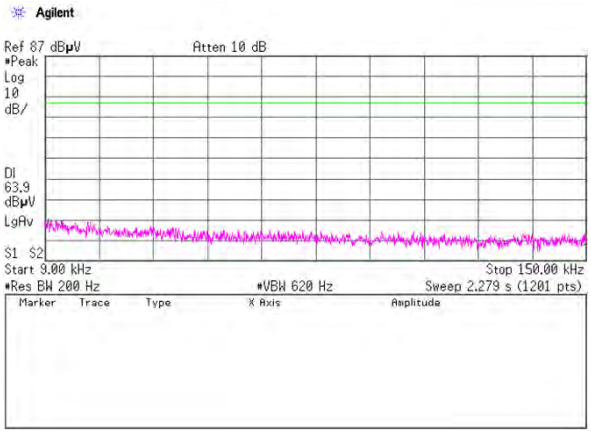
# Spurious emission (Conducted)

**Tx, IEEE802.11n(20HT)(2.4GHz), PN9, worst data mode 3(MCS)**

**Tx 2462MHz (1/2)**

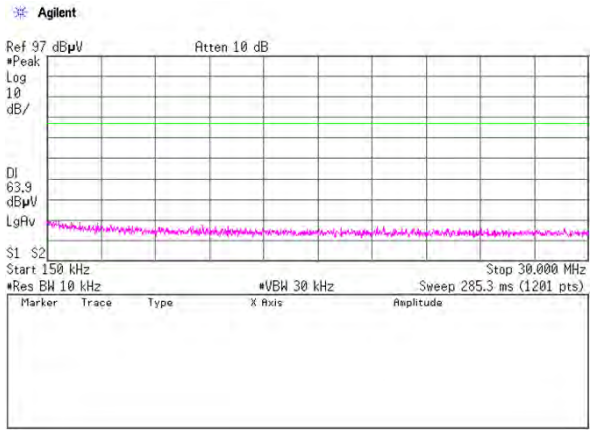
**9kHz - 150kHz**

Tx3_SpuriousM1



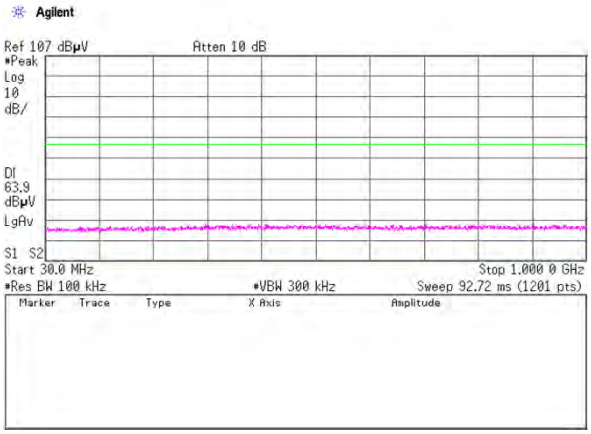

**150kHz - 30MHz**

Tx3_SpuriousM2



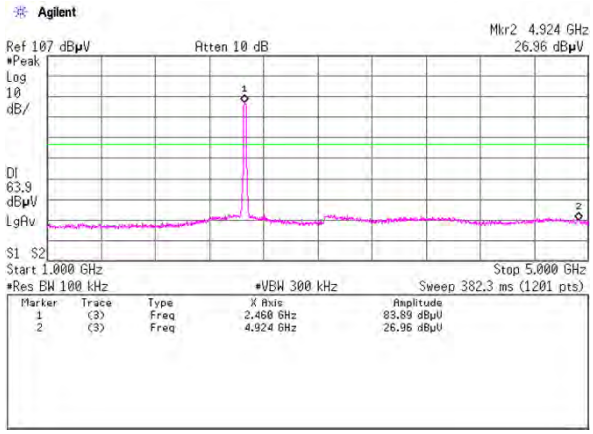

**30MHz - 1GHz**

Tx3_SpuriousM3



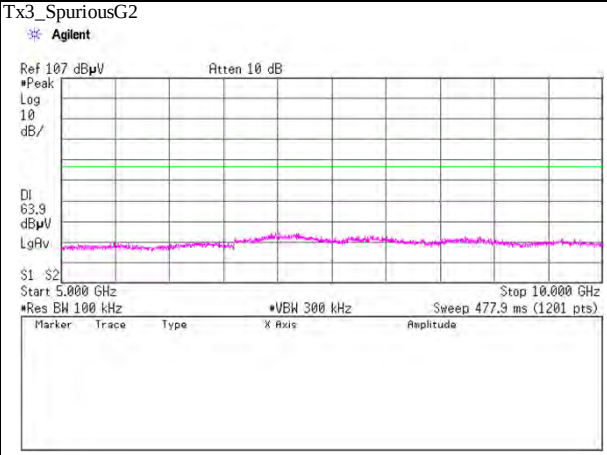

**1GHz - 5GHz**

Tx3_SpuriousG1



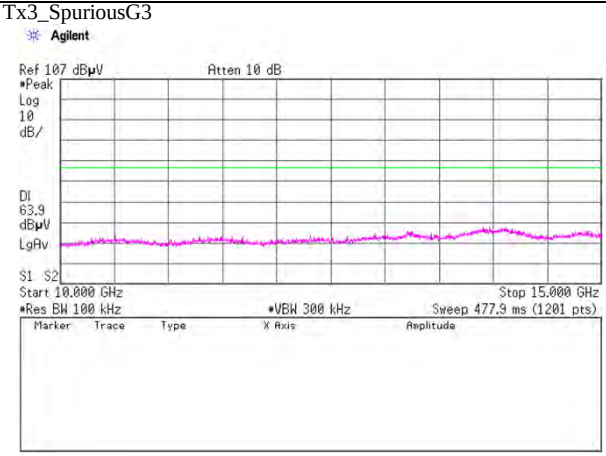

**5GHz - 10GHz**

Tx3_SpuriousG2




**10GHz - 15GHz**

Tx3_SpuriousG3

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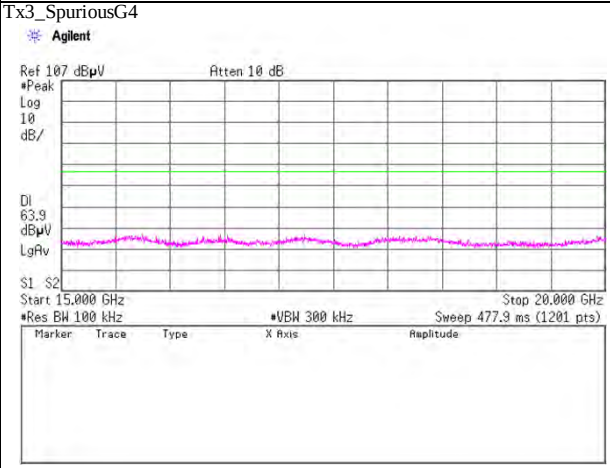
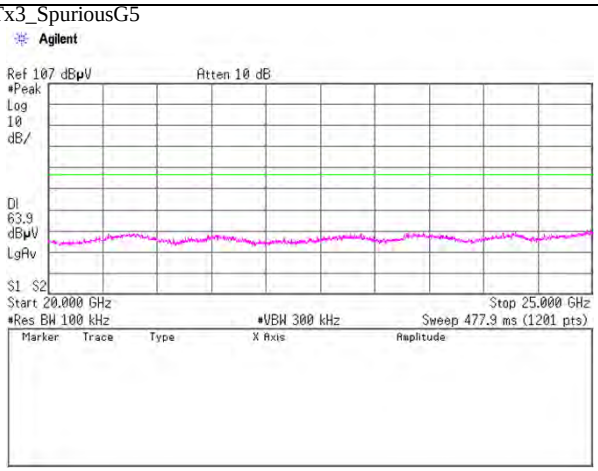
# Spurious emission (Conducted)

**Tx, IEEE802.11n(20HT)(2.4GHz), PN9, worst data mode 3(MCS)**

| Tx 2462MHz (2/2) | |
|---|---|
| **15GHz - 20GHz** | **20GHz - 25GHz** |
| Tx3_SpuriousG4   | Tx3_SpuriousG5   |
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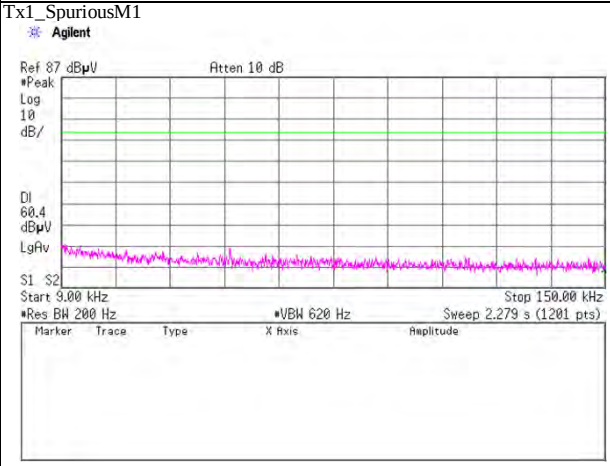
# Spurious emission (Conducted)

**Tx, IEEE802.11n(40HT)(2.4GHz), PN9, worst data mode 3(MCS)**

**Tx 2422MHz (1/2)**

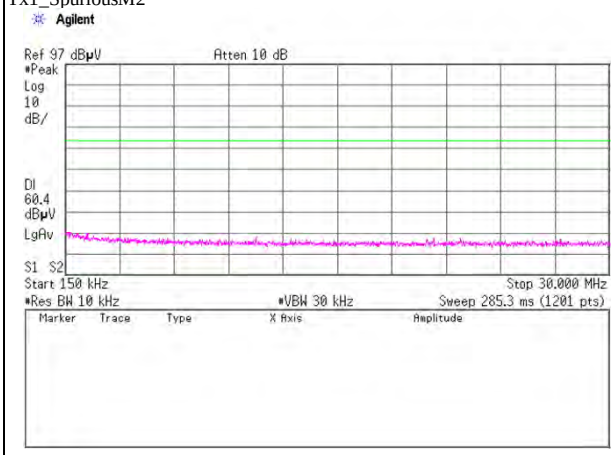
**9kHz - 150kHz**

Tx1_SpuriousM1



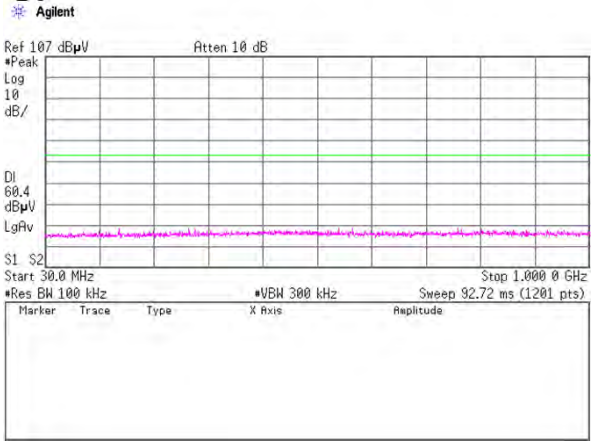

**150kHz - 30MHz**

Tx1_SpuriousM2



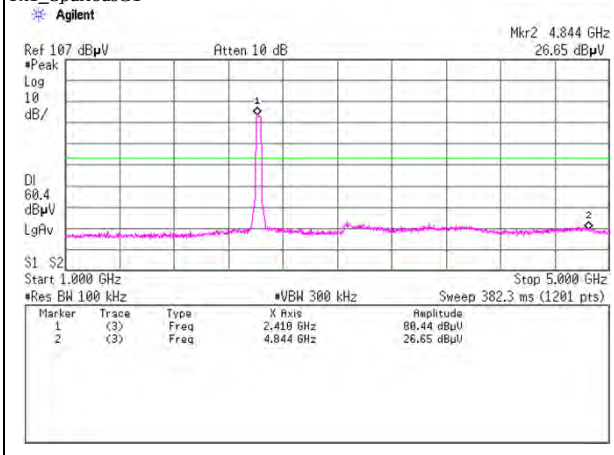

**30MHz - 1GHz**

Tx1_SpuriousM3



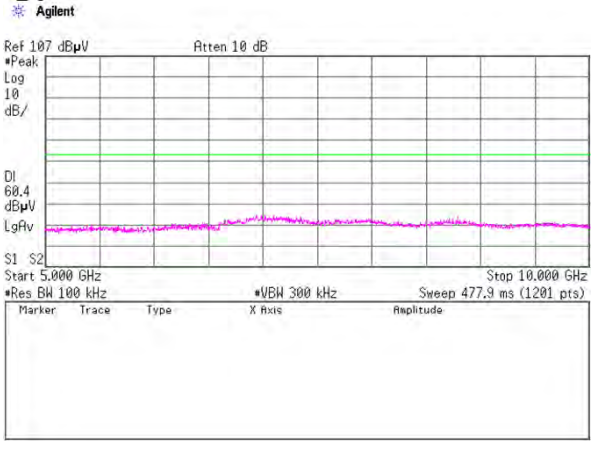

**1GHz - 5GHz**

Tx1_SpuriousG1



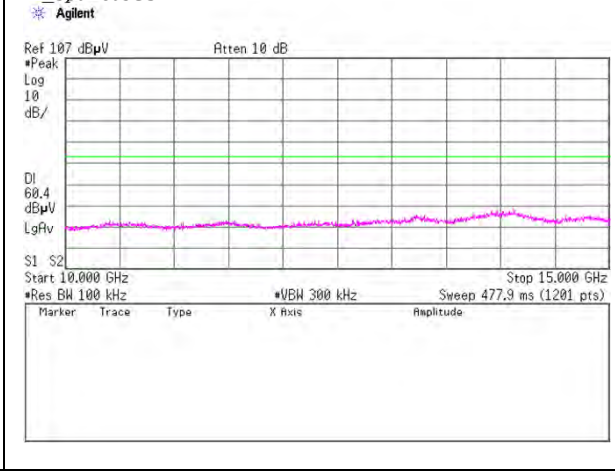

**5GHz - 10GHz**

Tx1_SpuriousG2




**10GHz - 15GHz**

Tx1_SpuriousG3

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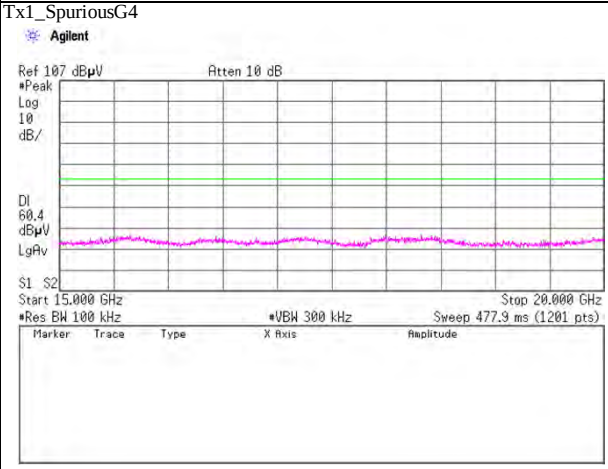
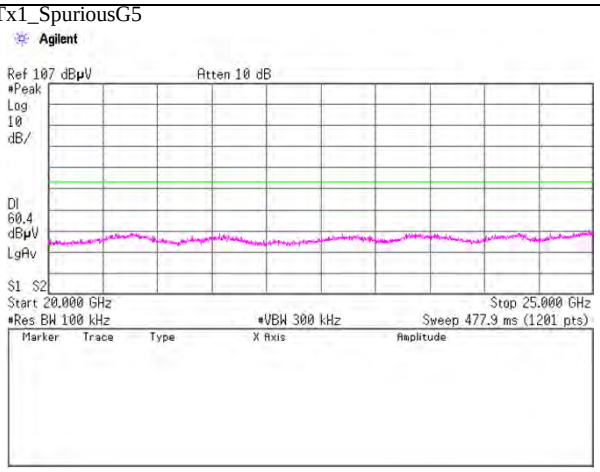
# Spurious emission (Conducted)

**Tx, IEEE802.11n(40HT)(2.4GHz), PN9, worst data mode 3(MCS)**

| Tx 2422MHz (2/2) | |
|---|---|
| **15GHz - 20GHz** | **20GHz - 25GHz** |
| Tx1_SpuriousG4   | Tx1_SpuriousG5   |
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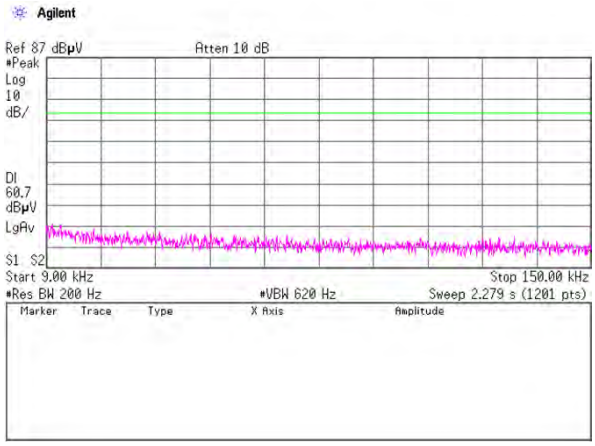
# Spurious emission (Conducted)

**Tx, IEEE802.11n(40HT)(2.4GHz), PN9, worst data mode 3(MCS)**

**Tx 2437MHz (1/2)**

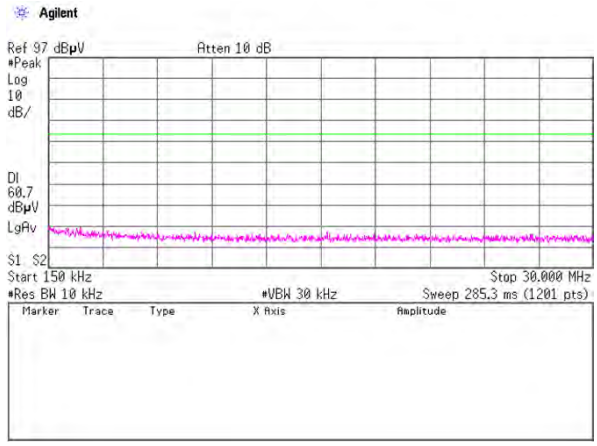
**9kHz - 150kHz**

Tx2_SpuriousM1



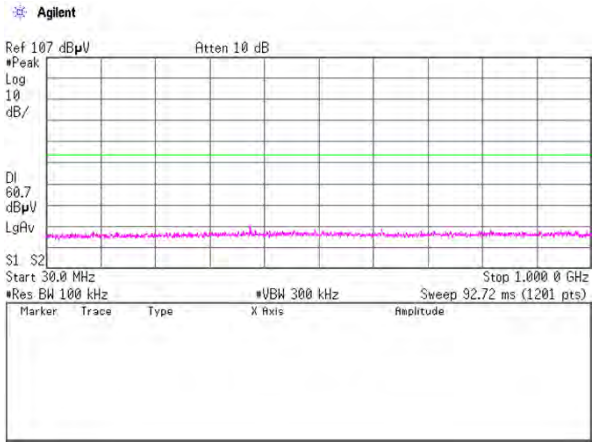

**150kHz - 30MHz**

Tx2_SpuriousM2



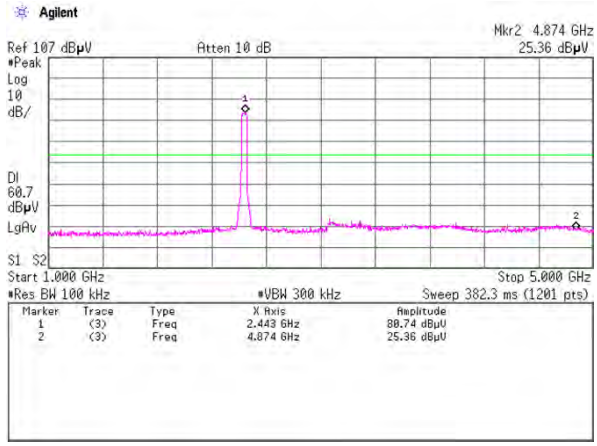

**30MHz - 1GHz**

Tx2_SpuriousM3



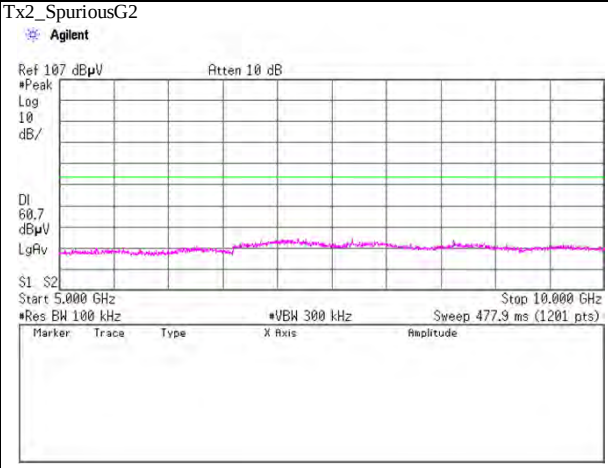

**1GHz - 5GHz**

Tx2_SpuriousG1



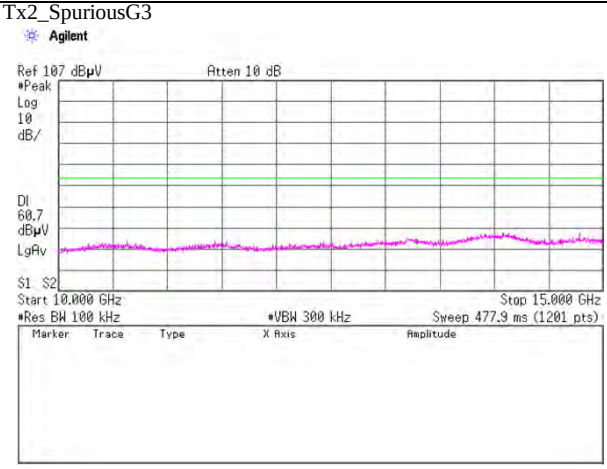

**5GHz - 10GHz**

Tx2_SpuriousG2




**10GHz - 15GHz**

Tx2_SpuriousG3

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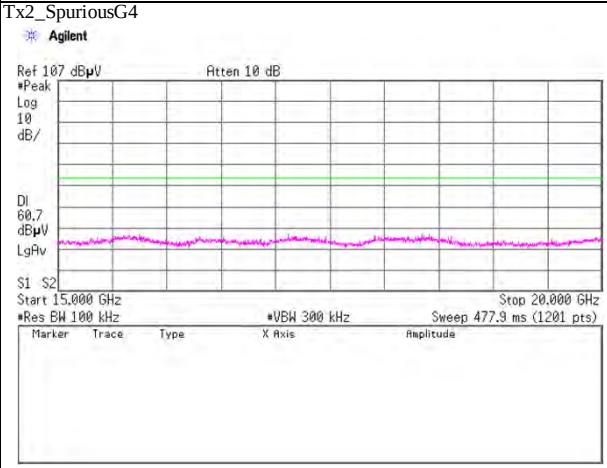
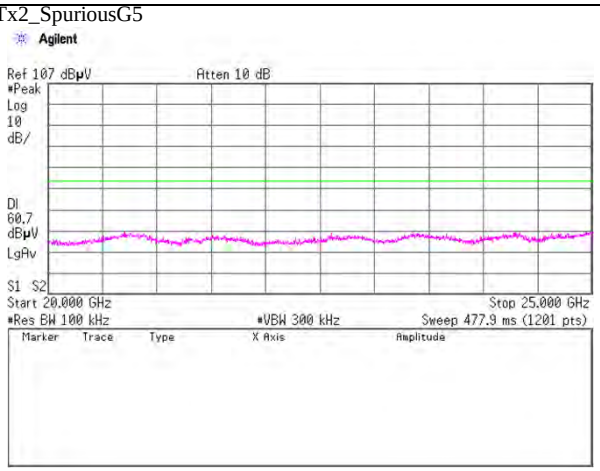
# Spurious emission (Conducted)

**Tx, IEEE802.11n(40HT)(2.4GHz), PN9, worst data mode 3(MCS)**

| Tx 2437MHz (2/2) | |
|---|---|
| **15GHz - 20GHz** | **20GHz - 25GHz** |
| Tx2_SpuriousG4   | Tx2_SpuriousG5   |
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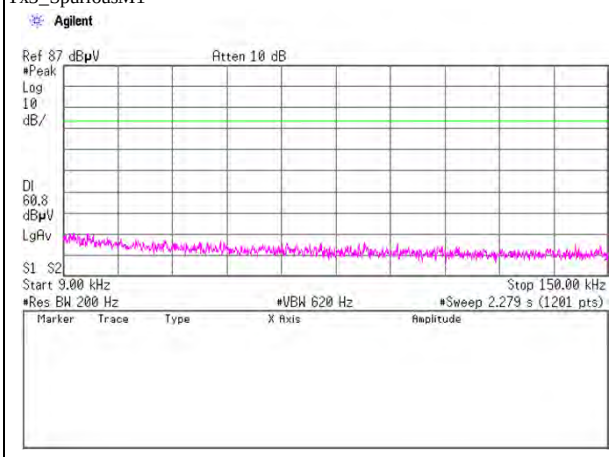
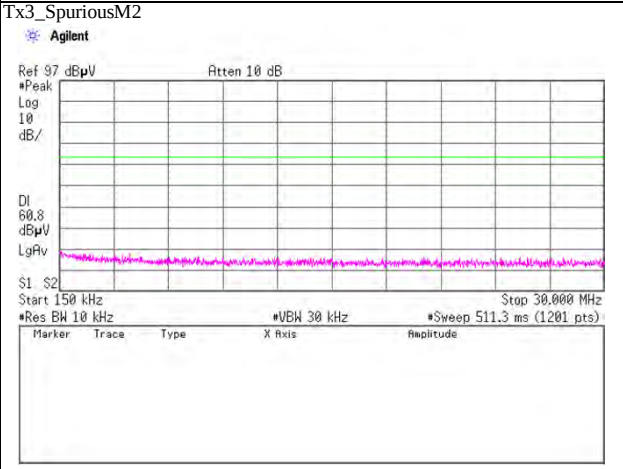
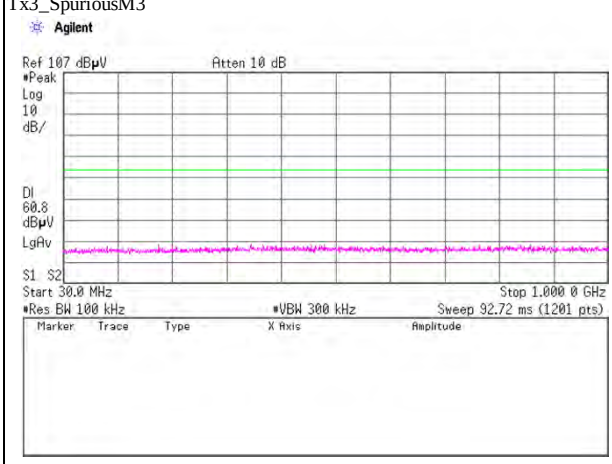
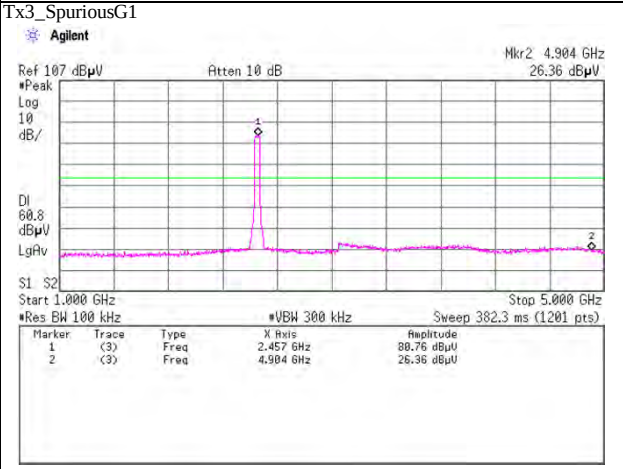
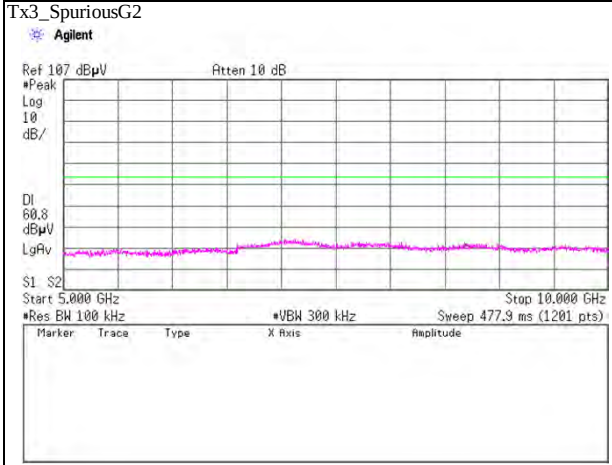
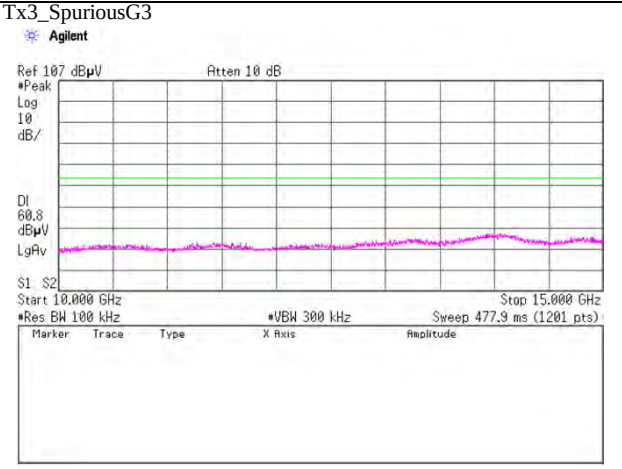
# Spurious emission (Conducted)

**Tx, IEEE802.11n(40HT)(2.4GHz), PN9, worst data mode 3(MCS)**

**Tx 2452MHz (1/2)**

| 9kHz - 150kHz | 150kHz - 30MHz |
|---|---|
| Tx3_SpuriousM1 | Tx3_SpuriousM2 |
|  |  |
| **30MHz - 1GHz** | **1GHz - 5GHz** |
| Tx3_SpuriousM3 | Tx3_SpuriousG1 |
|  |  |
| **5GHz - 10GHz** | **10GHz - 15GHz** |
| Tx3_SpuriousG2 | Tx3_SpuriousG3 |
|  |  |

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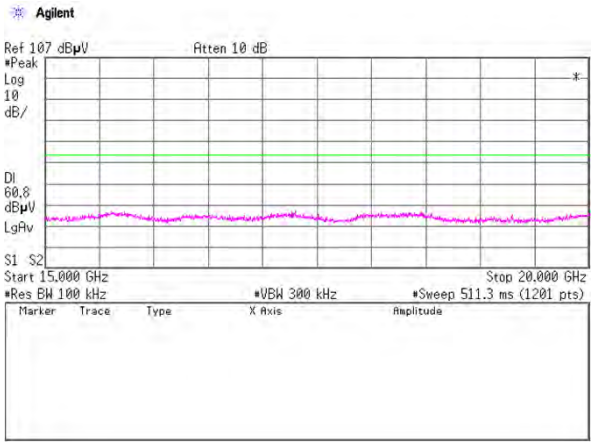
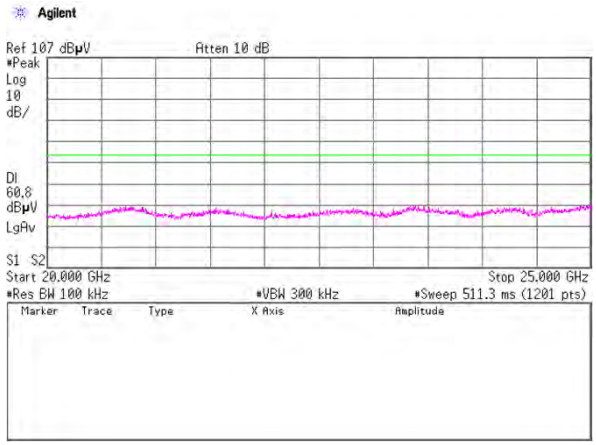
# Spurious emission (Conducted)

**Tx, IEEE802.11n(40HT)(2.4GHz), PN9, worst data mode 3(MCS)**

| Tx 2452MHz (2/2) | |
|---|---|
| **15GHz - 20GHz** | **20GHz - 25GHz** |
| Tx3_SpuriousG4 | Tx3_SpuriousG5 |
|  |  |
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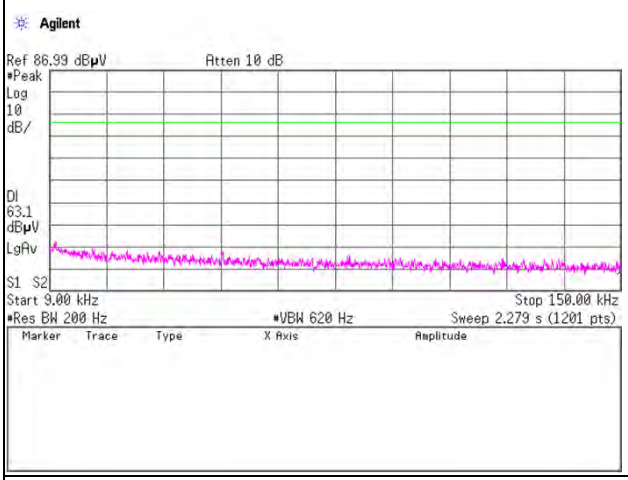
# Spurious emission (Conducted)

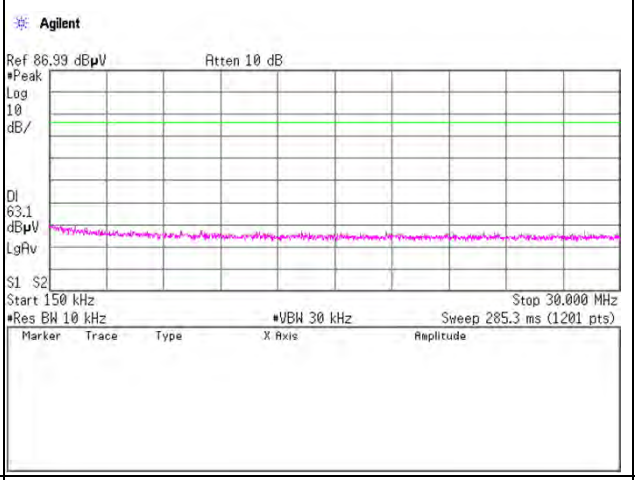
**Tx, IEEE802.11a (W58), PN9, worst data mode 24Mbps**

**Tx 5745MHz (1/2)**

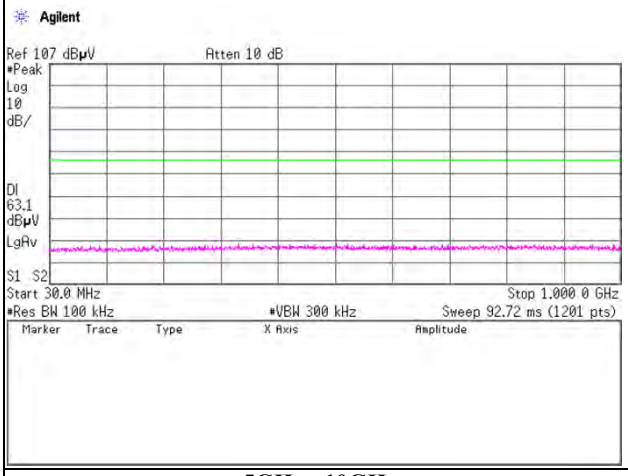
**9kHz - 150kHz**



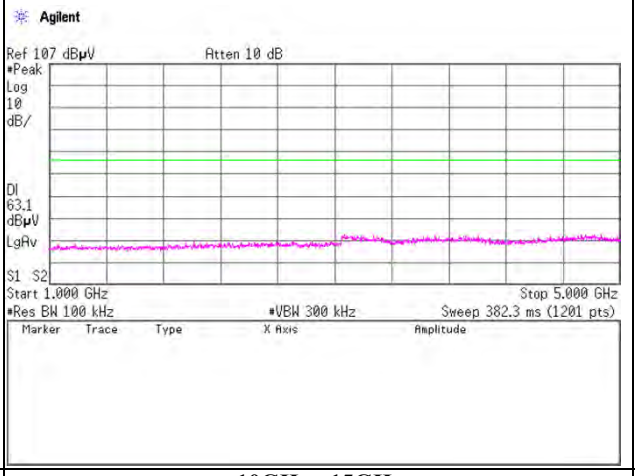

**150kHz - 30MHz**



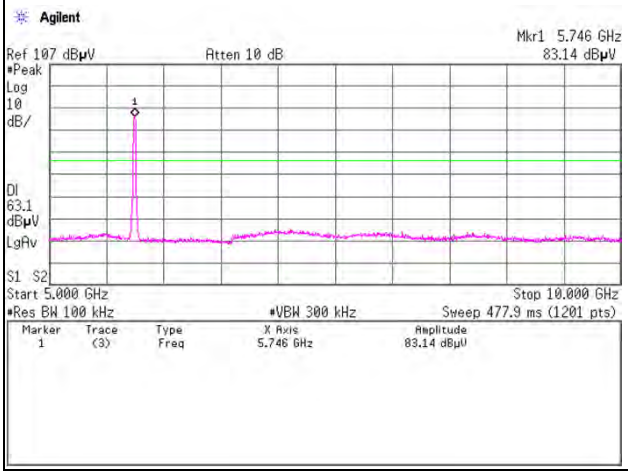

**30MHz - 1GHz**



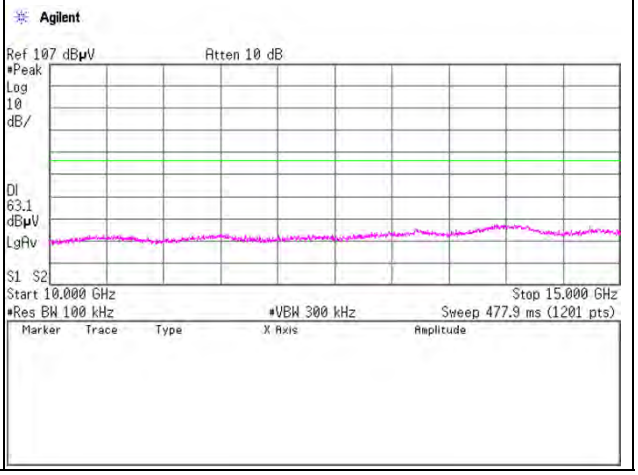

**1GHz - 5GHz**




**5GHz - 10GHz**




**10GHz - 15GHz**

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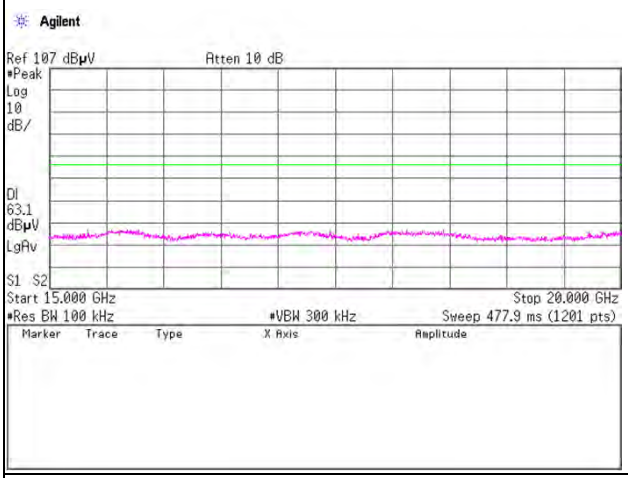
# Spurious emission (Conducted)

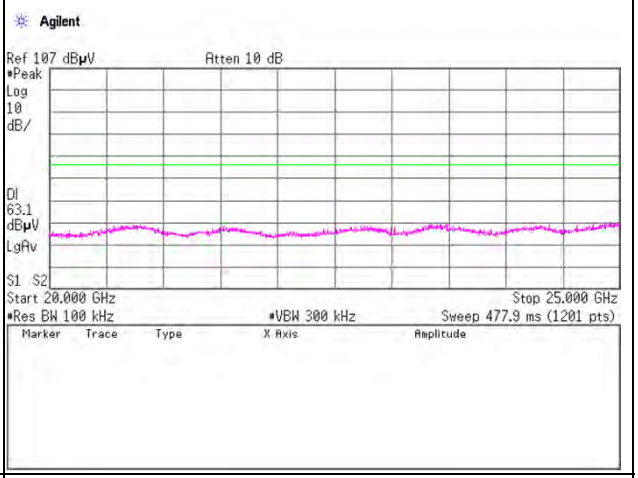
**Tx, IEEE802.11a (W58), PN9, worst data mode 24Mbps**

**Tx 5745MHz (2/2)**

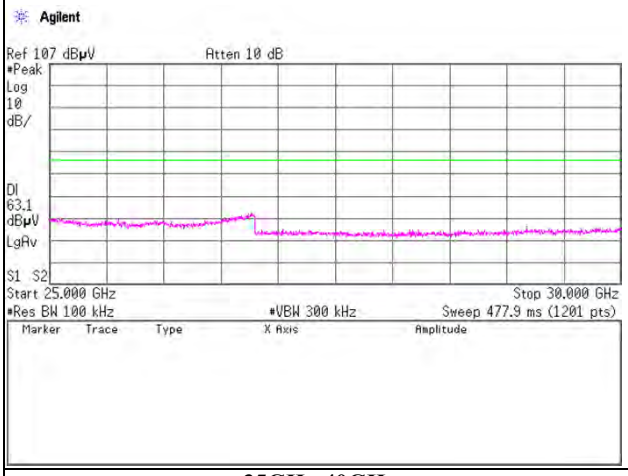
**15GHz - 20GHz**



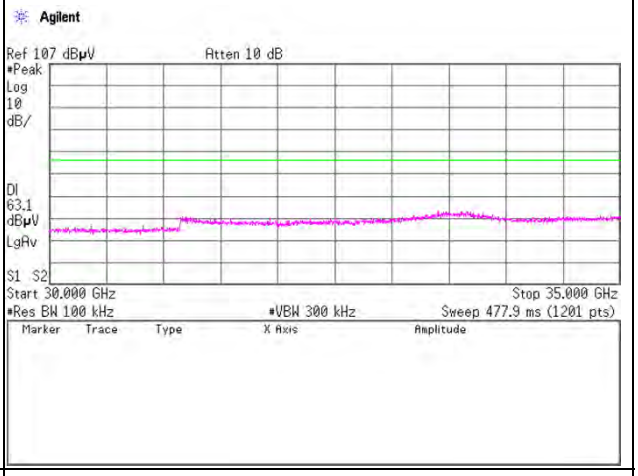

**20GHz - 25GHz**



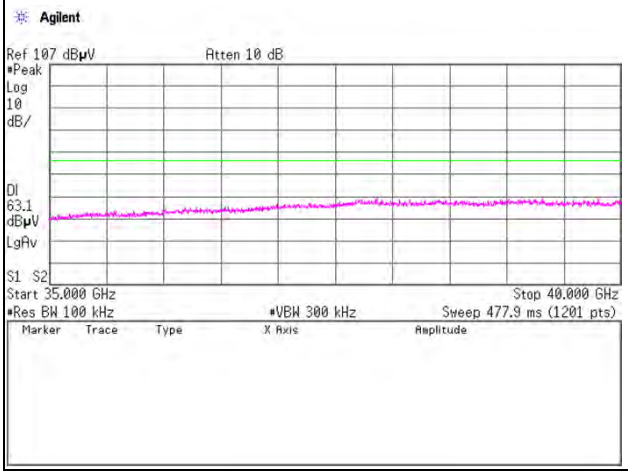

**25GHz-30GHz**




**30GHz-35GHz**




**35GHz-40GHz**

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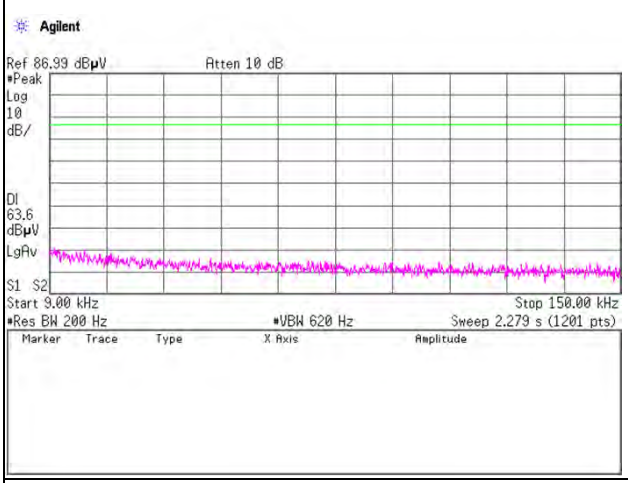
# Spurious emission (Conducted)

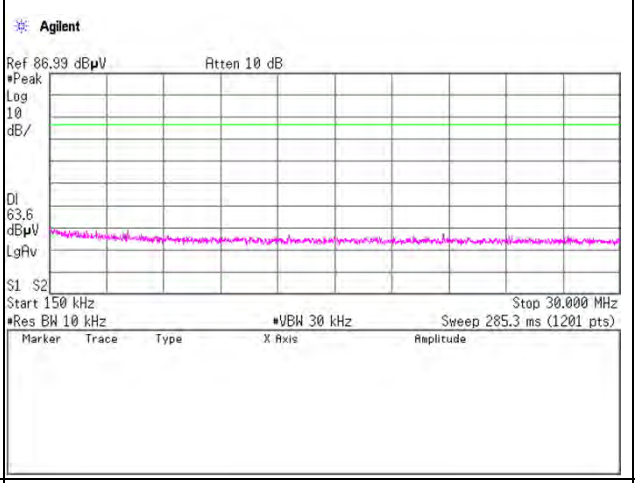
**Tx, IEEE802.11a (W58), PN9, worst data mode 24Mbps**

**Tx 5785MHz (1/2)**

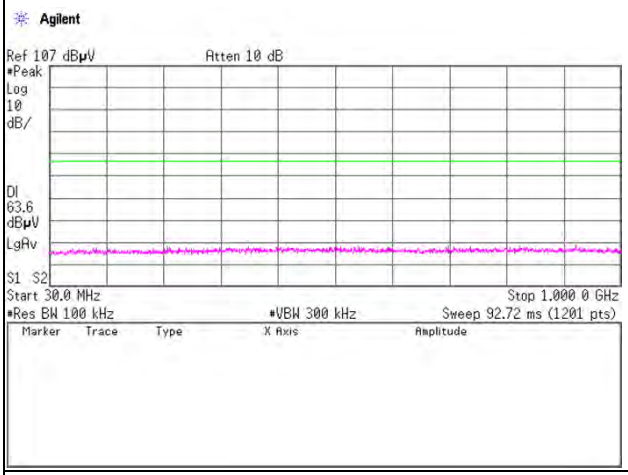
**9kHz - 150kHz**



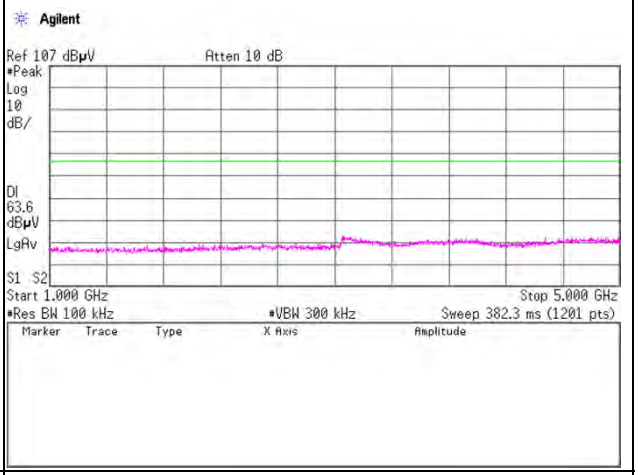

**150kHz - 30MHz**



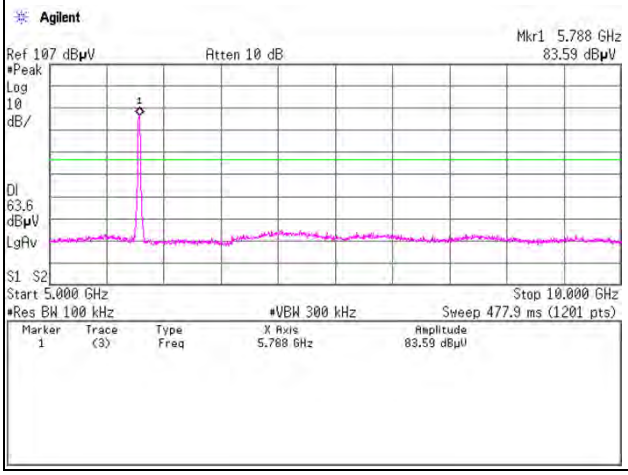

**30MHz - 1GHz**



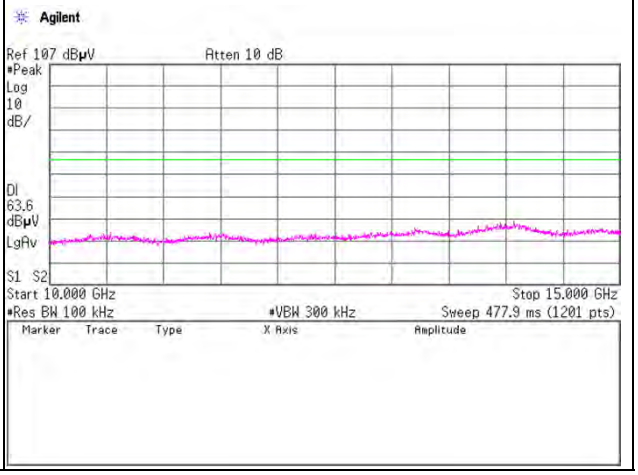

**1GHz - 5GHz**




**5GHz - 10GHz**




**10GHz - 15GHz**

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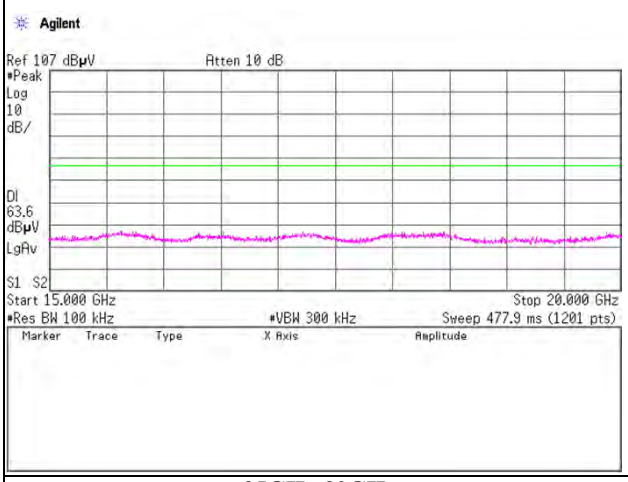
# Spurious emission (Conducted)

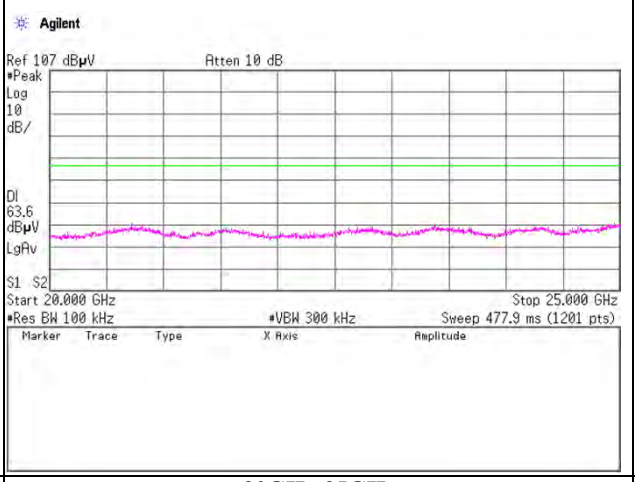
**Tx, IEEE802.11a (W58), PN9, worst data mode 24Mbps**

**Tx 5785MHz (2/2)**

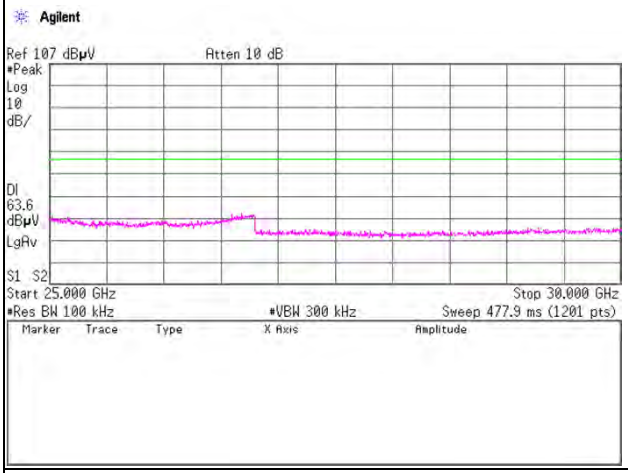
**15GHz - 20GHz**



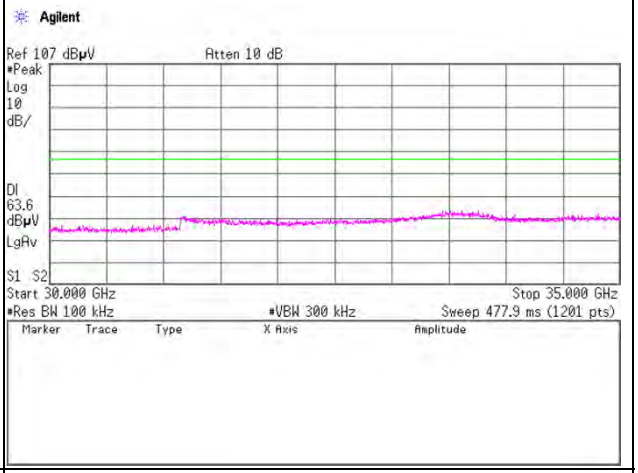

**20GHz - 25GHz**



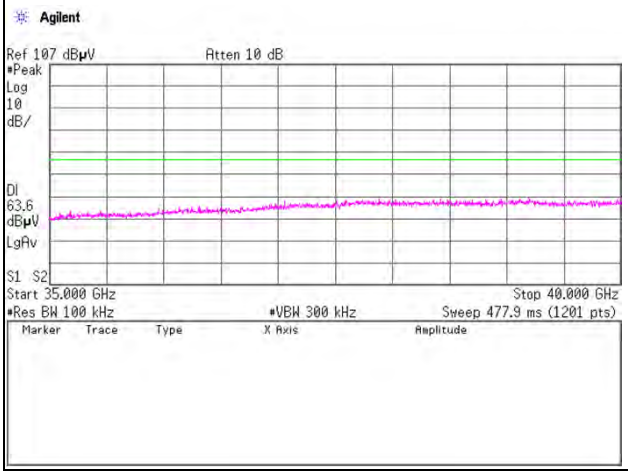

**25GHz-30GHz**




**30GHz-35GHz**




**35GHz-40GHz**

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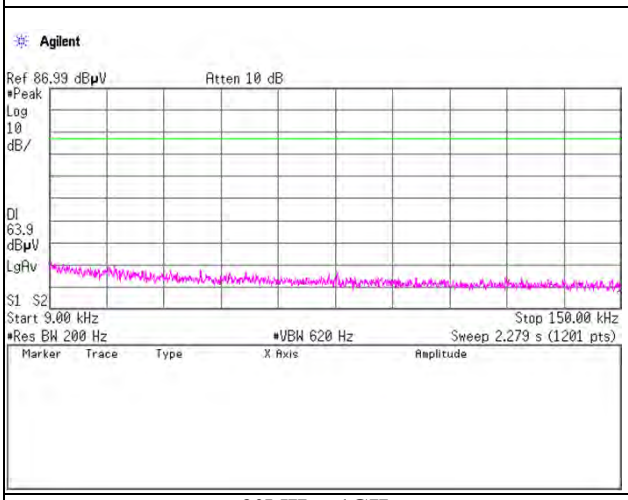
# Spurious emission (Conducted)

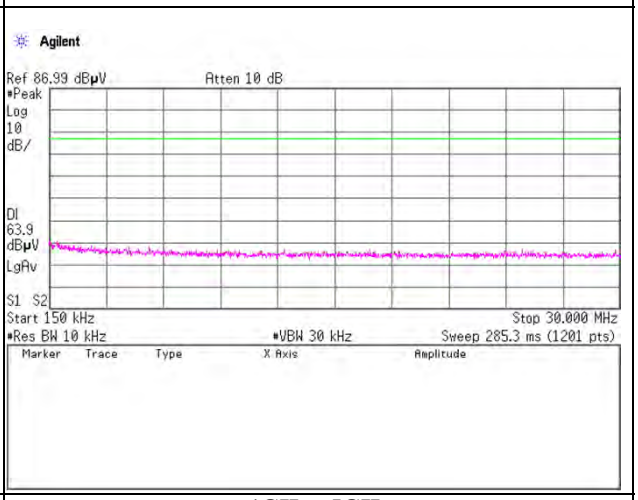
**Tx, IEEE802.11a (W58), PN9, worst data mode 24Mbps**

**Tx 5825MHz (1/2)**

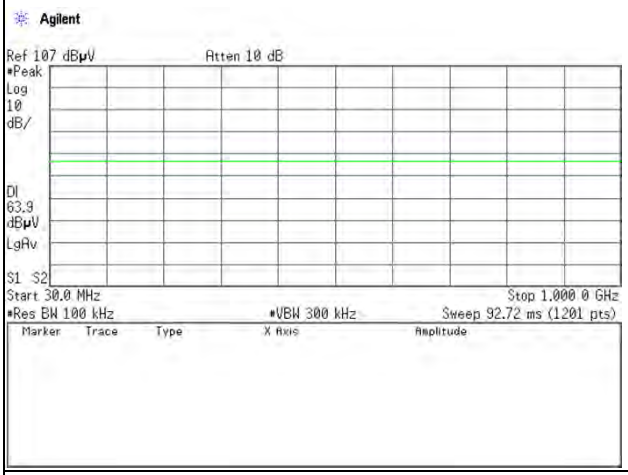
**9kHz - 150kHz**



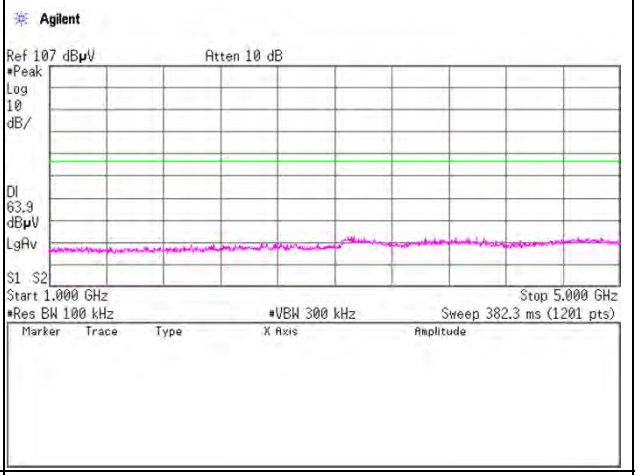

**150kHz - 30MHz**



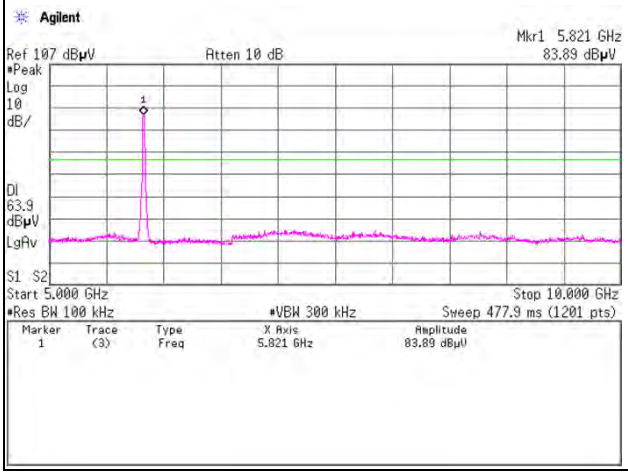

**30MHz - 1GHz**



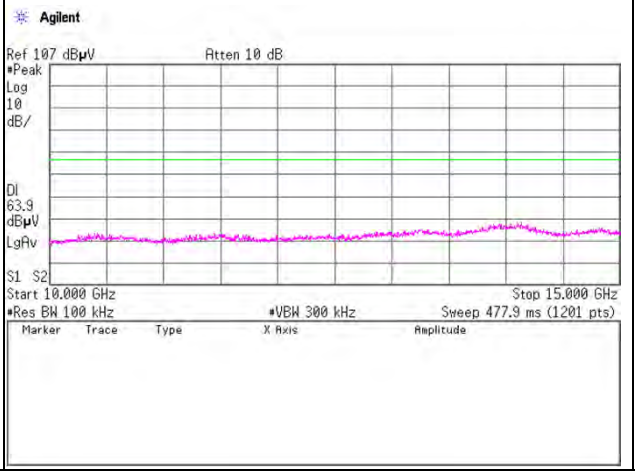

**1GHz - 5GHz**




**5GHz - 10GHz**




**10GHz - 15GHz**

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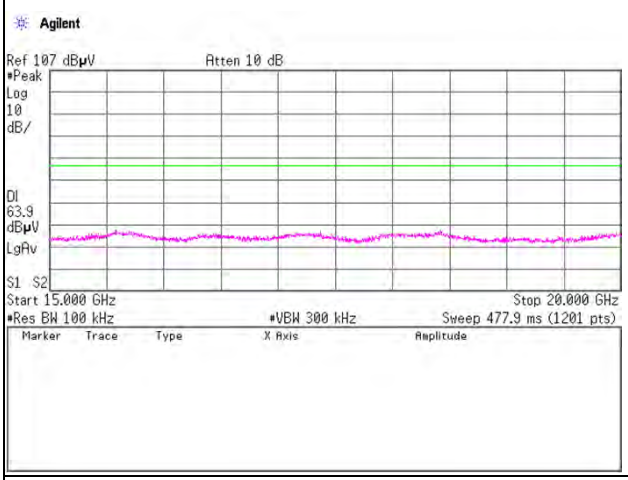
# Spurious emission (Conducted)

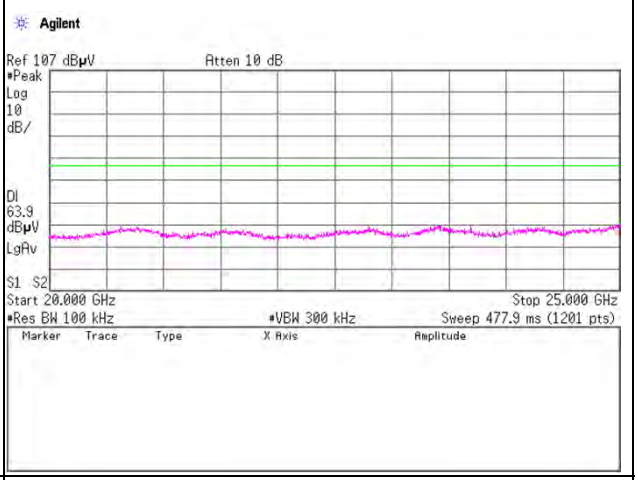
**Tx, IEEE802.11a (W58), PN9, worst data mode 24Mbps**

**Tx 5825MHz (2/2)**

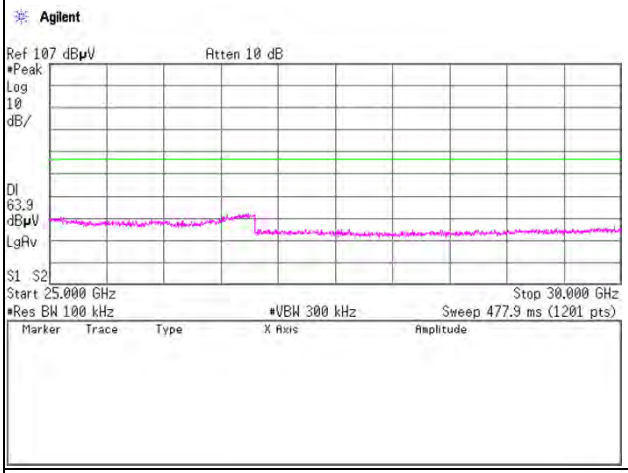
**15GHz - 20GHz**



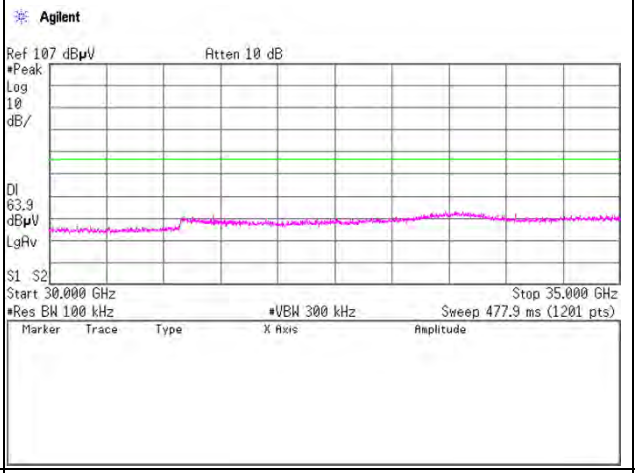

**20GHz - 25GHz**



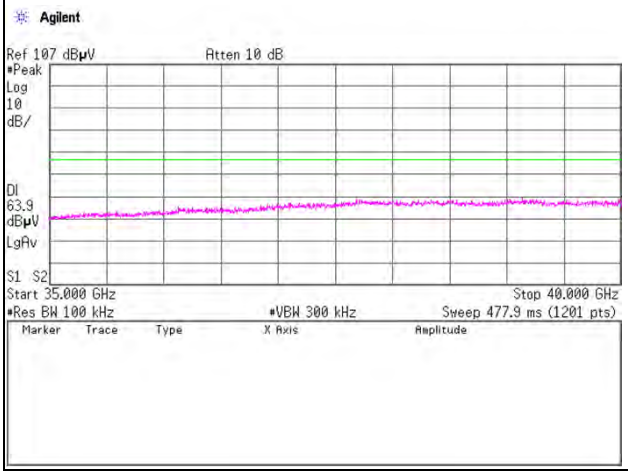

**25GHz-30GHz**




**30GHz-35GHz**




**35GHz-40GHz**

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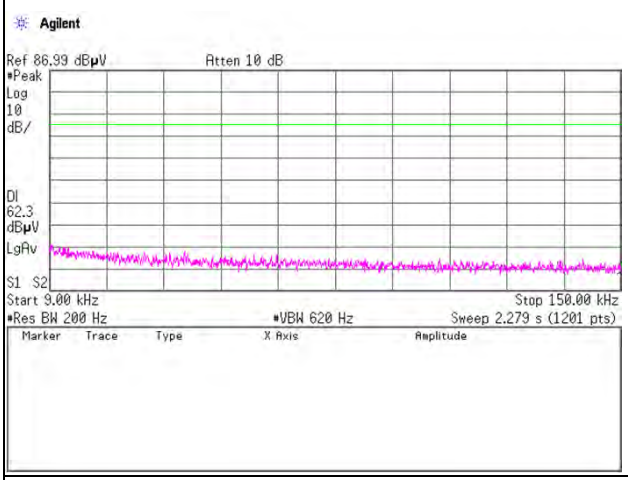
# Spurious emission (Conducted)

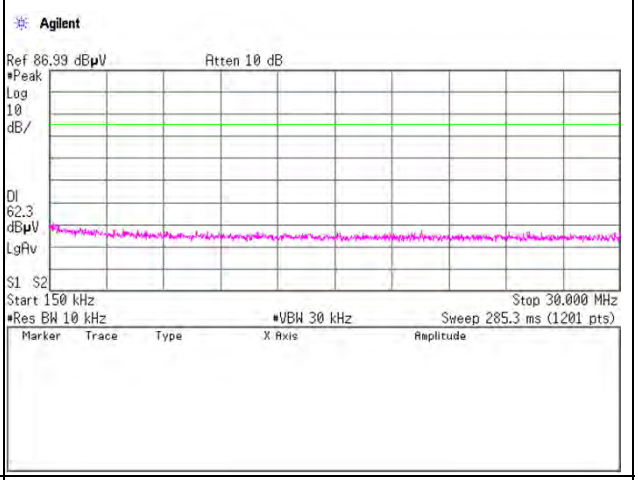
**Tx, IEEE802.11n (20HT), (W58), PN9, worst data mode 1(MCS)**

**Tx 5745MHz (1/2)**

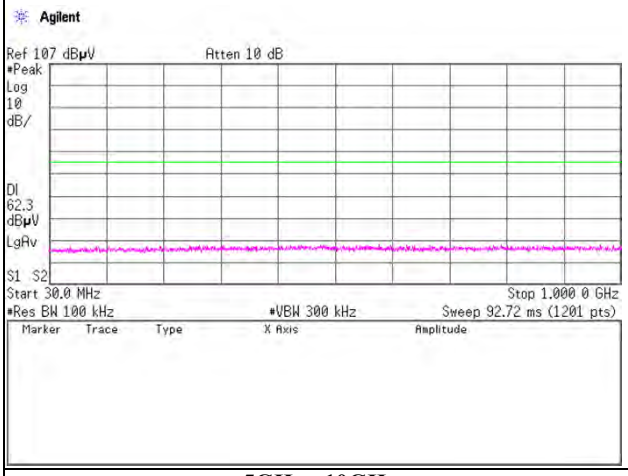
**9kHz - 150kHz**



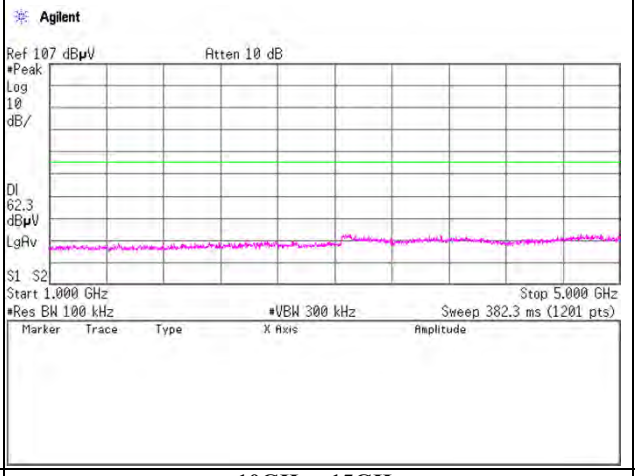

**150kHz - 30MHz**



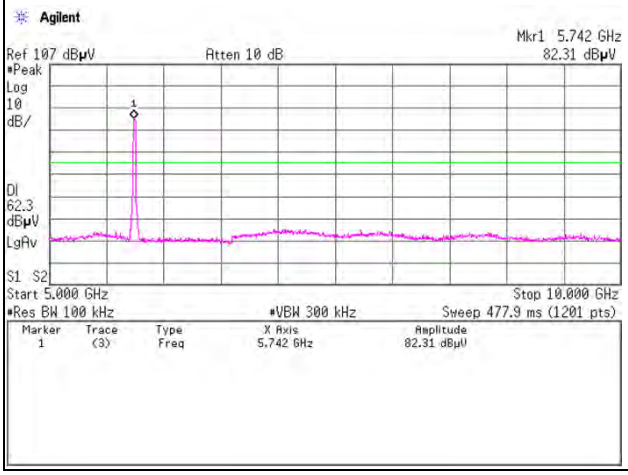

**30MHz - 1GHz**



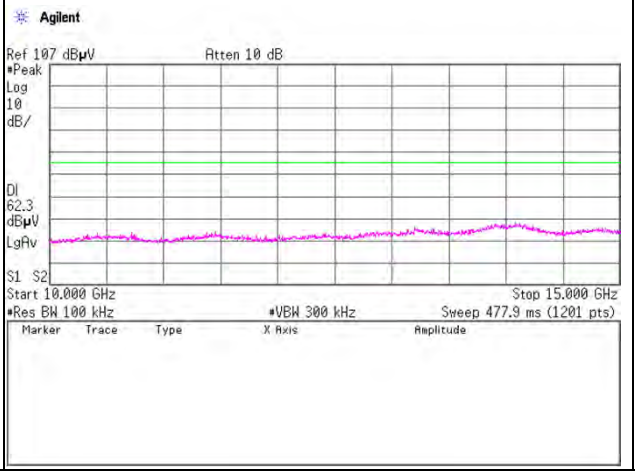

**1GHz - 5GHz**




**5GHz - 10GHz**




**10GHz - 15GHz**

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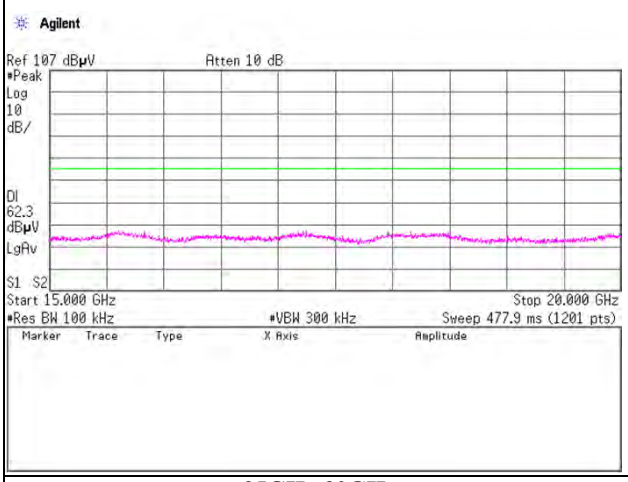
# Spurious emission (Conducted)

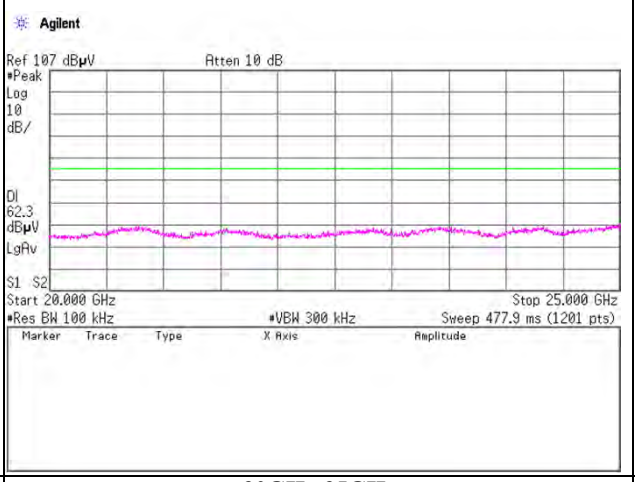
**Tx, IEEE802.11n (20HT), (W58), PN9, worst data mode 1(MCS)**

**Tx 5745MHz (2/2)**

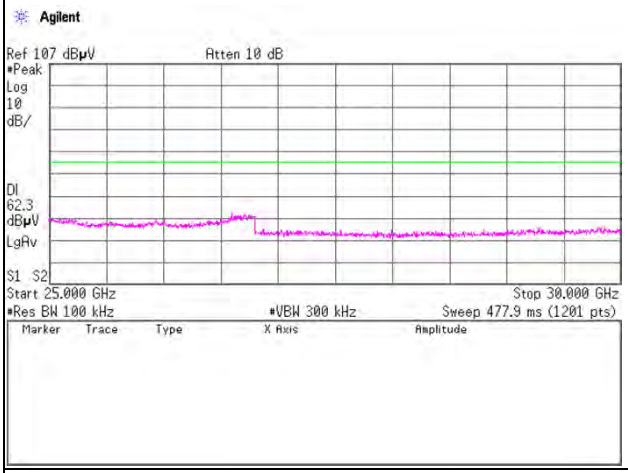
**15GHz - 20GHz**



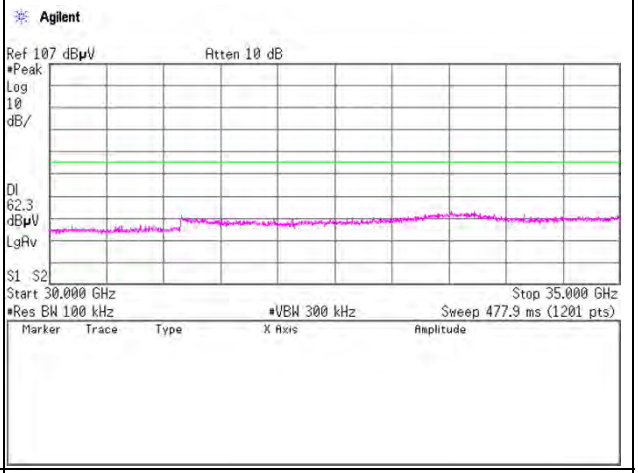

**20GHz - 25GHz**



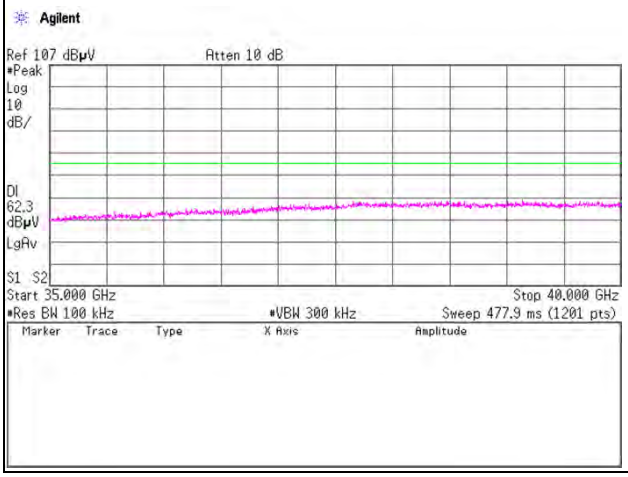

**25GHz-30GHz**




**30GHz-35GHz**




**35GHz-40GHz**

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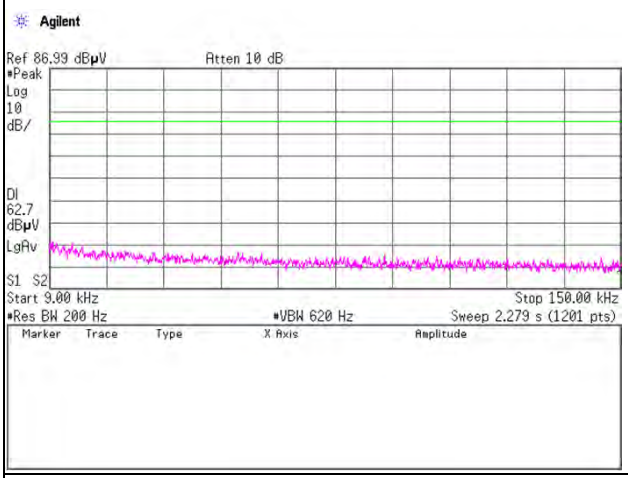
# Spurious emission (Conducted)

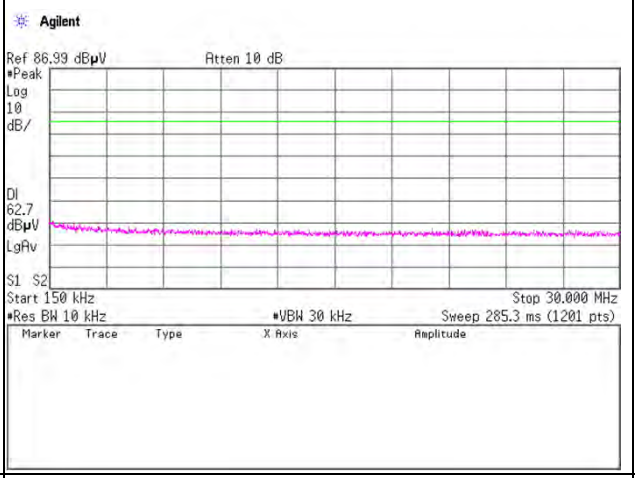
**Tx, IEEE802.11n (20HT), (W58), PN9, worst data mode 1(MCS)**

**Tx 5785MHz (1/2)**

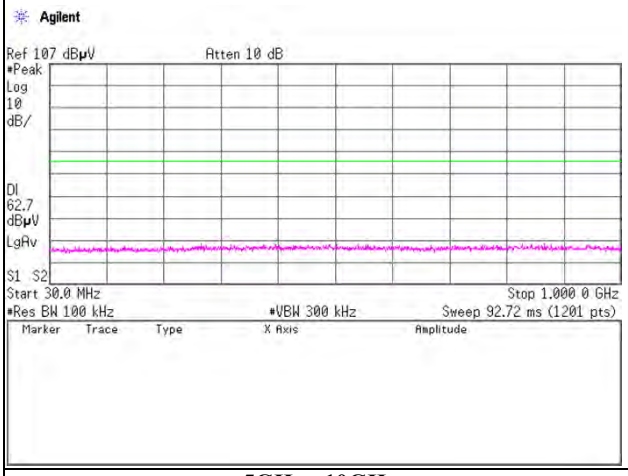
**9kHz - 150kHz**



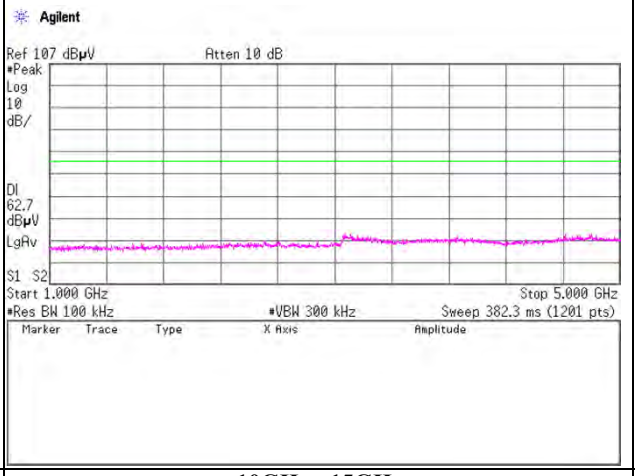

**150kHz - 30MHz**



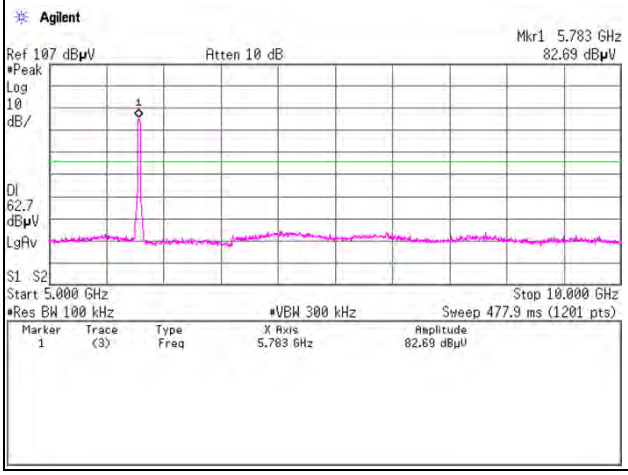

**30MHz - 1GHz**



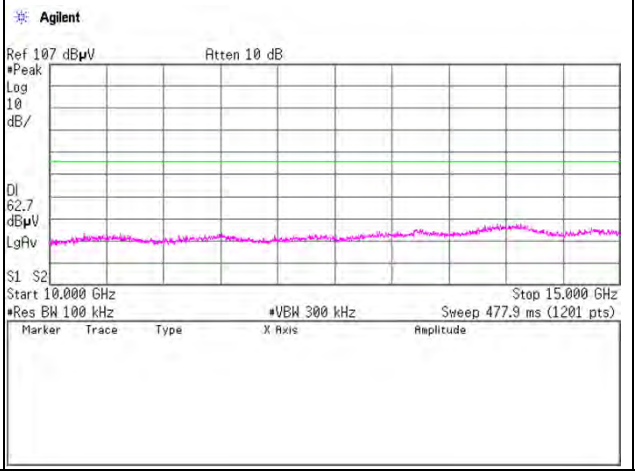

**1GHz - 5GHz**




**5GHz - 10GHz**




**10GHz - 15GHz**

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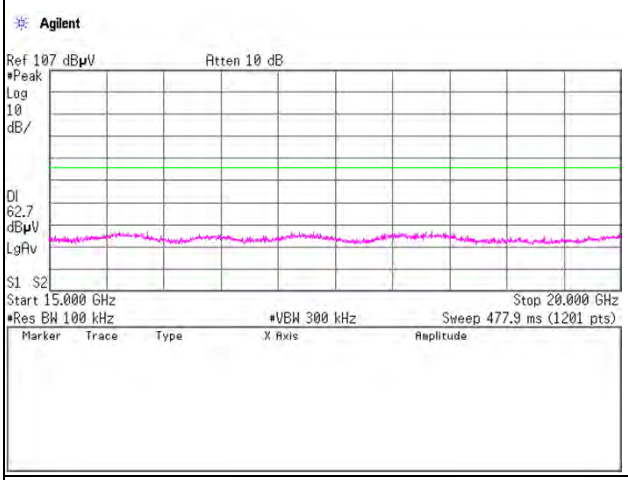
# Spurious emission (Conducted)

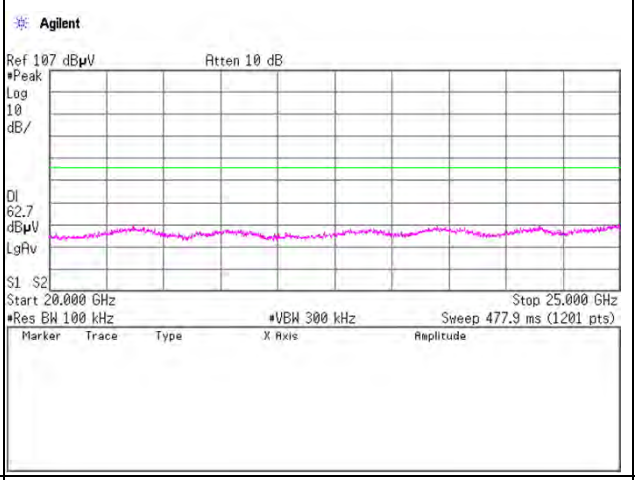
**Tx, IEEE802.11n (20HT), (W58), PN9, worst data mode 1(MCS)**

**Tx 5785MHz (2/2)**

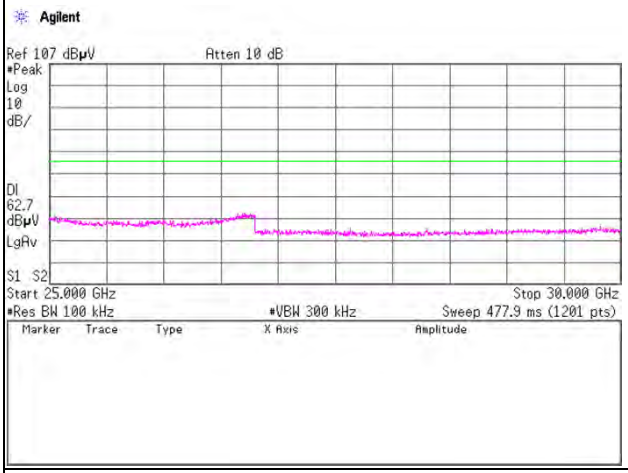
**15GHz - 20GHz**



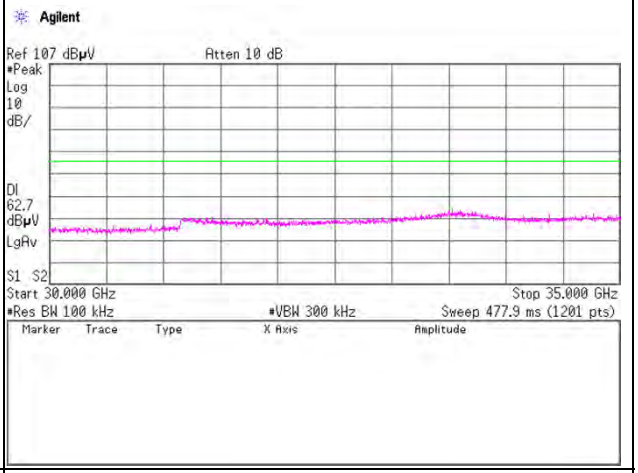

**20GHz - 25GHz**



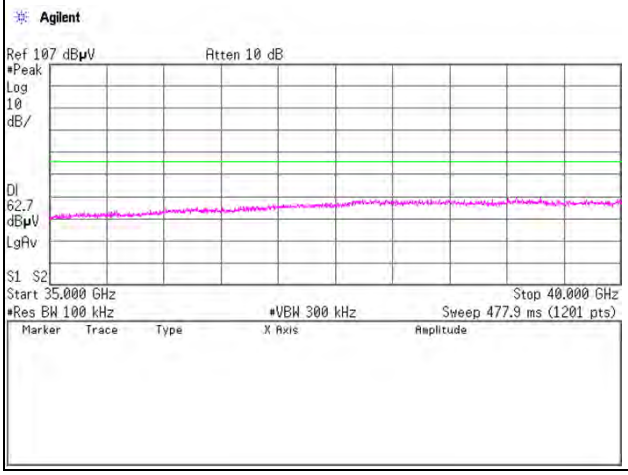

**25GHz-30GHz**




**30GHz-35GHz**




**35GHz-40GHz**

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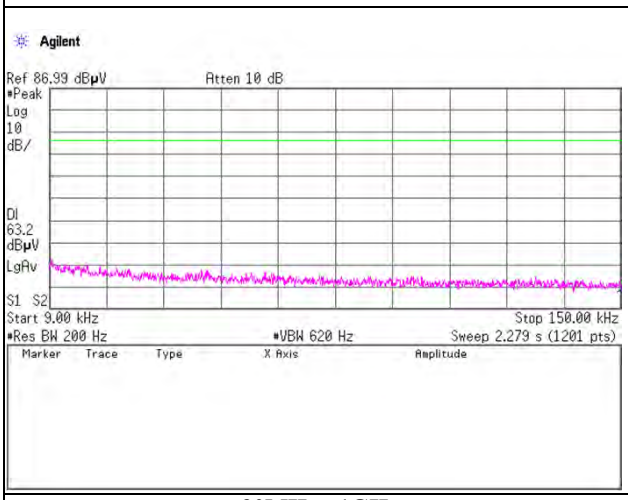
# Spurious emission (Conducted)

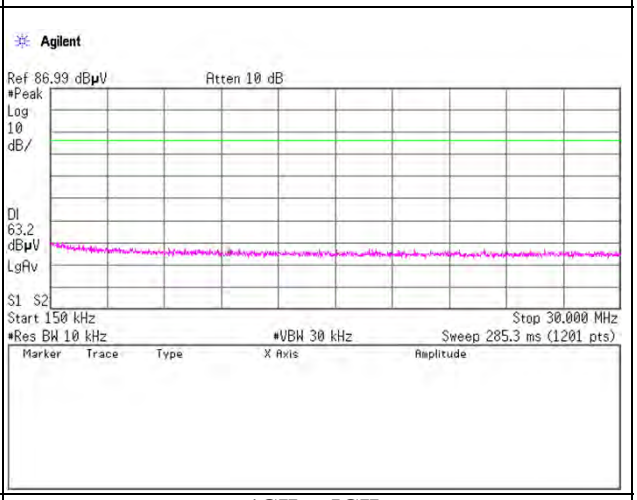
**Tx, IEEE802.11n (20HT), (W58), PN9, worst data mode 1(MCS)**

**Tx 5825MHz (1/2)**

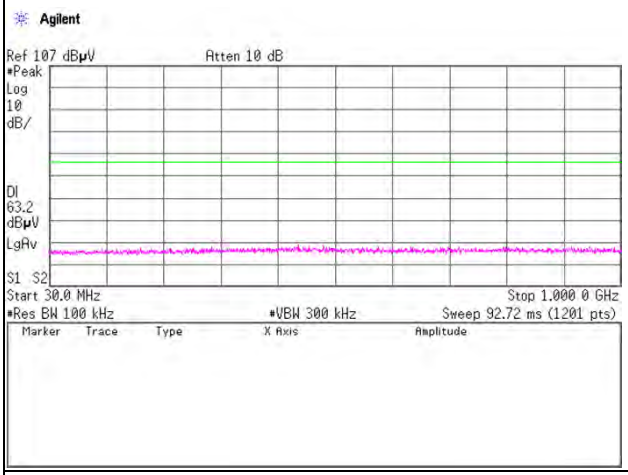
**9kHz - 150kHz**



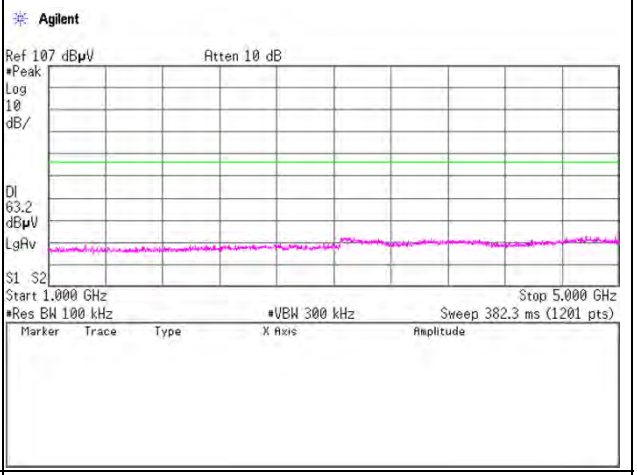

**150kHz - 30MHz**



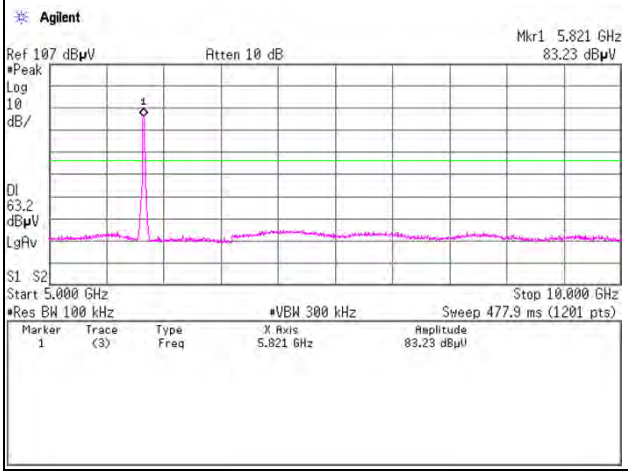

**30MHz - 1GHz**



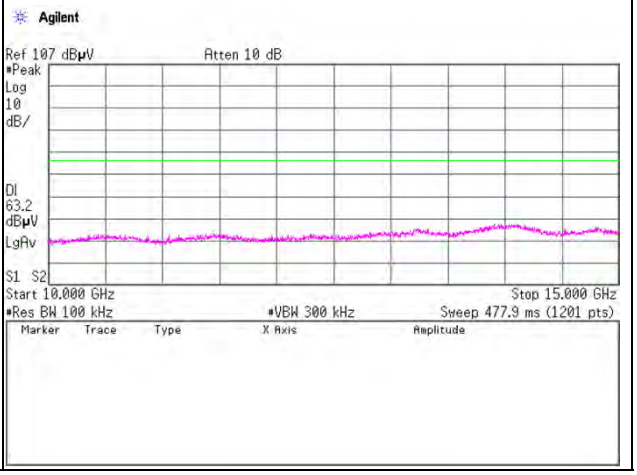

**1GHz - 5GHz**




**5GHz - 10GHz**




**10GHz - 15GHz**

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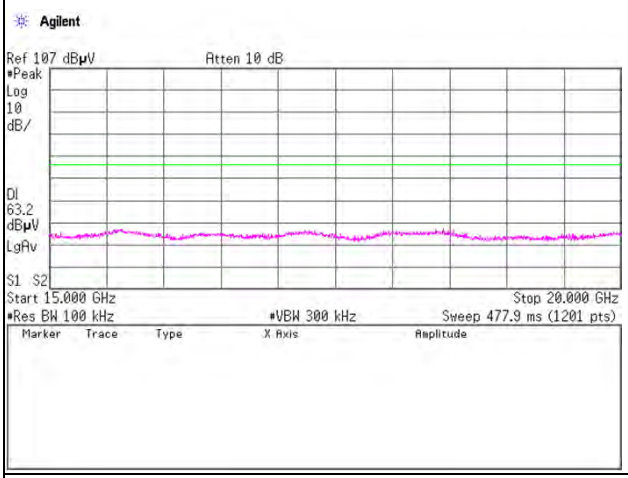
# Spurious emission (Conducted)

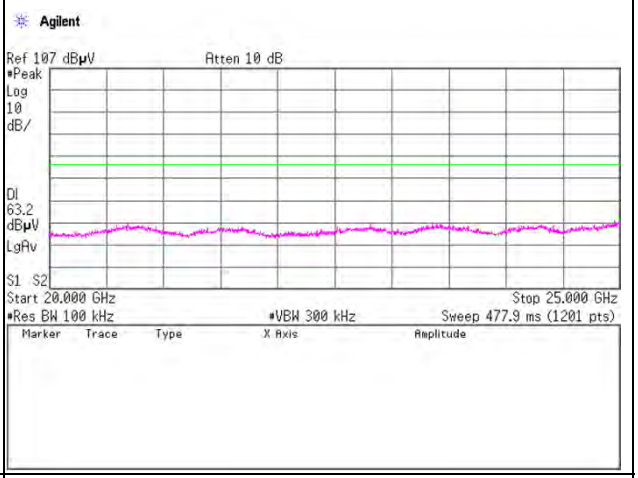
**Tx, IEEE802.11n (20HT), (W58), PN9, worst data mode 1(MCS)**

**Tx 5825MHz (2/2)**

**15GHz - 20GHz**

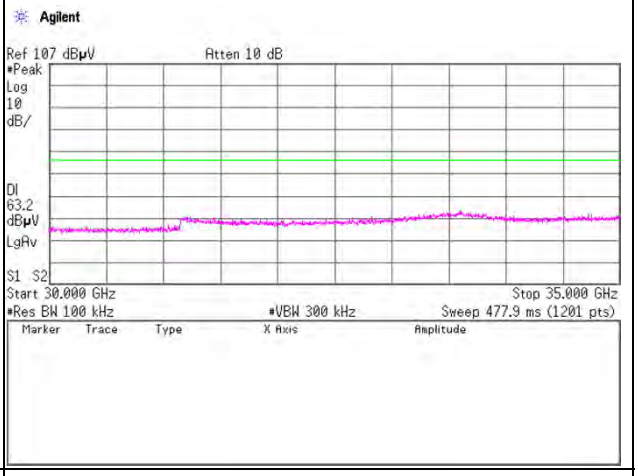



**20GHz - 25GHz**

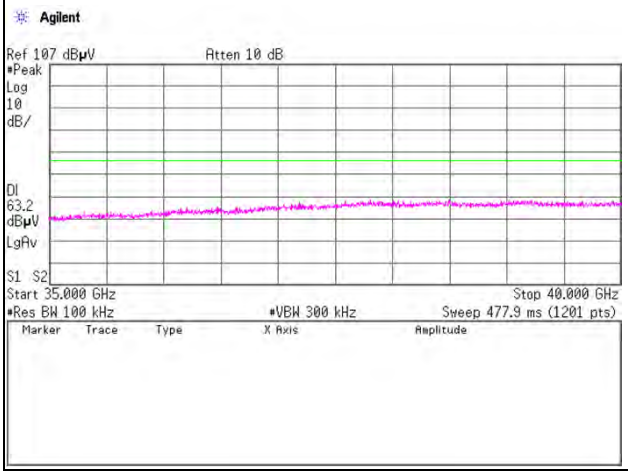



**25GHz-30GHz**


**30GHz-35GHz**




**35GHz-40GHz**

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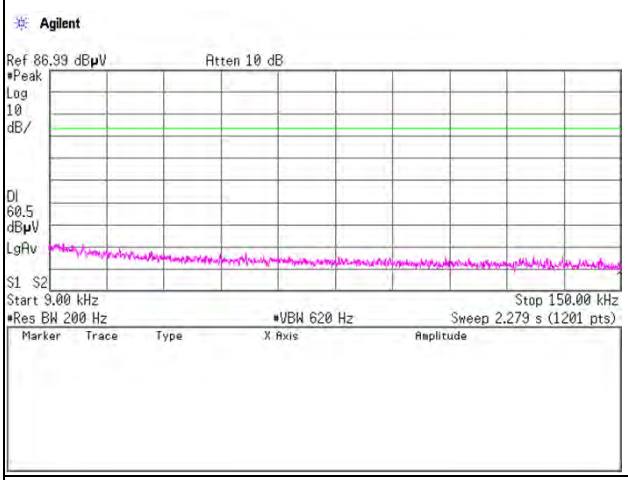
# Spurious emission (Conducted)

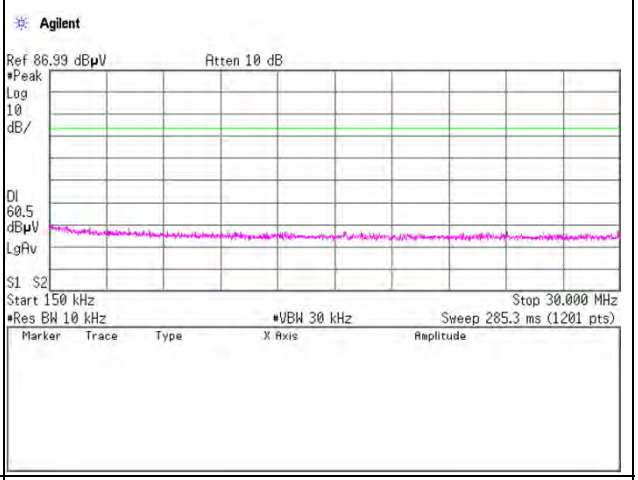
**Tx, IEEE802.11n (40HT),(W58), PN9, worst data mode 5(MCS)**

**Tx 5755MHz (1/2)**

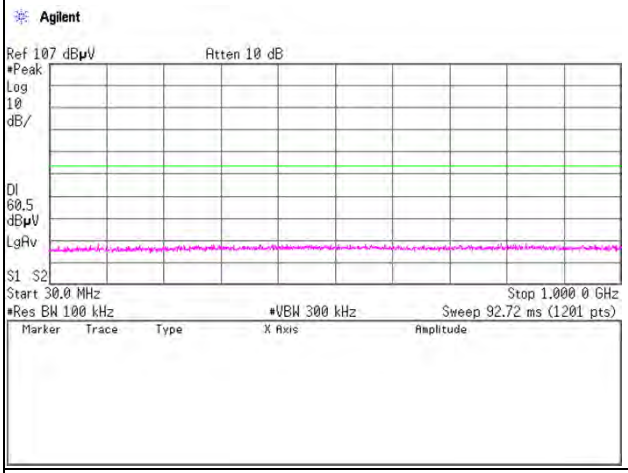
**9kHz - 150kHz**



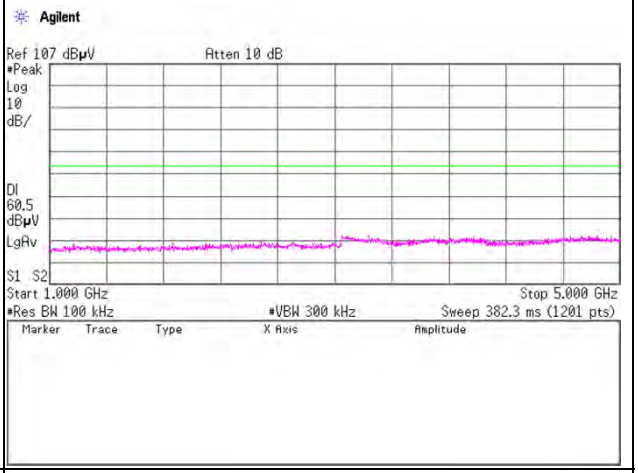

**150kHz - 30MHz**



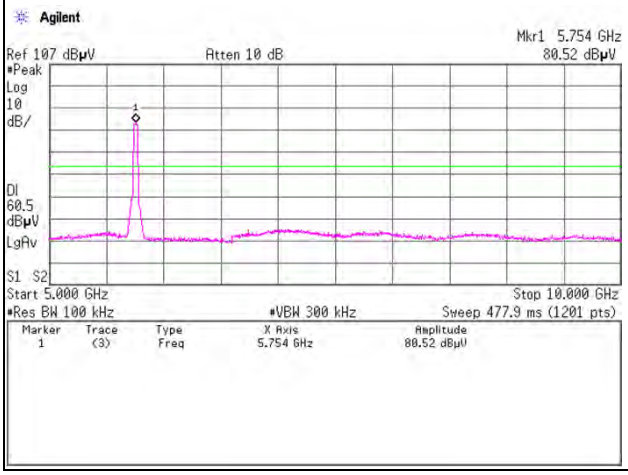

**30MHz - 1GHz**



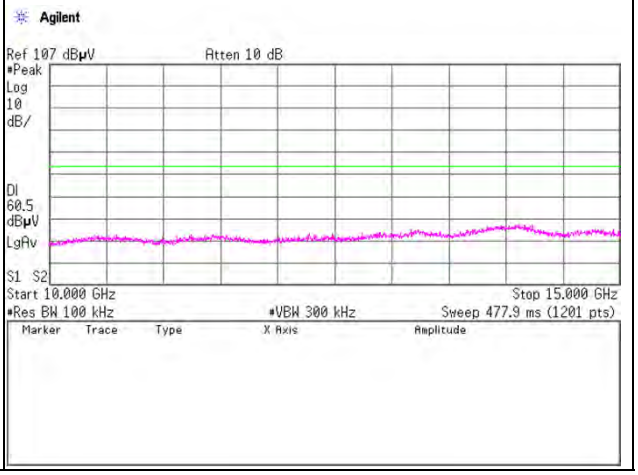

**1GHz - 5GHz**




**5GHz - 10GHz**




**10GHz - 15GHz**

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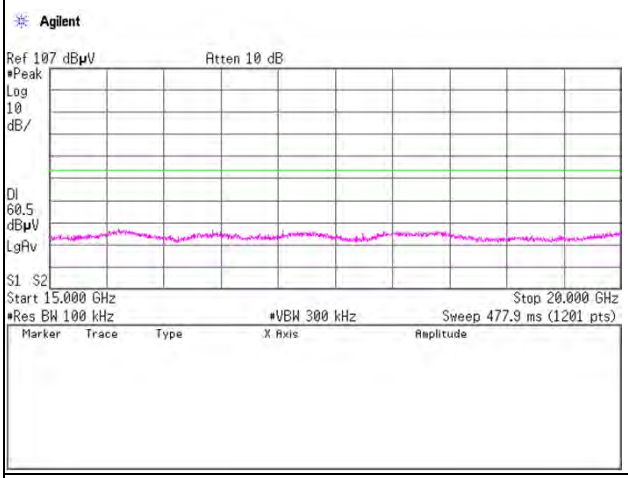
# Spurious emission (Conducted)

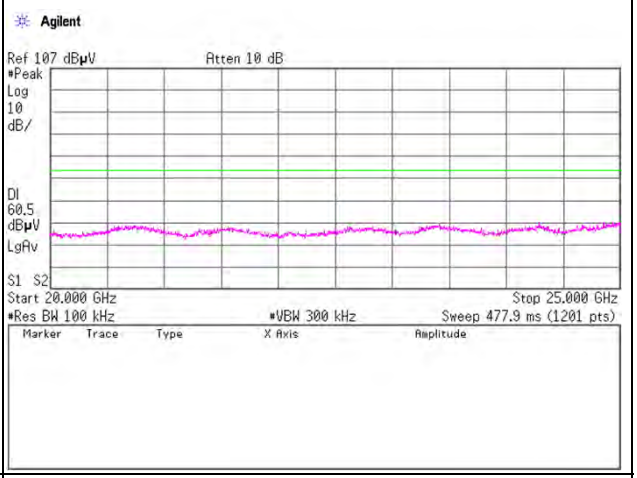
**Tx, IEEE802.11n (40HT),(W58), PN9, worst data mode 5(MCS)**

**Tx 5755MHz (2/2)**

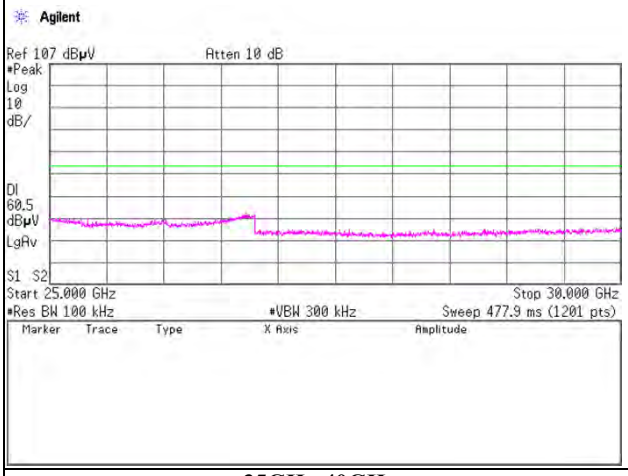
**15GHz - 20GHz**



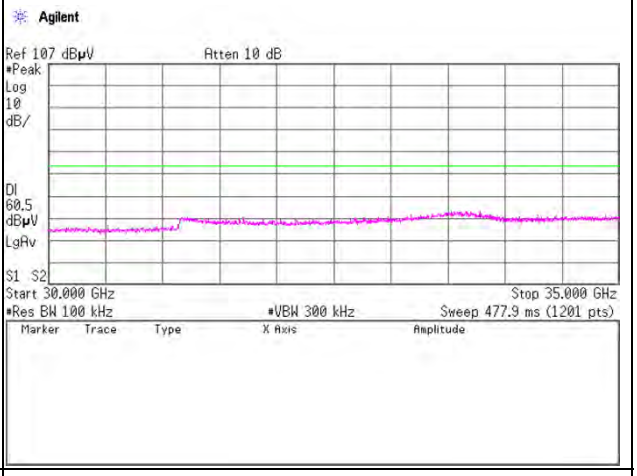

**20GHz - 25GHz**



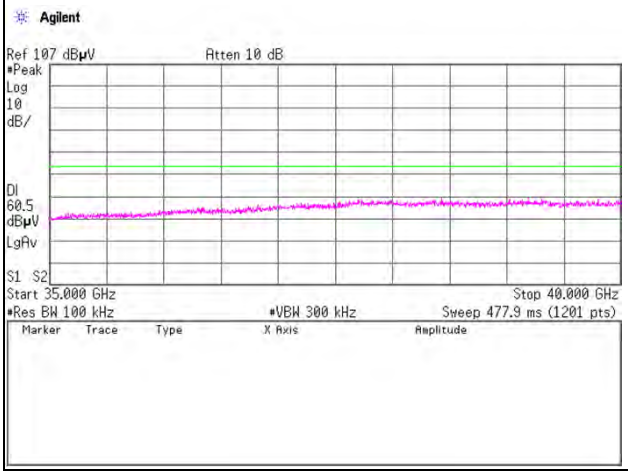

**25GHz-30GHz**




**30GHz-35GHz**




**35GHz-40GHz**

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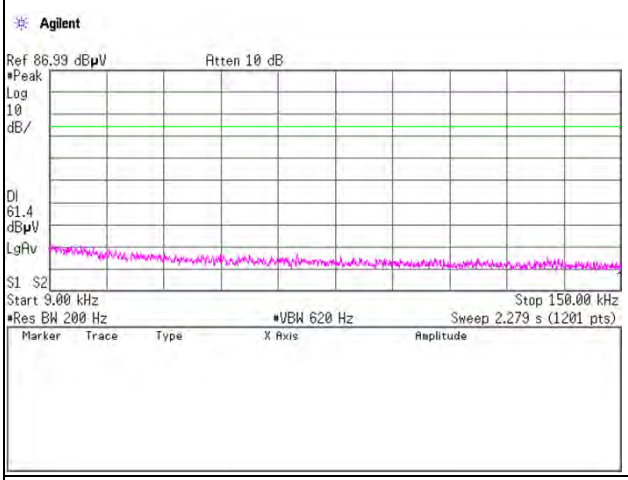
# Spurious emission (Conducted)

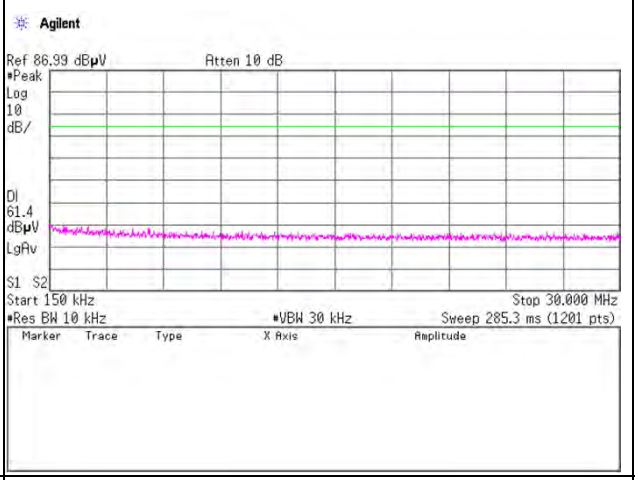
**Tx, IEEE802.11n (40HT),(W58), PN9, worst data mode 5(MCS)**

**Tx 5795MHz (1/2)**

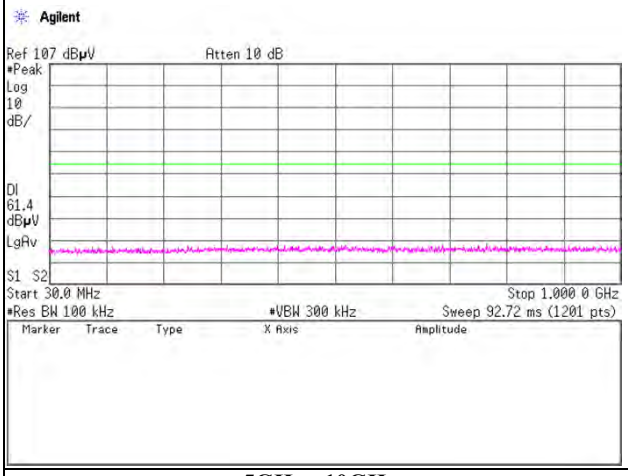
**9kHz - 150kHz**



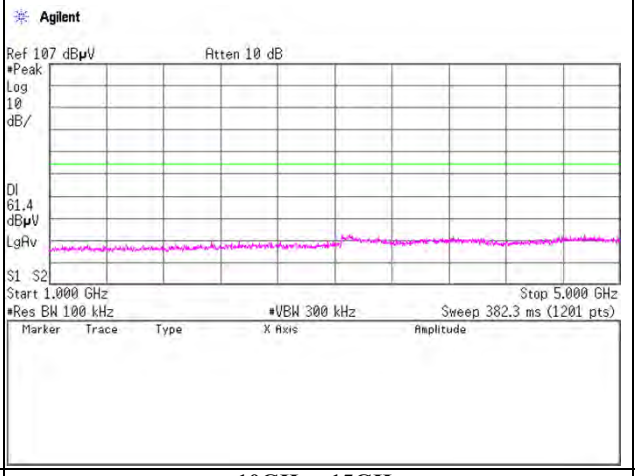

**150kHz - 30MHz**



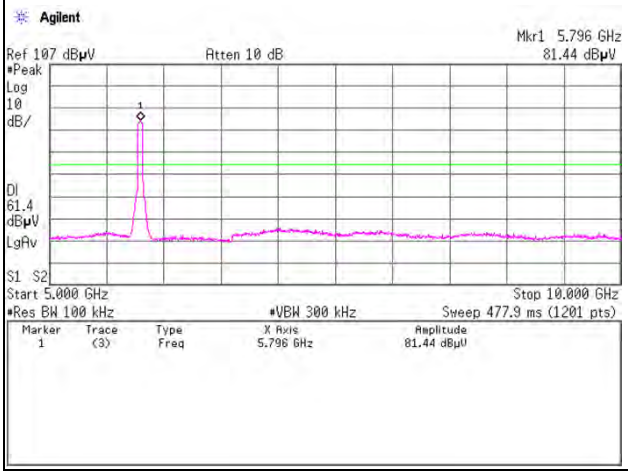

**30MHz - 1GHz**



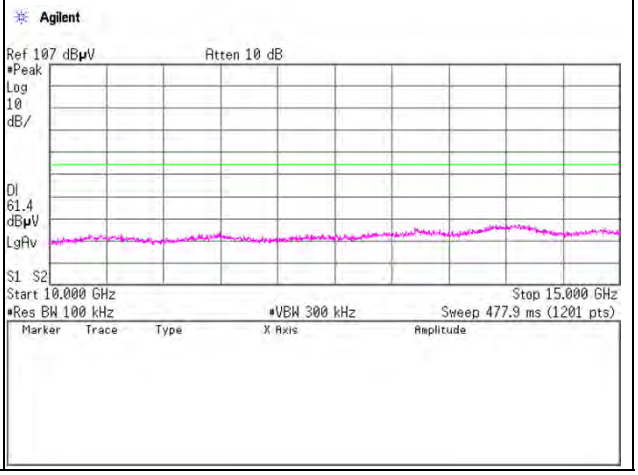

**1GHz - 5GHz**




**5GHz - 10GHz**




**10GHz - 15GHz**

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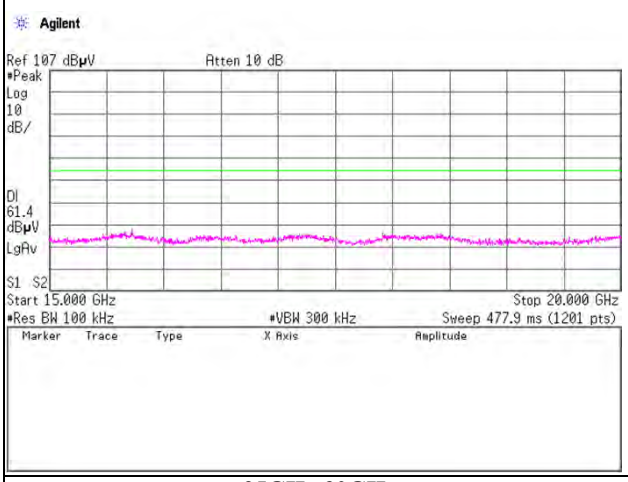
# Spurious emission (Conducted)

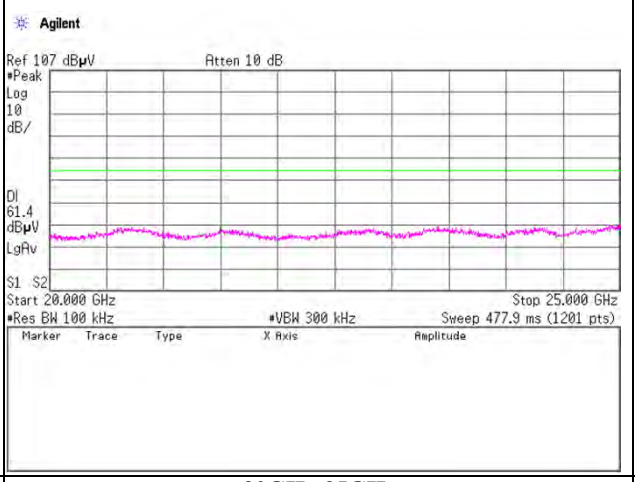
**Tx, IEEE802.11n (40HT),(W58), PN9, worst data mode 5(MCS)**

**Tx 5795MHz (2/2)**

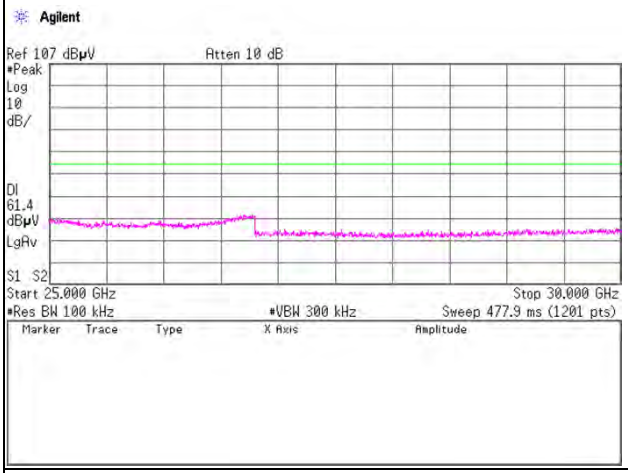
**15GHz - 20GHz**



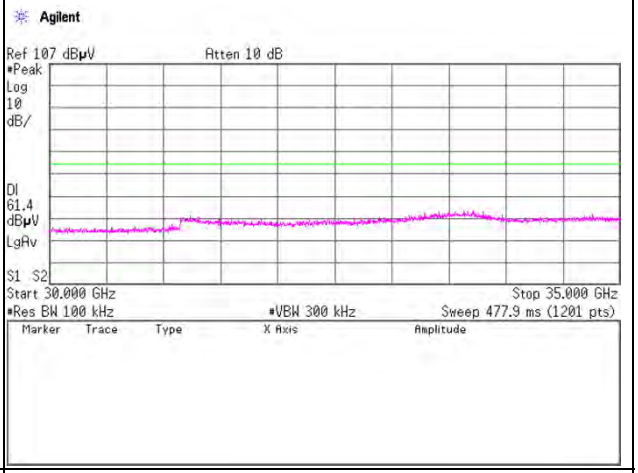

**20GHz - 25GHz**



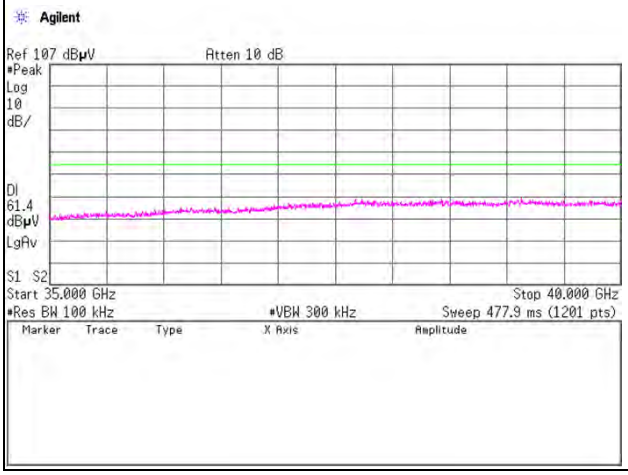

**25GHz-30GHz**




**30GHz-35GHz**




**35GHz-40GHz**

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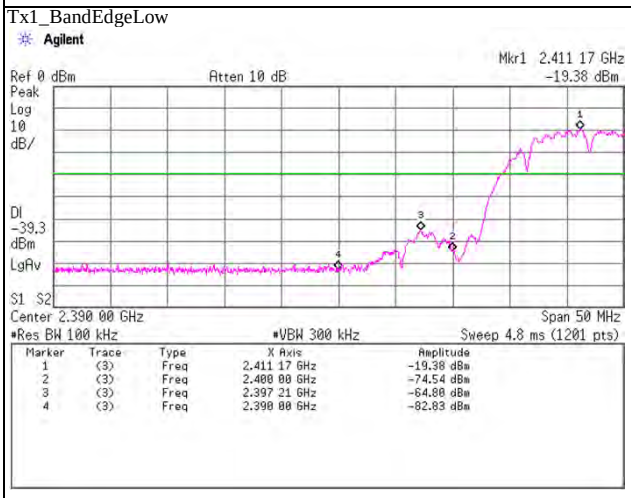
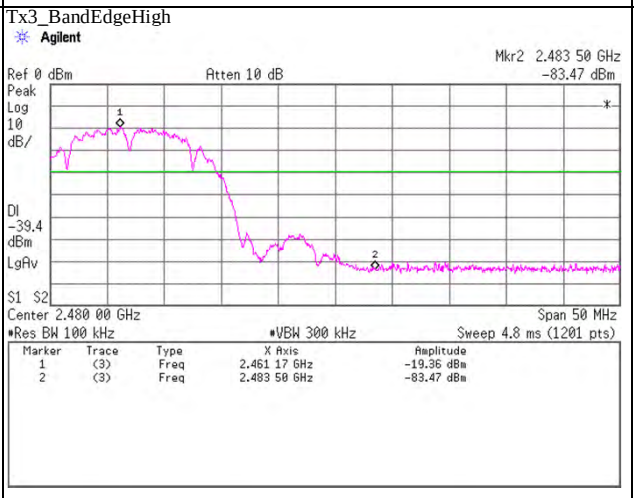
# Spurious emission (Conducted)

**Band Edge compliance**

| Tx, IEEE802.11b, PN9, worst data mode 2Mbps | |
|---|---|
| **Tx 2412MHz** | **Tx 2462MHz** |
| Tx1_BandEdgeLow<br>  | Tx3_BandEdgeHigh<br>  |

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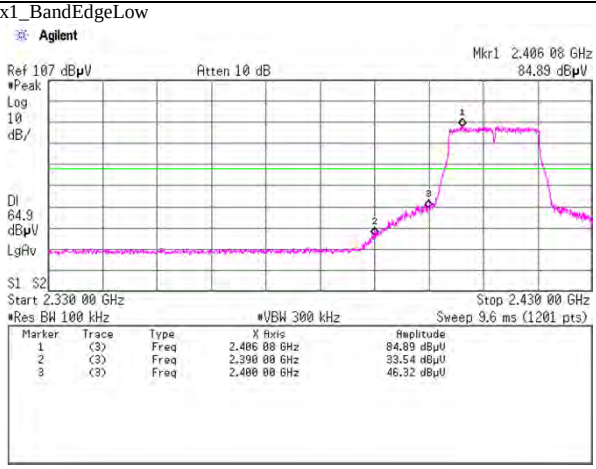
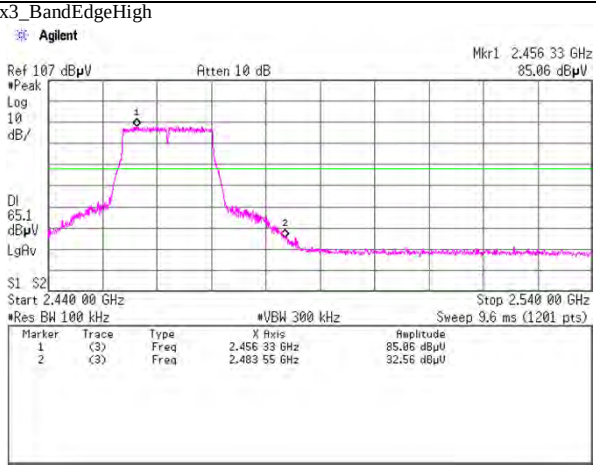
# Spurious emission (Conducted)

**Band Edge compliance**

| Tx, IEEE802.11g, PN9, worst data mode 24Mbps | |
|---|---|
| **Tx 2412MHz** | **Tx 2462MHz** |
| Tx1_BandEdgeLow<br>  | Tx3_BandEdgeHigh<br>  |

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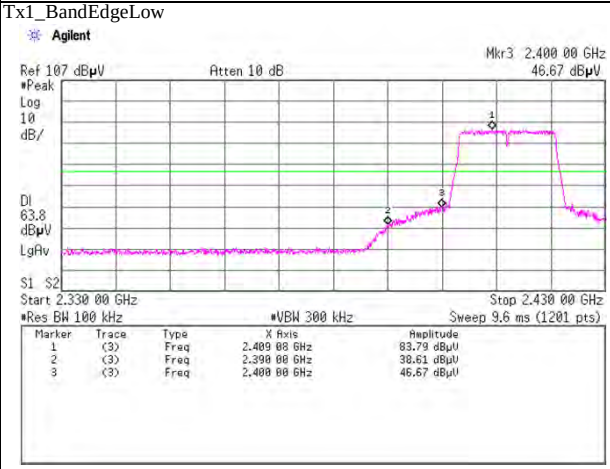
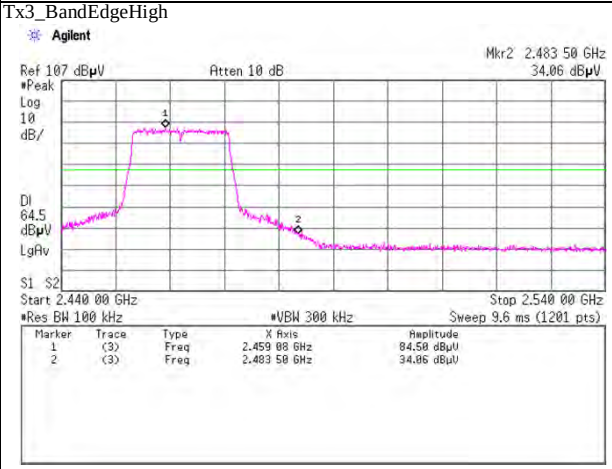
# Spurious emission (Conducted)

**Band Edge compliance**

| Tx, IEEE802.11n(20HT)(2.4GHz), PN9, worst data mode 3(MCS) | |
|---|---|
| **Tx 2412MHz** | **Tx 2462MHz** |
| Tx1_BandEdgeLow<br>  | Tx3_BandEdgeHigh<br>  |

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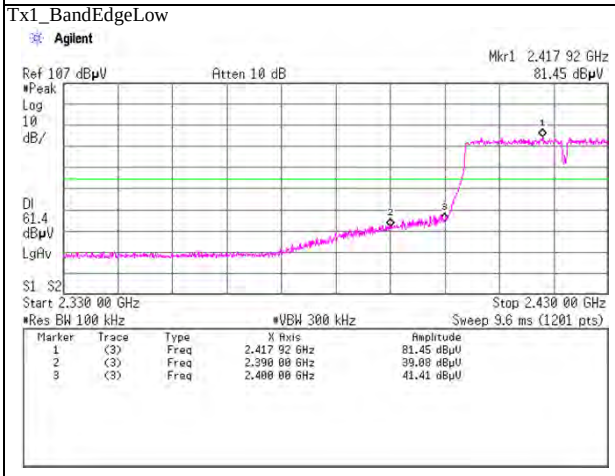
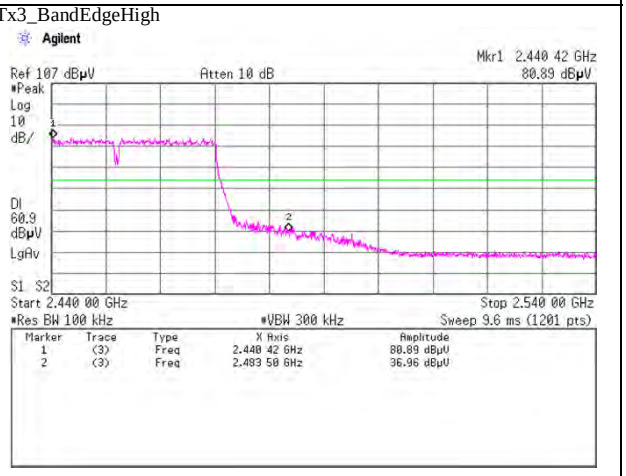
# Spurious emission (Conducted)

**Band Edge compliance**

| Tx, IEEE802.11n(40HT)(2.4GHz), PN9, worst data mode 3(MCS) | |
|---|---|
| **Tx 2422MHz** | **Tx 2452MHz** |
| Tx1_BandEdgeLow<br>  | Tx3_BandEdgeHigh<br>  |

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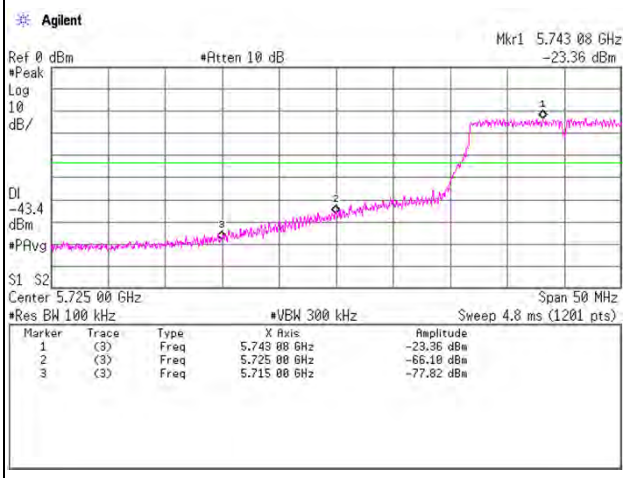
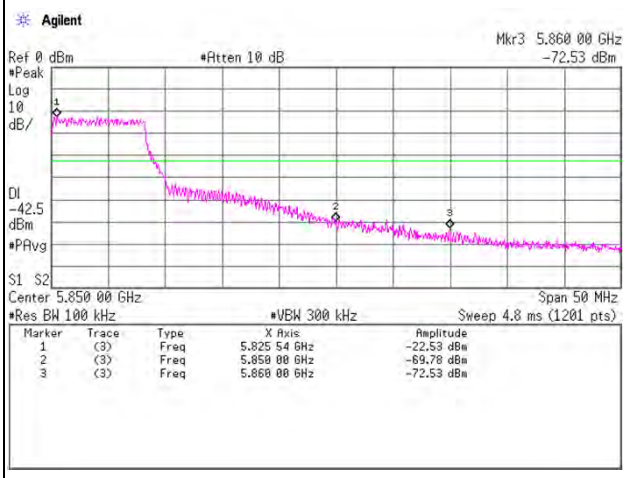
# Spurious emission (Conducted)

**Band Edge compliance**

| Tx, IEEE802.11a (W58), PN9, worst data mode 24Mbps | |
|---|---|
| **Tx 5745MHz** | **Tx 5825MHz** |
|  |  |





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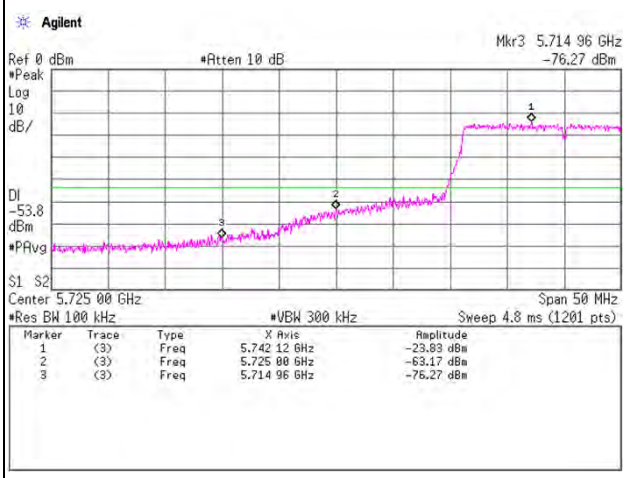
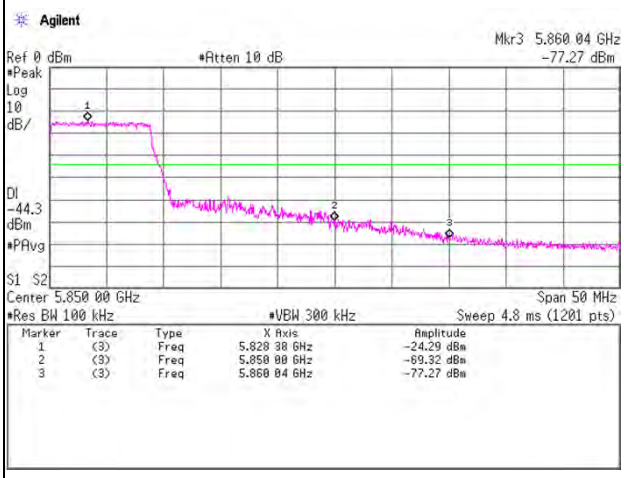
# Spurious emission (Conducted)

**Band Edge compliance**

| Tx, IEEE802.11n (20HT), (W58), PN9, worst data mode 1(MCS) | |
|---|---|
| **Tx 5745MHz** | **Tx 5825MHz** |
|  |  |





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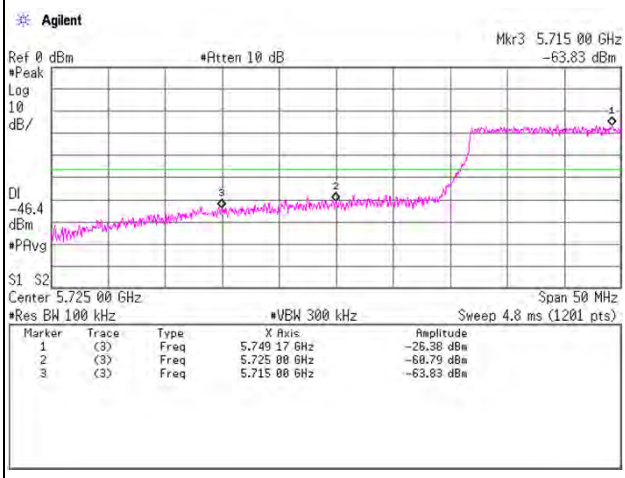
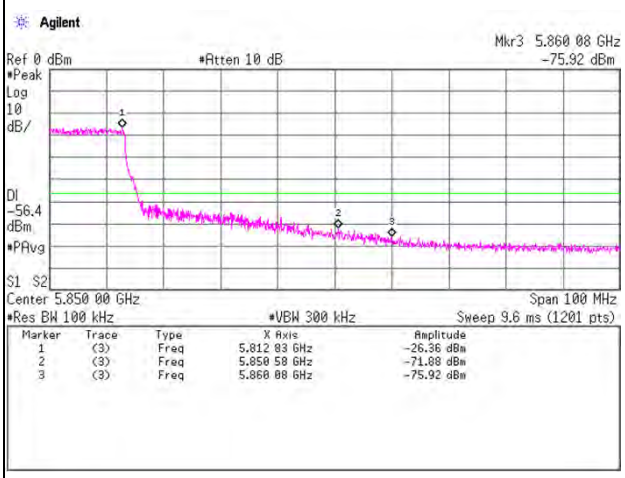
# Spurious emission (Conducted)

**Band Edge compliance**

| Tx, IEEE802.11n (40HT),(W58), PN9, worst data mode 5(MCS) | |
|---|---|
| **Tx 5755MHz** | **Tx 5795MHz** |
|  |  |

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# Power Density

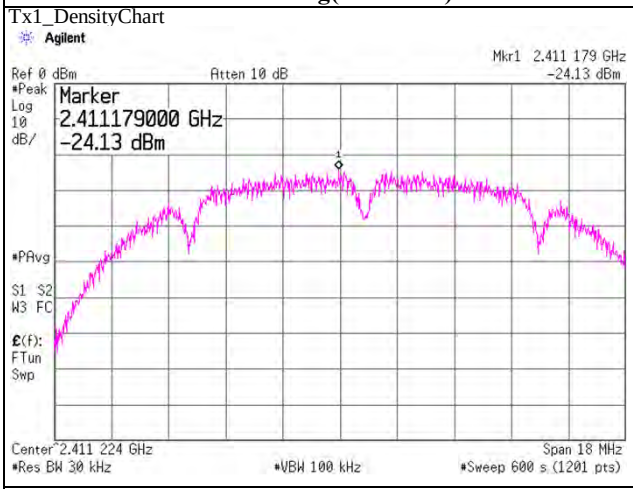
| | | |
|---|---|---|
| Test place | UL Japan, Inc. Shonan EMC Lab. | No.5 Shielded Room |
| Date | May 23, 2011 | |
| Temperature / Humidity | 25deg.C. , 47%RH | |
| Engineer | Kenichi Adachi | |
| Mode | Tx, IEEE802.11b, PN9, worst data mode 2Mbps | |

| Ch. Freq. [MHz] | Freq. Reading [MHz] | Reading [dBm] | Cable Loss [dB] | Atten. [dB] | Result [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|---|
| 2412.0000 | 2411.1790 | -24.13 | 1.43 | 20.16 | -2.55 | 8.00 | 10.55 |
| 2437.0000 | 2437.8100 | -23.72 | 1.43 | 20.15 | -2.14 | 8.00 | 10.14 |
| 2462.0000 | 2461.1750 | -23.51 | 1.44 | 20.15 | -1.92 | 8.00 | 9.92 |

Sample Calculation:
Result = Reading + Cable Loss + Atten. Loss

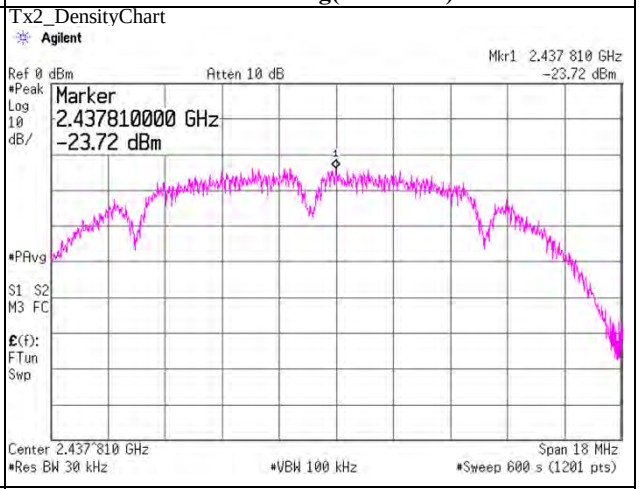
**Transmitting(2412MHz)**

Tx1_DensityChart



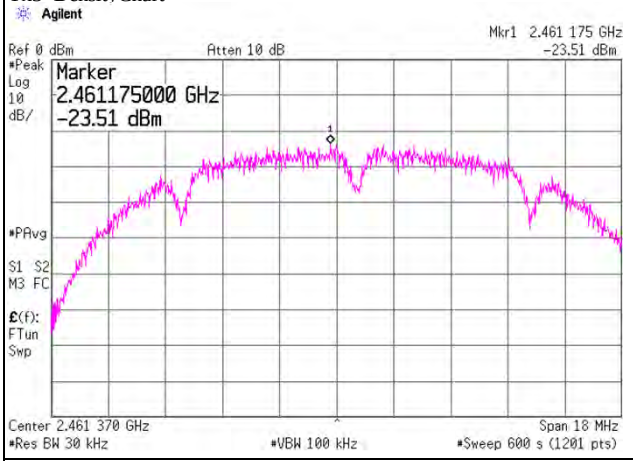

**Transmitting(2437MHz)**

Tx2_DensityChart




**Transmitting(2462MHz)**

Tx3_DensityChart

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# Power Density

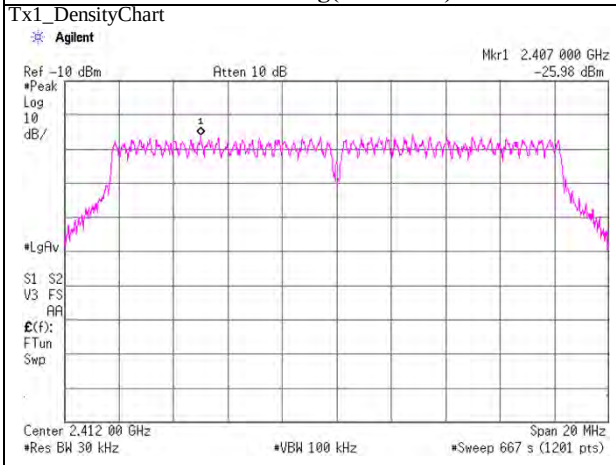
| | | |
|---|---|---|
| Test place | UL Japan, Inc. Shonan EMC Lab. | No.3 Shielded Room |
| Date | May 16, 2011 | |
| Temperature / Humidity | 23deg.C. , 47%RH | |
| Engineer | Hikaru Shirasawa | |
| Mode | Tx, IEEE802.11g, PN9, worst data mode 24Mbps | |

| Ch. Freq. [MHz] | Freq. Reading [MHz] | Reading [dBm] | Cable Loss [dB] | Atten. [dB] | Result [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|---|
| 2412.0000 | 2407.00 | -25.98 | 0.99 | 20.16 | -4.84 | 8.00 | 12.84 |
| 2437.0000 | 2431.97 | -25.13 | 0.99 | 20.15 | -3.99 | 8.00 | 11.99 |
| 2462.0000 | 2456.98 | -25.02 | 0.99 | 20.15 | -3.87 | 8.00 | 11.87 |

Sample Calculation:
Result = Reading + Cable Loss + Atten. Loss

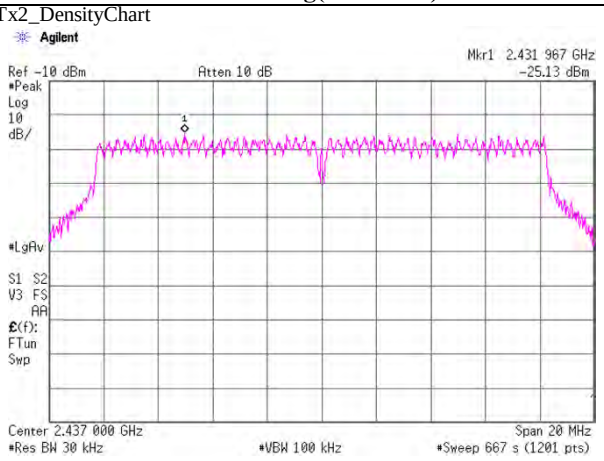
**Transmitting(2412MHz)**

Tx1_DensityChart



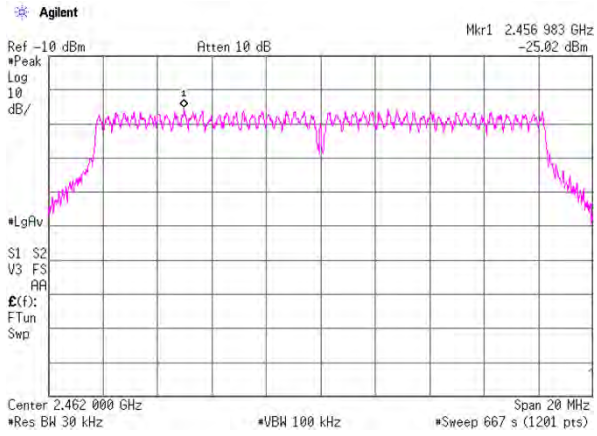

**Transmitting(2437MHz)**

Tx2_DensityChart




**Transmitting(2462MHz)**

Tx3_DensityChart

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**Facsimile :+81 463 50 6401**

# Power Density

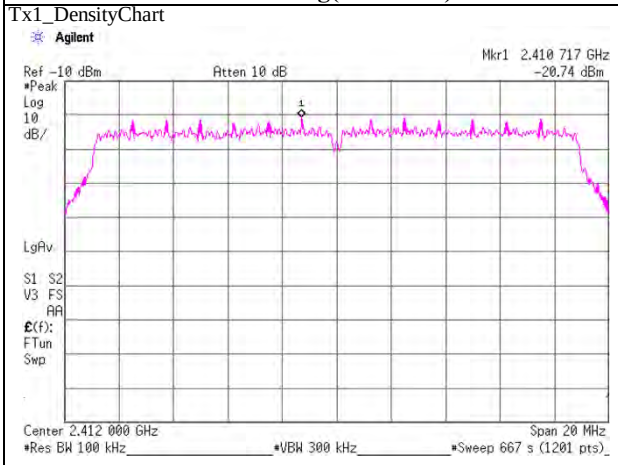
| | | |
|---|---|---|
| Test place | UL Japan, Inc. Shonan EMC Lab. | No.3 Shielded Room |
| Date | May 18, 2011 | |
| Temperature / Humidity | 26deg.C. , 47%RH | |
| Engineer | Hikaru Shirasawa | |
| Mode | Tx, IEEE802.11n(20HT)(2.4GHz), PN9, worst data mode 3(MCS) | |

| Ch. Freq. [MHz] | Freq. Reading [MHz] | Reading [dBm] | Cable Loss [dB] | Atten. [dB] | Result [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|---|
| 2412.0000 | 2410.72 | -20.74 | 1.43 | 20.16 | 0.85 | 8.00 | 7.15 |
| 2437.0000 | 2435.72 | -20.87 | 1.43 | 20.15 | 0.71 | 8.00 | 7.29 |
| 2462.0000 | 2456.98 | -20.36 | 1.44 | 20.15 | 1.23 | 8.00 | 6.77 |

Sample Calculation:
Result = Reading + Cable Loss + Atten. Loss

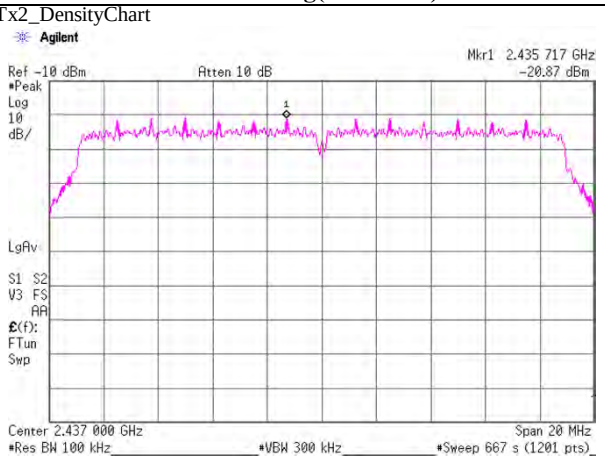
**Transmitting(2412MHz)**

Tx1_DensityChart



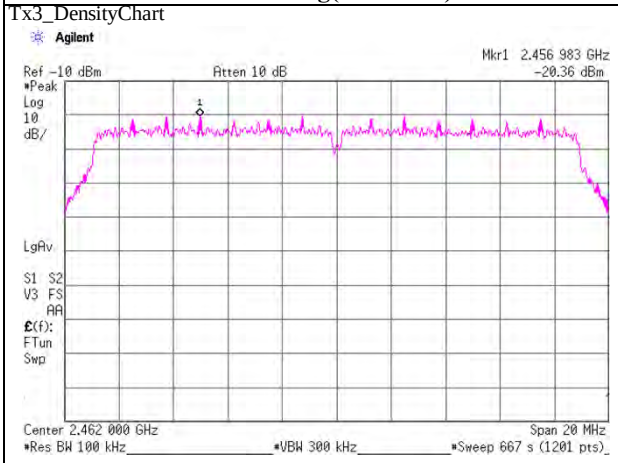

**Transmitting(2437MHz)**

Tx2_DensityChart




**Transmitting(2462MHz)**

Tx3_DensityChart

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# Power Density

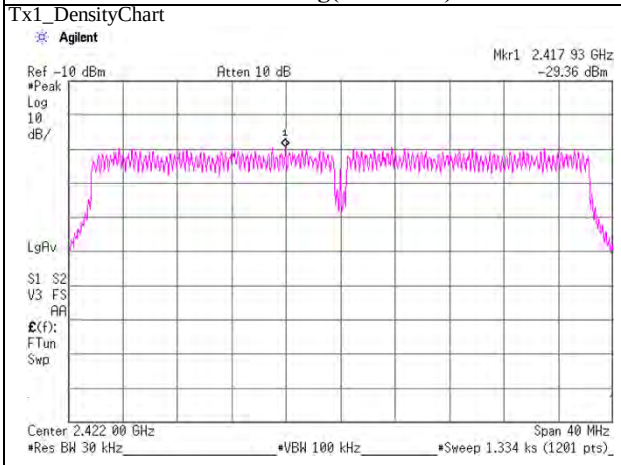
| | | |
|---|---|---|
| Test place | UL Japan, Inc. Shonan EMC Lab. | No.3 Shielded Room |
| Date | May 18, 2011 | |
| Temperature / Humidity | 26deg.C. , 47%RH | |
| Engineer | Hikaru Shirasawa | |
| Mode | Tx, IEEE802.11n(40HT)(2.4GHz), PN9, worst data mode 3(MCS) | |

| Ch. Freq. [MHz] | Freq. Reading [MHz] | Reading [dBm] | Cable Loss [dB] | Atten. [dB] | Result [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|---|
| 2422.0000 | 2417.93 | -29.36 | 1.43 | 20.15 | -7.78 | 8.00 | 15.78 |
| 2437.0000 | 2432.93 | -29.57 | 1.43 | 20.15 | -7.99 | 8.00 | 15.99 |
| 2452.0000 | 2446.97 | -29.15 | 1.43 | 20.15 | -7.56 | 8.00 | 15.56 |

Sample Calculation:
Result = Reading + Cable Loss + Atten. Loss

**Transmitting(2422MHz)**

Tx1_DensityChart

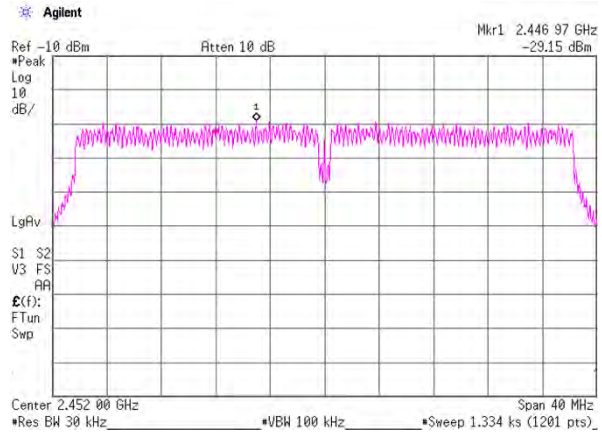



**Transmitting(2437MHz)**

Tx2_DensityChart


**Transmitting(2452MHz)**

Tx3_DensityChart

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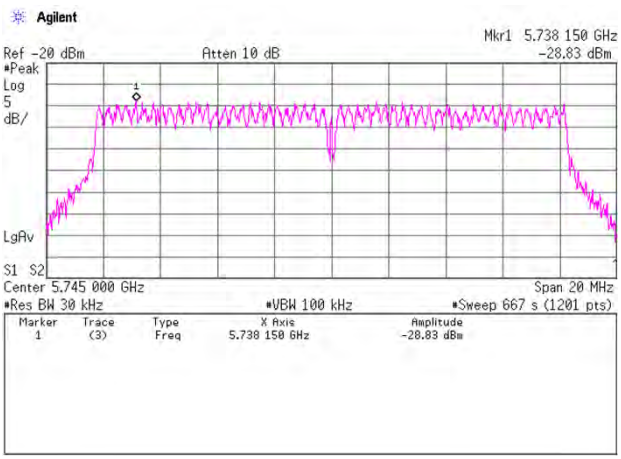
# Power Density

| | | |
|---|---|---|
| Test place | UL Japan, Inc. Shonan EMC Lab. | No.5 Shilded room |
| Date | May 20, 2011 | |
| Temperature / Humidity | 24deg.C. , 49%RH | |
| Engineer | Makoto Hosaka | |
| Mode | Tx, IEEE802.11a (W58), PN9, worst data mode 24Mbps | |

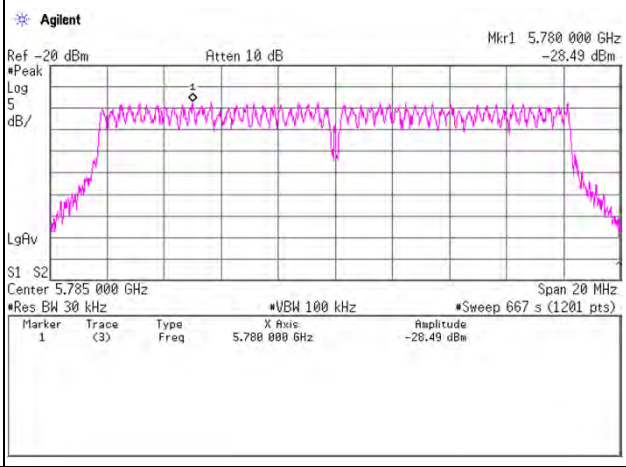
| Ch. Freq. [MHz] | Freq. Reading [MHz] | Reading [dBm] | Cable Loss [dB] | Atten. [dB] | Result [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|---|
| 5745.0000 | 5738.15 | -28.83 | 2.26 | 20.04 | -6.53 | 8.00 | 14.53 |
| 5785.0000 | 5780.00 | -28.49 | 2.43 | 20.05 | -6.01 | 8.00 | 14.01 |
| 5825.0000 | 5819.97 | -27.19 | 2.60 | 20.06 | -4.53 | 8.00 | 12.53 |

Sample Calculation:
Result = Reading + Cable Loss + Atten. Loss

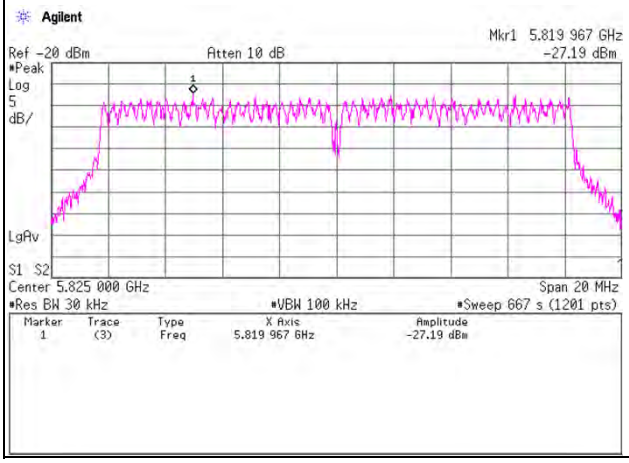
**Transmitting(5745MHz)**




**Transmitting(5785MHz)**




**Transmitting(5825MHz)**

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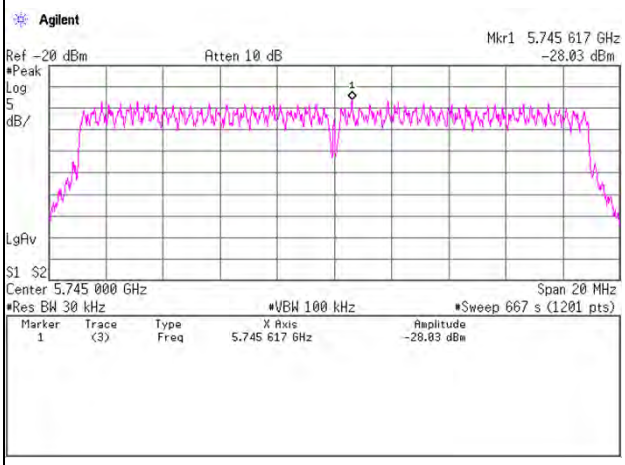
# Power Density

| | | |
|---|---|---|
| Test place | UL Japan, Inc. Shonan EMC Lab. | No.5 Shielded room |
| Date | May 20, 2011 | |
| Temperature / Humidity | 24deg.C. , 49%RH | |
| Engineer | Makoto Hosaka | |
| Mode | Tx, IEEE802.11n (20HT), (W58), PN9, worst data mode 1(MCS) | |

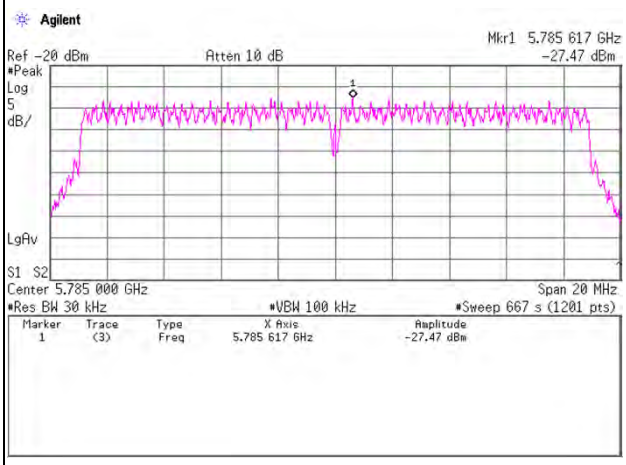
| Ch. Freq. [MHz] | Freq. Reading [MHz] | Reading [dBm] | Cable Loss [dB] | Atten. [dB] | Result [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|---|
| 5745.0000 | 5745.62 | -28.03 | 2.26 | 20.04 | -5.73 | 8.00 | 13.73 |
| 5785.0000 | 5785.62 | -27.47 | 2.43 | 20.05 | -4.99 | 8.00 | 12.99 |
| 5825.0000 | 5831.50 | -26.87 | 2.60 | 20.06 | -4.21 | 8.00 | 12.21 |

Sample Calculation:
Result = Reading + Cable Loss + Atten. Loss

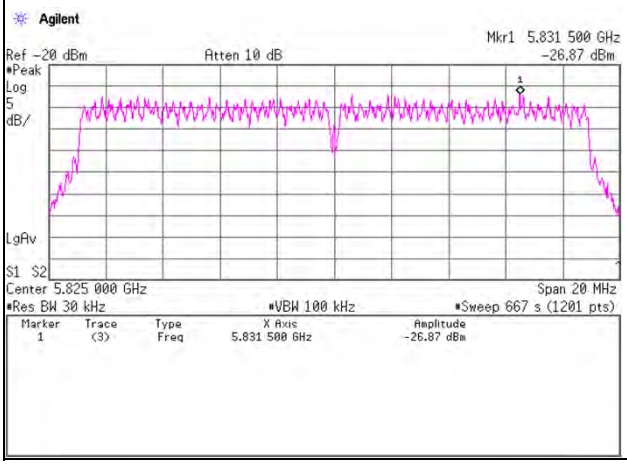
**Transmitting(5745MHz)**




**Transmitting(5785MHz)**




**Transmitting(5825MHz)**

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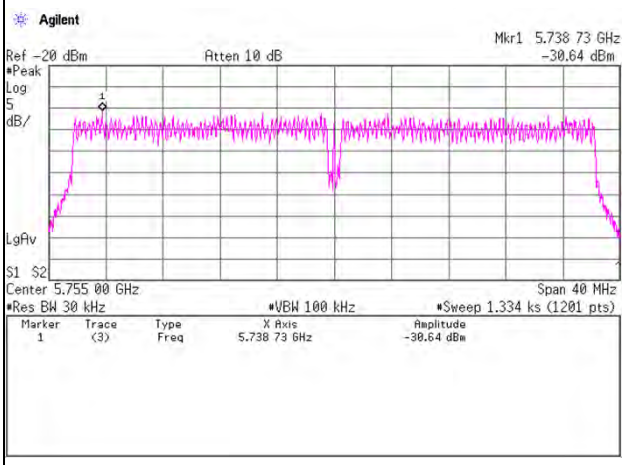
# Power Density

| | | |
|---|---|---|
| Test place | UL Japan, Inc. Shonan EMC Lab. | No.5 Shilded room |
| Date | May 20, 2011 | |
| Temperature / Humidity | 24deg.C. , 49%RH | |
| Engineer | Makoto Hosaka | |
| Mode | Tx, IEEE802.11n (40HT),(W58), PN9, worst data mode 5(MCS) | |

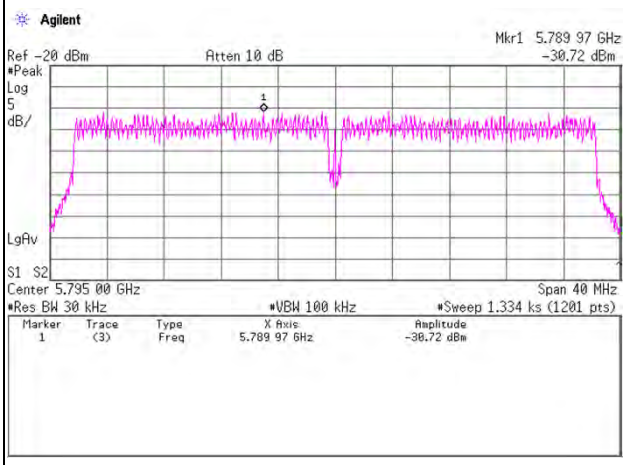
| Ch. Freq. [MHz] | Freq. Reading [MHz] | Reading [dBm] | Cable Loss [dB] | Atten. [dB] | Result [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|---|
| 5755.0000 | 5738.73 | -30.64 | 2.30 | 20.05 | -8.29 | 8.00 | 16.29 |
| 5795.0000 | 5789.97 | -30.72 | 2.47 | 20.05 | -8.20 | 8.00 | 16.20 |
| | | | | | | | |

Sample Calculation:
Result = Reading + Cable Loss + Atten. Loss

**Transmitting(5755MHz)**




**Transmitting(5795MHz)**




**Transmitting(5795MHz)**

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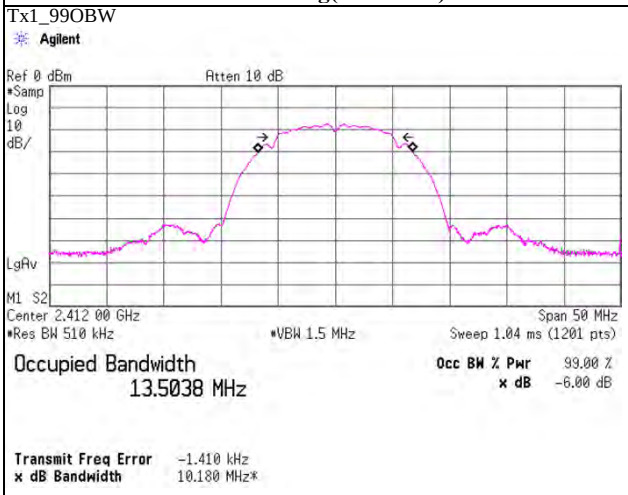
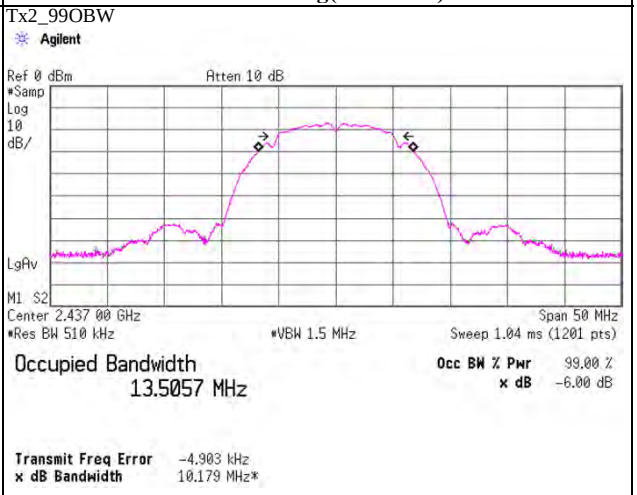
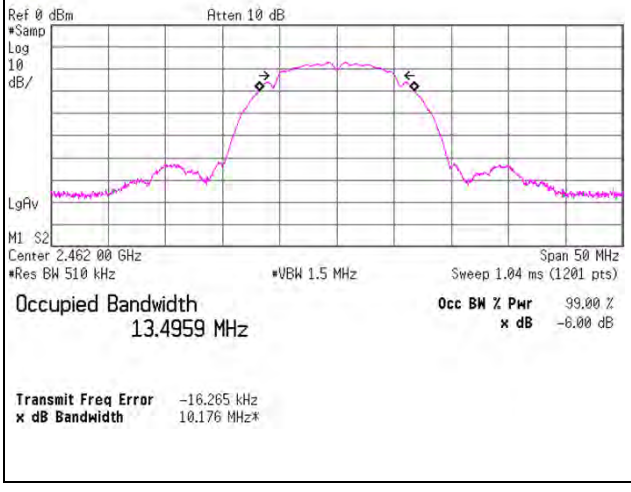
# 99% Occupied Bandwidth

| Tx, IEEE802.11b, PN9, worst data mode 2Mbps | |
|---|---|
| **Transmitting(2412MHz)** | **Transmitting(2437MHz)** |
| Tx1_99OBW<br>  | Tx2_99OBW<br>  |
| **Transmitting(2462MHz)** | |
| Tx3_99OBW<br>  | |

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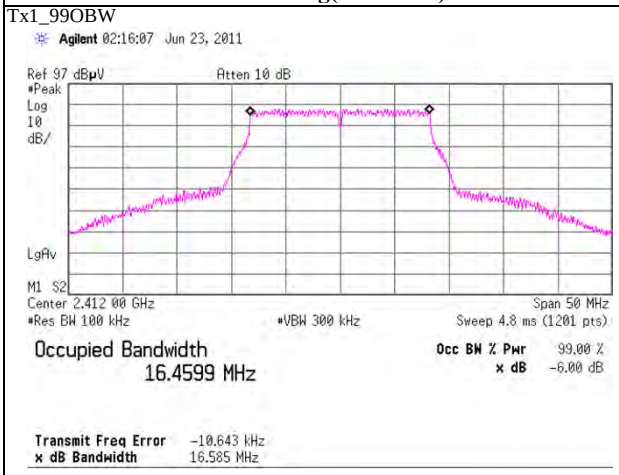
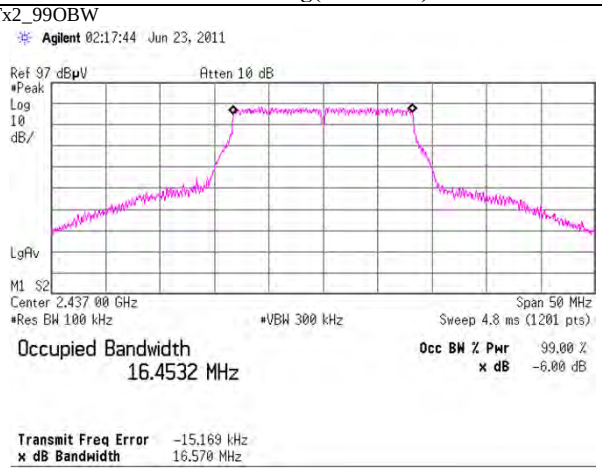
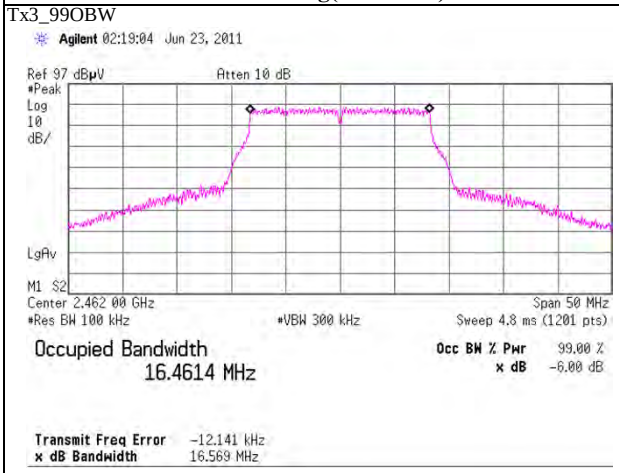
# 99% Occupied Bandwidth

| Tx, IEEE802.11g, PN9, worst data mode 24Mbps | |
|---|---|
| **Transmitting(2412MHz)** | **Transmitting(2437MHz)** |
| Tx1_99OBW<br>  | Tx2_99OBW<br>  |
| **Transmitting(2462MHz)** | |
| Tx3_99OBW<br>  | |

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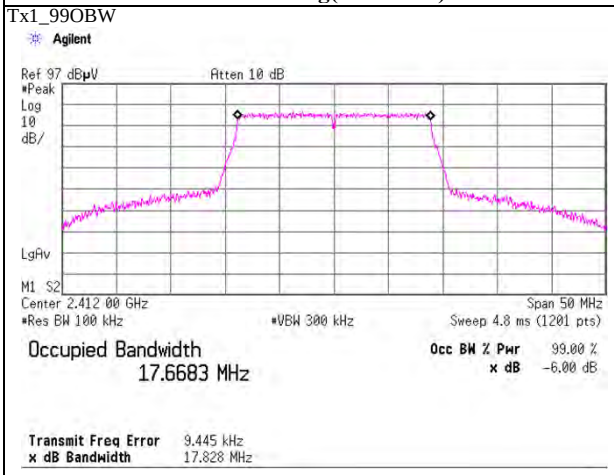
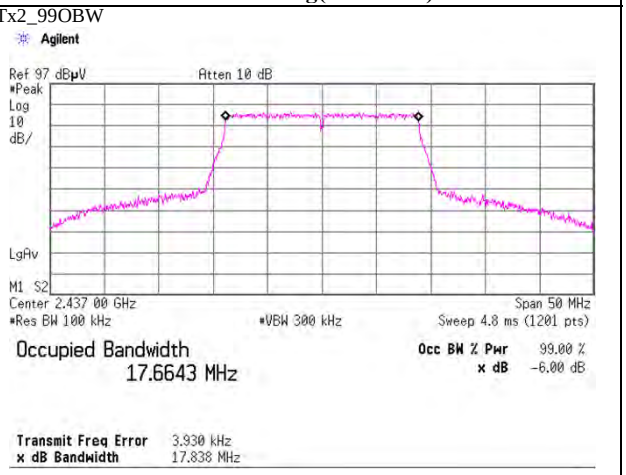
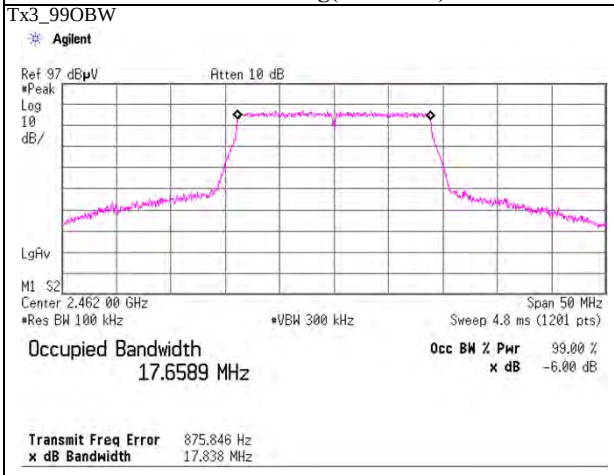
# 99% Occupied Bandwidth

| Tx, IEEE802.11n(20HT)(2.4GHz), PN9, worst data mode 3(MCS) | |
|---|---|
| **Transmitting(2412MHz)** | **Transmitting(2437MHz)** |
| Tx1_99OBW<br>  | Tx2_99OBW<br>  |
| **Transmitting(2462MHz)** | |
| Tx3_99OBW<br>  | |

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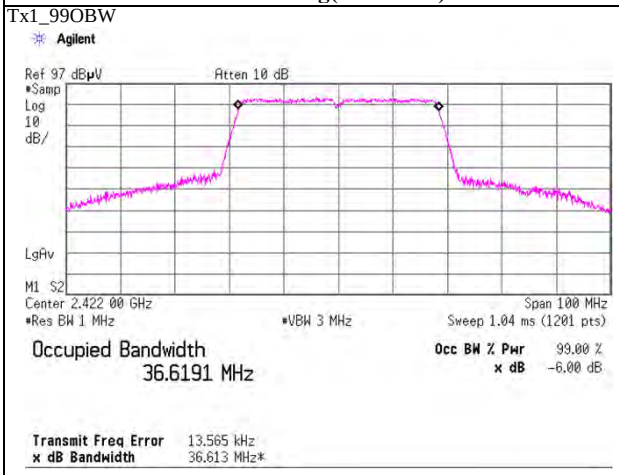
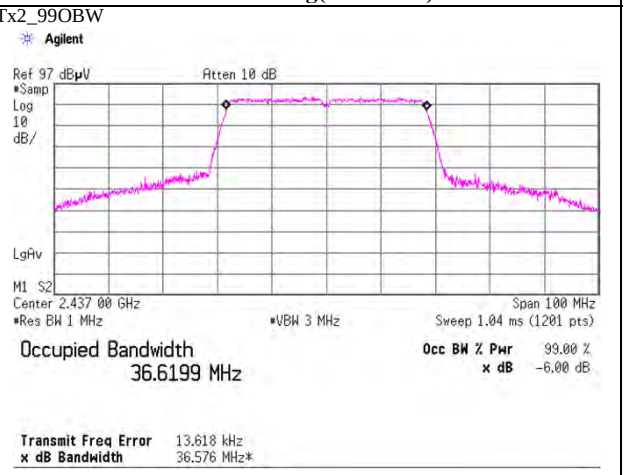
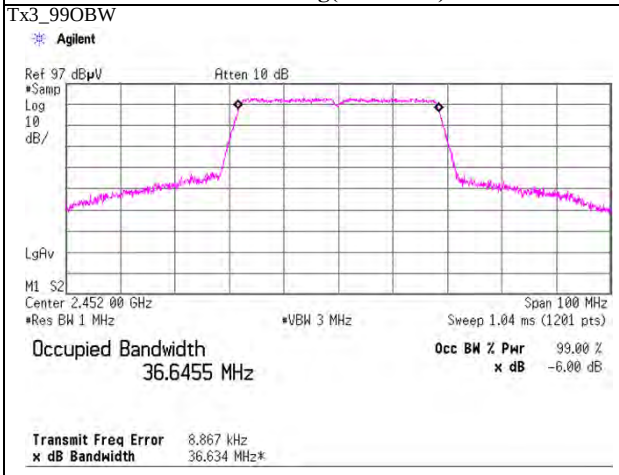
# 99% Occupied Bandwidth

| Tx, IEEE802.11n(40HT)(2.4GHz), PN9, worst data mode 3(MCS) | |
|---|---|
| **Transmitting(2422MHz)** | **Transmitting(2437MHz)** |
| Tx1_99OBW<br>  | Tx2_99OBW<br>  |
| **Transmitting(2452MHz)** | |
| Tx3_99OBW<br>  | |

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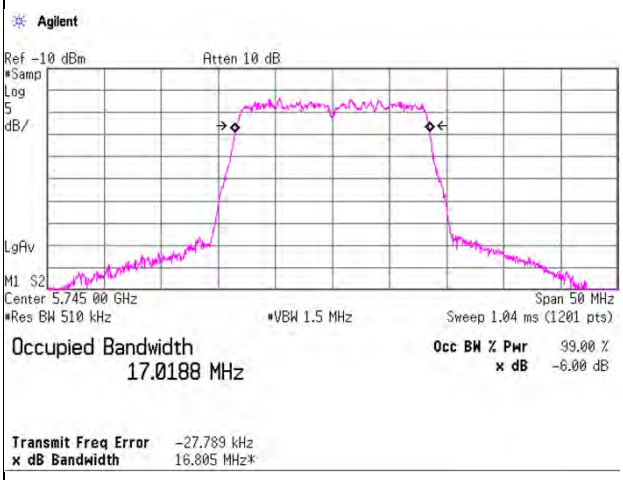
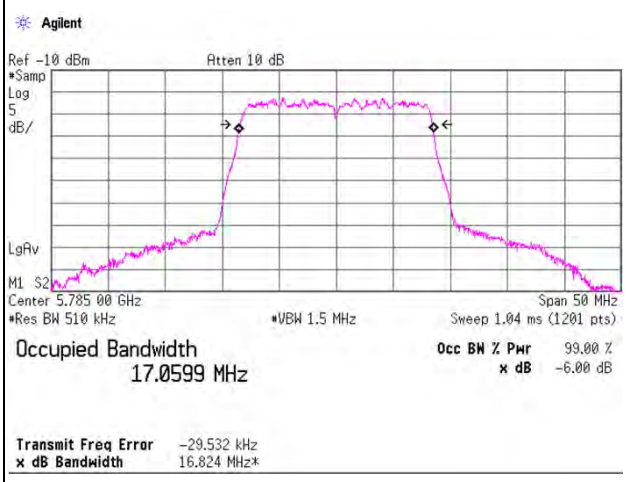
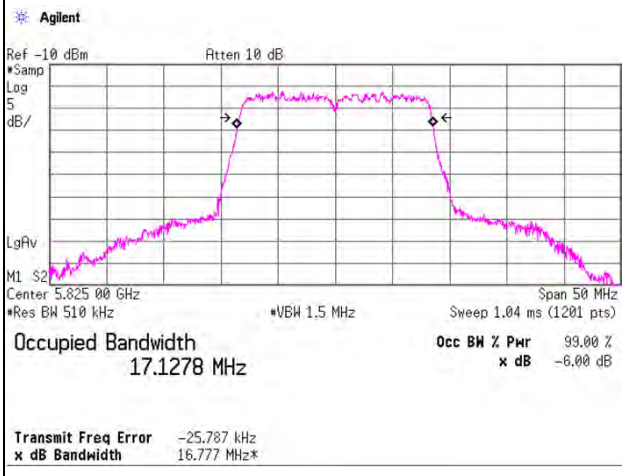
# 99% Occupied Bandwidth

| Tx, IEEE802.11a (W58), PN9, worst data mode 24Mbps | |
|---|---|
| **Transmitting(5745MHz)** | **Transmitting(5785MHz)** |
|  |  |
| **Transmitting(5825MHz)** | |
|  | |

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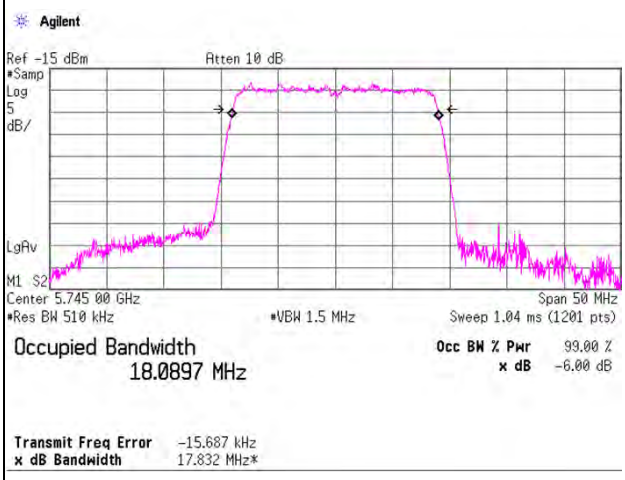
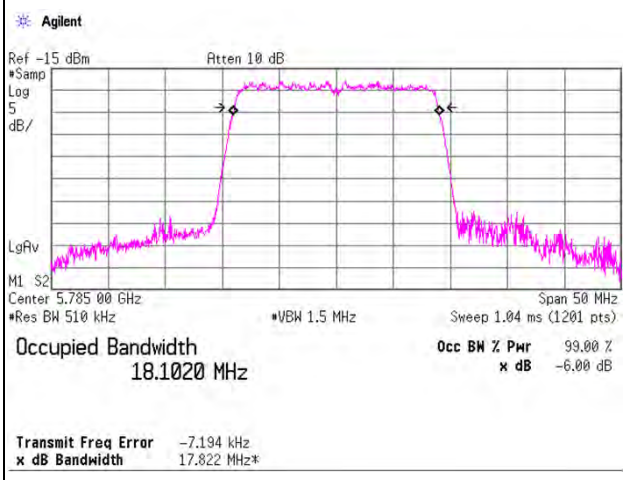
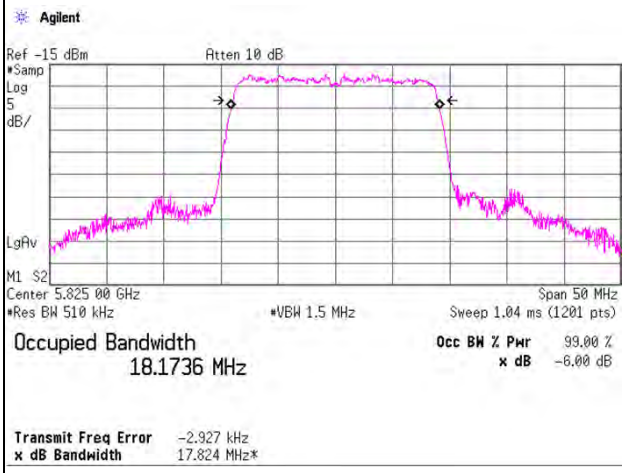
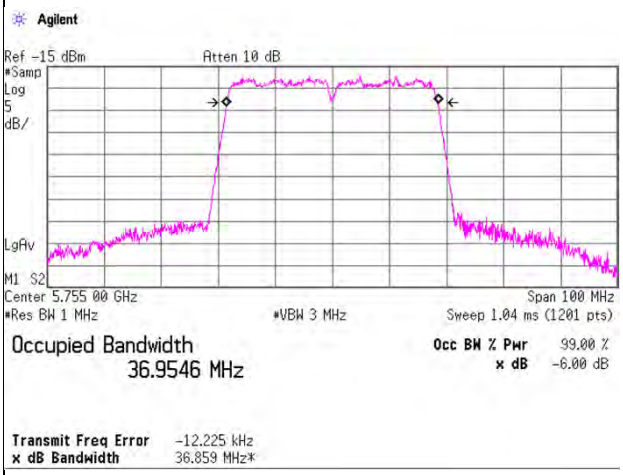
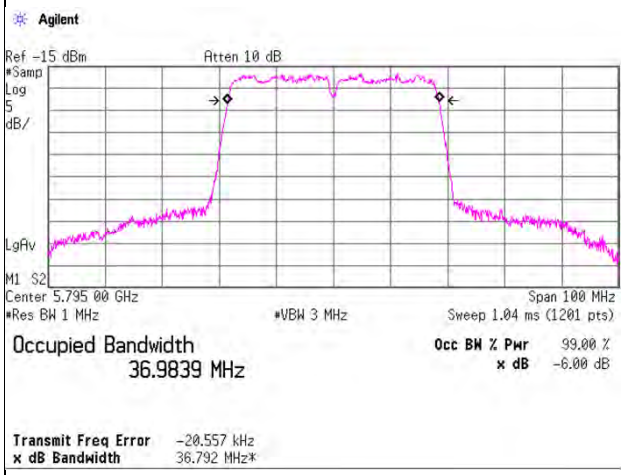
# 99% Occupied Bandwidth

| Tx, IEEE802.11n (20HT), (W58), PN9, worst data mode 1(MCS) | |
|---|---|
| **Transmitting(5745MHz)** | **Transmitting(5785MHz)** |
|  |  |
| **Transmitting(5825MHz)** | |
|  | |

# 99% Occupied Bandwidth

| Tx, IEEE802.11n (40HT),(W58), PN9, worst data mode 5(MCS) | |
|---|---|
| Transmitting(5755MHz) | Transmitting(5795MHz) |
|  |  |
| | |
| | |





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## APPENDIX 3
## Test Instruments

### EMI test equipment

| Control No. | Instrument | Manufacturer | Model No | Serial No | Test Item | Calibration Date * Interval(month) |
|---|---|---|---|---|---|---|
| SPM-06 | Power Meter | Anritsu | ML2495A | 0850009 | AT | 2011/04/12 * 12 |
| SPSS-03 | Power sensor | Anritsu | MA2411B | 0917063 | AT | 2011/04/12 * 12 |
| SSA-02 | Spectrum Analyzer | Agilent | E4448A | MY48250106 | AT,RE | 2011/03/07 * 12 |
| SAT20-01 | Attenuator(above1GHz) | Agilent | 8493C-020 | 74889 | AT | 2010/12/15 * 12 |
| SCC-G23 | Coaxial Cable | Suhner | SUCOFLEX 104 | 297342/4 | AT, RE | 2010/05/27 * 12 |
| SCC-H3 | Microwave cable | Hirose Electric | U.FL-2LP-066J1-A-(200) | - | AT | Pre Check |
| SOS-06 | Humidity Indicator | A&D | AD-5681 | 4062118 | AT | 2011/03/02 * 12 |
| SAF-05 | Pre Amplifier | TOYO Corporation | TPA0118-36 | 1440490 | RE | 2011/03/23 * 12 |
| SCC-G03 | Coaxial Cable | Suhner | SUCOFLEX 104A | 46499/4A | RE | 2011/04/28 * 12 |
| SHA-03 | Horn Antenna | Schwarzbeck | BBHA9120D | 9120D-739 | RE | 2010/08/17 * 12 |
| SOS-05 | Humidity Indicator | A&D | AD-5681 | 4062518 | RE | 2011/02/23 * 12 |
| SJM-10 | Measure | PROMART | SEN1935 | - | RE | - |
| COTS-SEMI-1 | EMI Software | TSJ | TEPTO-DV(RE,CE,RFI,MF) | - | RE,CE | - |
| SFL-03 | Highpass Filter | MICRO-TRONICS | HPM50112 | 028 | RE | 2010/12/15 * 12 |
| SAT10-05 | Attenuator(above1GHz) | Agilent | 8493C-010 | 74864 | RE | 2010/12/15 * 12 |
| SSA-03 | Spectrum Analyzer | Agilent | E4448A | MY48250152 | AT | 2010/11/16 * 12 |
| SCC-G12 | Coaxial Cable | Suhner | SUCOFLEX 102 | 30790/2 | AT | 2011/03/23 * 12 |
| SAT20-05 | Attenuator | Weinschel Corp. | 54A-20 | Y5649 | AT | 2010/11/24 * 12 |
| SFL-02 | Highpass Filter | MICRO-TRONICS | HPM50111 | 051 | RE | 2010/12/15 * 12 |
| SAT10-04 | Attenuator(above1GHz) | Agilent | 8493C-010 | 74863 | RE | 2010/12/15 * 12 |
| SAT20-01 | Attenuator(above1GHz) | Agilent | 8493C-020 | 74889 | RE | 2010/12/15 * 12 |
| SHA-04 | Horn Antenna | ETS LINDGREN | 3160-09 | LM3640 | RE | 2011/03/15 * 12 |
| SAF-08 | Pre Amplifier | TOYO Corporation | HAP18-26W | 00000019 | RE | 2011/03/16 * 12 |
| SCC-G17 | Coaxial Cable | Suhner | SUCOFLEX 104A | 46291/4A | RE | 2011/03/16 * 12 |
| SHA-06 | Horn Antenna | ETS LINDGREN | 3160-10 | LM3459 | RE | 2011/03/15 * 12 |
| SAF-10 | Pre Amplifier | TOYO Corporation | HAP26-40W | 00000010 | RE | 2011/03/16 * 12 |
| SCC-G19 | Coaxial Cable | Suhner | SUCOFLEX 102A | 1188/2A | RE | 2011/03/16 * 12 |
| SOS-09 | Humidity Indicator | A&D | AD-5681 | 4061484 | AT | 2011/03/02 * 12 |
| SAF-01 | Pre Amplifier | SONOMA | 310N | 290211 | RE | 2011/02/17 * 12 |
| SAT6-01 | Attenuator | JFW | 50HF-006N | - | RE | 2011/02/17 * 12 |
| SAT3-04 | Attenuator | JFW | 50HF-003N | - | RE | 2011/02/17 * 12 |
| SBA-01 | Biconical Antenna | Schwarzbeck | BBA9106 | 91032664 | RE | 2010/10/11 * 12 |
| SAEC-01(NSA) | Semi-Anechoic Chamber | TDK | SAEC-01(NSA) | 1 | RE | 2010/09/11 * 12 |
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The expiration date of the calibration is the end of the expired month .
As for some calibrations performed after the tested dates , those test equipment have been controlled by means of an unbroken chains of calibrations .

All equipment is calibrated with traceable calibrations . Each calibration is traceable to the national or international standards .
Test Item :
CE: Conducted emission ,
RE: Radiated emission ,
AT: Antenna terminal disturbance voltage

## APPENDIX 3
## Test Instruments

**EMI test equipment**

| Control No. | Instrument | Manufacturer | Model No | Serial No | Test Item | Calibration Date * Interval(month) |
|---|---|---|---|---|---|---|
| SCC-A1/A3/A5/A7/A8/A13/SRSE-01 | Coaxial Cable&RF Selector | Fujikura/Fujikura/Suhner/Suhner/Suhner/TOYO | 8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906 | -/0901-269(RF Selector) | RE | 2011/04/28 * 12 |
| SCC-A2/A4/A6/A7/A8/A13/SRSE-01 | Coaxial Cable&RF Selector | Fujikura/Fujikura/Suhner/Suhner/Suhner/TOYO | 8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906 | -/0901-269(RF Selector) | RE | 2011/04/28 * 12 |
| SLA-01 | Logperiodic Antenna | Schwarzbeck | UHALP9108A | UHALP 9108-A 0888 | RE | 2010/10/11 * 12 |
| SOS-01 | Humidity Indicator | A&D | AD-5681 | 4062555 | RE | 2011/02/23 * 12 |
| STR-01 | Test Receiver | Rohde & Schwarz | ESU40 | 100093 | RE,CE | 2010/10/29 * 12 |
| SJM-12 | Measure | PROMART | SEN1935 | - | RE,CE | - |
| SAF-03 | Pre Amplifier | SONOMA | 310N | 290213 | RE | 2011/02/17 * 12 |
| SAT6-03 | Attenuator | JFW | 50HF-006N | - | RE | 2011/02/17 * 12 |
| SBA-03 | Biconical Antenna | Schwarzbeck | BBA9106 | 91032666 | RE | 2010/10/15 * 12 |
| SCC-C1/C2/C3/C4/C5/C10/SRSE-03 | Coaxial Cable&RF Selector | Fujikura/Fujikura/Suhner/Suhner/Suhner/TOYO | 8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906 | -/0901-271(RF Selector) | RE | 2011/04/28 * 12 |
| SLA-03 | Logperiodic Antenna | Schwarzbeck | UHALP9108A | UHALP 9108-A 0901 | RE | 2010/10/15 * 12 |
| STR-03 | Test Receiver | Rohde & Schwarz | ESI40 | 100054/040 | RE | 2010/07/21 * 12 |
| SAEC-03(NSA) | Semi-Anechoic Chamber | TDK | SAEC-03(NSA) | 3 | RE | 2010/09/13 * 12 |
| SCC-A12/A13/SRSE-01 | Coaxial Cable&RF Selector | Suhner/Suhner/TOYO | RG223U/141PE/NS4906 | -/0901-269(RF Selector) | CE | 2011/04/28 * 12 |
| SLS-01 | LISN | Rohde & Schwarz | ENV216 | 100511 | CE(EUT) | 2011/02/22 * 12 |
| SLS-02 | LISN | Rohde & Schwarz | ENV216 | 100512 | CE(AE) | 2011/02/22 * 12 |
| SAT3-03 | Attenuator | JFW | 50HF-003N | - | CE | 2011/02/17 * 12 |
| SOS-02 | Humidity Indicator | A&D | AD-5681 | 4063343 | CE | 2011/03/02 * 12 |
| STM-01 | Terminator | TME | CT-01 BP | - | CE | 2011/01/07 * 12 |
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The expiration date of the calibration is the end of the expired month .
As for some calibrations performed after the tested dates , those test equipment have been controlled by means of an unbroken chains of calibrations .
All equipment is calibrated with traceable calibrations . Each calibration is traceable to the national or international standards .
Test Item :
CE: Conducted emission ,
RE: Radiated emission ,
AT: Antenna terminal disturbance voltage