

FCC RF Test Report

APPLICANT : HTC Corporation
EQUIPMENT : Smartphone
MODEL NAME : PM35110
FCC ID : NM8PM35110
STANDARD : FCC Part 15 Subpart E
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The product was received on Aug. 14, 2012 and completely tested on Sep. 06, 2012. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and shown the compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:



Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

SPORTON INTERNATIONAL INC.

TEL : 886-3-327-3456

FAX : 886-3-328-4978

FCC ID : NM8PM35110

Page Number : 1 of 113

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SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.403(i)	A9.2	26dB Bandwidth	-	Pass	-
3.2	15.407(a)	A9.2	Maximum Conducted Output Power	≤ 17, 24, 30 dBm (depend on band)	Pass	-
3.3	15.407(a)	A9.2	Power Spectral Density	≤ 4, 11, 17 dBm (depend on band)	Pass	-
3.4	15.407(a)(6)	A9.3	Peak Excursion Ratio	≤ 13dB	Pass	-
3.5	15.407(b)	A9.3	Unwanted Emissions	≤ -17, -27 dBm (depend on band)&15.209(a)	Pass	Under limit 3.75 dB at 5725.000 MHz
3.6	15.207	Gen 7.2.4	AC Conducted Emission	15.207(a)	Pass	Under limit 5.90 dB at 0.398 MHz
3.7	15.407(c)	A9.5	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.8	15.203 & 15.407(a)	A9.2	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

HTC Corporation

No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan.

1.2 Manufacturer

HTC Corporation

No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan.

1.3 Feature of Equipment Under Test

Product Feature & Specification	
Equipment	Smartphone
Model Name	PM35110
FCC ID	NM8PM35110
Sample 1	EUT with LCM 1, Camera Front 1, Camera Main 1, DDR Memory 1, and Battery 1
Sample 2	EUT with LCM 2, Camera Front 1, Camera Main 2, DDR Memory 2, and Battery 2
Sample 3	EUT with LCM 1, Camera Front 1, Camera Main 1, DDR Memory 3, and Battery 1
Sample 4	EUT with LCM 2, Camera Front 2, Camera Main 2, DDR Memory 3, and Battery 2
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA WLAN 11abgn / Bluetooth
EUT Stage	Production Unit

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Product Specification subjective to this standard	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5700 MHz
Maximum Output Power to Antenna	<p><5180 MHz ~ 5240 MHz> 802.11a : 14.86 dBm / 0.0306 W 802.11n HT20 : 13.80 dBm / 0.0240 W 802.11n HT40 : 13.84 dBm / 0.0242 W</p> <p><5260 MHz ~ 5320 MHz> 802.11a : 15.18 dBm / 0.0330 W 802.11n HT20 : 14.27 dBm / 0.0267 W 802.11n HT40 : 13.93 dBm / 0.0247 W</p> <p><5500 MHz ~ 5700 MHz> 802.11a : 15.67 dBm / 0.0369 W 802.11n HT20 : 14.69 dBm / 0.0294 W 802.11n HT40 : 14.29 dBm / 0.0269 W</p>
Antenna Type	PIFA Antenna with gain -0.08 dBi
Type of Modulation	OFDM (BPSK / QPSK / 16QAM / 64QAM)

1.4 Testing Site

Test Site	SPORTON INTERNATIONAL INC.			
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL: +886-3-3273456 / FAX: +886-3-3284978			
Test Site No.	Sporton Site No.			FCC/IC Registration No.
	TH02-HY	CO05-HY	03CH05-HY	722060/4086B-1

1.5 Applied 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 D01 General UNII Test Procedures v01r01
- ♦ ANSI C63.4-2003 and ANSI C63.10-2009
- ♦ IC RSS-210 Issued 8
- ♦ IC RSS-Gen Issue 3

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.

1.6 Ancillary Equipment List

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8 m
3.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
4.	Notebook	DELL	Latitude E6320	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A



2 Test Configuration of Equipment Under Test

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: conducted emission (150 KHz to 30 MHz) and radiated emission (9 KHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane for Band I, X plane for Band II, and Y plane for Band III) were recorded in this report.

The final configuration from all the combinations and the worst-case data rates were investigated by measuring the maximum power across all the data rates and modulation modes under section 2.2.

Based on the worst configuration found above, the RF power setting is set individually to meet FCC compliance limit for the final conducted and radiated tests shown in section 2.3.

2.1 Carrier Frequency Channel

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

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz Band 2	52	5260	60	5300
	54	5270	62	5310
	56	5280	64	5320

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

Note: The above Frequency and Channel in boldface were 802.11n HT40.



2.2 Pre-Scanned RF Power

Preliminary tests were performed in different data rate and antenna configurations as following table and the highest power data rates were chosen for full test in the following tables. Final Output Power equals to Measured Output Power adds the duty factor.

5GHz 802.11a mode								
Data Rate (MHz)	6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
Peak Power (dBm)	15.67	15.61	15.41	15.52	15.56	15.48	15.43	12.26

5GHz 802.11n HT20 mode								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Peak Power (dBm)	14.69	14.53	14.52	14.53	14.41	13.28	13.42	12.37

5GHz 802.11n HT40 mode								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Peak Power (dBm)	14.29	14.23	14.28	14.26	14.28	13.26	13.27	12.23

2.3 Test Mode

Final results of test modes, data rates and test channels are shown as following table.

Test Cases					
	Test Items	Mode	Data rate	Test Channel	Remark
Conducted TCs	26dB and 99% BW Power Spectral Density	802.11a	6 Mbps	L/M/H	-
		802.11n HT20	6.5 Mbps	L/M/H	-
		802.11n HT40	13.5 Mbps	L/M/H	-
	Output Power	802.11a	6 Mbps	L/M/H	-
		802.11n HT20	6.5 Mbps	L/M/H	-
		802.11n HT40	13.5 Mbps	L/M/H	-
	Peak Excursion	802.11a	6 Mbps	L/M/H	-
		802.11n HT20	6.5 Mbps	L/M/H	-
		802.11n HT40	13.5 Mbps	L/M/H	-
Radiated TCs	Radiated Band Edge	802.11a	6 Mbps	L/H	Sample 1
		802.11n HT20	6.5 Mbps	L/H	L/H for Sample 1 H for Sample 2
		802.11n HT40	13.5 Mbps	L/H	Sample 1
	Radiated Spurious Emission	802.11a	6 Mbps	L/M/H	Sample 1
		802.11n HT20	6.5 Mbps	L/M/H	L/M/H for Sample 1 H for Sample 2
		802.11n HT40	13.5 Mbps	L/M/H	Sample 1
AC Conducted Emission	Mode 1 : GSM850 Idle + Bluetooth Link + WLAN (5G) Link + GPS Rx + Earphone 1 + USB Cable 1 (Charging from Adapter 5) for Sample 1 Mode 2 : GSM850 Idle + Bluetooth Link + WLAN (5G) Link + GPS Rx + Earphone 1 + USB Cable 1 (Charging from Adapter 5) for Sample 2				
Remark: 1. The worst case of conducted emission is mode 2; only the test data of it was reported. 2. For Radiated TCs, the test was performance with adapter 5, earphone 1, and USB cable 1.					

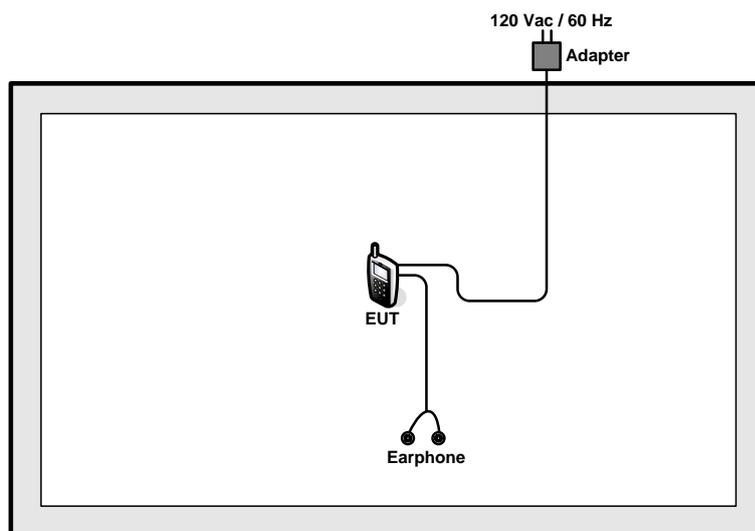
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725 MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725 MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

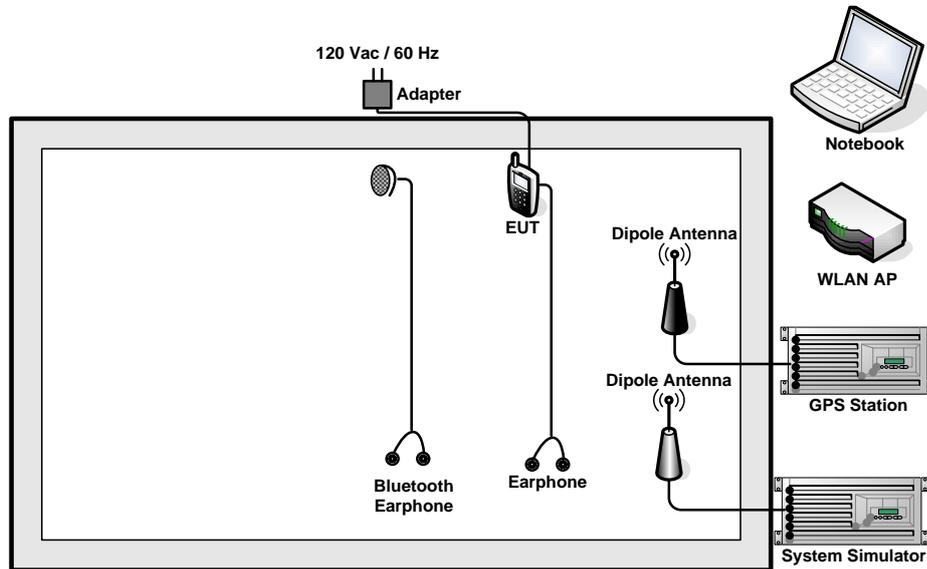
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725 MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134

2.4 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



2.5 RF Utility

The programmed RF utility "Remote 432X controller(P2.01)", is installed in EUT to provide channel selection, power level, data rate and the application type. RF Utility can send transmitting signal for all testing. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

3 Test Result

3.1 26dB Bandwidth Measurement

3.1.1 Description of Bandwidth Measurement

There is no restriction limits for bandwidth. The maximum conducted output power can be limited by measured emission bandwidth (B). For the band 5.15~5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 50 mW (17dBm) or 4 dBm + 10log B. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10log B.

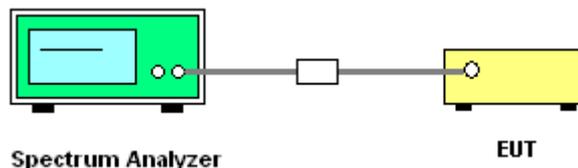
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D01 General UNII Test Procedures v01r01.
Section D) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.
Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

3.1.4 Test Setup



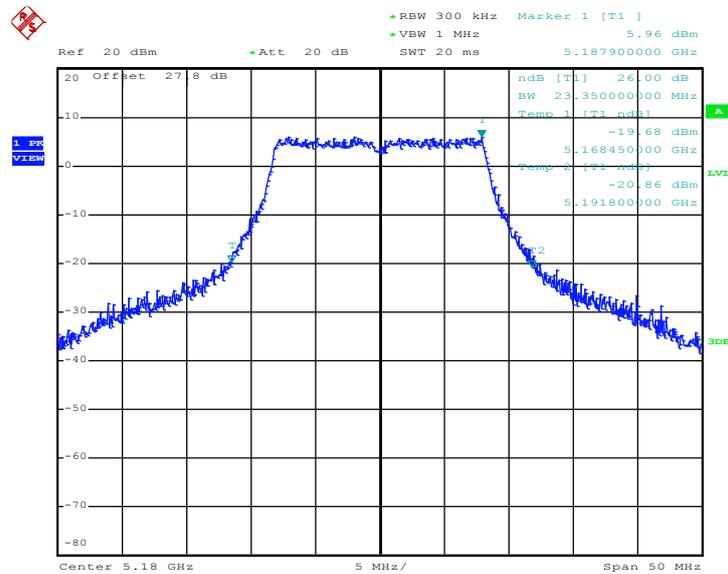


3.1.5 Test Result of 26dB Bandwidth Plots

Test Mode :	802.11a	Temperature :	24~26°C
Test Engineer :	Book Link	Relative Humidity :	45~49%

Channel	Frequency (MHz)	802.11a 26dB Bandwidth (MHz)	Pass/Fail
36	5180	23.350	N/A
44	5220	22.800	N/A
48	5240	23.000	N/A
52	5260	22.700	N/A
60	5300	23.000	N/A
64	5320	22.450	N/A
100	5500	23.050	N/A
116	5580	23.100	N/A
140	5700	23.050	N/A

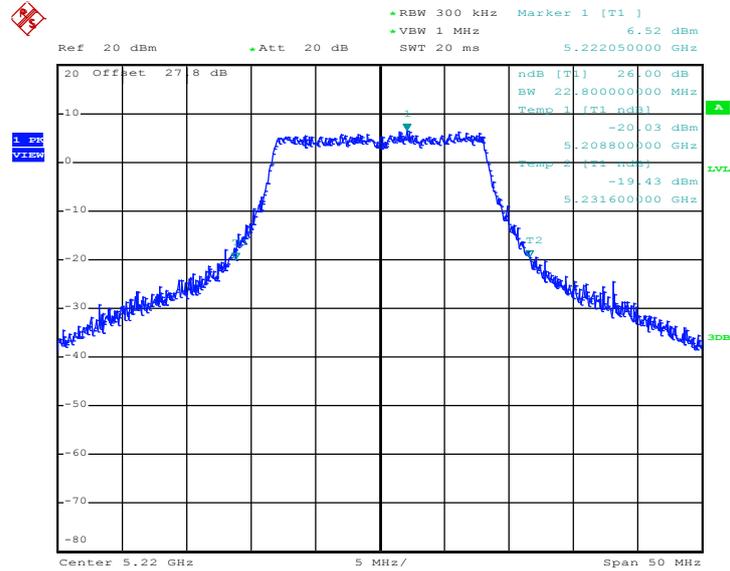
26 dB Bandwidth Plot on 802.11a Channel 36



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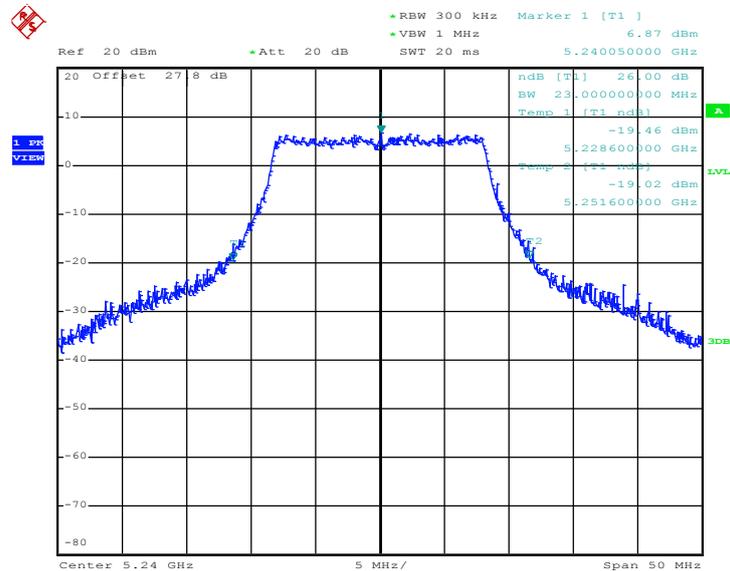


26 dB Bandwidth Plot on 802.11a Channel 44



Date: 22.AUG.2012 18:26:10

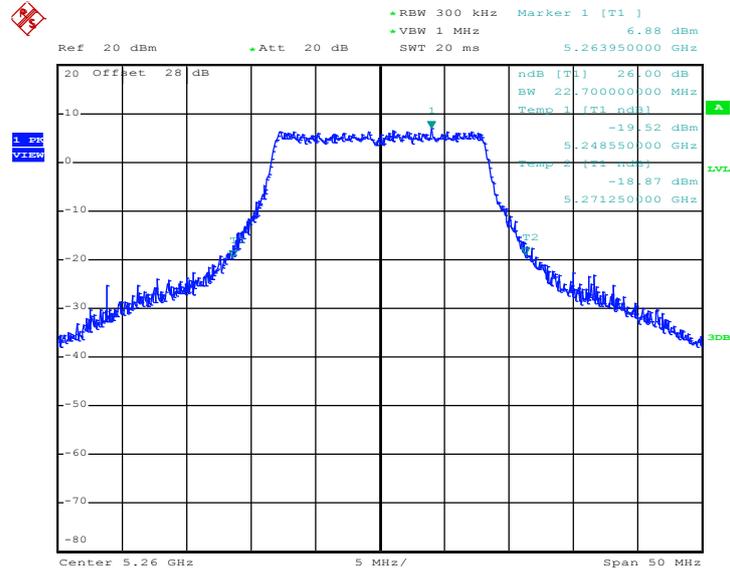
26 dB Bandwidth Plot on 802.11a Channel 48



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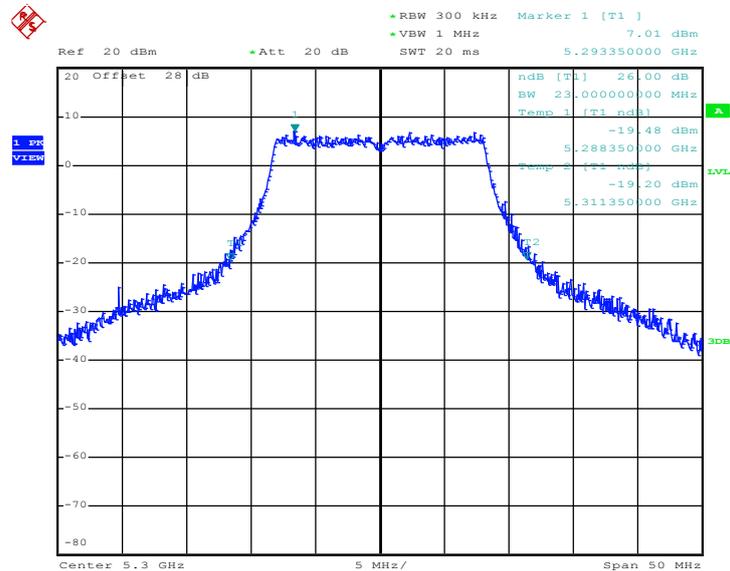


26 dB Bandwidth Plot on 802.11a Channel 52



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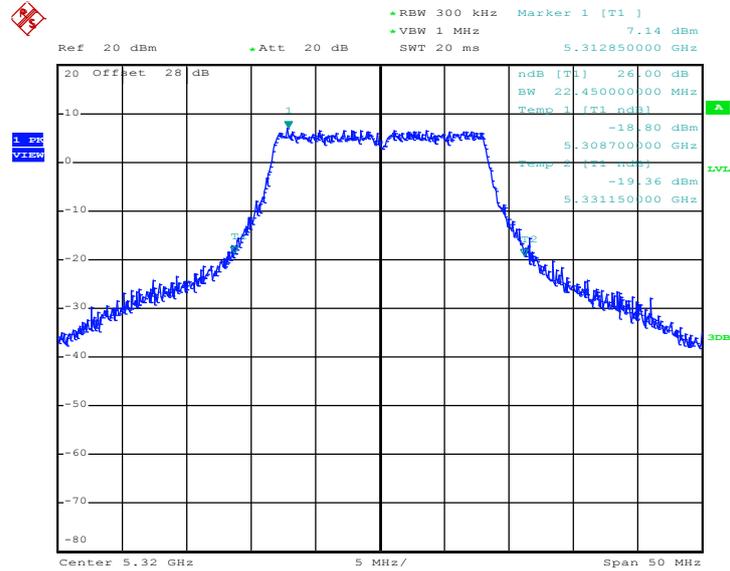
26 dB Bandwidth Plot on 802.11a Channel 60



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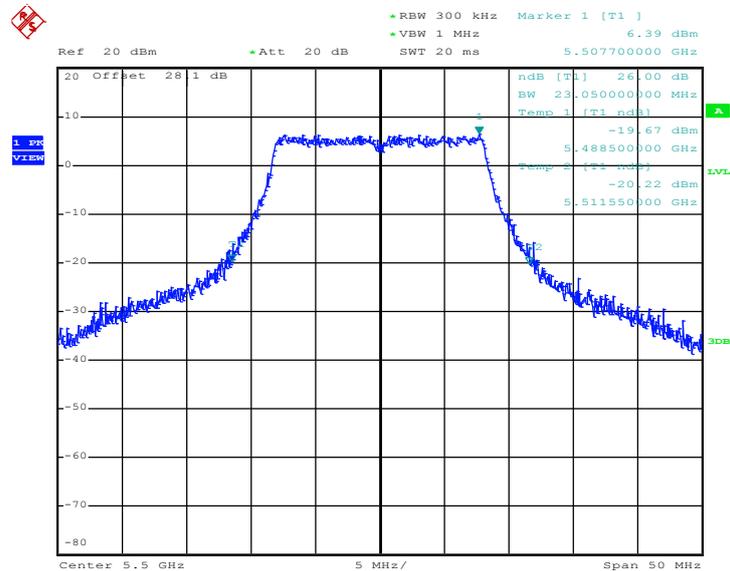


26 dB Bandwidth Plot on 802.11a Channel 64



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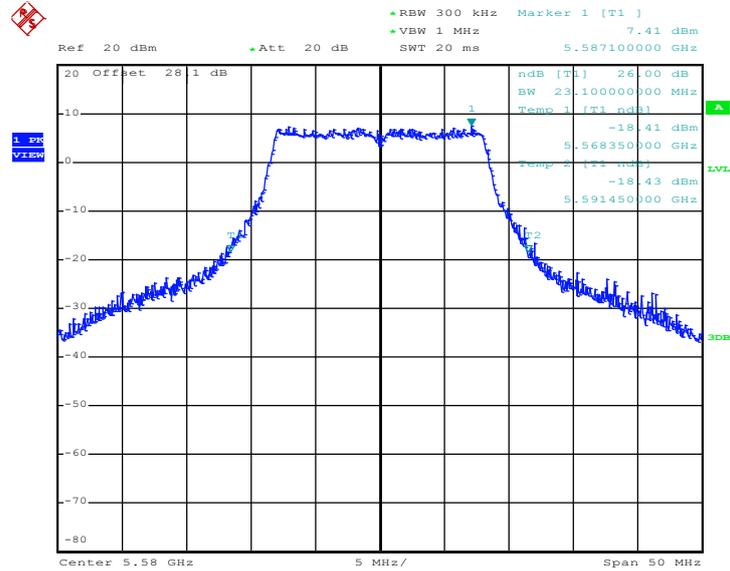
26 dB Bandwidth Plot on 802.11a Channel 100



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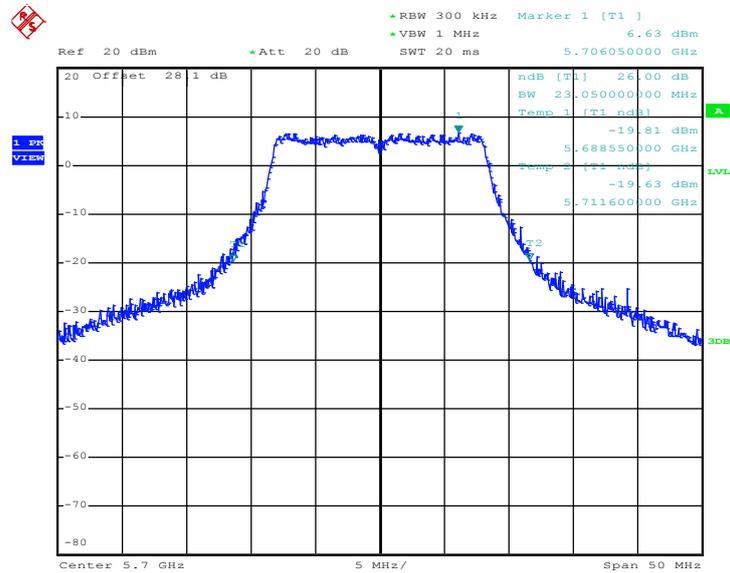


26 dB Bandwidth Plot on 802.11a Channel 116



Date: 22.AUG.2012 18:51:01

26 dB Bandwidth Plot on 802.11a Channel 140



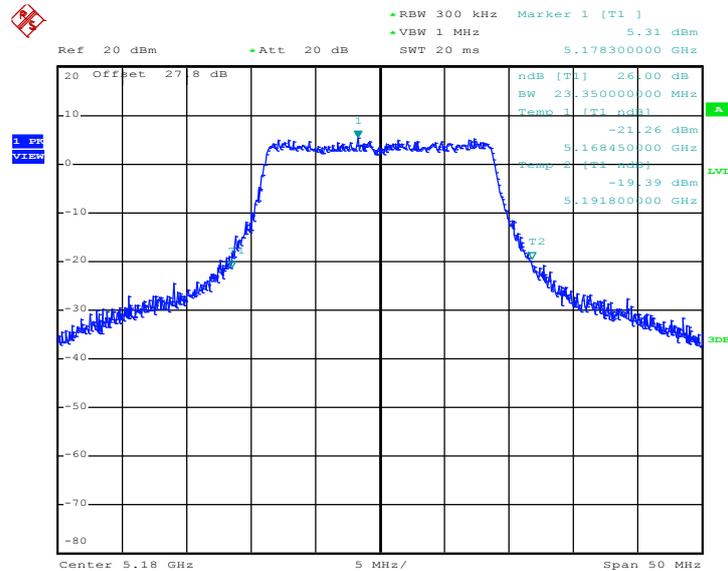
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Test Mode :	802.11n HT20	Temperature :	24~26°C
Test Engineer :	Book Link	Relative Humidity :	45~49%

Channel	Frequency (MHz)	802.11n HT20 26dB Bandwidth (MHz)	Pass/Fail
36	5180	23.350	N/A
44	5220	23.500	N/A
48	5240	23.550	N/A
52	5260	23.400	N/A
60	5300	23.400	N/A
64	5320	23.650	N/A
100	5500	23.250	N/A
116	5580	23.300	N/A
140	5700	23.000	N/A

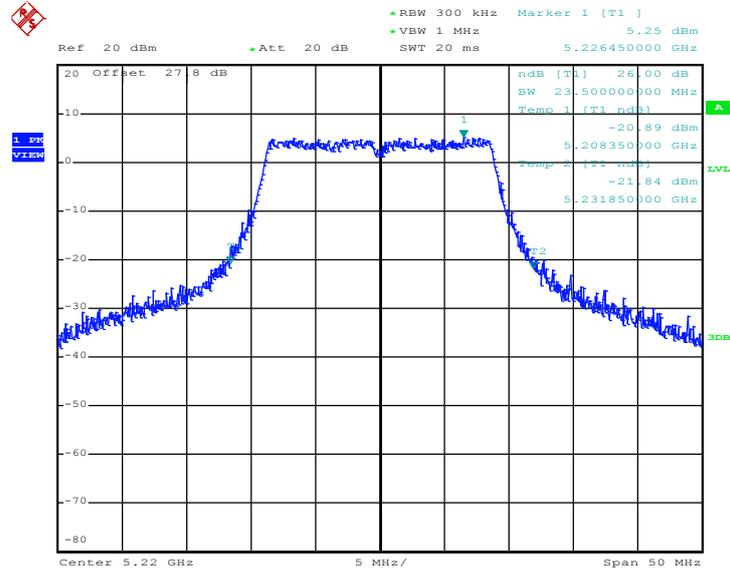
26 dB Bandwidth Plot on 802.11n HT20 Channel 36



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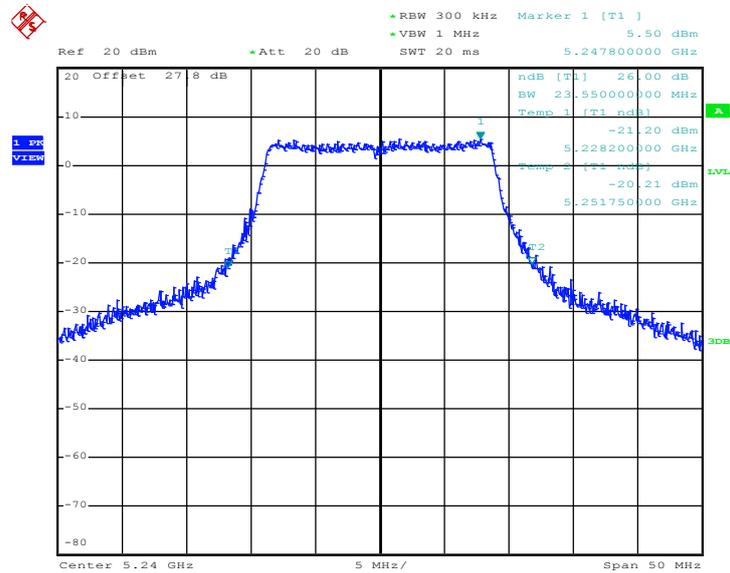


26 dB Bandwidth Plot on 802.11n HT20 Channel 44



Date: 22.AUG.2012 19:24:11

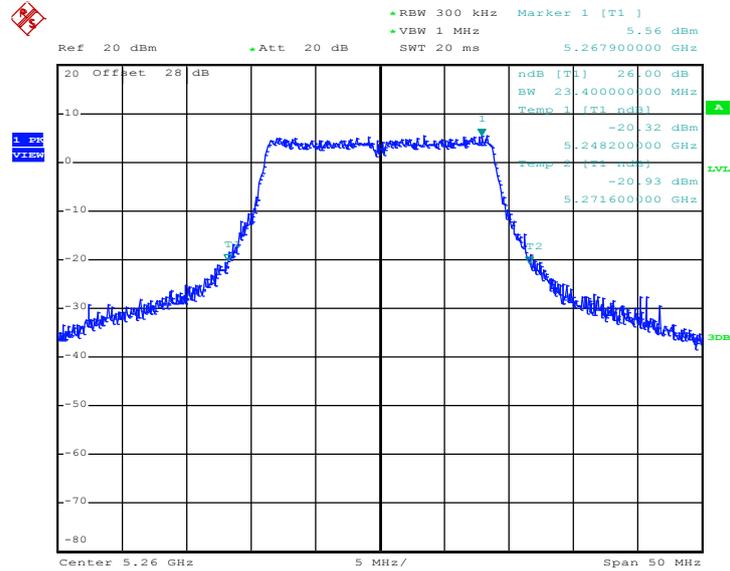
26 dB Bandwidth Plot on 802.11n HT20 Channel 48



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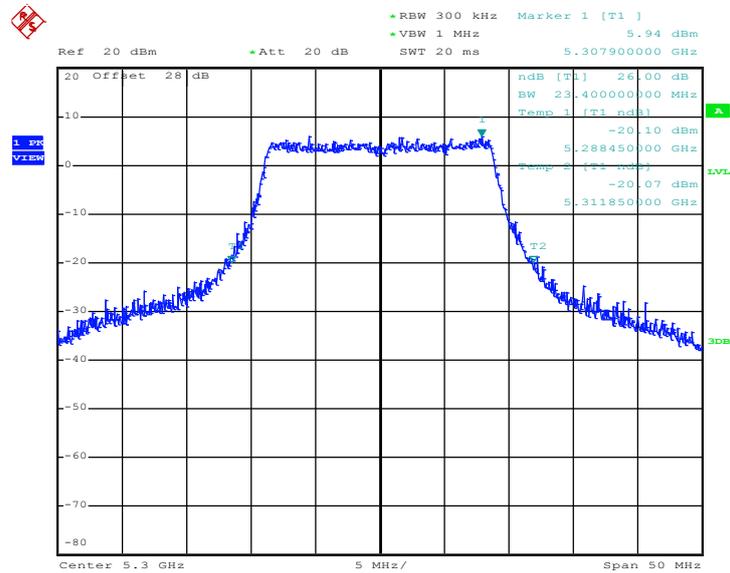


26 dB Bandwidth Plot on 802.11n HT20 Channel 52



Date: 22.AUG.2012 19:07:32

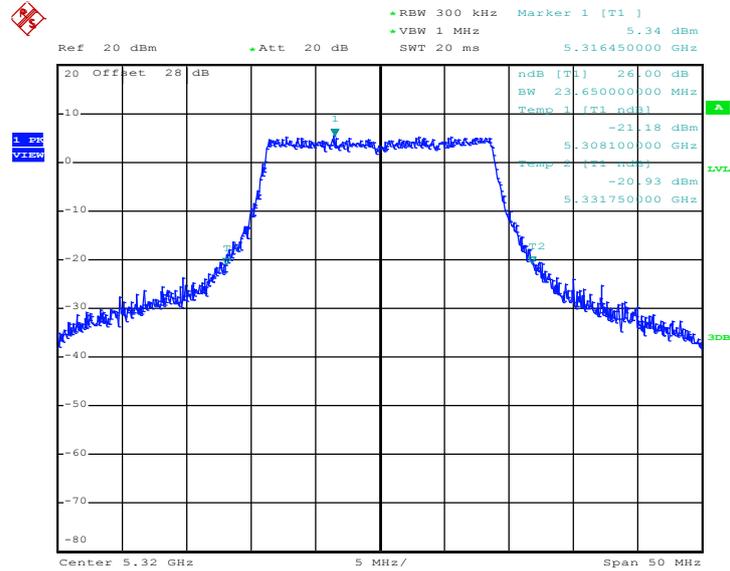
26 dB Bandwidth Plot on 802.11n HT20 Channel 60



Date: 22.AUG.2012 19:10:08

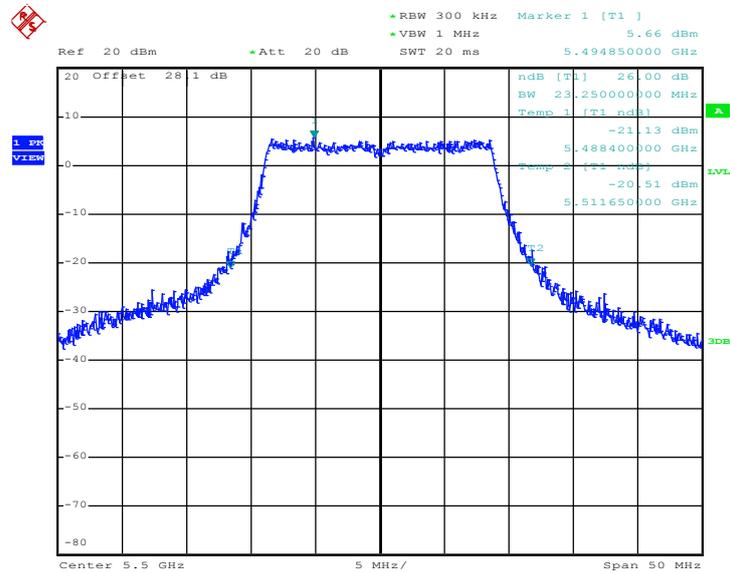


26 dB Bandwidth Plot on 802.11n HT20 Channel 64



Date: 22.AUG.2012 19:14:10

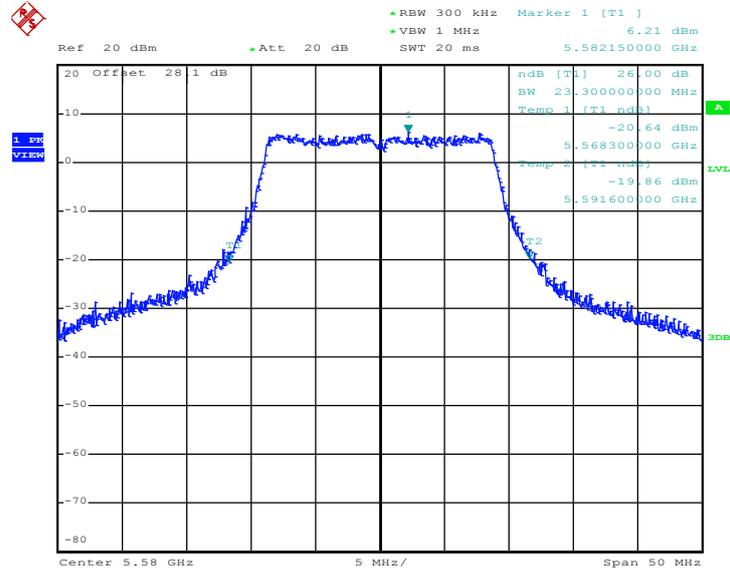
26 dB Bandwidth Plot on 802.11n HT20 Channel 100



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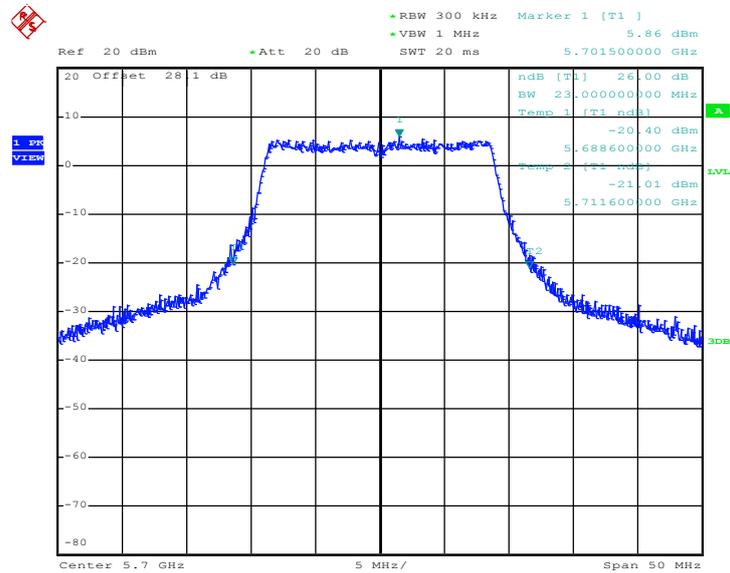


26 dB Bandwidth Plot on 802.11n HT20 Channel 116



Date: 22.AUG.2012 19:01:48

26 dB Bandwidth Plot on 802.11n HT20 Channel 140



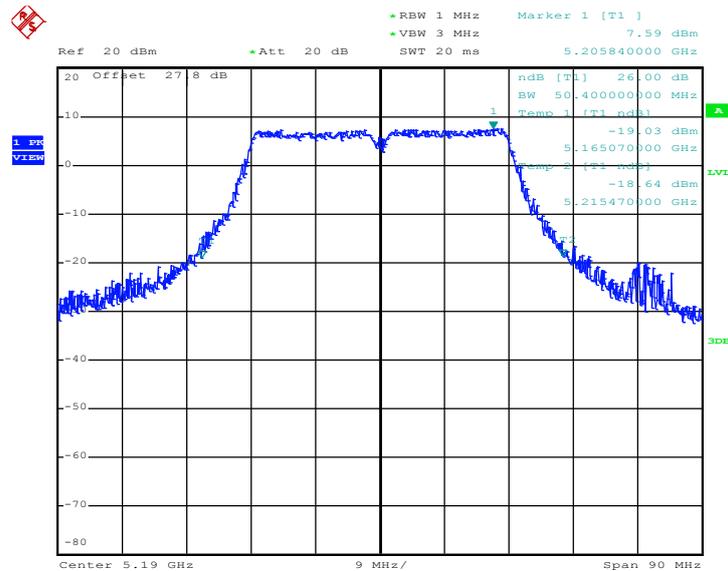
Date: 22.AUG.2012 18:58:56



Test Mode :	802.11n HT40	Temperature :	24~26°C
Test Engineer :	Book Link	Relative Humidity :	45~49%

Channel	Frequency (MHz)	802.11n HT40 26dB Bandwidth (MHz)	Pass/Fail
38	5190	50.400	N/A
46	5230	51.210	N/A
54	5270	50.130	N/A
62	5310	50.580	N/A
102	5510	50.670	N/A
110	5550	50.580	N/A
134	5670	51.210	N/A

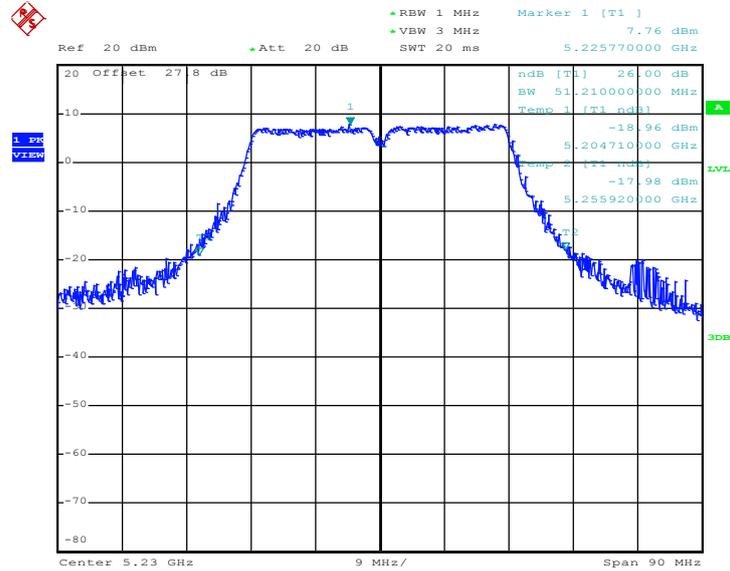
26 dB Bandwidth Plot on 802.11n HT40 Channel 38



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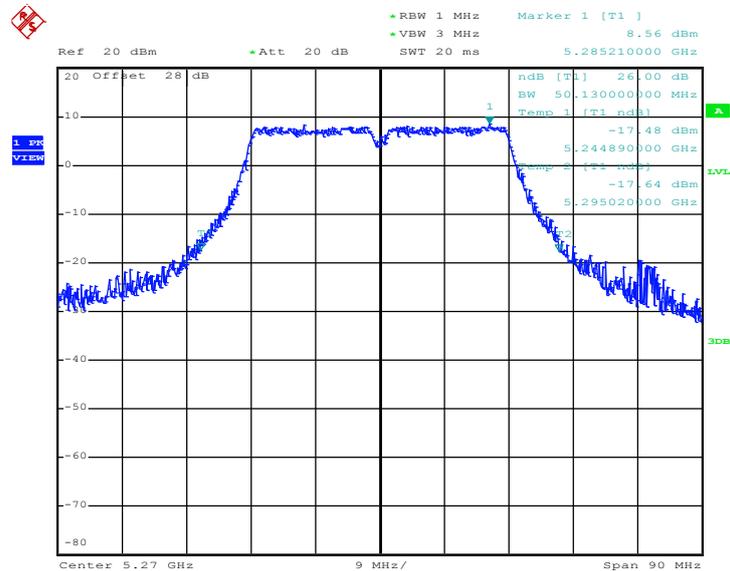


26 dB Bandwidth Plot on 802.11n HT40 Channel 46



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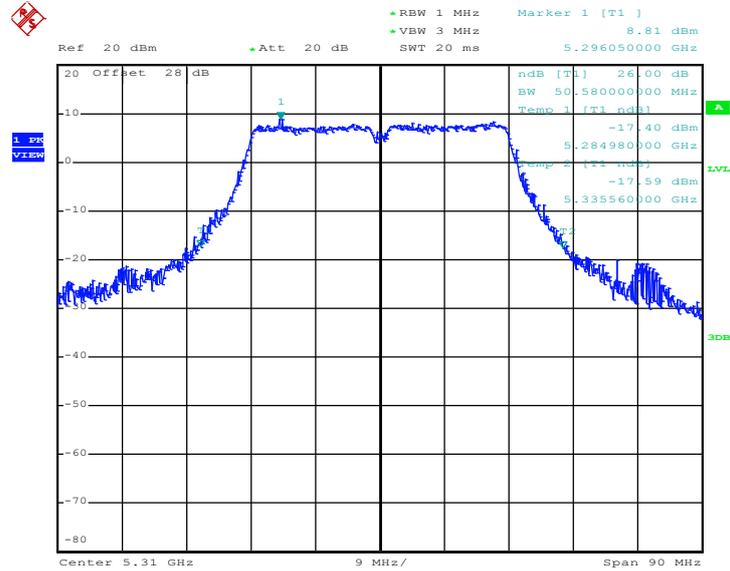
26 dB Bandwidth Plot on 802.11n HT40 Channel 54



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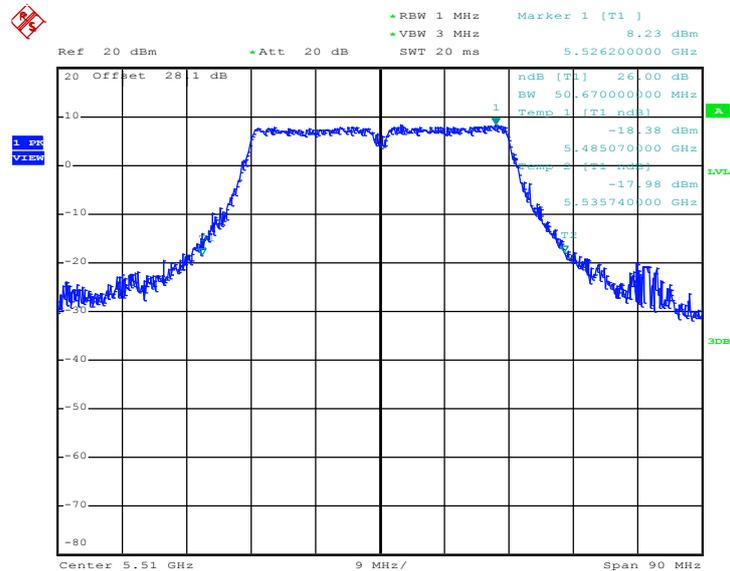


26 dB Bandwidth Plot on 802.11n HT40 Channel 62



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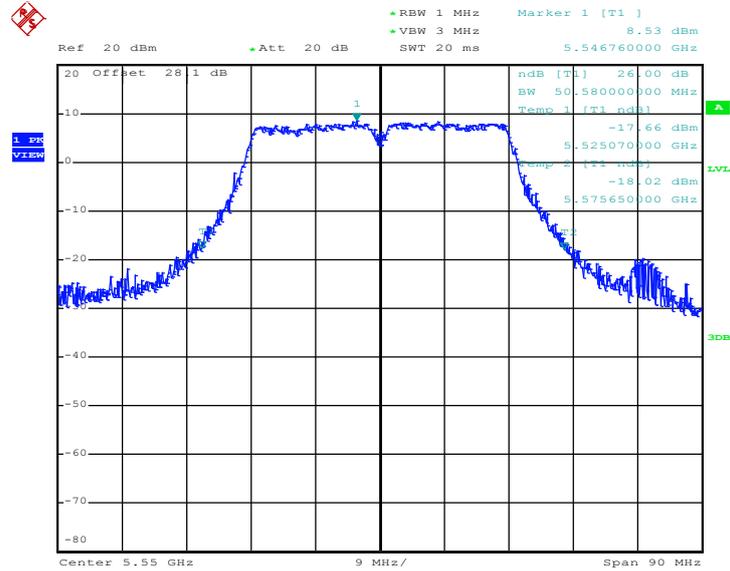
26 dB Bandwidth Plot on 802.11n HT40 Channel 102



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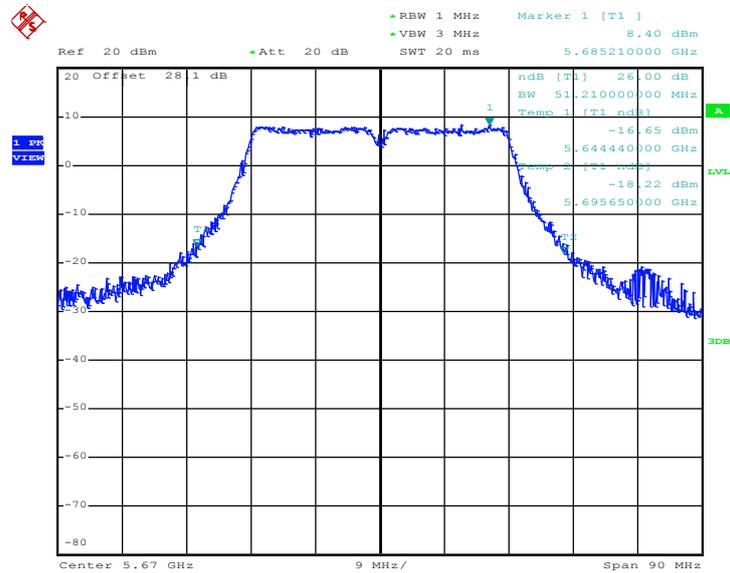


26 dB Bandwidth Plot on 802.11n HT40 Channel 110



Date: 22.AUG.2012 19:50:23

26 dB Bandwidth Plot on 802.11n HT40 Channel 134



Date: 22.AUG.2012 19:53:53

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

For the band 5.15~5.25 GHz, the maximum conducted output power shall not exceed the lesser of 50 mW (17dBm) or $4 \text{ dBm} + 10 \log B$, where B is the 26 dB emissions bandwidth in 1-MHz. If transmitting antenna directional gain is greater than 6 dBi, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power shall not exceed the lesser of 250 mW (24dBm) or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emissions bandwidth in 1-MHz. If transmitting antenna directional gain is greater than 6 dBi, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

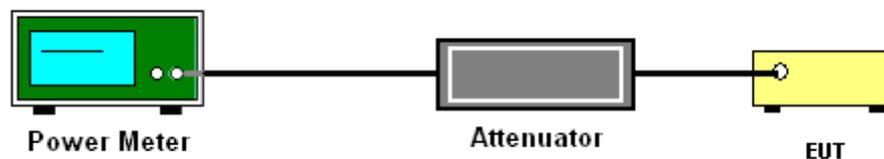
3.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D01 General UNII Test Procedures v01r01.

Method PM (Measurement using an RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, $10 \log(1/x)$, where x is the duty cycle.

3.2.4 Test Setup





3.2.5 Test Result of Maximum Conducted Output Power

Test Mode :	802.11a	Temperature :	24~26°C
Test Engineer :	Book Link	Relative Humidity :	45~49%
Duty Cycle	95.47%	Duty Factor	0.20dB

Channel	Frequency (MHz)	802.11a Output Power (dBm)		Max. Limits (dBm)	Pass/Fail
		Measured	Final		
36	5180	14.31	14.51	17	Pass
44	5220	14.50	14.70	17	Pass
48	5240	14.66	14.86	17	Pass
52	5260	14.56	14.76	24	Pass
60	5300	14.98	15.18	24	Pass
64	5320	14.62	14.82	24	Pass
100	5500	15.47	15.67	24	Pass
116	5580	15.40	15.60	24	Pass
140	5700	14.62	14.82	24	Pass

Note:

1. Final Output Power equals to Measured Output Power adds the duty factor.
2. For the band 5.15~5.25 GHz, the maximum conducted output power shall not exceed the lesser of 50 mW (17dBm) or 4 dBm + 10log (26dB BW)
3. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10log (26dB BW).



Test Mode :	802.11n HT20	Temperature :	24~26°C
Test Engineer :	Book Link	Relative Humidity :	45~49%
Duty Cycle	95.13%	Duty Factor	0.22dB

Channel	Frequency (MHz)	802.11n HT20 Output Power (dBm)		Max. Limits (dBm)	Pass/Fail
		Measured	Final		
36	5180	13.50	13.72	17	Pass
44	5220	13.43	13.65	17	Pass
48	5240	13.58	13.80	17	Pass
52	5260	13.64	13.86	24	Pass
60	5300	13.60	13.82	24	Pass
64	5320	14.05	14.27	24	Pass
100	5500	14.47	14.69	24	Pass
116	5580	14.14	14.36	24	Pass
140	5700	13.46	13.68	24	Pass

Note:

1. Final Output Power equals to Measured Output Power adds the duty factor.
2. For the band 5.15~5.25 GHz, the maximum conducted output power shall not exceed the lesser of 50 mW (17dBm) or 4 dBm + 10log (26dB BW)
3. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10log (26dB BW)



Test Mode :	802.11n HT40	Temperature :	24~26°C
Test Engineer :	Book Link	Relative Humidity :	45~49%
Duty Cycle	87.10%	Duty Factor	0.60dB

Channel	Frequency (MHz)	802.11n HT40 Output Power (dBm)		Max. Limits (dBm)	Pass/Fail
		Measured	Final		
38	5190	12.91	13.51	17	Pass
46	5230	13.24	13.84	17	Pass
54	5270	13.33	13.93	24	Pass
62	5310	13.13	13.73	24	Pass
102	5510	12.90	13.50	24	Pass
110	5550	13.69	14.29	24	Pass
134	5670	12.83	13.43	24	Pass

Note:

1. Final Output Power equals to Measured Output Power adds the duty factor.
2. For the band 5.15~5.25 GHz, the maximum conducted output power shall not exceed the lesser of 50 mW (17dBm) or 4 dBm + 10log (26dB BW)
3. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10log (26dB BW)



3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

For the band 5.15–5.25 GHz, the peak power spectral density shall not exceed 4 dBm in any 1-MHz band. For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the peak power spectral density shall not exceed 11 dBm in any 1-MHz band.

3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D01 General UNII Test Procedures v01r01.

Section E) Peak power spectral density (PPSD).

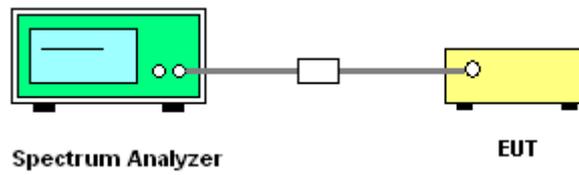
Note: Though the rule refers to “peak power spectral density”, the intent is to measure the maximum value of the time average of the power spectral density measured during a period of continuous transmission.

Method SA-2

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

1. The testing follows Method SA-2 of FCC KDB 789033 D01 General UNII Test Procedures v01r01.
 - Measure the duty cycle.
 - Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW \geq 3 MHz.
 - Number of points in sweep \geq 2 Span / RBW.
 - Sweep time = auto.
 - Detector = sample
 - Trace average at least 100 traces in power averaging mode.
 - Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.

3.3.4 Test Setup





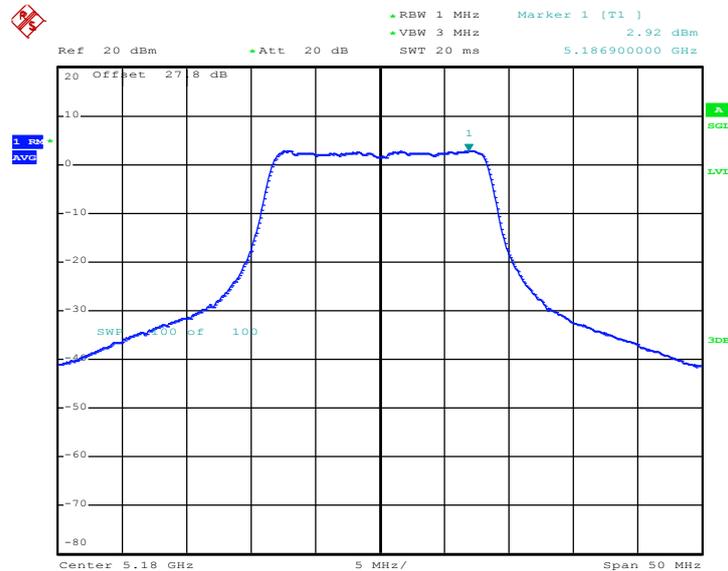
3.3.5 Test Result of Power Spectral Density

Test Mode :	802.11a	Temperature :	24~26°C
Test Engineer :	Book Link	Relative Humidity :	45~49%
Duty Cycle:	95.47%	Duty Factor:	0.20dB

Channel	Frequency (MHz)	802.11a PSD (dBm)		Max. Limits (dBm)	Pass/Fail
		Measured	Final		
36	5180	2.920	3.121	4	Pass
44	5220	3.140	3.341	4	Pass
48	5240	3.290	3.491	4	Pass
52	5260	3.640	3.841	11	Pass
60	5300	3.390	3.591	11	Pass
64	5320	3.560	3.761	11	Pass
100	5500	3.650	3.851	11	Pass
116	5580	3.950	4.151	11	Pass
140	5700	3.670	3.871	11	Pass

Note: Result of Final PSD equals to Measured PSD adds the duty factor.

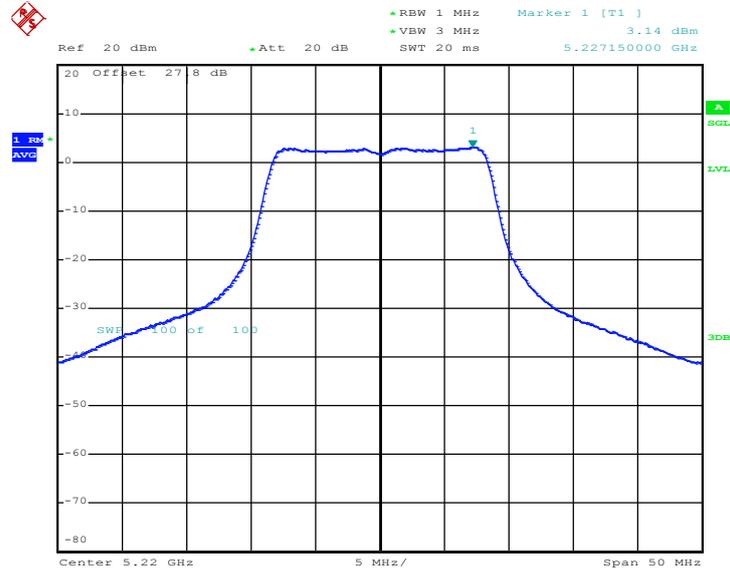
PSD Plot on 802.11a Channel 36



Date: 22.AUG.2012 18:21:16

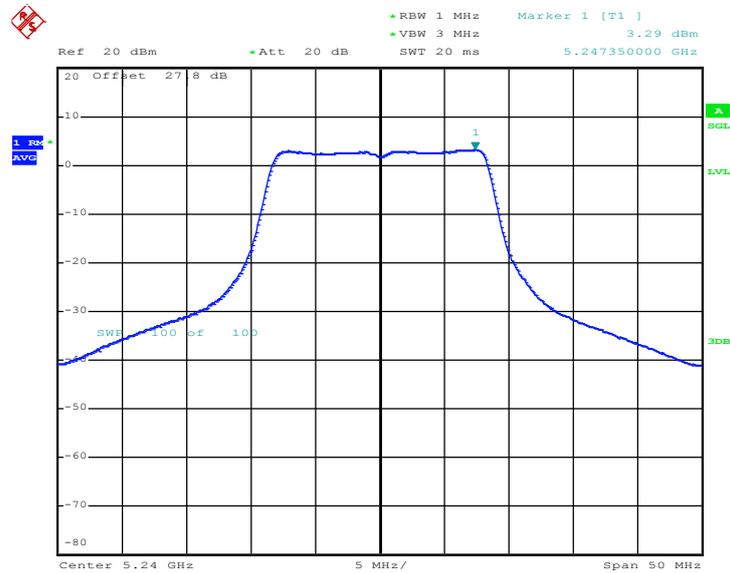


PSD Plot on 802.11a Channel 44



Date: 22.AUG.2012 18:26:55

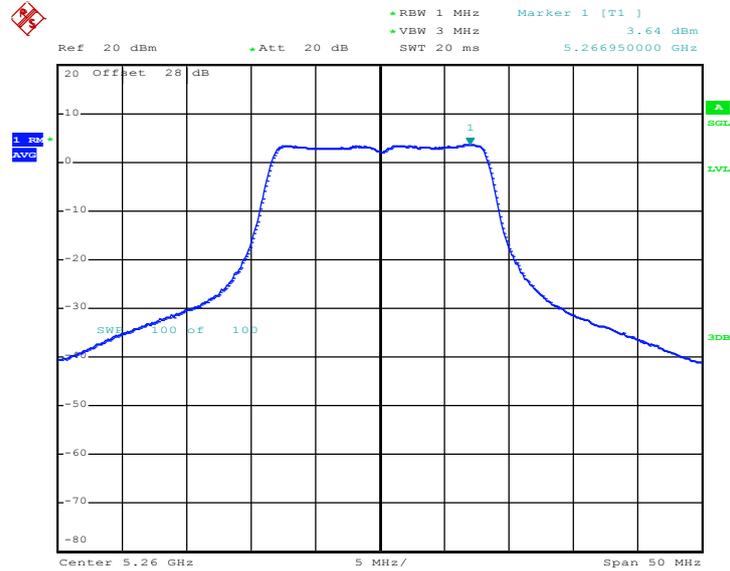
PSD Plot on 802.11a Channel 48



Date: 22.AUG.2012 18:30:24

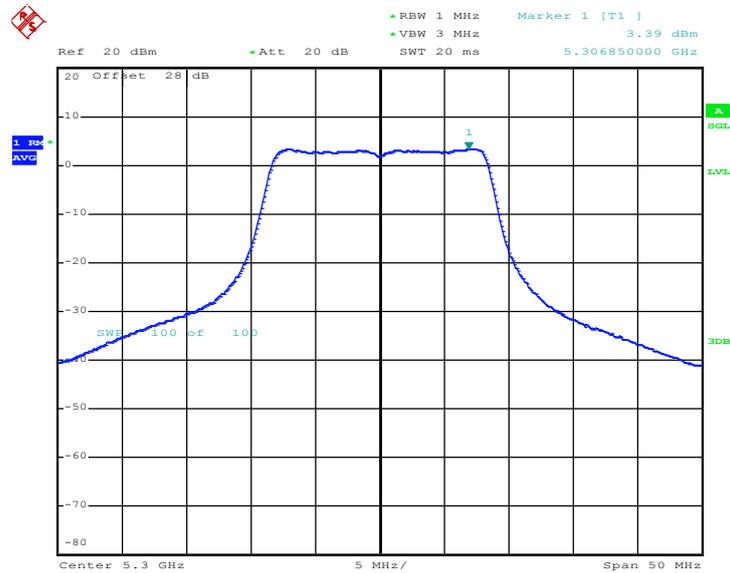


PSD Plot on 802.11a Channel 52



Date: 22.AUG.2012 18:37:59

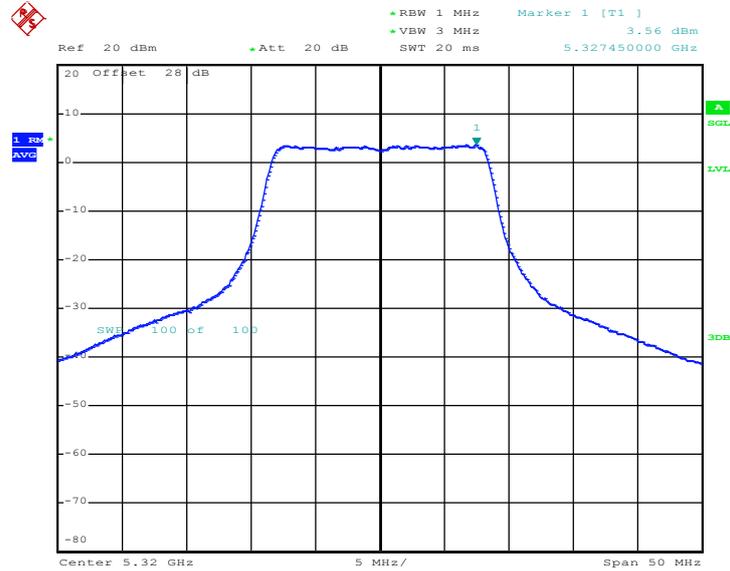
PSD Plot on 802.11a Channel 60



Date: 22.AUG.2012 18:41:08

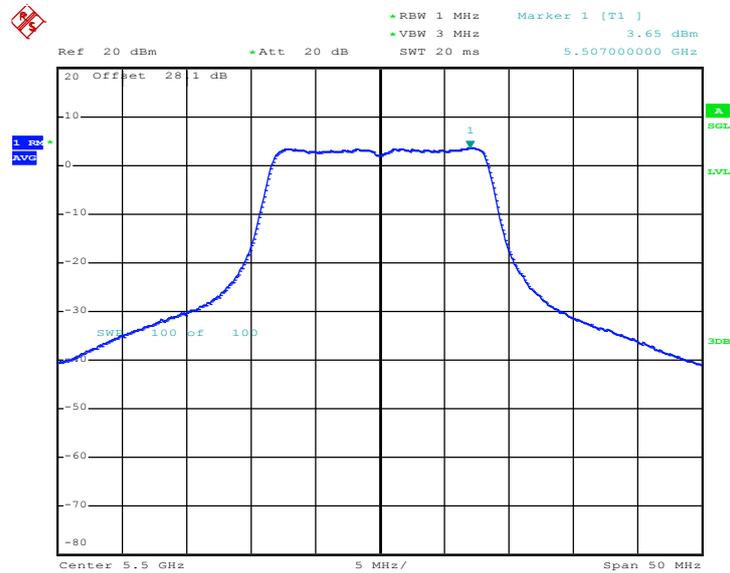


PSD Plot on 802.11a Channel 64



Date: 22.AUG.2012 18:44:11

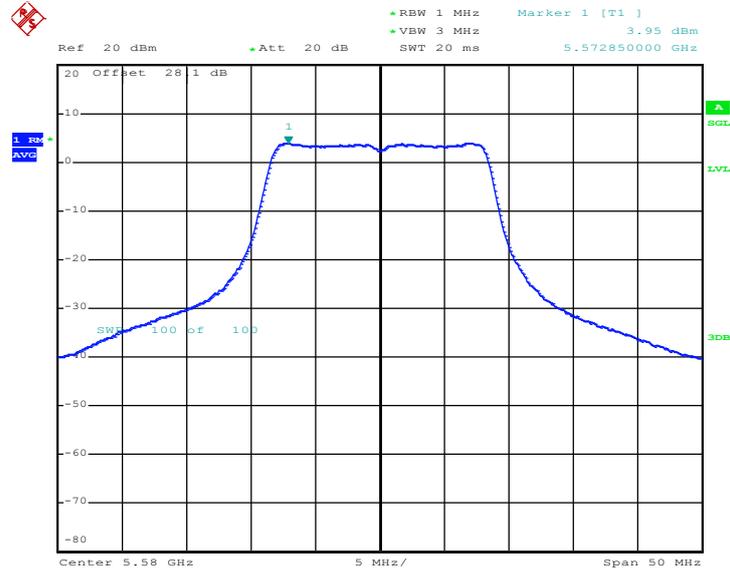
PSD Plot on 802.11a Channel 100



Date: 22.AUG.2012 18:47:35

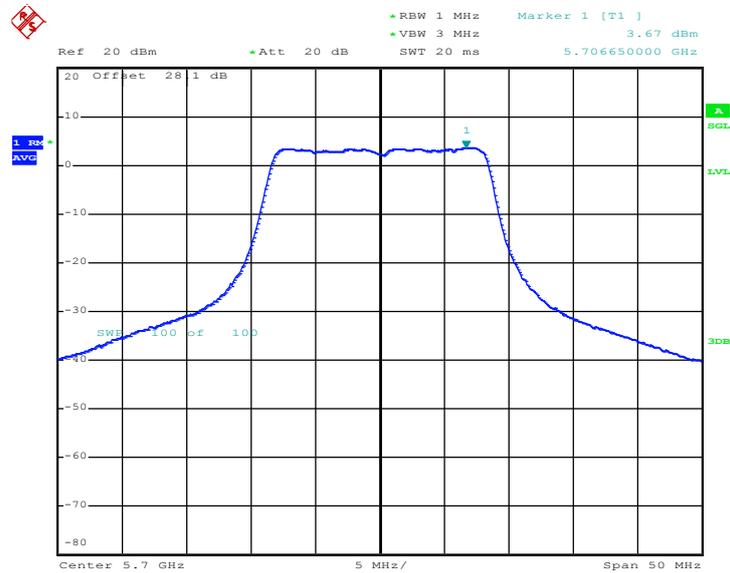


PSD Plot on 802.11a Channel 116



Date: 22.AUG.2012 18:51:31

PSD Plot on 802.11a Channel 140



Date: 22.AUG.2012 18:55:43

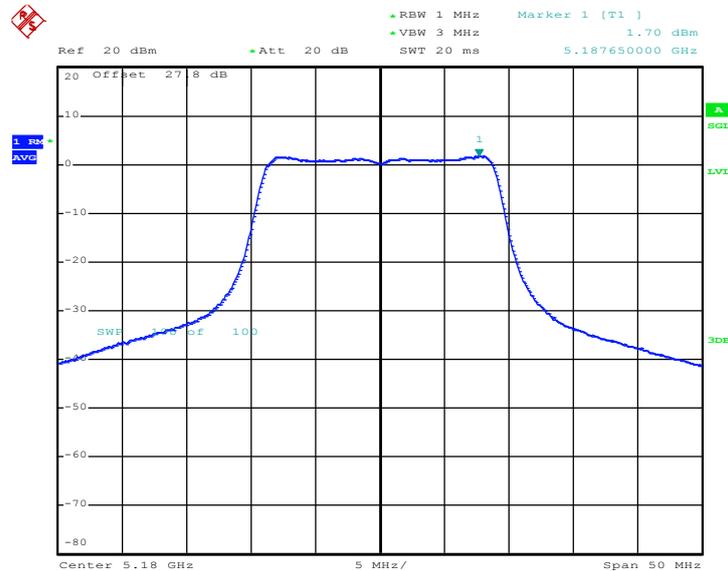


Test Mode :	802.11n HT20	Temperature :	24~26°C
Test Engineer :	Book Link	Relative Humidity :	45~49%
Duty Cycle:	95.13%	Duty Factor:	0.22dB

Channel	Frequency (MHz)	802.11n HT20 PSD (dBm)		Max. Limits (dBm)	Pass/Fail
		Measured	Final		
36	5180	1.700	1.917	4	Pass
44	5220	2.140	2.357	4	Pass
48	5240	2.350	2.567	4	Pass
52	5260	2.450	2.667	11	Pass
60	5300	2.330	2.547	11	Pass
64	5320	2.320	2.537	11	Pass
100	5500	2.370	2.587	11	Pass
116	5580	2.820	3.037	11	Pass
140	5700	2.580	2.797	11	Pass

Note: Result of Final PSD equals to Measured PSD adds the duty factor.

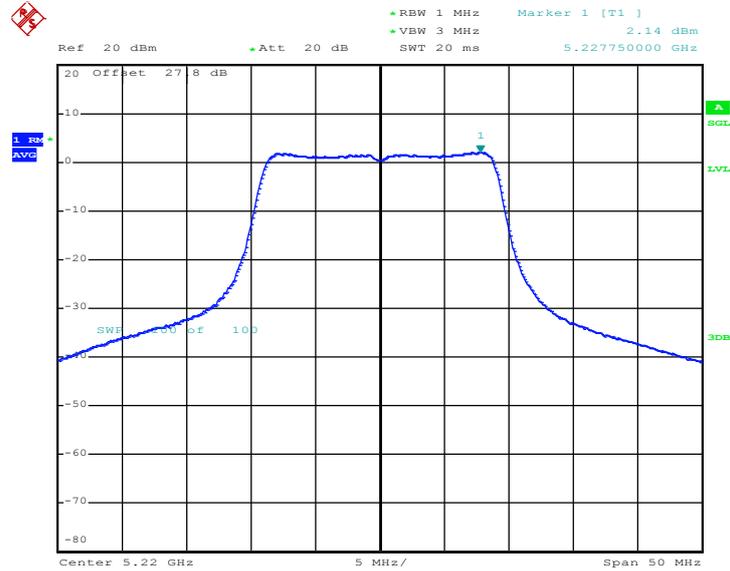
PSD Plot on 802.11n HT20 channel 36



Date: 22.AUG.2012 19:19:45

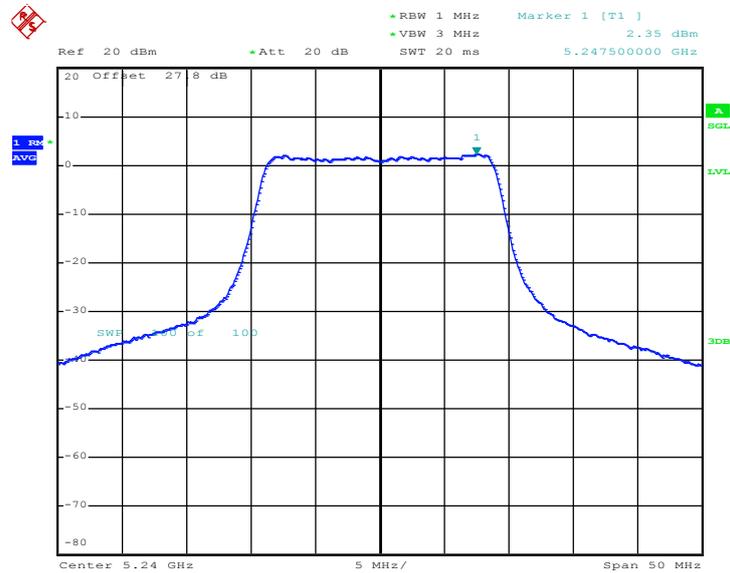


PSD Plot on 802.11n HT20 Channel 44



Date: 22.AUG.2012 19:24:40

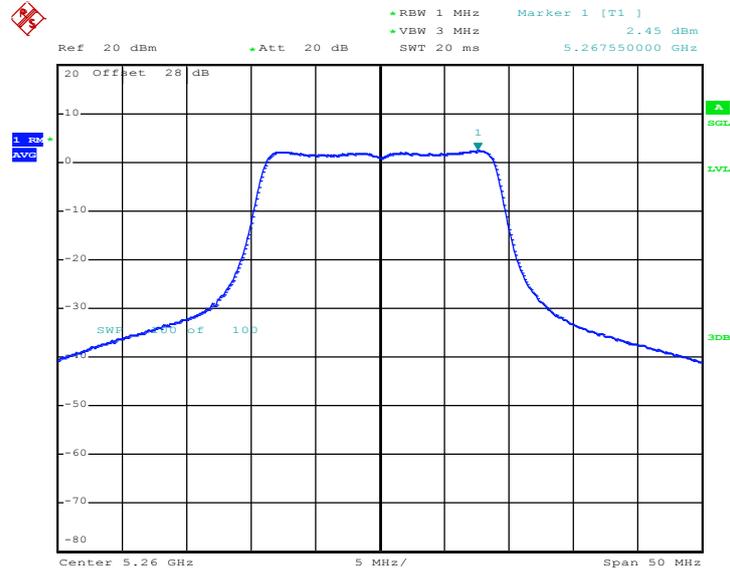
PSD Plot on 802.11n HT20 Channel 48



Date: 22.AUG.2012 19:27:41

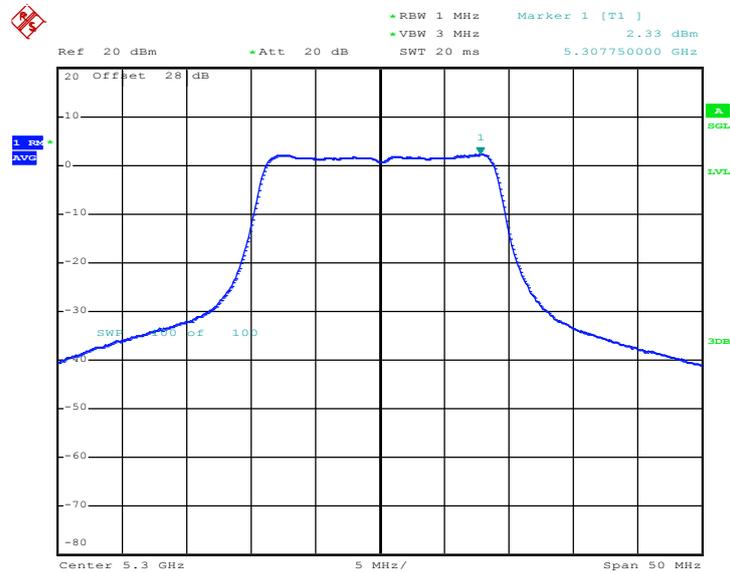


PSD Plot on 802.11n HT20 Channel 52



Date: 22.AUG.2012 19:07:55

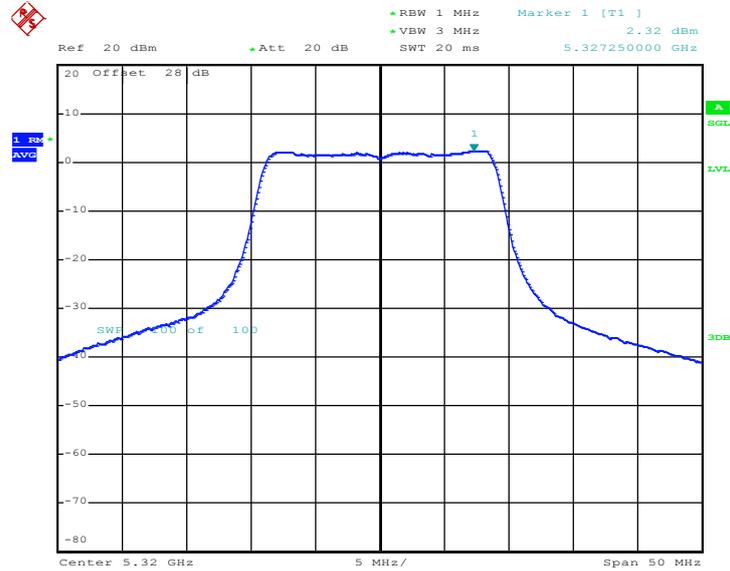
PSD Plot on 802.11n HT20 Channel 60



Date: 22.AUG.2012 19:10:43

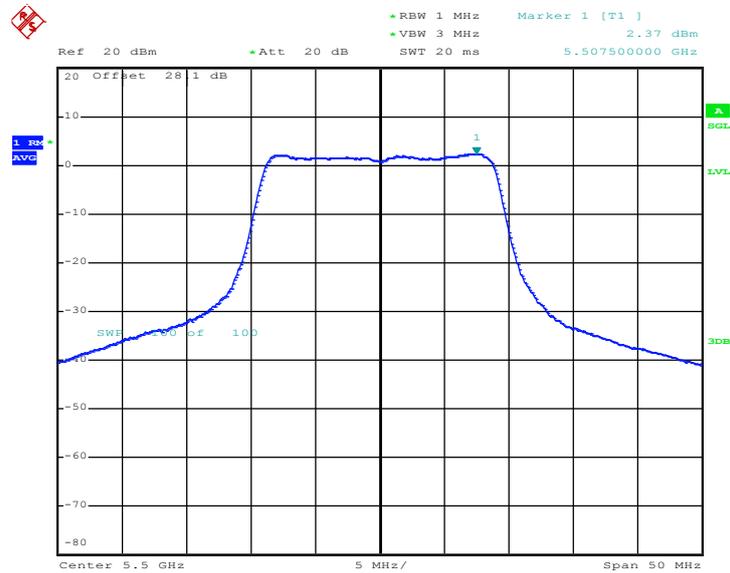


PSD Plot on 802.11n HT20 Channel 64



Date: 22.AUG.2012 19:14:38

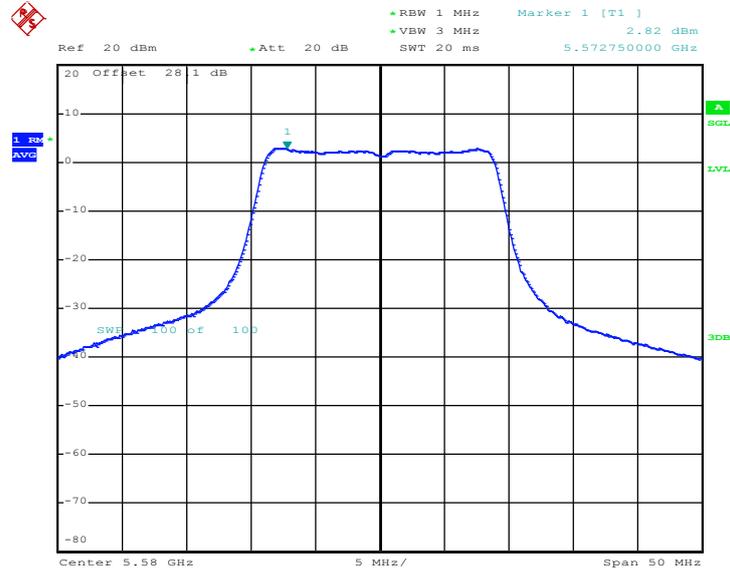
PSD Plot on 802.11n HT20 Channel 100



Date: 22.AUG.2012 19:05:14

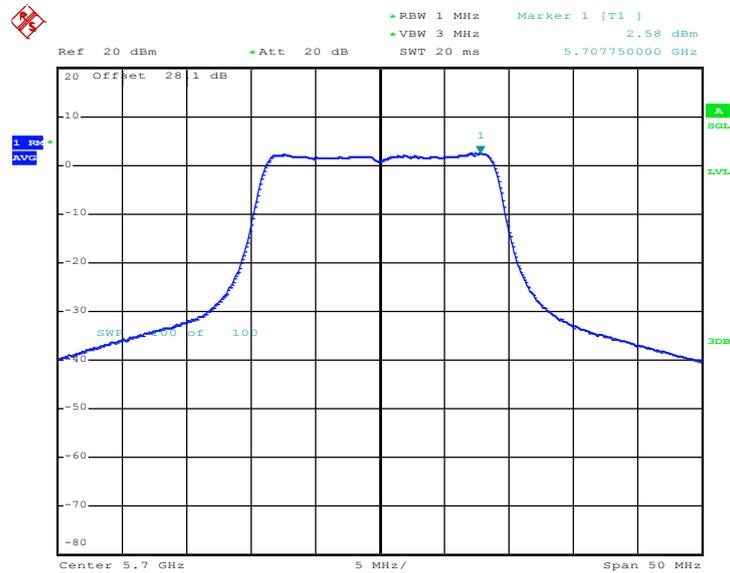


PSD Plot on 802.11n HT20 Channel 116



Date: 22.AUG.2012 19:02:09

PSD Plot on 802.11n HT20 Channel 140



Date: 22.AUG.2012 18:59:18

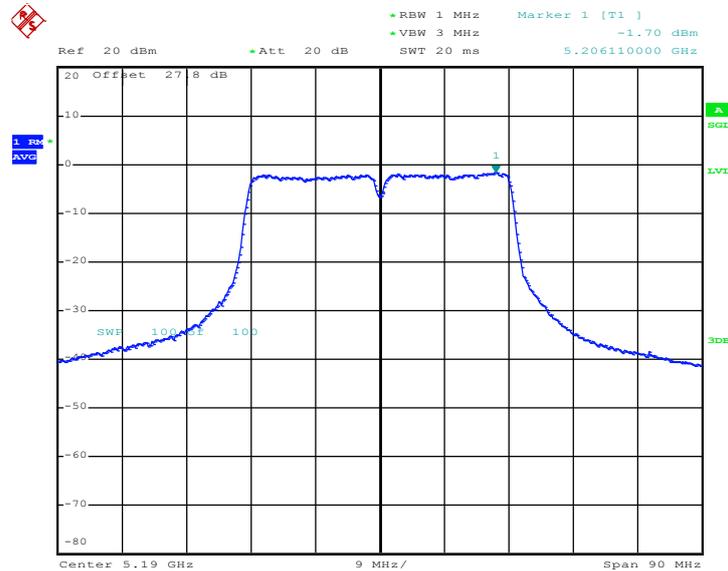


Test Mode :	802.11n HT40	Temperature :	24~26°C
Test Engineer :	Book Link	Relative Humidity :	45~49%
Duty Cycle:	87.10%	Duty Factor:	0.60dB

Channel	Frequency (MHz)	802.11n HT40 PSD (dBm)		Max. Limits (dBm)	Pass/Fail
		Measured	Final		
38	5190	-1.700	-1.100	4	Pass
46	5230	-1.400	-0.800	4	Pass
54	5270	-1.180	-0.580	11	Pass
62	5310	-1.140	-0.540	11	Pass
102	5510	-1.070	-0.470	11	Pass
110	5550	-0.730	-0.130	11	Pass
134	5670	-0.860	-0.260	11	Pass

Note: Result of Final PSD equals to Measured PSD adds the duty factor.

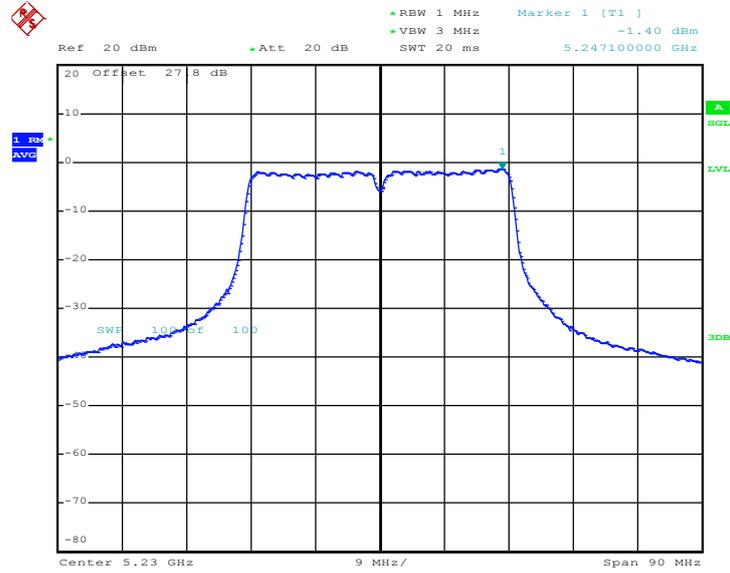
PSD Plot on 802.11n HT40 Channel 38



Date: 22.AUG.2012 19:33:45

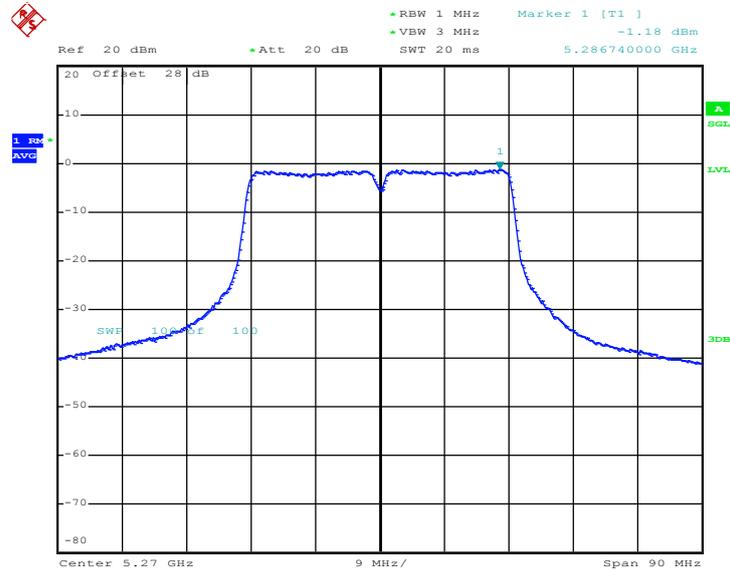


PSD Plot on 802.11n HT40 Channel 46



Date: 22.AUG.2012 19:38:59

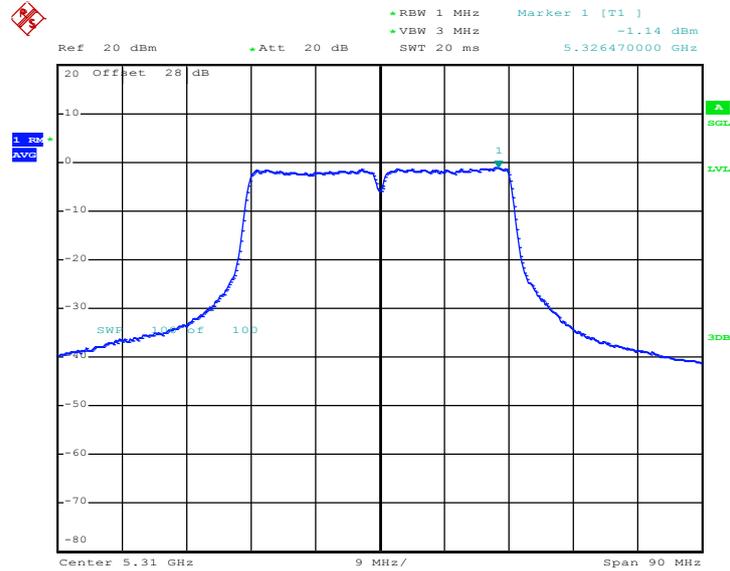
PSD Plot on 802.11n HT40 Channel 54



Date: 22.AUG.2012 19:42:05

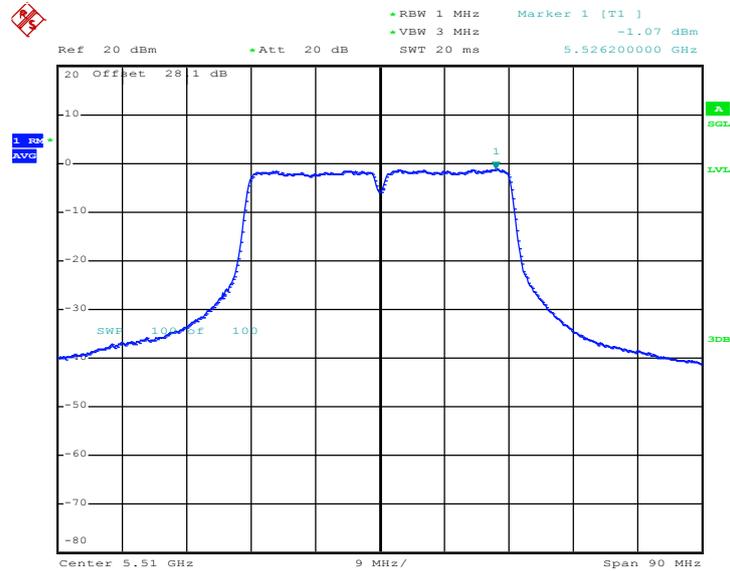


PSD Plot on 802.11n HT40 Channel 62



Date: 22.AUG.2012 19:45:07

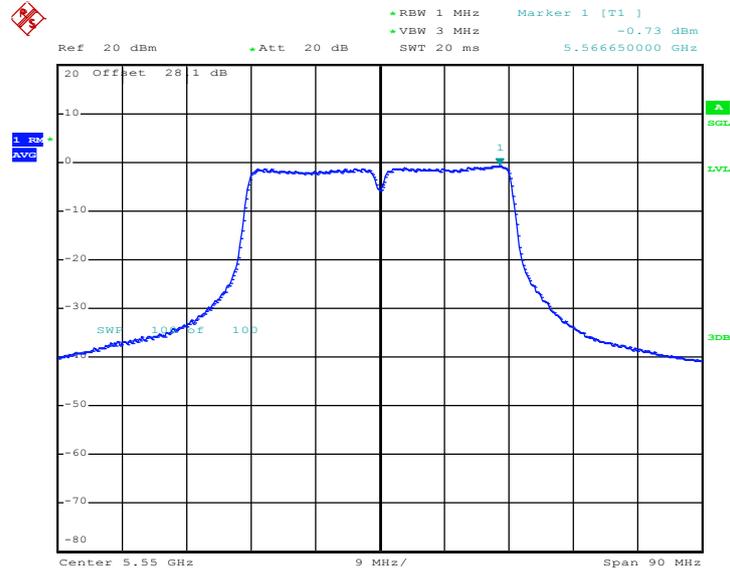
PSD Plot on 802.11n HT40 Channel 102



Date: 22.AUG.2012 19:48:15

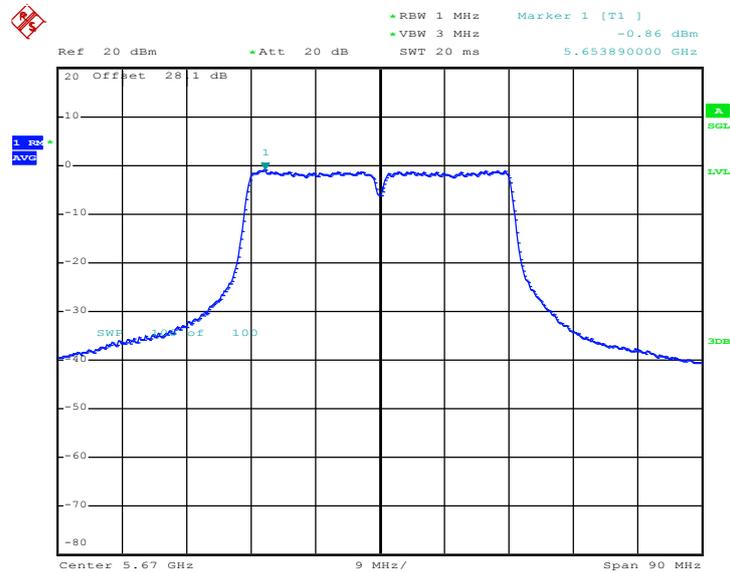


PSD Plot on 802.11n HT40 Channel 110



Date: 22.AUG.2012 19:50:47

PSD Plot on 802.11n HT40 Channel 134



Date: 22.AUG.2012 19:54:17

3.4 Peak Excursion Ratio Measurement

3.4.1 Limit of Peak Excursion Ratio

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

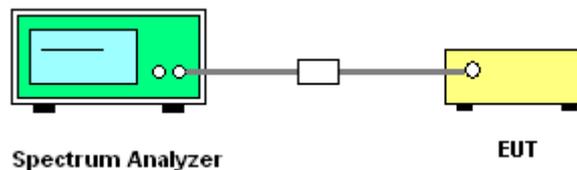
3.4.3 Test Procedures

The testing follows FCC KDB 789033 D01 General UNII Test Procedures v01r01.

Section F) Peak excursion measurement

1. The transmitter output is connected to the spectrum analyzer.
2. Set the spectrum analyzer span to view the entire emission bandwidth.
3. Find the maximum of the peak-max-hold spectrum.
 - *Set RBW = 1MHz.
 - *Set VBW \geq 3MHz.
 - *Detector = peak.
 - *Trace mode = max-hold.
 - *Allow the sweeps to continue until the trace stabilizes.
 - *Use the peak search function to find the peak of the spectrum.
4. Use the procedure found under section 3.3 to measure the PPSD.
5. Compute the ratio of the maximum of the peak-max-hold spectrum to the PPSD.

3.4.4 Test Setup

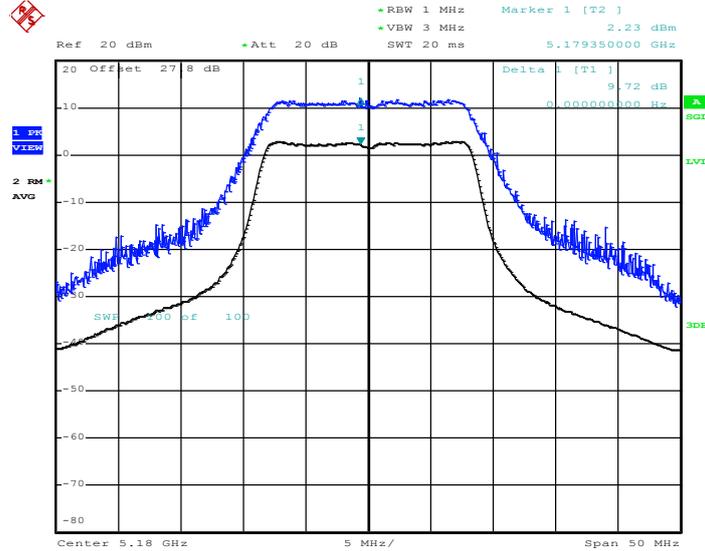




3.4.5 Test Result of Peak Excursion Ratio

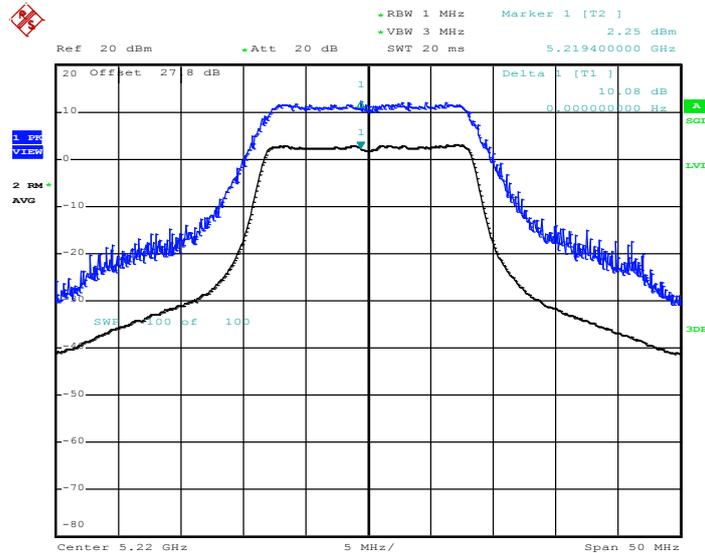
Test Mode :	802.11a	Temperature :	24~26°C
Test Engineer :	Book Link	Relative Humidity :	45~49%

Peak Excursion Ratio Plot on 802.11a Channel 36



Date: 22.AUG.2012 18:21:39

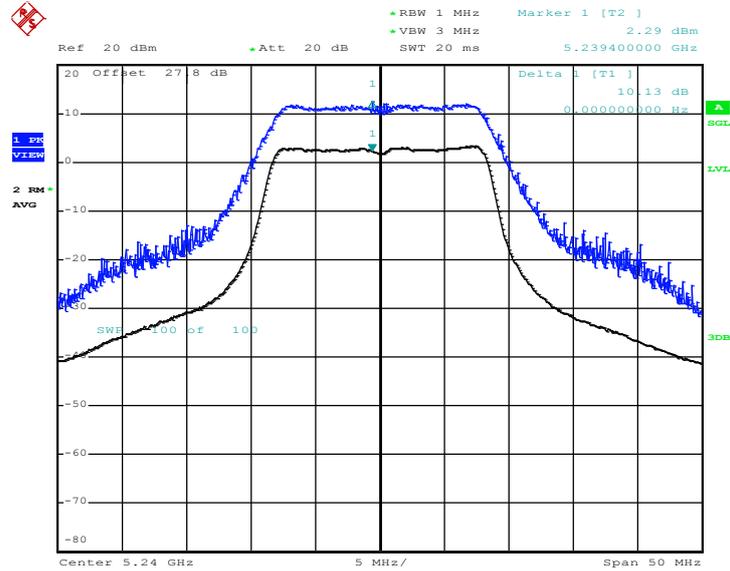
Peak Excursion Ratio Plot on 802.11a Channel 44



Date: 22.AUG.2012 18:27:22

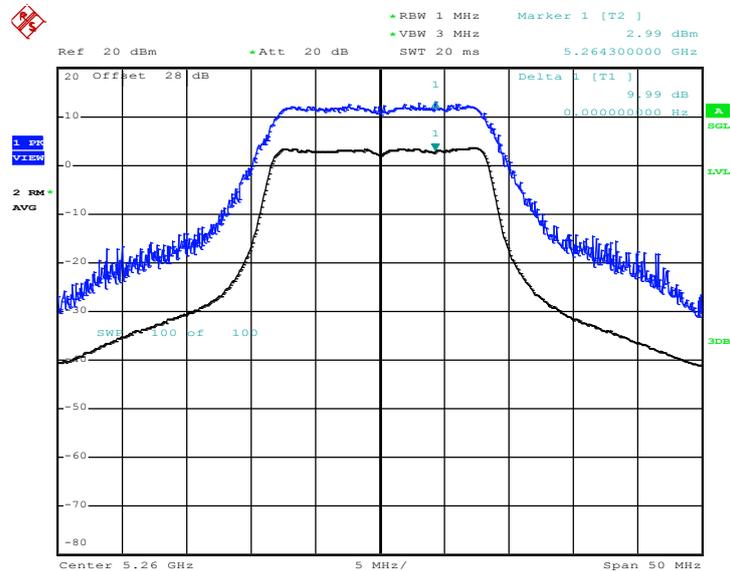


Peak Excursion Ratio Plot on 802.11a Channel 48



Date: 22.AUG.2012 18:30:55

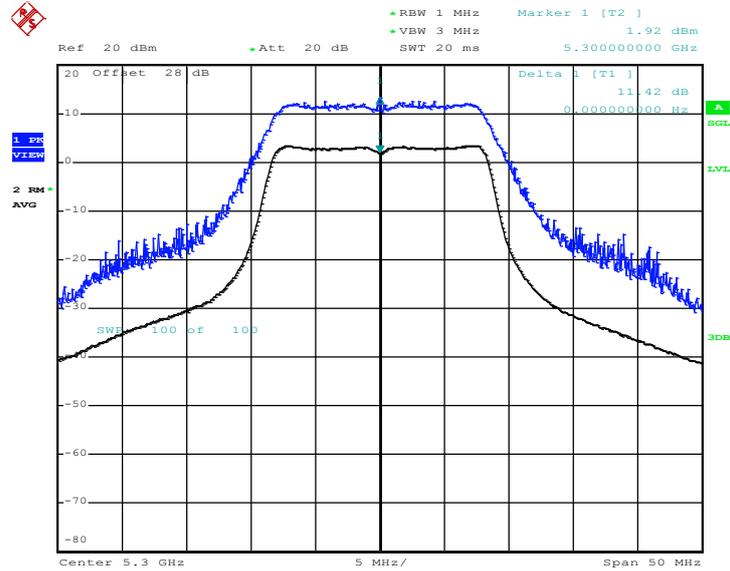
Peak Excursion Ratio Plot on 802.11a Channel 52



Date: 22.AUG.2012 18:38:24

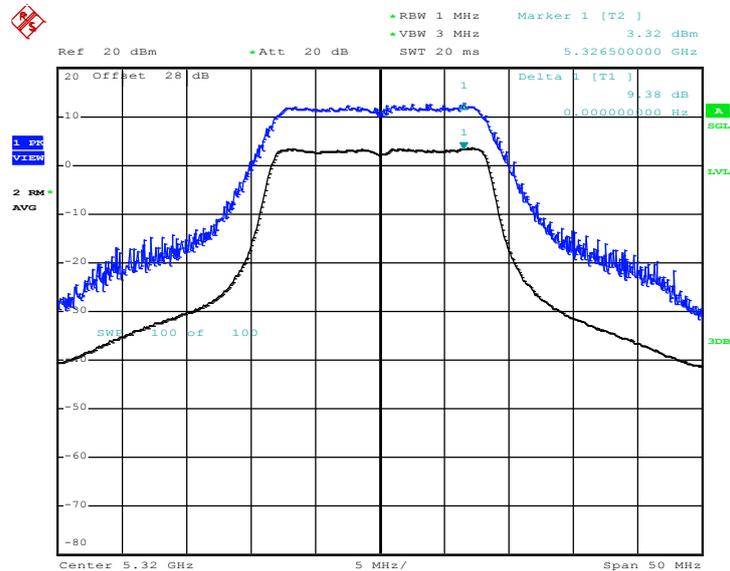


Peak Excursion Ratio Plot on 802.11a Channel 60



Date: 22.AUG.2012 18:41:34

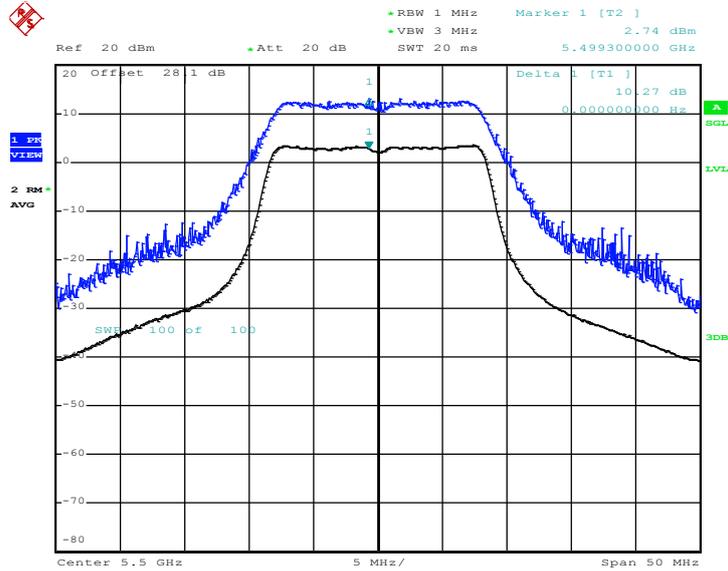
Peak Excursion Ratio Plot on 802.11a Channel 64



Date: 22.AUG.2012 18:44:39

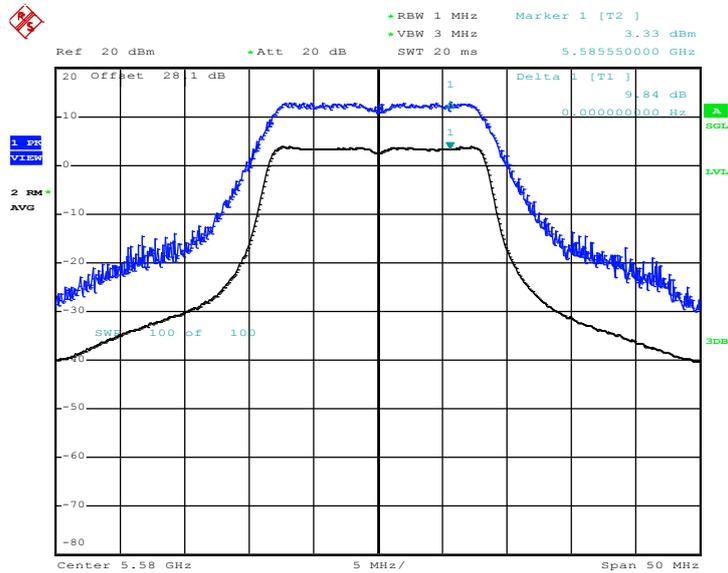


Peak Excursion Ratio Plot on 802.11a Channel 100



Date: 22.AUG.2012 18:48:05

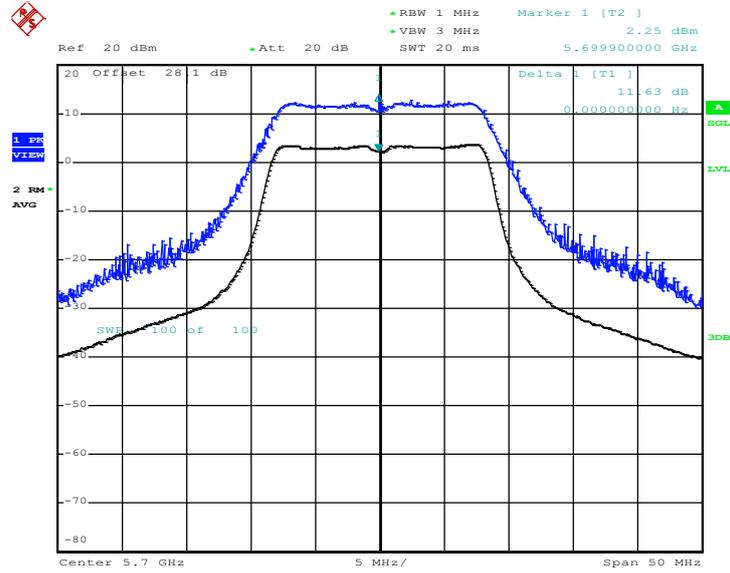
Peak Excursion Ratio Plot on 802.11a Channel 116



Date: 22.AUG.2012 18:51:56



Peak Excursion Ratio Plot on 802.11a Channel 140

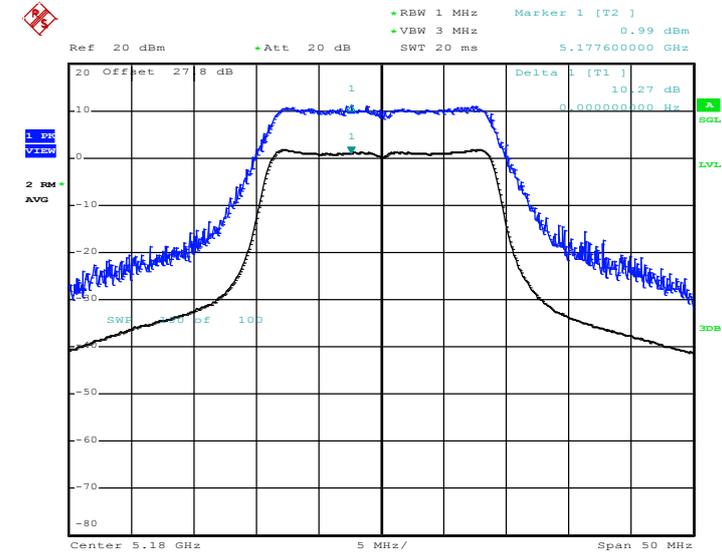


Date: 22.AUG.2012 18:56:06



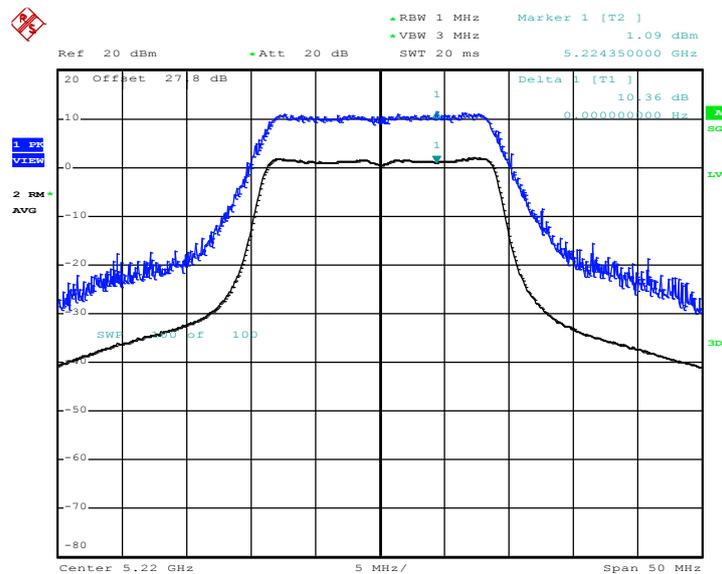
Test Mode :	802.11n HT20	Temperature :	24~26°C
Test Engineer :	Book Link	Relative Humidity :	45~49%

Peak Excursion Ratio Plot on 802.11n HT20 Channel 36



Date: 22.AUG.2012 19:20:25

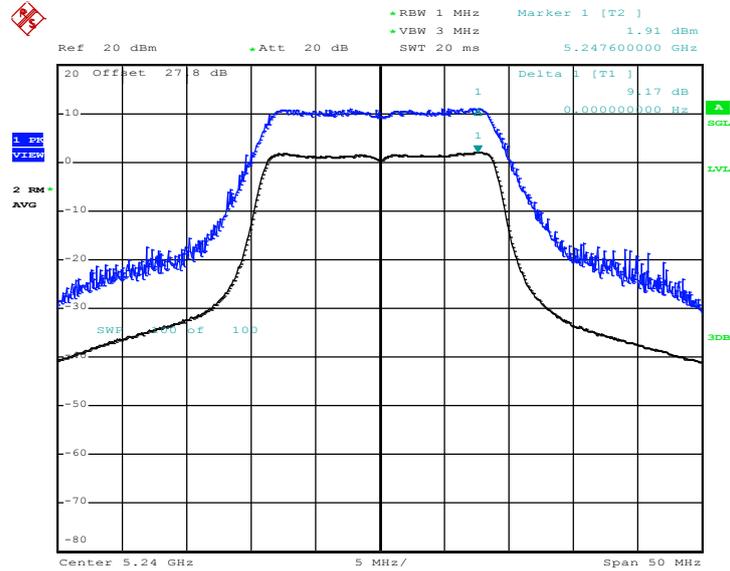
Peak Excursion Ratio Plot on 802.11n HT20 Channel 44



Date: 22.AUG.2012 19:25:05

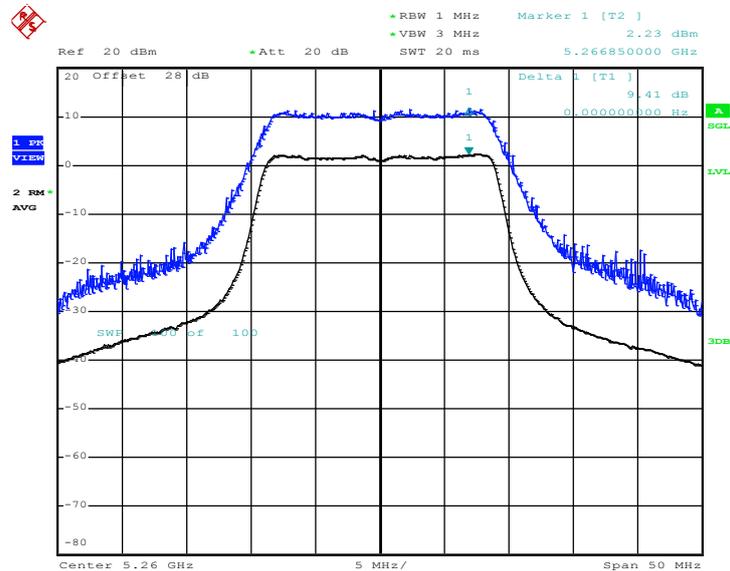


Peak Excursion Ratio Plot on 802.11n HT20 Channel 48



Date: 22.AUG.2012 19:28:04

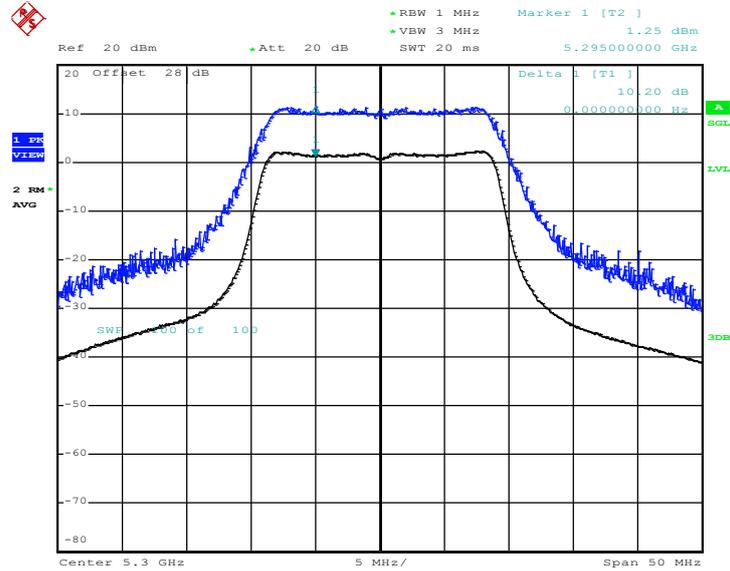
Peak Excursion Ratio Plot on 802.11n HT20 Channel 52



Date: 22.AUG.2012 19:08:23

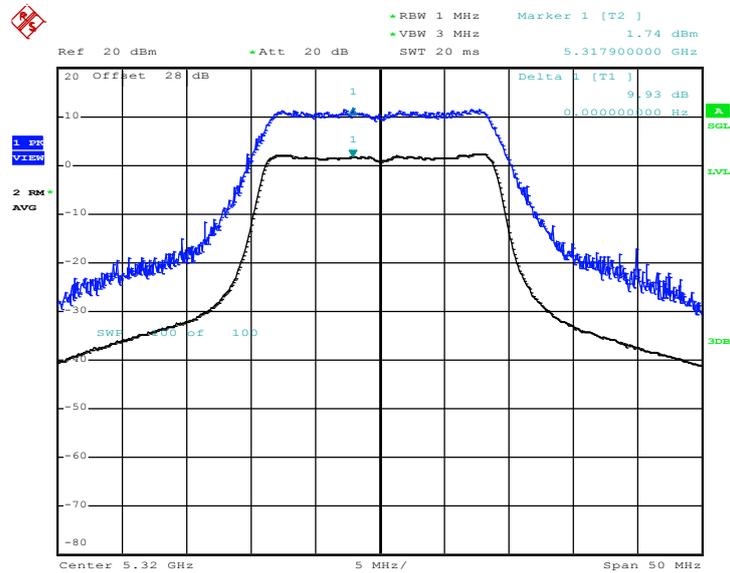


Peak Excursion Ratio Plot on 802.11n HT20 Channel 60



Date: 22.AUG.2012 19:11:10

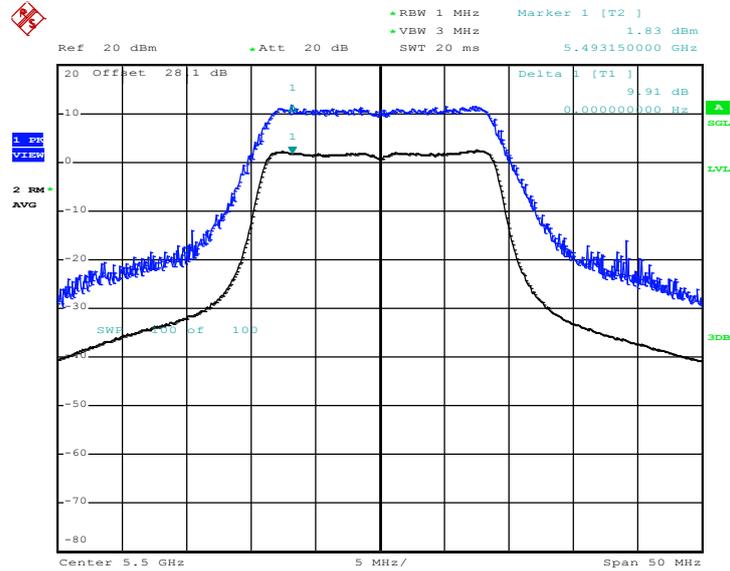
Peak Excursion Ratio Plot on 802.11n HT20 Channel 64



Date: 22.AUG.2012 19:15:22

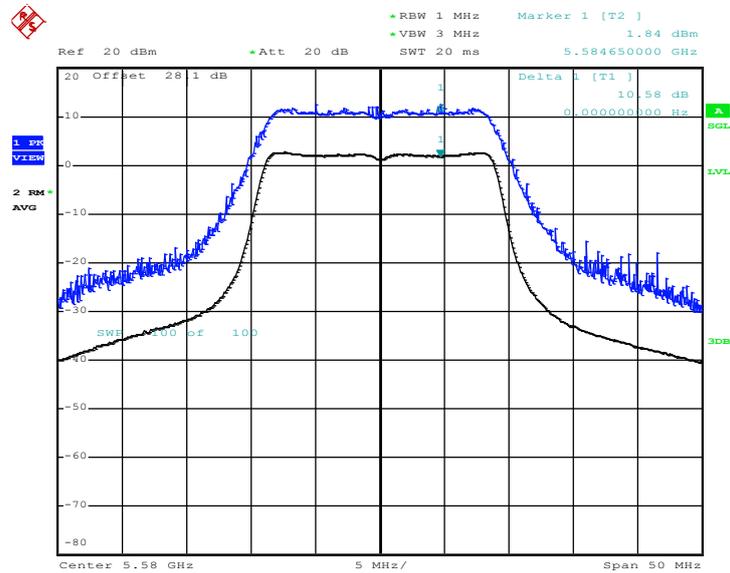


Peak Excursion Ratio Plot on 802.11n HT20 Channel 100



Date: 22.AUG.2012 19:05:37

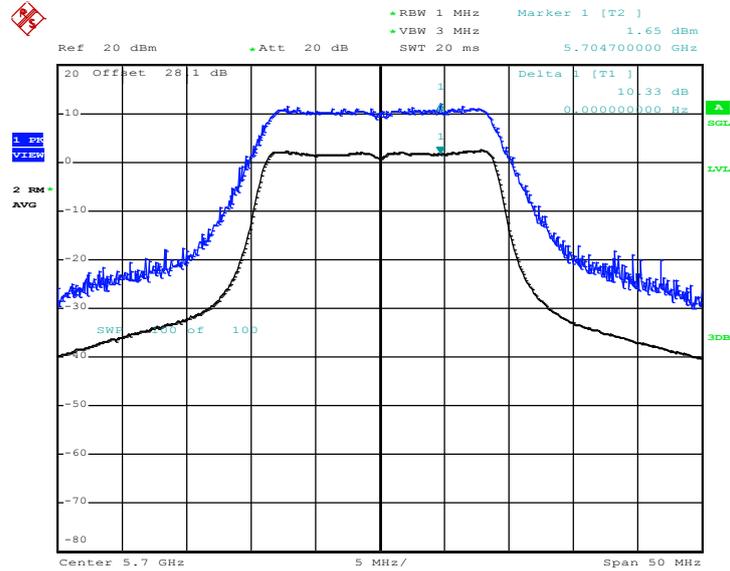
Peak Excursion Ratio Plot on 802.11n HT20 Channel 116



Date: 22.AUG.2012 19:02:52



Peak Excursion Ratio Plot on 802.11n HT20 Channel 140

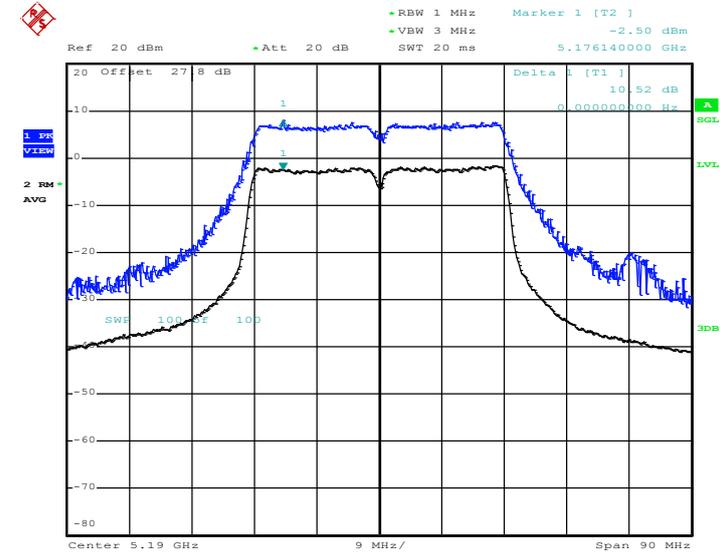


Date: 22.AUG.2012 18:59:41



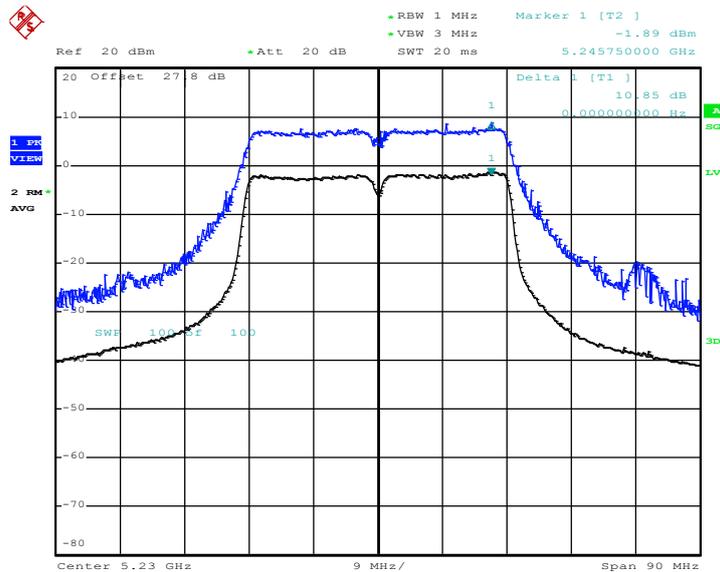
Test Mode :	802.11n HT40	Temperature :	24~26°C
Test Engineer :	Book Link	Relative Humidity :	45~49%

Peak Excursion Ratio Plot on 802.11n HT40 Channel 38



Date: 22.AUG.2012 19:34:10

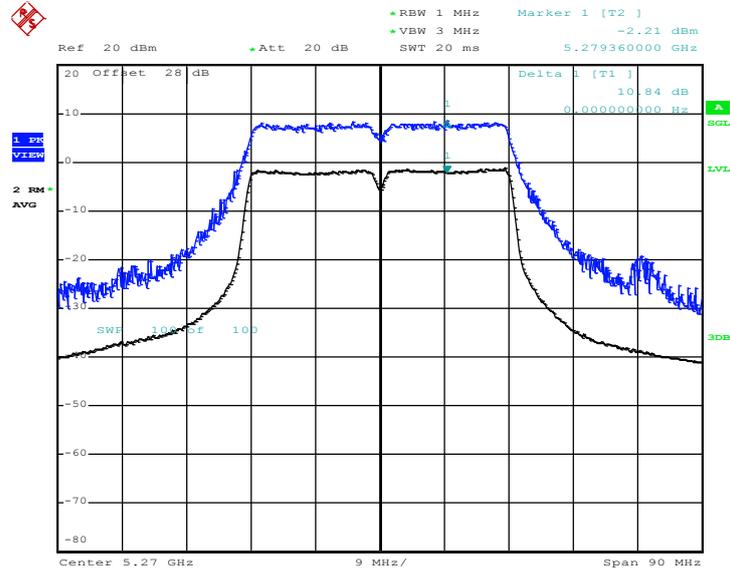
Peak Excursion Ratio Plot on 802.11n HT40 Channel 46



Date: 22.AUG.2012 19:39:33

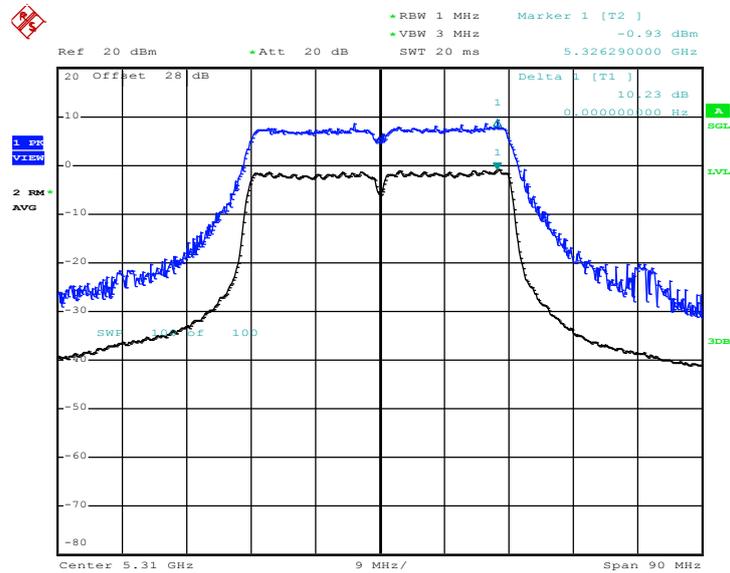


Peak Excursion Ratio Plot on 802.11n HT40 Channel 54



Date: 22.AUG.2012 19:42:34

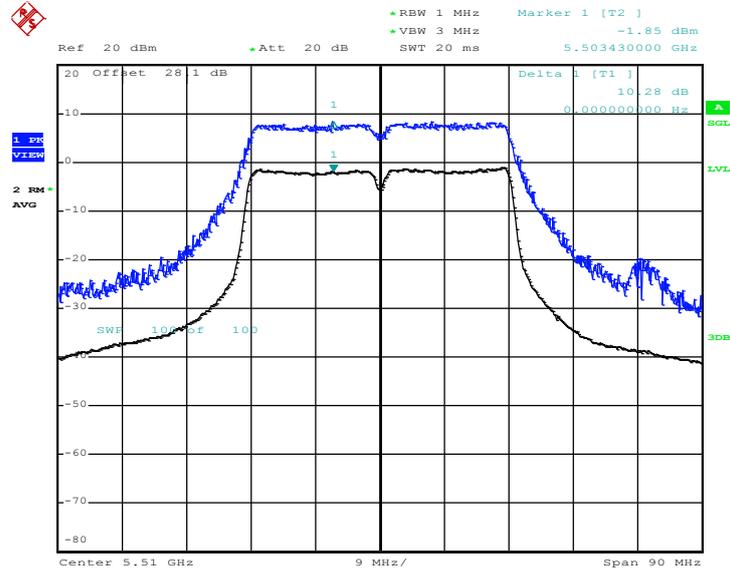
Peak Excursion Ratio Plot on 802.11n HT40 Channel 62



Date: 22.AUG.2012 19:45:32

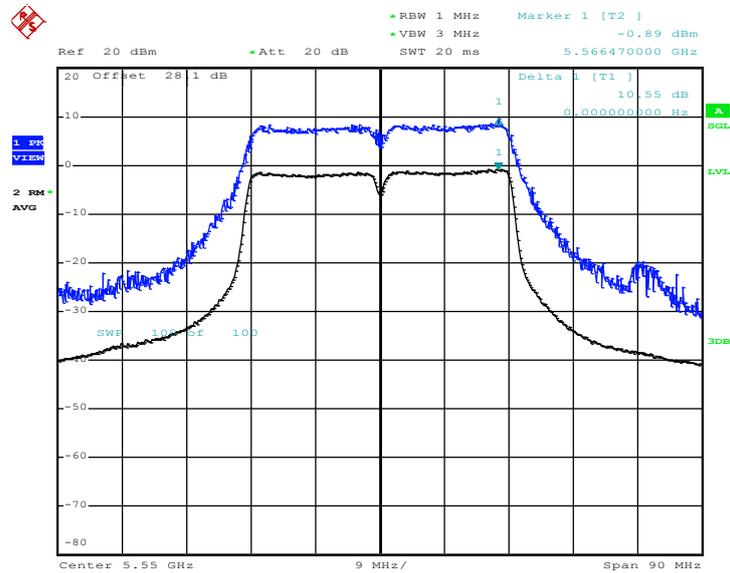


Peak Excursion Ratio Plot on 802.11n HT40 Channel 102



Date: 22.AUG.2012 19:48:38

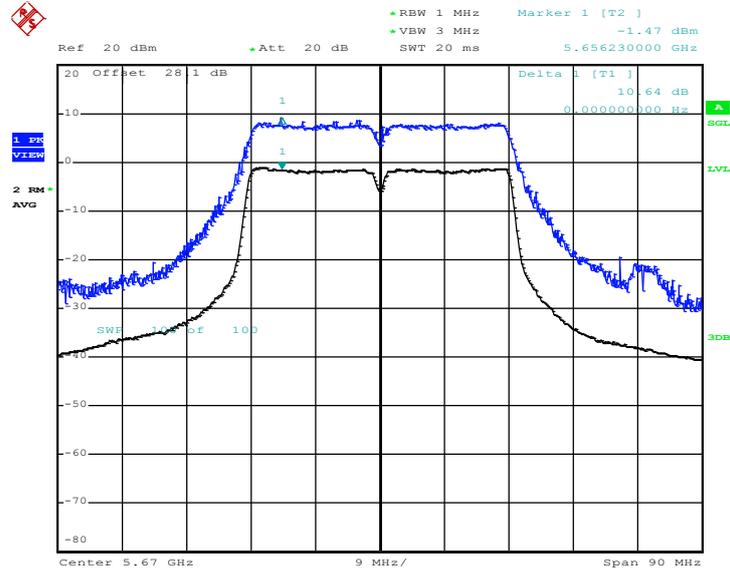
Peak Excursion Ratio Plot on 802.11n HT40 Channel 110



Date: 22.AUG.2012 19:51:12



Peak Excursion Ratio Plot on 802.11n HT40 Channel 134



Date: 22.AUG.2012 19:54:46

3.5 Unwanted Radiated Emission Measurement

This section as specified in FCC Part 15.407(b) is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement. The unwanted emissions shall comply with 15.407(b)(1) to (6), and restricted bands per FCC Part 15.205.

3.5.1 Limit of Unwanted Emissions

(1) For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of –27dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band.

For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.

(2) all comply with the general field strength limits set forth in § 15.209 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.

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

EIRP (dBm)	Field Strength at 3m (dBuV/m)
-17	78.3
- 27	68.3

3.5.2 Measuring Instruments

See list of measuring instruments of this test report.

3.5.3 Test Procedures

1. The testing follows the guidelines in fulfills ANSI C63.4-2003 and the guidelines in ANSI C63.10-2009 test site requirement and FCC KDB 789033 D01 General UNII Test Procedures v01r01.

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

- The setting follows the G) 5) of FCC KDB 789033.
- RBW = 1 MHz
- VBW ≥ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

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

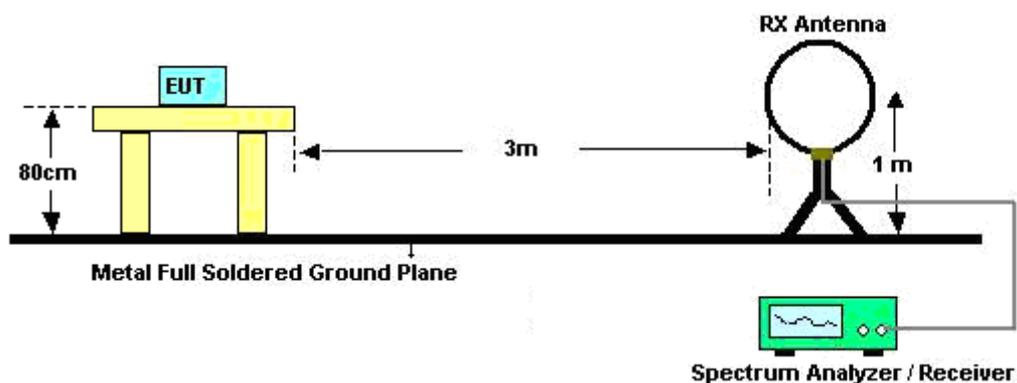
- The setting follows G) 6) of FCC KDB 789033.
- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- $VBW \geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

Band	Duty Cycle(%)	T(us)	1/T(KHz)	VBW Setting
802.11a	95.47	2070	0.48	1KHz
802.11n HT20	95.13	1920	0.52	1KHz
802.11n HT40	87.10	668	1.50	3KHz

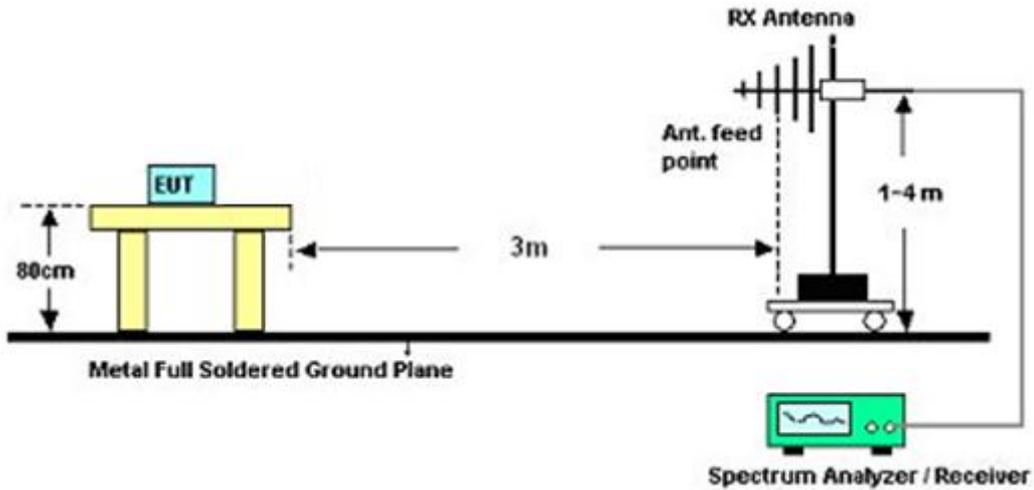
2. The EUT was placed on a rotatable table top 0.8 meter above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters 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.

3.5.4 Test Setup

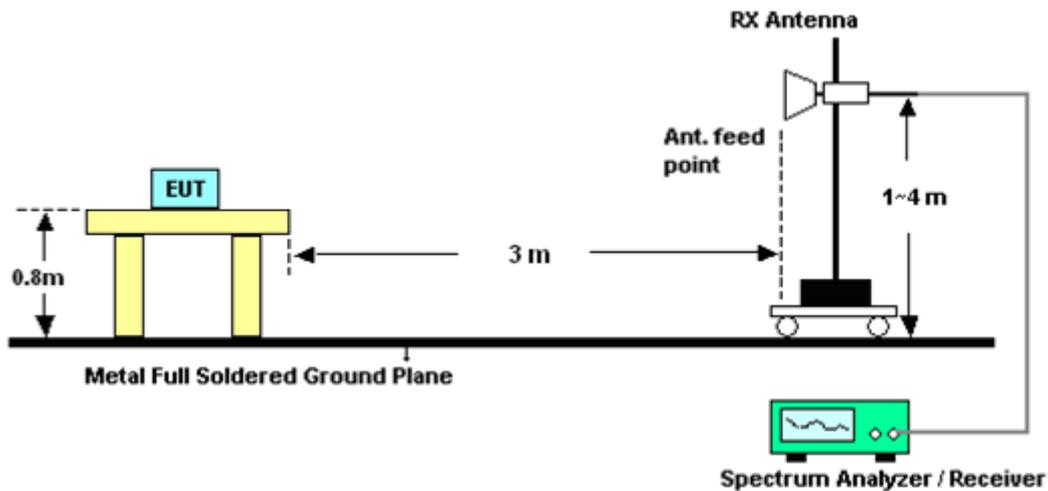
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.5.5 Test Results of Radiated 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 per 15.31(o) was not reported.



3.5.6 Test Result

3.5.6.1 Test Result of Radiated Band Edges

<Sample 1>

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5147.8	55.26	-18.74	74	49.26	34.45	6.69	35.14	100	61	Peak
5149.55	40.31	-13.69	54	34.31	34.45	6.69	35.14	100	61	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148.8	53.47	-20.53	74	47.47	34.45	6.69	35.14	103	294	Peak
5149.95	40.4	-13.6	54	34.4	34.45	6.69	35.14	103	294	Average

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5375.2	51.79	-22.21	74	45.18	34.67	6.85	34.91	100	58	Peak
5395.4	39.87	-14.13	54	33.22	34.7	6.86	34.91	100	58	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5365.2	52.63	-21.37	74	46.04	34.67	6.85	34.93	102	296	Peak
5355.45	40.51	-13.49	54	33.96	34.65	6.83	34.93	102	296	Average



Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5128.55	51.2	-22.8	74	45.26	34.43	6.68	35.17	120	72	Peak
5148.2	39.42	-14.58	54	33.42	34.45	6.69	35.14	120	72	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5114.1	51.13	-22.87	74	45.24	34.42	6.66	35.19	138	302	Peak
5144.95	39.48	-14.52	54	33.48	34.45	6.69	35.14	138	302	Average

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350.35	54.35	-19.65	74	47.8	34.65	6.83	34.93	120	66	Peak
5359.4	41.55	-12.45	54	34.98	34.65	6.85	34.93	120	66	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5352.1	55.42	-18.58	74	48.87	34.65	6.83	34.93	101	310	Peak
5350	42.14	-11.86	54	35.59	34.65	6.83	34.93	101	310	Average



Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5454.96	56.23	-17.77	74	49.39	34.75	6.92	34.83	102	69	Peak
5470	59.2	-9.1	68.3	52.34	34.77	6.92	34.83	102	69	Peak
5456.16	42.91	-11.09	54	36.07	34.75	6.92	34.83	102	69	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5457.6	55.57	-18.43	74	48.73	34.75	6.92	34.83	100	94	Peak
5470	56.95	-11.35	68.3	50.09	34.77	6.92	34.83	100	94	Peak
5455.04	43.12	-10.88	54	36.28	34.75	6.92	34.83	100	94	Average

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	60.21	-8.09	68.3	52.82	35.07	7.17	34.85	100	65	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	57.04	-11.26	68.3	49.65	35.07	7.17	34.85	181	3	Peak



Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5147.75	55.48	-18.52	74	49.48	34.45	6.69	35.14	100	63	Peak
5149.75	40.29	-13.71	54	34.29	34.45	6.69	35.14	100	63	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5149.8	55.94	-18.06	74	49.94	34.45	6.69	35.14	104	94	Peak
5149.9	41.15	-12.85	54	35.15	34.45	6.69	35.14	104	94	Average

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5368.9	51.86	-22.14	74	45.27	34.67	6.85	34.93	121	49	Peak
5355.75	39.78	-14.22	54	33.23	34.65	6.83	34.93	121	49	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5357.1	51.54	-22.46	74	44.97	34.65	6.85	34.93	139	302	Peak
5357.85	40.09	-13.91	54	33.52	34.65	6.85	34.93	139	302	Average



Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5134	50.61	-23.39	74	44.67	34.43	6.68	35.17	108	55	Peak
5147.55	39.29	-14.71	54	33.29	34.45	6.69	35.14	108	55	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5141.75	51.52	-22.48	74	45.55	34.45	6.69	35.17	127	301	Peak
5149.8	39.41	-14.59	54	33.41	34.45	6.69	35.14	127	301	Average

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5351.45	52.63	-21.37	74	46.08	34.65	6.83	34.93	132	51	Peak
5351.25	40.74	-13.26	54	34.19	34.65	6.83	34.93	132	51	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5351.45	54.93	-19.07	74	48.38	34.65	6.83	34.93	113	302	Peak
5350.4	42.04	-11.96	54	35.49	34.65	6.83	34.93	113	302	Average



Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5452.24	54.8	-19.2	74	47.96	34.75	6.92	34.83	102	65	Peak
5470	57.36	-10.94	68.3	50.5	34.77	6.92	34.83	102	65	Peak
5454.16	42.7	-11.3	54	35.86	34.75	6.92	34.83	102	65	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5456.16	53.22	-20.78	74	46.38	34.75	6.92	34.83	108	94	Peak
5470	54.48	-13.82	68.3	47.62	34.77	6.92	34.83	108	94	Peak
5459.6	41.71	-12.29	54	34.87	34.75	6.92	34.83	108	94	Average

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	63.75	-4.55	68.3	56.36	35.07	7.17	34.85	100	56	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	60.15	-8.15	68.3	52.76	35.07	7.17	34.85	116	97	Peak



<Sample 2>

Test Mode :	802.11n HT20 <Sample 2>	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	64.55	-3.75	68.3	57.16	35.07	7.17	34.85	100	341	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	59.42	-8.88	68.3	52.03	35.07	7.17	34.85	105	295	Peak



<Sample 1>

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	38	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5149.1	60.76	-13.24	74	54.76	34.45	6.69	35.14	100	53	Peak
5149.75	45.74	-8.26	54	39.74	34.45	6.69	35.14	100	53	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5149.8	60.21	-13.79	74	54.21	34.45	6.69	35.14	103	301	Peak
5149.65	45.3	-8.7	54	39.3	34.45	6.69	35.14	103	301	Average

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	46	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5384.4	51.66	-22.34	74	45.03	34.68	6.86	34.91	121	46	Peak
5367.05	40.31	-13.69	54	33.72	34.67	6.85	34.93	121	46	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5370	51.56	-22.44	74	44.97	34.67	6.85	34.93	127	302	Peak
5359.55	40.39	-13.61	54	33.82	34.65	6.85	34.93	127	302	Average



Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	54	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5116	50.9	-23.1	74	44.99	34.42	6.68	35.19	117	237	Peak
5147.6	39.74	-14.26	54	33.74	34.45	6.69	35.14	117	237	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5127.85	51.75	-22.25	74	45.81	34.43	6.68	35.17	103	293	Peak
5141.95	39.71	-14.29	54	33.74	34.45	6.69	35.17	103	293	Average

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	62	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5351.6	62.9	-11.1	74	56.35	34.65	6.83	34.93	107	56	Peak
5350	45.71	-8.29	54	39.16	34.65	6.83	34.93	107	56	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350.55	64.29	-9.71	74	57.74	34.65	6.83	34.93	114	289	Peak
5350	46.63	-7.37	54	40.08	34.65	6.83	34.93	114	289	Average



Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	102	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5460	58.65	-15.35	74	51.81	34.75	6.92	34.83	101	313	Peak
5470	62.38	-5.92	68.3	55.52	34.77	6.92	34.83	101	313	Peak
5460	44.63	-9.37	54	37.79	34.75	6.92	34.83	101	313	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5459.44	57.92	-16.08	74	51.08	34.75	6.92	34.83	108	105	Peak
5470	62.88	-5.42	68.3	56.02	34.77	6.92	34.83	108	105	Peak
5459.92	44.19	-9.81	54	37.35	34.75	6.92	34.83	108	105	Average

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	134	Relative Humidity :	51~52%
Test Engineer :	David Yang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	57.16	-11.14	68.3	49.77	35.07	7.17	34.85	110	300	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	51.97	-16.33	68.3	44.58	35.07	7.17	34.85	100	3	Peak

3.5.6.2 Test Result of Unwanted Radiated Emission (30MHz ~ 10th Harmonic)

<Sample 1>

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5180 MHz is fundamental signal which can be ignored. 2. 10360 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5180	85.76	-	-	79.7	34.47	6.71	35.12	100	61	Average
5180	95.62	-	-	89.56	34.47	6.71	35.12	100	61	Peak
10360	44.75	-23.55	68.3	52.98	37.72	9.71	55.66	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5180 MHz is fundamental signal which can be ignored. 2. 10360 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5180	87.11	-	-	81.05	34.47	6.71	35.12	103	294	Average
5180	97.42	-	-	91.36	34.47	6.71	35.12	103	294	Peak
10360	44.24	-24.06	68.3	52.47	37.72	9.71	55.66	100	0	Peak



Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	44	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5220 MHz is fundamental signal which can be ignored. 2. 10440 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5220	85.17	-	-	78.96	34.53	6.74	35.06	100	58	Average
5220	95.48	-	-	89.27	34.53	6.74	35.06	100	58	Peak
10440	43.98	-24.32	68.3	52.12	37.76	9.75	55.65	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	44	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5220 MHz is fundamental signal which can be ignored. 2. 10440 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5220	88.64	-	-	82.43	34.53	6.74	35.06	128	300	Average
5220	98.64	-	-	92.43	34.53	6.74	35.06	128	300	Peak
10440	44.48	-23.82	68.3	52.62	37.76	9.75	55.65	100	0	Peak



Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5240 MHz is fundamental signal which can be ignored. 2. 10480 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5240	84.92	-	-	78.71	34.53	6.74	35.06	100	58	Average
5240	94.72	-	-	88.51	34.53	6.74	35.06	100	58	Peak
10480	44.78	-23.52	68.3	52.84	37.79	9.78	55.63	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5240 MHz is fundamental signal which can be ignored. 2. 10480 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5240	87.87	-	-	81.62	34.55	6.76	35.06	102	296	Average
5240	97.66	-	-	91.41	34.55	6.76	35.06	102	296	Peak
10480	45.02	-23.28	68.3	53.08	37.79	9.78	55.63	100	0	Peak



Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5260 MHz is fundamental signal which can be ignored. 2. 10520 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5260	86.74	-	-	80.43	34.57	6.78	35.04	120	72	Average
5260	96.35	-	-	90.04	34.57	6.78	35.04	120	72	Peak
10520	45.7	-22.6	68.3	53.71	37.81	9.81	55.63	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5260 MHz is fundamental signal which can be ignored. 2. 10520 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5260	88.77	-	-	82.46	34.57	6.78	35.04	138	302	Average
5260	99.23	-	-	92.92	34.57	6.78	35.04	138	302	Peak
10520	46.58	-21.72	68.3	54.59	37.81	9.81	55.63	100	0	Peak



Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5300 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5300	86.64	-	-	80.27	34.58	6.8	35.01	118	70	Average
5300	96.71	-	-	90.34	34.58	6.8	35.01	118	70	Peak
10602	44.34	-29.66	74	52.25	37.84	9.85	55.6	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5300 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5300	88.49	-	-	82.07	34.6	6.8	34.98	100	301	Average
5300	98.45	-	-	92.03	34.6	6.8	34.98	100	301	Peak
10602	46.03	-27.97	74	53.94	37.84	9.85	55.6	100	0	Peak



Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5320 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5320	87.52	-	-	81.05	34.62	6.81	34.96	120	66	Average
5320	97.33	-	-	90.86	34.62	6.81	34.96	120	66	Peak
10640	45.85	-28.15	74	53.7	37.86	9.88	55.59	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5320 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5320	88.52	-	-	82.07	34.62	6.81	34.98	101	310	Average
5320	98.5	-	-	92.05	34.62	6.81	34.98	101	310	Peak
10640	46.19	-27.81	74	54.04	37.86	9.88	55.59	100	0	Peak



Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5500 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5500	93.39	-	-	86.44	34.8	6.95	34.8	102	69	Average
5500	103.05	-	-	96.1	34.8	6.95	34.8	102	69	Peak
11000	45.54	-28.46	74	52.92	38	10.11	55.49	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5500 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5500	91.8	-	-	84.85	34.8	6.95	34.8	100	94	Average
5500	102.54	-	-	95.59	34.8	6.95	34.8	100	94	Peak
11000	45.66	-28.34	74	53.04	38	10.11	55.49	100	0	Peak



Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	116	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5580 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5580	95.15	-	-	88.07	34.88	7.02	34.82	101	69	Average
5580	106.14	-	-	99.06	34.88	7.02	34.82	101	69	Peak
11160	44.66	-29.34	74	51.72	38.17	10.16	55.39	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	116	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5580 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5580	93.52	-	-	86.44	34.88	7.02	34.82	109	81	Average
5580	103.7	-	-	96.62	34.88	7.02	34.82	109	81	Peak
11160	46.07	-27.93	74	53.13	38.17	10.16	55.39	100	0	Peak



Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5700 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5700	96.95	-	-	89.61	35.03	7.15	34.84	100	65	Average
5700	106.1	-	-	98.76	35.03	7.15	34.84	100	65	Peak
11400	45.15	-28.85	74	51.78	38.4	10.23	55.26	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5700 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5700	93.18	-	-	85.84	35.03	7.15	34.84	181	3	Average
5700	103.15	-	-	95.81	35.03	7.15	34.84	181	3	Peak
11400	44.9	-29.1	74	51.53	38.4	10.23	55.26	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5180 MHz is fundamental signal which can be ignored. 2. 10360 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5180	85.15	-	-	79.08	34.48	6.71	35.12	100	63	Average
5180	95	-	-	88.93	34.48	6.71	35.12	100	63	Peak
10360	45.99	-22.31	68.3	54.22	37.72	9.71	55.66	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5180 MHz is fundamental signal which can be ignored. 2. 10360 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5180	86.98	-	-	80.91	34.48	6.71	35.12	104	94	Average
5180	97.07	-	-	91	34.48	6.71	35.12	104	94	Peak
10360	45.42	-22.88	68.3	53.65	37.72	9.71	55.66	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	44	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5220 MHz is fundamental signal which can be ignored. 2. 10440 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5220	84.64	-	-	78.47	34.52	6.74	35.09	109	57	Average
5220	94.51	-	-	88.34	34.52	6.74	35.09	109	57	Peak
10440	44.69	-23.61	68.3	52.83	37.76	9.75	55.65	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	44	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5220 MHz is fundamental signal which can be ignored. 2. 10440 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5220	87.12	-	-	80.95	34.52	6.74	35.09	115	299	Average
5220	97.12	-	-	90.95	34.52	6.74	35.09	115	299	Peak
10440	45.65	-22.65	68.3	53.79	37.76	9.75	55.65	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5240 MHz is fundamental signal which can be ignored. 2. 10480 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5240	84.5	-	-	78.27	34.53	6.76	35.06	121	49	Average
5240	94.26	-	-	88.03	34.53	6.76	35.06	121	49	Peak
10480	45.31	-22.99	68.3	53.37	37.79	9.78	55.63	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5240 MHz is fundamental signal which can be ignored. 2. 10480 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5240	87.59	-	-	81.36	34.53	6.76	35.06	139	302	Average
5240	97.68	-	-	91.45	34.53	6.76	35.06	139	302	Peak
10480	45.38	-22.92	68.3	53.44	37.79	9.78	55.63	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5260 MHz is fundamental signal which can be ignored. 2. 10524 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5260	85.35	-	-	79.04	34.57	6.78	35.04	108	55	Average
5260	95.25	-	-	88.94	34.57	6.78	35.04	108	55	Peak
10524	45.34	-22.96	68.3	53.35	37.81	9.81	55.63	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5260 MHz is fundamental signal which can be ignored. 2. 10521 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5260	88.23	-	-	81.92	34.57	6.78	35.04	127	301	Average
5260	97.87	-	-	91.56	34.57	6.78	35.04	127	301	Peak
10521	45.28	-23.02	68.3	53.29	37.81	9.81	55.63	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5300 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5300	83.78	-	-	77.36	34.6	6.8	34.98	120	46	Average
5300	94.51	-	-	88.09	34.6	6.8	34.98	120	46	Peak
10602	44.99	-29.01	74	52.9	37.84	9.85	55.6	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5300 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5300	87.38	-	-	80.96	34.6	6.8	34.98	113	300	Average
5300	97.53	-	-	91.11	34.6	6.8	34.98	113	300	Peak
10602	45.48	-28.52	74	53.39	37.84	9.85	55.6	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5320 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5320	85.38	-	-	78.93	34.62	6.81	34.98	132	51	Average
5320	95.58	-	-	89.13	34.62	6.81	34.98	132	51	Peak
10644	46.52	-27.48	74	54.37	37.86	9.88	55.59	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5320 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5320	88.07	-	-	81.62	34.62	6.81	34.98	113	302	Average
5320	98.11	-	-	91.66	34.62	6.81	34.98	113	302	Peak
10644	45.56	-28.44	74	53.41	37.86	9.88	55.59	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5500 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5500	93.97	-	-	87.02	34.8	6.95	34.8	102	65	Average
5500	103.32	-	-	96.37	34.8	6.95	34.8	102	65	Peak
10998	45.73	-28.27	74	53.11	38	10.11	55.49	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5500 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5500	91.06	-	-	84.11	34.8	6.95	34.8	108	94	Average
5500	101.2	-	-	94.25	34.8	6.95	34.8	108	94	Peak
11004	45.82	-28.18	74	53.2	38	10.11	55.49	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	116	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5580 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5580	94.13	-	-	87.05	34.88	7.02	34.82	101	59	Average
5580	104.09	-	-	97.01	34.88	7.02	34.82	101	59	Peak
11163	46.14	-27.86	74	53.2	38.17	10.16	55.39	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	116	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5580 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5580	93.01	-	-	85.93	34.88	7.02	34.82	108	97	Average
5580	103.01	-	-	95.93	34.88	7.02	34.82	108	97	Peak
11157	46.25	-27.75	74	53.34	38.15	10.16	55.4	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5700 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
32.16	22.67	-17.33	40	35.15	18.44	0.72	31.64	131	142	Peak
47.01	17.05	-22.95	40	38.59	9.15	0.79	31.48	-	-	Peak
221.43	17.72	-28.28	46	37.74	9.39	1.54	30.95	-	-	Peak
381.2	16.55	-29.45	46	30.36	15.23	1.97	31.01	-	-	Peak
580	21.35	-24.65	46	29.84	19.8	2.38	30.67	-	-	Peak
797.7	24.66	-21.34	46	29.61	22.04	2.83	29.82	-	-	Peak
5700	96.25	-	-	88.91	35.03	7.15	34.84	100	56	Average
5700	106.09	-	-	98.75	35.03	7.15	34.84	100	56	Peak
11400	45.72	-28.28	74	52.35	38.4	10.23	55.26	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5700 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
31.89	34.53	-5.47	40	47.01	18.44	0.72	31.64	100	310	Peak
44.85	29.65	-10.35	40	50.01	10.4	0.77	31.53	-	-	Peak
122.88	15.01	-28.49	43.5	33.35	11.8	1.21	31.35	-	-	Peak
507.2	19.23	-26.77	46	29.48	18.17	2.24	30.66	-	-	Peak
629	22.54	-23.46	46	29.67	20.59	2.52	30.24	-	-	Peak
827.1	24.74	-21.26	46	28.64	22.96	2.88	29.74	-	-	Peak
5700	94.57	-	-	87.23	35.03	7.15	34.84	116	97	Average
5700	103.9	-	-	96.56	35.03	7.15	34.84	116	97	Peak
11400	45.87	-28.13	74	52.5	38.4	10.23	55.26	100	0	Peak



<Sample 2>

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5700 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
32.16	20.62	-19.38	40	33.1	18.44	0.72	31.64	100	31	Peak
46.47	15.22	-24.78	40	36.37	9.57	0.78	31.5	-	-	Peak
209.28	16.34	-27.16	43.5	36.83	9.19	1.5	31.18	-	-	Peak
595.4	21.76	-24.24	46	29.96	19.85	2.41	30.46	-	-	Peak
741.7	24	-22	46	29.14	22.32	2.73	30.19	-	-	Peak
821.5	25.16	-20.84	46	29.36	22.69	2.87	29.76	-	-	Peak
5700	94.77	-	-	87.43	35.03	7.15	34.84	100	341	Average
5700	104.57	-	-	97.23	35.03	7.15	34.84	100	341	Peak
11400	46.44	-27.56	74	53.07	38.4	10.23	55.26	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5700 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
33.51	32.57	-7.43	40	46.39	17.08	0.73	31.63	100	133	Peak
46.2	28.42	-11.58	40	49.57	9.57	0.78	31.5	-	-	Peak
111.27	15.38	-28.12	43.5	34.36	11.4	1.15	31.53	-	-	Peak
638.8	22.28	-23.72	46	29.3	20.6	2.55	30.17	-	-	Peak
731.9	23.43	-22.57	46	28.86	22.06	2.71	30.2	-	-	Peak
826.4	25.05	-20.95	46	29	22.92	2.88	29.75	-	-	Peak
5700	92.54	-	-	85.2	35.03	7.15	34.84	105	295	Average
5700	101.59	-	-	94.25	35.03	7.15	34.84	105	295	Peak
11400	45.86	-28.14	74	52.49	38.4	10.23	55.26	100	0	Peak



<Sample 1>

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	38	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5190 MHz is fundamental signal which can be ignored. 2. 10383 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5190	82.1	-	-	76.01	34.48	6.73	35.12	100	53	Average
5190	91.75	-	-	85.66	34.48	6.73	35.12	100	53	Peak
10383	45.74	-22.56	68.3	53.94	37.73	9.73	55.66	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	38	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5190 MHz is fundamental signal which can be ignored. 2. 10380 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5190	84.31	-	-	78.22	34.48	6.73	35.12	103	301	Average
5190	93.92	-	-	87.83	34.48	6.73	35.12	103	301	Peak
10380	46	-22.3	68.3	54.2	37.73	9.73	55.66	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	46	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5230 MHz is fundamental signal which can be ignored. 2. 10461 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5230	82.12	-	-	75.91	34.53	6.74	35.06	121	46	Average
5230	91.68	-	-	85.47	34.53	6.74	35.06	121	46	Peak
10461	46.25	-22.05	68.3	54.35	37.78	9.76	55.64	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	46	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5230 MHz is fundamental signal which can be ignored. 2. 10458 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5230	84.59	-	-	78.38	34.53	6.74	35.06	127	302	Average
5230	93.88	-	-	87.67	34.53	6.74	35.06	127	302	Peak
10458	45.06	-23.24	68.3	53.17	37.77	9.76	55.64	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	54	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5270 MHz is fundamental signal which can be ignored. 2. 10539 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5270	82.51	-	-	76.2	34.57	6.78	35.04	117	237	Average
5270	92.4	-	-	86.06	34.57	6.78	35.01	117	237	Peak
10539	46.15	-22.15	68.3	54.15	37.81	9.81	55.62	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	54	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5270 MHz is fundamental signal which can be ignored. 2. 10545 MHz is not within a restricted band, and its limit line is 68.3dBuV/m.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5270	84.65	-	-	78.34	34.57	6.78	35.04	103	293	Average
5270	94.16	-	-	87.85	34.57	6.78	35.04	103	293	Peak
10545	45.96	-22.34	68.3	53.95	37.81	9.82	55.62	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	62	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5310 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5310	83.77	-	-	77.32	34.62	6.81	34.98	107	56	Average
5310	93.56	-	-	87.11	34.62	6.81	34.98	107	56	Peak
10620	45.36	-28.64	74	53.24	37.85	9.87	55.6	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	62	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5310 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5310	84.56	-	-	78.11	34.62	6.81	34.98	114	289	Average
5310	94.66	-	-	88.21	34.62	6.81	34.98	114	289	Peak
10620	45.06	-28.94	74	52.94	37.85	9.87	55.6	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	102	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5510 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5510	89.46	-	-	82.52	34.8	6.95	34.81	101	313	Average
5510	99.63	-	-	92.69	34.8	6.95	34.81	101	313	Peak
11022	45.15	-28.85	74	52.47	38.03	10.12	55.47	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	102	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5510 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5510	89.17	-	-	82.23	34.8	6.95	34.81	108	105	Average
5510	99.2	-	-	92.24	34.82	6.95	34.81	108	105	Peak
11019	46.26	-27.74	74	53.61	38.02	10.11	55.48	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	110	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5550 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5550	90.73	-	-	83.68	34.86	7	34.81	101	314	Average
5550	100.98	-	-	93.93	34.86	7	34.81	101	314	Peak
11103	46.13	-27.87	74	53.32	38.1	10.14	55.43	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	110	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5550 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5550	90.18	-	-	83.13	34.86	7	34.81	109	89	Average
5550	100.41	-	-	93.36	34.86	7	34.81	109	89	Peak
11097	46.19	-27.81	74	53.38	38.1	10.14	55.43	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	134	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Horizontal
Remark :	1. 5670 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5670	92.89	-	-	85.59	35.01	7.12	34.83	110	300	Average
5670	102.85	-	-	95.55	35.01	7.12	34.83	110	300	Peak
11340	45.84	-28.16	74	52.59	38.33	10.22	55.3	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	134	Relative Humidity :	51~52%
Test Engineer :	David Yang	Polarization :	Vertical
Remark :	1. 5670 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5670	89.61	-	-	82.31	35.01	7.12	34.83	100	3	Average
5670	99.98	-	-	92.7	35.01	7.1	34.83	100	3	Peak
11340	45.86	-28.14	74	52.61	38.33	10.22	55.3	100	0	Peak

3.6 AC Conducted Emission Measurement

3.6.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted 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.

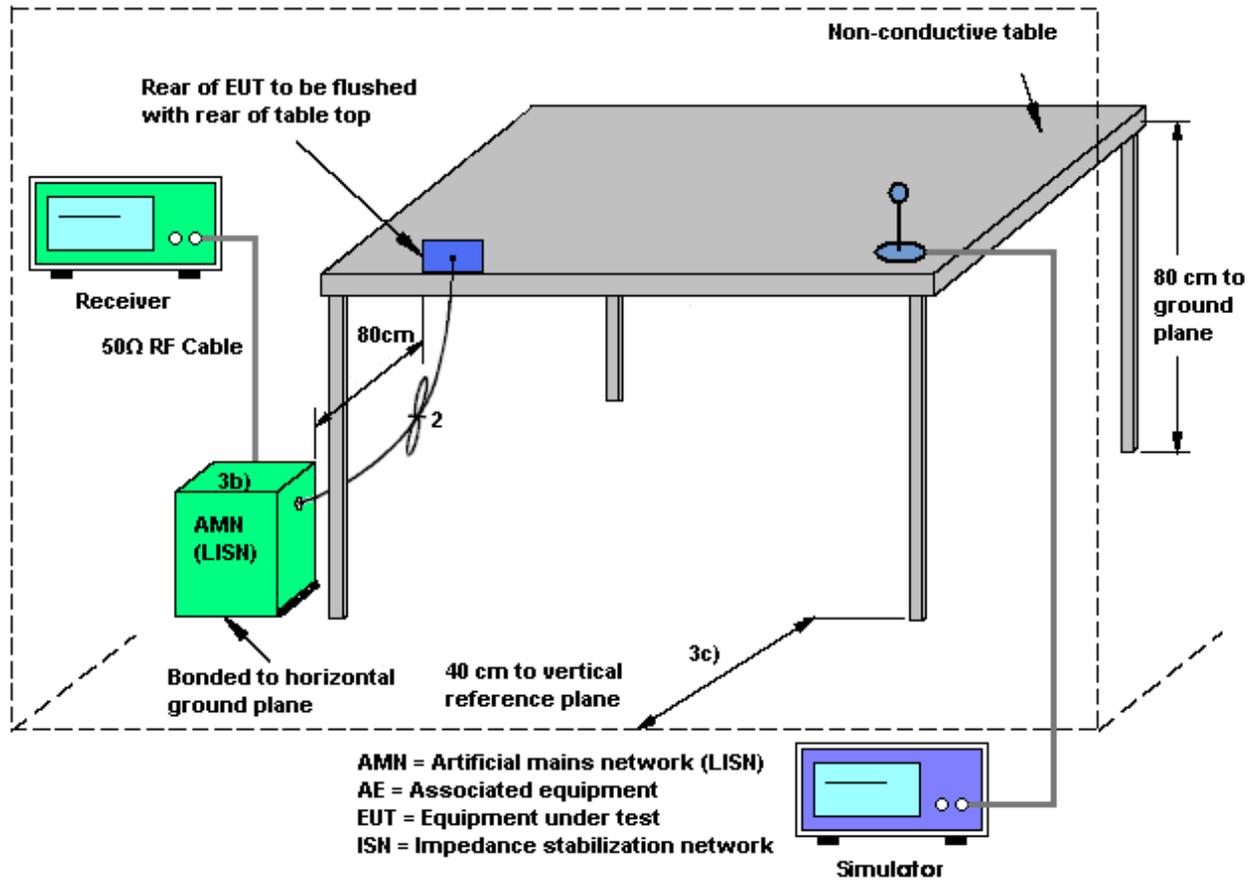
3.6.2 Measuring Instruments

See list of measuring instruments of this test report.

3.6.3 Test Procedures

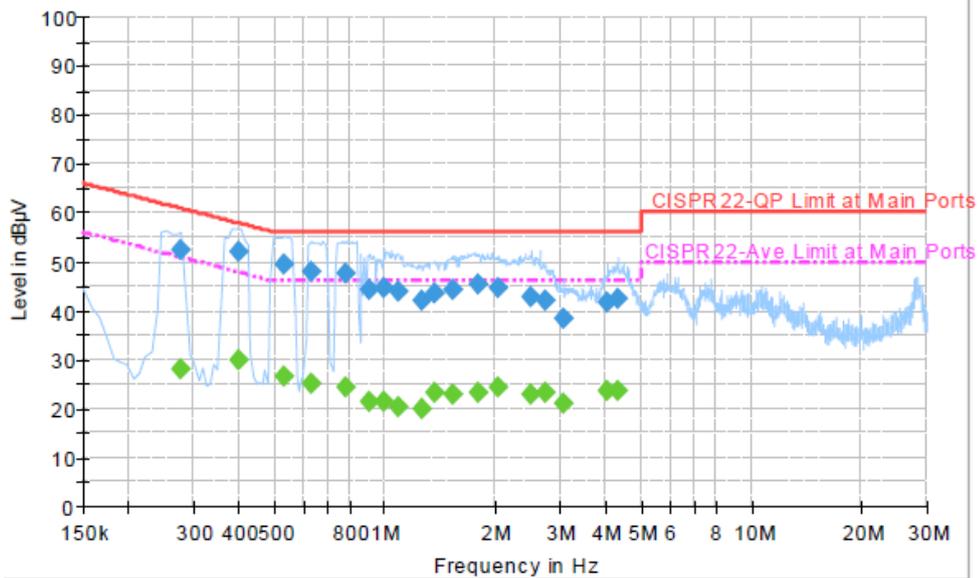
1. The testing follows the guidelines in ANSI C63.4-2003 and ANSI C63.10-2009 test site requirement.
2. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
3. Connect EUT to the power mains through a line impedance stabilization network (LISN).
4. All the support units are connecting to the other LISN.
5. The LISN provides 50 ohm coupling impedance for the measuring instrument.
6. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
7. Both sides of AC line were checked for maximum conducted interference.
8. The frequency range from 150 kHz to 30 MHz was searched.
9. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

Test Mode :	Mode 2	Temperature :	21~22°C
Test Engineer :	Kai-Chun Chu	Relative Humidity :	49~50%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 Idle + Bluetooth Link + WLAN (5G) Link + GPS Rx + Earphone 1 + USB Cable 1 (Charging from Adapter 5) for Sample 2		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

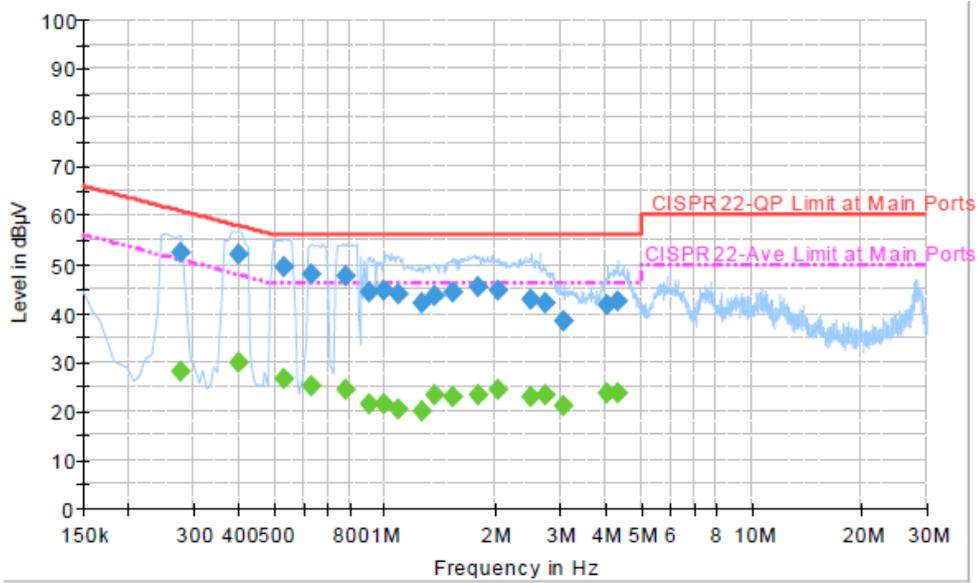


Final Result : QuasiPeak

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.278000	52.3	Off	L1	19.4	8.6	60.9
0.398000	52.0	Off	L1	19.4	5.9	57.9
0.534000	49.5	Off	L1	19.4	6.5	56.0
0.630000	48.1	Off	L1	19.5	7.9	56.0
0.782000	47.6	Off	L1	19.4	8.4	56.0
0.910000	44.1	Off	L1	19.4	11.9	56.0
0.990000	44.7	Off	L1	19.4	11.3	56.0
1.094000	44.0	Off	L1	19.4	12.0	56.0
1.262000	42.1	Off	L1	19.4	13.9	56.0
1.366000	43.4	Off	L1	19.4	12.6	56.0
1.526000	44.3	Off	L1	19.4	11.7	56.0
1.806000	45.4	Off	L1	19.6	10.6	56.0
2.030000	44.6	Off	L1	19.5	11.4	56.0
2.510000	42.9	Off	L1	19.6	13.1	56.0
2.734000	42.0	Off	L1	19.6	14.0	56.0
3.070000	38.3	Off	L1	19.6	17.7	56.0
4.038000	41.7	Off	L1	19.6	14.3	56.0
4.318000	42.3	Off	L1	19.6	13.7	56.0



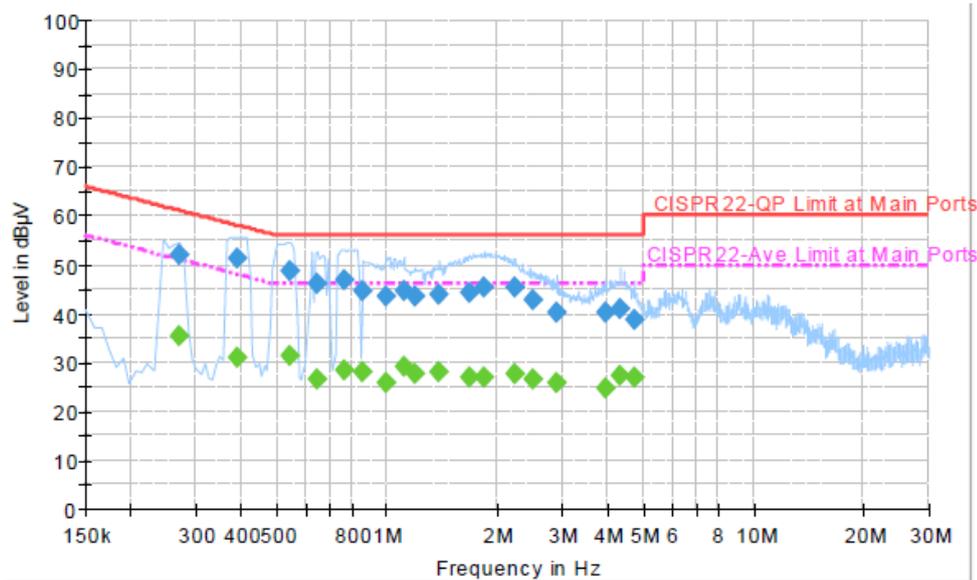
Test Mode :	Mode 2	Temperature :	21~22°C
Test Engineer :	Kai-Chun Chu	Relative Humidity :	49~50%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 Idle + Bluetooth Link + WLAN (5G) Link + GPS Rx + Earphone 1 + USB Cable 1 (Charging from Adapter 5) for Sample 2		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.278000	27.9	Off	L1	19.4	23.0	50.9
0.398000	30.0	Off	L1	19.4	17.9	47.9
0.534000	26.8	Off	L1	19.4	19.2	46.0
0.630000	25.0	Off	L1	19.5	21.0	46.0
0.782000	24.3	Off	L1	19.4	21.7	46.0
0.910000	21.5	Off	L1	19.4	24.5	46.0
0.990000	21.5	Off	L1	19.4	24.5	46.0
1.094000	20.4	Off	L1	19.4	25.6	46.0
1.262000	19.9	Off	L1	19.4	26.1	46.0
1.366000	23.2	Off	L1	19.4	22.8	46.0
1.526000	23.0	Off	L1	19.4	23.0	46.0
1.806000	23.3	Off	L1	19.6	22.7	46.0
2.030000	24.2	Off	L1	19.5	21.8	46.0
2.510000	22.7	Off	L1	19.6	23.3	46.0
2.734000	23.1	Off	L1	19.6	22.9	46.0
3.070000	21.2	Off	L1	19.6	24.8	46.0
4.038000	23.6	Off	L1	19.6	22.4	46.0
4.318000	23.8	Off	L1	19.6	22.2	46.0

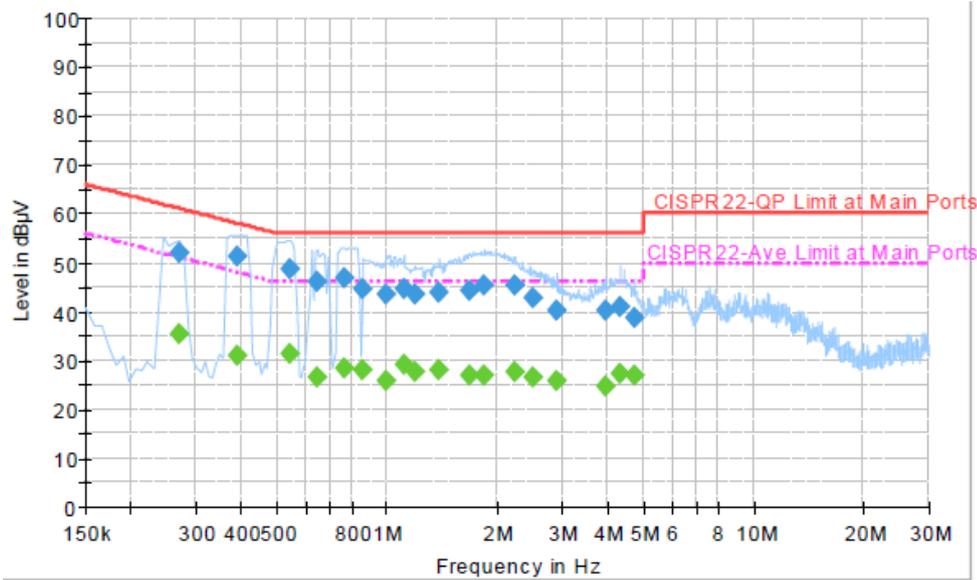
Test Mode :	Mode 2	Temperature :	21~22°C
Test Engineer :	Kai-Chun Chu	Relative Humidity :	49~50%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Link + WLAN (5G) Link + GPS Rx + Earphone 1 + USB Cable 1 (Charging from Adapter 5) for Sample 2		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result : QuasiPeak

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.270000	52.0	Off	N	19.4	9.1	61.1
0.390000	51.2	Off	N	19.3	6.9	58.1
0.542000	48.6	Off	N	19.4	7.4	56.0
0.646000	46.2	Off	N	19.4	9.8	56.0
0.766000	46.7	Off	N	19.4	9.3	56.0
0.862000	44.6	Off	N	19.4	11.4	56.0
0.990000	43.6	Off	N	19.5	12.4	56.0
1.110000	44.7	Off	N	19.4	11.3	56.0
1.190000	43.4	Off	N	19.5	12.6	56.0
1.390000	43.8	Off	N	19.5	12.2	56.0
1.670000	44.1	Off	N	19.5	11.9	56.0
1.838000	45.3	Off	N	19.6	10.7	56.0
2.222000	45.2	Off	N	19.6	10.8	56.0
2.502000	42.7	Off	N	19.6	13.3	56.0
2.918000	40.4	Off	N	19.6	15.6	56.0
3.950000	40.1	Off	N	19.6	15.9	56.0
4.310000	40.9	Off	N	19.6	15.1	56.0
4.726000	38.7	Off	N	19.7	17.3	56.0

Test Mode :	Mode 2	Temperature :	21~22°C
Test Engineer :	Kai-Chun Chu	Relative Humidity :	49~50%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Link + WLAN (5G) Link + GPS Rx + Earphone 1 + USB Cable 1 (Charging from Adapter 5) for Sample 2		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.270000	35.5	Off	N	19.4	15.6	51.1
0.390000	31.0	Off	N	19.3	17.1	48.1
0.542000	31.5	Off	N	19.4	14.5	46.0
0.646000	26.5	Off	N	19.4	19.5	46.0
0.766000	28.2	Off	N	19.4	17.8	46.0
0.862000	27.9	Off	N	19.4	18.1	46.0
0.990000	25.7	Off	N	19.5	20.3	46.0
1.110000	29.3	Off	N	19.4	16.7	46.0
1.190000	27.7	Off	N	19.5	18.3	46.0
1.390000	28.1	Off	N	19.5	17.9	46.0
1.670000	27.1	Off	N	19.5	18.9	46.0
1.838000	26.9	Off	N	19.6	19.1	46.0
2.222000	27.6	Off	N	19.6	18.4	46.0
2.502000	26.6	Off	N	19.6	19.4	46.0
2.918000	25.7	Off	N	19.6	20.3	46.0
3.950000	24.8	Off	N	19.6	21.2	46.0
4.310000	27.1	Off	N	19.6	18.9	46.0
4.726000	26.9	Off	N	19.7	19.1	46.0



3.7 Automatically Discontinue Transmission

3.7.1 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.

3.7.2 Measuring Instruments

See list of measuring instruments of this test report.

3.7.3 Test Result of Automatically Discontinue Transmission

During no any information transmission, 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.



3.8 Antenna Requirements

3.8.1 Standard Applicable

According to FCC 47 CFR Section 15.407(a)(1)(2), 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.

3.8.2 Antenna Connected Construction

Non-standard connector used.

3.8.3 Antenna Gain

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



4 List of Measuring Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100055	9kHz~40GHz	Jun. 06, 2012	Aug. 21, 2012~ Aug. 22, 2012	Jun. 05, 2013	Conducted (TH02-HY)
Power Meter	Anritsu	ML2495A	0932001	N/A	Sep. 18, 2011	Aug. 21, 2012~ Aug. 22, 2012	Sep. 17, 2012	Conducted (TH02-HY)
Power Sensor	Anritsu	MA2411B	0846202	N/A	Sep. 18, 2011	Aug. 21, 2012~ Aug. 22, 2012	Sep. 17, 2012	Conducted (TH02-HY)
EMI Test Receiver	R&S	ESCS 30	100356	9KHz ~ 2.75GHz	Oct. 27, 2011	Aug. 26, 2012	Oct. 26, 2012	Conduction (CO05-HY)
Two-LISN	R&S	ENV216	11-100081	9KHz ~ 30MHz	Dec. 09, 2011	Aug. 26, 2012	Dec. 08, 2012	Conduction (CO05-HY)
Two-LISN	R&S	ENV216	11-100080	9KHz ~ 30MHz	Dec. 06, 2011	Aug. 26, 2012	Dec. 05, 2012	Conduction (CO05-HY)
AC Power Source	APC	APC-1000W	N/A	N/A	N/A	Aug. 26, 2012	N/A	Conduction (CO05-HY)
System Simulator	R&S	CMU200	117995	N/A	Jul. 28, 2011	Aug. 26, 2012	Jul. 27, 2013	Conduction (CO05-HY)
GPS Station	Pendulum	GSG-54	N/A	N/A	N/A	Aug. 26, 2012	N/A	Conduction (CO05-HY)
Spectrum Analyzer	R&S	ESU26	100390	20Hz ~ 26.5GHz	Dec. 22, 2011	Sep. 04, 2012~ Sep. 06, 2012	Dec. 21, 2012	Radiation (03CH05-HY)
Bilog Antenna	SCHAFFNER	CBL6111C	2725	30MHz ~ 2GHz	Oct. 22, 2011	Sep. 04, 2012~ Sep. 06, 2012	Oct. 21, 2012	Radiation (03CH05-HY)
Turn Table	HD	Deis HD 2000	420/611	0 ~ 360 degree	N/A	Sep. 04, 2012~ Sep. 06, 2012	N/A	Radiation (03CH05-HY)
Antenna Mast	HD	MA 240	240/666	1 m ~ 4 m	N/A	Sep. 04, 2012~ Sep. 06, 2012	N/A	Radiation (03CH05-HY)
Horn Antenna	ESCO	3117	66584	1GHz~18GHz	Aug. 10, 2012	Sep. 04, 2012~ Sep. 06, 2012	Aug. 09, 2013	Radiation (03CH05-HY)
Pre Amplifier	COM-POWER	PA-103A	161075	10Hz ~ 1000MHz Gain:32dB	Feb. 27, 2012	Sep. 04, 2012~ Sep. 06, 2012	Feb. 26, 2013	Radiation (03CH05-HY)
Pre Amplifier	MITEQ	AMF-7D-0010 1800-30-10P	159087	1GHz~18GHz	Feb. 27, 2012	Sep. 04, 2012~ Sep. 06, 2012	Feb. 26, 2013	Radiation (03CH05-HY)
Pre Amplifier	Agilent	8449B	3008A02665	1GHz~26.5GHz	Aug. 28, 2012	Sep. 04, 2012~ Sep. 06, 2012	Aug. 27, 2013	Radiation (03CH05-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA917025 1	15GHz ~ 40GHz	Oct. 21, 2011	Sep. 04, 2012~ Sep. 06, 2012	Oct. 20, 2012	Radiation (03CH05-HY)
Loop Antenna	R&S	HFH2-Z2	860004/001	9KHz ~ 30MHz	Jul. 03, 2012	Sep. 04, 2012~ Sep. 06, 2012	Jul. 02, 2014	Radiation (03CH05-HY)



5 Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.26
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Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.54
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Uncertainty of Radiated Emission Measurement (1GHz ~ 40GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.72
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