APPLICATION FOR CERTIFICATION

On Behalf of

Elitegroup Computer Systems Co., Ltd.

7" Pocketable Pad

Models No.: (1)MICA-07…… (2)TABLET TB71……

FCC ID: WL6TB71A-W

Brand: (1)ADVANTECH (2)ECS

Prepared for : Elitegroup Computer Systems Co., Ltd.
No. 239, Sec. 2, Ti Ding Blvd.,
Taipei, Taiwan

Prepared By : AUDIX Technology Corporation
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File Number	:	C1S1404136
Report Number	:	EM-WL6TB71A-W
Date of Test	:	2014. 05. 05~ 19
Date of Report	:	2014. 05. 23

TABLE OF CONTENTS

TEST REPORT CERTIFICATION

Applicant	:	Elitegroup Computer Systems Co., Ltd.
Manufacturer	:	Elitegroup Computer Systems Co., Ltd.
EUT Description	:	7" Pocketable Pad
FCC ID	**:**	**F140298**
(A) Model No.	:	(1)MICA-07…… (2)TABLET TB71……
(B) Serial No.	:	N/A
(C) Brand	:	(1)ADVANTECH (2)ECS
(D) Power Supply	:	DC 3.7V (Battery) or DC 5V (USB)
(E) Test Voltage	:	AC 120V, 60Hz (Via Docking Power Adapter)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C, Oct 2013
(FCC CFR 47 Part 15C, §15.205, §15.207, §15.209 and §15.247)
ANSI C63.4/2003
FCC Public Notice DA 00-705, Mar. 2000

The device described above was tested by AUDIX Technology Corporation to determine the maximum emission levels emanating from the device. The maximum emission levels were compared to the FCC Part 15 Subpart C limits.

The measurement results are contained in this test report and AUDIX Technology Corporation is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the FCC Part 15 standard.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX Technology Corporation.

Date of Test : 2014. 05. 02~ 13 Date of Report : 2014. 05. 23

Producer : Tina Huang
(Tina Huang/Administrator)

Signatory : Ben Cheng
(Ben Cheng/Manager)

1. DESCRIPTION OF REVISION HISTORY

Edition No.	Date of Revision	Revision Summary	Report Number
0	2014. 05. 23	Original Report.	EM-F140298

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

Product	7" Pocketable Pad
Model Number	(1)MICA-07…… (2)TABLET TB71…… (The "." in the model name can be 0 to 9, A to Z, a to z, "-", "_", "\", "/" or blank, for marketing use only.) Above two models difference in brand and model name, others are the same. The model TABLET TB71A-W is test in this report
Serial Number	N/A
Brand Name	(1)ADVANTECH (2)ECS
Applicant	Elitegroup Computer Systems Co., Ltd. No. 239, Sec. 2, Ti Ding Blvd., Taipei, Taiwan
Manufacturer	Elitegroup Computer Systems Co., Ltd. No. 239, Sec. 2, Ti Ding Blvd., Taipei, Taiwan
FCC ID	WL6TB71A-W
Fundamental Range	802.11b/g/n-HT20: 2412MHz ~ 2462MHz 802.11a: 5180MHz ~ 5240MHz (UNII Band I) and 5260MHz ~ 5320MHz (UNII Band II-2A) and 5500MHz ~ 5700MHz (UNII Band II-2C) and 5745MHz ~ 5825MHz (UNII Band III) UNII Band II (DFS Function, Slave/no In service monitor, no Ad-Hoc mode) 802.11n-HT20: 2412MHz ~ 2462MHz and 5180MHz ~ 5240MHz (UNII Band I) and 5260MHz ~ 5320MHz (UNII Band II-2A) and 5500MHz ~ 5700MHz (UNII Band II-2C) and 5745MHz ~ 5825MHz (UNII Band III) UNII Band II (DFS Function, Slave/no In service monitor, no Ad-Hoc mode) 802.11n-HT40: 5190MHz ~ 5230MHz (UNII Band I) and 5270MHz ~ 5310MHz (UNII Band II-2A) and 5510MHz ~ 5670MHz (UNII Band II-2C) and 5755MHz ~ 5795MHz (UNII Band III) UNII Band II (DFS Function, Slave/no In service monitor, no Ad-Hoc mode) Bluetooth and BLE: 2402MHz ~ 2480MHz NFC: 13.56MHz GPS: 1575.42MHz

Frequency Channel	802.11b/g: 11 channels 802.11a: UNII Band I: 4 channels UNII Band II-2A: 4 channels UNII Band II-2C: 8 channels UNII Band III: 5 channels 802.11n-HT20: 2.4GHz: 11 channels 2.4G UNI Band I: 4channels UNII Band II-2A: 4 channels UNII Band II-2C: 8 channels UNII Band III: 5 channels 802.11n-HT40: UNII Band I: 2 channels UNII Band II-2A: 2 channels UNII Band II-2C: 3 channels UNII Band III: 2 channels Bluetooth: 79 channels BLE: 40 channels NFC: 1 Channel
Radio Technology	802.11b: DSSS Modulation (DBPSK/DQPSK/CCK) 802.11g: OFDM Modulation (BPSK/QPSK/16QAM/64QAM) 802.11a: OFDM Modulation (BPSK/QPSK/16QAM/64QAM) 802.11n: OFDM Modulation (MIMO) (BPSK/QPSK/16QAM/64QAM) Bluetooth: FHSS (GFSK,π/4DQPSK, 8-DPSK) BLE: GFSK NFC: ASK
Data Transfer Rate	802.11b: 1/2/5.5/11Mbps 802.11a/g: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 270Mbps BT: 1/2/3Mbps BLE: 1Mbps
Date of Receipt of Sample	2014. 04. 21
Note: This EUT has 2.4GHz (WLAN, Bluetooth and BLE), 5GHz and NFC function. See below for related test reports based on radio functionality. 1. The 2.4GHz (WLAN and BLE) function has been test in other report of EM-F140296. 2. The 5GHz function has been test in other report of EM-F140297. 3. The Bluetooth function has been test in other report of EM-F140298. 4. The DFS function has been test in other report of EM-F140303. 5. The NFC function has been test in other report of EM-F140299.	

2.2. Antenna Information

Antenna Part Number	Manufacture	Antenna Type	Peak Gain W/ Cable loss (dBi)			
			Frequency (MHz)		Max Gain (Peak) (dBi)	
WLAN/BT Antenna: E22-003-007-037 -8014b (Main)	INNETECH (Tianjin) Electronics Co. Ltd.	PCB Antenna	2400	5180	1.33	-1.53
			2412	5190	1.92	-1.53
			2417	5310	2.07	0.66
			2422	5320	2.19	0.05
			2427	5500	2.44	-0.19
			2432	5510	2.59	-0.41
			2437	5670	2.78	-1.57
			2442	5700	2.83	-3.16
			2447	5745	2.87	-3.55
			2450	5765	2.78	-2.70
			2452	5785	2.76	-2.93
			2457	5805	2.68	-3.46
			2462	5825	2.47	-3.15
			2467		2.38	
			2472		2.52	
			2500		2.17	
WLAN Antenna: E22-003-007-037 -8014b (AUX)	INNETECH (Tianjin) Electronics Co. Ltd.	PCB Antenna	2400	5180	3.08	0.61
			2412	5190	3.43	0.39
			2417	5310	3.10	0.91
			2422	5320	3.07	0.14
			2427	5500	2.78	-0.35
			2432	5510	2.68	-0.40
			2437	5670	2.63	-0.62
			2442	5700	2.49	-1.25
			2447	5745	2.68	-1.02
			2450	5765	2.60	0.06
			2452	5785	2.77	-0.30
			2457	5805	2.75	-0.23
			2462	5825	2.82	-0.09
			2467		2.77	
			2472		2.68	
			2500		2.58	
GPS Antenna	INNETECH (Tianjin) Electronics Co. Ltd.	PCB Antenna	1565		-3.38	
			1575		-2.87	
			1585		-3.25	
			1597		-2.42	
			1602		-2.22	
			1606		-1.98	
			1616		-1.37	

2.3. Description of Key Component Lists

Item		Supplier	Description	Character
System		Microsoft	Windows 8	---
Main Board		ECS	TB71A-W	
LCD Module		CPTF	CLAT070WP0D	7 inch CPT 800x1280 -10 point touch
CPU		Intel	Intel® Atom™ Processor Bay Trail	T Z3770, 1.46GHz Burst frequency 2.39GHz (Intel, BGA1380 pin)
GPU		Intel	---	HD Graphics
Memory		Hynix	H9CCNNN8KTMLBR-NTM	LP DDR3 2GB (up to 4G**)**
SSD		Sandisk	SDIN8DE4-32G	eMMC 32GB
Battery Pack		Sunwoda	MICA-071	3.7V / 4100 mAh /15.17Wh
Front Camera		LiteON	NL89A141	sensor Sony IMX175 .8MP
Rear Camera		LiteON	13P2SF206	sensor OV2722, 2MP
Barcode Scaner		Itermec	ED30	Decode Board + EA31 Imager
Touch Pad		CPTF	CLAA070WP03	--
WLAN+BT Combo Module		MITSUMI	DWM-W095A	WLAN: 2.412GHz to 2.472GHz 5.18GHz to 5.85GHz BT4.0+BLE: 2.402GHz to 2.480GHz
NFC		NXP	PN544PC	13.56MHz
GNSS		MITSUMI	SPG-SF102	GPS: 1575.42MHz GLONASS: 1598.0625 to 1605.375 MHz
WLAN/ BT Antenna	Main	INNETECH ELECTRONICS	e22-003-007-037-8014b	Laser Direct Structuring (LDS) Antenna on frame
	AUX	INNETECH ELECTRONICS	e22-003-007-037-8014b	Laser Direct Structuring (LDS) Antenna on frame
Stylus Pen		FO	BLACK/#8513.	CAPACITIVE TOUCH PEN
USB Charger		Chicony	W12-010N3A	I/P: 100-240V~, 50-60Hz, 0.3A O/P: 5V, 2A
Docking		AdvanTech	MICA-071-DCRE	DC 5V
		ECS	DOCKING TB71A-W	DC 5V
Docking Power Adapter		Asian	WA-20A05FU	I/P: 100-240V~, 0.6A, 50-60Hz O/P: 5V, 4A
		Power Cord: Non-Shielded, Undetached, 1.8m, Bonded a ferrite core		
USB Charge Docking Cable		Shielded, Detachable, 1.2m		
HDMI Docking Cable		Shielded, Detachable, 0.17m		
USB3.0 Docking Cable		Shielded, Detachable, 0.23m		

Remark: For a more detailed features description, please refer to the manufacturer's specifications or the user manual.

2.4. Tested Supporting System Details

2.4.1. Support Peripheral Unit

No.	Product	Brand	Model No.	Serial No.	FCC ID
1.	LCD Monitor	PHILIPS	273P3L	AU5A1222002498	FCC DoC Approved
2.	USB Keyboard	LENOVO	SK-8825	0056462	FCC DoC Approved
3.	USB Mouse	LENOVO	M-U0025-0	N/A	FCC DoC Approved
4.	USB 3.0 Hard Drive	BUFFALO	HD-HX1.0TU3-AP	15564891205965	FCC DoC Approved
5.	I-POD Earphone	APPLE	N/A	N/A	N/A
6.	Power Socket	AUDIX	N/A	N/A	N/A
7.	Micro SD Card	Kingston	NSDC4/8GB	N/A	N/A

2.4.2. Cable Lists

No.	Signal Cable Description Of The Above Support Units
1.	HDMI Cable: Shielded, Detachable, 1.8m
2.	USB Cable: Shielded, Detachable, 1.8m
3.	USB Cable: Shielded, Detachable, 1.8m
4.	USB Cable: Shielded, Detachable, 1.0m
5.	Earphone Cable: Non-Shielded, Detachable, 0.9m
6.	N/A
7.	N/A

Note：1. Support Unit 1 & 6: Power Cord: Non-Shielded, Detachable, 1.8m
2. Support Unit 4 AC Adapter: BUFFALO, M/N: WA-18H12, S/N: 219019279;
Cord: Non-Shielded, Undetachable, 1.5m

2.5. Description of Test Facility

Name of Firm	:	**AUDIX Technology Corporation** **EMC Department** No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan, R.O.C.
Test Location & Facility (C5/Semi-AC)	:	**No. 5 Shielded Room** No. 67-4, Dingfu, Linkou Dist., New Taipei City 244, Taiwan, R.O.C. **Semi-Anechoic Chamber** No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan, R.O.C. May 11, 2012 Renewal on Federal Communication Commission Registration Number: 90993
NVLAP Lab. Code	:	200077-0
TAF Accreditation No	:	1724

2.6. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty
Conduction Test	150kHz~30MHz	±3.43dB
Radiation Test (Distance: 3m)	30MHz~300MHz	±2.91dB
	300MHz~1000MHz	±2.94dB
	Above 1GHz	± 5.02dB

Remark **:** Uncertainty = $ku_c(y)$

Test Item	Uncertainty
20dB Bandwidth	± 0.2kHz
Carrier Frequency Separation	± 0.2kHz
Time Of Occupancy	± 0.03sec
Maximum peak Output power	± 0.52dBm
Emission Limitations	± 0.13dB
Band Edges	± 0.13dB

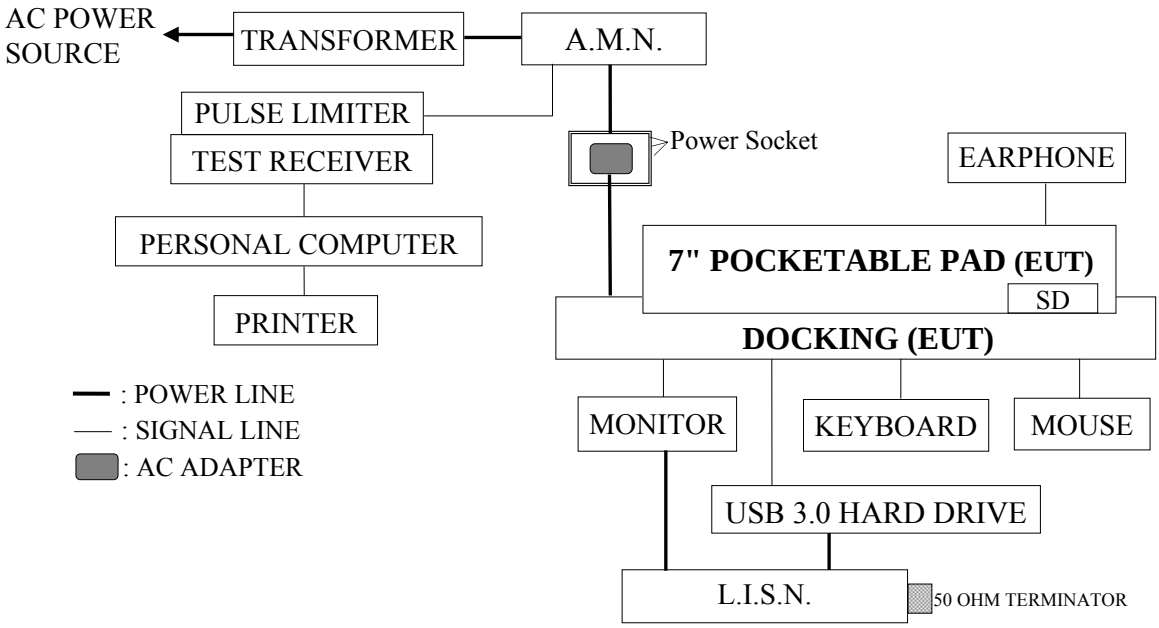
3. POWERLINE CONDUCTED EMISSION MEASUREMENT

3.1. Test Equipment

The following test equipment was used during the powerline conducted emission measurement: (No. 5 Shielded Room)

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Due Date
1.	Test Receiver	R&S	ESCS30	100039	2014. 06. 18
2.	A.M.N.	R&S	ENV4200	100003	2014. 05. 30
3.	L.I.S.N.	Kyoritsu	KNW-407	8-1539-2	2015. 01. 07
4.	Pulse Limiter	R&S	ESH3-Z2	100355	2015. 01. 17

3.2. Block Diagram of Test Setup



3.3. Powerline Conducted Emission Limit (§15.207)

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level	Average Level
150kHz ~ 500kHz	66 ~ 56 dBμV	56 ~ 46 dBμV
500kHz ~ 5MHz	56 dBμV	46 dBμV
5MHz ~ 30MHz	60 dBμV	50 dBμV

Remark1.: If the average limit is met when using a Quasi-Peak detector, the EUT shall be deemed to meet both limits and measurement with the average detector is unnecessary.

2.: The lower limit applies at the band edges.

3.4. Operating Condition of EUT

3.4.1. Setup the EUT and simulator as shown on 3.2.

3.4.2. Turn on the power of all equipment.

3.4.3. Set to EUT (7" Pocketable Pad) on transmitting and receiving during all testing.

3.5. Test Procedure

The EUT link to docking power adapter through docking was placed on the table which was above the ground by 80cm and adapter's power cord connected to the AC mains through an Artificial Mains Network (A.M.N.). This provided a 50 ohm coupling impedance for the measuring equipment. (Please refer to the block diagram of the test setup and photographs.)
Both sides of A.C. line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions simulators of the interface cables should be manipulated according to FCC ANSI C63.4-2003 during conducted measurement.

The bandwidth of the R & S Test Receiver ESCS30 was set at 9kHz.

The frequency range from 150kHz to 30MHz was checked.

All the final readings from Test Receiver were measured with the Quasi-Peak detector and Average detector. (Remark: If the Average limit is met when using a Quasi-Peak detector, the Average detector is unnecessary)

3.6. Powerline Conducted Emission Measurement Results

PASSED. All emissions not reported below are too low against the prescribed limits.

EUT was performed during this section testing and all the test results are attached in next pages.

EUT：7" Pocketable Pad M/N：TABLET TB71A-W

Test Date：2014. 05. 05 Temperature：22℃ Humidity：52%

The details are as follows：

Mode	Reference Test Data	
	Neutral	Line
1.	# 2	# 1

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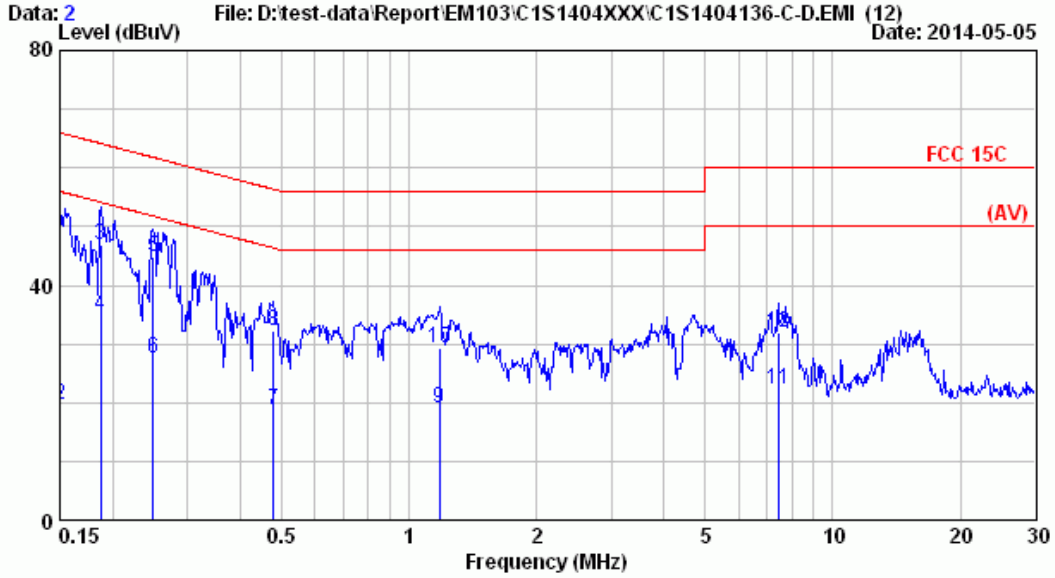

Site : No.5 Shielded Room Data : 2
Condition : ENV 4200 Phase : NEUTRAL
Limit : FCC 15C
Env. / Ins. : 22*C / 52% ESCS 30 (039) Engineer: Gary-Tsai
EUT : TB71A-W
Power Rating : 120Vac / 60Hz
Test Mode : Operating

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.150	10.10	0.20	33.47	43.77	66.00	22.23	QP
2	0.150	10.10	0.20	9.39	19.69	56.00	36.31	AVERAGE
3	0.187	10.05	0.20	36.61	46.86	64.15	17.29	QP
4	0.187	10.05	0.20	24.76	35.01	54.15	19.14	AVERAGE
5	0.249	9.98	0.20	34.78	44.96	61.78	16.81	QP
6	0.249	9.98	0.20	17.32	27.51	51.78	24.27	AVERAGE
7	0.479	9.88	0.20	8.53	18.62	46.36	27.75	AVERAGE
8	0.479	9.88	0.20	22.28	32.37	56.36	24.00	QP
9	1.178	9.80	0.40	8.76	18.96	46.00	27.04	AVERAGE
10	1.178	9.80	0.40	19.10	29.30	56.00	26.70	QP
11	7.446	9.91	0.60	11.74	22.25	50.00	27.75	AVERAGE
12	7.446	9.91	0.60	21.30	31.81	60.00	28.19	QP

Remarks: 1.Emission Level= AMN Factor + Cable Loss + Reading.
2.If the average limit is met when using a quasi-peak detector ,the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

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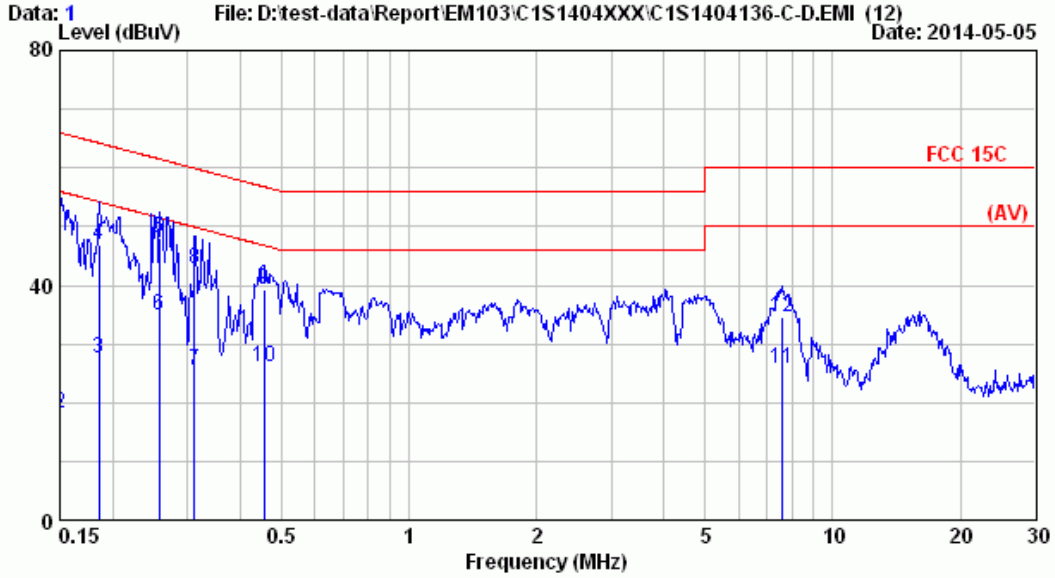


Site : No.5 Shielded Room Data : 1
Condition : ENV 4200 Phase : LINE
Limit : FCC 15C
Env. / Ins. : 22*C / 52% ESCS 30 (039) Engineer: Gary-Tsai
EUT : TB71A-W
Power Rating : 120Vac / 60Hz
Test Mode : Operating

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.150	10.10	0.20	34.58	44.88	66.00	21.12	QP
2	0.150	10.10	0.20	7.99	18.29	56.00	37.71	AVERAGE
3	0.185	10.05	0.20	17.32	27.57	54.24	26.67	AVERAGE
4	0.185	10.05	0.20	36.49	46.74	64.24	17.50	QP
5	0.258	9.97	0.20	37.84	48.01	61.51	13.50	QP
6	0.258	9.97	0.20	24.68	34.85	51.51	16.66	AVERAGE
7	0.312	9.95	0.20	15.45	25.60	49.93	24.33	AVERAGE
8	0.312	9.95	0.20	32.77	42.92	59.93	17.01	QP
9	0.454	9.89	0.20	29.09	39.18	56.80	17.62	QP
10	0.454	9.89	0.20	16.11	26.20	46.80	20.60	AVERAGE
11	7.566	9.86	0.60	15.26	25.72	50.00	24.28	AVERAGE
12	7.566	9.86	0.60	24.11	34.57	60.00	25.43	QP

Remarks: 1.Emission Level= AMN Factor + Cable Loss + Reading.
2.If the average limit is met when using a quasi-peak detector ,the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

4. RADIATED EMISSION MEASUREMENT

4.1. Test Equipment

The following test equipment was used during the radiated emission measurement:

4.1.1. For Frequency Range 30MHz~1000MHz (at Semi-Anechoic Chamber)

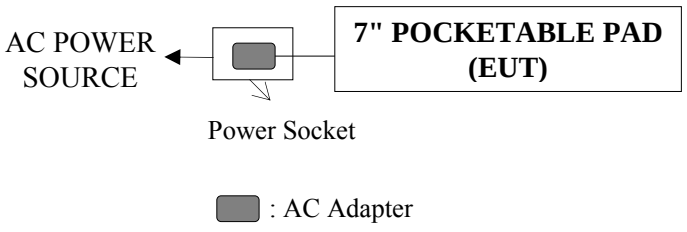
Item	Type	Manufacturer	Model No.	Serial No.	Cal. Due Date
1.	Spectrum Analyzer	Agilent	N9030A-544	US51350140	2014. 07. 29
2.	Test Receiver	R & S	ESCS30	100338	2014. 06. 30
3.	Amplifier	HP	8447D	2944A06305	2015. 02. 17
4.	Bilog Antenna	TESEQ	CBL6112D	33821	2014. 08. 07

4.1.2. For Frequency Above 1GHz (at Semi-Anechoic Chamber)

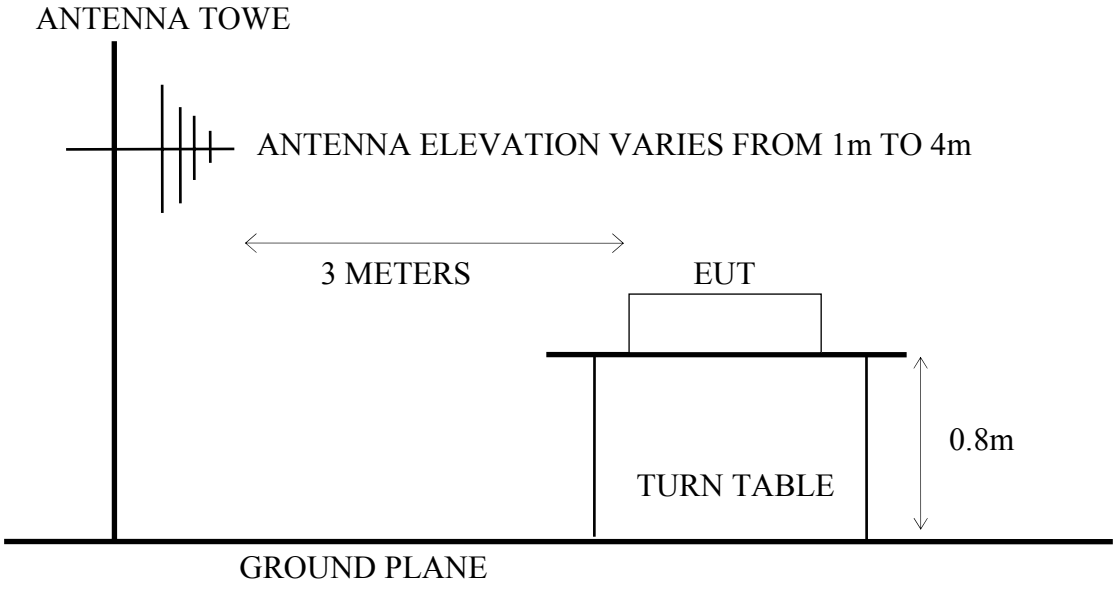
Item	Type	Manufacturer	Model No.	Serial No.	Cal. Due Date
1.	Spectrum Analyzer	Agilent	N9030A-544	US51350140	2014. 07. 29
2.	Test Receiver	R & S	ESCS30	100338	2014. 06. 30
3.	Pre-Amplifier	HP	8449B	3008A00529	2015. 01. 23
4.	2.4GHz Notch Filter	K&L	7NSL10-2441.5E 130.5-00	1	2014. 06. 12
5.	3G High Pass Filter	Microware Circuits	H3G018G1	484796	2014. 06. 12
6.	Horn Antenna	EMCO	3115	9609-4927	2014. 06. 16
7.	Horn Antenna	EMCO	3116	2653	2014. 10. 10

4.2. Block Diagram of Test Setup

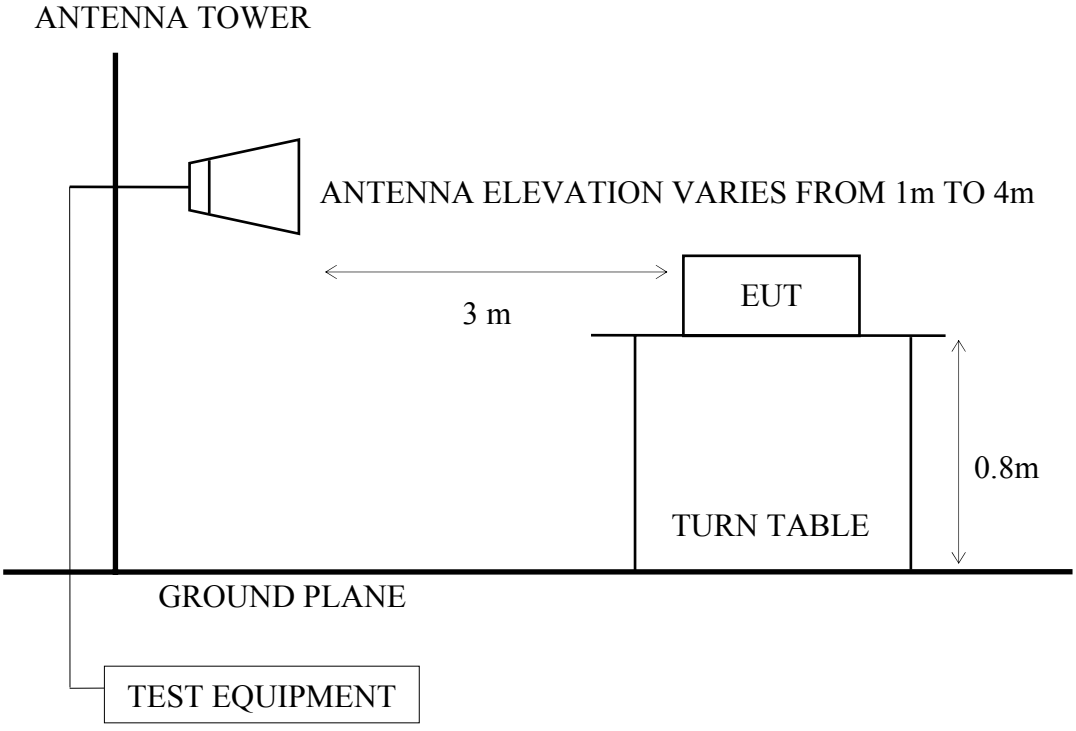
4.2.1. Block Diagram of connection between EUT and simulators



4.2.2. Semi-Anechoic Chamber (3m) Setup Diagram for 30-1000MHz



4.2.3. Semi-Anechoic Chamber (3m) Setup Diagram for above 1GHz



4.3. Radiated Emission Limits (§15.209)

Frequency MHz	Distance Meters	Field Strengths Limits	
		μV/m	dBμV/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
Above 960	3	500	54.0
Above 1000	3	74.0 dBμV/m (Peak) 54.0 dBμV/m (Average)	

Remark： (1) Emission level (dBμV/m) = 20 log Emission level (μV/m)
(2) The tighter limit applies at the edge between two frequency bands.
(3) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
(4) The limits in this table are based on CFR 47 Part 15.205(a)(b) and Part 15.209 (a).
(5) The over 1GHz limit, FCC limit is used based on CFR 47 Part 15.35 (b) and Part 15.205(b) & Part 15.209(e) and Part 15.207(c).

4.4. Operating Condition of EUT

4.4.1. Set up the EUT (7" Pocketable Pad) and simulator as shown on 4.2.1.

4.4.2. To turn on the power of all equipments.

4.4.3. The EUT was set the Notebook PC using test program “Blue Tool”.

4.4.4. The EUT set to continuously transmit signals at 2402MHz, 2441MHz and 2480MHz during all test time.

4.5. Test Procedure

The EUT and its simulators were placed on a turn table which was 0.8 meter above the ground. The turn table rotated 360 degrees to determine the position of the maximum emission level. EUT was set 3 meters away from the receiving antenna which was mounted on an antenna tower. The antenna moved up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna such as calibrated biconical and log-periodical antenna or horn antenna were used as a receiving antenna. Both horizontal and vertical polarization of the antenna were set on measurement. In order to find the maximum emission, all of the interface cables were manipulated according to FCC ANSI C63.4-2003 regulation, and the measurement guideline was according to FCC Public Notice DA 00-705.

The bandwidth of the R&S Test Receiver was set at 120kHz. (For 30MHz to 1000MHz)

The resolution bandwidth and video bandwidth of test spectrum analyzer is 1MHz for peak detection (PK) at frequency above 1GHz.

The resolution bandwidth of test spectrum analyzer is 1MHz and the video bandwidth is 10Hz for average detection (AV) at frequency above 1GHz.

The frequency range from 30MHz to 25GHz (Up to 10^{th} harmonics from fundamental frequency) was checked. 30MHz to 1000MHz was measured with Quasi-Peak detector.

Above 1GHz was measured with peak and average detector. For frequency from 1GHz to 40GHz, we checked it in 1 meter distance and with a shorter cable 2 meter instead of original's. There is no signal exist.

Pursuant to ANSI C63.4 8.3.1.2, when peak value complies with the average limit, we didn't perform measurement in average detector.

4.6. Radiated Emission Measurement Results

PASSED. (All the emissions not reported below are too low against the prescribed limits.)

EUT：7" Pocketable Pad M/N：TABLET TB71A-W

Test Date：2014. 05. 13 Temperature：26℃ Humidity：43%

For Frequency Range 30MHz-1000MHz:

[Note: We performed testing of the highest data rate.]

The EUT emitted the fundamental frequency with data code at the stand, side and lying conditions.

The EUT select **worst position "lying"** and link AC adapter and with following test modes was performed during this section testing and all the test results are listed in section 4.6.1.

No.	Test Mode and Frequency		Reference Test Data No.	
			Horizontal	Vertical
1.	Transmitting	2402MHz (CH0)	# 2	# 1
2.		2441MHz (CH39)	# 2	# 1
3.		2480MHz (CH78)	# 2	# 1

Type of modulation: 8-DPSK.
All above final readings were measured with Quasi-Peak detector.

For Frequency Range above 1GHz:

The emissions (up to 25GHz) not reported are too low to be measured.

For Restricted Bands:

The EUT select **worst position "lying"** land ink AC adapter and with following test modes was performed during this section testing and all the test results are listed in section 4.6.2. (The restricted bands defined in part 15.205(a))

No.	Type of modulation	Test Mode and Frequency		Reference Test Data No.	
				Horizontal	Vertical
1.	8-DPSK	Transmitting	2402MHz (CH0)	# 3, # 4	# 1, # 2
2.			2480MHz (CH78)	# 7, # 8	# 5, # 6
3.	GFSK	Transmitting	2402MHz (CH0)	# 3, # 4	# 1, # 2
4.			2480MHz (CH78)	# 7, # 8	# 5, # 6

4.6.1. Frequency Range 30MHz-1000MHz Measurement Result

Transmit, Frequency: 2402MHz (8-DPSK)

Site no. : Audix NO.1 Chamber Data no. : 2
Dis. / Ant. : 3m CBL6112D 33821 Ant. pol. : HORIZONTAL
Limit : 30M-1G
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : TX2402

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
	59.10	7.23	1.60	14.20	23.03	40.00	16.97	QP
	580.96	18.81	6.30	0.95	26.06	46.00	19.94	QP
	871.96	21.38	7.20	-1.45	27.13	46.00	18.87	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

Site no. : Audix NO.1 Chamber Data no. : 1
Dis. / Ant. : 3m CBL6112D 33821 Ant. pol. : VERTICAL
Limit : 30M-1G
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : TX2402

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	98.87	11.11	2.10	8.85	22.06	43.50	21.44	QP
2	493.66	17.71	6.40	-0.48	23.63	46.00	22.37	QP
3	903.00	21.63	7.40	-2.10	26.93	46.00	19.07	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

Transmit, Frequency: 2441MHz (8-DPSK)

Site no. : Audix NO.1 Chamber Data no. : 2
Dis. / Ant. : 3m CBL6112D 33821 Ant. pol. : HORIZONTAL
Limit : 30M-1G
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : TX2441

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
	107.60	12.02	0.00	9.47	21.49	43.50	22.01	QP
	580.96	18.81	0.00	7.47	26.28	46.00	19.72	QP
3	834.13	21.01	0.00	5.67	26.68	46.00	19.32	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

Site no. : Audix NO.1 Chamber Data no. : 1
Dis. / Ant. : 3m CBL6112D 33821 Ant. pol. : VERTICAL
Limit : 30M-1G
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : TX2441

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	60.07	7.00	0.00	16.23	23.23	40.00	16.77	QP
2	580.96	18.81	0.00	5.25	24.06	46.00	21.94	QP
3	816.67	20.80	0.00	5.49	26.29	46.00	19.71	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

Transmit, Frequency: 2480MHz (8-DPSK)

Site no. : Audix NO.1 Chamber Data no. : 2
Dis. / Ant. : 3m CBL6112D 33821 Ant. pol. : HORIZONTAL
Limit : 30M-1G
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : TX2480

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
	97.90	10.92	2.10	8.85	21.87	43.50	21.63	
	576.11	18.76	6.40	1.83	26.99	46.00	19.01	
v	845.77	21.15	7.10	-2.80	25.45	46.00	20.55	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

Site no. : Audix NO.1 Chamber Data no. : 1
Dis. / Ant. : 3m CBL6112D 33821 Ant. pol. : VERTICAL
Limit : 30M-1G
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : TX2480

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	60.07	7.00	1.60	13.91	22.51	40.00	17.49	
2	580.96	18.81	6.30	0.30	25.41	46.00	20.59	
3	850.62	21.21	7.10	-2.07	26.24	46.00	19.76	

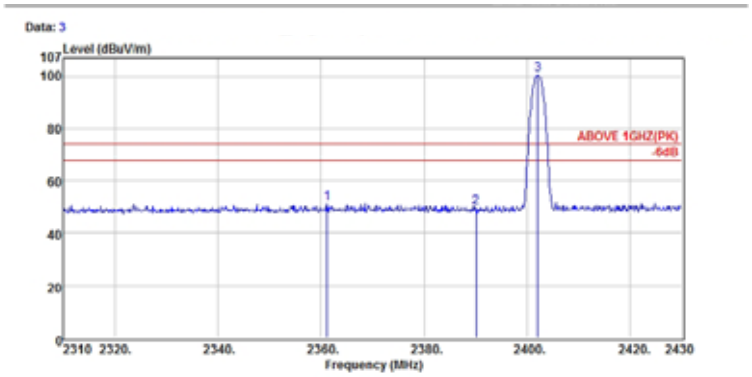
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

4.6.2. Restricted Bands Measurement Results

Date of Test： 2014. 05. 13 Temperature： 26℃

EUT： 7" Pocketable Pad Humidity： 43%

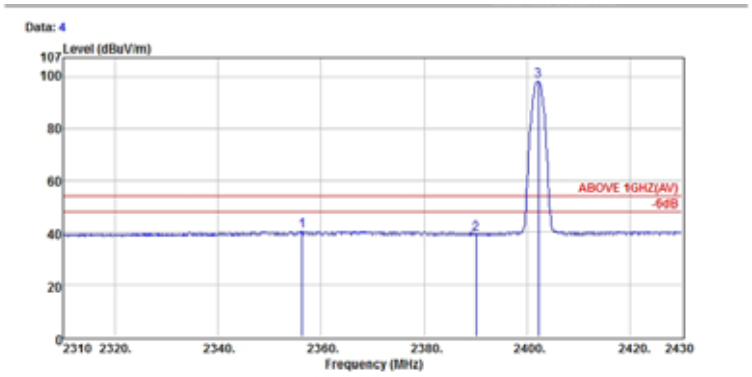
Test Mode： Transmit, Channel: 0, Frequency: 2402MHz, 8-DPSK



Site no. : Audix NO.1 Chamber Data no. : 3
Dis. / Ant. : 3m 3115(4927) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band 8DPSK

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2361.24	28.40	6.30	16.51	51.21	74.00	22.79	Peak
2	2390.04	28.47	6.34	14.92	49.73	74.00	24.27	Peak
3	2402.04	28.47	6.36	65.66	100.49	74.00	-26.49	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

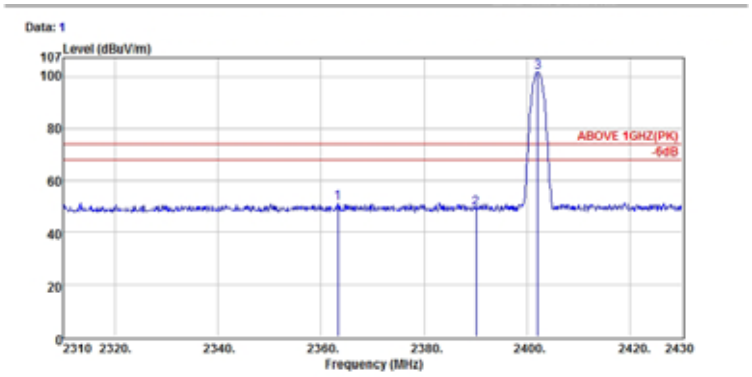


Site no. : Audix NO.1 Chamber Data no. : 4
Dis. / Ant. : 3m 3115(4927) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band 8DPSK

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2356.32	28.40	6.29	5.74	40.43	54.00	13.57	Average
2	2390.04	28.47	6.34	4.64	39.45	54.00	14.55	Average
3	2402.16	28.47	6.36	63.25	98.08	54.00	-44.08	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

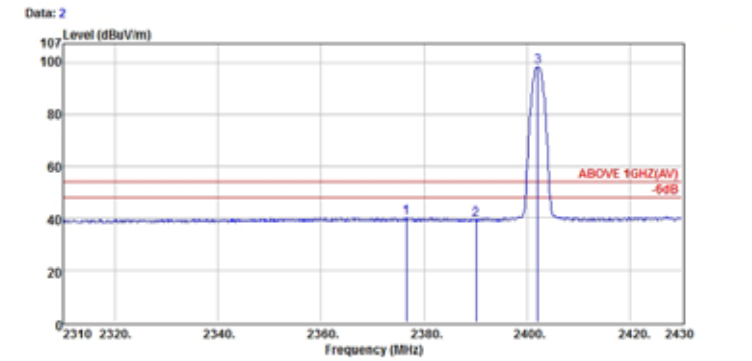
Date of Test：	2014. 05. 13	Temperature：	26℃
EUT：	7" Pocketable Pad	Humidity：	43%
Test Mode：	Transmit, Channel: 0, Frequency: 2402MHz, 8-DPSK		



Site no. : Audix NO.1 Chamber Data no. : 1
Dis. / Ant. : 3m 3115(4927) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band 8DPSK

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2363.28	28.40	6.30	16.50	51.20	74.00	22.80	Peak
2	2390.04	28.47	6.34	14.37	49.18	74.00	24.82	Peak
3	2402.04	28.47	6.36	66.65	101.48	74.00	-27.48	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : Audix NO.1 Chamber Data no. : 2
Dis. / Ant. : 3m 3115(4927) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band 8DPSK

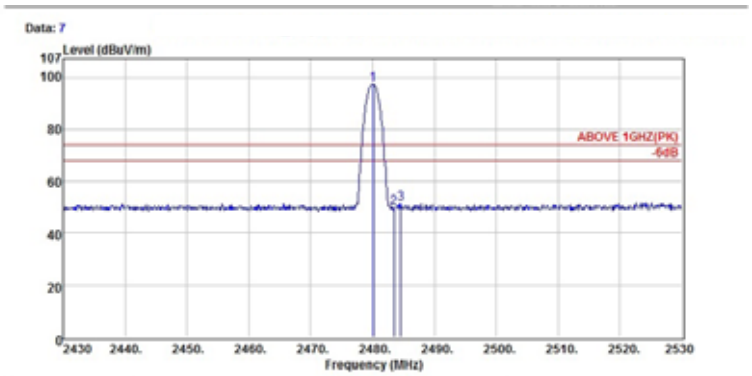
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2376.60	28.43	6.32	5.30	40.05	54.00	13.95	Average
2	2390.04	28.47	6.34	4.76	39.57	54.00	14.43	Average
3	2402.04	28.47	6.36	83.56	98.39	54.00	-44.39	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

Date of Test： 2014. 05. 13 Temperature： 26℃

EUT： 7" Pocketable Pad Humidity： 43%

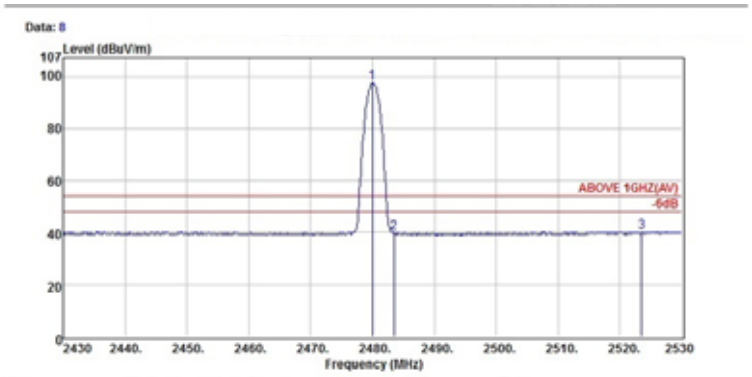
Test Mode： Transmit, Channel: 78, Frequency: 2480MHz, 8-DPSK



Site no. : Audix NO.1 Chamber Data no. : 7
Dis. / Ant. : 3m 3115(4927) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band 8DPSK

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2480.10	28.66	6.44	62.11	97.38	74.00	-23.21	Peak
2	2483.50	28.66	6.45	14.45	49.56	74.00	24.44	Peak
3	2484.80	28.66	6.45	16.22	51.33	74.00	22.67	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

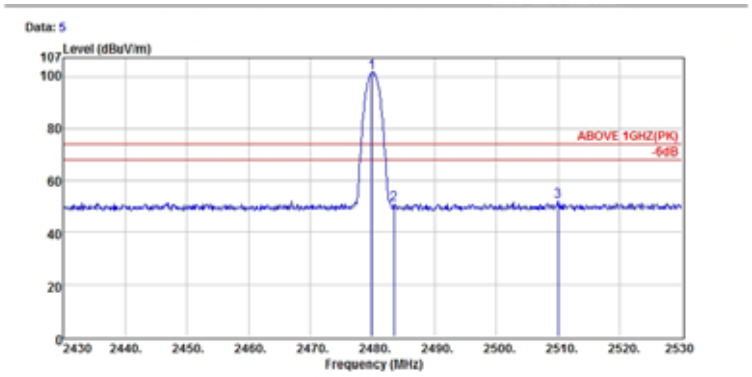


Site no. : Audix NO.1 Chamber Data no. : 8
Dis. / Ant. : 3m 3115(4927) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band 8DPSK

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2480.00	28.66	6.44	62.28	97.21	54.00	-43.38	Average
2	2483.50	28.66	6.45	4.72	39.83	54.00	14.17	Average
3	2523.50	28.81	6.50	4.82	40.13	54.00	13.87	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

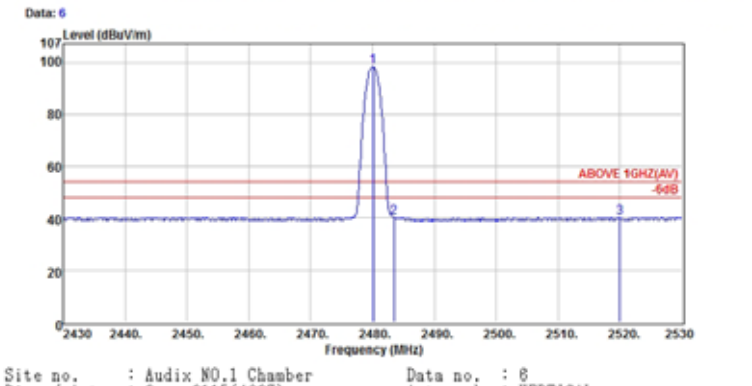
Date of Test：	2014. 05. 13	Temperature：	26℃
EUT：	7" Pocketable Pad	Humidity：	43%
Test Mode：	Transmit, Channel: 78, Frequency: 2480MHz, 8-DPSK		



Site no. : Audix NO.1 Chamber Data no. : 5
Dis. / Ant. : 3m 3115(4927) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band 8DPSK

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2479.80	28.66	6.44	66.34	101.44	74.00	-27.44	Peak
2	2483.50	28.66	6.45	15.87	50.98	74.00	23.02	Peak
3	2510.00	28.76	6.48	16.78	52.02	74.00	21.98	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : Audix NO.1 Chamber Data no. : 6
Dis. / Ant. : 3m 3115(4927) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band 8DPSK

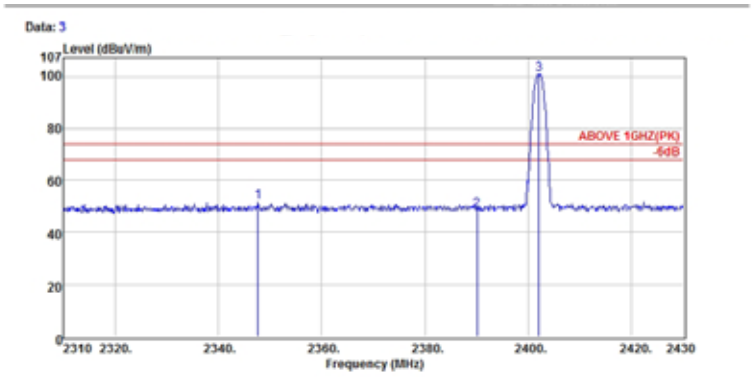
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2480.10	28.66	6.44	63.05	98.15	54.00	-44.15	Average
2	2483.50	28.66	6.45	5.01	40.12	54.00	13.88	Average
3	2520.00	28.76	6.50	5.09	40.35	54.00	13.65	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

Date of Test： 2014. 05. 13 Temperature： 26℃

EUT： 7" Pocketable Pad Humidity： 43%

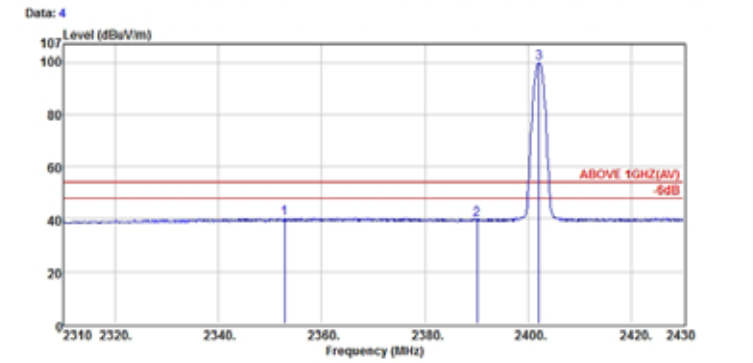
Test Mode： Transmit, Channel: 0, Frequency: 2402MHz, GFSK



Site no. : Audix NO.1 Chamber Data no. : 3
Dis. / Ant. : 3m 3115(4927) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band GFSK

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2347.68	28.36	6.29	16.84	51.59	74.00	22.41	Peak
2	2390.04	28.47	6.34	13.91	48.72	74.00	25.28	Peak
3	2402.04	28.47	6.36	65.87	100.70	74.00	-28.70	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : Audix NO.1 Chamber Data no. : 4
Dis. / Ant. : 3m 3115(4927) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band GFSK

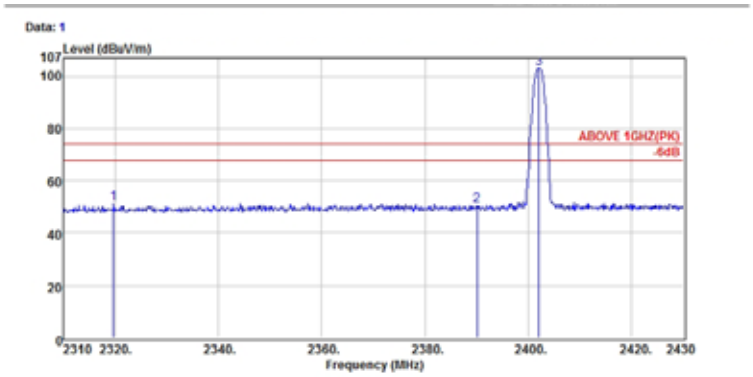
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2352.84	28.40	6.29	5.40	40.09	54.00	13.91	Average
2	2390.04	28.47	6.34	4.84	39.65	54.00	14.35	Average
3	2402.04	28.47	6.36	65.03	99.86	54.00	-45.86	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

Date of Test： 2014. 05. 13 Temperature： 26℃

EUT： 7" Pocketable Pad Humidity： 43%

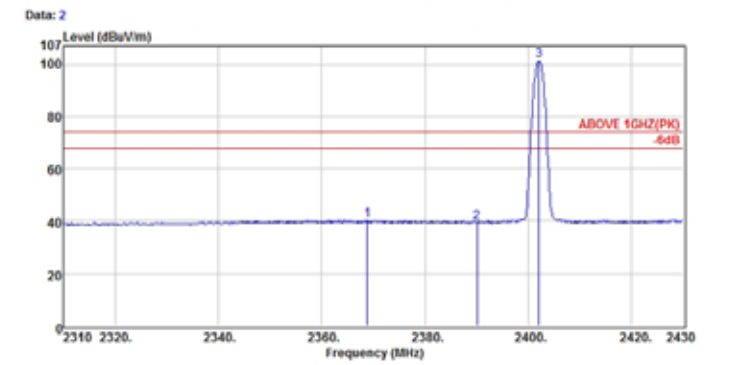
Test Mode： Transmit, Channel: 0, Frequency: 2402MHz, GFSK



Site no. : Audix NO.1 Chamber Data no. : 1
Dis. / Ant. : 3m 3115(4327) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band GFSK

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2319.72	28.32	6.25	16.72	51.29	74.00	22.71	Peak
2	2390.04	28.47	6.34	15.53	50.34	74.00	23.66	Peak
3	2402.04	28.47	6.36	68.28	103.11	74.00	-29.11	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : Audix NO.1 Chamber Data no. : 2
Dis. / Ant. : 3m 3115(4327) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band GFSK

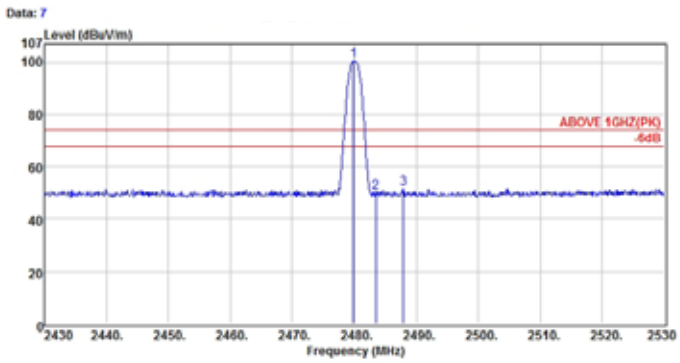
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2388.80	28.43	6.31	5.49	40.23	74.00	33.77	Average
2	2390.04	28.47	6.34	4.44	39.25	74.00	34.75	Average
3	2402.04	28.47	6.36	66.54	101.37	74.00	-27.37	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

Date of Test： 2014. 05. 13 Temperature： 26℃

EUT： 7" Pocketable Pad Humidity： 43%

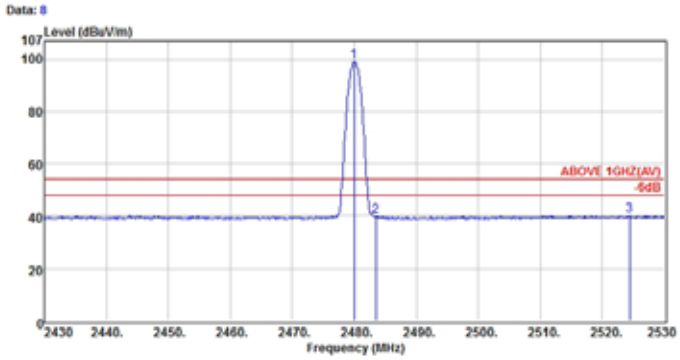
Test Mode： Transmit, Channel: 78, Frequency: 2480MHz, GFSK



Site no. : Audix NO.1 Chamber Data no. : 7
Dis. / Ant. : 3m 3115(4927) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band GFSK

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2479.90	28.66	6.44	65.36	100.46	74.00	-26.46	Peak
2	2483.50	28.66	6.45	15.01	50.12	74.00	23.88	Peak
3	2487.90	28.70	6.45	16.47	51.62	74.00	22.38	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : Audix NO.1 Chamber Data no. : 8
Dis. / Ant. : 3m 3115(4927) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 26*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band GFSK

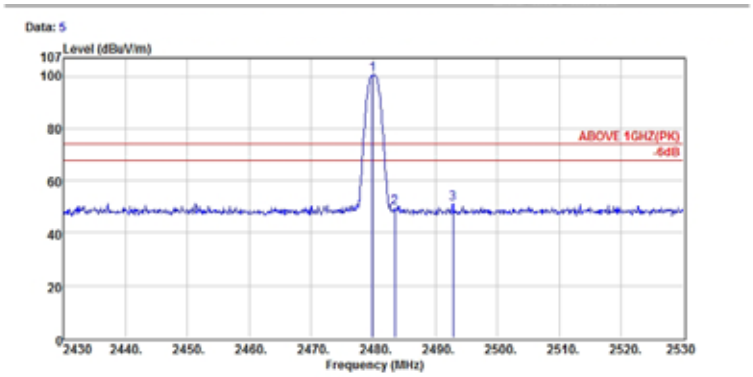
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2480.00	28.66	6.44	64.02	99.12	54.00	-45.12	Average
2	2483.50	28.66	6.45	4.74	39.85	54.00	14.15	Average
3	2524.40	28.81	6.50	4.69	40.00	54.00	14.00	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

Date of Test： 2014. 05. 13 Temperature： 26℃

EUT： 7" Pocketable Pad Humidity： 43%

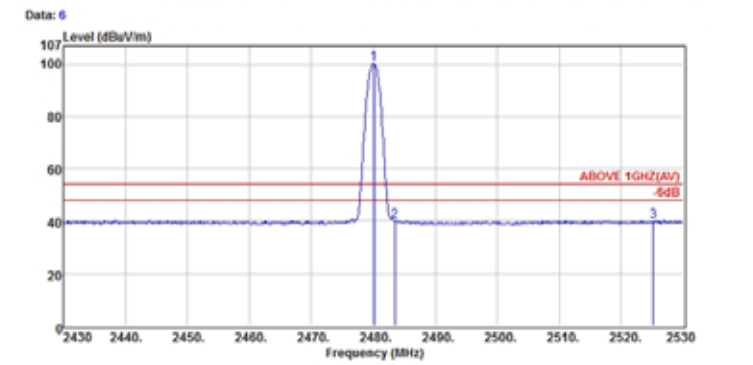
Test Mode： Transmit, Channel: 78, Frequency: 2480MHz, GFSK



Site no. : Audix NO.1 Chamber Data no. : 5
Dis. / Ant. : 3m 3115(4927) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 28*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band GFSK

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2479.90	28.66	6.44	65.54	100.64	74.00	-26.64	Peak
2	2483.50	28.66	6.45	14.48	49.59	74.00	24.41	Peak
3	2492.90	28.70	6.46	16.01	51.17	74.00	22.83	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : Audix NO.1 Chamber Data no. : 6
Dis. / Ant. : 3m 3115(4927) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 28*C / 43% N9010A Engineer : Wenbin_Yang
EUT : TB71A-W
Power Rating : DC5V
Test Mode : Out of band GFSK

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2480.10	28.66	6.44	65.33	100.43	54.00	-46.43	Average
2	2483.50	28.66	6.45	4.74	39.85	54.00	14.15	Average
3	2525.20	28.81	6.50	4.55	39.86	54.00	14.14	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emission levels that are 20dB below the official limit are not reported.

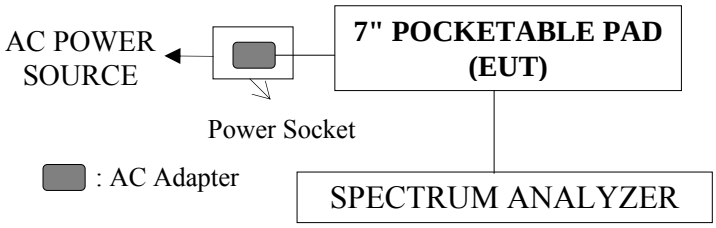
5. 20dB BANDWIDTH MEASUREMENT

5.1. Test Equipment

The following test equipment was used during the 20dB bandwidth measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Due Date
1.	Spectrum Analyzer	Agilent	N9030A-544	US51350140	2014. 07. 30

5.2. Block Diagram of Test Setup



5.3. Specification Limits [§15.247(a)(1)]

Alternatively, frequency hopping systems operating in the 2400-2483.5MHz band may have hopping channel carrier frequencies that are separated by 25kHz or two-thirds of the 20dB bandwidth of the hopping channel, whichever is greater.

5.4. Operating Condition of EUT

The test program "Blue tool" for BLE was used to enable the EUT to transmit data at different channel frequency individually.

5.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The RBW of the fundamental frequency was measure by spectrum analyzer 1% of the 20dB bandwidth and the setting equal to RBW and VBW is equal to RBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.
The measurement guideline was according to FCC Public Notice DA 00-705.

5.6. Test Results

PASSED. All the test results are attached in next pages.

[Note: We performed testing of the highest and lowest data rate.]

EUT: 7" Pocketable Pad M/N: TB71A-W

Test Date: 2014. 05. 05 Temperature: 24℃ Humidity: 48%

5.6.1. Type of Modulation: 8-DPSK

No.	Channel	Test Frequency	**20dB Bandwidth**	**2/3 (20dB Bandwidth)**
1.	0	2402MHz	**1.300MHz**	**0.867MHz**
2.	39	2441MHz	**1.300MHz**	**0.867MHz**
3.	78	2480MHz	**1.300MHz**	**0.867MHz**

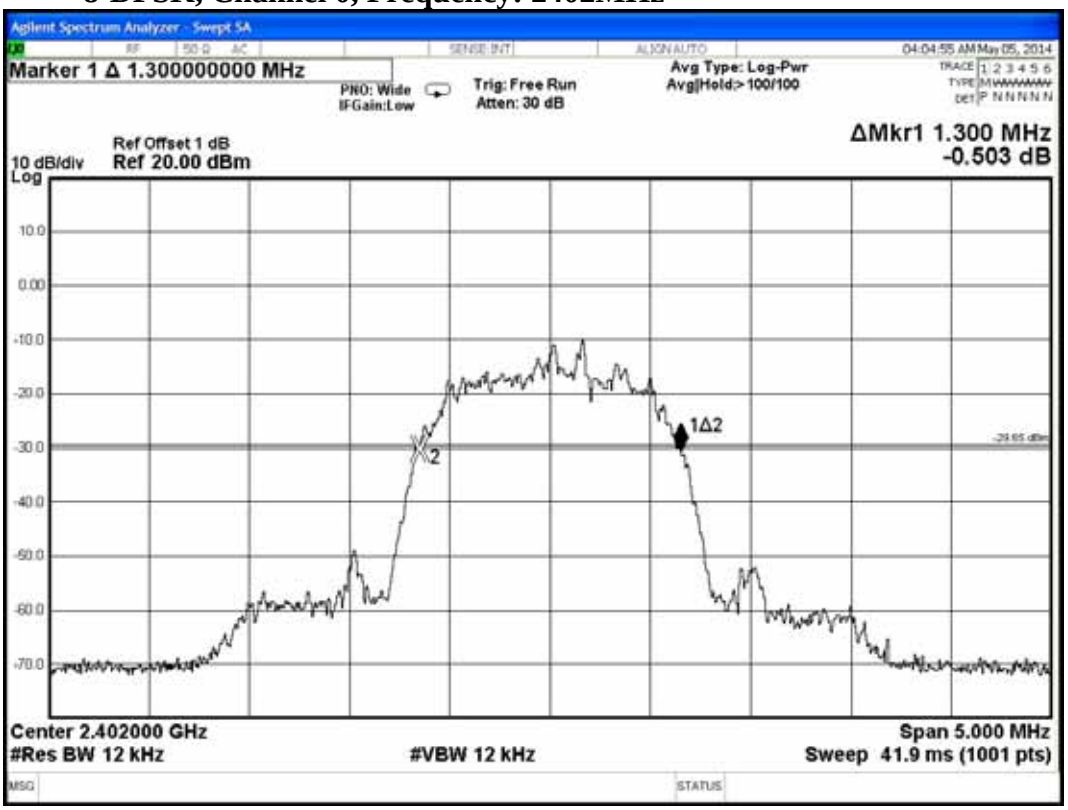
The maximum two-thirds of the 20dB bandwidth shall be at maximum 0.867MHz.

5.6.2. Type of Modulation: GFSK

No.	Channel	Test Frequency	**20dB Bandwidth**	**2/3 (20dB Bandwidth)**
1.	0	2402MHz	**960kHz**	**640kHz**
2.	39	2441MHz	**960kHz**	**640kHz**
3.	78	2480MHz	**960kHz**	**640kHz**

The maximum two-thirds of the 20dB bandwidth shall be at maximum 640kHz.

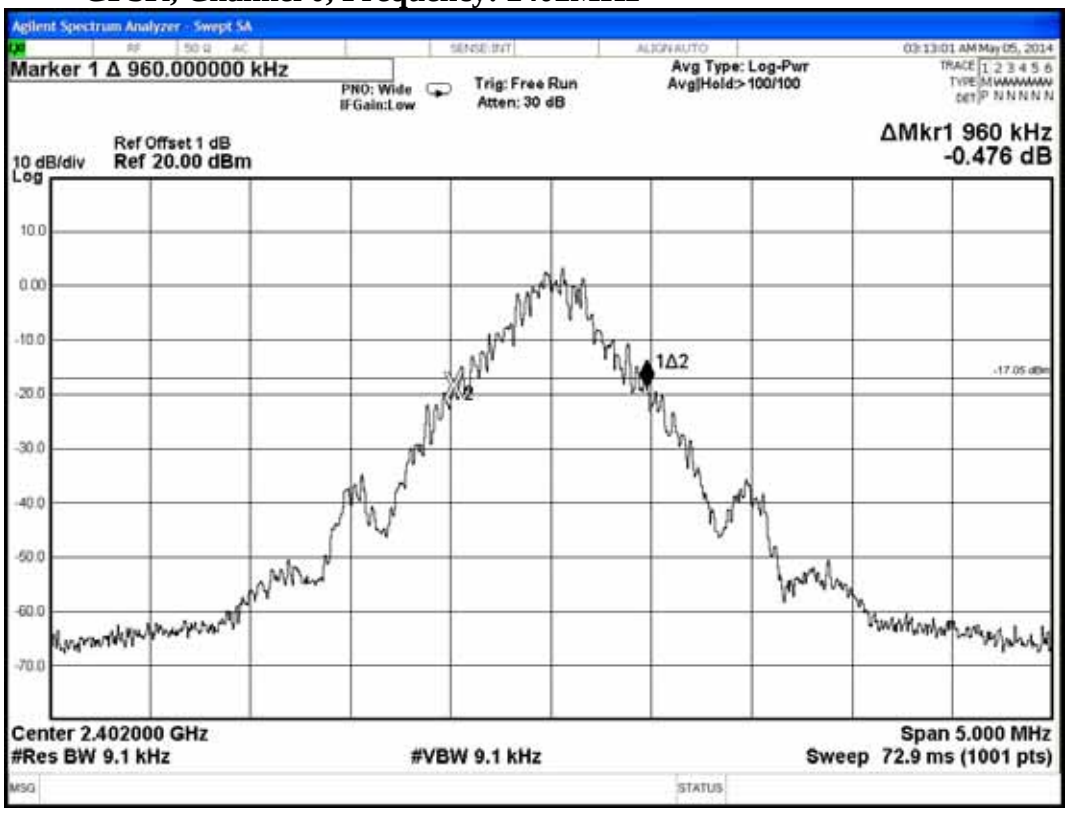
8-DPSK, Channel 0, Frequency: 2402MHz



8-DPSK, Channel 39, Frequency: 2441MHz

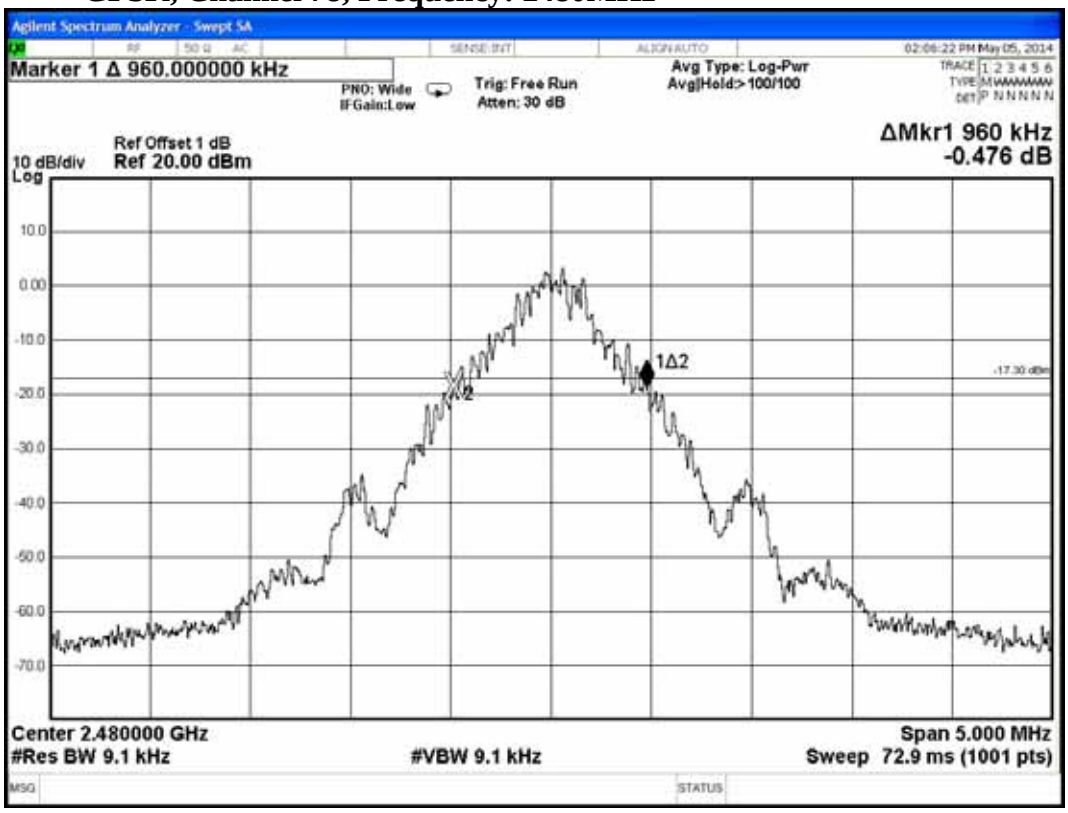
8-DPSK, Channel 78, Frequency: 2480MHz

GFSK, Channel 0, Frequency: 2402MHz



GFSK, Channel 39, Frequency: 2441MHz

GFSK, Channel 78, Frequency: 2480MHz



6. CARRIER FREQUENCY SEPARATION MEASUREMENT

6.1. Test Equipment

The following test equipment was used during the carrier frequency separation measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Due Date
1.	Spectrum Analyzer	Agilent	N9030A-544	US51350140	2014. 07. 30

6.2. Block Diagram of Test Setup

The same as section 5.2.

6.3. Specification Limits [§15.247(a)(1)]

Alternatively, frequency hopping systems operating in the 2400-2483.5MHz band may have hopping channel carrier frequencies that are separated by 25kHz or two-thirds of the 20dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output no greater than 125mW.

6.4. Operating Condition of EUT

Same as carrier frequency separation measurement which was listed in section 5.4.

6.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The channel separation was measure by spectrum analyzer with RBW equal to 1% of the span. The video bandwidth not to be smaller than resolution bandwidth, the peak was mark on adjacent bandwidth, the between of peak is carrier frequency separation.
The measurement guideline was according to FCC Public Notice DA 00-705.

6.6. Test Results

PASSED. All the test results are attached in next pages.

[Note: We performed testing of the highest and lowest data rate.]

EUT: 7" Pocketable Pad M/N: TB71A-W

Test Date: 2014. 05. 05 Temperature: 24℃ Humidity: 48%

6.6.1. Type of Modulation: 8-DPSK

1. 2402MHz adjacent channel of carrier frequency separation: 1.008MHz。
2. 2441MHz adjacent channel of right carrier frequency separation: 1.008MHz。
3. 2441MHz adjacent channel of left carrier frequency separation: 1.008MHz。
4. 2480MHz adjacent channel of carrier frequency separation: 1.008MHz。

[Above values have met the requirement as specified in section 4.3: frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.]

6.6.2. Type of Modulation: GFSK

1. 2402MHz adjacent channel of carrier frequency separation: 1.000MHz。
2. 2441MHz adjacent channel of right carrier frequency separation: 100MHz。
3. 2441MHz adjacent channel of left carrier frequency separation: 1.000MHz。
4. 2480MHz adjacent channel of carrier frequency separation: 1.000MHz。

[Above values have met the requirement as specified in section 4.3: frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.]

Test Mode: 8-DPSK, 2402MHz adjacent channel of carrier frequency separation

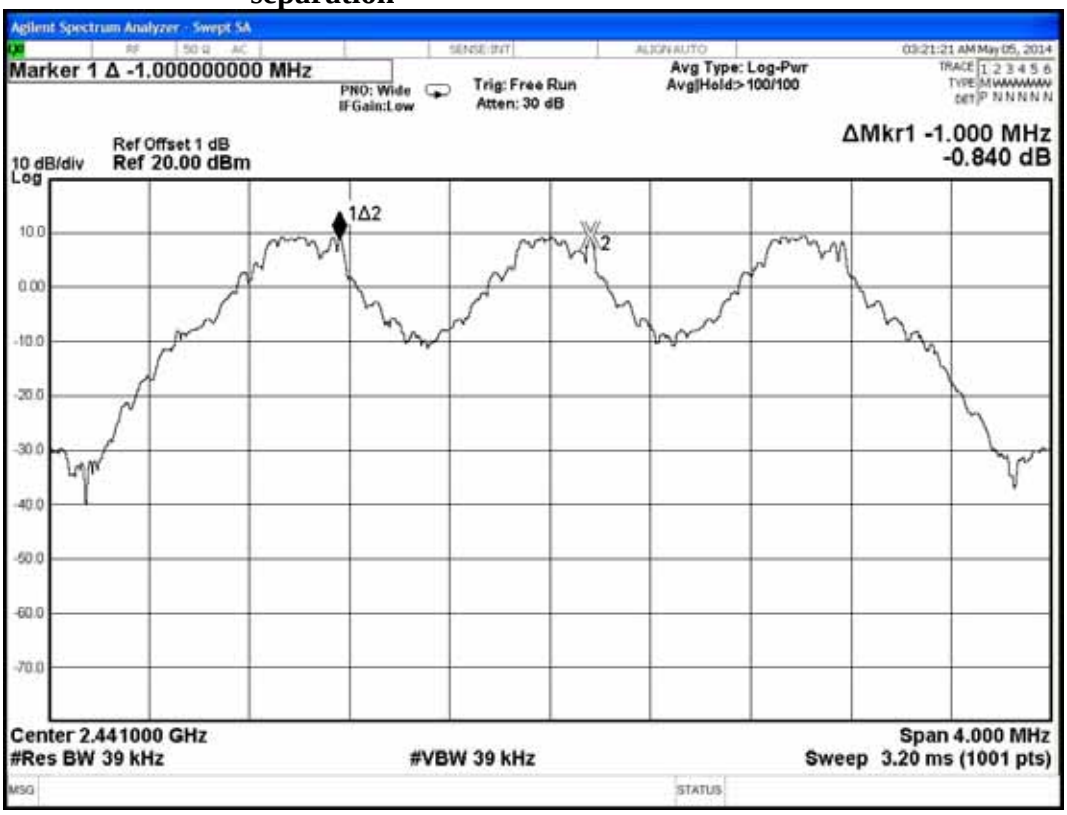
Test Mode: 8-DPSK, 2441MHz adjacent channel of right carrier frequency separation

Test Mode: 8-DPSK, 2441MHz adjacent channel of left carrier frequency separation

Test Mode: 8-DPSK, 2480MHz adjacent channel of carrier frequency separation

Test Mode: GFSK, 2402MHz adjacent channel of carrier frequency separation

Test Mode: GFSK, 2441MHz adjacent channel of right carrier frequency separation



Test Mode: GFSK, 2441MHz adjacent channel of left carrier frequency separation

Test Mode: GFSK, 2480MHz adjacent channel of carrier frequency separation

7. TIME OF OCCUPANCY MEASUREMENT

7.1. Test Equipment

The following test equipment was used during the time of occupancy measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Due Date
1.	Spectrum Analyzer	Agilent	N9030A-544	US51350140	2014. 07. 30

7.2. Block Diagram of Test Setup

The same as section 5.2.

7.3. Specification Limits [§15.247(a)(1)(iii)]

Frequency hopping systems in the 2400-2483.5MHz shall use at least 15 non-overlapping channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by number of hopping channels employed.

7.4. Operating Condition of EUT

Same as carrier frequency separation measurement which was listed in section 5.4.

7.5. Test Procedure

The EUT was connected to the notebook. The bandwidth of the fundamental frequency was measure by spectrum analyzer with 1MHz RBW and 1MHz VBW. VBW≥RBW ; Span=zero span.
Centred on a hopping channel sweep=as necessary to capture the entire dwell time per hopping channel ; Detector function=peak ; Trace=Max hold
The measurement guideline was according to FCC Public Notice DA 00-705.

7.6. Test Results

PASSED. All the test results are attached in next pages.

[Note: We performed testing of the highest and lowest data rate.]

EUT: 7" Pocketable Pad M/N: TB71A-W

Test Date: 2014. 05. 05 Temperature: 24℃ Humidity: 48%

7.6.1. Type of Modulation：8-DPSK, Test Frequency：2402MHz

Duty cycle: 79channels*0.4 seconds = 31.6 seconds

3DH1 : For each 5 seconds of 50 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

50 channels*31.6 seconds/5* 0.37ms = 116.92ms (<400ms)

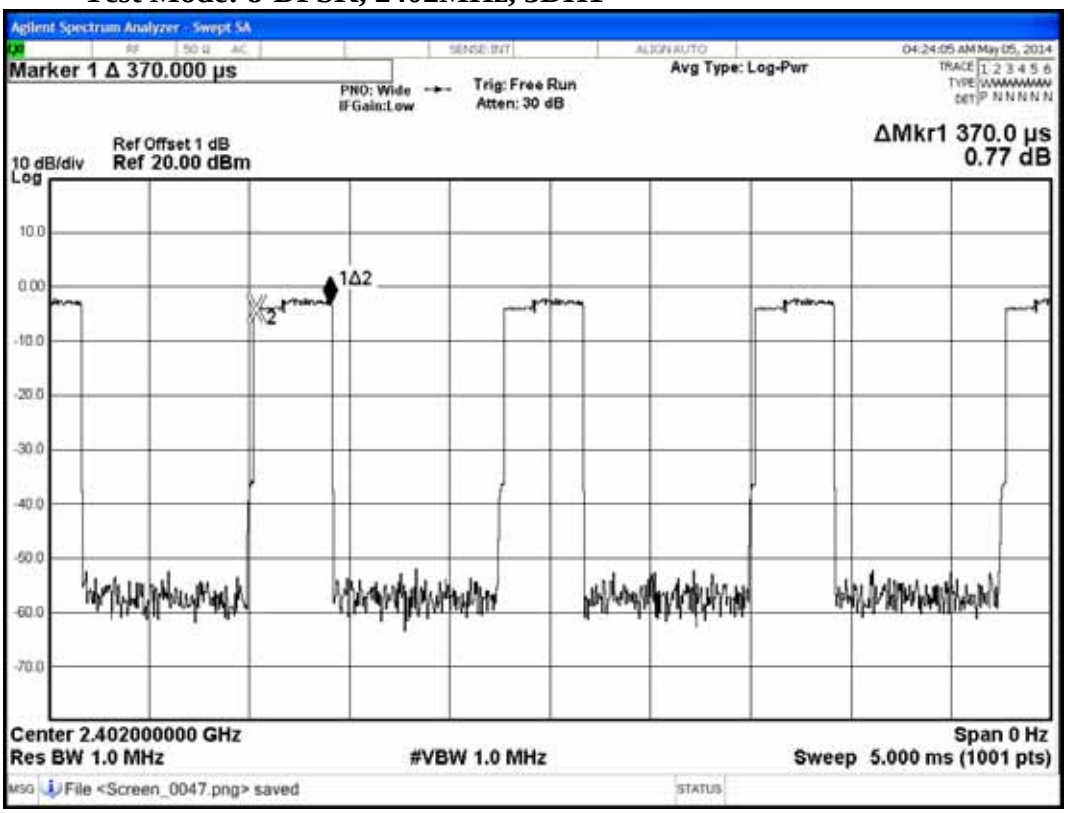
3DH3 : For each 5 seconds of 25 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

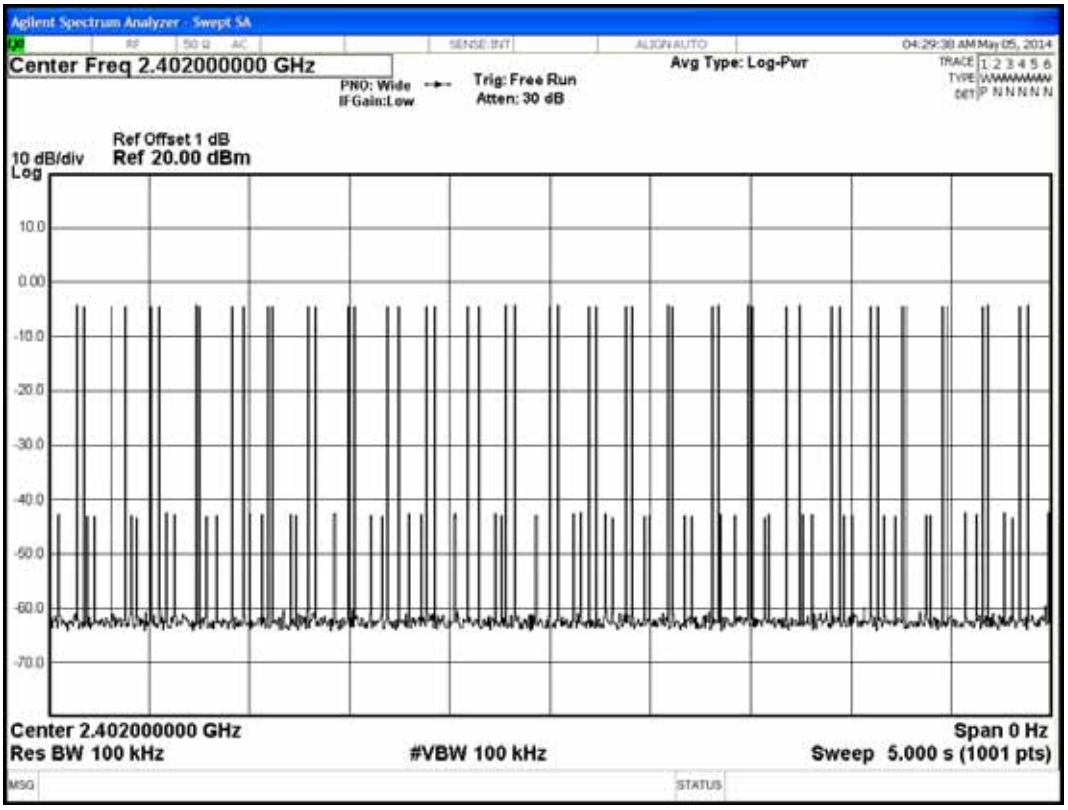
25 channels*31.6 seconds/5* 1.62ms = 255.96ms (<400ms)

3DH5 : For each 5 seconds of 17 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

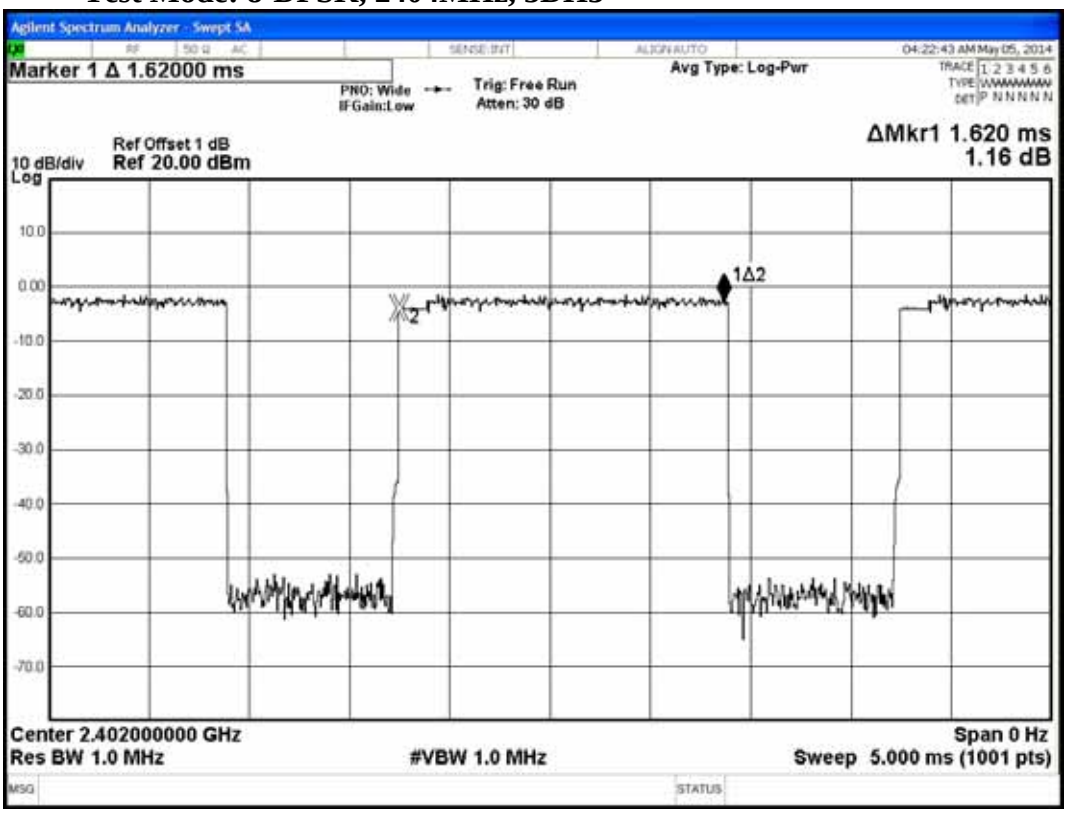
17 channels*31.6 seconds/5*2.88ms = 309.43ms (<400ms)

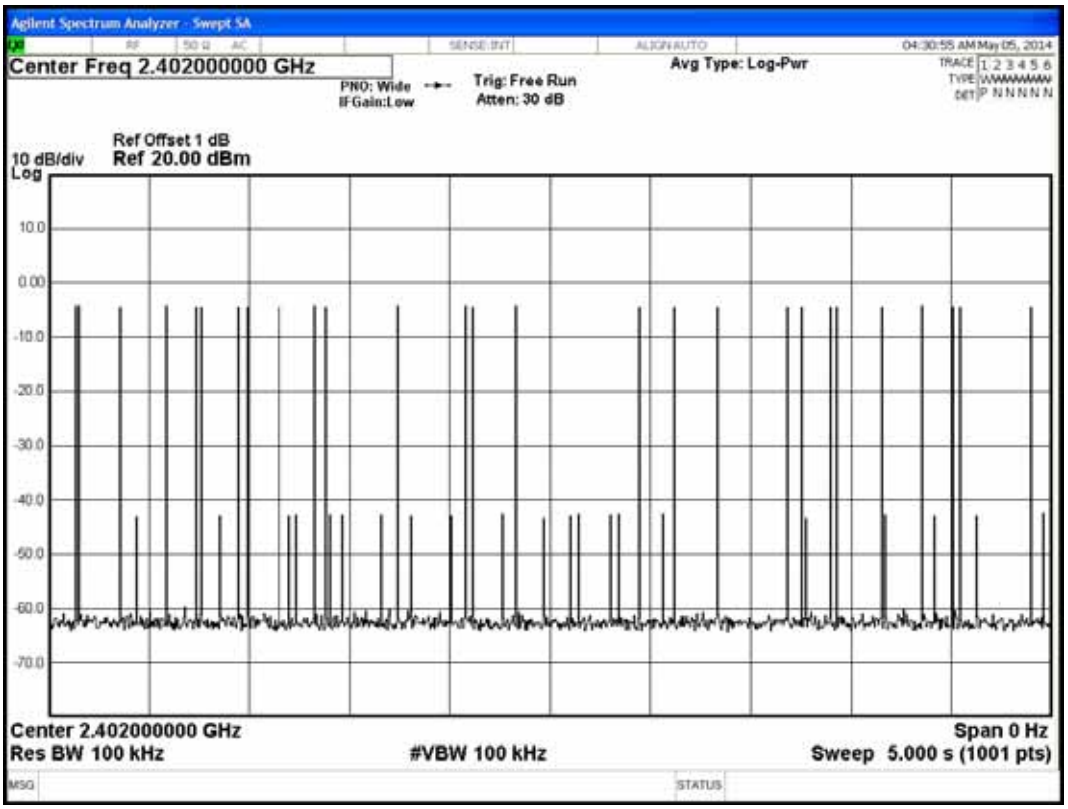
Test Mode: 8-DPSK, 2402MHz, 3DH1



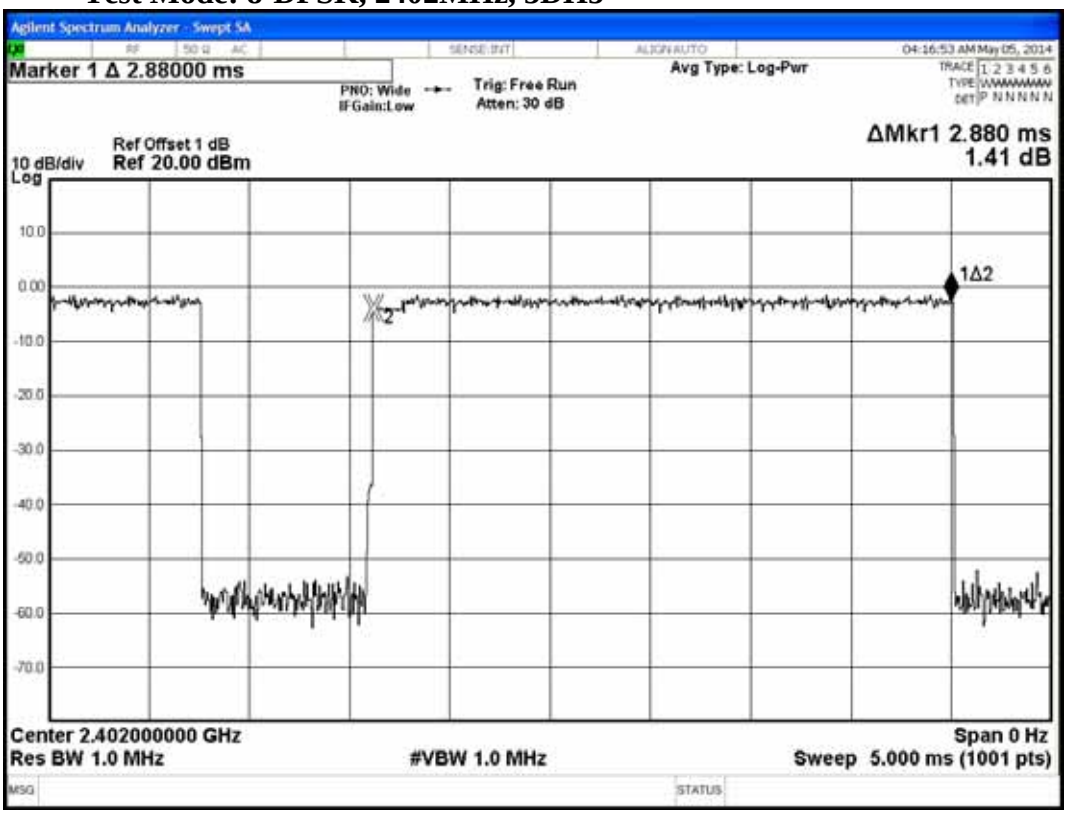


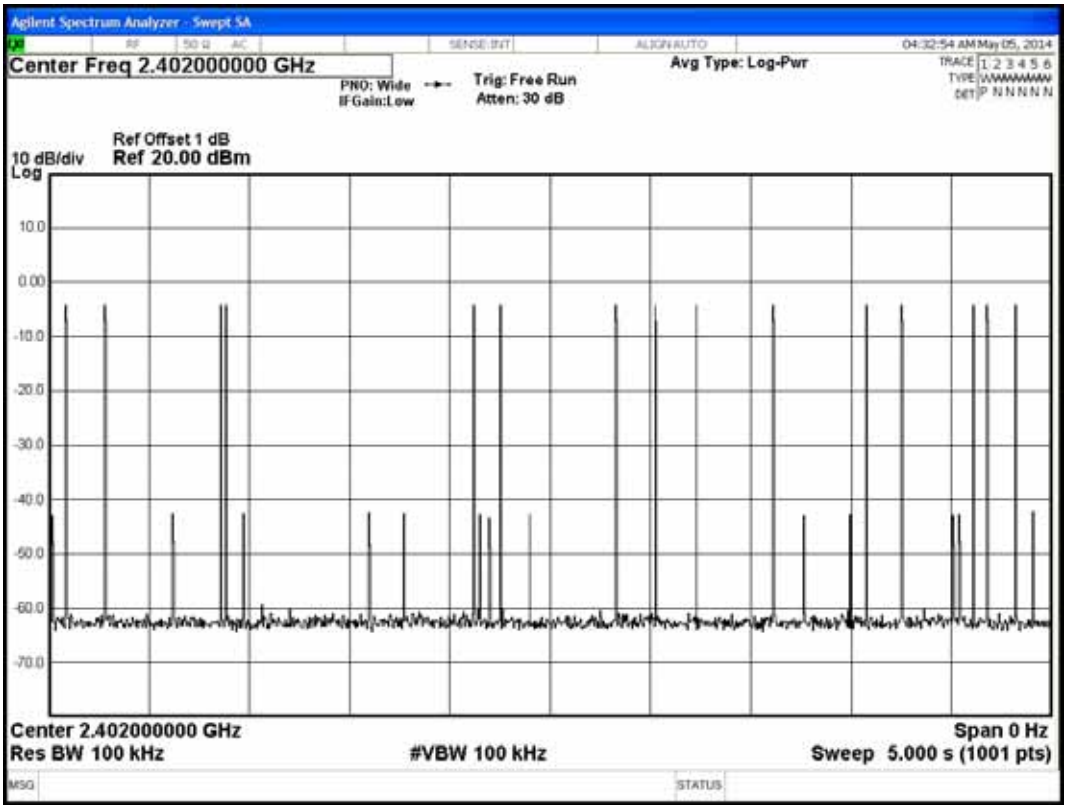
Test Mode: 8-DPSK, 2404MHz, 3DH3





Test Mode: 8-DPSK, 2402MHz, 3DH5





7.6.2. Type of Modulation：8-DPSK, Test Frequency：2441MHz

Duty cycle: 79channels*0.4 seconds = 31.6 seconds

3DH1：For each 5 seconds of 50 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

50 channels*31.6 seconds/5* 0.37ms = 116.92ms (<400ms)

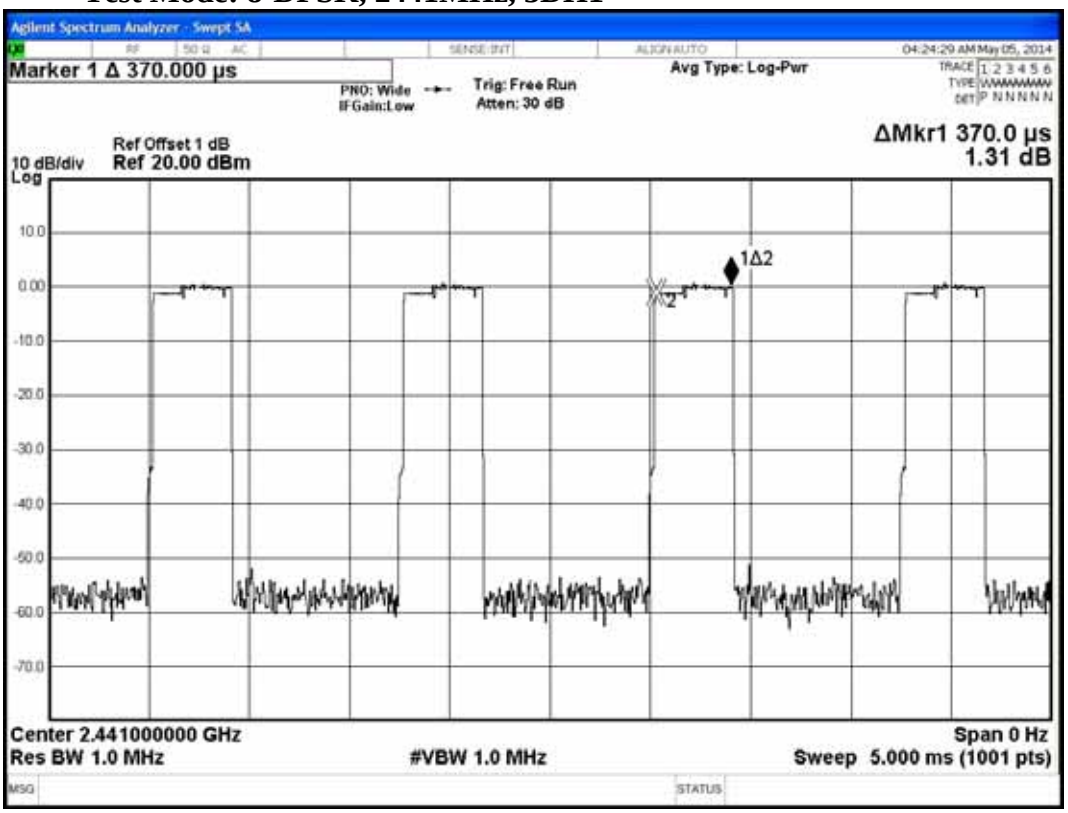
3DH3：For each 5 seconds of 23 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

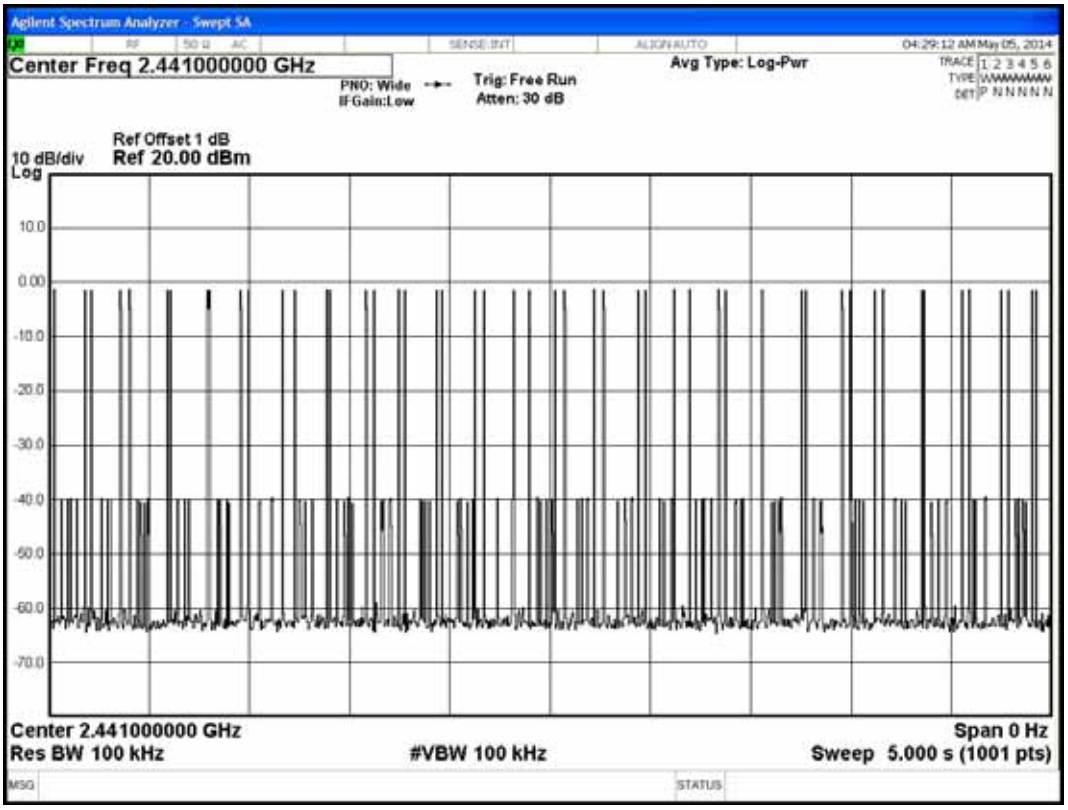
23 channels*31.6 seconds/5* 1.62ms = 235.48ms (<400ms)

3DH5：For each 5 seconds of 16 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

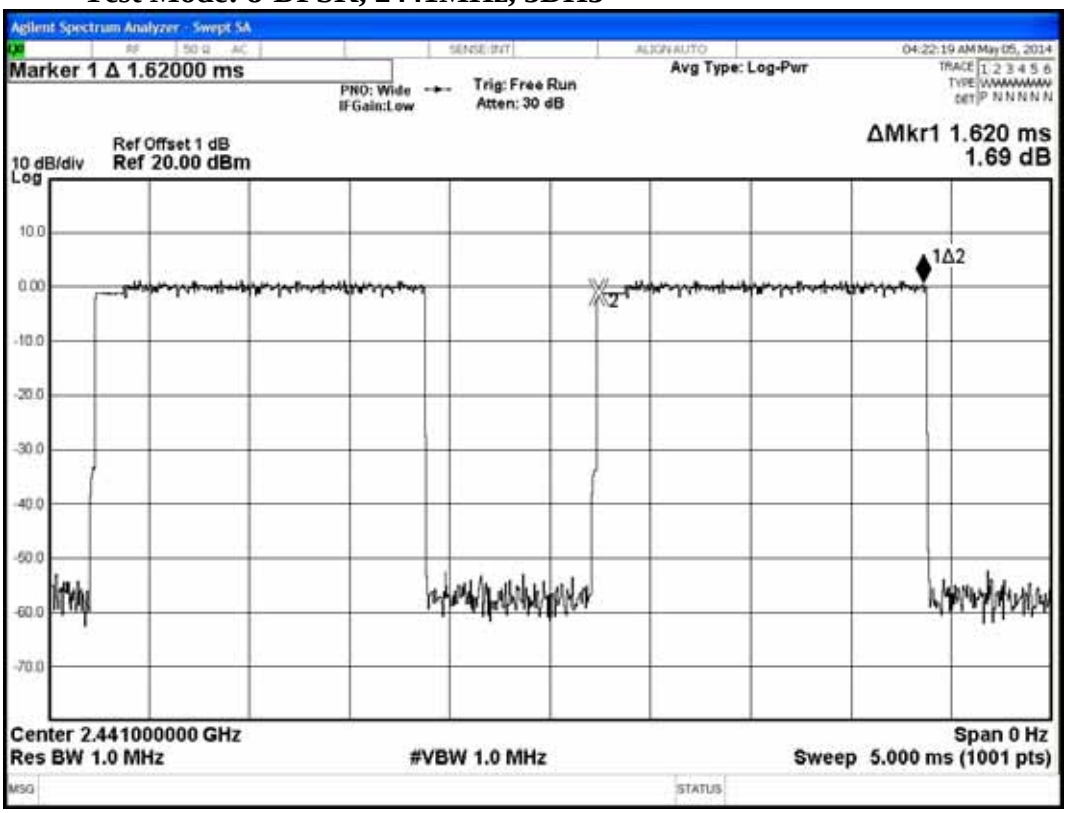
16 channels*31.6 seconds/5*2.88ms = 291.23ms (<400ms)

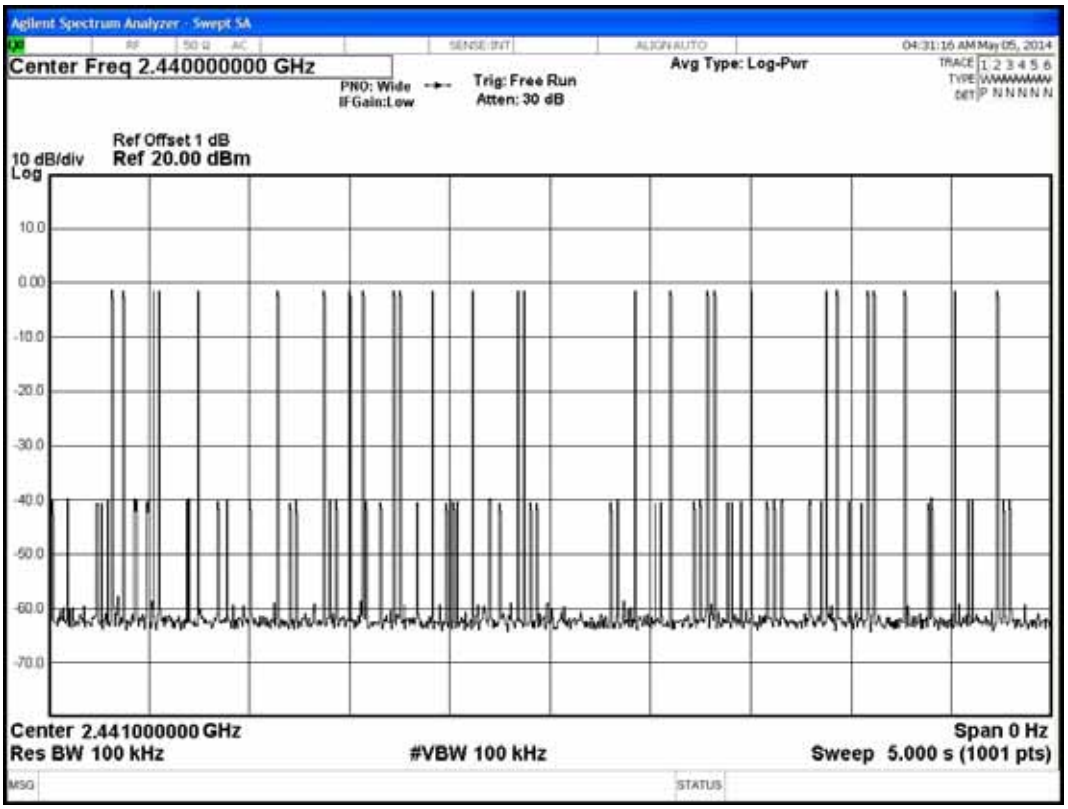
Test Mode: 8-DPSK, 2441MHz, 3DH1



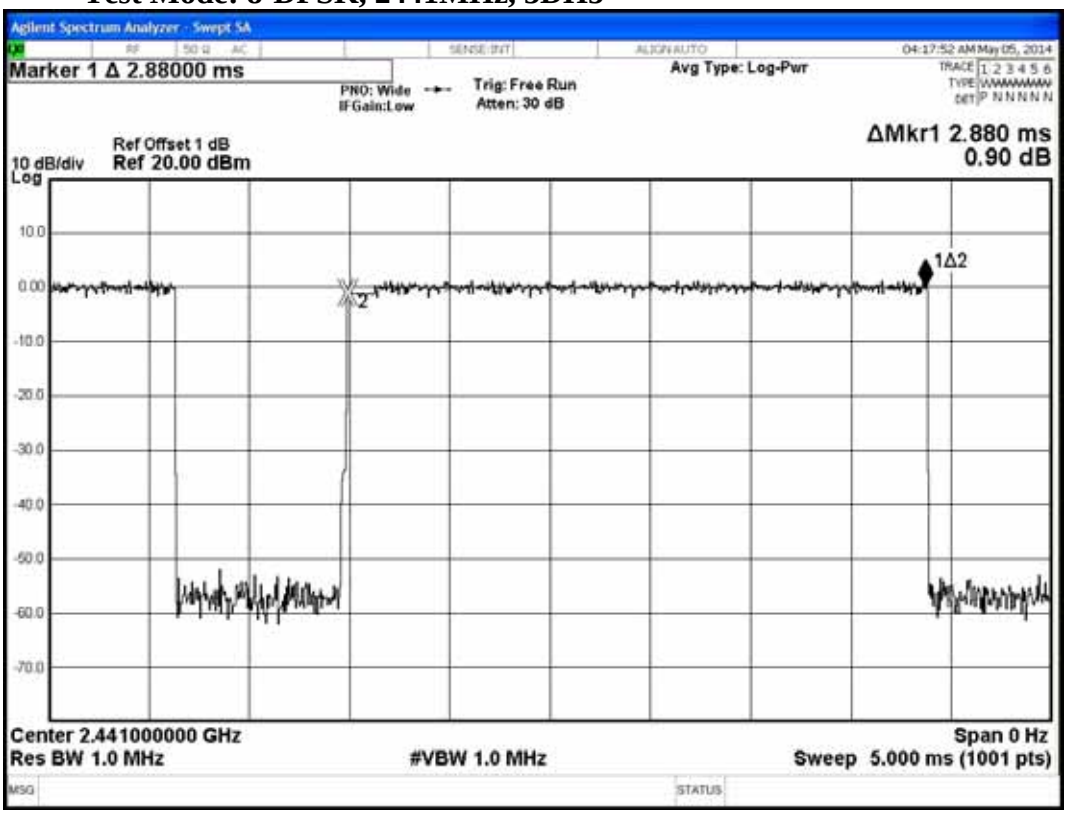


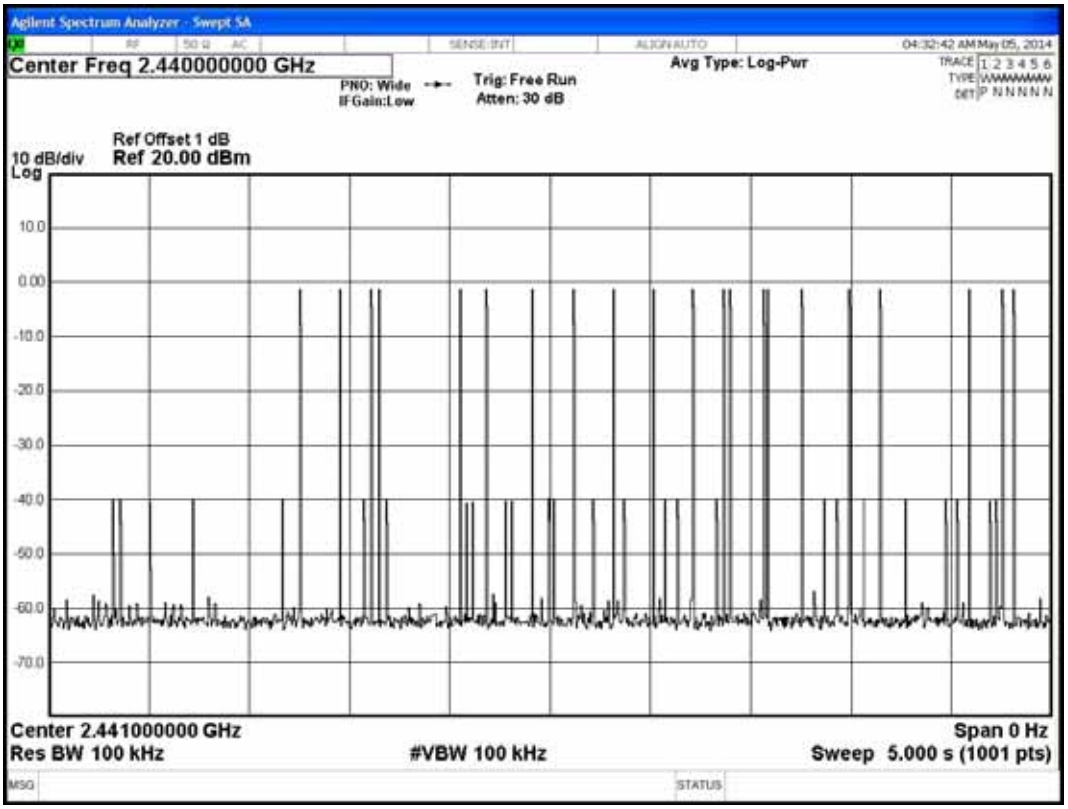
Test Mode: 8-DPSK, 2441MHz, 3DH3





Test Mode: 8-DPSK, 2441MHz, 3DH5





7.6.3. Type of Modulation：8-DPSK, Test Frequency：2480MHz

Duty cycle: 79channels*0.4 seconds = 31.6 seconds

3DH1 : For each 5 seconds of 49 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

49 channels*31.6 seconds/5* 0.37ms = 114.58ms (<400ms)

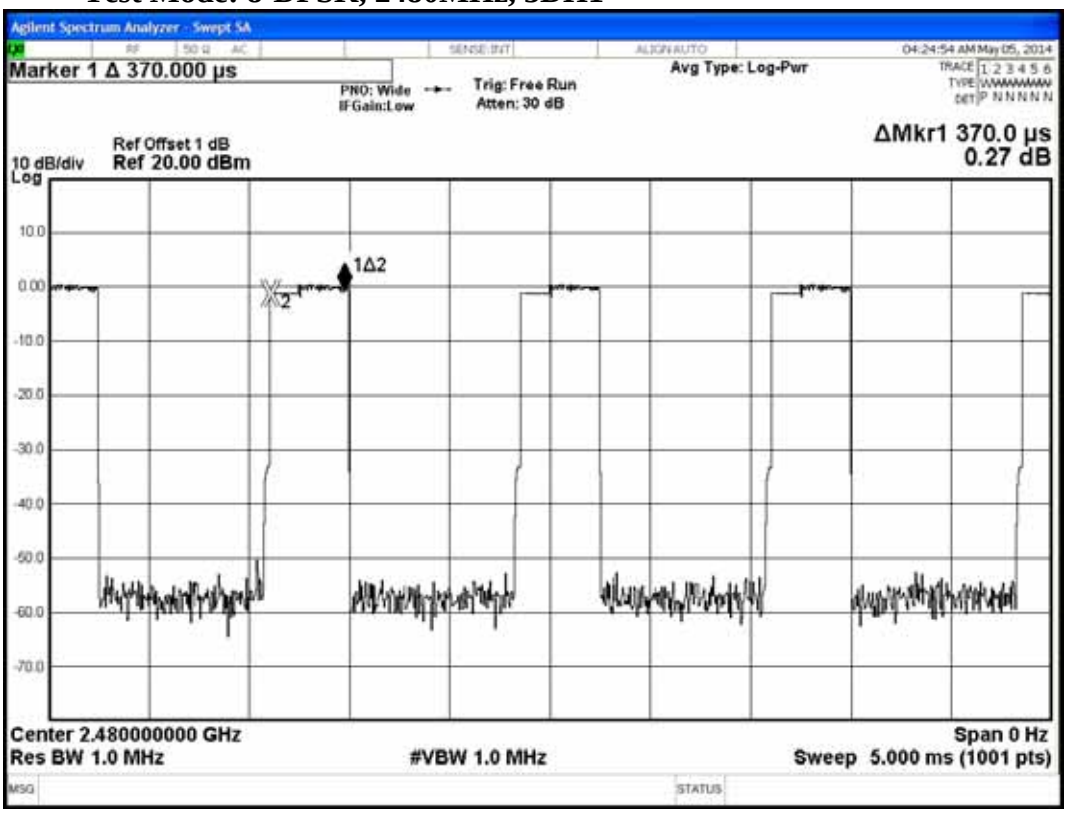
3DH3 : For each 5 seconds of 24 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

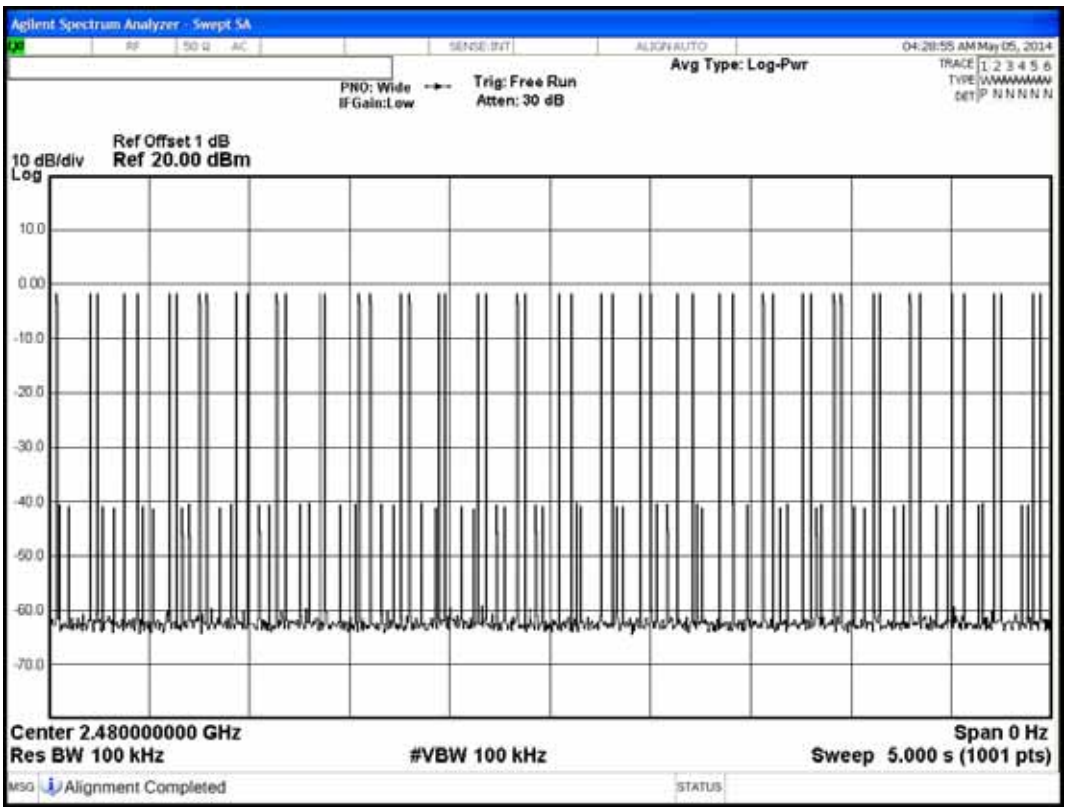
24 channels*31.6 seconds/5* 1.62ms = 245.72ms (<400ms)

3DH5 : For each 5 seconds of 18 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

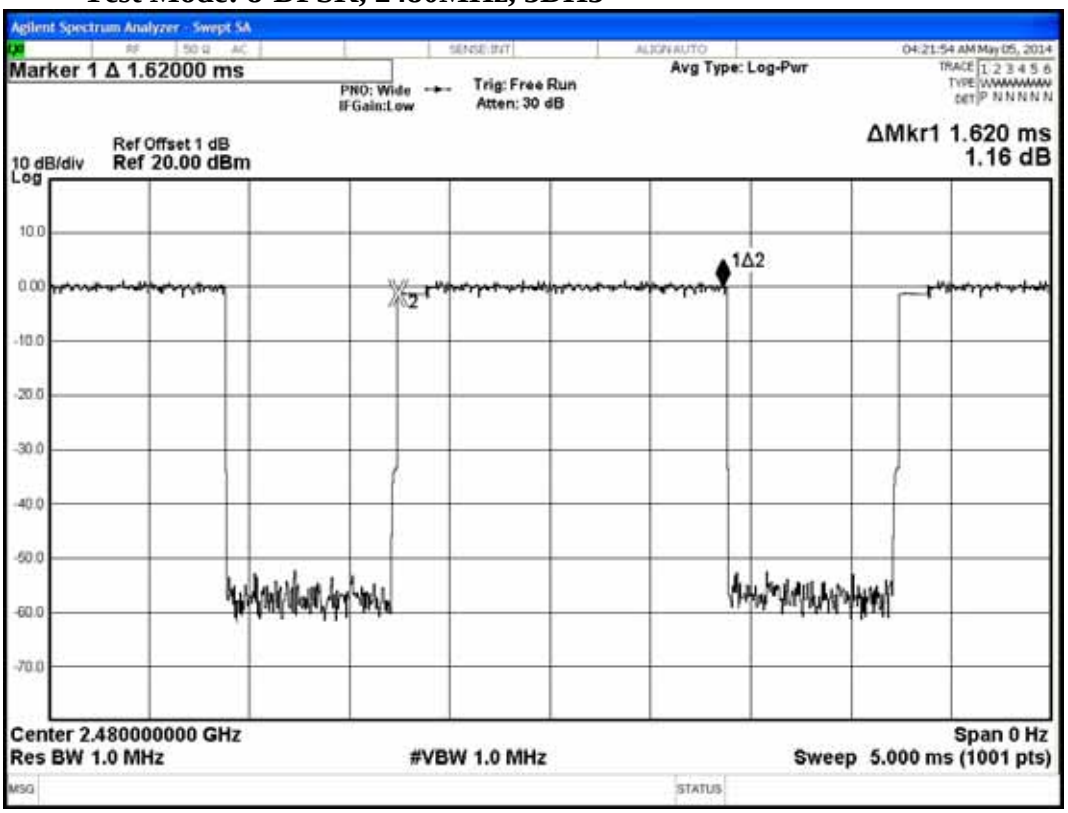
18 channels*31.6 seconds/5*2.88ms = 327.63ms (<400ms)

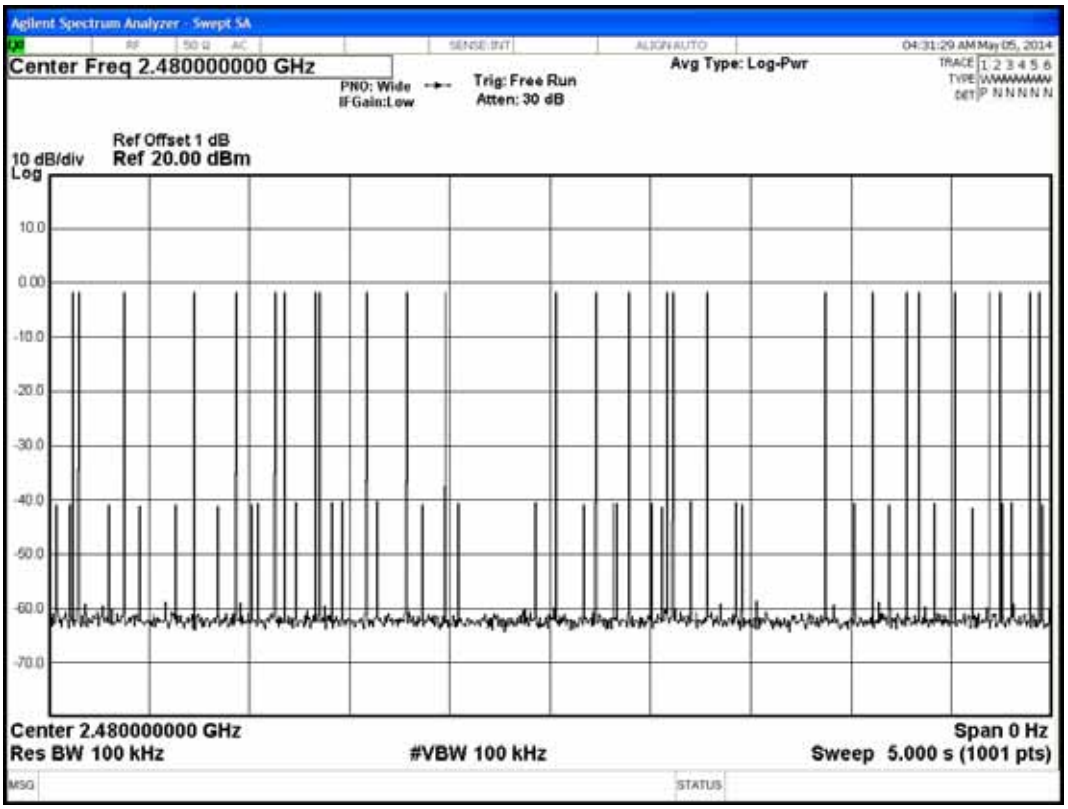
Test Mode: 8-DPSK, 2480MHz, 3DH1



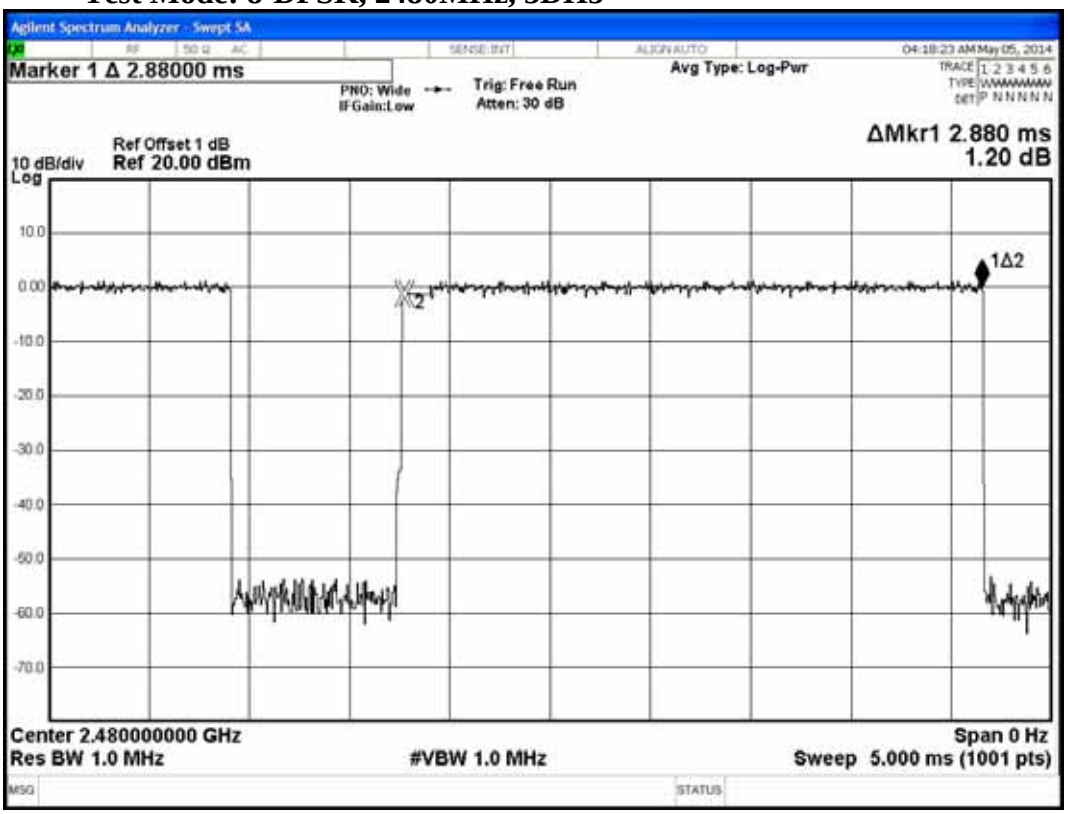


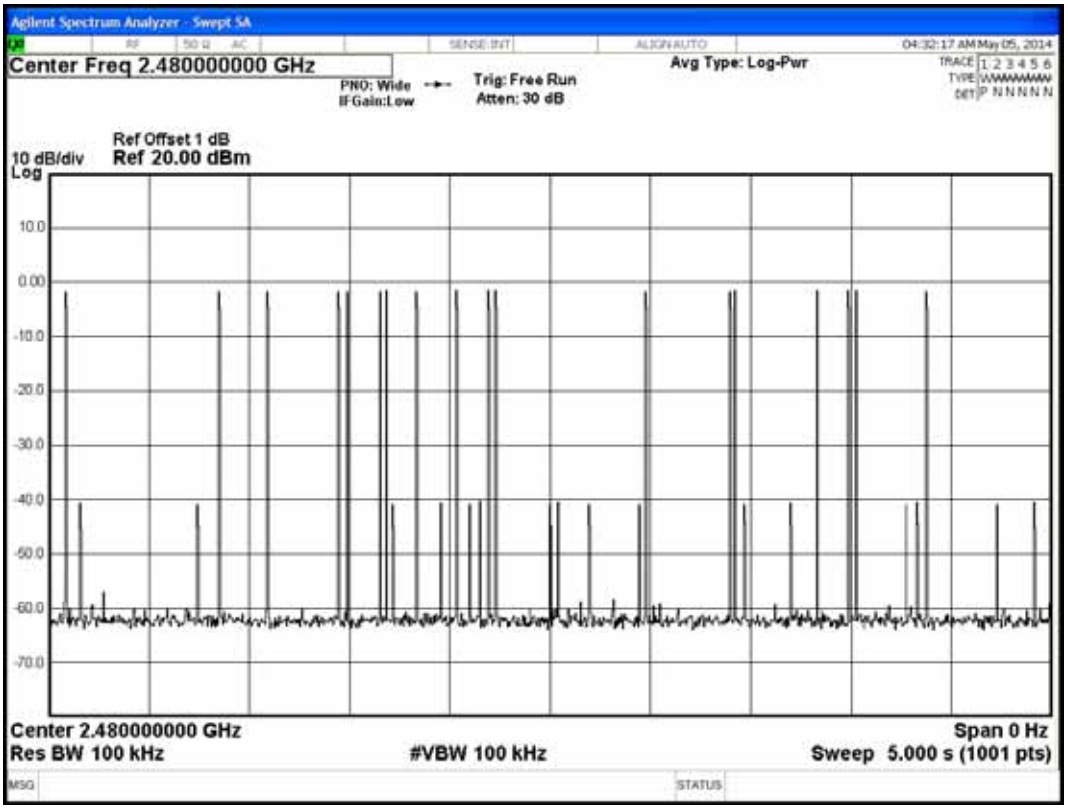
Test Mode: 8-DPSK, 2480MHz, 3DH3





Test Mode: 8-DPSK, 2480MHz, 3DH5





7.6.4. Type of Modulation：GFSK, Test Frequency：2402MHz

Duty cycle: 79channels*0.4 seconds = 31.6 seconds

DH1 : For each 5 seconds of 50 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

50 channels*31.6 seconds/5* 0.335ms = 105.86ms (<400ms)

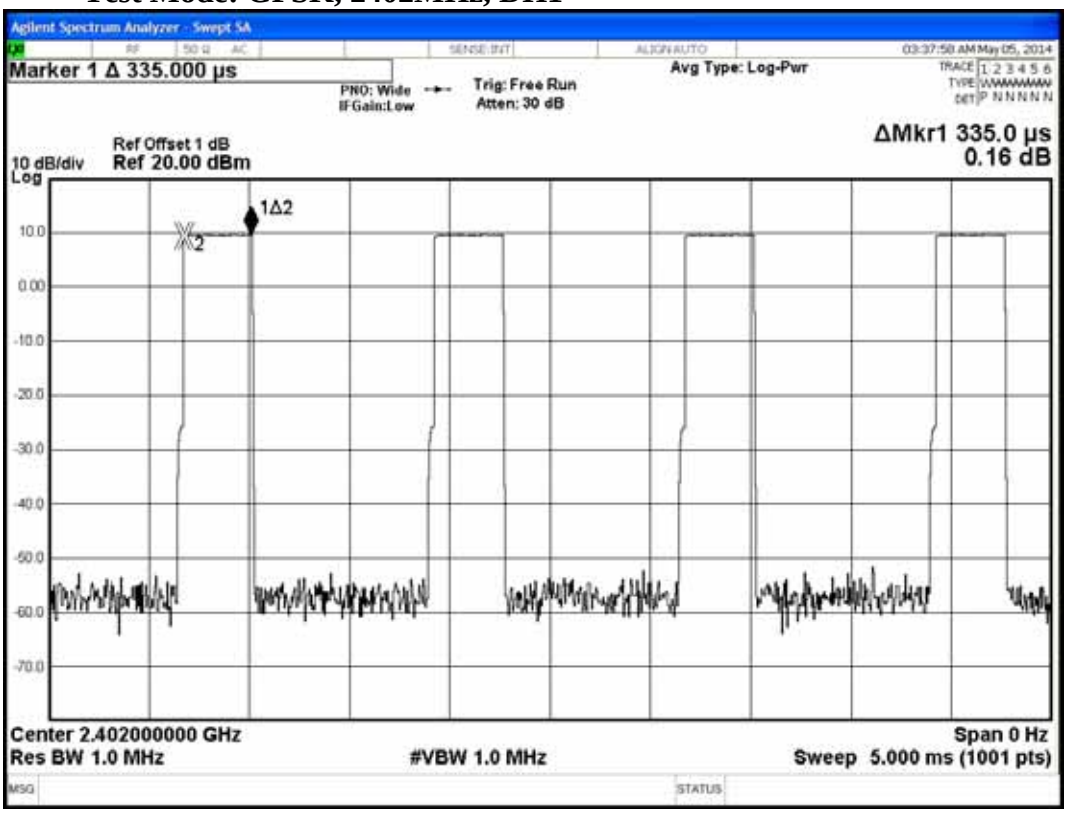
DH3 : For each 5 seconds of 26 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

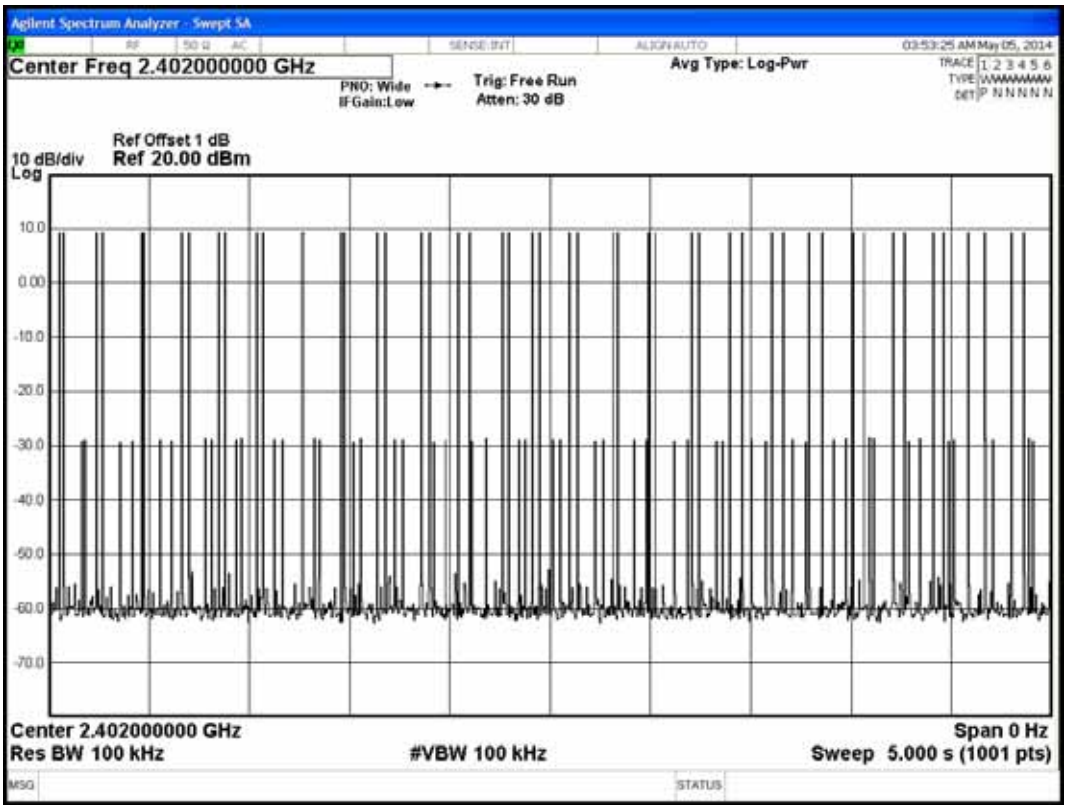
26 channels*31.6 seconds/5* 1.74ms = 285.92ms (<400ms)

DH5 : For each 5 seconds of 19 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

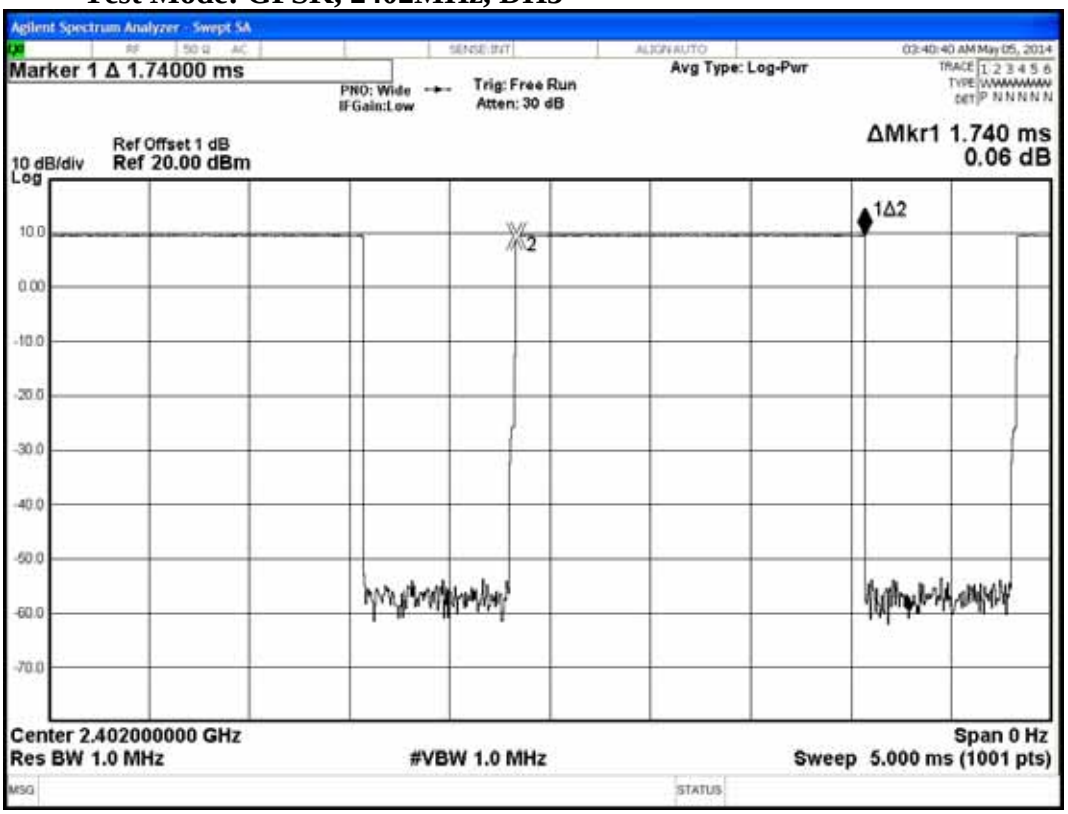
19 channels*31.6 seconds/5*2.87ms = 344.63ms (<400ms)

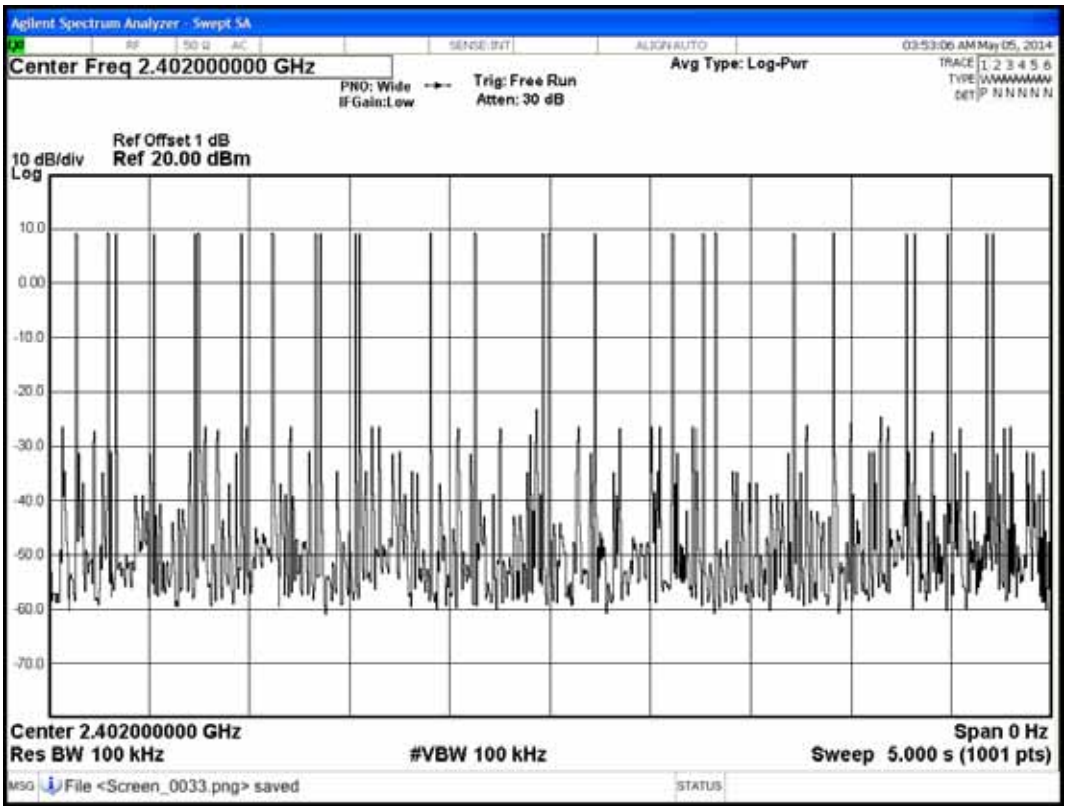
Test Mode: GFSK, 2402MHz, DH1



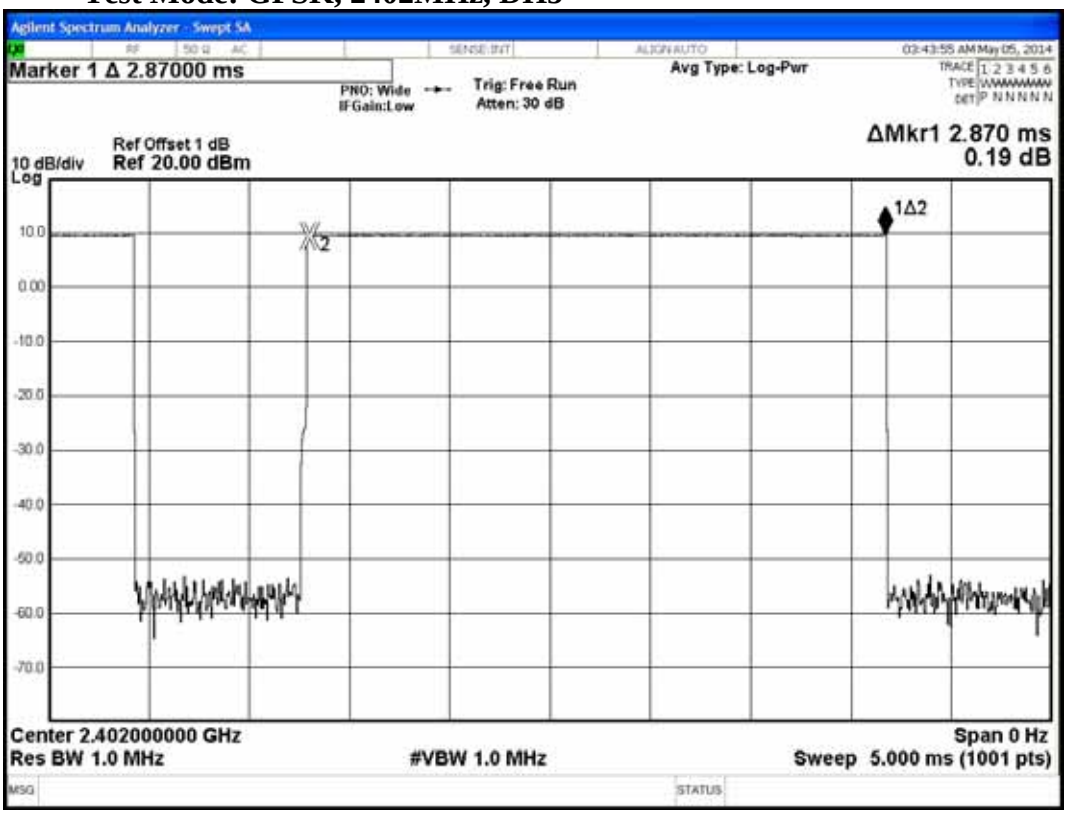


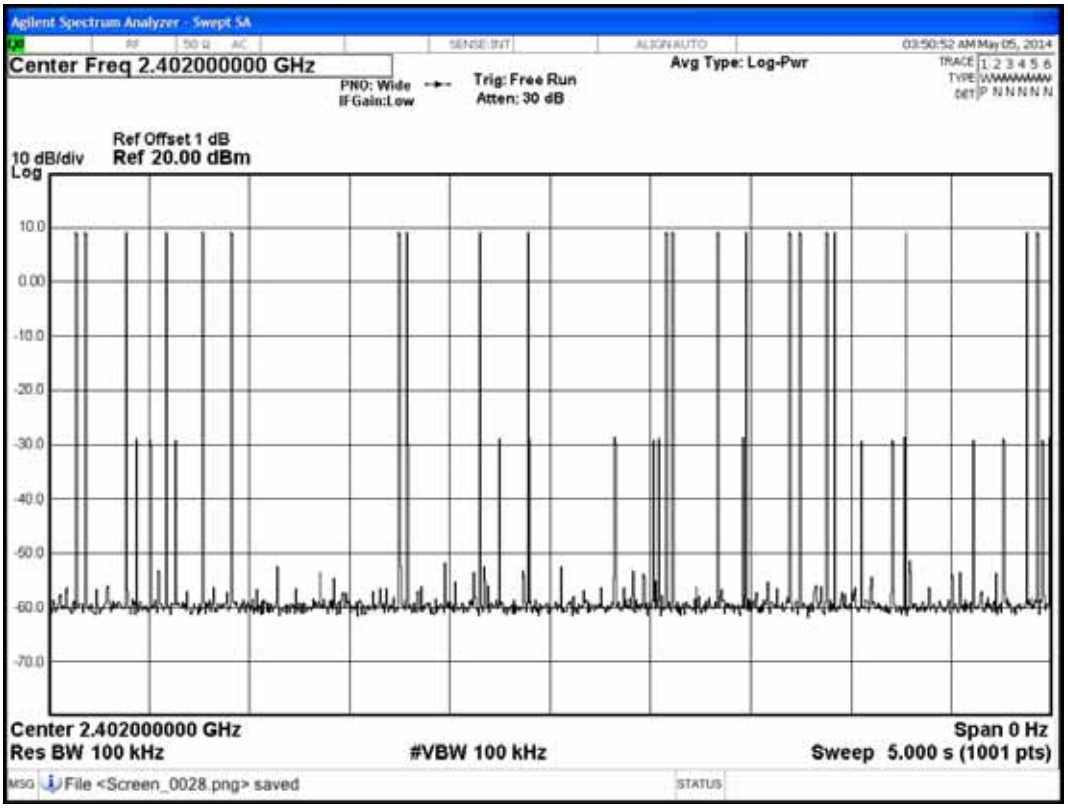
Test Mode: GFSK, 2402MHz, DH3





Test Mode: GFSK, 2402MHz, DH5





7.6.5. Type of Modulation：GFSK, Test Frequency：2441MHz

Duty cycle: 79channels*0.4 seconds = 31.6 seconds

DH1 : For each 5 seconds of 51 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

51 channels*31.6 seconds/5* 0.335ms = 107.98ms (<400ms)

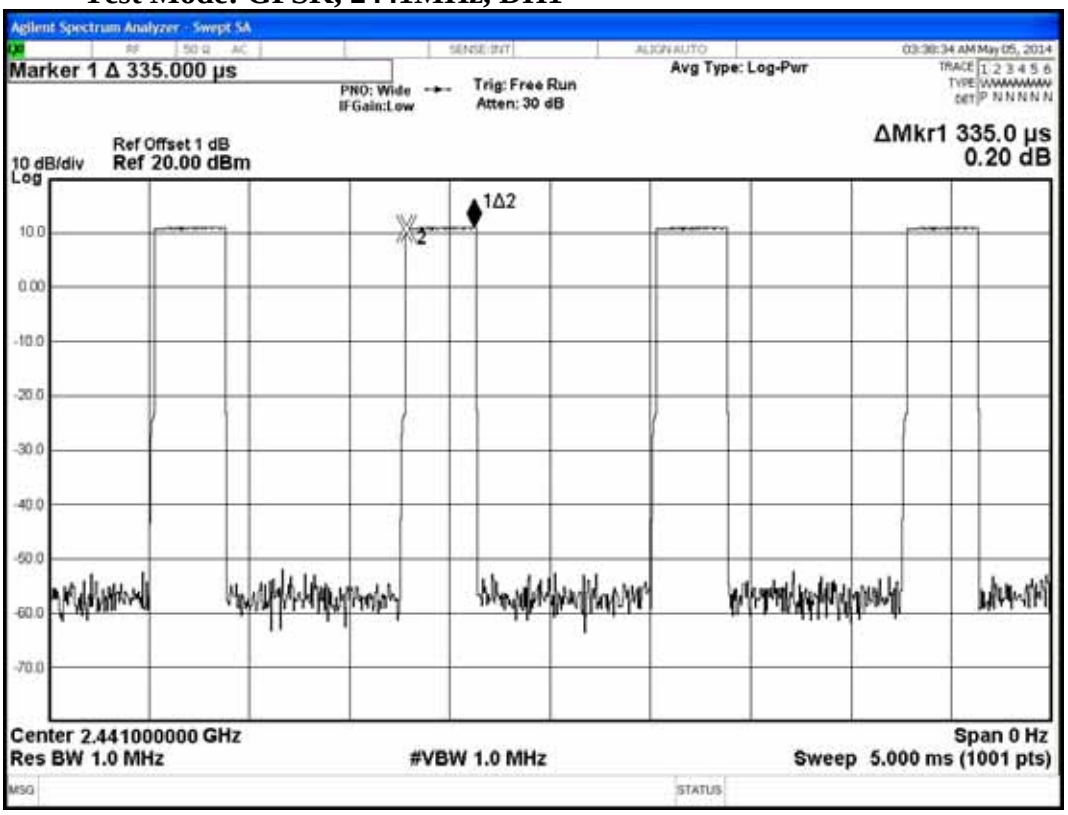
DH3 : For each 5 seconds of 25 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

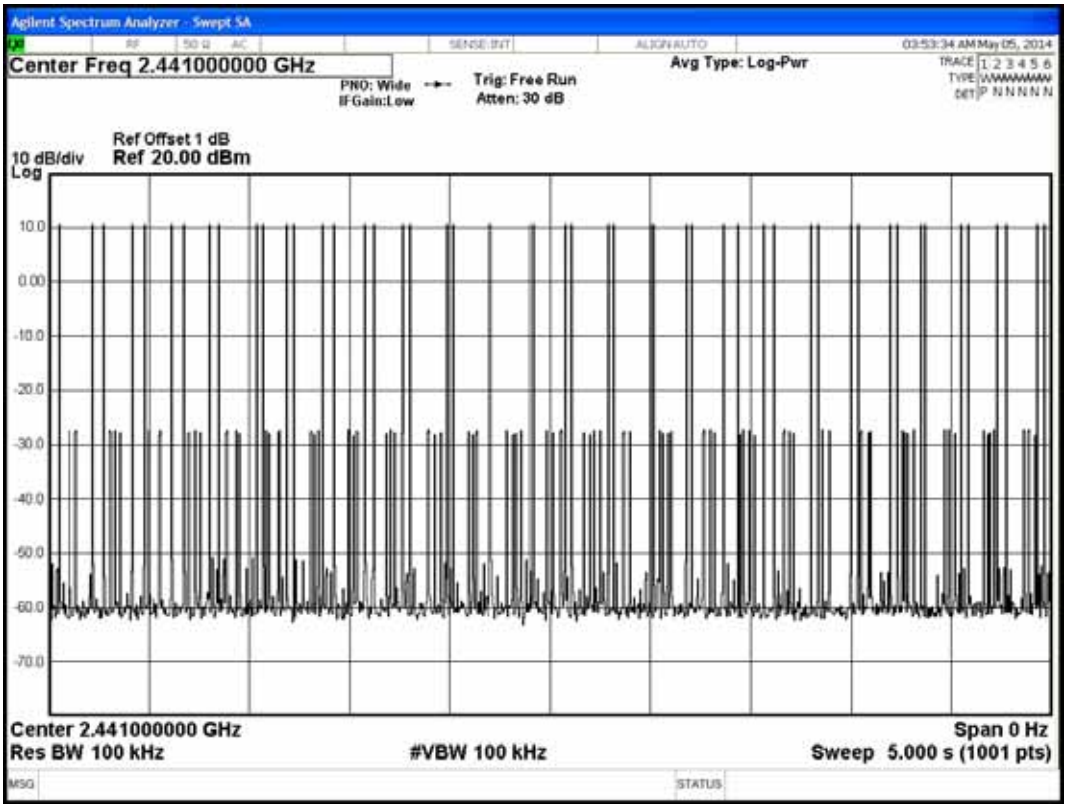
25 channels*31.6 seconds/5* 1.74ms = 274.92ms (<400ms)

DH5 : For each 5 seconds of 18 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

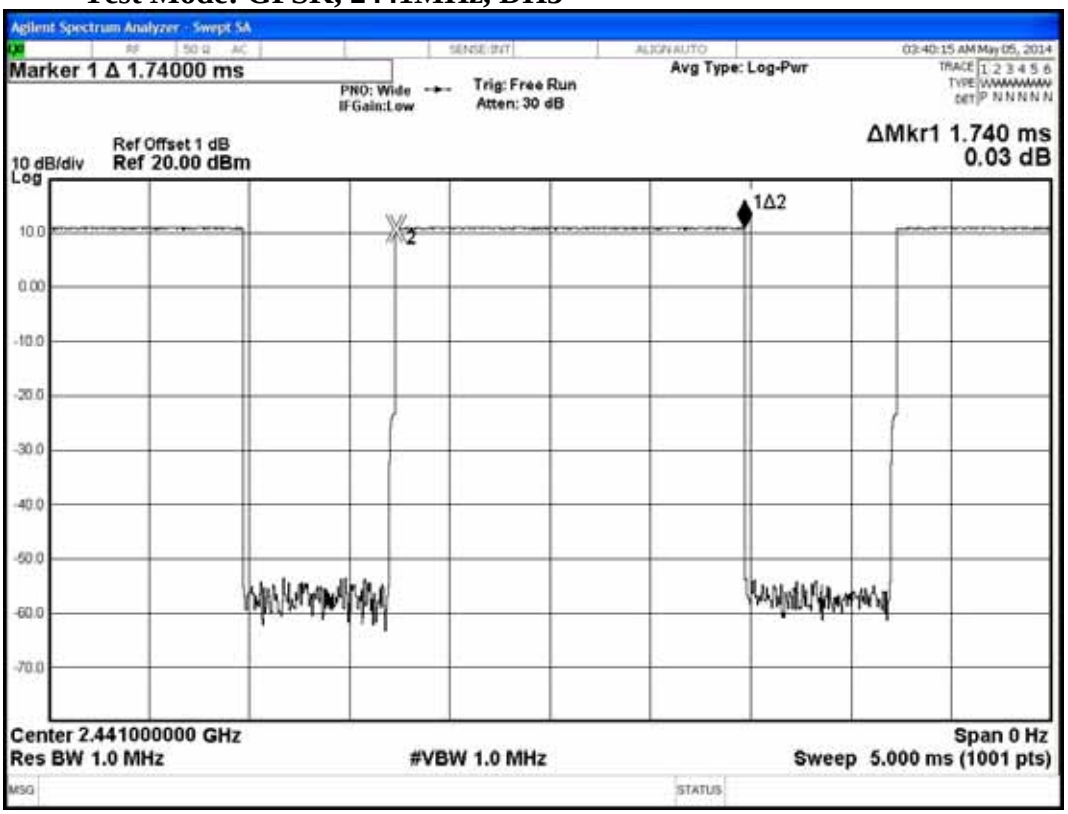
18 channels*31.6 seconds/5*2.87ms = 326.49ms (<400ms)

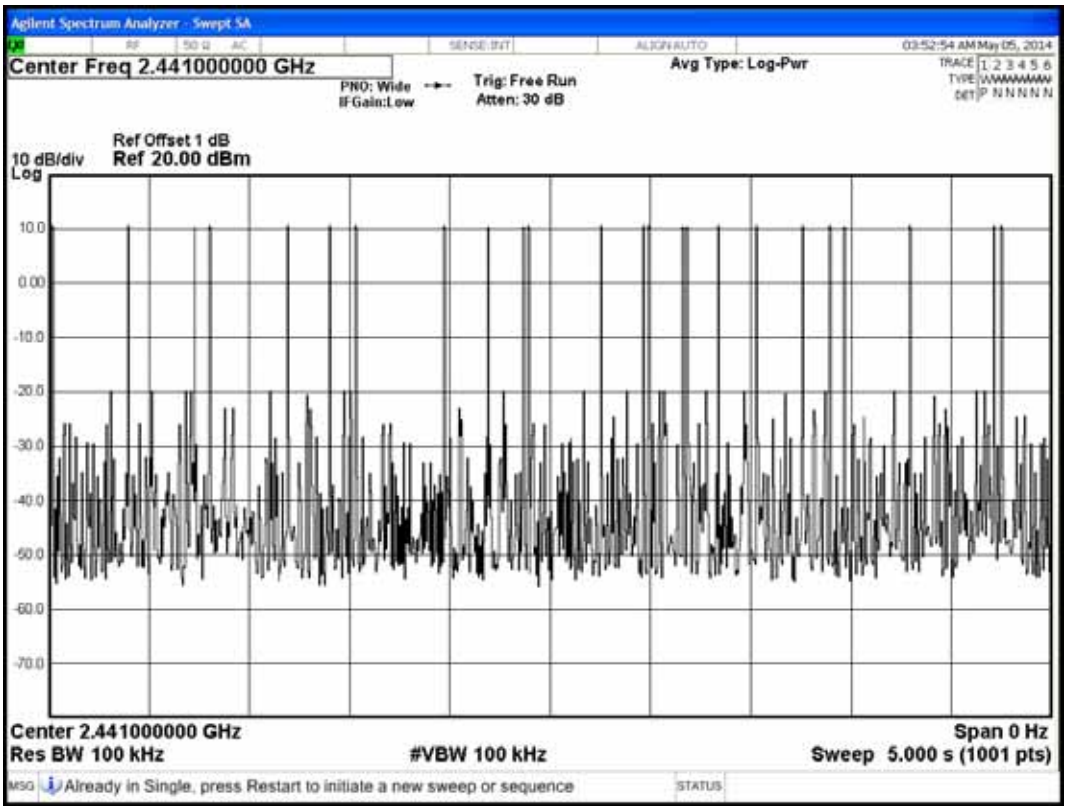
Test Mode: GFSK, 2441MHz, DH1



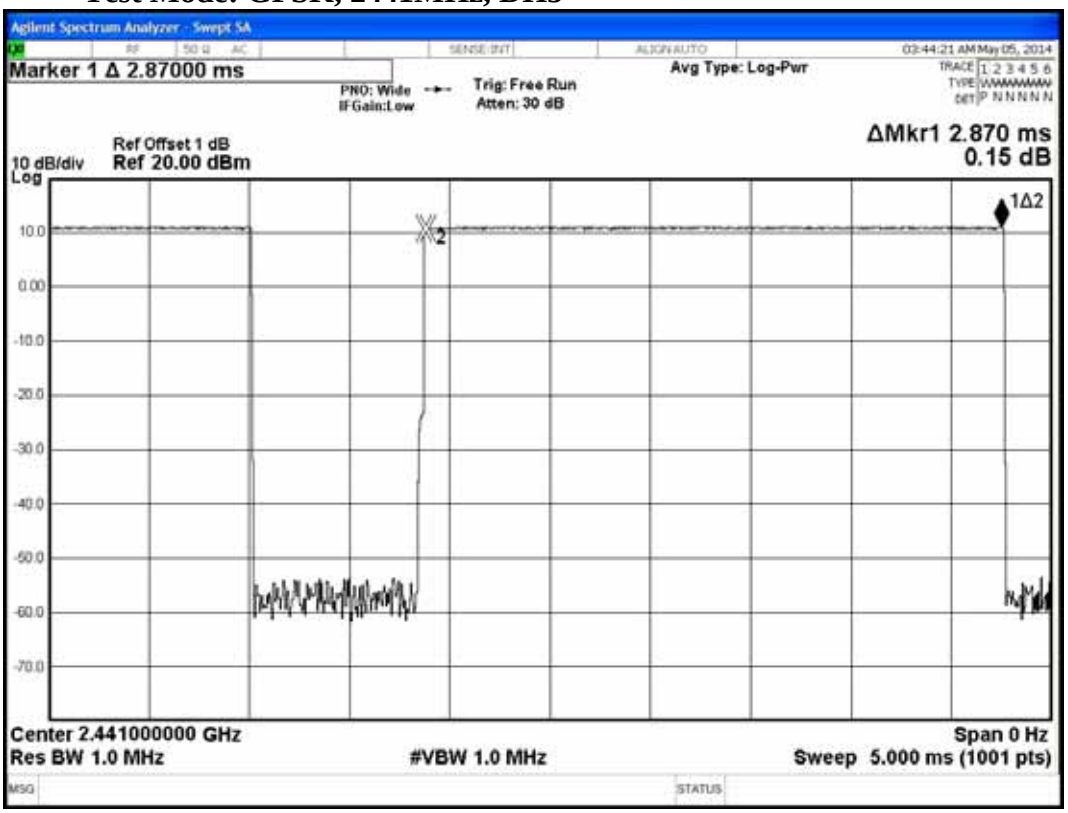


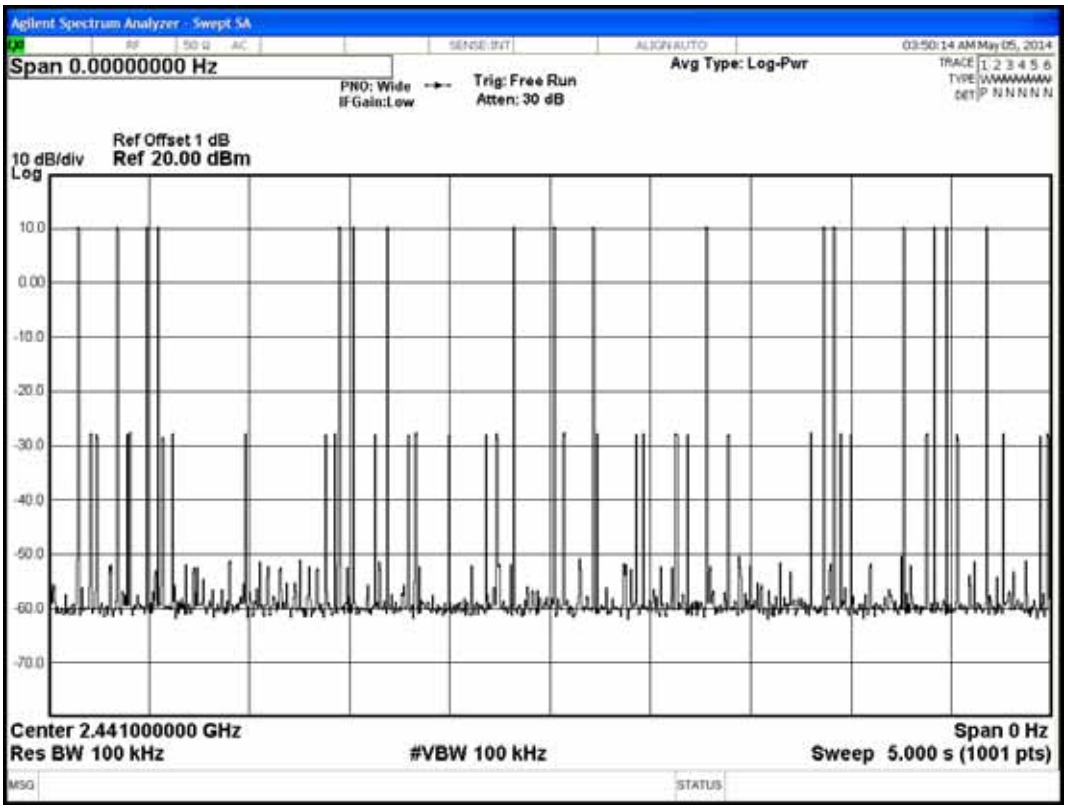
Test Mode: GFSK, 2441MHz, DH3





Test Mode: GFSK, 2441MHz, DH5





7.6.6. Type of Modulation：GFSK, Test Frequency：2480MHz

Duty cycle: 79channels*0.4 seconds = 31.6 seconds

DH1 : For each 5 seconds of 51 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

51 channels*31.6 seconds/5* 0.335ms = 107.98ms (<400ms)

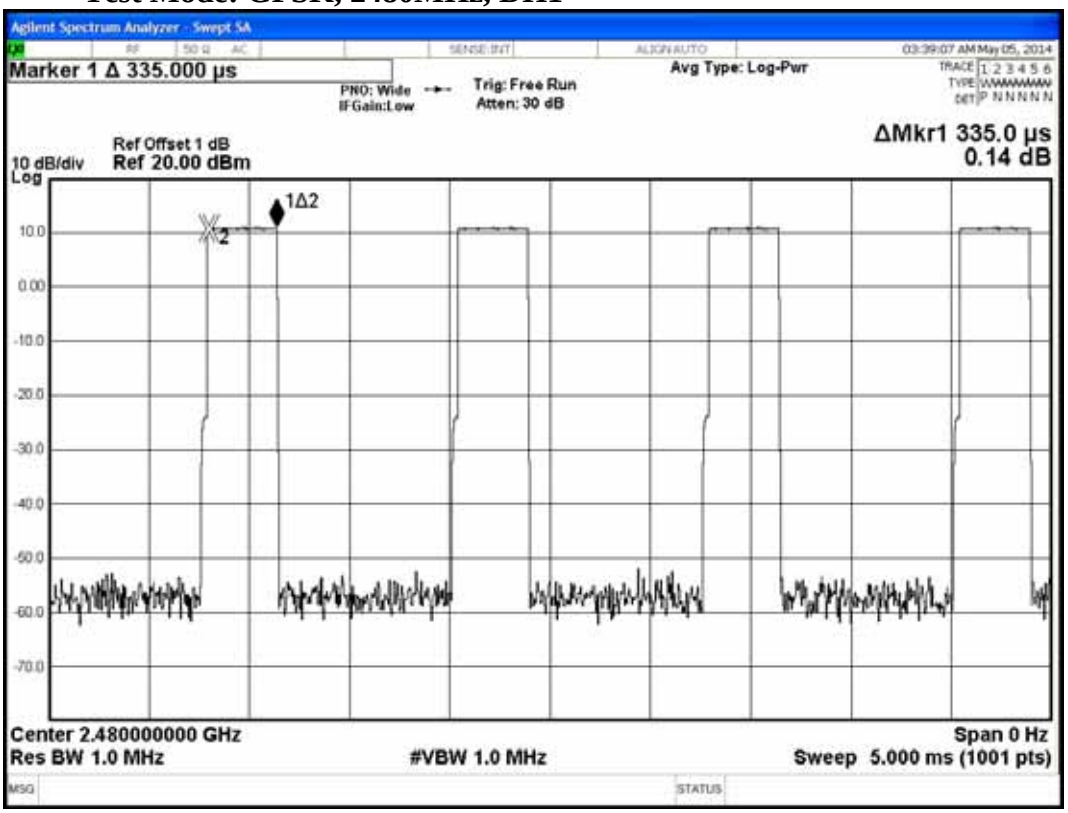
DH3 : For each 5 seconds of 25 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

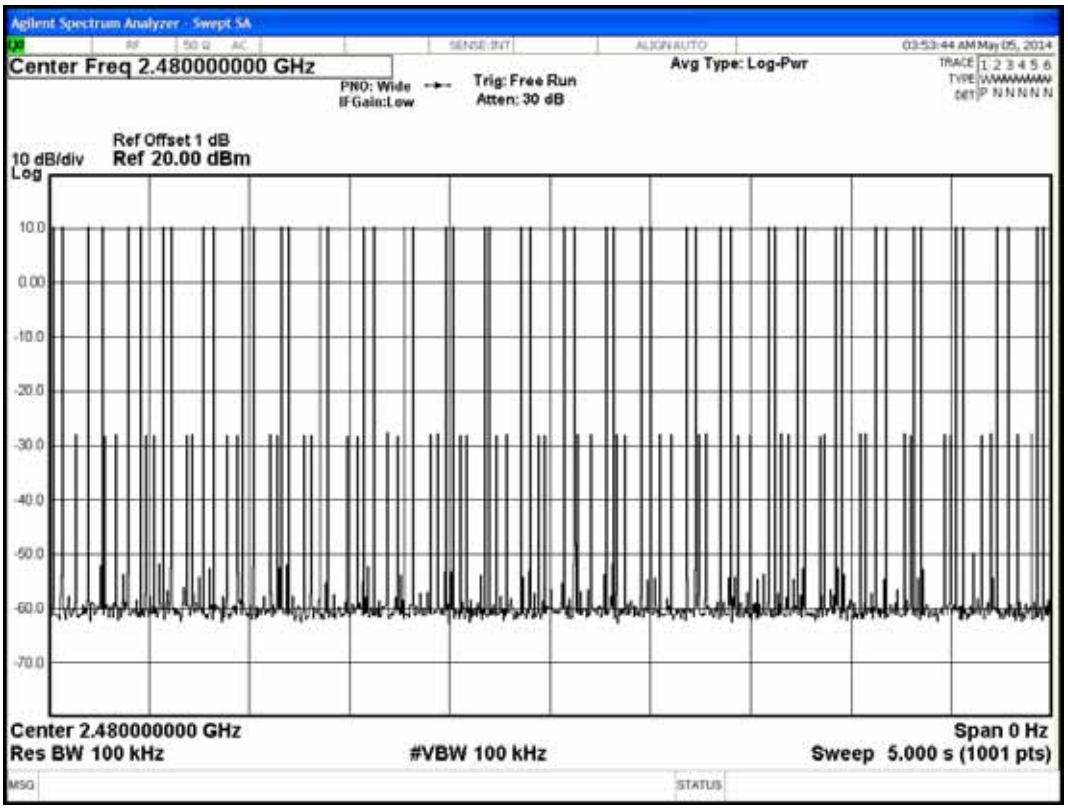
25 channels*31.6 seconds/5* 1.74ms = 274.92ms (<400ms)

DH5 : For each 5 seconds of 17 channels appearance, the longest time of occupancy for each of 31.6 seconds is:

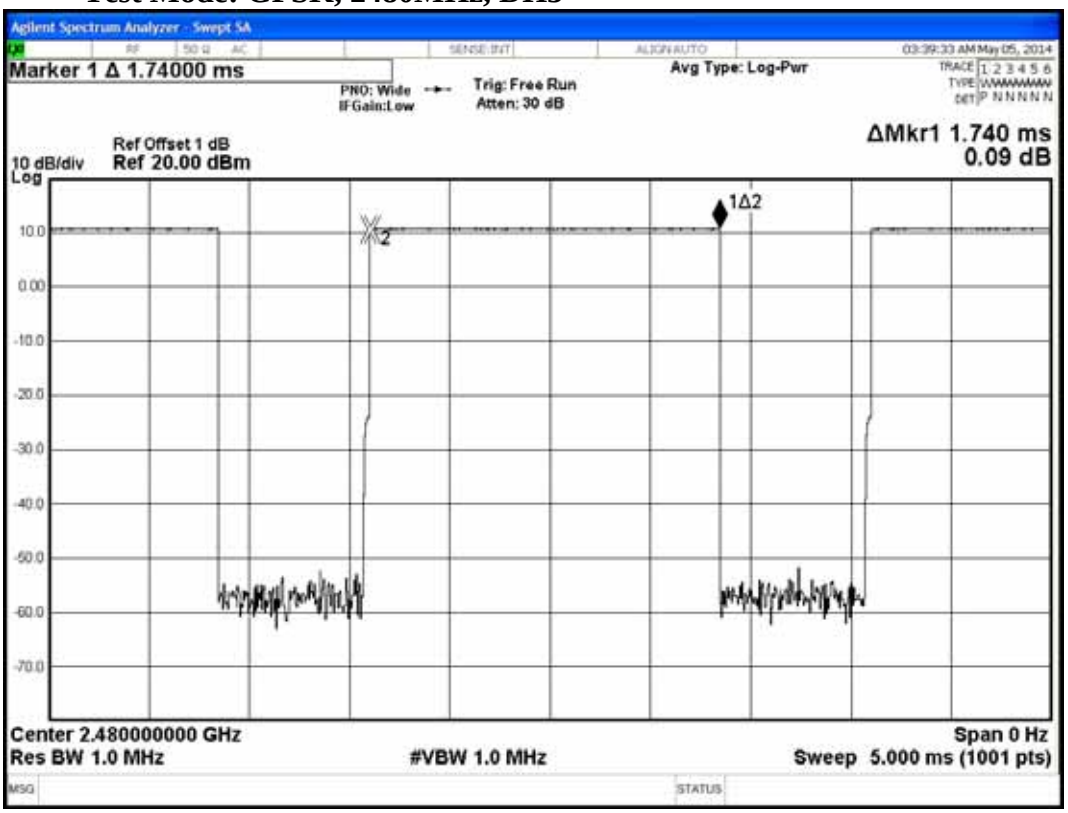
17 channels*31.6 seconds/5*2.87ms = 308.35ms (<400ms)

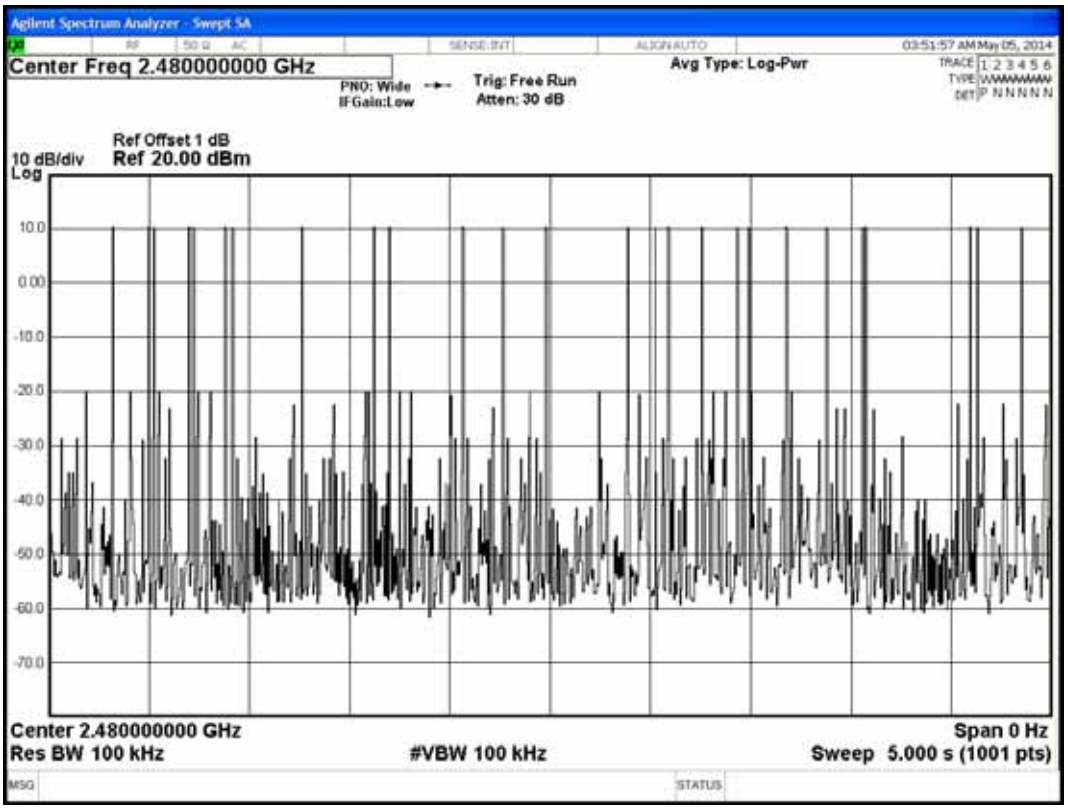
Test Mode: GFSK, 2480MHz, DH1



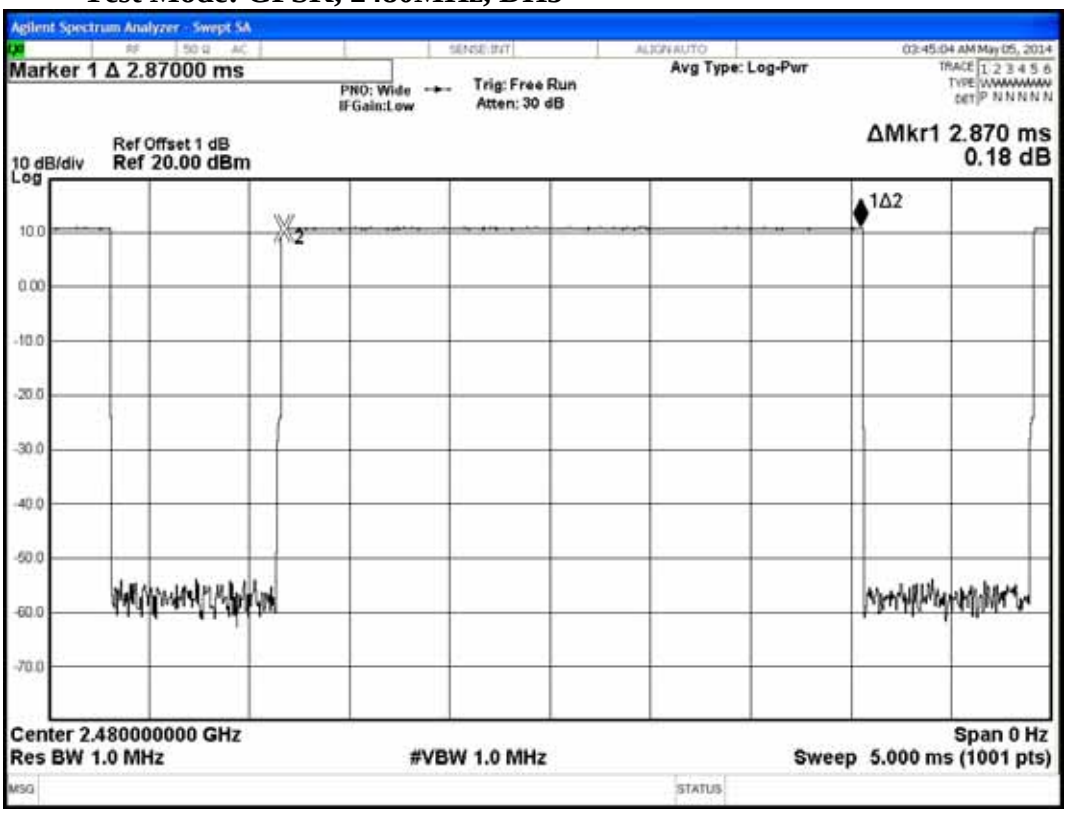


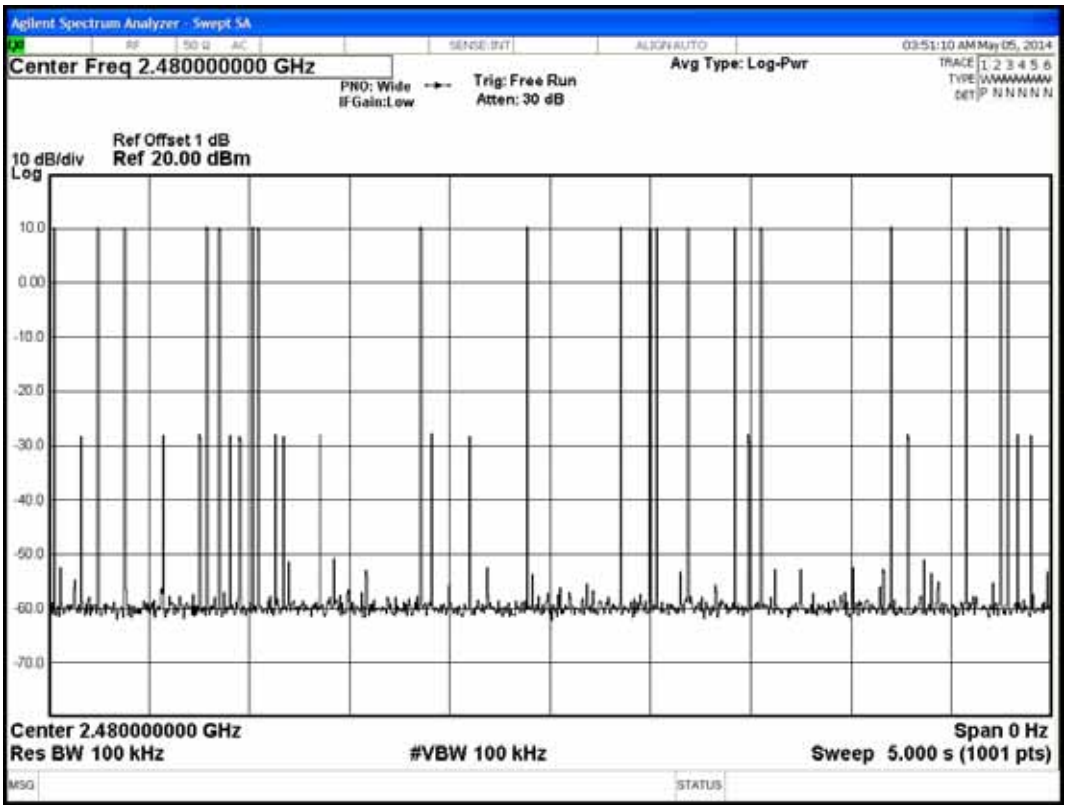
Test Mode: GFSK, 2480MHz, DH3





Test Mode: GFSK, 2480MHz, DH5





8. NUMBER OF HOPPING CHANNELS MEASUREMENT

8.1. Test Equipment

The following test equipment was used during the number of hopping channels measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Due Date
1.	Spectrum Analyzer	Agilent	N9030A-544	US51350140	2014. 07. 30

8.2. Block Diagram of Test Setup

The same as section 5.2.

8.3. Specification Limits [§15.247(a)(1)(iii)]

Frequency hopping systems which use fewer than 20 hopping frequencies may employ intelligent hopping techniques to avoid interference to other transmissions. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 non-overlapping channels.

8.4. Operating Condition of EUT

Same as carrier frequency separation measurement which was listed in section 5.4.

8.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measure by spectrum analyzer with 100kHz RBW and 100kHz VBW. Sweep=Auto ; Detector function=peak ; Trace=Max hold
The measurement guideline was according to FCC Public Notice DA 00-705.

8.6. Test Results

PASSED. All the test results are attached in next page.

[Note: We performed testing of the highest and lowest data rate.]

EUT: 7" Pocketable Pad M/N: TB71A-W

Test Date: 2014. 05. 05 Temperature: 24℃ Humidity: 48%

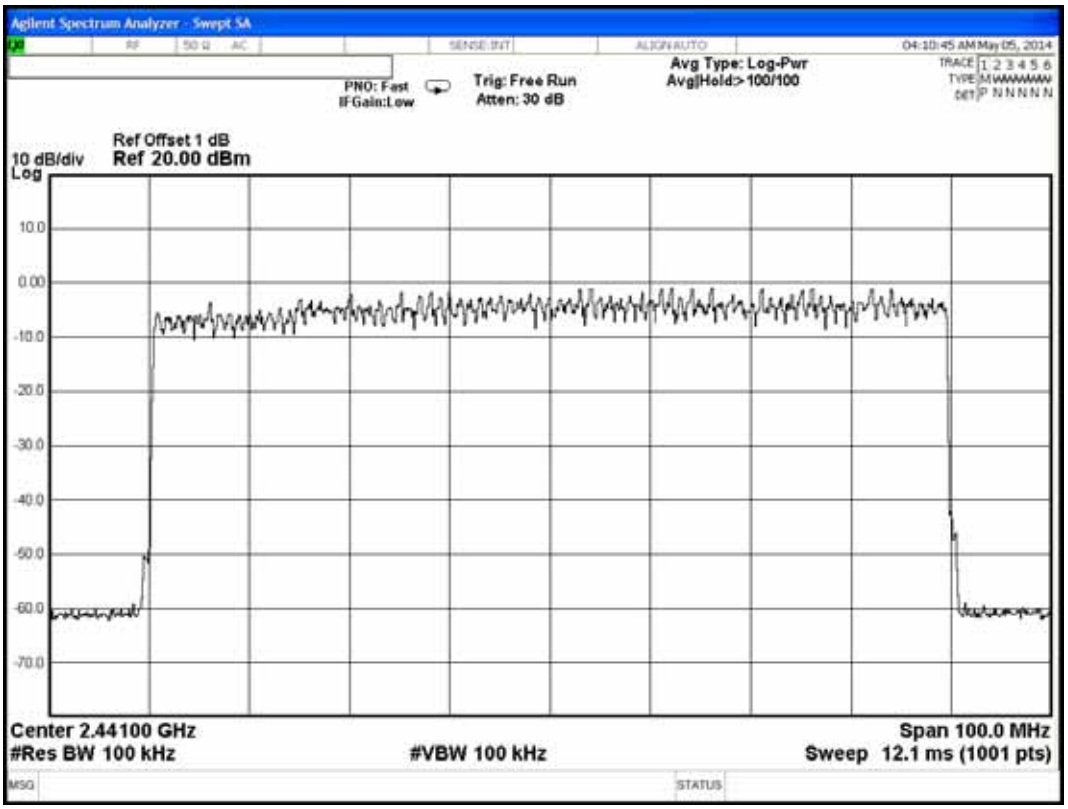
8.6.1.Type of Modulation: 8-DPSK

The number hopping channel is 79.

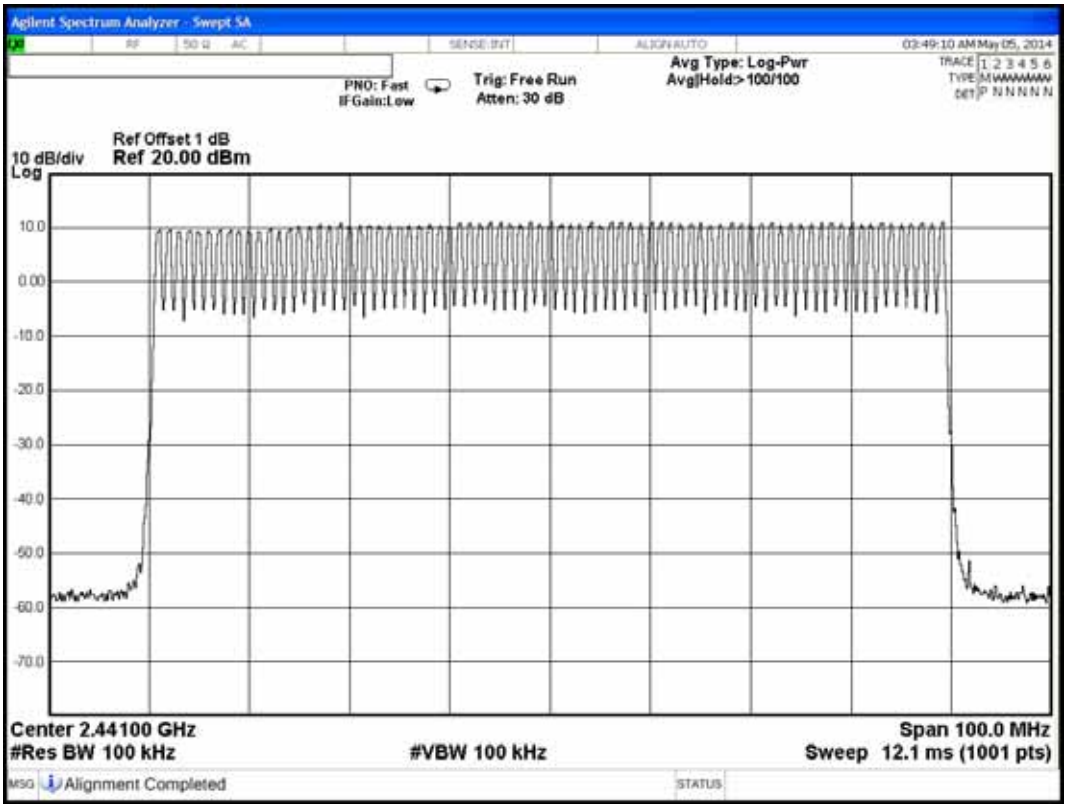
8.6.2.Type of Modulation: GFSK

The number hopping channel is 79.

Test Mode: 8-DPSK



Test Mode: GFSK



9. MAXIMUM PEAK OUTPUT POWER MEASUREMENT

9.1. Test Equipment

The following test equipment was used during the maximum peak output power measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Due Date
1.	Spectrum Analyzer	Agilent	N9030A-544	US51350140	2014. 07. 30

9.2. Block Diagram of Test Setup

The same as section 5.2.

9.3. Specification Limits [§15.247(b)-(1)]

The Limits of maximum Peak Output Power for frequency hopping systems in 2400-2483.5MHz is: 0.125Watt. (21dBm)

9.4. Operating Condition of EUT

Same as carrier frequency separation measurement which was listed in 5.4.

9.5. Test Procedure

The transmitter output was connected to the spectrum analyzer.
Span can encompass the waveform
RBW>EBW
VBW≧RBW
Sweep=5MHz
The measurement guideline was according to FCC Public Notice DA 00-705.

9.6. Test Results

PASSED. All the test results are listed below

.

[Note: We performed testing of the highest and lowest data rate.]

EUT: 7" Pocketable Pad M/N: TB71A-W

Test Date: 2014. 05. 05 Temperature: 24℃ Humidity: 48%

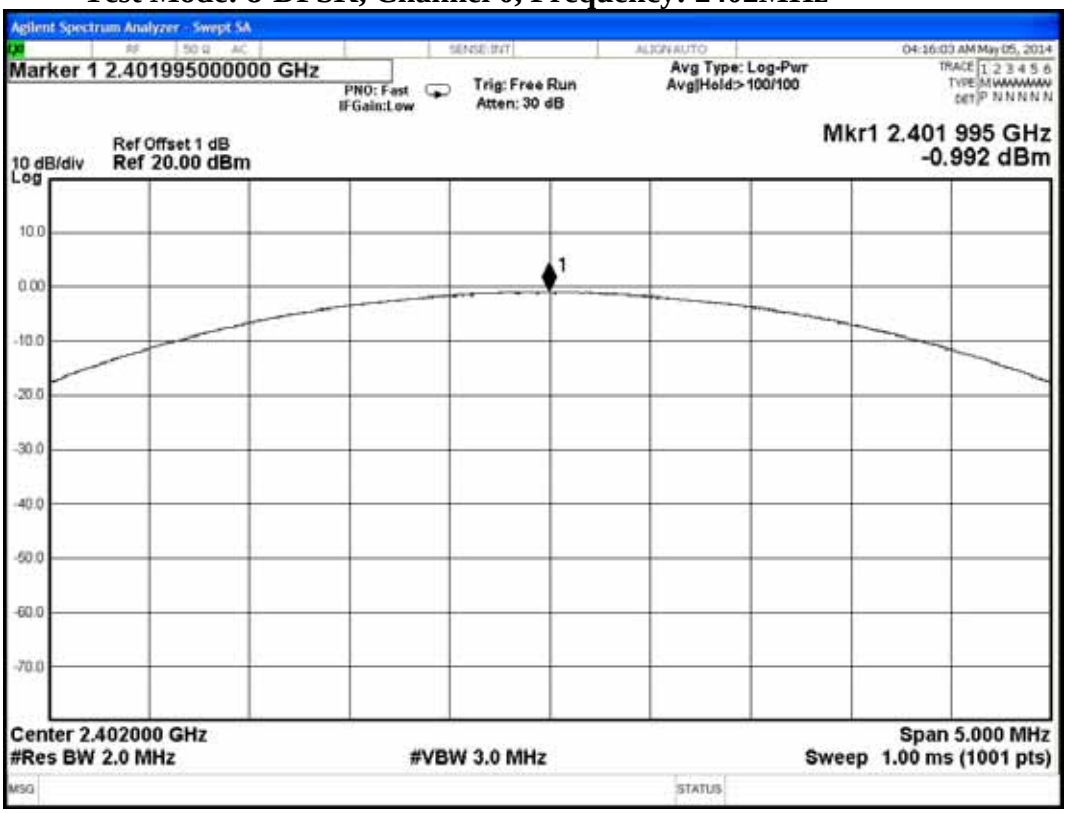
9.6.1.Type of Modulation: 8-DPSK

No.	Channel	Test Frequency	**Peak Output Power**	Limit
1.	0	2402MHz	**-0.992dBm**	21dBm
2.	39	2441MHz	**-2.259dBm**	21dBm
3.	78	2480MHz	**-2.079dBm**	21dBm

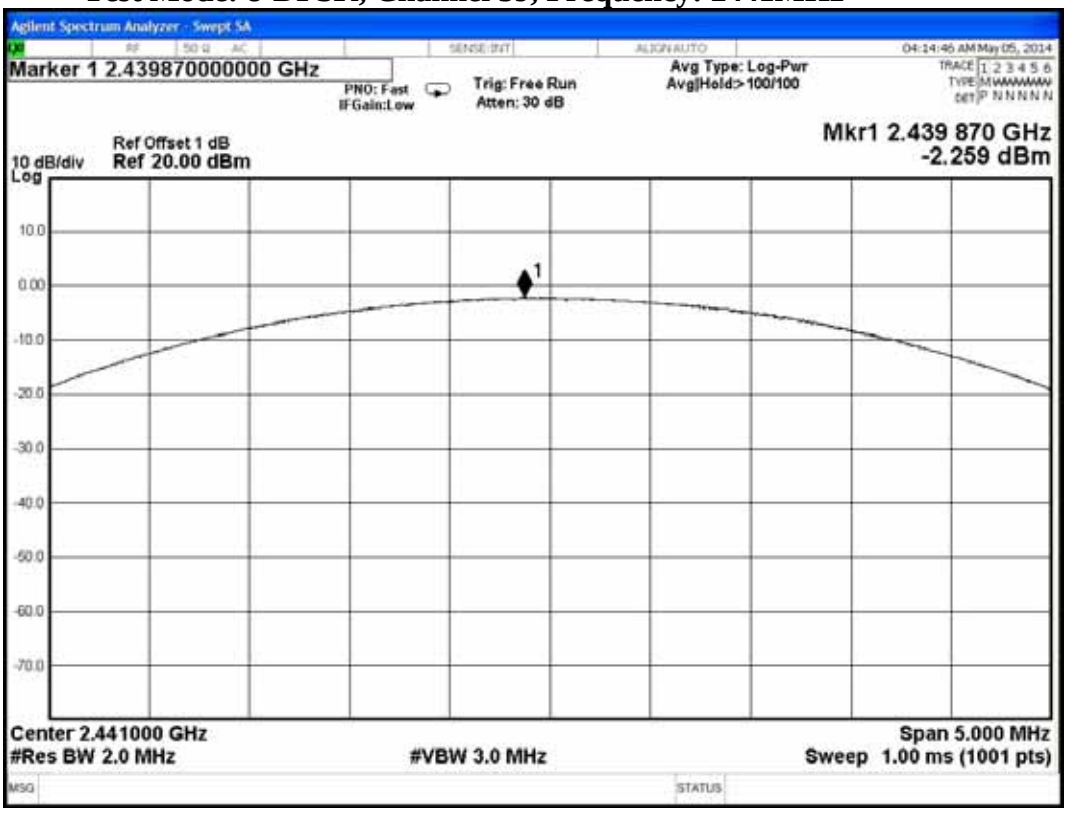
9.6.2.Type of Modulation: GFSK

No.	Channel	Test Frequency	**Peak Output Power**	Limit
1.	0	2402MHz	**9.611dBm**	21dBm
2.	39	2441MHz	**10.896dBm**	21dBm
3.	78	2480MHz	**10.841dBm**	21dBm

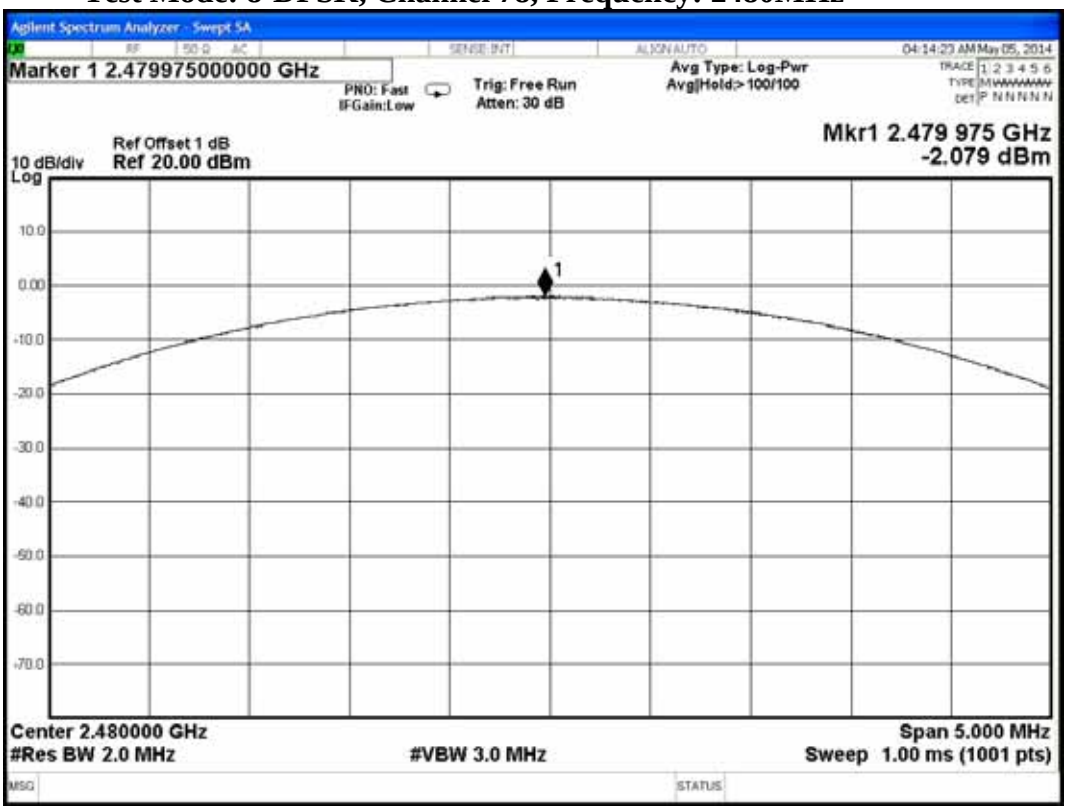
Test Mode: 8-DPSK, Channel 0, Frequency: 2402MHz



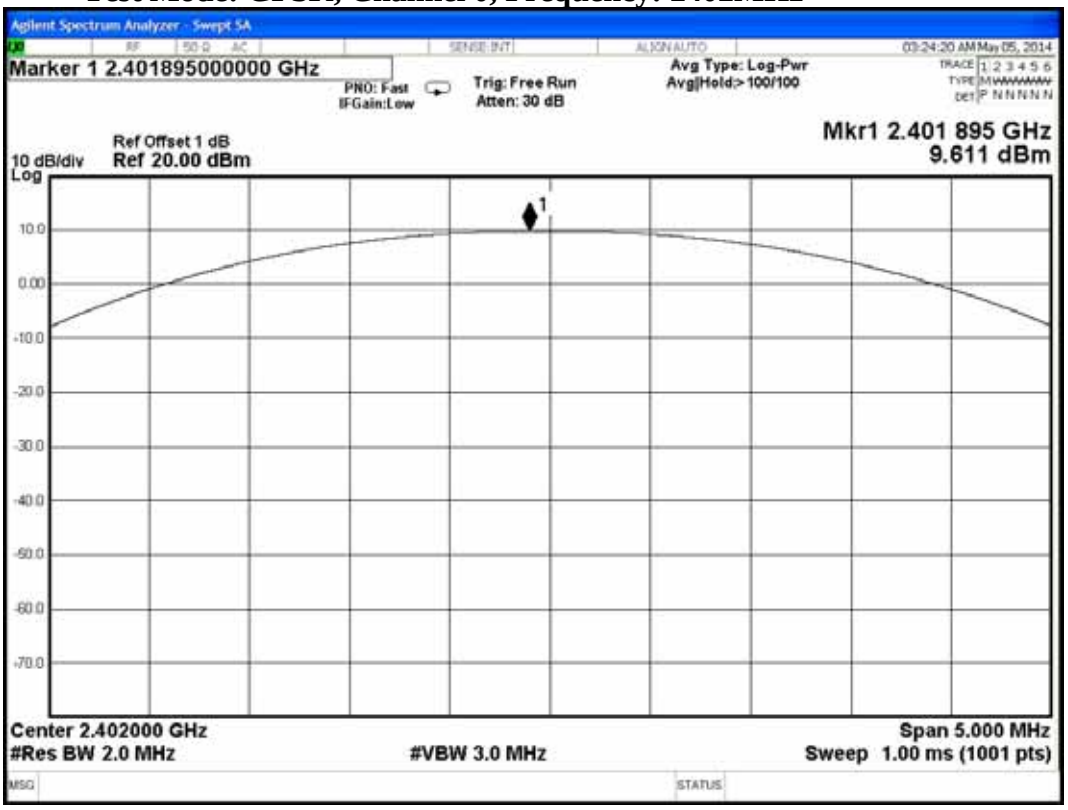
Test Mode: 8-DPSK, Channel 39, Frequency: 2441MHz



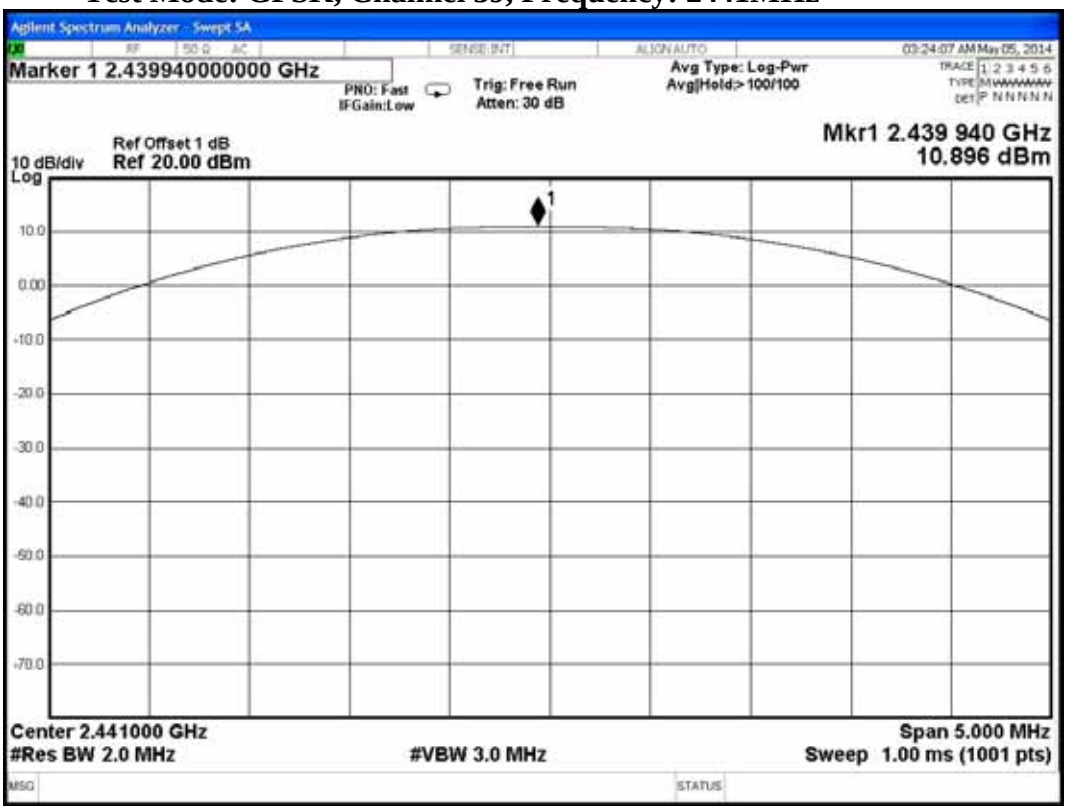
Test Mode: 8-DPSK, Channel 78, Frequency: 2480MHz



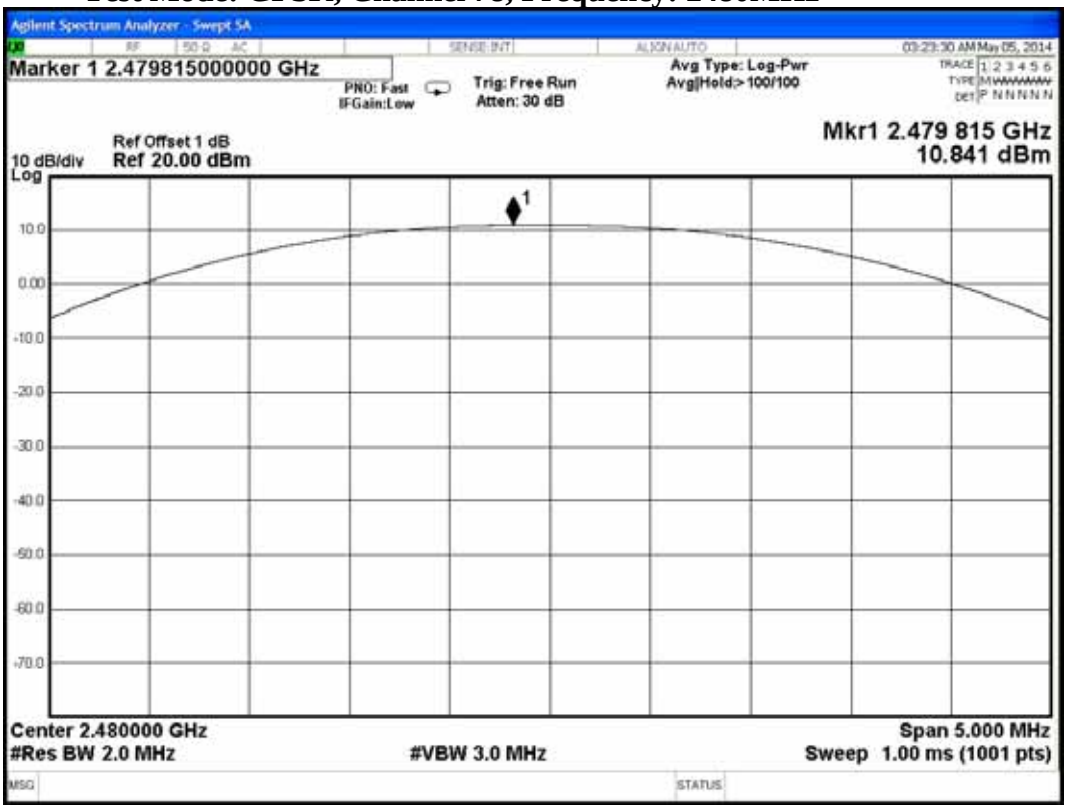
Test Mode: GFSK, Channel 0, Frequency: 2402MHz



Test Mode: GFSK, Channel 39, Frequency: 2441MHz



Test Mode: GFSK, Channel 78, Frequency: 2480MHz



10. EMISSION LIMITATIONS MEASUREMENT

10.1. Test Equipment

The following test equipment was used during the emission limitations test：

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Due Date
1.	Spectrum Analyzer	Agilent	N9030A-544	US51350140	2014. 07. 30

10.2. Block Diagram of Test Setup

The same as section 5.2.

10.3. Specification Limits [§15.247(c)]

10.3.1. In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (See Section 15.205(c)).(※This test result attaching to §3.6.3)

10.3.2. The reference level for determining limit of emission limitations is according to the value measured indicated in plots at section 9.6.

10.4. Operating Condition of EUT

Same as carrier frequency separation measurement which was listed in section 5.4.

10.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100kHz bandwidth from band edge.
The measurement guideline was according to FCC Public Notice DA 00-705.

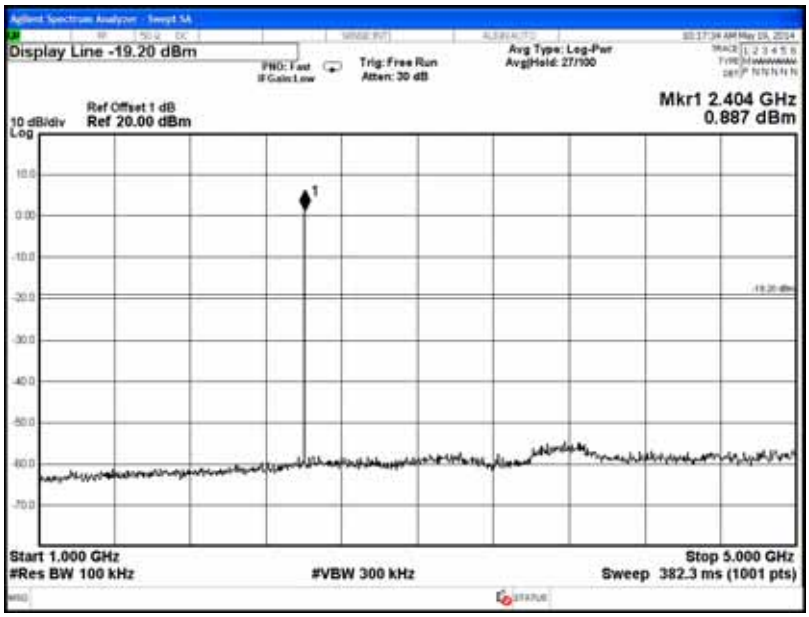
10.6. Test Results

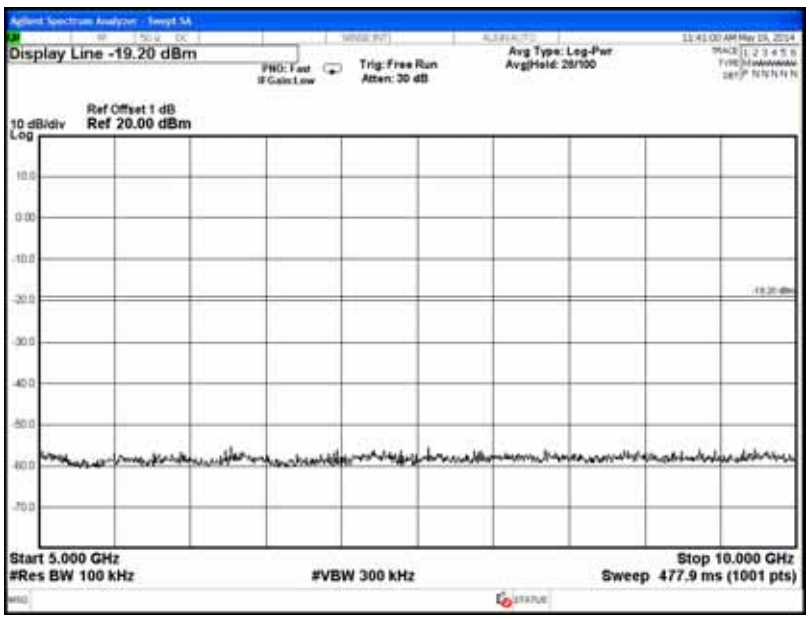
PASSED. The testing data was attached in the next pages.

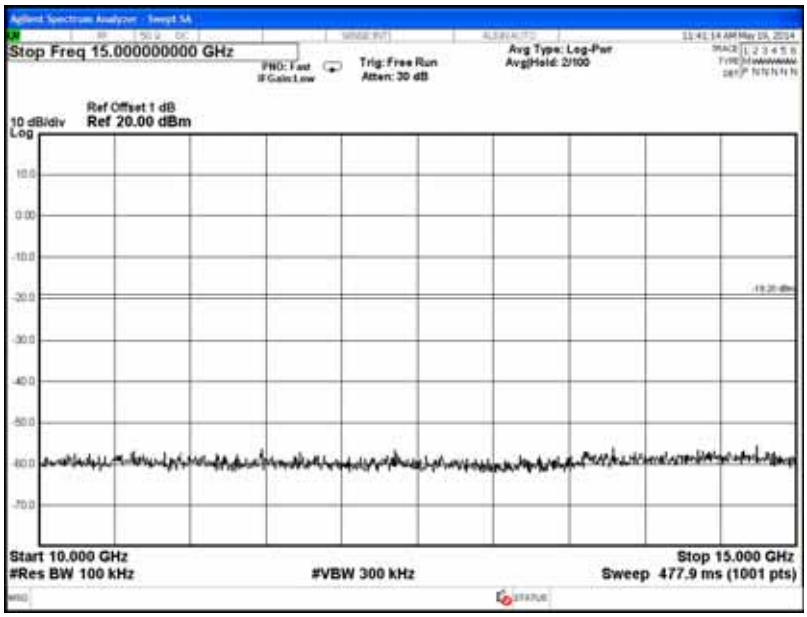
EUT: 7" Pocketable Pad M/N: TB71A-W

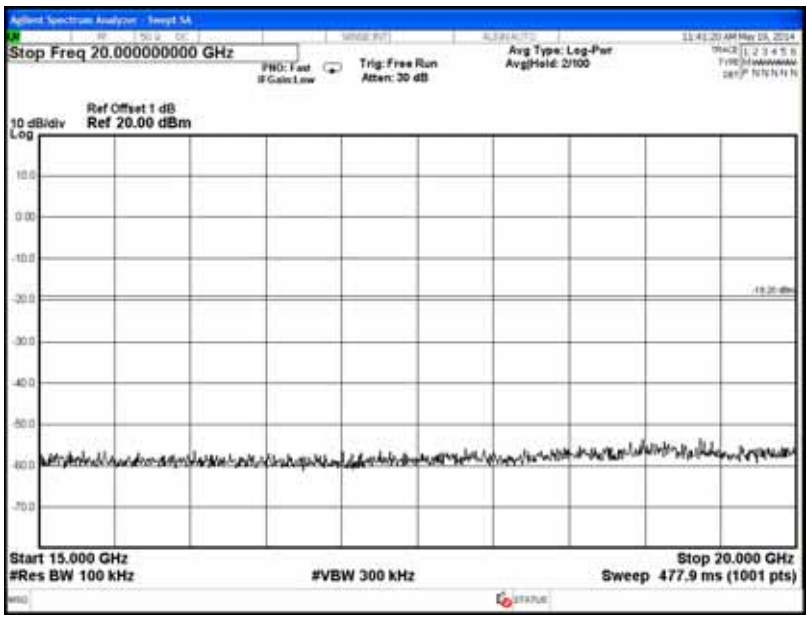
Test Date: 2014. 05. 19 Temperature: 24℃ Humidity: 46%

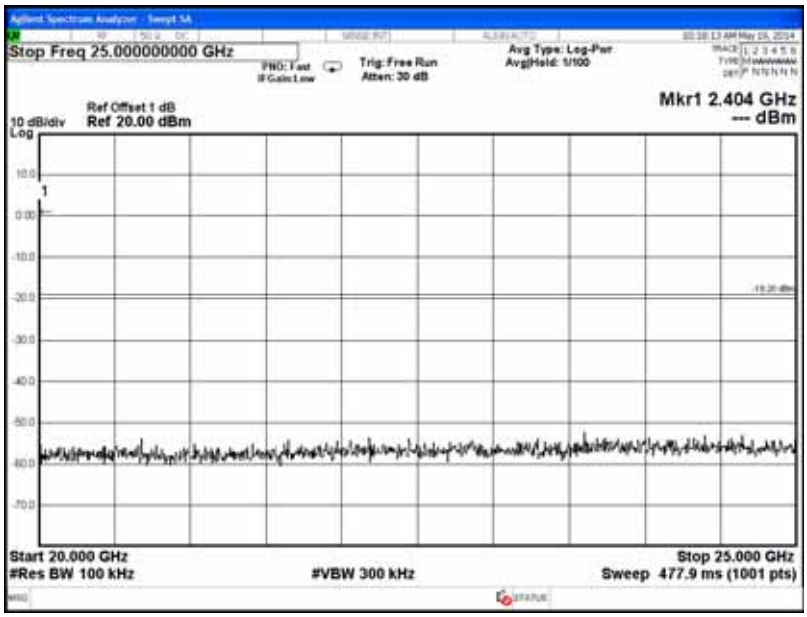
8-DPSK, Channel 0, Frequency: 2402MHz



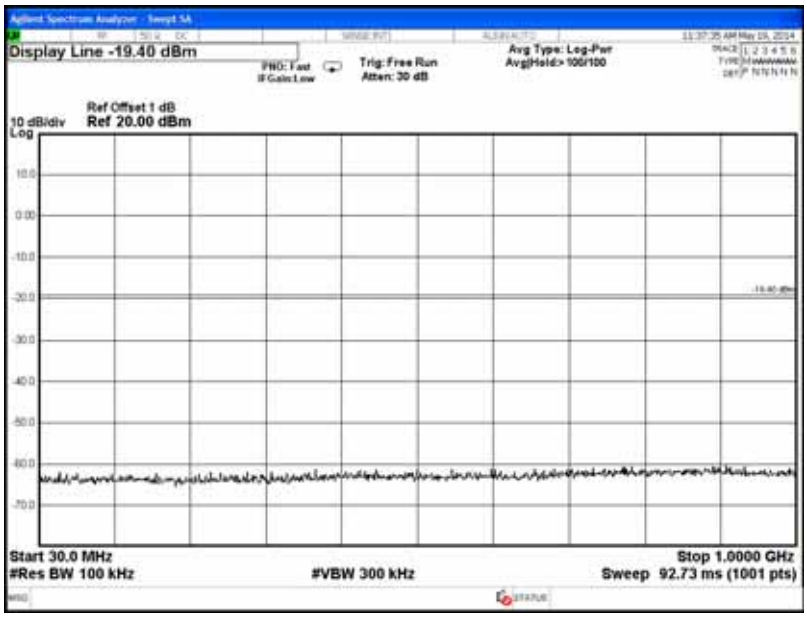


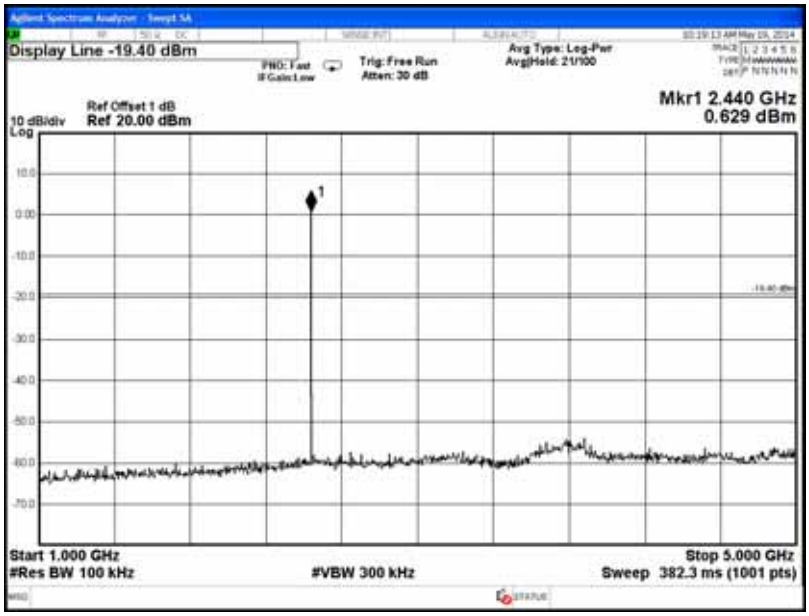

Agilent Spectrum Analyzer - Swept SA
Stop Freq 15.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Log
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 477.9 ms (1001 pts)

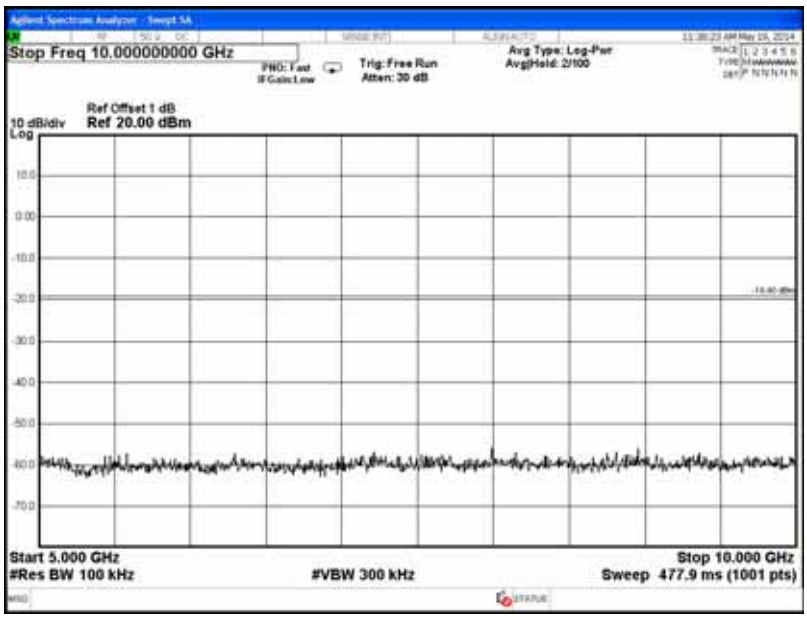

Agilent Spectrum Analyzer - Swept SA
Stop Freq 20.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Log
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 20.000 GHz
Sweep 477.9 ms (1001 pts)

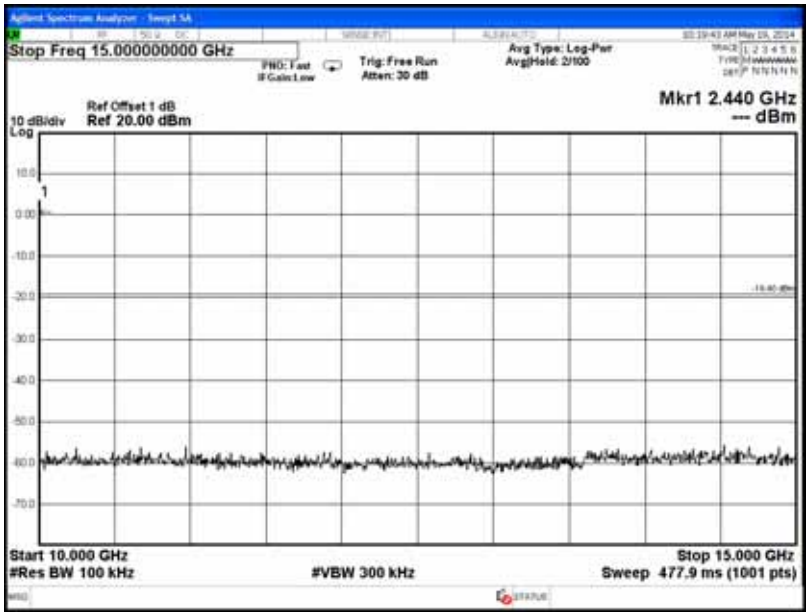

Agilent Spectrum Analyzer - Swept SA
Stop Freq 25.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 1/100
Mkr1 2.404 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Log
1
Start 20.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 477.9 ms (1001 pts)

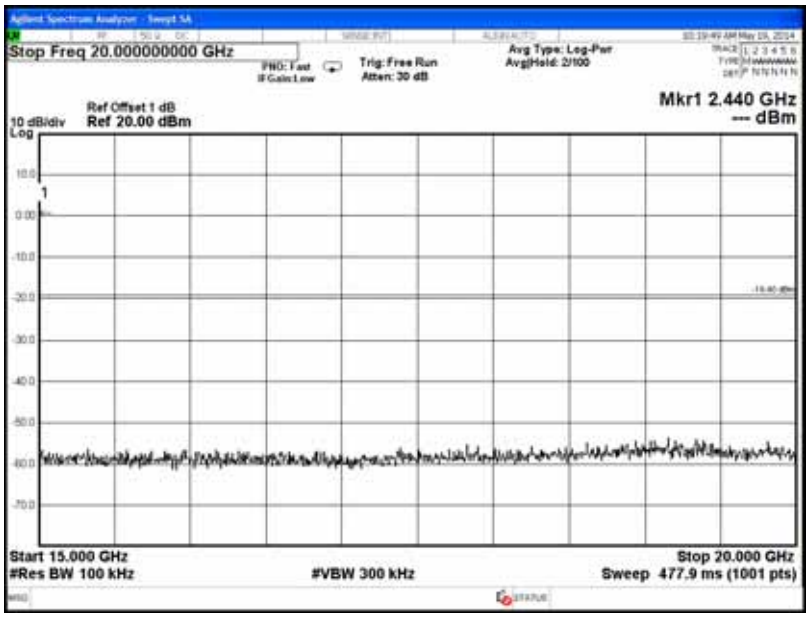
8-DPSK, Channel 39, Frequency: 2441MHz

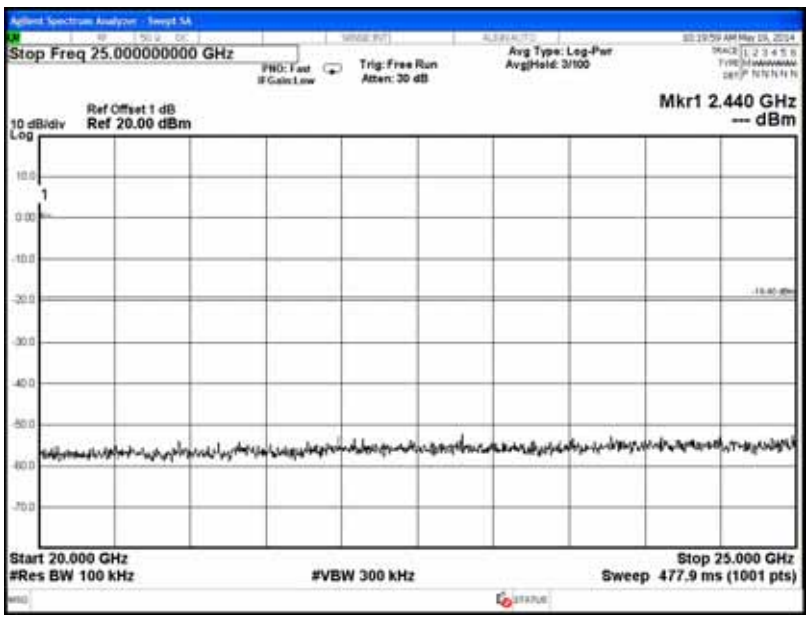




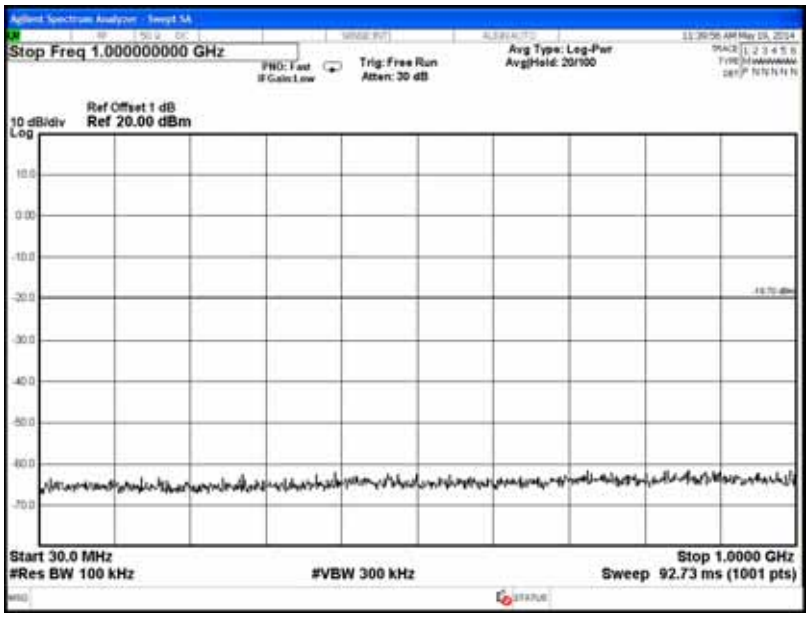


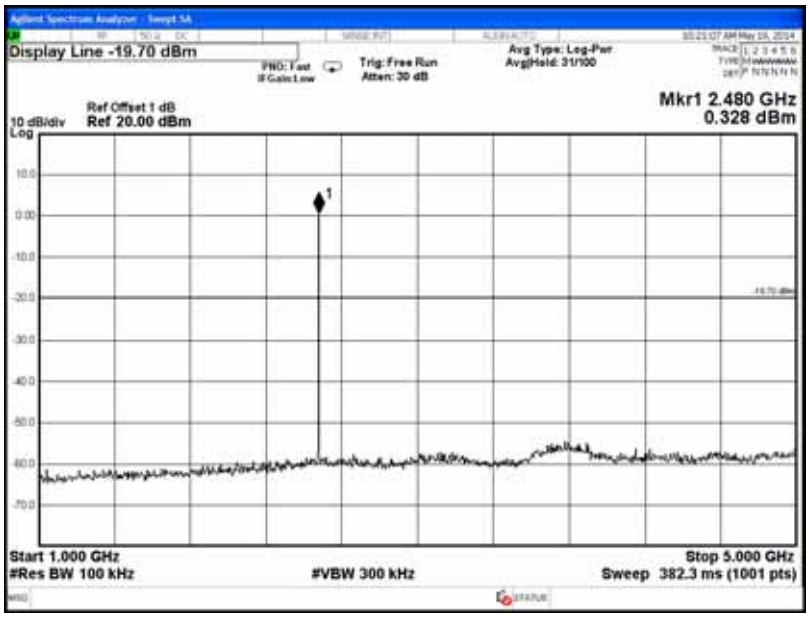

Agilent Spectrum Analyzer - Swept SA
Stop Freq 15.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
Mkr1 2.440 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Log
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 477.9 ms (1001 pts)

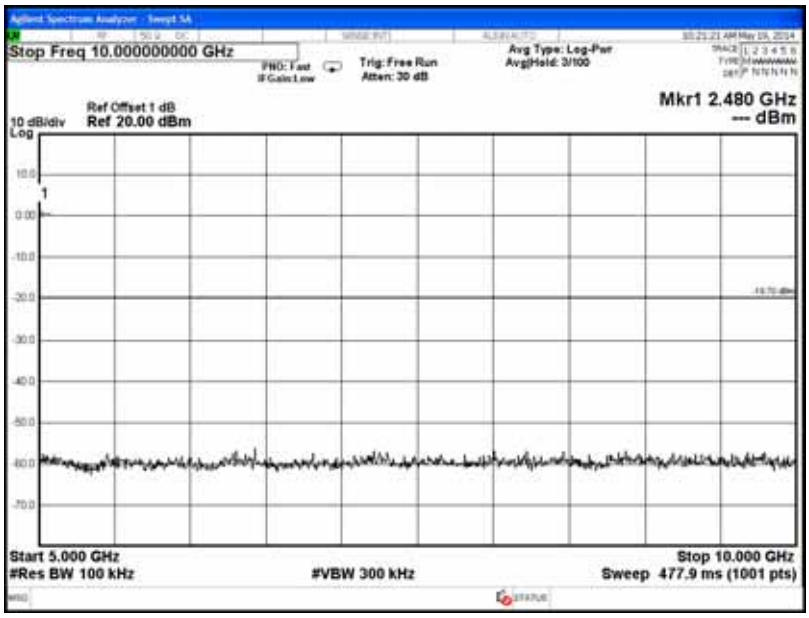

Agilent Spectrum Analyzer - Swept SA
Stop Freq 20.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
Mkr1 2.440 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Log
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 20.000 GHz
Sweep 477.9 ms (1001 pts)

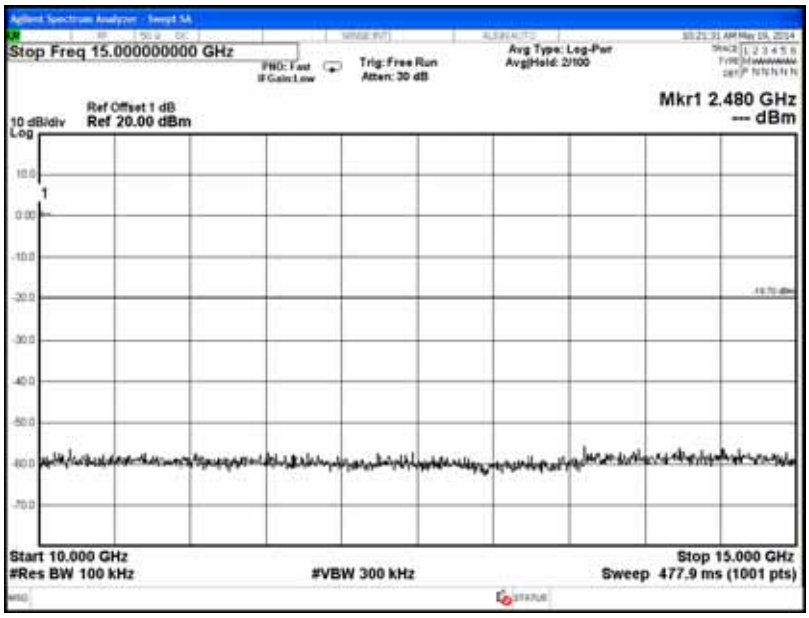

Agilent Spectrum Analyzer - Swept SA
Stop Freq 25.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 3/100
Mkr1 2.440 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Log
Start 20.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 477.9 ms (1001 pts)

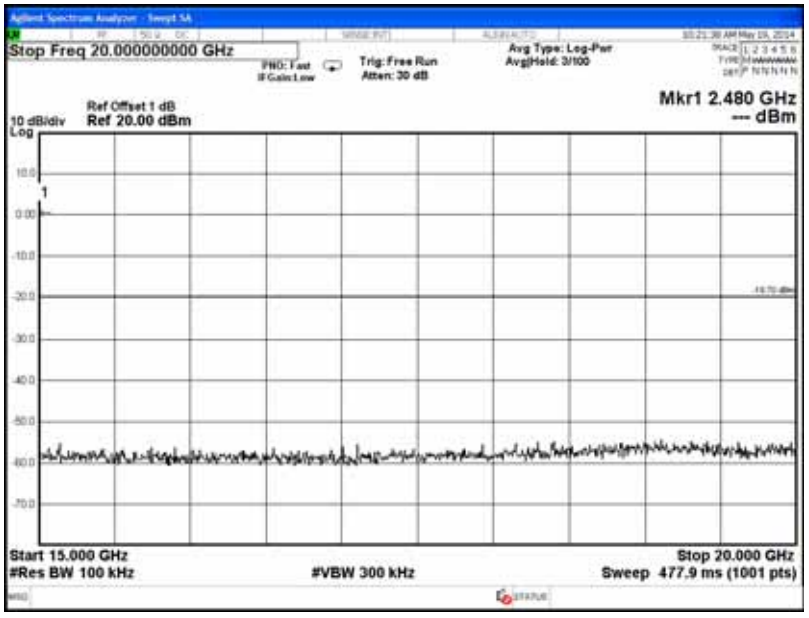
8-DPSK, Channel 78, Frequency: 2480MHz

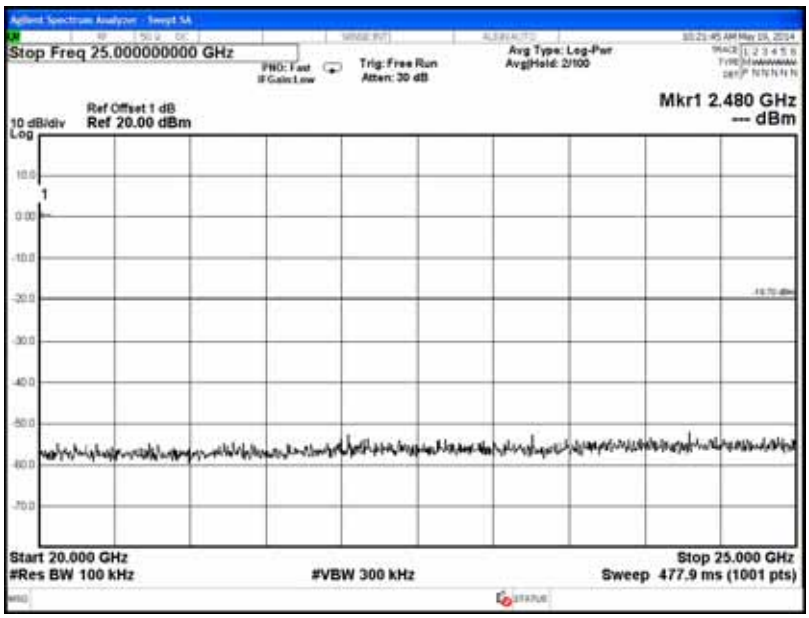




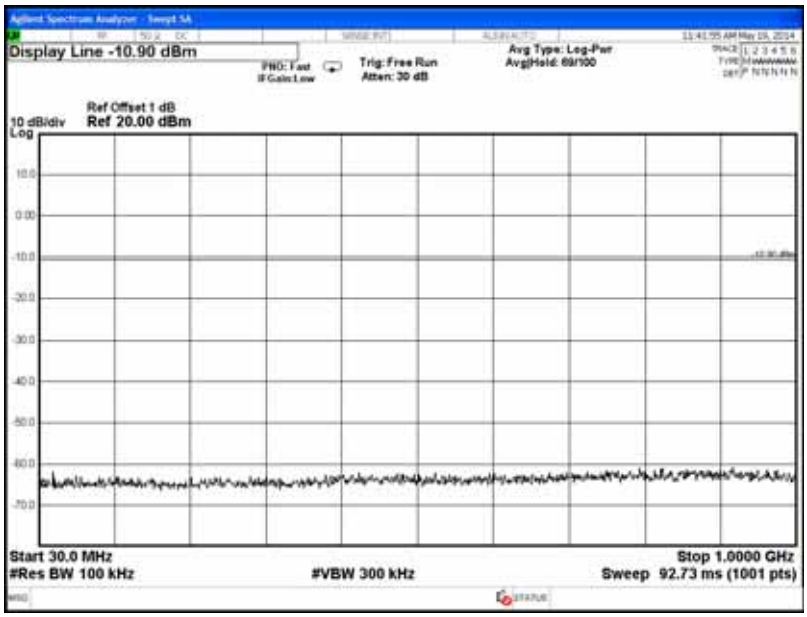


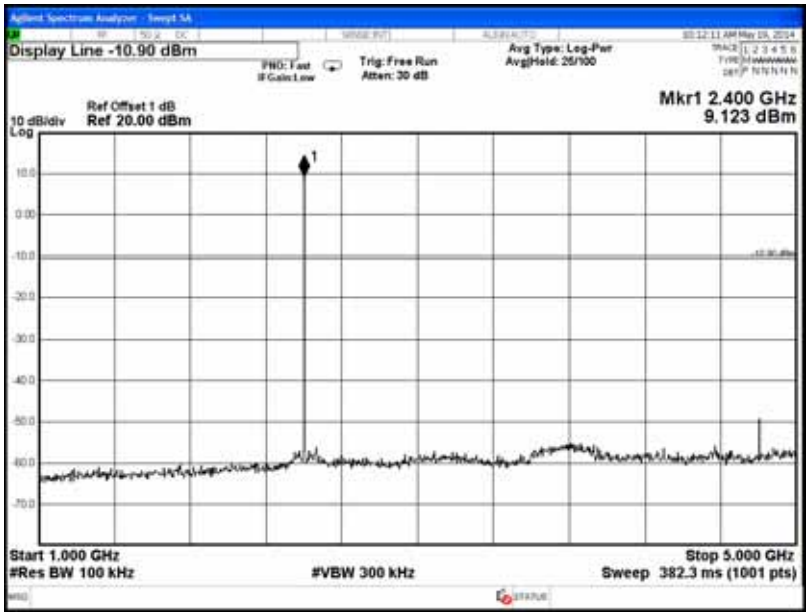

Agilent Spectrum Analyzer - Swept SA
Stop Freq 15.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
Mkr1 2.480 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Log
Ref 20.00 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 477.9 ms (1001 pts)

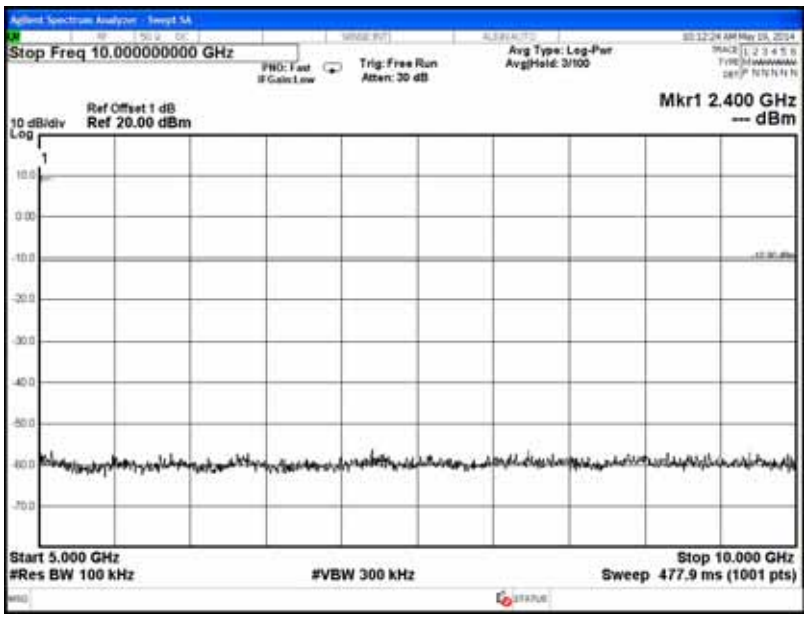

Agilent Spectrum Analyzer - Swept SA
Stop Freq 20.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 3/100
Mkr1 2.480 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Log
Ref 20.00 dBm
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 20.000 GHz
Sweep 477.9 ms (1001 pts)

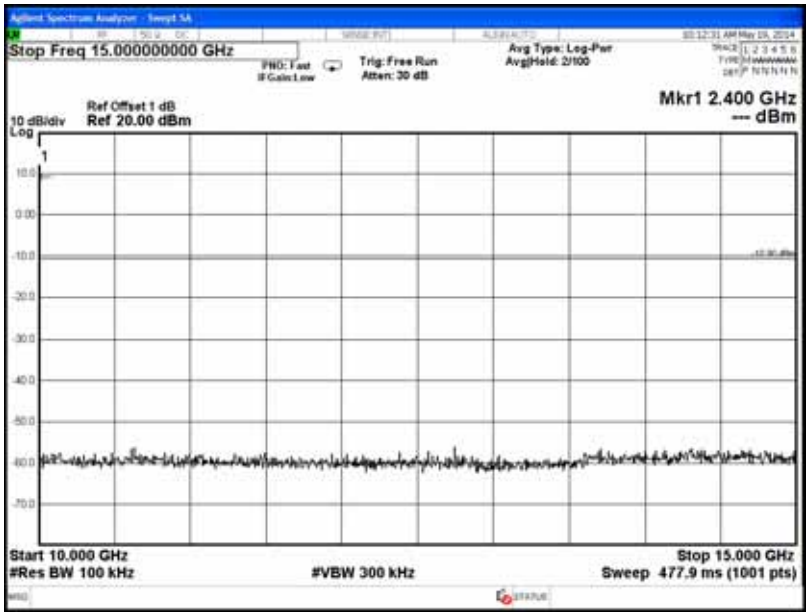

Agilent Spectrum Analyzer - Swept SA
Stop Freq 25.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
Mkr1 2.480 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Log
Ref 20.00 dBm
Start 20.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 477.9 ms (1001 pts)

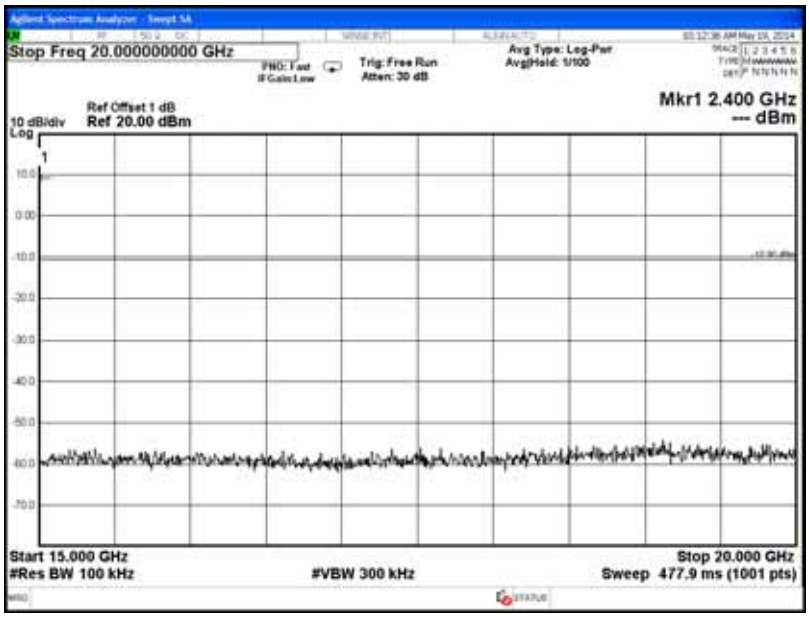
GFSK, Channel 0, Frequency: 2402MHz

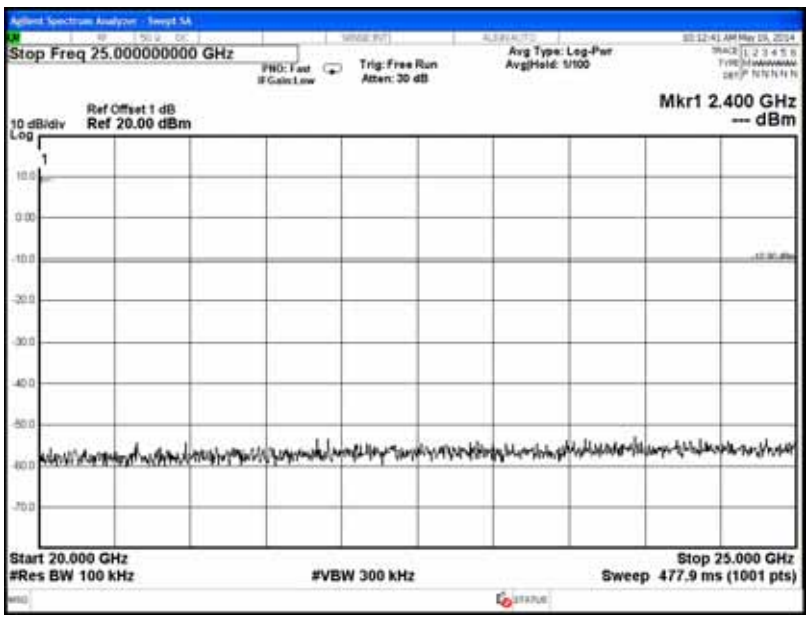




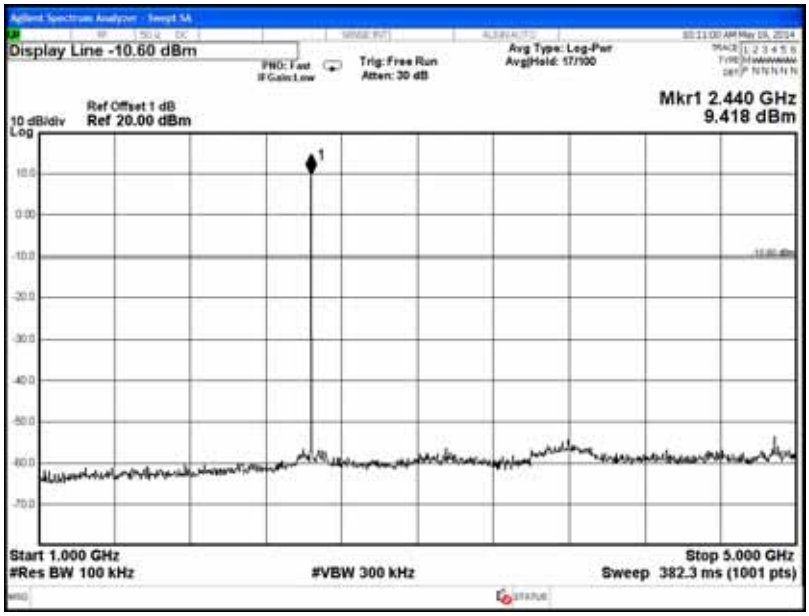


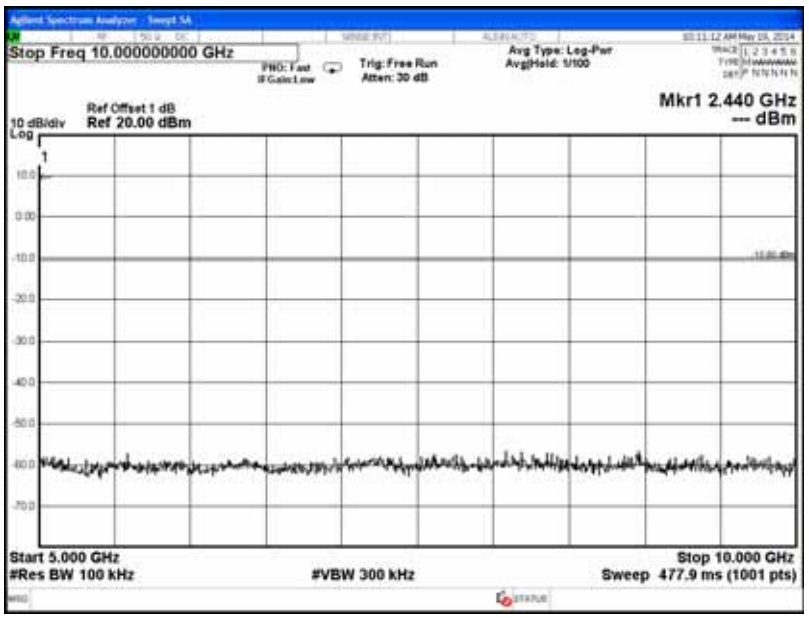

Agilent Spectrum Analyzer - Swept SA
Stop Freq 15.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
Mkr1 2.400 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Log
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 477.9 ms (1001 pts)

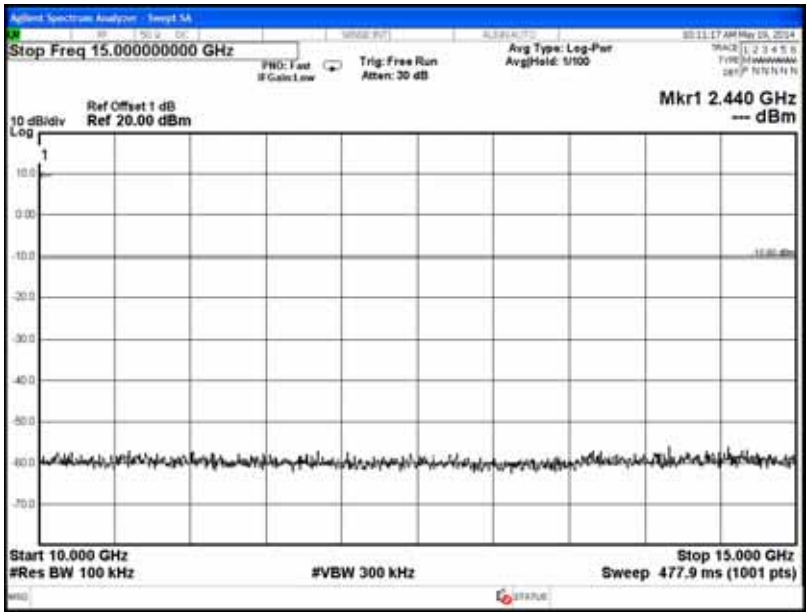

Agilent Spectrum Analyzer - Swept SA
Stop Freq 20.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 1/100
Mkr1 2.400 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Log
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 20.000 GHz
Sweep 477.9 ms (1001 pts)

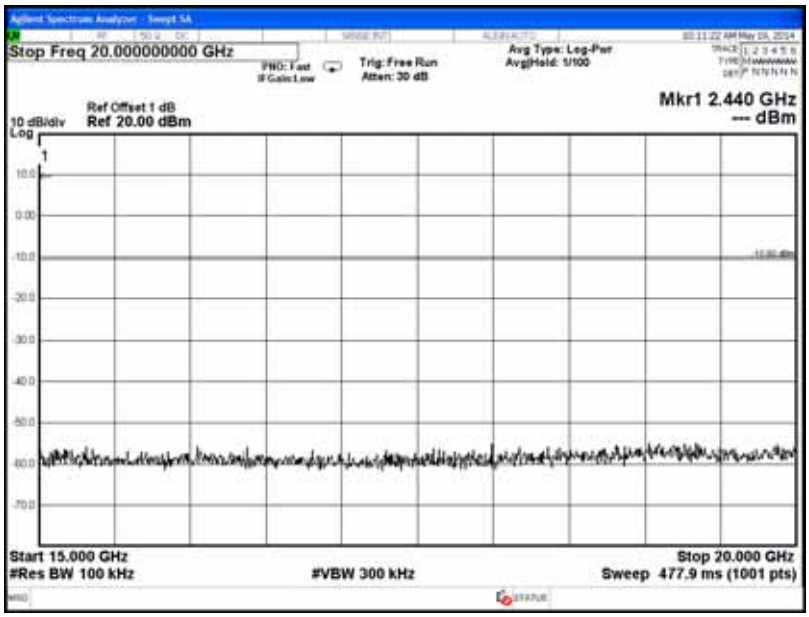

Agilent Spectrum Analyzer - Swept SA
Stop Freq 25.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 1/100
Mkr1 2.400 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Log
Start 20.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 477.9 ms (1001 pts)

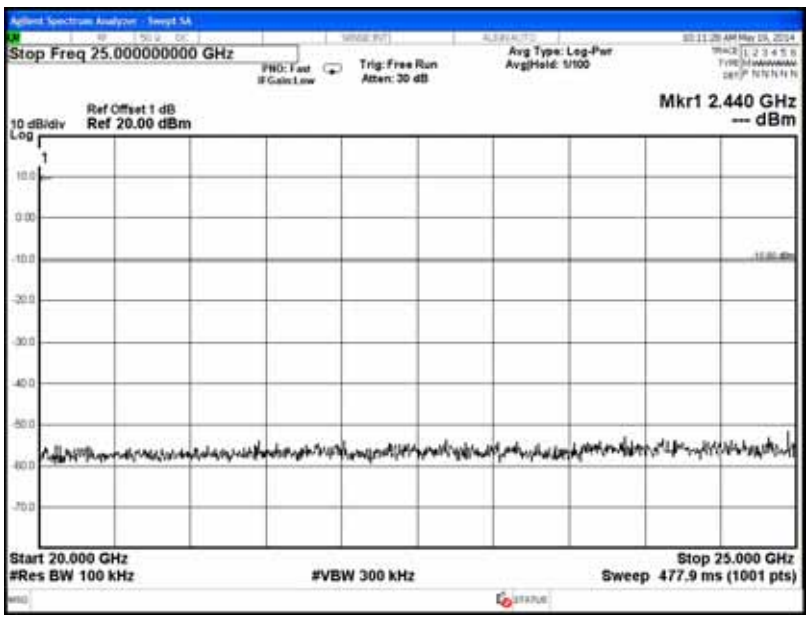
GFSK, Channel 39, Frequency: 2441MHz



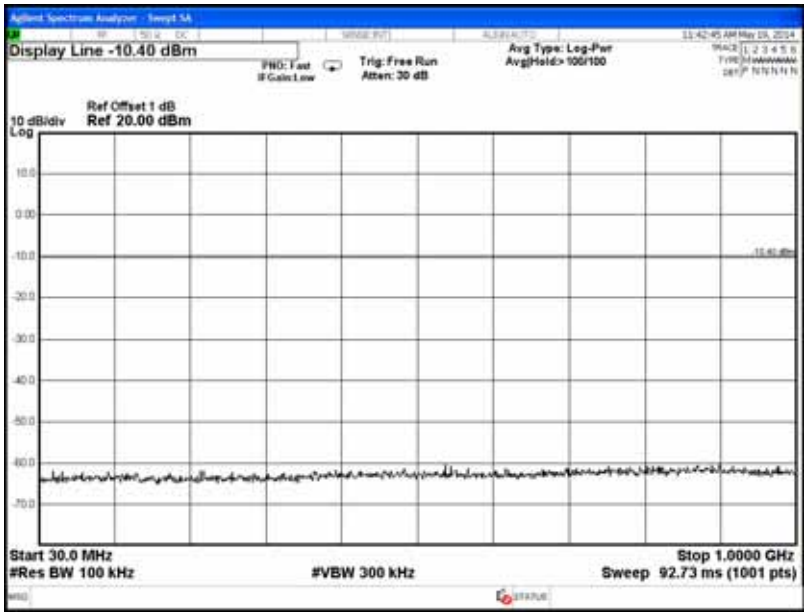


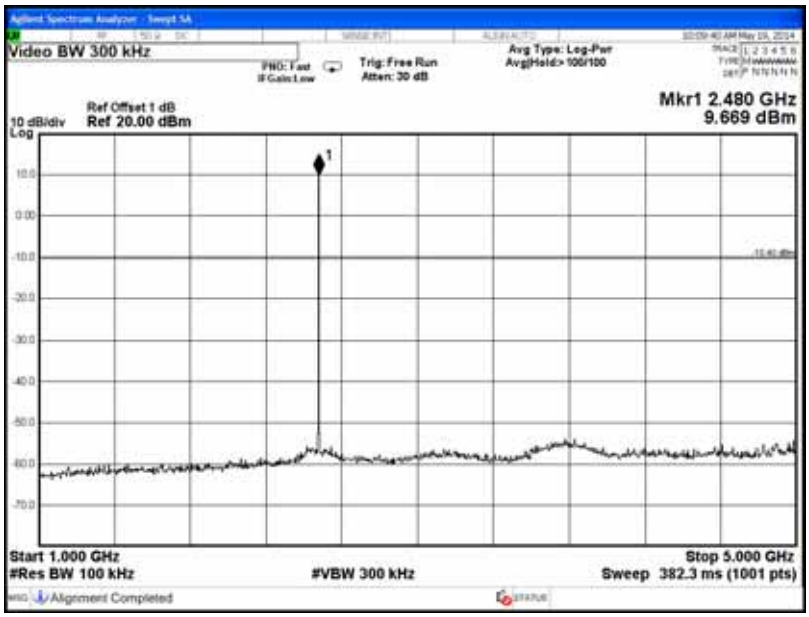

Agilent Spectrum Analyzer - Swept SA
Stop Freq 15.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 1/100
Mkr1 2.440 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Log
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 477.9 ms (1001 pts)

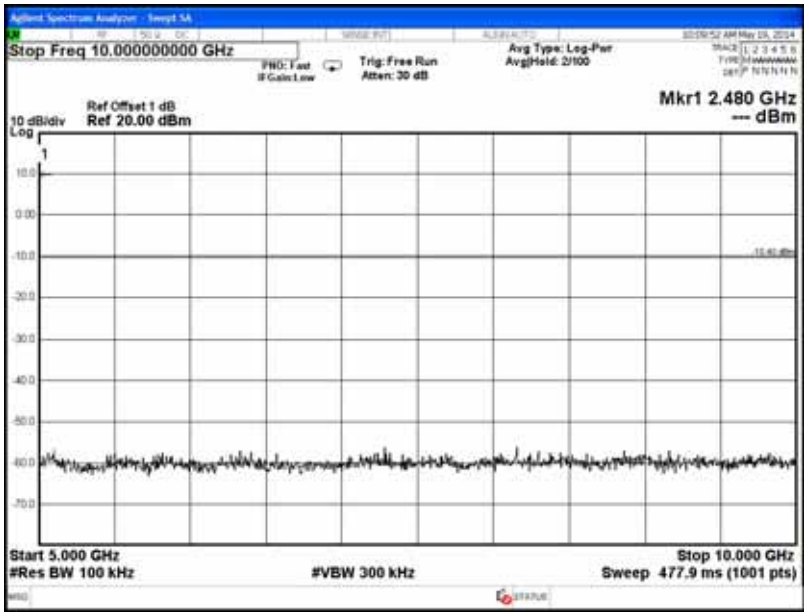

Agilent Spectrum Analyzer - Swept SA
Stop Freq 20.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 1/100
Mkr1 2.440 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Log
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 20.000 GHz
Sweep 477.9 ms (1001 pts)

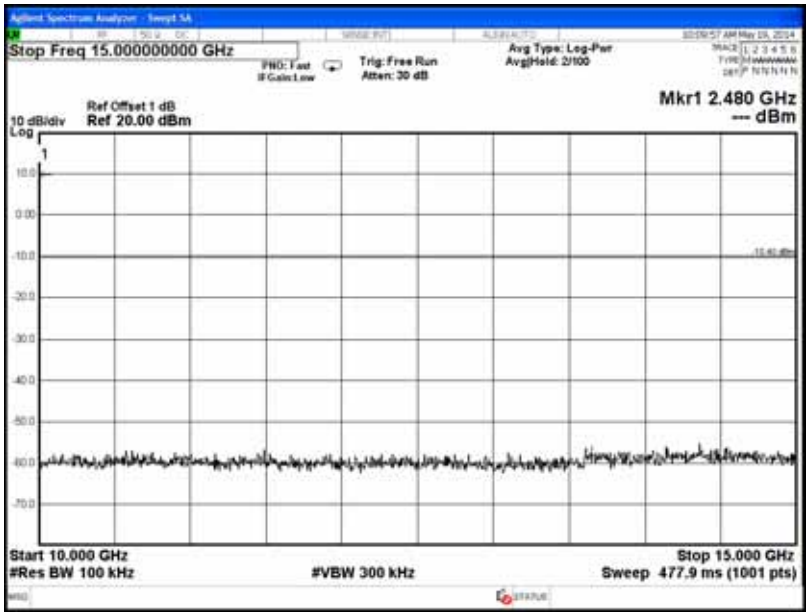

Agilent Spectrum Analyzer - Swept SA
Stop Freq 25.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 1/100
Mkr1 2.440 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Log
Start 20.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 477.9 ms (1001 pts)

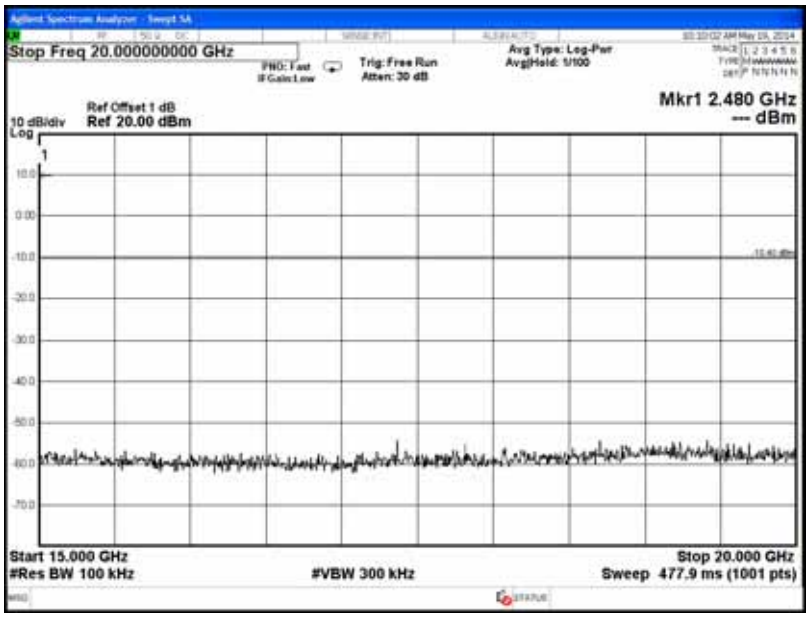
GFSK, Channel 78, Frequency: 2480MHz

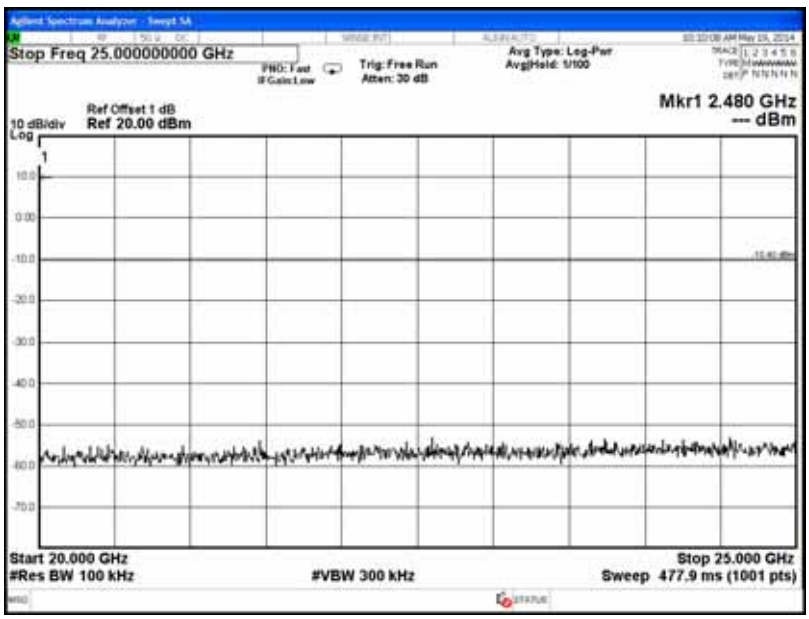







Agilent Spectrum Analyzer - Swept SA
Stop Freq 15.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
Mkr1 2.480 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Log
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 15.000 GHz
Sweep 477.9 ms (1001 pts)


Agilent Spectrum Analyzer - Swept SA
Stop Freq 20.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 1/100
Mkr1 2.480 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Log
Start 15.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 20.000 GHz
Sweep 477.9 ms (1001 pts)


Agilent Spectrum Analyzer - Swept SA
Stop Freq 25.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 1/100
Mkr1 2.480 GHz
--- dBm
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Log
Start 20.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 477.9 ms (1001 pts)

11. BAND EDGES MEASUREMENT

11.1. Test Equipment

The following test equipment was used during the band edges measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Due Date
1.	Spectrum Analyzer	Agilent	N9030A-544	US51350140	2014. 07. 30

11.2. Block Diagram of Test Setup

The same as section 5.2.

11.3. Specification Limits [§15.247(c)]

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (See Section 15.205(c)). (※This test result attaching to §3.6.3)

11.4. Operating Condition of EUT

Same as carrier frequency separation measurement which was listed in section 4.4.

11.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100kHz bandwidth from band edge.
The measurement guideline was according to FCC Public Notice DA 00-705.

11.6. Test Results

PASSED. The testing data was attached in the next pages.

[Note: We performed testing of the highest and lowest data rate.]

EUT: 7" Pocketable Pad M/N: TB71A-W

Test Date: 2014. 05. 05 Temperature: 24℃ Humidity: 48%

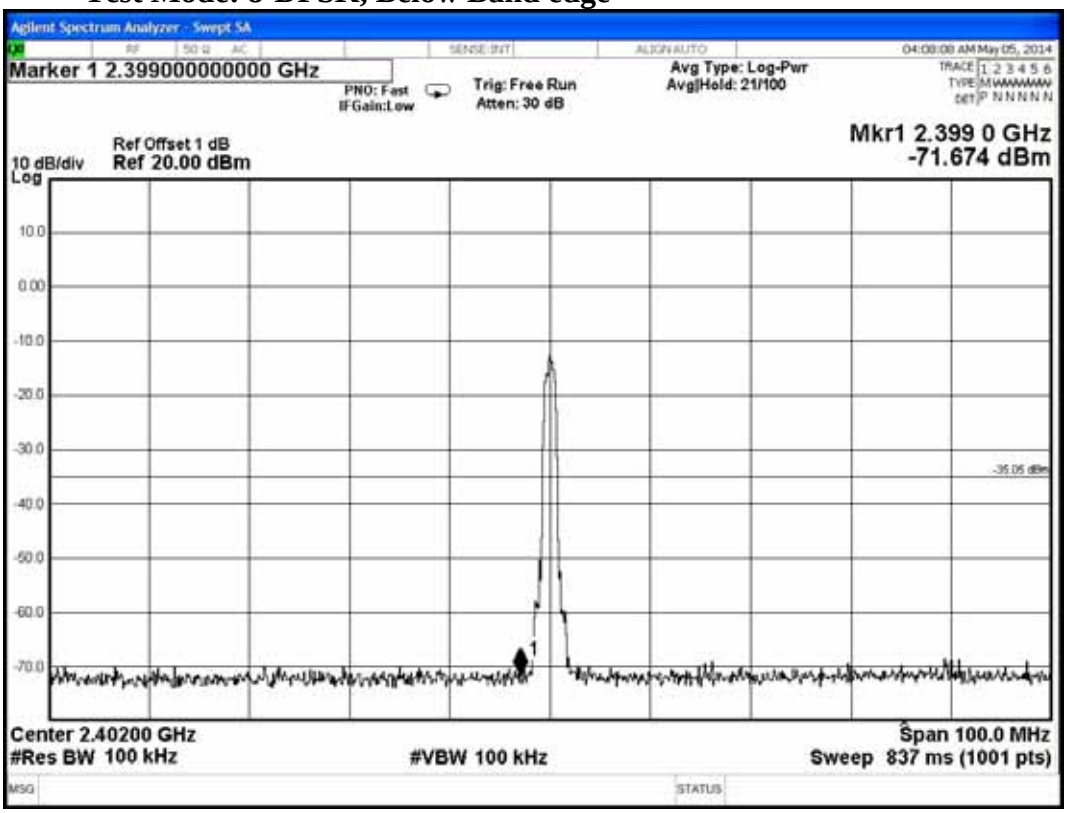
11.6.1. Type of Modulation: 8-DPSK

1. Below Band edge : The highest emission level is -71.674dBm on 2.39990GHz。
2. Upper Band edge: The highest emission level is -72.228dBm on 2.48360GHz。

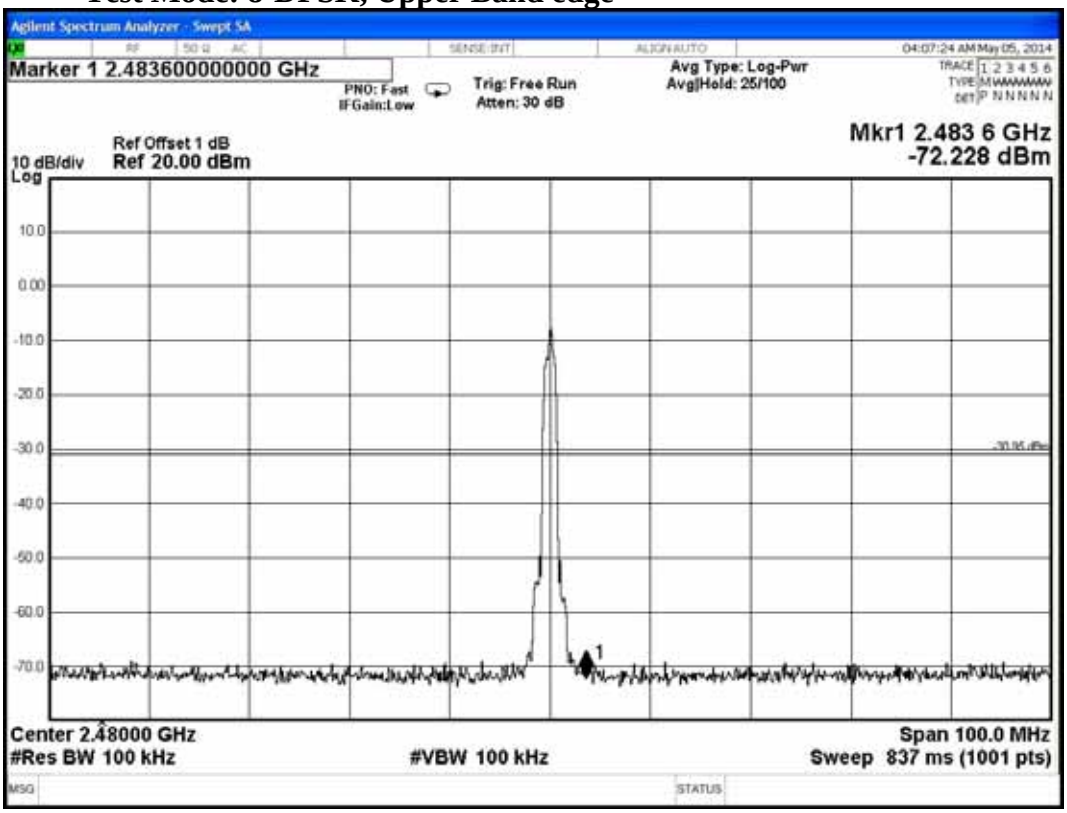
11.6.2. Type of Modulation: GFSK

1. Below Band edge : The highest emission level is -54.578dBm on 2.39900GHz。
2. Upper Band edge: The highest emission level is -56.056dBm on 2.48360GHz。

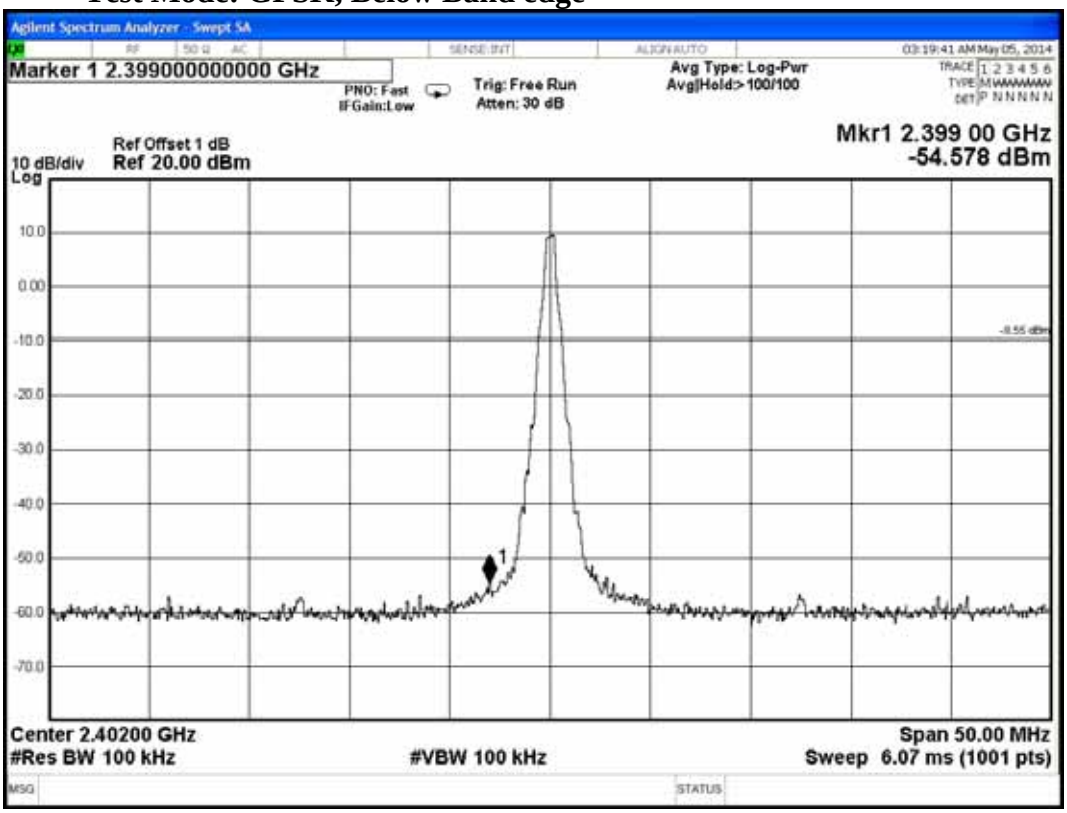
Test Mode: 8-DPSK, Below Band edge



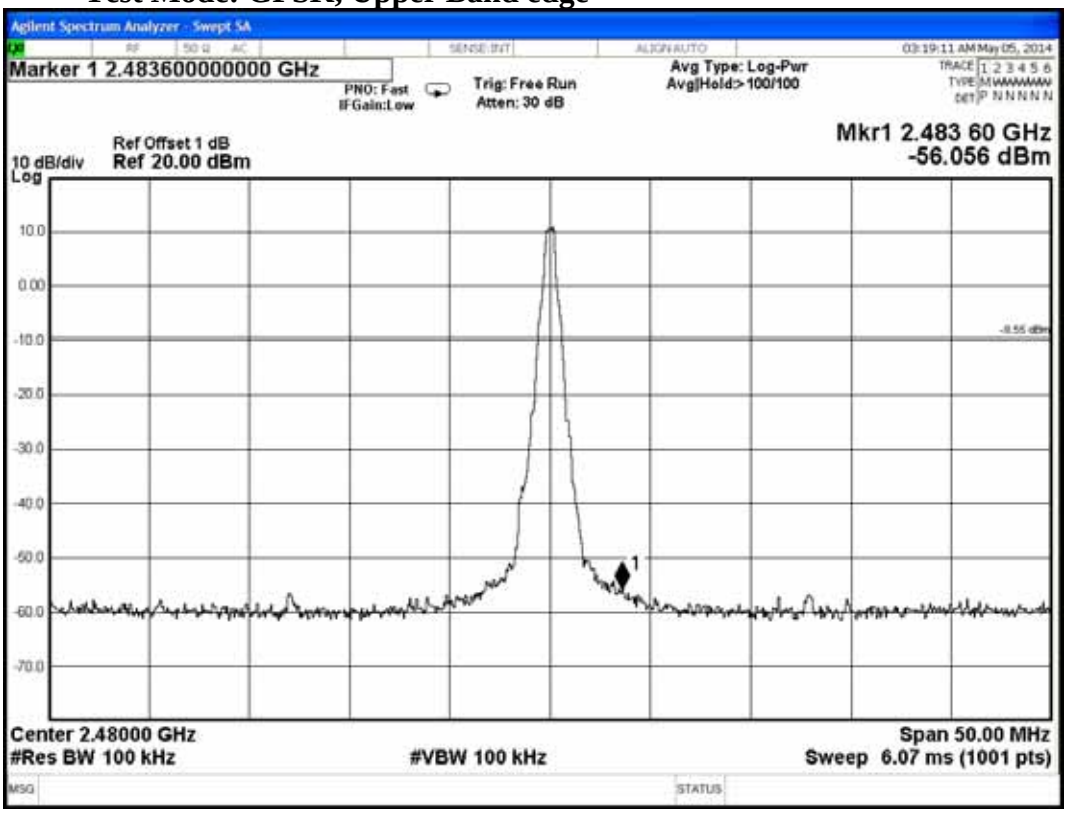
Test Mode: 8-DPSK, Upper Band edge



Test Mode: GFSK, Below Band edge



Test Mode: GFSK, Upper Band edge



12. DEVIATION TO TEST SPECIFICATIONS

【NONE】