FCC RF Test Report

APPLICANT	:	**Motorola Mobility LLC**
EQUIPMENT	:	**Mobile Cellular Phone**
BRAND NAME	:	**Motorola**
FCC ID	:	**IHDT56XE1**
STANDARD	:	**FCC Part 15 Subpart E §15.407**
CLASSIFICATION	:	**(NII) Unlicensed National Information Infrastructure**

This is partial report. The product was received on Mar. 07, 2018 and testing was completed on Apr. 04, 2018. We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

This report contains data that were produced under subcontract by Laboratory SPORTON INTERNATIONAL INC.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (Kunshan) Inc., the test report shall not be reproduced except in full.

James Huang

TESTING
NVLAP LAB CODE 600155-0

Approved by: James Huang / Manager

Sporton International (Kunshan) Inc.

No.3-2 Ping-Xiang Rd, Kunshan Development Zone Kunshan City Jiangsu Province 215335 China

TABLE OF CONTENTS

REVISION HISTORY **3**
SUMMARY OF TEST RESULT **4**
1 GENERAL DESCRIPTION **5**
1.1 Applicant 5
1.2 Manufacturer 5
1.3 Product Feature of Equipment Under Test 5
1.4 Product Specification of Equipment Under Test 6
1.5 Modification of EUT 6
1.6 Testing Location 7
1.7 Applicable Standards 7
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST **8**
2.1 Carrier Frequency and Channel 8
2.2 Test Mode 9
2.3 Connection Diagram of Test System 10
2.4 Support Unit used in test configuration and system 10
2.5 EUT Operation Test Setup 10
3 TEST RESULT **11**
3.1 Unwanted Emissions Measurement 11
3.2 Automatically Discontinue Transmission 17
3.3 Antenna Requirements 18
4 LIST OF MEASURING EQUIPMENT **19**
5 UNCERTAINTY OF EVALUATION **20**
APPENDIX A. RADIATED SPURIOUS EMISSION
APPENDIX B. RADIATED SPURIOUS EMISSION PLOTS
APPENDIX C. DUTY CYCLE PLOTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR811821-09G	Rev. 01	Initial issue of report	Apr. 23, 2018

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.407(b)	Unwanted Emissions	15.407(b) & 15.209(a)	Pass	Under limit 6.29 dB at 5350.400 MHz
3.3	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-

1 General Description

1.1 Applicant

Motorola Mobility LLC
222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

1.2 Manufacturer

Motorola Mobility LLC
222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
FCC ID	IHDT56XE1
IMEI Code	IMEI: 351886090021889
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/GNSS/NFC WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
HW Version	DVT2
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. This is a variant report by adding WPC Back Cover. All the test cases were performed on original report which can be referred to Sporton Report Number FR811821G. Based on the original report, only worst case was verified

Accessory List	
WPC Cover	Brand Name : Motorola
	Model Name : MD100W

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Channel Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5700 MHz
Antenna Type / Gain	**<5150 MHz ~ 5250 MHz>** Loop Antenna with gain -6.50 dBi **<5250 MHz ~ 5350 MHz>** Loop Antenna with gain -6.50 dBi **<5470 MHz ~ 5725 MHz>** Loop Antenna with gain -7.00 dBi
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)

Note: The WLAN operation in 5600 MHz ~ 5650 MHz is notched.

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Testing Location

Sporton International (Kunshan) Inc. is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600155-0) and the FCC designation No. is CN5013.

Test Site	Sporton International (Kunshan) Inc.	
Test Site Location	No.3-2 Ping-Xiang Rd, Kunshan Development Zone Kunshan City Jiangsu Province 215335 China TEL : +86-512-57900158 FAX : +86-512-57900958	
Test Site No.	**Sporton Site No.**	**FCC Test Firm Registration No.**
	03CH04-KS	630927

Note: The test site complies with ANSI C63.4 2014 requirement.

1.7 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5150-5250 MHz Band 1 (U-NII-1)	36	5180	44	5220
	38*	5190	46*	5230
	40	5200	48	5240
	42#	5210		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz Band 2 (U-NII-2A)	52	5260	60	5300
	54*	5270	62*	5310
	56	5280	64	5320
	58#	5290		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470-5725 MHz Band 3 (U-NII-2C)	100	5500	112	5560
	102*	5510	116	5580
	104	5520	132	5660
	106#	5530	134*	5670
	108	5540	136	5680
	110*	5550	140	5700

Note:

1. The above Frequency and Channel in "*" were 802.11n HT40 and 802.11ac VHT40.
2. The above Frequency and Channel in "#" were 802.11ac VHT80.

2.2 Test Mode

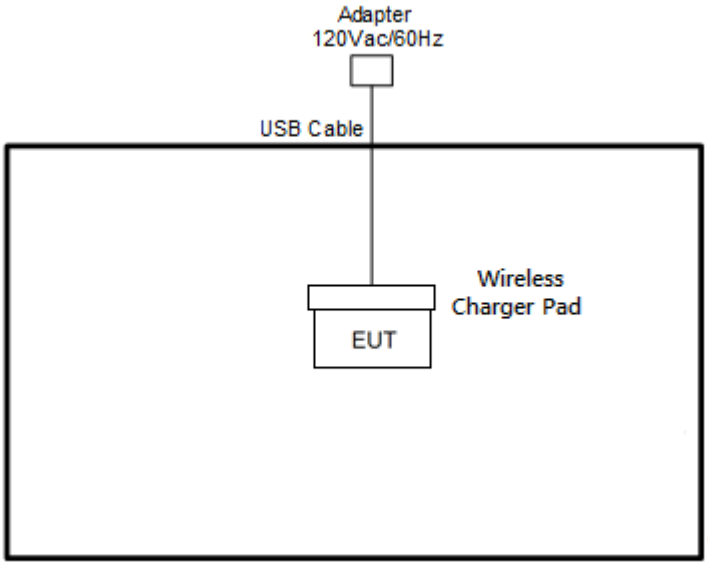
Final test modes are considering the modulation and worse data rates as below table.

Modulation	Data Rate
802.11ac VHT80	MCS0

Ch. #		Band II：5250-5350 MHz
		802.11ac VHT80
L	Low	-
M	Middle	58
H	High	-

2.3 Connection Diagram of Test System

<WLAN Tx with WPC Charging Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Wireless Charging pad	Nokia	N/A	N/A	N/A	N/A
2.	USB Cable	N/A	N/A	N/A	N/A	N/A
3.	Adapter	N/A	N/A	N/A	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “QRCT” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

3 Test Result

3.1 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

3.1.1 Limit of Unwanted Emissions

(1) For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

(2) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as below table,

Frequency (MHz)	Field Strength (microvolts/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: The following formula is used to convert the EIRP to field strength.

$$E=\frac{1000000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts)

EIRP (dBm)	Field Strength at 3m (dBµV/m)
- 27	68.3

(3) KDB789033 D02 v02r01 G)2)c)

(i) Section 15.407(b)(1) to (b)(3) specify the unwanted emission limits for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.[3]

(ii) Section 15.407(b)(4) specifies the unwanted emission limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are in terms of a Peak detector. An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the devices using the alternative limit.[4]

Note 3: An out-of-band emission that complies with both the average and peak limits of Section 15.209 is not required to satisfy the -27 dBm/MHz peak emission limit.

Note 4: Only devices with antenna gains of 10 dBi or less may be approved using the emission limits specified in Section 15.247(d) till March 2, 2018; all other devices operating in this band must use the mask specified in Section 15.407(b)(4)(i).

3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.

   (1) Procedure for Unwanted Emissions Measurements Below 1000MHz

   - RBW = 120 kHz
   - VBW = 300 kHz
   - Detector = Peak
   - Trace mode = max hold

   (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz

   - RBW = 1 MHz
   - VBW ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

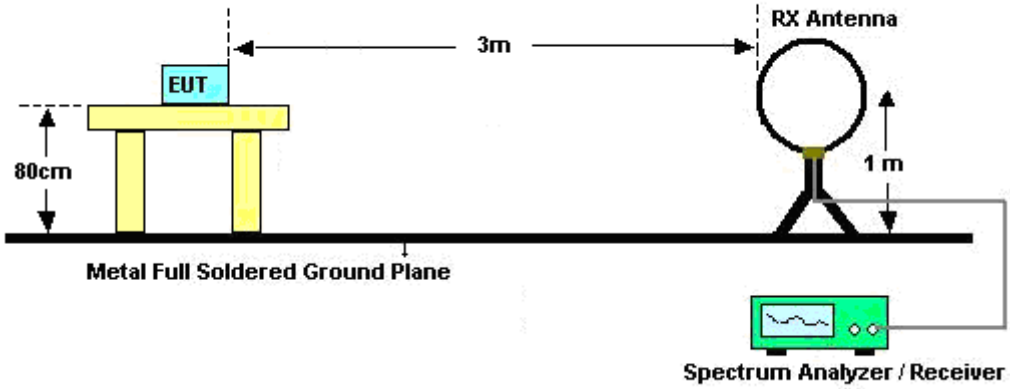
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

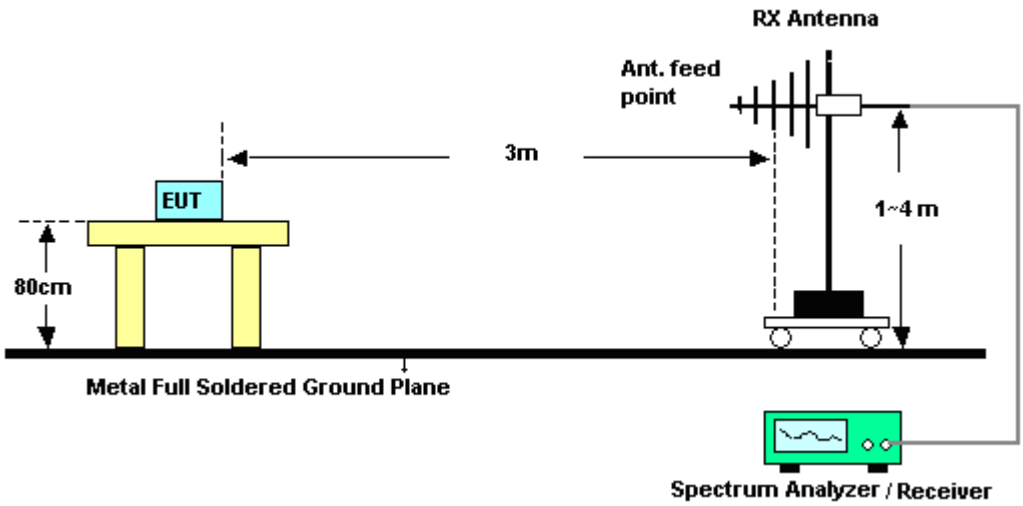
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.1.4 Test Setup

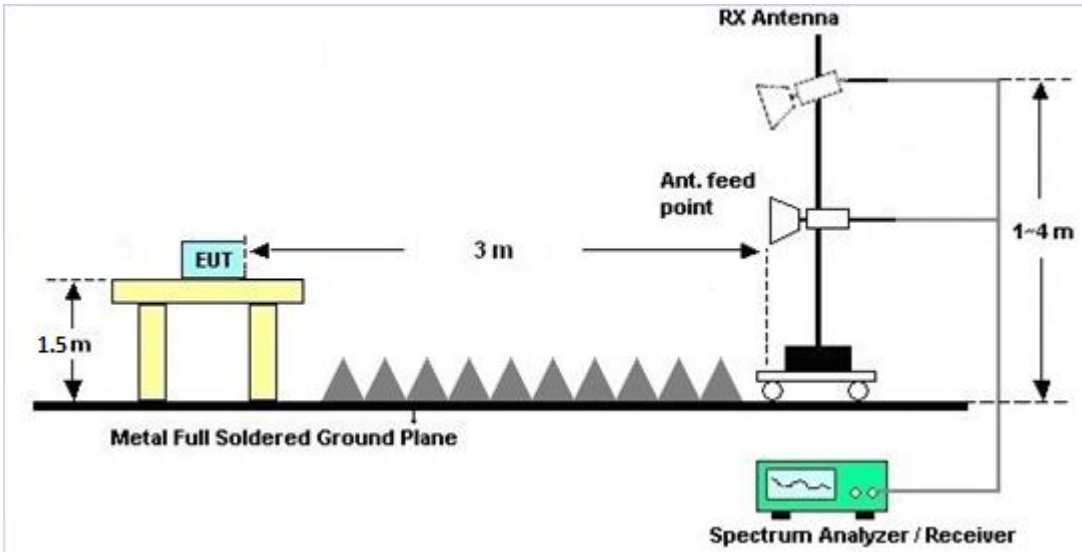
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.1.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

3.1.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix A and B.

3.1.7 Duty Cycle

Please refer to Appendix C.

3.1.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix A and B.

3.2 Automatically Discontinue Transmission

3.2.1 Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Result of Automatically Discontinue Transmission

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

3.3 Antenna Requirements

3.3.1 Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.3.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44GHz	Apr. 18, 2017	Apr. 04, 2018	Apr. 17, 2018	Radiation (03CH03-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 23, 2017	Apr. 04, 2018	Nov. 22, 2018	Radiation (03CH03-KS)
Bilog Antenna	TeseQ	CBL6112D	35406	25MHz-2GHz	Apr. 22, 2017	Apr. 04, 2018	Apr. 21, 2018	Radiation (03CH03-KS)
Double Ridge horn Antenna	ETS-lindgren	3117	75957	1GHz~18GHz	Oct. 21, 2017	Apr. 04, 2018	Oct. 20, 2018	Radiation (03CH03-KS)
SHF-EHF Horn	com-power	AH-840	101093	18GHz ~40GHz	Dec. 21, 2017	Apr. 04, 2018	Dec. 20, 2018	Radiation (03CH03-KS)
Amplifier	com-power	PA-103A	161069	1MHz ~1000MHz / 32 dB	Apr. 18, 2017	Apr. 04, 2018	Apr. 17, 2018	Radiation (03CH03-KS)
Amplifier	com-power	MITEQ	2025788	100MHz ~1800MHz /	Apr. 18, 2017	Apr. 04, 2018	Apr. 17, 2018	Radiation (03CH03-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Oct. 12, 2017	Apr. 04, 2018	Oct. 12, 2018	Radiation (03CH03-KS)
Amplifier	MITEQ	TTA1840-35-HG	2014749	18~40GHz	Apr. 18, 2017	Apr. 04, 2018	Apr. 17, 2018	Radiation (03CH03-KS)
RF Cable	HUBER+SUHNER	SUCOFLEX104	03CH01KS005	30Mhz-18Ghz	Jun. 20, 2017	Apr. 04, 2018	Jun. 19, 2018	Radiation (03CH03-KS)
RF Cable	HUBER+SUHNER	SUCOFLEX104	03CH01KS006	30Mhz-18Ghz	Jun. 20, 2017	Apr. 04, 2018	Jun. 19, 2018	Radiation (03CH03-KS)
Low Pass Filter	Wainwright Instruments Gmbh	WLK4-1000-1530-8000-40SS	2	1G Low Pass	Jun. 19, 2017	Apr. 04, 2018	Jun. 18, 2018	Radiation (03CH03-KS)
High Pass Filter	Wainwright Instruments Gmbh	WHKX10-5850-6500-18000-40ST	1	6.5G High Pass	Jun. 19, 2017	Apr. 04, 2018	Jun. 20, 2018	Radiation (03CH03-KS)

5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.60**

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.50**

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.50**

Appendix A. Radiated Spurious Emission

Test Engineer :	Genry	Temperature :	21~23°C
		Relative Humidity :	41~43%

Band 2 - 5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 58 5290MHz		5133.28	52.41	-21.59	74	42.71	34.54	11.86	36.7	105	30	P	H
		5115.68	43.78	-10.22	54	34.11	34.53	11.84	36.7	105	30	A	H
	*	5296	99.08	-	-	89.11	34.59	12.07	36.69	105	30	P	H
	*	5296	91.95	-	-	81.98	34.59	12.07	36.69	105	30	A	H
		5351.6	56.29	-17.71	74	46.24	34.61	12.13	36.69	105	30	P	H
		5350.4	47.71	-6.29	54	37.66	34.61	12.13	36.69	105	30	A	H
		5101.28	52.71	-21.29	74	43.06	34.53	11.82	36.7	394	108	P	V
		5121.12	43.83	-10.17	54	34.16	34.53	11.84	36.7	394	108	A	V
	*	5304	100.48	-	-	90.51	34.59	12.07	36.69	394	108	P	V
	*	5304	93.62	-	-	83.65	34.59	12.07	36.69	394	108	A	V
		5355.2	55.71	-18.29	74	45.66	34.61	12.13	36.69	394	108	P	V
		5362.8	46.59	-7.41	54	36.52	34.61	12.15	36.69	394	108	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		10580	42.5	-31.5	74	55.06	37.69	15.75	66	100	0	P	H
													H
													H
													H
		10580	43.31	-30.69	74	55.87	37.69	15.75	66	100	360	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11ac VHT80 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 LF		35.82	19.82	-20.18	40	26.72	24.5	0.64	32.04	-	-	P	H
		41.64	19.46	-20.54	40	29.55	21.33	0.65	32.07	-	-	P	H
		254.07	16.09	-29.91	46	28.85	17	1.76	31.52	-	-	P	H
		332.64	17.86	-28.14	46	27.64	19.29	1.91	30.98	-	-	P	H
		398.6	26.13	-19.87	46	29.3	25.47	2.07	30.71	100	25	P	H
		751.68	25.7	-20.3	46	24.85	26.69	2.81	28.65	-	-	P	H
													H
													H
													H
													H
													H
													H
		45.52	32.27	-7.73	40	43.91	19.8	0.67	32.11	100	25	P	V
		56.19	30.83	-9.17	40	48.08	14.1	0.77	32.12	-	-	P	V
		97.9	27.85	-15.65	43.5	41.31	17.5	1	31.96	-	-	P	V
		321	29.12	-16.88	46	39.34	18.9	1.91	31.03	-	-	P	V
		330.7	27.6	-18.4	46	37.45	19.22	1.91	30.98	-	-	P	V
		782.72	26.61	-19.39	46	25.78	26.57	2.7	28.44	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is **over limit** line.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Level(dBμV/m) =

Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.

Appendix B. Radiated Spurious Emission

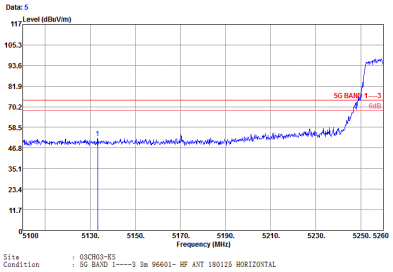
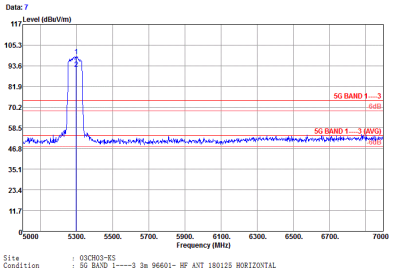
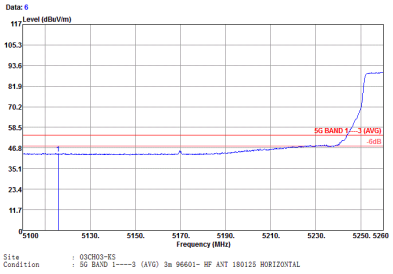
Test Engineer :	Genry	**Temperature :**	21~23°C
		Relative Humidity :	41~43%

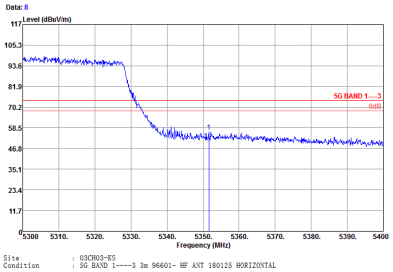
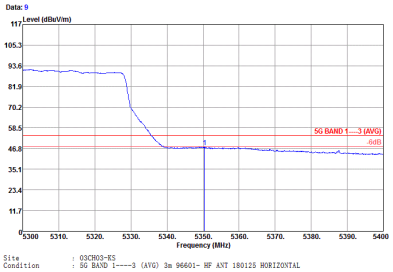
Note symbol

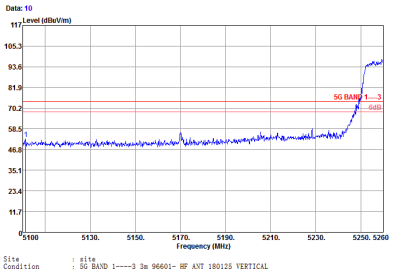
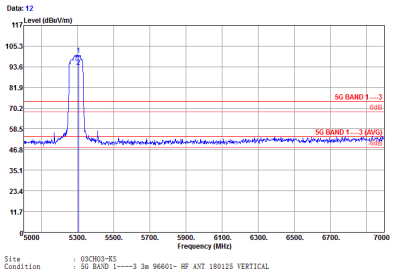
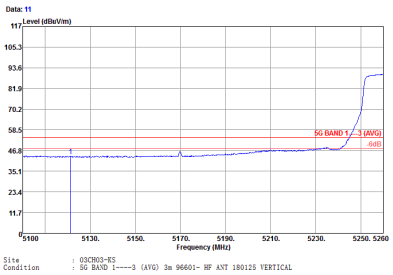
-L	**Low channel location**
-R	**High channel location**

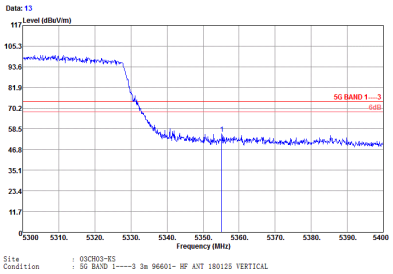
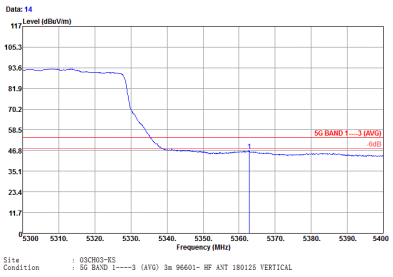
Band 2 - 5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank

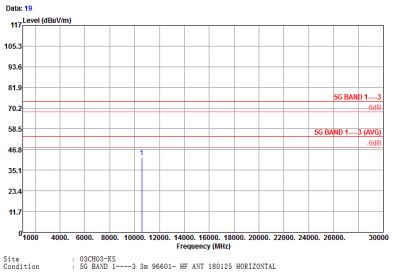
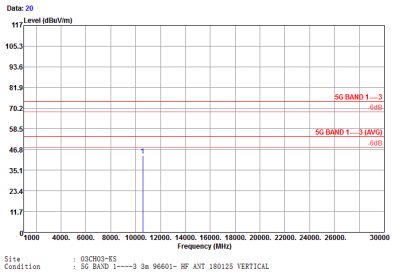
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

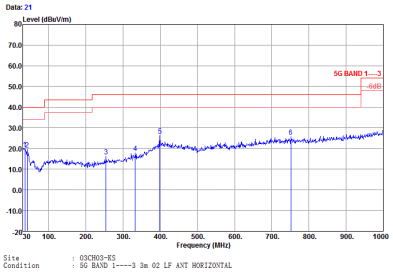
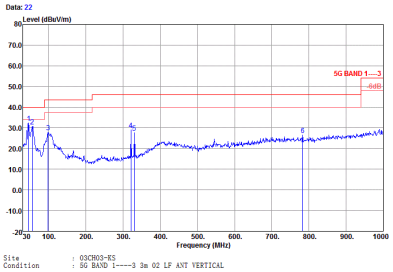
Band 2 - 5250~5350MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

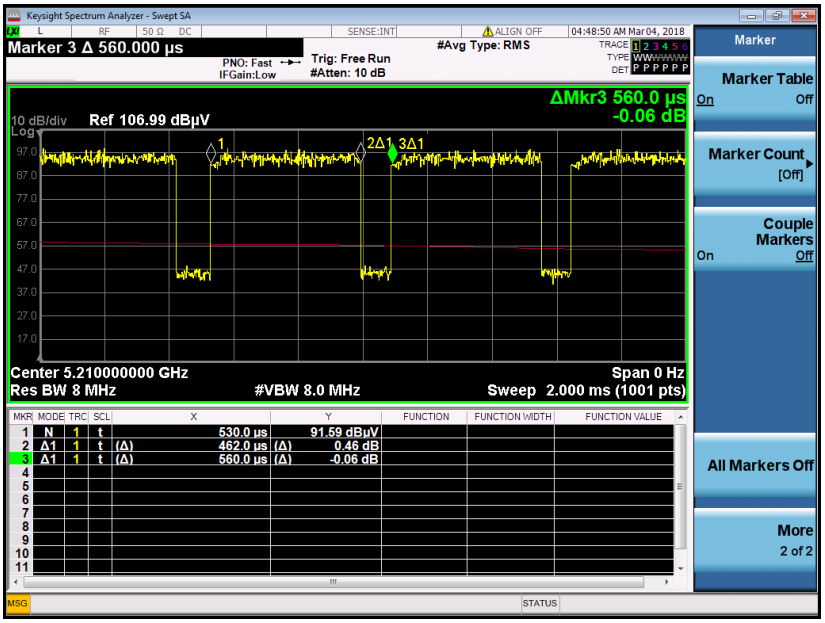
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz	
1	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

5GHz WIFI 802.11ac VHT80 (LF)

WIFI	5GHz WIFI	
ANT	802.11ac VHT80 LF	
1	Horizontal	Vertical
QP / Peak		

Appendix C. Duty Cycle Plots

Band	Duty Cycle (%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
5GHz 802.11ac VHT80	82.50	462	2.165	3KHz	0.60

802.11ac VHT80