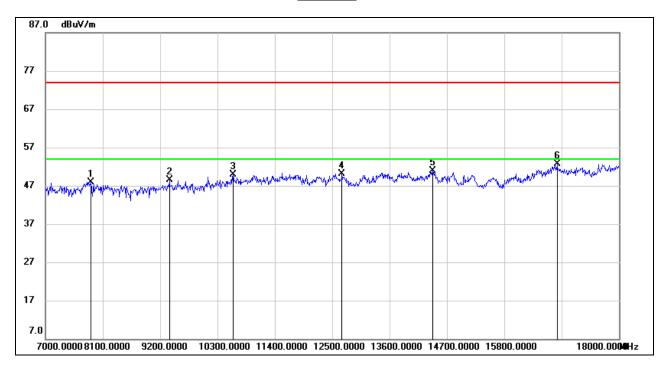


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## HORIZONTAL RESULTS 7-18GHz



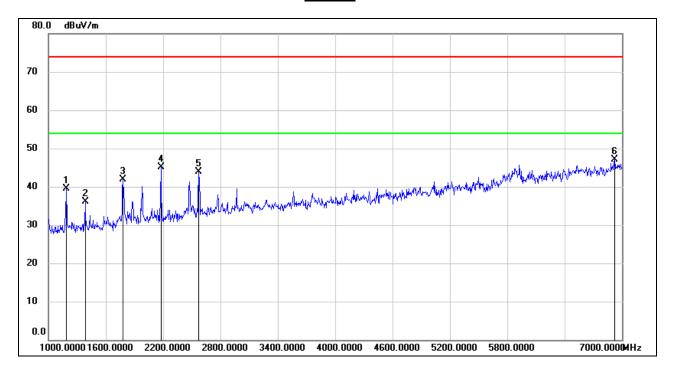
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 7869.000  | 38.67   | 9.29    | 47.96    | 74.00    | -26.04 | peak   |
| 2   | 9376.000  | 37.61   | 10.83   | 48.44    | 74.00    | -25.56 | peak   |
| 3   | 10597.000 | 36.54   | 13.38   | 49.92    | 74.00    | -24.08 | peak   |
| 4   | 12687.000 | 35.39   | 14.79   | 50.18    | 74.00    | -23.82 | peak   |
| 5   | 14425.000 | 33.85   | 16.97   | 50.82    | 74.00    | -23.18 | peak   |
| 6   | 16812.000 | 32.23   | 20.53   | 52.76    | 74.00    | -21.24 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## VERTICAL RESULTS 1-7GHz



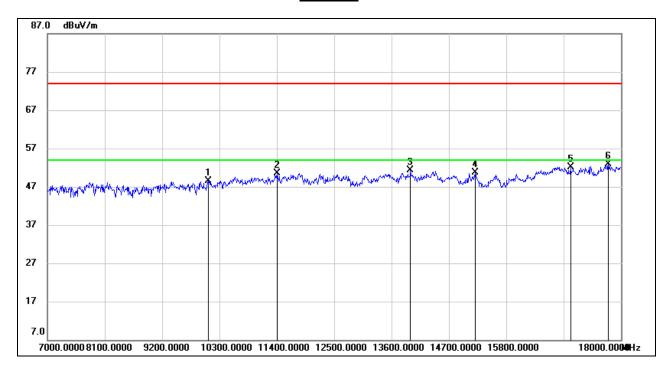
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 1186.000  | 53.05   | -13.64  | 39.41    | 74.00    | -34.59 | peak   |
| 2   | 1384.000  | 49.33   | -13.28  | 36.05    | 74.00    | -37.95 | peak   |
| 3   | 1780.000  | 53.13   | -11.14  | 41.99    | 74.00    | -32.01 | peak   |
| 4   | 2176.000  | 54.91   | -9.90   | 45.01    | 74.00    | -28.99 | peak   |
| 5   | 2572.000  | 52.31   | -8.48   | 43.83    | 74.00    | -30.17 | peak   |
| 6   | 6922.000  | 40.88   | 6.32    | 47.20    | 74.00    | -26.80 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## VERTICAL RESULTS 7-18GHz



| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 10080.000 | 37.04   | 11.51   | 48.55    | 74.00    | -25.45 | peak   |
| 2   | 11400.000 | 36.66   | 13.81   | 50.47    | 74.00    | -23.53 | peak   |
| 3   | 13963.000 | 34.56   | 16.75   | 51.31    | 74.00    | -22.69 | peak   |
| 4   | 15206.000 | 34.69   | 16.06   | 50.75    | 74.00    | -23.25 | peak   |
| 5   | 17032.000 | 30.98   | 21.15   | 52.13    | 74.00    | -21.87 | peak   |
| 6   | 17758.000 | 29.72   | 23.09   | 52.81    | 74.00    | -21.19 | peak   |

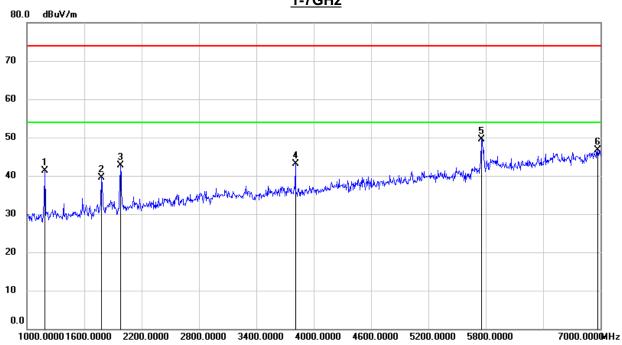
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



8.3.1. STRADDLE CHANNEL 142

#### HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL

## HORIZONTAL RESULTS 1-7GHz



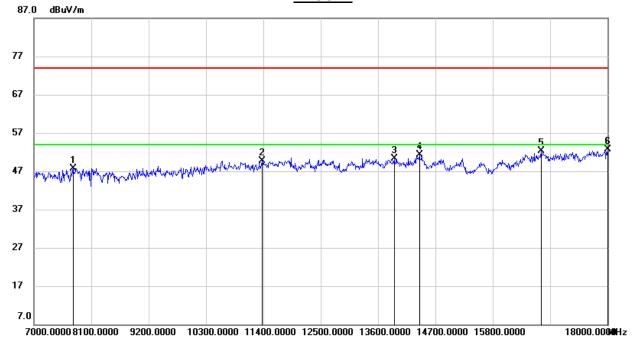
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 1186.000  | 54.87   | -13.64  | 41.23    | 74.00    | -32.77 | peak   |
| 2   | 1780.000  | 50.74   | -11.14  | 39.60    | 74.00    | -34.40 | peak   |
| 3   | 1978.000  | 53.48   | -10.85  | 42.63    | 74.00    | -31.37 | peak   |
| 4   | 3808.000  | 47.25   | -4.22   | 43.03    | 74.00    | -30.97 | peak   |
| 5   | 5752.000  | 46.96   | 2.57    | 49.53    | 74.00    | -24.47 | peak   |
| 6   | 6970.000  | 40.27   | 6.39    | 46.66    | 74.00    | -27.34 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## HORIZONTAL RESULTS 7-18GHz



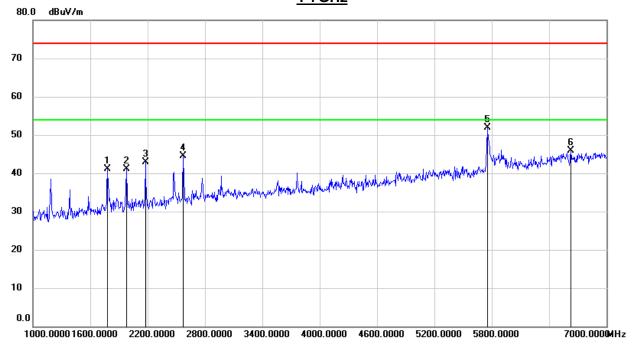
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 7748.000  | 38.87   | 8.93    | 47.80    | 74.00    | -26.20 | peak   |
| 2   | 11378.000 | 35.98   | 13.69   | 49.67    | 74.00    | -24.33 | peak   |
| 3   | 13908.000 | 33.65   | 16.72   | 50.37    | 74.00    | -23.63 | peak   |
| 4   | 14392.000 | 34.24   | 16.99   | 51.23    | 74.00    | -22.77 | peak   |
| 5   | 16724.000 | 32.00   | 20.40   | 52.40    | 74.00    | -21.60 | peak   |
| 6   | 18000.000 | 29.19   | 23.48   | 52.67    | 74.00    | -21.33 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## VERTICAL RESULTS 1-7GHz

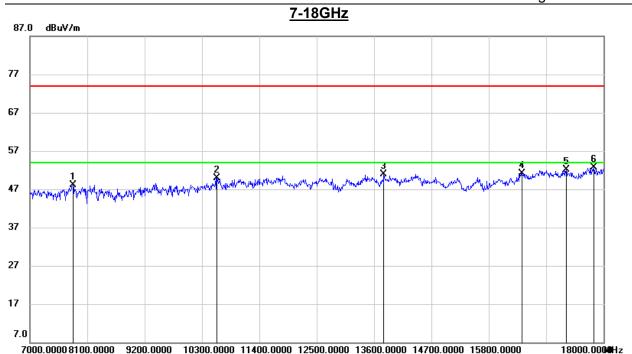


| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 1780.000  | 52.17   | -11.14  | 41.03    | 74.00    | -32.97 | peak   |
| 2   | 1978.000  | 51.96   | -10.85  | 41.11    | 74.00    | -32.89 | peak   |
| 3   | 2176.000  | 52.71   | -9.90   | 42.81    | 74.00    | -31.19 | peak   |
| 4   | 2572.000  | 53.07   | -8.48   | 44.59    | 74.00    | -29.41 | peak   |
| 5   | 5758.000  | 49.29   | 2.62    | 51.91    | 74.00    | -22.09 | peak   |
| 6   | 6628.000  | 40.39   | 5.55    | 45.94    | 74.00    | -28.06 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 7825.000  | 38.50   | 9.53    | 48.03    | 74.00    | -25.97 | peak   |
| 2   | 10586.000 | 36.66   | 13.25   | 49.91    | 74.00    | -24.09 | peak   |
| 3   | 13787.000 | 33.53   | 17.43   | 50.96    | 74.00    | -23.04 | peak   |
| 4   | 16438.000 | 31.53   | 19.56   | 51.09    | 74.00    | -22.91 | peak   |
| 5   | 17285.000 | 29.99   | 22.09   | 52.08    | 74.00    | -21.92 | peak   |
| 6   | 17813.000 | 29.22   | 23.45   | 52.67    | 74.00    | -21.33 | peak   |

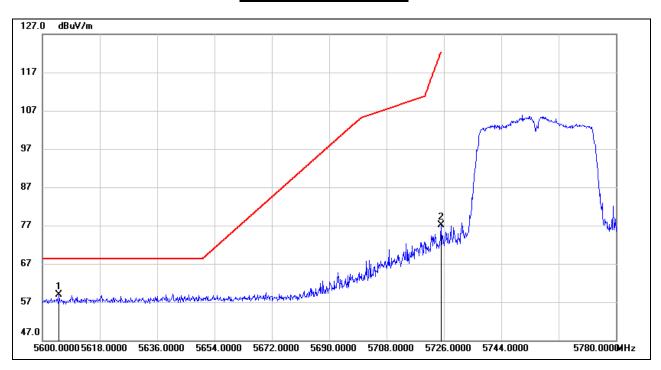
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



#### 8.3.2. UNII-3 BAND

## RESTRICTED BANDEDGE LOW CHANNEL

## **HORIZONTAL RESULTS**

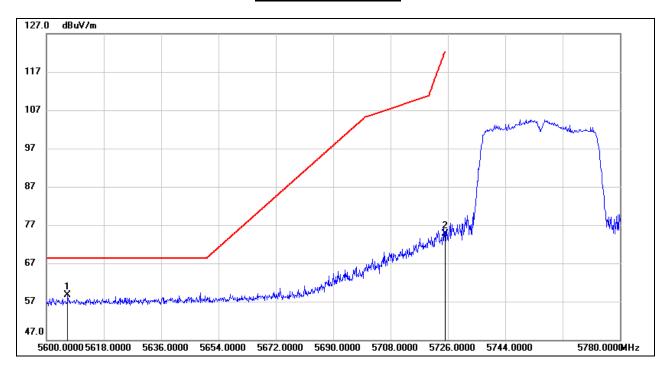


| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5605.220  | 17.41   | 41.47   | 58.88    | 68.20    | -9.32  | peak   |
| 2   | 5725.000  | 35.56   | 41.61   | 77.17    | 122.20   | -45.03 | peak   |

Note: 1. Measurement = Reading Level + Correct Factor.



## **VERTICAL RESULTS**



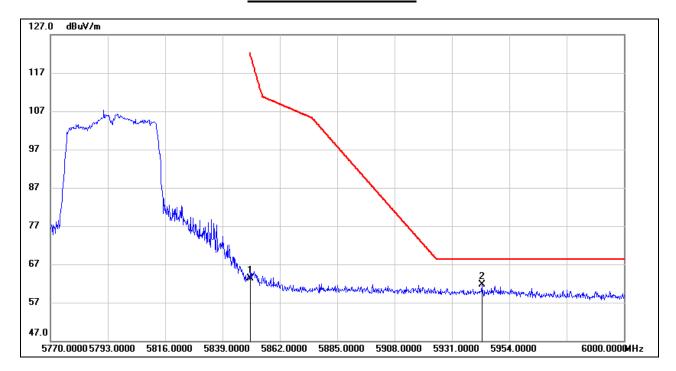
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5606.660  | 17.20   | 41.46   | 58.66    | 68.20    | -9.54  | peak   |
| 2   | 5725.000  | 33.08   | 41.61   | 74.69    | 122.20   | -47.51 | peak   |

Note: 1. Measurement = Reading Level + Correct Factor.

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## RESTRICTED BANDEDGE HIGH CHANNEL

## **HORIZONTAL RESULTS**



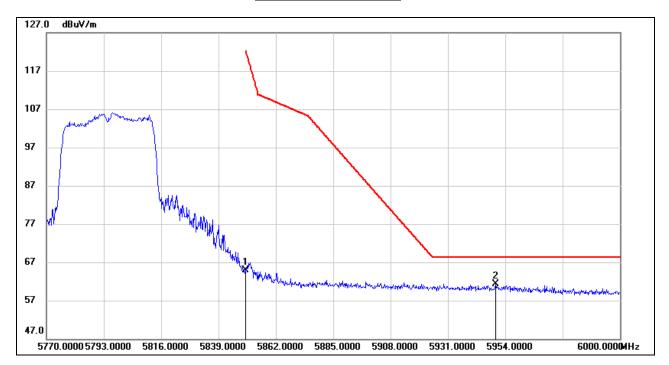
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5850.000  | 20.50   | 42.89   | 63.39    | 122.20   | -58.81 | peak   |
| 2   | 5942.960  | 18.60   | 43.11   | 61.71    | 68.20    | -6.49  | peak   |

Note: 1. Measurement = Reading Level + Correct Factor.



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## **VERTICAL RESULTS**



| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5850.000  | 22.09   | 42.89   | 64.98    | 122.20   | -57.22 | peak   |
| 2   | 5950.090  | 18.22   | 42.99   | 61.21    | 68.20    | -6.99  | peak   |

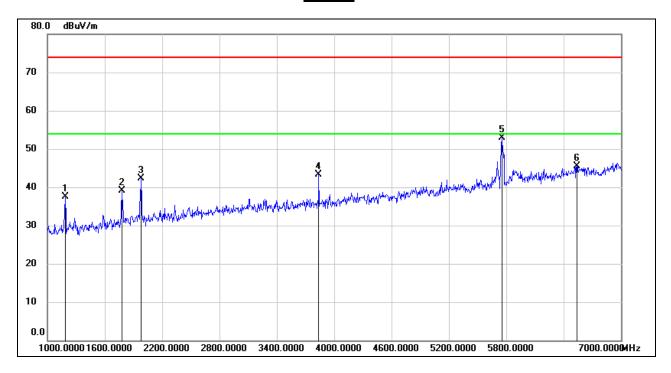
Note: 1. Measurement = Reading Level + Correct Factor.



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#### HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL

### HORIZONTAL RESULTS 1-7GHz



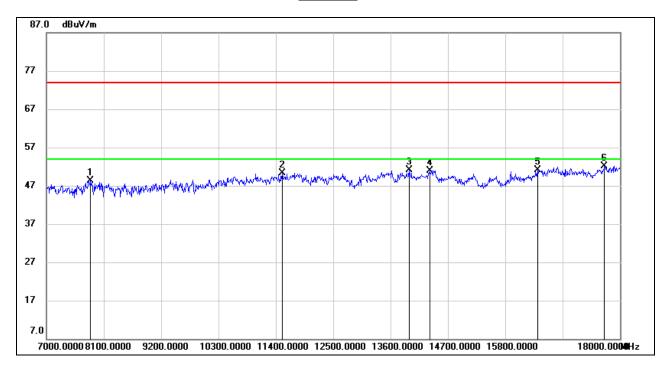
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark      |
|-----|-----------|---------|---------|----------|----------|--------|-------------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |             |
| 1   | 1186.000  | 51.24   | -13.64  | 37.60    | 74.00    | -36.40 | peak        |
| 2   | 1780.000  | 50.29   | -11.14  | 39.15    | 74.00    | -34.85 | peak        |
| 3   | 1978.000  | 53.18   | -10.85  | 42.33    | 74.00    | -31.67 | peak        |
| 4   | 3838.000  | 47.59   | -4.20   | 43.39    | 74.00    | -30.61 | peak        |
| 5   | 5755.000  | 50.33   | 2.57    | 52.90    | /        | /      | fundamental |
| 6   | 6538.000  | 39.79   | 5.75    | 45.54    | 74.00    | -28.46 | peak        |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## HORIZONTAL RESULTS 7-18GHz



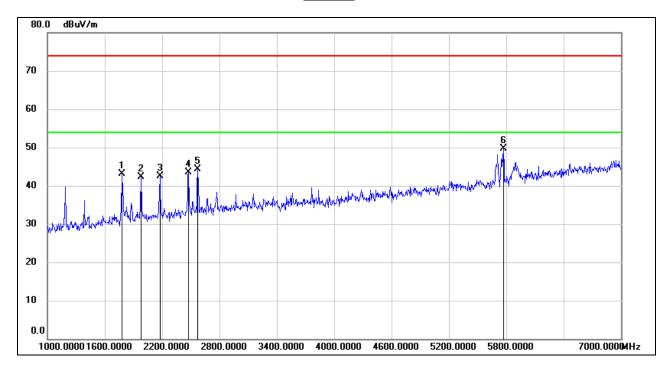
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 7836.000  | 38.83   | 9.46    | 48.29    | 74.00    | -25.71 | peak   |
| 2   | 11521.000 | 35.83   | 14.48   | 50.31    | 74.00    | -23.69 | peak   |
| 3   | 13952.000 | 34.34   | 16.74   | 51.08    | 74.00    | -22.92 | peak   |
| 4   | 14348.000 | 34.10   | 16.88   | 50.98    | 74.00    | -23.02 | peak   |
| 5   | 16416.000 | 31.61   | 19.47   | 51.08    | 74.00    | -22.92 | peak   |
| 6   | 17703.000 | 29.52   | 22.62   | 52.14    | 74.00    | -21.86 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## VERTICAL RESULTS 1-7GHz



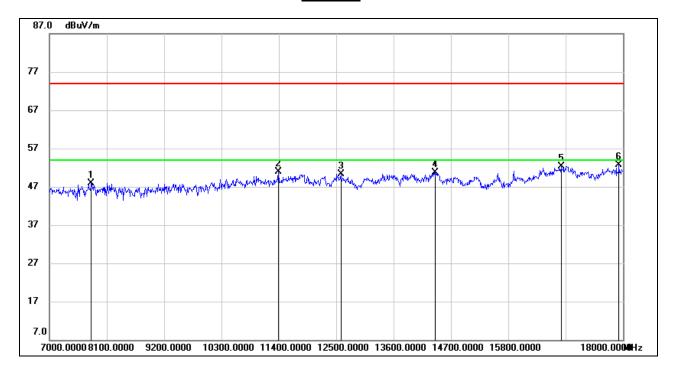
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 1780.000  | 54.27   | -11.14  | 43.13    | 74.00    | -30.87 | peak   |
| 2   | 1978.000  | 53.08   | -10.85  | 42.23    | 74.00    | -31.77 | peak   |
| 3   | 2176.000  | 52.41   | -9.90   | 42.51    | 74.00    | -31.49 | peak   |
| 4   | 2476.000  | 51.79   | -8.36   | 43.43    | 74.00    | -30.57 | peak   |
| 5   | 2572.000  | 52.78   | -8.48   | 44.30    | 74.00    | -29.70 | peak   |
| 6   | 5770.000  | 46.95   | 2.70    | 49.65    | 74.00    | -24.35 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## 7-18GHz



| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 7803.000  | 38.29   | 9.63    | 47.92    | 74.00    | -26.08 | peak   |
| 2   | 11389.000 | 37.09   | 13.76   | 50.85    | 74.00    | -23.15 | peak   |
| 3   | 12588.000 | 35.54   | 14.76   | 50.30    | 74.00    | -23.70 | peak   |
| 4   | 14403.000 | 33.66   | 17.01   | 50.67    | 74.00    | -23.33 | peak   |
| 5   | 16812.000 | 31.77   | 20.53   | 52.30    | 74.00    | -21.70 | peak   |
| 6   | 17923.000 | 29.24   | 23.40   | 52.64    | 74.00    | -21.36 | peak   |

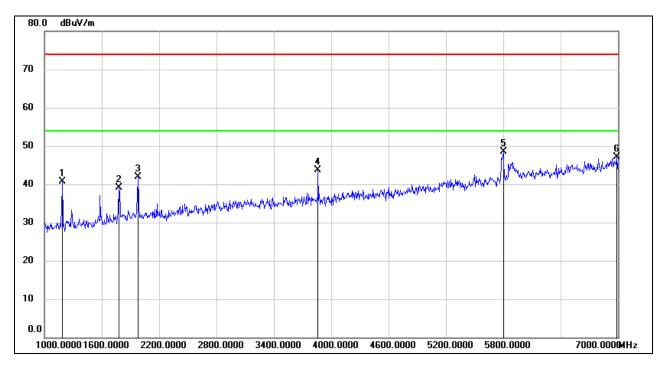
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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#### HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL

### HORIZONTAL RESULTS 1-7GHz



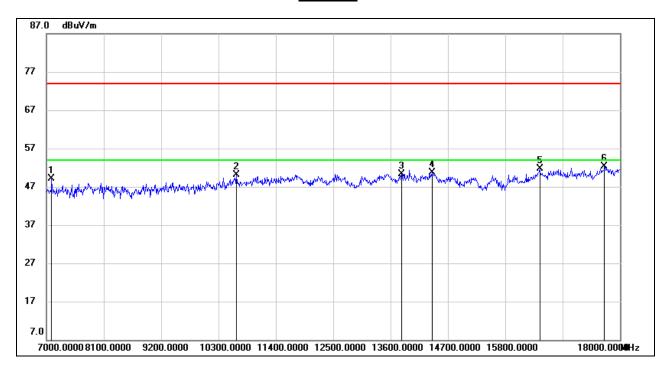
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark      |
|-----|-----------|---------|---------|----------|----------|--------|-------------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |             |
| 1   | 1186.000  | 54.38   | -13.64  | 40.74    | 74.00    | -33.26 | peak        |
| 2   | 1780.000  | 50.17   | -11.14  | 39.03    | 74.00    | -34.97 | peak        |
| 3   | 1978.000  | 52.82   | -10.85  | 41.97    | 74.00    | -32.03 | peak        |
| 4   | 3862.000  | 47.92   | -4.20   | 43.72    | 74.00    | -30.28 | peak        |
| 5   | 5795.000  | 45.51   | 2.90    | 48.41    | /        | /      | fundamental |
| 6   | 6988.000  | 40.61   | 6.40    | 47.01    | 74.00    | -26.99 | peak        |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## HORIZONTAL RESULTS 7-18GHz



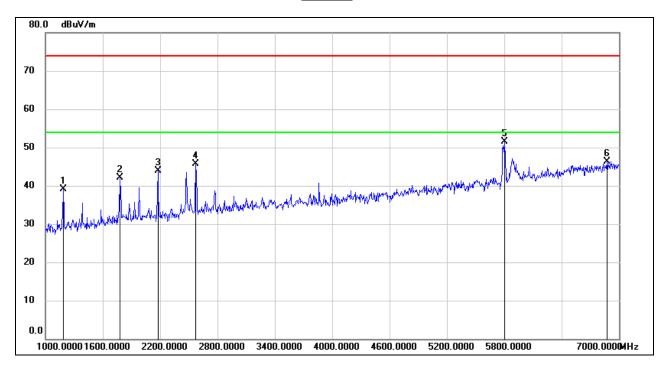
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 7099.000  | 41.37   | 7.81    | 49.18    | 74.00    | -24.82 | peak   |
| 2   | 10641.000 | 36.92   | 13.12   | 50.04    | 74.00    | -23.96 | peak   |
| 3   | 13809.000 | 32.88   | 17.49   | 50.37    | 74.00    | -23.63 | peak   |
| 4   | 14392.000 | 33.63   | 16.99   | 50.62    | 74.00    | -23.38 | peak   |
| 5   | 16460.000 | 31.96   | 19.65   | 51.61    | 74.00    | -22.39 | peak   |
| 6   | 17703.000 | 29.65   | 22.62   | 52.27    | 74.00    | -21.73 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## VERTICAL RESULTS 1-7GHz



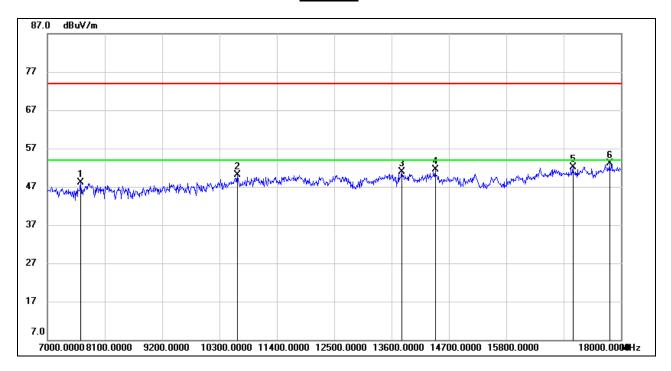
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark      |
|-----|-----------|---------|---------|----------|----------|--------|-------------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |             |
| 1   | 1186.000  | 52.73   | -13.64  | 39.09    | 74.00    | -34.91 | peak        |
| 2   | 1780.000  | 53.22   | -11.14  | 42.08    | 74.00    | -31.92 | peak        |
| 3   | 2176.000  | 53.75   | -9.90   | 43.85    | 74.00    | -30.15 | peak        |
| 4   | 2572.000  | 54.15   | -8.48   | 45.67    | 74.00    | -28.33 | peak        |
| 5   | 5795.000  | 48.54   | 2.90    | 51.44    | /        | /      | fundamental |
| 6   | 6874.000  | 40.21   | 6.11    | 46.32    | 74.00    | -27.68 | peak        |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## 7-18GHz



| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 7638.000  | 39.74   | 8.41    | 48.15    | 74.00    | -25.85 | peak   |
| 2   | 10641.000 | 37.01   | 13.12   | 50.13    | 74.00    | -23.87 | peak   |
| 3   | 13798.000 | 33.39   | 17.55   | 50.94    | 74.00    | -23.06 | peak   |
| 4   | 14436.000 | 34.49   | 16.95   | 51.44    | 74.00    | -22.56 | peak   |
| 5   | 17076.000 | 30.84   | 21.24   | 52.08    | 74.00    | -21.92 | peak   |
| 6   | 17780.000 | 29.88   | 23.28   | 53.16    | 74.00    | -20.84 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.

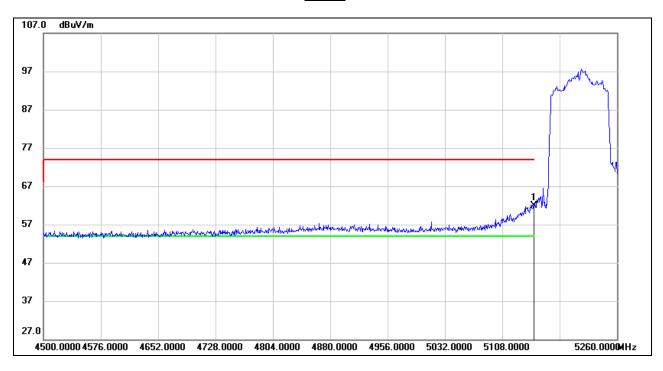


#### 8.4. 802.11ac VHT80 MODE

#### 8.4.1. UNII-1 BAND

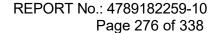
#### RESTRICTED BANDEDGE LOW CHANNEL

# HORIZONTAL RESULTS PEAK



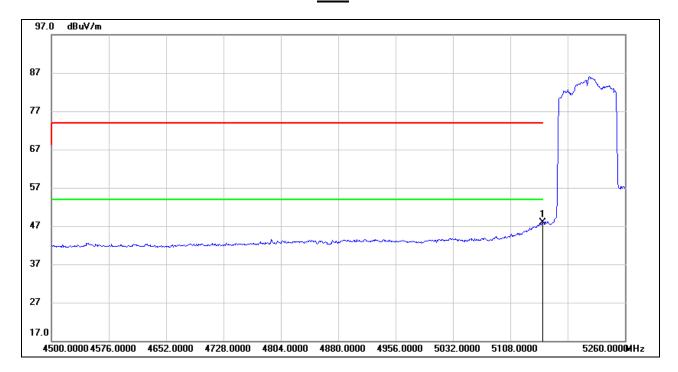
|   | No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|---|-----|-----------|---------|---------|----------|----------|--------|--------|
| Ī |     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
|   | 1   | 5150.000  | 21.40   | 40.46   | 61.86    | 74.00    | -12.14 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.





#### **AVG**



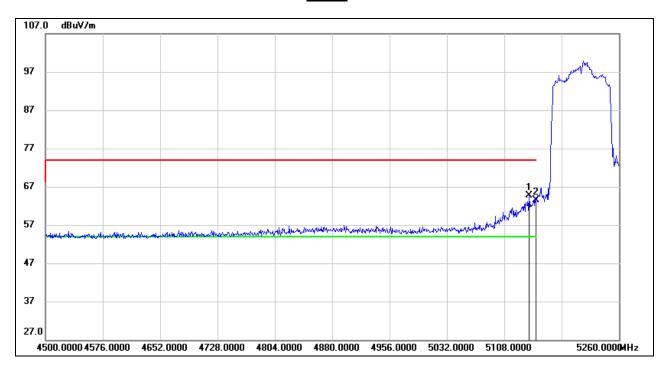
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5150.000  | 7.43    | 40.46   | 47.89    | 54.00    | -6.11  | AVG    |

- 2. AVG: VBW=1/Ton where: ton is transmit duration.
- 3. For duty cycle, please refer to clause 7.1.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.



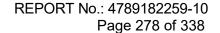
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# VERTICAL RESULTS PEAK



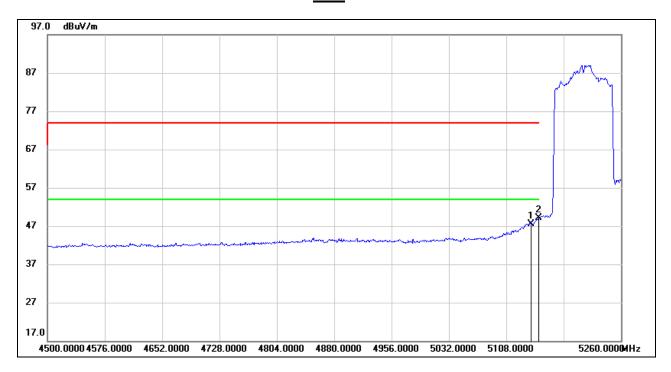
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5140.680  | 24.37   | 40.41   | 64.78    | 74.00    | -9.22  | peak   |
| 2   | 5150.000  | 22.98   | 40.46   | 63.44    | 74.00    | -10.56 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.





**AVG** 



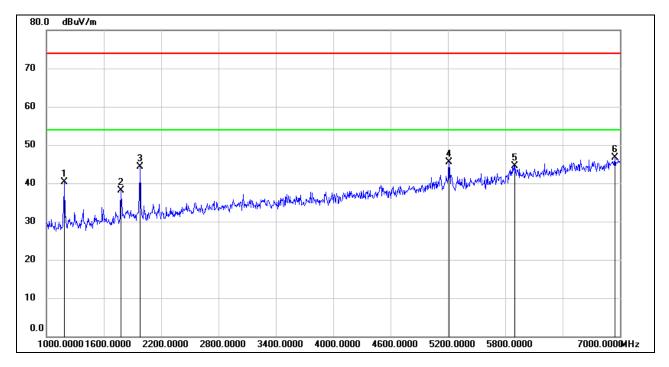
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5140.680  | 7.13    | 40.41   | 47.54    | 54.00    | -6.46  | AVG    |
| 2   | 5150.000  | 8.56    | 40.46   | 49.02    | 54.00    | -4.98  | AVG    |

- 2. AVG: VBW=1/Ton where: ton is transmit duration.
- 3. For duty cycle, please refer to clause 7.1.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.

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## HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL

### HORIZONTAL RESULTS 1-7GHz



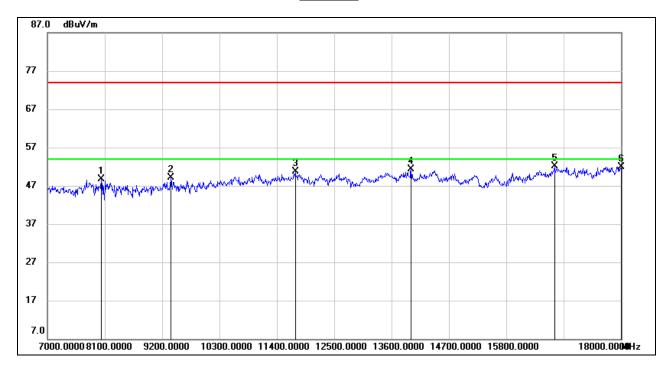
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark      |
|-----|-----------|---------|---------|----------|----------|--------|-------------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |             |
| 1   | 1186.000  | 53.96   | -13.64  | 40.32    | 74.00    | -33.68 | peak        |
| 2   | 1780.000  | 49.22   | -11.14  | 38.08    | 74.00    | -35.92 | peak        |
| 3   | 1978.000  | 55.23   | -10.85  | 44.38    | 74.00    | -29.62 | peak        |
| 4   | 5210.000  | 44.68   | 0.92    | 45.60    | /        | /      | fundamental |
| 5   | 5902.000  | 39.69   | 4.83    | 44.52    | 74.00    | -29.48 | peak        |
| 6   | 6946.000  | 40.43   | 6.34    | 46.77    | 74.00    | -27.23 | peak        |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## HORIZONTAL RESULTS 7-18GHz



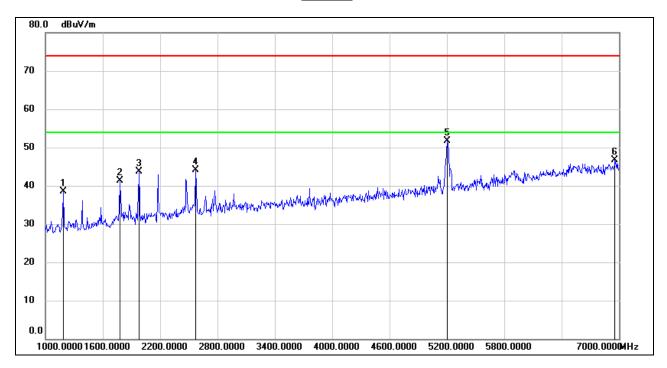
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 8034.000  | 39.49   | 9.21    | 48.70    | 74.00    | -25.30 | peak   |
| 2   | 9365.000  | 38.43   | 10.76   | 49.19    | 74.00    | -24.81 | peak   |
| 3   | 11752.000 | 36.37   | 14.26   | 50.63    | 74.00    | -23.37 | peak   |
| 4   | 13974.000 | 34.46   | 16.75   | 51.21    | 74.00    | -22.79 | peak   |
| 5   | 16724.000 | 31.66   | 20.40   | 52.06    | 74.00    | -21.94 | peak   |
| 6   | 18000.000 | 28.50   | 23.48   | 51.98    | 74.00    | -22.02 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## VERTICAL RESULTS 1-7GHz



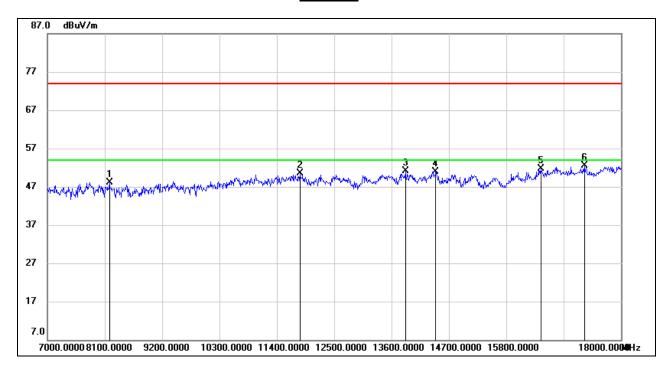
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark      |
|-----|-----------|---------|---------|----------|----------|--------|-------------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |             |
| 1   | 1186.000  | 52.15   | -13.64  | 38.51    | 74.00    | -35.49 | peak        |
| 2   | 1780.000  | 52.36   | -11.14  | 41.22    | 74.00    | -32.78 | peak        |
| 3   | 1978.000  | 54.59   | -10.85  | 43.74    | 74.00    | -30.26 | peak        |
| 4   | 2572.000  | 52.53   | -8.48   | 44.05    | 74.00    | -29.95 | peak        |
| 5   | 5210.000  | 50.87   | 0.91    | 51.78    | /        | /      | fundamental |
| 6   | 6958.000  | 40.27   | 6.36    | 46.63    | 74.00    | -27.37 | peak        |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## 7-18GHz



| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 8188.000  | 37.87   | 10.23   | 48.10    | 74.00    | -25.90 | peak   |
| 2   | 11840.000 | 35.98   | 14.45   | 50.43    | 74.00    | -23.57 | peak   |
| 3   | 13864.000 | 34.11   | 17.02   | 51.13    | 74.00    | -22.87 | peak   |
| 4   | 14447.000 | 33.91   | 16.93   | 50.84    | 74.00    | -23.16 | peak   |
| 5   | 16460.000 | 32.08   | 19.65   | 51.73    | 74.00    | -22.27 | peak   |
| 6   | 17296.000 | 30.28   | 22.16   | 52.44    | 74.00    | -21.56 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



#### 8.4.2. UNII-2A BAND

## RESTRICTED BANDEDGE LOW CHANNEL

## HORIZONTAL RESULTS PEAK

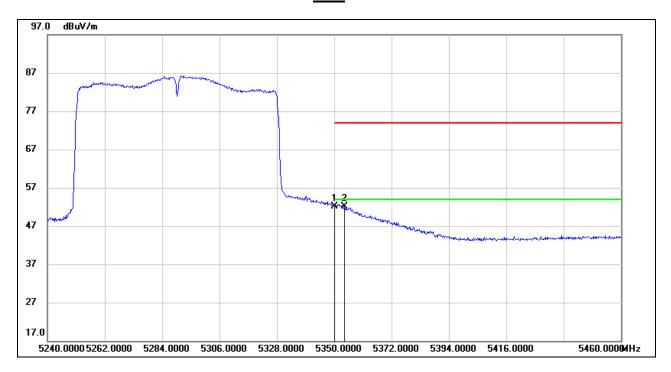


| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5350.000  | 24.86   | 40.64   | 65.50    | 74.00    | -8.50  | peak   |
| 2   | 5353.960  | 26.63   | 40.62   | 67.25    | 74.00    | -6.75  | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.



#### **AVG**



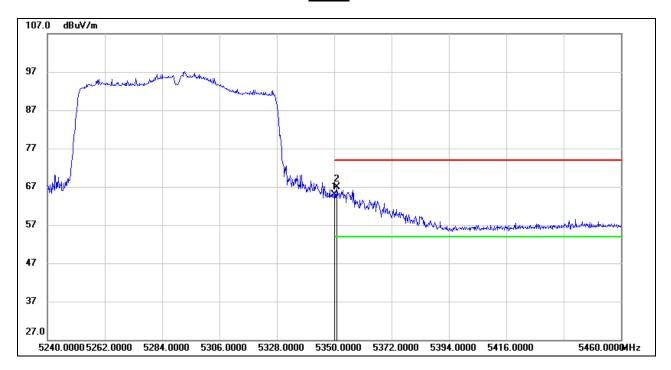
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5350.000  | 11.53   | 40.64   | 52.17    | 54.00    | -1.83  | AVG    |
| 2   | 5353.960  | 11.42   | 40.62   | 52.04    | 54.00    | -1.96  | AVG    |

- 2. AVG: VBW=1/Ton where: ton is transmit duration.
- 3. For duty cycle, please refer to clause 7.1.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.



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# VERTICAL RESULTS PEAK

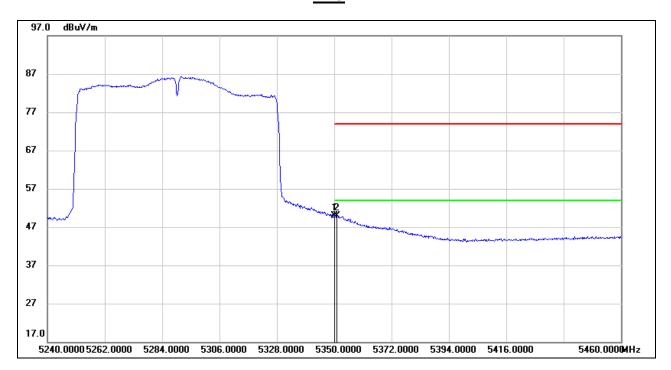


| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5350.000  | 24.35   | 40.64   | 64.99    | 74.00    | -9.01  | peak   |
| 2   | 5351.100  | 26.17   | 40.64   | 66.81    | 74.00    | -7.19  | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.



### **AVG**



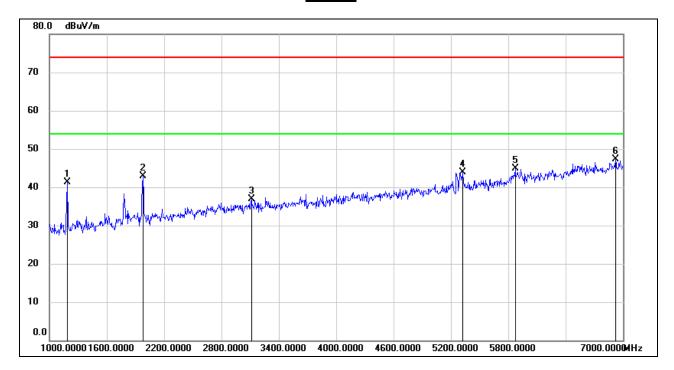
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5350.000  | 9.20    | 40.64   | 49.84    | 54.00    | -4.16  | AVG    |
| 2   | 5351.100  | 9.21    | 40.64   | 49.85    | 54.00    | -4.15  | AVG    |

- 2. AVG: VBW=1/Ton where: ton is transmit duration.
- 3. For duty cycle, please refer to clause 7.1.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.

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HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL

### HORIZONTAL RESULTS 1-7GHz



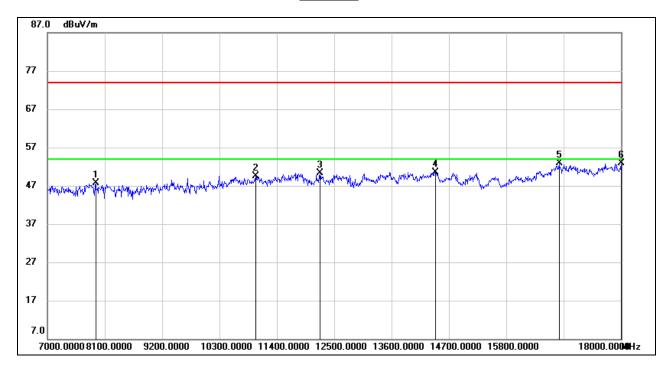
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 1186.000  | 54.96   | -13.64  | 41.32    | 74.00    | -32.68 | peak   |
| 2   | 1978.000  | 53.78   | -10.85  | 42.93    | 74.00    | -31.07 | peak   |
| 3   | 3112.000  | 42.51   | -5.68   | 36.83    | 74.00    | -37.17 | peak   |
| 4   | 5326.000  | 42.99   | 0.98    | 43.97    | 74.00    | -30.03 | peak   |
| 5   | 5872.000  | 40.60   | 4.33    | 44.93    | 74.00    | -29.07 | peak   |
| 6   | 6922.000  | 40.96   | 6.32    | 47.28    | 74.00    | -26.72 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## HORIZONTAL RESULTS 7-18GHz



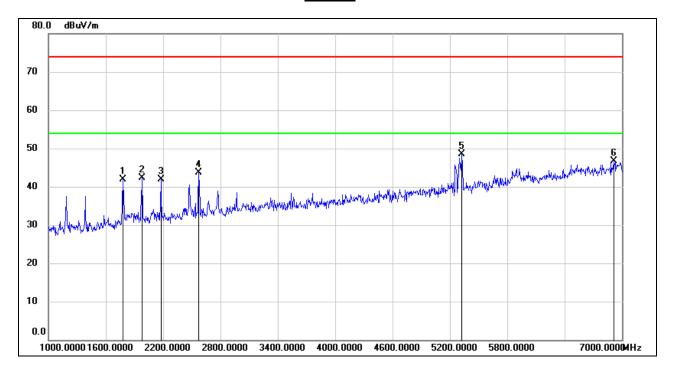
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 7924.000  | 38.52   | 9.09    | 47.61    | 74.00    | -26.39 | peak   |
| 2   | 10993.000 | 35.96   | 13.59   | 49.55    | 74.00    | -24.45 | peak   |
| 3   | 12225.000 | 35.30   | 15.02   | 50.32    | 74.00    | -23.68 | peak   |
| 4   | 14436.000 | 33.59   | 16.95   | 50.54    | 74.00    | -23.46 | peak   |
| 5   | 16812.000 | 32.32   | 20.53   | 52.85    | 74.00    | -21.15 | peak   |
| 6   | 18000.000 | 29.42   | 23.48   | 52.90    | 74.00    | -21.10 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## VERTICAL RESULTS 1-7GHz



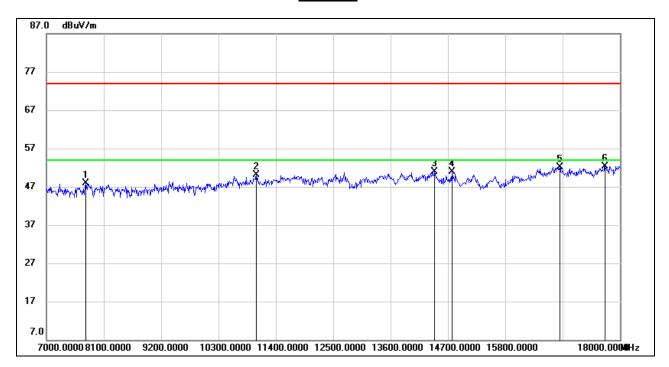
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 1780.000  | 52.97   | -11.14  | 41.83    | 74.00    | -32.17 | peak   |
| 2   | 1978.000  | 53.17   | -10.85  | 42.32    | 74.00    | -31.68 | peak   |
| 3   | 2176.000  | 51.72   | -9.90   | 41.82    | 74.00    | -32.18 | peak   |
| 4   | 2572.000  | 52.26   | -8.48   | 43.78    | 74.00    | -30.22 | peak   |
| 5   | 5326.000  | 47.53   | 0.98    | 48.51    | 74.00    | -25.49 | peak   |
| 6   | 6916.000  | 40.36   | 6.31    | 46.67    | 74.00    | -27.33 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## 7-18GHz



| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 7759.000  | 38.89   | 9.09    | 47.98    | 74.00    | -26.02 | peak   |
| 2   | 11026.000 | 36.42   | 13.66   | 50.08    | 74.00    | -23.92 | peak   |
| 3   | 14447.000 | 34.05   | 16.93   | 50.98    | 74.00    | -23.02 | peak   |
| 4   | 14777.000 | 34.78   | 16.17   | 50.95    | 74.00    | -23.05 | peak   |
| 5   | 16845.000 | 31.63   | 20.52   | 52.15    | 74.00    | -21.85 | peak   |
| 6   | 17714.000 | 29.66   | 22.71   | 52.37    | 74.00    | -21.63 | peak   |

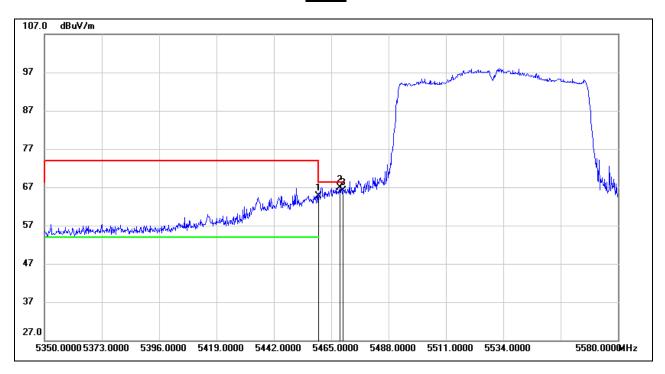
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



#### 8.4.3. UNII-2C BAND

## RESTRICTED BANDEDGE LOW CHANNEL

## HORIZONTAL RESULTS PEAK

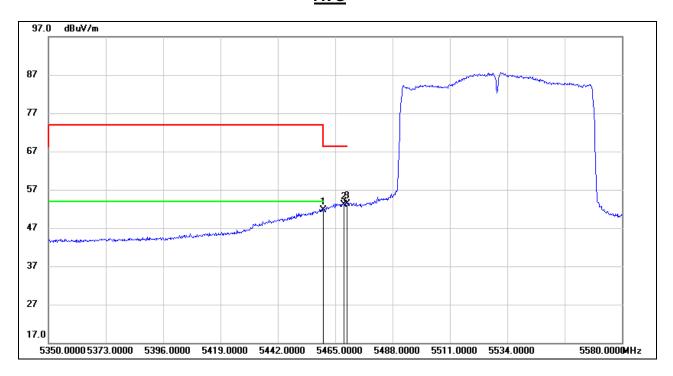


| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5460.000  | 23.44   | 41.28   | 64.72    | 68.20    | -3.48  | peak   |
| 2   | 5468.450  | 25.61   | 41.39   | 67.00    | 68.20    | -1.20  | peak   |
| 3   | 5470.000  | 24.61   | 41.41   | 66.02    | 68.20    | -2.18  | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.



AVG



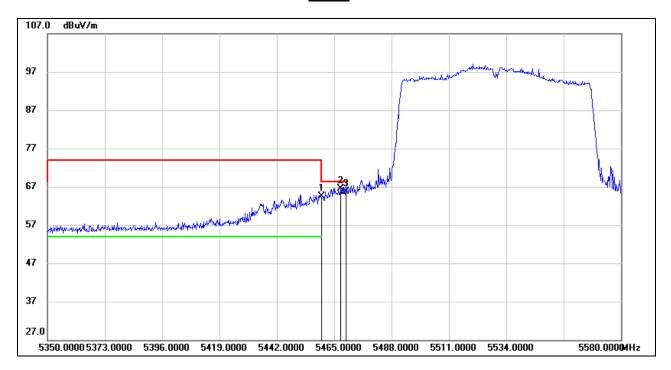
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5460.000  | 10.52   | 41.28   | 51.80    | 54.00    | -2.20  | AVG    |
| 2   | 5468.450  | 11.78   | 41.39   | 53.17    | 68.20    | -15.03 | AVG    |
| 3   | 5470.000  | 11.92   | 41.41   | 53.33    | 68.20    | -14.87 | AVG    |

- 2. AVG: VBW=1/Ton where: ton is transmit duration.
- 3. For duty cycle, please refer to clause 7.1.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.



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## VERTICAL RESULTS PEAK

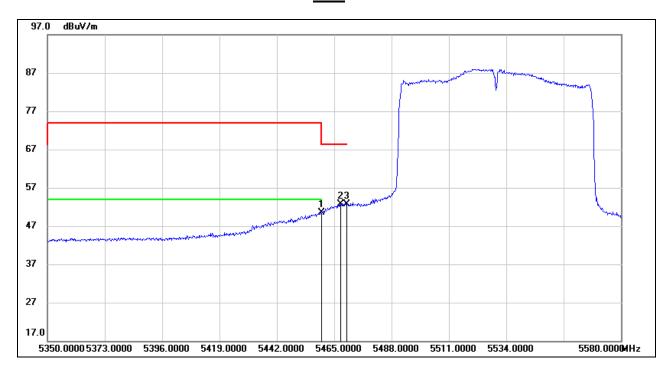


|   | No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|---|-----|-----------|---------|---------|----------|----------|--------|--------|
|   |     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
|   | 1   | 5460.000  | 23.30   | 41.28   | 64.58    | 68.20    | -3.62  | peak   |
|   | 2   | 5467.530  | 25.10   | 41.38   | 66.48    | 68.20    | -1.72  | peak   |
| Γ | 3   | 5470.000  | 24.37   | 41.41   | 65.78    | 68.20    | -2.42  | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.



**AVG** 



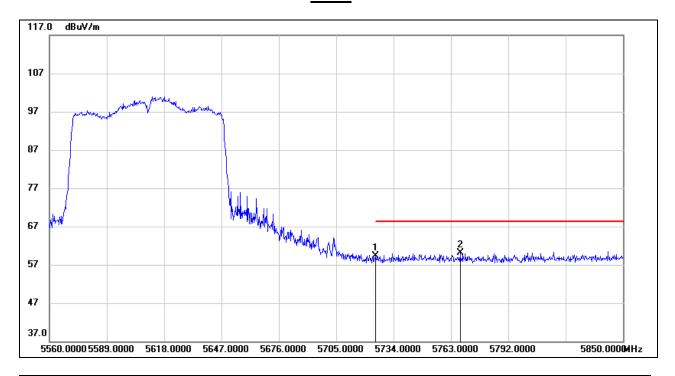
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5460.000  | 9.29    | 41.28   | 50.57    | 54.00    | -3.43  | AVG    |
| 2   | 5467.530  | 11.26   | 41.38   | 52.64    | 68.20    | -15.56 | AVG    |
| 3   | 5470.000  | 11.38   | 41.41   | 52.79    | 68.20    | -15.41 | AVG    |

- 2. AVG: VBW=1/Ton where: ton is transmit duration.
- 3. For duty cycle, please refer to clause 7.1.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.

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## RESTRICTED BANDEDGE HIGH CHANNEL

## HORIZONTAL RESULTS PEAK

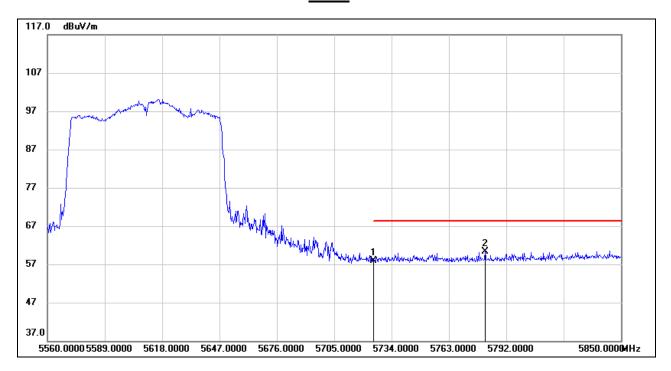


| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5725.000  | 17.67   | 41.61   | 59.28    | 68.20    | -8.92  | peak   |
| 2   | 5767.640  | 18.27   | 41.79   | 60.06    | 68.20    | -8.14  | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.



VERTICAL RESULTS
PEAK



| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5725.000  | 16.27   | 41.61   | 57.88    | 68.20    | -10.32 | peak   |
| 2   | 5781.270  | 18.42   | 41.85   | 60.27    | 68.20    | -7.93  | peak   |

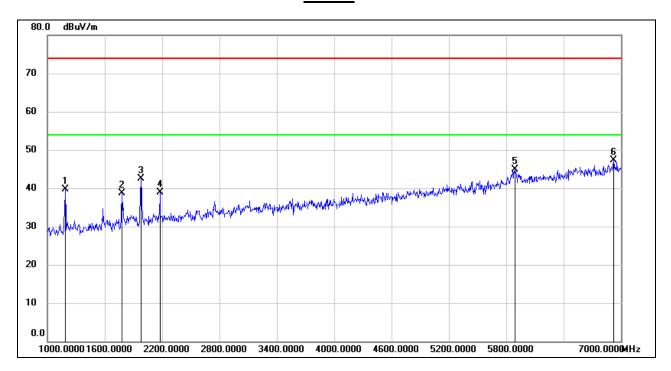
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.



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#### HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL

### HORIZONTAL RESULTS 1-7GHz



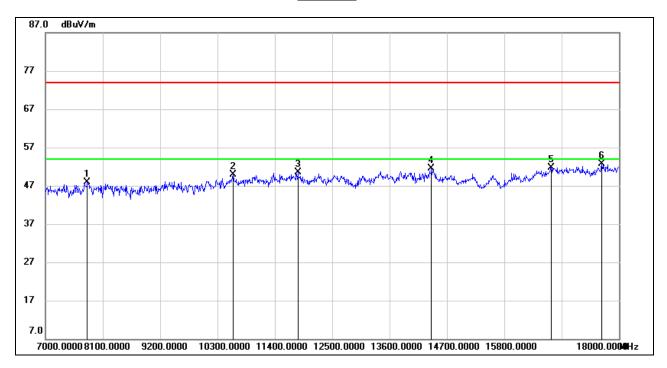
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 1186.000  | 53.40   | -13.64  | 39.76    | 74.00    | -34.24 | peak   |
| 2   | 1780.000  | 49.87   | -11.14  | 38.73    | 74.00    | -35.27 | peak   |
| 3   | 1978.000  | 53.43   | -10.85  | 42.58    | 74.00    | -31.42 | peak   |
| 4   | 2176.000  | 48.72   | -9.90   | 38.82    | 74.00    | -35.18 | peak   |
| 5   | 5890.000  | 40.30   | 4.68    | 44.98    | 74.00    | -29.02 | peak   |
| 6   | 6922.000  | 41.04   | 6.32    | 47.36    | 74.00    | -26.64 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## HORIZONTAL RESULTS 7-18GHz



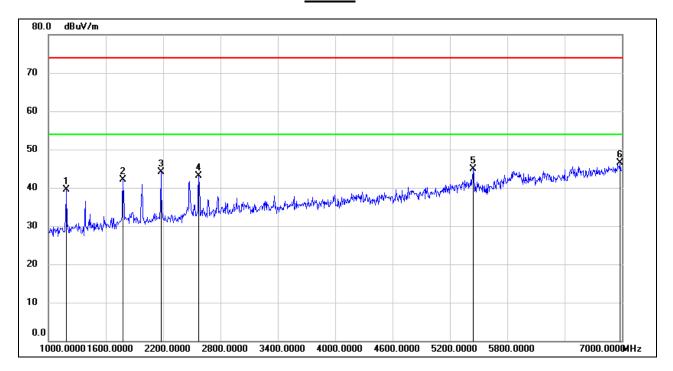
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 7803.000  | 38.28   | 9.63    | 47.91    | 74.00    | -26.09 | peak   |
| 2   | 10597.000 | 36.60   | 13.38   | 49.98    | 74.00    | -24.02 | peak   |
| 3   | 11840.000 | 36.04   | 14.45   | 50.49    | 74.00    | -23.51 | peak   |
| 4   | 14403.000 | 34.47   | 17.01   | 51.48    | 74.00    | -22.52 | peak   |
| 5   | 16702.000 | 31.45   | 20.35   | 51.80    | 74.00    | -22.20 | peak   |
| 6   | 17670.000 | 30.33   | 22.40   | 52.73    | 74.00    | -21.27 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## VERTICAL RESULTS 1-7GHz



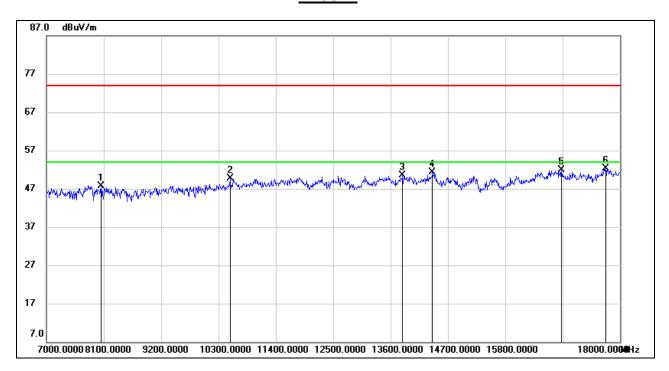
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 1186.000  | 53.06   | -13.64  | 39.42    | 74.00    | -34.58 | peak   |
| 2   | 1780.000  | 53.27   | -11.14  | 42.13    | 74.00    | -31.87 | peak   |
| 3   | 2176.000  | 53.93   | -9.90   | 44.03    | 74.00    | -29.97 | peak   |
| 4   | 2572.000  | 51.61   | -8.48   | 43.13    | 74.00    | -30.87 | peak   |
| 5   | 5446.000  | 43.45   | 1.54    | 44.99    | 74.00    | -29.01 | peak   |
| 6   | 6982.000  | 40.03   | 6.40    | 46.43    | 74.00    | -27.57 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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#### 7-18GHz



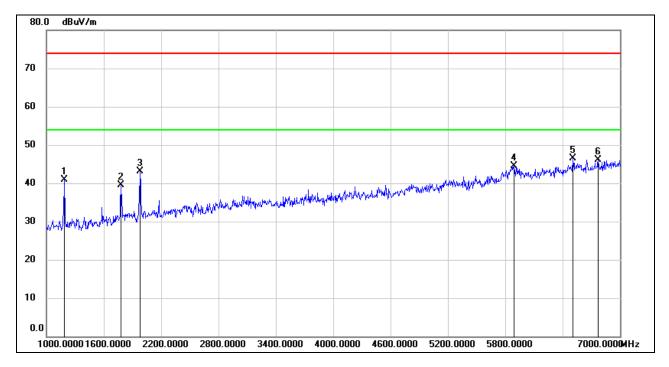
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 8045.000  | 38.46   | 9.29    | 47.75    | 74.00    | -26.25 | peak   |
| 2   | 10520.000 | 37.13   | 12.51   | 49.64    | 74.00    | -24.36 | peak   |
| 3   | 13831.000 | 33.24   | 17.31   | 50.55    | 74.00    | -23.45 | peak   |
| 4   | 14403.000 | 34.39   | 17.01   | 51.40    | 74.00    | -22.60 | peak   |
| 5   | 16878.000 | 31.37   | 20.51   | 51.88    | 74.00    | -22.12 | peak   |
| 6   | 17725.000 | 29.53   | 22.80   | 52.33    | 74.00    | -21.67 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.

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## HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL

## HORIZONTAL RESULTS 1-7GHz



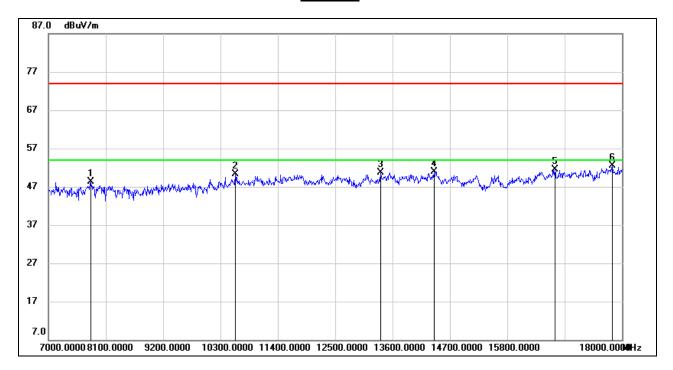
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 1186.000  | 54.45   | -13.64  | 40.81    | 74.00    | -33.19 | peak   |
| 2   | 1780.000  | 50.58   | -11.14  | 39.44    | 74.00    | -34.56 | peak   |
| 3   | 1978.000  | 53.94   | -10.85  | 43.09    | 74.00    | -30.91 | peak   |
| 4   | 5890.000  | 39.83   | 4.68    | 44.51    | 74.00    | -29.49 | peak   |
| 5   | 6508.000  | 40.71   | 5.85    | 46.56    | 74.00    | -27.44 | peak   |
| 6   | 6772.000  | 40.46   | 5.60    | 46.06    | 74.00    | -27.94 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## HORIZONTAL RESULTS 7-18GHz



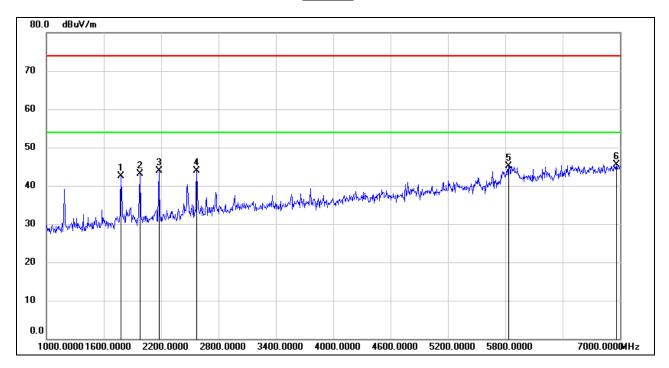
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 7814.000  | 38.66   | 9.58    | 48.24    | 74.00    | -25.76 | peak   |
| 2   | 10586.000 | 36.99   | 13.25   | 50.24    | 74.00    | -23.76 | peak   |
| 3   | 13369.000 | 34.46   | 16.32   | 50.78    | 74.00    | -23.22 | peak   |
| 4   | 14392.000 | 33.96   | 16.99   | 50.95    | 74.00    | -23.05 | peak   |
| 5   | 16713.000 | 31.23   | 20.37   | 51.60    | 74.00    | -22.40 | peak   |
| 6   | 17813.000 | 29.02   | 23.45   | 52.47    | 74.00    | -21.53 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## VERTICAL RESULTS 1-7GHz



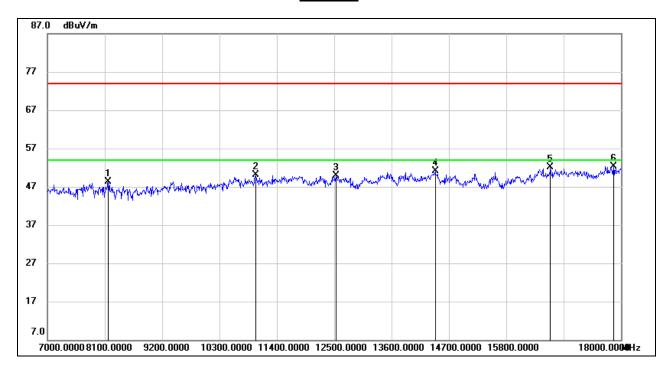
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 1780.000  | 53.55   | -11.14  | 42.41    | 74.00    | -31.59 | peak   |
| 2   | 1978.000  | 53.89   | -10.85  | 43.04    | 74.00    | -30.96 | peak   |
| 3   | 2176.000  | 53.87   | -9.90   | 43.97    | 74.00    | -30.03 | peak   |
| 4   | 2572.000  | 52.34   | -8.48   | 43.86    | 74.00    | -30.14 | peak   |
| 5   | 5836.000  | 41.49   | 3.60    | 45.09    | 74.00    | -28.91 | peak   |
| 6   | 6964.000  | 39.18   | 6.38    | 45.56    | 74.00    | -28.44 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## 7-18GHz



| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 8166.000  | 38.15   | 10.09   | 48.24    | 74.00    | -25.76 | peak   |
| 2   | 10993.000 | 36.59   | 13.59   | 50.18    | 74.00    | -23.82 | peak   |
| 3   | 12533.000 | 34.73   | 15.20   | 49.93    | 74.00    | -24.07 | peak   |
| 4   | 14436.000 | 34.18   | 16.95   | 51.13    | 74.00    | -22.87 | peak   |
| 5   | 16647.000 | 32.07   | 20.06   | 52.13    | 74.00    | -21.87 | peak   |
| 6   | 17857.000 | 28.91   | 23.42   | 52.33    | 74.00    | -21.67 | peak   |

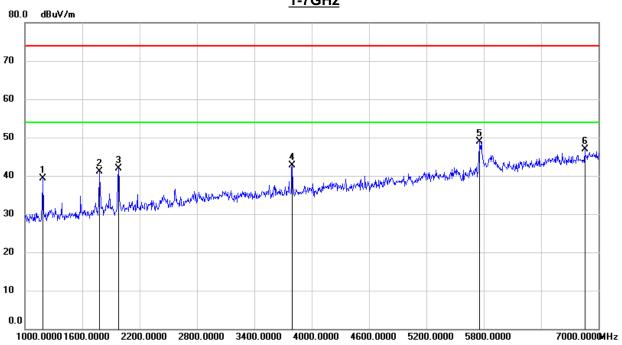
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



8.4.4. STRADDLE CHANNEL 138

#### HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL

## HORIZONTAL RESULTS 1-7GHz



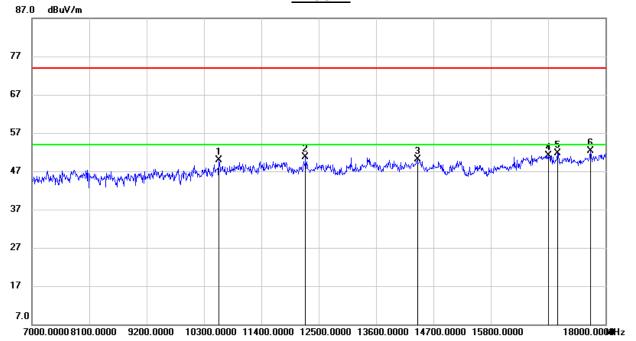
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 1186.000  | 52.95   | -13.64  | 39.31    | 74.00    | -34.69 | peak   |
| 2   | 1780.000  | 52.27   | -11.14  | 41.13    | 74.00    | -32.87 | peak   |
| 3   | 1978.000  | 52.75   | -10.85  | 41.90    | 74.00    | -32.10 | peak   |
| 4   | 3796.000  | 46.96   | -4.21   | 42.75    | 74.00    | -31.25 | peak   |
| 5   | 5758.000  | 46.35   | 2.62    | 48.97    | 74.00    | -25.03 | peak   |
| 6   | 6856.000  | 40.92   | 5.99    | 46.91    | 74.00    | -27.09 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## HORIZONTAL RESULTS 7-18GHz



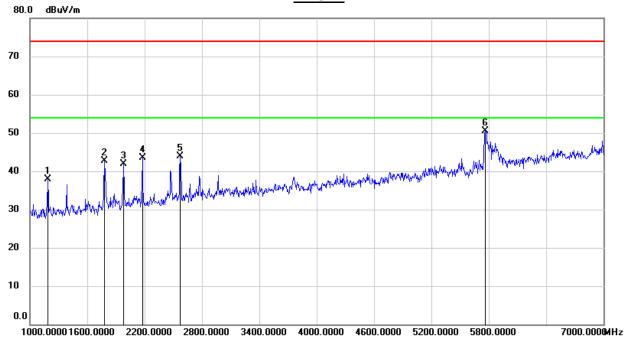
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 10586.000 | 36.68   | 13.25   | 49.93    | 74.00    | -24.07 | peak   |
| 2   | 12247.000 | 35.75   | 15.01   | 50.76    | 74.00    | -23.24 | peak   |
| 3   | 14392.000 | 33.14   | 16.99   | 50.13    | 74.00    | -23.87 | peak   |
| 4   | 16900.000 | 30.66   | 20.50   | 51.16    | 74.00    | -22.84 | peak   |
| 5   | 17076.000 | 30.48   | 21.24   | 51.72    | 74.00    | -22.28 | peak   |
| 6   | 17714.000 | 29.68   | 22.71   | 52.39    | 74.00    | -21.61 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## VERTICAL RESULTS 1-7GHz

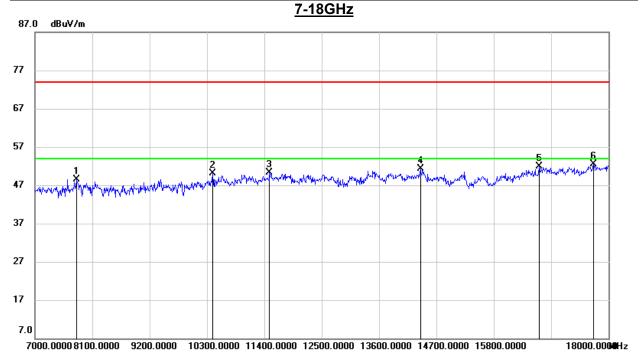


| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 1186.000  | 51.51   | -13.64  | 37.87    | 74.00    | -36.13 | peak   |
| 2   | 1780.000  | 53.78   | -11.14  | 42.64    | 74.00    | -31.36 | peak   |
| 3   | 1978.000  | 52.73   | -10.85  | 41.88    | 74.00    | -32.12 | peak   |
| 4   | 2176.000  | 53.40   | -9.90   | 43.50    | 74.00    | -30.50 | peak   |
| 5   | 2572.000  | 52.34   | -8.48   | 43.86    | 74.00    | -30.14 | peak   |
| 6   | 5764.000  | 47.79   | 2.66    | 50.45    | 74.00    | -23.55 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 7792.000  | 39.02   | 9.54    | 48.56    | 74.00    | -25.44 | peak   |
| 2   | 10410.000 | 37.94   | 12.11   | 50.05    | 74.00    | -23.95 | peak   |
| 3   | 11499.000 | 35.80   | 14.43   | 50.23    | 74.00    | -23.77 | peak   |
| 4   | 14392.000 | 34.26   | 16.99   | 51.25    | 74.00    | -22.75 | peak   |
| 5   | 16669.000 | 31.62   | 20.19   | 51.81    | 74.00    | -22.19 | peak   |
| 6   | 17714.000 | 29.74   | 22.71   | 52.45    | 74.00    | -21.55 | peak   |

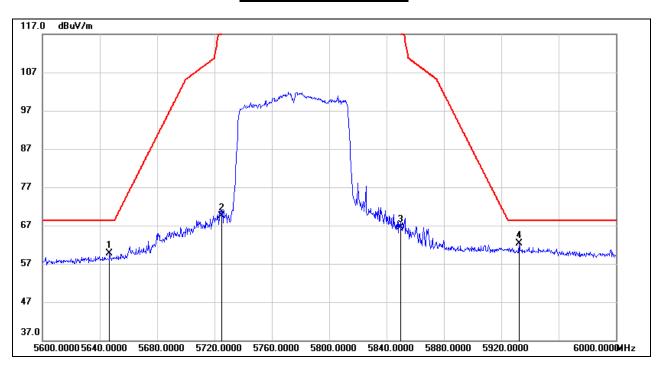
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



8.4.5. UNII-3 BAND

## RESTRICTED BANDEDGE MID CHANNEL

#### **HORIZONTAL RESULTS**



| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5646.800  | 18.26   | 41.48   | 59.74    | 68.20    | -8.46  | peak   |
| 2   | 5725.000  | 27.79   | 41.61   | 69.40    | 122.20   | -52.80 | peak   |
| 3   | 5850.000  | 23.67   | 42.89   | 66.56    | 122.20   | -55.64 | peak   |
| 4   | 5932.400  | 18.97   | 43.30   | 62.27    | 68.20    | -5.93  | peak   |

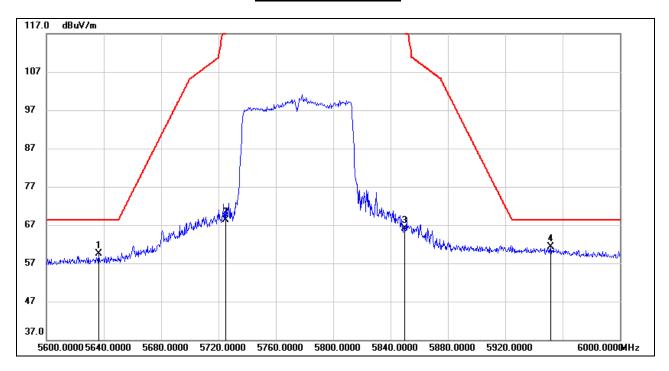
Note: 1. Measurement = Reading Level + Correct Factor.

2. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.



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## **VERTICAL RESULTS**



| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 5636.400  | 18.04   | 41.47   | 59.51    | 68.20    | -8.69  | peak   |
| 2   | 5725.000  | 26.77   | 41.61   | 68.38    | 122.20   | -53.82 | peak   |
| 3   | 5850.000  | 23.18   | 42.89   | 66.07    | 122.20   | -56.13 | peak   |
| 4   | 5951.600  | 18.30   | 42.97   | 61.27    | 68.20    | -6.93  | peak   |

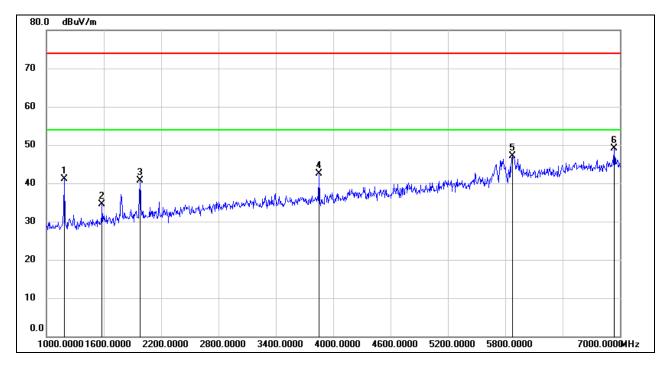
Note: 1. Measurement = Reading Level + Correct Factor.

2. Only the worst case emission will be recorder, if it complies with the limit, the other emissions deemed to comply with the limit.

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## HARMONICS AND SPURIOUS EMISSIONS MID CHANNEL

## HORIZONTAL RESULTS 1-7GHz



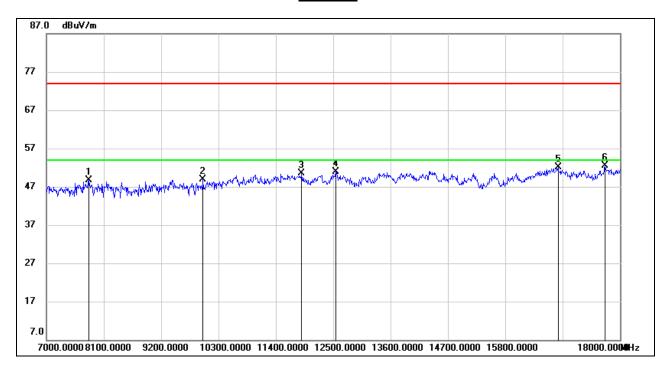
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 1186.000  | 54.77   | -13.64  | 41.13    | 74.00    | -32.87 | peak   |
| 2   | 1582.000  | 46.88   | -12.38  | 34.50    | 74.00    | -39.50 | peak   |
| 3   | 1978.000  | 51.48   | -10.85  | 40.63    | 74.00    | -33.37 | peak   |
| 4   | 3850.000  | 46.64   | -4.20   | 42.44    | 74.00    | -31.56 | peak   |
| 5   | 5878.000  | 42.68   | 4.43    | 47.11    | 74.00    | -26.89 | peak   |
| 6   | 6940.000  | 42.68   | 6.34    | 49.02    | 74.00    | -24.98 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## HORIZONTAL RESULTS 7-18GHz



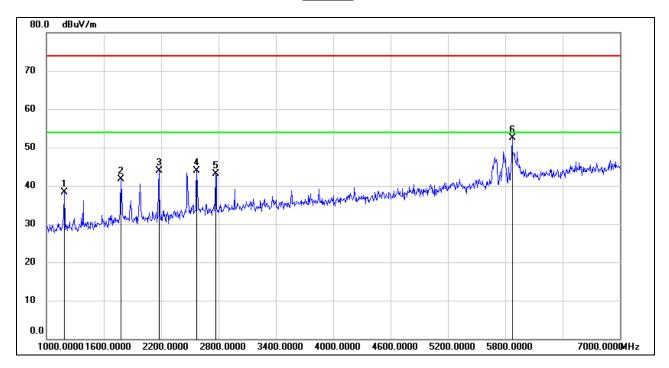
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 7814.000  | 39.09   | 9.58    | 48.67    | 74.00    | -25.33 | peak   |
| 2   | 10003.000 | 37.86   | 10.99   | 48.85    | 74.00    | -25.15 | peak   |
| 3   | 11895.000 | 35.99   | 14.54   | 50.53    | 74.00    | -23.47 | peak   |
| 4   | 12544.000 | 35.71   | 15.12   | 50.83    | 74.00    | -23.17 | peak   |
| 5   | 16812.000 | 31.60   | 20.53   | 52.13    | 74.00    | -21.87 | peak   |
| 6   | 17714.000 | 29.71   | 22.71   | 52.42    | 74.00    | -21.58 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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## VERTICAL RESULTS 1-7GHz

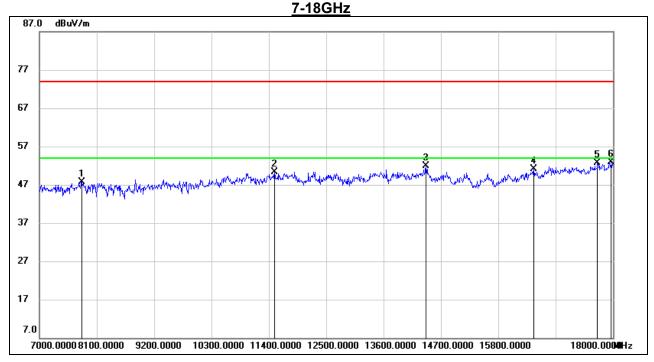


| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 1186.000  | 51.95   | -13.64  | 38.31    | 74.00    | -35.69 | peak   |
| 2   | 1780.000  | 52.79   | -11.14  | 41.65    | 74.00    | -32.35 | peak   |
| 3   | 2176.000  | 53.74   | -9.90   | 43.84    | 74.00    | -30.16 | peak   |
| 4   | 2572.000  | 52.36   | -8.48   | 43.88    | 74.00    | -30.12 | peak   |
| 5   | 2770.000  | 50.58   | -7.44   | 43.14    | 74.00    | -30.86 | peak   |
| 6   | 5872.000  | 48.19   | 4.33    | 52.52    | 74.00    | -21.48 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.



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| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 7814.000  | 38.20   | 9.58    | 47.78    | 74.00    | -26.22 | peak   |
| 2   | 11510.000 | 35.77   | 14.47   | 50.24    | 74.00    | -23.76 | peak   |
| 3   | 14414.000 | 34.84   | 16.98   | 51.82    | 74.00    | -22.18 | peak   |
| 4   | 16482.000 | 31.33   | 19.73   | 51.06    | 74.00    | -22.94 | peak   |
| 5   | 17703.000 | 30.11   | 22.62   | 52.73    | 74.00    | -21.27 | peak   |
| 6   | 17967.000 | 29.40   | 23.45   | 52.85    | 74.00    | -21.15 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Owing to the highest peak level of unwanted emission out of the restricted bands complies with the lowest limit(54dBuV/m), so all the test point were deemed to comply with the limits list in the standard.

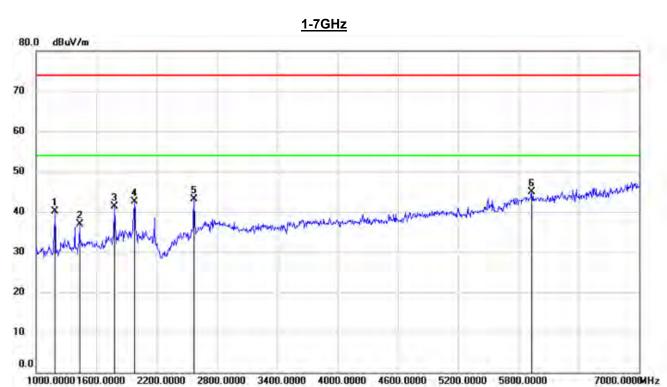


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## 8.5. WORST-CASE CO-LOCATION

# 8.5.1. BT GFSK MODE AND 802.11n HT20 MIMO MODE (TRANSMIT SIMULTANEOUSLY)

#### SPURIOUS EMISSIONS (MID CHANNEL, WORST-CASE CONFIGURATION, HORIZONTAL)



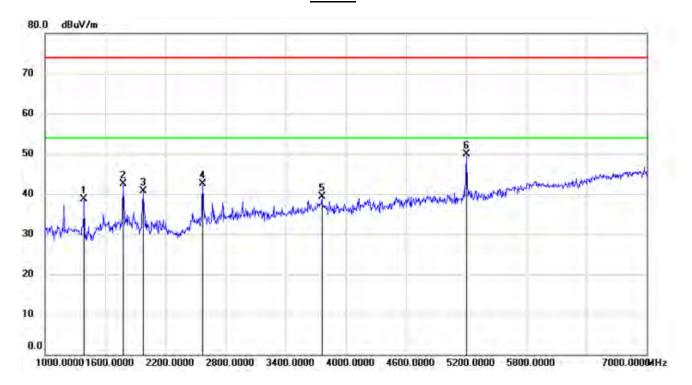
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 1186.000  | 53.76   | -13.64  | 40.12    | 74.00    | -33.88 | peak   |
| 2   | 1432.000  | 50.12   | -13.22  | 36.90    | 74.00    | -37.10 | peak   |
| 3   | 1780.000  | 52.38   | -11.14  | 41.24    | 74.00    | -32.76 | peak   |
| 4   | 1978.000  | 53.43   | -10.85  | 42.58    | 74.00    | -31.42 | peak   |
| 5   | 2572.000  | 51.59   | -8.48   | 43.11    | 74.00    | -30.89 | peak   |
| 6   | 5932.000  | 40.59   | 4.36    | 44.95    | 74.00    | -29.05 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



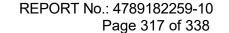
SPURIOUS EMISSIONS (LOW CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)

#### 1-7GHz



| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark      |
|-----|-----------|---------|---------|----------|----------|--------|-------------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |             |
| 1   | 1390.000  | 52.03   | -13.29  | 38.74    | 74.00    | -35.26 | peak        |
| 2   | 1780.000  | 53.68   | -11.14  | 42.54    | 74.00    | -31.46 | peak        |
| 3   | 1978.000  | 51.61   | -10.85  | 40.76    | 74.00    | -33.24 | peak        |
| 4   | 2572.000  | 51.04   | -8.48   | 42.56    | 74.00    | -31.44 | peak        |
| 5   | 3760.000  | 43.38   | -4.15   | 39.23    | 74.00    | -34.77 | peak        |
| 6   | 5200.000  | 48.99   | 0.91    | 49.90    | /        | /      | fundamental |

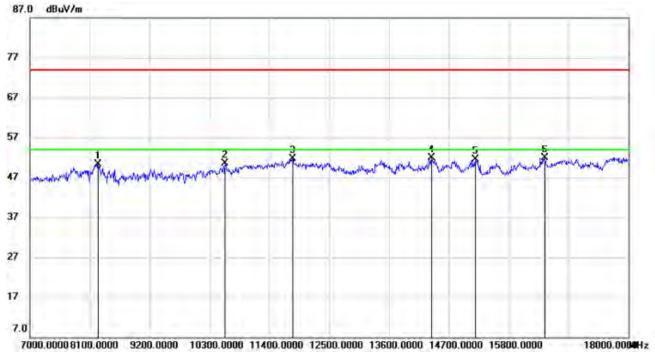
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.





SPURIOUS EMISSIONS (LOW CHANNEL, WORST-CASE CONFIGURATION, HORIZONTAL)

#### 7-18GHz



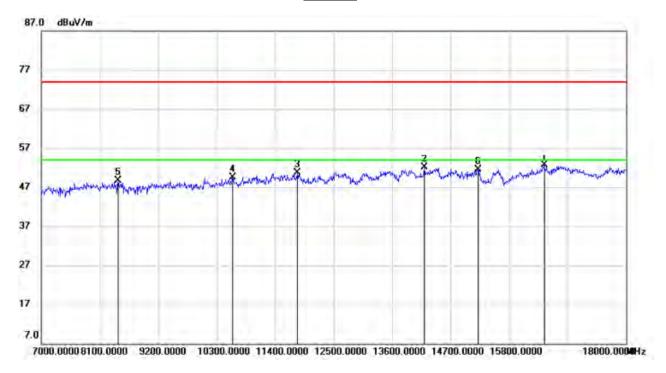
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 8254.000  | 40.54   | 9.67    | 50.21    | 74.00    | -23.79 | peak   |
| 2   | 10586.000 | 37.27   | 13.25   | 50.52    | 74.00    | -23.48 | peak   |
| 3   | 11829.000 | 37.31   | 14.42   | 51.73    | 74.00    | -22.27 | peak   |
| 4   | 14381.000 | 34.90   | 16.97   | 51.87    | 74.00    | -22.13 | peak   |
| 5   | 15184.000 | 35.42   | 16.05   | 51.47    | 74.00    | -22.53 | peak   |
| 6   | 16471.000 | 32.15   | 19.69   | 51.84    | 74.00    | -22.16 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



SPURIOUS EMISSIONS (LOW CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)

#### 7-18GHz



| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 16460.000 | 33.15   | 19.65   | 52.80    | 74.00    | -21.20 | peak   |
| 2   | 14205.000 | 35.14   | 16.98   | 52.12    | 74.00    | -21.88 | peak   |
| 3   | 11818.000 | 36.25   | 14.41   | 50.66    | 74.00    | -23.34 | peak   |
| 4   | 10597.000 | 36.22   | 13.38   | 49.60    | 74.00    | -24.40 | peak   |
| 5   | 8441.000  | 39.48   | 9.27    | 48.75    | 74.00    | -25.25 | peak   |
| 6   | 15217.000 | 35.53   | 16.04   | 51.57    | 74.00    | -22.43 | peak   |

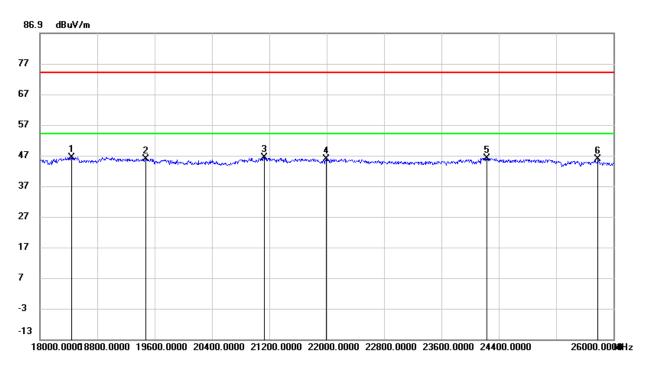
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



#### 8.6. SPURIOUS EMISSIONS 18~26GHz

## 8.6.1. 802.11a MODE

## SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)

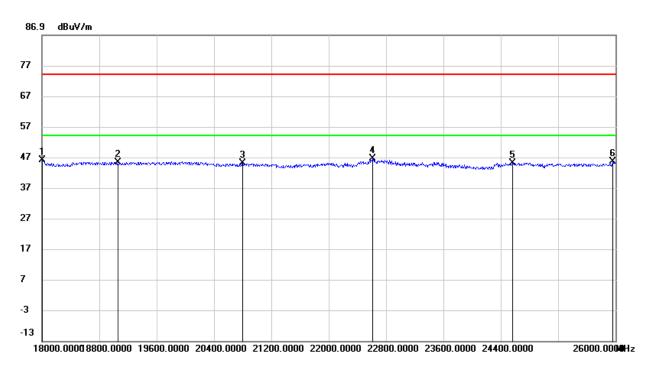


| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 18440.000 | 50.76   | -4.38   | 46.38    | 74.00    | -27.62 | peak   |
| 2   | 19480.000 | 50.70   | -4.82   | 45.88    | 74.00    | -28.12 | peak   |
| 3   | 21128.000 | 51.78   | -5.40   | 46.38    | 74.00    | -27.62 | peak   |
| 4   | 21992.000 | 52.12   | -6.23   | 45.89    | 74.00    | -28.11 | peak   |
| 5   | 24232.000 | 49.78   | -3.63   | 46.15    | 74.00    | -27.85 | peak   |
| 6   | 25784.000 | 47.23   | -1.49   | 45.74    | 74.00    | -28.26 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. The preamplifier only effect to the above 18GHz signal and no filter added to the measurement chain.



SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 18000.000 | 49.94   | -3.87   | 46.07    | 74.00    | -27.93 | peak   |
| 2   | 19056.000 | 50.33   | -4.93   | 45.40    | 74.00    | -28.60 | peak   |
| 3   | 20800.000 | 50.23   | -5.15   | 45.08    | 74.00    | -28.92 | peak   |
| 4   | 22608.000 | 52.35   | -5.78   | 46.57    | 74.00    | -27.43 | peak   |
| 5   | 24568.000 | 47.55   | -2.42   | 45.13    | 74.00    | -28.87 | peak   |
| 6   | 25960.000 | 47.75   | -2.28   | 45.47    | 74.00    | -28.53 | peak   |

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. The preamplifier only effect to the above 18GHz signal and no filter added to the measurement chain.

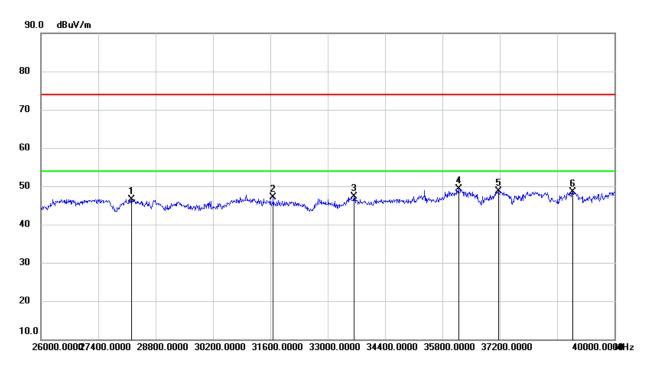
Note: All the test modes have been tested, only the worst data record in the report.



#### 8.7. SPURIOUS EMISSIONS 26~40GHz

#### 8.7.1. 802.11a MODE

## <u>SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)</u>

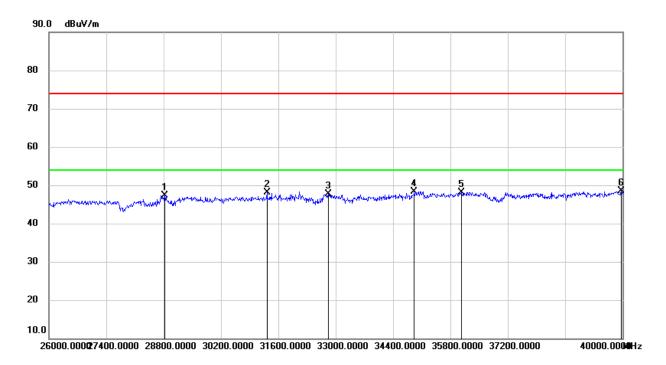


| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 28212.000 | 49.12   | -2.64   | 46.48    | 74.00    | -27.52 | peak   |
| 2   | 31670.000 | 48.36   | -1.21   | 47.15    | 74.00    | -26.85 | peak   |
| 3   | 33644.000 | 46.81   | 0.42    | 47.23    | 74.00    | -26.77 | peak   |
| 4   | 36192.000 | 45.87   | 3.43    | 49.30    | 74.00    | -24.70 | peak   |
| 5   | 37172.000 | 45.56   | 3.16    | 48.72    | 74.00    | -25.28 | peak   |
| 6   | 38978.000 | 44.12   | 4.35    | 48.47    | 74.00    | -25.53 | peak   |

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Proper operation of the transmitter prior to adding the filter to the measurement chain.



### SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 28828.000 | 48.13   | -0.79   | 47.34    | 74.00    | -26.66 | peak   |
| 2   | 31320.000 | 49.11   | -0.93   | 48.18    | 74.00    | -25.82 | peak   |
| 3   | 32818.000 | 48.81   | -1.08   | 47.73    | 74.00    | -26.27 | peak   |
| 4   | 34918.000 | 46.98   | 1.40    | 48.38    | 74.00    | -25.62 | peak   |
| 5   | 36066.000 | 44.35   | 3.83    | 48.18    | 74.00    | -25.82 | peak   |
| 6   | 39972.000 | 43.45   | 5.13    | 48.58    | 74.00    | -25.42 | peak   |

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Proper operation of the transmitter prior to adding the filter to the measurement chain.

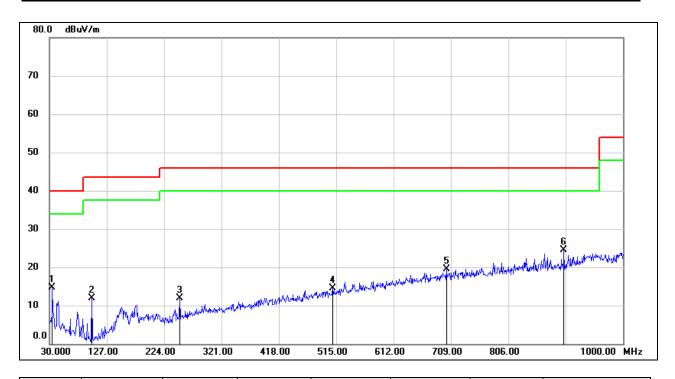
Note: All the test modes have been tested, only the worst data record in the report.



#### 8.8. SPURIOUS EMISSIONS 30M ~ 1 GHz

#### 8.8.1. 802.11a MODE

## SPURIOUS EMISSIONS (LOW CHANNELHORIZONTAL, WORST-CASE CONFIGURATION)



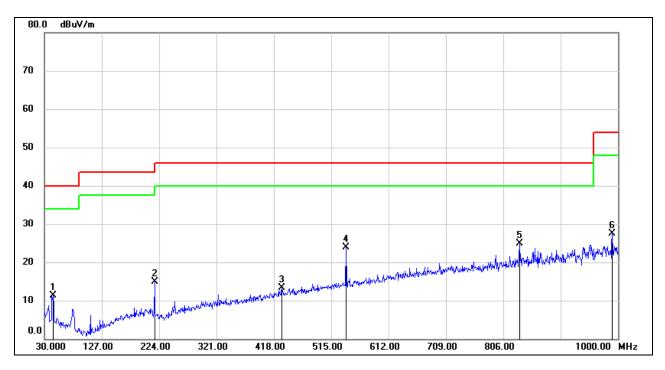
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 34.8500   | 32.34   | -17.56  | 14.78    | 40.00    | -25.22 | QP     |
| 2   | 101.7800  | 33.70   | -21.75  | 11.95    | 43.50    | -31.55 | QP     |
| 3   | 250.1900  | 27.94   | -16.12  | 11.82    | 46.00    | -34.18 | QP     |
| 4   | 509.1800  | 24.82   | -10.22  | 14.60    | 46.00    | -31.40 | QP     |
| 5   | 701.2400  | 26.04   | -6.52   | 19.52    | 46.00    | -26.48 | QP     |
| 6   | 900.0900  | 28.55   | -4.11   | 24.44    | 46.00    | -21.56 | QP     |

Note: 1. Result Level = Read Level + Correct Factor.

- 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
- 3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.



SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 44.5500   | 29.38   | -18.05  | 11.33    | 40.00    | -28.67 | QP     |
| 2   | 216.2400  | 31.58   | -16.67  | 14.91    | 46.00    | -31.09 | QP     |
| 3   | 431.5800  | 25.05   | -11.72  | 13.33    | 46.00    | -32.67 | QP     |
| 4   | 540.2199  | 33.57   | -9.59   | 23.98    | 46.00    | -22.02 | QP     |
| 5   | 833.1599  | 29.79   | -4.80   | 24.99    | 46.00    | -21.01 | QP     |
| 6   | 990.3000  | 30.60   | -3.06   | 27.54    | 54.00    | -26.46 | QP     |

Note: 1. Result Level = Read Level + Correct Factor.

- 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
- 3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto

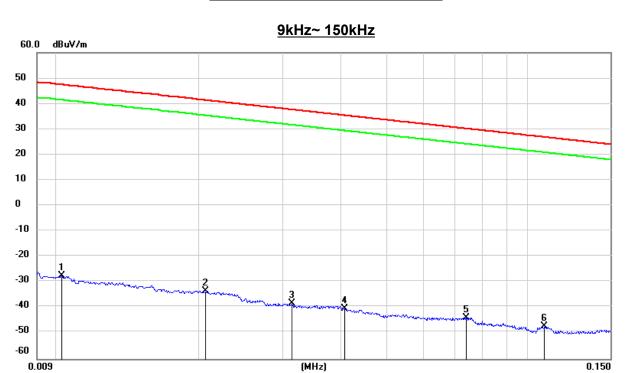
Note: All the test modes have been tested, only the worst data record in the report.



#### 8.9. SPURIOUS EMISSIONS BELOW 30M

#### 8.9.1. 802.11a MODE

## SPURIOUS EMISSIONS (HIGH CHANNEL, LOOP ANTENNA FACE ON TO THE EUT, WORST-CASE CONFIGURATION)

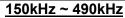


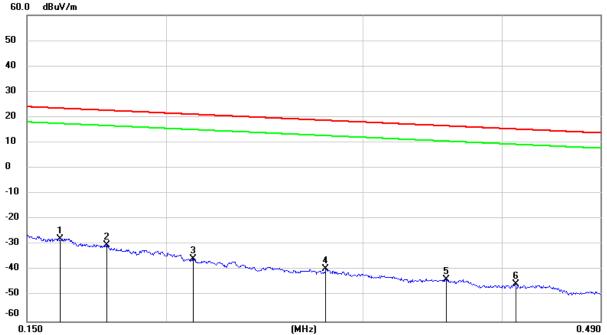
| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 0.0102    | 74.05   | -101.40 | -27.35   | 47.43    | -74.78 | peak   |
| 2   | 0.0206    | 67.92   | -101.35 | -33.43   | 41.32    | -74.75 | peak   |
| 3   | 0.0314    | 63.10   | -101.40 | -38.30   | 37.66    | -75.96 | peak   |
| 4   | 0.0407    | 61.00   | -101.44 | -40.44   | 35.41    | -75.85 | peak   |
| 5   | 0.0738    | 57.65   | -101.58 | -43.93   | 30.24    | -74.17 | peak   |
| 6   | 0.1087    | 54.38   | -101.78 | -47.40   | 26.88    | -74.28 | peak   |

- 2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
- 3. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.



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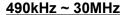


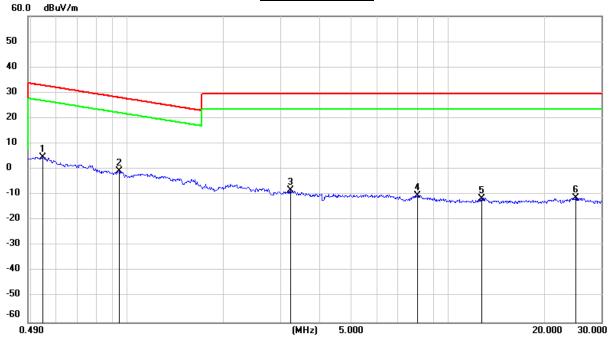


| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 0.1607    | 74.04   | -101.65 | -27.61   | 23.48    | -51.09 | peak   |
| 2   | 0.1768    | 71.49   | -101.68 | -30.19   | 22.66    | -52.85 | peak   |
| 3   | 0.2114    | 66.06   | -101.73 | -35.67   | 21.10    | -56.77 | peak   |
| 4   | 0.2782    | 62.29   | -101.83 | -39.54   | 18.71    | -58.25 | peak   |
| 5   | 0.3563    | 58.20   | -101.91 | -43.71   | 16.57    | -60.28 | peak   |
| 6   | 0.4112    | 56.52   | -101.97 | -45.45   | 15.32    | -60.77 | peak   |

- 2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
- 3. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.







| No. | Frequency | Reading | Correct | Result   | Limit    | Margin | Remark |
|-----|-----------|---------|---------|----------|----------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB/m)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1   | 0.5453    | 66.87   | -62.08  | 4.79     | 32.87    | -28.08 | peak   |
| 2   | 0.9425    | 61.39   | -62.23  | -0.84    | 28.12    | -28.96 | peak   |
| 3   | 3.2343    | 53.29   | -61.53  | -8.24    | 29.54    | -37.78 | peak   |
| 4   | 8.0151    | 50.84   | -61.07  | -10.23   | 29.54    | -39.77 | peak   |
| 5   | 12.7367   | 49.29   | -60.92  | -11.63   | 29.54    | -41.17 | peak   |
| 6   | 24.9832   | 49.11   | -60.45  | -11.34   | 29.54    | -40.88 | peak   |

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
- 3. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

Note: All the test modes have been tested, only the worst data record in the report.



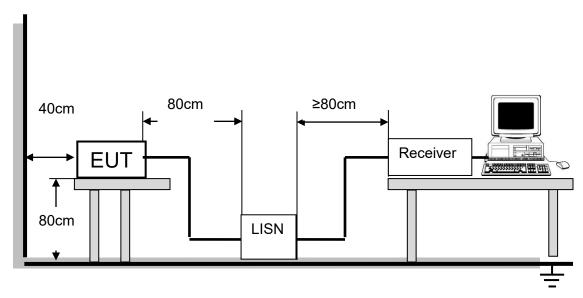
9. AC POWER LINE CONDUCTED EMISSIONS

### **LIMITS**

Please refer to CFR 47 FCC §15.207 (a) and ISED RSS-Gen Clause 8.8

| FREQUENCY(MHz) | Quasi-peak | Average   |
|----------------|------------|-----------|
| 0.15 -0.5      | 66 - 56 *  | 56 - 46 * |
| 0.50 -5.0      | 56.00      | 46.00     |
| 5.0 -30.0      | 60.00      | 50.00     |

#### **TEST SETUP AND PROCEDURE**



The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through an Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10 -2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9kHz.

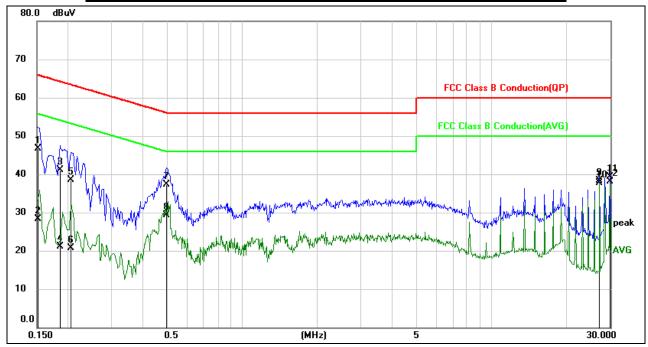
The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

#### **TEST RESULTS**

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#### 9.1. 802.11a MODE

### LINE N RESULTS (LOW CHANNEL, WORST-CASE CONFIGURATION)



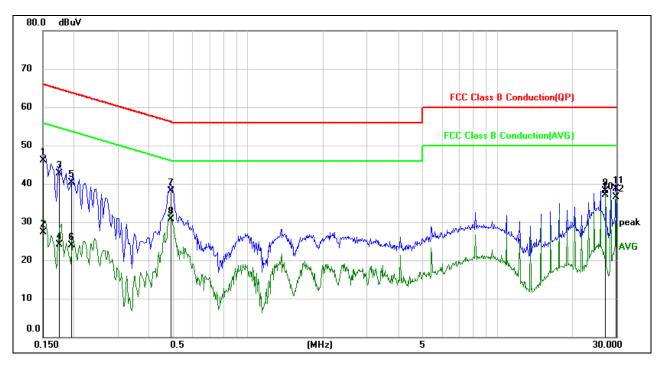
| No. | Frequency | Reading | Correct | Result | Limit  | Margin | Remark |
|-----|-----------|---------|---------|--------|--------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB)    | (dBuV) | (dBuV) | (dB)   |        |
| 1   | 0.1519    | 37.15   | 9.60    | 46.75  | 65.90  | -19.15 | QP     |
| 2   | 0.1519    | 18.75   | 9.60    | 28.35  | 55.90  | -27.55 | AVG    |
| 3   | 0.1849    | 31.52   | 9.60    | 41.12  | 64.26  | -23.14 | QP     |
| 4   | 0.1849    | 11.57   | 9.60    | 21.17  | 54.26  | -33.09 | AVG    |
| 5   | 0.2041    | 28.99   | 9.60    | 38.59  | 63.44  | -24.85 | QP     |
| 6   | 0.2041    | 11.02   | 9.60    | 20.62  | 53.44  | -32.82 | AVG    |
| 7   | 0.4958    | 27.76   | 9.60    | 37.36  | 56.07  | -18.71 | QP     |
| 8   | 0.4958    | 19.78   | 9.60    | 29.38  | 46.07  | -16.69 | AVG    |
| 9   | 27.2344   | 28.34   | 9.99    | 38.33  | 60.00  | -21.67 | QP     |
| 10  | 27.2344   | 27.70   | 9.99    | 37.69  | 50.00  | -12.31 | AVG    |
| 11  | 29.9565   | 29.36   | 9.87    | 39.23  | 60.00  | -20.77 | QP     |
| 12  | 29.9565   | 28.17   | 9.87    | 38.04  | 50.00  | -11.96 | AVG    |

Note: 1. Result = Reading +Correct Factor.

- 2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
- 4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.



LINE L RESULTS (LOW CHANNEL, WORST-CASE CONFIGURATION)



| No. | Frequency | Reading | Correct | Result | Limit  | Margin | Remark |
|-----|-----------|---------|---------|--------|--------|--------|--------|
|     | (MHz)     | (dBuV)  | (dB)    | (dBuV) | (dBuV) | (dB)   |        |
| 1   | 0.1505    | 36.54   | 9.61    | 46.15  | 65.97  | -19.82 | QP     |
| 2   | 0.1505    | 17.76   | 9.61    | 27.37  | 55.97  | -28.60 | AVG    |
| 3   | 0.1740    | 33.13   | 9.61    | 42.74  | 64.77  | -22.03 | QP     |
| 4   | 0.1740    | 14.45   | 9.61    | 24.06  | 54.77  | -30.71 | AVG    |
| 5   | 0.1947    | 30.73   | 9.60    | 40.33  | 63.83  | -23.50 | QP     |
| 6   | 0.1947    | 14.27   | 9.60    | 23.87  | 53.83  | -29.96 | AVG    |
| 7   | 0.4891    | 28.46   | 9.60    | 38.06  | 56.18  | -18.12 | QP     |
| 8   | 0.4891    | 21.11   | 9.60    | 30.71  | 46.18  | -15.47 | AVG    |
| 9   | 27.2341   | 28.29   | 9.88    | 38.17  | 60.00  | -21.83 | QP     |
| 10  | 27.2341   | 27.32   | 9.88    | 37.20  | 50.00  | -12.80 | AVG    |
| 11  | 29.9554   | 28.91   | 9.78    | 38.69  | 60.00  | -21.31 | QP     |
| 12  | 29.9554   | 26.81   | 9.78    | 36.59  | 50.00  | -13.41 | AVG    |

Note: 1. Result = Reading +Correct Factor.

- 2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
- 4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.

Note: All the test modes have been tested, only the worst data record in the report.



10. FREQUENCY STABILITY

## **LIMITS**

The frequency of the carrier signal shall be maintained within band of operation

## **TEST SETUP AND PROCEDURE**

Connect the UUT to the spectrum analyser and use the following settings:

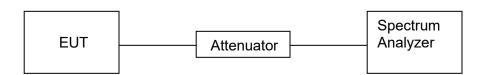
| Center Frequency | The center frequency of the channel under test               |
|------------------|--|
| Detector         | PEAK   |
| RBW              | 10kHz  |
| VBW              | ≥3 × RBW   |
| Span             | Encompass the entire emissions bandwidth (EBW) of the signal |
| Trace            | Max hold   |
| Sweep time       | Auto   |

Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

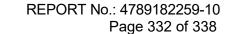
The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

User manual temperature is 0°C~40°C.

## **TEST SETUP**



|                | Normal Test Conditions       | Extreme Test Conditions    |
|----------------|------------------------------|----------------------------|
| Tomporatura    | NT(Normal Temperature):      | LT(Low Temperature): 0°C   |
| Temperature    | 22.4°C                       | HT(High Temperature): 40°C |
| Supply Voltage | NIV/Normal Valtaga): DC 2.7V | LT(Low Voltage): DC 4.25V  |
| Supply Voltage | NV(Normal Voltage): DC 3.7V  | HT(High Voltage): DC 5.75V |





**TEST RESULTS** 

|       | Frequency Error vs. Voltage |                     |                    |                     |                    |                     |                    |                     |                    |
|-------|-----------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|       |                             |                     |                    | 802.1               | 1a:5200MH          | z                   |                    |                     |                    |
| _     |                             | 0 Mii               | nute               | 2 Mii               | nute               | 5 Mii               | nute               | 10 M                | inute              |
| Temp. | Volt.                       | Freq.Error<br>(MHz) | Tolerance<br>(ppm) | Freq.Error<br>(MHz) | Tolerance (ppm)    | Freq.Error<br>(MHz) | Tolerance (ppm)    | Freq.Error<br>(MHz) | Tolerance (ppm)    |
| TN    | VL                          | 5200.0171           | 3.29               | 5200.0174           | 3.35               | 5200.0177           | 3.40               | 5200.0130           | 3.29               |
| TN    | VN                          | 5200.0241           | 4.64               | 5200.0265           | 5.10               | 5200.0243           | 4.67               | 5200.0246           | 4.64               |
| TN    | VH                          | 5200.0121           | 2.33               | 5200.0122           | 2.35               | 5200.0133           | 2.56               | 5200.0351           | 2.33               |
|       |                             |                     | F                  | requency Er         | ror vs. Tem        | perature            |                    |                     |                    |
|       |                             |                     |                    | 802.1               | 1a:5200MH          | z                   |                    |                     |                    |
| _     | ., .,                       | 0 Mir               | 0 Minute 2 Minute  |                     | nute               | 5 Minute            |                    | 10 Minute           |                    |
| Temp. | Volt.                       | Freq.Error<br>(MHz) | Tolerance<br>(ppm) | Freq.Error<br>(MHz) | Tolerance<br>(ppm) | Freq.Error<br>(MHz) | Tolerance<br>(ppm) | Freq.Error<br>(MHz) | Tolerance<br>(ppm) |
| 40    | VN                          | 5200.0235           | 4.51               | 5200.0379           | 7.29               | 5200.0354           | 6.81               | 5200.0432           | 8.31               |
| 30    | VN                          | 5200.0242           | 4.66               | 5200.0264           | 5.08               | 5200.0794           | 15.27              | 5200.0567           | 10.91              |
| 20    | VN                          | 5200.0346           | 6.65               | 5200.0346           | 6.66               | 5200.0457           | 8.79               | 5200.0379           | 7.28               |
| 10    | VN                          | 5200.0347           | 6.67               | 5200.0232           | 4.47               | 5200.0365           | 7.03               | 5200.0423           | 8.14               |
|       |                             |                     |                    |                     |                    |                     |                    |                     |                    |

|       | Frequency Error vs. Voltage |                     |                    |                     |                    |                     |                    |                     |                    |
|-------|-----------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|       |                             |                     |                    | 802.1               | 1a:5825MH          | z                   |                    |                     |                    |
| _     |                             | 0 Mii               | nute               | 2 Mii               | nute               | 5 Mii               | nute               | 10 Mi               | nute               |
| Temp. | Volt.                       | Freq.Error<br>(MHz) | Tolerance<br>(ppm) | Freq.Error<br>(MHz) | Tolerance<br>(ppm) | Freq.Error<br>(MHz) | Tolerance<br>(ppm) | Freq.Error<br>(MHz) | Tolerance<br>(ppm) |
| TN    | VL                          | 5825.0234           | 4.02               | 5825.0253           | 4.34               | 5825.0289           | 4.96               | 5825.0313           | 5.37               |
| TN    | VN                          | 5825.0357           | 6.13               | 5825.0377           | 6.46               | 5825.0199           | 3.42               | 5825.0215           | 3.68               |
| TN    | VH                          | 5825.0461           | 7.91               | 5825.0459           | 7.88               | 5825.0359           | 6.16               | 5825.0245           | 4.21               |
|       |                             |                     | F                  | requency Er         | ror vs. Tem        | perature            |                    |                     |                    |
|       |                             |                     |                    | 802.1               | 1a:5825MH          | z                   |                    |                     |                    |
| _     |                             | 0 Mir               | nute               | 2 Mir               | nute               | 5 Mir               | nute               | 10 Mi               | nute               |
| Temp. | Volt.                       | Freq.Error<br>(MHz) | Tolerance<br>(ppm) | Freq.Error<br>(MHz) | Tolerance (ppm)    | Freq.Error<br>(MHz) | Tolerance<br>(ppm) | Freq.Error<br>(MHz) | Tolerance<br>(ppm) |
| 40    | VN                          | 5825.0235           | 4.04               | 5825.0213           | 3.66               | 5825.0321           | 5.51               | 5825.0343           | 5.89               |
| 30    | VN                          | 5825.0352           | 6.05               | 5825.0334           | 5.74               | 5825.0245           | 4.20               | 5825.0341           | 5.86               |
| 20    | VN                          | 5825.0443           | 7.61               | 5825.0465           | 7.99               | 5825.0354           | 6.08               | 5825.0254           | 4.37               |
| 10    | VN                          | 5785.0231           | 3.99               | 5200.0301           | 5.79               | 5200.0303           | 5.83               | 5200.0333           | 6.40               |
| 0     | VN                          | 5785.0321           | 5.55               | 5200.0221           | 4.25               | 5200.0311           | 5.98               | 5200.0278           | 5.35               |

Note: All the test modes have been tested, only the worst data record in the report.

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## 11. DYNAMIC FREQUENCY SELECTION

## **APPLICABILITY OF DFS REQUIREMENTS**

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

|                                 | Operational Mode |                                    |                                    |  |  |
|---------------------------------|------------------|------------------------------------|------------------------------------|--|--|
| Requirement                     | □Master          | ⊠Client Without<br>Radar Detection | □Client With<br>Radar<br>Detection |  |  |
| Non-Occupancy Period            | Yes              | Not required                       | Yes                                |  |  |
| DFS Detection Threshold         | Yes              | Not required                       | Yes                                |  |  |
| Channel Availability Check Time | Yes              | Not required                       | Not required                       |  |  |
| U-NII Detection Bandwidth       | Yes              | Not required                       | Yes                                |  |  |

Table 2: Applicability of DFS requirements during normal operation

| Table 2. Applicability of DF3 requirements during normal operation |   |                                    |  |  |  |  |
|--|---|------------------------------------|--|--|--|--|
|  | Operational Mode                                    |                                    |  |  |  |  |
| Requirement  | □Master Device or Client<br>with<br>Radar Detection | ⊠Client Without Radar<br>Detection |  |  |  |  |
| DFS Detection Threshold  | Yes   | Not required                       |  |  |  |  |
| Channel Closing Transmission Time                                  | Yes   | Yes                                |  |  |  |  |
| Channel Move Time  | Yes   | Yes                                |  |  |  |  |
| U-NII Detection Bandwidth  | Yes   | Not required                       |  |  |  |  |

| Additional requirements for devices with multiple bandwidth modes | □Master Device or Client<br>with<br>Radar Detection | ⊠Client Without Radar<br>Detection |
|---|---|------------------------------------|
| U-NII Detection Bandwidth<br>and<br>Statistical Performance Check | All BW modes must be tested                         | Not required                       |
| Channel Move Time and   | Test using widest BW                                | Test using the widest BW           |
| Channel Closing Transmission                                      | mode  | mode                               |
| Time  | available   | available for the link             |
| All other tests   | Any single BW mode                                  | Not required                       |

Note: Frequencies selected for statistical performance check should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.



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### **LIMITS**

#### (1) DFS Detection Thresholds

Table 3: DFS Detection Thresholds for Master Devices and Client Devices With Radar Detection

| Maximum Transmit Power   | Value (See Notes 1, 2, and 3) |
|--|-------------------------------|
| EIRP ≥ 200 milliwatt   | -64 dBm                       |
| EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz                 | -62 dBm                       |
| EIRP < 200 milliwatt that do not meet the power spectral density requirement | -64 dBm                       |

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.

Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

### (2) DFS Response Requirements

Table 4: DFS Response Requirement Values

| Parameter                         | Value                                      |
|-----------------------------------|--|
| Non-occupancy period              | Minimum 30 minutes                         |
| Channel Availability Check Time   | 60 seconds                                 |
| Channel Move Time                 | 10 seconds                                 |
| Charmer wove Time                 | See Note 1.                                |
|                                   | 200 milliseconds + an aggregate of 60      |
| Channel Closing Transmission Time | milliseconds over                          |
| Charmer Closing Transmission Time | remaining 10 second period.                |
|                                   | See Notes 1 and 2.                         |
| U-NII Detection Bandwidth         | Minimum 100% of the U-NII 99% transmission |
| 0-MI Detection pandwidth          | power bandwidth. See Note 3.               |

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required facilitating a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

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#### PARAMETERS OF RADAR TEST WAVEFORMS

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Table 5 Short Pulse Radar Test Waveforms

| Radar Type   | Pulse Width<br>(µsec) | PRI<br>(µsec) | Number of Pulses                   | Minimum Percentage<br>of Successful<br>Detection | Minimum<br>Number of<br>Trials |
|--------------|-----------------------|---------------|------------------------------------|--|--------------------------------|
| Q            | 1                     | 1428          | 18                                 | See Note 1                                       |                                |
| 1            | f                     | Test A        | (1)                                |  |                                |
|              |                       | Test B        | Roundup ( 360 ) ( 19·10° ) ( PRI ) | 60%  | 30                             |
| 2            | 1-5                   | 150-230       | 23-29                              | 60%  | 30                             |
| 3            | 6-10                  | 200-500       | 16-18                              | 60%  | 30                             |
| 4            | 11-20                 | 200-500       | 12-16                              | 60%  | 30                             |
| Aggregate (F | Radar Types 1-4       | 80%           | 120                                |  |                                |

Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.

Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a.

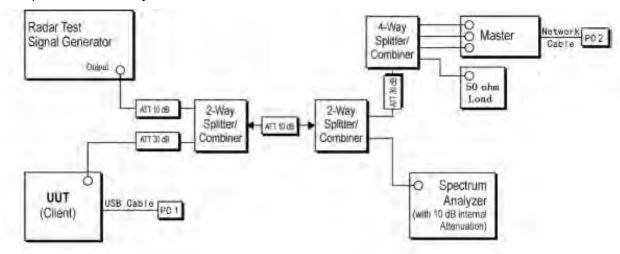
Test B: 15 unique PRI values randomly selected within the range of 518-3066 µsec, with a minimum increment of 1 µsec, excluding PRI values selected in Test A

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B. Test aggregate is average of the percentage of successful detections of short pulse radar types 1-4



**TEST SETUP** 

Setup for Client with injection at the Master



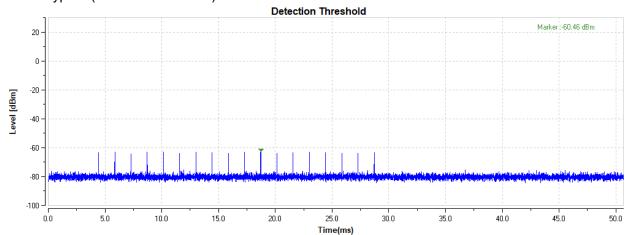
#### **DFS Detection Threshold levels**

DFS Threshold Level:-60

The Interference **Radar Detection Threshold Level** is (-62dBm) + (1 [dBi] ) + {1 dB}= -60.0 dBm. That had been taken into account the master output power range and antenna gain.

The Master antenna Gain is 1 dBi.

#### Radar Type 0 (80MHz / 5290MHz)





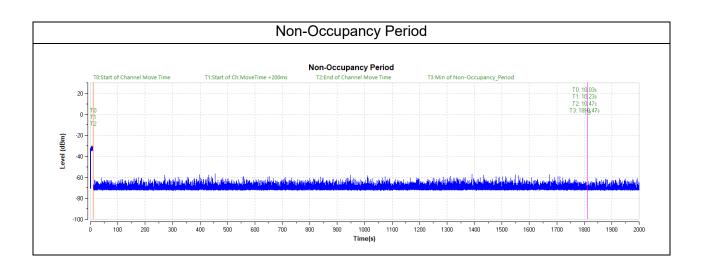
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#### **Test Data**

| BW/Channel         | Test Item                               | Test Result        | Limit   | Results |
|--------------------|---|--------------------|---|---------|
|                    | Channel Move<br>Time                    | 0.5S               | <10 s   | pass    |
|                    | Channel Closing<br>Transmission<br>Time | 0.005S             | 200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period.   | pass    |
| 80MHz /<br>5290MHz | Non-Occupancy<br>Period                 | Nothing<br>appears | If the client moves with the master, the device is considered compliant if nothing appears in the client non-occupancy period test. For devices that shut down (rather than moving channels), no beacons should appear. | pass    |

Test plots as follows:







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## 12. ANTENNA REQUIREMENTS

## **APPLICABLE REQUIREMENTS**

Please refer to FCC §15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC §15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

**RESULTS** 

Complies

**END OF REPORT**