Maximum Permissible Exposure

Equipment	**: 11bgn USB module,2T2R**
Brand Name	**: CC&C**
Model No.	**: WM-8192EU**
FCC ID	**: PANWM8192EU**
Standard	**: ANSI/IEEE C95.1**
Applicant	**: CC&C Technologies, Inc.** 8F, No.150, Jian Yi Rd, Zhonghe District, New Taipei City, 235, Taiwan
Manufacturer	**: Kunshan CC&C Technologies,Co.,LTD.** No.9 Building, 3rd Main Street, Kunshan Free Trade Zone, Jiangsu Province,P.R. China

The product sample received on Aug. 18, 2014 and completely tested on Aug. 27, 2014. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI/IEEE C95.1 and shown compliance with the applicable technical standards.

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

Reviewed by:

Kevin Liang / Assistant Manager

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Revision History

Report No.	Version	Issued Date	Description
FA472267	Rev. 01	Sep. 24, 2014	Initial issue of report
FA472267-01	Rev. 01	Mar. 18, 2016	Add Ant. D, E and F.

1 Human Exposure Assessment

1.1 Maximum Permissible Exposure

1.1.1 Limit of Maximum Permissible Exposure

Limits for Occupational / Controlled Exposure				
Frequency Range (MHz)	**Electric Field Strength (E) (V/m)**	**Magnetic Field Strength (H) (A/m)**	**Power Density (S) (mW/ cm²)**	**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	($900 / f^2$)*	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	F/300	6
1500-100,000	-	-	5	6
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/ cm²)**	**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	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	F/1500	30
1500-100,000	-	-	1.0	30
Note 1: f = frequency in MHz ; *Plane-wave equivalent power density Note 2: For the applicable limit, see FCC 1.1310				

1.1.2 MPE Calculation Method

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

S = power density (in appropriate units, e.g. mW/cm^2)
P = power input to the antenna (in appropriate units, e.g., mW)
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 (appropriate units, e.g., cm)

1.1.3 Result of Maximum Permissible Exposure

RF General Information 2400 MHz – 2483.5 MHz					
Frequency Range (MHz)	**IEEE Std. 802.11 Protocol**	**Ch. Frequency (MHz)**	**Channel Number**	**Number of Transmit Chains (N_{TX})**	**RF Output Power (dBm)**
2400-2483.5	b	2412-2462	1-11 [11]	1	17.45
2400-2483.5	g	2412-2462	1-11 [11]	1	15.26
2400-2483.5	n (HT20)	2412-2462	1-11 [11]	2	13.49
2400-2483.5	n (HT40)	2422-2452	3-9 [7]	2	12.92
Note 1: RF output power specifies that Maximum Conducted (Average) Output Power.					

Worst Maximum RF Output Power Result					
Exposure Environment		General Population / Uncontrolled Exposure			
Separation Distance (cm)		20			
Condition		**RF Output Power (dBm)**			
Modulation Mode	**N_{TX}**	**RF Output Power (dBm)**	**Ant. (dBi)**	**EIRP Power**	**PD (S) (mW/cm²)**
11b	1	17.45	3.76	21.21	0.02629
Maximum Permissible Exposure Limit (mW/cm²)					1
Note 1: N_{TX} = Number of Transmit Chains					