

1 General Information

1.1 Client Information

Applicant:	QVS Marketing Inc.
Address of Applicant:	10721 S. Hidden Ridge Lane Sandy Utah 84092
Manufacturer/ Factory:	QVS Manufacturing Services.
Address of Manufacturer/ Factory:	10721 S. Hidden Ridge Lane Sandy Utah 84092

1.2 General Description of E.U.T.

Product Name:	802.11n USB Module
Model No.:	TS-802NRUMS VQ
Operation Frequency:	2412MHz~2462MHz (802.11b/802.11g/802.11n(H20)) 2422MHz~2452MHz (802.11n(H40))
Channel numbers:	11 for 802.11b/802.11g/802.11(H20) 7 for 802.11(H40)
Channel separation:	5MHz
Modulation technology: (IEEE 802.11b)	Direct Sequence Spread Spectrum (DSSS)
Modulation technology: (IEEE 802.11g/802.11n)	Orthogonal Frequency Division Multiplexing(OFDM)
Data speed (IEEE 802.11b):	1Mbps, 2Mbps, 5.5Mbps, 11Mbps
Data speed (IEEE 802.11g):	6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps,54Mbps
Data speed (IEEE 802.11n):	Up to 150Mbps
Antenna Type:	Integral
Antenna gain:	2dBi (declare by manufacturer)
Power supply:	DC 3.3V

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz	X	

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

802.11b/802.11g/802.11n(H20)

Channel	Frequency
The lowest channel	2412MHz
The middle channel	2437MHz
The Highest channel	2462MHz

802.11n(H40)

Channel	Frequency
The lowest channel	2422MHz
The middle channel	2437MHz
The Highest channel	2452MHz

1.3 Test environment and mode

Operating Environment:	
Temperature:	24.0 °C
Humidity:	54 % RH
Atmospheric Pressure:	1010 mbar
Test mode:	
Transmitting mode	Keep the EUT in Transmitting mode

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	Data rate
802.11b	1Mbps
802.11g	6Mbps
802.11n(H20)	6.5Mbps
802.11n(H40)	13.0Mbps

Final Test Mode:

According to ANSI C63.4 standards, the test results are both the “worst case” and “worst setup” 1Mbps for 802.11b, 6Mbps for 802.11g, 6.5Mbps for 802.11n(H20), 13Mbps for 802.11n(H40)

1.4 Test Facility

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

● **FCC —Registration No.: 600491**

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 600491, July 20, 2010.

● **Industry Canada (IC)**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. Has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-1.

1.5 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.
 Address: 2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District, Shenzhen, China
 Tel: 0755-27798480
 Fax: 0755-27798960

2 Test Instruments list

Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	Mar. 30 2011	Mar. 29 2012
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Jul. 04 2011	Jul. 03 2012
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	Feb. 26 2011	Feb. 25 2012
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June 30 2011	June 29 2012
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 30 2011	Mar. 29 2012
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	Apr. 01 2011	Mar. 31 2012
9	Coaxial Cable	GTS	N/A	GTS211	Apr. 01 2011	Mar. 31 2012
9	Coaxial cable	GTS	N/A	GTS210	Apr. 01 2011	Mar. 31 2012
11	Coaxial Cable	GTS	N/A	GTS212	Apr. 01 2011	Mar. 31 2012
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	Jul. 04 2011	Jul. 03 2012
13	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	Jul. 04 2011	Jul. 03 2012
14	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 30 2011	June 29 2012
15	Band filter	Amindeon	82346	GTS219	June 30 2011	June 29 2012

3 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205				
Test Method:	ANSI C63.4:2009				
Test Frequency Range:	30MHz to 25GHz				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Remark
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
		Average	1MHz	10Hz	Average Value
Limit:	Frequency	Limit (dBuV/m @3m)		Remark	
	30MHz-88MHz	40.0		Quasi-peak Value	
	88MHz-216MHz	43.5		Quasi-peak Value	
	216MHz-960MHz	46.0		Quasi-peak Value	
	960MHz-1GHz	54.0		Quasi-peak Value	
	Above 1GHz	54.0		Average Value	
		74.0		Peak Value	
Test Procedure:	<ol style="list-style-type: none"> 1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. 				

Test setup:	Below 1GHz
Test Instruments:	Above 1GHz
Test Instruments:	Refer to section 2 for details
Test mode:	Refer to section 1.3 for details
Test results:	Passed

Below 1GHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
360.448	48.89	14.43	1.18	26.87	37.63	46.00	-8.37	Vertical
480.528	50.49	16.07	1.42	27.61	40.37	46.00	-5.63	Vertical
601.427	44.68	18.46	1.68	27.80	37.02	46.00	-8.98	Vertical
721.726	43.38	19.10	1.95	27.65	36.78	46.00	-9.22	Vertical
842.130	46.90	20.51	2.09	27.46	42.04	46.00	-3.96	Vertical
962.162	46.99	21.49	2.23	27.21	43.50	54.00	-10.50	Vertical
238.890	47.41	12.09	0.87	26.47	33.90	46.00	-12.10	Horizontal
350.490	52.29	14.43	1.18	26.87	41.03	46.00	-4.97	Horizontal
478.560	52.50	16.07	1.42	27.61	42.38	46.00	-3.62	Horizontal
720.240	42.55	19.10	1.95	27.65	35.95	46.00	-10.05	Horizontal
841.830	41.32	20.51	2.09	27.46	36.46	46.00	-9.54	Horizontal
961.570	43.81	21.49	2.23	27.21	40.32	54.00	-13.68	Horizontal

Above 1GHz

Test mode:		802.11b		Test channel:		Lowest		Remark:		Peak
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4824.00	51.14	31.54	5.87	34.55	54.00	74.00	-20.00	Vertical		
7236.00	40.67	36.50	7.10	36.11	48.16	74.00	-25.84	Vertical		
9648.00	39.70	38.25	9.03	35.97	51.01	74.00	-22.99	Vertical		
12060.00	*					74.00		Vertical		
14472.00	*					74.00		Vertical		
4824.00	52.10	31.54	5.87	34.55	54.96	74.00	-19.04	Horizontal		
7236.00	48.95	36.49	7.10	36.12	56.42	74.00	-17.58	Horizontal		
9648.00	48.79	38.12	9.01	35.88	60.04	74.00	-13.96	Horizontal		
12060.00	*					74.00		Horizontal		
14472.00	*					74.00		Horizontal		

Test mode:		802.11b		Test channel:		Lowest		Remark:		Average
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4824.00	34.16	31.54	5.87	34.55	37.02	54.00	-16.98	Vertical		
7236.00	33.72	36.50	7.10	36.11	41.21	54.00	-12.79	Vertical		
9648.00	32.82	38.25	9.03	35.97	44.13	54.00	-9.87	Vertical		
12060.00	*					54.00		Vertical		
14472.00	*					54.00		Vertical		
4824.00	35.34	31.54	5.87	34.55	38.20	54.00	-15.80	Horizontal		
7236.00	31.93	36.49	7.10	36.12	39.40	54.00	-14.60	Horizontal		
9648.00	32.77	38.12	9.01	35.88	44.02	54.00	-9.98	Horizontal		
12060.00	*					54.00		Horizontal		
14472.00	*					54.00		Horizontal		

Test mode:		802.11b		Test channel:		Middle		Remark:		Peak
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4874.00	48.09	31.57	5.91	34.65	50.92	74.00	-23.08	Vertical		
7311.00	39.51	36.48	7.14	36.14	46.99	74.00	-27.01	Vertical		
9748.00	39.08	38.64	9.08	36.35	50.45	74.00	-23.55	Vertical		
12185.00	*					74.00		Vertical		
14622.00	*					74.00		Vertical		
4874.00	50.78	31.57	5.91	34.65	53.61	74.00	-20.39	Horizontal		
7311.00	38.10	36.47	7.14	36.14	45.57	74.00	-28.43	Horizontal		
9748.00	38.51	38.45	9.06	36.24	49.78	74.00	-24.22	Horizontal		
12185.00	*					74.00		Horizontal		
14622.00	*					74.00		Horizontal		

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor*
2. *“*” means this data is too weak; instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not shown in test report.*

Test mode:		802.11b		Test channel:		Middle		Remark:		Average
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4874.00	31.52	31.57	5.91	34.65	34.35	54.00	-19.65	Vertical		
7311.00	32.29	36.48	7.14	36.14	39.77	54.00	-14.23	Vertical		
9748.00	33.34	38.64	9.08	36.35	44.71	54.00	-9.29	Vertical		
12185.00	*					54.00		Vertical		
14622.00	*					54.00		Vertical		
4874.00	34.10	31.57	5.91	34.65	36.93	54.00	-17.07	Horizontal		
7311.00	31.15	36.47	7.14	36.14	38.62	54.00	-15.38	Horizontal		
9748.00	31.82	38.45	9.06	36.24	43.09	54.00	-10.91	Horizontal		
12185.00	*					54.00		Horizontal		
14622.00	*					54.00		Horizontal		

Test mode:		802.11b		Test channel:		Highest		Remark:		Peak
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4924.00	48.87	31.64	5.95	34.79	51.67	74.00	-22.33	Vertical		
7386.00	38.81	36.49	7.16	36.16	46.30	74.00	-27.70	Vertical		
9848.00	39.58	38.69	9.11	36.53	50.85	74.00	-23.15	Vertical		
12310.00	*					74.00		Vertical		
14772.00	*					74.00		Vertical		
4924.00	50.21	31.74	5.97	34.86	53.06	74.00	-20.94	Horizontal		
7386.00	38.52	36.50	7.10	36.11	46.01	74.00	-27.99	Horizontal		
9848.00	38.90	38.67	9.08	36.47	50.88	74.00	-23.12	Horizontal		
12310.00	*					74.00		Horizontal		
14772.00	*					74.00		Horizontal		

Test mode:		802.11b		Test channel:		Highest		Remark:		Average
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4924.00	33.29	31.64	5.95	34.79	36.09	54.00	-17.91	Vertical		
7386.00	32.30	36.49	7.16	36.16	39.79	54.00	-14.21	Vertical		
9848.00	34.33	38.69	9.11	36.53	45.60	54.00	-8.40	Vertical		
12310.00	*					54.00		Vertical		
14772.00	*					54.00		Vertical		
4924.00	33.21	31.74	5.97	34.86	36.06	54.00	-17.94	Horizontal		
7386.00	32.91	36.50	7.10	36.11	40.40	54.00	-13.60	Horizontal		
9848.00	31.87	38.67	9.08	36.47	43.15	54.00	-10.85	Horizontal		
12310.00	*					54.00		Horizontal		
14772.00	*					54.00		Horizontal		

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor
2. “*” means this data is too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:		802.11g		Test channel:		Lowest		Remark:		Peak
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4824.00	48.32	31.55	5.89	34.58	51.18	74.00	-22.82	Vertical		
7236.00	38.39	36.50	7.10	36.11	45.88	74.00	-28.12	Vertical		
9648.00	38.64	38.12	9.01	35.90	49.87	74.00	-24.13	Vertical		
12060.00	*					74.00		Vertical		
14472.00	*					74.00		Vertical		
4824.00	42.74	31.55	5.89	34.58	45.60	74.00	-28.40	Horizontal		
7236.00	38.53	36.47	7.10	36.11	45.99	74.00	-28.01	Horizontal		
9648.00	37.78	38.25	9.03	35.97	49.09	74.00	-24.91	Horizontal		
12060.00	*					74.00		Horizontal		
14472.00	*					74.00		Horizontal		

Test mode:		802.11g		Test channel:		Lowest		Remark:		Average
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4824.00	31.12	31.55	5.89	34.58	33.98	54.00	-20.02	Vertical		
7236.00	31.22	36.50	7.10	36.11	38.71	54.00	-15.29	Vertical		
9648.00	32.13	38.12	9.01	35.90	43.36	54.00	-10.64	Vertical		
12060.00	*					54.00		Vertical		
14472.00	*					54.00		Vertical		
4824.00	32.44	31.55	5.89	34.58	35.30	54.00	-18.70	Horizontal		
7236.00	32.31	36.47	7.10	36.11	39.77	54.00	-14.23	Horizontal		
9648.00	31.14	38.25	9.03	35.97	42.45	54.00	-11.55	Horizontal		
12060.00	*					54.00		Horizontal		
14472.00	*					54.00		Horizontal		

Test mode:		802.11g		Test channel:		Middle		Remark:		Peak
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4874.00	47.51	31.56	5.89	34.58	50.38	74.00	-23.62	Vertical		
7311.00	37.92	36.47	7.14	36.14	45.39	74.00	-28.61	Vertical		
9748.00	37.91	38.45	9.06	36.24	49.18	74.00	-24.82	Vertical		
12185.00	*					74.00		Vertical		
14622.00	*					74.00		Vertical		
4874.00	47.34	31.56	5.89	34.58	50.21	74.00	-23.79	Horizontal		
7311.00	38.06	36.48	7.14	36.14	45.54	74.00	-28.46	Horizontal		
9748.00	38.72	38.45	9.06	36.18	50.05	74.00	-23.95	Horizontal		
12185.00	*					74.00		Horizontal		
14622.00	*					74.00		Horizontal		

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor
2. "*" means this data is too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:		802.11g		Test channel:		Middle		Remark:		Average
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4874.00	31.17	31.56	5.89	34.58	34.04	54.00	-19.96	Vertical		
7311.00	31.63	36.47	7.14	36.14	39.10	54.00	-14.90	Vertical		
9748.00	32.24	38.45	9.06	36.24	43.51	54.00	-10.49	Vertical		
12185.00	*					54.00		Vertical		
14622.00	*					54.00		Vertical		
4874.00	30.51	31.56	5.89	34.58	33.38	54.00	-20.62	Horizontal		
7311.00	31.74	36.48	7.14	36.14	39.22	54.00	-14.78	Horizontal		
9748.00	32.25	38.45	9.06	36.18	43.58	54.00	-10.42	Horizontal		
12185.00	*					54.00		Horizontal		
14622.00	*					54.00		Horizontal		

Test mode:		802.11g		Test channel:		Highest		Remark:		Peak
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4924.00	47.34	31.61	5.93	34.76	50.12	74.00	-23.88	Vertical		
7386.00	37.79	36.52	7.16	36.16	45.31	74.00	-28.69	Vertical		
9848.00	37.85	38.67	9.08	36.47	49.13	74.00	-24.87	Vertical		
12310.00	*					74.00		Vertical		
14772.00	*					74.00		Vertical		
4924.00	47.55	31.64	5.95	34.79	50.35	74.00	-23.65	Horizontal		
7386.00	38.09	36.54	7.16	36.16	45.63	74.00	-28.37	Horizontal		
9848.00	37.59	38.69	9.11	36.53	48.86	74.00	-25.14	Horizontal		
12310.00	*					74.00		Horizontal		
14772.00	*					74.00		Horizontal		

Test mode:		802.11g		Test channel:		Highest		Remark:		Average
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4924.00	30.46	31.61	5.93	34.76	33.24	54.00	-20.76	Vertical		
7386.00	31.19	36.52	7.16	36.16	38.71	54.00	-15.29	Vertical		
9848.00	30.53	38.67	9.08	36.47	41.81	54.00	-12.19	Vertical		
12310.00	*					54.00		Vertical		
14772.00	*					54.00		Vertical		
4924.00	31.52	31.64	5.95	34.79	34.32	54.00	-19.68	Horizontal		
7386.00	31.75	36.54	7.16	36.16	39.29	54.00	-14.71	Horizontal		
9848.00	30.31	38.69	9.11	36.53	41.58	54.00	-12.42	Horizontal		
12310.00	*					54.00		Horizontal		
14772.00	*					54.00		Horizontal		

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor
2. "*" means this data is too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:		802.11n(H20)		Test channel:		Lowest		Remark:		Peak
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4824.00	48.53	31.85	6.00	34.92	51.46	74.00	-22.54	Vertical		
7236.00	39.27	36.50	7.10	36.11	46.76	74.00	-27.24	Vertical		
9648.00	38.37	38.12	9.01	35.88	49.62	74.00	-24.38	Vertical		
12060.00	*					74.00		Vertical		
14472.00	*					74.00		Vertical		
4824.00	47.96	31.55	5.89	34.58	50.82	74.00	-23.18	Horizontal		
7236.00	39.08	36.50	7.10	36.11	46.57	74.00	-27.43	Horizontal		
9648.00	39.03	38.12	9.01	35.90	50.26	74.00	-23.74	Horizontal		
12060.00	*					74.00		Horizontal		
14472.00	*					74.00		Horizontal		

Test mode:		802.11n(H20)		Test channel:		Lowest		Remark:		Average
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4824.00	32.41	31.85	6.00	34.92	35.34	54.00	-18.66	Vertical		
7236.00	32.68	36.50	7.10	36.11	40.17	54.00	-13.83	Vertical		
9648.00	31.36	38.12	9.01	35.88	42.61	54.00	-11.39	Vertical		
12060.00	*					54.00		Vertical		
14472.00	*					54.00		Vertical		
4824.00	30.82	31.55	5.89	34.58	33.68	54.00	-20.32	Horizontal		
7236.00	32.75	36.50	7.10	36.11	40.24	54.00	-13.76	Horizontal		
9648.00	32.99	38.12	9.01	35.90	44.22	54.00	-9.78	Horizontal		
12060.00	*					54.00		Horizontal		
14472.00	*					54.00		Horizontal		

Test mode:		802.11n(H20)		Test channel:		Middle		Remark:		Peak
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4874	47.33	31.57	5.91	34.65	50.16	74.00	-23.84	Vertical		
7311	37.49	36.47	7.14	36.14	44.96	74.00	-29.04	Vertical		
9748	37.61	38.30	9.03	36.00	48.94	74.00	-25.06	Vertical		
12185	*					74.00		Vertical		
14622	*					74.00		Vertical		
4874	41.72	31.79	5.97	34.90	44.58	74.00	-29.42	Horizontal		
7311	37.91	36.48	7.14	36.14	45.39	74.00	-28.61	Horizontal		
9748	38.88	38.45	9.06	36.24	50.15	74.00	-23.85	Horizontal		
12185	*					74.00		Horizontal		
14622	*					74.00		Horizontal		

Test mode:		802.11n(H20)		Test channel:		Middle		Remark:		Average
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4874	30.97	31.57	5.91	34.65	33.80	54.00	-20.20	Vertical		
7311	30.38	36.47	7.14	36.14	37.85	54.00	-16.15	Vertical		
9748	31.32	38.30	9.03	36.00	42.65	54.00	-11.35	Vertical		
12185	*					54.00		Vertical		
14622	*					54.00		Vertical		
4874	34.72	31.79	5.97	34.90	37.58	54.00	-16.42	Horizontal		
7311	31.28	36.48	7.14	36.14	38.76	54.00	-15.24	Horizontal		
9748	31.50	38.45	9.06	36.24	42.77	54.00	-11.23	Horizontal		
12185	*					54.00		Horizontal		
14622	*					54.00		Horizontal		

Test mode:		802.11n(H20)		Test channel:		Highest		Remark:		Peak
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4924	48.42	31.61	5.93	34.76	51.20	74.00	-22.80	Vertical		
7386	38.92	36.52	7.16	36.16	46.44	74.00	-27.56	Vertical		
9848	38.07	38.69	9.11	36.53	49.34	74.00	-24.66	Vertical		
12310	*					74.00		Vertical		
14772	*					74.00		Vertical		
4924	47.16	31.61	5.93	34.76	49.94	74.00	-24.06	Horizontal		
7386	37.95	36.52	7.16	36.16	45.47	74.00	-28.53	Horizontal		
9848	37.39	38.67	9.08	36.47	48.67	74.00	-25.33	Horizontal		
12310	*					74.00		Horizontal		
14772	*					74.00		Horizontal		

Test mode:		802.11n(H20)		Test channel:		Highest		Remark:		Average
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4924	31.59	31.61	5.93	34.76	34.37	54.00	-19.63	Vertical		
7386	32.22	36.52	7.16	36.16	39.74	54.00	-14.26	Vertical		
9848	32.48	38.69	9.11	36.53	43.75	54.00	-10.25	Vertical		
12310	*					54.00		Vertical		
14772	*					54.00		Vertical		
4924	30.60	31.61	5.93	34.76	33.38	54.00	-20.62	Horizontal		
7386	31.56	36.52	7.16	36.16	39.08	54.00	-14.92	Horizontal		
9848	29.52	38.67	9.08	36.47	40.80	54.00	-13.20	Horizontal		
12310	*					54.00		Horizontal		
14772	*					54.00		Horizontal		

Test mode:		802.11n(H40)		Test channel:		Lowest		Remark:		Peak
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4844	47.43	31.56	5.89	34.58	50.30	74.00	-23.70	Vertical		
7266	37.71	36.49	7.10	36.12	45.18	74.00	-28.82	Vertical		
9688	37.51	38.25	9.03	35.97	48.82	74.00	-25.18	Vertical		
12110	*					74.00		Vertical		
14532	*					74.00		Vertical		
4844	47.97	31.56	5.89	34.58	50.84	74.00	-23.16	Horizontal		
7266	38.09	36.49	7.12	36.12	45.58	74.00	-28.42	Horizontal		
9688	37.86	38.25	9.03	35.97	49.17	74.00	-24.83	Horizontal		
12110	*					74.00		Horizontal		
14532	*					74.00		Horizontal		

Test mode:		802.11n(H40)		Test channel:		Lowest		Remark:		Average
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4844	30.51	31.56	5.89	34.58	33.38	54.00	-20.62	Vertical		
7266	30.49	36.49	7.10	36.12	37.96	54.00	-16.04	Vertical		
9688	29.21	38.25	9.03	35.97	40.52	54.00	-13.48	Vertical		
12110	*					54.00		Vertical		
14532	*					54.00		Vertical		
4844	31.94	31.56	5.89	34.58	34.81	54.00	-19.19	Horizontal		
7266	31.78	36.49	7.12	36.12	39.27	54.00	-14.73	Horizontal		
9688	31.39	38.25	9.03	35.97	42.70	54.00	-11.30	Horizontal		
12110	*					54.00		Horizontal		
14532	*					54.00		Horizontal		

Test mode:		802.11n(H40)		Test channel:		Middle		Remark:		Peak
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4874	47.40	31.57	5.91	34.65	50.23	74.00	-23.77	Vertical		
7311	37.49	36.48	7.14	36.14	44.97	74.00	-29.03	Vertical		
9784	37.66	38.40	9.06	36.12	49.00	74.00	-25.00	Vertical		
12233	*					74.00		Vertical		
14688	*					74.00		Vertical		
4874	47.75	31.57	5.91	34.65	50.58	74.00	-23.42	Horizontal		
7311	37.36	36.48	7.14	36.14	44.84	74.00	-29.16	Horizontal		
9784	36.93	38.45	9.06	36.18	48.26	74.00	-25.74	Horizontal		
12233	*					74.00		Horizontal		
14688	*					74.00		Horizontal		

Test mode:		802.11n(H40)		Test channel:		Middle		Remark:		Average
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4874	31.48	31.57	5.91	34.65	34.31	54.00	-19.69	Vertical		
7311	30.57	36.48	7.14	36.14	38.05	54.00	-15.95	Vertical		
9784	30.38	38.40	9.06	36.12	41.72	54.00	-12.28	Vertical		
12233	*					54.00		Vertical		
14688	*					54.00		Vertical		
4874	30.60	31.57	5.91	34.65	33.43	54.00	-20.57	Horizontal		
7311	30.76	36.48	7.14	36.14	38.24	54.00	-15.76	Horizontal		
9784	29.37	38.45	9.06	36.18	40.70	54.00	-13.30	Horizontal		
12233	*					54.00		Horizontal		
14688	*					54.00		Horizontal		

Test mode:		802.11n(H40)		Test channel:		Highest		Remark:		Peak
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4904	46.92	31.61	5.93	34.76	49.70	74.00	-24.30	Vertical		
7356	38.49	36.54	7.16	36.16	46.03	74.00	-27.97	Vertical		
9808	37.12	38.67	9.08	36.41	48.46	74.00	-25.54	Vertical		
12260	*					74.00		Vertical		
14712	*					74.00		Vertical		
4904	47.59	31.59	5.93	34.72	50.39	74.00	-23.61	Horizontal		
7356	38.07	36.49	7.16	36.16	45.56	74.00	-28.44	Horizontal		
9808	37.96	38.64	9.08	36.35	49.33	74.00	-24.67	Horizontal		
12260	*					74.00		Horizontal		
14712	*					74.00		Horizontal		

Test mode:		802.11n(H40)		Test channel:		Highest		Remark:		Average
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
4904	29.83	31.61	5.93	34.76	32.61	54.00	-21.39	Vertical		
7356	31.69	36.54	7.16	36.16	39.23	54.00	-14.77	Vertical		
9808	29.65	38.67	9.08	36.41	40.99	54.00	-13.01	Vertical		
12260	*					54.00		Vertical		
14712	*					54.00		Vertical		
4904	29.85	31.59	5.93	34.72	32.65	54.00	-21.35	Horizontal		
7356	31.61	36.49	7.16	36.16	39.10	54.00	-14.90	Horizontal		
9808	30.52	38.64	9.08	36.35	41.89	54.00	-12.11	Horizontal		
12260	*					54.00		Horizontal		
14712	*					54.00		Horizontal		

4 Test Setup Photo

Radiated Emission

