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|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 6</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-34: Peak Power Spectral Density  
SISO Secondary, 802.11b, Channel 1, 1 Mbps

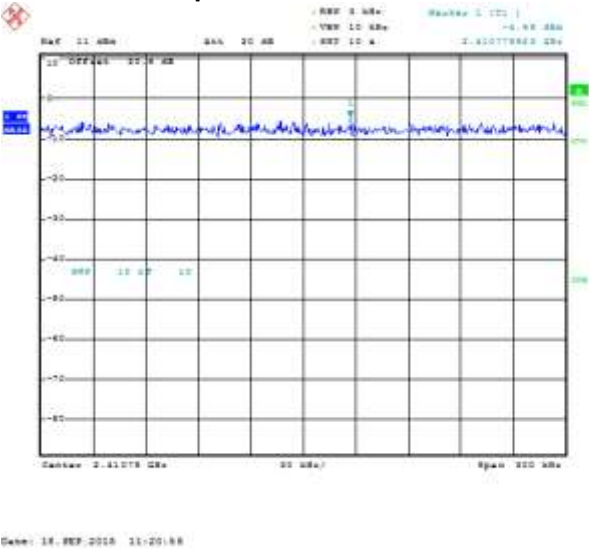


Figure 6-35: Peak Power Spectral Density  
SISO Secondary, 802.11b, Channel 6, 1 Mbps

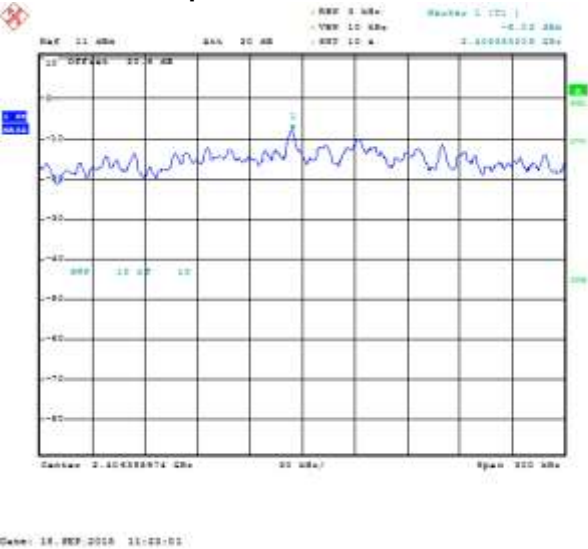
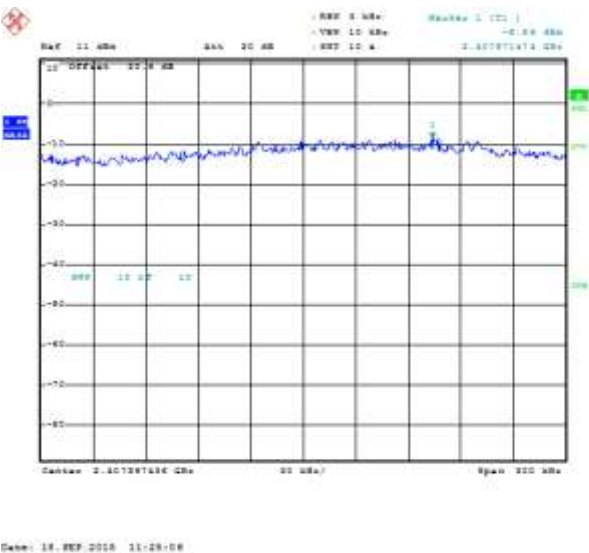


Figure 6-36: Peak Power Spectral Density  
SISO Secondary, 802.11b, Channel 11, 1 Mbps



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 6</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-37: Peak Power Spectral Density  
SISO Secondary, 802.11g, Channel 1, 6  
Mbps

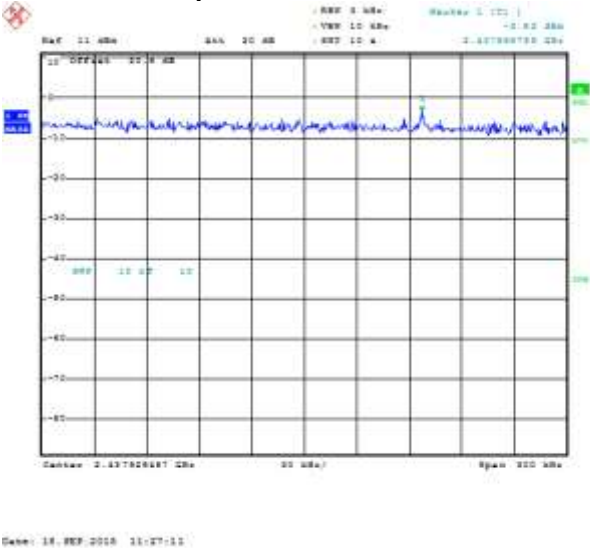


Figure 6-38: Peak Power Spectral Density  
SISO Secondary, 802.11g, Channel 6, 6  
Mbps

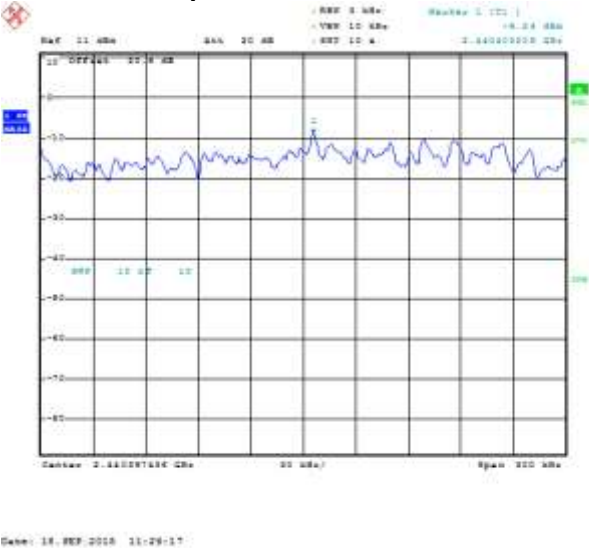
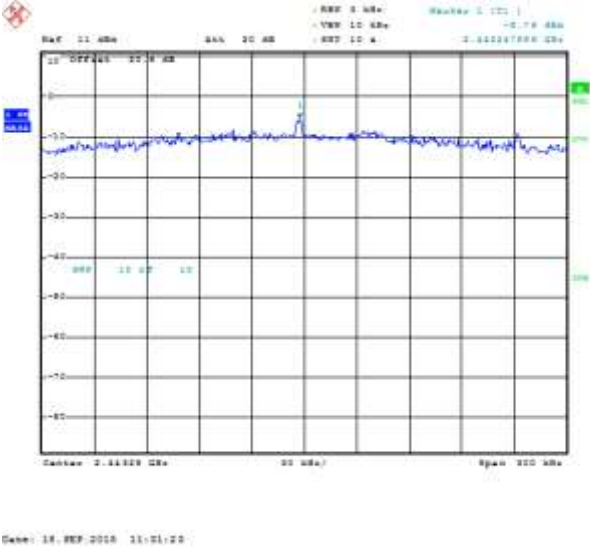


Figure 6-39: Peak Power Spectral Density  
SISO Secondary, 802.11g, Channel 11, 6  
Mbps



|                                                                                   |                                                                             |                                                                                  |
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|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015      | <b>APPENDIX 6</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-40: Peak Power Spectral Density  
SISO Secondary, 802.11n, Channel 1,  
MCS 0

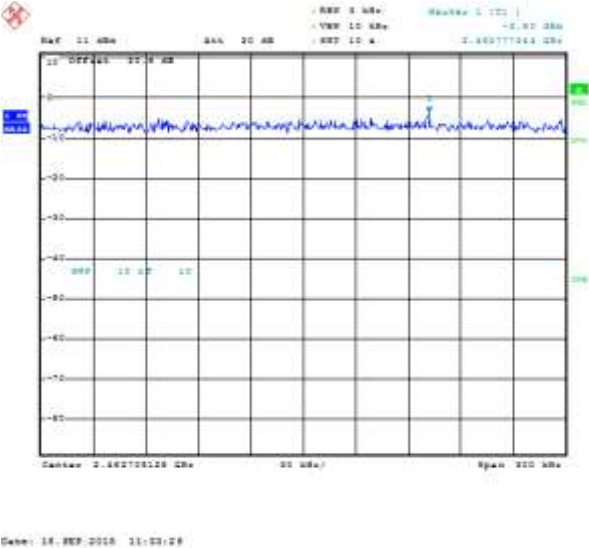


Figure 6-41: Peak Power Spectral Density  
SISO Secondary, 802.11n, Channel 6,  
MCS 0

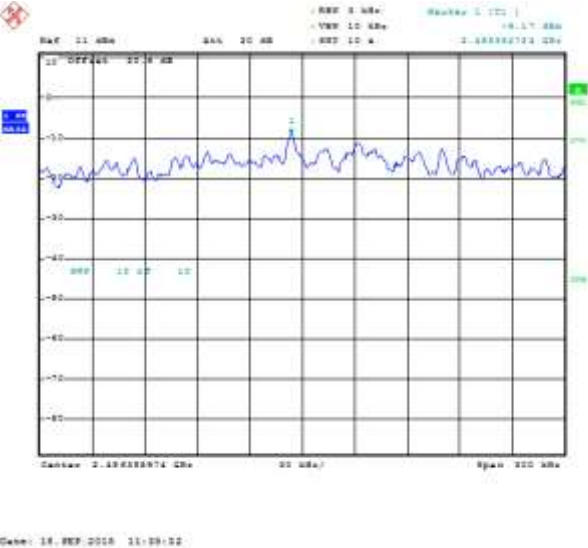
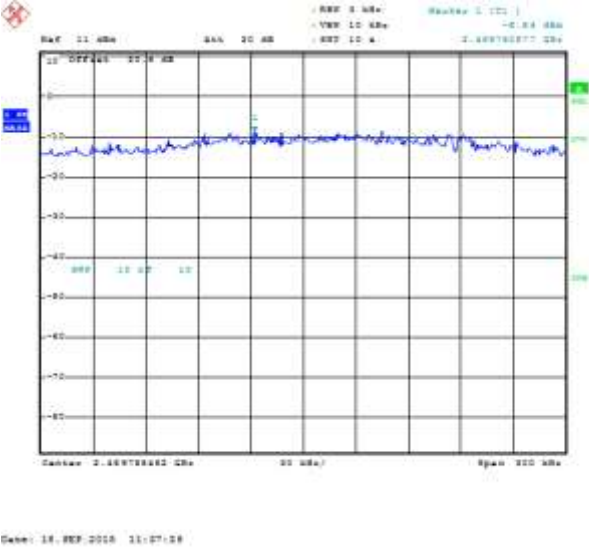


Figure 6-42: Peak Power Spectral Density  
SISO Secondary, 802.11n, Channel 11,  
MCS 0



|                                                                                   |                                                                                                   |                                                         |
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|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 6</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-43: Peak Power Spectral Density  
MIMO Primary, 802.11b, Channel 1, 1 Mbps

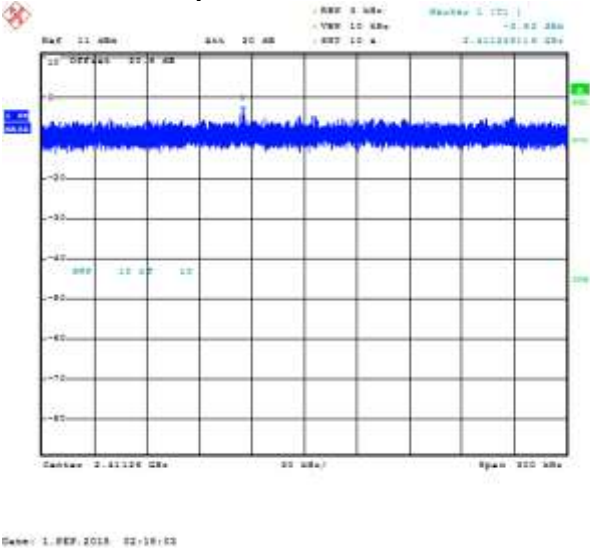


Figure 6-44: Peak Power Spectral Density  
MIMO Primary, 802.11b, Channel 6, 1 Mbps

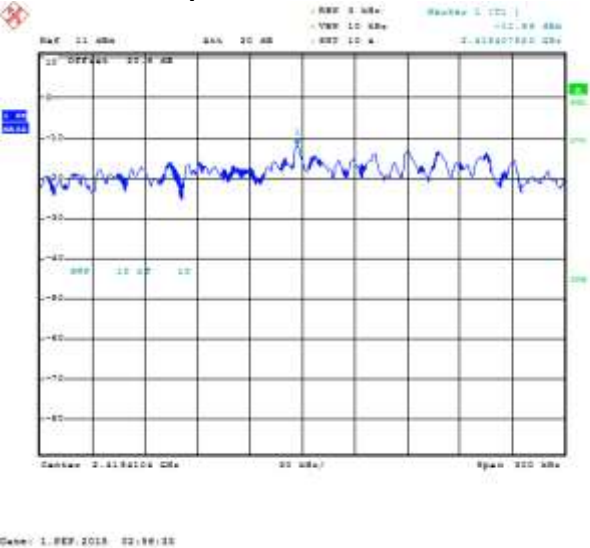
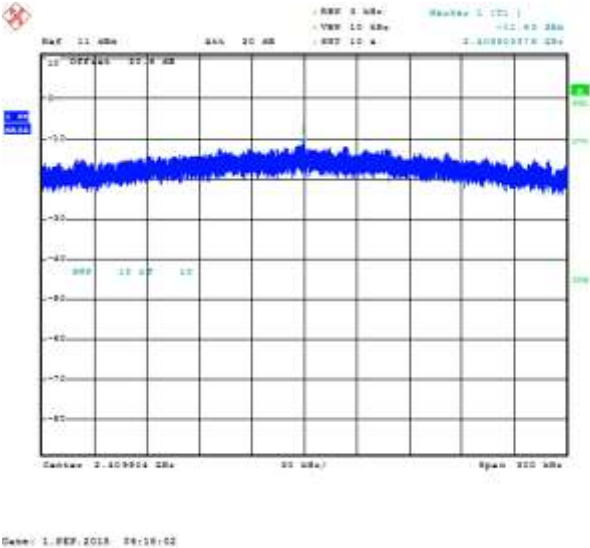


Figure 6-45: Peak Power Spectral Density  
MIMO Primary, 802.11b, Channel 11, 1 Mbps



|                                                                                   |                                                                             |                                                                                  |
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|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015      | <b>APPENDIX 6</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-46: Peak Power Spectral Density  
MIMO Primary, 802.11g, Channel 1, 6  
Mbps

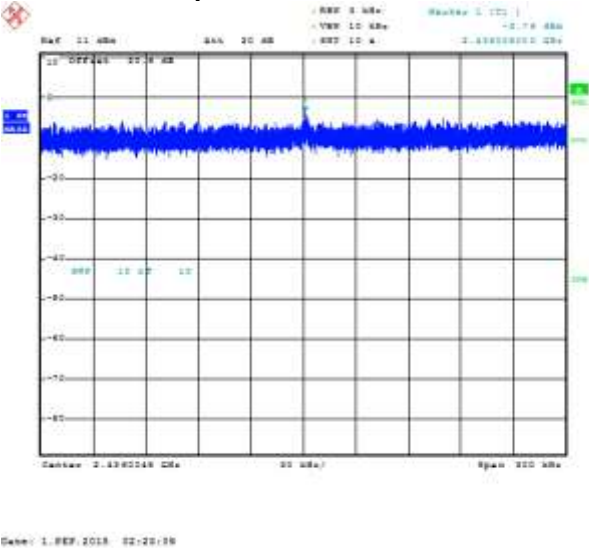


Figure 6-47: Peak Power Spectral Density  
MIMO Primary, 802.11g, Channel 6, 6  
Mbps

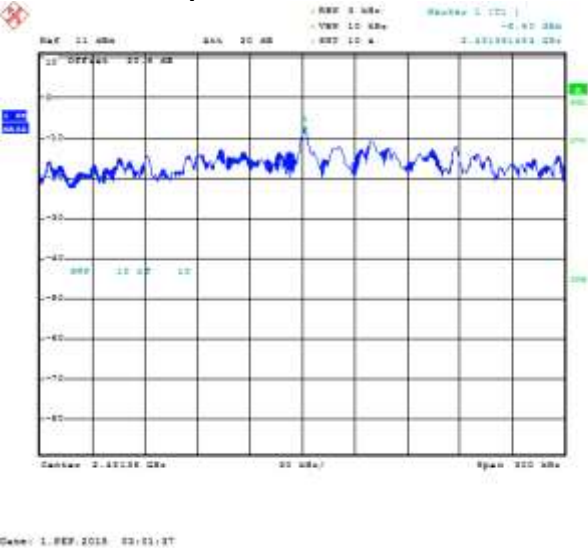
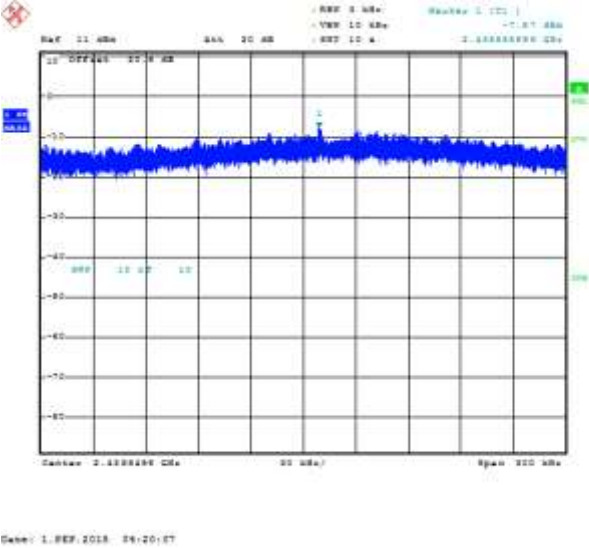


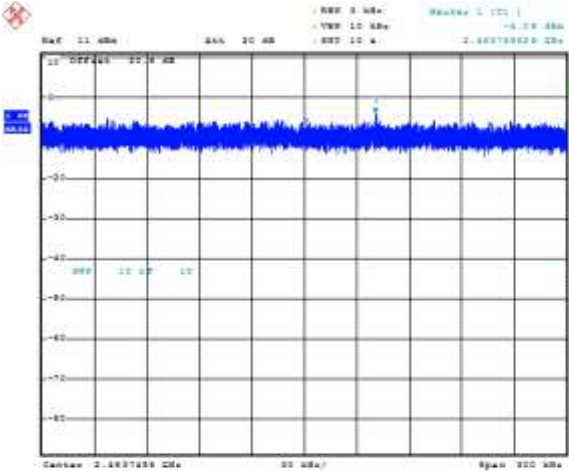
Figure 6-48: Peak Power Spectral Density  
MIMO Primary, 802.11g, Channel 11, 6  
Mbps



|                                                                                   |                                                                             |                                                                                  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015      | <b>APPENDIX 6</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

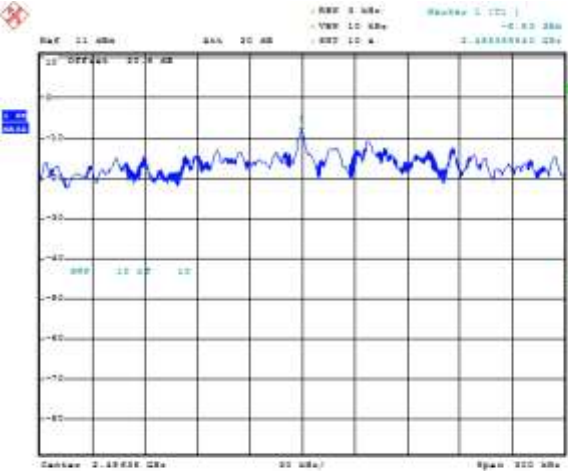
802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-49: Peak Power Spectral Density  
MIMO Primary, 802.11n, Channel 1, MCS 0



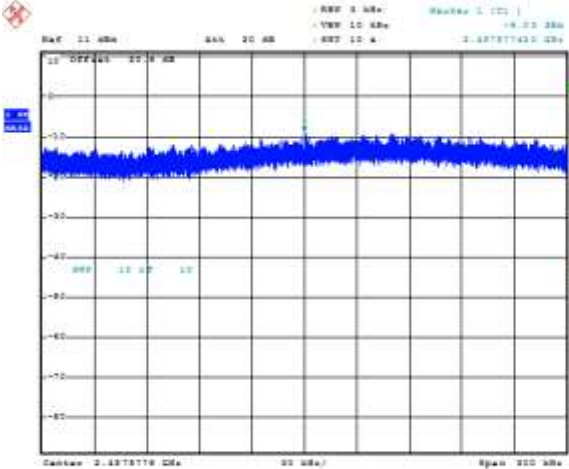
Date: 1.FEB.2015 02:29:12

Figure 6-50: Peak Power Spectral Density  
MIMO Primary, 802.11n, Channel 6, MCS 0



Date: 1.FEB.2015 02:00:40

Figure 6-51: Peak Power Spectral Density  
MIMO Primary, 802.11n, Channel 11, MCS 0



Date: 1.FEB.2015 06:28:55

|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 6</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-52: Peak Power Spectral Density  
MIMO Secondary, 802.11b, Channel 1, 1 Mbps

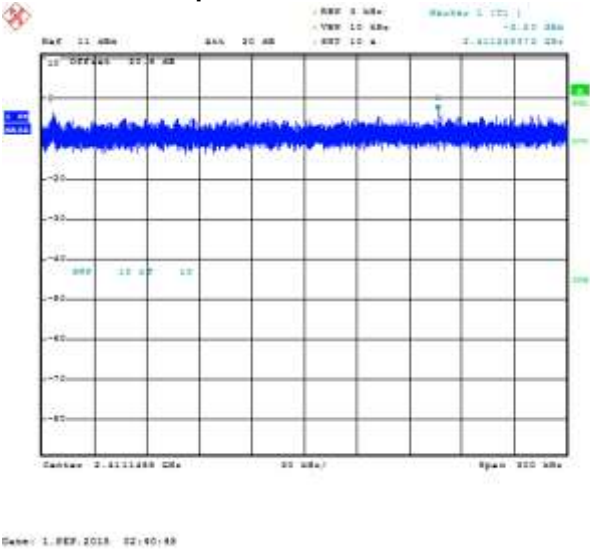


Figure 6-53: Peak Power Spectral Density  
MIMO Secondary, 802.11b, Channel 6, 1 Mbps

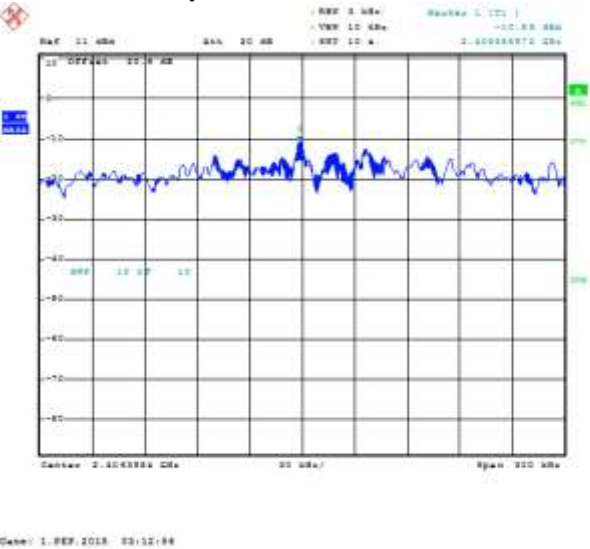
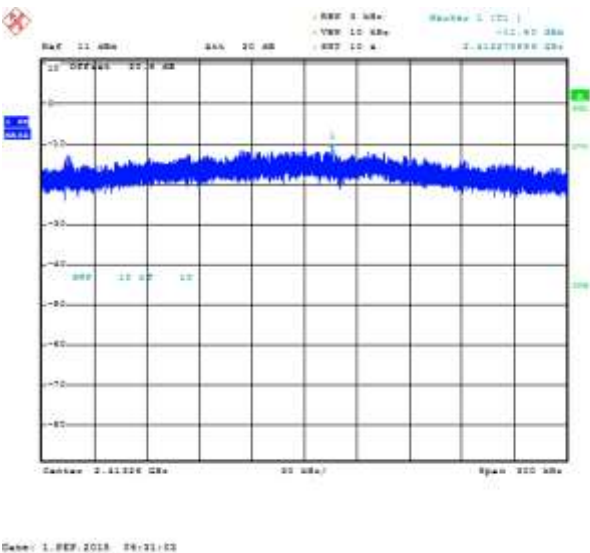


Figure 6-54: Peak Power Spectral Density  
MIMO Secondary, 802.11b, Channel 11, 1 Mbps



|                                                                                   |                                                                                                   |                                                         |
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|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 6</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-55: Peak Power Spectral Density  
MIMO Secondary, 802.11g, Channel 1, 6  
Mbps

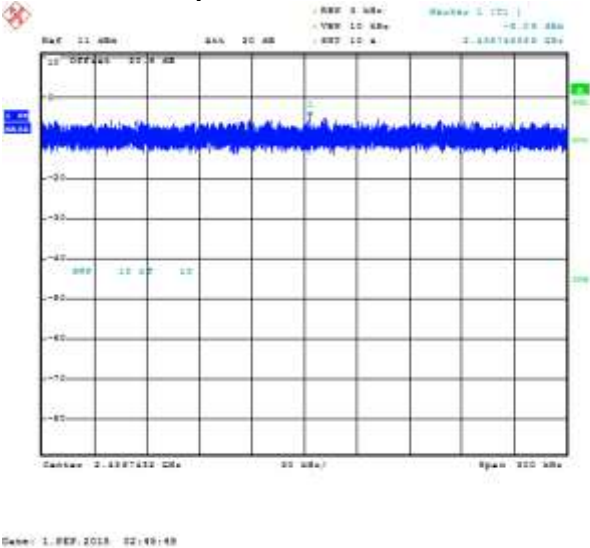
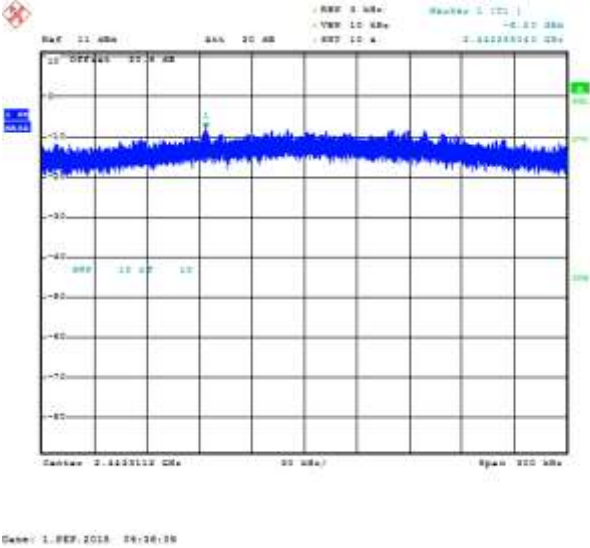


Figure 6-56: Peak Power Spectral Density  
MIMO Secondary, 802.11g, Channel 6, 6  
Mbps



Figure 6-57: Peak Power Spectral Density  
MIMO Secondary, 802.11g, Channel 11, 6  
Mbps



|                                                                                   |                                                                                                   |                                                         |
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|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 6</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-58: Peak Power Spectral Density  
MIMO Secondary, 802.11n, Channel 1,  
MCS 0

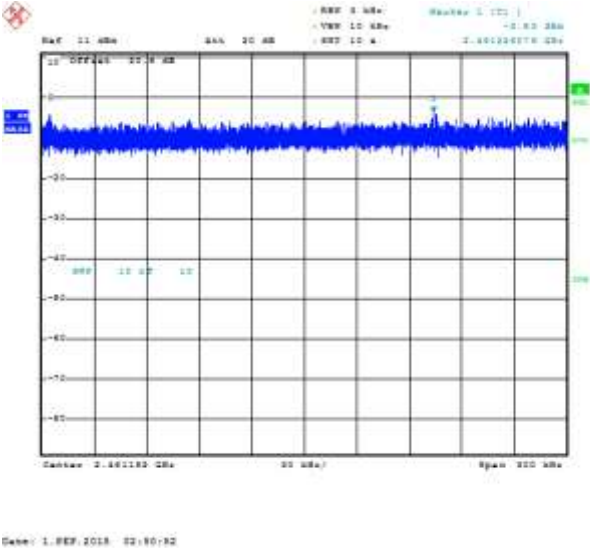
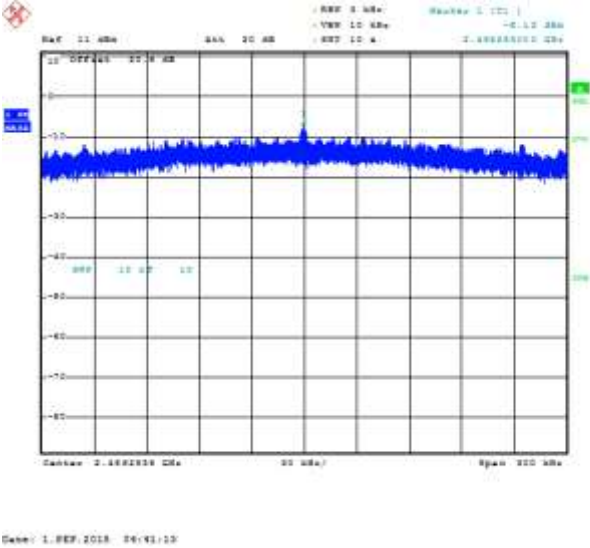


Figure 6-59: Peak Power Spectral Density  
MIMO Secondary, 802.11n, Channel 6,  
MCS 0



Figure 6-60: Peak Power Spectral Density  
MIMO Secondary, 802.11n, Channel 11,  
MCS 0



|                                                                                   |                                                                                               |                                                         |
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|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 6</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11b/g/n RF Conducted Emission Test Results cont'd

#### **Spurious RF Conducted Emissions**

The EUT met the requirements of the spurious RF conducted emissions as per 47 CFR 15.247(c) and RSS-247. Channels 1, 6 and 11 were measured at 1 Mbps for 802.11b mode, 6 Mbps each for 802.11g mode, and MCS 0 for 802.11n mode. Peak power was measured using an Agilent power meter, model N1911A with model N1921A power sensor. A reference offset of 18.4 dB was applied to the power meter reference level for the coaxial cable loss and attenuators in the test circuit.

#### Primary Antenna

| Channel | Data Rate | Carrier Level (dBm) | Max. Measured Level (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------------|----------------------------------------|-------------|
| 1       | 1 Mbps    | 16.33               | -27.67                    | -44.00                                 | -20         |
|         | 6 Mbps    | 16.20               | -21.41                    | -37.61                                 | -20         |
|         | MCS 0     | 15.99               | -18.85                    | -34.84                                 | -20         |
| 6       | 1 Mbps    | 16.85               | -26.70                    | -43.55                                 | -20         |
|         | 6 Mbps    | 16.66               | -16.69                    | -33.35                                 | -20         |
|         | MCS 0     | 16.56               | -17.04                    | -33.60                                 | -20         |
| 11      | 1 Mbps    | 17.08               | -26.96                    | -44.04                                 | -20         |
|         | 6 Mbps    | 16.74               | -22.18                    | -38.92                                 | -20         |
|         | MCS 0     | 16.70               | -16.06                    | -32.76                                 | -20         |

#### Secondary Antenna

| Channel | Data Rate | Carrier Level (dBm) | Max. Measured Level (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------------|----------------------------------------|-------------|
| 1       | 1 Mbps    | 17.01               | -24.92                    | -41.93                                 | -20         |
|         | 6 Mbps    | 16.41               | -17.42                    | -33.83                                 | -20         |
|         | MCS 0     | 16.18               | -19.94                    | -36.12                                 | -20         |
| 6       | 1 Mbps    | 17.04               | -36.17                    | -53.21                                 | -20         |
|         | 6 Mbps    | 16.55               | -19.39                    | -35.94                                 | -20         |
|         | MCS 0     | 16.30               | -18.73                    | -35.03                                 | -20         |
| 11      | 1 Mbps    | 16.79               | -26.96                    | -43.75                                 | -20         |
|         | 6 Mbps    | 16.14               | -22.28                    | -38.42                                 | -20         |
|         | MCS 0     | 16.08               | -18.66                    | -34.74                                 | -20         |

|                                                                                   |                                                                                                  |                                                         |
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|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 6</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Sum

| Channel | Data Rate | Carrier Level (dBm) | Max. Measured Level (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------------|----------------------------------------|-------------|
| 1       | 1 Mbps    | 19.87               | -23.07                    | -42.94                                 | -20         |
|         | 6 Mbps    | 16.67               | -15.96                    | -32.63                                 | -20         |
|         | MCS 0     | 16.69               | -16.35                    | -33.04                                 | -20         |
| 6       | 1 Mbps    | 20.09               | -26.24                    | -46.33                                 | -20         |
|         | 6 Mbps    | 19.64               | -14.82                    | -34.46                                 | -20         |
|         | MCS 0     | 19.56               | -14.79                    | -34.35                                 | -20         |
| 11      | 1 Mbps    | 20.05               | -23.95                    | -44.00                                 | -20         |
|         | 6 Mbps    | 18.69               | -19.22                    | -37.91                                 | -20         |
|         | MCS 0     | 18.47               | -14.16                    | -32.63                                 | -20         |

See figures 6-61 to 6-78 for the plots of the spurious RF conducted emissions for Channels 1, 6 and 11, at 1 Mbps each for 802.11b mode, 6 Mbps each for 802.11g mode, and MCS 0 each for 802.11n mode.

|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 6</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-61: Spurious Conducted RF Emissions  
Primary, 802.11b, Channel 1, 1 Mbps

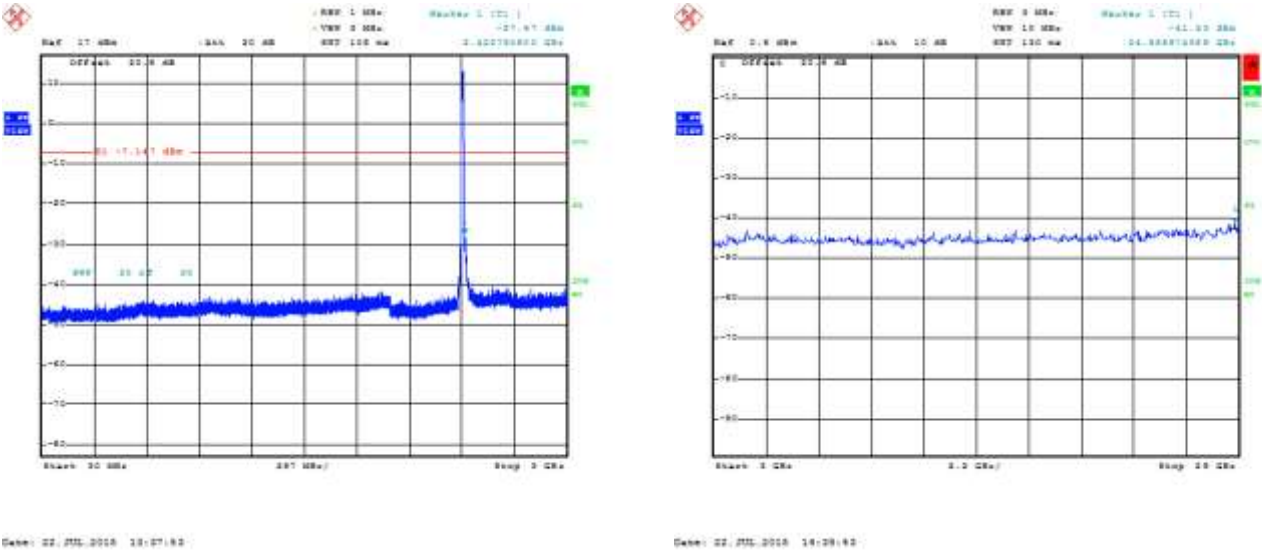
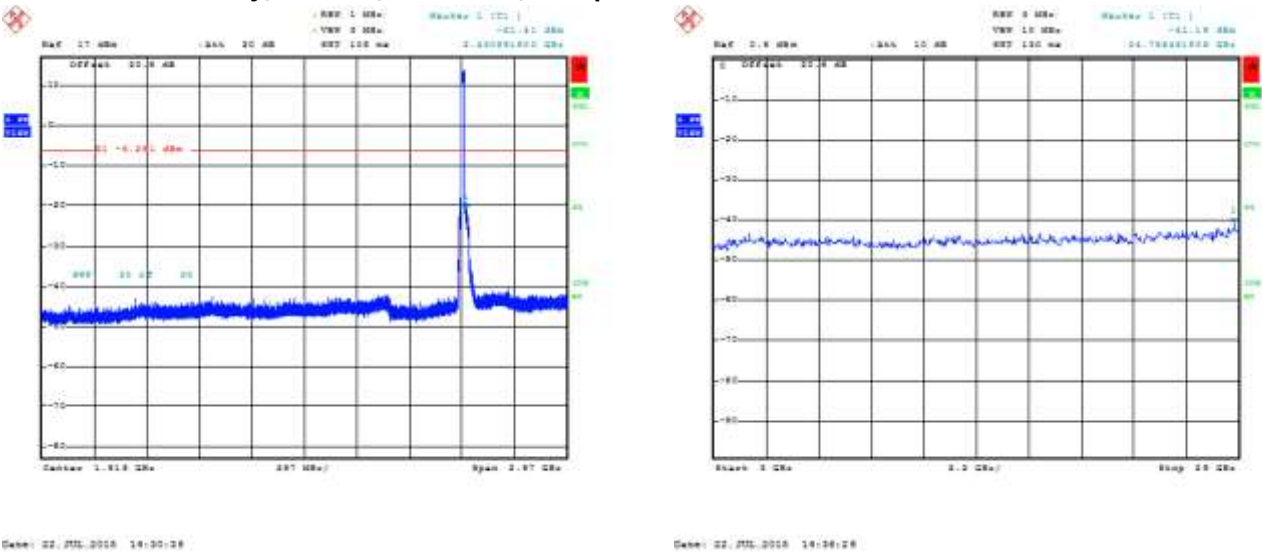


Figure 6-62 : Spurious Conducted RF Emissions  
Primary, 802.11b, Channel 6, 1 Mbps



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 6</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-63: Spurious Conducted RF Emissions  
Primary, 802.11b, Channel 11, 1 Mbps

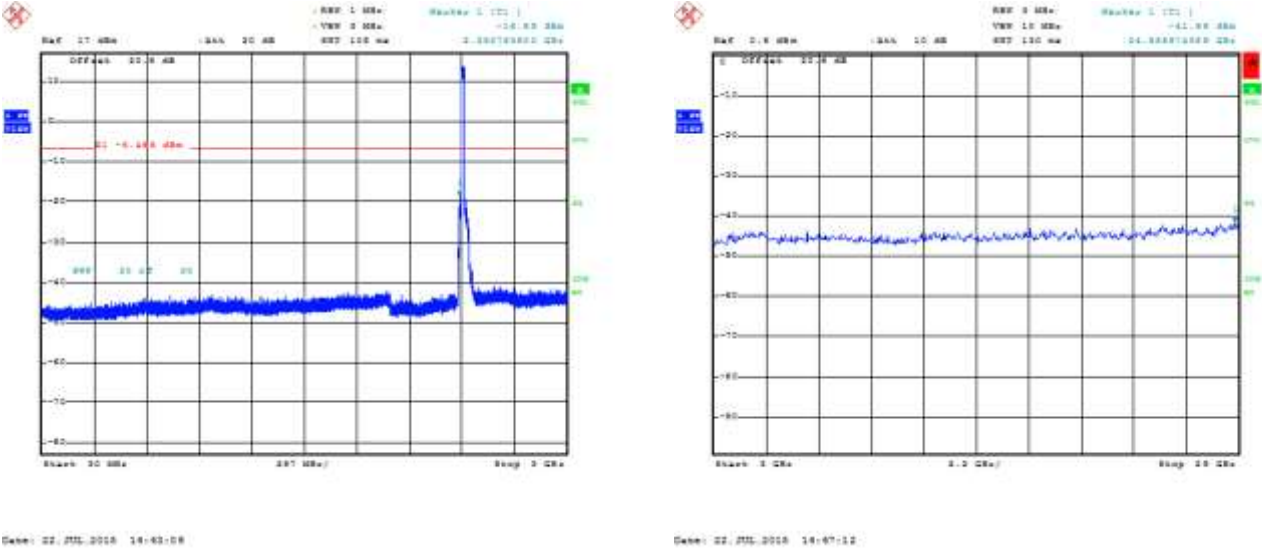
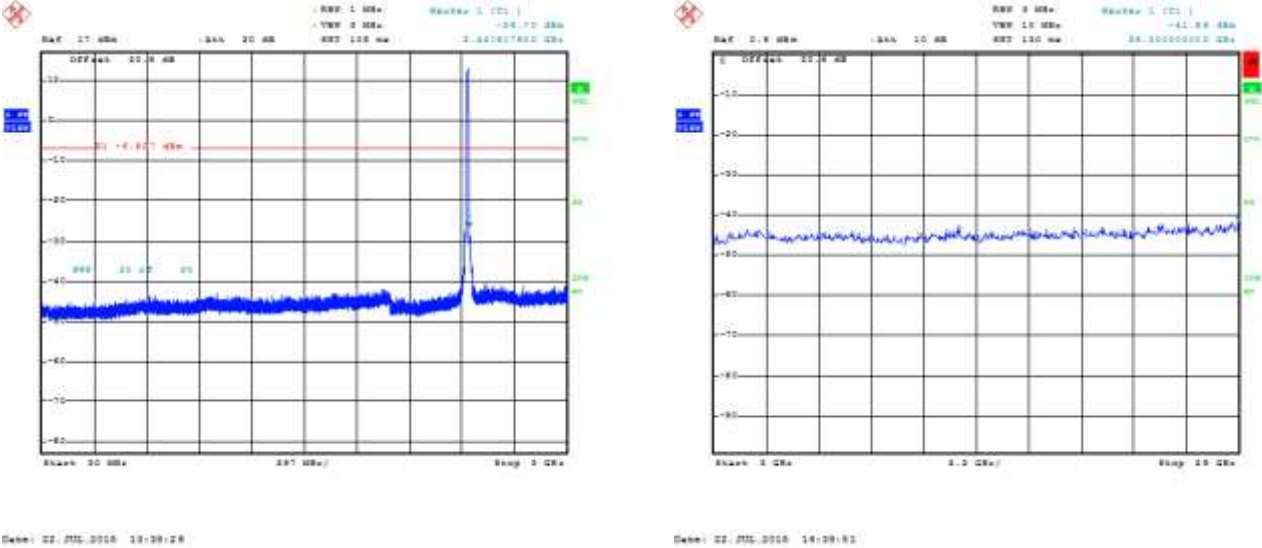


Figure 6-64: Spurious Conducted RF Emissions  
Primary, 802.11g, Channel 1, 6 Mbps



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 6</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-65: Spurious Conducted RF Emissions  
Primary, 802.11g, Channel 6, 6 Mbps

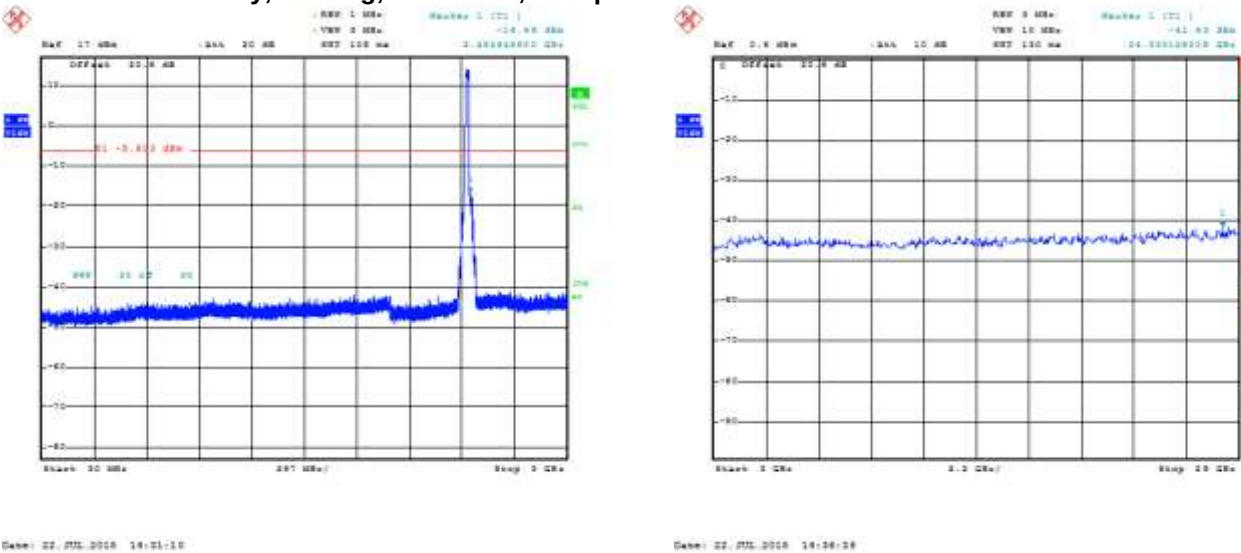
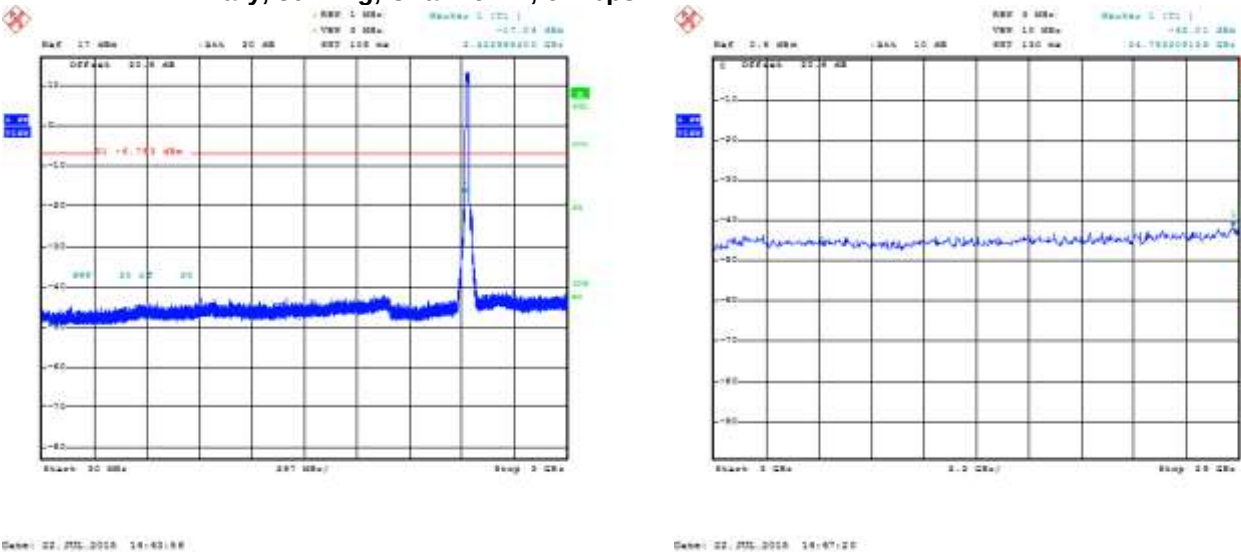


Figure 6-66: Spurious Conducted RF Emissions  
Primary, 802.11g, Channel 11, 6 Mbps



|                                                                                   |                                                                             |                                                                                  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015      | <b>APPENDIX 6</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-67: Spurious Conducted RF Emissions  
Primary, 802.11n, Channel 1, MCS 0

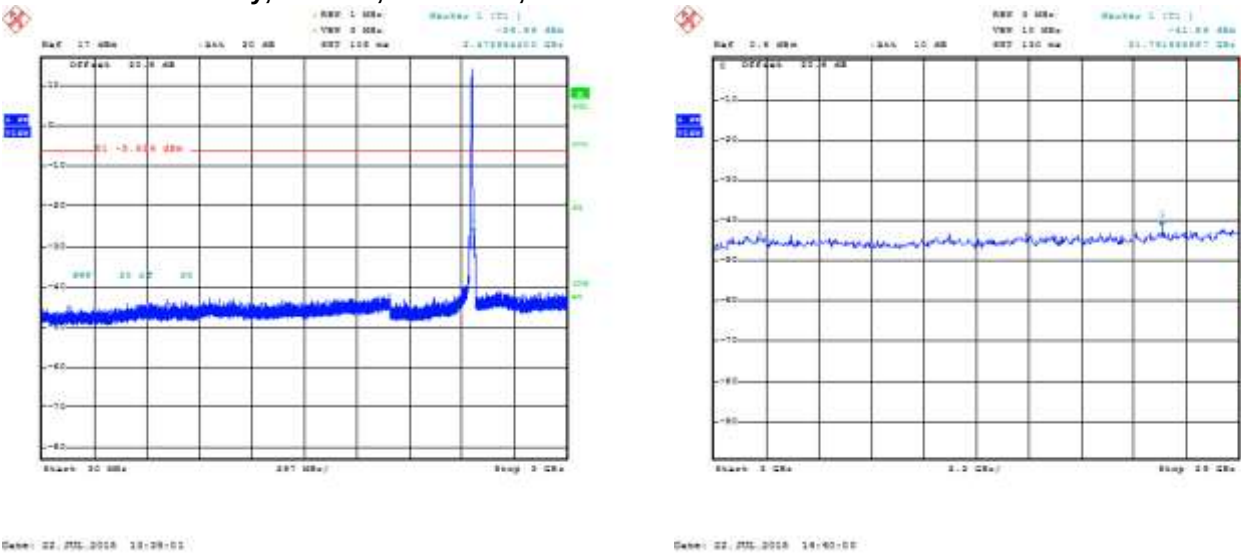
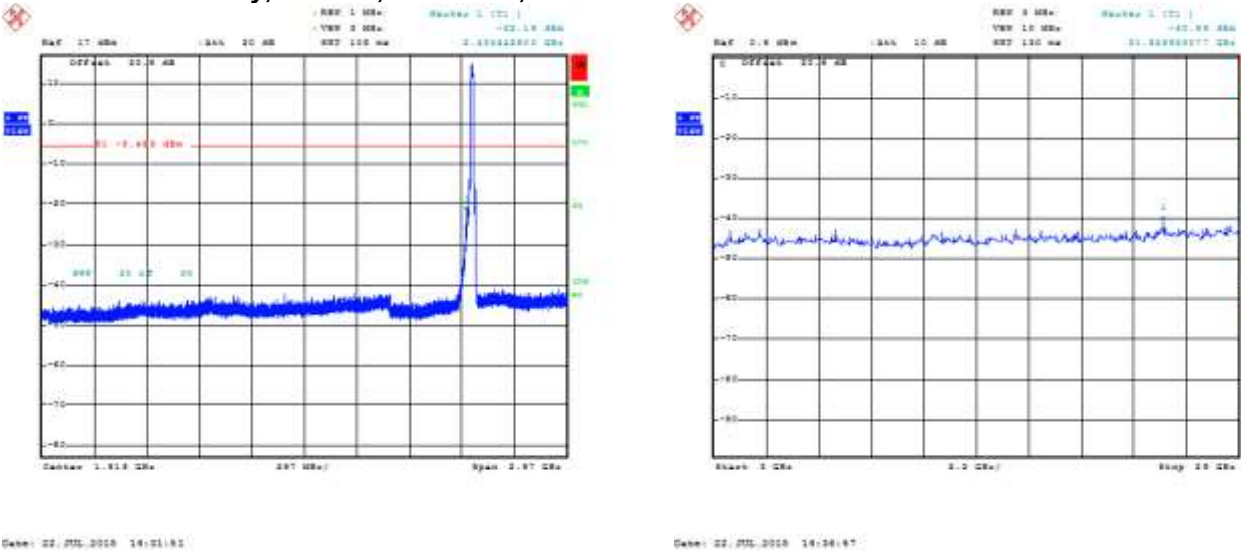


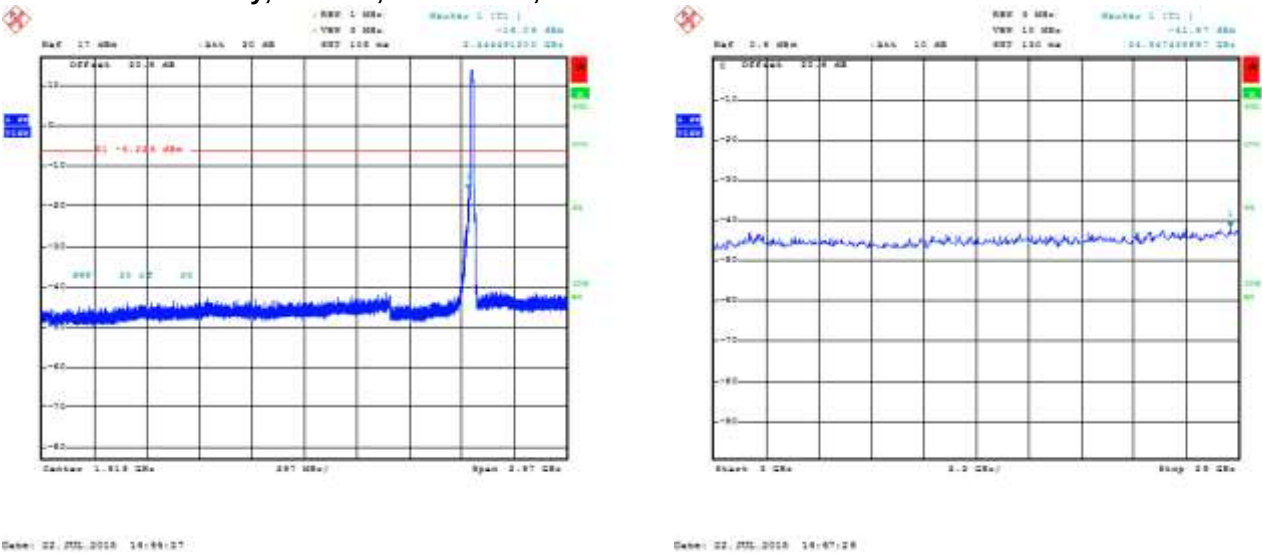
Figure 6-68: Spurious Conducted RF Emissions  
Primary, 802.11n, Channel 6, MCS 0



|                                                                                   |                                                                                                   |                                                         |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 6</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-69: Spurious Conducted RF Emissions  
Primary, 802.11n, Channel 11, MCS 0



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 6</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-70: Spurious Conducted RF Emissions  
Secondary, 802.11b, Channel 1, 1 Mbps

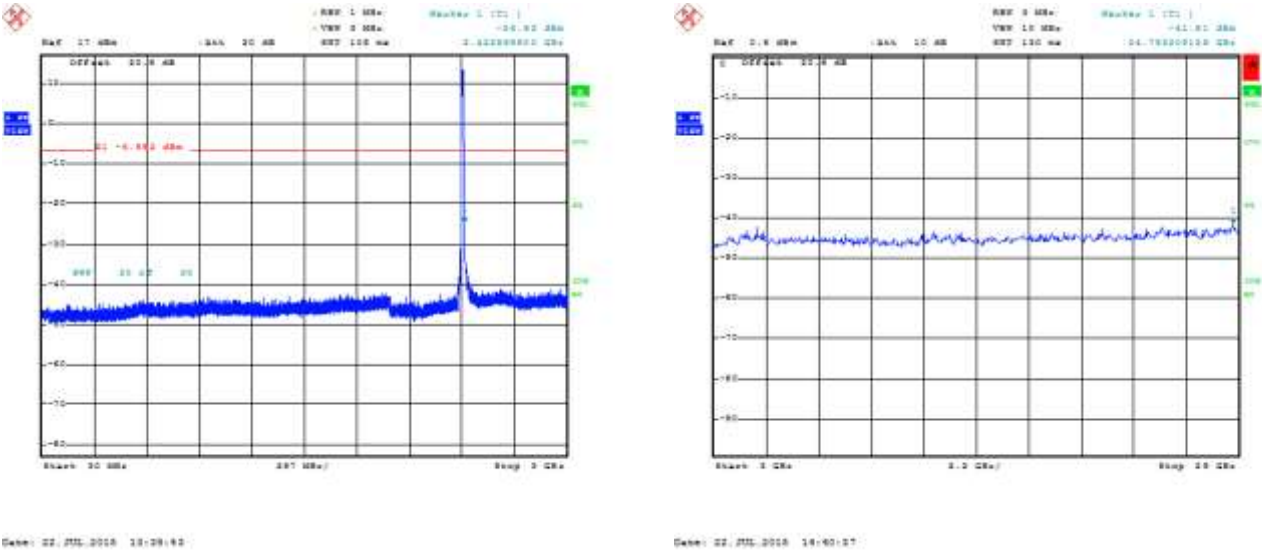
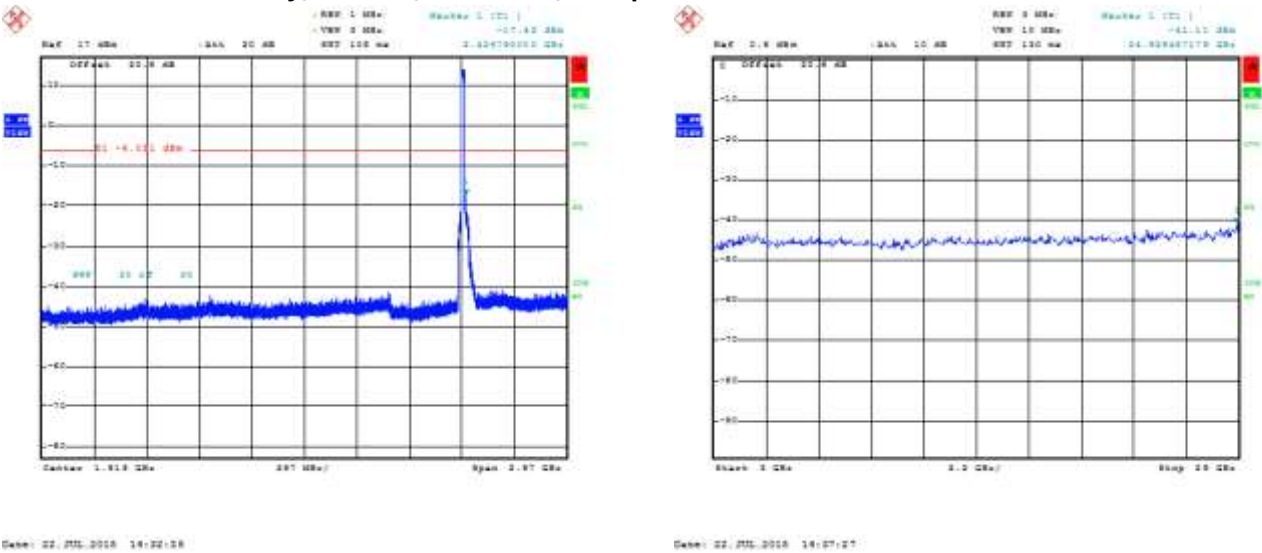


Figure 6-71 : Spurious Conducted RF Emissions  
Secondary, 802.11b, Channel 6, 1 Mbps



|                                                                                   |                                                                                                   |                                                         |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 6</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-72: Spurious Conducted RF Emissions  
Secondary, 802.11b, Channel 11, 1 Mbps

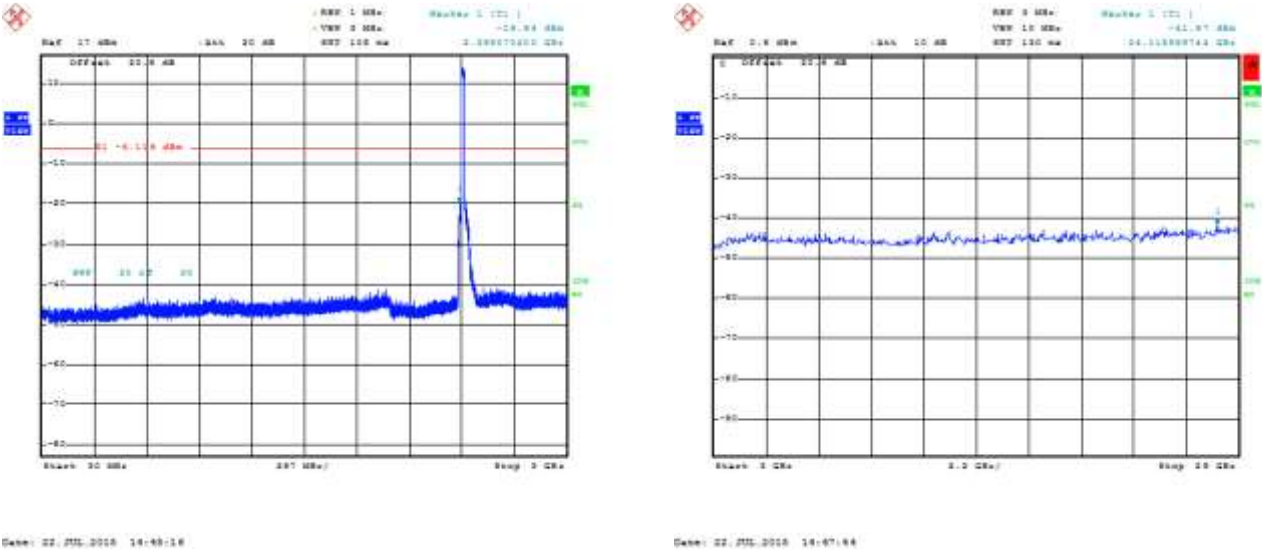
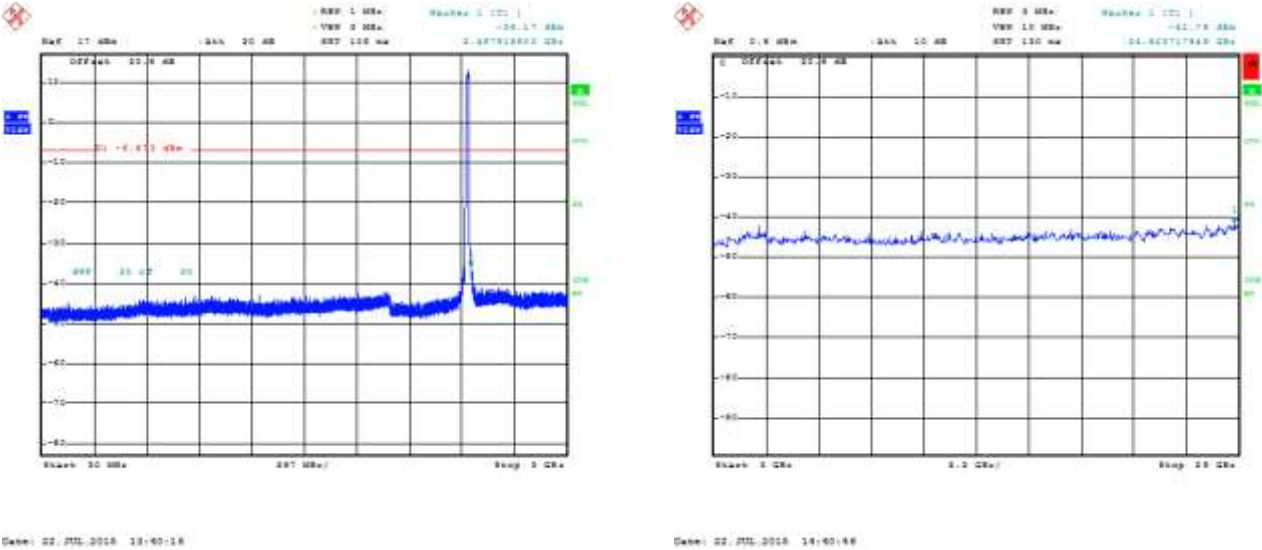


Figure 6-73: Spurious Conducted RF Emissions  
Secondary, 802.11g, Channel 1, 6 Mbps



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 6</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-74: Spurious Conducted RF Emissions  
Secondary, 802.11g, Channel 6, 6 Mbps

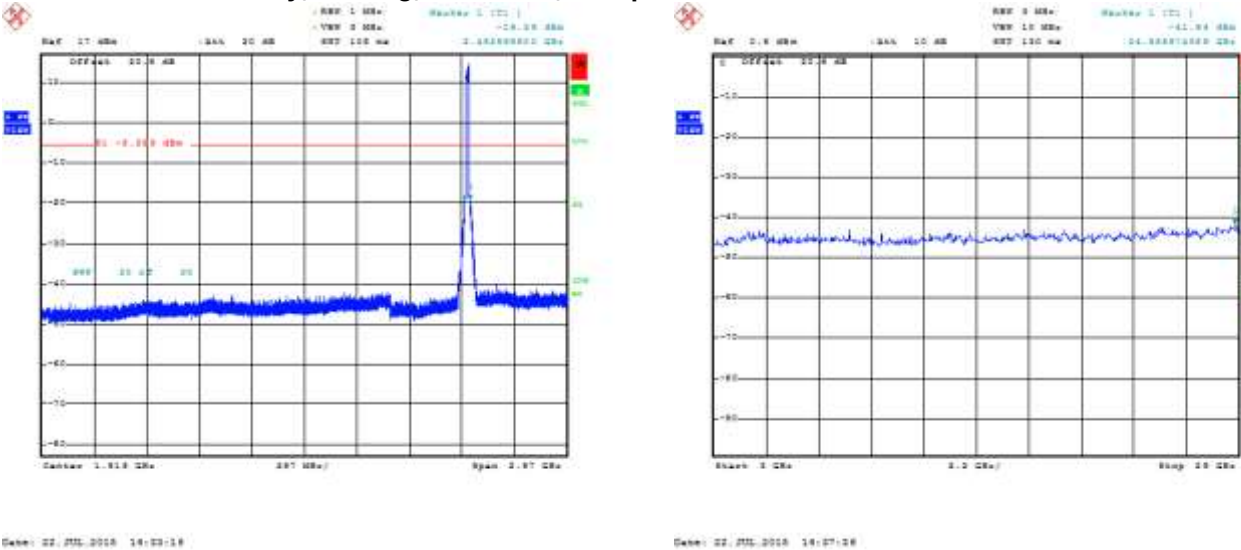
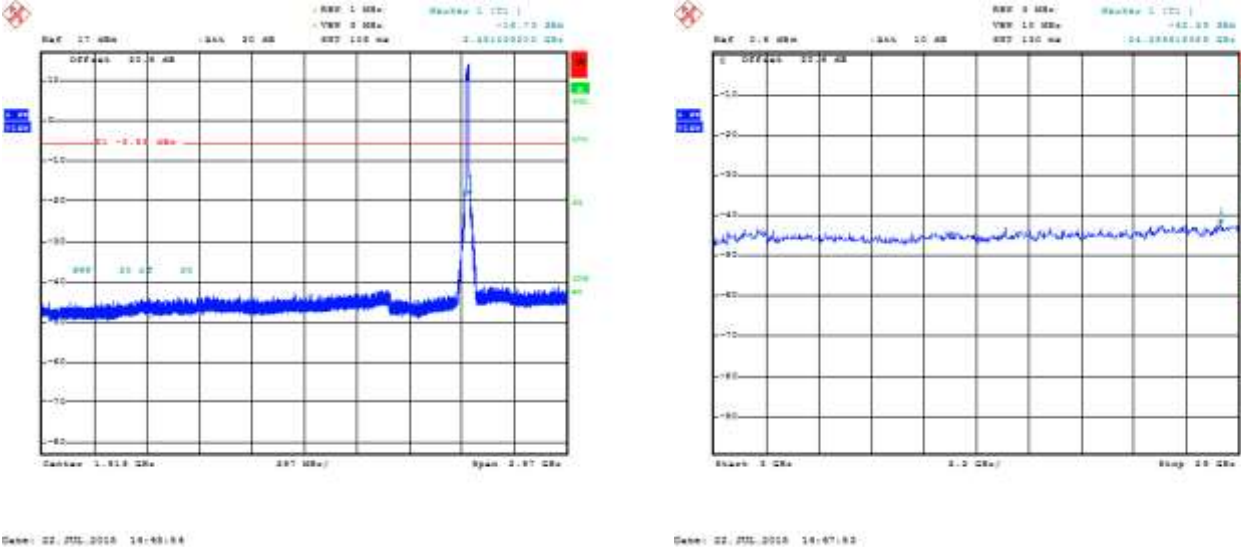


Figure 6-75: Spurious Conducted RF Emissions  
Secondary, 802.11g, Channel 11, 6 Mbps



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 6</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-76: Spurious Conducted RF Emissions  
Secondary, 802.11n, Channel 1, MCS 0

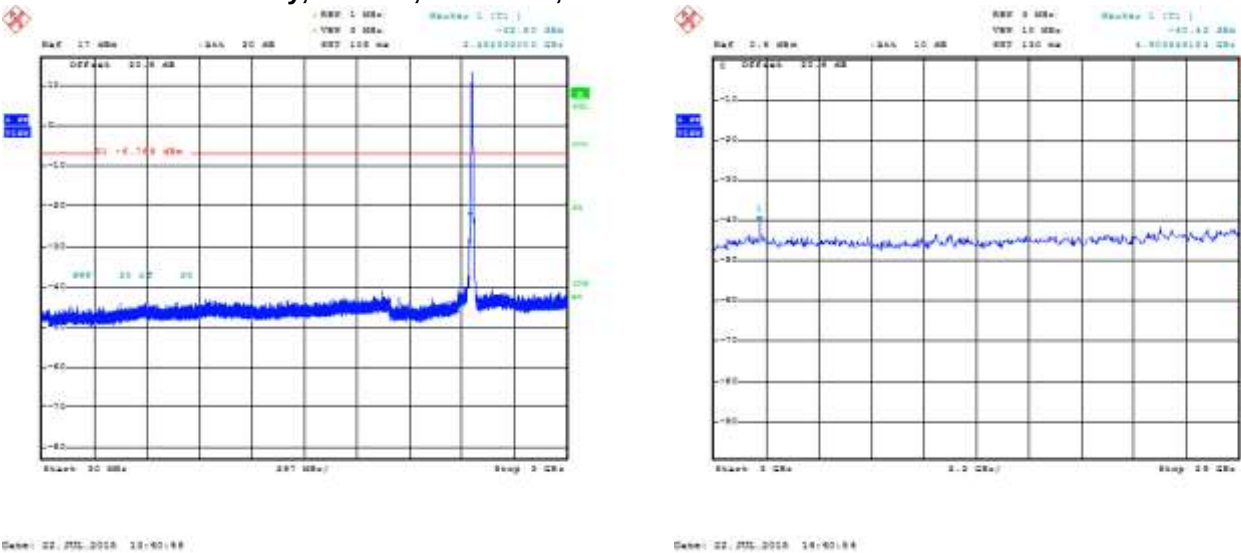
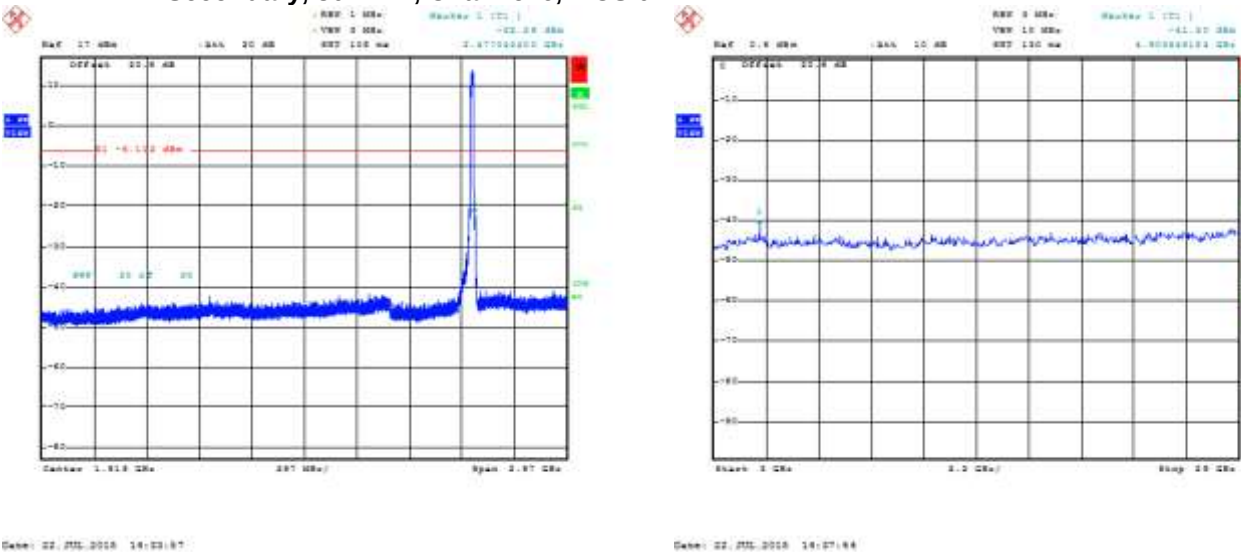


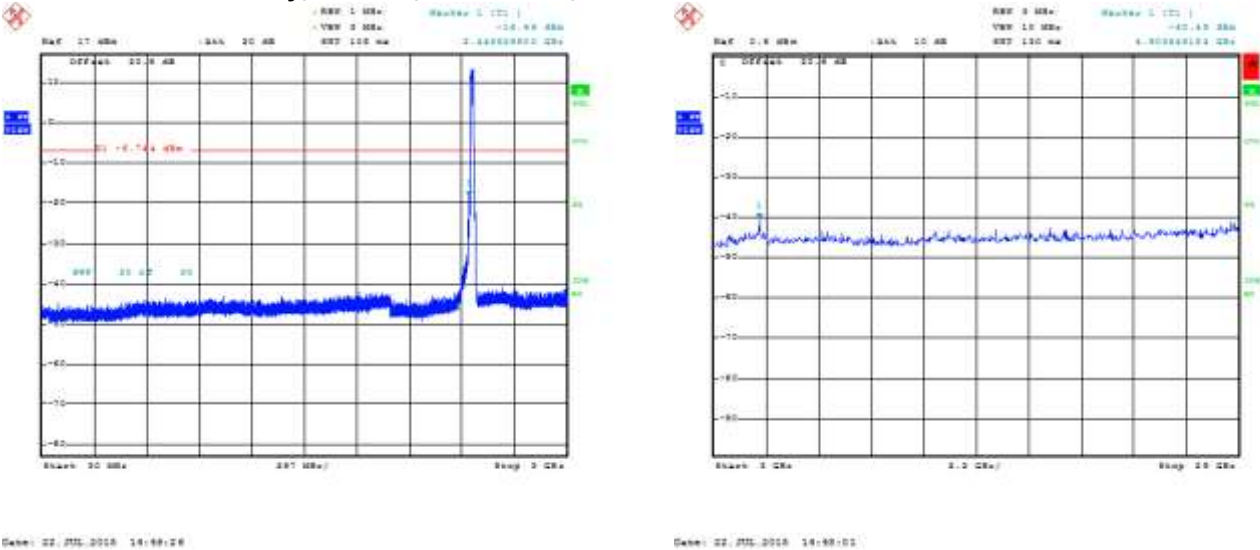
Figure 6-77: Spurious Conducted RF Emissions  
Secondary, 802.11n, Channel 6, MCS 0



|                                                                                   |                                                                                                   |                                                         |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 6</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11b/g/n RF Conducted Emission Test Results cont'd

Figure 6-78: Spurious Conducted RF Emissions  
Secondary, 802.11n, Channel 11, MCS 0



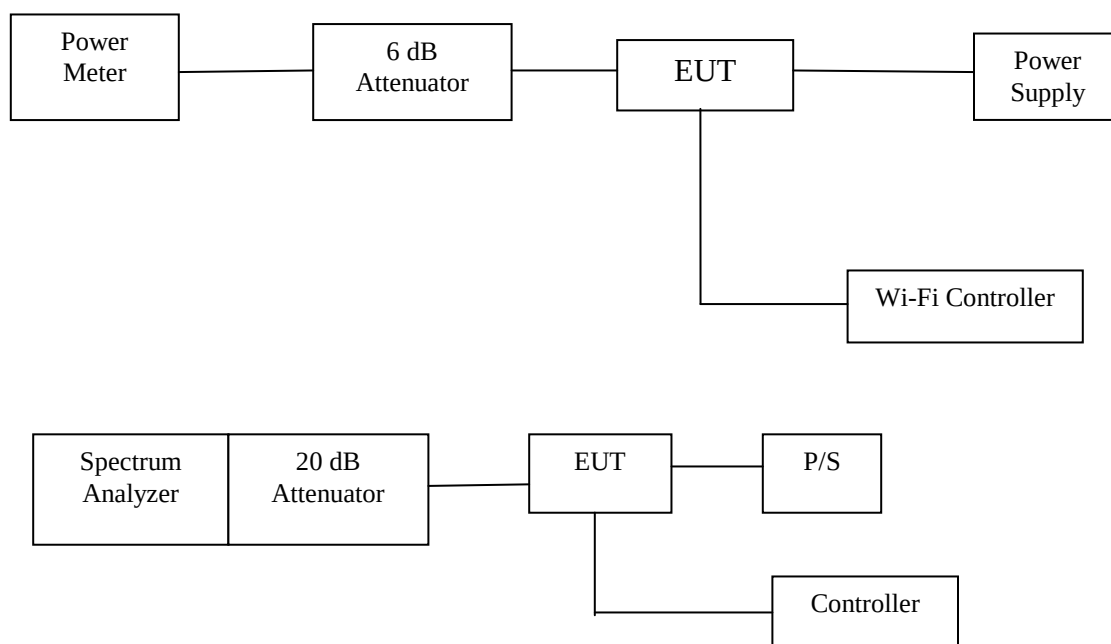
|                                                                                   |                                                                                                      |                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, 2015                                                 | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## APPENDIX 7 – 802.11a/n CONDUCTED EMISSIONS TEST DATA/PLOTS

|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## 802.11a/n RF Conducted Emission Test Results

### Test Setup Diagram



A reference offset of 8.9 dB was applied to the spectrum analyzer and 7.4 dB to the Power Meter reference level for the attenuators and coaxial cable loss in the test circuit.

Date of test: August 20, and September 28, 2015  
The measurements were performed by Landon Martin.

The environmental test conditions were:      Temperature:            23.6 °C  
                                                                          Relative Humidity:      62.90 %

|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11a RF Conducted Emission Test Results cont'd

#### **6 dB Bandwidth**

The EUT met the requirements of the 6 dB bandwidth as per 47 CFR 15.247(a) (2) and RSS-247. Channels 36, 48, 64, 100, 140, and 165 were measured at 6 Mbps each for 802.11a mode.

| Channel | Data Rate | Limit (kHz) | Measured Level Primary Antenna (MHz) | Measured Level Secondary Antenna (MHz) |
|---------|-----------|-------------|--------------------------------------|----------------------------------------|
| 36      | 6 Mbps    | ≥ 500       | 16.38                                | <b>16.42</b>                           |
| 48      | 6 Mbps    | ≥ 500       | 16.40                                | 16.26                                  |
| 64      | 6 Mbps    | ≥ 500       | 16.26                                | 16.40                                  |
| 100     | 6 Mbps    | ≥ 500       | 16.36                                | 16.38                                  |
| 140     | 6 Mbps    | ≥ 500       | 16.38                                | 16.12                                  |
| 165     | 6 Mbps    | ≥ 500       | 16.38                                | 16.22                                  |

See figures 7-1 to 7-12 for the plots of the 6 dB bandwidth measurements for Channel 36, 48, 64, 100, 140, and 165 at 6 Mbps each for 802.11a mode

|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11n RF Conducted Emission Test Results

#### **6 dB Bandwidth**

The EUT met the requirements of the 6 dB bandwidth as per 47 CFR 15.247(a) (2) and RSS-247. Channels 36, 64, 140, 100 and 165 were measured at MCS 0 each for 802.11n mode.

#### **20 MHz Bandwidth**

| Channel | Data Rate | Limit (kHz) | Measured Level Primary Antenna (MHz) | Measured Level Secondary Antenna (MHz) |
|---------|-----------|-------------|--------------------------------------|----------------------------------------|
| 36      | MCS0      | ≥ 500       | 17.60                                | <b>17.62</b>                           |
| 64      | MCS0      | ≥ 500       | 17.42                                | <b>17.62</b>                           |
| 100     | MCS0      | ≥ 500       | <b>17.62</b>                         | 17.50                                  |
| 140     | MCS0      | ≥ 500       | 17.60                                | 17.60                                  |
| 165     | MCS0      | ≥ 500       | 17.60                                | <b>17.62</b>                           |

#### **40 MHz Bandwidth**

| Channel | Data Rate | Limit (kHz) | Measured Level Primary Antenna (MHz) | Measured Level Secondary Antenna (MHz) |
|---------|-----------|-------------|--------------------------------------|----------------------------------------|
| 36      | MCS0      | ≥ 500       | <b>36.40</b>                         | <b>36.40</b>                           |
| 64      | MCS0      | ≥ 500       | 36.32                                | 36.20                                  |
| 100     | MCS0      | ≥ 500       | 36.32                                | 36.20                                  |
| 140     | MCS0      | ≥ 500       | 36.28                                | 36.32                                  |
| 161     | MCS0      | ≥ 500       | 36.04                                | 36.40                                  |

See figures 7-13 to 7-32 for the plots of the 6 dB bandwidth measurements for Channel 36, 64, 140, 100 and 161 at MCS 0 each for 802.11n mode.

|                                                                                   |                                                                          |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

APPENDIX 7

802.11a RF Conducted Emission Test Results cont'd

Figure 7-1: 6 dB Bandwidth  
Primary, 802.11a, Channel 36, 6 Mbps

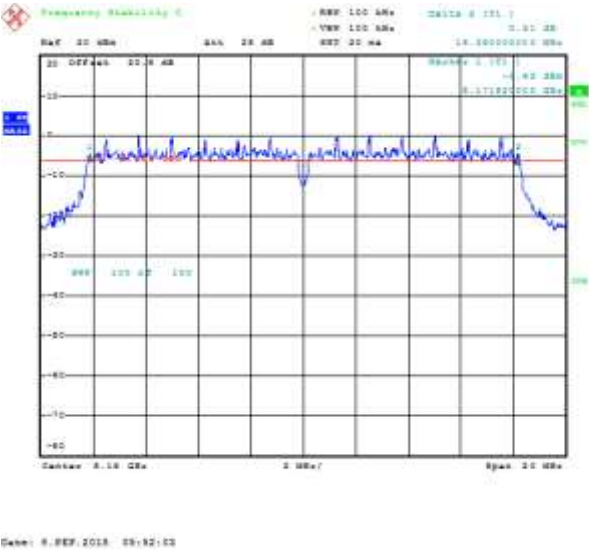


Figure 7-2: 6 dB Bandwidth  
Primary, 802.11a, Channel 48, 6 Mbps

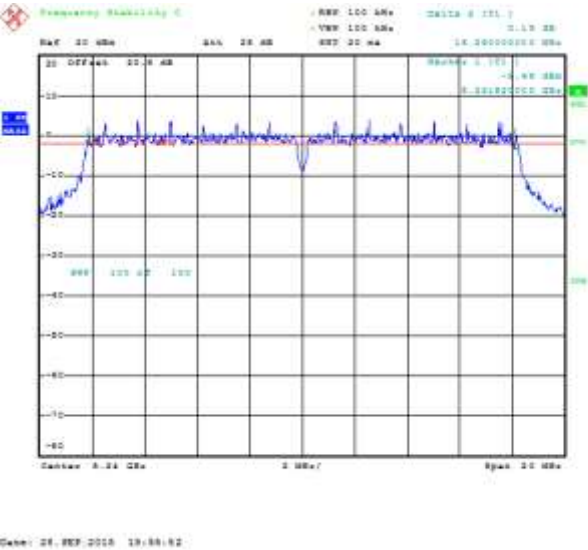


Figure 7-3: 6 dB Bandwidth  
Primary, 802.11a, Channel 64, 6 Mbps

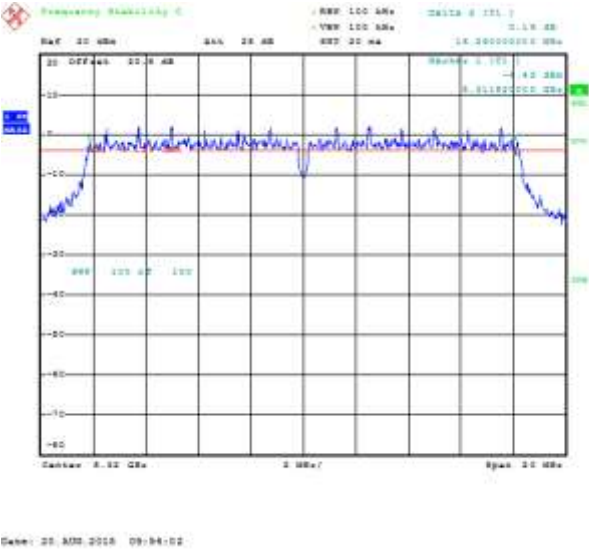
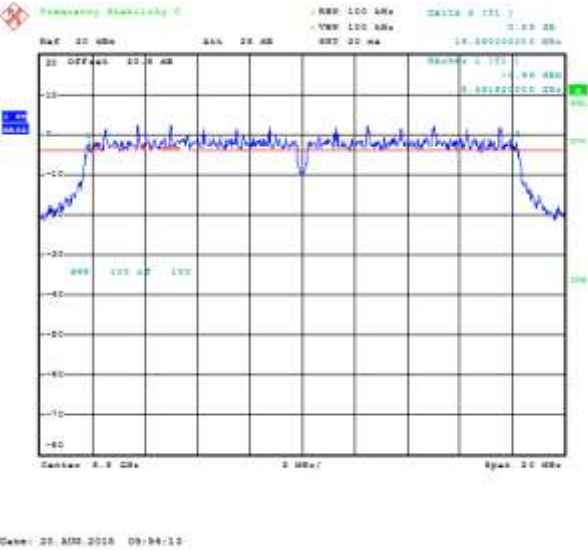


Figure 7-4: 6 dB Bandwidth  
Primary, 802.11a, Channel 100, 6 Mbps



|                                                                                   |                                                                          |                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                                                                                                                                                      |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       |                                                                          | <div style="text-align: center;"><b>APPENDIX 7</b></div> <div> <b>Dates of Test:</b><br/>July 22 – September 8, and September 28, 2015 </div> <div> <b>FCC ID:</b> L6ARHK210LW<br/> <b>IC:</b> 2503A-RHK210LW </div> |

802.11a RF Conducted Emission Test Results cont'd

Figure 7-5: 6 dB Bandwidth  
Primary, 802.11a, Channel 140, 6 Mbps

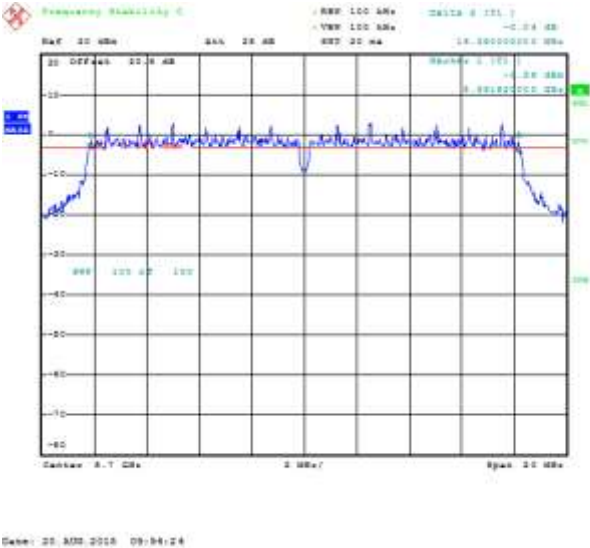


Figure 7-6: 6 dB Bandwidth  
Primary, 802.11a, Channel 165, 6 Mbps

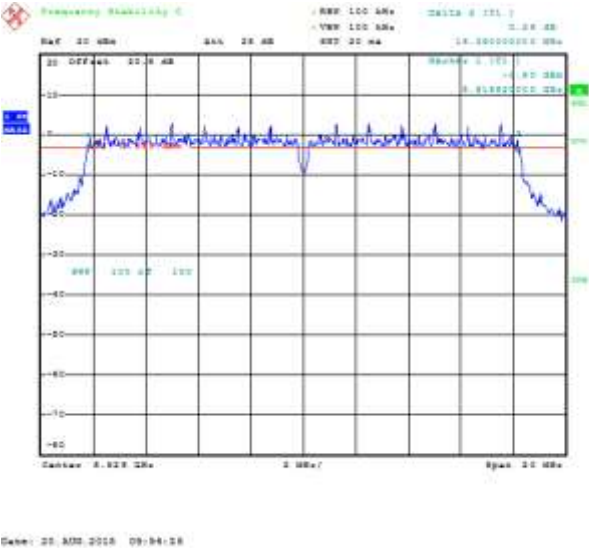


Figure 7-7: 6 dB Bandwidth  
Secondary, 802.11a, Channel 36, 6 Mbps

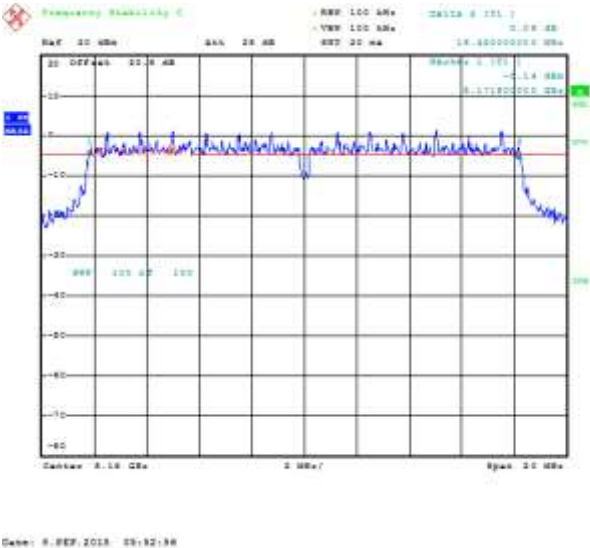


Figure 7-8: 6 dB Bandwidth  
Secondary, 802.11a, Channel 48, 6 Mbps



|                                                                                   |                                                                          |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

APPENDIX 7

802.11a RF Conducted Emission Test Results cont'd

Figure 7-9: 6 dB Bandwidth  
Secondary, 802.11a, Channel 64, 6 Mbps

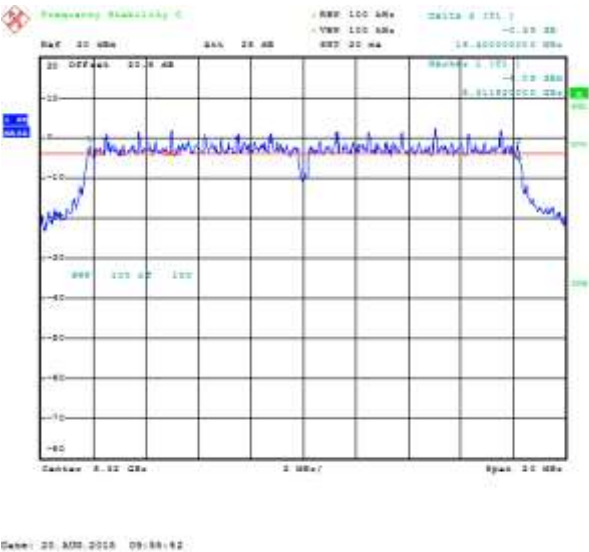


Figure 7-10: 6 dB Bandwidth  
Secondary, 802.11a, Channel 100, 6 Mbps

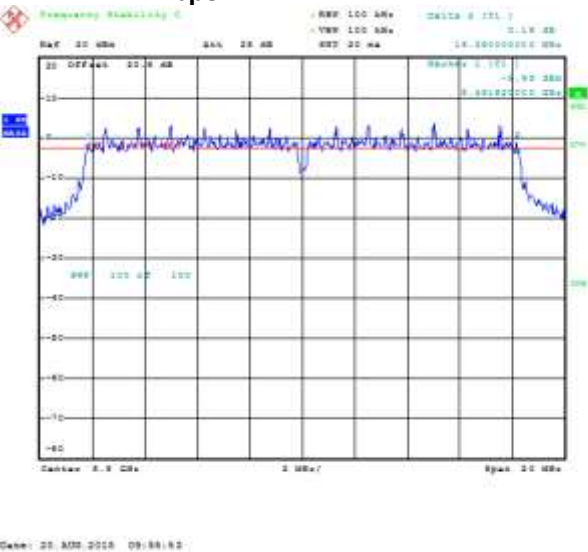


Figure 7-11: 6 dB Bandwidth  
Secondary, 802.11a, Channel 140, 6 Mbps

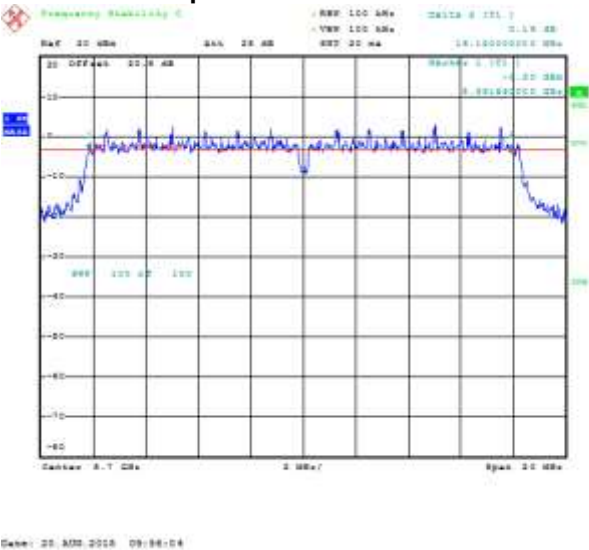
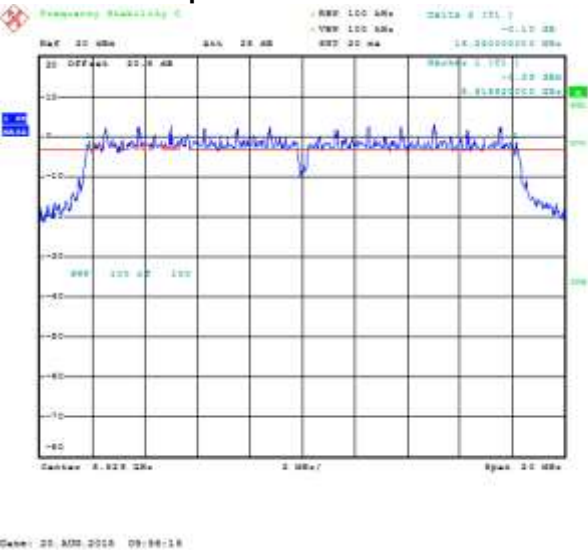


Figure 7-12: 6 dB Bandwidth  
Secondary, 802.11a, Channel 165, 6 Mbps



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 7</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

20 MHz Bandwidth

Figure 7-13: 6 dB Bandwidth  
Primary, 802.11n, Channel 36, MCS 0

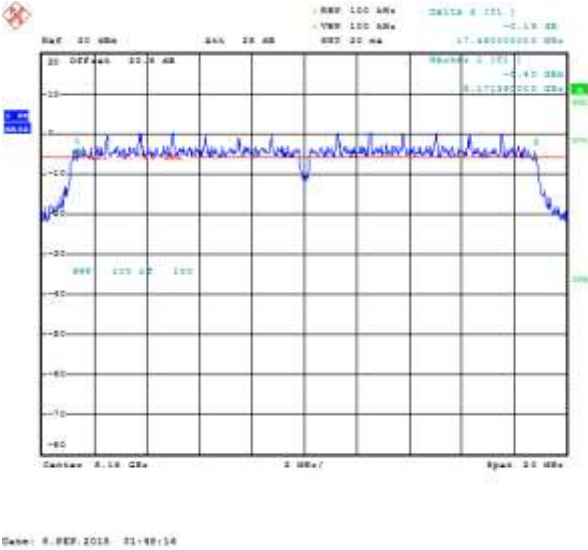


Figure 7-14: 6 dB Bandwidth  
Primary, 802.11n, Channel 64, MCS 0



Figure 7-15: 6 dB Bandwidth  
Primary, 802.11n, Channel 100, MCS 0



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 7</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

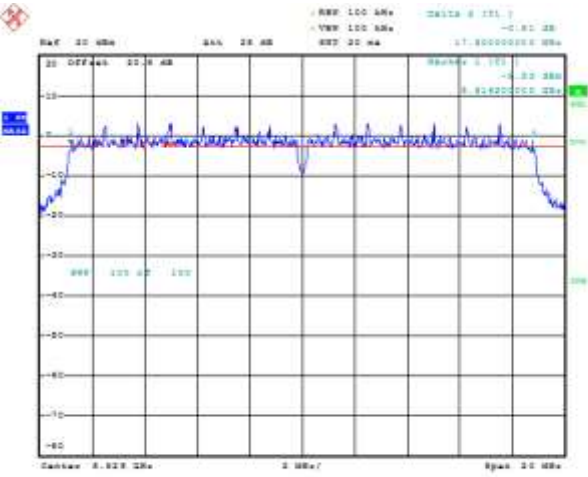
802.11n RF Conducted Emission Test Results cont'd

Figure 7-16: 6 dB Bandwidth  
Primary, 802.11n, Channel 140, MCS 0



Date: 20, Sep 2015 09:40:58

Figure 7-17: 6 dB Bandwidth  
Primary, 802.11n, Channel 165, MCS 0



Date: 20, Sep 2015 09:41:00

|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

Figure 7-18: 6 dB Bandwidth  
Secondary, 802.11n, Channel 36, MCS 0

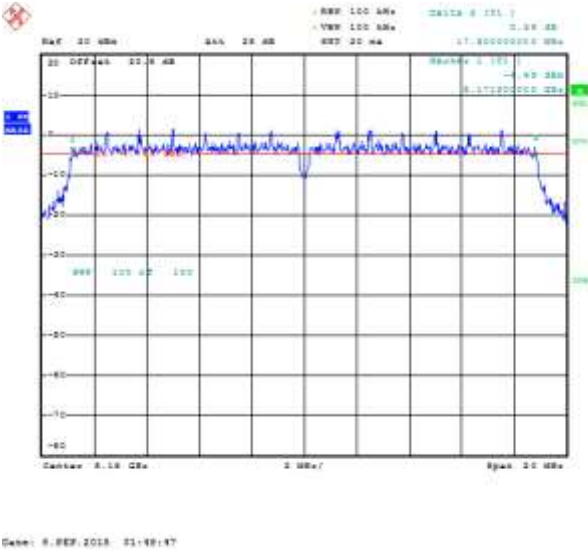


Figure 7-19: 6 dB Bandwidth  
Secondary, 802.11n, Channel 64, MCS 0

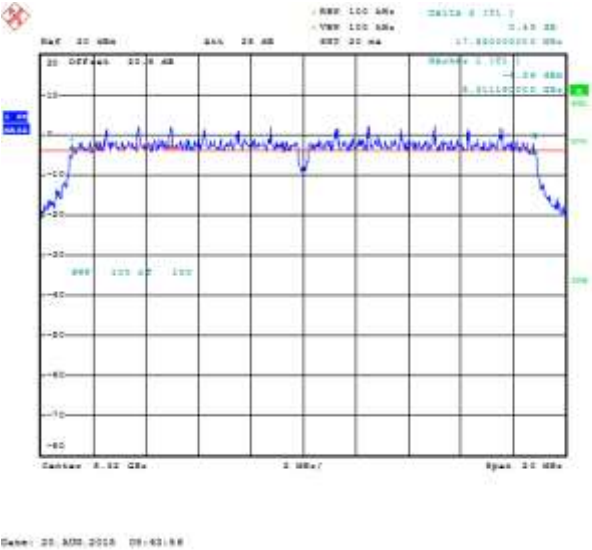
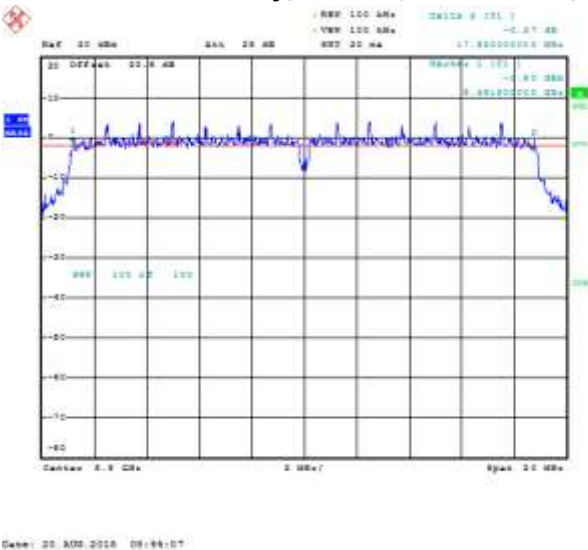


Figure 7-20: 6 dB Bandwidth  
Secondary, 802.11n, Channel 100, MCS 0



|                                                                                   |                                                                                                   |                                                         |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

Figure 7-21: 6 dB Bandwidth  
Secondary, 802.11n, Channel 140, MCS 0

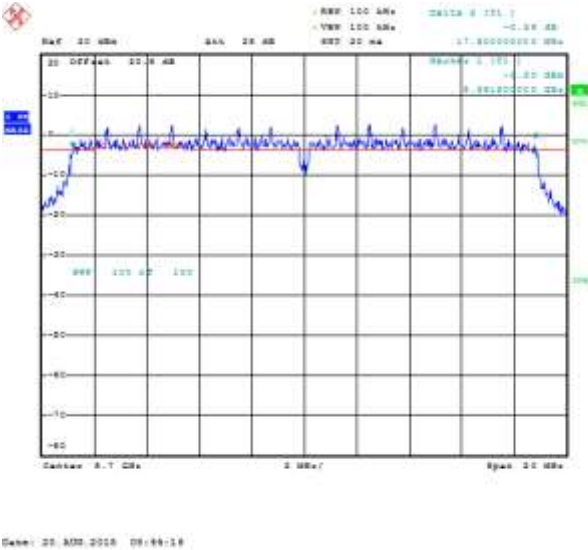
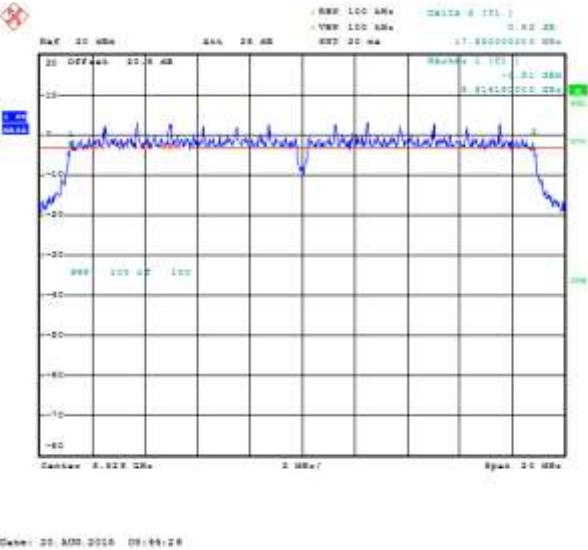


Figure 7-22: 6 dB Bandwidth  
Secondary, 802.11n, Channel 165, MCS 0



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 7</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

40 MHz Bandwidth

Figure 7-23: 6 dB Bandwidth  
Primary, 802.11n, Channel 36, MCS 0

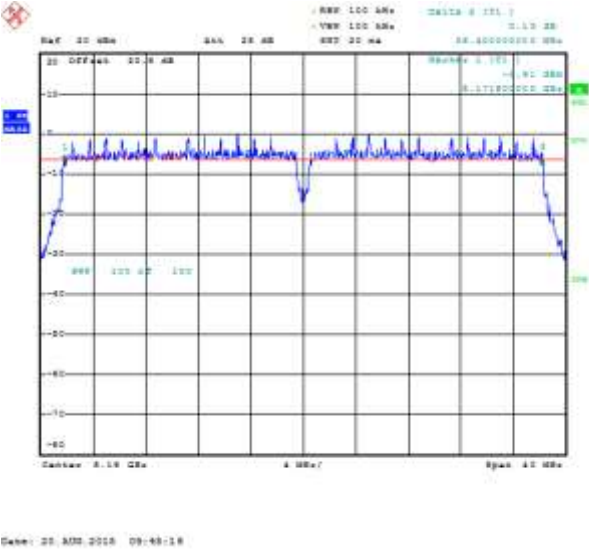
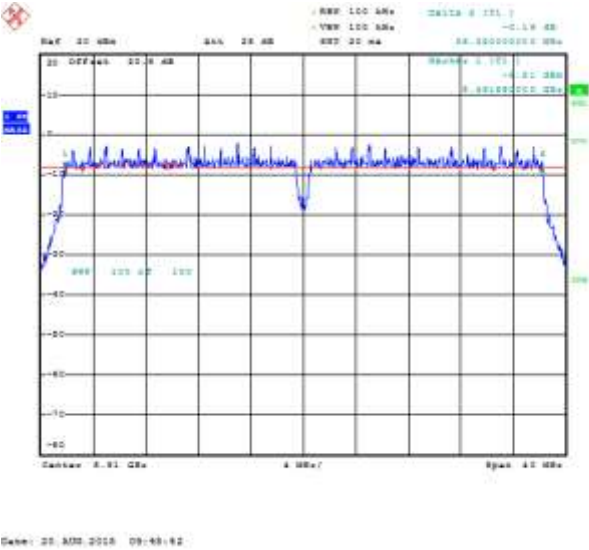


Figure 7-24: 6 dB Bandwidth  
Primary, 802.11n, Channel 64, MCS 0



Figure 7-25: 6 dB Bandwidth  
Primary, 802.11n, Channel 100, MCS 0



|                                                                                   |                                                                                                |                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) <div>APPENDIX 7</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                         | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

Figure 7-26: 6 dB Bandwidth  
Primary, 802.11n, Channel 140, MCS 0

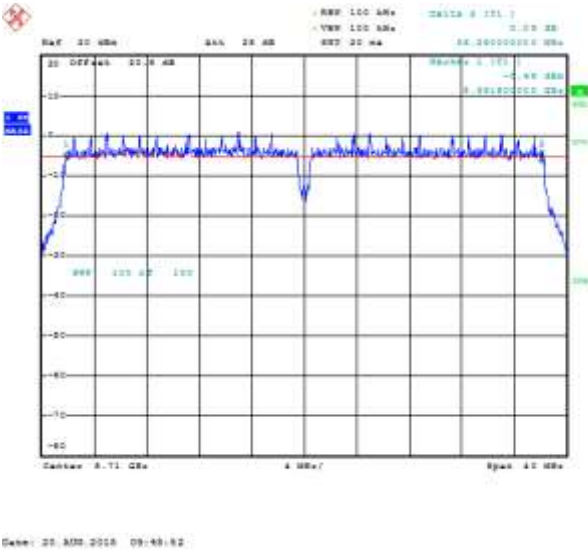
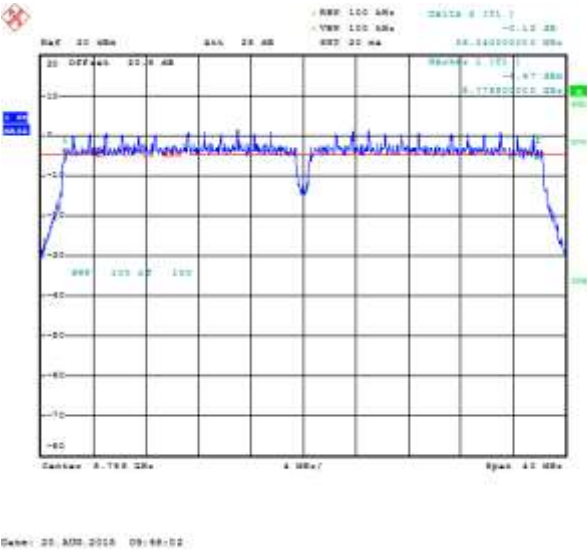


Figure 7-27: 6 dB Bandwidth  
Primary, 802.11n, Channel 161, MCS 0



|                                                                                   |                                                                          |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

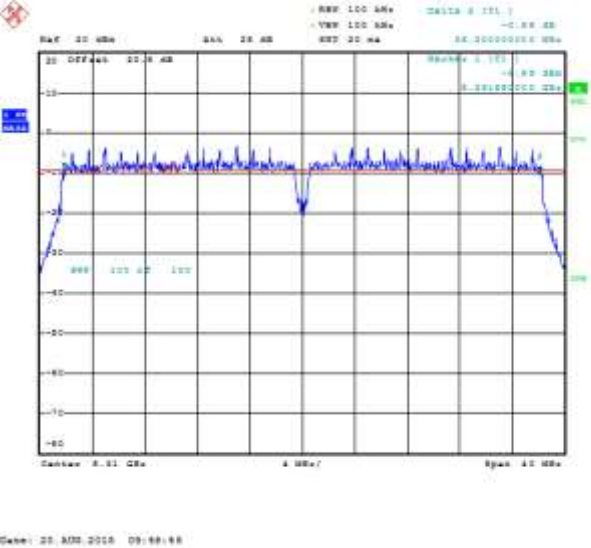
**APPENDIX 7**

802.11n RF Conducted Emission Test Results cont'd

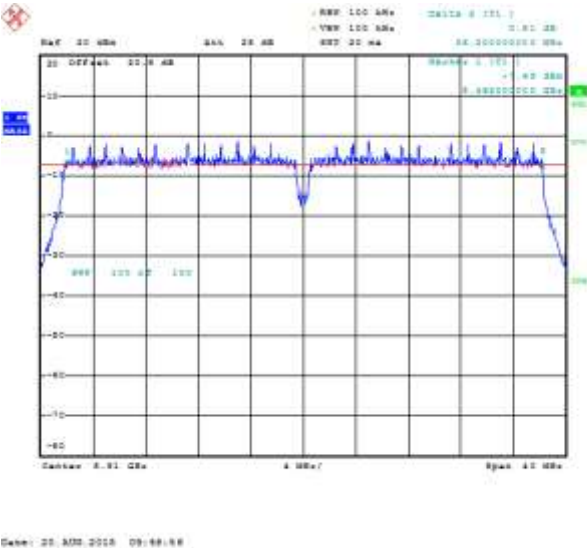
**Figure 7-28: 6 dB Bandwidth**  
Secondary, 802.11n, Channel 36, MCS 0



**Figure 7-29: 6 dB Bandwidth**  
Secondary, 802.11n, Channel 64, MCS 0



**Figure 7-30: 6 dB Bandwidth**  
Secondary, 802.11n, Channel 100, MCS 0



|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

Figure 7-31: 6 dB Bandwidth  
Secondary, 802.11n, Channel 140, MCS 0

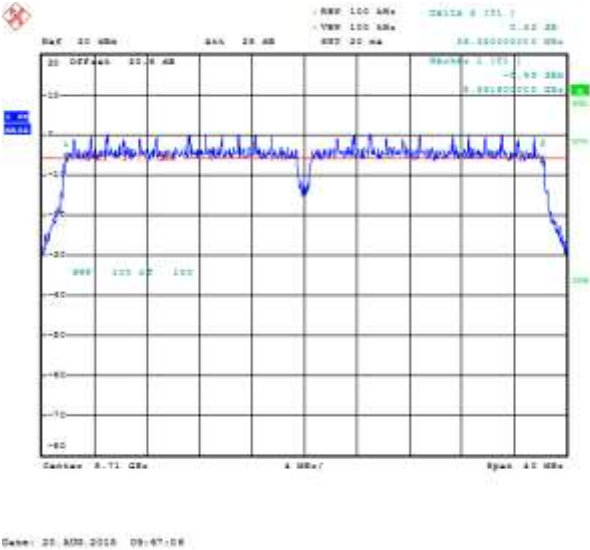
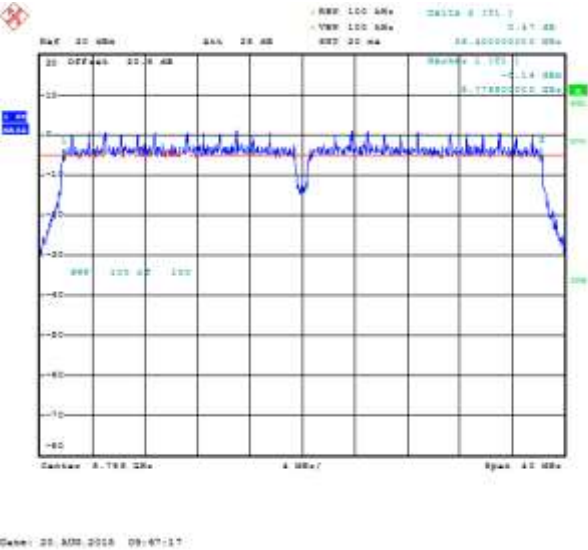


Figure 7-32: 6 dB Bandwidth  
Secondary, 802.11n, Channel 161, MCS 0



|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11a RF Conducted Emission Test Results cont'd

#### **Maximum Conducted Output Power**

The EUT met the requirements of the maximum conducted output power of class 2 as per 47 CFR 15.407 and RSS-247. Channels 36, 48, 64, 100, 140 and 165 were measured for 802.11a mode using an Agilent power meter, model N1911A with model N1921A power sensor. A reference offset of 8.9 dB was applied to the power meter reference level for the coaxial cable loss and attenuators in the test circuit.

#### SISO Primary Antenna

| Channel | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|-----------|------------------|----------------------|---------------------|
| 36      | 6 Mbps    | < 250.0          | 12.32                | 17.06               |
| 48      | 6 Mbps    | < 250.0          | 15.20                | 33.11               |
| 64      | 6 Mbps    | < 250.0          | 13.93                | 24.72               |
| 100     | 6 Mbps    | < 250.0          | 14.37                | 27.35               |
| 140     | 6 Mbps    | < 250.0          | 14.66                | 29.24               |
| 165     | 6 Mbps    | < 1000           | 14.70                | 29.51               |

#### SISO Secondary Antenna

| Channel | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|-----------|------------------|----------------------|---------------------|
| 36      | 6 Mbps    | < 250.0          | 13.36                | 21.68               |
| 48      | 6 Mbps    | < 250.0          | 15.50                | 35.48               |
| 64      | 6 Mbps    | < 250.0          | 13.62                | 23.01               |
| 100     | 6 Mbps    | < 250.0          | 14.75                | 29.85               |
| 140     | 6 Mbps    | < 250.0          | 13.73                | 23.60               |
| 165     | 6 Mbps    | < 1000           | 14.26                | 26.67               |

|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11a RF Conducted Emission Test Results cont'd

#### 2TX//CDD Primary Antenna

| Channel | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|-----------|------------------|----------------------|---------------------|
| 36      | 6 Mbps    | < 250.0          | 12.32                | 17.06               |
| 48      | 6 Mbps    | < 250.0          | 15.50                | 35.48               |
| 64      | 6 Mbps    | < 250.0          | 13.97                | 24.95               |
| 100     | 6 Mbps    | < 250.0          | 15.05                | 31.99               |
| 140     | 6 Mbps    | < 250.0          | 13.82                | 24.10               |
| 165     | 6 Mbps    | < 1000           | 14.41                | 27.61               |

#### 2TX//CDD Secondary Antenna

| Channel | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|-----------|------------------|----------------------|---------------------|
| 36      | 6 Mbps    | < 250.0          | 13.35                | 21.63               |
| 48      | 6 Mbps    | < 250.0          | 15.15                | 32.73               |
| 64      | 6 Mbps    | < 250.0          | 14.13                | 25.88               |
| 100     | 6 Mbps    | < 250.0          | 14.54                | 28.44               |
| 140     | 6 Mbps    | < 250.0          | 15.01                | 31.70               |
| 165     | 6 Mbps    | < 1000           | 14.81                | 30.27               |

#### 2TX/CDD Sum

| Channel | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|-----------|------------------|----------------------|---------------------|
| 36      | 6 Mbps    | < 250.0          | 15.88                | 38.69               |
| 48      | 6 Mbps    | < 250.0          | <b>18.34</b>         | <b>68.22</b>        |
| 64      | 6 Mbps    | < 250.0          | 17.06                | 50.83               |
| 100     | 6 Mbps    | < 250.0          | 17.81                | 60.43               |
| 140     | 6 Mbps    | < 250.0          | 17.47                | 55.79               |
| 165     | 6 Mbps    | < 1000           | 17.62                | 57.87               |

|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## 802.11n RF Conducted Emission Test Results

### Maximum Conducted Output Power

The EUT met the requirements of the maximum conducted output power of class 2 as per 47 CFR 15.407 and RSS-247. Channels 36, 64, 100, 140 and 165 were measured for 802.11n mode using an Agilent power meter, model N1911A with model N1921A power sensor. A reference offset of 8.9 dB was applied to the power meter reference level for the coaxial cable loss and attenuators in the test circuit.

### 20 MHz Bandwidth

#### SISO Primary Antenna

| Channel | Data Rate | Class 2 Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|-----------|--------------------|----------------------|---------------------|
| 36      | MCS0      | < 250.0            | 12.01                | 15.89               |
| 64      | MCS0      | < 250.0            | 14.17                | 26.12               |
| 100     | MCS0      | < 250.0            | 14.65                | 29.17               |
| 140     | MCS0      | < 250.0            | 14.61                | 28.91               |
| 165     | MCS0      | < 1000             | 14.73                | 29.72               |

#### SISO Secondary Antenna

| Channel | Data Rate | Class 2 Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|-----------|--------------------|----------------------|---------------------|
| 36      | MCS0      | < 250.0            | 13.16                | 20.70               |
| 64      | MCS0      | < 250.0            | 13.77                | 23.82               |
| 100     | MCS0      | < 250.0            | 15.11                | 32.43               |
| 140     | MCS0      | < 250.0            | 13.86                | 24.32               |
| 165     | MCS0      | < 1000             | 14.11                | 25.76               |

|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11n RF Conducted Emission Test Results cont'd

#### MIMO Primary Antenna

| Channel | Data Rate | Class 2 Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|-----------|--------------------|----------------------|---------------------|
| 36      | MCS0      | < 250.0            | 15.02                | 31.77               |
| 64      | MCS0      | < 250.0            | 14.07                | 25.53               |
| 100     | MCS0      | < 250.0            | 14.48                | 28.05               |
| 140     | MCS0      | < 250.0            | 14.89                | 30.83               |
| 165     | MCS0      | < 1000             | 14.55                | 28.51               |

#### MIMO Secondary Antenna

| Channel | Data Rate | Class 2 Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|-----------|--------------------|----------------------|---------------------|
| 36      | MCS0      | < 250.0            | 15.89                | 38.82               |
| 64      | MCS0      | < 250.0            | 13.75                | 23.71               |
| 100     | MCS0      | < 250.0            | 14.90                | 30.90               |
| 140     | MCS0      | < 250.0            | 13.72                | 23.55               |
| 165     | MCS0      | < 1000             | 14.27                | 26.73               |

#### MIMO Sum

| Channel | Data Rate | Class 2 Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|-----------|--------------------|----------------------|---------------------|
| 36      | MCS0      | < 250.0            | <b>18.49</b>         | <b>70.58</b>        |
| 64      | MCS0      | < 250.0            | 16.92                | 49.24               |
| 100     | MCS0      | < 250.0            | 17.71                | 58.96               |
| 140     | MCS0      | < 250.0            | 17.35                | 54.38               |
| 165     | MCS0      | < 1000             | 17.42                | 55.24               |

|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

**40 MHz Bandwidth**

SISO Primary Antenna

| Channel | Data Rate | Class 2 Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|-----------|--------------------|----------------------|---------------------|
| 36      | MCS0      | < 250.0            | 13.65                | 23.17               |
| 64      | MCS0      | < 250.0            | 10.76                | 11.91               |
| 100     | MCS0      | < 250.0            | 11.90                | 15.49               |
| 140     | MCS0      | < 250.0            | 14.78                | 30.06               |
| 165     | MCS0      | < 1000             | 15.04                | 31.92               |

SISO Secondary Antenna

| Channel | Data Rate | Class 2 Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|-----------|--------------------|----------------------|---------------------|
| 36      | MCS0      | < 250.0            | 14.50                | 28.18               |
| 64      | MCS0      | < 250.0            | 10.64                | 11.59               |
| 100     | MCS0      | < 250.0            | 12.32                | 17.06               |
| 140     | MCS0      | < 250.0            | 13.99                | 25.06               |
| 165     | MCS0      | < 1000             | 14.65                | 29.17               |

|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11n RF Conducted Emission Test Results cont'd

#### MIMO Primary Antenna

| Channel | Data Rate | Class 2 Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|-----------|--------------------|----------------------|---------------------|
| 36      | MCS0      | < 250.0            | 11.51                | 14.16               |
| 64      | MCS0      | < 250.0            | 10.67                | 11.67               |
| 100     | MCS0      | < 250.0            | 11.73                | 14.89               |
| 140     | MCS0      | < 250.0            | 14.20                | 26.30               |
| 165     | MCS0      | < 1000             | 14.84                | 30.48               |

#### MIMO Secondary Antenna

| Channel | Data Rate | Class 2 Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|-----------|--------------------|----------------------|---------------------|
| 36      | MCS0      | < 250.0            | 10.62                | 11.53               |
| 64      | MCS0      | < 250.0            | 10.75                | 11.89               |
| 100     | MCS0      | < 250.0            | 11.26                | 13.37               |
| 140     | MCS0      | < 250.0            | 15.08                | 32.21               |
| 165     | MCS0      | < 1000             | 15.40                | 34.67               |

#### MIMO Sum

| Channel | Data Rate | Class 2 Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|-----------|--------------------|----------------------|---------------------|
| 36      | MCS0      | < 250.0            | 14.10                | 25.69               |
| 64      | MCS0      | < 250.0            | 13.72                | 23.55               |
| 100     | MCS0      | < 250.0            | 14.51                | 28.26               |
| 140     | MCS0      | < 250.0            | 17.67                | 58.51               |
| 165     | MCS0      | < 1000             | <b>18.14</b>         | <b>65.15</b>        |

|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11a RF Conducted Emission Test Results cont'd

#### **Band Edge Compliance**

The EUT met the requirements of the band edge compliance as per 47 CFR 15.407 and RSS-247. Channels 36, 64, 100, 140, 149, and 165 were measured at 6 Mbps each for 802.11a mode.

#### Primary Antenna

| Channel | Data Rate | Limit (dBc) | Measured Level (dBc) | Margin (dB) |
|---------|-----------|-------------|----------------------|-------------|
| 36      | 6 Mbps    | < -20       | -42.21               | -22.21      |
| 64      | 6 Mbps    | < -20       | -43.11               | -23.11      |
| 100     | 6 Mbps    | < -20       | -43.05               | -23.05      |
| 140     | 6 Mbps    | < -20       | -42.92               | -22.92      |
| 149     | 6 Mbps    | < -20       | -42.88               | -22.88      |
| 165     | 6 Mbps    | < -20       | -41.21               | -21.21      |

#### Secondary Antenna

| Channel | Data Rate | Limit (dBc) | Measured Level (dBc) | Margin (dB) |
|---------|-----------|-------------|----------------------|-------------|
| 36      | 6 Mbps    | < -20       | -42.88               | -22.88      |
| 64      | 6 Mbps    | < -20       | -43.80               | -23.80      |
| 100     | 6 Mbps    | < -20       | -44.08               | -24.08      |
| 140     | 6 Mbps    | < -20       | -43.04               | -23.04      |
| 149     | 6 Mbps    | < -20       | -38.60               | -18.60      |
| 165     | 6 Mbps    | < -20       | -36.34               | -16.34      |

See figures 7-32 to 7-43 for the plots of the band edge compliance measurements for Channel 36, 64, 100, 140, 149 and 165 at 6 Mbps each for 802.11a mode.

|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## 802.11n RF Conducted Emission Test Results

### **Band Edge Compliance**

The EUT met the requirements of the band edge compliance as per 47 CFR 15.407 and RSS-247. Channels 36, 64, 100, 140, 149 and 165 were measured at MCS 0 each for 802.11n mode.

### **20 MHz bandwidth**

#### Primary Antenna

| Channel | Data Rate | Limit (dBc) | Measured Level (dBc) | Margin (dB) |
|---------|-----------|-------------|----------------------|-------------|
| 36      | 6 Mbps    | < -20       | -40.03               | -20.03      |
| 64      | 6 Mbps    | < -20       | -43.97               | -23.97      |
| 100     | 6 Mbps    | < -20       | -44.20               | -24.20      |
| 140     | 6 Mbps    | < -20       | -43.23               | -23.23      |
| 149     | 6 Mbps    | < -20       | -42.86               | -22.86      |
| 165     | 6 Mbps    | < -20       | -42.30               | -22.30      |

#### Secondary Antenna

| Channel | Data Rate | Limit (dBc) | Measured Level (dBc) | Margin (dB) |
|---------|-----------|-------------|----------------------|-------------|
| 36      | 6 Mbps    | < -20       | -42.17               | -22.17      |
| 64      | 6 Mbps    | < -20       | -43.33               | -23.33      |
| 100     | 6 Mbps    | < -20       | -44.42               | -24.42      |
| 140     | 6 Mbps    | < -20       | -41.49               | -21.49      |
| 149     | 6 Mbps    | < -20       | -40.18               | -20.18      |
| 165     | 6 Mbps    | < -20       | -35.51               | -15.51      |

|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## 802.11n RF Conducted Emission Test Results

### **40 MHz bandwidth**

#### Primary Antenna

| Channel | Data Rate | Limit (dBc) | Measured Level (dBc) | Margin (dB) |
|---------|-----------|-------------|----------------------|-------------|
| 36      | 6 Mbps    | < -20       | -37.69               | -17.69      |
| 64      | 6 Mbps    | < -20       | -38.54               | -18.54      |
| 100     | 6 Mbps    | < -20       | -36.35               | -16.35      |
| 140     | 6 Mbps    | < -20       | -26.18               | -6.18       |
| 149     | 6 Mbps    | < -20       | -30.15               | -10.15      |

#### Secondary Antenna

| Channel | Data Rate | Limit (dBc) | Measured Level (dBc) | Margin (dB) |
|---------|-----------|-------------|----------------------|-------------|
| 36      | 6 Mbps    | < -20       | -37.69               | -17.69      |
| 64      | 6 Mbps    | < -20       | -38.54               | -18.54      |
| 100     | 6 Mbps    | < -20       | -36.35               | -16.35      |
| 140     | 6 Mbps    | < -20       | -26.18               | -6.18       |
| 149     | 6 Mbps    | < -20       | -30.15               | -10.15      |

See figures 7-44 to 7-65 for the plots of the band edge compliance measurements for Channel 36, 64, 100, 140, 149, and 165 at MCS 0 each for 802.11n mode.

|                                                                                   |                                                                             |                                                                                  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015      | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11a RF Conducted Emission Test Results cont'd

Figure 7-32: Band Edge Compliance  
Primary, 802.11a, Channel 36, 6 Mbps

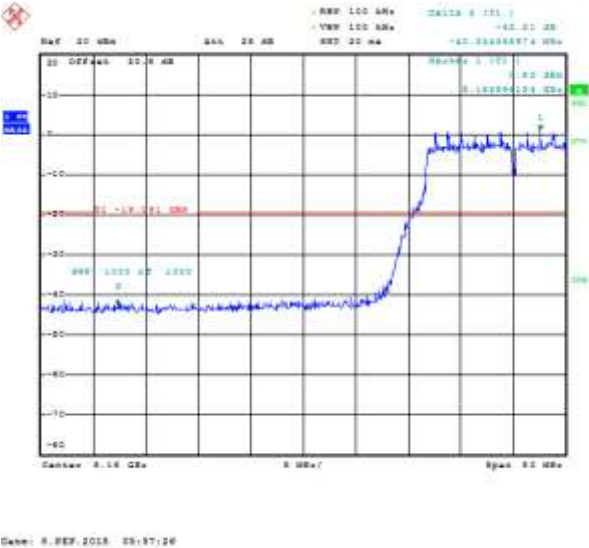


Figure 7-33: Band Edge Compliance  
Primary, 802.11a, Channel 64, 6 Mbps

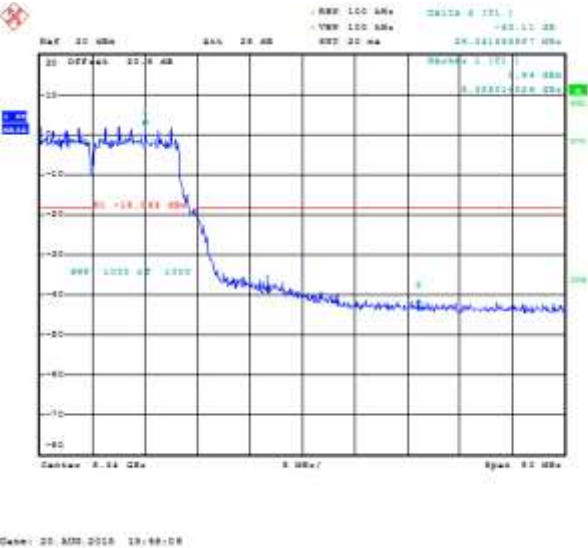


Figure 7-34: Band Edge Compliance  
Primary, 802.11a, Channel 100, 6 Mbps

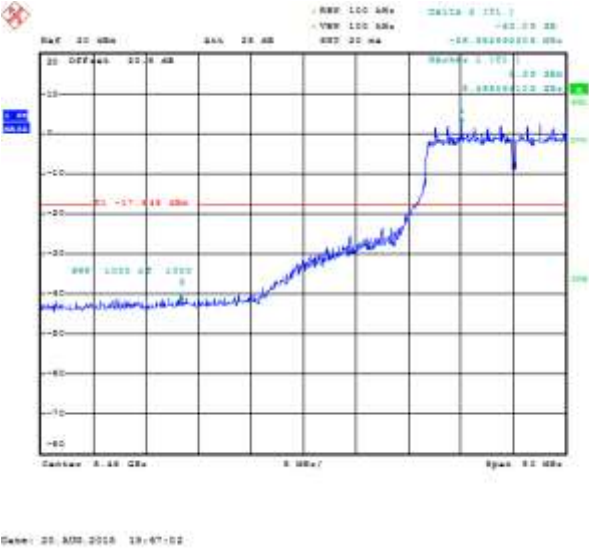
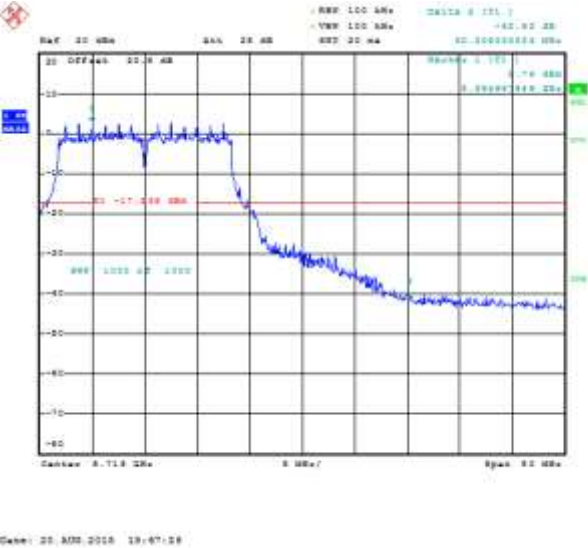


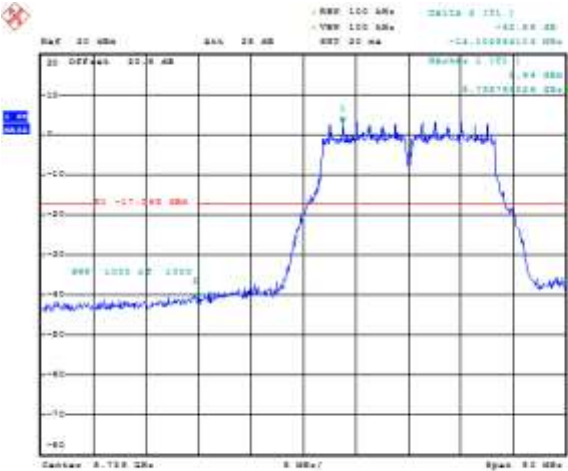
Figure 7-35: Band Edge Compliance  
Primary, 802.11a, Channel 140, 6 Mbps



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

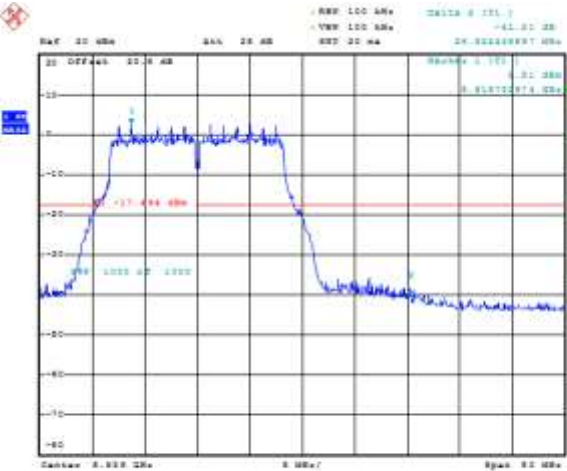
802.11a RF Conducted Emission Test Results cont'd

Figure 7-36: Band Edge Compliance  
Primary, 802.11a, Channel 149, 6 Mbps



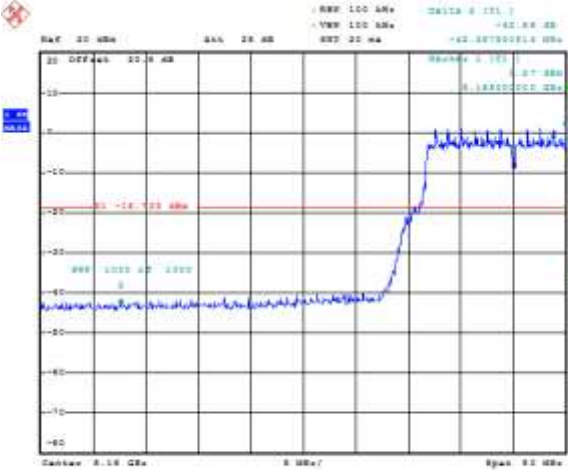
Date: 20. MAR. 2015 19:59:25

Figure 7-37: Band Edge Compliance  
Primary, 802.11a, Channel 165, 6 Mbps



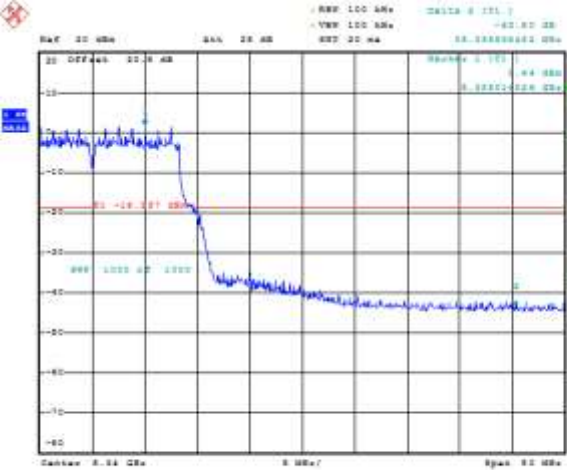
Date: 20. MAR. 2015 19:50:15

Figure 7-38: Band Edge Compliance  
Secondary, 802.11a, Channel 36, 6 Mbps



Date: 8. SEP. 2015 19:59:15

Figure 7-39: Band Edge Compliance  
Secondary, 802.11a, Channel 64, 6 Mbps



Date: 20. MAR. 2015 19:52:15

|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11a RF Conducted Emission Test Results cont'd

Figure 7-40: Band Edge Compliance  
Secondary, 802.11a, Channel 100, 6 Mbps

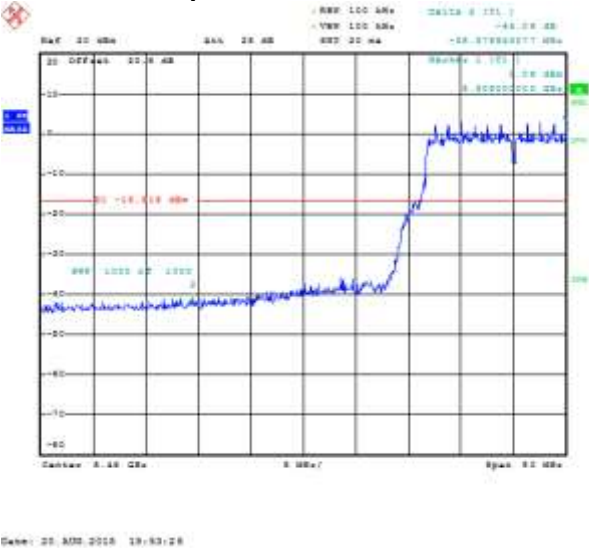


Figure 7-41: Band Edge Compliance  
Secondary, 802.11a, Channel 140, 6 Mbps

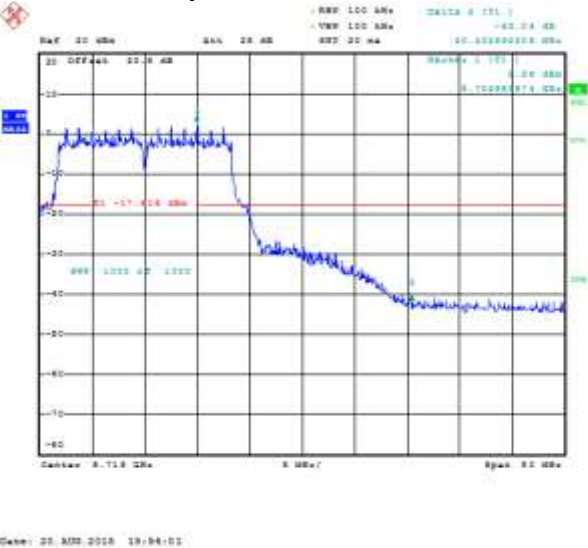


Figure 7-42: Band Edge Compliance  
Secondary, 802.11a, Channel 149, 6 Mbps

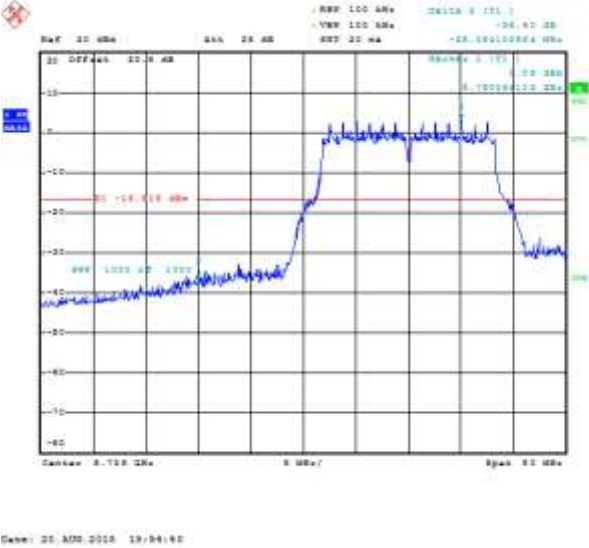
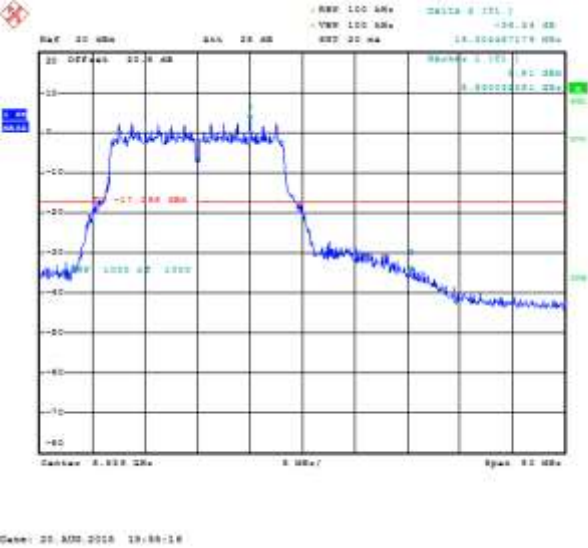


Figure 7-43: Band Edge Compliance  
Secondary, 802.11a, Channel 165, 6 Mbps



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results

20 MHz Bandwidth

Figure 7-44: Band Edge Compliance  
Primary, 802.11n, Channel 36, 6 Mbps

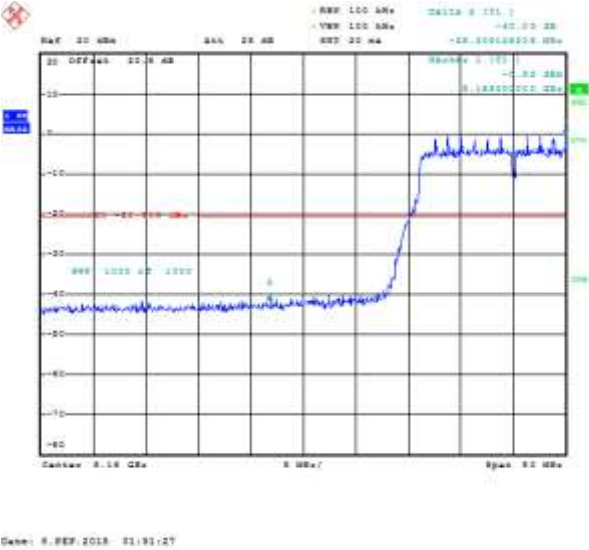


Figure 7-45: Band Edge Compliance  
Primary, 802.11n, Channel 64, 6 Mbps

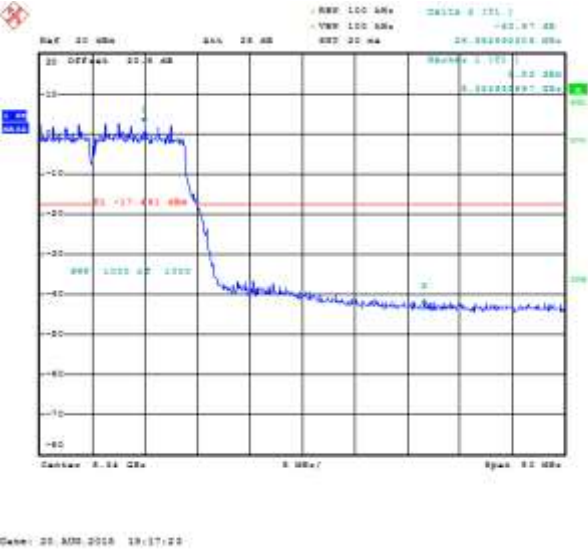


Figure 7-46: Band Edge Compliance  
Primary, 802.11n, Channel 100, 6 Mbps

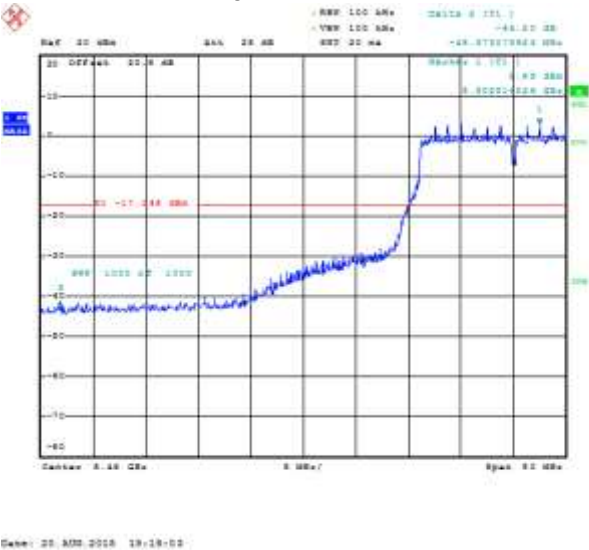
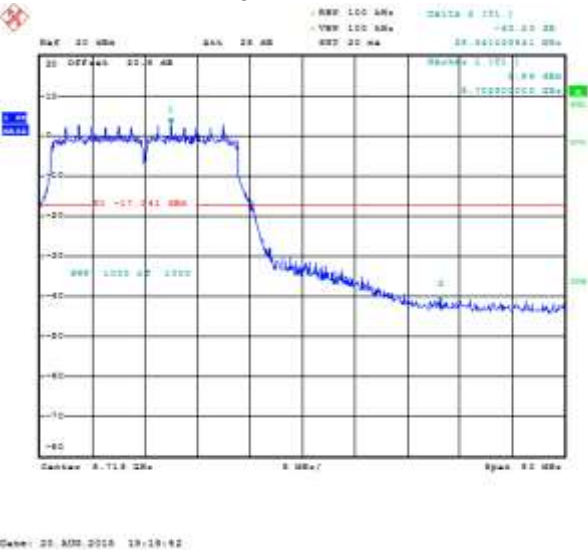


Figure 7-47: Band Edge Compliance  
Primary, 802.11n, Channel 140, 6 Mbps

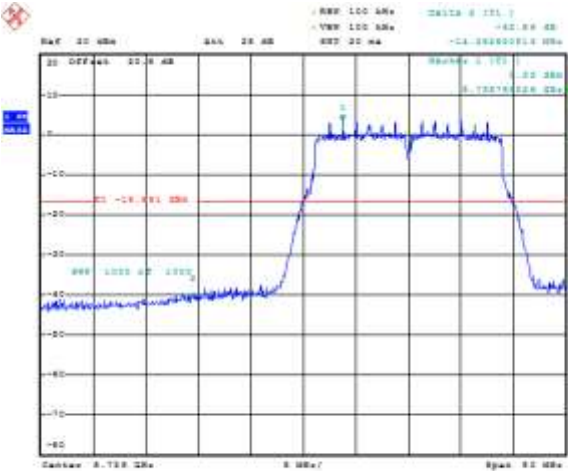


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|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

**APPENDIX 7**

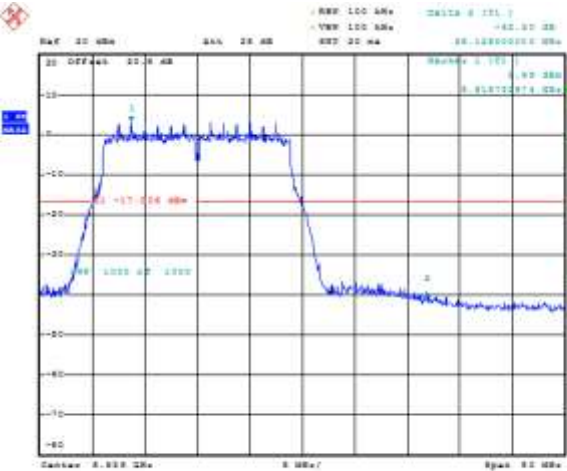
802.11n RF Conducted Emission Test Results cont'd

**Figure 7-48: Band Edge Compliance**  
**Primary, 802.11n, Channel 149, 6 Mbps**



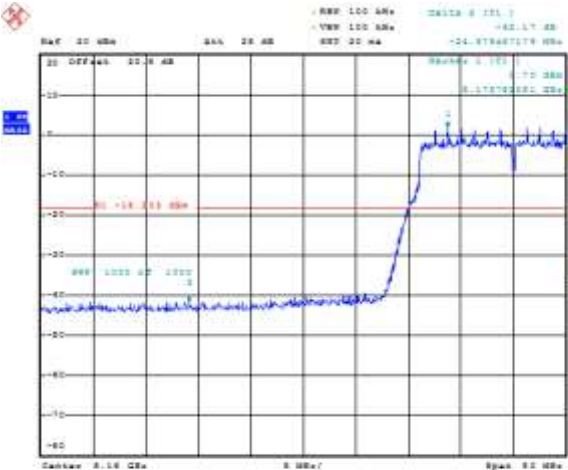
Date: 20. MAR. 2015 19:20:24

**Figure 7-49: Band Edge Compliance**  
**Primary, 802.11n, Channel 165, 6 Mbps**



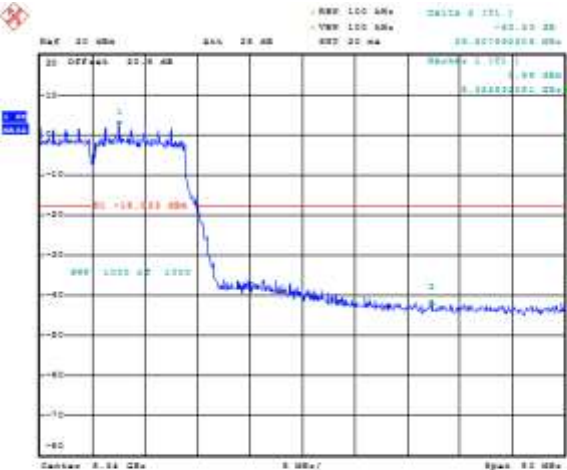
Date: 20. MAR. 2015 19:21:19

**Figure 7-50: Band Edge Compliance**  
**Secondary, 802.11n, Channel 36, 6 Mbps**



Date: 8. SEP. 2015 21:52:12

**Figure 7-51: Band Edge Compliance**  
**Secondary, 802.11n, Channel 64, 6 Mbps**



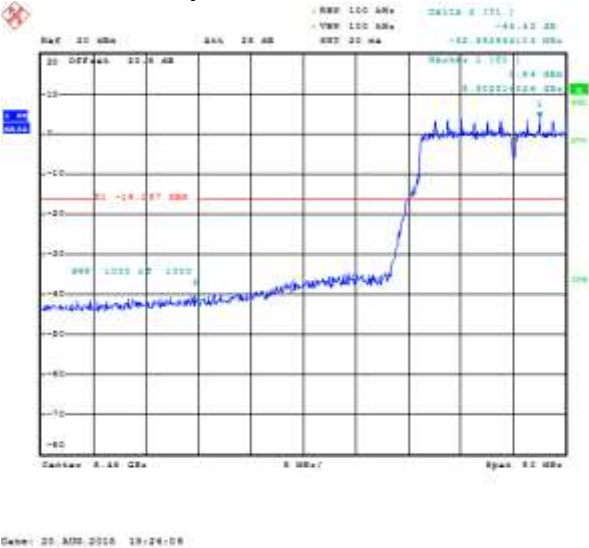
Date: 20. MAR. 2015 19:23:23

|                                                                                   |                                                                          |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

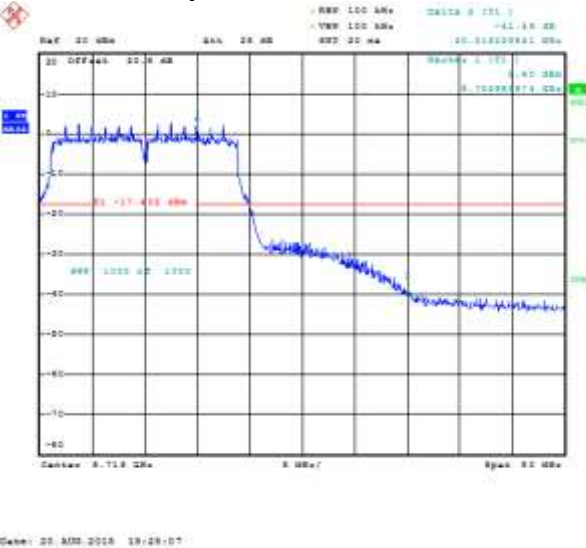
**APPENDIX 7**

802.11n RF Conducted Emission Test Results cont'd

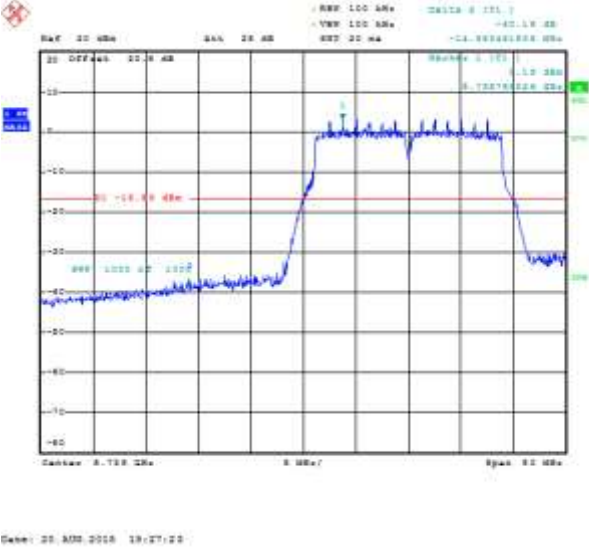
**Figure 7-52: Band Edge Compliance**  
**Secondary, 802.11n, Channel 100, 6 Mbps**



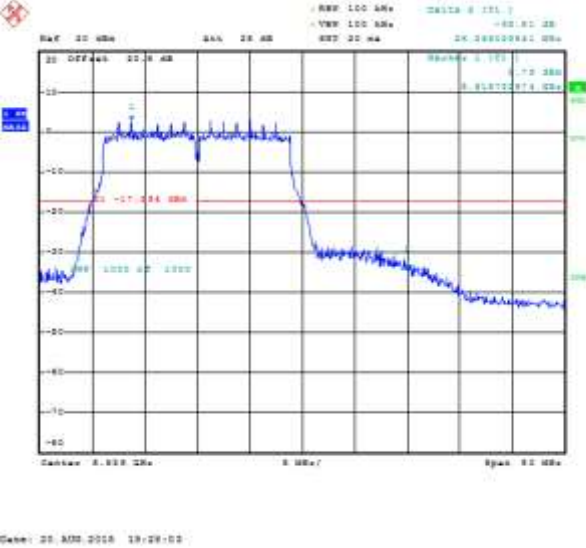
**Figure 7-53: Band Edge Compliance**  
**Secondary, 802.11n, Channel 140, 6 Mbps**



**Figure 7-54: Band Edge Compliance**  
**Secondary, 802.11n, Channel 149, 6 Mbps**



**Figure 7-55: Band Edge Compliance**  
**Secondary, 802.11n, Channel 165, 6 Mbps**



|                                                                                   |                                                                             |                                                                                  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015      | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

40 MHz Bandwidth

Figure 7-56: Band Edge Compliance  
Primary, 802.11n, Channel 36, 6 Mbps

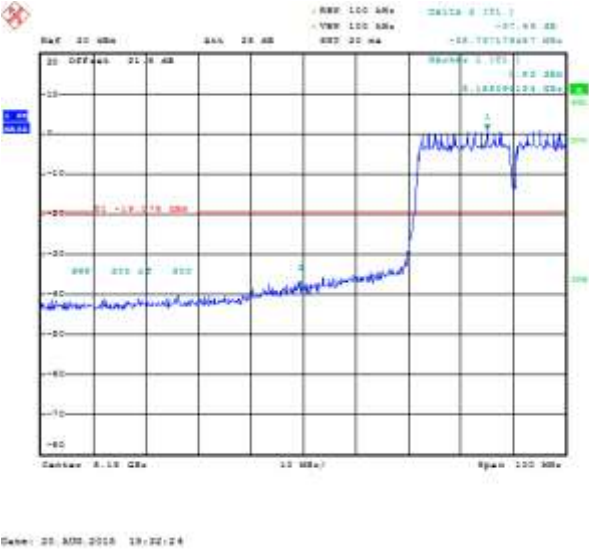


Figure 7-57: Band Edge Compliance  
Primary, 802.11n, Channel 64, 6 Mbps

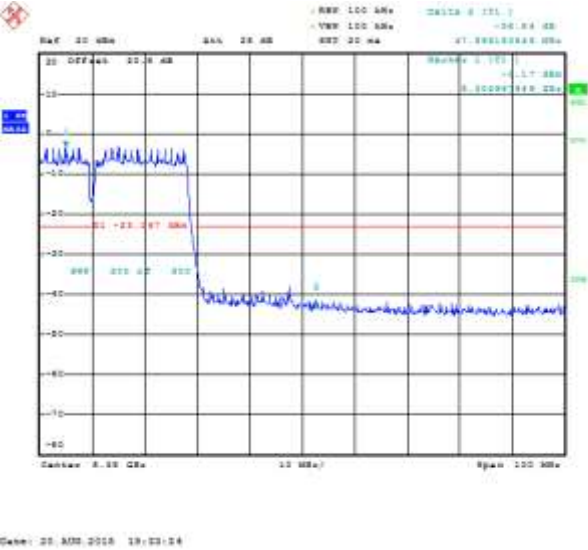


Figure 7-58: Band Edge Compliance  
Primary, 802.11n, Channel 100, 6 Mbps

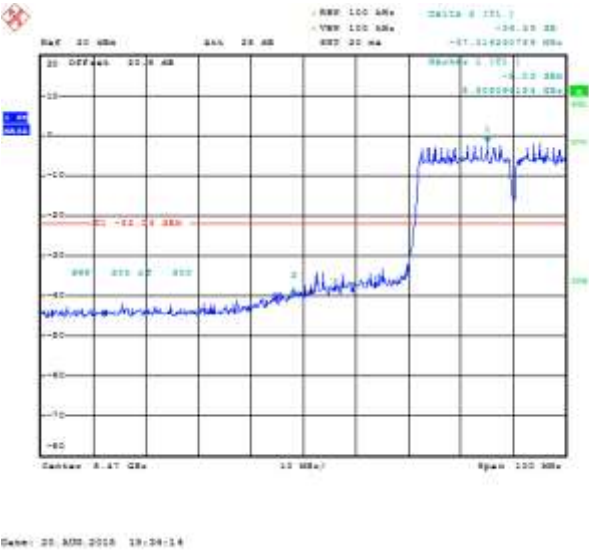
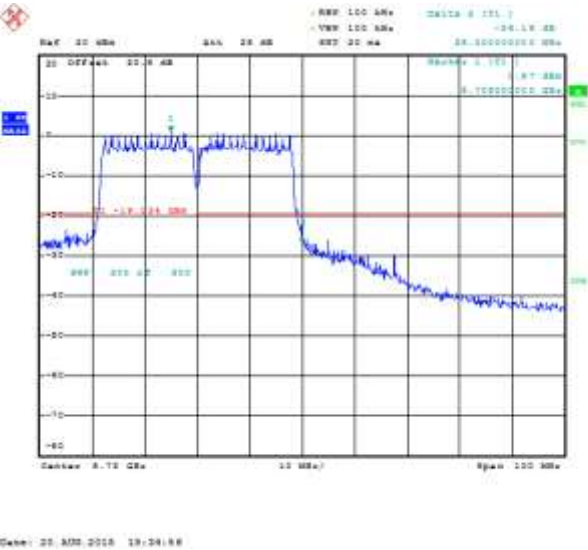


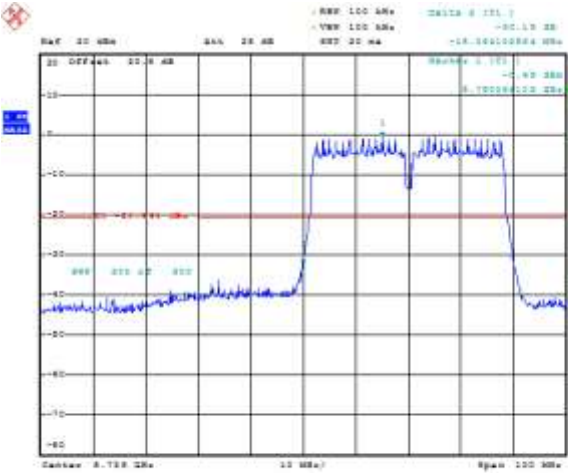
Figure 7-59: Band Edge Compliance  
Primary, 802.11n, Channel 140, 6 Mbps



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

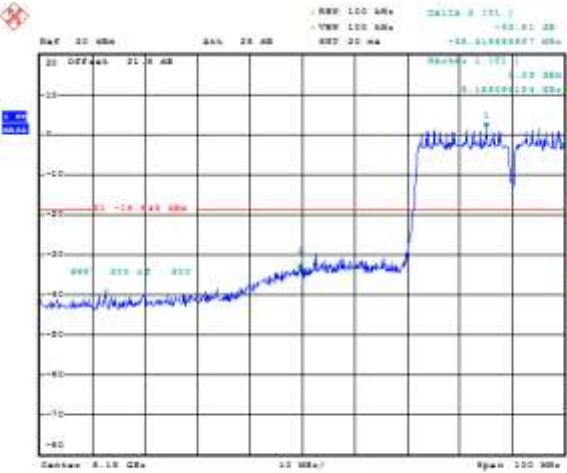
802.11n RF Conducted Emission Test Results cont'd

Figure 7-60: Band Edge Compliance  
Primary, 802.11n, Channel 149, 6 Mbps



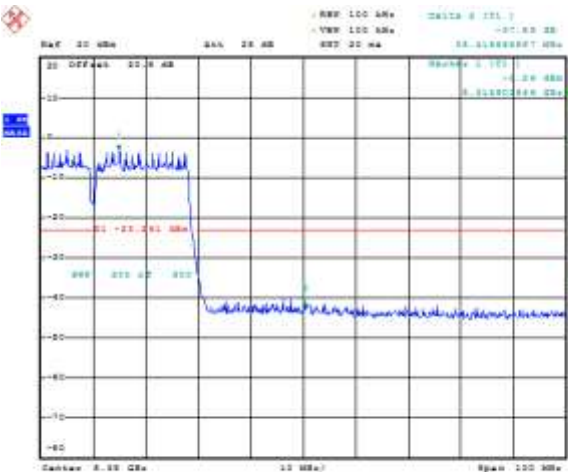
Date: 20. MAR. 2015 19:59:37

Figure 7-61: Band Edge Compliance  
Secondary, 802.11n, Channel 36, 6 Mbps



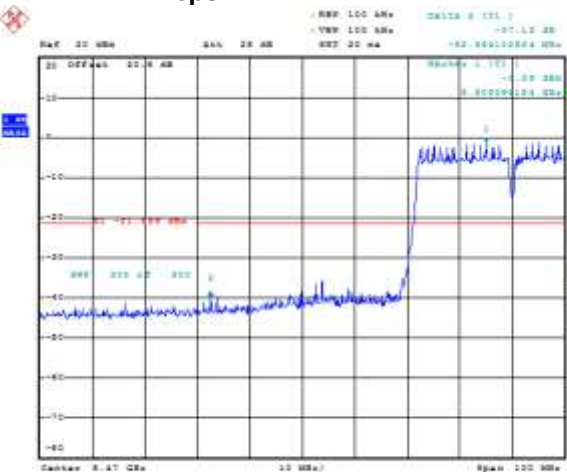
Date: 20. MAR. 2015 19:58:46

Figure 7-62: Band Edge Compliance  
Secondary, 802.11n, Channel 64, 6 Mbps



Date: 20. MAR. 2015 19:57:20

Figure 7-63: Band Edge Compliance  
Secondary, 802.11n, Channel 100, 6 Mbps



Date: 20. MAR. 2015 19:58:00

|                                                                                   |                                                                                                   |                                                         |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

Figure 7-64: Band Edge Compliance  
Secondary, 802.11n, Channel 140, 6 Mbps

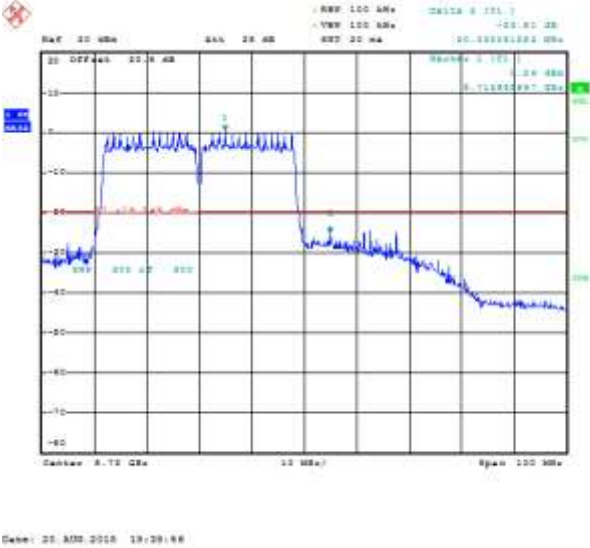
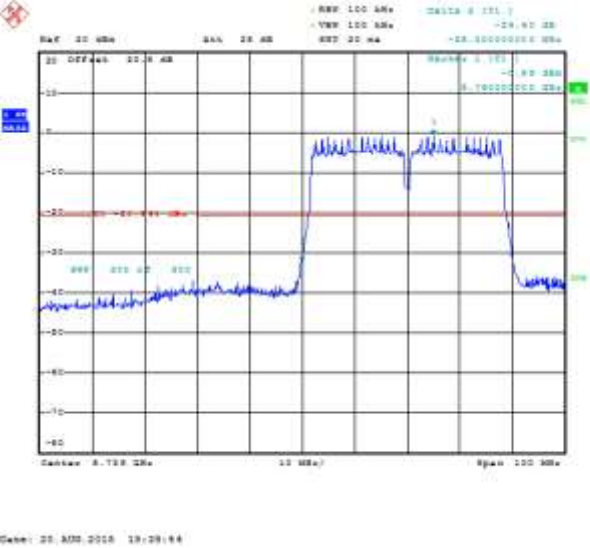


Figure 7-65: Band Edge Compliance  
Secondary, 802.11n, Channel 149, 6 Mbps



|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## 802.11a RF Conducted Emission Test Results cont'd

### Peak Power Spectral Density

The EUT met the requirements of the peak power spectral density as per 47 CFR 15.407 and RSS-247. Channels 36, 48, 64, 100, 140 and 165 were measured at 6 Mbps each for 802.11a mode.

#### SISO Primary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 36      | 6 Mbps    | < 11.00         | -0.81                    | -11.81      |
| 48      | 6 Mbps    | < 11.00         | 3.83                     | -7.17       |
| 64      | 6 Mbps    | < 11.00         | 2.91                     | -8.09       |
| 100     | 6 Mbps    | < 11.00         | 2.21                     | -8.79       |
| 140     | 6 Mbps    | < 11.00         | 1.69                     | -9.31       |
| 165     | 6 Mbps    | < 33.00         | 2.06                     | -30.94      |

#### SISO Secondary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 36      | 6 Mbps    | < 11.00         | 0.39                     | -10.61      |
| 48      | 6 Mbps    | < 11.00         | 3.70                     | -7.30       |
| 64      | 6 Mbps    | < 11.00         | 2.34                     | -8.66       |
| 100     | 6 Mbps    | < 11.00         | 2.58                     | -8.42       |
| 140     | 6 Mbps    | < 11.00         | 1.83                     | -9.17       |
| 165     | 6 Mbps    | < 33.00         | 2.50                     | -30.5       |

#### 2TX/CDD Primary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 36      | 6 Mbps    | < 11.00         | 0.84                     | -10.16      |
| 48      | 6 Mbps    | < 11.00         | 4.10                     | -6.90       |
| 64      | 6 Mbps    | < 11.00         | 2.54                     | -8.46       |
| 100     | 6 Mbps    | < 11.00         | 3.67                     | -7.33       |
| 140     | 6 Mbps    | < 11.00         | 3.86                     | -7.14       |
| 165     | 6 Mbps    | < 33.00         | 3.55                     | -29.45      |

|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## 802.11a RF Conducted Emission Test Results cont'd

### 2TX/CDD Secondary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 36      | 6 Mbps    | < 11.00         | -1.18                    | -12.18      |
| 48      | 6 Mbps    | < 11.00         | 4.06                     | -6.94       |
| 64      | 6 Mbps    | < 11.00         | 2.91                     | -8.09       |
| 100     | 6 Mbps    | < 11.00         | 3.83                     | -7.17       |
| 140     | 6 Mbps    | < 11.00         | 2.69                     | -8.31       |
| 165     | 6 Mbps    | < 33.00         | 3.29                     | -29.71      |

### 2TX/CDD Combined

| Channel | Data Rate | Limit (dBm/MHz) | Combined Peak (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|-------------------------|-------------|
| 36      | 6 Mbps    | < 11.00         | 2.86                    | -8.14       |
| 48      | 6 Mbps    | < 11.00         | 6.96                    | -4.04       |
| 64      | 6 Mbps    | < 11.00         | 5.67                    | -5.33       |
| 100     | 6 Mbps    | < 11.00         | 6.62                    | -4.38       |
| 140     | 6 Mbps    | < 11.00         | 6.21                    | -10.79      |
| 165     | 6 Mbps    | < 33.00         | 6.34                    | -10.66      |

See figures 7-66 to 7-89 for the plots of the peak power spectral density for Channel 36, 48, 64, 100, 140, and 165 at 6 Mbps each for 802.11a mode.

|                                                                                   |                                                                                                      |                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September<br>28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11n RF Conducted Emission Test Results

#### **Peak Power Spectral Density**

The EUT met the requirements of the peak power spectral density as per 47 CFR 15.407 and RSS-247. Channels 36, 64 100 and 140 were measured at MCS 0 each for 802.11n mode.

#### **20 MHz Bandwidth**

##### SISO Primary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 36      | MCS0      | < 11.00         | 0.54                     | -10.46      |
| 64      | MCS0      | < 11.00         | 2.70                     | -8.3        |
| 100     | MCS0      | < 11.00         | 3.06                     | -7.94       |
| 140     | MCS0      | < 11.00         | 3.07                     | -7.93       |

##### SISO Secondary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 36      | MCS0      | < 11.00         | 0.92                     | -10.08      |
| 64      | MCS0      | < 11.00         | 1.89                     | -9.11       |
| 100     | MCS0      | < 11.00         | 3.54                     | -7.46       |
| 140     | MCS0      | < 11.00         | 2.44                     | -8.56       |

##### MIMO Primary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 36      | MCS0      | < 11.00         | -2.25                    | -13.25      |
| 64      | MCS0      | < 11.00         | 2.46                     | -8.54       |
| 100     | MCS0      | < 11.00         | 2.96                     | -8.04       |
| 140     | MCS0      | < 11.00         | 3.25                     | -7.75       |

|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## 802.11n RF Conducted Emission Test Results cont'd

### MIMO Secondary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 36      | MCS0      | < 11.00         | -1.00                    | -12.00      |
| 64      | MCS0      | < 11.00         | 2.27                     | -8.73       |
| 100     | MCS0      | < 11.00         | 3.52                     | -7.48       |
| 140     | MCS0      | < 11.00         | 2.34                     | -8.66       |

### MIMO Combined

| Channel | Data Rate | Limit (dBm/MHz) | Combined Peak (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|-------------------------|-------------|
| 36      | MCS0      | < 11.00         | 1.43                    | -9.72       |
| 64      | MCS0      | < 11.00         | 5.38                    | -5.75       |
| 100     | MCS0      | < 11.00         | 6.26                    | -4.88       |
| 140     | MCS0      | < 11.00         | 5.83                    | -5.32       |

### **40 MHz Bandwidth** SISO Primary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 36      | MCS0      | < 11.00         | -0.93                    | -11.93      |
| 64      | MCS0      | < 11.00         | -3.44                    | -14.44      |
| 100     | MCS0      | < 11.00         | -2.85                    | -13.85      |
| 140     | MCS0      | < 11.00         | 0.14                     | -10.86      |

### SISO Secondary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 36      | MCS0      | < 11.00         | -0.78                    | -11.78      |
| 64      | MCS0      | < 11.00         | -4.27                    | -15.27      |
| 100     | MCS0      | < 11.00         | -2.31                    | -13.31      |
| 140     | MCS0      | < 11.00         | -0.29                    | -11.29      |

|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11n RF Conducted Emission Test Results cont'd

#### MIMO Primary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 36      | MCS0      | < 11.00         | -3.61                    | -14.61      |
| 64      | MCS0      | < 11.00         | -3.44                    | -14.44      |
| 100     | MCS0      | < 11.00         | -2.73                    | -13.73      |
| 140     | MCS0      | < 11.00         | 0.88                     | -10.12      |

#### MIMO Secondary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 36      | MCS0      | < 11.00         | -2.73                    | -13.73      |
| 64      | MCS0      | < 11.00         | -3.46                    | -14.46      |
| 100     | MCS0      | < 11.00         | -2.39                    | -13.39      |
| 140     | MCS0      | < 11.00         | 0.20                     | -10.80      |

#### MIMO Combined

| Channel | Data Rate | Limit (dBm/MHz) | Combined Peak (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|-------------------------|-------------|
| 36      | MCS0      | < 11.00         | -0.28                   | -11.28      |
| 64      | MCS0      | < 11.00         | -0.48                   | -11.48      |
| 100     | MCS0      | < 11.00         | 0.31                    | -10.69      |
| 140     | MCS0      | < 11.00         | 3.40                    | -7.60       |

See figures 7-90 to 7-121 for the plots of the peak power spectral density for Channel 36, 64 and 165 at MCS 0 each for 802.11n mode.

|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 7</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11a RF Conducted Emission Test Results cont'd

Figure 7-66: Peak Power Spectral Density  
SISO Primary, 802.11a, Channel 36, 6  
Mbps



Figure 7-67: Peak Power Spectral Density  
SISO Primary, 802.11a, Channel 48, 6  
Mbps



Figure 7-68: Peak Power Spectral Density  
SISO Primary, 802.11a, Channel 64, 6  
Mbps



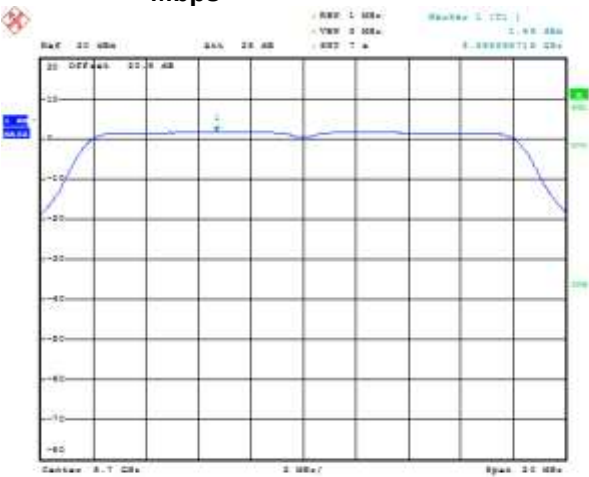
Figure 7-69: Peak Power Spectral Density  
SISO Primary, 802.11a, Channel 100, 6  
Mbps



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|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

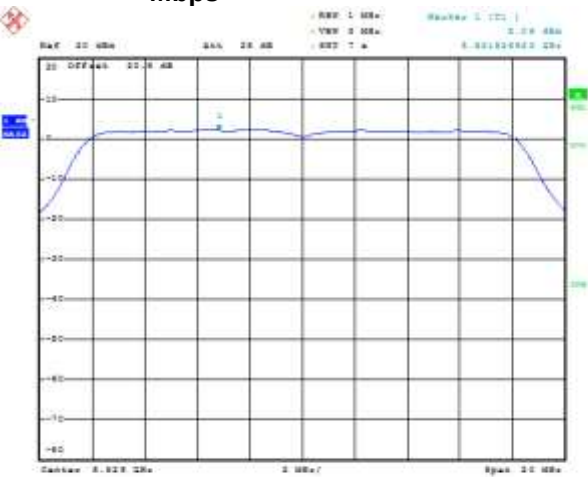
802.11a RF Conducted Emission Test Results cont'd

Figure 7-70: Peak Power Spectral Density  
SISO Primary, 802.11a, Channel 140, 6  
Mbps



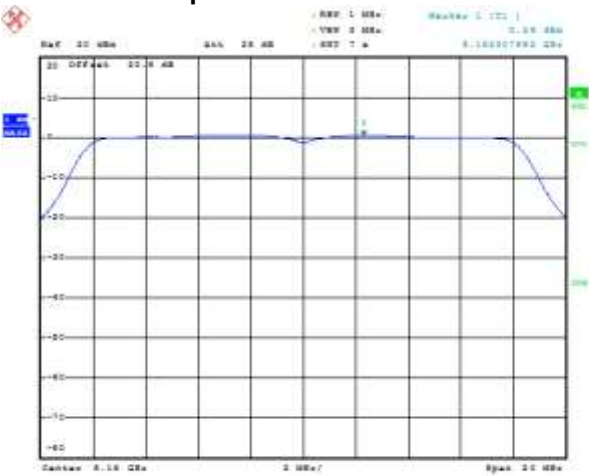
Date: 18, SEP, 2015 10:59:02

Figure 7-71: Peak Power Spectral Density  
SISO Primary, 802.11a, Channel 165, 6  
Mbps



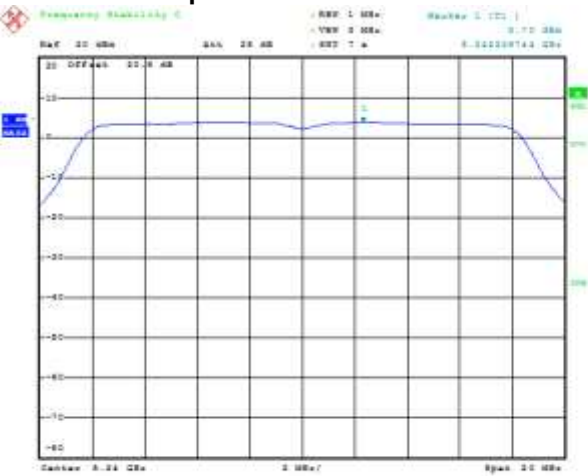
Date: 18, SEP, 2015 10:59:02

Figure 7-72: Peak Power Spectral Density  
SISO Secondary, 802.11a, Channel 36, 6  
Mbps



Date: 18, SEP, 2015 10:59:02

Figure 7-73: Peak Power Spectral Density  
SISO Secondary, 802.11a, Channel 48, 6  
Mbps



Date: 18, SEP, 2015 10:59:02

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|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

APPENDIX 7

802.11a RF Conducted Emission Test Results cont'd

Figure 7-74: Peak Power Spectral Density  
SISO Secondary, 802.11a, Channel 64, 6 Mbps

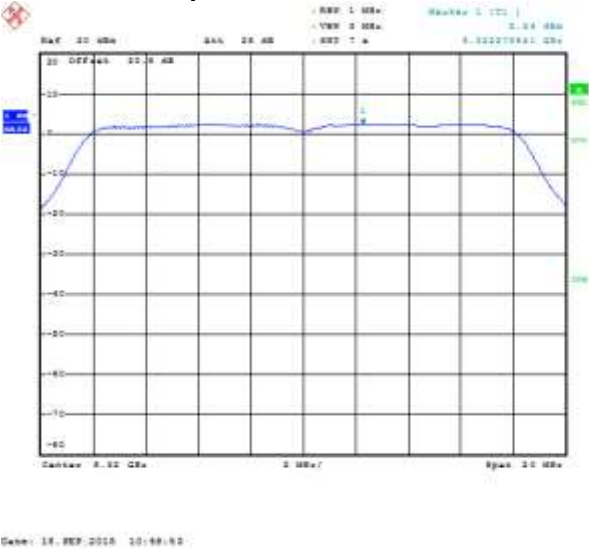


Figure 7-75: Peak Power Spectral Density  
SISO Secondary, 802.11a, Channel 100, 6 Mbps



Figure 7-76: Peak Power Spectral Density  
SISO Secondary, 802.11a, Channel 140, 6 Mbps



Figure 7-77: Peak Power Spectral Density  
SISO Secondary, 802.11a, Channel 165, 6 Mbps



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11a RF Conducted Emission Test Results cont'd

Figure 7-78: Peak Power Spectral Density  
MIMO Primary, 802.11a, Channel 36, 6  
Mbps

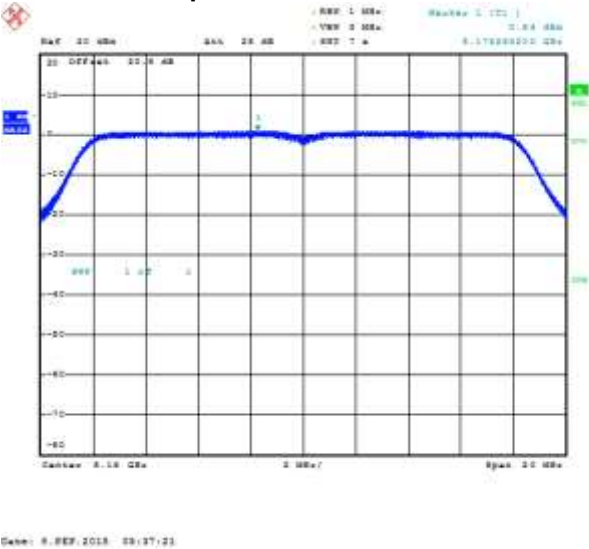


Figure 7-79: Peak Power Spectral Density  
MIMO Primary, 802.11a, Channel 48, 6  
Mbps

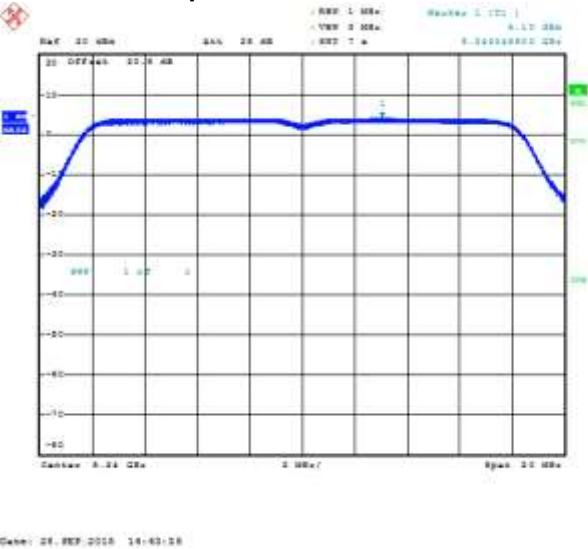


Figure 7-80: Peak Power Spectral Density  
MIMO Primary, 802.11a, Channel 64, 6  
Mbps

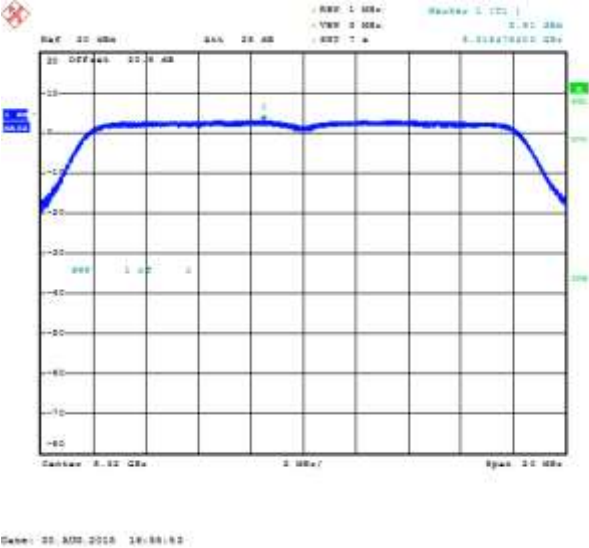
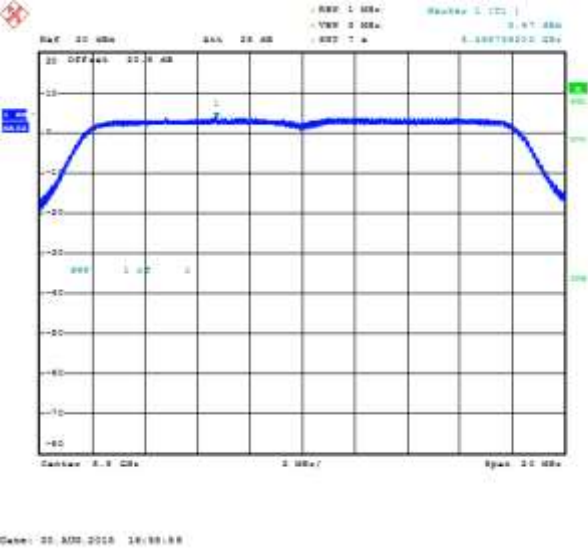


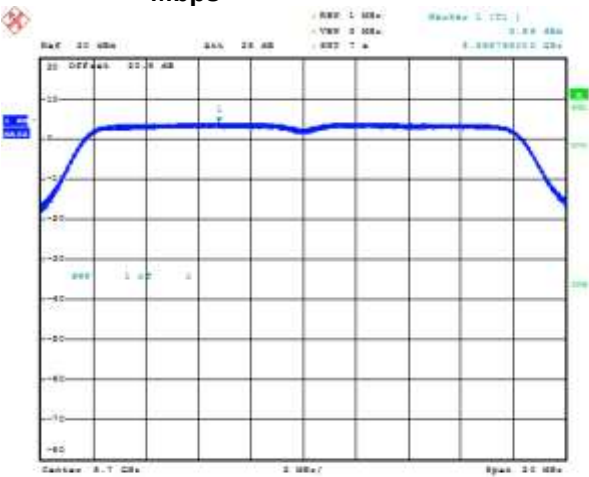
Figure 7-81: Peak Power Spectral Density  
MIMO Primary, 802.11a, Channel 100, 6  
Mbps



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|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

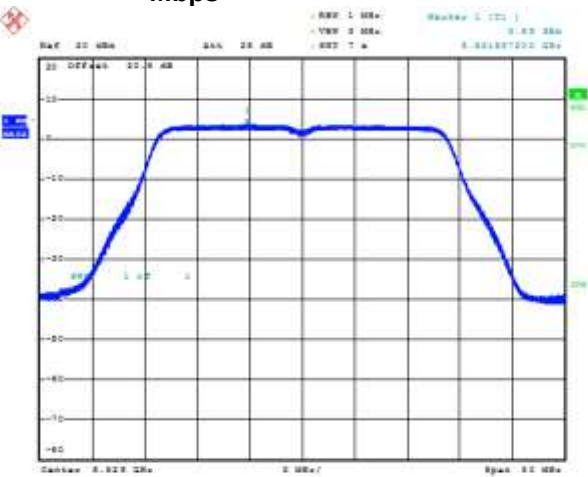
802.11a RF Conducted Emission Test Results cont'd

Figure 7-82: Peak Power Spectral Density  
MIMO Primary, 802.11a, Channel 140, 6  
Mbps



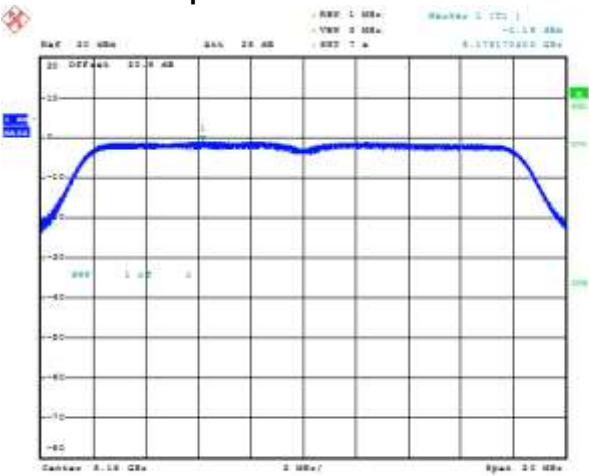
Date: 20. SEP. 2008 17:02:04

Figure 7-83: Peak Power Spectral Density  
MIMO Primary, 802.11a, Channel 165, 6  
Mbps



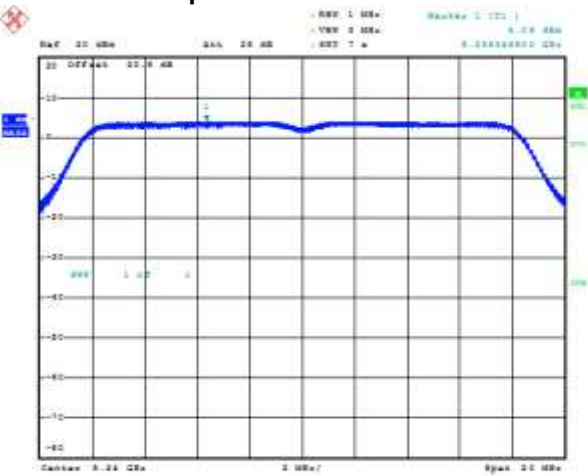
Date: 20. SEP. 2008 17:09:14

Figure 7-84: Peak Power Spectral Density  
MIMO Secondary, 802.11a, Channel 36, 6  
Mbps



Date: 8. SEP. 2015 09:46:27

Figure 7-85: Peak Power Spectral Density  
MIMO Secondary, 802.11a, Channel 48, 6  
Mbps



Date: 28. SEP. 2008 16:59:38

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|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11a RF Conducted Emission Test Results cont'd

Figure 7-86: Peak Power Spectral Density  
MIMO Secondary, 802.11a, Channel 64, 6 Mbps

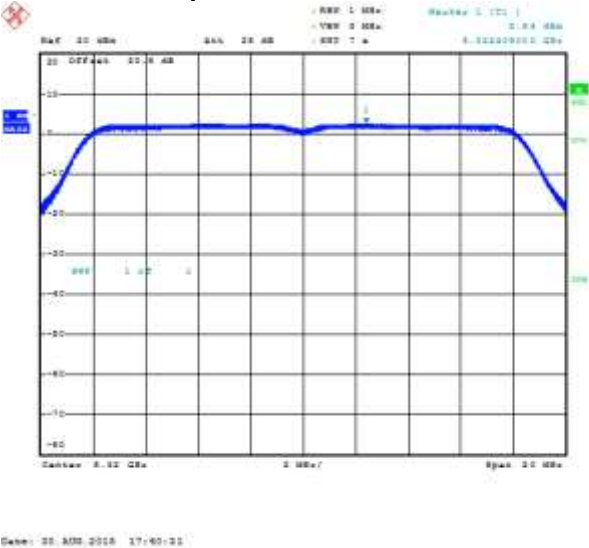


Figure 7-87: Peak Power Spectral Density  
MIMO Secondary, 802.11a, Channel 100, 6 Mbps

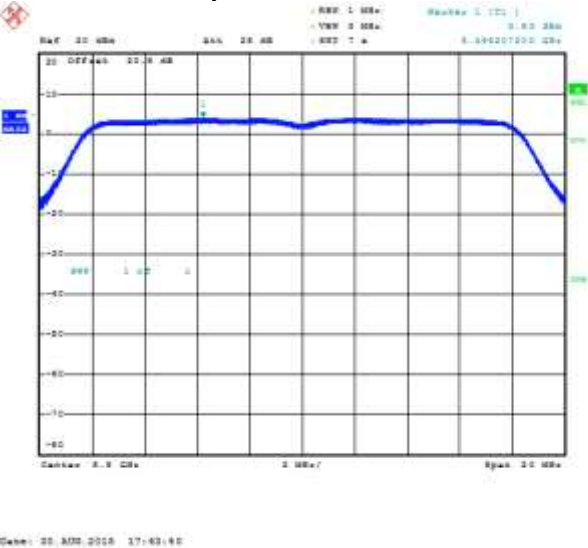


Figure 7-88: Peak Power Spectral Density  
MIMO Secondary, 802.11a, Channel 140, 6 Mbps

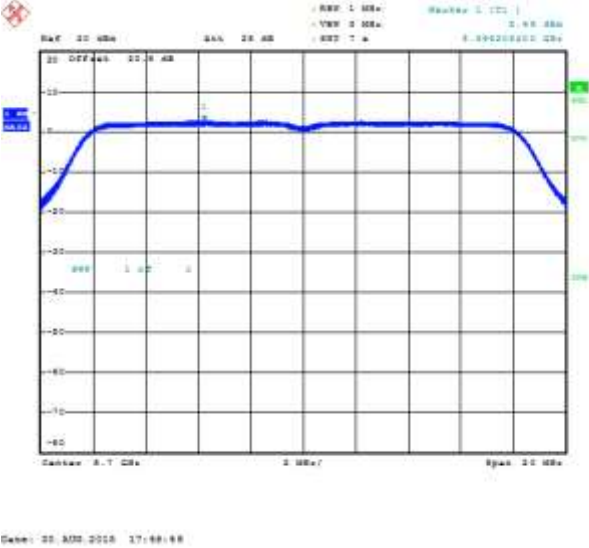
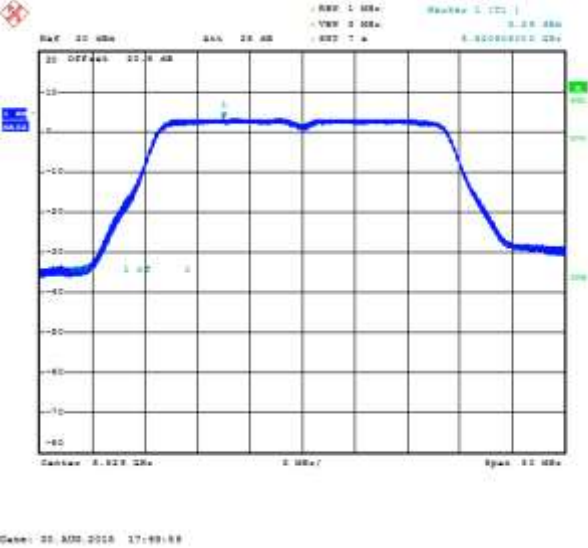


Figure 7-89: Peak Power Spectral Density  
MIMO Secondary, 802.11a, Channel 165, 6 Mbps



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|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results

20 MHz bandwidth

Figure 7-90: Peak Power Spectral Density  
SISO Primary, 802.11n, Channel 36, MCS 0

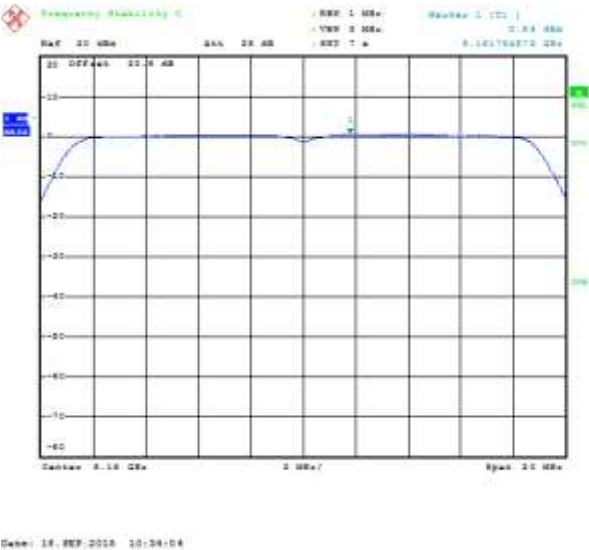


Figure 7-91: Peak Power Spectral Density  
SISO Primary, 802.11n, Channel 64, MCS 0

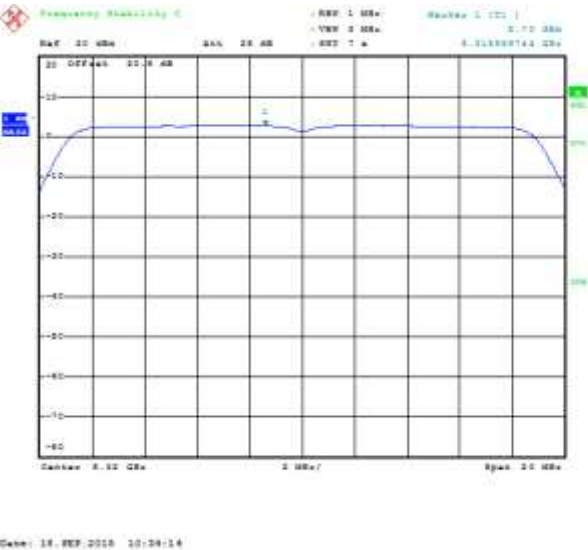


Figure 7-92: Peak Power Spectral Density  
SISO Primary, 802.11n, Channel 100, MCS 0

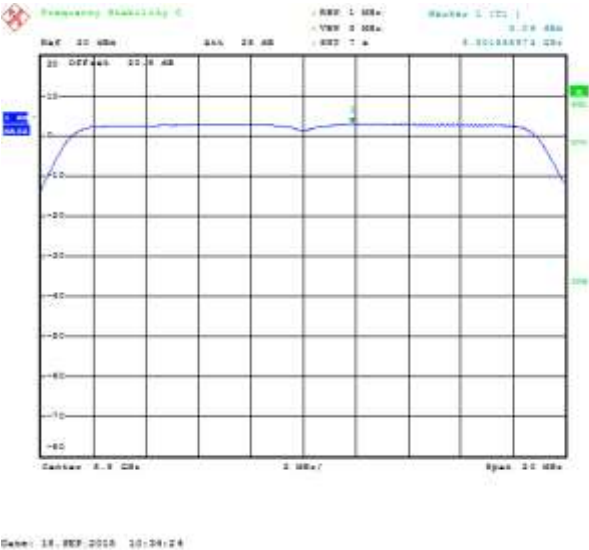
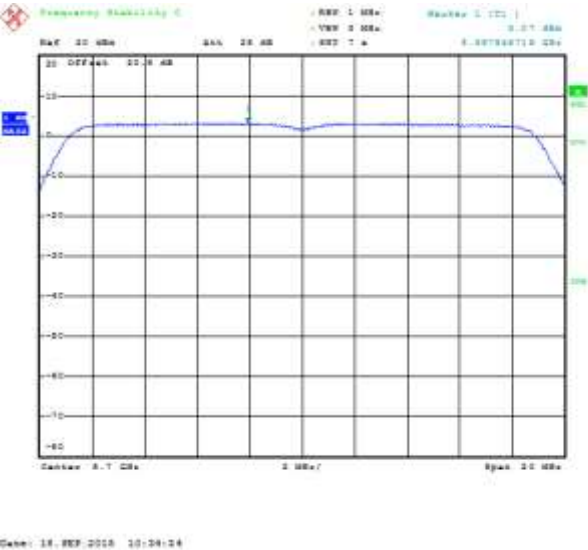


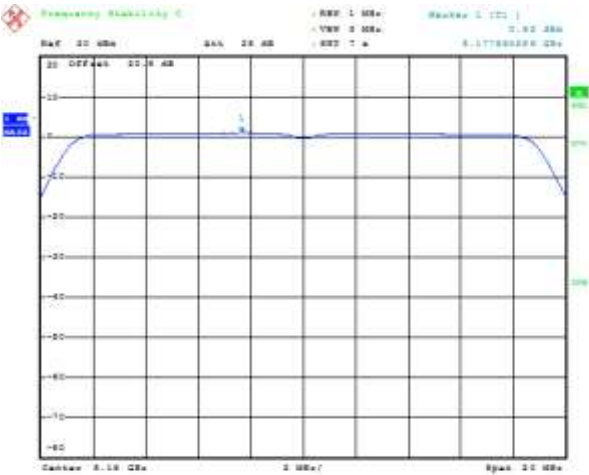
Figure 7-93: Peak Power Spectral Density  
SISO Primary, 802.11n, Channel 140, MCS 0



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|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

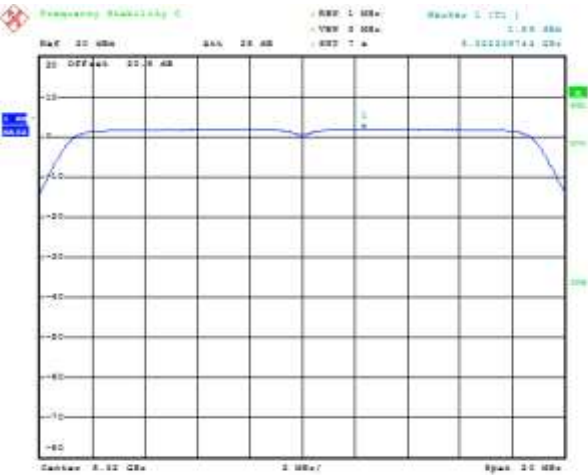
802.11n RF Conducted Emission Test Results

Figure 7-94: Peak Power Spectral Density  
SISO Secondary, 802.11n, Channel 36,  
MCS 0



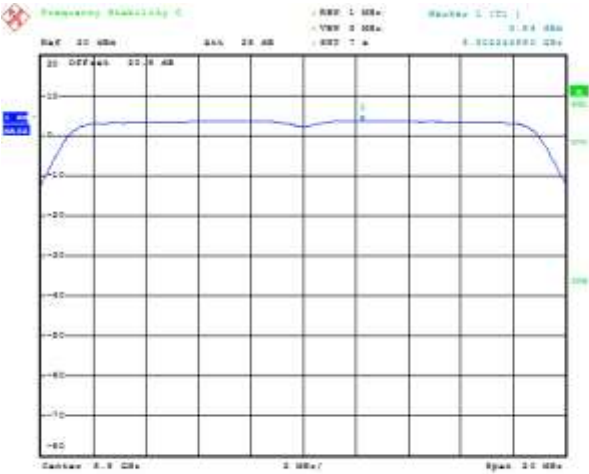
Date: 18. SEP. 2015 10:59:27

Figure 7-95: Peak Power Spectral Density  
SISO Secondary, 802.11n, Channel 48,  
MCS 0



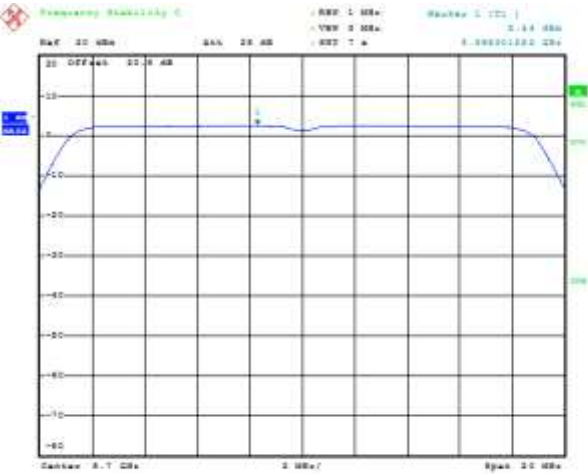
Date: 18. SEP. 2015 10:59:27

Figure 7-96: Peak Power Spectral Density  
SISO Secondary, 802.11n, Channel 100,  
MCS 0



Date: 18. SEP. 2015 10:59:27

Figure 7-97: Peak Power Spectral Density  
SISO Secondary, 802.11n, Channel 140,  
MCS 0



Date: 18. SEP. 2015 10:59:27

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|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results

20 MHz bandwidth

Figure 7-98: Peak Power Spectral Density  
MIMO Primary, 802.11n, Channel 36, MCS 0

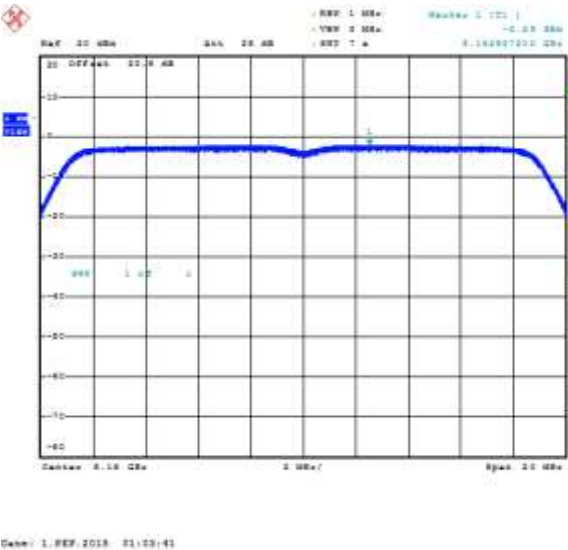


Figure 7-99: Peak Power Spectral Density  
MIMO Primary, 802.11n, Channel 64, MCS 0

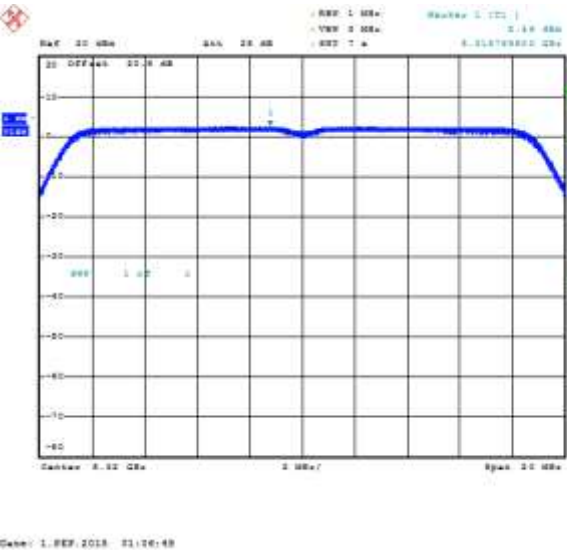


Figure 7-100: Peak Power Spectral Density  
MIMO Primary, 802.11n, Channel 100, MCS 0

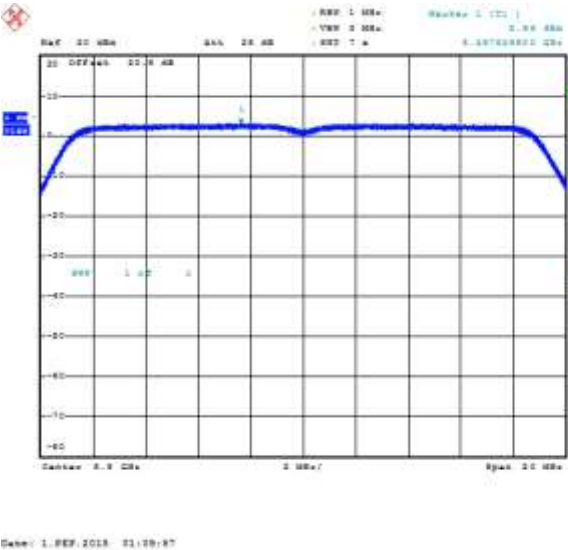
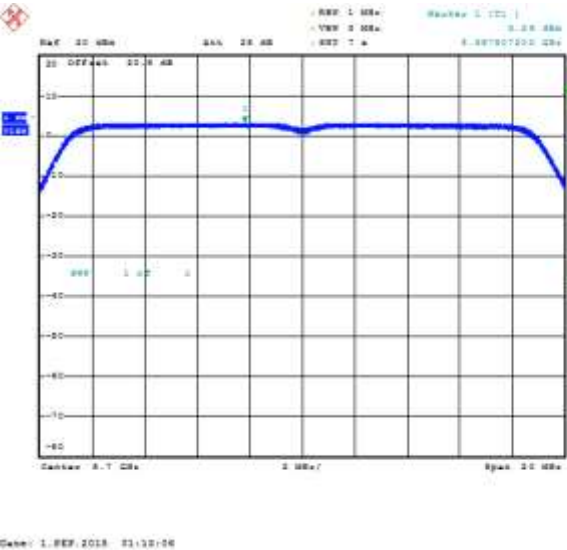


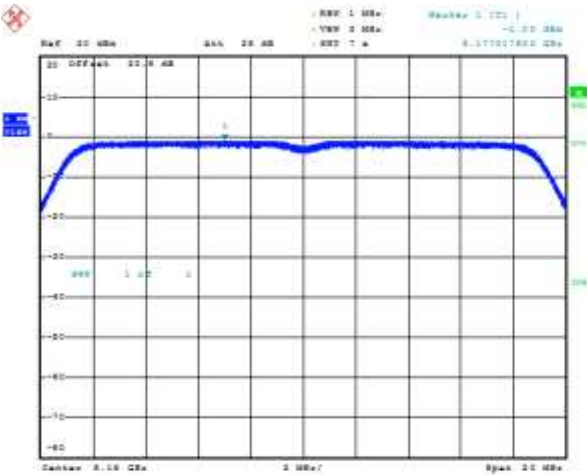
Figure 7-101: Peak Power Spectral Density  
MIMO Primary, 802.11n, Channel 140, MCS 0



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|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

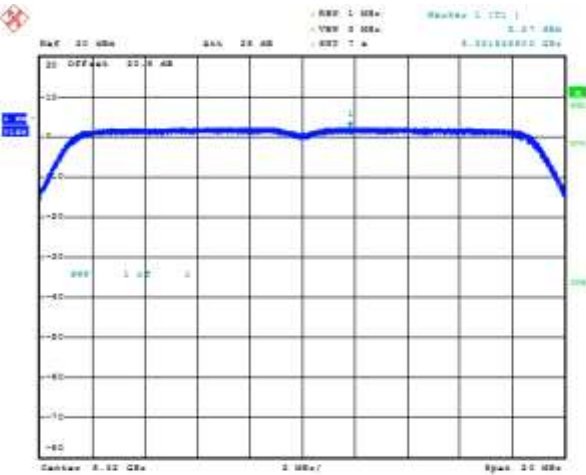
802.11n RF Conducted Emission Test Results

Figure 7-102: Peak Power Spectral Density  
MIMO Secpmdaru, 802.11n, Channel 36,  
MCS 0



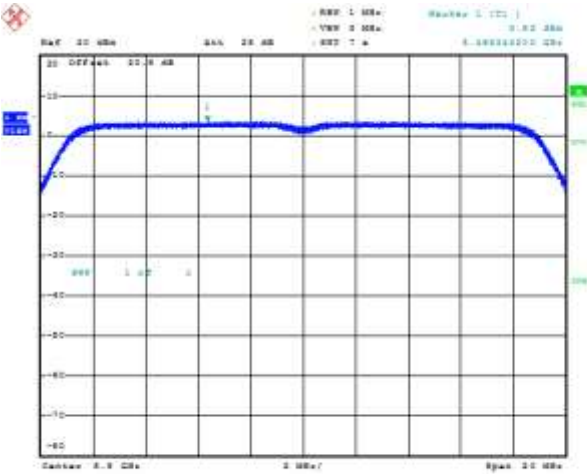
Date: 1 SEP 2015 11:20:36

Figure 7-103: Peak Power Spectral Density  
MIMO Secondary, 802.11n, Channel 64,  
MCS 0



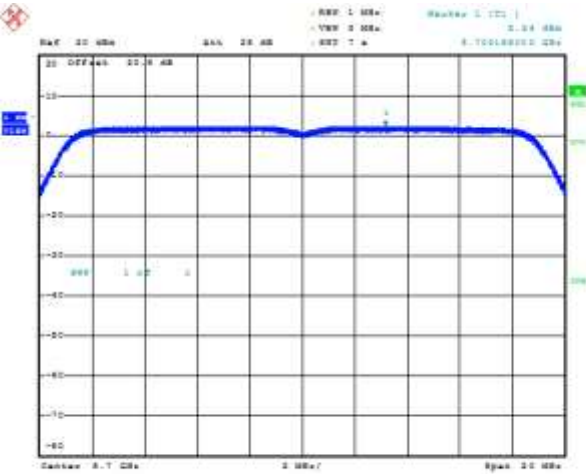
Date: 1 SEP 2015 11:20:52

Figure 7-104: Peak Power Spectral Density  
MIMO Secondary, 802.11n, Channel 100,  
MCS 0



Date: 1 SEP 2015 11:20:50

Figure 7-105: Peak Power Spectral Density  
MIMO Secondary, 802.11n, Channel 140,  
MCS 0



Date: 1 SEP 2015 11:21:00

|                                                                                   |                                                                                                   |                                                         |
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|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results

40 MHz bandwidth

Figure 7-106: Peak Power Spectral Density  
SISO Primary, 802.11n, Channel 36, MCS 0



Figure 7-107: Peak Power Spectral Density  
SISO Primary, 802.11n, Channel 64, MCS 0

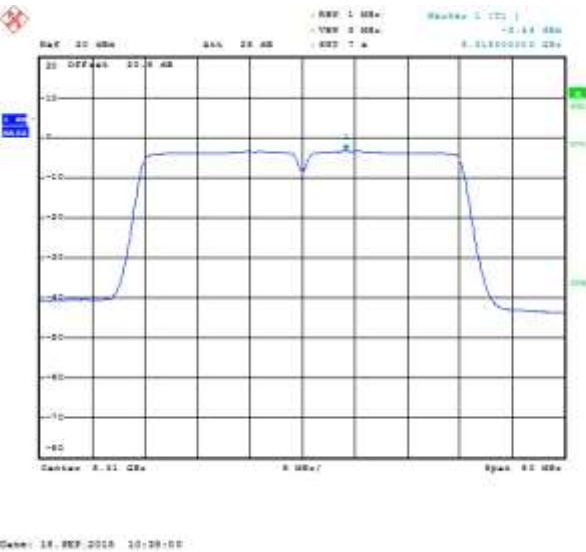
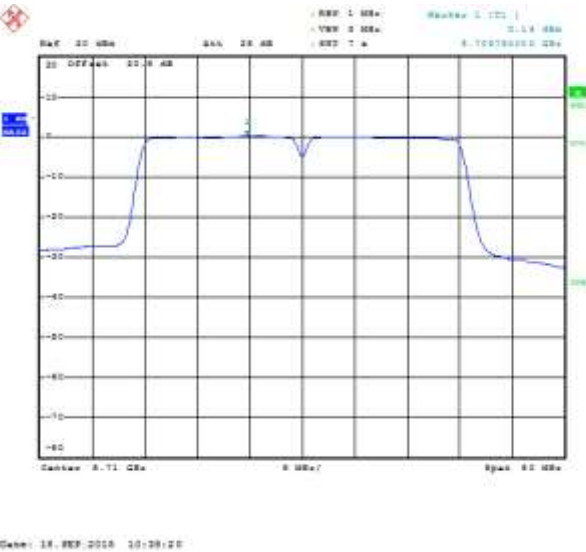


Figure 7-108: Peak Power Spectral Density  
SISO Primary, 802.11n, Channel 100, MCS 0



Figure 7-109: Peak Power Spectral Density  
SISO Primary, 802.11n, Channel 140, MCS 0



|                                                                                   |                                                                                               |                                                         |
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|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results

Figure 7-110: Peak Power Spectral Density  
SISO Secondary, 802.11n, Channel 36,  
MCS 0



Figure 7-111: Peak Power Spectral Density  
SISO Secondary, 802.11n, Channel 64,  
MCS 0



Figure 7-112: Peak Power Spectral Density  
SISO Secondary, 802.11n, Channel 100,  
MCS 0

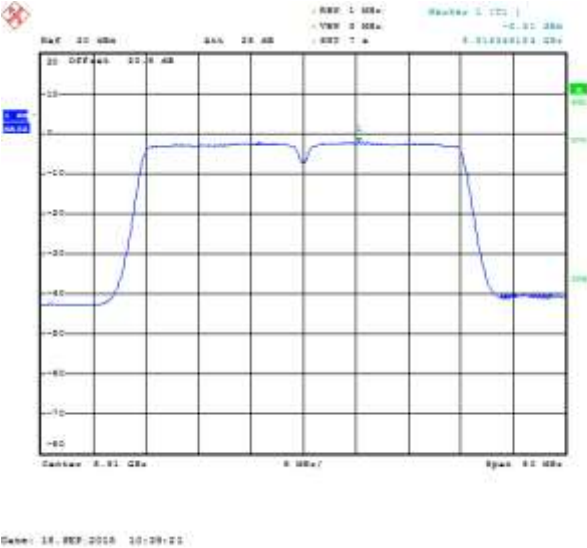


Figure 7-113: Peak Power Spectral Density  
SISO Secondary, 802.11n, Channel 140,  
MCS 0

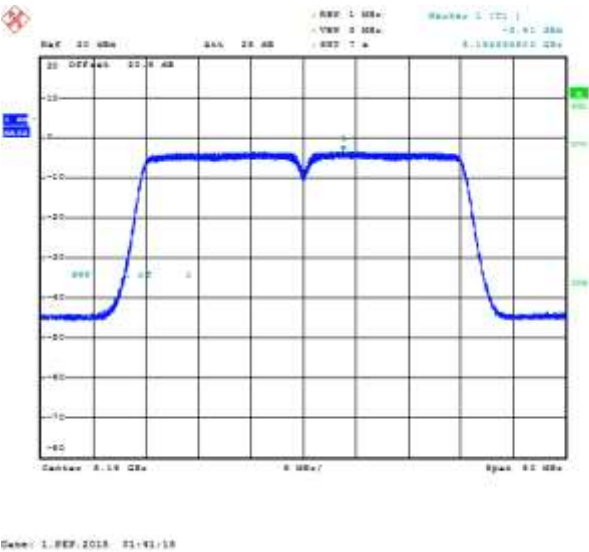


|                                                                                   |                                                                                                                                          |                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div style="text-align: center;"><b>APPENDIX 7</b></div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                                                   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

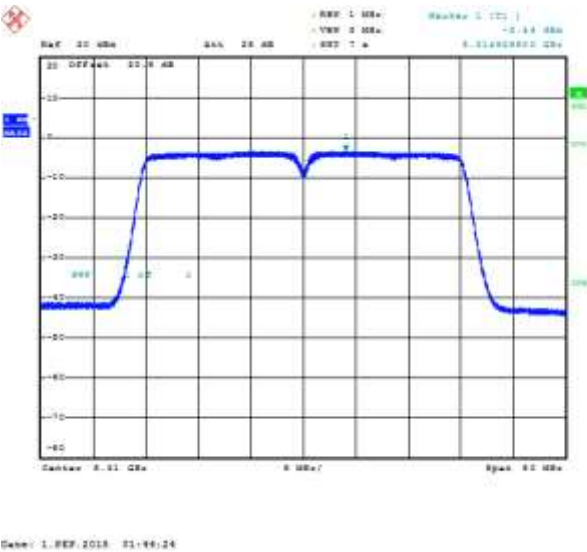
802.11n RF Conducted Emission Test Results

40 MHz bandwidth

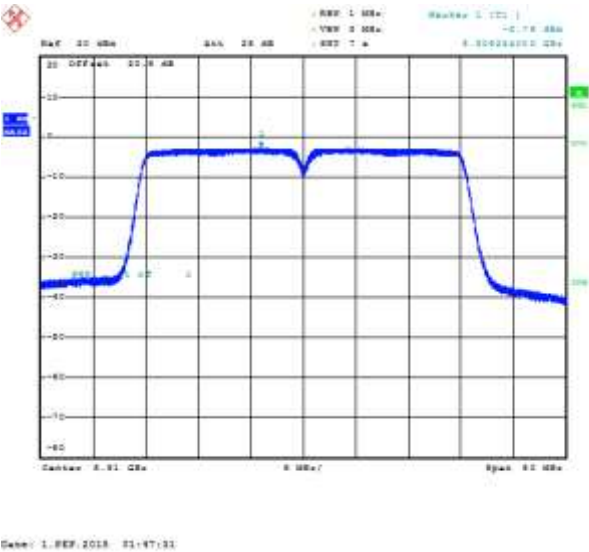
**Figure 7-114: Peak Power Spectral Density**  
**MIMO Primary, 802.11n, Channel 36, MCS 0**



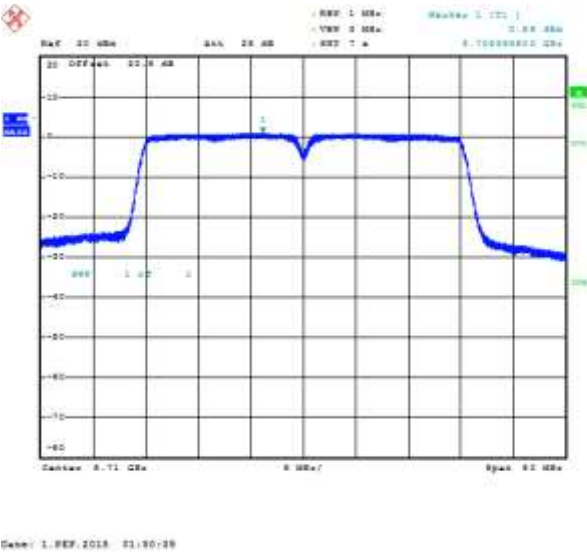
**Figure 7-115: Peak Power Spectral Density**  
**MIMO Primary, 802.11n, Channel 64, MCS 0**



**Figure 7-116: Peak Power Spectral Density**  
**MIMO Primary, 802.11n, Channel 100, MCS 0**



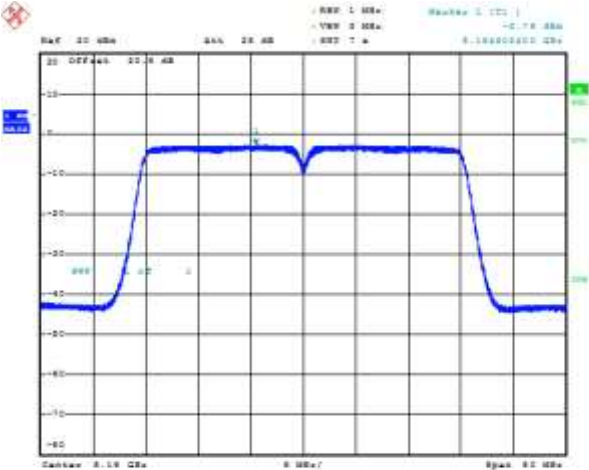
**Figure 7-117: Peak Power Spectral Density**  
**MIMO Primary, 802.11n, Channel 140, MCS 0**



|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

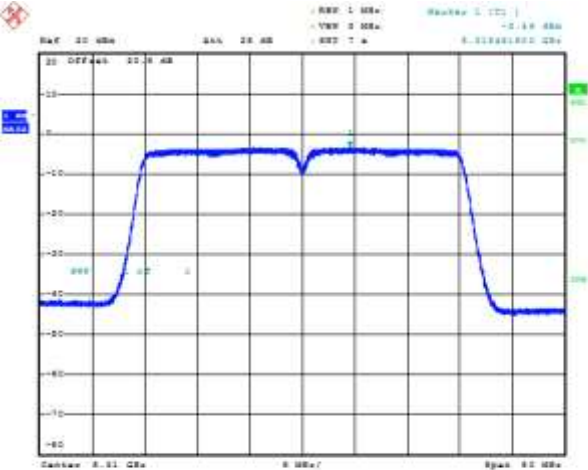
802.11n RF Conducted Emission Test Results

Figure 7-118: Peak Power Spectral Density  
MIMO Secondary, 802.11n, Channel 36,  
MCS 0



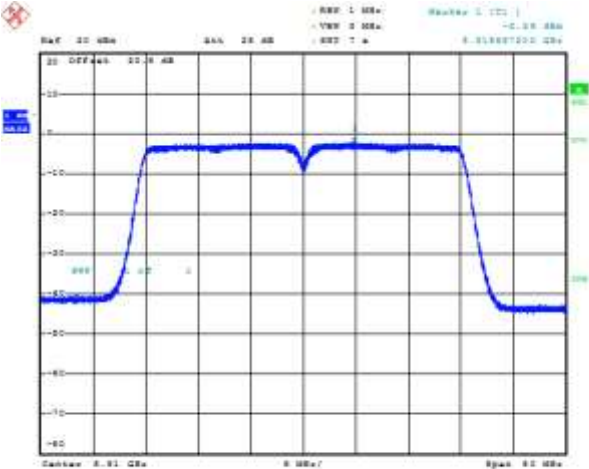
Date: 1 SEP 2015 21:56:43

Figure 7-119: Peak Power Spectral Density  
MIMO Secondary, 802.11n, Channel 64,  
MCS 0



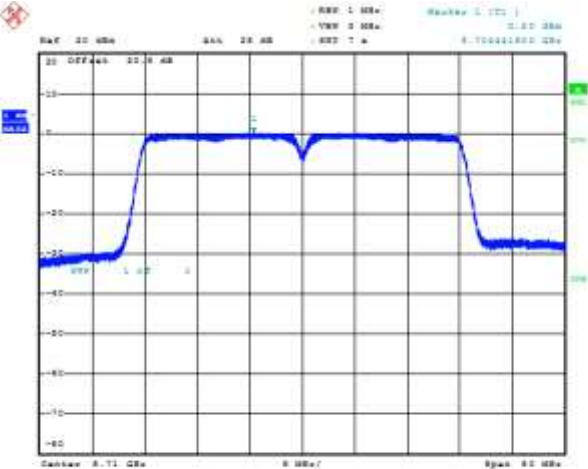
Date: 1 SEP 2015 21:56:51

Figure 7-120: Peak Power Spectral Density  
MIMO Secondary, 802.11n, Channel 100,  
MCS 0



Date: 1 SEP 2015 22:01:48

Figure 7-121: Peak Power Spectral Density  
MIMO Secondary, 802.11n, Channel 140,  
MCS 0



Date: 1 SEP 2015 22:06:58

|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11a RF Conducted Emission Test Results cont'd

#### **Spurious RF Conducted Emissions**

The EUT met the requirements of the spurious RF conducted emissions as per 47 CFR 15.407 and RSS-247. Channels 36, 64, 100 and 140 were measured at MCS 0 each for 802.11a mode. Peak power was measured using an Agilent power meter, model N1911A with model N1921A power sensor. A reference offset of 29.0 dB was applied to the spectrum analyzer reference level for the attenuators and coaxial cable loss in the test circuit.

#### Primary Antenna

| Channel | Data Rate | Carrier Level (dBm) | Max. Measured Level (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------------|----------------------------------------|-------------|
| 36      | MCS0      | 12.32               | -43.01                    | -55.33                                 | -20         |
| 64      | MCS0      | 12.74               | -44.75                    | -57.49                                 | -20         |
| 100     | MCS0      | 13.93               | -45.34                    | -59.27                                 | -20         |
| 140     | MCS0      | 14.37               | -46.48                    | -60.85                                 | -20         |

#### Secondary Antenna

| Channel | Data Rate | Carrier Level (dBm) | Max. Measured Level (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------------|----------------------------------------|-------------|
| 36      | MCS0      | 13.36               | -46.38                    | -59.74                                 | -20         |
| 64      | MCS0      | 12.78               | -38.87                    | -51.65                                 | -20         |
| 100     | MCS0      | 13.62               | -43.68                    | -57.30                                 | -20         |
| 140     | MCS0      | 14.75               | -46.52                    | -61.27                                 | -20         |

#### Sum

| Channel | Data Rate | Carrier Level (dBm) | Combined Peak (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------|----------------------------------------|-------------|
| 36      | MCS0      | 15.88               | -41.37              | -57.24                                 | -20         |
| 64      | MCS0      | 15.77               | -37.87              | -53.64                                 | -20         |
| 100     | MCS0      | 17.06               | -41.42              | -58.48                                 | -20         |
| 140     | MCS0      | 17.81               | -43.49              | -61.30                                 | -20         |

|                                                                                   |                                                                                                      |                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September<br>28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

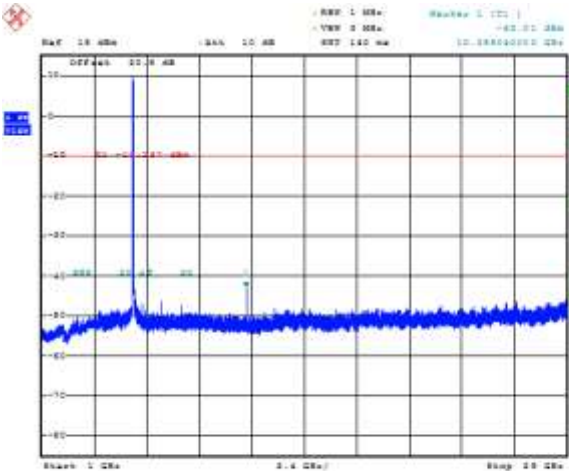
### 802.11a RF Conducted Emission Test Results cont'd

See figures 7-122 to 7-137 for the plots of the spurious RF conducted emissions for Channel 36, 64, 100 and 140 at MCS 0 each for 802.11a mode.

|                                                                                   |                                                                                                   |                                                         |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

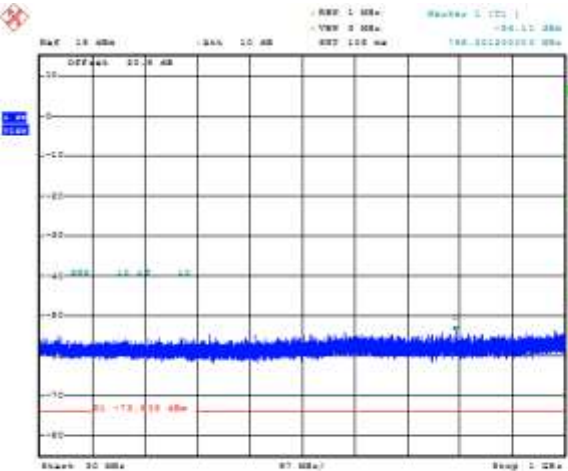
802.11a RF Conducted Emission Test Results cont'd

Figure 7-122: Spurious RF Conducted Emissions  
Primary, 802.11a, Channel 36, MCS 0



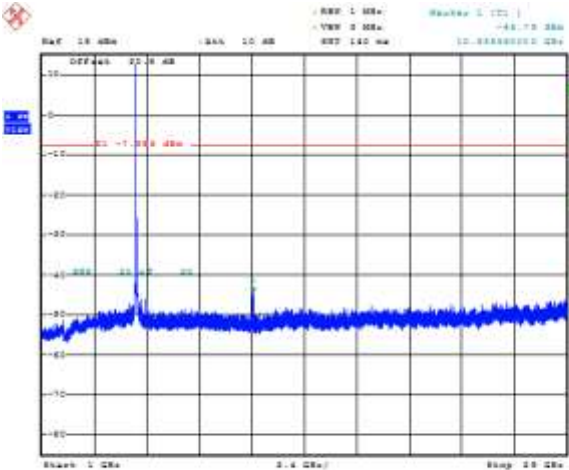
Date: 22/07/2015 11:29:12

Figure 7-123: Spurious RF Conducted Emissions  
Primary, 802.11a, Channel 36, MCS 0



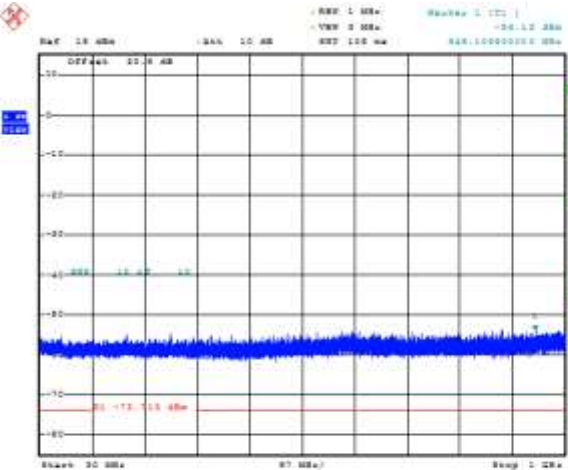
Date: 22/07/2015 11:29:18

Figure 7-124: Spurious RF Conducted Emissions  
Primary, 802.11a, Channel 64, MCS 0



Date: 22/07/2015 11:29:18

Figure 7-125: Spurious RF Conducted Emissions  
Primary, 802.11a, Channel 64, MCS 0



Date: 22/07/2015 11:29:18

|                                                                                   |                                                                          |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
| <b>APPENDIX 7</b>                                                                 |                                                                          |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11a RF Conducted Emission Test Results cont'd

Figure 7-126: Spurious RF Conducted Emissions  
Primary, 802.11a, Channel 100, MCS 0

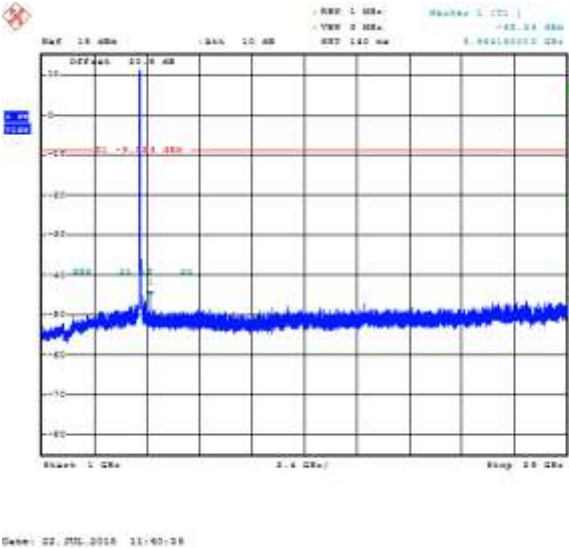


Figure 7-127: Spurious RF Conducted Emissions  
Primary, 802.11a, Channel 100, MCS 0

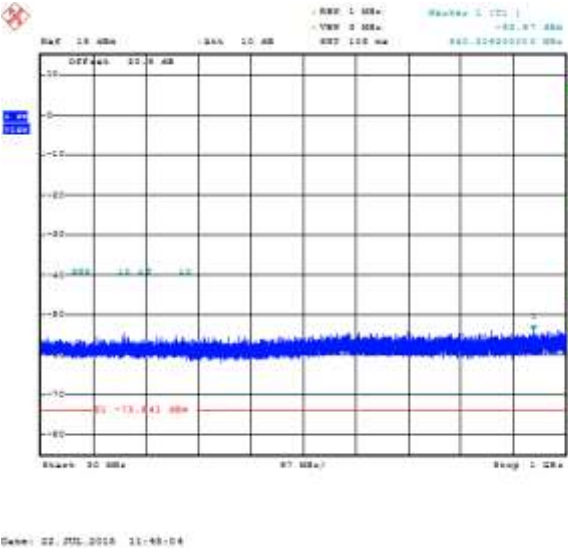


Figure 7-128: Spurious RF Conducted Emissions  
Primary, 802.11a, Channel 140, MCS 0

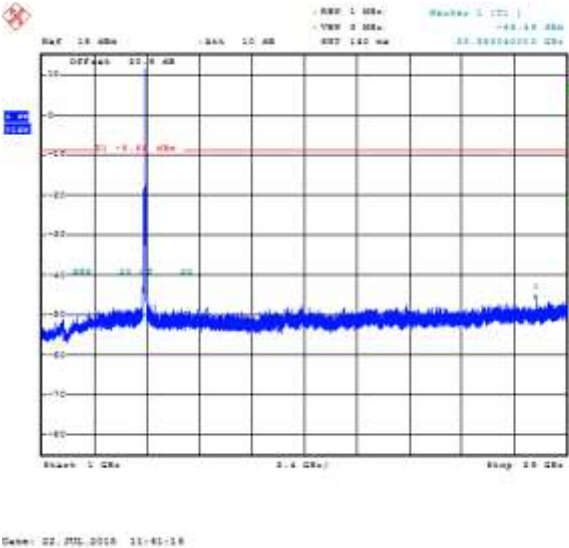
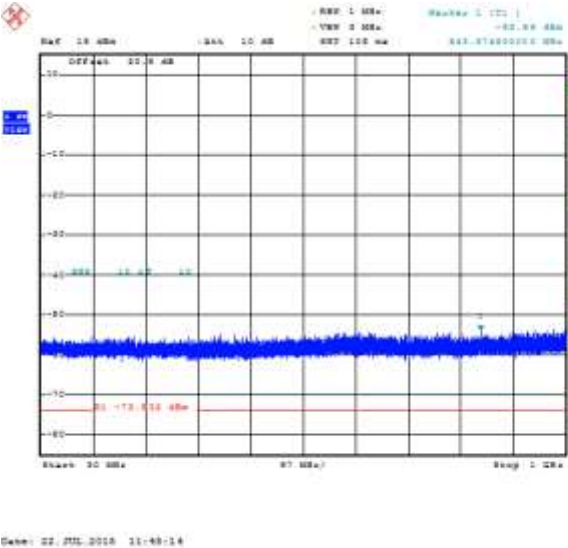


Figure 7-129: Spurious RF Conducted Emissions  
Primary, 802.11a, Channel 140, MCS 0



|                                                                                   |                                                                                                   |                                                         |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11a RF Conducted Emission Test Results cont'd

Figure 7-130: Spurious RF Conducted Emissions  
Secondary, 802.11a, Channel 36, MCS 0

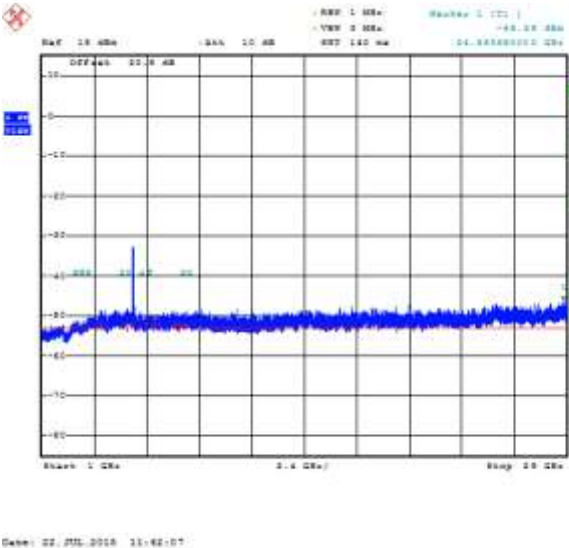


Figure 7-131: Spurious RF Conducted Emissions  
Secondary, 802.11a, Channel 36, MCS 0

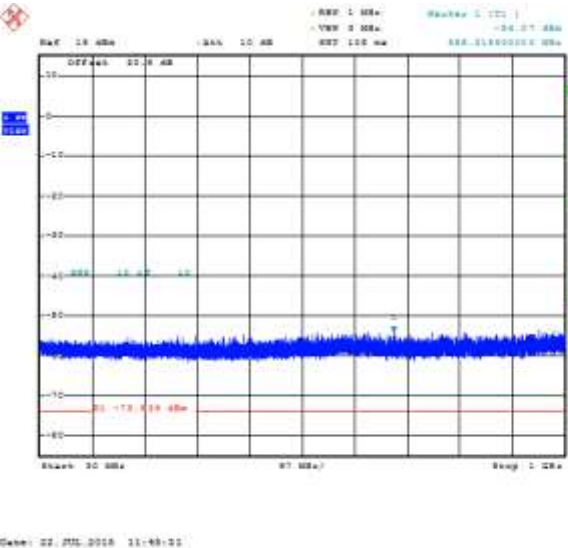


Figure 7-132: Spurious RF Conducted Emissions  
Secondary, 802.11a, Channel 64, MCS 0

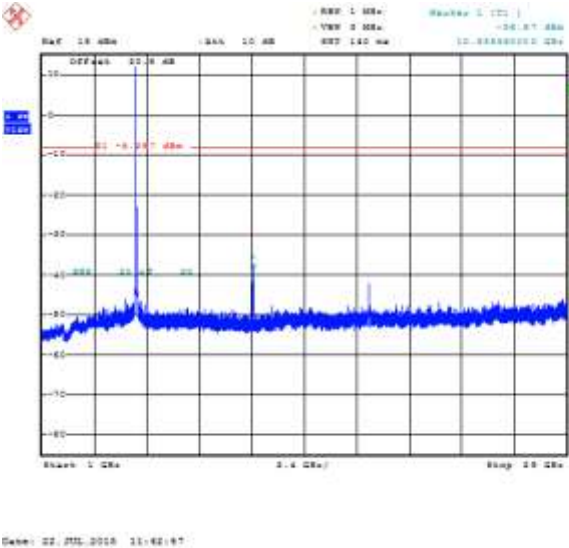
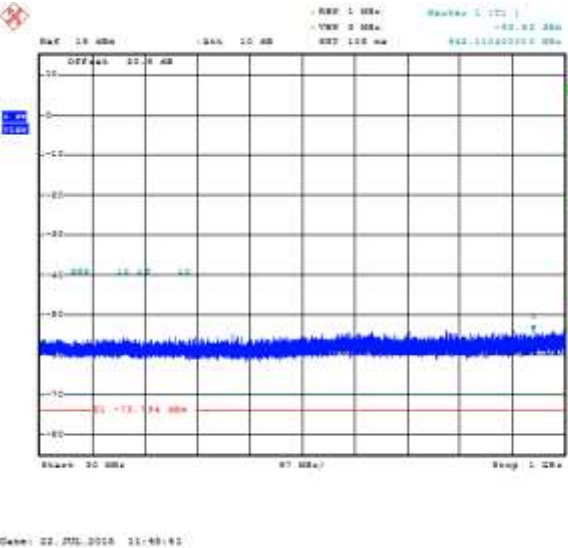


Figure 7-133: Spurious RF Conducted Emissions  
Secondary, 802.11a, Channel 64, MCS 0



|                                                                                   |                                                                                                   |                                                         |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11a RF Conducted Emission Test Results cont'd

Figure 7-134: Spurious RF Conducted Emissions  
Secondary, 802.11a, Channel 100, MCS 0

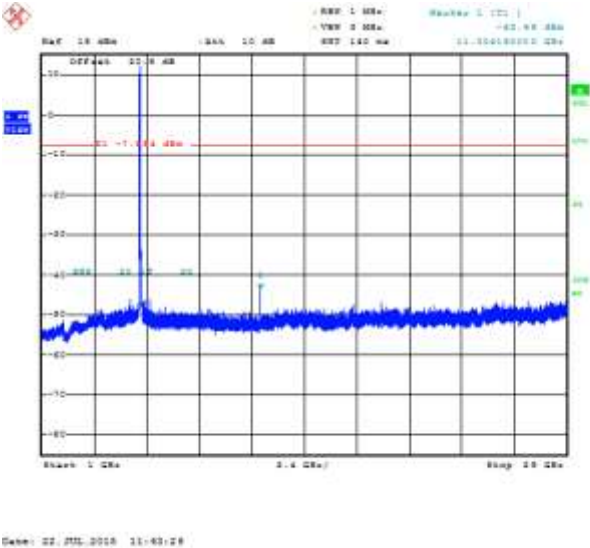


Figure 7-135: Spurious RF Conducted Emissions  
Secondary, 802.11a, Channel 100, MCS 0

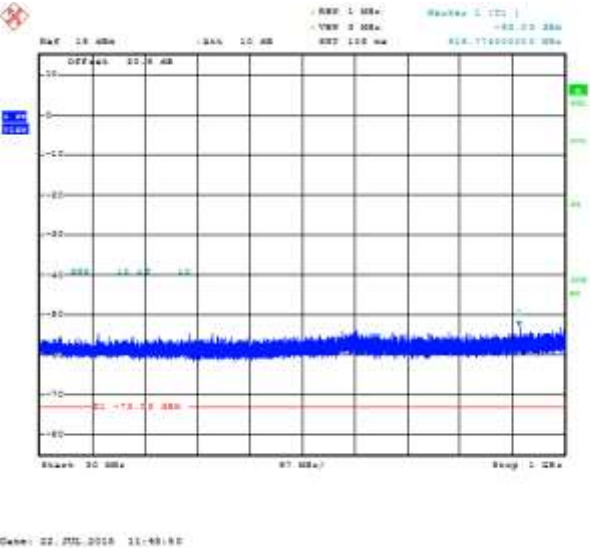


Figure 7-136: Spurious RF Conducted Emissions  
Secondary, 802.11a, Channel 140, MCS 0

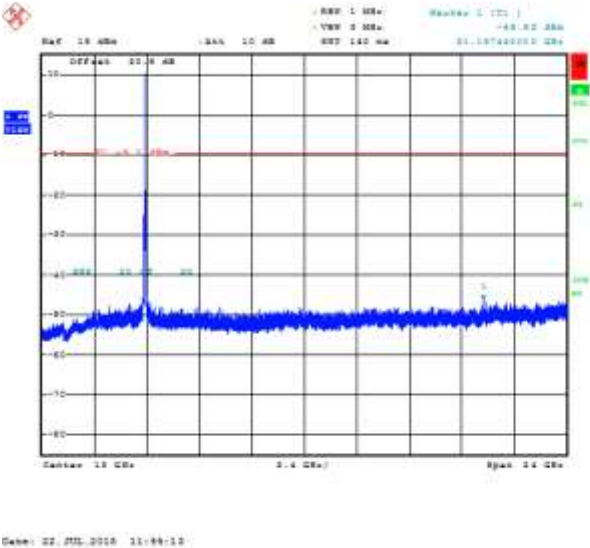
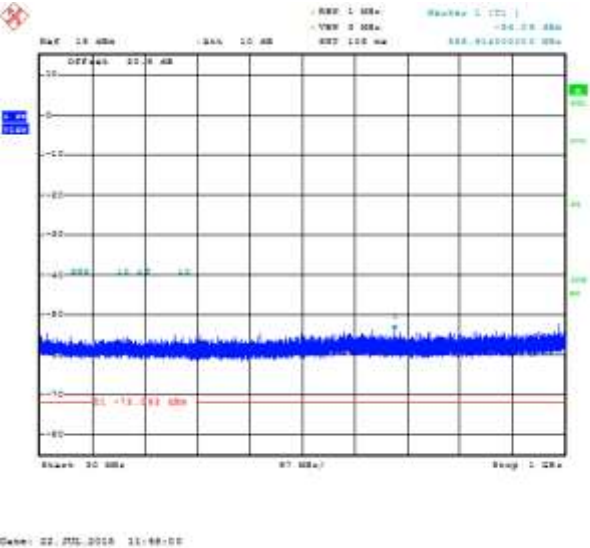


Figure 7-137: Spurious RF Conducted Emissions  
Secondary, 802.11a, Channel 140, MCS 0



|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## 802.11n RF Conducted Emission Test Results cont'd

### **Spurious RF Conducted Emissions**

The EUT met the requirements of the spurious RF conducted emissions as per 47 CFR 15.407 and RSS-247. Channels 36, 64, 100 and 140 were measured at MCS0 Mbps each for 802.11n mode. Peak power was measured using an Agilent power meter, model N1911A with model N1921A power sensor. A reference offset of 29.0 dB was applied to the spectrum analyzer reference level for the attenuators and coaxial cable loss in the test circuit.

### **20 MHZ Bandwidth**

#### Primary Antenna

| Channel | Data Rate | Carrier Level (dBm) | Max. Measured Level (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------------|----------------------------------------|-------------|
| 36      | MCS0      | 12.01               | -45.53                    | -57.54                                 | -20         |
| 64      | MCS0      | 14.17               | -45.11                    | -59.28                                 | -20         |
| 100     | MCS0      | 14.65               | -45.53                    | -60.18                                 | -20         |
| 140     | MCS0      | 14.61               | -46.52                    | -61.13                                 | -20         |

#### Secondary Antenna

| Channel | Data Rate | Carrier Level (dBm) | Max. Measured Level (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------------|----------------------------------------|-------------|
| 36      | MCS0      | 13.16               | -46.97                    | -60.13                                 | -20         |
| 64      | MCS0      | 13.77               | -44.47                    | -58.24                                 | -20         |
| 100     | MCS0      | 15.11               | -46.86                    | -61.97                                 | -20         |
| 140     | MCS0      | 13.86               | -47.53                    | -61.39                                 | -20         |

|                                                                                   |                                                                                                      |                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September<br>28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11n RF Conducted Emission Test Results cont'd

#### Sum

| Channel | Data Rate | Carrier Level (dBm) | Combined Peak (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------|----------------------------------------|-------------|
| 36      | MCS0      | 18.49               | -43.18              | -61.67                                 | -20         |
| 64      | MCS0      | 16.92               | -41.77              | -58.69                                 | -20         |
| 100     | MCS0      | 17.71               | -43.13              | -60.84                                 | -20         |
| 140     | MCS0      | 17.35               | -43.99              | -61.34                                 | -20         |

#### **40 MHZ Bandwidth**

#### Primary Antenna

| Channel | Data Rate | Carrier Level (dBm) | Max. Measured Level (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------------|----------------------------------------|-------------|
| 36      | MCS0      | 13.65               | -42.48                    | -56.13                                 | -20         |
| 64      | MCS0      | 10.76               | -42.79                    | -53.55                                 | -20         |
| 100     | MCS0      | 11.90               | -42.59                    | -54.49                                 | -20         |
| 140     | MCS0      | 11.90               | -46.47                    | -58.37                                 | -20         |

#### Secondary Antenna

| Channel | Data Rate | Carrier Level (dBm) | Max. Measured Level (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------------|----------------------------------------|-------------|
| 36      | MCS0      | 14.50               | -44.75                    | -59.25                                 | -20         |
| 64      | MCS0      | 10.64               | -44.94                    | -55.58                                 | -20         |
| 100     | MCS0      | 12.32               | -44.66                    | -56.98                                 | -20         |
| 140     | MCS0      | 13.99               | -48.11                    | -62.10                                 | -20         |

|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

Sum

| Channel | Data Rate | Carrier Level (dBm) | Combined Peak (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------|----------------------------------------|-------------|
| 36      | MCS0      | 14.10               | -40.46              | -54.56                                 | -20         |
| 64      | MCS0      | 13.72               | -40.72              | -54.44                                 | -20         |
| 100     | MCS0      | 14.51               | -40.49              | -55.00                                 | -20         |
| 140     | MCS0      | 17.67               | -44.20              | -61.88                                 | -20         |

See figures 7-138 to 7-169 for the plots of the spurious RF conducted emissions for Channel 36, 64, 100 and 140 at MCS0 Mbps each for 802.11n mode.

|                                                                                   |                                                                                                   |                                                         |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

20 MHz Bandwidth

Figure 7-138: Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 36, MCS 0

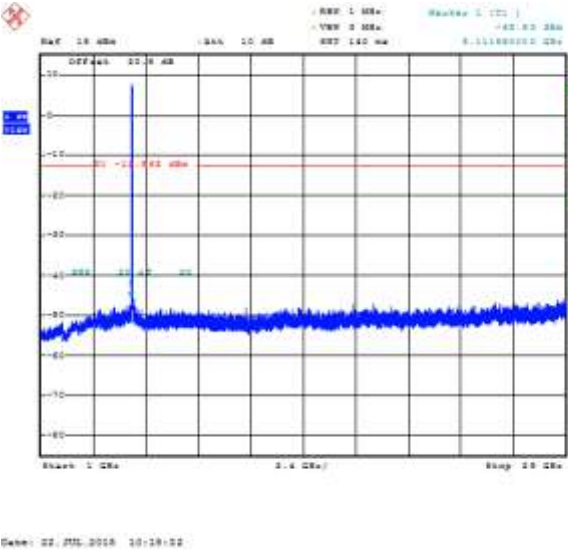


Figure 7-139: Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 36, MCS 0

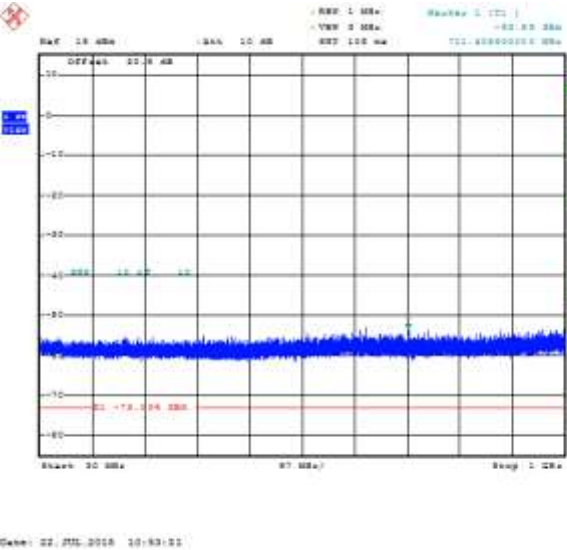


Figure 7-140: Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 64, MCS 0

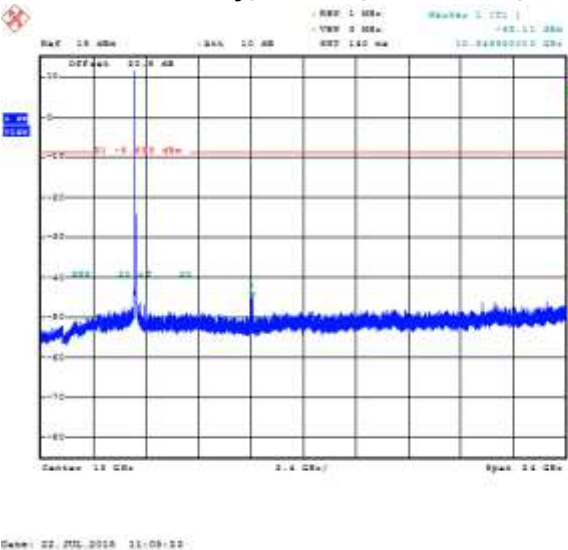
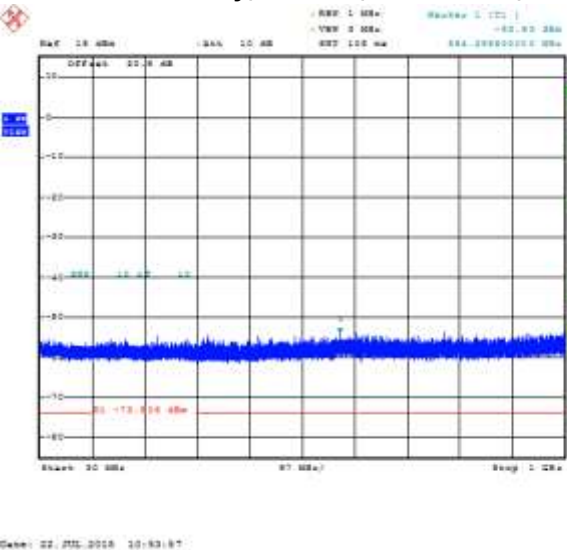


Figure 7-141: Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 64, MCS 0



|                                                                                   |                                                                          |                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                                                                                                                                                      |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       |                                                                          | <div style="text-align: center;"><b>APPENDIX 7</b></div> <div> <b>Dates of Test:</b><br/>July 22 – September 8, and September 28, 2015 </div> <div> <b>FCC ID:</b> L6ARHK210LW<br/> <b>IC:</b> 2503A-RHK210LW </div> |

802.11n RF Conducted Emission Test Results cont'd

Figure 7-142: Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 100, MCS 0

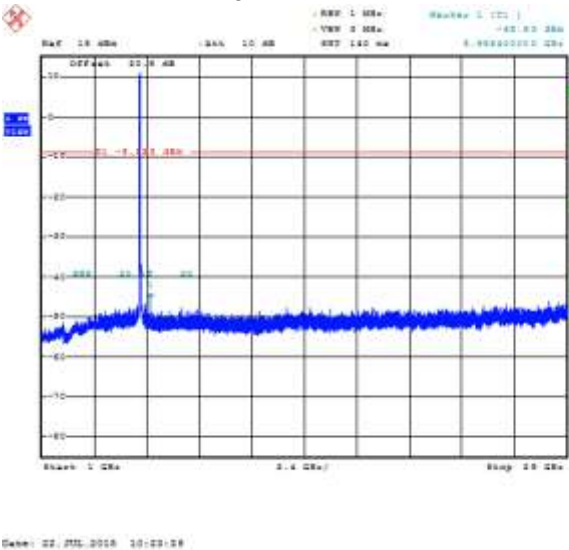


Figure 7-143: Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 100, MCS 0

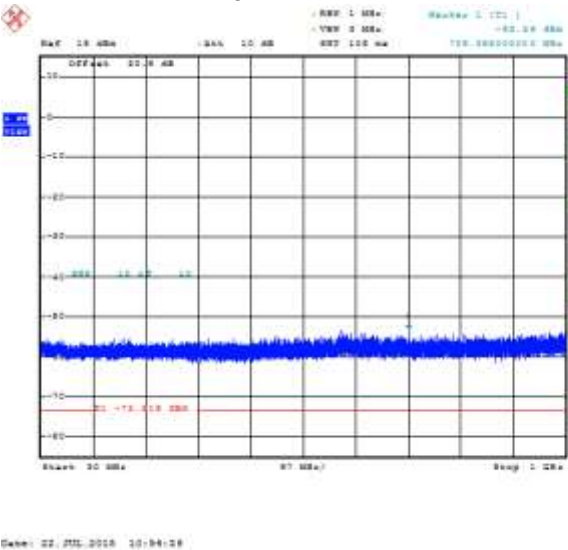


Figure 7-144: Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 140, MCS 0

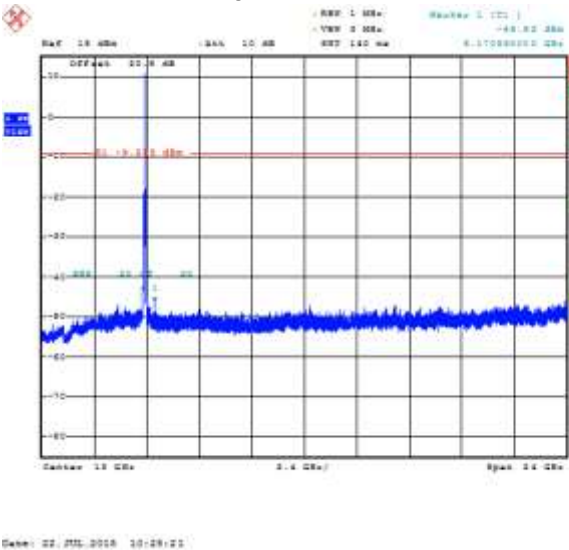
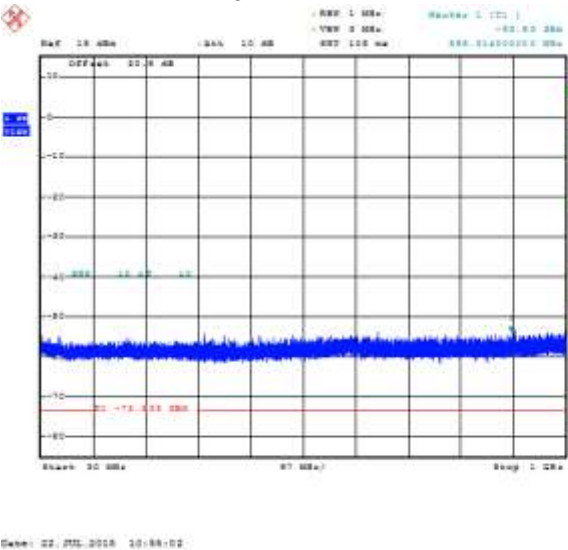


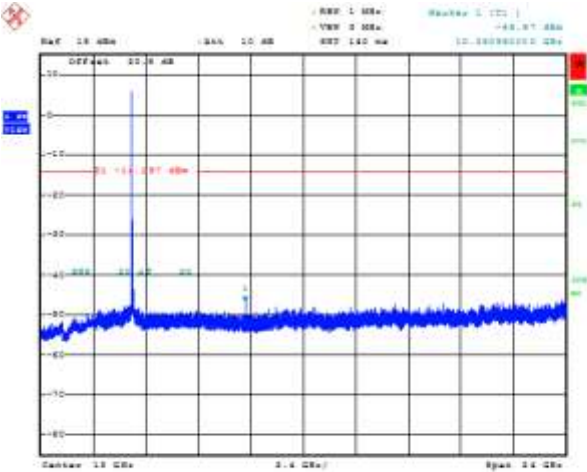
Figure 7-145: Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 140, MCS 0



|                                                                                   |                                                                             |                                                                                  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015      | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

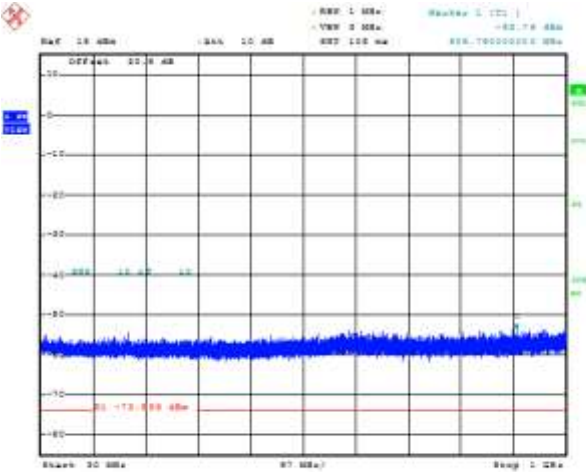
802.11n RF Conducted Emission Test Results cont'd

Figure 7-146: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 36, MCS 0



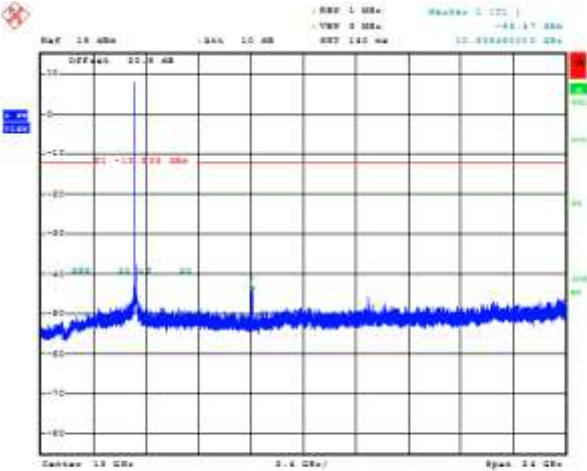
Date: 22, JUL 2008 10:30:22

Figure 7-147: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 36, MCS 0



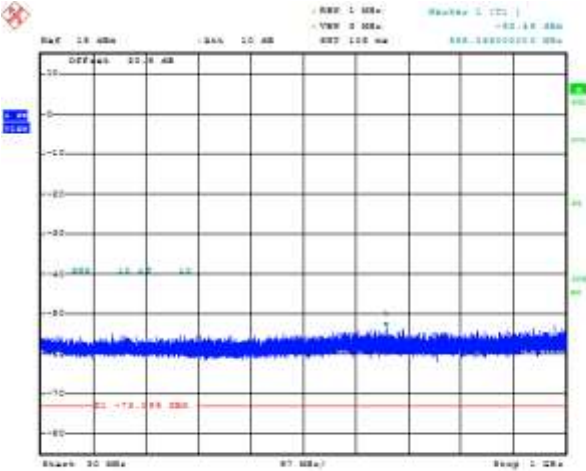
Date: 22, JUL 2008 10:31:42

Figure 7-148: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 64, MCS 0



Date: 22, JUL 2008 10:32:02

Figure 7-149: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 64, MCS 0



Date: 22, JUL 2008 10:32:04

|                                                                                   |                                                                          |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
| <b>APPENDIX 7</b>                                                                 |                                                                          |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

Figure 7-150: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 100, MCS 0

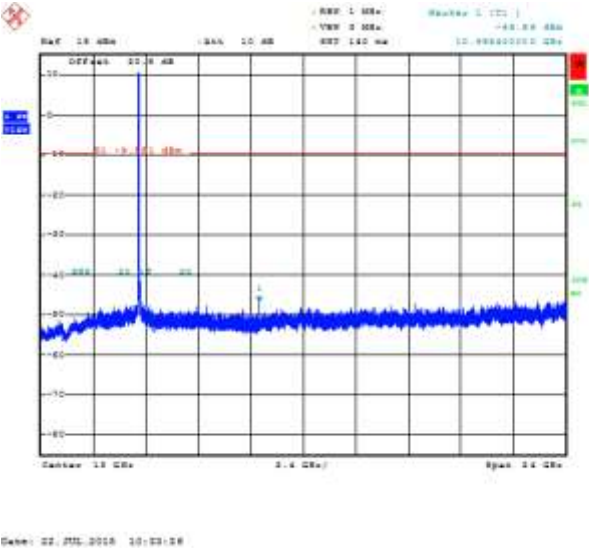


Figure 7-151: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 100, MCS 0

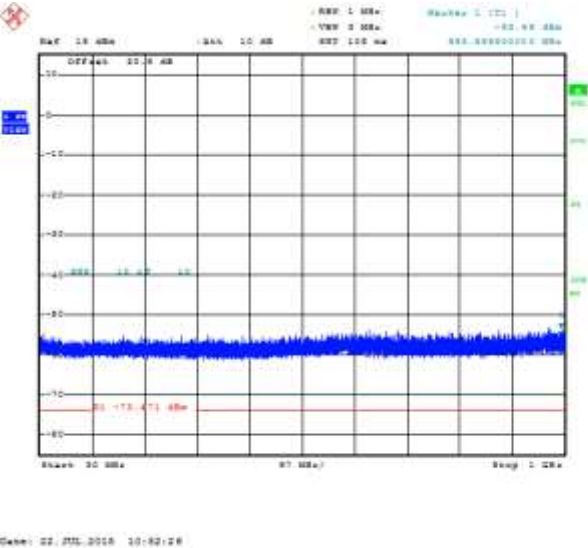


Figure 7-152: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 140, MCS 0

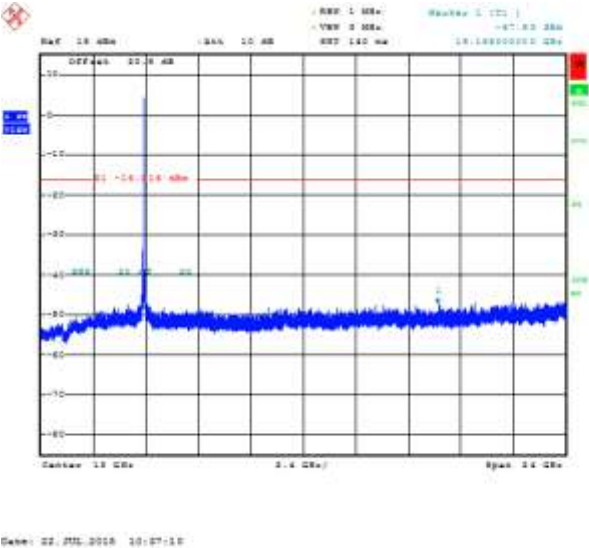
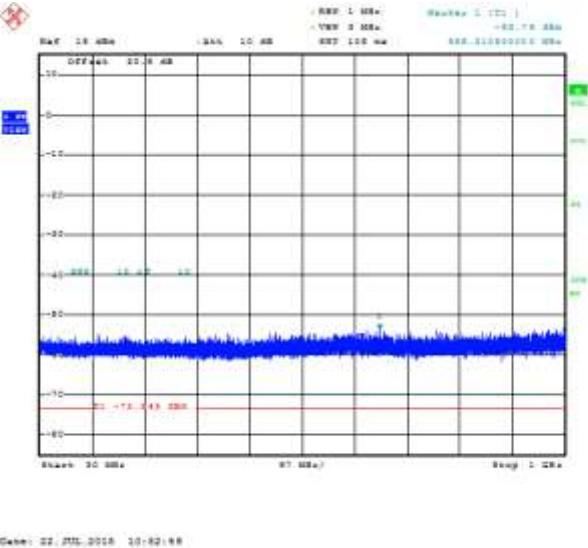


Figure 7-153: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 140, MCS 0



|                                                                                   |                                                                                                   |                                                         |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 7</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

40 MHz Bandwidth

Figure 7-154: Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 36, MCS 0

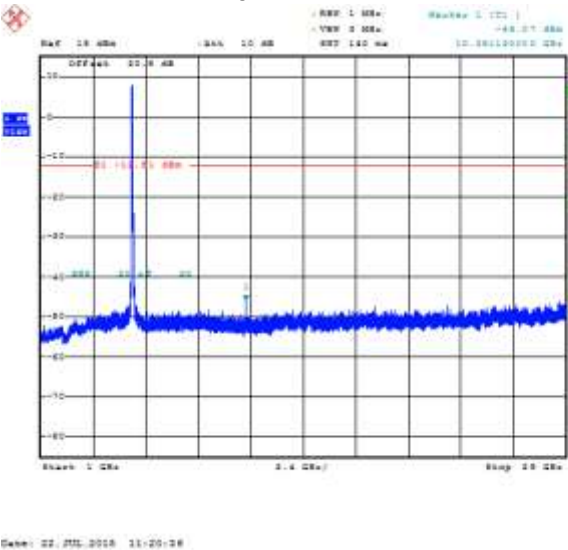


Figure 7-155: Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 36, MCS 0

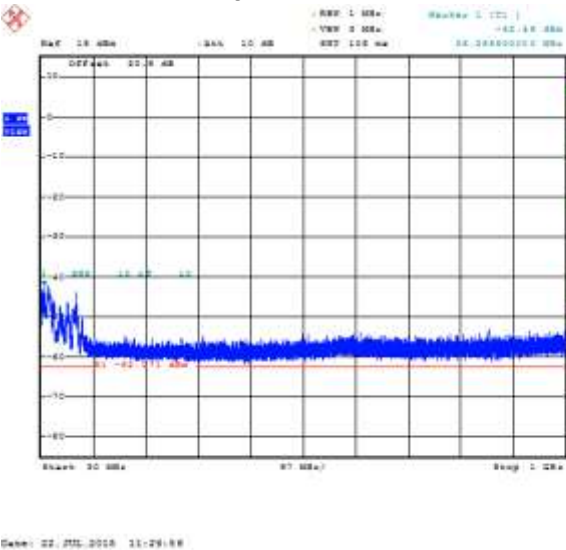


Figure 7-156: Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 64, MCS 0

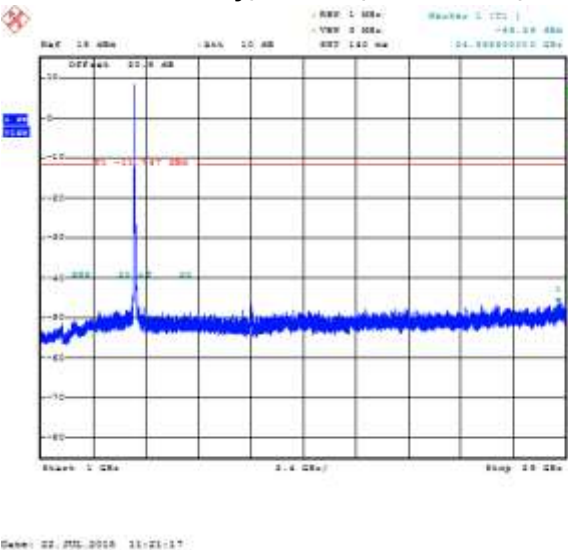
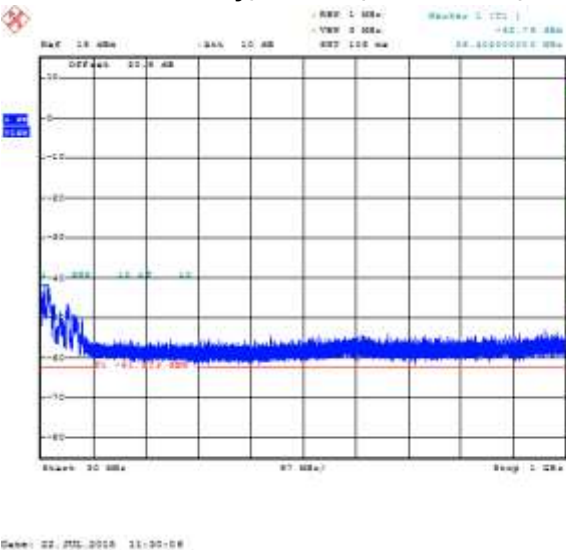


Figure 7-157: Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 64, MCS 0



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

Figure 7-158: Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 100, MCS 0

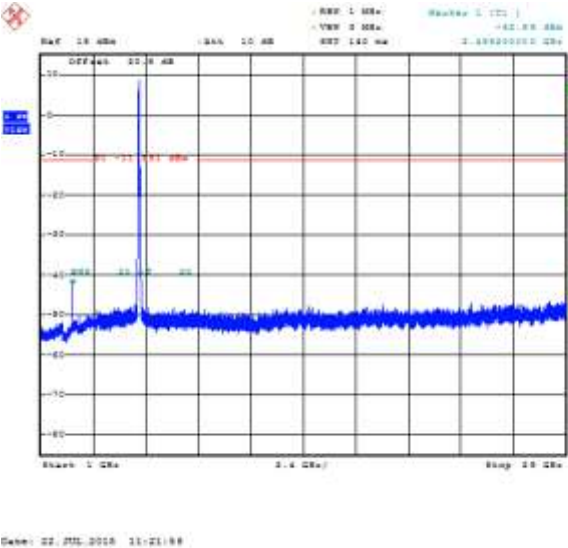


Figure 7-159 Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 100, MCS 0

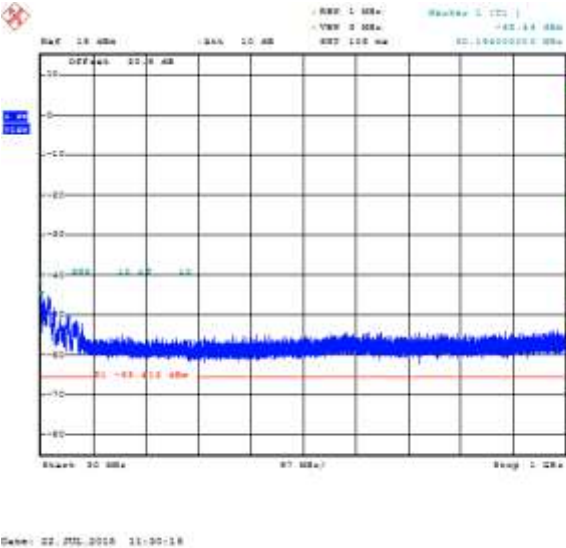


Figure 7-160: Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 140, MCS 0

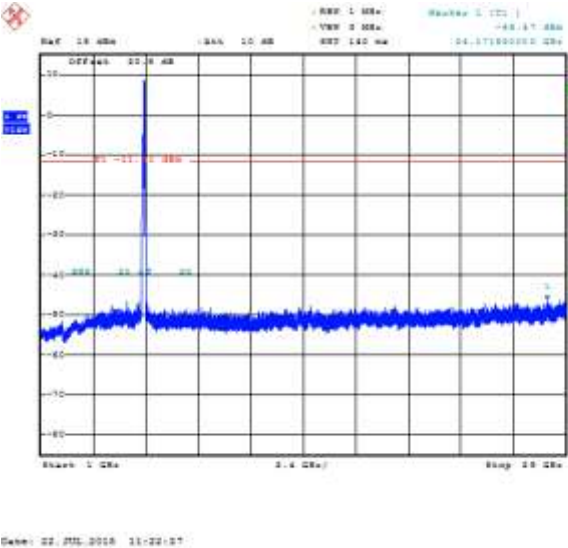
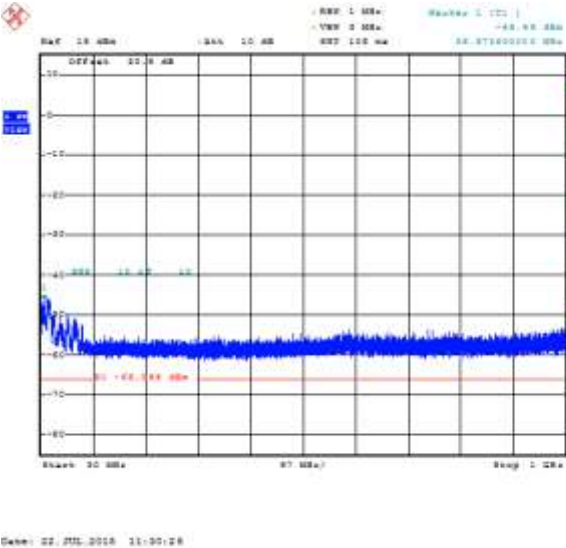


Figure 7-161: Spurious RF Conducted Emissions  
Primary, 802.11n, Channel 140, MCS 0



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 7</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

Figure 7-162: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 36, MCS 0

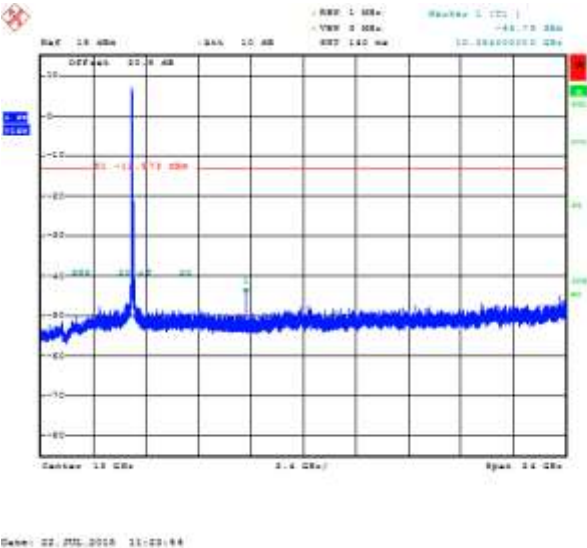


Figure 7-163: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 36, MCS 0

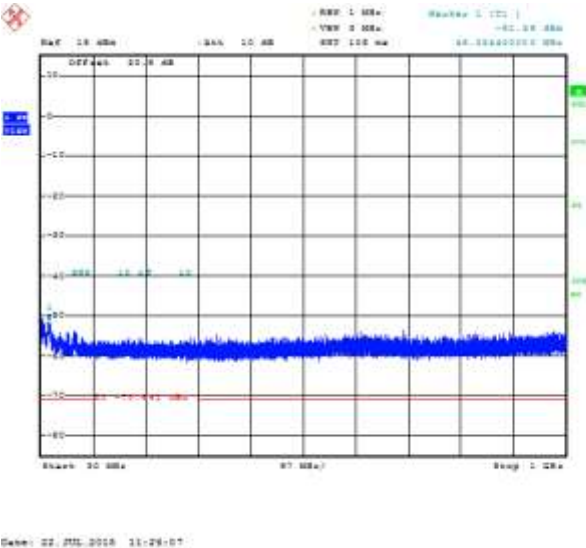


Figure 7-164: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 64, MCS 0

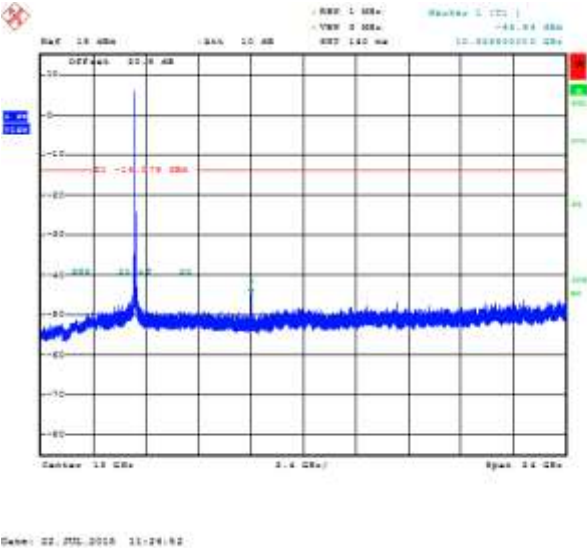
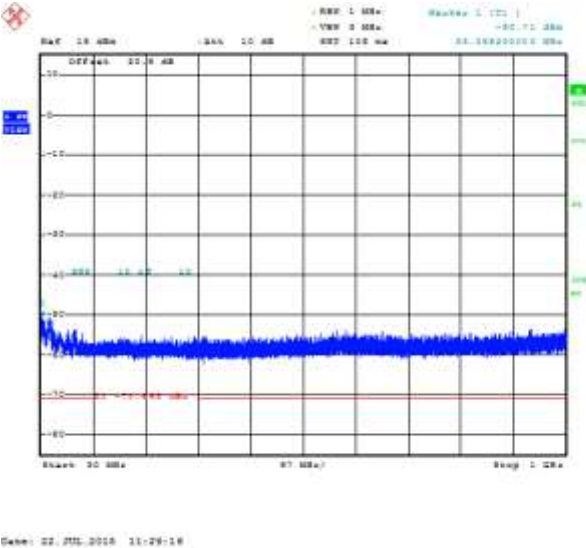


Figure 7-165: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 64, MCS 0



|                                                                                   |                                                                          |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
| <b>APPENDIX 7</b>                                                                 |                                                                          |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11n RF Conducted Emission Test Results cont'd

Figure 7-166: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 100, MCS 0

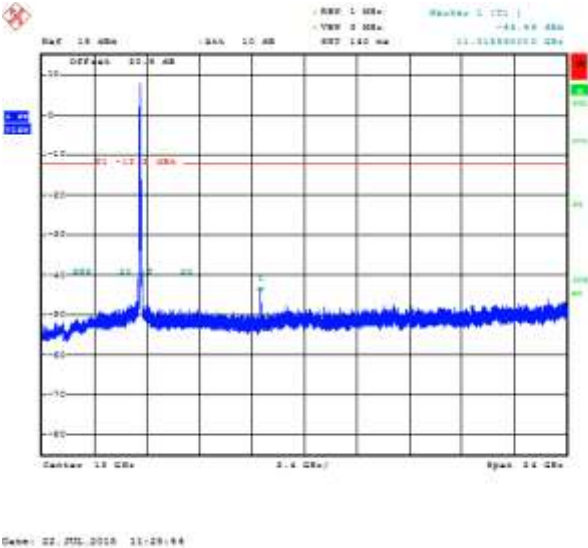


Figure 7-167: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 100, MCS 0

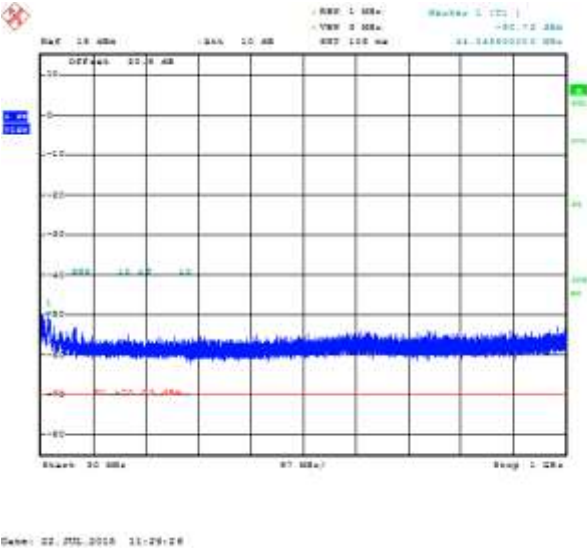


Figure 7-168: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 140, MCS 0

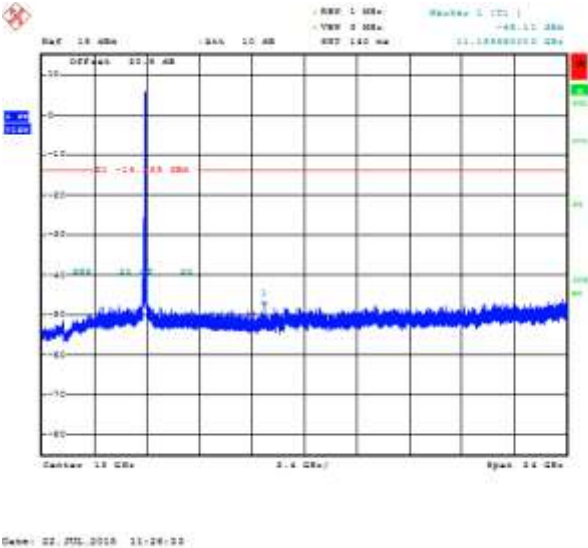
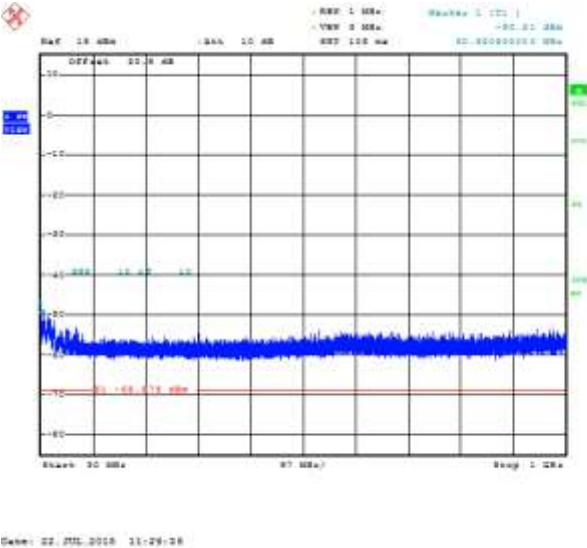


Figure 7-169: Spurious RF Conducted Emissions  
Secondary, 802.11n, Channel 140, MCS 0

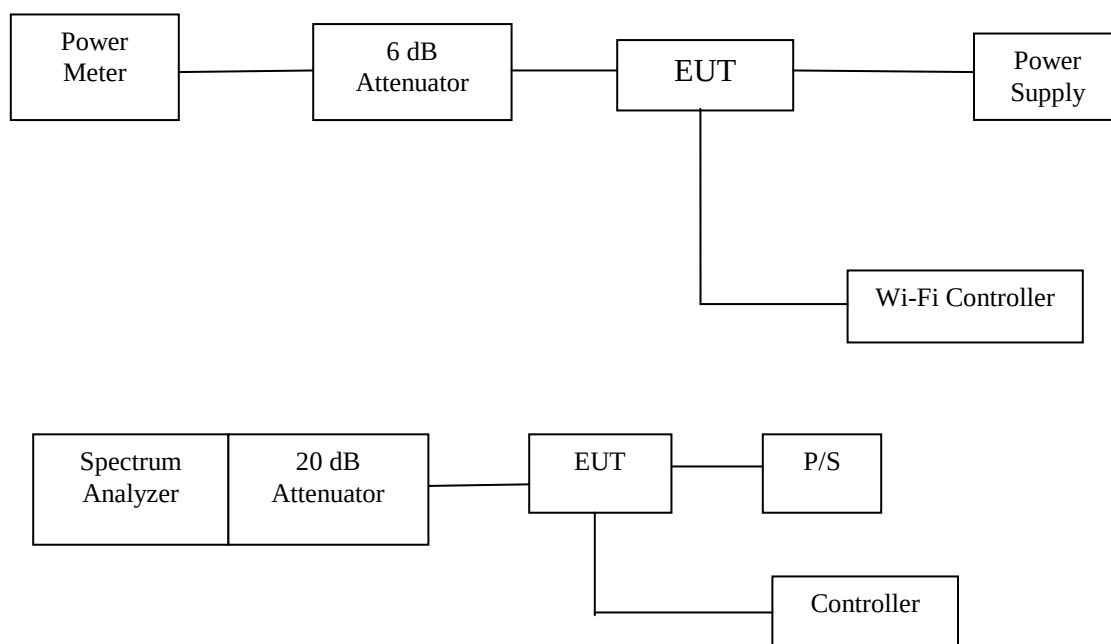


## **APPENDIX 8 – 802.11ac CONDUCTED EMISSIONS TEST DATA/PLOTS**

|                                             |                                                                                               |                                                         |
|---------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
| <b>BlackBerry</b>                           | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01 | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results

#### Test Setup Diagram



A reference offset of 8.9 dB was applied to the spectrum analyzer and 7.4 dB to the Power Meter reference level for the attenuators and coaxial cable loss in the test circuit.

Date of test: July 22, August 20, 24, and 30, 2015  
The measurements were performed by Landon Martin.

The environmental test conditions were:      Temperature:      26.4 °C  
                                                                         Relative Humidity:      48.2 %

|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## 802.11ac RF Conducted Emission Test Results cont'd

### **6 dB Bandwidth**

The EUT met the requirements of the 6 dB bandwidth as per 47 CFR 15.247(a) (2) and RSS-247. For bandwidth 20 MHz, channels 36, 64, 100, 140 and 149 were measured at MCS 0 each; for bandwidth 40 MHz, channels 36, 64, 100 and 149 were measured at MCS 0 each; for bandwidth 80 MHz, channels 36, 64, 100, 140 and 149 were measured at MCS 0 each.

### **20MHz Bandwidth**

#### Primary Antenna

| Channel | Data Rate | Limit (kHz) | Measured Level (MHz) |
|---------|-----------|-------------|----------------------|
| 36      | MCS0      | ≥ 500       | 17.46                |
| 64      | MCS0      | ≥ 500       | <b>17.62</b>         |
| 100     | MCS0      | ≥ 500       | 17.38                |
| 140     | MCS0      | ≥ 500       | 17.60                |
| 149     | MCS0      | ≥ 500       | 17.52                |

#### Secondary Antenna

| Channel | Data Rate | Limit (kHz) | Measured Level (MHz) |
|---------|-----------|-------------|----------------------|
| 36      | MCS0      | ≥ 500       | <b>17.62</b>         |
| 64      | MCS0      | ≥ 500       | <b>17.62</b>         |
| 100     | MCS0      | ≥ 500       | 17.60                |
| 140     | MCS0      | ≥ 500       | 17.52                |
| 149     | MCS0      | ≥ 500       | 17.52                |

See figures 8-1 to 8-10 for the plots of the 6 dB bandwidth measurements for Channel 36, 64, 100, 140 and 149 at MCS0 Mbps each for 802.11ac mode

|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## 802.11ac RF Conducted Emission Test Results cont'd

### 40MHz Bandwidth

#### Primary Antenna

| Channel | Data Rate | Limit (kHz) | Measured Level (MHz) |
|---------|-----------|-------------|----------------------|
| 36      | MCS0      | ≥ 500       | 36.36                |
| 64      | MCS0      | ≥ 500       | 36.20                |
| 100     | MCS0      | ≥ 500       | <b>36.40</b>         |
| 140     | MCS0      | ≥ 500       | <b>36.40</b>         |
| 149     | MCS0      | ≥ 500       | <b>36.40</b>         |

#### Secondary Antenna

| Channel | Data Rate | Limit (kHz) | Measured Level (MHz) |
|---------|-----------|-------------|----------------------|
| 36      | MCS0      | ≥ 500       | 36.16                |
| 64      | MCS0      | ≥ 500       | 36.20                |
| 100     | MCS0      | ≥ 500       | <b>36.40</b>         |
| 140     | MCS0      | ≥ 500       | <b>36.40</b>         |
| 149     | MCS0      | ≥ 500       | <b>36.40</b>         |

See figures 8-11 to 8-20 for the plots of the 6 dB bandwidth measurements for Channel 36, 64, 100, 140 and 149 at MCS 0 each for 802.11ac mode.

|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## 802.11ac RF Conducted Emission Test Results cont'd

### 80MHz Bandwidth

#### Primary Antenna

| Channel | Data Rate | Limit (kHz) | Measured Level (MHz) |
|---------|-----------|-------------|----------------------|
| 36      | MCS0      | ≥ 500       | 76.32                |
| 64      | MCS0      | ≥ 500       | 76.16                |
| 100     | MCS0      | ≥ 500       | 76.08                |
| 140     | MCS0      | ≥ 500       | 76.08                |
| 149     | MCS0      | ≥ 500       | <b>76.40</b>         |

#### Secondary Antenna

| Channel | Data Rate | Limit (kHz) | Measured Level (MHz) |
|---------|-----------|-------------|----------------------|
| 36      | MCS0      | ≥ 500       | 76.08                |
| 64      | MCS0      | ≥ 500       | 76.08                |
| 100     | MCS0      | ≥ 500       | 76.08                |
| 140     | MCS0      | ≥ 500       | <b>76.40</b>         |
| 149     | MCS0      | ≥ 500       | 76.32                |

See figures 8-21 to 8-30 for the plots of the 6 dB bandwidth measurements for Channel 36, 64, 100, 140 and 149 at MCS 0 each for 802.11n mode.

|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

20 MHz Bandwidth

Figure 8-1: 6 dB Bandwidth  
Primary, 802.11ac, Channel 36, MCS0 Mbps

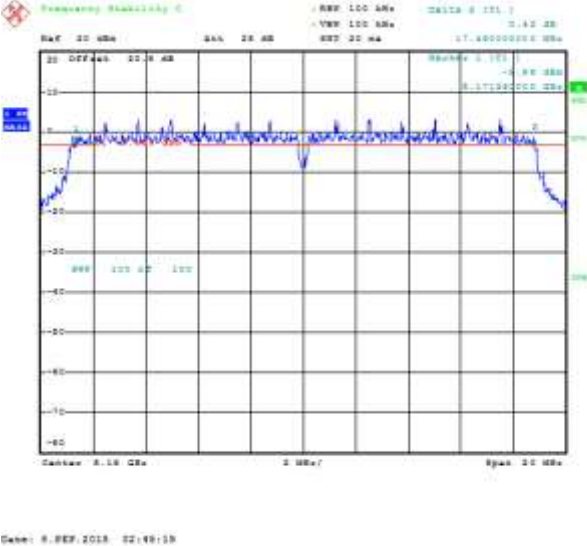


Figure 8-2: 6 dB Bandwidth  
Primary, 802.11ac, Channel 64, MCS0 Mbps

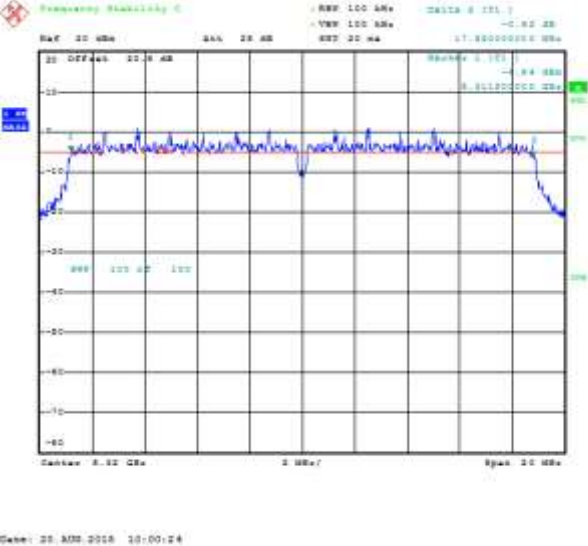


Figure 8-3: 6 dB Bandwidth  
Primary, 802.11ac, Channel 100, 6 Mbps

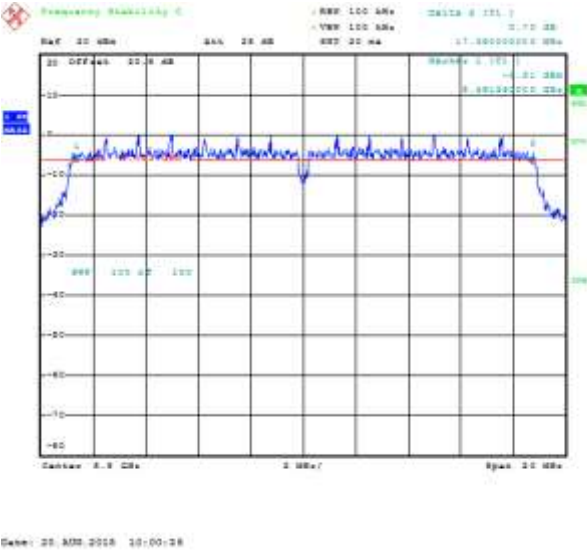
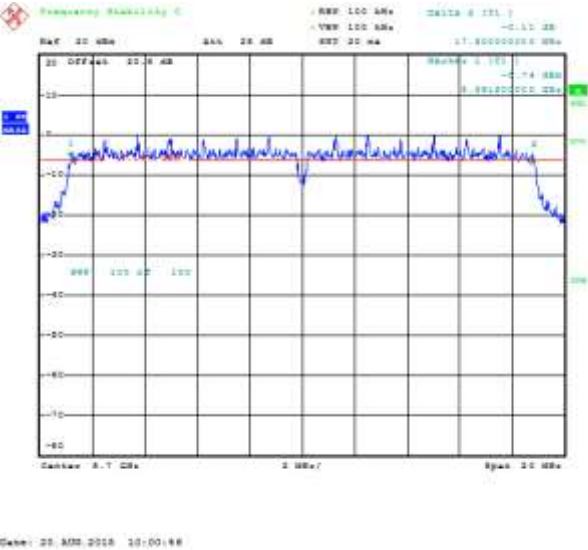


Figure 8-4: 6 dB Bandwidth  
Primary, 802.11ac, Channel 140, 6 Mbps



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-5: 6 dB Bandwidth  
Primary, 802.11ac, Channel 149, MCS0 Mbps



Figure 8-6: 6 dB Bandwidth  
Secondary, 802.11ac, Channel 36, MCS0 Mbps

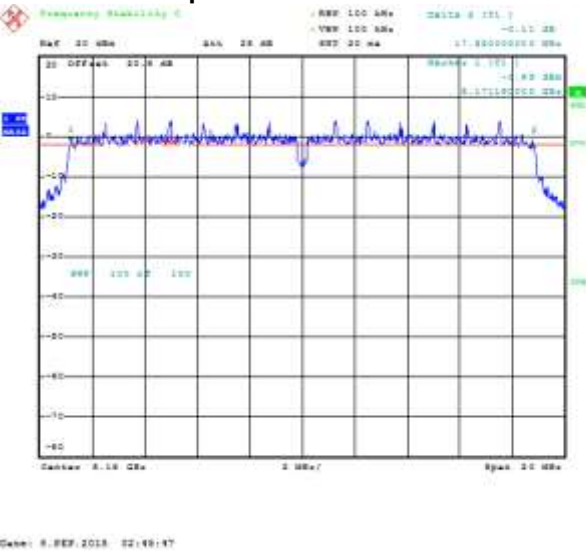
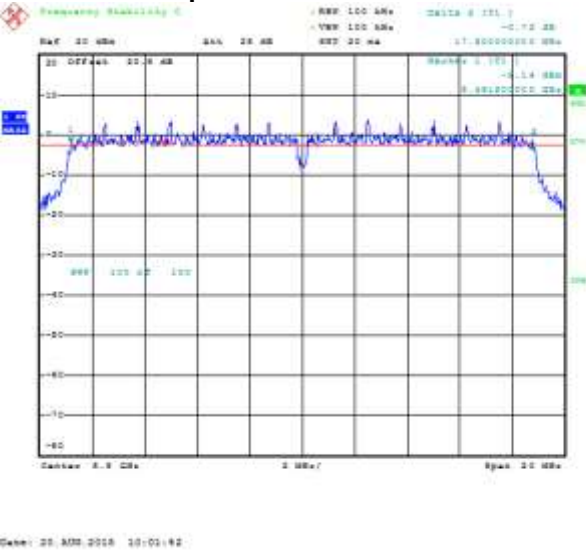


Figure 8-7: 6 dB Bandwidth  
Secondary, 802.11ac, Channel 64, 6 Mbps



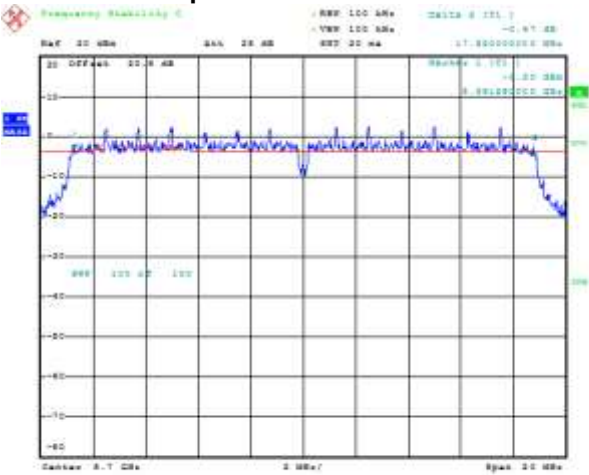
Figure 8-8: 6 dB Bandwidth  
Secondary, 802.11ac, Channel 100, 6 Mbps



|                                                                                   |                                                                                                |                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) <div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                         | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-9: 6 dB Bandwidth  
Secondary, 802.11ac, Channel 140, MCS0 Mbps



Date: 20. Mar. 2015 10:01:13

Figure 8-10: 6 dB Bandwidth  
Secondary, 802.11ac, Channel 149, MCS0 Mbps



Date: 20. Mar. 2015 10:02:04

|                                                                                   |                                                                                                   |                                                         |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

40 MHz Bandwidth

Figure 8-11: 6 dB Bandwidth  
Primary, 802.11ac, Channel 36, MCS0 Mbps



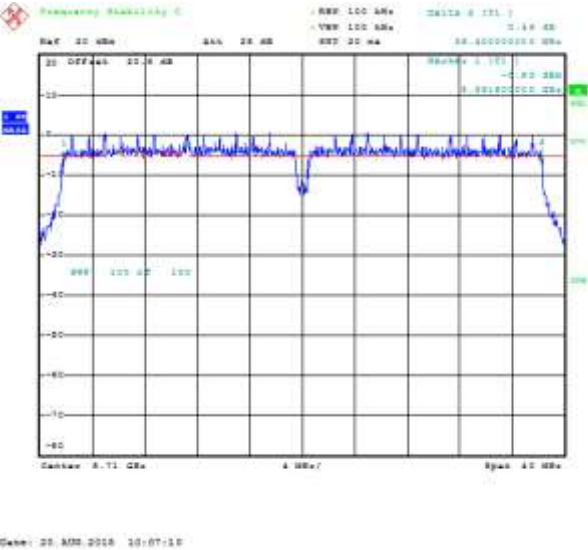
Figure 8-12: 6 dB Bandwidth  
Primary, 802.11ac, Channel 64, MCS0 Mbps



Figure 8-13: 6 dB Bandwidth  
Primary, 802.11ac, Channel 100, 6 Mbps



Figure 8-14: 6 dB Bandwidth  
Primary, 802.11ac, Channel 140, 6 Mbps



|                                                                                   |                                                                          |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

APPENDIX 8

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-15: 6 dB Bandwidth  
Primary, 802.11ac, Channel 149, MCS0 Mbps



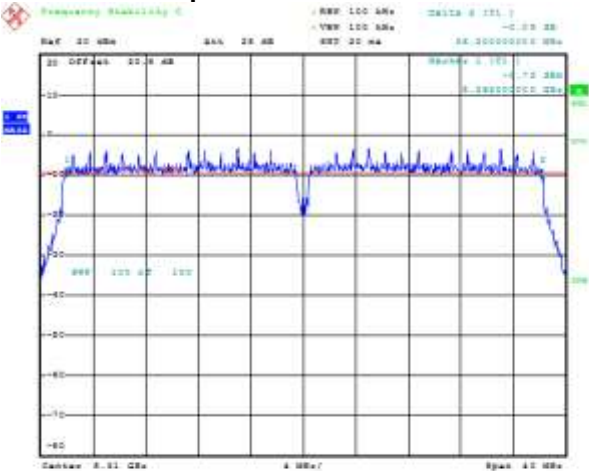
Date: 20.07.2015 10:07:20

Figure 8-16: 6 dB Bandwidth  
Secondary, 802.11ac, Channel 36, MCS0 Mbps



Date: 20.07.2015 10:07:42

Figure 8-17: 6 dB Bandwidth  
Secondary, 802.11ac, Channel 64, 6 Mbps



Date: 20.07.2015 10:07:42

Figure 8-18: 6 dB Bandwidth  
Secondary, 802.11ac, Channel 100, 6 Mbps



Date: 20.07.2015 10:08:02

|                                                                                   |                                                                          |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
|                                                                                   |                                                                          | <b>APPENDIX 8</b>                                       |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-19: 6 dB Bandwidth  
Secondary, 802.11ac, Channel 140, MCS0 Mbps



Date: 20. Mar. 2015 10:09:12

Figure 8-20: 6 dB Bandwidth  
Secondary, 802.11ac, Channel 149, MCS0 Mbps



Date: 20. Mar. 2015 10:09:22

|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

80 MHz Bandwidth

Figure 8-21: 6 dB Bandwidth  
Primary, 802.11ac, Channel 36, MCS0 Mbps

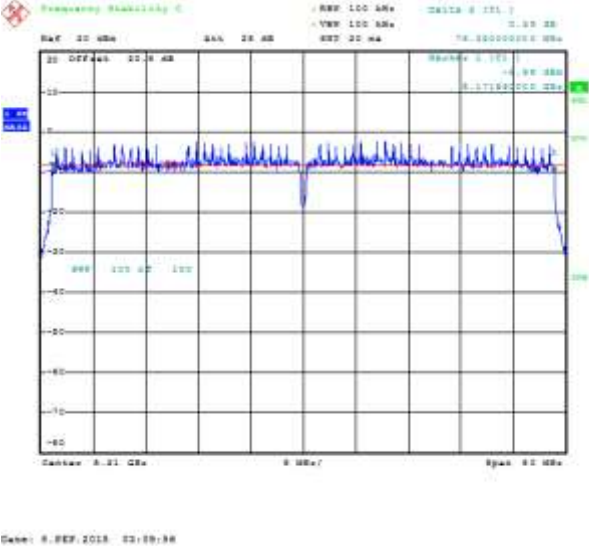


Figure 8-22: 6 dB Bandwidth  
Primary, 802.11ac, Channel 64, MCS0 Mbps

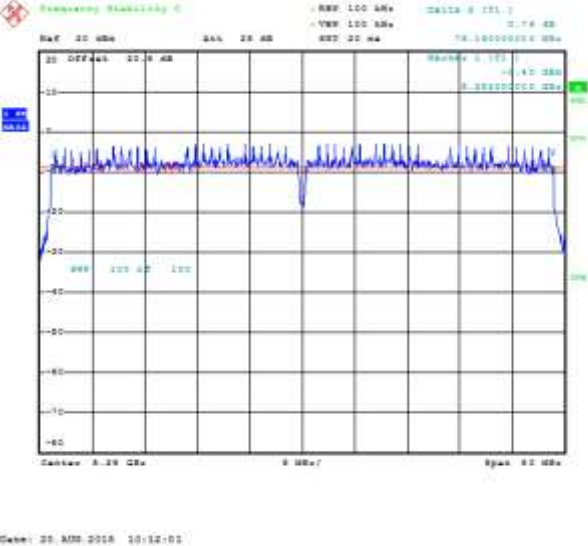


Figure 8-23: 6 dB Bandwidth  
Primary, 802.11ac, Channel 100, 6 Mbps

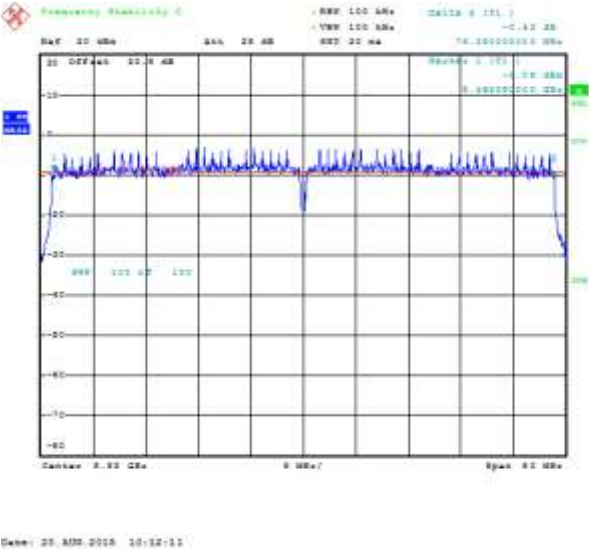
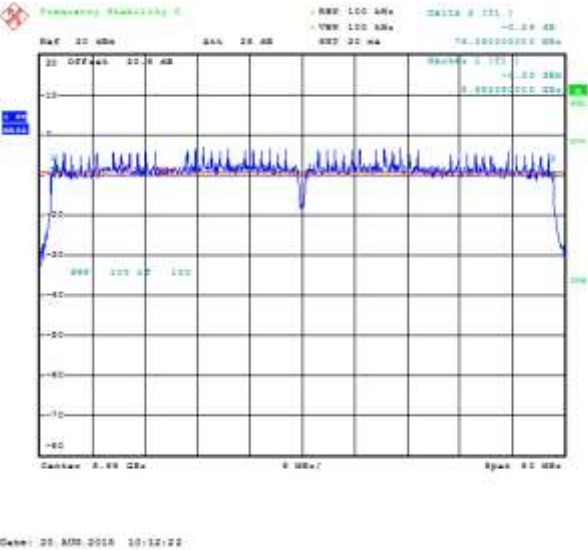


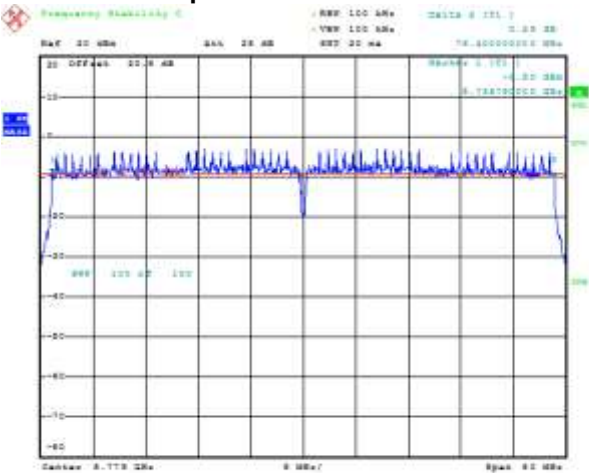
Figure 8-24: 6 dB Bandwidth  
Primary, 802.11ac, Channel 140, 6 Mbps



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

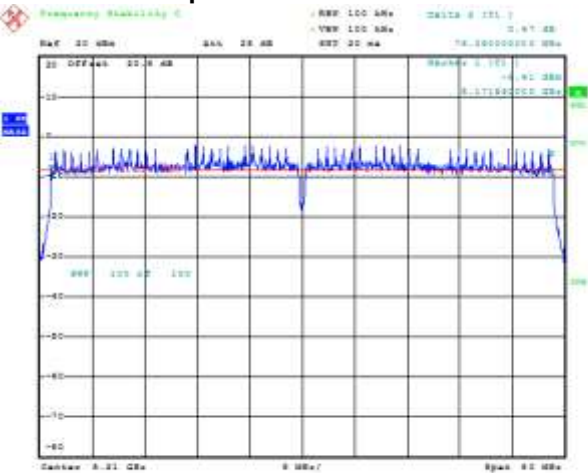
802.11ac RF Conducted Emission Test Results cont'd

Figure 8-25: 6 dB Bandwidth  
Primary, 802.11ac, Channel 149, MCS0 Mbps



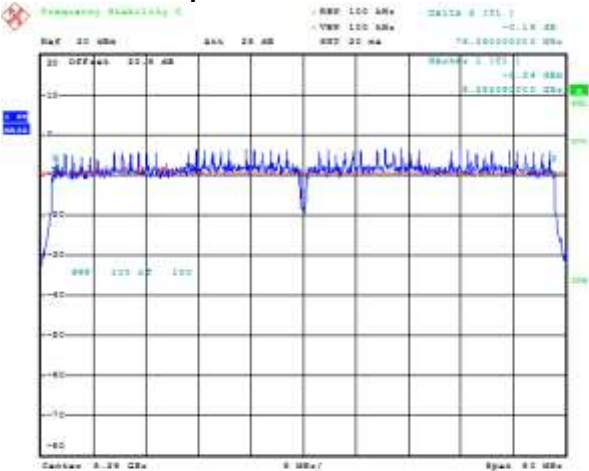
Date: 20. SEP. 2015 10:12:22

Figure 8-26: 6 dB Bandwidth  
Secondary, 802.11ac, Channel 36, MCS0 Mbps



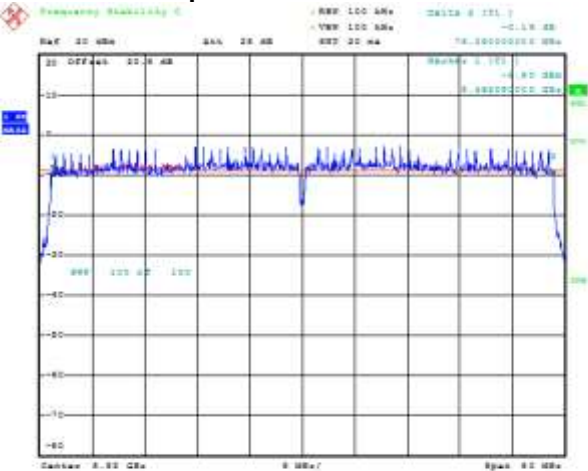
Date: 8. SEP. 2015 13:11:24

Figure 8-27: 6 dB Bandwidth  
Secondary, 802.11ac, Channel 64, 6 Mbps



Date: 20. SEP. 2015 10:18:14

Figure 8-28: 6 dB Bandwidth  
Secondary, 802.11ac, Channel 100, 6 Mbps

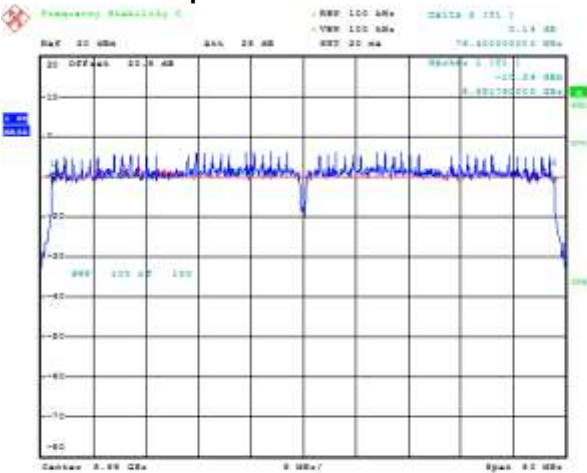


Date: 20. SEP. 2015 10:18:24

|                                                                                   |                                                                                                |                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) <div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                         | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

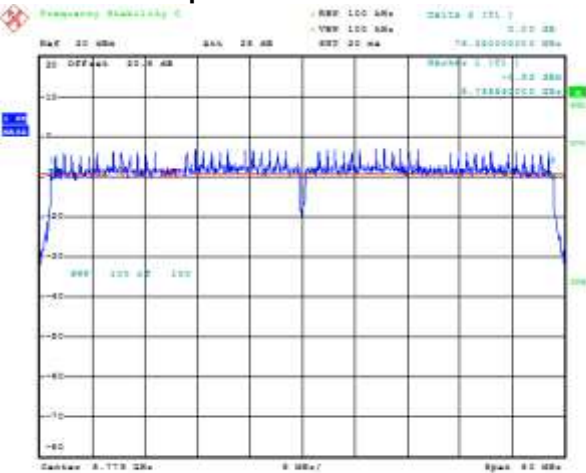
802.11ac RF Conducted Emission Test Results cont'd

Figure 8-29: 6 dB Bandwidth  
 Secondary, 802.11ac, Channel 140, MCS0 Mbps



Date: 20. SEP. 2015 10:10:58

Figure 8-30: 6 dB Bandwidth  
 Secondary, 802.11ac, Channel 149, MCS0 Mbps



Date: 20. SEP. 2015 10:10:58

|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## 802.11ac RF Conducted Emission Test Results cont'd

### **Maximum Conducted Output Power**

The EUT met the requirements of the maximum conducted output power of class 2 as per 47 CFR 15.407 and RSS-247. Channels 36, 64, 100, 140 and 165 were measured for 802.11ac mode, bandwidth 20MHz, using an Agilent power meter, model N1911A with model N1921A power sensor. A reference offset of 8.9 dB was applied to the power meter reference level for the coaxial cable loss and attenuators in the test circuit.

### 20 MHz Bandwidth

#### SISO Primary Antenna

| Channel | BW(MHz) | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|---------|-----------|------------------|----------------------|---------------------|
| 36      | 20      | MCS0      | < 250.0          | 14.73                | 29.72               |
| 64      | 20      | MCS0      | < 250.0          | 12.29                | 16.94               |
| 100     | 20      | MCS0      | < 250.0          | 17.59                | 57.41               |
| 140     | 20      | MCS0      | < 250.0          | 17.45                | 55.59               |
| 149     | 20      | MCS0      | < 1000           | 15.10                | 32.36               |

#### SISO Secondary Antenna

| Channel | BW(MHz) | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|---------|-----------|------------------|----------------------|---------------------|
| 36      | 20      | MCS0      | < 250.0          | 15.91                | 38.99               |
| 64      | 20      | MCS0      | < 250.0          | 14.04                | 25.35               |
| 100     | 20      | MCS0      | < 250.0          | 15.30                | 33.88               |
| 140     | 20      | MCS0      | < 250.0          | 13.86                | 24.32               |
| 149     | 20      | MCS0      | < 1000           | 14.62                | 28.97               |

#### MIMO Primary Antenna

| Channel | BW(MHz) | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|---------|-----------|------------------|----------------------|---------------------|
| 36      | 20      | MCS0      | < 250.0          | 15.01                | 31.70               |
| 64      | 20      | MCS0      | < 250.0          | 13.90                | 24.55               |
| 100     | 20      | MCS0      | < 250.0          | 14.96                | 31.33               |
| 140     | 20      | MCS0      | < 250.0          | 13.71                | 23.50               |
| 149     | 20      | MCS0      | < 1000           | 14.75                | 29.85               |

|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results cont'd

#### MIMO Secondary Antenna

| Channel | BW(MHz) | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|---------|-----------|------------------|----------------------|---------------------|
| 36      | 20      | MCS0      | < 250.0          | 15.80                | 38.02               |
| 64      | 20      | MCS0      | < 250.0          | 13.60                | 22.91               |
| 100     | 20      | MCS0      | < 250.0          | 13.71                | 23.50               |
| 140     | 20      | MCS0      | < 250.0          | 14.52                | 28.31               |
| 149     | 20      | MCS0      | < 1000           | 15.21                | 33.19               |

#### MIMO Sum

| Channel | BW(MHz) | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|---------|-----------|------------------|----------------------|---------------------|
| 36      | 20      | MCS0      | < 250.0          | <b>18.43</b>         | <b>69.71</b>        |
| 64      | 20      | MCS0      | < 250.0          | 16.76                | 47.46               |
| 100     | 20      | MCS0      | < 250.0          | 17.39                | 54.83               |
| 140     | 20      | MCS0      | < 250.0          | 17.14                | 51.81               |
| 149     | 20      | MCS0      | < 1000           | 18.00                | 63.04               |

|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results

Channels 36, 64, 100, 140 and 165 were measured for 802.11ac mode, bandwidth 40MHz, using an Agilent power meter, model N1911A with model N1921A power sensor. A reference offset of 8.9 dB was applied to the power meter reference level for the coaxial cable loss and attenuators in the test circuit.

#### 40 MHz Bandwidth

##### SISO Primary Antenna

| Channel | BW(MHz) | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|---------|-----------|------------------|----------------------|---------------------|
| 36      | 20      | MCS0      | < 250.0          | 12.18                | 16.52               |
| 64      | 20      | MCS0      | < 250.0          | 10.81                | 12.05               |
| 100     | 20      | MCS0      | < 250.0          | 11.87                | 15.38               |
| 140     | 20      | MCS0      | < 250.0          | 14.68                | 29.38               |
| 149     | 20      | MCS0      | < 1000           | 13.24                | 21.09               |

##### SISO Secondary Antenna

| Channel | BW(MHz) | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|---------|-----------|------------------|----------------------|---------------------|
| 36      | 20      | MCS0      | < 250.0          | 14.65                | 29.17               |
| 64      | 20      | MCS0      | < 250.0          | 10.81                | 12.05               |
| 100     | 20      | MCS0      | < 250.0          | 12.35                | 17.18               |
| 140     | 20      | MCS0      | < 250.0          | 14.21                | 26.36               |
| 149     | 20      | MCS0      | < 1000           | 13.11                | 20.46               |

##### MIMO Primary Antenna

| Channel | BW(MHz) | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|---------|-----------|------------------|----------------------|---------------------|
| 36      | 20      | MCS0      | < 250.0          | 11.60                | 14.45               |
| 64      | 20      | MCS0      | < 250.0          | 10.76                | 11.91               |
| 100     | 20      | MCS0      | < 250.0          | 11.71                | 14.83               |
| 140     | 20      | MCS0      | < 250.0          | 14.20                | 26.30               |
| 149     | 20      | MCS0      | < 1000           | 13.09                | 20.37               |

|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results cont'd

#### MIMO Secondary Antenna

| Channel | BW(MHz) | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|---------|-----------|------------------|----------------------|---------------------|
| 36      | 20      | MCS0      | < 250.0          | 10.73                | 11.83               |
| 64      | 20      | MCS0      | < 250.0          | 10.87                | 12.22               |
| 100     | 20      | MCS0      | < 250.0          | 11.25                | 13.34               |
| 140     | 20      | MCS0      | < 250.0          | 15.22                | 33.27               |
| 149     | 20      | MCS0      | < 1000           | 13.47                | 22.23               |

#### MIMO Sum

| Channel | BW(MHz) | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|---------|-----------|------------------|----------------------|---------------------|
| 36      | 20      | MCS0      | < 250.0          | 14.20                | 26.28               |
| 64      | 20      | MCS0      | < 250.0          | 13.83                | 24.13               |
| 100     | 20      | MCS0      | < 250.0          | 14.50                | 28.16               |
| 140     | 20      | MCS0      | < 250.0          | <b>17.75</b>         | <b>59.57</b>        |
| 149     | 20      | MCS0      | < 1000           | 16.29                | 42.60               |

|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results

Channels 36, 64, 100, 140 and 165 were measured for 802.11ac mode, bandwidth 80MHz, using an Agilent power meter; model N1911A with model N1921A power sensor. A reference offset of 8.9 dB was applied to the power meter reference level for the coaxial cable loss and attenuators in the test circuit.

#### 80 MHz Bandwidth

##### SISO Primary Antenna

| Channel | BW(MHz) | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|---------|-----------|------------------|----------------------|---------------------|
| 36      | 20      | MCS0      | < 250.0          | 13.14                | 20.61               |
| 64      | 20      | MCS0      | < 250.0          | 13.07                | 20.28               |
| 100     | 20      | MCS0      | < 250.0          | 12.79                | 19.01               |
| 140     | 20      | MCS0      | < 250.0          | 12.63                | 18.32               |
| 149     | 20      | MCS0      | < 1000           | 12.94                | 19.68               |

##### SISO Secondary Antenna

| Channel | BW(MHz) | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|---------|-----------|------------------|----------------------|---------------------|
| 36      | 20      | MCS0      | < 250.0          | 13.69                | 23.39               |
| 64      | 20      | MCS0      | < 250.0          | 12.30                | 16.98               |
| 100     | 20      | MCS0      | < 250.0          | 12.72                | 18.71               |
| 140     | 20      | MCS0      | < 250.0          | 11.32                | 13.55               |
| 149     | 20      | MCS0      | < 1000           | 12.19                | 16.56               |

##### MIMO Primary Antenna

| Channel | BW(MHz) | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|---------|-----------|------------------|----------------------|---------------------|
| 36      | 20      | MCS0      | < 250.0          | 13.68                | 23.33               |
| 64      | 20      | MCS0      | < 250.0          | 10.50                | 11.22               |
| 100     | 20      | MCS0      | < 250.0          | 11.65                | 14.62               |
| 140     | 20      | MCS0      | < 250.0          | 12.22                | 16.67               |
| 149     | 20      | MCS0      | < 1000           | 12.43                | 17.50               |

|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results cont'd

#### MIMO Secondary Antenna

| Channel | BW(MHz) | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|---------|-----------|------------------|----------------------|---------------------|
| 36      | 20      | MCS0      | < 250.0          | 14.12                | 25.82               |
| 64      | 20      | MCS0      | < 250.0          | 10.98                | 12.53               |
| 100     | 20      | MCS0      | < 250.0          | 11.24                | 13.30               |
| 140     | 20      | MCS0      | < 250.0          | 13.08                | 20.32               |
| 149     | 20      | MCS0      | < 1000           | 12.83                | 19.19               |

#### MIMO Sum

| Channel | BW(MHz) | Data Rate | Power Limit (mW) | Measured Level (dBm) | Measured Level (mW) |
|---------|---------|-----------|------------------|----------------------|---------------------|
| 36      | 20      | MCS0      | < 250.0          | <b>16.92</b>         | <b>49.16</b>        |
| 64      | 20      | MCS0      | < 250.0          | 13.76                | 23.75               |
| 100     | 20      | MCS0      | < 250.0          | 14.46                | 27.93               |
| 140     | 20      | MCS0      | < 250.0          | 15.68                | 37.00               |
| 149     | 20      | MCS0      | < 1000           | 15.64                | 36.69               |

|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## 802.11ac RF Conducted Emission Test Results cont'd

### **Band Edge Compliance**

The EUT met the requirements of the band edge compliance as per 47 CFR 15.407 and RSS-247. Channels 36, 64, 100, 140, 149, and 165 were measured at MCS 0 Mbps each for bandwidth 20MHz, 802.11ac mode.

### **20MHz Bandwidth**

#### SISO Primary Antenna

| Channel | Bandwidth(MHz) | Data Rate | Limit (dBc) | Measured Level (dBc) | Margin (dB) |
|---------|----------------|-----------|-------------|----------------------|-------------|
| 36      | 20             | MCS0      | < -20       | -44.18               | -24.18      |
| 64      | 20             | MCS0      | < -20       | -48.86               | -28.86      |
| 100     | 20             | MCS0      | < -20       | -49.75               | -29.75      |
| 140     | 20             | MCS0      | < -20       | -49.13               | -29.13      |
| 149     | 20             | MCS0      | < -20       | -43.28               | -23.28      |
| 165     | 20             | MCS0      | < -20       | -45.43               | -25.43      |

#### SISO Secondary Antenna

| Channel | Bandwidth(MHz) | Data Rate | Limit (dBc) | Measured Level (dBc) | Margin (dB) |
|---------|----------------|-----------|-------------|----------------------|-------------|
| 36      | 20             | MCS0      | < -20       | -44.16               | -24.16      |
| 64      | 20             | MCS0      | < -20       | -49.63               | -29.63      |
| 100     | 20             | MCS0      | < -20       | -47.81               | -27.81      |
| 140     | 20             | MCS0      | < -20       | -43.94               | -23.94      |
| 149     | 20             | MCS0      | < -20       | -41.38               | -21.38      |
| 165     | 20             | MCS0      | < -20       | -35.15               | -15.15      |

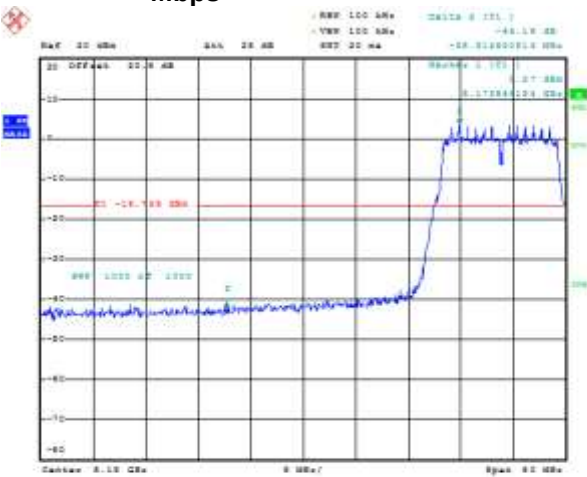
See figures 8-31 to 8-42 for the plots of the band edge compliance measurements for Channel 36, 64, 100, 149 and 165 at MCS0 Mbps each for 802.11ac mode.

|                                                                                   |                                                                          |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

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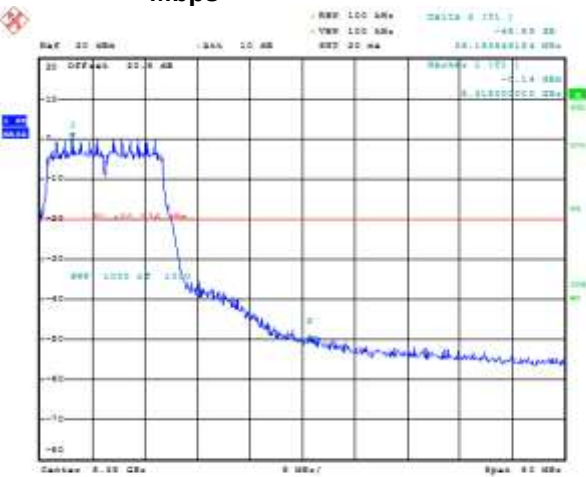
802.11ac RF Conducted Emission Test Results cont'd

Figure 8-31: Band Edge Compliance  
Primary, 802.11ac, Channel 36, MCS0 Mbps



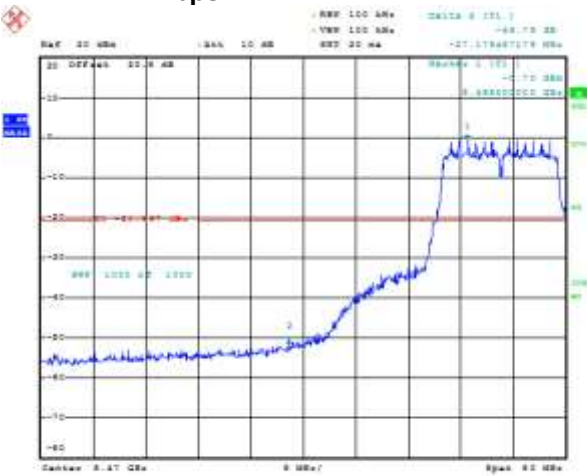
Date: 8 SEP 2015 22:49:50

Figure 8-32: Band Edge Compliance  
Primary, 802.11ac, Channel 64, MCS0 Mbps



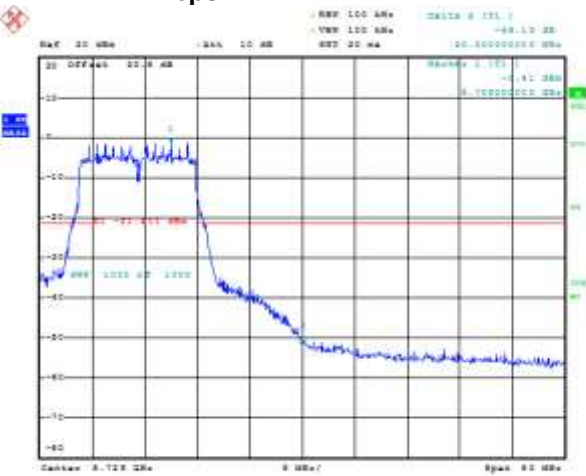
Date: 21 MAR 2016 19:26:07

Figure 8-33: Band Edge Compliance  
Primary, 802.11ac, Channel 100, MCS0 Mbps



Date: 21 MAR 2016 19:29:28

Figure 8-34: Band Edge Compliance  
Primary, 802.11ac, Channel 140, MCS0 Mbps



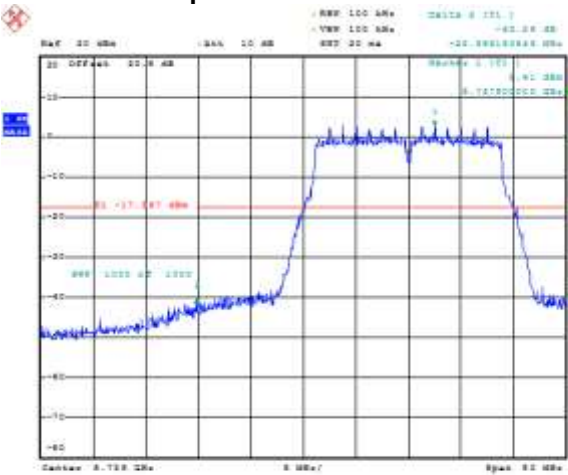
Date: 21 MAR 2016 19:26:28

|                                                                                   |                                                                          |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

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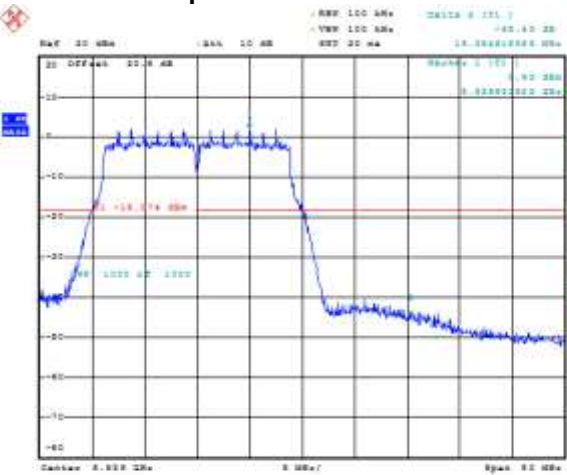
802.11a RF Conducted Emission Test Results cont'd

Figure 8-35: Band Edge Compliance  
Primary, 802.11ac, Channel 149, MCS0 Mbps



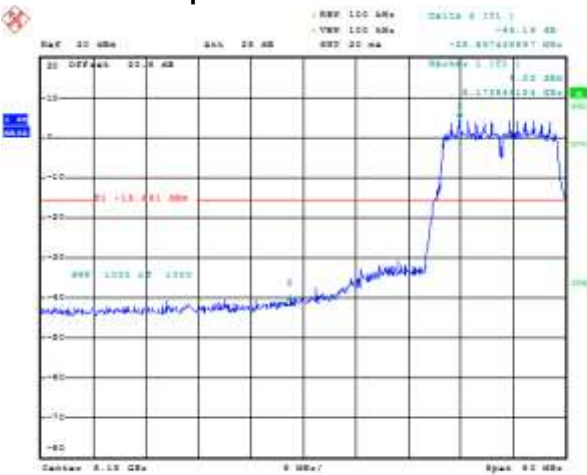
Date: 21, MAR, 2016 19:54:33

Figure 8-36: Band Edge Compliance  
Primary, 802.11ac, Channel 165, MCS0 Mbps



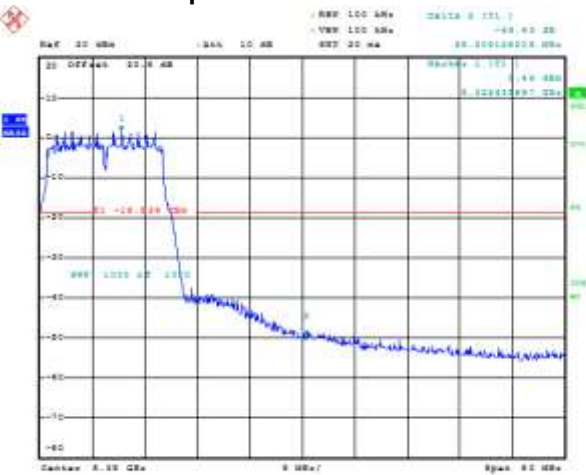
Date: 21, MAR, 2016 19:57:28

Figure 8-37: Band Edge Compliance  
Secondary, 802.11ac, Channel 36, MCS0 Mbps



Date: 8, SEP, 2015 22:48:46

Figure 8-38: Band Edge Compliance  
Secondary, 802.11ac, Channel 64, MCS0 Mbps



Date: 21, MAR, 2016 19:29:28

|                                                                                   |                                                                             |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1) |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015      | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

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802.11ac RF Conducted Emission Test Results cont'd

Figure 8-39: Band Edge Compliance  
Secondary, 802.11ac, Channel 100,  
MCS0 Mbps

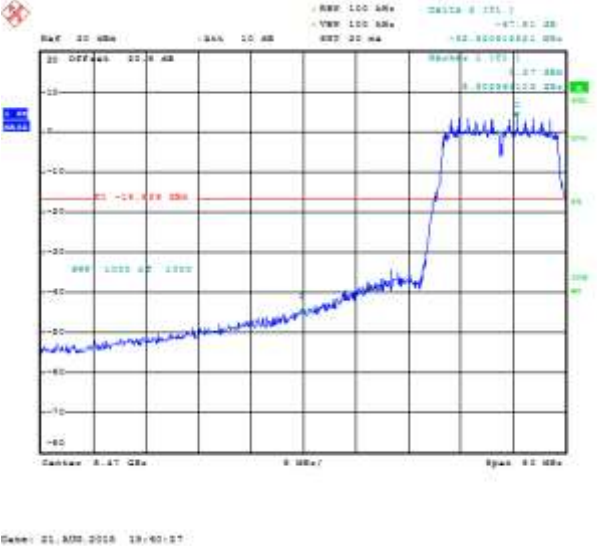


Figure 8-40: Band Edge Compliance  
Secondary, 802.11ac, Channel 140,  
MCS0 Mbps

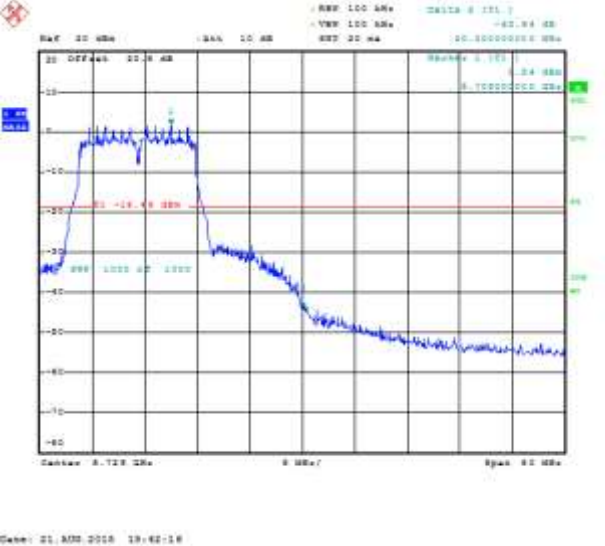


Figure 8-41: Band Edge Compliance  
Secondary, 802.11ac, Channel 149,  
MCS0 Mbps

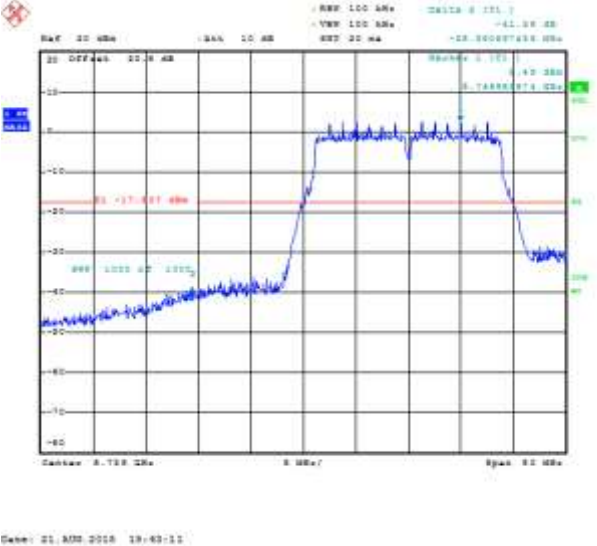
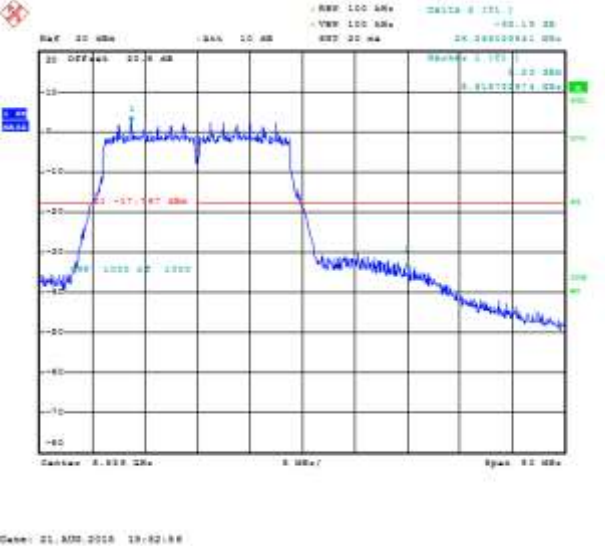


Figure 8-42: Band Edge Compliance  
Secondary, 802.11ac, Channel 165,  
MCS0 Mbps



|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results cont'd

Channels 36, 64, 100, 140, and 149 were measured at MCS0 mode each for bandwidth 40MHz, 802.11ac mode.

#### 40MHz Bandwidth

##### SISO Primary Antenna

| Channel | Bandwidth(MHz) | Data Rate | Limit (dBc) | Measured Level (dBc) | Margin (dB) |
|---------|----------------|-----------|-------------|----------------------|-------------|
| 36      | 40             | MCS0      | < -20       | -43.33               | -23.33      |
| 64      | 40             | MCS0      | < -20       | -40.37               | -20.37      |
| 100     | 40             | MCS0      | < -20       | -35.49               | -15.49      |
| 140     | 40             | MCS0      | < -20       | -26.37               | -6.37       |
| 149     | 40             | MCS0      | < -20       | -40.12               | -20.12      |

##### SISO Secondary Antenna

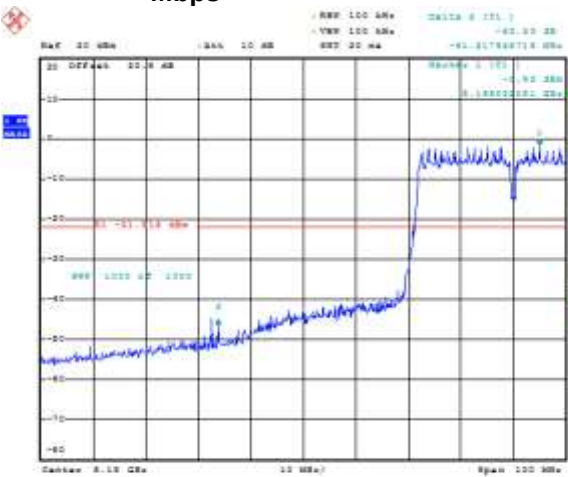
| Channel | Bandwidth(MHz) | Data Rate | Limit (dBc) | Measured Level (dBc) | Margin (dB) |
|---------|----------------|-----------|-------------|----------------------|-------------|
| 36      | 40             | MCS0      | < -20       | -35.18               | -15.18      |
| 64      | 40             | MCS0      | < -20       | -42.22               | -22.22      |
| 100     | 40             | MCS0      | < -20       | -39.60               | -19.60      |
| 140     | 40             | MCS0      | < -20       | -23.43               | -3.43       |
| 149     | 40             | MCS0      | < -20       | -38.35               | -18.35      |

See figures 8-43 to 8-52 for the plots of the band edge compliance measurements for Channel 36, 64, 100, 140, and 149 at MCS0 Mbps each for 802.11ac mode.

|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

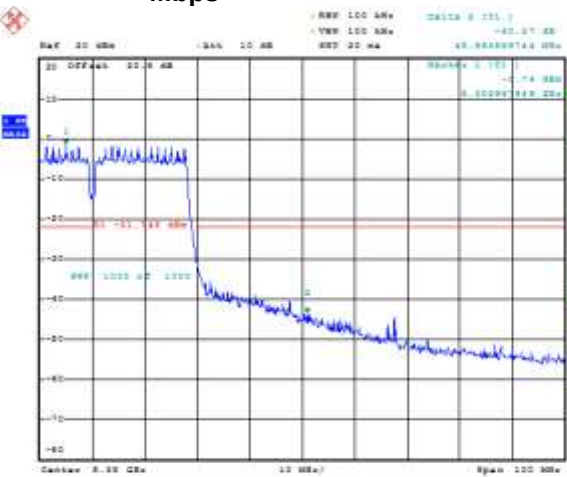
802.11ac RF Conducted Emission Test Results cont'd

Figure 8-43: Band Edge Compliance  
Primary, 802.11ac, Channel 36, MCS0 Mbps



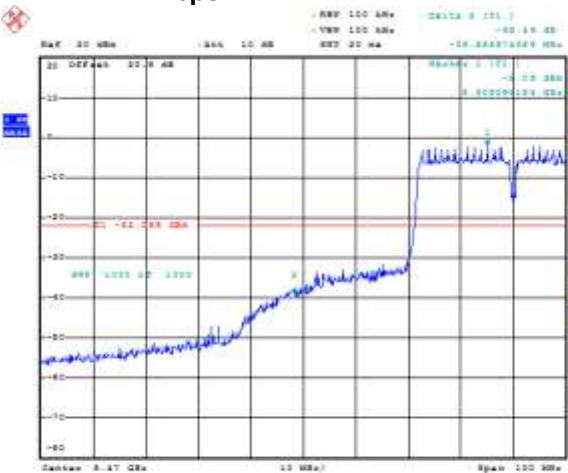
Date: 29.MAR.2016 09:59:10

Figure 8-44: Band Edge Compliance  
Primary, 802.11ac, Channel 64, MCS0 Mbps



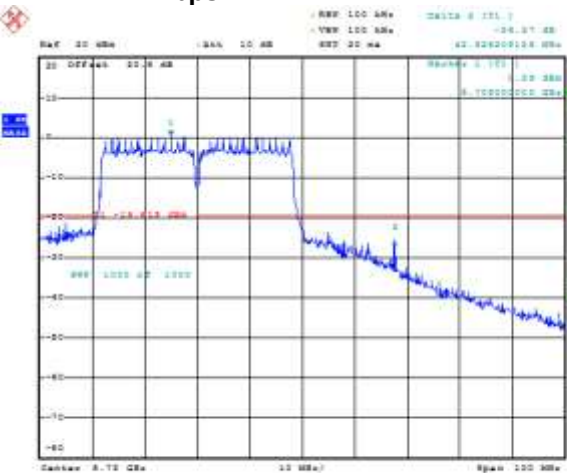
Date: 29.MAR.2016 10:00:22

Figure 8-45: Band Edge Compliance  
Primary, 802.11ac, Channel 100, MCS0 Mbps



Date: 29.MAR.2016 10:01:28

Figure 8-46: Band Edge Compliance  
Primary, 802.11ac, Channel 140, MCS0 Mbps

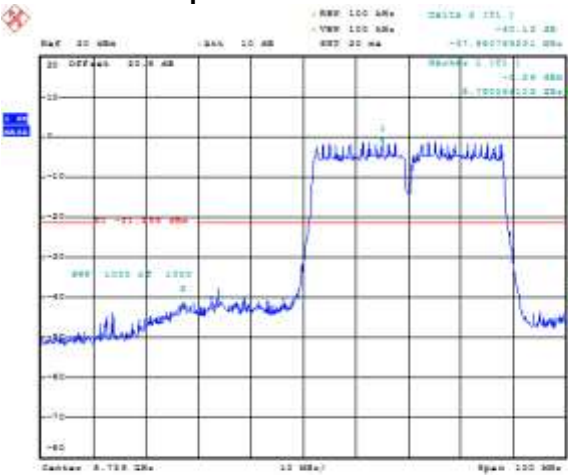


Date: 29.MAR.2016 10:02:28

|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

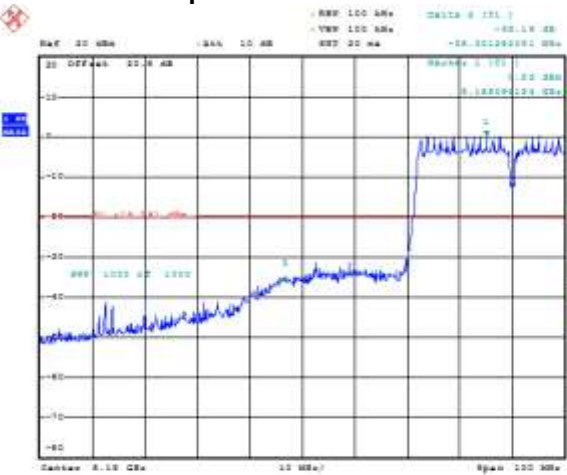
802.11a RF Conducted Emission Test Results cont'd

Figure 8-47: Band Edge Compliance  
Primary, 802.11ac, Channel 149, MCS0 Mbps



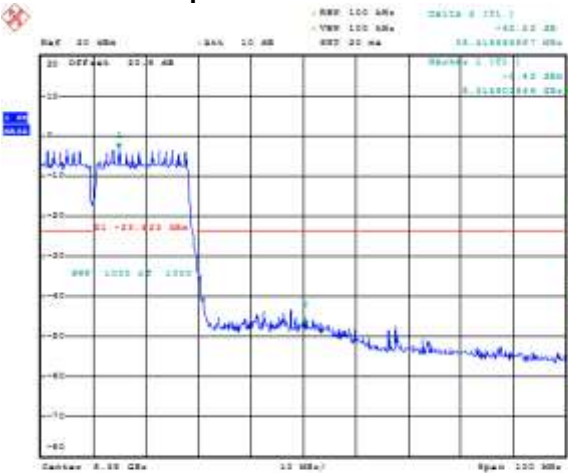
Date: 29. MAR. 2015 10:03:28

Figure 8-48: Band Edge Compliance  
Secondary, 802.11ac, Channel 36, MCS0 Mbps



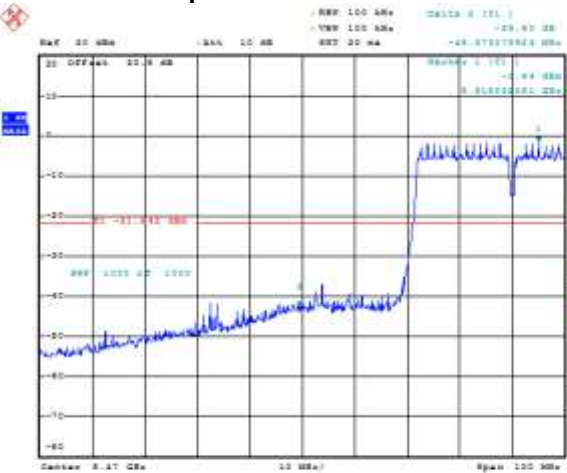
Date: 29. MAR. 2015 10:06:18

Figure 8-49: Band Edge Compliance  
Secondary, 802.11ac, Channel 64, MCS0 Mbps



Date: 29. MAR. 2015 10:09:18

Figure 8-50: Band Edge Compliance  
Secondary, 802.11ac, Channel 100, MCS0 Mbps



Date: 29. MAR. 2015 10:09:18

|                                                                                   |                                                                                                   |                                                         |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11a RF Conducted Emission Test Results cont'd

Figure 8-51: Band Edge Compliance  
Secondary, 802.11ac, Channel 140,  
MCS0 Mbps

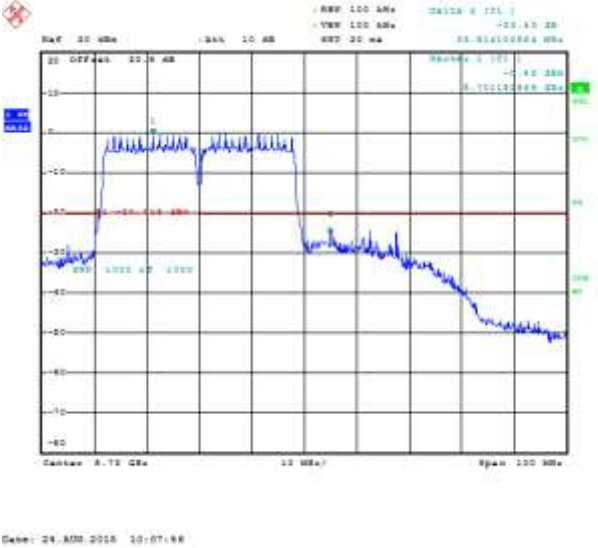
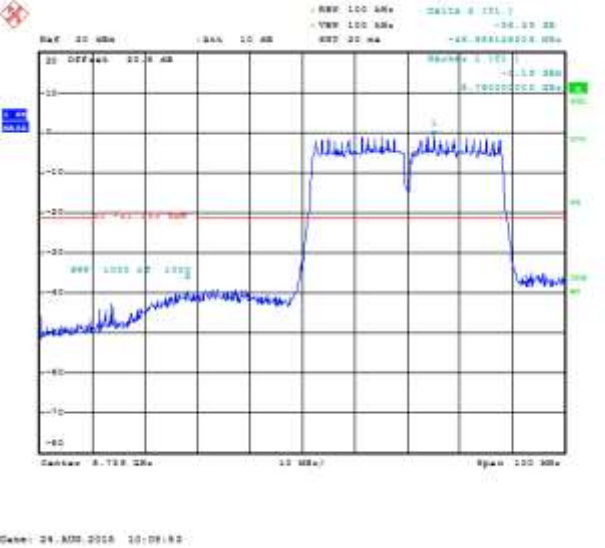


Figure 8-52: Band Edge Compliance  
Secondary, 802.11ac, Channel 149,  
MCS0 Mbps



|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results cont'd

Channels 36, 64, 100, 140, and 149 were measured at MCS0 Mbps each for bandwidth 80MHz, 802.11ac mode.

#### 80MHz Bandwidth

##### SISO Primary Antenna

| Channel | Bandwidth(MHz) | Data Rate | Limit (dBc) | Measured Level (dBc) | Margin (dB) |
|---------|----------------|-----------|-------------|----------------------|-------------|
| 36      | 80             | MCS0      | < -20       | -35.19               | -15.19      |
| 64      | 80             | MCS0      | < -20       | -36.34               | -16.34      |
| 100     | 80             | MCS0      | < -20       | -33.34               | -13.34      |
| 140     | 80             | MCS0      | < -20       | -26.24               | -6.24       |
| 149     | 80             | MCS0      | < -20       | -37.75               | -17.75      |

##### SISO Secondary Antenna

| Channel | Bandwidth(MHz) | Data Rate | Limit (dBc) | Measured Level (dBc) | Margin (dB) |
|---------|----------------|-----------|-------------|----------------------|-------------|
| 36      | 80             | MCS0      | < -20       | -31.22               | -11.22      |
| 64      | 80             | MCS0      | < -20       | -36.10               | -16.10      |
| 100     | 80             | MCS0      | < -20       | -36.16               | -16.16      |
| 140     | 80             | MCS0      | < -20       | -27.95               | -7.95       |
| 149     | 80             | MCS0      | < -20       | -33.74               | -13.74      |

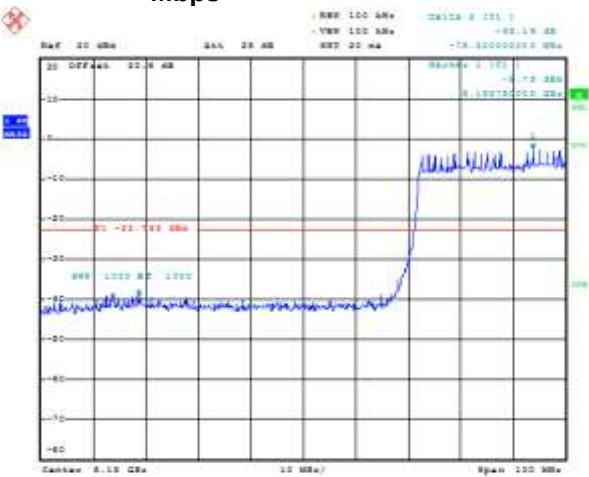
See figures 8-53 to 8-62 for the plots of the band edge compliance measurements for Channel 36, 64, 100, 140, and 149 at MCS0 Mbps each for 802.11ac mode.

|                                                                                   |                                                                          |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

APPENDIX 8

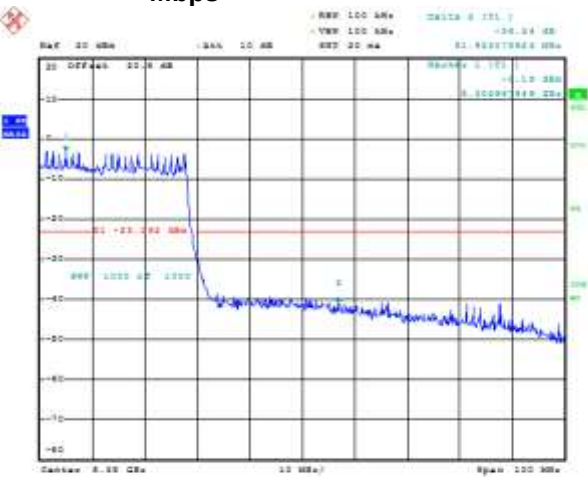
802.11ac RF Conducted Emission Test Results cont'd

Figure 8-53: Band Edge Compliance  
Primary, 802.11ac, Channel 36, MCS0 Mbps



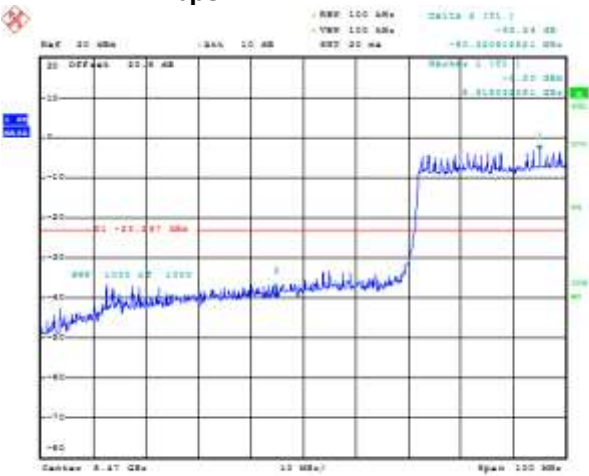
Date: 8 SEP 2015 13:17:40

Figure 8-54: Band Edge Compliance  
Primary, 802.11ac, Channel 64, MCS0 Mbps



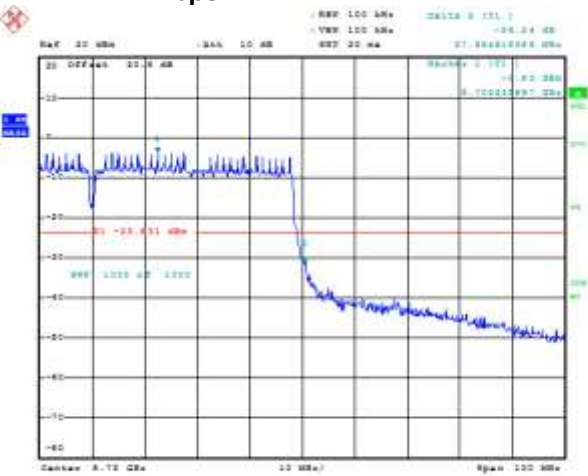
Date: 24 MAR 2016 10:19:40

Figure 8-55: Band Edge Compliance  
Primary, 802.11ac, Channel 100, MCS0 Mbps



Date: 24 MAR 2016 10:19:40

Figure 8-56: Band Edge Compliance  
Primary, 802.11ac, Channel 140, MCS0 Mbps



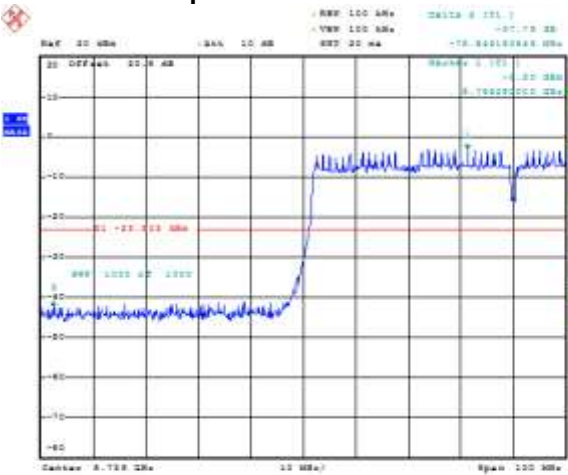
Date: 24 MAR 2016 10:20:12

|                                                                                   |                                                                             |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1) |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015      | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

**APPENDIX 8**

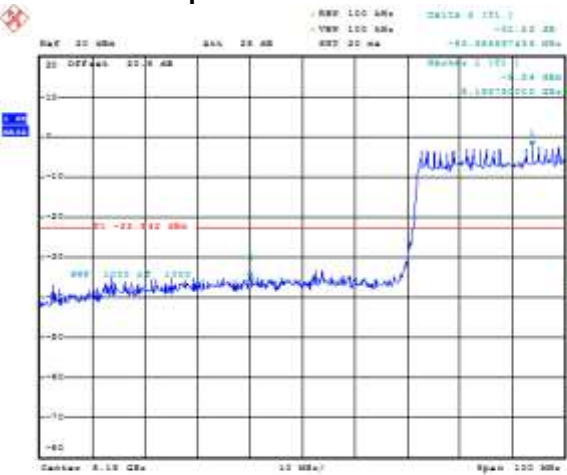
802.11ac RF Conducted Emission Test Results cont'd

**Figure 8-57: Band Edge Compliance**  
**Primary, 802.11ac, Channel 149, MCS0**  
**Mbps**



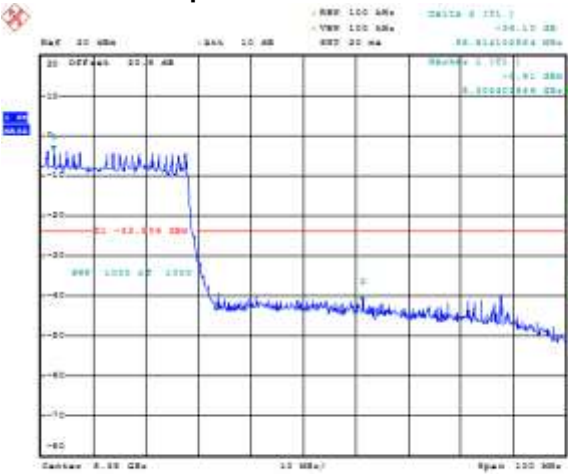
Date: 24.MAY.2016 10:21:42

**Figure 8-58: Band Edge Compliance**  
**Secondary, 802.11ac, Channel 36, MCS0**  
**Mbps**



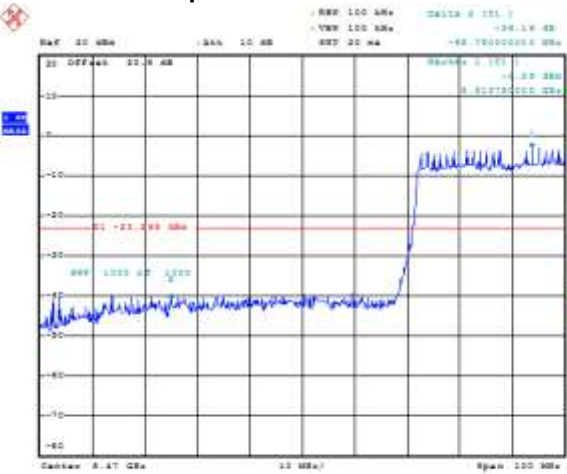
Date: 8.SEP.2015 22:16:38

**Figure 8-59: Band Edge Compliance**  
**Secondary, 802.11ac, Channel 64, MCS0**  
**Mbps**



Date: 24.MAY.2016 10:29:12

**Figure 8-60: Band Edge Compliance**  
**Secondary, 802.11ac, Channel 100, MCS0**  
**Mbps**



Date: 24.MAY.2016 10:29:18

|                                                                                   |                                                                                                |                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) <div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                         | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-61: Band Edge Compliance  
Secondary, 802.11ac, Channel 140,  
MCS0 Mbps

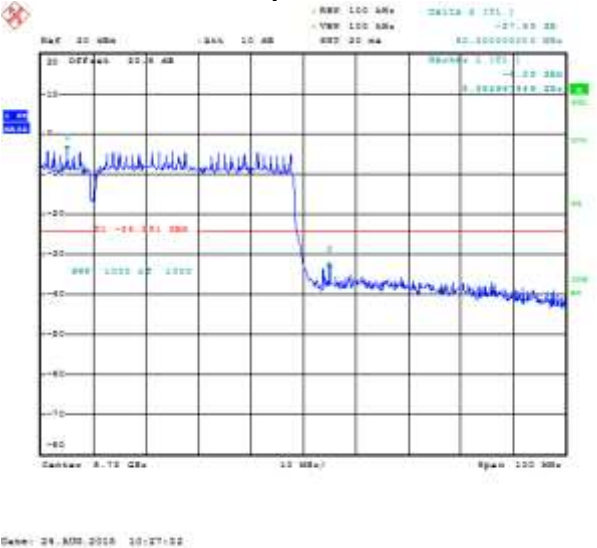
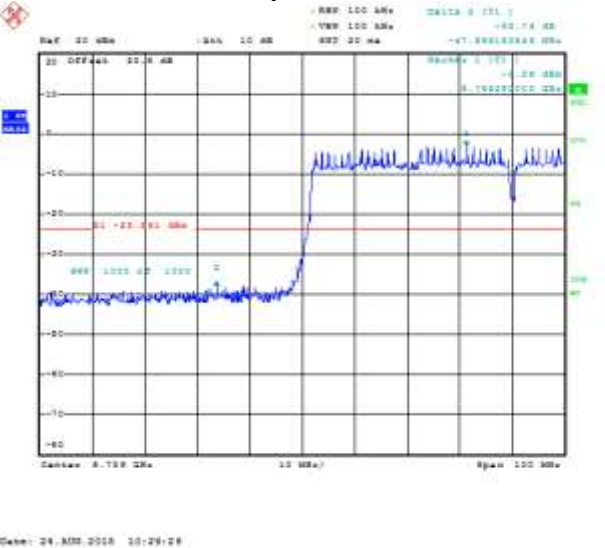


Figure 8-62: Band Edge Compliance  
Secondary, 802.11ac, Channel 149,  
MCS0 Mbps



|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results cont'd

#### **Peak Power Spectral Density**

The EUT met the requirements of the peak power spectral density as per 47 CFR 15.407 and RSS-247. Channels 36, 64, 140 and 149 were measured at MCS0 Mbps each for 802.11ac mode, bandwidth 20MHz.

#### **Bandwidth 20 MHz**

##### SISO Primary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 36      | MCS0      | < 11.00         | 2.89                     | -8.11       |
| 64      | MCS0      | < 11.00         | 3.25                     | -7.75       |
| 140     | MCS0      | < 11.00         | 2.52                     | -8.48       |
| 149     | MCS0      | < 33.00         | 2.94                     | -30.06      |

##### SISO Secondary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 36      | MCS0      | < 11.00         | 3.26                     | -7.74       |
| 64      | MCS0      | < 11.00         | 2.63                     | -8.37       |
| 140     | MCS0      | < 11.00         | 2.19                     | -8.81       |
| 149     | MCS0      | < 33.00         | 2.96                     | -30.04      |

##### MIMO Primary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dB) | Margin (dB) |
|---------|-----------|-----------------|---------------------|-------------|
| 36      | MCS0      | < 11.00         | 3.00                | -8.00       |
| 64      | MCS0      | < 11.00         | 2.60                | -8.40       |
| 140     | MCS0      | < 11.00         | 3.29                | -7.71       |
| 149     | MCS0      | < 33.00         | 3.60                | -29.40      |

|                                                                                   |                                                                                                      |                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September<br>28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results cont'd

#### MIMO Secondary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dB) | Margin (dB) |
|---------|-----------|-----------------|---------------------|-------------|
| 36      | MCS0      | < 11.00         | 3.90                | -7.10       |
| 64      | MCS0      | < 11.00         | 2.43                | -8.57       |
| 140     | MCS0      | < 11.00         | 2.29                | -8.71       |
| 149     | MCS0      | < 33.00         | 3.44                | -29.56      |

#### MIMO Combined

| Channel | Data Rate | Limit (dBm/MHz) | Combined Peak (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|-------------------------|-------------|
| 36      | MCS0      | < 11.00         | 6.38                    | -4.62       |
| 64      | MCS0      | < 11.00         | 5.41                    | -5.59       |
| 140     | MCS0      | < 11.00         | 5.73                    | -5.27       |
| 149     | MCS0      | < 33.00         | 6.41                    | -26.59      |

See figures 8-63 to 8-78 for the plots of the peak power spectral density for Channel 36, 64, 140 and 149 at MCS0 Mbps each for 802.11ac mode, 20MHz bandwidth.

|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-63: Peak Power Spectral Density  
SISO Primary, 802.11ac, Channel 36,  
MCS0 Mbps

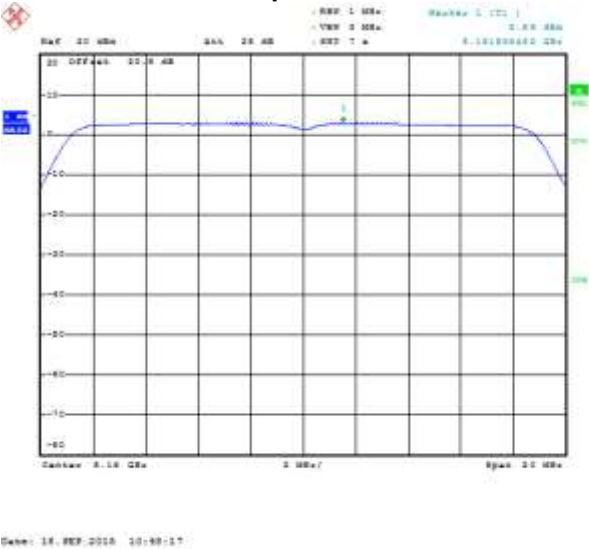


Figure 8-64: Peak Power Spectral Density  
SISO Primary, 802.11ac, Channel 64,  
MCS0 Mbps

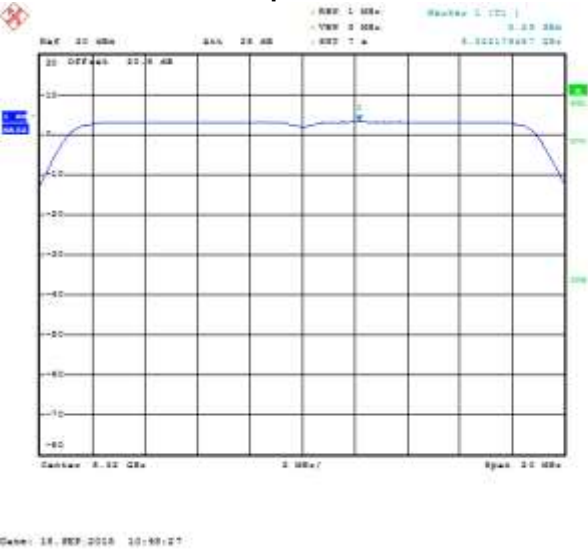


Figure 8-65: Peak Power Spectral Density  
SISO Primary, 802.11ac, Channel 140,  
MCS0 Mbps

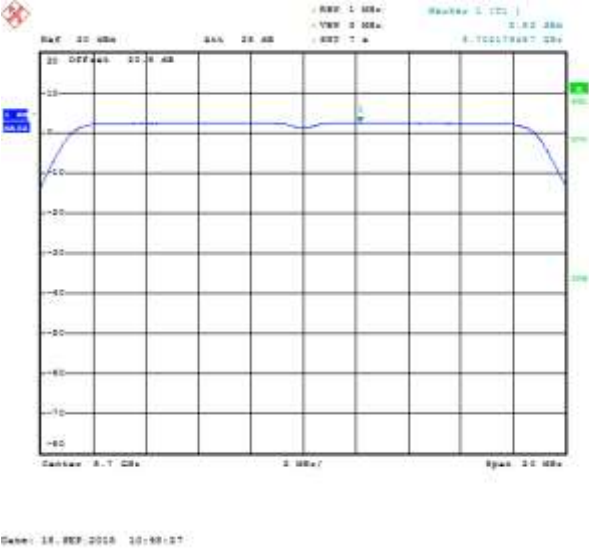
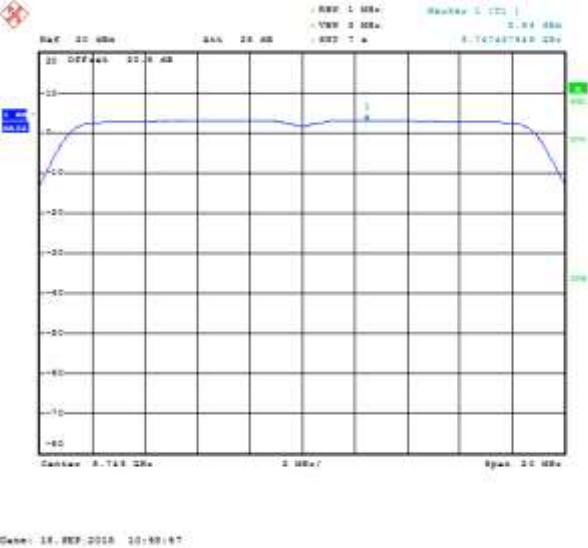


Figure 8-66: Peak Power Spectral Density  
SISO Primary, 802.11ac, Channel 149,  
MCS0 Mbps



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-67: Peak Power Spectral Density  
SISO Secondary, 802.11ac, Channel 36,  
MCS0 Mbps



Figure 8-68: Peak Power Spectral Density  
SISO Secondary, 802.11ac, Channel 64,  
MCS0 Mbps

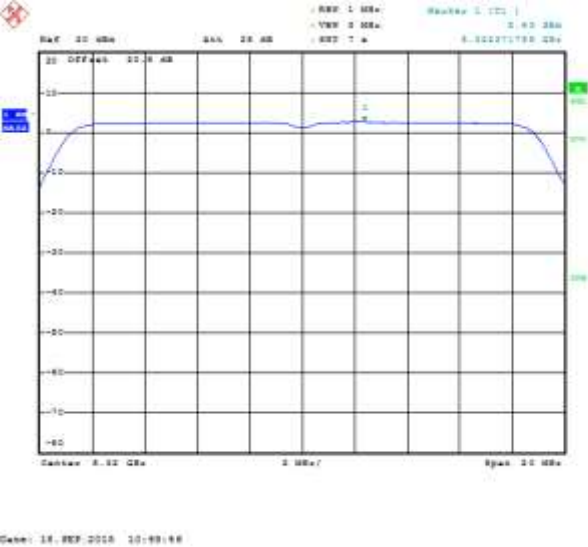


Figure 8-69: Peak Power Spectral Density  
SISO Secondary, 802.11ac, Channel 140,  
MCS0 Mbps

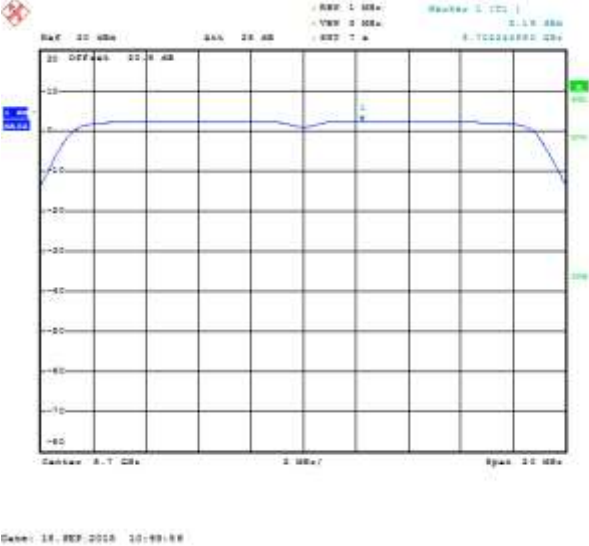
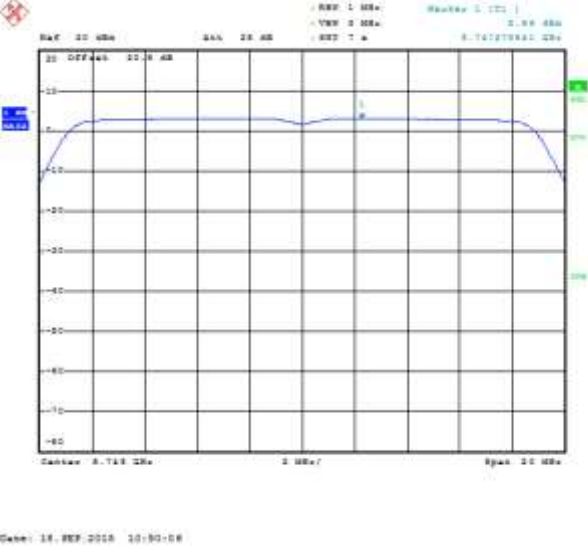


Figure 8-70: Peak Power Spectral Density  
SISO Secondary, 802.11ac, Channel 149,  
MCS0 Mbps



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-71: Peak Power Spectral Density  
MIMO Primary, 802.11ac, Channel 36,  
MCS0 Mbps

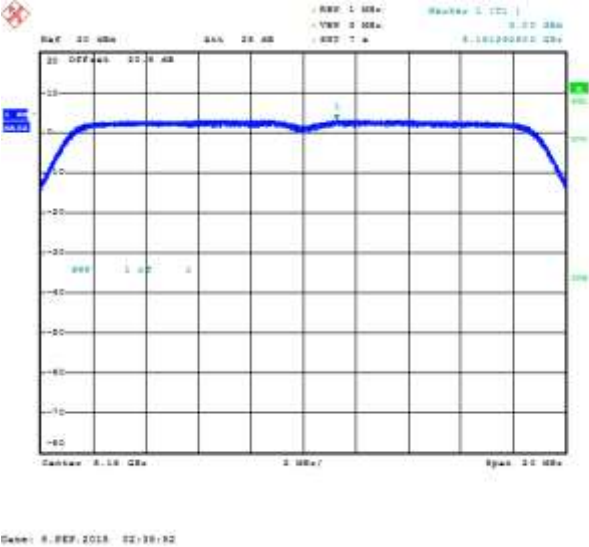


Figure 8-72: Peak Power Spectral Density  
MIMO Primary, 802.11ac, Channel 64,  
MCS0 Mbps

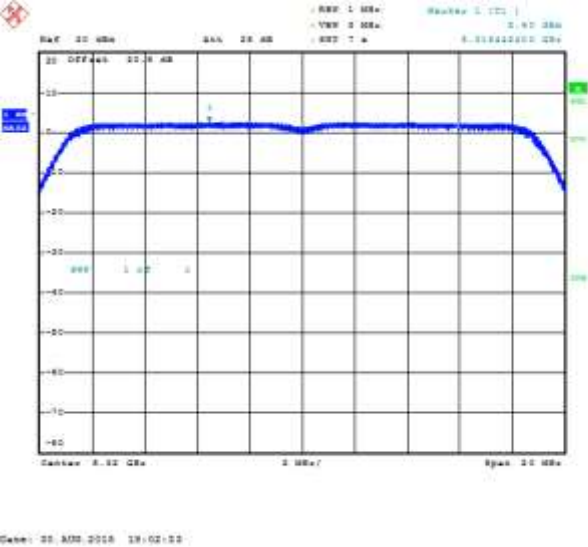


Figure 8-73: Peak Power Spectral Density  
MIMO Primary, 802.11ac, Channel 140,  
MCS0 Mbps

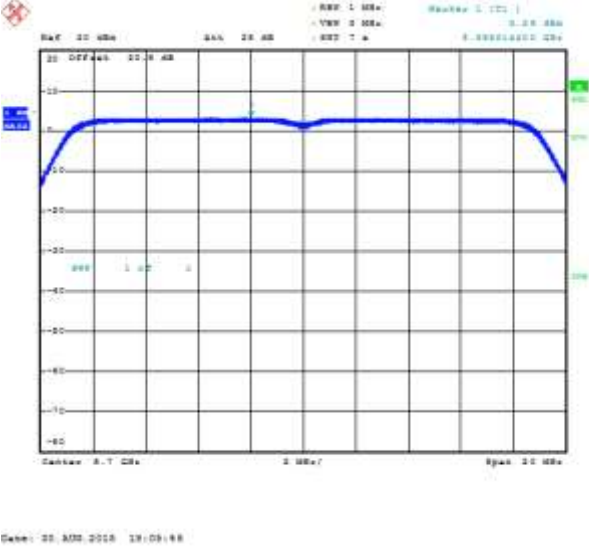
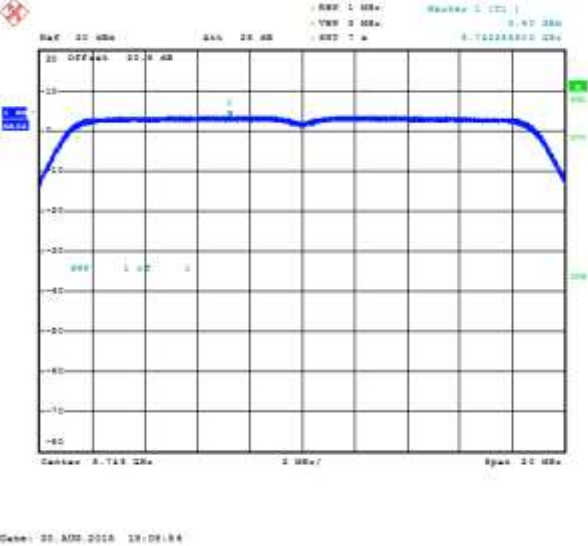


Figure 8-74: Peak Power Spectral Density  
MIMO Primary, 802.11ac, Channel 149,  
MCS0 Mbps



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-75: Peak Power Spectral Density  
MIMO Secondary, 802.11ac, Channel 36,  
MCS0 Mbps

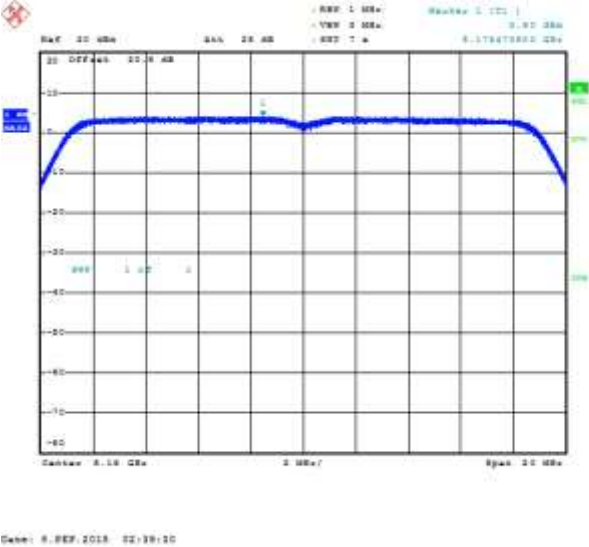


Figure 8-76: Peak Power Spectral Density  
MIMO Secondary, 802.11ac, Channel 64,  
MCS0 Mbps

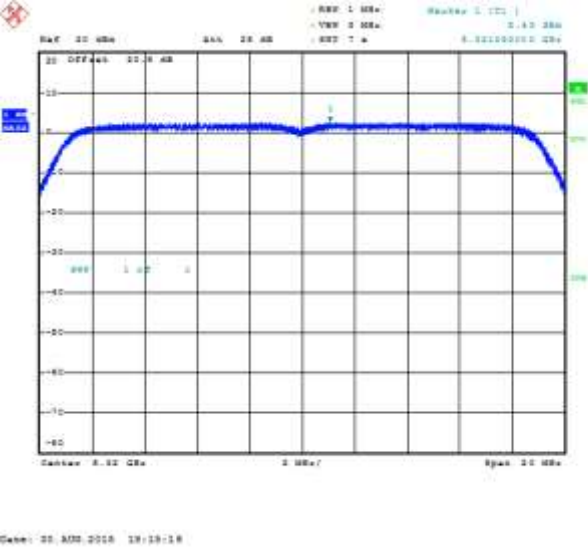


Figure 8-77: Peak Power Spectral Density  
MIMO Secondary, 802.11ac, Channel 140,  
MCS0 Mbps

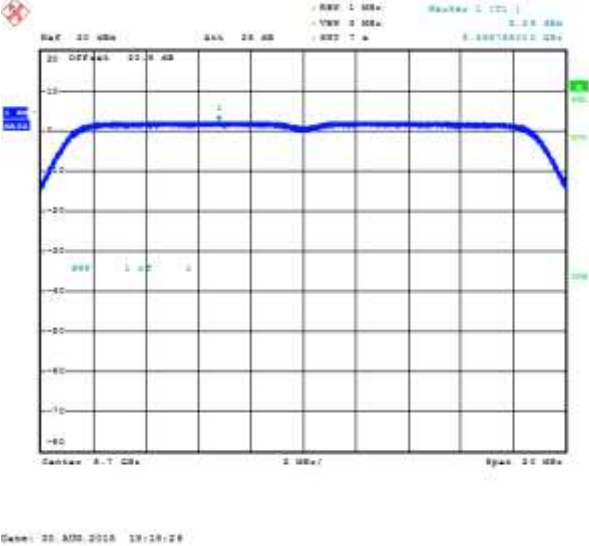
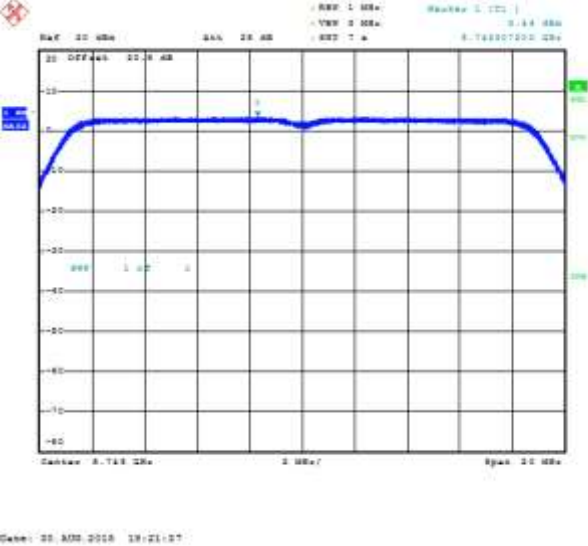


Figure 8-78: Peak Power Spectral Density  
MIMO Secondary, 802.11ac, Channel 149,  
MCS0 Mbps



|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                           | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results cont'd

Channels 38, 62, 142 and 151 were measured at MCS0 Mbps each for 802.11ac mode, bandwidth 40MHz.

#### **Bandwidth 40MHz**

##### SISO Primary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 38      | MCS0      | < 11.00         | 0.19                     | -10.81      |
| 62      | MCS0      | < 11.00         | 1.10                     | -9.9        |
| 142     | MCS0      | < 11.00         | 0.06                     | -10.94      |
| 151     | MCS0      | < 33.00         | 0.65                     | -32.35      |

##### SISO Secondary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 38      | MCS0      | < 11.00         | 0.93                     | -10.07      |
| 62      | MCS0      | < 11.00         | 0.29                     | -10.71      |
| 142     | MCS0      | < 11.00         | 0.05                     | -10.95      |
| 151     | MCS0      | < 33.00         | 1.06                     | -31.94      |

##### MIMO Primary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 38      | MCS0      | < 11.00         | -3.51                    | -14.51      |
| 62      | MCS0      | < 11.00         | -3.35                    | -14.35      |
| 142     | MCS0      | < 11.00         | -1.23                    | -12.23      |
| 151     | MCS0      | < 33.00         | -0.74                    | -33.74      |

##### MIMO Secondary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 38      | MCS0      | < 11.00         | -3.68                    | -14.68      |
| 62      | MCS0      | < 11.00         | -3.39                    | -14.39      |
| 142     | MCS0      | < 11.00         | 0.58                     | -10.42      |
| 151     | MCS0      | < 33.00         | -0.56                    | -33.56      |

|                                                                                   |                                                                                                      |                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September<br>28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results cont'd

#### MIMO Combined

| Channel | Data Rate | Limit<br>(dBm/MHz) | Combined Peak<br>(dBm/MHz) | Margin (dB) |
|---------|-----------|--------------------|----------------------------|-------------|
| 38      | MCS0      | < 11.00            | -0.69                      | -11.69      |
| 62      | MCS0      | < 11.00            | -0.47                      | -11.47      |
| 142     | MCS0      | < 11.00            | 3.88                       | -7.12       |
| 151     | MCS0      | < 33.00            | 2.21                       | -30.79      |

See figures 8-79 to 8-94 for the plots of the peak power spectral density for channel 38, 62, 142 and 151 at MCS0 Mbps each for 802.11ac mode, 40MHz bandwidth.

|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-79: Peak Power Spectral Density  
SISO Primary, 802.11ac, Channel 38,  
MCS0 Mbps

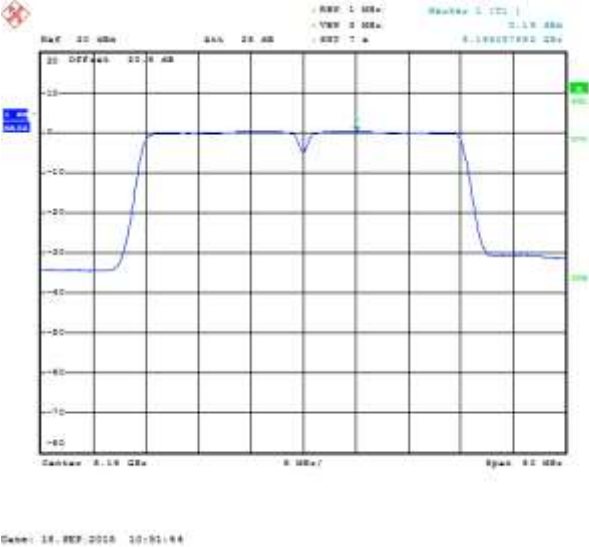


Figure 8-80: Peak Power Spectral Density  
SISO Primary, 802.11ac, Channel 62,  
MCS0 Mbps



Figure 8-81: Peak Power Spectral Density  
SISO Primary, 802.11ac, Channel 142,  
MCS0 Mbps

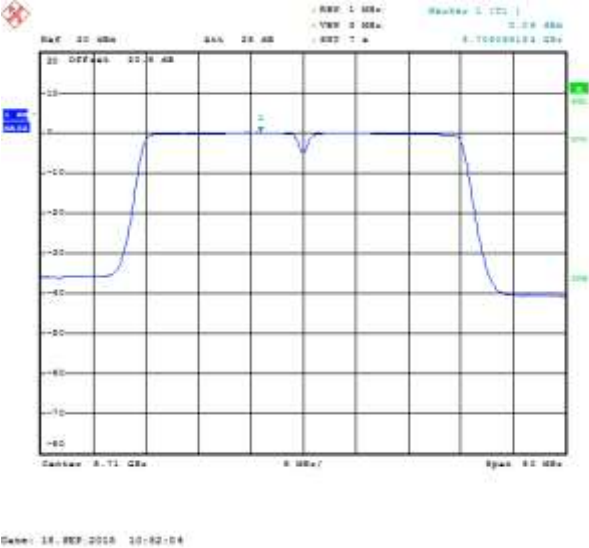


Figure 8-82: Peak Power Spectral Density  
SISO Primary, 802.11ac, Channel 151,  
MCS0 Mbps



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 8</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-83: Peak Power Spectral Density  
SISO Secondary, 802.11ac, Channel 38,  
MCS0 Mbps



Figure 8-84: Peak Power Spectral Density  
SISO Secondary, 802.11ac, Channel 62,  
MCS0 Mbps



Figure 8-85: Peak Power Spectral Density  
SISO Secondary, 802.11ac, Channel 142,  
MCS0 Mbps

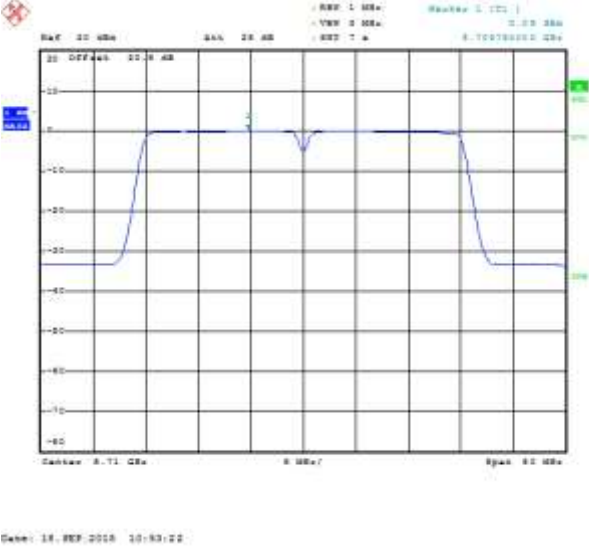
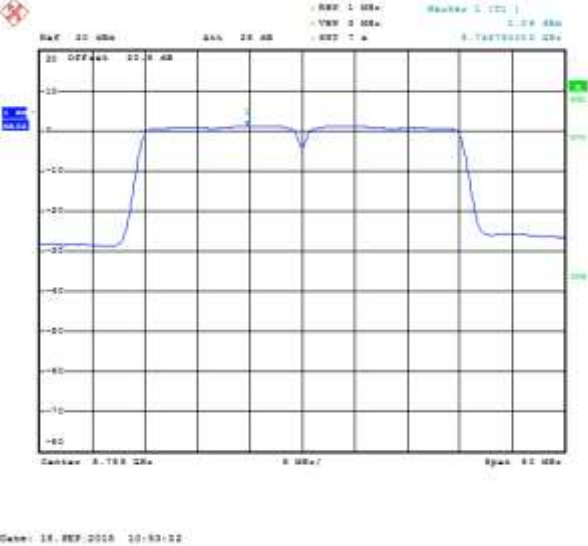


Figure 8-86: Peak Power Spectral Density  
SISO Secondary, 802.11ac, Channel 151,  
MCS0 Mbps



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 8</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-87: Peak Power Spectral Density  
MIMO Primary, 802.11ac, Channel 38,  
MCS0 Mbps

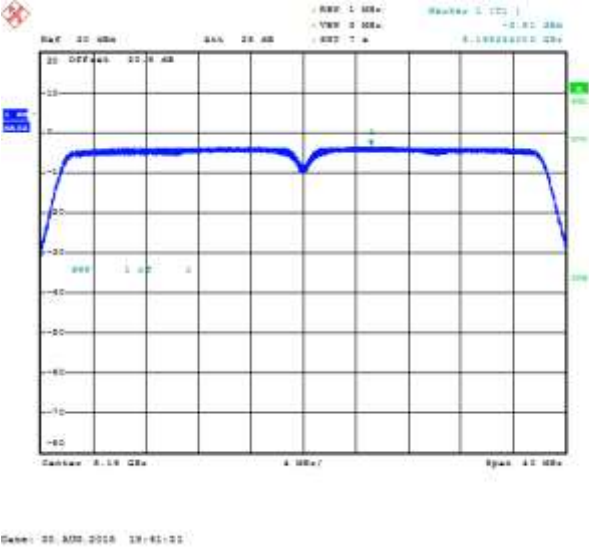


Figure 8-88: Peak Power Spectral Density  
MIMO Primary, 802.11ac, Channel 62,  
MCS0 Mbps

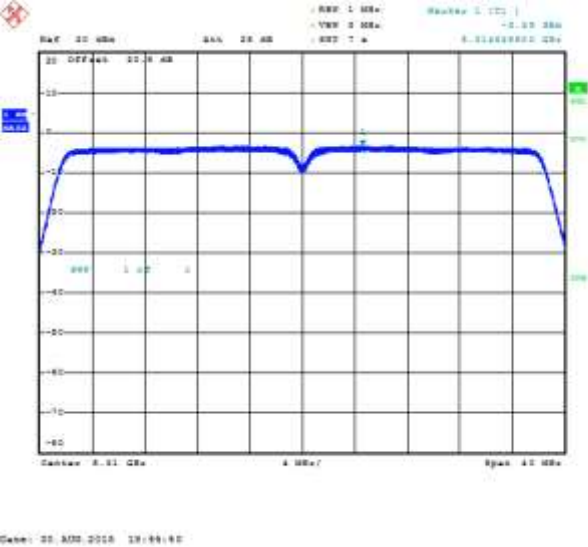


Figure 8-89: Peak Power Spectral Density  
MIMO Primary, 802.11ac, Channel 142,  
MCS0 Mbps

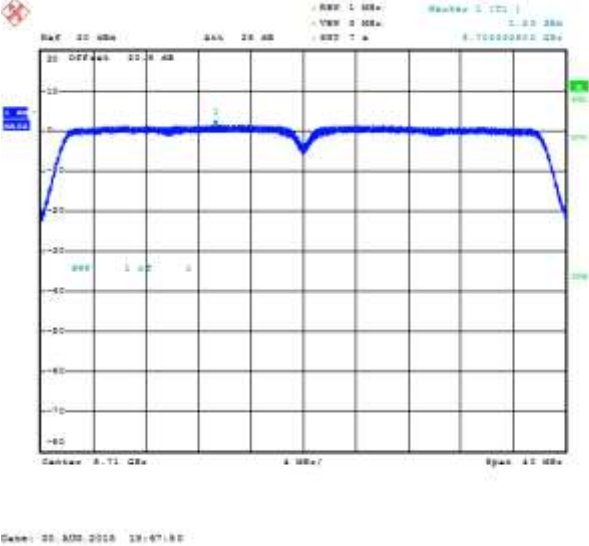
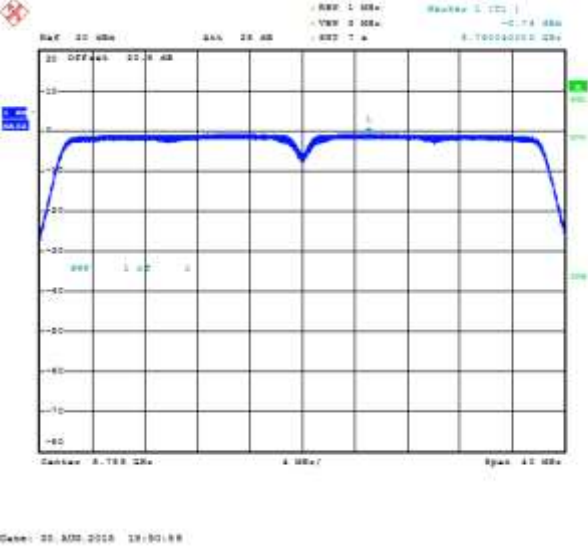


Figure 8-90: Peak Power Spectral Density  
MIMO Primary, 802.11ac, Channel 151,  
MCS0 Mbps



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 8</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-91: Peak Power Spectral Density  
MIMO Secondary, 802.11ac, Channel 38,  
MCS0 Mbps

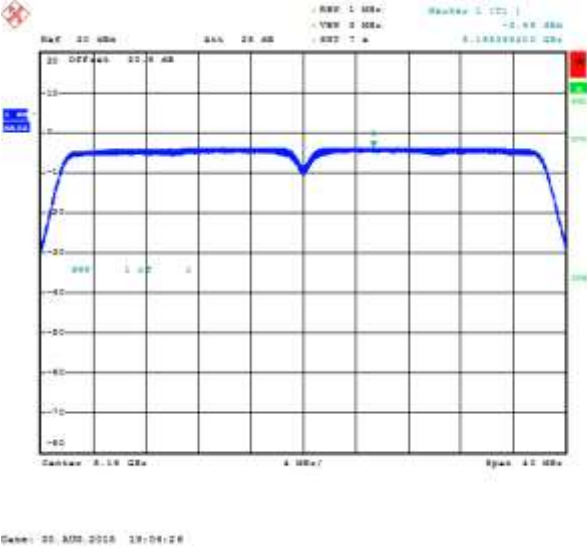


Figure 8-92: Peak Power Spectral Density  
MIMO Secondary, 802.11ac, Channel 62,  
MCS0 Mbps

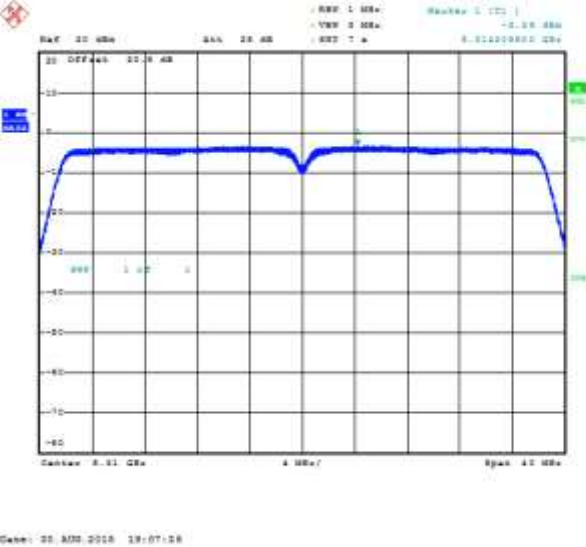


Figure 8-93: Peak Power Spectral Density  
MIMO Secondary, 802.11ac, Channel 142,  
MCS0 Mbps

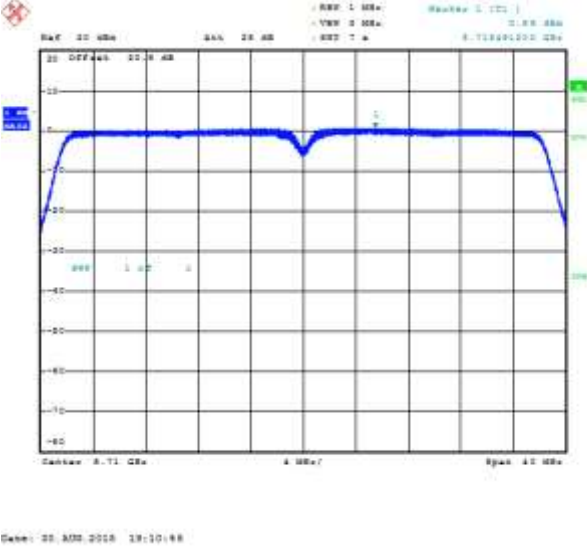
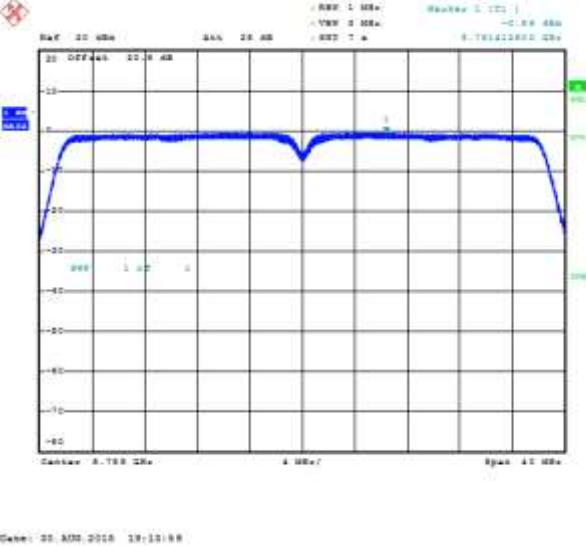


Figure 8-94: Peak Power Spectral Density  
MIMO Secondary, 802.11ac, Channel 151,  
MCS0 Mbps



|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results cont'd

Channels 42, 58, 138 and 155 were measured at MCS0 Mbps each for 802.11ac mode, bandwidth 80MHz.

#### **Bandwidth 80 MHz**

##### SISO Primary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 42      | MCS0      | < 11.00         | -6.41                    | -17.41      |
| 58      | MCS0      | < 11.00         | -5.78                    | -16.78      |
| 106     | MCS0      | < 11.00         | -6.51                    | -17.51      |
| 138     | MCS0      | < 11.00         | -6.12                    | -17.12      |
| 155     | MCS0      | < 33.00         | -5.41                    | -38.41      |

##### SISO Secondary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|--------------------------|-------------|
| 42      | MCS0      | < 11.00         | -4.23                    | -15.23      |
| 58      | MCS0      | < 11.00         | -5.02                    | -16.02      |
| 106     | MCS0      | < 11.00         | -4.05                    | -15.05      |
| 138     | MCS0      | < 11.00         | -4.86                    | -15.86      |
| 155     | MCS0      | < 33.00         | -4.01                    | -37.01      |

##### MIMO Primary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dB/MHz) | Margin (dB) |
|---------|-----------|-----------------|-------------------------|-------------|
| 42      | MCS0      | < 11.00         | -2.80                   | -13.80      |
| 58      | MCS0      | < 11.00         | -5.90                   | -16.90      |
| 106     | MCS0      | < 11.00         | -5.00                   | -16.00      |
| 138     | MCS0      | < 11.00         | -3.18                   | -14.18      |
| 155     | MCS0      | < 33.00         | -3.73                   | -36.73      |

|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## 802.11ac RF Conducted Emission Test Results cont'd

### MIMO Secondary Antenna

| Channel | Data Rate | Limit (dBm/MHz) | Measured Level (dB/MHz) | Margin (dB) |
|---------|-----------|-----------------|-------------------------|-------------|
| 42      | MCS0      | < 11.00         | -2.91                   | -13.91      |
| 58      | MCS0      | < 11.00         | -6.05                   | -17.05      |
| 106     | MCS0      | < 11.00         | -4.63                   | -15.63      |
| 138     | MCS0      | < 11.00         | -3.92                   | -14.92      |
| 155     | MCS0      | < 33.00         | -3.64                   | -36.64      |

### MIMO Combined

| Channel | Data Rate | Limit (dBm/MHz) | Combined Peak (dBm/MHz) | Margin (dB) |
|---------|-----------|-----------------|-------------------------|-------------|
| 42      | MCS0      | < 11.00         | 0.06                    | -10.94      |
| 58      | MCS0      | < 11.00         | -3.13                   | -14.13      |
| 106     | MCS0      | < 11.00         | -2.00                   | -13.00      |
| 138     | MCS0      | < 11.00         | -0.98                   | -11.98      |
| 155     | MCS0      | < 33.00         | -0.78                   | -33.78      |

See figures 8-95 to 8-114 for the plots of the peak power spectral density for channel 42, 58, 138 and 155 at MCS0 Mbps each for 802.11ac mode, 80MHz bandwidth.

|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-95: Peak Power Spectral Density  
SISO Primary, 802.11ac, Channel 42,  
MCS0 Mbps



Figure 8-96: Peak Power Spectral Density  
SISO Primary, 802.11ac, Channel 58,  
MCS0 Mbps



Figure 8-97: Peak Power Spectral Density  
SISO Primary, 802.11ac, Channel 106,  
MCS0 Mbps



Figure 8-98: Peak Power Spectral Density  
SISO Primary, 802.11ac, Channel 138,  
MCS0 Mbps



|                                                                                   |                                                                                                |                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) <div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                         | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-99: Peak Power Spectral Density  
SISO Primary, 802.11ac, Channel 155,  
MCS0 Mbps



Date: 18 SEP 2015 10:59:22

|                                                                                   |                                                                                                |                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) <div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                         | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-100 Peak Power Spectral Density  
SISO Secondary, 802.11ac, Channel 42,  
MCS0 Mbps



Figure 8-101: Peak Power Spectral Density  
SISO Secondary, 802.11ac, Channel 58,  
MCS0 Mbps



Figure 8-102: Peak Power Spectral Density  
SISO Secondary, 802.11ac, Channel 106,  
MCS0 Mbps



Figure 8-103: Peak Power Spectral Density  
SISO Secondary, 802.11ac, Channel 138,  
MCS0 Mbps



|                                                                                   |                                                                                                |                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) <div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                         | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-104: Peak Power Spectral Density  
SISO Secondary, 802.11ac, Channel 155,  
MCS0 Mbps



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 8</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-105: Peak Power Spectral Density  
MIMO Primary, 802.11ac, Channel 42,  
MCS0 Mbps

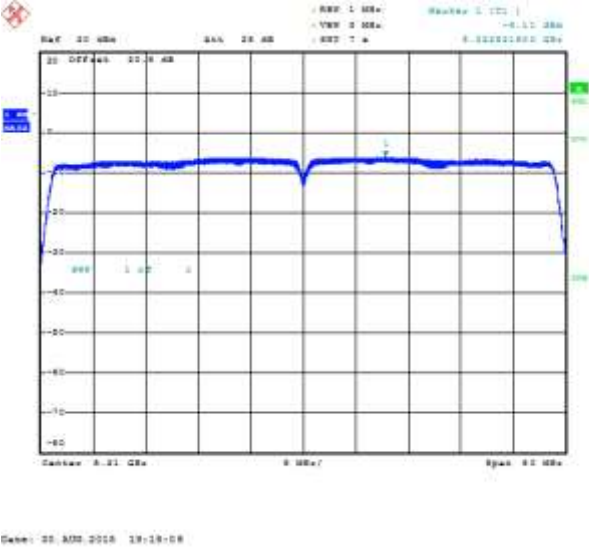


Figure 8-106: Peak Power Spectral Density  
MIMO Primary, 802.11ac, Channel 58,  
MCS0 Mbps

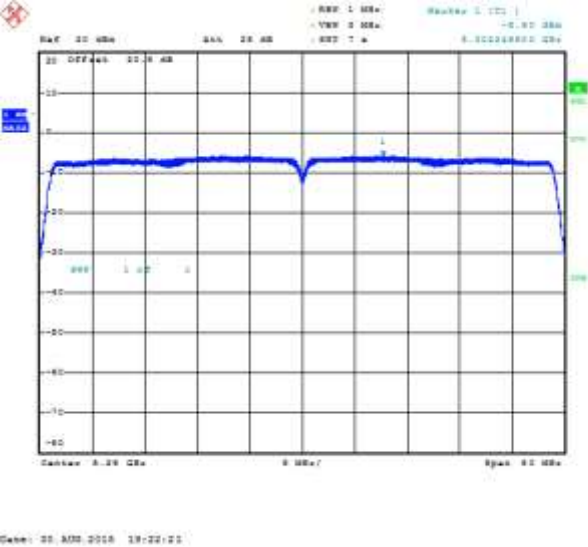


Figure 8-107: Peak Power Spectral Density  
MIMO Primary, 802.11ac, Channel 106,  
MCS0 Mbps

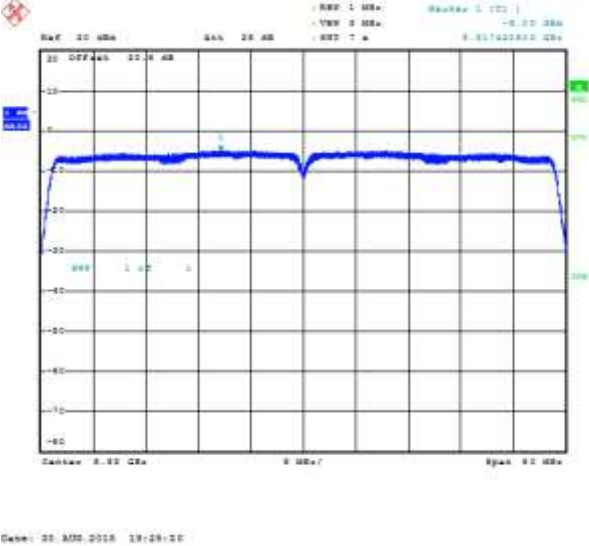
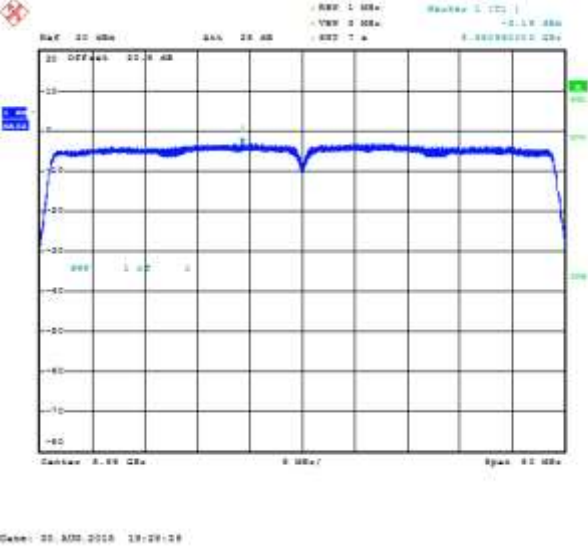


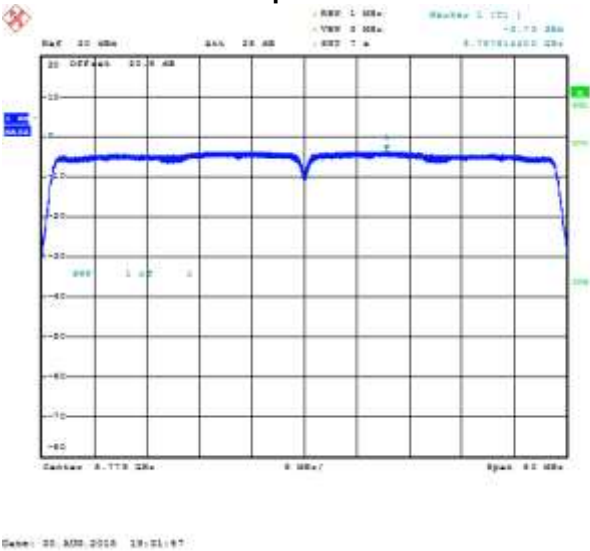
Figure 8-108: Peak Power Spectral Density  
MIMO Primary, 802.11ac, Channel 138,  
MCS0 Mbps



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-109: Peak Power Spectral Density  
MIMO Primary, 802.11ac, Channel 155,  
MCS0 Mbps



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 8</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-110: Peak Power Spectral Density  
MIMO Secondary, 802.11ac, Channel 42,  
MCS0 Mbps

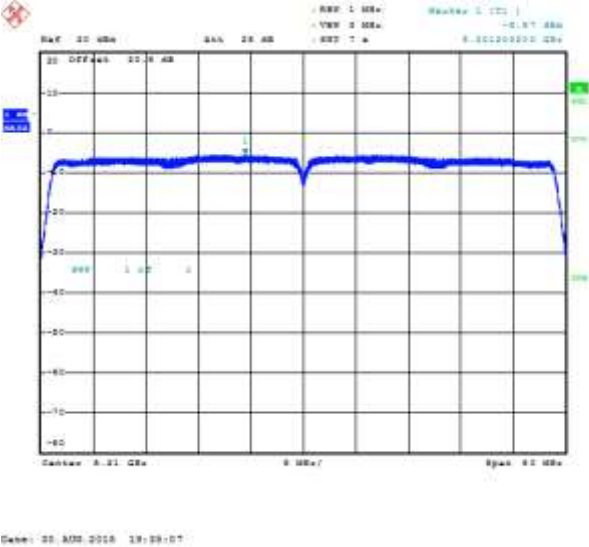


Figure 8-111: Peak Power Spectral Density  
MIMO Secondary, 802.11ac, Channel 58,  
MCS0 Mbps

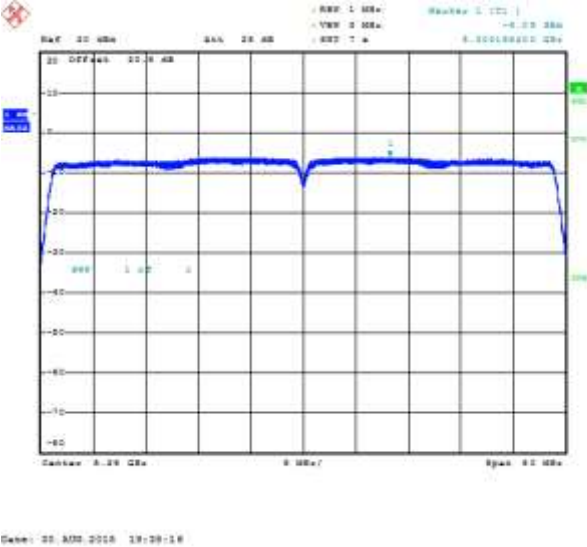


Figure 8-112: Peak Power Spectral Density  
MIMO Secondary, 802.11ac, Channel 106,  
MCS0 Mbps

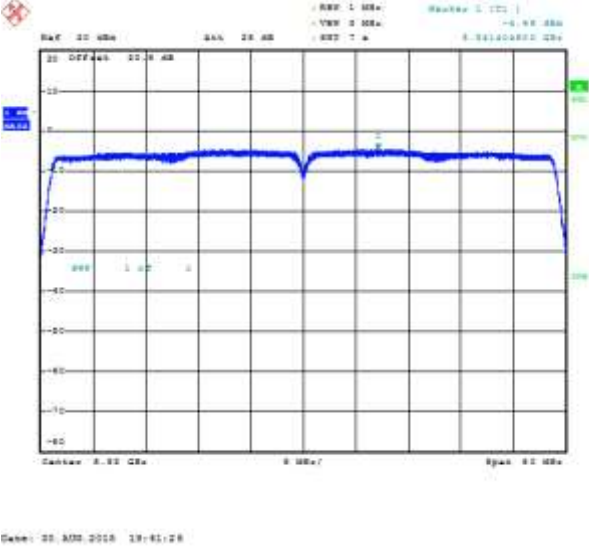
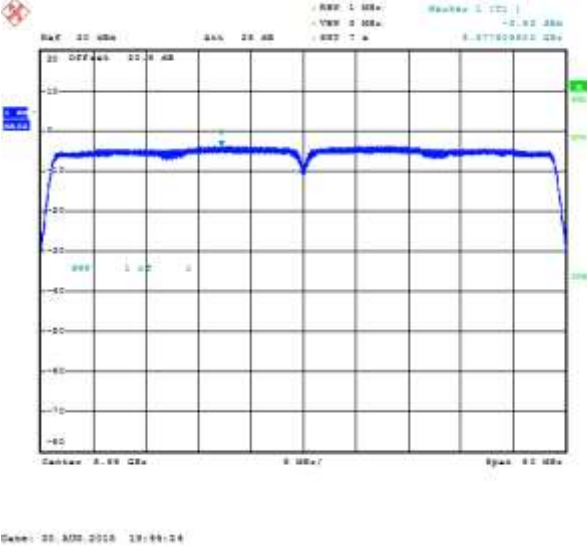


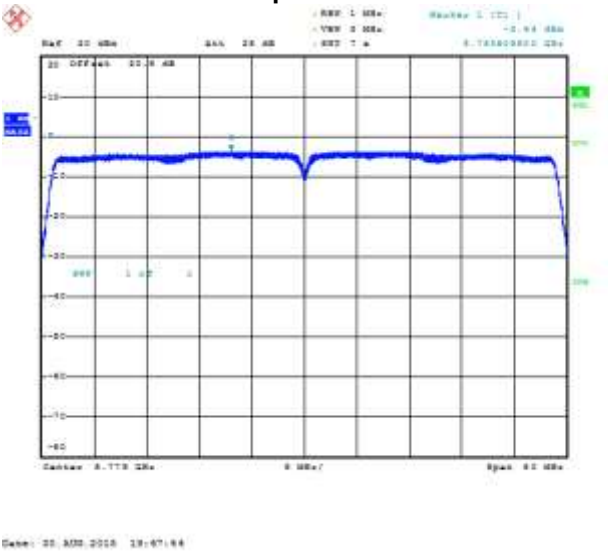
Figure 8-113: Peak Power Spectral Density  
MIMO Secondary, 802.11ac, Channel 138,  
MCS0 Mbps



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-114: Peak Power Spectral Density  
MIMO Secondary, 802.11ac, Channel 155,  
MCS0 Mbps



|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results cont'd

#### **Spurious RF Conducted Emissions**

The EUT met the requirements of the spurious RF conducted emissions as per 47 CFR 15.407 and RSS-247. Channels 36, 64, 140 and 149 were measured at MCS0 Mbps each for 802.11ac mode, 20MHz bandwidth. Peak power was measured using an Agilent power meter, model N1911A with model N1921A power sensor. A reference offset of 29.0 dB was applied to the spectrum analyzer reference level for the attenuators and coaxial cable loss in the test circuit.

#### **20 MHz Bandwidth**

##### **Primary Antenna**

| Channel | Data Rate | Carrier Level (dBm) | Max. Measured Level (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------------|----------------------------------------|-------------|
| 36      | MCS0      | 14.73               | -46.54                    | -61.27                                 | -20         |
| 64      | MCS0      | 12.29               | -44.72                    | -57.01                                 | -20         |
| 140     | MCS0      | 17.45               | -46.42                    | -63.87                                 | -20         |
| 149     | MCS0      | 15.10               | -45.25                    | -60.35                                 | -20         |

##### **Secondary Antenna**

| Channel | Data Rate | Carrier Level (dBm) | Max. Measured Level (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------------|----------------------------------------|-------------|
| 36      | MCS0      | 15.91               | -43.95                    | -59.86                                 | -20         |
| 64      | MCS0      | 14.04               | -42.35                    | -56.39                                 | -20         |
| 140     | MCS0      | 13.86               | -45.11                    | -58.97                                 | -20         |
| 149     | MCS0      | 14.62               | -45.63                    | -60.25                                 | -20         |

##### **Sum**

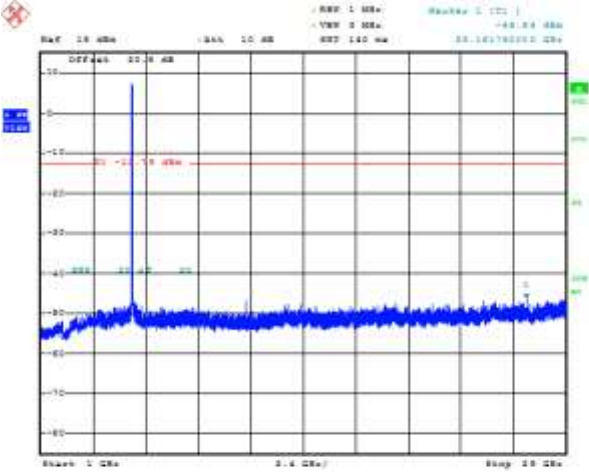
| Channel | Data Rate | Carrier Level (dBm) | Combined Peak (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------|----------------------------------------|-------------|
| 36      | MCS0      | 18.43               | -42.04              | -60.48                                 | -20         |
| 64      | MCS0      | 16.76               | -40.36              | -57.13                                 | -20         |
| 140     | MCS0      | 17.14               | -42.71              | -59.85                                 | -20         |
| 149     | MCS0      | 18.00               | -42.43              | -60.42                                 | -20         |

|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

See figures 8-115 to 8-130 for the plots of the spurious RF conducted emissions for Channel 36, 64, 140 and 149 at MCS0 Mbps each for 802.11ac mode.

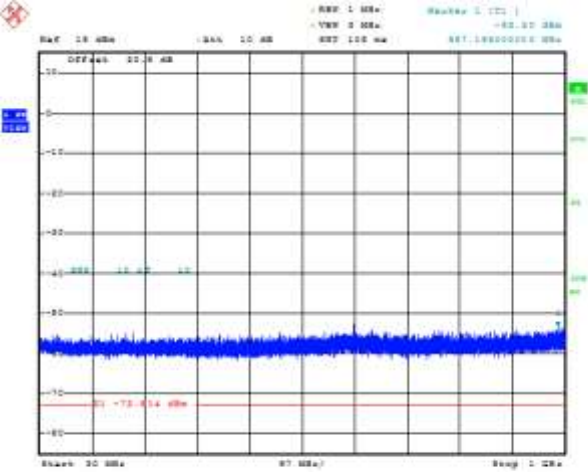
802.11ac RF Conducted Emission Test Results cont'd

Figure 8-115: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 36, MCS0 Mbps



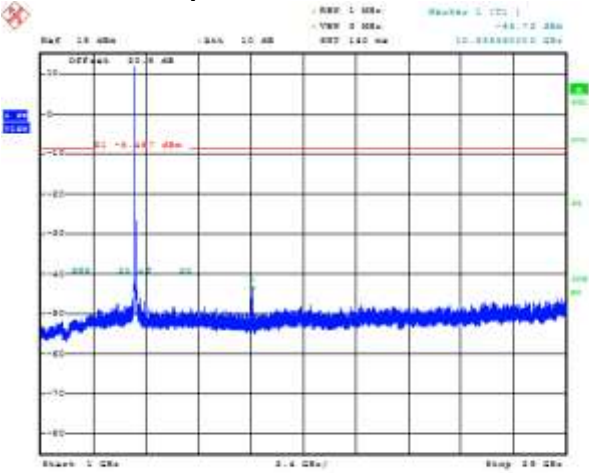
Date: 22-Jul-2015 11:56:28

Figure 8-116: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 36, MCS0 Mbps



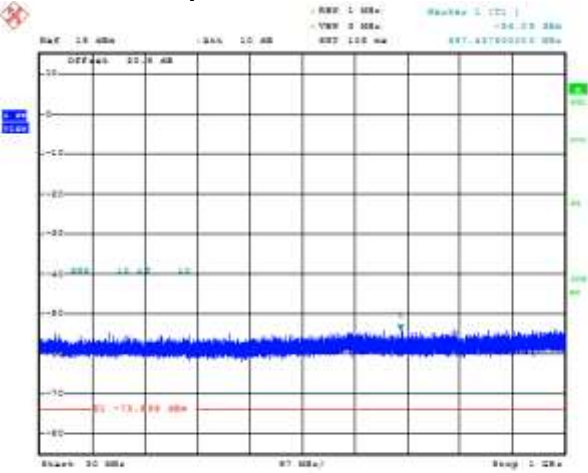
Date: 22-Jul-2015 12:01:58

Figure 8-117: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 64, MCS0 Mbps



Date: 22-Jul-2015 11:57:08

Figure 8-118: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 64, MCS0 Mbps



Date: 22-Jul-2015 12:01:58

|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-119: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 140, MCS0  
Mbps

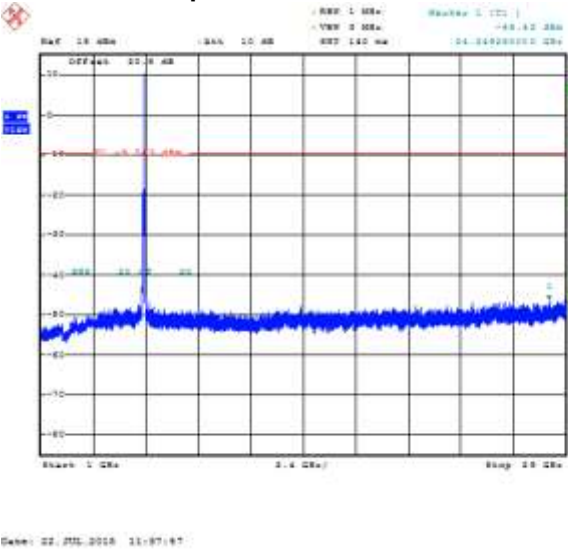


Figure 8-120: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 140, MCS0  
Mbps

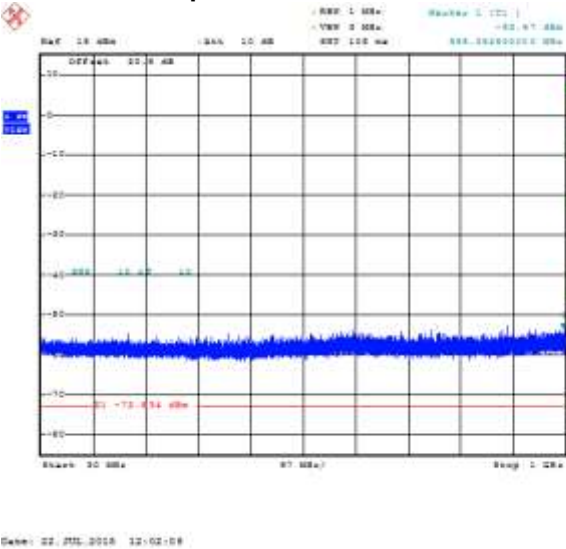


Figure 8-121: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 149, MCS0  
Mbps

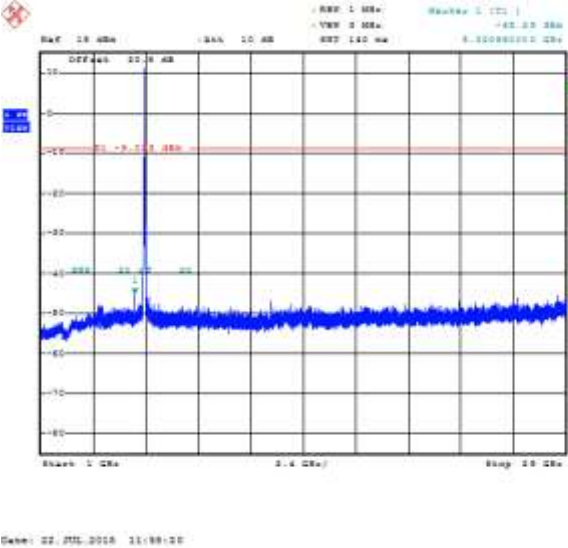
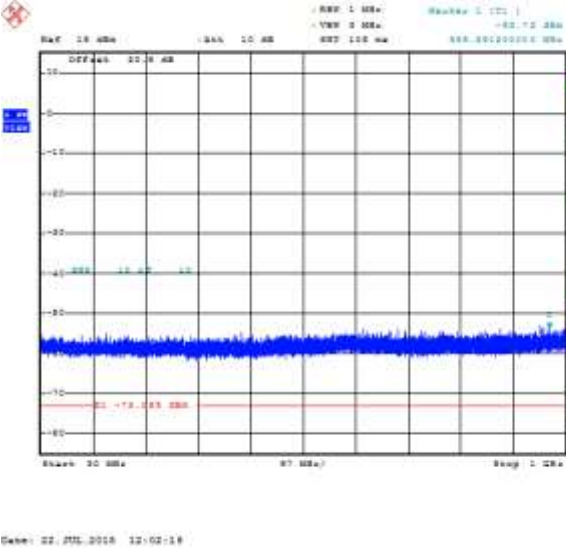


Figure 8-122: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 149, MCS0  
Mbps



|                                                                                   |                                                                          |                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                                                  |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>APPENDIX 8</b><br><br><b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-123: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 36, MCS0  
Mbps

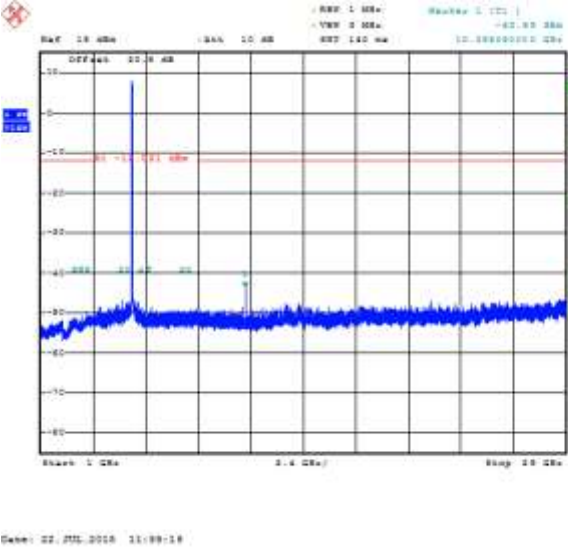


Figure 8-124: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 36, MCS0  
Mbps

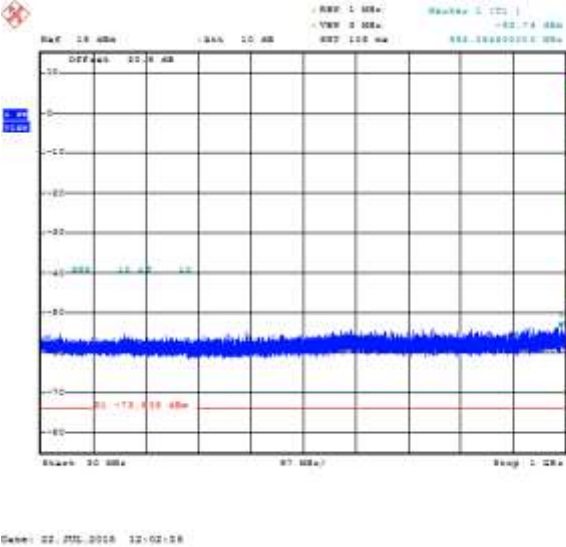


Figure 8-125: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 64, MCS0  
Mbps

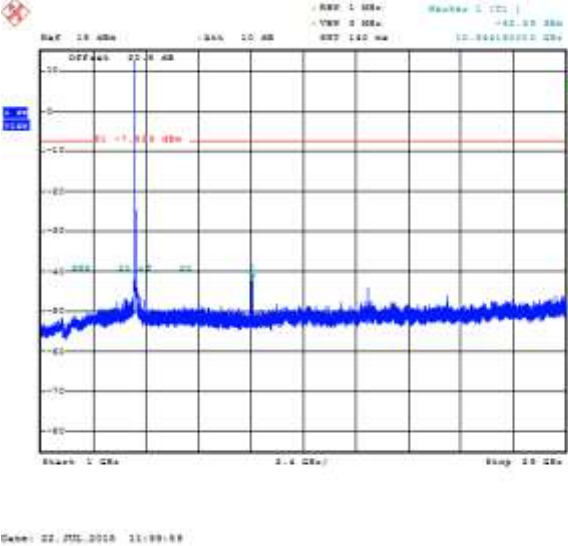
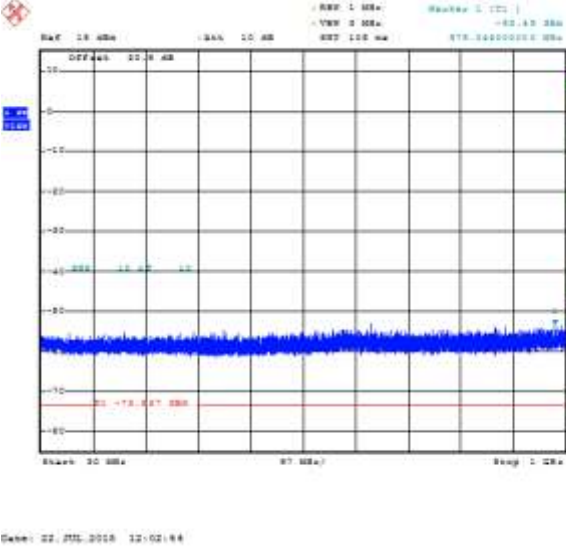


Figure 8-126: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 64, MCS0  
Mbps



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-127: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 140, MCS0  
Mbps

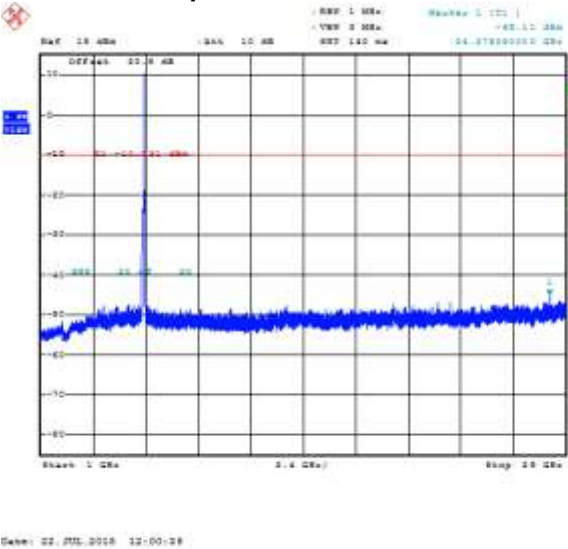


Figure 8-128: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 140, MCS0  
Mbps

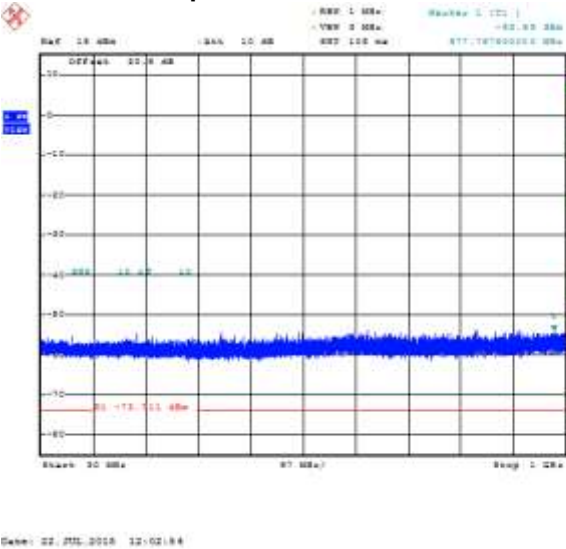


Figure 8-129: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 149, MCS0  
Mbps

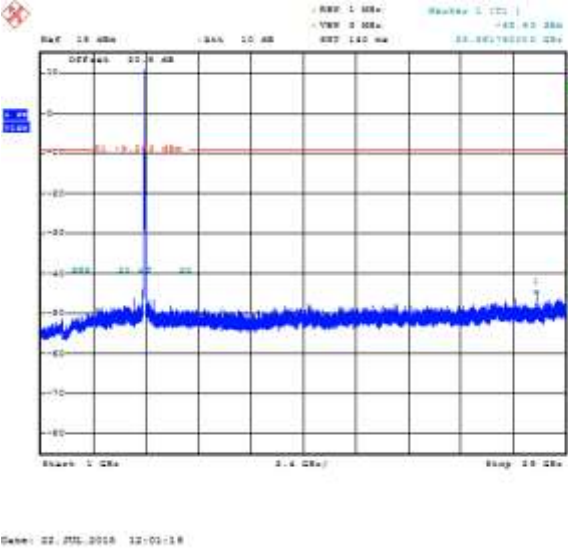
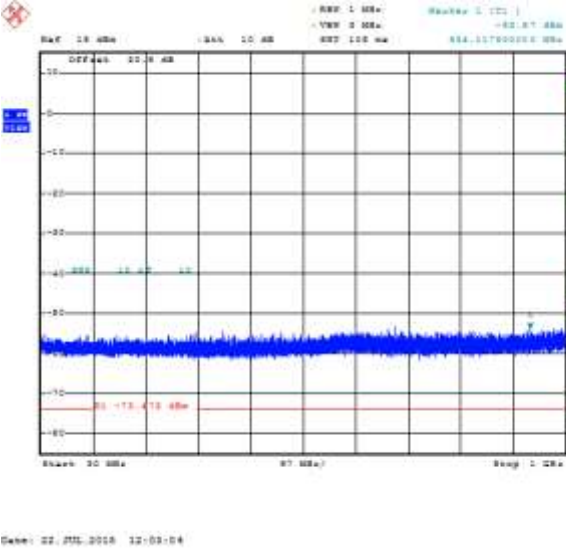


Figure 8-130: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 149, MCS0  
Mbps



|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results cont'd

Channels 36, 64, 140 and 149 were measured at MCS0 Mbps each for 802.11ac mode, 40MHz bandwidth. Peak power was measured using an Agilent power meter, model N1911A with model N1921A power sensor. A reference offset of 29.0 dB was applied to the spectrum analyzer reference level for the attenuators and coaxial cable loss in the test circuit.

#### 40 MHz Bandwidth

##### Primary Antenna

| Channel | Data Rate | Carrier Level (dBm) | Max. Measured Level (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------------|----------------------------------------|-------------|
| 36      | MCS0      | 12.18               | -44.45                    | -56.63                                 | -20         |
| 64      | MCS0      | 10.81               | -45.43                    | -56.24                                 | -20         |
| 140     | MCS0      | 14.68               | -46.18                    | -60.86                                 | -20         |
| 149     | MCS0      | 13.24               | -45.22                    | -58.46                                 | -20         |

##### Secondary Antenna

| Channel | Data Rate | Carrier Level (dBm) | Max. Measured Level (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------------|----------------------------------------|-------------|
| 36      | MCS0      | 14.65               | -42.28                    | -56.93                                 | -20         |
| 64      | MCS0      | 10.81               | -44.25                    | -55.06                                 | -20         |
| 140     | MCS0      | 14.21               | -45.91                    | -60.12                                 | -20         |
| 149     | MCS0      | 13.11               | -46.64                    | -59.75                                 | -20         |

##### Sum

| Channel | Data Rate | Carrier Level (dBm) | Combined Peak (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------|----------------------------------------|-------------|
| 36      | MCS0      | 14.20               | -40.22              | -54.42                                 | -20         |
| 64      | MCS0      | 13.83               | -41.79              | -55.62                                 | -20         |
| 140     | MCS0      | 17.75               | -43.03              | -60.78                                 | -20         |
| 149     | MCS0      | 16.29               | -42.86              | -59.16                                 | -20         |

See figures 8-131 to 8-146 for the plots of the spurious RF conducted emissions for Channel 36, 64, 140 and 149 at MCS0 Mbps each for 802.11ac mode, bandwidth 40MHz.

|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-131: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 36, MCS0  
Mbps

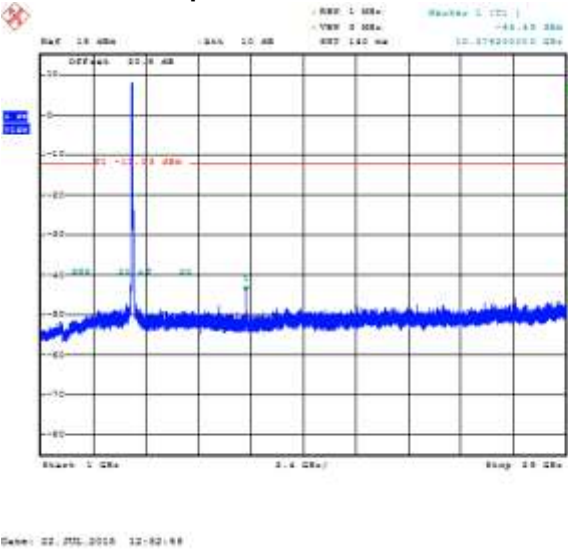


Figure 8-132: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 36, MCS0  
Mbps

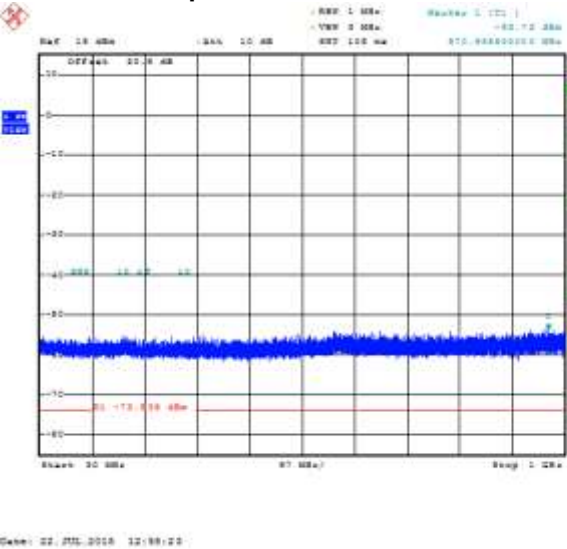


Figure 8-133: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 64, MCS0  
Mbps

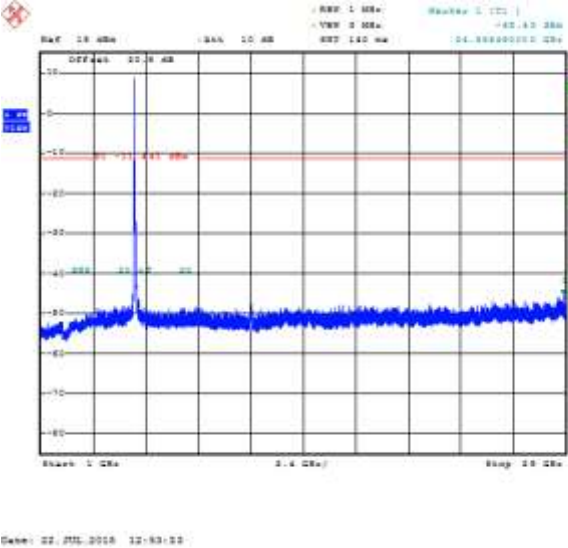
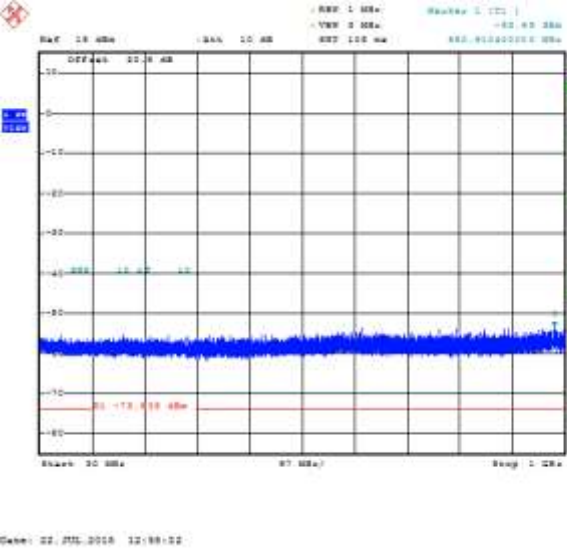


Figure 8-134: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 64, MCS0  
Mbps



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-135: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 140, MCS0  
Mbps

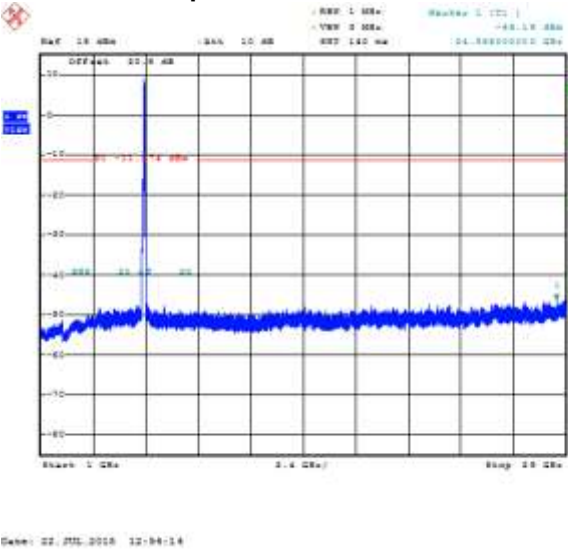


Figure 8-136: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 140, MCS0  
Mbps

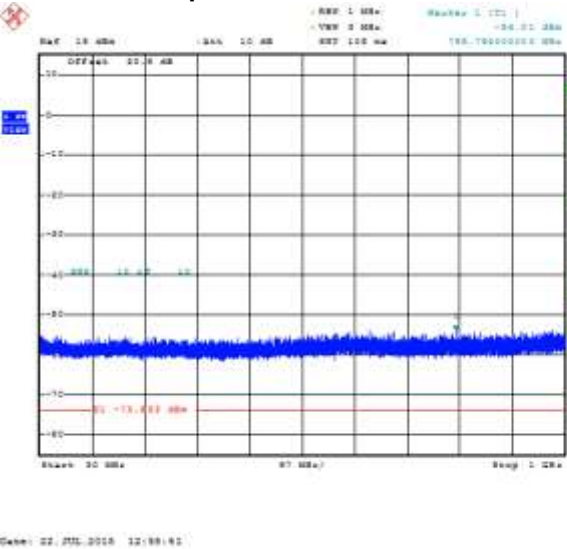


Figure 8-137: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 149, MCS0  
Mbps

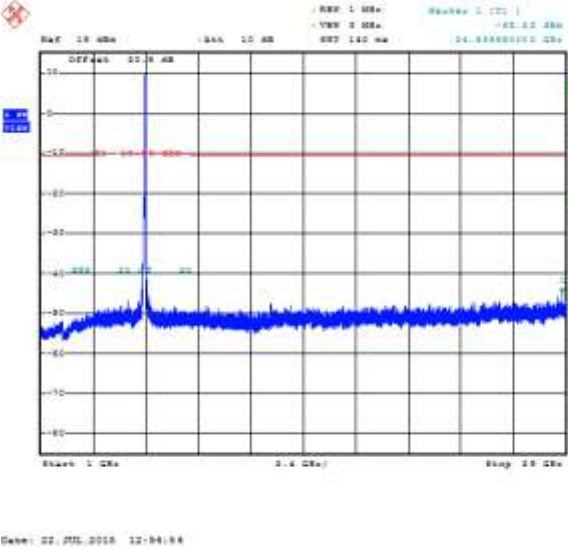
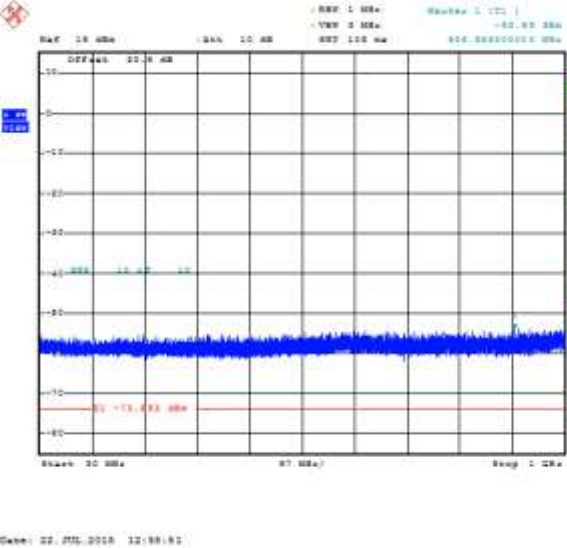


Figure 8-138: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 149, MCS0  
Mbps



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-139: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 36, MCS0  
Mbps

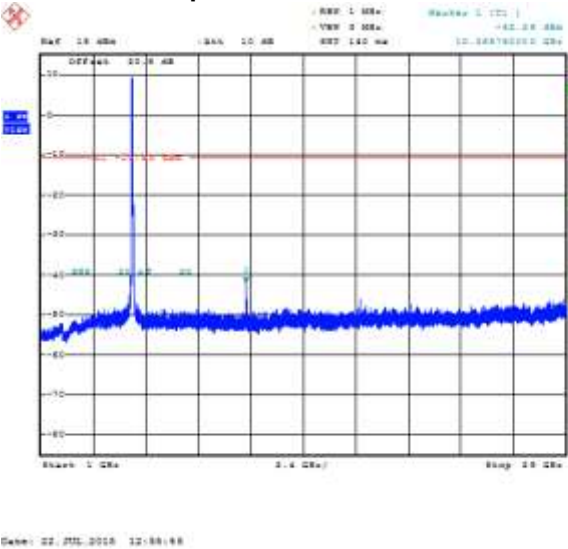


Figure 8-140: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 36, MCS0  
Mbps

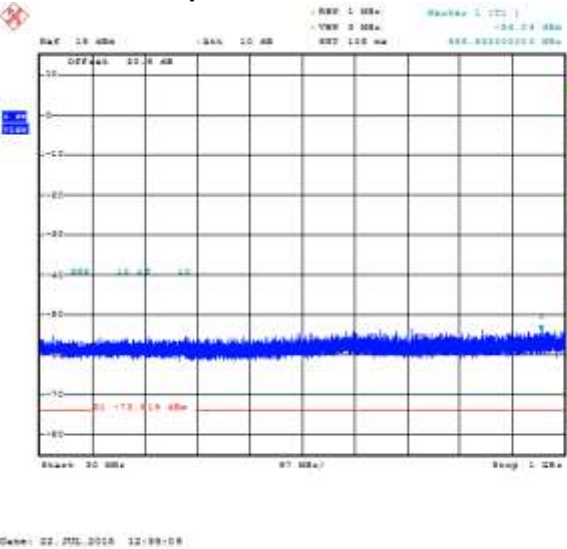


Figure 8-141: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 60, MCS0  
Mbps

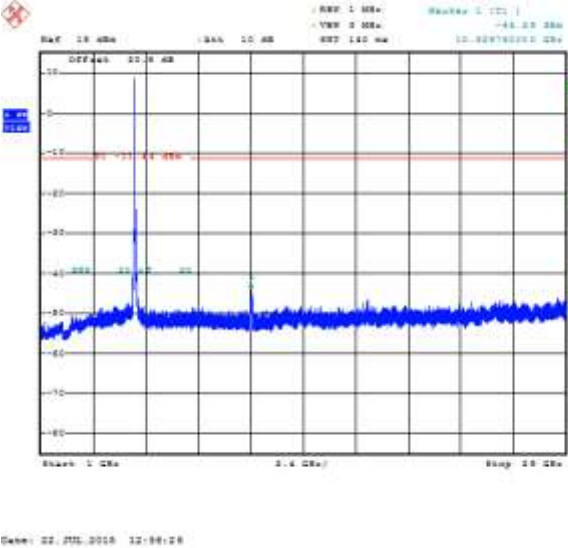
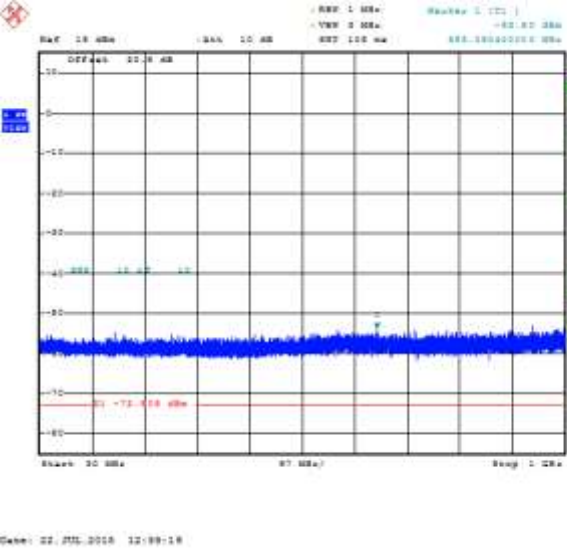


Figure 8-142: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 60, MCS0  
Mbps



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-143: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 140, MCS0  
Mbps

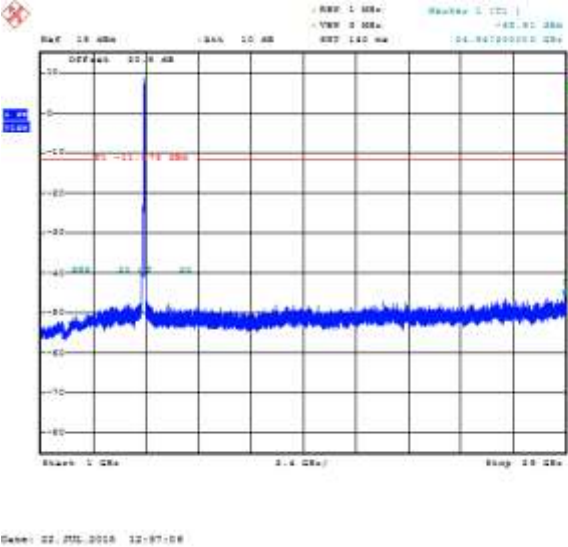


Figure 8-144: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 140, MCS0  
Mbps

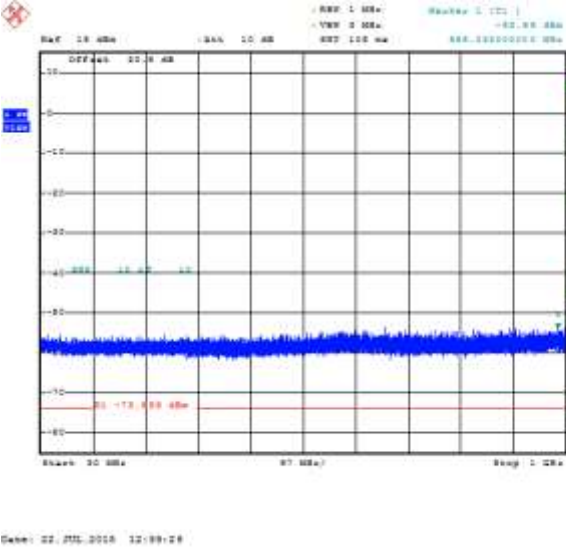


Figure 8-145: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 149, MCS0  
Mbps

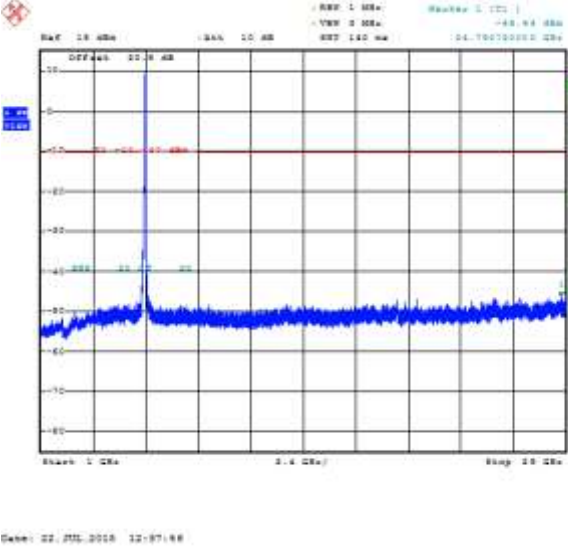
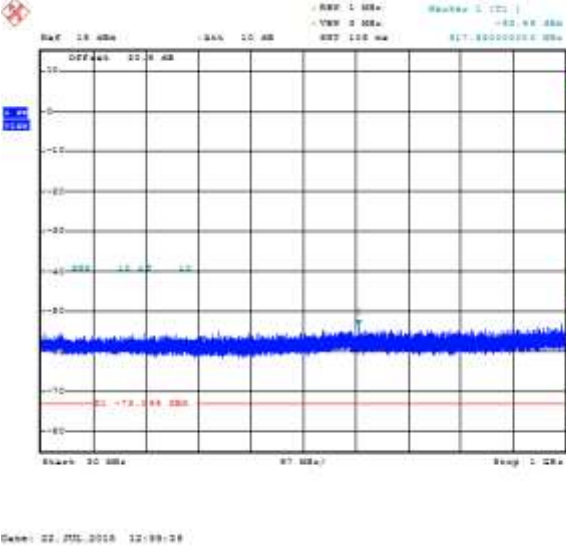


Figure 8-146: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 149, MCS0  
Mbps



|                                                                                   |                                                                                               |                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><b>APPENDIX 8</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

### 802.11ac RF Conducted Emission Test Results cont'd

Channels 36, 64, 140 and 149 were measured at MCS0 Mbps each for 802.11ac mode, 80MHz bandwidth. Peak power was measured using an Agilent power meter, model N1911A with model N1921A power sensor. A reference offset of 29.0 dB was applied to the spectrum analyzer reference level for the attenuators and coaxial cable loss in the test circuit.

#### 80 MHz Bandwidth Primary Antenna

| Channel | Data Rate | Carrier Level (dBm) | Max. Measured Level (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------------|----------------------------------------|-------------|
| 36      | MCS0      | 13.14               | -45.79                    | -58.93                                 | -20         |
| 64      | MCS0      | 13.07               | -46.23                    | -59.30                                 | -20         |
| 140     | MCS0      | 12.63               | -46.57                    | -59.20                                 | -20         |
| 149     | MCS0      | 12.94               | -46.23                    | -59.17                                 | -20         |

#### Secondary Antenna

| Channel | Data Rate | Carrier Level (dBm) | Max. Measured Level (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------------|----------------------------------------|-------------|
| 36      | MCS0      | 13.69               | -45.97                    | -59.66                                 | -20         |
| 64      | MCS0      | 12.30               | -45.57                    | -57.87                                 | -20         |
| 140     | MCS0      | 11.32               | -46.26                    | -57.58                                 | -20         |
| 149     | MCS0      | 12.19               | -46.37                    | -58.56                                 | -20         |

#### Sum

| Channel | Data Rate | Carrier Level (dBm) | Combined Peak (dBm) | Max. Measured Level from Carrier (dBc) | Limit (dBc) |
|---------|-----------|---------------------|---------------------|----------------------------------------|-------------|
| 36      | MCS0      | 16.92               | -42.87              | -59.78                                 | -20         |
| 64      | MCS0      | 13.76               | -42.88              | -56.63                                 | -20         |
| 140     | MCS0      | 15.68               | -43.40              | -59.08                                 | -20         |
| 149     | MCS0      | 15.64               | -43.29              | -58.93                                 | -20         |

See figures 8-147 to 8-162 for the plots of the spurious RF conducted emissions for Channel 36, 64, 140 and 149 at MCS0 Mbps each for 802.11ac mode, bandwidth 80MHz.

|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-147: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 36, MCS0  
Mbps

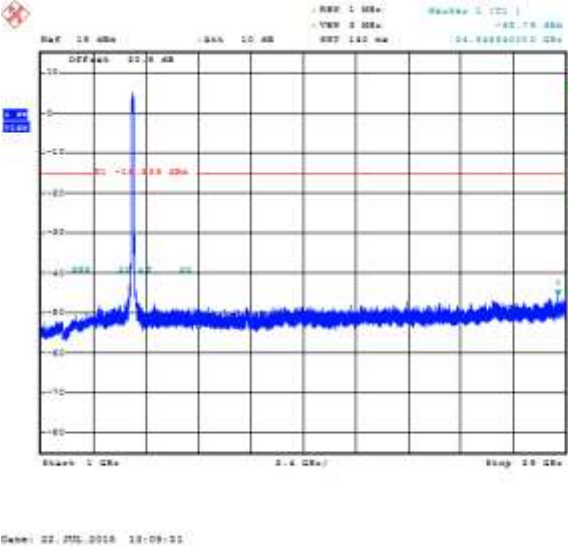


Figure 8-148: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 36, MCS0  
Mbps

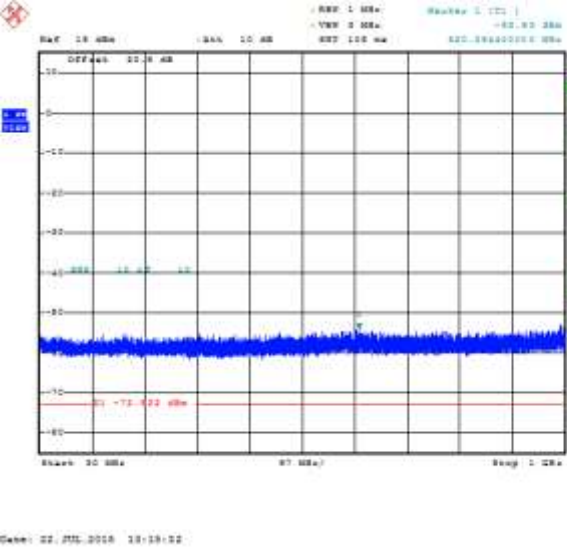


Figure 8-149: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 64, MCS0  
Mbps

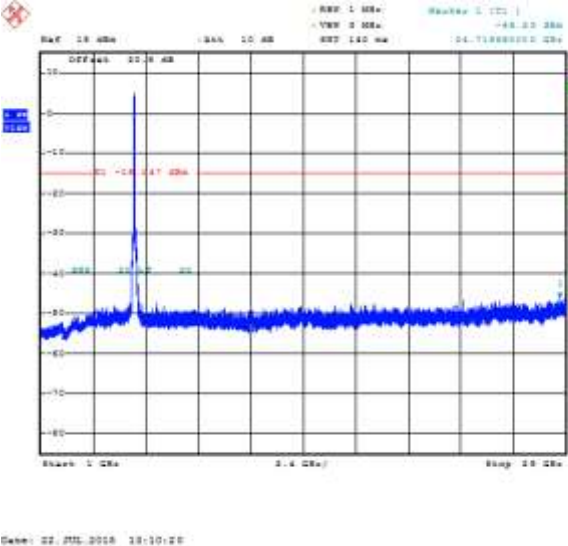
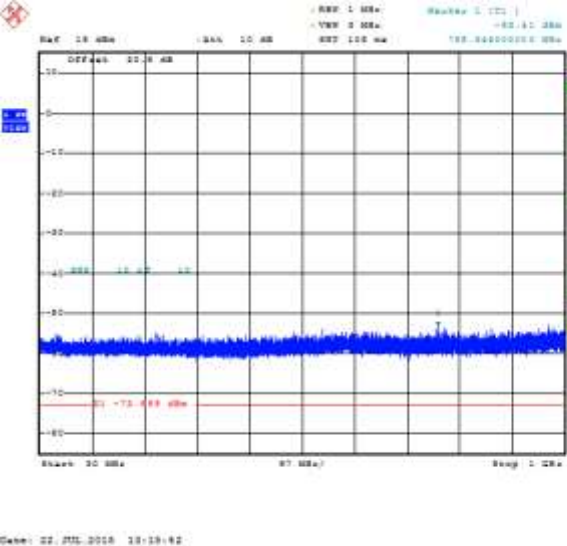


Figure 8-150: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 64, MCS0  
Mbps



|                                                                                   |                                                                                                       |                                                         |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><div>APPENDIX 8</div> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                                | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-151: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 140, MCS0  
Mbps

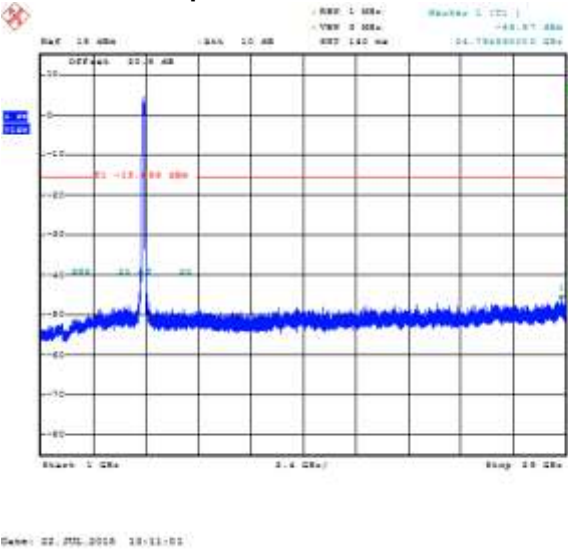


Figure 8-152: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 140, MCS0  
Mbps

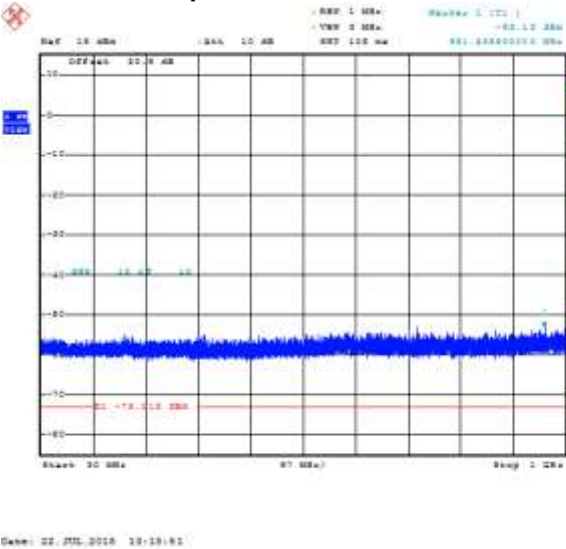


Figure 8-153 Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 149, MCS0  
Mbps

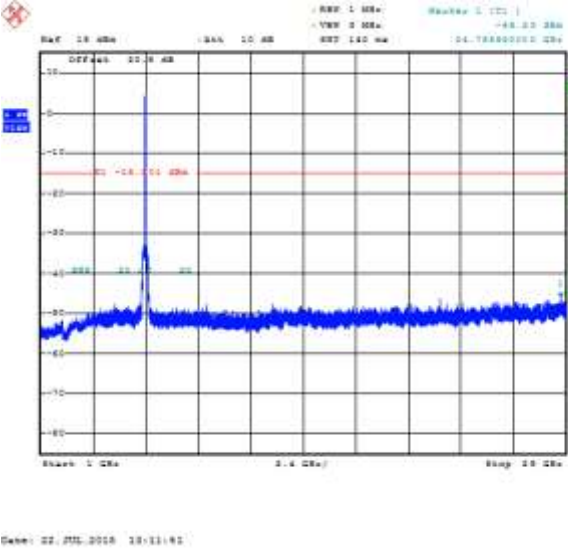
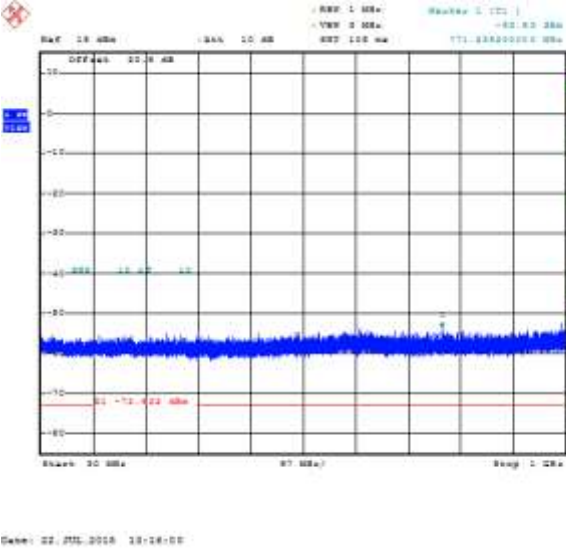


Figure 8-154: Spurious RF Conducted Emissions  
Primary, 802.11ac, Channel 149, MCS0  
Mbps



|                                                                                   |                                                                          |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
|                                                                                   |                                                                          | <b>APPENDIX 8</b>                                       |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

802.11ac RF Conducted Emission Test Results cont'd

Figure 8-155: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 36, MCS0  
Mbps

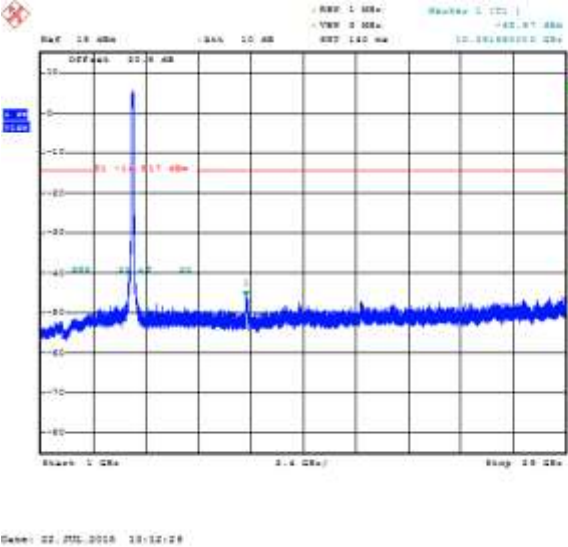


Figure 8-156: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 36, MCS0  
Mbps

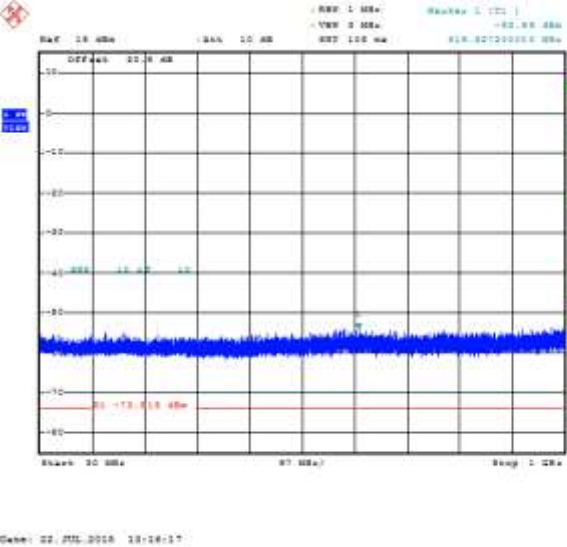


Figure 8-157: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 64, MCS0  
Mbps

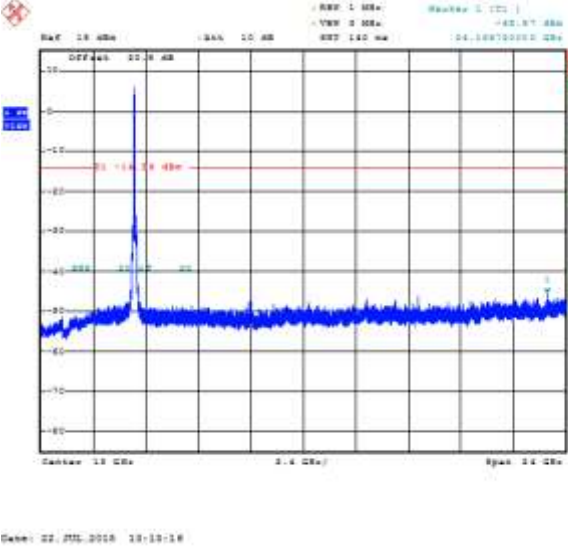
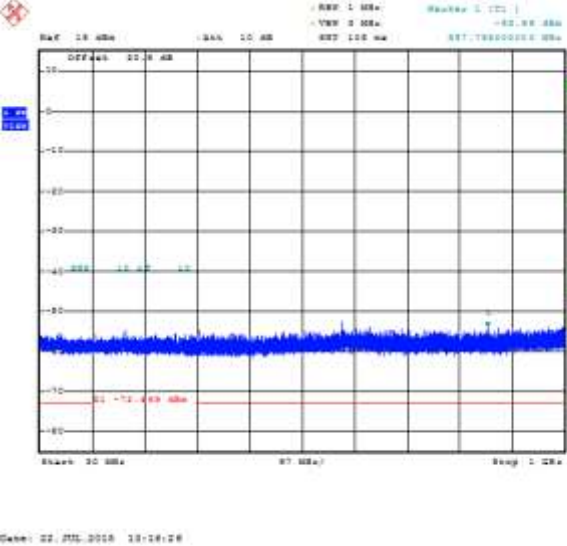


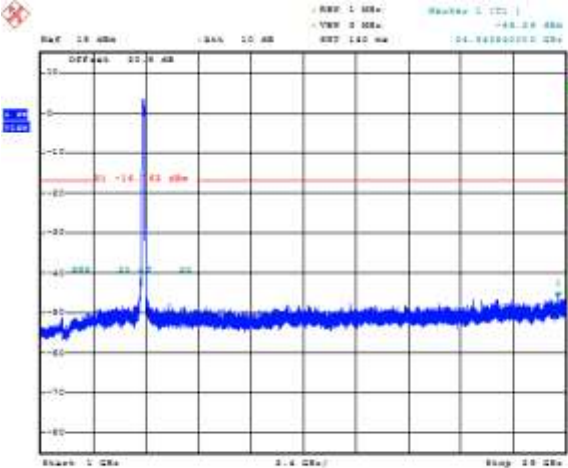
Figure 8-158: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 64, MCS0  
Mbps



|                                                                                   |                                                                          |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1) |                                                         |
|                                                                                   |                                                                          | <b>APPENDIX 8</b>                                       |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015   | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

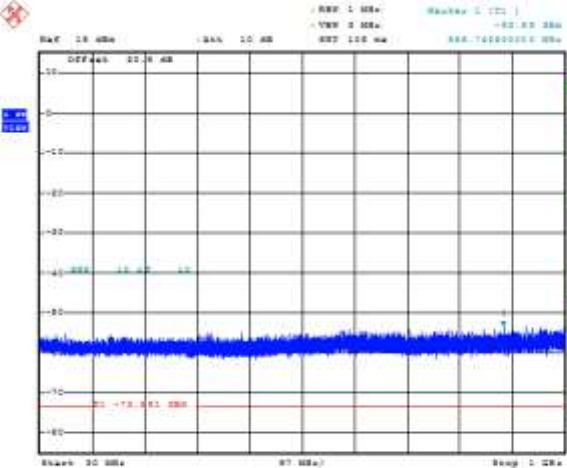
802.11ac RF Conducted Emission Test Results cont'd

Figure 8-159: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 140, MCS0  
Mbps



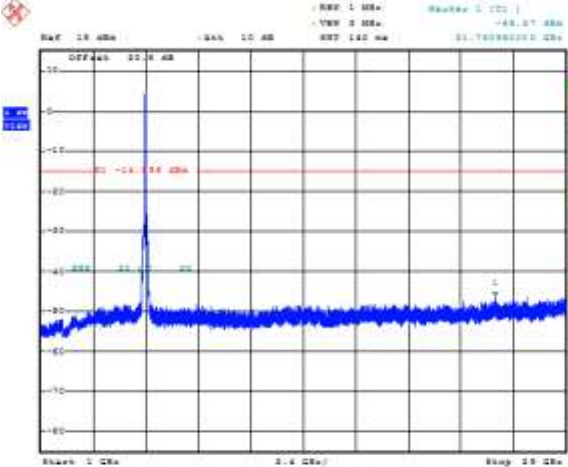
Date: 22/Jul/2015 15:13:57

Figure 8-160: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 140, MCS0  
Mbps



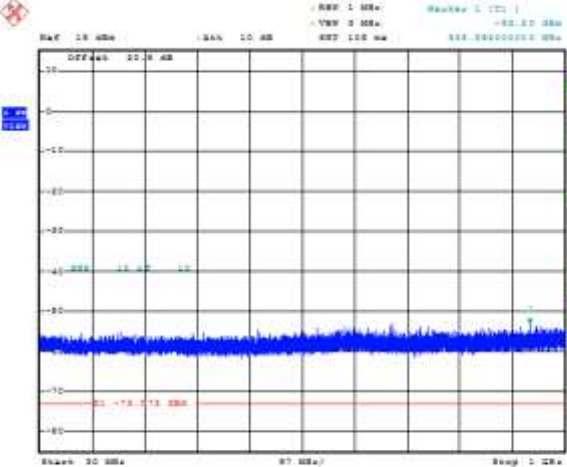
Date: 22/Jul/2015 15:18:38

Figure 8-161: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 149, MCS0  
Mbps



Date: 22/Jul/2015 15:16:55

Figure 8-162: Spurious RF Conducted Emissions  
Secondary, 802.11ac, Channel 149, MCS0  
Mbps



Date: 22/Jul/2015 15:16:58

## **APPENDIX 9 – NEAR FIELD COMMUNICATIONS TEST DATA/PLOTS**

|                                                                                   |                                                                                                  |                                                         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><b>APPENDIX 9</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September<br>28, 2015                        | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## Near Field Communications (NFC) Test Results

### Radiated Emissions

Date of Test: August 24, 2015

Measurements were performed by Savtej Sandhu.

The environmental test conditions were: Temperature: 26.2 °C  
Relative Humidity: 31.5 %

The test distance was 3.0 meters with a EUT height of 1.5 meters, and sweep frequency of 9 kHz to 1 GHz.

The BlackBerry® smartphone was in vertical position.

The frequency sweep measurements were performed in Near Field Communications Tx mode at 13.56 MHz

| Frequency<br>(MHz) | Reading<br>(QP)<br>(dBµV/m) | Correction<br>Factor<br>(dB) | Corrected<br>Reading<br>(QP)<br>(dBµV/m) | Limit<br>(dBµV/m) | Test<br>Margin<br>(dB) |
|--------------------|-----------------------------|------------------------------|------------------------------------------|-------------------|------------------------|
| 13.57              | 56.00                       | 16.67                        | 56                                       | 124.00            | -68                    |

All other emissions had a test margin of greater than 25.0 dB

|                                                                                   |                                                                                                   |                                                         |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model RHK211LW (STV100-1)<br><br><b>APPENDIX 9</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September 28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

## Near Field Communications (NFC) Test Results

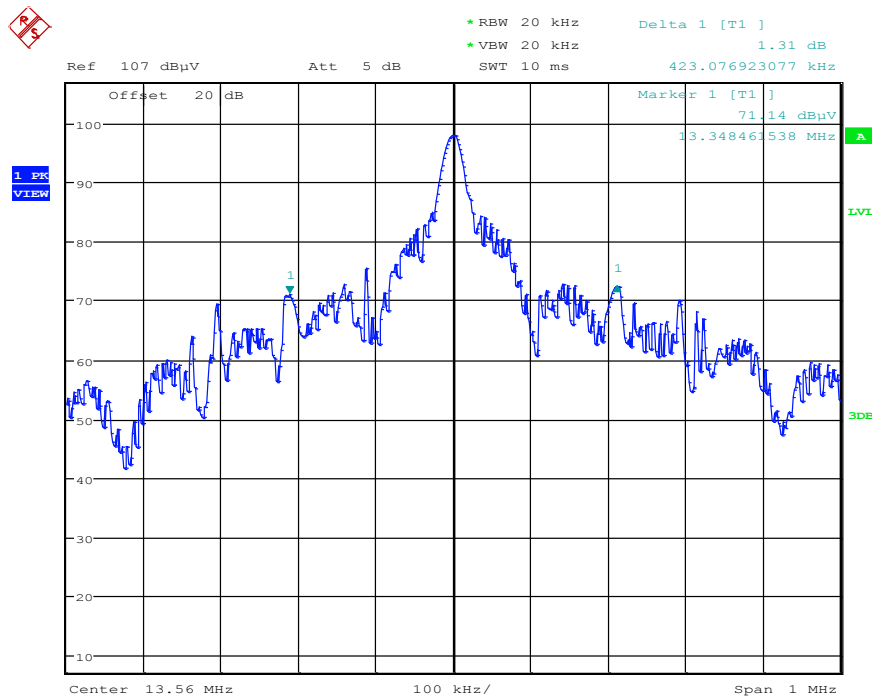
### Occupied Bandwidth

Date of test: September 2, 2015  
The measurements were performed by Kevin Guo.

The environmental test conditions were:    Temperature:        25.2 °C  
                                                                                         Relative Humidity:    41.5 %

| Operation mode (TX ON) | Occupied Bandwidth (kHz) |
|------------------------|--------------------------|
| NFC, modulated         | 491.99                   |

**Figure 9-1: Occupied Bandwidth, NFC TX Frequency = 13.56 MHz**



Date: 13.MAY.2015 12:21:02



|                                                                                   |                                                                                                      |                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | EMC Test Report for the BlackBerry® smartphone Model<br>RHK211LW (STV100-1)<br><br><b>APPENDIX 9</b> |                                                         |
| <b>Test Report No.:</b><br>RTS-6066-1509-01                                       | <b>Dates of Test:</b><br>July 22 – September 8, and September<br>28, 2015                            | <b>FCC ID:</b> L6ARHK210LW<br><b>IC:</b> 2503A-RHK210LW |

Near Field Communications (NFC) Test Results cont'd

Frequency Stability cont'd

| Test Temperature<br>(Celsius) | Nominal Freq.<br>(MHz) | Measured Freq.<br>(MHz) | Input Voltage<br>(Volts) | Max Freq Error<br>(Hz) | % Deviation<br>(Limit .01%) | PPM      |
|-------------------------------|------------------------|-------------------------|--------------------------|------------------------|-----------------------------|----------|
| 30                            | 13.56                  | 13.560000               | 3.6                      | 0.000000               | 0                           | 0.00000  |
| 30                            | 13.56                  | 13.560014               | 3.8                      | 0.000014               | 140                         | 0.00010  |
| 30                            | 13.56                  | 13.559949               | 4.35                     | -0.000051              | -510                        | -0.00038 |
| 40                            | 13.56                  | 13.559963               | 3.6                      | -0.000037              | -367                        | -0.00027 |
| 40                            | 13.56                  | 13.559965               | 3.8                      | -0.000035              | -351                        | -0.00026 |
| 40                            | 13.56                  | 13.559921               | 4.35                     | -0.000079              | -790                        | -0.00058 |
| 50                            | 13.56                  | 13.559952               | 3.6                      | -0.000048              | -478                        | -0.00035 |
| 50                            | 13.56                  | 13.559953               | 3.8                      | -0.000047              | -473                        | -0.00035 |
| 50                            | 13.56                  | 13.559967               | 4.35                     | -0.000033              | -326                        | -0.00024 |
| 60                            | 13.56                  | 13.559954               | 3.6                      | -0.000046              | -465                        | -0.00034 |
| 60                            | 13.56                  | 13.559960               | 3.8                      | -0.000040              | -404                        | -0.00030 |
| 60                            | 13.56                  | 13.559963               | 4.35                     | -0.000037              | -371                        | -0.00027 |