

## Appendix B: Test Results of General 2.4GHz

|                                                                                  |           |
|----------------------------------------------------------------------------------|-----------|
| <b>APPENDIX B: TEST RESULTS OF GENERAL 2.4GHZ.....</b>                           | <b>1</b>  |
| <b>APPENDIX B.1: FUNDAMENTAL &amp; HARMONICS RADIATED EMISSION .....</b>         | <b>2</b>  |
| 30MHz - 1GHz.....                                                                | 2         |
| 1GHz - 18GHz.....                                                                | 6         |
| <b>APPENDIX B.2: TEST RESULTS OF 20dB BANDWIDTH .....</b>                        | <b>12</b> |
| <b>APPENDIX B.3: TEST RESULTS OF 99% BANDWIDTH.....</b>                          | <b>14</b> |
| <b>APPENDIX B.4: TEST RESULTS OF RADIATED EMISSIONS IN RESTRICTED BANDS.....</b> | <b>16</b> |
| <b>APPENDIX B.5: TEST PLOTS OF CONDUCTED EMISSION ON AC MAINS .....</b>          | <b>20</b> |

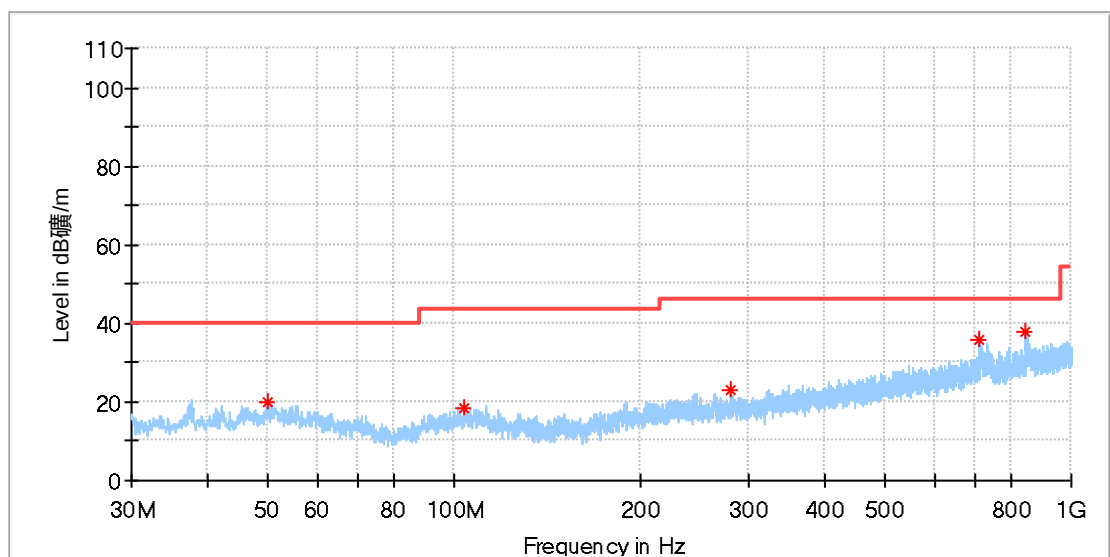
Note: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz -26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

## Appendix B.1: Fundamental & Harmonics Radiated Emission

### 30MHz - 1GHz

### EUT Information

|                |                   |
|----------------|-------------------|
| EUT Name:      | Wireless Receiver |
| Model:         | RG51-6108         |
| Test Mode:     | Low channel       |
| Test Voltage:: | DC 5V From USB    |
| Remark:        | Temp 24 Humi:45%  |
| Test Standard: | FCC 15.249        |
| Tested By:     | Kei Zhang         |
| Reviewed By:   | Terry Yin         |

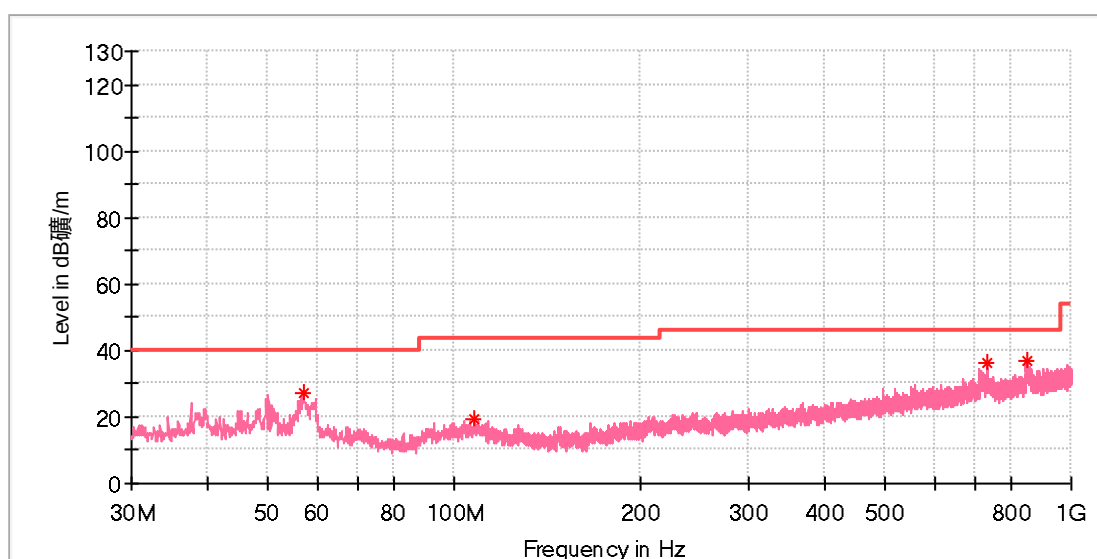


### Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 49.739500       | 20.19            | ---              | 40.00          | 19.81       | 100.0       | H   | 254.0         | -18.6        |
| 103.768500      | 18.51            | ---              | 43.50          | 24.99       | 100.0       | H   | 334.0         | -19.1        |
| 281.230000      | 23.24            | ---              | 46.00          | 22.76       | 100.0       | H   | 180.0         | -17.0        |
| 709.145500      | 35.97            | ---              | 46.00          | 10.03       | 100.0       | H   | 303.0         | -8.3         |
| 844.848500      | 37.74            | ---              | 46.00          | 8.26        | 100.0       | H   | 5.0           | -6.0         |

## EUT Information

EUT Name: Wireless Receiver  
Model: RG51-6108  
Test Mode: Low channel  
Test Voltage:: DC 5V From USB  
Remark: Temp 24 Humi:45%  
Test Standard: FCC 15.249  
Tested By: Kei Zhang  
Reviewed By: Terry Yin

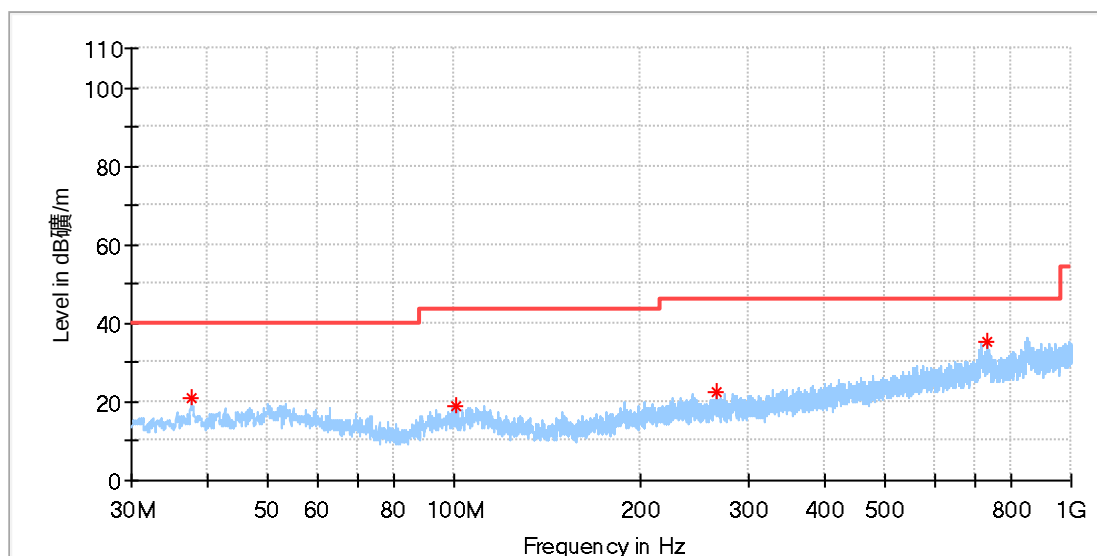


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 57.063000       | 27.14            | ---              | 40.00          | 12.86       | 100.0       | V   | 344.0         | -19.0        |
| 108.036500      | 19.22            | ---              | 43.50          | 24.28       | 100.0       | V   | 166.0         | -19.3        |
| 729.030500      | 36.04            | ---              | 46.00          | 9.96        | 100.0       | V   | 99.0          | -7.9         |
| 845.188000      | 36.65            | ---              | 46.00          | 9.35        | 100.0       | V   | 145.0         | -6.0         |

## EUT Information

EUT Name: Wireless Receiver  
Model: RG51-6108  
Test Mode: High channel  
Test Voltage:: DC 5V From USB  
Remark: Temp 24 Humi:45%  
Test Standard: FCC 15.249  
Tested By: Kei Zhang  
Reviewed By: Terry Yin

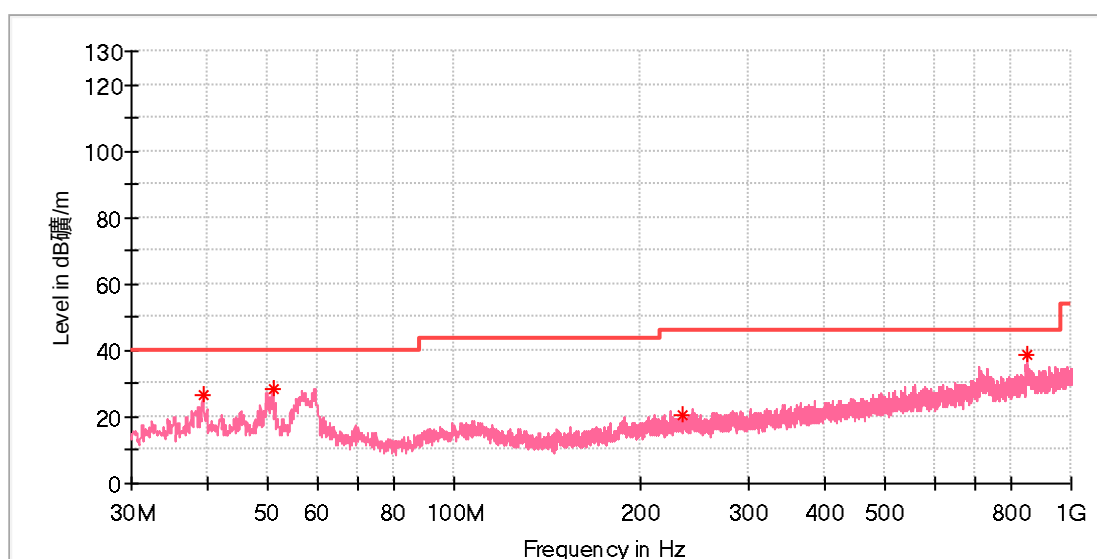


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 37.469000       | 21.19            | ---              | 40.00          | 18.81       | 100.0       | H   | 12.0          | -21.3        |
| 100.664500      | 19.18            | ---              | 43.50          | 24.32       | 100.0       | H   | 305.0         | -19.3        |
| 265.370500      | 22.73            | ---              | 46.00          | 23.27       | 100.0       | H   | 252.0         | -17.3        |
| 728.788000      | 35.35            | ---              | 46.00          | 10.65       | 100.0       | H   | 315.0         | -7.9         |

## EUT Information

EUT Name: Wireless Receiver  
Model: RG51-6108  
Test Mode: High channel  
Test Voltage:: DC 5V From USB  
Remark: Temp 24 Humi:45%  
Test Standard: FCC 15.249  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical\_Freqs

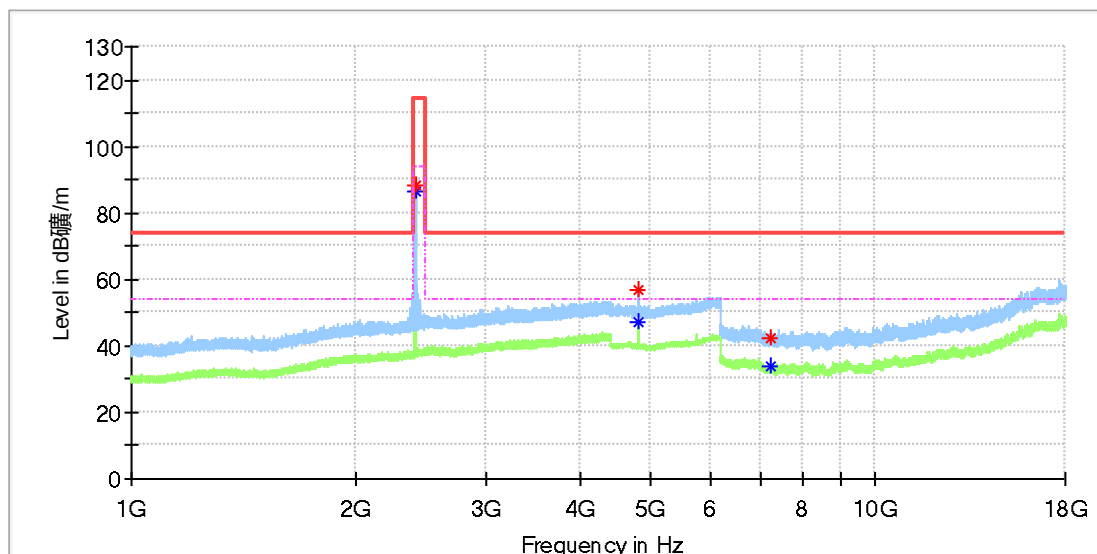
| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 39.215000       | 26.65            | ---              | 40.00          | 13.35       | 100.0       | V   | 0.0           | -20.7        |
| 50.855000       | 28.15            | ---              | 40.00          | 11.85       | 100.0       | V   | 287.0         | -18.6        |
| 235.300500      | 20.59            | ---              | 46.00          | 25.41       | 100.0       | V   | 45.0          | -18.2        |
| 845.673000      | 38.47            | ---              | 46.00          | 7.53        | 100.0       | V   | 179.0         | -6.0         |

Produkte  
Products

1GHz - 18GHz

## EUT Information

|                |                   |
|----------------|-------------------|
| EUT Name:      | Wireless Receiver |
| Model:         | RG51-6108         |
| Test Mode:     | Low channel       |
| Test Voltage:: | DC 5V From USB    |
| Remark:        | Temp 22 Humi:52%  |
| Test Standard: | FCC 15.249        |
| Tested By:     | Kei Zhang         |
| Reviewed By:   | Terry Yin         |

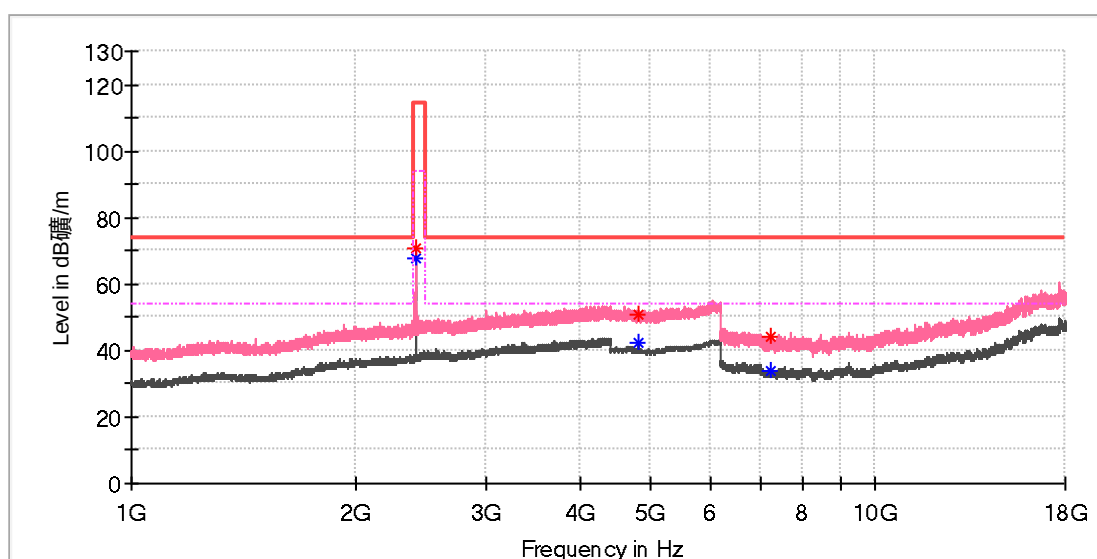


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 2405.687500     | ---              | 86.70            | 94.00          | 7.30        | 100.0       | H   | 19.0          | 7.0          |
| 2405.687500     | 88.42            | ---              | 114.00         | 25.58       | 100.0       | H   | 19.0          | 7.0          |
| 4808.500000     | 57.04            | ---              | 74.00          | 16.96       | 100.0       | H   | 195.0         | 13.6         |
| 4809.000000     | ---              | 47.03            | 54.00          | 6.97        | 100.0       | H   | 195.0         | 13.6         |
| 7212.341667     | ---              | 34.15            | 54.00          | 19.85       | 100.0       | H   | 269.0         | 8.7          |
| 7213.816667     | 42.32            | ---              | 74.00          | 31.68       | 100.0       | H   | 153.0         | 8.7          |

## EUT Information

EUT Name: Wireless Receiver  
Model: RG51-6108  
Test Mode: Low channel  
Test Voltage:: DC 5V From USB  
Remark: Temp 22 Humi:52%  
Test Standard: FCC 15.249  
Tested By: Kei Zhang  
Reviewed By: Terry Yin

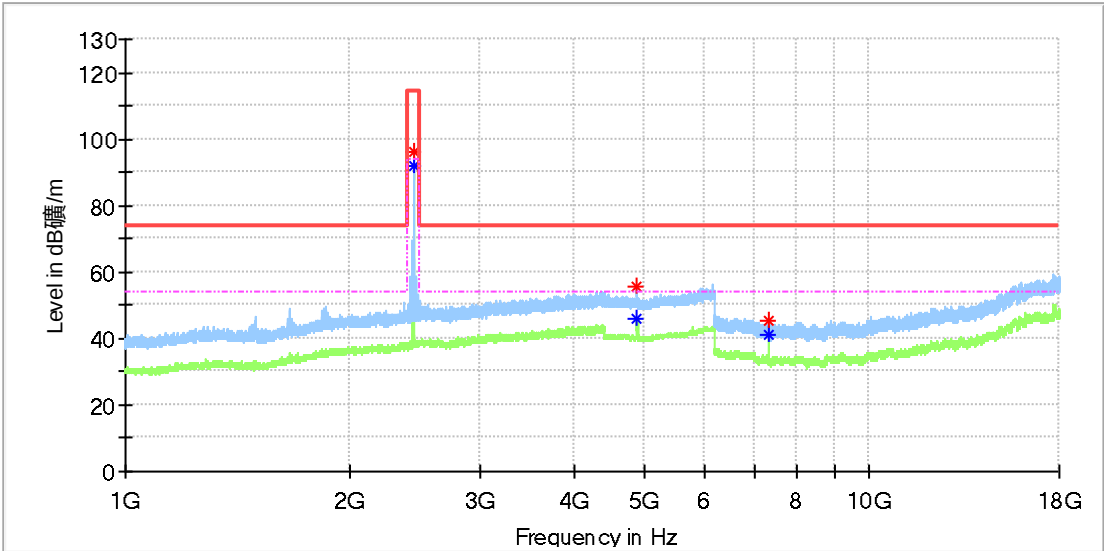


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 2405.687500     | 70.60            | ---              | 114.00         | 43.40       | 100.0       | V   | 289.0         | 7.0          |
| 2405.687500     | ---              | 67.76            | 94.00          | 26.24       | 100.0       | V   | 289.0         | 7.0          |
| 4809.500000     | 51.06            | ---              | 74.00          | 22.94       | 100.0       | V   | 87.0          | 13.6         |
| 4809.500000     | ---              | 42.23            | 54.00          | 11.77       | 100.0       | V   | 87.0          | 13.6         |
| 7220.208333     | ---              | 33.70            | 54.00          | 20.30       | 100.0       | V   | 58.0          | 8.7          |
| 7229.550000     | 43.85            | ---              | 74.00          | 30.15       | 100.0       | V   | 264.0         | 8.6          |

# EUT Information

EUT Name: Wireless Receiver  
Model: RG51-6108  
Test Mode: Mid channel  
Test Voltage:: DC 5V From USB  
Remark: Temp 22 Humi:52%  
Test Standard: FCC 15.249  
Tested By: Kei Zhang  
Reviewed By: Terry Yin

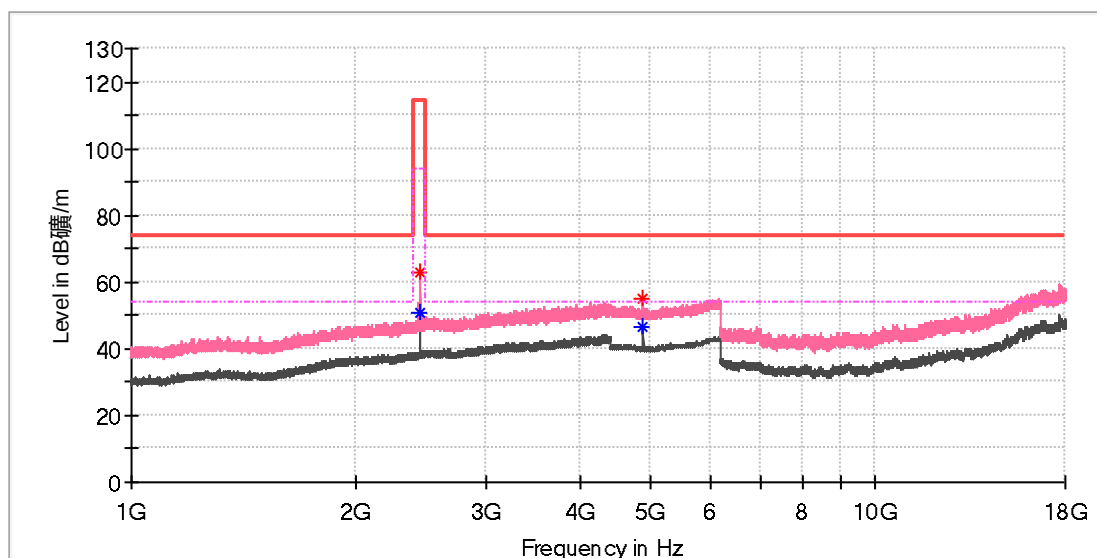


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 2438.412500     | 95.87            | ---              | 114.00         | 18.13       | 100.0       | H   | 224.0         | 7.4          |
| 2438.412500     | ---              | 92.15            | 94.00          | 1.85        | 100.0       | H   | 224.0         | 7.4          |
| 4877.000000     | ---              | 46.10            | 54.00          | 7.90        | 100.0       | H   | 202.0         | 13.4         |
| 4877.000000     | 55.48            | ---              | 74.00          | 18.52       | 100.0       | H   | 202.0         | 13.4         |
| 7317.066667     | 45.47            | ---              | 74.00          | 28.53       | 100.0       | H   | 254.0         | 8.2          |
| 7317.066667     | ---              | 41.25            | 54.00          | 12.75       | 100.0       | H   | 254.0         | 8.2          |

## EUT Information

EUT Name: Wireless Receiver  
Model: RG51-6108  
Test Mode: Mid channel  
Test Voltage:: DC 5V From USB  
Remark: Temp 22 Humi:52%  
Test Standard: FCC 15.249  
Tested By: Kei Zhang  
Reviewed By: Terry Yin

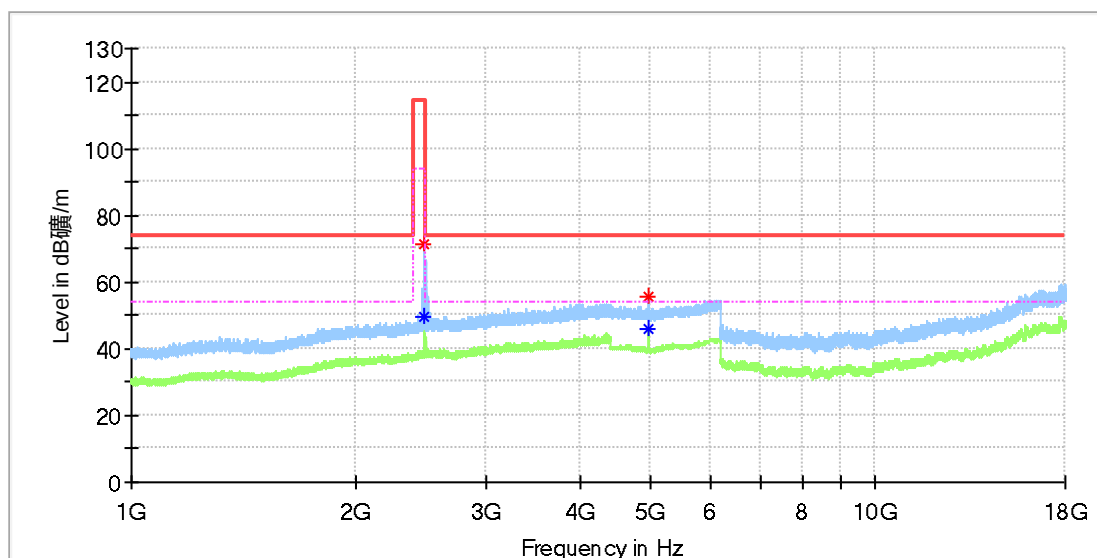


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 2442.025000     | ---              | 50.72            | 94.00          | 43.28       | 100.0       | V   | 0.0           | 7.4          |
| 2442.662500     | 63.03            | ---              | 114.00         | 50.97       | 100.0       | V   | 0.0           | 7.4          |
| 4877.500000     | 54.76            | ---              | 74.00          | 19.24       | 100.0       | V   | 150.0         | 13.4         |
| 4877.500000     | ---              | 46.53            | 54.00          | 7.47        | 100.0       | V   | 150.0         | 13.4         |

## EUT Information

EUT Name: Wireless Receiver  
Model: RG51-6108  
Test Mode: High channel  
Test Voltage:: DC 5V From USB  
Remark: Temp 22 Humi:52%  
Test Standard: FCC 15.249  
Tested By: Kei Zhang  
Reviewed By: Terry Yin

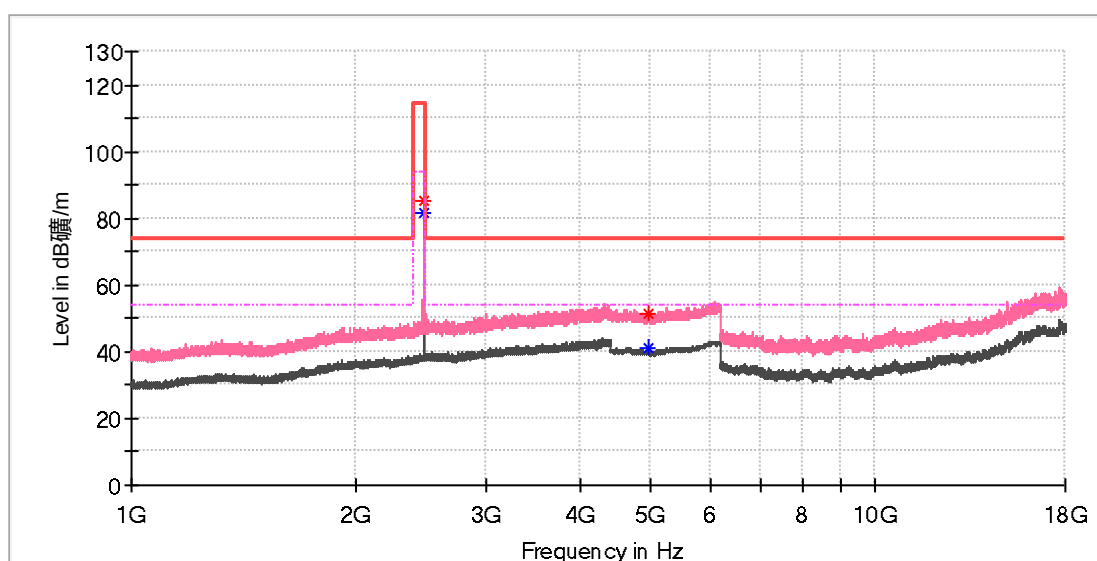


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 2471.137500     | ---              | 49.86            | 94.00          | 44.14       | 100.0       | H   | 355.0         | 7.4          |
| 2471.137500     | 71.13            | ---              | 114.00         | 42.87       | 100.0       | H   | 355.0         | 7.4          |
| 4951.500000     | 55.64            | ---              | 74.00          | 18.36       | 100.0       | H   | 186.0         | 13.2         |
| 4951.500000     | ---              | 45.93            | 54.00          | 8.07        | 100.0       | H   | 186.0         | 13.2         |

## EUT Information

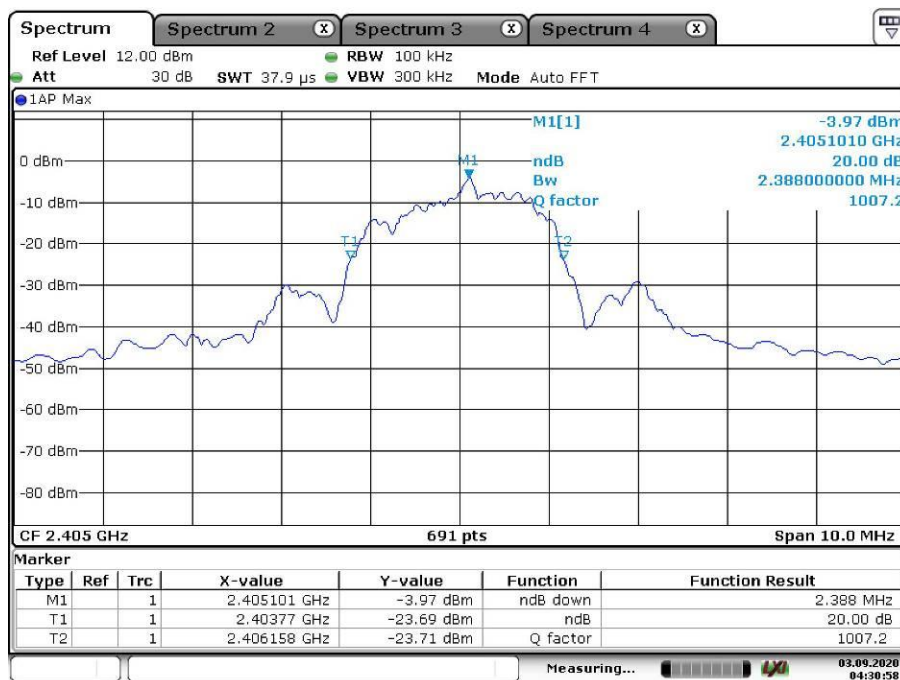
EUT Name: Wireless Receiver  
 Model: RG51-6108  
 Test Mode: High channel  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:52%  
 Test Standard: FCC 15.249  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



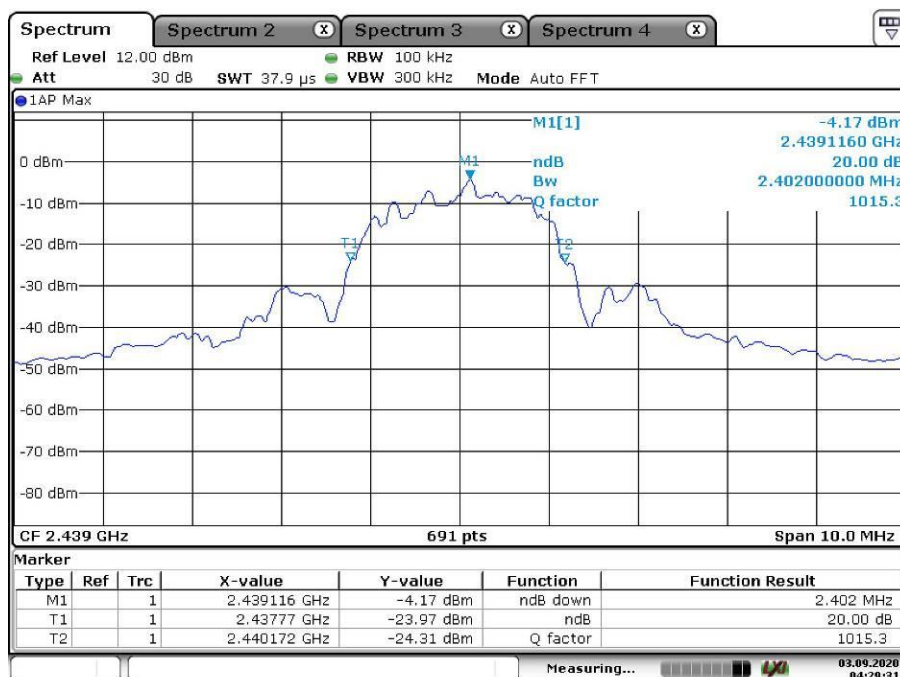
## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 2474.325000     | 85.22            | ---              | 114.00         | 28.78       | 100.0       | V   | 117.0         | 7.4          |
| 2474.325000     | ---              | 81.35            | 94.00          | 12.65       | 100.0       | V   | 117.0         | 7.4          |
| 4949.500000     | 51.24            | ---              | 74.00          | 22.76       | 100.0       | V   | 273.0         | 13.2         |
| 4949.500000     | ---              | 41.18            | 54.00          | 12.82       | 100.0       | V   | 273.0         | 13.2         |

## Appendix B.2: Test Results of 20dB Bandwidth



Date: 3.SEP.2020 04:30:59



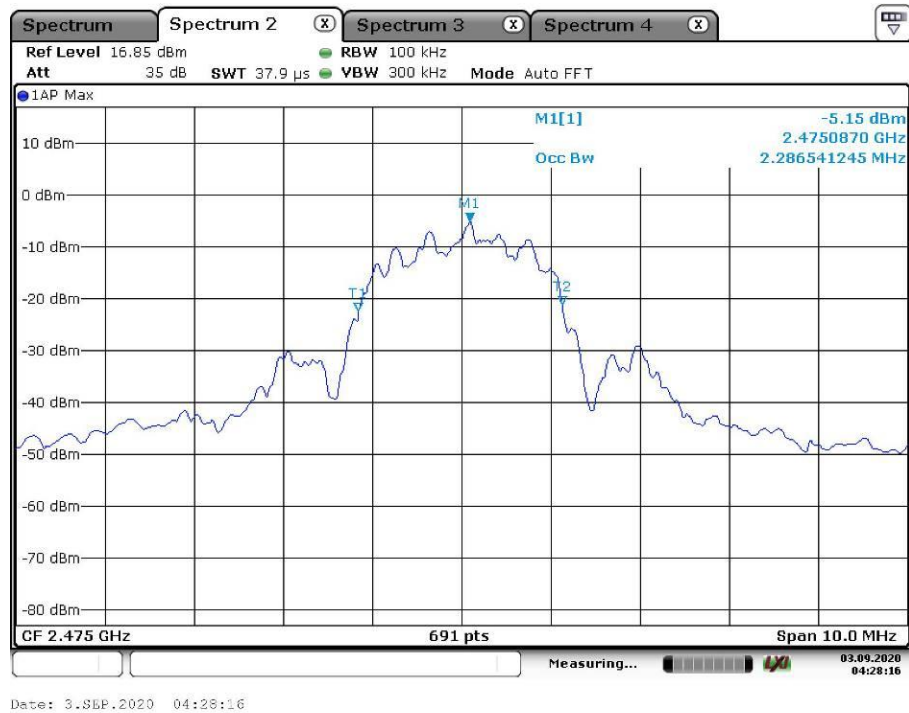
Date: 3.SEP.2020 04:29:32



## Appendix B.3: Test Results of 99% Bandwidth

Note: for refer purpose.

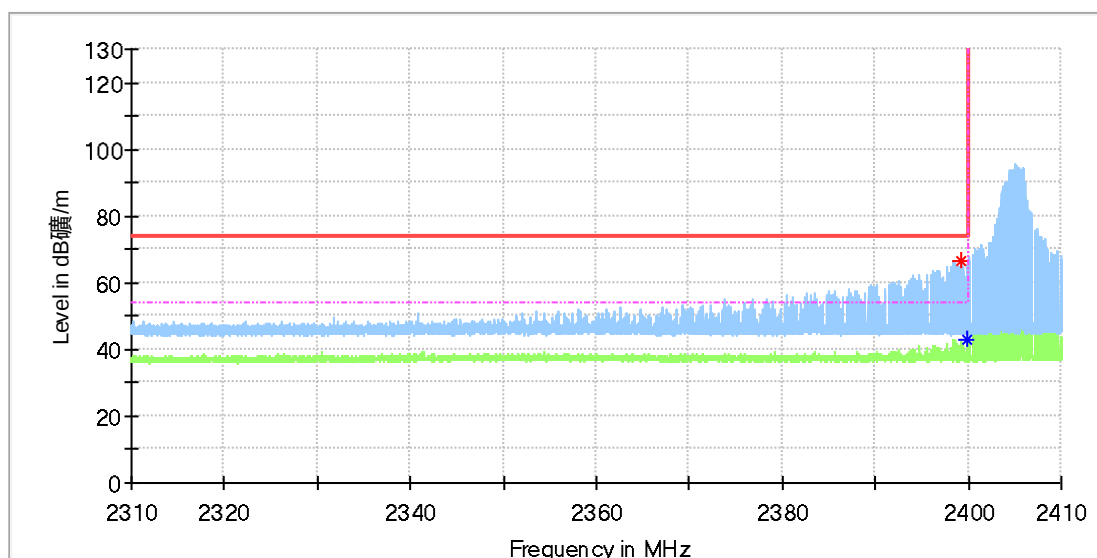




## Appendix B.4: Test Results of Radiated Emissions in Restricted Bands

### EUT Information

|                |                   |
|----------------|-------------------|
| EUT Name:      | Wireless Receiver |
| Model:         | RG51-6108         |
| Test Mode:     | Low channel       |
| Test Voltage:: | DC 5V From USB    |
| Remark:        | Temp 22 Humi:52%  |
| Test Standard: | FCC 15.249        |
| Tested By:     | Kei Zhang         |
| Reviewed By:   | Terry Yin         |

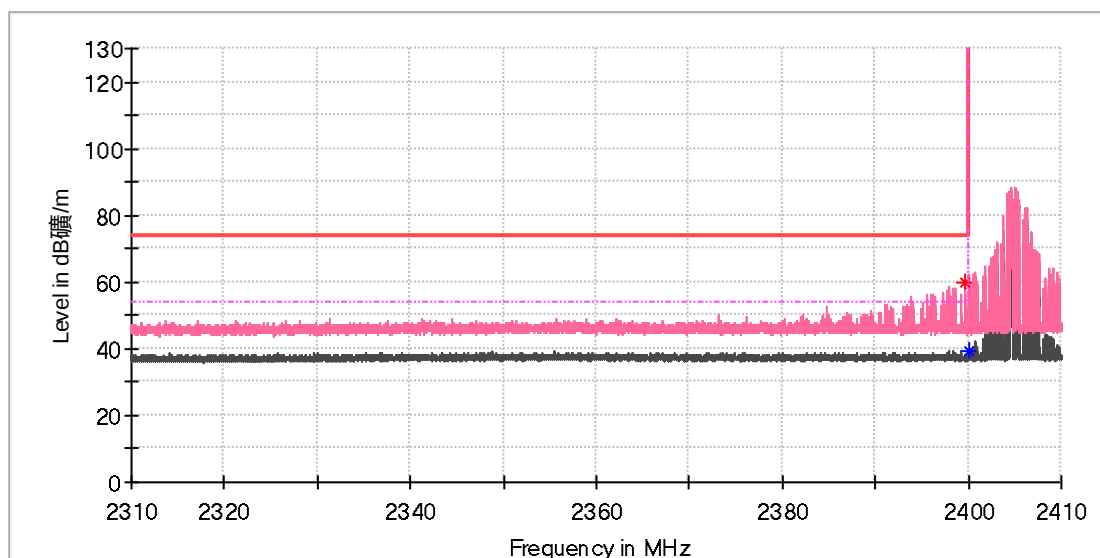


### Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 2399.206250     | 66.28            | ---              | 74.00          | 7.72        | 100.0       | H   | 343.0         | 7.0          |
| 2399.968750     | ---              | 42.76            | 54.00          | 11.24       | 100.0       | H   | 17.0          | 7.0          |

## EUT Information

EUT Name: Wireless Receiver  
Model: RG51-6108  
Test Mode: Low channel  
Test Voltage:: DC 5V From USB  
Remark: Temp 22 Humi:52%  
Test Standard: FCC 15.249  
Tested By: Kei Zhang  
Reviewed By: Terry Yin

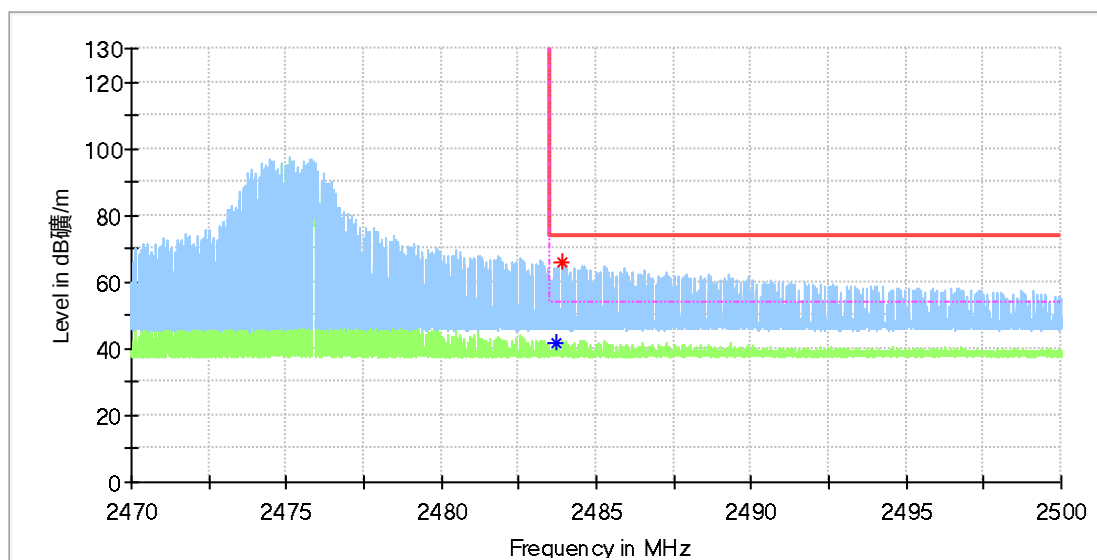


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 2399.631250     | 60.12            | ---              | 74.00          | 13.88       | 100.0       | V   | 29.0          | 7.0          |
| 2399.981250     | ---              | 39.50            | 54.00          | 14.50       | 100.0       | V   | 6.0           | 7.0          |

## EUT Information

EUT Name: Wireless Receiver  
 Model: RG51-6108  
 Test Mode: High channel  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 22 Humi:52%  
 Test Standard: FCC 15.249  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin

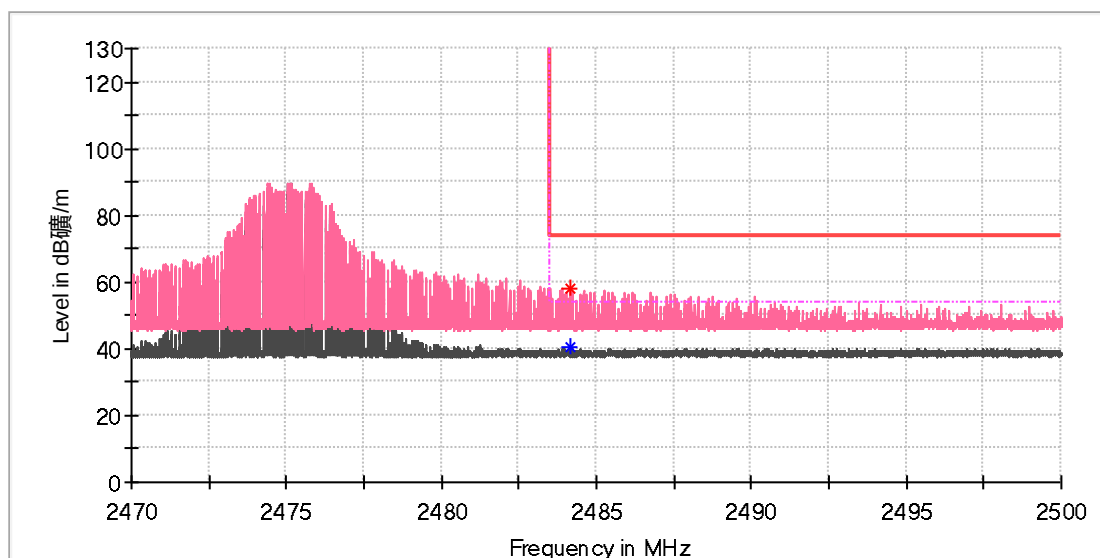


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 2483.713750     | ---              | 41.79            | 54.00          | 12.21       | 100.0       | H   | 0.0           | 7.4          |
| 2483.875000     | 65.66            | ---              | 74.00          | 8.34        | 100.0       | H   | 336.0         | 7.4          |

## EUT Information

EUT Name: Wireless Receiver  
Model: RG51-6108  
Test Mode: High channel  
Test Voltage:: DC 5V From USB  
Remark: Temp 22 Humi:52%  
Test Standard: FCC 15.249  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



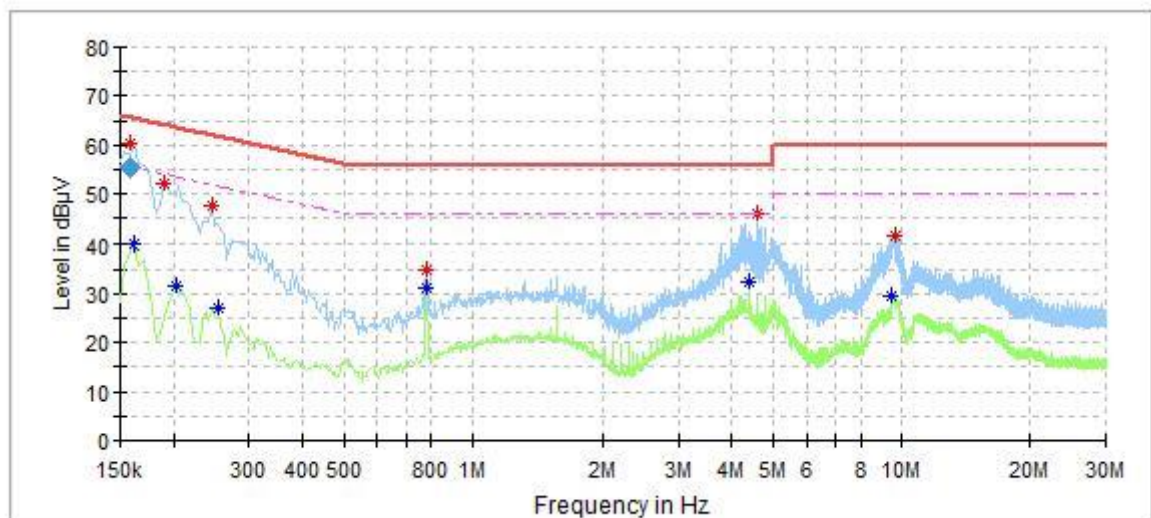
## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-------------|-----|---------------|--------------|
| 2484.135625     | ---              | 40.37            | 54.00          | 13.63       | 100.0       | V   | 44.0          | 7.4          |
| 2484.135625     | 58.17            | ---              | 74.00          | 15.83       | 100.0       | V   | 44.0          | 7.4          |

## Appendix B.5: Test Plots of Conducted Emission on AC Mains

### EUT Information

EUT Name: Wireless Receiver  
Model: RG51-6108  
Test Mode: Tx  
Test Voltage: DC 5V From USB  
Test By: Shower.Dai  
Review By: Gary Chen  
Remark: SR1



### Critical\_Freqs

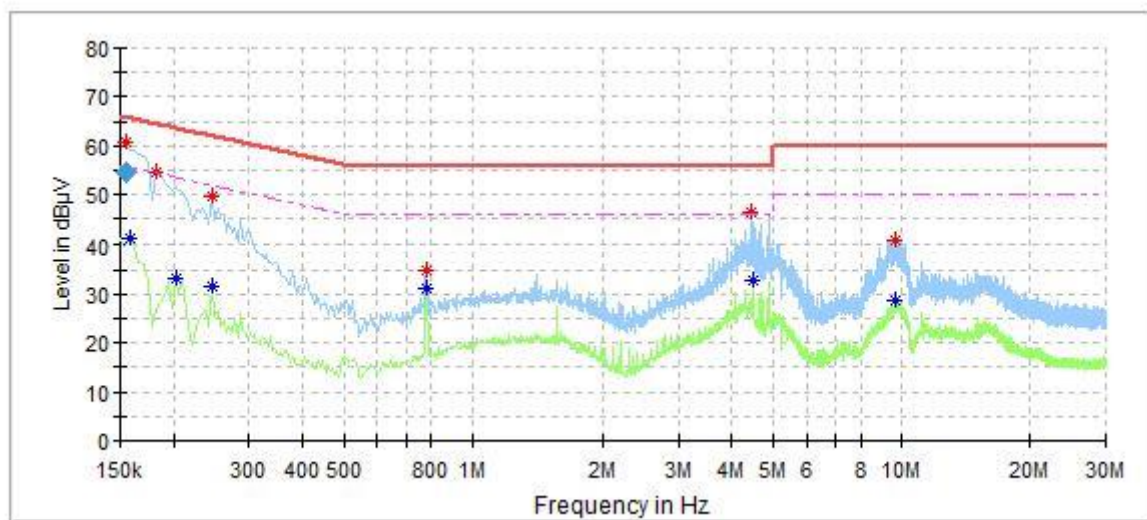
| Frequency (MHz) | MaxPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Line | Corr. (dB) |
|-----------------|----------------|----------------|--------------|-------------|------|------------|
| 0.157500        | 60.12          | ---            | 65.36        | 5.24        | L1   | 9.6        |
| 0.162000        | ---            | 39.65          | 55.36        | 15.72       | L1   | 9.6        |
| 0.190000        | 52.15          | ---            | 64.04        | 11.89       | L1   | 9.6        |
| 0.202000        | ---            | 31.43          | 53.53        | 22.09       | L1   | 9.6        |
| 0.246000        | 47.65          | ---            | 61.89        | 14.24       | L1   | 9.6        |
| 0.254000        | ---            | 27.19          | 51.63        | 24.44       | L1   | 9.6        |
| 0.780000        | ---            | 31.07          | 46.00        | 14.93       | L1   | 9.7        |
| 0.780000        | 34.98          | ---            | 56.00        | 21.02       | L1   | 9.7        |
| 4.388000        | ---            | 32.32          | 46.00        | 13.68       | L1   | 9.8        |
| 4.580000        | 46.00          | ---            | 56.00        | 10.00       | L1   | 9.9        |
| 9.472000        | ---            | 29.57          | 50.00        | 20.43       | L1   | 10.0       |
| 9.620000        | 41.40          | ---            | 60.00        | 18.60       | L1   | 10.0       |

### Final Result

| Frequency (MHz) | QuasiPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Corr. (dB) |
|-----------------|------------------|----------------|--------------|-------------|-----------------|-----------------|------|------------|
| 0.157500        | 55.42            | ---            | 65.60        | 10.17       | 200.0           | 9.000           | L1   | 9.6        |

## EUT Information

|               |                   |
|---------------|-------------------|
| EUT Name:     | Wireless Receiver |
| Model         | RG51-6108         |
| Test Mode:    | Tx                |
| Test Voltage: | DC 5V From USB    |
| Test By:      | Shower.Dai        |
| Review By:    | Gary Chen         |
| Remark:       | SR1               |



## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Line | Corr. (dB) |
|-----------------|----------------|----------------|--------------|-------------|------|------------|
| 0.154500        | 60.89          | ---            | 66.00        | 5.11        | N    | 9.6        |
| 0.158000        | ---            | 40.84          | 55.57        | 14.72       | N    | 9.6        |
| 0.182000        | 54.54          | ---            | 64.39        | 9.86        | N    | 9.6        |
| 0.202000        | ---            | 33.43          | 53.53        | 20.10       | N    | 9.6        |
| 0.246000        | 49.69          | ---            | 61.89        | 12.20       | N    | 9.6        |
| 0.246000        | ---            | 31.64          | 51.89        | 20.25       | N    | 9.6        |
| 0.780000        | ---            | 31.33          | 46.00        | 14.67       | N    | 9.7        |
| 0.784000        | 35.04          | ---            | 56.00        | 20.96       | N    | 9.7        |
| 4.436000        | 46.20          | ---            | 56.00        | 9.80        | N    | 9.8        |
| 4.472000        | ---            | 32.96          | 46.00        | 13.04       | N    | 9.8        |
| 9.636000        | ---            | 28.56          | 50.00        | 21.44       | N    | 10.0       |
| 9.668000        | 40.56          | ---            | 60.00        | 19.44       | N    | 10.0       |

## Final\_Result

| Frequency (MHz) | QuasiPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Corr. (dB) |
|-----------------|------------------|----------------|--------------|-------------|-----------------|-----------------|------|------------|
| 0.154500        | 54.55            | ---            | 65.75        | 11.20       | 200.0           | 9.000           | N    | 9.6        |