



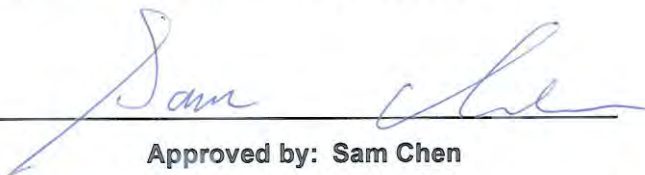
# FCC RADIO EXPOSURE TEST REPORT

**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.)



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**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 <sup>2</sup> )	Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> 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 <sup>2</sup> )	Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> 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:

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

**E** = Electric field (V/m)

**P** = RF output power (W)

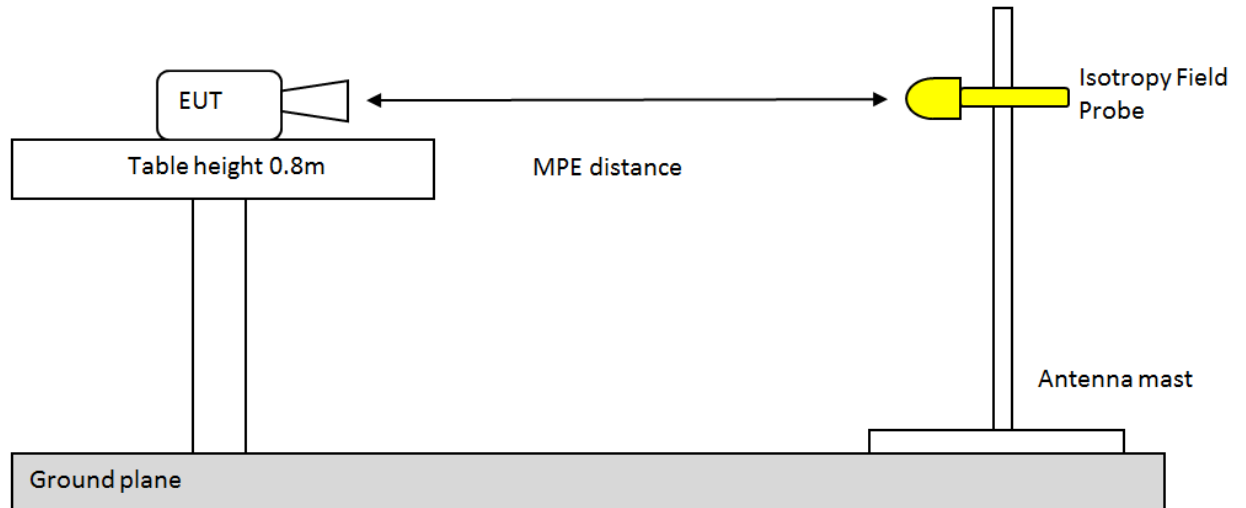
**G** = EUT Antenna numeric gain (numeric)

**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  $\geq 300$  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		
<b>EUT Plane</b>	Horizontal								
<b>Probe height (cm) \ Deg</b>	<b>0~45°</b>	<b>45~90°</b>	<b>90~135°</b>	<b>135~180°</b>	<b>180~225°</b>	<b>225~270°</b>	<b>270~315°</b>	<b>315~360°</b>	
	<b>Max PSD (mW/cm<sup>2</sup>)</b>	<b>Max PSD (mW/cm<sup>2</sup>)</b>	<b>Max PSD (mW/cm<sup>2</sup>)</b>	<b>Max PSD (mW/cm<sup>2</sup>)</b>	<b>Max PSD (mW/cm<sup>2</sup>)</b>	<b>Max PSD (mW/cm<sup>2</sup>)</b>	<b>Max PSD (mW/cm<sup>2</sup>)</b>	<b>Max PSD (mW/cm<sup>2</sup>)</b>	
187	0.87485	0.03444	0.00453	0.00109	0.00155	0.00464	0.02667	0.86476	
<b>Max PSD (mW/cm<sup>2</sup>)</b>	0.87485								
<b>MPE Limit (mW/cm<sup>2</sup>)</b>	1								
<b>EUT Plane</b>	Vertical								
<b>Probe height (cm) \ Deg</b>	<b>0~45°</b>	<b>45~90°</b>	<b>90~135°</b>	<b>135~180°</b>	<b>180~225°</b>	<b>225~270°</b>	<b>270~315°</b>	<b>315~360°</b>	
	<b>Max PSD (mW/cm<sup>2</sup>)</b>	<b>Max PSD (mW/cm<sup>2</sup>)</b>	<b>Max PSD (mW/cm<sup>2</sup>)</b>	<b>Max PSD (mW/cm<sup>2</sup>)</b>	<b>Max PSD (mW/cm<sup>2</sup>)</b>	<b>Max PSD (mW/cm<sup>2</sup>)</b>	<b>Max PSD (mW/cm<sup>2</sup>)</b>	<b>Max PSD (mW/cm<sup>2</sup>)</b>	
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	
<b>Spatial Average (mW/cm<sup>2</sup>)</b>	0.169135556	0.004355	0.00415	0.001541667	0.001509444	0.002772222	0.004882222	0.15002	
<b>Max Spatial Average (mW/cm<sup>2</sup>)</b>	0.16914								
<b>MPE Limit (mW/cm<sup>2</sup>)</b>	1								





<b>Test Mode</b>	VHT20	<b>Test Frequency (MHz)</b>	5785	<b>MPE Distance (cm)</b>	73	<b>Power Setting</b>	29	
<b>EUT Plane</b>	Horizontal							
<b>Probe height (cm) \ Deg</b>	0~45°	45~90°	90~135°	135~180°	180~225°	225~270°	270~315°	315~360°
	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>
186	0.96695	0.02464	0.00351	0.00122	0.00109	0.00567	0.02826	0.96629
<b>Max PSD (mW/cm²)</b>	0.96695							
<b>MPE Limit (mW/cm²)</b>	1							
<b>EUT Plane</b>	Vertical							
<b>Probe height (cm) \ Deg</b>	0~45°	45~90°	90~135°	135~180°	180~225°	225~270°	270~315°	315~360°
	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>
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
<b>Spatial Average (mW/cm²)</b>	0.179786667	0.005327778	0.002885556	0.001755556	0.002011667	0.002878333	0.005911667	0.1748355
<b>Max Spatial Average (mW/cm²)</b>	0.17979							
<b>MPE Limit (mW/cm²)</b>	1							



<b>Test Mode</b>	VHT20	<b>Test Frequency (MHz)</b>	5825	<b>MPE Distance (cm)</b>	73	<b>Power Setting</b>	29		
<b>EUT Plane</b>	Horizontal								
<b>Probe height (cm) \ Deg</b>	0~45°	45~90°	90~135°	135~180°	180~225°	225~270°	270~315°	315~360°	
	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	
186	0.79374	0.02509	0.00331	0.00067	0.00101	0.00406	0.02476	0.76046	
<b>Max PSD (mW/cm²)</b>	0.79374								
<b>MPE Limit (mW/cm²)</b>	1								
<b>EUT Plane</b>	Vertical								
<b>Probe height (cm) \ Deg</b>	0~45°	45~90°	90~135°	135~180°	180~225°	225~270°	270~315°	315~360°	
	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	
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	
<b>Spatial Average (mW/cm²)</b>	0.120290556	0.003952778	0.001834778	0.001564444	0.001367778	0.002136667	0.005233333	0.128464444	
<b>Max Spatial Average (mW/cm²)</b>	0.12846								
<b>MPE Limit (mW/cm²)</b>	1								



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/cm <sup>2</sup> )	Max PSD (mW/cm <sup>2</sup> )	Max PSD (mW/cm <sup>2</sup> )	Max PSD (mW/cm <sup>2</sup> )	Max PSD (mW/cm <sup>2</sup> )	Max PSD (mW/cm <sup>2</sup> )	Max PSD (mW/cm <sup>2</sup> )	Max PSD (mW/cm <sup>2</sup> )
187	0.80923	0.02113	0.00329	0.00098	0.00073	0.00314	0.01972	0.78329
Max PSD (mW/cm <sup>2</sup> )	0.80923							
MPE Limit (mW/cm <sup>2</sup> )	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/cm <sup>2</sup> )	Max PSD (mW/cm <sup>2</sup> )	Max PSD (mW/cm <sup>2</sup> )	Max PSD (mW/cm <sup>2</sup> )	Max PSD (mW/cm <sup>2</sup> )	Max PSD (mW/cm <sup>2</sup> )	Max PSD (mW/cm <sup>2</sup> )	Max PSD (mW/cm <sup>2</sup> )
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/cm <sup>2</sup> )	0.116778889	0.003212222	0.001596111	0.001142222	0.000943889	0.001781667	0.003882778	0.115308889
Max Spatial Average (mW/cm <sup>2</sup> )	0.11678							
MPE Limit (mW/cm <sup>2</sup> )	1							



<b>Test Mode</b>	VHT40	<b>Test Frequency (MHz)</b>	5795	<b>MPE Distance (cm)</b>	73	<b>Power Setting</b>	24		
<b>EUT Plane</b>	Horizontal								
<b>Probe height (cm) \ Deg</b>	0~45°	45~90°	90~135°	135~180°	180~225°	225~270°	270~315°	315~360°	
	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	
187	0.87883	0.00201	0.00388	0.00098	0.00134	0.01034	0.02205	0.87351	
<b>Max PSD (mW/cm²)</b>	0.87883								
<b>MPE Limit (mW/cm²)</b>	1								
<b>EUT Plane</b>	Vertical								
<b>Probe height (cm) \ Deg</b>	0~45°	45~90°	90~135°	135~180°	180~225°	225~270°	270~315°	315~360°	
	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	<b>Max PSD (mW/cm²)</b>	
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	
<b>Spatial Average (mW/cm²)</b>	0.129251667	0.003817222	0.001750556	0.001308889	0.001293333	0.002100556	0.004345556	0.119748889	
<b>Max Spatial Average (mW/cm²)</b>	0.12925								
<b>MPE Limit (mW/cm²)</b>	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 <sup>2</sup> )	S Limit (mW/cm <sup>2</sup> )
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 <sup>2</sup> )	S Limit (mW/cm <sup>2</sup> )
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 <sup>2</sup> )	S Limit (mW/cm <sup>2</sup> )
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 <sup>2</sup> )	S Limit (mW/cm <sup>2</sup> )	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 <sup>2</sup> )	S Limit (mW/cm <sup>2</sup> )	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