



FCC RADIO TEST REPORT

FCC ID : UZ7VC8300
Equipment : Vehicle Computer
Brand Name : Zebra
Model Name : VC8300
Applicant : Zebra Technologies Corporation
1 Zebra Plaza, Holtsville, NY 11742
Manufacturer : Zebra Technologies Corporation
1 Zebra Plaza, Holtsville, NY 11742
Standard : FCC Part 15 Subpart C §15.247

The product was received on Nov. 08, 2018 and testing was started from Nov. 22, 2018 and completed on Mar. 25, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Jones Tsai

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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History of this test report



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.247(a)(2)	6dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.247(b)	Power Output Measurement	Pass	-
3.3	15.247(e)	Power Spectral Density	Pass	-
3.4	15.247(d)	Conducted Band Edges	Pass	-
		Conducted Spurious Emission	Pass	-
3.5	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	Pass	Under limit 1.03 dB at 2390.000 MHz
3.6	15.207	AC Conducted Emission	Pass	Under limit 13.80 dB at 0.236 MHz
3.7	15.203 & 15.247(b)	Antenna Requirement	Pass	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Wii Chang

Report Producer: Natasha Hsieh



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Vehicle Computer
Brand Name	Zebra
Model Name	VC8300
FCC ID	UZ7VC8300
Sample 1	EUT with SKU 1
Sample 2	EUT with SKU 2
Sample 3	EUT with SKU 3
Sample 4	EUT with SKU 4
Sample 5	EUT with SKU 5
Sample 6	EUT with SKU 6
Sample 7	EUT with SKU 7
EUT supports Radios application	WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
HW Version	EVT1
SW Version	Zebra/VC8300/VC8310:8.1.0/01-14-12-00-ON-U00-PRD/266: eng/release-keys
FW Version	01-14-12.00-ON-U00-PRD
MFD	03Nov18
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer.

Specification of Accessories				
AC Adapter	Brand Name	Zebra	Model Name	FSP150-AAAN2-Z
Battery	Brand Name	Zebra	Model Name	BT000254A01
Car Charger	Brand Name	Zebra	Model Name	CA1210
RJ50/USB cable	Brand Name	Zebra	Model Name	CBA-U01-S07ZAR
Scanner	Brand Name	Zebra	Model Name	DS3508
Scanner	Brand Name	Zebra	Model Name	LS3408
Audio Speaker	Brand Name	Zebra	Model Name	M1000
Ferrite Core	Brand Name	Zebra	Model Name	M1000
Keyboard (ikey)	Brand Name	Zebra	Model Name	SLK-101-M-USB-3F
Keyboard (remote keyboard)	Brand Name	Zebra	Model Name	KYBD-QWH-VC80
External Antenna (Monopole)	Brand Name	Zebra	Model Name	AN2010
External Antenna (Monopole)	Brand Name	Zebra	Model Name	AN2020
External Antenna (Dipole)	Brand Name	Zebra	Model Name	AN2030
Power Pre-regulator	Brand Name	PSION	Model Name	PS1370



<Sample Information>

Model Name	VC80x 8"			VC80x 10"			
	SKU1	SKU2	SKU3	SKU4	SKU5	SKU6	SKU7
SKU Name	Warehouse 1	Warehouse 2	Freezer SK HYNIX eMMC & MICRON DRAM	Warehouse	Outdoor	Warehouse	Freezer
OS	Android O	Android O	Android O	Android O	Android O	Android O	Android O
Display	Tianma	Tianma	Tianma	AUO	Mitsubishi	AUO	AUO
DTB board / Fuxture	DTB 8" CTP (TCA8414)	DTB 8" CTP (TCA8414)	DTB 8" CTP (TCA8414)	DTB AUO CTP (TCA8414)	DTB MIT CTP (TCA8414)	DTB AUO RTP (TCA8414)	DTB AUO RTP (TCA8414)
TP Type (Gunze)	CTP 8"	CTP 8"	CTP 8" w/ Heater	CTP 10"	CTP 10"	RTP	RTP w/ Heater
KB printing	QWERTY	AZETY	QWERTY				
KB Board	NO	NO	NO	Yes	Yes	Yes	Yes
KB	Yes	Yes	Yes	NO	NO	NO	NO
MLB	SDA660	SDA660	SDA660	SDA660	SDA660	SDA660	SDA660
PWR Board	Yes	Yes	Yes	Yes	Yes	Yes	Yes
USB Board	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DB9 Board	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Battery Heater Board	Yes	Yes	Yes	Yes	Yes	Yes	Yes

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Channel Frequency Range	2412 MHz ~ 2462 MHz
Maximum (Peak) Output Power to antenna	<p><Chain 1></p> 802.11b : 23.52 dBm (0.2249 W) 802.11g : 25.34 dBm (0.3420 W) 802.11n HT20 : 25.27 dBm (0.3365 W) 802.11n HT40 : 18.82 dBm (0.0762 W) 802.11ac VHT20 : 25.23 dBm(0.3334 W) 802.11ac VHT40 : 18.79 dBm(0.0757 W)
	<p><Chain 2></p> 802.11b : 23.45 dBm (0.2213 W) 802.11g : 24.96 dBm (0.3133 W) 802.11n HT20 : 24.76 dBm (0.2992 W) 802.11n HT40 : 22.94 dBm (0.1968 W) 802.11ac VHT20 : 24.74 dBm(0.2979 W) 802.11ac VHT40 : 22.90 dBm(0.1950 W)
	<p><MIMO Chain 1 + 2></p> 802.11b : 25.71 dBm (0.3724 W) 802.11g : 27.83 dBm (0.6067 W) 802.11n HT20 : 27.43 dBm (0.5534 W) 802.11n HT40 : 22.84 dBm (0.1923 W) 802.11ac VHT20 : 27.35 dBm(0.5433 W) 802.11ac VHT40 : 22.81 dBm(0.1910 W)



Standards-related Product Specification										
99% Occupied Bandwidth	<p><Chain 1> 802.11b : 14.00MHz 802.11g : 23.45MHz 802.11n HT20 : 23.75MHz 802.11n HT40 : 36.70MHz</p> <p><Chain 2> 802.11b : 14.00MHz 802.11g : 27.95MHz 802.11n HT20 : 27.50MHz 802.11n HT40 : 36.80MHz</p> <p><MIMO Chain 1> 802.11b : 13.50MHz 802.11g : 20.85MHz 802.11n HT20 : 19.90MHz 802.11n HT40 : 36.60MHz</p> <p><MIMO Chain 2> 802.11b : 14.35MHz 802.11g : 27.30MHz 802.11n HT20 : 27.75MHz 802.11n HT40 : 36.60MHz</p>									
Type of Modulation	802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)									
Antenna Function Description	<table border="1"> <thead> <tr> <th></th><th>Chain 1</th><th>Chain 2</th></tr> </thead> <tbody> <tr> <td>802.11 b/g/n/ac</td><td>V</td><td>V</td></tr> <tr> <td>802.11 b/g/n/ac MIMO</td><td>V</td><td>V</td></tr> </tbody> </table>		Chain 1	Chain 2	802.11 b/g/n/ac	V	V	802.11 b/g/n/ac MIMO	V	V
	Chain 1	Chain 2								
802.11 b/g/n/ac	V	V								
802.11 b/g/n/ac MIMO	V	V								

Note: MIMO Chain 1+2 is a calculated result from sum of the power MIMO Chain 1 and MIMO Chain 2.

Antenna No.	Chain No.	Model	Antenna Type	Antenna Gain (dBi) Exclude Cable loss	Internal Cable loss (dB)	External Cable loss (dB)	Antenna Gain (dBi) Include Cable loss	Frequency (GHz)
1	Int. Chain 0	AN-000242-01	Patch	3.30	N/A	N/A	3.30	2.4~2.4835
				4.53	N/A	N/A	4.53	5.15~5.85
	Int. Chain 1			4.00	N/A	N/A	4.00	2.4~2.4835
				4.79	N/A	N/A	4.79	5.15~5.85
2	Ext. Chain 0	AN2010	Monopole	2	0.6	1.8	-0.4	2.4~2.4835
				2	0.9	2.6	-1.5	5.15~5.85
	Ext. Chain 1			2	0.6	1.8	-0.4	2.4~2.4835
				2	0.9	2.6	-1.5	5.15~5.85
3	Ext. Chain 0	AN2020	Monopole	5	0.6	1.8	2.6	2.4~2.4835
	Ext. Chain 1			5	0.6	1.8	2.6	2.4~2.4835
4	Ext. Chain 0	AN2030	Dipole	2	0.6	N/A	1.4	2.4~2.4835
				3.7	0.9	N/A	2.8	5.15~5.85
	Ext. Chain 1			2	0.6	N/A	1.4	2.4~2.4835
				3.7	0.9	N/A	2.8	5.15~5.85



1.3 Modification of EUT

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

1.4 Testing Location

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	Sportun Site No.	
	TH05-HY	CO05-HY

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

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855	
Test Site No.	Sportun Site No.	
	03CH11-HY	

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

FCC Designation No. TW1190 and TW0007

1.5 Applicable Standards

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

- ♦ FCC Part 15 Subpart C §15.247
- ♦ FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v05r01
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2013

Remark:

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



2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation 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 Antenna 1; Y plane for Antenna 2; Horizontal for Antenna 4) were recorded in this report.

- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	1	2412	7	2442
	2	2417	8	2447
	3	2422	9	2452
	4	2427	10	2457
	5	2432	11	2462
	6	2437		



<Chain 1>

802.11b RF Peak Output Power (dBm)						
Power vs. Channel			Power vs Data Rate			
Channel	Frequency (MHz)	Data Rate (bps)	Channel	Data Rate (bps)		
				2M	5.5M	11M
CH 01	2412	22.72	CH 11	23.42	23.32	23.36
CH 06	2437	23.51				
CH 11	2462	23.52				

802.11g RF Peak Output Power (dBm)							
Power vs. Channel			Power vs Data Rate				
Channel	Frequency (MHz)	Data Rate (bps)	Channel	Data Rate (bps)			
				9Mbps	12Mbps	18Mbps	24Mbps
CH 01	2412	17.42	CH 06	25.13	25.12	25.30	25.32
CH 06	2437	25.34		25.32	25.32	25.30	25.32
CH 11	2462	18.37		25.32	25.30	25.32	25.32

802.11n HT20 RF Peak Output Power (dBm)							
Power vs. Channel			Power vs Data Rate				
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index			
				MCS 1	MCS 2	MCS 3	MCS 4
CH 01	2412	16.06	CH 06	24.94	25.15	25.27	25.22
CH 06	2437	25.27		25.21	25.22	25.22	25.22
CH 11	2462	17.91		25.22	25.22	25.22	25.22

802.11n HT40 RF Peak Output Power (dBm)							
Power vs. Channel			Power vs Data Rate				
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index			
				MCS 1	MCS 2	MCS 3	MCS 4
CH 03	2422	15.42	CH 06	18.71	18.60	18.72	18.72
CH 06	2437	18.82		18.78	18.56	18.63	18.63
CH 09	2452	18.70		18.63	18.56	18.63	18.63



802.11ac VHT20 RF Peak Output Power (dBm)											
Power vs. Channel			Power vs Data Rate								
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index							
		MCS 0		MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8
CH 01	2412	16.02	CH 06	24.94	25.15	25.18	25.20	25.17	25.18	25.19	25.16
CH 06	2437	25.23									
CH 11	2462	17.83									

802.11ac VHT40 RF Peak Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index								
		MCS 0		MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
CH 03	2422	15.40	CH 06	18.69	18.58	18.70	18.68	18.75	18.50	18.63	18.63	18.55
CH 06	2437	18.79										
CH 09	2452	18.69										



<Chain 2>

802.11b RF Peak Output Power (dBm)						
Power vs. Channel			Power vs Data Rate			
Channel	Frequency (MHz)	Data Rate (bps) 1M	Channel	Data Rate (bps)		
				2M	5.5M	11M
CH 01	2412	23.02	CH 06	23.25	23.01	23.20
CH 06	2437	23.45				
CH 11	2462	20.36				

802.11g RF Peak Output Power (dBm)							
Power vs. Channel			Power vs Data Rate				
Channel	Frequency (MHz)	Data Rate (bps) 6M	Channel	Data Rate (bps)			
				9Mbps	12Mbps	18Mbps	24Mbps
CH 01	2412	19.72	CH 06	24.85	24.81	24.81	24.87
CH 06	2437	24.96		24.90	24.93	24.92	24.92
CH 11	2462	19.52					

802.11n HT20 RF Peak Output Power (dBm)							
Power vs. Channel			Power vs Data Rate				
Channel	Frequency (MHz)	MCS Index MCS 0	Channel	MCS Index			
				MCS 1	MCS 2	MCS 3	MCS 4
CH 01	2412	18.74	CH 06	24.65	24.63	24.63	24.75
CH 06	2437	24.76		24.73	24.72	24.72	24.72
CH 11	2462	19.20					

802.11n HT40 RF Peak Output Power (dBm)							
Power vs. Channel			Power vs Data Rate				
Channel	Frequency (MHz)	MCS Index MCS 0	Channel	MCS Index			
				MCS 1	MCS 2	MCS 3	MCS 4
CH 03	2422	19.74	CH 06	22.90	22.72	22.80	22.82
CH 06	2437	22.94					
CH 09	2452	20.28					



802.11ac VHT20 RF Peak Output Power (dBm)											
Power vs. Channel			Power vs Data Rate								
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index							
		MCS 0		MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8
CH 01	2412	18.64	CH 06	24.60	24.60	24.61	24.72	24.70	24.69	24.73	24.72
CH 06	2437	24.74									
CH 11	2462	19.16									

802.11ac VHT40 RF Peak Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index								
		MCS 0		MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
CH 03	2422	19.70	CH 06	22.88	22.69	22.75	22.78	22.78	22.78	22.70	22.68	22.72
CH 06	2437	22.90										
CH 09	2452	20.24										



MIMO <Chain 1+2>

802.11b RF Peak Output Power (dBm)						
Power vs. Channel			Power vs Data Rate			
Channel	Frequency (MHz)	Data Rate (bps) 1M	Channel	Data Rate (bps)		
				2M	5.5M	11M
CH 01	2412	25.71	CH 01	25.70	25.16	25.17
CH 06	2437	25.14				
CH 11	2462	23.90				

802.11g RF Peak Output Power (dBm)							
Power vs. Channel			Power vs Data Rate				
Channel	Frequency (MHz)	Data Rate (bps) 6M	Channel	Data Rate (bps)			
				9Mbps	12Mbps	18Mbps	24Mbps
CH 01	2412	19.89	CH 06	27.58	27.59	27.76	27.78
CH 06	2437	27.83		27.75	27.82	27.78	
CH 11	2462	21.21					

802.11n HT20 RF Peak Output Power (dBm)							
Power vs. Channel			Power vs Data Rate				
Channel	Frequency (MHz)	MCS Index MCS0	Channel	MCS Index			
				MCS1	MCS2	MCS3	MCS4
CH 01	2412	18.79	CH 06	27.32	27.28	27.36	27.41
CH 06	2437	27.43		27.42	27.39	27.42	
CH 11	2462	20.18					

802.11n HT40 RF Peak Output Power (dBm)							
Power vs. Channel			Power vs Data Rate				
Channel	Frequency (MHz)	MCS Index MCS0	Channel	MCS Index			
				MCS1	MCS2	MCS3	MCS4
CH 03	2422	19.25	CH 06	22.69	22.74	22.78	22.82
CH 06	2437	22.84		22.69	22.77	22.70	
CH 09	2452	19.13					



802.11ac VHT20 RF Peak Output Power (dBm)											
Power vs. Channel			Power vs Data Rate								
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index							
		MCS 0		MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8
CH 01	2412	18.76	CH 06	27.30	27.24	27.32	27.34	27.34	27.33	27.34	27.34
CH 06	2437	27.35									
CH 11	2462	20.15									

802.11ac VHT40 RF Peak Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index								
		MCS 0		MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
CH 03	2422	19.22	CH 06	22.68	22.71	22.75	22.79	22.64	22.74	22.67	22.65	22.63
CH 06	2437	22.81										
CH 09	2452	19.10										



2.2 Test Mode

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

Single Antenna

Modulation	Data Rate
802.11b	1 Mbps
802.11g	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20 (Covered by HT20)	MCS0
802.11ac VHT40 (Covered by HT40)	MCS0

MIMO Antenna

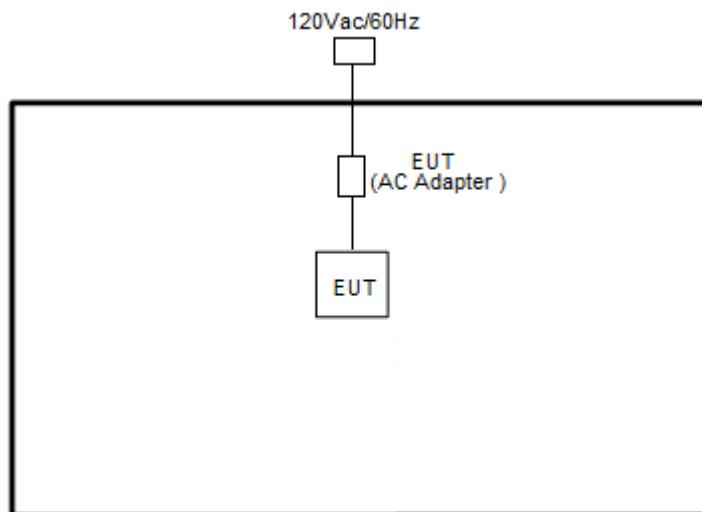
Modulation	Data Rate
802.11b	1 Mbps
802.11g	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20 (Covered by HT20)	MCS0
802.11ac VHT40 (Covered by HT40)	MCS0

Test Cases	
AC Conducted Emission	Mode 1: WLAN (2.4GHz) Link + Bluetooth Link + Audio Speaker (M1000) + Keyboard (SLK-101-M-USB-3F) + Scanner (LS3408) + RS-232 (Cable Load)* 2 + Int. Antenna + Ext. Antenna (AN2020) + Adapter + MPEG4 for Sample 4
Remark: For Radiated Test Cases, the tests were performed with Sample 3, and each antenna (Ant. 1, Ant. 3, Ant. 4) was tested.	

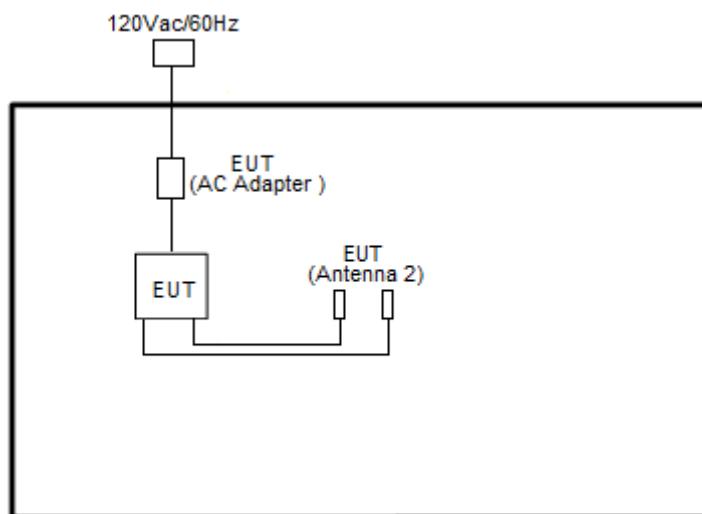


2.3 Connection Diagram of Test System

<EUT with Antenna 1>

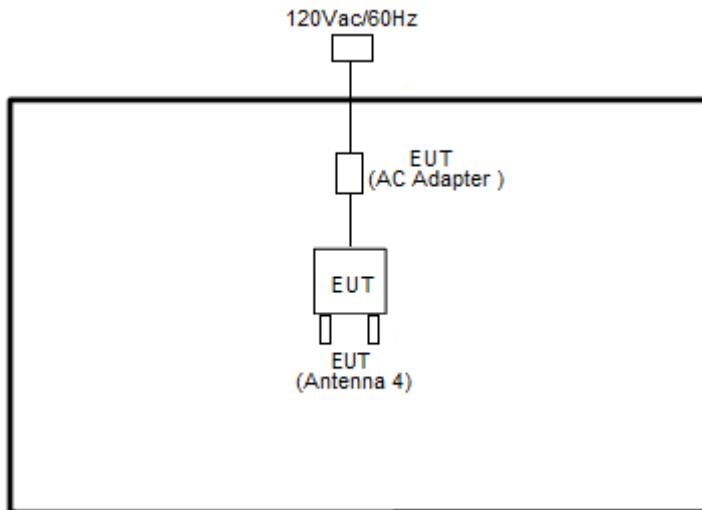


<EUT with Antenna 2>

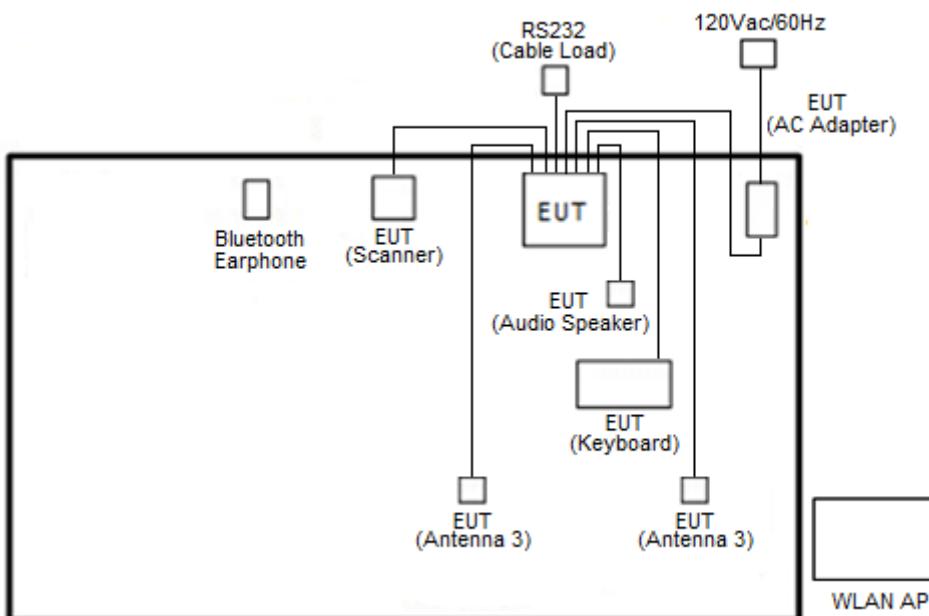




<EUT with Antenna 4>



<AC Conducted Emission Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
3.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m



2.5 EUT Operation Test Setup

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

2.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

$$= 4.2 + 10 = 14.2 \text{ (dB)}$$



3 Test Result

3.1 6dB and 99% Bandwidth Measurement

3.1.1 Limit of 6dB and 99% Bandwidth

The minimum 6 dB bandwidth shall be at least 500 kHz.

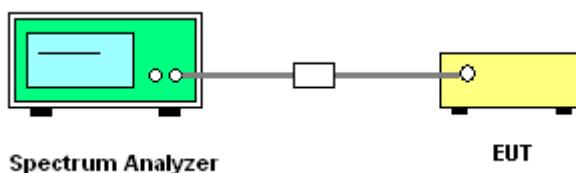
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 6.9.3 (OBW) and 11.8.1 (6dB BW).
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6 dB bandwidth must be greater than 500 kHz.
5. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) $\geq 3 * \text{RBW}$.
6. Measure and record the results in the test report.

3.1.4 Test Setup

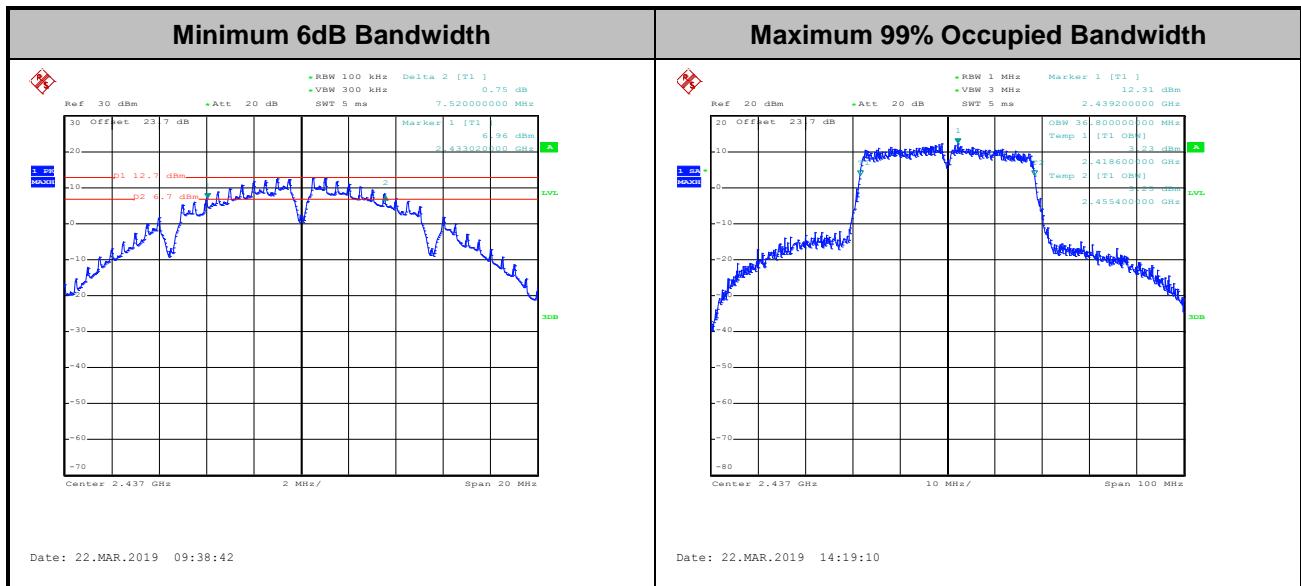




3.1.5 Test Result of 6dB and 99% Occupied Bandwidth

Test Engineer :	Shiming Liu and Richard Qiu	Temperature :		21~25°C
		Relative Humidity :		51~54%

2.4GHz Band										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
					Chain 1	Chain 2	Chain 1	Chain 2		
11b	1Mbps	1	1	2412	13.40	13.70	8.04	8.00	0.50	Pass
11b	1Mbps	1	6	2437	13.30	14.00	7.56	7.52	0.50	Pass
11b	1Mbps	1	11	2462	14.00	12.80	8.04	7.52	0.50	Pass
11g	6Mbps	1	1	2412	16.85	16.75	15.84	15.12	0.50	Pass
11g	6Mbps	1	6	2437	23.45	27.95	16.28	16.28	0.50	Pass
11g	6Mbps	1	11	2462	16.85	16.85	16.28	15.72	0.50	Pass
HT20	MCS0	1	1	2412	17.90	17.85	15.88	16.88	0.50	Pass
HT20	MCS0	1	6	2437	23.75	27.50	16.34	16.88	0.50	Pass
HT20	MCS0	1	11	2462	18.00	17.95	16.64	15.72	0.50	Pass
HT40	MCS0	1	3	2422	36.60	36.50	35.28	35.30	0.50	Pass
HT40	MCS0	1	6	2437	36.50	36.80	35.04	35.92	0.50	Pass
HT40	MCS0	1	9	2452	36.70	36.40	35.68	35.44	0.50	Pass
11b	1Mbps	2	1	2412	13.50	14.35	7.52	8.52	0.50	Pass
11b	1Mbps	2	6	2437	12.90	13.25	7.56	8.04	0.50	Pass
11b	1Mbps	2	11	2462	12.90	13.05	7.56	7.56	0.50	Pass
11g	6Mbps	2	1	2412	16.75	16.65	15.12	15.68	0.50	Pass
11g	6Mbps	2	6	2437	20.85	27.30	16.32	16.28	0.50	Pass
11g	6Mbps	2	11	2462	16.85	16.75	15.78	15.68	0.50	Pass
HT20	MCS0	2	1	2412	17.95	17.85	16.28	15.92	0.50	Pass
HT20	MCS0	2	6	2437	19.90	27.75	16.68	17.56	0.50	Pass
HT20	MCS0	2	11	2462	18.00	17.90	15.88	16.52	0.50	Pass
HT40	MCS0	2	3	2422	36.60	36.50	35.92	35.12	0.50	Pass
HT40	MCS0	2	6	2437	36.40	36.60	35.04	35.44	0.50	Pass
HT40	MCS0	2	9	2452	36.60	36.50	35.92	35.12	0.50	Pass



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



3.2 Output Power Measurement

3.2.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm. If transmitting antenna with directional gain greater than 6dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

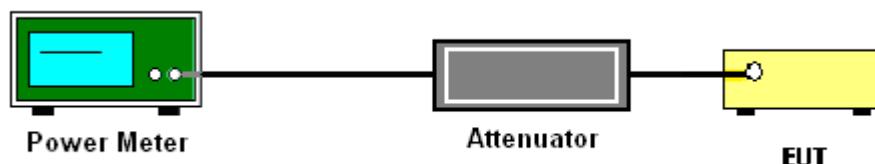
3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

3.2.3 Test Procedures

1. For Peak Power, the testing follows ANSI C63.10 Section 11.9.1.3 PKPM1
2. For Average Power, the testing follows the Measurement Procedure of FCC KDB No. 558074 DTS D01 Meas. Guidance v05r01 section 9.2.3.1 Method AVGPM.
3. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. Set to the maximum power setting and enable the EUT transmit continuously.
5. Measure the conducted output power and record the results in the test report.
6. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

3.2.4 Test Setup



3.2.5 Test Result of Peak Output Power

Test Engineer :	Shiming Liu and Richard Qiu	Temperature :	21~25°C
		Relative Humidity :	51~54%



2.4GHz Band																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	1	1	2412	22.72	23.02	-	30.00	30.00	5.00	5.00	27.72	28.02	36.00	36.00	Pass
11b	1Mbps	1	6	2437	23.51	23.45	-	30.00	30.00	5.00	5.00	28.51	28.45	36.00	36.00	Pass
11b	1Mbps	1	11	2462	23.52	20.36	-	30.00	30.00	5.00	5.00	28.52	25.36	36.00	36.00	Pass
11g	6Mbps	1	1	2412	17.42	19.72	-	30.00	30.00	5.00	5.00	22.42	24.72	36.00	36.00	Pass
11g	6Mbps	1	6	2437	25.34	24.96	-	30.00	30.00	5.00	5.00	30.34	29.96	36.00	36.00	Pass
11g	6Mbps	1	11	2462	18.37	19.52	-	30.00	30.00	5.00	5.00	23.37	24.52	36.00	36.00	Pass
HT20	MCS0	1	1	2412	16.06	18.74	-	30.00	30.00	5.00	5.00	21.06	23.74	36.00	36.00	Pass
HT20	MCS0	1	6	2437	25.27	24.76	-	30.00	30.00	5.00	5.00	30.27	29.76	36.00	36.00	Pass
HT20	MCS0	1	11	2462	17.91	19.20	-	30.00	30.00	5.00	5.00	22.91	24.20	36.00	36.00	Pass
HT40	MCS0	1	3	2422	15.42	19.74	-	30.00	30.00	5.00	5.00	20.42	24.74	36.00	36.00	Pass
HT40	MCS0	1	6	2437	18.82	22.94	-	30.00	30.00	5.00	5.00	23.82	27.94	36.00	36.00	Pass
HT40	MCS0	1	9	2452	18.70	20.28	-	30.00	30.00	5.00	5.00	23.70	25.28	36.00	36.00	Pass
VHT20	MCS0	1	1	2412	16.02	18.64	-	30.00	30.00	5.00	5.00	21.02	23.64	36.00	36.00	Pass
VHT20	MCS0	1	6	2437	25.23	24.74	-	30.00	30.00	5.00	5.00	30.23	29.74	36.00	36.00	Pass
VHT20	MCS0	1	11	2462	17.83	19.16	-	30.00	30.00	5.00	5.00	22.83	24.16	36.00	36.00	Pass
VHT40	MCS0	1	3	2422	15.40	19.70	-	30.00	30.00	5.00	5.00	20.40	24.70	36.00	36.00	Pass
VHT40	MCS0	1	6	2437	18.79	22.90	-	30.00	30.00	5.00	5.00	23.79	27.90	36.00	36.00	Pass
VHT40	MCS0	1	9	2452	18.69	20.24	-	30.00	30.00	5.00	5.00	23.69	25.24	36.00	36.00	Pass



2.4GHz Band																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	2	1	2412	22.47	22.92	25.71	30.00		5.00		30.71		36.00		Pass
11b	1Mbps	2	6	2437	22.11	22.15	25.14	30.00		5.00		30.14		36.00		Pass
11b	1Mbps	2	11	2462	20.72	21.06	23.90	30.00		5.00		28.90		36.00		Pass
11g	6Mbps	2	1	2412	16.86	16.90	19.89	30.00		5.00		24.89		36.00		Pass
11g	6Mbps	2	6	2437	24.80	24.83	27.83	30.00		5.00		32.83		36.00		Pass
11g	6Mbps	2	11	2462	18.01	18.38	21.21	30.00		5.00		26.21		36.00		Pass
HT20	MCS0	2	1	2412	15.84	15.72	18.79	30.00		5.00		23.79		36.00		Pass
HT20	MCS0	2	6	2437	24.41	24.42	27.43	30.00		5.00		32.43		36.00		Pass
HT20	MCS0	2	11	2462	16.95	17.38	20.18	30.00		5.00		25.18		36.00		Pass
HT40	MCS0	2	3	2422	16.23	16.25	19.25	30.00		5.00		24.25		36.00		Pass
HT40	MCS0	2	6	2437	19.75	19.90	22.84	30.00		5.00		27.84		36.00		Pass
HT40	MCS0	2	9	2452	16.10	16.14	19.13	30.00		5.00		24.13		36.00		Pass
VHT20	MCS0	2	1	2412	15.80	15.69	18.76	30.00		5.00		23.76		36.00		Pass
VHT20	MCS0	2	6	2437	24.30	24.38	27.35	30.00		5.00		32.35		36.00		Pass
VHT20	MCS0	2	11	2462	16.92	17.35	20.15	30.00		5.00		25.15		36.00		Pass
VHT40	MCS0	2	3	2422	16.20	16.22	19.22	30.00		5.00		24.22		36.00		Pass
VHT40	MCS0	2	6	2437	19.73	19.86	22.81	30.00		5.00		27.81		36.00		Pass
VHT40	MCS0	2	9	2452	16.06	16.11	19.10	30.00		5.00		24.10		36.00		Pass



3.2.6 Test Result of Average output Power (Reporting Only)

Test Engineer :	Shiming Liu and Richard Qiu	Temperature :		21~25°C
		Relative Humidity :		51~54%

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)	
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11b	1Mbps	1	1	2412	0.00	0.00	20.28	20.64		30.00	30.00	5.00	5.00	25.28	25.64
11b	1Mbps	1	6	2437	0.00	0.00	21.11	21.11		30.00	30.00	5.00	5.00	26.11	26.11
11b	1Mbps	1	11	2462	0.00	0.00	21.18	17.69		30.00	30.00	5.00	5.00	26.18	22.69
11g	6Mbps	1	1	2412	0.23	0.23	12.57	15.05		30.00	30.00	5.00	5.00	17.57	20.05
11g	6Mbps	1	6	2437	0.23	0.23	22.69	22.59		30.00	30.00	5.00	5.00	27.69	27.59
11g	6Mbps	1	11	2462	0.23	0.23	13.77	15.04		30.00	30.00	5.00	5.00	18.77	20.04
HT20	MCS0	1	1	2412	0.26	0.22	10.89	13.79		30.00	30.00	5.00	5.00	15.89	18.79
HT20	MCS0	1	6	2437	0.26	0.22	22.14	21.79		30.00	30.00	5.00	5.00	27.14	26.79
HT20	MCS0	1	11	2462	0.26	0.22	13.19	14.40		30.00	30.00	5.00	5.00	18.19	19.40
HT40	MCS0	1	3	2422	0.40	0.37	10.88	13.62		30.00	30.00	5.00	5.00	15.88	18.62
HT40	MCS0	1	6	2437	0.40	0.37	12.68	18.55		30.00	30.00	5.00	5.00	17.68	23.55
HT40	MCS0	1	11	2462	0.40	0.37	12.52	14.11		30.00	30.00	5.00	5.00	17.52	19.11
VHT20	MCS0	1	1	2412	0.25	0.23	10.84	13.71		30.00	30.00	5.00	5.00	15.84	18.71
VHT20	MCS0	1	6	2437	0.25	0.23	22.07	21.72		30.00	30.00	5.00	5.00	27.07	26.72
VHT20	MCS0	1	11	2462	0.25	0.23	13.14	14.33		30.00	30.00	5.00	5.00	18.14	19.33
VHT40	MCS0	1	3	2422	0.44	0.42	10.86	13.61		30.00	30.00	5.00	5.00	15.86	18.61
VHT40	MCS0	1	6	2437	0.44	0.42	12.66	18.53		30.00	30.00	5.00	5.00	17.66	23.53
VHT40	MCS0	1	9	2452	0.44	0.42	12.48	14.09		30.00	30.00	5.00	5.00	17.48	19.09



2.4GHz Band															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)	
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11b	1Mbps	2	1	2412	0.00	0.00	20.00	20.50	23.27	30.00	30.00	5.00	5.00	28.27	
11b	1Mbps	2	6	2437	0.00	0.00	19.16	19.20	22.19	30.00	30.00	5.00	5.00	27.19	
11b	1Mbps	2	11	2462	0.00	0.00	17.90	18.49	21.22	30.00	30.00	5.00	5.00	26.22	
11g	6Mbps	2	1	2412	0.20	0.23	11.85	11.98	14.93	30.00	30.00	5.00	5.00	19.93	
11g	6Mbps	2	6	2437	0.20	0.23	21.55	21.93	24.75	30.00	30.00	5.00	5.00	29.75	
11g	6Mbps	2	11	2462	0.20	0.23	13.38	13.68	16.54	30.00	30.00	5.00	5.00	21.54	
HT20	MCS0	2	1	2412	0.22	0.21	10.72	10.66	13.70	30.00	30.00	5.00	5.00	18.70	
HT20	MCS0	2	6	2437	0.22	0.21	20.97	21.53	24.27	30.00	30.00	5.00	5.00	29.27	
HT20	MCS0	2	11	2462	0.22	0.21	12.25	12.51	15.39	30.00	30.00	5.00	5.00	20.39	
HT40	MCS0	2	3	2422	0.43	0.39	9.73	9.78	12.77	30.00	30.00	5.00	5.00	17.77	
HT40	MCS0	2	6	2437	0.43	0.39	13.53	13.62	16.59	30.00	30.00	5.00	5.00	21.59	
HT40	MCS0	2	11	2462	0.43	0.39	9.63	9.81	12.73	30.00	30.00	5.00	5.00	17.73	
VHT20	MCS0	2	1	2412	0.23	0.22	10.69	10.62	13.67	30.00	30.00	5.00	5.00	18.67	
VHT20	MCS0	2	6	2437	0.23	0.22	20.93	21.49	24.23	30.00	30.00	5.00	5.00	29.23	
VHT20	MCS0	2	11	2462	0.23	0.22	12.23	12.48	15.37	30.00	30.00	5.00	5.00	20.37	
VHT40	MCS0	2	3	2422	0.47	0.43	9.70	9.75	12.74	30.00	30.00	5.00	5.00	17.74	
VHT40	MCS0	2	6	2437	0.47	0.43	13.48	13.56	16.53	30.00	30.00	5.00	5.00	21.53	
VHT40	MCS0	2	9	2452	0.47	0.43	9.58	9.78	12.69	30.00	30.00	5.00	5.00	17.69	



3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

The peak power spectral density shall not be greater than 8dBm in any 3kHz band at any time interval of continuous transmission.

3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 11.10.2 Method PKPSD.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 3 kHz. Video bandwidth VBW = 10 kHz In order to make an accurate measurement, set the span to 1.5 times DTS Channel Bandwidth. (6dB BW)
5. Detector = peak, Sweep time = auto couple, Trace mode = max hold, Allow trace to fully stabilize. Use the peak marker function to determine the maximum power level.
6. Measure and record the results in the test report.
7. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

If measurements performed using method (2) plus $10 \log(N)$ exceeds the emission limit, the test should choose method (1) before declaring that the device fails the emission limit.

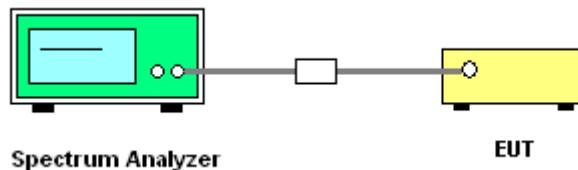
Method (1): Measure and sum the spectra across the outputs.

The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points, the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

Method (2): Measure and add $10 \log(N)$ dB, where N is the number of outputs. (N=2)



3.3.4 Test Setup



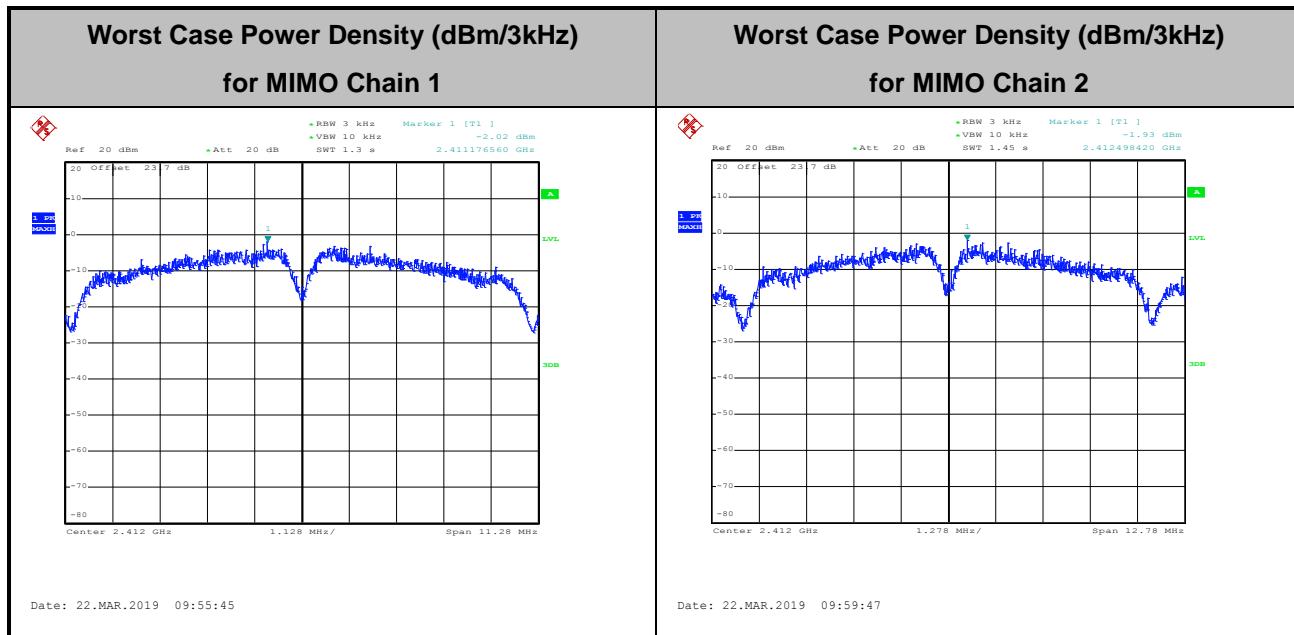
3.3.5 Test Result of Power Spectral Density

Test Engineer :	Shiming Liu and Richard Qiu					Temperature :		21~25°C	
						Relative Humidity :		51~54%	

Mod.	Data Rate	N _{Tx}	CH.	Freq. (MHz)	Duty Factor (dB)		Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Chain 1	Chain 2	Chain 1	Chain 2	Worse + 3.01	Chain 1	Chain 2	Chain 1	Chain 2	
11b	1Mbps	1	1	2412	0.00	0.00	-1.84	-1.82	-	5.00	5.00	8.00	8.00	Pass
11b	1Mbps	1	6	2437	0.00	0.00	-1.59	-2.80		5.00	5.00	8.00	8.00	Pass
11b	1Mbps	1	11	2462	0.00	0.00	-2.33	-4.25		5.00	5.00	8.00	8.00	Pass
11g	6Mbps	1	1	2412	0.23	0.23	-12.22	-8.61		5.00	5.00	8.00	8.00	Pass
11g	6Mbps	1	6	2437	0.23	0.23	-2.74	-2.32		5.00	5.00	8.00	8.00	Pass
11g	6Mbps	1	11	2462	0.23	0.23	-11.02	-10.59		5.00	5.00	8.00	8.00	Pass
HT20	MCS0	1	1	2412	0.26	0.22	-15.32	-10.09		5.00	5.00	8.00	8.00	Pass
HT20	MCS0	1	6	2437	0.26	0.22	-3.17	-2.84		5.00	5.00	8.00	8.00	Pass
HT20	MCS0	1	11	2462	0.26	0.22	-12.75	-10.96		5.00	5.00	8.00	8.00	Pass
HT40	MCS0	1	3	2422	0.40	0.37	-18.44	-15.58		5.00	5.00	8.00	8.00	Pass
HT40	MCS0	1	6	2437	0.40	0.37	-16.35	-10.97		5.00	5.00	8.00	8.00	Pass



2.4GHz Band														
Mod.	Data Rate	Ntx	CH.	Freq. (MHz)	Duty Factor (dB)		Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Chain 1	Chain 2	Chain 1	Chain 2	Worse + 3.01	Chain 1	Chain 2	Chain 1	Chain 2	
11b	1Mbps	2	1	2412	0.00	0.00	-2.02	-1.93	1.08	8.01		5.99		Pass
11b	1Mbps	2	6	2437	0.00	0.00	-2.96	-2.71	0.30	8.01		5.99		Pass
11b	1Mbps	2	11	2462	0.00	0.00	-3.39	-4.41	-0.38	8.01		5.99		Pass
11g	6Mbps	2	1	2412	0.20	0.23	-12.99	-13.65	-9.98	8.01		5.99		Pass
11g	6Mbps	2	6	2437	0.20	0.23	-3.72	-3.79	-0.71	8.01		5.99		Pass
11g	6Mbps	2	11	2462	0.20	0.23	-11.99	-9.89	-6.88	8.01		5.99		Pass
HT20	MCS0	2	1	2412	0.22	0.21	-14.96	-15.46	-11.95	8.01		5.99		Pass
HT20	MCS0	2	6	2437	0.22	0.21	-5.71	-5.03	-2.02	8.01		5.99		Pass
HT20	MCS0	2	11	2462	0.22	0.21	-13.05	-14.13	-10.04	8.01		5.99		Pass
HT40	MCS0	2	3	2422	0.43	0.39	-18.06	-18.64	-15.05	8.01		5.99		Pass
HT40	MCS0	2	6	2437	0.43	0.39	-15.25	-14.90	-11.89	8.01		5.99		Pass





3.4 Conducted Band Edges and Spurious Emission Measurement

3.4.1 Limit of Conducted Band Edges and Spurious Emission Measurement

In any 100 kHz bandwidth outside of the authorized frequency band, the emissions which fall in the non-restricted bands shall be attenuated at least 20 dB / 30dB relative to the maximum PSD level in 100 kHz by RF conducted measurement.

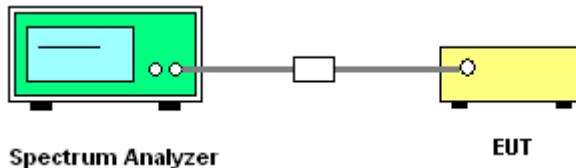
3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 11.11.3 Emission level measurement.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB per 15.247(d).
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.4.4 Test Setup



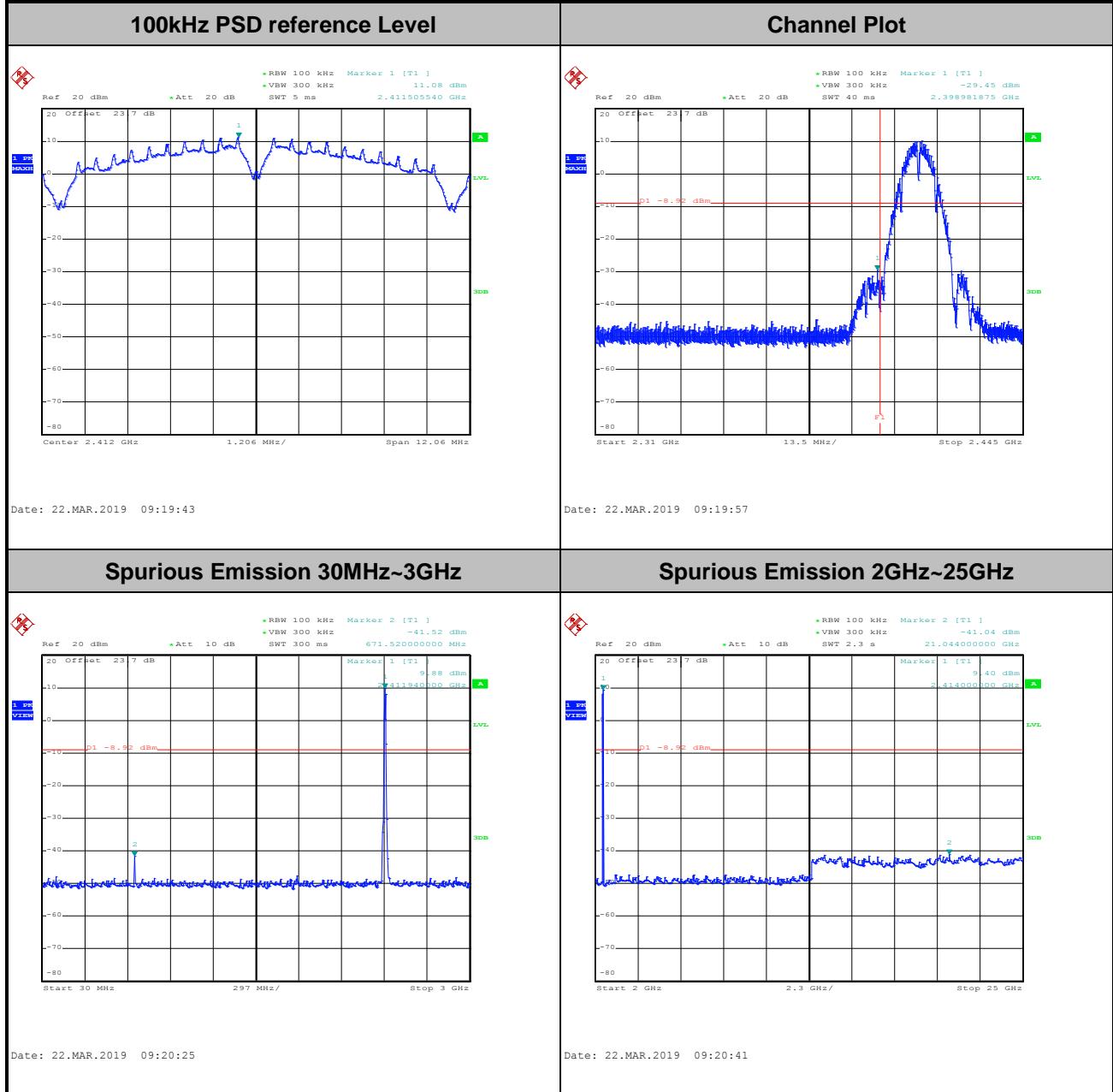


3.4.5 Test Result of Conducted Band Edges and Spurious Emission

Test Engineer :	Shiming Liu and Richard Qiu	Temperature :	21~25°C
		Relative Humidity :	51~54%

Number of TX = 1, Chain. 1 (Measured)

Test Mode :	802.11b	Test Channel :	01
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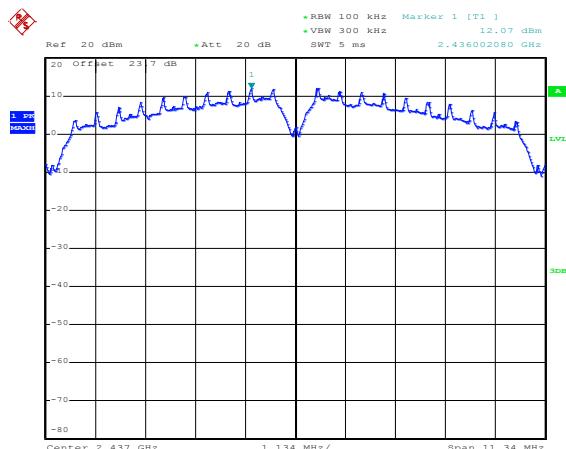




Test Mode : 802.11b

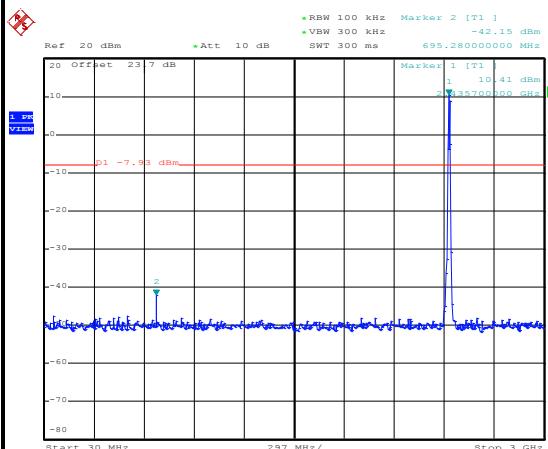
Test Channel : 06

100kHz PSD reference Level



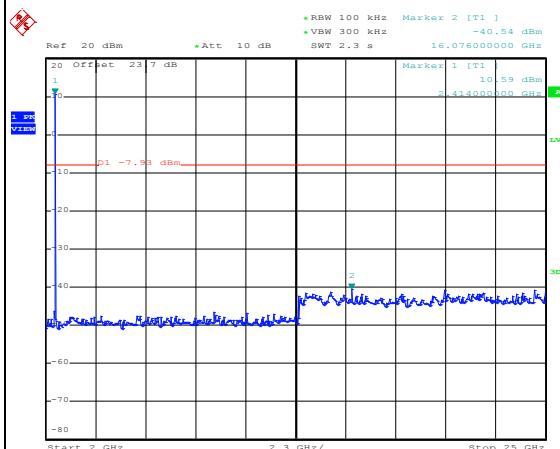
Date: 22.MAR.2019 09:23:25

Spurious Emission 30MHz~3GHz

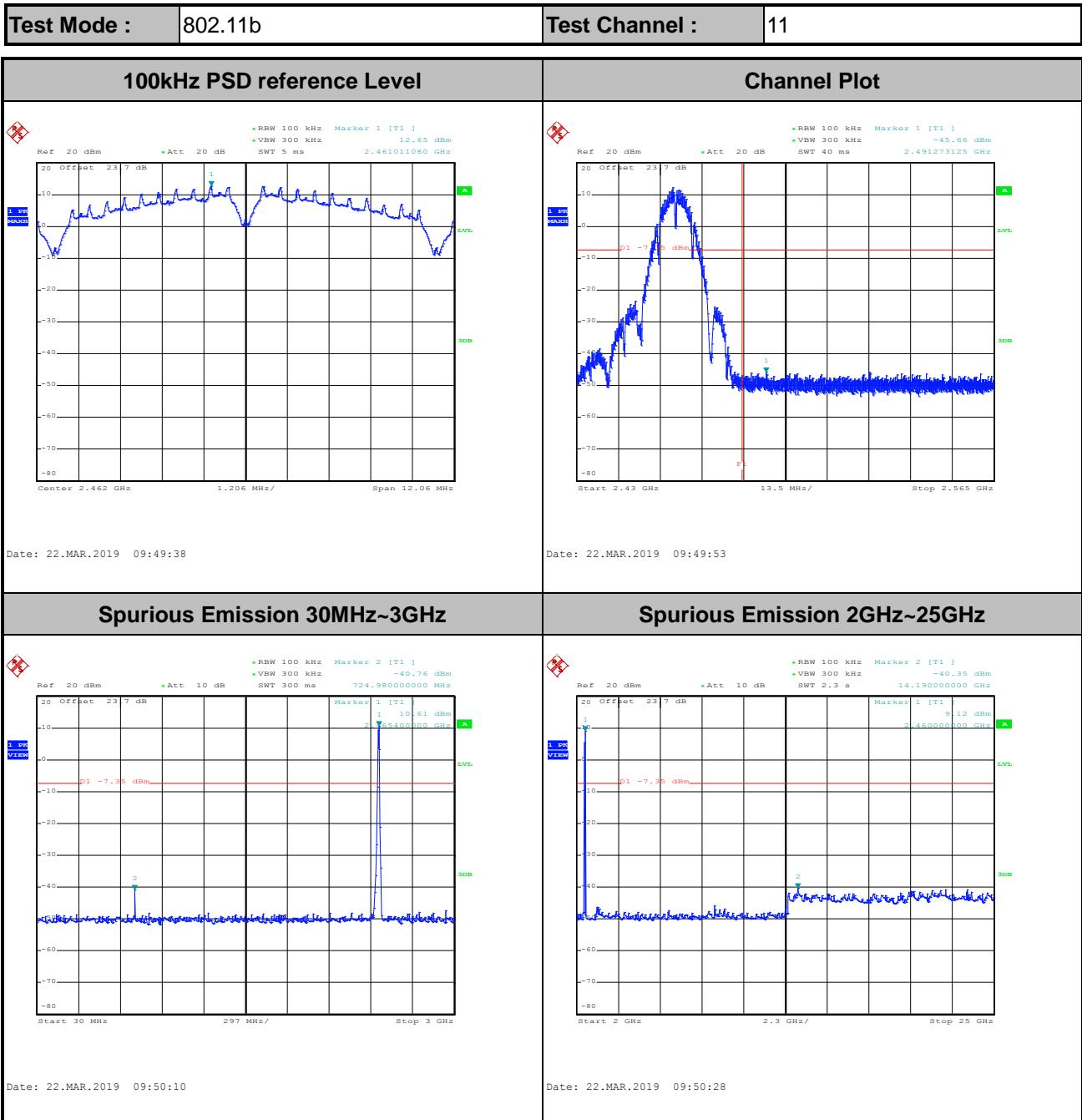


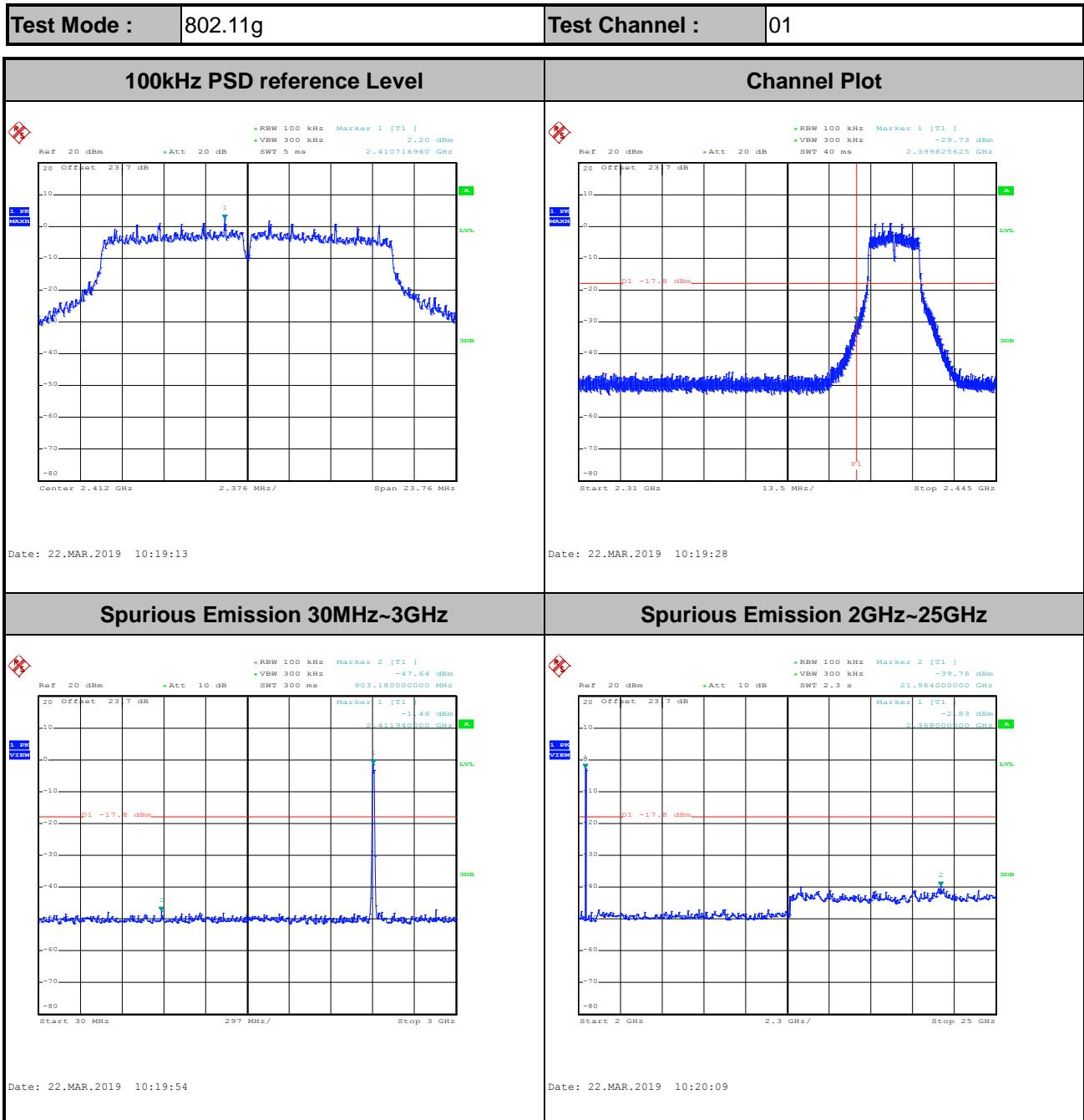
Date: 22.MAR.2019 09:23:42

Spurious Emission 2GHz~25GHz



Date: 22.MAR.2019 09:23:58



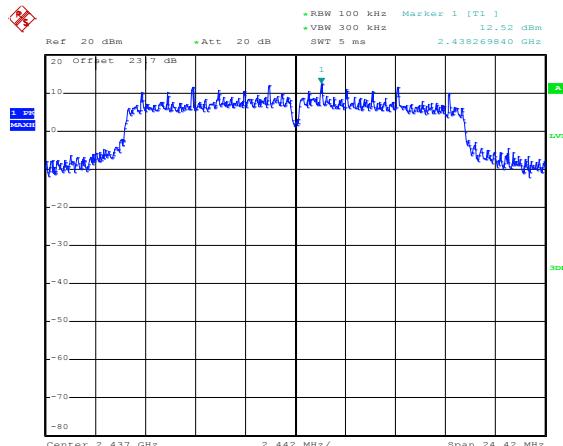




Test Mode : 802.11g

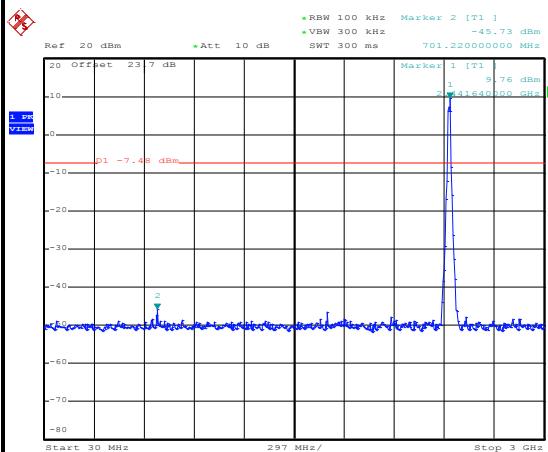
Test Channel : 06

100kHz PSD reference Level



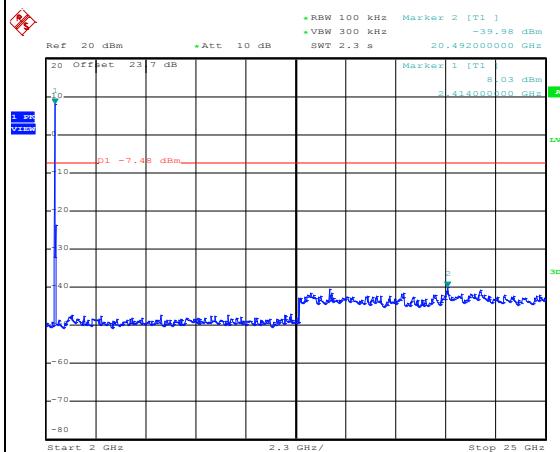
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Spurious Emission 30MHz~3GHz

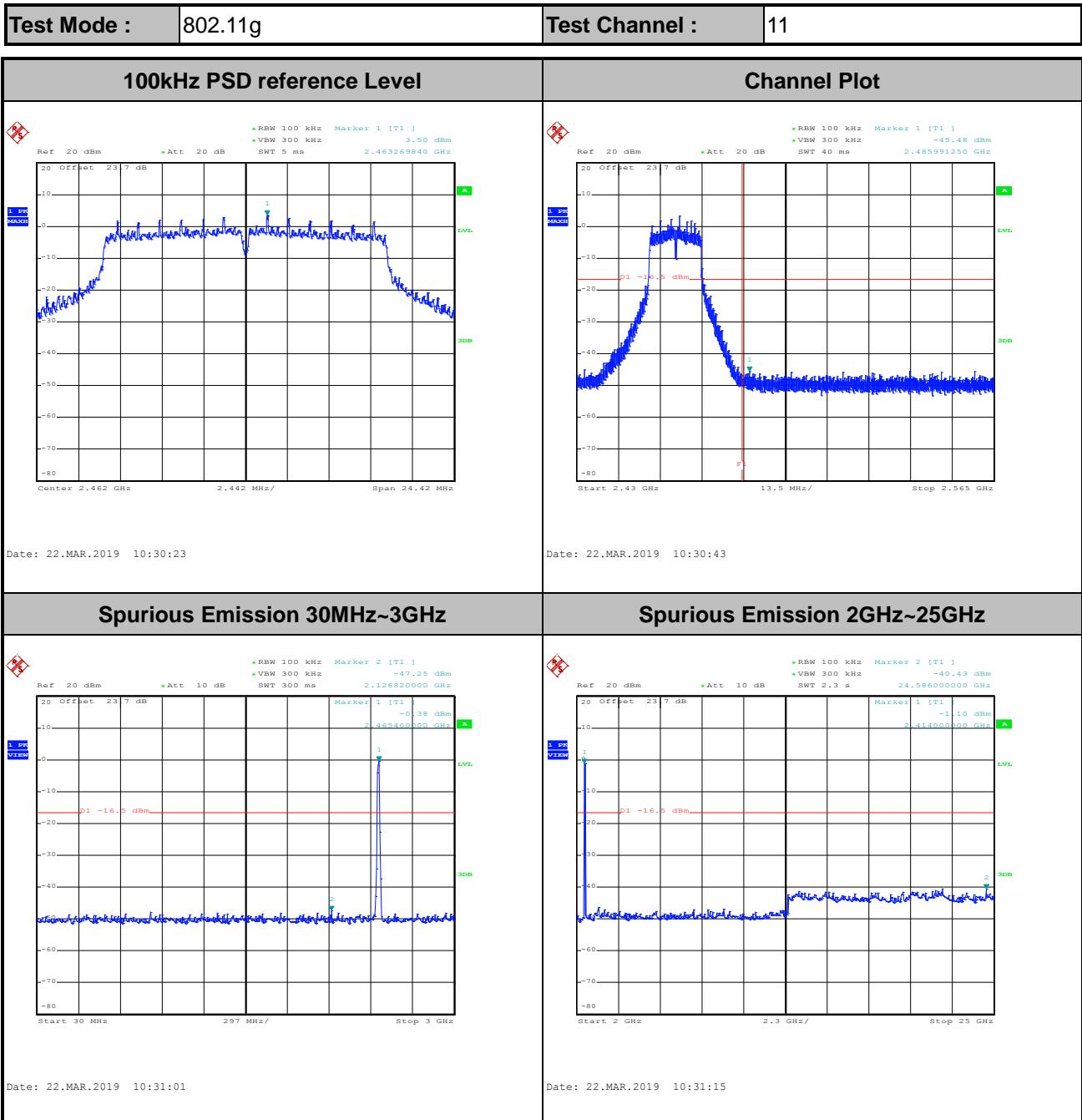


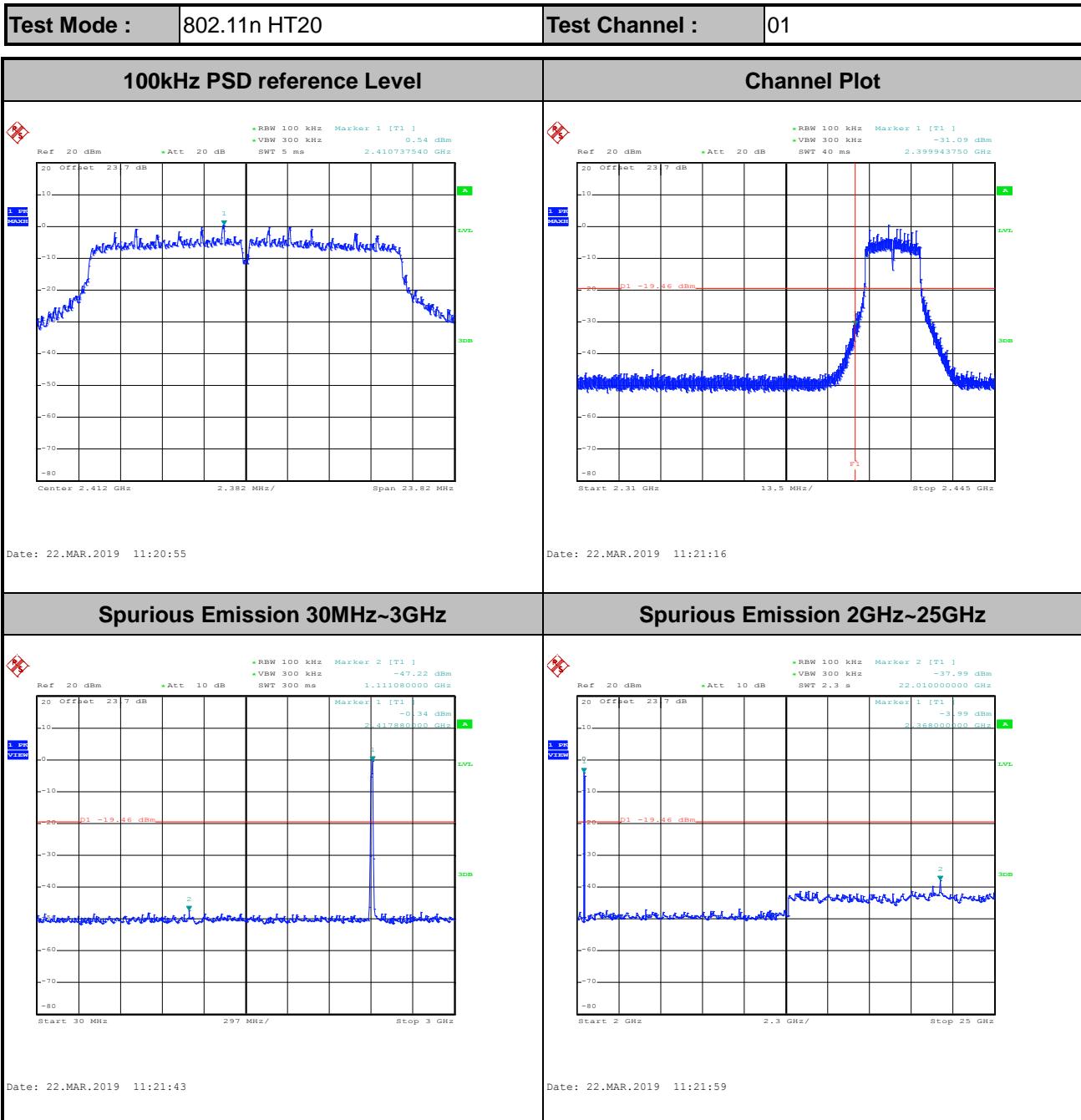
Date: 22.MAR.2019 10:23:57

Spurious Emission 2GHz~25GHz



Date: 22.MAR.2019 10:24:13

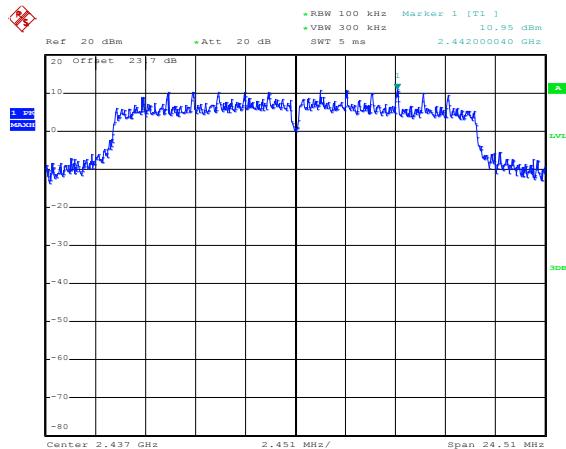






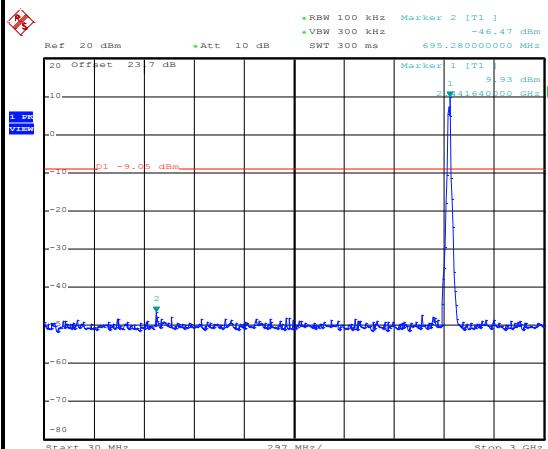
Test Mode :	802.11n HT20	Test Channel :	06
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100kHz PSD reference Level



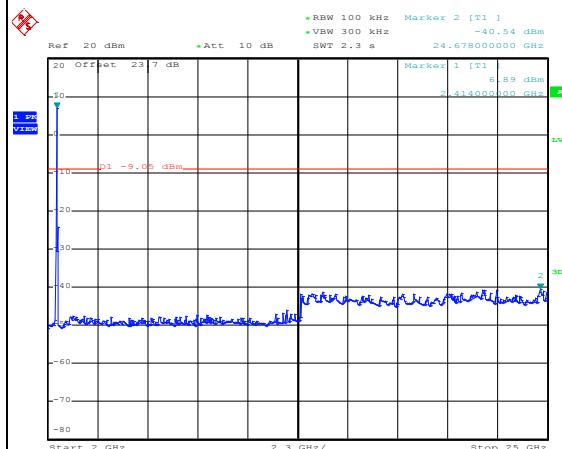
Date: 22.MAR.2019 11:25:06

Spurious Emission 30MHz~3GHz

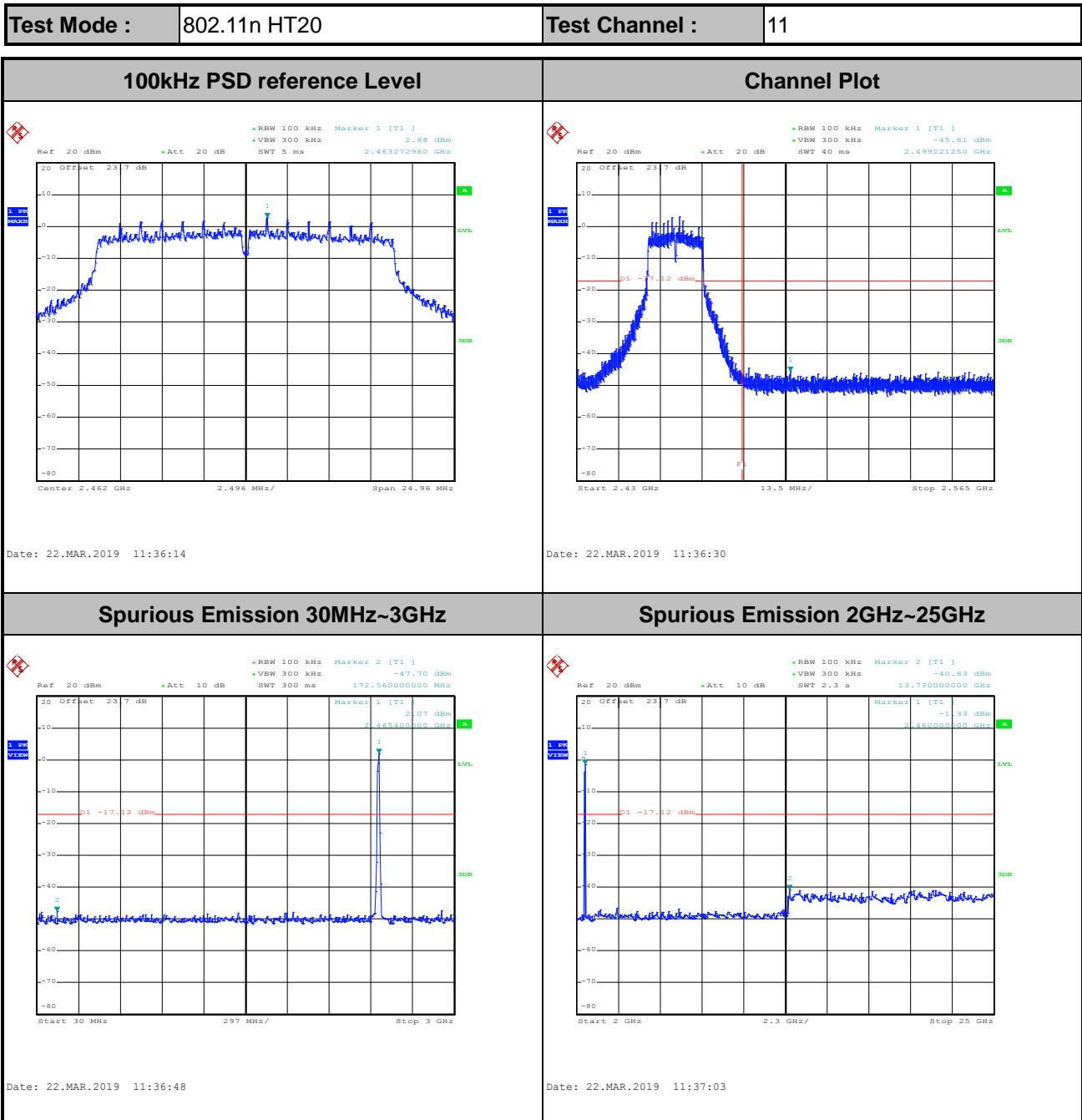


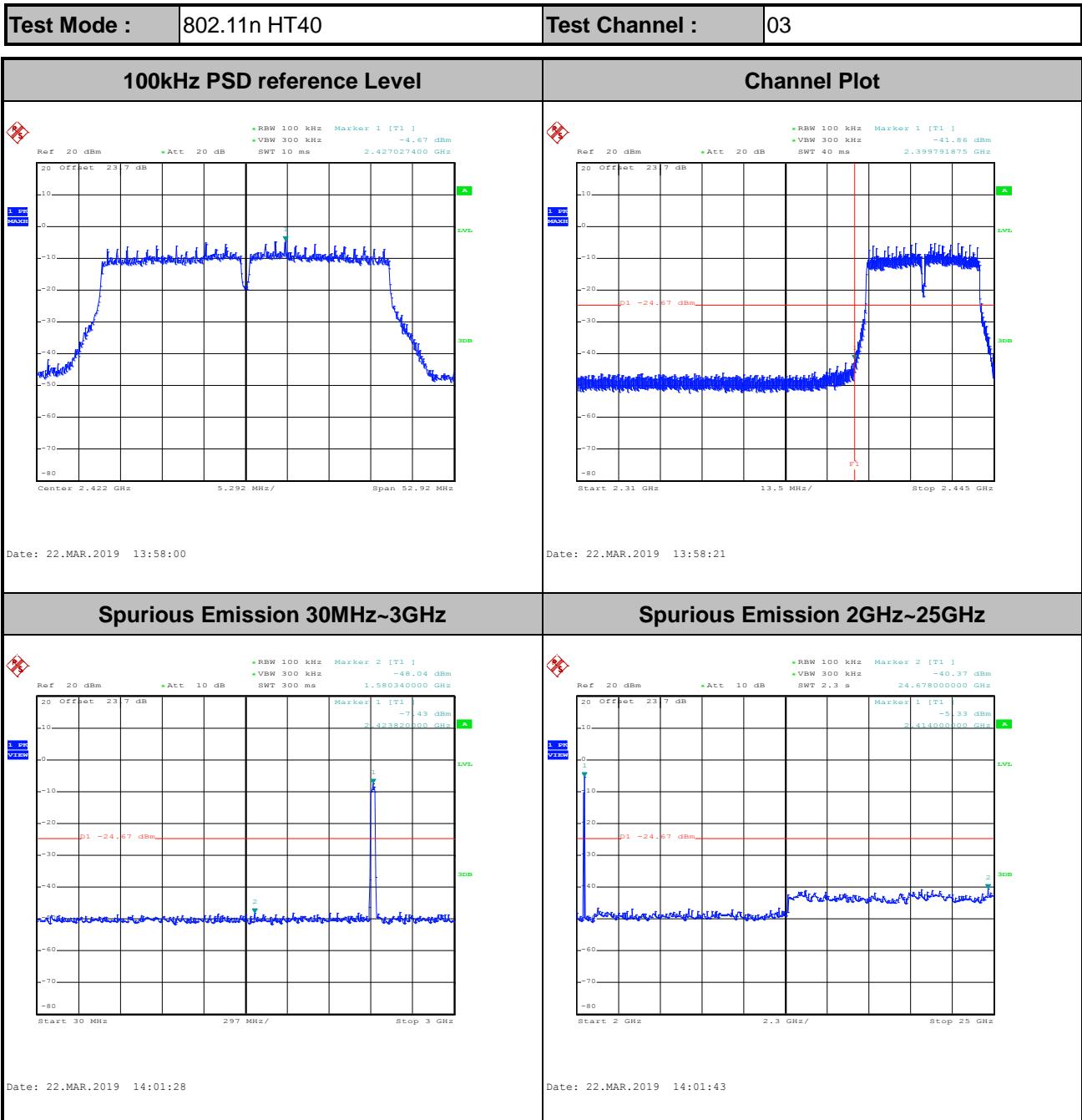
Date: 22.MAR.2019 11:25:33

Spurious Emission 2GHz~25GHz



Date: 22.MAR.2019 11:25:48

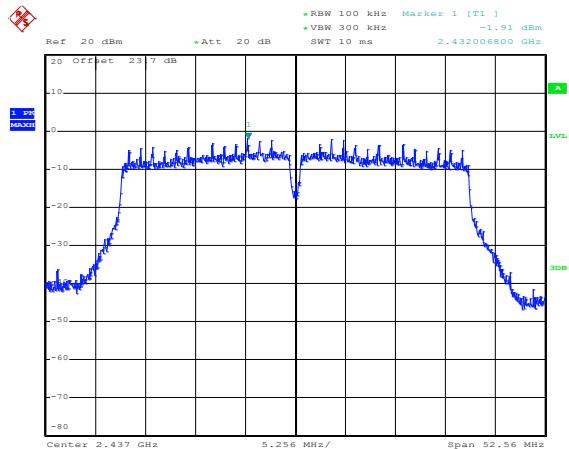






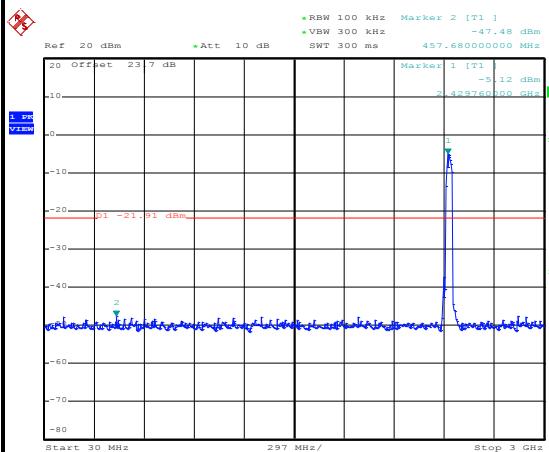
Test Mode :	802.11n HT40	Test Channel :	06
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100kHz PSD reference Level



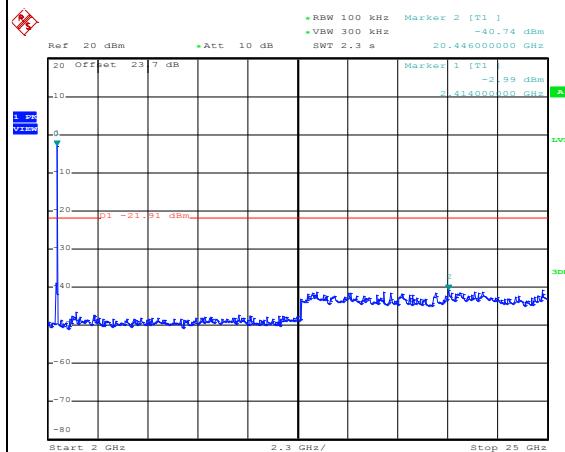
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Spurious Emission 30MHz~3GHz

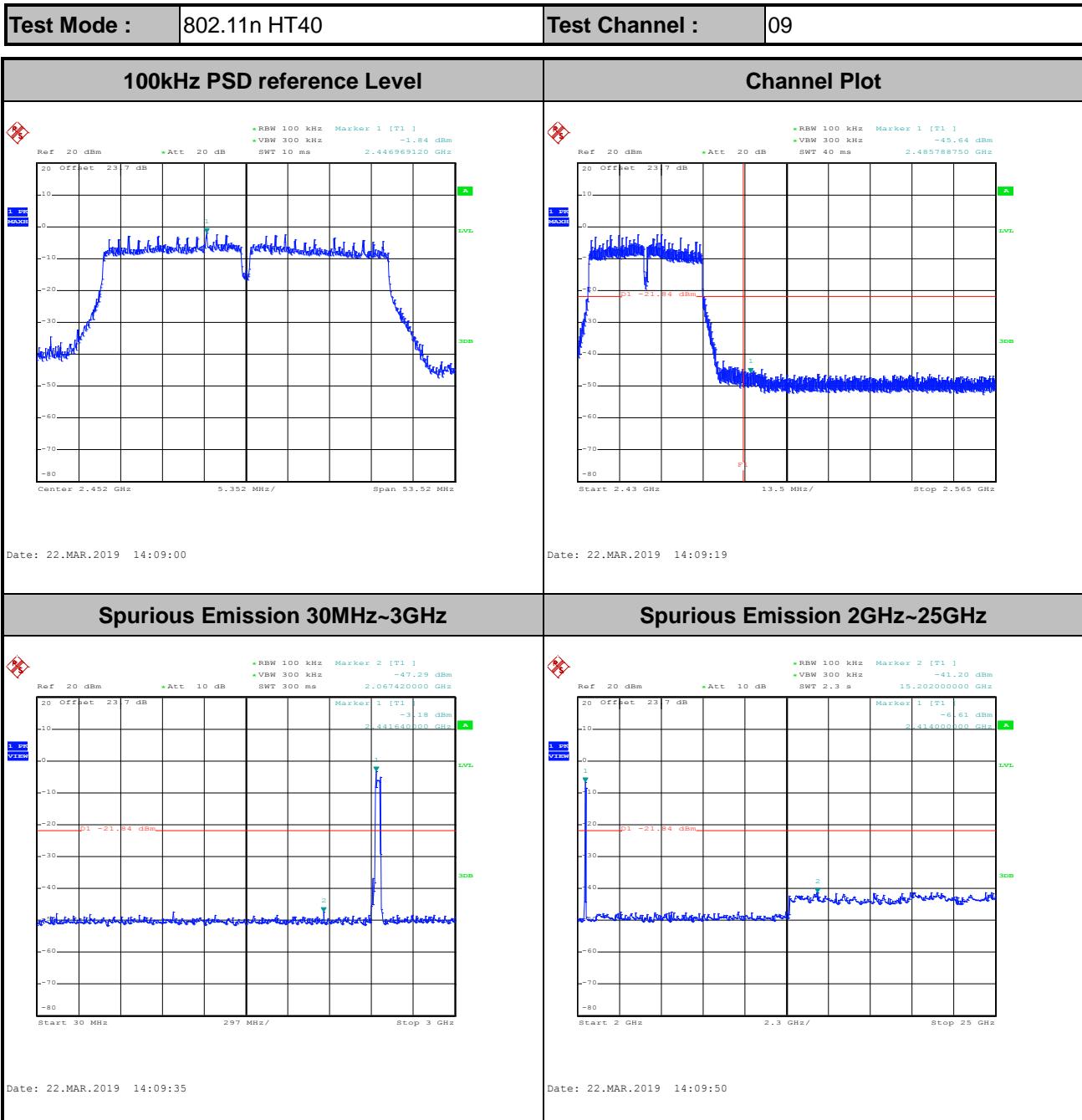


Date: 22.MAR.2019 14:05:13

Spurious Emission 2GHz~25GHz

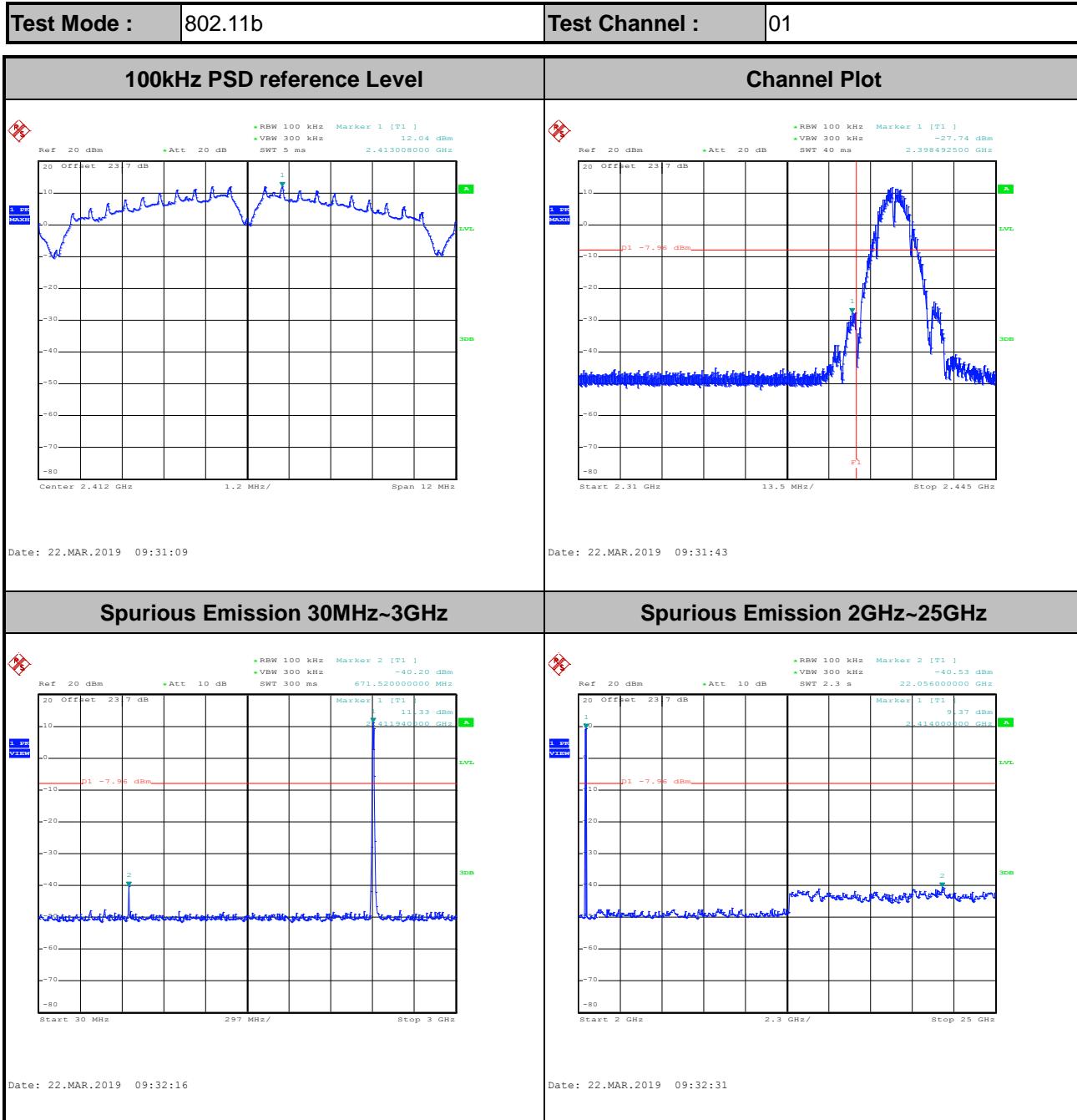


Date: 22.MAR.2019 14:05:28





Number of TX = 1, Chain. 2 (Measured)

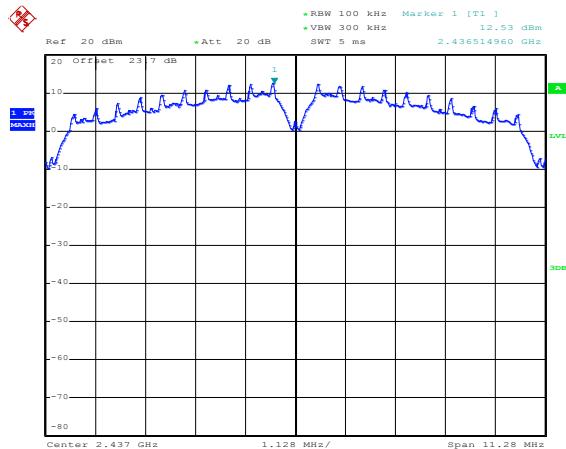




Test Mode : 802.11b

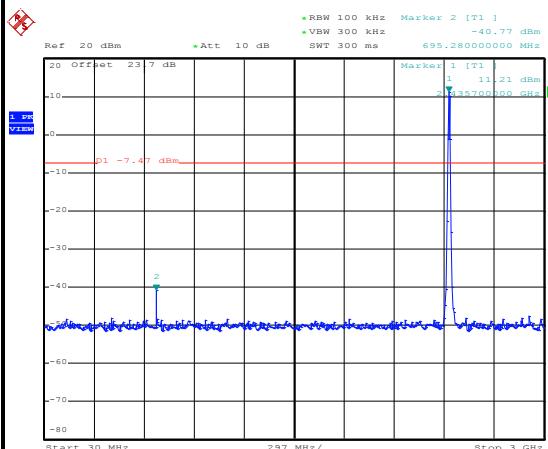
Test Channel : 06

100kHz PSD reference Level



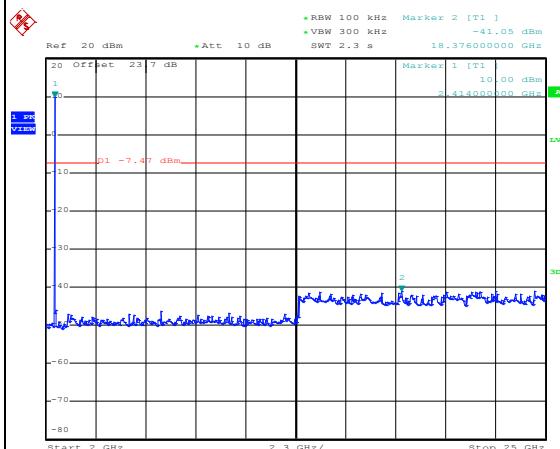
Date: 22.MAR.2019 09:39:10

Spurious Emission 30MHz~3GHz

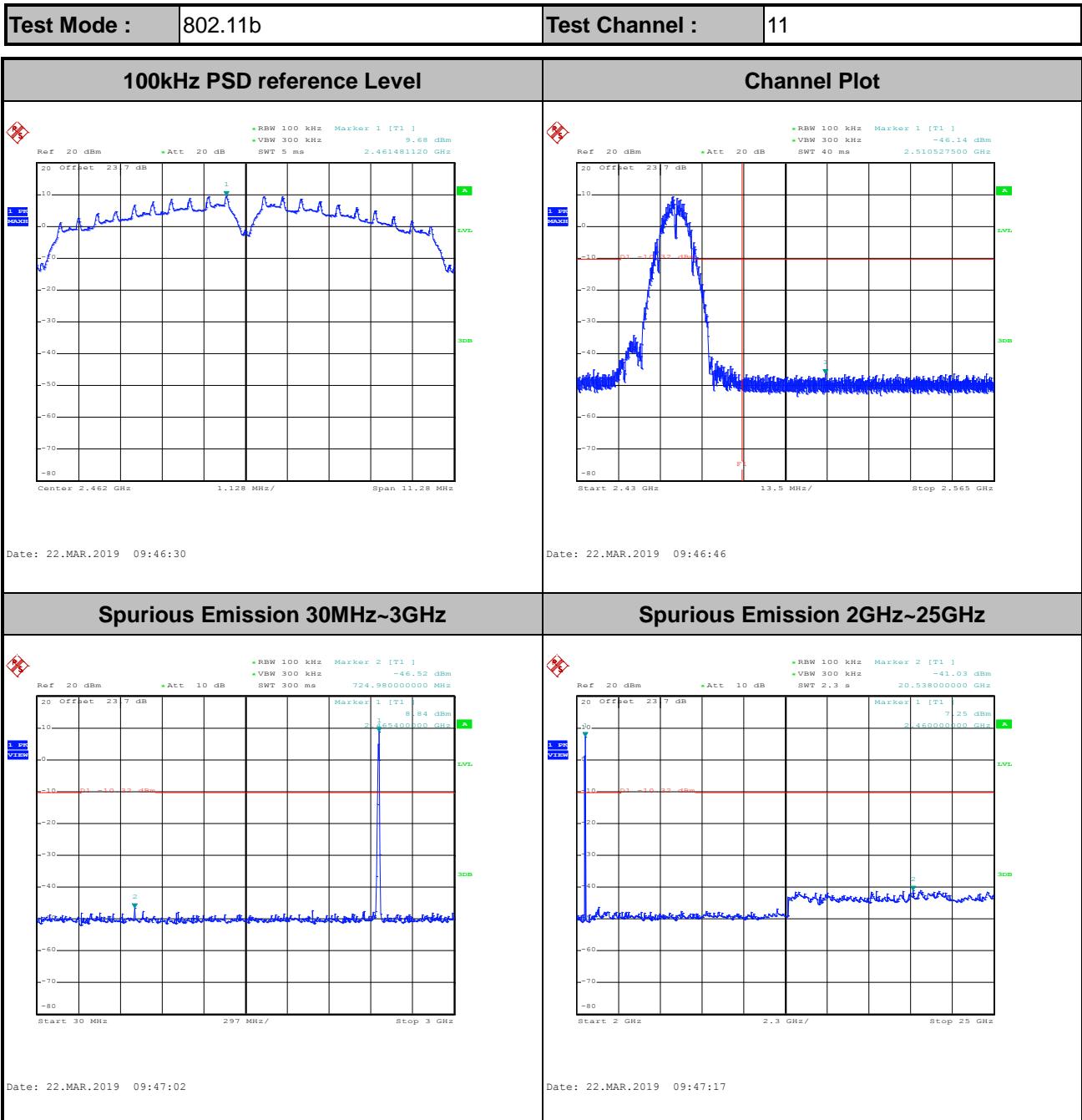


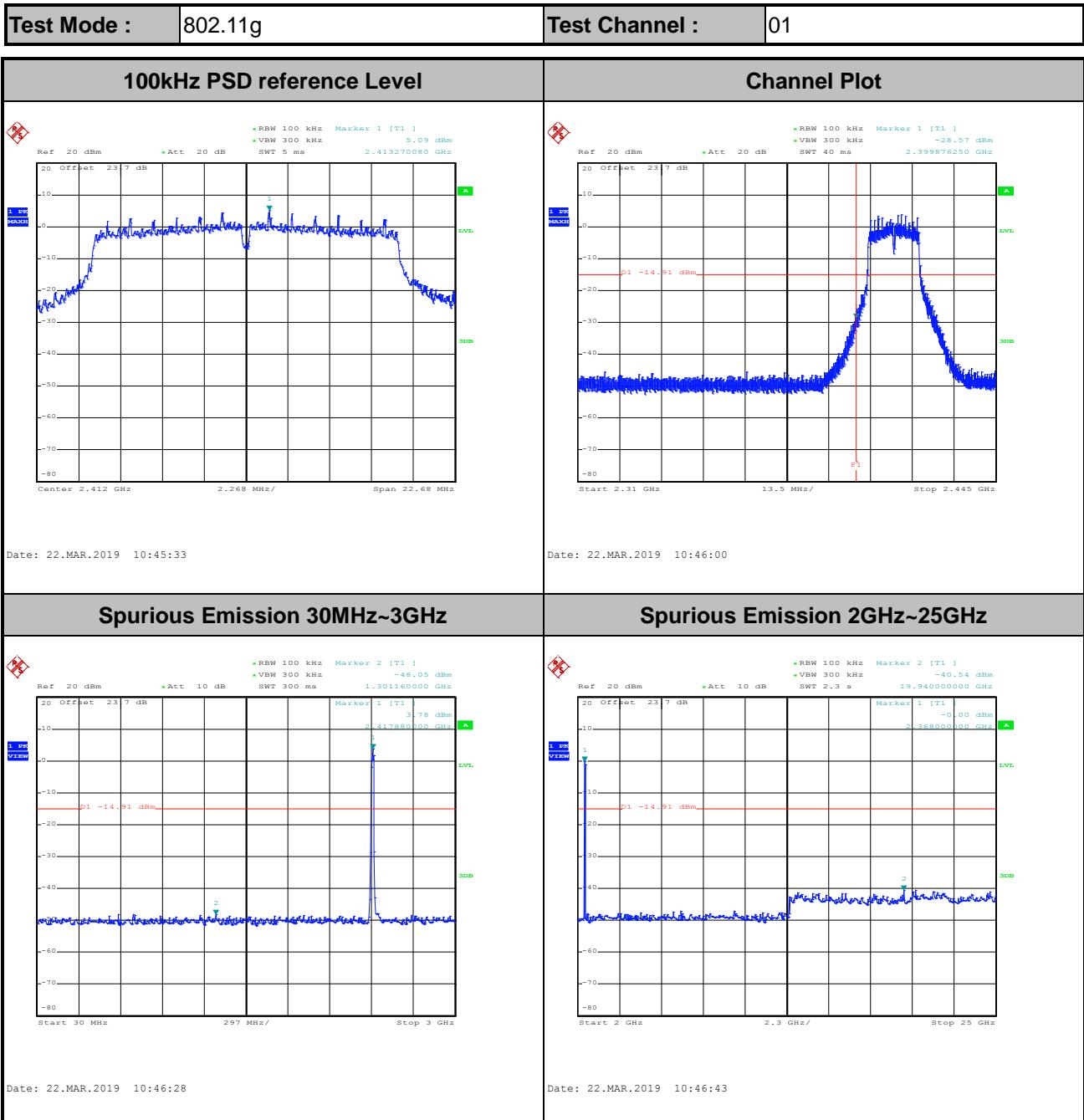
Date: 22.MAR.2019 09:39:40

Spurious Emission 2GHz~25GHz



Date: 22.MAR.2019 09:39:55



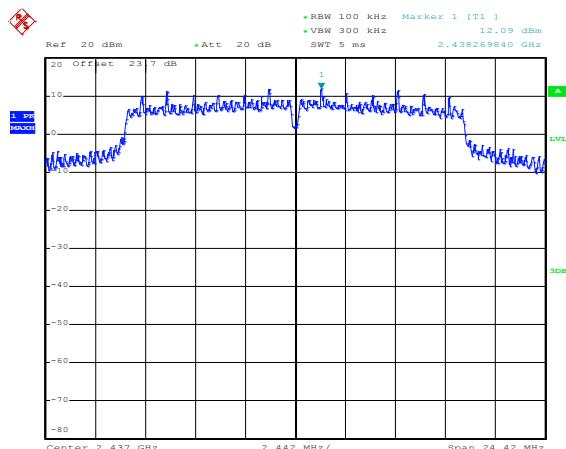




Test Mode : 802.11g

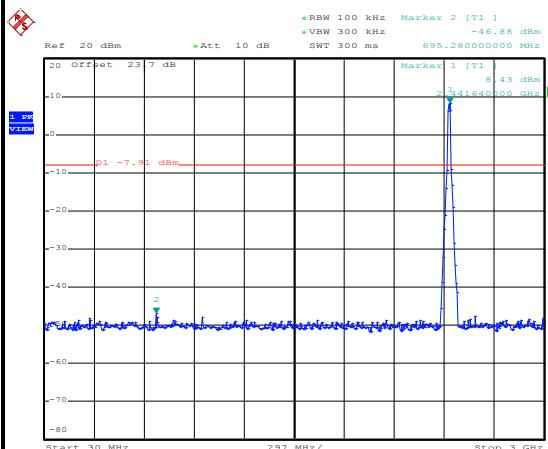
Test Channel : 06

100kHz PSD reference Level



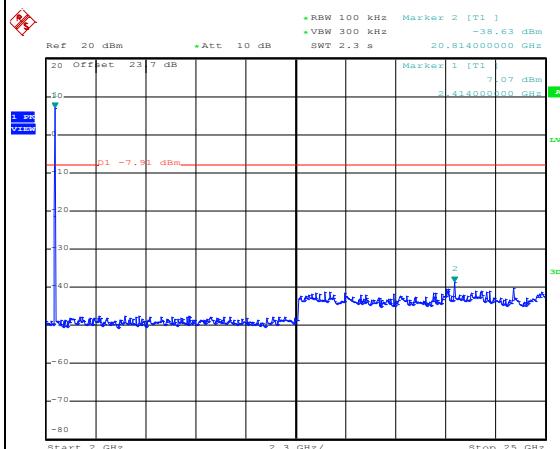
Date: 22.MAR.2019 10:41:40

Spurious Emission 30MHz~3GHz

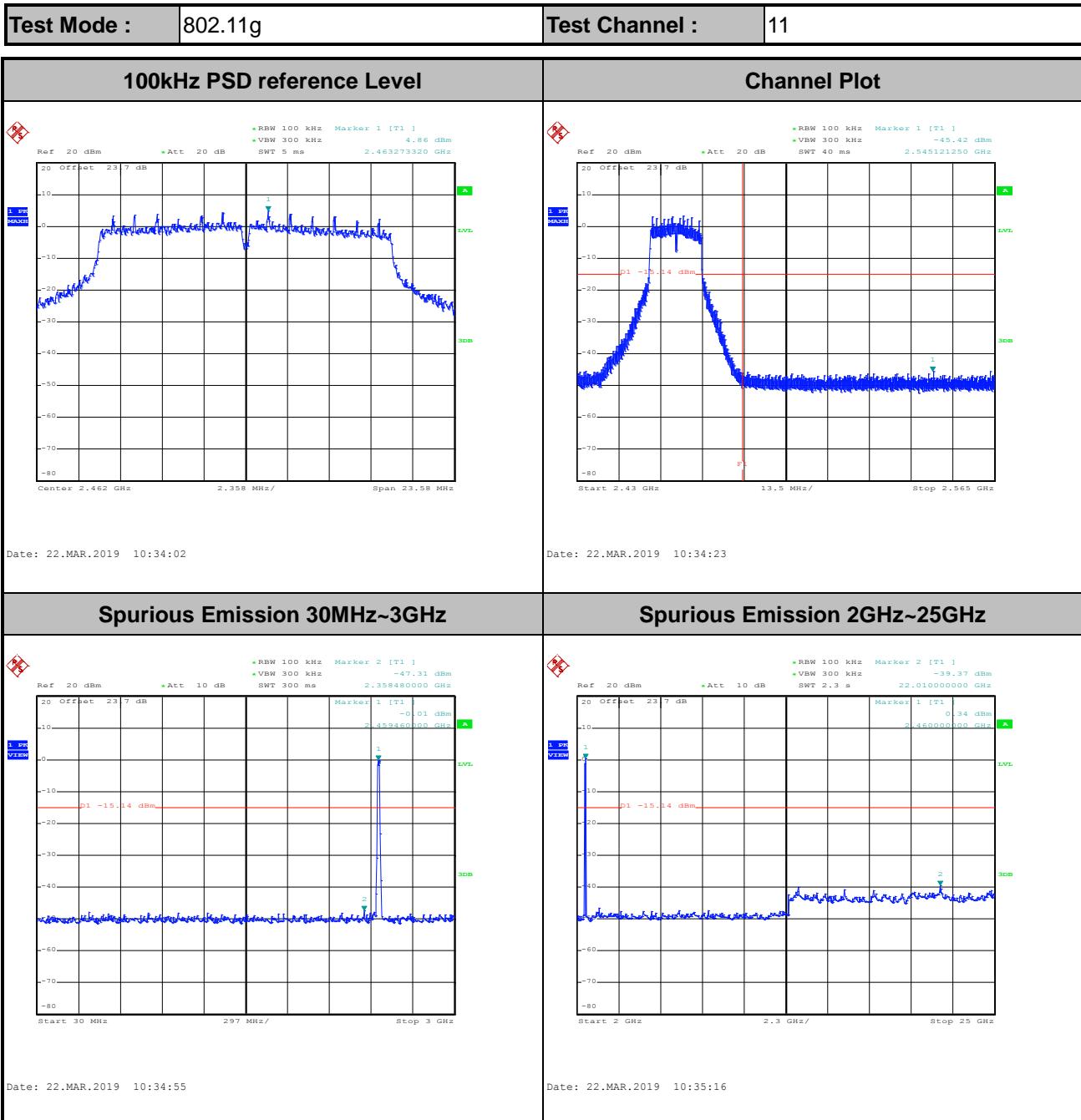


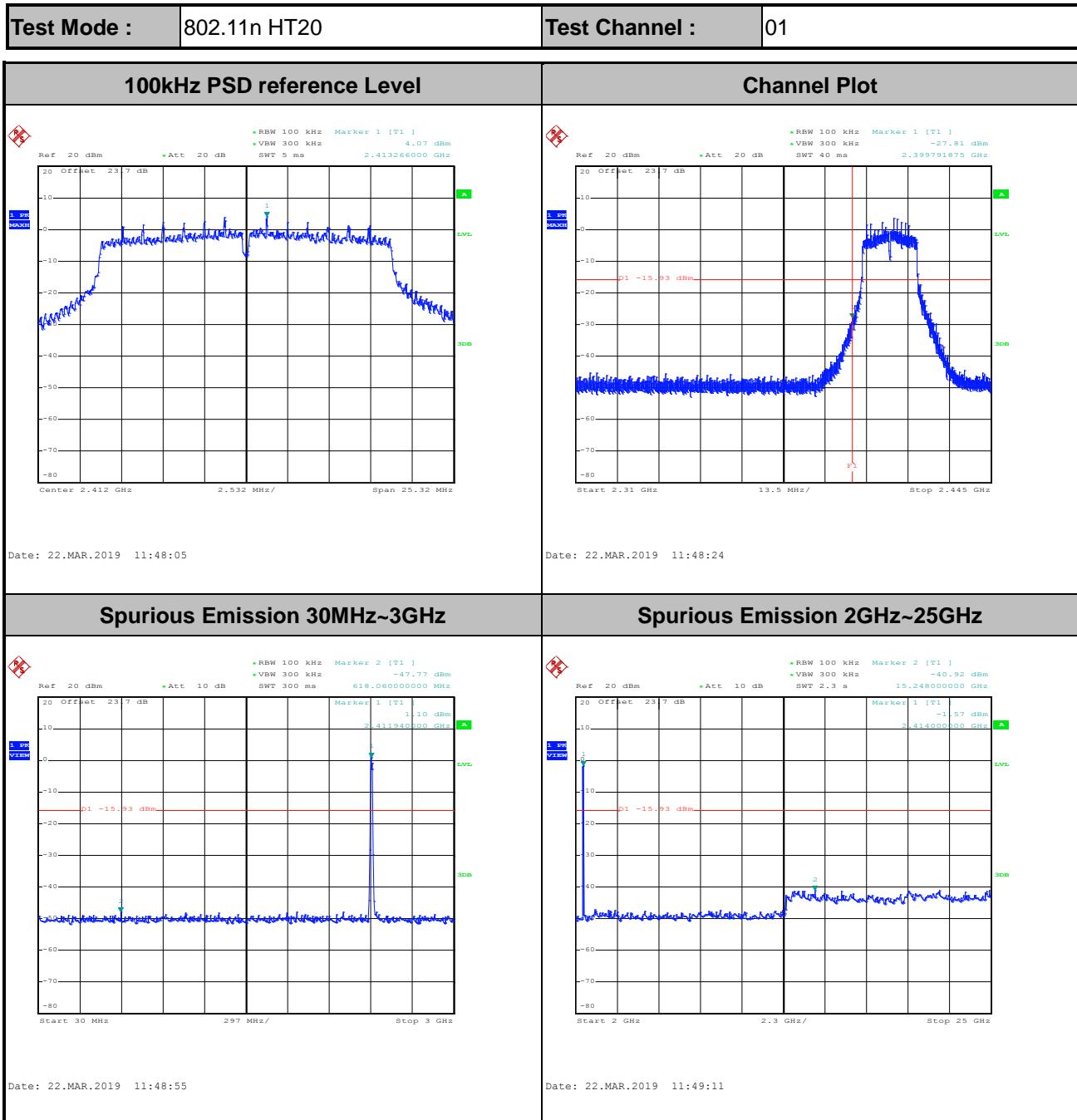
Date: 22.MAR.2019 10:42:13

Spurious Emission 2GHz~25GHz



Date: 22.MAR.2019 10:42:29

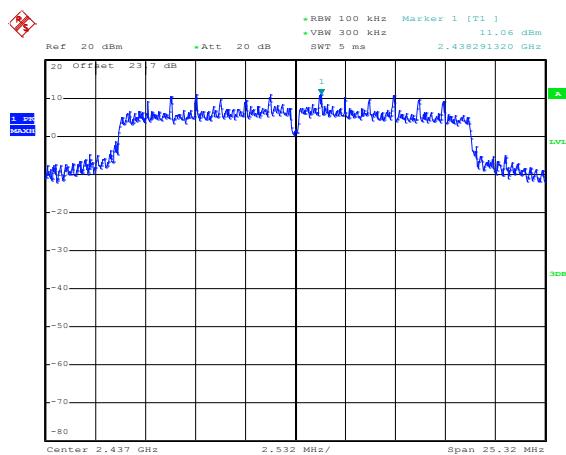






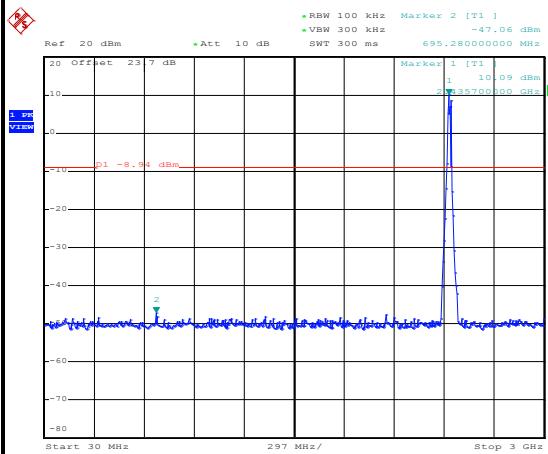
Test Mode :	802.11n HT20	Test Channel :	06
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100kHz PSD reference Level



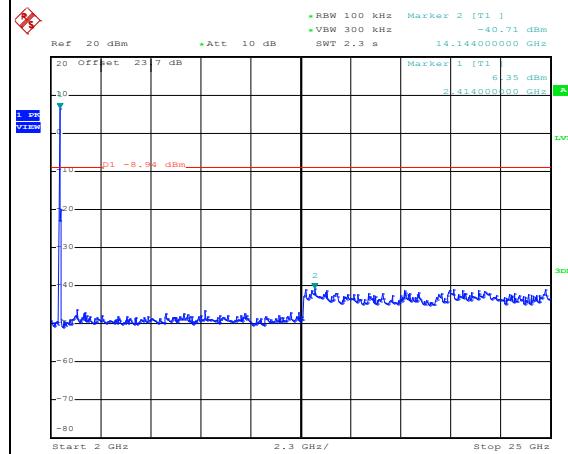
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Spurious Emission 30MHz~3GHz

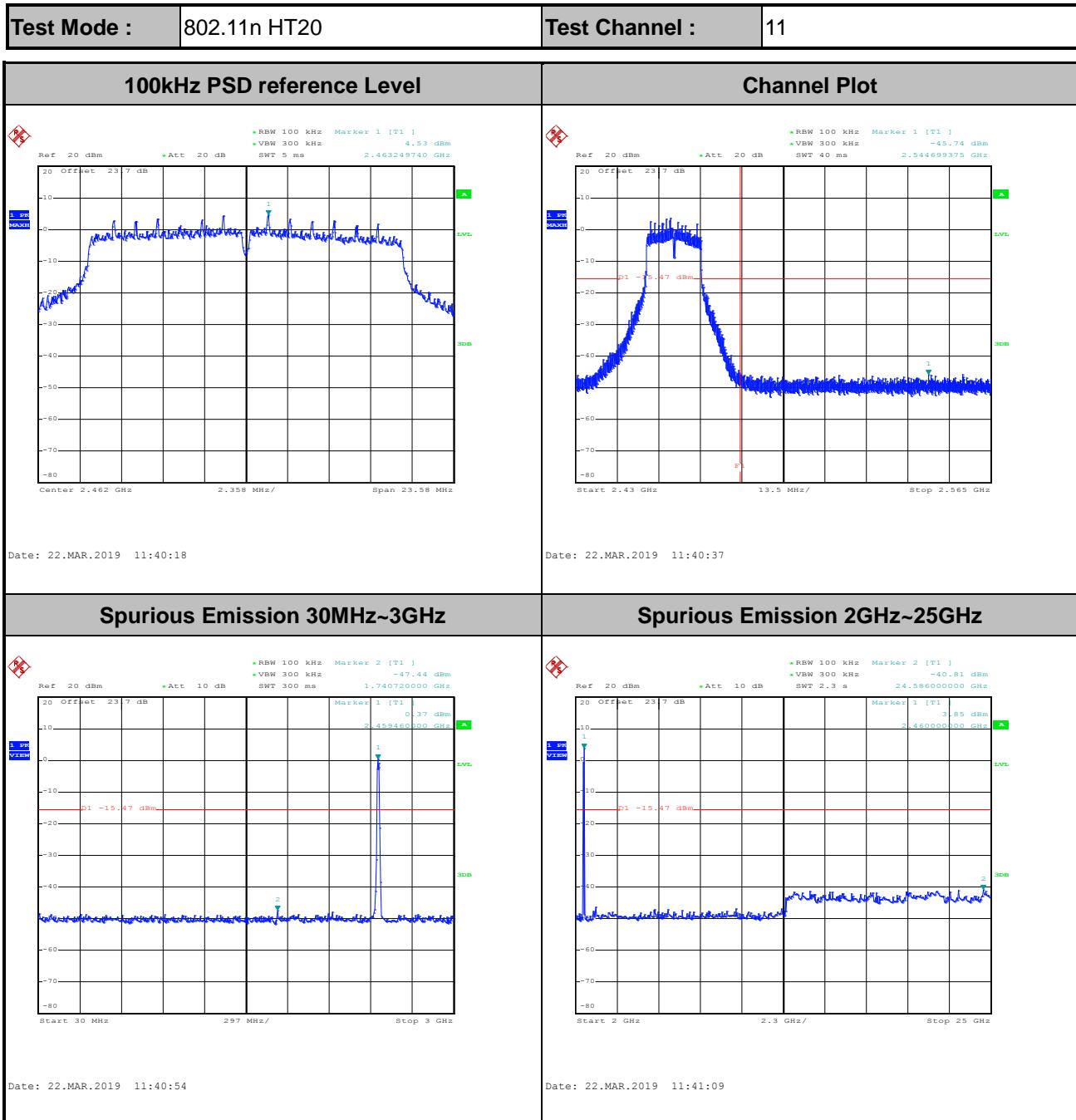


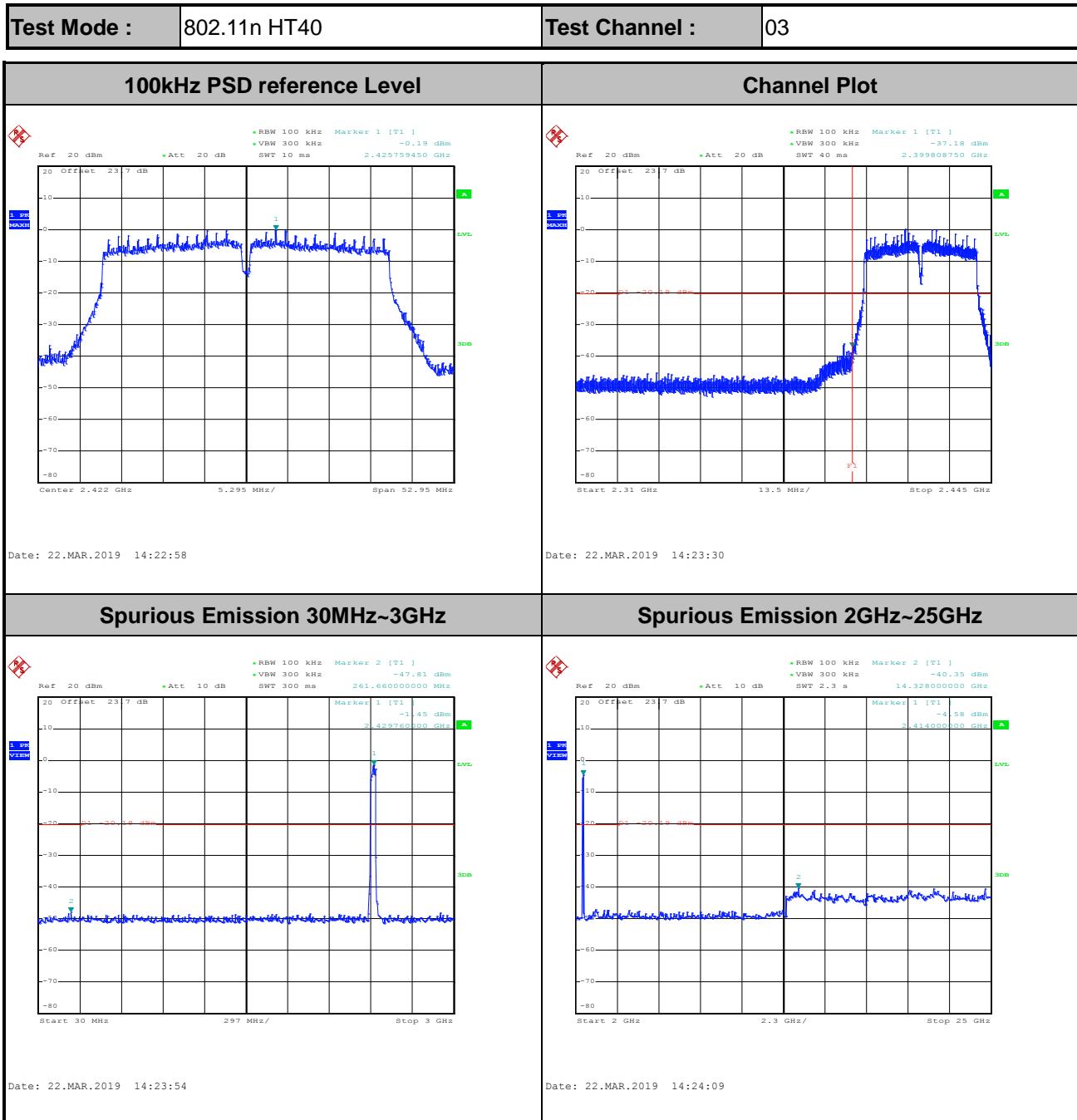
Date: 22.MAR.2019 11:44:31

Spurious Emission 2GHz~25GHz



Date: 22.MAR.2019 11:44:46

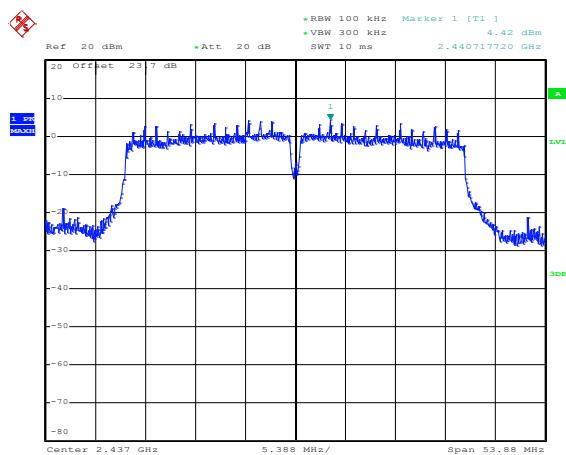






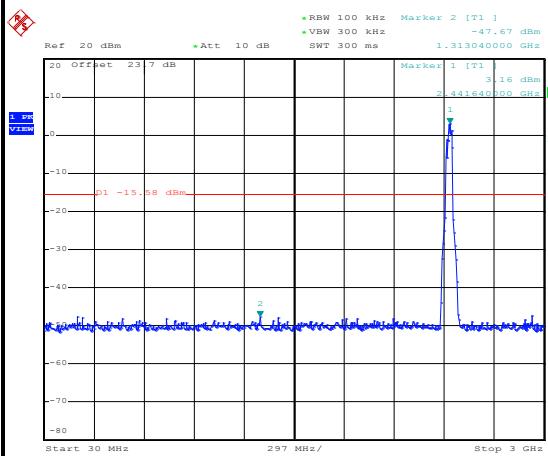
Test Mode :	802.11n HT40	Test Channel :	06
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100kHz PSD reference Level



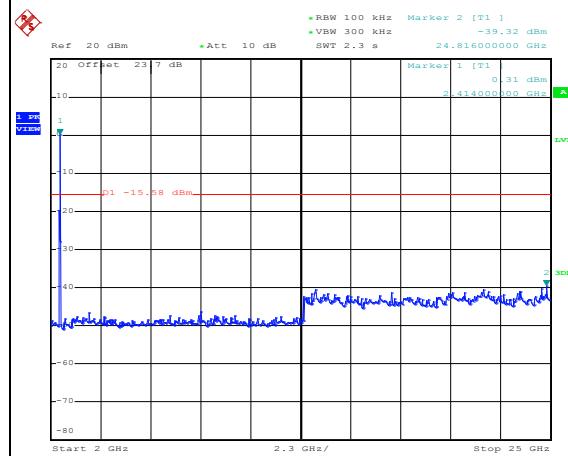
Date: 22.MAR.2019 14:16:49

Spurious Emission 30MHz~3GHz



Date: 22.MAR.2019 14:18:32

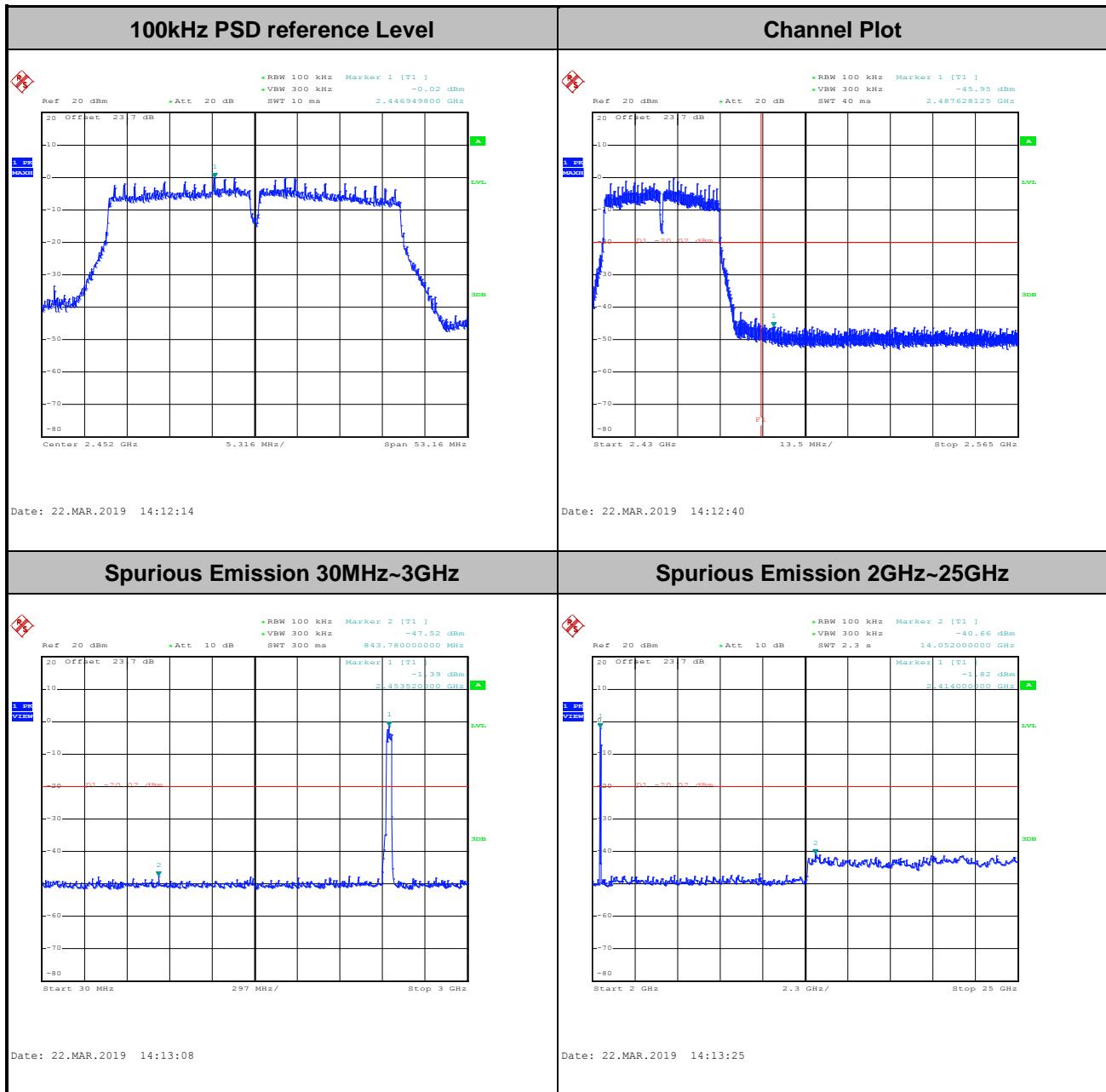
Spurious Emission 2GHz~25GHz



Date: 22.MAR.2019 14:18:47

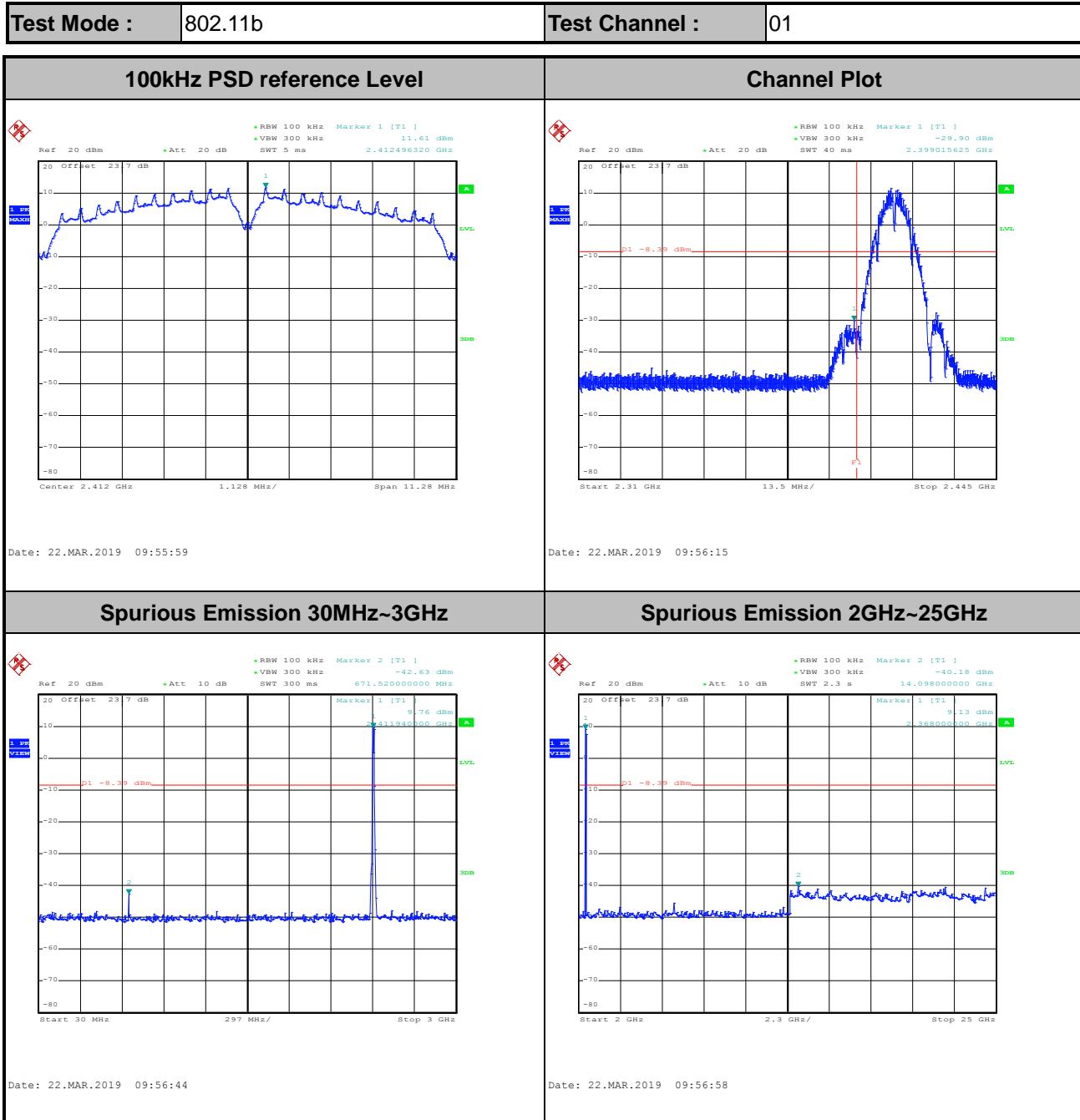


Test Mode :	802.11n HT40	Test Channel :	09
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Number of TX = 2, Chain. 1 (Measured)

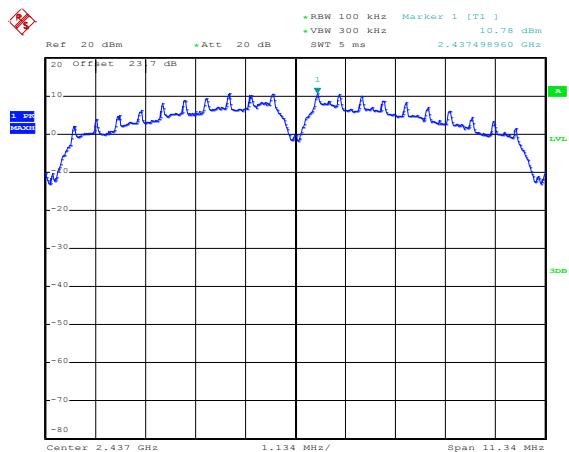




Test Mode : 802.11b

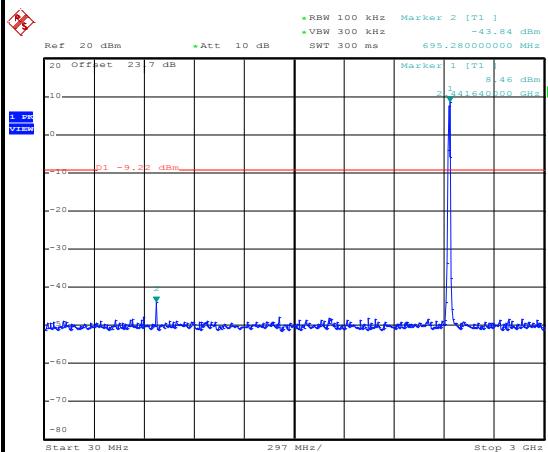
Test Channel : 06

100kHz PSD reference Level



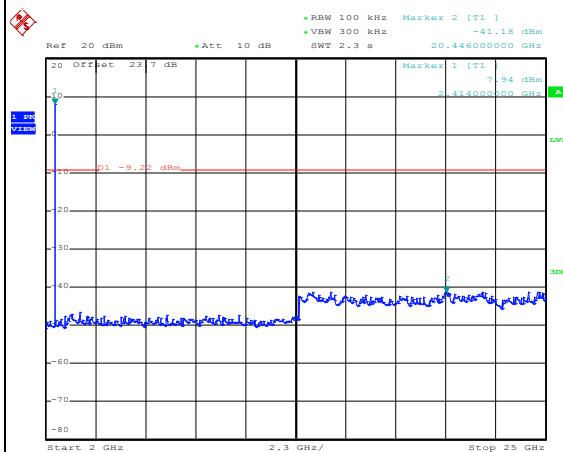
Date: 22.MAR.2019 10:07:43

Spurious Emission 30MHz~3GHz

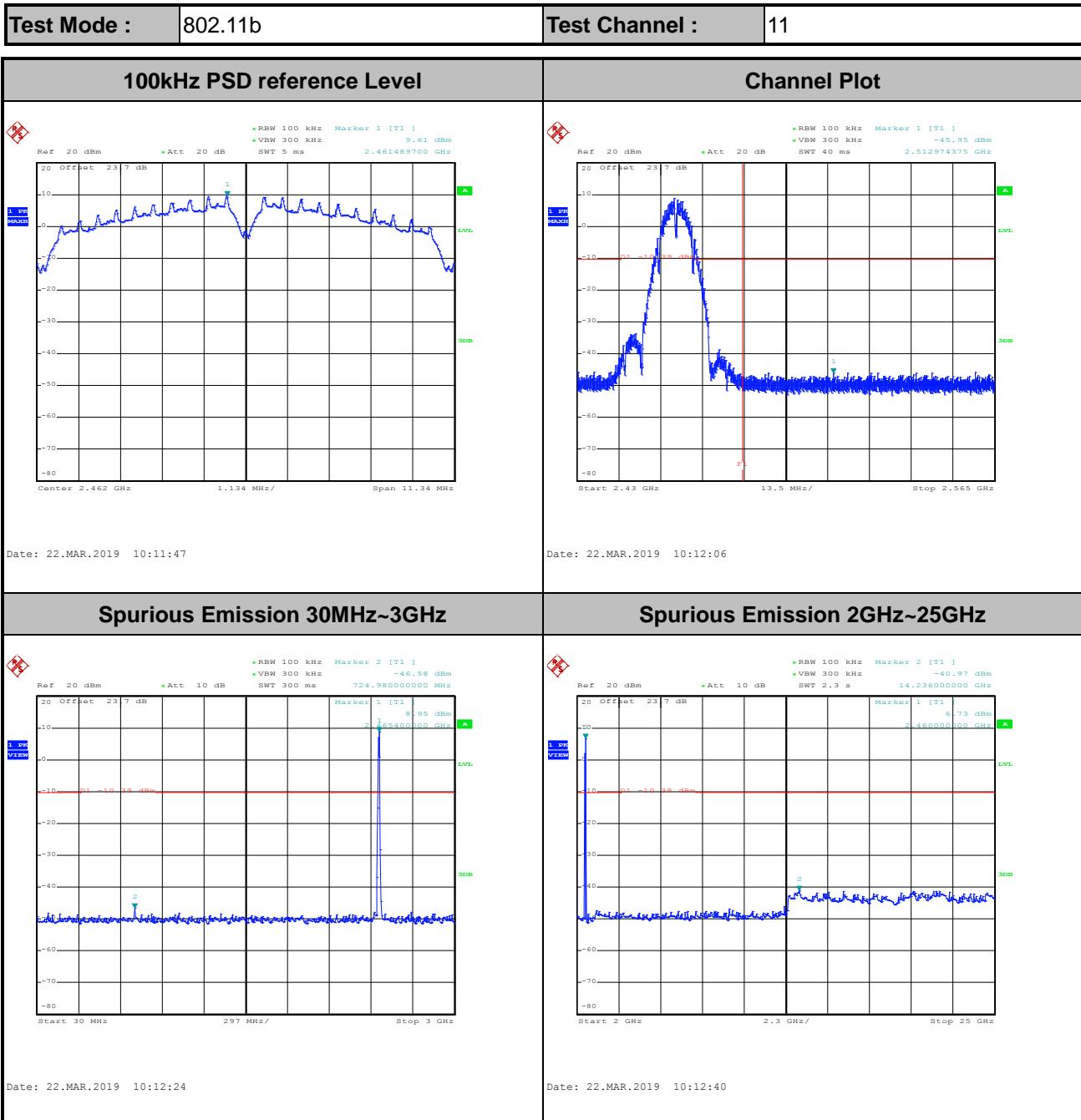


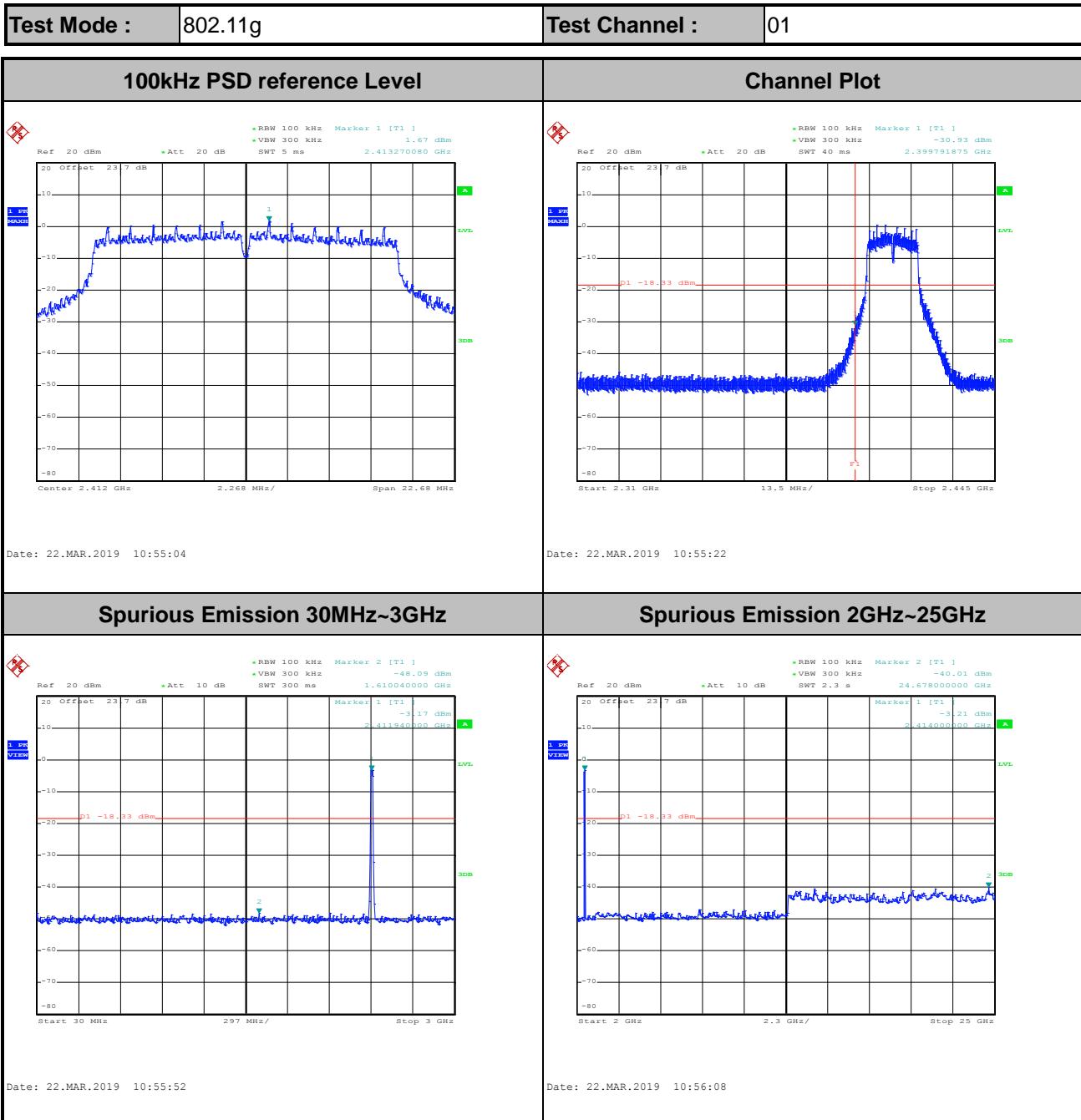
Date: 22.MAR.2019 10:08:00

Spurious Emission 2GHz~25GHz



Date: 22.MAR.2019 10:08:14



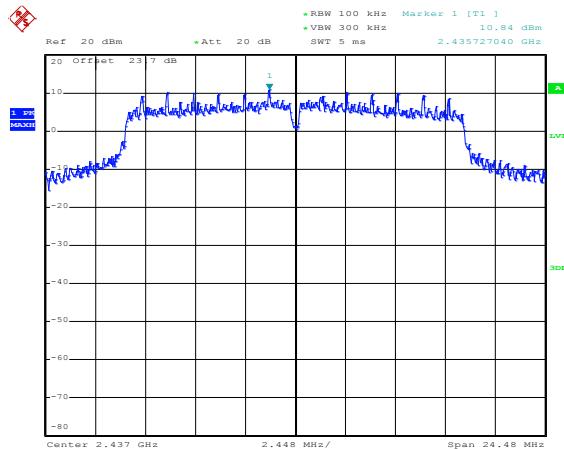




Test Mode : 802.11g

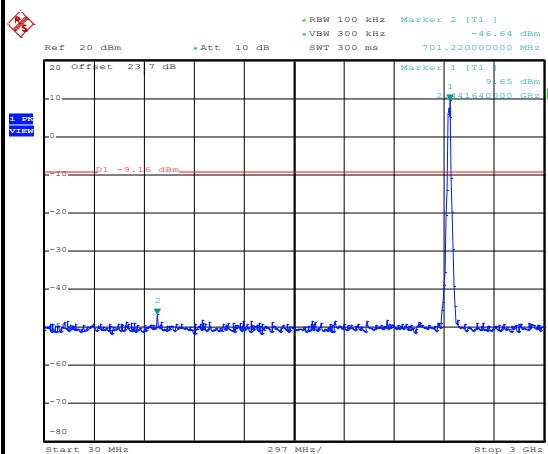
Test Channel : 06

100kHz PSD reference Level



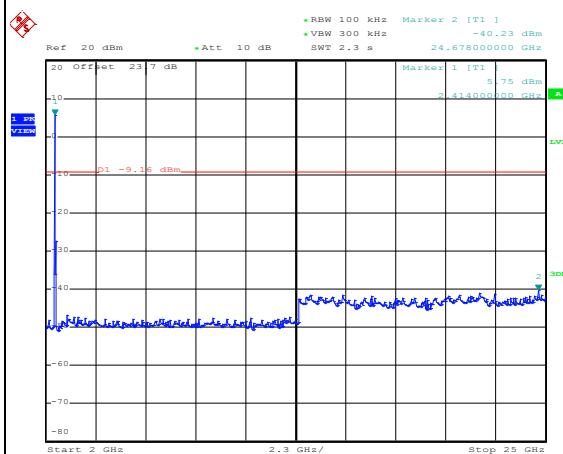
Date: 22.MAR.2019 10:59:24

Spurious Emission 30MHz~3GHz

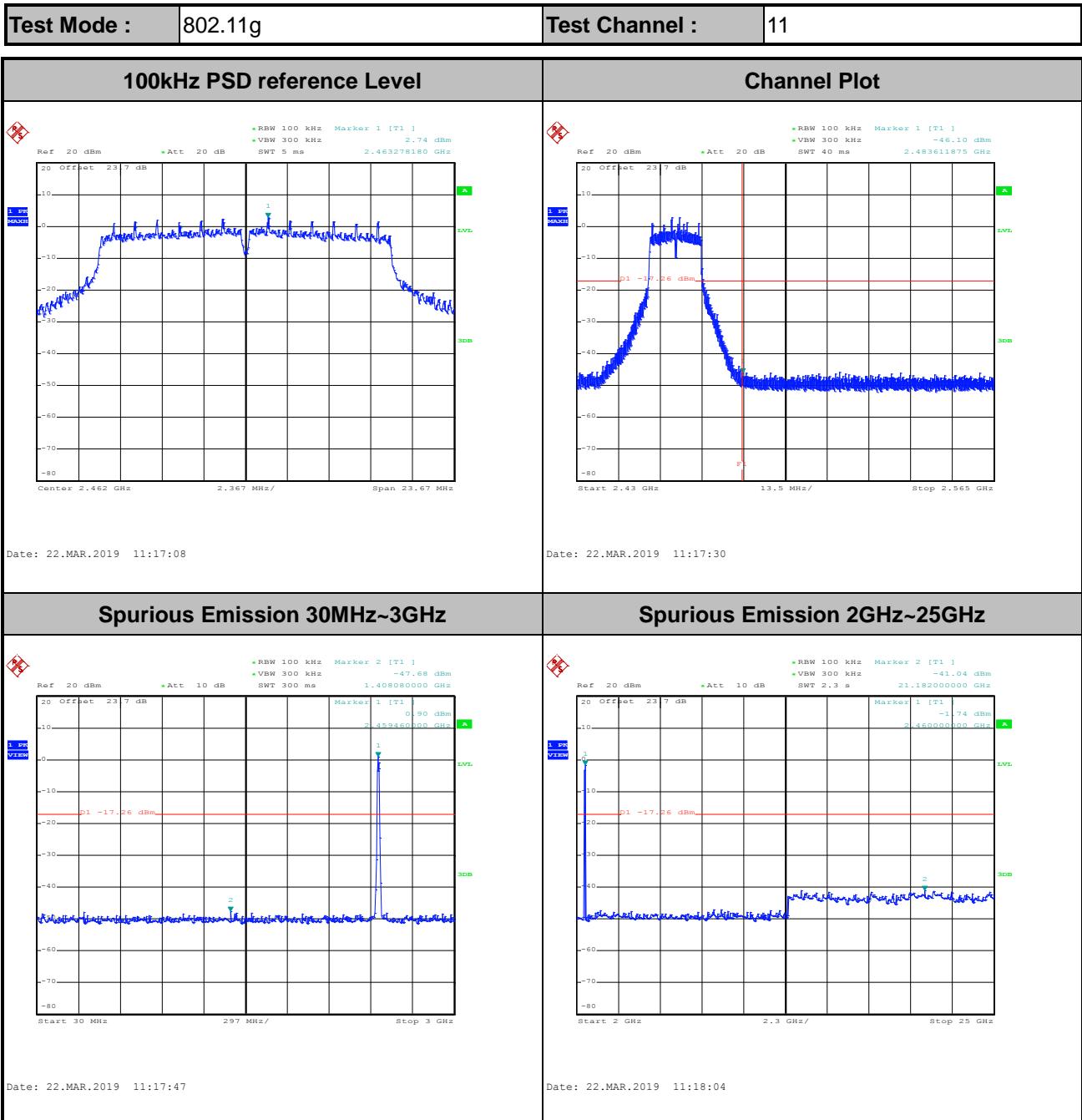


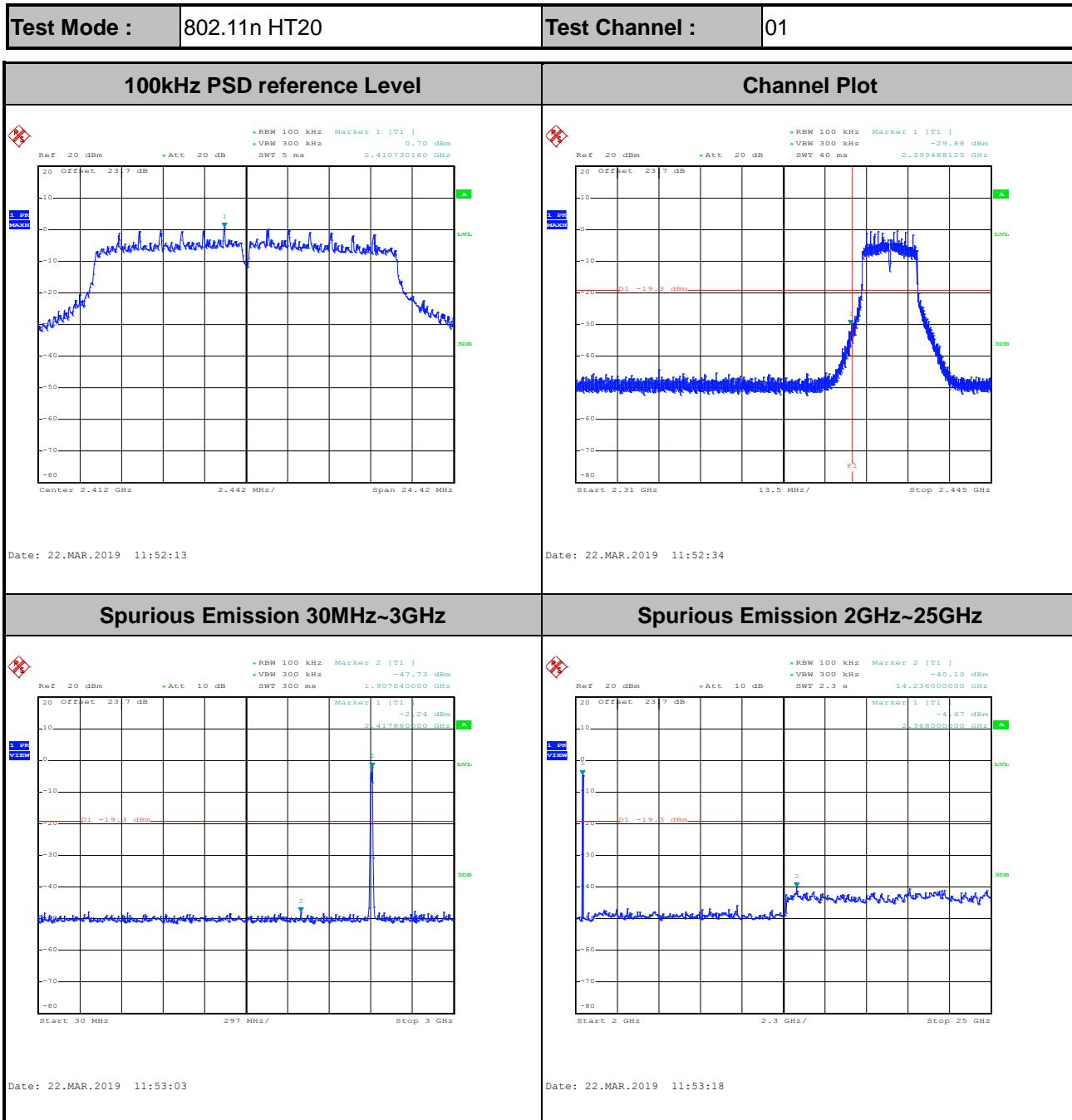
Date: 22.MAR.2019 10:59:52

Spurious Emission 2GHz~25GHz



Date: 22.MAR.2019 11:00:06

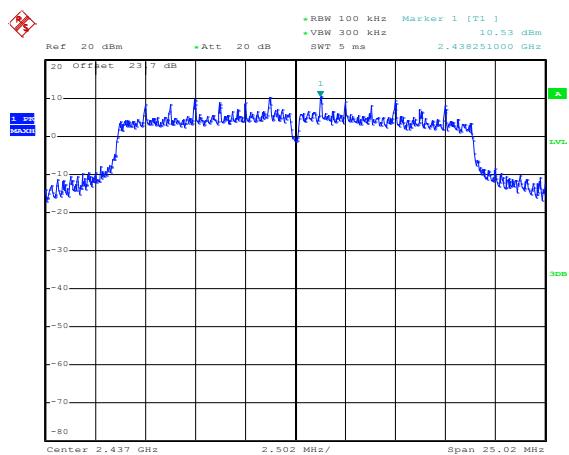






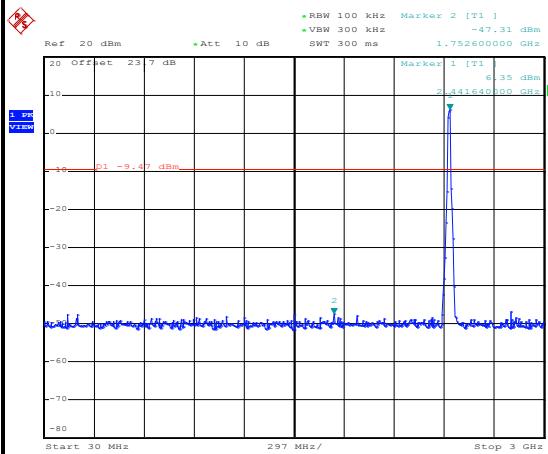
Test Mode :	802.11n HT20	Test Channel :	06
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100kHz PSD reference Level



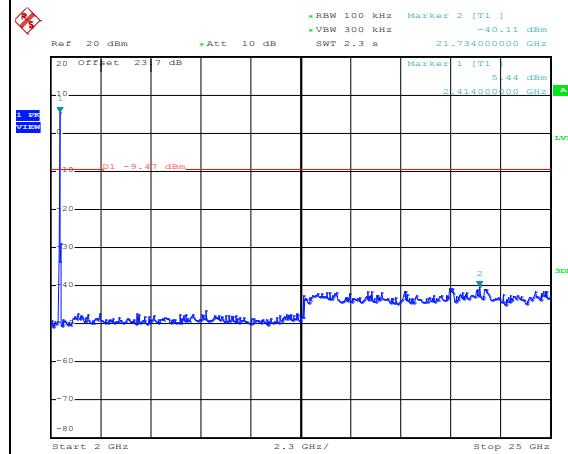
Date: 22.MAR.2019 13:38:27

Spurious Emission 30MHz~3GHz

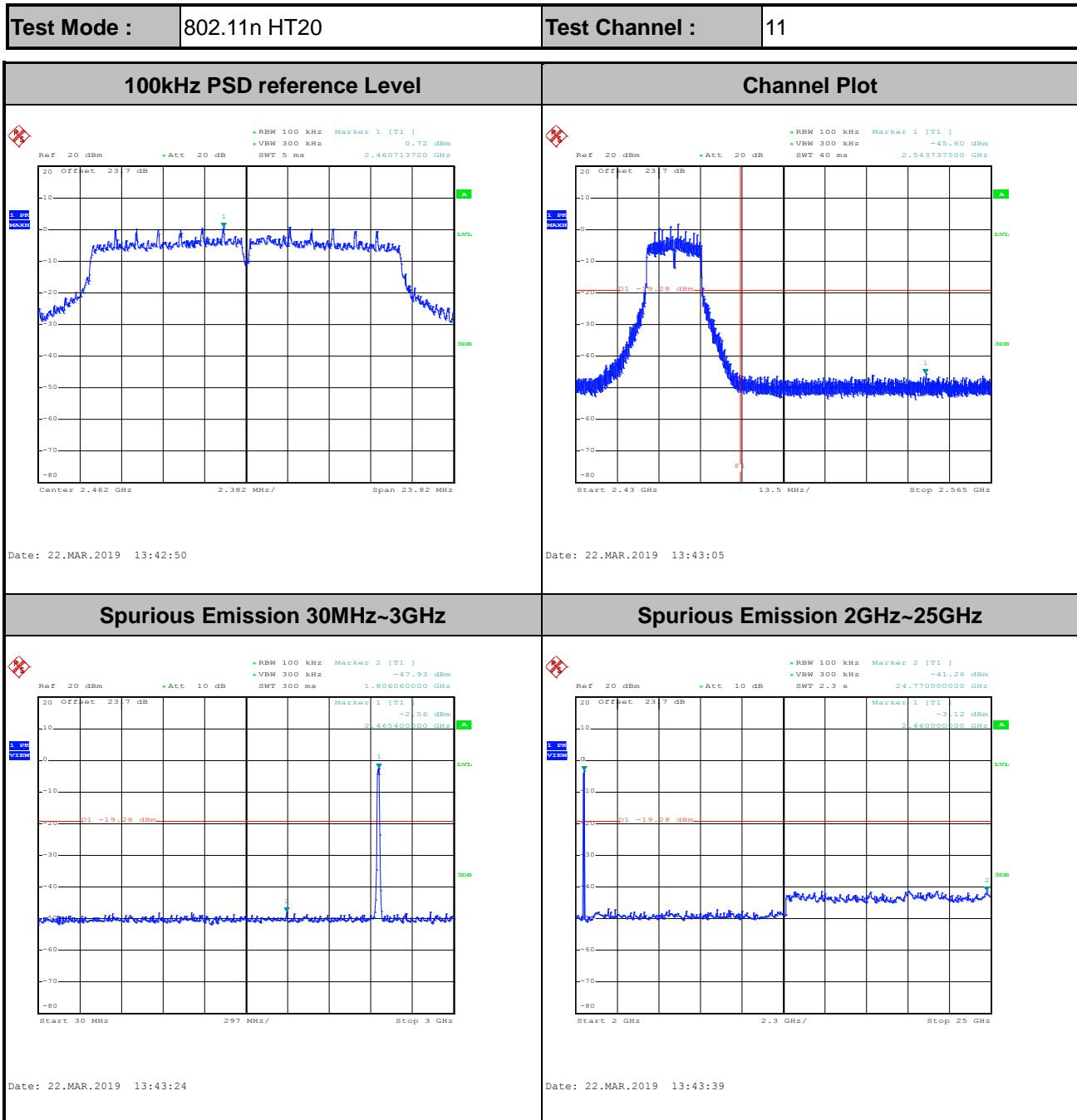


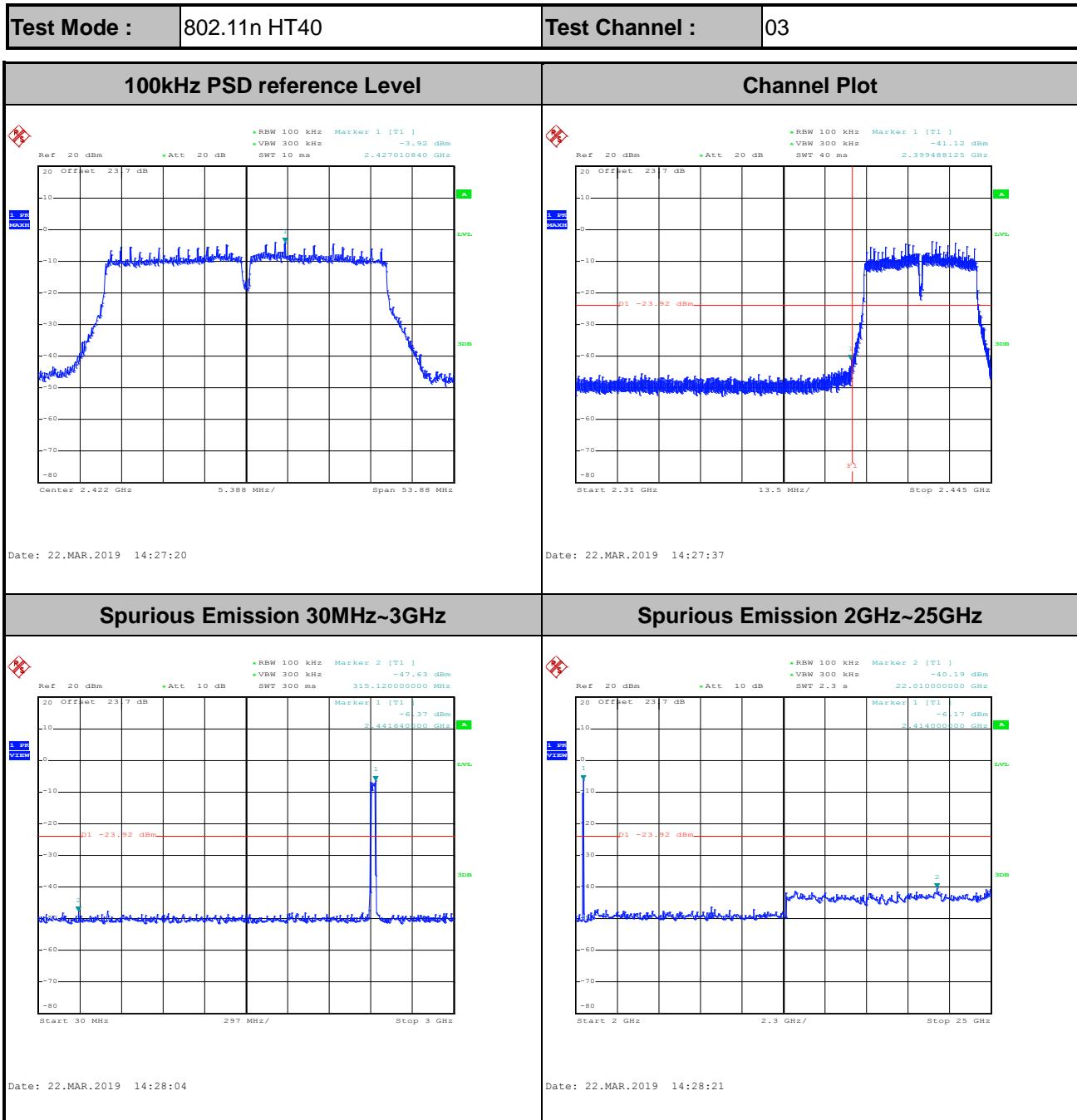
Date: 22.MAR.2019 13:38:56

Spurious Emission 2GHz~25GHz



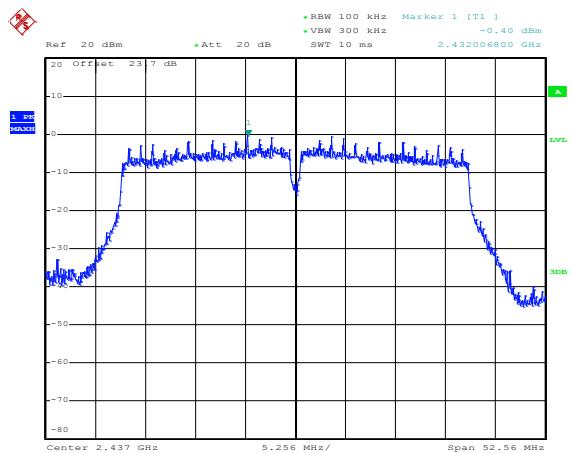
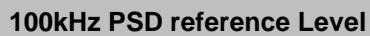
Date: 22.MAR.2019 13:39:10





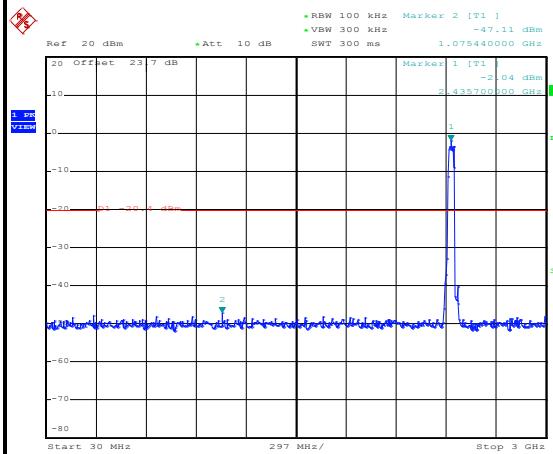


Test Mode : 802.11n HT40 **Test Channel :** 06



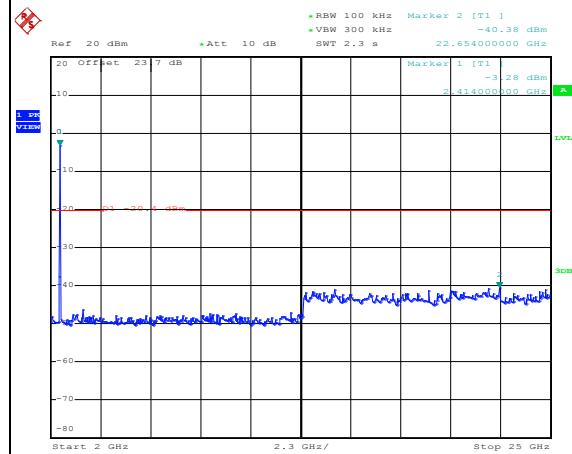
Date: 22.MAR.2019 14:39:55

Spurious Emission 30MHz~3GHz



Date: 22.MAR.2019 14:40:23

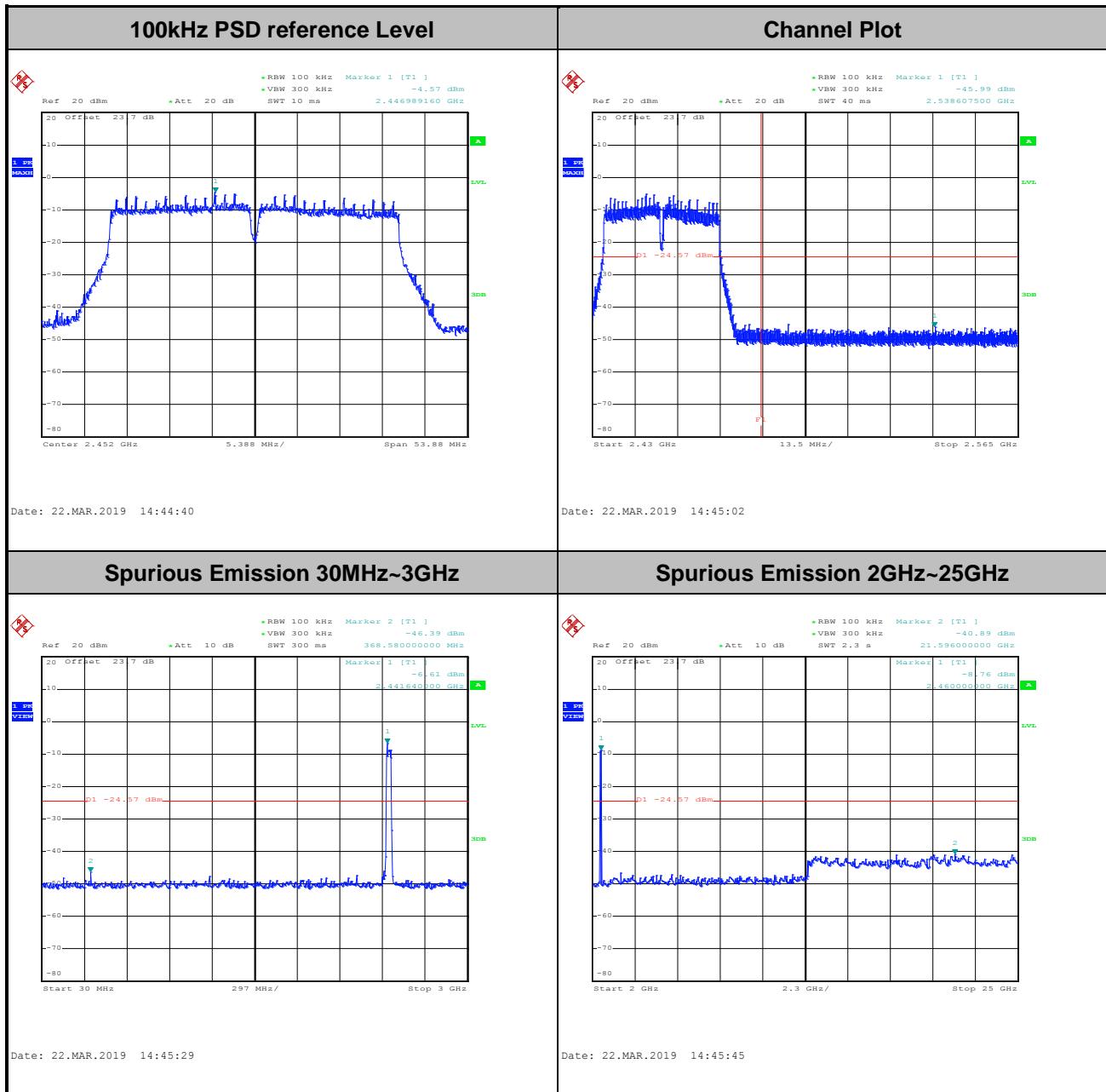
Spurious Emission 2GHz~25GHz



Date: 22.MAR.2019 14:40:40



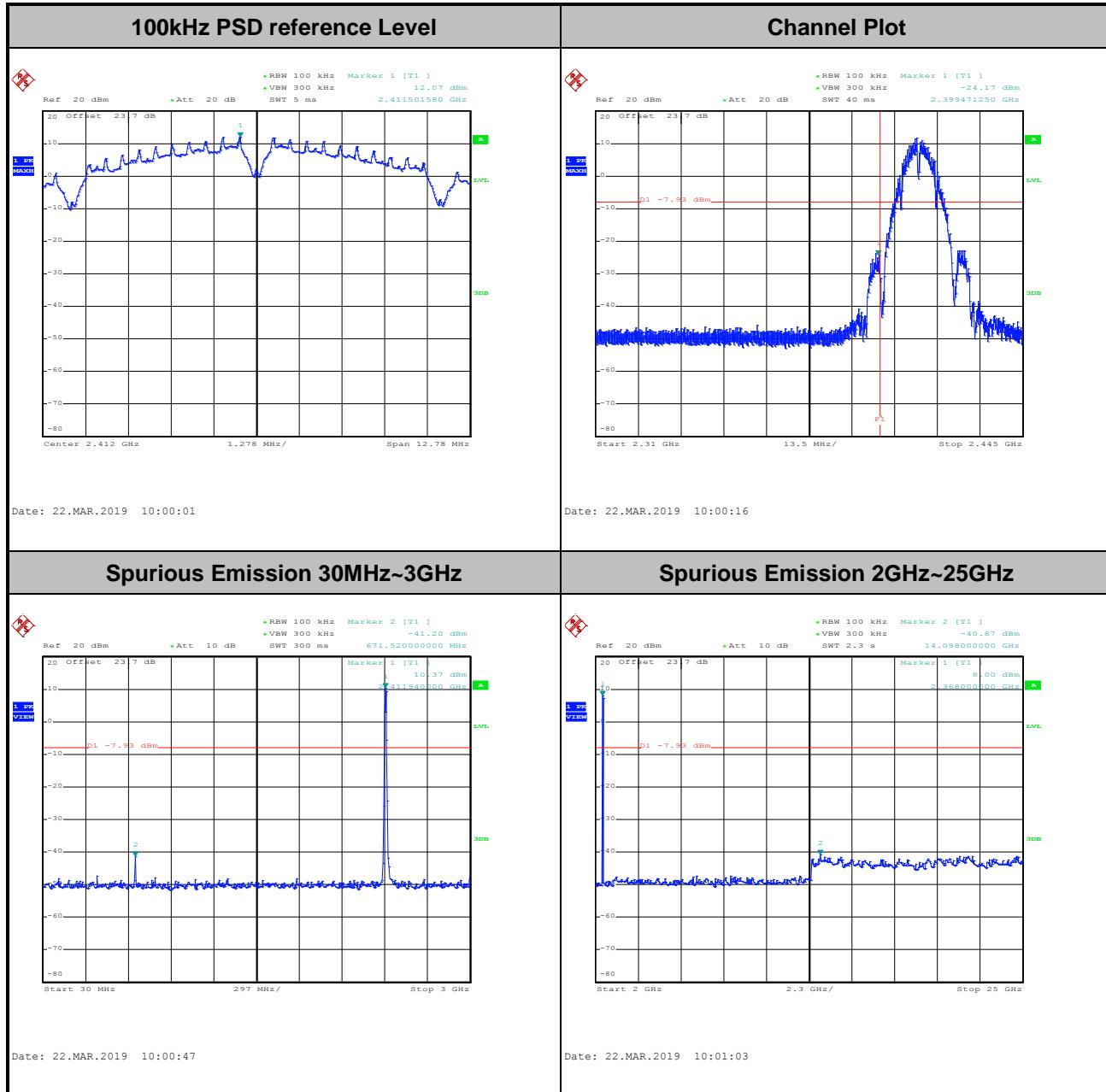
Test Mode :	802.11n HT40	Test Channel :	09
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Number of TX = 2, Chain. 2 (Measured)

Test Mode :	802.11b	Test Channel :	01
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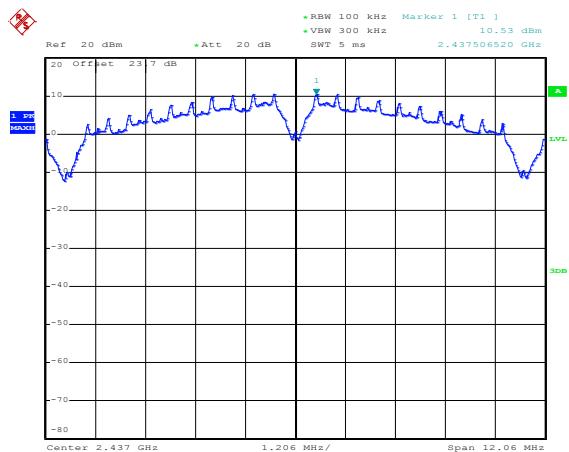




Test Mode : 802.11b

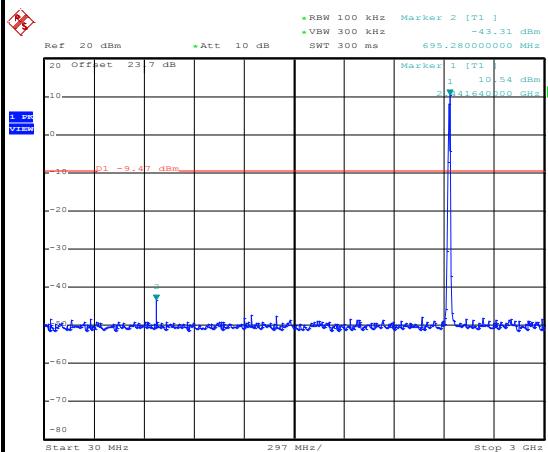
Test Channel : 06

100kHz PSD reference Level



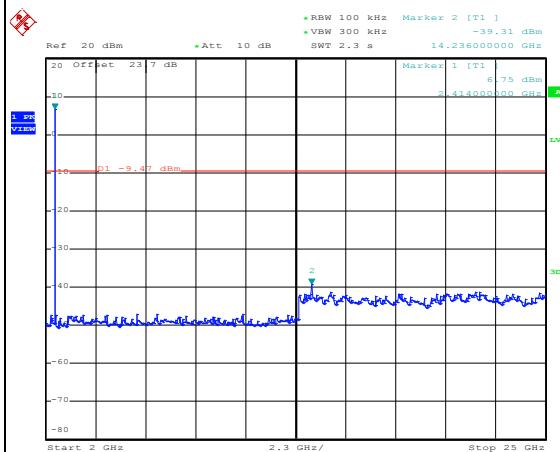
Date: 22.MAR.2019 10:04:41

Spurious Emission 30MHz~3GHz

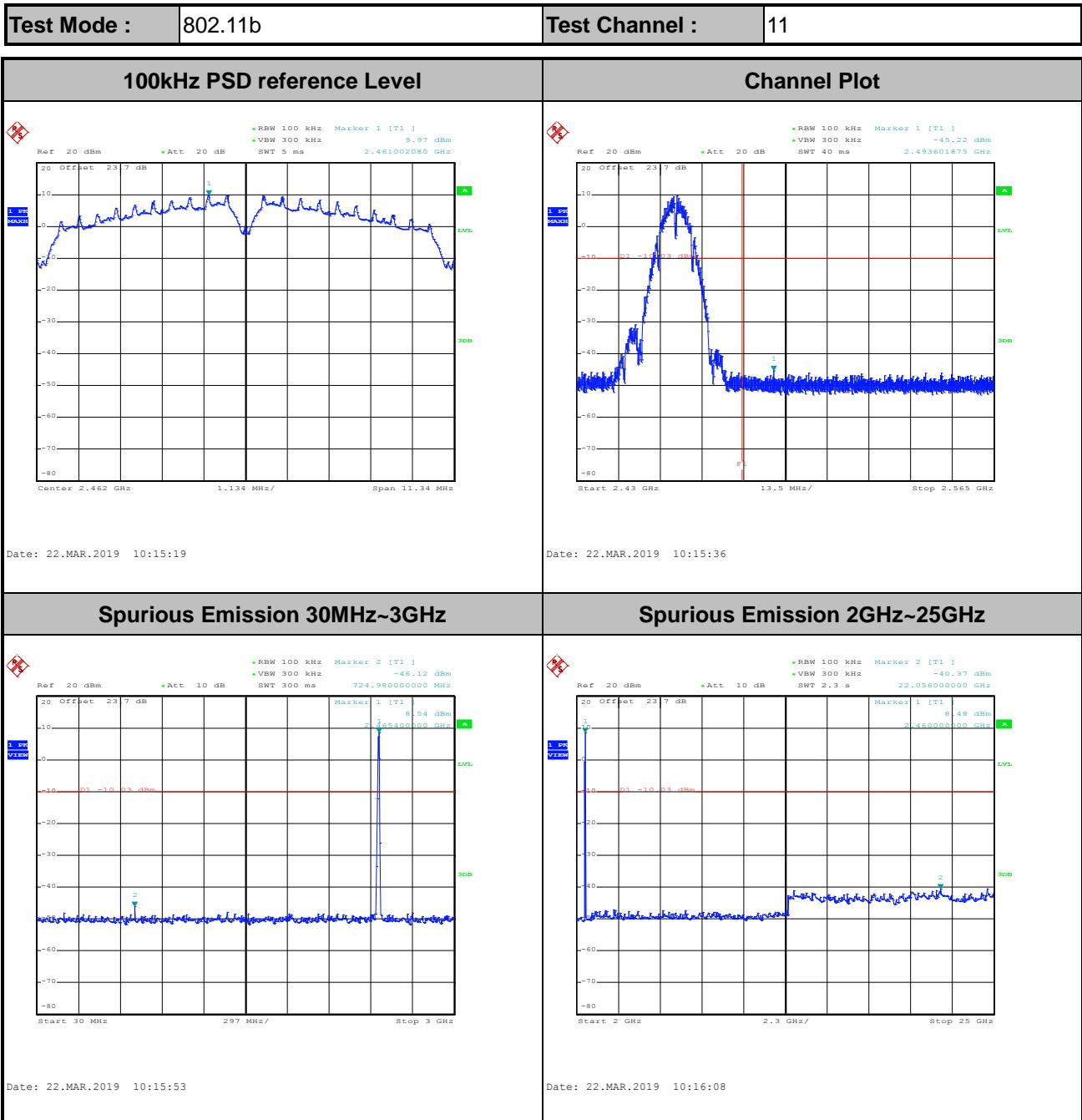


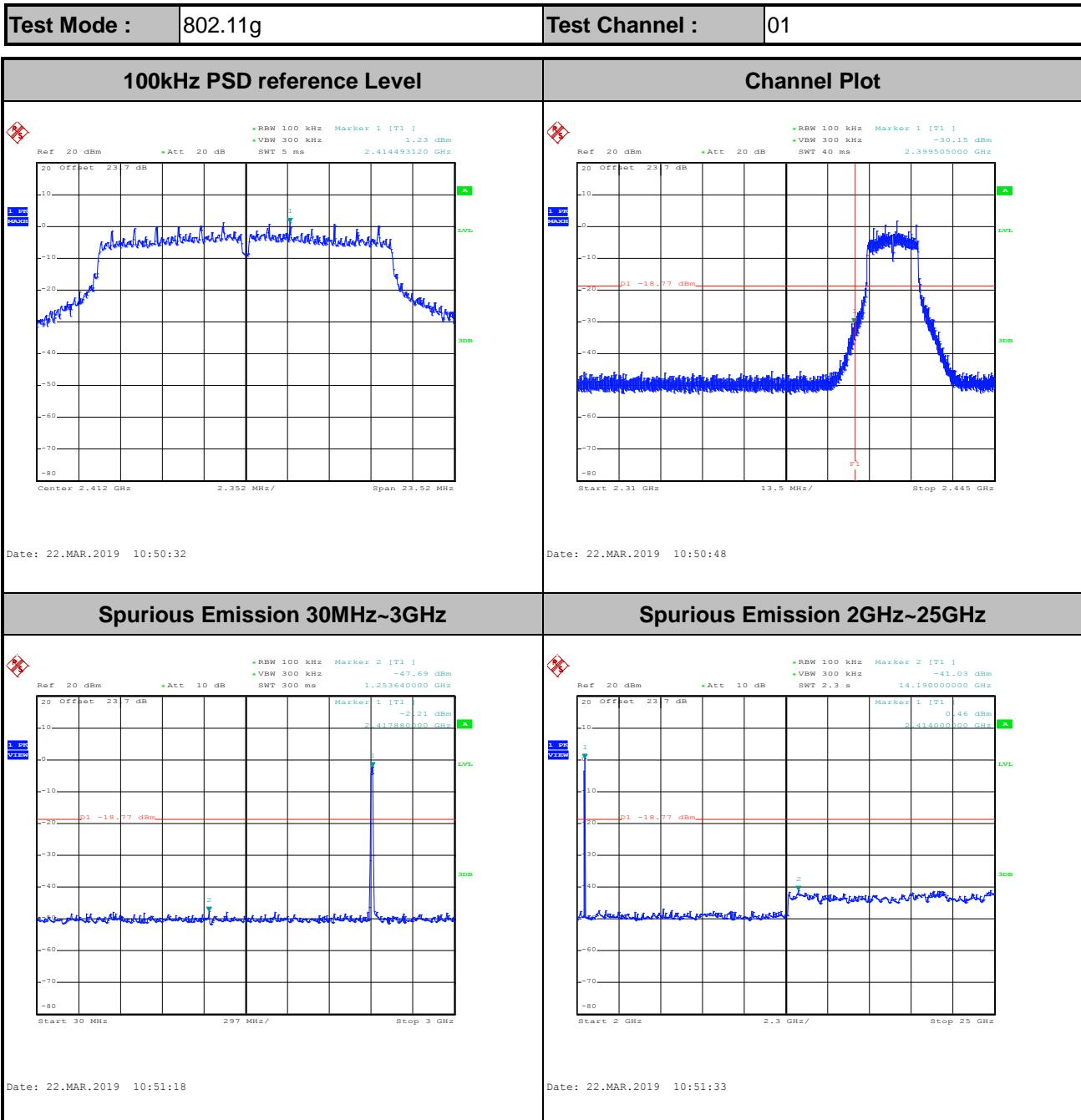
Date: 22.MAR.2019 10:05:04

Spurious Emission 2GHz~25GHz



Date: 22.MAR.2019 10:05:20



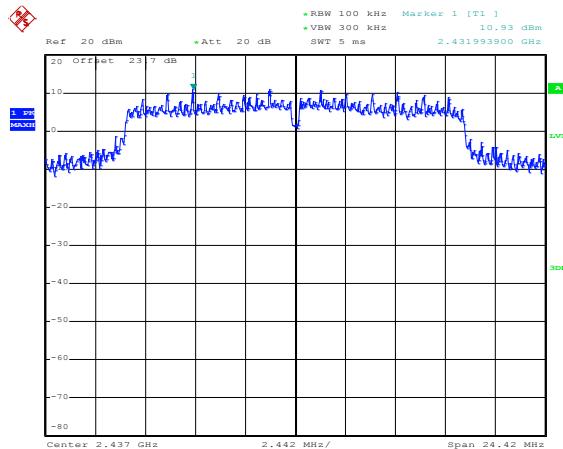




Test Mode : 802.11g

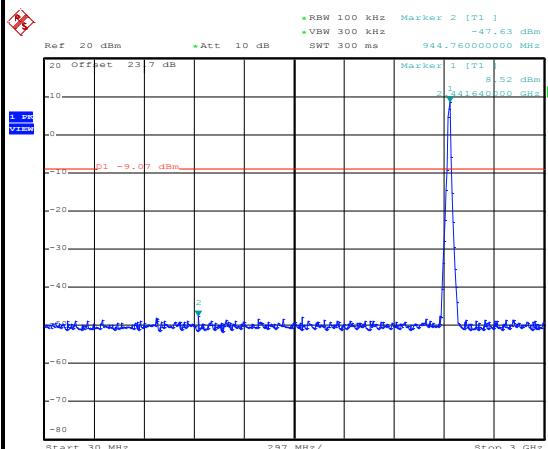
Test Channel : 06

100kHz PSD reference Level



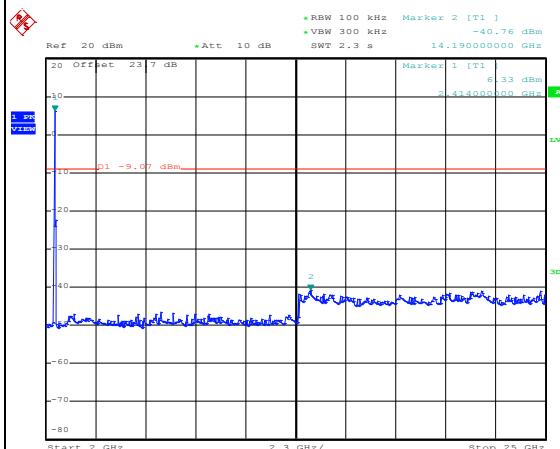
Date: 22.MAR.2019 11:06:45

Spurious Emission 30MHz~3GHz

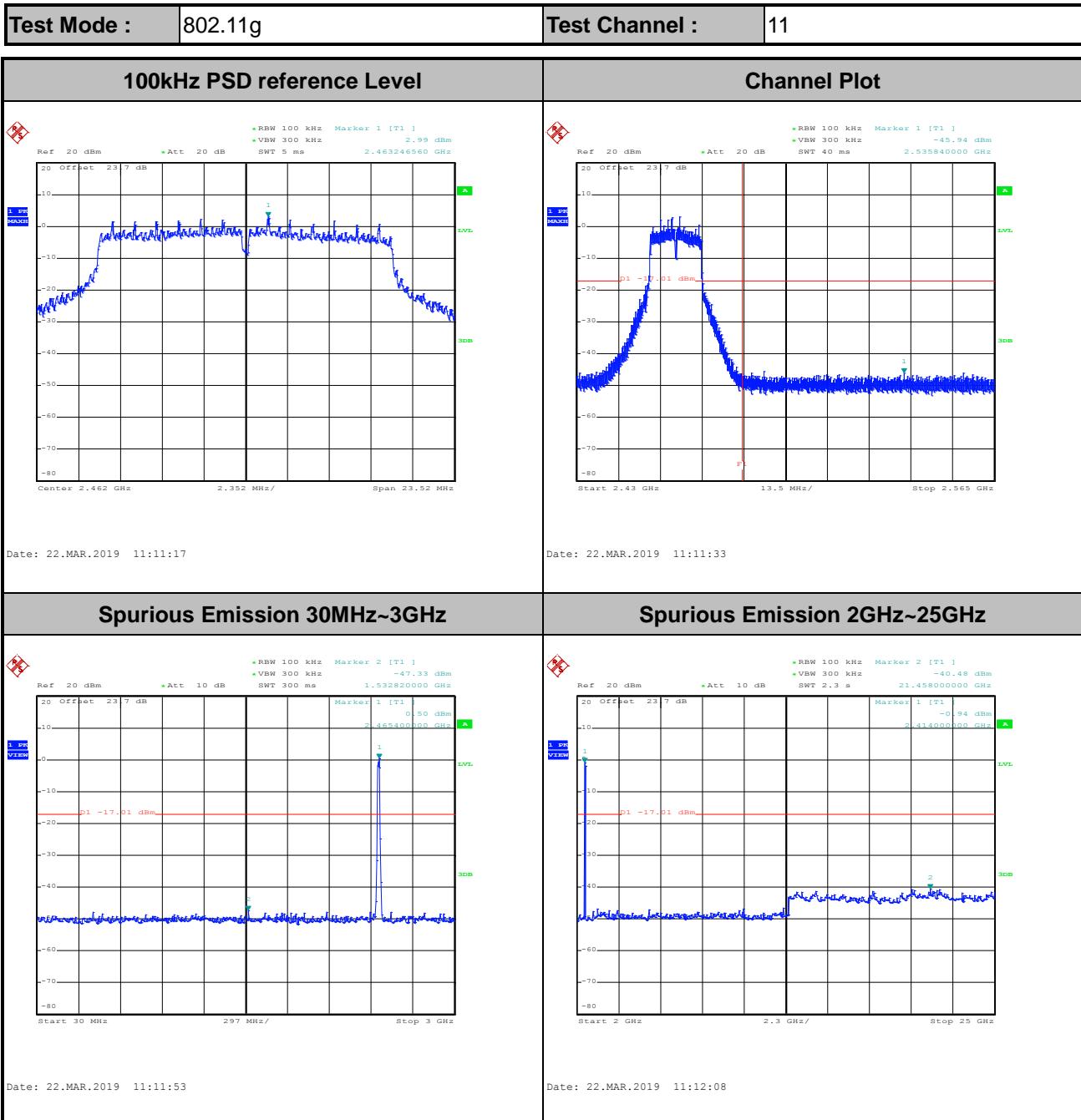


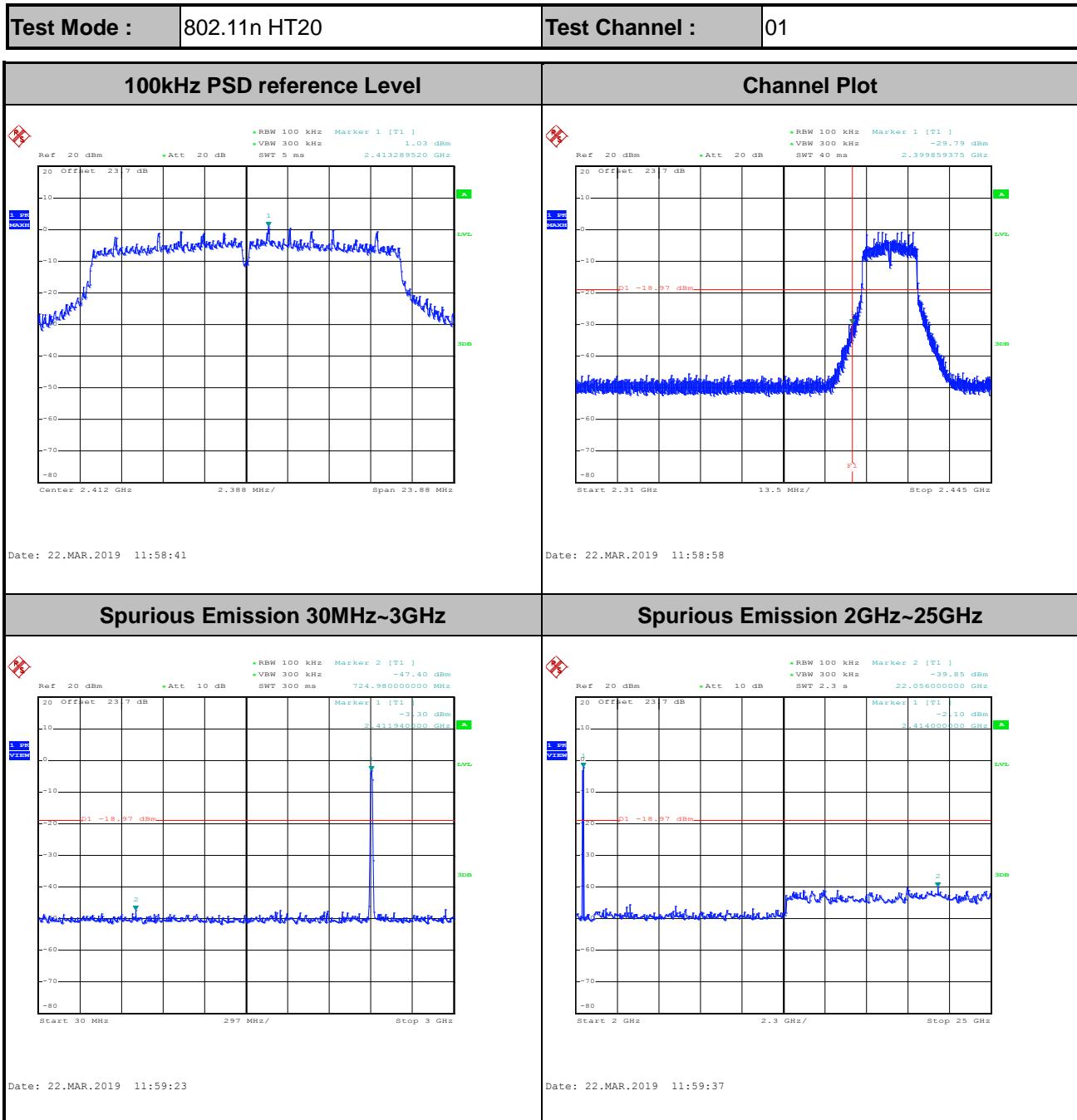
Date: 22.MAR.2019 11:07:20

Spurious Emission 2GHz~25GHz



Date: 22.MAR.2019 11:07:35

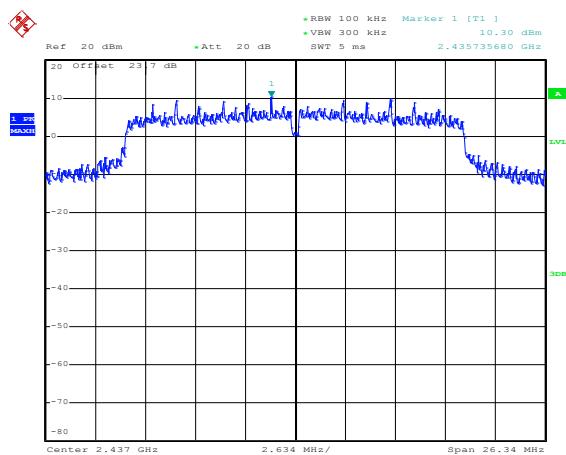






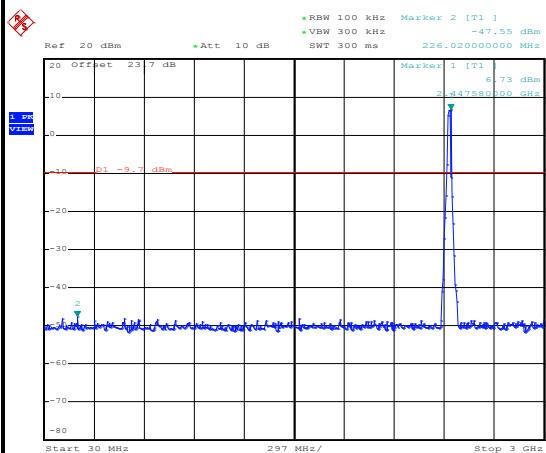
Test Mode :	802.11n HT20	Test Channel :	06
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100kHz PSD reference Level



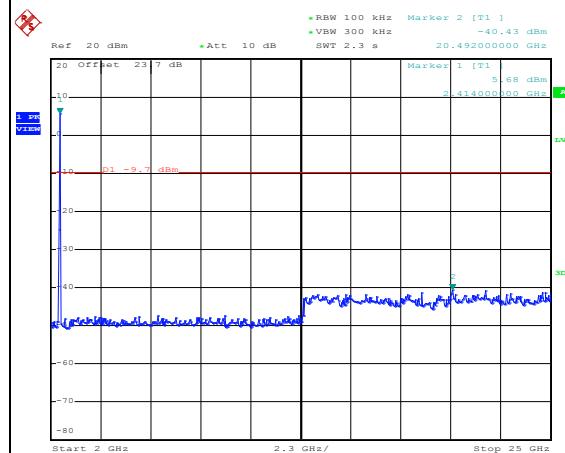
Date: 22.MAR.2019 13:34:47

Spurious Emission 30MHz~3GHz

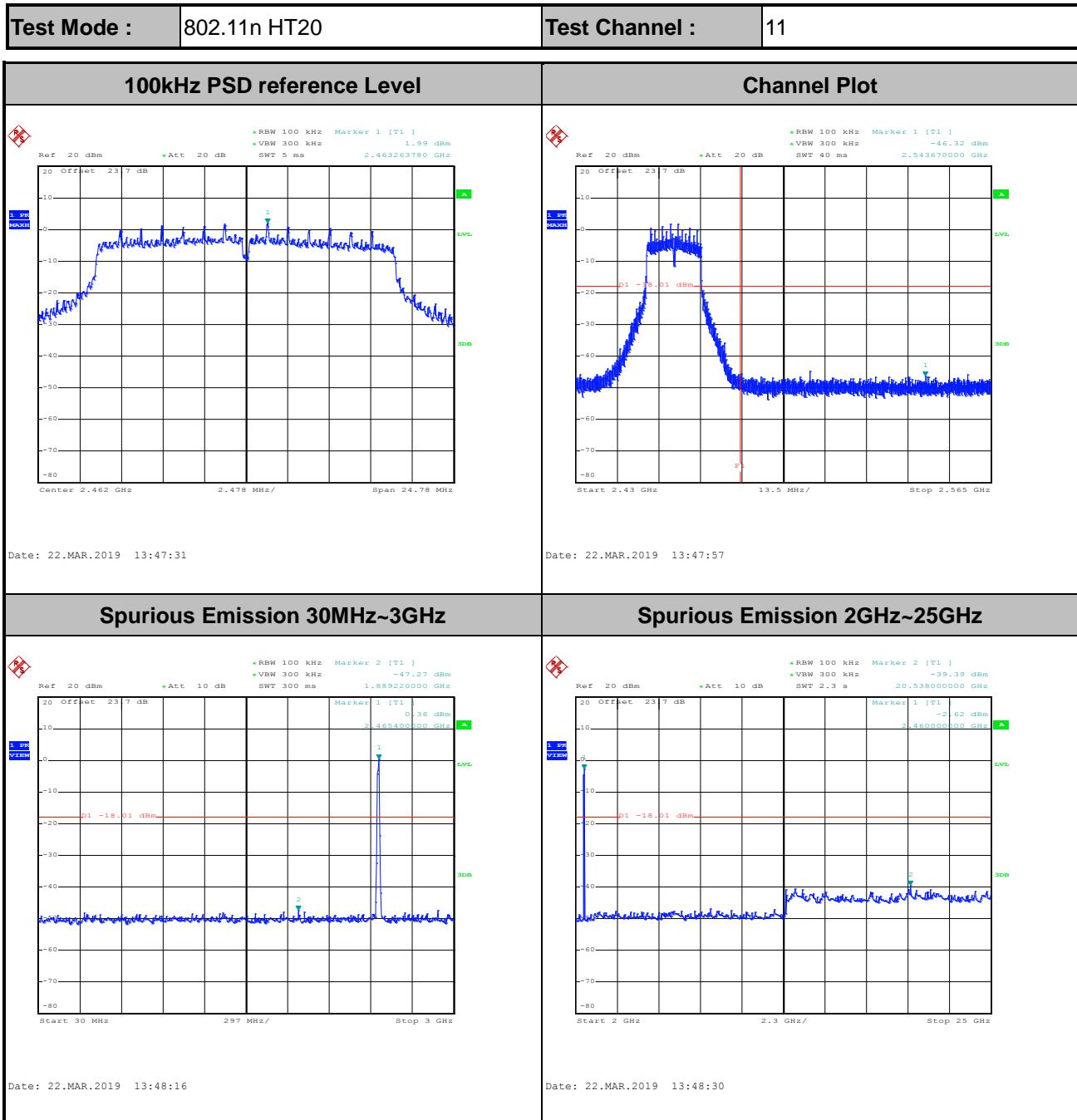


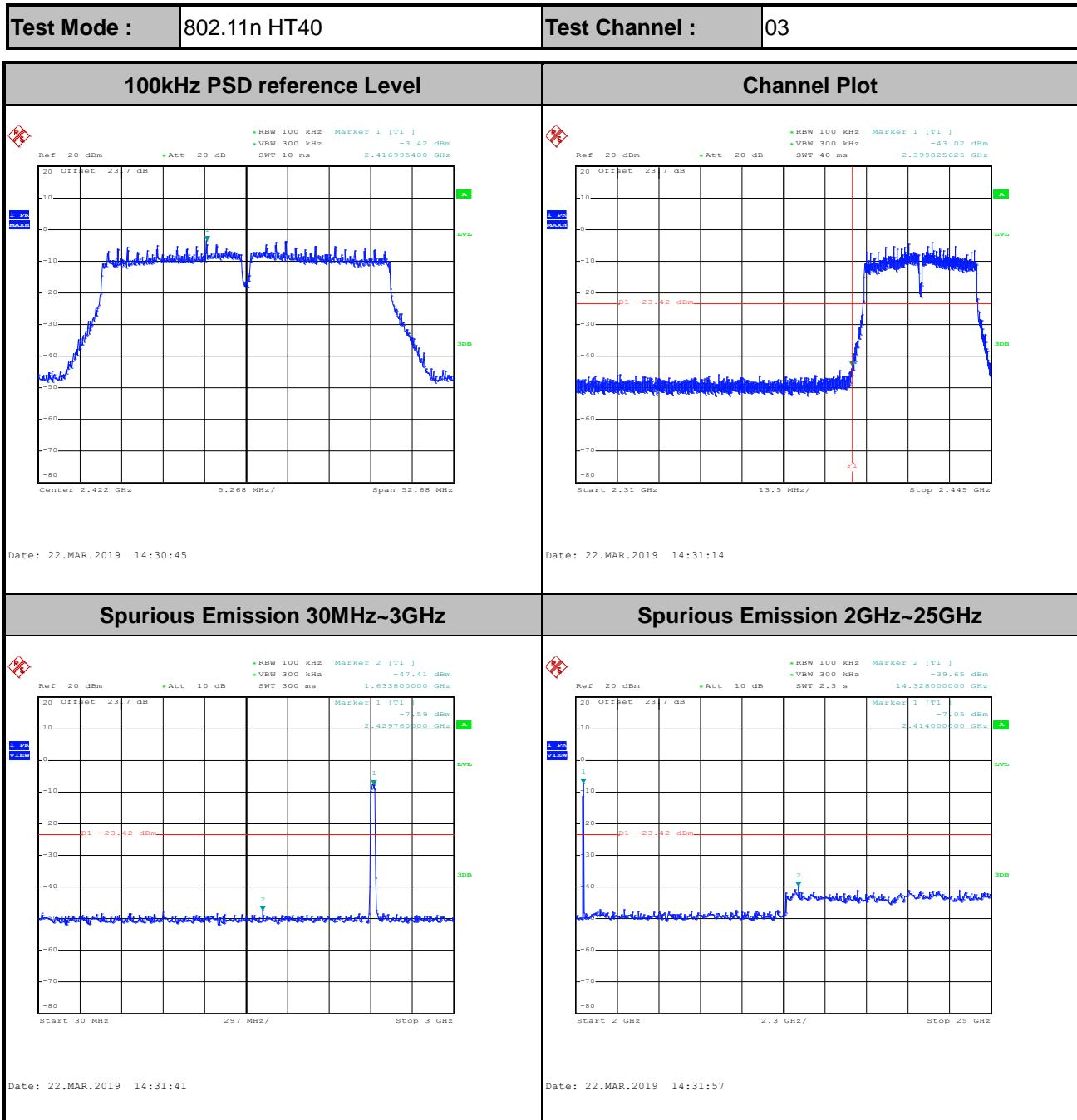
Date: 22.MAR.2019 13:35:11

Spurious Emission 2GHz~25GHz



Date: 22.MAR.2019 13:35:26

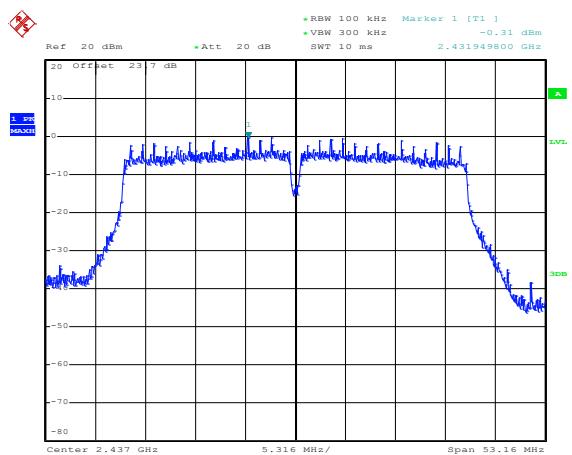






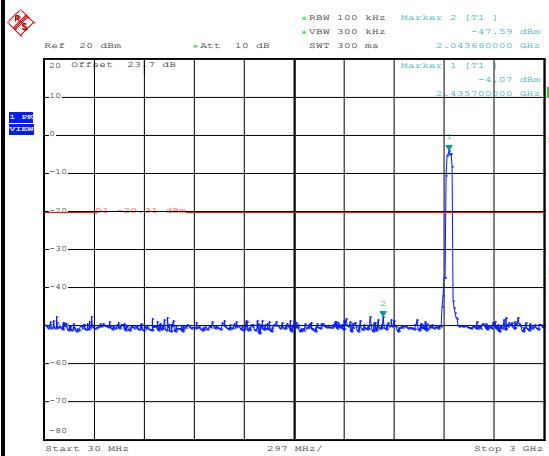
Test Mode :	802.11n HT40	Test Channel :	06
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100kHz PSD reference Level



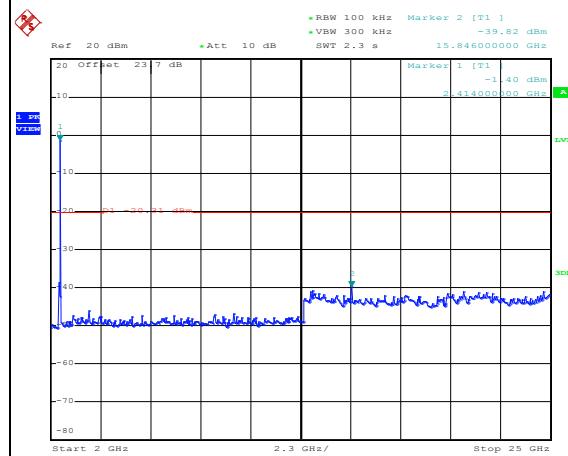
Date: 22.MAR.2019 14:34:40

Spurious Emission 30MHz~3GHz



Date: 22.MAR.2019 14:35:05

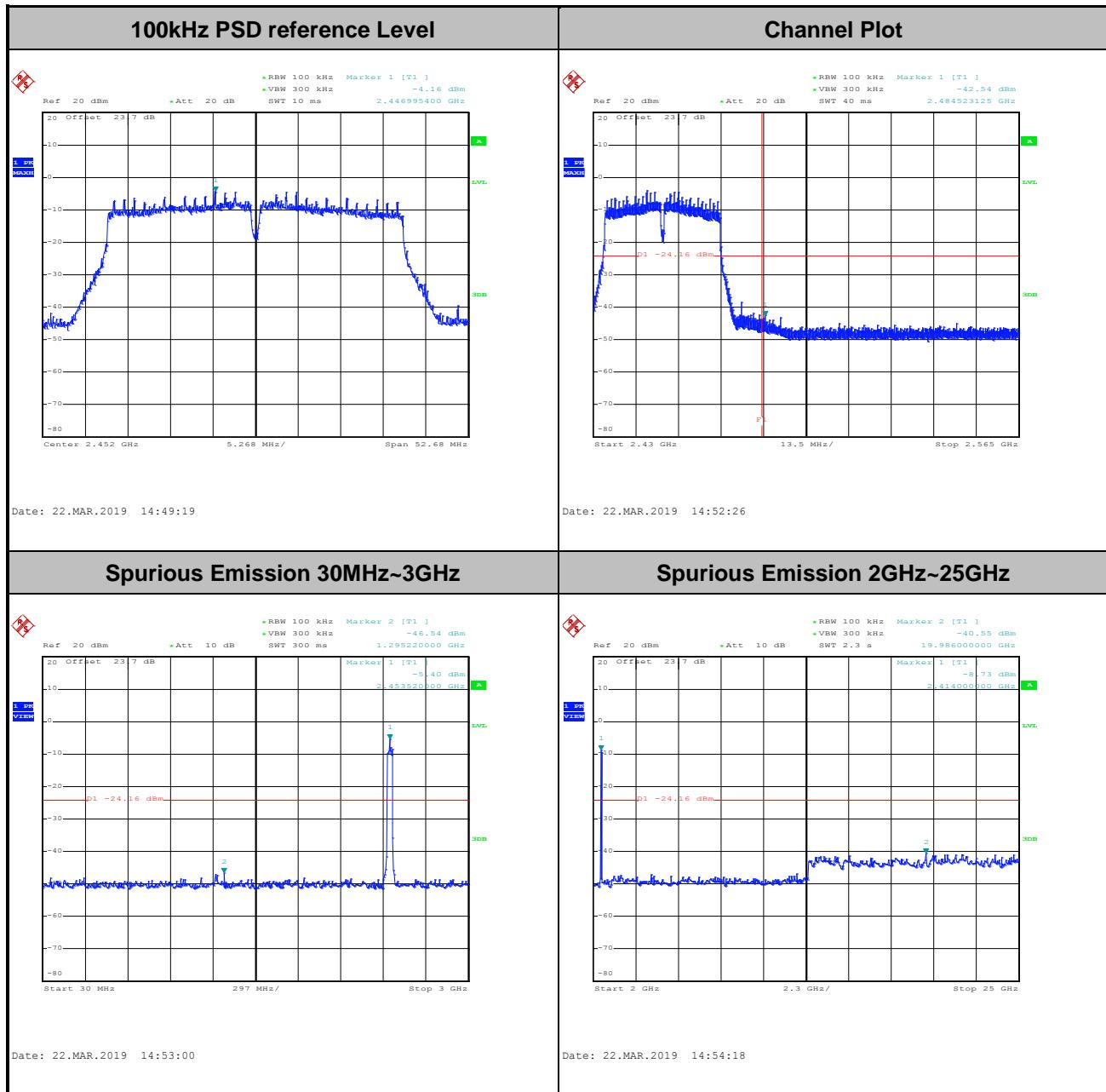
Spurious Emission 2GHz~25GHz



Date: 22.MAR.2019 14:35:21



Test Mode :	802.11n HT40	Test Channel :	09
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3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 Limit of Radiated band edge and Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

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

3.5.2 Measuring Instruments

See list of measuring equipment of this test report.



3.5.3 Test Procedures

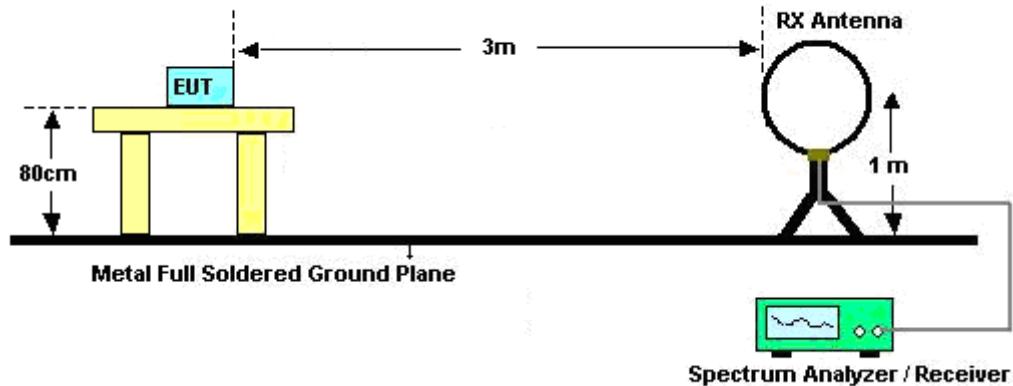
1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
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.
8. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW=100 kHz for $f < 1$ GHz; VBW \geq RBW; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement.

For average measurement:

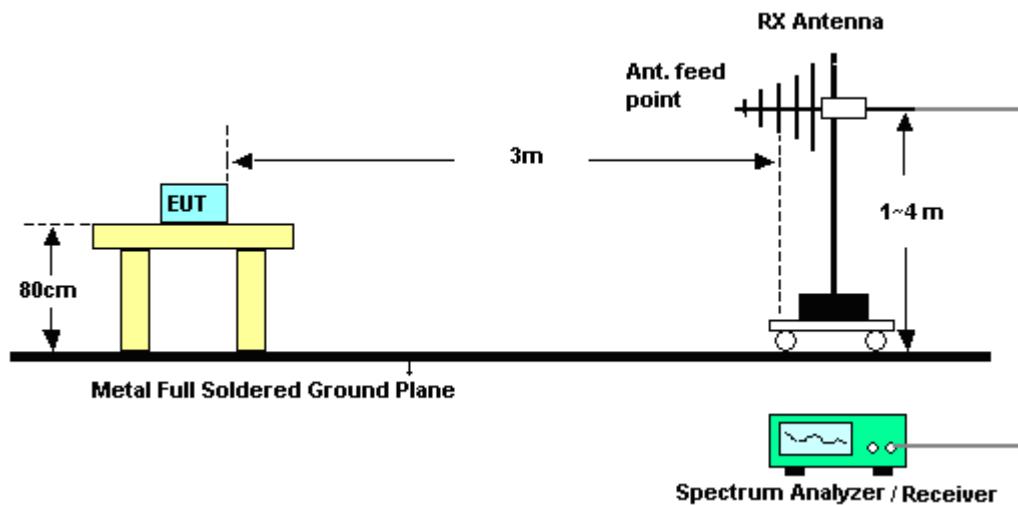
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - $VBW \geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.5.4 Test Setup

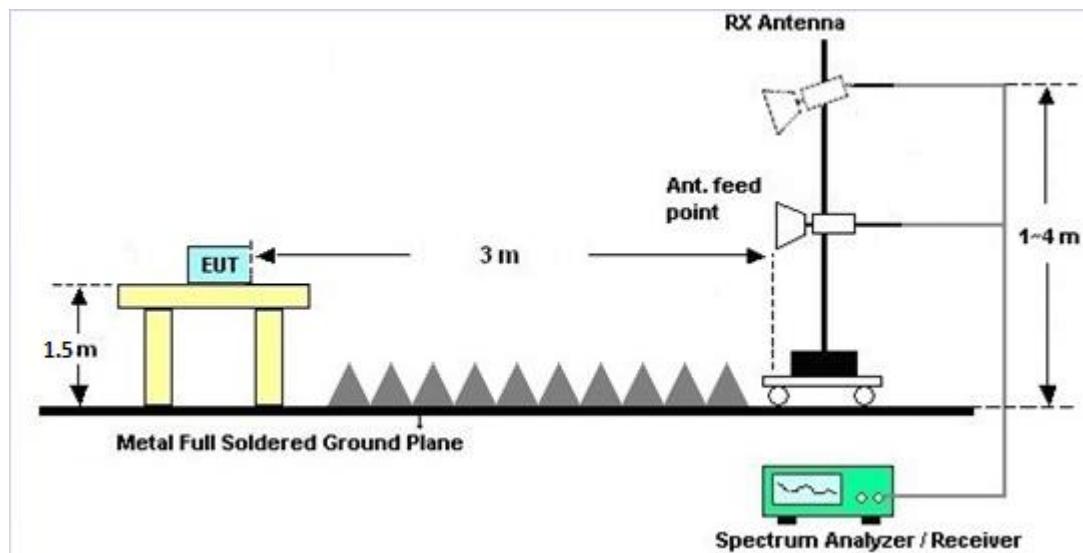
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.5.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B and C.

3.5.7 Duty Cycle

Please refer to Appendix D.

3.5.8 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic)

Please refer to Appendix B and C.



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 (dB μ V)	
	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.

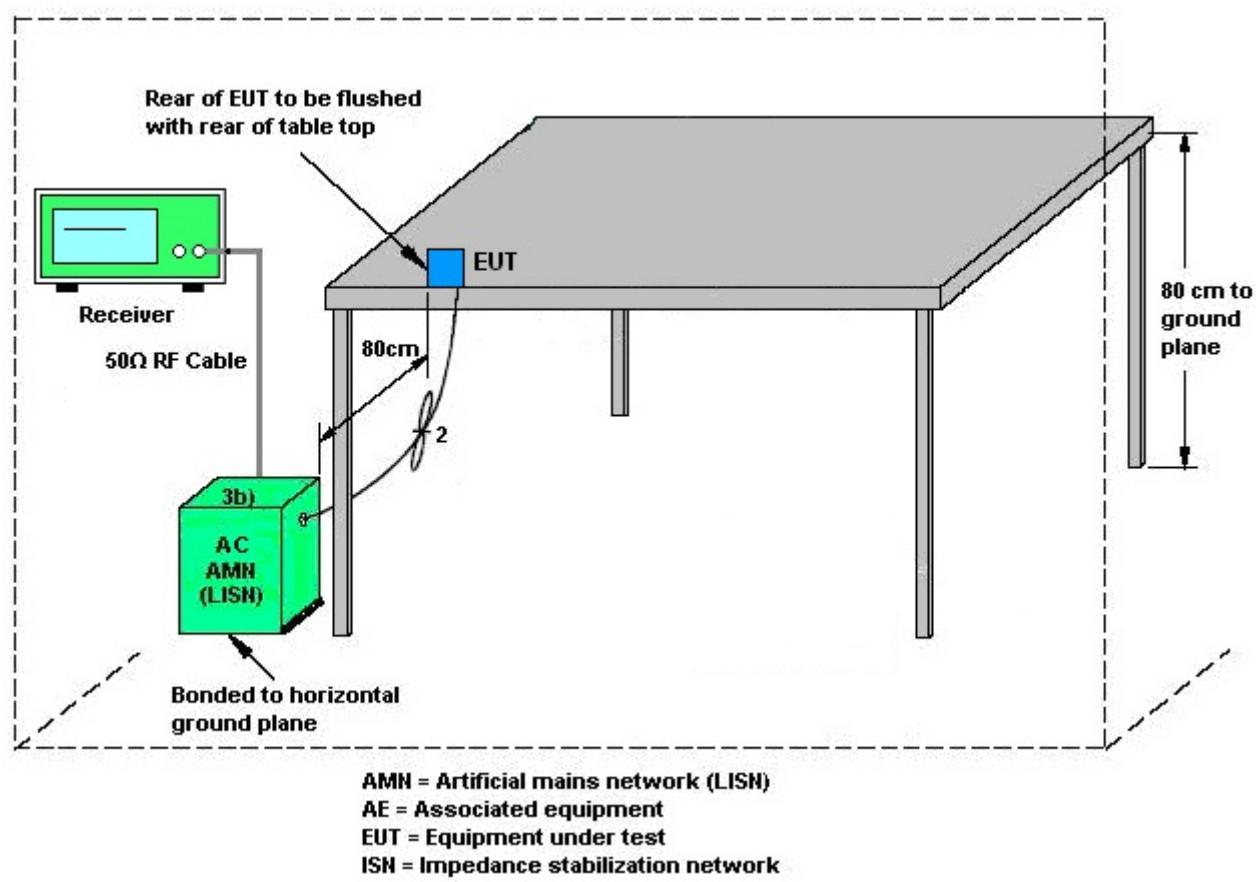
3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 Test Procedures

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

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix A.



3.7 Antenna Requirements

3.7.1 Standard Applicable

If directional gain of transmitting Antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. The use of a permanently attached Antenna or of an Antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = $10 \log(N_{ANT}/N_{SS}=1)$ dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with GANT set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 v02r01.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain "DG" is calculated as following table.

<CDD Modes>						
	Chain. 1	Chain. 2	DG for Power	DG for PSD	Power Limit	PSD Limit
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
2.4 GHz	5.00	5.00	5.00	8.01	0.00	2.01

Power Limit Reduction = DG(Power) – 6dBi, (min = 0)

PSD Limit Reduction = DG(PSD) – 6dBi, (min = 0)



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	1132003	N/A	Aug. 16, 2018	Nov. 22, 2018~Mar. 22, 2019	Aug. 15, 2019	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1126017	300MHz~40GHz	Aug. 16, 2018	Nov. 22, 2018~Mar. 22, 2019	Aug. 15, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 21, 2018	Nov. 22, 2018~Mar. 22, 2019	Nov. 20, 2019	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC130048-4	N/A	Apr. 17, 2018	Nov. 22, 2018~Mar. 22, 2019	Apr. 16, 2019	Conducted (TH05-HY)
Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 16, 2018	Nov. 22, 2018~Jan. 28, 2019	Jul. 15, 2019	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187311	9kHz~1GHz	Oct. 23, 2018	Nov. 22, 2018~Jan. 28, 2019	Oct. 22, 2019	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL 6111D&N-6-06	35414&AT-N0602	30MHz~1GHz	Oct. 13, 2018	Nov. 22, 2018~Jan. 28, 2019	Oct. 12, 2019	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1326	1GHz ~ 18GHz	Oct. 30, 2018	Nov. 22, 2018~Jan. 28, 2019	Oct. 29, 2019	Radiation (03CH11-HY)
Loop Antenna	TESEQ	HLA 6120	31244	9 kHz~30 MHz	Mar. 29, 2018	Nov. 22, 2018~Jan. 28, 2019	Mar. 28, 2019	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY532700-80	1GHz~26.5GHz	Nov. 14, 2018	Nov. 22, 2018~Jan. 28, 2019	Nov. 13, 2020	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY542004-86	10Hz ~ 44GHz	Oct. 19, 2018	Nov. 22, 2018~Jan. 28, 2019	Oct. 18, 2019	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Nov. 22, 2018~Jan. 28, 2019	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Nov. 22, 2018~Jan. 28, 2019	N/A	Radiation (03CH11-HY)
Preamplifier	Jet-Power	JPA0118-55-303K	1710001800054002	1GHz~18GHz	Apr. 17, 2018	Nov. 22, 2018~Jan. 28, 2019	Apr. 16, 2019	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170-251	BBHA9170-251	18GHz ~ 40GHz	Nov. 20, 2018	Nov. 22, 2018~Jan. 28, 2019	Nov. 19, 2019	Radiation (03CH11-HY)
Software	Audix	E3 6.2009-8-24	RK-00104-2	N/A	N/A	Nov. 22, 2018~Jan. 28, 2019	N/A	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4 PE	9kHz-30MHz	Mar. 14, 2018	Nov. 22, 2018~Jan. 28, 2019	Mar. 13, 2019	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30MHz-40GHz	Mar. 14, 2018	Nov. 22, 2018~Jan. 28, 2019	Mar. 13, 2019	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4 PE	30M-18G	Mar. 14, 2018	Nov. 22, 2018~Jan. 28, 2019	Mar. 13, 2019	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY4274/2	30MHz-40GHz	Mar. 14, 2018	Nov. 22, 2018~Jan. 28, 2019	Mar. 13, 2019	Radiation (03CH11-HY)
Filter	Wainwright	WHKX12-270-0-3000-18000-60SS	SN3	2.7G High Pass	Sep. 16, 2018	Nov. 22, 2018~Jan. 28, 2019	Sep. 17, 2019	Radiation (03CH11-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN11	1G Low Pass	Sep. 16, 2018	Nov. 22, 2018~Jan. 28, 2019	Sep. 17, 2019	Radiation (03CH11-HY)

**FCC RADIO TEST REPORT**

Report No. : FR8N0846C

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Dec. 27, 2018	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9KHz~3.6GHz	Nov. 12, 2018	Dec. 27, 2018	Nov. 11, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 14, 2018	Dec. 27, 2018	Nov. 13, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 09, 2018	Dec. 27, 2018	Nov. 08, 2019	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Dec. 27, 2018	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 03, 2018	Dec. 27, 2018	Jan. 02, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 03, 2018	Dec. 27, 2018	Jan. 02, 2019	Conduction (CO05-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{c(y)}$)	2.2
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{c(y)}$)	5.2
---	-----

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{c(y)}$)	5.5
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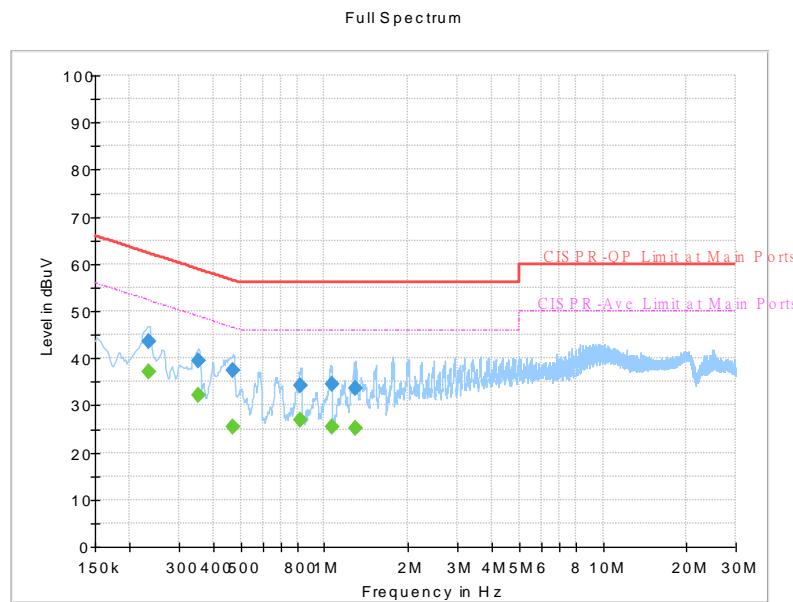
Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{c(y)}$)	5.2
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Appendix A. AC Conducted Emission Test Results

Test Engineer :	Rick Lin	Temperature :	23~24°C
Test Voltage :	120Vac / 60Hz	Relative Humidity :	56~58%
		Phase :	Line

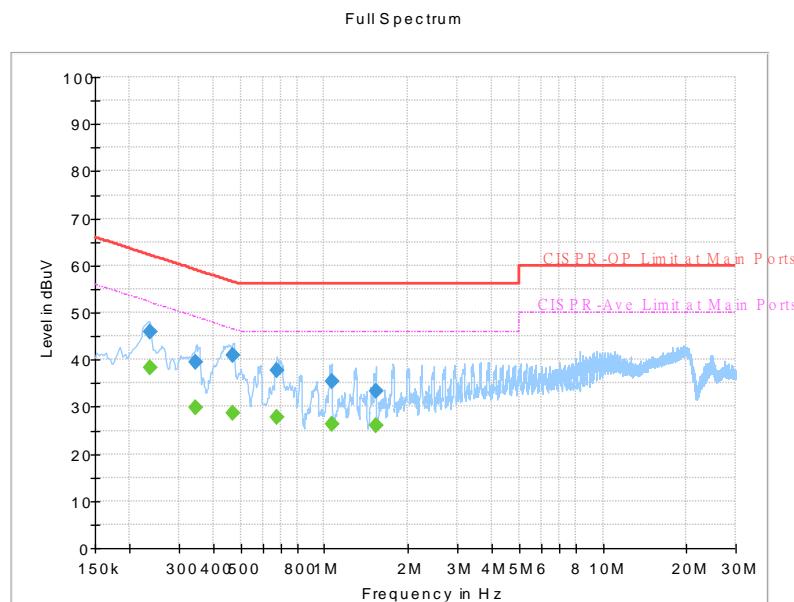


Final Result :

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.233250	---	37.21	52.33	15.12	L1	OFF	19.5
0.233250	43.51	---	62.33	18.82	L1	OFF	19.5
0.352500	---	32.20	48.90	16.70	L1	OFF	19.5
0.352500	39.44	---	58.90	19.46	L1	OFF	19.5
0.469500	---	25.33	46.52	21.19	L1	OFF	19.5
0.469500	37.37	---	56.52	19.15	L1	OFF	19.5
0.822750	---	26.99	46.00	19.01	L1	OFF	19.5
0.822750	34.24	---	56.00	21.76	L1	OFF	19.5
1.059000	---	25.48	46.00	20.52	L1	OFF	19.5
1.059000	34.55	---	56.00	21.45	L1	OFF	19.5
1.293000	---	25.28	46.00	20.72	L1	OFF	19.6
1.293000	33.59	---	56.00	22.41	L1	OFF	19.6



Test Engineer :	Rick Lin	Temperature :	23~24°C
		Relative Humidity :	56~58%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral

**Final Result :**

Frequency	QuasiPeak	CAverage	Limit	Margin	Line	Filter	Corr.
0.235500	---	38.45	52.25	13.80	N	OFF	19.5
0.235500	45.91	---	62.25	16.34	N	OFF	19.5
0.345750	---	29.91	49.06	19.15	N	OFF	19.5
0.345750	39.62	---	59.06	19.44	N	OFF	19.5
0.469500	---	28.68	46.52	17.84	N	OFF	19.5
0.469500	41.03	---	56.52	15.49	N	OFF	19.5
0.674250	---	27.66	46.00	18.34	N	OFF	19.5
0.674250	37.71	---	56.00	18.29	N	OFF	19.5
1.059000	---	26.25	46.00	19.75	N	OFF	19.5
1.059000	35.48	---	56.00	20.52	N	OFF	19.5
1.527000	---	26.16	46.00	19.84	N	OFF	19.6
1.527000	33.32	---	56.00	22.68	N	OFF	19.6



Appendix B. Radiated Spurious Emission

Test Engineer :	Hao Xu, Ace Zhu, Ken Wu, and JC Liang	Temperature :	21~26°C
		Relative Humidity :	52~57%



<For Antenna 1>

<Chain 1>

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2387.49	57.42	-16.58	74	47.1	27.45	16.5	33.63	122	179	P	H
		2387.385	50.19	-3.81	54	39.87	27.45	16.5	33.63	122	179	A	H
	*	2412	117.12	-	-	106.83	27.38	16.53	33.62	122	179	P	H
	*	2412	113.96	-	-	103.67	27.38	16.53	33.62	122	179	A	H
													H
													H
		2387.28	53.3	-20.7	74	42.98	27.45	16.5	33.63	105	284	P	V
		2390	42.97	-11.03	54	32.65	27.44	16.51	33.63	105	284	A	V
	*	2412	106.38	-	-	96.09	27.38	16.53	33.62	105	284	P	V
	*	2412	103.26	-	-	92.97	27.38	16.53	33.62	105	284	A	V
802.11b CH 06 2437MHz		2390	56.95	-17.05	74	46.63	27.44	16.51	33.63	100	181	P	H
		2390	43.22	-10.78	54	32.9	27.44	16.51	33.63	100	181	A	H
	*	2437	117.75	-	-	107.48	27.33	16.55	33.61	100	181	P	H
	*	2437	114.53	-	-	104.26	27.33	16.55	33.61	100	181	A	H
		2485.44	59.09	-14.91	74	48.8	27.3	16.59	33.6	100	181	P	H
		2484	43.91	-10.09	54	33.62	27.3	16.59	33.6	100	181	A	H
		2340.24	52.68	-21.32	74	42.26	27.64	16.43	33.65	100	294	P	V
		2322.16	41.81	-12.19	54	31.35	27.71	16.4	33.65	100	294	A	V
	*	2437	107.02	-	-	96.75	27.33	16.55	33.61	100	294	P	V
	*	2437	103.79	-	-	93.52	27.33	16.55	33.61	100	294	A	V
		2488.88	52.11	-21.89	74	41.81	27.3	16.59	33.59	100	294	P	V
		2483.84	41.9	-12.1	54	31.61	27.3	16.59	33.6	100	294	A	V



802.11b CH 11 2462MHz	*	2462	117.61	-	-	107.34	27.3	16.57	33.6	115	177	P	H
	*	2462	114.65	-	-	104.38	27.3	16.57	33.6	115	177	A	H
		2483.72	59.3	-14.7	74	49.01	27.3	16.59	33.6	115	177	P	H
		2484.8	52	-2	54	41.71	27.3	16.59	33.6	115	177	A	H
													H
													H
	*	2462	106.51	-	-	96.24	27.3	16.57	33.6	129	294	P	V
	*	2462	103.42	-	-	93.15	27.3	16.57	33.6	129	294	A	V
		2485.04	53.29	-20.71	74	43	27.3	16.59	33.6	129	294	P	V
		2484.6	43.76	-10.24	54	33.47	27.3	16.59	33.6	129	294	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	47.37	-26.63	74	64.74	31.1	10.1	58.57	100	0	P	H
													H
													H
													H
		4824	45.55	-28.45	74	62.92	31.1	10.1	58.57	100	0	P	V
													V
													V
													V
802.11b CH 06 2437MHz		4874	45.53	-28.47	74	62.89	31.05	10.14	58.55	100	0	P	H
		7311	53.59	-20.41	74	63.41	36.52	12.49	58.83	357	182	P	H
		7311	49.04	-4.96	54	58.86	36.52	12.49	58.83	357	182	A	H
													H
		4874	44.8	-29.2	74	62.16	31.05	10.14	58.55	100	0	P	V
		7311	49.28	-24.72	74	59.1	36.52	12.49	58.83	100	0	P	V
													V
													V
802.11b CH 11 2462MHz		4924	47.12	-26.88	74	64.32	31.14	10.19	58.53	100	0	P	H
		7386	54.11	-19.89	74	63.94	36.46	12.43	58.72	100	121	P	H
		7386	50.08	-3.92	54	59.91	36.46	12.43	58.72	100	121	A	H
													H
		4924	49.91	-24.09	74	67.11	31.14	10.19	58.53	100	0	P	V
		7386	48.55	-25.45	74	58.38	36.46	12.43	58.72	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2389.485	66.16	-7.84	74	55.85	27.44	16.5	33.63	118	182	P	H
		2390	52.78	-1.22	54	42.46	27.44	16.51	33.63	118	182	A	H
	*	2412	111.43	-	-	101.14	27.38	16.53	33.62	118	182	P	H
	*	2412	103.73	-	-	93.44	27.38	16.53	33.62	118	182	A	H
													H
													H
		2389.17	54.93	-19.07	74	44.62	27.44	16.5	33.63	237	191	P	V
		2390	43.79	-10.21	54	33.47	27.44	16.51	33.63	237	191	A	V
	*	2412	99.48	-	-	89.19	27.38	16.53	33.62	237	191	P	V
	*	2412	91.86	-	-	81.57	27.38	16.53	33.62	237	191	A	V
													V
													V
802.11g CH 06 2437MHz		2389.36	63.72	-10.28	74	53.41	27.44	16.5	33.63	142	180	P	H
		2389.68	52.62	-1.38	54	42.31	27.44	16.5	33.63	142	180	A	H
	*	2437	119.49	-	-	109.22	27.33	16.55	33.61	142	180	P	H
	*	2437	111.83	-	-	101.56	27.33	16.55	33.61	142	180	A	H
		2484.16	65.87	-8.13	74	55.58	27.3	16.59	33.6	142	180	P	H
		2483.52	50.15	-3.85	54	39.86	27.3	16.59	33.6	142	180	A	H
		2389.68	55.22	-18.78	74	44.91	27.44	16.5	33.63	228	194	P	V
		2390	45.72	-8.28	54	35.4	27.44	16.51	33.63	228	194	A	V
	*	2437	109.9	-	-	99.63	27.33	16.55	33.61	228	194	P	V
	*	2437	102.4	-	-	92.13	27.33	16.55	33.61	228	194	A	V
		2484.48	54.02	-19.98	74	43.73	27.3	16.59	33.6	228	194	P	V
		2483.6	43.64	-10.36	54	33.35	27.3	16.59	33.6	228	194	A	V



802.11g CH 11 2462MHz	*	2462	112.81	-	-	102.54	27.3	16.57	33.6	110	178	P	H
	*	2462	105.17	-	-	94.9	27.3	16.57	33.6	110	178	A	H
		2483.84	65.82	-8.18	74	55.53	27.3	16.59	33.6	110	178	P	H
		2483.52	51.67	-2.33	54	41.38	27.3	16.59	33.6	110	178	A	H
													H
													H
	*	2462	102.6	-	-	92.33	27.3	16.57	33.6	284	191	P	V
	*	2462	95	-	-	84.73	27.3	16.57	33.6	284	191	A	V
		2485.32	55.66	-18.34	74	45.37	27.3	16.59	33.6	284	191	P	V
		2483.52	44.12	-9.88	54	33.83	27.3	16.59	33.6	284	191	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	38.79	-35.21	74	56.16	31.1	10.1	58.57	100	0	P	H
													H
													H
													H
		4824	39.16	-34.84	74	56.53	31.1	10.1	58.57	100	0	P	V
													V
													V
													V
802.11g CH 06 2437MHz		4874	39.97	-34.03	74	57.33	31.05	10.14	58.55	100	0	P	H
		7311	57.95	-16.05	74	67.77	36.52	12.49	58.83	100	122	P	H
		7311	46.9	-7.1	54	56.72	36.52	12.49	58.83	100	122	A	H
													H
		4874	43.7	-30.3	74	61.06	31.05	10.14	58.55	100	0	P	V
		7311	54.49	-19.51	74	64.31	36.52	12.49	58.83	100	114	P	V
		7311	44.11	-9.89	54	53.93	36.52	12.49	58.83	100	114	A	V
													V
802.11g CH 11 2462MHz		4924	38.26	-35.74	74	55.46	31.14	10.19	58.53	100	0	P	H
		7386	42.17	-31.83	74	52	36.46	12.43	58.72	100	0	P	H
													H
													H
		4924	38.77	-35.23	74	55.97	31.14	10.19	58.53	100	0	P	V
		7386	40.83	-33.17	74	50.66	36.46	12.43	58.72	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2390	67.83	-6.17	74	57.51	27.44	16.51	33.63	120	185	P	H
		2390	52.11	-1.89	54	41.79	27.44	16.51	33.63	120	185	A	H
	*	2412	109.61	-	-	99.32	27.38	16.53	33.62	120	185	P	H
	*	2412	101.57	-	-	91.28	27.38	16.53	33.62	120	185	A	H
													H
													H
		2390	57.66	-16.34	74	47.34	27.44	16.51	33.63	103	295	P	V
		2390	44.69	-9.31	54	34.37	27.44	16.51	33.63	103	295	A	V
	*	2412	97.77	-	-	87.48	27.38	16.53	33.62	103	295	P	V
	*	2412	89.94	-	-	79.65	27.38	16.53	33.62	103	295	A	V
													V
													V
802.11n HT20 CH 06 2437MHz		2389.52	65.33	-8.67	74	55.02	27.44	16.5	33.63	144	182	P	H
		2390	52.6	-1.4	54	42.28	27.44	16.51	33.63	144	182	A	H
	*	2437	118.94	-	-	108.67	27.33	16.55	33.61	144	182	P	H
	*	2437	110.95	-	-	100.68	27.33	16.55	33.61	144	182	A	H
		2483.6	68.34	-5.66	74	58.05	27.3	16.59	33.6	144	182	P	H
		2483.84	50.71	-3.29	54	40.42	27.3	16.59	33.6	144	182	A	H
		2389.84	55.4	-18.6	74	45.09	27.44	16.5	33.63	100	267	P	V
		2389.84	43.97	-10.03	54	33.66	27.44	16.5	33.63	100	267	A	V
	*	2437	107.23	-	-	96.96	27.33	16.55	33.61	100	267	P	V
	*	2437	99.44	-	-	89.17	27.33	16.55	33.61	100	267	A	V
		2484.4	56.27	-17.73	74	45.98	27.3	16.59	33.6	100	267	P	V
		2483.52	43.49	-10.51	54	33.2	27.3	16.59	33.6	100	267	A	V



FCC RADIO TEST REPORT

Report No. : FR8N0846C

802.11n HT20 CH 11 2462MHz	*	2462	111.81	-	-	101.54	27.3	16.57	33.6	105	184	P	H
	*	2462	104.08	-	-	93.81	27.3	16.57	33.6	105	184	A	H
		2484.44	65.93	-8.07	74	55.64	27.3	16.59	33.6	105	184	P	H
		2483.6	51.72	-2.28	54	41.43	27.3	16.59	33.6	105	184	A	H
													H
													H
	*	2462	102.19	-	-	91.92	27.3	16.57	33.6	120	298	P	V
	*	2462	94.67	-	-	84.4	27.3	16.57	33.6	120	298	A	V
		2484.56	55.6	-18.4	74	45.31	27.3	16.59	33.6	120	298	P	V
		2483.64	44.06	-9.94	54	33.77	27.3	16.59	33.6	120	298	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		4824	38.83	-35.17	74	56.2	31.1	10.1	58.57	100	0	P	H
													H
													H
													H
		4824	38.08	-35.92	74	55.45	31.1	10.1	58.57	100	0	P	V
													V
													V
													V
802.11n HT20 CH 06 2437MHz		4874	40.18	-33.82	74	57.54	31.05	10.14	58.55	100	0	P	H
		7311	55.67	-18.33	74	65.49	36.52	12.49	58.83	100	178	P	H
		7311	43.13	-10.87	54	52.95	36.52	12.49	58.83	100	178	A	H
													H
		4874	44.55	-29.45	74	61.91	31.05	10.14	58.55	100	0	P	V
		7311	49.68	-24.32	74	59.5	36.52	12.49	58.83	100	0	P	V
													V
													V
802.11n HT20 CH 11 2462MHz		4924	38.3	-35.7	74	55.5	31.14	10.19	58.53	100	0	P	H
		7386	41.11	-32.89	74	50.94	36.46	12.43	58.72	100	0	P	H
													H
													H
		4924	38.41	-35.59	74	55.61	31.14	10.19	58.53	100	0	P	V
		7386	41.06	-32.94	74	50.89	36.46	12.43	58.72	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		2388.3	60.3	-13.7	74	49.98	27.45	16.5	33.63	139	177	P	H
		2389.35	51.84	-2.16	54	41.53	27.44	16.5	33.63	139	177	A	H
	*	2422	103.67	-	-	93.39	27.36	16.54	33.62	139	177	P	H
	*	2422	96.34	-	-	86.06	27.36	16.54	33.62	139	177	A	H
		2483.68	54.44	-19.56	74	44.15	27.3	16.59	33.6	139	177	P	H
		2483.52	44.01	-9.99	54	33.72	27.3	16.59	33.6	139	177	A	H
		2388	53.72	-20.28	74	43.4	27.45	16.5	33.63	103	296	P	V
		2389.2	44.7	-9.3	54	34.39	27.44	16.5	33.63	103	296	A	V
	*	2422	93.14	-	-	82.86	27.36	16.54	33.62	103	296	P	V
	*	2422	85.76	-	-	75.48	27.36	16.54	33.62	103	296	A	V
802.11n HT40 CH 06 2437MHz		2485.6	51.78	-22.22	74	41.49	27.3	16.59	33.6	103	296	P	V
		2489.36	43.44	-10.56	54	33.14	27.3	16.59	33.59	103	296	A	V
		2388.15	61.73	-12.27	74	51.41	27.45	16.5	33.63	124	180	P	H
		2389.95	52.07	-1.93	54	41.76	27.44	16.5	33.63	124	180	A	H
	*	2437	107.17	-	-	96.9	27.33	16.55	33.61	124	180	P	H
	*	2437	99.62	-	-	89.35	27.33	16.55	33.61	124	180	A	H
		2483.68	61.05	-12.95	74	50.76	27.3	16.59	33.6	124	180	P	H
		2483.52	49.25	-4.75	54	38.96	27.3	16.59	33.6	124	180	A	H
		2389.35	52.94	-21.06	74	42.63	27.44	16.5	33.63	100	297	P	V
		2389.5	44.66	-9.34	54	34.35	27.44	16.5	33.63	100	297	A	V
802.11n HT40 CH 06 2437MHz	*	2437	96.75	-	-	86.48	27.33	16.55	33.61	100	297	P	V
	*	2437	89.44	-	-	79.17	27.33	16.55	33.61	100	297	A	V
		2483.68	53.59	-20.41	74	43.3	27.3	16.59	33.6	100	297	P	V
		2483.6	44.33	-9.67	54	34.04	27.3	16.59	33.6	100	297	A	V



		2389.2	55.58	-18.42	74	45.27	27.44	16.5	33.63	136	180	P	H
		2389.05	44.41	-9.59	54	34.1	27.44	16.5	33.63	136	180	A	H
	*	2452	106.65	-	-	96.4	27.3	16.56	33.61	136	180	P	H
	*	2452	99.04	-	-	88.79	27.3	16.56	33.61	136	180	A	H
		2484.16	61.5	-12.5	74	51.21	27.3	16.59	33.6	136	180	P	H
		2484.24	52.6	-1.4	54	42.31	27.3	16.59	33.6	136	180	A	H
		2349.6	53.12	-20.88	74	42.72	27.6	16.44	33.64	100	298	P	V
		2360.25	43.62	-10.38	54	33.24	27.56	16.46	33.64	100	298	A	V
	*	2452	96.14	-	-	85.89	27.3	16.56	33.61	100	298	P	V
	*	2452	88.63	-	-	78.38	27.3	16.56	33.61	100	298	A	V
		2484.16	53.97	-20.03	74	43.68	27.3	16.59	33.6	100	298	P	V
		2484.64	45.29	-8.71	54	35	27.3	16.59	33.6	100	298	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		4844	37.61	-36.39	74	54.96	31.1	10.11	58.56	100	0	P	H
		7266	42.74	-31.26	74	52.64	36.43	12.54	58.87	100	0	P	H
													H
													H
		4844	38.46	-35.54	74	55.81	31.1	10.11	58.56	100	0	P	V
		7266	42.41	-31.59	74	52.31	36.43	12.54	58.87	100	0	P	V
													V
													V
802.11n HT40 CH 06 2437MHz		4874	38.3	-35.7	74	55.66	31.05	10.14	58.55	100	0	P	H
		7311	42.08	-31.92	74	51.9	36.52	12.49	58.83	100	0	P	H
													H
													H
		4874	37.51	-36.49	74	54.87	31.05	10.14	58.55	100	0	P	V
		7311	41.8	-32.2	74	51.62	36.52	12.49	58.83	100	0	P	V
													V
													V
802.11n HT40 CH 09 2452MHz		4904	38.19	-35.81	74	55.54	31.02	10.16	58.53	100	0	P	H
		7356	41.58	-32.42	74	51.31	36.58	12.46	58.77	100	0	P	H
													H
													H
		4904	37.78	-36.22	74	55.13	31.02	10.16	58.53	100	0	P	V
		7356	41.55	-32.45	74	51.28	36.58	12.46	58.77	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

2.4GHz WIFI 802.11g (LF)



<Chain 2>

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2389.065	58.33	-15.67	74	48.02	27.44	16.5	33.63	150	305	P	H
		2389.17	52.46	-1.54	54	42.15	27.44	16.5	33.63	150	305	A	H
	*	2412	117.63	-	-	107.34	27.38	16.53	33.62	150	305	P	H
	*	2412	114.41	-	-	104.12	27.38	16.53	33.62	150	305	A	H
													H
													H
		2389.38	53.67	-20.33	74	43.36	27.44	16.5	33.63	109	123	P	V
		2388.96	42.5	-11.5	54	32.19	27.44	16.5	33.63	109	123	A	V
	*	2412	106.7	-	-	96.41	27.38	16.53	33.62	109	123	P	V
	*	2412	103.59	-	-	93.3	27.38	16.53	33.62	109	123	A	V
													V
													V
802.11b CH 06 2437MHz		2389.68	53.72	-20.28	74	43.41	27.44	16.5	33.63	112	175	P	H
		2389.84	42.47	-11.53	54	32.16	27.44	16.5	33.63	112	175	A	H
	*	2437	116.52	-	-	106.25	27.33	16.55	33.61	112	175	P	H
	*	2437	113.36	-	-	103.09	27.33	16.55	33.61	112	175	A	H
		2485.52	56.7	-17.3	74	46.41	27.3	16.59	33.6	112	175	P	H
		2484.16	43.47	-10.53	54	33.18	27.3	16.59	33.6	112	175	A	H
		2321.68	52.16	-21.84	74	41.7	27.71	16.4	33.65	103	295	P	V
		2315.44	41.5	-12.5	54	31.03	27.74	16.39	33.66	103	295	A	V
	*	2437	105.05	-	-	94.78	27.33	16.55	33.61	103	295	P	V
	*	2437	101.88	-	-	91.61	27.33	16.55	33.61	103	295	A	V
		2498.08	53.4	-20.6	74	43.09	27.3	16.6	33.59	103	295	P	V
		2484.32	41.53	-12.47	54	31.24	27.3	16.59	33.6	103	295	A	V



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	*	2462	114.21	-	-	103.94	27.3	16.57	33.6	134	164	P	H
802.11b CH 11 2462MHz	*	2462	111.05	-	-	100.78	27.3	16.57	33.6	134	164	A	H
		2484.12	62.33	-11.67	74	52.04	27.3	16.59	33.6	134	164	P	H
		2483.52	46.26	-7.74	54	35.97	27.3	16.59	33.6	134	164	A	H
													H
													H
	*	2462	102.06	-	-	91.79	27.3	16.57	33.6	100	81	P	V
	*	2462	98.92	-	-	88.65	27.3	16.57	33.6	100	81	A	V
		2495.84	52.36	-21.64	74	42.05	27.3	16.6	33.59	100	81	P	V
		2483.52	41.74	-12.26	54	31.45	27.3	16.59	33.6	100	81	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	51.85	-22.15	74	69.22	31.1	10.1	58.57	266	332	P	H
		4824	49.18	-4.82	54	66.55	31.1	10.1	58.57	266	332	A	H
													H
													H
		4824	51.52	-22.48	74	68.89	31.1	10.1	58.57	190	193	P	V
		4824	48.7	-5.3	54	66.07	31.1	10.1	58.57	190	193	A	V
													V
													V
802.11b CH 06 2437MHz		4874	52.14	-21.86	74	69.5	31.05	10.14	58.55	273	321	P	H
		4874	49.74	-4.26	54	67.1	31.05	10.14	58.55	273	321	A	H
		7311	41.86	-32.14	74	51.68	36.52	12.49	58.83	100	0	P	H
													H
		4874	49.94	-24.06	74	67.3	31.05	10.14	58.55	200	245	P	V
		4874	47.61	-6.39	54	64.97	31.05	10.14	58.55	200	245	A	V
		7311	42.78	-31.22	74	52.6	36.52	12.49	58.83	100	0	P	V
													V
802.11b CH 11 2462MHz		4924	52.89	-21.11	74	70.09	31.14	10.19	58.53	100	42	P	H
		4924	50.7	-3.3	54	67.9	31.14	10.19	58.53	100	42	A	H
		7386	40.93	-33.07	74	50.76	36.46	12.43	58.72	100	0	P	H
													H
		4924	49.6	-24.4	74	66.8	31.14	10.19	58.53	100	151	P	V
		4924	47.3	-6.7	54	64.5	31.14	10.19	58.53	100	151	A	V
		7386	41.96	-32.04	74	51.79	36.46	12.43	58.72	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2389.905	64.47	-9.53	74	54.16	27.44	16.5	33.63	111	165	P	H
		2390	52.23	-1.77	54	41.91	27.44	16.51	33.63	111	165	A	H
	*	2412	107.72	-	-	97.43	27.38	16.53	33.62	111	165	P	H
	*	2412	99.97	-	-	89.68	27.38	16.53	33.62	111	165	A	H
													H
													H
		2389.905	62.23	-11.77	74	51.92	27.44	16.5	33.63	129	188	P	V
		2390	49.05	-4.95	54	38.73	27.44	16.51	33.63	129	188	A	V
	*	2412	103.92	-	-	93.63	27.38	16.53	33.62	129	188	P	V
	*	2412	96.37	-	-	86.08	27.38	16.53	33.62	129	188	A	V
													V
													V
802.11g CH 06 2437MHz		2389.2	58.88	-15.12	74	48.57	27.44	16.5	33.63	100	160	P	H
		2390	48.36	-5.64	54	38.04	27.44	16.51	33.63	100	160	A	H
	*	2437	113.27	-	-	103	27.33	16.55	33.61	100	160	P	H
	*	2437	105.49	-	-	95.22	27.33	16.55	33.61	100	160	A	H
		2484.88	63.85	-10.15	74	53.56	27.3	16.59	33.6	100	160	P	H
		2483.84	52.93	-1.07	54	42.64	27.3	16.59	33.6	100	160	A	H
		2389.68	56.62	-17.38	74	46.31	27.44	16.5	33.63	124	195	P	V
		2390	45.82	-8.18	54	35.5	27.44	16.51	33.63	124	195	A	V
	*	2437	110.58	-	-	100.31	27.33	16.55	33.61	124	195	P	V
	*	2437	102.41	-	-	92.14	27.33	16.55	33.61	124	195	A	V
		2484.96	61.8	-12.2	74	51.51	27.3	16.59	33.6	124	195	P	V
		2483.52	49.71	-4.29	54	39.42	27.3	16.59	33.6	124	195	A	V



802.11g CH 11 2462MHz	*	2462	107.84	-	-	97.57	27.3	16.57	33.6	136	175	P	H
	*	2462	99.94	-	-	89.67	27.3	16.57	33.6	136	175	A	H
		2483.92	66.24	-7.76	74	55.95	27.3	16.59	33.6	136	175	P	H
		2483.52	52.15	-1.85	54	41.86	27.3	16.59	33.6	136	175	A	H
													H
													H
	*	2462	104.8	-	-	94.53	27.3	16.57	33.6	100	198	P	V
	*	2462	97.03	-	-	86.76	27.3	16.57	33.6	100	198	A	V
		2483.88	63.29	-10.71	74	53	27.3	16.59	33.6	100	198	P	V
		2483.6	49.67	-4.33	54	39.38	27.3	16.59	33.6	100	198	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	37.99	-36.01	74	55.36	31.1	10.1	58.57	100	0	P	H
													H
													H
													H
		4824	38.22	-35.78	74	55.59	31.1	10.1	58.57	100	0	P	V
													V
													V
													V
802.11g CH 06 2437MHz		4874	55.5	-18.5	74	72.86	31.05	10.14	58.55	264	142	P	H
		4874	44.41	-9.59	54	61.77	31.05	10.14	58.55	264	142	A	H
		7311	45.03	-28.97	74	54.85	36.52	12.49	58.83	100	0	P	H
													H
		4874	57.26	-16.74	74	74.62	31.05	10.14	58.55	144	16	P	V
		4874	46.63	-7.37	54	63.99	31.05	10.14	58.55	144	16	A	V
		7311	41.73	-32.27	74	51.55	36.52	12.49	58.83	100	0	P	V
													V
802.11g CH 11 2462MHz		4924	41.26	-32.74	74	58.46	31.14	10.19	58.53	100	0	P	H
		7386	42.39	-31.61	74	52.22	36.46	12.43	58.72	100	0	P	H
													H
													H
		4924	40.93	-33.07	74	58.13	31.14	10.19	58.53	100	0	P	V
		7386	41.09	-32.91	74	50.92	36.46	12.43	58.72	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2389.905	66.9	-7.1	74	56.59	27.44	16.5	33.63	111	163	P	H
		2390	51.91	-2.09	54	41.59	27.44	16.51	33.63	111	163	A	H
	*	2412	106.89	-	-	96.6	27.38	16.53	33.62	111	163	P	H
	*	2412	98.82	-	-	88.53	27.38	16.53	33.62	111	163	A	H
													H
													H
		2389.905	63.15	-10.85	74	52.84	27.44	16.5	33.63	129	184	P	V
		2390	48.93	-5.07	54	38.61	27.44	16.51	33.63	129	184	A	V
	*	2412	102.88	-	-	92.59	27.38	16.53	33.62	129	184	P	V
	*	2412	95.16	-	-	84.87	27.38	16.53	33.62	129	184	A	V
													V
													V
802.11n HT20 CH 06 2437MHz		2389.36	59.24	-14.76	74	48.93	27.44	16.5	33.63	100	159	P	H
		2390	47.26	-6.74	54	36.94	27.44	16.51	33.63	100	159	A	H
	*	2437	112.63	-	-	102.36	27.33	16.55	33.61	100	159	P	H
	*	2437	104.9	-	-	94.63	27.33	16.55	33.61	100	159	A	H
		2484.08	64.94	-9.06	74	54.65	27.3	16.59	33.6	100	159	P	H
		2483.76	51.26	-2.74	54	40.97	27.3	16.59	33.6	100	159	A	H
		2389.2	56.89	-17.11	74	46.58	27.44	16.5	33.63	124	191	P	V
		2389.68	45.27	-8.73	54	34.96	27.44	16.5	33.63	124	191	A	V
	*	2437	109.2	-	-	98.93	27.33	16.55	33.61	124	191	P	V
	*	2437	101.55	-	-	91.28	27.33	16.55	33.61	124	191	A	V
		2484.32	62.07	-11.93	74	51.78	27.3	16.59	33.6	124	191	P	V
		2483.52	48.46	-5.54	54	38.17	27.3	16.59	33.6	124	191	A	V



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802.11n HT20 CH 11 2462MHz	*	2462	107.19	-	-	96.92	27.3	16.57	33.6	134	174	P	H
	*	2462	99.26	-	-	88.99	27.3	16.57	33.6	134	174	A	H
		2483.72	67.49	-6.51	74	57.2	27.3	16.59	33.6	134	174	P	H
		2483.52	52.44	-1.56	54	42.15	27.3	16.59	33.6	134	174	A	H
													H
													H
	*	2462	104.04	-	-	93.77	27.3	16.57	33.6	101	198	P	V
	*	2462	96.32	-	-	86.05	27.3	16.57	33.6	101	198	A	V
		2483.56	62.95	-11.05	74	52.66	27.3	16.59	33.6	101	198	P	V
		2483.52	49.53	-4.47	54	39.24	27.3	16.59	33.6	101	198	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		4824	37.48	-36.52	74	54.85	31.1	10.1	58.57	100	0	P	H
													H
													H
													H
		4824	38.14	-35.86	74	55.51	31.1	10.1	58.57	100	0	P	V
													V
													V
802.11n HT20 CH 06 2437MHz		4874	55.53	-18.47	74	72.89	31.05	10.14	58.55	265	141	P	H
		4874	43.75	-10.25	54	61.11	31.05	10.14	58.55	265	141	A	H
		7311	42.86	-31.14	74	52.68	36.52	12.49	58.83	100	0	P	H
													H
		4874	54.66	-19.34	74	72.02	31.05	10.14	58.55	143	16	P	V
		4874	42.24	-11.76	54	59.6	31.05	10.14	58.55	143	16	A	V
		7311	41.4	-32.6	74	51.22	36.52	12.49	58.83	100	0	P	V
													V
802.11n HT20 CH 11 2462MHz		4924	38.49	-35.51	74	55.69	31.14	10.19	58.53	100	0	P	H
		7386	41.17	-32.83	74	51	36.46	12.43	58.72	100	0	P	H
													H
													H
		4924	38.27	-35.73	74	55.47	31.14	10.19	58.53	100	0	P	V
		7386	41.07	-32.93	74	50.9	36.46	12.43	58.72	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		2389.95	60.82	-13.18	74	50.51	27.44	16.5	33.63	114	164	P	H
		2389.65	51.66	-2.34	54	41.35	27.44	16.5	33.63	114	164	A	H
	*	2422	103.12	-	-	92.84	27.36	16.54	33.62	114	164	P	H
	*	2422	94.53	-	-	84.25	27.36	16.54	33.62	114	164	A	H
		2483.6	56.82	-17.18	74	46.53	27.3	16.59	33.6	114	164	P	H
		2484.64	45.16	-8.84	54	34.87	27.3	16.59	33.6	114	164	A	H
		2388.9	57.55	-16.45	74	47.24	27.44	16.5	33.63	123	201	P	V
		2389.8	47.91	-6.09	54	37.6	27.44	16.5	33.63	123	201	A	V
	*	2422	98.72	-	-	88.44	27.36	16.54	33.62	123	201	P	V
	*	2422	91.16	-	-	80.88	27.36	16.54	33.62	123	201	A	V
802.11n HT40 CH 06 2437MHz		2483.52	53.04	-20.96	74	42.75	27.3	16.59	33.6	123	201	P	V
		2484.08	43.77	-10.23	54	33.48	27.3	16.59	33.6	123	201	A	V
		2389.95	62.29	-11.71	74	51.98	27.44	16.5	33.63	100	161	P	H
		2389.8	50.27	-3.73	54	39.96	27.44	16.5	33.63	100	161	A	H
	*	2437	106.56	-	-	96.29	27.33	16.55	33.61	100	161	P	H
	*	2437	99.34	-	-	89.07	27.33	16.55	33.61	100	161	A	H
		2483.52	62.89	-11.11	74	52.6	27.3	16.59	33.6	100	161	P	H
		2483.52	52.72	-1.28	54	42.43	27.3	16.59	33.6	100	161	A	H
		2389.35	55.93	-18.07	74	45.62	27.44	16.5	33.63	123	199	P	V
		2389.95	47.2	-6.8	54	36.89	27.44	16.5	33.63	123	199	A	V
802.11n HT40 CH 06 2437MHz	*	2437	103.1	-	-	92.83	27.33	16.55	33.61	123	199	P	V
	*	2437	95.61	-	-	85.34	27.33	16.55	33.61	123	199	A	V
		2484.56	59.84	-14.16	74	49.55	27.3	16.59	33.6	123	199	P	V
		2483.76	49.82	-4.18	54	39.53	27.3	16.59	33.6	123	199	A	V



		2387.1	53.18	-20.82	74	42.86	27.45	16.5	33.63	100	160	P	H
		2389.8	43.48	-10.52	54	33.17	27.44	16.5	33.63	100	160	A	H
	*	2452	103.07	-	-	92.82	27.3	16.56	33.61	100	160	P	H
	*	2452	95.59	-	-	85.34	27.3	16.56	33.61	100	160	A	H
		2484.56	61.93	-12.07	74	51.64	27.3	16.59	33.6	100	160	P	H
	HT40	2483.52	52.23	-1.77	54	41.94	27.3	16.59	33.6	100	160	P	H
	CH 09	2374.2	53.9	-20.1	74	43.56	27.5	16.48	33.64	123	198	P	V
	2452MHz	2363.1	43.38	-10.62	54	33.01	27.55	16.46	33.64	123	198	A	V
	*	2452	99.32	-	-	89.07	27.3	16.56	33.61	123	198	P	V
	*	2452	91.81	-	-	81.56	27.3	16.56	33.61	123	198	A	V
		2483.92	59.35	-14.65	74	49.06	27.3	16.59	33.6	123	198	P	V
		2483.76	49.06	-4.94	54	38.77	27.3	16.59	33.6	123	198	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		4844	38.09	-35.91	74	55.44	31.1	10.11	58.56	100	0	P	H
		7266	41.99	-32.01	74	51.89	36.43	12.54	58.87	100	0	P	H
													H
													H
		4844	38.47	-35.53	74	55.82	31.1	10.11	58.56	100	0	P	V
		7266	42.63	-31.37	74	52.53	36.43	12.54	58.87	100	0	P	V
													V
													V
802.11n HT40 CH 06 2437MHz		4874	39.18	-34.82	74	56.54	31.05	10.14	58.55	100	0	P	H
		7311	40.68	-33.32	74	50.5	36.52	12.49	58.83	100	0	P	H
													H
													H
		4874	38.67	-35.33	74	56.03	31.05	10.14	58.55	100	0	P	V
		7311	40.69	-33.31	74	50.51	36.52	12.49	58.83	100	0	P	V
													V
													V
802.11n HT40 CH 09 2452MHz		4904	37.65	-36.35	74	55	31.02	10.16	58.53	100	0	P	H
		7356	40.69	-33.31	74	50.42	36.58	12.46	58.77	100	0	P	H
													H
													H
		4904	38.24	-35.76	74	55.59	31.02	10.16	58.53	100	0	P	V
		7356	40.41	-33.59	74	50.14	36.58	12.46	58.77	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

2.4GHz WIFI 802.11g (LF)



MIMO <Chain 1+2>

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2386.86	58.27	-15.73	74	47.95	27.45	16.5	33.63	151	206	P	H
		2387.49	49.51	-4.49	54	39.19	27.45	16.5	33.63	151	206	A	H
	*	2412	118.65	-	-	108.36	27.38	16.53	33.62	151	206	P	H
	*	2412	115.65	-	-	105.36	27.38	16.53	33.62	151	206	A	H
													H
													H
		2386.545	52.86	-21.14	74	42.54	27.45	16.5	33.63	100	181	P	V
		2387.91	42.86	-11.14	54	32.54	27.45	16.5	33.63	100	181	A	V
	*	2412	110.56	-	-	100.27	27.38	16.53	33.62	100	181	P	V
	*	2412	107.55	-	-	97.26	27.38	16.53	33.62	100	181	A	V
													V
													V
802.11b CH 06 2437MHz		2352.56	51.76	-22.24	74	41.36	27.59	16.45	33.64	100	166	P	H
		2390	42.26	-11.74	54	31.94	27.44	16.51	33.63	100	166	A	H
	*	2437	117.6	-	-	107.33	27.33	16.55	33.61	100	166	P	H
	*	2437	114.57	-	-	104.3	27.33	16.55	33.61	100	166	A	H
		2483.52	57.47	-16.53	74	47.18	27.3	16.59	33.6	100	166	P	H
		2484.08	42.9	-11.1	54	32.61	27.3	16.59	33.6	100	166	A	H
		2386.64	52.03	-21.97	74	41.71	27.45	16.5	33.63	183	201	P	V
		2390	41.56	-12.44	54	31.24	27.44	16.51	33.63	183	201	A	V
	*	2437	109.47	-	-	99.2	27.33	16.55	33.61	183	201	P	V
	*	2437	106.49	-	-	96.22	27.33	16.55	33.61	183	201	A	V
		2490	53.23	-20.77	74	42.93	27.3	16.59	33.59	183	201	P	V
		2484	41.81	-12.19	54	31.52	27.3	16.59	33.6	183	201	A	V



802.11b CH 11 2462MHz	*	2462	117.23	-	-	106.96	27.3	16.57	33.6	118	167	P	H
	*	2462	114.33	-	-	104.06	27.3	16.57	33.6	118	167	A	H
		2483.88	61.68	-12.32	74	51.39	27.3	16.59	33.6	118	167	P	H
		2484.8	46.64	-7.36	54	36.35	27.3	16.59	33.6	118	167	A	H
													H
													H
	*	2462	109.6	-	-	99.33	27.3	16.57	33.6	129	204	P	V
	*	2462	106.43	-	-	96.16	27.3	16.57	33.6	129	204	A	V
		2483.6	54.89	-19.11	74	44.6	27.3	16.59	33.6	129	204	P	V
		2484.92	42.95	-11.05	54	32.66	27.3	16.59	33.6	129	204	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	51.92	-22.08	74	69.29	31.1	10.1	58.57	268	143	P	H
		4824	49.01	-4.99	54	66.38	31.1	10.1	58.57	268	143	A	H
													H
													H
		4824	49.7	-24.3	74	67.07	31.1	10.1	58.57	100	0	P	V
													V
													V
													V
802.11b CH 06 2437MHz		4874	47.19	-26.81	74	64.55	31.05	10.14	58.55			P	H
		7311	44.31	-29.69	74	54.13	36.52	12.49	58.83	100	0	P	H
													H
													H
		4874	53.04	-20.96	74	70.4	31.05	10.14	58.55	123	13	P	V
		4874	50.85	-3.15	54	68.21	31.05	10.14	58.55	123	13	A	V
		7311	42.65	-31.35	74	52.47	36.52	12.49	58.83	100	0	P	V
													V
802.11b CH 11 2462MHz		4924	48.45	-25.55	74	65.65	31.14	10.19	58.53	100	0	P	H
		7386	43.1	-30.9	74	52.93	36.46	12.43	58.72	100	0	P	H
													H
													H
		4924	52.12	-21.88	74	69.32	31.14	10.19	58.53	100	15	P	V
		4924	49.33	-4.67	54	66.53	31.14	10.19	58.53	100	15	A	V
		7386	42.61	-31.39	74	52.44	36.46	12.43	58.72	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2390	66.08	-7.92	74	55.76	27.44	16.51	33.63	100	177	P	H
		2390	52.97	-1.03	54	42.65	27.44	16.51	33.63	100	177	A	H
	*	2412	113.14	-	-	102.85	27.38	16.53	33.62	100	177	P	H
	*	2412	105.93	-	-	95.64	27.38	16.53	33.62	100	177	A	H
													H
													H
		2389.17	61.79	-12.21	74	51.48	27.44	16.5	33.63	158	185	P	V
		2389.485	46.5	-7.5	54	36.19	27.44	16.5	33.63	158	185	A	V
	*	2412	106.49	-	-	96.2	27.38	16.53	33.62	158	185	P	V
	*	2412	99.26	-	-	88.97	27.38	16.53	33.62	158	185	A	V
													V
													V
802.11g CH 06 2437MHz		2389.52	65.13	-8.87	74	54.82	27.44	16.5	33.63	100	180	P	H
		2389.84	51.46	-2.54	54	41.15	27.44	16.5	33.63	100	180	A	H
	*	2437	121.08	-	-	110.81	27.33	16.55	33.61	100	180	P	H
	*	2437	113.75	-	-	103.48	27.33	16.55	33.61	100	180	A	H
		2483.68	65.63	-8.37	74	55.34	27.3	16.59	33.6	100	180	P	H
		2483.52	52.52	-1.48	54	42.23	27.3	16.59	33.6	100	180	A	H
		2389.52	57.67	-16.33	74	47.36	27.44	16.5	33.63	186	190	P	V
		2389.04	45.31	-8.69	54	35	27.44	16.5	33.63	186	190	A	V
	*	2437	115.35	-	-	105.08	27.33	16.55	33.61	186	190	P	V
	*	2437	107.49	-	-	97.22	27.33	16.55	33.61	186	190	A	V
		2484.4	61.92	-12.08	74	51.63	27.3	16.59	33.6	186	190	P	V
		2483.6	49.63	-4.37	54	39.34	27.3	16.59	33.6	186	190	A	V



FCC RADIO TEST REPORT

Report No. : FR8N0846C

	*	2462	113.84	-	-	103.57	27.3	16.57	33.6	118	174	P	H
802.11g CH 11 2462MHz	*	2462	106.27	-	-	96	27.3	16.57	33.6	118	174	A	H
		2483.52	66.29	-7.71	74	56	27.3	16.59	33.6	118	174	P	H
		2483.56	52.59	-1.41	54	42.3	27.3	16.59	33.6	118	174	A	H
													H
													H
	*	2462	109.04	-	-	98.77	27.3	16.57	33.6	211	188	P	V
	*	2462	101.1	-	-	90.83	27.3	16.57	33.6	211	188	A	V
		2483.6	61.1	-12.9	74	50.81	27.3	16.59	33.6	211	188	P	V
		2483.52	47.88	-6.12	54	37.59	27.3	16.59	33.6	211	188	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	38.04	-35.96	74	55.41	31.1	10.1	58.57	100	0	P	H
													H
													H
													H
		4824	38.26	-35.74	74	55.63	31.1	10.1	58.57	100	0	P	V
													V
													V
													V
802.11g CH 06 2437MHz		4874	49.64	-24.36	74	67	31.05	10.14	58.55	100	0	P	H
		7311	58.11	-15.89	74	67.93	36.52	12.49	58.83	100	124	P	H
		7311	44.3	-9.7	54	54.12	36.52	12.49	58.83	100	124	A	H
													H
		4874	55.75	-18.25	74	73.11	31.05	10.14	58.55	122	15	P	V
		4874	44.87	-9.13	54	62.23	31.05	10.14	58.55	122	15	A	V
		7311	49.51	-24.49	74	59.33	36.52	12.49	58.83	100	0	P	V
													V
802.11g CH 11 2462MHz		4924	39.73	-34.27	74	56.93	31.14	10.19	58.53	100	0	P	H
		7386	42.04	-31.96	74	51.87	36.46	12.43	58.72	100	0	P	H
													H
													H
		4924	39.77	-34.23	74	56.97	31.14	10.19	58.53	100	0	P	V
		7386	41.2	-32.8	74	51.03	36.46	12.43	58.72	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2389.695	65.72	-8.28	74	55.41	27.44	16.5	33.63	100	177	P	H
		2390	52.35	-1.65	54	42.03	27.44	16.51	33.63	100	177	A	H
	*	2412	112.7	-	-	102.41	27.38	16.53	33.62	100	177	P	H
	*	2412	104.92	-	-	94.63	27.38	16.53	33.62	100	177	A	H
													H
													H
		2325.645	52.87	-21.13	74	42.41	27.7	16.41	33.65	156	186	P	V
		2390	43.07	-10.93	54	32.75	27.44	16.51	33.63	156	186	A	V
	*	2412	104.87	-	-	94.58	27.38	16.53	33.62	156	186	P	V
	*	2412	97.21	-	-	86.92	27.38	16.53	33.62	156	186	A	V
													V
													V
802.11n HT20 CH 06 2437MHz		2388.56	64.7	-9.3	74	54.38	27.45	16.5	33.63	100	178	P	H
		2390	50.99	-3.01	54	40.67	27.44	16.51	33.63	100	178	A	H
	*	2437	120.3	-	-	110.03	27.33	16.55	33.61	100	178	P	H
	*	2437	112.82	-	-	102.55	27.33	16.55	33.61	100	178	A	H
		2485.36	65.16	-8.84	74	54.87	27.3	16.59	33.6	100	178	P	H
		2483.6	52.87	-1.13	54	42.58	27.3	16.59	33.6	100	178	A	H
		2389.52	57.43	-16.57	74	47.12	27.44	16.5	33.63	187	185	P	V
		2390	45.33	-8.67	54	35.01	27.44	16.51	33.63	187	185	A	V
	*	2437	113.9	-	-	103.63	27.33	16.55	33.61	187	185	P	V
	*	2437	106.55	-	-	96.28	27.33	16.55	33.61	187	185	A	V
		2484.72	63.25	-10.75	74	52.96	27.3	16.59	33.6	187	185	P	V
		2483.68	49.16	-4.84	54	38.87	27.3	16.59	33.6	187	185	A	V



802.11n HT20 CH 11 2462MHz	*	2462	113.97	-	-	103.7	27.3	16.57	33.6	122	177	P	H
	*	2462	106.22	-	-	95.95	27.3	16.57	33.6	122	177	A	H
		2484.48	65.11	-8.89	74	54.82	27.3	16.59	33.6	122	177	P	H
		2483.52	52.9	-1.1	54	42.61	27.3	16.59	33.6	122	177	A	H
													H
													H
	*	2462	107.22	-	-	96.95	27.3	16.57	33.6	212	183	P	V
	*	2462	99.48	-	-	89.21	27.3	16.57	33.6	212	183	A	V
		2483.76	59.44	-14.56	74	49.15	27.3	16.59	33.6	212	183	P	V
		2483.56	47.55	-6.45	54	37.26	27.3	16.59	33.6	212	183	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		4824	38.12	-35.88	74	55.49	31.1	10.1	58.57	100	0	P	H
													H
													H
													H
		4824	38.96	-35.04	74	56.33	31.1	10.1	58.57	100	0	P	V
													V
													V
802.11n HT20 CH 06 2437MHz		4874	54.73	-19.27	74	72.09	31.05	10.14	58.55	264	139	P	H
		4874	42.19	-11.81	54	59.55	31.05	10.14	58.55	264	139	A	H
		7311	56.07	-17.93	74	65.89	36.52	12.49	58.83	100	120	P	H
		7311	42.52	-11.48	54	52.34	36.52	12.49	58.83	100	120	A	H
		4874	56.53	-17.47	74	73.89	31.05	10.14	58.55	263	177	P	V
		4874	44.26	-9.74	54	61.62	31.05	10.14	58.55	263	177	A	V
		7311	49.03	-24.97	74	58.85	36.52	12.49	58.83	100	0	P	V
													V
802.11n HT20 CH 11 2462MHz		4924	39.42	-34.58	74	56.62	31.14	10.19	58.53	100	0	P	H
		7386	41.46	-32.54	74	51.29	36.46	12.43	58.72	100	0	P	H
													H
													H
		4924	41.09	-32.91	74	58.29	31.14	10.19	58.53	100	0	P	V
		7386	41.34	-32.66	74	51.17	36.46	12.43	58.72	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		2389.95	61.21	-12.79	74	50.9	27.44	16.5	33.63	100	177	P	H
		2389.35	52.73	-1.27	54	42.42	27.44	16.5	33.63	100	177	A	H
	*	2422	107.46	-	-	97.18	27.36	16.54	33.62	100	177	P	H
	*	2422	99.96	-	-	89.68	27.36	16.54	33.62	100	177	A	H
		2484.08	53.39	-20.61	74	43.1	27.3	16.59	33.6	100	177	P	H
		2485.04	44.48	-9.52	54	34.19	27.3	16.59	33.6	100	177	A	H
		2389.05	57.18	-16.82	74	46.87	27.44	16.5	33.63	180	185	P	V
		2388.9	47.29	-6.71	54	36.98	27.44	16.5	33.63	180	185	A	V
	*	2422	100.45	-	-	90.17	27.36	16.54	33.62	180	185	P	V
	*	2422	92.96	-	-	82.68	27.36	16.54	33.62	180	185	A	V
802.11n HT40 CH 06 2437MHz		2486.16	53.23	-20.77	74	42.93	27.3	16.59	33.59	180	185	P	V
		2483.52	43.66	-10.34	54	33.37	27.3	16.59	33.6	180	185	A	V
		2389.35	65.49	-8.51	74	55.18	27.44	16.5	33.63	100	178	P	H
		2389.95	52.84	-1.16	54	42.53	27.44	16.5	33.63	100	178	A	H
	*	2437	111.26	-	-	100.99	27.33	16.55	33.61	100	178	P	H
	*	2437	103.71	-	-	93.44	27.33	16.55	33.61	100	178	A	H
		2483.68	63.75	-10.25	74	53.46	27.3	16.59	33.6	100	178	P	H
		2483.52	52.24	-1.76	54	41.95	27.3	16.59	33.6	100	178	A	H
		2389.05	57.26	-16.74	74	46.95	27.44	16.5	33.63	187	186	P	V
		2389.8	46.41	-7.59	54	36.1	27.44	16.5	33.63	187	186	A	V
802.11n HT40 CH 06 2437MHz	*	2437	104.41	-	-	94.14	27.33	16.55	33.61	187	186	P	V
	*	2437	96.86	-	-	86.59	27.33	16.55	33.61	187	186	A	V
		2484.48	57.16	-16.84	74	46.87	27.3	16.59	33.6	187	186	P	V
		2485.44	45.23	-8.77	54	34.94	27.3	16.59	33.6	187	186	A	V



		2389.35	53.85	-20.15	74	43.54	27.44	16.5	33.63	100	179	P	H
		2389.65	43.8	-10.2	54	33.49	27.44	16.5	33.63	100	179	A	H
	*	2452	106.57	-	-	96.32	27.3	16.56	33.61	100	179	P	H
	*	2452	98.98	-	-	88.73	27.3	16.56	33.61	100	179	A	H
		2485.12	63.32	-10.68	74	53.03	27.3	16.59	33.6	100	179	P	H
	HT40	2484.56	52.53	-1.47	54	42.24	27.3	16.59	33.6	100	179	A	H
	CH 09	2369.85	52.27	-21.73	74	41.92	27.52	16.47	33.64	186	184	P	V
	2452MHz	2354.7	43.33	-10.67	54	32.94	27.58	16.45	33.64	186	184	A	V
	*	2452	99.81	-	-	89.56	27.3	16.56	33.61	186	184	P	V
	*	2452	92.88	-	-	82.63	27.3	16.56	33.61	186	184	A	V
		2483.76	56.52	-17.48	74	46.23	27.3	16.59	33.6	186	184	P	V
		2483.6	47.06	-6.94	54	36.77	27.3	16.59	33.6	186	184	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		4844	37.77	-36.23	74	55.12	31.1	10.11	58.56	100	0	P	H
		7266	42.26	-31.74	74	52.16	36.43	12.54	58.87	100	0	P	H
													H
													H
		4844	37.9	-36.1	74	55.25	31.1	10.11	58.56	100	0	P	V
		7266	42.4	-31.6	74	52.3	36.43	12.54	58.87	100	0	P	V
													V
													V
802.11n HT40 CH 06 2437MHz		4874	37.8	-36.2	74	55.16	31.05	10.14	58.55	100	0	P	H
		7311	41.51	-32.49	74	51.33	36.52	12.49	58.83	100	0	P	H
													H
													H
		4874	37.35	-36.65	74	54.71	31.05	10.14	58.55	100	0	P	V
		7311	41.56	-32.44	74	51.38	36.52	12.49	58.83	100	0	P	V
													V
													V
802.11n HT40 CH 09 2452MHz		4904	37.93	-36.07	74	55.28	31.02	10.16	58.53	100	0	P	H
		7356	41.33	-32.67	74	51.06	36.58	12.46	58.77	100	0	P	H
													H
													H
		4904	37.91	-36.09	74	55.26	31.02	10.16	58.53	100	0	P	V
		7356	41.21	-32.79	74	50.94	36.58	12.46	58.77	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

2.4GHz WIFI 802.11g (LF)



<For Antenna 3>

<Chain 1>

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2314.2	52.19	-21.81	74	41.72	27.74	16.39	33.66	197	17	P	H
		2387.28	43.28	-10.72	54	32.96	27.45	16.5	33.63	197	17	A	H
	*	2412	105.86	-	-	95.57	27.38	16.53	33.62	197	17	P	H
	*	2412	102.97	-	-	92.68	27.38	16.53	33.62	197	17	A	H
													H
													H
		2388.33	54.31	-19.69	74	43.99	27.45	16.5	33.63	100	295	P	V
		2387.595	46.18	-7.82	54	35.86	27.45	16.5	33.63	100	295	A	V
	*	2412	110.8	-	-	100.51	27.38	16.53	33.62	100	295	P	V
	*	2412	107.74	-	-	97.45	27.38	16.53	33.62	100	295	A	V
802.11b CH 06 2437MHz		2387.44	52.06	-21.94	74	41.74	27.45	16.5	33.63	191	12	P	H
		2317.04	41.43	-12.57	54	30.96	27.73	16.4	33.66	191	12	A	H
	*	2437	107.36	-	-	97.09	27.33	16.55	33.61	191	12	P	H
	*	2437	104.3	-	-	94.03	27.33	16.55	33.61	191	12	A	H
		2486.32	51.87	-22.13	74	41.57	27.3	16.59	33.59	191	12	P	H
		2485.12	41.49	-12.51	54	31.2	27.3	16.59	33.6	191	12	A	H
		2323.76	52.26	-21.74	74	41.8	27.7	16.41	33.65	100	296	P	V
		2389.52	41.52	-12.48	54	31.21	27.44	16.5	33.63	100	296	A	V
	*	2437	112.89	-	-	102.62	27.33	16.55	33.61	100	296	P	V
	*	2437	109.82	-	-	99.55	27.33	16.55	33.61	100	296	A	V
		2485.6	52.99	-21.01	74	42.7	27.3	16.59	33.6	100	296	P	V
		2483.84	42.04	-11.96	54	31.75	27.3	16.59	33.6	100	296	A	V



	*	2462	106.74	-	-	96.47	27.3	16.57	33.6	182	17	P	H
802.11b CH 11 2462MHz	*	2462	103.67	-	-	93.4	27.3	16.57	33.6	182	17	A	H
		2497.72	52.81	-21.19	74	42.5	27.3	16.6	33.59	182	17	P	H
		2484.76	44.03	-9.97	54	33.74	27.3	16.59	33.6	182	17	A	H
													H
													H
	*	2462	112.87	-	-	102.6	27.3	16.57	33.6	100	296	P	V
	*	2462	109.75	-	-	99.48	27.3	16.57	33.6	100	296	A	V
		2484.64	56.36	-17.64	74	46.07	27.3	16.59	33.6	100	296	P	V
		2484.88	48.14	-5.86	54	37.85	27.3	16.59	33.6	100	296	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	39.78	-34.22	74	57.15	31.1	10.1	58.57	100	0	P	H
													H
													H
													H
		4824	47.27	-26.73	74	64.64	31.1	10.1	58.57	100	0	P	V
													V
													V
													V
802.11b CH 06 2437MHz		4874	39.69	-34.31	74	57.05	31.05	10.14	58.55	100	0	P	H
		7311	42.76	-31.24	74	52.58	36.52	12.49	58.83	100	0	P	H
													H
		4874	48.47	-25.53	74	65.83	31.05	10.14	58.55	100	0	P	V
		7311	44.03	-29.97	74	53.85	36.52	12.49	58.83	100	0	P	V
													V
													V
													V
802.11b CH 11 2462MHz		4924	44.13	-29.87	74	61.33	31.14	10.19	58.53	100	0	P	H
		7386	40.75	-33.25	74	50.58	36.46	12.43	58.72	100	0	P	H
													H
		4924	52.29	-21.71	74	69.49	31.14	10.19	58.53	100	91	P	V
		4924	49.53	-4.47	54	66.73	31.14	10.19	58.53	100	91	A	V
		7386	41.66	-32.34	74	51.49	36.46	12.43	58.72	100	0	P	V
													V
	Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2390	53.14	-20.86	74	42.82	27.44	16.51	33.63	195	15	P	H
		2390	43.95	-10.05	54	33.63	27.44	16.51	33.63	195	15	A	H
	*	2412	100.29	-	-	90	27.38	16.53	33.62	195	15	P	H
	*	2412	92.54	-	-	82.25	27.38	16.53	33.62	195	15	A	H
													H
													H
		2389.905	55.27	-18.73	74	44.96	27.44	16.5	33.63	102	174	P	V
		2390	45.97	-8.03	54	35.65	27.44	16.51	33.63	102	174	A	V
	*	2412	105.82	-	-	95.53	27.38	16.53	33.62	102	174	P	V
	*	2412	97.97	-	-	87.68	27.38	16.53	33.62	102	174	A	V
													V
													V
802.11g CH 06 2437MHz		2388.4	58.17	-15.83	74	47.85	27.45	16.5	33.63	187	16	P	H
		2390	47.28	-6.72	54	36.96	27.44	16.51	33.63	187	16	A	H
	*	2437	110.34	-	-	100.07	27.33	16.55	33.61	187	16	P	H
	*	2437	102.83	-	-	92.56	27.33	16.55	33.61	187	16	A	H
		2484.4	58.02	-15.98	74	47.73	27.3	16.59	33.6	187	16	P	H
		2483.68	47.05	-6.95	54	36.76	27.3	16.59	33.6	187	16	A	H
		2389.84	62.99	-11.01	74	52.68	27.44	16.5	33.63	100	296	P	V
		2390	52.21	-1.79	54	41.89	27.44	16.51	33.63	100	296	A	V
	*	2437	116.78	-	-	106.51	27.33	16.55	33.61	100	296	P	V
	*	2437	109.19	-	-	98.92	27.33	16.55	33.61	100	296	A	V
		2484.08	63.74	-10.26	74	53.45	27.3	16.59	33.6	100	296	P	V
		2483.52	51.46	-2.54	54	41.17	27.3	16.59	33.6	100	296	A	V



802.11g CH 11 2462MHz	*	2462	101.16	-	-	90.89	27.3	16.57	33.6	203	17	P	H
	*	2462	93.37	-	-	83.1	27.3	16.57	33.6	203	17	A	H
		2484.48	53.92	-20.08	74	43.63	27.3	16.59	33.6	203	17	P	H
		2483.76	44.17	-9.83	54	33.88	27.3	16.59	33.6	203	17	A	H
													H
													H
	*	2462	107.18	-	-	96.91	27.3	16.57	33.6	100	296	P	V
	*	2462	99.26	-	-	88.99	27.3	16.57	33.6	100	296	A	V
		2484.64	58.32	-15.68	74	48.03	27.3	16.59	33.6	100	296	P	V
		2483.52	47.04	-6.96	54	36.75	27.3	16.59	33.6	100	296	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4804	38.02	-35.98	74	55.43	31.1	10.07	58.58	100	0	P	H
													H
													H
													H
		4804	37.76	-36.24	74	55.17	31.1	10.07	58.58	100	0	P	V
													V
													V
													V
802.11g CH 06 2437MHz		4874	39.67	-34.33	74	57.03	31.05	10.14	58.55	100	0	P	H
		7311	46	-28	74	55.82	36.52	12.49	58.83	100	0	P	H
													H
		4874	44.02	-29.98	74	61.38	31.05	10.14	58.55	100	0	P	V
		7311	47.54	-26.46	74	57.36	36.52	12.49	58.83	100	0	P	V
													V
													V
													V
802.11g CH 11 2462MHz		4924	38.25	-35.75	74	55.45	31.14	10.19	58.53	100	0	P	H
		7386	40.75	-33.25	74	50.58	36.46	12.43	58.72	100	0	P	H
													H
		4924	38.5	-35.5	74	55.7	31.14	10.19	58.53	100	0	P	V
		7386	41.4	-32.6	74	51.23	36.46	12.43	58.72	100	0	P	V
													V
													V
	Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2390	53.84	-20.16	74	43.52	27.44	16.51	33.63	194	15	P	H
		2390	43.53	-10.47	54	33.21	27.44	16.51	33.63	194	15	A	H
	*	2412	98.66	-	-	88.37	27.38	16.53	33.62	194	15	P	H
	*	2412	90.61	-	-	80.32	27.38	16.53	33.62	194	15	A	H
													H
													H
		2389.8	54.53	-19.47	74	44.22	27.44	16.5	33.63	102	174	P	V
		2390	45.13	-8.87	54	34.81	27.44	16.51	33.63	102	174	A	V
	*	2412	104.22	-	-	93.93	27.38	16.53	33.62	102	174	P	V
	*	2412	96.31	-	-	86.02	27.38	16.53	33.62	102	174	A	V
													V
													V
802.11n HT20 CH 06 2437MHz		2389.84	58.4	-15.6	74	48.09	27.44	16.5	33.63	201	20	P	H
		2390	46.61	-7.39	54	36.29	27.44	16.51	33.63	201	20	A	H
	*	2437	109.83	-	-	99.56	27.33	16.55	33.61	201	20	P	H
	*	2437	101.75	-	-	91.48	27.33	16.55	33.61	201	20	A	H
		2483.76	55.25	-18.75	74	44.96	27.3	16.59	33.6	201	20	P	H
		2483.6	45.08	-8.92	54	34.79	27.3	16.59	33.6	201	20	A	H
		2389.84	61.75	-12.25	74	51.44	27.44	16.5	33.63	100	296	P	V
		2390	50.92	-3.08	54	40.6	27.44	16.51	33.63	100	296	A	V
	*	2437	116.27	-	-	106	27.33	16.55	33.61	100	296	P	V
	*	2437	108.29	-	-	98.02	27.33	16.55	33.61	100	296	A	V
		2483.52	60.03	-13.97	74	49.74	27.3	16.59	33.6	100	296	P	V
		2483.6	49.05	-4.95	54	38.76	27.3	16.59	33.6	100	296	A	V



802.11n HT20 CH 11 2462MHz	*	2462	100.22	-	-	89.95	27.3	16.57	33.6	182	17	P	H
	*	2462	92.44	-	-	82.17	27.3	16.57	33.6	182	17	A	H
		2483.52	54.39	-19.61	74	44.1	27.3	16.59	33.6	182	17	P	H
		2483.88	44.21	-9.79	54	33.92	27.3	16.59	33.6	182	17	A	H
													H
													H
	*	2462	106.41	-	-	96.14	27.3	16.57	33.6	100	296	P	V
	*	2462	98.16	-	-	87.89	27.3	16.57	33.6	100	296	A	V
		2483.96	57.83	-16.17	74	47.54	27.3	16.59	33.6	100	296	P	V
		2483.64	47.56	-6.44	54	37.27	27.3	16.59	33.6	100	296	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		4804	37.21	-36.79	74	54.62	31.1	10.07	58.58	100	0	P	H
													H
													H
													H
		4804	37.42	-36.58	74	54.83	31.1	10.07	58.58	100	0	P	V
													V
													V
													V
802.11n HT20 CH 06 2437MHz		4874	37.9	-36.1	74	55.26	31.05	10.14	58.55	100	0	P	H
		7311	45.15	-28.85	74	54.97	36.52	12.49	58.83	100	0	P	H
													H
													H
		4874	43.07	-30.93	74	60.43	31.05	10.14	58.55	100	0	P	V
		7311	44.63	-29.37	74	54.45	36.52	12.49	58.83	100	0	P	V
													V
													V
802.11n HT20 CH 11 2462MHz		4924	38.68	-35.32	74	55.88	31.14	10.19	58.53	100	0	P	H
		7386	41.45	-32.55	74	51.28	36.46	12.43	58.72	100	0	P	H
													H
													H
		4924	37.83	-36.17	74	55.03	31.14	10.19	58.53	100	0	P	V
		7386	41.19	-32.81	74	51.02	36.46	12.43	58.72	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		2389.2	53.31	-20.69	74	43	27.44	16.5	33.63	195	14	P	H
		2389.2	44.98	-9.02	54	34.67	27.44	16.5	33.63	195	14	A	H
	*	2422	95.12	-	-	84.84	27.36	16.54	33.62	195	14	P	H
	*	2422	87.09	-	-	76.81	27.36	16.54	33.62	195	14	A	H
		2492.88	52.73	-21.27	74	42.43	27.3	16.59	33.59	195	14	P	H
		2484.72	43.44	-10.56	54	33.15	27.3	16.59	33.6	195	14	A	H
		2389.84	55.18	-18.82	74	44.87	27.44	16.5	33.63	100	295	P	V
		2389.68	47.98	-6.02	54	37.67	27.44	16.5	33.63	100	295	A	V
	*	2422	99.91	-	-	89.63	27.36	16.54	33.62	100	295	P	V
	*	2422	92.28	-	-	82	27.36	16.54	33.62	100	295	A	V
802.11n HT40 CH 06 2437MHz		2495.6	53.71	-20.29	74	43.4	27.3	16.6	33.59	100	295	P	V
		2483.68	43.41	-10.59	54	33.12	27.3	16.59	33.6	100	295	A	V
		2389.52	53.66	-20.34	74	43.35	27.44	16.5	33.63	205	20	P	H
		2389.84	45.03	-8.97	54	34.72	27.44	16.5	33.63	205	20	A	H
	*	2437	97.51	-	-	87.24	27.33	16.55	33.61	205	20	P	H
	*	2437	89.64	-	-	79.37	27.33	16.55	33.61	205	20	A	H
		2485.44	53.49	-20.51	74	43.2	27.3	16.59	33.6	205	20	P	H
		2484.08	44.29	-9.71	54	34	27.3	16.59	33.6	205	20	A	H
		2389.68	57.53	-16.47	74	47.22	27.44	16.5	33.63	100	295	P	V
		2390	47.3	-6.7	54	36.98	27.44	16.51	33.63	100	295	A	V



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		2377.68	53.16	-20.84	74	42.81	27.49	16.49	33.63	193	17	P	H
		2316.24	43.41	-10.59	54	32.94	27.74	16.39	33.66	193	17	A	H
	*	2452	97.61	-	-	87.36	27.3	16.56	33.61	193	17	P	H
	*	2452	89.45	-	-	79.2	27.3	16.56	33.61	193	17	A	H
		2485.44	55.33	-18.67	74	45.04	27.3	16.59	33.6	193	17	P	H
	HT40	2484.64	46.58	-7.42	54	36.29	27.3	16.59	33.6	193	17	A	H
	CH 09	2389.52	54.05	-19.95	74	43.74	27.44	16.5	33.63	100	295	P	V
	2452MHz	2389.04	43.58	-10.42	54	33.27	27.44	16.5	33.63	100	295	A	V
	*	2452	103.29	-	-	93.04	27.3	16.56	33.61	100	295	P	V
	*	2452	95.67	-	-	85.42	27.3	16.56	33.61	100	295	A	V
		2483.52	58.95	-15.05	74	48.66	27.3	16.59	33.6	100	295	P	V
		2483.84	49.93	-4.07	54	39.64	27.3	16.59	33.6	100	295	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		4844	38.44	-35.56	74	55.79	31.1	10.11	58.56	100	0	P	H
		7266	41.09	-32.91	74	50.99	36.43	12.54	58.87	100	0	P	H
													H
													H
		4844	37.1	-36.9	74	54.45	31.1	10.11	58.56	100	0	P	V
		7266	41.12	-32.88	74	51.02	36.43	12.54	58.87	100	0	P	V
													V
802.11n HT40 CH 06 2437MHz		4874	37.05	-36.95	74	54.41	31.05	10.14	58.55	100	0	P	H
		7311	40.05	-33.95	74	49.87	36.52	12.49	58.83	100	0	P	H
													H
													H
		4874	38.21	-35.79	74	55.57	31.05	10.14	58.55	100	0	P	V
		7311	41.68	-32.32	74	51.5	36.52	12.49	58.83	100	0	P	V
													V
802.11n HT40 CH 09 2452MHz		4904	37.47	-36.53	74	54.82	31.02	10.16	58.53	100	0	P	H
		7356	40.61	-33.39	74	50.34	36.58	12.46	58.77	100	0	P	H
													H
													H
		4904	36.58	-37.42	74	53.93	31.02	10.16	58.53	100	0	P	V
		7356	40.09	-33.91	74	49.82	36.58	12.46	58.77	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

Emission below 1GHz

2.4GHz WIFI 802.11g (LF)



<Chain 2>

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.	
		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
802.11g CH 06 2437MHz		2388.4	56.96	-17.04	74	46.64	27.45	16.5	33.63	106	15	P	H	
		2390	47.43	-6.57	54	37.11	27.44	16.51	33.63	106	15	A	H	
	*	2437	110.25	-	-	99.98	27.33	16.55	33.61	106	15	P	H	
	*	2437	103.29	-	-	93.02	27.33	16.55	33.61	106	15	A	H	
		2484.32	54.75	-19.25	74	44.46	27.3	16.59	33.6	106	15	P	H	
		2483.68	45.76	-8.24	54	35.47	27.3	16.59	33.6	106	15	A	H	
		2388.56	62.24	-11.76	74	51.92	27.45	16.5	33.63	124	95	P	V	
		2390	52.34	-1.66	54	42.02	27.44	16.51	33.63	124	95	A	V	
	*	2437	115.93	-	-	105.66	27.33	16.55	33.61	124	95	P	V	
	*	2437	108.52	-	-	98.25	27.33	16.55	33.61	124	95	A	V	
		2484.48	61.53	-12.47	74	51.24	27.3	16.59	33.6	124	95	P	V	
		2483.52	51.89	-2.11	54	41.6	27.3	16.59	33.6	124	95	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 06 2437MHz		4874	45.17	-28.83	74	62.53	31.05	10.14	58.55	100	0	P	H
		7311	41.4	-32.6	74	51.22	36.52	12.49	58.83	100	0	P	H
													H
													H
		4874	56.9	-17.1	74	74.26	31.05	10.14	58.55	200	69	P	V
		4874	46.31	-7.69	54	63.67	31.05	10.14	58.55	200	69	A	V
		7311	41.32	-32.68	74	51.14	36.52	12.49	58.83	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

Emission below 1GHz

2.4GHz WIFI 802.11g (LF)



MIMO <Chain 1+2>

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2343.705	52.73	-21.27	74	42.31	27.63	16.44	33.65	122	4	P	H
		2390	42.89	-11.11	54	32.57	27.44	16.51	33.63	122	4	A	H
	*	2412	110.79	-	-	100.5	27.38	16.53	33.62	122	4	P	H
	*	2412	107.7	-	-	97.41	27.38	16.53	33.62	122	4	A	H
													H
													H
		2360.505	53.48	-20.52	74	43.1	27.56	16.46	33.64	100	166	P	V
		2390	42.58	-11.42	54	32.26	27.44	16.51	33.63	100	166	A	V
	*	2412	113.45	-	-	103.16	27.38	16.53	33.62	100	166	P	V
	*	2412	110.35	-	-	100.06	27.38	16.53	33.62	100	166	A	V
													V
													V
802.11b CH 06 2437MHz		2375.44	53.18	-20.82	74	42.83	27.5	16.48	33.63	145	2	P	H
		2315.6	41.7	-12.3	54	31.23	27.74	16.39	33.66	145	2	A	H
	*	2437	110.06	-	-	99.79	27.33	16.55	33.61	145	2	P	H
	*	2437	106.99	-	-	96.72	27.33	16.55	33.61	145	2	A	H
		2484.16	52.4	-21.6	74	42.11	27.3	16.59	33.6	145	2	P	H
		2483.84	41.79	-12.21	54	31.5	27.3	16.59	33.6	145	2	A	H
		2341.36	52.45	-21.55	74	42.04	27.63	16.43	33.65	123	162	P	V
		2390	41.81	-12.19	54	31.49	27.44	16.51	33.63	123	162	A	V
	*	2437	114.31	-	-	104.04	27.33	16.55	33.61	123	162	P	V
	*	2437	111.35	-	-	101.08	27.33	16.55	33.61	123	162	A	V
		2499.52	52.11	-21.89	74	41.8	27.3	16.6	33.59	123	162	P	V
		2483.6	42.21	-11.79	54	31.92	27.3	16.59	33.6	123	162	A	V



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802.11b CH 11 2462MHz	*	2462	107.98	-	-	97.71	27.3	16.57	33.6	111	5	P	H
	*	2462	104.9	-	-	94.63	27.3	16.57	33.6	111	5	A	H
		2485.88	52.65	-21.35	74	42.36	27.3	16.59	33.6	111	5	P	H
		2484.72	42.75	-11.25	54	32.46	27.3	16.59	33.6	111	5	A	H
													H
													H
	*	2462	113.39	-	-	103.12	27.3	16.57	33.6	100	163	P	V
	*	2462	110.44	-	-	100.17	27.3	16.57	33.6	100	163	A	V
		2487.56	54.9	-19.1	74	44.6	27.3	16.59	33.59	100	163	P	V
		2486.04	43.63	-10.37	54	33.34	27.3	16.59	33.6	100	163	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	41.17	-32.83	74	58.54	31.1	10.1	58.57	100	0	P	H
													H
													H
													H
		4824	43.19	-30.81	74	60.56	31.1	10.1	58.57	100	0	P	V
													V
													V
													V
802.11b CH 06 2437MHz		4874	41.01	-32.99	74	58.37	31.05	10.14	58.55	100	0	P	H
		7311	40.99	-33.01	74	50.81	36.52	12.49	58.83	100	0	P	H
													H
		4874	43.57	-30.43	74	60.93	31.05	10.14	58.55	100	0	P	V
		7311	41.67	-32.33	74	51.49	36.52	12.49	58.83	100	0	P	V
													V
													V
													V
802.11b CH 11 2462MHz		4924	40.66	-33.34	74	57.86	31.14	10.19	58.53	100	0	P	H
		7386	41.39	-32.61	74	51.22	36.46	12.43	58.72	100	0	P	H
													H
		4924	42.49	-31.51	74	59.69	31.14	10.19	58.53	100	0	P	V
		7386	41.08	-32.92	74	50.91	36.46	12.43	58.72	100	0	P	V
													V
													V
	Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2346.96	52.97	-21.03	74	42.57	27.61	16.44	33.65	107	295	P	H
		2389.275	42.56	-11.44	54	32.25	27.44	16.5	33.63	107	295	A	H
	*	2412	100.7	-	-	90.41	27.38	16.53	33.62	107	295	P	H
	*	2412	92.59	-	-	82.3	27.38	16.53	33.62	107	295	A	H
													H
													H
		2390	55.05	-18.95	74	44.73	27.44	16.51	33.63	107	289	P	V
		2389.905	44.91	-9.09	54	34.6	27.44	16.5	33.63	107	289	A	V
	*	2412	108.57	-	-	98.28	27.38	16.53	33.62	107	289	P	V
	*	2412	101.19	-	-	90.9	27.38	16.53	33.62	107	289	A	V
													V
													V
802.11g CH 06 2437MHz		2330.16	53.21	-20.79	74	42.76	27.68	16.42	33.65	115	338	P	H
		2389.04	42.75	-11.25	54	32.44	27.44	16.5	33.63	115	338	A	H
	*	2437	109.52	-	-	99.25	27.33	16.55	33.61	115	338	P	H
	*	2437	102.15	-	-	91.88	27.33	16.55	33.61	115	338	A	H
		2483.92	52.92	-21.08	74	42.63	27.3	16.59	33.6	115	338	P	H
		2485.84	42.87	-11.13	54	32.58	27.3	16.59	33.6	115	338	A	H
		2389.36	55.85	-18.15	74	45.54	27.44	16.5	33.63	100	304	P	V
		2390	46.09	-7.91	54	35.77	27.44	16.51	33.63	100	304	A	V
	*	2437	118.22	-	-	107.95	27.33	16.55	33.61	100	304	P	V
	*	2437	110.55	-	-	100.28	27.33	16.55	33.61	100	304	A	V
		2483.76	56.03	-17.97	74	45.74	27.3	16.59	33.6	100	304	P	V
		2484.32	45.93	-8.07	54	35.64	27.3	16.59	33.6	100	304	A	V



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802.11g CH 11 2462MHz	*	2462	101.98	-	-	91.71	27.3	16.57	33.6	112	339	P	H
	*	2462	94.26	-	-	83.99	27.3	16.57	33.6	112	339	A	H
		2498.16	53.21	-20.79	74	42.9	27.3	16.6	33.59	112	339	P	H
		2483.6	43.54	-10.46	54	33.25	27.3	16.59	33.6	112	339	A	H
													H
													H
	*	2462	111	-	-	100.73	27.3	16.57	33.6	100	171	P	V
	*	2462	103.09	-	-	92.82	27.3	16.57	33.6	100	171	A	V
		2483.52	58.26	-15.74	74	47.97	27.3	16.59	33.6	100	171	P	V
		2483.52	48.33	-5.67	54	38.04	27.3	16.59	33.6	100	171	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	38.34	-35.66	74	55.71	31.1	10.1	58.57	100	0	P	H
													H
													H
													H
		4824	38.17	-35.83	74	55.54	31.1	10.1	58.57	100	0	P	V
													V
													V
													V
802.11g CH 06 2437MHz		4874	41.54	-32.46	74	58.9	31.05	10.14	58.55	100	0	P	H
		7311	41.39	-32.61	74	51.21	36.52	12.49	58.83	100	0	P	H
													H
		4874	47.11	-26.89	74	64.47	31.05	10.14	58.55	100	0	P	V
		7311	43.44	-30.56	74	53.26	36.52	12.49	58.83	100	0	P	V
													V
													V
													V
802.11g CH 11 2462MHz		4924	39.08	-34.92	74	56.28	31.14	10.19	58.53	100	0	P	H
		7386	40.67	-33.33	74	50.5	36.46	12.43	58.72	100	0	P	H
													H
		4924	40.28	-33.72	74	57.48	31.14	10.19	58.53	100	0	P	V
		7386	40.44	-33.56	74	50.27	36.46	12.43	58.72	100	0	P	V
													V
													V
	Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2337.825	52.78	-21.22	74	42.35	27.65	16.43	33.65	100	303	P	H
		2390	42.98	-11.02	54	32.66	27.44	16.51	33.63	100	303	A	H
	*	2412	99.24	-	-	88.95	27.38	16.53	33.62	100	303	P	H
	*	2412	91.2	-	-	80.91	27.38	16.53	33.62	100	303	A	H
													H
													H
		2390	56.47	-17.53	74	46.15	27.44	16.51	33.63	105	290	P	V
		2390	45.89	-8.11	54	35.57	27.44	16.51	33.63	105	290	A	V
	*	2412	108.91	-	-	98.62	27.38	16.53	33.62	105	290	P	V
	*	2412	101.31	-	-	91.02	27.38	16.53	33.62	105	290	A	V
													V
													V
802.11n HT20 CH 06 2437MHz		2325.84	52.72	-21.28	74	42.26	27.7	16.41	33.65	113	338	P	H
		2390	43.08	-10.92	54	32.76	27.44	16.51	33.63	113	338	A	H
	*	2437	110.27	-	-	100	27.33	16.55	33.61	113	338	P	H
	*	2437	102.44	-	-	92.17	27.33	16.55	33.61	113	338	A	H
		2483.68	54.51	-19.49	74	44.22	27.3	16.59	33.6	113	338	P	H
		2484.08	43.4	-10.6	54	33.11	27.3	16.59	33.6	113	338	A	H
		2389.68	59.32	-14.68	74	49.01	27.44	16.5	33.63	100	303	P	V
		2390	48.83	-5.17	54	38.51	27.44	16.51	33.63	100	303	A	V
	*	2437	117.74	-	-	107.47	27.33	16.55	33.61	100	303	P	V
	*	2437	108.9	-	-	98.63	27.33	16.55	33.61	100	303	A	V
		2483.84	56.48	-17.52	74	46.19	27.3	16.59	33.6	100	303	P	V
		2484.08	46.77	-7.23	54	36.48	27.3	16.59	33.6	100	303	A	V



802.11n HT20 CH 11 2462MHz	*	2462	101.71	-	-	91.44	27.3	16.57	33.6	111	340	P	H
	*	2462	93.83	-	-	83.56	27.3	16.57	33.6	111	340	A	H
		2484.16	53.84	-20.16	74	43.55	27.3	16.59	33.6	111	340	P	H
		2483.8	43.48	-10.52	54	33.19	27.3	16.59	33.6	111	340	A	H
													H
													H
	*	2462	109.64	-	-	99.37	27.3	16.57	33.6	100	187	P	V
	*	2462	101.68	-	-	91.41	27.3	16.57	33.6	100	187	A	V
		2483.8	57.98	-16.02	74	47.69	27.3	16.59	33.6	100	187	P	V
		2483.52	47.93	-6.07	54	37.64	27.3	16.59	33.6	100	187	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		4824	40.61	-33.39	74	57.98	31.1	10.1	58.57	100	0	P	H
													H
													H
													H
		4824	39.47	-34.53	74	56.84	31.1	10.1	58.57	100	0	P	V
													V
													V
802.11n HT20 CH 06 2437MHz		4874	37.94	-36.06	74	55.3	31.05	10.14	58.55	100	0	P	H
		7311	41.29	-32.71	74	51.11	36.52	12.49	58.83	100	0	P	H
													H
													H
		4874	42.41	-31.59	74	59.77	31.05	10.14	58.55	100	0	P	V
		7311	42.09	-31.91	74	51.91	36.52	12.49	58.83	100	0	P	V
													V
802.11n HT20 CH 11 2462MHz		4924	40.46	-33.54	74	57.66	31.14	10.19	58.53	100	0	P	H
		7386	40.7	-33.3	74	50.53	36.46	12.43	58.72	100	0	P	H
													H
													H
		4924	38.92	-35.08	74	56.12	31.14	10.19	58.53	100	0	P	V
		7386	40.94	-33.06	74	50.77	36.46	12.43	58.72	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		2316.72	52.48	-21.52	74	42.01	27.73	16.4	33.66	122	341	P	H
		2321.68	43.43	-10.57	54	32.97	27.71	16.4	33.65	122	341	A	H
	*	2422	96.16	-	-	85.88	27.36	16.54	33.62	122	341	P	H
	*	2422	88.95	-	-	78.67	27.36	16.54	33.62	122	341	A	H
		2486.24	52.26	-21.74	74	41.96	27.3	16.59	33.59	122	341	P	H
		2493.6	43.36	-10.64	54	33.06	27.3	16.59	33.59	122	341	A	H
		2390	54.99	-19.01	74	44.67	27.44	16.51	33.63	100	143	P	V
		2390	46.71	-7.29	54	36.39	27.44	16.51	33.63	100	143	A	V
	*	2422	103.07	-	-	92.79	27.36	16.54	33.62	100	143	P	V
	*	2422	95.09	-	-	84.81	27.36	16.54	33.62	100	143	A	V
802.11n HT40 CH 06 2437MHz		2484.24	52.77	-21.23	74	42.48	27.3	16.59	33.6	100	143	P	V
		2485.2	43.54	-10.46	54	33.25	27.3	16.59	33.6	100	143	A	V
		2382.64	53.38	-20.62	74	43.05	27.47	16.49	33.63	126	340	P	H
		2389.52	43.74	-10.26	54	33.43	27.44	16.5	33.63	126	340	A	H
	*	2437	99.87	-	-	89.6	27.33	16.55	33.61	126	340	P	H
	*	2437	92.34	-	-	82.07	27.33	16.55	33.61	126	340	A	H
		2488.08	52.77	-21.23	74	42.47	27.3	16.59	33.59	126	340	P	H
		2483.6	43.9	-10.1	54	33.61	27.3	16.59	33.6	126	340	A	H
		2389.68	60.36	-13.64	74	50.05	27.44	16.5	33.63	100	304	P	V
		2390	50.31	-3.69	54	39.99	27.44	16.51	33.63	100	304	A	V
802.11n HT40 CH 06 2437MHz	*	2437	109.7	-	-	99.43	27.33	16.55	33.61	100	304	P	V
	*	2437	101.83	-	-	91.56	27.33	16.55	33.61	100	304	A	V
		2484.4	54.86	-19.14	74	44.57	27.3	16.59	33.6	100	304	P	V
		2483.76	45.77	-8.23	54	35.48	27.3	16.59	33.6	100	304	A	V



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		2357.52	52.86	-21.14	74	42.47	27.57	16.46	33.64	144	2	P	H
		2377.68	43.29	-10.71	54	32.94	27.49	16.49	33.63	144	2	A	H
	*	2452	99.67	-	-	89.42	27.3	16.56	33.61	144	2	P	H
	*	2452	91.65	-	-	81.4	27.3	16.56	33.61	144	2	A	H
		2484.72	53.19	-20.81	74	42.9	27.3	16.59	33.6	144	2	P	H
	HT40	2483.76	44.58	-9.42	54	34.29	27.3	16.59	33.6	144	2	A	H
	CH 09	2368.72	53.02	-20.98	74	42.66	27.53	16.47	33.64	100	178	P	V
	2452MHz	2371.12	43.61	-10.39	54	33.25	27.52	16.48	33.64	100	178	A	V
	*	2452	105.17	-	-	94.92	27.3	16.56	33.61	100	178	P	V
	*	2452	97.54	-	-	87.29	27.3	16.56	33.61	100	178	A	V
		2484.16	55.73	-18.27	74	45.44	27.3	16.59	33.6	100	178	P	V
		2484.8	47.92	-6.08	54	37.63	27.3	16.59	33.6	100	178	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		4844	37.58	-36.42	74	54.93	31.1	10.11	58.56	100	0	P	H
		7266	41.77	-32.23	74	51.67	36.43	12.54	58.87	100	0	P	H
													H
													H
		4844	37.21	-36.79	74	54.56	31.1	10.11	58.56	100	0	P	V
		7266	40.71	-33.29	74	50.61	36.43	12.54	58.87	100	0	P	V
													V
													V
802.11n HT40 CH 06 2437MHz		4874	37.06	-36.94	74	54.42	31.05	10.14	58.55	100	0	P	H
		7311	41.24	-32.76	74	51.06	36.52	12.49	58.83	100	0	P	H
													H
													H
		4874	37.36	-36.64	74	54.72	31.05	10.14	58.55	100	0	P	V
		7311	41.96	-32.04	74	51.78	36.52	12.49	58.83	100	0	P	V
													V
													V
802.11n HT40 CH 09 2452MHz		4904	37.43	-36.57	74	54.78	31.02	10.16	58.53	100	0	P	H
		7356	40.14	-33.86	74	49.87	36.58	12.46	58.77	100	0	P	H
													H
													H
		4904	36.59	-37.41	74	53.94	31.02	10.16	58.53	100	0	P	V
		7356	40.14	-33.86	74	49.87	36.58	12.46	58.77	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

Emission below 1GHz

2.4GHz WIFI 802.11n HT40 (LF)

WIFI	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11n HT40 LF		85.35	24.04	-15.96	40	41.21	13.84	1.32	32.33	-	-	P	H
		135.3	28.76	-14.74	43.5	42.25	17.23	1.57	32.29	-	-	P	H
		226.29	29.53	-16.47	46	44.1	15.63	2.02	32.22	-	-	P	H
		681.5	28.76	-17.24	46	30.94	26.53	3.43	32.14	-	-	P	H
		779.5	30.07	-15.93	46	30.31	27.97	3.72	31.93	-	-	P	H
		893.6	33.24	-12.76	46	31.58	29.02	4.02	31.38	100	0	P	H
													H
													H
													H
													H
													H
													H
													V
													V
													V
													V
													V
													V
	1. No other spurious found. 2. All results are PASS against limit line.												
Remark													



<For Antenna 4>

<Chain 1>

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2387.385	53.63	-20.37	74	43.31	27.45	16.5	33.63	283	95	P	H
		2387.28	44.73	-9.27	54	34.41	27.45	16.5	33.63	283	95	A	H
	*	2412	110.21	-	-	99.92	27.38	16.53	33.62	283	95	P	H
	*	2412	107.08	-	-	96.79	27.38	16.53	33.62	283	95	A	H
													H
													H
		2388.855	54.66	-19.34	74	44.35	27.44	16.5	33.63	347	0	P	V
		2390	46.91	-7.09	54	36.59	27.44	16.51	33.63	347	0	A	V
	*	2412	114.46	-	-	104.17	27.38	16.53	33.62	347	0	P	V
	*	2412	111.29	-	-	101	27.38	16.53	33.62	347	0	A	V
802.11b CH 06 2437MHz		2313.04	52.29	-21.71	74	41.81	27.75	16.39	33.66	285	95	P	H
		2389.84	41.55	-12.45	54	31.24	27.44	16.5	33.63	285	95	A	H
	*	2437	110.05	-	-	99.78	27.33	16.55	33.61	285	95	P	H
	*	2437	106.93	-	-	96.66	27.33	16.55	33.61	285	95	A	H
		2489.52	52.3	-21.7	74	42	27.3	16.59	33.59	285	95	P	H
		2484.24	41.55	-12.45	54	31.26	27.3	16.59	33.6	285	95	A	H
		2315.6	52.04	-21.96	74	41.57	27.74	16.39	33.66	302	0	P	V
		2390	41.88	-12.12	54	31.56	27.44	16.51	33.63	302	0	A	V
	*	2437	114.94	-	-	104.67	27.33	16.55	33.61	302	0	P	V
	*	2437	111.81	-	-	101.54	27.33	16.55	33.61	302	0	A	V
		2485.44	52.44	-21.56	74	42.15	27.3	16.59	33.6	302	0	P	V
		2484.72	42.15	-11.85	54	31.86	27.3	16.59	33.6	302	0	A	V



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802.11b CH 11 2462MHz	*	2462	108.17	-	-	97.9	27.3	16.57	33.6	270	92	P	H
	*	2462	105.2	-	-	94.93	27.3	16.57	33.6	270	92	A	H
		2484.84	53.31	-20.69	74	43.02	27.3	16.59	33.6	270	92	P	H
		2484.72	44.64	-9.36	54	34.35	27.3	16.59	33.6	270	92	A	H
													H
													H
	*	2462	114.67	-	-	104.4	27.3	16.57	33.6	289	0	P	V
	*	2462	111.53	-	-	101.26	27.3	16.57	33.6	289	0	A	V
		2484.64	57.02	-16.98	74	46.73	27.3	16.59	33.6	289	0	P	V
		2484.72	46.38	-7.62	54	36.09	27.3	16.59	33.6	289	0	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	39.92	-34.08	74	57.29	31.1	10.1	58.57	100	0	P	H
													H
													H
													H
		4824	48.01	-25.99	74	65.38	31.1	10.1	58.57	100	0	P	V
													V
													V
													V
802.11b CH 06 2437MHz		4874	41.33	-32.67	74	58.69	31.05	10.14	58.55	100	0	P	H
		7311	42.57	-31.43	74	52.39	36.52	12.49	58.83	100	0	P	H
													H
		4874	49.22	-24.78	74	66.58	31.05	10.14	58.55	100	0	P	V
		7311	42.53	-31.47	74	52.35	36.52	12.49	58.83	100	0	P	V
													V
													V
													V
802.11b CH 11 2462MHz		4924	45.29	-28.71	74	62.49	31.14	10.19	58.53	100	0	P	H
		7386	42.37	-31.63	74	52.2	36.46	12.43	58.72	100	0	P	H
													H
		4924	52.07	-21.93	74	69.27	31.14	10.19	58.53	100	202	P	V
		4924	49.7	-4.3	54	66.9	31.14	10.19	58.53	100	202	A	V
		7386	42.46	-31.54	74	52.29	36.46	12.43	58.72	100	0	P	V
													V
	Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2390	55.11	-18.89	74	44.79	27.44	16.51	33.63	283	95	P	H
		2390	44.84	-9.16	54	34.52	27.44	16.51	33.63	283	95	A	H
	*	2412	104.02	-	-	93.73	27.38	16.53	33.62	283	95	P	H
	*	2412	96.49	-	-	86.2	27.38	16.53	33.62	283	95	A	H
													H
													H
		2389.905	57.07	-16.93	74	46.76	27.44	16.5	33.63	339	0	P	V
		2390	47.12	-6.88	54	36.8	27.44	16.51	33.63	339	0	A	V
	*	2412	108.4	-	-	98.11	27.38	16.53	33.62	339	0	P	V
	*	2412	100.76	-	-	90.47	27.38	16.53	33.62	339	0	A	V
													V
													V
802.11g CH 06 2437MHz		2390	57.81	-16.19	74	47.49	27.44	16.51	33.63	286	94	P	H
		2389.84	48.62	-5.38	54	38.31	27.44	16.5	33.63	286	94	A	H
	*	2437	111.91	-	-	101.64	27.33	16.55	33.61	286	94	P	H
	*	2437	104.53	-	-	94.26	27.33	16.55	33.61	286	94	A	H
		2483.84	53.64	-20.36	74	43.35	27.3	16.59	33.6	286	94	P	H
		2483.52	43.64	-10.36	54	33.35	27.3	16.59	33.6	286	94	A	H
		2390	61.62	-12.38	74	51.3	27.44	16.51	33.63	302	360	P	V
		2390	51.08	-2.92	54	40.76	27.44	16.51	33.63	302	360	A	V
	*	2437	117.36	-	-	107.09	27.33	16.55	33.61	302	360	P	V
	*	2437	109.49	-	-	99.22	27.33	16.55	33.61	302	360	A	V
		2484.08	57.45	-16.55	74	47.16	27.3	16.59	33.6	302	360	P	V
		2483.68	45.75	-8.25	54	35.46	27.3	16.59	33.6	302	360	A	V



802.11g CH 11 2462MHz	*	2462	102.76	-	-	92.49	27.3	16.57	33.6	270	92	P	H
	*	2462	94.86	-	-	84.59	27.3	16.57	33.6	270	92	A	H
		2484.04	53.47	-20.53	74	43.18	27.3	16.59	33.6	270	92	P	H
		2483.64	44.2	-9.8	54	33.91	27.3	16.59	33.6	270	92	A	H
													H
													H
	*	2462	108.93	-	-	98.66	27.3	16.57	33.6	289	0	P	V
	*	2462	101.19	-	-	90.92	27.3	16.57	33.6	289	0	A	V
		2484.56	56	-18	74	45.71	27.3	16.59	33.6	289	0	P	V
		2483.56	45.53	-8.47	54	35.24	27.3	16.59	33.6	289	0	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	38.39	-35.61	74	55.76	31.1	10.1	58.57	100	0	P	H
													H
													H
													H
		4824	38.88	-35.12	74	56.25	31.1	10.1	58.57	100	0	P	V
													V
													V
													V
802.11g CH 06 2437MHz		4874	38.21	-35.79	74	55.57	31.05	10.14	58.55	100	0	P	H
		7311	41.05	-32.95	74	50.87	36.52	12.49	58.83	100	0	P	H
													H
		4874	46.43	-27.57	74	63.79	31.05	10.14	58.55	100	0	P	V
		7311	42.06	-31.94	74	51.88	36.52	12.49	58.83	100	0	P	V
													V
													V
													V
802.11g CH 11 2462MHz		4924	37.35	-36.65	74	54.55	31.14	10.19	58.53	100	0	P	H
		7386	41.58	-32.42	74	51.41	36.46	12.43	58.72	100	0	P	H
													H
		4924	38.91	-35.09	74	56.11	31.14	10.19	58.53	100	0	P	V
		7386	40.79	-33.21	74	50.62	36.46	12.43	58.72	100	0	P	V
													V
													V
	Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2389.485	54.34	-19.66	74	44.03	27.44	16.5	33.63	283	95	P	H
		2389.905	44.23	-9.77	54	33.92	27.44	16.5	33.63	283	95	A	H
	*	2412	101.92	-	-	91.63	27.38	16.53	33.62	283	95	P	H
	*	2412	94.66	-	-	84.37	27.38	16.53	33.62	283	95	A	H
													H
													H
		2390	56.08	-17.92	74	45.76	27.44	16.51	33.63	339	91	P	V
		2390	46.1	-7.9	54	35.78	27.44	16.51	33.63	339	91	A	V
	*	2412	106.35	-	-	96.06	27.38	16.53	33.62	339	91	P	V
	*	2412	98.83	-	-	88.54	27.38	16.53	33.62	339	91	A	V
													V
													V
802.11n HT20 CH 06 2437MHz		2390	59.86	-14.14	74	49.54	27.44	16.51	33.63	286	94	P	H
		2389.84	49.04	-4.96	54	38.73	27.44	16.5	33.63	286	94	A	H
	*	2437	111.66	-	-	101.39	27.33	16.55	33.61	286	94	P	H
	*	2437	104	-	-	93.73	27.33	16.55	33.61	286	94	A	H
		2484.72	54.45	-19.55	74	44.16	27.3	16.59	33.6	286	94	P	H
		2484	43.67	-10.33	54	33.38	27.3	16.59	33.6	286	94	A	H
		2389.2	62.55	-11.45	74	52.24	27.44	16.5	33.63	302	0	P	V
		2390	52.21	-1.79	54	41.89	27.44	16.51	33.63	302	0	A	V
	*	2437	116.63	-	-	106.36	27.33	16.55	33.61	302	0	P	V
	*	2437	109	-	-	98.73	27.33	16.55	33.61	302	0	A	V
		2483.92	59.07	-14.93	74	48.78	27.3	16.59	33.6	302	0	P	V
		2483.52	46.02	-7.98	54	35.73	27.3	16.59	33.6	302	0	A	V



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802.11n HT20 CH 11 2462MHz	*	2462	101.49	-	-	91.22	27.3	16.57	33.6	270	92	P	H
	*	2462	93.97	-	-	83.7	27.3	16.57	33.6	270	92	A	H
		2483.52	54.33	-19.67	74	44.04	27.3	16.59	33.6	270	92	P	H
		2483.64	44.7	-9.3	54	34.41	27.3	16.59	33.6	270	92	A	H
													H
													H
	*	2462	108.17	-	-	97.9	27.3	16.57	33.6	289	0	P	V
	*	2462	100.08	-	-	89.81	27.3	16.57	33.6	289	0	A	V
		2483.76	55.96	-18.04	74	45.67	27.3	16.59	33.6	289	0	P	V
		2483.56	46.19	-7.81	54	35.9	27.3	16.59	33.6	289	0	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		4824	36.83	-37.17	74	54.2	31.1	10.1	58.57	100	0	P	H
													H
													H
													H
		4824	37.18	-36.82	74	54.55	31.1	10.1	58.57	100	0	P	V
													V
													V
802.11n HT20 CH 06 2437MHz		4874	40.1	-33.9	74	57.46	31.05	10.14	58.55	100	0	P	H
		7311	41.55	-32.45	74	51.37	36.52	12.49	58.83	100	0	P	H
													H
													H
		4874	44.83	-29.17	74	62.19	31.05	10.14	58.55	100	0	P	V
		7311	41.63	-32.37	74	51.45	36.52	12.49	58.83	100	0	P	V
													V
802.11n HT20 CH 11 2462MHz		4924	38.36	-35.64	74	55.56	31.14	10.19	58.53	100	0	P	H
		7386	41.06	-32.94	74	50.89	36.46	12.43	58.72	100	0	P	H
													H
													H
		4924	38.43	-35.57	74	55.63	31.14	10.19	58.53	100	0	P	V
		7386	40.83	-33.17	74	50.66	36.46	12.43	58.72	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		2389.84	55.8	-18.2	74	45.49	27.44	16.5	33.63	276	94	P	H
		2389.84	46.28	-7.72	54	35.97	27.44	16.5	33.63	276	94	A	H
	*	2422	98.31	-	-	88.03	27.36	16.54	33.62	276	94	P	H
	*	2422	90.37	-	-	80.09	27.36	16.54	33.62	276	94	A	H
		2489.12	52.55	-21.45	74	42.25	27.3	16.59	33.59	276	94	P	H
		2488.4	43.03	-10.97	54	32.73	27.3	16.59	33.59	276	94	A	H
		2389.84	56.92	-17.08	74	46.61	27.44	16.5	33.63	343	1	P	V
		2390	49.5	-4.5	54	39.18	27.44	16.51	33.63	343	1	A	V
	*	2422	102.08	-	-	91.8	27.36	16.54	33.62	343	1	P	V
	*	2422	94.66	-	-	84.38	27.36	16.54	33.62	343	1	A	V
802.11n HT40 CH 06 2437MHz		2484.08	51.87	-22.13	74	41.58	27.3	16.59	33.6	343	1	P	V
		2484.4	43.44	-10.56	54	33.15	27.3	16.59	33.6	343	1	A	V
		2389.36	55.36	-18.64	74	45.05	27.44	16.5	33.63	285	95	P	H
		2389.68	46.09	-7.91	54	35.78	27.44	16.5	33.63	285	95	A	H
	*	2437	100.36	-	-	90.09	27.33	16.55	33.61	285	95	P	H
	*	2437	92.63	-	-	82.36	27.33	16.55	33.61	285	95	A	H
		2486.64	52.56	-21.44	74	42.26	27.3	16.59	33.59	285	95	P	H
		2483.92	43.88	-10.12	54	33.59	27.3	16.59	33.6	285	95	A	H
		2389.04	57.16	-16.84	74	46.85	27.44	16.5	33.63	303	0	P	V
		2389.68	48.04	-5.96	54	37.73	27.44	16.5	33.63	303	0	A	V
	*	2437	105.62	-	-	95.35	27.33	16.55	33.61	303	0	P	V
	*	2437	97.56	-	-	87.29	27.33	16.55	33.61	303	0	A	V
		2484	56.45	-17.55	74	46.16	27.3	16.59	33.6	303	0	P	V
		2484	45.98	-8.02	54	35.69	27.3	16.59	33.6	303	0	A	V



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		2356.56	51.99	-22.01	74	41.61	27.57	16.45	33.64	274	92	P	H
		2319.28	43	-11	54	32.54	27.72	16.4	33.66	274	92	A	H
	*	2452	99.18	-	-	88.93	27.3	16.56	33.61	274	92	P	H
	*	2452	91.43	-	-	81.18	27.3	16.56	33.61	274	92	A	H
		2483.68	54.98	-19.02	74	44.69	27.3	16.59	33.6	274	92	P	H
	HT40	2484.56	46.72	-7.28	54	36.43	27.3	16.59	33.6	274	92	A	H
	CH 09	2389.52	54.8	-19.2	74	44.49	27.44	16.5	33.63	334	0	P	V
	2452MHz	2388.56	43.44	-10.56	54	33.12	27.45	16.5	33.63	334	0	A	V
	*	2452	105.13	-	-	94.88	27.3	16.56	33.61	334	0	P	V
	*	2452	96.93	-	-	86.68	27.3	16.56	33.61	334	0	A	V
		2484.24	58.75	-15.25	74	48.46	27.3	16.59	33.6	334	0	P	V
		2483.92	50.83	-3.17	54	40.54	27.3	16.59	33.6	334	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		4844	37.02	-36.98	74	54.37	31.1	10.11	58.56	100	0	P	H
		7266	41.23	-32.77	74	51.13	36.43	12.54	58.87	100	0	P	H
													H
													H
		4844	36.97	-37.03	74	54.32	31.1	10.11	58.56	100	0	P	V
		7266	42.25	-31.75	74	52.15	36.43	12.54	58.87	100	0	P	V
													V
													V
802.11n HT40 CH 06 2437MHz		4874	37.03	-36.97	74	54.39	31.05	10.14	58.55	100	0	P	H
		7311	41.09	-32.91	74	50.91	36.52	12.49	58.83	100	0	P	H
													H
													H
		4874	36.65	-37.35	74	54.01	31.05	10.14	58.55	100	0	P	V
		7311	40.5	-33.5	74	50.32	36.52	12.49	58.83	100	0	P	V
													V
													V
802.11n HT40 CH 09 2452MHz		4904	37.26	-36.74	74	54.61	31.02	10.16	58.53	100	0	P	H
		7356	40.55	-33.45	74	50.28	36.58	12.46	58.77	100	0	P	H
													H
													H
		4904	37.31	-36.69	74	54.66	31.02	10.16	58.53	100	0	P	V
		7356	40.06	-33.94	74	49.79	36.58	12.46	58.77	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

Emission below 1GHz

2.4GHz WIFI 802.11n HT20 (LF)

WIFI	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11n HT20 LF		187.41	37.4	-6.1	43.5	53.13	14.61	1.91	32.25	100	0	P	H
		231.42	36.51	-9.49	46	50.57	16.12	2.04	32.22	-	-	P	H
		241.41	36.79	-9.21	46	49.75	17.19	2.07	32.22	-	-	P	H
		301.4	30.29	-15.71	46	41.08	19.09	2.3	32.18	-	-	P	H
		355.3	28.54	-17.46	46	37.85	20.39	2.47	32.17	-	-	P	H
		859.3	32.14	-13.86	46	30.46	29.3	3.95	31.57	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



<Chain 2>

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.	
		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
802.11n HT20 CH 06 2437MHz		2362.64	52.23	-21.77	74	41.86	27.55	16.46	33.64	305	203	P	H	
		2389.84	42.8	-11.2	54	32.49	27.44	16.5	33.63	305	203	A	H	
	*	2437	110.27	-	-	100.01	27.33	16.55	33.61	305	203	P	H	
	*	2437	102.41	-	-	92.15	27.33	16.55	33.61	305	203	A	H	
		2483.84	55.57	-18.43	74	45.28	27.3	16.59	33.6	305	203	P	H	
		2483.52	46.31	-7.69	54	36.02	27.3	16.59	33.6	305	203	A	H	
		2389.84	60.29	-13.71	74	49.98	27.44	16.5	33.63	301	149	P	V	
		2390	50.2	-3.8	54	39.88	27.44	16.51	33.63	301	149	A	V	
	*	2437	116.33	-	-	106.06	27.33	16.55	33.61	301	149	P	V	
	*	2437	108.77	-	-	98.5	27.33	16.55	33.61	301	149	A	V	
		2483.76	62.64	-11.36	74	52.35	27.3	16.59	33.6	301	149	P	V	
		2483.52	51.39	-2.61	54	41.1	27.3	16.59	33.6	301	149	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 06 2437MHz		4874	42.67	-31.33	74	60.03	31.05	10.14	58.55	100	0	P	H
		7311	40.73	-33.27	74	50.55	36.52	12.49	58.83	100	0	P	H
													H
													H
		4874	57.66	-16.34	74	75.02	31.05	10.14	58.55	192	193	P	V
		4874	43.54	-10.46	54	60.9	31.05	10.14	58.55	192	193	A	V
		7311	41.71	-32.29	74	51.53	36.52	12.49	58.83	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

Emission below 1GHz

2.4GHz WIFI 802.11n HT20 (LF)

WIFI	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11n HT20 LF		186.87	36.92	-6.58	43.5	52.66	14.61	1.9	32.25	100	0	P	H
		231.42	36.16	-9.84	46	50.22	16.12	2.04	32.22	-	-	P	H
		241.41	36.47	-9.53	46	49.43	17.19	2.07	32.22	-	-	P	H
		301.4	29.48	-16.52	46	40.27	19.09	2.3	32.18	-	-	P	H
		870.5	31.61	-14.39	46	29.9	29.25	3.97	31.51	-	-	P	H
		949.6	33.35	-12.65	46	29.54	30.55	4.15	30.89	-	-	P	H
													H
													H
													H
													H
													H
													H
													V
													V
													V
													V
													V
													V
													V
	1. No other spurious found. 2. All results are PASS against limit line.												
Remark													



MIMO <Chain 1+2>

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2355.255	52.61	-21.39	74	42.22	27.58	16.45	33.64	281	275	P	H
		2390	42.22	-11.78	54	31.9	27.44	16.51	33.63	281	275	A	H
	*	2412	111.28	-	-	100.99	27.38	16.53	33.62	281	275	P	H
	*	2412	108.15	-	-	97.86	27.38	16.53	33.62	281	275	A	H
													H
													H
		2388.96	56.87	-17.13	74	46.56	27.44	16.5	33.63	378	175	P	V
		2390	45.59	-8.41	54	35.27	27.44	16.51	33.63	378	175	A	V
	*	2412	118.73	-	-	108.44	27.38	16.53	33.62	378	175	P	V
	*	2412	115.55	-	-	105.26	27.38	16.53	33.62	378	175	A	V
													V
													V
802.11b CH 06 2437MHz		2326	52.57	-21.43	74	42.11	27.7	16.41	33.65	269	194	P	H
		2318.8	41.55	-12.45	54	31.09	27.72	16.4	33.66	269	194	A	H
	*	2437	110.73	-	-	100.46	27.33	16.55	33.61	269	194	P	H
	*	2437	107.86	-	-	97.59	27.33	16.55	33.61	269	194	A	H
		2496.16	52.54	-21.46	74	42.23	27.3	16.6	33.59	269	194	P	H
		2483.92	41.62	-12.38	54	31.33	27.3	16.59	33.6	269	194	A	H
		2322.8	53.62	-20.38	74	43.16	27.71	16.4	33.65	337	183	P	V
		2390	42.26	-11.74	54	31.94	27.44	16.51	33.63	337	183	A	V
	*	2437	118.32	-	-	108.05	27.33	16.55	33.61	337	183	P	V
	*	2437	115.44	-	-	105.17	27.33	16.55	33.61	337	183	A	V
		2483.76	56.2	-17.8	74	45.91	27.3	16.59	33.6	337	183	P	V
		2484	42.65	-11.35	54	32.36	27.3	16.59	33.6	337	183	A	V



FCC RADIO TEST REPORT

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802.11b CH 11 2462MHz	*	2462	109.07	-	-	98.8	27.3	16.57	33.6	293	196	P	H
	*	2462	106.17	-	-	95.9	27.3	16.57	33.6	293	196	A	H
		2487.52	53.38	-20.62	74	43.08	27.3	16.59	33.59	293	196	P	H
		2485.08	42.31	-11.69	54	32.02	27.3	16.59	33.6	293	196	A	H
													H
													H
	*	2462	116.86	-	-	106.59	27.3	16.57	33.6	327	187	P	V
	*	2462	113.82	-	-	103.55	27.3	16.57	33.6	327	187	A	V
		2483.52	59.23	-14.77	74	48.94	27.3	16.59	33.6	327	187	P	V
		2484.76	45	-9	54	34.71	27.3	16.59	33.6	327	187	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	43.06	-30.94	74	60.43	31.1	10.1	58.57	100	0	P	H
													H
													H
													H
		4824	50.11	-23.89	74	67.48	31.1	10.1	58.57	100	0	P	V
		4824	48.68	-5.32	54	66.05	31.1	10.1	58.57	211	0	A	V
													V
													V
802.11b CH 06 2437MHz		4874	43.24	-30.76	74	60.6	31.05	10.14	58.55	100	0	P	H
		7311	40.54	-33.46	74	50.36	36.52	12.49	58.83	100	0	P	H
													H
		4874	51.47	-22.53	74	68.83	31.05	10.14	58.55	234	0	P	V
		4874	49.98	-4.02	54	67.34	31.05	10.14	58.55	234	0	A	V
		7311	41.44	-32.56	74	51.26	36.52	12.49	58.83	100	0	P	V
													V
802.11b CH 11 2462MHz		4924	45.16	-28.84	74	62.36	31.14	10.19	58.53	100	0	P	H
		7386	41.47	-32.53	74	51.3	36.46	12.43	58.72	100	0	P	H
													H
		4924	51.21	-22.79	74	68.41	31.14	10.19	58.53	275	3	P	V
		4924	49.7	-4.3	54	66.9	31.14	10.19	58.53	275	3	A	V
		7386	41.3	-32.7	74	51.13	36.46	12.43	58.72	100	0	P	V
													V
	Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											