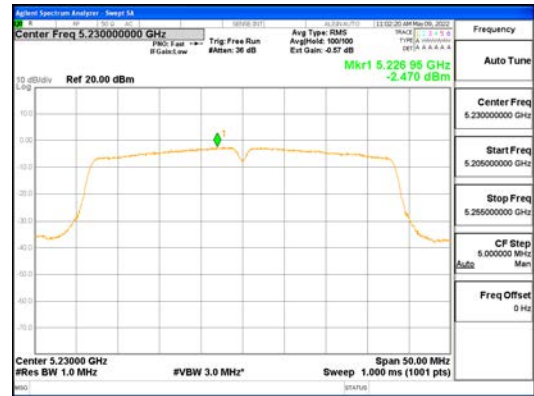
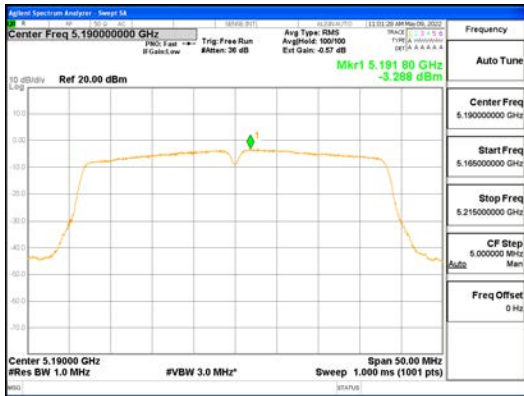


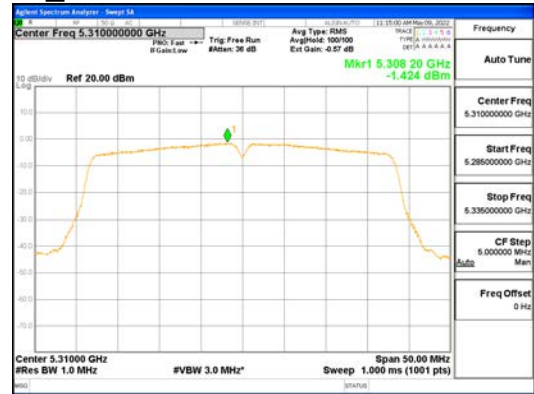
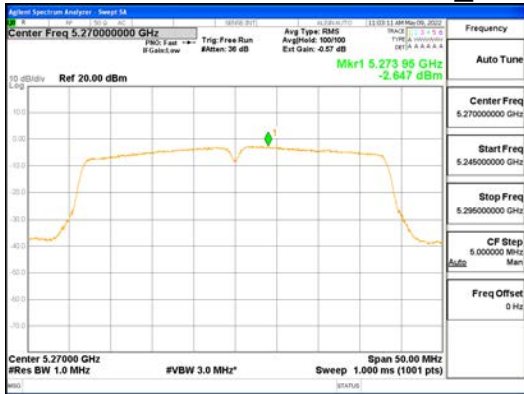


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

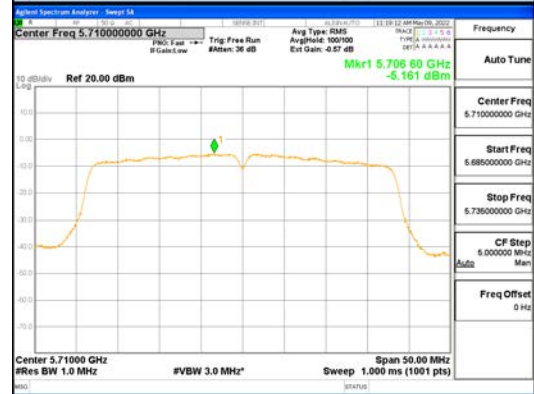
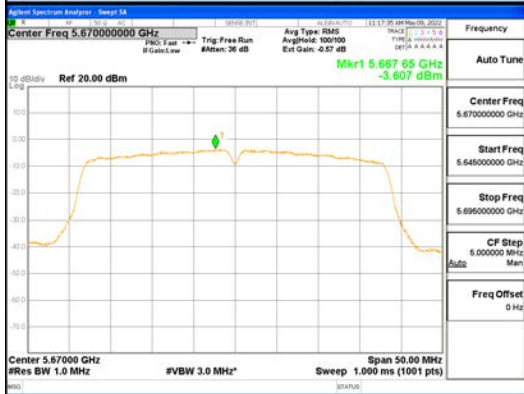
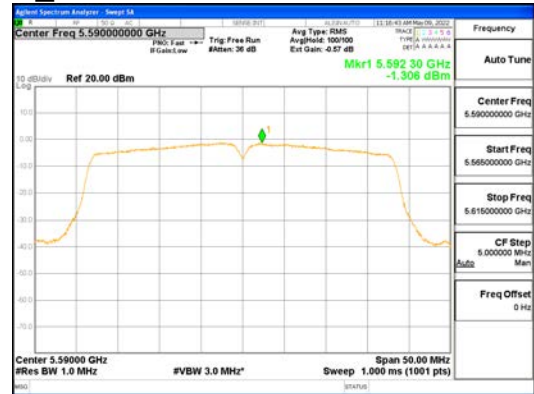
Report No.:  
 CTK-2022-01661  
 Page (96) / (188) Pages



**ANT2\_802.11n\_HT40\_UNII 1**



**ANT2\_802.11n\_HT40\_UNII 2A**

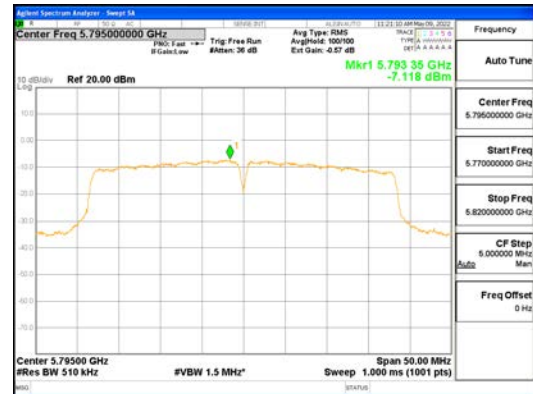
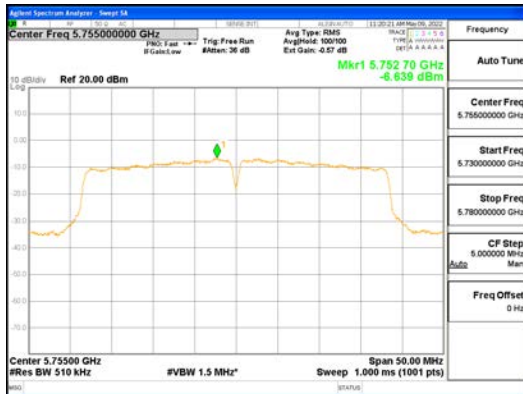


**ANT2\_802.11n\_HT40\_UNII 2C**



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (97) / (188) Pages

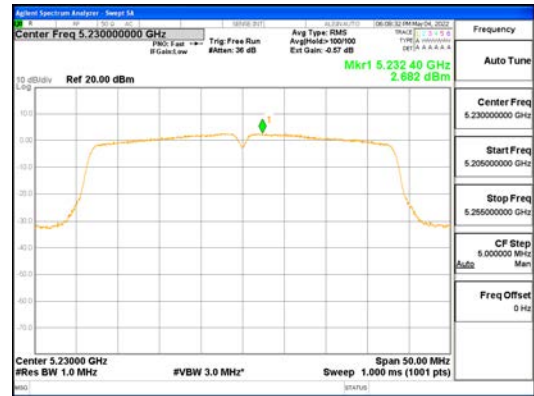
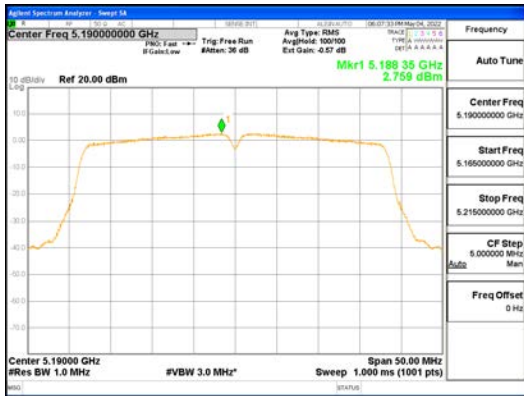


ANT2\_802.11n\_HT40\_UNII 3

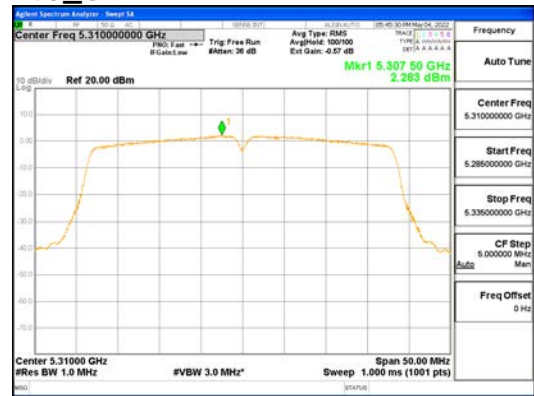
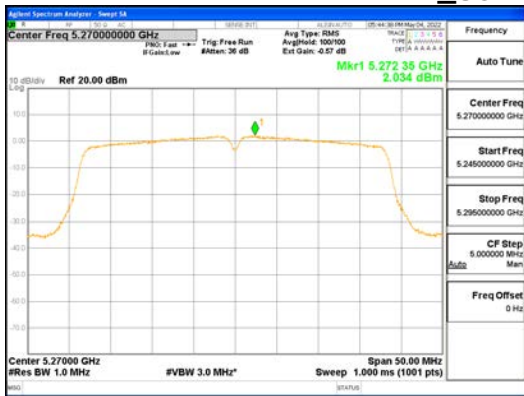


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

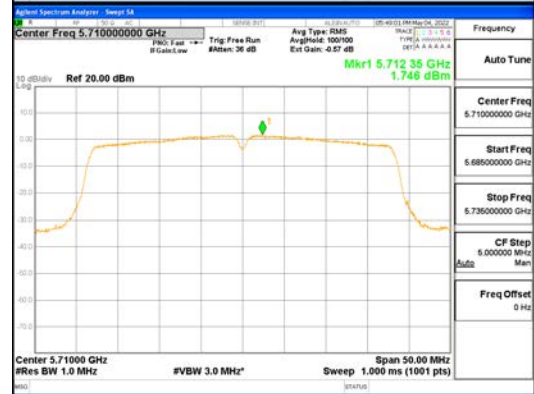
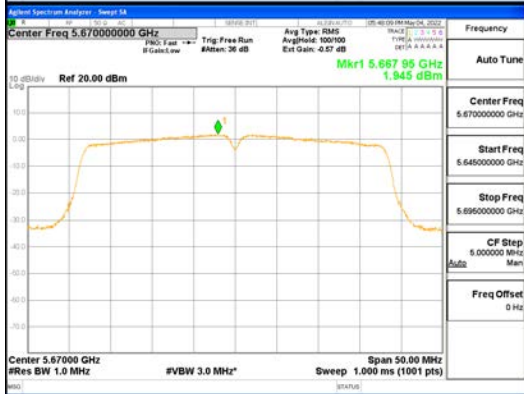
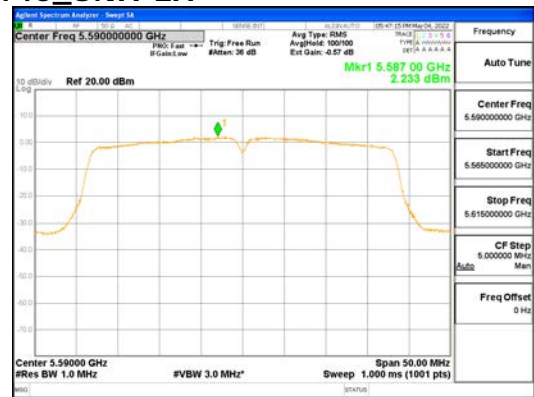
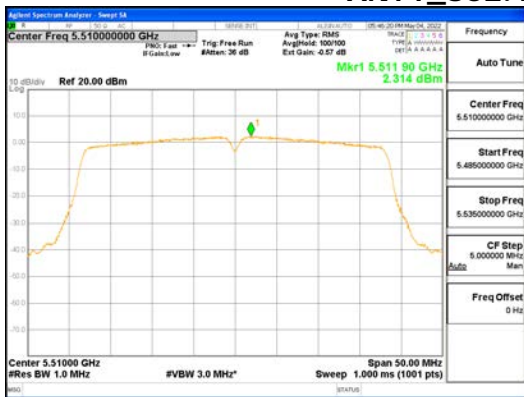
Report No.:  
 CTK-2022-01661  
 Page (98) / (188) Pages



**ANT1\_802.11ac\_VHT40\_UNII 1**



**ANT1\_802.11ac\_VHT40\_UNII 2A**

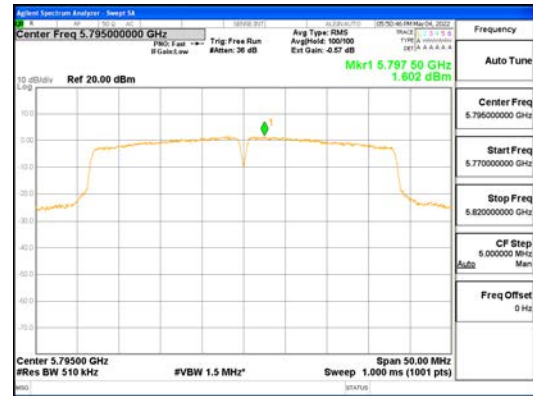
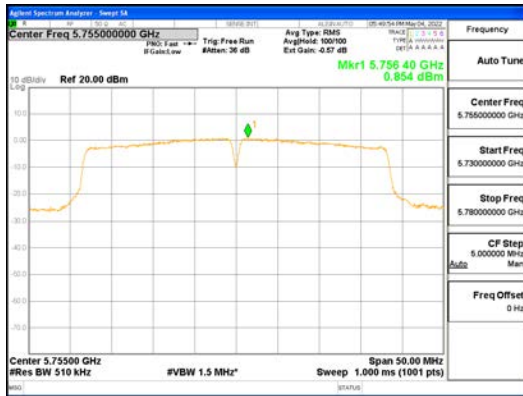


**ANT1\_802.11ac\_VHT40\_UNII 2C**



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (99) / (188) Pages

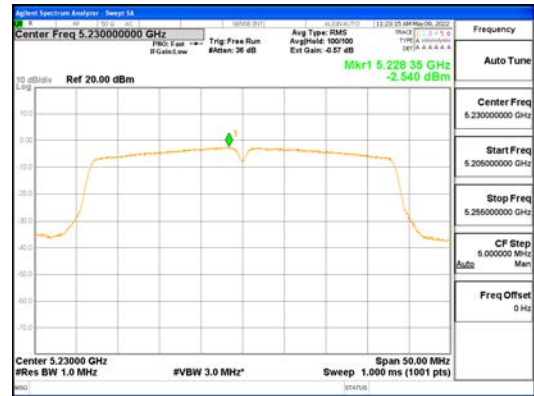
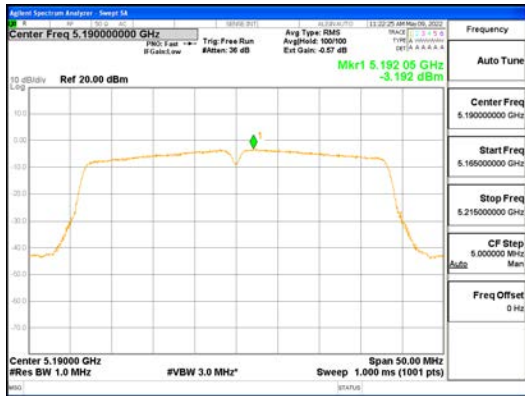


ANT1\_802.11ac\_VHT40\_UNII 3

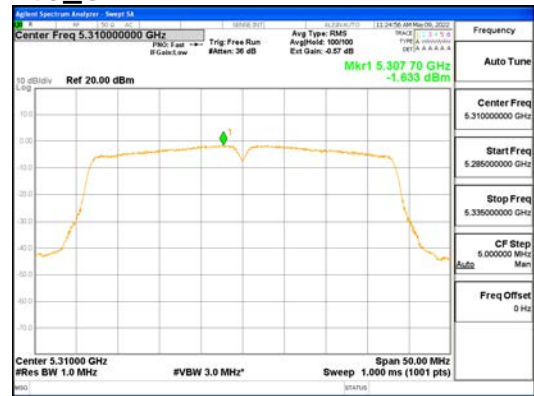
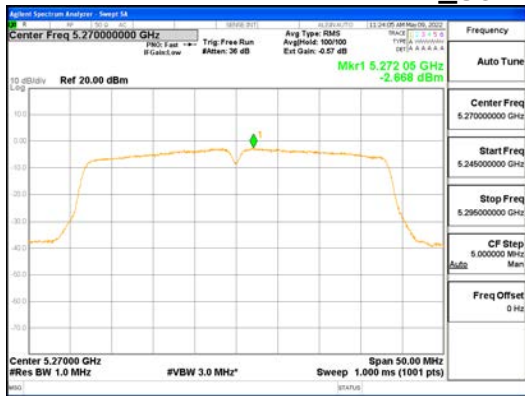


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

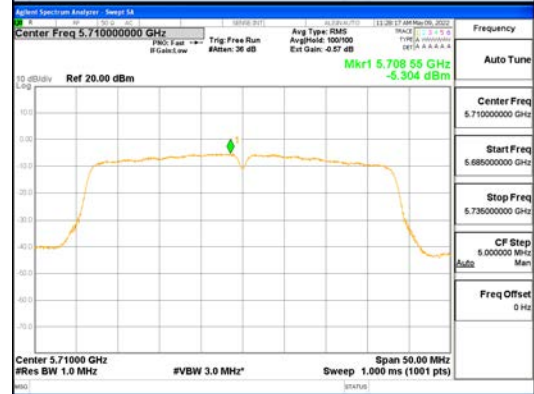
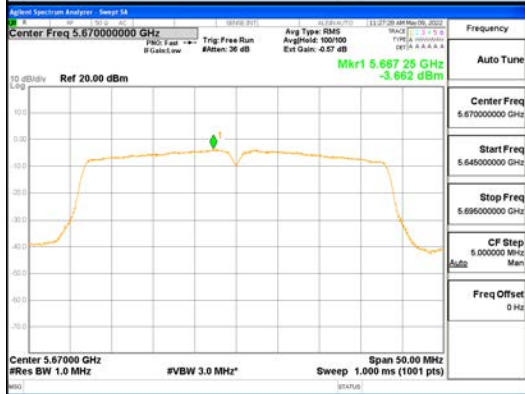
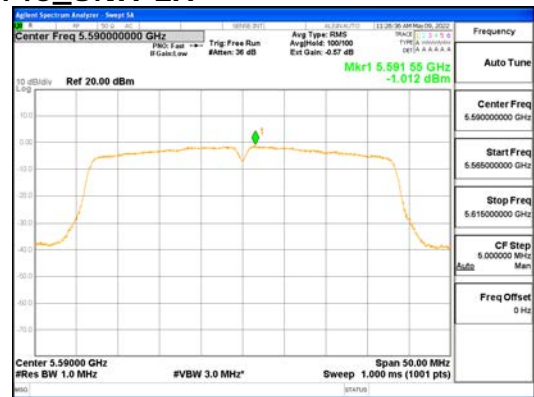
Report No.:  
 CTK-2022-01661  
 Page (100) / (188) Pages



ANT2\_802.11ac\_VHT40\_UNII 1



ANT2\_802.11ac\_VHT40\_UNII 2A

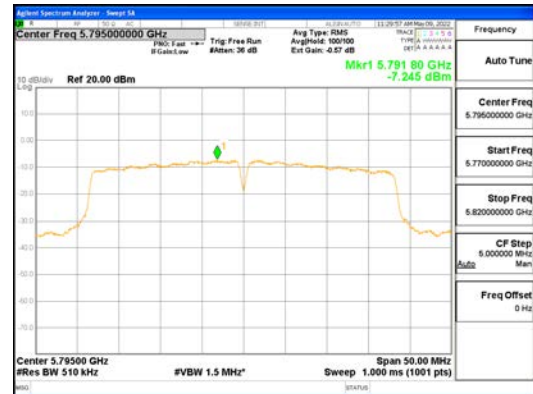
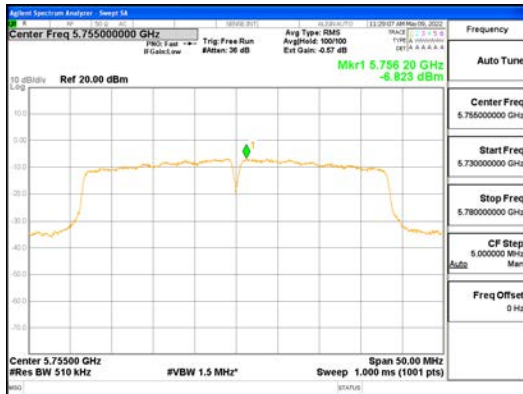


ANT2\_802.11ac\_VHT40\_UNII 2C

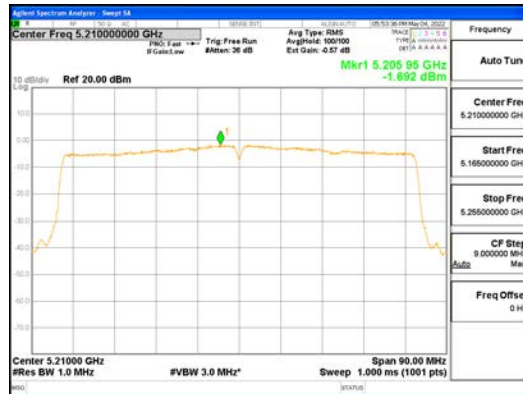


**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

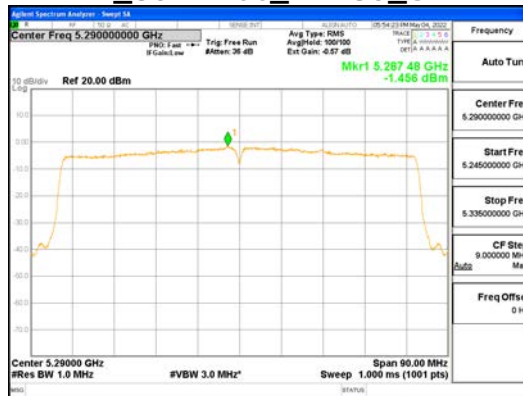
Report No.:  
CTK-2022-01661  
Page (101) / (188) Pages



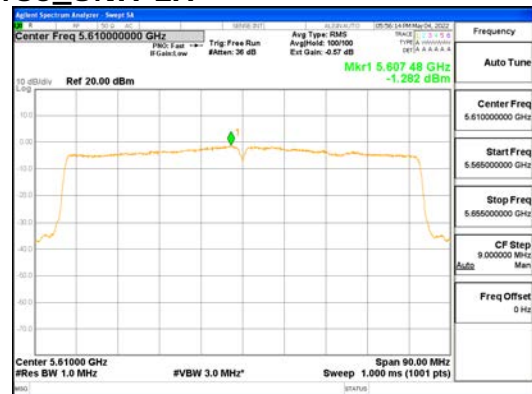
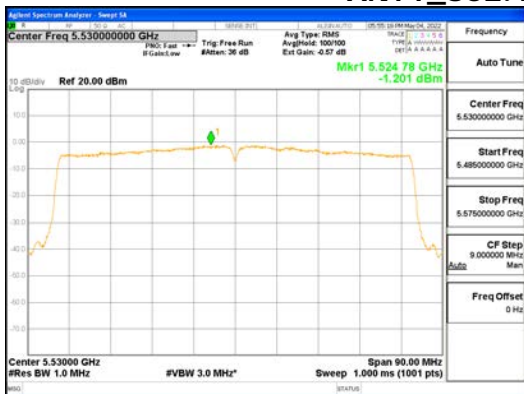
ANT2\_802.11ac\_VHT40\_UNII 3



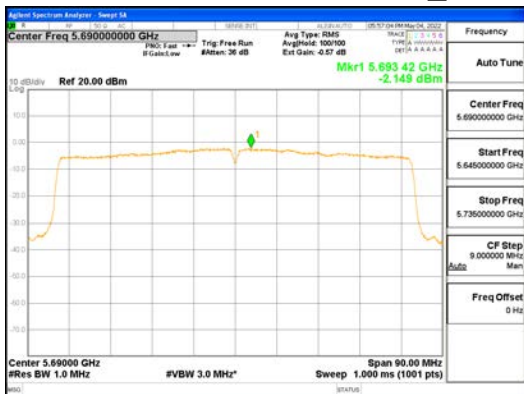
**ANT1\_802.11ac\_VHT80\_UNII 1**



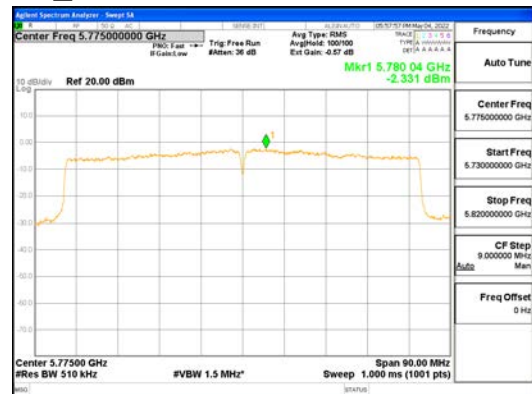
**ANT1\_802.11ac\_VHT80\_UNII 2A**



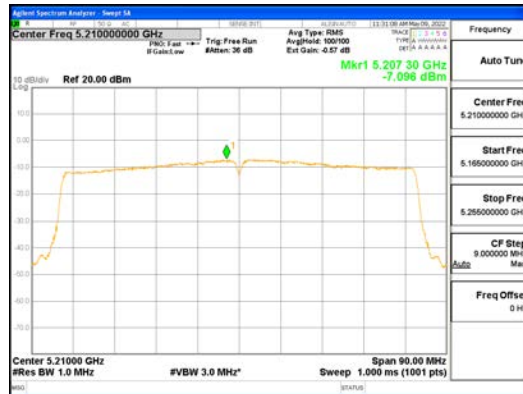
**ANT1\_802.11ac\_VHT80\_UNII 2C**



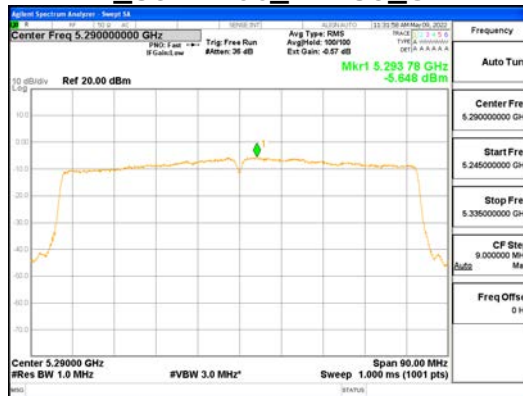
**ANT1\_802.11ac\_VHT80\_UNII 2C**



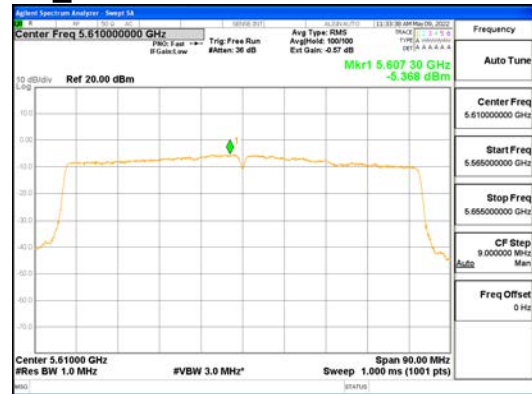
**ANT1\_802.11ac\_VHT80\_UNII 3**



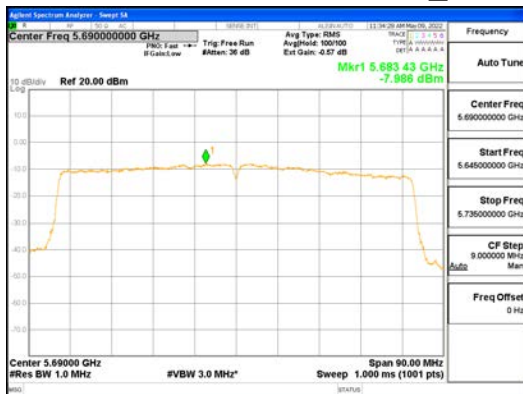
**ANT2\_802.11ac\_VHT80\_UNII 1**



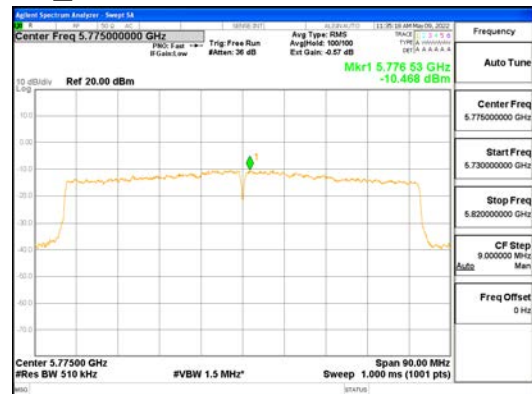
**ANT2\_802.11ac\_VHT80\_UNII 2A**



**ANT2\_802.11ac\_VHT80\_UNII 2C**



**ANT2\_802.11ac\_VHT80\_UNII 2C**



**ANT2\_802.11ac\_VHT80\_UNII 3**



## 4.5 Frequency Stability

### Test Procedures

KDB 789033 – Section A.3

The EUT was placed inside of an environmental chamber as the temperature in the chamber was varied between -10 °C and +50 °C (Declaration by the Manufacturer). The temperature was incremented by 10 °C intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.

Data for the worst case channel is shown below.

| Measured Frequency Error (kHz) |                  |                      |         |         |         |         |         |
|--------------------------------|------------------|----------------------|---------|---------|---------|---------|---------|
| Voltage (VDC)                  | Temperature (°C) | Test Frequency (MHz) |         |         |         |         |         |
|                                |                  | 5 180                | 5 200   | 5 240   | 5 260   | 5 300   | 5 320   |
| 5.0                            | -10              | 32 232               | 31 699  | 31 460  | 31 499  | 31 829  | 32 079  |
| 5.0                            | 0                | 24 674               | 22 589  | 24 661  | 21 351  | 21 432  | 21523   |
| 5.0                            | 10               | 8 391                | 7 567   | 6 809   | 6 606   | 6 654   | 6 790   |
| 5.0                            | 20(Ref)          | -8 411               | -8 694  | -9 265  | -9 352  | -9 230  | -9 119  |
| 5.0                            | 30               | -22 560              | -22 742 | -23 358 | -23 488 | -23 551 | -23 489 |
| 5.0                            | 40               | -28 717              | -27 176 | -28 440 | -28 857 | -29 133 | -29 225 |
| 5.0                            | 50               | -30 334              | -30 097 | -30 157 | -29 866 | -29 700 | -29 600 |
| 4.25                           | 20(Ref)          | -27 694              | -28 427 | -29 446 | -29 966 | -30 214 | -30 354 |
| 5.75                           | 20(Ref)          | -26 994              | -28 406 | -27 040 | -27 354 | -28 111 | -28 615 |



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (105) / (188) Pages

| Measured Frequency Error (kHz) |                  |                      |         |         |         |         |         |
|--------------------------------|------------------|----------------------|---------|---------|---------|---------|---------|
| Voltage (VDC)                  | Temperature (°C) | Test Frequency (MHz) |         |         |         |         |         |
|                                |                  | 5 500                | 5 600   | 5 720   | 5 745   | 5 785   | 5 825   |
| 5.0                            | -10              | 33 018               | 33 591  | 34 371  | 34 363  | 34 454  | 34 782  |
| 5.0                            | 0                | 21 900               | 22 227  | 22 827  | 22 612  | 22 521  | 22 856  |
| 5.0                            | 10               | 6 754                | 6 741   | 6 915   | 6 733   | 6 613   | 6 800   |
| 5.0                            | 20(Ref)          | -9 560               | -9 841  | -10 073 | -10 321 | -10 589 | -10 567 |
| 5.0                            | 30               | -24 475              | -24 928 | -25 410 | -25 608 | -26 004 | -26 033 |
| 5.0                            | 40               | -30 472              | -31 109 | -31 675 | -31 943 | -32 382 | -32 465 |
| 5.0                            | 50               | -30 541              | -30 973 | -31 466 | -31 461 | -31 872 | -31 881 |
| 4.25                           | 20(Ref)          | -31 633              | -32 452 | -33 051 | -33 312 | -33 801 | -33 932 |
| 5.75                           | 20(Ref)          | -30 124              | -31 014 | -31 866 | -32 294 | -32 882 | -33 108 |

Note :

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature range as tested.

## 4.6 Unwanted Emissions

### Test Location

- 10 m SAC (test distance :  10 m,  3 m)  
 3 m SAC (test distance : 3 m)

### Test Procedures

KDB 789033 - Section G  
ANSI C63.10-2013 – Section 12.7

- 1) In the frequency range of 9 kHz to 30 MHz, magnetic field is measured with Loop Antenna. The Test Antenna is positioned with its plane vertical at 1m distance from the EUT. The center of the Loop Test Antenna is 1m above the ground. During the measurement the Loop Test Antenna rotates about its vertical axis for maximum response at each azimuth about the EUT.
- 2) In the frequency range above 30 MHz, Bi-Log Test Antenna(30 MHz to 1 GHz) and Horn Test Antenna(above 1 GHz) are used. Test Antenna is 3m away from the EUT. Test Antenna height is carried from 1m to 4m above the ground to determine the maximum value of the field strength. The emissions levels at both horizontal and vertical polarizations should be tested.

### Test Settings:

Frequency Range = 9 kHz ~ 1 GHz

- a) RBW = 100 kHz for  $f < 1$  GHz, 9 kHz for  $f < 30$  MHz  
b) VBW  $\geq$  RBW  
c) Detector = CISPR Quasi-peak  
d) Sweep time = auto couple

- Peak

Frequency Range = 1 GHz ~ 40 GHz

- a) RBW = 1 MHz  
b) VBW  $\geq 3 \times$  RBW  
c) Detector = Peak  
d) Sweep time = auto  
e) Trace mode = max hold

- Average (duty cycle  $\geq 98\%$ )

Frequency Range = 1 GHz ~ 40 GHz

- a) RBW = 1 MHz  
b) VBW  $\geq 3 \times$  RBW  
c) Detector = RMS  
d) Sweep time = auto  
e) Averaging type = power (i.e., RMS)  
f) Trace mode = average (at least 100 traces)



- Average (duty cycle < 98%)

Frequency Range = 1 GHz ~ 40 GHz

a) RBW = 1 MHz

b) VBW  $\geq$  3 x RBW

c) Detector = RMS

d) Sweep time = auto

e) Averaging type = power (i.e., RMS)

f) Trace mode = average (at least 100 traces)

If power averaging (RMS) mode, then the applicable correction factor is  $10 \log(1/x)$ , where x is the duty cycle.

| Test mode      | Duty Cycle Factor |
|----------------|-------------------|
| 802.11a        | 0.15 dB           |
| 802.11n_HT20   | 0.16 dB           |
| 802.11n_HT40   | 0.30 dB           |
| 802.11ac_VHT20 | 0.16 dB           |
| 802.11ac_VHT40 | 0.32 dB           |
| 802.11ac_VHT80 | 0.62 dB           |

## Limit

1. UNII 1, 2A : All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
2. UNII 2C : All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
3. UNII 3 : All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

\* E.I.R.P -27 dBm/MHz

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2, \text{ for } d = 3\text{m}$$



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (108) / (188) Pages

4. Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209.

- 15.209(a)

| Frequency(MHz) | Field Strength uV/m@3m | Field Strength dBuV/m@3m | Deasurement Distance (meters) |
|----------------|------------------------|--------------------------|-------------------------------|
| 0.009-0.490    | 2400/F(kHz)            | -                        | 300                           |
| 0.490-1.705    | 24000/F(kHz)           | -                        | 30                            |
| 1.705-30       | 30                     | -                        | 30                            |
| 30-88          | 100**                  | 40                       | 3                             |
| 88-216         | 150**                  | 43.5                     | 3                             |
| 216-960        | 200**                  | 46                       | 3                             |
| Above 960      | 500                    | 54                       | 3                             |

\*\* Except as provided in 15.209(g).fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72MHz, 76-88MHz, 174-216MHz, 470-806MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g.15.231 and 15.241.

5. FCC Part 15 § 15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

| MHz                      | MHz               | MHz                 | MHz           | MHz         | GHz                     |
|--------------------------|-------------------|---------------------|---------------|-------------|-------------------------|
| 0.09-0.11                | 8.37626-8.38675   | 73-74.6             | 399.9-410     | 2690-2900   | 10.6-12.7               |
| <sup>1</sup> 0.495-0.505 | 8.41425-8.41475   | 74.8-75.2           | 608-614       | 3260-3267   | 13.25-13.4              |
| 2.1735-2.1905            | 12.29-12.293      | 108-121.94          | 960-1240      | 3332-3339   | 14.47-14.5              |
| 4.125-4.128              | 12.51975-12.52025 | 123-138             | 1300-1427     | 3345.8-3358 | 15.35-16.2              |
| 4.17725-4.17775          | 12.57675-12.57725 | 149.9-150.05        | 1435-1626.5   | 3600-4400   | 17.7-21.4               |
| 4.20725-4.20775          | 13.36-13.41       | 156.52475-156.52525 | 1645.5-1646.5 | 4500-5150   | 22.01-23.12             |
| 6.215-6.218              | 16.42-16.423      | 156.7-156.9         | 1660-1710     | 5350-5460   | 23.6-24                 |
| 6.26775-6.26825          | 16.69475-16.69525 | 162.0125-167.17     | 1718.8-1722.2 | 7250-7750   | 31.2-31.8               |
| 6.31175-6.31225          | 16.80425-16.80475 | 167.72-173.2        | 2200-2300     | 8025-8500   | 36.43-36.5              |
| 8.291-8.294              | 25.5-25.67        | 240-285             | 2310-2390     | 9000-9200   | <sup>2</sup> Above 38.6 |
| 8.362-8.366              | 37.5-38.25        | 322-335.4           | 2483.5-2500   | 9300-9500   |                         |

<sup>1</sup> Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

<sup>2</sup> Above 38.6

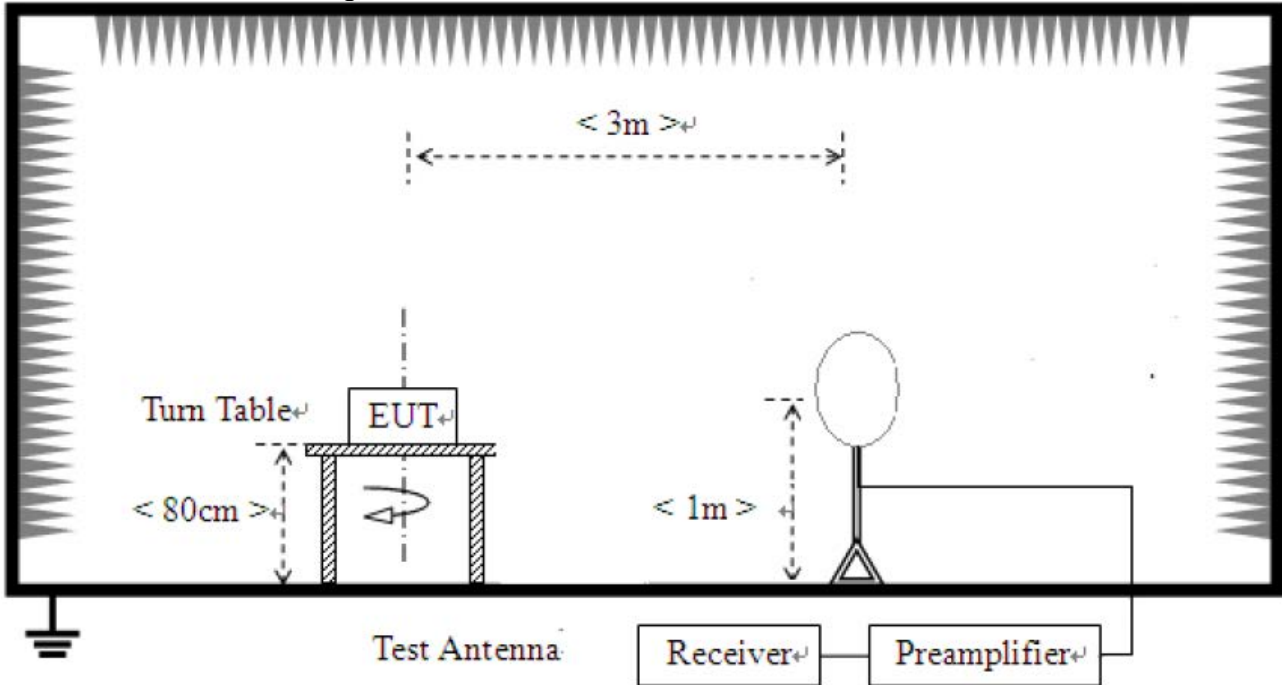
§ 15.205 (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

Note :

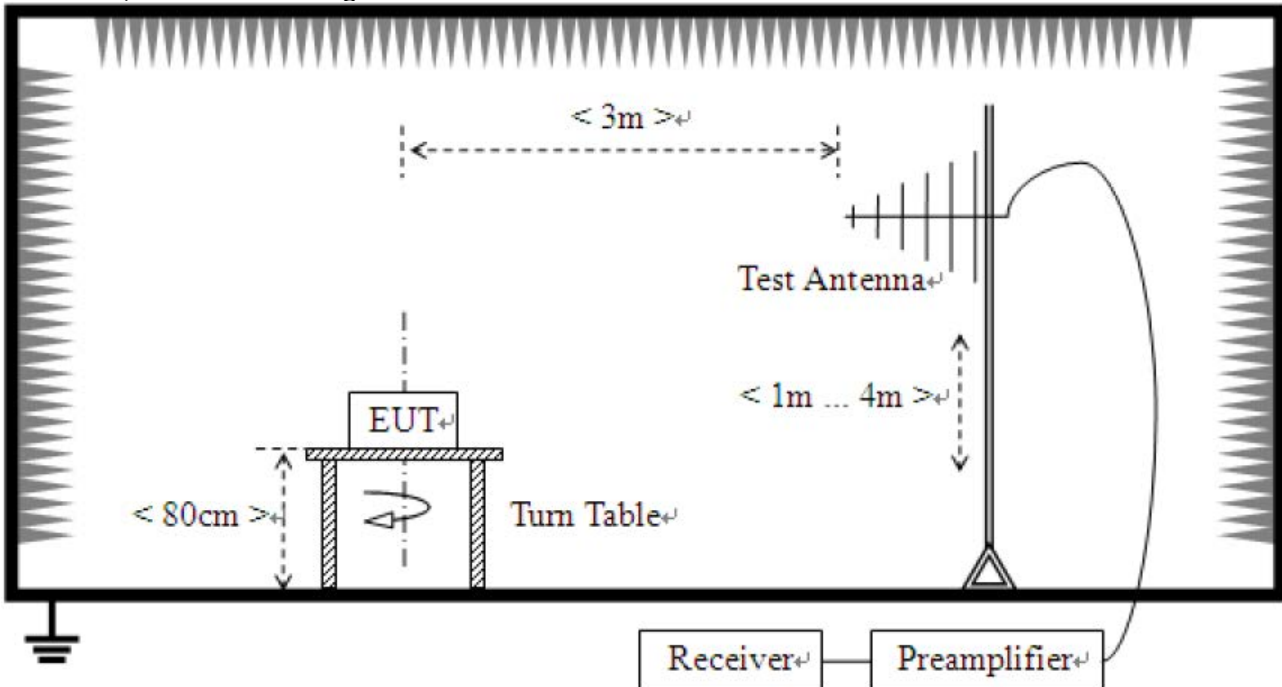
- 1) For above 1 GHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.
- 2) For above 1 GHz, limit field strength of harmonics : 54 dBuV/m@3m (AV) and 74 dBuV/m@3m (PK)

**Test Setup:**

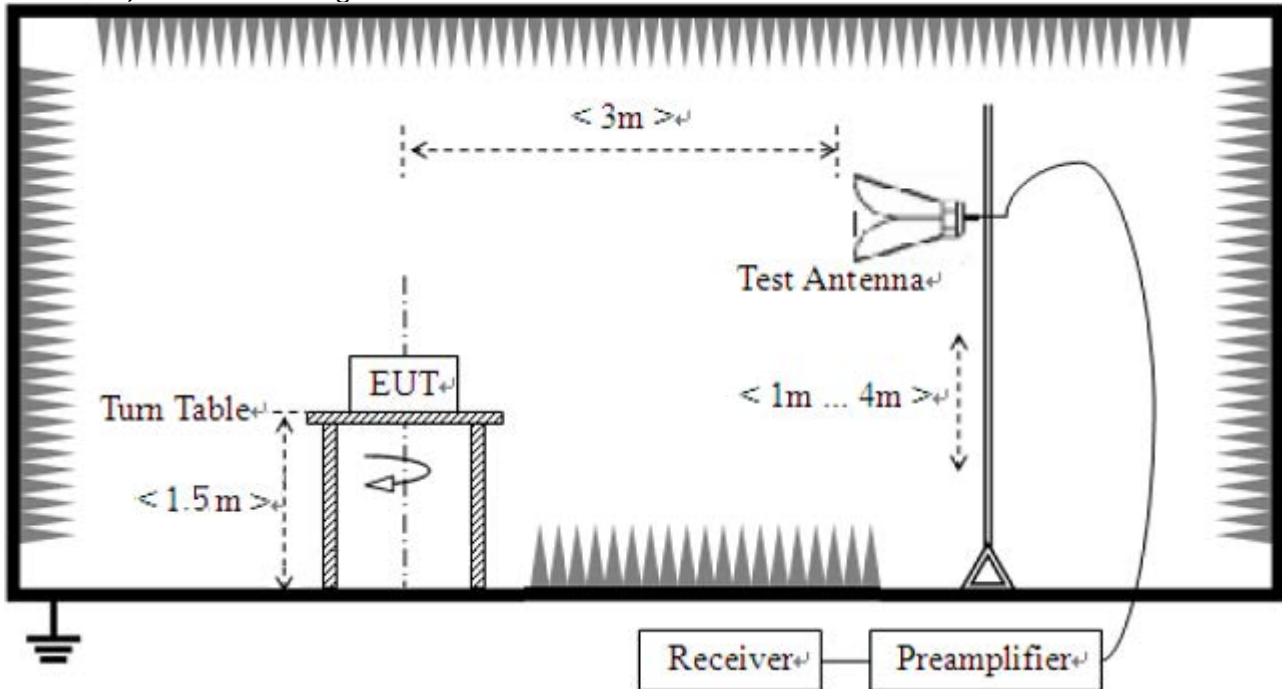
- 1) For field strength of emissions from 9 kHz to 30 MHz



- 2) For field strength of emissions from 30 MHz to 1 GHz



3) For field strength of emissions above 1 GHz



**Test Mode**

We have done all test mode.

The worst case antenna configuration and Test mode are determined to be as follows.

802.11a : ANT1, ANT2 (SISO)

802.11n : ANT1 + ANT2 (MIMO)

802.11ac : ANT1 + ANT2 (MIMO)

So the results are only attached worst cases.

## Test Results

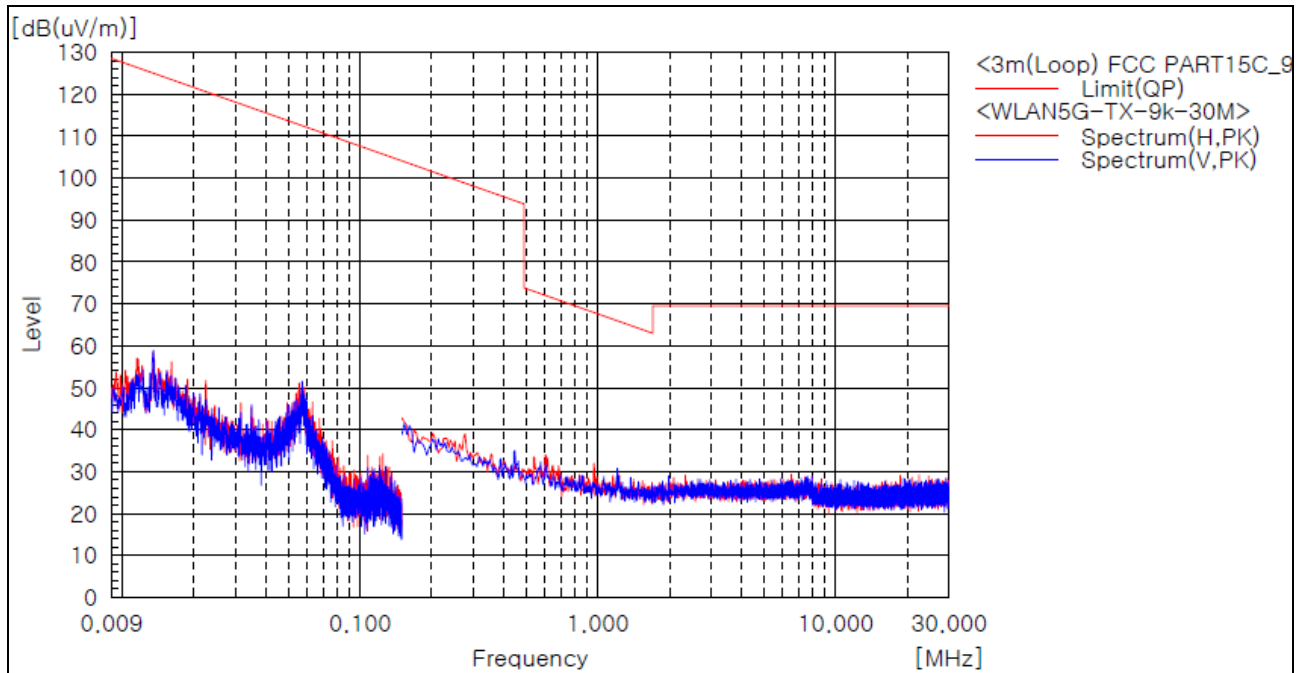
### 1) 9 kHz to 30 MHz

Test mode : Transmitter (Worst Case)

The requirements are:

Complies

### Test Data



| Frequency [MHz] | (P) | Reading [dBuV] | c.f [dB(1/m)] | Level [dB(uV/m)] | Limit [dB(uV/m)] | Margin [dB] |
|-----------------|-----|----------------|---------------|------------------|------------------|-------------|
|-----------------|-----|----------------|---------------|------------------|------------------|-------------|

The emissions 9 kHz to 30 MHz were 20 dB lower than the limit.

### Remark :

1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X,Y axis). The worst emission was found in lie-down position(X axis) and the worst case was recorded.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain
4. This data is the Peak(PK) value.

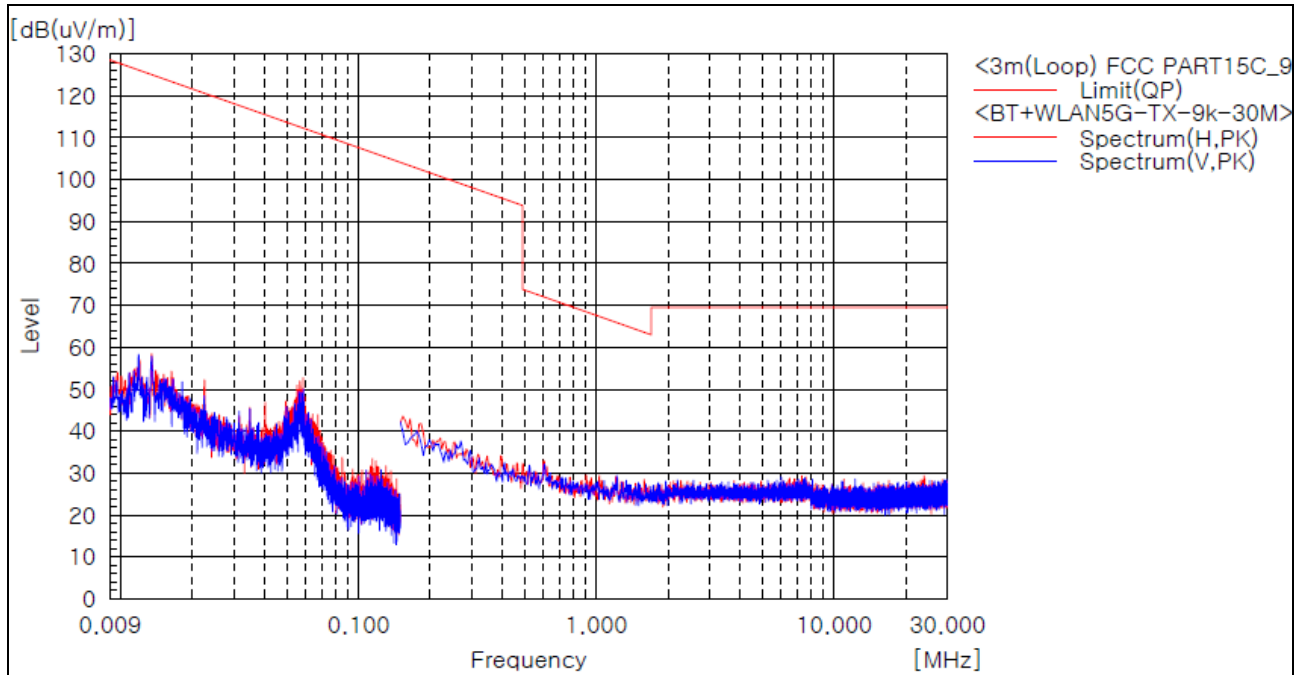


**Test mode : Transmitter (simultaneous transmissions DSS+ NII)**

The requirements are:

Complies

**Test Data**



| Frequency [MHz] | (P) | Reading [dBuV] | c.f [dB(1/m)] | Level [dB(uV/m)] | Limit [dB(uV/m)] | Margin [dB] |
|-----------------|-----|----------------|---------------|------------------|------------------|-------------|
|-----------------|-----|----------------|---------------|------------------|------------------|-------------|

The emissions 9 kHz to 30 MHz were 20 dB lower than the limit.

**Remark :**

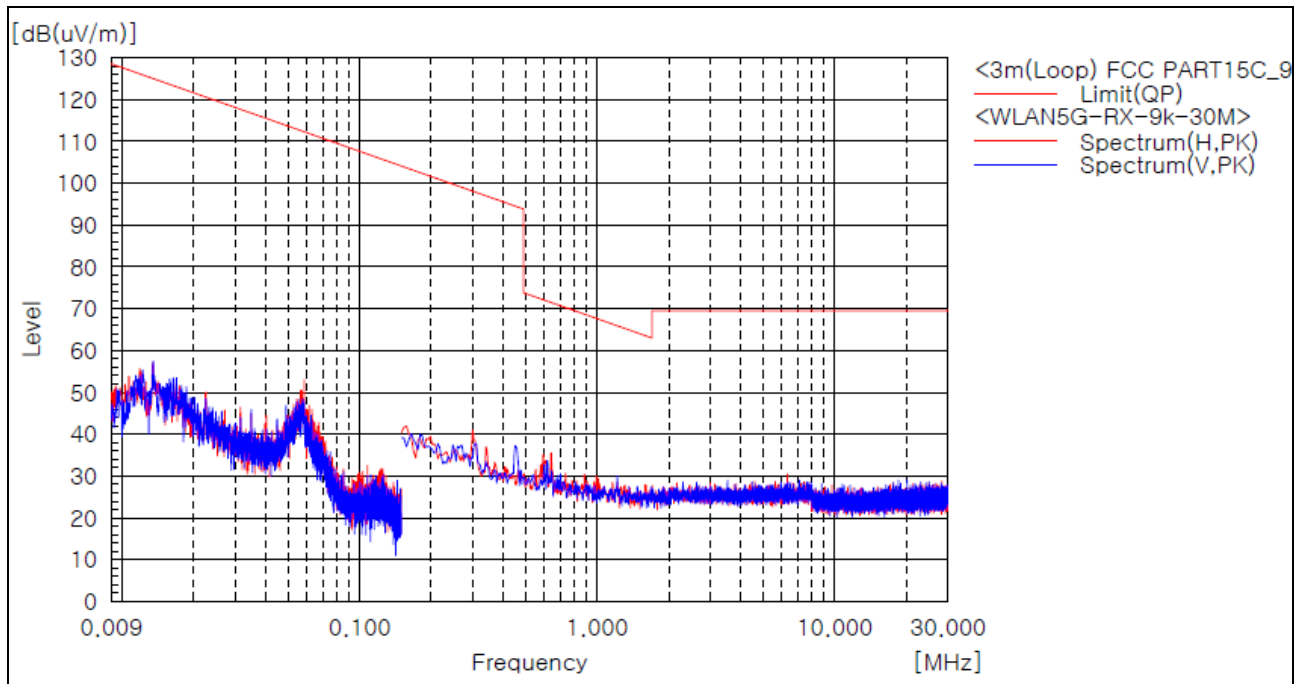
1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X,Y axis). The worst emission was found in lie-down position(X axis) and the worst case was recorded.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain
4. This data is the Peak(PK) value.

**Test mode : Receiver (Worst Case)**

The requirements are:

Complies

**Test Data**



| Frequency [MHz] | (P) | Reading [dBuV] | c.f [dB(1/m)] | Level [dB(uV/m)] | Limit [dB(uV/m)] | Margin [dB] |
|-----------------|-----|----------------|---------------|------------------|------------------|-------------|
|-----------------|-----|----------------|---------------|------------------|------------------|-------------|

The emissions 9 kHz to 30 MHz were 20 dB lower than the limit.

**Remark :**

1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X,Y axis). The worst emission was found in lie-down position(X axis) and the worst case was recorded.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain
4. This data is the Peak(PK) value.

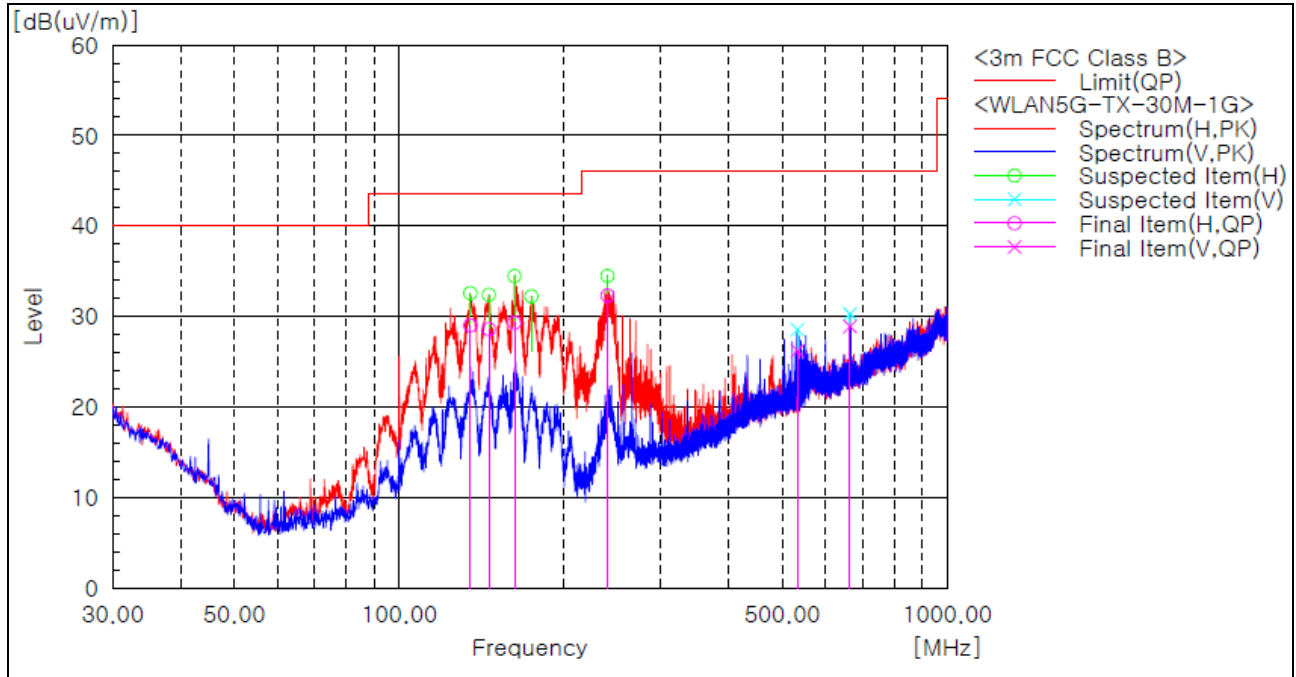
## 2) 30 MHz to 1 GHz

Test mode : Transmitter (Worst Case)

The requirements are:

Complies

### Test Data



### Final Result

| No. | Frequency [MHz] | (P) | Reading QP [dB(uV)] | c.f [dB(1/m)] | Result QP [dB(uV/m)] | Limit QP [dB(uV/m)] | Margin QP [dB] | Height [cm] | Angle [deg] |
|-----|-----------------|-----|---------------------|---------------|----------------------|---------------------|----------------|-------------|-------------|
| 1   | 134.881         | H   | 40.6                | -11.6         | 29.0                 | 43.5                | 14.5           | 209.0       | 8.0         |
| 2   | 145.794         | H   | 40.0                | -11.4         | 28.6                 | 43.5                | 14.9           | 209.0       | 0.0         |
| 3   | 162.405         | H   | 42.0                | -12.7         | 29.3                 | 43.5                | 14.2           | 209.0       | 0.0         |
| 4   | 240.005         | H   | 43.0                | -10.7         | 32.3                 | 46.0                | 13.7           | 100.0       | 0.0         |
| 5   | 533.066         | V   | 28.3                | -2.1          | 26.2                 | 46.0                | 19.8           | 101.0       | 16.0        |
| 6   | 664.623         | V   | 27.6                | 1.3           | 28.9                 | 46.0                | 17.1           | 194.0       | 137.0       |

### Remark :

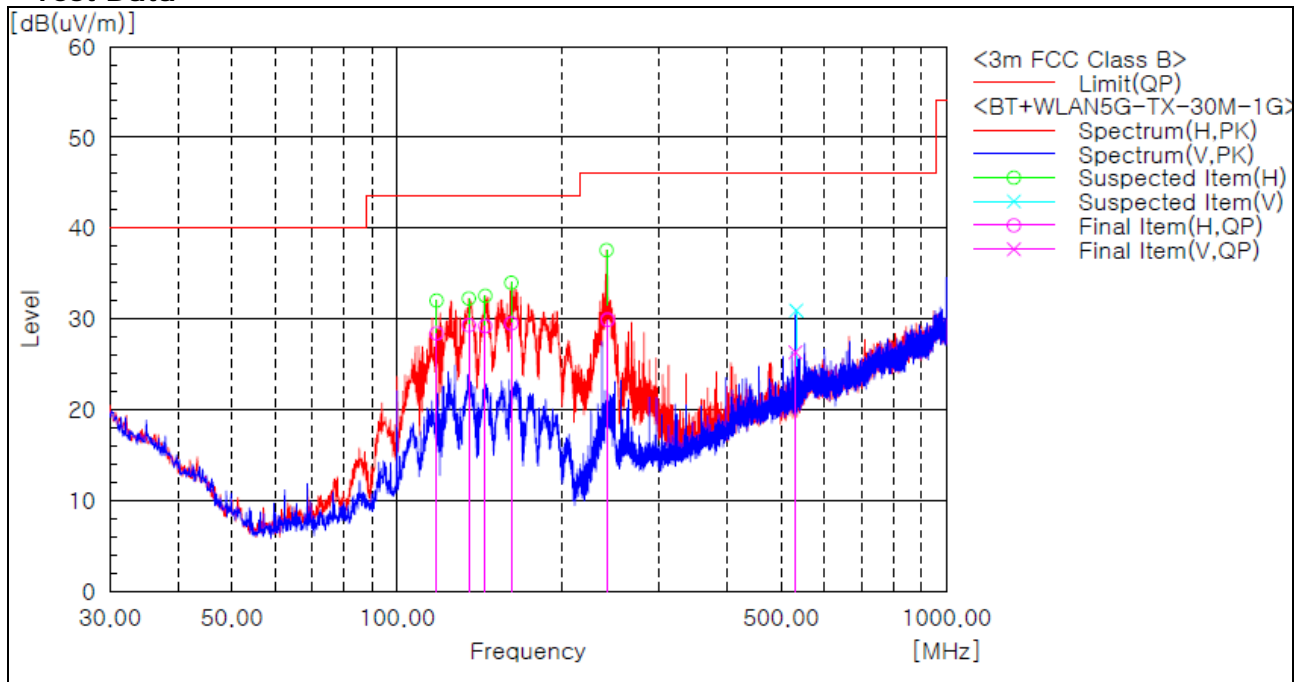
1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X,Y axis). The worst emission was found in lie-down position(X axis) and the worst case was recorded.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

**Test mode : Transmitter (simultaneous transmissions DSS + NII)**

The requirements are:

Complies

**Test Data**



**Final Result**

| No. | Frequency [MHz] | (P) | Reading QP [dB(uV)] | c.f [dB(1/m)] | Result QP [dB(uV/m)] | Limit QP [dB(uV/m)] | Margin QP [dB] | Height [cm] | Angle [deg] |
|-----|-----------------|-----|---------------------|---------------|----------------------|---------------------|----------------|-------------|-------------|
| 1   | 118.028         | H   | 40.6                | -12.2         | 28.4                 | 43.5                | 15.1           | 206.0       | 6.0         |
| 2   | 135.124         | H   | 40.9                | -11.6         | 29.3                 | 43.5                | 14.2           | 206.0       | 8.0         |
| 3   | 144.824         | H   | 40.5                | -11.3         | 29.2                 | 43.5                | 14.3           | 206.0       | 6.0         |
| 4   | 161.435         | H   | 42.1                | -12.6         | 29.5                 | 43.5                | 14.0           | 206.0       | 8.0         |
| 5   | 241.833         | H   | 40.2                | -10.3         | 29.9                 | 46.0                | 16.1           | 101.0       | 21.0        |
| 6   | 531.051         | V   | 28.5                | -2.2          | 26.3                 | 46.0                | 19.7           | 100.0       | 209.0       |

**Remark :**

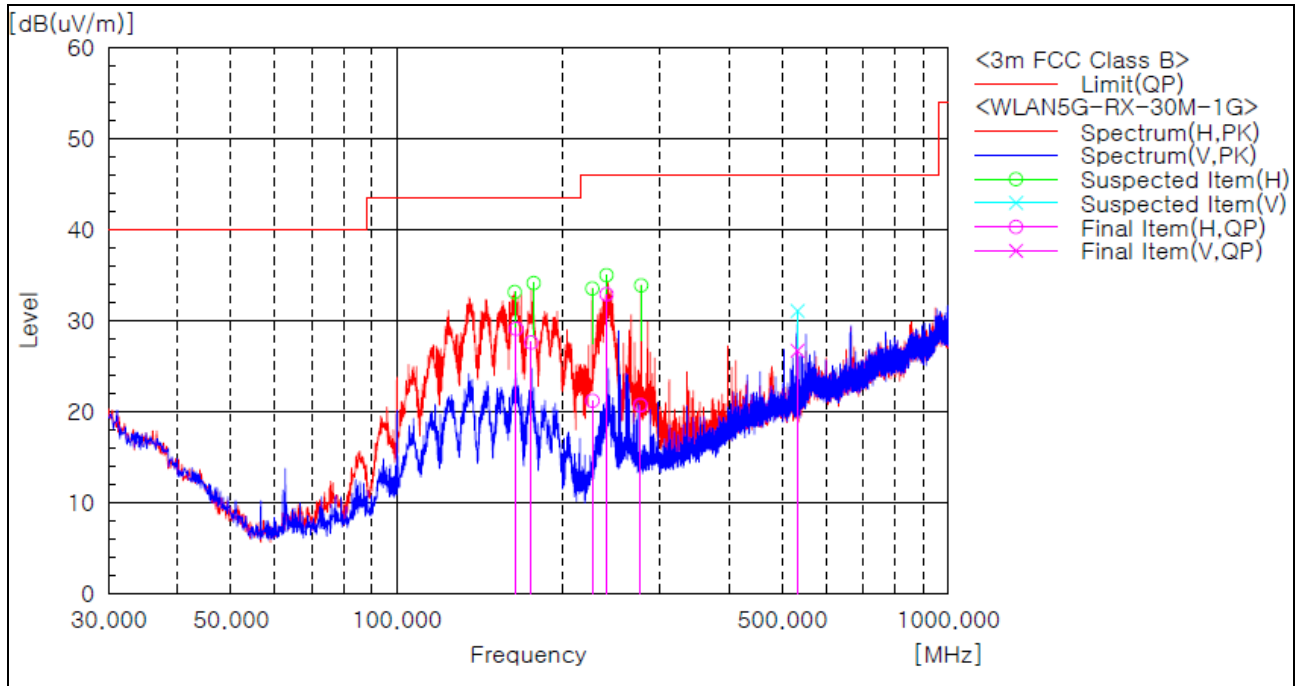
1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X,Y axis). The worst emission was found in lie-down position(X axis) and the worst case was recorded.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

**Test mode : Receiver (Worst Case)**

The requirements are:

Complies

**Test Data**



**Final Result**

| No. | Frequency [MHz] | (P) | Reading QP [dB(uV)] | c.f [dB(1/m)] | Result QP [dB(uV/m)] | Limit QP [dB(uV/m)] | Margin QP [dB] | Height [cm] | Angle [deg] |
|-----|-----------------|-----|---------------------|---------------|----------------------|---------------------|----------------|-------------|-------------|
| 1   | 164.588         | H   | 41.9                | -12.8         | 29.1                 | 43.5                | 14.4           | 209.0       | 334.0       |
| 2   | 175.293         | H   | 41.1                | -13.5         | 27.6                 | 43.5                | 15.9           | 100.0       | 7.0         |
| 3   | 226.474         | H   | 33.5                | -12.3         | 21.2                 | 46.0                | 24.8           | 100.0       | 64.0        |
| 4   | 240.018         | H   | 43.6                | -10.7         | 32.9                 | 46.0                | 13.1           | 100.0       | 5.0         |
| 5   | 276.501         | H   | 29.8                | -9.1          | 20.7                 | 46.0                | 25.3           | 100.0       | 17.0        |
| 6   | 533.188         | V   | 28.8                | -2.1          | 26.7                 | 46.0                | 19.3           | 101.0       | 197.0       |

**Remark :**

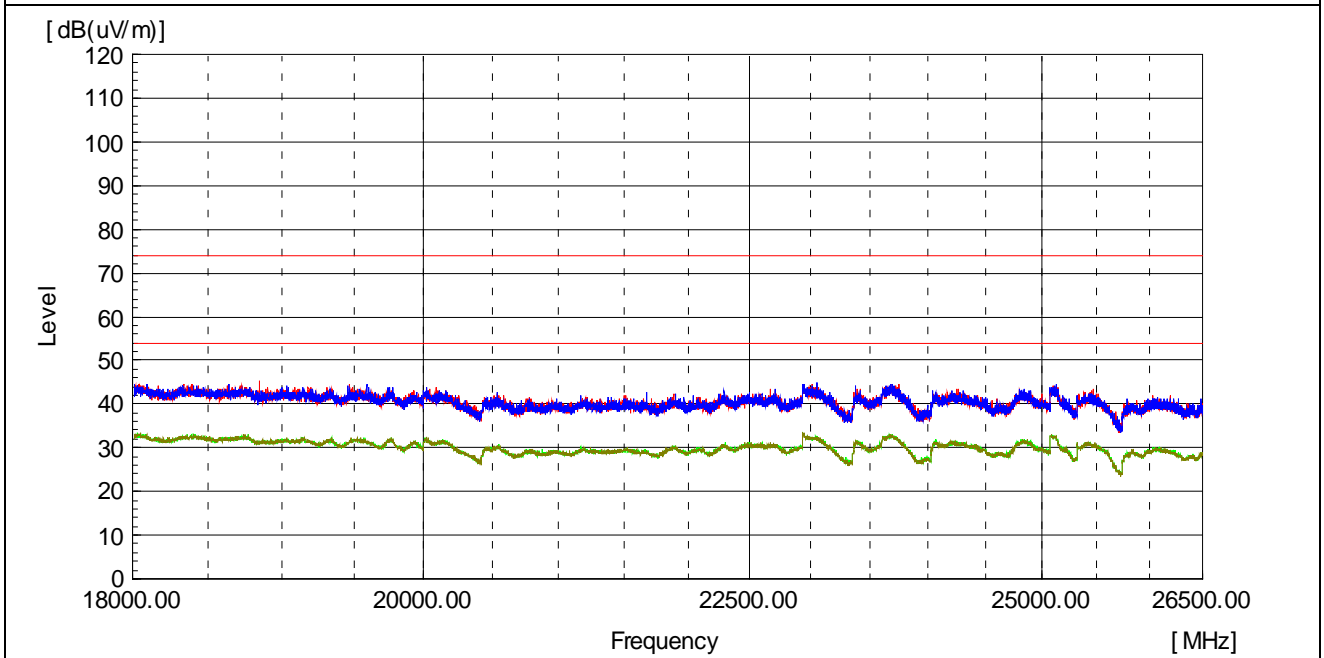
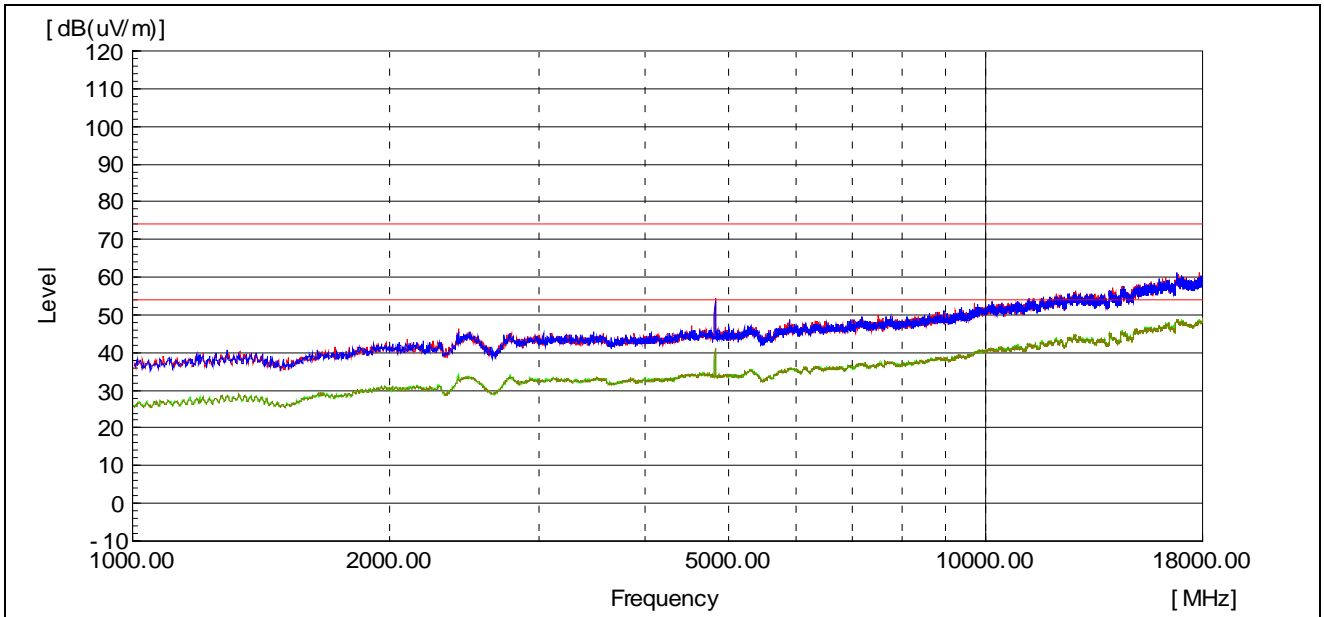
1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X,Y axis). The worst emission was found in lie-down position(X axis) and the worst case was recorded.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

### 3) above 1 GHz

The requirements are:

Complies

#### Test Data





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (118) / (188) Pages

**Test mode : Transmitter, 802.11a-ANT1**

The requirements are:

Complies

**Test Data**

**Ch.36(5 180 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 356.67       | H   | 52.7              | -----             | 6.6           | -----                  | 59.3                | -----               | 74.0                | -----               | 14.7           | -----          |
| 10 361.31       | H   | -----             | 35.8              | 6.6           | 0.2                    | -----               | 42.6                | -----               | 54.0                | -----          | 11.4           |
| 10 361.79       | V   | 58.9              | -----             | 6.6           | -----                  | 65.5                | -----               | 74.0                | -----               | 8.5            | -----          |
| 10 360.97       | V   | -----             | 44.4              | 6.6           | 0.2                    | -----               | 51.2                | -----               | 54.0                | -----          | 2.8            |

**Ch.40(5 200 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 399.90       | H   | 51.3              | -----             | 7.2           | -----                  | 58.5                | -----               | 74.0                | -----               | 15.5           | -----          |
| 10 401.89       | H   | -----             | 35.6              | 7.2           | 0.2                    | -----               | 43.0                | -----               | 54.0                | -----          | 11.0           |
| 10 401.76       | V   | 56.9              | -----             | 7.2           | -----                  | 64.1                | -----               | 74.0                | -----               | 9.9            | -----          |
| 10 402.83       | V   | -----             | 42.3              | 7.2           | 0.2                    | -----               | 49.7                | -----               | 54.0                | -----          | 4.3            |

**Ch.48(5 240 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 475.97       | H   | 50.3              | -----             | 7.2           | -----                  | 57.5                | -----               | 74.0                | -----               | 16.5           | -----          |
| 10 481.05       | H   | -----             | 35.6              | 7.4           | 0.2                    | -----               | 43.2                | -----               | 54.0                | -----          | 10.8           |
| 10 481.44       | V   | 56.0              | -----             | 7.4           | -----                  | 63.4                | -----               | 74.0                | -----               | 10.6           | -----          |
| 10 482.20       | V   | -----             | 41.8              | 7.4           | 0.2                    | -----               | 49.4                | -----               | 54.0                | -----          | 4.6            |

**Ch.52(5 260 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 516.29       | H   | 51.8              | -----             | 7.5           | -----                  | 59.3                | -----               | 74.0                | -----               | 14.7           | -----          |
| 10 521.97       | H   | -----             | 36.4              | 7.4           | 0.2                    | -----               | 44.0                | -----               | 54.0                | -----          | 10.0           |
| 10 516.39       | V   | 57.8              | -----             | 7.5           | -----                  | 65.3                | -----               | 74.0                | -----               | 8.7            | -----          |
| 10 517.95       | V   | -----             | 42.1              | 7.5           | 0.2                    | -----               | 49.8                | -----               | 54.0                | -----          | 4.2            |

Ch.60(5 300 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 600.65       | H   | 50.6              | -----             | 7.3           | -----                  | 57.9                | -----               | 74.0                | -----               | 16.1           | -----          |
| 10 599.64       | H   | -----             | 35.9              | 7.3           | 0.2                    | -----               | 43.4                | -----               | 54.0                | -----          | 10.6           |
| 10 596.46       | V   | 55.0              | -----             | 7.3           | -----                  | 62.3                | -----               | 74.0                | -----               | 11.7           | -----          |
| 10 599.99       | V   | -----             | 41.3              | 7.3           | 0.2                    | -----               | 48.8                | -----               | 54.0                | -----          | 5.2            |

Ch.64(5 320 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 641.55       | H   | 51.5              | -----             | 7.4           | -----                  | 58.9                | -----               | 74.0                | -----               | 15.1           | -----          |
| 10 637.90       | H   | -----             | 35.9              | 7.4           | 0.2                    | -----               | 43.5                | -----               | 54.0                | -----          | 10.5           |
| 10 640.91       | V   | 54.2              | -----             | 7.4           | -----                  | 61.6                | -----               | 74.0                | -----               | 12.4           | -----          |
| 10 642.42       | V   | -----             | 41.7              | 7.4           | 0.2                    | -----               | 49.3                | -----               | 54.0                | -----          | 4.7            |

Ch.100(5 500 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 003.24       | H   | 46.7              | -----             | 7.8           | -----                  | 54.5                | -----               | 74.0                | -----               | 19.5           | -----          |
| 11 002.09       | H   | -----             | 34.3              | 7.8           | 0.2                    | -----               | 42.3                | -----               | 54.0                | -----          | 11.7           |
| 10 996.46       | V   | 48.7              | -----             | 7.8           | -----                  | 56.5                | -----               | 74.0                | -----               | 17.5           | -----          |
| 11 002.64       | V   | -----             | 36.1              | 7.8           | 0.2                    | -----               | 44.1                | -----               | 54.0                | -----          | 9.9            |

Ch.120(5 600 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 169.56       | H   | 46.4              | -----             | 8.1           | -----                  | 54.5                | -----               | 74.0                | -----               | 19.5           | -----          |
| 11 202.14       | H   | -----             | 34.3              | 8.2           | 0.2                    | -----               | 42.7                | -----               | 54.0                | -----          | 11.3           |
| 11 199.45       | V   | 47.8              | -----             | 8.2           | -----                  | 56.0                | -----               | 74.0                | -----               | 18.0           | -----          |
| 11 201.30       | V   | -----             | 35.2              | 8.2           | 0.2                    | -----               | 43.6                | -----               | 54.0                | -----          | 10.4           |





Ch.140(5 700 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 401.85       | H   | 46.8              | -----             | 8.6           | -----                  | 55.4                | -----               | 74.0                | -----               | 18.6           | -----          |
| 11 398.74       | H   | -----             | 34.3              | 8.6           | 0.2                    | -----               | 43.1                | -----               | 54.0                | -----          | 10.9           |
| 11 405.91       | V   | 49.5              | -----             | 8.6           | -----                  | 58.1                | -----               | 74.0                | -----               | 15.9           | -----          |
| 11 401.99       | V   | -----             | 36.3              | 8.6           | 0.2                    | -----               | 45.1                | -----               | 54.0                | -----          | 8.9            |

Ch.144(5 720 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 436.20       | H   | 46.8              | -----             | 8.6           | -----                  | 55.4                | -----               | 74.0                | -----               | 18.6           | -----          |
| 11 437.96       | H   | -----             | 34.9              | 8.7           | 0.2                    | -----               | 43.8                | -----               | 54.0                | -----          | 10.2           |
| 11 445.24       | V   | 50.0              | -----             | 8.7           | -----                  | 58.7                | -----               | 74.0                | -----               | 15.3           | -----          |
| 11 441.58       | V   | -----             | 36.6              | 8.7           | 0.2                    | -----               | 45.5                | -----               | 54.0                | -----          | 8.5            |

Ch.149(5 745 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 485.13       | H   | 47.1              | -----             | 8.4           | -----                  | 55.5                | -----               | 74.0                | -----               | 18.5           | -----          |
| 11 487.72       | H   | -----             | 35.1              | 8.3           | 0.2                    | -----               | 43.6                | -----               | 54.0                | -----          | 10.4           |
| 11 486.31       | V   | 51.8              | -----             | 8.3           | -----                  | 60.1                | -----               | 74.0                | -----               | 13.9           | -----          |
| 11 491.79       | V   | -----             | 36.6              | 8.3           | 0.2                    | -----               | 45.1                | -----               | 54.0                | -----          | 8.9            |

Ch.157(5 785 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 532.61       | H   | 46.7              | -----             | 8.5           | -----                  | 55.2                | -----               | 74.0                | -----               | 18.8           | -----          |
| 11 564.05       | H   | -----             | 34.6              | 8.6           | 0.2                    | -----               | 43.4                | -----               | 54.0                | -----          | 10.6           |
| 11 569.80       | V   | 51.0              | -----             | 8.6           | -----                  | 59.6                | -----               | 74.0                | -----               | 14.4           | -----          |
| 11 567.90       | V   | -----             | 37.7              | 8.6           | 0.2                    | -----               | 46.5                | -----               | 54.0                | -----          | 7.5            |



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (121) / (188) Pages

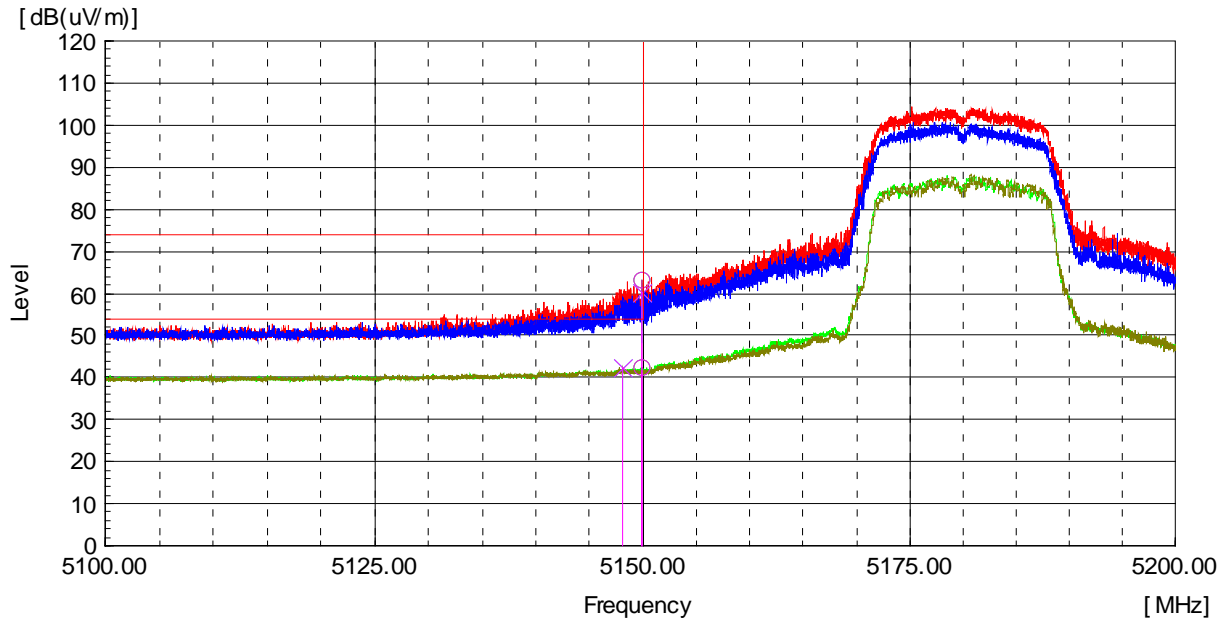
Ch.165(5 825 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 648.72       | H   | 48.1              | -----             | 8.3           | -----                  | 56.4                | -----               | 74.0                | -----               | 17.6           | -----          |
| 11 647.74       | H   | -----             | 34.8              | 8.3           | 0.2                    | -----               | 43.3                | -----               | 54.0                | -----          | 10.7           |
| 11 650.99       | V   | 52.1              | -----             | 8.3           | -----                  | 60.4                | -----               | 74.0                | -----               | 13.6           | -----          |
| 11 651.69       | V   | -----             | 38.2              | 8.3           | 0.2                    | -----               | 46.7                | -----               | 54.0                | -----          | 7.3            |

**Remarks**

1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down positon(X,Y axis). The worst emission was found in lie-down positon(X axis) and the worst case was recorded.
2. Peak Result = Reading + c.f(Correction factor)  
 Average Result = Reading + c.f(Correction factor) + Duty Cycle Factor
3. Correction factor = Antenna factor + Cable loss - Amp Gain

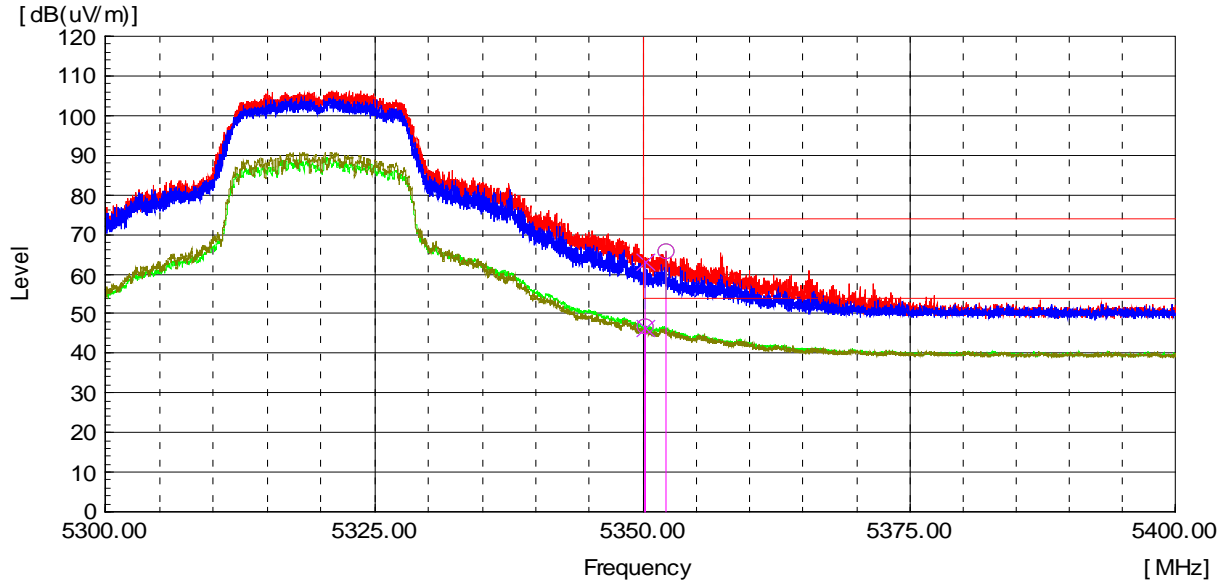
|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11a-ANT1 |
| Worst Case Transfer Rate : | 6 Mbps       |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 180 MHz    |
| Channel :                  | 36           |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 149.86        | H   | 61.5              | -----             | 1.6           | -----                  | 63.1                | -----               | 74.0                | -----               | 10.9           | -----          |
| 5 149.93        | H   | -----             | 40.6              | 1.6           | 0.2                    | -----               | 42.4                | -----               | 54.0                | -----          | 11.6           |
| 5 149.91        | V   | 58.5              | -----             | 1.6           | -----                  | 60.1                | -----               | 74.0                | -----               | 13.9           | -----          |
| 5 148.18        | V   | -----             | 40.9              | 1.6           | 0.2                    | -----               | 42.7                | -----               | 54.0                | -----          | 11.3           |

Radiated Restricted Band Edge Plot

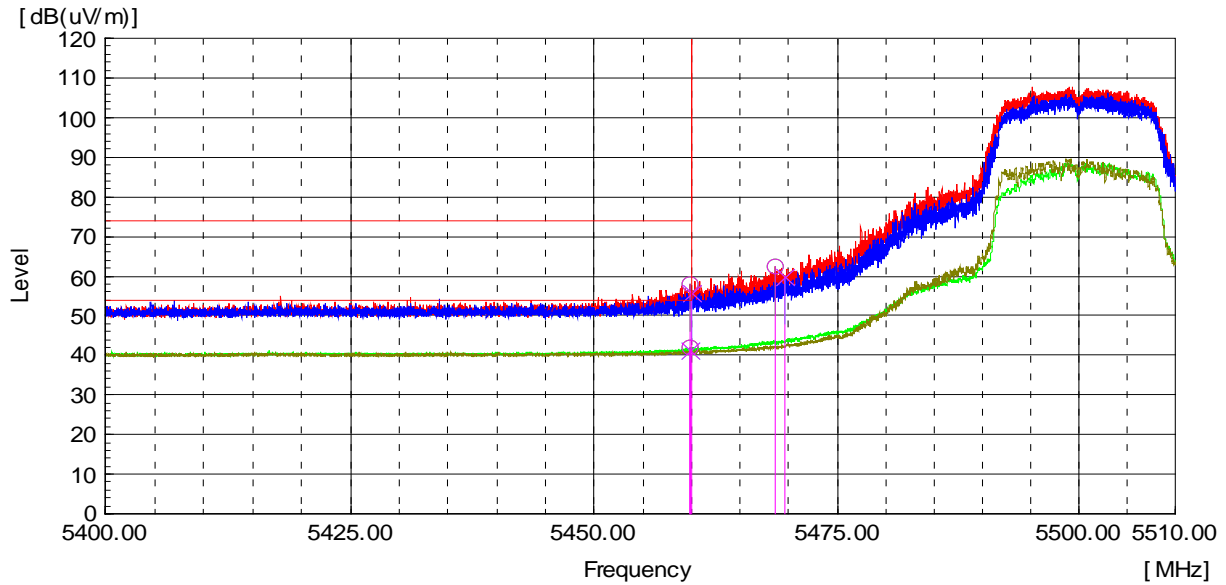
|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11a-ANT1 |
| Worst Case Transfer Rate : | 6 Mbps       |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 320 MHz    |
| Channel :                  | 64           |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 352.18        | H   | 64.2              | -----             | 1.7           | -----                  | 65.9                | -----               | 74.0                | -----               | 8.1            | -----          |
| 5 350.20        | H   | -----             | 45.1              | 1.7           | 0.2                    | -----               | 47.0                | -----               | 54.0                | -----          | 7.0            |
| 5 350.16        | V   | 61.4              | -----             | 1.7           | -----                  | 63.1                | -----               | 74.0                | -----               | 10.9           | -----          |
| 5 350.23        | V   | -----             | 44.6              | 1.7           | 0.2                    | -----               | 46.5                | -----               | 54.0                | -----          | 7.5            |

Radiated Restricted Band Edge Plot

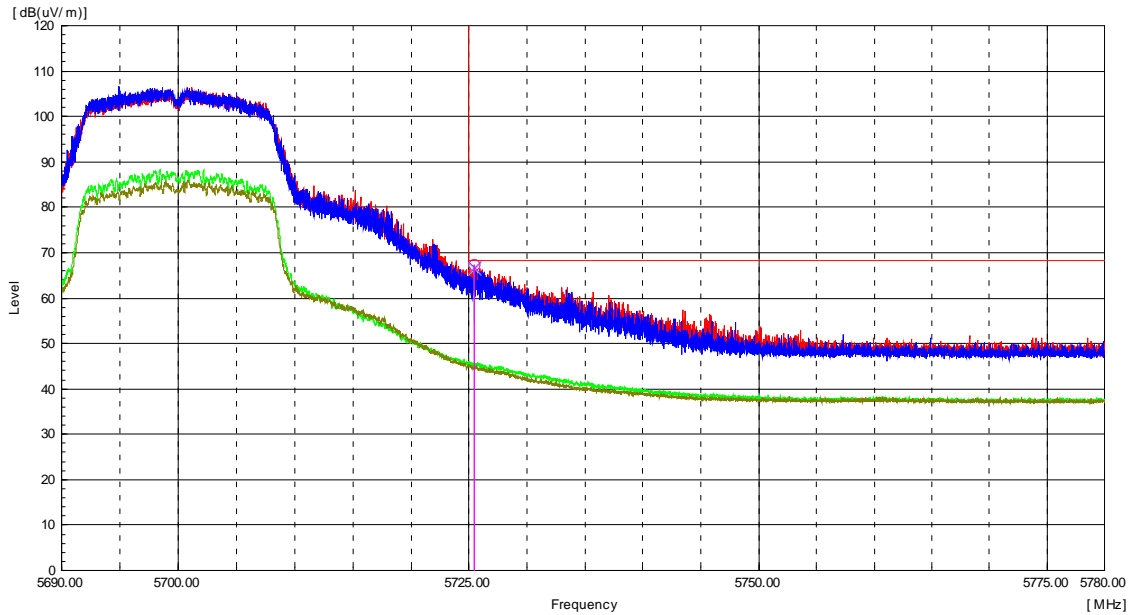
|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11a-ANT1 |
| Worst Case Transfer Rate : | 6 Mbps       |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 500 MHz    |
| Channel :                  | 100          |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 459.81        | H   | 56.2              | -----             | 1.7           | -----                  | 57.9                | -----               | 74.0                | -----               | 16.1           | -----          |
| 5 459.90        | H   | -----             | 40.3              | 1.7           | 0.2                    | -----               | 42.2                | -----               | 54.0                | -----          | 11.8           |
| 5 459.96        | V   | 54.0              | -----             | 1.7           | -----                  | 55.7                | -----               | 74.0                | -----               | 18.3           | -----          |
| 5 459.91        | V   | -----             | 39.5              | 1.7           | 0.2                    | -----               | 41.4                | -----               | 54.0                | -----          | 12.6           |
| 5 468.68        | H   | 60.6              | -----             | 1.7           | -----                  | 62.3                | -----               | 68.2                | -----               | 5.9            | -----          |
| 5 469.66        | V   | 58.0              | -----             | 1.7           | -----                  | 59.7                | -----               | 68.2                | -----               | 8.5            | -----          |

Radiated Restricted Band Edge Plot

|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11a-ANT1 |
| Worst Case Transfer Rate : | 6 Mbps       |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 700 MHz    |
| Channel :                  | 140          |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 725.48        | H   | 65.2              | -----             | 2.0           | -----                  | 67.2                | -----               | 74.0                | -----               | 1.0            | -----          |
| 5 725.44        | V   | 64.7              | -----             | 2.0           | -----                  | 66.7                | -----               | 74.0                | -----               | 1.5            | -----          |

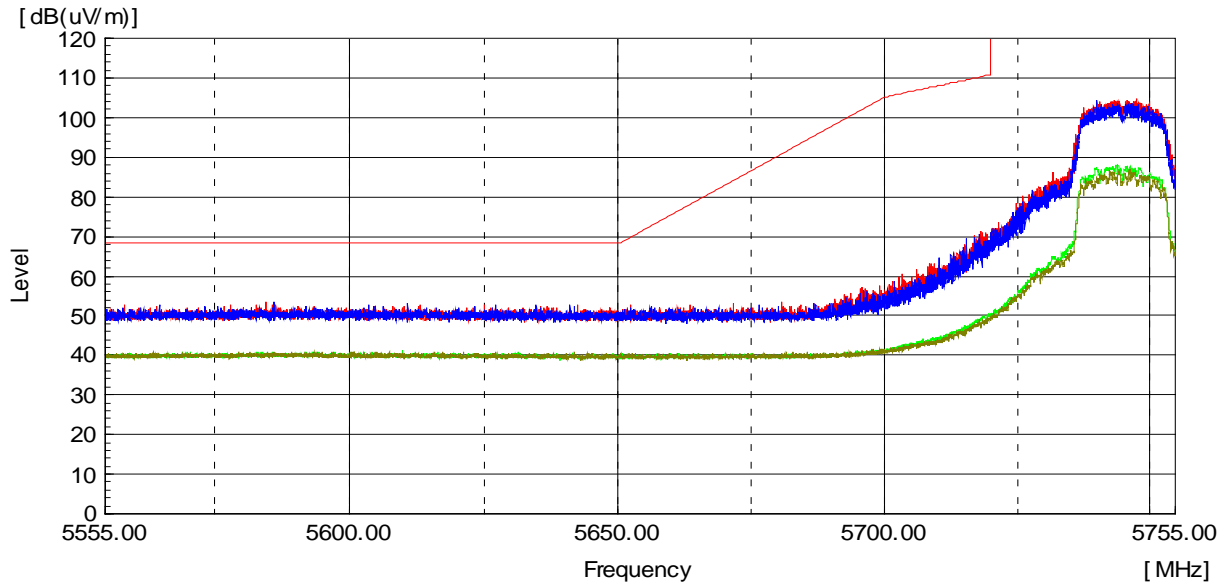
Radiated Restricted Band Edge Plot



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (126) / (188) Pages

|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11a-ANT1 |
| Worst Case Transfer Rate : | 6 Mbps       |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 745 MHz    |
| Channel :                  | 149          |

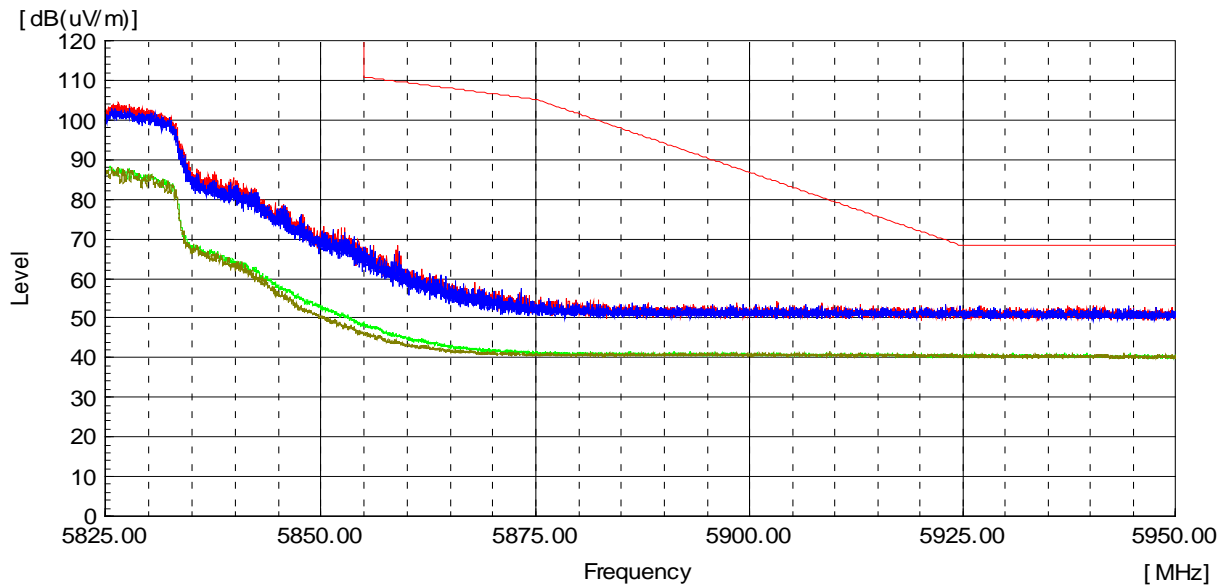


| Frequency [MHz] | Reading (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-------------|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
|-----------------|-------------|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|

The emissions above 1 GHz were 20 dB lower than the limit.

### Radiated Restricted Band Edge Plot

|                            |               |
|----------------------------|---------------|
| Worst Case Mode :          | 802.11a –ANT1 |
| Worst Case Transfer Rate : | 6 Mbps        |
| Distance of Measurements : | 3 Meters      |
| Operating Frequency :      | 5 825 MHz     |
| Channel :                  | 165           |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|

The emissions above 1 GHz were 20 dB lower than the limit.

### Radiated Restricted Band Edge Plot





**Test mode : Transmitter, 802.11a-ANT2**

The requirements are:

Complies

**Test Data**

**Ch.36(5 180 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 356.50       | H   | 51.0              | -----             | 6.6           | -----                  | 57.6                | -----               | 74.0                | -----               | 16.4           | -----          |
| 10 358.17       | H   | -----             | 34.9              | 6.6           | 0.2                    | -----               | 41.7                | -----               | 54.0                | -----          | 12.3           |
| 10 361.40       | V   | 52.5              | -----             | 6.6           | -----                  | 59.1                | -----               | 74.0                | -----               | 14.9           | -----          |
| 10 360.42       | V   | -----             | 38.3              | 6.6           | 0.2                    | -----               | 45.1                | -----               | 54.0                | -----          | 8.9            |

**Ch.40(5 200 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 401.25       | H   | 50.8              | -----             | 7.2           | -----                  | 58.0                | -----               | 74.0                | -----               | 16.0           | -----          |
| 10 401.54       | H   | -----             | 34.8              | 7.2           | 0.2                    | -----               | 42.2                | -----               | 54.0                | -----          | 11.8           |
| 10 401.54       | V   | 53.4              | -----             | 7.2           | -----                  | 60.6                | -----               | 74.0                | -----               | 13.4           | -----          |
| 10 402.10       | V   | -----             | 36.8              | 7.2           | 0.2                    | -----               | 44.2                | -----               | 54.0                | -----          | 9.8            |

**Ch.48(5 240 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 480.85       | H   | 50.1              | -----             | 7.4           | -----                  | 57.5                | -----               | 74.0                | -----               | 16.5           | -----          |
| 10 481.75       | H   | -----             | 34.8              | 7.4           | 0.2                    | -----               | 42.4                | -----               | 54.0                | -----          | 11.6           |
| 10 475.78       | V   | 53.3              | -----             | 7.2           | -----                  | 60.5                | -----               | 74.0                | -----               | 13.5           | -----          |
| 10 481.70       | V   | -----             | 37.7              | 7.4           | 0.2                    | -----               | 45.3                | -----               | 54.0                | -----          | 8.7            |

**Ch.52(5 260 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 518.20       | H   | 50.0              | -----             | 7.5           | -----                  | 57.5                | -----               | 74.0                | -----               | 16.5           | -----          |
| 10 518.40       | H   | -----             | 35.2              | 7.5           | 0.2                    | -----               | 42.9                | -----               | 54.0                | -----          | 11.1           |
| 10 516.11       | V   | 54.1              | -----             | 7.5           | -----                  | 61.6                | -----               | 74.0                | -----               | 12.4           | -----          |
| 10 517.50       | V   | -----             | 38.2              | 7.5           | 0.2                    | -----               | 45.9                | -----               | 54.0                | -----          | 8.1            |

Ch.60(5 300 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 600.70       | H   | 51.4              | -----             | 7.3           | -----                  | 58.7                | -----               | 74.0                | -----               | 15.3           | -----          |
| 10 601.59       | H   | -----             | 37.1              | 7.3           | 0.2                    | -----               | 44.6                | -----               | 54.0                | -----          | 9.4            |
| 10 596.10       | V   | 53.7              | -----             | 7.3           | -----                  | 61.0                | -----               | 74.0                | -----               | 13.0           | -----          |
| 10 602.26       | V   | -----             | 38.5              | 7.3           | 0.2                    | -----               | 46.0                | -----               | 54.0                | -----          | 8.0            |

Ch.64(5 320 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 641.92       | H   | 50.9              | -----             | 7.4           | -----                  | 58.3                | -----               | 74.0                | -----               | 15.7           | -----          |
| 10 639.69       | H   | -----             | 37.3              | 7.4           | 0.2                    | -----               | 44.9                | -----               | 54.0                | -----          | 9.1            |
| 10 636.17       | V   | 54.4              | -----             | 7.4           | -----                  | 61.8                | -----               | 74.0                | -----               | 12.2           | -----          |
| 10 642.19       | V   | -----             | 38.7              | 7.4           | 0.2                    | -----               | 46.3                | -----               | 54.0                | -----          | 7.7            |

Ch.100(5 500 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 996.56       | H   | 49.5              | -----             | 7.8           | -----                  | 57.3                | -----               | 74.0                | -----               | 16.7           | -----          |
| 11 002.10       | H   | -----             | 37.0              | 7.8           | 0.2                    | -----               | 45.0                | -----               | 54.0                | -----          | 9.0            |
| 11 001.83       | V   | 52.1              | -----             | 7.8           | -----                  | 59.9                | -----               | 74.0                | -----               | 14.1           | -----          |
| 10 998.06       | V   | -----             | 36.6              | 7.8           | 0.2                    | -----               | 44.6                | -----               | 54.0                | -----          | 9.4            |

Ch.120(5 600 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 203.31       | H   | 46.9              | -----             | 8.2           | -----                  | 55.1                | -----               | 74.0                | -----               | 18.9           | -----          |
| 11 195.41       | H   | -----             | 34.7              | 8.2           | 0.2                    | -----               | 43.1                | -----               | 54.0                | -----          | 10.9           |
| 11 196.47       | V   | 48.0              | -----             | 8.2           | -----                  | 56.2                | -----               | 74.0                | -----               | 17.8           | -----          |
| 11 202.90       | V   | -----             | 34.7              | 8.2           | 0.2                    | -----               | 43.1                | -----               | 54.0                | -----          | 10.9           |

Ch.140(5 700 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 406.44       | H   | 46.2              | -----             | 8.6           | -----                  | 54.8                | -----               | 74.0                | -----               | 19.2           | -----          |
| 11 399.29       | H   | -----             | 34.7              | 8.6           | 0.2                    | -----               | 43.5                | -----               | 54.0                | -----          | 10.5           |
| 11 401.05       | V   | 46.8              | -----             | 8.6           | -----                  | 55.4                | -----               | 74.0                | -----               | 18.6           | -----          |
| 11 405.21       | V   | -----             | 34.6              | 8.6           | 0.2                    | -----               | 43.4                | -----               | 54.0                | -----          | 10.6           |

Ch.144(5 720 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 489.11       | H   | 46.4              | -----             | 8.3           | -----                  | 54.7                | -----               | 74.0                | -----               | 19.3           | -----          |
| 11 445.16       | H   | -----             | 34.1              | 8.7           | 0.2                    | -----               | 43.0                | -----               | 54.0                | -----          | 11.0           |
| 11 438.25       | V   | 46.9              | -----             | 8.7           | -----                  | 55.6                | -----               | 74.0                | -----               | 18.4           | -----          |
| 11 442.99       | V   | -----             | 34.1              | 8.7           | 0.2                    | -----               | 43.0                | -----               | 54.0                | -----          | 11.0           |

Ch.149(5 745 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11487.40        | H   | 47.0              | -----             | 8.3           | -----                  | 55.3                | -----               | 74.0                | -----               | 18.7           | -----          |
| 11484.34        | H   | -----             | 34.6              | 8.4           | 0.2                    | -----               | 43.2                | -----               | 54.0                | -----          | 10.8           |
| 11494.92        | V   | 47.9              | -----             | 8.3           | -----                  | 56.2                | -----               | 74.0                | -----               | 17.8           | -----          |
| 11496.64        | V   | -----             | 34.9              | 8.3           | 0.2                    | -----               | 43.4                | -----               | 54.0                | -----          | 10.6           |

Ch.157(5 785 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 571.17       | H   | 47.4              | -----             | 8.5           | -----                  | 55.9                | -----               | 74.0                | -----               | 18.1           | -----          |
| 11 536.26       | H   | -----             | 34.2              | 8.6           | 0.2                    | -----               | 43.0                | -----               | 54.0                | -----          | 11.0           |
| 11 566.29       | V   | 47.6              | -----             | 8.6           | -----                  | 56.2                | -----               | 74.0                | -----               | 17.8           | -----          |
| 11 570.76       | V   | -----             | 34.5              | 8.6           | 0.2                    | -----               | 43.3                | -----               | 54.0                | -----          | 10.7           |



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (131) / (188) Pages

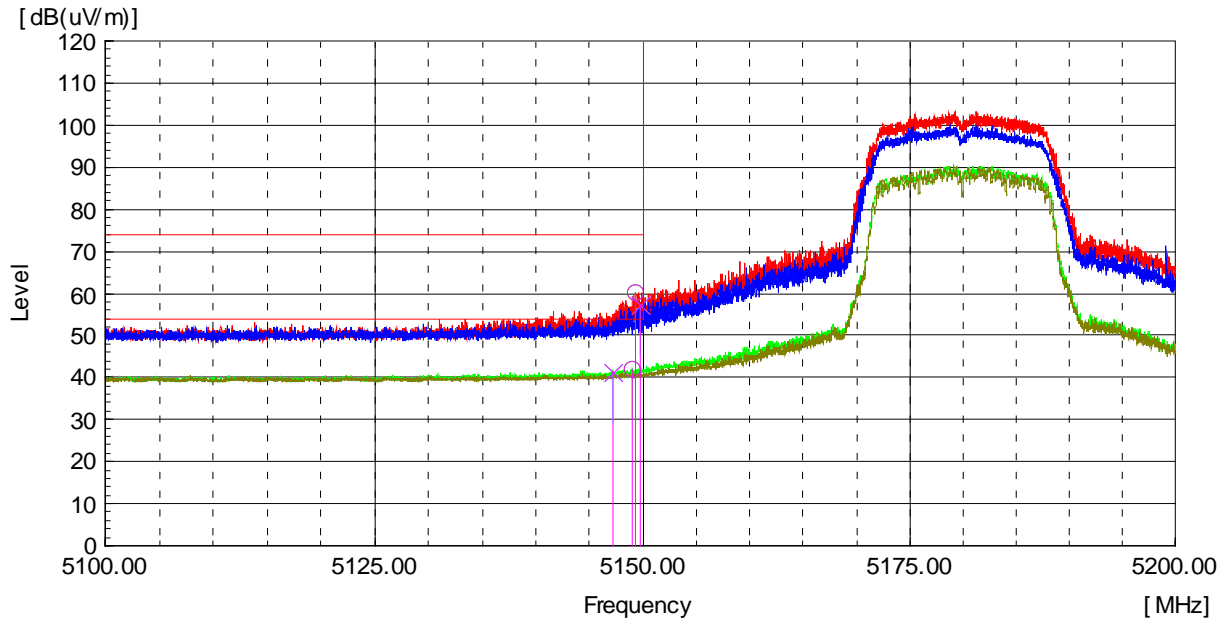
Ch.165(5 825 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 684.91       | H   | 46.8              | -----             | 8.3           | -----                  | 55.1                | -----               | 74.0                | -----               | 18.9           | -----          |
| 11 647.55       | H   | -----             | 35.0              | 8.3           | 0.2                    | -----               | 43.5                | -----               | 54.0                | -----          | 10.5           |
| 11 647.60       | V   | 47.9              | -----             | 8.3           | -----                  | 56.2                | -----               | 74.0                | -----               | 17.8           | -----          |
| 11 644.33       | V   | -----             | 35.0              | 8.3           | 0.2                    | -----               | 43.5                | -----               | 54.0                | -----          | 10.5           |

**Remarks**

1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down positon(X,Y axis). The worst emission was found in lie-down positon(X axis) and the worst case was recorded.
2. Peak Result = Reading + c.f(Correction factor)  
 Average Result = Reading + c.f(Correction factor) + Duty Cycle Factor
3. Correction factor = Antenna factor + Cable loss - Amp Gain

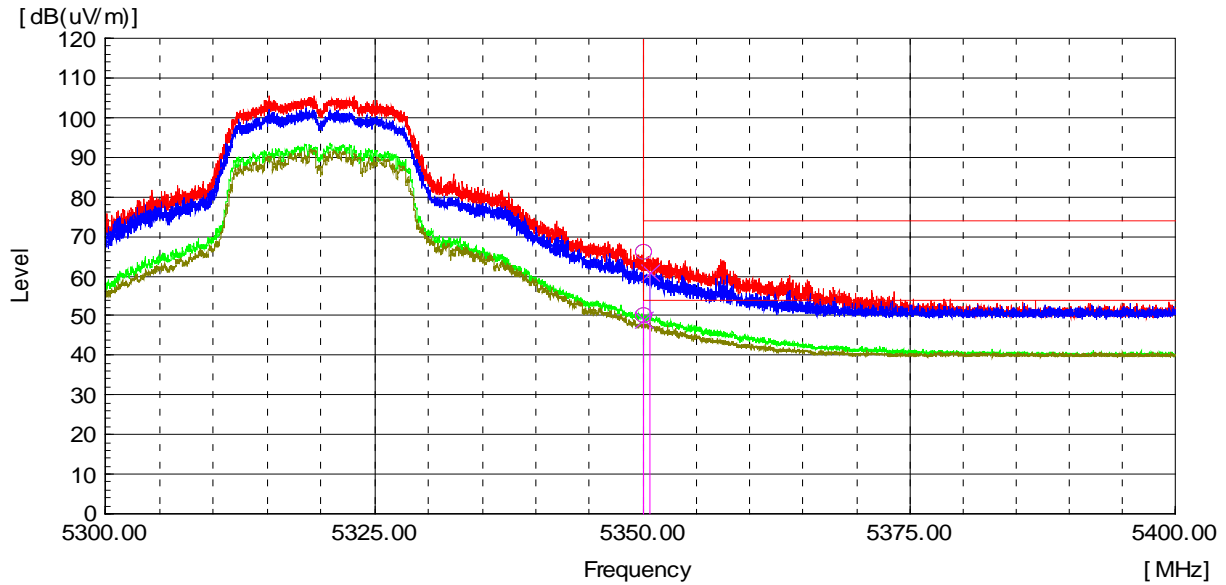
|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11a-ANT2 |
| Worst Case Transfer Rate : | 6 Mbps       |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 180 MHz    |
| Channel :                  | 36           |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 149.28        | H   | 58.7              | -----             | 1.6           | -----                  | 60.3                | -----               | 74.0                | -----               | 13.7           | -----          |
| 5 148.94        | H   | -----             | 40.4              | 1.6           | 0.2                    | -----               | 42.2                | -----               | 54.0                | -----          | 11.8           |
| 5 149.81        | V   | 55.6              | -----             | 1.6           | -----                  | 57.2                | -----               | 74.0                | -----               | 16.8           | -----          |
| 5 147.26        | V   | -----             | 39.6              | 1.6           | 0.2                    | -----               | 41.4                | -----               | 54.0                | -----          | 12.6           |

Radiated Restricted Band Edge Plot

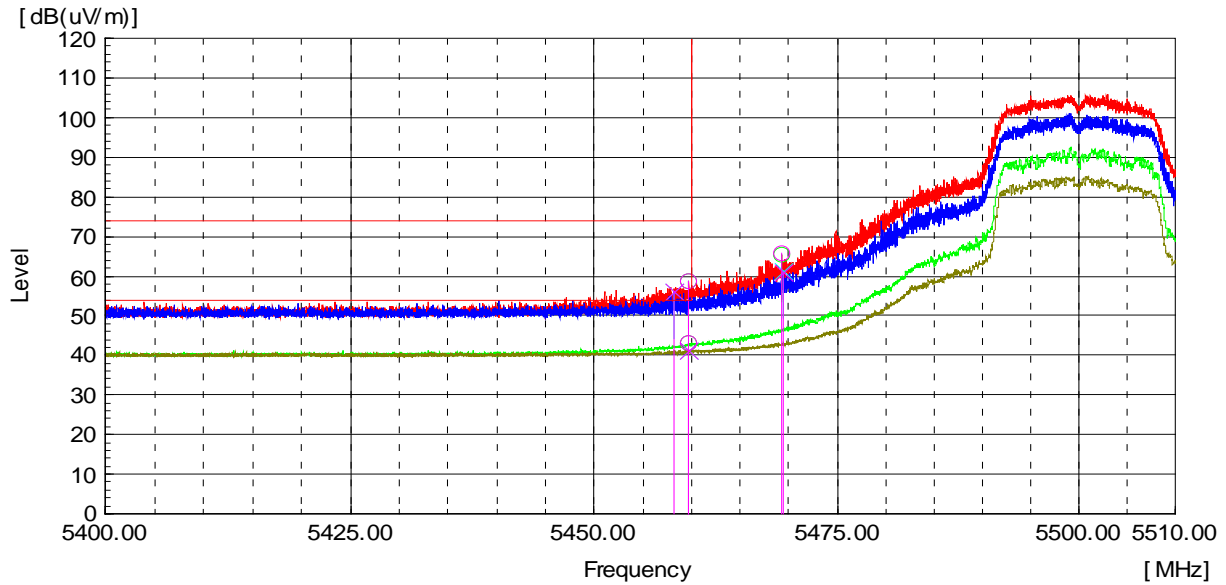
|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11a-ANT2 |
| Worst Case Transfer Rate : | 6 Mbps       |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 320 MHz    |
| Channel :                  | 64           |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 350.06        | H   | 64.3              | -----             | 1.7           | -----                  | 66.0                | -----               | 74.0                | -----               | 8.0            | -----          |
| 5 350.00        | H   | -----             | 48.5              | 1.7           | 0.2                    | -----               | 50.4                | -----               | 54.0                | -----          | 3.6            |
| 5 350.68        | V   | 59.3              | -----             | 1.7           | -----                  | 61.0                | -----               | 74.0                | -----               | 13.0           | -----          |
| 5 350.11        | V   | -----             | 47.2              | 1.7           | 0.2                    | -----               | 49.1                | -----               | 54.0                | -----          | 4.9            |

Radiated Restricted Band Edge Plot

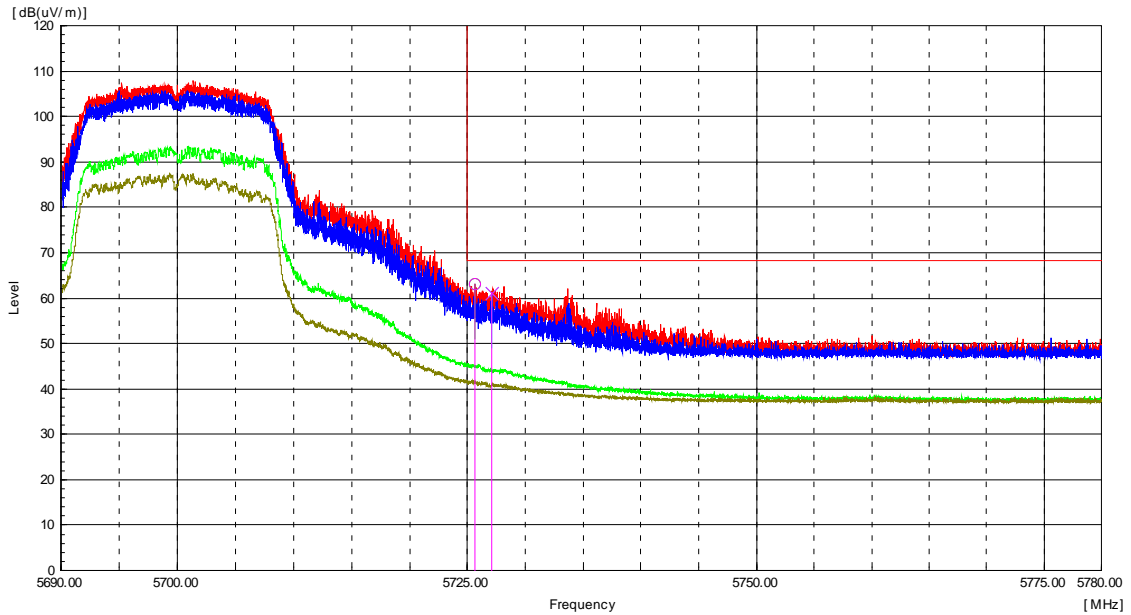
|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11a-ANT2 |
| Worst Case Transfer Rate : | 6 Mbps       |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 500 MHz    |
| Channel :                  | 100          |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 459.76        | H   | 56.9              | -----             | 1.7           | -----                  | 58.6                | -----               | 74.0                | -----               | 15.4           | -----          |
| 5 459.69        | H   | -----             | 41.4              | 1.7           | 0.2                    | -----               | 43.3                | -----               | 54.0                | -----          | 10.7           |
| 5 458.12        | V   | 54.3              | -----             | 1.7           | -----                  | 56.0                | -----               | 74.0                | -----               | 18.0           | -----          |
| 5 459.65        | V   | -----             | 39.5              | 1.7           | 0.2                    | -----               | 41.4                | -----               | 54.0                | -----          | 12.6           |
| 5 469.31        | H   | 63.9              | -----             | 1.7           | -----                  | 65.6                | -----               | 68.2                | -----               | 2.6            | -----          |
| 5 469.52        | V   | 59.4              | -----             | 1.7           | -----                  | 61.1                | -----               | 68.2                | -----               | 7.1            | -----          |

Radiated Restricted Band Edge Plot

|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11a-ANT2 |
| Worst Case Transfer Rate : | 6 Mbps       |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 700 MHz    |
| Channel :                  | 140          |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 725.63        | H   | 61.2              | -----             | 2.0           | -----                  | 63.2                | -----               | 68.2                | -----               | 5.0            | -----          |
| 5 727.11        | V   | 59.2              | -----             | 2.0           | -----                  | 61.2                | -----               | 68.2                | -----               | 7.0            | -----          |

Radiated Restricted Band Edge Plot

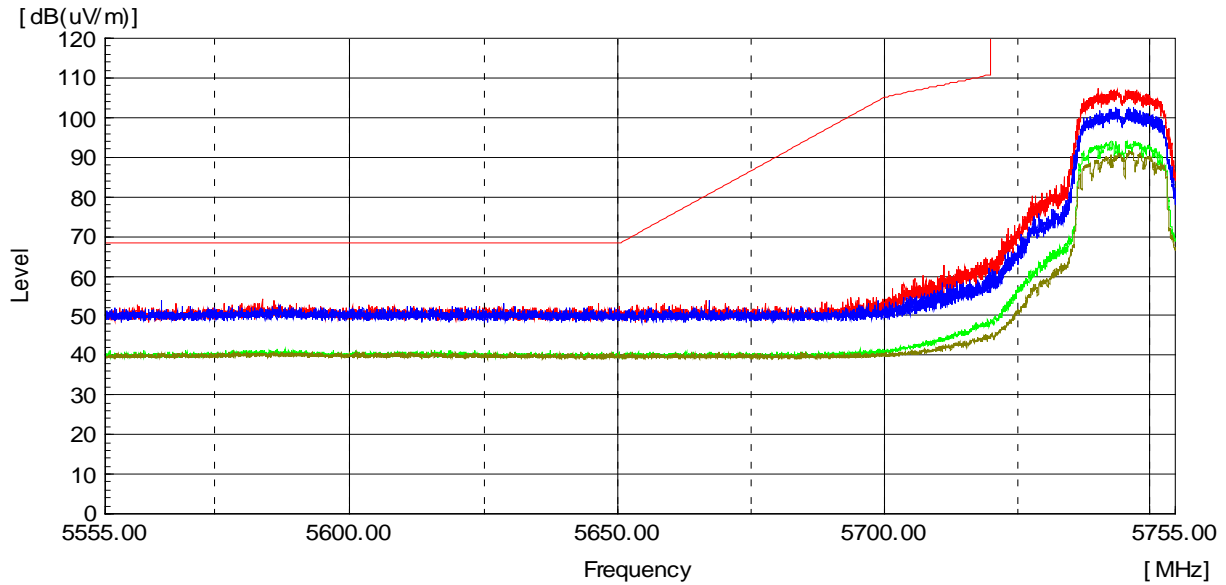




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (136) / (188) Pages

|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11a-ANT2 |
| Worst Case Transfer Rate : | 6 Mbps       |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 745 MHz    |
| Channel :                  | 149          |

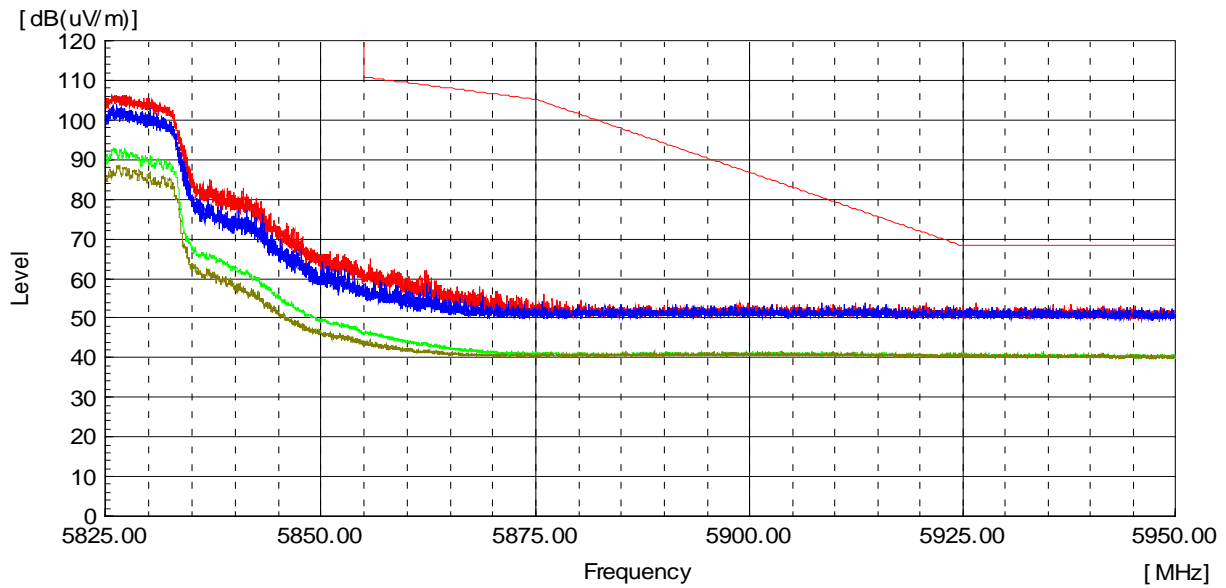


| Frequency [MHz] | Reading (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-------------|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
|-----------------|-------------|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|

The emissions above 1 GHz were 20 dB lower than the limit.

### Radiated Restricted Band Edge Plot

|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11a-ANT2 |
| Worst Case Transfer Rate : | 6 Mbps       |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 825 MHz    |
| Channel :                  | 165          |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|

The emissions above 1 GHz were 20 dB lower than the limit.

### Radiated Restricted Band Edge Plot



**Test mode : Transmitter, 802.11n\_HT20**

The requirements are:

Complies

**Test Data**

**Ch.36(5 180 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 357.33       | H   | 51.7              | -----             | 6.6           | -----                  | 58.3                | -----               | 74.0                | -----               | 15.7           | -----          |
| 10 359.58       | H   | -----             | 35.4              | 6.6           | 0.2                    | -----               | 42.2                | -----               | 54.0                | -----          | 11.8           |
| 10 359.96       | V   | 55.6              | -----             | 6.6           | -----                  | 62.2                | -----               | 74.0                | -----               | 11.8           | -----          |
| 10 360.06       | V   | -----             | 41.7              | 6.6           | 0.2                    | -----               | 48.5                | -----               | 54.0                | -----          | 5.5            |

**Ch.40(5 200 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 397.04       | H   | 51.6              | -----             | 7.2           | -----                  | 58.8                | -----               | 74.0                | -----               | 15.2           | -----          |
| 10 399.79       | H   | -----             | 35.0              | 7.2           | 0.2                    | -----               | 42.4                | -----               | 54.0                | -----          | 11.6           |
| 10 397.13       | V   | 56.9              | -----             | 7.2           | -----                  | 64.1                | -----               | 74.0                | -----               | 9.9            | -----          |
| 10 399.63       | V   | -----             | 39.9              | 7.2           | 0.2                    | -----               | 47.3                | -----               | 54.0                | -----          | 6.7            |

**Ch.48(5 240 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 479.25       | H   | 48.9              | -----             | 7.3           | -----                  | 56.2                | -----               | 74.0                | -----               | 17.8           | -----          |
| 10 481.85       | H   | -----             | 34.8              | 7.4           | 0.2                    | -----               | 42.4                | -----               | 54.0                | -----          | 11.6           |
| 10 476.95       | V   | 55.5              | -----             | 7.3           | -----                  | 62.8                | -----               | 74.0                | -----               | 11.2           | -----          |
| 10 481.90       | V   | -----             | 39.3              | 7.4           | 0.2                    | -----               | 46.9                | -----               | 54.0                | -----          | 7.1            |

**Ch.52(5 260 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 515.30       | H   | 52.6              | -----             | 7.5           | -----                  | 60.1                | -----               | 74.0                | -----               | 13.9           | -----          |
| 10 514.74       | H   | -----             | 37.1              | 7.5           | 0.2                    | -----               | 44.8                | -----               | 54.0                | -----          | 9.2            |
| 10 517.21       | V   | 59.5              | -----             | 7.5           | -----                  | 67.0                | -----               | 74.0                | -----               | 7.0            | -----          |
| 10 514.47       | V   | -----             | 41.5              | 7.5           | 0.2                    | -----               | 49.2                | -----               | 54.0                | -----          | 4.8            |

Ch.60(5 300 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 600.34       | H   | 53.1              | -----             | 7.3           | -----                  | 60.4                | -----               | 74.0                | -----               | 13.6           | -----          |
| 10 602.08       | H   | -----             | 37.9              | 7.3           | 0.2                    | -----               | 45.4                | -----               | 54.0                | -----          | 8.6            |
| 10 596.96       | V   | 56.1              | -----             | 7.3           | -----                  | 63.4                | -----               | 74.0                | -----               | 10.6           | -----          |
| 10 599.33       | V   | -----             | 41.6              | 7.3           | 0.2                    | -----               | 49.1                | -----               | 54.0                | -----          | 4.9            |

Ch.64(5 320 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 637.01       | H   | 54.1              | -----             | 7.4           | -----                  | 61.5                | -----               | 74.0                | -----               | 12.5           | -----          |
| 10 634.72       | H   | -----             | 37.7              | 7.4           | 0.2                    | -----               | 45.3                | -----               | 54.0                | -----          | 8.7            |
| 10 637.51       | V   | 56.1              | -----             | 7.4           | -----                  | 63.5                | -----               | 74.0                | -----               | 10.5           | -----          |
| 10 637.30       | V   | -----             | 41.3              | 7.4           | 0.2                    | -----               | 48.9                | -----               | 54.0                | -----          | 5.1            |

Ch.100(5 500 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 001.56       | H   | 49.1              | -----             | 7.8           | -----                  | 56.9                | -----               | 74.0                | -----               | 17.1           | -----          |
| 10 999.20       | H   | -----             | 36.8              | 7.8           | 0.2                    | -----               | 44.8                | -----               | 54.0                | -----          | 9.2            |
| 10 997.25       | V   | 52.2              | -----             | 7.8           | -----                  | 60.0                | -----               | 74.0                | -----               | 14.0           | -----          |
| 10 999.21       | V   | -----             | 37.4              | 7.8           | 0.2                    | -----               | 45.4                | -----               | 54.0                | -----          | 8.6            |

Ch.120(5 600 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 201.74       | H   | 47.5              | -----             | 8.2           | -----                  | 55.7                | -----               | 74.0                | -----               | 18.3           | -----          |
| 11 201.63       | H   | -----             | 35.1              | 8.2           | 0.2                    | -----               | 43.5                | -----               | 54.0                | -----          | 10.5           |
| 11 198.78       | V   | 50.0              | -----             | 8.2           | -----                  | 58.2                | -----               | 74.0                | -----               | 15.8           | -----          |
| 11 203.92       | V   | -----             | 35.7              | 8.2           | 0.2                    | -----               | 44.1                | -----               | 54.0                | -----          | 9.9            |

Ch.140(5 700 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 402.51       | H   | 46.4              | -----             | 8.6           | -----                  | 55.0                | -----               | 74.0                | -----               | 19.0           | -----          |
| 11 399.01       | H   | -----             | 34.0              | 8.6           | 0.2                    | -----               | 42.8                | -----               | 54.0                | -----          | 11.2           |
| 11 399.22       | V   | 48.6              | -----             | 8.6           | -----                  | 57.2                | -----               | 74.0                | -----               | 16.8           | -----          |
| 11 402.05       | V   | -----             | 36.0              | 8.6           | 0.2                    | -----               | 44.8                | -----               | 54.0                | -----          | 9.2            |

Ch.144(5 720 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 436.96       | H   | 55.6              | -----             | 8.7           | -----                  | 64.3                | -----               | 74.0                | -----               | 9.7            | -----          |
| 11 439.17       | H   | -----             | 35.7              | 8.7           | 0.2                    | -----               | 44.6                | -----               | 54.0                | -----          | 9.4            |
| 11 441.00       | V   | 51.6              | -----             | 8.7           | -----                  | 60.3                | -----               | 74.0                | -----               | 13.7           | -----          |
| 11 441.94       | V   | -----             | 37.3              | 8.7           | 0.2                    | -----               | 46.2                | -----               | 54.0                | -----          | 7.8            |

Ch.149(5 745 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 489.46       | H   | 47.5              | -----             | 8.3           | -----                  | 55.8                | -----               | 74.0                | -----               | 18.2           | -----          |
| 11 489.66       | H   | -----             | 35.6              | 8.3           | 0.2                    | -----               | 44.1                | -----               | 54.0                | -----          | 9.9            |
| 11 491.84       | V   | 52.5              | -----             | 8.3           | -----                  | 60.8                | -----               | 74.0                | -----               | 13.2           | -----          |
| 11 489.96       | V   | -----             | 37.3              | 8.3           | 0.2                    | -----               | 45.8                | -----               | 54.0                | -----          | 8.2            |

Ch.157(5 785 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 567.69       | H   | 48.8              | -----             | 8.6           | -----                  | 57.4                | -----               | 74.0                | -----               | 16.6           | -----          |
| 11 564.74       | H   | -----             | 35.2              | 8.6           | 0.2                    | -----               | 44.0                | -----               | 54.0                | -----          | 10.0           |
| 11 567.01       | V   | 51.8              | -----             | 8.6           | -----                  | 60.4                | -----               | 74.0                | -----               | 13.6           | -----          |
| 11 564.56       | V   | -----             | 38.6              | 8.6           | 0.2                    | -----               | 47.4                | -----               | 54.0                | -----          | 6.6            |



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (141) / (188) Pages

Ch.165(5 825 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 643.05       | H   | 48.4              | -----             | 8.3           | -----                  | 56.7                | -----               | 74.0                | -----               | 17.3           | -----          |
| 11 657.53       | H   | -----             | 34.9              | 8.3           | 0.2                    | -----               | 43.4                | -----               | 54.0                | -----          | 10.6           |
| 11 647.15       | V   | 53.1              | -----             | 8.3           | -----                  | 61.4                | -----               | 74.0                | -----               | 12.6           | -----          |
| 11 649.67       | V   | -----             | 39.1              | 8.3           | 0.2                    | -----               | 47.6                | -----               | 54.0                | -----          | 6.4            |

**Remarks**

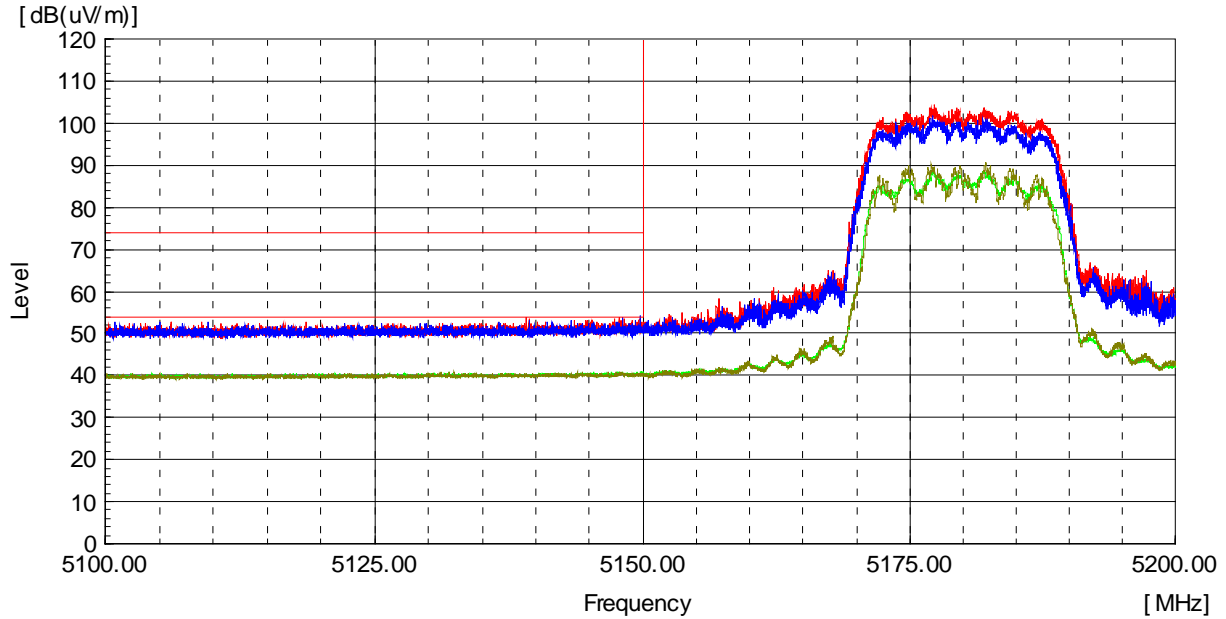
1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down positon(X,Y axis). The worst emission was found in lie-down positon(X axis) and the worst case was recorded.
2. Peak Result = Reading + c.f(Correction factor)  
 Average Result = Reading + c.f(Correction factor) + Duty Cycle Factor
3. Correction factor = Antenna factor + Cable loss - Amp Gain



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (142) / (188) Pages

|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11n_HT20 |
| Worst Case Transfer Rate : | MCS 0        |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 180 MHz    |
| Channel :                  | 36           |

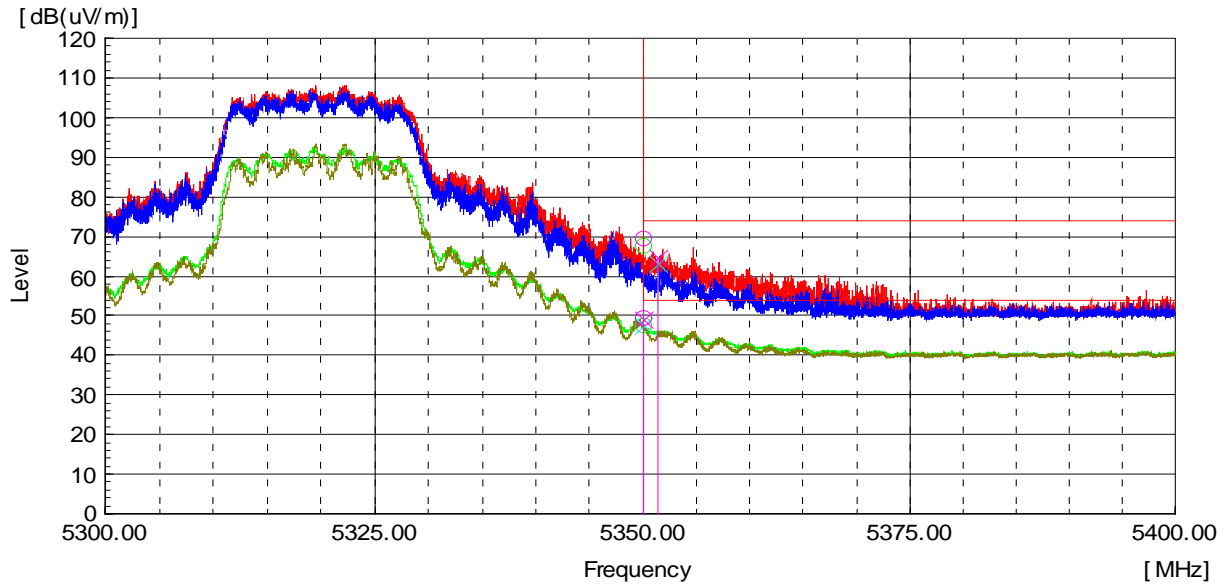


| Frequency [MHz] | Reading (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-------------|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
|-----------------|-------------|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|

The emissions above 1 GHz were 20 dB lower than the limit.

### Radiated Restricted Band Edge Plot

|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11n_HT20 |
| Worst Case Transfer Rate : | MCS 0        |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 320 MHz    |
| Channel :                  | 64           |

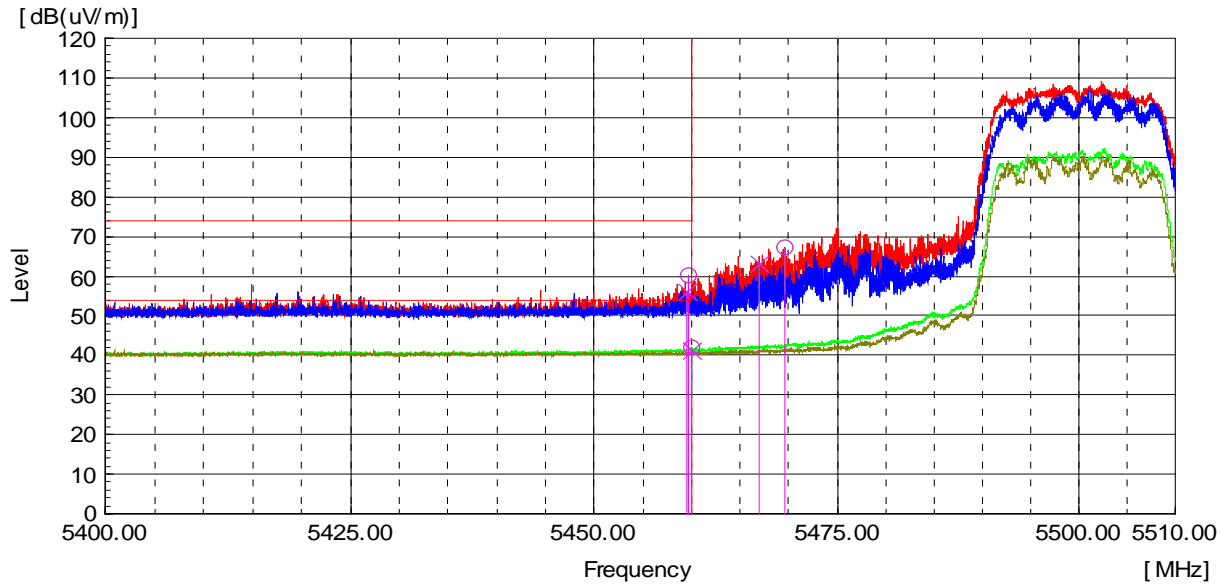


| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 350.10        | H   | 67.6              | -----             | 1.7           | -----                  | 69.3                | -----               | 74.0                | -----               | 4.7            | -----          |
| 5 350.14        | H   | -----             | 47.6              | 1.7           | 0.2                    | -----               | 49.5                | -----               | 54.0                | -----          | 4.5            |
| 5 351.49        | V   | 63.0              | -----             | 1.7           | -----                  | 64.7                | -----               | 74.0                | -----               | 9.3            | -----          |
| 5 350.08        | V   | -----             | 47.4              | 1.7           | 0.2                    | -----               | 49.3                | -----               | 54.0                | -----          | 4.7            |

Radiated Restricted Band Edge Plot



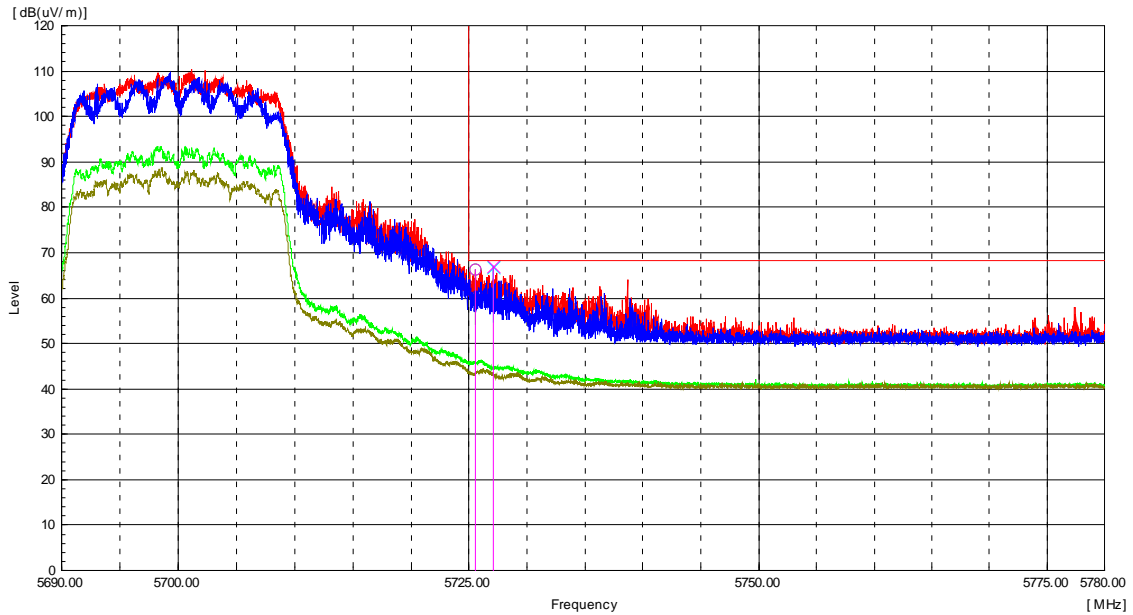
|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11n_HT20 |
| Worst Case Transfer Rate : | MCS 0        |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 500 MHz    |
| Channel :                  | 100          |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 459.65        | H   | 58.4              | -----             | 1.7           | -----                  | 60.1                | -----               | 74.0                | -----               | 13.9           | -----          |
| 5 459.98        | H   | -----             | 40.2              | 1.7           | 0.2                    | -----               | 42.1                | -----               | 54.0                | -----          | 11.9           |
| 5 459.58        | V   | 54.3              | -----             | 1.7           | -----                  | 56.0                | -----               | 74.0                | -----               | 18.0           | -----          |
| 5 459.94        | V   | -----             | 39.5              | 1.7           | 0.2                    | -----               | 41.4                | -----               | 54.0                | -----          | 12.6           |
| 5 469.69        | H   | 65.4              | -----             | 1.7           | -----                  | 67.1                | -----               | 68.2                | -----               | 1.1            | -----          |
| 5 467.02        | V   | 61.3              | -----             | 1.7           | -----                  | 63.0                | -----               | 68.2                | -----               | 5.2            | -----          |

Radiated Restricted Band Edge Plot

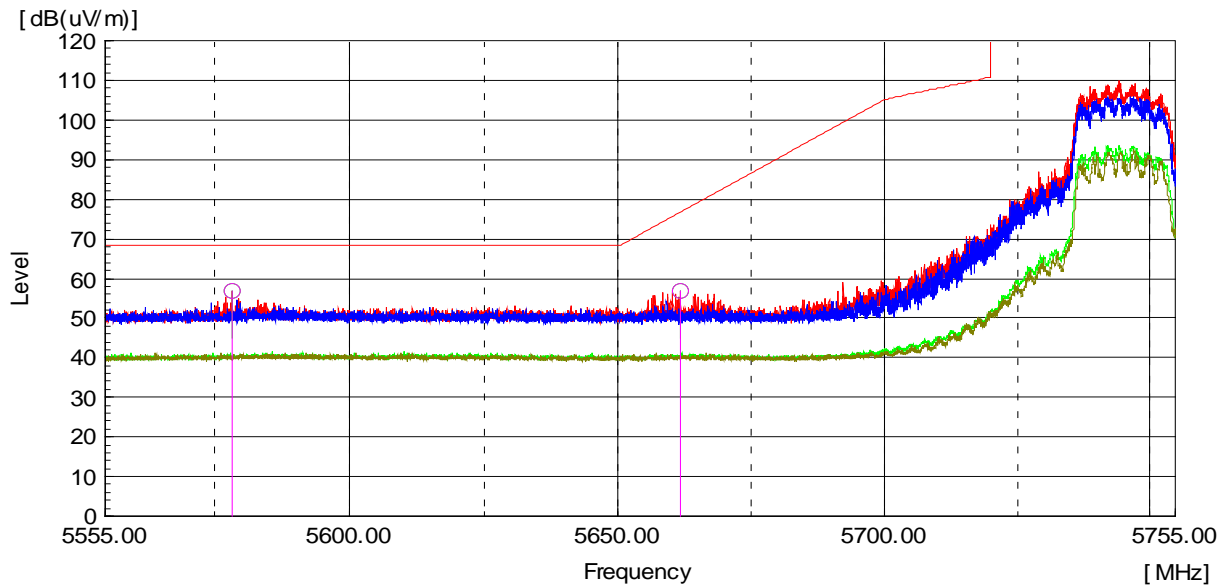
|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11n_HT20 |
| Worst Case Transfer Rate : | MCS 0        |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 700 MHz    |
| Channel :                  | 140          |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 725.52        | H   | 64.4              | -----             | 2.0           | -----                  | 66.4                | -----               | 68.2                | -----               | 1.8            | -----          |
| 5 727.11        | V   | 64.9              | -----             | 2.0           | -----                  | 66.9                | -----               | 68.2                | -----               | 1.3            | -----          |

Radiated Restricted Band Edge Plot

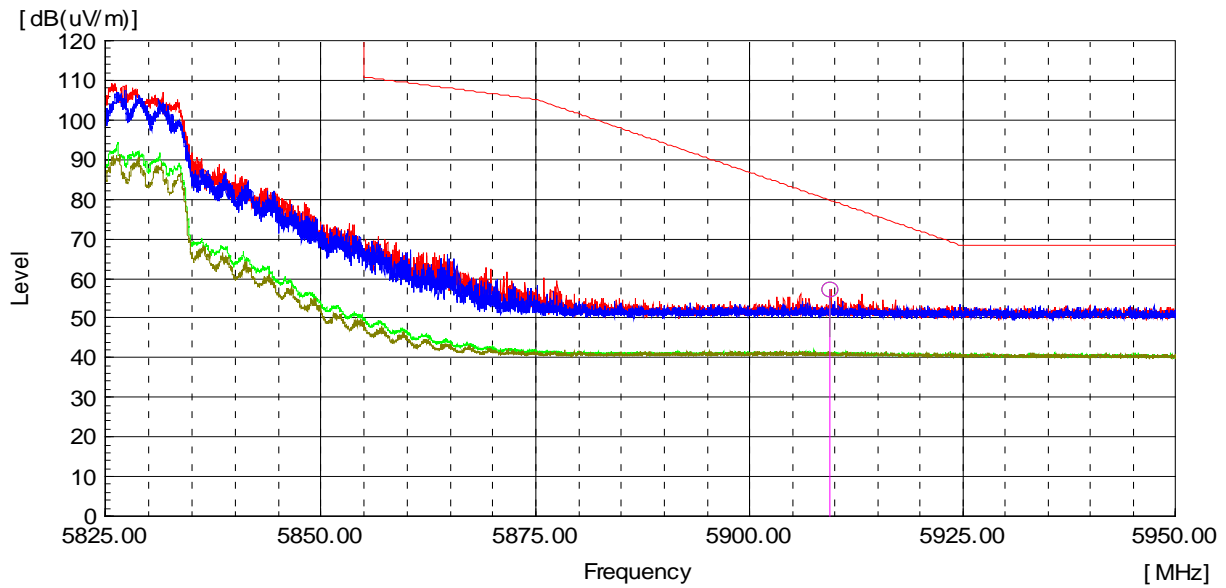
|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11n_HT20 |
| Worst Case Transfer Rate : | MCS 0        |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 745 MHz    |
| Channel :                  | 149          |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 578.33        | H   | 55.0              | -----             | 1.8           | -----                  | 56.8                | -----               | 68.2                | -----               | 11.4           | -----          |
| 5 661.60        | H   | 54.7              | -----             | 2.0           | -----                  | 56.7                | -----               | 76.8                | -----               | 20.1           | -----          |

Radiated Restricted Band Edge Plot

|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11n_HT20 |
| Worst Case Transfer Rate : | MCS 0        |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 825 MHz    |
| Channel :                  | 165          |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 909.28        | H   | 54.2              | -----             | 3.1           | -----                  | 57.3                | -----               | 79.8                | -----               | 22.5           | -----          |

Radiated Restricted Band Edge Plot



**Test mode : Transmitter, 802.11ac\_VHT20**

The requirements are:

Complies

**Test Data**

**Ch.36(5 180 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 362.47       | H   | 52.2              | -----             | 6.6           | -----                  | 58.8                | -----               | 74.0                | -----               | 15.2           | -----          |
| 10 359.94       | H   | -----             | 35.6              | 6.6           | 0.2                    | -----               | 42.4                | -----               | 54.0                | -----          | 11.6           |
| 10 357.19       | V   | 56.5              | -----             | 6.6           | -----                  | 63.1                | -----               | 74.0                | -----               | 10.9           | -----          |
| 10 360.03       | V   | -----             | 42.4              | 6.6           | 0.2                    | -----               | 49.2                | -----               | 54.0                | -----          | 4.8            |

**Ch.40(5 200 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 394.95       | H   | 51.5              | -----             | 7.2           | -----                  | 58.7                | -----               | 74.0                | -----               | 15.3           | -----          |
| 10 399.88       | H   | -----             | 35.4              | 7.2           | 0.2                    | -----               | 42.8                | -----               | 54.0                | -----          | 11.2           |
| 10 397.14       | V   | 56.0              | -----             | 7.2           | -----                  | 63.2                | -----               | 74.0                | -----               | 10.8           | -----          |
| 10 397.55       | V   | -----             | 40.4              | 7.2           | 0.2                    | -----               | 47.8                | -----               | 54.0                | -----          | 6.2            |

**Ch.48(5 240 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 484.83       | H   | 49.2              | -----             | 7.4           | -----                  | 56.6                | -----               | 74.0                | -----               | 17.4           | -----          |
| 10 479.45       | H   | -----             | 35.4              | 7.3           | 0.2                    | -----               | 42.9                | -----               | 54.0                | -----          | 11.1           |
| 10 479.67       | V   | 56.1              | -----             | 7.3           | -----                  | 63.4                | -----               | 74.0                | -----               | 10.6           | -----          |
| 10 479.67       | V   | -----             | 40.1              | 7.3           | 0.2                    | -----               | 47.6                | -----               | 54.0                | -----          | 6.4            |

**Ch.52(5 260 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 517.24       | H   | 53.8              | -----             | 7.5           | -----                  | 61.3                | -----               | 74.0                | -----               | 12.7           | -----          |
| 10 514.58       | H   | -----             | 37.5              | 7.5           | 0.2                    | -----               | 45.2                | -----               | 54.0                | -----          | 8.8            |
| 10 517.08       | V   | 60.2              | -----             | 7.5           | -----                  | 67.7                | -----               | 74.0                | -----               | 6.3            | -----          |
| 10 519.75       | V   | -----             | 42.4              | 7.4           | 0.2                    | -----               | 50.0                | -----               | 54.0                | -----          | 4.0            |

Ch.60(5 300 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 600.20       | H   | 53.9              | -----             | 7.3           | -----                  | 61.2                | -----               | 74.0                | -----               | 12.8           | -----          |
| 10 599.46       | H   | -----             | 37.9              | 7.3           | 0.2                    | -----               | 45.4                | -----               | 54.0                | -----          | 8.6            |
| 10 604.92       | V   | 56.2              | -----             | 7.3           | -----                  | 63.5                | -----               | 74.0                | -----               | 10.5           | -----          |
| 10 604.65       | V   | -----             | 41.6              | 7.3           | 0.2                    | -----               | 49.1                | -----               | 54.0                | -----          | 4.9            |

Ch.64(5 320 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 637.13       | H   | 53.4              | -----             | 7.4           | -----                  | 60.8                | -----               | 74.0                | -----               | 13.2           | -----          |
| 10 637.13       | H   | -----             | 37.9              | 7.4           | 0.2                    | -----               | 45.5                | -----               | 54.0                | -----          | 8.5            |
| 10 637.06       | V   | 55.8              | -----             | 7.4           | -----                  | 63.2                | -----               | 74.0                | -----               | 10.8           | -----          |
| 10 641.75       | V   | -----             | 41.7              | 7.4           | 0.2                    | -----               | 49.3                | -----               | 54.0                | -----          | 4.7            |

Ch.100(5 500 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 001.38       | H   | 50.4              | -----             | 7.8           | -----                  | 58.2                | -----               | 74.0                | -----               | 15.8           | -----          |
| 10 999.31       | H   | -----             | 37.3              | 7.8           | 0.2                    | -----               | 45.3                | -----               | 54.0                | -----          | 8.7            |
| 10 997.10       | V   | 53.0              | -----             | 7.8           | -----                  | 60.8                | -----               | 74.0                | -----               | 13.2           | -----          |
| 10 999.36       | V   | -----             | 37.9              | 7.8           | 0.2                    | -----               | 45.9                | -----               | 54.0                | -----          | 8.1            |

Ch.120(5 600 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 200.66       | H   | 47.6              | -----             | 8.2           | -----                  | 55.8                | -----               | 74.0                | -----               | 18.2           | -----          |
| 11 201.47       | H   | -----             | 35.4              | 8.2           | 0.2                    | -----               | 43.8                | -----               | 54.0                | -----          | 10.2           |
| 11 198.66       | V   | 51.0              | -----             | 8.2           | -----                  | 59.2                | -----               | 74.0                | -----               | 14.8           | -----          |
| 11 198.83       | V   | -----             | 36.2              | 8.2           | 0.2                    | -----               | 44.6                | -----               | 54.0                | -----          | 9.4            |



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (150) / (188) Pages

Ch.140(5 700 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 394.42       | H   | 46.8              | -----             | 8.5           | -----                  | 55.3                | -----               | 74.0                | -----               | 18.7           | -----          |
| 11 401.90       | H   | -----             | 34.8              | 8.6           | 0.2                    | -----               | 43.6                | -----               | 54.0                | -----          | 10.4           |
| 11 402.00       | V   | 49.0              | -----             | 8.6           | -----                  | 57.6                | -----               | 74.0                | -----               | 16.4           | -----          |
| 11 401.85       | V   | -----             | 35.9              | 8.6           | 0.2                    | -----               | 44.7                | -----               | 54.0                | -----          | 9.3            |

Ch.144(5 720 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 444.53       | H   | 46.7              | -----             | 8.7           | -----                  | 55.4                | -----               | 74.0                | -----               | 18.6           | -----          |
| 11 439.10       | H   | -----             | 35.4              | 8.7           | 0.2                    | -----               | 44.3                | -----               | 54.0                | -----          | 9.7            |
| 11 441.11       | V   | 51.5              | -----             | 8.7           | -----                  | 60.2                | -----               | 74.0                | -----               | 13.8           | -----          |
| 11 441.76       | V   | -----             | 37.4              | 8.7           | 0.2                    | -----               | 46.3                | -----               | 54.0                | -----          | 7.7            |

Ch.149(5 745 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 485.76       | H   | 47.8              | -----             | 8.3           | -----                  | 56.1                | -----               | 74.0                | -----               | 17.9           | -----          |
| 11 489.50       | H   | -----             | 35.6              | 8.3           | 0.2                    | -----               | 44.1                | -----               | 54.0                | -----          | 9.9            |
| 11 486.56       | V   | 52.1              | -----             | 8.3           | -----                  | 60.4                | -----               | 74.0                | -----               | 13.6           | -----          |
| 11 492.10       | V   | -----             | 37.4              | 8.3           | 0.2                    | -----               | 45.9                | -----               | 54.0                | -----          | 8.1            |

Ch.157(5 785 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 570.26       | H   | 48.3              | -----             | 8.6           | -----                  | 56.9                | -----               | 74.0                | -----               | 17.1           | -----          |
| 11 567.26       | H   | -----             | 35.0              | 8.6           | 0.2                    | -----               | 43.8                | -----               | 54.0                | -----          | 10.2           |
| 11 569.94       | V   | 51.4              | -----             | 8.6           | -----                  | 60.0                | -----               | 74.0                | -----               | 14.0           | -----          |
| 11 569.86       | V   | -----             | 38.4              | 8.6           | 0.2                    | -----               | 47.2                | -----               | 54.0                | -----          | 6.8            |



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (151) / (188) Pages

Ch.165(5 825 MHz)

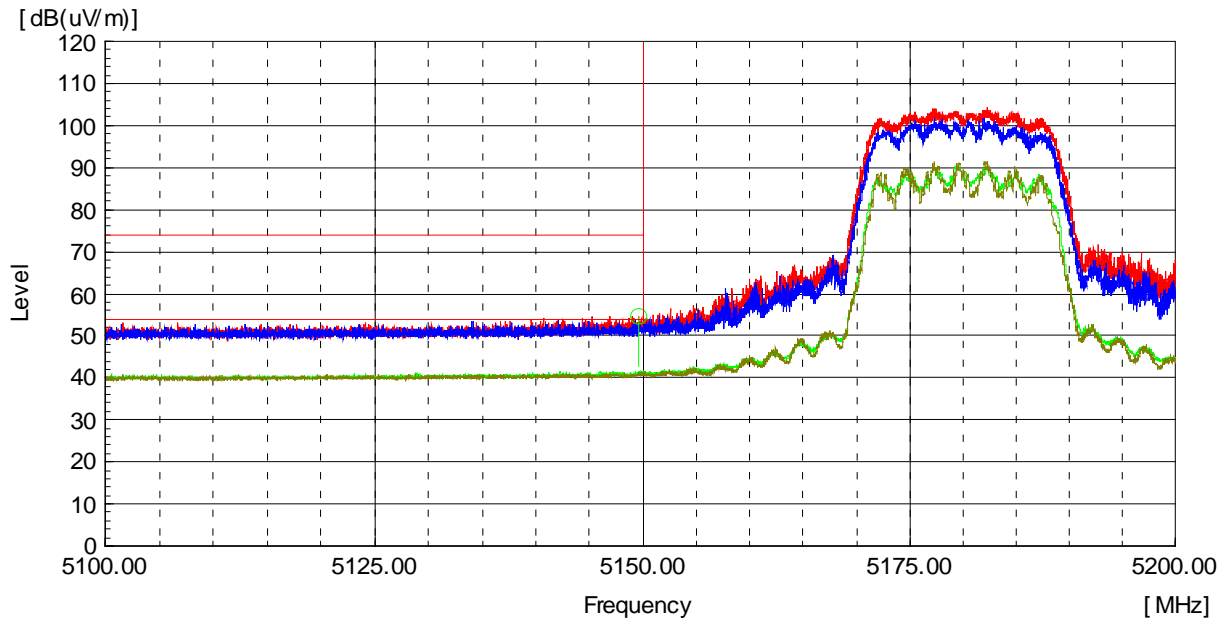
| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 652.70       | H   | 49.4              | -----             | 8.3           | -----                  | 57.7                | -----               | 74.0                | -----               | 16.3           | -----          |
| 11 652.16       | H   | -----             | 34.9              | 8.3           | 0.2                    | -----               | 43.4                | -----               | 54.0                | -----          | 10.6           |
| 11 647.33       | V   | 52.3              | -----             | 8.3           | -----                  | 60.6                | -----               | 74.0                | -----               | 13.4           | -----          |
| 11 649.88       | V   | -----             | 39.0              | 8.3           | 0.2                    | -----               | 47.5                | -----               | 54.0                | -----          | 6.5            |

**Remarks**

1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down positon(X,Y axis). The worst emission was found in lie-down positon(X axis) and the worst case was recorded.
2. Peak Result = Reading + c.f(Correction factor)  
 Average Result = Reading + c.f(Correction factor) + Duty Cycle Factor
3. Correction factor = Antenna factor + Cable loss - Amp Gain



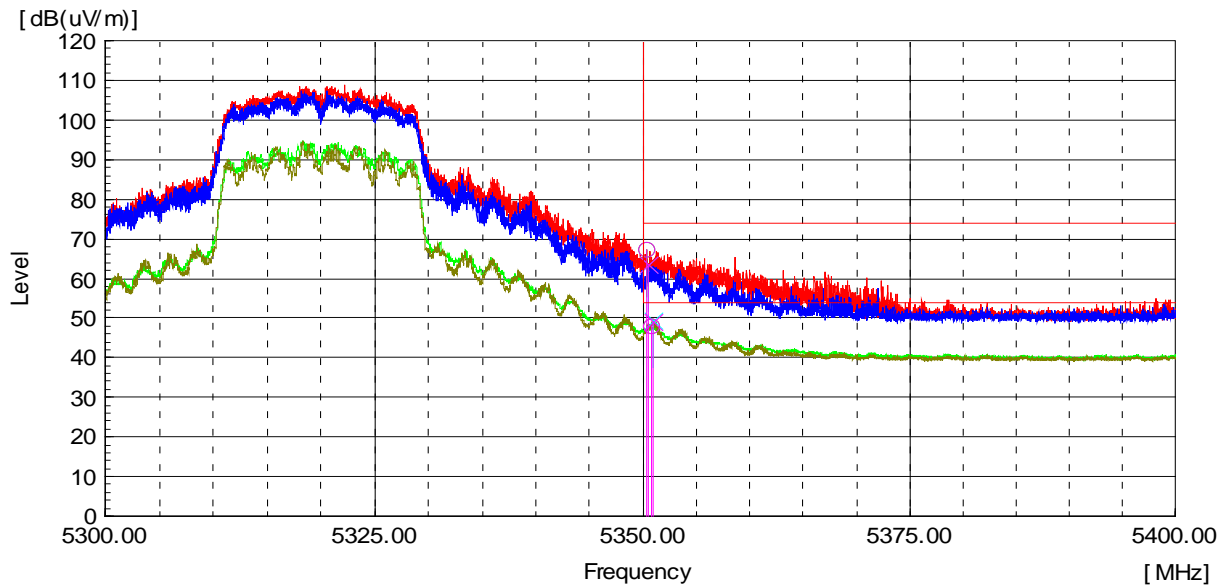
|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT20 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 180 MHz      |
| Channel :                  | 36             |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 149.59        | H   | 53.2              | -----             | 1.6           | -----                  | 54.8                | -----               | 74.0                | -----               | 19.2           | -----          |

Radiated Restricted Band Edge Plot

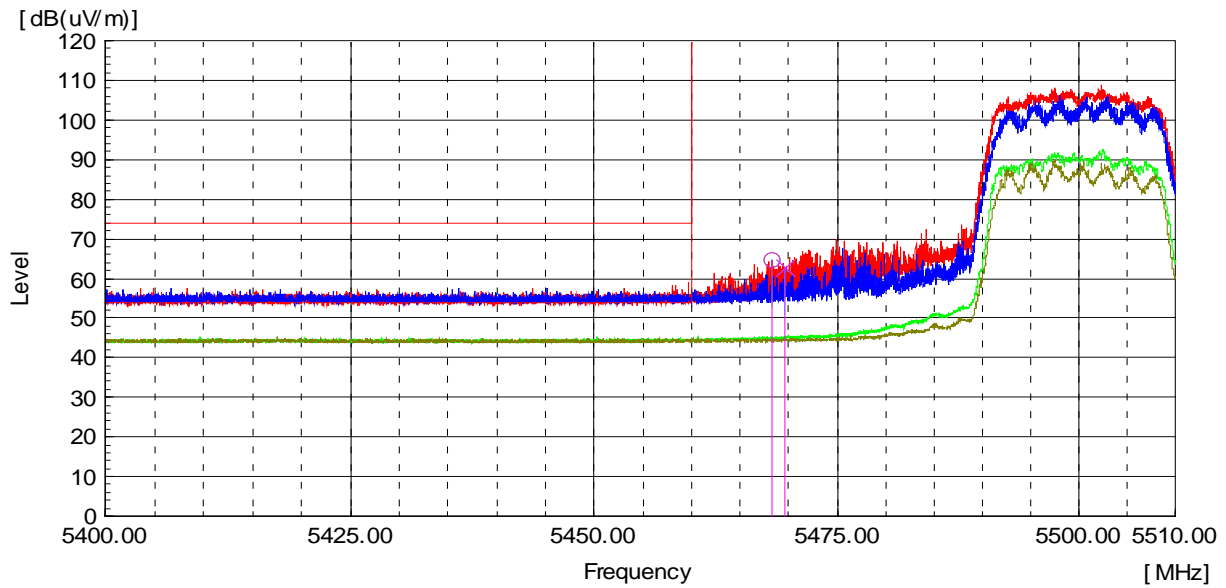
|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT20 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 320 MHz      |
| Channel :                  | 64             |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 350.43        | H   | 65.7              | -----             | 1.7           | -----                  | 67.4                | -----               | 74.0                | -----               | 6.6            | -----          |
| 5 350.83        | H   | -----             | 46.1              | 1.7           | 0.2                    | -----               | 48.0                | -----               | 54.0                | -----          | 6.0            |
| 5 350.54        | V   | 61.7              | -----             | 1.7           | -----                  | 63.4                | -----               | 74.0                | -----               | 10.6           | -----          |
| 5 350.93        | V   | -----             | 47.5              | 1.7           | 0.2                    | -----               | 49.4                | -----               | 54.0                | -----          | 4.6            |

Radiated Restricted Band Edge Plot

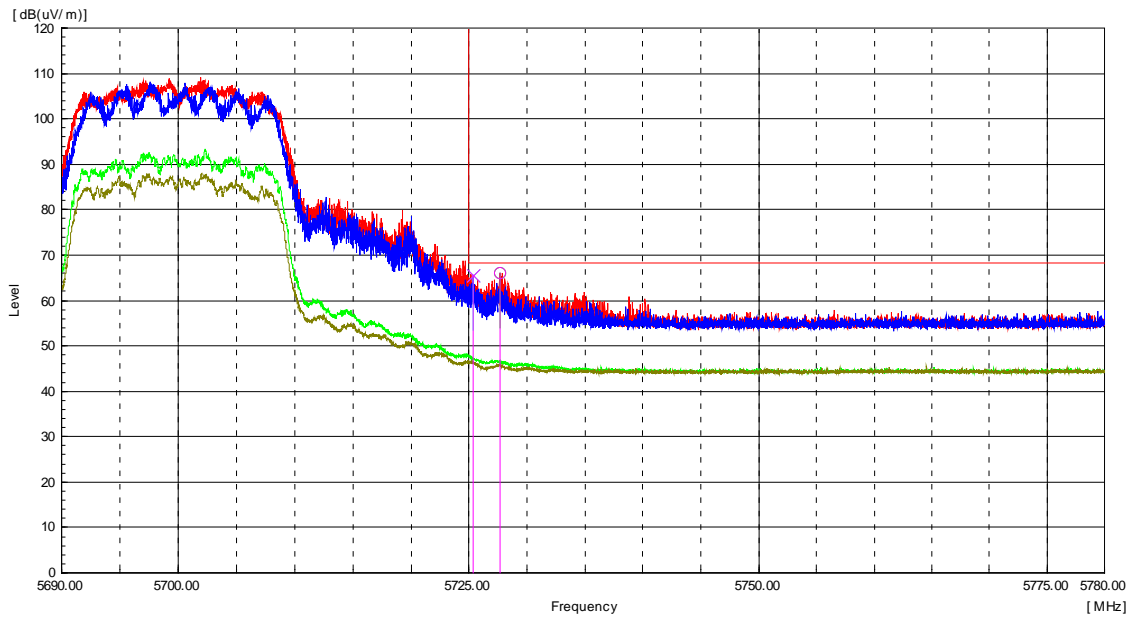
|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT20 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 500 MHz      |
| Channel :                  | 100            |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 468.21        | H   | 63.1              | -----             | 1.7           | -----                  | 64.8                | -----               | 68.2                | -----               | 3.4            | -----          |
| 5 469.60        | V   | 61.0              | -----             | 1.7           | -----                  | 62.7                | -----               | 68.2                | -----               | 5.5            | -----          |

Radiated Restricted Band Edge Plot

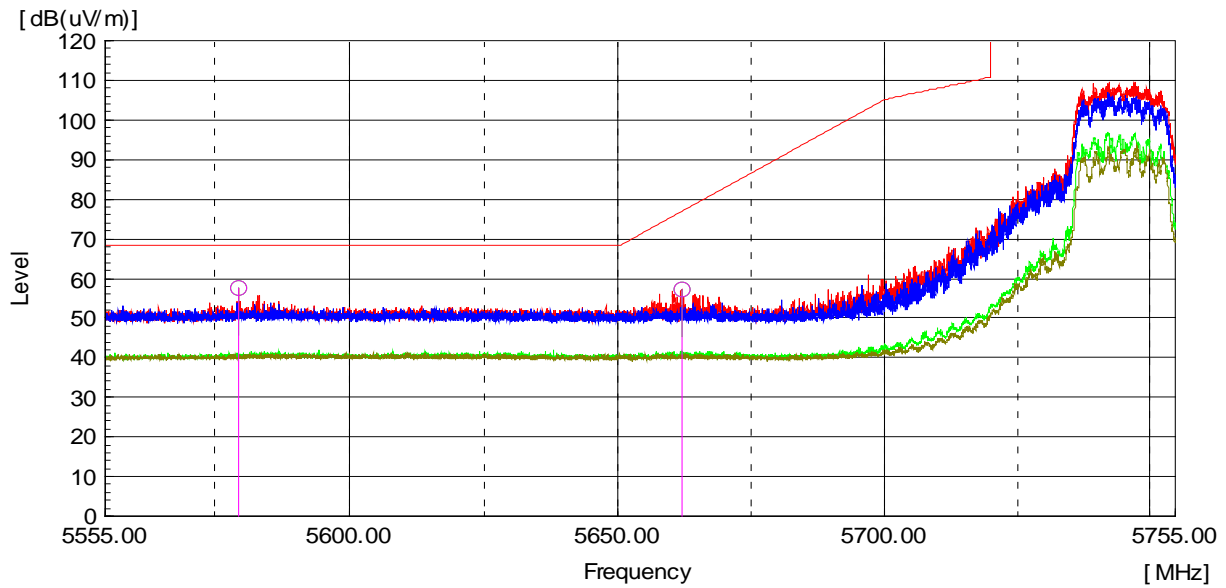
|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT20 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 700 MHz      |
| Channel :                  | 140            |



| Frequency [MHz] | Reading (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-------------|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 725.38        | V           | 63.5              | -----             | 2.0           | -----                  | 65.5                | -----               | 68.2                | -----               | 2.7            | -----          |
| 5 727.62        | H           | 64.0              | -----             | 2.1           | -----                  | 66.1                | -----               | 68.2                | -----               | 2.1            | -----          |

Radiated Restricted Band Edge Plot

|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT20 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 745 MHz      |
| Channel :                  | 149            |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 579.65        | H   | 55.7              | -----             | 1.8           | -----                  | 57.5                | -----               | 68.2                | -----               | 10.7           | -----          |
| 5 661.80        | H   | 55.2              | -----             | 2.0           | -----                  | 57.2                | -----               | 76.9                | -----               | 19.7           | -----          |

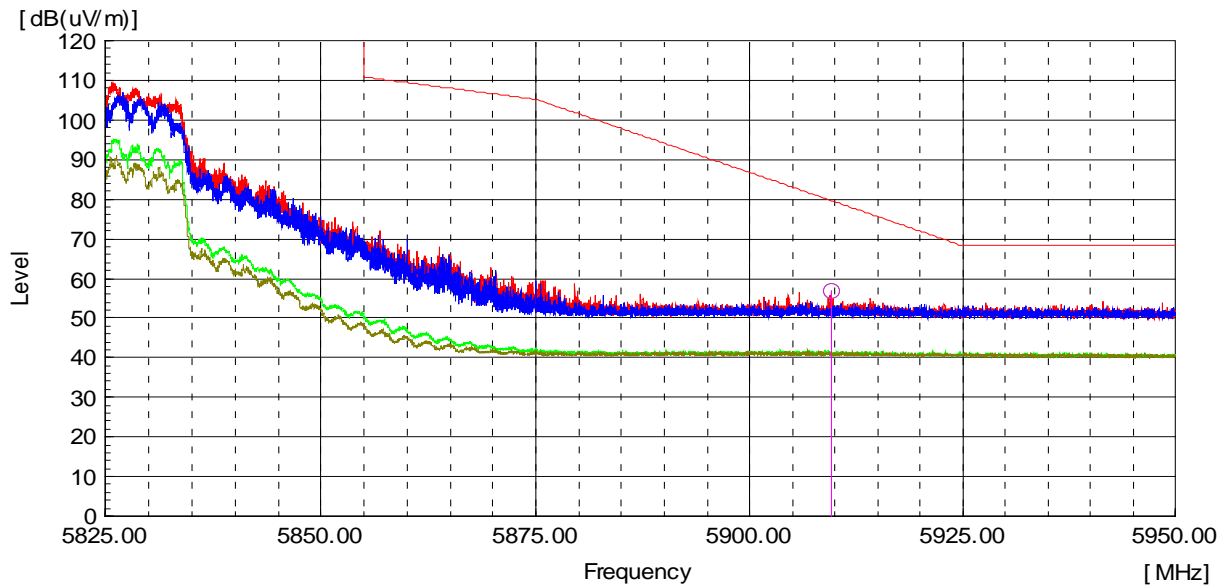
Radiated Restricted Band Edge Plot



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (157) / (188) Pages

|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT20 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 825 MHz      |
| Channel :                  | 165            |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 909.47        | H   | 53.7              | -----             | 3.1           | -----                  | 56.8                | -----               | 79.7                | -----               | 22.9           | -----          |

Radiated Restricted Band Edge Plot



**Test mode : Transmitter, 802.11n\_HT40**

The requirements are:

Complies

**Test Data**

**Ch.38(5 190 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 379.51       | H   | 51.6              | -----             | 6.9           | -----                  | 58.5                | -----               | 74.0                | -----               | 15.5           | -----          |
| 10 379.53       | H   | -----             | 35.8              | 6.9           | 0.3                    | -----               | 43.0                | -----               | 54.0                | -----          | 11.0           |
| 10 377.31       | V   | 56.4              | -----             | 6.9           | -----                  | 63.3                | -----               | 74.0                | -----               | 10.7           | -----          |
| 10 379.95       | V   | -----             | 41.4              | 7.0           | 0.3                    | -----               | 48.7                | -----               | 54.0                | -----          | 5.3            |

**Ch.46(5 230 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 458.78       | H   | 51.2              | -----             | 6.9           | -----                  | 58.1                | -----               | 74.0                | -----               | 15.9           | -----          |
| 10 459.30       | H   | -----             | 35.9              | 6.9           | 0.3                    | -----               | 43.1                | -----               | 54.0                | -----          | 10.9           |
| 10 459.80       | V   | 56.2              | -----             | 6.9           | -----                  | 63.1                | -----               | 74.0                | -----               | 10.9           | -----          |
| 10 459.58       | V   | -----             | 41.7              | 6.9           | 0.3                    | -----               | 48.9                | -----               | 54.0                | -----          | 5.1            |

**Ch.54(5 270 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 540.10       | H   | 49.6              | -----             | 7.2           | -----                  | 56.8                | -----               | 74.0                | -----               | 17.2           | -----          |
| 10 539.67       | H   | -----             | 36.2              | 7.2           | 0.3                    | -----               | 43.7                | -----               | 54.0                | -----          | 10.3           |
| 10 539.77       | V   | 54.3              | -----             | 7.2           | -----                  | 61.5                | -----               | 74.0                | -----               | 12.5           | -----          |
| 10 539.35       | V   | -----             | 38.8              | 7.2           | 0.3                    | -----               | 46.3                | -----               | 54.0                | -----          | 7.7            |

**Ch.62(5 310 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 614.40       | H   | 49.2              | -----             | 7.3           | -----                  | 56.5                | -----               | 74.0                | -----               | 17.5           | -----          |
| 10 619.58       | H   | -----             | 36.4              | 7.3           | 0.3                    | -----               | 44.0                | -----               | 54.0                | -----          | 10.0           |
| 10 614.78       | V   | 52.3              | -----             | 7.3           | -----                  | 59.6                | -----               | 74.0                | -----               | 14.4           | -----          |
| 10 619.58       | V   | -----             | 39.1              | 7.3           | 0.3                    | -----               | 46.7                | -----               | 54.0                | -----          | 7.3            |

Ch.102(5 510 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 028.90       | H   | 47.1              | -----             | 7.7           | -----                  | 54.8                | -----               | 74.0                | -----               | 19.2           | -----          |
| 11 024.63       | H   | -----             | 35.3              | 7.7           | 0.3                    | -----               | 43.3                | -----               | 54.0                | -----          | 10.7           |
| 11 016.95       | V   | 48.7              | -----             | 7.7           | -----                  | 56.4                | -----               | 74.0                | -----               | 17.6           | -----          |
| 11 019.90       | V   | -----             | 36.1              | 7.7           | 0.3                    | -----               | 44.1                | -----               | 54.0                | -----          | 9.9            |

Ch.118(5 590 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 178.80       | H   | 47.6              | -----             | 8.2           | -----                  | 55.8                | -----               | 74.0                | -----               | 18.2           | -----          |
| 11 203.25       | H   | -----             | 34.9              | 8.2           | 0.3                    | -----               | 43.4                | -----               | 54.0                | -----          | 10.6           |
| 11 201.75       | V   | 46.7              | -----             | 8.2           | -----                  | 54.9                | -----               | 74.0                | -----               | 19.1           | -----          |
| 11 183.95       | V   | -----             | 35.1              | 8.2           | 0.3                    | -----               | 43.6                | -----               | 54.0                | -----          | 10.4           |

Ch.134(5 670 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 318.80       | H   | 45.7              | -----             | 8.4           | -----                  | 54.1                | -----               | 74.0                | -----               | 19.9           | -----          |
| 11 348.65       | H   | -----             | 34.3              | 8.4           | 0.3                    | -----               | 43.0                | -----               | 54.0                | -----          | 11.0           |
| 11 339.17       | V   | 46.9              | -----             | 8.4           | -----                  | 55.3                | -----               | 74.0                | -----               | 18.7           | -----          |
| 11 338.90       | V   | -----             | 35.8              | 8.4           | 0.3                    | -----               | 44.5                | -----               | 54.0                | -----          | 9.5            |

Ch.142(5 710 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 431.08       | H   | 45.9              | -----             | 8.6           | -----                  | 54.5                | -----               | 74.0                | -----               | 19.5           | -----          |
| 11 403.25       | H   | -----             | 34.2              | 8.6           | 0.3                    | -----               | 43.1                | -----               | 54.0                | -----          | 10.9           |
| 11 413.80       | V   | 47.2              | -----             | 8.6           | -----                  | 55.8                | -----               | 74.0                | -----               | 18.2           | -----          |
| 11 419.53       | V   | -----             | 35.5              | 8.6           | 0.3                    | -----               | 44.4                | -----               | 54.0                | -----          | 9.6            |



Ch.151(5 755 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 504.33       | H   | 46.8              | -----             | 8.3           | -----                  | 55.1                | -----               | 74.0                | -----               | 18.9           | -----          |
| 11 519.13       | H   | -----             | 34.9              | 8.4           | 0.3                    | -----               | 43.6                | -----               | 54.0                | -----          | 10.4           |
| 11 508.92       | V   | 48.6              | -----             | 8.3           | -----                  | 56.9                | -----               | 74.0                | -----               | 17.1           | -----          |
| 11 508.92       | V   | -----             | 36.5              | 8.3           | 0.3                    | -----               | 45.1                | -----               | 54.0                | -----          | 8.9            |

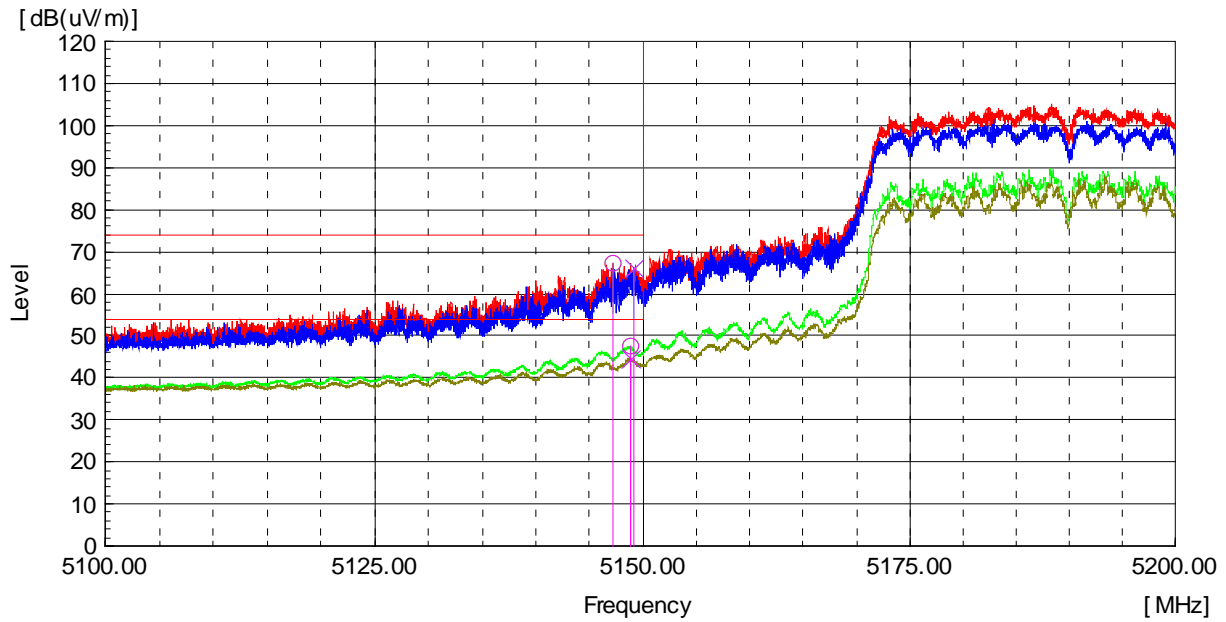
Ch.159(5 795 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 571.78       | H   | 47.0              | -----             | 8.5           | -----                  | 55.5                | -----               | 74.0                | -----               | 18.5           | -----          |
| 11 568.15       | H   | -----             | 34.9              | 8.6           | 0.3                    | -----               | 43.8                | -----               | 54.0                | -----          | 10.2           |
| 11 589.53       | V   | 50.1              | -----             | 8.4           | -----                  | 58.5                | -----               | 74.0                | -----               | 15.5           | -----          |
| 11 589.67       | V   | -----             | 38.1              | 8.4           | 0.3                    | -----               | 46.8                | -----               | 54.0                | -----          | 7.2            |

**Remarks**

1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down positon(X,Y axis). The worst emission was found in lie-down positon(X axis) and the worst case was recorded.
2. Peak Result = Reading + c.f(Correction factor)  
Average Result = Reading + c.f(Correction factor) + Duty Cycle Factor
3. Correction factor = Antenna factor + Cable loss - Amp Gain

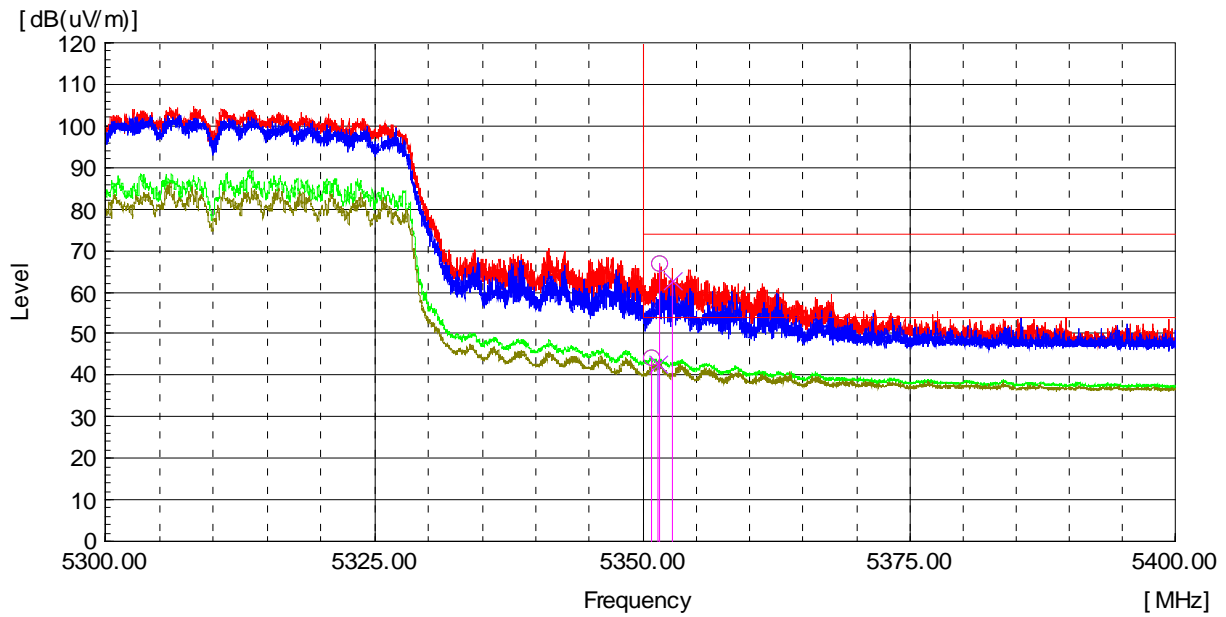
|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11n_HT40 |
| Worst Case Transfer Rate : | MCS 0        |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 190 MHz    |
| Channel :                  | 38           |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 147.16        | H   | 65.8              | -----             | 1.6           | -----                  | 67.4                | -----               | 74.0                | -----               | 6.6            | -----          |
| 5 148.83        | H   | -----             | 46.1              | 1.6           | 0.3                    | -----               | 48.0                | -----               | 54.0                | -----          | 6.0            |
| 5 149.14        | V   | 64.4              | -----             | 1.6           | -----                  | 66.0                | -----               | 74.0                | -----               | 8.0            | -----          |
| 5 148.84        | V   | -----             | 43.1              | 1.6           | 0.3                    | -----               | 45.0                | -----               | 54.0                | -----          | 9.0            |

Radiated Restricted Band Edge Plot

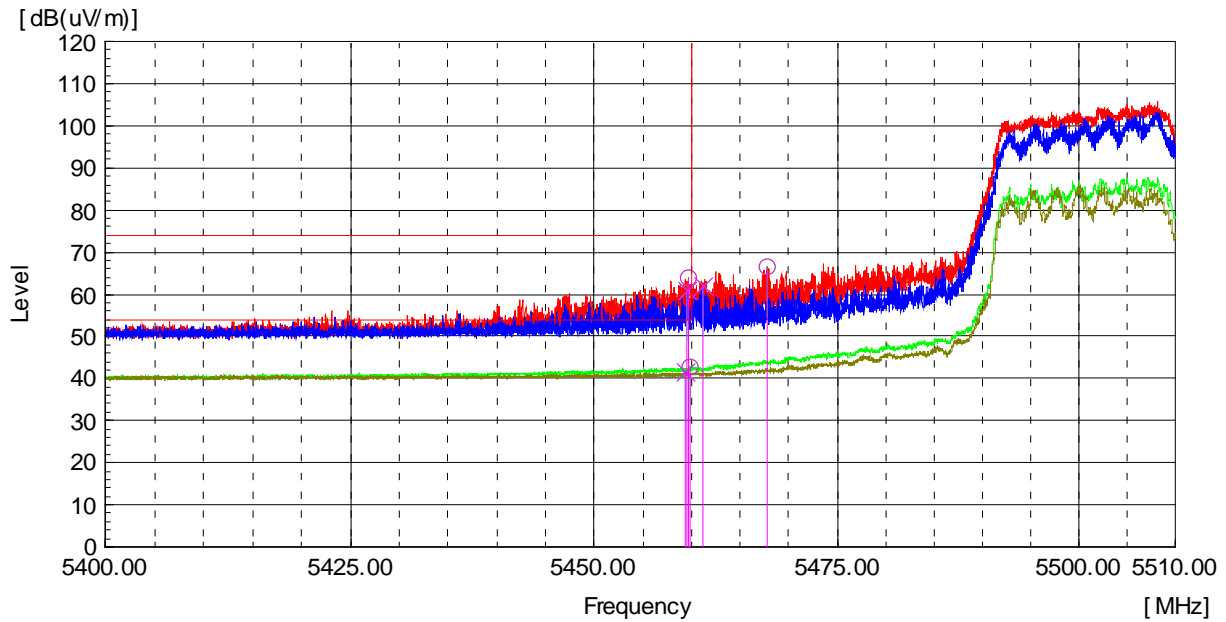
|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11n_HT40 |
| Worst Case Transfer Rate : | MCS 0        |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 310 MHz    |
| Channel :                  | 62           |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 351.63        | H   | 65.1              | -----             | 1.7           | -----                  | 66.8                | -----               | 74.0                | -----               | 7.2            | -----          |
| 5 350.75        | H   | -----             | 42.4              | 1.7           | 0.3                    | -----               | 44.4                | -----               | 54.0                | -----          | 9.6            |
| 5 352.74        | V   | 61.1              | -----             | 1.7           | -----                  | 62.8                | -----               | 74.0                | -----               | 11.2           | -----          |
| 5 351.38        | V   | -----             | 41.1              | 1.7           | 0.3                    | -----               | 43.1                | -----               | 54.0                | -----          | 10.9           |

Radiated Restricted Band Edge Plot

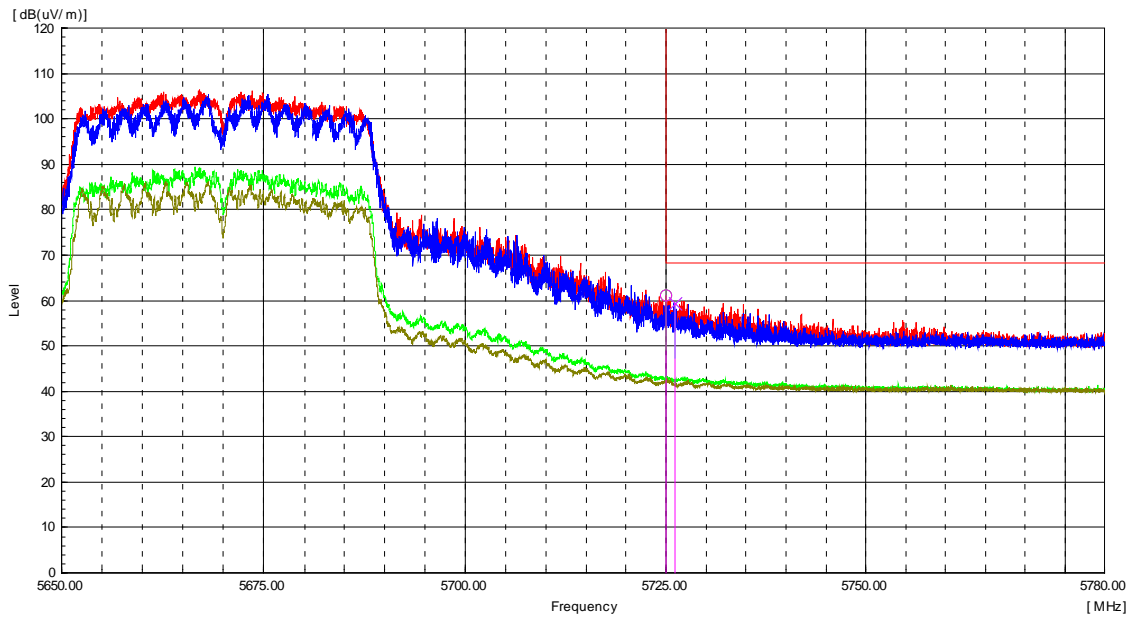
|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11n_HT40 |
| Worst Case Transfer Rate : | MCS 0        |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 510 MHz    |
| Channel :                  | 102          |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 459.62        | H   | 62.1              | -----             | 1.7           | -----                  | 63.8                | -----               | 74.0                | -----               | 10.2           | -----          |
| 5 459.91        | H   | -----             | 41.0              | 1.7           | 0.3                    | -----               | 43.0                | -----               | 54.0                | -----          | 11.0           |
| 5 459.58        | V   | 59.2              | -----             | 1.7           | -----                  | 60.9                | -----               | 74.0                | -----               | 13.1           | -----          |
| 5 459.35        | V   | -----             | 39.8              | 1.7           | 0.3                    | -----               | 41.8                | -----               | 54.0                | -----          | 12.2           |
| 5 467.72        | H   | 64.7              | -----             | 1.7           | -----                  | 66.4                | -----               | 68.2                | -----               | 1.8            | -----          |
| 5 461.16        | V   | 60.5              | -----             | 1.7           | -----                  | 62.2                | -----               | 68.2                | -----               | 6.0            | -----          |

Radiated Restricted Band Edge Plot

|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11n_HT40 |
| Worst Case Transfer Rate : | MCS 0        |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 670 MHz    |
| Channel :                  | 134          |



| Frequency [MHz] | Reading (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-------------|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 725.03        | H           | 59.0              | -----             | 2.0           | -----                  | 61.0                | -----               | 68.2                | -----               | 7.2            | -----          |
| 5 726.03        | V           | 57.3              | -----             | 2.0           | -----                  | 59.3                | -----               | 68.2                | -----               | 8.9            | -----          |

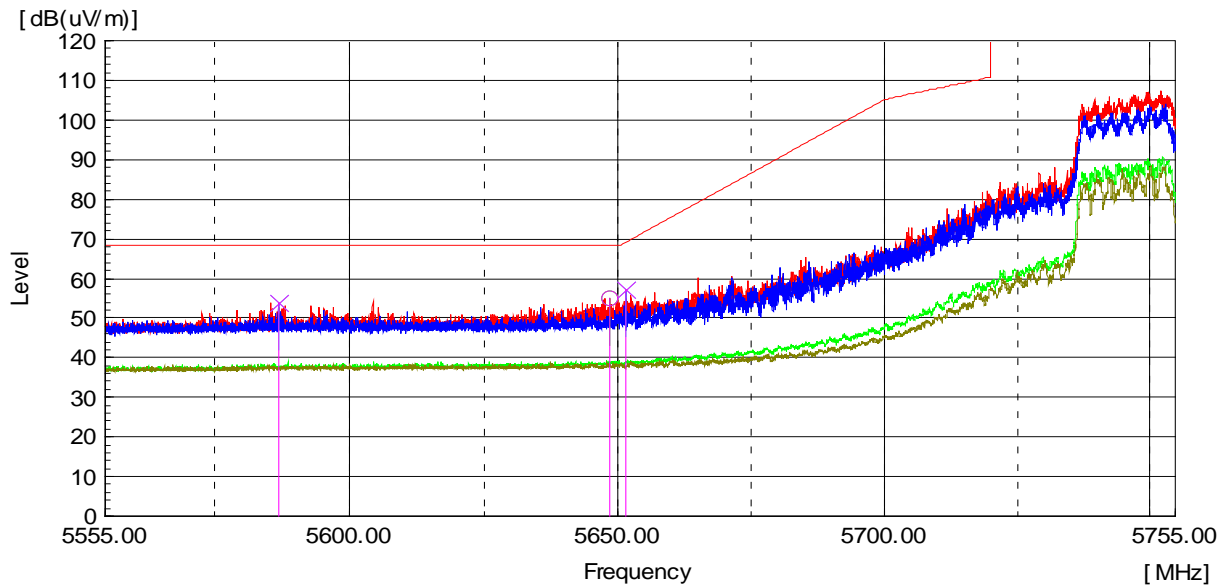
Radiated Restricted Band Edge Plot



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (165) / (188) Pages

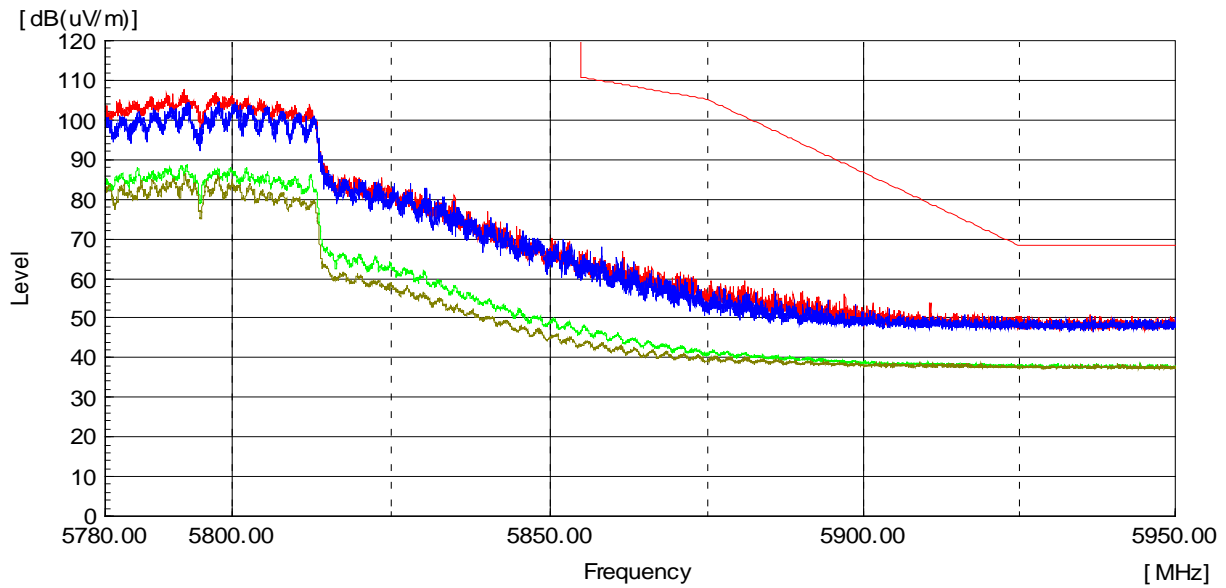
|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11n_HT40 |
| Worst Case Transfer Rate : | MCS 0        |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 755 MHz    |
| Channel :                  | 151          |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 586.85        | V   | 52.1              | -----             | 1.9           | -----                  | 54.0                | -----               | 68.2                | -----               | 14.2           | -----          |
| 5 648.48        | H   | 52.9              | -----             | 2.0           | -----                  | 54.9                | -----               | 68.2                | -----               | 13.3           | -----          |
| 5 651.45        | V   | 55.1              | -----             | 2.0           | -----                  | 57.1                | -----               | 69.3                | -----               | 12.2           | -----          |

Radiated Restricted Band Edge Plot

|                            |              |
|----------------------------|--------------|
| Worst Case Mode :          | 802.11n_HT40 |
| Worst Case Transfer Rate : | MCS 0        |
| Distance of Measurements : | 3 Meters     |
| Operating Frequency :      | 5 795 MHz    |
| Channel :                  | 159          |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|

The emissions above 1 GHz were 20 dB lower than the limit.

### Radiated Restricted Band Edge Plot



**Test mode : Transmitter, 802.11ac\_VHT40**

The requirements are:

Complies

**Test Data**

**Ch.38(5 190 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 379.70       | H   | 51.5              | -----             | 6.9           | -----                  | 58.4                | -----               | 74.0                | -----               | 15.6           | -----          |
| 10 379.70       | H   | -----             | 35.9              | 6.9           | 0.3                    | -----               | 43.1                | -----               | 54.0                | -----          | 10.9           |
| 10 379.80       | V   | 57.7              | -----             | 6.9           | -----                  | 64.6                | -----               | 74.0                | -----               | 9.4            | -----          |
| 10 379.62       | V   | -----             | 41.5              | 6.9           | 0.3                    | -----               | 48.7                | -----               | 54.0                | -----          | 5.3            |

**Ch.46(5 230 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 460.22       | H   | 49.9              | -----             | 6.9           | -----                  | 56.8                | -----               | 74.0                | -----               | 17.2           | -----          |
| 10 459.60       | H   | -----             | 36.0              | 6.9           | 0.3                    | -----               | 43.2                | -----               | 54.0                | -----          | 10.8           |
| 10 454.35       | V   | 56.0              | -----             | 6.8           | -----                  | 62.8                | -----               | 74.0                | -----               | 11.2           | -----          |
| 10 459.83       | V   | -----             | 42.1              | 6.9           | 0.3                    | -----               | 49.3                | -----               | 54.0                | -----          | 4.7            |

**Ch.54(5 270 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 538.65       | H   | 49.5              | -----             | 7.2           | -----                  | 56.7                | -----               | 74.0                | -----               | 17.3           | -----          |
| 10 539.65       | H   | -----             | 36.3              | 7.2           | 0.3                    | -----               | 43.8                | -----               | 54.0                | -----          | 10.2           |
| 10 539.72       | V   | 52.9              | -----             | 7.2           | -----                  | 60.1                | -----               | 74.0                | -----               | 13.9           | -----          |
| 10 539.82       | V   | -----             | 39.0              | 7.2           | 0.3                    | -----               | 46.5                | -----               | 54.0                | -----          | 7.5            |

**Ch.62(5 310 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 614.23       | H   | 50.0              | -----             | 7.3           | -----                  | 57.3                | -----               | 74.0                | -----               | 16.7           | -----          |
| 10 619.75       | H   | -----             | 36.5              | 7.3           | 0.3                    | -----               | 44.1                | -----               | 54.0                | -----          | 9.9            |
| 10 619.53       | V   | 51.7              | -----             | 7.3           | -----                  | 59.0                | -----               | 74.0                | -----               | 15.0           | -----          |
| 10 619.60       | V   | -----             | 38.9              | 7.3           | 0.3                    | -----               | 46.5                | -----               | 54.0                | -----          | 7.5            |





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (168) / (188) Pages

Ch.102(5 510 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 012.07       | H   | 46.6              | -----             | 7.8           | -----                  | 54.4                | -----               | 74.0                | -----               | 19.6           | -----          |
| 11 016.52       | H   | -----             | 35.3              | 7.7           | 0.3                    | -----               | 43.3                | -----               | 54.0                | -----          | 10.7           |
| 11 013.67       | V   | 48.4              | -----             | 7.8           | -----                  | 56.2                | -----               | 74.0                | -----               | 17.8           | -----          |
| 11 019.22       | V   | -----             | 36.1              | 7.7           | 0.3                    | -----               | 44.1                | -----               | 54.0                | -----          | 9.9            |

Ch.118(5 590 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 173.62       | H   | 46.1              | -----             | 8.1           | -----                  | 54.2                | -----               | 74.0                | -----               | 19.8           | -----          |
| 11 191.28       | H   | -----             | 35.0              | 8.2           | 0.3                    | -----               | 43.5                | -----               | 54.0                | -----          | 10.5           |
| 11 175.60       | V   | 46.6              | -----             | 8.1           | -----                  | 54.7                | -----               | 74.0                | -----               | 19.3           | -----          |
| 11 176.82       | V   | -----             | 35.2              | 8.1           | 0.3                    | -----               | 43.6                | -----               | 54.0                | -----          | 10.4           |

Ch.134(5 670 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 352.60       | H   | 45.9              | -----             | 8.4           | -----                  | 54.3                | -----               | 74.0                | -----               | 19.7           | -----          |
| 11 361.50       | H   | -----             | 34.3              | 8.5           | 0.3                    | -----               | 43.1                | -----               | 54.0                | -----          | 10.9           |
| 11 342.38       | V   | 47.1              | -----             | 8.4           | -----                  | 55.5                | -----               | 74.0                | -----               | 18.5           | -----          |
| 11 332.55       | V   | -----             | 35.8              | 8.4           | 0.3                    | -----               | 44.5                | -----               | 54.0                | -----          | 9.5            |

Ch.142(5 710 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 405.15       | H   | 46.1              | -----             | 8.6           | -----                  | 54.7                | -----               | 74.0                | -----               | 19.3           | -----          |
| 11 401.98       | H   | -----             | 34.2              | 8.6           | 0.3                    | -----               | 43.1                | -----               | 54.0                | -----          | 10.9           |
| 11 416.98       | V   | 47.5              | -----             | 8.6           | -----                  | 56.1                | -----               | 74.0                | -----               | 17.9           | -----          |
| 11 414.48       | V   | -----             | 36.1              | 8.6           | 0.3                    | -----               | 45.0                | -----               | 54.0                | -----          | 9.0            |

Ch.151(5 755 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 538.95       | H   | 46.4              | -----             | 8.6           | -----                  | 55.0                | -----               | 74.0                | -----               | 19.0           | -----          |
| 11 529.47       | H   | -----             | 34.8              | 8.5           | 0.3                    | -----               | 43.6                | -----               | 54.0                | -----          | 10.4           |
| 11 509.55       | V   | 48.9              | -----             | 8.3           | -----                  | 57.2                | -----               | 74.0                | -----               | 16.8           | -----          |
| 11 509.90       | V   | -----             | 36.9              | 8.3           | 0.3                    | -----               | 45.5                | -----               | 54.0                | -----          | 8.5            |

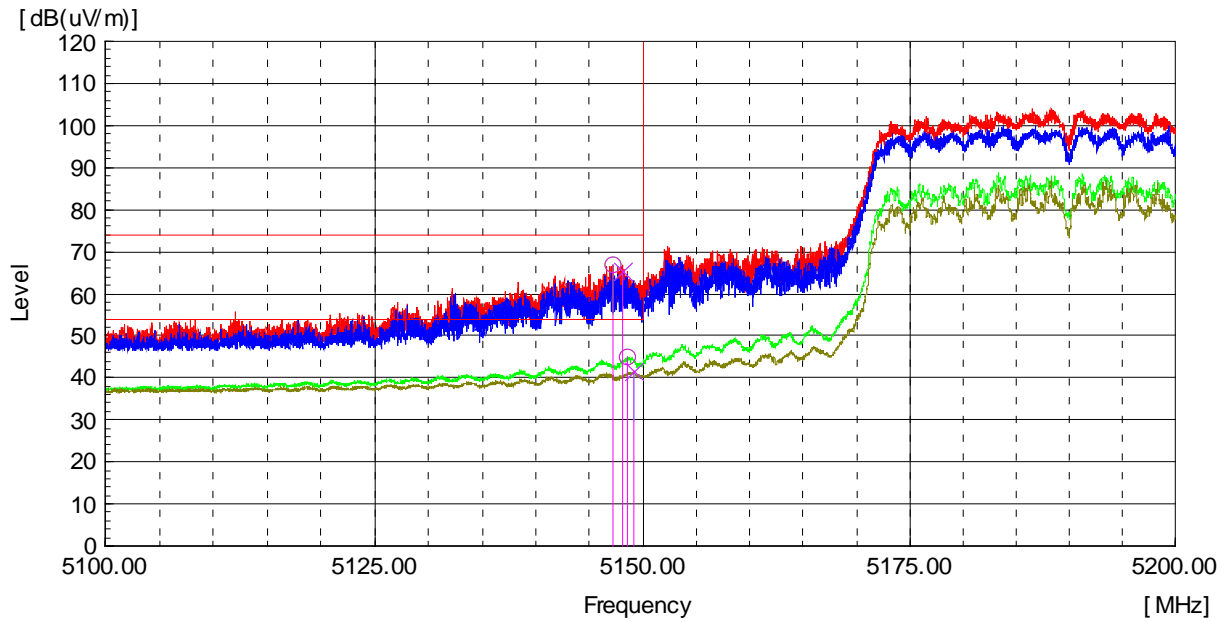
Ch.159(5 795 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 584.67       | H   | 47.2              | -----             | 8.4           | -----                  | 55.6                | -----               | 74.0                | -----               | 18.4           | -----          |
| 11 579.88       | H   | -----             | 34.9              | 8.4           | 0.3                    | -----               | 43.6                | -----               | 54.0                | -----          | 10.4           |
| 11 589.60       | V   | 50.6              | -----             | 8.4           | -----                  | 59.0                | -----               | 74.0                | -----               | 15.0           | -----          |
| 11 589.97       | V   | -----             | 37.9              | 8.4           | 0.3                    | -----               | 46.6                | -----               | 54.0                | -----          | 7.4            |

**Remarks**

1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X,Y axis). The worst emission was found in lie-down position(X axis) and the worst case was recorded.
2. Peak Result = Reading + c.f(Correction factor)  
Average Result = Reading + c.f(Correction factor) + Duty Cycle Factor
3. Correction factor = Antenna factor + Cable loss - Amp Gain

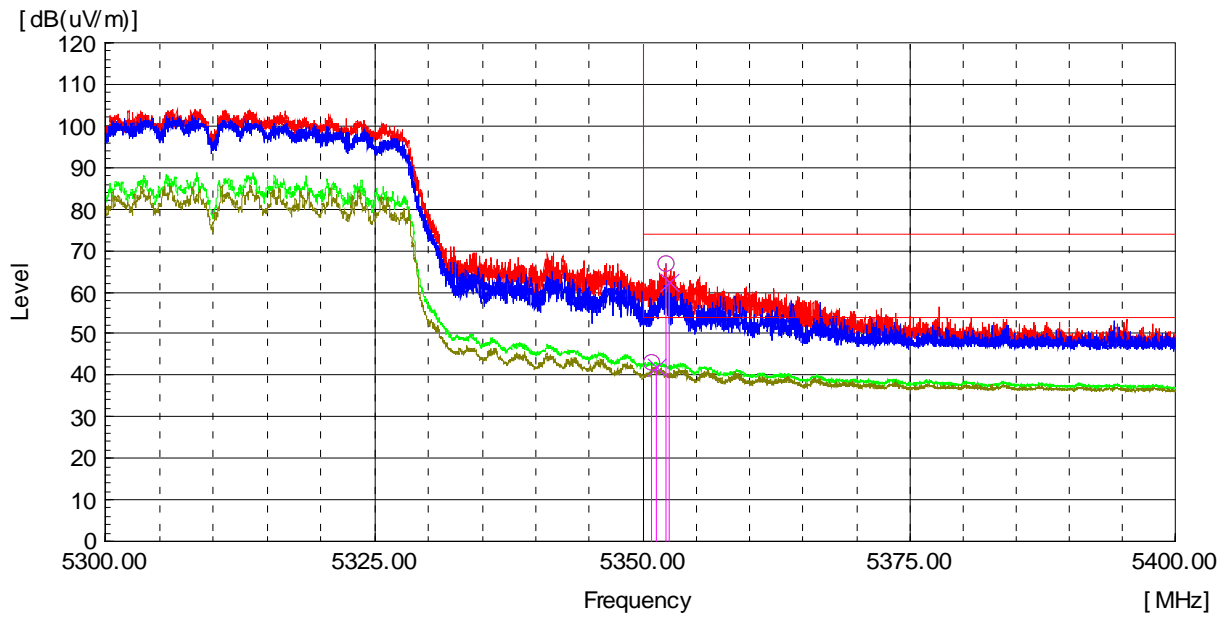
|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT40 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 190 MHz      |
| Channel :                  | 38             |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 147.24        | H   | 65.3              | -----             | 1.6           | -----                  | 66.9                | -----               | 74.0                | -----               | 7.1            | -----          |
| 5 148.59        | H   | -----             | 43.3              | 1.6           | 0.3                    | -----               | 45.2                | -----               | 54.0                | -----          | 8.8            |
| 5 148.14        | V   | 63.9              | -----             | 1.6           | -----                  | 65.5                | -----               | 74.0                | -----               | 8.5            | -----          |
| 5 149.16        | V   | -----             | 39.9              | 1.6           | 0.3                    | -----               | 41.8                | -----               | 54.0                | -----          | 12.2           |

Radiated Restricted Band Edge Plot

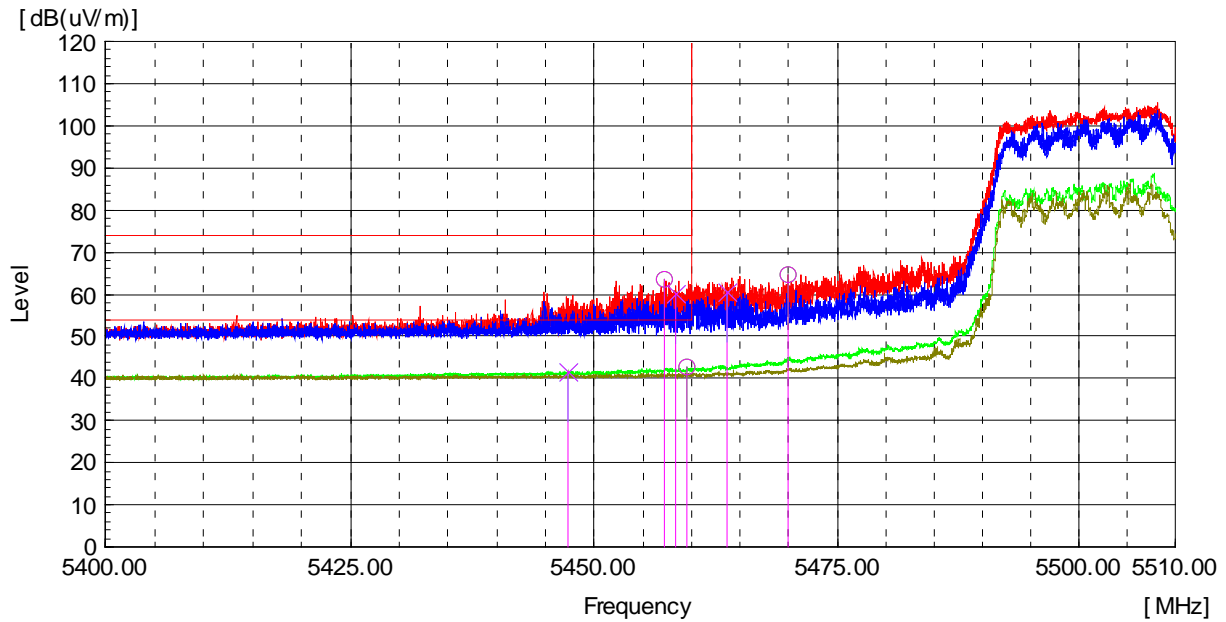
|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT40 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 310 MHz      |
| Channel :                  | 62             |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 352.21        | H   | 65.3              | -----             | 1.7           | -----                  | 67.0                | -----               | 74.0                | -----               | 7.0            | -----          |
| 5 350.81        | H   | -----             | 41.5              | 1.7           | 0.3                    | -----               | 43.5                | -----               | 54.0                | -----          | 10.5           |
| 5 352.44        | V   | 60.7              | -----             | 1.7           | -----                  | 62.4                | -----               | 74.0                | -----               | 11.6           | -----          |
| 5 351.20        | V   | -----             | 40.2              | 1.7           | 0.3                    | -----               | 42.2                | -----               | 54.0                | -----          | 11.8           |

Radiated Restricted Band Edge Plot

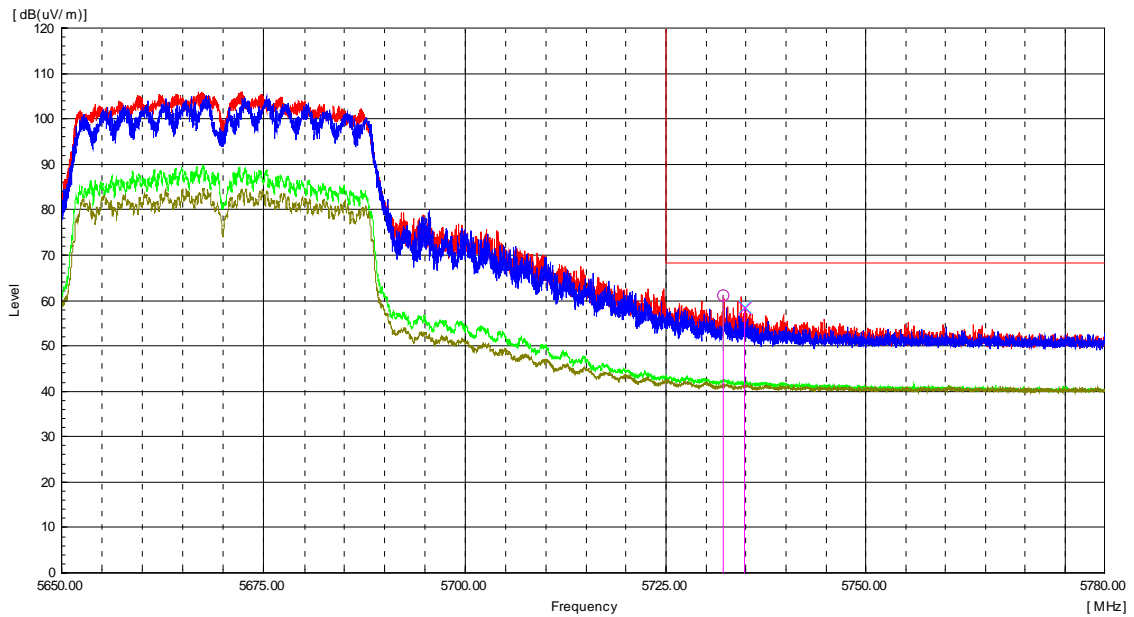
|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT40 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 510 MHz      |
| Channel :                  | 102            |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 457.28        | H   | 61.8              | -----             | 1.7           | -----                  | 63.5                | -----               | 74.0                | -----               | 10.5           | -----          |
| 5 459.58        | H   | -----             | 40.9              | 1.7           | 0.3                    | -----               | 42.9                | -----               | 54.0                | -----          | 11.1           |
| 5 458.38        | V   | 58.5              | -----             | 1.7           | -----                  | 60.2                | -----               | 74.0                | -----               | 13.8           | -----          |
| 5 447.22        | V   | -----             | 39.9              | 1.7           | 0.3                    | -----               | 41.9                | -----               | 54.0                | -----          | 12.1           |
| 5 469.96        | H   | 63.0              | -----             | 1.7           | -----                  | 64.7                | -----               | 68.2                | -----               | 3.5            | -----          |
| 5 463.61        | V   | 58.9              | -----             | 1.7           | -----                  | 60.6                | -----               | 68.2                | -----               | 7.6            | -----          |

Radiated Restricted Band Edge Plot

|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT40 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 670 MHz      |
| Channel :                  | 134            |



| Frequency [MHz] | Reading (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-------------|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 732.11        | H           | 59.1              | -----             | 2.1           | -----                  | 61.2                | -----               | 68.2                | -----               | 7.0            | -----          |
| 5 734.79        | V           | 56.4              | -----             | 2.1           | -----                  | 58.5                | -----               | 68.2                | -----               | 9.7            | -----          |

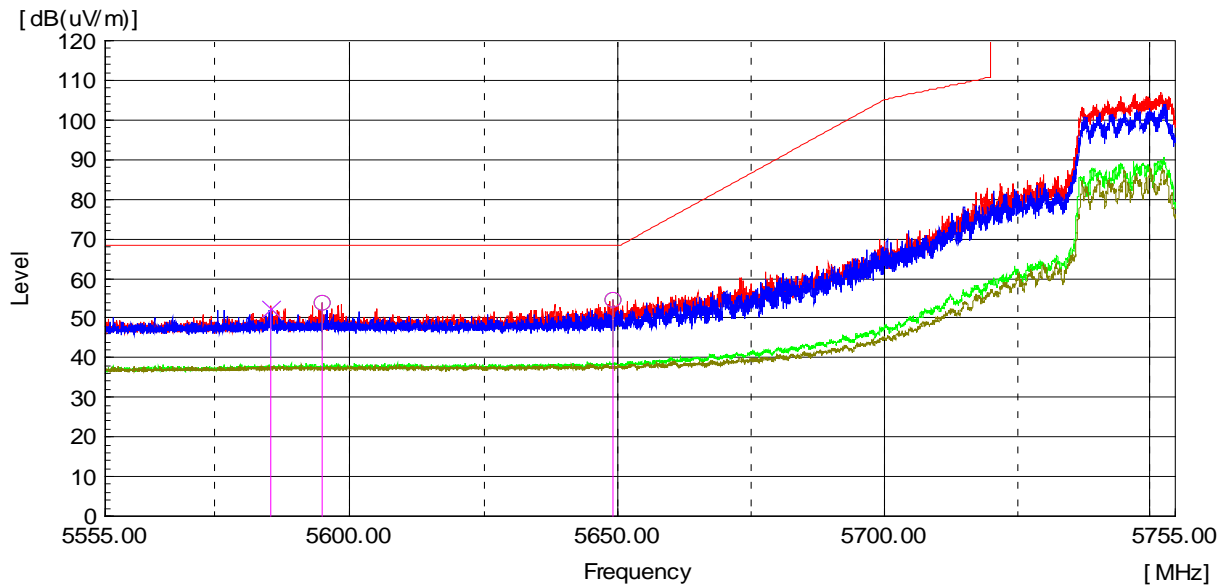
Radiated Restricted Band Edge Plot



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (174) / (188) Pages

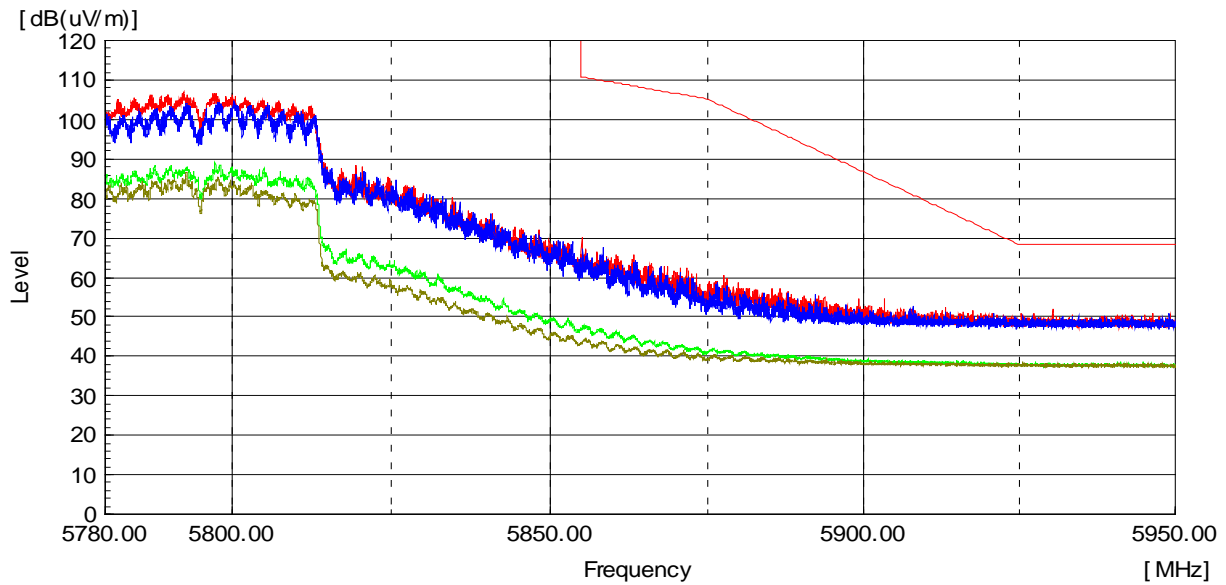
|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT40 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 755 MHz      |
| Channel :                  | 151            |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 594.88        | H   | 51.9              | -----             | 1.9           | -----                  | 53.8                | -----               | 68.2                | -----               | 14.4           | -----          |
| 5 585.50        | V   | 50.6              | -----             | 1.9           | -----                  | 52.5                | -----               | 68.2                | -----               | 15.7           | -----          |
| 5 649.08        | H   | 52.6              | -----             | 2.0           | -----                  | 54.6                | -----               | 68.2                | -----               | 13.6           | -----          |

Radiated Restricted Band Edge Plot

|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT40 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 795 MHz      |
| Channel :                  | 159            |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|

The emissions above 1 GHz were 20 dB lower than the limit.

### Radiated Restricted Band Edge Plot



**Test mode : Transmitter, 802.11ac\_VHT80**

The requirements are:

Complies

**Test Data**

**Ch.42(5 210 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 449.00       | H   | 48.8              | -----             | 6.8           | -----                  | 55.6                | -----               | 74.0                | -----               | 18.4           | -----          |
| 10 494.65       | H   | -----             | 34.9              | 7.6           | 0.6                    | -----               | 43.1                | -----               | 54.0                | -----          | 10.9           |
| 10 412.30       | V   | 54.1              | -----             | 7.1           | -----                  | 61.2                | -----               | 74.0                | -----               | 12.8           | -----          |
| 10 419.95       | V   | -----             | 38.1              | 7.0           | 0.6                    | -----               | 45.7                | -----               | 54.0                | -----          | 8.3            |

**Ch.58(5 290 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 10 598.85       | H   | 47.9              | -----             | 7.3           | -----                  | 55.2                | -----               | 74.0                | -----               | 18.8           | -----          |
| 10 570.05       | H   | -----             | 35.4              | 7.2           | 0.6                    | -----               | 43.2                | -----               | 54.0                | -----          | 10.8           |
| 10 599.30       | V   | 50.8              | -----             | 7.3           | -----                  | 58.1                | -----               | 74.0                | -----               | 15.9           | -----          |
| 10 579.85       | V   | -----             | 36.9              | 7.2           | 0.6                    | -----               | 44.7                | -----               | 54.0                | -----          | 9.3            |

**Ch.106(5 530 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|

The emissions above 1 GHz were 20 dB lower than the limit.

**Ch.122(5 610 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|

The emissions above 1 GHz were 20 dB lower than the limit.

**Ch.138(5 690 MHz)**

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|

The emissions above 1 GHz were 20 dB lower than the limit.



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (177) / (188) Pages

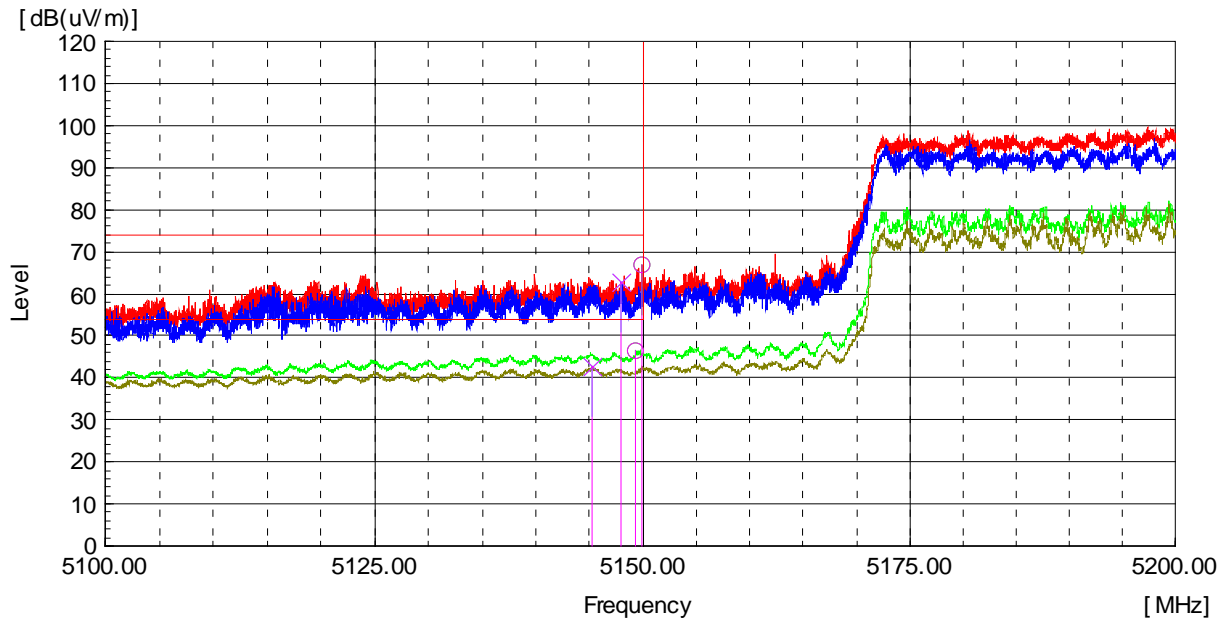
Ch.155(5 775 MHz)

| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 11 543.20       | H   | 46.4              | -----             | 8.6           | -----                  | 55.0                | -----               | 74.0                | -----               | 19.0           | -----          |
| 11 557.25       | H   | -----             | 34.7              | 8.7           | 0.6                    | -----               | 44.0                | -----               | 54.0                | -----          | 10.0           |
| 11 569.45       | V   | 48.8              | -----             | 8.6           | -----                  | 57.4                | -----               | 74.0                | -----               | 16.6           | -----          |
| 11 552.30       | V   | -----             | 35.4              | 8.7           | 0.6                    | -----               | 44.7                | -----               | 54.0                | -----          | 9.3            |

**Remarks**

1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down positon(X,Y axis). The worst emission was found in lie-down positon(X axis) and the worst case was recorded.
2. Peak Result = Reading + c.f(Correction factor)  
 Average Result = Reading + c.f(Correction factor) + Duty Cycle Factor
3. Correction factor = Antenna factor + Cable loss - Amp Gain

|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT80 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 210 MHz      |
| Channel :                  | 42             |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 149.95        | H   | 65.3              | -----             | 1.6           | -----                  | 66.9                | -----               | 74.0                | -----               | 7.1            | -----          |
| 5 149.38        | H   | -----             | 44.9              | 1.6           | 0.6                    | -----               | 47.1                | -----               | 54.0                | -----          | 6.9            |
| 5 147.96        | V   | 61.3              | -----             | 1.6           | -----                  | 62.9                | -----               | 74.0                | -----               | 11.1           | -----          |
| 5 145.31        | V   | -----             | 41.1              | 1.6           | 0.6                    | -----               | 43.3                | -----               | 54.0                | -----          | 10.7           |

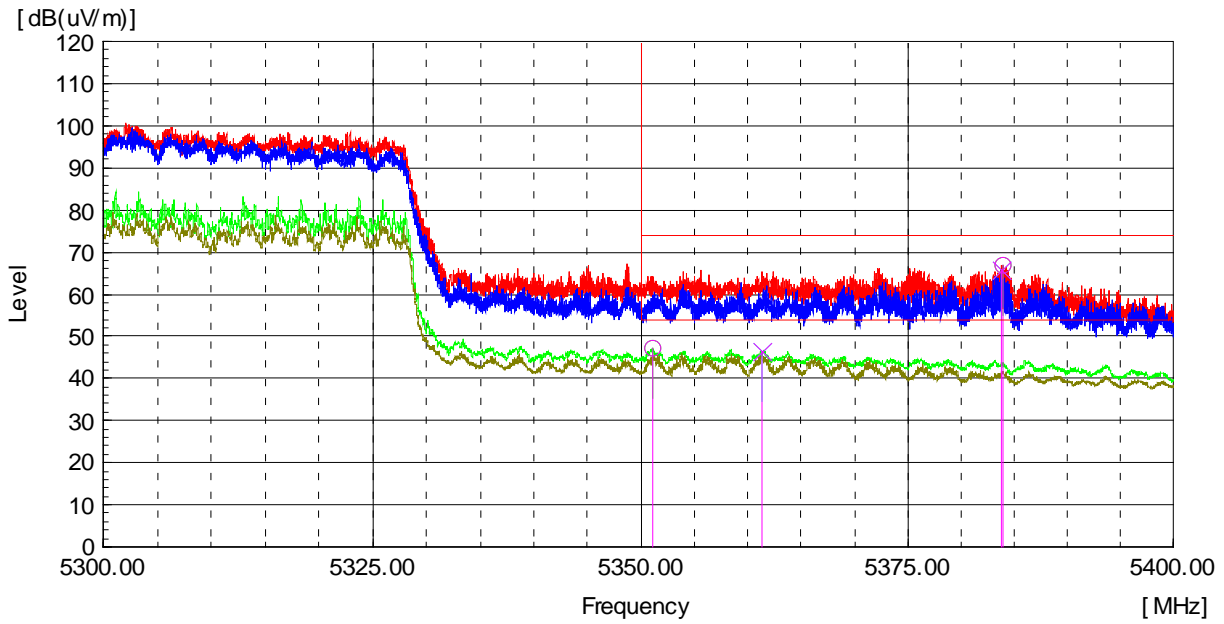
Radiated Restricted Band Edge Plot



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (179) / (188) Pages

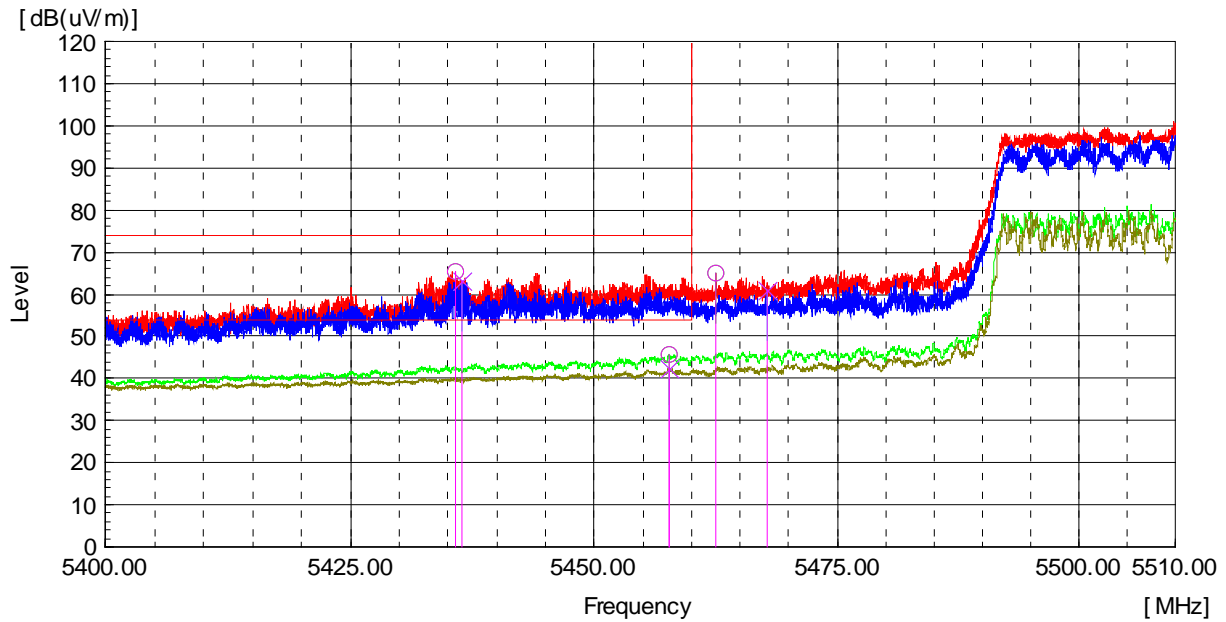
|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT80 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 290 MHz      |
| Channel :                  | 58             |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 383.95        | H   | 65.1              | -----             | 1.9           | -----                  | 67.0                | -----               | 74.0                | -----               | 7.0            | -----          |
| 5 351.09        | H   | -----             | 45.4              | 1.7           | 0.6                    | -----               | 47.7                | -----               | 54.0                | -----          | 6.3            |
| 5 383.74        | V   | 63.9              | -----             | 1.9           | -----                  | 65.8                | -----               | 74.0                | -----               | 8.2            | -----          |
| 5 361.29        | V   | -----             | 44.6              | 1.7           | 0.6                    | -----               | 46.9                | -----               | 54.0                | -----          | 7.1            |

Radiated Restricted Band Edge Plot

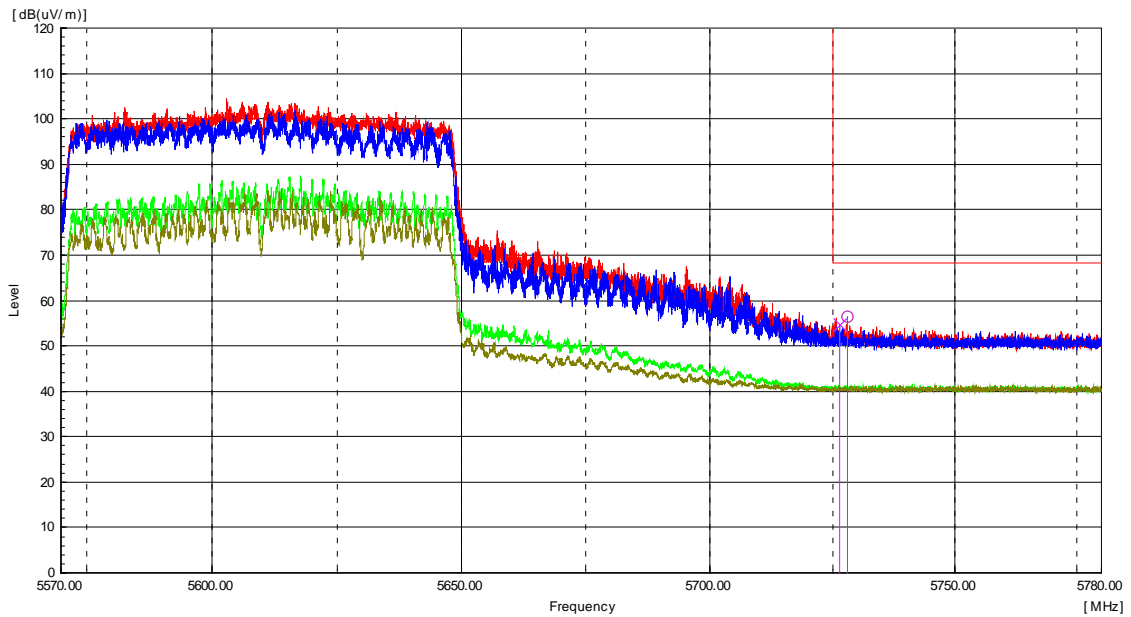
|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT80 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 530 MHz      |
| Channel :                  | 106            |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 435.82        | H   | 63.7              | -----             | 1.8           | -----                  | 65.5                | -----               | 74.0                | -----               | 8.5            | -----          |
| 5 457.65        | H   | -----             | 44.0              | 1.7           | 0.6                    | -----               | 46.3                | -----               | 54.0                | -----          | 7.7            |
| 5 436.45        | V   | 61.2              | -----             | 1.8           | -----                  | 63.0                | -----               | 74.0                | -----               | 11.0           | -----          |
| 5 457.71        | V   | -----             | 40.6              | 1.7           | 0.6                    | -----               | 42.9                | -----               | 54.0                | -----          | 11.1           |
| 5 462.47        | H   | 63.3              | -----             | 1.7           | -----                  | 65.0                | -----               | 68.2                | -----               | 3.2            | -----          |
| 5 467.77        | V   | 59.2              | -----             | 1.7           | -----                  | 60.9                | -----               | 68.2                | -----               | 7.3            | -----          |

Radiated Restricted Band Edge Plot

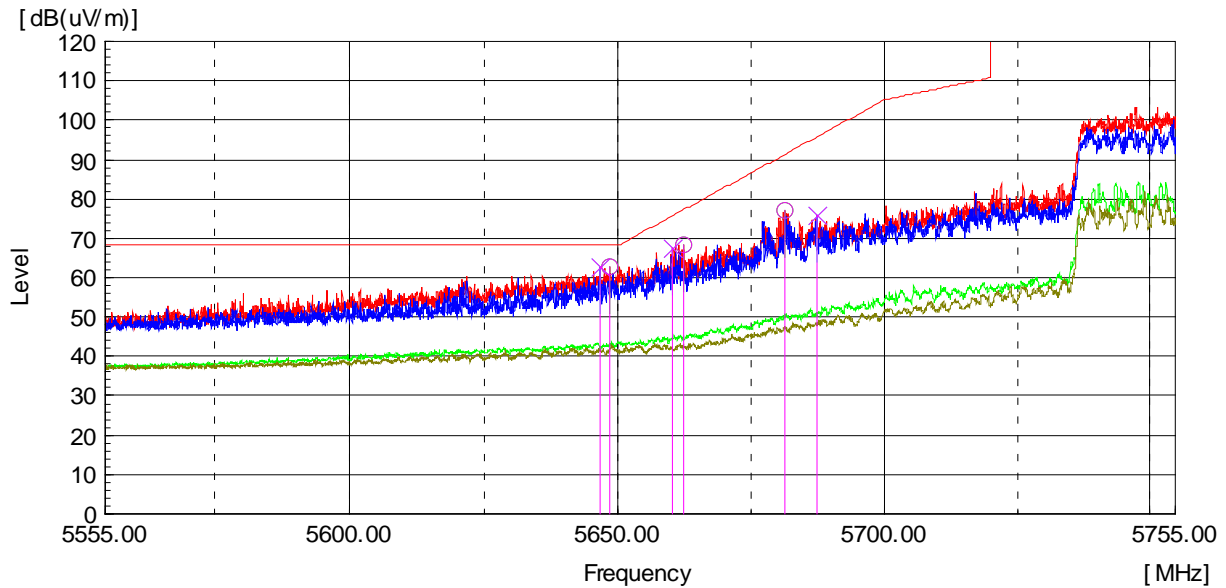
|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT80 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 610 MHz      |
| Channel :                  | 122            |



| Frequency [MHz] | Reading (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-------------|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 728.05        | H           | 54.3              | -----             | 2.1           | -----                  | 56.4                | -----               | 68.2                | -----               | 11.8           | -----          |
| 5 726.35        | V           | 52.8              | -----             | 2.0           | -----                  | 54.8                | -----               | 68.2                | -----               | 13.4           | -----          |

Radiated Restricted Band Edge Plot

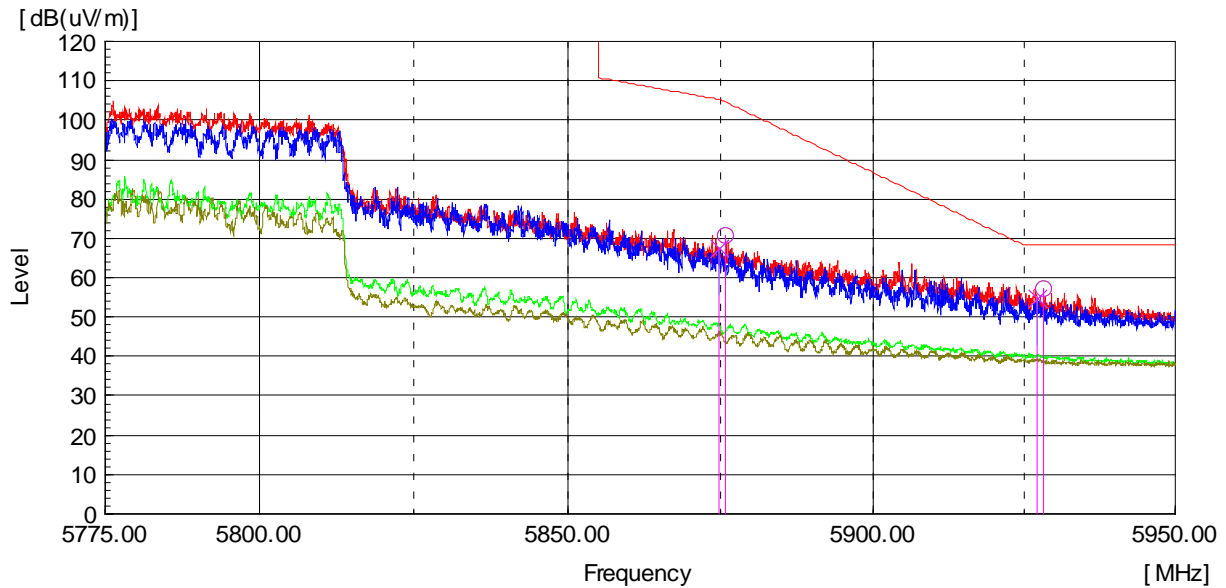
|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT80 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 775 MHz      |
| Channel :                  | 155            |



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 646.54        | V   | 60.7              | -----             | 2.0           | -----                  | 62.7                | -----               | 68.2                | -----               | 5.5            | -----          |
| 5 648.32        | H   | 60.8              | -----             | 2.0           | -----                  | 62.8                | -----               | 68.2                | -----               | 5.4            | -----          |
| 5 660.07        | V   | 65.6              | -----             | 2.0           | -----                  | 67.6                | -----               | 75.7                | -----               | 8.1            | -----          |
| 5 662.24        | H   | 66.4              | -----             | 2.0           | -----                  | 68.4                | -----               | 77.3                | -----               | 8.9            | -----          |
| 5 681.25        | H   | 75.0              | -----             | 1.9           | -----                  | 76.9                | -----               | 91.3                | -----               | 14.4           | -----          |
| 5 687.28        | V   | 74.1              | -----             | 1.9           | -----                  | 76.0                | -----               | 95.8                | -----               | 19.8           | -----          |

Radiated Restricted Band Edge Plot

|                            |                |
|----------------------------|----------------|
| Worst Case Mode :          | 802.11ac_VHT80 |
| Worst Case Transfer Rate : | MNSS 0         |
| Distance of Measurements : | 3 Meters       |
| Operating Frequency :      | 5 775 MHz      |
| Channel :                  | 155            |



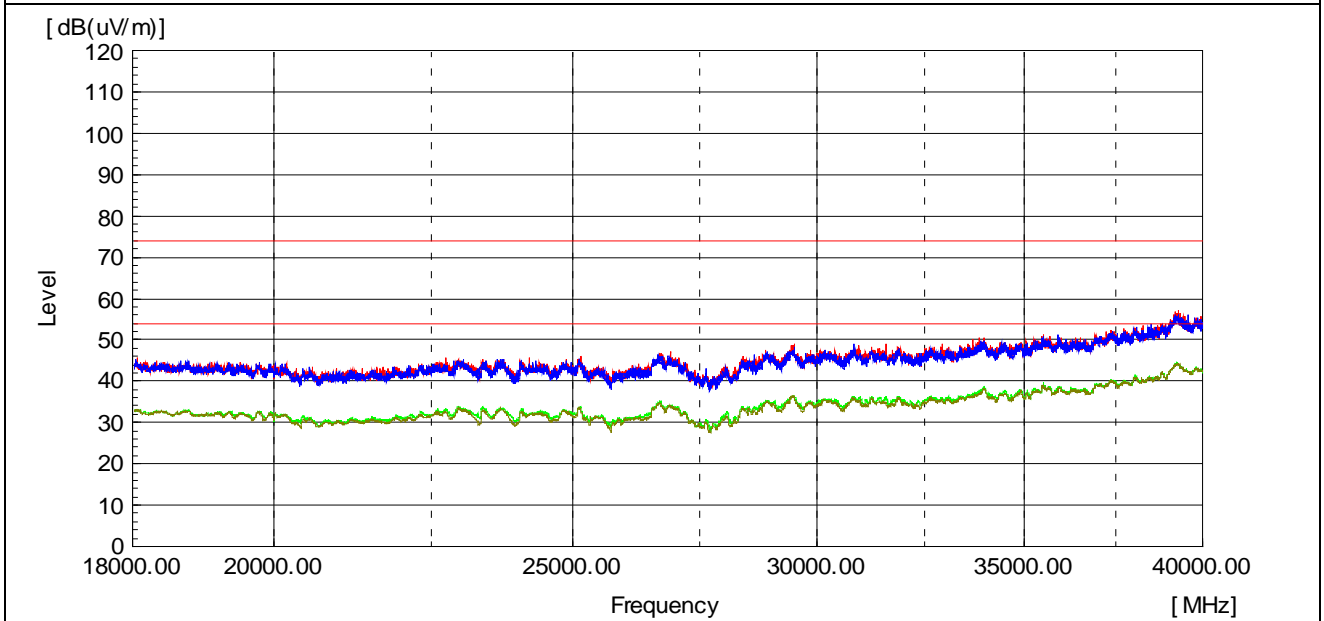
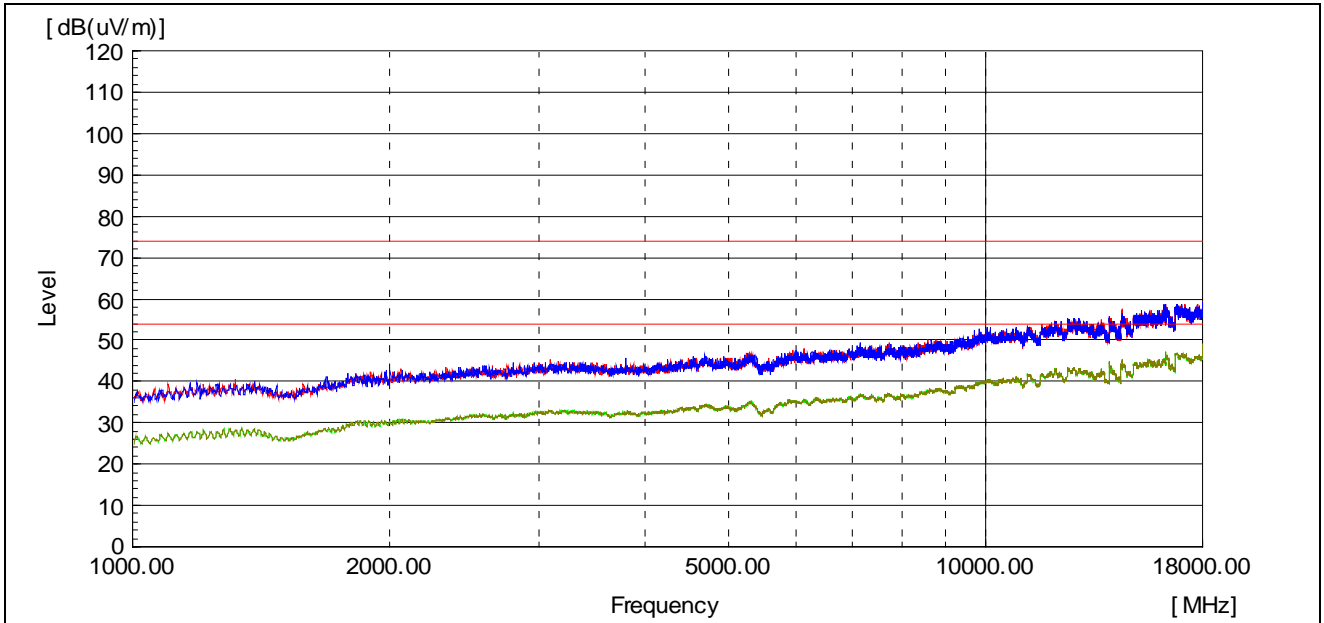
| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
| 5 927.24        | V   | 51.8              | -----             | 3.0           | -----                  | 54.8                | -----               | 68.2                | -----               | 13.4           | -----          |
| 5 928.23        | H   | 54.1              | -----             | 3.0           | -----                  | 57.1                | -----               | 68.2                | -----               | 11.1           | -----          |

Radiated Restricted Band Edge Plot



**Test mode : Receiver (Worst Case)**

**Test Data**



| Frequency [MHz] | (P) | Reading PK [dBuV] | Reading AV [dBuV] | c.f [dB(1/m)] | Duty Cycle Factor [dB] | Level PK [dB(uV/m)] | Level AV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin AV [dB] |
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|
|-----------------|-----|-------------------|-------------------|---------------|------------------------|---------------------|---------------------|---------------------|---------------------|----------------|----------------|

The emissions above 1 GHz were 20 dB lower than the limit.

**Remarks**

1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down positon(X,Y axis). The worst emission was found in lie-down positon(X axis) and the worst case was recorded.
2. Peak Result = Reading + c.f(Correction factor)  
Average Result = Reading + c.f(Correction factor) + Duty Cycle Factor
3. Correction factor = Antenna factor + Cable loss - Amp Gain



**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

Report No.:  
CTK-2022-01661  
Page (185) / (188) Pages

## 4.7 AC Conducted Emissions

### Test Location

Shielded Room

### Frequency Range of Measurement

150 kHz to 30 MHz

### Instrument Settings

IF Band Width: 9 kHz

### Test Procedures

ANSI C63.10-2013 - Section 6.2

RSS-Gen - Section 8.8

The EUT was placed on a non-metallic table 0.8m above the metallic, grounded floor and 0.4m from the reference ground plane wall. The distance to other metallic surfaces was at least 0.8m.

Amplitude measurements were performed with a quasi-peak detector and an average detector.

### Limit

#### - 15.207(a)

| Frequency (MHz) | Conducted Limit (dBuV) |           |
|-----------------|------------------------|-----------|
|                 | Quasi-peak             | Average** |
| 0.15 ~ 0.5      | 66 to 56*              | 56 to 46* |
| 0.5 ~ 5         | 56                     | 46        |
| 5 ~ 30          | 60                     | 50        |

\* The level decreases linearly with the logarithm of the frequency.

\*\* A linear average detector is required.

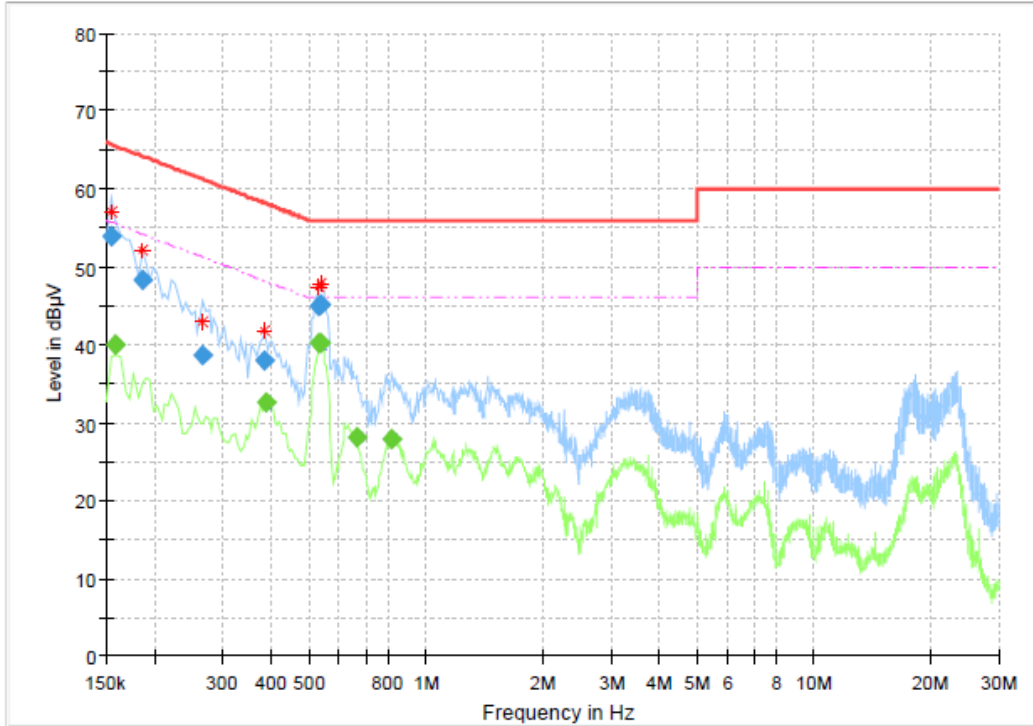
### Test Results

The requirements are:

Complies

Test Data

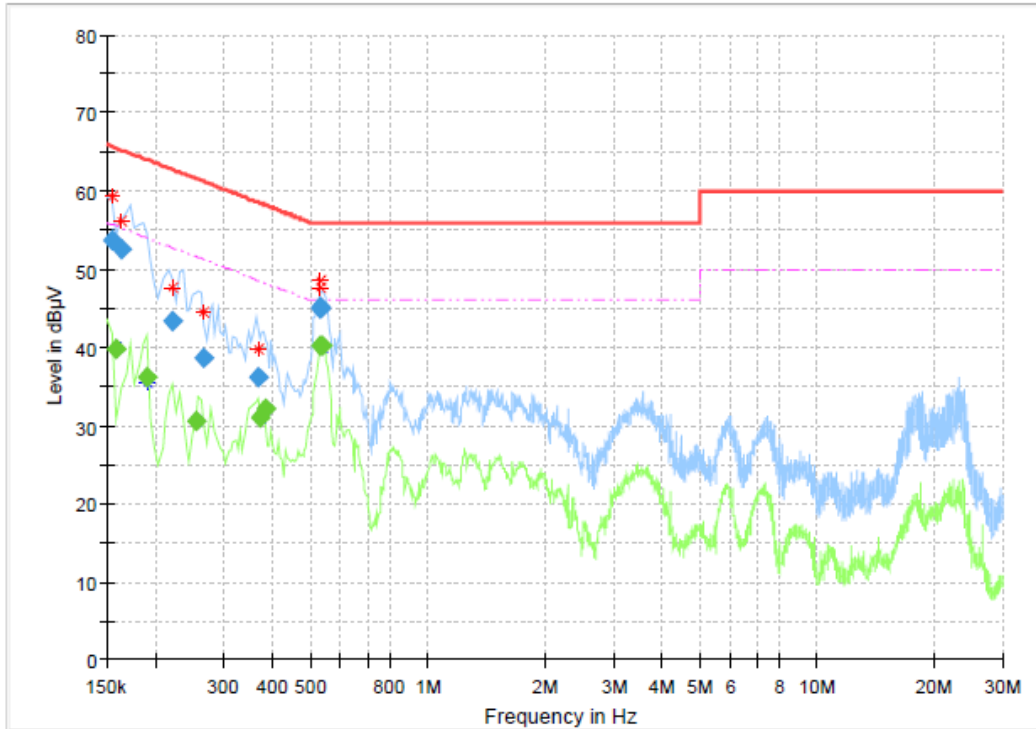
[LINE]



Final Result

| Frequency (MHz) | QuasiPeak (dBµV) | CAverage (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------|-----------------|--------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.154500        | 53.85            | ---             | 65.75        | 11.90       | 3000.0          | 9.000           | L1   | ON     | 9.7        |
| 0.159000        | ---              | 39.95           | 55.52        | 15.57       | 3000.0          | 9.000           | L1   | ON     | 9.7        |
| 0.186000        | 48.36            | ---             | 64.21        | 15.85       | 3000.0          | 9.000           | L1   | ON     | 9.9        |
| 0.267000        | 38.74            | ---             | 61.21        | 22.47       | 3000.0          | 9.000           | L1   | ON     | 9.7        |
| 0.384000        | 38.07            | ---             | 58.19        | 20.12       | 3000.0          | 9.000           | L1   | ON     | 9.9        |
| 0.388500        | ---              | 32.52           | 48.10        | 15.58       | 3000.0          | 9.000           | L1   | ON     | 9.9        |
| 0.532500        | ---              | 40.13           | 46.00        | 5.87        | 3000.0          | 9.000           | L1   | ON     | 9.9        |
| 0.532500        | 45.04            | ---             | 56.00        | 10.96       | 3000.0          | 9.000           | L1   | ON     | 9.9        |
| 0.537000        | ---              | 40.14           | 46.00        | 5.86        | 3000.0          | 9.000           | L1   | ON     | 9.9        |
| 0.537000        | 45.06            | ---             | 56.00        | 10.94       | 3000.0          | 9.000           | L1   | ON     | 9.9        |
| 0.663000        | ---              | 28.01           | 46.00        | 17.99       | 3000.0          | 9.000           | L1   | ON     | 9.8        |
| 0.820500        | ---              | 27.87           | 46.00        | 18.13       | 3000.0          | 9.000           | L1   | ON     | 9.8        |

[NEUTRAL]



**Final Result**

| Frequency (MHz) | QuasiPeak (dBµV) | CAverage (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------|-----------------|--------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.154500        | 53.76            | ---             | 65.75        | 11.99       | 3000.0          | 9.000           | N    | ON     | 9.9        |
| 0.159000        | ---              | 39.74           | 55.52        | 15.78       | 3000.0          | 9.000           | N    | ON     | 9.9        |
| 0.163500        | 52.49            | ---             | 65.28        | 12.80       | 3000.0          | 9.000           | N    | ON     | 9.9        |
| 0.190500        | ---              | 36.09           | 54.02        | 17.92       | 3000.0          | 9.000           | N    | ON     | 10.0       |
| 0.222000        | 43.35            | ---             | 62.74        | 19.39       | 3000.0          | 9.000           | N    | ON     | 9.9        |
| 0.253500        | ---              | 30.52           | 51.64        | 21.12       | 3000.0          | 9.000           | N    | ON     | 9.8        |
| 0.267000        | 38.67            | ---             | 61.21        | 22.54       | 3000.0          | 9.000           | N    | ON     | 9.8        |
| 0.366000        | 36.12            | ---             | 58.59        | 22.47       | 3000.0          | 9.000           | N    | ON     | 10.0       |
| 0.370500        | ---              | 31.05           | 48.49        | 17.44       | 3000.0          | 9.000           | N    | ON     | 10.0       |
| 0.384000        | ---              | 32.22           | 48.19        | 15.98       | 3000.0          | 9.000           | N    | ON     | 10.0       |
| 0.528000        | 44.91            | ---             | 56.00        | 11.09       | 3000.0          | 9.000           | N    | ON     | 10.1       |
| 0.532500        | ---              | 40.19           | 46.00        | 5.81        | 3000.0          | 9.000           | N    | ON     | 10.1       |
| 0.532500        | 45.06            | ---             | 56.00        | 10.94       | 3000.0          | 9.000           | N    | ON     | 10.1       |
| 0.537000        | ---              | 40.24           | 46.00        | 5.76        | 3000.0          | 9.000           | N    | ON     | 10.1       |



**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2022-01661  
 Page (188) / (188) Pages

## APPENDIX A – Test Equipment Used For Tests

|    | Name of Equipment           | Manufacturer    | Model No.  | Serial No. | Date of Calibration | Due Date   |
|----|-----------------------------|-----------------|------------|------------|---------------------|------------|
| 1  | Signal Analyzer             | Agilent         | N9020A     | MY46471102 | 2022-01-13          | 2023-01-13 |
| 2  | Signal Analyzer             | Agilent         | N9020A     | MY50200096 | 2022-01-07          | 2023-01-07 |
| 3  | Signal Generator            | Rohde & Schwarz | SMB100A    | 175528     | 2022-03-25          | 2023-03-25 |
| 4  | EMI Test Receiver           | Rohde & Schwarz | ESCI7      | 100814     | 2021-10-20          | 2022-10-20 |
| 5  | BILOG ANTENNA               | TESEQ           | CBL6111D   | 58490      | 2021-03-03          | 2023-03-03 |
| 6  | Active Loop Antenna         | SCHWARZBECK     | FMZB 1513  | 1513-126   | 2022-05-11          | 2024-05-11 |
| 7  | ATTENUATOR                  | PASTERNAK       | PE7047-6   | NONE       | 2022-02-22          | 2023-02-22 |
| 8  | 6dB Attenuator              | BIRD            | 5W 6dB     | 1744       | 2021-11-18          | 2022-11-18 |
| 9  | AMPLIFIER                   | SONOMA          | 310        | 291721     | 2022-01-21          | 2023-01-21 |
| 10 | EMI Test Receiver           | Rohde & Schwarz | ESU40      | 100336     | 2022-01-11          | 2023-01-11 |
| 11 | Preamplifier                | Agilent         | 8449B      | 3008A01504 | 2021-12-17          | 2022-12-17 |
| 12 | Double Ridged Guide Antenna | ETS-Lindgren    | 3117       | 00154525   | 2021-10-21          | 2022-10-21 |
| 13 | Horn Antenna                | SCHWARZBECK     | BBHA9170   | 00967      | 2022-05-18          | 2023-05-18 |
| 14 | Low Noise Amplifier         | TESTEK          | TK-PA1840H | 200115-L   | 2022-05-11          | 2023-05-11 |
| 15 | Band Reject Filter          | Micro Tronics   | BRM50716   | G184       | 2022-01-07          | 2023-01-07 |
| 16 | LISN                        | Rohde & Schwarz | ENV216     | 102324     | 2022-03-23          | 2023-03-23 |
| 17 | EMI Test Receiver           | Rohde & Schwarz | ESR7       | 101088     | 2022-03-23          | 2023-03-23 |
| 18 | Temp&Humi Chamber           | ESPEC CORP.     | SH-241     | 92000872   | 2022-01-21          | 2023-01-21 |
| 19 | Signal Analyzer             | Rohde & Schwarz | FSV-30     | 100925     | 2022-01-07          | 2023-01-07 |
| 20 | DC Power Supply             | Agilent         | E3632A     | MY40009327 | 2022-04-18          | 2023-04-18 |

|   | Cable                                | Manufacturer       | Model No.    | Serial No. | Check Date |
|---|--------------------------------------|--------------------|--------------|------------|------------|
| 1 | RF Cable (Conducted)                 | Junkosha Inc.      | MWX221       | 1802S135   | 2022-04-20 |
| 2 | RF Cable (Conducted)                 | Junkosha Inc.      | MWX221       | 1802S136   | 2022-04-20 |
| 3 | RF Cable (Line Conducted)            | Canare Corporation | L-5D2W       | N/A        | 2022-04-21 |
| 4 | RF Cable (9kHz-30MHz Radiated)       | HUBER+SUHNER       | NA           | NA         | 2022-04-16 |
| 5 | RF Cable (9kHz-1GHz Below Radiated)  | HUBER+SUHNER       | SUCOFLEX 104 | MY27558/4  | 2022-04-16 |
| 6 | RF Cable (30MHz-1GHz Below Radiated) | HUBER+SUHNER       | SUCOFLEX 104 | N/A        | 2022-04-16 |
| 7 | RF Cable (1GHz-18GHz Radiated)       | HUBER+SUHNER       | SUCOFLEX 102 | MY2374/2   | 2022-04-16 |
| 8 | RF Cable (1GHz-40GHz Radiated)       | HUBER+SUHNER       | SUCOFLEX 102 | MY4728/2   | 2022-04-16 |
| 9 | RF Cable (18GHz-40GHz Radiated)      | HUBER+SUHNER       | SUCOFLEX 102 | 803010/2   | 2022-04-16 |

-END-