# FCC 15.225 13.56MHz Test Report

for

Elitegroup Computer Systems Co., Ltd.

No. 239, Sec. 2, TiDing Blvd, Taipei, Taiwan 11493

Brand : ECS

**Product Name : 7" Multi Function Pad** 

Model Name : mPAD-7.....

(The "." in the model name can be 0 to 9, A to Z, a to z, "-", "\_", "\", "/" or blank for marketing use only)

FCC ID : WL6TB71A-W-SI2

Prepared by: : AUDIX Technology Corporation,

**EMC Department** 









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## TEST REPORT CERTIFICATION

Applicant	•	Elitegroup	Computer S	veteme	Co Itd
тррисані	•	Entegroup	Computer 5	youns	Co., Liu.

Product Name : 7" Multi Function Pad

Model No. : mPAD-7.....

(The "." in the model name can be 0 to 9, A to Z, a to z, "-", " ", "\",

"/" or blank for marketing use only)

Serial No. : N/A Brand : ECS

Applicable Standards:

47 CFR FCC Part 15 Subpart C:2015 ANSI C63.10:2013

AUDIX Technology Corp. tested the equipment mentioned in accordance with the requirements set forth in the above standards. Test results indicate that the equipment tested is capable of demonstrating compliance with the requirements as documented within this report. AUDIX Technology Corp. does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens and samples.

Date of Test: 2016. 08. 14 ~ 16 Date of Report: 2016. 08. 16

Producer:

(Jarwei Wang/Section Manager)





## 1. REPORT HISTORY

Revision	Date	Revision Summary	Report Number
0	2016. 08. 16	Original Report.	EM-F160525



## 2. SUMMARY OF TEST RESULTS

Rule	Description	Results
15.207	Conducted Emission	PASS
15.225(a)(b)(c)	In-Band Emission	PASS
15.225(d)/15.209	Out-of-Band Emission	PASS
15.215 (c)	20dB Bandwidth	PASS
15.225(e)	Frequency Stability Tolerance	PASS

## 3. GENERAL INFORMATION

# 3.1. Description of EUT

Product	7" Multi Function Pad
Model Number	mPAD-7 (The "." in the model name can be 0 to 9, A to Z, a to z, "-", "_", "\", "/" or blank for marketing use only)
Test Model	mPAD-7-CHT3-I
Serial Number	N/A
Brand Name	ECS
Applicant	Elitegroup Computer Systems Co., Ltd. No. 239, Sec. 2., TiDing Blvd., Taipei, Taiwan 11493
	WLAN:802.11b/g/n
RF Features	Bluetooth: BT and BLE
	NFC
Date of Receipt of Sample	2016. 07. 20

# 3.2. EUT Specifications Assessed in Current Report

Fundamental Range (MHz)	Channel Number	Modulation
13.56	1	ASK



# 3.3. Description of Key Component Lists

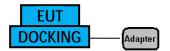
Item	Supplier	Model / Type	Character		
Main Board	ECS	TB71A-W-SI2			
CPU (Socket: BGA1380)	Intel	Z8350	1.44GHz, up to 1.84GHz		
Memory (On Board)	KINGSTON	D2516EC4BXGGB	LPDDR3 1600MHz 4GB		
7" LCD Panel	СРТ	CLAT070WQ64	C1AA070WQ64XG" 800x1280		
Touch Module	FocalTech	FT3417	Support 10-points multi-touch(Capacivtive)		
Storage	SandDisk	SDINADF4-32G	32GB		
Front Camera	KINGCOME	O6P2-TC12A-WFHQ.	Front Camera: 2.0M		
Rear Camera	KINGCOME	O9P5-TB71ABHQ	Rear Camera: 8.0M		
Wi-Fi +BT Module	Qualcomm (Azurewave)	RTL8723BS (AW-NB177NF)	Wi-Fi 802.11 b/g/n + BT 4.0		
GPS	Boradcam	BCM4752	GPS & GLONASS		
NFC	NXP	NPC100			
BATTREY	Sunwoda	MICA-071	3.7V / 4100 mAh /15.17Wh		
AC Adapter	EDAC	EA1024CR-050	I/P: AC 100-240V, 50-60Hz, 1.0A MAX O/P: DC 5V, 4A		
(Wall-mount, 2C)	DC Power Cord	DC Power Cord: Unshielded, Undetachable, 1.8m With one ferrite core			
mPad Module (Option)	ECS	Barcode Scanner mPAD	Barcode Scanner		
7" Pad Docking (Option)	ECS	DOCKING mPAD-7	Docking		

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



## 3.4. Setup Configuration

3.4.1. EUT Configuration for Power Line and Radiated Emission



3.4.2. EUT Configuration for Radiated Emission



3.4.3. EUT Configuration for Near-Fielded Test Items



## 3.5. Operating Condition of EUT

To Set EUT on RF function under continues transmitting.

Note 1:

Mobile Device: Device was pre-assessed with docking and portable (3 axis), the worst case is tested with portable (Lie).

Portable Device, and 3 axis were assessed.

Lie

Side

Stand

## 3.6. Description of Test Facility

Test Firm Name : AUDIX Technology Corporation

**EMC** Department

No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan

Test Location & Facility : No. 8 Shielded Room

No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan

**Semi-Anechoic Chamber** 

No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan

NVLAP Lab. Code : 200077-0

TAF Accreditation No : 1724

FCC OET Designation : TW1004 & TW1090

## 3.7. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty
Conduction Test	150kHz~30MHz	± 3.5dB
Radiation Test	9kHz-30MHz	± 2.3dB
(Distance: 3m)	30MHz~1000MHz	± 4.7dB

Remark: Uncertainty =  $ku_c(y)$ 

Test Item	Uncertainty
20dB Bandwidth	± 0.2kHz
Frequency Stability	±0.78ppm

# 4. MEASUREMENT EQUIPMENT LIST

## 4.1. Conducted Emission Measurement

Item	Туре	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
1.	Test Receiver	R&S	ESR3	101774	2016. 02. 04	2017. 02. 03
2.	A.M.N.	R&S	ENV4200	825358/003	2016. 04. 21	2017. 04. 20
3.	L.I.S.N.	Kyoritsu	KNW-407	8-855-9	2015. 12. 23	2016. 12. 22
4.	Pulse Limiter	R&S	ESH3-Z2	100354	2016. 01. 17	2017. 01. 16
5.	Test Software	Audix	e3	V.6.120424	N.C.R.	N.C.R.

## 4.2. Radiated Emission Measurement

## 4.2.1. Frequency Range 9kHz~30MHz

Item	Туре	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
1.	Spectrum Analyzer	Agilent	N9010A-526	MY53400071	2015. 09. 14	2016. 09. 13
2.	Test Receiver	R & S	ESCS30	100338	2016. 06. 22	2017. 06. 21
3.	Loop Antenna	R&S	HFH2-Z2	891847/27	2015. 12. 24	2016. 12. 23
4.	Test Software	Audix	e3	V.6.110601	N.C.R.	N.C.R.

## 4.2.2. Frequency Range 30MHz~1000MHz

Item	Туре	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
1.	Spectrum Analyzer	Agilent	N9010A-526	MY53400071	2015. 09. 14	2016. 09. 13
2.	Test Receiver	R & S	ESCS30	100338	2016. 06. 22	2017. 06. 21
3.	Amplifier	HP	8447D	2944A06305	2016. 02. 23	2017. 02. 22
4.	Bilog Antenna	CHASE	CBL6112D	33821	2016. 01. 30	2017. 01. 29
5.	Test Software	Audix	e3	V.6.110601	N.C.R.	N.C.R.

## 4.3. RF Conducted Measurement

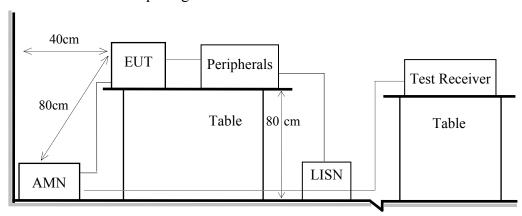
Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
1.	Spectrum Analyzer	Agilent	N9030A-526	MY53310269	2015. 11. 28	2016. 11. 27
2.	Programmable Temperature & Humidity Chamber	GIANT	GTH-150-40 -CP-AR	MAA1505-008	2016. 05. 11	2017. 05. 10
3.	Transformer	TAILI	TL-220	N/A	N.C.R.	N.C.R.



## 5. CONDUCTED EMISSION MEASUREMET

## 5.1. Block Diagram of Test Setup

#### Shielded Room Setup Diagram



Ground Plane

#### 5.2. Power Line Conducted Emission Limit

Eraguanav	Conducted Limit			
Frequency	Quasi-Peak Level	Average Level		
150kHz ~ 500kHz	66 ~ 56 dBμV	$56 \sim 46 \; dB \mu V$		
500kHz ~ 5MHz	56 dBμV	46 dBμV		
5MHz ~ 30MHz	60 dBμV	50 dBμV		

Remark 1.: If the average limit is met when using a Quasi-Peak detector, the measurement using the average detector is not required.

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

#### 5.3. Test Procedure

- 5.3.1. To set up the EUT as indicated in ANSI C 63.10 The EUT was placed on the table which has 80 cm height to the ground and 40 cm distance to the conducting wall.
- 5.3.2. Power supplier of the EUT was connected to the AC mains through an Artificial Mains Network (A.M.N.).
- 5.3.3. The AC power supplies to all peripheral devices must be provided through line impedance stabilization network (L.I.S.N.)
- 5.3.4. Checking frequency range from 150 kHz to 30 MHz and record the emission which does not have 20 dB below limit.

# 5.4. Conducted Emission Measurement Results PASSED.

Test Date	2016/08/01	Temp./Hum.	28 /48%		
Test Voltage	AC 120V, 60Hz				



Site no. : No.8 Shielded Room Data no. : 2
Condition : ENV4200 358 (H) Phase : NEUTRAL
Limit : FCC PART 15C
Env. / Ins. : 28\*C / 48% ESR3 (1774) Engineer : Jemy

EUT : mPAD-7-CHT3-I Power Rating : 120Vac/60Hz Test Mode : Operating

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBμV)	Emission Level (dBµV)	Limits (dBμV)	Margin (dB)	Remark
1	0.153	9.94	0.02	9.86	25.41	45.23	55.82	10.59	Average
2	0.153	9.94	0.02	9.86	40.43	60.25	65.82	5.57	QP
3	0.162	9.93	0.02	9.86	23.36	43.17	55.36	12.19	Average
4	0.162	9.93	0.02	9.86	39.13	58.94	65.36	6.42	QP
5	0.211	9.91	0.02	9.86	18.31	38.10	53.19	15.09	Average
6	0.211	9.91	0.02	9.86	31.37	51.16	63.19	12.03	QP
7	0.260	9.86	0.02	9.86	15.27	35.01	51.42	16.41	Average
8	0.260	9.86	0.02	9.86	27.03	46.77	61.42	14.65	QP
9	0.317	9.82	0.03	9.86	8.44	28.15	49.80	21.65	Average
10	0.317	9.82	0.03	9.86	20.36	40.07	59.80	19.73	QP
11	4.525	9.76	0.12	9.87	10.29	30.04	46.00	15.96	Average
12	4.525	9.76	0.12	9.87	15.78	35.53	56.00	20.47	QP
12	4.525	9.76	0.12	9.87	15.78	35.53	56.00	20.47	QΡ

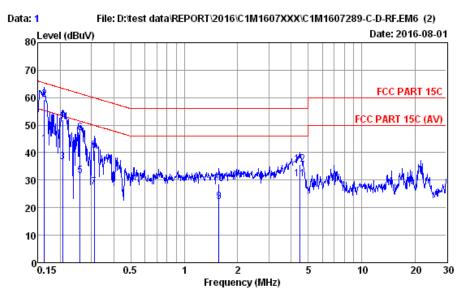
Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.

If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



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Test Date	2016/08/01	Temp./Hum.	28	/48%	
Test Voltage	AC 120V, 60Hz				



Site no. : No.8 Shielded Room Data no. : 1
Condition : ENV4200 358 (H) Phase : LINE

Limit : FCC PART 15C

Env. / Ins. : 28\*C / 48% ESR3 (1774) Engineer : Jemy

EUT : mPAD-7-CHT3-I Power Rating : 120Vac/60Hz Test Mode : Operating

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dB <b>µ</b> V)	Emission Level (dBµV)	Limits (dBμV)	Margin (dB)	Remark
1	0.162	10.07	0.02	9.86	23.02	42.97	55.34	12.37	Average
2	0.162	10.07	0.02	9.86	39.37	59.32	65.34	6.02	QP
3	0.206	10.08	0.02	9.86	16.77	36.73	53.36	16.63	Average
4	0.206	10.08	0.02	9.86	31.98	51.94	63.36	11.42	QP
5	0.259	10.04	0.02	9.86	11.72	31.64	51.47	19.83	Average
6	0.259	10.04	0.02	9.86	27.37	47.29	61.47	14.18	QP
7	0.312	10.02	0.03	9.86	7.53	27.44	49.93	22.49	Average
8	0.312	10.02	0.03	9.86	20.75	40.66	59.93	19.27	QP
9	1.568	9.97	0.07	9.86	2.14	22.04	46.00	23.96	Average
10	1.568	9.97	0.07	9.86	8.66	28.56	56.00	27.44	QP
11	4.501	10.04	0.12	9.87	10.51	30.54	46.00	15.46	Average
12	4.501	10.04	0.12	9.87	15.64	35.67	56.00	20.33	QР

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.

 If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



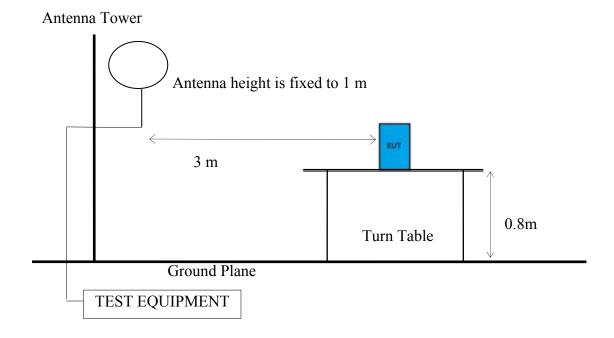
## 6. RADIATED SPURIOUS EMISSION MEASUREMENT

(IN-BAND)

## 6.1. Block Diagram of Test Setup

6.1.1. Block Diagram of EUT Indicated as section 3.4

## 6.1.2. Setup Diagram for 9kHz-30MHz



## 6.2. IN-Band Radiated Spurious Emission Limits

Eraguanay (MHz)	Distance (m)	Limits			
Frequency (MHz)	Distance (m)	$\mu V/m$	$dB\mu V/m$		
13.553-13.567	30	15848	84		
13.333-13.307	3	1584893	124		
13.410 -13.553 and	30	334	50.50		
13.567-13.710	3	33381	90.50		
13.110 -13.410 and	30	106	40.5		
13.710-14.010	3	10592	80.50		

Remark: (1)  $dB\mu V/m = 20 \log (\mu V/m)$ 

(2) 15848uV/m= 84dBuV/m=84+40log(30m/3m)=124dBuV/m 334uV/m= 50.5dBuV/m=50.5+40log(30m/3m)=90.5dBuV/m 106uV/m= 40.5dBuV/m=40.5+40log(30m/3m)=80.5dBuV/m

#### 6.3. Test Procedure

The EUT setup on the turn table which has 0.8 m height to the ground. The turn table rotated 360 degrees and antenna fixed to 2 m to find the maximum emission level. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4-2013 regulation.

#### Below 30MHz:

- (1) RBW = 9kHz with peak and average detector.
- (2) Detector: average and peak (10kHz-490kHz)

Q.P. (490kHz-30MHz)



## 6.4. Test Results

PASSED.

Test Date	2016/08/15	Temp./Hum.	24 /56%		
Test Voltage	DC 3.7V				

## Antenna at 0 Degree

Test Frequency	Test Result	Limits	Margin	Detector
(MHz)	$(dB\mu V/m at 3m)$	$(dB\mu V/m at 3m)$	(dB)	
13.560	31.60	123.99	92.39	QP

Antenna at 90 Degree

Test Frequency	Test Result	Limits	Margin	Detector
(MHz)	$(dB\mu V/m at 3m)$	$(dB\mu V/m at 3m)$	(dB)	
13.560	26.80	123.99	97.19	QP

Note: 1. All emissions are lower than the ambient level cannot be measured.

- 2. The Peak value has been compliance with Q.P. limit, thus measurement with Q.P. is not needed.
- 3. Except to the emission presented here, other emissions are too low to measure.



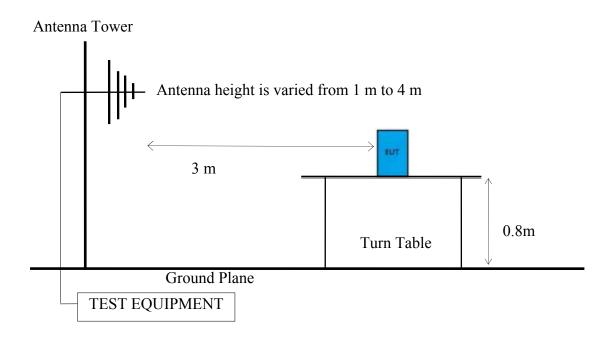
## 7. RADIATED SPURIOUS EMISSION MEASUREMENT

(OUT-BAND)

## 7.1. Block Diagram of Test Setup

7.1.1. Block Diagram of EUT Indicated as section 3.4

## 7.1.2. Setup Diagram for 30MHz-1000MHz



## 7.2. Out-Band Radiated Spurious Emission Limits

In any 100kHz bandwidth outside the frequency band, the radio frequency power produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level. In addition, radiated emissions which fall in restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified as below.

Engavenery (MII-)	Distance (m)	Field Strengths Limits			
Frequency (MHz)	Distance (m)	μV/m	dBμV/m		
1.705 ~ 30	30 (3)	30 (2985)	29.54 (69.54)		
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	2	74.0 dBμV/m (Peak)			
Above 1000	3	54.0 dBμV/m (Average)			

Remark: (1)  $dB\mu V/m = 20 \log (\mu V/m)$ 

- (2) The tighter limit applies to 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) Fundamental and emission fall within operation band are exempted from this section.
- (5) Pursuant to ANSI C63.10: 6.6.4.3, if the maximized peak measured value complies with the average limit, then it is unnecessary to perform an average measurement.

#### 7.3. Test Procedure

The EUT setup on the turn table which has 0.8 m height to the ground. The turn table rotated 360 degrees and antenna varied from 1 m to 4 m to find the maximum emission level. Both horizontal and vertical polarization are required. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 regulation.

Spectrum Analyzer is used for pre-testing with following setting:

- (1) RBW = 120KHz
- (2)  $VBW \ge 3 \times RBW$ .
- (3) Detector = Peak.
- (4) Sweep time = auto.
- (5) Trace mode =  $\max$  hold.
- (6) Allow sweeps to continue until the trace stabilizes.
- (7) When peak-detected value is lower than limit that the measurement using the Q.P. detector is not required. Otherwise using Q.P. for finally measurement.



## 7.4. Measurement Result Explanation

Emission Level=Antenna Factor + Cable Loss + Meter Reading

#### 7.5. Test Results

PASSED.

Test Date	2016/08/15	Temp./Hum.	24 /56%		
Test Voltage	DC 3.7V				

## 7.5.1. Emissions within Restricted Frequency Bands

## 7.5.1.1. Frequency Range 9kHz~30MHz

Antenna at 0 Degree

Test Frequency	Test Result	Limits	Margin	Detector
(MHz)	$(dB\mu V/m at 3m)$	$(dB\mu V/m at 3m)$	(dB)	
27.120	<sup>Note</sup>	69.54		Peak

Antenna at 90 Degree

Test Frequency	Test Result	Limits	Margin	Detector
(MHz)	$(dB\mu V/m at 3m)$	$(dB\mu V/m at 3m)$	(dB)	
27.120	Note Note	69.54		Peak

Note: 1. All emissions are lower than the ambient level cannot be measured.

2. The Peak value has been compliance with Q.P. limit, thus measurement with Q.P. is not needed.



## 7.5.1.2. Frequency Range 30MHz ~ 1000MHz

## **Antenna at Horizontal Polarization**

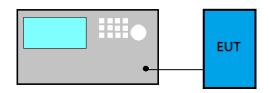
Emission Frequency	Antenna Factor	Cable Loss	Meter Reading	Emission Level	Limits	Margin	Detector
(MHz)	(dB/m)	(dB)	$(\text{dB}\mu V)$	$(dB\mu V/m)$	$\left(dB\mu V/m\right)$	(dB)	
400.54	15.95	5.56	6.52	28.03	46.00	17.97	Peak
505.30	17.20	6.44	7.64	31.28	46.00	14.72	Peak
800.18	19.60	7.60	13.76	40.96	46.00	5.04	Peak
960.23	20.94	8.57	5.99	35.50	54.00	18.50	Peak

#### **Antenna at Vertical Polarization**

Emission Frequency	Antenna Factor	Cable Loss	Meter Reading	Emission Level	Limits	Margin	Detector
(MHz)	(dB/m)	(dB)	$(dB\mu V)$	$(dB\mu V/m)$	$\left(dB\mu V/m\right)$	(dB)	
120.21	13.02	2.51	4.54	20.07	43.50	23.43	Peak
533.43	17.60	6.54	6.27	30.41	46.00	15.59	Peak
600.36	18.41	6.75	7.37	32.53	46.00	13.47	Peak
800.18	19.60	7.60	7.21	34.41	46.00	11.59	Peak

## 8. 20dB BANDWIDTH MEASUREMENT

# 8.1. Block Diagram of Test Setup



## 8.2. Specification Limits

The 20dB bandwidth shall be specified in operating frequency band.

## 8.3. Test Procedure

Following measurement procedure is reference to KDB 558074 D01 DTS Meas Guidance v03r02:

Option 2

- (1) Set RBW = 1% of Span.
- (2) Set the video bandwidth (VBW)  $\geq$  3 × RBW.
- (3) Detector = Peak.
- (4) Trace mode =  $\max$  hold.
- (5) Sweep = auto couple.
- (6) Allow the trace to stabilize.
- (7) Setting channel bandwidth function x dB to -20 dB to record the final bandwidth.



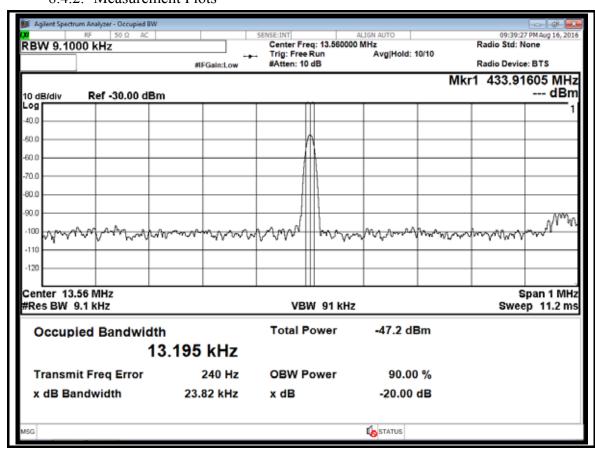
## 8.4. Test Results

Test Date	2016/08/16	Temp./Hum.	25 /50%
Cable Loss		Test Voltage	DC 3.7V

#### 8.4.1. 20dB Bandwidth Result

Centre Frequency (MHz)	20 dB Bandwidth (kHz)		
13.56	23.82		

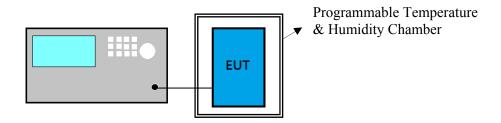
## 8.4.2. Measurement Plots





## 9. FREQUENCY STABILITY MEASUREMENT

## 9.1. Block Diagram of Test Setup



## 9.2. Specification Limits

The frequency tolerance of the carrier signal shall be maintained within ±0.01% of the operating frequency over a temperature variation of -20degrees to 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degree C.

## 9.3. Test Procedure

The device operating in the 13.553-13.567MHz shall maintain the carrier frequency within 0.01% of the operating frequency over the temperature variation of -20 degrees to +50 degree C at normal supply voltage.



## 9.4. Test Results

Test Date	2016/08/14	Temp./Hum.	25 /50%
Cable Loss		Test Voltage	DC 3.7V

Test Mode: 2 Minute

Temperature( )	-20	-10	0	10	20
Voltage	DC 3.7V	DC 3.7V	DC 3.7V	DC 3.7V	DC 4.225V
Frequency(MHz)	13.55895	13.55928	13.55953	13.55974	13.55997
Error (%)	-0.00774	0.00531	-0.00347	-0.00192	-0.00022

Temperature( )	20	30	40	50	20
Voltage	DC 3.145V	DC 3.7V	DC 3.7V	DC 3.7V	DC 3.7V
Frequency(MHz)	13.55968	13.56027	13.56056	13.56095	13.56018
Error (%)	-0.00236	0.00199	0.00413	0.00701	0.00133

Test Mode: 5 Minute

Temperature( )	-20	-10	0	10	20
Voltage	DC 3.7V	DC 3.7V	DC 3.7V	DC 3.7V	DC 4.225V
Frequency(MHz)	13.55889	13.55923	13.55951	13.55969	13.55985
Error (%)	-0.00819	-0.00568	-0.00361	-0.00229	-0.00111

Temperature( )	20	30	40	50	20
Voltage	DC 3.145V	DC 3.7V	DC 3.7V	DC 3.7V	DC 3.7V
Frequency(MHz)	13.55969	13.56024	13.56058	13.56098	13.56014
Error (%)	-0.00229	0.00177	0.00428	0.00723	0.00103

Test Mode: 10 Minute

Temperature( )	-20	-10	0	10	20
Voltage	DC 3.7V	DC 3.7V	DC 3.7V	DC 3.7V	DC 4.225V
Frequency(MHz)	13.55895	13.55926	13.55948	13.55961	13.55976
Error (%)	-0.00774	-0.00546	-0.00383	-0.00288	-0.00177

Temperature( )	20	30	40	50	20
Voltage	DC 3.145V	DC 3.7V	DC 3.7V	DC 3.7V	DC 3.7V
Frequency(MHz)	13.55966	13.56026	13.56061	13.56103	13.56018
Error (%)	-0.00251	0.00192	0.00450	0.00760	0.00133





# 10. DEVIATION TO TEST SPECIFICATIONS

[NONE]