RF Exposure Evaluation Report

Product Name	ROG Throne Qi
Model No.	ROG Throne Qi
FCC ID.	BJM-ROGTHRONEQI

Applicant	Tatung Company
Address	22 Chungshan N Road Sec 3 , Taipei 10451, Taiwan

Date of Receipt	Mar. 27, 2019
Date of Declaration	May. 29, 2019
Report No.	1930448R-RFUSP02V00

Issued Date: May. 29, 2019
Report No.: 1930448R-RFUSP02V00

Product Name	ROG Throne Qi
Applicant	Tatung Company
Address	22 Chungshan N Road Sec 3 , Taipei 10451, Taiwan
Manufacturer	Tatung Company
Model No.	ROG Throne Qi
FCC ID.	BJM-ROGTHRONEQI
EUT Rated Voltage	AC 100-240V, 50/60Hz
EUT Test Voltage	AC 110V, 60Hz
Trade Name	ASUS
Applicable Standard	FCC 47 CFR 1.1310 KDB 680106 D01
Test Result	Complied

Documented By :

(Adm. Specialist / Vita Wang)

Tested By :

(Engineer / Anson lu)

Approved By :

(Director / Vincent Lin)

1. RF Exposure Evaluation

1.1. Test Equipment

Equipment		Manufacturer	Model No./Serial No.	Last Cal.
X	EM Field Meter	ENAC	SMP2 / WP400-3	Apr., 2018

Note:

Test Mode	Mode 1: DC 5V Mode 2: DC 9V

1.2. Limits

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^2)	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
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	6
300-1500	--	--	F/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/F	2.19/F	*($180/F^2$)	30
300-1500	27.5	0.073	0.2	30
300-1500	--	--	F/1500	30
1500-100,000	--	--	1	30

Note:

1. RF Exposure evaluation should be conducted assuming a separation distance of 10 cm
2. The EUT is including four models for different marketing requirement.

1.3. Test Procedure

The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils per the FCC 's request. (reference KDB 680106 D01 RF Exposure Wireless Charging Apps v03)

The temperature and related humidity: 18℃and 62％ RH.

1.4. Test Result of RF Exposure Evaluation for WPT

Test Mode	Mode 1: DC 5V
Items to be covered	Answer from applicant
Power transfer frequency is less than 1 MHz.	Operation frequency range is 127.4~128kHz.
Output power from each primary coil is less than or equal to 15 watts.	Output Power equal to 10W.
The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.	Yes, allow coupling only between individual pairs of coils.
Client device is placed directly in contact with the transmitter.	Yes, meet the requirements.
Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).	Yes, meet the requirements.
The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.	*Electric Field Strength (V/m) @15cm = 0.830 V/m (< 307 V/m) MPE Limit (614 V/m) *50% =307 V/m *Magnetic Field Strength (A/m) @15cm =0.130 A/m (< 0.815 A/m) MPE Limit (1.63 A/m) *50%= 0.815 A/m

Test Mode	Mode 2: DC 9V
Items to be covered	Answer from applicant
Power transfer frequency is less than 1 MHz.	Operation frequency range is 127.4~128kHz.
Output power from each primary coil is less than or equal to 15 watts.	Output Power equal to 10W.
The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.	Yes, allow coupling only between individual pairs of coils.
Client device is placed directly in contact with the transmitter.	Yes, meet the requirements.
Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).	Yes, meet the requirements.
The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.	*Electric Field Strength (V/m) @15cm = 0.830 V/m (< 307 V/m) MPE Limit (614 V/m) *50% =307 V/m *Magnetic Field Strength (A/m) @15cm =0.130 A/m (< 0.815 A/m) MPE Limit (1.63 A/m) *50%= 0.815 A/m

Product : ROG Throne Qi
Test Item : RF Exposure Evaluation
Test Site : No.7 Chamber
Test Mode : Mode 1: DC 5V
Test Date : 2019/05/27

E-Field Emissions

Test Position	Frequency (MHz)	Measurement Level @15cm (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Side 1	0.12776	0.460	614.0	307.0	PASS
Side 2	0.12776	0.830	614.0	307.0	PASS
Side 3	0.12776	0.710	614.0	307.0	PASS
Side 4	0.12776	0.480	614.0	307.0	PASS

Test Position	Frequency (MHz)	Measurement Level @20cm (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Top	0.12776	0.790	614.0	307.0	PASS
Bottom	0.12776	0.490	614.0	307.0	PASS

H-Field Emissions

Test Position	Frequency (MHz)	Measurement Level @15cm (A/m)	Limit (A/m)	50% Limit (A/m)	Result
Side 1	0.12776	0.100	1.63	0.815	PASS
Side 2	0.12776	0.130	1.63	0.815	PASS
Side 3	0.12776	0.110	1.63	0.815	PASS
Side 4	0.12776	0.060	1.63	0.815	PASS

Test Position	Frequency (MHz)	Measurement Level @20cm (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Top	0.12776	0.110	1.63	0.815	PASS
Bottom	0.12776	0.050	1.63	0.815	PASS

Product : ROG Throne Qi
Test Item : RF Exposure Evaluation
Test Site : No.7 Chamber
Test Mode : Mode 2: DC 9V
Test Date : 2019/05/28

E-Field Emissions

Test Position	Frequency (MHz)	Measurement Level @15cm (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Side 1	0.12776	0.470	614.0	307.0	PASS
Side 2	0.12776	0.830	614.0	307.0	PASS
Side 3	0.12776	0.710	614.0	307.0	PASS
Side 4	0.12776	0.490	614.0	307.0	PASS

Test Position	Frequency (MHz)	Measurement Level @20cm (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Top	0.12776	0.790	614.0	307.0	PASS
Bottom	0.12776	0.490	614.0	307.0	PASS

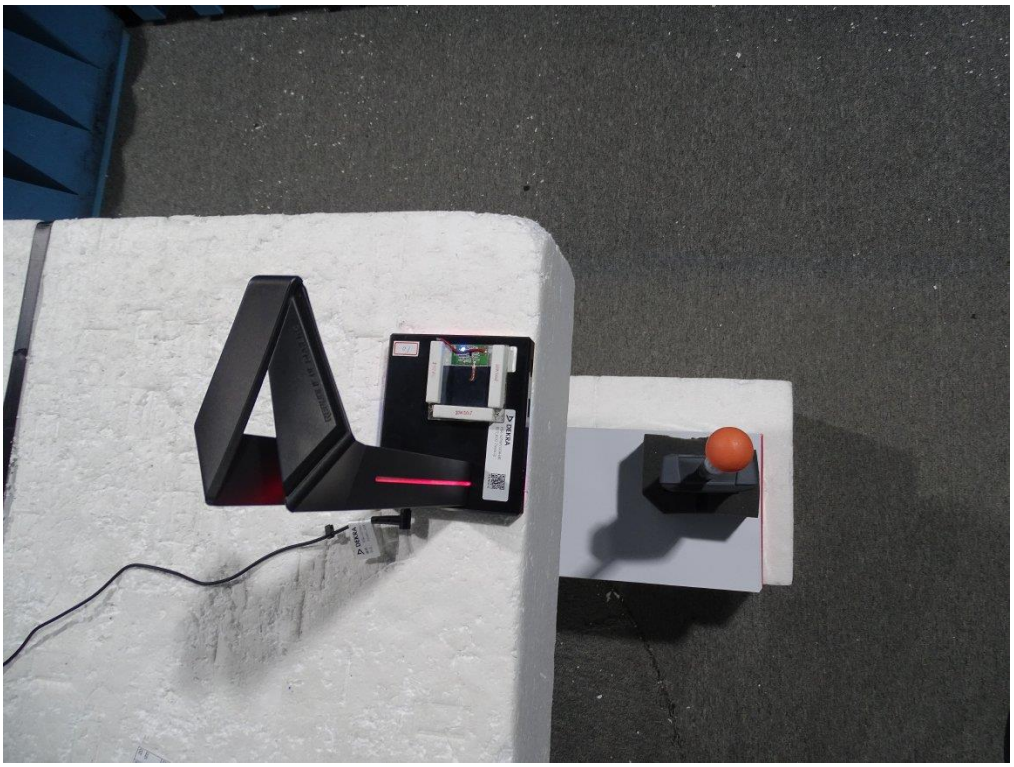
H-Field Emissions

Test Position	Frequency (MHz)	Measurement Level @15cm (A/m)	Limit (A/m)	50% Limit (A/m)	Result
Side 1	0.12776	0.110	1.63	0.815	PASS
Side 2	0.12776	0.130	1.63	0.815	PASS
Side 3	0.12776	0.110	1.63	0.815	PASS
Side 4	0.12776	0.070	1.63	0.815	PASS

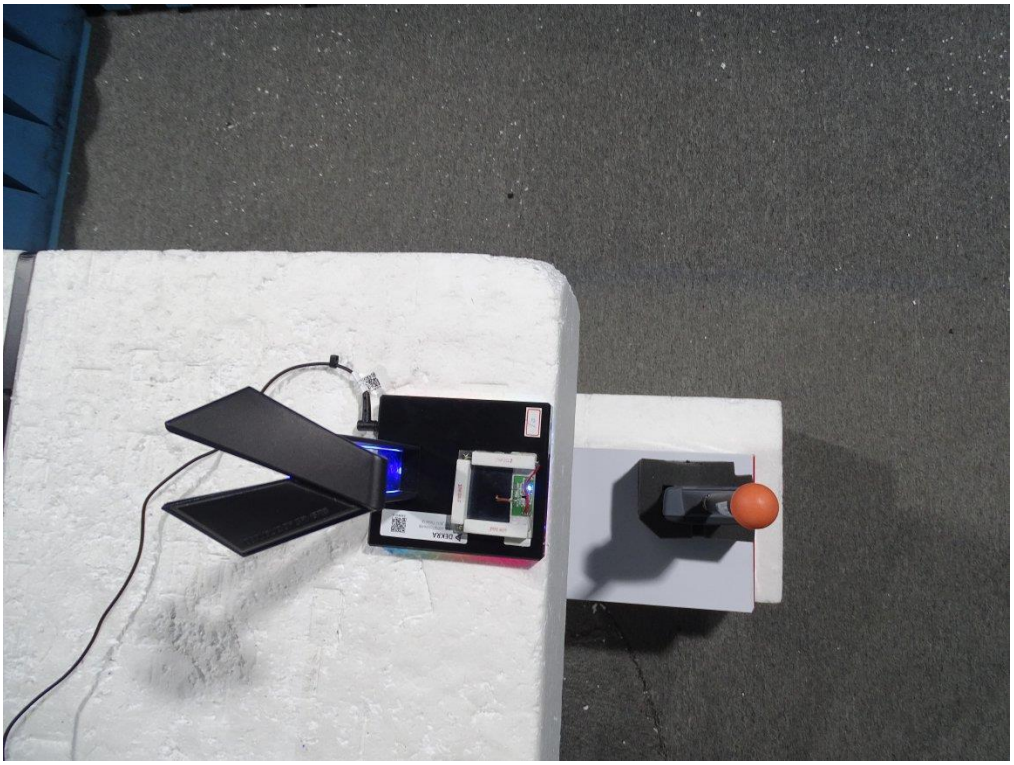
Test Position	Frequency (MHz)	Measurement Level @20cm (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Top	0.12776	0.110	1.63	0.815	PASS
Bottom	0.12776	0.050	1.63	0.815	PASS

1.5. EUT Test Setup Photographs

Side 1

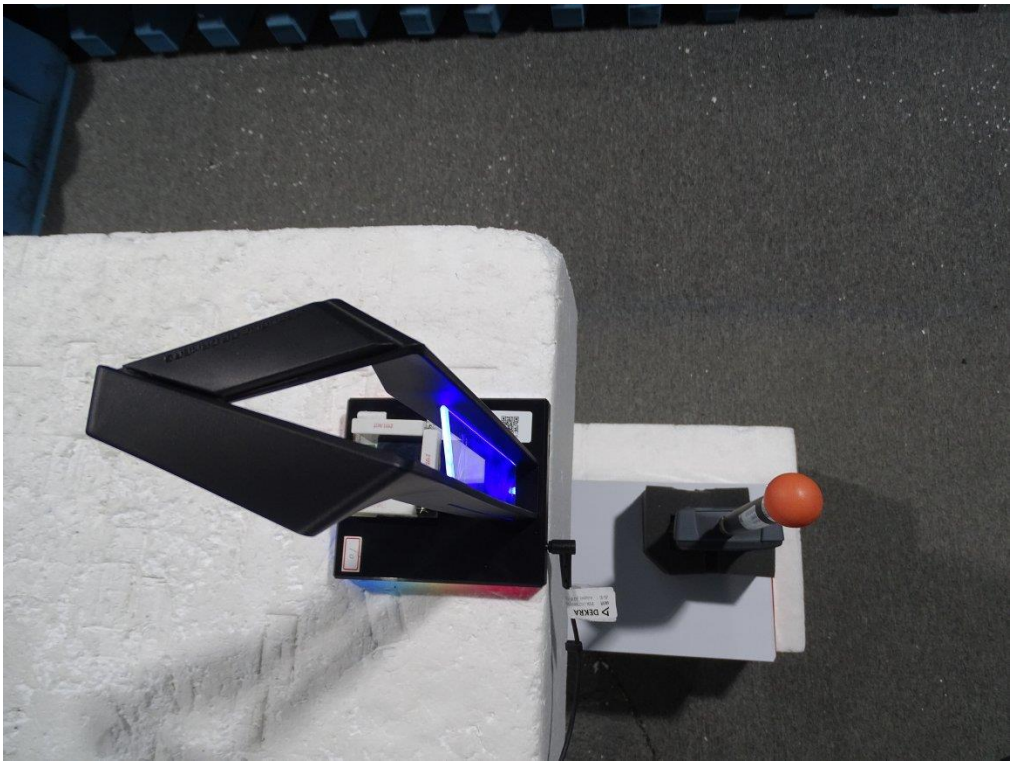


Side 2

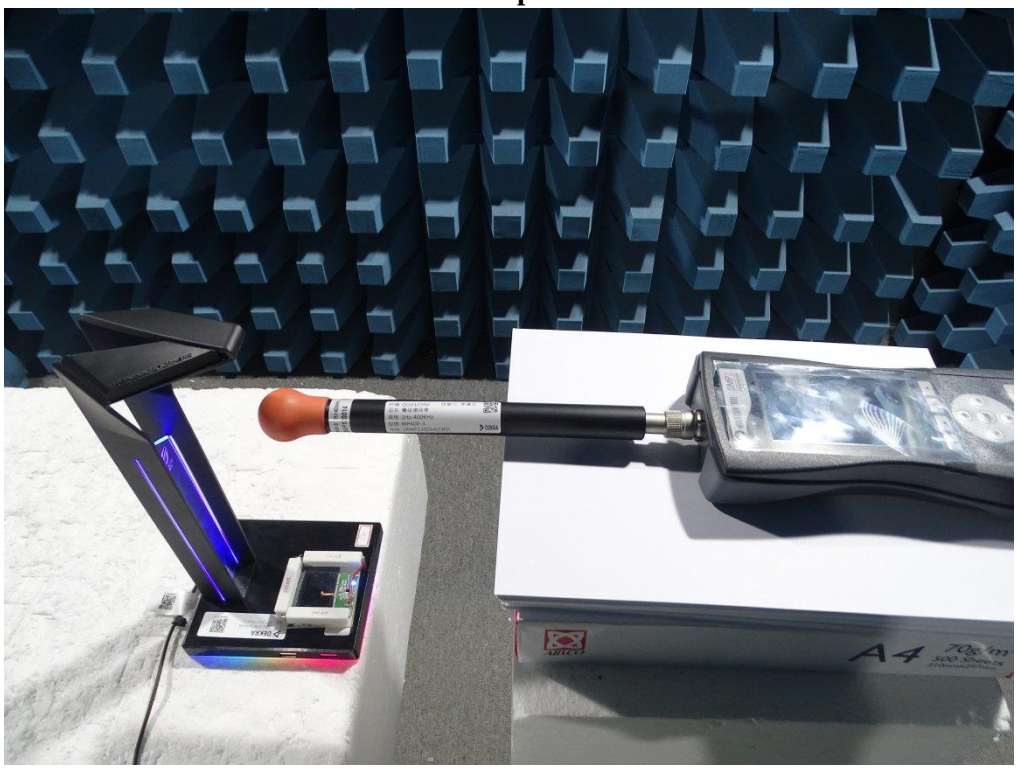


Side 3

Side 4



Top



Bottom