

# RF EXPOSURE Test Report

**Report No.** : MTi250515021-0101E3  
**Date of issue** : 2025-07-28  
**Applicant** : INSTAR Deutschland GmbH  
**Product** : IP / NETWORK CAMERA  
**Model(s)** : IN-9808 4K, IN-9806 4K, IN-9809 4K  
**FCC ID** : SO6-IN9808

**Shenzhen Microtest Co., Ltd.**

# TEST REPORT

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| <b>Test Result Certification</b> |                                               |                     |
| Applicant                        | INSTAR Deutschland GmbH                       |                     |
| Applicant Address                | Auf der Hostert 17, 65510 Hünstetten, Germany |                     |
| Manufacturer                     | INSTAR Deutschland GmbH                       |                     |
| Manufacturer Address             | Auf der Hostert 17, 65510 Hünstetten, Germany |                     |
| <b>Product description</b>       |                                               |                     |
| Product name                     | IP / NETWORK CAMERA                           |                     |
| Trademark                        | INSTAR                                        |                     |
| Model name                       | IN-9808 4K                                    |                     |
| Series Model(s)                  | IN-9806 4K, IN-9809 4K                        |                     |
| Standards                        | 47 CFR Part 2.1091                            |                     |
| Test method                      | KDB 447498 D01 v06                            |                     |
| <b>Testing Information</b>       |                                               |                     |
| Date of test                     | 2025-06-09 to 2025-06-20                      |                     |
| Test Result                      | Pass                                          |                     |
| Prepared by:                     | Letter Lan                                    | <i>Letter. Lan.</i> |
| Reviewed by:                     | David Lee                                     | <i>David. Lee</i>   |
| Approved by:                     | Lewis Lian                                    | <i>Lewis Lian</i>   |

## 1 RF EXPOSURE EVALUATION

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) Radiation as specified in §1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

| Frequency range (MHz)                                          | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density (mW/cm <sup>2</sup> ) | Averaging time (minutes) |
|----------------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| <b>(A) Limits for Occupational/Controlled Exposure</b>         |                               |                               |                                     |                          |
| 0.3-3.0                                                        | 614                           | 1.63                          | *100                                | 6                        |
| 3.0-30                                                         | 1842/f                        | 4.89/f                        | *900/f <sup>2</sup>                 | 6                        |
| 30-300                                                         | 61.4                          | 0.163                         | 1.0                                 | 6                        |
| 300-1,500                                                      |                               |                               | f/300                               | 6                        |
| 1,500-100,000                                                  |                               |                               | 5                                   | 6                        |
| <b>(B) Limits for General Population/Uncontrolled Exposure</b> |                               |                               |                                     |                          |
| 0.3-1.34                                                       | 614                           | 1.63                          | *100                                | 30                       |
| 1.34-30                                                        | 824/f                         | 2.19/f                        | *180/f <sup>2</sup>                 | 30                       |
| 30-300                                                         | 27.5                          | 0.073                         | 0.2                                 | 30                       |
| 300-1,500                                                      |                               |                               | f/1500                              | 30                       |
| 1,500-100,000                                                  |                               |                               | 1.0                                 | 30                       |

f = frequency in MHz \* = Plane-wave equivalent power density

### MPE Calculation Method

Friis transmission formula:  $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot R^2)$

Where

$P_d$  = Power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

G = Numeric gain of the antenna relative to isotropic antenna

$\pi$  = 3.1415926

R = distance between observation point and center of the radiator in cm(20cm)

$P_d$  the limit of MPE, 1mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

## 2 Measurement Result

### 2.4GWiFi:

Operation Frequency: WIFI 802.11b/g/n HT20: 2412-2462MHz, n HT40: 2422-2452

Power density limited: 1mW/ cm<sup>2</sup>

### 5GWiFi:

802.11a: 20 MHz

802.11n: 20 MHz, 40 MHz

802.11ac: 20 MHz, 40 MHz, 80MHz

Antenna Type: Rod-shaped antenna;

Antenna gain:

2.4G: ANT1: 3.56dBi; ANT2: 3.56dBi; Directional gain: 6.57dBi;

5G: ANT1: 4.17dBi; ANT2: 4.17dBi; Directional gain: 7.18dBi;

5.8G: ANT1: 5.15dBi; ANT2: 5.15dBi; Directional gain: 8.16dBi;

R=20cm

mW=10<sup>^(dBi/10)</sup>

2.4G: antenna 1 gain Numeric=10<sup>^(dBi/10)</sup>= 10<sup>^(3.56/10)</sup>= 2.27

2.4G: antenna 2 gain Numeric=10<sup>^(dBi/10)</sup>= 10<sup>^(3.56/10)</sup>= 2.27

2.4G: antenna 1+2 gain Numeric=10<sup>^(dBi/10)</sup>= 10<sup>^(6.57/10)</sup>= 4.54

5G: antenna1 gain Numeric=10<sup>^(dBi/10)</sup>= 10<sup>^(4.17/10)</sup>= 2.61

5G: antenna2 gain Numeric=10<sup>^(dBi/10)</sup>= 10<sup>^(4.17/10)</sup>= 2.61

5G: antenna1+2 gain Numeric=10<sup>^(dBi/10)</sup>= 10<sup>^(7.18/10)</sup>= 5.22

5.8G: antenna1 gain Numeric=10<sup>^(dBi/10)</sup>= 10<sup>^(5.15/10)</sup>= 3.27

5.8G: antenna2 gain Numeric=10<sup>^(dBi/10)</sup>= 10<sup>^(5.15/10)</sup>= 3.27

5.8G: antenna1+2 gain Numeric=10<sup>^(dBi/10)</sup>= 10<sup>^(8.16/10)</sup>= 6.55

2.4G WIFI and 5G WIFI cannot work at the same time.

Either SAR-based or MPE-based exemption may be considered for test exemption for fixed, mobile, or portable device exposure conditions; therefore, the contributions from each exemption in conjunction with the measured SAR (*Evaluated<sub>k</sub>* term) shall be used to determine exemption for simultaneous transmission according to Formula (C.1) [repeated from § 1.1307(b)(3)(ii)(B)].

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1 \quad (C.1)$$



## 2.4GWiFi SISO:

### ANT 1

| Channel Freq.<br>(MHz) | modulation     | conducted power | Tune-up power | Max           |        | Antenna | Evaluation result at 20cm          | Power density Limits  |
|------------------------|----------------|-----------------|---------------|---------------|--------|---------|------------------------------------|-----------------------|
|                        |                | (dBm)           | (dBm)         | tune-up power |        | Gain    | Power density(mW/cm <sup>2</sup> ) | (mW/cm <sup>2</sup> ) |
|                        |                |                 |               | (dBm)         | (mW)   | Numeric |                                    |                       |
| 2412                   | 802.11b        | 15.95           | 15±1          | 16            | 39.811 | 2.27    | 0.01798                            | 1                     |
| 2437                   |                | 15.66           | 15±1          | 16            | 39.811 | 2.27    | 0.01798                            | 1                     |
| 2462                   |                | 15.4            | 15±1          | 16            | 39.811 | 2.27    | 0.01798                            | 1                     |
| 2412                   | 802.11g        | 15.28           | 15±1          | 16            | 39.811 | 2.27    | 0.01798                            | 1                     |
| 2437                   |                | 15.61           | 15±1          | 16            | 39.811 | 2.27    | 0.01798                            | 1                     |
| 2462                   |                | 15.64           | 15±1          | 16            | 39.811 | 2.27    | 0.01798                            | 1                     |
| 2412                   | 802.11n<br>H20 | 16.17           | 16±1          | 17            | 50.119 | 2.27    | 0.02263                            | 1                     |
| 2437                   |                | 16.06           | 16±1          | 17            | 50.119 | 2.27    | 0.02263                            | 1                     |
| 2462                   |                | 15.26           | 15±1          | 16            | 39.811 | 2.27    | 0.01798                            | 1                     |
| 2422                   | 802.11n<br>H40 | 15.87           | 15±1          | 16            | 39.811 | 2.27    | 0.01798                            | 1                     |
| 2437                   |                | 15.26           | 15±1          | 16            | 39.811 | 2.27    | 0.01798                            | 1                     |
| 2452                   |                | 14.84           | 14±1          | 15            | 31.623 | 2.27    | 0.01428                            | 1                     |

### ANT 2

| Channel Freq. (MHz) | modulation  | conducted power | Tune-up power | Max           |        | Antenna | Evaluation result at 20cm          | Power density Limits  |
|---------------------|-------------|-----------------|---------------|---------------|--------|---------|------------------------------------|-----------------------|
|                     |             | (dBm)           | (dBm)         | tune-up power |        | Gain    | Power density(mW/cm <sup>2</sup> ) | (mW/cm <sup>2</sup> ) |
|                     |             |                 |               | (dBm)         | (mW)   | Numeric |                                    |                       |
| 2412                | 802.11b     | 15.39           | 15±1          | 16            | 39.811 | 2.27    | 0.01798                            | 1                     |
| 2437                |             | 15.57           | 15±1          | 16            | 39.811 | 2.27    | 0.01798                            | 1                     |
| 2462                |             | 13.35           | 13±1          | 14            | 25.119 | 2.27    | 0.01134                            | 1                     |
| 2412                | 802.11g     | 14.5            | 14±1          | 15            | 31.623 | 2.27    | 0.01428                            | 1                     |
| 2437                |             | 14.2            | 14±1          | 15            | 31.623 | 2.27    | 0.01428                            | 1                     |
| 2462                |             | 12.96           | 12±1          | 13            | 19.953 | 2.27    | 0.00901                            | 1                     |
| 2412                | 802.11n H20 | 14.36           | 14±1          | 15            | 31.623 | 2.27    | 0.01428                            | 1                     |
| 2437                |             | 14.27           | 14±1          | 15            | 31.623 | 2.27    | 0.01428                            | 1                     |
| 2462                |             | 13.09           | 13±1          | 14            | 25.119 | 2.27    | 0.01134                            | 1                     |
| 2422                | 802.11n H40 | 14.12           | 14±1          | 15            | 31.623 | 2.27    | 0.01428                            | 1                     |
| 2437                |             | 13.37           | 13±1          | 14            | 25.119 | 2.27    | 0.01134                            | 1                     |
| 2452                |             | 13.53           | 13±1          | 14            | 25.119 | 2.27    | 0.01134                            | 1                     |

## MIMO

| Channel Freq. (MHz) | modulation  | conducted power |       | Tune-up power |       | Max           |       |        |        | Antenna |       | Evaluation result at 20cm |         |         | Power density Limits |
|---------------------|-------------|-----------------|-------|---------------|-------|---------------|-------|--------|--------|---------|-------|---------------------------|---------|---------|----------------------|
|                     |             | (dBm)           |       | (dBm)         |       | tune-up power |       |        |        | Gain    |       | Power density (mW/cm2 )   |         |         | (mW/cm2)             |
|                     |             |                 |       |               |       | (dBm)         |       | (mW)   |        | Numeric |       |                           |         |         |                      |
|                     |             | Ant A           | Ant B | Ant A         | Ant B | Ant A         | Ant B | Ant A  | Ant B  | Ant A   | Ant B | Ant A                     | Ant B   | Sum     |                      |
| 2412                | 802.11n H20 | 16.35           | 14.3  | 16±1          | 14±1  | 17            | 15    | 50.119 | 31.623 | 4.54    | 4.54  | 0.04527                   | 0.02856 | 0.07383 |                      |
| 2437                |             | 14.61           | 12.7  | 14±1          | 12±1  | 15            | 13    | 31.623 | 19.953 | 4.54    | 4.54  | 0.02856                   | 0.01802 | 0.04658 | 1                    |
| 2462                |             | 13.65           | 11.66 | 16±1          | 14±1  | 14            | 12    | 25.119 | 15.849 | 4.54    | 4.54  | 0.02269                   | 0.01431 | 0.03700 | 1                    |
| 2422                | 802.11n H40 | 13.43           | 12.17 | 13±1          | 10±1  | 14            | 13    | 25.119 | 19.953 | 4.54    | 4.54  | 0.02269                   | 0.01802 | 0.04071 | 1                    |
| 2437                |             | 13.71           | 10.77 | 13±1          | 10±1  | 14            | 12    | 25.119 | 15.849 | 4.54    | 4.54  | 0.02269                   | 0.01431 | 0.03700 | 1                    |
| 2452                |             | 13.19           | 11.70 | 13±1          | 11±1  | 14            | 12    | 25.119 | 15.849 | 4.54    | 4.54  | 0.02269                   | 0.01431 | 0.03700 | 1                    |

ΣPower density (Sum )=Power density (ANTA )/Power density Limit+Power density (ANTB )/Power density Limit

5G WIFI: UNII-1

SISO ANT1

| Channel Freq. (MHz) | modulation  | conduct ed | Tune-up | Max           |        | Antenn a | Evaluation result at 20cm          | Power density         |
|---------------------|-------------|------------|---------|---------------|--------|----------|------------------------------------|-----------------------|
|                     |             | (dBm )     | (dBm)   | tune-up power |        | Gain     | Power density(mW/cm <sup>2</sup> ) | (mW/cm <sup>2</sup> ) |
|                     |             |            |         | (dBm)         | (mW)   | Numeric  |                                    |                       |
| 5180                | 11a         | 14.04      | 14±1    | 15            | 31.623 | 2.61     | 0.01643                            | 1                     |
| 5200                | 11a         | 14.75      | 14±1    | 15            | 31.623 | 2.61     | 0.01643                            | 1                     |
| 5240                | 11a         | 15.28      | 15±1    | 16            | 39.811 | 2.61     | 0.02069                            | 1                     |
| 5180                | 11n (HT20)  | 14.28      | 14±1    | 15            | 31.623 | 2.61     | 0.01643                            | 1                     |
| 5200                | 11n (HT20)  | 14.05      | 14±1    | 15            | 31.623 | 2.61     | 0.01643                            | 1                     |
| 5240                | 11n (HT20)  | 15.09      | 15±1    | 16            | 39.811 | 2.61     | 0.02069                            | 1                     |
| 5190                | 11n (HT40)  | 13.73      | 13±1    | 14            | 25.119 | 2.61     | 0.01305                            | 1                     |
| 5230                | 11n (HT40)  | 15.61      | 15±1    | 16            | 39.811 | 2.61     | 0.01643                            | 1                     |
| 5180                | 11ac(HT20)  | 12.61      | 12±1    | 13            | 19.953 | 2.61     | 0.01037                            | 1                     |
| 5200                | 11ac (HT20) | 11.87      | 11±1    | 12            | 15.849 | 2.61     | 0.00824                            | 1                     |
| 5240                | 11ac (HT20) | 13.92      | 13±1    | 14            | 25.119 | 2.61     | 0.01305                            | 1                     |
| 5190                | 11ac (HT40) | 13.09      | 13±1    | 14            | 25.119 | 2.61     | 0.01305                            | 1                     |
| 5230                | 11ac (HT40) | 12.69      | 12±1    | 13            | 19.953 | 2.61     | 0.01037                            | 1                     |
| 5210                | 11ac (HT80) | 13.37      | 13±1    | 14            | 25.119 | 2.61     | 0.01305                            | 1                     |

ANT2

| Channel Freq. (MHz) | modulation  | conduct ed | Tune-up | Max           |        | Antenna | Evaluation result at 20cm          | Power density         |
|---------------------|-------------|------------|---------|---------------|--------|---------|------------------------------------|-----------------------|
|                     |             | (dBm)      | (dBm)   | tune-up power |        | Gain    | Power density(mW/cm <sup>2</sup> ) | (mW/cm <sup>2</sup> ) |
|                     |             |            |         | (dBm)         | (mW)   | Numeric |                                    |                       |
| 5180                | 11a         | 14.66      | 14±1    | 15            | 31.623 | 2.61    | 0.01643                            | 1                     |
| 5200                | 11a         | 13.8       | 13±1    | 14            | 25.119 | 2.61    | 0.01305                            | 1                     |
| 5240                | 11a         | 13.72      | 13±1    | 14            | 25.119 | 2.61    | 0.01305                            | 1                     |
| 5180                | 11n (HT20)  | 13.47      | 13±1    | 14            | 25.119 | 2.61    | 0.01305                            | 1                     |
| 5200                | 11n (HT20)  | 13.94      | 13±1    | 14            | 25.119 | 2.61    | 0.01305                            | 1                     |
| 5240                | 11n (HT20)  | 13.81      | 13±1    | 14            | 25.119 | 2.61    | 0.01305                            | 1                     |
| 5190                | 11n (HT40)  | 13.49      | 13±1    | 14            | 25.119 | 2.61    | 0.01305                            | 1                     |
| 5230                | 11n (HT40)  | 14.56      | 14±1    | 15            | 31.623 | 2.61    | 0.01643                            | 1                     |
| 5180                | 11ac (HT20) | 13.06      | 13±1    | 14            | 25.119 | 2.61    | 0.01305                            | 1                     |
| 5200                | 11ac (HT20) | 13.92      | 13±1    | 14            | 25.119 | 2.61    | 0.01305                            | 1                     |
| 5240                | 11ac (HT20) | 13.26      | 13±1    | 14            | 25.119 | 2.61    | 0.01305                            | 1                     |
| 5190                | 11ac (HT40) | 13.89      | 13±1    | 14            | 25.119 | 2.61    | 0.01305                            | 1                     |
| 5230                | 11ac (HT40) | 11.9       | 11±1    | 12            | 15.849 | 2.61    | 0.00824                            | 1                     |
| 5210                | 11ac (HT80) | 13.92      | 13±1    | 14            | 25.119 | 2.61    | 0.01305                            | 1                     |

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MIMO

| Channel Freq. (MHz) | modulation  | conducted power |       | Tune-up power |       | Max           |       |        |        | Antenna |       | Evaluation result at 20cm           |         |         | Power density Limits  |
|---------------------|-------------|-----------------|-------|---------------|-------|---------------|-------|--------|--------|---------|-------|-------------------------------------|---------|---------|-----------------------|
|                     |             | (dBm)           |       | (dBm)         |       | tune-up power |       |        |        | Gain    |       | Power density (mW/cm <sup>2</sup> ) |         |         | (mW/cm <sup>2</sup> ) |
|                     |             | Ant A           | Ant B | Ant A         | Ant B | Ant A         | Ant B | Ant A  | Ant B  | Ant A   | Ant B | Numeric                             | Ant A   | Ant B   | Sum                   |
| 5180                | 11n (HT20)  | 11.89           | 13.30 | 11±1          | 13±1  | 12            | 14    | 15.849 | 25.119 | 5.22    | 5.22  | 0.01646                             | 0.02609 | 0.04254 | 1                     |
| 5200                |             | 12.68           | 13.53 | 12±1          | 13±1  | 13            | 14    | 19.953 | 25.119 | 5.22    | 5.22  | 0.02072                             | 0.02609 | 0.04681 | 1                     |
| 5240                |             | 13.47           | 14.04 | 13±1          | 14±1  | 14            | 15    | 25.119 | 31.623 | 5.22    | 5.22  | 0.02609                             | 0.03284 | 0.05893 | 1                     |
| 5190                | 11n (HT40)  | 12.75           | 12.71 | 12±1          | 12±1  | 13            | 13    | 19.953 | 19.953 | 5.22    | 5.22  | 0.02072                             | 0.02072 | 0.04144 | 1                     |
| 5230                |             | 12.73           | 13.54 | 12±1          | 13±1  | 13            | 14    | 19.953 | 25.119 | 5.22    | 5.22  | 0.02072                             | 0.02609 | 0.04681 | 1                     |
| 5180                | 11ac (HT20) | 12.8            | 13.48 | 12±1          | 13±1  | 13            | 14    | 19.953 | 25.119 | 5.22    | 5.22  | 0.02072                             | 0.02609 | 0.04681 | 1                     |
| 5200                |             | 14.28           | 12.23 | 14±1          | 12±1  | 15            | 13    | 31.623 | 19.953 | 5.22    | 5.22  | 0.03284                             | 0.02072 | 0.05356 | 1                     |
| 5240                |             | 11.68           | 6.84  | 11±1          | 6±1   | 12            | 7     | 15.849 | 5.012  | 5.22    | 5.22  | 0.01646                             | 0.00520 | 0.02166 | 1                     |
| 5190                | 11ac (HT40) | 10.91           | 11.62 | 10±1          | 11±1  | 11            | 12    | 12.589 | 15.849 | 5.22    | 5.22  | 0.01307                             | 0.01646 | 0.02953 | 1                     |
| 5230                |             | 12.79           | 12.09 | 12±1          | 12±1  | 13            | 13    | 19.953 | 19.953 | 5.22    | 5.22  | 0.02072                             | 0.02072 | 0.04144 | 1                     |
| 5210                | 11ac (HT80) | 11.48           | 12.99 | 11±1          | 12±1  | 12            | 13    | 15.849 | 19.953 | 5.22    | 5.22  | 0.01646                             | 0.02072 | 0.03718 | 1                     |

 $\Sigma \text{Power density (Sum)} = \text{Power density (ANTA)} / \text{Power density Limit} + \text{Power density (ANTB)} / \text{Power density Limit}$



5G WIFI: UNII-3

SISO ANT 1

| Channel Freq. (MHz) | modulation  | conduct ed | Tune-up | Max           |        | Antenna | Evaluation result at 20cm          | Power density         |
|---------------------|-------------|------------|---------|---------------|--------|---------|------------------------------------|-----------------------|
|                     |             | (dBm)      | (dBm)   | tune-up power |        | Gain    | Power density(mW/cm <sup>2</sup> ) | (mW/cm <sup>2</sup> ) |
|                     |             |            |         | (dBm)         | (mW)   | Numeric |                                    |                       |
| 5745                | 11a         | 14.41      | 14±1    | 15            | 31.623 | 3.27    | 0.02059                            | 1                     |
| 5785                | 11a         | 13.45      | 13±1    | 14            | 25.119 | 3.27    | 0.01636                            | 1                     |
| 5825                | 11a         | 13.94      | 13±1    | 14            | 25.119 | 3.27    | 0.01636                            | 1                     |
| 5745                | 11n (HT20)  | 14.28      | 14±1    | 15            | 31.623 | 3.27    | 0.02059                            | 1                     |
| 5785                | 11n (HT20)  | 14.05      | 14±1    | 15            | 31.623 | 3.27    | 0.02059                            | 1                     |
| 5825                | 11n (HT20)  | 15.09      | 15±1    | 16            | 39.811 | 3.27    | 0.02593                            | 1                     |
| 5755                | 11n (HT40)  | 13.73      | 13±1    | 14            | 25.119 | 3.27    | 0.01636                            | 1                     |
| 5795                | 11n (HT40)  | 15.61      | 15±1    | 16            | 39.811 | 3.27    | 0.02593                            | 1                     |
| 5745                | 11ac (HT20) | 12.61      | 12±1    | 13            | 19.953 | 3.27    | 0.01299                            | 1                     |
| 5785                | 11ac (HT20) | 11.87      | 11±1    | 12            | 15.849 | 3.27    | 0.01032                            | 1                     |
| 5825                | 11ac (HT20) | 13.92      | 13±1    | 14            | 25.119 | 3.27    | 0.01636                            | 1                     |
| 5755                | 11ac (HT40) | 13.09      | 13±1    | 14            | 25.119 | 3.27    | 0.01636                            | 1                     |
| 5795                | 11ac (HT40) | 12.69      | 12±1    | 13            | 19.953 | 3.27    | 0.01299                            | 1                     |
| 5775                | 11ac (HT80) | 13.37      | 13±1    | 14            | 25.119 | 3.27    | 0.01636                            | 1                     |

ANT2

| Channel Freq. (MHz) | modulation  | conduct ed | Tune-up | Max           |        | Antenn a | Evaluation result at 20cm          | Power density         |
|---------------------|-------------|------------|---------|---------------|--------|----------|------------------------------------|-----------------------|
|                     |             | (dBm)      | (dBm)   | tune-up power |        | Gain     | Power density(mW/cm <sup>2</sup> ) | (mW/cm <sup>2</sup> ) |
|                     |             |            |         | (dBm)         | (mW)   | Numeric  |                                    |                       |
| 5745                | 11a         | 13.33      | 13±1    | 14            | 25.119 | 3.27     | 0.01636                            | 1                     |
| 5785                | 11a         | 13.42      | 13±1    | 14            | 25.119 | 3.27     | 0.01636                            | 1                     |
| 5825                | 11a         | 11.49      | 11±1    | 12            | 15.849 | 3.27     | 0.01032                            | 1                     |
| 5745                | 11n (HT20)  | 14.69      | 14±1    | 15            | 31.623 | 3.27     | 0.02059                            | 1                     |
| 5785                | 11n (HT20)  | 13.7       | 13±1    | 14            | 25.119 | 3.27     | 0.01636                            | 1                     |
| 5825                | 11n (HT20)  | 11.54      | 11±1    | 12            | 15.849 | 3.27     | 0.01032                            | 1                     |
| 5755                | 11n (HT40)  | 13.94      | 13±1    | 14            | 25.119 | 3.27     | 0.01636                            | 1                     |
| 5795                | 11n (HT40)  | 14         | 14±1    | 15            | 31.623 | 3.27     | 0.02059                            | 1                     |
| 5745                | 11ac (HT20) | 11.48      | 11±1    | 12            | 15.849 | 3.27     | 0.01032                            | 1                     |
| 5785                | 11ac (HT20) | 11.78      | 11±1    | 12            | 15.849 | 3.27     | 0.01032                            | 1                     |
| 5825                | 11ac (HT20) | 11.57      | 11±1    | 12            | 15.849 | 3.27     | 0.01032                            | 1                     |
| 5755                | 11ac (HT40) | 11.53      | 11±1    | 12            | 15.849 | 3.27     | 0.01032                            | 1                     |
| 5795                | 11ac (HT40) | 11.3       | 11±1    | 12            | 15.849 | 3.27     | 0.01032                            | 1                     |
| 5775                | 11ac (HT80) | 11.7       | 11±1    | 12            | 15.849 | 3.27     | 0.01032                            | 1                     |

## MIMO

| Channel Freq. (MHz) | modulation  | conducted power |       | Tune-up power |       | Max           |       |        |        | Antenna |       | Evaluation result at 20cm           |         |         | Power density Limits  |
|---------------------|-------------|-----------------|-------|---------------|-------|---------------|-------|--------|--------|---------|-------|-------------------------------------|---------|---------|-----------------------|
|                     |             | (dBm)           |       | (dBm)         |       | tune-up power |       |        |        | Gain    |       | Power density (mW/cm <sup>2</sup> ) |         |         | (mW/cm <sup>2</sup> ) |
|                     |             | Ant A           | Ant B | Ant A         | Ant B | Ant A         | Ant B | Ant A  | Ant B  | Ant A   | Ant B | Ant A                               | Ant B   | Sum     |                       |
| 5180                | 11n (HT20)  | 13.78           | 12.97 | 13±1          | 12±1  | 14            | 13    | 25.119 | 19.953 | 6.55    | 6.55  | 0.03273                             | 0.02600 | 0.05873 | 1                     |
| 5200                |             | 14.26           | 13.36 | 14±1          | 13±1  | 15            | 14    | 31.623 | 25.119 | 6.55    | 6.55  | 0.04121                             | 0.03273 | 0.07394 | 1                     |
| 5240                |             | 13.06           | 12.03 | 13±1          | 12±1  | 14            | 13    | 25.119 | 19.953 | 6.55    | 6.55  | 0.03273                             | 0.02600 | 0.05873 | 1                     |
| 5190                | 11n (HT40)  | 13.41           | 12.08 | 13±1          | 12±1  | 14            | 13    | 25.119 | 19.953 | 6.55    | 6.55  | 0.03273                             | 0.02600 | 0.05873 | 1                     |
| 5230                |             | 13.32           | 12.02 | 13±1          | 12±1  | 14            | 13    | 25.119 | 19.953 | 6.55    | 6.55  | 0.03273                             | 0.02600 | 0.05873 | 1                     |
| 5180                | 11ac (HT20) | 12.12           | 13.64 | 12±1          | 13±1  | 13            | 14    | 19.953 | 25.119 | 6.55    | 6.55  | 0.02600                             | 0.03273 | 0.05873 | 1                     |
| 5200                |             | 12.78           | 11.45 | 12±1          | 11±1  | 13            | 12    | 19.953 | 15.849 | 6.55    | 6.55  | 0.02600                             | 0.02065 | 0.04665 | 1                     |
| 5240                |             | 12.31           | 11.18 | 12±1          | 11±1  | 13            | 12    | 19.953 | 15.849 | 6.55    | 6.55  | 0.02600                             | 0.02065 | 0.04665 | 1                     |
| 5190                | 11ac (HT40) | 12.48           | 11.34 | 12±1          | 11±1  | 13            | 12    | 19.953 | 15.849 | 6.55    | 6.55  | 0.02600                             | 0.02065 | 0.04665 | 1                     |
| 5230                |             | 8.7             | 10.78 | 8±1           | 10±1  | 9             | 11    | 7.943  | 12.589 | 6.55    | 6.55  | 0.01035                             | 0.01640 | 0.02676 | 1                     |
| 5210                | 11ac (HT80) | 11.95           | 11.96 | 11±1          | 11±1  | 12            | 12    | 15.849 | 15.849 | 6.55    | 6.55  | 0.02065                             | 0.02065 | 0.04130 | 1                     |

ΣPower density (Sum )=Power density (ANTA )/Power density Limit+Power density (ANTB )/Power density Limit

### Conclusion:

For the max result:  $0.07394 \leq 1.0$  test exclusion threshold, No SAR is required.

## Statement

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\*\*\*\*\* END OF REPORT \*\*\*\*\*