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Report No.:
KR21-SRF0159

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**802.11ac VHT20 UNII-2A 2TX MIMO****Lowest Channel (5 260 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 055.62 ¹⁾ | H | 73.84 | 28.81 | -49.05 | - | 53.60 | 74.00 | 20.40 |
| 10 603.34 ¹⁾ | V | 58.57 | 37.80 | -49.66 | - | 46.71 | 74.00 | 27.29 |
| 15 794.16 ¹⁾ | H | 56.28 | 39.88 | -45.73 | - | 50.43 | 74.00 | 23.57 |
| Average Data | | | | | | | | |
| 1 055.62 ¹⁾ | H | 67.36 | 28.81 | -49.05 | 0.61 | 47.73 | 54.00 | 6.27 |

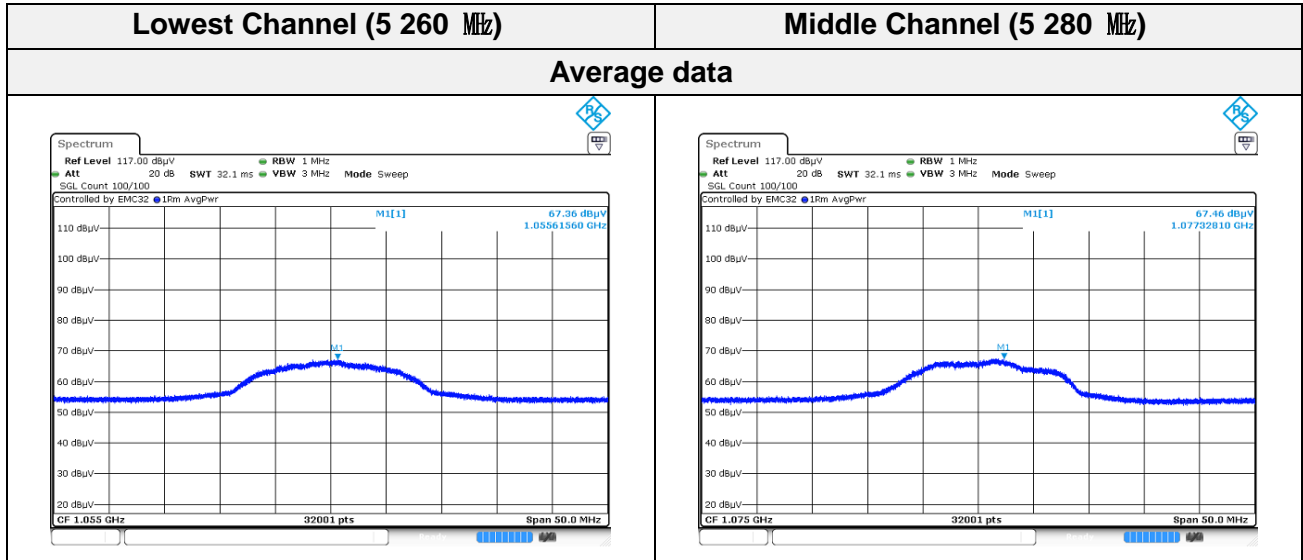
Middle Channel (5 280 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 077.33 ¹⁾ | H | 73.50 | 28.82 | -49.03 | - | 53.29 | 74.00 | 20.71 |
| 10 551.95 | H | 58.76 | 37.75 | -49.72 | - | 46.79 | 68.20 | 21.41 |
| 15 835.13 ¹⁾ | H | 54.68 | 39.87 | -45.76 | - | 48.79 | 74.00 | 25.21 |
| Average Data | | | | | | | | |
| 1 077.33 ¹⁾ | H | 67.46 | 28.82 | -49.03 | 0.61 | 47.86 | 54.00 | 6.14 |

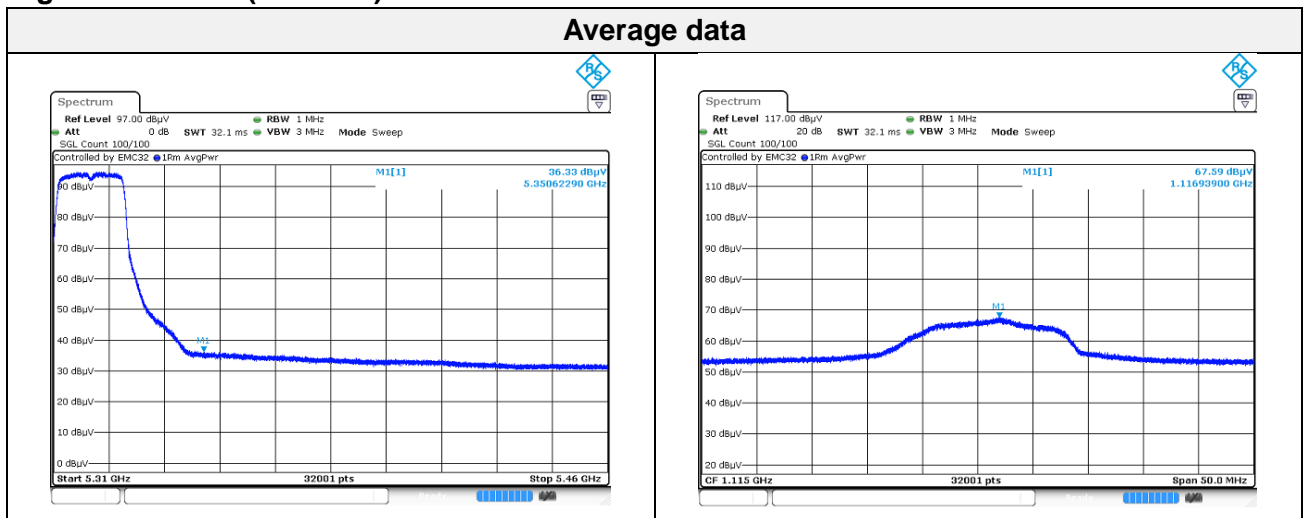
Highest Channel (5 320 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 116.94 ¹⁾ | H | 72.90 | 28.82 | -48.91 | - | 52.81 | 74.00 | 21.19 |
| 5 350.62 ¹⁾ | H | 44.28 | 34.53 | -25.48 | - | 53.33 | 74.00 | 20.67 |
| 10 631.73 ¹⁾ | H | 58.79 | 37.83 | -49.62 | - | 47.00 | 74.00 | 27.00 |
| 15 918.86 ¹⁾ | V | 55.94 | 39.83 | -45.82 | - | 49.95 | 74.00 | 24.05 |
| Average Data | | | | | | | | |
| 1 116.94 ¹⁾ | H | 67.59 | 28.82 | -48.91 | 0.61 | 48.11 | 54.00 | 5.89 |
| 5 350.62 ¹⁾ | H | 36.33 | 34.53 | -25.48 | 0.61 | 45.99 | 54.00 | 8.01 |

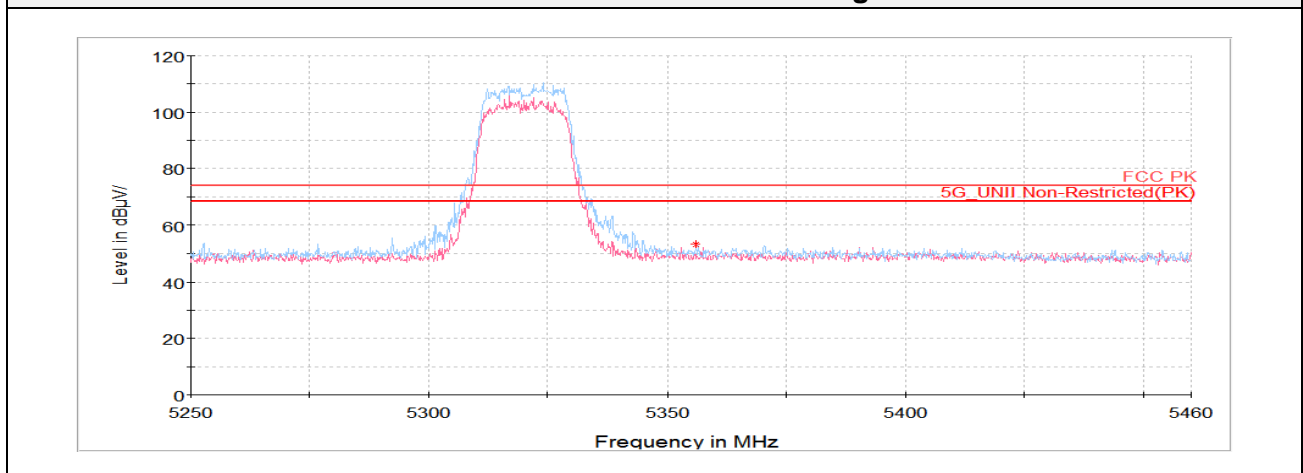
802.11ac VHT20 UNII-2A 2TX MIMO



Highest Channel (5 320 MHz)



Horizontal/Vertical for Band-edge



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**802.11ac VHT40 UNII-2A ANT1****Lowest Channel (5 270 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 065.66 ¹⁾ | H | 67.72 | 28.81 | -49.04 | - | 47.49 | 74.00 | 26.51 |
| 10 583.58 | H | 58.79 | 37.78 | -49.68 | - | 46.89 | 68.20 | 21.31 |
| 15 863.52 ¹⁾ | V | 55.68 | 39.85 | -45.78 | - | 49.75 | 74.00 | 24.25 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

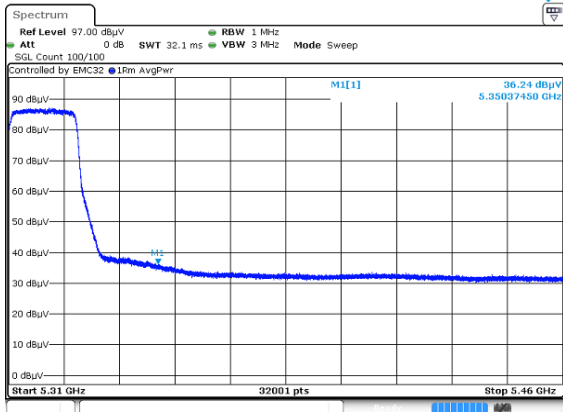
Highest Channel (5 310 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 106.73 ¹⁾ | H | 67.04 | 28.82 | -48.97 | - | 46.89 | 74.00 | 27.11 |
| 5 350.37 ¹⁾ | H | 42.98 | 34.53 | -25.48 | - | 52.03 | 74.00 | 21.97 |
| 10 631.38 ¹⁾ | V | 58.43 | 37.83 | -49.62 | - | 46.64 | 74.00 | 27.36 |
| 15 928.92 ¹⁾ | V | 55.99 | 39.83 | -45.82 | - | 50.00 | 74.00 | 24.00 |
| Average Data | | | | | | | | |
| 5 350.37 ¹⁾ | H | 36.24 | 34.53 | -25.48 | 0.63 | 45.92 | 54.00 | 8.08 |

802.11ac VHT40 UNII-2A ANT1

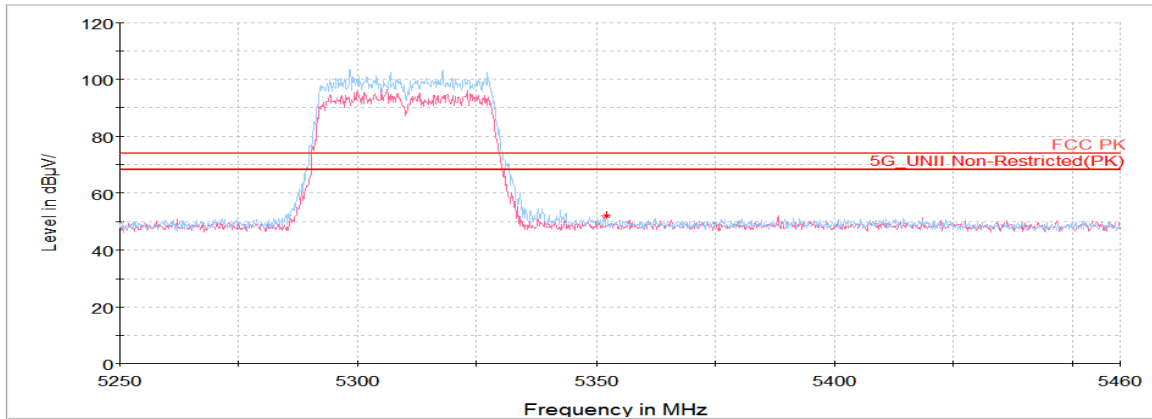
Highest Channel (5 310 MHz)

Average data



Blank

Horizontal/Vertical for Band-edge



802.11ac VHT40 UNII-2A ANT2

Lowest Channel (5 270 MHz)

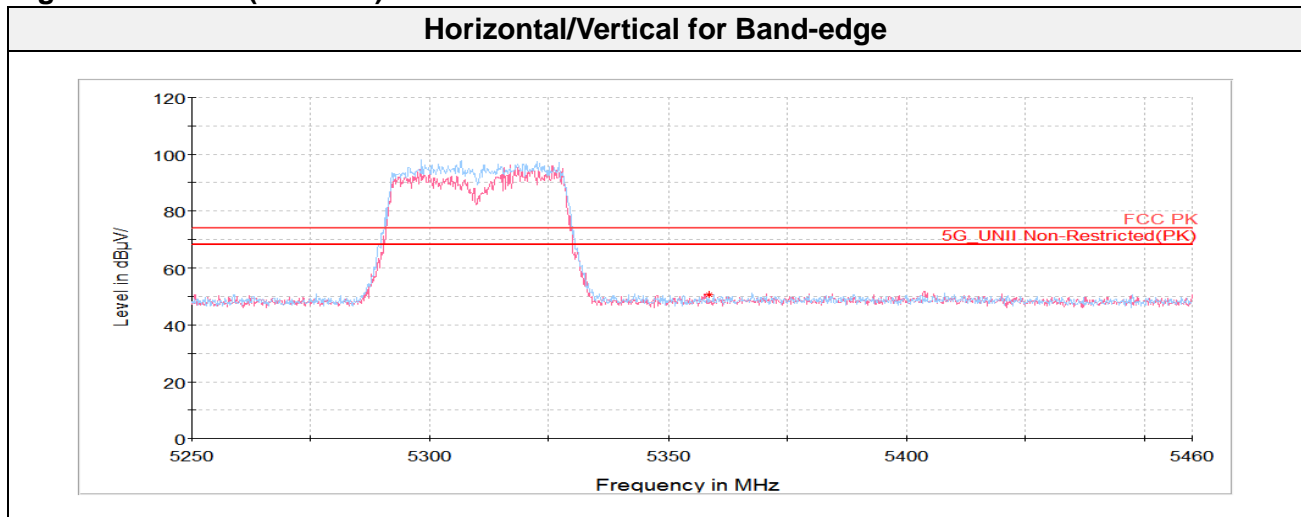
| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------|-------------|------------|------|------------|------------|--------|
| (MHz) | (V/H) | (dB(μV)) | (dB) | (dB) | (dB) | (dB(μV/m)) | (dB(μV/m)) | (dB) |
| Peak data | | | | | | | | |
| 10 540.81 | V | 56.91 | 37.74 | -49.73 | - | 44.92 | 68.20 | 23.28 |
| 15 795.95 ¹⁾ | V | 55.45 | 39.88 | -45.73 | - | 49.60 | 74.00 | 24.40 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Highest Channel (5 310 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------|-------------|------------|------|------------|------------|--------|
| (MHz) | (V/H) | (dB(μV)) | (dB) | (dB) | (dB) | (dB(μV/m)) | (dB(μV/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 358.41 ¹⁾ | V | 41.66 | 34.55 | -25.42 | - | 50.79 | 74.00 | 23.21 |
| 10 618.80 ¹⁾ | H | 57.97 | 37.82 | -49.64 | - | 46.15 | 74.00 | 27.85 |
| 15 921.02 ¹⁾ | V | 55.18 | 39.83 | -45.82 | - | 49.19 | 74.00 | 24.81 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT40 UNII-2A ANT2

Highest Channel (5 310 MHz)



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**802.11ac VHT40 UNII-2A 2TX MIMO****Lowest Channel (5 270 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 070.81 ¹⁾ | H | 68.29 | 28.81 | -49.04 | - | 48.06 | 74.00 | 25.94 |
| 10 547.64 | V | 57.47 | 37.75 | -49.72 | - | 45.50 | 68.20 | 22.70 |
| 15 823.27 ¹⁾ | H | 56.45 | 39.87 | -45.75 | - | 50.57 | 74.00 | 23.43 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

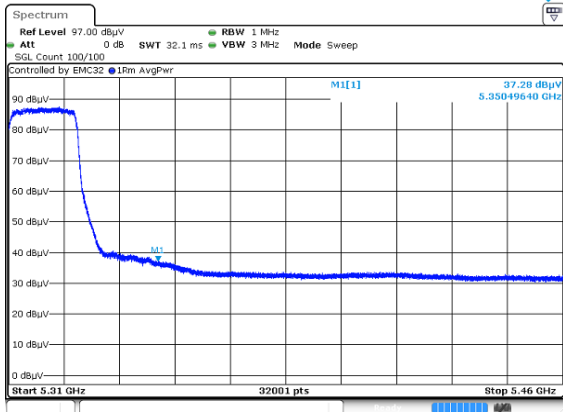
Highest Channel (5 310 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 097.28 ¹⁾ | H | 69.13 | 28.82 | -49.01 | - | 48.94 | 74.00 | 25.06 |
| 5 350.50 ¹⁾ | H | 46.44 | 34.53 | -25.48 | - | 55.49 | 74.00 | 18.51 |
| 10 637.13 ¹⁾ | H | 58.24 | 37.84 | -49.61 | - | 46.47 | 74.00 | 27.53 |
| 15 940.78 ¹⁾ | H | 54.53 | 39.82 | -45.83 | - | 48.52 | 74.00 | 25.48 |
| Average Data | | | | | | | | |
| 5 350.50 ¹⁾ | H | 37.28 | 34.53 | -25.48 | 1.10 | 47.43 | 54.00 | 6.57 |

802.11ac VHT40 UNII-2A 2TX MIMO

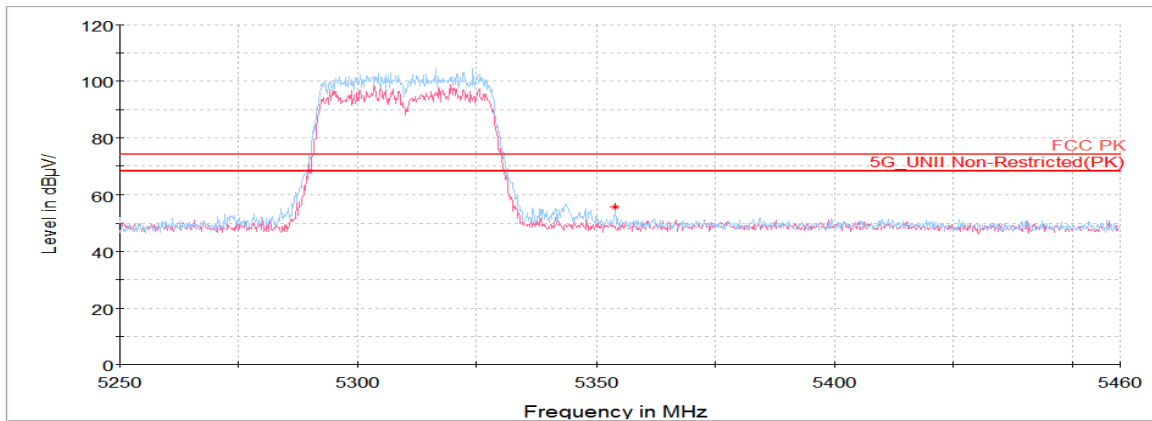
Highest Channel (5 310 MHz)

Average data



Blank

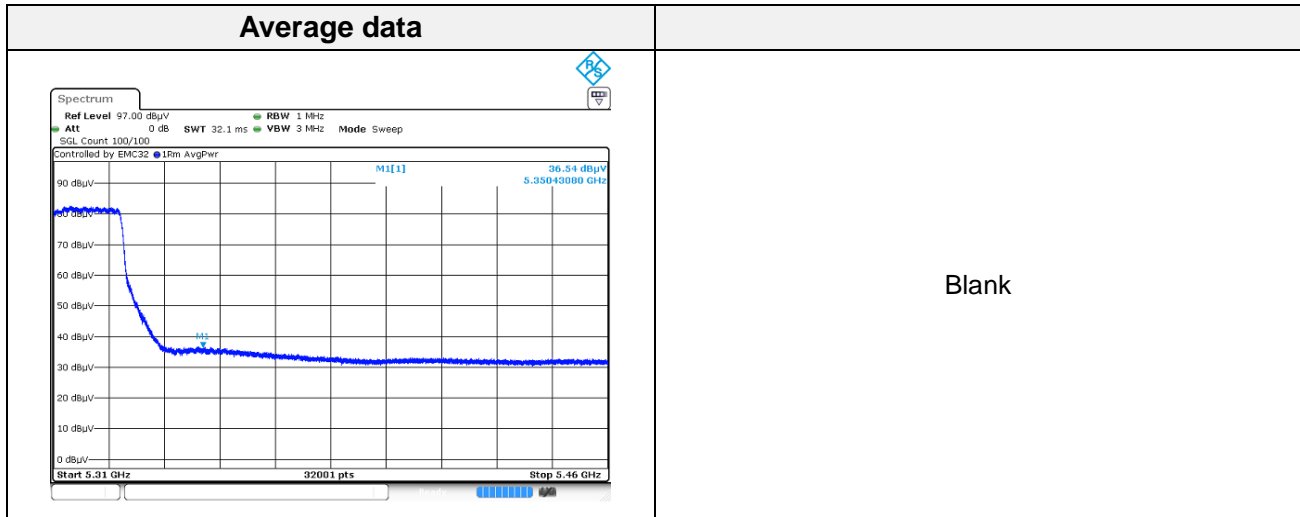
Horizontal/Vertical for Band-edge



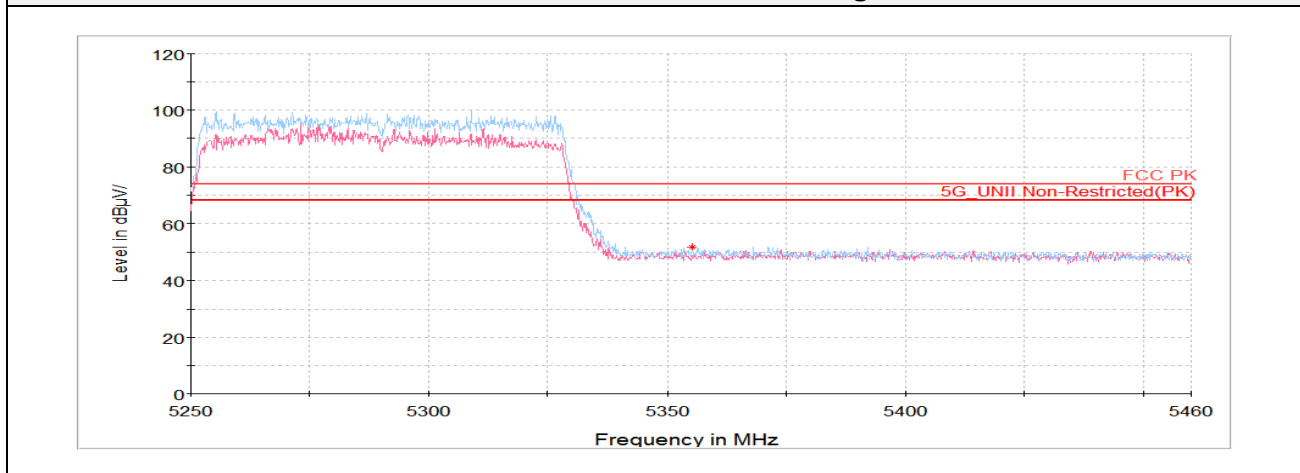
802.11ac VHT80 UNII-2A ANT1

Lowest Channel (5 290 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------|-------------|------------|------|------------|------------|--------|
| (MHz) | (V/H) | (dB(μV)) | (dB) | (dB) | (dB) | (dB(μV/m)) | (dB(μV/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 350.43 ¹⁾ | H | 42.87 | 34.53 | -25.48 | - | 51.92 | 74.00 | 22.08 |
| 10 642.16 ¹⁾ | V | 58.92 | 37.84 | -49.61 | - | 47.15 | 74.00 | 26.85 |
| 15 773.67 ¹⁾ | V | 56.54 | 39.89 | -45.71 | - | 50.72 | 74.00 | 23.28 |
| Average Data | | | | | | | | |
| 5 350.43 ¹⁾ | H | 36.54 | 34.53 | -25.48 | 1.18 | 46.77 | 54.00 | 7.23 |



Horizontal/Vertical for Band-edge



KCTL Inc.

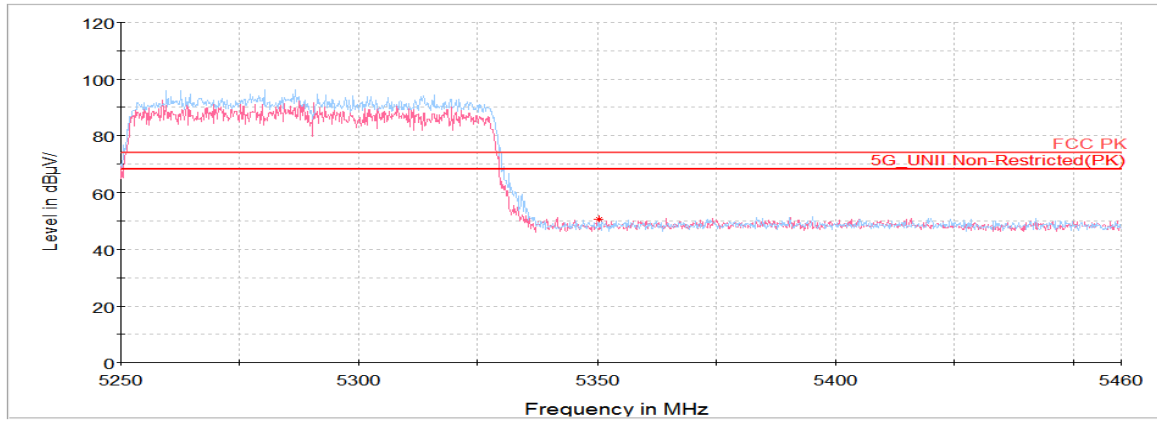
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**802.11ac VHT80 UNII-2A ANT2****Lowest Channel (5 290 MHz)**

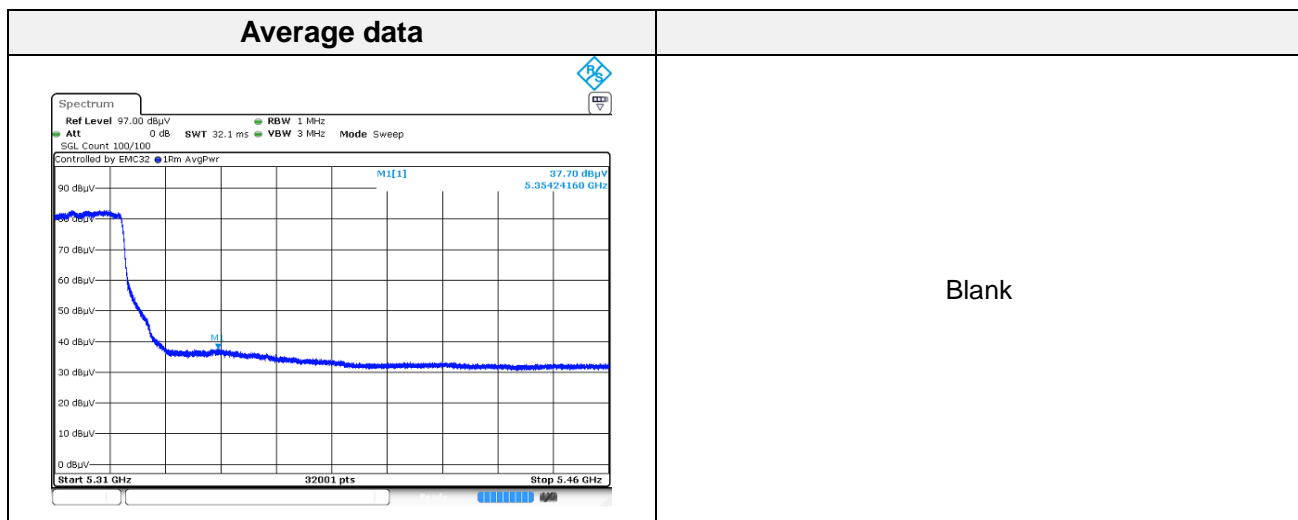
| Frequency (MHz) | Pol. (V/H) | Reading (dB(μ V)) | Ant. Factor (dB) | Amp.+Cable (dB) | DCF (dB) | Result (dB(μ V/m)) | Limit (dB(μ V/m)) | Margin (dB) |
|--|---------------|---------------------------|---------------------|--------------------|-------------|----------------------------|---------------------------|----------------|
| Peak data | | | | | | | | |
| 5 350.16 ¹⁾ | V | 41.77 | 34.53 | -25.48 | - | 50.82 | 74.00 | 23.18 |
| 10 583.94 | H | 58.01 | 37.78 | -49.68 | - | 46.11 | 68.20 | 22.09 |
| 15 869.63 ¹⁾ | H | 54.50 | 39.85 | -45.78 | - | 48.57 | 74.00 | 25.43 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Horizontal/Vertical for Band-edge

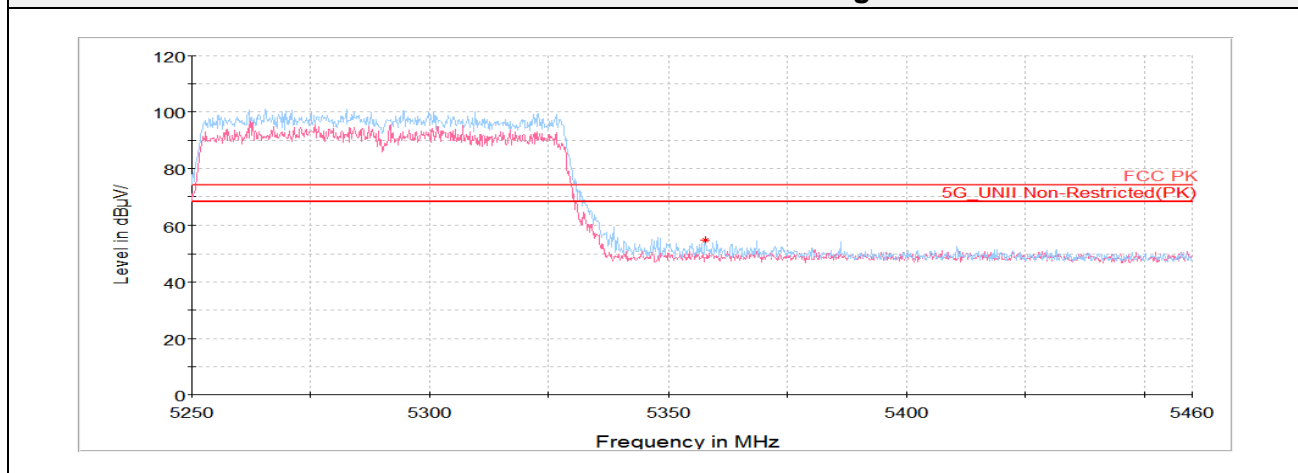
802.11ac VHT80 UNII-2A 2TX MIMO

Lowest Channel (5 290 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------|-------------|------------|------|------------|------------|--------|
| (MHz) | (V/H) | (dB(μV)) | (dB) | (dB) | (dB) | (dB(μV/m)) | (dB(μV/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 354.24 ¹⁾ | H | 45.44 | 34.54 | -25.45 | - | 54.53 | 74.00 | 19.47 |
| 10 541.17 | V | 59.58 | 37.74 | -49.73 | - | 47.59 | 68.20 | 20.61 |
| 15 895.86 ¹⁾ | H | 55.75 | 39.84 | -45.80 | - | 49.79 | 74.00 | 24.21 |
| Average Data | | | | | | | | |
| 5 354.24 ¹⁾ | H | 37.70 | 34.54 | -25.45 | 1.86 | 48.65 | 54.00 | 5.35 |



Horizontal/Vertical for Band-edge

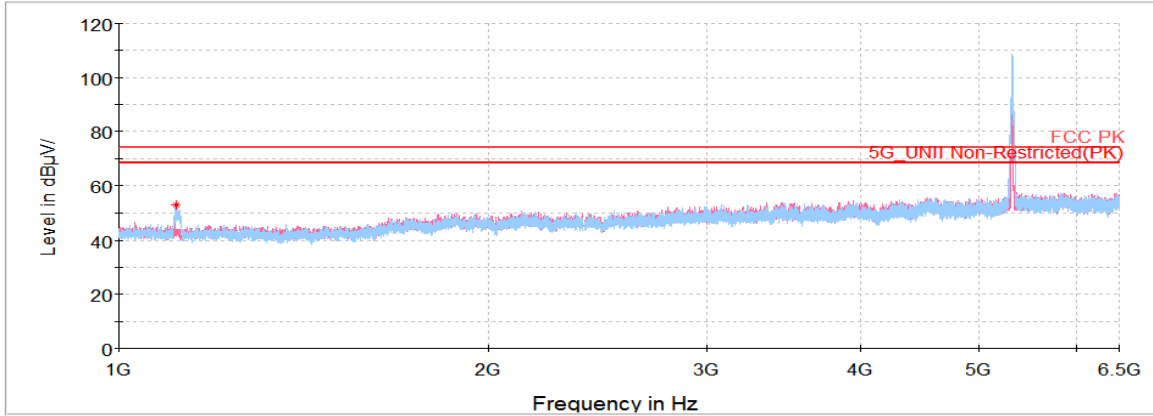


Plot of Harmonics and Spurious Emissions

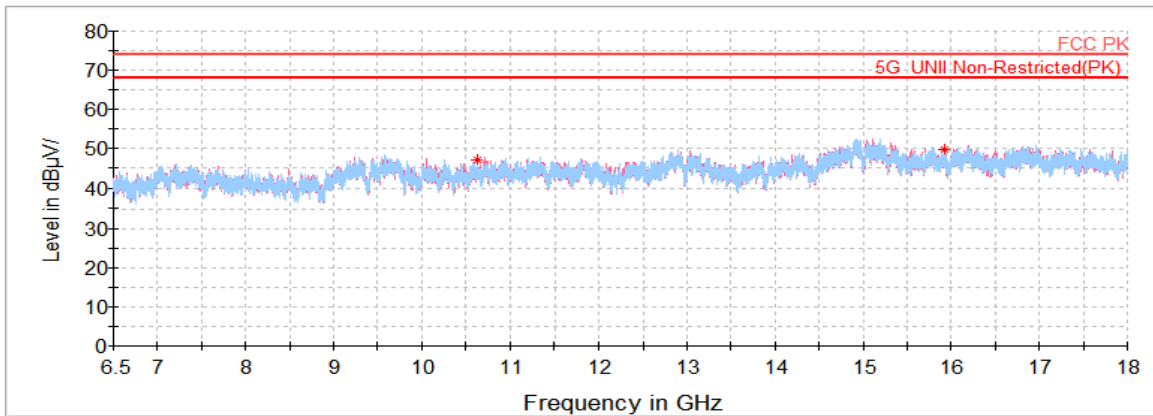
In order to simplify the report, attached plots were only the lowest margin condition

802.11ac VHT20 UNII-2A_2TX MIMO_Highest Channel (5 320 MHz)

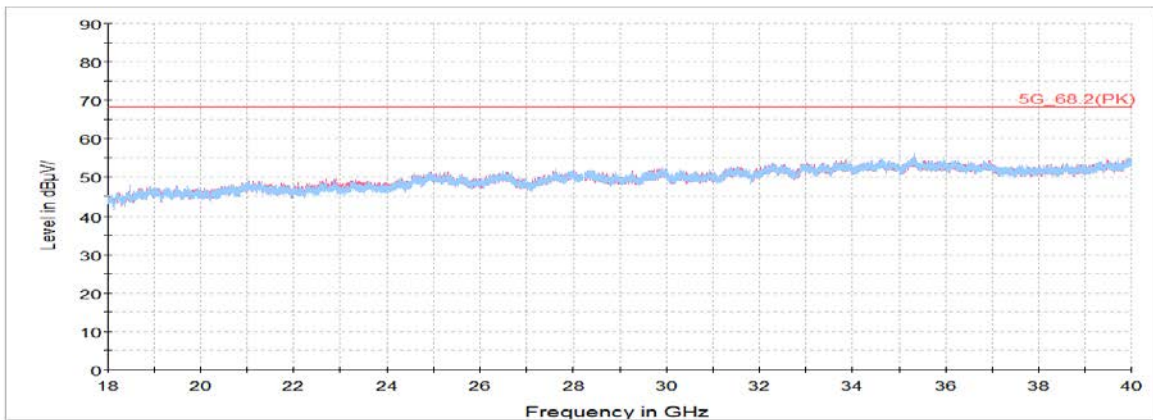
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



802.11a UNII-2C ANT1**Lowest Channel (5 500 MHz)**

| Frequency (MHz) | Pol. (V/H) | Reading (dB(μ V)) | Ant. Factor (dB) | Amp.+Cable (dB) | DCF (dB) | Result (dB(μ V/m)) | Limit (dB(μ V/m)) | Margin (dB) |
|--|---------------|---------------------------|---------------------|--------------------|-------------|----------------------------|---------------------------|----------------|
| Peak data | | | | | | | | |
| 1 295.97 | H | 68.68 | 28.86 | -48.47 | - | 49.07 | 68.20 | 19.13 |
| 5 447.44 ¹⁾ | H | 41.41 | 34.71 | -25.45 | - | 50.67 | 74.00 | 23.33 |
| 11 068.02 ¹⁾ | V | 59.02 | 38.21 | -49.18 | - | 48.05 | 74.00 | 25.95 |
| 14 924.11 | V | 54.81 | 41.06 | -41.96 | - | 53.91 | 68.20 | 14.29 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 600 MHz)

| Frequency (MHz) | Pol. (V/H) | Reading (dB(μ V)) | Ant. Factor (dB) | Amp.+Cable (dB) | DCF (dB) | Result (dB(μ V/m)) | Limit (dB(μ V/m)) | Margin (dB) |
|--|---------------|---------------------------|---------------------|--------------------|-------------|----------------------------|---------------------------|----------------|
| Peak data | | | | | | | | |
| 1 391.88 ¹⁾ | H | 69.07 | 28.88 | -48.56 | - | 49.39 | 74.00 | 24.61 |
| 11 090.30 ¹⁾ | V | 58.94 | 38.22 | -49.19 | - | 47.97 | 74.00 | 26.03 |
| 14 890.33 | H | 55.26 | 41.00 | -42.31 | - | 53.95 | 68.20 | 14.25 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

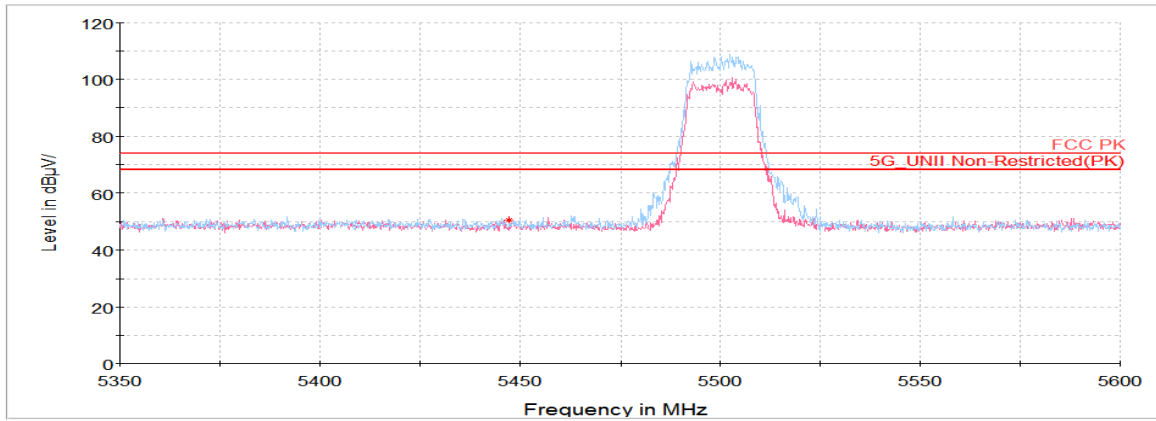
Highest Channel (5 700 MHz)

| Frequency (MHz) | Pol. (V/H) | Reading (dB(μ V)) | Ant. Factor (dB) | Amp.+Cable (dB) | DCF (dB) | Result (dB(μ V/m)) | Limit (dB(μ V/m)) | Margin (dB) |
|--|---------------|---------------------------|---------------------|--------------------|-------------|----------------------------|---------------------------|----------------|
| Peak data | | | | | | | | |
| 1 494.66 ¹⁾ | H | 69.64 | 28.90 | -47.81 | - | 50.73 | 74.00 | 23.27 |
| 5 730.52 | H | 43.93 | 35.03 | -25.44 | - | 53.52 | 68.20 | 14.68 |
| 11 349.05 ¹⁾ | H | 60.00 | 38.27 | -49.26 | - | 49.01 | 74.00 | 24.99 |
| 14 892.13 | V | 54.97 | 41.01 | -42.29 | - | 53.69 | 68.20 | 14.51 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11a UNII-2C ANT1

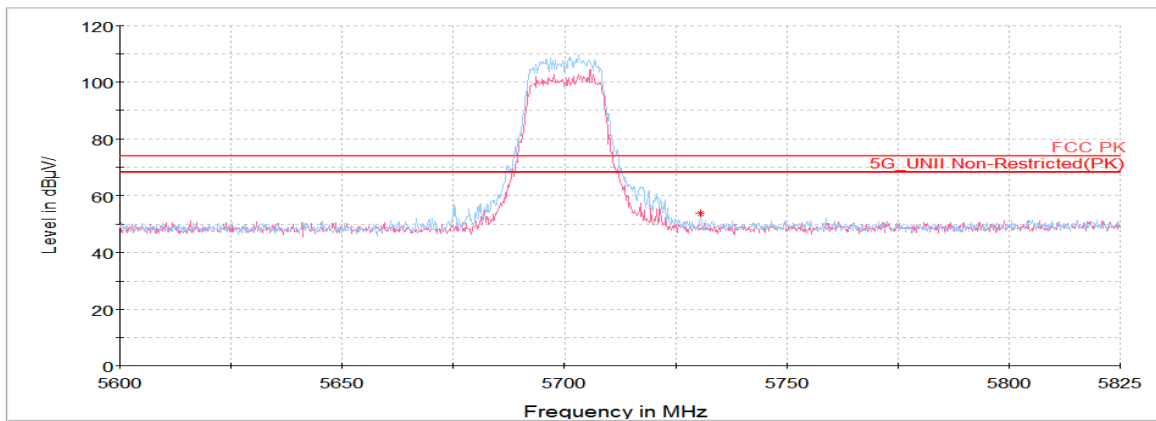
Lowest Channel (5 500 MHz)

Horizontal/Vertical for Band-edge



Highest Channel (5 700 MHz)

Horizontal/Vertical for Band-edge



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**802.11a UNII-2C ANT2****Lowest Channel (5 500 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 456.89 ¹⁾ | V | 41.57 | 34.72 | -25.52 | - | 50.77 | 74.00 | 23.23 |
| 11 007.28 ¹⁾ | H | 56.86 | 38.20 | -49.17 | - | 45.89 | 74.00 | 28.11 |
| 16 504.64 | H | 55.04 | 41.00 | -47.35 | - | 48.69 | 68.20 | 19.51 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 600 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 203.86 ¹⁾ | V | 57.71 | 38.24 | -49.22 | - | 46.73 | 74.00 | 27.27 |
| 16 801.13 | V | 55.94 | 41.24 | -46.94 | - | 50.24 | 68.20 | 17.96 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

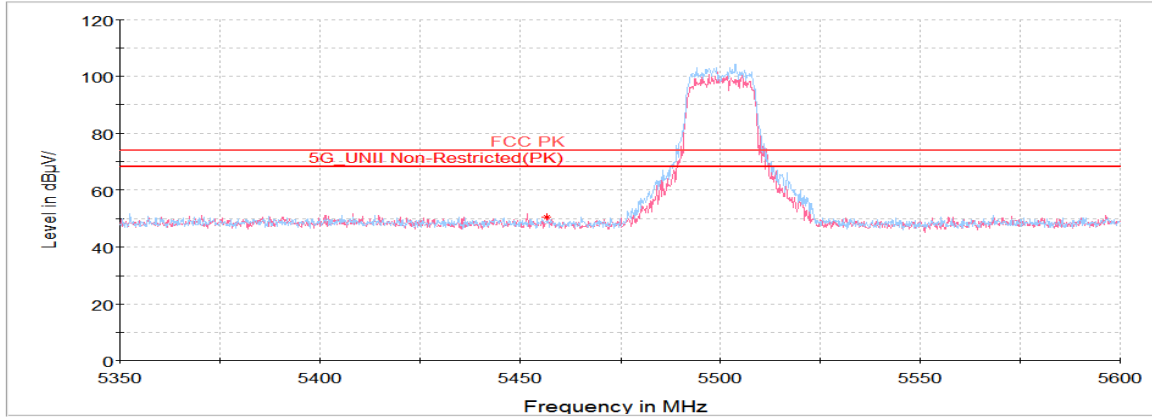
Highest Channel (5 700 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 725.70 | H | 41.10 | 35.03 | -25.53 | - | 50.60 | 68.20 | 17.60 |
| 11 398.64 ¹⁾ | V | 57.47 | 38.28 | -49.28 | - | 46.47 | 74.00 | 27.53 |
| 17 102.28 | H | 53.02 | 40.64 | -46.69 | - | 46.97 | 68.20 | 21.23 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11a UNII-2C ANT2

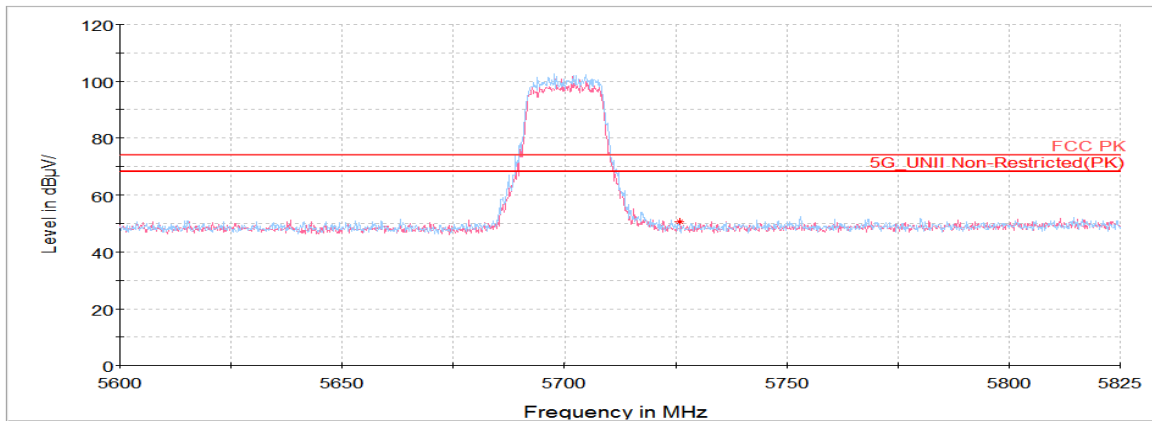
Lowest Channel (5 500 MHz)

Horizontal/Vertical for Band-edge



Highest Channel (5 700 MHz)

Horizontal/Vertical for Band-edge



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Report No.:
KR21-SRF0159

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**802.11a UNII-2C 2TX MIMO****Lowest Channel (5 500 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 295.11 | H | 70.03 | 28.86 | -48.47 | - | 50.42 | 68.20 | 17.78 |
| 5 455.00 ¹⁾ | H | 41.18 | 34.72 | -25.51 | - | 50.39 | 74.00 | 23.61 |
| 11 010.88 ¹⁾ | V | 56.86 | 38.20 | -49.17 | - | 45.89 | 74.00 | 28.11 |
| 16 506.08 | H | 56.47 | 41.00 | -47.35 | - | 50.12 | 68.20 | 18.08 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 600 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 391.53 ¹⁾ | H | 69.95 | 28.88 | -48.56 | - | 50.27 | 74.00 | 23.73 |
| 11 202.42 ¹⁾ | V | 57.43 | 38.24 | -49.22 | - | 46.45 | 74.00 | 27.55 |
| 16 798.61 | V | 55.40 | 41.24 | -46.94 | - | 49.70 | 68.20 | 18.50 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

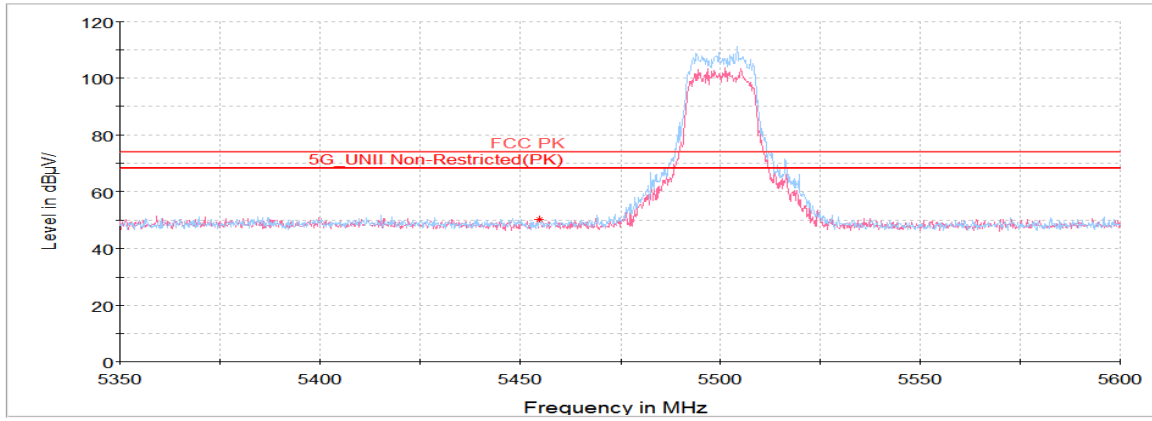
Highest Channel (5 700 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 495.95 ¹⁾ | H | 73.03 | 28.90 | -47.81 | - | 54.12 | 74.00 | 19.88 |
| 5 725.02 | H | 49.28 | 35.03 | -25.55 | - | 58.76 | 68.20 | 9.44 |
| 11 345.81 ¹⁾ | H | 58.96 | 38.27 | -49.26 | - | 47.97 | 74.00 | 26.03 |
| 17 077.84 | H | 55.10 | 40.65 | -46.68 | - | 49.07 | 68.20 | 19.13 |
| Average Data | | | | | | | | |
| 1 495.95 ¹⁾ | H | 65.13 | 28.90 | -47.81 | 0.28 | 46.50 | 54.00 | 7.50 |

802.11a UNII-2C 2TX MIMO

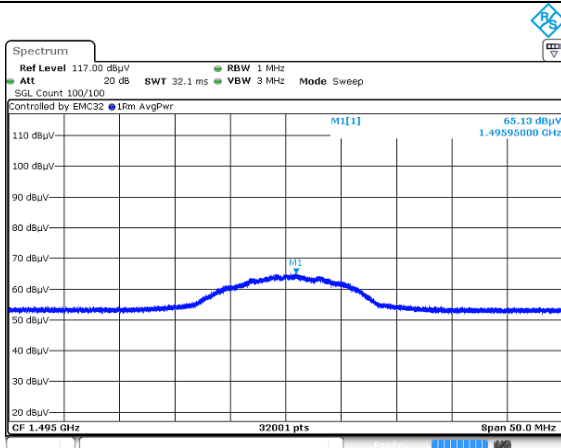
Lowest Channel (5 500 MHz)

Horizontal/Vertical for Band-edge



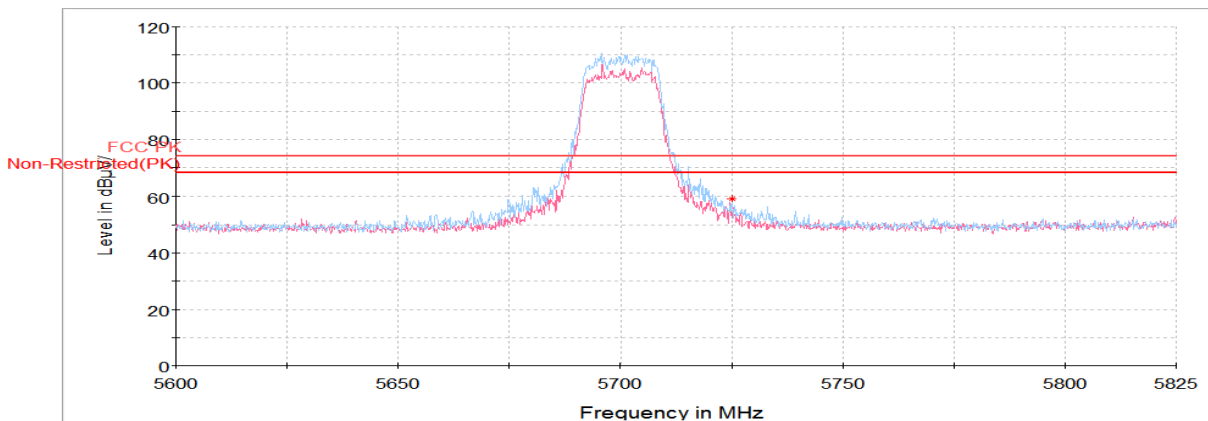
Highest Channel (5 700 MHz)

Average data



Blank

Horizontal/Vertical for Band-edge



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**802.11n HT20 UNII-2C ANT1****Lowest Channel (5 500 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 293.91 | H | 70.06 | 28.86 | -48.47 | - | 50.45 | 68.20 | 17.75 |
| 5 447.44 ¹⁾ | H | 41.38 | 34.71 | -25.45 | - | 50.64 | 74.00 | 23.36 |
| 10 958.41 ¹⁾ | H | 58.49 | 38.16 | -49.22 | - | 47.43 | 74.00 | 26.57 |
| 15 665.14 ¹⁾ | H | 55.50 | 39.93 | -45.63 | - | 49.80 | 74.00 | 24.20 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 600 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 393.25 ¹⁾ | H | 69.10 | 28.88 | -48.56 | - | 49.42 | 74.00 | 24.58 |
| 11 125.16 ¹⁾ | H | 57.77 | 38.23 | -49.20 | - | 46.80 | 74.00 | 27.20 |
| 16 866.53 | H | 56.35 | 41.29 | -46.85 | - | 50.79 | 68.20 | 17.41 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

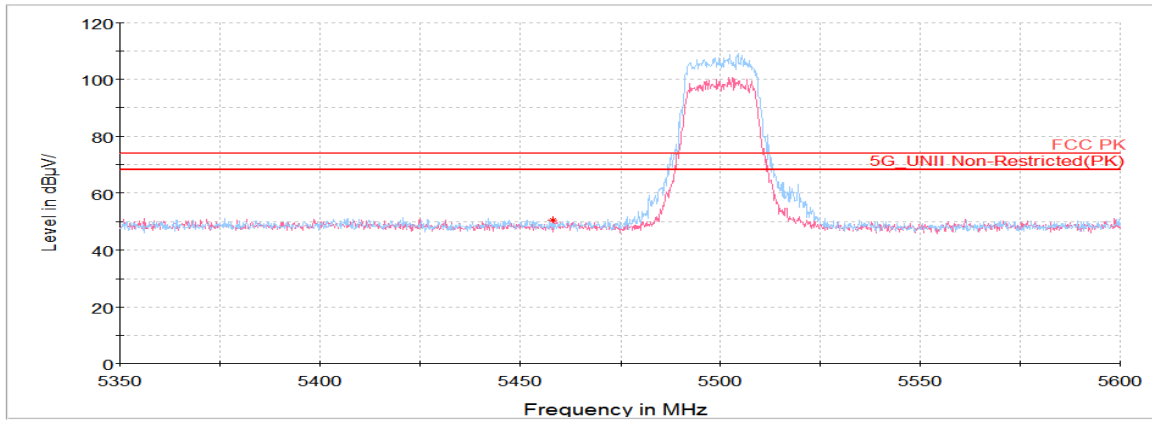
Highest Channel (5 700 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 495.28 ¹⁾ | H | 70.10 | 28.90 | -47.81 | - | 51.19 | 74.00 | 22.81 |
| 5 725.19 | H | 42.64 | 35.03 | -25.54 | - | 52.13 | 68.20 | 16.07 |
| 11 384.98 ¹⁾ | V | 58.83 | 38.28 | -49.27 | - | 47.84 | 74.00 | 26.16 |
| 16 837.78 | V | 56.90 | 41.27 | -46.89 | - | 51.28 | 68.20 | 16.92 |
| Average Data | | | | | | | | |
| 1 495.28 ¹⁾ | H | 64.50 | 28.90 | -47.81 | 0.33 | 45.92 | 54.00 | 8.08 |

802.11n HT20 UNII-2C ANT1

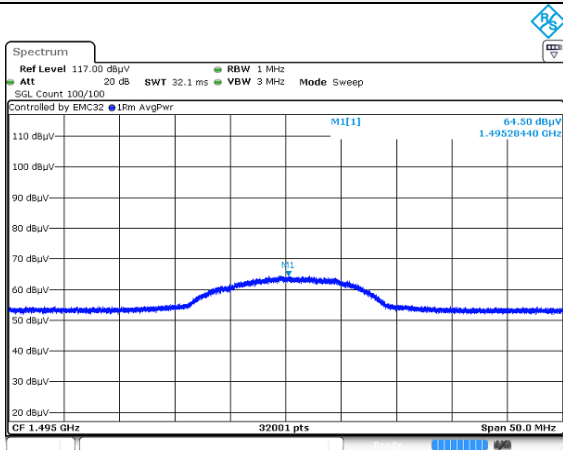
Lowest Channel (5 500 MHz)

Horizontal/Vertical for Band-edge



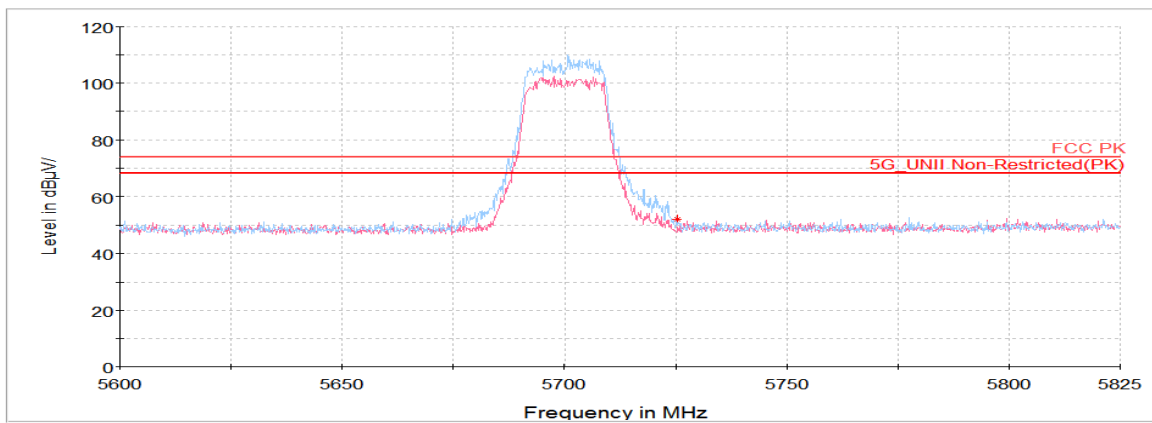
Highest Channel (5 700 MHz)

Average data



Blank

Horizontal/Vertical for Band-edge



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**802.11n HT20 UNII-2C ANT2****Lowest Channel (5 500 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 456.38 ¹⁾ | H | 41.44 | 34.72 | -25.52 | - | 50.64 | 74.00 | 23.36 |
| 11 066.58 ¹⁾ | H | 57.79 | 38.21 | -49.18 | - | 46.82 | 74.00 | 27.18 |
| 16 499.61 | H | 55.01 | 41.20 | -47.36 | - | 48.85 | 68.20 | 19.35 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 600 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 200.27 ¹⁾ | H | 57.52 | 38.24 | -49.22 | - | 46.54 | 74.00 | 27.46 |
| 16 798.25 | H | 56.01 | 41.24 | -46.94 | - | 50.31 | 68.20 | 17.89 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

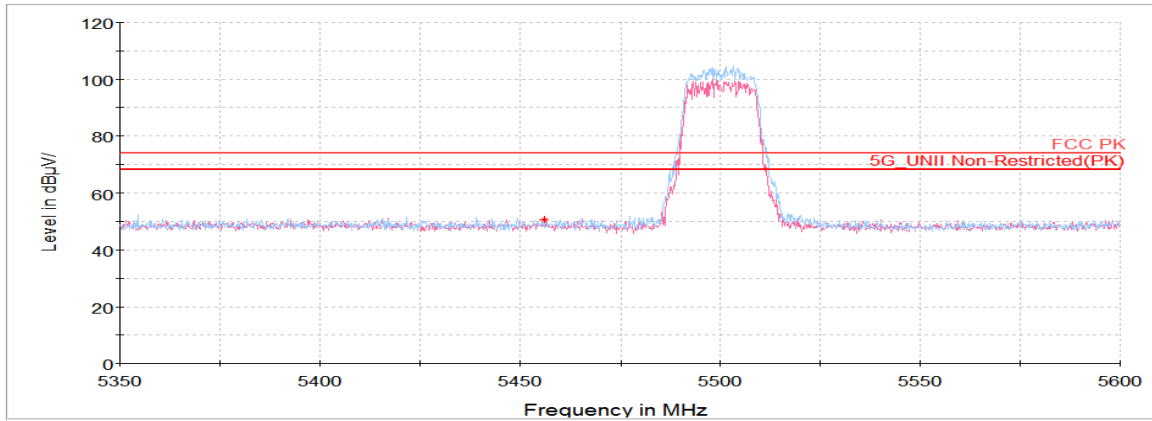
Highest Channel (5 700 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 733.61 | H | 41.53 | 35.03 | -25.38 | - | 51.18 | 68.20 | 17.02 |
| 11 413.73 ¹⁾ | H | 57.26 | 38.28 | -49.28 | - | 46.26 | 74.00 | 27.74 |
| 17 166.25 | V | 55.48 | 40.60 | -46.71 | - | 49.37 | 68.20 | 18.83 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11n HT20 UNII-2C ANT2

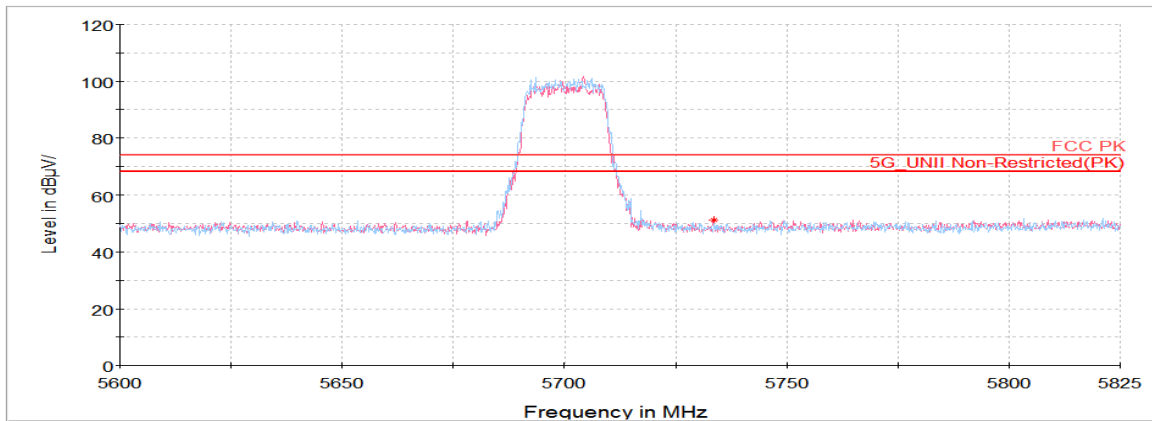
Lowest Channel (5 500 MHz)

Horizontal/Vertical for Band-edge



Highest Channel (5 700 MHz)

Horizontal/Vertical for Band-edge



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**802.11n HT20 UNII-2C 2TX MIMO****Lowest Channel (5 500 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ N/m)) | (dB(μ N/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 294.42 | H | 69.02 | 28.86 | -48.47 | - | 49.41 | 68.20 | 18.79 |
| 5 459.11 ¹⁾ | H | 43.68 | 34.73 | -25.54 | - | 52.87 | 74.00 | 21.13 |
| 11 008.00 ¹⁾ | V | 56.50 | 38.20 | -49.17 | - | 45.53 | 74.00 | 28.47 |
| 16 508.95 | V | 55.85 | 41.01 | -47.35 | - | 49.51 | 68.20 | 18.69 |
| Average Data | | | | | | | | |
| 5 459.11 ¹⁾ | H | 36.96 | 34.73 | -25.54 | 0.61 | 46.76 | 54.00 | 7.24 |

Middle Channel (5 600 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ N/m)) | (dB(μ N/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 394.97 ¹⁾ | H | 69.45 | 28.88 | -48.56 | - | 49.77 | 74.00 | 24.23 |
| 11 198.83 ¹⁾ | H | 57.05 | 38.24 | -49.22 | - | 46.07 | 74.00 | 27.93 |
| 16 805.08 | H | 55.43 | 41.24 | -46.93 | - | 49.74 | 68.20 | 18.46 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

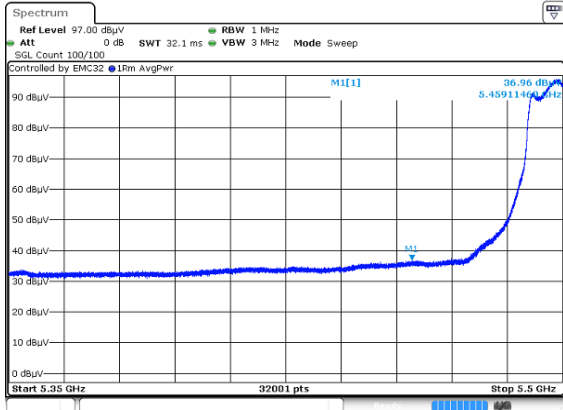
Highest Channel (5 700 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ N/m)) | (dB(μ N/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 495.29 ¹⁾ | H | 69.94 | 28.90 | -47.81 | - | 51.03 | 74.00 | 22.97 |
| 5 727.42 | H | 47.89 | 35.03 | -25.50 | - | 57.42 | 68.20 | 10.78 |
| 11 395.05 ¹⁾ | V | 57.85 | 38.28 | -49.28 | - | 46.85 | 74.00 | 27.15 |
| 17 087.19 | V | 53.84 | 40.65 | -46.69 | - | 47.80 | 68.20 | 20.40 |
| Average Data | | | | | | | | |
| 1 495.29 ¹⁾ | H | 64.57 | 28.90 | -47.81 | 0.61 | 46.27 | 54.00 | 7.73 |

802.11n HT20 UNII-2C 2TX MIMO

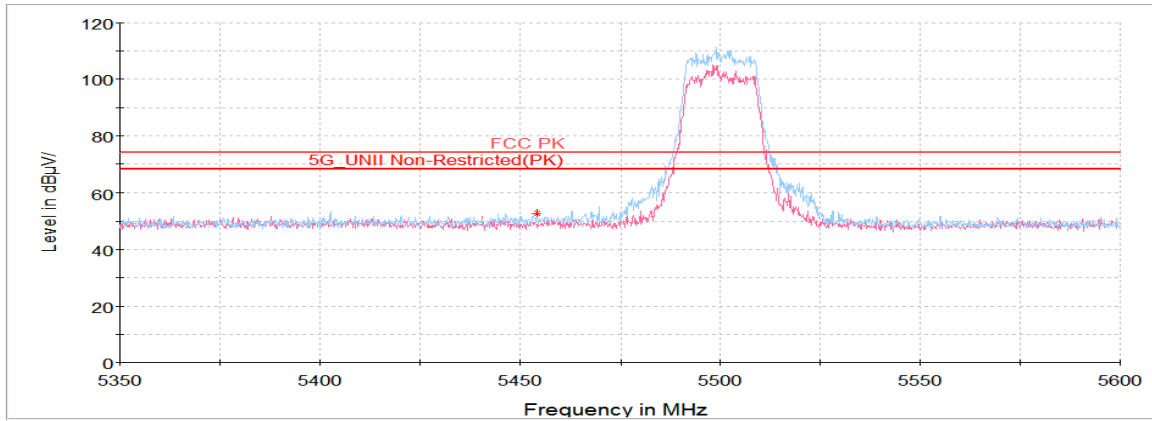
Lowest Channel (5 500 MHz)

Average data



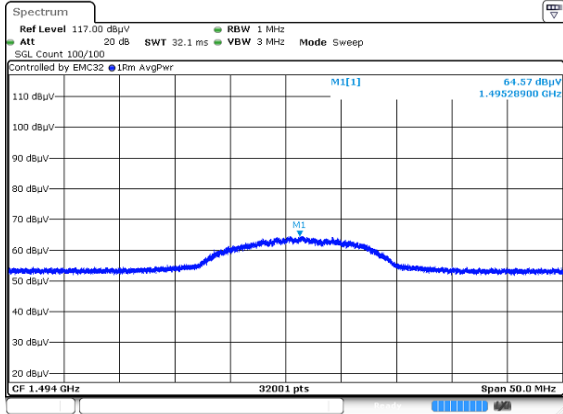
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Horizontal/Vertical for Band-edge



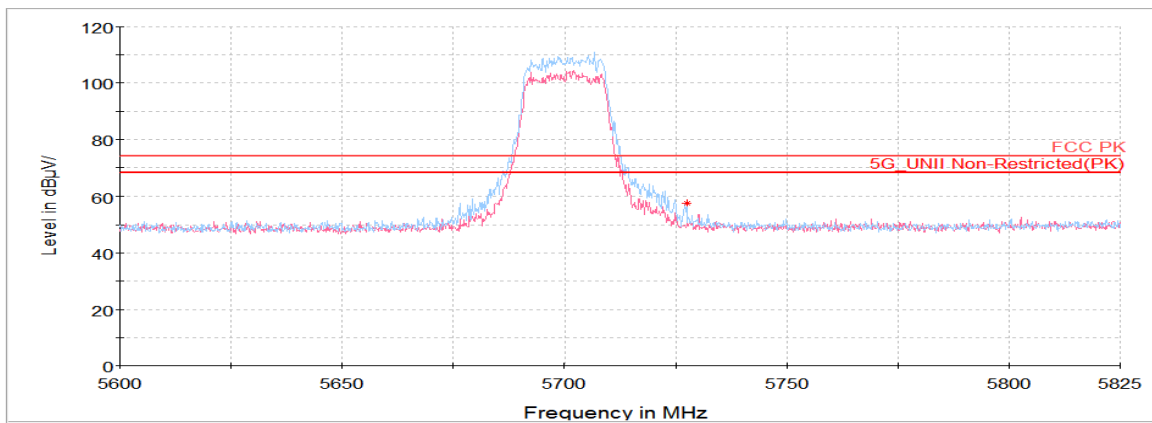
Highest Channel (5 700 MHz)

Average data



Blank

Horizontal/Vertical for Band-edge



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**802.11n HT40 UNII-2C ANT1****Lowest Channel (5 510 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 456.72 ¹⁾ | H | 41.78 | 34.72 | -25.52 | - | 50.98 | 74.00 | 23.02 |
| 11 076.64 ¹⁾ | H | 58.07 | 38.22 | -49.19 | - | 47.10 | 74.00 | 26.90 |
| 16 503.56 | H | 55.78 | 41.00 | -47.35 | - | 49.43 | 68.20 | 18.77 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 590 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 250.22 ¹⁾ | V | 58.41 | 38.25 | -49.23 | - | 47.43 | 74.00 | 26.57 |
| 16 877.67 | H | 56.47 | 41.30 | -46.83 | - | 50.94 | 68.20 | 17.26 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

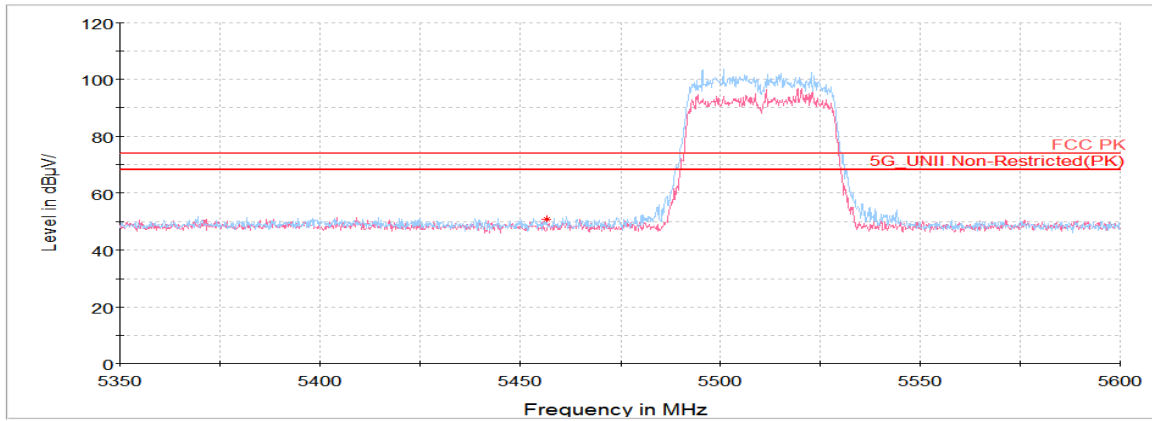
Highest Channel (5 670 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 795.66 | H | 40.76 | 35.10 | -24.18 | - | 51.68 | 68.20 | 16.52 |
| 11 358.39 ¹⁾ | V | 58.41 | 38.27 | -49.27 | - | 47.41 | 74.00 | 26.59 |
| 16 986.20 | H | 55.85 | 41.39 | -46.68 | - | 50.56 | 68.20 | 17.64 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11n HT40 UNII-2C ANT1

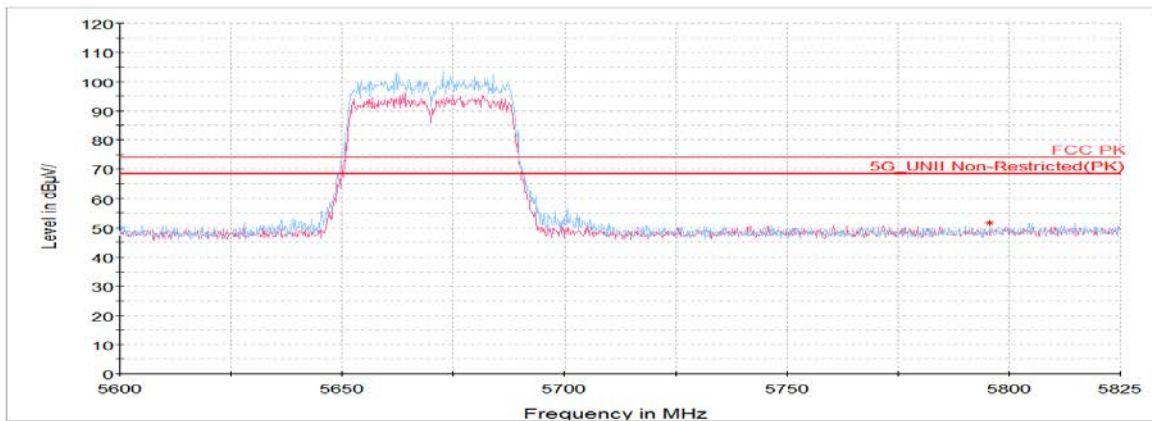
Lowest Channel (5 510 MHz)

Horizontal/Vertical for Band-edge



Highest Channel (5 670 MHz)

Horizontal/Vertical for Band-edge



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**802.11n HT40 UNII-2C ANT2****Lowest Channel (5 510 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 454.14 ¹⁾ | H | 41.12 | 34.72 | -25.50 | - | 50.34 | 74.00 | 23.66 |
| 11 066.58 ¹⁾ | H | 58.21 | 38.21 | -49.18 | - | 47.24 | 74.00 | 26.76 |
| 16 631.86 | V | 56.80 | 41.11 | -47.18 | - | 50.73 | 68.20 | 17.47 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 590 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 193.08 ¹⁾ | H | 57.54 | 38.24 | -49.22 | - | 46.56 | 74.00 | 27.44 |
| 16 763.03 | V | 54.98 | 41.21 | -46.99 | - | 49.20 | 68.20 | 19.00 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

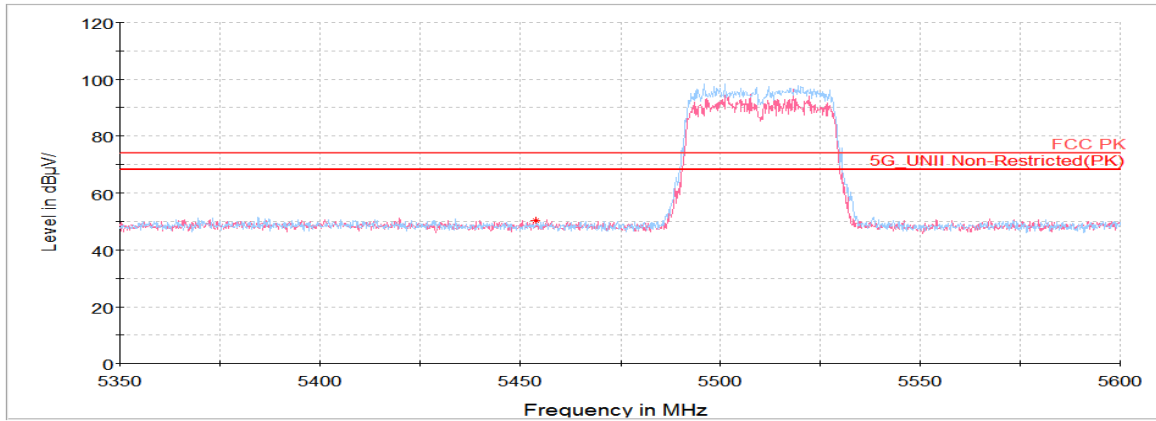
Highest Channel (5 670 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 732.06 | H | 41.71 | 35.03 | -25.41 | - | 51.33 | 68.20 | 16.87 |
| 11 333.95 ¹⁾ | H | 58.69 | 38.27 | -49.26 | - | 47.70 | 74.00 | 26.30 |
| 17 013.88 | V | 56.08 | 40.69 | -46.67 | - | 50.10 | 68.20 | 18.10 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11n HT40 UNII-2C ANT2

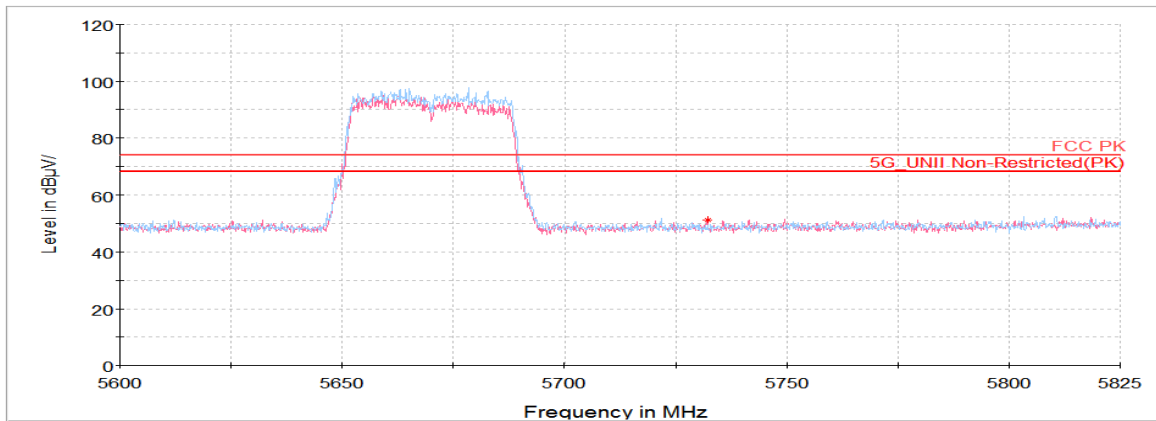
Lowest Channel (5 510 MHz)

Horizontal/Vertical for Band-edge



Highest Channel (5 670 MHz)

Horizontal/Vertical for Band-edge



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**802.11n HT40 UNII-2C 2TX MIMO****Lowest Channel (5 510 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 448.47 ¹⁾ | H | 41.58 | 34.71 | -25.46 | - | 50.83 | 74.00 | 23.17 |
| 11 010.88 ¹⁾ | V | 56.88 | 38.20 | -49.17 | - | 45.91 | 74.00 | 28.09 |
| 16 533.75 | V | 53.98 | 41.03 | -47.31 | - | 47.70 | 68.20 | 20.50 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 590 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 806.17 ¹⁾ | H | 57.93 | 38.54 | -49.55 | - | 46.92 | 74.00 | 27.08 |
| 16 770.22 | H | 53.70 | 41.22 | -46.98 | - | 47.94 | 68.20 | 20.26 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

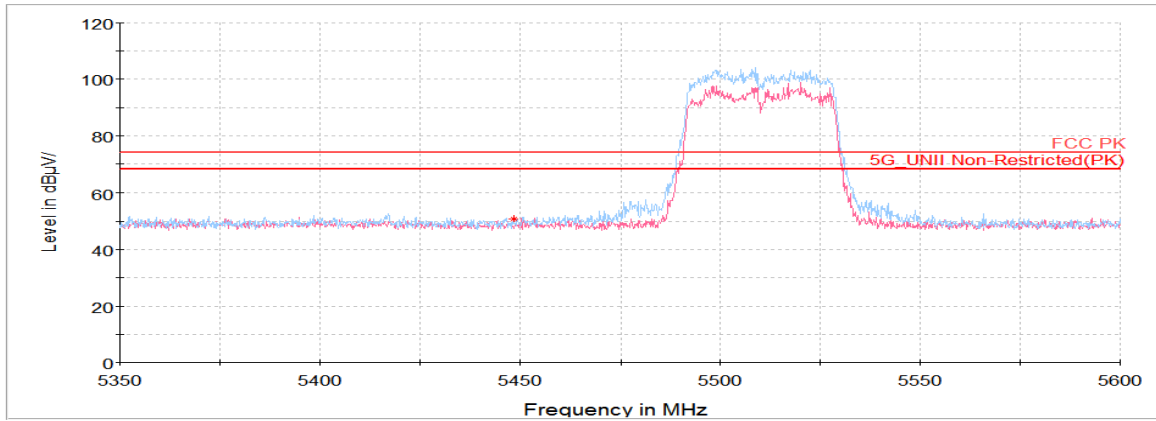
Highest Channel (5 670 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 730.34 | H | 42.01 | 35.03 | -25.44 | - | 51.60 | 68.20 | 16.60 |
| 11 335.03 ¹⁾ | V | 57.73 | 38.27 | -49.26 | - | 46.74 | 74.00 | 27.26 |
| 17 009.20 | H | 54.62 | 40.69 | -46.67 | - | 48.64 | 68.20 | 19.56 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11 HT40 UNII-2C 2TX MIMO

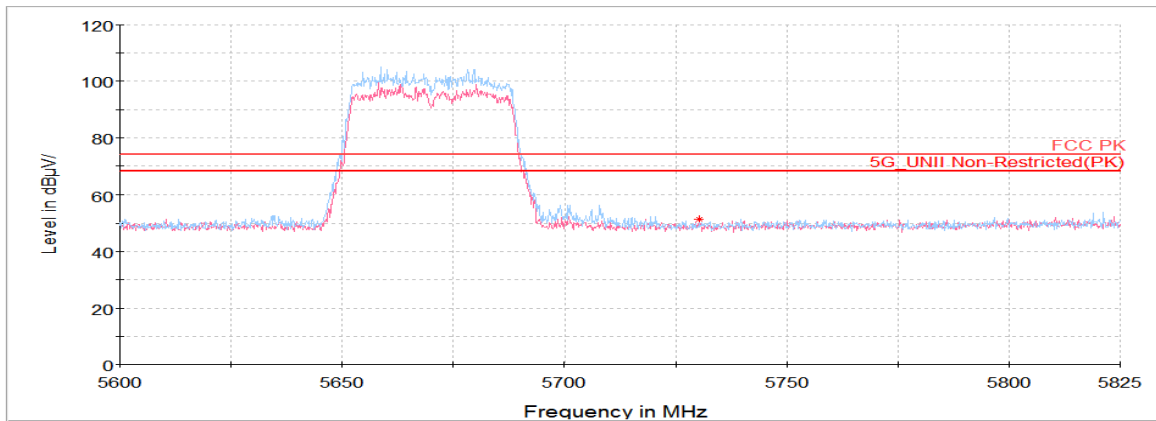
Lowest Channel (5 510 MHz)

Horizontal/Vertical for Band-edge



Highest Channel (5 670 MHz)

Horizontal/Vertical for Band-edge



KCTL Inc.

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Report No.:
KR21-SRF0159

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**802.11ac VHT20 UNII-2C ANT1****Lowest Channel (5 500 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 293.91 | H | 70.07 | 28.86 | -48.47 | - | 50.46 | 68.20 | 17.74 |
| 5 459.25 ¹⁾ | H | 43.28 | 34.73 | -25.54 | - | 52.47 | 74.00 | 21.53 |
| 10 959.48 ¹⁾ | V | 59.04 | 38.16 | -49.21 | - | 47.99 | 74.00 | 26.01 |
| 15 057.44 | V | 54.45 | 40.19 | -41.69 | - | 52.95 | 68.20 | 15.25 |
| Average Data | | | | | | | | |
| 5 459.25 ¹⁾ | H | 36.69 | 34.73 | -25.54 | 0.32 | 46.20 | 54.00 | 7.80 |

Middle Channel (5 600 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 396.34 ¹⁾ | H | 68.96 | 28.88 | -48.56 | - | 49.28 | 74.00 | 24.72 |
| 11 074.48 ¹⁾ | H | 57.70 | 38.21 | -49.18 | - | 46.73 | 74.00 | 27.27 |
| 14 924.11 | H | 54.12 | 41.06 | -41.96 | - | 53.22 | 68.20 | 14.98 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

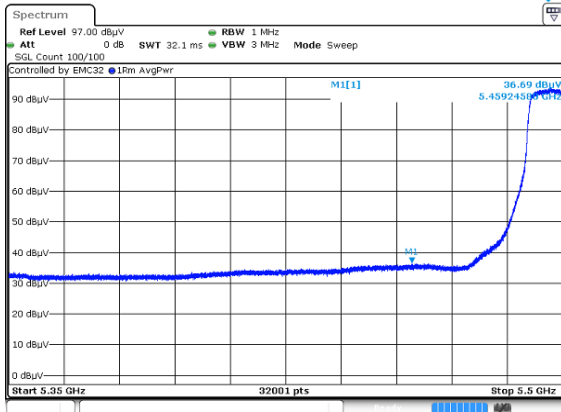
Highest Channel (5 700 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 494.43 ¹⁾ | H | 72.34 | 28.90 | -47.84 | - | 53.40 | 74.00 | 20.60 |
| 5 726.91 | H | 43.79 | 35.03 | -25.51 | - | 53.31 | 68.20 | 14.89 |
| 11 330.00 ¹⁾ | H | 58.86 | 38.27 | -49.26 | - | 47.87 | 74.00 | 26.13 |
| 14 917.28 | V | 53.83 | 41.05 | -42.03 | - | 52.85 | 68.20 | 15.35 |
| Average Data | | | | | | | | |
| 1 494.43 ¹⁾ | H | 64.45 | 28.90 | -47.84 | 0.32 | 45.83 | 54.00 | 8.17 |

802.11ac VHT20 UNII-2C ANT1

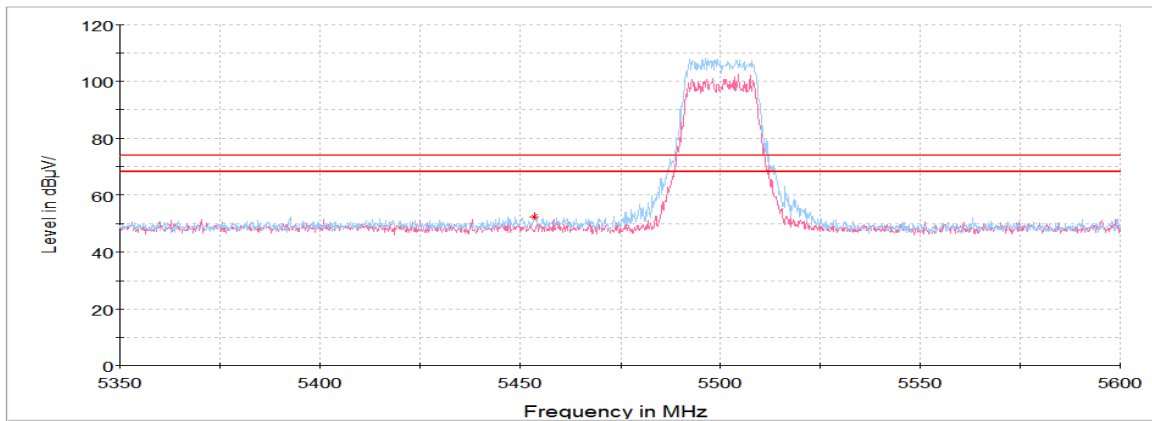
Lowest Channel (5 500 MHz)

Average data



Blank

Horizontal/Vertical for Band-edge



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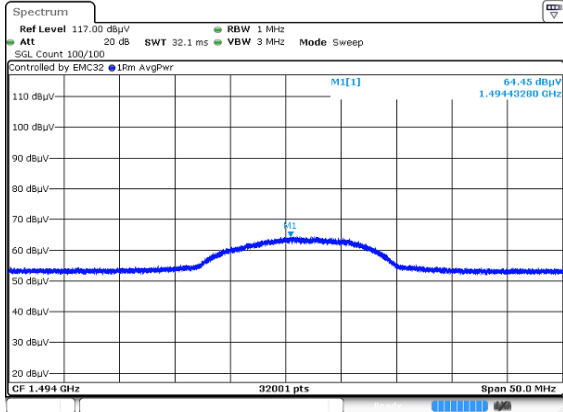
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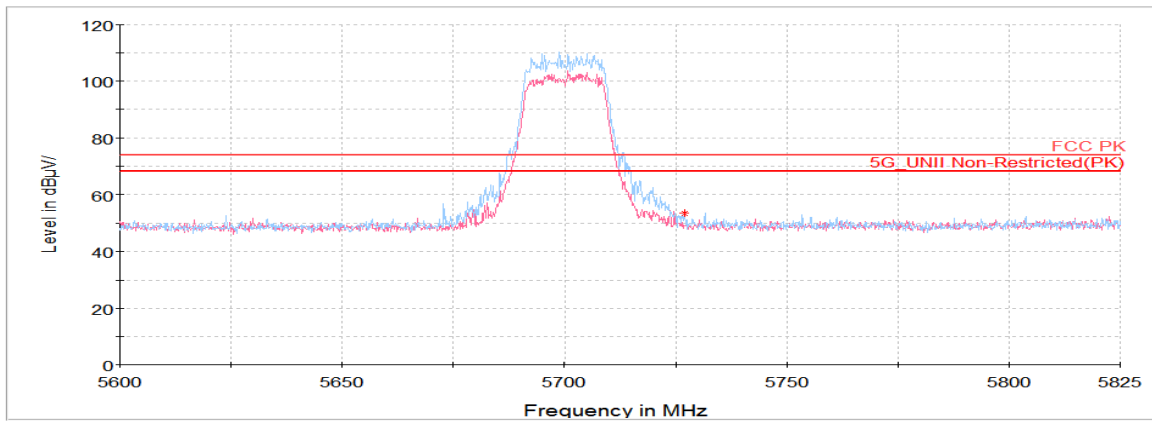
Highest Channel (5 700 MHz)

Average data



Blank

Horizontal/Vertical for Band-edge



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**802.11ac VHT20 UNII-2C ANT2****Lowest Channel (5 500 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 290.81 | H | 68.11 | 28.86 | -48.46 | - | 48.51 | 68.20 | 19.69 |
| 5 456.03 | H | 41.71 | 34.72 | -25.52 | - | 50.91 | 74.00 | 23.09 |
| 10 999.02 | V | 55.78 | 38.20 | -49.16 | - | 44.82 | 74.00 | 29.18 |
| 16 499.25 | V | 54.37 | 41.20 | -47.36 | - | 48.21 | 68.20 | 19.99 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 600 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 202.06 | H | 57.12 | 38.24 | -49.22 | - | 46.14 | 74.00 | 27.86 |
| 16 801.84 | V | 56.00 | 41.24 | -46.94 | - | 50.30 | 68.20 | 17.90 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

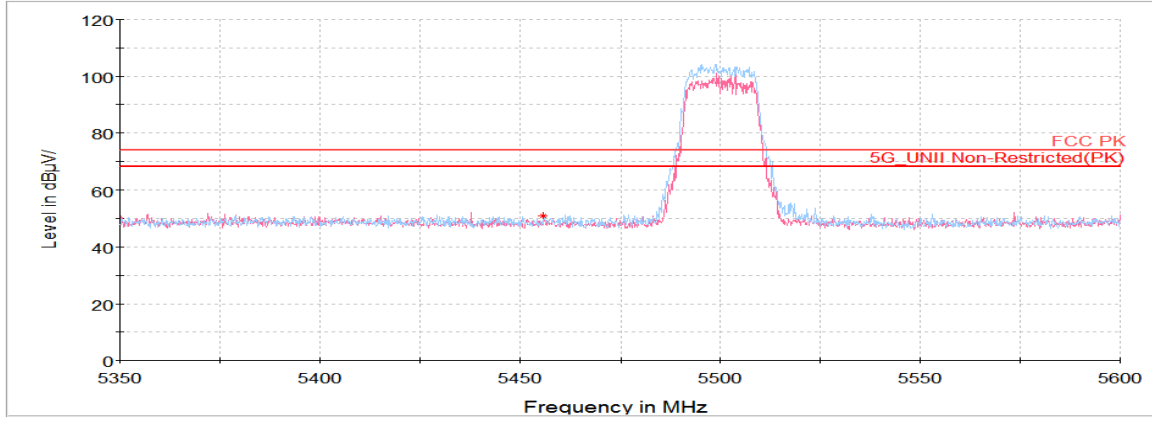
Highest Channel (5 700 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 734.30 | H | 41.92 | 35.03 | -25.37 | - | 51.58 | 68.20 | 16.62 |
| 11 378.88 | V | 58.79 | 38.28 | -49.27 | - | 47.80 | 74.00 | 26.20 |
| 17 105.52 | V | 54.61 | 40.64 | -46.69 | - | 48.56 | 68.20 | 19.64 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT20 UNII-2C ANT2

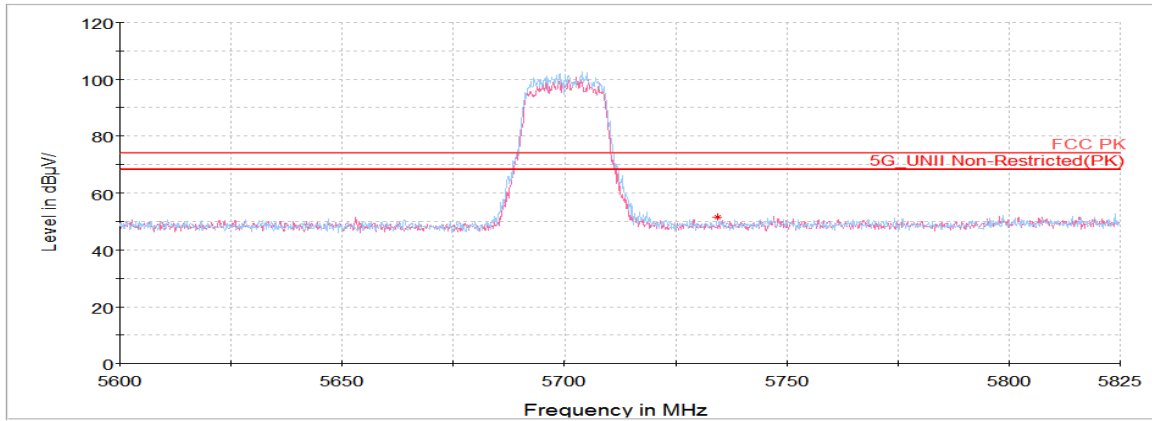
Lowest Channel (5 500 MHz)

Horizontal/Vertical for Band-edge



Highest Channel (5 700 MHz)

Horizontal/Vertical for Band-edge



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**802.11ac VHT20 UNII-2C 2TX MIMO****Lowest Channel (5 500 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ N/m)) | (dB(μ N/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 289.44 | H | 68.87 | 28.86 | -48.46 | - | 49.27 | 68.20 | 18.93 |
| 5 459.77 ¹⁾ | H | 43.80 | 34.73 | -25.55 | - | 52.98 | 74.00 | 21.02 |
| 11 007.64 ¹⁾ | V | 57.31 | 38.20 | -49.17 | - | 46.34 | 74.00 | 27.66 |
| 16 506.44 | H | 55.16 | 41.01 | -47.35 | - | 48.82 | 68.20 | 19.38 |
| Average Data | | | | | | | | |
| 5 459.77 ¹⁾ | H | 36.64 | 34.73 | -25.55 | 0.61 | 46.43 | 54.00 | 7.57 |

Middle Channel (5 600 MHz)

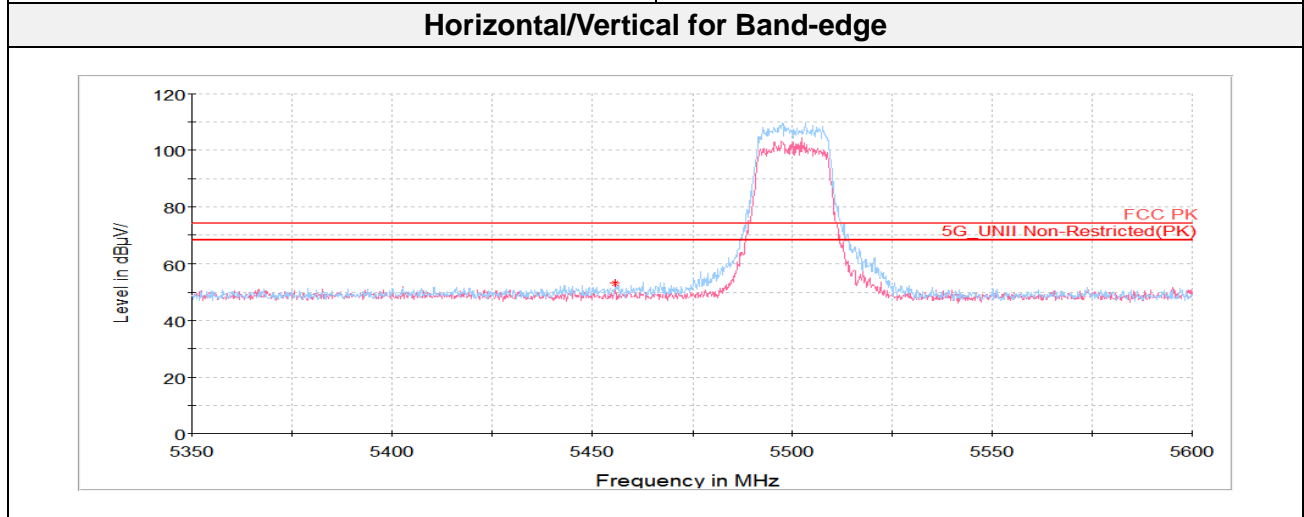
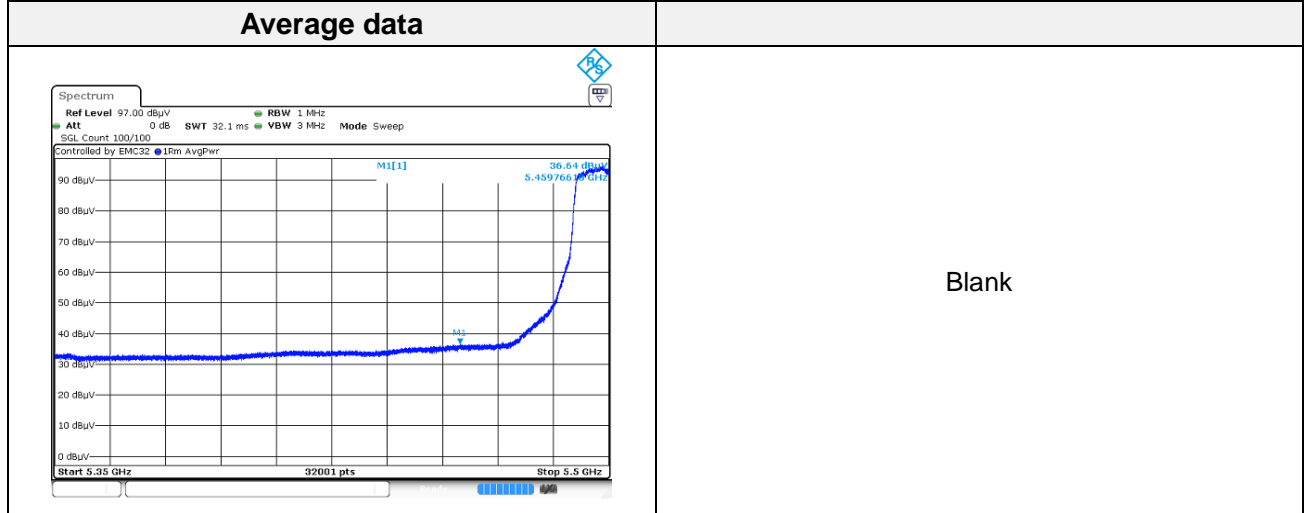
| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ N/m)) | (dB(μ N/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 395.14 ¹⁾ | H | 70.16 | 28.88 | -48.56 | - | 50.48 | 74.00 | 23.52 |
| 11 196.67 ¹⁾ | H | 56.43 | 38.24 | -49.22 | - | 45.45 | 74.00 | 28.55 |
| 16 798.97 | H | 55.37 | 41.24 | -46.94 | - | 49.67 | 68.20 | 18.53 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Highest Channel (5 700 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ N/m)) | (dB(μ N/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 494.46 ¹⁾ | H | 70.45 | 28.90 | -47.81 | - | 51.54 | 74.00 | 22.46 |
| 5 729.66 | H | 45.07 | 35.03 | -25.46 | - | 54.64 | 68.20 | 13.56 |
| 11 395.05 ¹⁾ | H | 56.69 | 38.28 | -49.28 | - | 45.69 | 74.00 | 28.31 |
| 17 096.53 | H | 52.99 | 40.64 | -46.69 | - | 46.94 | 68.20 | 21.26 |
| Average Data | | | | | | | | |
| 1 494.46 ¹⁾ | H | 64.33 | 28.90 | -47.81 | 0.61 | 46.03 | 54.00 | 7.97 |

802.11ac VHT20 UNII-2C 2TX MIMO

Lowest Channel (5 500 MHz)



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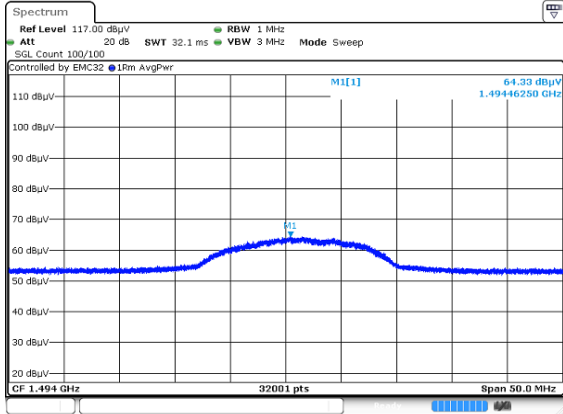
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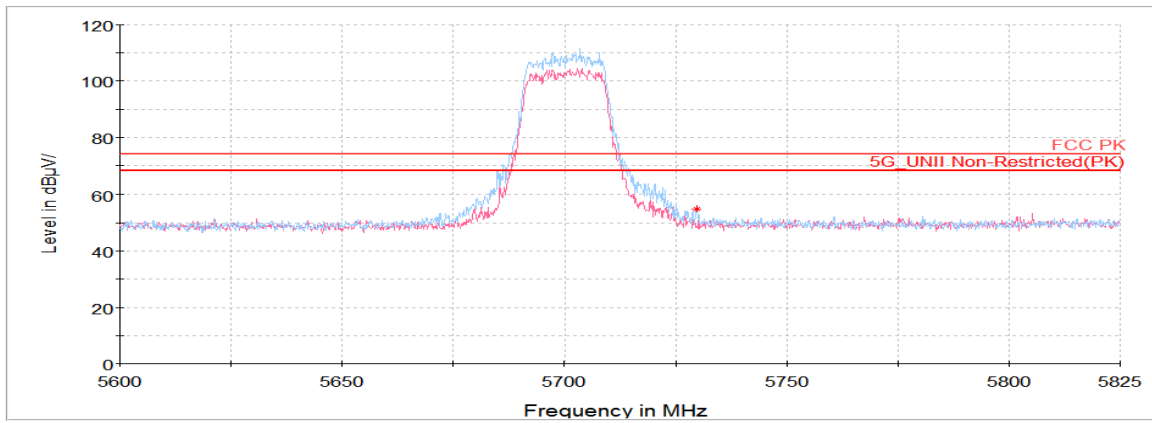
Highest Channel (5 700 MHz)

Average data



Blank

Horizontal/Vertical for Band-edge



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**802.11ac VHT40 UNII-2C ANT1****Lowest Channel (5 510 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 447.44 ¹⁾ | H | 41.73 | 34.71 | -25.45 | - | 50.99 | 74.00 | 23.01 |
| 10 952.30 ¹⁾ | H | 58.22 | 38.15 | -49.22 | - | 47.15 | 74.00 | 26.85 |
| 14 922.67 | V | 54.57 | 41.06 | -41.98 | - | 53.65 | 68.20 | 14.55 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 590 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 210.69 ¹⁾ | V | 59.07 | 38.24 | -49.22 | - | 48.09 | 74.00 | 25.91 |
| 15 113.86 | H | 55.34 | 40.18 | -42.18 | - | 53.34 | 68.20 | 14.86 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

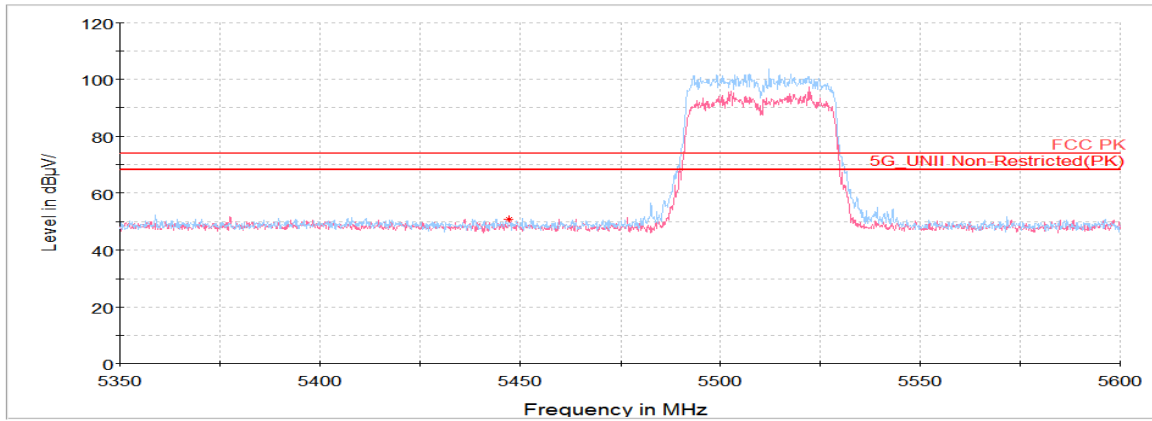
Highest Channel (5 670 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 746.50 | H | 42.11 | 35.05 | -25.13 | - | 52.03 | 68.20 | 16.17 |
| 11 366.66 ¹⁾ | H | 58.43 | 38.27 | -49.27 | - | 47.43 | 74.00 | 26.57 |
| 15 039.47 | V | 55.50 | 40.19 | -41.54 | - | 54.15 | 68.20 | 14.05 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT40 UNII-2C ANT1

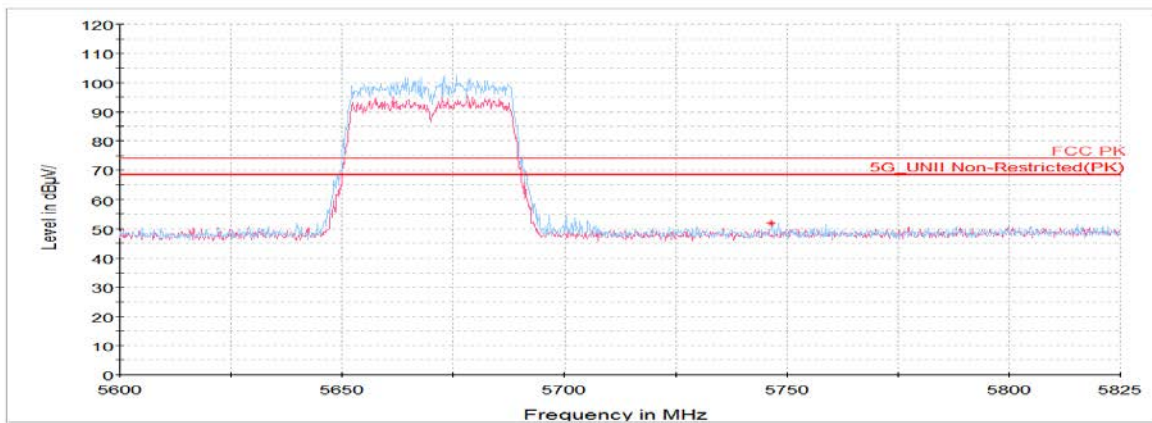
Lowest Channel (5 510 MHz)

Horizontal/Vertical for Band-edge



Highest Channel (5 670 MHz)

Horizontal/Vertical for Band-edge



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**802.11ac VHT40 UNII-2C ANT2****Lowest Channel (5 510 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 455.17 ¹⁾ | H | 40.66 | 34.72 | -25.51 | - | 49.87 | 74.00 | 24.13 |
| 11 009.08 ¹⁾ | H | 56.98 | 38.20 | -49.17 | - | 46.01 | 74.00 | 27.99 |
| 16 529.08 | H | 55.14 | 41.02 | -47.32 | - | 48.84 | 68.20 | 19.36 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 590 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 194.52 ¹⁾ | V | 57.05 | 38.24 | -49.22 | - | 46.07 | 74.00 | 27.93 |
| 16 838.50 | V | 58.08 | 41.27 | -46.89 | - | 52.46 | 68.20 | 15.74 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

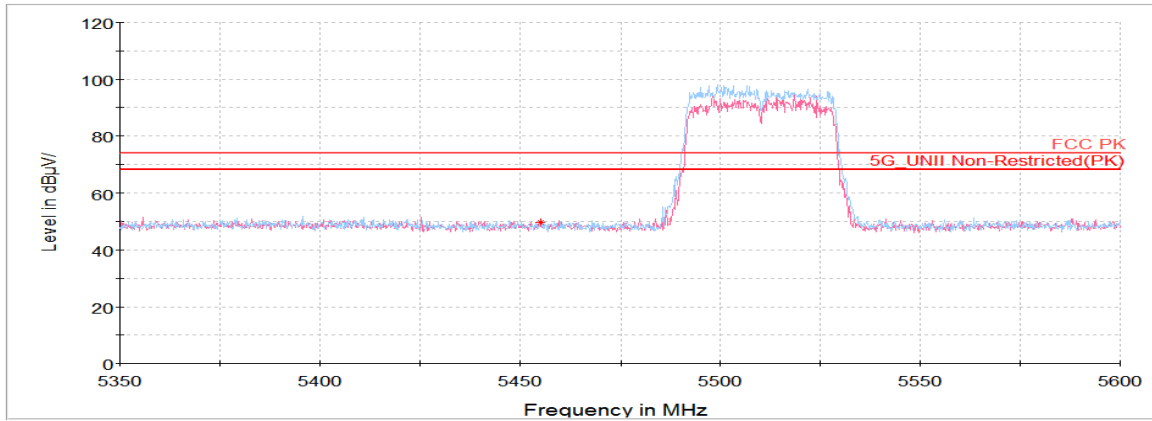
Highest Channel (5 670 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 729.66 | H | 41.29 | 35.03 | -25.46 | - | 50.86 | 68.20 | 17.34 |
| 11 352.28 ¹⁾ | V | 57.50 | 38.27 | -49.26 | - | 46.51 | 74.00 | 27.49 |
| 17 007.77 | V | 55.07 | 40.70 | -46.66 | - | 49.11 | 68.20 | 19.09 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT40 UNII-2C ANT2

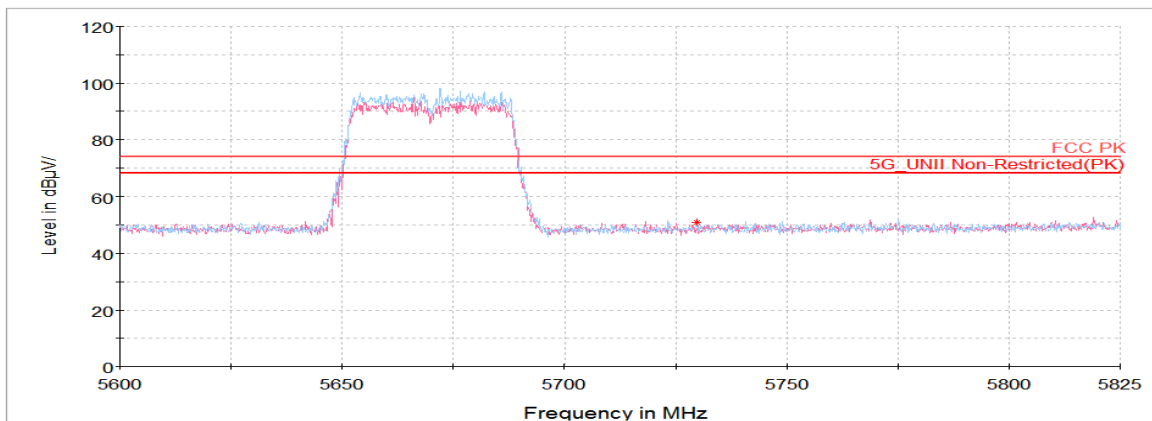
Lowest Channel (5 510 MHz)

Horizontal/Vertical for Band-edge



Highest Channel (5 670 MHz)

Horizontal/Vertical for Band-edge



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**802.11ac VHT40 UNII-2C 2TX MIMO****Lowest Channel (5 510 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 457.06 ¹⁾ | H | 41.76 | 34.72 | -25.52 | - | 50.96 | 74.00 | 23.04 |
| 11 046.45 ¹⁾ | H | 57.83 | 38.21 | -49.18 | - | 46.86 | 74.00 | 27.14 |
| 16 480.56 | V | 55.95 | 41.18 | -47.30 | - | 49.83 | 68.20 | 18.37 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 590 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 253.81 ¹⁾ | H | 58.34 | 38.25 | -49.24 | - | 47.35 | 74.00 | 26.65 |
| 16 758.36 | H | 55.68 | 41.21 | -47.00 | - | 49.89 | 68.20 | 18.31 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

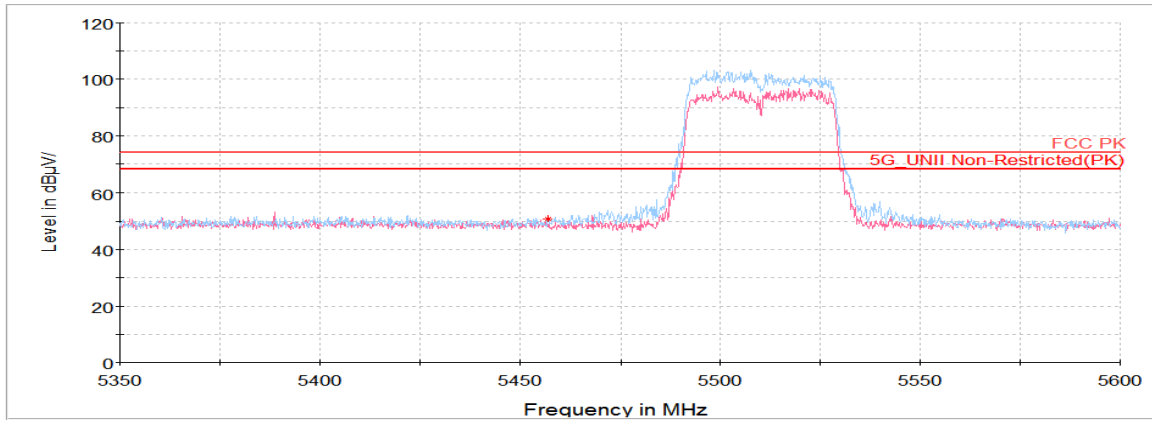
Highest Channel (5 670 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 746.67 | H | 44.13 | 35.05 | -25.13 | - | 54.05 | 68.20 | 14.15 |
| 11 342.22 ¹⁾ | H | 57.47 | 38.27 | -49.26 | - | 46.48 | 74.00 | 27.52 |
| 16 997.70 | V | 54.85 | 41.40 | -46.67 | - | 49.58 | 68.20 | 18.62 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT40 UNII-2C 2TX MIMO

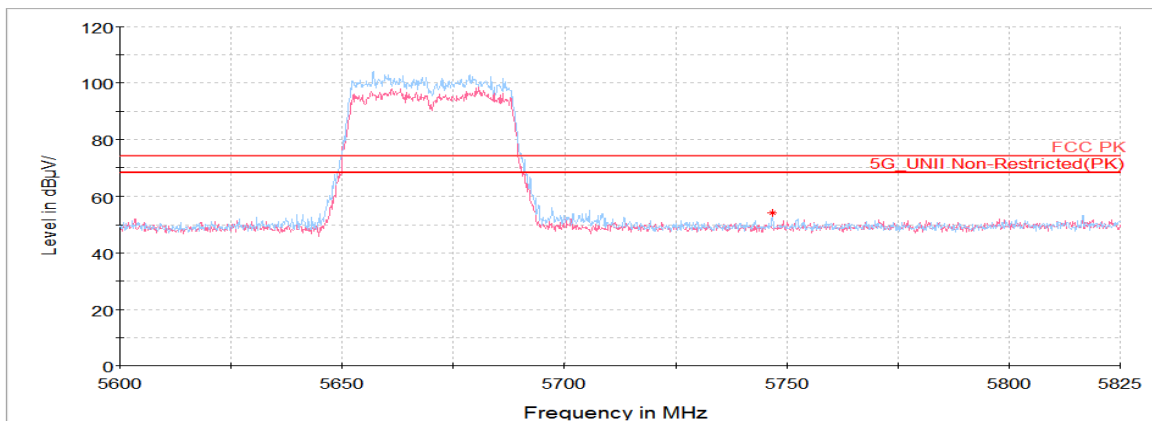
Lowest Channel (5 510 MHz)

Horizontal/Vertical for Band-edge



Highest Channel (5 670 MHz)

Horizontal/Vertical for Band-edge



KCTL Inc.

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www.kctl.co.kr

Report No.:
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**802.11ac VHT80 UNII-2C ANT1****Lowest Channel (5 530 MHz)**

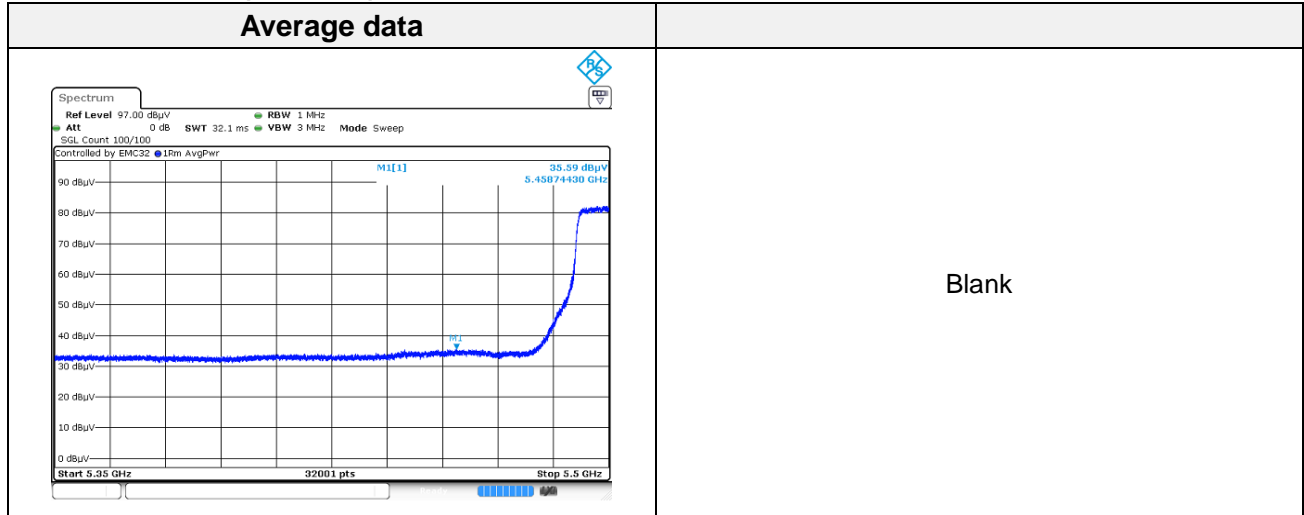
| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 458.74 ¹⁾ | H | 42.71 | 34.73 | -25.54 | - | 51.90 | 74.00 | 22.10 |
| 11 092.45 ¹⁾ | H | 57.55 | 38.22 | -49.19 | - | 46.58 | 74.00 | 27.42 |
| 14 926.98 | V | 53.86 | 41.07 | -41.94 | - | 52.99 | 68.20 | 15.21 |
| Average Data | | | | | | | | |
| 5 458.74 ¹⁾ | H | 35.59 | 34.73 | -25.54 | 1.18 | 45.96 | 54.00 | 8.04 |

Highest Channel (5 610 MHz)

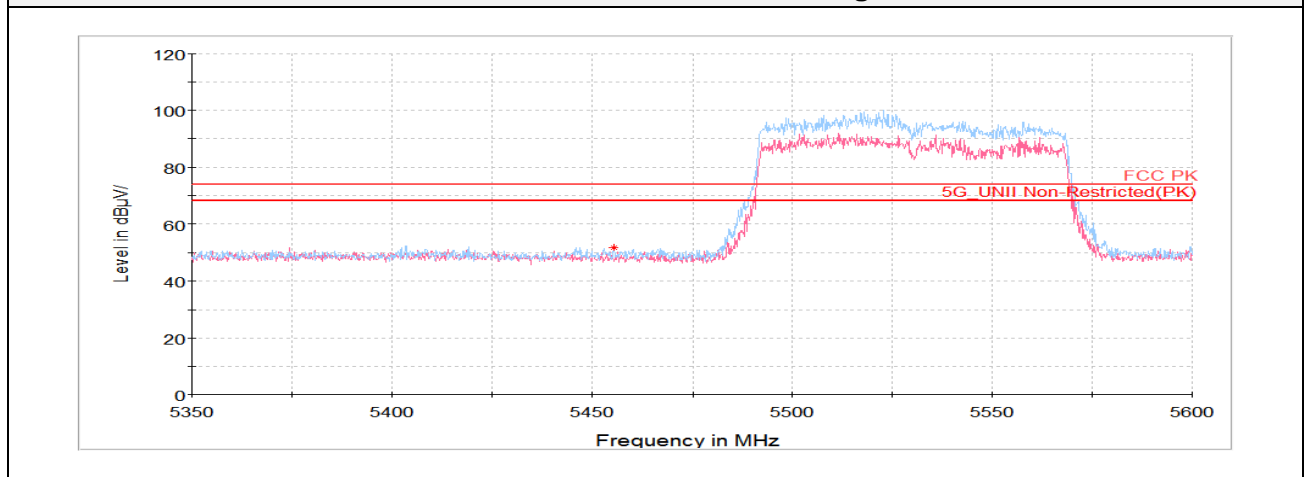
| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 758.88 | H | 42.06 | 35.06 | -24.89 | - | 52.23 | 68.20 | 15.97 |
| 11 204.94 ¹⁾ | H | 58.55 | 38.24 | -49.22 | - | 47.57 | 74.00 | 26.43 |
| 14 896.80 | H | 54.68 | 41.01 | -42.24 | - | 53.45 | 68.20 | 14.75 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT80 UNII-2C ANT1

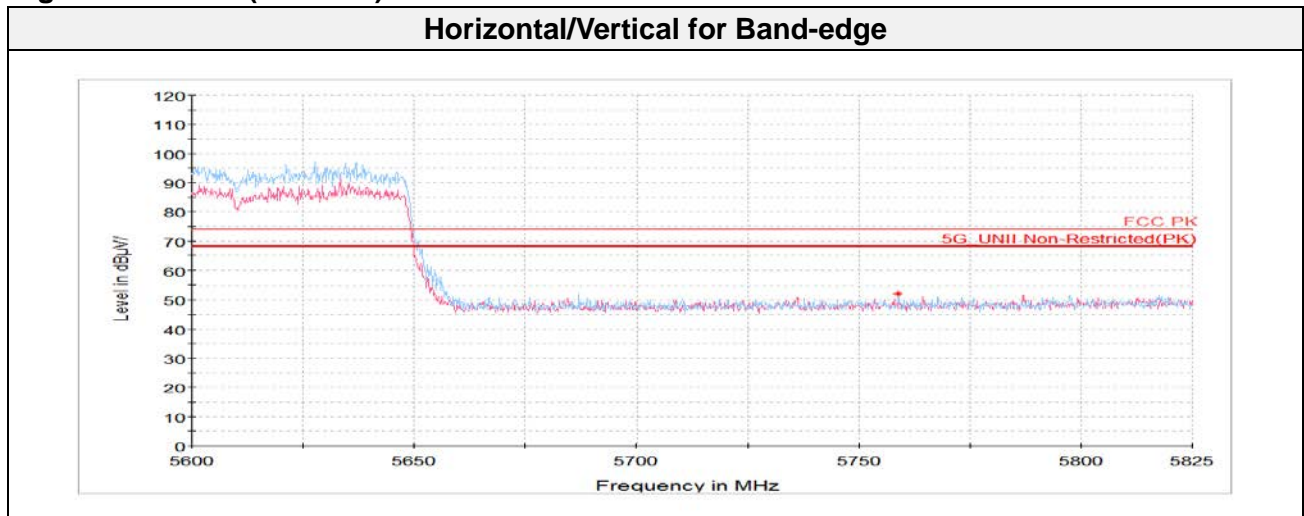
Lowest Channel (5 530 MHz)



Horizontal/Vertical for Band-edge



Highest Channel (5 610 MHz)



802.11ac VHT80 UNII-2C ANT2

Lowest Channel (5 530 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|-----------------|-------------|------------|------|-------------------|-------------------|--------|
| (MHz) | (V/H) | (dB(μV)) | (dB) | (dB) | (dB) | (dB($\mu V/m$)) | (dB($\mu V/m$)) | (dB) |
| Peak data | | | | | | | | |
| 5 456.89 ¹⁾ | H | 41.74 | 34.72 | -25.52 | - | 50.94 | 74.00 | 23.06 |
| 11 056.88 ¹⁾ | V | 57.28 | 38.21 | -49.18 | - | 46.31 | 74.00 | 27.69 |
| 16 636.53 | V | 55.54 | 41.11 | -47.17 | - | 49.48 | 68.20 | 18.72 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

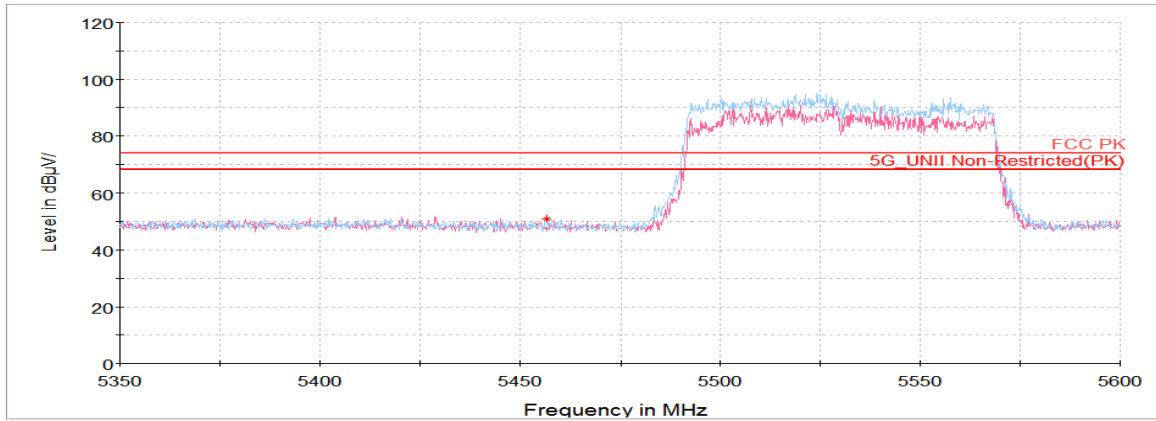
Highest Channel (5 610 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|-----------------|-------------|------------|------|-------------------|-------------------|--------|
| (MHz) | (V/H) | (dB(μV)) | (dB) | (dB) | (dB) | (dB($\mu V/m$)) | (dB($\mu V/m$)) | (dB) |
| Peak data | | | | | | | | |
| 5 757.67 | H | 42.48 | 35.06 | -24.91 | - | 52.63 | 68.20 | 15.57 |
| 11 204.22 ¹⁾ | V | 57.41 | 38.24 | -49.22 | - | 46.43 | 74.00 | 27.57 |
| 16 847.48 | V | 56.79 | 41.28 | -46.88 | - | 51.19 | 68.20 | 17.01 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT80 UNII-2C ANT2

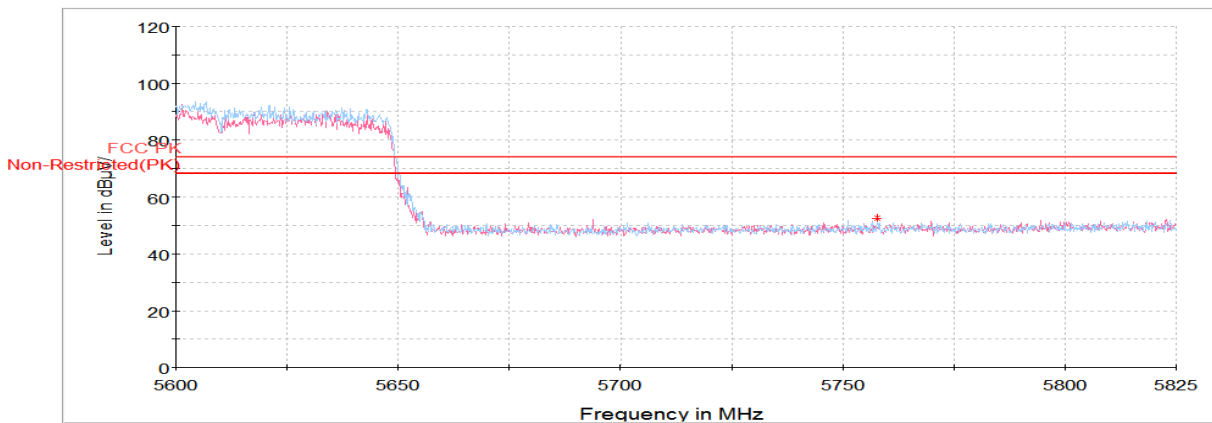
Lowest Channel (5 530 MHz)

Horizontal/Vertical for Band-edge



Highest Channel (5 610 MHz)

Horizontal/Vertical for Band-edge



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**802.11ac VHT80 UNII-2C 2TX MIMO****Lowest Channel (5 530 MHz)**

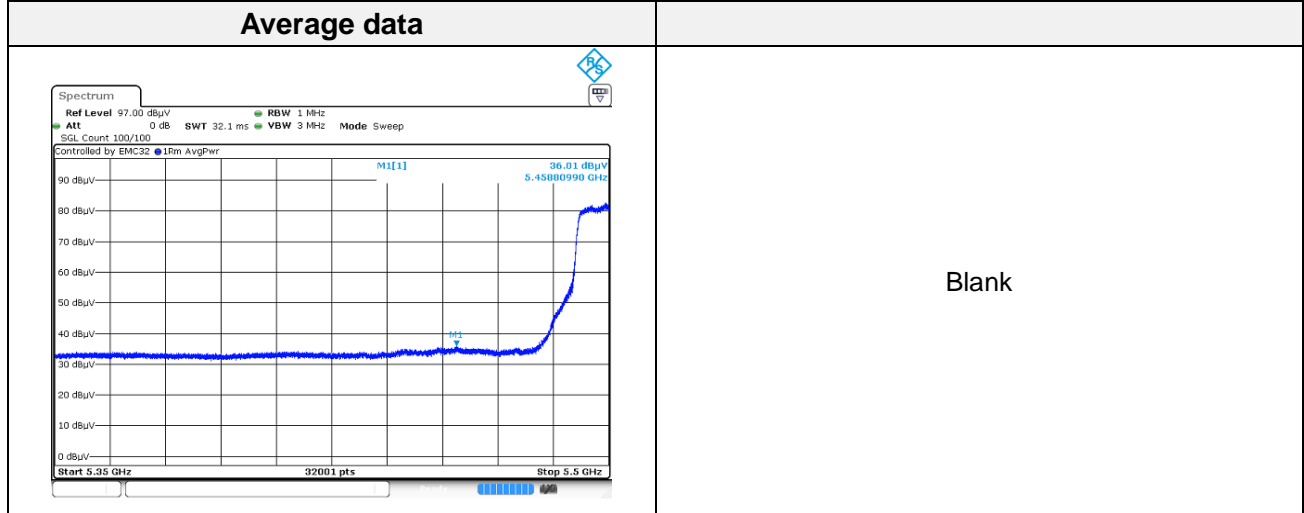
| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 458.81 ¹⁾ | H | 43.67 | 34.73 | -25.54 | - | 52.86 | 74.00 | 21.14 |
| 11 070.89 ¹⁾ | V | 57.98 | 38.21 | -49.18 | - | 47.01 | 74.00 | 26.99 |
| 16 617.48 | V | 54.57 | 41.09 | -47.20 | - | 48.46 | 68.20 | 19.74 |
| Average Data | | | | | | | | |
| 5 458.81 | H | 36.01 | 34.73 | -25.54 | 1.86 | 47.06 | 54.00 | 6.94 |

Highest Channel (5 610 MHz)

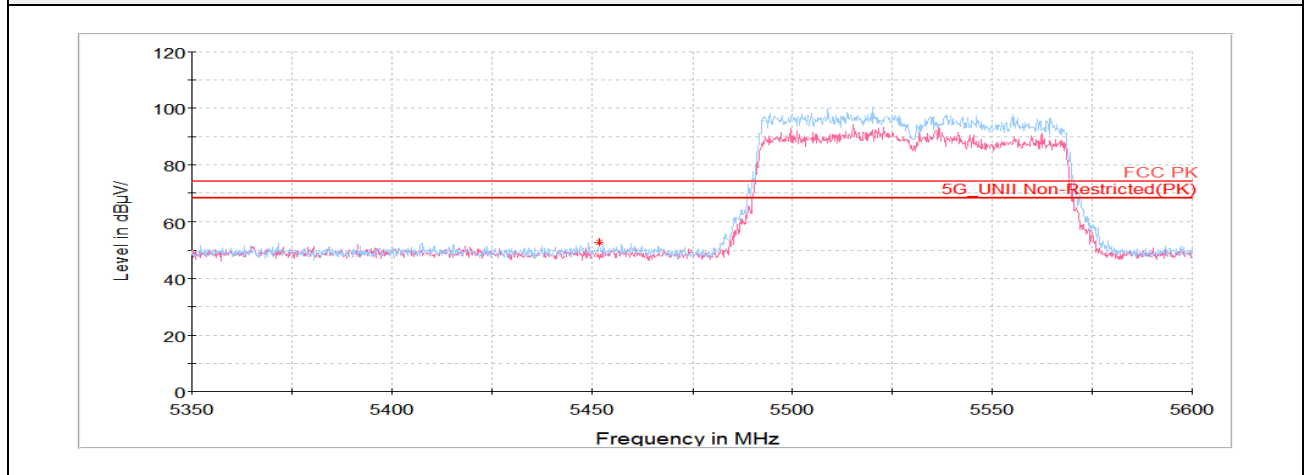
| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 731.20 | H | 42.27 | 35.03 | -25.43 | - | 51.87 | 68.20 | 16.33 |
| 11 198.83 ¹⁾ | V | 56.50 | 38.24 | -49.22 | - | 45.52 | 74.00 | 28.48 |
| 16 827.00 | H | 55.83 | 41.26 | -46.90 | - | 50.19 | 68.20 | 18.01 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT80 UNII-2C 2TX MIMO

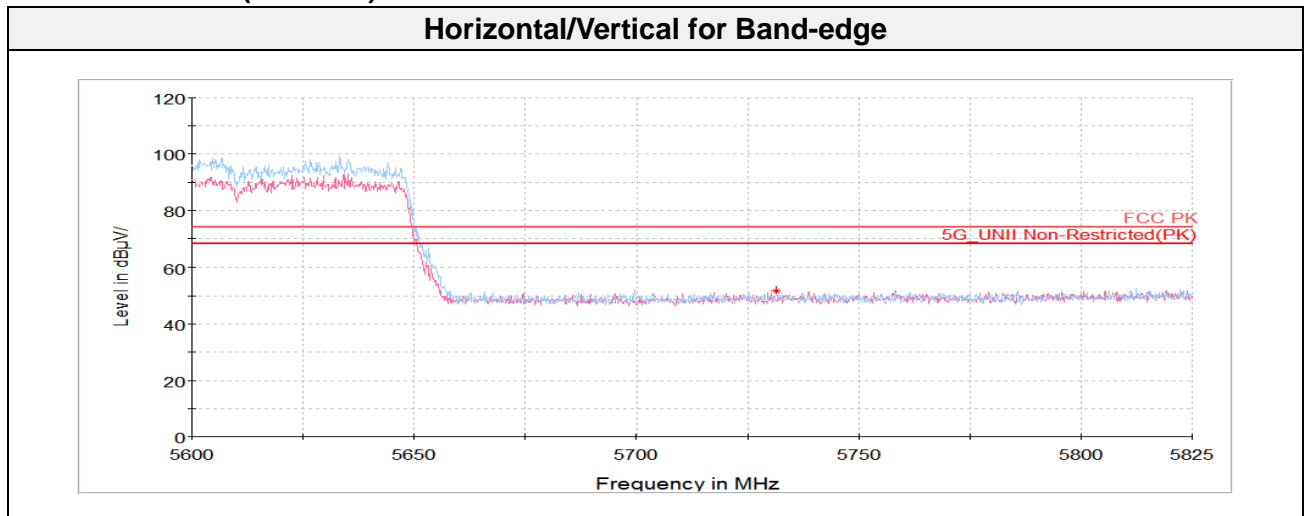
Lowest Channel (5 530 MHz)



Horizontal/Vertical for Band-edge



Lowest Channel (5 530 MHz)

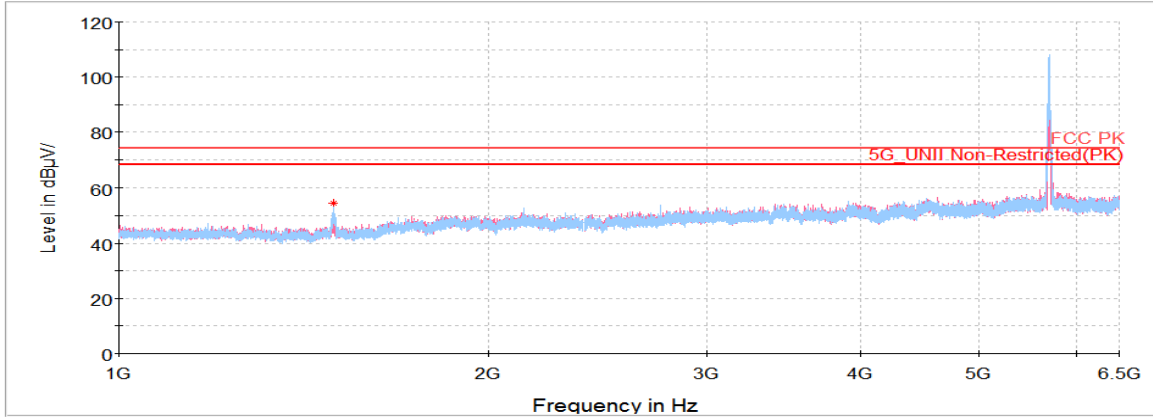


Plot of Harmonics and Spurious Emissions

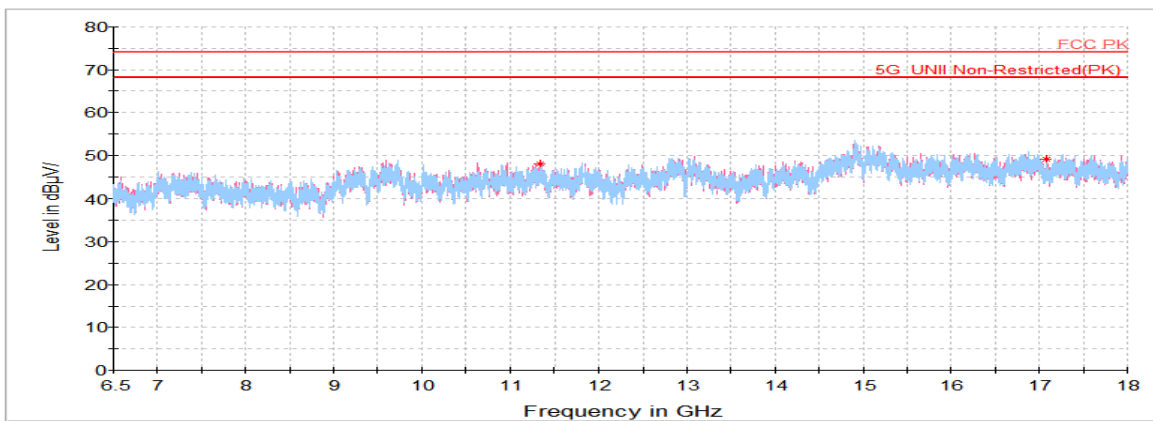
In order to simplify the report, attached plots were only the lowest margin condition

802.11a_UNII-2C_2TX MIMO_Highest Channel (5 700 MHz)

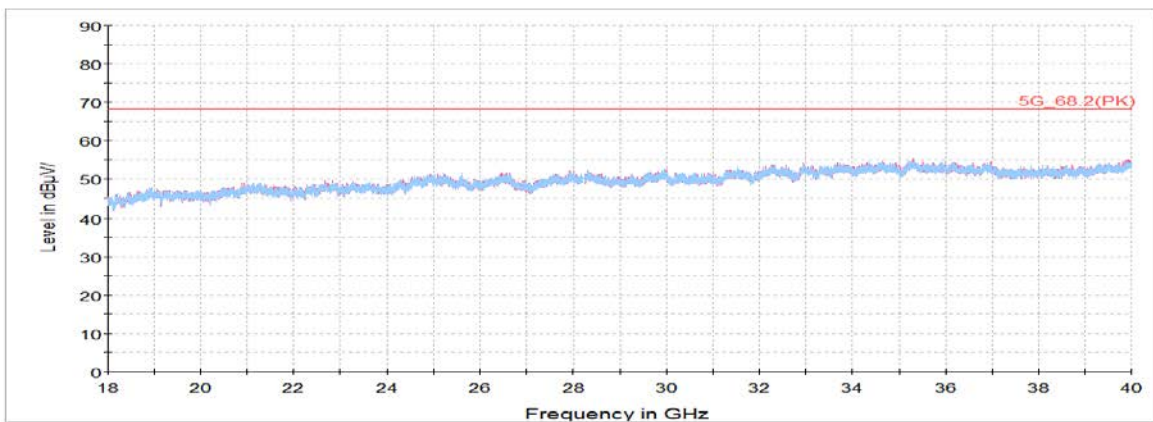
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



Straddle Channel

ANT 1

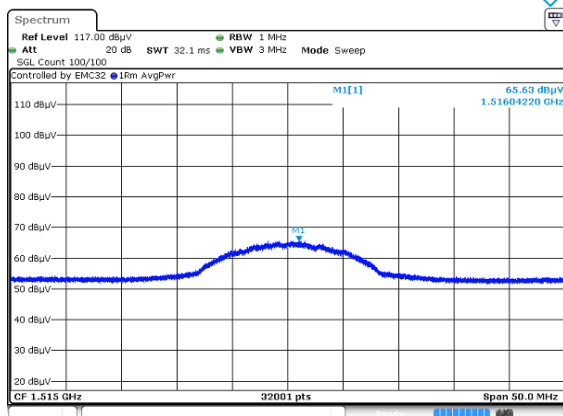
802.11a (5 720 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------|-------------|------------|------|------------|------------|--------|
| (MHz) | (V/H) | (dB(μV)) | (dB) | (dB) | (dB) | (dB(μV/m)) | (dB(μV/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 516.04 ¹⁾ | H | 71.55 | 28.98 | -47.82 | - | 52.71 | 74.00 | 21.29 |
| 11 493.88 ¹⁾ | H | 58.03 | 38.30 | -49.30 | - | 47.03 | 74.00 | 26.97 |
| 15 048.45 | V | 54.25 | 40.19 | -41.62 | - | 52.82 | 68.20 | 15.38 |
| Average Data | | | | | | | | |
| 1 516.04 ¹⁾ | H | 65.63 | 28.98 | -47.82 | 0.28 | 47.07 | 54.00 | 6.93 |

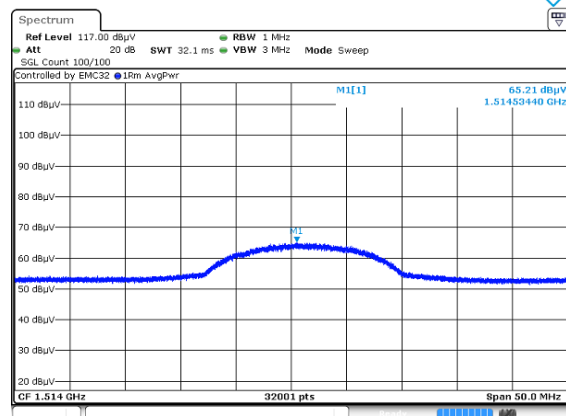
802.11n HT20 (5 720 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------|-------------|------------|------|------------|------------|--------|
| (MHz) | (V/H) | (dB(μV)) | (dB) | (dB) | (dB) | (dB(μV/m)) | (dB(μV/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 514.53 ¹⁾ | H | 71.35 | 28.97 | -47.82 | - | 52.50 | 74.00 | 21.50 |
| 11 524.06 ¹⁾ | H | 58.74 | 38.32 | -49.32 | - | 47.74 | 74.00 | 26.26 |
| 14 902.91 | H | 53.91 | 41.03 | -42.18 | - | 52.76 | 68.20 | 15.44 |
| Average Data | | | | | | | | |
| 1 514.53 ¹⁾ | H | 65.21 | 28.97 | -47.82 | 0.33 | 46.69 | 54.00 | 7.31 |

Average data_802.11a (5 720 MHz)



Average data_802.11n HT20 (5 720 MHz)



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Report No.:
KR21-SRF0159

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**802.11n HT40 (5 710 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 368.81 ¹⁾ | V | 58.20 | 38.27 | -49.27 | - | 47.20 | 74.00 | 26.80 |
| 14 915.84 | H | 53.29 | 41.05 | -42.05 | - | 52.29 | 68.20 | 15.91 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT20 (5 720 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 512.70 ¹⁾ | H | 69.83 | 28.96 | -47.81 | - | 50.98 | 74.00 | 23.02 |
| 11 518.31 ¹⁾ | V | 58.24 | 38.31 | -49.32 | - | 47.23 | 74.00 | 26.77 |
| 14 921.95 | V | 53.66 | 41.06 | -41.99 | - | 52.73 | 68.20 | 15.47 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT40 (5 710 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 492.08 ¹⁾ | V | 59.10 | 38.30 | -49.30 | - | 48.10 | 74.00 | 25.90 |
| 14 912.97 | V | 53.90 | 41.04 | -42.08 | - | 52.86 | 68.20 | 15.34 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT80 (5 690 MHz)

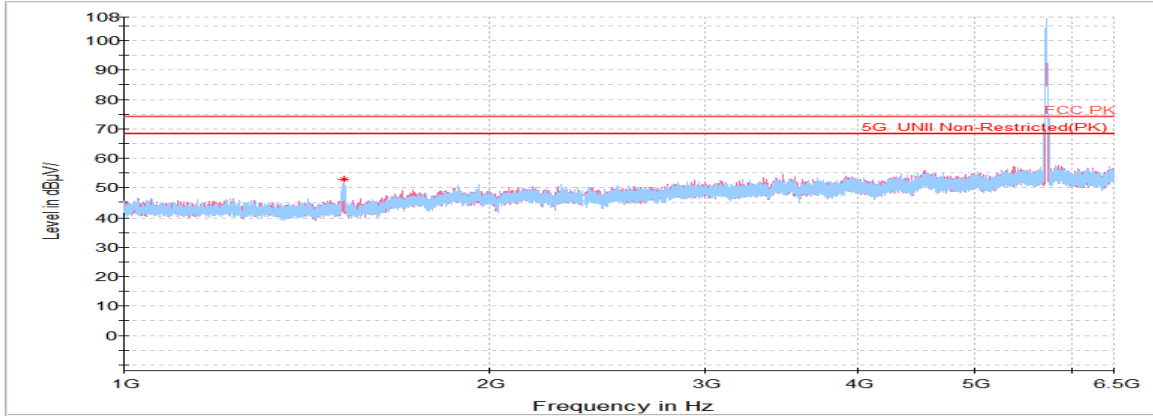
| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 492.44 ¹⁾ | V | 58.55 | 38.30 | -49.30 | - | 47.55 | 74.00 | 26.45 |
| 14 908.66 | H | 53.84 | 41.04 | -42.12 | - | 52.76 | 68.20 | 15.44 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Plot of Harmonics and Spurious Emissions

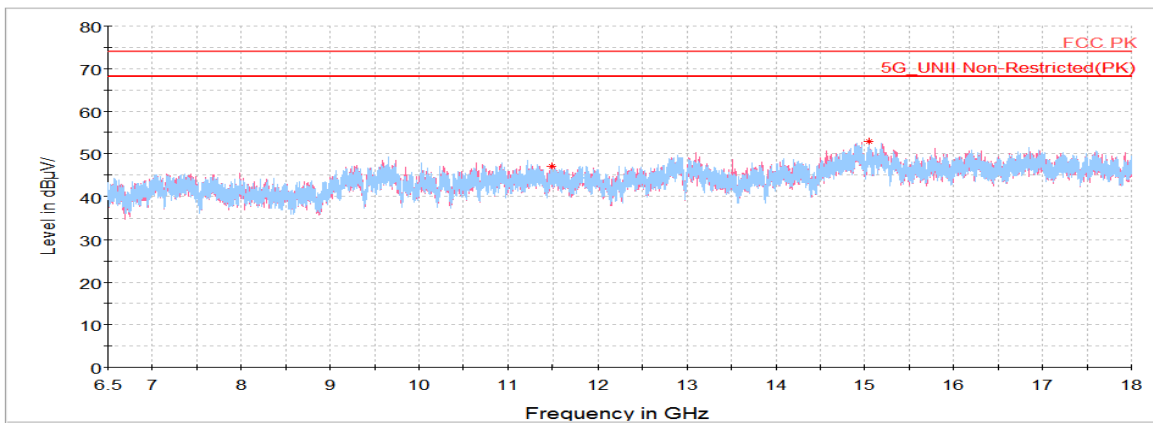
In order to simplify the report, attached plots were only the lowest margin condition

802.11a_Straddle Channel (5 720 MHz)

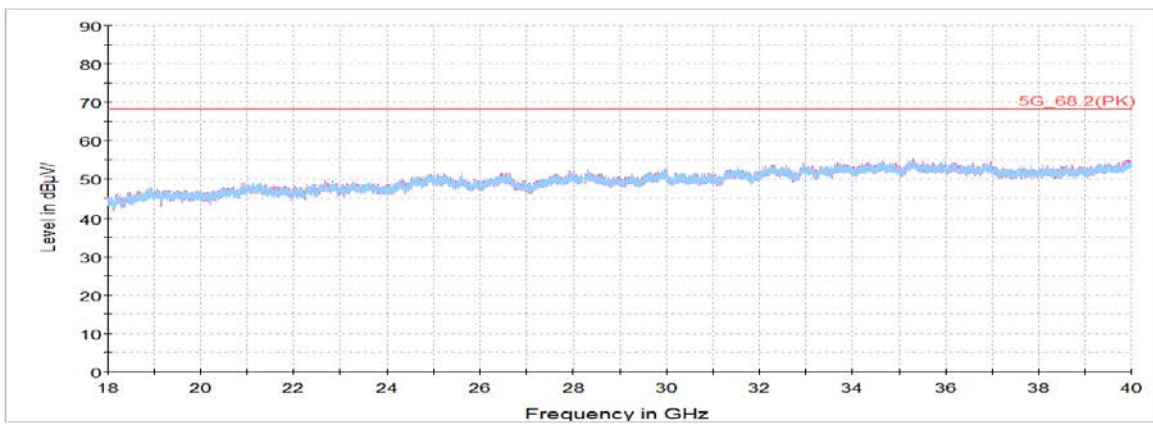
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



ANT 2

802.11a (5 720 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------|-------------|------------|------|------------|------------|--------|
| (MHz) | (V/H) | (dB(μV)) | (dB) | (dB) | (dB) | (dB(μV/m)) | (dB(μV/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 400.08 ¹⁾ | V | 55.84 | 38.28 | -49.28 | - | 44.84 | 74.00 | 29.16 |
| 17 159.78 | V | 54.63 | 40.60 | -46.71 | - | 48.52 | 68.20 | 19.68 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11n HT20 (5 720 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------|-------------|------------|------|------------|------------|--------|
| (MHz) | (V/H) | (dB(μV)) | (dB) | (dB) | (dB) | (dB(μV/m)) | (dB(μV/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 471.59 ¹⁾ | V | 57.72 | 38.29 | -49.30 | - | 46.71 | 74.00 | 27.29 |
| 17 169.84 | H | 55.92 | 40.60 | -46.71 | - | 49.81 | 68.20 | 18.39 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11n HT40 (5 710 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------|-------------|------------|------|------------|------------|--------|
| (MHz) | (V/H) | (dB(μV)) | (dB) | (dB) | (dB) | (dB(μV/m)) | (dB(μV/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 392.53 ¹⁾ | V | 57.50 | 38.28 | -49.27 | - | 46.51 | 74.00 | 27.49 |
| 17 132.11 ¹⁾ | H | 55.01 | 40.62 | -46.70 | - | 48.93 | 74.00 | 25.07 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

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KR21-SRF0159

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**802.11ac VHT20 (5 720 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 130.19 ¹⁾ | V | 57.45 | 38.23 | -49.20 | - | 46.48 | 74.00 | 27.52 |
| 17 160.50 | H | 55.72 | 40.60 | -46.71 | - | 49.61 | 68.20 | 18.59 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT40 (5 710 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 393.97 ¹⁾ | H | 58.04 | 38.28 | -49.28 | - | 47.04 | 74.00 | 26.96 |
| 17 160.50 | H | 56.11 | 40.60 | -46.71 | - | 50.00 | 68.20 | 18.20 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT80 (5 690 MHz)

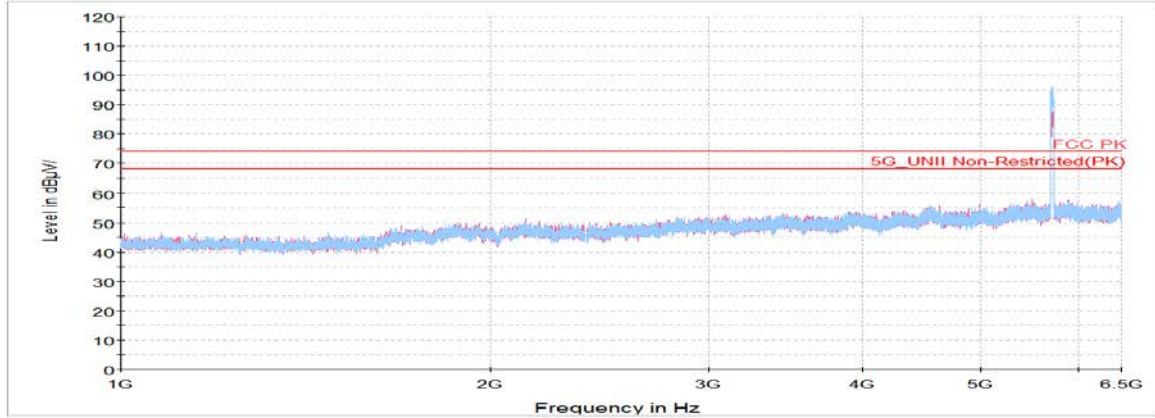
| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 383.55 ¹⁾ | V | 58.92 | 38.28 | -49.27 | - | 47.93 | 74.00 | 26.07 |
| 17 075.69 | V | 53.92 | 40.65 | -46.68 | - | 47.89 | 68.20 | 20.31 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Plot of Harmonics and Spurious Emissions

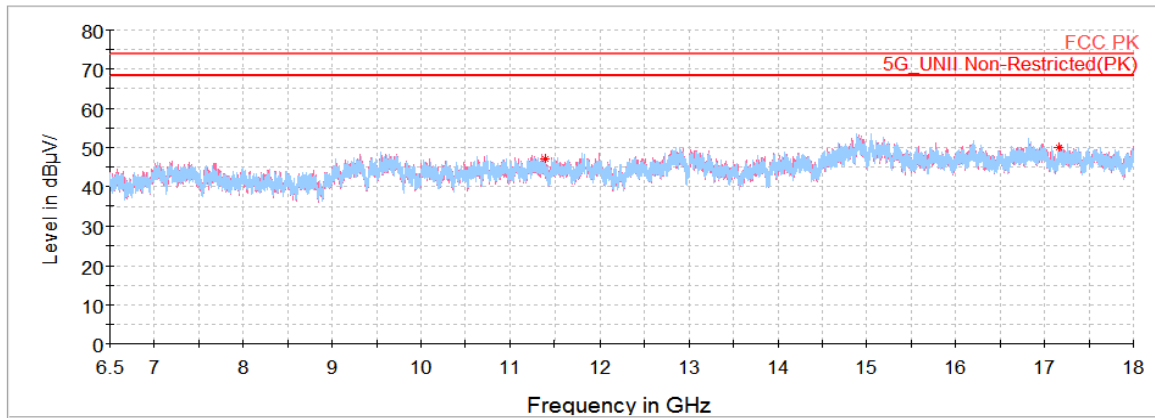
In order to simplify the report, attached plots were only the lowest margin condition

802.11ac VHT40_ Straddle Channel (5 710 MHz)

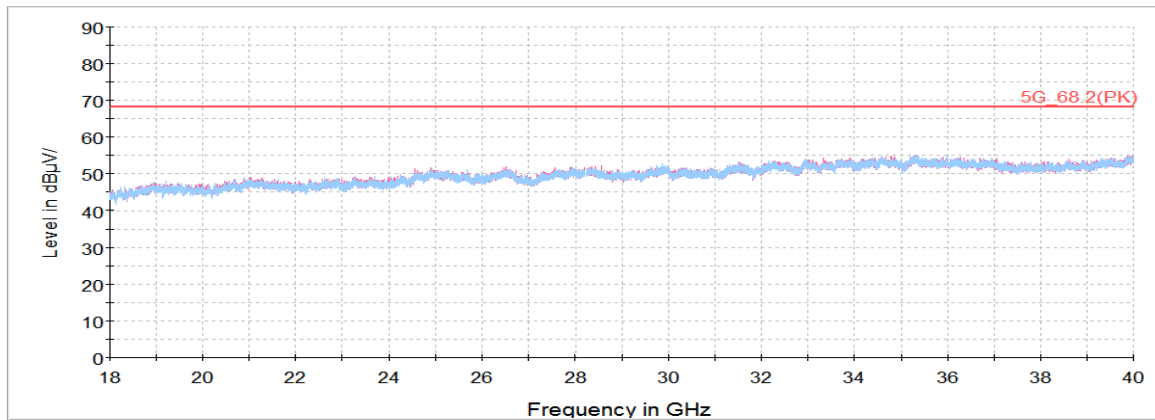
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



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MIMO

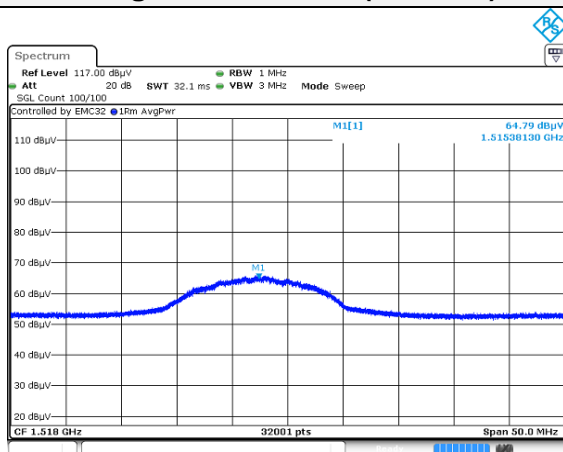
802.11a (5 720 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 515.38 ¹⁾ | H | 74.79 | 28.99 | -47.83 | - | 55.95 | 74.00 | 18.05 |
| 11 372.77 ¹⁾ | V | 58.93 | 38.27 | -49.27 | - | 47.93 | 74.00 | 26.07 |
| 17 187.81 | V | 56.22 | 40.59 | -46.71 | - | 50.10 | 68.20 | 18.10 |
| Average Data | | | | | | | | |
| 1 515.38 ¹⁾ | H | 64.79 | 28.99 | -47.83 | 0.28 | 46.23 | 54.00 | 7.77 |

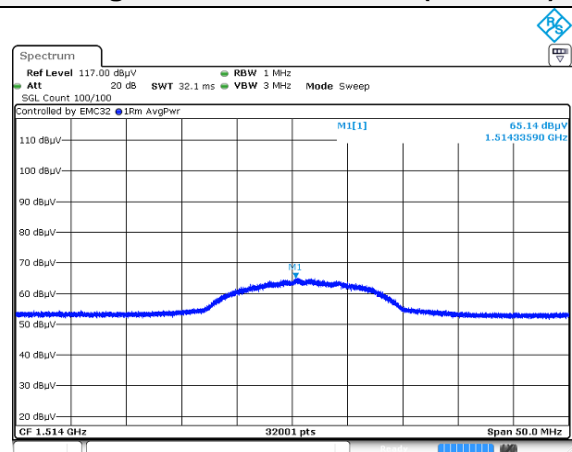
802.11n HT20 (5 720 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 514.34 ¹⁾ | H | 70.91 | 28.97 | -47.82 | - | 52.06 | 74.00 | 21.94 |
| 11 462.97 ¹⁾ | V | 57.14 | 38.29 | -49.29 | - | 46.14 | 74.00 | 27.86 |
| 17 160.86 | H | 54.06 | 40.60 | -46.71 | - | 47.95 | 68.20 | 20.25 |
| Average Data | | | | | | | | |
| 1 514.34 ¹⁾ | H | 65.14 | 28.97 | -47.82 | 0.61 | 46.90 | 54.00 | 7.10 |

Average data_802.11a (5 720 MHz)



Average data_802.11n HT20 (5 720 MHz)



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KR21-SRF0159

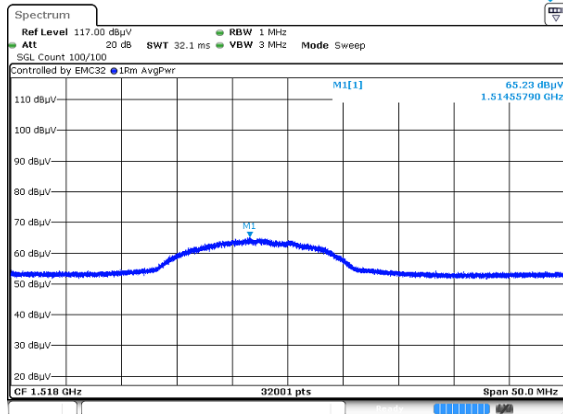
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**802.11n HT40 (5 710 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 422.36 ¹⁾ | H | 56.98 | 38.28 | -49.28 | - | 45.98 | 74.00 | 28.02 |
| 17 188.17 | V | 55.95 | 40.59 | -46.71 | - | 49.83 | 68.20 | 18.37 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT20 (5 720 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 514.56 ¹⁾ | H | 70.29 | 28.99 | -47.83 | - | 51.45 | 74.00 | 22.55 |
| 11 490.28 ¹⁾ | H | 57.53 | 38.30 | -49.30 | - | 46.53 | 74.00 | 27.47 |
| 17 181.34 | V | 56.68 | 40.59 | -46.71 | - | 50.56 | 68.20 | 17.64 |
| Average Data | | | | | | | | |
| 1 514.56 ¹⁾ | H | 65.23 | 28.99 | -47.83 | 0.61 | 47.00 | 54.00 | 7.00 |

Average data_802.11ac VHT20 (5 720 MHz)

Blank

802.11ac VHT40 (5 710 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 393.97 ¹⁾ | V | 59.10 | 38.28 | -49.28 | - | 48.10 | 74.00 | 25.90 |
| 17 195.00 | V | 55.68 | 40.58 | -46.72 | - | 49.54 | 68.20 | 18.66 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

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**802.11ac VHT80 (5 690 MHz)**

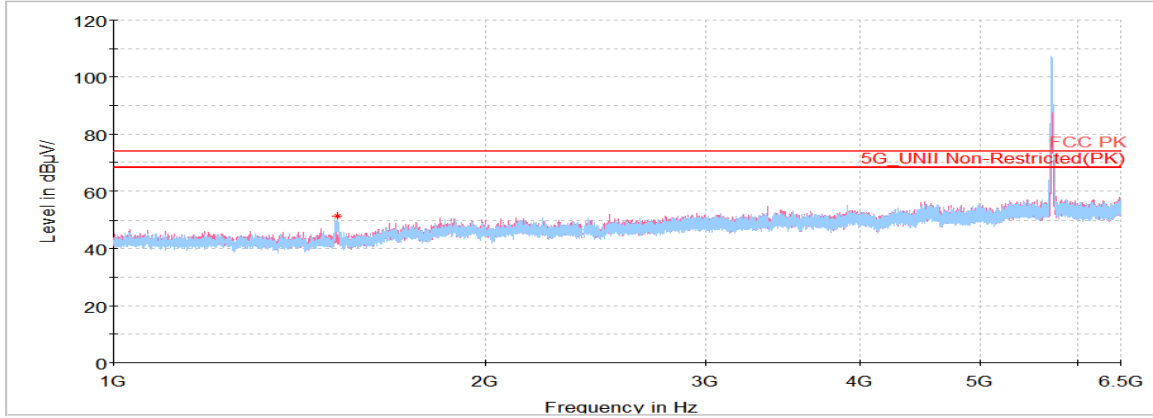
| Frequency (MHz) | Pol. (V/H) | Reading (dB(μ V)) | Ant. Factor (dB) | Amp.+Cable (dB) | DCF (dB) | Result (dB(μ V/m)) | Limit (dB(μ V/m)) | Margin (dB) |
|--|---------------|---------------------------|---------------------|--------------------|-------------|----------------------------|---------------------------|----------------|
| Peak data | | | | | | | | |
| 11 374.20 ¹⁾ | V | 58.89 | 38.27 | -49.27 | - | 47.89 | 74.00 | 26.11 |
| 17 078.20 | H | 53.75 | 40.65 | -46.68 | - | 47.72 | 68.20 | 20.48 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Plot of Harmonics and Spurious Emissions

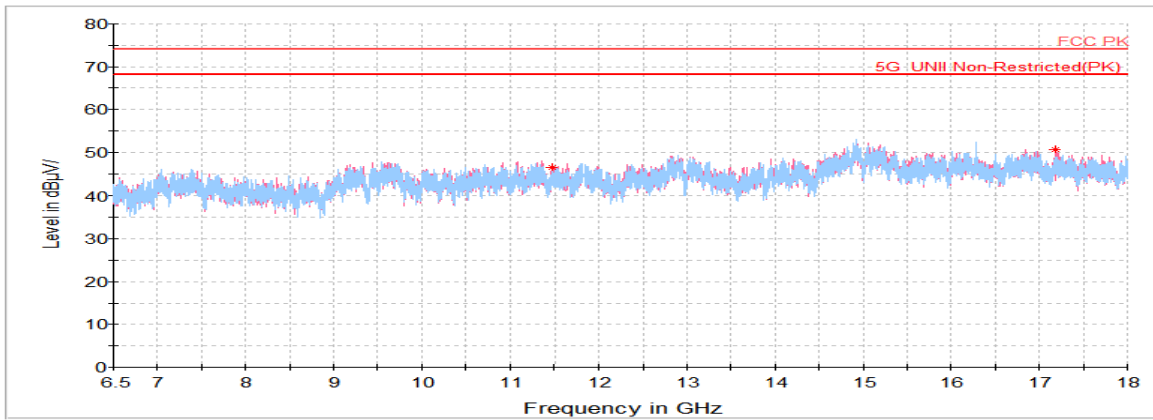
In order to simplify the report, attached plots were only the lowest margin condition

802.11ac VHT20_Straddle Channel (5 720 MHz)

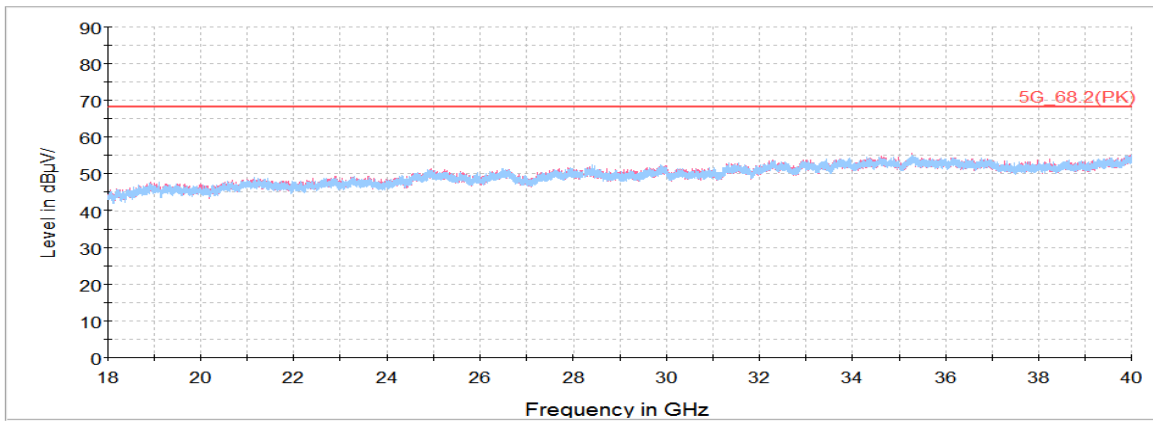
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



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**802.11a UNII-3 ANT1****Lowest Channel (5 745 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 538.83 ¹⁾ | H | 68.64 | 29.09 | -47.90 | - | 49.83 | 74.00 | 24.17 |
| 5 723.13 | H | 43.89 | 35.02 | -25.58 | - | 53.33 | 117.93 | 64.59 |
| 11 485.61 ¹⁾ | V | 58.43 | 38.30 | -49.30 | - | 47.43 | 74.00 | 26.57 |
| 14 908.66 | H | 54.51 | 41.04 | -42.12 | - | 53.43 | 68.20 | 14.77 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 785 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 486.33 ¹⁾ | V | 59.54 | 38.30 | -49.30 | - | 48.54 | 74.00 | 25.46 |
| 14 913.33 | H | 55.40 | 41.04 | -42.07 | - | 54.37 | 68.20 | 13.83 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

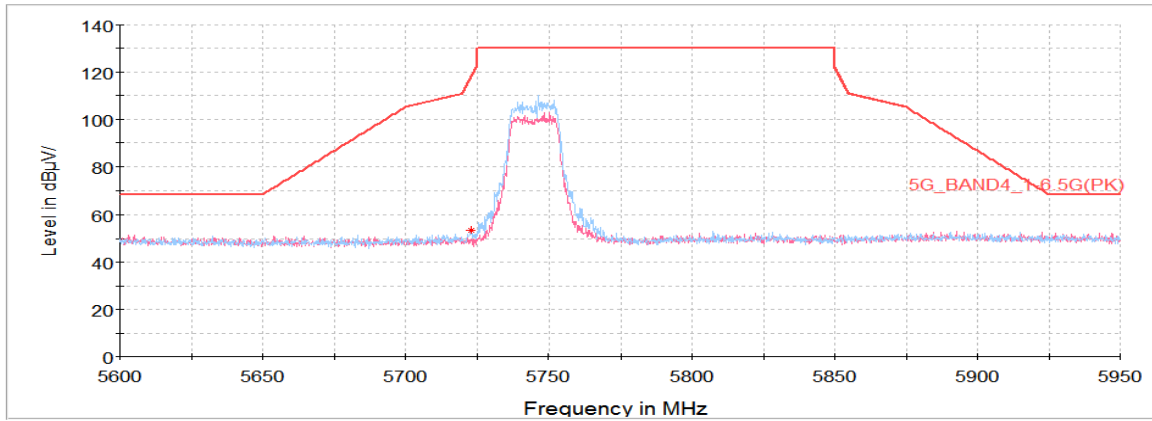
Highest Channel (5 825 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 619.08 ¹⁾ | H | 71.35 | 29.48 | -47.55 | - | 53.28 | 74.00 | 20.72 |
| 5 879.53 | H | 42.04 | 35.18 | -23.71 | - | 53.51 | 101.85 | 48.33 |
| 11 664.22 ¹⁾ | V | 58.99 | 38.43 | -49.44 | - | 47.98 | 74.00 | 26.02 |
| 17 570.19 | V | 57.37 | 40.81 | -46.94 | - | 51.24 | 68.20 | 16.96 |
| Average Data | | | | | | | | |
| 1 619.08 ¹⁾ | H | 65.10 | 29.48 | -47.55 | 0.28 | 47.31 | 54.00 | 6.69 |

802.11a UNII-3 ANT1

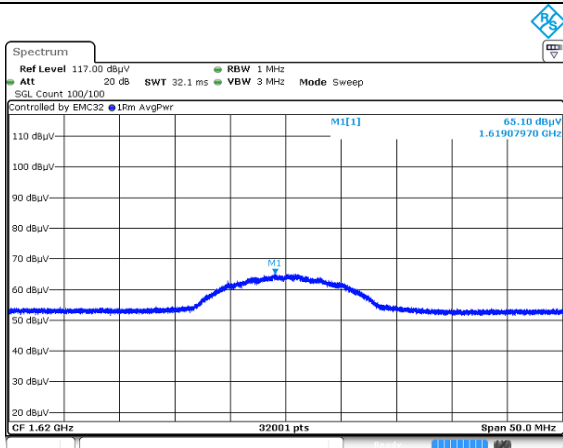
Lowest Channel (5 745 MHz)

Horizontal/Vertical for Band-edge



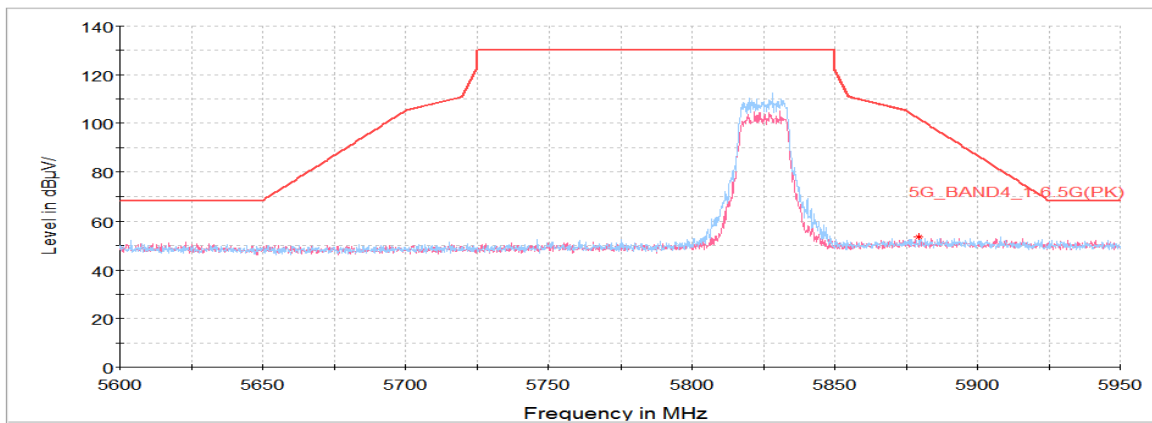
Lowest Channel (5 825 MHz)

Average data



Blank

Horizontal/Vertical for Band-edge



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**802.11a UNII-3 ANT2****Lowest Channel (5 745 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 717.45 | H | 41.34 | 35.02 | -25.69 | - | 50.67 | 110.09 | 59.42 |
| 11 487.77 ¹⁾ | H | 57.76 | 38.30 | -49.30 | - | 46.76 | 74.00 | 27.24 |
| 17 242.80 | V | 56.43 | 40.55 | -46.73 | - | 50.25 | 68.20 | 17.95 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 785 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 574.38 ¹⁾ | H | 57.04 | 38.36 | -49.36 | - | 46.04 | 74.00 | 27.96 |
| 17 266.88 | H | 57.77 | 40.54 | -46.73 | - | 51.58 | 68.20 | 16.62 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

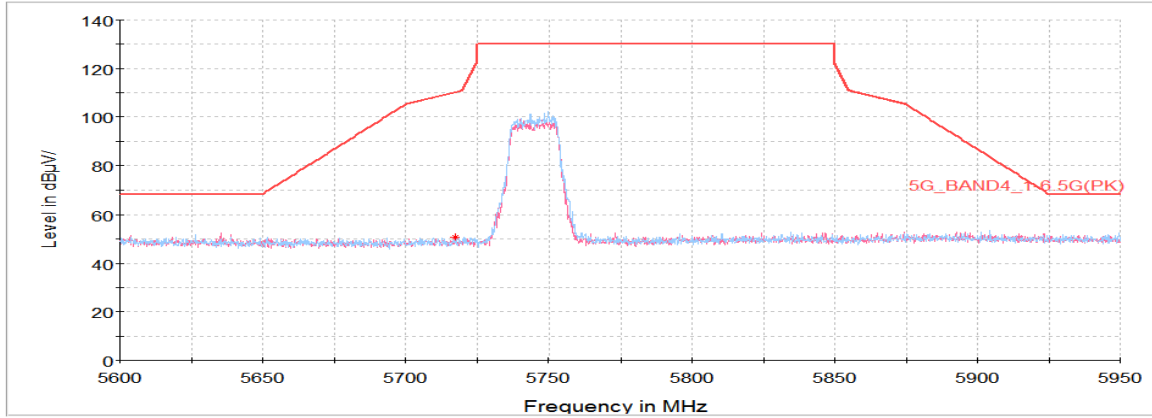
Highest Channel (5 825 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 858.39 | H | 42.01 | 35.16 | -23.81 | - | 53.36 | 109.85 | 56.49 |
| 11 643.38 ¹⁾ | V | 57.70 | 38.41 | -49.42 | - | 46.69 | 74.00 | 27.31 |
| 17 481.78 | V | 57.09 | 40.41 | -46.79 | - | 50.71 | 68.20 | 17.49 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11a UNII-3 ANT2

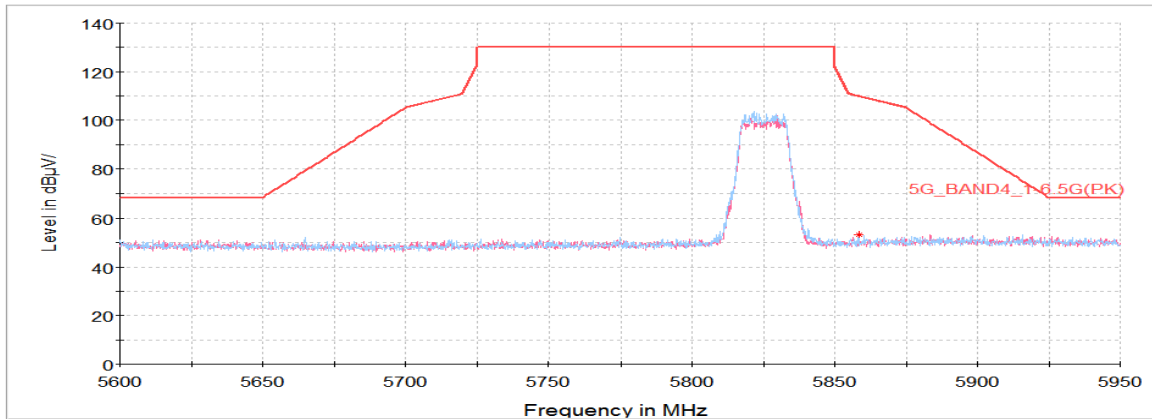
Lowest Channel (5 745 MHz)

Horizontal/Vertical for Band-edge



Lowest Channel (5 825 MHz)

Horizontal/Vertical for Band-edge



802.11a UNII-3 2TX MIIMO**Lowest Channel (5 745 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 540.72 ¹⁾ | H | 68.49 | 29.10 | -47.90 | - | 49.69 | 74.00 | 24.31 |
| 5 719.52 | H | 43.78 | 35.02 | -25.65 | - | 53.15 | 110.66 | 57.52 |
| 11 494.95 ¹⁾ | V | 56.88 | 38.30 | -49.30 | - | 45.88 | 74.00 | 28.12 |
| 17 236.33 | H | 54.55 | 40.56 | -46.73 | - | 48.38 | 68.20 | 19.82 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 785 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 570.06 ¹⁾ | H | 56.57 | 38.36 | -49.36 | - | 45.57 | 74.00 | 28.43 |
| 17 355.64 | V | 54.28 | 40.49 | -46.76 | - | 48.01 | 68.20 | 20.19 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

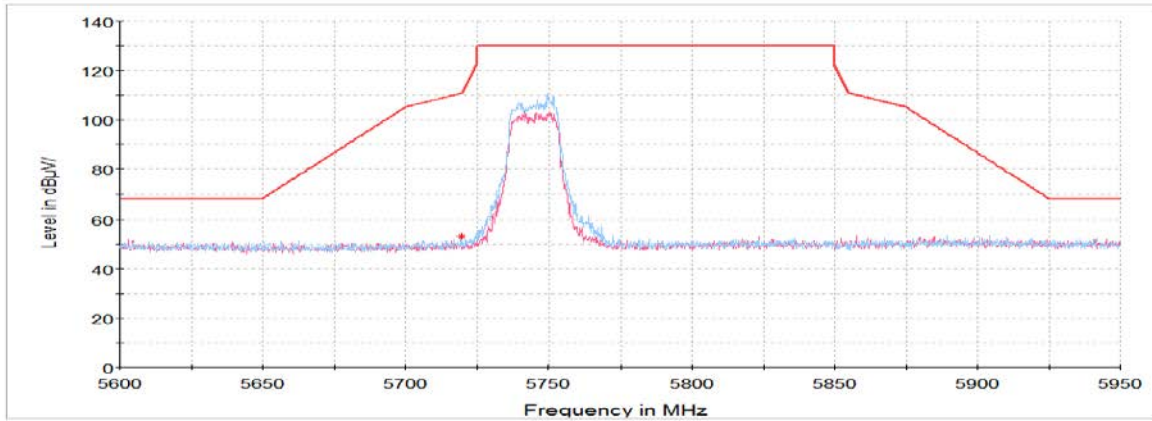
Highest Channel (5 825 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 621.06 ¹⁾ | H | 70.05 | 29.46 | -47.64 | - | 51.87 | 74.00 | 22.13 |
| 5 865.27 | H | 42.57 | 35.17 | -23.78 | - | 53.96 | 107.93 | 53.97 |
| 11 654.52 ¹⁾ | V | 57.51 | 38.42 | -49.43 | - | 46.50 | 74.00 | 27.50 |
| 17 485.02 | V | 55.48 | 40.41 | -46.79 | - | 49.10 | 68.20 | 19.10 |
| Average Data | | | | | | | | |
| 1 621.06 ¹⁾ | H | 64.98 | 29.46 | -47.64 | 0.28 | 47.08 | 54.00 | 6.92 |

802.11a UNII-3 2TX MIIMO

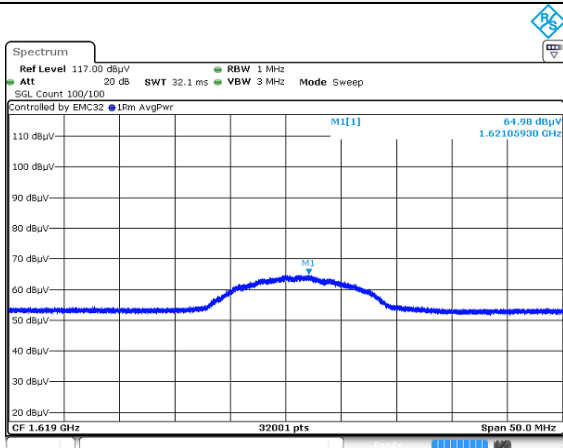
Lowest Channel (5 745 MHz)

Horizontal/Vertical for Band-edge



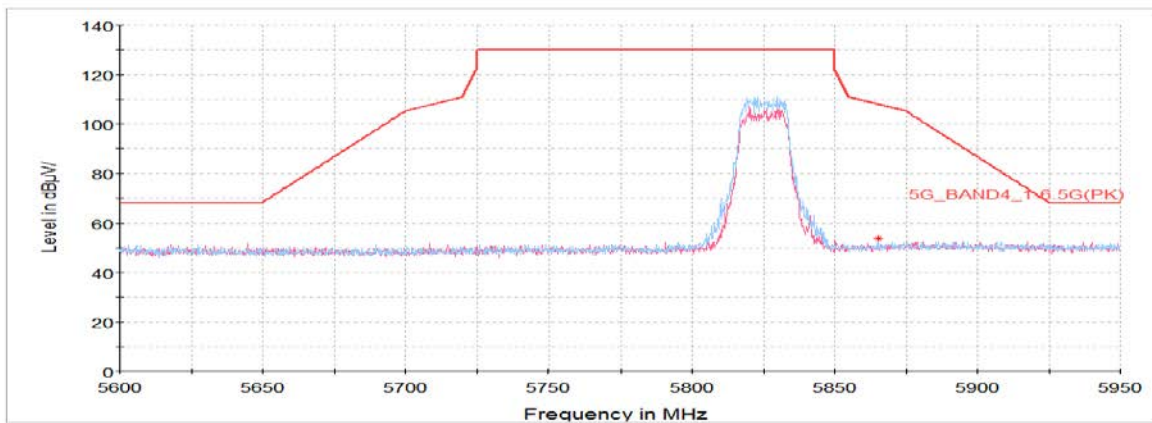
Lowest Channel (5 825 MHz)

Average data



Blank

Horizontal/Vertical for Band-edge



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**802.11n HT20 UNII-3 ANT1****Lowest Channel (5 745 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 539.96 ¹⁾ | H | 71.05 | 29.10 | -47.91 | - | 52.24 | 74.00 | 21.76 |
| 5 722.95 | H | 46.13 | 35.02 | -25.59 | - | 55.56 | 117.53 | 61.97 |
| 11 512.20 ¹⁾ | H | 58.45 | 38.31 | -49.31 | - | 47.45 | 74.00 | 26.55 |
| 17 341.27 | H | 56.19 | 40.50 | -46.75 | - | 49.94 | 68.20 | 18.26 |
| Average Data | | | | | | | | |
| 1 539.96 | H | 63.47 | 29.10 | -47.91 | 0.33 | 44.99 | 54.00 | 9.01 |

Middle Channel (5 785 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 538.80 ¹⁾ | V | 57.90 | 38.33 | -49.34 | - | 46.89 | 74.00 | 27.11 |
| 14 911.89 | V | 53.69 | 41.04 | -42.09 | - | 52.64 | 68.20 | 15.56 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

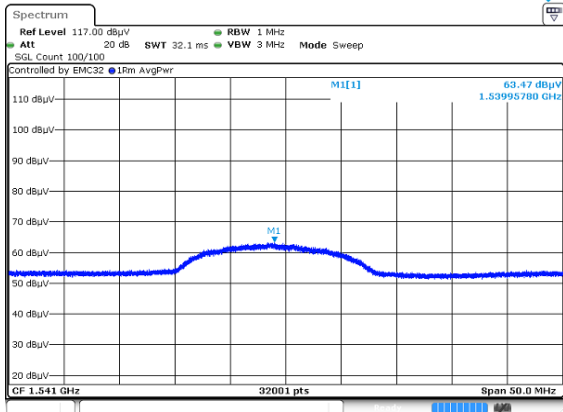
Highest Channel (5 825 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 618.40 ¹⁾ | H | 71.54 | 29.46 | -47.65 | - | 53.35 | 74.00 | 20.65 |
| 5 879.36 | H | 42.29 | 35.18 | -23.71 | - | 53.76 | 101.97 | 48.22 |
| 11 658.83 ¹⁾ | H | 58.51 | 38.43 | -49.43 | - | 47.51 | 74.00 | 26.49 |
| 15 053.48 | V | 54.41 | 40.19 | -41.66 | - | 52.94 | 68.20 | 15.26 |
| Average Data | | | | | | | | |
| 1 618.40 ¹⁾ | H | 64.79 | 29.46 | -47.65 | 0.33 | 46.93 | 54.00 | 7.07 |

802.11n HT20 UNII-3 ANT1

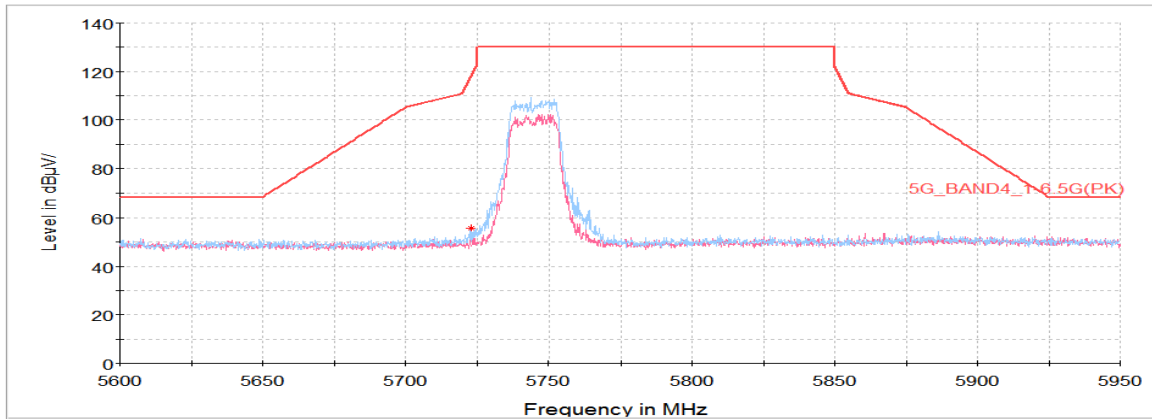
Lowest Channel (5 745 MHz)

Average data



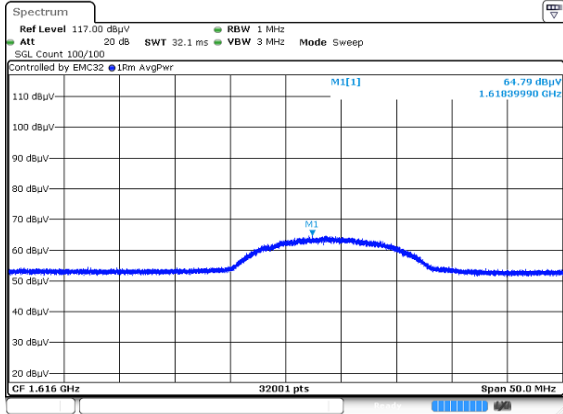
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Horizontal/Vertical for Band-edge



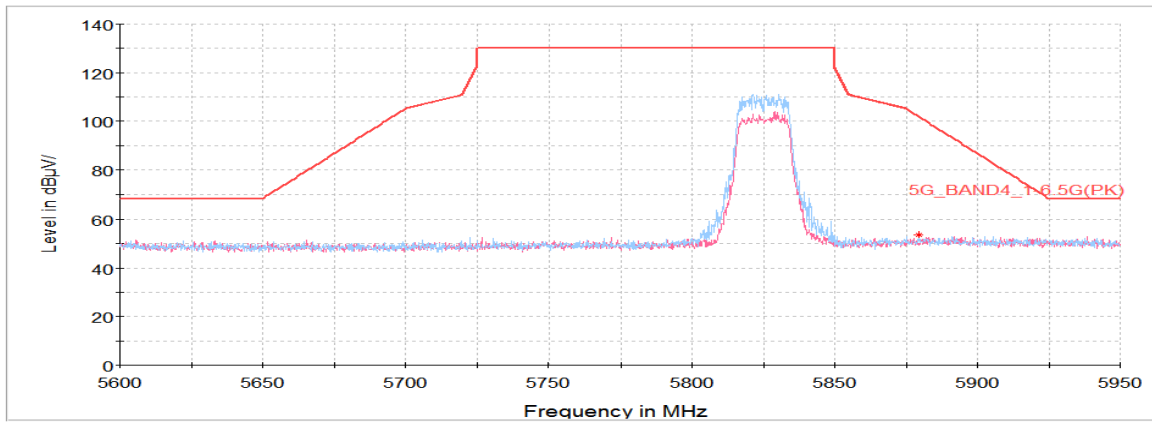
Lowest Channel (5 825 MHz)

Average data



Blank

Horizontal/Vertical for Band-edge



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**802.11n HT20 UNII-3 ANT2****Lowest Channel (5 745 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 710.06 | V | 42.18 | 35.01 | -25.84 | - | 51.35 | 108.02 | 56.67 |
| 11 495.31 ¹⁾ | V | 57.18 | 38.30 | -49.30 | - | 46.18 | 74.00 | 27.82 |
| 17 226.98 | V | 55.37 | 40.56 | -46.72 | - | 49.21 | 68.20 | 18.99 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 785 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 581.20 ¹⁾ | H | 57.84 | 38.36 | -49.37 | - | 46.83 | 74.00 | 27.17 |
| 17 367.86 | V | 55.47 | 40.48 | -46.76 | - | 49.19 | 68.20 | 19.01 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

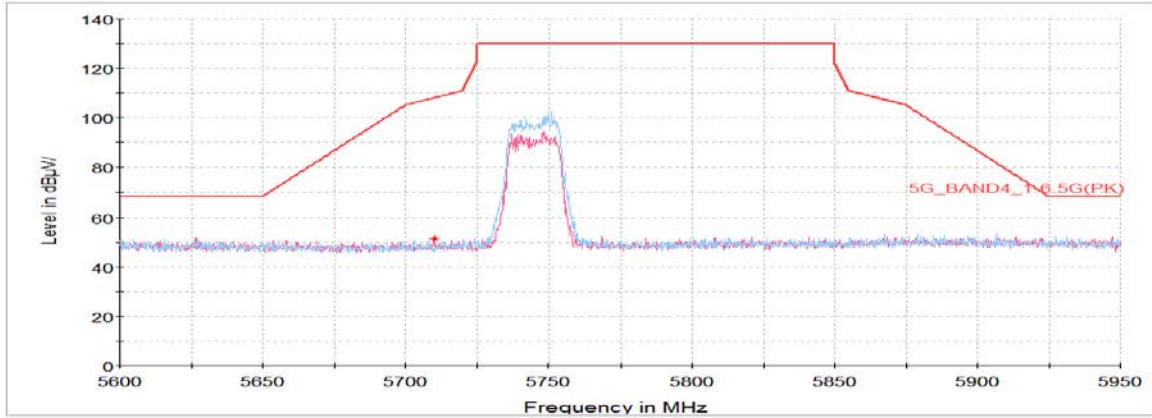
Highest Channel (5 825 MHz)

| Frequency | Pol. | Reading | Amp. + Cable | Antenna Factor | DCF | Result | Limit | Margin |
|--|-------|----------------|--------------|----------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 863.03 | H | 41.65 | 35.16 | -23.79 | - | 53.02 | 108.55 | 55.53 |
| 11 653.80 ¹⁾ | V | 57.54 | 38.42 | -49.43 | - | 46.53 | 74.00 | 27.47 |
| 17 471.36 | H | 56.04 | 40.42 | -46.79 | - | 49.67 | 68.20 | 18.53 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11n HT20 UNII-3 ANT2

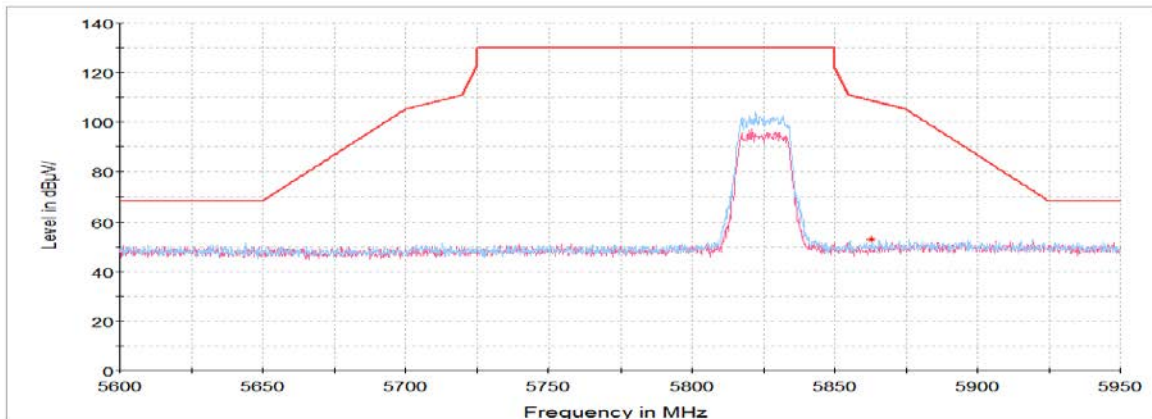
Lowest Channel (5 745 MHz)

Horizontal/Vertical for Band-edge



Lowest Channel (5 825 MHz)

Horizontal/Vertical for Band-edge



802.11n HT20 UNII-3 2TX MIMO

Lowest Channel (5 745 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|-----------------|-------------|------------|------|-------------------|-------------------|--------|
| (MHz) | (V/H) | (dB(μV)) | (dB) | (dB) | (dB) | (dB($\mu V/m$)) | (dB($\mu V/m$)) | (dB) |
| Peak data | | | | | | | | |
| 1 539.86 ¹⁾ | H | 69.20 | 29.09 | -47.90 | - | 50.39 | 74.00 | 23.61 |
| 5 724.50 | H | 49.05 | 35.02 | -25.56 | - | 58.51 | 121.06 | 62.55 |
| 11 477.70 ¹⁾ | H | 57.83 | 38.30 | -49.30 | - | 46.83 | 74.00 | 27.17 |
| 17 246.75 | V | 55.09 | 40.55 | -46.73 | - | 48.91 | 68.20 | 19.29 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 785 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|-----------------|-------------|------------|------|-------------------|-------------------|--------|
| (MHz) | (V/H) | (dB(μV)) | (dB) | (dB) | (dB) | (dB($\mu V/m$)) | (dB($\mu V/m$)) | (dB) |
| Peak data | | | | | | | | |
| 11 579.41 ¹⁾ | V | 56.97 | 38.36 | -49.37 | - | 45.96 | 74.00 | 28.04 |
| 17 351.33 | H | 55.32 | 40.49 | -46.76 | - | 49.05 | 68.20 | 19.15 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

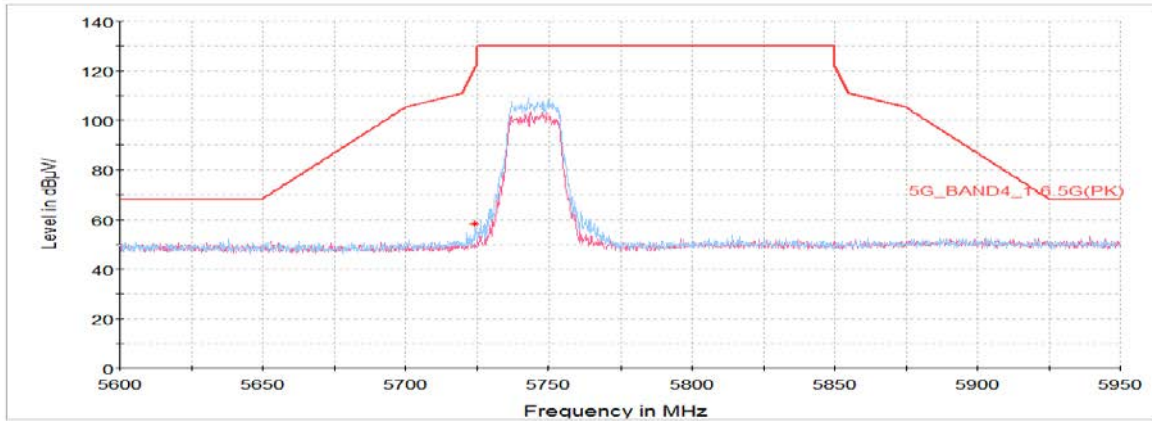
Highest Channel (5 825 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|-----------------|-------------|------------|------|-------------------|-------------------|--------|
| (MHz) | (V/H) | (dB(μV)) | (dB) | (dB) | (dB) | (dB($\mu V/m$)) | (dB($\mu V/m$)) | (dB) |
| Peak data | | | | | | | | |
| 1 619.40 ¹⁾ | H | 71.19 | 29.47 | -47.59 | - | 53.07 | 74.00 | 20.93 |
| 5 886.23 | H | 42.19 | 35.19 | -23.68 | - | 53.70 | 96.89 | 43.18 |
| 11 651.28 ¹⁾ | H | 55.88 | 38.42 | -49.43 | - | 44.87 | 74.00 | 29.13 |
| 17 476.75 | H | 54.14 | 40.41 | -46.79 | - | 47.76 | 68.20 | 20.44 |
| Average Data | | | | | | | | |
| 1 619.40 ¹⁾ | H | 65.03 | 29.47 | -47.59 | 0.61 | 47.52 | 54.00 | 6.48 |

802.11n HT20 UNII-3 2TX MIMO

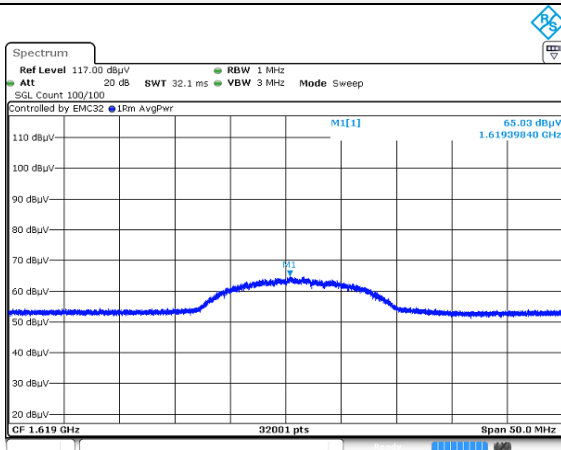
Lowest Channel (5 745 MHz)

Horizontal/Vertical for Band-edge



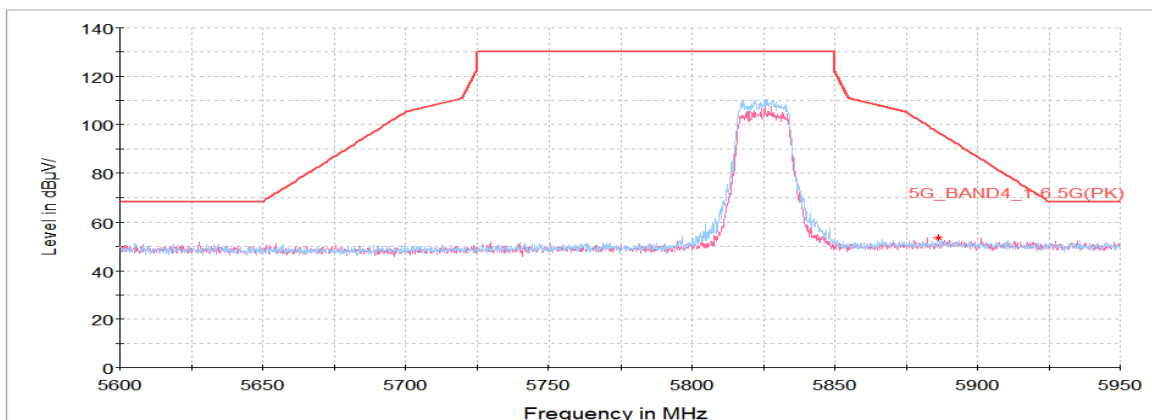
Lowest Channel (5 825 MHz)

Average data



Blank

Horizontal/Vertical for Band-edge



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KR21-SRF0159

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**802.11n HT40 UNII-3 ANT1****Lowest Channel (5 755 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 722.44 | H | 42.96 | 35.02 | -25.60 | - | 52.38 | 116.36 | 63.98 |
| 11 563.23 ¹⁾ | V | 58.63 | 38.35 | -49.36 | - | 47.62 | 74.00 | 26.38 |
| 15 053.13 | H | 54.51 | 40.19 | -41.66 | - | 53.04 | 68.20 | 15.16 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

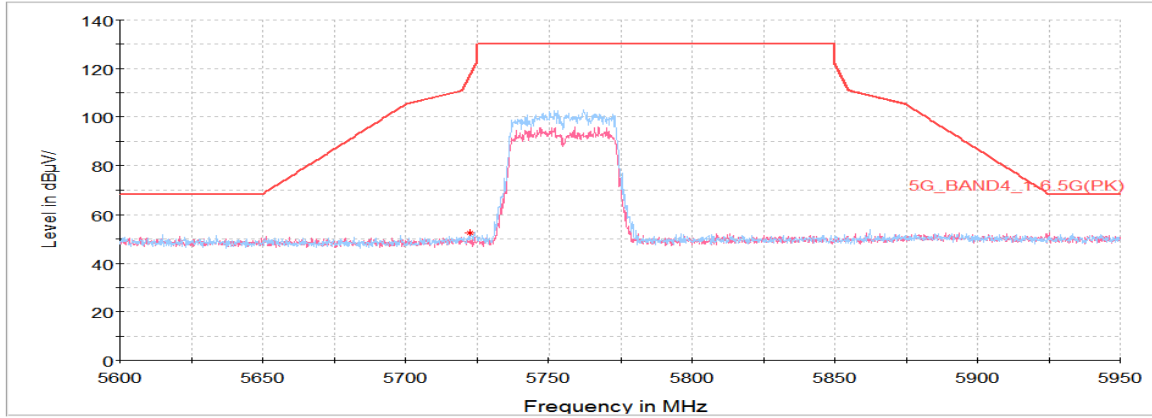
Highest Channel (5 795 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 866.98 | H | 40.83 | 35.17 | -23.77 | - | 52.23 | 107.44 | 55.21 |
| 11 547.42 ¹⁾ | H | 57.91 | 38.34 | -49.34 | - | 46.91 | 74.00 | 27.09 |
| 14 912.97 | H | 54.41 | 41.04 | -42.08 | - | 53.37 | 68.20 | 14.83 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11n HT40 UNII-3 ANT1

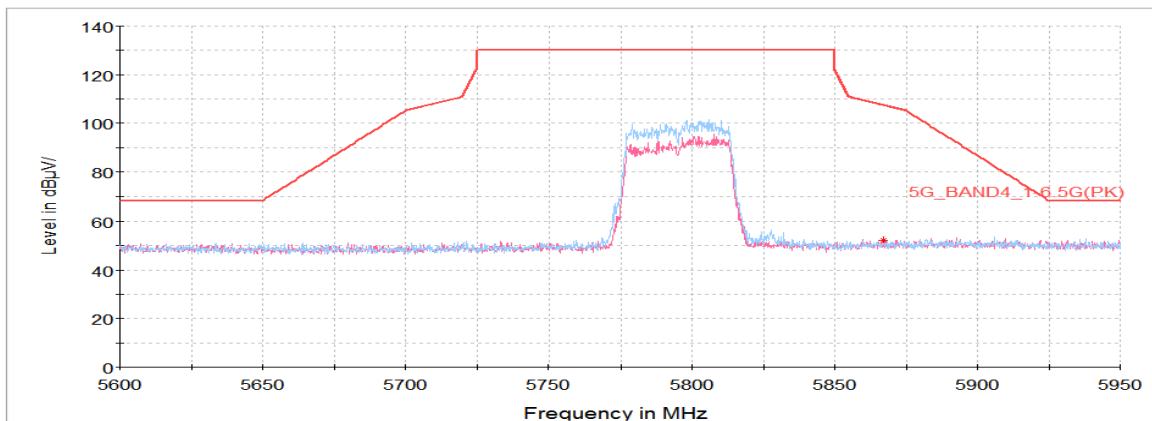
Lowest Channel (5 755 MHz)

Horizontal/Vertical for Band-edge



Lowest Channel (5 795 MHz)

Horizontal/Vertical for Band-edge



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**802.11n HT40 UNII-3 ANT2****Lowest Channel (5 755 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 717.80 | H | 41.24 | 35.02 | -25.69 | - | 50.57 | 110.18 | 59.62 |
| 11 519.75 ¹⁾ | V | 56.77 | 38.32 | -49.32 | - | 45.77 | 74.00 | 28.23 |
| 17 260.41 | H | 56.66 | 40.54 | -46.73 | - | 50.47 | 68.20 | 17.73 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

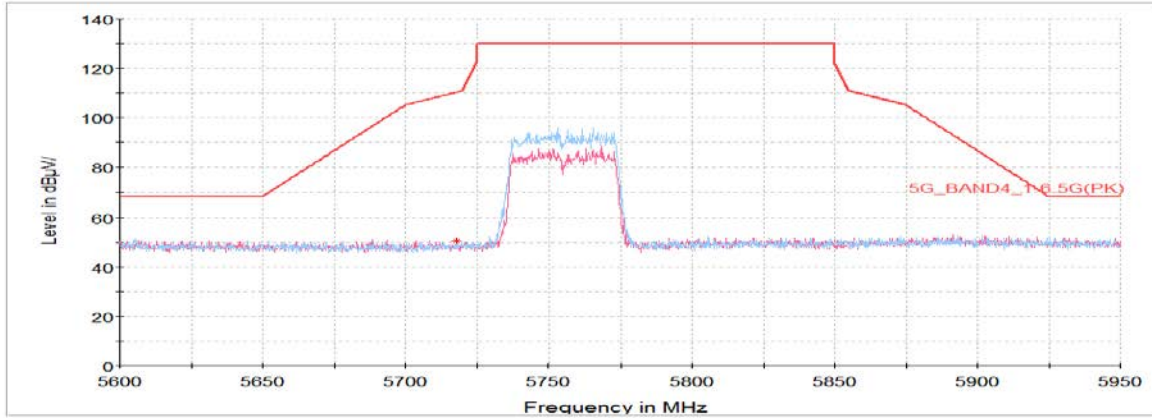
Highest Channel (5 795 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 865.44 | V | 41.48 | 35.17 | -23.78 | - | 52.87 | 107.88 | 55.01 |
| 11 586.95 ¹⁾ | V | 57.34 | 38.37 | -49.37 | - | 46.34 | 74.00 | 27.66 |
| 17 321.86 | V | 57.18 | 40.51 | -46.75 | - | 50.94 | 68.20 | 17.26 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11n HT40 UNII-3 ANT2

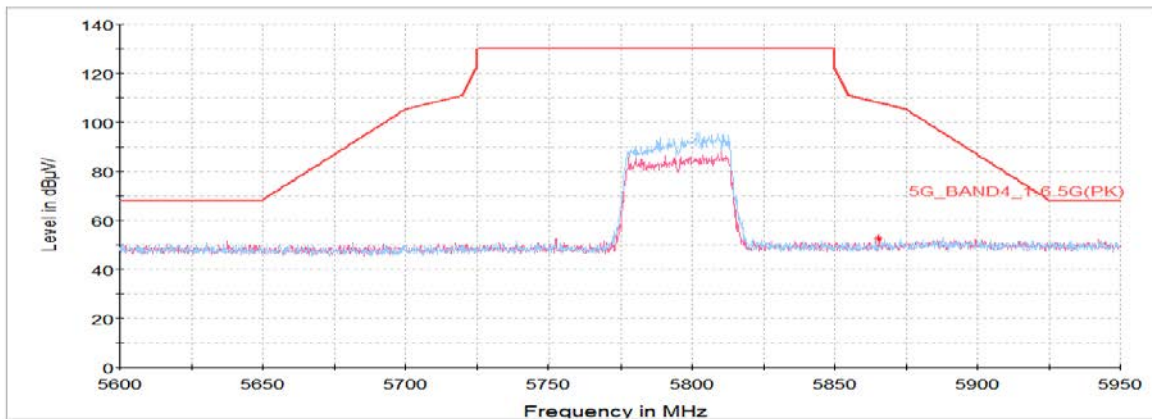
Lowest Channel (5 755 MHz)

Horizontal/Vertical for Band-edge



Lowest Channel (5 795 MHz)

Horizontal/Vertical for Band-edge



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**802.11n HT40 UNII-3 2TX MIMO****Lowest Channel (5 755 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 722.27 | H | 44.37 | 35.02 | -25.60 | - | 53.79 | 115.97 | 62.18 |
| 11 528.02 ¹⁾ | H | 57.56 | 38.32 | -49.33 | - | 46.55 | 74.00 | 27.45 |
| 17 270.11 | V | 55.48 | 40.54 | -46.74 | - | 49.28 | 68.20 | 18.92 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

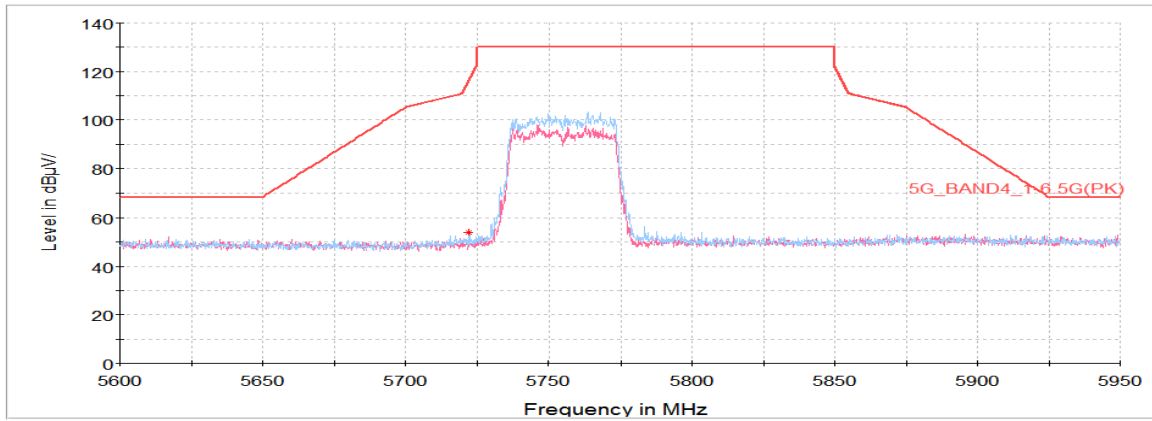
Highest Channel (5 795 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 867.67 | H | 42.29 | 35.17 | -23.77 | - | 53.69 | 107.25 | 53.56 |
| 11 592.34 ¹⁾ | V | 56.88 | 38.37 | -49.38 | - | 45.87 | 74.00 | 28.13 |
| 17 385.83 | V | 53.95 | 40.47 | -46.77 | - | 47.65 | 68.20 | 20.55 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11n HT40 UNII-3 2TX MIMO

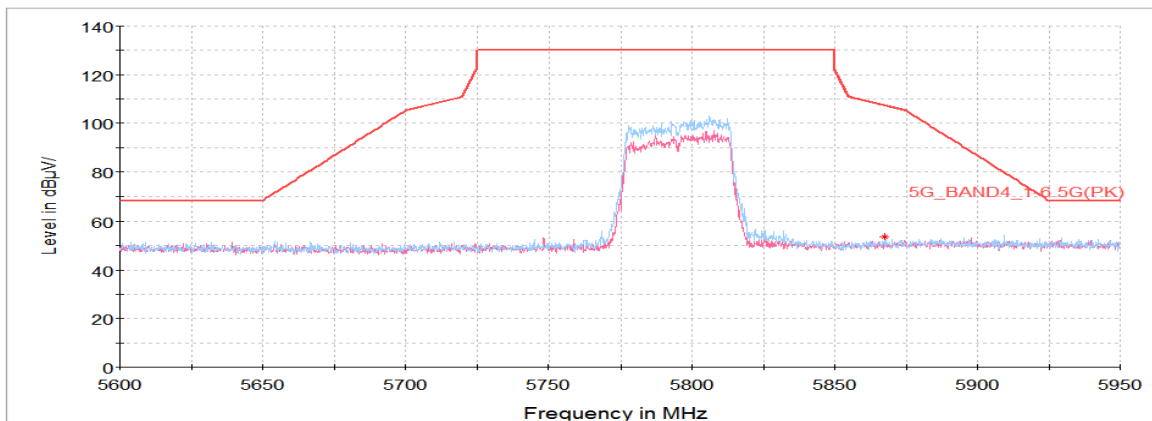
Lowest Channel (5 755 MHz)

Horizontal/Vertical for Band-edge



Lowest Channel (5 795 MHz)

Horizontal/Vertical for Band-edge



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**802.11ac VHT20 UNII-3 ANT1****Lowest Channel (5 745 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 539.84 ¹⁾ | H | 70.72 | 29.09 | -47.90 | - | 51.91 | 74.00 | 22.09 |
| 5 722.95 | H | 45.19 | 35.02 | -25.59 | - | 54.62 | 117.53 | 62.91 |
| 11 364.86 ¹⁾ | H | 58.74 | 38.27 | -49.27 | - | 47.74 | 74.00 | 26.26 |
| 17 223.75 | V | 56.55 | 40.57 | -46.72 | - | 50.40 | 68.20 | 17.80 |
| Average Data | | | | | | | | |
| 1 539.84 | H | 63.43 | 29.09 | -47.90 | 0.32 | 44.94 | 54.00 | 9.06 |

Middle Channel (5 785 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 536.64 ¹⁾ | H | 57.92 | 38.33 | -49.33 | - | 46.92 | 74.00 | 27.08 |
| 15 046.30 | H | 54.38 | 40.19 | -41.60 | - | 52.97 | 68.20 | 15.23 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Highest Channel (5 825 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 619.38 ¹⁾ | H | 70.85 | 29.48 | -47.56 | - | 52.77 | 74.00 | 21.23 |
| 5 877.98 | H | 42.15 | 35.18 | -23.72 | - | 53.61 | 102.99 | 49.38 |
| 11 833.13 ¹⁾ | H | 59.16 | 38.57 | -49.57 | - | 48.16 | 74.00 | 25.84 |
| 15 048.45 | V | 54.54 | 40.19 | -41.62 | - | 53.11 | 68.20 | 15.09 |
| Average Data | | | | | | | | |
| 1 619.38 | H | 64.84 | 29.48 | -47.56 | 0.32 | 47.08 | 54.00 | 6.92 |

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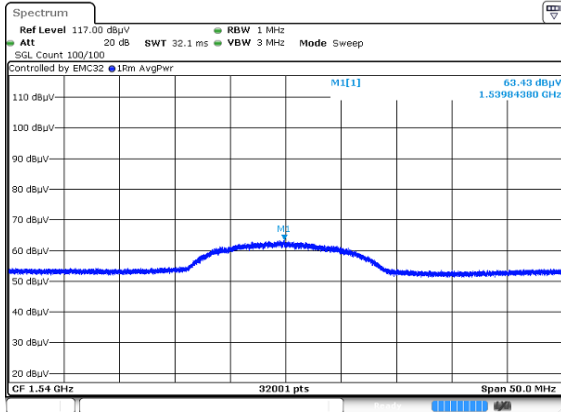
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802.11ac VHT20 UNII-3 ANT1

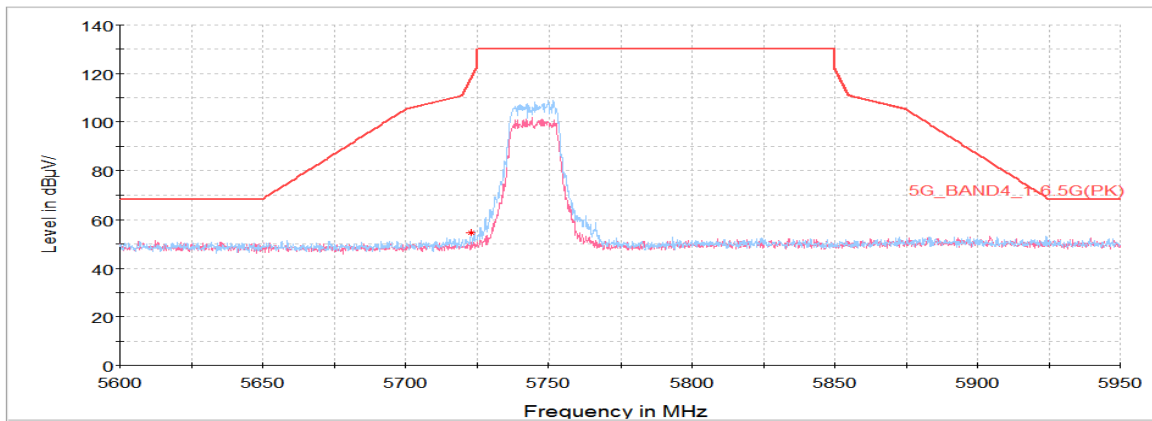
Lowest Channel (5 745 MHz)

Average data



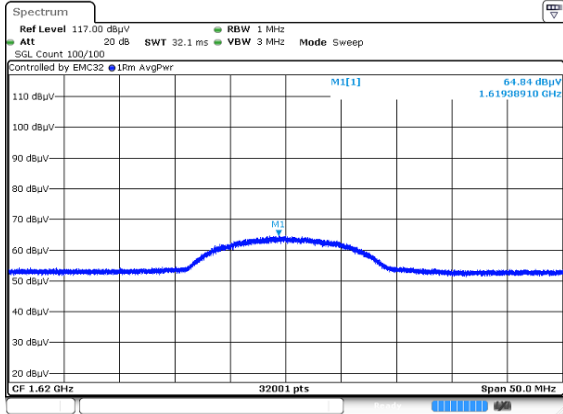
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Horizontal/Vertical for Band-edge



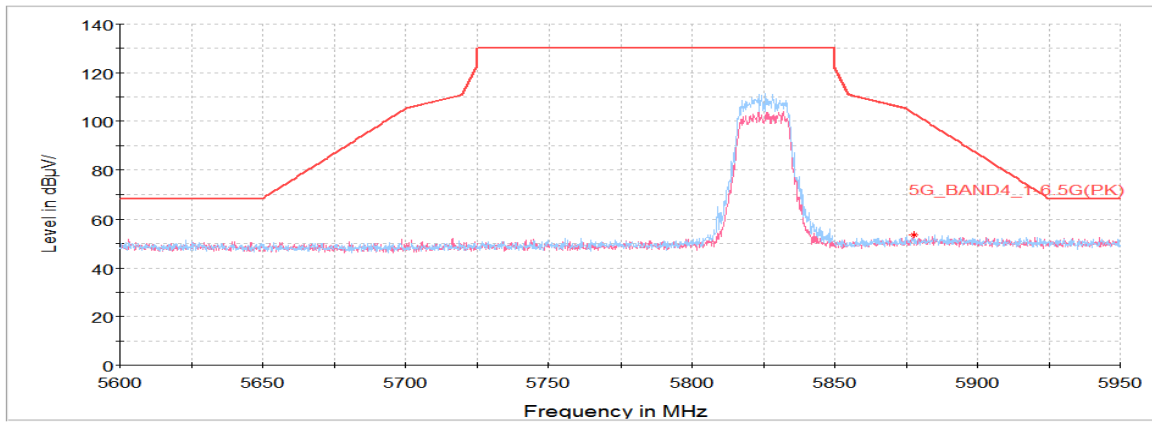
Lowest Channel (5 825 MHz)

Average data



Blank

Horizontal/Vertical for Band-edge



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**802.11ac VHT20 UNII-3 ANT2****Lowest Channel (5 745 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 708.86 | V | 42.53 | 35.01 | -25.86 | - | 51.68 | 107.68 | 56.00 |
| 11 479.14 ¹⁾ | H | 58.41 | 38.30 | -49.30 | - | 47.41 | 74.00 | 26.59 |
| 17 234.17 | H | 55.08 | 40.56 | -46.73 | - | 48.91 | 68.20 | 19.29 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Middle Channel (5 785 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 577.25 ¹⁾ | V | 56.78 | 38.36 | -49.37 | - | 45.77 | 74.00 | 28.23 |
| 17 346.66 | V | 55.22 | 40.49 | -46.76 | - | 48.95 | 68.20 | 19.25 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

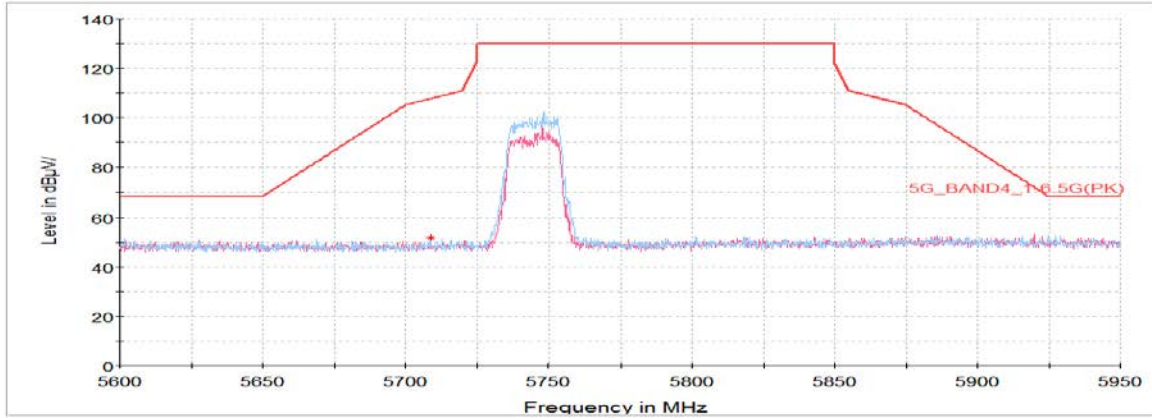
Highest Channel (5 825 MHz)

| Frequency | Pol. | Reading | Amp. + Cable | Antenna Factor | DCF | Result | Limit | Margin |
|--|-------|----------------|--------------|----------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 877.64 | H | 42.30 | 35.18 | -23.72 | - | 53.76 | 103.25 | 49.49 |
| 11 656.31 ¹⁾ | V | 57.38 | 38.43 | -49.43 | - | 46.38 | 74.00 | 27.62 |
| 17 487.53 | H | 56.28 | 40.41 | -46.79 | - | 49.90 | 68.20 | 18.30 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT20 UNII-3 ANT2

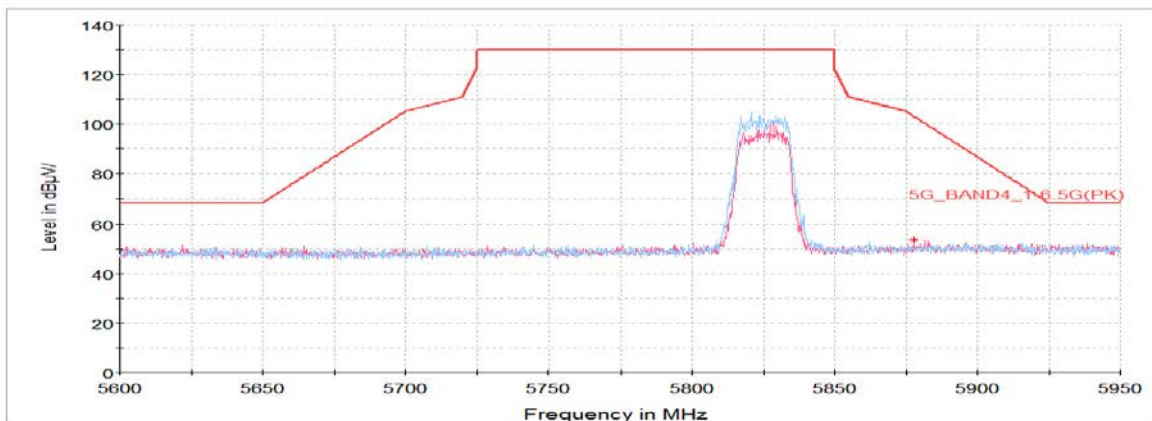
Lowest Channel (5 745 MHz)

Horizontal/Vertical for Band-edge



Lowest Channel (5 825 MHz)

Horizontal/Vertical for Band-edge



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**802.11ac VHT20 UNII-3 2TX MIMO****Lowest Channel (5 745 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 539.15 ¹⁾ | H | 69.89 | 29.09 | -47.90 | - | 51.08 | 74.00 | 22.92 |
| 5 724.33 | H | 45.14 | 35.02 | -25.56 | - | 54.60 | 120.67 | 66.07 |
| 11 468.00 ¹⁾ | H | 57.94 | 38.29 | -49.30 | - | 46.93 | 74.00 | 27.07 |
| 17 262.20 | V | 55.11 | 40.54 | -46.73 | - | 48.92 | 68.20 | 19.28 |
| Average Data | | | | | | | | |
| 1 539.15 | H | 62.75 | 29.09 | -47.90 | 0.61 | 44.55 | 54.00 | 9.45 |

Middle Channel (5 785 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 11 551.02 ¹⁾ | H | 57.28 | 38.34 | -49.35 | - | 46.27 | 74.00 | 27.73 |
| 17 351.69 | H | 56.30 | 40.49 | -46.76 | - | 50.03 | 68.20 | 18.17 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

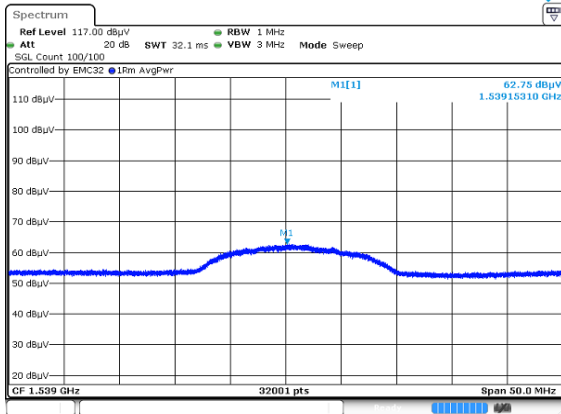
Highest Channel (5 825 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|-------------------------|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 1 619.56 ¹⁾ | H | 72.14 | 29.48 | -47.52 | - | 54.10 | 74.00 | 19.90 |
| 5 865.27 | H | 42.17 | 35.17 | -23.78 | - | 53.56 | 107.93 | 54.36 |
| 11 650.56 ¹⁾ | H | 56.29 | 38.42 | -49.43 | - | 45.28 | 74.00 | 28.72 |
| 17 474.95 | V | 53.51 | 40.42 | -46.79 | - | 47.14 | 68.20 | 21.06 |
| Average Data | | | | | | | | |
| 1 619.56 | H | 64.87 | 29.48 | -47.52 | 0.61 | 47.44 | 54.00 | 6.56 |

802.11ac VHT20 UNII-3 2TX MIMO

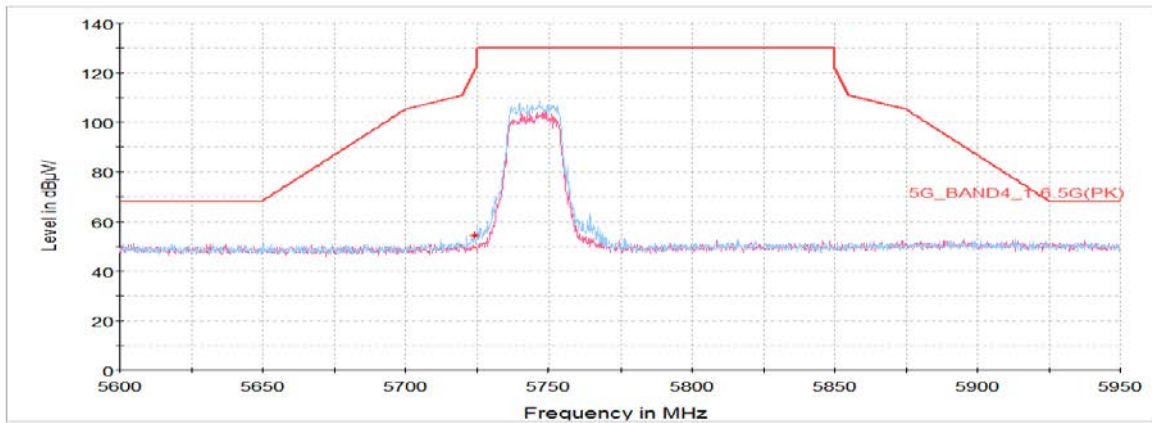
Lowest Channel (5 745 MHz)

Average data



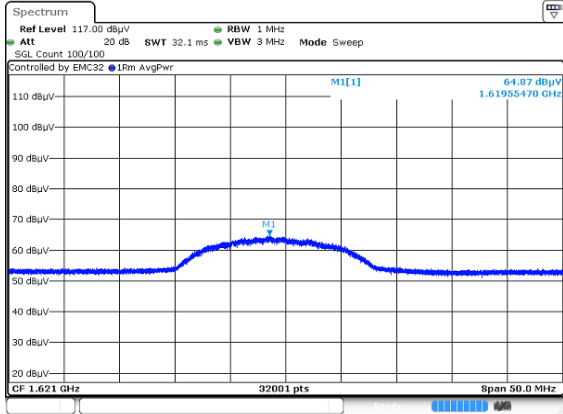
Blank

Horizontal/Vertical for Band-edge



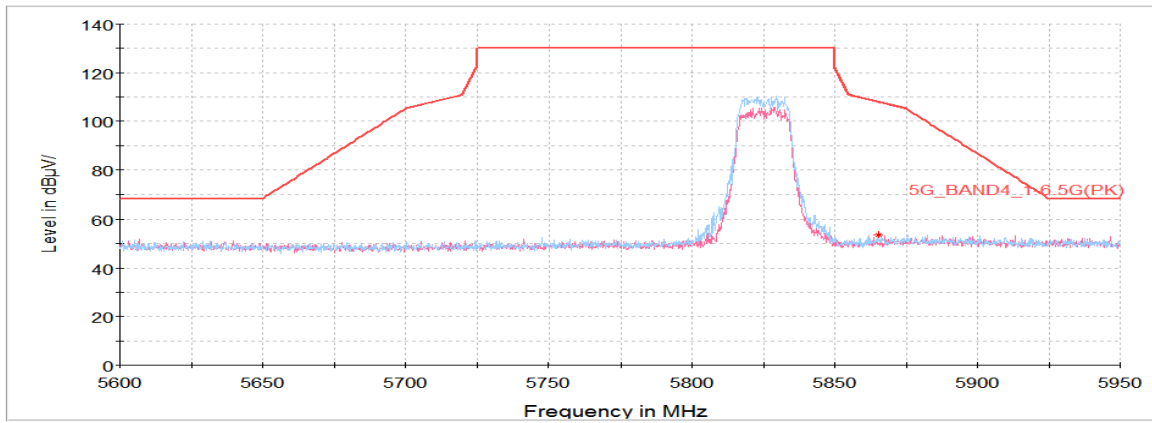
Lowest Channel (5 825 MHz)

Average data



Blank

Horizontal/Vertical for Band-edge



802.11ac VHT40 UNII-3 ANT1

Lowest Channel (5 755 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 721.23 | H | 45.10 | 35.02 | -25.62 | - | 54.50 | 113.61 | 59.12 |
| 11 652.36 ¹⁾ | H | 58.67 | 38.42 | -49.43 | - | 47.66 | 74.00 | 26.34 |
| 14 897.16 | V | 53.83 | 41.01 | -42.24 | - | 52.60 | 68.20 | 15.60 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

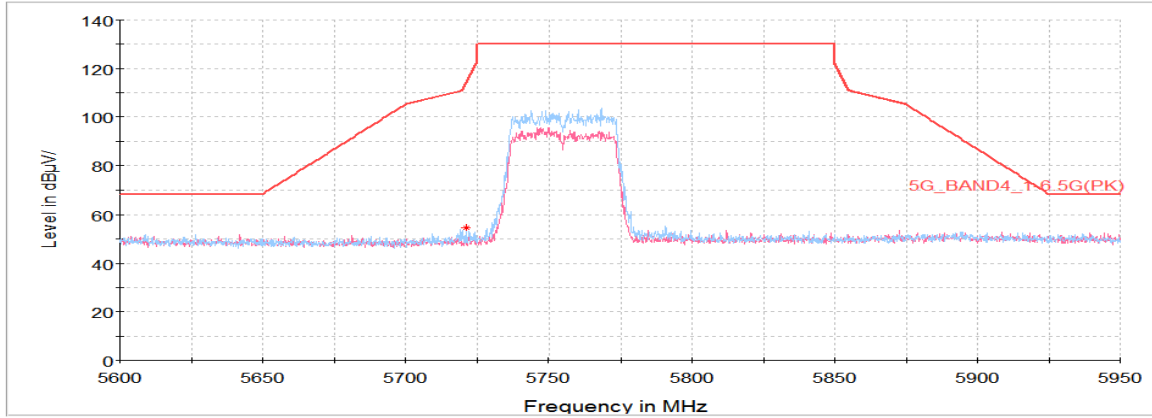
Highest Channel (5 795 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 870.25 | H | 41.69 | 35.17 | -23.75 | - | 53.11 | 106.53 | 53.42 |
| 11 572.58 ¹⁾ | H | 57.80 | 38.36 | -49.36 | - | 46.80 | 74.00 | 27.20 |
| 14 918.00 | H | 53.83 | 41.05 | -42.03 | - | 52.85 | 68.20 | 15.35 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT40 UNII-3 ANT1

Lowest Channel (5 755 MHz)

Horizontal/Vertical for Band-edge



Lowest Channel (5 795 MHz)

Horizontal/Vertical for Band-edge



802.11ac VHT40 UNII-3 ANT2

Lowest Channel (5 755 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 697.52 | H | 42.97 | 35.00 | -26.01 | - | 51.96 | 103.36 | 51.41 |
| 11 536.64 ¹⁾ | H | 56.79 | 38.33 | -49.33 | - | 45.79 | 74.00 | 28.21 |
| 17 263.28 | V | 55.27 | 40.54 | -46.73 | - | 49.08 | 68.20 | 19.12 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

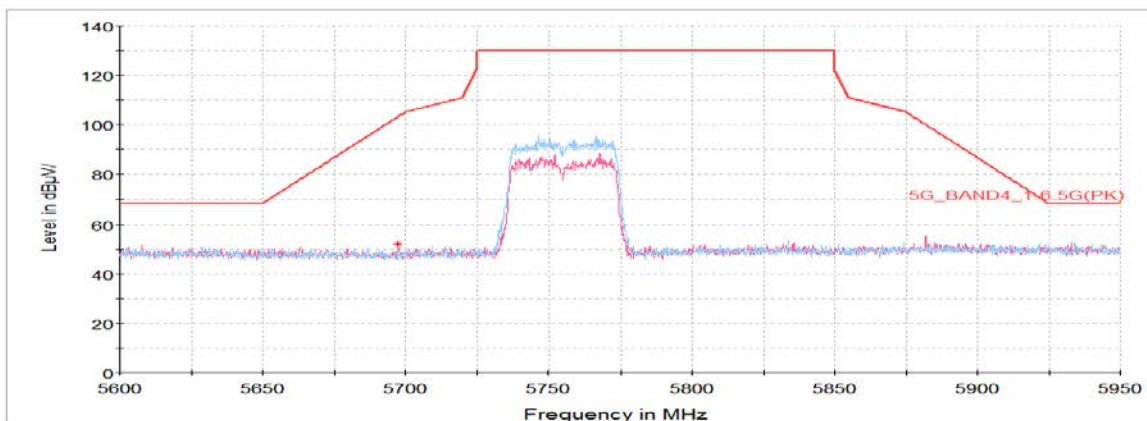
Highest Channel (5 795 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 853.92 | V | 41.33 | 35.15 | -23.83 | - | 52.65 | 113.26 | 60.61 |
| 11 588.75 ¹⁾ | V | 57.34 | 38.37 | -49.38 | - | 46.33 | 74.00 | 27.67 |
| 17 384.03 | H | 55.96 | 40.47 | -46.77 | - | 49.66 | 68.20 | 18.54 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT40 UNII-3 ANT2

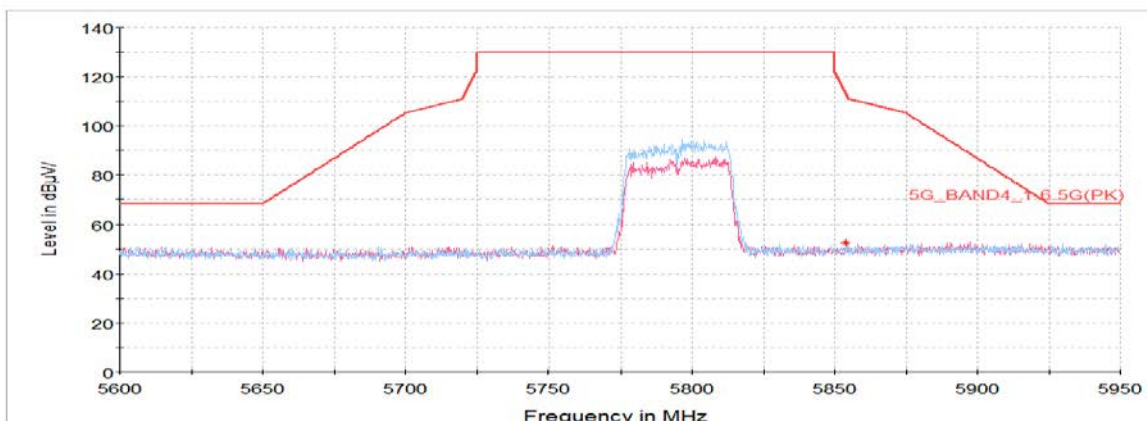
Lowest Channel (5 755 MHz)

Horizontal/Vertical for Band-edge



Lowest Channel (5 795 MHz)

Horizontal/Vertical for Band-edge



KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
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www.kctl.co.kr

Report No.:
KR21-SRF0159

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**802.11ac VHT40 UNII-3 2TX MIMO****Lowest Channel (5 755 MHz)**

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 724.84 | H | 44.72 | 35.02 | -25.55 | - | 54.19 | 121.84 | 67.66 |
| 11 510.41 ¹⁾ | H | 56.17 | 38.31 | -49.31 | - | 45.17 | 74.00 | 28.83 |
| 17 264.36 | H | 54.91 | 40.54 | -46.73 | - | 48.72 | 68.20 | 19.48 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

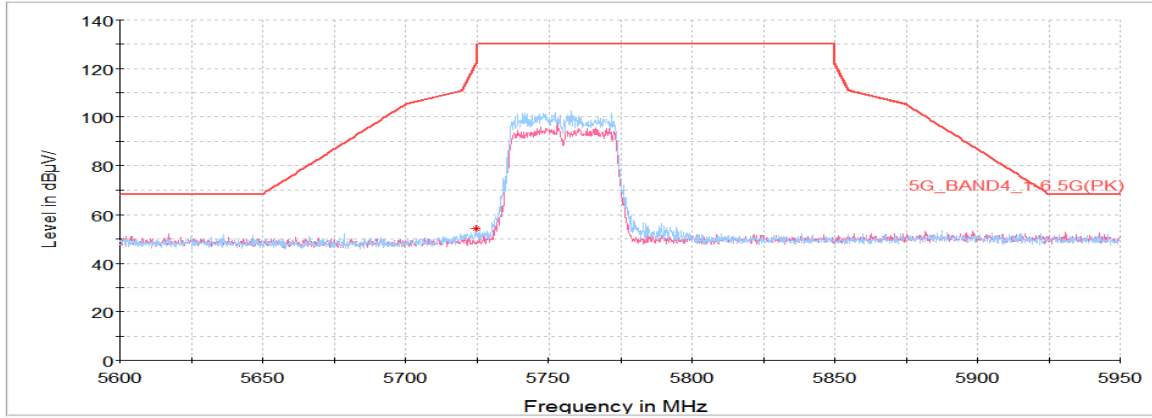
Highest Channel (5 795 MHz)

| Frequency | Pol. | Reading | Ant. Factor | Amp.+Cable | DCF | Result | Limit | Margin |
|--|-------|----------------|-------------|------------|------|------------------|------------------|--------|
| (MHz) | (V/H) | (dB(μ V)) | (dB) | (dB) | (dB) | (dB(μ V/m)) | (dB(μ V/m)) | (dB) |
| Peak data | | | | | | | | |
| 5 866.30 | H | 40.83 | 35.17 | -23.77 | - | 52.23 | 107.64 | 55.41 |
| 11 579.41 ¹⁾ | V | 57.36 | 38.36 | -49.37 | - | 46.35 | 74.00 | 27.65 |
| 17 380.80 | V | 55.86 | 40.47 | -46.77 | - | 49.56 | 68.20 | 18.64 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

802.11ac VHT40 UNII-3 2TX MIMO

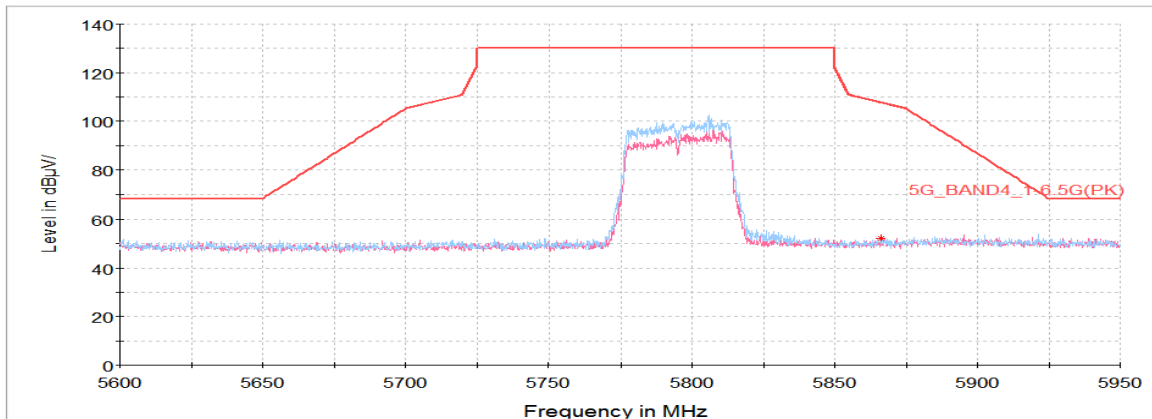
Lowest Channel (5 755 MHz)

Horizontal/Vertical for Band-edge



Lowest Channel (5 795 MHz)

Horizontal/Vertical for Band-edge



KCTL Inc.

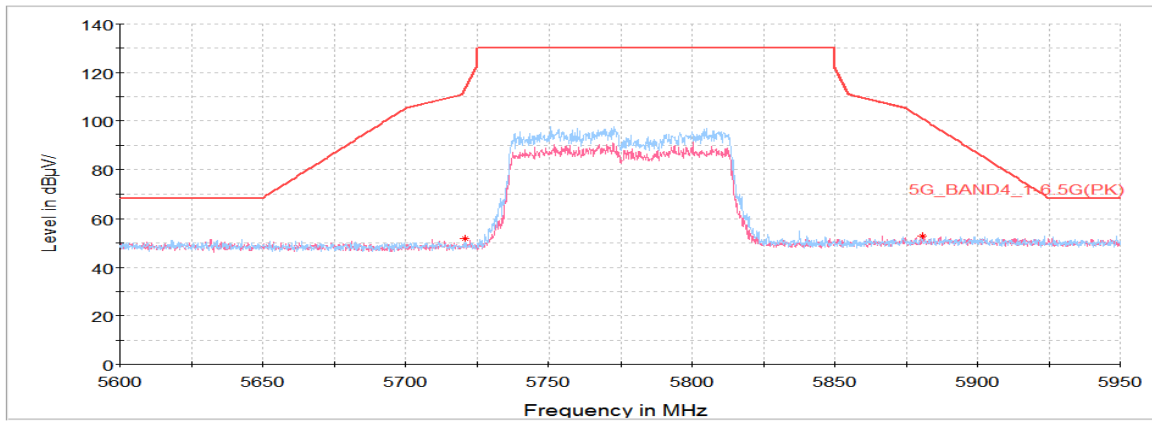
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR21-SRF0159

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**802.11ac VHT80 UNII-3 ANT1****Lowest Channel (5 775 MHz)**

| Frequency (MHz) | Pol. (V/H) | Reading (dB(μ V)) | Ant. Factor (dB) | Amp.+Cable (dB) | DCF (dB) | Result (dB(μ V/m)) | Limit (dB(μ V/m)) | Margin (dB) |
|--|---------------|---------------------------|---------------------|--------------------|-------------|----------------------------|---------------------------|----------------|
| Peak data | | | | | | | | |
| 5 721.06 | H | 42.57 | 35.02 | -25.62 | - | 51.97 | 113.22 | 61.26 |
| 5 880.56 | H | 41.58 | 35.18 | -23.70 | - | 53.06 | 101.08 | 48.02 |
| 11 662.78 ¹⁾ | V | 58.78 | 38.43 | -49.44 | - | 47.77 | 74.00 | 26.23 |
| 14 917.28 | V | 54.03 | 41.05 | -42.03 | - | 53.05 | 68.20 | 15.15 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Horizontal/Vertical for Band-edge

KCTL Inc.

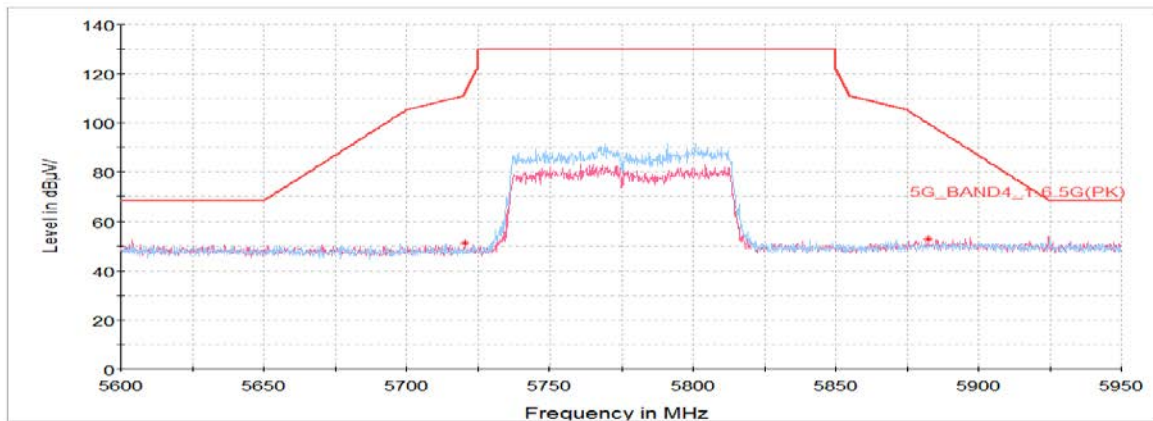
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
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**802.11ac VHT80 UNII-3 ANT2****Lowest Channel (5 775 MHz)**

| Frequency (MHz) | Pol. (V/H) | Reading (dB(μ V)) | Ant. Factor (dB) | Amp.+Cable (dB) | DCF (dB) | Result (dB(μ V/m)) | Limit (dB(μ V/m)) | Margin (dB) |
|--|---------------|---------------------------|---------------------|--------------------|-------------|----------------------------|---------------------------|----------------|
| Peak data | | | | | | | | |
| 5 720.55 | V | 42.01 | 35.02 | -25.63 | - | 51.40 | 112.05 | 60.65 |
| 5 882.45 | V | 41.67 | 35.18 | -23.69 | - | 53.16 | 99.69 | 46.52 |
| 11 516.52 ¹⁾ | V | 56.94 | 38.31 | -49.32 | - | 45.93 | 74.00 | 28.07 |
| 17 261.48 | H | 56.77 | 40.54 | -46.73 | - | 50.58 | 68.20 | 17.62 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

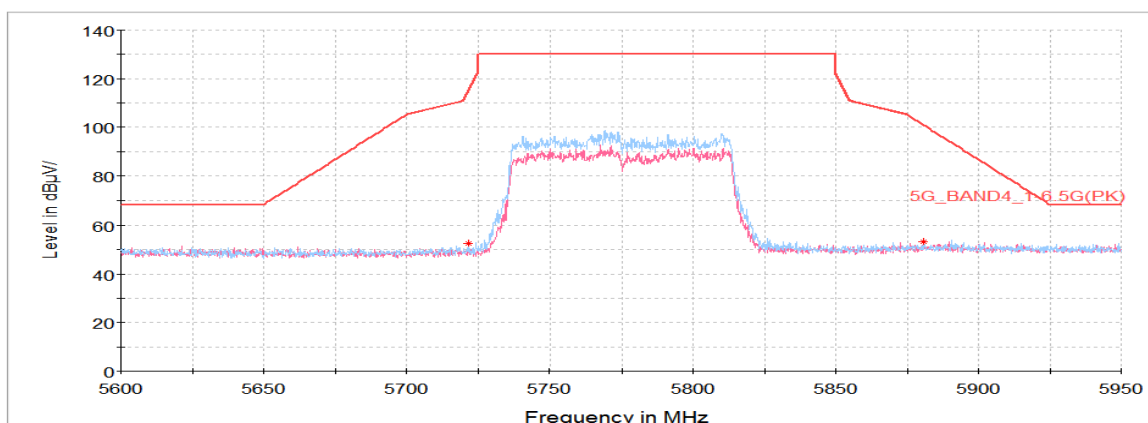
Horizontal/Vertical for Band-edge

802.11ac VHT80 UNII-3 2TX MIMO

Lowest Channel (5 775 MHz)

| Frequency (MHz) | Pol. (V/H) | Reading (dB(μV)) | Ant. Factor (dB) | Amp.+Cable (dB) | DCF (dB) | Result (dB(μV/m)) | Limit (dB(μV/m)) | Margin (dB) |
|--|---------------|---------------------|---------------------|--------------------|-------------|----------------------|---------------------|----------------|
| Peak data | | | | | | | | |
| 5 721.92 | H | 43.07 | 35.02 | -25.61 | - | 52.48 | 115.18 | 62.70 |
| 5 880.73 | H | 41.90 | 35.18 | -23.70 | - | 53.38 | 100.96 | 47.57 |
| 11 521.91 ¹⁾ | V | 57.77 | 38.32 | -49.32 | - | 46.77 | 74.00 | 27.23 |
| 17 320.06 | V | 55.48 | 40.51 | -46.75 | - | 49.24 | 68.20 | 18.96 |
| Average Data | | | | | | | | |
| No spurious emissions were detected within 20 dB of the limit. | | | | | | | | |

Horizontal/Vertical for Band-edge

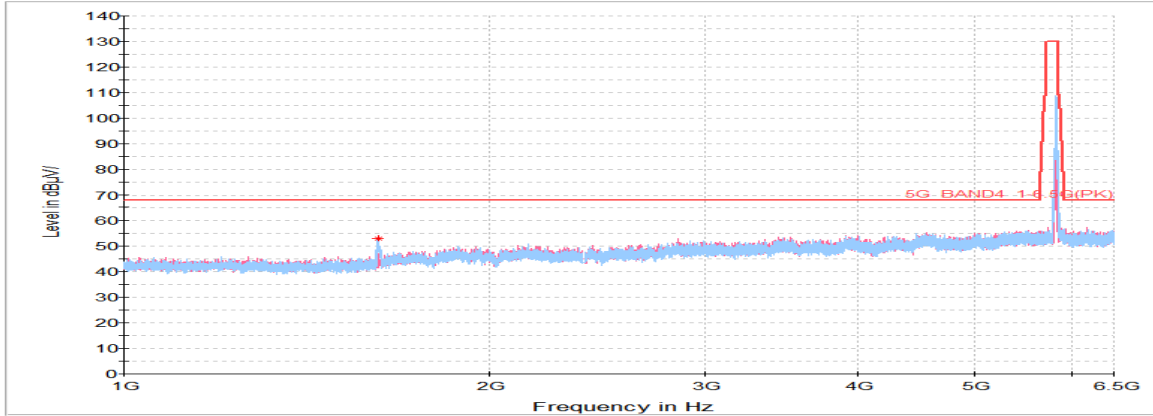


Plot of Harmonics and Spurious Emissions

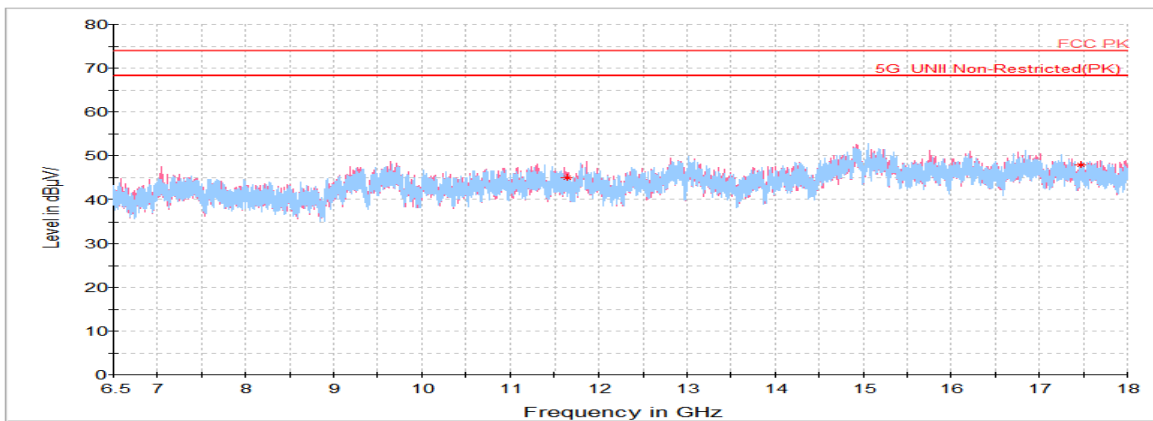
In order to simplify the report, attached plots were only the lowest margin condition

802.11n HT20_UNII-3_MIMO_Highest Channel (5 825 MHz)

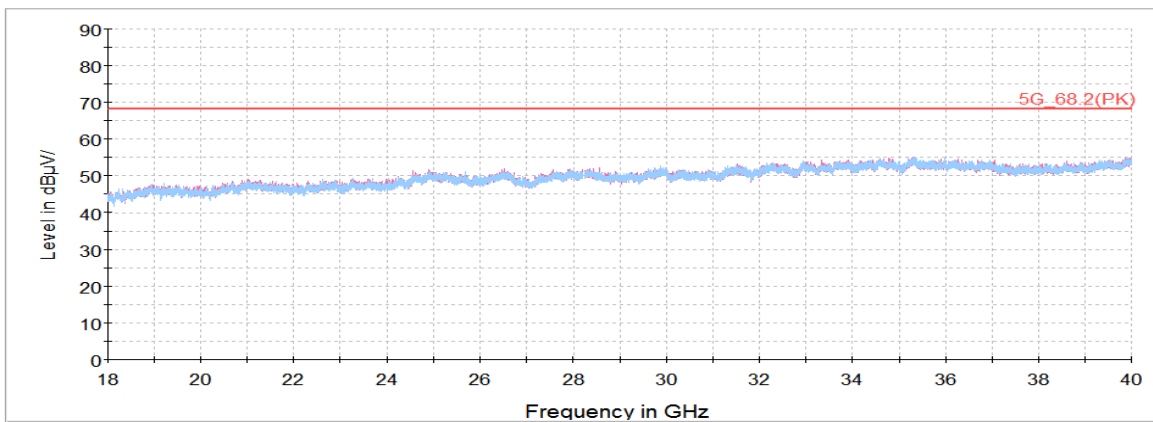
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz

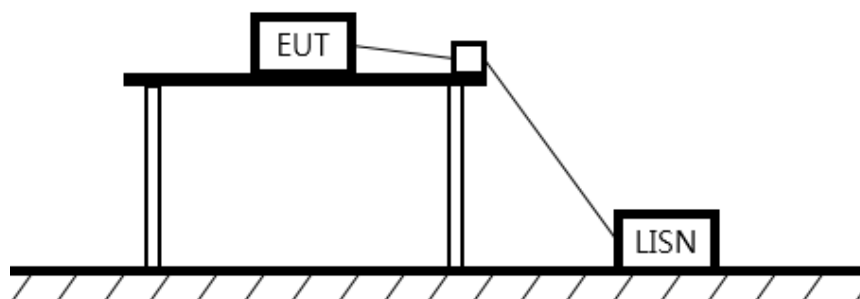


Horizontal/Vertical for 18 GHz ~ 40 GHz



8.7. AC Conducted emission

Test setup



Limit

§15.407

According to 15.207(a) and RSS-Gen (8.8), for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohm line impedance stabilization network (LISN). Compliance with the provision of this paragraph shall on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower applies at the boundary between the frequencies ranges.

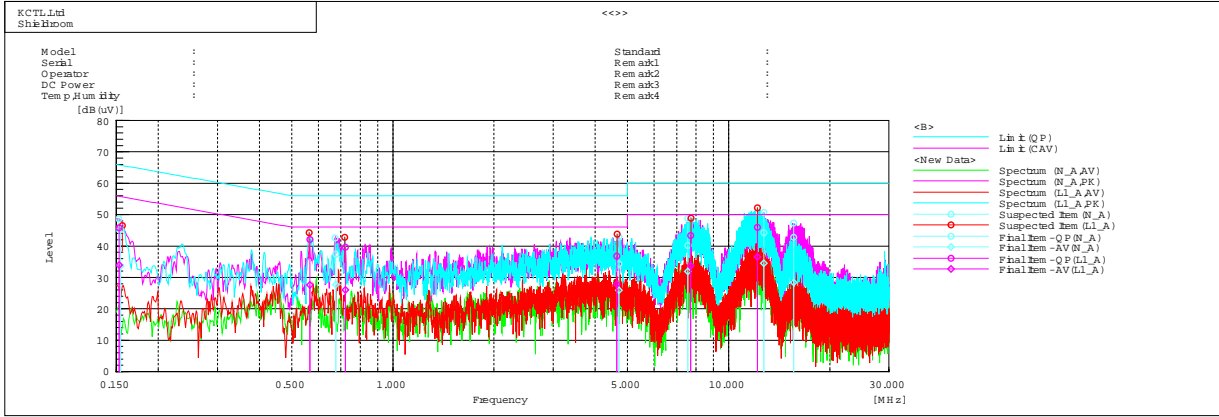
| Frequency of Emission (MHz) | Conducted limit (dB μ V/m) | |
|-----------------------------|--------------------------------|----------|
| | Quasi-peak | Average |
| 0.15 – 0.50 | 66 - 56* | 56 - 46* |
| 0.50 – 5.00 | 56 | 46 |
| 5.00 – 30.0 | 60 | 50 |

Measurement procedure

1. The EUT was placed on a wooden table of size, 1 m by 1.5 m, raised 80 cm in which is located 40 cm away from the vertical wall and 1.5m away from the side wall of the shielded room.
2. Each current-carrying conductor of the EUT power cord was individually connected through a 50 Ω /50 μ H LISN, which is an input transducer to a spectrum analyzer or an EMI/Field Intensity Meter, to the input power source.
3. Exploratory measurements were made to identify the frequency of the emission that had the highest amplitude relative to the limit by operating the EUT in a range of typical modes of operation, cable position, and with a typical system equipment configuration and arrangement. Based on the exploratory tests of the EUT, the one EUT cable configuration and arrangement and mode of operation that had produced the emission with the highest amplitude relative to the limit was selected for the final measurement.
4. The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment is the system) was then performed over the frequency range of 0.15 MHz to 30 MHz.
5. The measurements were made with the detector set to peak amplitude within a bandwidth of 10 kHz or to quasi-peak and average within a bandwidth of 9 kHz. The EUT was in transmitting mode during the measurements.

Test results

Worst case: 802.11n HT 20 2TX MIMO / UNII-2C 5 700 MHz



Final Result

--- N_A Phase ---

| No. | Frequency [MHz] | Reading QP [dB(uV)] | Reading CAV [dB(uV)] | c.f [dB] | Result QP [dB(uV)] | Result CAV [dB(uV)] | Limit QP [dB(uV)] | Limit AV [dB(uV)] | Margin QP [dB] | Margin CAV [dB] |
|-----|-----------------|---------------------|----------------------|----------|--------------------|---------------------|-------------------|-------------------|----------------|-----------------|
| 1 | 0.15448 | 35.2 | 23.7 | 9.9 | 45.1 | 33.6 | 65.8 | 55.8 | 20.7 | 22.2 |
| 2 | 0.67644 | 27.5 | 17.8 | 9.9 | 37.4 | 27.7 | 56.0 | 46.0 | 18.6 | 18.3 |
| 3 | 4.70996 | 24.4 | 16.0 | 9.9 | 34.3 | 25.9 | 56.0 | 46.0 | 21.7 | 20.1 |
| 4 | 7.56083 | 30.1 | 21.9 | 10.0 | 40.1 | 31.9 | 60.0 | 50.0 | 19.9 | 18.1 |
| 5 | 12.71391 | 34.1 | 24.3 | 10.2 | 44.3 | 34.5 | 60.0 | 50.0 | 15.7 | 15.5 |
| 6 | 15.61248 | 32.4 | 18.0 | 10.4 | 42.8 | 28.4 | 60.0 | 50.0 | 17.2 | 21.6 |

--- L1_A Phase ---

| No. | Frequency [MHz] | Reading QP [dB(uV)] | Reading CAV [dB(uV)] | c.f [dB] | Result QP [dB(uV)] | Result CAV [dB(uV)] | Limit QP [dB(uV)] | Limit AV [dB(uV)] | Margin QP [dB] | Margin CAV [dB] |
|-----|-----------------|---------------------|----------------------|----------|--------------------|---------------------|-------------------|-------------------|----------------|-----------------|
| 1 | 0.15285 | 36.0 | 24.2 | 9.8 | 45.8 | 34.0 | 65.8 | 55.8 | 20.0 | 21.8 |
| 2 | 0.56643 | 32.2 | 17.7 | 9.9 | 42.1 | 27.6 | 56.0 | 46.0 | 13.9 | 18.4 |
| 3 | 0.72178 | 29.7 | 16.1 | 9.9 | 39.6 | 26.0 | 56.0 | 46.0 | 16.4 | 20.0 |
| 4 | 4.64733 | 26.9 | 18.0 | 9.9 | 36.8 | 27.9 | 56.0 | 46.0 | 19.2 | 18.1 |
| 5 | 7.71361 | 33.3 | 23.7 | 10.0 | 43.3 | 33.7 | 60.0 | 50.0 | 16.7 | 16.3 |
| 6 | 12.18327 | 35.8 | 26.3 | 10.2 | 46.0 | 36.5 | 60.0 | 50.0 | 14.0 | 13.5 |

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www.kctl.co.kr

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KR21-SRF0159

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9. Measurement equipment

| Equipment Name | Manufacturer | Model No. | Serial No. | Next Cal. Date |
|-----------------------------|----------------------|---|------------------------|------------------------|
| Spectrum Analyzer | R&S | FSV30 | 100732 | 22.01.20 |
| Attenuator | API Inmet | 40AH2W-10 | 17 | 22.05.11 |
| Signal Generator | R&S | SMB100A | 176206 | 22.01.20 |
| Vector Signal Generator | R&S | SMBV100A | 257566 | 22.07.09 ¹⁾ |
| Power Sensor | R&S | NRP-Z81 | 1137.9009.02-106225-JM | 22.05.11 |
| Attenuator | R&S | DNF Dämpfungsglied 10 dB in N-50 Ohm | 31210 | 22.05.11 |
| Spectrum Analyzer | R&S | FSV30 | 100732 | 22.01.20 |
| Spectrum Analyzer | R&S | FSV40 | 100989 | 21.12.23 |
| EMI TEST RECEIVER | R&S | ESC13 | 101408 | 21.08.20 |
| Bi-Log Antenna | SCHWARZBECK | VULB9168 | 583 | 22.04.23 |
| Amplifier | SONOMA INSTRUMENT | 310N | 284608 | 21.08.20 |
| COAXIAL FIXED ATTENUATOR | Agilent | 8491B-003 | 2708A18758 | 22.04.23 |
| Horn antenna | ETS.lindgren | 3117 | 155787 | 21.10.28 |
| Horn antenna | ETS.lindgren | 3116 | 00086635 | 22.05.17 |
| Attenuator | API Inmet | 40AH2W-10 | 12 | 22.05.11 |
| Broadband PreAmplifier | SCHWARZBECK | BBV9718 | 216 | 22.07.27 ²⁾ |
| AMPLIFIER | L-3 Narda-MITEQ | AMF-7D-01001800 -22-10P | 2003683 | 21.08.28 |
| AMPLIFIER | L-3 Narda-MITEQ | JS44-18004000-33-8P | 2000996 | 22.01.21 |
| LOOP Antenna | R&S | HFH2-Z2 | 100355 | 22.08.21 |
| Antenna Mast | Innco Systems | MA4640-XP-ET | - | - |
| Turn Table | Innco Systems | DT2000 | 79 | - |
| Antenna Mast | Innco Systems | MA4000-EP | 303 | - |
| Turn Table | Innco Systems | DT2000 | 79 | - |
| Highpass Filter | WT | WT-A1699-HS | WT160411002 | 22.05.10 |
| TWO-LINE V - NETWORK | R&S | ENV216 | 101358 | 21.09.29 |
| EMI TEST RECEIVER | R&S | ESCI | 100001 | 21.08.20 |

1) Tests related to this equipment were progressed after the calibration was completed.

2) Tests related to this equipment were progressed before the calibration was requested

End of test report