

# **FCC RF EXPOSURE REPORT**

**FCC ID: TVE-24100012**

**Project No. : 1504C174**  
**Equipment : Wireless Access Point**  
**Model : FORTIAP-C220Cxxxxxx, FAP-C220Cxxxxxx,  
FORTIAP-C225Cxxxxxx, FAP-C225Cxxxxxx**  
**Applicant : Fortinet, Inc.**  
**Address : 899 Kifer Road, Sunnyvale, CA 94086 USA**  
**According: : FCC Guidelines for Human Exposure IEEE  
C95.1**

**B T L I N C .**

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## MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2} = \frac{EIRP}{4\pi r^2}$$

where:

S = power density

P = power input to the antenna



G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna



Table for Filed Antenna

### 2.4G

#### Internal antenna



| Ant. | Brand   | P/N                    | Antenna Type | Connector | Gain (dBi) | Note |
|------|---|------------------------|--------------|-----------|------------|------|
| 1    |  | RFPCA3806<br>17NNAB301 | PCB          | N/A       | 3.00       | 2.4G |
| 2    |  | RFPCA3806<br>20NNAB301 | PCB          | N/A       | 4.16       | 2.4G |

#### External antenna



| Ant. | Brand   | P/N         | Antenna Type | Connector | Gain (dBi) | Note |
|------|---|-------------|--------------|-----------|------------|------|
| 1    |  | RF21S00081A | Dipole       | R-SMA     | 4.30       | 2.4G |
| 2    |  | RF21S00081A | Dipole       | R-SMA     | 4.30       | 2.4G |

### 5G

#### Internal antenna

| Ant. | Brand   | P/N                    | Antenna Type | Connector | Gain (dBi) | Note |
|------|---|------------------------|--------------|-----------|------------|------|
| 3    |  | RFPCA1610<br>06NN5B301 | PCB          | N/A       | 3.38       | 5G   |
| 4    |  | RFPCA1610<br>13NN5B301 | PCB          | N/A       | 3.08       | 5G   |

#### External antenna

| Ant. | Brand   | P/N         | Antenna Type | Connector | Gain (dBi) | Note |
|------|---|-------------|--------------|-----------|------------|------|
| 3    |  | RF21S00081A | Dipole       | R-SMA     | 4.64       | 5G   |
| 4    |  | RF21S00081A | Dipole       | R-SMA     | 4.64       | 5G   |

# TEST RESULTS

## 2.4G Internal antenna

|                |                             |                    |           |
|----------------|-----------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point       | Model Name :       | FAP-C220C |
| Temperature :  | 25 °C                       | Relative Humidity: | 55 %      |
| Test Voltage : | AC 120V/60Hz                |                    |           |
| Test Mode :    | TX B MODE /CH01, CH06, CH11 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.16               | 2.6062                 | 17.02                   | 50.3501                | 0.02611863                              | 1  | Complies    |
| 4.16               | 2.6062                 | 17.82                   | 60.5341                | 0.03140150                              | 1  | Complies    |
| 4.16               | 2.6062                 | 17.99                   | 62.9506                | 0.03265505                              | 1  | Complies    |

|                |                             |                    |           |
|----------------|-----------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point       | Model Name :       | FAP-C220C |
| Temperature :  | 25 °C                       | Relative Humidity: | 55 %      |
| Test Voltage : | AC 120V/60Hz                |                    |           |
| Test Mode :    | TX G MODE /CH01, CH06, CH11 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.16               | 2.6062                 | 21.98                   | 157.7611               | 0.08183713                              | 1  | Complies    |
| 4.16               | 2.6062                 | 21.91                   | 155.2387               | 0.08052864                              | 1  | Complies    |
| 4.16               | 2.6062                 | 22.31                   | 170.2159               | 0.08829790                              | 1  | Complies    |

|                |  |                    |           |
|----------------|--|--------------------|-----------|
| EUT :          | Wireless Access Point                  | Model Name :       | FAP-C220C |
| Temperature:   | 25 °C                                  | Relative Humidity: | 55 %      |
| Test Voltage : | AC 120V/60Hz                           |                    |           |
| Test Mode :    | TX N-20M MODE_ Total /CH01, CH06, CH11 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.16               | 2.6062                 | 22.9                    | 194.9845               | 0.10114639                              | 1  | Complies    |
| 4.16               | 2.6062                 | 23.02                   | 200.4472               | 0.10398013                              | 1  | Complies    |
| 4.16               | 2.6062                 | 22.9                    | 194.9845               | 0.10114639                              | 1  | Complies    |

|                |  |                    |           |
|----------------|--|--------------------|-----------|
| EUT :          | Wireless Access Point                  | Model Name :       | FAP-C220C |
| Temperature:   | 25 °C                                  | Relative Humidity: | 55 %      |
| Test Voltage : | AC 120V/60Hz                           |                    |           |
| Test Mode :    | TX N-40M MODE_ Total /CH03, CH06, CH09 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.16               | 2.6062                 | 23.53                   | 225.4239               | 0.11693657                              | 1  | Complies    |
| 4.16               | 2.6062                 | 23.45                   | 221.3095               | 0.11480224                              | 1  | Complies    |
| 4.16               | 2.6062                 | 23.48                   | 222.8435               | 0.11559801                              | 1  | Complies    |

## 2.4G External antenna

|                |                             |                    |           |
|----------------|-----------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point       | Model Name :       | FAP-C225C |
| Temperature :  | 25 °C                       | Relative Humidity: | 55 %      |
| Test Voltage : | AC 120V/60Hz                |                    |           |
| Test Mode :    | TX B MODE /CH01, CH06, CH11 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.3                | 2.6915                 | 17.97                   | 62.6614                | 0.03356992                              | 1  | Complies    |
| 4.3                | 2.6915                 | 17.89                   | 61.5177                | 0.03295720                              | 1  | Complies    |
| 4.3                | 2.6915                 | 17.69                   | 58.7489                | 0.03147389                              | 1  | Complies    |

|                |                             |                    |           |
|----------------|-----------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point       | Model Name :       | FAP-C225C |
| Temperature :  | 25 °C                       | Relative Humidity: | 55 %      |
| Test Voltage : | AC 120V/60Hz                |                    |           |
| Test Mode :    | TX G MODE /CH01, CH06, CH11 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.3                | 2.6915                 | 22.29                   | 169.4338               | 0.09077168                              | 1  | Complies    |
| 4.3                | 2.6915                 | 22.15                   | 164.0590               | 0.08789221                              | 1  | Complies    |
| 4.3                | 2.6915                 | 22.31                   | 170.2159               | 0.09119066                              | 1  | Complies    |

|                |  |                    |           |
|----------------|--|--------------------|-----------|
| EUT :          | Wireless Access Point                  | Model Name :       | FAP-C225C |
| Temperature:   | 25 °C                                  | Relative Humidity: | 55 %      |
| Test Voltage : | AC 120V/60Hz                           |                    |           |
| Test Mode :    | TX N-20M MODE_ Total /CH01, CH06, CH11 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.3                | 2.6915                 | 22.83                   | 191.8669               | 0.10278988                              | 1  | Complies    |
| 4.3                | 2.6915                 | 22.96                   | 197.6970               | 0.10591327                              | 1  | Complies    |
| 4.3                | 2.6915                 | 20.88                   | 122.4616               | 0.06560703                              | 1  | Complies    |

|                |  |                    |           |
|----------------|--|--------------------|-----------|
| EUT :          | Wireless Access Point                  | Model Name :       | FAP-C225C |
| Temperature:   | 25 °C                                  | Relative Humidity: | 55 %      |
| Test Voltage : | AC 120V/60Hz                           |                    |           |
| Test Mode :    | TX N-40M MODE_ Total /CH03, CH06, CH09 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.3                | 2.6915                 | 23.4                    | 218.7762               | 0.11720614                              | 1  | Complies    |
| 4.3                | 2.6915                 | 23.58                   | 228.0342               | 0.12216600                              | 1  | Complies    |
| 4.3                | 2.6915                 | 23.58                   | 228.0342               | 0.12216600                              | 1  | Complies    |

### Band 1 Internal antenna

|                |                             |                    |           |
|----------------|-----------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point       | Model Name :       | FAP-C220C |
| Temperature:   | 28 °C                       | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                |                    |           |
| Test Mode :    | TX A MODE /CH36, CH40, CH48 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3.38               | 2.1777                 | 14.97                   | 31.4051                | 0.01361289                              | 1  | Complies    |
| 3.38               | 2.1777                 | 14.95                   | 31.2608                | 0.01355035                              | 1  | Complies    |
| 3.38               | 2.1777                 | 15.02                   | 31.7687                | 0.01377052                              | 1  | Complies    |

|                |  |                    |           |
|----------------|--|--------------------|-----------|
| EUT :          | Wireless Access Point                  | Model Name :       | FAP-C220C |
| Temperature:   | 28 °C                                  | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                           |                    |           |
| Test Mode :    | TX N-20M MODE_ Total /CH36, CH40, CH48 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3.38               | 2.1777                 | 15.2                    | 33.1131                | 0.01435325                              | 1  | Complies    |
| 3.38               | 2.1777                 | 15.23                   | 33.3426                | 0.01445275                              | 1  | Complies    |
| 3.38               | 2.1777                 | 15.27                   | 33.6512                | 0.01458648                              | 1  | Complies    |

|                |                                  |                    |           |
|----------------|----------------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point            | Model Name :       | FAP-C220C |
| Temperature:   | 28 °C                            | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                     |                    |           |
| Test Mode :    | TX N-40M MODE_ Total /CH38, CH46 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3.38               | 2.1777                 | 15.71                   | 37.2392                | 0.01614174                              | 1  | Complies    |
| 3.38               | 2.1777                 | 15.68                   | 36.9828                | 0.01603062                              | 1  | Complies    |

|                |                                |                    |           |
|----------------|--------------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point          | Model Name :       | FAP-C220C |
| Temperature:   | 28 °C                          | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                   |                    |           |
| Test Mode :    | TX AC20 MODE /CH36, CH40, CH48 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3.38               | 2.1777                 | 16.18                   | 41.4954                | 0.01798665                              | 1  | Complies    |
| 3.38               | 2.1777                 | 16.16                   | 41.3048                | 0.01790401                              | 1  | Complies    |
| 3.38               | 2.1777                 | 16.12                   | 40.9261                | 0.01773987                              | 1  | Complies    |

|                |                                 |                    |           |
|----------------|---------------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point           | Model Name :       | FAP-C220C |
| Temperature:   | 28 °C                           | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                    |                    |           |
| Test Mode :    | TX AC40 MODE_ Total /CH38, CH46 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3.38               | 2.1777                 | 17.24                   | 52.9663                | 0.02295886                              | 1  | Complies    |
| 3.38               | 2.1777                 | 17.3                    | 53.7032                | 0.02327825                              | 1  | Complies    |

|                |                           |                    |           |
|----------------|---------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point     | Model Name :       | FAP-C220C |
| Temperature:   | 28 °C                     | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz              |                    |           |
| Test Mode :    | TX AC80 MODE_ Total /CH42 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3.38               | 2.1777                 | 15.89                   | 38.8150                | 0.01682482                              | 1  | Complies    |



### Band 1 External antenna

|                |                             |                    |           |
|----------------|-----------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point       | Model Name :       | FAP-C225C |
| Temperature:   | 28 °C                       | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                |                    |           |
| Test Mode :    | TX A MODE /CH36, CH40, CH48 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.64               | 2.9107                 | 15.03                   | 31.8420                | 0.01844805                              | 1  | Complies    |
| 4.64               | 2.9107                 | 15.1                    | 32.3594                | 0.01874780                              | 1  | Complies    |
| 4.64               | 2.9107                 | 15.1                    | 32.3594                | 0.01874780                              | 1  | Complies    |

|                |  |                    |           |
|----------------|--|--------------------|-----------|
| EUT :          | Wireless Access Point                  | Model Name :       | FAP-C225C |
| Temperature:   | 28 °C                                  | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                           |                    |           |
| Test Mode :    | TX N-20M MODE_ Total /CH36, CH40, CH48 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.64               | 2.9107                 | 14.9                    | 30.9030                | 0.01790401                              | 1  | Complies    |
| 4.64               | 2.9107                 | 15.03                   | 31.8420                | 0.01844805                              | 1  | Complies    |
| 4.64               | 2.9107                 | 15.09                   | 32.2849                | 0.01870468                              | 1  | Complies    |

|                |                                  |                    |           |
|----------------|----------------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point            | Model Name :       | FAP-C225C |
| Temperature:   | 28 °C                            | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                     |                    |           |
| Test Mode :    | TX N-40M MODE_ Total /CH38, CH46 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.64               | 2.9107                 | 15.76                   | 37.6704                | 0.02182480                              | 1  | Complies    |
| 4.64               | 2.9107                 | 15.76                   | 37.6704                | 0.02182480                              | 1  | Complies    |

|                |                                |                    |           |
|----------------|--------------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point          | Model Name :       | FAP-C225C |
| Temperature:   | 28 °C                          | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                   |                    |           |
| Test Mode :    | TX AC20 MODE /CH36, CH40, CH48 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.64               | 2.9107                 | 16.85                   | 48.4172                | 0.02805113                              | 1  | Complies    |
| 4.64               | 2.9107                 | 16.82                   | 48.0839                | 0.02785803                              | 1  | Complies    |
| 4.64               | 2.9107                 | 16.75                   | 47.3151                | 0.02741261                              | 1  | Complies    |

|                |                                 |                    |           |
|----------------|---------------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point           | Model Name :       | FAP-C225C |
| Temperature:   | 28 °C                           | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                    |                    |           |
| Test Mode :    | TX AC40 MODE_ Total /CH38, CH46 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.64               | 2.9107                 | 17.75                   | 59.5662                | 0.03451043                              | 1  | Complies    |
| 4.64               | 2.9107                 | 17.63                   | 57.9429                | 0.03356992                              | 1  | Complies    |

|                |                           |                    |           |
|----------------|---------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point     | Model Name :       | FAP-C225C |
| Temperature:   | 28 °C                     | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz              |                    |           |
| Test Mode :    | TX AC80 MODE_ Total /CH42 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.64               | 2.9107                 | 15.56                   | 35.9749                | 0.02084253                              | 1  | Complies    |

### Band 4 Internal antenna

|                |                                |                    |           |
|----------------|--------------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point          | Model Name :       | FAP-C220C |
| Temperature:   | 28 °C                          | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                   |                    |           |
| Test Mode :    | TX A MODE /CH149, CH157, CH165 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3.38               | 2.1777                 | 14.94                   | 31.1889                | 0.01351918                              | 1  | Complies    |
| 3.38               | 2.1777                 | 14.92                   | 31.0456                | 0.01345707                              | 1  | Complies    |
| 3.38               | 2.1777                 | 15.05                   | 31.9890                | 0.01386597                              | 1  | Complies    |

|                |   |                    |           |
|----------------|---|--------------------|-----------|
| EUT :          | Wireless Access Point                     | Model Name :       | FAP-C220C |
| Temperature:   | 28 °C                                     | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                              |                    |           |
| Test Mode :    | TX N-20M MODE_ Total /CH149, CH157, CH165 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3.38               | 2.1777                 | 15.24                   | 33.4195                | 0.01448606                              | 1  | Complies    |
| 3.38               | 2.1777                 | 15.11                   | 32.4340                | 0.01405887                              | 1  | Complies    |
| 3.38               | 2.1777                 | 15.22                   | 33.2660                | 0.01441951                              | 1  | Complies    |

|                |                                    |                    |           |
|----------------|------------------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point              | Model Name :       | FAP-C220C |
| Temperature:   | 28 °C                              | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                       |                    |           |
| Test Mode :    | TX N-40M MODE_ Total /CH151, CH159 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3.38               | 2.1777                 | 15.71                   | 37.2392                | 0.01614174                              | 1  | Complies    |
| 3.38               | 2.1777                 | 15.66                   | 36.8129                | 0.01595697                              | 1  | Complies    |

|                |                                   |                    |           |
|----------------|-----------------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point             | Model Name :       | FAP-C220C |
| Temperature:   | 28 °C                             | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                      |                    |           |
| Test Mode :    | TX AC20 MODE /CH149, CH157, CH165 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3.38               | 2.1777                 | 16.11                   | 40.8319                | 0.01769907                              | 1  | Complies    |
| 3.38               | 2.1777                 | 16.06                   | 40.3645                | 0.01749647                              | 1  | Complies    |
| 3.38               | 2.1777                 | 16.11                   | 40.8319                | 0.01769907                              | 1  | Complies    |

|                |                                   |                    |           |
|----------------|-----------------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point             | Model Name :       | FAP-C220C |
| Temperature:   | 28 °C                             | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                      |                    |           |
| Test Mode :    | TX AC40 MODE_ Total /CH151, CH159 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3.38               | 2.1777                 | 17.14                   | 51.7607                | 0.02243626                              | 1  | Complies    |
| 3.38               | 2.1777                 | 17.32                   | 53.9511                | 0.02338570                              | 1  | Complies    |

|                |                            |                    |           |
|----------------|----------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point      | Model Name :       | FAP-C220C |
| Temperature:   | 28 °C                      | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz               |                    |           |
| Test Mode :    | TX AC80 MODE_ Total /CH155 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 3.38               | 2.1777                 | 15.91                   | 38.9942                | 0.01690248                              | 1  | Complies    |

### Band 4 External antenna

|                |                                |                    |           |
|----------------|--------------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point          | Model Name :       | FAP-C225C |
| Temperature:   | 28 °C                          | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                   |                    |           |
| Test Mode :    | TX A MODE /CH149, CH157, CH165 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.64               | 2.9107                 | 15.07                   | 32.1366                | 0.01861874                              | 1  | Complies    |
| 4.64               | 2.9107                 | 14.92                   | 31.0456                | 0.01798665                              | 1  | Complies    |
| 4.64               | 2.9107                 | 15.06                   | 32.0627                | 0.01857592                              | 1  | Complies    |

|                |   |                    |           |
|----------------|---|--------------------|-----------|
| EUT :          | Wireless Access Point                     | Model Name :       | FAP-C225C |
| Temperature:   | 28 °C                                     | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                              |                    |           |
| Test Mode :    | TX N-20M MODE_ Total /CH149, CH157, CH165 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.64               | 2.9107                 | 15.03                   | 31.8420                | 0.01844805                              | 1  | Complies    |
| 4.64               | 2.9107                 | 15.07                   | 32.1366                | 0.01861874                              | 1  | Complies    |
| 4.64               | 2.9107                 | 14.97                   | 31.4051                | 0.01819493                              | 1  | Complies    |

|                |                                    |                    |           |
|----------------|------------------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point              | Model Name :       | FAP-C225C |
| Temperature:   | 28 °C                              | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                       |                    |           |
| Test Mode :    | TX N-40M MODE_ Total /CH151, CH159 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.64               | 2.9107                 | 15.72                   | 37.3250                | 0.02162471                              | 1  | Complies    |
| 4.64               | 2.9107                 | 15.72                   | 37.3250                | 0.02162471                              | 1  | Complies    |

|                |                                   |                    |           |
|----------------|-----------------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point             | Model Name :       | FAP-C225C |
| Temperature:   | 28 °C                             | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                      |                    |           |
| Test Mode :    | TX AC20 MODE /CH149, CH157, CH165 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.64               | 2.9107                 | 16.78                   | 47.6431                | 0.02760262                              | 1  | Complies    |
| 4.64               | 2.9107                 | 16.8                    | 47.8630                | 0.02773003                              | 1  | Complies    |
| 4.64               | 2.9107                 | 16.7                    | 46.7735                | 0.02709882                              | 1  | Complies    |

|                |                                   |                    |           |
|----------------|-----------------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point             | Model Name :       | FAP-C225C |
| Temperature:   | 28 °C                             | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz                      |                    |           |
| Test Mode :    | TX AC40 MODE_ Total /CH151, CH159 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.64               | 2.9107                 | 17.69                   | 58.7489                | 0.03403693                              | 1  | Complies    |
| 4.64               | 2.9107                 | 17.73                   | 59.2925                | 0.03435187                              | 1  | Complies    |

|                |                            |                    |           |
|----------------|----------------------------|--------------------|-----------|
| EUT :          | Wireless Access Point      | Model Name :       | FAP-C225C |
| Temperature:   | 28 °C                      | Relative Humidity: | 60 %      |
| Test Voltage : | AC 120V/60Hz               |                    |           |
| Test Mode :    | TX AC80 MODE_ Total /CH155 |                    |           |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.64               | 2.9107                 | 15.54                   | 35.8096                | 0.02074676                              | 1  | Complies    |

Note: the calculated distance is 20 cm.

## FOR MAXIMUM EIRP

### 2.4G Only MPE

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.3                | 2.6915                 | 23.58                   | 228.0342               | 0.12216600                              | 1  | Complies    |

### 5G Only MPE

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 4.64               | 2.9107                 | 17.73                   | 59.2925                | 0.03435187                              | 1  | Complies    |

so for 2.4G+5G simultaneous transmission MPE

$$0.1222/1+0.0344/1=0.1566<1$$