FCC Test Report

Report No.: AGC00653161204FE04

FCC ID	:	2AEM6TTV-767
APPLICATION PURPOSE	:	Original Equipment
PRODUCT DESIGNATION	:	Tablet
BRAND NAME	:	TIGERS
MODEL NAME	:	TTV-767
CLIENT	:	MOVEON TECHNOLOGY (HK) CO., LTD.
DATE OF ISSUE	:	Jan. 05, 2017
STANDARD(S) TEST PROCEDURE(S)	:	FCC Part 15.247 KDB 558074 v03r02
REPORT VERSION	:	V1.0

Attestation of Global compliance (Shenzhen) Co., Ltd

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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jan. 05, 2017	Valid	Original Report

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Applicant	MOVEON TECHNOLOGY (HK) CO., LTD.				
Address	Room 3201, Building A, World Trading Plaza Block, Futian Rd., Futian Distric, Shenzhen, China				
Manufacturer	MOVEON TECHNOLOGY LIMITED				
Address	World Trade Plaza-A Block #3201-3202 Fuhong Road, Futian				
Product Designation	Tablet				
Brand Name	TIGERS				
Test Model TTV-767					
Date of test	Dec. 17, 2016~Dec. 29, 2016				
Deviation	None				
Condition of Test Sample	Normal				
Report Template	AGCRT-US-BGN/RF				

1. VERIFICATION OF CONFORMITY

We hereby certify that:

The above equipment was tested by Dongguan Precise Testing Service Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with requirement of FCC Part 15 Rules requirement.

Tested By	demine itmong	
	Donjon Huang(Huang Dongyang)	Dec.29, 2016
Reviewed By	Bore sie	
	Bart Xie(Xie Xiaobin)	Jan. 05, 2017
Approved By	Selya shary	
	Solger Zhang(Zhang Hongyi) Authorized Officer	Jan. 05, 2017

2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

The EUT is designed as "Tablet". It is designed by way of utilizing the DSSS and OFDM technology to achieve the system operation.

A major technical description of EOT is described as following			
Operation Frequency	2.412 GHz~2.462GHz		
Output Power	IEEE 802.11b: 13.38 dBm, IEEE 802.11g: 10.97 dBm;		
Output Power	IEEE 802.11n(20): 10.89 dBm, IEEE 802.11n(40): 9.76 dBm;		
Modulation DSSS(DBPSK/DQPSK/CCK);OFDM(BPSK/QPSK/16-QAM/64-QAM)			
Number of channels 11			
Hardware Version K0712B_V3.3			
Software Version TY0712B_2G-LD-2_KK_V3.7.1_151127			
Antenna Designation	PIFA Antenna		
Antenna Gain	3.28dBi		
Power Supply	DC3.7V by Built-in Li-ion Battery		

A major technical description of EUT is described as following

2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency		
	1	2412 MHZ		
	2	2417 MHZ		
	3	2422 MHZ		
	4	2427 MHZ		
	5	2432 MHZ 2437 MHZ		
2400~2483.5MHZ	6			
-	7	2442 MHZ		
	8	2447 MHZ		
	9	2452 MHZ		
	10	2457 MHZ		
	11	2462 MHZ		

Note: For 20MHZ bandwidth system use Channel 1 to Channel 11 For 40MHZ bandwidth system use Channel 3 to Channel 9

MCS Index	Nss	Modulation	R NBPSC	lation R NBPSC NCBPS		NDBPS		Data rate(Mbps) 800nsGI		
					20MHz	40MHz	20MHz	40MHz	20MHz	40MHz
0	1	BPSK	1/2	1	52	108	26	54	6.5	13.5
1	1	QPSK	1/2	2	104	216	52	108	13.0	27.0
2	1	QPSK	3/4	2	104	216	78	162	19.5	40.5
3	1	16-QAM	1/2	4	208	432	104	216	26.0	54.0
4	1	16-QAM	3/4	4	208	432	156	324	39.0	81.0
5	1	64-QAM	2/3	6	312	648	208	432	52.0	108.0
6	1	64-QAM	3/4	6	312	648	234	489	58.5	121.5
7	1	64-QAM	5/6	6	312	648	260	540	65.0	135.0

2.3. IEEE 802.11N MODULATION SCHEME

Symbol	Explanation
NSS	Number of spatial streams
R	Code rate
NBPSC	Number of coded bits per single carrier
NCBPS	Number of coded bits per symbol
NDBPS	Number of data bits per symbol
GI	Guard interval

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

This submittal(s) (test report) is intended for **FCC ID: 2AEM6TTV-767** filing to comply with the FCC Part 15 requirements.

2.5. TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 (2013). Radiated testing was performed at an antenna to EUT distance 3 meters.

Others testing (listed at item 5.3) was performed according to the procedures in FCC Part 15.247 rules KDB 558074 D01 DTS Meas Guidance v03r02.

2.6. SPECIAL ACCESSORIES

Refer to section 5.2.

2.7. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

3. MEASUREMENT UNCERTAINTY

Conducted measurement: +/- 2.75dB Radiated measurement: +/- 3.2dB

4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION			
1	Low channel TX			
2	Middle channel TX			
3	High channel TX			
4	Normal operating			
Note: Transmit by 802.11b with Date rate (1/2/5.5/11) Transmit by 802.11g with Date rate (6/9/12/18/24/36/48/54) Transmit by 802.11n (20MHz) with Date rate (6.5/13/19.5/26/39/52/58.5/65)				

Transmit by 802.11n (20MHz) with Date rate (6.5/13/19.5/26/39/52/58.5/65)

Transmit by 802.11n (40MHz) with Date rate (13.5/27/40.5/54/81/108/121.5/135)

Note:

1. The EUT has been set to operate continuously on the lowest, middle and highest operation frequency Individually, and the eut is operating at its maximum duty cycle>or equal 98%

- 2. All modes under which configure applicable have been tested and the worst mode test data recording in the test report, if no other mode data.
- 3. For Radiated Emission, 3axis were chosen for testing for each applicable mode.

5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Configure:

EUT	Accessory
-----	-----------

5.2. EQUIPMENT USED IN EUT SYSTEM

Item	Equipment	Model No.	ID or Specification	Note
1	Tablet	TTV-767	2AEM6TTV-767	EUT
2	Adapter	TTV-767	DC5V /2000mA	Accessory
3	Battery	376593	DC3.7V/3400mAh	Accessory
4	Earphone	TTV-767	N/A	Accessory
5	USB Cable	TTV-767	N/A	Accessory

Note: All the accessories have been used during the test in conduction emission test.

5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.247	Output Power	Compliant
§15.247	6 dB Bandwidth	Compliant
§15.247	Conducted Spurious Emission	Compliant
§15.247	Maximum Conducted Output Power SPECTRAL Density	Compliant
§15.209	Radiated Emission	Compliant
§15.247	Band Edges	Compliant
§15.207	Line Conduction Emission	Compliant

Note: The EUT received power from DC3.8V lithium battery.

6. TEST FACILITY

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

ALL TEST EQUIPMENT LIST

FOR RADIATED EMISSION TEST (BELOW 1GHZ)

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

FOR RADIATED EMISSION TEST (1GHZ ABOVE)

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

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

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

7. OUTPUT POWER

7.1. MEASUREMENT PROCEDURE

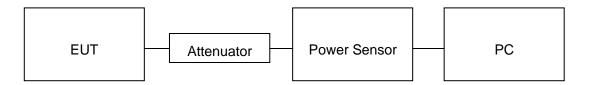
For max average conducted output power test:

- 1. Connect EUT RF output port to power probe through an RF attenuator.
- 2. Connect the power probe to the PC.
- 3. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 4. Record the maximum power from the software.

Note : The EUT was tested according to KDB 558074v03r02 for compliance to FCC 47CFR 15.247 requirements.

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

AVERAGE POWER SETUP



7.3. LIMITS AND MEASUREMENT RESULT

TEST ITEM	OUTPUT POWER
TEST MODE	802.11b with data rate 1

Frequency (GHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.412	13.38	30	Pass
2.437	13.27	30	Pass
2.462	13.11	30	Pass

TEST ITEM	OUTPUT POWER
TEST MODE	802.11g with data rate 6

Frequency (GHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.412	10.97	30	Pass
2.437	10.81	30	Pass
2.462	10.67	30	Pass

TEST ITEM	OUTPUT POWER
TEST MODE	802.11n 20 with data rate 6.5

Frequency (GHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.412	10.89	30	Pass
2.437	10.75	30	Pass
2.462	10.34	30	Pass

TEST ITEM	OUTPUT POWER
TEST MODE	802.11n 40 with data rate 13.5

Frequency (GHz)	Average Power (dBm)	Applicable Limits (dBm)	Pass or Fail
2.422	9.67	30	Pass
2.437	9.54	30	Pass
2.452	9.76	30	Pass

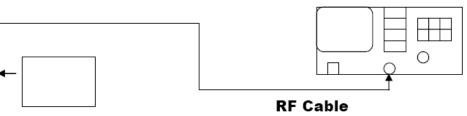
8. 6DB BANDWIDTH

8.1. MEASUREMENT PROCEDURE

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set SPA Centre Frequency = Operation Frequency, RBW= 100 KHz, VBW \ge 3×RBW.
- 4. Set SPA Trace 1 Max hold, then View.

Note: The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

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



EUT

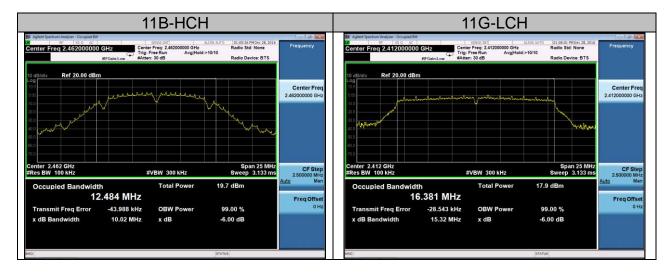
8.3. LIMITS AND MEASUREMENT RESULTS

Mode	Channel	6dB Bandwidth [MHz]	Verdict
	LCH	10.01	PASS
11B	МСН	9.559	PASS
	НСН	10.02	PASS
	LCH	15.32	PASS
11G	МСН	15.13	PASS
	НСН	15.43	PASS
	LCH	15.13	PASS
11nHT20	МСН	16.08	PASS
	НСН	16.06	PASS
	LCH	35.34	PASS
11nHT40	MCH	35.35	PASS
	HCH	35.19	PASS

Spectrum Analyzer

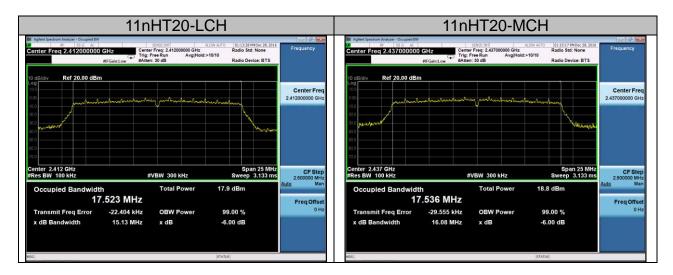
Test Graph

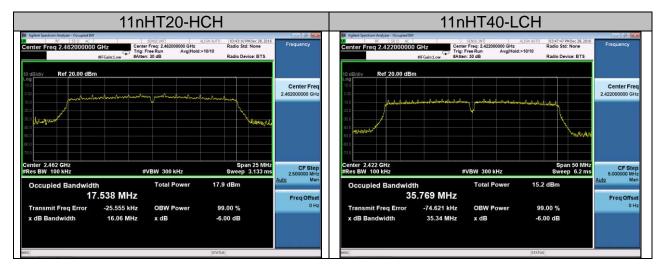


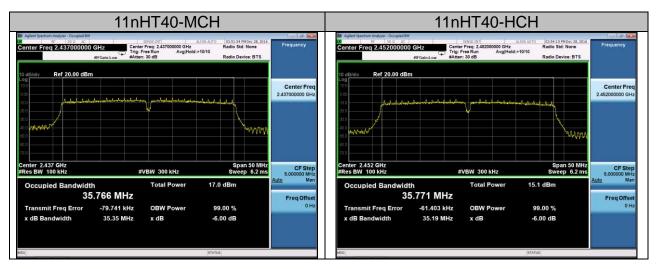




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9. CONDUCTED SPURIOUS EMISSION

9.1. MEASUREMENT PROCEDURE

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2, Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set SPA Trace 1 Max hold, then View.
- Note: The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements. Owing to satisfy the requirements of the number of measurement points, we set the RBW=1MHz, VBW > RBW, scan up through 10th harmonic, and consider the tested results as the worst case, if the tested results conform to the requirement, we can deem that the real tested results(set the RBW=100KHz, VBW > RBW) are conform to the requirement.

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

The same as described in section 8.2.

9.3. MEASUREMENT EQUIPMENT USED

The same as described in section 6.

9.4. LIMITS AND MEASUREMENT RESULT

LIMITS AND MEASUREMENT RESULT					
Applieghte Limite	Measurement Result				
Applicable Limits	Test Data	Criteria			
In any 100 KHz Bandwidth Outside the	At least -20dBc than the limit				
frequency band in which the spread spectrum	Specified on the BOTTOM	PASS			
intentional radiator is operating, the radio frequency	Channel				
power that is produce by the intentional radiator shall be at least 20 dB below that in 100KHz bandwidth within the band that contains the highest level of the desired power. In addition, radiation emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in§15.209(a))	At least -20dBc than the limit Specified on the TOP Channel	PASS			

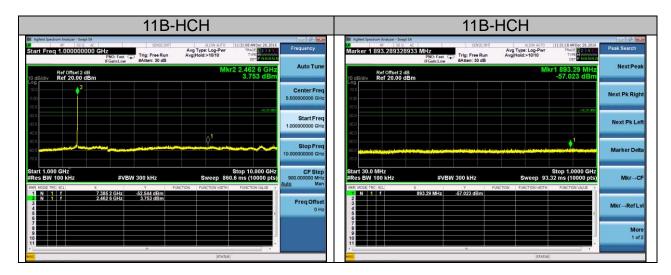
Test Graph

	11B-I	LCH			11B-	LCH	
Agilent Spectrum Anelyzer - Swept SA RF S0 @ AC RF S0 @ AC Start Freq 1.000000000 G		ALIGN AUTO 11:24:06 AMDec 29, 2016 Avg Type: Log-Pwr TRACE 27, 2016 Avg[Hold:>10/10 Type Det	Frequency	Bit: Agilent Spectrum Analyzer - Swept SA Dit: RF S0 0 AC Marker 1 430.6550065007		ALIGN AUTO 11:24:59 AMDec 29, 2016 Avg Type: Log-Pwr TRACE 22:201 Avg[Hold:>10/10 Trife Det Automatic	Peak Search
Ref Offset 2 dB 10 dB/div Ref 20.00 dBm		Mkr2 2.413 1 GHz 3.873 dBm	Auto Tune	10 dB/div Ref Offset 2 dB Ref 20.00 dBm	i	Mkr1 430.65 MHz -56.282 dBm	NextPeak
10.5 0.00			Center Freq 5.50000000 GHz	10.0			Next Pk Righ
-200 -300 -400			Start Freq 1.000000000 GHz	200 -330 -400		-1632.009	Next Pk Le
60.0 60.0 70.0			Stop Freq 10.00000000 GHz	50.0 -50.0 -71.0			Marker Del
Start 1.000 GHz #Res BW 100 kHz	#VBW 300 kHz	Stop 10.000 GHz Sweep 860.6 ms (10000 pts)	CF Step 900.000000 MHz Auto Man	Start 30.0 MHz #Res BW 100 kHz	#VBW 300 kHz	Stop 1.0000 GHz Sweep 93.32 ms (10000 pts)	Mkr→C
	9.648 1 GHz 49.055 dBm 2413 1 GHz 3.873 dBm	CTION FUNCTION WIDTH FUNCTION VALUE +	Freq Offset 0 Hz	MAR MODE TRC: SCL >	430.65 MHz -56.282 dBm	INCTION FUNCTION WIDTH FUNCTION VALUE +	Mkr→RefL
7 8 9 10 11				7 8 9 10 11			Mo 1 of
Mass storage error,Director	bry not found	STATUS		MIG		STATUS	

11B-LCH		11B-MCH
Bit Speed Ford ALIGN MITCO 112 664 AMOR* 25 WHE Markor 1 24,878487648765 CH27 CH27 Trig: Free Run (Freinit.ow) Aug Type: Log-Pwr Trig: Trig: Trig: Ree Run (Freinit.ow) Ref Offset 2 dB Ref 200 at the 45.587 CBm Mkr1 24,878 5 CH27	Peak Search Next Peak	Image: Registre Registre Adaption Registre Strengt SA. Strengt
	Next Pk Right	Center Freq
40	Next Pk Left	200
	Marker Delta	000 000 100000000000000000000000000000
Start 10.000 GHz Stop 25.000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.434 s (10000 pts) NF MOG TRC SCI x. Y Punction Punction <t< td=""><td>Mkr→CF</td><td>Start 1.000 GHz Stop 10.000 GHz CF Step #Res BW 100 kHz #VBW 300 kHz Sweep 860.6 ms (10000 pts) 900 00000 MHz More Mode TRC Scil x Y Function Participation Auto Man 1 1 1 97.490 GHz 537.480 GHz Function Function Function Man</td></t<>	Mkr→CF	Start 1.000 GHz Stop 10.000 GHz CF Step #Res BW 100 kHz #VBW 300 kHz Sweep 860.6 ms (10000 pts) 900 00000 MHz More Mode TRC Scil x Y Function Participation Auto Man 1 1 1 97.490 GHz 537.480 GHz Function Function Function Man
R 1 1 A3763 UNL 45367 dum 3 3 3 3 3 4 3 3 3 3 5 3 3 3 3 4 3 3 3 3 3 6 3 3 3 3 3 3 7 4	Mkr→Ref Lvi More	N 1 7 2/412 GHz -7/32 GHm Freq Offset 1 1 2/412 GHz 2/314 dGm GHz Freq Offset 1 1 2/412 GHz 2/314 dGm GHz 0 Hz 1 1 2/412 GHz 0 Hz 0 Hz 0 Hz
	1 of 2	

11	B-MCH	11B-MCH
Aglent Spectrum Analyser - Singst SA So AC Sector All Solo AC Sector AC Trig: Free PNO: Fast PNO: Fast Stress Frequencies	Aug Type: Log-Pwr TRACE TO 19 Construction C	Image: Search Image: Search Image: Search Statute of the sear
Ref Offset 2 dB 10 dB/div Ref 20.00 dBm	Mkr1 830.23 MHz -56.257 dBm	lextPeak Ref Offset 2 dB Nkr1 24.896 5 GHz 10 dB/dev Ref 20.00 dBm -45.733 dBm
0.00	Next	Pk Right 000 Next Pk Right
-00	str 26 dim	kt PK Left 2010
-400 	Mar	ker Detta
Start 30.0 MHz #Res BW 100 kHz #VBW 300 kHz		Storp 25.000 GHz Storp 25.000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.434 s (10000 pts)
MAR MODE TRC: ScL X Y 1 N 1 F 830,23 MHz -56,257 dBr 3 4 - 5 - 6 -		INF NOC TRC SLI X Y P JACTON Function watching F
7 8 9 9 10		More 9 1 of 2 11
MIQ	STATUS	4

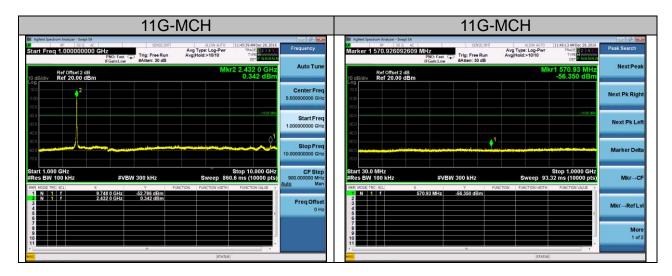
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	11B	-HCH			11G-LCH
Agileri Spectrum Analyzer - Swept SA RF 50 AC Marker 1 24.7839783978		Avg Type: Log-Pwr Avg Hold:>10/10	11:31:44 AM Dec 29, 2016 TRACE 17:24 4 10 TYPE MWWWWWW DET PINNING	Peak Search	Statt Freq 1.00000000 GHz Stret Circl Avg Type: Log-Per Trig: Frequency Frequency Frequency Trig: Free Run Avg Type: Log-Per Trig: Free Run Avg Type: Log-Per Trig: Free Run Avg Type: Log-Per Trig: Free Run Avg Type: Log-Per
Ref Offset 2 dB 10 dB/div Ref 20.00 dBm		Mkr1	24.784 0 GHz -45.754 dBm	HEATTCAR	Ref Offset 2 dB Mkr2 2.413 1 GHz 10 dB/div Ref 20.00 dBm 0.463 dBm
10.0				Next Pk Right	105 2 Center Freq 000 650000000 GHz
-20.0				Next Pk Left	300 1194.0% Start Freq 300 2010 100000000 GH2
60.0 40.0 -75.0		and the second second		Marker Delta	000 003 709
Start 10.000 GHz #Res BW 100 kHz	#VBW 300 kHz	Sweep 1	Stop 25.000 GHz 434 s (10000 pts)	Mkr→CF	Start 1.000 GHz Stop 10.000 GHz CF Step #Res BW 100 kHz #VBW 300 kHz Sweep 860.6 ms (10000 pts) 900.000000 MHz
MRR MODE TRC SCL X	4.784 0 GHz -45.754 dBm	FUNCTION FUNCTION WOTH:	FUNCTION VALUE +	MkrRef Lvl	Imme Mode Function Punction Punction Punction Auto Man 1 1 1 2.2131 GHz -50004 Emericinal worth Punction worth Punction worth Punction worth Emericinal worth
7 8 9 9 10 11				More 1 of 2	
MSO		STATUS			MSG (STATUS

11G-LCH		11G-LCH
Maginet Sectors Auger: Tests 5A Structure ALIGN MITO 11.02.18 MOto: 2016 28 Structure Structure ALIGN MITO 11.02.18 MOto: 2016 Marker: 1 811.025102510 MHz Trig: Free Run Avg Type: Log-Pwr Trig: C Task with the sector of the	Peak Search	Bit Agent Spectra Rodyn: Swed SA SPECENT at the NTD 1137-07 MIDe: 28 JULE Warker 1 24,786978697870 GHz Frig: Free Run Avg Type: Log-Pwr Trid: Free Run PRO: Frei Tick Trid: Free Run Avg Type: Log-Pwr Trid: Tick Free Run
Ref Offset 2 dB Mkr1 811.03 MHz 10 dB/div Ref 20.00 dBm -57.169 dBm	Next Peak	Ref Officet 2 dB Mkr1 24.787 0 GHz
	Next Pk Right	102 Next Pk Right
20	Next Pk Left	100
	Marker Delta	Augusta and a second and the
Start 30.0 MHz Stop 1.0000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 93.32 ms (10000 pts)	Mkr→CF	Star 10.000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.434 s (10000 pts) MkrCF
MPR NOCE TRC ISL. X Y FANCTION POINTONNOCH FUNCTIONNUCH STATUS	Mkr→RefLvl	MMR NOE TRC: X Y Function Function value * 2 N 1 F 24787.0 GHz -46.092.0 BBM * MkrRefLvi * 3 - - - - - MkrRefLvi *
	More 1 of 2	10 More 1 of 2
MSC STATUS		Miso Status

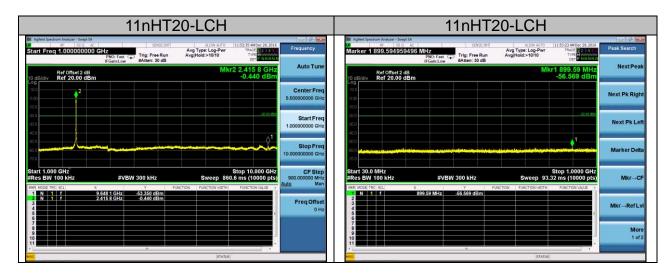
Report No.: AGC00653161204FE04 Page 22 of 51



	11G-M	ICH		11G-HCH
Agilent Spectrum Analyzer - Swept SA RF S0 0 AC Marker 1 24.77797779778	O GHz PNO: Fast IFGain:Low #Atten: 30 dB	ALION AUTO 11:46:45 AMDec 29, 2016 Avg Type: Log-Pwr TRACE 29, 2016 Avg Hold:>10/10 TrACE 29, 2016 Det AMMANN	Peak Search Next Peak	State Sector Advance Sector Sector Stock Intl Allow AUTO 1148.15 AUTO Cold Cold Cold Cold Cold Cold Cold Cold
Ref Offset 2 dB 10 dB/div Ref 20.00 dBm		Mkr1 24.778 0 GHz -45.011 dBm	NextPeak	Ref Offset 2 dB Mkr 2 2.457 2 GHz Auto Tune to dB/div Ref 20.00 dBm -1.375 dBm
10.0 0.00 			Next Pk Right	100 Center Freq 000 5.50000000 GHz
-20.0		-1966-000	Next Pk Left	200
-600 -600 -700		~~~~~	Marker Delta	4.0 600 700 700 700 700 700 700 70
Start 10.000 GHz #Res BW 100 kHz	#VBW 300 kHz	Stop 25.000 GHz Sweep 1.434 s (10000 pts)	Mkr→CF	Start 1.000 GHz Stop 10.000 GHz CF Step #Res BW 100 kHz #VBW 300 kHz Sweep 860.6 ms (10000 pts)
MRR MODE TRC SCL X	778 0 GHz 45.011 dBm	N FUNCTION WOTH FUNCTION VALUE +	Mkr→RefLvl	Non uses rec. fcl. 2 Parchow Parchow
7 8 9 10			More 1 of 2	
MSG		STATUS		MIG STATUS

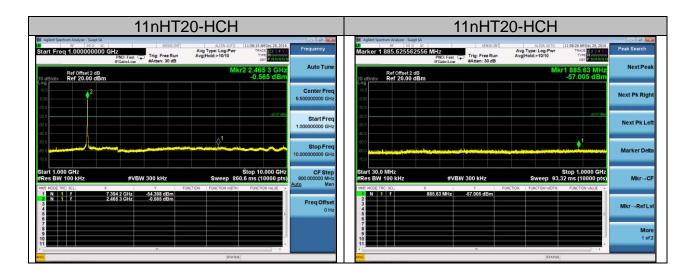
11G-HCH				11G-HCH	
Agilent Spectrum Analyzer - Swept SA BF S0 Ω AC Narker 1 351.684168417 M	SENSE:INT PNO: Fast IFGsin:Low #Atten: 30 dB	ALION MUTO 11:48:40 AMORC 29, 2016 Avg Type: Log-Pwr TRACE 12:43 Avg[Hold:>10/10 Tive: Det Patients	Peak Search	B Aginet Spectrum Rodyner: Singl SA. Stridle:Strill ALION MUTD 1114P226 MPGer 25: 2016 Morrikor 1 24,743347435 GHz Stridle:Strill ALION MUTD 1114P226 MPGer 25: 2016 Morrikor 1 24,743474347435 GHz Trig: Free Run Action: 30 dB Avg Type Log-Pwr Rogittadio: 1010 Trig: Strill	Peak Search
Ref Offset 2 dB 0 dB/div Ref 20.00 dBm		Mkr1 351.68 MHz -56.178 dBm	Next Peak	Ref Offset 2 dB Mkr1 24.743 5 GHz	Next Peak
10.0			Next Pk Right		Next Pk Right
30.0		21.00.000	Next Pk Left	300	Next Pk Left
40 D 50 0 60 0 41 June 19 - 20	1		Marker Delta		Marker Delta
Start 30.0 MHz Res BW 100 kHz	#VBW 300 kHz	Stop 1.0000 GHz Sweep 93.32 ms (10000 pts)	Mkr→CF	Start 10.000 GHz Start 10.000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.434 s (10000 pts)	Mkr→CF
MR MODE TRC SCL X 1 N 1 f 35 3 4 5	1.68 MHz -56,178 dBm	PUNCTION WOTH FUNCTION VALUE +	Mkr→RefLvi	Improvement X Y Function Function worth Function worth Function wave > 1 1 1 2.4.743.6 GHz -45.333.6Bm -	Mkr→RefLvi
9 9 1			More 1 of 2		More 1 of 2
9		STATUS		MIG. STATUS	

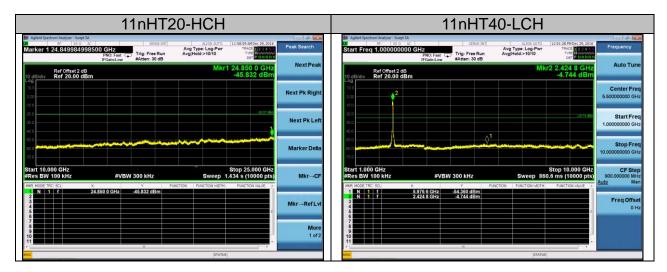
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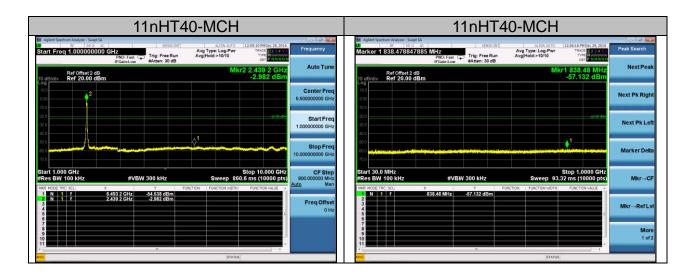
11nHT2	0-LCH	11nHT20-MCH
Marker 1 24854485448545 GHz Trig: Free Run PNO: Fast Trig: Free Run #Atten: 30 dB	AUDI AUTO 115336 AMORC 29 2016 Avg Type: Log-Pwr Avg Hold>10/10 tree tree tree tree tree tree tree tre	D Start Freq 1.00000000 GHz Stort Frequency Aug Number 10,559 Addres 30,358 Frequency Start Freq 1.00000000 GHz Frequency Trig: Free Run Avg Type: Log Port Trig: Free Run Avg Hold=1010 Trig: Free Run Frequency Frequency <t< th=""></t<>
Ref Offset 2 dB 10 dB/dly Ref 20.00 dBm	Mkr1 24.854 5 GHz -45.456 dBm	Ref Officet 2 dB Mkr2 2.437 4 GHz 10 dBldiv Ref 20.00 dBm -1.193 dBm
	Next Pk R	ght 2 Center Freq 5.50000000 GHz
	Next Pk	Left 505 Start Freq 1.0000000 GH2
	Marker I	
Start 10.000 GHz #Res BW 100 kHz #VBW 300 kHz	Stop 25.000 GHz Sweep 1.434 s (10000 pts) Mkr	
MRM MODE TRC: ScLi X. Y Func 1 N 1 7 24.864.9 GHz 46.459.0 Bm 2 3 4 4 46.459.0 Bm 46.459.0 Bm 3 4 4 4 46.459.0 Bm 46.459.0 Bm 46.459.0 Bm		MRR MODE TPC, Std. X Y Function Function wight Function value Fun
		ore 9 9 10 11
MSG	STATUS	NGG STATUS

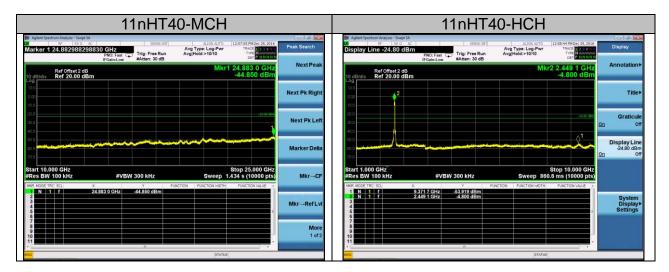
1 [.]	1nHT20-MCI	-	11nHT20-MCH			
Agilert Spechum Analyzer - Swept SA BF S0 0 AC Marker 1 865.641564156 MHz PNO: Fast C+ IFGaintLow IFGaintLow	SENSE:DIT ALTON AU Trig: Free Run #Atten: 30 dB	TRACE 23457 Peak Search	Bit Aglets Spectrum Avglyser - Sangt SA SSEE Sectrum Avg Type: Marker 1 248 91939193920 CHz Frequencies Marker 1 248 9193920 CHz Trig: Free Run PNO: Fast Composition Avg Type: IFGainLoss Avgl/Hold:>			
Ref Offset 2 dB 10 dB/div Ref 20.00 dBm		Mkr1 865.64 MHz -56.489 dBm	Ref Offset 2 dB 10 dB/div Ref 20.00 dBm	Mkr1 24.892 0 GHz -44.969 dBm		
10.0		Next Pk Right		Next Pk Right		
20.0		Next Pk Left	20 D	Next Pk Left		
40 0 50 0 Minington - Anno Marine Marine Marine Anno 1000 70 0		Marker Delta		Marker Delta		
Start 30.0 MHz Res BW 100 kHz #VBW	300 kHz Sweep	Stop 1.0000 GHz 93.32 ms (10000 pts) Mkr→CF	Start 10.000 GHz #Res BW 100 kHz #VBW 300 kHz \$	Stop 25.000 GHz Sweep 1.434 s (10000 pts) MkrCF		
MODE TRC SCL X 1 1 1 865.64 MHz 2 3 4 5 5 5 5	Y FUNCTION FUNCTION 4	TH FUNCTION VALUE • MKrRefLvi	MRF MORE TRO [KL] X Y Function Function 1 N 1 F 24.892 0 GHz 44.999 dBm Function Function 2			
7 8 9 10	10	More 1 of 2		More 1 of 2		
	st	TUS	MBG	STATUS		





11r	HT40-LCH		11nHT40-LCH			
Marker 1 790.944094409 MHz	SENSCINT Allow auto 12:03:41 04:04:29:2016 Avg Type::Log-Pwr TRXCE TRXCE Free Run Avg[Hold:>10/10 TYPE err: 30 dB cert cert	Peak Search	Bit Agent System Andyrer: Sheet 5A SPECENT 4109-8470 124214 PMGe239, 2015 Warker: 1:24,768976897690 GHz SPECENT Avg Type: Log-Part TMGE Bit and TMGE Bit and state: 30 dB Tmg: Free Run Avg Type: Log-Part TMGE Bit and TMGE Bit and state: 30 dB Tmg: Free Run Avg Type: Log-Part TMGE Bit and TMGE Bit and state: 30 dB Tmg: Free Run Avg Type: Log-Part TMGE Bit and the state and state: 30 dB Tmg: Free Run Avg Type: Log-Part TMGE Bit and the state and state: 30 dB Tmg: Free Run Avg Type: Log-Part TMGE Bit and the state and state: 30 dB Tmg: Free Run Avg Type: Log-Part TMGE Bit and the state and state: 30 dB Tmg: Free Run Avg Type: Log-Part TMGE Bit and the state and state: 30 dB Tmg: Free Run Avg Type: Log-Part Tmg: Free R	Peak Search		
Ref Offset 2 dB 10 dB/div Ref 20.00 dBm 10 D	Mkr1 790.94 MHz -56.366 dBm	Next Peak Next Pk Right	Ref Offset 2 dB Mkr1 24,769 0 GHz 10 dB/dv/ Ref 20,00 dBm -44.320 dBm us	Next Peak Next Pk Right		
100 200 300	-50.34.050	Next Pk Left	223	Next Pk Left		
-410 		Marker Delta		Marker Delta		
Start 30.0 MHz #Res BW 100 kHz #VBW 300 More find sci.l x y	FUNCTION FUNCTION WIDTH FUNCTION VALUE +	Mkr→CF	Start 10.000 GHz Stöp 25.000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.434 s (10000 pts) Mor Mode The Set x Y Partnoli Function inform	Mkr→CF		
1 N 1 f 790.94 MHz -56.3 2 - - - - - 3 - - - - - 4 - - - - - 5 - - - - - - 6 -	65 dBm	Mkr→RefLvl	N 1 f 24769 0 GHz 44.320 dBm	Mkr→RefLvl		
7 8 9 10 11		More 1 of 2		More 1 of 2		
Into .	STATUS		and STATUS			





	11nHT4	D-HCH		11	nHT40-HCH	
Agilent Spectrum Analyzer - Swept SA Agilent Spectrum Analyzer - Swept SA Marker 1 892.804280428		ALCON AUTO 12:09:44 PMOrec 29, 2016 Avg Type: Log-Pwr TRACE Avg[Hold:>10/10 TYPE Der Printentz	Peak Search	M Agtert Spectrum Analyzer - Swept SA 00 0 AC Marker 1 24.834983498350 GHz PNO: Fast T IFGain:Low #	SENSE.Intl ALIGN ALTO 12:10:09 PM Dec 29, 2016 frig: Free Run Avg Type: Log-Pwr TRACE Type: Log-Pwr frig: Free Run Avg[Hold:>10/10 Trace Type: Log-Pwr Atten: 30 dB Core Type: Log-Pwr Trace Type: Log-Pwr	Peak Search
Ref Offset 2 dB 10 dB/div Ref 20.00 dBm	1	Mkr1 892.80 MHz -57.320 dBm	Next Peak	Ref Offset 2 dB 10 dB/div Ref 20.00 dBm	Mkr1 24.835 0 GHz -45.799 dBm	Next Peak
0.00			Next Pk Right	0.00		Next Pk Right
-200		.05006	Next Pk Left	-100 200 300	.3150.000	Next Pk Left
50.0 50.0 meži (1997 - 1997 - 1997 - 1997 -70.0	Neigh agus ann an thaith an tha ann an a		Marker Delta	80 0 80 0 70 0		Marker Delta
Start 30.0 MHz #Res BW 100 kHz	#VBW 300 kHz	Stop 1.0000 GHz Sweep 93.32 ms (10000 pts)	Mkr→CF	Start 10.000 GHz #Res BW 100 kHz #VBW 30	Stop 25.000 GHz 00 kHz Sweep 1.434 s (10000 pts)	Mkr→CF
	X Y FUNC 892.80 MHz -57.320 dBm	NON FUNCTION WIDTH FUNCTION VALUE >	Mkr→RefLvl	MRR MODE THC SCL X 1 N 1 f 24.835 0 GHz 45 2 3 4 5 6		Mkr→RefLvl
7 8 9 10 11			More 1 of 2	7 8 9 10		More 1 of 2
alg		STATUS		MEC	STATUS	

10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY

10.1 MEASUREMENT PROCEDURE

- (1). Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- (2). Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- (3). Set SPA Trace 1 Max hold, then View.

Note: The method of AVGPSD in the KDB 558074 item 10.3 was used in this testing.

10.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

Refer To Section 8.2.

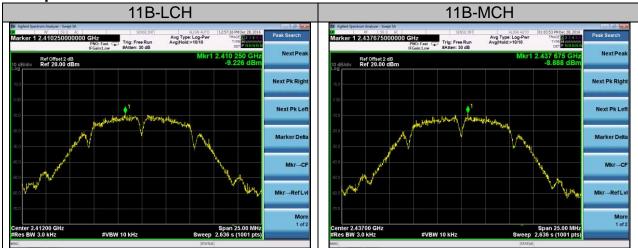
10.3 MEASUREMENT EQUIPMENT USED

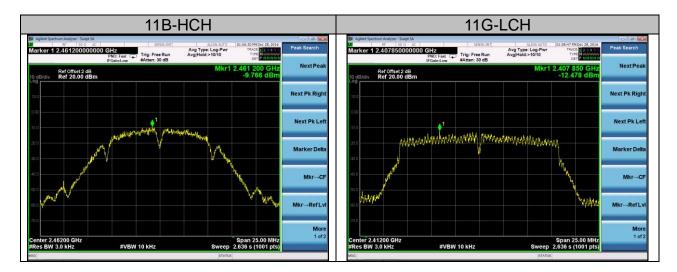
Refer To Section 6.

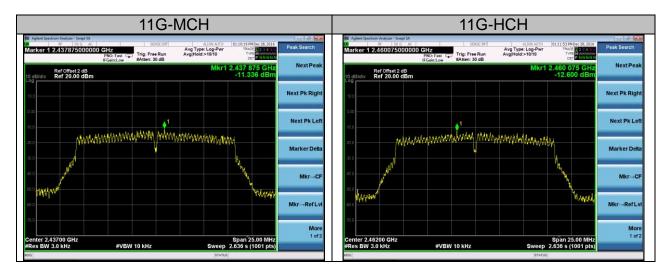
10.4 LIMITS AND MEASUREMENT RESULT

Mode	Channel	PSD [dBm/3kHz]	Limit[dBm/3kHz]	Verdict
	LCH	-9.226	8	PASS
11B	MCH	-8.888	8	PASS
	НСН	-9.766	8	PASS
	LCH	-12.478	8	PASS
11G	MCH	-11.336	8	PASS
	НСН	-12.600	8	PASS
	LCH	-13.391	8	PASS
11nHT20	MCH	-9.827	8	PASS
	HCH	-12.077	8	PASS
	LCH	-17.994	8	PASS
11nHT40	MCH	-14.735	8	PASS
	HCH	-18.550	8	PASS

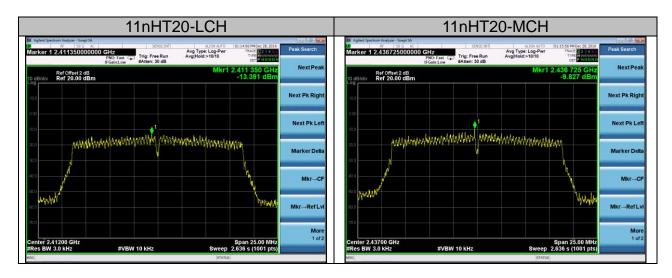


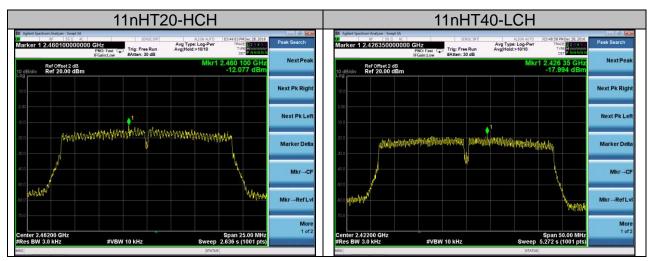


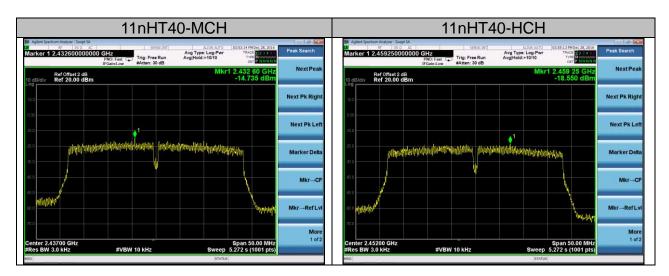




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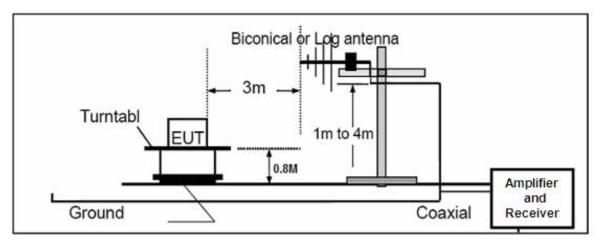


11. RADIATED EMISSION

11.1. MEASUREMENT PROCEDURE

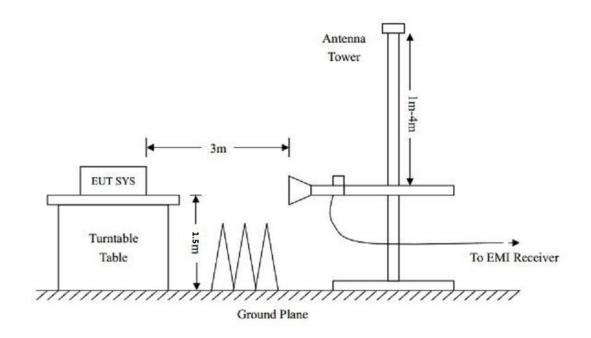
- 1. Configure the EUT according to ANSI C63.10. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer. The EUT was placed on the top of the turntable 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 8.If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.

11.2. TEST SETUP



RADIATED EMISSION TEST SETUP 30MHz-1000MHz





11.3. LIMITS AND MEASUREMENT RESULT

15.209(a) Limit in the below table has to be followed

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

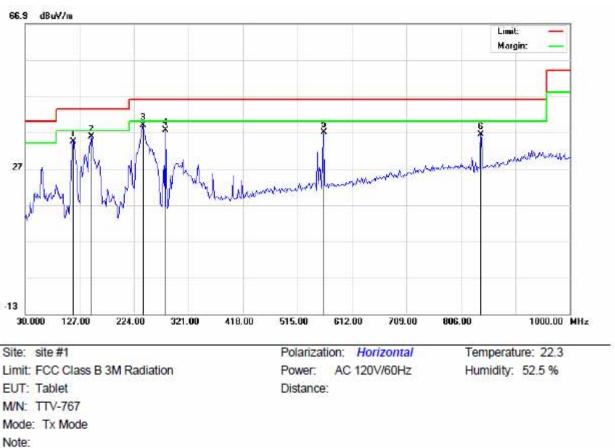
Note: All modes were tested For restricted band radiated emission,

the test records reported below are the worst result compared to other modes.

11.4. TEST RESULT

RADIATED EMISSION BELOW 30MHZ

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

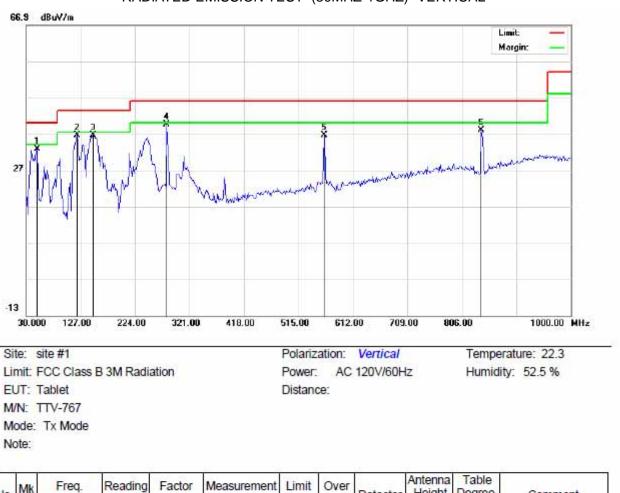


RADIATED EMISSION BELOW 1GHZ

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

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	1	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		115.6833	29.75	4.71	34.46	43.50	-9.04	peak		i ii	
2		148.0167	20.54	15.25	35.79	43.50	-7.71	peak		Ĩ	
3	*	240.1667	26.07	12.94	39.01	46.00	-6.99	peak		i ii	
4		280.5833	22.81	14.82	37.63	46.00	-8.37	peak		<u>] </u>	
5		561.8832	14.38	22.54	36.92	46.00	-9.08	peak			
6		841.5667	9.01	27.31	36.32	46.00	-9.68	peak]]	

RESULT: PASS



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

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree		
1		49.4000	24.46	8.28	32.74	40.00	-7.26	peak			
2		120.5333	29.59	7.08	36.67	43.50	-6.83	peak		i i	
3		149.6333	21.41	15.26	36.67	43.50	-6.83	peak			
4	*	280.5833	24.77	14.82	39.59	46.00	-6.41	peak			
5		560.2667	14.01	22.53	36.54	46.00	-9.46	peak			
6		839.9500	10.64	27.31	37.95	46.00	-8.05	peak			

RESULT: PASS

Note:

1. Factor=Antenna Factor + Cable loss, Margin= Result -Limit.

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

3. All test modes had been pre-tested. The 802.11b at low channel is the worst case and recorded in the report.

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Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре	Connorm
			TX 11b 2412M	Hz			
4824	4824 44.08 10.44 54.52		74	-19.48	Pk	Horizontal	
4824	32.14	10.44	42.58	54	-11.42	AV	Horizontal
7236	47.09	10.39	57.48	74	-16.52	pk	Horizontal
7236	30.8	10.39	41.19	54	-12.81	AV	Horizontal
4824	39.46	10.39	49.85	74	-24.15	Pk	Vertical
4824	30.57	10.39	40.96	54	-13.04	AV	Vertical
7236	42.04	10.68	52.72	74	-21.28	Pk	Vertical
7236	29.23	10.68	39.91	54	-14.09	AV	Vertical
			TX 11b 2437M	Hz			
4874	40.41	10.39	50.8	74	-23.2	Pk	Horizontal
4874	34.04	10.39	44.43	54	-9.57	AV	Horizontal
7311	39.09	12.68	51.77	74	-22.23	Pk	Horizontal
7311	29.29	12.68	41.97	54	-12.03	AV	Horizontal
4874	41.6	10.39	51.99	74	-22.01	Pk	Vertical
4874	29.67	10.39	40.06	54	-13.94	AV	Vertical
7311	40.98	12.68	53.66	74	-20.34	Pk	Vertical
7311	30.25	12.68	42.93	54	-11.07	AV	Vertical
			TX 11b 2462M	Hz			
4924	44.51	10.39	54.9	74	-19.1	pk	Horizontal
4924	27.33	10.39	37.72	54	-16.28	AV	Horizontal
7386	41.92	12.68	54.6	74	-19.4	pk	Horizontal
7386	31.05	12.68	43.73	54	-10.27	AV	Horizontal
4924	41.41	10.39	51.8	74	-22.2	pk	Vertical
4924	30.59	10.39	40.98	54	-13.02	AV	Vertical
7386	41.27	12.68	53.95	74	-20.05	pk	Vertical
7386	31.87	12.68	44.55	54	-9.45	AV	Vertical

RADIATED EMISSION ABOVE 1GHZ

RESULT: PASS Note:

- 1. Factor = Antenna Factor + Cable Loss Pre-amplifier.
- 2. Emission Level = Meter Reading + Factor
- 3. Margin = Emission Leve Limit

4. All test modes had been pre-tested. The 802.11b mode is the worst case and recorded in the report. No recording in the test report at least have 20dB margin.

12. BAND EDGE EMISSION

12.1. MEASUREMENT PROCEDURE

1)Radiated restricted band edge measurements

The radiated restricted band edge measurements are measured with an EMI test receiver connected to the receive antenna while the EUT is transmitting

2)Conducted Emissions at the bang edge

a)The transmitter output was connected to the spectrum analyzer

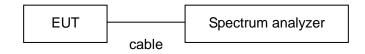
b)Set RBW=100kHz,VBW=300kHz

c)Suitable frequency span including 100kHz bandwidth from band edge

12.2. TEST SET-UP

Radiated same as 11.2

Conducted set up



Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector	Comment		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре			
TX 11b 2412MHz									
2399.9	74.91	-13	61.91	74	-12.09	pk	Horizontal		
2399.9	56.66	-13	43.66	54	-10.34	AV	Horizontal		
2400	74.15	-12.99	61.16	74	-12.84	pk	Horizontal		
2400	53.27	-12.99	40.28	54	-13.72	AV	Horizontal		
2399.9	68.73	-12.97	55.76	74	-18.24	pk	Vertical		
2399.9	57.54	-12.97	44.57	54	-9.43	AV	Vertical		
2400	72.9	-12.94	59.96	74	-14.04	pk	Vertical		
2400	55.47	-12.94	42.53	54	-11.47	AV	Vertical		
			TX 11b 2	2462MHz					
2483.5	76.03	-12.78	63.25	74	-10.75	pk	Horizontal		
2483.5	55.35	-12.78	42.57	54	-11.43	AV	Horizontal		
2483.6	70.18	-12.77	57.41	74	-16.59	pk	Horizontal		
2483.6	47.75	-12.77	34.98	54	-19.02	AV	Horizontal		
2483.5	79.34	-12.76	66.58	74	-7.42	pk	Vertical		
2483.5	50.37	-12.76	37.61	54	-16.39	AV	Vertical		
2483.6	69.08	-12.72	56.36	74	-17.64	pk	Vertical		
2483.6	57.27	-12.72	44.55	54	-9.45	AV	Vertical		

12.3. Radiated Test Result

RESULT: PASS

Note: Scan with 11b,11g,11n, the worst casw is 11b Mode

Factor=Antenna Factor + Cable loss - Amplifier gain,

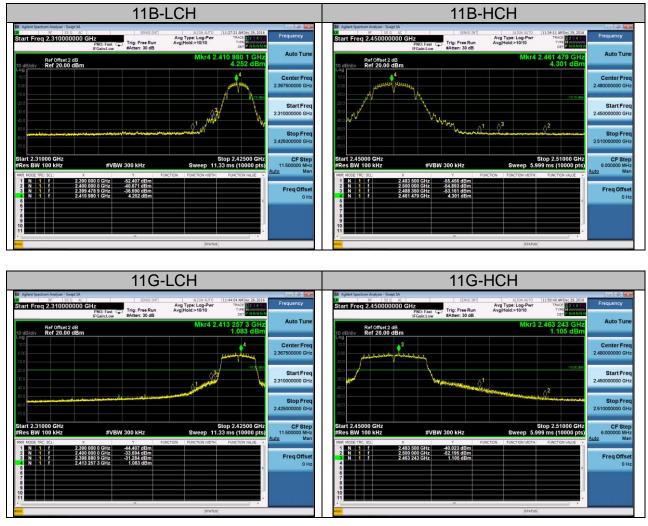
Emission Level = Meter Reading + Factor

Margin= Emission Level -Limit.

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

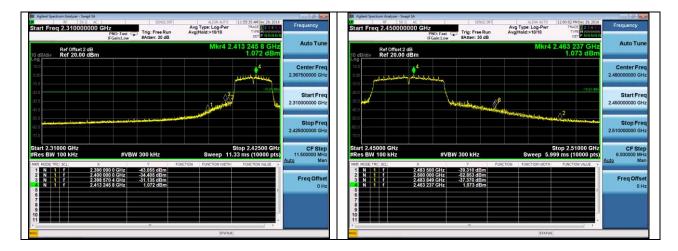
12.4. Conducted Test Result

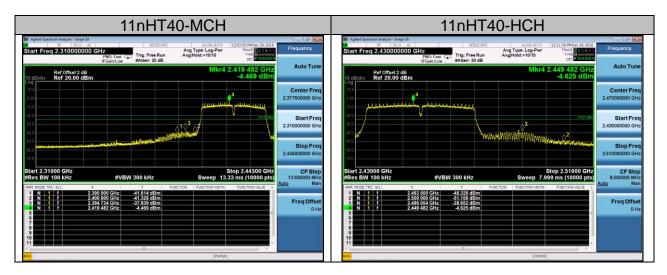
Test Graph



11nHT20-LCH 11nHT20-HCH

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13. FCC LINE CONDUCTED EMISSION TEST

13.1. LIMITS OF LINE CONDUCTED EMISSION TEST

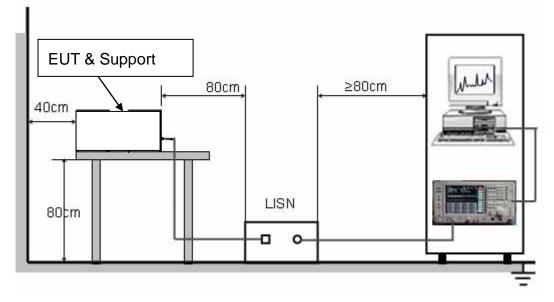
Frequency	Maximum RF Line Voltage				
Frequency	Q.P.(dBuV)	Average(dBuV)			
150kHz~500kHz	66-56	56-46			
500kHz~5MHz	56	46			
5MHz~30MHz	60	50			

Note:

1. The lower limit shall apply at the transition frequency.

2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

13.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



13.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

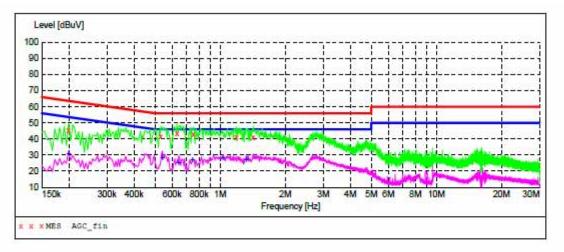
- The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2. Support equipment, if needed, was placed as per ANSI C63.10.
- 3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4. All support equipments received AC120V/60Hz power from a LISN, if any.
- 5. The EUT received charging voltage by adapter which received 120V/60Hzpower by a LISN..
- 6. The test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 8. During the above scans, the emissions were maximized by cable manipulation.
- 9. The test mode(s) were scanned during the preliminary test.

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

13.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

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

13.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST



LINE CONDUCTED EMISSION TEST LINE 1-L

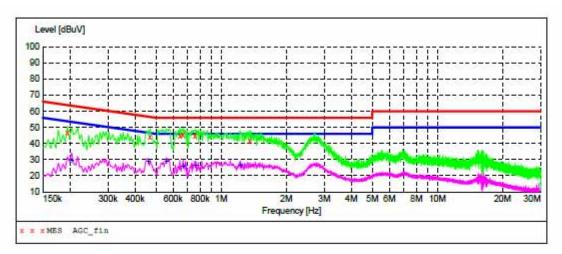
MEASUREMENT RESULT: "AGC fin"

Frequency	Level	Transd	Limit	Margin	Detector	Line	PE	AUX
								STATE
MHz	dBuV	dB	dBuV	dB				
0.199500	45.50	10.3	64	18.1	QP	Ll	FLC	ON
0.532500	42.00	10.3	56	14.0	QP	Ll	FLC	ON
0.631500	43.80	10.3	56	12.2	QP	Ll	FLC	ON
0.753000	42.70	10.3	56	13.3	QP	L1	FLC	ON
1.189500	41.10	10.4	5.6	14.9	QP	L1	FLC	ON
1.423500	40.90	10.4	56	15.1	QP	Ll	FLC	ON

MEASUREMENT RESULT: "AGC fin2"

2016/12/31 12:04

Frequency	Level	Transd	Limit	Margin	Detector	Line	PE	AUX STATE
MHz	dBuV	dB	dBuV	dB				
0.199500	30.90	10.3	54	22.7	AV	Ll	FLC	ON
0.541500	28.60	10.3	46	17.4	AV	Ll	FLC	ON
0.645000	25.50	10.3	46	20.5	AV	Ll	FLC	ON
0.744000	27.40	10.3	46	18.6	VA	Ll	FLC	ON
1.032000	28.40	10.4	46	17.6	AV	Ll	FLC	ON
1.320000	27.60	10.4	46	18.4	VA	Ll	FLO	ON



Line Conducted Emission Test Line 2-N

MEASUREMENT RESULT: "AGC_fin"

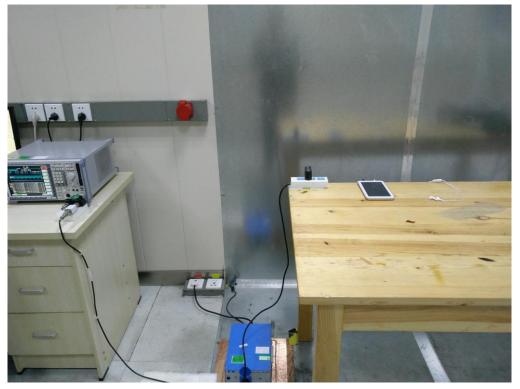
2016/12/31 12	:00							
Frequency	Level	Transd	Limit	Margin	Detector	Line	PE	AUX
								STATE
MHz	dBuV	dB	dBuV	dB				
0.195000	46.80	10.3	64	17.0	QP	N	FLC	ON
0.469500	44.00	10.3	57	12.5	OP	N	FLC	ON
0.645000	44.90	10.3	56	11.1	QP	N	FLC	ON
0.667500	45.50	10.3	56	10.5	QP	N	FLC	ON
0.757500	44.60	10.3	56	11.4	QP	N	FLC	ON
1.360500	41.50	10.4	56	14.5	QP	N	FLC	ON

MEASUREMENT RESULT: "AGC fin2"

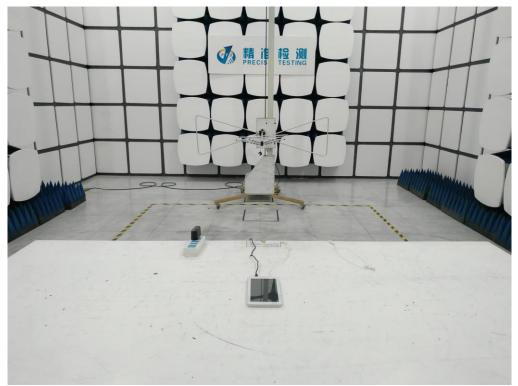
2016/12/31	12:00

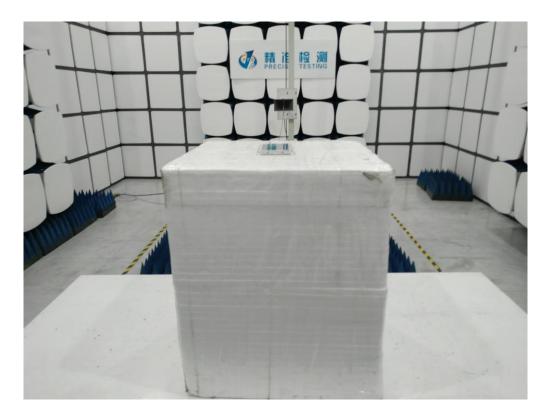
Frequency	Level	Transd	Limit	Margin	Detector	Line	PE	AUX
MHz	dBuV	dB	dBuV	dB				
0.204000	30.10	10.3	53	23.3	AV	N	FLC	ON
0.460500	29.40	10.3	47	17.3	AV	N	FLC	ON
0.559500	29.30	10.3	46	16.7	AV	N	FLC	ON
0.667500	26.30	10.3	46	19.7	AV	N	FLC	ON
0.762000	26.90	10.3	46	19.1	AV	N	FLC	ON
1.230000	26.80	10.4	46	19.2	AV	N	FLC	ON

APPENDIX A: PHOTOGRAPHS OF TEST SETUP FCC LINE CONDUCTED EMISSION TEST SETUP



FCC RADIATED EMISSION TEST SETUP





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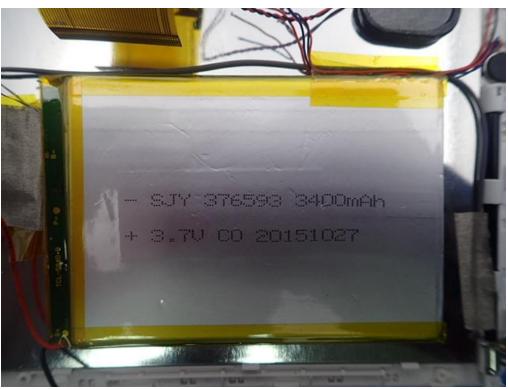


APPENDIX B: PHOTOGRAPHS OF EUT

TOTAL VIEW OF EUT

THE LABEL OF ADAPTER





THE LABEL OF BATTERY

TOP VIEW OF EUT





BOTTOM VIEW OF EUT

FRONT VIEW OF EUT



BACK VIEW OF EUT



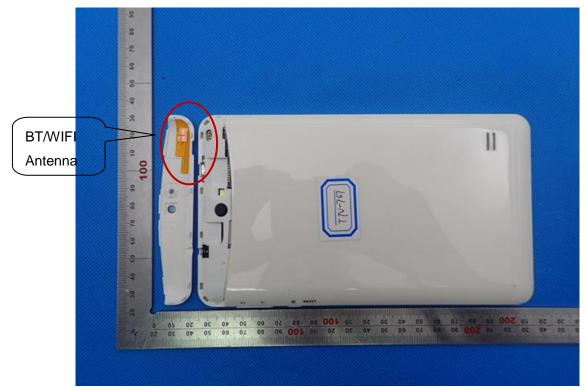
LEFT VIEW OF EUT





RIGHT VIEW OF EUT

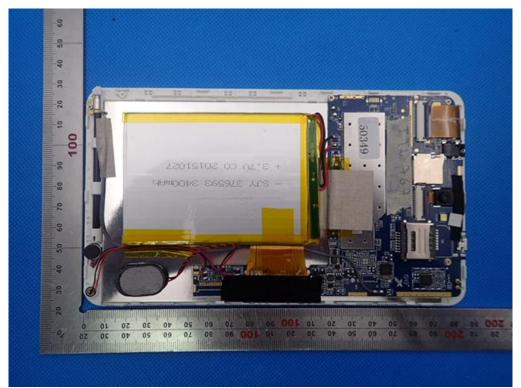
OPEN VIEW OF EUT-1



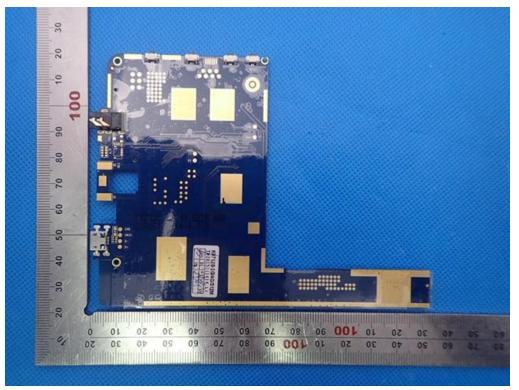


OPEN VIEW OF EUT-2

OPEN VIEW OF EUT-3



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INTERNAL VIEW OF EUT-1

INTERNAL VIEW OF EUT-2



----END OF REPORT----