



# SPORTON International Inc.

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## FCC RADIO TEST REPORT

|                        |                                                             |
|------------------------|-------------------------------------------------------------|
| Applicant's company    | <b>Zebra Technologies, Corp.</b>                            |
| Applicant Address      | 1 Zebra Plaza Holtsville, NY 11742 USA                      |
| FCC ID                 | <b>UZ7CDR2G</b>                                             |
| Manufacturer's company | <b>Wistron NeWeb Corporation</b>                            |
| Manufacturer Address   | 20 Park Avenue II, Hsinchu Science Park, Hsinchu 308 Taiwan |

|                  |                                       |
|------------------|---------------------------------------|
| Product Name     | 802.11 b/g/n radio module             |
| Brand Name       | ZEBRA                                 |
| Model No.        | CDR2G                                 |
| Test Rule        | 47 CFR FCC Part 15 Subpart C § 15.247 |
| Test Freq. Range | 2400 ~ 2483.5MHz                      |
| Received Date    | Feb. 12, 2015                         |
| Final Test Date  | Dec. 13, 2015                         |
| Submission Type  | Original Equipment                    |

### Statement

**Test result included in this report is for the IEEE 802.11n and IEEE 802.11b/g of the product.**

The test result in this report refers exclusively to the presented test model / sample.

Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.

The measurements and test results shown in this test report were made in accordance with the procedures and found in compliance with the limit given in **ANSI C63.10-2013, 47 CFR FCC Part 15 Subpart C, KDB558074 D01 v03r03 and KDB 662911 D01 v02r01.**

The test equipment used to perform the test is calibrated and traceable to NML/ROC.



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## History of This Test Report

| REPORT NO. | VERSION | DESCRIPTION             | ISSUED DATE   |
|------------|---------|-------------------------|---------------|
| FR592302   | Rev. 01 | Initial issue of report | Jan. 29, 2016 |
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## 1. VERIFICATION OF COMPLIANCE

Product Name : 802.11 b/g/n radio module  
Brand Name : ZEBRA  
Model No. : CDR2G  
Applicant : Zebra Technologies, Corp.  
Test Rule Part(s) : 47 CFR FCC Part 15 Subpart C § 15.247

Sporton International as requested by the applicant to evaluate the EMC performance of the product sample received on Feb. 12, 2015 would like to declare that the tested sample has been evaluated and found to be in compliance with the tested rule parts. The data recorded as well as the test configuration specified is true and accurate for showing the sample's EMC nature.



Sam Chen

SPORTON INTERNATIONAL INC.

## 2. SUMMARY OF THE TEST RESULT

| Applied Standard: 47 CFR FCC Part 15 Subpart C |              |                                   |          |             |
|------------------------------------------------|--------------|-----------------------------------|----------|-------------|
| Part                                           | Rule Section | Description of Test               | Result   | Under Limit |
| 4.1                                            | 15.207       | AC Power Line Conducted Emissions | Complies | 14.10 dB    |
| 4.2                                            | 15.247(b)(3) | Maximum Conducted Output Power    | Complies | 0.09 dB     |
| 4.3                                            | 15.247(e)    | Power Spectral Density            | Complies | 0.18 dB     |
| 4.4                                            | 15.247(a)(2) | 6dB Spectrum Bandwidth            | Complies | -           |
| 4.5                                            | 15.247(d)    | Radiated Emissions                | Complies | 3.69 dB     |
| 4.6                                            | 15.247(d)    | Band Edge Emissions               | Complies | 1.00 dB     |
| 4.7                                            | 15.203       | Antenna Requirements              | Complies | -           |

### 3. GENERAL INFORMATION

#### 3.1. Product Details

| Items                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Type             | WLAN (1TX, 2TX, 3TX, 4TX / 4RX)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Radio Type               | Intentional Transceiver                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Power Type               | From host system                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Modulation               | IEEE 802.11b: DSSS<br>IEEE 802.11g: OFDM<br>IEEE 802.11n: see the below table                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Data Modulation          | IEEE 802.11b: DSSS (BPSK / QPSK / CCK)<br>IEEE 802.11g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Data Rate (Mbps)         | IEEE 802.11b: DSSS (1/ 2/ 5.5/11)<br>IEEE 802.11g: OFDM (6/9/12/18/24/36/48/54)<br>IEEE 802.11n: see the below table                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Frequency Range          | 2400 ~ 2483.5MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Channel Number           | 11 for 20MHz bandwidth ; 7 for 40MHz bandwidth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Channel Band Width (99%) | <b>For Non-Beamforming Mode</b><br><b>Mode 1 (Set 3 Dipole antenna)</b><br><b>1TX:</b><br>IEEE 802.11b: 10.51 MHz<br>IEEE 802.11g: 16.50 MHz<br>IEEE 802.11n MCS0 (HT20): 17.71 MHz<br>IEEE 802.11n MCS0 (HT40): 37.05 MHz<br><b>2TX:</b><br>IEEE 802.11b: 10.51 MHz<br>IEEE 802.11g: 16.24 MHz<br>IEEE 802.11n MCS0 (HT20): 17.54 MHz<br>IEEE 802.11n MCS0 (HT40): 36.90 MHz<br><b>3TX:</b><br>IEEE 802.11b: 10.51 MHz<br>IEEE 802.11g: 16.85 MHz<br>IEEE 802.11n MCS0 (HT20): 17.45 MHz<br>IEEE 802.11n MCS0 (HT40): 35.89 MHz<br><b>4TX:</b><br>IEEE 802.11b: 10.51 MHz<br>IEEE 802.11g: 15.80 MHz<br>IEEE 802.11n MCS0 (HT20): 17.11 MHz<br>IEEE 802.11n MCS0 (HT40): 36.76 MHz |

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|  | <p><b>Mode 2 (Set 5 Polarized Dipole antenna)</b></p> <p><b>1TX:</b></p> <p>IEEE 802.11b: 10.51 MHz</p> <p>IEEE 802.11g: 16.67 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.71 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 36.90 MHz</p> <p><b>2TX:</b></p> <p>IEEE 802.11b: 10.59 MHz</p> <p>IEEE 802.11g: 16.58 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.54 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 37.05 MHz</p> <p><b>3TX:</b></p> <p>IEEE 802.11b: 10.51 MHz</p> <p>IEEE 802.11g: 16.85 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.45 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 35.89 MHz</p> <p><b>4TX:</b></p> <p>IEEE 802.11b: 10.59 MHz</p> <p>IEEE 802.11g: 15.63 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.11 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 37.05 MHz</p> <p><b>Mode 3 (Set 6 Panel antenna)</b></p> <p><b>1TX:</b></p> <p>IEEE 802.11b: 10.51 MHz</p> <p>IEEE 802.11g: 16.67 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.88 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 37.05 MHz</p> <p><b>2TX:</b></p> <p>IEEE 802.11b: 10.59 MHz</p> <p>IEEE 802.11g: 16.58 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.54 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 37.05 MHz</p> <p><b>3TX:</b></p> <p>IEEE 802.11b: 10.51 MHz</p> <p>IEEE 802.11g: 16.85 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.45 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 36.03 MHz</p> <p><b>4TX:</b></p> <p>IEEE 802.11b: 10.59 MHz</p> <p>IEEE 802.11g: 15.63 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.11 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 36.90 MHz</p> |
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|  | <p><b>Mode 4 (Set 7 Polarized Panel antenna)</b></p> <p><b>1TX:</b></p> <p>IEEE 802.11b: 10.51 MHz</p> <p>IEEE 802.11g: 16.67 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.89 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 37.05 MHz</p> <p><b>2TX:</b></p> <p>IEEE 802.11b: 10.51 MHz</p> <p>IEEE 802.11g: 16.15 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.54 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 37.19 MHz</p> <p><b>3TX:</b></p> <p>IEEE 802.11b: 10.51 MHz</p> <p>IEEE 802.11g: 16.85 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.45 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 35.89 MHz</p> <p><b>4TX:</b></p> <p>IEEE 802.11b: 10.59 MHz</p> <p>IEEE 802.11g: 15.63 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.11 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 36.90 MHz</p> <p><b>Mode 5 (Set 8 Patch antenna)</b></p> <p><b>1TX:</b></p> <p>IEEE 802.11b: 10.51 MHz</p> <p>IEEE 802.11g: 16.67 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.89 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 37.05 MHz</p> <p><b>2TX:</b></p> <p>IEEE 802.11b: 10.51 MHz</p> <p>IEEE 802.11g: 16.15 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.54 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 37.19 MHz</p> <p><b>3TX:</b></p> <p>IEEE 802.11b: 10.51 MHz</p> <p>IEEE 802.11g: 16.85 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.45 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 36.18 MHz</p> <p><b>4TX:</b></p> <p>IEEE 802.11b: 10.59 MHz</p> <p>IEEE 802.11g: 15.63 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.11 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 36.90 MHz</p> |
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|                                | <p><b>Mode 6 (Set 9 Monopole antenna)</b></p> <p><b>1TX:</b></p> <p>IEEE 802.11b: 10.51 MHz</p> <p>IEEE 802.11g: 16.67 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.80 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 37.05 MHz</p> <p><b>2TX:</b></p> <p>IEEE 802.11b: 10.59 MHz</p> <p>IEEE 802.11g: 16.58 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.54 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 37.05 MHz</p> <p><b>3TX:</b></p> <p>IEEE 802.11b: 10.51 MHz</p> <p>IEEE 802.11g: 16.85 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.45 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 35.89 MHz</p> <p><b>4TX:</b></p> <p>IEEE 802.11b: 10.59 MHz</p> <p>IEEE 802.11g: 15.63 MHz</p> <p>IEEE 802.11n MCS0 (HT20): 17.11 MHz</p> <p>IEEE 802.11n MCS0 (HT40): 36.76 MHz</p> |
| Maximum Conducted Output Power | <p><b>For Non-Beamforming Mode</b></p> <p><b>Mode 1 (Set 3 Dipole antenna)</b></p> <p><b>1TX:</b></p> <p>IEEE 802.11b: 20.96 dBm</p> <p>IEEE 802.11g: 20.79 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 20.93 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 17.36 dBm</p> <p><b>2TX:</b></p> <p>IEEE 802.11b: 23.80 dBm</p> <p>IEEE 802.11g: 23.69 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 23.44 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 19.91 dBm</p> <p><b>3TX:</b></p> <p>IEEE 802.11b: 25.23 dBm</p> <p>IEEE 802.11g: 25.23 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 25.45 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 20.75 dBm</p>                                                                                                                                   |

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|  | <p><b>4TX:</b></p> <p>IEEE 802.11b: 26.64 dBm</p> <p>IEEE 802.11g: 26.69 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 26.74 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 21.90 dBm</p> <p><b>Mode 2 (Set 5 Polarized Dipole antenna)</b></p> <p><b>1TX:</b></p> <p>IEEE 802.11b: 20.96 dBm</p> <p>IEEE 802.11g: 20.79 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 20.93 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 17.36 dBm</p> <p><b>2TX:</b></p> <p>IEEE 802.11b: 23.75 dBm</p> <p>IEEE 802.11g: 23.81 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 23.48 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 19.12 dBm</p> <p><b>3TX:</b></p> <p>IEEE 802.11b: 25.23 dBm</p> <p>IEEE 802.11g: 25.23 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 25.45 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 20.93 dBm</p> <p><b>4TX:</b></p> <p>IEEE 802.11b: 26.64 dBm</p> <p>IEEE 802.11g: 26.69 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 26.74 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 21.92 dBm</p> <p><b>Mode 3 (Set 6 Panel antenna)</b></p> <p><b>1TX:</b></p> <p>IEEE 802.11b: 20.96 dBm</p> <p>IEEE 802.11g: 20.79 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 20.93 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 17.36 dBm</p> <p><b>2TX:</b></p> <p>IEEE 802.11b: 23.75 dBm</p> <p>IEEE 802.11g: 23.81 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 23.48 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 19.54 dBm</p> |
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|  | <p><b>3TX:</b></p> <p>IEEE 802.11b: 25.23 dBm</p> <p>IEEE 802.11g: 25.23 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 25.45 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 19.85 dBm</p> <p><b>4TX:</b></p> <p>IEEE 802.11b: 26.48 dBm</p> <p>IEEE 802.11g: 26.69 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 26.74 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 20.95 dBm</p> <p><b>Mode 4 (Set 7 Polarized Panel antenna)</b></p> <p><b>1TX:</b></p> <p>IEEE 802.11b: 20.96 dBm</p> <p>IEEE 802.11g: 20.79 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 20.93 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 17.76 dBm</p> <p><b>2TX:</b></p> <p>IEEE 802.11b: 23.80 dBm</p> <p>IEEE 802.11g: 23.69 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 23.44 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 19.46 dBm</p> <p><b>3TX:</b></p> <p>IEEE 802.11b: 25.23 dBm</p> <p>IEEE 802.11g: 25.23 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 25.45 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 20.25 dBm</p> <p><b>4TX:</b></p> <p>IEEE 802.11b: 26.64 dBm</p> <p>IEEE 802.11g: 26.69 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 26.74 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 21.81 dBm</p> <p><b>Mode 5 (Set 8 Patch antenna)</b></p> <p><b>1TX:</b></p> <p>IEEE 802.11b: 20.96 dBm</p> <p>IEEE 802.11g: 20.79 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 20.93 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 17.76 dBm</p> |
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|  | <p><b>2TX:</b></p> <p>IEEE 802.11b: 23.80 dBm</p> <p>IEEE 802.11g: 23.80 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 23.44 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 19.46 dBm</p> <p><b>3TX:</b></p> <p>IEEE 802.11b: 25.23 dBm</p> <p>IEEE 802.11g: 25.23 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 25.45 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 20.57 dBm</p> <p><b>4TX:</b></p> <p>IEEE 802.11b: 26.64 dBm</p> <p>IEEE 802.11g: 26.69 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 26.74 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 21.21 dBm</p> <p><b>Mode 6 (Set 9 Monopole antenna)</b></p> <p><b>1TX:</b></p> <p>IEEE 802.11b: 20.96 dBm</p> <p>IEEE 802.11g: 20.79 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 20.93 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 17.36 dBm</p> <p><b>2TX:</b></p> <p>IEEE 802.11b: 23.75 dBm</p> <p>IEEE 802.11g: 23.81 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 23.48 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 19.54 dBm</p> <p><b>3TX:</b></p> <p>IEEE 802.11b: 25.23 dBm</p> <p>IEEE 802.11g: 25.23 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 25.45 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 20.81 dBm</p> <p><b>4TX:</b></p> <p>IEEE 802.11b: 26.64 dBm</p> <p>IEEE 802.11g: 26.69 dBm</p> <p>IEEE 802.11n MCS0 (HT20): 26.74 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 21.81 dBm</p> |
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|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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|  | <p><b>For Beamforming Mode</b></p> <p><b>Mode 1 (Set 3 Dipole antenna)</b></p> <p><b>2TX:</b></p> <p>IEEE 802.11n MCS0 (HT20): 23.44 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 19.34 dBm</p> <p><b>3TX:</b></p> <p>IEEE 802.11n MCS0 (HT20): 25.45 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 20.24 dBm</p> <p><b>4TX:</b></p> <p>IEEE 802.11n MCS0 (HT20): 25.71 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 21.38 dBm</p> <p><b>Mode 2 (Set 5 Polarized Dipole antenna)</b></p> <p><b>2TX:</b></p> <p>IEEE 802.11n MCS0 (HT20): 23.38 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 19.09 dBm</p> <p><b>3TX:</b></p> <p>IEEE 802.11n MCS0 (HT20): 25.45 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 20.59 dBm</p> <p><b>4TX:</b></p> <p>IEEE 802.11n MCS0 (HT20): 26.74 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 21.21 dBm</p> <p><b>Mode 3 (Set 6 Panel antenna)</b></p> <p><b>2TX:</b></p> <p>IEEE 802.11n MCS0 (HT20): 23.44 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 18.20 dBm</p> <p><b>3TX:</b></p> <p>IEEE 802.11n MCS0 (HT20): 25.45 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 19.14 dBm</p> <p><b>4TX:</b></p> <p>IEEE 802.11n MCS0 (HT20): 25.71 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 20.95 dBm</p> <p><b>Mode 4 (Set 7 Polarized Panel antenna)</b></p> <p><b>2TX:</b></p> <p>IEEE 802.11n MCS0 (HT20): 23.64 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 20.15 dBm</p> <p><b>3TX:</b></p> <p>IEEE 802.11n MCS0 (HT20): 25.45 dBm</p> <p>IEEE 802.11n MCS0 (HT40): 20.99 dBm</p> |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     | <b>4TX:</b><br>IEEE 802.11n MCS0 (HT20): 26.46 dBm<br>IEEE 802.11n MCS0 (HT40): 21.81 dBm<br><b>Mode 5 (Set 8 Patch antenna)</b><br><b>2TX:</b><br>IEEE 802.11n MCS0 (HT20): 23.44 dBm<br>IEEE 802.11n MCS0 (HT40): 19.46 dBm<br><b>3TX:</b><br>IEEE 802.11n MCS0 (HT20): 25.45 dBm<br>IEEE 802.11n MCS0 (HT40): 20.57 dBm<br><b>4TX:</b><br>IEEE 802.11n MCS0 (HT20): 25.89 dBm<br>IEEE 802.11n MCS0 (HT40): 21.21 dBm<br><b>Mode 6 (Set 9 Monopole antenna)</b><br><b>2TX:</b><br>IEEE 802.11n MCS0 (HT20): 23.44 dBm<br>IEEE 802.11n MCS0 (HT40): 19.34 dBm<br><b>3TX:</b><br>IEEE 802.11n MCS0 (HT20): 25.45 dBm<br>IEEE 802.11n MCS0 (HT40): 20.24 dBm<br><b>4TX:</b><br>IEEE 802.11n MCS0 (HT20): 25.71 dBm<br>IEEE 802.11n MCS0 (HT40): 21.81 dBm |
| Carrier Frequencies | Please refer to section 3.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Antenna             | Please refer to section 3.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| Items                | Description                                          |                                              |
|----------------------|------------------------------------------------------|----------------------------------------------|
| Beamforming Function | <input checked="" type="checkbox"/> With beamforming | <input type="checkbox"/> Without beamforming |

Note: The product has beamforming function for 802.11n.

### Antenna and Band width

| Antenna         | Single (TX) |        | Two (TX) |        | Three (TX) |        | Four (TX) |        |
|-----------------|-------------|--------|----------|--------|------------|--------|-----------|--------|
| Band width Mode | 20 MHz      | 40 MHz | 20 MHz   | 40 MHz | 20 MHz     | 40 MHz | 20 MHz    | 40 MHz |
| IEEE 802.11b    | V           | X      | V        | X      | V          | X      | V         | X      |
| IEEE 802.11g    | V           | X      | V        | X      | V          | X      | V         | X      |
| IEEE 802.11n    | V           | V      | V        | V      | V          | V      | V         | V      |

### IEEE 11n Spec.

| Protocol                                                                                                                                                                                                                  | Number of Transmit Chains (NTX) | Data Rate / MCS                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------------|
| 802.11n (HT20)                                                                                                                                                                                                            | 1, 2, 3, 4                      | MCS 0-7, MCS 0-15, MCS 0-23, MCS 0-31 |
| 802.11n (HT40)                                                                                                                                                                                                            | 1, 2, 3, 4                      | MCS 0-7, MCS 0-15, MCS 0-23, MCS 0-31 |
| <p>Note 1: IEEE Std. 802.11n modulation consists of HT20 and HT40 (HT: High Throughput).<br/>Then EUT supports HT20 and HT40.</p> <p>Note 2: Modulation modes consist of below configuration: HT20/HT40: IEEE 802.11n</p> |                                 |                                       |

## 3.2. Accessories

N/A

### 3.3. Table for Filed Antenna

| Set | Ant.   | Brand | Model Name<br>(Part Number) | Polarity | Antenna Type     | Connector   | Indoor/<br>Outdoor |
|-----|--------|-------|-----------------------------|----------|------------------|-------------|--------------------|
| 1   | 1      | ZEBRA | ML-2452-HPAG4A6-01          | -        | Dipole           | N-Type male | Indoor/<br>Outdoor |
| 2   | 2      | ZEBRA | ML-2452-APAG2A1-01          | -        |                  | RP-SMA male | Indoor             |
| 3   | 3      | ZEBRA | ML-2452-HPA6-01             | -        |                  | N-TYPE male | Indoor/<br>Outdoor |
| 4   | 4      | ZEBRA | ML-2452-APA2-01             | -        |                  | RP-SMA male | Indoor             |
| 5   | 5 (1A) | ZEBRA | ML-2452-HPAG4A6-01          | (V)      | Polarized Dipole | N-TYPE male | Indoor/<br>Outdoor |
|     | 5 (1B) | ZEBRA | ML-2499-HPA6H-01            | (H)      |                  | N-TYPE male | Indoor/<br>Outdoor |
| 6   | 6      | ZEBRA | ML-2452-PNA5-01R            | -        | Panel            | N-TYPE male | Indoor/<br>Outdoor |
| 7   | 7      | ZEBRA | ML-2452-SEC5M4-N36          | -        | Polarized Panel  | RP-SMA male | Indoor/<br>Outdoor |
| 8   | 8      | ZEBRA | ML-2452-PTA4M4-036          | -        | Patch            | RP-SMA male | Indoor             |
| 9   | 9      | ZEBRA | CEDAR-INT-ANT               | -        | Monopole         | U.FL        | Indoor/<br>Outdoor |

Note1:

| Set | Ant.   | Antenna Gain (dBi) | Cable Loss (dB) | True Gain (dBi) |
|-----|--------|--------------------|-----------------|-----------------|
| 1   | 1      | 4                  | 1.47            | 2.53            |
| 2   | 2      | 2.7                | 1.47            | 1.23            |
| 3   | 3      | 5.3                | 1.47            | 3.83            |
| 4   | 4      | 3.17               | 1.47            | 1.70            |
| 5   | 5 (1A) | 4                  | 1.47            | 2.53            |
|     | 5 (1B) | 5.4                | 1.47            | 3.93            |
| 6   | 6      | 5.5                | 1.47            | 4.03            |
| 7   | 7      | 6.92               | 1.47            | 5.45            |
| 8   | 8      | 5                  | 1.47            | 3.53            |

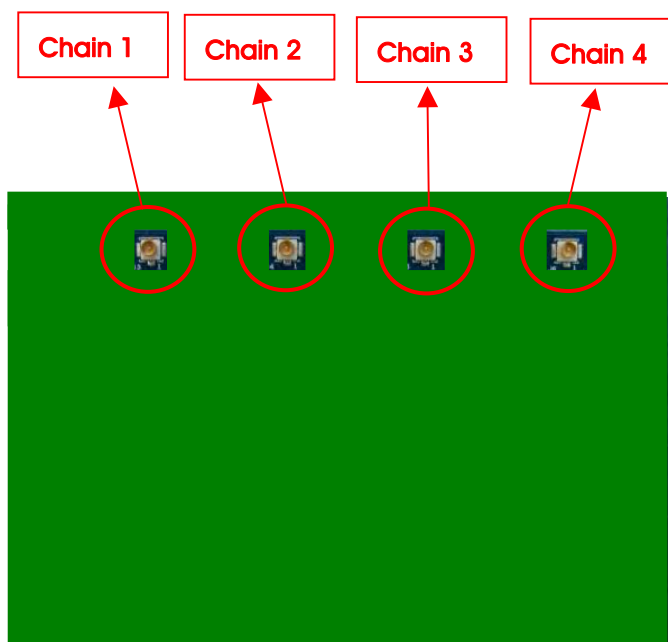
| Set | Ant. | Antenna Gain (dBi) |         |         |         |
|-----|------|--------------------|---------|---------|---------|
|     |      | Chain 1            | Chain 2 | Chain 3 | Chain 4 |
| 9   | 9    | 5.2                | 3.7     | 3.2     | 4.5     |

Note2:

There are 9 set antennas in the antenna table list. Besides, only set 3, 5, 6, 7, 8 and 9 were selected to perform the test and written in this report due to they have the highest gains from each different types of antenna.

| For IEEE 802.11b/g/n                                            |    |        |         |         |         |         |
|-----------------------------------------------------------------|----|--------|---------|---------|---------|---------|
| Mode                                                            | BF | Non BF | Chain 1 | Chain 2 | Chain 3 | Chain 4 |
| For 1TX                                                         | -  | V      | TX/RX   | RX      | RX      | RX      |
| For 2TX-Type 1<br>(Worst case for Mode 1, Mode 4<br>and Mode 5) | -  | V      | TX/RX   | TX/RX   | RX      | RX      |
| For 2TX-Type 2<br>(Worst case for Mode 2, Mode 3<br>and Mode 6) | -  | V      | TX/RX   | RX      | TX/RX   | RX      |
| For 2TX                                                         | V  | -      | TX/RX   | TX/RX   | RX      | RX      |
| For 3TX                                                         | V  | V      | TX/RX   | TX/RX   | RX      | RX      |
| For 4TX                                                         | V  | V      | TX/RX   | TX/RX   | TX/RX   | TX/RX   |
| For IEEE 802.11a/n/ac                                           |    |        |         |         |         |         |
| Mode                                                            | BF | Non BF | Chain 1 | Chain 2 | Chain 3 | Chain 4 |
| For 1RX                                                         | -  | V      | -       | -       | -       | RX      |

Note: BF = Beamforming ; Non-BF = Non Beamforming



### 3.4. Table for Carrier Frequencies

There are two bandwidth systems.

For 20MHz bandwidth systems, use Channel 1~Channel 11.

For 40MHz bandwidth systems, use Channel 3~Channel 9.

| Frequency Band | Channel No. | Frequency | Channel No. | Frequency |
|----------------|-------------|-----------|-------------|-----------|
| 2400~2483.5MHz | 1           | 2412 MHz  | 7           | 2442 MHz  |
|                | 2           | 2417 MHz  | 8           | 2447 MHz  |
|                | 3           | 2422 MHz  | 9           | 2452 MHz  |
|                | 4           | 2427 MHz  | 10          | 2457 MHz  |
|                | 5           | 2432 MHz  | 11          | 2462 MHz  |
|                | 6           | 2437 MHz  | -           | -         |

### 3.5. Table for Test Modes

Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

| Test Items                        | Mode                            | Data Rate | Channel | Chain                                                                       |
|-----------------------------------|---------------------------------|-----------|---------|-----------------------------------------------------------------------------|
| AC Power Line Conducted Emissions | CTX                             | -         | -       | -                                                                           |
| Maximum Conducted Output Power    | <b>For Non-Beamforming Mode</b> |           |         |                                                                             |
|                                   | 11b/CCK                         | 1 Mbps    | 1/6/11  | 1<br>1+2 ( For Mode 1, 4, 5)<br>1+3 ( For Mode 2, 3, 6)<br>1+2+3<br>1+2+3+4 |
|                                   | 11g/BPSK                        | 6 Mbps    | 1/6/11  | 1<br>1+2 ( For Mode 1, 4, 5)<br>1+3 ( For Mode 2, 3, 6)<br>1+2+3<br>1+2+3+4 |
|                                   | 11n HT20                        | MCS0      | 1/6/11  | 1<br>1+2 ( For Mode 1, 4, 5)<br>1+3 ( For Mode 2, 3, 6)<br>1+2+3<br>1+2+3+4 |
|                                   | 11n HT40                        | MCS0      | 3/6/9   | 1<br>1+2 ( For Mode 1, 4, 5)<br>1+3 ( For Mode 2, 3, 6)<br>1+2+3<br>1+2+3+4 |
|                                   | <b>For Beamforming Mode</b>     |           |         |                                                                             |
|                                   | 11n HT20                        | MCS0      | 1/6/11  | 1+2<br>1+2+3<br>1+2+3+4                                                     |
|                                   | 11n HT40                        | MCS0      | 3/6/9   | 1+2<br>1+2+3<br>1+2+3+4                                                     |
|                                   | <b>For Non-Beamforming Mode</b> |           |         |                                                                             |
| Power Spectral Density            | 11b/CCK                         | 1 Mbps    | 1/6/11  | 1<br>1+2 ( For Mode 1, 4, 5)<br>1+3 ( For Mode 2, 3, 6)<br>1+2+3<br>1+2+3+4 |

|                        |                                 |        |        |                                                                                   |
|------------------------|---------------------------------|--------|--------|-----------------------------------------------------------------------------------|
|                        | 11g/BPSK                        | 6 Mbps | 1/6/11 | 1<br>1+2 ( For Mode<br>1, 4, 5)<br>1+3 ( For Mode<br>2, 3, 6)<br>1+2+3<br>1+2+3+4 |
|                        | 11n HT20                        | MCS0   | 1/6/11 | 1<br>1+2 ( For Mode<br>1, 4, 5)<br>1+3 ( For Mode<br>2, 3, 6)<br>1+2+3<br>1+2+3+4 |
|                        | 11n HT40                        | MCS0   | 3/6/9  | 1<br>1+2 ( For Mode<br>1, 4, 5)<br>1+3 ( For Mode<br>2, 3, 6)<br>1+2+3<br>1+2+3+4 |
|                        | <b>For Beamforming Mode</b>     |        |        |                                                                                   |
|                        | 11n HT20                        | MCS0   | 1/6/11 | 1+2<br>1+2+3<br>1+2+3+4                                                           |
|                        | 11n HT40                        | MCS0   | 3/6/9  | 1+2<br>1+2+3<br>1+2+3+4                                                           |
| 6dB Spectrum Bandwidth | <b>For Non-Beamforming Mode</b> |        |        |                                                                                   |
|                        | 11b/CCK                         | 1 Mbps | 1/6/11 | 1<br>1+2 ( For Mode<br>1, 4, 5)<br>1+3 ( For Mode<br>2, 3, 6)<br>1+2+3<br>1+2+3+4 |
|                        | 11g/BPSK                        | 6 Mbps | 1/6/11 | 1<br>1+2 ( For Mode<br>1, 4, 5)<br>1+3 ( For Mode<br>2, 3, 6)<br>1+2+3<br>1+2+3+4 |
|                        | 11n HT20                        | MCS0   | 1/6/11 | 1<br>1+2 ( For Mode<br>1, 4, 5)<br>1+3 ( For Mode<br>2, 3, 6)<br>1+2+3<br>1+2+3+4 |

|                                                      |                                 |        |        |                                                                                   |
|------------------------------------------------------|---------------------------------|--------|--------|-----------------------------------------------------------------------------------|
|                                                      | 11n HT40                        | MCS0   | 3/6/9  | 1<br>1+2 ( For Mode<br>1, 4, 5)<br>1+3 ( For Mode<br>2, 3, 6)<br>1+2+3<br>1+2+3+4 |
| Radiated Emissions 9kHz~1GHz                         | CTX                             | -      | -      | -                                                                                 |
| Radiated Emissions 1GHz~10 <sup>th</sup><br>Harmonic | <b>For Non-Beamforming Mode</b> |        |        |                                                                                   |
|                                                      | 11b/CCK                         | 1 Mbps | 1/6/11 | 1+2+3+4                                                                           |
|                                                      | 11g/BPSK                        | 6 Mbps | 1/6/11 | 1+2+3+4                                                                           |
|                                                      | 11n HT20                        | MCS0   | 1/6/11 | 1+2+3+4                                                                           |
|                                                      | 11n HT40                        | MCS0   | 3/6/9  | 1+2+3+4                                                                           |
| Band Edge Emissions                                  | <b>For Non-Beamforming Mode</b> |        |        |                                                                                   |
|                                                      | 11b/CCK                         | 1 Mbps | 1/6/11 | 1<br>1+2 ( For Mode<br>1, 4, 5)<br>1+3 ( For Mode<br>2, 3, 6)<br>1+2+3<br>1+2+3+4 |
|                                                      | 11g/BPSK                        | 6 Mbps | 1/6/11 | 1<br>1+2 ( For Mode<br>1, 4, 5)<br>1+3 ( For Mode<br>2, 3, 6)<br>1+2+3<br>1+2+3+4 |
|                                                      | 11n HT20                        | MCS0   | 1/6/11 | 1<br>1+2 ( For Mode<br>1, 4, 5)<br>1+3 ( For Mode<br>2, 3, 6)<br>1+2+3<br>1+2+3+4 |
|                                                      | 11n HT40                        | MCS0   | 3/6/9  | 1<br>1+2 ( For Mode<br>1, 4, 5)<br>1+3 ( For Mode<br>2, 3, 6)<br>1+2+3<br>1+2+3+4 |
|                                                      | <b>For Beamforming Mode</b>     |        |        |                                                                                   |
|                                                      | 11n HT20                        | MCS0   | 1/6/11 | 1+2<br>1+2+3<br>1+2+3+4                                                           |
|                                                      | 11n HT40                        | MCS0   | 3/6/9  | 1+2<br>1+2+3<br>1+2+3+4                                                           |

Note1:

EUT supports two modes as below. Mode: 4TX(Regular data) is covered by Mode: 3TX+1TX(Sensor).

| Mode | RF configuration                                            | 2.4G    |         |         | 2.4G/5G                  | Support (Y/N) |
|------|-------------------------------------------------------------|---------|---------|---------|--------------------------|---------------|
|      |                                                             | Chain 1 | Chain 2 | Chain 3 | Chain 4                  | Y             |
| 1    | 4TX (Regular data)                                          | V       | V       | V       | V<br>(2.4G regular data) | Y             |
| 2    | 3TX(2G)+1RX(2G/5G)<br>Chain1~3 leverage data from<br>Mode 1 | V       | V       | V       | V (2G/5G sensor)         | Y             |

Note2: There are two modes of EUT, one is beamforming mode, and the other is non-beamforming mode for 802.11n. Beamforming mode and non-beamforming mode has been test and record in this test report for Maximum Conducted Output Power, Power Spectral Density and Band Edge Emissions tests.

Note3: There are two modes of EUT, one is beamforming mode, and the other is non-beamforming mode for 802.11n. After evaluating, non-beamforming mode had been evaluated to be the worst case, so it was selected to record in this test report for 6dB Spectrum Bandwidth and Radiated Emissions 1GHz~10<sup>th</sup> Harmonic tests.

Note4: All the specification of test configurations and test modes were based on customer's request

The following test modes were performed for all tests:

| Conducted Emission test |     |       |
|-------------------------|-----|-------|
| Mode                    | EUT | Set 7 |
| 1                       | •   | •     |

| Radiated Emission below 1GHz test                                                                                                                                                                                                                |     |        |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--------|-------|
| The EUT was performed at Y axis and Z axis position for Radiated emission above 1GHz test, and the worst case was found at Z axis. So the measurement will follow this same test configuration. Only the higher gain antenna "Set 7" was tested. |     |        |       |
| Mode                                                                                                                                                                                                                                             | EUT | Z axis | Set 7 |
| 1                                                                                                                                                                                                                                                | •   | •      | •     |

### Radiated Emission above 1GHz test

The EUT can only be placed in Y axis for Mode 1 ~ Mode 2.

The EUT was performed at Y axis and Z axis position, and the worst case was found at Z axis. So the measurement will follow this same test configuration for Mode 3 ~ Mode 6

| Mode | Non BF | BF | 1TX | 2TX | 3TX | 4TX | EUT in Y axis | EUT in Z axis | Set in Y axis | Set in Z axis | Set 3 | Set 5 (1A) | Set 5 (1B) | Set 6 | Set 7 | Set 8 | Set 9 |
|------|--------|----|-----|-----|-----|-----|---------------|---------------|---------------|---------------|-------|------------|------------|-------|-------|-------|-------|
| 1    | ●      | -  | ●   | ●   | ●   | -   | ●             | -             | ●             | -             | ●     | -          | -          | -     | -     | -     | -     |
| 1    | -      | ●  | -   | ●   | ●   | -   | ●             | -             | ●             | -             | ●     | -          | -          | -     | -     | -     | -     |
| 1    | ●      | ●  | -   | -   | -   | ●   | ●             | -             | ●<br>Set 3    | ●<br>Set 9    | ●*3   | -          | -          | -     | -     | -     | ●*1   |
| 2    | ●      | -  | ●   | -   | -   | -   | ●             | -             | ●             | -             | -     | ●          | -          | -     | -     | -     | -     |
| 2    | ●      | -  | -   | ●   | -   | -   | ●             | -             | ●             | -             | -     | ●*2        | -          | -     | -     | -     | -     |
| 2    | -      | ●  | -   | ●   | -   | -   | ●             | -             | ●             | -             | -     | ●*1        | ●*1        | -     | -     | -     | -     |
| 2    | ●      | ●  | -   | -   | ●   | -   | ●             | -             | ●             | -             | -     | ●*2        | ●*1        | -     | -     | -     | -     |
| 2    | ●      | ●  | -   | -   | -   | ●   | ●             | -             | ●<br>Set 5    | ●<br>Set 9    | -     | ●*2        | ●*1        | -     | -     | -     | ●*1   |
| 3    | ●      | -  | ●   | ●   | ●   | -   | -             | ●             | ●             | -             | -     | -          | -          | ●     | -     | -     | -     |
| 3    | -      | ●  | -   | ●   | ●   | -   | -             | ●             | ●             | -             | -     | -          | -          | ●     | -     | -     | -     |
| 3    | ●      | ●  | -   | -   | -   | ●   | -             | ●             | ●<br>Set 6    | ●<br>Set 9    | -     | -          | -          | ●*3   | -     | -     | ●*1   |
| 4    | ●      | -  | ●   | ●   | ●   | -   | -             | ●             | ●             | -             | -     | -          | -          | -     | ●     | -     | -     |
| 4    | -      | ●  | -   | ●   | ●   | -   | -             | ●             | ●             | -             | -     | -          | -          | -     | ●     | -     | -     |
| 4    | ●      | ●  | -   | -   | -   | ●   | -             | ●             | ●<br>Set 7    | ●<br>Set 9    | -     | -          | -          | -     | ●*3   | -     | ●*1   |
| 5    | ●      | -  | ●   | ●   | ●   | -   | -             | ●             | ●             | -             | -     | -          | -          | -     | -     | ●     | -     |
| 5    | -      | ●  | -   | ●   | ●   | -   | -             | ●             | ●             | -             | -     | -          | -          | -     | -     | ●     | -     |
| 5    | ●      | ●  | -   | -   | -   | ●   | -             | ●             | ●<br>Set 8    | ●<br>Set 9    | -     | -          | -          | -     | -     | ●*3   | ●*1   |
| 6    | ●      | -  | ●   | ●   | ●   | ●   | -             | ●             | -             | ●             | -     | -          | -          | -     | -     | -     | ●     |
| 6    | -      | ●  | -   | ●   | ●   | ●   | -             | ●             | -             | ●             | -     | -          | -          | -     | -     | -     | ●     |

### 3.6. Table for Testing Locations

| Test Site Location |                                                                            |          |              |             |
|--------------------|----------------------------------------------------------------------------|----------|--------------|-------------|
| Address:           | No.8, Lane 724, Bo-ai St., Jhubei City, Hsinchu County 302, Taiwan, R.O.C. |          |              |             |
| TEL:               | 886-3-656-9065                                                             |          |              |             |
| FAX:               | 886-3-656-9085                                                             |          |              |             |
| Test Site No.      | Site Category                                                              | Location | FCC Reg. No. | IC File No. |
| 03CH01-CB          | SAC                                                                        | Hsin Chu | 262045       | IC 4086D    |
| CO01-CB            | Conduction                                                                 | Hsin Chu | 262045       | IC 4086D    |
| TH01-CB            | OVEN Room                                                                  | Hsin Chu | -            | -           |

Open Area Test Site (OATS); Semi Anechoic Chamber (SAC).

### 3.7. Table for Supporting Units

For Test Site No: 03CH01-CB (For Below 1GHz and Above 1GHz / For Non-Beamforming Mode)

| Support Unit | Brand  | Model           | FCC ID |
|--------------|--------|-----------------|--------|
| Notebook     | DELL   | E4300           | DoC    |
| PoE          | Symbol | APSBIA5-2P3-ATR | N/A    |
| Fixture      | Bplus  | P22S-P22F       | N/A    |

For Test Site No: 03CH01-CB (For Above 1GHz / For Beamforming Mode)

| Support Unit  | Brand  | Model           | FCC ID |
|---------------|--------|-----------------|--------|
| Notebook      | DELL   | E4300           | DoC    |
| Notebook      | DELL   | E4300           | DoC    |
| Client Device | Cedar  | AP-8532         | N/A    |
| PoE           | Symbol | APSBIA5-2P3-ATR | N/A    |
| Fixture       | Bplus  | P22S-P22F       | N/A    |

For Test Site No: CO01-CB

| Support Unit | Brand  | Model           | FCC ID |
|--------------|--------|-----------------|--------|
| Notebook     | DELL   | E6430           | DoC    |
| PoE          | Symbol | APSBIA5-2P3-ATR | N/A    |
| Fixture      | Bplus  | P22S-P22F       | N/A    |

For Test Site No: TH01-CB

| Support Unit | Brand  | Model           | FCC ID |
|--------------|--------|-----------------|--------|
| Notebook     | DELL   | E4300           | DoC    |
| PoE          | Symbol | APSBIA5-2P3-ATR | N/A    |
| Fixture      | Bplus  | P22S-P22F       | N/A    |

### 3.8. Table for Parameters of Test Software Setting

During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

#### For Non-Beamforming Mode

##### Mode 1 (Set 3 Dipole antenna / 3.83dBi / 1TX)

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 85                   | 85       | 85       | -          | -        | -        |
| 802.11g               | 70                   | 80       | 68       | -          | -        | -        |
| 802.11n MCS0 HT20     | 70                   | 80       | 68       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 63         | 66       | 59       |

##### Mode 1 (Set 3 Dipole antenna / 3.83dBi / 2TX)

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 83                   | 83       | 83       | -          | -        | -        |
| 802.11g               | 65                   | 77       | 62       | -          | -        | -        |
| 802.11n MCS0 HT20     | 64                   | 77       | 61       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 59         | 63       | 53       |

##### Mode 1 (Set 3 Dipole antenna / 3.83dBi / 3TX)

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 82                   | 83       | 83       | -          | -        | -        |
| 802.11g               | 62                   | 77       | 59       | -          | -        | -        |
| 802.11n MCS0 HT20     | 61                   | 78       | 60       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 58         | 59       | 52       |

**Mode 1 (Set 3 Dipole antenna / 3.83dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 82                   | 83       | 80       | -          | -        | -        |
| 802.11g               | 57                   | 77       | 59       | -          | -        | -        |
| 802.11n MCS0 HT20     | 58                   | 78       | 61       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 56         | 58       | 51       |

**Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi\*1 / 1TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 85                   | 85       | 85       | -          | -        | -        |
| 802.11g               | 74                   | 80       | 73       | -          | -        | -        |
| 802.11n MCS0 HT20     | 70                   | 80       | 69       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 63         | 66       | 60       |

**Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi\*2 / 2TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 84                   | 84       | 85       | -          | -        | -        |
| 802.11g               | 68                   | 77       | 66       | -          | -        | -        |
| 802.11n MCS0 HT20     | 67                   | 77       | 64       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 58         | 60       | 55       |

**Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi\*2, (1B)3.93dBi\*1 / 3TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 82                   | 83       | 83       | -          | -        | -        |
| 802.11g               | 64                   | 77       | 65       | -          | -        | -        |
| 802.11n MCS0 HT20     | 64                   | 78       | 64       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 58         | 59       | 54       |

**Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi\*2, (1B)3.93dBi\*1 + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 82                   | 83       | 84       | -          | -        | -        |
| 802.11g               | 67                   | 77       | 64       | -          | -        | -        |
| 802.11n MCS0 HT20     | 63                   | 78       | 64       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 51         | 59       | 52       |

**Mode 3 (Set 6 Panel antenna / 4.03dBi / 1TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 85                   | 85       | 85       | -          | -        | -        |
| 802.11g               | 65                   | 80       | 68       | -          | -        | -        |
| 802.11n MCS0 HT20     | 66                   | 80       | 67       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 60         | 66       | 58       |

**Mode 3 (Set 6 Panel antenna / 4.03dBi / 2TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 84                   | 84       | 85       | -          | -        | -        |
| 802.11g               | 61                   | 77       | 65       | -          | -        | -        |
| 802.11n MCS0 HT20     | 61                   | 77       | 62       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 53         | 61       | 54       |

**Mode 3 (Set 6 Panel antenna / 4.03dBi / 3TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 82                   | 83       | 83       | -          | -        | -        |
| 802.11g               | 62                   | 77       | 60       | -          | -        | -        |
| 802.11n MCS0 HT20     | 61                   | 78       | 61       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 53         | 55       | 50       |

**Mode 3 (Set 6 Panel antenna / 4.03dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 81                   | 83       | 84       | -          | -        | -        |
| 802.11g               | 60                   | 77       | 60       | -          | -        | -        |
| 802.11n MCS0 HT20     | 58                   | 78       | 56       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 48         | 55       | 49       |

**Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi / 1TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 85                   | 85       | 85       | -          | -        | -        |
| 802.11g               | 70                   | 80       | 72       | -          | -        | -        |
| 802.11n MCS0 HT20     | 68                   | 80       | 69       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 61         | 67       | 61       |

**Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi / 2TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 83                   | 83       | 83       | -          | -        | -        |
| 802.11g               | 65                   | 77       | 65       | -          | -        | -        |
| 802.11n MCS0 HT20     | 64                   | 77       | 65       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 55         | 62       | 56       |

**Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi / 3TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 82                   | 83       | 83       | -          | -        | -        |
| 802.11g               | 60                   | 77       | 65       | -          | -        | -        |
| 802.11n MCS0 HT20     | 59                   | 78       | 60       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 48         | 56       | 53       |

**Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 82                   | 83       | 84       | -          | -        | -        |
| 802.11g               | 60                   | 77       | 62       | -          | -        | -        |
| 802.11n MCS0 HT20     | 61                   | 78       | 61       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 51         | 58       | 53       |

**Mode 5 (Set 8 Patch antenna / 3.53dBi / 1TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 85                   | 85       | 85       | -          | -        | -        |
| 802.11g               | 70                   | 80       | 73       | -          | -        | -        |
| 802.11n MCS0 HT20     | 68                   | 80       | 72       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 62         | 67       | 62       |

**Mode 5 (Set 8 Patch antenna / 3.53dBi / 2TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 83                   | 83       | 83       | -          | -        | -        |
| 802.11g               | 64                   | 77       | 68       | -          | -        | -        |
| 802.11n MCS0 HT20     | 66                   | 77       | 68       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 60         | 62       | 61       |

**Mode 5 (Set 8 Patch antenna / 3.53dBi / 3TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 82                   | 83       | 83       | -          | -        | -        |
| 802.11g               | 62                   | 77       | 65       | -          | -        | -        |
| 802.11n MCS0 HT20     | 64                   | 78       | 66       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 55         | 58       | 54       |

**Mode 5 (Set 8 Patch antenna / 3.53dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 82                   | 83       | 84       | -          | -        | -        |
| 802.11g               | 61                   | 77       | 65       | -          | -        | -        |
| 802.11n MCS0 HT20     | 64                   | 78       | 64       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 54         | 57       | 54       |

**Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi / 1TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 85                   | 85       | 85       | -          | -        | -        |
| 802.11g               | 67                   | 80       | 71       | -          | -        | -        |
| 802.11n MCS0 HT20     | 66                   | 80       | 70       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 58         | 66       | 63       |

**Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi, Chain 3: 3.2dBi / 2TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 84                   | 84       | 85       | -          | -        | -        |
| 802.11g               | 65                   | 77       | 68       | -          | -        | -        |
| 802.11n MCS0 HT20     | 63                   | 77       | 66       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 56         | 61       | 58       |

**Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi, Chain 2: 3.7dBi , Chain 3: 3.2dBi / 3TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 82                   | 83       | 83       | -          | -        | -        |
| 802.11g               | 65                   | 77       | 65       | -          | -        | -        |
| 802.11n MCS0 HT20     | 63                   | 78       | 65       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 56         | 59       | 52       |

Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi, Chain 2: 3.7dBi , Chain 3: 3.2dBi , Chain 4: 4.5dBi / 4TX)

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11b               | 82                   | 83       | 84       | -          | -        | -        |
| 802.11g               | 63                   | 77       | 63       | -          | -        | -        |
| 802.11n MCS0 HT20     | 62                   | 78       | 61       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 55         | 58       | 51       |

For Beamforming Mode

Mode 1 (Set 3 Dipole antenna / 3.83dBi / 2TX)

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 64                   | 77       | 61       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 57         | 61       | 53       |

Mode 1 (Set 3 Dipole antenna / 3.83dBi / 3TX)

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 61                   | 78       | 60       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 56         | 54       | 52       |

Mode 1 (Set 3 Dipole antenna / 3.83dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX)

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 58                   | 74       | 61       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 56         | 56       | 51       |

**Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi\*1, (1B)3.93dBi \*1 / 2TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 67                   | 77       | 64       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 58         | 60       | 55       |

**Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi, (1B)3.93dBi / 3TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 64                   | 78       | 64       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 58         | 58       | 51       |

**Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi\*2, (1B)3.93dBi\*1 + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 62                   | 78       | 61       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 51         | 57       | 50       |

**Mode 3 (Set 6 Panel antenna / 4.03dBi / 2TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 58                   | 77       | 60       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 51         | 57       | 55       |

**Mode 3 (Set 6 Panel antenna / 4.03dBi / 3TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 54                   | 78       | 59       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 44         | 52       | 50       |

**Mode 3 (Set 6 Panel antenna / 4.03dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 56                   | 74       | 58       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 48         | 55       | 51       |

**Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi / 2TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 63                   | 78       | 64       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 59         | 64       | 55       |

**Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi / 3TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 59                   | 78       | 60       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 57         | 60       | 52       |

**Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 57                   | 77       | 61       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 51         | 58       | 53       |

**Mode 5 (Set 8 Patch antenna / 3.53dBi / 2TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 66                   | 77       | 66       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 59         | 62       | 60       |

**Mode 5 (Set 8 Patch antenna / 3.53dBi / 3TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 63                   | 78       | 62       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 55         | 58       | 54       |

**Mode 5 (Set 8 Patch antenna / 3.53dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 62                   | 75       | 61       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 54         | 57       | 54       |

**Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi, Chain 2: 3.7dBi / 2TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 63                   | 77       | 66       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 56         | 61       | 57       |

**Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi, Chain 2: 3.7dBi , Chain 3: 3.2dBi / 3TX)**

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 61                   | 78       | 62       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 52         | 57       | 49       |

Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi, Chain 2: 3.7dBi , Chain 3: 3.2dBi , Chain 4: 4.5dBi / 4TX)

| Test Software Version | DoS                  |          |          |            |          |          |
|-----------------------|----------------------|----------|----------|------------|----------|----------|
| Mode                  | Test Frequency (MHz) |          |          |            |          |          |
|                       | NCB: 20MHz           |          |          | NCB: 40MHz |          |          |
|                       | 2412 MHz             | 2437 MHz | 2462 MHz | 2422 MHz   | 2437 MHz | 2452 MHz |
| 802.11n MCS0 HT20     | 62                   | 74       | 59       | -          | -        | -        |
| 802.11n MCS0 HT40     | -                    | -        | -        | 52         | 58       | 49       |

### 3.9. EUT Operation during Test

For Non-Beamforming Mode:

The EUT was programmed to be in continuously transmitting mode.

For Beamforming Mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

During the test, the following programs under WIN XP were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under DOS.
3. Executed "Lantest.exe " to link with the remote workstation to receive and transmit packet by Client Device and transmit duty cycle no less 98%

### 3.10. Duty Cycle

For Non-Beamforming Mode

For 1TX

| Mode              | On Time<br>(ms) | On+Off Time<br>(ms) | Duty Cycle<br>(%) | Duty Factor<br>(dB) | 1/T Minimum VBW<br>(kHz) |
|-------------------|-----------------|---------------------|-------------------|---------------------|--------------------------|
| 802.11b           | 1.000           | 1.000               | 100.00%           | 0.00                | 0.01                     |
| 802.11g           | 2.060           | 2.090               | 98.56%            | 0.06                | 0.01                     |
| 802.11n MCS0 HT20 | 1.925           | 1.950               | 98.72%            | 0.06                | 0.01                     |
| 802.11n MCS0 HT40 | 0.933           | 0.968               | 96.38%            | 0.16                | 1.07                     |

For 2TX

| Mode              | On Time<br>(ms) | On+Off Time<br>(ms) | Duty Cycle<br>(%) | Duty Factor<br>(dB) | 1/T Minimum VBW<br>(kHz) |
|-------------------|-----------------|---------------------|-------------------|---------------------|--------------------------|
| 802.11b           | 1.000           | 1.000               | 100.00%           | 0.00                | 0.01                     |
| 802.11g           | 2.060           | 2.099               | 98.14%            | 0.08                | 0.01                     |
| 802.11n MCS0 HT20 | 1.925           | 1.960               | 98.21%            | 0.08                | 0.01                     |
| 802.11n MCS0 HT40 | 0.932           | 0.969               | 96.18%            | 0.17                | 1.07                     |

For 3TX

| Mode              | On Time<br>(ms) | On+Off Time<br>(ms) | Duty Cycle<br>(%) | Duty Factor<br>(dB) | 1/T Minimum VBW<br>(kHz) |
|-------------------|-----------------|---------------------|-------------------|---------------------|--------------------------|
| 802.11b           | 1.000           | 1.000               | 100.00%           | 0.00                | 0.01                     |
| 802.11g           | 2.059           | 2.080               | 98.99%            | 0.04                | 0.01                     |
| 802.11n MCS0 HT20 | 1.911           | 1.944               | 98.30%            | 0.07                | 0.01                     |
| 802.11n MCS0 HT40 | 0.940           | 0.966               | 97.31%            | 0.12                | 1.06                     |

For 4TX

| Mode              | On Time<br>(ms) | On+Off Time<br>(ms) | Duty Cycle<br>(%) | Duty Factor<br>(dB) | 1/T Minimum VBW<br>(kHz) |
|-------------------|-----------------|---------------------|-------------------|---------------------|--------------------------|
| 802.11b           | 1.000           | 1.000               | 100.00%           | 0.00                | 0.01                     |
| 802.11g           | 2.055           | 2.093               | 98.18%            | 0.08                | 0.01                     |
| 802.11n MCS0 HT20 | 1.920           | 1.950               | 98.46%            | 0.07                | 0.01                     |
| 802.11n MCS0 HT40 | 0.939           | 0.966               | 97.20%            | 0.12                | 1.06                     |

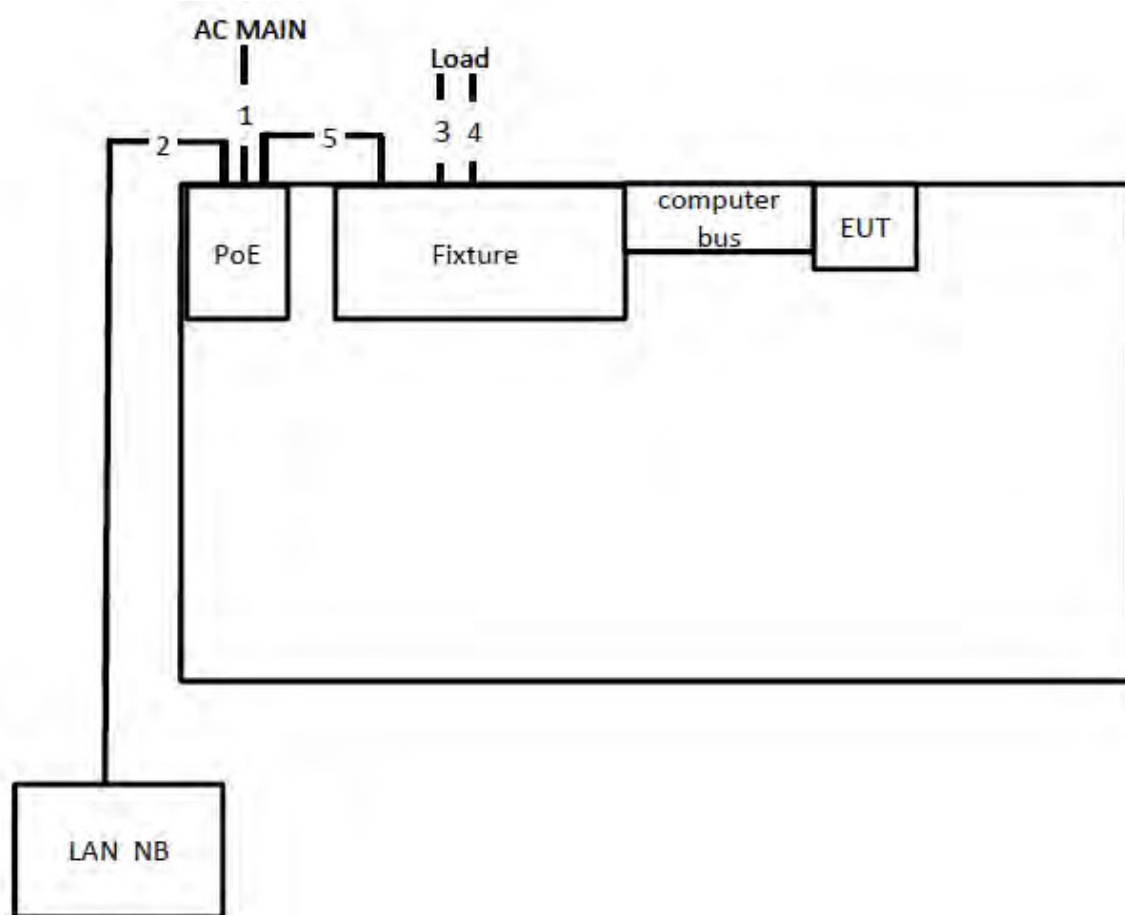
**For Beamforming Mode**

**For 2TX, 3TX, 4TX**

| Mode              | On Time<br>(ms) | On+Off Time<br>(ms) | Duty Cycle<br>(%) | Duty Factor<br>(dB) | 1/T Minimum VBW<br>(kHz) |
|-------------------|-----------------|---------------------|-------------------|---------------------|--------------------------|
| 802.11n MCS0 HT20 | 3.784           | 4.136               | 91.49%            | 0.39                | 0.26                     |
| 802.11n MCS0 HT40 | 4.584           | 4.992               | 91.83%            | 0.37                | 0.22                     |

### 3.11. Test Configurations

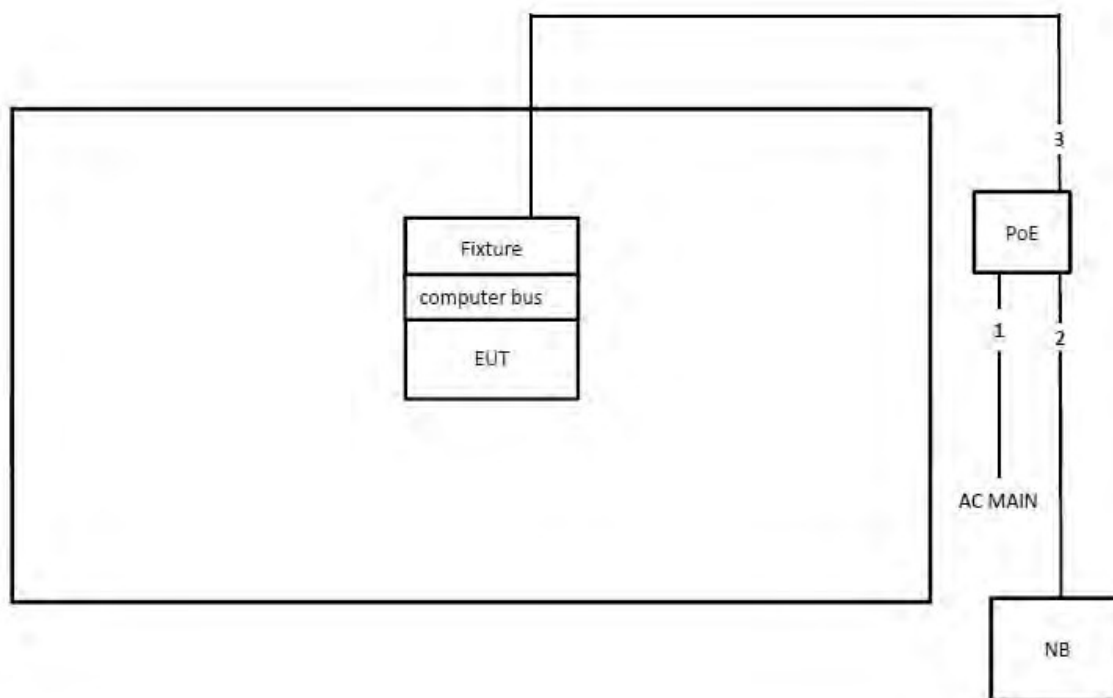
#### 3.11.1. AC Power Line Conduction Emissions Test Configuration



| Item | Connection    | Shielded | Length |
|------|---------------|----------|--------|
| 1    | Power cable   | No       | 1.8m   |
| 2    | RJ-45 cable   | No       | 10m    |
| 3    | RJ-45 cable   | No       | 1.5m   |
| 4    | Console cable | No       | 1.5m   |
| 5    | RJ-45 cable   | No       | 1.5m   |

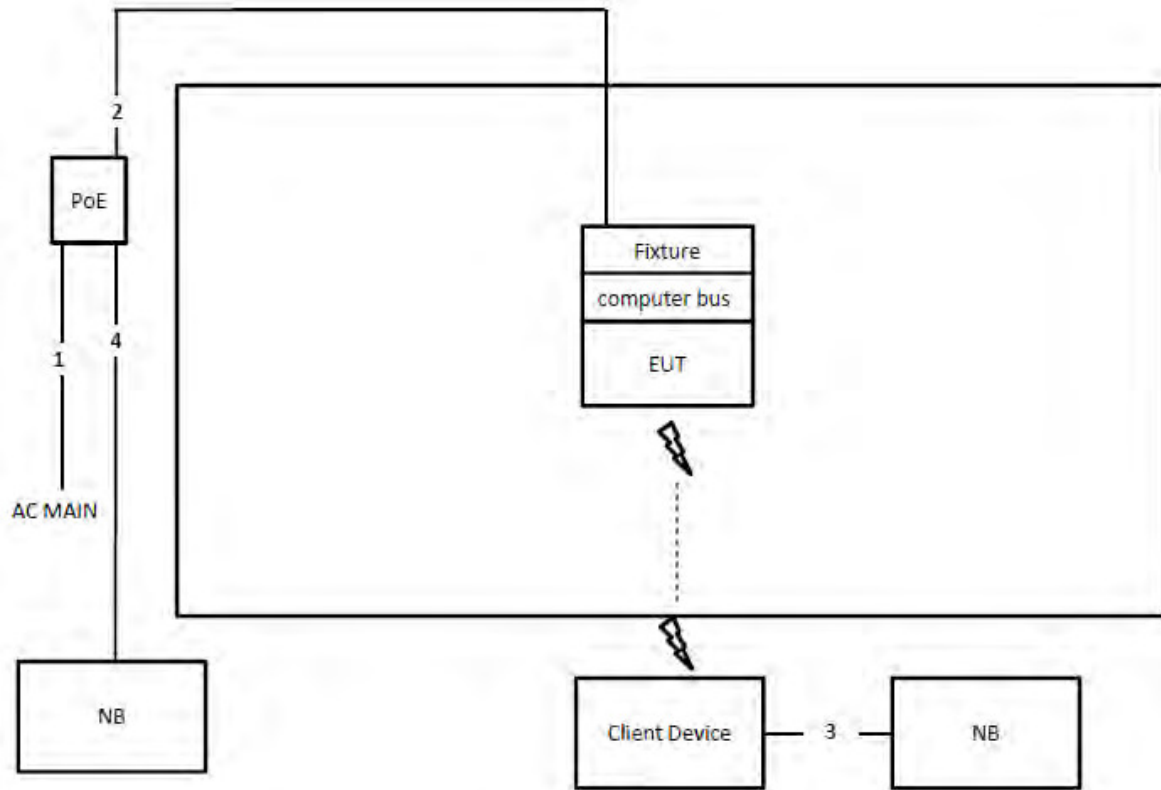
### 3.11.2. Radiation Emissions Test Configuration

Test Configuration: 30MHz~1GHz and above 1GHz / For Non-Beamforming Mode



| Item | Connection  | Shielded | Length |
|------|-------------|----------|--------|
| 1    | Power cable | No       | 1.8m   |
| 2    | RJ-45 cable | No       | 1.5m   |
| 3    | RJ-45 cable | No       | 10m    |

### Test Configuration: above 1GHz / For Beamforming Mode



| Item | Connection  | Shielded | Length |
|------|-------------|----------|--------|
| 1    | Power cable | No       | 1.8m   |
| 2    | RJ-45 cable | No       | 10m    |
| 3    | RJ-45 cable | No       | 1.5m   |
| 4    | RJ-45 cable | No       | 1.5m   |

## 4. TEST RESULT

### 4.1. AC Power Line Conducted Emissions Measurement

#### 4.1.1. Limit

For this product which is designed to be connected to the 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 below limits table.

| Frequency (MHz) | QP Limit (dBuV) | AV Limit (dBuV) |
|-----------------|-----------------|-----------------|
| 0.15~0.5        | 66~56           | 56~46           |
| 0.5~5           | 56              | 46              |
| 5~30            | 60              | 50              |

#### 4.1.2. Measuring Instruments and Setting

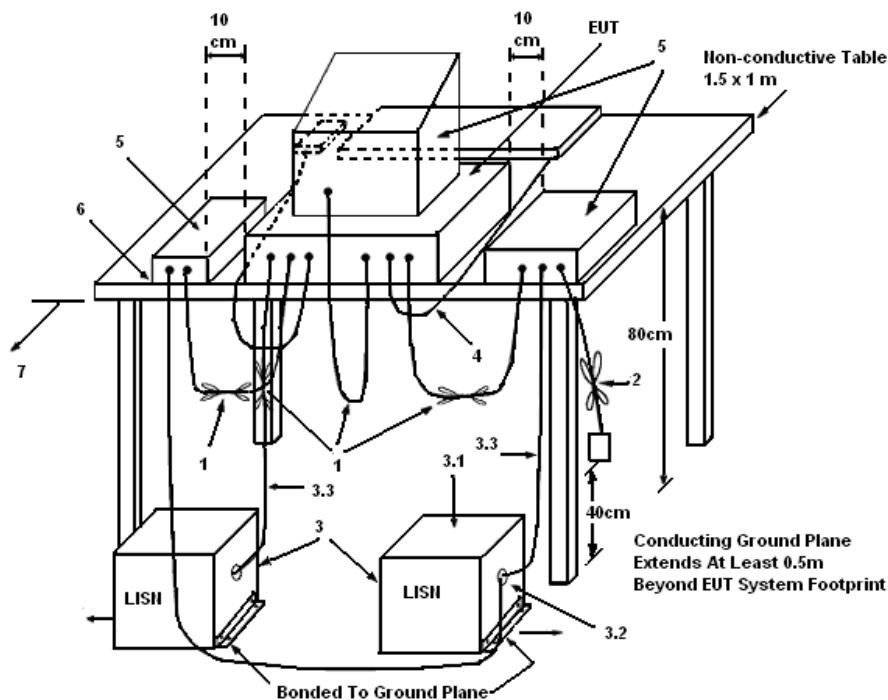
Please refer to section 5 of equipments list in this report. The following table is the setting of the receiver.

| Receiver Parameters | Setting  |
|---------------------|----------|
| Attenuation         | 10 dB    |
| Start Frequency     | 0.15 MHz |
| Stop Frequency      | 30 MHz   |
| IF Bandwidth        | 9 kHz    |

#### 4.1.3. Test Procedures

1. Configure the EUT according to ANSI C63.10. The EUT or host of EUT has to be placed 0.4 meter far from the conducting wall of the shielding room and at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT or host of EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connected to the other LISNs. The LISN should provide 50uH/50ohms coupling impedance.
4. The frequency range from 150 kHz to 30 MHz was searched.
5. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. The measurement has to be done between each power line and ground at the power terminal.

#### 4.1.4. Test Setup Layout



#### LEGEND:

- (1) Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- (2) I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- (3) EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50  $\Omega$ . LISN can be placed on top of, or immediately beneath, reference ground plane.
- (3.1) All other equipment powered from additional LISN(s).
- (3.2) Multiple outlet strip can be used for multiple power cords of non-EUT equipment.
- (3.3) LISN at least 80 cm from nearest part of EUT chassis.
- (4) Cables of hand-operated devices, such as keyboards, mice, etc., shall be placed as for normal use.
- (5) Non-EUT components of EUT system being tested.
- (6) Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop.
- (7) Rear of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.

#### 4.1.5. Test Deviation

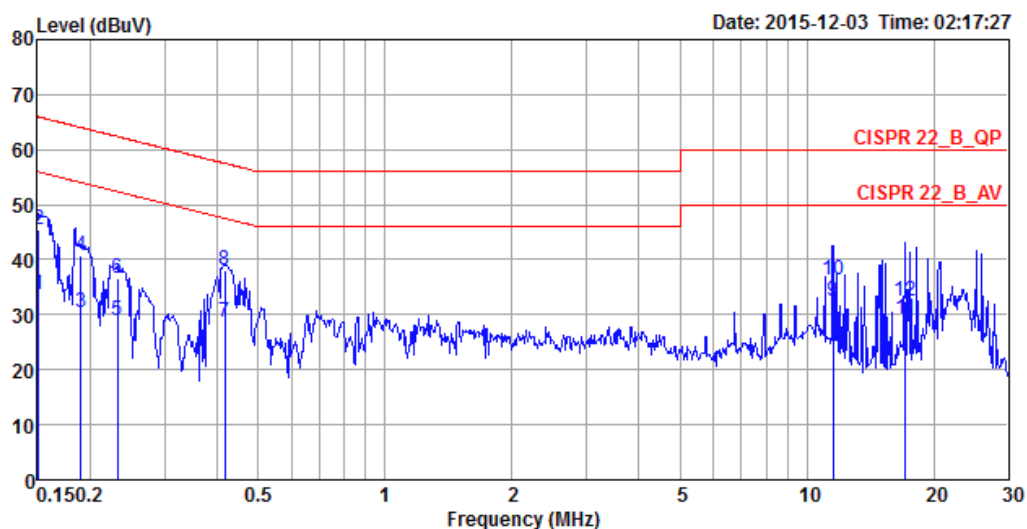
There is no deviation with the original standard.

#### 4.1.6. EUT Operation during Test

The EUT was placed on the test table and programmed in normal function.

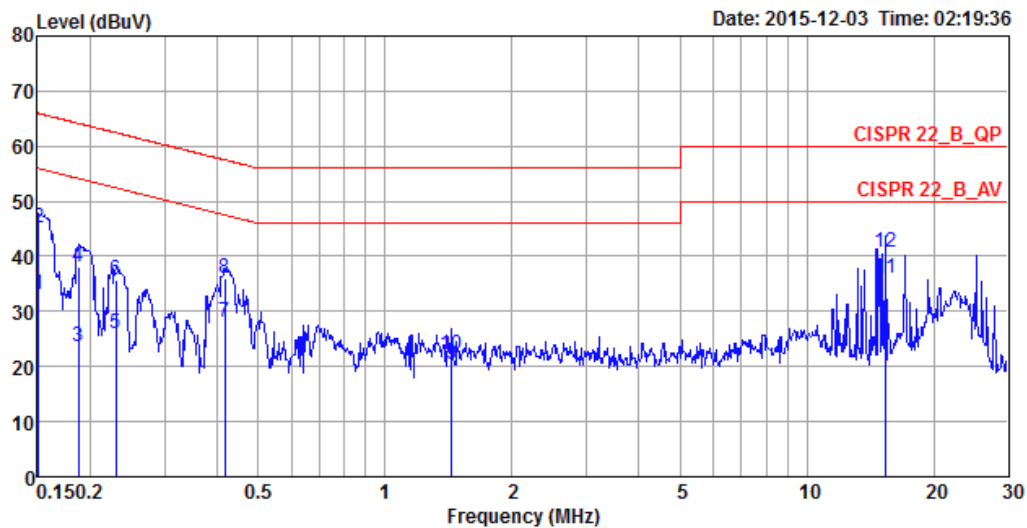
#### 4.1.7. Results of AC Power Line Conducted Emissions Measurement

|               |         |          |      |
|---------------|---------|----------|------|
| Temperature   | 25°C    | Humidity | 59%  |
| Test Engineer | Da Deng | Phase    | Line |
| Configuration | CTX     |          |      |



|    | Freq    | Level | Over Limit | Limit Line | Read Level | LISM Factor | Cable Loss | Pol/Phase | Remark  |
|----|---------|-------|------------|------------|------------|-------------|------------|-----------|---------|
|    | MHz     | dBuV  | dB         | dBuV       | dBuV       | dB          | dB         |           |         |
| 1  | 0.1508  | 33.63 | -22.33     | 55.96      | 23.68      | 9.93        | 0.02       | LINE      | Average |
| 2  | 0.1508  | 45.53 | -20.43     | 65.96      | 35.58      | 9.93        | 0.02       | LINE      | QP      |
| 3  | 0.1904  | 30.52 | -23.50     | 54.02      | 20.57      | 9.93        | 0.02       | LINE      | Average |
| 4  | 0.1904  | 40.71 | -23.31     | 64.02      | 30.76      | 9.93        | 0.02       | LINE      | QP      |
| 5  | 0.2316  | 28.91 | -23.48     | 52.39      | 18.95      | 9.93        | 0.03       | LINE      | Average |
| 6  | 0.2316  | 36.60 | -25.79     | 62.39      | 26.64      | 9.93        | 0.03       | LINE      | QP      |
| 7  | 0.4171  | 28.60 | -18.91     | 47.51      | 18.63      | 9.93        | 0.04       | LINE      | Average |
| 8  | 0.4171  | 37.95 | -19.56     | 57.51      | 27.98      | 9.93        | 0.04       | LINE      | QP      |
| 9  | 11.5414 | 32.59 | -17.41     | 50.00      | 22.11      | 10.23       | 0.25       | LINE      | Average |
| 10 | 11.5414 | 36.30 | -23.70     | 60.00      | 25.82      | 10.23       | 0.25       | LINE      | QP      |
| 11 | 17.1085 | 29.33 | -20.67     | 50.00      | 18.69      | 10.38       | 0.26       | LINE      | Average |
| 12 | 17.1085 | 32.38 | -27.62     | 60.00      | 21.74      | 10.38       | 0.26       | LINE      | QP      |

|               |         |          |         |
|---------------|---------|----------|---------|
| Temperature   | 25°C    | Humidity | 59%     |
| Test Engineer | Da Deng | Phase    | Neutral |
| Configuration | CTX     |          |         |



|    | Freq    | Level | Over Limit | Limit Line | Read Level | LISN Factor | Cable Loss | Pol/Phase | Remark  |
|----|---------|-------|------------|------------|------------|-------------|------------|-----------|---------|
|    | MHz     | dBuV  | dB         | dBuV       | dBuV       | dB          | dB         |           |         |
| 1  | 0.1508  | 33.10 | -22.86     | 55.96      | 23.30      | 9.78        | 0.02       | NEUTRAL   | Average |
| 2  | 0.1508  | 45.18 | -20.78     | 65.96      | 35.38      | 9.78        | 0.02       | NEUTRAL   | QP      |
| 3  | 0.1874  | 23.65 | -30.50     | 54.15      | 13.84      | 9.79        | 0.02       | NEUTRAL   | Average |
| 4  | 0.1874  | 38.11 | -26.04     | 64.15      | 28.30      | 9.79        | 0.02       | NEUTRAL   | QP      |
| 5  | 0.2304  | 25.91 | -26.53     | 52.44      | 16.09      | 9.79        | 0.03       | NEUTRAL   | Average |
| 6  | 0.2304  | 35.68 | -26.76     | 62.44      | 25.86      | 9.79        | 0.03       | NEUTRAL   | QP      |
| 7  | 0.4171  | 27.92 | -19.59     | 47.51      | 18.09      | 9.79        | 0.04       | NEUTRAL   | Average |
| 8  | 0.4171  | 36.15 | -21.36     | 57.51      | 26.32      | 9.79        | 0.04       | NEUTRAL   | QP      |
| 9  | 1.4409  | 20.50 | -25.50     | 46.00      | 10.61      | 9.83        | 0.06       | NEUTRAL   | Average |
| 10 | 1.4409  | 22.14 | -33.86     | 56.00      | 12.25      | 9.83        | 0.06       | NEUTRAL   | QP      |
| 11 | 15.3883 | 35.90 | -14.10     | 50.00      | 25.52      | 10.12       | 0.26       | NEUTRAL   | Average |
| 12 | 15.3883 | 40.79 | -19.21     | 60.00      | 30.41      | 10.12       | 0.26       | NEUTRAL   | QP      |

Note:

Level = Read Level + LISN Factor + Cable Loss.

## 4.2. Maximum Conducted Output Power Measurement

### 4.2.1. Limit

The limit for output power is 30dBm.

### 4.2.2. Measuring Instruments and Setting

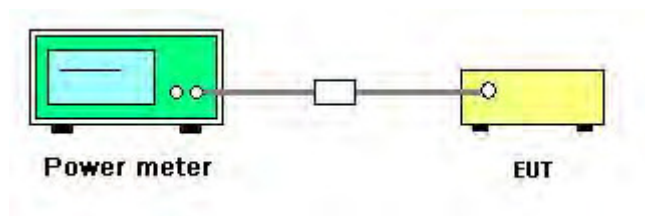
Please refer to section 5 of equipments list in this report. The following table is the setting of the power meter.

| Power Meter Parameter | Setting                                                    |
|-----------------------|------------------------------------------------------------|
| Bandwidth             | 50MHz bandwidth is greater than the EUT emission bandwidth |
| Detector              | Average                                                    |

### 4.2.3. Test Procedures

1. Test procedures refer KDB558074 D01 v03r03 section 9.2.3.2 Measurement using a power meter (PM).
2. Multiple antenna systems was performed in accordance with KDB 662911 D01 v02r01 Emissions Testing of Transmitters with Multiple Outputs in the Same Band.
3. This procedure provides an alternative for determining the RMS output power using a broadband RF average power meter with a thermocouple detector.

### 4.2.4. Test Setup Layout



### 4.2.5. Test Deviation

There is no deviation with the original standard.

### 4.2.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

#### 4.2.7. Test Result of Maximum Conducted Output Power

For Non-Beamforming Mode

|               |                                               |           |                               |
|---------------|-----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                          | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                   | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 1 (Set 3 Dipole antenna / 3.83dBi / 1TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|------------------|----------|
|                      |           | Chain 1               |                  |          |
| 802.11b              | 2412 MHz  | 20.96                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.87                 | 30.00            | Complies |
|                      | 2462 MHz  | 20.74                 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 18.30                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.79                 | 30.00            | Complies |
|                      | 2462 MHz  | 18.19                 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 18.53                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.93                 | 30.00            | Complies |
|                      | 2462 MHz  | 17.95                 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 16.83                 | 30.00            | Complies |
|                      | 2437 MHz  | 17.36                 | 30.00            | Complies |
|                      | 2452 MHz  | 16.01                 | 30.00            | Complies |

|                      |                                               |                  |                               |
|----------------------|-----------------------------------------------|------------------|-------------------------------|
| <b>Temperature</b>   | 25°C                                          | <b>Humidity</b>  | 46%                           |
| <b>Test Engineer</b> | Lucas Huang                                   | <b>Test Date</b> | Oct. 29, 2015 ~ Oct. 30, 2015 |
| <b>Test Mode</b>     | Mode 1 (Set 3 Dipole antenna / 3.83dBi / 2TX) |                  |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.69                 | 20.88   | 23.80 | 30.00            | Complies |
|                      | 2437 MHz  | 20.32                 | 20.75   | 23.55 | 30.00            | Complies |
|                      | 2462 MHz  | 20.29                 | 20.71   | 23.52 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 17.17                 | 18.10   | 20.67 | 30.00            | Complies |
|                      | 2437 MHz  | 20.45                 | 20.89   | 23.69 | 30.00            | Complies |
|                      | 2462 MHz  | 16.26                 | 16.81   | 19.55 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 17.01                 | 17.32   | 20.18 | 30.00            | Complies |
|                      | 2437 MHz  | 20.11                 | 20.72   | 23.44 | 30.00            | Complies |
|                      | 2462 MHz  | 15.98                 | 16.54   | 19.28 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 16.33                 | 16.25   | 19.30 | 30.00            | Complies |
|                      | 2437 MHz  | 16.59                 | 17.18   | 19.91 | 30.00            | Complies |
|                      | 2452 MHz  | 13.92                 | 14.84   | 17.41 | 30.00            | Complies |

|               |                                               |           |                               |
|---------------|-----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                          | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                   | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 1 (Set 3 Dipole antenna / 3.83dBi / 3TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.01                 | 20.79   | 20.53   | 25.23 | 30.00            | Complies |
|                      | 2437 MHz  | 20.15                 | 20.76   | 20.33   | 25.19 | 30.00            | Complies |
|                      | 2462 MHz  | 20.06                 | 20.72   | 20.21   | 25.11 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 16.31                 | 16.93   | 16.74   | 21.44 | 30.00            | Complies |
|                      | 2437 MHz  | 20.15                 | 20.72   | 20.49   | 25.23 | 30.00            | Complies |
|                      | 2462 MHz  | 15.39                 | 15.86   | 15.96   | 20.51 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.06                 | 16.81   | 16.52   | 21.25 | 30.00            | Complies |
|                      | 2437 MHz  | 20.43                 | 20.91   | 20.68   | 25.45 | 30.00            | Complies |
|                      | 2462 MHz  | 15.49                 | 15.97   | 16.08   | 20.63 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 15.47                 | 16.01   | 16.11   | 20.64 | 30.00            | Complies |
|                      | 2437 MHz  | 15.61                 | 16.17   | 16.14   | 20.75 | 30.00            | Complies |
|                      | 2452 MHz  | 14.02                 | 14.32   | 14.28   | 18.98 | 30.00            | Complies |

|                      |                                                                                          |                  |                               |
|----------------------|------------------------------------------------------------------------------------------|------------------|-------------------------------|
| <b>Temperature</b>   | 25°C                                                                                     | <b>Humidity</b>  | 46%                           |
| <b>Test Engineer</b> | Lucas Huang                                                                              | <b>Test Date</b> | Oct. 29, 2015 ~ Oct. 30, 2015 |
| <b>Test Mode</b>     | Mode 1 (Set 3 Dipole antenna / 3.83dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |                  |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Chain 4 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.16                 | 20.95   | 20.61   | 20.72   | 26.64 | 30.00            | Complies |
|                      | 2437 MHz  | 20.06                 | 20.52   | 20.48   | 20.75   | 26.48 | 30.00            | Complies |
|                      | 2462 MHz  | 20.14                 | 20.78   | 20.17   | 20.43   | 26.41 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 15.27                 | 15.70   | 15.75   | 15.64   | 21.61 | 30.00            | Complies |
|                      | 2437 MHz  | 20.18                 | 20.85   | 20.64   | 20.96   | 26.69 | 30.00            | Complies |
|                      | 2462 MHz  | 15.54                 | 16.08   | 16.10   | 15.63   | 21.87 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 15.15                 | 15.96   | 15.85   | 15.76   | 21.71 | 30.00            | Complies |
|                      | 2437 MHz  | 20.33                 | 20.81   | 20.75   | 20.95   | 26.74 | 30.00            | Complies |
|                      | 2462 MHz  | 15.87                 | 16.26   | 15.99   | 16.29   | 22.13 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 15.05                 | 15.37   | 15.42   | 15.06   | 21.25 | 30.00            | Complies |
|                      | 2437 MHz  | 15.78                 | 15.94   | 15.97   | 15.81   | 21.90 | 30.00            | Complies |
|                      | 2452 MHz  | 14.01                 | 14.08   | 14.19   | 14.01   | 20.09 | 30.00            | Complies |

|                      |                                                                |                  |                               |
|----------------------|----------------------------------------------------------------|------------------|-------------------------------|
| <b>Temperature</b>   | 25°C                                                           | <b>Humidity</b>  | 46%                           |
| <b>Test Engineer</b> | Lucas Huang                                                    | <b>Test Date</b> | Oct. 29, 2015 ~ Oct. 30, 2015 |
| <b>Test Mode</b>     | Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi *1 / 1TX) |                  |                               |

| Mode                 | Frequency | Conducted Power (dBm) | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|------------------|----------|
|                      |           | Chain 1               |                  |          |
| 802.11b              | 2412 MHz  | 20.96                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.87                 | 30.00            | Complies |
|                      | 2462 MHz  | 20.74                 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 19.44                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.79                 | 30.00            | Complies |
|                      | 2462 MHz  | 18.82                 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 18.31                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.93                 | 30.00            | Complies |
|                      | 2462 MHz  | 18.24                 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 16.92                 | 30.00            | Complies |
|                      | 2437 MHz  | 17.36                 | 30.00            | Complies |
|                      | 2452 MHz  | 15.87                 | 30.00            | Complies |

|                      |                                                               |                  |                               |
|----------------------|---------------------------------------------------------------|------------------|-------------------------------|
| <b>Temperature</b>   | 25°C                                                          | <b>Humidity</b>  | 46%                           |
| <b>Test Engineer</b> | Lucas Huang                                                   | <b>Test Date</b> | Oct. 29, 2015 ~ Oct. 30, 2015 |
| <b>Test Mode</b>     | Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi*2 / 2TX) |                  |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 3 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.66                 | 20.78   | 23.73 | 30.00            | Complies |
|                      | 2437 MHz  | 20.51                 | 20.85   | 23.69 | 30.00            | Complies |
|                      | 2462 MHz  | 20.58                 | 20.89   | 23.75 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 18.40                 | 18.74   | 21.58 | 30.00            | Complies |
|                      | 2437 MHz  | 20.69                 | 20.91   | 23.81 | 30.00            | Complies |
|                      | 2462 MHz  | 17.17                 | 17.78   | 20.50 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 17.71                 | 17.94   | 20.84 | 30.00            | Complies |
|                      | 2437 MHz  | 20.18                 | 20.74   | 23.48 | 30.00            | Complies |
|                      | 2462 MHz  | 16.59                 | 16.93   | 19.77 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 15.85                 | 15.88   | 18.88 | 30.00            | Complies |
|                      | 2437 MHz  | 15.96                 | 16.25   | 19.12 | 30.00            | Complies |
|                      | 2452 MHz  | 14.78                 | 15.24   | 18.03 | 30.00            | Complies |

|                      |                                                                              |                  |                               |
|----------------------|------------------------------------------------------------------------------|------------------|-------------------------------|
| <b>Temperature</b>   | 25°C                                                                         | <b>Humidity</b>  | 46%                           |
| <b>Test Engineer</b> | Lucas Huang                                                                  | <b>Test Date</b> | Oct. 29, 2015 ~ Oct. 30, 2015 |
| <b>Test Mode</b>     | Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi*2, (1B)3.93dBi*1 / 3TX) |                  |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.01                 | 20.79   | 20.53   | 25.23 | 30.00            | Complies |
|                      | 2437 MHz  | 20.15                 | 20.76   | 20.33   | 25.19 | 30.00            | Complies |
|                      | 2462 MHz  | 20.06                 | 20.72   | 20.21   | 25.11 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 16.61                 | 17.04   | 16.84   | 21.60 | 30.00            | Complies |
|                      | 2437 MHz  | 20.15                 | 20.72   | 20.49   | 25.23 | 30.00            | Complies |
|                      | 2462 MHz  | 15.92                 | 16.95   | 16.98   | 21.42 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.95                 | 16.98   | 16.87   | 21.70 | 30.00            | Complies |
|                      | 2437 MHz  | 20.43                 | 20.91   | 20.68   | 25.45 | 30.00            | Complies |
|                      | 2462 MHz  | 16.34                 | 16.84   | 16.98   | 21.50 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 15.29                 | 16.25   | 15.86   | 20.59 | 30.00            | Complies |
|                      | 2437 MHz  | 15.85                 | 16.40   | 16.20   | 20.93 | 30.00            | Complies |
|                      | 2452 MHz  | 14.24                 | 14.89   | 14.76   | 19.41 | 30.00            | Complies |

|                      |                                                                                                                         |                  |                               |
|----------------------|-------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------|
| <b>Temperature</b>   | 25°C                                                                                                                    | <b>Humidity</b>  | 46%                           |
| <b>Test Engineer</b> | Lucas Huang                                                                                                             | <b>Test Date</b> | Oct. 29, 2015 ~ Oct. 30, 2015 |
| <b>Test Mode</b>     | Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi*2, (1B)3.93dBi*1 + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |                  |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Chain 4 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.16                 | 20.95   | 20.61   | 20.72   | 26.64 | 30.00            | Complies |
|                      | 2437 MHz  | 20.06                 | 20.52   | 20.48   | 20.75   | 26.48 | 30.00            | Complies |
|                      | 2462 MHz  | 20.14                 | 20.78   | 20.17   | 20.43   | 26.41 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 17.70                 | 18.75   | 18.24   | 18.15   | 24.25 | 30.00            | Complies |
|                      | 2437 MHz  | 20.18                 | 20.85   | 20.64   | 20.96   | 26.69 | 30.00            | Complies |
|                      | 2462 MHz  | 16.84                 | 16.96   | 17.04   | 17.12   | 23.01 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.56                 | 16.63   | 16.64   | 16.13   | 22.52 | 30.00            | Complies |
|                      | 2437 MHz  | 20.33                 | 20.81   | 20.75   | 20.95   | 26.74 | 30.00            | Complies |
|                      | 2462 MHz  | 16.41                 | 16.87   | 16.43   | 16.56   | 22.59 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 13.67                 | 14.50   | 13.78   | 13.65   | 19.94 | 30.00            | Complies |
|                      | 2437 MHz  | 15.62                 | 16.01   | 16.02   | 15.92   | 21.92 | 30.00            | Complies |
|                      | 2452 MHz  | 13.69                 | 14.13   | 14.13   | 14.36   | 20.10 | 30.00            | Complies |

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 3 (Set 6 Panel antenna / 4.03dBi / 1TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|------------------|----------|
|                      |           | Chain 1               |                  |          |
| 802.11b              | 2412 MHz  | 20.96                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.87                 | 30.00            | Complies |
|                      | 2462 MHz  | 20.74                 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 17.37                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.79                 | 30.00            | Complies |
|                      | 2462 MHz  | 18.19                 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 17.42                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.93                 | 30.00            | Complies |
|                      | 2462 MHz  | 18.01                 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 16.36                 | 30.00            | Complies |
|                      | 2437 MHz  | 17.36                 | 30.00            | Complies |
|                      | 2452 MHz  | 15.65                 | 30.00            | Complies |

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 3 (Set 6 Panel antenna / 4.03dBi / 2TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 3 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.66                 | 20.78   | 23.73 | 30.00            | Complies |
|                      | 2437 MHz  | 20.51                 | 20.85   | 23.69 | 30.00            | Complies |
|                      | 2462 MHz  | 20.58                 | 20.89   | 23.75 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 16.48                 | 16.64   | 19.57 | 30.00            | Complies |
|                      | 2437 MHz  | 20.69                 | 20.91   | 23.81 | 30.00            | Complies |
|                      | 2462 MHz  | 17.13                 | 17.68   | 20.42 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.31                 | 16.61   | 19.47 | 30.00            | Complies |
|                      | 2437 MHz  | 20.18                 | 20.74   | 23.48 | 30.00            | Complies |
|                      | 2462 MHz  | 16.01                 | 16.83   | 19.45 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 14.41                 | 14.78   | 17.61 | 30.00            | Complies |
|                      | 2437 MHz  | 16.31                 | 16.73   | 19.54 | 30.00            | Complies |
|                      | 2452 MHz  | 14.74                 | 15.01   | 17.89 | 30.00            | Complies |

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 3 (Set 6 Panel antenna / 4.03dBi / 3TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.01                 | 20.79   | 20.53   | 25.23 | 30.00            | Complies |
|                      | 2437 MHz  | 20.15                 | 20.76   | 20.33   | 25.19 | 30.00            | Complies |
|                      | 2462 MHz  | 20.06                 | 20.72   | 20.21   | 25.11 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 16.31                 | 16.93   | 16.74   | 21.44 | 30.00            | Complies |
|                      | 2437 MHz  | 20.15                 | 20.72   | 20.49   | 25.23 | 30.00            | Complies |
|                      | 2462 MHz  | 15.89                 | 16.37   | 16.23   | 20.94 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.06                 | 16.81   | 16.52   | 21.25 | 30.00            | Complies |
|                      | 2437 MHz  | 20.43                 | 20.91   | 20.68   | 25.45 | 30.00            | Complies |
|                      | 2462 MHz  | 15.93                 | 16.67   | 16.36   | 21.10 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 14.28                 | 14.77   | 14.69   | 19.36 | 30.00            | Complies |
|                      | 2437 MHz  | 14.83                 | 15.13   | 15.26   | 19.85 | 30.00            | Complies |
|                      | 2452 MHz  | 13.54                 | 14.13   | 13.79   | 18.60 | 30.00            | Complies |

|                      |                                                                                         |                  |                               |
|----------------------|-----------------------------------------------------------------------------------------|------------------|-------------------------------|
| <b>Temperature</b>   | 25°C                                                                                    | <b>Humidity</b>  | 46%                           |
| <b>Test Engineer</b> | Lucas Huang                                                                             | <b>Test Date</b> | Oct. 29, 2015 ~ Oct. 30, 2015 |
| <b>Test Mode</b>     | Mode 3 (Set 6 Panel antenna / 4.03dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |                  |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Chain 4 | Total |                  |          |
| 802.11b              | 2412 MHz  | 19.75                 | 19.95   | 19.72   | 20.06   | 25.89 | 30.00            | Complies |
|                      | 2437 MHz  | 20.06                 | 20.52   | 20.48   | 20.75   | 26.48 | 30.00            | Complies |
|                      | 2462 MHz  | 20.14                 | 20.78   | 20.17   | 20.43   | 26.41 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 16.14                 | 16.42   | 16.28   | 16.31   | 22.31 | 30.00            | Complies |
|                      | 2437 MHz  | 20.18                 | 20.85   | 20.64   | 20.96   | 26.69 | 30.00            | Complies |
|                      | 2462 MHz  | 16.01                 | 16.14   | 16.03   | 16.02   | 22.07 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 15.15                 | 15.96   | 15.85   | 15.76   | 21.71 | 30.00            | Complies |
|                      | 2437 MHz  | 20.33                 | 20.81   | 20.75   | 20.95   | 26.74 | 30.00            | Complies |
|                      | 2462 MHz  | 14.59                 | 14.83   | 14.85   | 14.96   | 20.83 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 13.06                 | 13.25   | 13.33   | 13.65   | 19.35 | 30.00            | Complies |
|                      | 2437 MHz  | 14.73                 | 15.03   | 15.13   | 14.83   | 20.95 | 30.00            | Complies |
|                      | 2452 MHz  | 13.31                 | 13.42   | 13.51   | 13.60   | 19.48 | 30.00            | Complies |

|                      |                                                        |                  |                               |
|----------------------|--------------------------------------------------------|------------------|-------------------------------|
| <b>Temperature</b>   | 25°C                                                   | <b>Humidity</b>  | 46%                           |
| <b>Test Engineer</b> | Lucas Huang                                            | <b>Test Date</b> | Oct. 29, 2015 ~ Oct. 31, 2015 |
| <b>Test Mode</b>     | Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi / 1TX) |                  |                               |

| Mode                 | Frequency | Conducted Power (dBm) | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|------------------|----------|
|                      |           | Chain 1               |                  |          |
| 802.11b              | 2412 MHz  | 20.96                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.87                 | 30.00            | Complies |
|                      | 2462 MHz  | 20.74                 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 18.44                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.79                 | 30.00            | Complies |
|                      | 2462 MHz  | 18.71                 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 17.81                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.93                 | 30.00            | Complies |
|                      | 2462 MHz  | 18.24                 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 16.76                 | 30.00            | Complies |
|                      | 2437 MHz  | 17.76                 | 30.00            | Complies |
|                      | 2452 MHz  | 16.53                 | 30.00            | Complies |

|               |                                                        |           |                               |
|---------------|--------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                   | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                            | Test Date | Oct. 29, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi / 2TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.69                 | 20.88   | 23.80 | 30.00            | Complies |
|                      | 2437 MHz  | 20.32                 | 20.75   | 23.55 | 30.00            | Complies |
|                      | 2462 MHz  | 20.29                 | 20.71   | 23.52 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 17.02                 | 17.03   | 20.04 | 30.00            | Complies |
|                      | 2437 MHz  | 20.45                 | 20.89   | 23.69 | 30.00            | Complies |
|                      | 2462 MHz  | 16.89                 | 17.13   | 20.02 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 17.15                 | 17.13   | 20.15 | 30.00            | Complies |
|                      | 2437 MHz  | 20.11                 | 20.72   | 23.44 | 30.00            | Complies |
|                      | 2462 MHz  | 16.83                 | 17.38   | 20.12 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 14.90                 | 15.56   | 18.25 | 30.00            | Complies |
|                      | 2437 MHz  | 16.65                 | 16.23   | 19.46 | 30.00            | Complies |
|                      | 2452 MHz  | 14.73                 | 15.38   | 18.08 | 30.00            | Complies |

|               |                                                        |           |                               |
|---------------|--------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                   | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                            | Test Date | Oct. 29, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi / 3TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.01                 | 20.79   | 20.53   | 25.23 | 30.00            | Complies |
|                      | 2437 MHz  | 20.15                 | 20.76   | 20.33   | 25.19 | 30.00            | Complies |
|                      | 2462 MHz  | 20.06                 | 20.72   | 20.21   | 25.11 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 15.93                 | 16.43   | 16.62   | 21.11 | 30.00            | Complies |
|                      | 2437 MHz  | 20.15                 | 20.72   | 20.49   | 25.23 | 30.00            | Complies |
|                      | 2462 MHz  | 15.92                 | 16.95   | 16.98   | 21.42 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 15.58                 | 16.72   | 16.31   | 21.00 | 30.00            | Complies |
|                      | 2437 MHz  | 20.43                 | 20.91   | 20.68   | 25.45 | 30.00            | Complies |
|                      | 2462 MHz  | 15.61                 | 16.08   | 16.12   | 20.71 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 13.11                 | 13.56   | 13.66   | 18.22 | 30.00            | Complies |
|                      | 2437 MHz  | 15.38                 | 15.77   | 15.26   | 20.25 | 30.00            | Complies |
|                      | 2452 MHz  | 13.96                 | 14.73   | 14.39   | 19.14 | 30.00            | Complies |

|                      |                                                                                                   |                  |                               |
|----------------------|---------------------------------------------------------------------------------------------------|------------------|-------------------------------|
| <b>Temperature</b>   | 25°C                                                                                              | <b>Humidity</b>  | 46%                           |
| <b>Test Engineer</b> | Lucas Huang                                                                                       | <b>Test Date</b> | Oct. 29, 2015 ~ Oct. 31, 2015 |
| <b>Test Mode</b>     | Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |                  |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Chain 4 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.16                 | 20.95   | 20.61   | 20.72   | 26.64 | 30.00            | Complies |
|                      | 2437 MHz  | 20.06                 | 20.52   | 20.48   | 20.75   | 26.48 | 30.00            | Complies |
|                      | 2462 MHz  | 20.14                 | 20.78   | 20.17   | 20.43   | 26.41 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 16.14                 | 16.42   | 16.28   | 16.31   | 22.31 | 30.00            | Complies |
|                      | 2437 MHz  | 20.18                 | 20.85   | 20.64   | 20.96   | 26.69 | 30.00            | Complies |
|                      | 2462 MHz  | 16.42                 | 16.96   | 16.52   | 16.69   | 22.67 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 15.85                 | 16.75   | 16.73   | 16.43   | 22.48 | 30.00            | Complies |
|                      | 2437 MHz  | 20.33                 | 20.81   | 20.75   | 20.95   | 26.74 | 30.00            | Complies |
|                      | 2462 MHz  | 15.89                 | 16.33   | 16.16   | 16.13   | 22.15 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 13.67                 | 14.50   | 13.78   | 13.65   | 19.94 | 30.00            | Complies |
|                      | 2437 MHz  | 15.43                 | 16.19   | 15.72   | 15.80   | 21.81 | 30.00            | Complies |
|                      | 2452 MHz  | 13.72                 | 14.55   | 14.34   | 14.58   | 20.33 | 30.00            | Complies |

|                      |                                              |                  |                               |
|----------------------|----------------------------------------------|------------------|-------------------------------|
| <b>Temperature</b>   | 25°C                                         | <b>Humidity</b>  | 46%                           |
| <b>Test Engineer</b> | Lucas Huang                                  | <b>Test Date</b> | Oct. 29, 2015 ~ Oct. 30, 2015 |
| <b>Test Mode</b>     | Mode 5 (Set 8 Patch antenna / 3.53dBi / 1TX) |                  |                               |

| Mode                 | Frequency | Conducted Power (dBm) | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|------------------|----------|
|                      |           | Chain 1               |                  |          |
| 802.11b              | 2412 MHz  | 20.96                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.87                 | 30.00            | Complies |
|                      | 2462 MHz  | 20.74                 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 18.46                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.79                 | 30.00            | Complies |
|                      | 2462 MHz  | 18.82                 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 17.81                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.93                 | 30.00            | Complies |
|                      | 2462 MHz  | 18.98                 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 16.57                 | 30.00            | Complies |
|                      | 2437 MHz  | 17.76                 | 30.00            | Complies |
|                      | 2452 MHz  | 16.38                 | 30.00            | Complies |

|                      |                                              |                  |                               |
|----------------------|----------------------------------------------|------------------|-------------------------------|
| <b>Temperature</b>   | 25°C                                         | <b>Humidity</b>  | 46%                           |
| <b>Test Engineer</b> | Lucas Huang                                  | <b>Test Date</b> | Oct. 29, 2015 ~ Oct. 30, 2015 |
| <b>Test Mode</b>     | Mode 5 (Set 8 Patch antenna / 3.53dBi / 2TX) |                  |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.69                 | 20.88   | 23.80 | 30.00            | Complies |
|                      | 2437 MHz  | 20.32                 | 20.75   | 23.55 | 30.00            | Complies |
|                      | 2462 MHz  | 20.29                 | 20.71   | 23.52 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 16.81                 | 16.98   | 19.91 | 30.00            | Complies |
|                      | 2437 MHz  | 20.69                 | 20.89   | 23.80 | 30.00            | Complies |
|                      | 2462 MHz  | 17.65                 | 17.98   | 20.83 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 17.32                 | 17.54   | 20.44 | 30.00            | Complies |
|                      | 2437 MHz  | 20.11                 | 20.72   | 23.44 | 30.00            | Complies |
|                      | 2462 MHz  | 17.72                 | 17.98   | 20.86 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 15.87                 | 15.98   | 18.94 | 30.00            | Complies |
|                      | 2437 MHz  | 16.65                 | 16.23   | 19.46 | 30.00            | Complies |
|                      | 2452 MHz  | 15.05                 | 16.81   | 19.03 | 30.00            | Complies |

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 5 (Set 8 Patch antenna / 3.53dBi / 3TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.01                 | 20.79   | 20.53   | 25.23 | 30.00            | Complies |
|                      | 2437 MHz  | 20.15                 | 20.76   | 20.33   | 25.19 | 30.00            | Complies |
|                      | 2462 MHz  | 20.06                 | 20.72   | 20.21   | 25.11 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 16.31                 | 16.93   | 16.74   | 21.44 | 30.00            | Complies |
|                      | 2437 MHz  | 20.15                 | 20.72   | 20.49   | 25.23 | 30.00            | Complies |
|                      | 2462 MHz  | 15.92                 | 16.95   | 16.98   | 21.42 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.95                 | 16.98   | 16.87   | 21.70 | 30.00            | Complies |
|                      | 2437 MHz  | 20.43                 | 20.91   | 20.68   | 25.45 | 30.00            | Complies |
|                      | 2462 MHz  | 17.04                 | 17.54   | 17.53   | 22.15 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 14.89                 | 14.99   | 14.98   | 19.72 | 30.00            | Complies |
|                      | 2437 MHz  | 15.54                 | 15.87   | 15.97   | 20.57 | 30.00            | Complies |
|                      | 2452 MHz  | 14.24                 | 14.89   | 14.76   | 19.41 | 30.00            | Complies |

|               |                                                                                         |           |                               |
|---------------|-----------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                    | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                             | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 5 (Set 8 Patch antenna / 3.53dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Chain 4 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.16                 | 20.95   | 20.61   | 20.72   | 26.64 | 30.00            | Complies |
|                      | 2437 MHz  | 20.06                 | 20.52   | 20.48   | 20.75   | 26.48 | 30.00            | Complies |
|                      | 2462 MHz  | 20.14                 | 20.78   | 20.17   | 20.43   | 26.41 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 16.34                 | 16.76   | 16.77   | 16.76   | 22.68 | 30.00            | Complies |
|                      | 2437 MHz  | 20.18                 | 20.85   | 20.64   | 20.96   | 26.69 | 30.00            | Complies |
|                      | 2462 MHz  | 16.84                 | 16.76   | 16.78   | 16.89   | 22.84 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.65                 | 16.73   | 16.68   | 16.76   | 22.73 | 30.00            | Complies |
|                      | 2437 MHz  | 20.33                 | 20.81   | 20.75   | 20.95   | 26.74 | 30.00            | Complies |
|                      | 2462 MHz  | 16.41                 | 16.87   | 16.43   | 16.56   | 22.59 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 13.79                 | 14.76   | 13.89   | 13.98   | 20.14 | 30.00            | Complies |
|                      | 2437 MHz  | 15.23                 | 15.12   | 14.96   | 15.43   | 21.21 | 30.00            | Complies |
|                      | 2452 MHz  | 14.76                 | 14.21   | 13.81   | 14.87   | 20.45 | 30.00            | Complies |

|                      |                                                        |                  |                               |
|----------------------|--------------------------------------------------------|------------------|-------------------------------|
| <b>Temperature</b>   | 25°C                                                   | <b>Humidity</b>  | 46%                           |
| <b>Test Engineer</b> | Lucas Huang                                            | <b>Test Date</b> | Oct. 29, 2015 ~ Oct. 31, 2015 |
| <b>Test Mode</b>     | Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi / 1TX) |                  |                               |

| Mode                 | Frequency | Conducted Power (dBm) | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|------------------|----------|
|                      |           | Chain 1               |                  |          |
| 802.11b              | 2412 MHz  | 20.96                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.87                 | 30.00            | Complies |
|                      | 2462 MHz  | 20.74                 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 17.74                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.79                 | 30.00            | Complies |
|                      | 2462 MHz  | 18.56                 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 17.42                 | 30.00            | Complies |
|                      | 2437 MHz  | 20.93                 | 30.00            | Complies |
|                      | 2462 MHz  | 18.01                 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 15.87                 | 30.00            | Complies |
|                      | 2437 MHz  | 17.36                 | 30.00            | Complies |
|                      | 2452 MHz  | 16.83                 | 30.00            | Complies |

|                      |                                                                         |                  |                               |
|----------------------|-------------------------------------------------------------------------|------------------|-------------------------------|
| <b>Temperature</b>   | 25°C                                                                    | <b>Humidity</b>  | 46%                           |
| <b>Test Engineer</b> | Lucas Huang                                                             | <b>Test Date</b> | Oct. 29, 2015 ~ Oct. 31, 2015 |
| <b>Test Mode</b>     | Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi, Chain 3: 3.2dBi / 2TX) |                  |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 3 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.66                 | 20.78   | 23.73 | 30.00            | Complies |
|                      | 2437 MHz  | 20.51                 | 20.85   | 23.69 | 30.00            | Complies |
|                      | 2462 MHz  | 20.58                 | 20.89   | 23.75 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 17.74                 | 17.69   | 20.73 | 30.00            | Complies |
|                      | 2437 MHz  | 20.69                 | 20.91   | 23.81 | 30.00            | Complies |
|                      | 2462 MHz  | 17.79                 | 18.02   | 20.92 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.65                 | 16.89   | 19.78 | 30.00            | Complies |
|                      | 2437 MHz  | 20.18                 | 20.74   | 23.48 | 30.00            | Complies |
|                      | 2462 MHz  | 16.91                 | 17.65   | 20.31 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 14.93                 | 15.57   | 18.27 | 30.00            | Complies |
|                      | 2437 MHz  | 16.31                 | 16.73   | 19.54 | 30.00            | Complies |
|                      | 2452 MHz  | 15.61                 | 15.66   | 18.65 | 30.00            | Complies |

|                      |                                                                                           |                  |                               |
|----------------------|-------------------------------------------------------------------------------------------|------------------|-------------------------------|
| <b>Temperature</b>   | 25°C                                                                                      | <b>Humidity</b>  | 46%                           |
| <b>Test Engineer</b> | Lucas Huang                                                                               | <b>Test Date</b> | Oct. 29, 2015 ~ Oct. 31, 2015 |
| <b>Test Mode</b>     | Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi, Chain 2: 3.7dBi , Chain 3: 3.2dBi / 3TX) |                  |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.01                 | 20.79   | 20.53   | 25.23 | 30.00            | Complies |
|                      | 2437 MHz  | 20.15                 | 20.76   | 20.33   | 25.19 | 30.00            | Complies |
|                      | 2462 MHz  | 20.06                 | 20.72   | 20.21   | 25.11 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 17.15                 | 18.20   | 17.95   | 22.56 | 30.00            | Complies |
|                      | 2437 MHz  | 20.15                 | 20.72   | 20.49   | 25.23 | 30.00            | Complies |
|                      | 2462 MHz  | 15.92                 | 16.95   | 16.98   | 21.42 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.53                 | 16.78   | 16.67   | 21.43 | 30.00            | Complies |
|                      | 2437 MHz  | 20.43                 | 20.91   | 20.68   | 25.45 | 30.00            | Complies |
|                      | 2462 MHz  | 17.01                 | 17.36   | 17.13   | 21.94 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 15.03                 | 15.73   | 15.62   | 20.24 | 30.00            | Complies |
|                      | 2437 MHz  | 15.77                 | 16.35   | 15.98   | 20.81 | 30.00            | Complies |
|                      | 2452 MHz  | 13.64                 | 14.31   | 14.28   | 18.86 | 30.00            | Complies |

|                      |                                                                                                            |                  |                               |
|----------------------|------------------------------------------------------------------------------------------------------------|------------------|-------------------------------|
| <b>Temperature</b>   | 25°C                                                                                                       | <b>Humidity</b>  | 46%                           |
| <b>Test Engineer</b> | Lucas Huang                                                                                                | <b>Test Date</b> | Oct. 29, 2015 ~ Oct. 31, 2015 |
| <b>Test Mode</b>     | Mode 6 (Set 9 Monopole antenna / Chain 1: 5.2dBi, Chain 2: 3.7dBi, Chain 3: 3.2dBi, Chain 4: 4.5dBi / 4TX) |                  |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Chain 4 | Total |                  |          |
| 802.11b              | 2412 MHz  | 20.16                 | 20.95   | 20.61   | 20.72   | 26.64 | 30.00            | Complies |
|                      | 2437 MHz  | 20.06                 | 20.52   | 20.48   | 20.75   | 26.48 | 30.00            | Complies |
|                      | 2462 MHz  | 20.14                 | 20.78   | 20.17   | 20.43   | 26.41 | 30.00            | Complies |
| 802.11g              | 2412 MHz  | 16.51                 | 17.71   | 17.17   | 16.96   | 23.13 | 30.00            | Complies |
|                      | 2437 MHz  | 20.18                 | 20.85   | 20.64   | 20.96   | 26.69 | 30.00            | Complies |
|                      | 2462 MHz  | 16.31                 | 16.73   | 16.55   | 16.71   | 22.60 | 30.00            | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.79                 | 16.43   | 16.23   | 16.34   | 22.47 | 30.00            | Complies |
|                      | 2437 MHz  | 20.33                 | 20.81   | 20.75   | 20.95   | 26.74 | 30.00            | Complies |
|                      | 2462 MHz  | 15.89                 | 16.33   | 16.16   | 16.13   | 22.15 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 13.98                 | 14.99   | 14.01   | 14.13   | 20.32 | 30.00            | Complies |
|                      | 2437 MHz  | 15.43                 | 16.19   | 15.72   | 15.80   | 21.81 | 30.00            | Complies |
|                      | 2452 MHz  | 13.56                 | 14.06   | 13.95   | 13.73   | 19.85 | 30.00            | Complies |

### For Beamforming Mode

|               |                                               |           |                               |
|---------------|-----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                          | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                   | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 1 (Set 3 Dipole antenna / 3.83dBi / 2TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 17.01                 | 17.32   | 20.18 | 29.16            | Complies |
|                      | 2437 MHz  | 20.11                 | 20.72   | 23.44 | 29.16            | Complies |
|                      | 2462 MHz  | 15.98                 | 16.54   | 19.28 | 29.16            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 15.83                 | 15.79   | 18.82 | 29.16            | Complies |
|                      | 2437 MHz  | 16.02                 | 16.62   | 19.34 | 29.16            | Complies |
|                      | 2452 MHz  | 13.92                 | 14.84   | 17.41 | 29.16            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 6.84\text{dBi} > 6\text{dBi}$ , So Limit = 30-(6.84-6)=29.16dBm.

|               |                                               |           |                               |
|---------------|-----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                          | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                   | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 1 (Set 3 Dipole antenna / 3.83dBi / 3TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.06                 | 16.81   | 16.52   | 21.25 | 27.40            | Complies |
|                      | 2437 MHz  | 20.43                 | 20.91   | 20.68   | 25.45 | 27.40            | Complies |
|                      | 2462 MHz  | 15.49                 | 15.97   | 16.08   | 20.63 | 27.40            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 15.03                 | 15.73   | 15.62   | 20.24 | 27.40            | Complies |
|                      | 2437 MHz  | 14.39                 | 14.92   | 14.89   | 19.51 | 27.40            | Complies |
|                      | 2452 MHz  | 14.02                 | 14.32   | 14.28   | 18.98 | 27.40            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.60\text{dBi} > 6\text{dBi}$ , So Limit = 30-(8.60-6)=27.40dBm.

|               |                                                                                          |           |                               |
|---------------|------------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                     | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                              | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 1 (Set 3 Dipole antenna / 3.83dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Chain 4 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 15.15                 | 15.96   | 15.85   | 15.76   | 21.71 | 25.98            | Complies |
|                      | 2437 MHz  | 19.33                 | 19.82   | 19.72   | 19.87   | 25.71 | 25.98            | Complies |
|                      | 2462 MHz  | 15.87                 | 16.26   | 15.99   | 16.29   | 22.13 | 25.98            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 15.05                 | 15.37   | 15.42   | 15.06   | 21.25 | 25.98            | Complies |
|                      | 2437 MHz  | 15.21                 | 15.43   | 15.47   | 15.32   | 21.38 | 25.98            | Complies |
|                      | 2452 MHz  | 14.01                 | 14.08   | 14.19   | 14.01   | 20.09 | 25.98            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 10.02\text{dBi} > 6\text{dBi}$ , So Limit = 30-(10.2-6)=25.98dBm.

|               |                                                                               |           |                               |
|---------------|-------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                          | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                   | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi*1, (1B)3.93dBi *1 / 2TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 17.71                 | 17.64   | 20.69 | 30.00            | Complies |
|                      | 2437 MHz  | 20.11                 | 20.62   | 23.38 | 30.00            | Complies |
|                      | 2462 MHz  | 16.58                 | 16.85   | 19.73 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 15.83                 | 15.76   | 18.81 | 30.00            | Complies |
|                      | 2437 MHz  | 15.92                 | 16.23   | 19.09 | 30.00            | Complies |
|                      | 2452 MHz  | 14.51                 | 14.87   | 17.70 | 30.00            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 3.93\text{dBi} < 6\text{dBi}$ , so the limit doesn't reduce.

|               |                                                                              |           |                               |
|---------------|------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                  | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi*2, (1B)3.93dBi*1 / 3TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.95                 | 16.98   | 16.87   | 21.70 | 30.00            | Complies |
|                      | 2437 MHz  | 20.43                 | 20.91   | 20.68   | 25.45 | 30.00            | Complies |
|                      | 2462 MHz  | 16.34                 | 16.84   | 16.98   | 21.50 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 15.29                 | 16.25   | 15.86   | 20.59 | 30.00            | Complies |
|                      | 2437 MHz  | 15.54                 | 15.87   | 15.97   | 20.57 | 30.00            | Complies |
|                      | 2452 MHz  | 13.51                 | 14.06   | 14.01   | 18.64 | 30.00            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 5.34\text{dBi} < 6\text{dBi}$ , so the limit doesn't reduce.

|               |                                                                                                                         |           |                               |
|---------------|-------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                                                    | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                                                             | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi*2, (1B)3.93dBi*1 + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Chain 4 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.69                 | 16.33   | 16.13   | 16.24   | 22.37 | 28.43            | Complies |
|                      | 2437 MHz  | 20.33                 | 20.81   | 20.75   | 20.95   | 26.74 | 28.43            | Complies |
|                      | 2462 MHz  | 15.89                 | 16.33   | 16.16   | 16.13   | 22.15 | 28.43            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 13.67                 | 14.5    | 13.78   | 13.65   | 19.94 | 28.43            | Complies |
|                      | 2437 MHz  | 15.23                 | 15.12   | 14.96   | 15.43   | 21.21 | 28.43            | Complies |
|                      | 2452 MHz  | 13.39                 | 13.87   | 13.84   | 14.36   | 19.90 | 28.43            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 7.57\text{dBi} > 6\text{dBi}$ , So Limit = 30-(7.57-6)=28.43dBm.

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 3 (Set 6 Panel antenna / 4.03dBi / 2TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 15.63                 | 15.84   | 18.75 | 28.96            | Complies |
|                      | 2437 MHz  | 20.11                 | 20.72   | 23.44 | 28.96            | Complies |
|                      | 2462 MHz  | 15.69                 | 16.24   | 18.98 | 28.96            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 13.91                 | 14.52   | 17.24 | 28.96            | Complies |
|                      | 2437 MHz  | 15.32                 | 15.06   | 18.20 | 28.96            | Complies |
|                      | 2452 MHz  | 14.54                 | 15.09   | 17.83 | 28.96            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 7.04\text{dBi} > 6\text{dBi}$ , So Limit = 30-(7.04-6)=28.96dBm.

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 3 (Set 6 Panel antenna / 4.03dBi / 3TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 14.23                 | 15.13   | 14.69   | 19.47 | 27.20            | Complies |
|                      | 2437 MHz  | 20.43                 | 20.91   | 20.68   | 25.45 | 27.20            | Complies |
|                      | 2462 MHz  | 15.42                 | 16.13   | 15.84   | 20.58 | 27.20            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 12.07                 | 12.51   | 12.39   | 17.10 | 27.20            | Complies |
|                      | 2437 MHz  | 14.14                 | 14.41   | 14.54   | 19.14 | 27.20            | Complies |
|                      | 2452 MHz  | 13.54                 | 14.13   | 13.79   | 18.60 | 27.20            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.80\text{dBi} > 6\text{dBi}$ , So Limit = 30-(8.80-6)=27.20dBm.

|               |                                                                                         |           |                               |
|---------------|-----------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                    | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                             | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 3 (Set 6 Panel antenna / 4.03dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Chain 4 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 14.63                 | 15.43   | 15.37   | 15.21   | 21.19 | 25.83            | Complies |
|                      | 2437 MHz  | 19.33                 | 19.82   | 19.72   | 19.87   | 25.71 | 25.83            | Complies |
|                      | 2462 MHz  | 15.09                 | 15.34   | 15.38   | 15.47   | 21.34 | 25.83            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 13.06                 | 13.25   | 13.33   | 13.65   | 19.35 | 25.83            | Complies |
|                      | 2437 MHz  | 14.73                 | 15.03   | 15.13   | 14.83   | 20.95 | 25.83            | Complies |
|                      | 2452 MHz  | 14.01                 | 14.08   | 14.19   | 14.01   | 20.09 | 25.83            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 10.17\text{dBi} > 6\text{dBi}$ , So Limit = 30-(10.17-6)=25.83dBm.

|               |                                                        |           |                               |
|---------------|--------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                   | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                            | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi / 2TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.72                 | 17.11   | 19.93 | 30.00            | Complies |
|                      | 2437 MHz  | 20.31                 | 20.92   | 23.64 | 30.00            | Complies |
|                      | 2462 MHz  | 16.59                 | 16.93   | 19.77 | 30.00            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 16.33                 | 16.25   | 19.30 | 30.00            | Complies |
|                      | 2437 MHz  | 16.83                 | 17.42   | 20.15 | 30.00            | Complies |
|                      | 2452 MHz  | 14.51                 | 14.87   | 17.70 | 30.00            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 5.45\text{dBi} < 6\text{dBi}$ , so the limit doesn't reduce.

|               |                                                        |           |                               |
|---------------|--------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                   | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                            | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi / 3TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 15.58                 | 16.72   | 16.31   | 21.00 | 28.79            | Complies |
|                      | 2437 MHz  | 20.43                 | 20.91   | 20.68   | 25.45 | 28.79            | Complies |
|                      | 2462 MHz  | 15.61                 | 16.08   | 16.12   | 20.71 | 28.79            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 15.22                 | 15.73   | 15.92   | 20.40 | 28.79            | Complies |
|                      | 2437 MHz  | 15.83                 | 16.42   | 16.39   | 20.99 | 28.79            | Complies |
|                      | 2452 MHz  | 14.02                 | 14.32   | 14.28   | 18.98 | 28.79            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 7.21 \text{ dBi} > 6 \text{ dBi}$ , So Limit = 30-(7.21-6)=28.79dBm.

|               |                                                                                                   |           |                               |
|---------------|---------------------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                              | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                                       | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Chain 4 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 15.32                 | 15.68   | 15.62   | 15.35   | 21.52 | 26.66            | Complies |
|                      | 2437 MHz  | 20.12                 | 20.47   | 20.43   | 20.71   | 26.46 | 26.66            | Complies |
|                      | 2462 MHz  | 15.89                 | 16.33   | 16.16   | 16.13   | 22.15 | 26.66            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 13.67                 | 14.50   | 13.78   | 13.65   | 19.94 | 26.66            | Complies |
|                      | 2437 MHz  | 15.43                 | 16.19   | 15.72   | 15.80   | 21.81 | 26.66            | Complies |
|                      | 2452 MHz  | 13.72                 | 14.55   | 14.34   | 14.58   | 20.33 | 26.66            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 9.34\text{dBi} > 6\text{dBi}$ , So Limit = 30-(9.34-6)=26.66dBm.

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 5 (Set 8 Patch antenna / 3.53dBi / 2TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 17.32                 | 17.54   | 20.44 | 29.46            | Complies |
|                      | 2437 MHz  | 20.11                 | 20.72   | 23.44 | 29.46            | Complies |
|                      | 2462 MHz  | 17.24                 | 17.96   | 20.63 | 29.46            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 15.67                 | 15.74   | 18.72 | 29.46            | Complies |
|                      | 2437 MHz  | 16.65                 | 16.23   | 19.46 | 29.46            | Complies |
|                      | 2452 MHz  | 14.76                 | 15.59   | 18.21 | 29.46            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 6.54\text{dBi} > 6\text{dBi}$ , So Limit = 30-(6.54-6)=29.46dBm.

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 5 (Set 8 Patch antenna / 3.53dBi / 3TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.53                 | 16.78   | 16.67   | 21.43 | 27.70            | Complies |
|                      | 2437 MHz  | 20.43                 | 20.91   | 20.68   | 25.45 | 27.70            | Complies |
|                      | 2462 MHz  | 16.21                 | 16.47   | 16.53   | 21.18 | 27.70            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 14.89                 | 14.99   | 14.98   | 19.72 | 27.70            | Complies |
|                      | 2437 MHz  | 15.54                 | 15.87   | 15.97   | 20.57 | 27.70            | Complies |
|                      | 2452 MHz  | 14.24                 | 14.89   | 14.76   | 19.41 | 27.70            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.30\text{dBi} > 6\text{dBi}$ , So Limit = 30-(8.30-6)=27.70dBm.

|               |                                                                                         |           |                               |
|---------------|-----------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                    | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                             | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 5 (Set 8 Patch antenna / 3.53dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Chain 4 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.79                 | 16.43   | 16.23   | 16.34   | 22.47 | 26.20            | Complies |
|                      | 2437 MHz  | 19.58                 | 20.12   | 19.91   | 19.84   | 25.89 | 26.20            | Complies |
|                      | 2462 MHz  | 15.88                 | 16.23   | 15.82   | 16.01   | 22.01 | 26.20            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 13.79                 | 14.76   | 13.89   | 13.98   | 20.14 | 26.20            | Complies |
|                      | 2437 MHz  | 15.23                 | 15.12   | 14.96   | 15.43   | 21.21 | 26.20            | Complies |
|                      | 2452 MHz  | 14.76                 | 14.21   | 13.81   | 14.87   | 20.45 | 26.20            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 9.80\text{dBi} > 6\text{dBi}$ , So Limit = 30-(9.80-6)=26.20dBm.

|               |                                                                         |           |                               |
|---------------|-------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                    | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                             | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi, Chain 2: 3.7dBi / 2TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.72                 | 17.11   | 19.93 | 28.51            | Complies |
|                      | 2437 MHz  | 20.11                 | 20.72   | 23.44 | 28.51            | Complies |
|                      | 2462 MHz  | 17.24                 | 17.96   | 20.63 | 28.51            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 15.49                 | 15.47   | 18.49 | 28.51            | Complies |
|                      | 2437 MHz  | 16.02                 | 16.62   | 19.34 | 28.51            | Complies |
|                      | 2452 MHz  | 15.14                 | 15.59   | 18.38 | 28.51            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 7.49\text{dBi} > 6\text{dBi}$ , So Limit = 30-(7.49-6)=28.51 dBm.

|               |                                                                                           |           |                               |
|---------------|-------------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                      | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                               | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi, Chain 2: 3.7dBi , Chain 3: 3.2dBi / 3TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.06                 | 16.51   | 16.22   | 21.04 | 27.15            | Complies |
|                      | 2437 MHz  | 20.43                 | 20.91   | 20.68   | 25.45 | 27.15            | Complies |
|                      | 2462 MHz  | 16.21                 | 16.47   | 16.53   | 21.18 | 27.15            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 14.21                 | 14.43   | 14.51   | 19.16 | 27.15            | Complies |
|                      | 2437 MHz  | 15.21                 | 15.53   | 15.64   | 20.24 | 27.15            | Complies |
|                      | 2452 MHz  | 13.01                 | 13.54   | 13.52   | 18.13 | 27.15            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.85\text{dBi} > 6\text{dBi}$ , So Limit = 30-(8.85-6)=27.15dBm.

|               |                                                                                                            |           |                               |
|---------------|------------------------------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                                       | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                                                | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 6 (Set 9 Monopole antenna / Chain 1: 5.2dBi, Chain 2: 3.7dBi, Chain 3: 3.2dBi, Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Conducted Power (dBm) |         |         |         |       | Max. Limit (dBm) | Result   |
|----------------------|-----------|-----------------------|---------|---------|---------|-------|------------------|----------|
|                      |           | Chain 1               | Chain 2 | Chain 3 | Chain 4 | Total |                  |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | 16.79                 | 16.43   | 16.23   | 16.34   | 22.47 | 25.80            | Complies |
|                      | 2437 MHz  | 19.33                 | 19.82   | 19.72   | 19.87   | 25.71 | 25.80            | Complies |
|                      | 2462 MHz  | 15.31                 | 15.83   | 15.64   | 15.69   | 21.64 | 25.80            | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | 13.48                 | 13.66   | 13.76   | 14.02   | 19.76 | 25.80            | Complies |
|                      | 2437 MHz  | 15.43                 | 16.19   | 15.72   | 15.8    | 21.81 | 25.80            | Complies |
|                      | 2452 MHz  | 13.31                 | 13.42   | 13.51   | 13.6    | 19.48 | 25.80            | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 10.20\text{dBi} > 6\text{dBi}$ , So Limit =  $30 - (10.20 - 6) = 25.80\text{dBm}$ .

### 4.3. Power Spectral Density Measurement

#### 4.3.1. Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

#### 4.3.2. Measuring Instruments and Setting

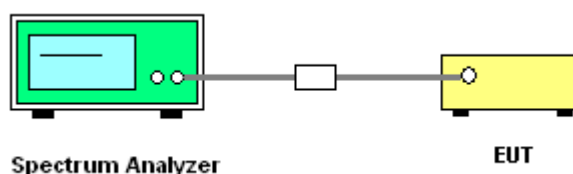
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

| Spectrum Parameter | Setting                                              |
|--------------------|------------------------------------------------------|
| Attenuation        | Auto                                                 |
| Span Frequency     | Set the span to 1.5 times the DTS channel bandwidth. |
| RBW                | $3 \text{ kHz} \leq \text{RBW} \leq 100\text{kHz}$   |
| VBW                | $\geq 3 \times \text{RBW}$                           |
| Detector           | Peak                                                 |
| Trace              | Max Hold                                             |
| Sweep Time         | Auto couple                                          |

#### 4.3.3. Test Procedures

1. Test was performed in accordance with KDB558074 D01 v03r03 for Performing Compliance Measurements on Digital Transmission Systems (DTS) - section 10.2 Method PKPSD (peak PSD) and KDB 662911 D01 v02r01 section In-Band Power Spectral Density (PSD) Measurements option (b) Measure and sum spectral maximal across the outputs.
2. Use this procedure when the maximum conducted output power in the fundamental emission is used to demonstrate compliance. The EUT must be configured to transmit continuously at full power over the measurement duration.
3. Ensure that the number of measurement points in the sweep  $\geq 2 \times \text{span/RBW}$  (use of a greater number of measurement points than this minimum requirement is recommended).
4. Use the peak marker function to determine the maximum level in any 3 kHz band segment within the fundamental EBW.
5. The resulting PSD level must be  $\leq 8 \text{ dBm}$ .

#### 4.3.4. Test Setup Layout



#### **4.3.5. Test Deviation**

There is no deviation with the original standard.

#### **4.3.6. EUT Operation during Test**

The EUT was programmed to be in continuously transmitting mode.

#### 4.3.7. Test Result of Power Spectral Density

##### For Non-Beamforming Mode

|               |                                               |           |                               |
|---------------|-----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                          | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                   | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 1 (Set 3 Dipole antenna / 3.83dBi / 1TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|--------------------------------|----------|
|                      |           | Chain 1                  |                                |          |
| 802.11b              | 2412 MHz  | -3.42                    | 8.00                           | Complies |
|                      | 2437 MHz  | -4.63                    | 8.00                           | Complies |
|                      | 2462 MHz  | -3.54                    | 8.00                           | Complies |
| 802.11g              | 2412 MHz  | -6.23                    | 8.00                           | Complies |
|                      | 2437 MHz  | -5.07                    | 8.00                           | Complies |
|                      | 2462 MHz  | -8.90                    | 8.00                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -7.61                    | 8.00                           | Complies |
|                      | 2437 MHz  | -6.50                    | 8.00                           | Complies |
|                      | 2462 MHz  | -8.26                    | 8.00                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -11.16                   | 8.00                           | Complies |
|                      | 2437 MHz  | -12.86                   | 8.00                           | Complies |
|                      | 2452 MHz  | -15.19                   | 8.00                           | Complies |

|               |                                               |           |                               |
|---------------|-----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                          | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                   | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 1 (Set 3 Dipole antenna / 3.83dBi / 2TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Total  |                                |          |
| 802.11b              | 2412 MHz  | -3.23                    | -2.95   | -0.08  | 7.16                           | Complies |
|                      | 2437 MHz  | -4.80                    | -2.23   | -0.32  | 7.16                           | Complies |
|                      | 2462 MHz  | -4.09                    | -4.22   | -1.14  | 7.16                           | Complies |
| 802.11g              | 2412 MHz  | -8.28                    | -9.08   | -5.65  | 7.16                           | Complies |
|                      | 2437 MHz  | -6.35                    | -6.78   | -3.55  | 7.16                           | Complies |
|                      | 2462 MHz  | -10.39                   | -9.50   | -6.91  | 7.16                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -9.06                    | -8.94   | -5.99  | 7.16                           | Complies |
|                      | 2437 MHz  | -7.23                    | -6.86   | -4.03  | 7.16                           | Complies |
|                      | 2462 MHz  | -11.66                   | -10.88  | -8.24  | 7.16                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -14.44                   | -13.98  | -11.19 | 7.16                           | Complies |
|                      | 2437 MHz  | -13.83                   | -13.97  | -10.89 | 7.16                           | Complies |
|                      | 2452 MHz  | -15.51                   | -17.22  | -13.27 | 7.16                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 6.84\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (6.84 - 6) = 7.16\text{dBm/3kHz}$ .

|               |                                               |           |                               |
|---------------|-----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                          | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                   | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 1 (Set 3 Dipole antenna / 3.83dBi / 3TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Total  |                                |          |
| 802.11b              | 2412 MHz  | -3.73                    | -2.94   | -3.50   | 1.39   | 5.40                           | Complies |
|                      | 2437 MHz  | -4.66                    | -4.68   | -4.99   | 0.00   | 5.40                           | Complies |
|                      | 2462 MHz  | -4.63                    | -3.58   | -1.44   | 1.76   | 5.40                           | Complies |
| 802.11g              | 2412 MHz  | -10.99                   | -7.79   | -9.35   | -4.41  | 5.40                           | Complies |
|                      | 2437 MHz  | -7.45                    | -6.89   | -6.39   | -2.12  | 5.40                           | Complies |
|                      | 2462 MHz  | -12.02                   | -11.26  | -10.35  | -6.38  | 5.40                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.86                   | -9.65   | -10.14  | -5.42  | 5.40                           | Complies |
|                      | 2437 MHz  | -5.18                    | -6.58   | -6.65   | -1.31  | 5.40                           | Complies |
|                      | 2462 MHz  | -11.21                   | -10.40  | -11.57  | -6.26  | 5.40                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -12.68                   | -15.01  | -15.85  | -9.53  | 5.40                           | Complies |
|                      | 2437 MHz  | -14.98                   | -14.95  | -14.83  | -10.15 | 5.40                           | Complies |
|                      | 2452 MHz  | -17.33                   | -16.14  | -15.36  | -11.43 | 5.40                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.60\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (8.60 - 6) = 5.40\text{dBm/3kHz}$ .

|               |                                                                                          |           |                               |
|---------------|------------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                     | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                              | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 1 (Set 3 Dipole antenna / 3.83dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Chain 4 | Total  |                                |          |
| 802.11b              | 2412 MHz  | -4.25                    | -5.44   | -4.27   | -3.91   | 1.59   | 3.98                           | Complies |
|                      | 2437 MHz  | -4.95                    | -4.78   | -4.90   | -4.59   | 1.22   | 3.98                           | Complies |
|                      | 2462 MHz  | -5.27                    | -5.49   | -6.03   | -4.88   | 0.62   | 3.98                           | Complies |
| 802.11g              | 2412 MHz  | -11.12                   | -10.38  | -10.92  | -1.64   | -0.29  | 3.98                           | Complies |
|                      | 2437 MHz  | -7.93                    | -4.59   | -5.85   | -6.34   | 0.00   | 3.98                           | Complies |
|                      | 2462 MHz  | -13.08                   | -11.12  | -10.59  | -10.57  | -5.21  | 3.98                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -11.92                   | -11.07  | -9.96   | -11.37  | -5.00  | 3.98                           | Complies |
|                      | 2437 MHz  | -6.85                    | -6.83   | -7.49   | -6.84   | -0.97  | 3.98                           | Complies |
|                      | 2462 MHz  | -12.10                   | -9.29   | -9.26   | -11.13  | -4.26  | 3.98                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -15.74                   | -16.37  | -16.05  | -14.95  | -9.72  | 3.98                           | Complies |
|                      | 2437 MHz  | -17.23                   | -14.22  | -14.66  | -14.64  | -9.02  | 3.98                           | Complies |
|                      | 2452 MHz  | -17.94                   | -17.00  | -15.47  | -16.86  | -10.71 | 3.98                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 10.02\text{dBi} > 6\text{dBi}$ , So Limit = 8-(10.02-6)=3.98dBm/3kHz.

|               |                                                                |           |                               |
|---------------|----------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                           | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                    | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi *1 / 1TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|--------------------------------|----------|
|                      |           | Chain 1                  |                                |          |
| 802.11b              | 2412 MHz  | -3.42                    | 8.00                           | Complies |
|                      | 2437 MHz  | -4.63                    | 8.00                           | Complies |
|                      | 2462 MHz  | -3.54                    | 8.00                           | Complies |
| 802.11g              | 2412 MHz  | -4.64                    | 8.00                           | Complies |
|                      | 2437 MHz  | -5.07                    | 8.00                           | Complies |
|                      | 2462 MHz  | -4.92                    | 8.00                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -7.61                    | 8.00                           | Complies |
|                      | 2437 MHz  | -6.50                    | 8.00                           | Complies |
|                      | 2462 MHz  | -7.08                    | 8.00                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -11.16                   | 8.00                           | Complies |
|                      | 2437 MHz  | -12.86                   | 8.00                           | Complies |
|                      | 2452 MHz  | -13.67                   | 8.00                           | Complies |

|               |                                                               |           |                               |
|---------------|---------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                          | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                   | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi*2 / 2TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 3 | Total  |                                |          |
| 802.11b              | 2412 MHz  | -1.89                    | -1.64   | 1.25   | 8.00                           | Complies |
|                      | 2437 MHz  | -2.26                    | -1.65   | 1.07   | 8.00                           | Complies |
|                      | 2462 MHz  | -2.31                    | -1.36   | 1.20   | 8.00                           | Complies |
| 802.11g              | 2412 MHz  | -8.53                    | -7.49   | -4.97  | 8.00                           | Complies |
|                      | 2437 MHz  | -4.08                    | -4.81   | -1.42  | 8.00                           | Complies |
|                      | 2462 MHz  | -8.24                    | -8.32   | -5.27  | 8.00                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -9.01                    | -6.81   | -4.76  | 8.00                           | Complies |
|                      | 2437 MHz  | -5.17                    | -4.53   | -1.83  | 8.00                           | Complies |
|                      | 2462 MHz  | -10.09                   | -9.59   | -6.82  | 8.00                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -15.71                   | -13.70  | -11.58 | 8.00                           | Complies |
|                      | 2437 MHz  | -13.35                   | -14.85  | -11.03 | 8.00                           | Complies |
|                      | 2452 MHz  | -16.25                   | -15.00  | -12.57 | 8.00                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 3.93\text{dBi} < 6\text{dBi}$ , so the limit doesn't reduce.

|               |                                                                              |           |                               |
|---------------|------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                  | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi*2, (1B)3.93dBi*1 / 3TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Total  |                                |          |
| 802.11b              | 2412 MHz  | -3.73                    | -2.94   | -3.50   | 1.39   | 8.00                           | Complies |
|                      | 2437 MHz  | -4.66                    | -4.68   | -4.99   | 0.00   | 8.00                           | Complies |
|                      | 2462 MHz  | -4.63                    | -3.58   | -1.44   | 1.76   | 8.00                           | Complies |
| 802.11g              | 2412 MHz  | -8.92                    | -6.40   | -8.40   | -2.99  | 8.00                           | Complies |
|                      | 2437 MHz  | -7.45                    | -6.89   | -6.39   | -2.12  | 8.00                           | Complies |
|                      | 2462 MHz  | -7.84                    | -5.56   | -6.26   | -1.68  | 8.00                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -8.16                    | -6.79   | -7.32   | -2.62  | 8.00                           | Complies |
|                      | 2437 MHz  | -5.18                    | -6.58   | -6.65   | -1.31  | 8.00                           | Complies |
|                      | 2462 MHz  | -9.85                    | -9.26   | -7.77   | -4.10  | 8.00                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -12.68                   | -15.01  | -15.85  | -9.53  | 8.00                           | Complies |
|                      | 2437 MHz  | -14.98                   | -14.95  | -14.83  | -10.15 | 8.00                           | Complies |
|                      | 2452 MHz  | -13.47                   | -13.70  | -14.36  | -9.06  | 8.00                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 5.34\text{dBi} < 6\text{dBi}$ , so the limit doesn't reduce.

|               |                                                                                                                         |           |                               |
|---------------|-------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                                                    | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                                                             | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi*2, (1B)3.93dBi*1 + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |         |       | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|---------|-------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Chain 4 | Total |                                |          |
| 802.11b              | 2412 MHz  | -4.25                    | -5.44   | -4.27   | -3.91   | 1.59  | 6.43                           | Complies |
|                      | 2437 MHz  | -4.95                    | -4.78   | -4.90   | -4.59   | 1.22  | 6.43                           | Complies |
|                      | 2462 MHz  | -2.79                    | -2.74   | -2.19   | -2.11   | 3.57  | 6.43                           | Complies |
| 802.11g              | 2412 MHz  | -8.87                    | -9.46   | -7.88   | -8.22   | -2.54 | 6.43                           | Complies |
|                      | 2437 MHz  | -7.93                    | -4.59   | -5.85   | -6.34   | 0.00  | 6.43                           | Complies |
|                      | 2462 MHz  | -10.30                   | -7.33   | -9.47   | -9.24   | -2.92 | 6.43                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.57                   | -8.88   | -9.54   | -9.00   | -3.43 | 6.43                           | Complies |
|                      | 2437 MHz  | -6.85                    | -6.83   | -7.49   | -6.84   | -0.97 | 6.43                           | Complies |
|                      | 2462 MHz  | -7.87                    | -6.53   | -6.91   | -7.91   | -1.24 | 6.43                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -17.21                   | -14.46  | -15.89  | -13.75  | -9.11 | 6.43                           | Complies |
|                      | 2437 MHz  | -14.93                   | -14.85  | -13.72  | -14.27  | -8.39 | 6.43                           | Complies |
|                      | 2452 MHz  | -16.65                   | -16.28  | -16.03  | -15.20  | -9.99 | 6.43                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 7.57\text{dBi} > 6\text{dBi}$ , So Limit = 8-(7.57-6)=6.43dBm/3kHz.

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 3 (Set 6 Panel antenna / 4.03dBi / 1TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|--------------------------------|----------|
|                      |           | Chain 1                  |                                |          |
| 802.11b              | 2412 MHz  | -3.42                    | 8.00                           | Complies |
|                      | 2437 MHz  | -4.63                    | 8.00                           | Complies |
|                      | 2462 MHz  | -3.54                    | 8.00                           | Complies |
| 802.11g              | 2412 MHz  | -6.96                    | 8.00                           | Complies |
|                      | 2437 MHz  | -5.07                    | 8.00                           | Complies |
|                      | 2462 MHz  | -7.60                    | 8.00                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -7.70                    | 8.00                           | Complies |
|                      | 2437 MHz  | -6.50                    | 8.00                           | Complies |
|                      | 2462 MHz  | -6.95                    | 8.00                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -12.51                   | 8.00                           | Complies |
|                      | 2437 MHz  | -12.86                   | 8.00                           | Complies |
|                      | 2452 MHz  | -14.21                   | 8.00                           | Complies |

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 3 (Set 6 Panel antenna / 4.03dBi / 2TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 3 | Total  |                                |          |
| 802.11b              | 2412 MHz  | -1.89                    | -1.64   | 1.25   | 6.96                           | Complies |
|                      | 2437 MHz  | -2.26                    | -1.65   | 1.07   | 6.96                           | Complies |
|                      | 2462 MHz  | -2.31                    | -1.36   | 1.20   | 6.96                           | Complies |
| 802.11g              | 2412 MHz  | -8.46                    | -8.67   | -5.55  | 6.96                           | Complies |
|                      | 2437 MHz  | -4.08                    | -4.81   | -1.42  | 6.96                           | Complies |
|                      | 2462 MHz  | -8.02                    | -7.06   | -4.50  | 6.96                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -8.59                    | -8.45   | -5.51  | 6.96                           | Complies |
|                      | 2437 MHz  | -5.17                    | -4.53   | -1.83  | 6.96                           | Complies |
|                      | 2462 MHz  | -9.81                    | -7.64   | -5.58  | 6.96                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -14.83                   | -14.24  | -11.51 | 6.96                           | Complies |
|                      | 2437 MHz  | -12.62                   | -11.72  | -9.14  | 6.96                           | Complies |
|                      | 2452 MHz  | -13.60                   | -12.58  | -10.05 | 6.96                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 7.04\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (7.04 - 6) = 6.96\text{dBm}/3\text{kHz}$ .

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 3 (Set 6 Panel antenna / 4.03dBi / 3TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Total  |                                |          |
| 802.11b              | 2412 MHz  | -3.73                    | -2.94   | -3.50   | 1.39   | 5.20                           | Complies |
|                      | 2437 MHz  | -4.66                    | -4.68   | -4.99   | 0.00   | 5.20                           | Complies |
|                      | 2462 MHz  | -4.63                    | -3.58   | -1.44   | 1.76   | 5.20                           | Complies |
| 802.11g              | 2412 MHz  | -10.99                   | -7.79   | -9.35   | -4.41  | 5.20                           | Complies |
|                      | 2437 MHz  | -7.45                    | -6.89   | -6.39   | -2.12  | 5.20                           | Complies |
|                      | 2462 MHz  | -8.87                    | -7.11   | -7.85   | -3.11  | 5.20                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.86                   | -9.65   | -10.14  | -5.42  | 5.20                           | Complies |
|                      | 2437 MHz  | -5.18                    | -6.58   | -6.65   | -1.31  | 5.20                           | Complies |
|                      | 2462 MHz  | -9.52                    | -7.42   | -8.11   | -3.49  | 5.20                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -15.22                   | -13.92  | -14.68  | -9.80  | 5.20                           | Complies |
|                      | 2437 MHz  | -13.92                   | -13.15  | -13.90  | -8.87  | 5.20                           | Complies |
|                      | 2452 MHz  | -15.92                   | -14.15  | -14.53  | -10.03 | 5.20                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.80\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (8.80 - 6) = 5.20\text{dBm}/3\text{kHz}$ .

|               |                                                                                         |           |                               |
|---------------|-----------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                    | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                             | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 3 (Set 6 Panel antenna / 4.03dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |         |       | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|---------|-------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Chain 4 | Total |                                |          |
| 802.11b              | 2412 MHz  | -2.48                    | -2.21   | -2.31   | -2.47   | 3.65  | 3.83                           | Complies |
|                      | 2437 MHz  | -4.95                    | -4.78   | -4.90   | -4.59   | 1.22  | 3.83                           | Complies |
|                      | 2462 MHz  | -2.79                    | -2.74   | -2.19   | -2.11   | 3.57  | 3.83                           | Complies |
| 802.11g              | 2412 MHz  | -9.18                    | -7.15   | -7.90   | -8.87   | -2.18 | 3.83                           | Complies |
|                      | 2437 MHz  | -7.93                    | -4.59   | -5.85   | -6.34   | 0.00  | 3.83                           | Complies |
|                      | 2462 MHz  | -9.54                    | -8.68   | -8.47   | -8.82   | -2.84 | 3.83                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -11.92                   | -11.07  | -9.96   | -11.37  | -5.00 | 3.83                           | Complies |
|                      | 2437 MHz  | -6.85                    | -6.83   | -7.49   | -6.84   | -0.97 | 3.83                           | Complies |
|                      | 2462 MHz  | -9.27                    | -8.99   | -9.80   | -9.53   | -3.37 | 3.83                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -15.78                   | -14.48  | -15.88  | -15.80  | -9.42 | 3.83                           | Complies |
|                      | 2437 MHz  | -13.65                   | -13.74  | -13.83  | -14.16  | -7.82 | 3.83                           | Complies |
|                      | 2452 MHz  | -15.37                   | -14.54  | -14.94  | -15.48  | -9.05 | 3.83                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 10.17\text{dBi} > 6\text{dBi}$ , So Limit = 8-(10.17-6)=3.83dBm/3kHz.

|               |                                                        |           |                               |
|---------------|--------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                   | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                            | Test Date | Oct. 29, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi / 1TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|--------------------------------|----------|
|                      |           | Chain 1                  |                                |          |
| 802.11b              | 2412 MHz  | -3.42                    | 8.00                           | Complies |
|                      | 2437 MHz  | -4.63                    | 8.00                           | Complies |
|                      | 2462 MHz  | -3.54                    | 8.00                           | Complies |
| 802.11g              | 2412 MHz  | -6.23                    | 8.00                           | Complies |
|                      | 2437 MHz  | -5.07                    | 8.00                           | Complies |
|                      | 2462 MHz  | -6.00                    | 8.00                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -6.35                    | 8.00                           | Complies |
|                      | 2437 MHz  | -6.50                    | 8.00                           | Complies |
|                      | 2462 MHz  | -6.26                    | 8.00                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -12.14                   | 8.00                           | Complies |
|                      | 2437 MHz  | -10.96                   | 8.00                           | Complies |
|                      | 2452 MHz  | -13.38                   | 8.00                           | Complies |

|               |                                                        |           |                               |
|---------------|--------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                   | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                            | Test Date | Oct. 29, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi / 2TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Total  |                                |          |
| 802.11b              | 2412 MHz  | -3.23                    | -2.95   | -0.08  | 8.00                           | Complies |
|                      | 2437 MHz  | -4.80                    | -2.23   | -0.32  | 8.00                           | Complies |
|                      | 2462 MHz  | -4.09                    | -4.22   | -1.14  | 8.00                           | Complies |
| 802.11g              | 2412 MHz  | -8.28                    | -9.08   | -5.65  | 8.00                           | Complies |
|                      | 2437 MHz  | -6.35                    | -6.78   | -3.55  | 8.00                           | Complies |
|                      | 2462 MHz  | -10.39                   | -8.62   | -6.41  | 8.00                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -9.06                    | -8.94   | -5.99  | 8.00                           | Complies |
|                      | 2437 MHz  | -7.23                    | -6.86   | -4.03  | 8.00                           | Complies |
|                      | 2462 MHz  | -8.88                    | -9.24   | -6.05  | 8.00                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -16.68                   | -14.84  | -12.65 | 8.00                           | Complies |
|                      | 2437 MHz  | -11.91                   | -11.26  | -8.56  | 8.00                           | Complies |
|                      | 2452 MHz  | -15.43                   | -15.67  | -12.54 | 8.00                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 5.45\text{dBi} < 6\text{dBi}$ , so the limit doesn't reduce.

|               |                                                        |           |                               |
|---------------|--------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                   | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                            | Test Date | Oct. 29, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi / 3TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Total  |                                |          |
| 802.11b              | 2412 MHz  | -3.73                    | -2.94   | -3.50   | 1.39   | 6.79                           | Complies |
|                      | 2437 MHz  | -4.66                    | -4.68   | -4.99   | 0.00   | 6.79                           | Complies |
|                      | 2462 MHz  | -4.63                    | -3.58   | -1.44   | 1.76   | 6.79                           | Complies |
| 802.11g              | 2412 MHz  | -11.48                   | -10.13  | -8.86   | -5.26  | 6.79                           | Complies |
|                      | 2437 MHz  | -7.45                    | -6.89   | -6.39   | -2.12  | 6.79                           | Complies |
|                      | 2462 MHz  | -7.84                    | -5.56   | -6.26   | -1.68  | 6.79                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.67                   | -9.53   | -11.63  | -5.75  | 6.79                           | Complies |
|                      | 2437 MHz  | -5.18                    | -6.58   | -6.65   | -1.31  | 6.79                           | Complies |
|                      | 2462 MHz  | -11.21                   | -10.40  | -11.57  | -6.26  | 6.79                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -17.23                   | -17.24  | -17.58  | -12.58 | 6.79                           | Complies |
|                      | 2437 MHz  | -16.14                   | -14.27  | -15.46  | -10.45 | 6.79                           | Complies |
|                      | 2452 MHz  | -14.31                   | -15.61  | -15.18  | -10.23 | 6.79                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 7.21 \text{ dBi} > 6 \text{ dBi}$ , So Limit =  $8 - (7.21 - 6) = 6.79 \text{ dBm/3kHz}$ .

|               |                                                                                                   |           |                               |
|---------------|---------------------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                              | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                                       | Test Date | Oct. 29, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |         |       | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|---------|-------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Chain 4 | Total |                                |          |
| 802.11b              | 2412 MHz  | -4.25                    | -5.44   | -4.27   | -3.91   | 1.59  | 4.66                           | Complies |
|                      | 2437 MHz  | -4.95                    | -4.78   | -4.90   | -4.59   | 1.22  | 4.66                           | Complies |
|                      | 2462 MHz  | -2.79                    | -2.74   | -2.19   | -2.11   | 3.57  | 4.66                           | Complies |
| 802.11g              | 2412 MHz  | -9.18                    | -7.15   | -7.90   | -8.87   | -2.18 | 4.66                           | Complies |
|                      | 2437 MHz  | -7.93                    | -4.59   | -5.85   | -6.34   | 0.00  | 4.66                           | Complies |
|                      | 2462 MHz  | -11.91                   | -10.83  | -7.98   | -9.73   | -3.84 | 4.66                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.49                   | -11.41  | -9.73   | -11.03  | -4.60 | 4.66                           | Complies |
|                      | 2437 MHz  | -6.85                    | -6.83   | -7.49   | -6.84   | -0.97 | 4.66                           | Complies |
|                      | 2462 MHz  | -12.10                   | -9.29   | -9.26   | -11.13  | -4.26 | 4.66                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -17.21                   | -14.46  | -15.89  | -13.75  | -9.11 | 4.66                           | Complies |
|                      | 2437 MHz  | -17.23                   | -14.22  | -14.66  | -14.64  | -9.02 | 4.66                           | Complies |
|                      | 2452 MHz  | -16.23                   | -14.17  | -16.22  | -16.07  | -9.56 | 4.66                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 9.34\text{dBi} > 6\text{dBi}$ , So Limit = 8-(9.34-6)=4.66dBm/3kHz.

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 5 (Set 8 Patch antenna / 3.53dBi / 1TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|--------------------------------|----------|
|                      |           | Chain 1                  |                                |          |
| 802.11b              | 2412 MHz  | -3.42                    | 8.00                           | Complies |
|                      | 2437 MHz  | -4.63                    | 8.00                           | Complies |
|                      | 2462 MHz  | -3.54                    | 8.00                           | Complies |
| 802.11g              | 2412 MHz  | -6.23                    | 8.00                           | Complies |
|                      | 2437 MHz  | -5.07                    | 8.00                           | Complies |
|                      | 2462 MHz  | -4.92                    | 8.00                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -6.35                    | 8.00                           | Complies |
|                      | 2437 MHz  | -6.50                    | 8.00                           | Complies |
|                      | 2462 MHz  | -6.26                    | 8.00                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -11.49                   | 8.00                           | Complies |
|                      | 2437 MHz  | -10.96                   | 8.00                           | Complies |
|                      | 2452 MHz  | -11.96                   | 8.00                           | Complies |

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 5 (Set 8 Patch antenna / 3.53dBi / 2TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |       | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|-------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Total |                                |          |
| 802.11b              | 2412 MHz  | -3.23                    | -2.95   | -0.08 | 7.46                           | Complies |
|                      | 2437 MHz  | -4.80                    | -2.23   | -0.32 | 7.46                           | Complies |
|                      | 2462 MHz  | -4.09                    | -4.22   | -1.14 | 7.46                           | Complies |
| 802.11g              | 2412 MHz  | -7.57                    | -5.99   | -3.70 | 7.46                           | Complies |
|                      | 2437 MHz  | -6.35                    | -6.78   | -3.55 | 7.46                           | Complies |
|                      | 2462 MHz  | -7.32                    | -6.06   | -3.63 | 7.46                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -6.86                    | -5.86   | -3.32 | 7.46                           | Complies |
|                      | 2437 MHz  | -7.23                    | -6.86   | -4.03 | 7.46                           | Complies |
|                      | 2462 MHz  | -7.21                    | -6.07   | -3.59 | 7.46                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -11.73                   | -11.81  | -8.76 | 7.46                           | Complies |
|                      | 2437 MHz  | -11.91                   | -11.26  | -8.56 | 7.46                           | Complies |
|                      | 2452 MHz  | -12.67                   | -11.33  | -8.94 | 7.46                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 6.54\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (6.54 - 6) = 7.46\text{dBm/3kHz}$ .

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 5 (Set 8 Patch antenna / 3.53dBi / 3TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |       | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|-------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Total |                                |          |
| 802.11b              | 2412 MHz  | -3.73                    | -2.94   | -3.50   | 1.39  | 5.70                           | Complies |
|                      | 2437 MHz  | -4.66                    | -4.68   | -4.99   | 0.00  | 5.70                           | Complies |
|                      | 2462 MHz  | -4.63                    | -3.58   | -1.44   | 1.76  | 5.70                           | Complies |
| 802.11g              | 2412 MHz  | -10.99                   | -7.79   | -9.35   | -4.41 | 5.70                           | Complies |
|                      | 2437 MHz  | -7.45                    | -6.89   | -6.39   | -2.12 | 5.70                           | Complies |
|                      | 2462 MHz  | -7.84                    | -5.56   | -6.26   | -1.68 | 5.70                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -8.16                    | -6.79   | -7.32   | -2.62 | 5.70                           | Complies |
|                      | 2437 MHz  | -5.18                    | -6.58   | -6.65   | -1.31 | 5.70                           | Complies |
|                      | 2462 MHz  | -8.08                    | -6.59   | -6.27   | -2.14 | 5.70                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -14.45                   | -13.34  | -13.42  | -8.94 | 5.70                           | Complies |
|                      | 2437 MHz  | -12.44                   | -12.68  | -12.44  | -7.75 | 5.70                           | Complies |
|                      | 2452 MHz  | -13.47                   | -13.70  | -14.36  | -9.06 | 5.70                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.30\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (8.30 - 6) = 5.70\text{dBm}/3\text{kHz}$ .

|               |                                                                                         |           |                               |
|---------------|-----------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                    | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                             | Test Date | Oct. 29, 2015 ~ Oct. 30, 2015 |
| Test Mode     | Mode 5 (Set 8 Patch antenna / 3.53dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |         |       | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|---------|-------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Chain 4 | Total |                                |          |
| 802.11b              | 2412 MHz  | -4.25                    | -5.44   | -4.27   | -3.91   | 1.59  | 4.20                           | Complies |
|                      | 2437 MHz  | -4.95                    | -4.78   | -4.90   | -4.59   | 1.22  | 4.20                           | Complies |
|                      | 2462 MHz  | -2.79                    | -2.74   | -2.19   | -2.11   | 3.57  | 4.20                           | Complies |
| 802.11g              | 2412 MHz  | -8.39                    | -7.36   | -7.41   | -7.10   | -1.52 | 4.20                           | Complies |
|                      | 2437 MHz  | -7.93                    | -4.59   | -5.85   | -6.34   | 0.00  | 4.20                           | Complies |
|                      | 2462 MHz  | -7.81                    | -5.70   | -6.03   | -7.35   | -0.61 | 4.20                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -8.25                    | -7.09   | -7.93   | -7.38   | -1.62 | 4.20                           | Complies |
|                      | 2437 MHz  | -6.85                    | -6.83   | -7.49   | -6.84   | -0.97 | 4.20                           | Complies |
|                      | 2462 MHz  | -7.87                    | -6.53   | -6.91   | -7.91   | -1.24 | 4.20                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -13.89                   | -12.16  | -14.21  | -13.54  | -7.36 | 4.20                           | Complies |
|                      | 2437 MHz  | -13.95                   | -10.90  | -13.23  | -12.72  | -6.53 | 4.20                           | Complies |
|                      | 2452 MHz  | -14.63                   | -13.49  | -13.50  | -13.33  | -7.69 | 4.20                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 9.80\text{dBi} > 6\text{dBi}$ , So Limit = 8-(9.80-6)=4.20dBm/3kHz.

|               |                                                        |           |                               |
|---------------|--------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                   | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                            | Test Date | Oct. 29, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi / 1TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|--------------------------------|----------|
|                      |           | Chain 1                  |                                |          |
| 802.11b              | 2412 MHz  | -3.42                    | 8.00                           | Complies |
|                      | 2437 MHz  | -4.63                    | 8.00                           | Complies |
|                      | 2462 MHz  | -3.54                    | 8.00                           | Complies |
| 802.11g              | 2412 MHz  | -7.90                    | 8.00                           | Complies |
|                      | 2437 MHz  | -5.07                    | 8.00                           | Complies |
|                      | 2462 MHz  | -7.30                    | 8.00                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -7.99                    | 8.00                           | Complies |
|                      | 2437 MHz  | -6.50                    | 8.00                           | Complies |
|                      | 2462 MHz  | -8.09                    | 8.00                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -14.65                   | 8.00                           | Complies |
|                      | 2437 MHz  | -12.86                   | 8.00                           | Complies |
|                      | 2452 MHz  | -14.64                   | 8.00                           | Complies |

|               |                                                                         |           |                               |
|---------------|-------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                    | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                             | Test Date | Oct. 29, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi, Chain 3: 3.2dBi / 2TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 3 | Total  |                                |          |
| 802.11b              | 2412 MHz  | -1.89                    | -1.64   | 1.25   | 6.73                           | Complies |
|                      | 2437 MHz  | -2.26                    | -1.65   | 1.07   | 6.73                           | Complies |
|                      | 2462 MHz  | -2.31                    | -1.36   | 1.20   | 6.73                           | Complies |
| 802.11g              | 2412 MHz  | -8.69                    | -8.19   | -5.42  | 6.73                           | Complies |
|                      | 2437 MHz  | -4.08                    | -4.81   | -1.42  | 6.73                           | Complies |
|                      | 2462 MHz  | -7.51                    | -9.17   | -5.25  | 6.73                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -9.63                    | -9.88   | -6.74  | 6.73                           | Complies |
|                      | 2437 MHz  | -5.17                    | -4.53   | -1.83  | 6.73                           | Complies |
|                      | 2462 MHz  | -8.70                    | -7.91   | -5.28  | 6.73                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -16.43                   | -14.65  | -12.44 | 6.73                           | Complies |
|                      | 2437 MHz  | -12.62                   | -11.72  | -9.14  | 6.73                           | Complies |
|                      | 2452 MHz  | -14.10                   | -15.62  | -11.78 | 6.73                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 7.27\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (7.27 - 6) = 6.73\text{dBm/3kHz}$ .

|               |                                                                                           |           |                               |
|---------------|-------------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                      | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                               | Test Date | Oct. 29, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi, Chain 2: 3.7dBi , Chain 3: 3.2dBi / 3TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Total  |                                |          |
| 802.11b              | 2412 MHz  | -3.73                    | -2.94   | -3.50   | 1.39   | 5.15                           | Complies |
|                      | 2437 MHz  | -4.66                    | -4.68   | -4.99   | 0.00   | 5.15                           | Complies |
|                      | 2462 MHz  | -4.63                    | -5.38   | -1.44   | 1.31   | 5.15                           | Complies |
| 802.11g              | 2412 MHz  | -8.67                    | -8.07   | -9.00   | -3.79  | 5.15                           | Complies |
|                      | 2437 MHz  | -7.45                    | -6.89   | -6.39   | -2.12  | 5.15                           | Complies |
|                      | 2462 MHz  | -7.84                    | -5.56   | -6.26   | -1.68  | 5.15                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -9.47                    | -11.14  | -9.42   | -5.17  | 5.15                           | Complies |
|                      | 2437 MHz  | -5.18                    | -6.58   | -6.65   | -1.31  | 5.15                           | Complies |
|                      | 2462 MHz  | -10.58                   | -8.50   | -8.33   | -4.25  | 5.15                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -14.70                   | -13.45  | -13.56  | -9.10  | 5.15                           | Complies |
|                      | 2437 MHz  | -14.98                   | -14.95  | -14.83  | -10.15 | 5.15                           | Complies |
|                      | 2452 MHz  | -17.33                   | -16.14  | -15.36  | -11.43 | 5.15                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.85\text{dBi} > 6\text{dBi}$ , So Limit = 8-(8.85-6)=5.15dBm/3kHz.

|               |                                                                                                            |           |                               |
|---------------|------------------------------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                                       | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                                                | Test Date | Oct. 29, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 6 (Set 9 Monopole antenna / Chain 1: 5.2dBi, Chain 2: 3.7dBi, Chain 3: 3.2dBi, Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Chain 4 | Total  |                                |          |
| 802.11b              | 2412 MHz  | -4.25                    | -5.44   | -4.27   | -3.91   | 1.59   | 3.80                           | Complies |
|                      | 2437 MHz  | -4.95                    | -4.78   | -4.90   | -4.59   | 1.22   | 3.80                           | Complies |
|                      | 2462 MHz  | -2.79                    | -2.74   | -2.19   | -2.11   | 3.57   | 3.80                           | Complies |
| 802.11g              | 2412 MHz  | -10.02                   | -8.70   | -8.87   | -8.77   | -3.04  | 3.80                           | Complies |
|                      | 2437 MHz  | -7.93                    | -4.59   | -5.85   | -6.34   | 0.00   | 3.80                           | Complies |
|                      | 2462 MHz  | -9.66                    | -8.21   | -8.31   | -7.70   | -2.39  | 3.80                           | Complies |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.93                   | -8.34   | -9.80   | -9.34   | -3.48  | 3.80                           | Complies |
|                      | 2437 MHz  | -6.85                    | -6.83   | -7.49   | -6.84   | -0.97  | 3.80                           | Complies |
|                      | 2462 MHz  | -12.10                   | -9.29   | -9.26   | -11.13  | -4.26  | 3.80                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -16.08                   | -16.50  | -15.34  | -15.95  | -9.93  | 3.80                           | Complies |
|                      | 2437 MHz  | -17.23                   | -14.22  | -14.66  | -14.64  | -9.02  | 3.80                           | Complies |
|                      | 2452 MHz  | -17.94                   | -17.00  | -15.47  | -16.86  | -10.71 | 3.80                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 10.20\text{dBi} > 6\text{dBi}$ , So Limit = 8-(10.20-6)=3.80dBm/3kHz.

### For Beamforming Mode

|               |                                               |           |                               |
|---------------|-----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                          | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                   | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 1 (Set 3 Dipole antenna / 3.83dBi / 2TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Total  |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -9.06                    | -8.94   | -5.99  | 7.16                           | Complies |
|                      | 2437 MHz  | -7.23                    | -6.86   | -4.03  | 7.16                           | Complies |
|                      | 2462 MHz  | -11.66                   | -10.88  | -8.24  | 7.16                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -13.92                   | -14.52  | -11.20 | 7.16                           | Complies |
|                      | 2437 MHz  | -14.93                   | -14.42  | -11.66 | 7.16                           | Complies |
|                      | 2452 MHz  | -15.51                   | -17.22  | -13.27 | 7.16                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 6.84\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (6.84 - 6) = 7.16\text{dBm/3kHz}$ .

|               |                                               |           |                               |
|---------------|-----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                          | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                   | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 1 (Set 3 Dipole antenna / 3.83dBi / 3TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Total  |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.86                   | -9.65   | -10.14  | -5.42  | 5.40                           | Complies |
|                      | 2437 MHz  | -5.18                    | -6.58   | -6.65   | -1.31  | 5.40                           | Complies |
|                      | 2462 MHz  | -11.21                   | -10.40  | -11.57  | -6.26  | 5.40                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -14.70                   | -13.45  | -13.56  | -9.10  | 5.40                           | Complies |
|                      | 2437 MHz  | -16.68                   | -14.51  | -14.94  | -10.51 | 5.40                           | Complies |
|                      | 2452 MHz  | -17.33                   | -16.14  | -15.36  | -11.43 | 5.40                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.60\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (8.60 - 6) = 5.40\text{dBm/3kHz}$ .

|               |                                                                                          |           |                               |
|---------------|------------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                     | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                              | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 1 (Set 3 Dipole antenna / 3.83dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Chain 4 | Total  |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -11.92                   | -11.07  | -9.96   | -11.37  | -5.00  | 3.98                           | Complies |
|                      | 2437 MHz  | -8.33                    | -6.63   | -7.28   | -6.87   | -1.21  | 3.98                           | Complies |
|                      | 2462 MHz  | -12.10                   | -9.29   | -9.26   | -11.13  | -4.26  | 3.98                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -15.74                   | -16.37  | -16.05  | -14.95  | -9.72  | 3.98                           | Complies |
|                      | 2437 MHz  | -15.00                   | -15.17  | -16.12  | -14.99  | -9.28  | 3.98                           | Complies |
|                      | 2452 MHz  | -17.94                   | -17.00  | -15.47  | -16.86  | -10.71 | 3.98                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 10.02\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (10.02 - 6) = 3.98\text{dBm/3kHz}$ .

|               |                                                                               |           |                               |
|---------------|-------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                          | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                   | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi*1, (1B)3.93dBi *1 / 2TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Total  |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.26                   | -7.99   | -5.97  | 8.00                           | Complies |
|                      | 2437 MHz  | -7.23                    | -6.86   | -4.03  | 8.00                           | Complies |
|                      | 2462 MHz  | -7.92                    | -8.81   | -5.33  | 8.00                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -15.07                   | -14.82  | -11.93 | 8.00                           | Complies |
|                      | 2437 MHz  | -14.40                   | -15.91  | -12.08 | 8.00                           | Complies |
|                      | 2452 MHz  | -16.71                   | -15.11  | -12.83 | 8.00                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 3.93\text{dBi} < 6\text{dBi}$ , so the limit doesn't reduce.

|               |                                                                              |           |                               |
|---------------|------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                  | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi*2, (1B)3.93dBi*1 / 3TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Total  |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -8.16                    | -6.79   | -7.32   | -2.62  | 8.00                           | Complies |
|                      | 2437 MHz  | -5.18                    | -6.58   | -6.65   | -1.31  | 8.00                           | Complies |
|                      | 2462 MHz  | -9.85                    | -9.26   | -7.77   | -4.10  | 8.00                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -12.68                   | -15.01  | -15.85  | -9.53  | 8.00                           | Complies |
|                      | 2437 MHz  | -12.44                   | -12.68  | -12.44  | -7.75  | 8.00                           | Complies |
|                      | 2452 MHz  | -16.49                   | -15.87  | -15.23  | -11.06 | 8.00                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 5.34\text{dBi} < 6\text{dBi}$ , so the limit doesn't reduce.

|               |                                                                                                                         |           |                               |
|---------------|-------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                                                    | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                                                             | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi*2, (1B)3.93dBi*1 + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Chain 4 | Total  |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.93                   | -8.34   | -9.80   | -9.34   | -3.48  | 6.43                           | Complies |
|                      | 2437 MHz  | -6.85                    | -6.83   | -7.49   | -6.84   | -0.97  | 6.43                           | Complies |
|                      | 2462 MHz  | -12.10                   | -9.29   | -9.26   | -11.13  | -4.26  | 6.43                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -17.21                   | -14.46  | -15.89  | -13.75  | -9.11  | 6.43                           | Complies |
|                      | 2437 MHz  | -13.95                   | -10.90  | -13.23  | -12.72  | -6.53  | 6.43                           | Complies |
|                      | 2452 MHz  | -17.01                   | -16.80  | -16.44  | -16.97  | -10.78 | 6.43                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 7.57\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (7.57 - 6) = 6.43\text{dBm/3kHz}$ .

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 3 (Set 6 Panel antenna / 4.03dBi / 2TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Total  |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.76                   | -11.68  | -8.19  | 6.96                           | Complies |
|                      | 2437 MHz  | -7.23                    | -6.86   | -4.03  | 6.96                           | Complies |
|                      | 2462 MHz  | -11.75                   | -11.08  | -8.39  | 6.96                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -16.85                   | -18.18  | -14.45 | 6.96                           | Complies |
|                      | 2437 MHz  | -14.99                   | -14.05  | -11.48 | 6.96                           | Complies |
|                      | 2452 MHz  | -16.71                   | -15.11  | -12.83 | 6.96                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 7.04\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (7.04 - 6) = 6.96\text{dBm/3kHz}$ .

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 3 (Set 6 Panel antenna / 4.03dBi / 3TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Total  |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -11.94                   | -11.88  | -12.71  | -7.39  | 5.20                           | Complies |
|                      | 2437 MHz  | -5.18                    | -6.58   | -6.65   | -1.31  | 5.20                           | Complies |
|                      | 2462 MHz  | -11.24                   | -10.41  | -11.79  | -6.34  | 5.20                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -19.74                   | -18.73  | -18.35  | -14.13 | 5.20                           | Complies |
|                      | 2437 MHz  | -19.17                   | -16.67  | -16.82  | -12.64 | 5.20                           | Complies |
|                      | 2452 MHz  | -15.92                   | -14.15  | -14.53  | -10.03 | 5.20                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.80\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (8.80 - 6) = 5.20\text{dBm/3kHz}$ .

|               |                                                                                         |           |                               |
|---------------|-----------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                    | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                             | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 3 (Set 6 Panel antenna / 4.03dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Chain 4 | Total  |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -11.00                   | -11.00  | -10.58  | -11.80  | -5.05  | 3.83                           | Complies |
|                      | 2437 MHz  | -8.33                    | -6.63   | -7.28   | -6.87   | -1.21  | 3.83                           | Complies |
|                      | 2462 MHz  | -12.19                   | -11.37  | -11.73  | -11.28  | -5.61  | 3.83                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -15.78                   | -14.48  | -15.88  | -15.80  | -9.42  | 3.83                           | Complies |
|                      | 2437 MHz  | -13.65                   | -13.74  | -13.83  | -14.16  | -7.82  | 3.83                           | Complies |
|                      | 2452 MHz  | -17.94                   | -17.00  | -15.47  | -16.86  | -10.71 | 3.83                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 10.17\text{dBi} > 6\text{dBi}$ , So Limit = 8-(10.17-6)=3.83dBm/3kHz.

|               |                                                        |           |                               |
|---------------|--------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                   | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                            | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi / 2TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Total  |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.27                   | -9.47   | -6.84  | 8.00                           | Complies |
|                      | 2437 MHz  | -7.23                    | -6.86   | -4.03  | 8.00                           | Complies |
|                      | 2462 MHz  | -7.92                    | -8.81   | -5.33  | 8.00                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -14.44                   | -13.98  | -11.19 | 8.00                           | Complies |
|                      | 2437 MHz  | -14.66                   | -12.79  | -10.61 | 8.00                           | Complies |
|                      | 2452 MHz  | -16.71                   | -15.11  | -12.83 | 8.00                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 5.45\text{dBi} < 6\text{dBi}$ , so the limit doesn't reduce.

|               |                                                        |           |                               |
|---------------|--------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                   | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                            | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi / 3TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Total  |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.67                   | -9.53   | -11.63  | -5.75  | 6.79                           | Complies |
|                      | 2437 MHz  | -5.18                    | -6.58   | -6.65   | -1.31  | 6.79                           | Complies |
|                      | 2462 MHz  | -11.21                   | -10.40  | -11.57  | -6.26  | 6.79                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -16.43                   | -15.04  | -14.42  | -10.45 | 6.79                           | Complies |
|                      | 2437 MHz  | -14.23                   | -14.12  | -15.51  | -9.80  | 6.79                           | Complies |
|                      | 2452 MHz  | -17.33                   | -16.14  | -15.36  | -11.43 | 6.79                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 7.21 \text{ dBi} > 6 \text{ dBi}$ , So Limit =  $8 - (7.21 - 6) = 6.79 \text{ dBm/3kHz}$ .

|               |                                                                                                   |           |                               |
|---------------|---------------------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                              | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                                       | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 4 (Set 7 Polarized Panel antenna / 5.45dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |         |       | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|---------|-------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Chain 4 | Total |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.14                   | -9.79   | -10.97  | -11.09  | -4.44 | 4.66                           | Complies |
|                      | 2437 MHz  | -6.85                    | -6.83   | -7.49   | -6.84   | -0.97 | 4.66                           | Complies |
|                      | 2462 MHz  | -12.10                   | -9.29   | -9.26   | -11.13  | -4.26 | 4.66                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -17.21                   | -14.46  | -15.89  | -13.75  | -9.11 | 4.66                           | Complies |
|                      | 2437 MHz  | -17.23                   | -14.22  | -14.66  | -14.64  | -9.02 | 4.66                           | Complies |
|                      | 2452 MHz  | -16.23                   | -14.17  | -16.22  | -16.07  | -9.56 | 4.66                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 9.34\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (9.34 - 6) = 4.66\text{dBm}/3\text{kHz}$ .

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 5 (Set 8 Patch antenna / 3.53dBi / 2TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Total  |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -6.86                    | -5.86   | -3.32  | 7.46                           | Complies |
|                      | 2437 MHz  | -7.23                    | -6.86   | -4.03  | 7.46                           | Complies |
|                      | 2462 MHz  | -9.48                    | -8.21   | -5.79  | 7.46                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -14.44                   | -13.98  | -11.19 | 7.46                           | Complies |
|                      | 2437 MHz  | -11.91                   | -11.26  | -8.56  | 7.46                           | Complies |
|                      | 2452 MHz  | -12.40                   | -14.37  | -10.26 | 7.46                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 6.54\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (6.54 - 6) = 7.46\text{dBm/3kHz}$ .

|               |                                              |           |                               |
|---------------|----------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                         | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                  | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 5 (Set 8 Patch antenna / 3.53dBi / 3TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |       | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|-------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Total |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -9.47                    | -11.14  | -9.42   | -5.17 | 5.70                           | Complies |
|                      | 2437 MHz  | -5.18                    | -6.58   | -6.65   | -1.31 | 5.70                           | Complies |
|                      | 2462 MHz  | -11.25                   | -9.07   | -10.76  | -5.48 | 5.70                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -14.45                   | -13.34  | -13.42  | -8.94 | 5.70                           | Complies |
|                      | 2437 MHz  | -12.44                   | -12.68  | -12.44  | -7.75 | 5.70                           | Complies |
|                      | 2452 MHz  | -13.47                   | -13.70  | -14.36  | -9.06 | 5.70                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.30\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (8.30 - 6) = 5.70\text{dBm/3kHz}$ .

|               |                                                                                         |           |                               |
|---------------|-----------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                    | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                             | Test Date | Oct. 30, 2015 ~ Oct. 31, 2015 |
| Test Mode     | Mode 5 (Set 8 Patch antenna / 3.53dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |         |       | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|---------|-------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Chain 4 | Total |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.93                   | -8.34   | -9.80   | -9.34   | -3.48 | 4.20                           | Complies |
|                      | 2437 MHz  | -8.87                    | -6.34   | -7.30   | -6.09   | -1.00 | 4.20                           | Complies |
|                      | 2462 MHz  | -7.87                    | -6.53   | -6.91   | -7.91   | -1.24 | 4.20                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -13.89                   | -12.16  | -14.21  | -13.54  | -7.36 | 4.20                           | Complies |
|                      | 2437 MHz  | -13.95                   | -10.90  | -13.23  | -12.72  | -6.53 | 4.20                           | Complies |
|                      | 2452 MHz  | -14.63                   | -13.49  | -13.50  | -13.33  | -7.69 | 4.20                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 9.80\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (9.80 - 6) = 4.20\text{dBm}/3\text{kHz}$ .

|               |                                                                         |           |                               |
|---------------|-------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                    | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                             | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi, Chain 2: 3.7dBi / 2TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Total  |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.27                   | -9.47   | -6.84  | 6.51                           | Complies |
|                      | 2437 MHz  | -7.23                    | -6.86   | -4.03  | 6.51                           | Complies |
|                      | 2462 MHz  | -9.48                    | -8.21   | -5.79  | 6.51                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -15.12                   | -15.15  | -12.12 | 6.51                           | Complies |
|                      | 2437 MHz  | -14.93                   | -14.42  | -11.66 | 6.51                           | Complies |
|                      | 2452 MHz  | -16.05                   | -13.17  | -11.37 | 6.51                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 7.49\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (7.49 - 6) = 6.51\text{ dBm/3kHz}$ .

|               |                                                                                           |           |                               |
|---------------|-------------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                      | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                               | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 6 (Set 9 Monopole antenna / Chain 1:5.2dBi, Chain 2: 3.7dBi , Chain 3: 3.2dBi / 3TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Total  |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.86                   | -9.65   | -10.14  | -5.42  | 5.15                           | Complies |
|                      | 2437 MHz  | -5.18                    | -6.58   | -6.65   | -1.31  | 5.15                           | Complies |
|                      | 2462 MHz  | -11.25                   | -9.07   | -10.76  | -5.48  | 5.15                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -16.72                   | -13.72  | -16.16  | -10.56 | 5.15                           | Complies |
|                      | 2437 MHz  | -16.48                   | -14.72  | -13.46  | -9.94  | 5.15                           | Complies |
|                      | 2452 MHz  | -18.87                   | -16.96  | -15.86  | -12.29 | 5.15                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.85\text{dBi} > 6\text{dBi}$ , So Limit = 8-(8.85-6)=5.15dBm/3kHz.

|               |                                                                                                            |           |                               |
|---------------|------------------------------------------------------------------------------------------------------------|-----------|-------------------------------|
| Temperature   | 25°C                                                                                                       | Humidity  | 46%                           |
| Test Engineer | Lucas Huang                                                                                                | Test Date | Oct. 30, 2015 ~ Nov. 01, 2015 |
| Test Mode     | Mode 6 (Set 9 Monopole antenna / Chain 1: 5.2dBi, Chain 2: 3.7dBi, Chain 3: 3.2dBi, Chain 4: 4.5dBi / 4TX) |           |                               |

| Mode                 | Frequency | Power Density (dBm/3kHz) |         |         |         |        | Power Density Limit (dBm/3kHz) | Result   |
|----------------------|-----------|--------------------------|---------|---------|---------|--------|--------------------------------|----------|
|                      |           | Chain 1                  | Chain 2 | Chain 3 | Chain 4 | Total  |                                |          |
| 802.11n<br>MCS0 HT20 | 2412 MHz  | -10.93                   | -8.34   | -9.80   | -9.34   | -3.48  | 3.80                           | Complies |
|                      | 2437 MHz  | -8.33                    | -6.63   | -7.28   | -6.87   | -1.21  | 3.80                           | Complies |
|                      | 2462 MHz  | -11.77                   | -11.03  | -11.47  | -9.57   | -4.85  | 3.80                           | Complies |
| 802.11n<br>MCS0 HT40 | 2422 MHz  | -17.72                   | -15.35  | -16.50  | -15.25  | -10.07 | 3.80                           | Complies |
|                      | 2437 MHz  | -17.23                   | -14.22  | -14.66  | -14.64  | -9.02  | 3.80                           | Complies |
|                      | 2452 MHz  | -15.37                   | -14.54  | -14.94  | -15.48  | -9.05  | 3.80                           | Complies |

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 10.20\text{dBi} > 6\text{dBi}$ , So Limit =  $8 - (10.20 - 6) = 3.80\text{dBm}/3\text{kHz}$ .

Note: All the test values were listed in the report.

For plots, only the channel with worse result was shown.

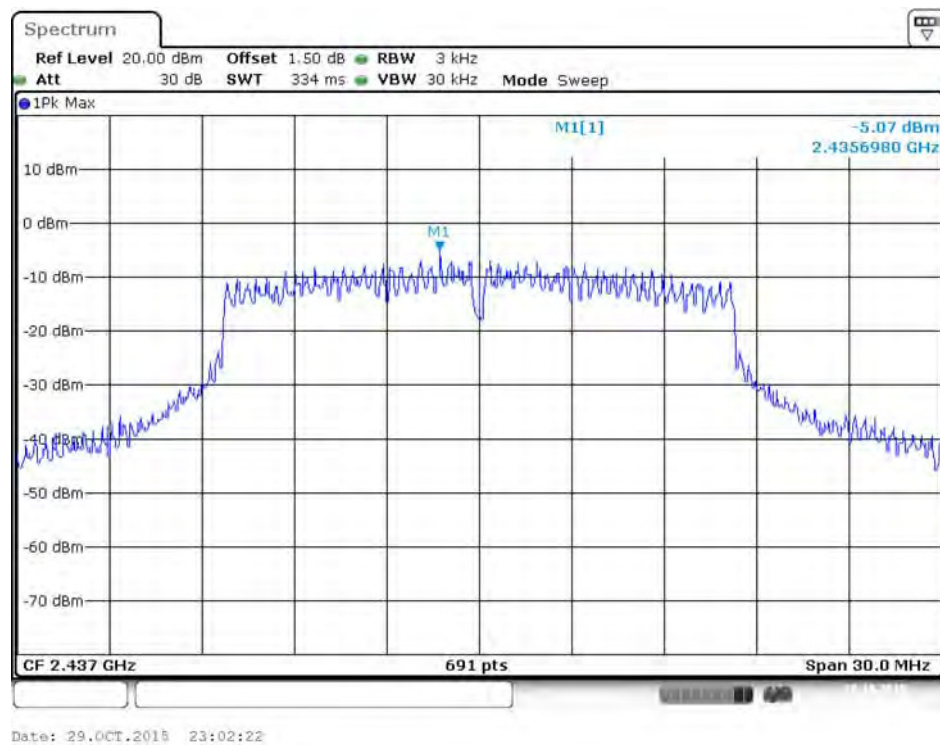
### For Non-Beamforming Mode

Mode 1 (Set 3 Dipole antenna / 3.83dBi / 1TX)

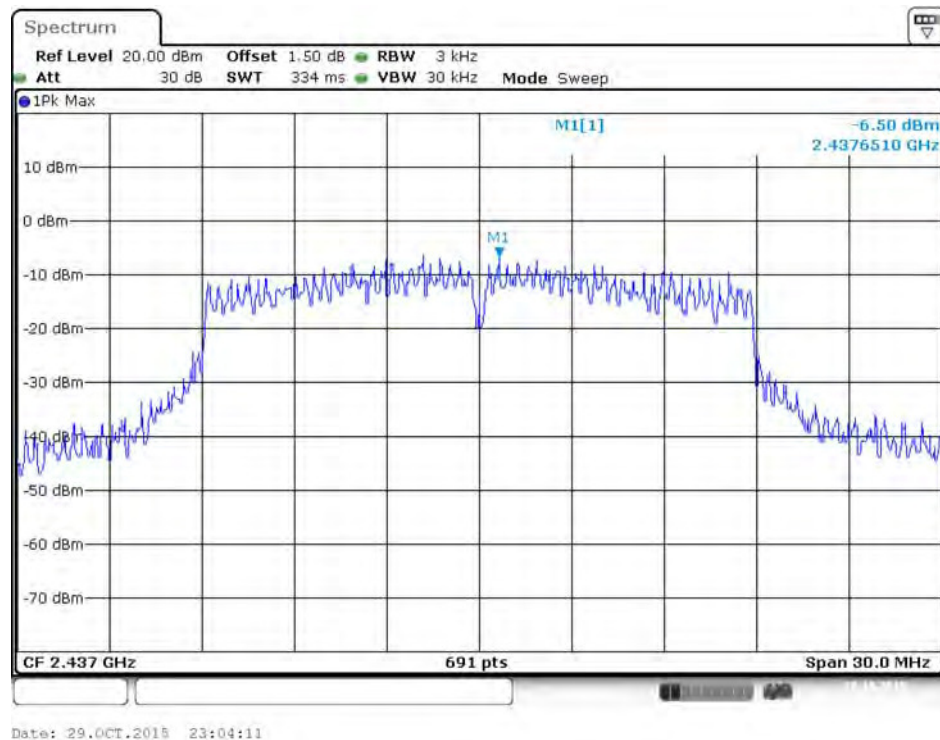
Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 1



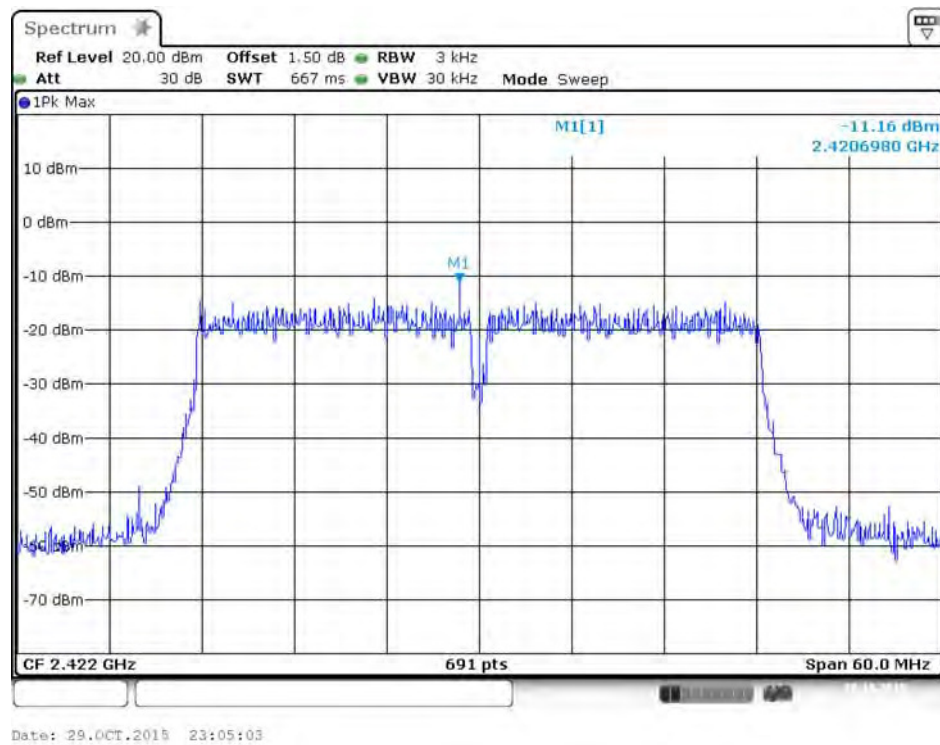
Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 1



### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 1

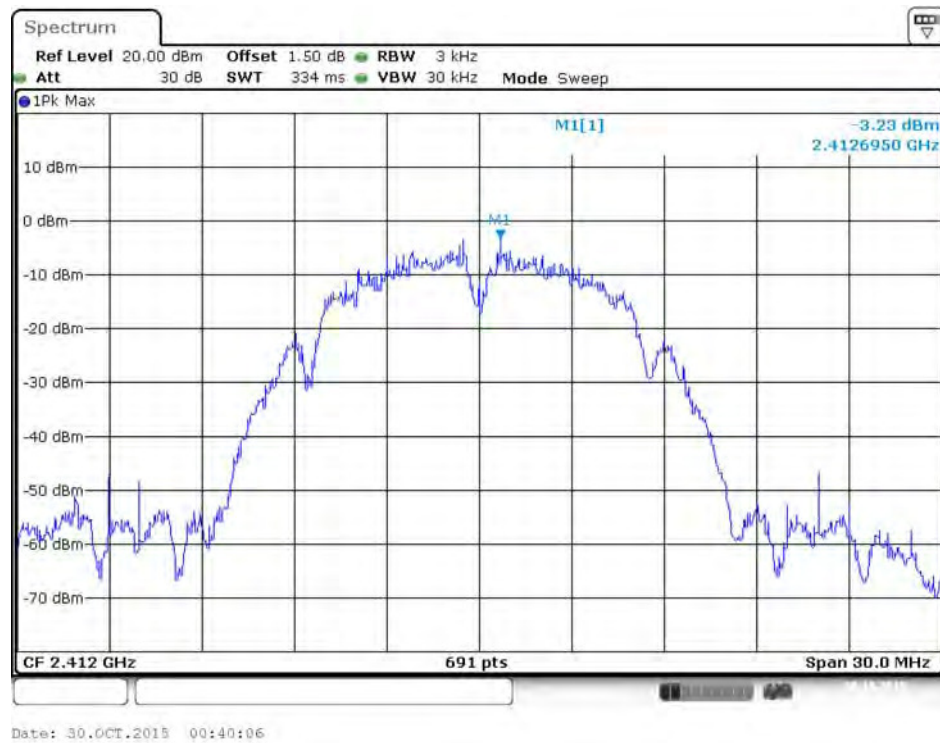


### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2422 MHz / Chain 1

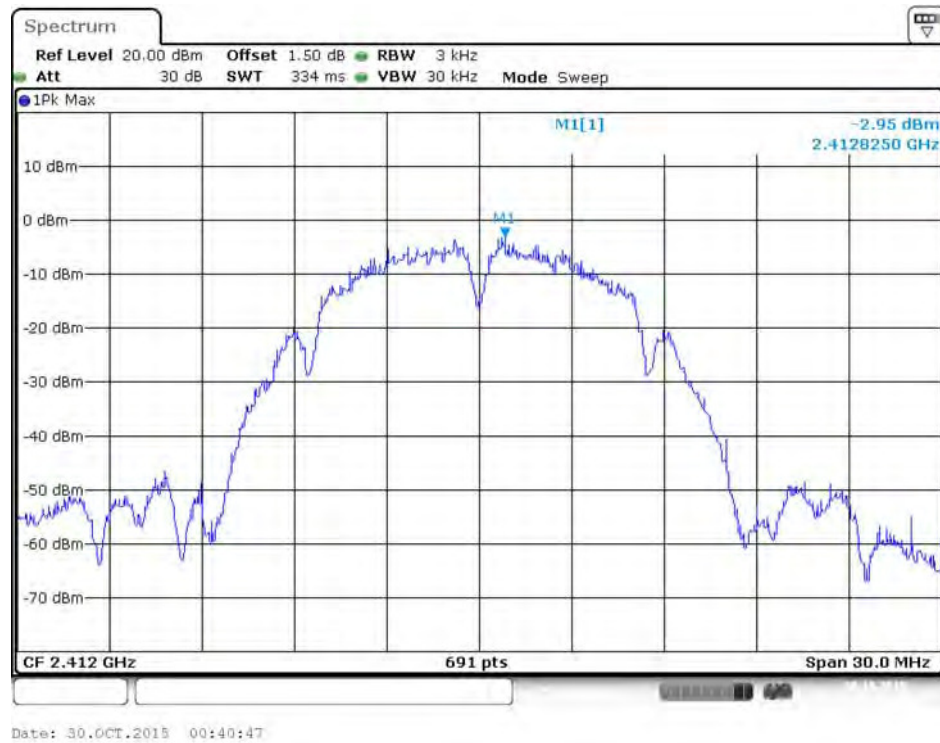


Mode 1 (Set 3 Dipole antenna / 3.83dBi / 2TX)

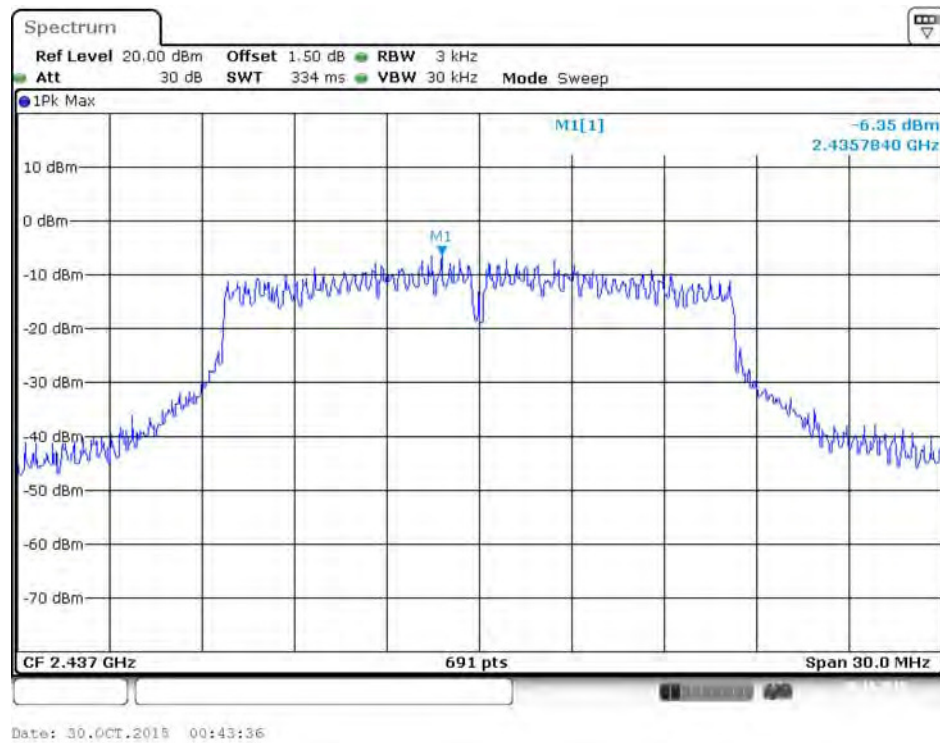
Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 1



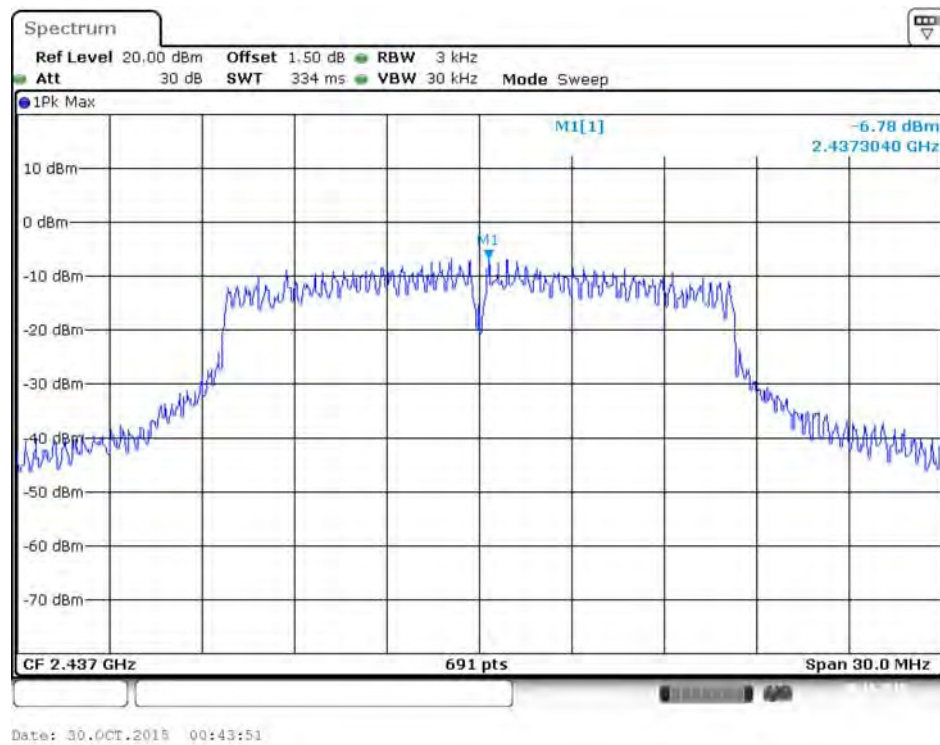
Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 2



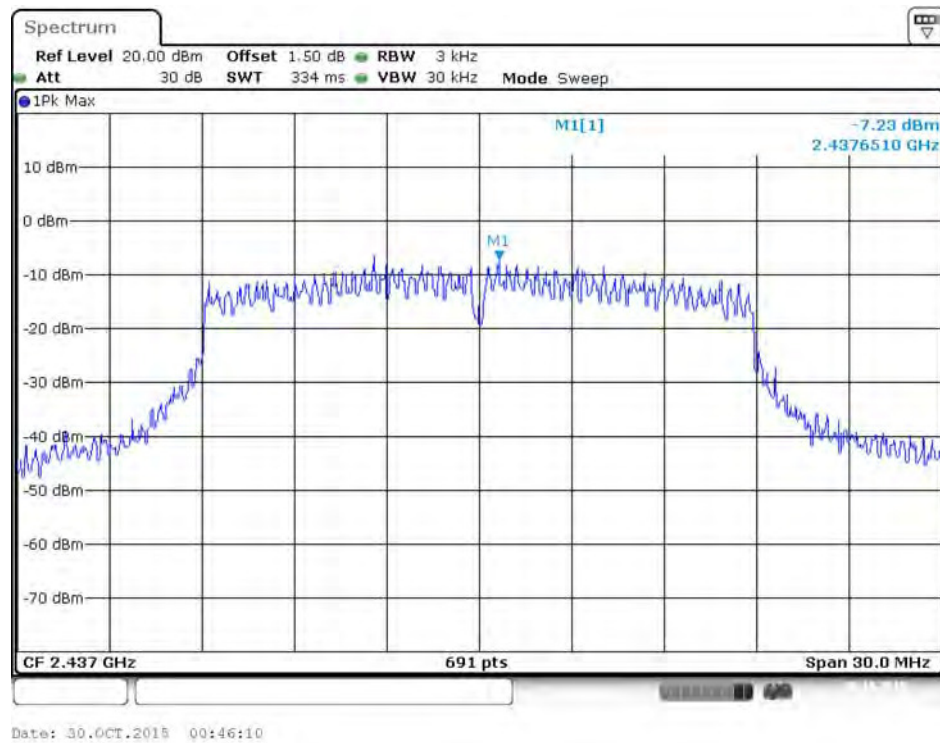
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 1



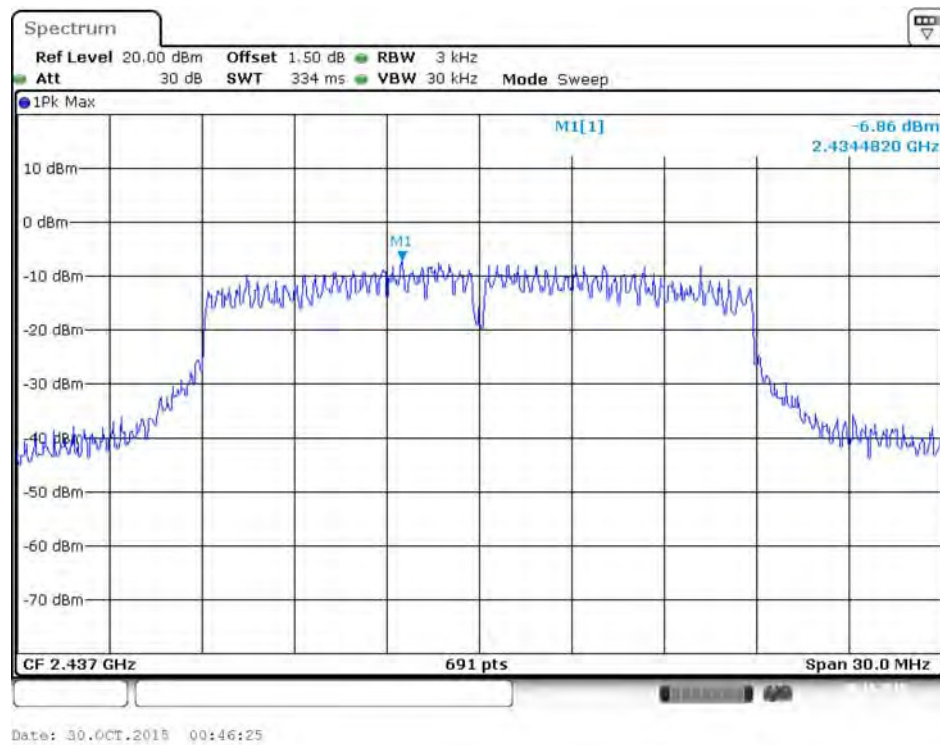
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 2



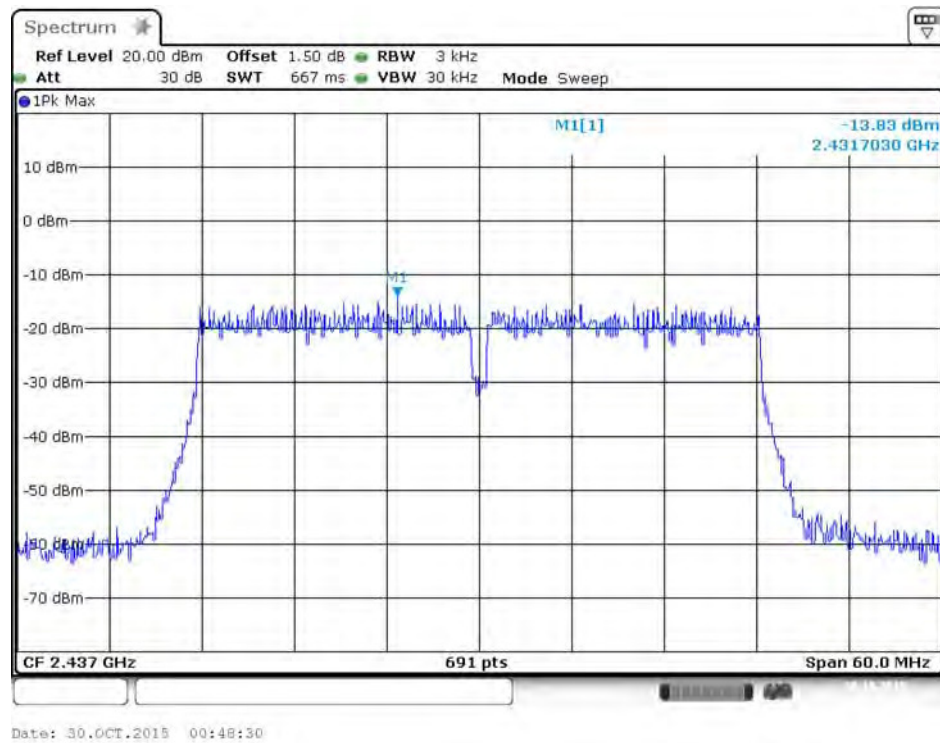
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 1



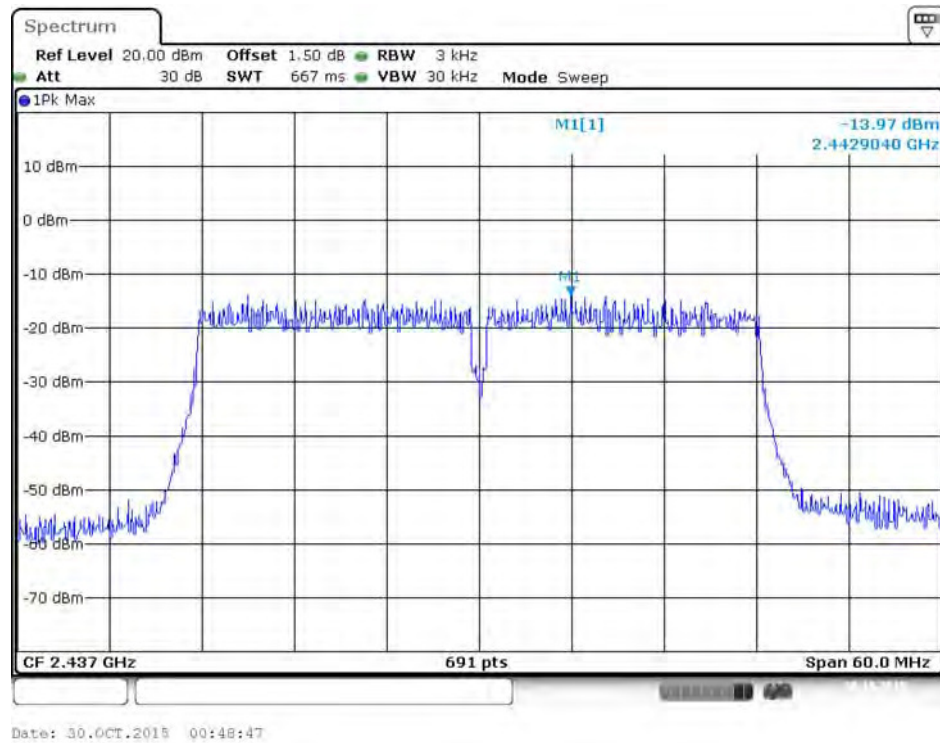
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 2



### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 1

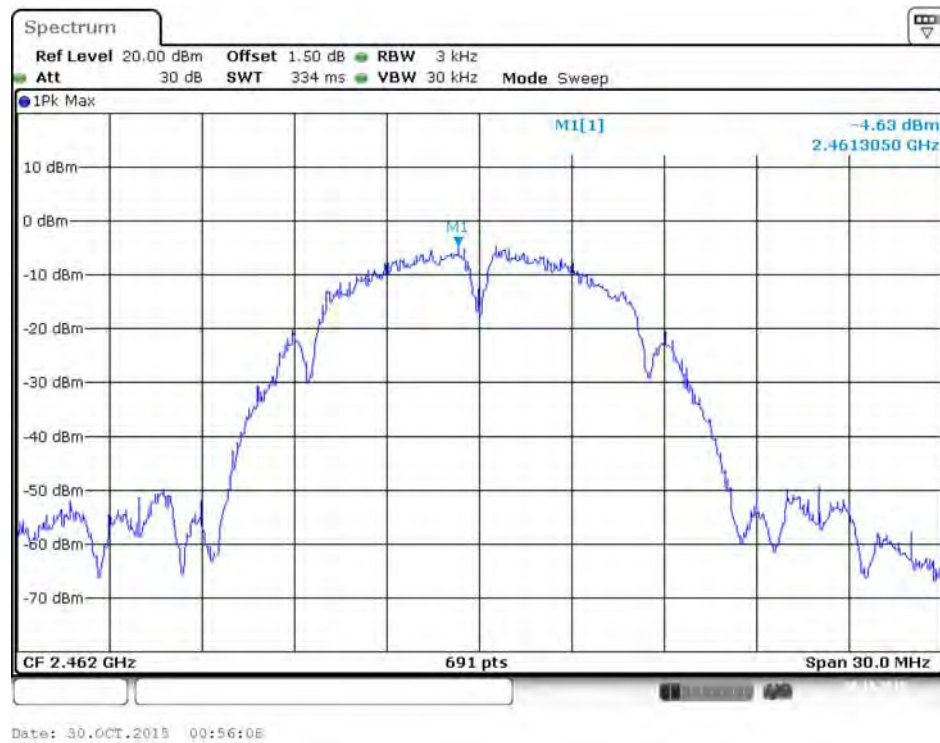


### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 2

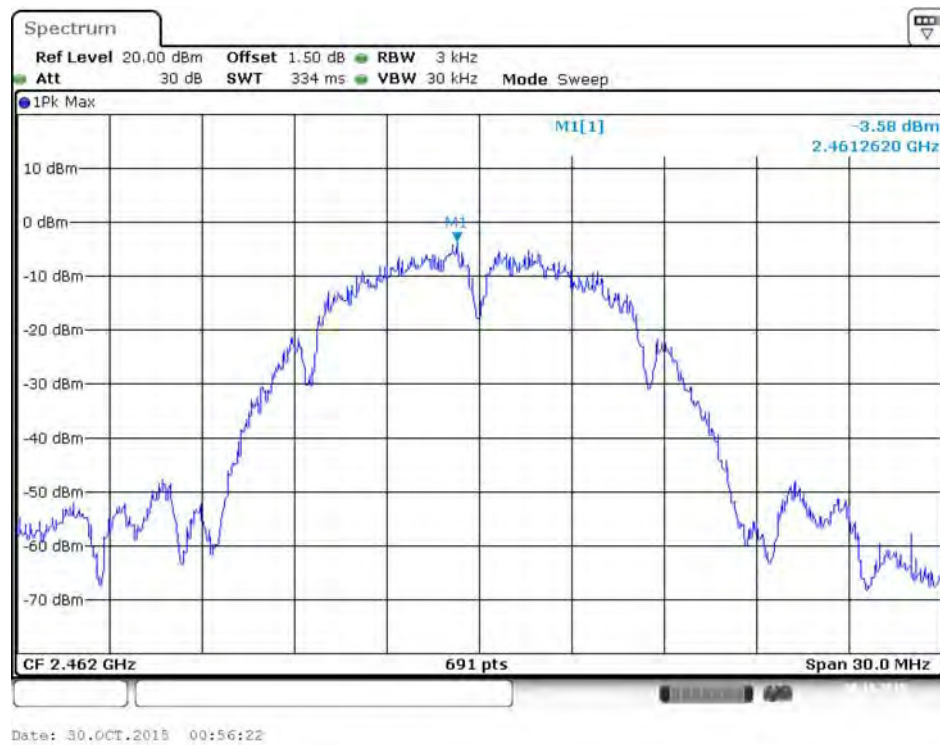


Mode 1 (Set 3 Dipole antenna / 3.83dBi / 3TX)

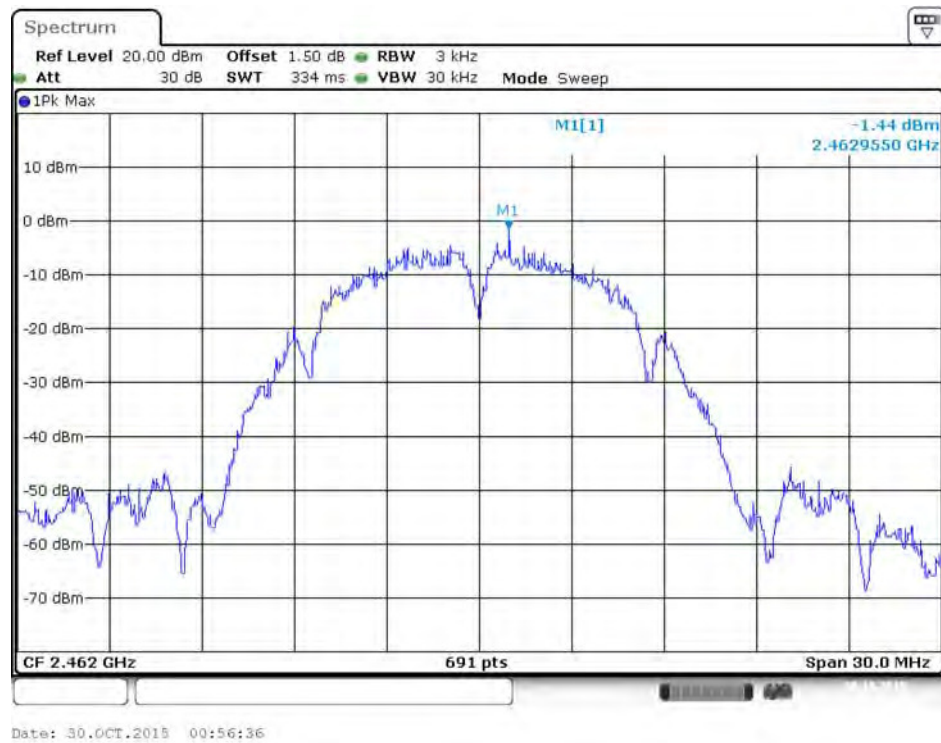
Power Density Plot on Configuration IEEE 802.11b / 2462 MHz / Chain 1



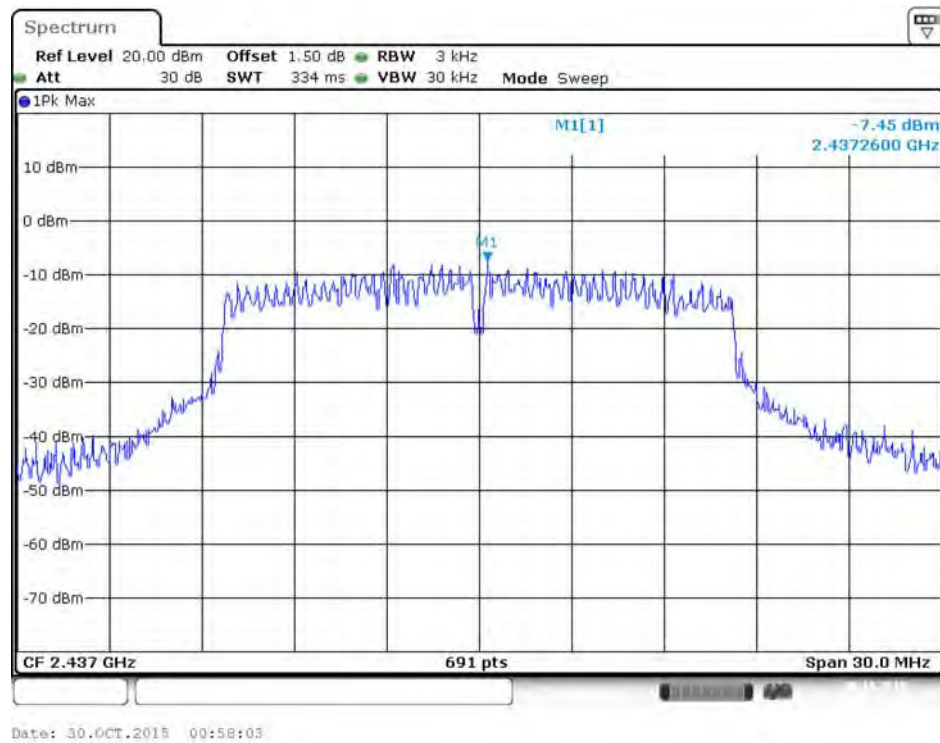
Power Density Plot on Configuration IEEE 802.11b / 2462 MHz / Chain 2



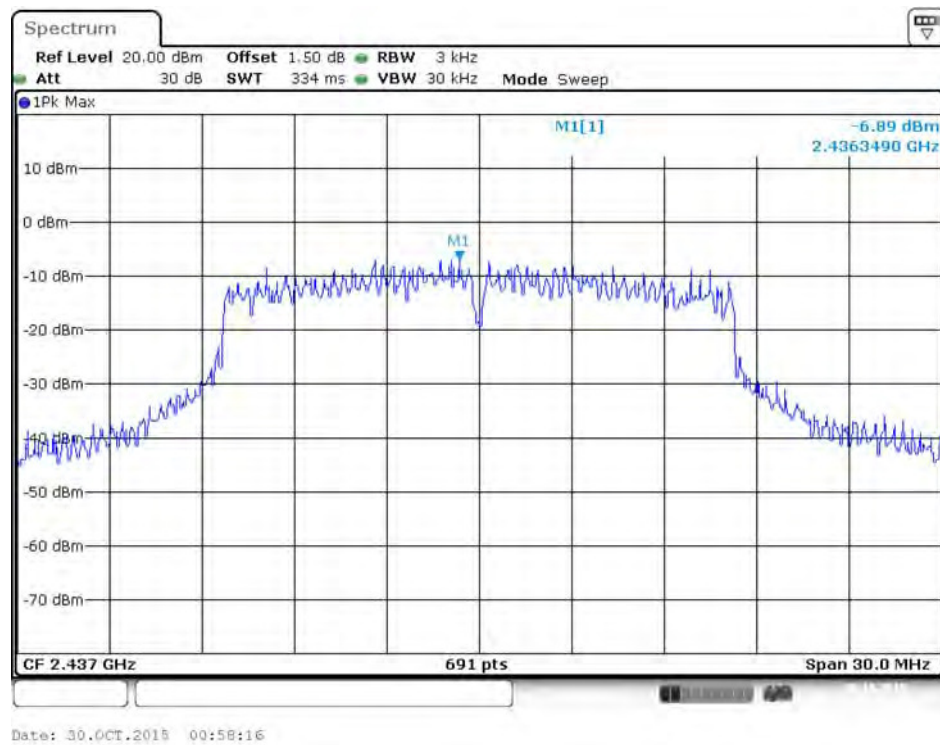
### Power Density Plot on Configuration IEEE 802.11b / 2462 MHz / Chain 3



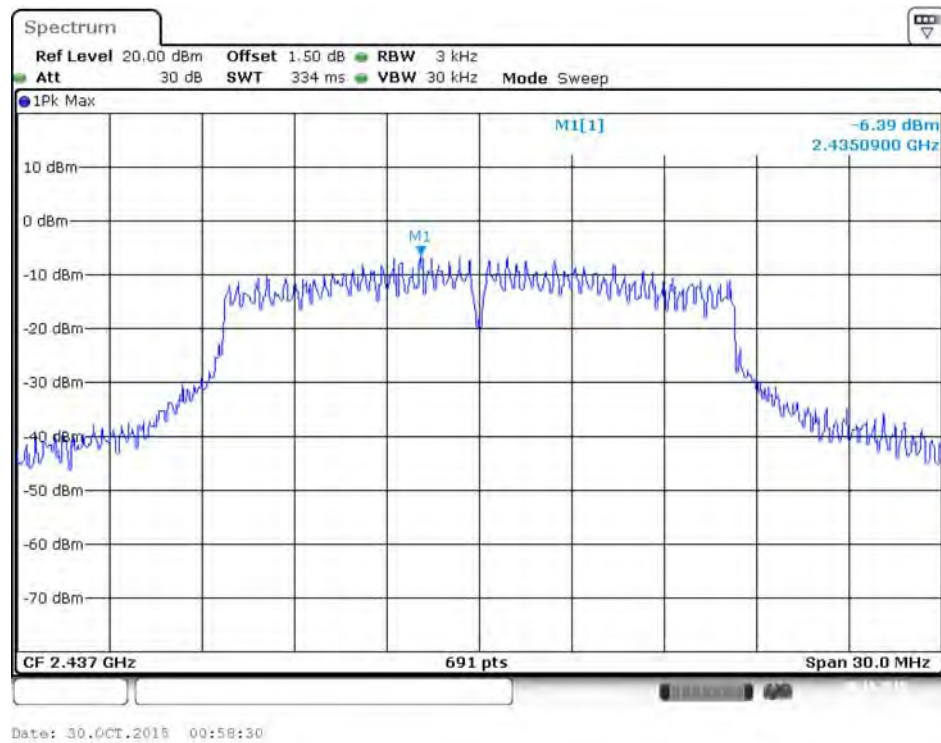
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 1



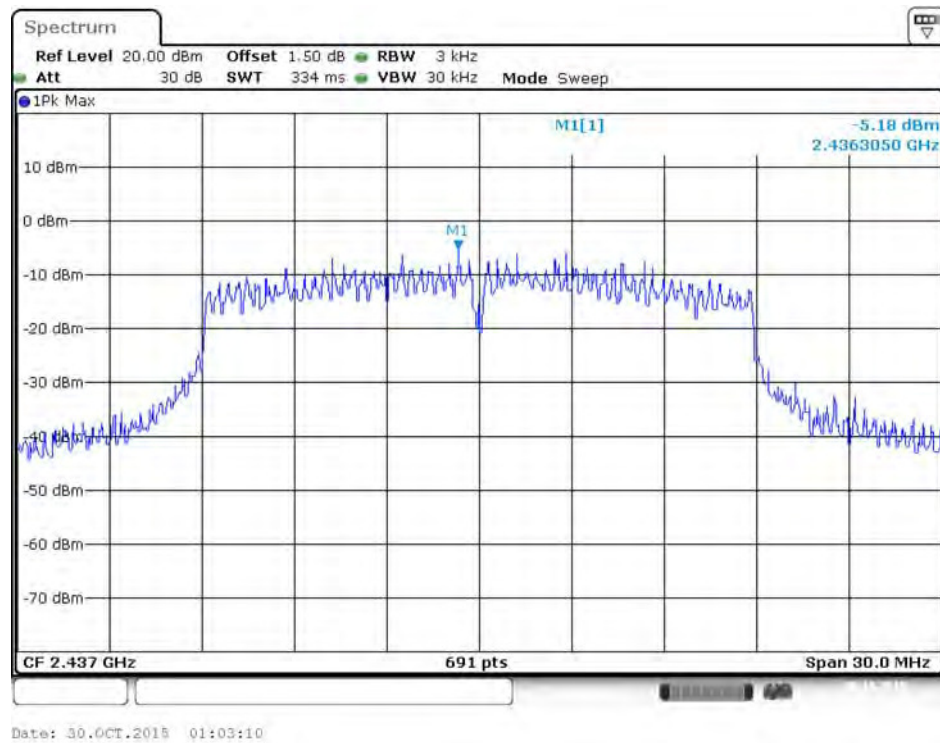
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 2



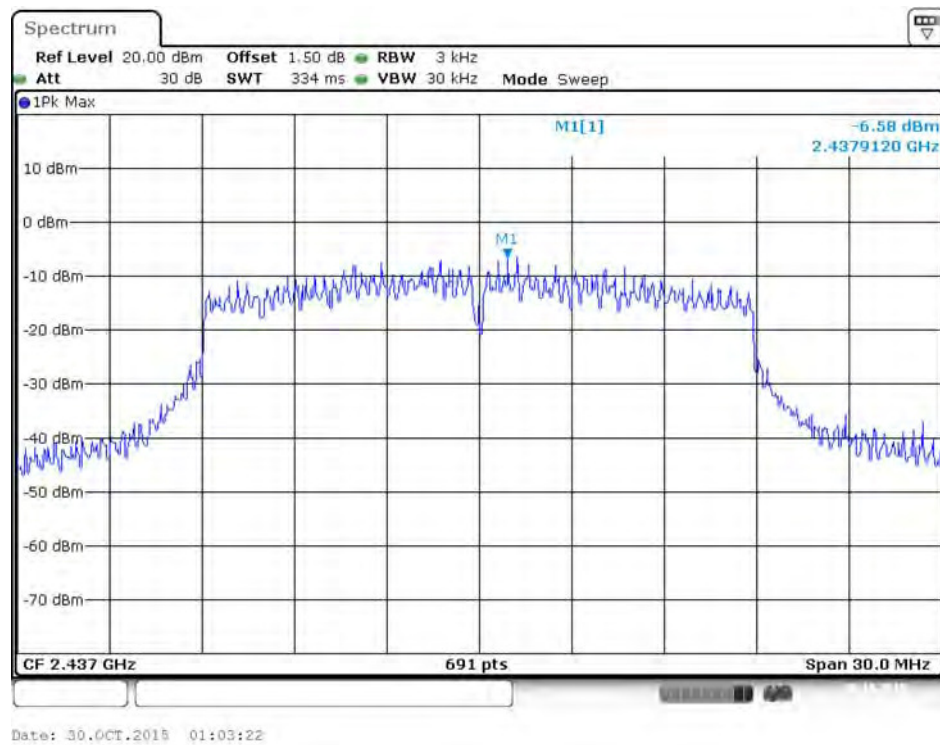
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 3



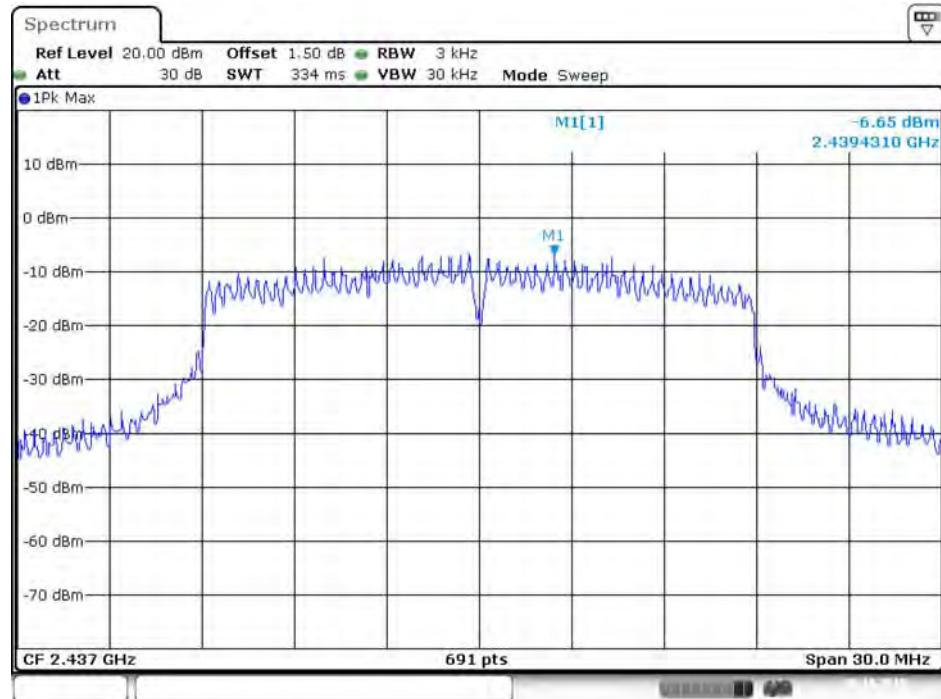
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 1



### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 2

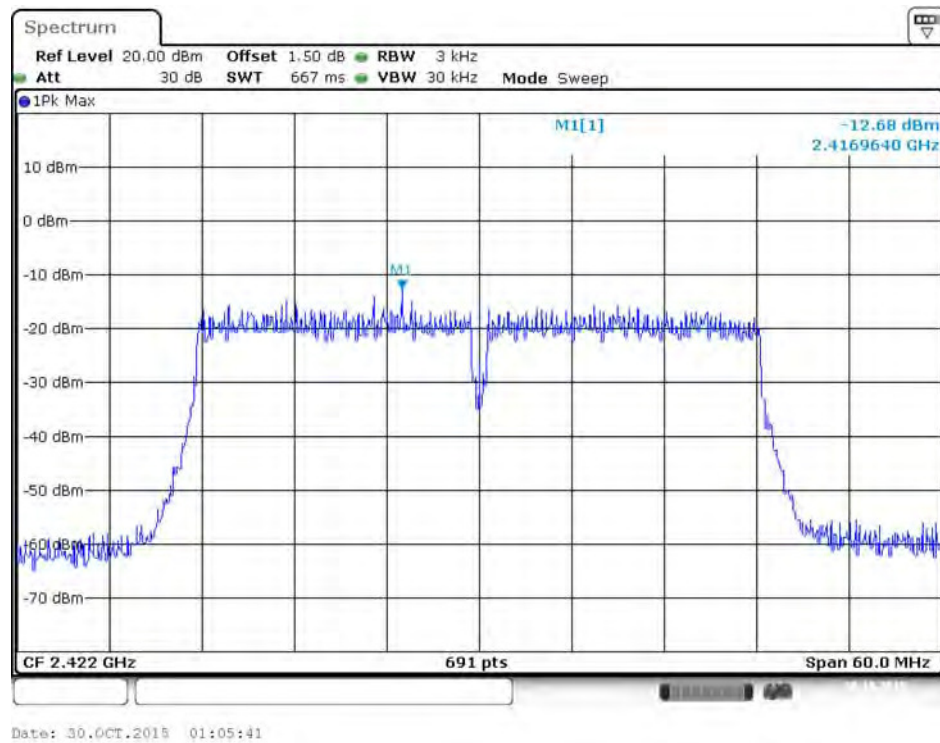


### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 3

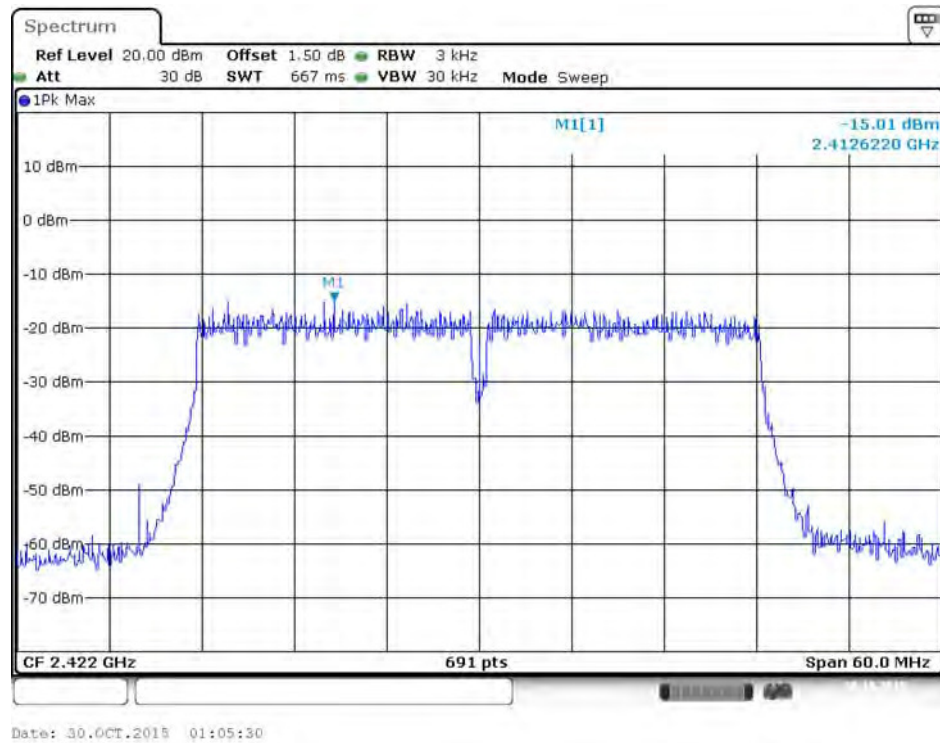


Date: 30.OCT.2015 01:03:34

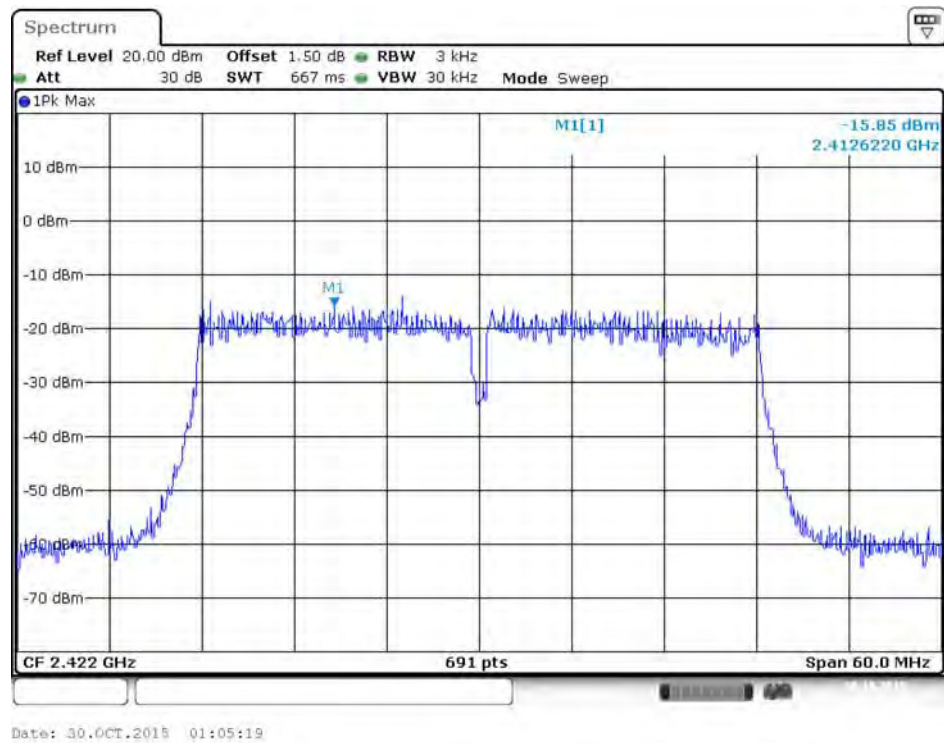
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2422 MHz / Chain 1



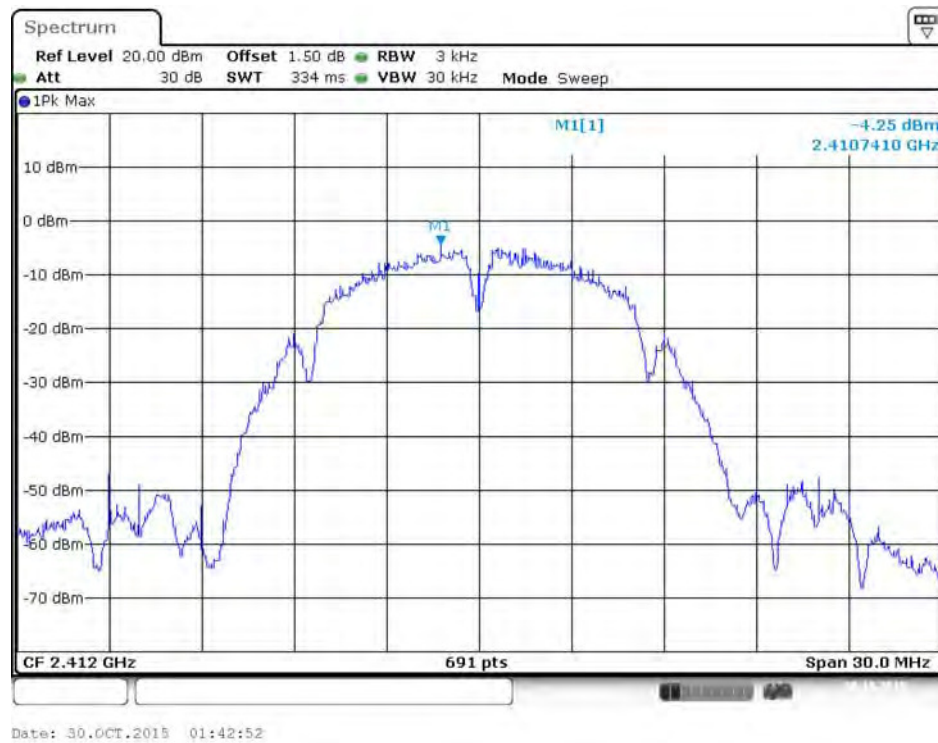
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2422 MHz / Chain 2



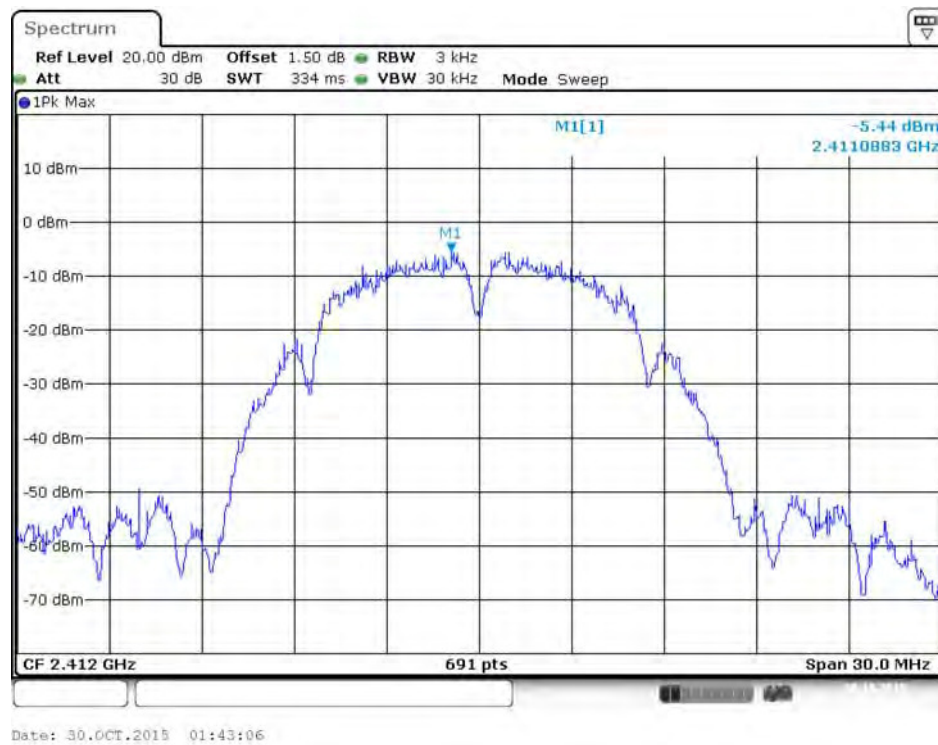
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2422 MHz / Chain 3



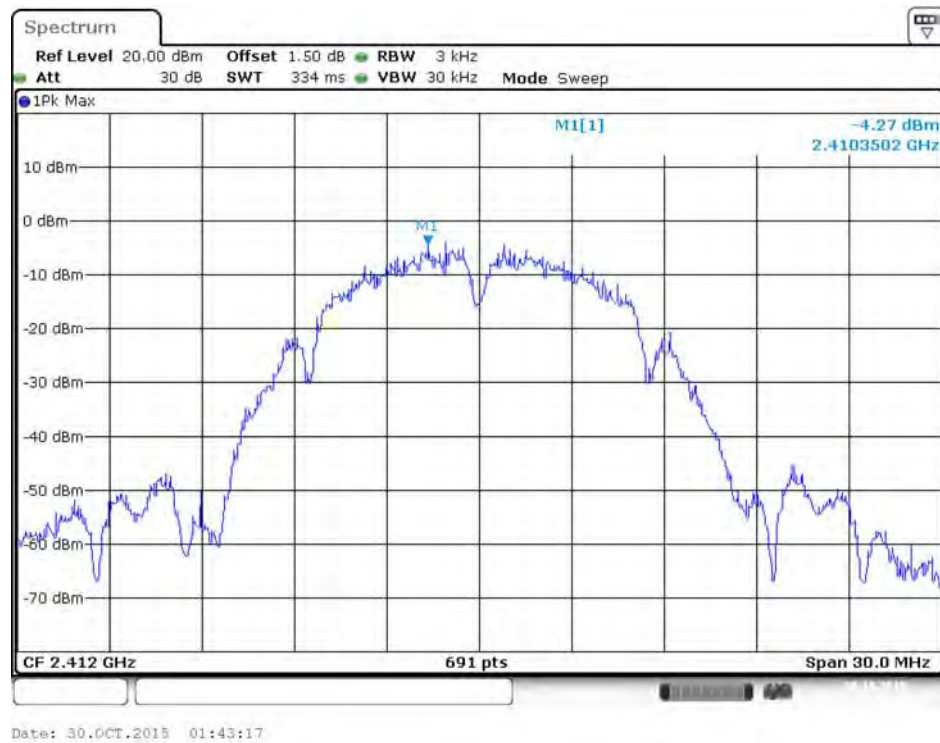
Mode 1 (Set 3 Dipole antenna / 3.83dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX)  
Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 1



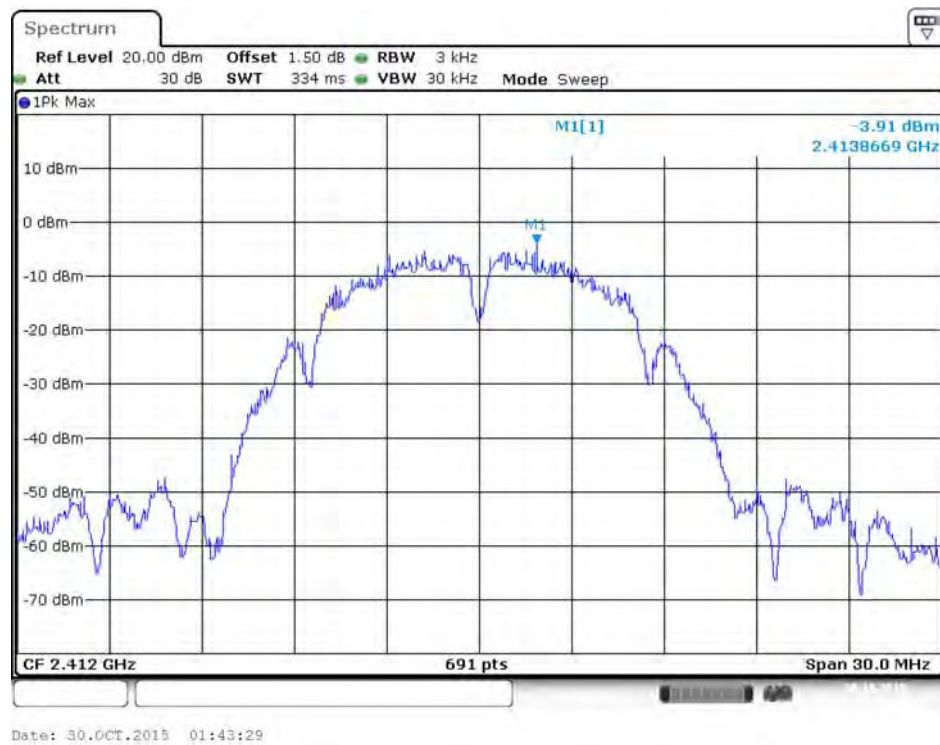
Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 2



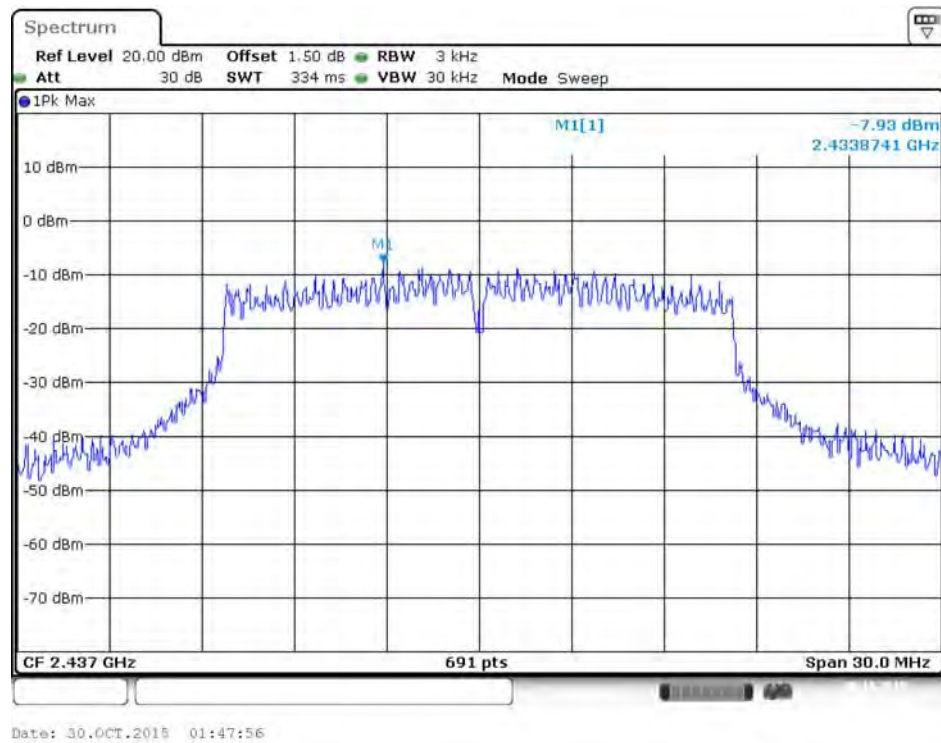
### Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 3



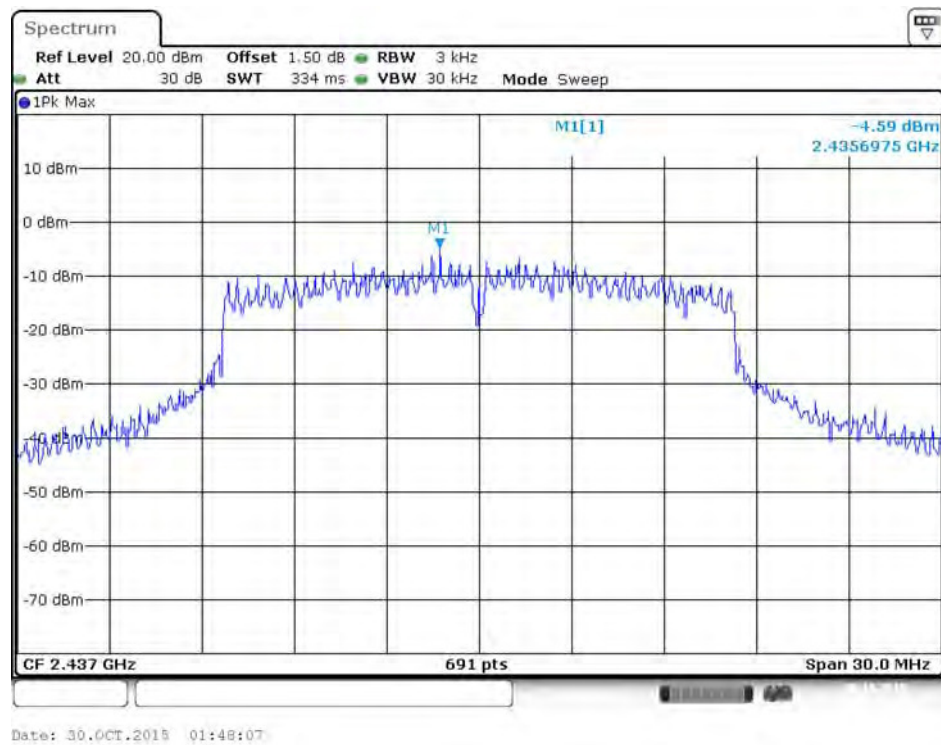
### Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 4



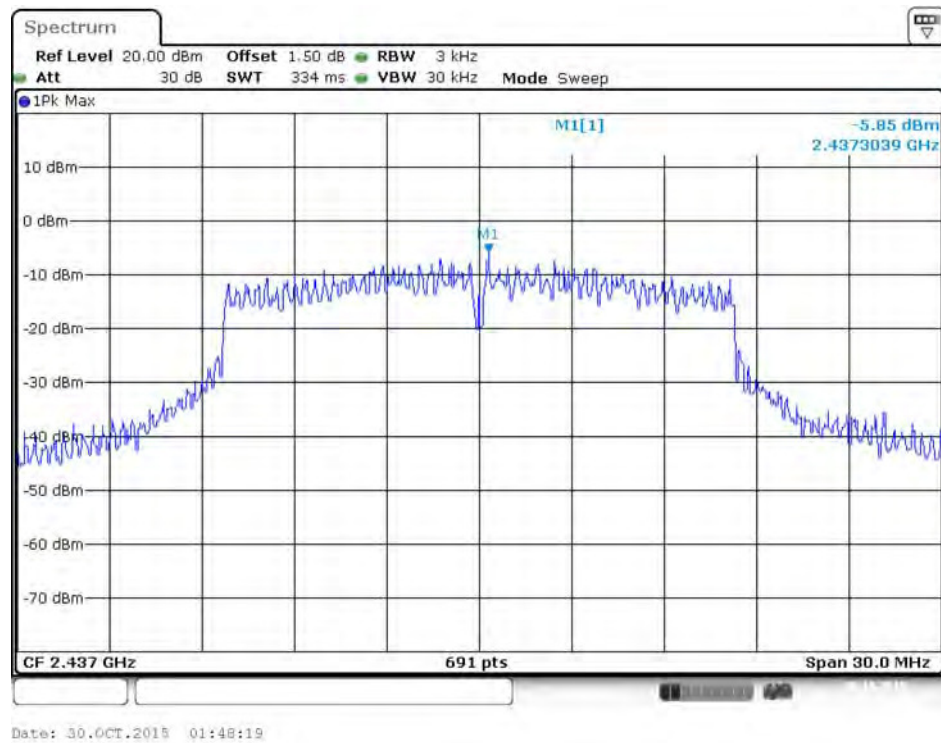
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 1



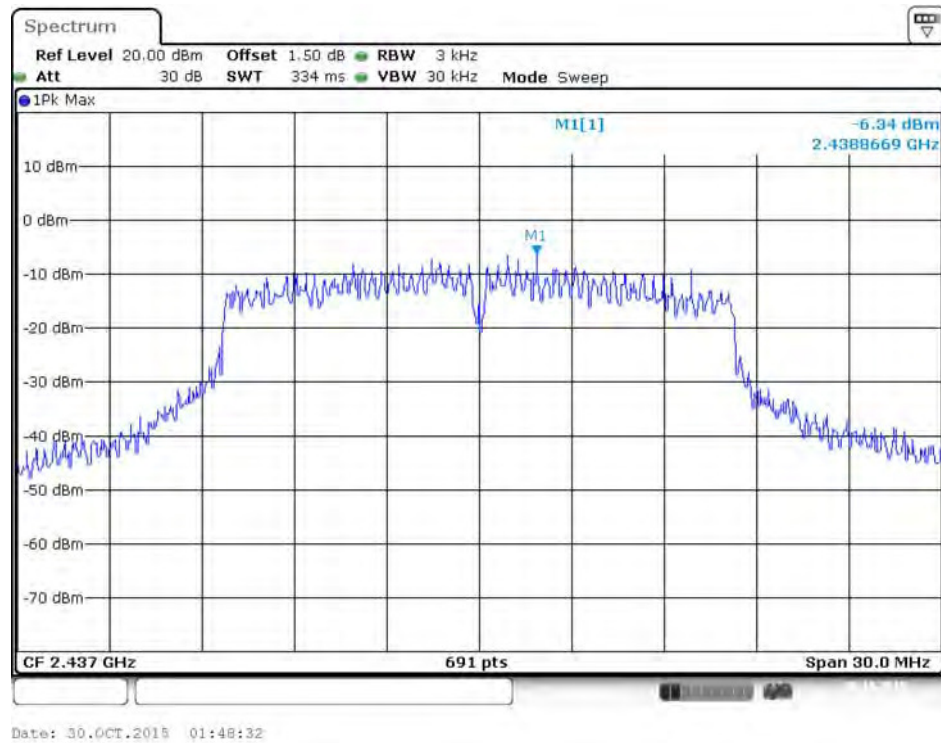
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 2



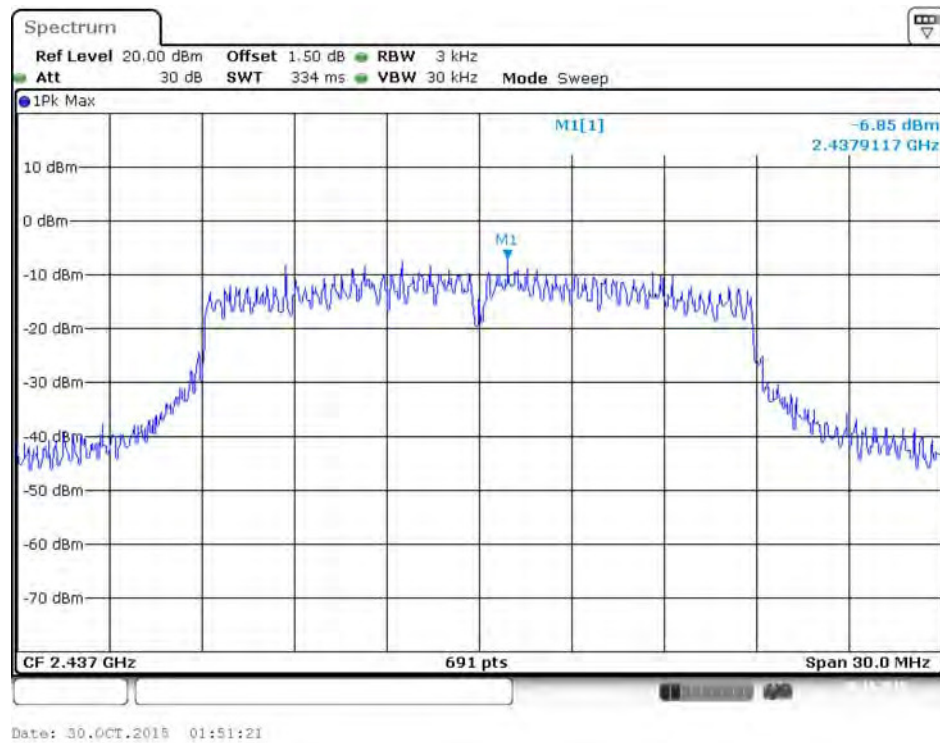
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 3



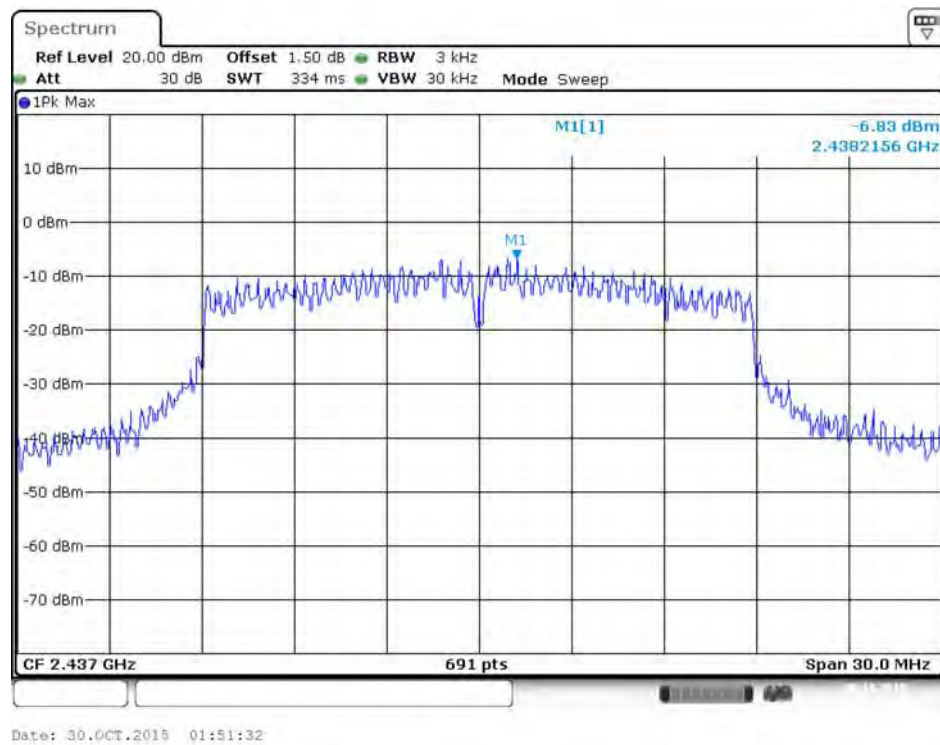
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 4



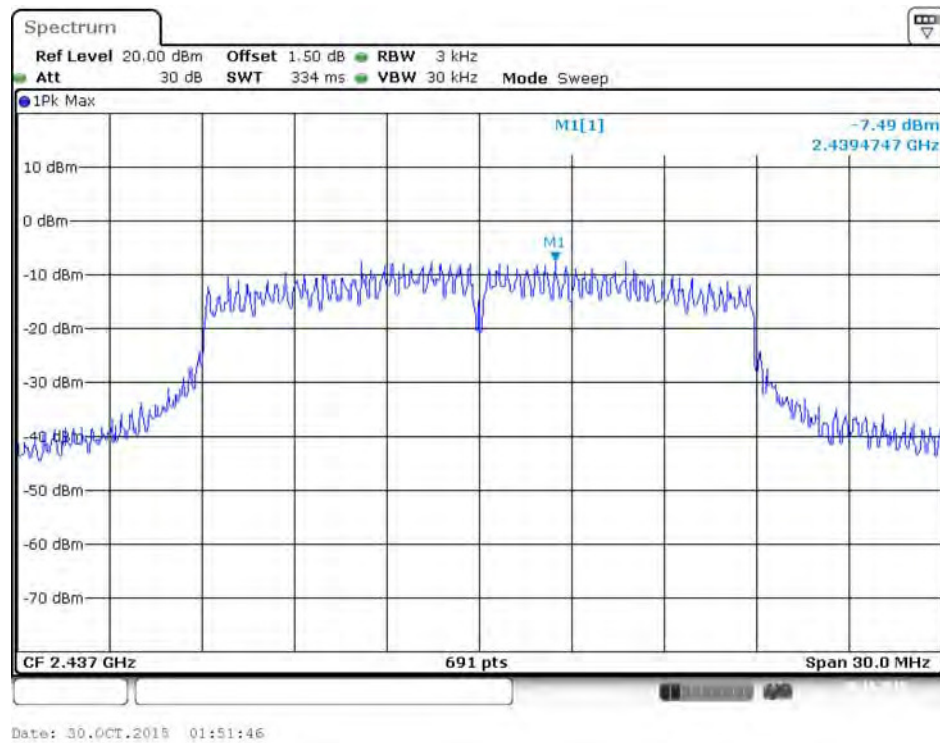
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 1



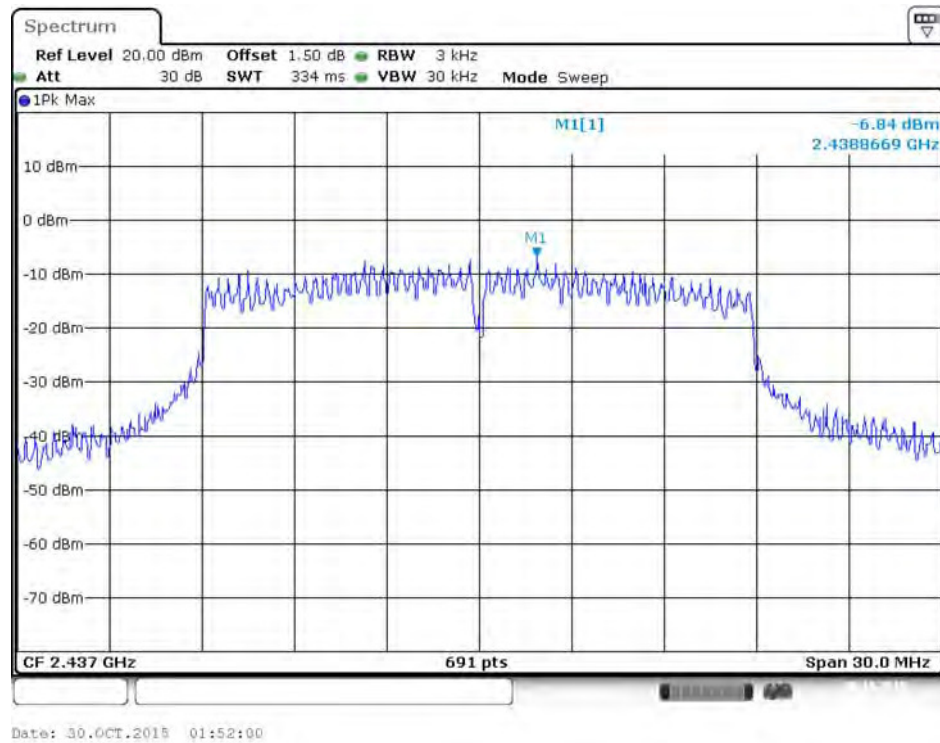
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 2



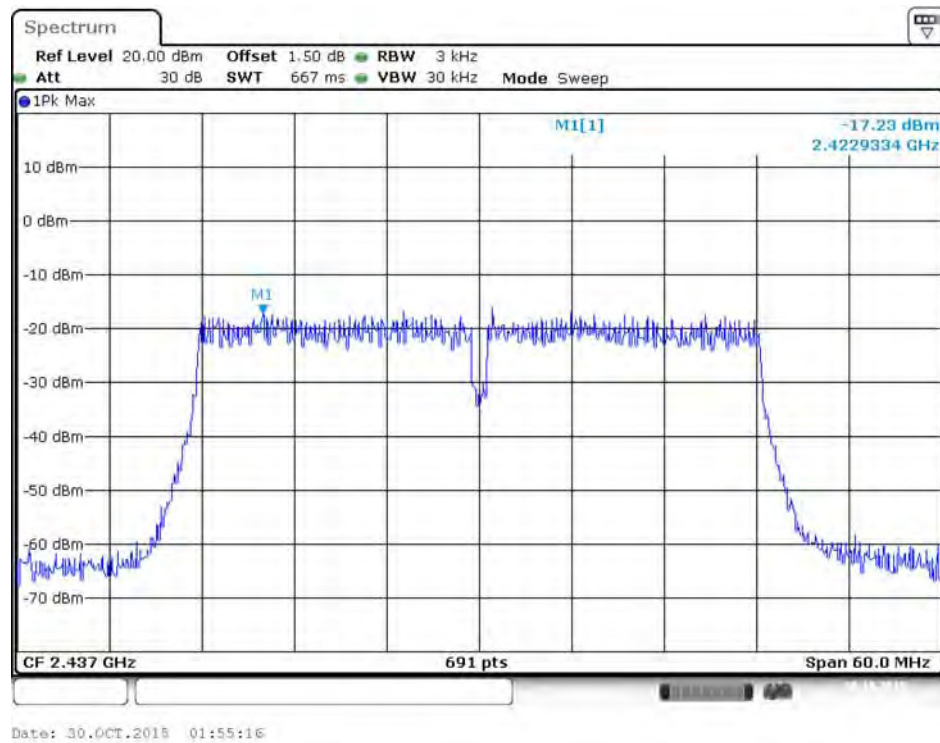
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 3



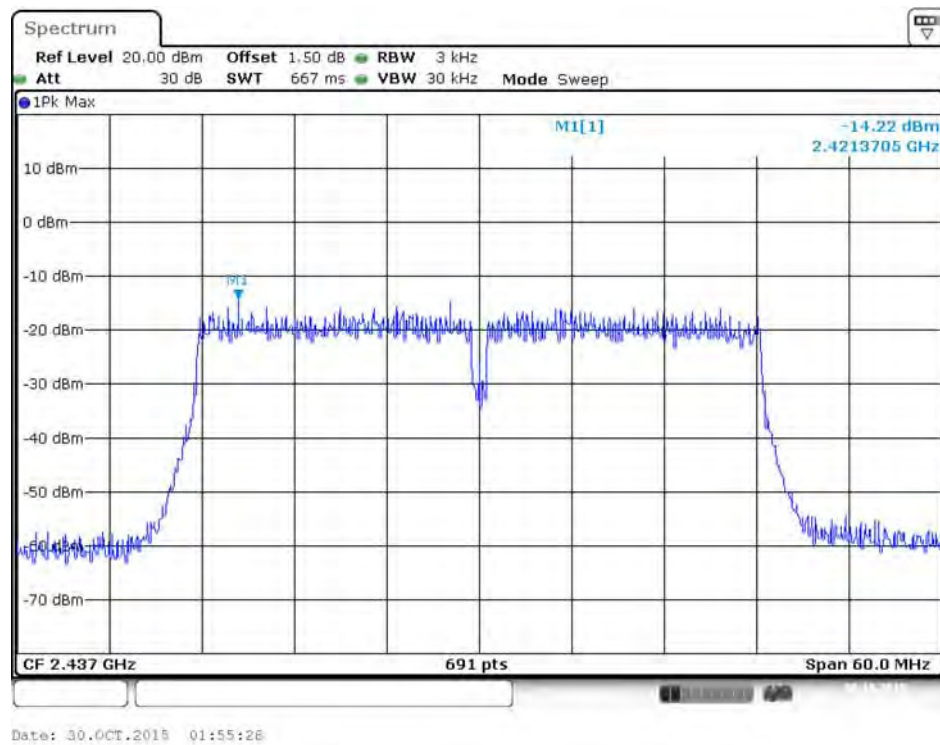
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 4



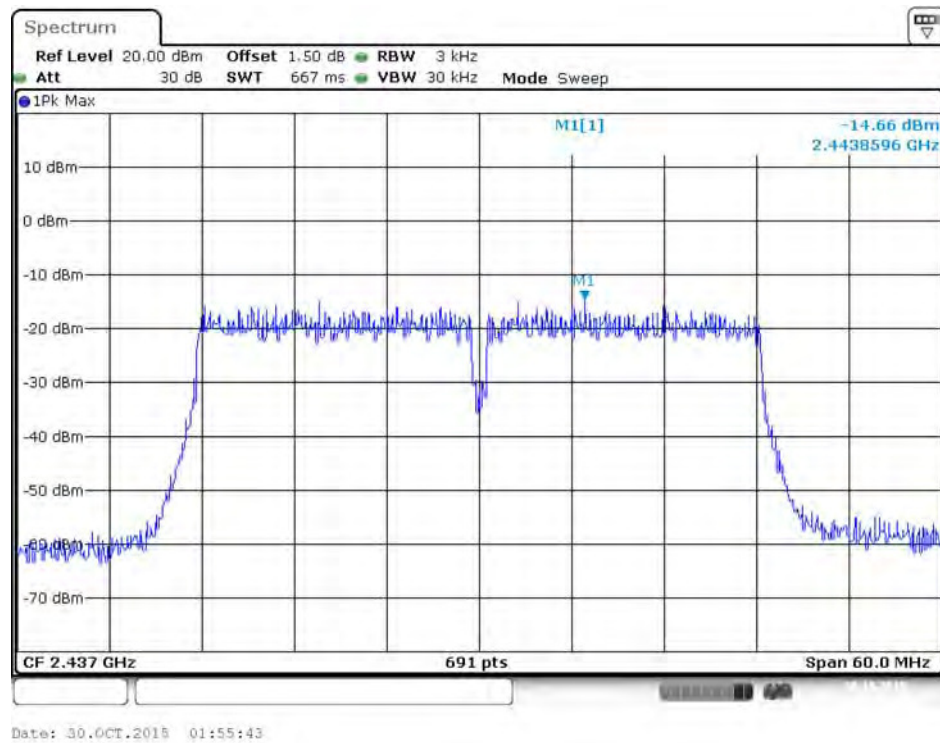
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 1



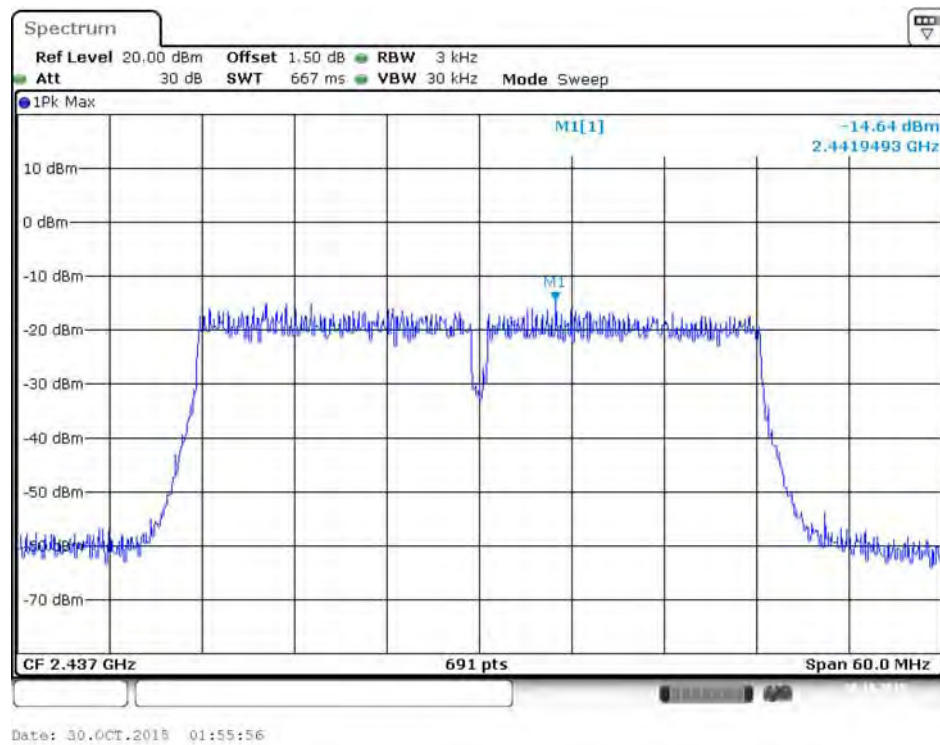
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 2



### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 3

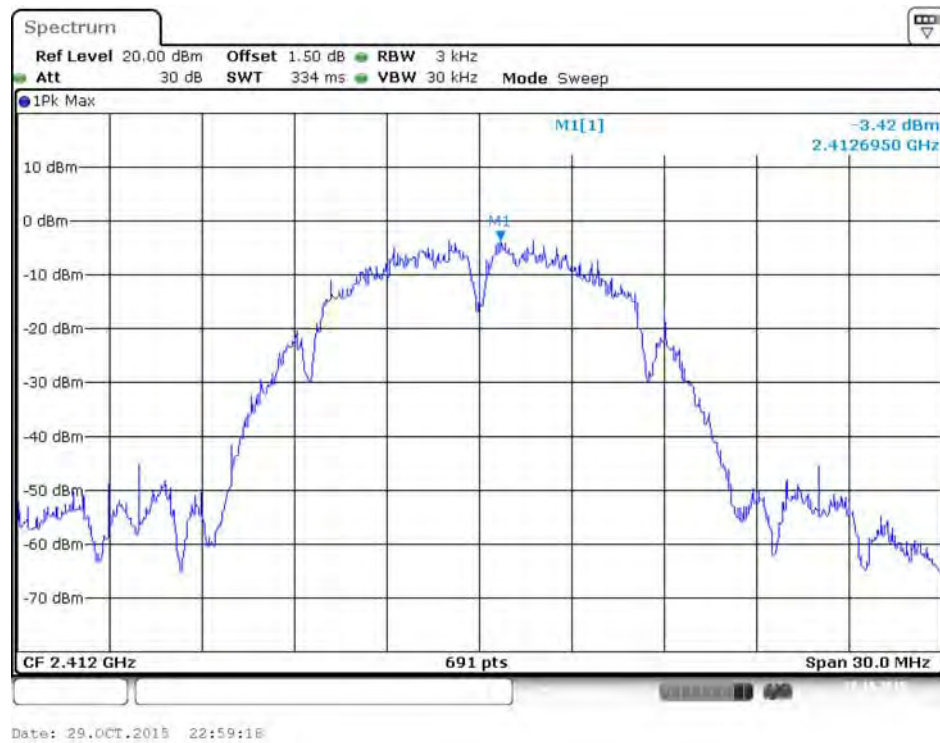


### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 4

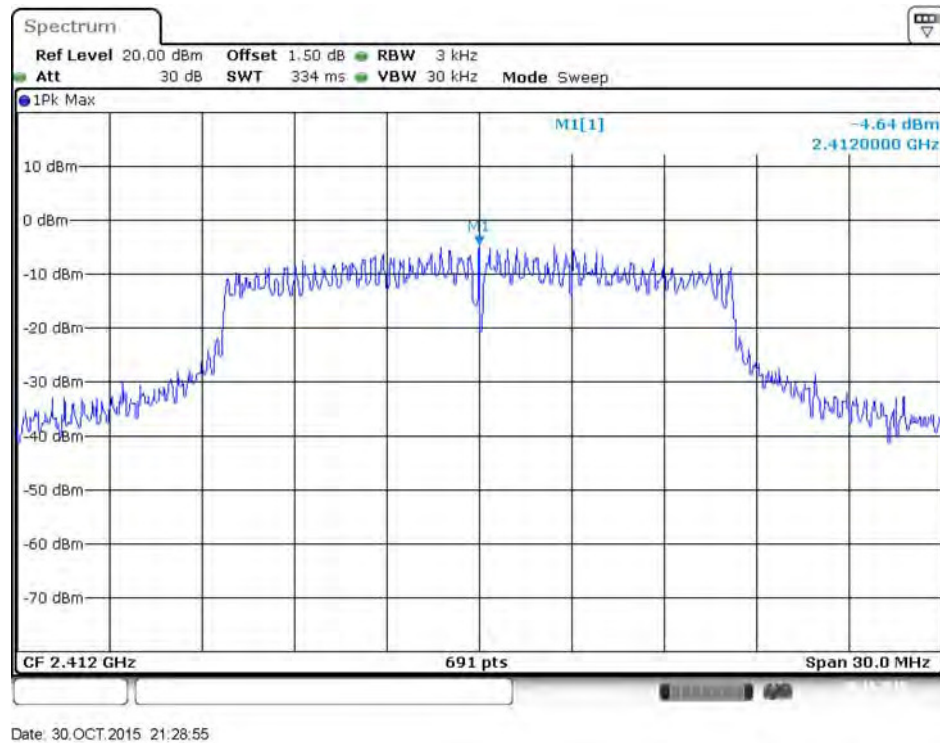


Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi \*1 / 1TX)

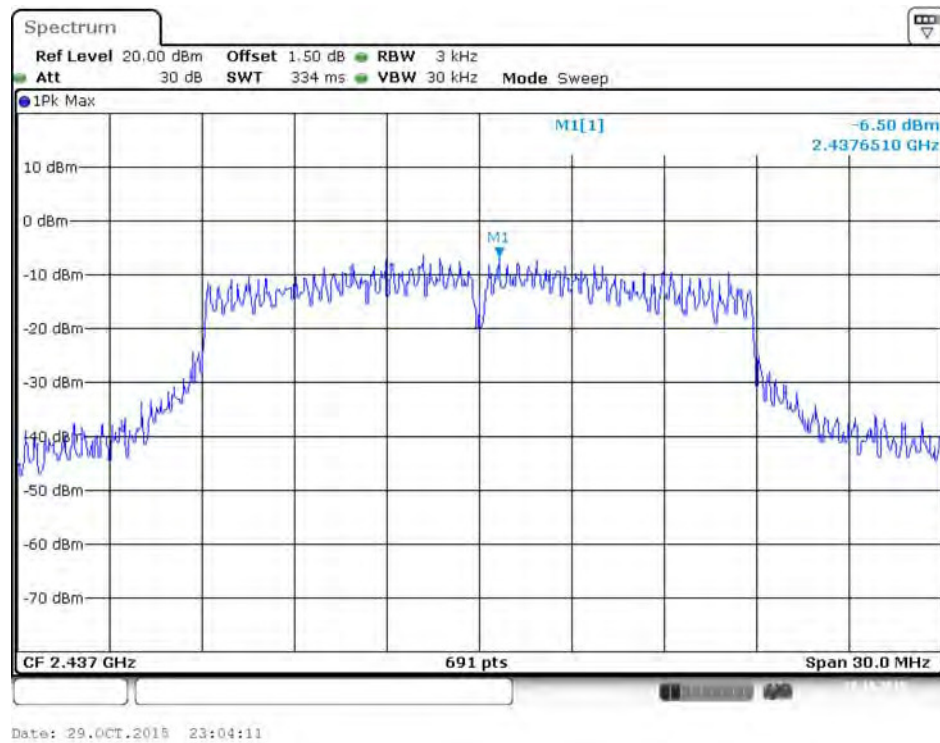
Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 1



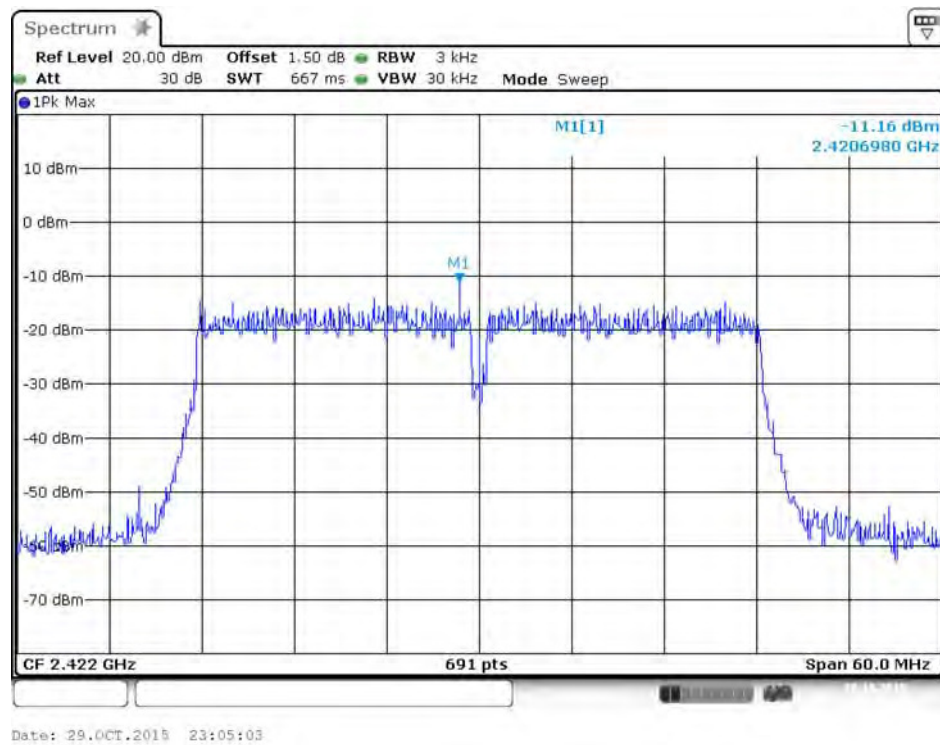
Power Density Plot on Configuration IEEE 802.11g / 2412 MHz / Chain 1



### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 1

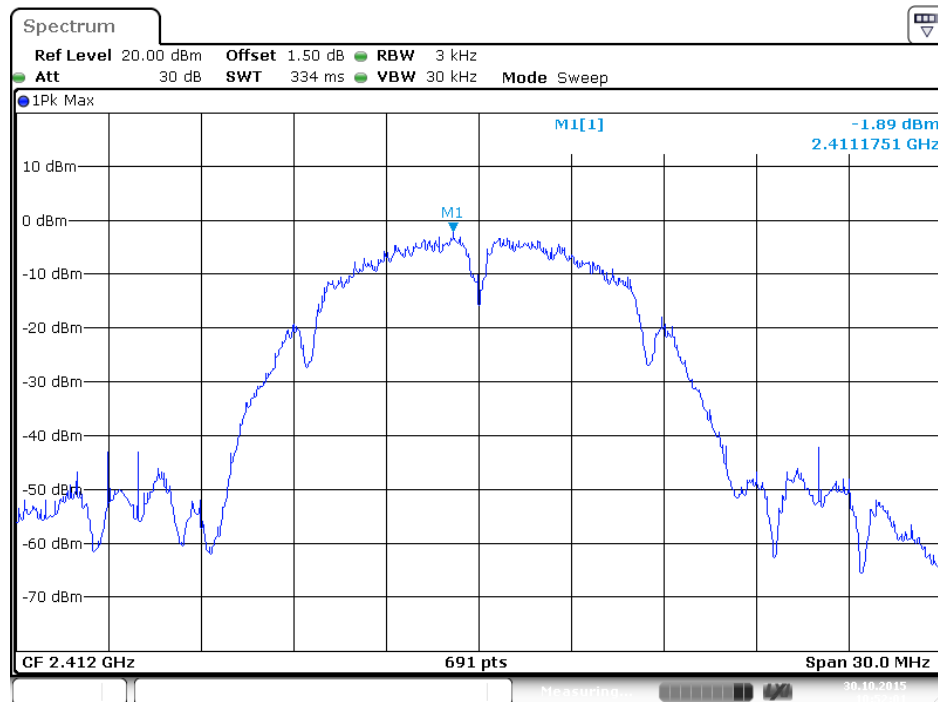


### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2422 MHz / Chain 1



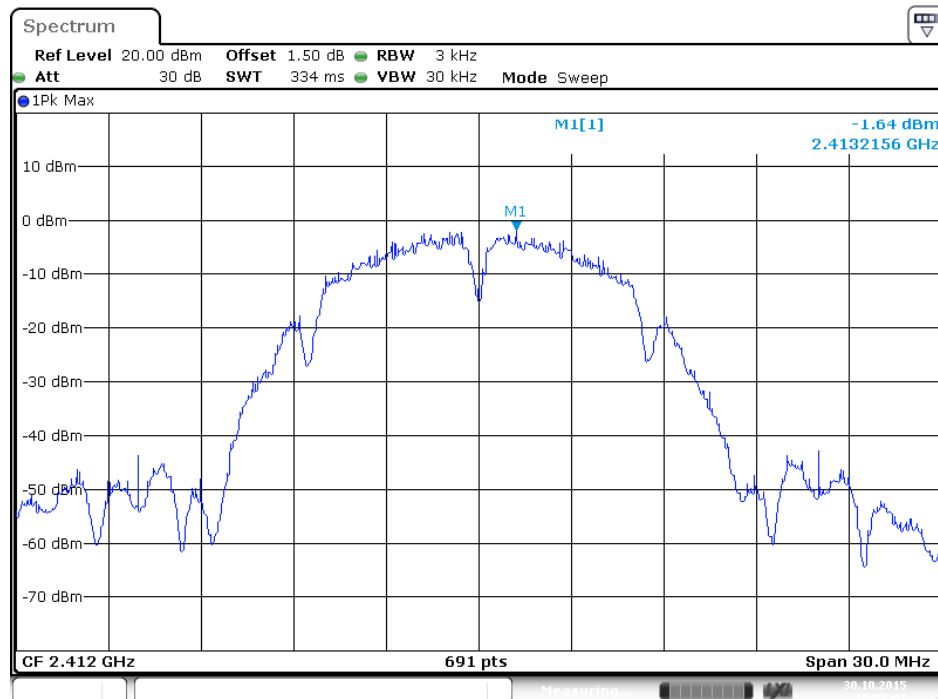
## Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi\*2 / 2TX)

### Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 1



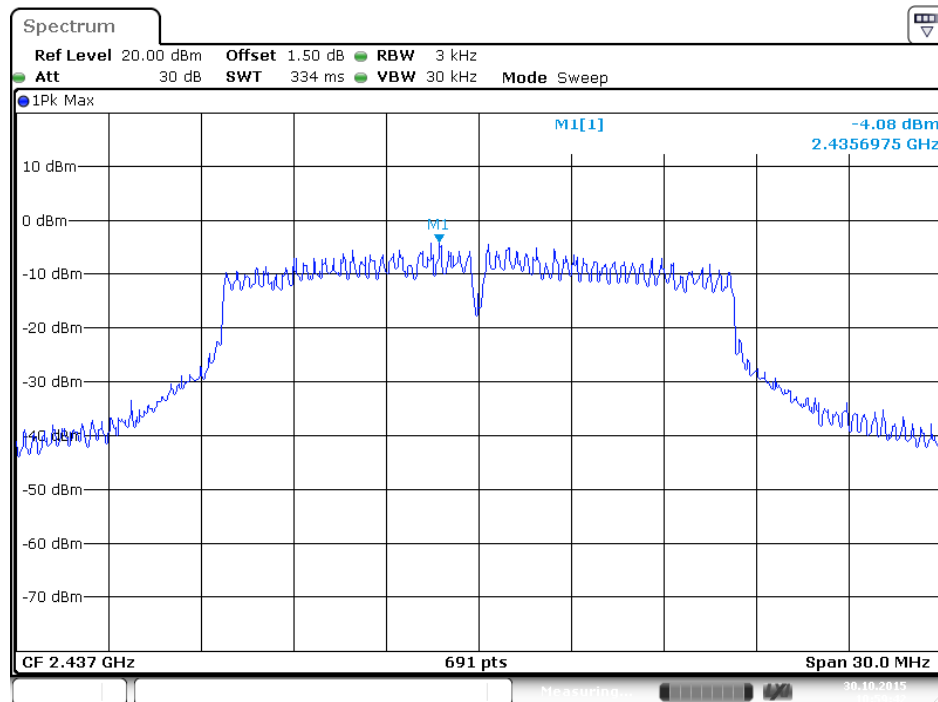
Date: 30.OCT.2015 10:52:01

### Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 3



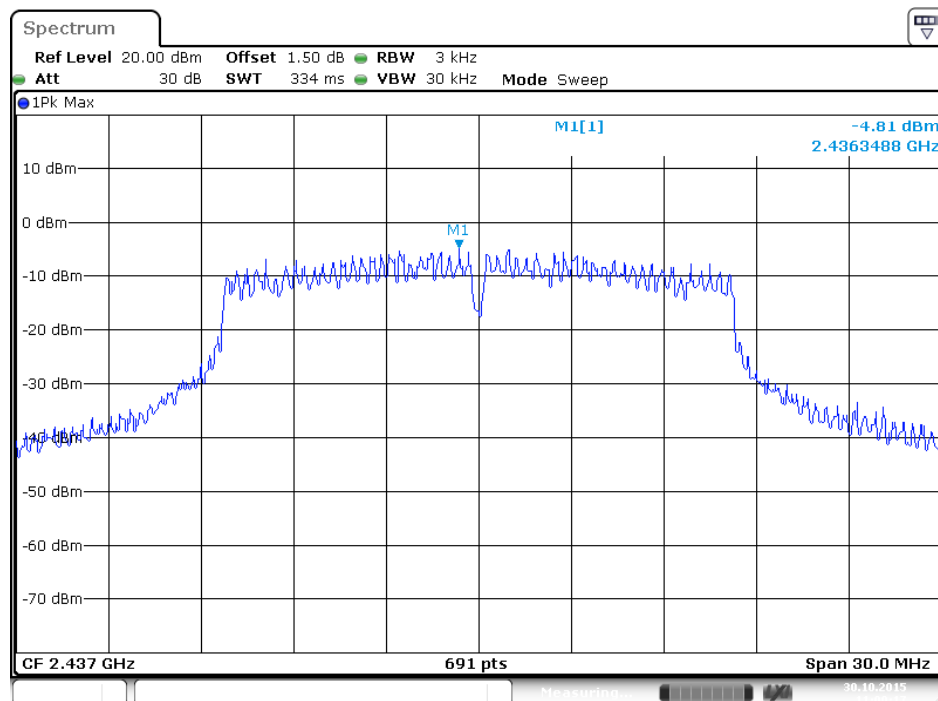
Date: 30.OCT.2015 10:52:41

### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 1



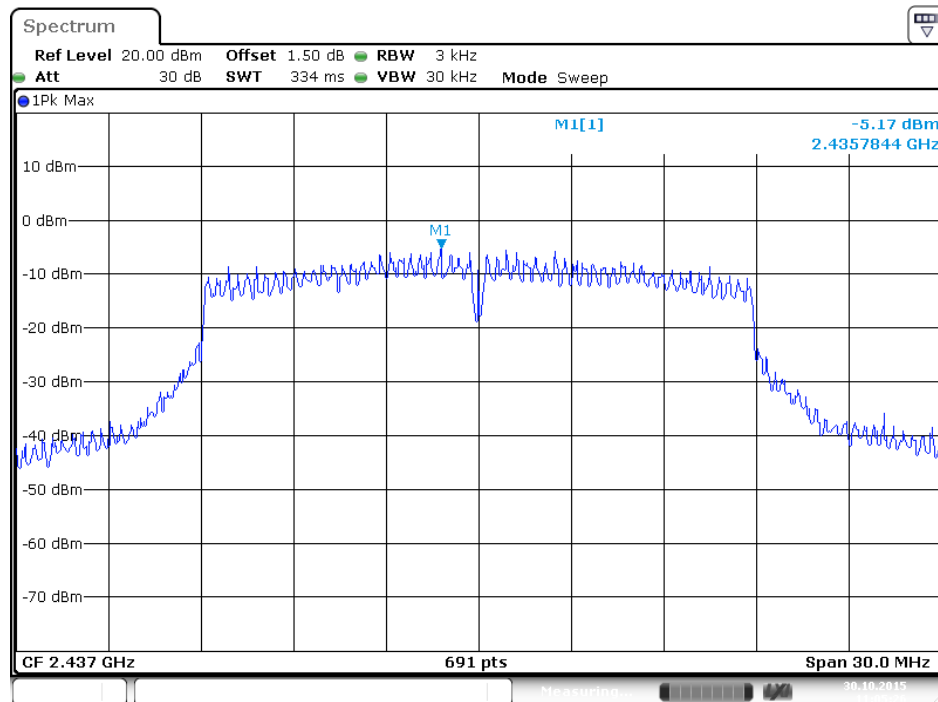
Date: 30.OCT.2015 10:59:42

### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 3



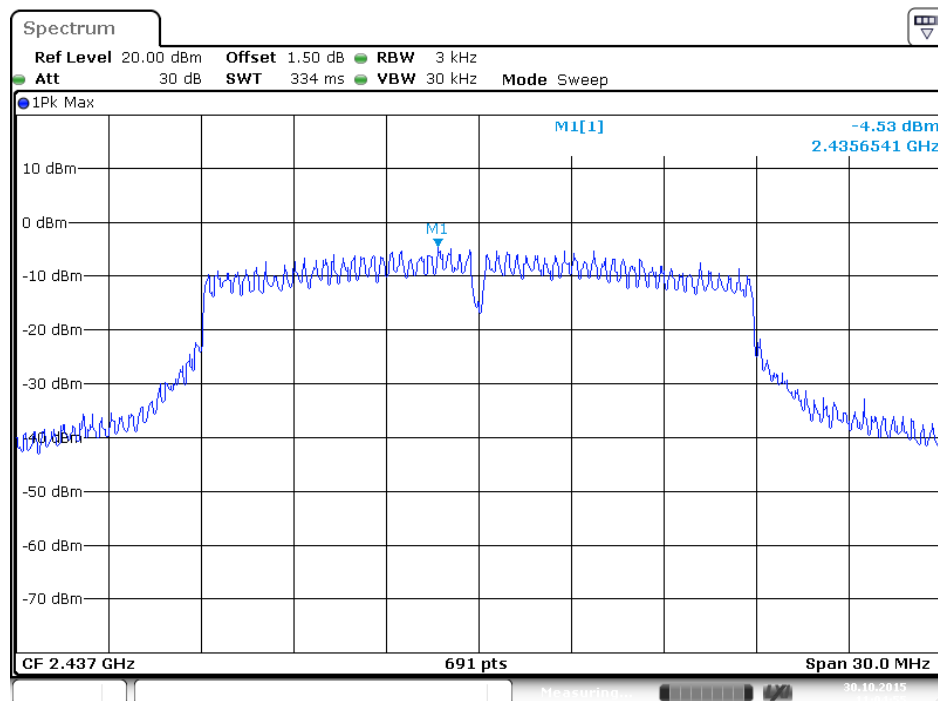
Date: 30.OCT.2015 11:00:17

### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 1



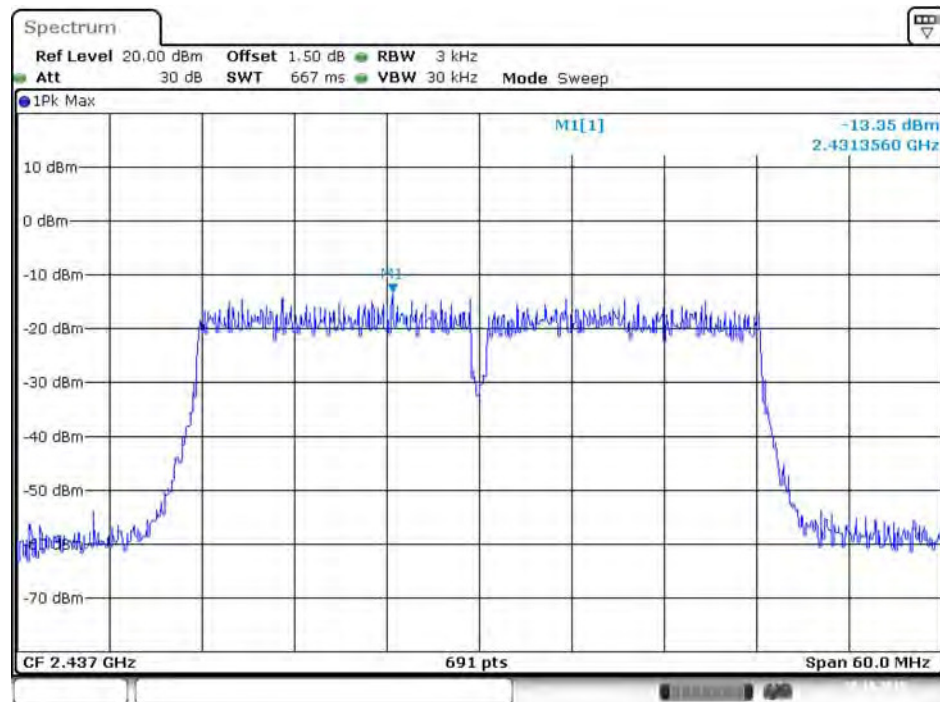
Date: 30.OCT.2015 11:05:26

### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 3



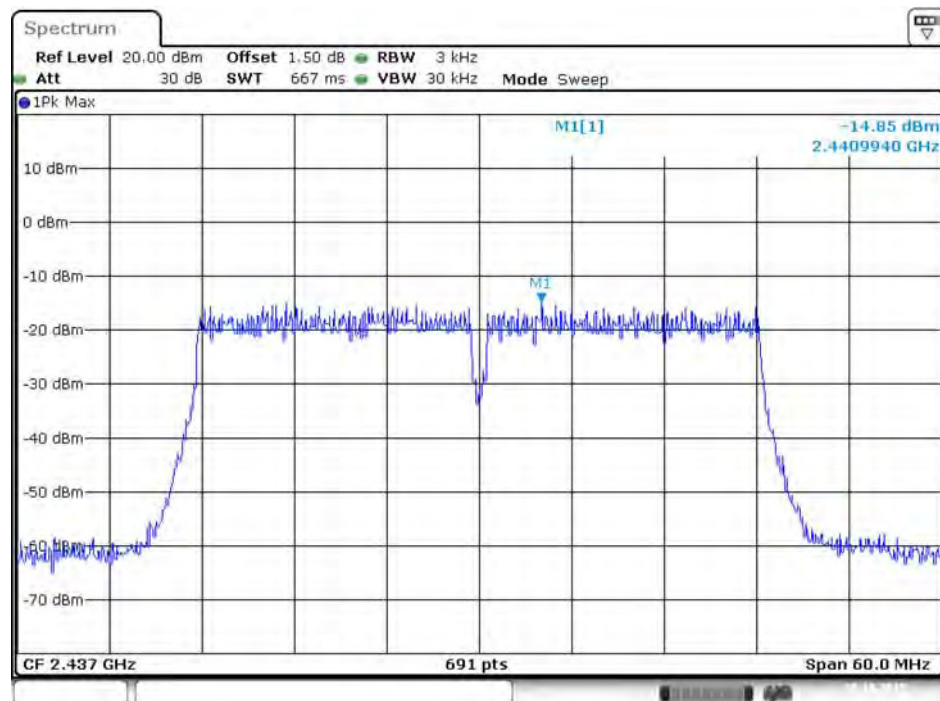
Date: 30.OCT.2015 11:04:55

### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 1



Date: 30.OCT.2015 21:38:49

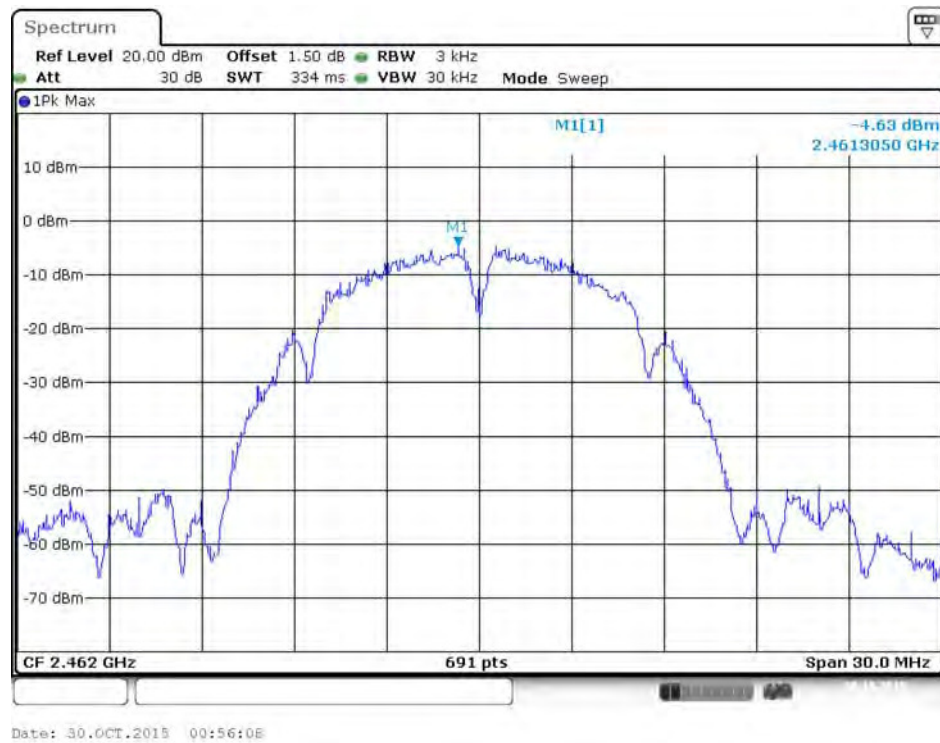
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 3



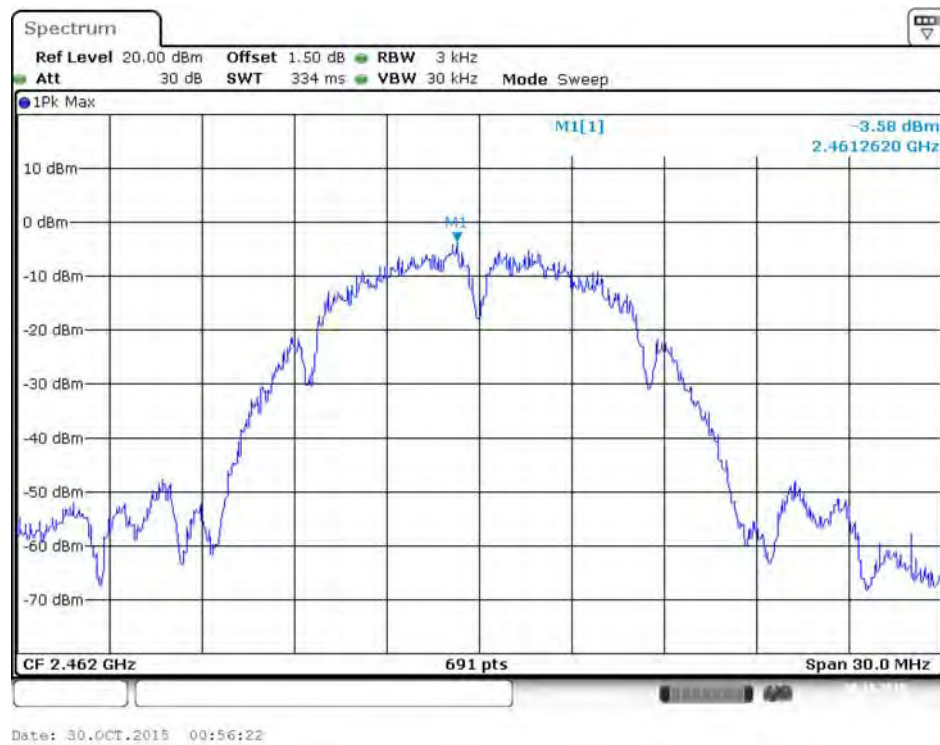
Date: 30.OCT.2015 21:39:05

Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi\*2, (1B)3.93dBi\*1 / 3TX)

Power Density Plot on Configuration IEEE 802.11b / 2462 MHz / Chain 1



Power Density Plot on Configuration IEEE 802.11b / 2462 MHz / Chain 2

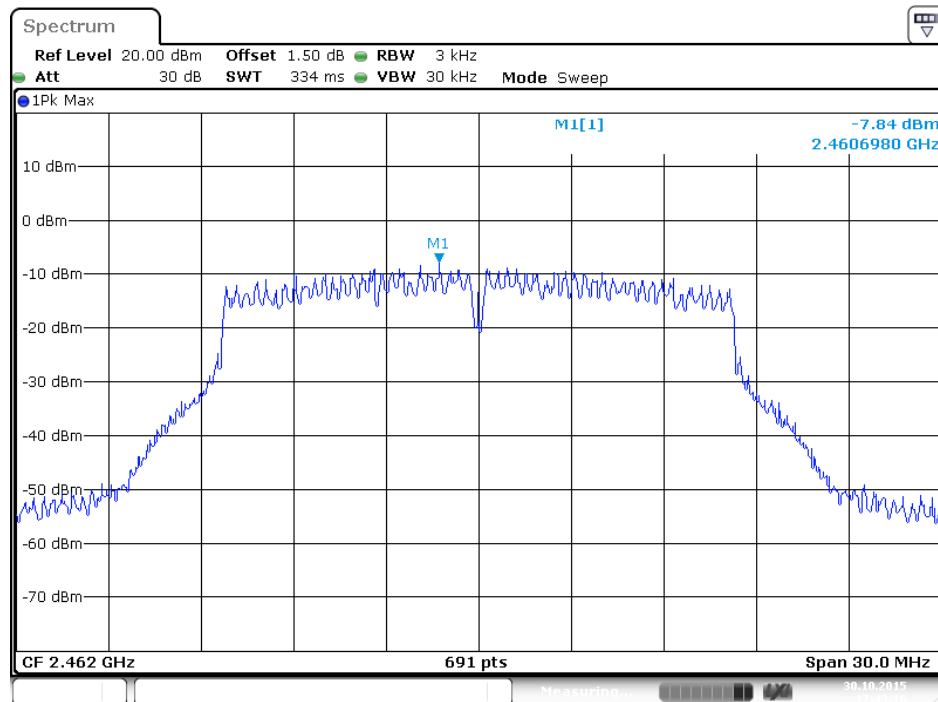


Power Density Plot on Configuration IEEE 802.11b / 2462 MHz / Chain 3



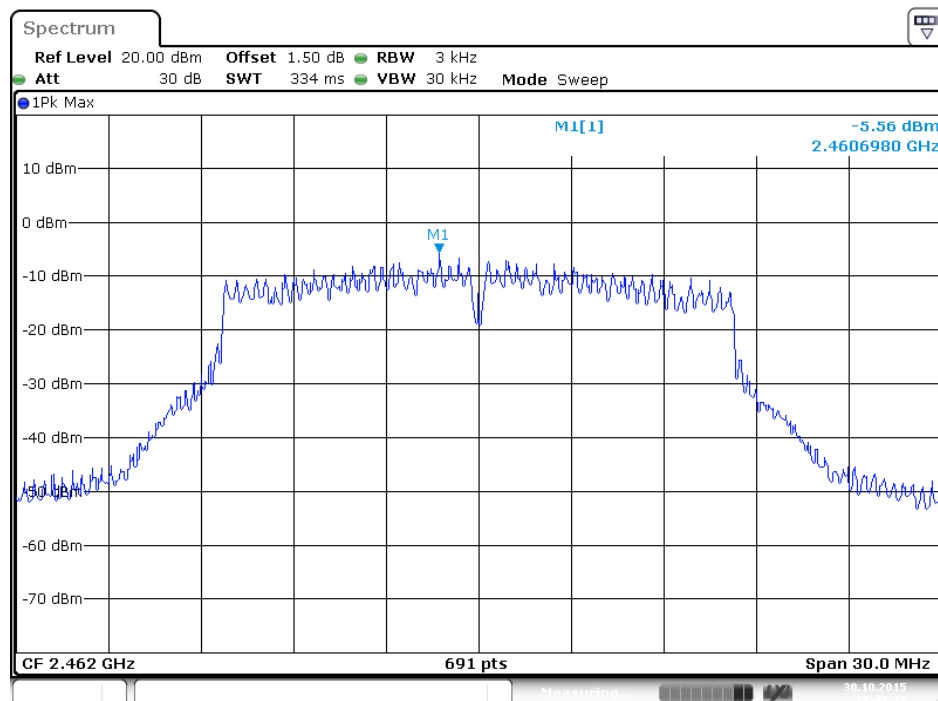
Date: 30.OCT.2015 00:56:36

### Power Density Plot on Configuration IEEE 802.11g / 2462 MHz / Chain 1



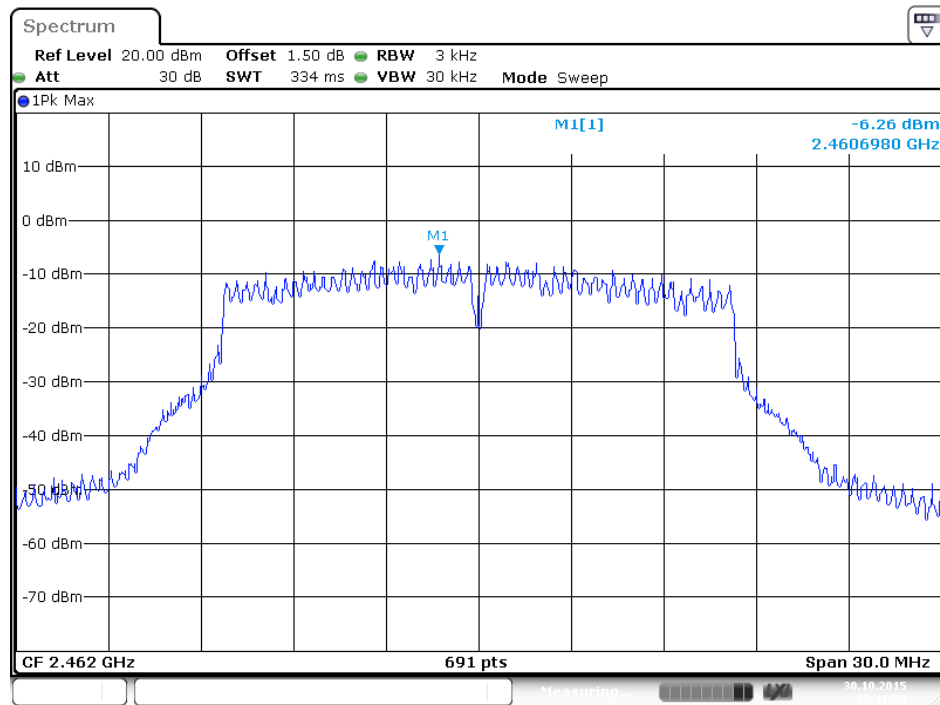
Date: 30 OCT 2015 17:43:16

### Power Density Plot on Configuration IEEE 802.11g / 2462 MHz / Chain 2



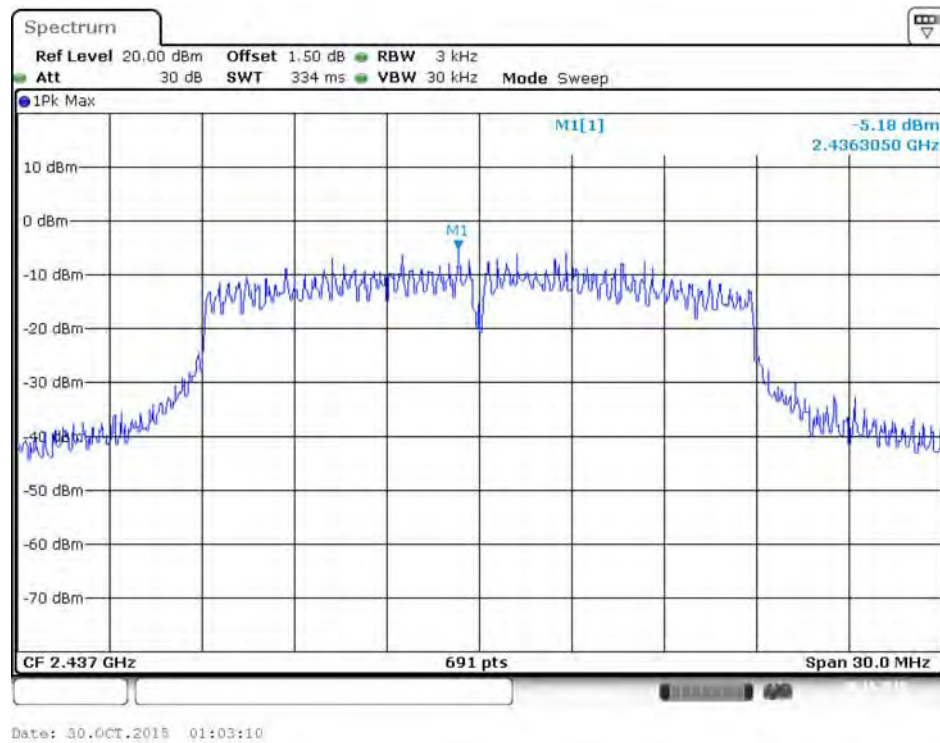
Date: 30 OCT 2015 17:42:36

### Power Density Plot on Configuration IEEE 802.11g / 2462 MHz / Chain 3

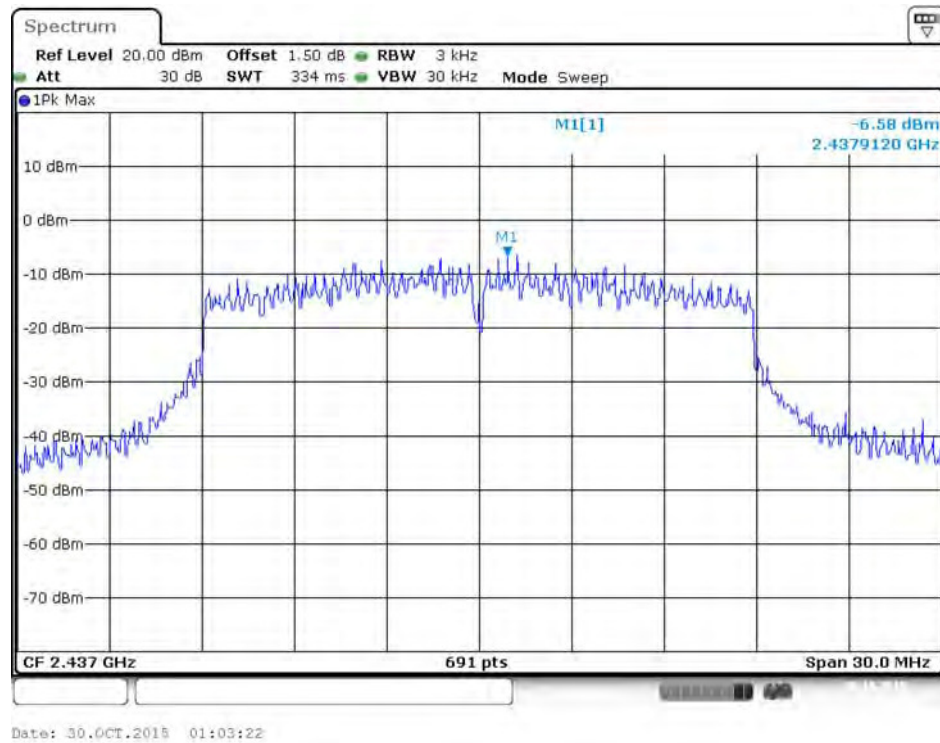


Date: 30 OCT 2015 17:41:59

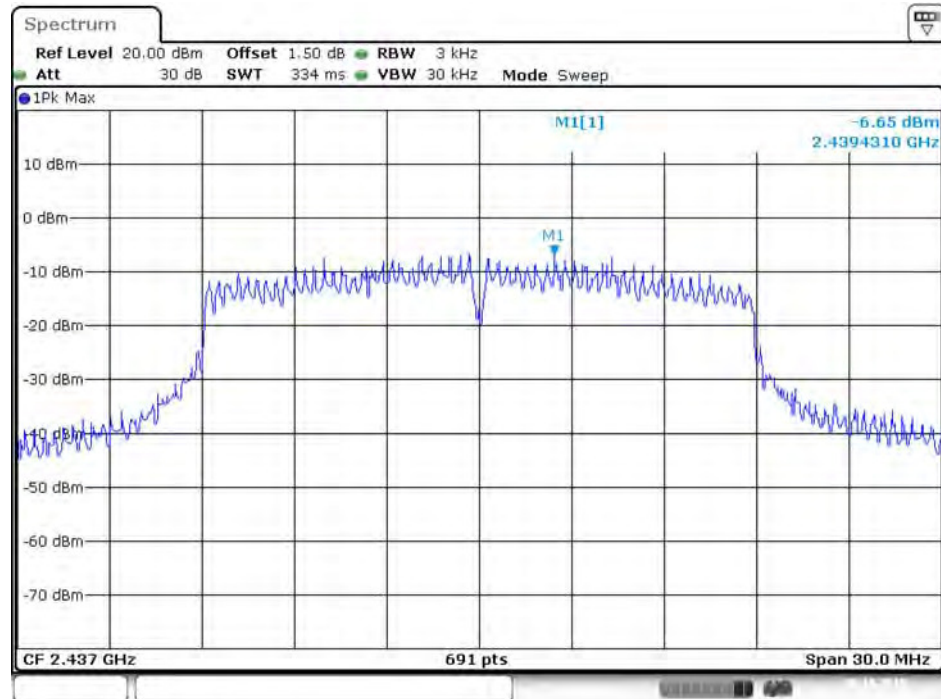
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 1



### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 2

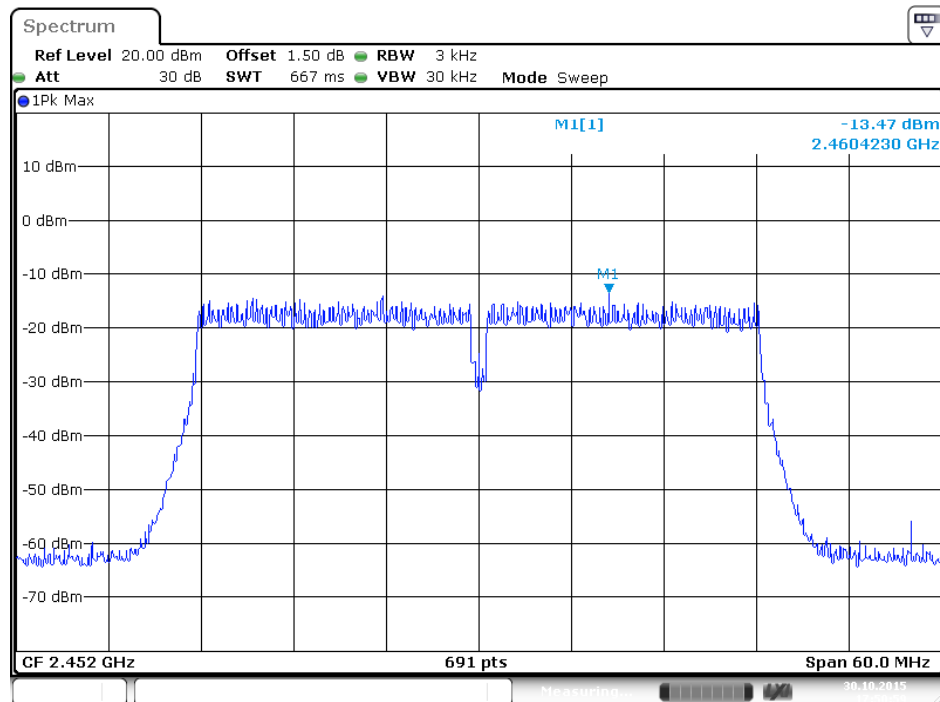


### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 3



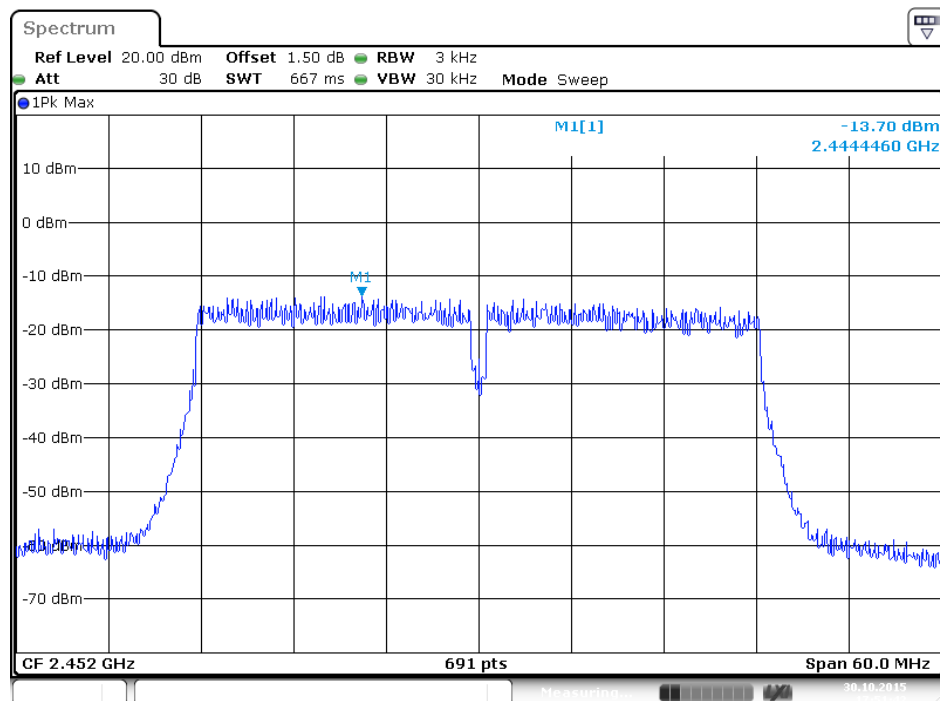
Date: 30.OCT.2015 01:03:34

### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2452 MHz / Chain 1



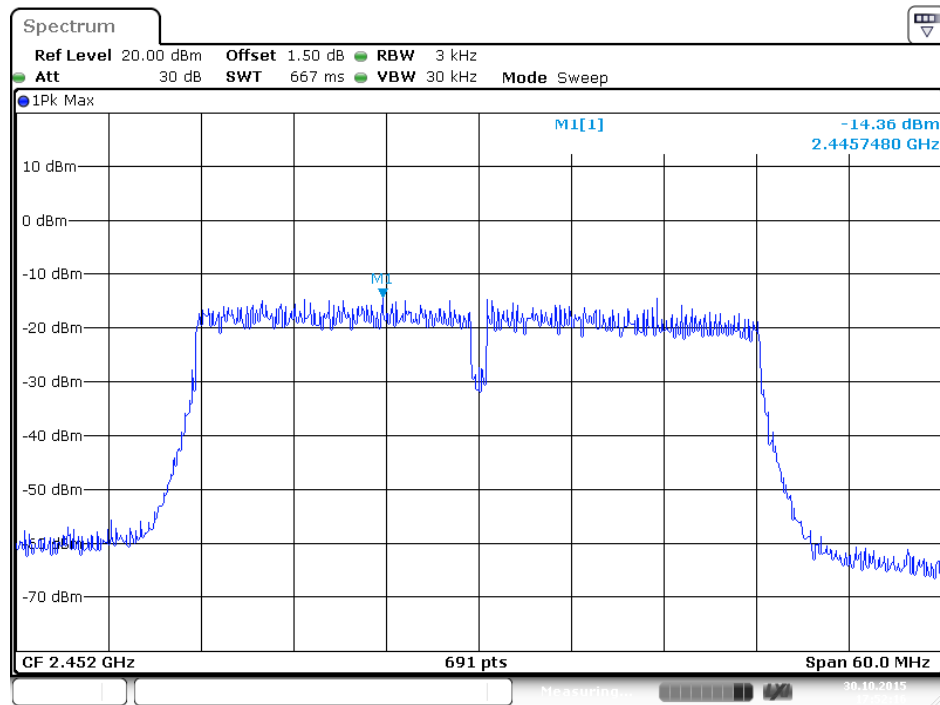
Date: 30 OCT 2015 17:50:59

### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2452 MHz / Chain 2



Date: 30 OCT 2015 17:51:42

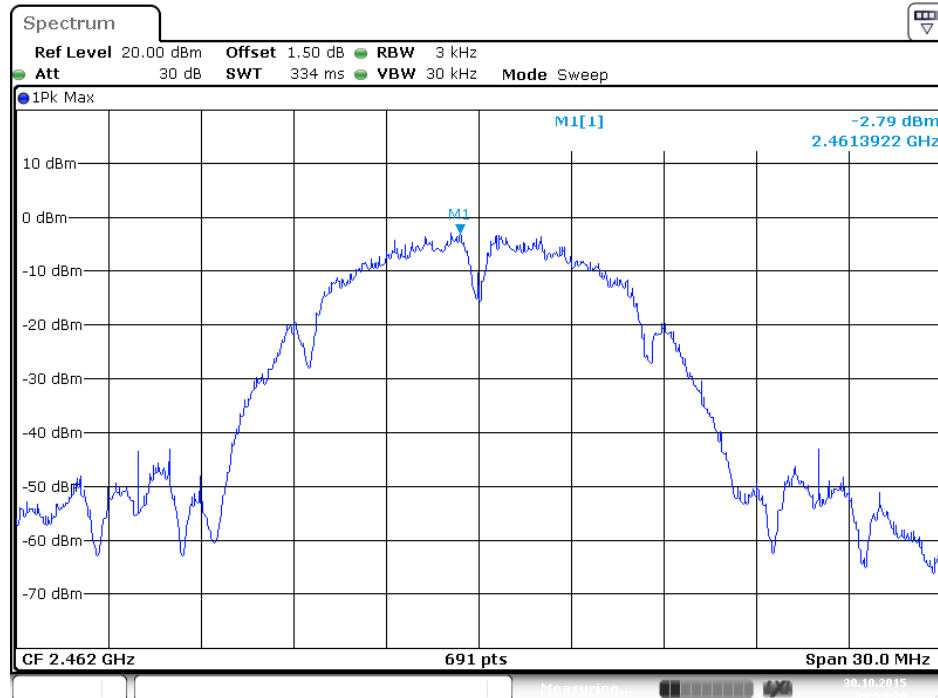
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2452 MHz / Chain 3



Date: 30 OCT 2015 17:52:17

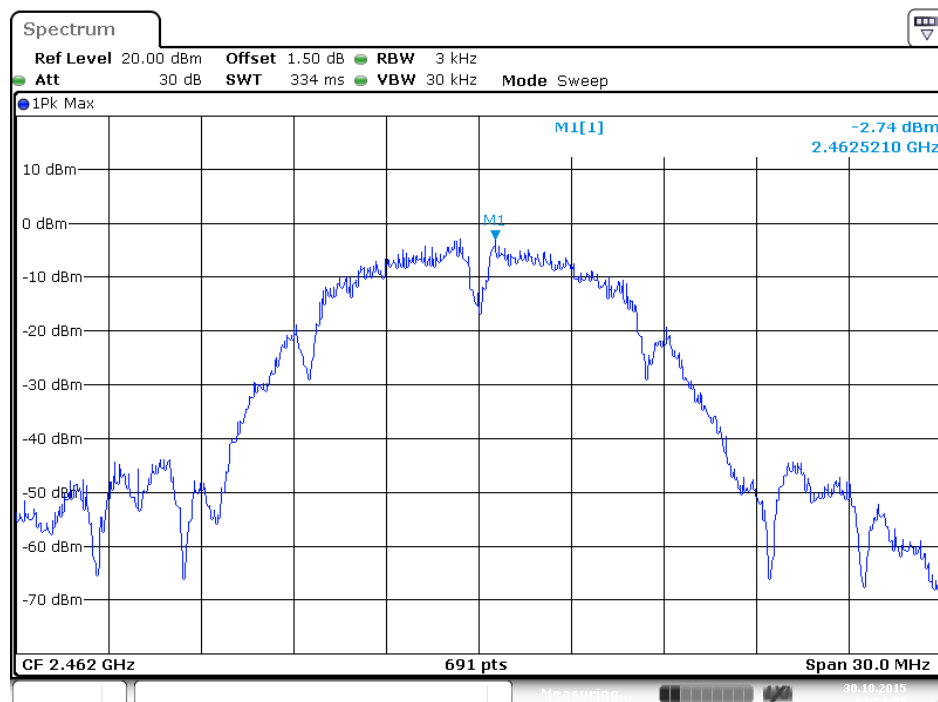
Mode 2 (Set 5 Polarized Dipole antenna / (1A)2.53dBi\*2, (1B)3.93dBi\*1 + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX)

Power Density Plot on Configuration IEEE 802.11b / 2462 MHz / Chain 1



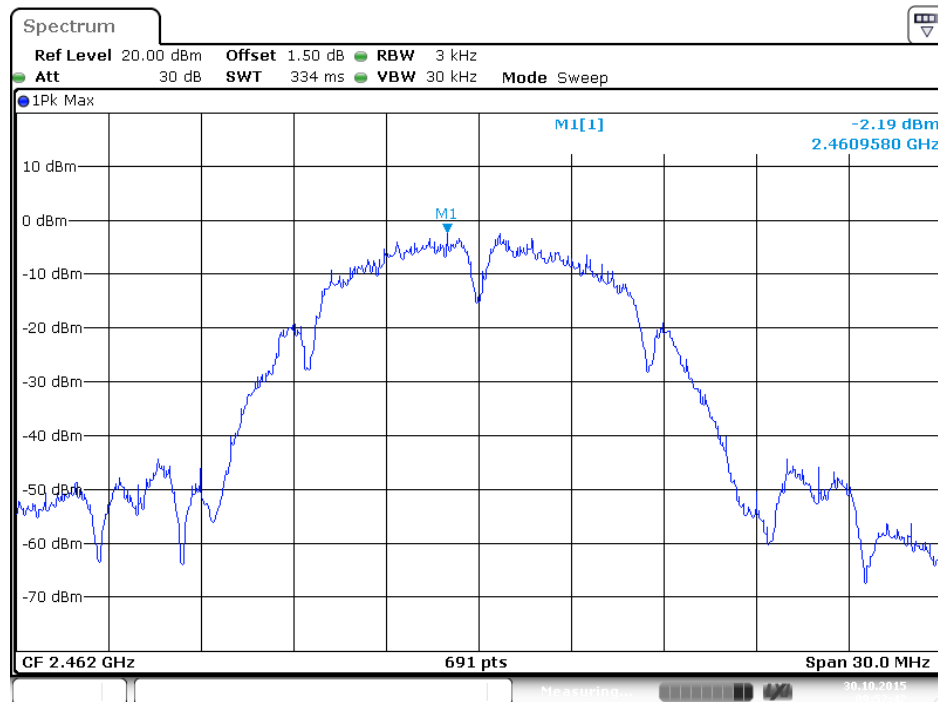
Date: 30.OCT.2015 09:54:28

Power Density Plot on Configuration IEEE 802.11b / 2462 MHz / Chain 2



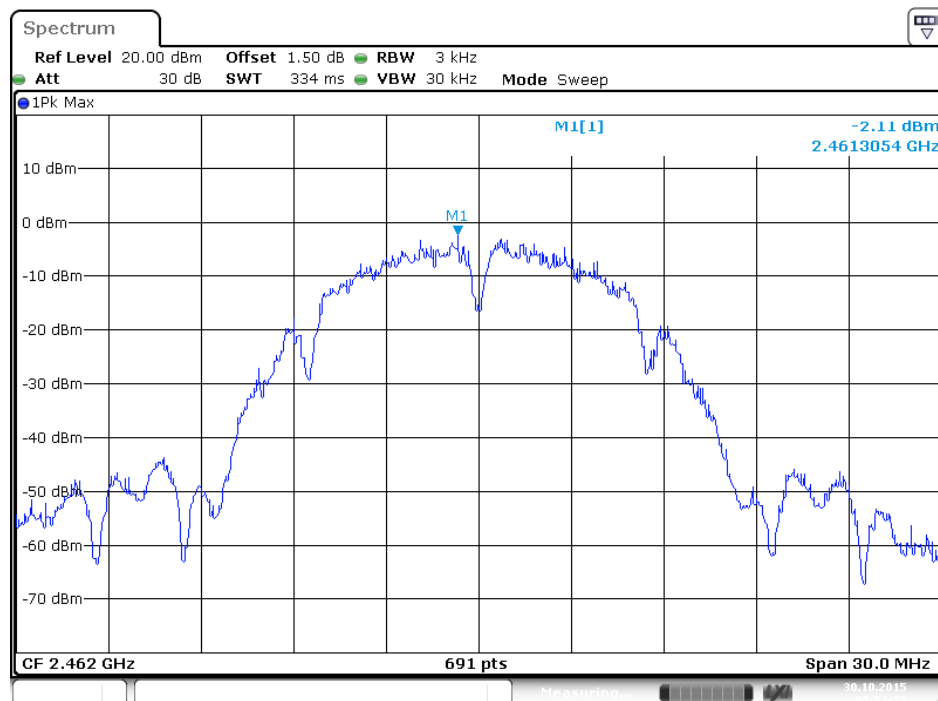
Date: 30.OCT.2015 09:53:50

### Power Density Plot on Configuration IEEE 802.11b / 2462 MHz / Chain 3



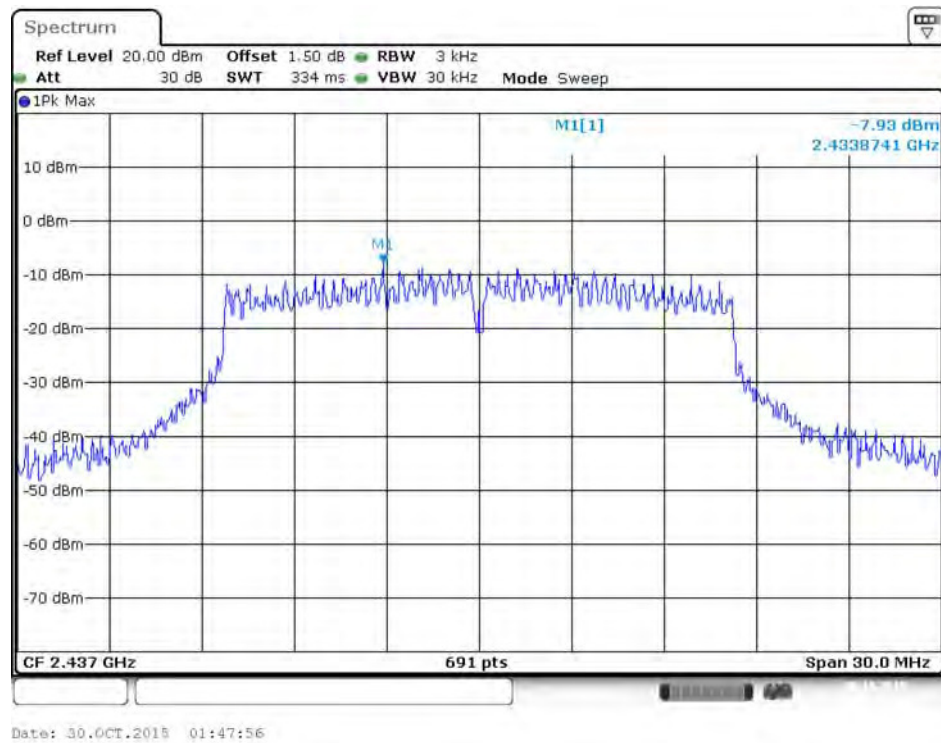
Date: 30.OCT.2015 09:52:42

### Power Density Plot on Configuration IEEE 802.11b / 2462 MHz / Chain 4

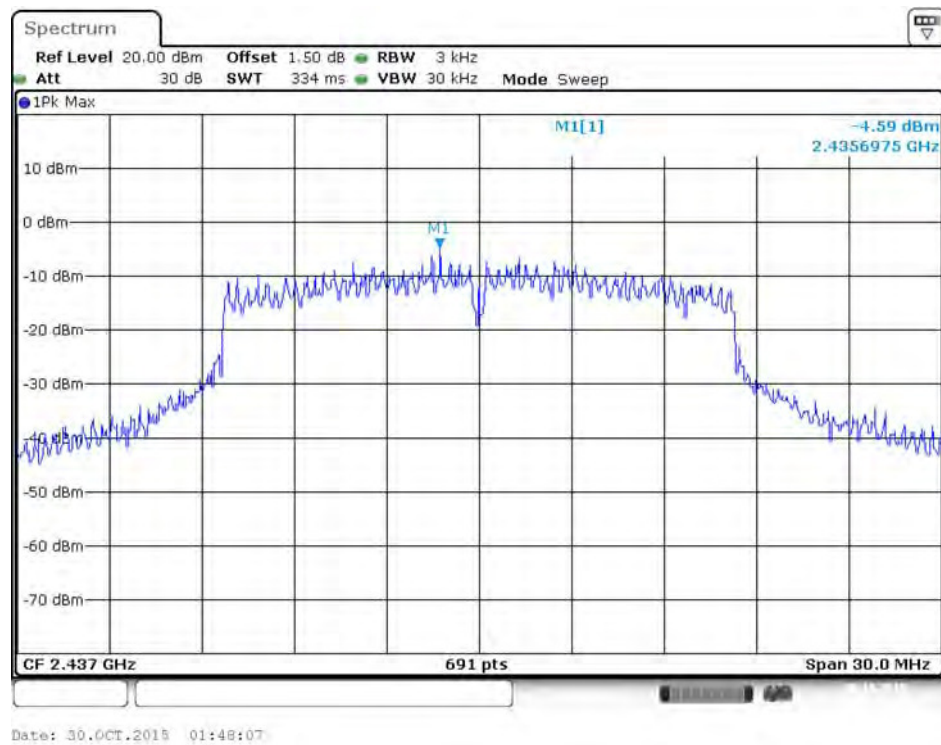


Date: 30.OCT.2015 09:53:22

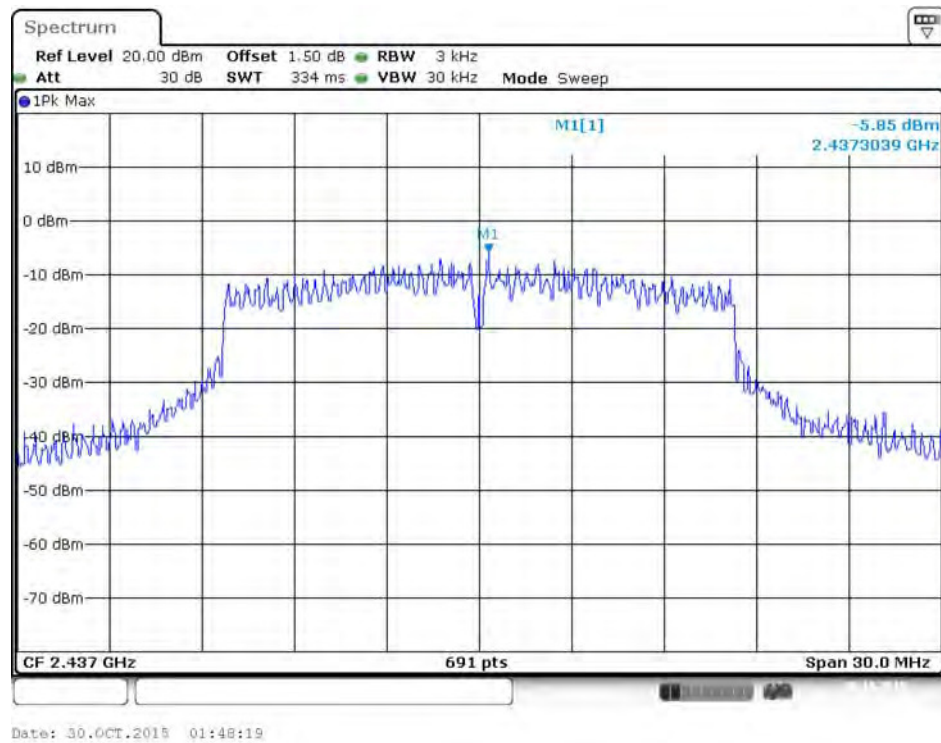
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 1



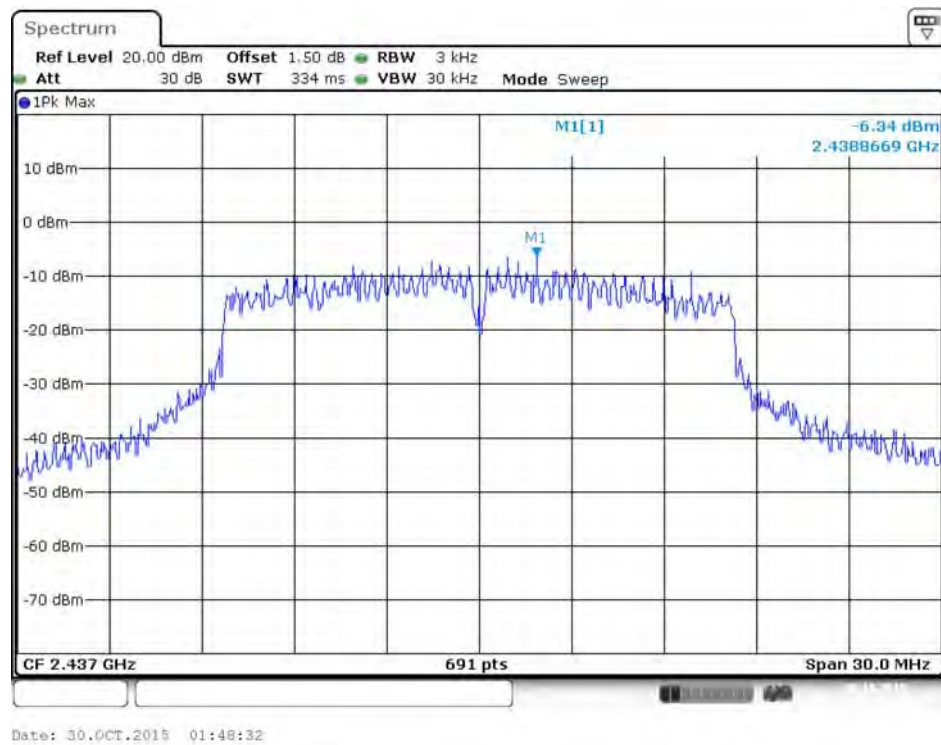
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 2



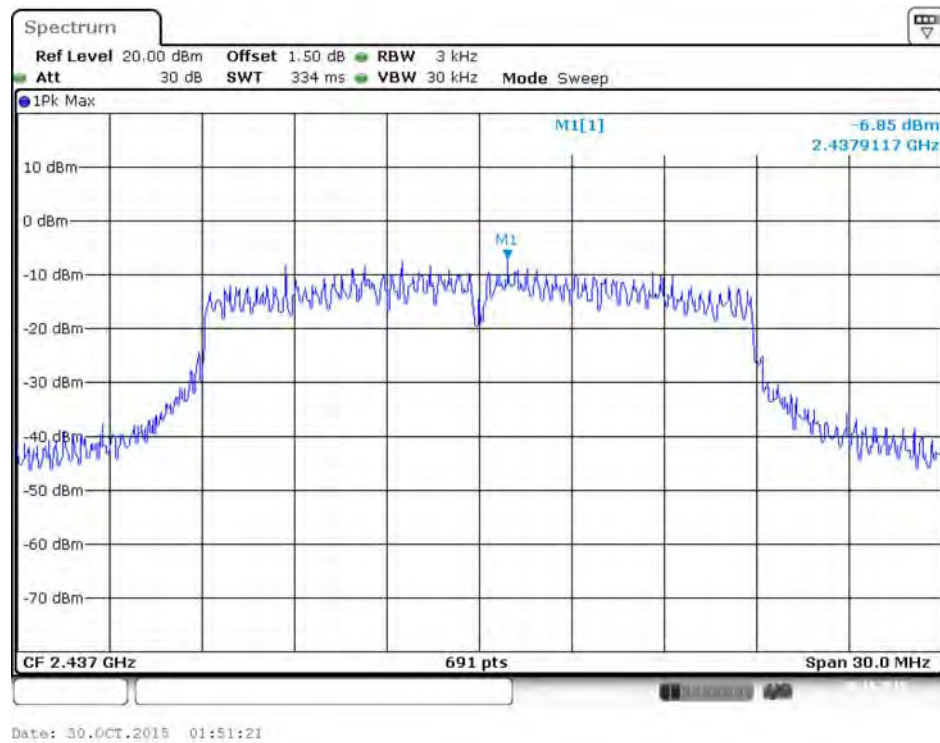
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 3



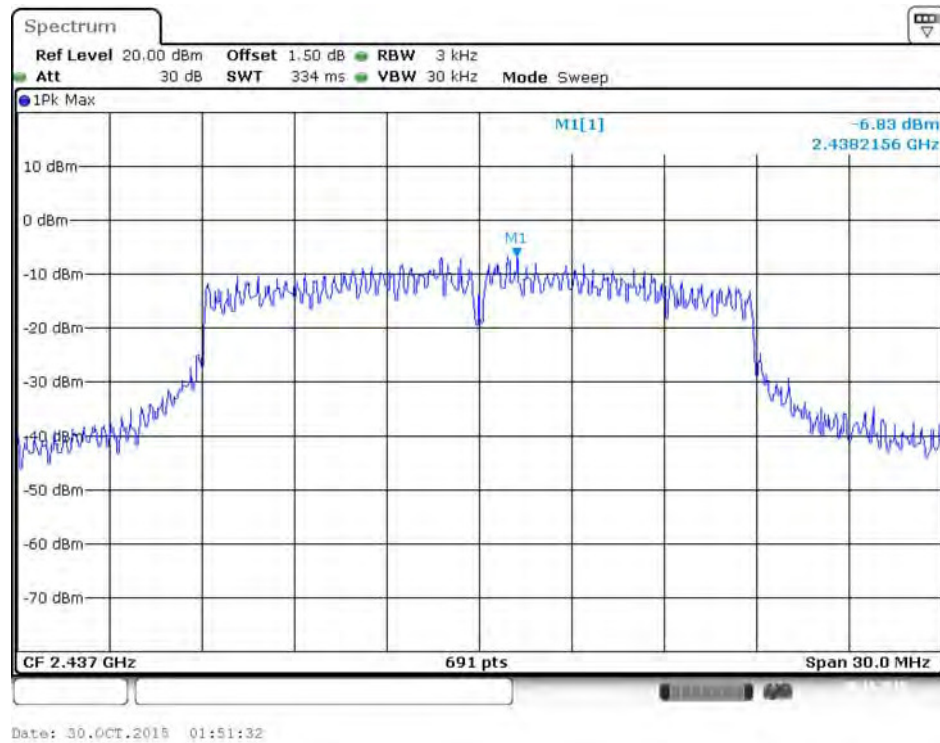
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 4



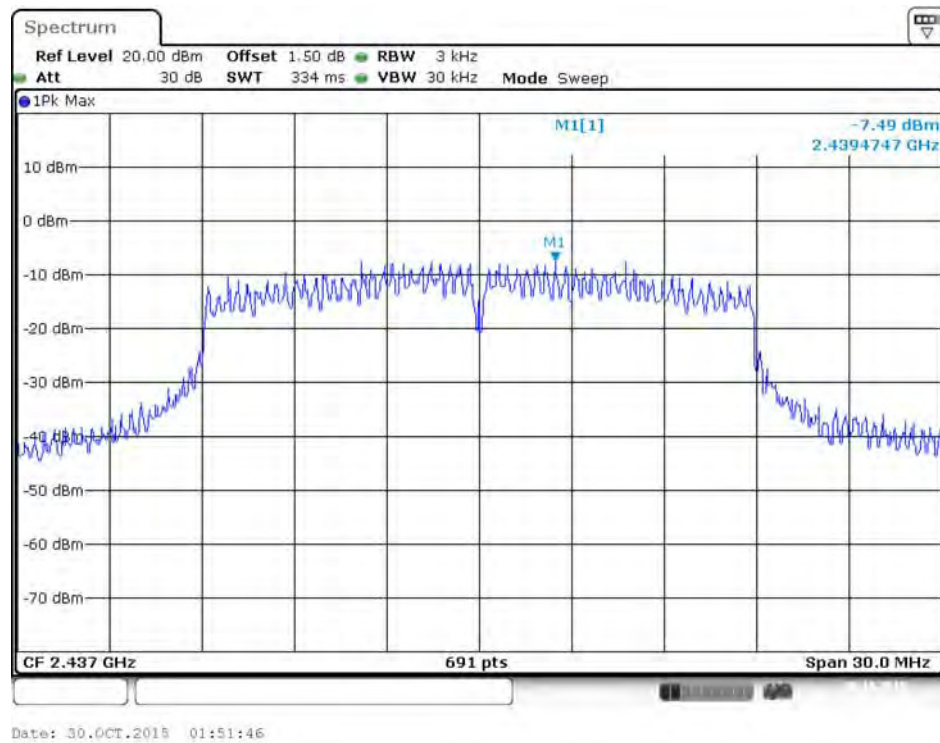
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 1



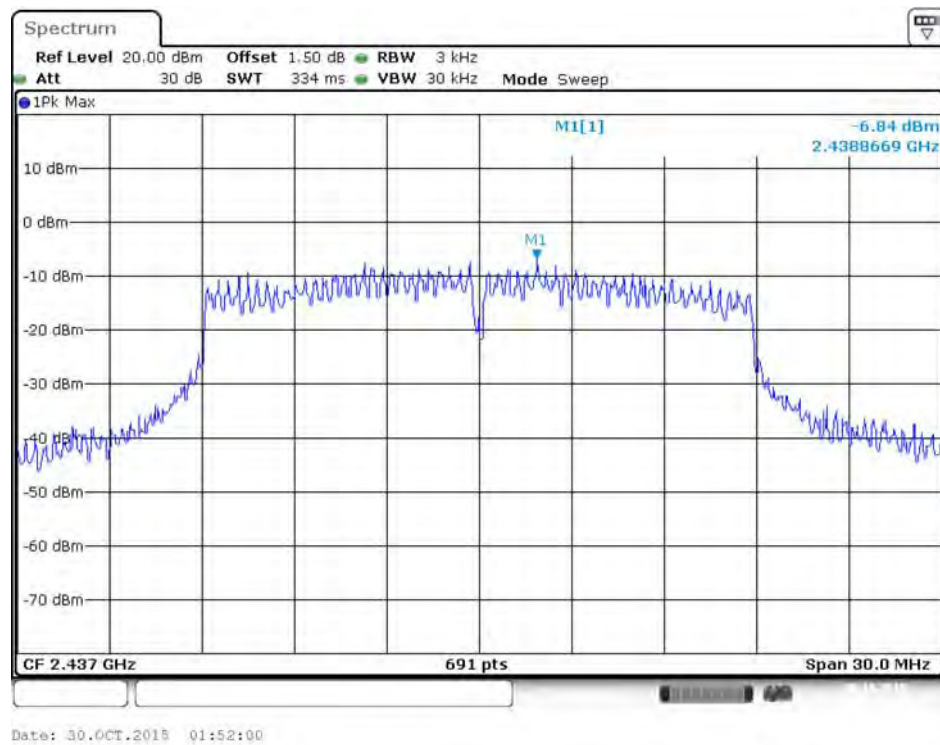
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 2



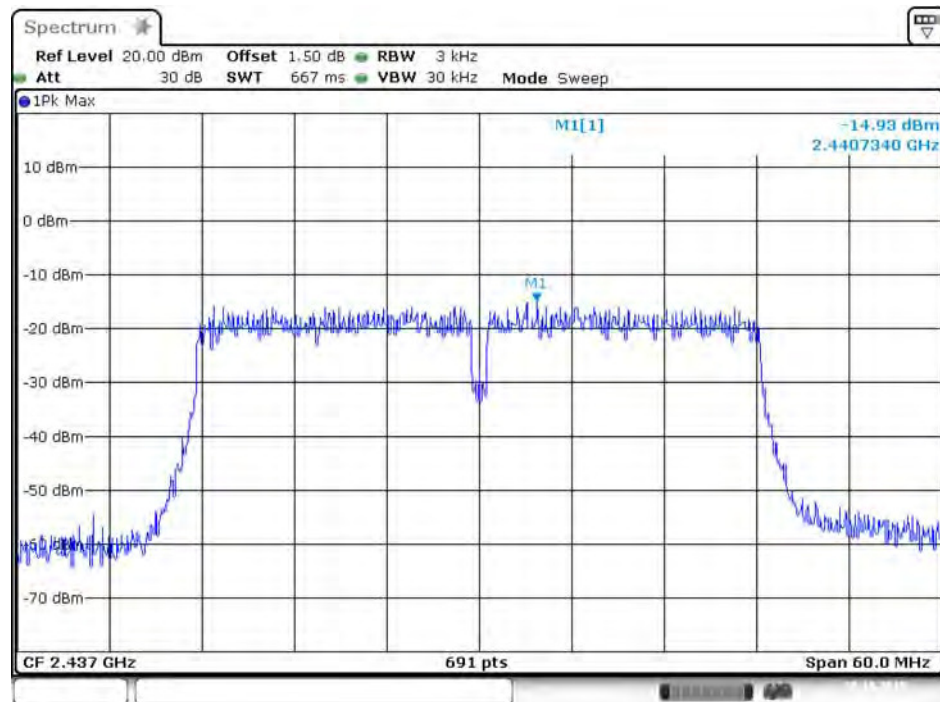
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 3



### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 4

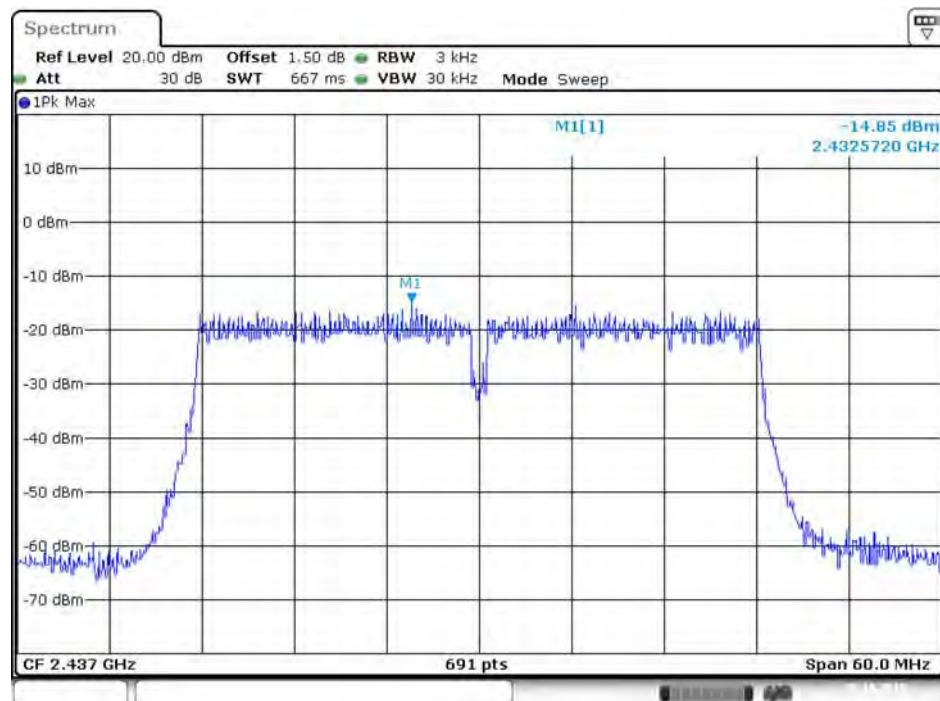


### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 1



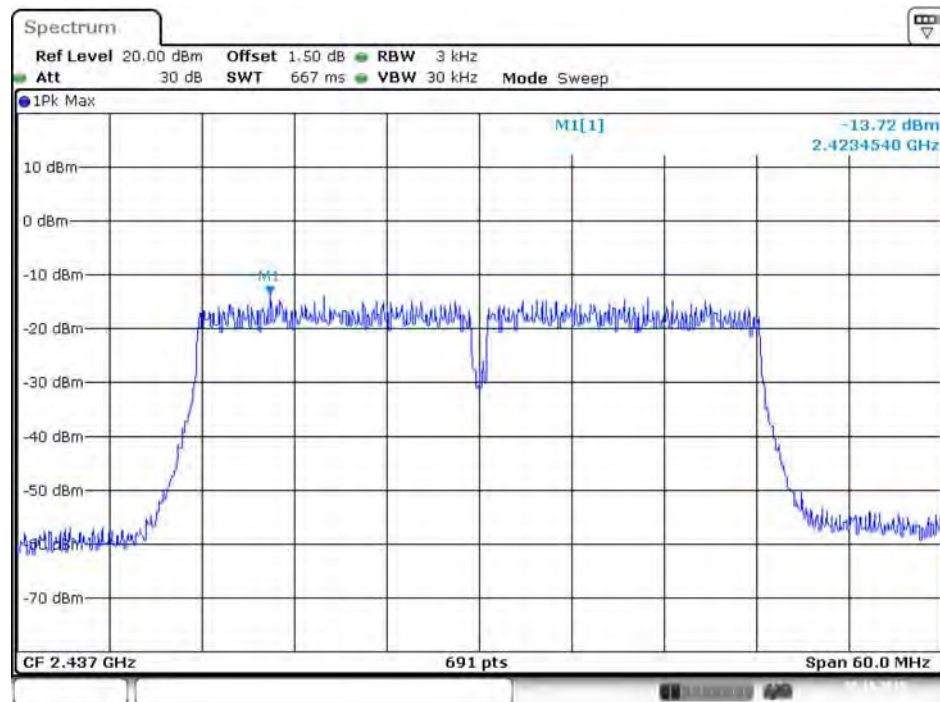
Date: 30.OCT.2015 21:57:06

### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 2



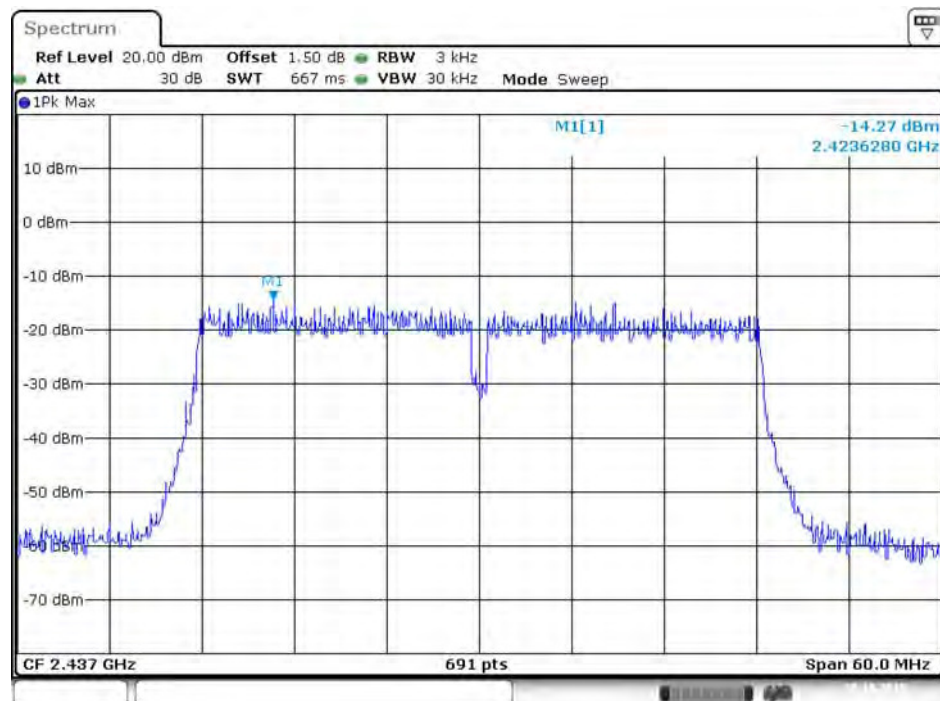
Date: 30.OCT.2015 21:57:21

### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 3



Date: 30.OCT.2015 21:57:31

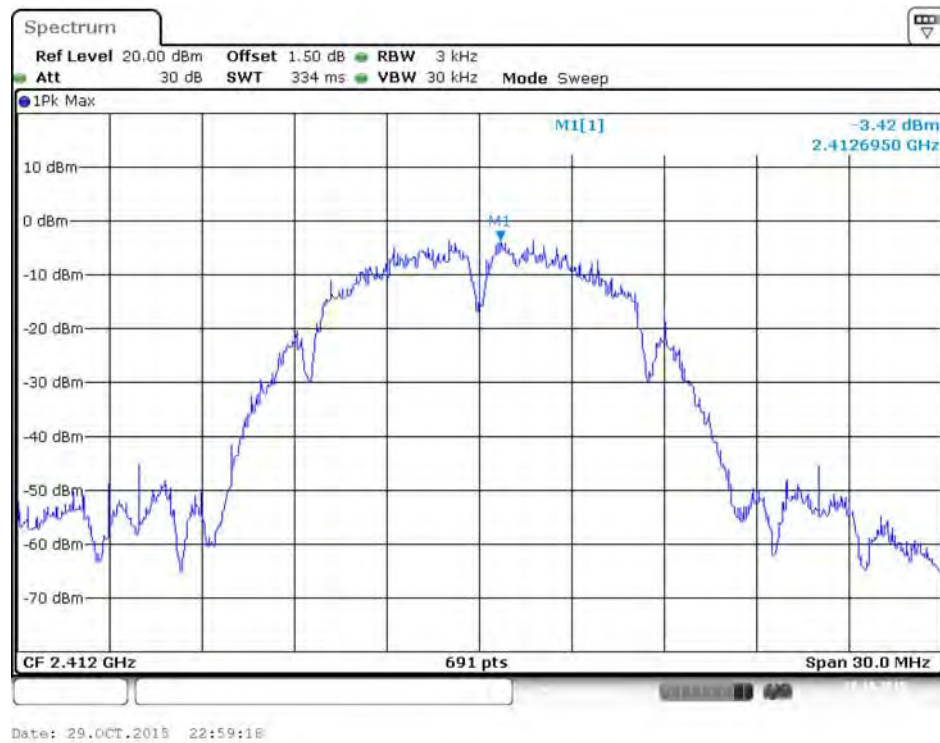
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 4



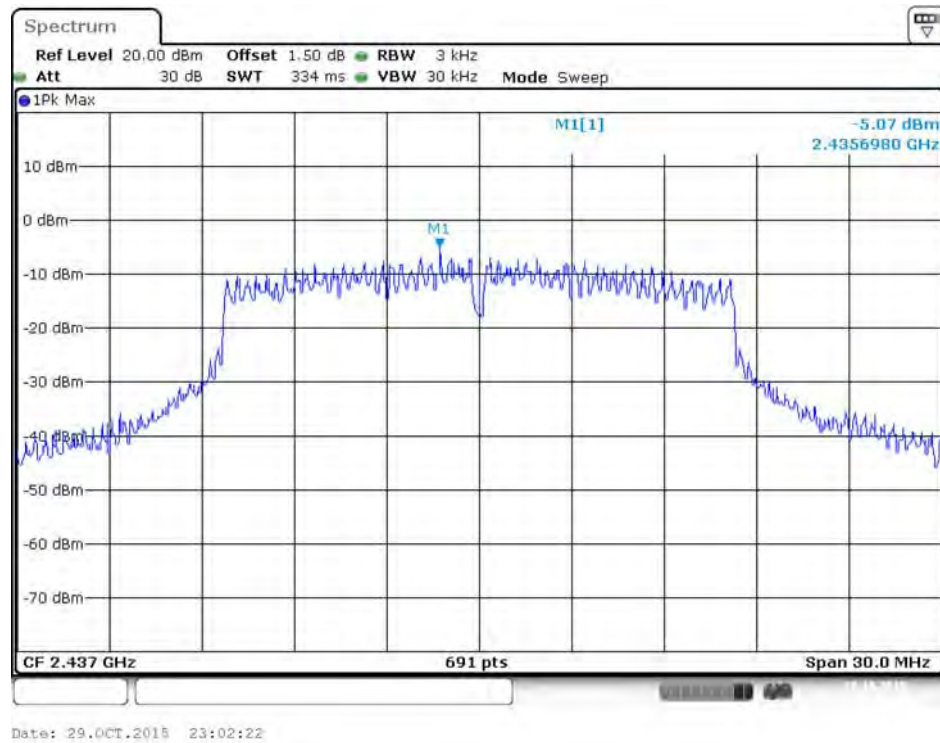
Date: 30.OCT.2015 21:57:44

Mode 3 (Set 6 Panel antenna / 4.03dBi / 1TX)

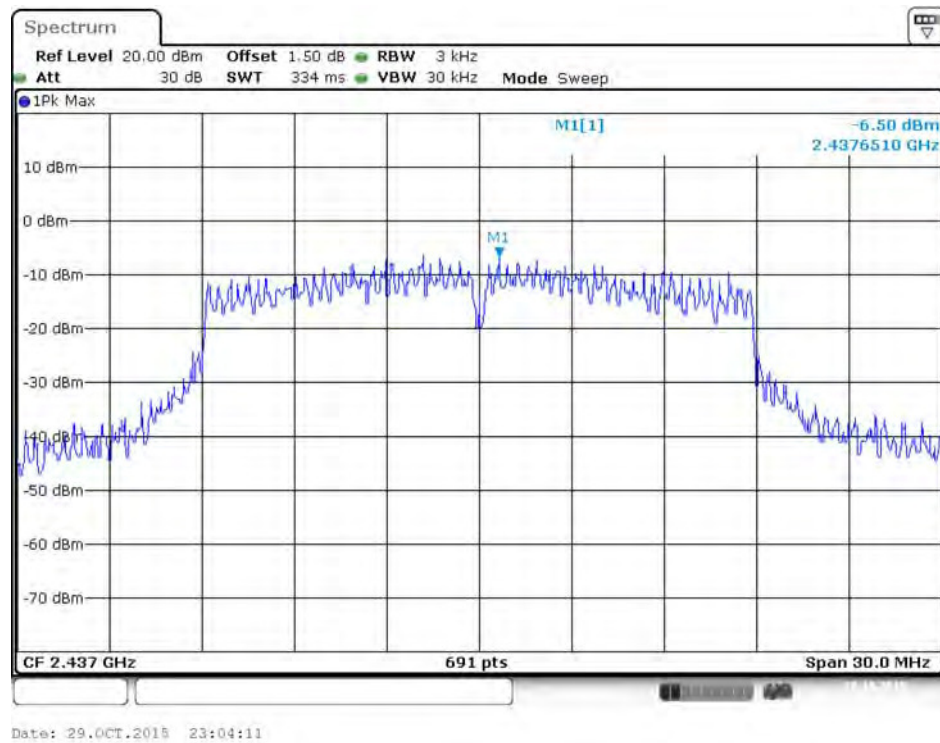
Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 1



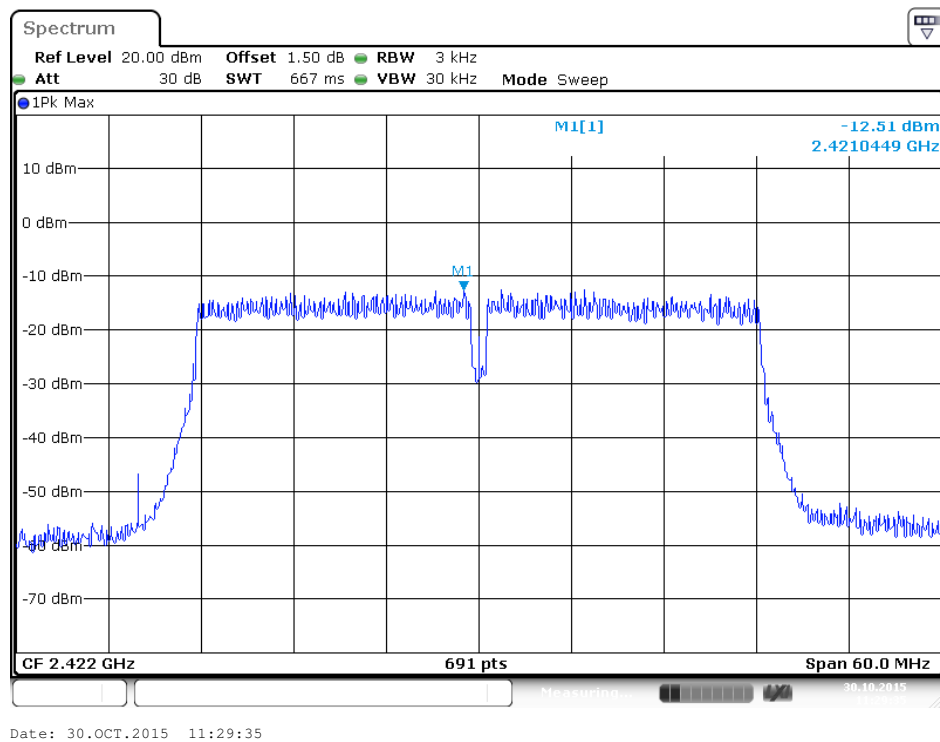
Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 1



### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 1

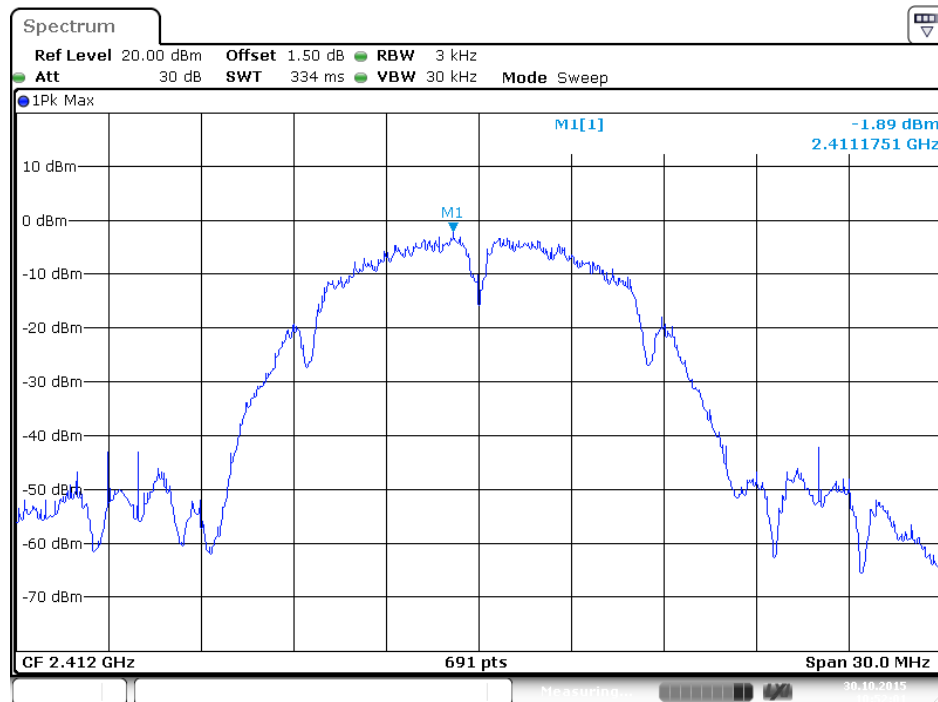


### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2422 MHz / Chain 1



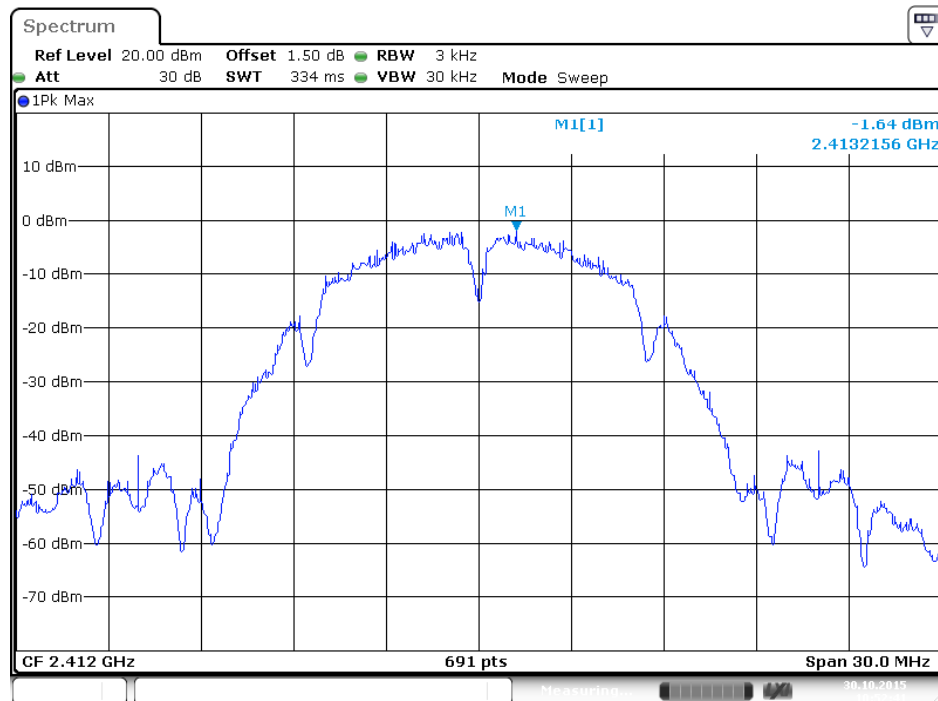
### Mode 3 (Set 6 Panel antenna / 4.03dBi / 2TX)

#### Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 1



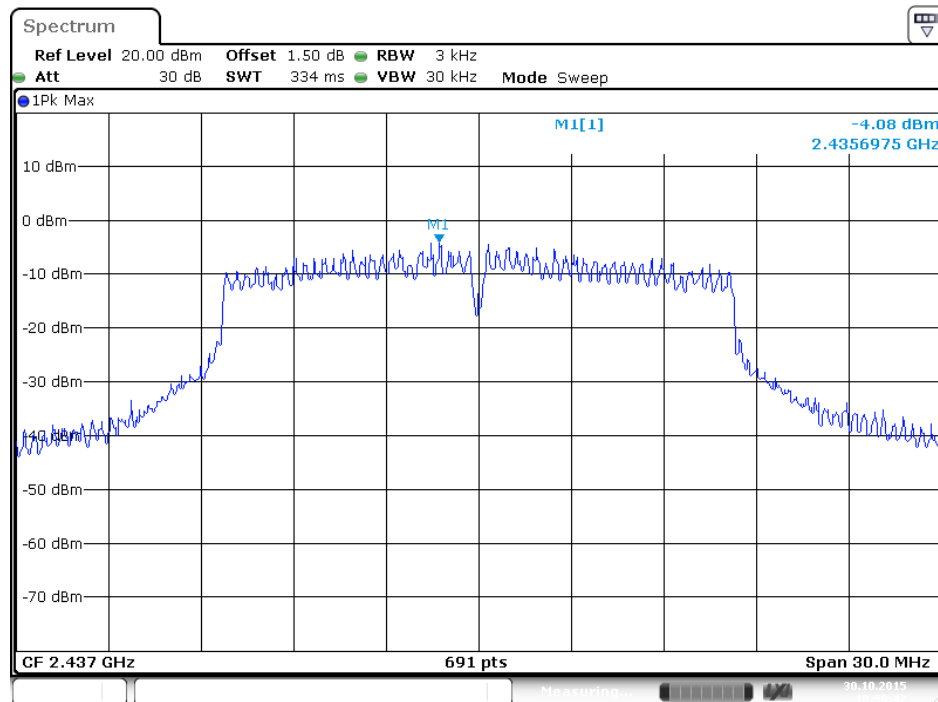
Date: 30.OCT.2015 10:52:01

#### Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 3



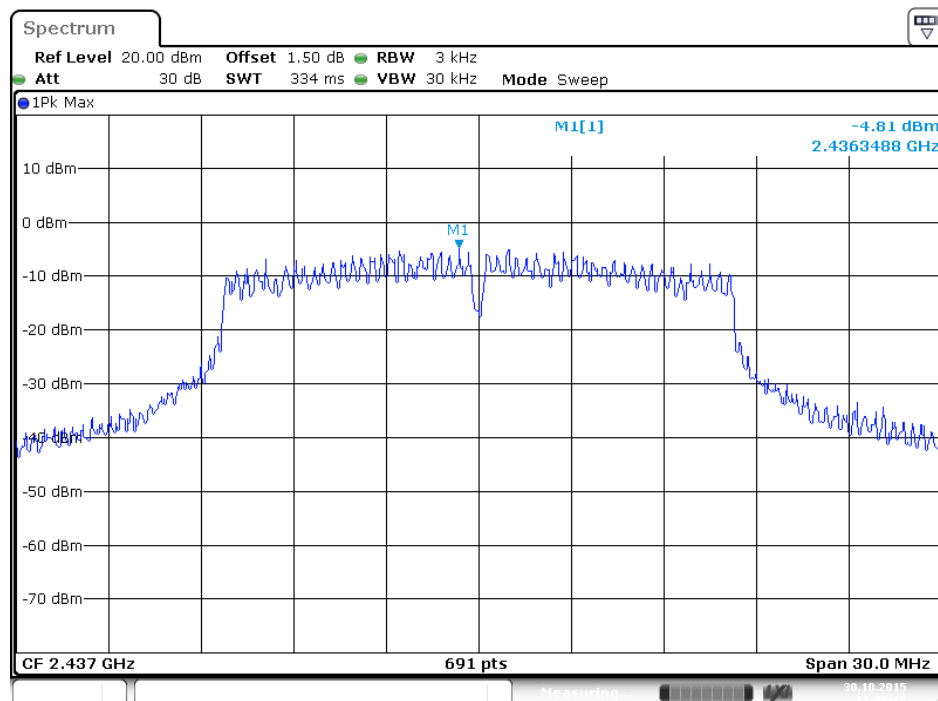
Date: 30.OCT.2015 10:52:41

### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 1



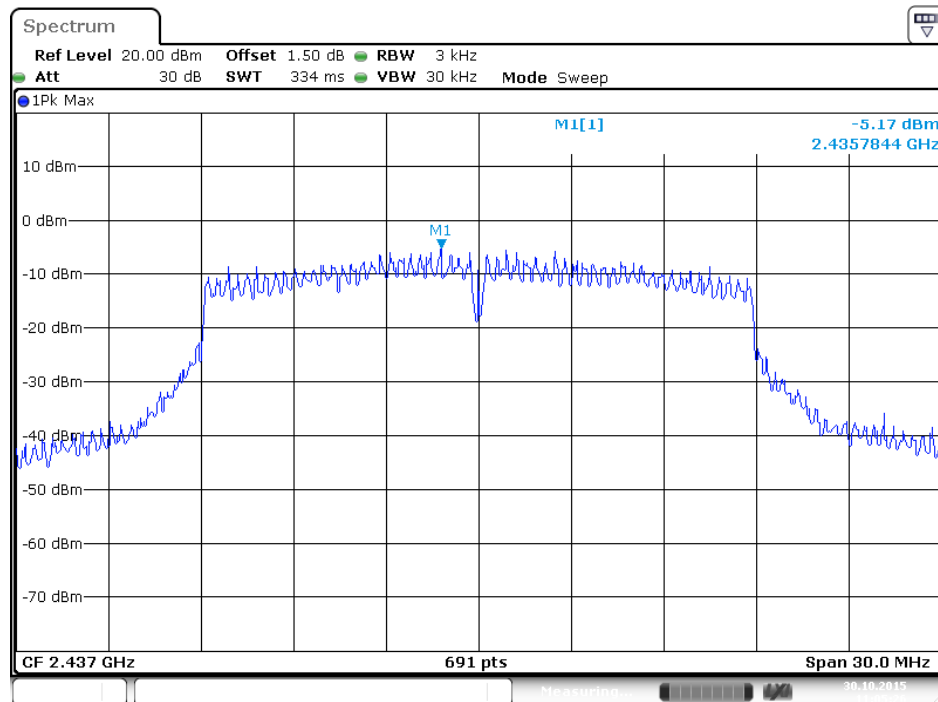
Date: 30.OCT.2015 10:59:42

### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 3

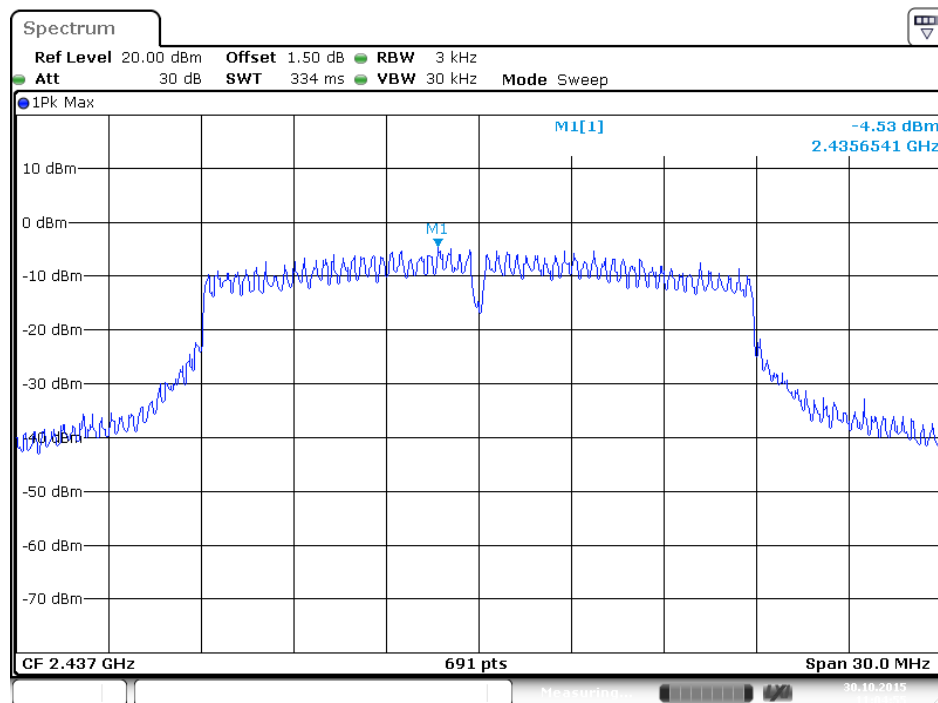


Date: 30.OCT.2015 11:00:17

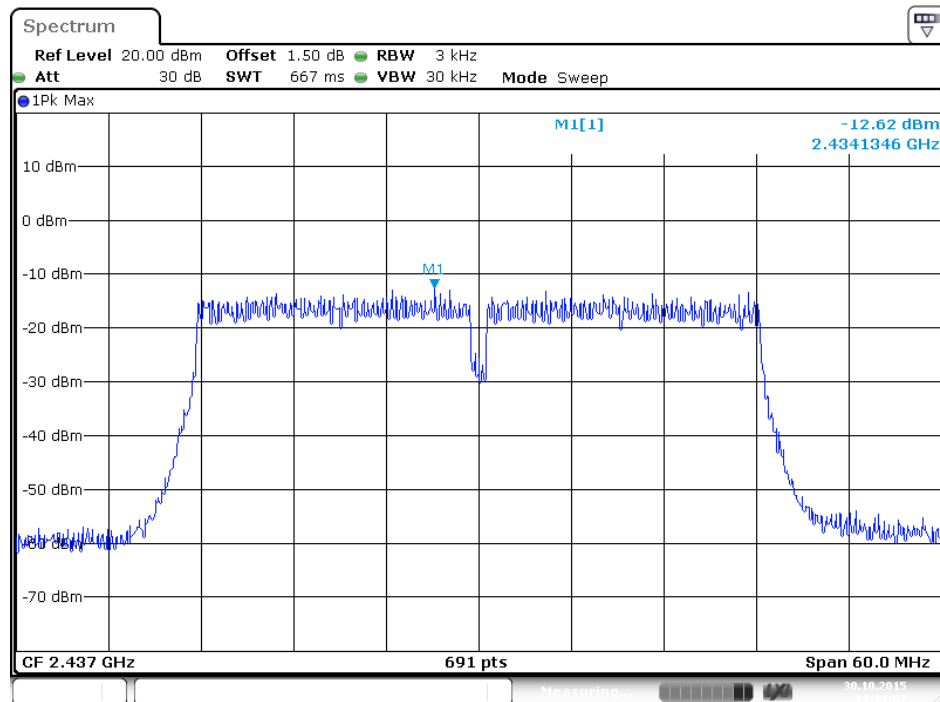
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 1



### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 3

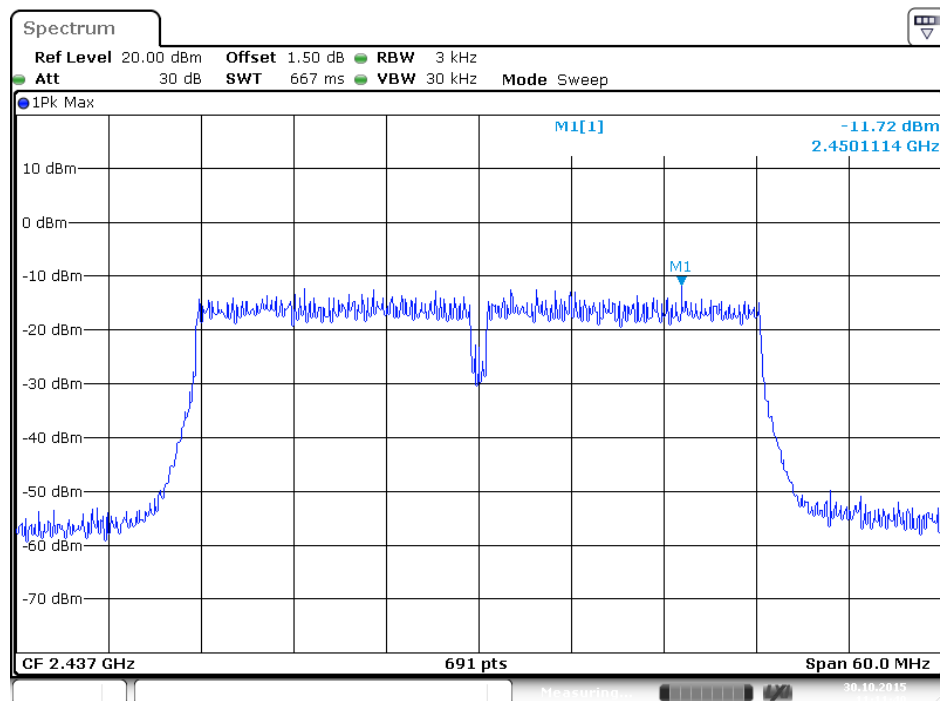


### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 1



Date: 30.OCT.2015 11:11:07

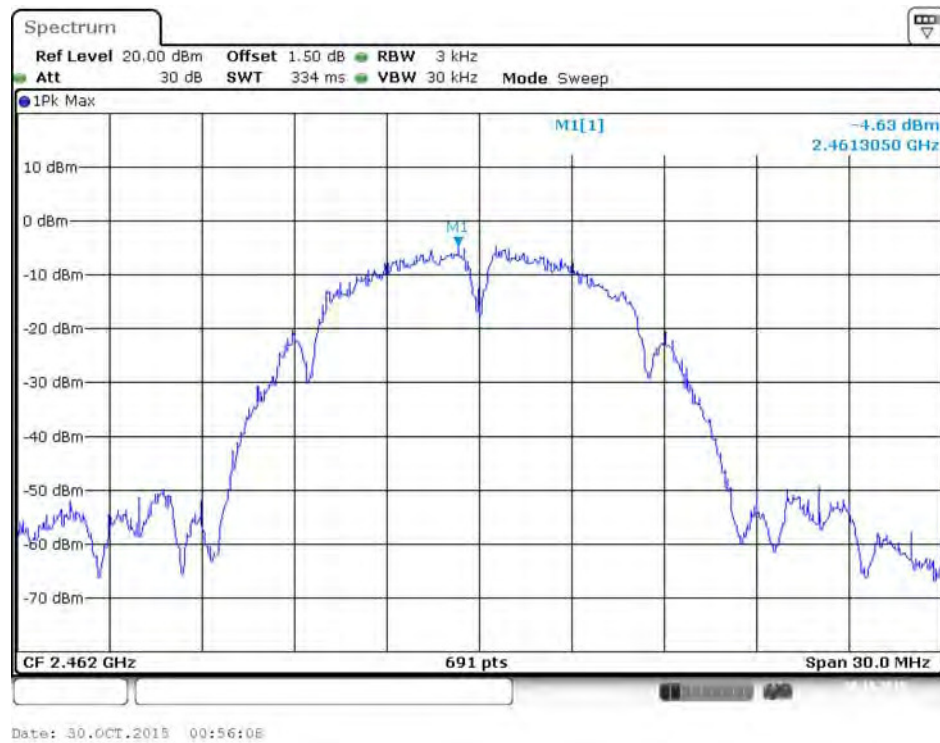
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 3



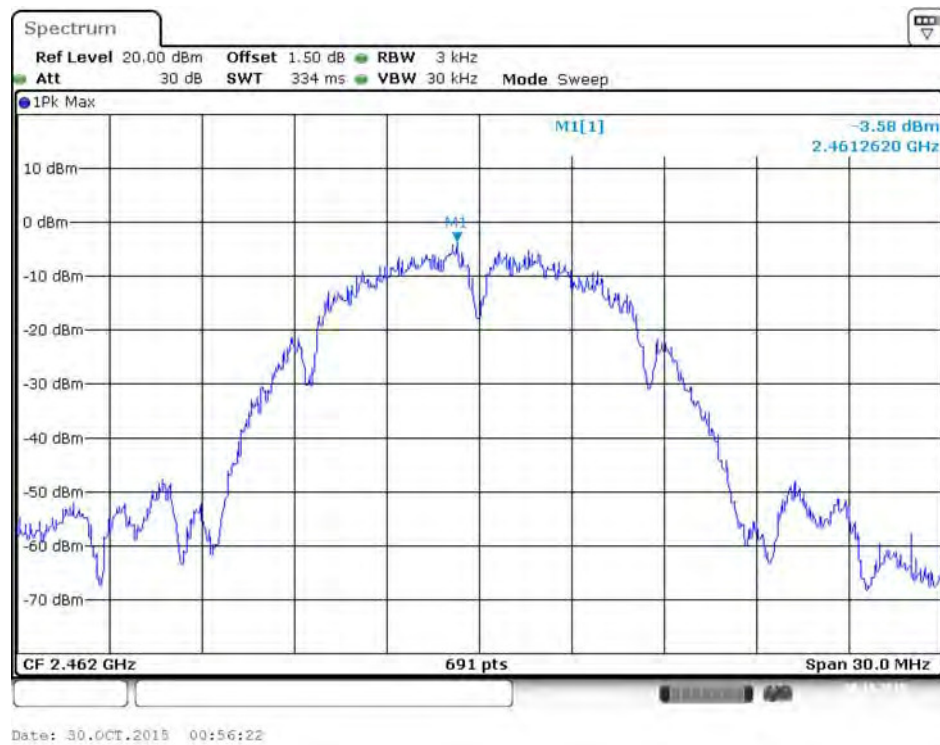
Date: 30.OCT.2015 11:11:40

Mode 3 (Set 6 Panel antenna / 4.03dBi / 3TX)

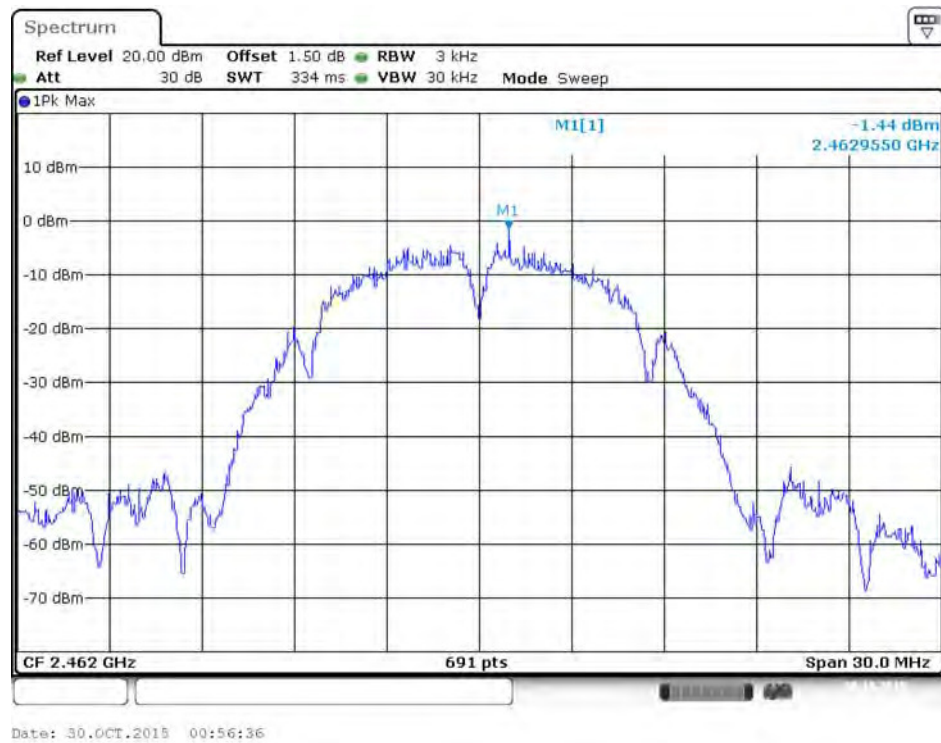
Power Density Plot on Configuration IEEE 802.11b / 2462 MHz / Chain 1



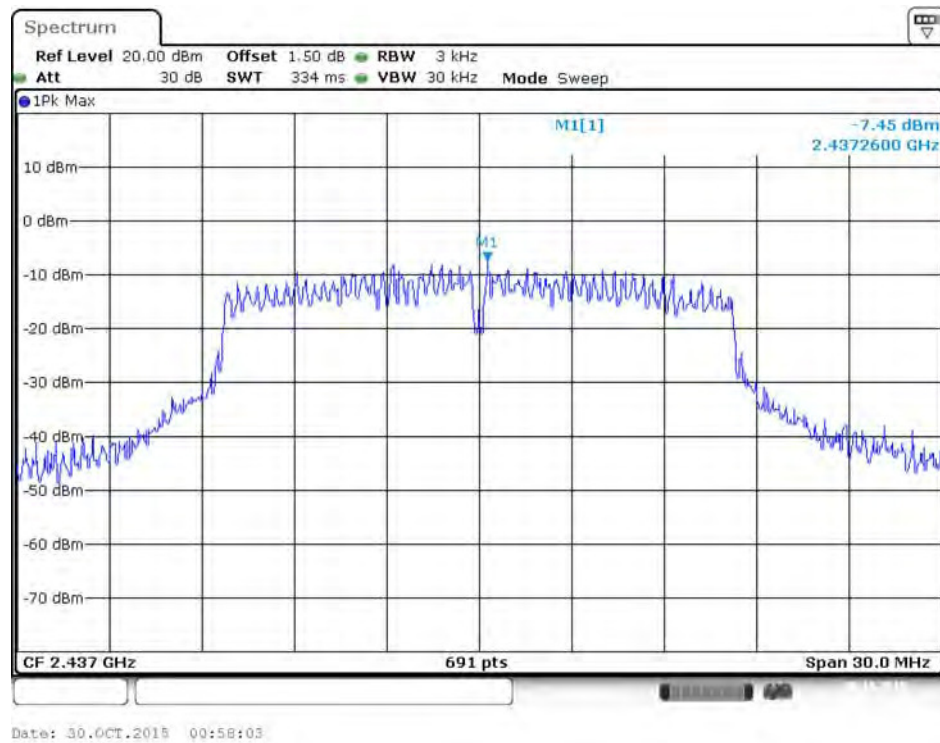
Power Density Plot on Configuration IEEE 802.11b / 2462 MHz / Chain 2



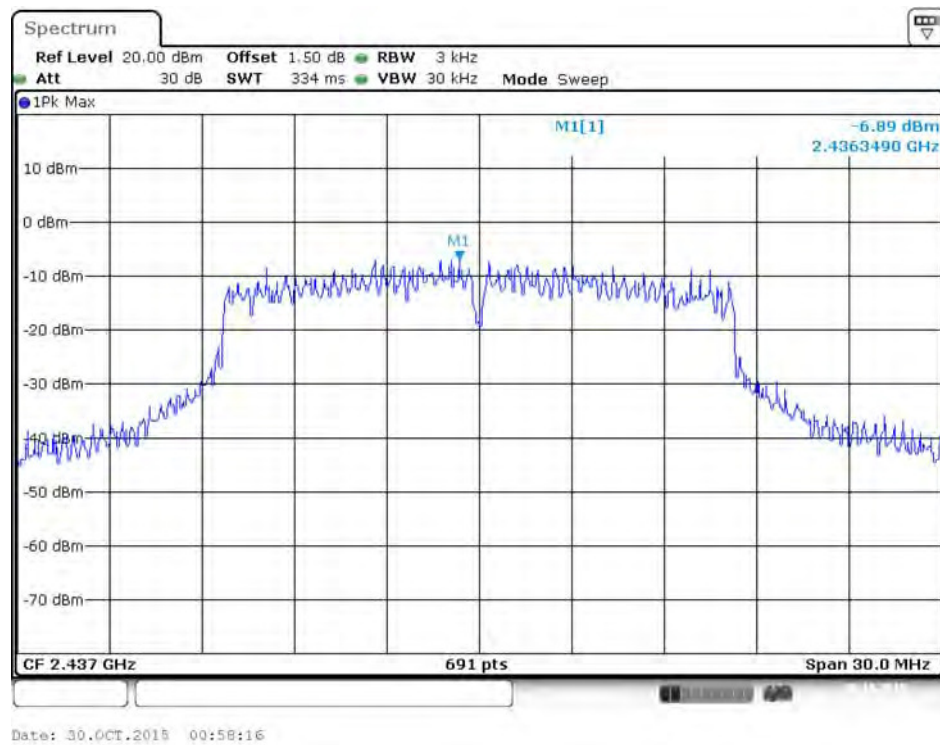
### Power Density Plot on Configuration IEEE 802.11b / 2462 MHz / Chain 3



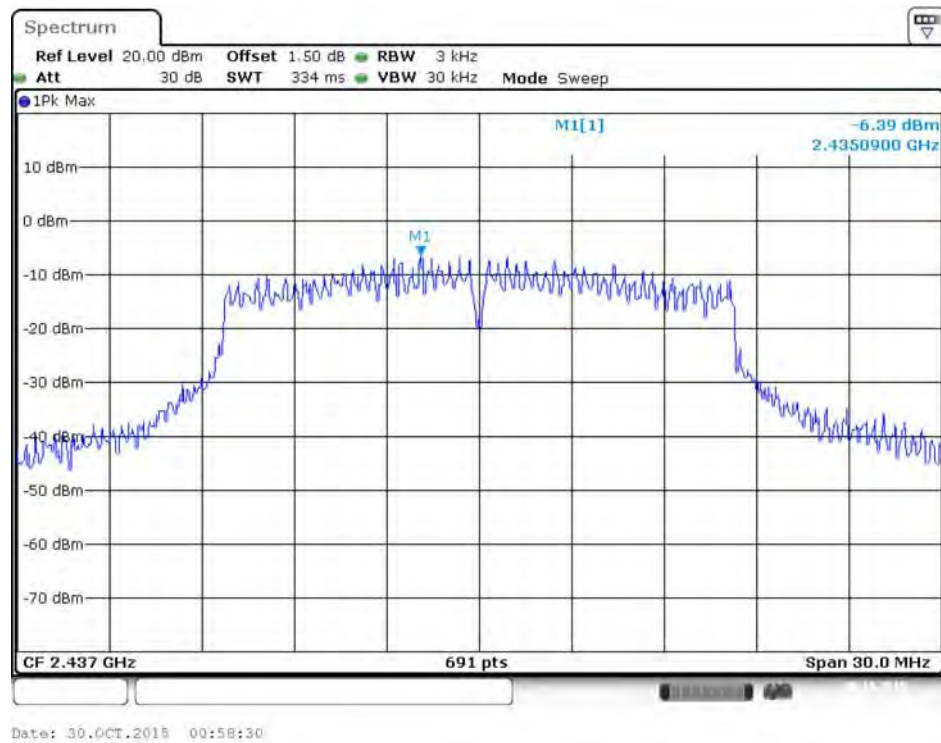
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 1



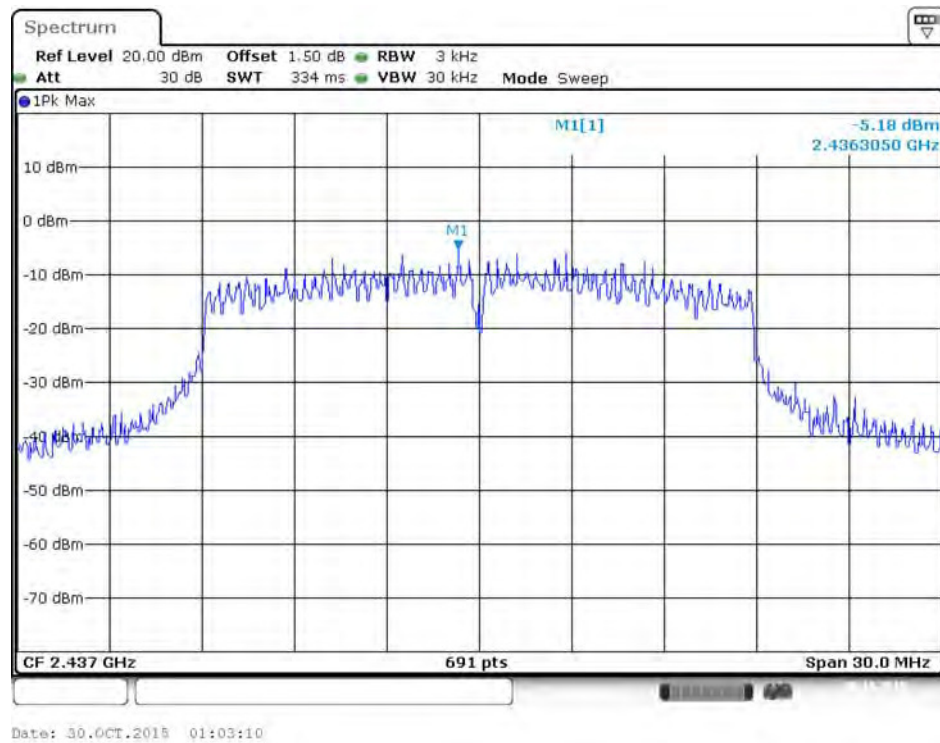
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 2



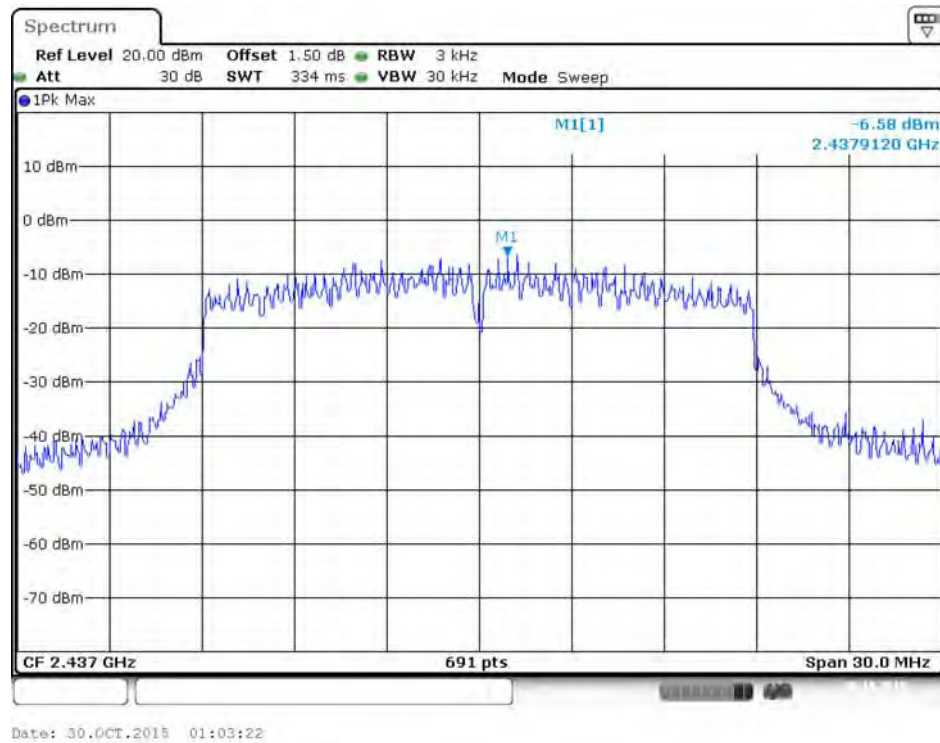
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 3



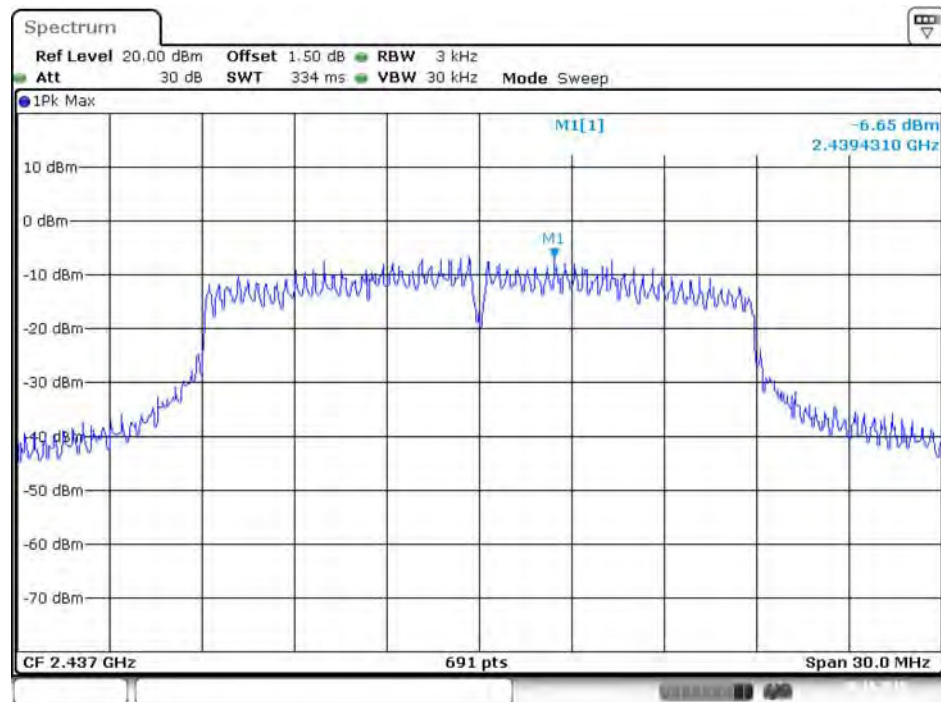
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 1



### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 2

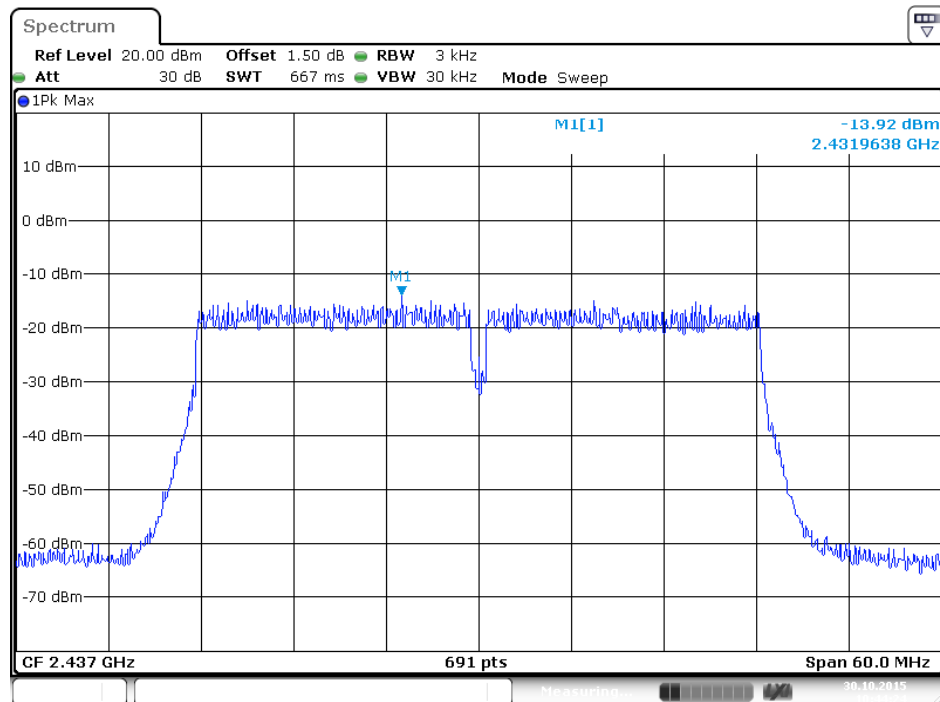


### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 3

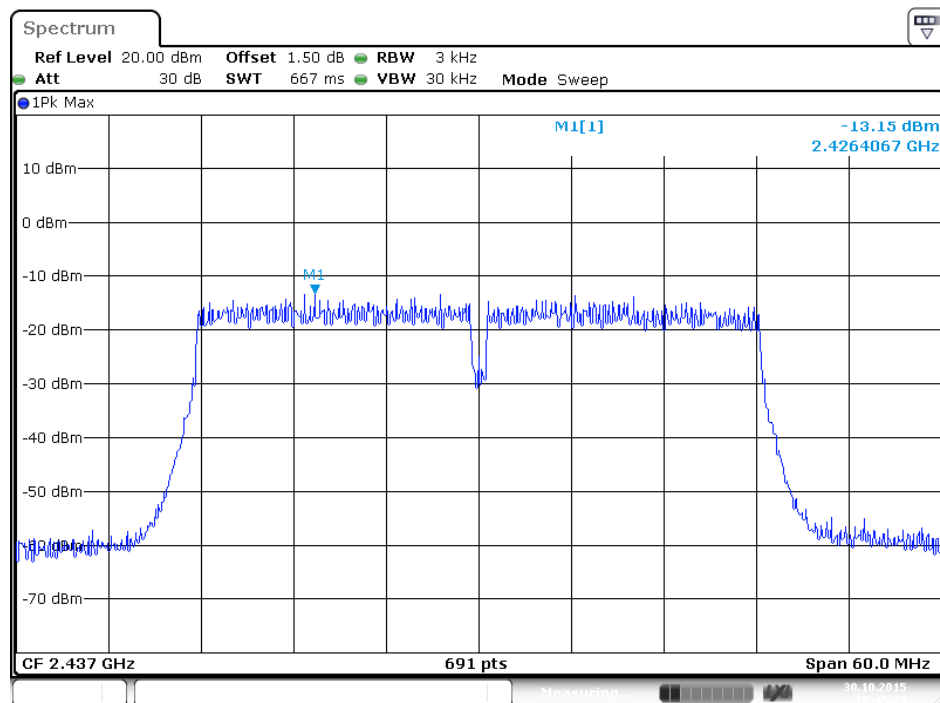


Date: 30.OCT.2015 01:03:34

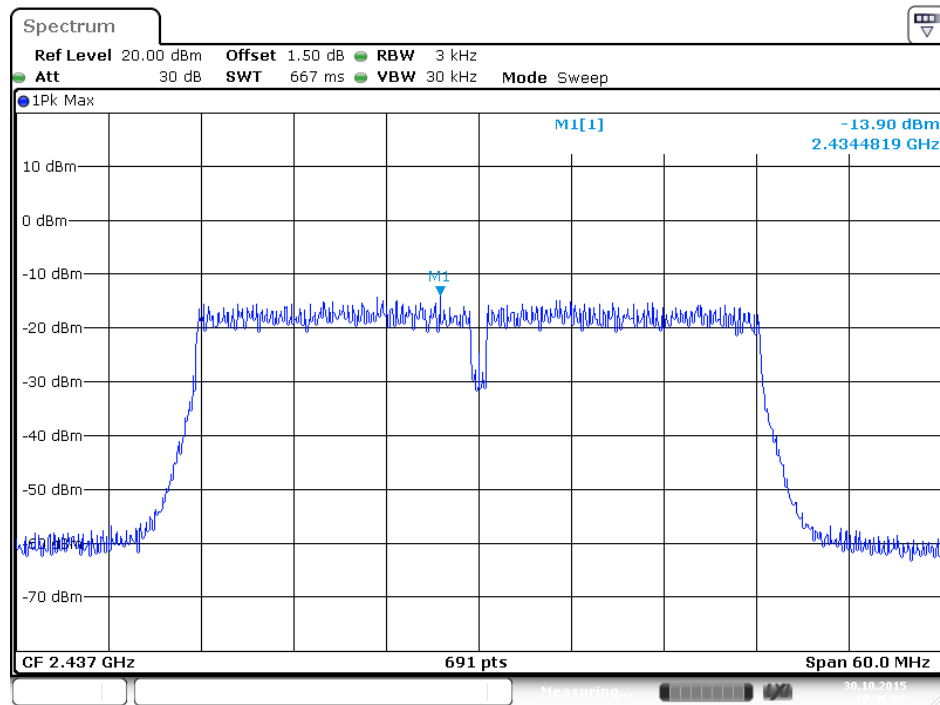
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 1



### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 2



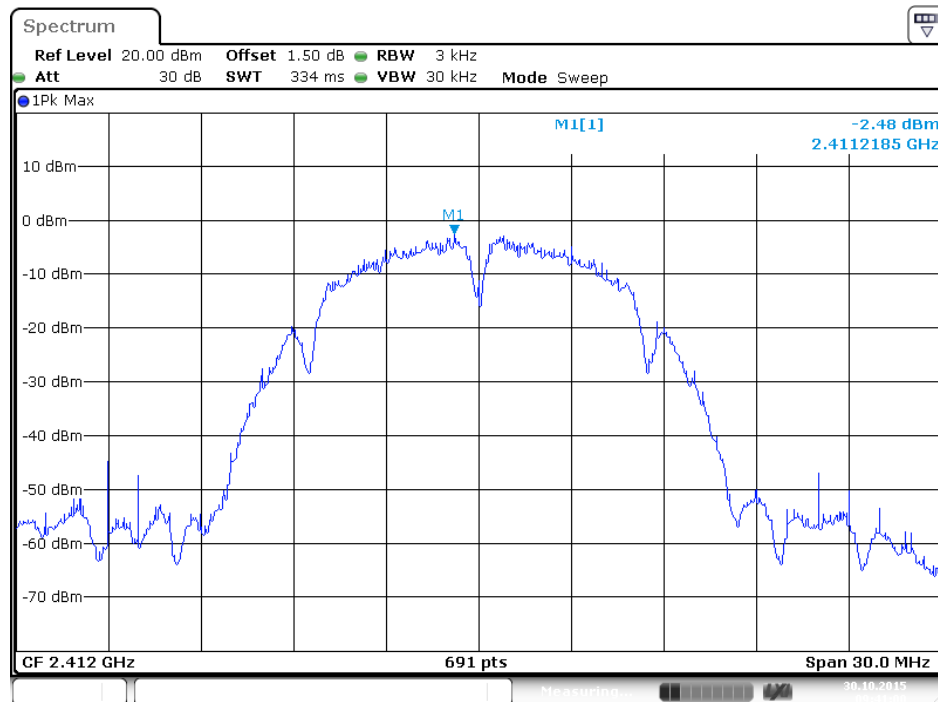
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 3



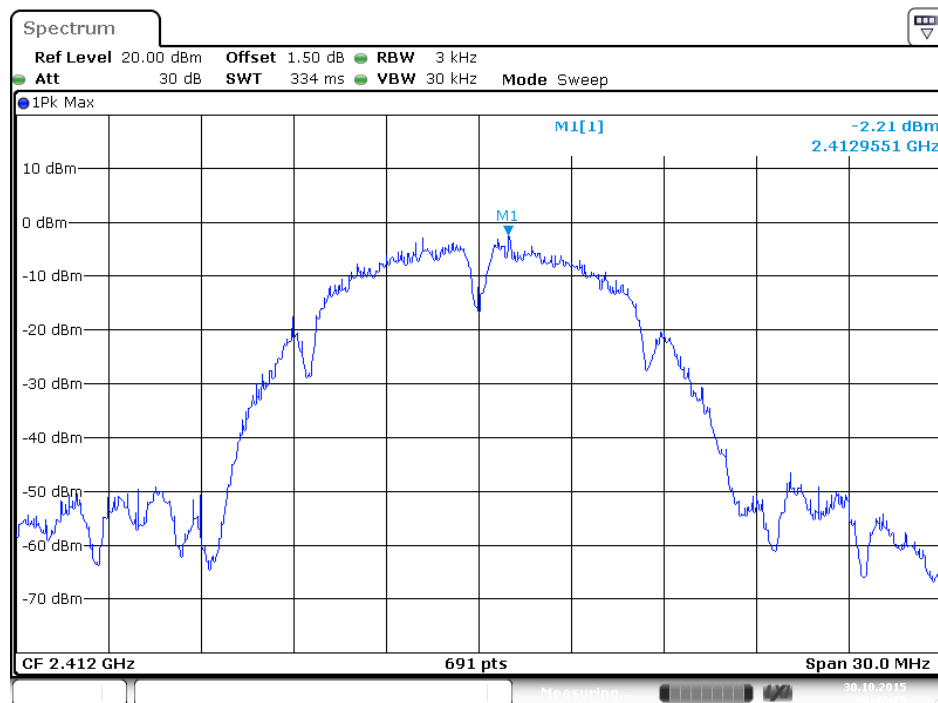
Date: 30.OCT.2015 10:46:02

Mode 3 (Set 6 Panel antenna / 4.03dBi + Set 9 Monopole antenna / Chain 4: 4.5dBi / 4TX)

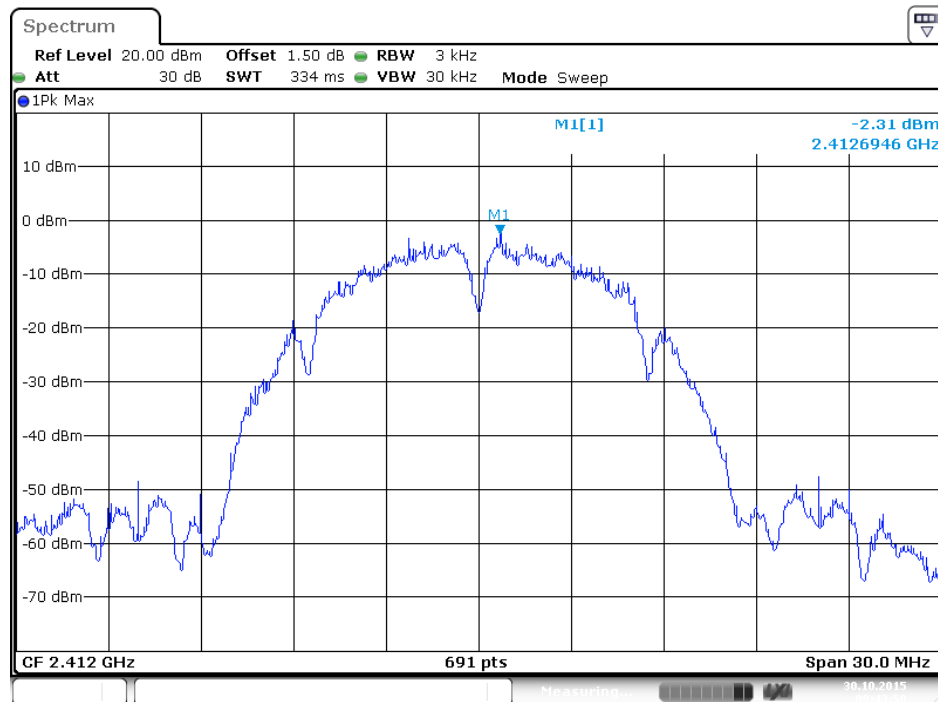
Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 1



Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 2

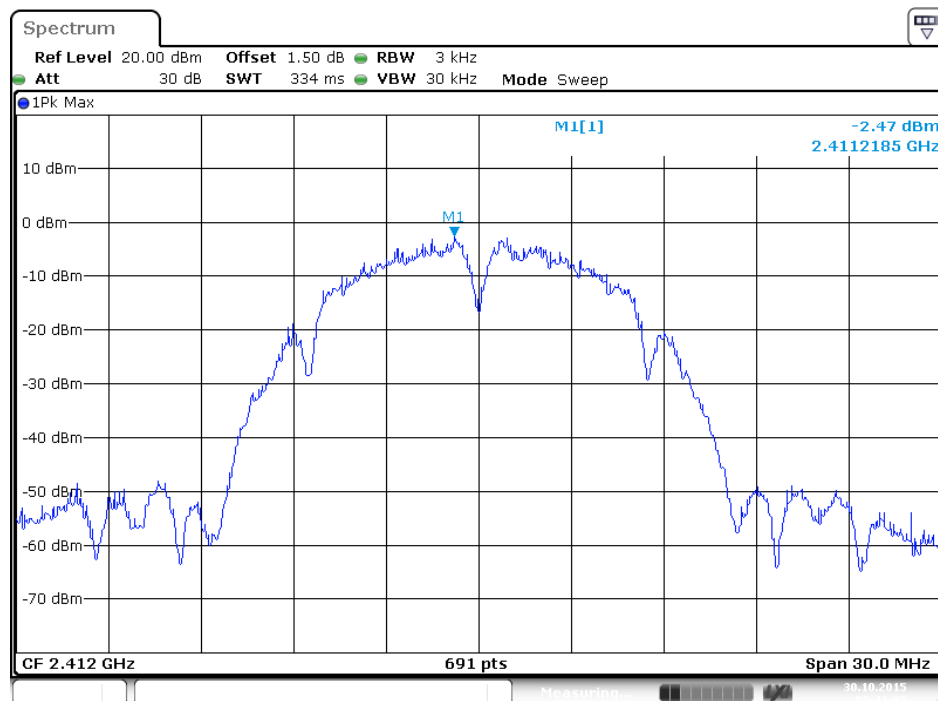


### Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 3



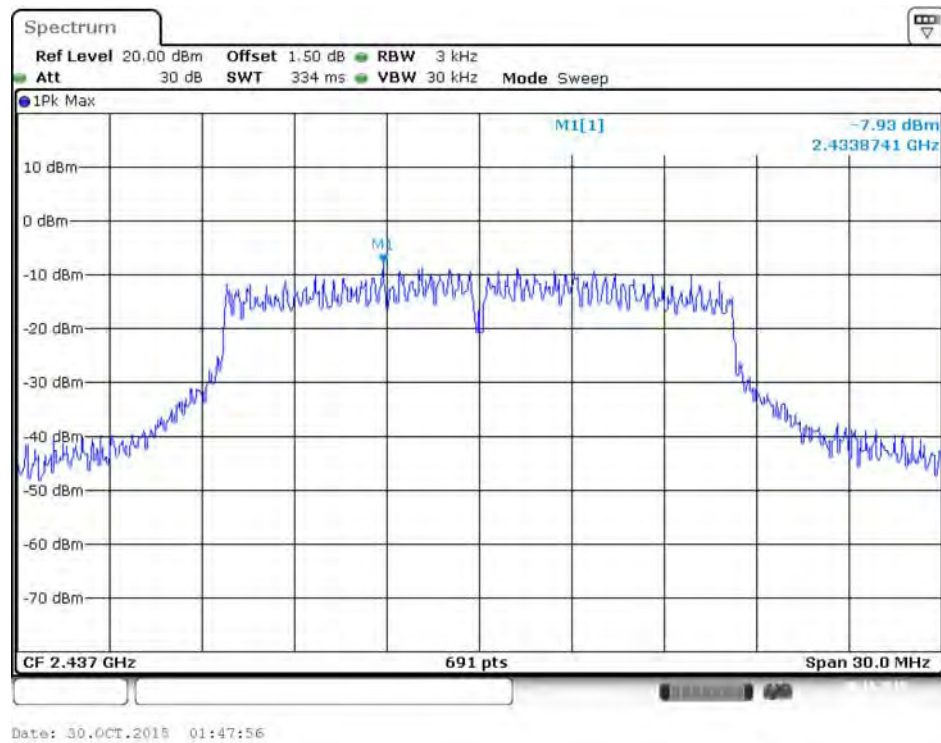
Date: 30.OCT.2015 09:43:50

### Power Density Plot on Configuration IEEE 802.11b / 2412 MHz / Chain 4

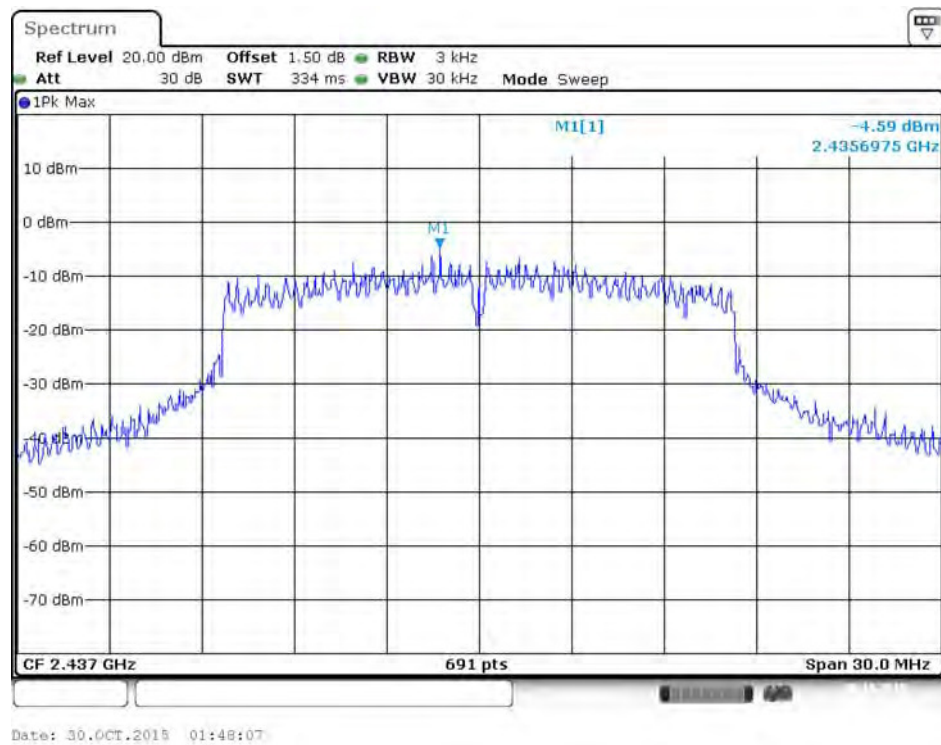


Date: 30.OCT.2015 09:43:05

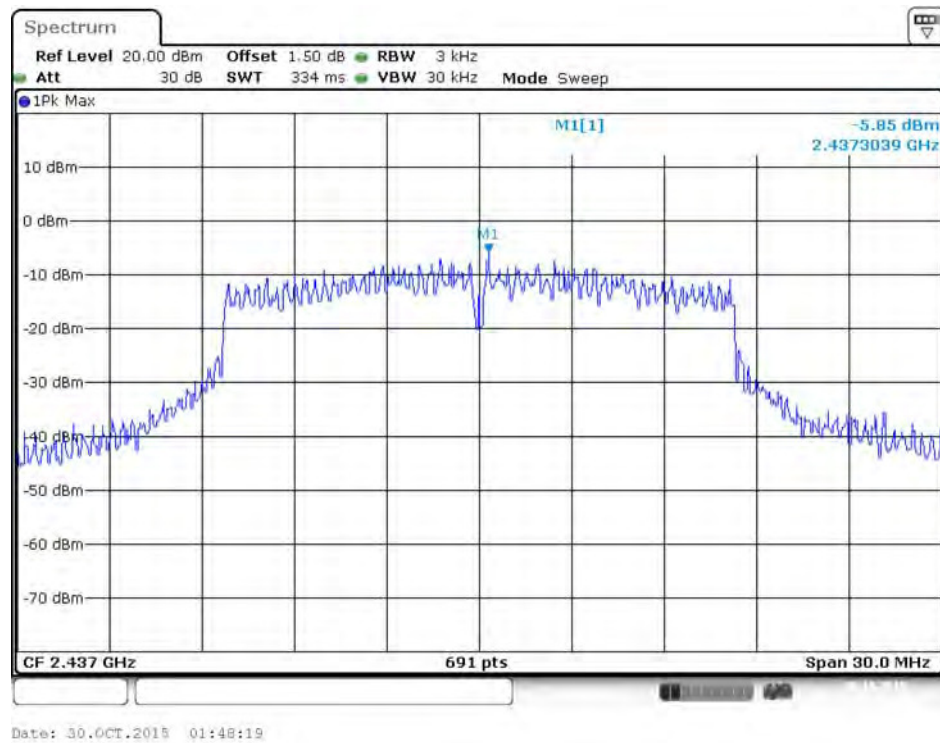
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 1



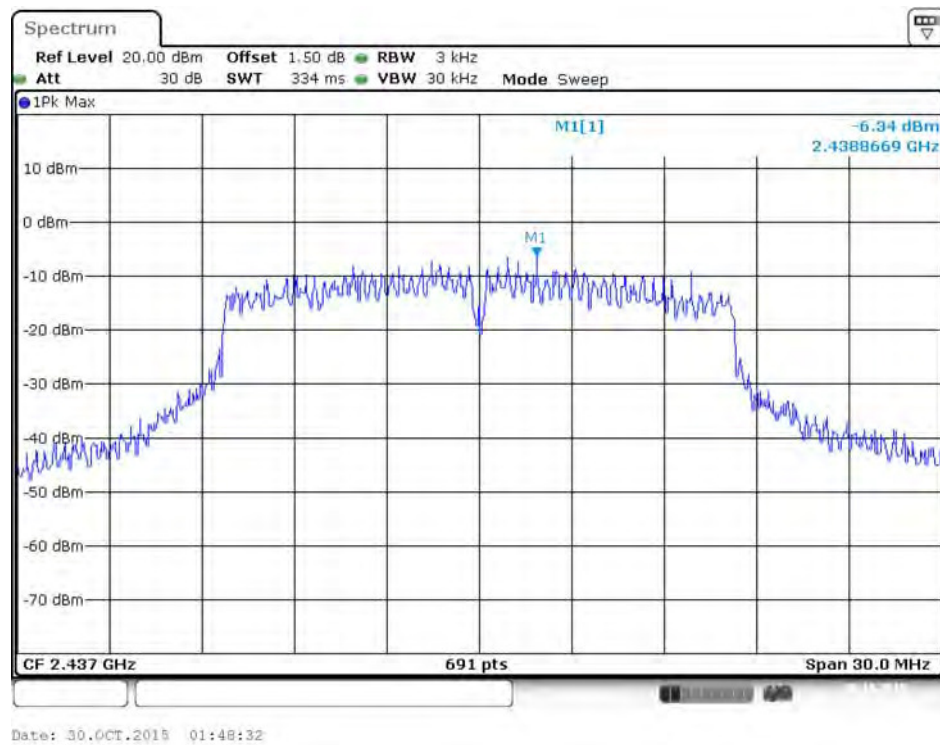
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 2



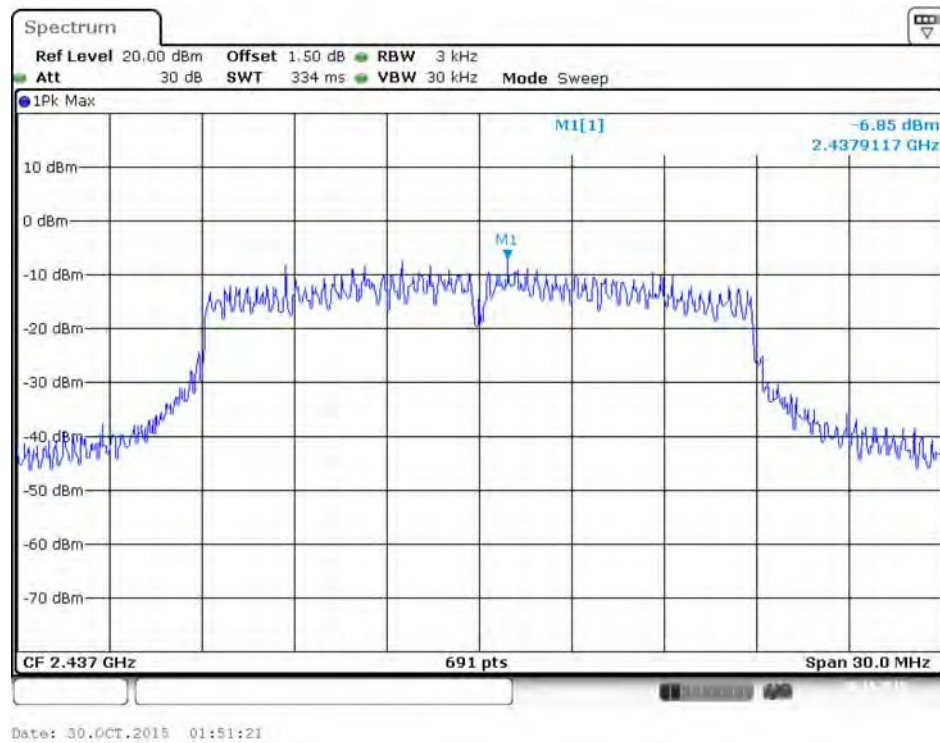
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 3



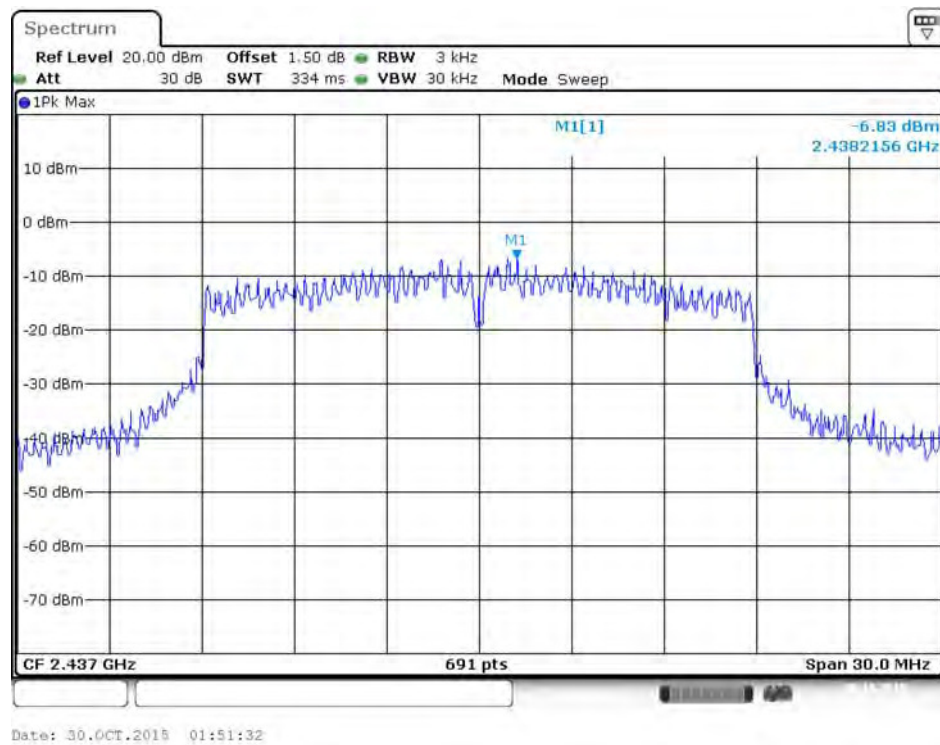
### Power Density Plot on Configuration IEEE 802.11g / 2437 MHz / Chain 4



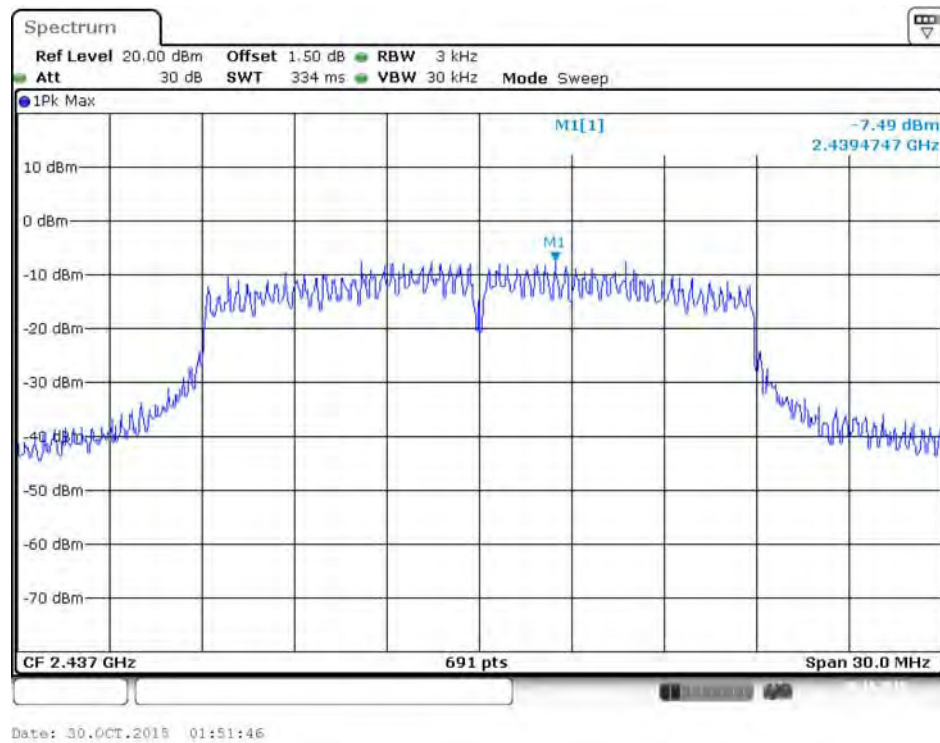
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 1



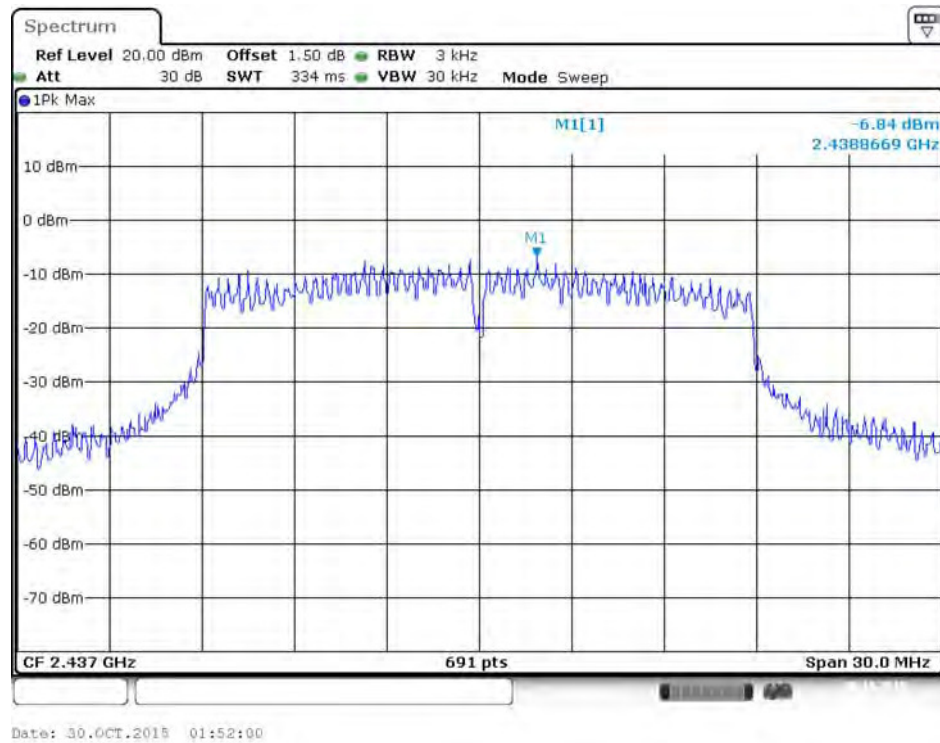
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 2



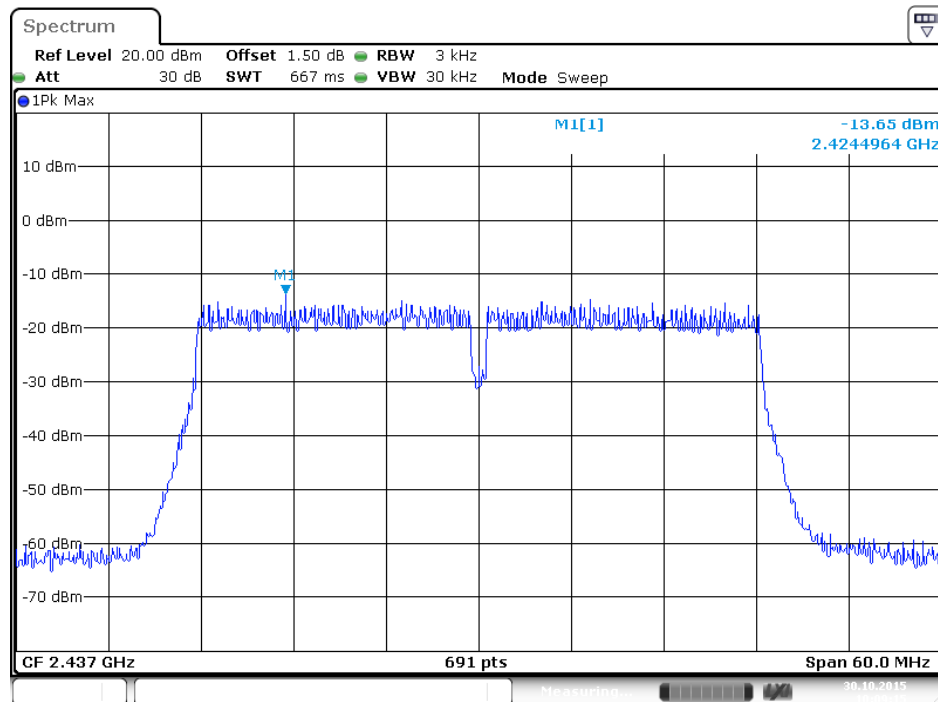
### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 3



### Power Density Plot on Configuration IEEE 802.11n MCS0 HT20 / 2437 MHz / Chain 4

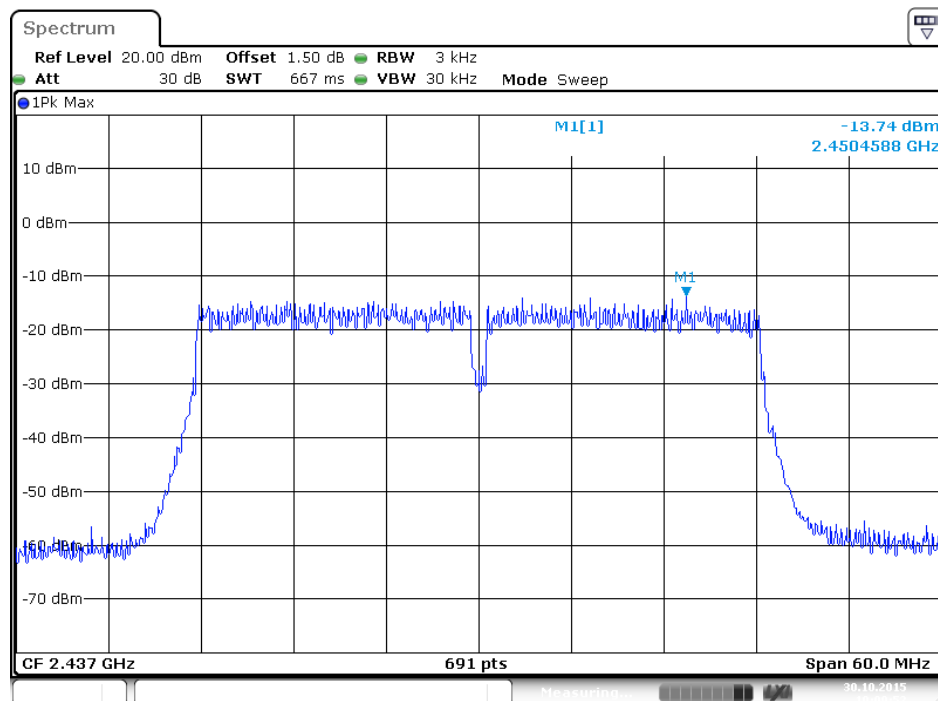


### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 1



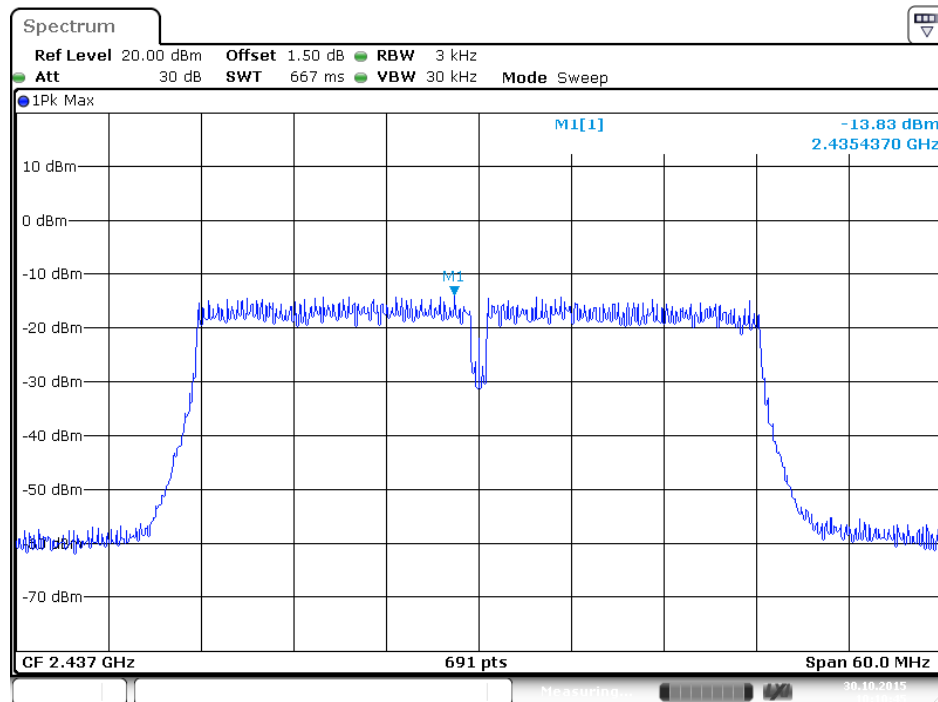
Date: 30.OCT.2015 10:09:15

### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 2



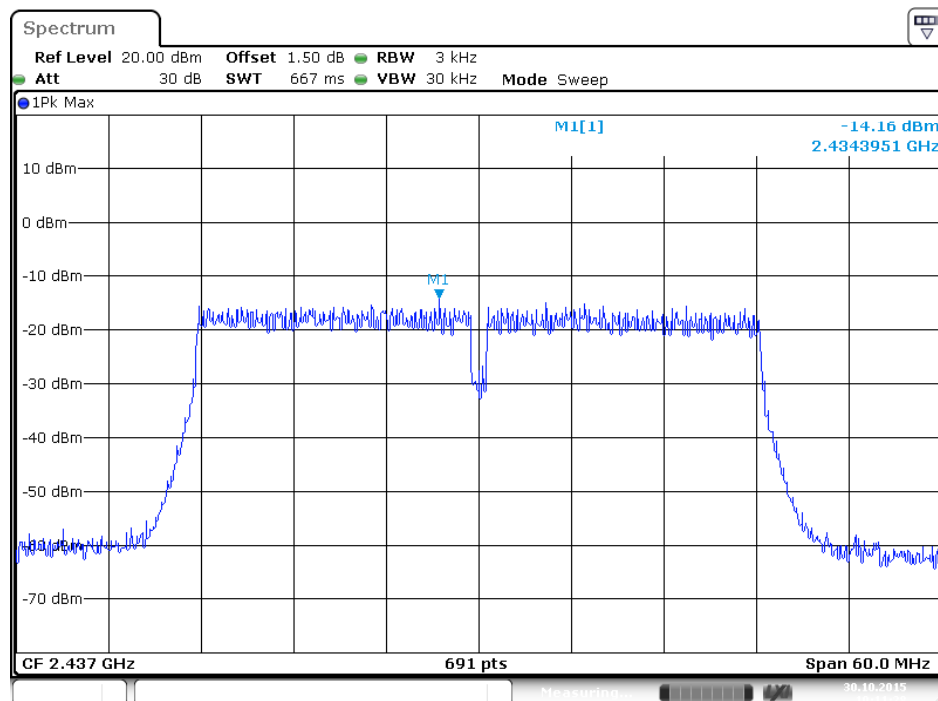
Date: 30.OCT.2015 10:09:52

### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 3



Date: 30.OCT.2015 10:10:45

### Power Density Plot on Configuration IEEE 802.11n MCS0 HT40 / 2437 MHz / Chain 4



Date: 30.OCT.2015 10:11:28