

RF EXPOSURE REPORT

REPORT NO.: SA140804E03

MODEL NO.: AW-BT715C

FCC ID: TLZ-BT715C

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TESTED: Aug. 26, 2014

ISSUED: Sep. 26, 2014

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RELEASE CONTROL RECORD

ISSUE NO.	NO. REASON FOR CHANGE	
SA140804E03	Original release	Sep. 26, 2014

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1. CERTIFICATION

PRODUCT: Bluetooth Module

BRAND NAME: AzureWave

MODEL NO.: AW-BT715C

TEST SAMPLE: **ENGINEERING SAMPLE**

APPLICANT: AzureWave Technologies, Inc.

TESTED: Aug. 26, 2014

STANDARDS: FCC Part 2 (Section 2.1091)

KDB 447498 D03

IEEE C95.1

The above equipment (Model: AW-BT715C) has been tested by Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : _____, DATE: Sep. 26, 2014 (Claire Kuan, Specialist)

APPROVED BY : _ , **DATE**: Sep. 26, 2014

(May Chen, Manager)



2. EVALUATION RESULT

2.1 SAR TEST EXCLUSION THRESHOLDS

Following FCC KDB 447498 D03 "General SAR test exclusion guidance"

The corresponding SAR Exclusion Threshold condition, listed below:

- 1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
 - [(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] $\cdot [\sqrt{f(GHz)}] \le 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR where
 - > f(GHz) is the RF channel transmit frequency in GHz
 - Power and distance are rounded to the nearest mW and mm before calculation
 - The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

- 2) At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following:
 - a) [Threshold at 50 mm in step 1) + (test separation distance 50 mm)·(f(MHz)/150)] mW, at 100MHz to 1500 MHz
 - b) [Threshold at 50 mm in step 1) + (test separation distance 50 mm)·10] mW at > 1500 MHz and ≤ 6 GHz
- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
 - a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by [1 + log(100/f(MHz))] for test separation distances > 50 mm and < 200 mm.
 - b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$ for test separation distances \leq 50 mm.
 - c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.



3. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Ant. No.	Vender	Model No.	Antenna Type	Antenna Connector	Cable Loss (dB)	Net Gain (dBi)	Cable Length (mm)	Frequency range (GHz to GHz)
1	Yageo	ANT9520LL06R2400A	Chip	RP-SMA	-	2.85	-	2.4~2.5
2	Yageo	ANT1204F001R2400A	Chip	I-PEX	0.4	1.27	65	2.4~2.5
3	Yageo	ANT8010LL04R2400A	Chip	RP-SMA	-	5.46	-	2.4~2.5
4	Taoglas	FXP74.07.0100A	PIFA	I-PEX	0.5	4	100	2.4~2.5
5	MAG LAYERS	MSA-4008-25GC1-A1	PIFA	I-PEX	0.7	4	150	2.4~2.5
6	Taoglas	FXP73.07.0100A	PCB	I-PEX	0.5	2.5	100	2.4~2.5
7	Yageo	ANTX100P001B24003	PCB	I-PEX	0.5	4.4	100	2.4~2.5
8	MAG LAYERS	FPA-4605-2G4C1-A18	PCB	I-PEX	0.8	2.75	170	2.4~2.5
9	Taoglas	GW11.A153	Dipole	RP-SMA	-	2.3	-	2.4~2.5
10	Taoglas	FXP830.24.0100B	Dipole	I-PEX	0.5	1.8	100	2.4~2.5
11	MAG LAYERS	EDA-1713-2G4C1-B16	Dipole	I-PEX	0.5	5	100	2.4~2.5



Maximum measured transmitter power:

BT-EDR mode

Frequency (GHz)	Max. Power (mW)	Min. test separation distance (mm)	SAR test exclusion calculation value	1-g SAR test exclusion thresholds	Result
2.402 ~ 2.480	3.864	5	1.197	3	Pass

NOTE: 1. Calculate SAR test exclusion thresholds from condition "1" formulas.

BT-LE mode

Frequency (GHz)	, , , , , , , , , , , , , , , , , , ,		SAR test exclusion calculation value	1-g SAR test exclusion thresholds	Result
2.402 ~ 2.480	2.173	5	0.673	3	Pass

NOTE: 1. Calculate SAR test exclusion thresholds from condition "1" formulas.

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