FCC Test Report

Report No.: AGC05843161101FE03

FCC ID	:	2AKLPA8
APPLICATION PURPOSE	:	Original Equipment
PRODUCT DESIGNATION	:	Smart Phone
BRAND NAME	:	Blackview
MODEL NAME	:	A8
CLIENT	:	TOOCAN ELECTRONICS S.A.S
DATE OF ISSUE	:	Dec. 07, 2016
STANDARD(S) **TEST PROCEDURE(S)**	:	FCC Part 15 Rules DA 00-705
REPORT VERSION	:	V1.0

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

CAUTION:
This report shall not be reproduced except in full without the written permission of the test laboratory and shall not be quoted out of context.

Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Dec. 07, 2016	Valid	Original Report

TABLE OF CONTENTS

1. VERIFICATION OF CONFORMITY

Applicant	TOOCAN ELECTRONICS S.A.S
Address	Calle 45 # 53-50 oficina 0911 CC gran plaza medellin Colombia
Manufacturer	Shenzhen JEKO Communication Co., Ltd.
Address	13th Floor, Weidonglong Commercial Building B, Meilong Avenue, Longhua New District, Shenzhen, China
Product Designation	Smart Phone
Brand Name	Blackview
Test Model	A8
Date of test	Nov. 20, 2016~Dec. 05, 2016
Deviation	None
Condition of Test Sample	Normal
Report Template	AGCRT-US-BR/RF

We hereby certify that:
The above equipment was tested by Dongguan Precise Testing Service Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) 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.

Tested By	Donjon Yang Huang(Huang Dongyang)	Dec. 05, 2016
Reviewed By	Bart Xie(Xie Xiaobin)	Dec. 07, 2016
Approved By	Solger Zhang(Zhang Hongyi) Authorized Officer	Dec. 07, 2016

2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

The EUT is “Smart Phone ” 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	**4.66**dBm(Max)
Bluetooth Version	V 3.0
Modulation	GFSK, π /4-DQPSK, 8DPSK
Number of channels	79(For BR/EDR)
Hardware Version	Y813
Software Version	Y813.YX.A8.Panama.b2b5.5.1__Y813.YX-A8-Blackview-2016.09.22_12.3
Antenna Designation	Integrated Antenna
Antenna Gain	0.5dBi
Power Supply	DC3.8V by Battery

2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency
2400~2483.5MHZ	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: 2AKLPA8**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 FCC DA 00-705. Radiated testing was performed at an antenna to EUT distance 3 meters.

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

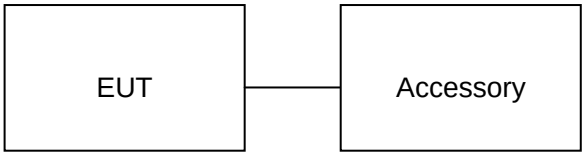
NO.	TEST MODE DESCRIPTION
1	Low channel GFSK
2	Middle channel GFSK
3	High channel GFSK
4	Low channel π /4-DQPSK
5	Middle channel π /4-DQPSK
6	High channel π /4-DQPSK
7	Low channel 8DPSK
8	Middle channel 8DPSK
9	High channel 8DPSK
10	Normal Hopping

Note:
1. All the test modes can be supply by Built-in Li-ion battery, 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.

5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Configuration:



5.2. EQUIPMENT USED IN EUT SYSTEM

Item	Equipment	Model No.	ID or Specification	Remark
1	Smart Phone	A8	2AKLPA8	EUT
2	Adapter	A050100U01	DC5V /1000mA	Accessory
3	Battery	A8	DC3.8V/2350mAh	Accessory
4	Earphone	A8	N/A	Accessory
5	USB Cable	A8	N/A	Accessory

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	Dongguan Precise Testing Service Co., Ltd.
Location	Building D,Baoding Technology Park,Guangming Road2,Dongcheng District, Dongguan, Guangdong, China,
FCC Registration No.	371540
Description	The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.10:2013.

ALL TEST EQUIPMENT LIST

FOR RADIATED EMISSION TEST (BELOW 1GHZ)

Radiated Emission Test Site					
Name of Equipment	**Manufacturer**	**Model Number**	**Serial Number**	**Last Calibration**	**Due Calibration**
EMI Test Receiver	Rohde & Schwarz	ESCI	101417	July 3, 2016	July 2, 2017
Trilog Broadband Antenna (25M-1GHz)	SCHWARZBECK	VULB9160	9160-3355	July 3, 2016	July 2, 2017
Signal Amplifier	SCHWARZBECK	BBV 9475	9745-0013	July 3, 2016	July 2, 2017
RF Cable	SCHWARZBECK	AK9515E	96221	July 3, 2016	July 2, 2017
3m Anechoic Chamber	CHENGYU	966	PTS-001	June 5, 2016	June 4, 2017
MULTI-DEVICE Positioning Controller	Max-Full	MF-7802	MF780208339	N/A	N/A
Active loop antenna (9K-30MHz)	Schwarzbeck	FMZB1519	1519-038	June 5, 2016	June 4, 2017
Spectrum analyzer	Agilent	E4407B	MY46185649	June 5, 2016	June 4, 2017
Power Probe	R&S	NRP-Z23	100323	July 24,2016	July 23,2017
RF attenuator	N/A	RFA20db	68	N/A	N/A

FOR RADIATED EMISSION TEST (1GHZ ABOVE)

Radiated Emission Test Site					
Name of Equipment	**Manufacturer**	**Model Number**	**Serial Number**	**Last Calibration**	**Due Calibration**
EMI Test Receiver	Rohde & Schwarz	ESCI	101417	July 3, 2016	July 2, 2017
Horn Antenna (1G-18GHz)	SCHWARZBECK	BBHA9120D	9120D-1246	July 10, 2016	July 9, 2017
Spectrum Analyzer	Agilent	E4411B	MY4511453	July 3, 2016	July 2, 2017
Signal Amplifier	SCHWARZBECK	BBV 9718	9718-269	July 6, 2016	July 5, 2017
RF Cable	SCHWARZBECK	AK9515H	96220	July 7, 2016	July 6, 2017
3m Anechoic Chamber	CHENGYU	966	PTS-001	June 5, 2016	June 4, 2017
MULTI-DEVICE Positioning Controller	Max-Full	MF-7802	MF780208339	N/A	N/A

Horn Ant (18G-40GHz)	Schwarzbeck	BBHA 9170	9170-181	June 5, 2016	June 4, 2017
Power Probe	R&S	NRP-Z23	100323	July 24,2016	July 23,2017
RF attenuator	N/A	RFA20db	68	N/A	N/A

Conducted Emission Test Site					
Name of Equipment	**Manufacturer**	**Model Number**	**Serial Number**	**Last Calibration**	**Due Calibration**
EMI Test Receiver	Rohde & Schwarz	ESCI	101417	July 3, 2016	July 2, 2017
Artificial Mains Network	Narda	L2-16B	000WX31025	July 7, 2016	July 6, 2017
Artificial Mains Network (AUX)	Narda	L2-16B	000WX31026	July 7, 2016	July 6, 2017
RF Cable	SCHWARZBECK	AK9515E	96222	July 3, 2016	July 2, 2017
Shielded Room	CHENGYU	843	PTS-002	June 5,2016	June 4,2017

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.

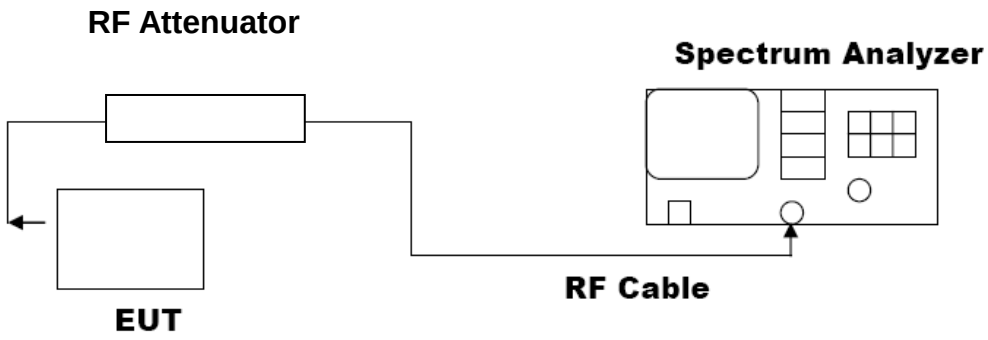
For average power test:

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



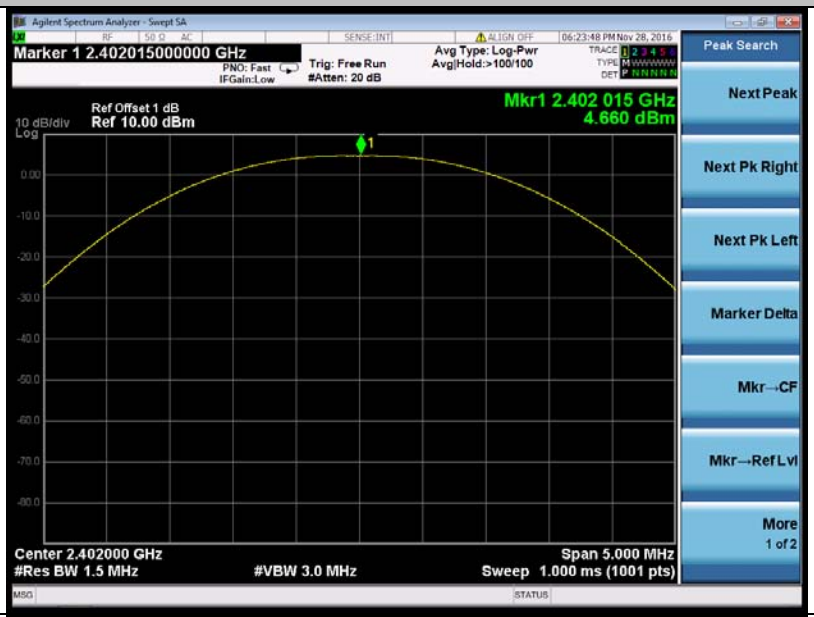
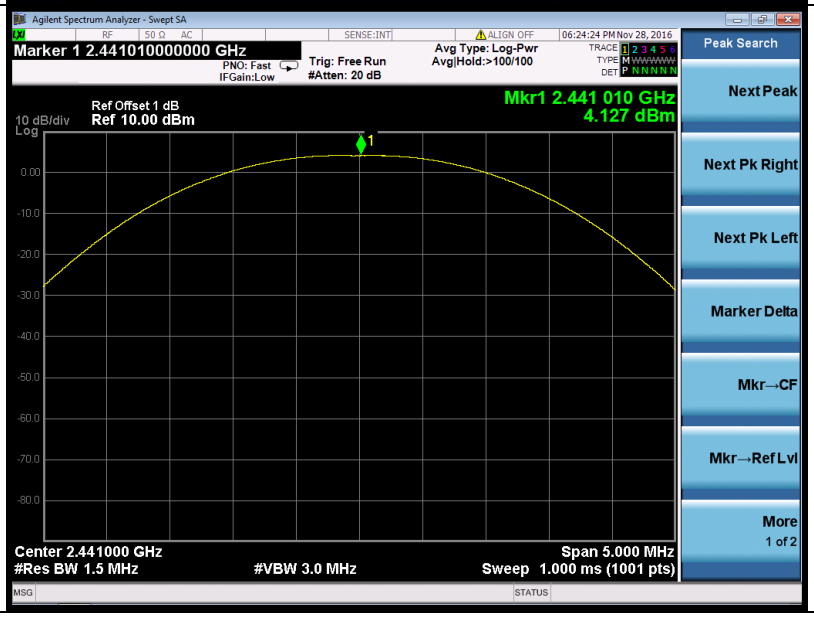
7.3. LIMITS AND MEASUREMENT RESULT

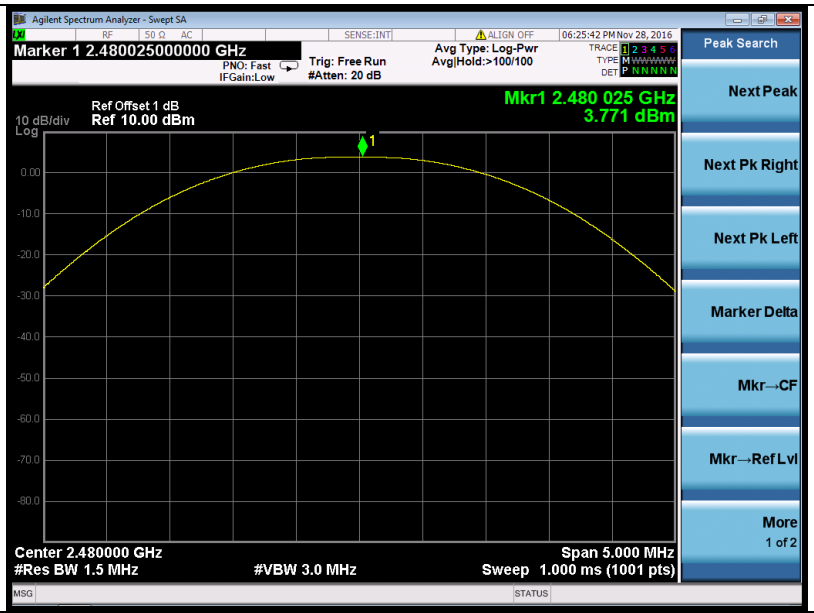
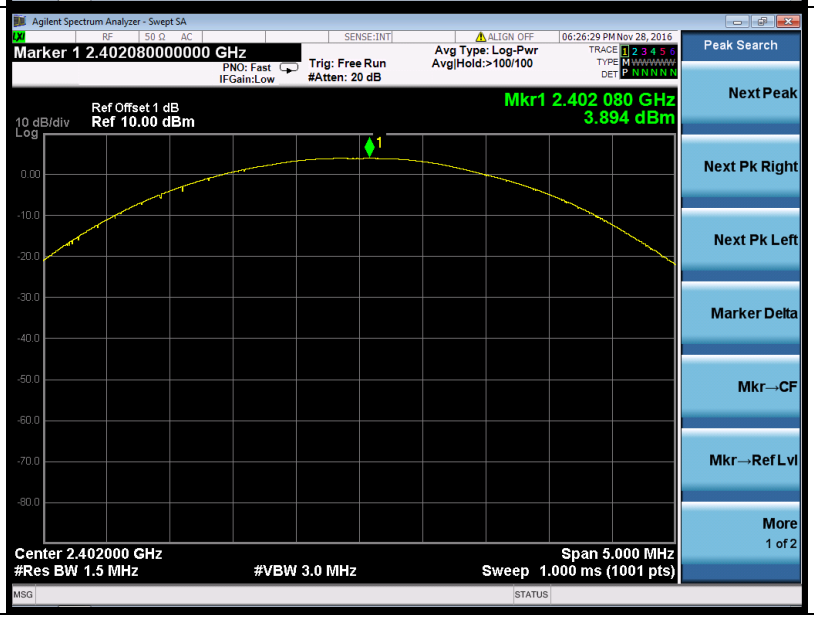
Frequency (GHz)	Peak Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.402	4.660	21	Pass
2.441	4.127	21	Pass
2.480	3.771	21	Pass

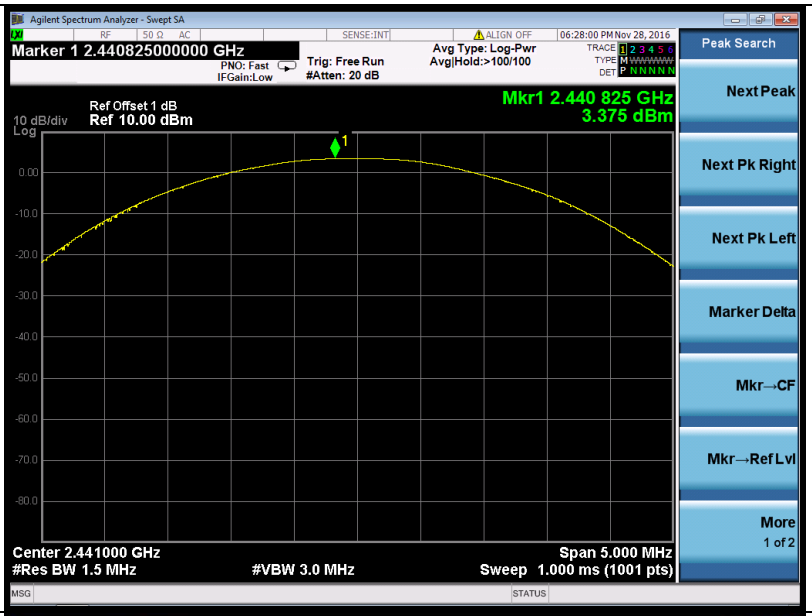
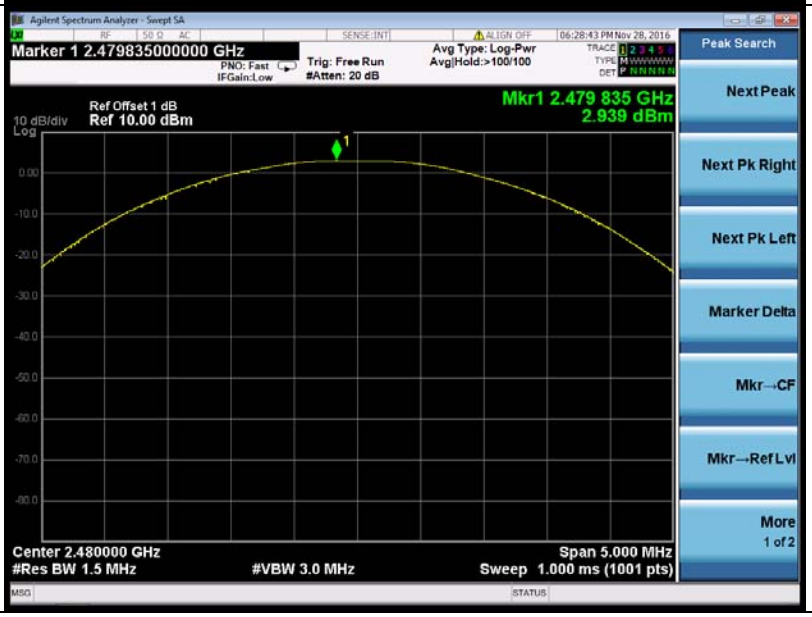
Frequency (GHz)	Peak Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.402	3.894	21	Pass
2.441	3.375	21	Pass
2.480	2.939	21	Pass

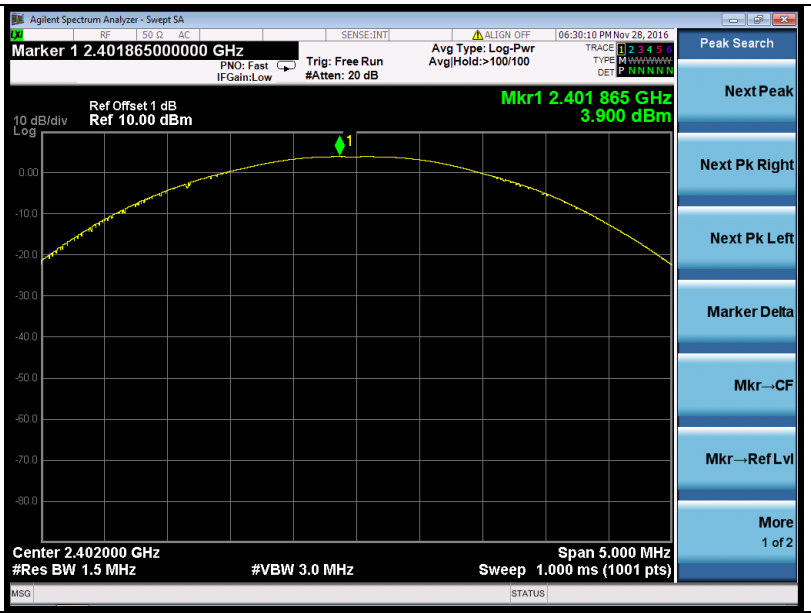
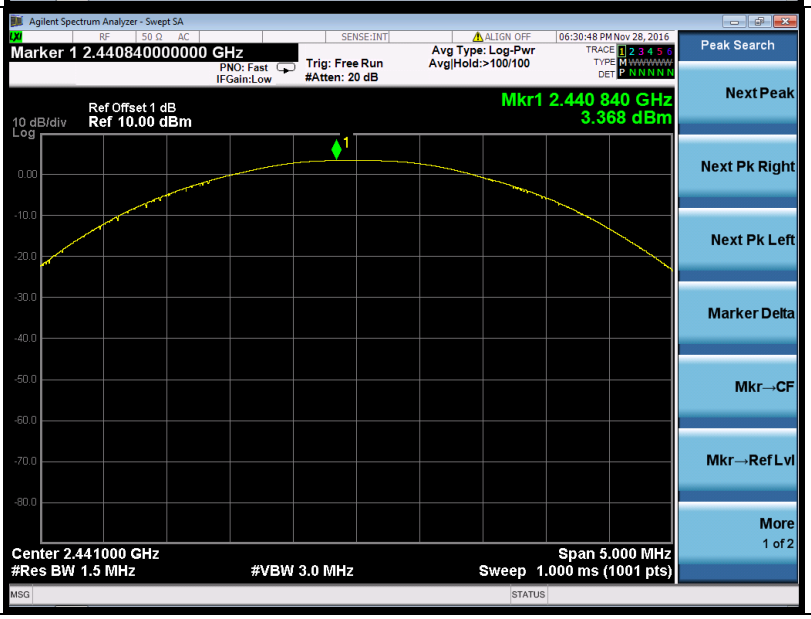
Frequency (GHz)	Peak Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.402	3.900	21	Pass
2.441	3.368	21	Pass
2.480	3.038	21	Pass

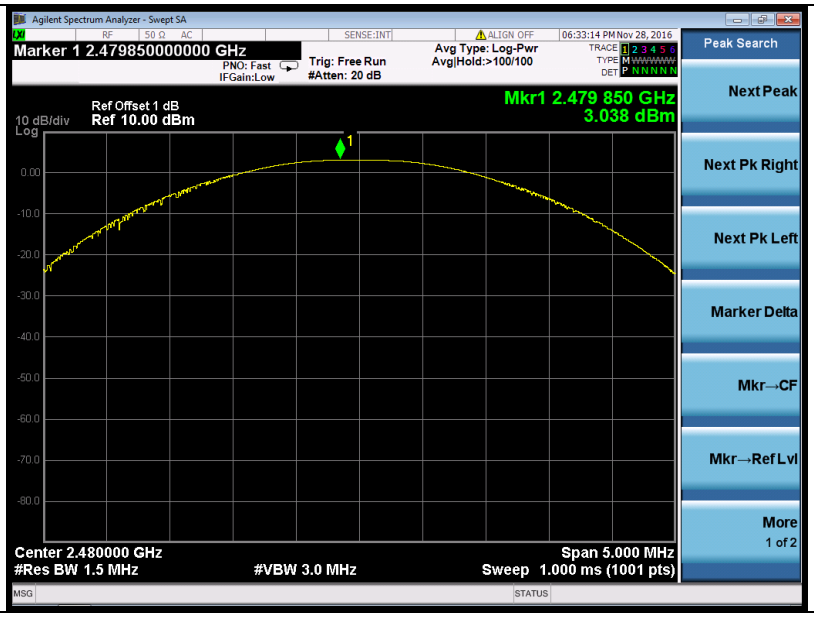
Test Graph

Graphs			
GFSK/LCH			
GFSK/MCH			

GFSK/HCH	
π /4DQPSK/LCH		

π /4DQPSK/MCH			
π /4DQPSK/HCH			

8DPSK/LCH		
8DPSK/MCH		

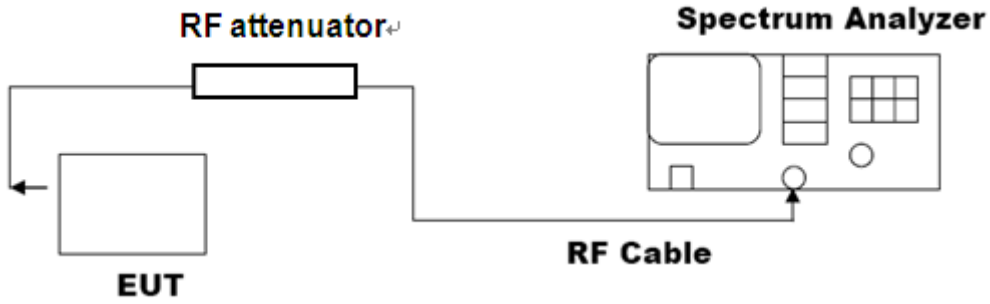
8DPSK/HCH		 Agilent Spectrum Analyzer - Swept SA Marker 1 2.479850000000 GHz PNO: Fast IFGain:Low Trig: Free Run #Atten: 20 dB Avg Type: Log-Pwr Avg|Hold:>100/100 06:33:14 PM Nov 28, 2016 Ref Offset 1 dB 10 dB/div Log Ref 10.00 dBm Mkr1 2.479 850 GHz 3.038 dBm Center 2.480000 GHz #Res BW 1.5 MHz #VBW 3.0 MHz Span 5.000 MHz Sweep 1.000 ms (1001 pts) Peak Search Next Peak Next Pk Right Next Pk Left Marker Delta Mkr→CF Mkr→Ref Lvl More 1 of 2

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.

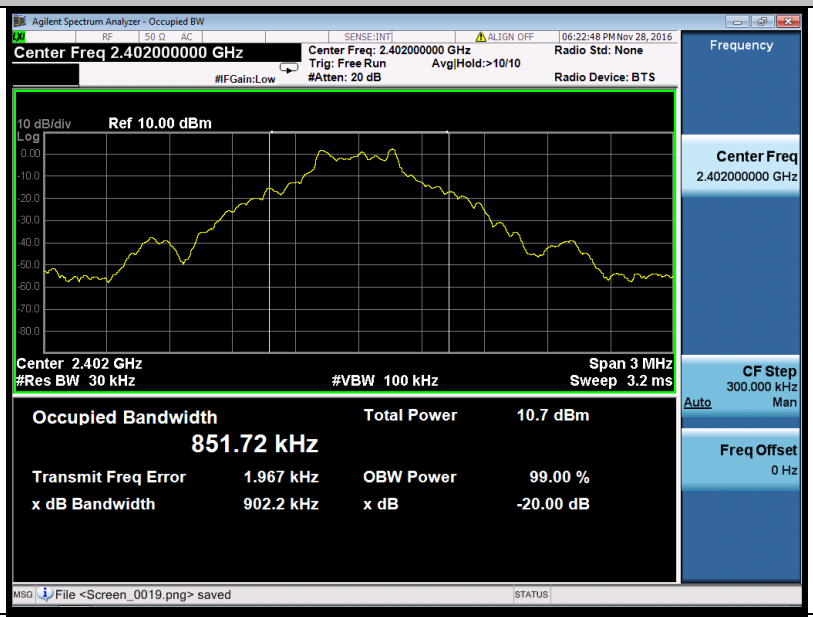
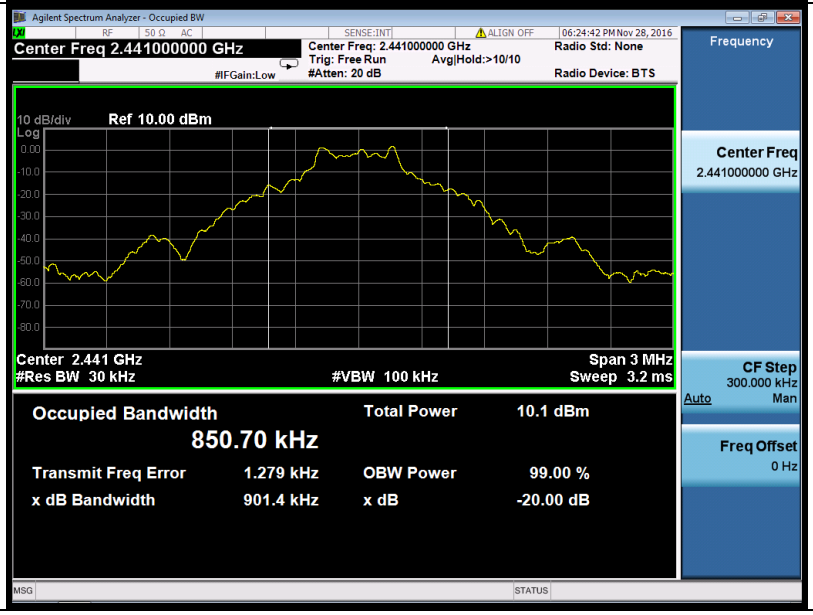
8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

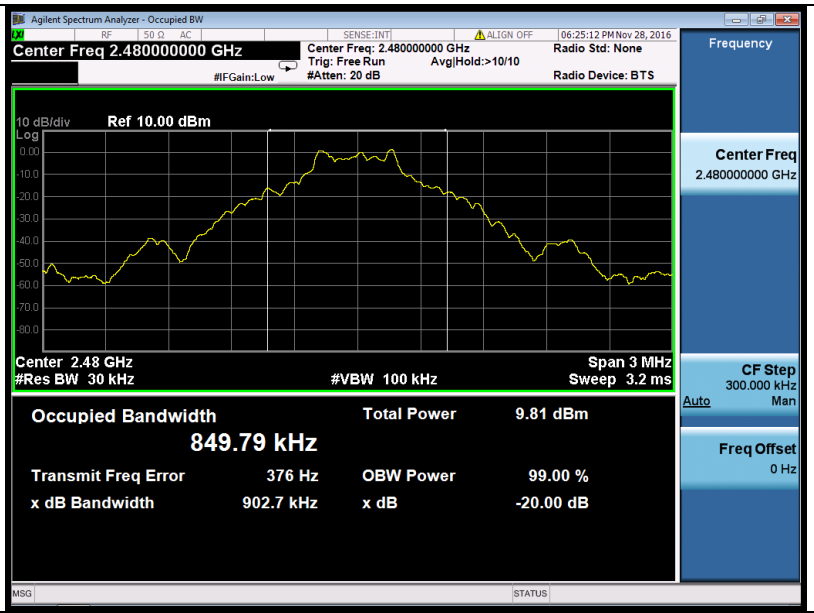
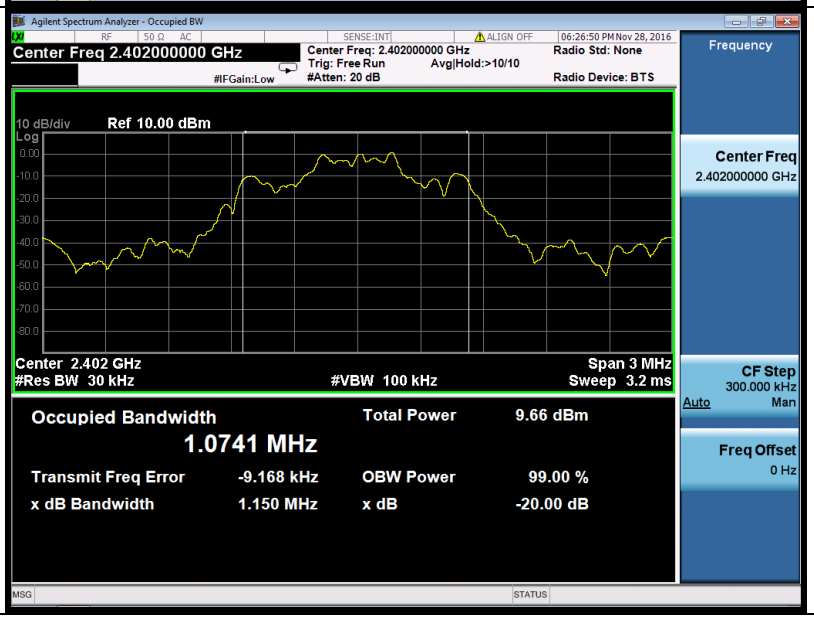


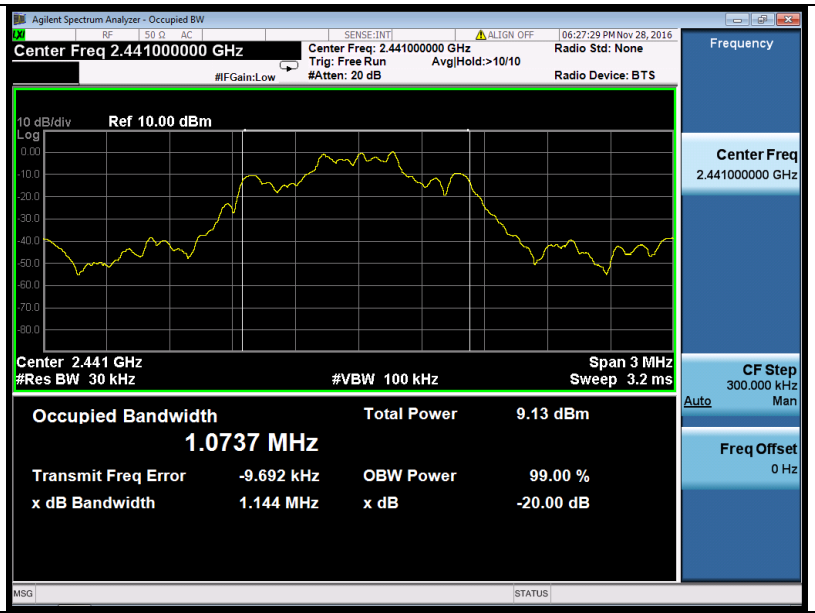
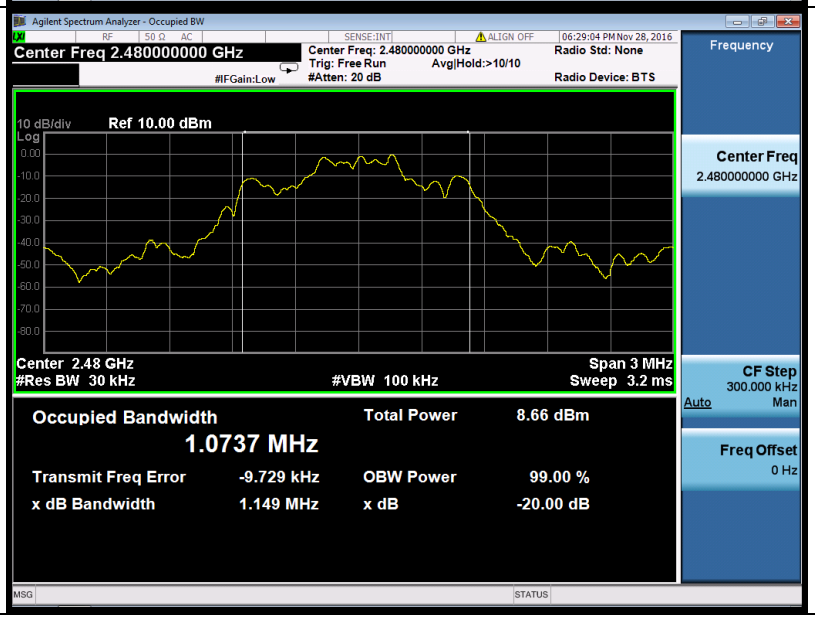
8.3. LIMITS AND MEASUREMENT RESULTS

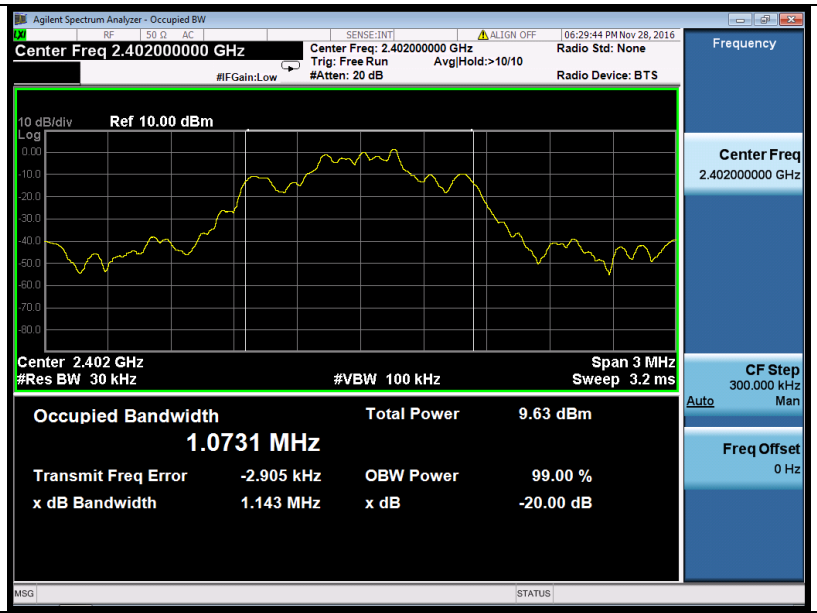
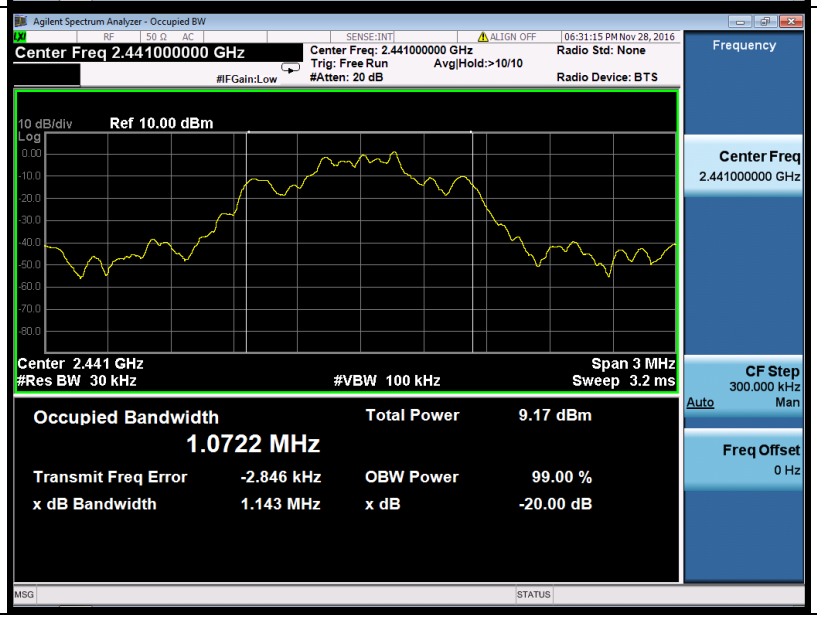
Mode	Channel.	EBW [KHz]	Verdict
GFSK	LCH	902.2	PASS
GFSK	MCH	901.4	PASS
GFSK	HCH	902.7	PASS
π/4DQPSK	LCH	1150	PASS
π/4DQPSK	MCH	1144	PASS
π/4DQPSK	HCH	1149	PASS
8DPSK	LCH	1143	PASS
8DPSK	MCH	1143	PASS
8DPSK	HCH	1143	PASS

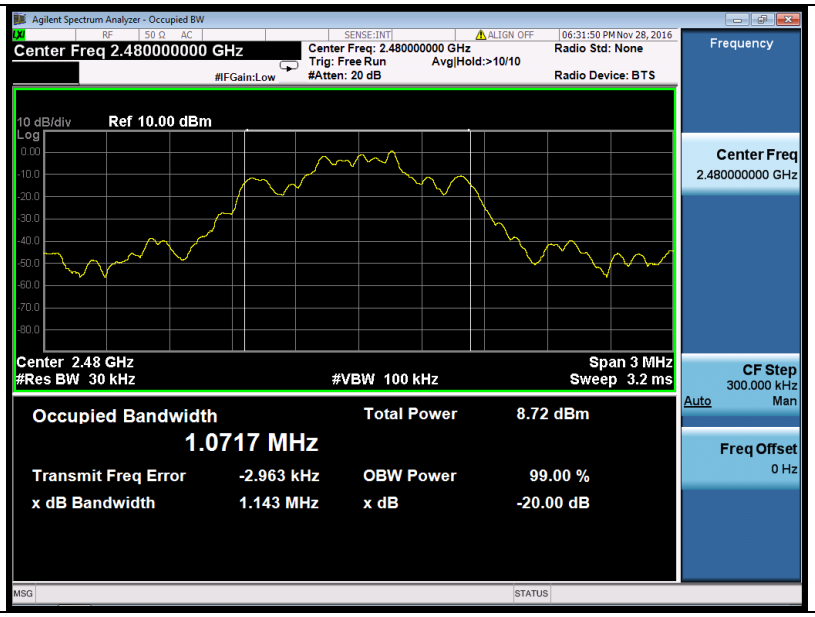
Test Graph

Graphs		
GFSK/LCH		
GFSK/MCH		

GFSK/HCH		
π/4DQPSK/LCH		

π /4DQPSK/MCH		
π /4DQPSK/HCH		

8DPSK/LCH		
8DPSK/MCH		

8DPSK/HCH		 Agilent Spectrum Analyzer - Occupied BW Center Freq 2.480000000 GHz Center Freq: 2.480000000 GHz Trig: Free Run Avg|Hold:>10/10 #Atten: 20 dB #IFGain:Low Radio Std: None Radio Device: BTS 06:31:50 PM Nov 28, 2016 Frequency 10 dB/div Ref 10.00 dBm Log Center Freq 2.480000000 GHz Center 2.48 GHz #Res BW 30 kHz #VBW 100 kHz Span 3 MHz Sweep 3.2 ms CF Step 300.000 kHz Auto Man Occupied Bandwidth 1.0717 MHz Total Power 8.72 dBm Transmit Freq Error -2.963 kHz OBW Power 99.00 % x dB Bandwidth 1.143 MHz x dB -20.00 dB Freq Offset 0 Hz MSG STATUS

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.

Note: The EUT was tested according to DA000705 for compliance to FCC 47CFR 15.247 requirements. Owing to satisfy the requirements of the number of measurement points, we set the RBW=1MHz, VBW＞RBW, scan up through 10th harmonic, and consider the tested results as the worst case, if the tested results conform to the requirement, we can deem that the real tested results(set the RBW=100KHz, VBW＞RBW) are conform to the requirement.

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

The same as described in section 8.2

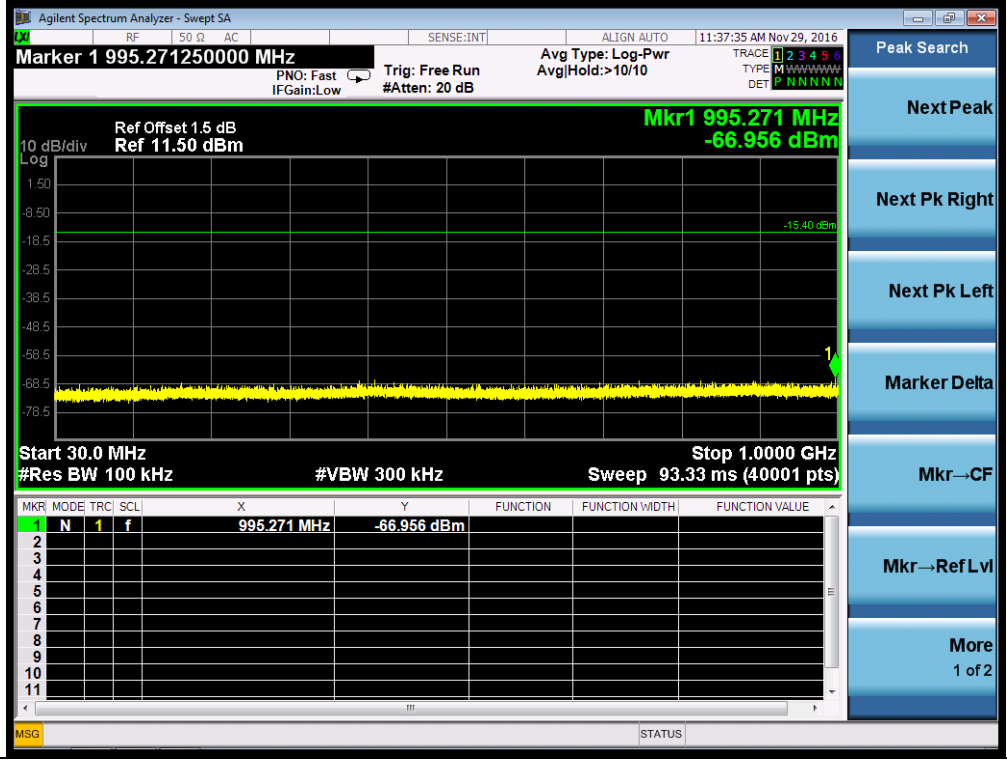
9.3. MEASUREMENT EQUIPMENT USED

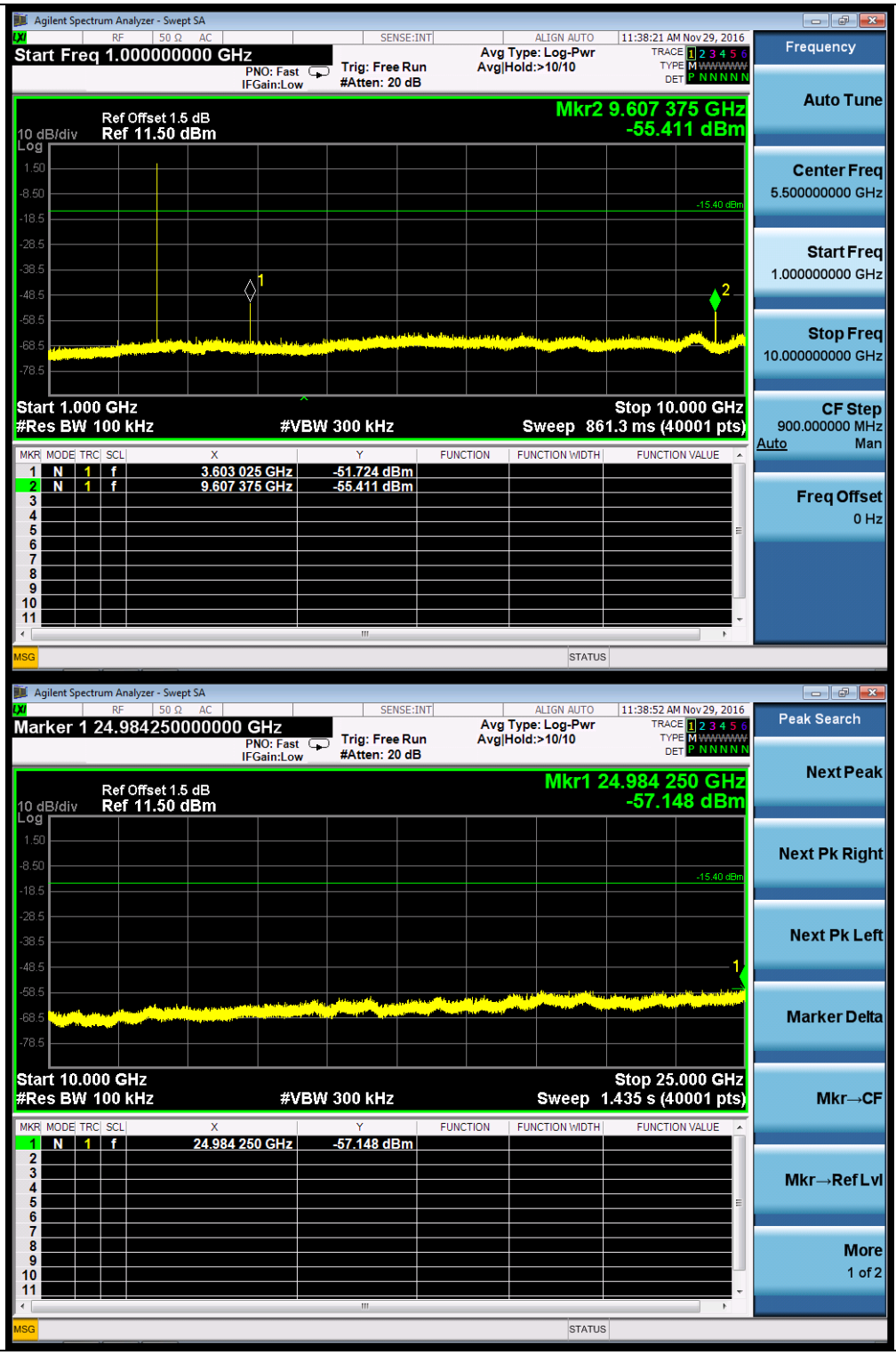
The same as described in section 6

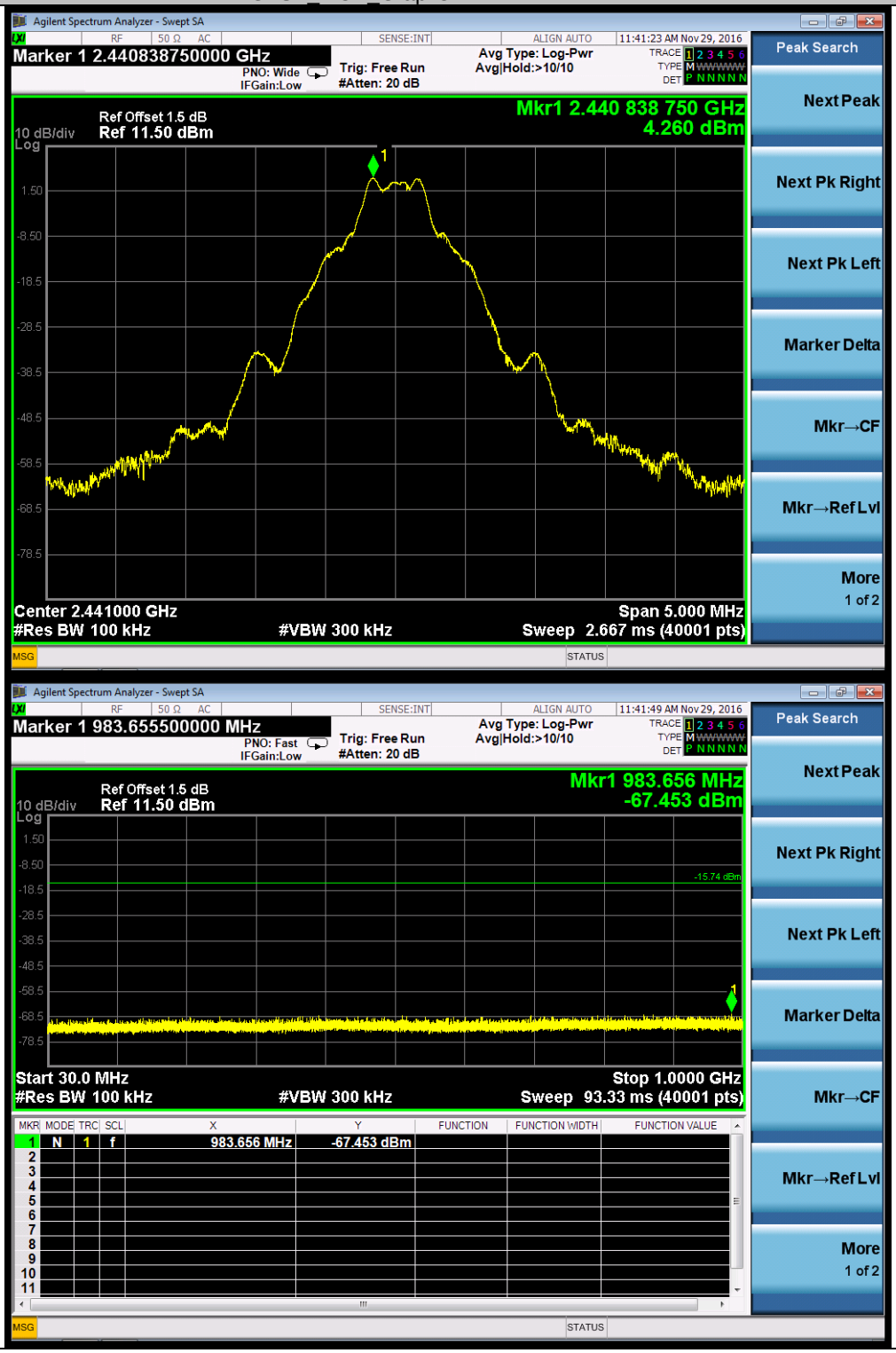
9.4. LIMITS AND MEASUREMENT RESULT

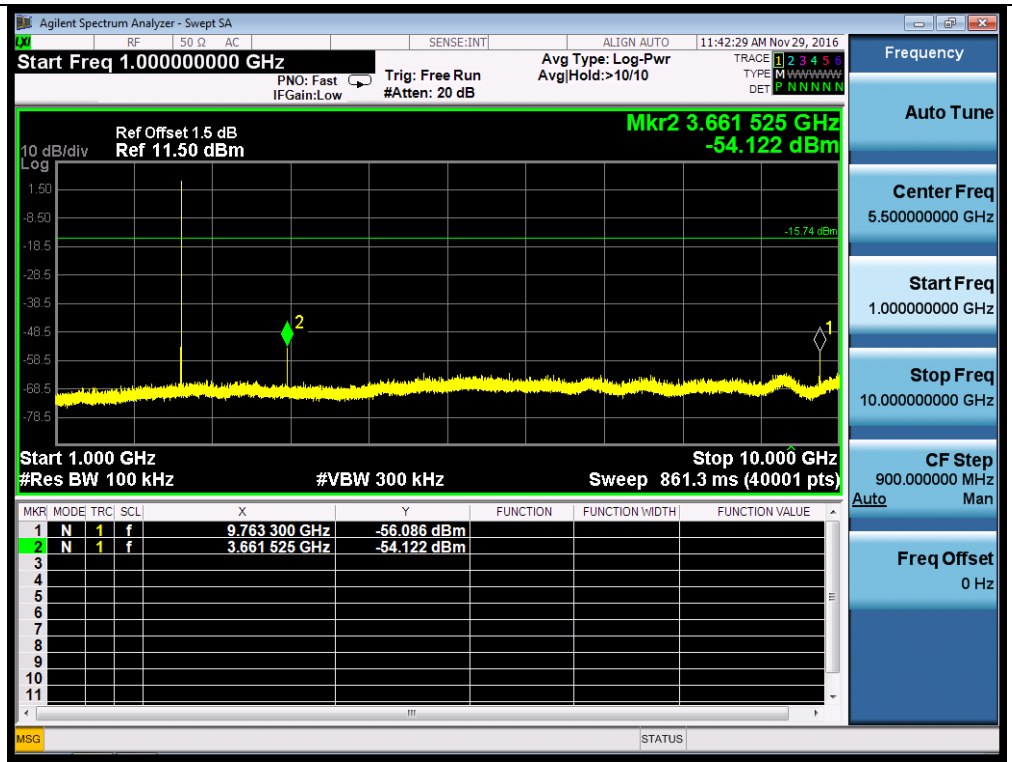
LIMITS AND MEASUREMENT RESULT		
Applicable Limits	**Measurement Result**	
	Test Data	**Criteria**
In any 100 KHz Bandwidth Outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produce by the intentional radiator shall be at least 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

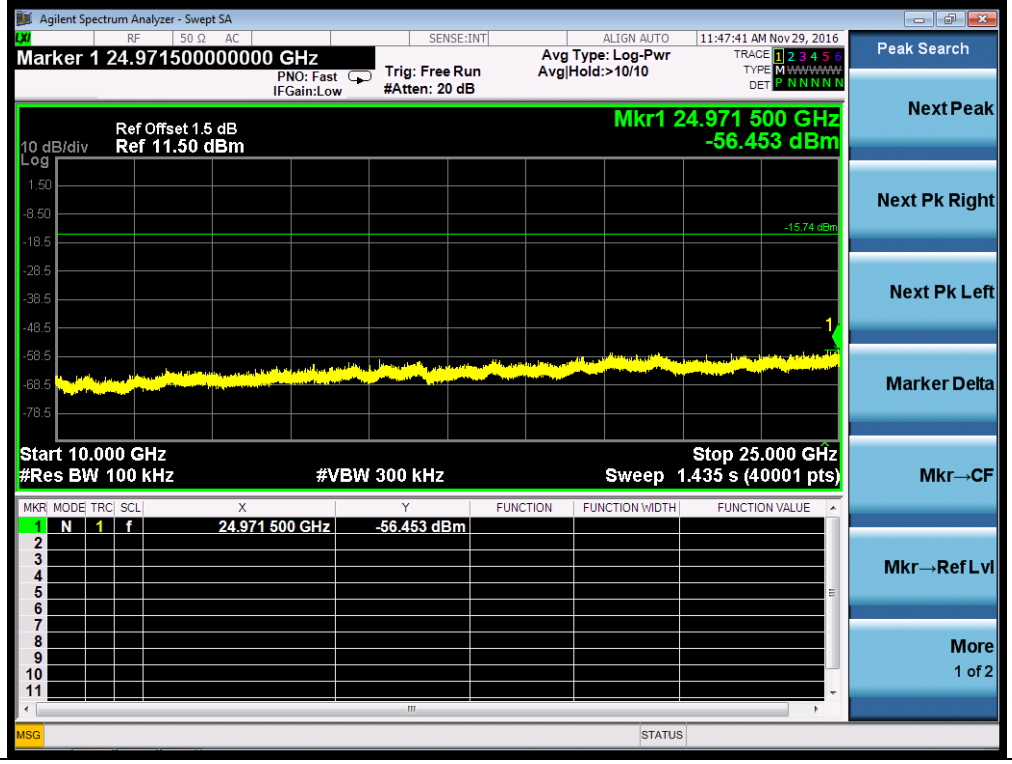
Test Graph

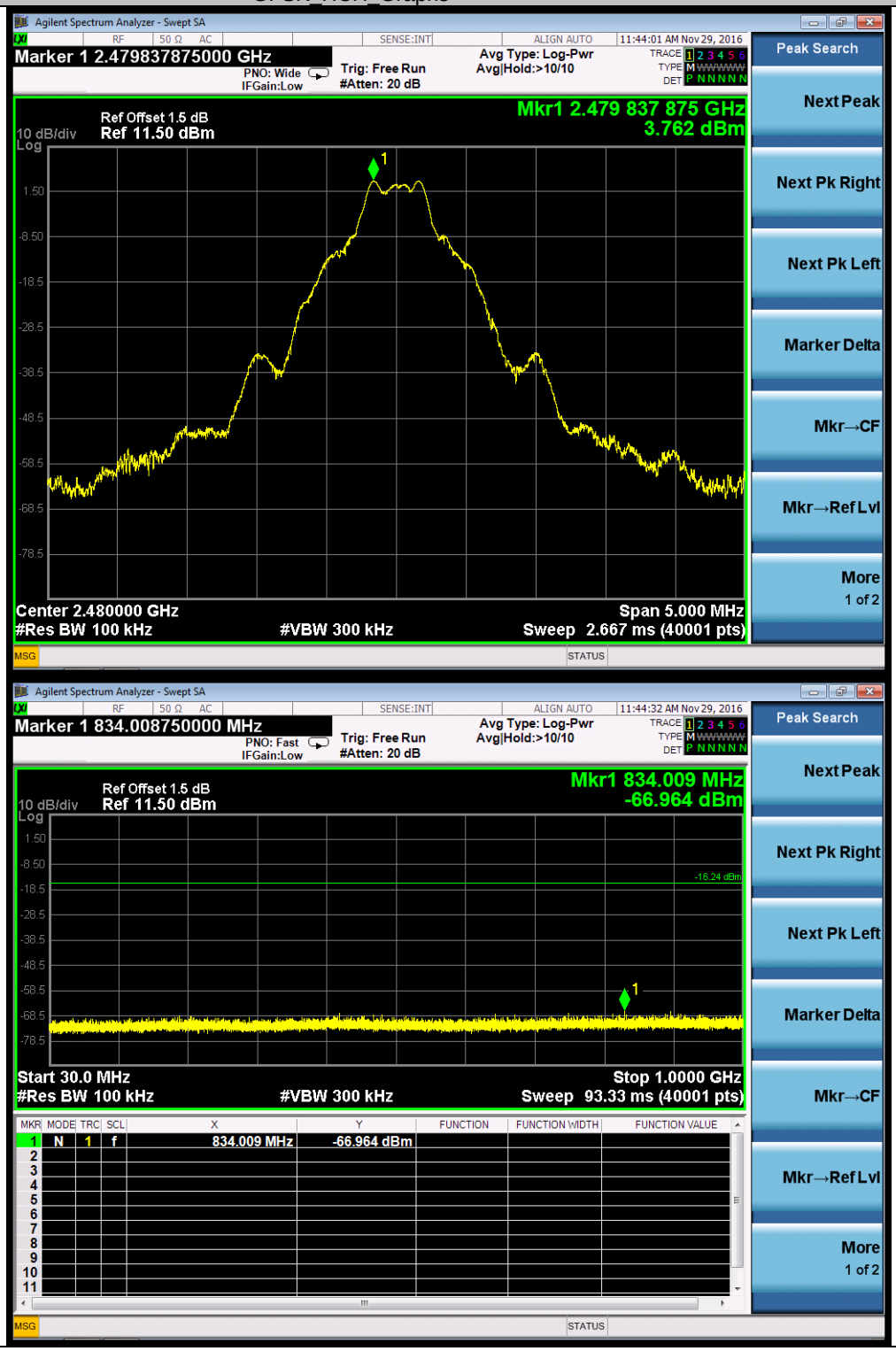
GFSK_LCH_Graphs		
Puw	 	

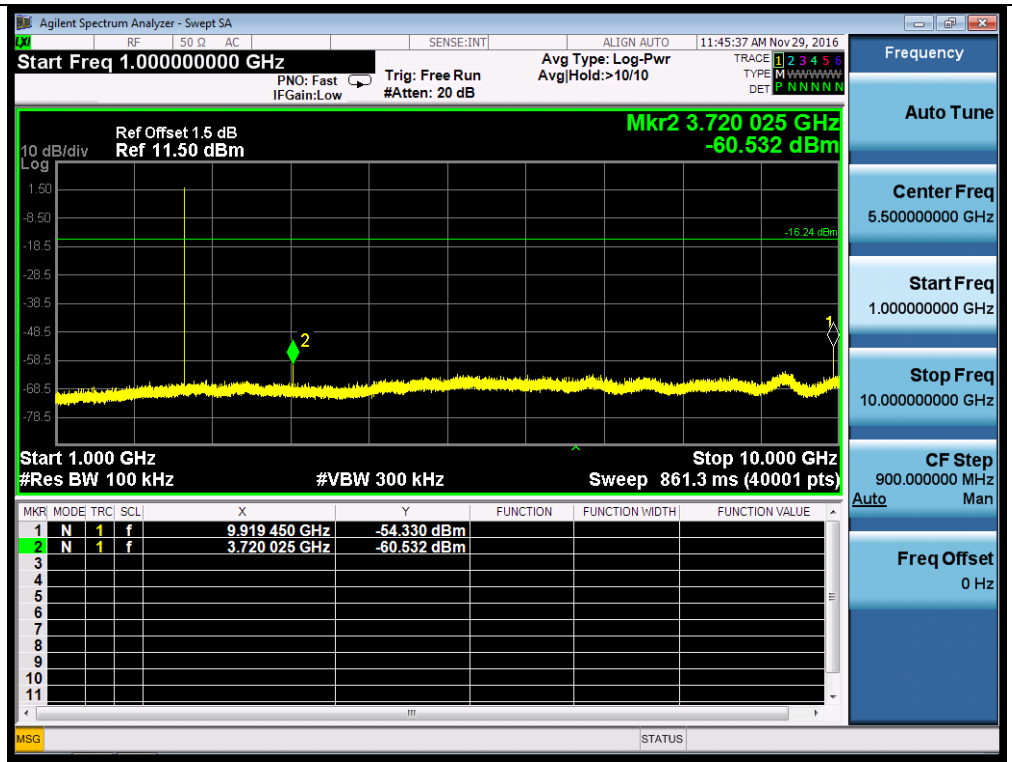

Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
11:38:21 AM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Log
Mkr2 9.607 375 GHz
-55.411 dBm
-15.40 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 861.3 ms (40001 pts)
1 N 1 f 3.603 025 GHz -51.724 dBm
2 N 1 f 9.607 375 GHz -55.411 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
900.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS
Agilent Spectrum Analyzer - Swept SA
Marker 1 24.984250000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
11:38:52 AM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Log
Mkr1 24.984 250 GHz
-57.148 dBm
-15.40 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.435 s (40001 pts)
1 N 1 f 24.984 250 GHz -57.148 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

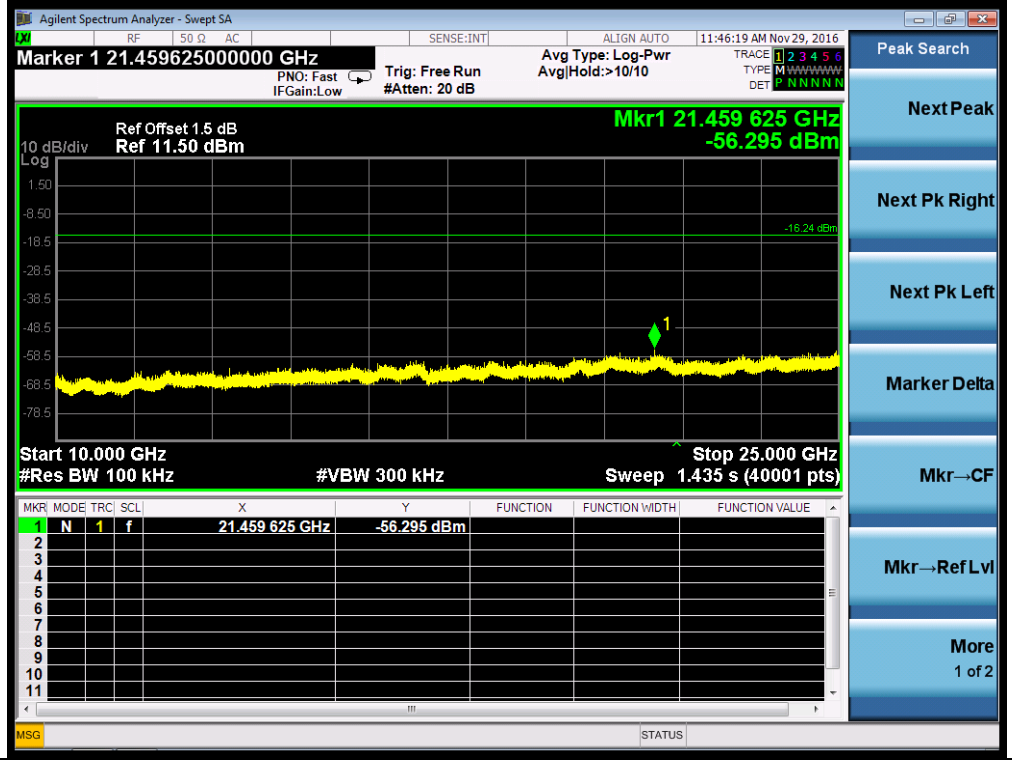
GFSK_MCH_Graphs		
Puw		

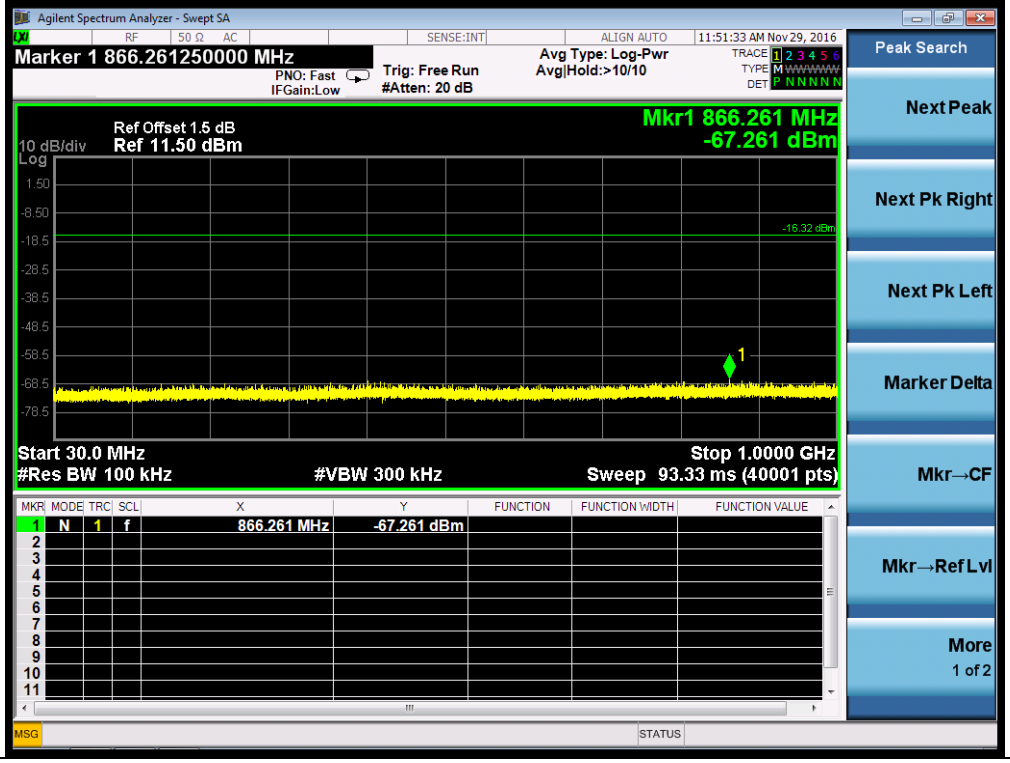

Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
11:42:29 AM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr2 3.661 525 GHz
-54.122 dBm
-15.74 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 861.3 ms (40001 pts)
1 N 1 f 9.763 300 GHz -56.086 dBm
2 N 1 f 3.661 525 GHz -54.122 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
900.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

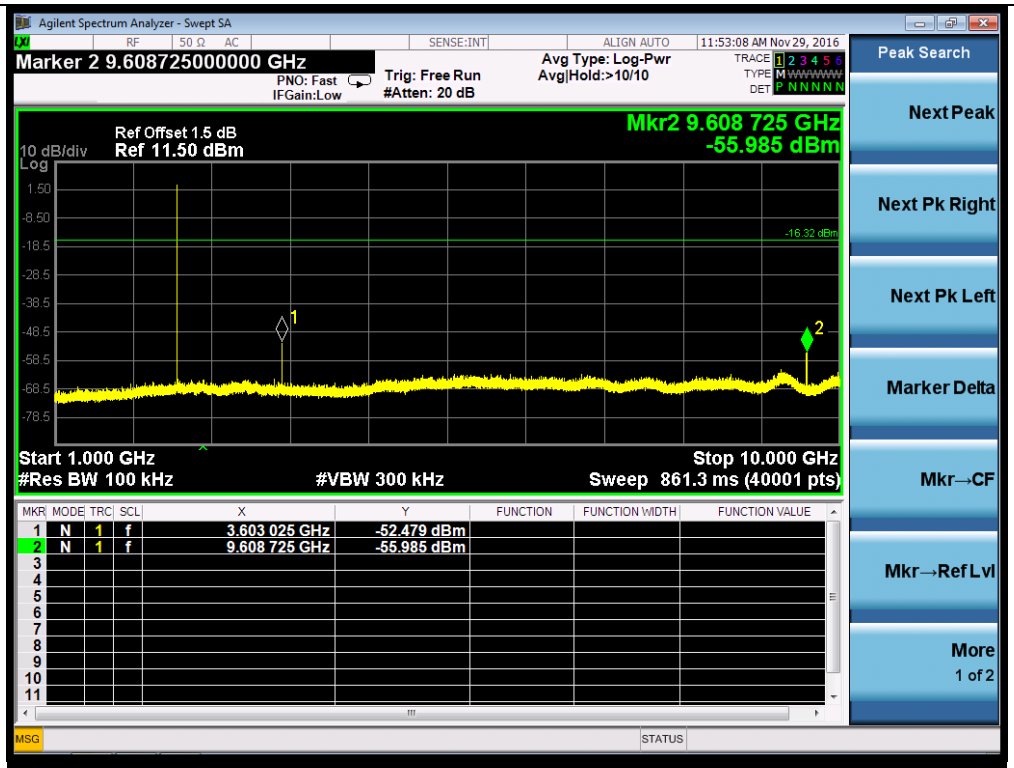

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.971500000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
11:47:41 AM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr1 24.971 500 GHz
-56.453 dBm
-15.74 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.435 s (40001 pts)
1 N 1 f 24.971 500 GHz -56.453 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

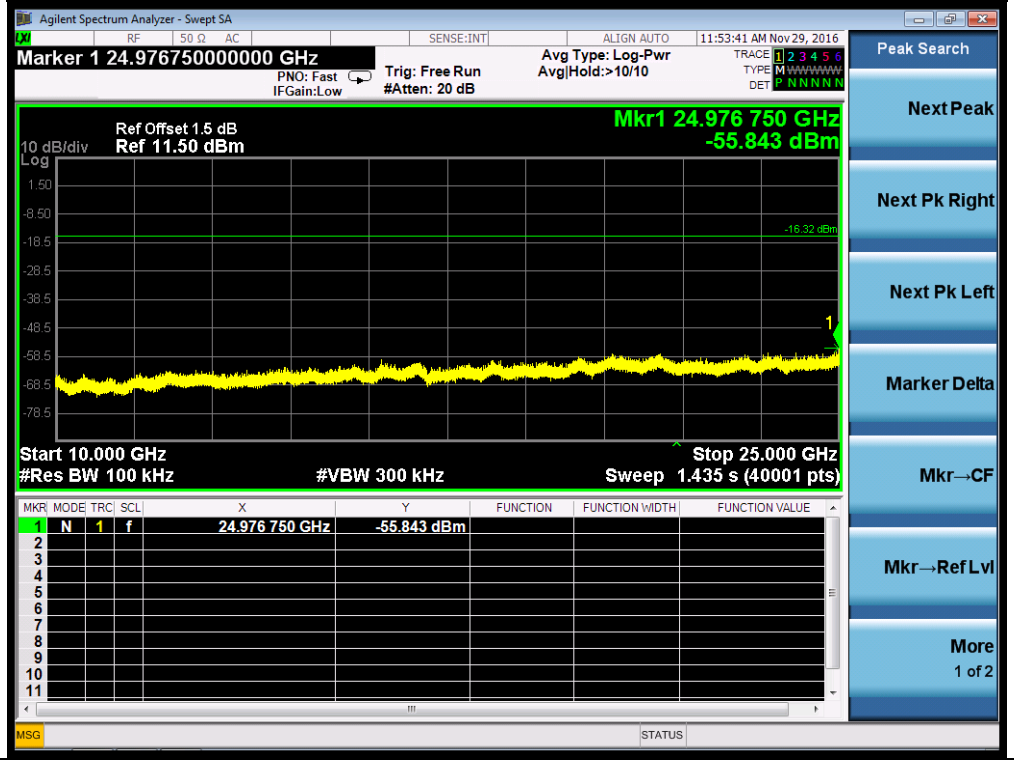
GFSK_HCH_Graphs		
Puw		

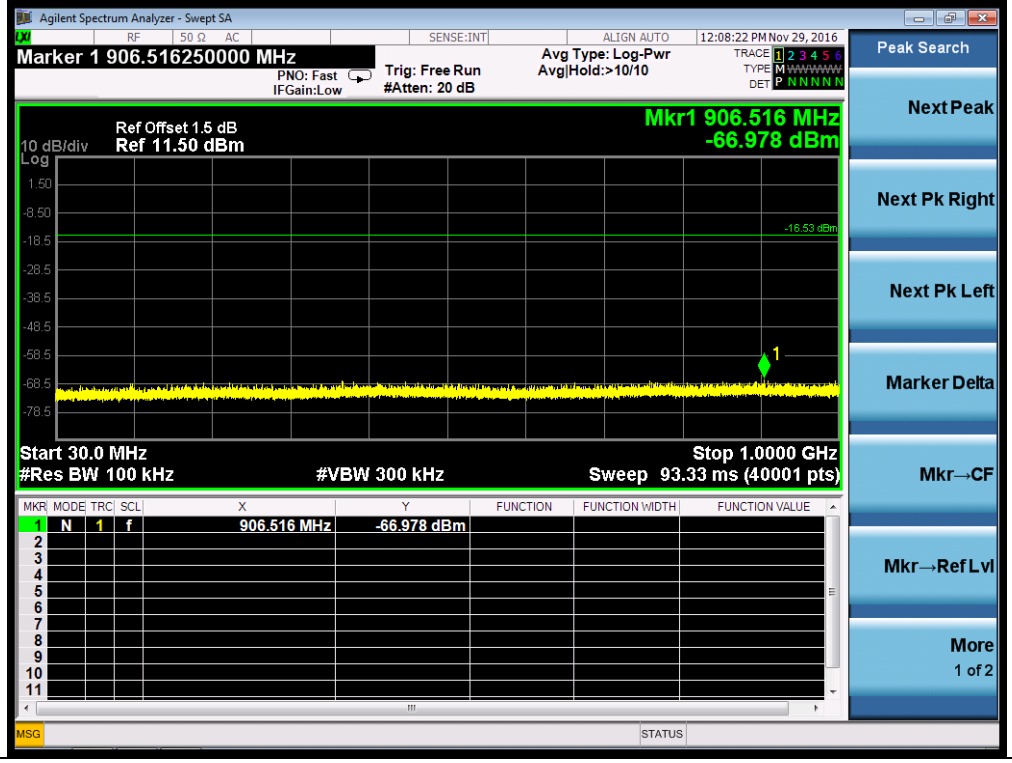

Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
11:45:37 AM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr2 3.720 025 GHz
-60.532 dBm
-16.24 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 861.3 ms (40001 pts)
1 N 1 f 9.919 450 GHz -54.330 dBm
2 N 1 f 3.720 025 GHz -60.532 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
900.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

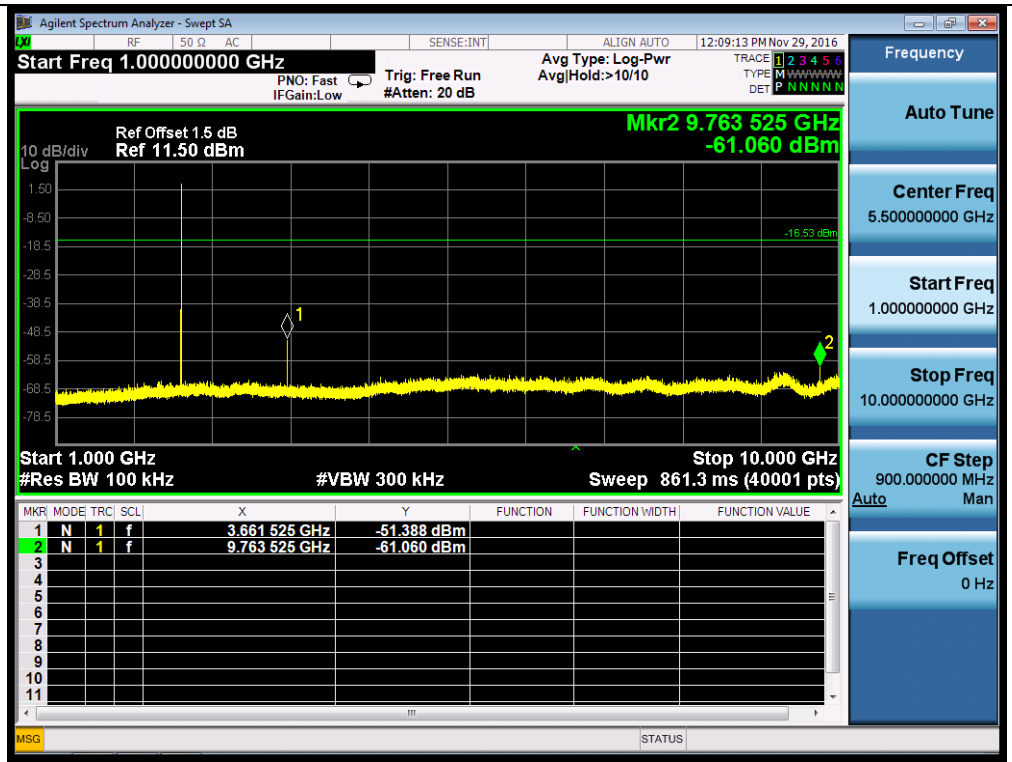

Agilent Spectrum Analyzer - Swept SA
Marker 1 21.459625000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
11:46:19 AM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr1 21.459 625 GHz
-56.295 dBm
-16.24 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.435 s (40001 pts)
1 N 1 f 21.459 625 GHz -56.295 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

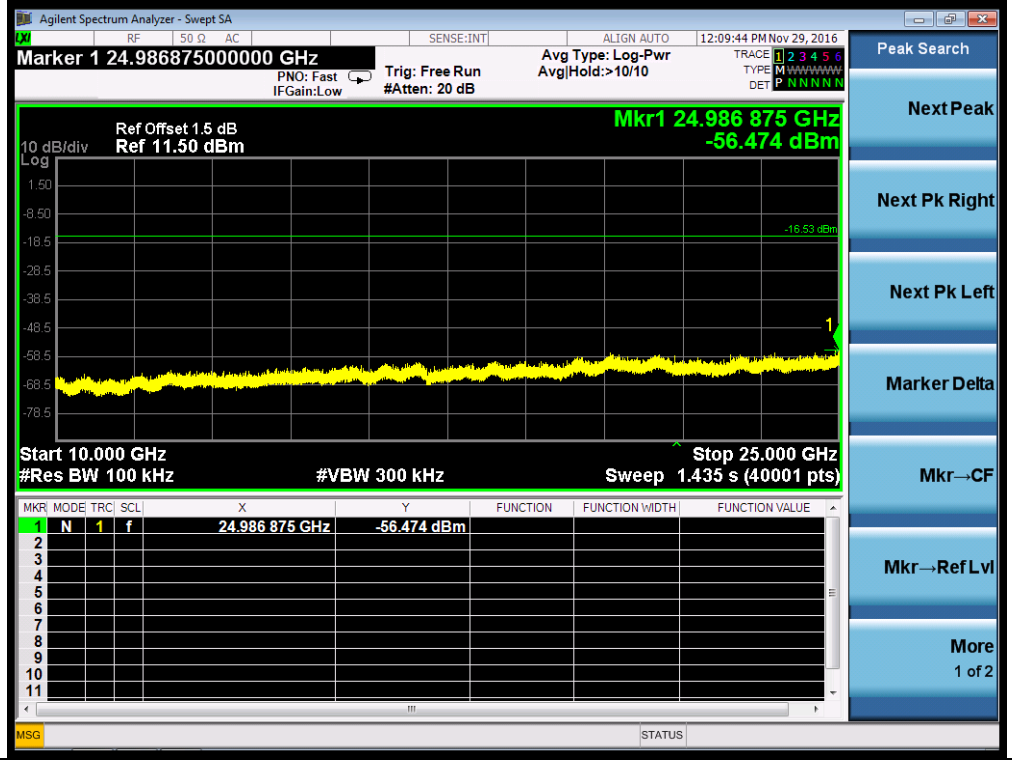
π /4DQPSK_LCH_Graphs		
Puw	 	


Agilent Spectrum Analyzer - Swept SA
Marker 2 9.608725000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
11:53:08 AM Nov 29, 2016
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr2 9.608 725 GHz
-55.985 dBm
-16.32 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 861.3 ms (40001 pts)
1 N 1 f 3.603 025 GHz -52.479 dBm
2 N 1 f 9.608 725 GHz -55.985 dBm
MSG
STATUS

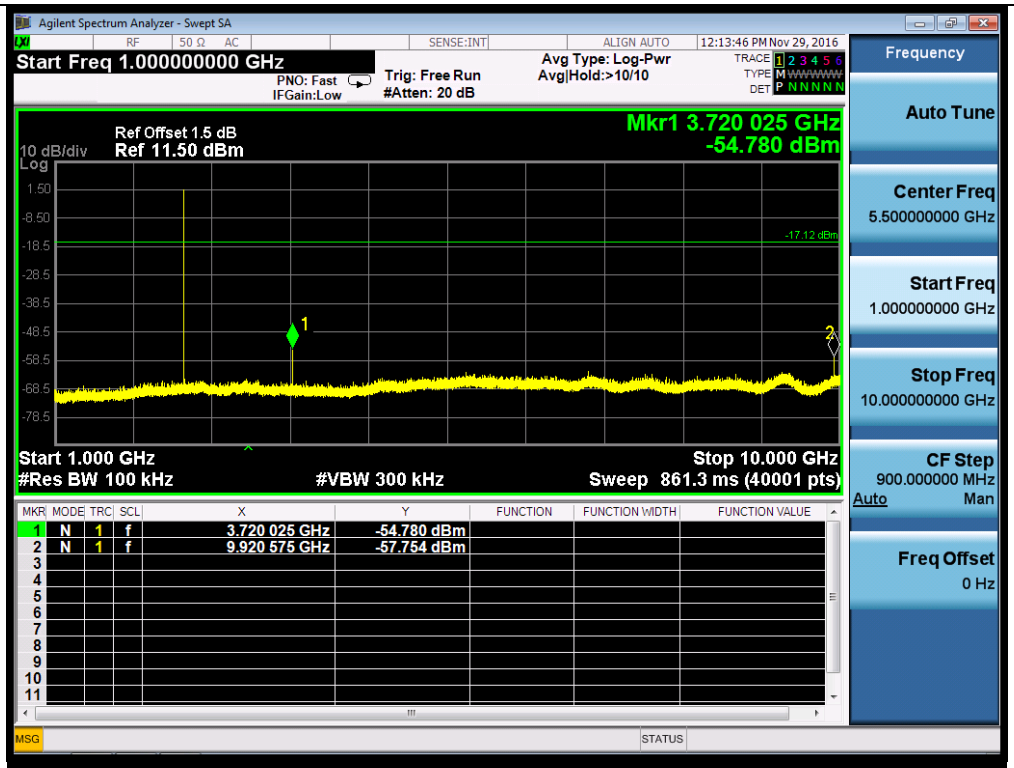

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.976750000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
11:53:41 AM Nov 29, 2016
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr1 24.976 750 GHz
-55.843 dBm
-16.32 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.435 s (40001 pts)
1 N 1 f 24.976 750 GHz -55.843 dBm
MSG
STATUS

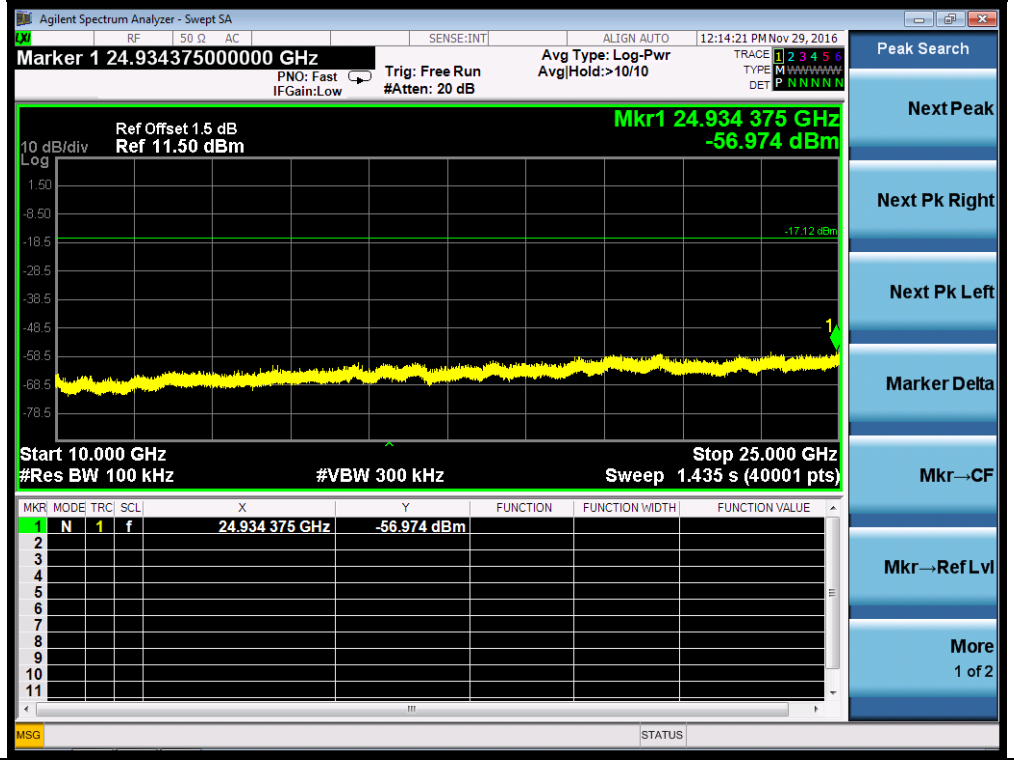
π/4DQPSK_MCH_Graphs		
Puw	 	

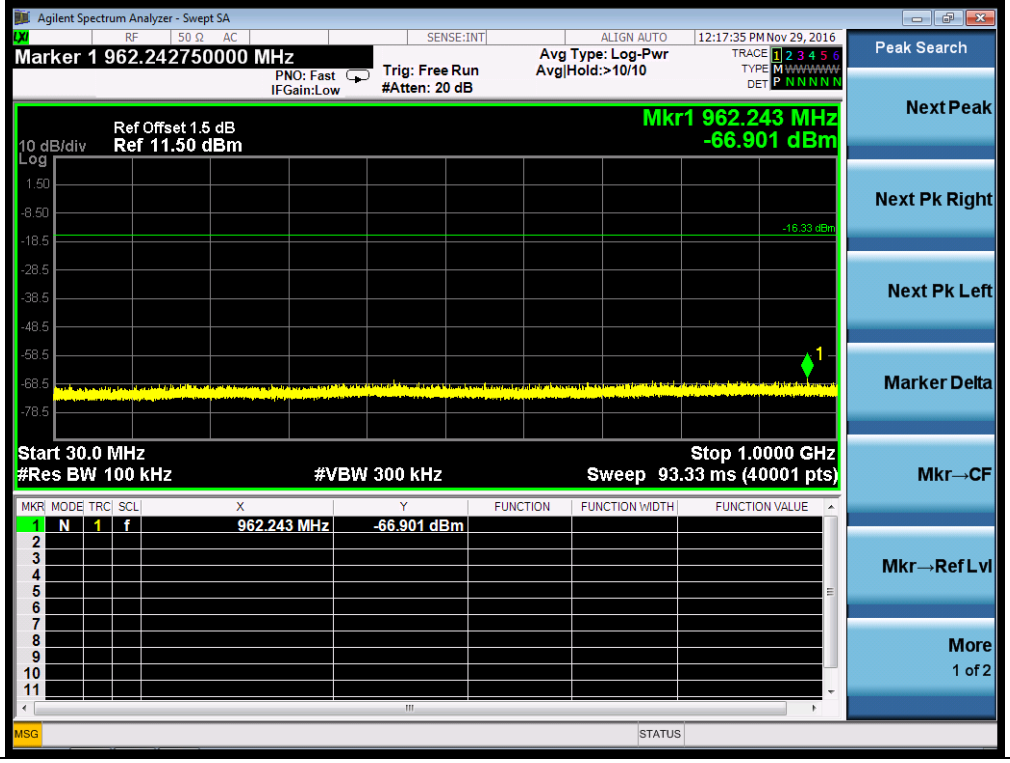

Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
12:09:13 PM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr2 9.763 525 GHz
-61.060 dBm
-16.53 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 861.3 ms (40001 pts)
1 N 1 f 3.661 525 GHz -51.388 dBm
2 N 1 f 9.763 525 GHz -61.060 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
900.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

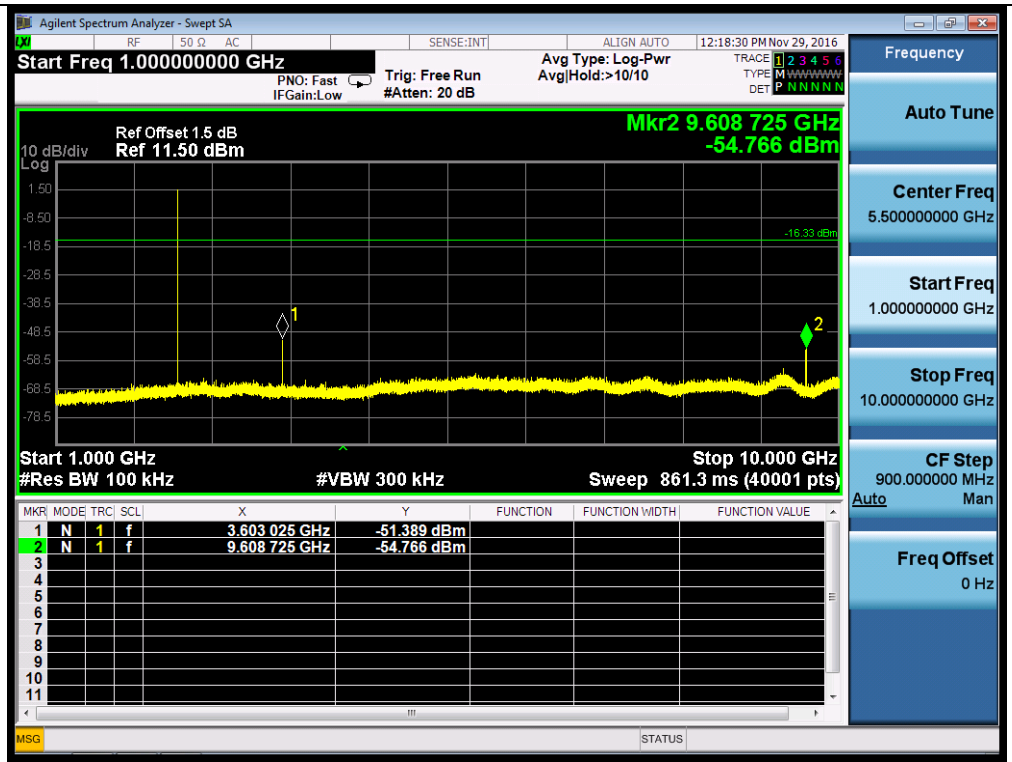

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.986875000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
12:09:44 PM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr1 24.986 875 GHz
-56.474 dBm
-16.53 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.435 s (40001 pts)
1 N 1 f 24.986 875 GHz -56.474 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

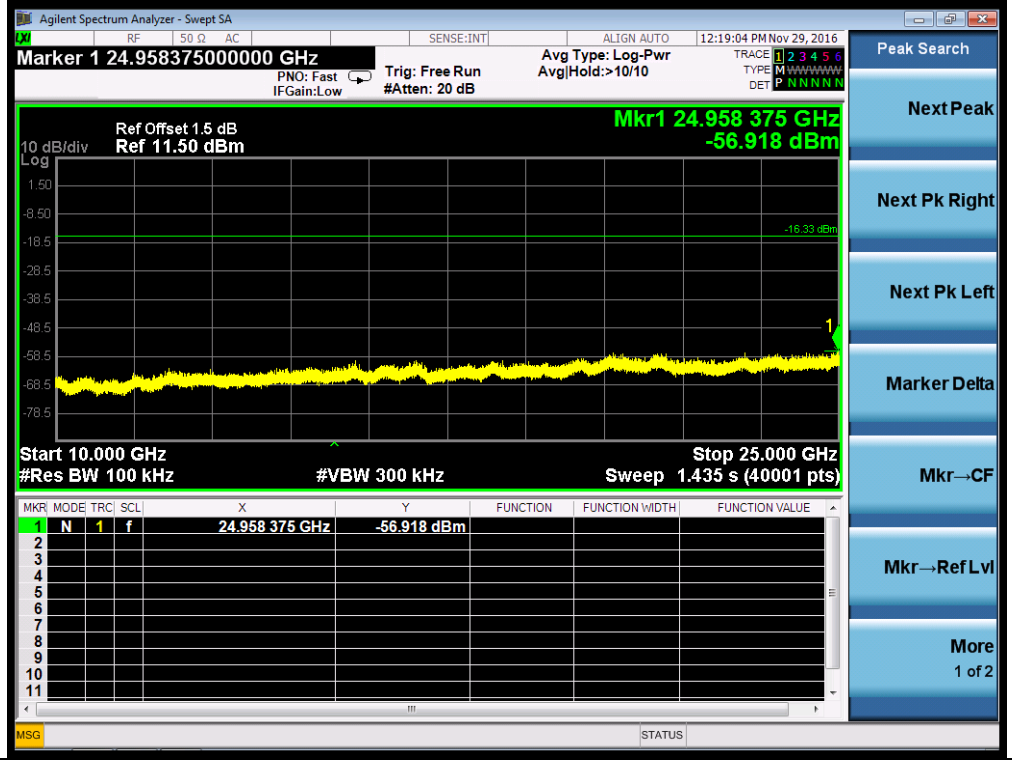
π /4DQPSK_HCH_Graphs		
Puw		


Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
12:13:46 PM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr1 3.720 025 GHz
-54.780 dBm
-17.12 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 861.3 ms (40001 pts)
1 N 1 f 3.720 025 GHz -54.780 dBm
2 N 1 f 9.920 575 GHz -57.754 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
900.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

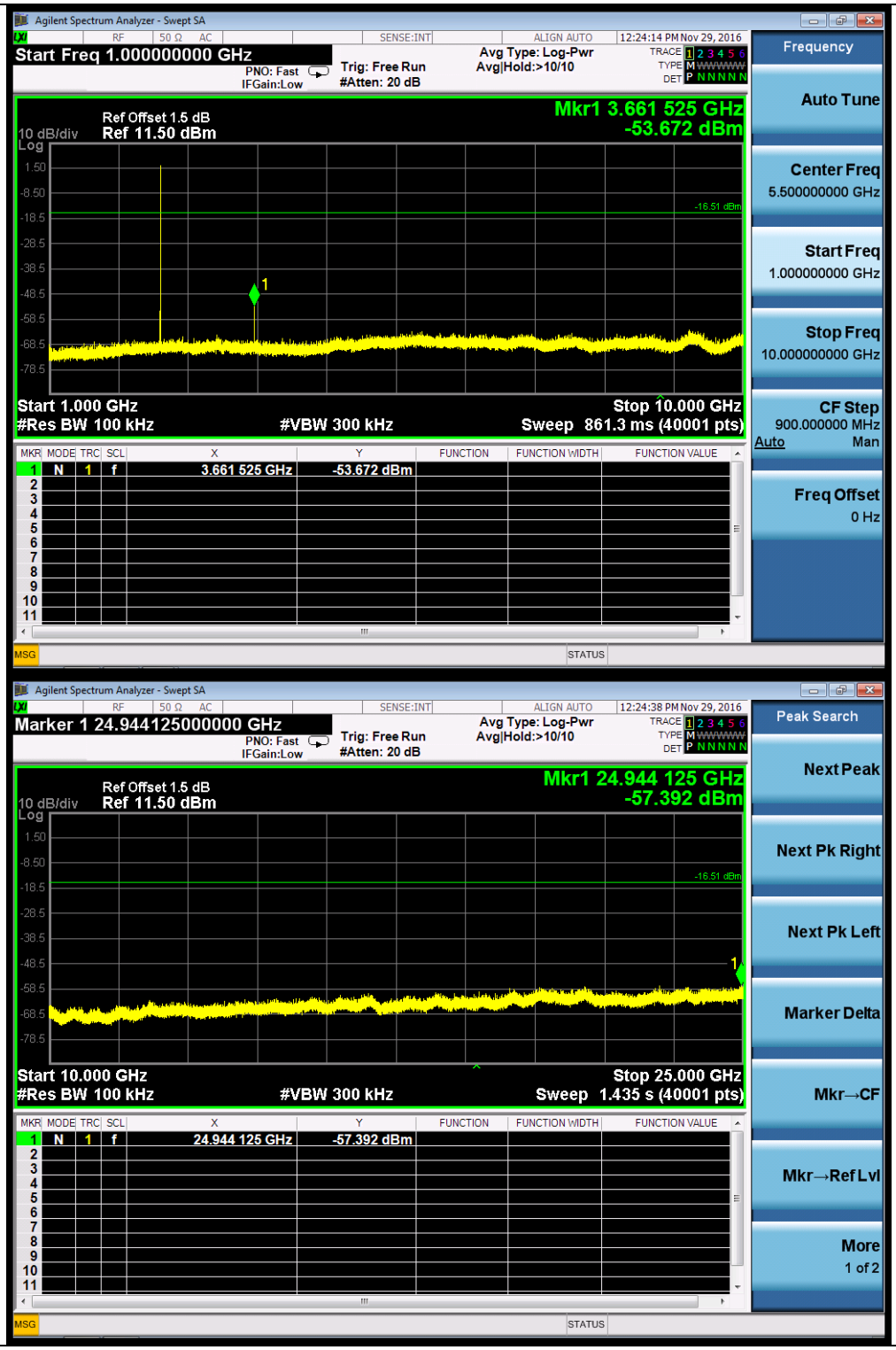

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.934375000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
12:14:21 PM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr1 24.934 375 GHz
-56.974 dBm
-17.12 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.435 s (40001 pts)
1 N 1 f 24.934 375 GHz -56.974 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

8DPSK_LCH_Graphs		
Puw		 

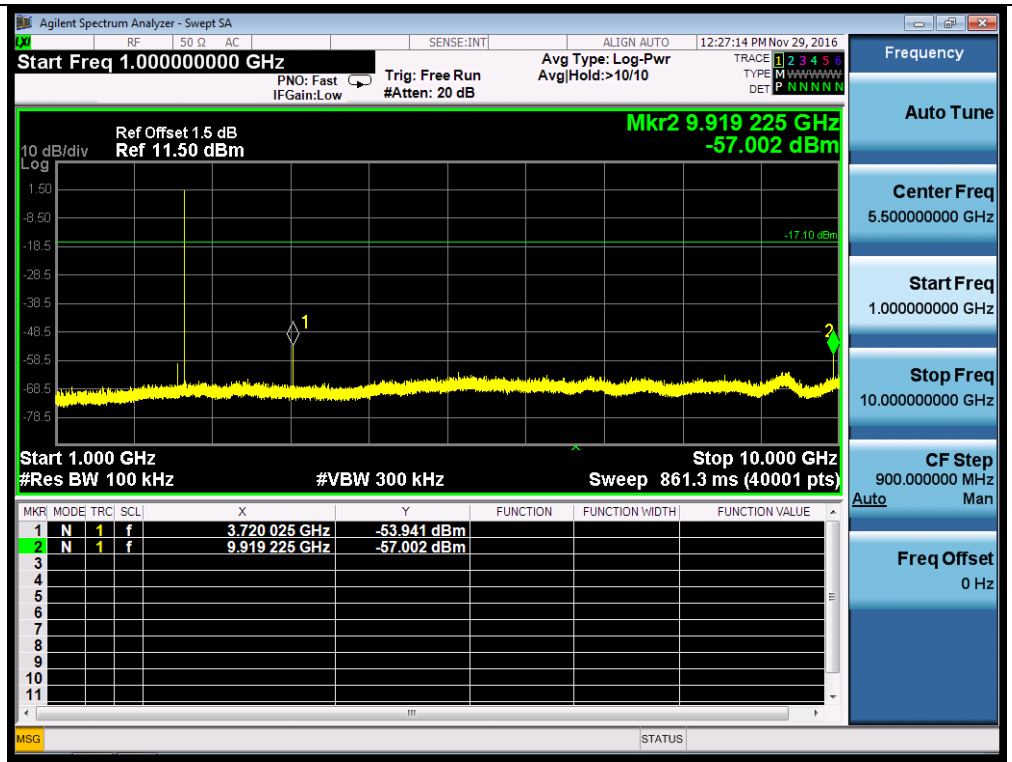

Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
12:18:30 PM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr2 9.608 725 GHz
-54.766 dBm
-16.33 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 861.3 ms (40001 pts)
1 N 1 f 3.603 025 GHz -51.389 dBm
2 N 1 f 9.608 725 GHz -54.766 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
900.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

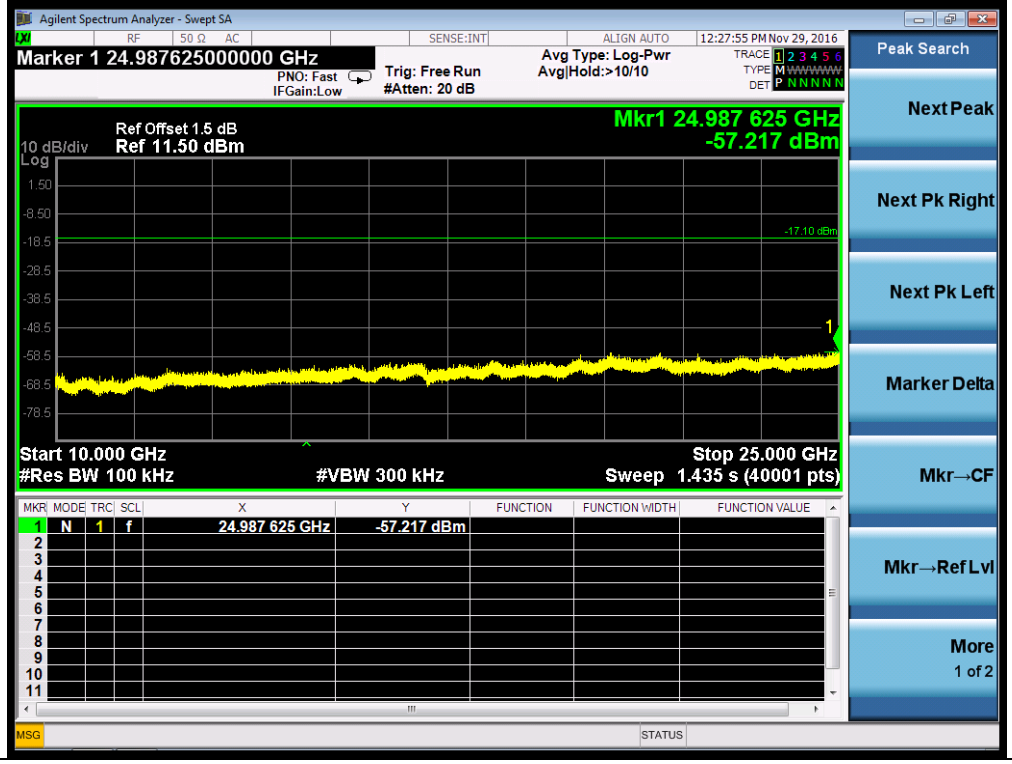

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.958375000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
12:19:04 PM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr1 24.958 375 GHz
-56.918 dBm
-16.33 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.435 s (40001 pts)
1 N 1 f 24.958 375 GHz -56.918 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

8DPSK_MCH_Graphs		
Puw		


Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
12:24:14 PM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr1 3.661 525 GHz
-53.672 dBm
-16.51 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 861.3 ms (40001 pts)
1 N 1 f 3.661 525 GHz -53.672 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
900.000000 MHz
Auto
Man
Freq Offset
0 Hz
Agilent Spectrum Analyzer - Swept SA
Marker 1 24.944125000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
12:24:38 PM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr1 24.944 125 GHz
-57.392 dBm
-16.51 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.435 s (40001 pts)
1 N 1 f 24.944 125 GHz -57.392 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

8DPSK_HCH_Graphs		
Puw		


Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
12:27:14 PM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr2 9.919 225 GHz
-57.002 dBm
-17.10 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 861.3 ms (40001 pts)
1 N 1 f 3.720 025 GHz -53.941 dBm
2 N 1 f 9.919 225 GHz -57.002 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
900.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Marker 1 24.987625000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
12:27:55 PM Nov 29, 2016
Ref Offset 1.5 dB
10 dB/div
Ref 11.50 dBm
Mkr1 24.987 625 GHz
-57.217 dBm
-17.10 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.435 s (40001 pts)
1 N 1 f 24.987 625 GHz -57.217 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS