Start or Stop Frequency=Operation Frequency, RBW>=100kHz, VBW>=3*RBW, Center frequency =Operation frequency
3. The band edges was measured and recorded.

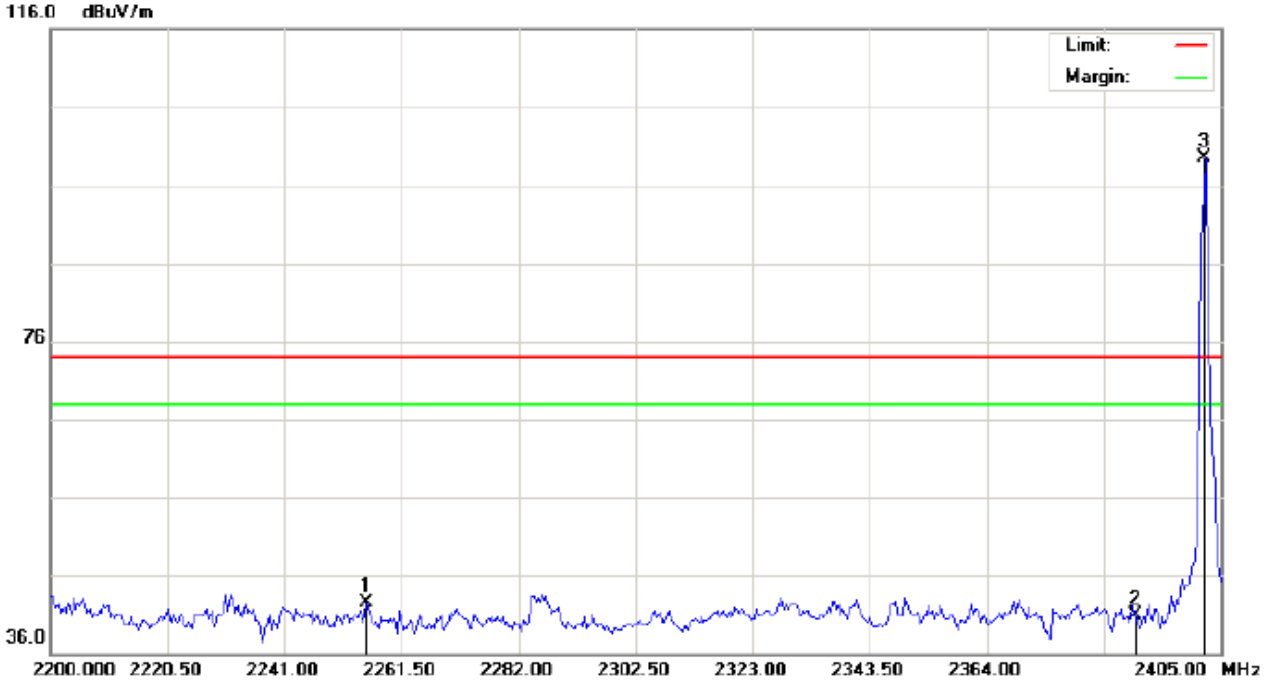
11.2. TEST SET-UP

Radiated same as 10.2

11.3. TEST RESULT (Worst Modulation: GFSK)

For CSR 1

TEST PLOT OF BAND EDGE FOR LOW CHANNEL (1Mbps)-Horizontal



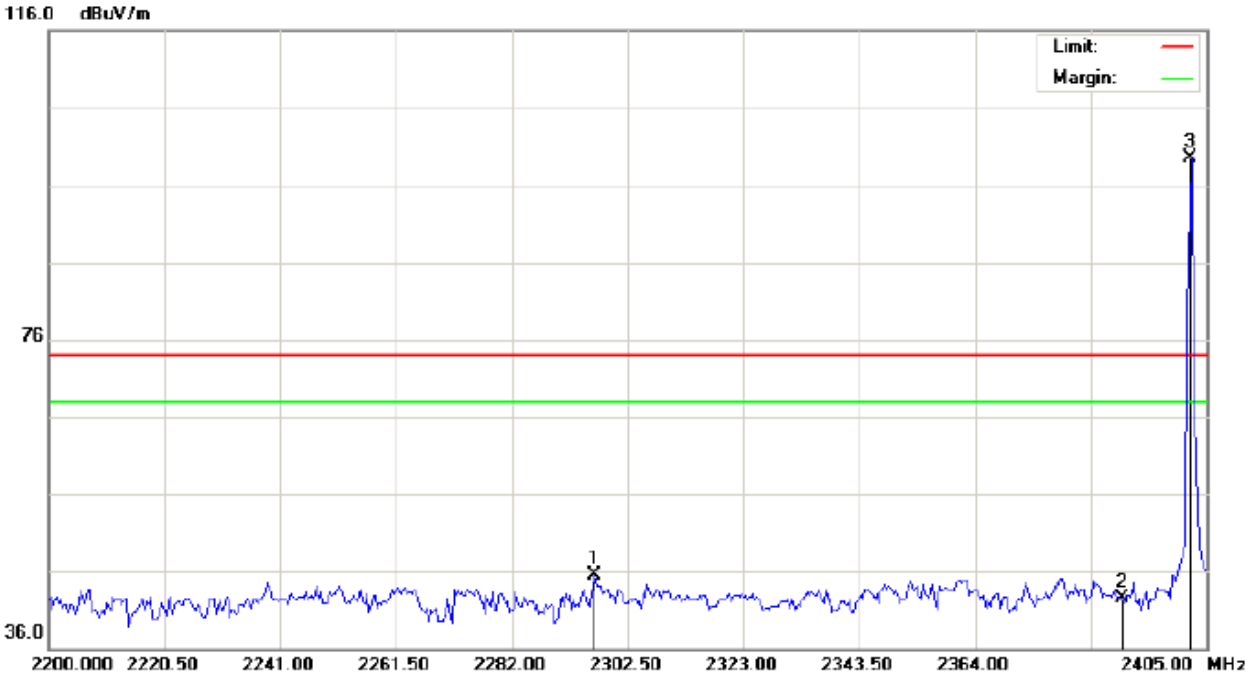
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		2255.350	32.34	10.16	42.50	74.00	-31.50	peak			
2		2390.000	30.50	10.31	40.81	74.00	-33.19	peak			
3	*	2402.000	89.22	10.32	99.54	74.00	25.54	peak			

TEST PLOT OF BAND EDGE FOR LOW CHANNEL (1Mbps)-Vertical



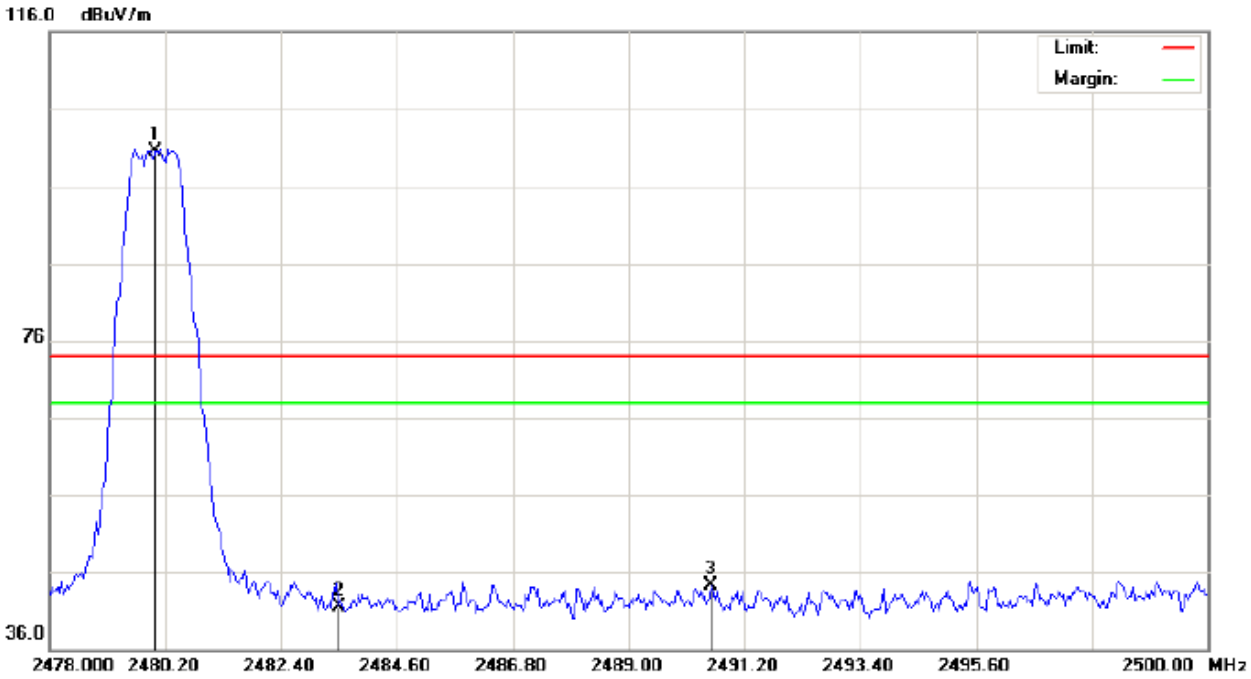
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

Polarization: *Vertical*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		2296.692	35.22	10.21	45.43	74.00	-28.57	peak			
2		2390.000	32.21	10.31	42.52	74.00	-31.48	peak			
3	*	2402.000	89.09	10.32	99.41	74.00	25.41	peak			

TEST PLOT OF BAND EDGE FOR HIGH CHANNEL (1Mbps)-Horizontal



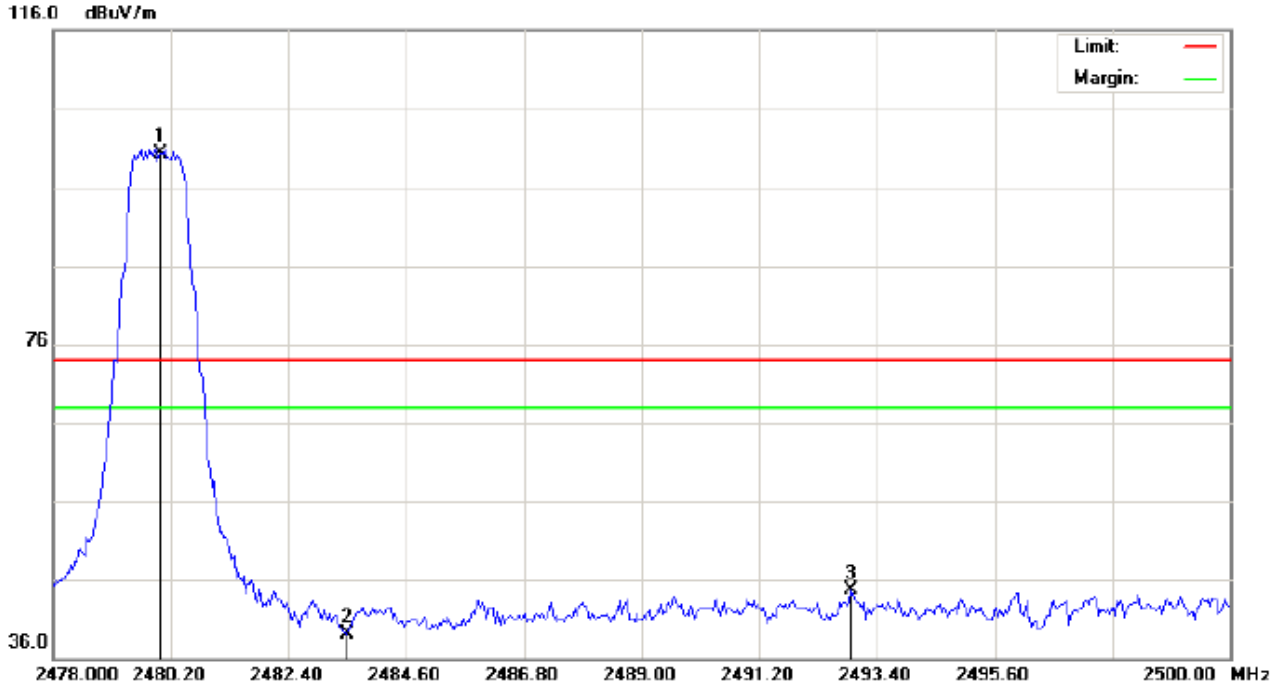
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	90.05	10.41	100.46	74.00	26.46	peak			
2		2483.500	31.19	10.41	41.60	74.00	-32.40	peak			
3		2490.577	33.81	10.42	44.23	74.00	-29.77	peak			

TEST PLOT OF BAND EDGE FOR HIGH CHANNEL (1Mbps)-Vertical



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Vertical*
Power:
Distance:

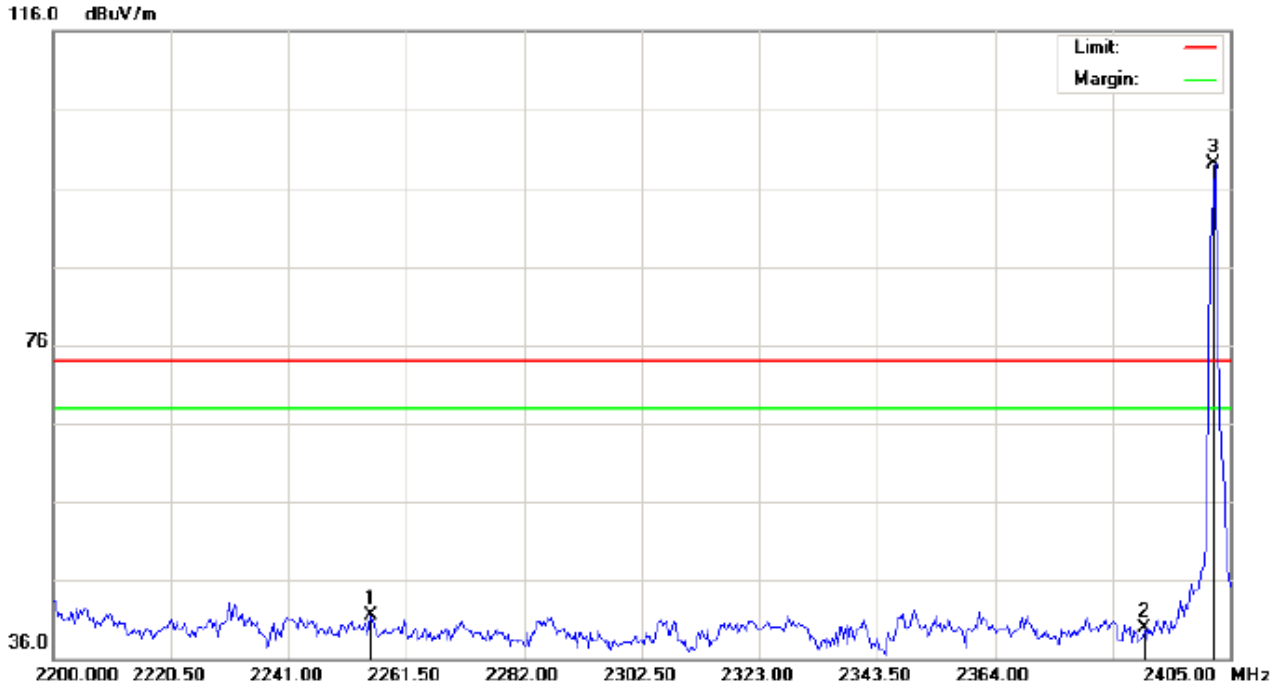
Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	89.82	10.41	100.23	74.00	26.23	peak			
2		2483.500	28.76	10.41	39.17	74.00	-34.83	peak			
3		2492.923	34.38	10.42	44.80	74.00	-29.20	peak			

RESULT: PASS

For CSR 2

TEST PLOT OF BAND EDGE FOR LOW CHANNEL (1Mbps)-Horizontal



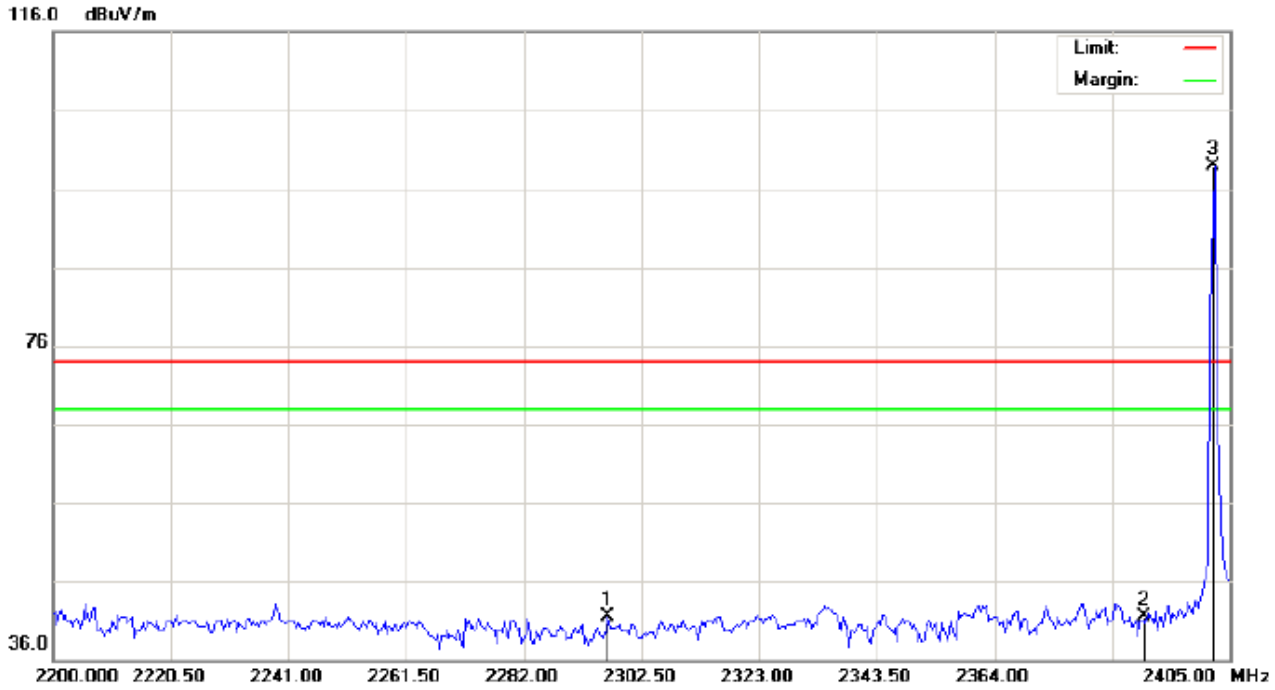
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		2255.350	31.34	10.16	41.50	74.00	-32.50	peak			
2		2390.000	29.50	10.31	39.81	74.00	-34.19	peak			
3	*	2402.000	88.72	10.32	99.04	74.00	25.04	peak			

TEST PLOT OF BAND EDGE FOR LOW CHANNEL (1Mbps)-Vertical



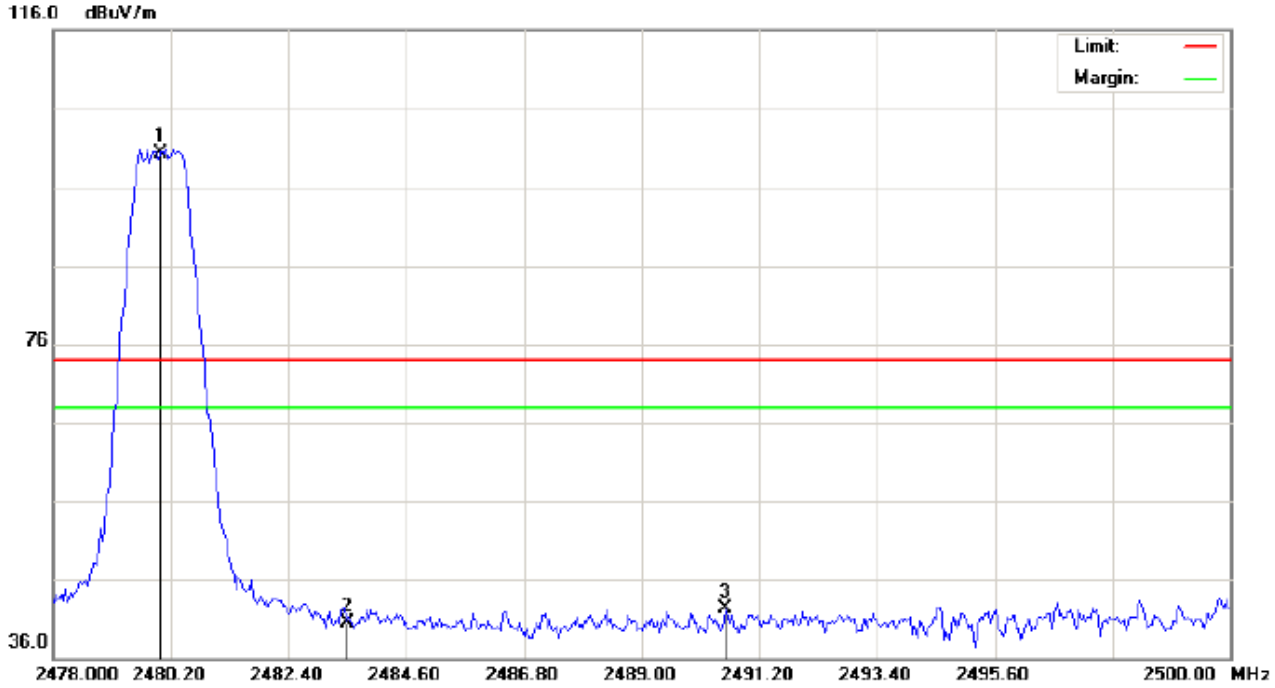
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

Polarization: *Vertical*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		2296.692	31.22	10.21	41.43	74.00	-32.57	peak			
2		2390.000	31.21	10.31	41.52	74.00	-32.48	peak			
3	*	2402.000	88.59	10.32	98.91	74.00	24.91	peak			

TEST PLOT OF BAND EDGE FOR HIGH CHANNEL (1Mbps)-Horizontal



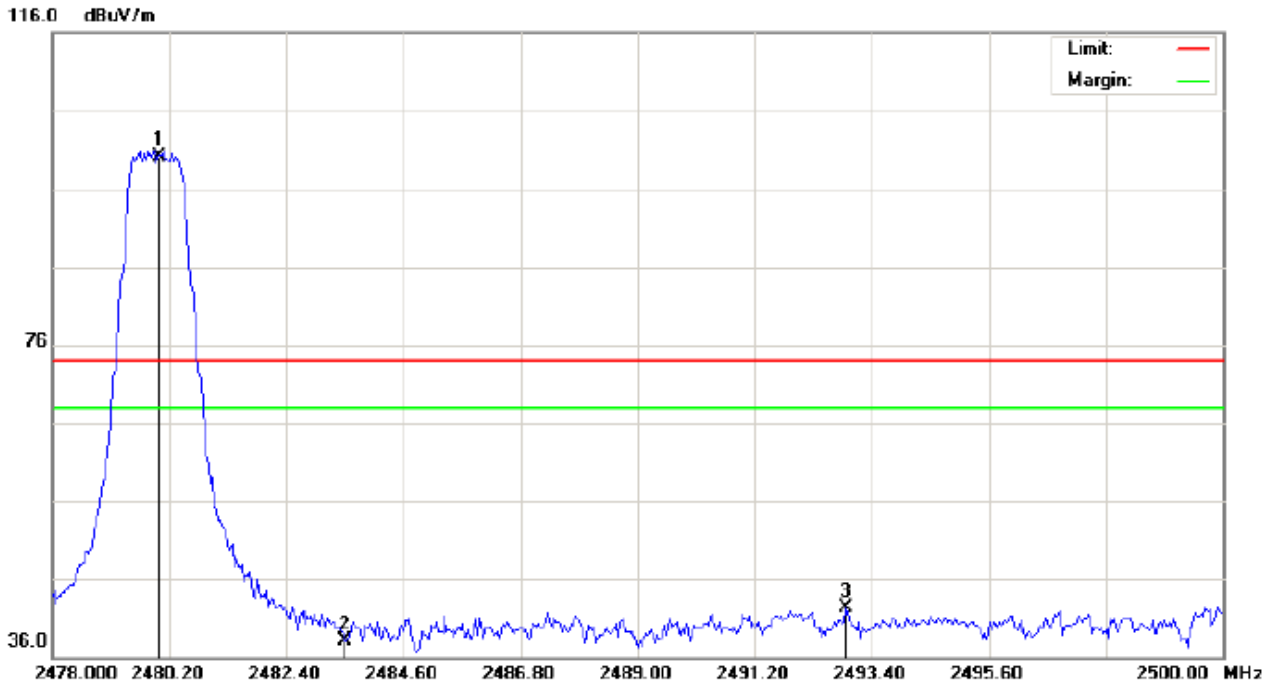
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	89.96	10.41	100.37	74.00	26.37	peak			
2		2483.500	30.19	10.41	40.60	74.00	-33.40	peak			
3		2490.577	31.81	10.42	42.23	74.00	-31.77	peak			

TEST PLOT OF BAND EDGE FOR HIGH CHANNEL (1Mbps)-Vertical



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Vertical*
Power:
Distance:

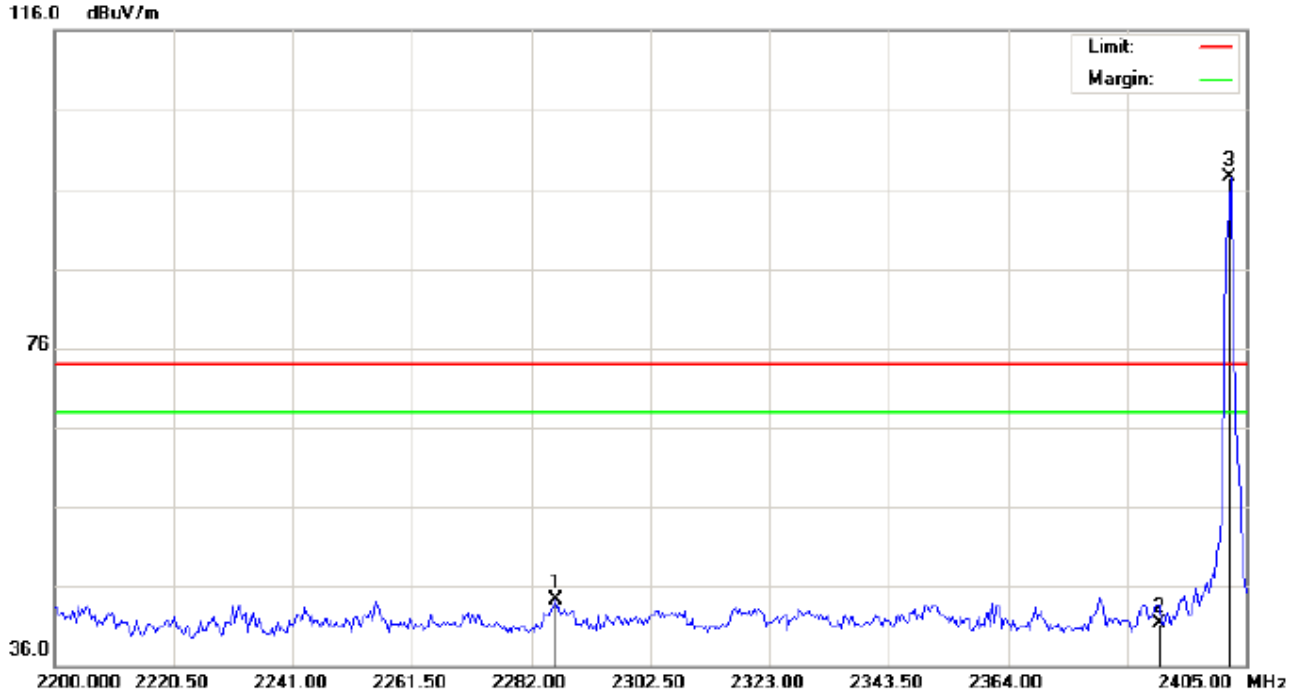
Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	89.77	10.41	100.18	74.00	26.18	peak			
2		2483.500	27.76	10.41	38.17	74.00	-35.83	peak			
3		2492.923	31.88	10.42	42.30	74.00	-31.70	peak			

RESULT: PASS

For iSSC 1

TEST PLOT OF BAND EDGE FOR LOW CHANNEL (1Mbps)-Horizontal



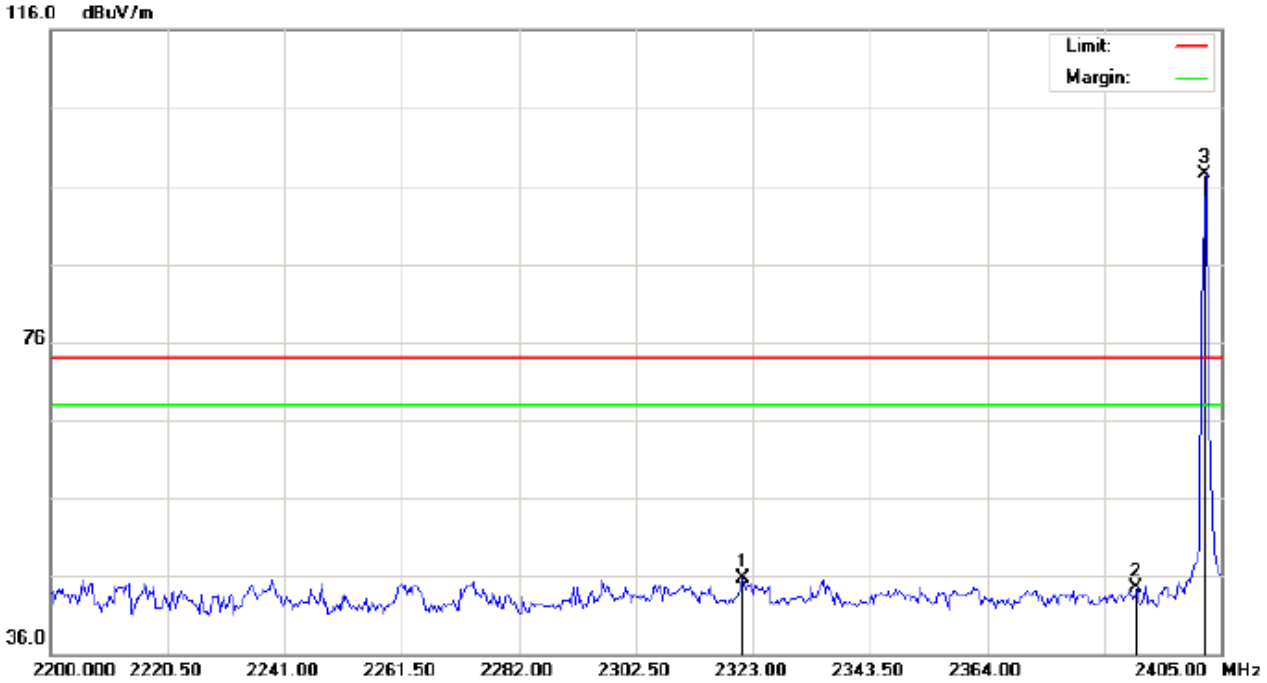
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		2286.100	34.07	10.19	44.26	74.00	-29.74	peak			
2		2390.000	31.00	10.31	41.31	74.00	-32.69	peak			
3	*	2402.000	87.22	10.32	97.54	74.00	23.54	peak			

TEST PLOT OF BAND EDGE FOR LOW CHANNEL (1Mbps)-Vertical



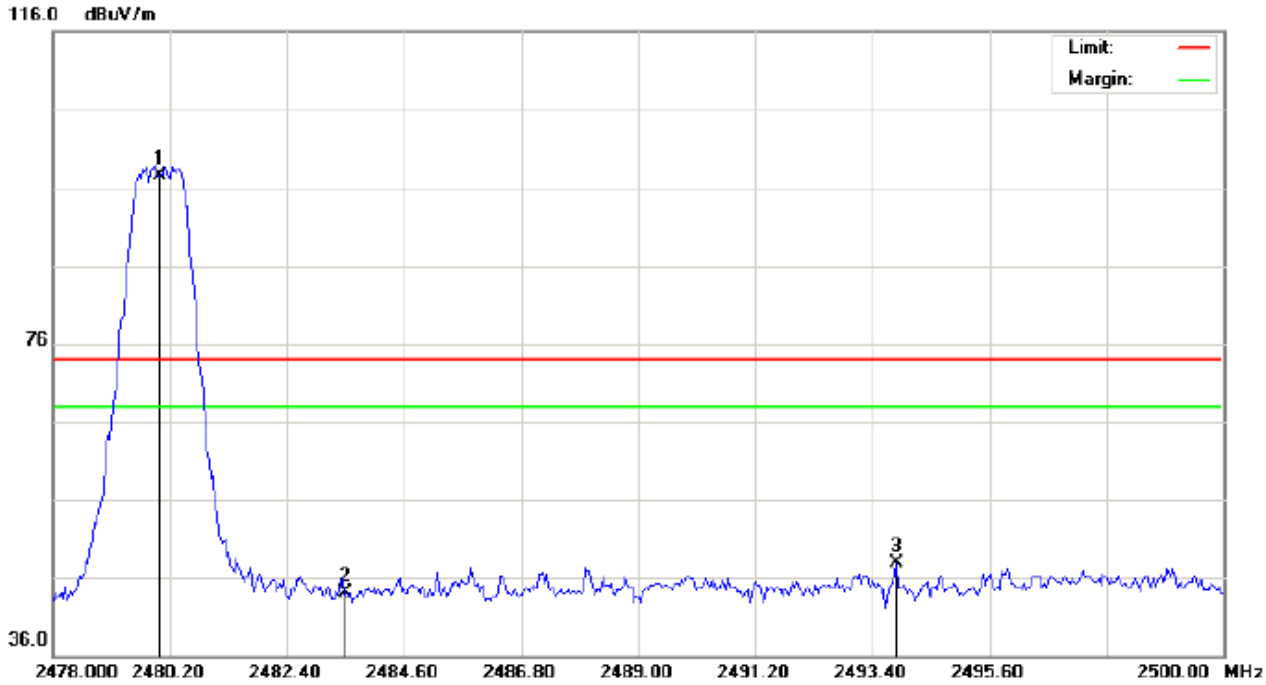
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

Polarization: *Vertical*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	.	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		2321.292	35.38	10.23	45.61	74.00	-28.39	peak			
2		2390.000	34.21	10.31	44.52	74.00	-29.48	peak			
3	*	2402.000	87.09	10.32	97.41	74.00	23.41	peak			

TEST PLOT OF BAND EDGE FOR HIGH CHANNEL (1Mbps)-Horizontal



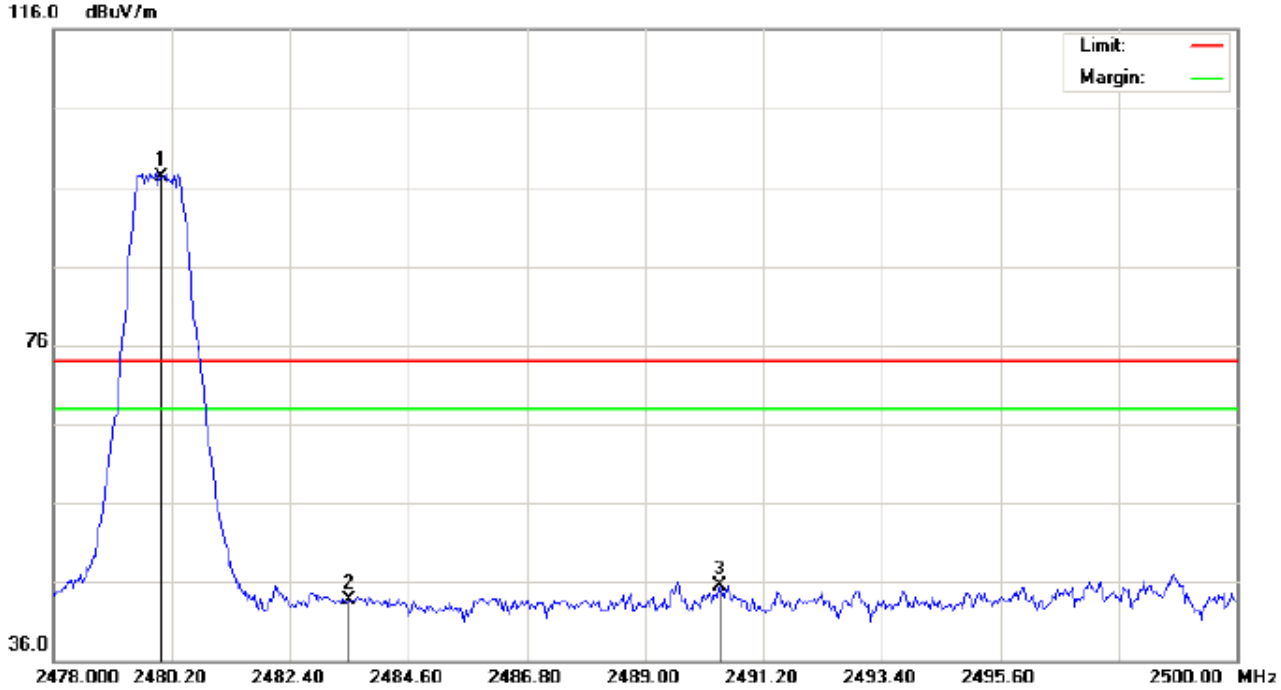
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	87.05	10.41	97.46	74.00	23.46	peak			
2		2483.500	33.69	10.41	44.10	74.00	-29.90	peak			
3		2493.840	37.55	10.42	47.97	74.00	-26.03	peak			

TEST PLOT OF BAND EDGE FOR HIGH CHANNEL (1Mbps)-Vertical



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Vertical*
Power:
Distance:

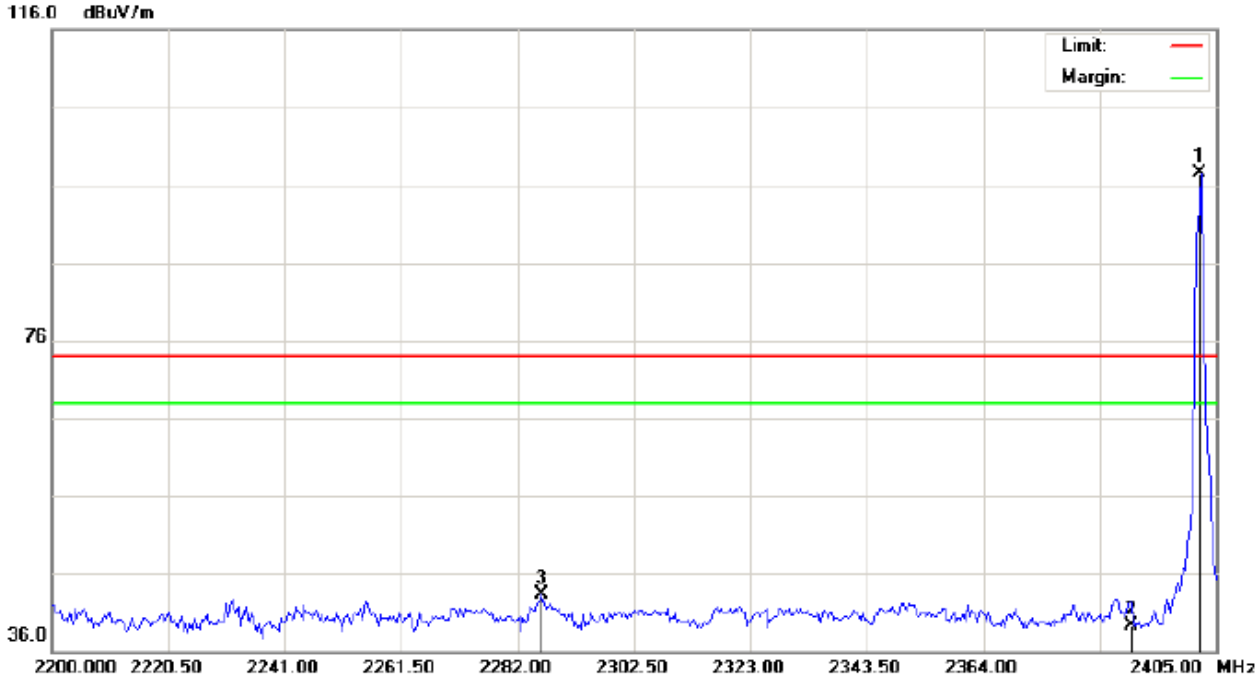
Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	86.82	10.41	97.23	74.00	23.23	peak			
2		2483.500	33.26	10.41	43.67	74.00	-30.33	peak			
3		2490.393	35.16	10.42	45.58	74.00	-28.42	peak			

RESULT: PASS

For iSSC 2

TEST PLOT OF BAND EDGE FOR LOW CHANNEL (1Mbps)-Horizontal



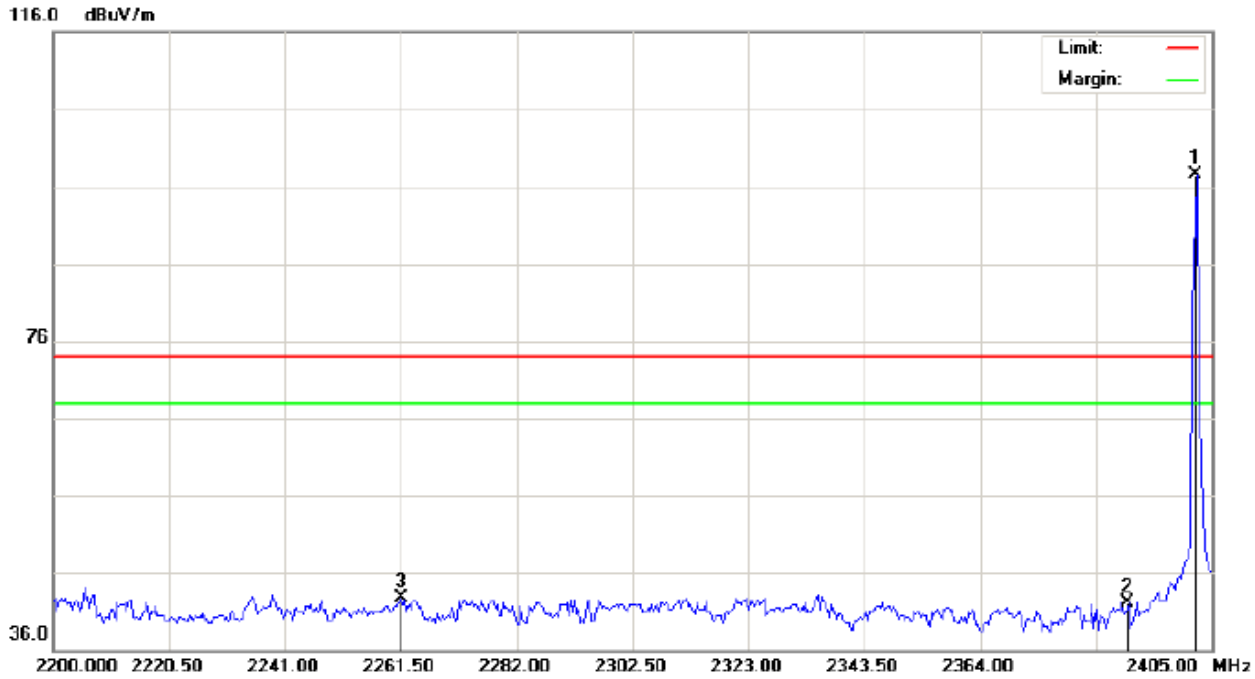
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2402.000	87.26	10.32	97.58	74.00	23.58	peak			
2		2390.000	29.00	10.31	39.31	74.00	-34.69	peak			
3		2286.100	33.07	10.19	43.26	74.00	-30.74	peak			

TEST PLOT OF BAND EDGE FOR LOW CHANNEL (1Mbps)-Vertical



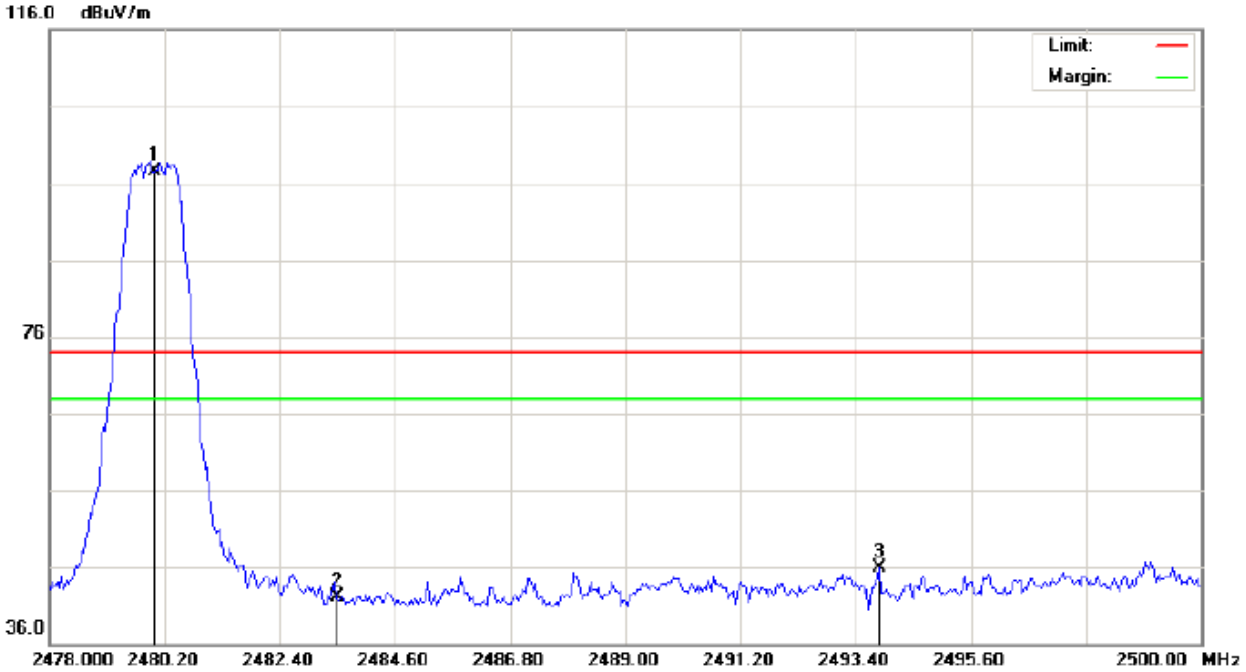
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

Polarization: *Vertical*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2402.000	87.12	10.32	97.44	74.00	23.44	peak			
2		2390.000	31.71	10.31	42.02	74.00	-31.98	peak			
3		2261.500	32.51	10.17	42.68	74.00	-31.32	peak			

TEST PLOT OF BAND EDGE FOR HIGH CHANNEL (1Mbps)-Horizontal



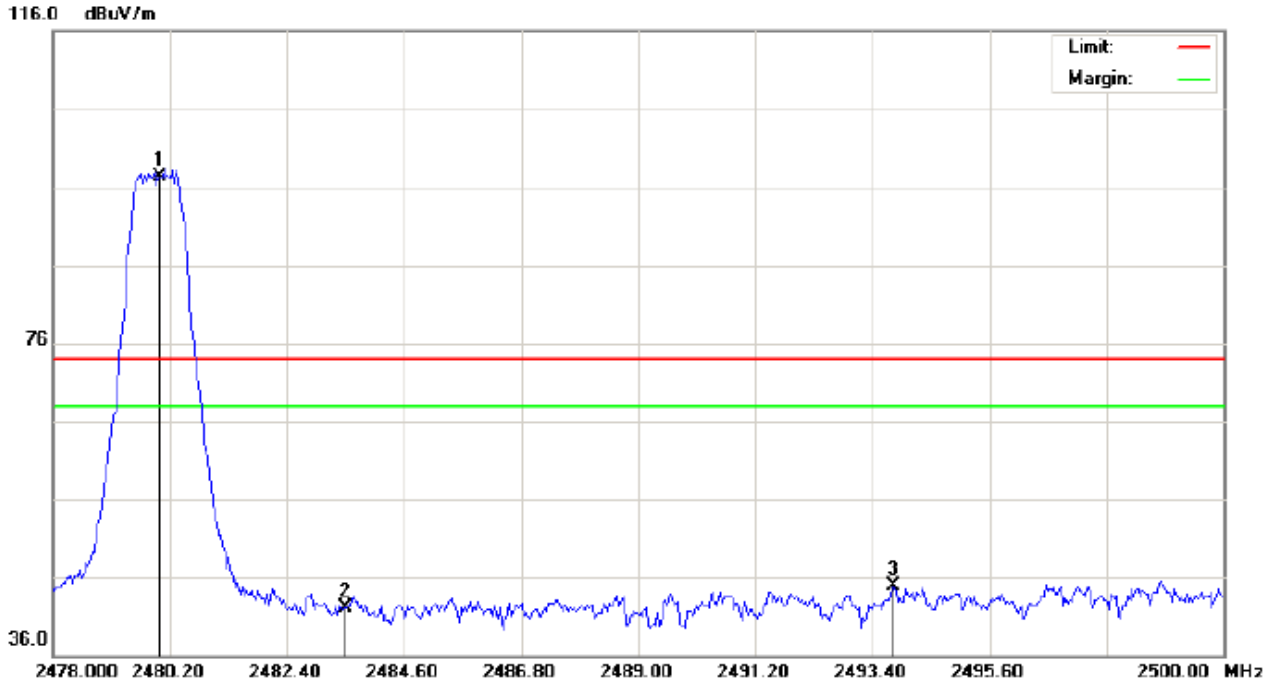
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	87.10	10.41	97.51	74.00	23.51	peak			
2		2483.500	31.69	10.41	42.10	74.00	-31.90	peak			
3		2493.840	35.55	10.42	45.97	74.00	-28.03	peak			

TEST PLOT OF BAND EDGE FOR HIGH CHANNEL (1Mbps)-Vertical



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Vertical*
Power:
Distance:

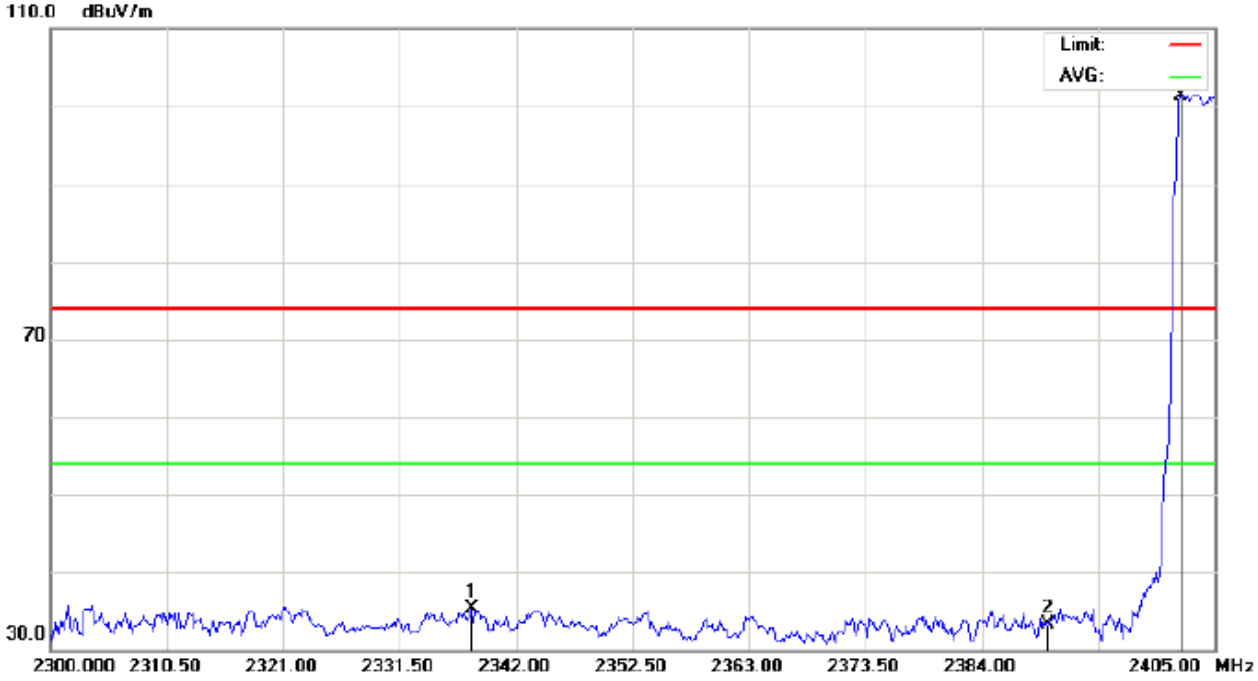
Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	86.86	10.41	97.27	74.00	23.27	peak			
2		2483.500	31.76	10.41	42.17	74.00	-31.83	peak			
3		2493.803	34.53	10.42	44.95	74.00	-29.05	peak			

RESULT: PASS

Band Edge results of four modules working at the same time

TEST PLOT OF BAND EDGE FOR LOW CHANNEL-Horizontal



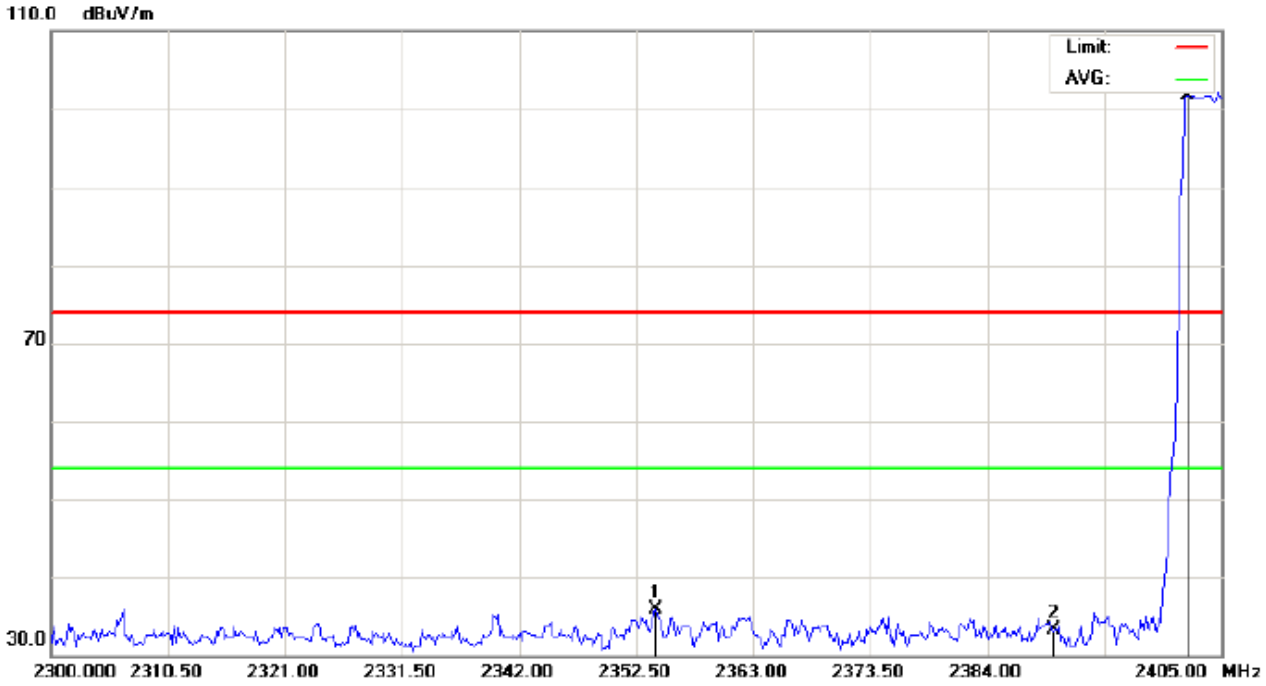
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 24.1
Humidity: 53.6 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		2337.975	45.00	-9.75	35.25	74.00	-38.75	peak			
2		2390.000	42.92	-9.69	33.23	74.00	-40.77	peak			
3	*	2402.000	110.97	-9.68	101.29	74.00	27.29	peak			

TEST PLOT OF BAND EDGE FOR LOW CHANNEL-Vertical



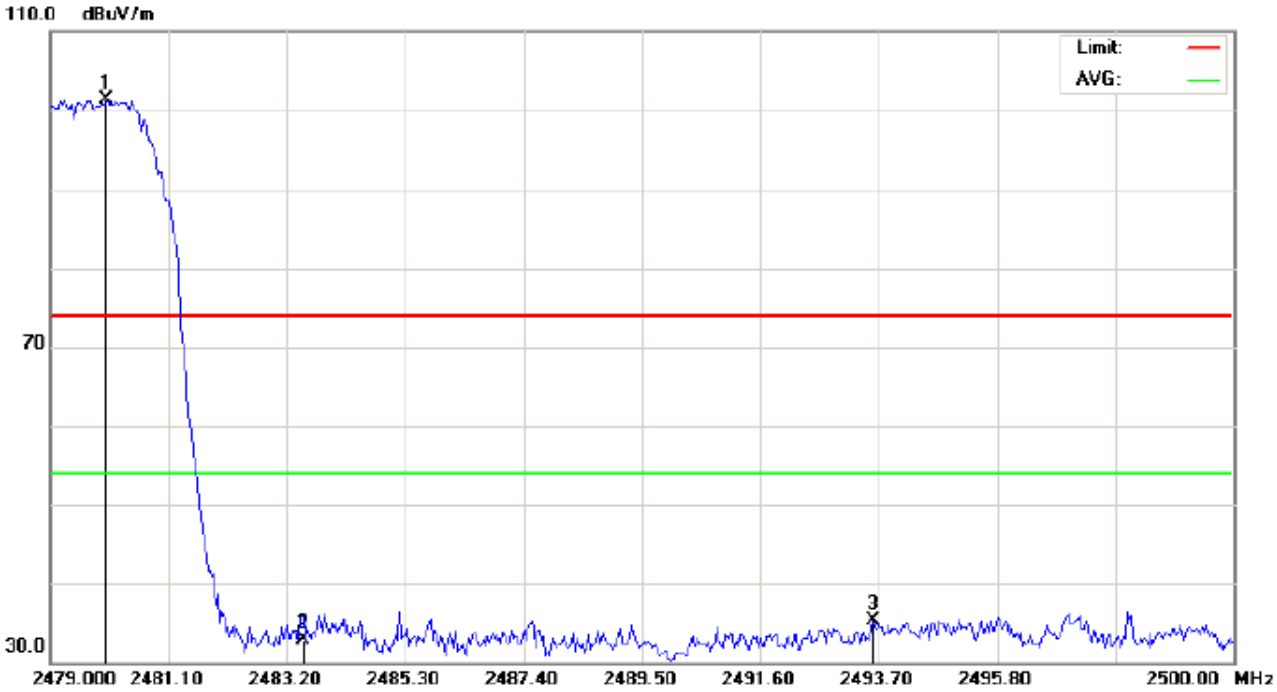
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: Low Channel TX
Note:

Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 24.1
Humidity: 53.6 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		2354.250	45.63	-9.73	35.90	74.00	-38.10	peak			
2		2390.000	42.92	-9.69	33.23	74.00	-40.77	peak			
3	*	2402.000	111.47	-9.68	101.79	74.00	27.79	peak			

TEST PLOT OF BAND EDGE FOR HIGH CHANNEL-Horizontal



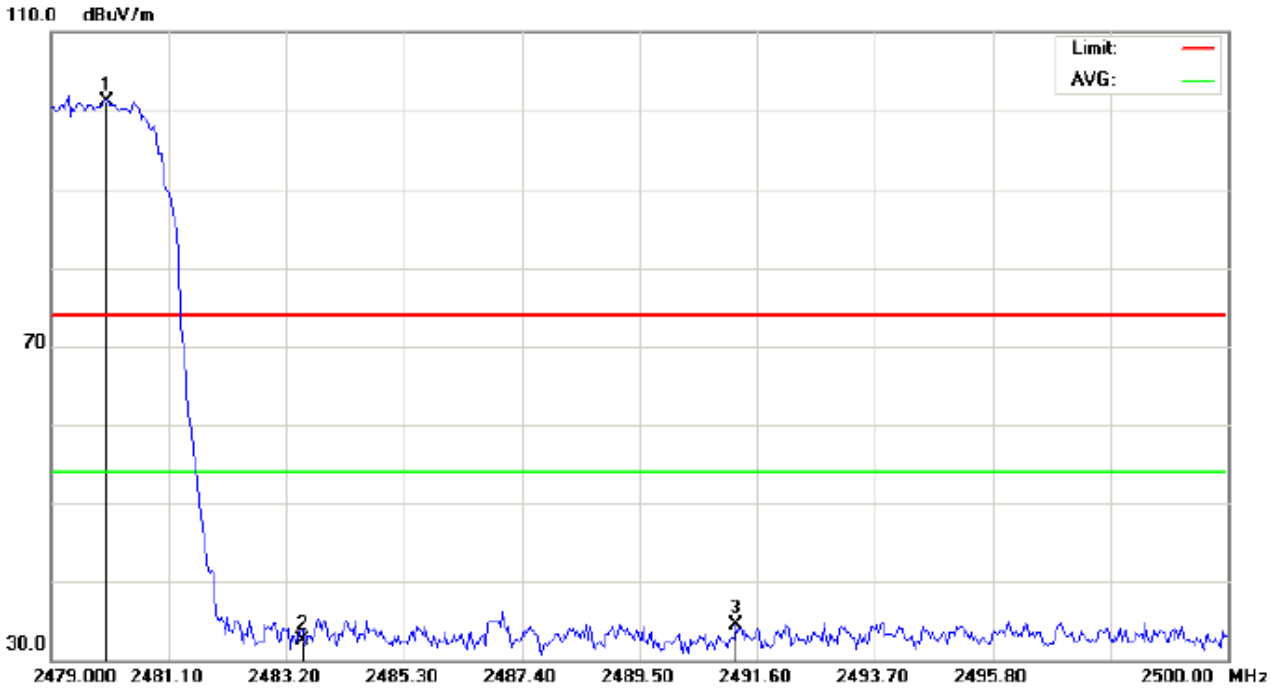
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 24.1
Humidity: 53.6 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	110.84	-9.59	101.25	74.00	27.25	peak			
2		2483.500	42.54	-9.59	32.95	74.00	-41.05	peak			
3		2493.595	44.93	-9.58	35.35	74.00	-38.65	peak			

TEST PLOT OF BAND EDGE FOR HIGH CHANNEL-Vertical



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: FUSE
M/N: BFUSEBA
Mode: High Channel TX
Note:

Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 24.1
Humidity: 53.6 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	.	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	110.78	-9.59	101.19	74.00	27.19	peak			
2		2483.500	42.04	-9.59	32.45	74.00	-41.55	peak			
3		2491.215	44.12	-9.58	34.54	74.00	-39.46	peak			

RESULT: PASS

Note: 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.

2. The “Factor” value can be calculated automatically by software of measurement system.

3. Hopping off and Hopping on have been tested and only worst case recorded

12. NUMBER OF HOPPING FREQUENCY

12.1. MEASUREMENT PROCEDURE

1. Place the EUT on the table and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer Start = 2.4GHz Stop = 2.4835GHz
4. Set the Spectrum Analyzer as RBW>=1%span, VBW>=RBW.

12.2. TEST SETUP (BLOCK DIAGRAM OF CONFIGURATION)

Same as described in section 8.2

12.3. MEASUREMENT EQUIPMENT USED

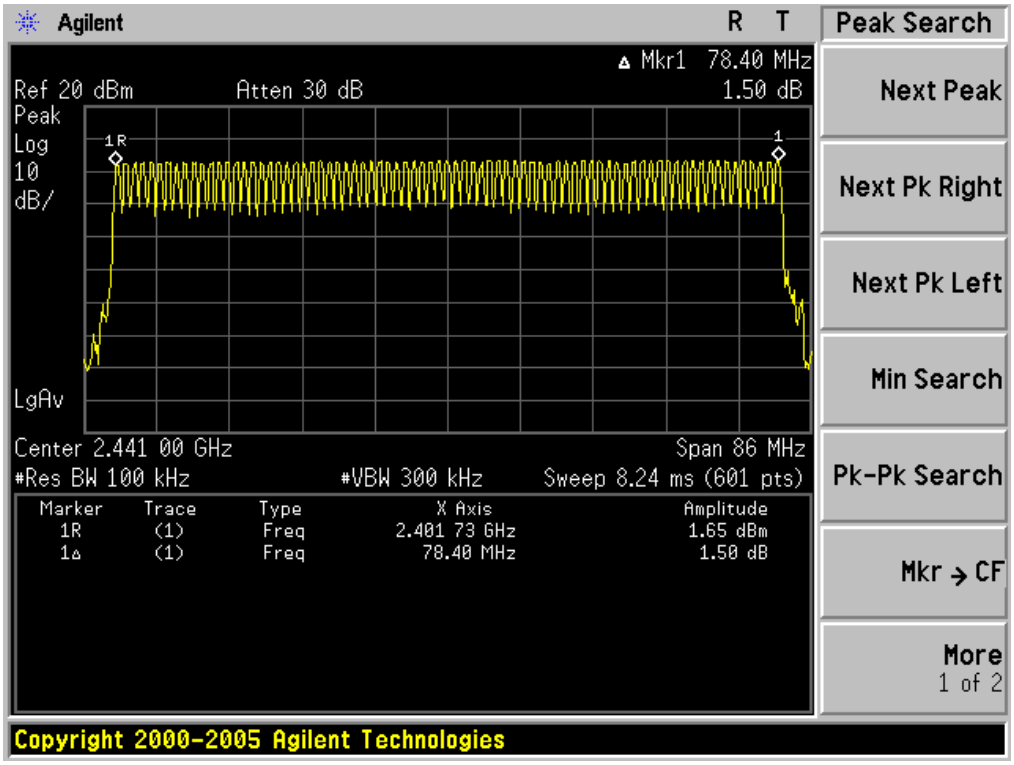
The same as described in section 6

12.4. LIMITS AND MEASUREMENT RESULT

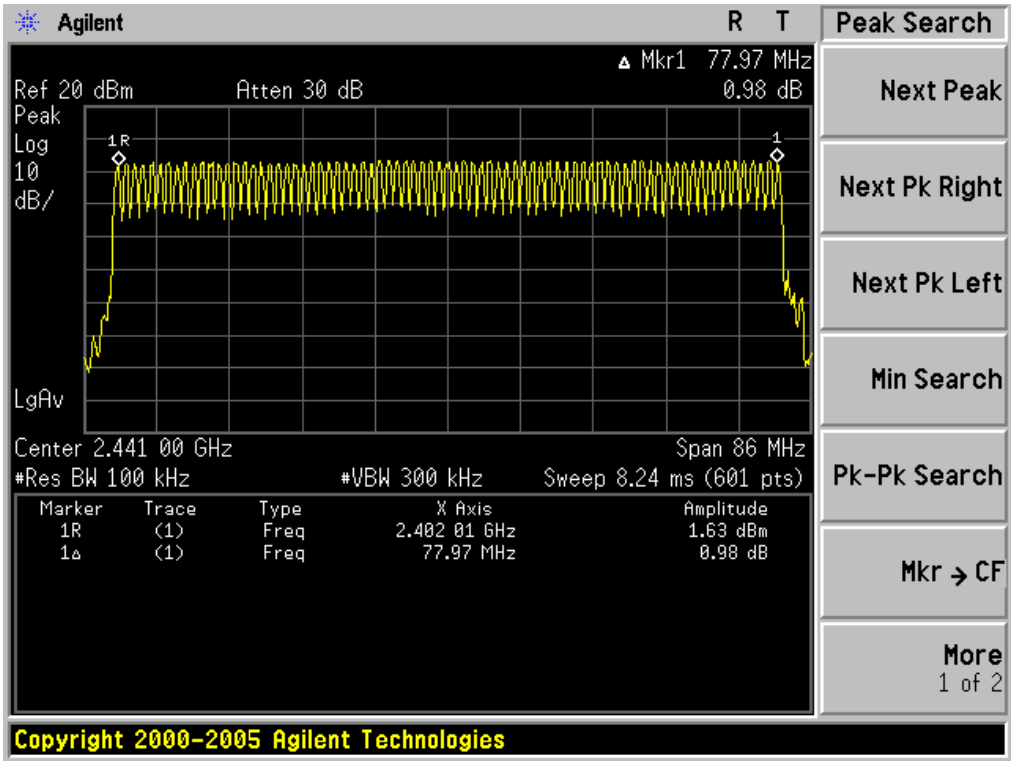
TOTAL NO. OF HOPPING CHANNEL	LIMIT (NO. OF CH)	MEASUREMENT (NO. OF CH)	RESULT
	>=15	79	PASS

TEST PLOT FOR NO. OF TOTAL CHANNELS

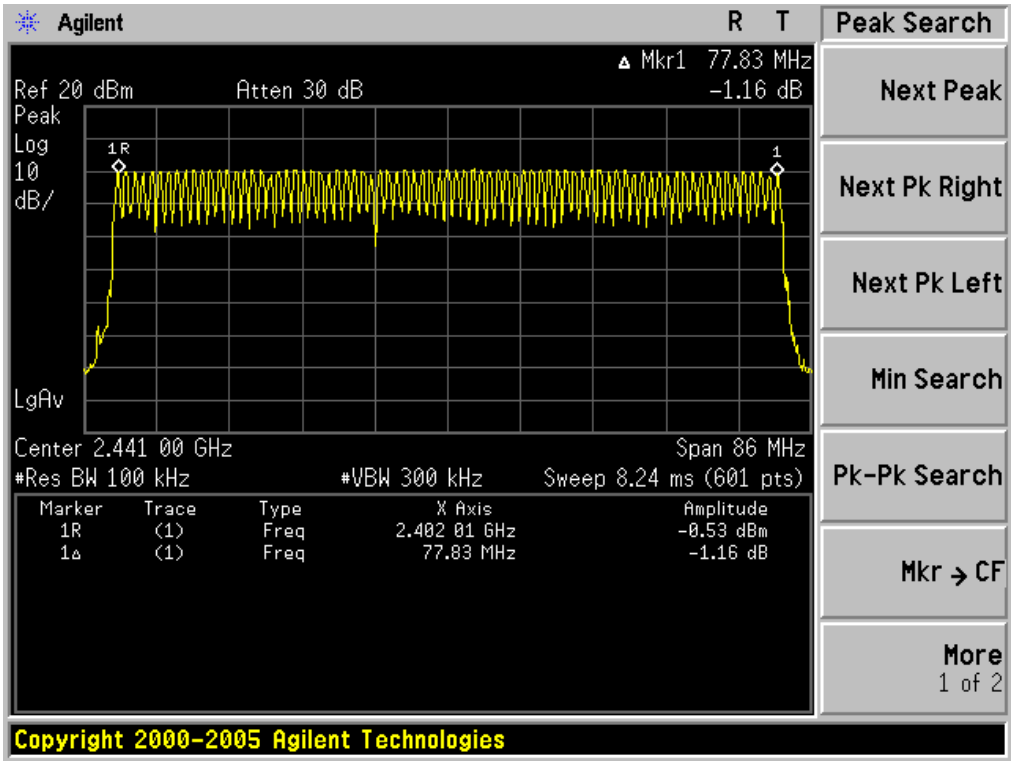
For CSR 1



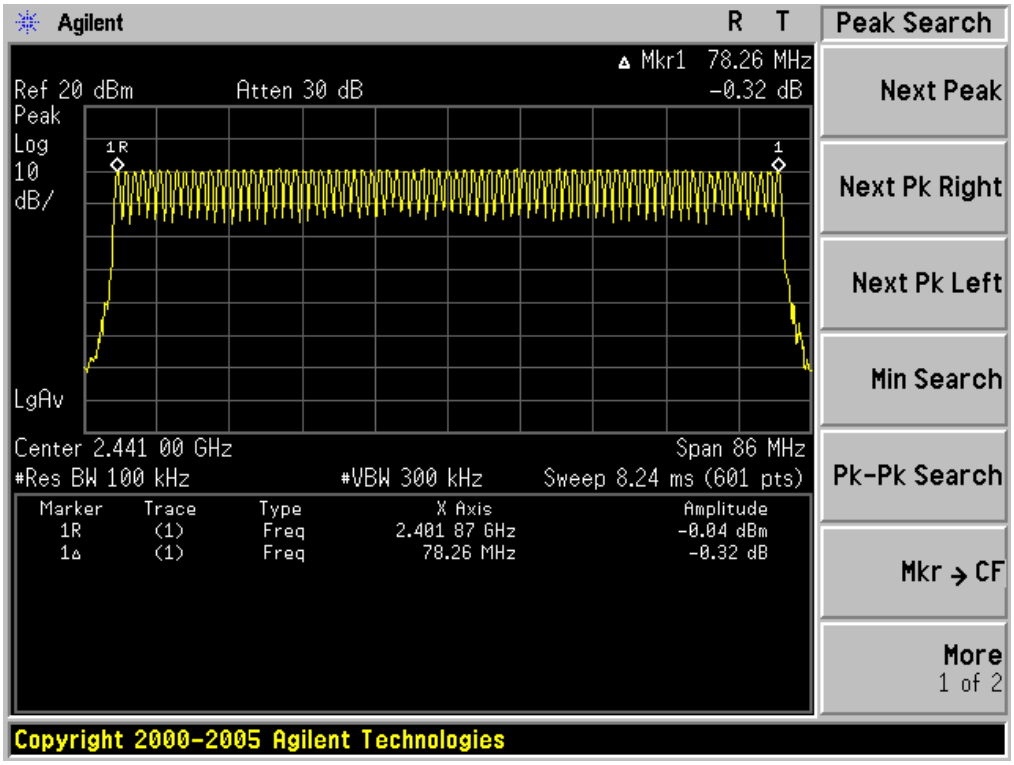
For CSR 2



For iSSC 1



For iSSC 2


Agilent
R T
Peak Search
Mkr1 78.26 MHz
Ref 20 dBm
Atten 30 dB
-0.32 dB
Next Peak
Peak
Log
10
dB/
1R
1
Next Pk Right
Next Pk Left
Min Search
LgAv
Center 2.441 00 GHz
Span 86 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 8.24 ms (601 pts)
Pk-Pk Search
Marker Trace Type X Axis Amplitude
1R (1) Freq 2.401 87 GHz -0.04 dBm
1Δ (1) Freq 78.26 MHz -0.32 dB
Mkr → CF
More
1 of 2
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13. TIME OF OCCUPANCY (DWELL TIME)

13.1. MEASUREMENT PROCEDURE

1. Place the EUT on the table and set it in transmitting mode
2. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum analyzer.
3. Set Span = zero span, centered on a hoping channel
4. Set the spectrum analyzer as RBW=1MHz, VBW>=RBW, Span = 0 Hz

13.2. TEST SETUP (BLOCK DIAGRAM OF CONFIGURATION)

Same as described in section 8.2

13.3. MEASUREMENT EQUIPMENT USED

The same as described in section 6

13.4. LIMITS AND MEASUREMENT RESULT

For CSR 1

The Worst Case (3Mbps)

Channel	Time of Pulse for DH5 (ms)	Period Time (s)	Sweep Time (ms)	Limit (ms)
Low	2.912	31.6	310.61	400
Middle	2.912	31.6	310.61	400
High	2.912	31.6	310.61	400

Low Channel Time

2.912*(1600/6)/79*31.6=310.61ms

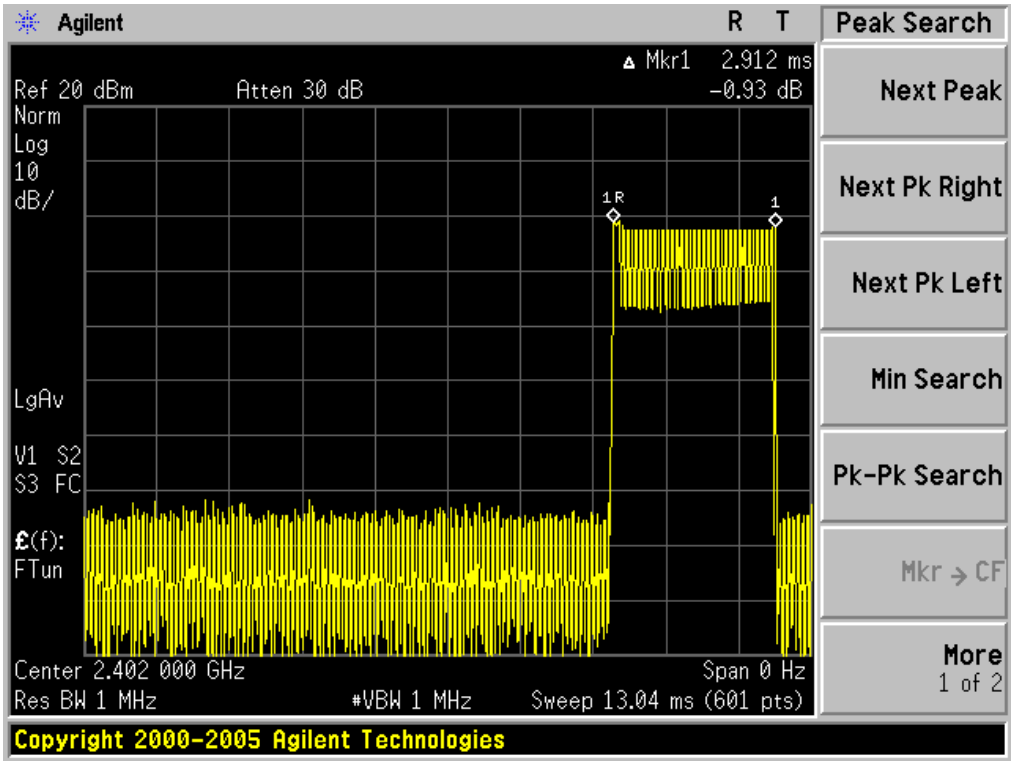
Middle Channel Time

2.912*(1600/6)/79*31.6=310.61ms

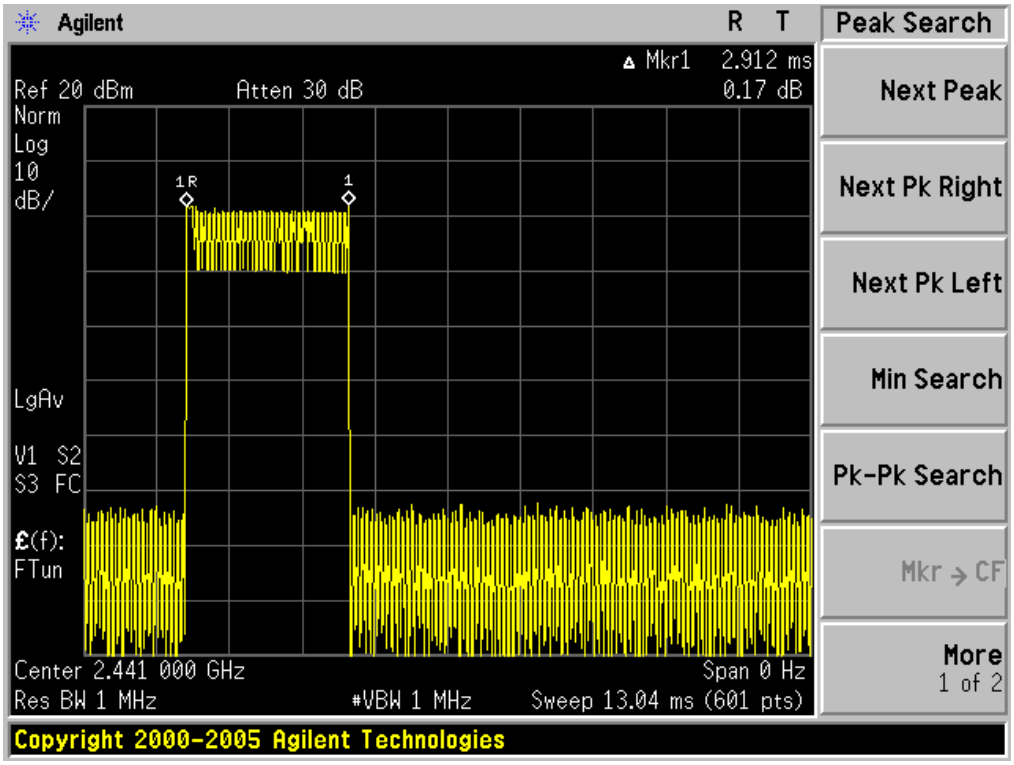
High Channel Time

2.912*(1600/6)/79*31.6=310.61ms

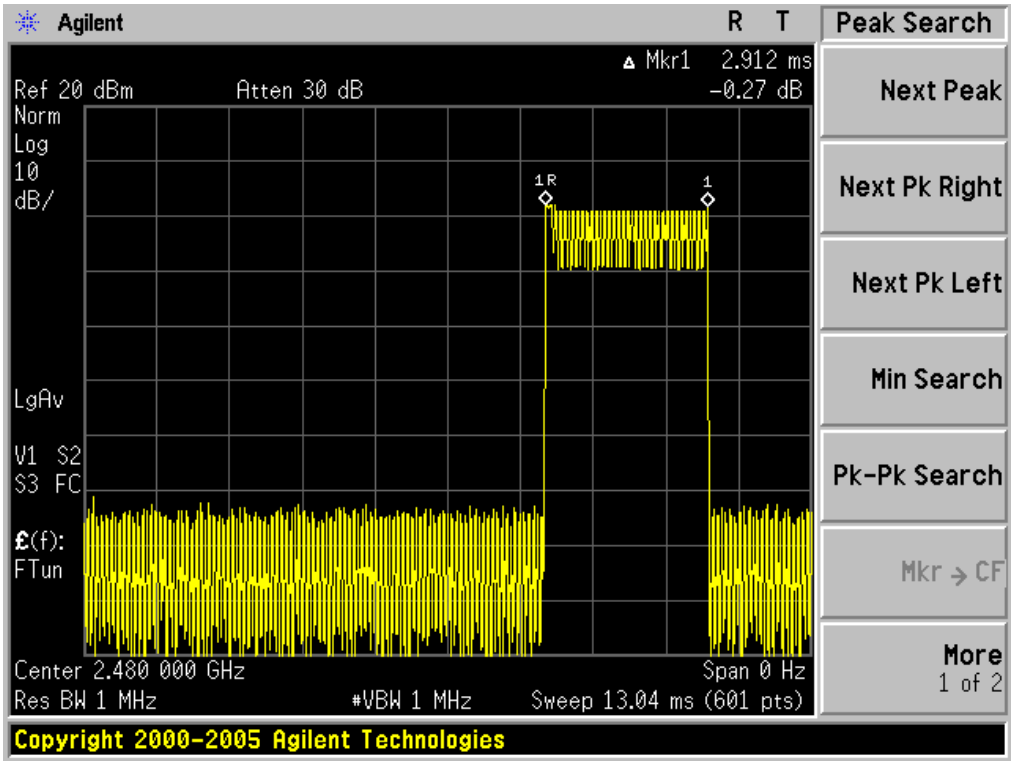
TEST PLOT OF LOW CHANNEL



TEST PLOT OF MIDDLE CHANNEL



TEST PLOT OF HIGH CHANNEL



For CSR 2

The Worst Case (3Mbps)

Channel	Time of Pulse for DH5 (ms)	Period Time (s)	Sweep Time (ms)	Limit (ms)
Low	2.912	31.6	310.61	400
Middle	2.912	31.6	310.61	400
High	2.912	31.6	310.61	400

Low Channel Time

2.912*(1600/6)/79*31.6=310.61ms

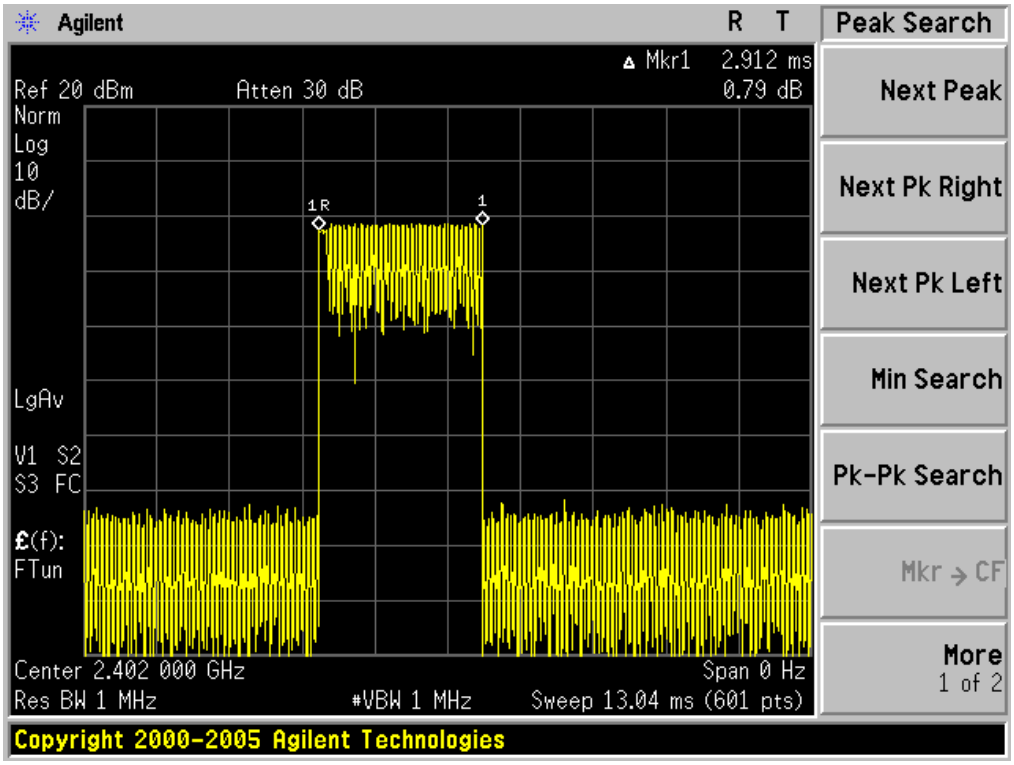
Middle Channel Time

2.912*(1600/6)/79*31.6=310.61ms

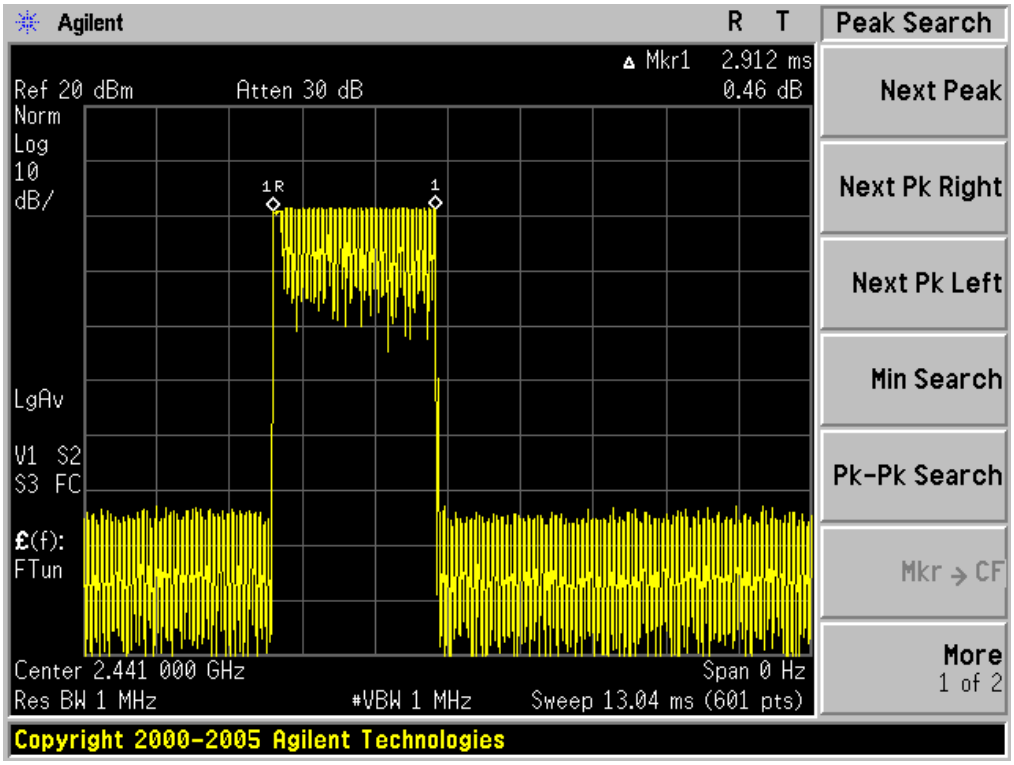
High Channel Time

2.912*(1600/6)/79*31.6=310.61ms

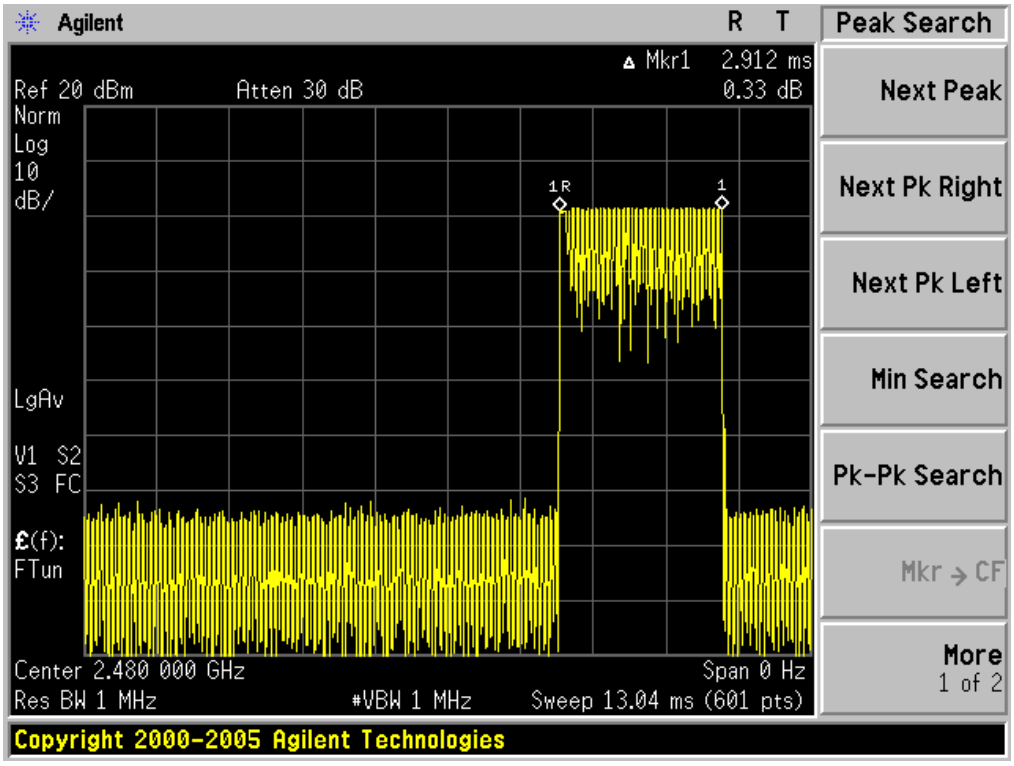
TEST PLOT OF LOW CHANNEL



TEST PLOT OF MIDDLE CHANNEL



TEST PLOT OF HIGH CHANNEL



For iSSC 1

The Worst Case (3Mbps)

Channel	Time of Pulse for DH5 (ms)	Period Time (s)	Sweep Time (ms)	Limit (ms)
Low	2.907	31.6	310.08	400
Middle	2.907	31.6	310.08	400
High	2.907	31.6	310.08	400

Low Channel Time

2.907*(1600/6)/79*31.6=310.08ms

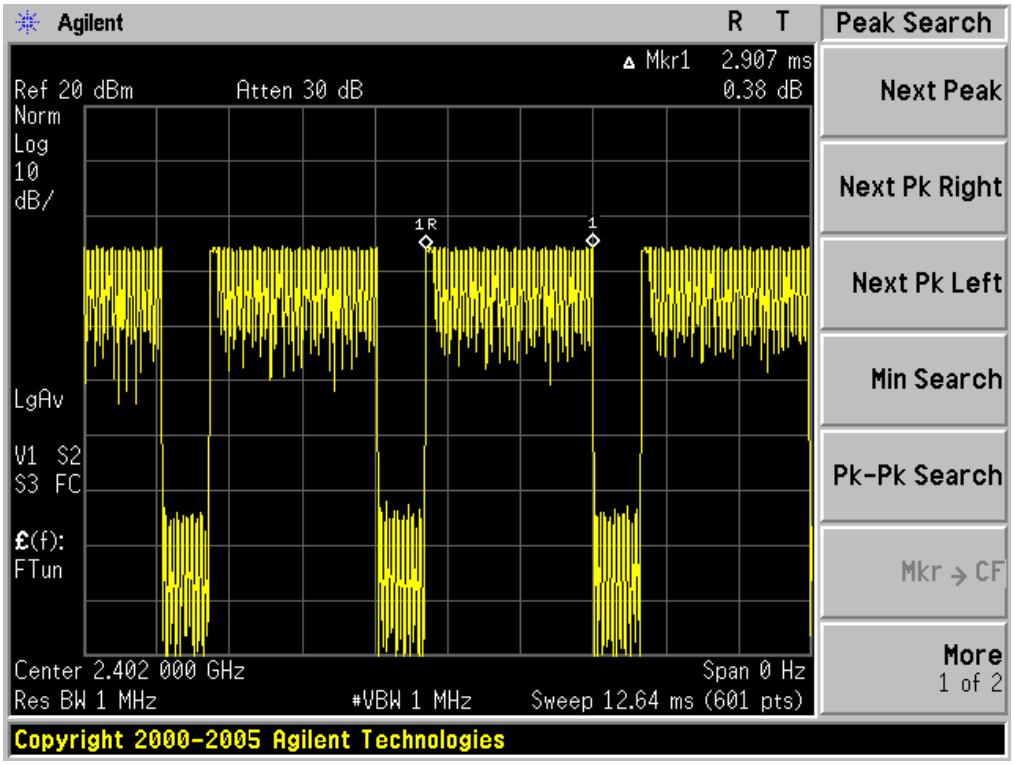
Middle Channel Time

2.907*(1600/6)/79*31.6=310.08ms

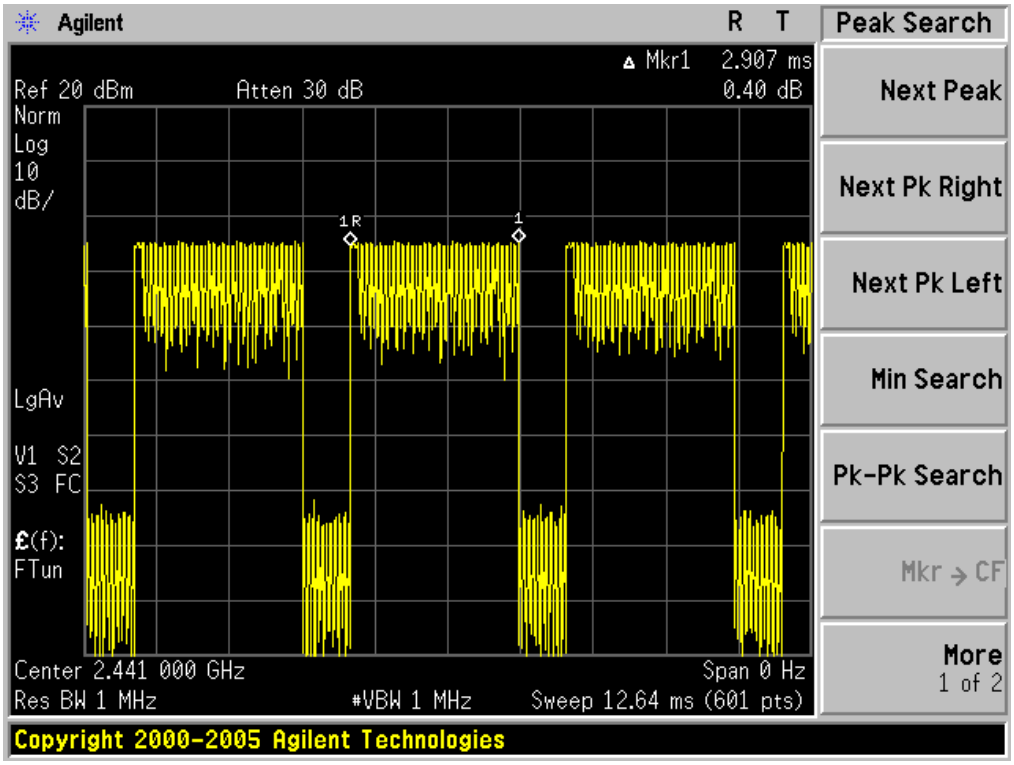
High Channel Time

2.907*(1600/6)/79*31.6=310.08ms

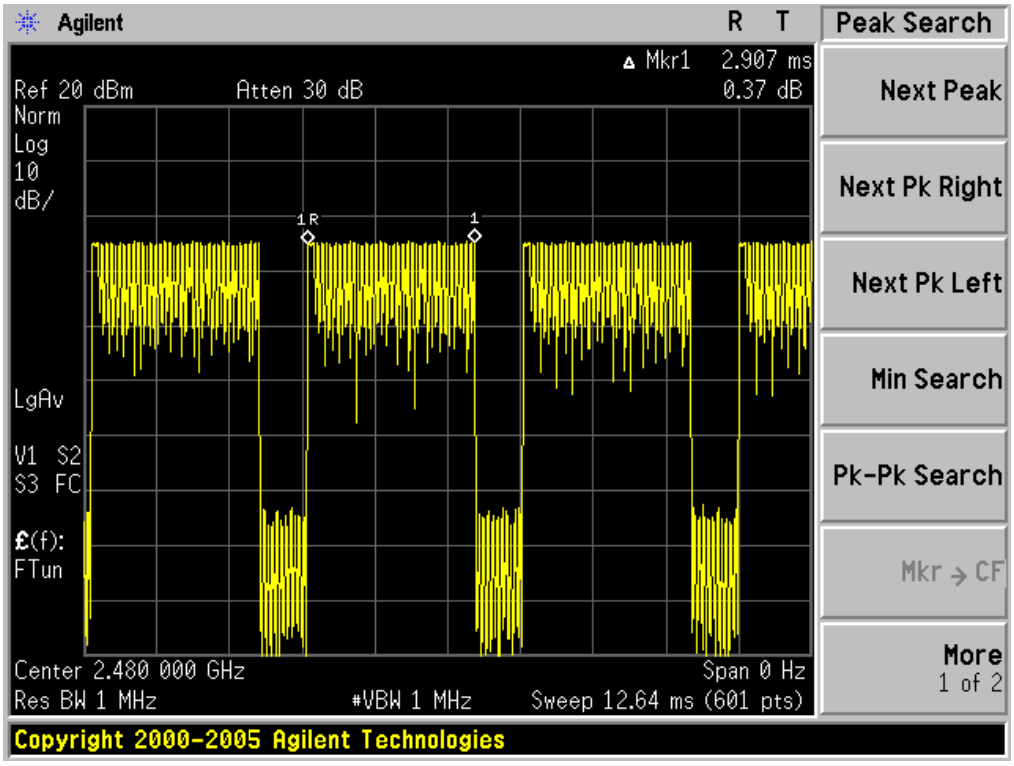
TEST PLOT OF LOW CHANNEL



TEST PLOT OF MIDDLE CHANNEL



TEST PLOT OF HIGH CHANNEL



For iSSC 2

The Worst Case (3Mbps)

Channel	Time of Pulse for DH5 (ms)	Period Time (s)	Sweep Time (ms)	Limit (ms)
Low	2.886	31.6	307.84	400
Middle	2.886	31.6	307.84	400
High	2.886	31.6	307.84	400

Low Channel Time

2.886*(1600/6)/79*31.6=307.84ms

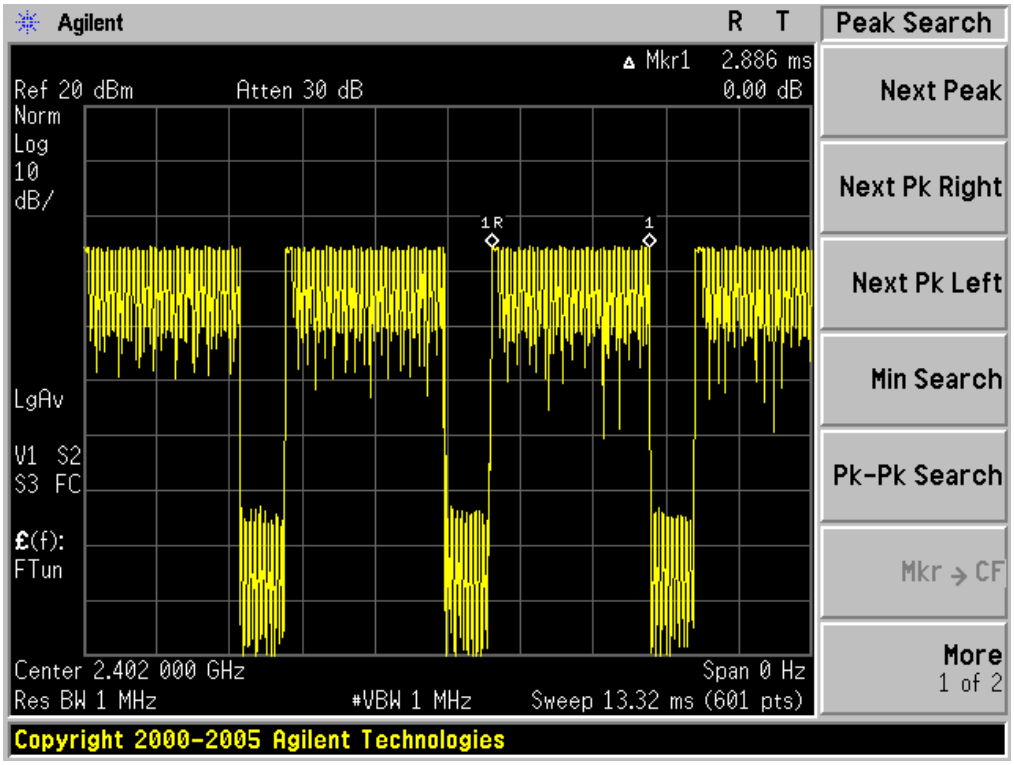
Middle Channel Time

2.886*(1600/6)/79*31.6=307.84ms

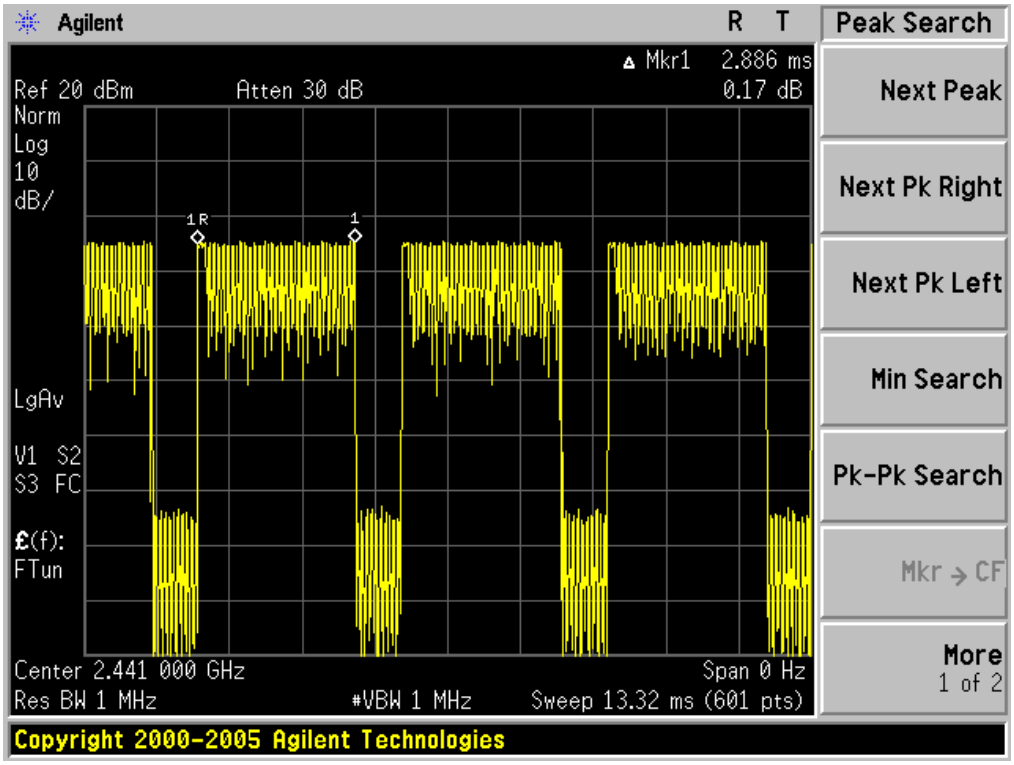
High Channel Time

2.886*(1600/6)/79*31.6=307.84ms

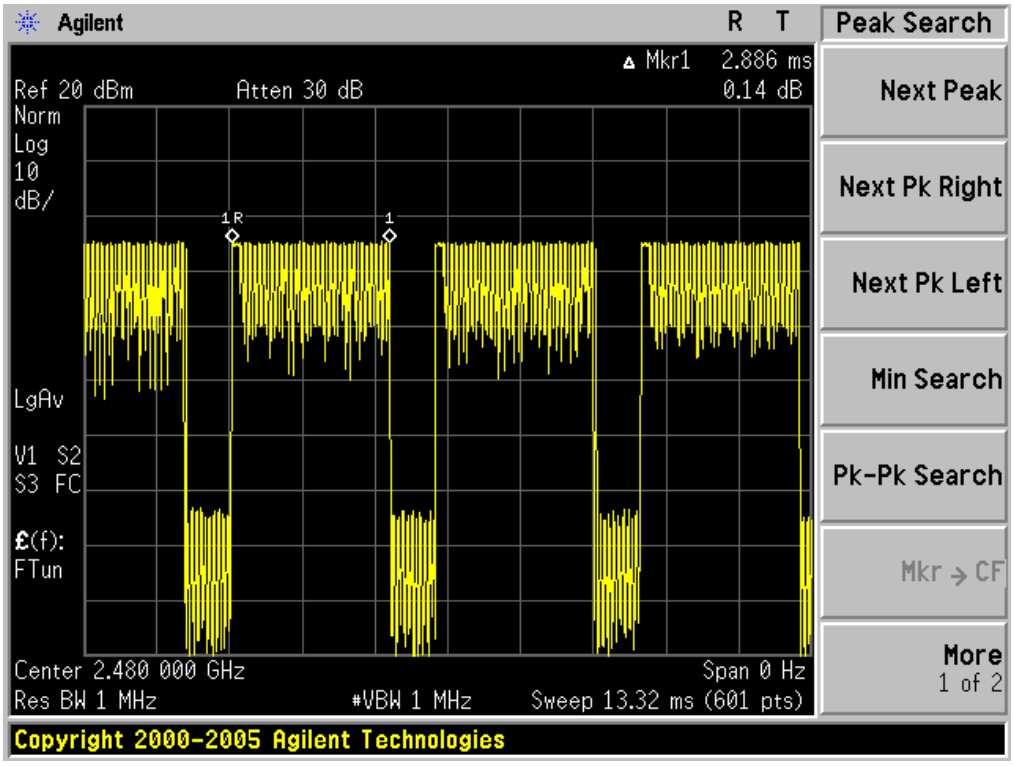
TEST PLOT OF LOW CHANNEL



TEST PLOT OF MIDDLE CHANNEL



TEST PLOT OF HIGH CHANNEL



14. FREQUENCY SEPARATION

14.1. MEASUREMENT PROCEDURE

1. Place the EUT on the table and set it in transmitting mode
2. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum analyzer
3. Set Span = wide enough to capture the peaks of two adjacent channels Resolution (or IF) Bandwidth (RBW) ≥ 1% of the span Video (or Average) Bandwidth (VBW) ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold

14.2. TEST SETUP (BLOCK DIAGRAM OF CONFIGURATION)

Same as described in section 6.2

14.3. MEASUREMENT EQUIPMENT USED

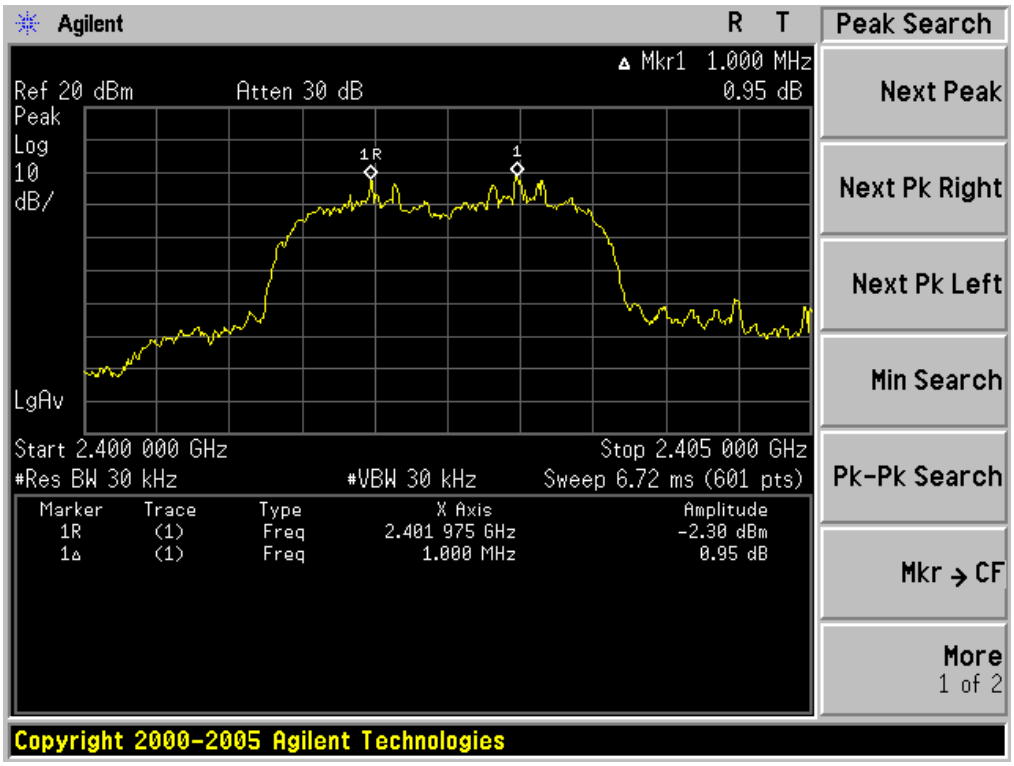
The same as described in section 6.3

14.4. LIMITS AND MEASUREMENT RESULT

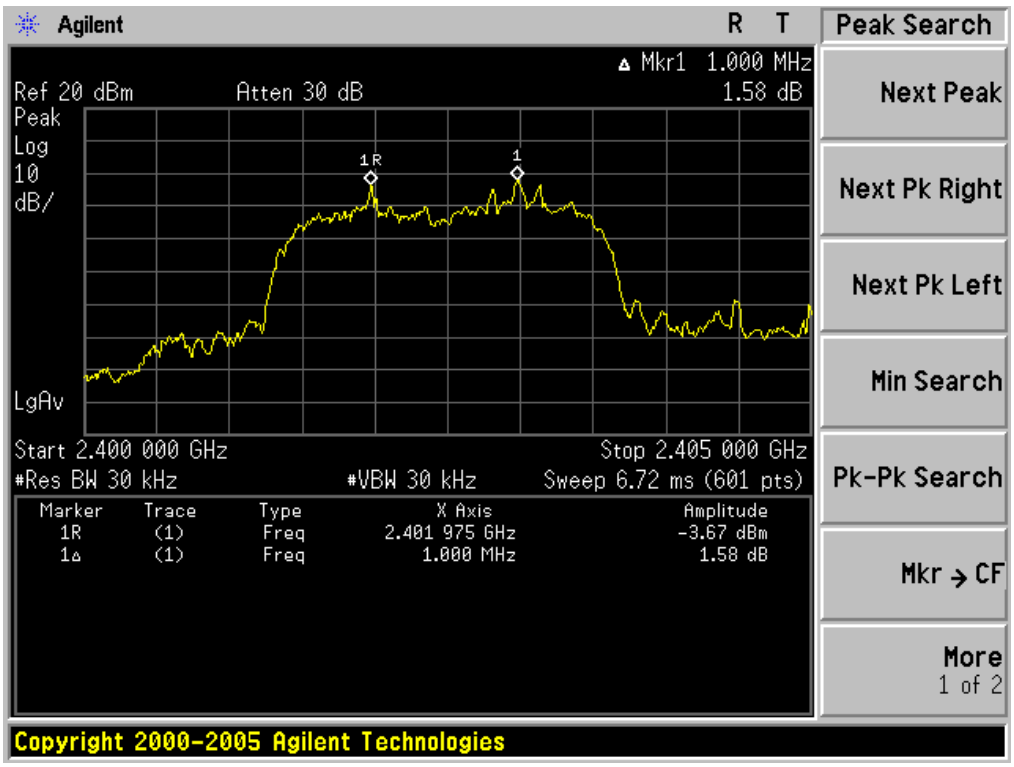
CHANNEL	CHANNEL SEPARATION	LIMIT	RESULT
	KHz	KHz	Pass
CH00-CH01	853	>=25 KHz or 2/3 20 dB BW	

TEST PLOT FOR FREQUENCY SEPARATION（3Mbps）

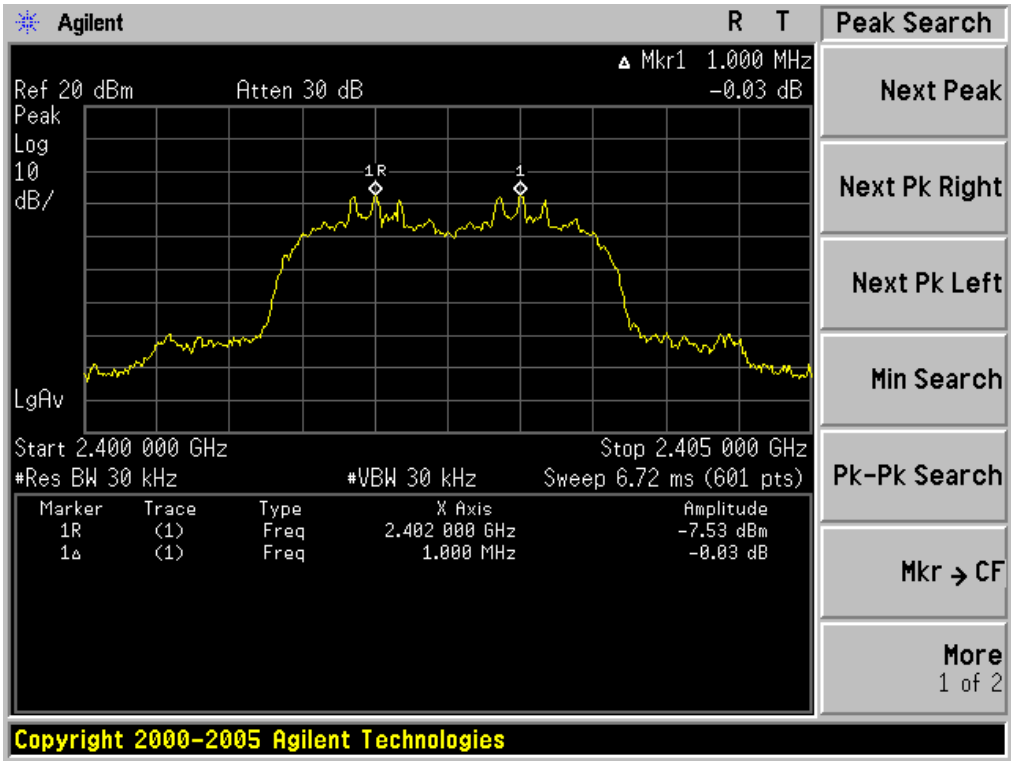
For CSR 1



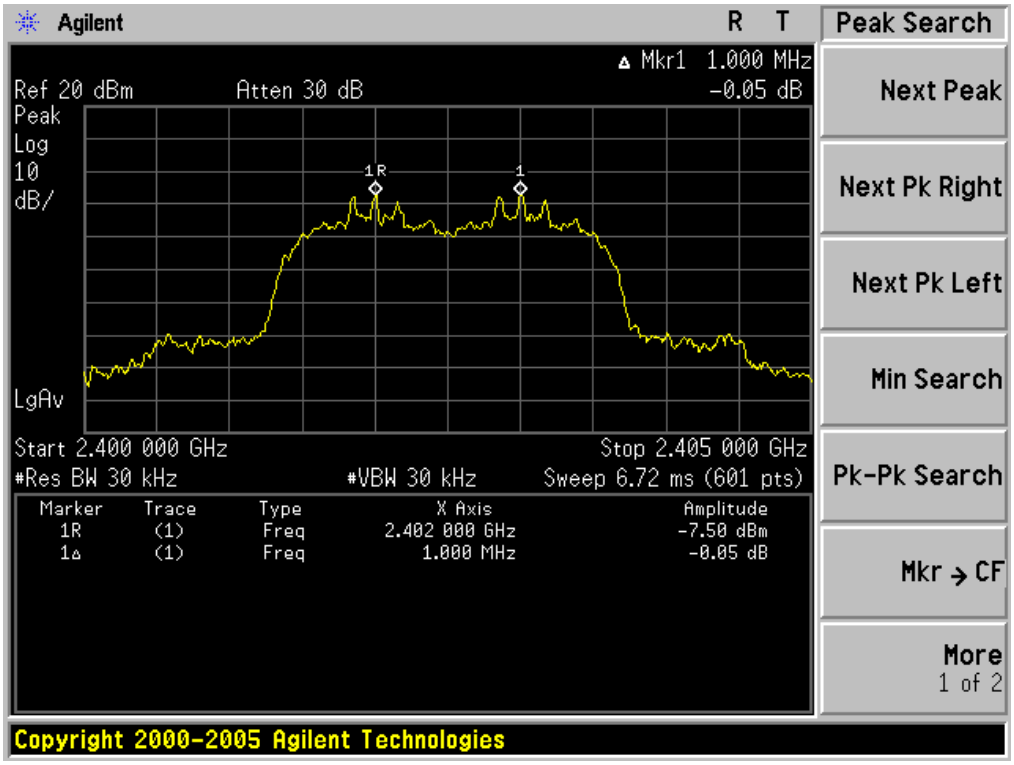
For CSR 2



For iSSC 1



For iSSC 2



15. FCC LINE CONDUCTED EMISSION TEST

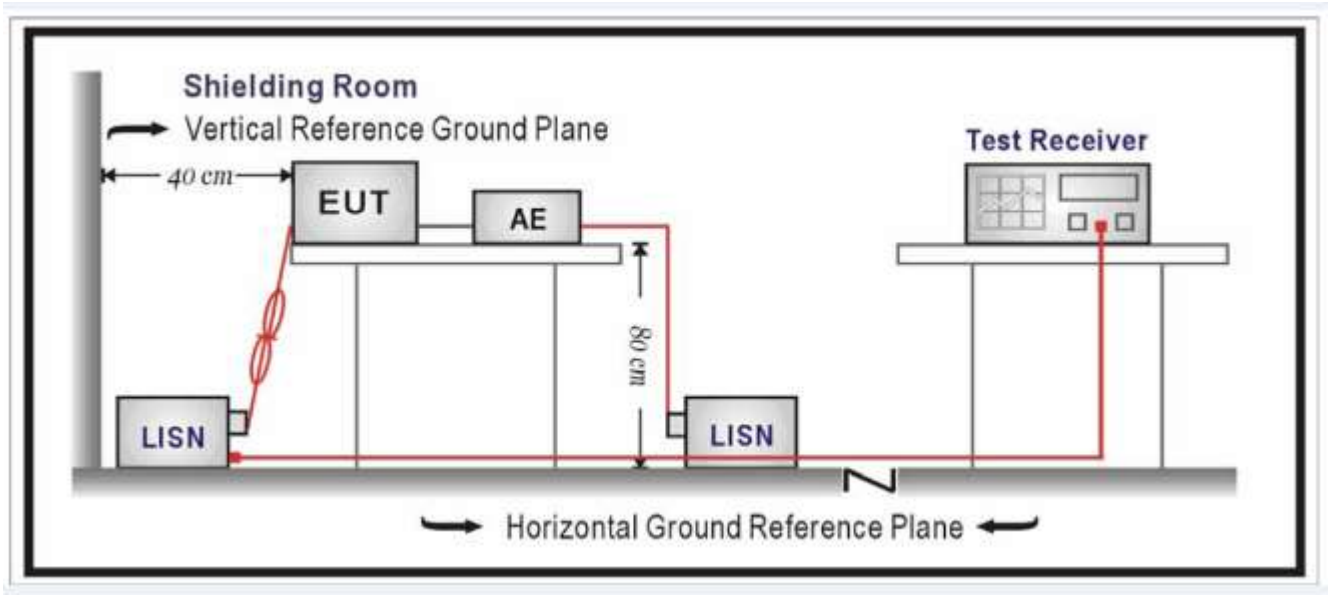
15.1. LIMITS OF LINE CONDUCTED EMISSION TEST

Frequency	Maximum RF Line Voltage	
	Q.P.(dBuV)	Average(dBuV)
150kHz~500kHz	66-56	56-46
500kHz~5MHz	56	46
5MHz~30MHz	60	50

Note:

1. The lower limit shall apply at the transition frequency.
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

15.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



15.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
2. Support equipment, if needed, was placed as per ANSI C63.4.
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
4. All support equipments received AC120V/60Hz power from a LISN, if any.
5. The EUT received DC charging voltage by PC which received 120V/60Hzpower by a LISN..
6. The test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
8. During the above scans, the emissions were maximized by cable manipulation.
9. The test mode(s) were scanned during the preliminary test.

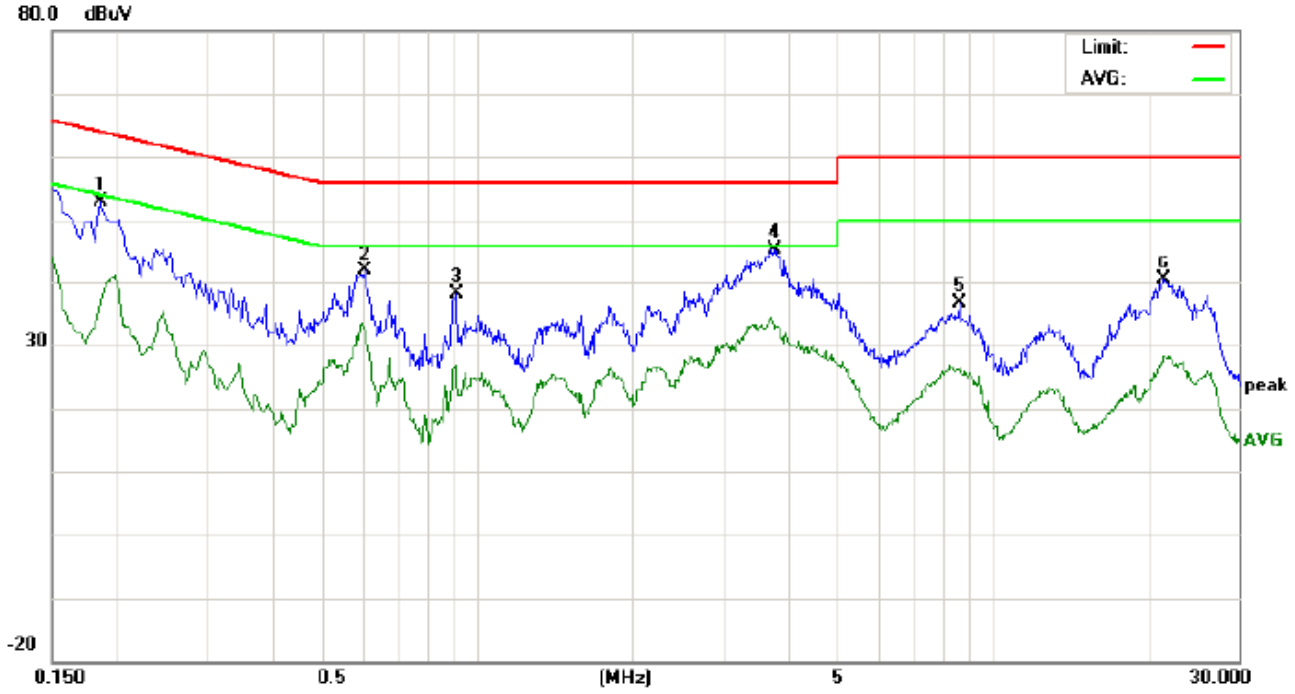
Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

15.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

1. EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
2. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less –2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
3. The test data of the worst case condition(s) was reported on the Summary Data page.

15.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

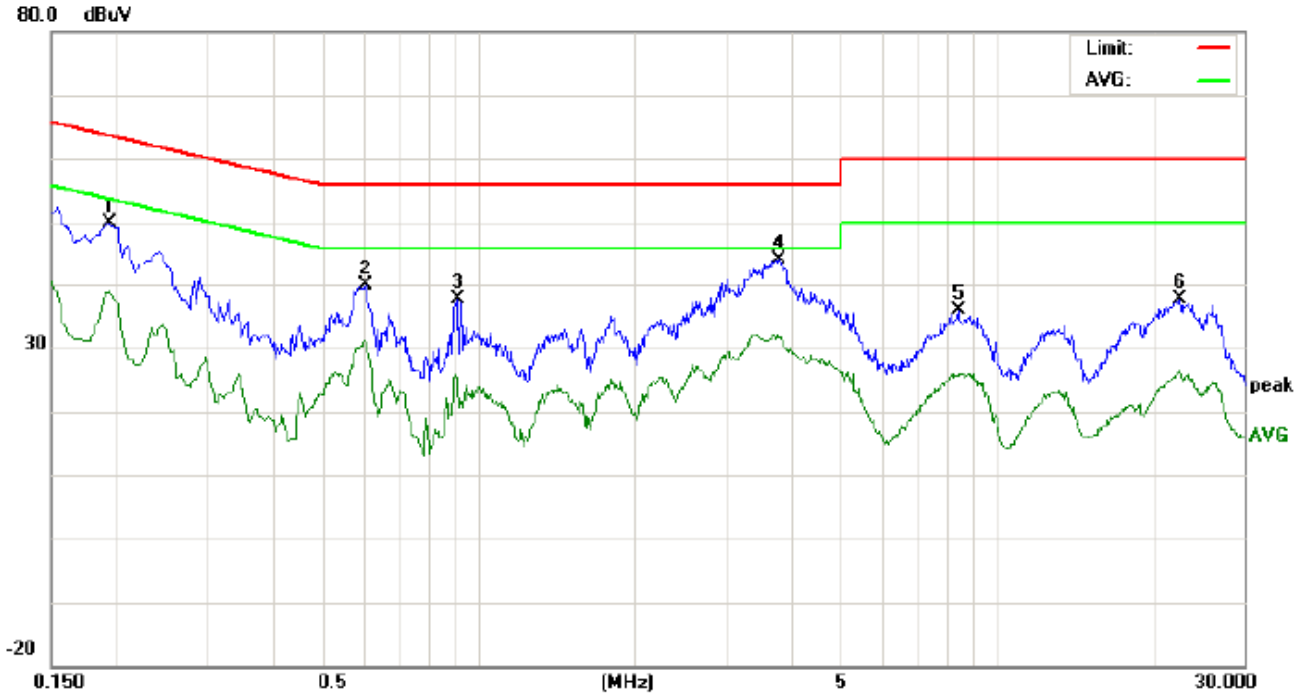
Line Conducted Emission Test Line 1-L



Site: Conduction
Phase: *L1*
Temperature: 24.8
Limit: FCC Class B Conduction(QP)
Power:
Humidity: 52.6 %
EUT: FUSE
M/N: BFUSEBA
Mode: Normal operation with charging
Note:

No.	Freq. (MHz)	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1860	42.77		26.70	10.20	52.97		36.90	64.21	54.21	-11.24	-17.31	P	
2	0.6060	31.64		21.73	10.31	41.95		32.04	56.00	46.00	-14.05	-13.96	P	
3	0.9100	27.80		16.48	10.41	38.21		26.89	56.00	46.00	-17.79	-19.11	P	
4	3.7900	34.99		22.06	10.46	45.45		32.52	56.00	46.00	-10.55	-13.48	P	
5	8.6019	26.24		16.17	10.31	36.55		26.48	60.00	50.00	-23.45	-23.52	P	
6	21.4780	30.26		17.14	10.13	40.39		27.27	60.00	50.00	-19.61	-22.73	P	

Line Conducted Emission Test Line 2-N



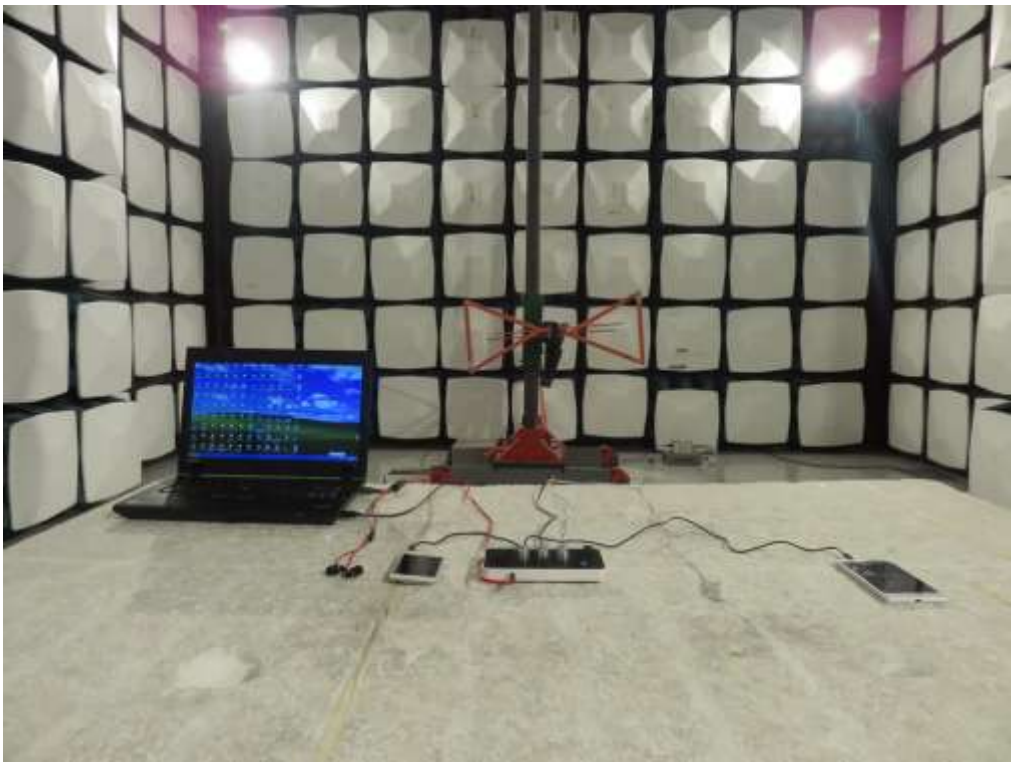
Site: Conduction
Phase: N
Temperature: 24.8
Limit: FCC Class B Conduction(QP)
Power:
Humidity: 52.6 %
EUT: FUSE
M/N: BFUSEBA
Mode: Normal operation with charging
Note:

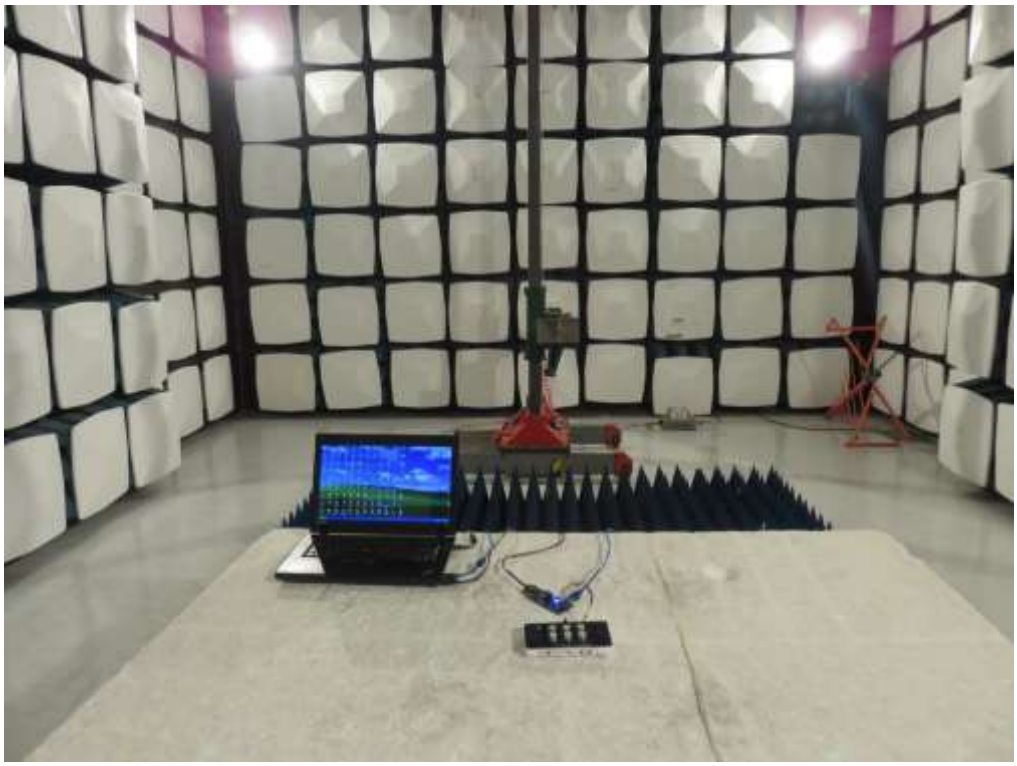
No.	Freq. (MHz)	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1940	39.56		28.58	10.21	49.77		38.79	63.86	53.86	-14.09	-15.07	P	
2	0.6060	29.47		20.58	10.31	39.78		30.89	56.00	46.00	-16.22	-15.11	P	
3	0.9100	27.16		14.78	10.41	37.57		25.19	56.00	46.00	-18.43	-20.81	P	
4	3.8100	33.69		21.08	10.46	44.15		31.54	56.00	46.00	-11.85	-14.46	P	
5	8.4379	25.54		15.40	10.34	35.88		25.74	60.00	50.00	-24.12	-24.26	P	
6	22.6180	27.59		16.34	10.11	37.70		26.45	60.00	50.00	-22.30	-23.55	P	

APPENDIX A: PHOTOGRAPHS OF TEST SETUP

FCC LINE CONDUCTED EMISSION TEST SETUP

FCC RADIATED EMISSION TEST SETUP





APPENDIX B: PHOTOGRAPHS OF EUT

TOP VIEW OF EUT

BOTTOM VIEW OF EUT

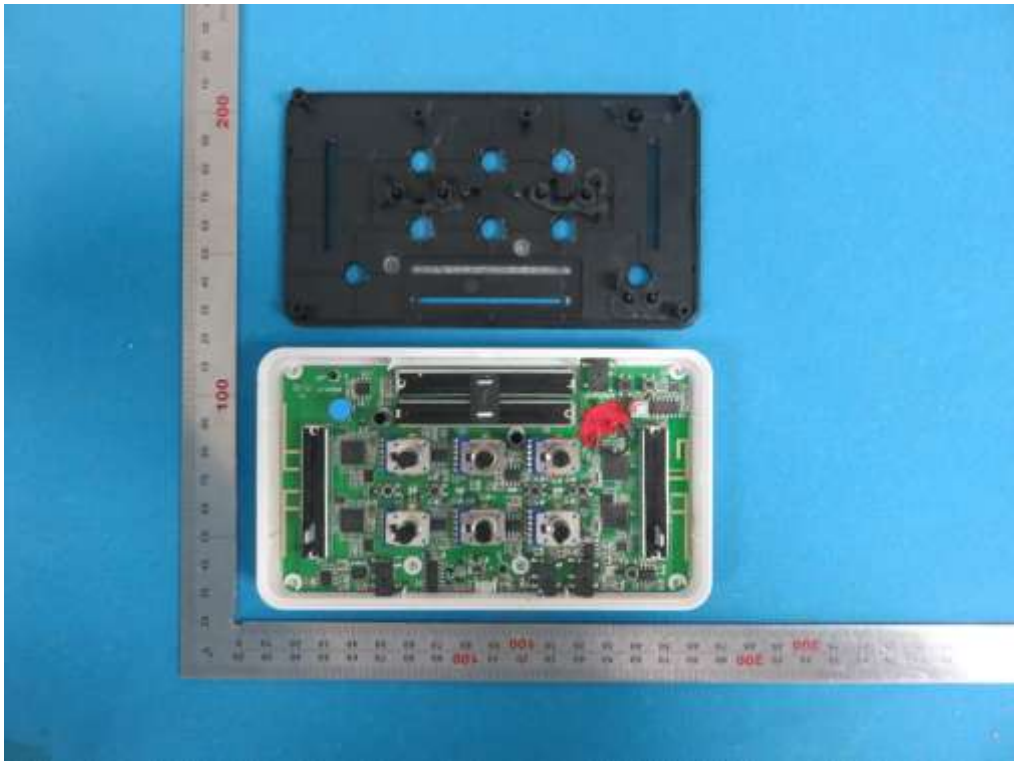
FRONT VIEW OF EUT

BACK VIEW OF EUT

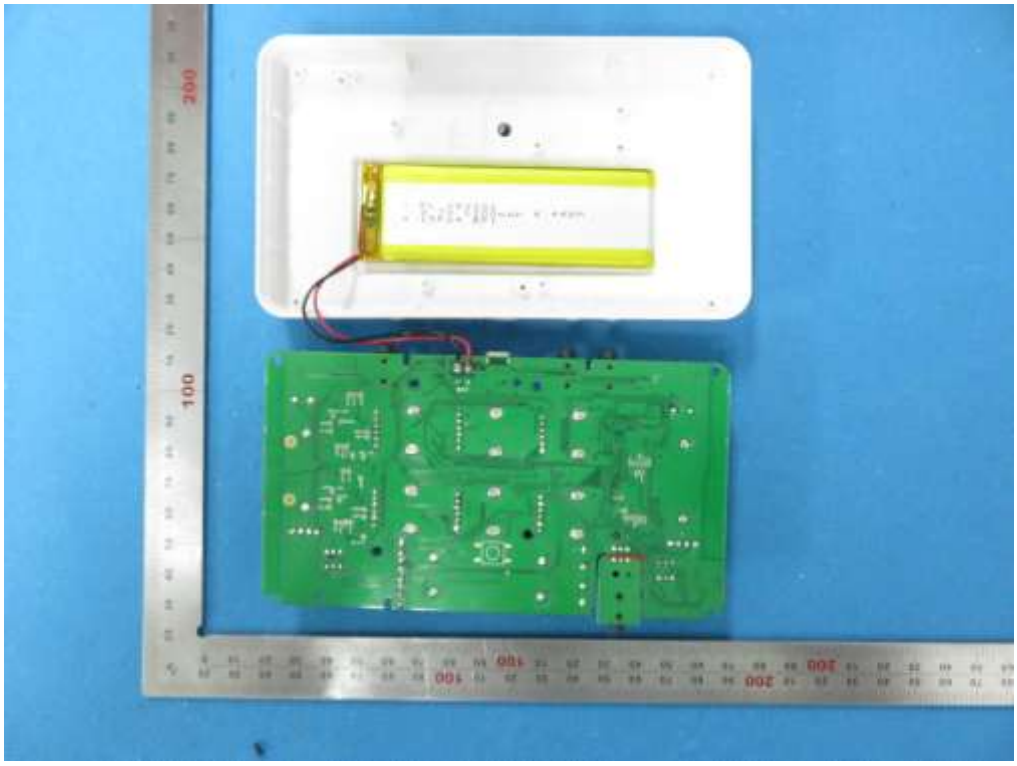
LEFT VIEW OF EUT

RIGHT VIEW OF EUT

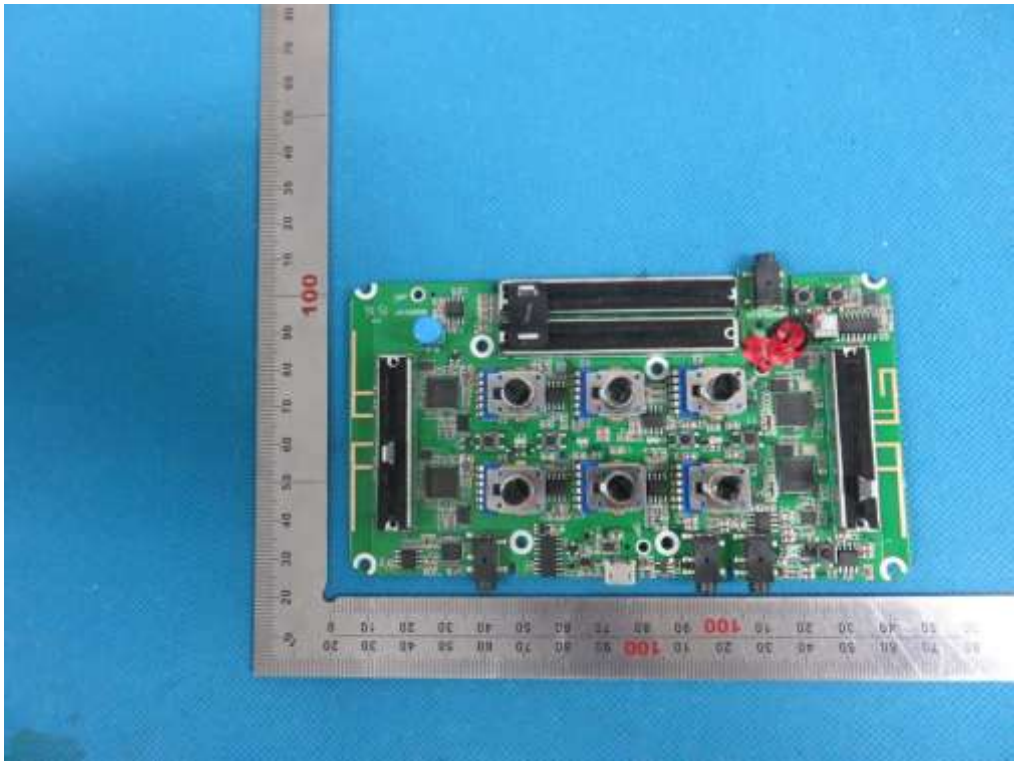
OPEN VIEW OF EUT



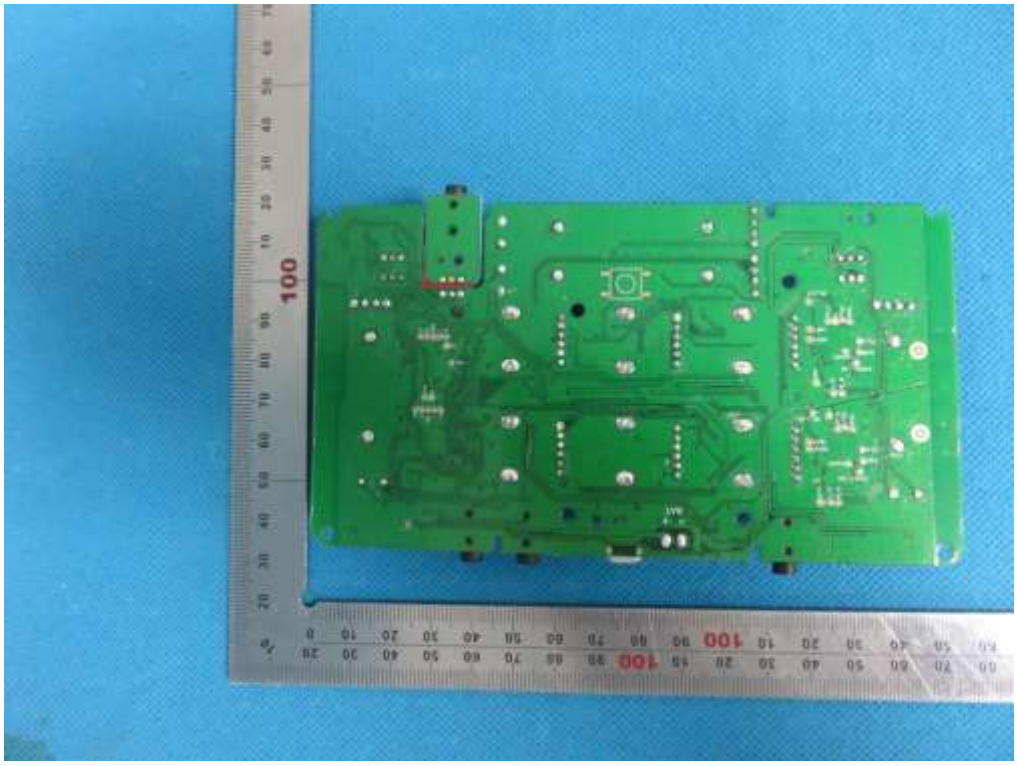
INTERNAL VIEW OF EUT-1



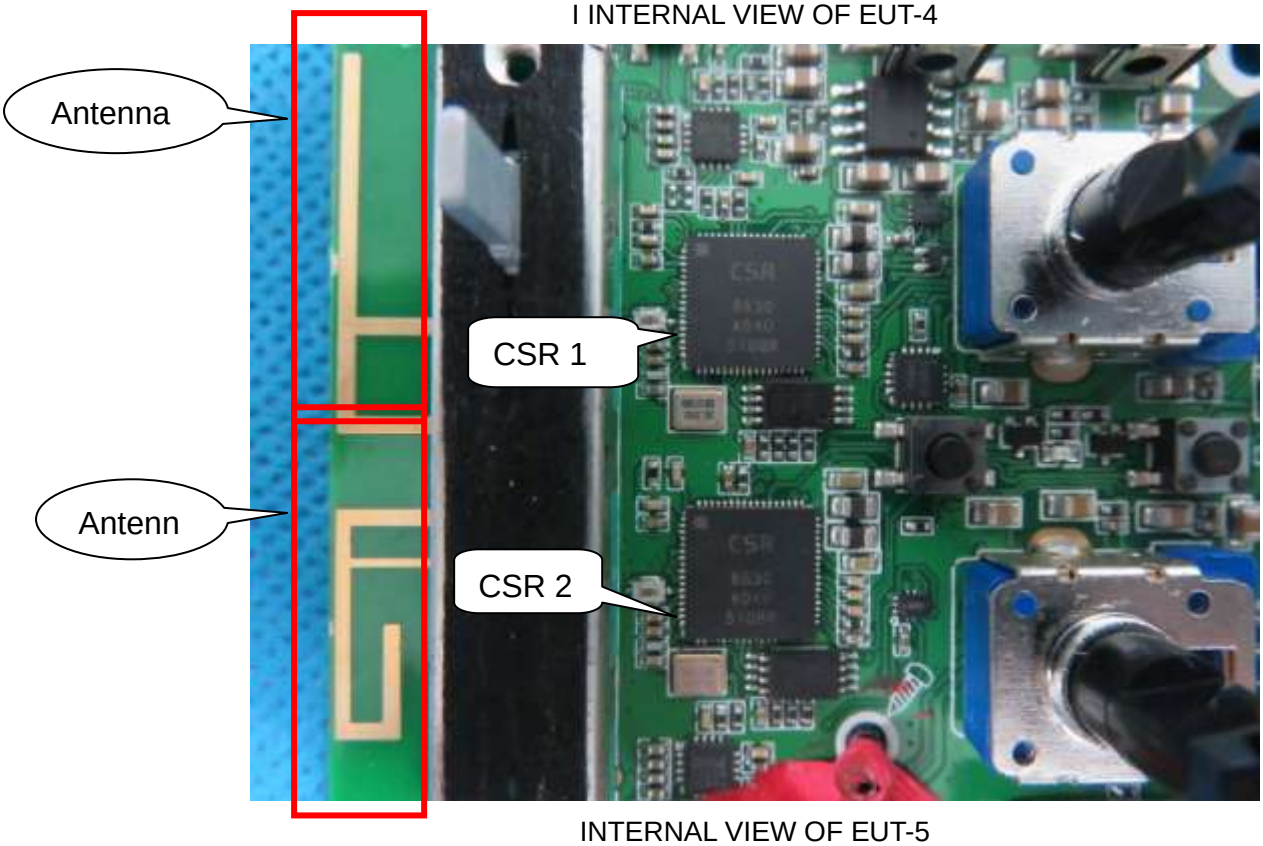
INTERNAL VIEW OF EUT-2



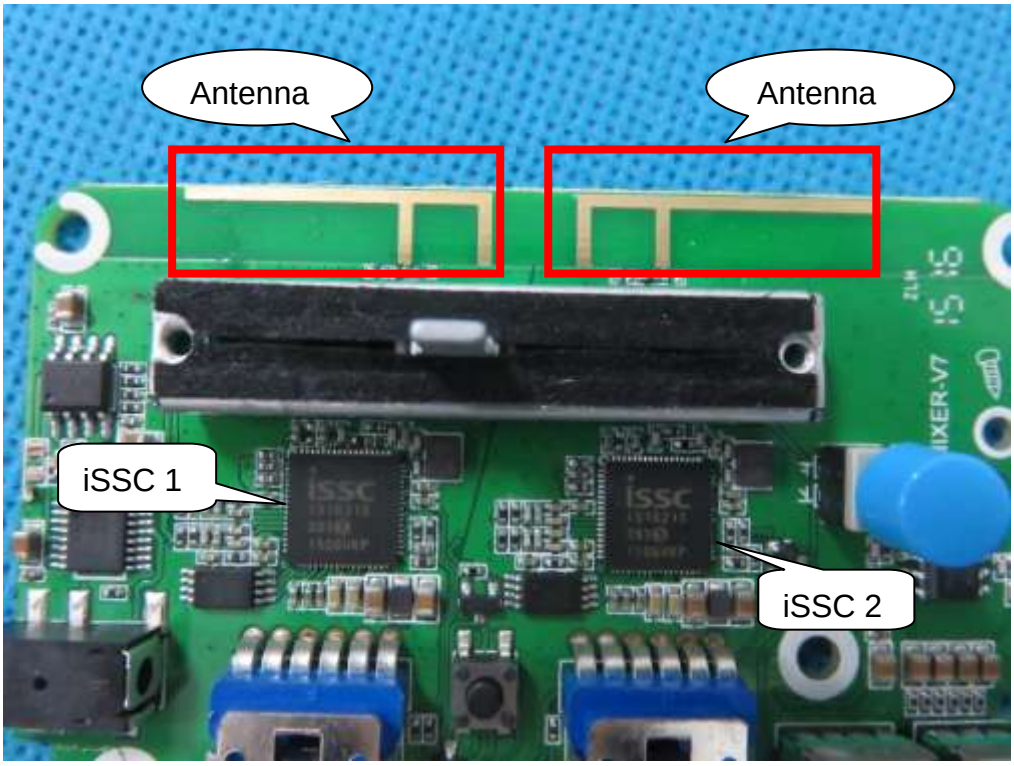
INTERNAL VIEW OF EUT-3



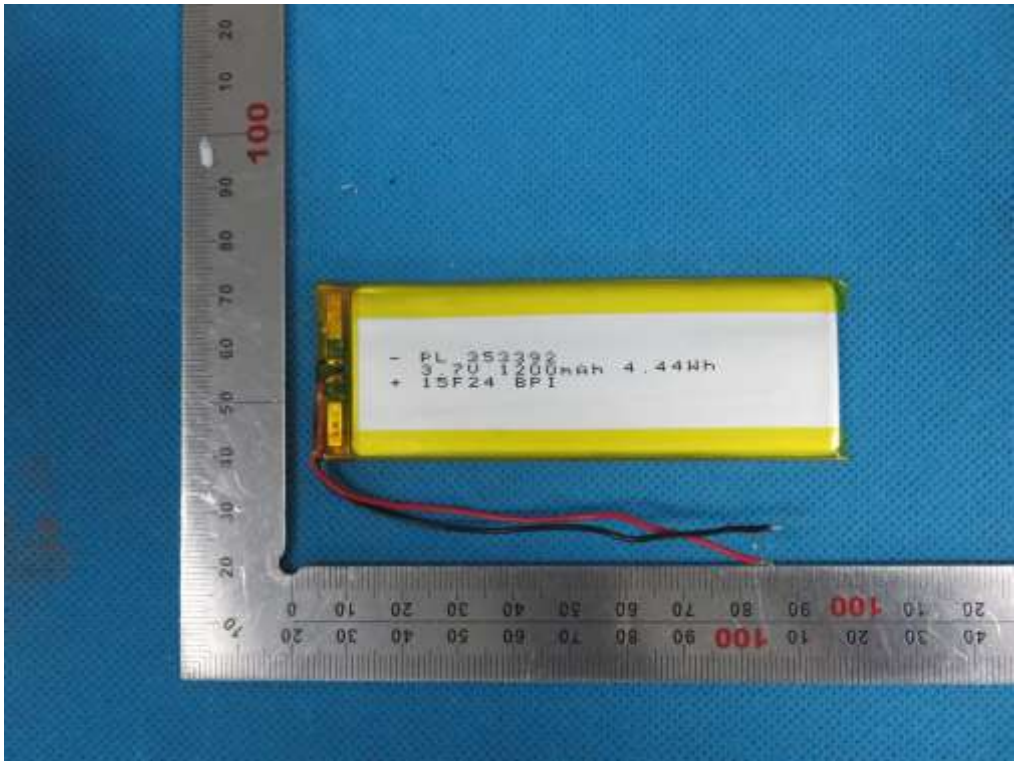
I INTERNAL VIEW OF EUT-4



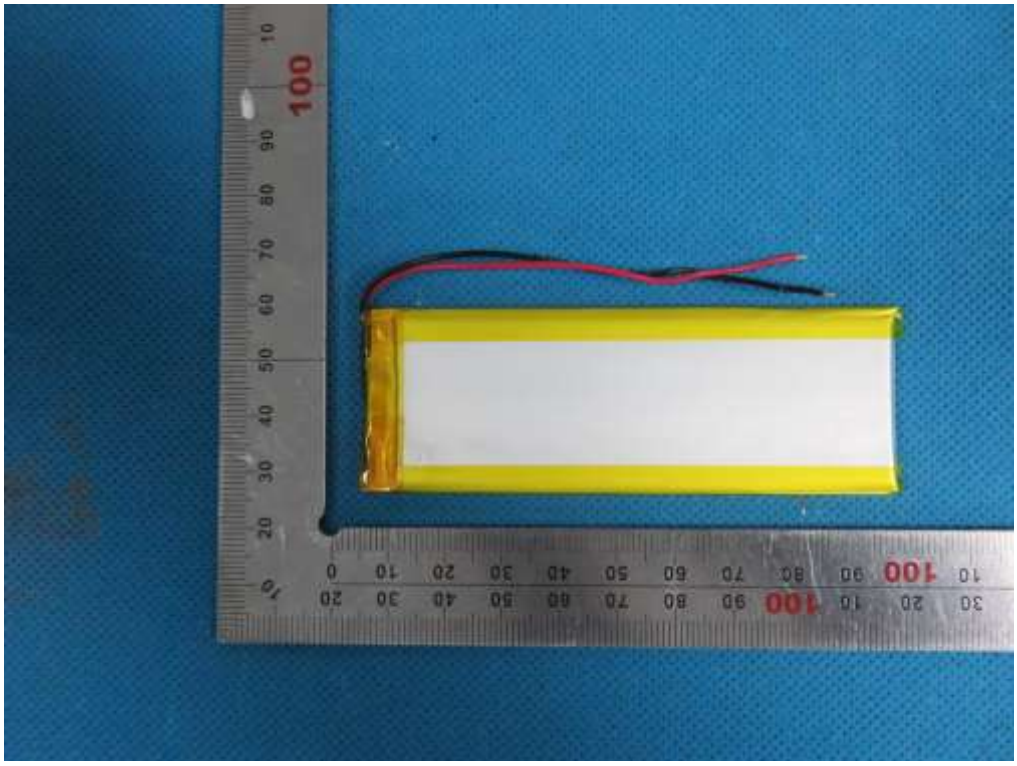
INTERNAL VIEW OF EUT-5



INTERNAL VIEW OF EUT-6



INTERNAL VIEW OF EUT-7



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