Shenzhen Huatongwei International Inspection Co., Ltd.
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TEST REPORT

Report Reference No. ..... :	**TRE1605009506**	R/C…….: 59796
FCC ID ..... :	**2ADE3IDATA50A**	
Applicant's name ..... :	**WUXI IDATA TECHNOLOGY COMPANY LTD.**	
Address.....:	Floor 11, Building B1, Wuxi Binhu National Sensing Information Center, No.999 Gaolang East Road, Wuxi City, P.R.C.	
Manufacturer.....:	WUXI IDATA TECHNOLOGY COMPANY LTD.	
Address.....:	Floor 11, Building B1, Wuxi Binhu National Sensing Information Center, No.999 Gaolang East Road, Wuxi City, P.R.C.	
Test item description ..... :	**NEW MOBILE COMPUTER**	
Trade Mark .....:	iData	
Model/Type reference.....:	iData 50	
Listed Model(s) .....:	-	
Standard ..... :	**FCC CFR Title 47 Part 15 Subpart E Section 15.407**	
Date of receipt of test sample……..:	May.19, 2016	
Date of testing……:	May.20, 2016 ~ Aug.13, 2016	
Date of issue……...:	Aug.14, 2016	
Result..... ……..:	**PASS**	

Compiled by (position+printedname+signature)...:	File administrators Candy Liu	Candy Liu
Supervised by (position+printedname+signature)....:	Project Engineer Lion Cai	Lion Cai
Approved by (position+printedname+signature)....:	RF Manager Hans Hu	Hans Hu

Testing Laboratory Name ..... :	**Shenzhen Huatongwei International Inspection Co., Ltd**
Address.....:	1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China

Contents

1. APPLICABLE STANDARDS ANDTEST DESCRIPTION

1.1. Applicable Standards

The tests were performed according to following standards:
FCC Rules Part 15.407: General technical requirements.

ANSI C63.10-2013:AmericanNationalStandardforTestingUnlicensedWirelessDevices

KDB789033 D02 V01R02: GUIDELINES FOR COMPLIANCE TESTING OF UNLICENSED NATIONAL INFORMATION INFRASTRUCTURE (U-NII) DEVICES PART 15, SUBPART E

1.2. Test Description

ReportSection	Test Item	FCC Rule	Result
4.1	Antenna Requirement	15.203	Pass
4.2	Line Conducted Emission (AC Main)	15.207	Pass
4.3	Maximum Conducted Output Power	15.407 (a.1)(a.2)(a.3)	Pass
4.4	Maximum Power Spectral Density	15.407 (a.1)(a.2)(a.3)	Pass
4.5	6dB&26dB Bandwidth	15.407(a.5)	Pass
4.6	Radiated Emissions & Bandedge	15.407(b.1)(b.2)(b.4)	Pass
4.7	Frequency Stability	15.407(g)	Pass
4.8	TPC and DFS	15.407(h)	Pass

Remark: 1.The measurement uncertainty is not included in the test result.
2.The EUT is a client device without radar detection.a TPC mechanism is not required for systems with an e.i.r.p. of less than 500mW.

2. SUMMARY

2.1. Client Information

Applicant:	WUXI IDATA TECHNOLOGY COMPANY LTD.
Address:	Floor 11, Building B1, Wuxi Binhu National Sensing Information Center, No.999 Gaolang East Road, Wuxi City, P.R.C.
Manufacturer:	WUXI IDATA TECHNOLOGY COMPANY LTD.
Address:	Floor 11, Building B1, Wuxi Binhu National Sensing Information Center, No.999 Gaolang East Road, Wuxi City, P.R.C.

2.2. Product Description

Name of EUT	NEW MOBILE COMPUTER
Trade Mark:	iData
Model No.:	iData 50
Listed Model(s):	-
IMEI 1:	869881011800052
Power supply:	DC 3.7V From internal battery
Adapter information1:	Model:FJ-SW1260502000UN Input:AC 100-240V 50/60Hz 0.4A Max Output: 5Vd.c., 2000mA
Adapter information2:	Model:FJ-SW1202000N Input:AC 100-240V 50/60Hz 0.6A Max Output: 12Vd.c., 2000mA
5G WIFI	
Supported type:	802.11a/802.11ac/802.11n
Modulation:	BPSK /QPSK /16QAM /64QAM
Operation frequency:	Band I:5150MHz-5250MHz Band II:5250MHz-5350MHz(Client device) Band IV:5725MHz-5850MHz
Channel Bandwidth	802.11a/n(H20):20MHz 802.11ac/n(H40):40MHz
Channel separation:	5MHz
Antenna type:	Internal Antenna
Antenna gain:	1.5dBi

2.3. Operation state

◆ **Test frequency list**

According to section 15.31(m), regards to the operating frequency range over 10 MHz, must select three channel which were tested. the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, please see the above gray bottom.

20MHz				40MHz			
Band	Test Channel	Channel	Frequency (MHz)	Band	Test Channel	Channel	Frequency (MHz)
Band I	Low	36	5180	Band I	Low	38	5190
		40	5200		High	46	5230
	Mid	44	5220	Band II	Low	54	5270
	High	48	5240		High	62	5310
Band II	Low	52	5260	Band IV	Low	151	5755
		56	5280		High	159	5795
	Mid	60	5300				
	High	64	5320				
Band IV	Low	149	5745				
		153	5765				
	Mid	157	5785				
		161	5805				
	High	165	5825				

◆ **Data Rated**

Preliminary tests were performed in different data rate, and found which the below bit rate is worst case mode, so only show data which it is a worst case mode.

Mode	datarate (worst mode)
802.11a	6Mbps
802.11ac	13.5Mbps
802.11n(H20)	MCS0
802.11n(H40)	MCS0

◆ **Test mode**

For RF test items:

the engineering test program was provided and enabled to make EUT continuous transmit/receive. The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

For AC power line conducted emissions:

the EUT was set to connect with the WLAN AP under large package sizes transmission.

2.4. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

● - supplied by the manufacturer

○ - supplied by the lab

		Length (m) :	/
		Shield :	/
		Detachable :	/
		Manufacturer :	/
		Model No. :	/

2.5. Modifications

No modifications were implemented to meet testing criteria.

3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Laboratory:Shenzhen Huatongwei International Inspection Co., Ltd.
Address: 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China
Phone: 86-755-26748019 Fax: 86-755-26748089

3.2. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L1225
Shenzhen Huatongwei International Inspection Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories, Date of Registration: February 28, 2015. Valid time is until February 27, 2018.

A2LA-Lab Cert. No. 3902.01
Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. Valid time is until December 31, 2016.

FCC-Registration No.: 317478
Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration 317478, Renewal date Jul. 18, 2014, valid time is until Jul. 18, 2017.

IC-Registration No.: 5377A&5377B
The 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377A on Dec. 31, 2013, valid time is until Dec. 31, 2016.
Two 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377B on Dec.03, 2014, valid time is until Dec.03, 2017.

ACA
Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

VCCI
The 3m Semi-anechoic chamber (12.2m×7.95m×6.7m) of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2484. Date of Registration: Dec. 20, 2012. Valid time is until Dec. 29, 2015.
Radiated disturbance above 1GHz measurement of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-292. Date of Registration: Dec. 24, 2013. Valid time is until Dec. 23, 2016.
Main Ports Conducted Interference Measurement of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: C-2726. Date of Registration: Dec. 20, 2012. Valid time is until Dec. 19, 2015.
Telecommunication Ports Conducted Interference Measurement of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: T-1837. Date of Registration: May 07, 2013. Valid time is until May 06, 2016.

DNV
Shenzhen Huatongwei International Inspection Co., Ltd. has been found to comply with the requirements of DNV towards subcontractor of EMC and safety testing services in conjunction with the EMC and Low voltage Directives and in the voluntary field. The acceptance is based on a formal quality Audit and follow-ups according to relevant parts of ISO/IEC Guide 17025 (2005), in accordance with the requirements of the DNV Laboratory Quality Manual towards subcontractors. Valid time is until Aug. 24, 2016.

3.3. Equipments Used during the Test

Radiated Emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal
1	Ultra-Broadband Antenna	ShwarzBeck	VULB9163	538	2015/11/02
2	EMI TEST RECEIVER	Rohde&Schwarz	ESI 26	100009	2015/11/02
3	EMI TEST Software	Audix	E3	N/A	N/A
4	TURNTABLE	ETS	2088	2149	N/A
5	ANTENNA MAST	ETS	2075	2346	N/A
6	EMI TEST Software	Rohde&Schwarz	ESK1	N/A	N/A
7	HORNANTENNA	ShwarzBeck	9120D	1011	2015/11/02
8	Amplifer	Sonoma	310N	E009-13	2015/11/02
9	JS amplifer	Rohde&Schwarz	JS4-00101800-28-5A	F201504	2015/11/02
10	High pass filter	Compliance Direction systems	BSU-6	34202	2015/11/02
11	HORNANTENNA	ShwarzBeck	9120D	1012	2015/11/02
12	Amplifer	Compliance Direction systems	PAP1-4060	120	2015/11/02
13	Loop Antenna	Rohde&Schwarz	HFH2-Z2	100020	2015/11/02
14	TURNTABLE	MATURO	TT2.0	----	N/A
15	ANTENNA MAST	MATURO	TAM-4.0-P	----	N/A
16	Horn Antenna	SCHWARZBECK	BBHA9170	25841	2015/11/02
17	ULTRA-BROADBAND ANTENNA	Rohde&Schwarz	HL562	100015	2015/11/02

Conducted test					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal
1	Spectrum Analyzer	Rohde&Schwarz	FSV40	100048	2015/11/02
2	OSP	Rohde&Schwarz	OSP120	101317	2015/11/02
3	OSP	Rohde&Schwarz	OSP-B157	100890	2015/11/02
4	Signal generator	Rohde&Schwarz	SMB100A	177956	2015/11/02
5	Vector signal generator	Rohde&Schwarz	SMBV100A	260790	2015/11/02
6	EXA Signal Analyzer	Agilent	N9010A	184247	2015/11/02

The Cal.Interval was one year

3.4. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15~35°C
lative Humidity:	30~60 %
Air Pressure:	950~1050mba

3.5. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01"Electromagnetic compatibilityand Radio spectrum Matters (ERM);Uncertainties in the measurementof mobile radio equipment characteristics;Part 1"and TR-100028-02 "Electromagnetic compatibilityand Radio spectrum Matters (ERM);Uncertainties in the measurementof mobile radio equipment characteristics;Part 2 " and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Huatongwei laboratory is reported:

Test Items	MeasurementUncertainty	Notes
Transmitter power conducted	0.57 dB	(1)
Transmitter power Radiated	2.20 dB	(1)
Conducted spurious emission 9KHz-40 GHz	1.60 dB	(1)
Radiated spurious emission 9KHz-40 GHz	2.20 dB	(1)
Conducted Emission 9KHz-30MHz	3.39 dB	(1)
Radiated Emission 30~1000MHz	4.24 dB	(1)
Radiated Emissio 1~18GHz	5.16 dB	(1)
Radiated Emissio 18-40GHz	5.54 dB	(1)
Occupied Bandwidth	---------	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

4. TEST CONDITIONS AND RESULTS

4.1. Antenna requirement

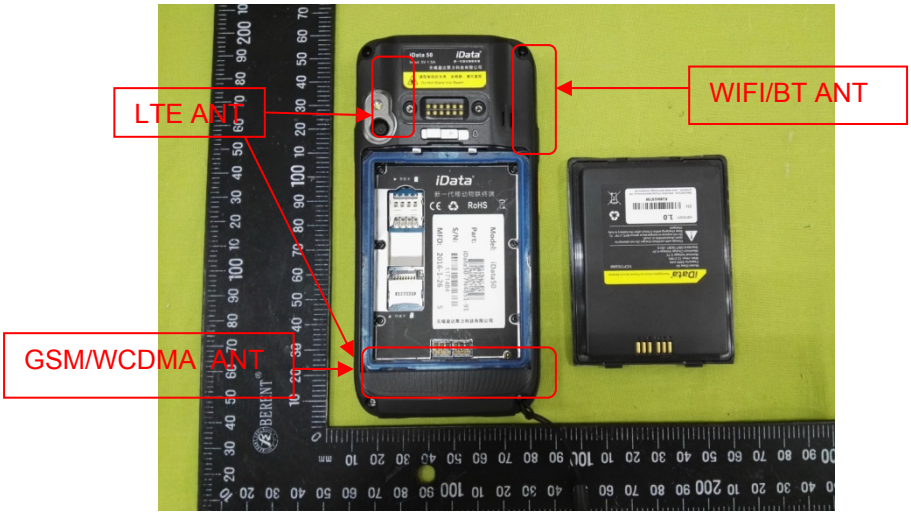
Requirement

FCC CFR Title 47 Part 15 Subpart C Section 15.203:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of anantenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Test Result:

The antenna is integral antenna, the best case gain of the antenna is 1.5dBi.



4.2. Conducted Emission (AC Main)

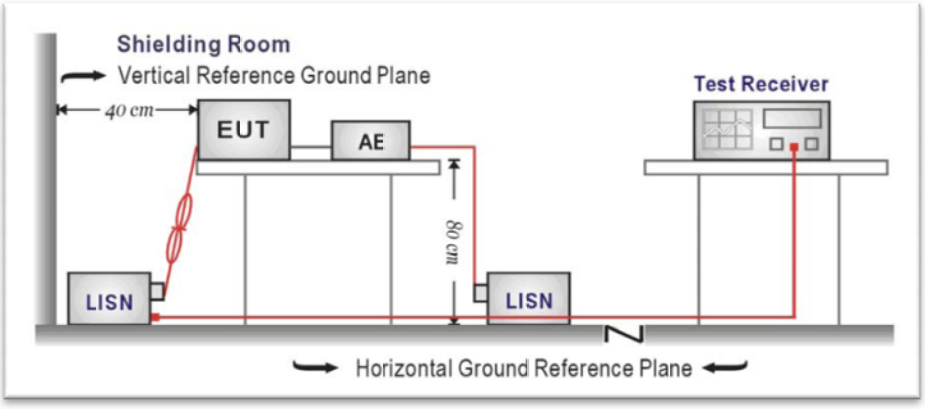
LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.207

Frequency range (MHz)	Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST CONFIGURATION

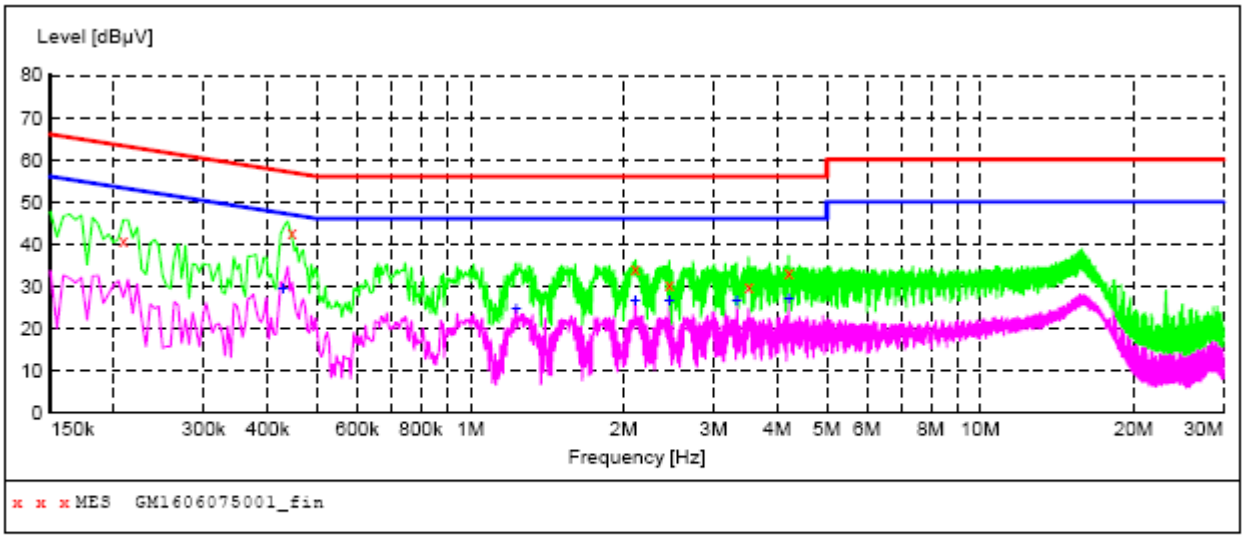


TEST PROCEDURE

1. The EUT was setup and tested according to ANSI C63.10:2013 for compliance to FCC 47CFR 15.247 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above theconducting ground plane. The vertical conducting plane was located 40 cm to the rear of theEUT. All other surfaces of EUT were at least 80 cm from any other grounded conductingsurface.
3. The EUT and simulators are connected to the main power through a line impedancestabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for themeasuring equipment.
4. The peripheral devices are also connected to the main power through aLISN. (Please refer to the block diagram of the test setup and photographs)
5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor,was individually connected through a LISN to the input power source.
6. The excess length of the power cord between the EUT and the LISN receptacle were foldedback and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHzusing a receiver bandwidth of 9 kHz.

TEST RESULTS

Test mode:AC 120V	5G WIFI	Polarization	L



MEASUREMENT RESULT: "GM1606075001_fin"

6/7/2016 11:36AM

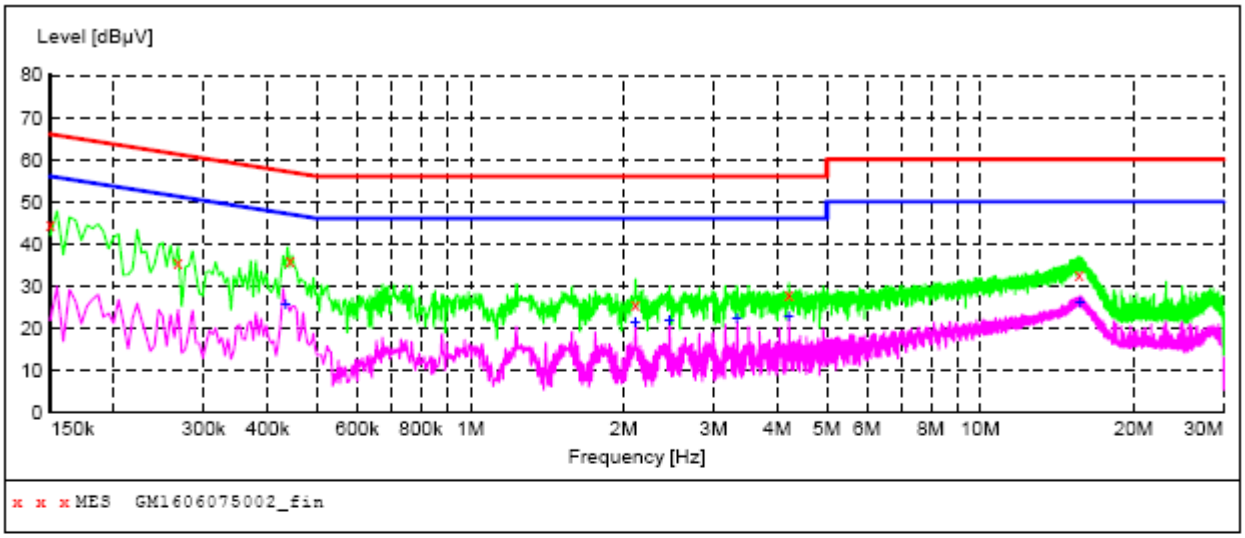
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.208500	41.00	10.2	63	22.3	QP	L1	GND
0.447000	42.60	10.2	57	14.3	QP	L1	GND
2.107500	34.30	10.2	56	21.7	QP	L1	GND
2.454000	30.40	10.3	56	25.6	QP	L1	GND
3.520500	30.00	10.3	56	26.0	QP	L1	GND
4.213500	33.40	10.3	56	22.6	QP	L1	GND

MEASUREMENT RESULT: "GM1606075001_fin2"

6/7/2016 11:36AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.429000	29.50	10.2	47	17.8	AV	L1	GND
1.230000	24.70	10.2	46	21.3	AV	L1	GND
2.107500	26.50	10.2	46	19.5	AV	L1	GND
2.458500	26.70	10.3	46	19.3	AV	L1	GND
3.336000	26.70	10.3	46	19.3	AV	L1	GND
4.213500	26.80	10.3	46	19.2	AV	L1	GND

Test mode: AC 120V	5G WIFI	Polarization	N



MEASUREMENT RESULT: "GM1606075002_fin"

6/7/2016 11:39AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	44.50	10.3	66	21.5	QP	N	GND
0.267000	35.80	10.2	61	25.4	QP	N	GND
0.442500	36.00	10.2	57	21.0	QP	N	GND
2.103000	25.80	10.2	56	30.2	QP	N	GND
4.213500	27.90	10.3	56	28.1	QP	N	GND
15.616500	32.50	10.8	60	27.5	QP	N	GND

MEASUREMENT RESULT: "GM1606075002_fin2"

6/7/2016 11:39AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.433500	25.60	10.2	47	21.6	AV	N	GND
2.107500	21.30	10.2	46	24.7	AV	N	GND
2.458500	21.70	10.3	46	24.3	AV	N	GND
3.336000	22.10	10.3	46	23.9	AV	N	GND
4.213500	22.70	10.3	46	23.3	AV	N	GND
15.702000	26.30	10.8	50	23.7	AV	N	GND

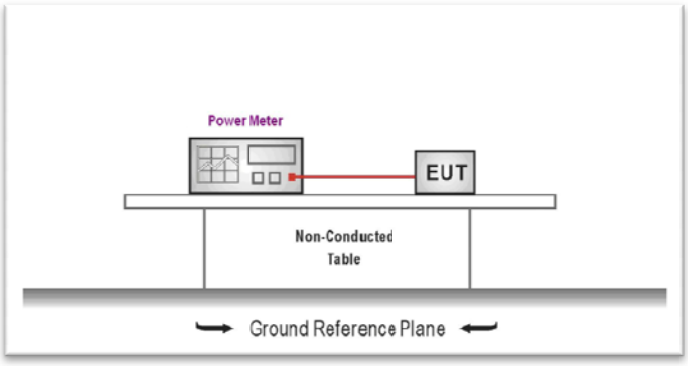
Remark:Transd=Cable lose+ PULSE LIMITER factor+ ARTIFICIAL MAINS factor; Margin= Limit -Level

4.3. Maximum Conducted Output Power

LIMIT

FCC CFR Title 47 Part 15 Subpart E Section 15.407:
In the 5.15 – 5.25GHz band, the maximum permissible conducted output power is 250mW (23.98dBm)
In the 5.25 – 5.35GHz band, the maximum permissible conducted output power is the lesser of 250mW (23.98dBm) and 11 dBm + 10log10(26dB BW) = 11 dBm + 10log10(18.87) = 23.76dBm.
In the 5.725 – 5.850GHz band, the maximum permissible conducted output power is 1W (30dBm).

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT was tested according to KDB789033 D02 V01R02 requirements.

2. The maximum conducted output power may be measured using a broadband AVG RF power meter.

3. Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power

4. Record the measurement data.

TEST RESULTS

	Type	Channel	Output power (dBm)	Limit (dBm)	Result
Band I 5150-5250MHz	802.11a	Low	10.89	24.00	Pass
		Mid	10.42		
		High	10.65		
	802.11ac(H40)	Low	11.44	24.00	Pass
		High	10.38		
	802.11n(H20)	Low	10.52	24.00	Pass
		Mid	10.69		
		High	10.78		
	802.11n(H40)	Low	10.57	24.00	Pass
		High	10.39		

	Type	Channel	Output power (dBm)	Limit (dBm)	Result
Band II 5250-5350MHz	802.11a	Low	10.42	24.00	Pass
		Mid	10.52		
		High	9.96		
	802.11ac(H40)	Low	10.85	24.00	Pass
		High	10.25		
	802.11n(H20)	Low	10.38	24.00	Pass
		Mid	10.32		
		High	9.79		
	802.11n(H40)	Low	10.52	24.00	Pass
		High	10.36		

	Type	Channel	Output power (dBm)	Limit (dBm)	Result
Band IV 5725-5850MHz	802.11a	Low	10.01	30.00	Pass
		Mid	10.58		
		High	9.97		
	802.11ac(H40)	Low	10.42	30.00	Pass
		High	9.39		
	802.11n(H20)	Low	10.26	30.00	Pass
		Mid	9.88		
		High	10.36		
	802.11n(H40)	Low	9.59	30.00	Pass
		High	10.47		

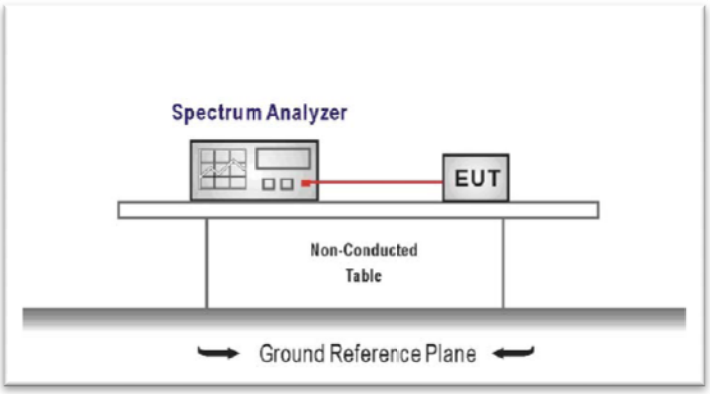
4.4. Maximum Power Spectral Density

LIMIT

FCC CFR Title 47 Part 15 Subpart E Section 15.407:

In the 5.15 – 5.25GHz, 5.25 – 5.35GHz, 5.47 – 5.725GHz bands, the maximum permissible power spectral density is 11dBm/MHz.
In the 5.725 – 5.850GHz band, the maximum permissible power spectral density is 30dBm/500kHz.

TEST CONFIGURATION



TEST PROCEDURE

According KDB 789033 D02 v01r02 – Section F
1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire emission bandwidth of the signal
3. RBW = 1MHz, 4. VBW = 3MHz
7. Number of sweep points > 2 x (span/RBW)
8. Sweep time = auto
6. Detector = power averaging (RMS)
7. Trigger was set to free run for all modes
8. Trace was averaged over 100 sweeps
9. The peak search function of the spectrum analyzer was used to find the peak of the spectrum.

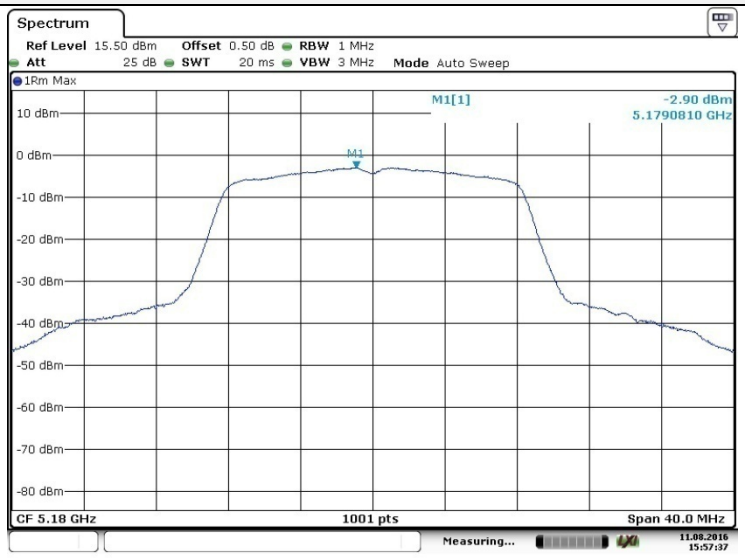
TEST RESULTS

	Type	Channel	PSD (dBm/MHz)	Limit (dBm/MHz)	Result
Band I 5150-5250MHz	802.11a	Low	-2.90	11.00	Pass
		Mid	-3.64		
		High	-4.02		
	802.11ac(H40)	Low	-6.25	11.00	Pass
		High	-6.83		
	802.11n(H20)	Low	-2.89	11.00	Pass
		Mid	-4.12		
		High	-4.11		
	802.11n(H40)	Low	-6.10	11.00	Pass
		High	-6.79		

	Type	Channel	PSD (dBm/MHz)	Limit (dBm/MHz)	Result
Band II 5250-5350MHz	802.11a	Low	-3.88	11.00	Pass
		Mid	-2.95		
		High	-3.79		
	802.11ac(H40)	Low	-7.22	11.00	Pass
		High	-7.08		
	802.11n(H20)	Low	-3.86	11.00	Pass
		Mid	-3.37		
		High	-3.82		
	802.11n(H40)	Low	-6.75	11.00	Pass
		High	-6.92		

	Type	Channel	PSD (dBm/500KHz)	Limit (dBm/500KHz)	Result
Band IV 5725-5850MHz	802.11a	Low	-8.20	30.00	Pass
		Mid	-8.18		
		High	-8.60		
	802.11ac(H40)	Low	-11.93	30.00	Pass
		High	-12.18		
	802.11n(H20)	Low	-7.88	30.00	Pass
		Mid	-8.53		
		High	-8.69		
	802.11n(H40)	Low	-11.52	30.00	Pass
		High	-11.96		

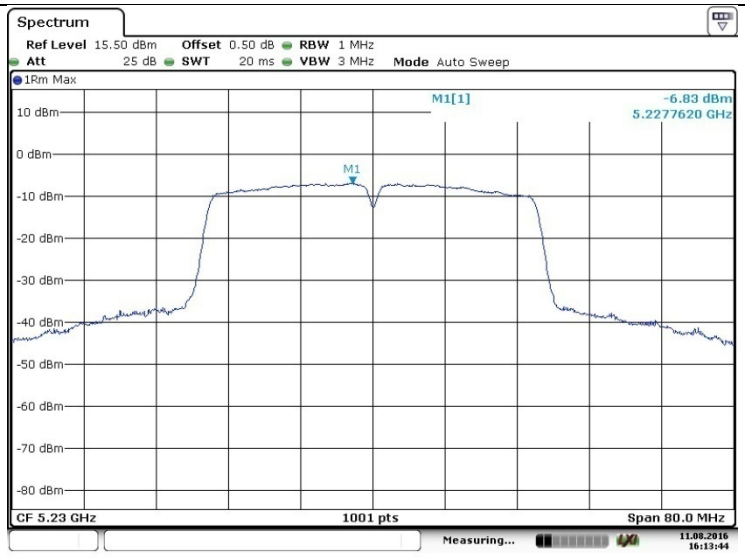
Test plot as follows:

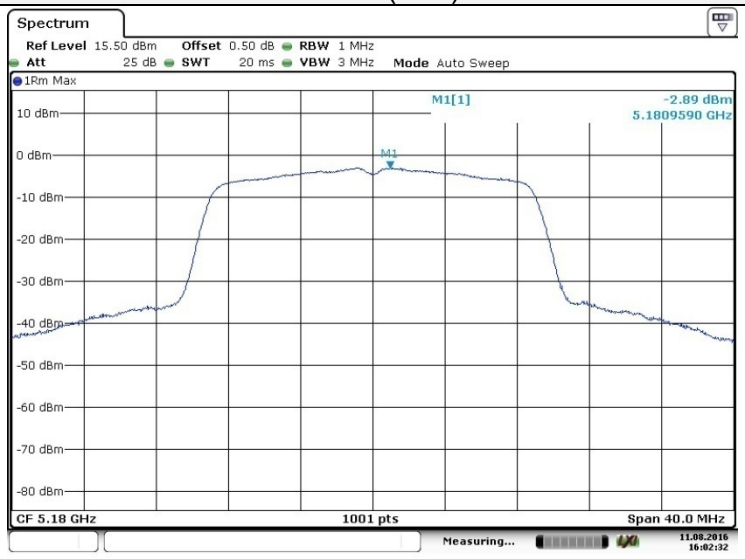
Band I
802.11a

Low

Mid

High

802.11ac(H40)

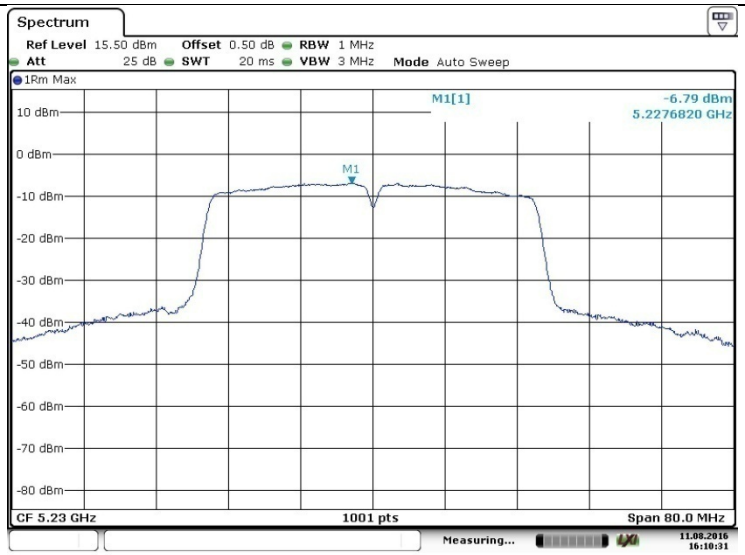
Low

High

802.11n(H20)

Low

Mid

High

802.11n(H40)

Low

High

Band II
802.11a

Low

Mid

High

802.11ac(H40)

Low

High

802.11n(H20)

Low

Mid

High

802.11n(H40)

Low

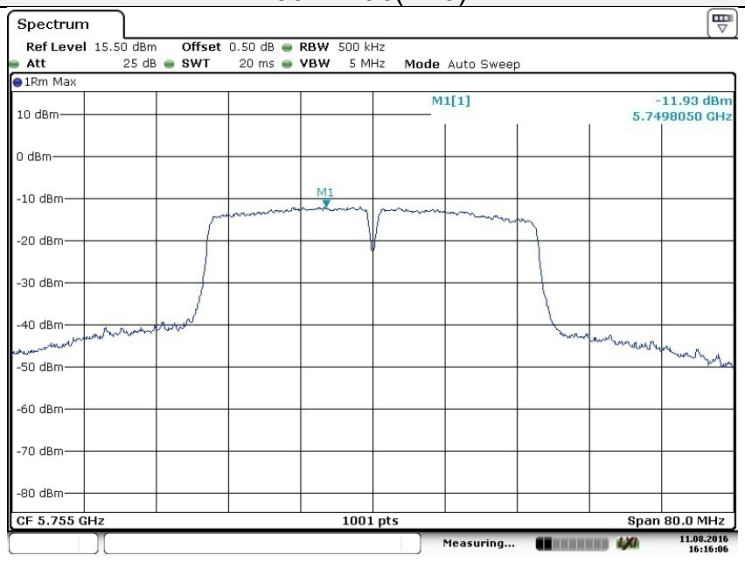
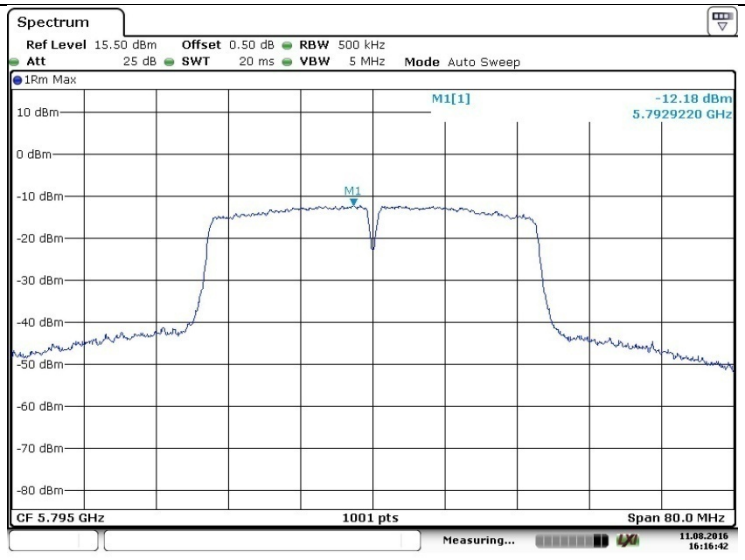
High

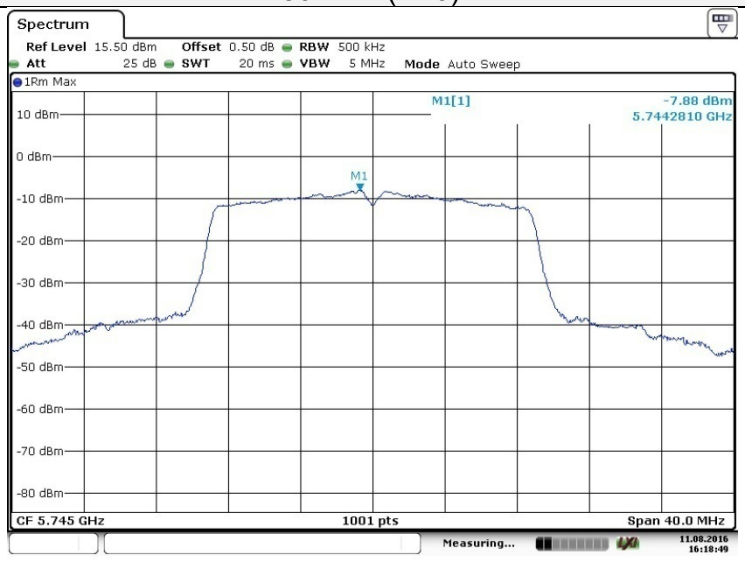
Band IV
802.11a

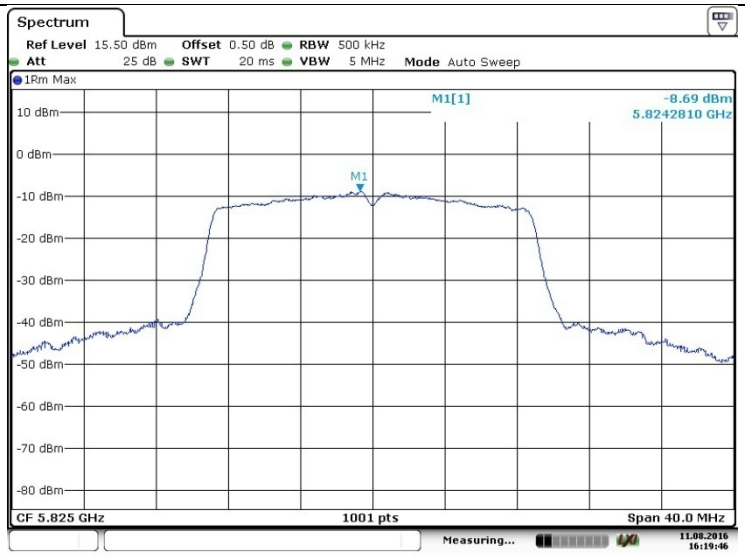
Low

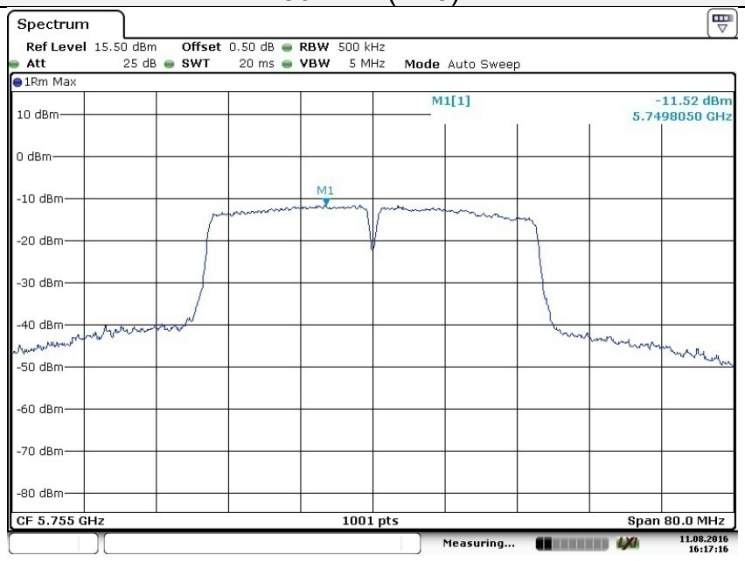
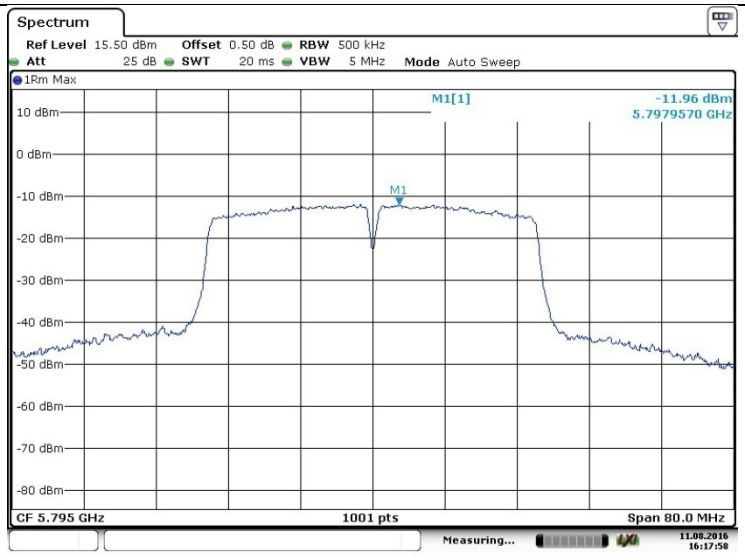
Mid

High

802.11ac(H40)

Low

High

802.11n(H20)

Low

Mid

High

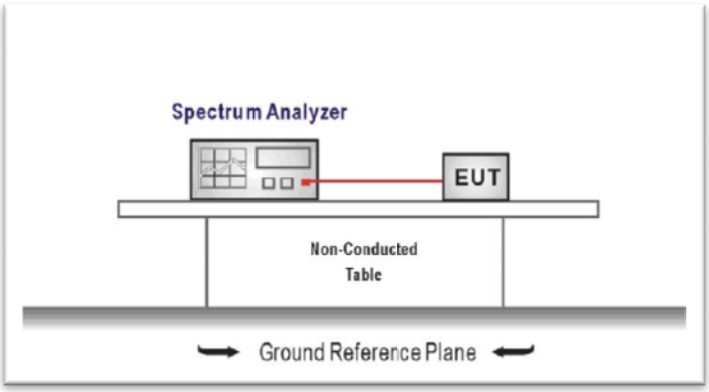
802.11n(H40)

Low

High

4.5. 6dB&26dB bandwidth

LIMIT

The bandwidth at 26dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in KDB 789033 D02 v01r02, and at the appropriate frequencies. The spectrum analyzer's bandwidth measurement function is configured to measure the 26dB bandwidth.

TEST CONFIGURATION



TEST PROCEDURE

According KDB 789033 D02 v01r02 – Section C
1. The signal analyzers' automatic bandwidth measurement capability was used to perform the 26dB bandwidth measurement. The "X" dB bandwidth parameter was set to X = 26. The automatic bandwidth measurement function also has the capability of simultaneously measuring the 99% occupied bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = approximately 1% of the emission bandwidth
3. VBW > 3 x RBW
4. Detector = Peak
5. Trace mode = max hold

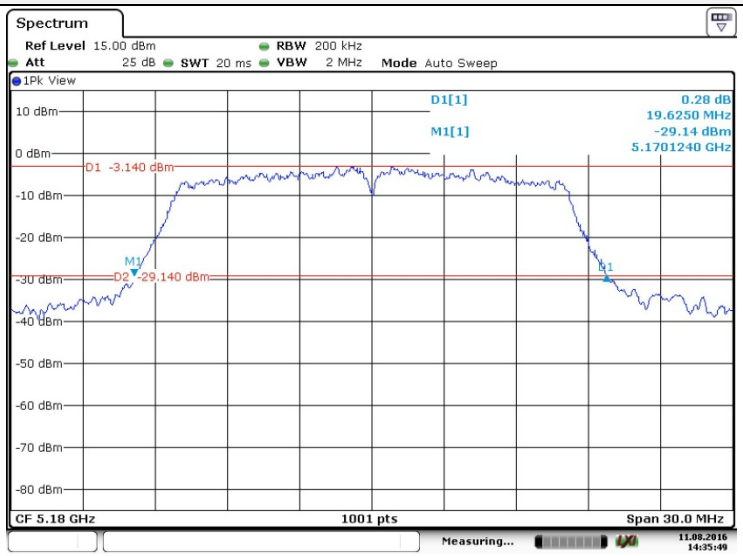
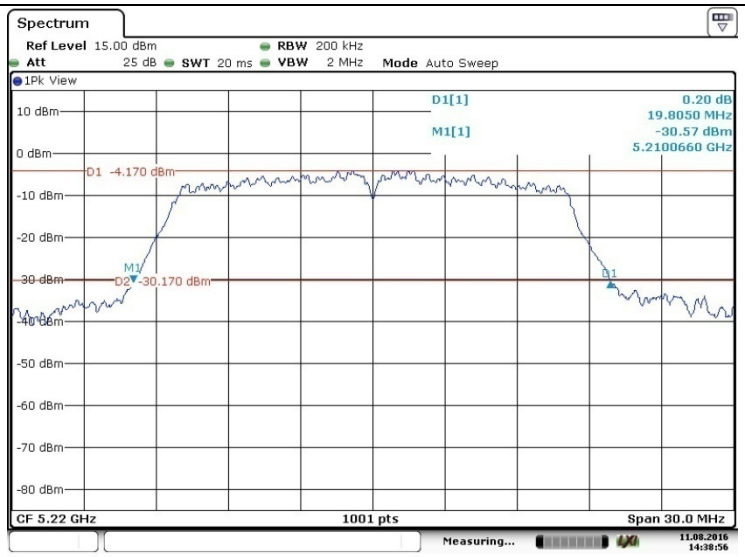
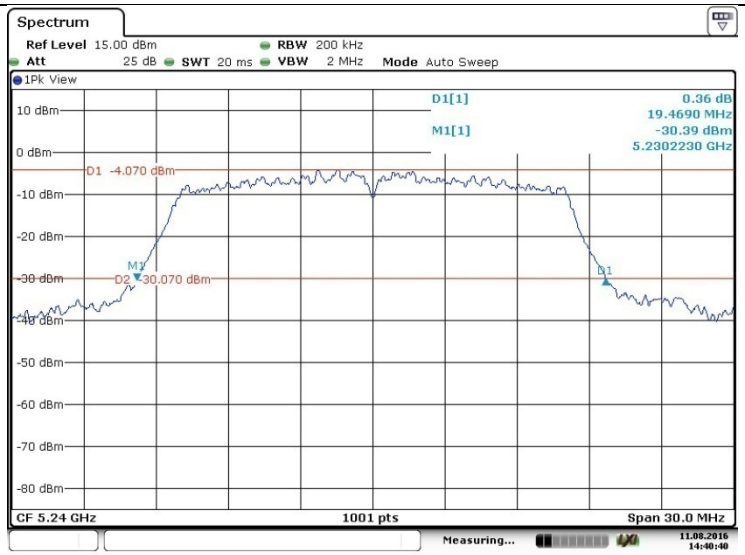
TEST RESULTS

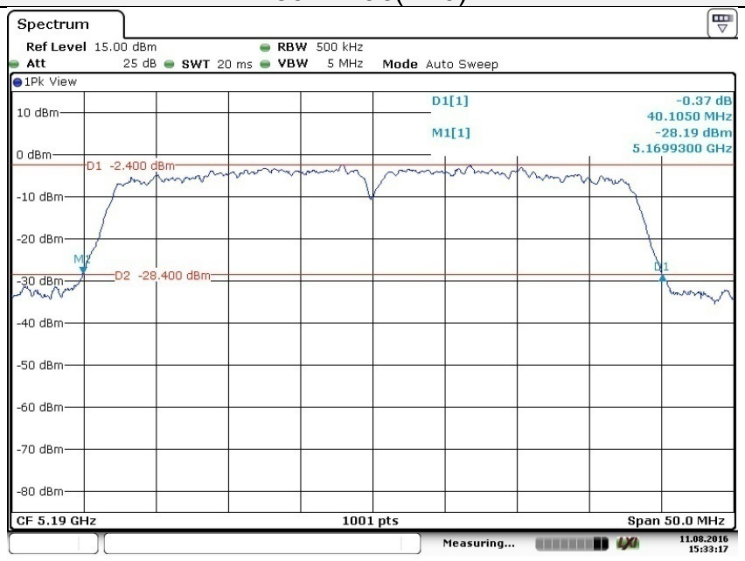
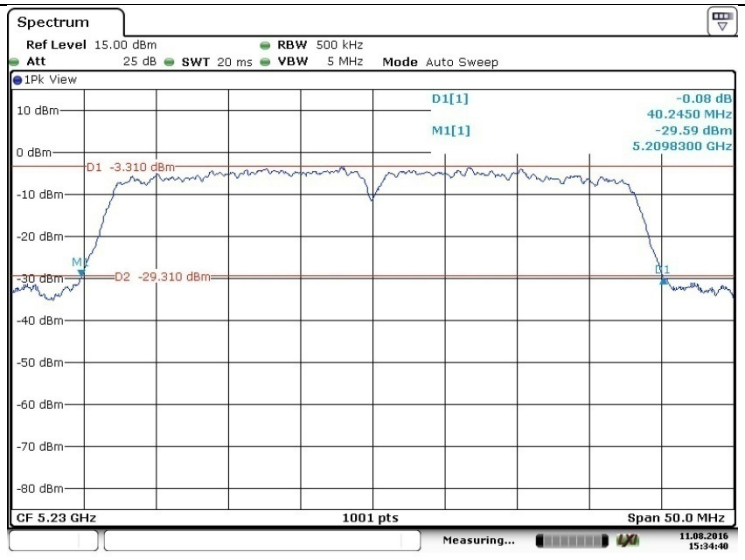
	Type	Channel	26dB Bandwidth (MHz)	Limit	Result
Band I 5150-5250MHz	802.11a	Low	19.63	-	Pass
		Mid	19.81		
		High	19.47		
	802.11ac(H40)	Low	40.11	-	Pass
		High	40.25		
	802.11n(H20)	Low	19.89	-	Pass
		Mid	19.84		
		High	19.93		
	802.11n(H40)	Low	40.03	-	Pass
		High	40.18		

	Type	Channel	26dB Bandwidth (MHz))	Limit	Result
Band II 5250-5350MHz	802.11a	Low	19.41	-	Pass
		Mid	19.72		
		High	19.70		
	802.11ac(H40)	Low	40.28	-	Pass
		High	40.17		
	802.11n(H20)	Low	19.84	-	Pass
		Mid	19.86		
		High	19.84		
	802.11n(H40)	Low	40.42	-	Pass
		High	40.02		

	Type	Channel	6dB Bandwidth (MHz))	Limit (MHz)	Result
Band IV 5720-5850MHz	802.11a	Low	16.44	0.5	Pass
		Mid	16.40		
		High	16.22		
	802.11ac(H40)	Low	36.35	0.5	Pass
		High	36.44		
	802.11n(H20)	Low	17.58	0.5	Pass
		Mid	17.64		
		High	17.63		
	802.11n(H40)	Low	36.33	0.5	Pass
		High	36.35		

Test plot as follows:

Band I
802.11a

Low

Mid

High

802.11ac(H40)

Low

High