



FCC RADIO EXPOSURE TEST REPORT

FCC ID : Z8H89FT0016

Equipment : 5GHz Force 300-16

Brand Name : Cambium Networks

Model Name : 5GHz Force 300-16

Applicant : Cambium Networks Inc.
3800 Golf Road, Suite 360 Rolling Meadows, IL
60008, USA

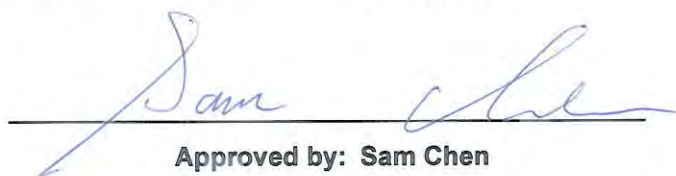
Manufacturer : Cambium Networks Inc.
3800 Golf Road, Suite 360 Rolling Meadows, IL
60008, USA

Standard : 47 CFR Part 2.1091

The product was received on Mar. 15, 2018, and testing was started from Mar. 15, 2018 and completed on May 08, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in 47 CFR Part 2.1091 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.



Approved by: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



Table of Contents

| | |
|---|----------|
| History of this test report..... | 3 |
| Summary of Test Result..... | 4 |
| 1 General Description | 5 |
| 1.1 EUT General Information | 5 |
| 1.2 Table for Class III Change..... | 5 |
| 1.3 Testing Location | 5 |
| 2 Maximum Permissible Exposure | 6 |
| 2.1 Limit of Maximum Permissible Exposure | 6 |
| 2.2 MPE Calculation Method..... | 6 |
| 2.3 MPE Measurement Method..... | 7 |
| 2.4 Measurement Result and Limit..... | 8 |
| 2.5 List of Measuring Equipments | 13 |
| 2.6 Calculated Result and Limit..... | 14 |
| Appendix A. Test Photos | |
| Photographs of EUT v01 | |



Summary of Test Result

| Report Clause | Ref Std. Clause | Test Items | Result (PASS/FAIL) | Remark |
|---------------|-----------------|---------------------|--------------------|--------|
| 2 | - | Exposure evaluation | PASS | - |

Note: From Sporton Project No.: 7O2407-03

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Viola Huang



1 General Description

1.1 EUT General Information

| RF General Information | | | |
|------------------------|--|--|---|
| Evaluation Mode | Frequency Range (MHz) | Operating Frequency (MHz) | Modulation Type |
| 2.4GHz WLAN | 2400-2483.5 | 2412-2462 | 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) |
| 5GHz WLAN | 5150-5250 5250-5350 5470-5725 5725-5850 | 5180-5240 5260-5320 5500-5720 5745-5825 | 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) |

1.2 Table for Class III Change

This product is an extension of original one reported under Sporton project number: FA7O2407-04

Below is the table for the change of the product with respect to the original one.

| Modifications | Performance Checking |
|--|------------------------------|
| 1. Adding Band 2 and Band 3 (5250~5350 MHz, 5470~5725 MHz) in 20/80MHz. | Maximum Permissible Exposure |

Note: RF Exposure Evaluation of 5GHz Band 1, 4 and 2.4GHz Band are based on original test report.

1.3 Testing Location

| Testing Location | | |
|-------------------------------------|--------|---|
| <input type="checkbox"/> | HWA YA | ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL : 886-3-327-3456 FAX : 886-3-327-0973 |
| <input checked="" type="checkbox"/> | JHUBEI | ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085 |

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086B with Industry Canada.



2 Maximum Permissible Exposure

2.1 Limit of Maximum Permissible Exposure

(A) Limits for Occupational / Controlled Exposure

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/ cm ²) | Averaging Time E ² , H ² or S (minutes) |
|-----------------------|-----------------------------------|-----------------------------------|--|--|
| 0.3-3.0 | 614 | 1.63 | (100)* | 6 |
| 3.0-30 | 1842 / f | 4.89 / f | (900 / f)* | 6 |
| 30-300 | 61.4 | 0.163 | 1.0 | 6 |
| 300-1500 | | | F/300 | 6 |
| 1500-100,000 | | | 5 | 6 |

(B) Limits for General Population / Uncontrolled Exposure

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/ cm ²) | Averaging Time E ² , H ² or S (minutes) |
|-----------------------|-----------------------------------|-----------------------------------|--|--|
| 0.3-1.34 | 614 | 1.63 | (100)* | 30 |
| 1.34-30 | 824/f | 2.19/f | (180/f)* | 30 |
| 30-300 | 27.5 | 0.073 | 0.2 | 30 |
| 300-1500 | | | F/1500 | 30 |
| 1500-100,000 | | | 1.0 | 30 |

Note: f = frequency in MHz ; *Plane-wave equivalent power density

2.2 MPE Calculation Method

The MPE was calculated at 73 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = RF output power (W)

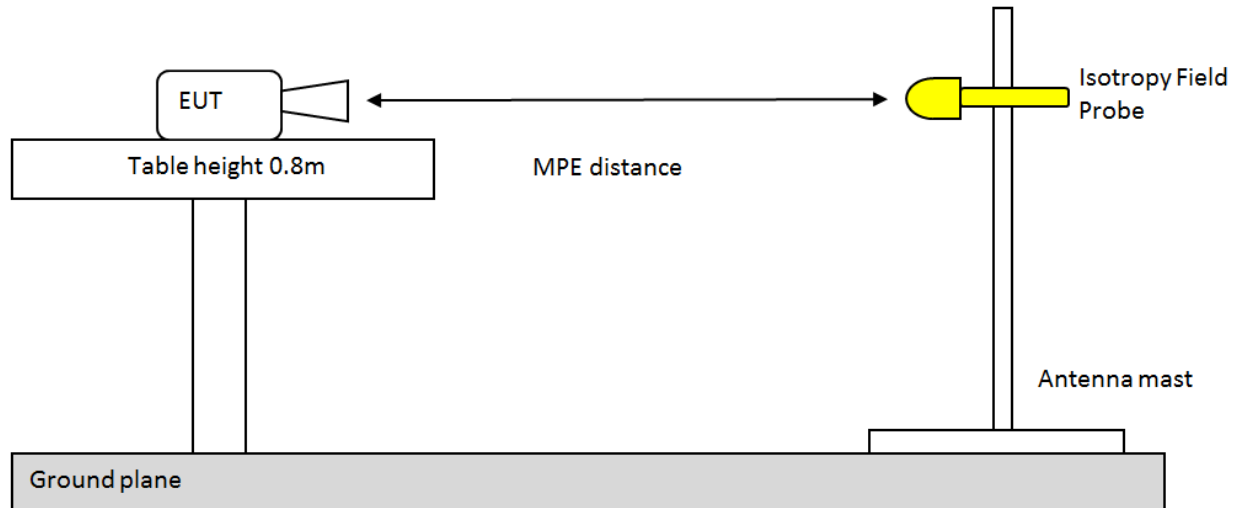
G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$

2.3 MPE Measurement Method



Horizontal Plane

1. Align Probe with antenna axis. Probe should same height as Antenna axis.
And take power density measurement with Probe.
 2. Rotate table 45 degree (30 degree if MPE distance is more 60cm).
Take power density measurement again.
 3. Repeat step 2, until complete 360 degree.
- Each measured power density should be less than MPE limit.

Vertical Plane

1. Align Probe with antenna axis. Move probe to height of 10cm above ground plane.
Take power density measurement.
Then repeat measure with 10cm increment of probe height until 180 cm.
 2. Rotate table 45 degree (30 degree if MPE distance is more 60cm).
Repeat the power density measure from 10cm to 180cm
 3. Repeat step 2, until complete 360 degree.
- Spatial Average of same vertical plane should be less then MPE limit.

For Probe or measurement equipment requirement, please see FCC OET Bulletin 65 97-01

Note:

Either peak or spatially averaged results may be applied to determine compliance; and with respect to plane-wave equivalent power density limits when ≥ 300 MHz, and electric and magnetic field strength limits when < 300 MHz.



2.4 Measurement Result and Limit

For 5.8G;D1D (Ant.2)

| Test Mode | VHT20 | Test Frequency (MHz) | 5745 | MPE Distance (cm) | 73 | Power Setting | 29 | |
|---------------------------------|---------------------|----------------------------|---------------------|-------------------------|---------------------|---------------------|---------------------|---------------------|
| EUT Plane | Horizontal | | | | | | | |
| Probe height (cm) \ Deg | 0~45° | 45~90° | 90~135° | 135~180° | 180~225° | 225~270° | 270~315° | 315~360° |
| | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) |
| 187 | 0.87485 | 0.03444 | 0.00453 | 0.00109 | 0.00155 | 0.00464 | 0.02667 | 0.86476 |
| Max PSD (mW/cm²) | 0.87485 | | | | | | | |
| MPE Limit (mW/cm²) | 1 | | | | | | | |
| EUT Plane | Vertical | | | | | | | |
| Probe height (cm) \ Deg | 0~45° | 45~90° | 90~135° | 135~180° | 180~225° | 225~270° | 270~315° | 315~360° |
| | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) |
| 10 | 0.00462 | 0.00561 | 0.00075 | 0.00194 | 0.00286 | 0.00127 | 0.00161 | 0.04389 |
| 20 | 0.04849 | 0.00641 | 0.00095 | 0.00199 | 0.00171 | 0.00076 | 0.00214 | 0.04744 |
| 30 | 0.00984 | 0.00564 | 0.00113 | 0.00231 | 0.00231 | 0.00142 | 0.00286 | 0.01051 |
| 40 | 0.03951 | 0.00369 | 0.00136 | 0.00226 | 0.00194 | 0.00105 | 0.00198 | 0.03902 |
| 50 | 0.08636 | 0.00491 | 0.03410 | 0.00124 | 0.00132 | 0.00331 | 0.00493 | 0.06441 |
| 60 | 0.55698 | 0.00569 | 0.00495 | 0.00146 | 0.00145 | 0.00712 | 0.00948 | 0.46701 |
| 70 | 0.80726 | 0.01024 | 0.00791 | 0.00144 | 0.00109 | 0.00477 | 0.01542 | 0.68751 |
| 80 | 0.81898 | 0.01114 | 0.00768 | 0.00145 | 0.00128 | 0.00671 | 0.01643 | 0.77271 |
| 90 | 0.42573 | 0.00645 | 0.00338 | 0.00171 | 0.00131 | 0.00392 | 0.01044 | 0.34165 |
| 100 | 0.14579 | 0.00382 | 0.00381 | 0.00131 | 0.00128 | 0.00231 | 0.00475 | 0.12984 |
| 110 | 0.01840 | 0.00184 | 0.00205 | 0.00137 | 0.00139 | 0.00902 | 0.00255 | 0.01849 |
| 120 | 0.00252 | 0.00201 | 0.00072 | 0.00185 | 0.00211 | 0.00055 | 0.00117 | 0.00288 |
| 130 | 0.00379 | 0.00165 | 0.00067 | 0.00195 | 0.00206 | 0.00039 | 0.00108 | 0.00261 |
| 140 | 0.01388 | 0.00237 | 0.00084 | 0.00138 | 0.00135 | 0.00044 | 0.00107 | 0.01269 |
| 150 | 0.01403 | 0.00214 | 0.00072 | 0.00141 | 0.00143 | 0.00054 | 0.00081 | 0.01434 |
| 160 | 0.02043 | 0.00210 | 0.00210 | 0.00097 | 0.00082 | 0.00056 | 0.00110 | 0.01936 |
| 170 | 0.01349 | 0.00169 | 0.00059 | 0.00087 | 0.00081 | 0.00076 | 0.00910 | 0.01304 |
| 180 | 0.01434 | 0.00099 | 0.00099 | 0.00084 | 0.00065 | 0.00500 | 0.00096 | 0.01296 |
| Spatial Average (mW/cm²) | 0.169135556 | 0.004355 | 0.00415 | 0.001541667 | 0.001509444 | 0.002772222 | 0.004882222 | 0.15002 |
| Max Spatial Average (mW/cm²) | 0.16914 | | | | | | | |
| MPE Limit (mW/cm²) | 1 | | | | | | | |

**FCC RADIO EXPOSURE TEST REPORT**

Report No. : FA7O2407-06

| | | | | | | | | |
|---------------------------------|---------------------|----------------------------|---------------------|-------------------------|---------------------|---------------------|---------------------|---------------------|
| Test Mode | VHT20 | Test Frequency (MHz) | 5785 | MPE Distance (cm) | 73 | Power Setting | 29 | |
| EUT Plane | Horizontal | | | | | | | |
| Probe height (cm) \ Deg | 0~45° | 45~90° | 90~135° | 135~180° | 180~225° | 225~270° | 270~315° | 315~360° |
| | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) |
| 186 | 0.96695 | 0.02464 | 0.00351 | 0.00122 | 0.00109 | 0.00567 | 0.02826 | 0.96629 |
| Max PSD (mW/cm²) | 0.96695 | | | | | | | |
| MPE Limit (mW/cm²) | 1 | | | | | | | |
| EUT Plane | Vertical | | | | | | | |
| Probe height (cm) \ Deg | 0~45° | 45~90° | 90~135° | 135~180° | 180~225° | 225~270° | 270~315° | 315~360° |
| | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) |
| 10 | 0.01918 | 0.00436 | 0.00059 | 0.00201 | 0.00259 | 0.00169 | 0.00288 | 0.02113 |
| 20 | 0.02509 | 0.00959 | 0.00092 | 0.00248 | 0.00258 | 0.00134 | 0.00367 | 0.02594 |
| 30 | 0.01262 | 0.00751 | 0.00106 | 0.00186 | 0.00118 | 0.00177 | 0.00425 | 0.01314 |
| 40 | 0.08391 | 0.00291 | 0.00171 | 0.00302 | 0.00302 | 0.0013 | 0.00232 | 0.07663 |
| 50 | 0.10151 | 0.00496 | 0.00412 | 0.00164 | 0.00174 | 0.00655 | 0.00744 | 0.10589 |
| 60 | 0.59442 | 0.00754 | 0.00559 | 0.0016 | 0.00141 | 0.00747 | 0.01207 | 0.6531 |
| 70 | 0.89654 | 0.01504 | 0.01038 | 0.00184 | 0.00858 | 0.00858 | 0.01981 | 0.86047 |
| 80 | 0.8244 | 0.01514 | 0.01021 | 0.0018 | 0.00186 | 0.00742 | 0.01963 | 0.80262 |
| 90 | 0.36411 | 0.00587 | 0.00375 | 0.00171 | 0.00128 | 0.00167 | 0.01191 | 0.35489 |
| 100 | 0.18441 | 0.00561 | 0.00572 | 0.00147 | 0.00102 | 0.00278 | 0.00762 | 0.1249 |
| 110 | 0.02404 | 0.00235 | 0.00215 | 0.00134 | 0.00139 | 0.00143 | 0.00294 | 0.02431 |
| 120 | 0.00234 | 0.00192 | 0.00101 | 0.00193 | 0.00183 | 0.00053 | 0.00101 | 0.00319 |
| 130 | 0.00426 | 0.00196 | 0.00068 | 0.00252 | 0.00249 | 0.00247 | 0.00138 | 0.00442 |
| 140 | 0.02107 | 0.00268 | 0.00054 | 0.00162 | 0.00084 | 0.0042 | 0.00134 | 0.02012 |
| 150 | 0.02078 | 0.00124 | 0.00131 | 0.00169 | 0.00168 | 0.00063 | 0.00115 | 0.02084 |
| 160 | 0.02649 | 0.00303 | 0.00067 | 0.00129 | 0.00137 | 0.00082 | 0.00319 | 0.002701 |
| 170 | 0.01441 | 0.00241 | 0.00046 | 0.00059 | 0.00063 | 0.00052 | 0.00239 | 0.01537 |
| 180 | 0.01658 | 0.00178 | 0.00107 | 0.00119 | 0.00072 | 0.00064 | 0.00141 | 0.01738 |
| Spatial Average (mW/cm²) | 0.179786667 | 0.005327778 | 0.002885556 | 0.001755556 | 0.002011667 | 0.002878333 | 0.005911667 | 0.1748355 |
| Max Spatial Average (mW/cm²) | 0.17979 | | | | | | | |
| MPE Limit (mW/cm²) | 1 | | | | | | | |



| | | | | | | | | |
|---------------------------------|---------------------|----------------------------|---------------------|-------------------------|---------------------|---------------------|---------------------|---------------------|
| Test Mode | VHT20 | Test Frequency (MHz) | 5825 | MPE Distance (cm) | 73 | Power Setting | 29 | |
| EUT Plane | Horizontal | | | | | | | |
| Probe height (cm) \ Deg | 0~45° | 45~90° | 90~135° | 135~180° | 180~225° | 225~270° | 270~315° | 315~360° |
| | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) |
| 186 | 0.79374 | 0.02509 | 0.00331 | 0.00067 | 0.00101 | 0.00406 | 0.02476 | 0.76046 |
| Max PSD (mW/cm²) | 0.79374 | | | | | | | |
| MPE Limit (mW/cm²) | 1 | | | | | | | |
| EUT Plane | Vertical | | | | | | | |
| Probe height (cm) \ Deg | 0~45° | 45~90° | 90~135° | 135~180° | 180~225° | 225~270° | 270~315° | 315~360° |
| | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) |
| 10 | 0.03594 | 0.00856 | 0.00093 | 0.00244 | 0.00183 | 0.00178 | 0.00364 | 0.03681 |
| 20 | 0.01714 | 0.00181 | 0.00049 | 0.00225 | 0.00162 | 0.00132 | 0.00129 | 0.01809 |
| 30 | 0.01132 | 0.00341 | 0.00171 | 0.00209 | 0.00171 | 0.00221 | 0.00161 | 0.01033 |
| 40 | 0.00675 | 0.00258 | 0.00174 | 0.00127 | 0.00122 | 0.00217 | 0.00231 | 0.00907 |
| 50 | 0.12989 | 0.00393 | 0.00178 | 0.00282 | 0.00228 | 0.00339 | 0.00431 | 0.12068 |
| 60 | 0.16093 | 0.00674 | 0.00361 | 0.00144 | 0.00184 | 0.00561 | 0.01119 | 0.19636 |
| 70 | 0.41557 | 0.00804 | 0.00445 | 0.00159 | 0.00138 | 0.00486 | 0.01515 | 0.42427 |
| 80 | 0.53485 | 0.00799 | 0.00364 | 0.00199 | 0.00187 | 0.00461 | 0.01606 | 0.54852 |
| 90 | 0.44312 | 0.00873 | 0.00579 | 0.00129 | 0.00102 | 0.00423 | 0.01402 | 0.46448 |
| 100 | 0.19341 | 0.00389 | 0.00171 | 0.00099 | 0.00098 | 0.00168 | 0.00842 | 0.25251 |
| 110 | 0.10587 | 0.00212 | 0.00133 | 0.00124 | 0.00113 | 0.00218 | 0.00613 | 0.12041 |
| 120 | 0.02659 | 0.00192 | 0.00058 | 0.00132 | 0.00133 | 0.00094 | 0.00248 | 0.02966 |
| 130 | 0.00545 | 0.00195 | 0.00103 | 0.00138 | 0.00114 | 0.00048 | 0.00121 | 0.00505 |
| 140 | 0.01474 | 0.00191 | 0.00096 | 0.00102 | 0.00081 | 0.00058 | 0.00081 | 0.01448 |
| 150 | 0.01217 | 0.00172 | 0.00104 | 0.00258 | 0.00225 | 0.00049 | 0.00154 | 0.01102 |
| 160 | 0.01867 | 0.00161 | 0.00063 | 0.00076 | 0.00075 | 0.00064 | 0.00083 | 0.01868 |
| 170 | 0.01109 | 0.00251 | 0.00052 | 0.00093 | 0.00089 | 0.00066 | 0.00176 | 0.01178 |
| 180 | 0.02173 | 0.00173 | 0.00109 | 0.00076 | 0.00057 | 0.00063 | 0.00144 | 0.02016 |
| Spatial Average (mW/cm²) | 0.120290556 | 0.003952778 | 0.001834778 | 0.001564444 | 0.001367778 | 0.002136667 | 0.005233333 | 0.128464444 |
| Max Spatial Average (mW/cm²) | 0.12846 | | | | | | | |
| MPE Limit (mW/cm²) | 1 | | | | | | | |



FCC RADIO EXPOSURE TEST REPORT

Report No. : FA7O2407-06

| | | | | | | | | |
|---------------------------------|---------------------|----------------------------|---------------------|-------------------------|---------------------|---------------------|---------------------|---------------------|
| Test Mode | VHT40 | Test Frequency (MHz) | 5755 | MPE Distance (cm) | 73 | Power Setting | 24 | |
| EUT Plane | Horizontal | | | | | | | |
| Probe height (cm) \ Deg | 0~45° | 45~90° | 90~135° | 135~180° | 180~225° | 225~270° | 270~315° | 315~360° |
| | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) |
| 187 | 0.80923 | 0.02113 | 0.00329 | 0.00098 | 0.00073 | 0.00314 | 0.01972 | 0.78329 |
| Max PSD (mW/cm²) | 0.80923 | | | | | | | |
| MPE Limit (mW/cm²) | 1 | | | | | | | |
| EUT Plane | Vertical | | | | | | | |
| Probe height (cm) \ Deg | 0~45° | 45~90° | 90~135° | 135~180° | 180~225° | 225~270° | 270~315° | 315~360° |
| | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) |
| 10 | 0.06044 | 0.00413 | 0.00074 | 0.00156 | 0.00165 | 0.00111 | 0.00281 | 0.06492 |
| 20 | 0.02249 | 0.00404 | 0.00103 | 0.00119 | 0.00064 | 0.00121 | 0.00213 | 0.02178 |
| 30 | 0.00793 | 0.00245 | 0.00076 | 0.00212 | 0.00129 | 0.00152 | 0.00158 | 0.00796 |
| 40 | 0.00525 | 0.00234 | 0.00231 | 0.00122 | 0.00079 | 0.00129 | 0.00192 | 0.00721 |
| 50 | 0.12521 | 0.00341 | 0.00172 | 0.00163 | 0.00094 | 0.00279 | 0.00344 | 0.11015 |
| 60 | 0.20234 | 0.00584 | 0.00404 | 0.00107 | 0.00111 | 0.00398 | 0.00771 | 0.17925 |
| 70 | 0.35205 | 0.00645 | 0.00342 | 0.00122 | 0.00107 | 0.00416 | 0.01075 | 0.31369 |
| 80 | 0.47344 | 0.00684 | 0.00469 | 0.00105 | 0.00098 | 0.00421 | 0.01073 | 0.47987 |
| 90 | 0.52326 | 0.00724 | 0.00452 | 0.00115 | 0.00086 | 0.00531 | 0.01125 | 0.58562 |
| 100 | 0.19991 | 0.00262 | 0.00132 | 0.00084 | 0.00088 | 0.00203 | 0.00701 | 0.17456 |
| 110 | 0.06172 | 0.00139 | 0.00077 | 0.00092 | 0.00092 | 0.00135 | 0.00341 | 0.06286 |
| 120 | 0.01491 | 0.00131 | 0.00061 | 0.00113 | 0.00106 | 0.00051 | 0.00169 | 0.01448 |
| 130 | 0.00369 | 0.00131 | 0.00051 | 0.00087 | 0.00088 | 0.00038 | 0.00094 | 0.00357 |
| 140 | 0.00231 | 0.00116 | 0.00045 | 0.00102 | 0.00116 | 0.00041 | 0.00081 | 0.00242 |
| 150 | 0.00991 | 0.00191 | 0.00046 | 0.00111 | 0.00074 | 0.00033 | 0.00101 | 0.00921 |
| 160 | 0.01219 | 0.00142 | 0.00058 | 0.00064 | 0.00052 | 0.00037 | 0.00065 | 0.01199 |
| 170 | 0.01575 | 0.00193 | 0.00038 | 0.00096 | 0.00067 | 0.00044 | 0.00102 | 0.01661 |
| 180 | 0.00922 | 0.00203 | 0.00042 | 0.00086 | 0.00083 | 0.00067 | 0.00103 | 0.00941 |
| Spatial Average (mW/cm²) | 0.116778889 | 0.003212222 | 0.001596111 | 0.001142222 | 0.000943889 | 0.001781667 | 0.003882778 | 0.115308889 |
| Max Spatial Average (mW/cm²) | 0.11678 | | | | | | | |
| MPE Limit (mW/cm²) | 1 | | | | | | | |



| | | | | | | | | |
|---------------------------------|---------------------|----------------------------|---------------------|-------------------------|---------------------|---------------------|---------------------|---------------------|
| Test Mode | VHT40 | Test Frequency (MHz) | 5795 | MPE Distance (cm) | 73 | Power Setting | 24 | |
| EUT Plane | Horizontal | | | | | | | |
| Probe height (cm) \ Deg | 0~45° | 45~90° | 90~135° | 135~180° | 180~225° | 225~270° | 270~315° | 315~360° |
| | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) |
| 187 | 0.87883 | 0.00201 | 0.00388 | 0.00098 | 0.00134 | 0.01034 | 0.02205 | 0.87351 |
| Max PSD (mW/cm²) | 0.87883 | | | | | | | |
| MPE Limit (mW/cm²) | 1 | | | | | | | |
| EUT Plane | Vertical | | | | | | | |
| Probe height (cm) \ Deg | 0~45° | 45~90° | 90~135° | 135~180° | 180~225° | 225~270° | 270~315° | 315~360° |
| | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) | Max PSD (mW/cm²) |
| 10 | 0.02851 | 0.00539 | 0.00081 | 0.00206 | 0.00259 | 0.00128 | 0.00274 | 0.02881 |
| 20 | 0.01009 | 0.00531 | 0.00112 | 0.00121 | 0.00094 | 0.00147 | 0.00263 | 0.01011 |
| 30 | 0.02068 | 0.00262 | 0.00141 | 0.00285 | 0.00235 | 0.00129 | 0.00179 | 0.02049 |
| 40 | 0.01032 | 0.00252 | 0.00206 | 0.00132 | 0.00116 | 0.00145 | 0.00365 | 0.01068 |
| 50 | 0.18807 | 0.00413 | 0.00150 | 0.00171 | 0.00162 | 0.00311 | 0.00465 | 0.18804 |
| 60 | 0.35002 | 0.00841 | 0.00443 | 0.00136 | 0.00124 | 0.00597 | 0.01274 | 0.30097 |
| 70 | 0.49222 | 0.00703 | 0.00402 | 0.00169 | 0.00186 | 0.00554 | 0.01259 | 0.41012 |
| 80 | 0.54019 | 0.00816 | 0.00444 | 0.00149 | 0.00182 | 0.00426 | 0.01151 | 0.52173 |
| 90 | 0.43811 | 0.00789 | 0.00550 | 0.00091 | 0.00117 | 0.00636 | 0.01136 | 0.42542 |
| 100 | 0.13903 | 0.00236 | 0.00199 | 0.00095 | 0.00092 | 0.00226 | 0.00496 | 0.13399 |
| 110 | 0.03494 | 0.00151 | 0.00062 | 0.00091 | 0.00072 | 0.00142 | 0.00324 | 0.03531 |
| 120 | 0.00835 | 0.00152 | 0.00061 | 0.00124 | 0.00112 | 0.00065 | 0.00125 | 0.00834 |
| 130 | 0.00505 | 0.00145 | 0.00067 | 0.00107 | 0.00105 | 0.00037 | 0.00075 | 0.00476 |
| 140 | 0.00772 | 0.00148 | 0.00046 | 0.00097 | 0.00096 | 0.00042 | 0.00052 | 0.00745 |
| 150 | 0.01452 | 0.00248 | 0.00044 | 0.00129 | 0.00131 | 0.00039 | 0.00126 | 0.01206 |
| 160 | 0.01389 | 0.00215 | 0.00052 | 0.00057 | 0.00054 | 0.00051 | 0.00066 | 0.01396 |
| 170 | 0.01407 | 0.00208 | 0.00047 | 0.00132 | 0.00127 | 0.00049 | 0.00111 | 0.01301 |
| 180 | 0.01075 | 0.00222 | 0.00044 | 0.00064 | 0.00064 | 0.00057 | 0.00081 | 0.01023 |
| Spatial Average (mW/cm²) | 0.129251667 | 0.003817222 | 0.001750556 | 0.001308889 | 0.001293333 | 0.002100556 | 0.004345556 | 0.119748889 |
| Max Spatial Average (mW/cm²) | 0.12925 | | | | | | | |
| MPE Limit (mW/cm²) | 1 | | | | | | | |



2.5 List of Measuring Equipments

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Calibration Due Date | Remark |
|-----------------|--------------|-----------|------------|-----------------|------------------|----------------------|-----------|
| Isotropic Probe | ETS-LINDGREN | HI-6105 | 00130664 | 100kHz-6GHz | Nov. 15, 2017 | Nov. 14, 2018 | 03CH01-CB |

Note: Calibration Interval of instrument listed above is one year.



2.6 Calculated Result and Limit

Exposure Environment: General Population / Uncontrolled Exposure

For Ant. 1

| Mode | DG (dBi) | Power (dBm) | EIRP (dBm) | Tolerance (dB) | Tune-up EIRP (dBm) | Tune-up EIRP (W) | Distance (cm) | S (mW/cm ²) | S Limit (mW/cm ²) |
|----------|----------|-------------|------------|----------------|--------------------|------------------|---------------|-------------------------|-------------------------------|
| 2.4G;D1D | 6.00 | 18.45 | 24.45 | 0.50 | 24.95 | 0.31261 | 73 | 0.00467 | 1.00000 |

For Ant. 2

| Mode | DG (dBi) | Power (dBm) | EIRP (dBm) | Tolerance (dB) | Tune-up EIRP (dBm) | Tune-up EIRP (W) | Distance (cm) | S (mW/cm ²) | S Limit (mW/cm ²) |
|----------|----------|-------------|------------|----------------|--------------------|------------------|---------------|-------------------------|-------------------------------|
| 5.2G;D1D | 16.00 | 13.33 | 29.33 | 0.50 | 29.83 | 0.96161 | 73 | 0.01436 | 1.00000 |
| 5.3G;D1D | 16.00 | 12.88 | 28.88 | 0.50 | 29.38 | 0.86696 | 73 | 0.01295 | 1.00000 |
| 5.6G;D1D | 16.00 | 13.84 | 29.84 | 0.13 | 29.97 | 0.99312 | 73 | 0.01483 | 1.00000 |
| 5.8G;D1D | 16.00 | 29.19 | 45.19 | 0.50 | 45.69 | 37.06807 | 73 | 0.96695 | 1.00000 |

For Ant. 3

| Mode | DG (dBi) | Power (dBm) | EIRP (dBm) | Tolerance (dB) | Tune-up EIRP (dBm) | Tune-up EIRP (W) | Distance (cm) | S (mW/cm ²) | S Limit (mW/cm ²) |
|----------|----------|-------------|------------|----------------|--------------------|------------------|---------------|-------------------------|-------------------------------|
| 5.2G;D1D | 2.00 | 28.31 | 30.31 | 0.50 | 30.81 | 1.20504 | 73 | 0.01799 | 1.00000 |
| 5.3G;D1D | 2.00 | 23.80 | 25.80 | 0.50 | 26.30 | 0.42658 | 73 | 0.00637 | 1.00000 |
| 5.6G;D1D | 2.00 | 23.95 | 25.95 | 0.50 | 26.45 | 0.44157 | 73 | 0.00659 | 1.00000 |
| 5.8G;D1D | 2.00 | 29.19 | 31.19 | 0.50 | 31.69 | 1.47571 | 73 | 0.02204 | 1.00000 |

Simultaneous Transmission Analysis Mode:

WLAN 2.4GHz + WLAN 5GHz_Ant. 2

| Mode | DG (dBi) | Power (dBm) | EIRP (dBm) | Tolerance (dB) | Tune-up EIRP (dBm) | Tune-up EIRP (W) | Distance (cm) | S (mW/cm ²) | S Limit (mW/cm ²) | Ratio (S/Limit) |
|----------|----------|-------------|------------|----------------|--------------------|------------------|---------------|-------------------------|-------------------------------|-----------------|
| 2.4G;D1D | 6.00 | 18.45 | 24.45 | 0.50 | 24.95 | 0.31261 | 73 | 0.00467 | 1.00000 | 0.00467 |
| 5.8G;D1D | 16.00 | 29.19 | 45.19 | 0.50 | 45.69 | 37.06807 | 73 | 0.96695 | 1.00000 | 0.96695 |
| | | | | | | | | | Sum Ratio | 0.97164 |
| | | | | | | | | | Ratio Limit | 1.00000 |

WLAN 2.4GHz + WLAN 5GHz_Ant. 3

| Mode | DG (dBi) | Power (dBm) | EIRP (dBm) | Tolerance (dB) | Tune-up EIRP (dBm) | Tune-up EIRP (W) | Distance (cm) | S (mW/cm ²) | S Limit (mW/cm ²) | Ratio (S/Limit) |
|----------|----------|-------------|------------|----------------|--------------------|------------------|---------------|-------------------------|-------------------------------|-----------------|
| 2.4G;D1D | 6.00 | 18.45 | 24.45 | 0.50 | 24.95 | 0.31261 | 73 | 0.00467 | 1.00000 | 0.00467 |
| 5.8G;D1D | 2.00 | 29.19 | 31.19 | 0.50 | 31.69 | 1.47571 | 73 | 0.02204 | 1.00000 | 0.02204 |
| | | | | | | | | | Sum Ratio | 0.02671 |
| | | | | | | | | | Ratio Limit | 1.00000 |