FCC Test Report

Product Name	ROG STRIX Fusion Wireless
Model No.	ROGSTRIX F-WL/BLK/UBD/AS
FCC ID	BJM-ROGSTRIXFWL

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

Date of Receipt	Apr. 17, 2018		
Issued Date	Jun. 27, 2018		
Report No.	1840177R-RFUSP15V00		
Report Version	V1.0		
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The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.

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Test Report

Issued Date: Jun. 27, 2018 Report No.: 1840177R-RFUSP15V00



Product Name	ROG STRIX Fusion Wireless		
Applicant	Tatung Company		
Address	22 Chungshan N Road Sec 3 , Taipei 10451, Taiwan		
Manufacturer	Tatung Company		
Model No.	ROGSTRIX F-WL/BLK/UBD/AS		
EUT Rated Voltage	DC 4.2V (Power by Battery)		
EUT Test Voltage	DC 4.2V (Power by Battery)		
Trade Name	ASUS		
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2017		
	ANSI C63.4: 2014, ANSI C63.10: 2013		
Test Result	Complied		
Documented By	Jinn Chen		
	(Senior Adm. Specialist / Jinn Chen)		
Tested By	Nova chu		
	(Engineer / Nova Chu)		
Approved By	Howks		
	(Director / Vincent Lin)		



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Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs



1. **GENERAL INFORMATION**

1.1. EUT Description

Product Name	ROG STRIX Fusion Wireless	
Trade Name	ASUS	
Model No.	ROGSTRIX F-WL/BLK/UBD/AS	
FCC ID	BJM-ROGSTRIXFWL	
Frequency Range	2405.35-2477.35MHz	
Channel Number	37ch	
Channel Control	Auto	
Type of Modulation	Pi/4 DQPSK	
Antenna Type	PCB Antenna	
Antenna Gain	Refer to the table "Antenna List"	

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Tatung	051-044R,048-056R(Ant 1)	РСВ	5.48dBi for 2.4 GHz
		051-044R,048-056R(Ant 2)		

Note: The antenna of EUT is conform to FCC 15.203



Center Frequency of Each Channel

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 1:	2405.35 MHz	Channel 11:	2425.35 MHz	Channel 21:	2445.35 MHz	Channel 31:	2465.35 MHz
Channel 2:	2407.35 MHz	Channel 12:	2427.35 MHz	Channel 22:	2447.35 MHz	Channel 32:	2467.35 MHz
Channel 3:	2409.35 MHz	Channel 13:	2429.35 MHz	Channel 23:	2449.35 MHz	Channel 33:	2469.35 MHz
Channel 4:	2411.35 MHz	Channel 14:	2431.35 MHz	Channel 24:	2451.35 MHz	Channel 34:	2471.35 MHz
Channel 5:	2413.35 MHz	Channel 15:	2433.35 MHz	Channel 25:	2453.35 MHz	Channel 35:	2473.35 MHz
Channel 6:	2415.35 MHz	Channel 16:	2435.35 MHz	Channel 26:	2455.35 MHz	Channel 36:	2475.35 MHz
Channel 7:	2417.35 MHz	Channel 17:	2437.35 MHz	Channel 27:	2457.35 MHz	Channel 37:	2477.35 MHz
Channel 8:	2419.35 MHz	Channel 18:	2439.35 MHz	Channel 28:	2459.35 MHz		
Channel 9:	2421.35 MHz	Channel 19:	2441.35 MHz	Channel 29:	2461.35 MHz		
Channel 10:	2423.35 MHz	Channel 20:	2443.35 MHz	Channel 30:	2463.35 MHz		

Note:

- 1. The EUT is a ROG STRIX Fusion Wireless with a built-in 2.4GHz transceiver.
- 2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
- 3. These tests are conducted on a sample of the equipment for the purpose of demonstrating compliance of 2.4G transmitter with Part 15 Subpart C Paragraph 15.249 for spread spectrum devices.
- 4. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

Test Mode	Mode 1: Transmit
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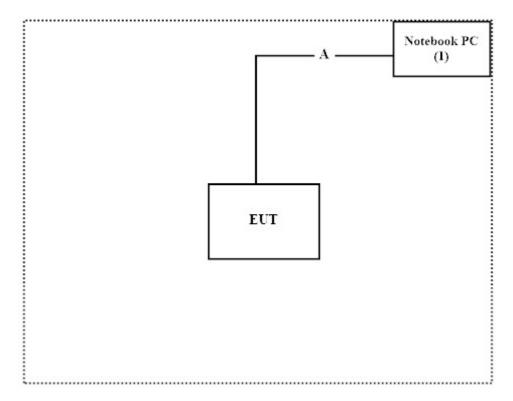
1.3. Tested System Datails

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Pro	oduct	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	DELL	Inspiron 15 3000	GT5JPJ2	N/A

Signal Cable Type		Signal cable Description	
А	USB Cable	Non-Shielded, 0.9m	

1.4. Configuration of Test System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown in Section 1.4.
- (2) Execute software "Avnera_Continue_v2017.1.20.4" on the Notebook.
- (3) Configure the test mode, the test channel, and the data rate.
- (4) Press "OK" to start the continuous Transmit.
- (5) Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site:

http://www.dekra.com.tw/english/about/certificates.aspx?bval=5

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: <u>http://www.dekra.com.tw/index_en.aspx</u>

Site Description:	Accredited by TAF Accredited Number: 3023
Site Name:	DEKRA Testing and Certification Co., Ltd.
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FCC Accreditation Number: TW0023

1.7. List of Test Equipment

For Conduction measurements /ASR1

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
Х	EMI Test Receiver	R&S	ESR7	101601	2018.02.08	2019.02.07
Х	Two-Line V-Network	R&S	ENV216	101306	2018.03.09	2019.03.08
Х	Two-Line V-Network	R&S	ENV216	101307	2018.03.20	2019.03.19
Х	Coaxial Cable	Quietek	RG400_BNC	RF001	2018.05.24	2019.05.23

Note:

- 1. All equipments are calibrated every one year.
- 2. The test instruments marked with "X" are used to measure the final test results.

3. Test Software version : QuieTek EMI 2.0 V2.1.113

For Conducted measurements /ASR4

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
Х	Spectrum Analyzer	R&S	FSV30	103464	2018.01.23	2019.01.22
	Power Meter	Anritsu	ML2496A	1548003	2017.12.11	2018.12.10
	Power Sensor	Anritsu	MA2411B	1531024	2017.12.11	2018.12.10
	Power Sensor	Anritsu	MA2411B	1531025	2017.12.11	2018.12.10
	Bluetooth Tester	R&S	CBT	101238	2018.01.18	2019.01.17

Note:

- 2. The test instruments marked with "X" are used to measure the final test results.
- 3. Test Software version : QuieTek Conduction Test System V8.0.110

For Radiated measurements /ACB1

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
Х	Loop Antenna	AMETEK	HLA6121	49611	2018.01.26	2019.01.25
Х	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-674	2018.04.02	2019.04.01
Х	Horn Antenna	ETS-Lindgren	3117	00203800	2017.11.10	2018.11.09
Х	Horn Antenna	Com-Power	AH-840	101087	2018.06.01	2019.05.31
Х	Pre-Amplifier	EMCI	EMC001330	980316	2018.06.01	2019.05.31
Х	Pre-Amplifier	EMCI	EMC051835SE	980311	2018.06.04	2019.06.03
Х	Pre-Amplifier	EMCI	EMC05820SE	980310	2018.06.04	2019.06.03
Х	Pre-Amplifier	EMCI	EMC184045SE	980314	2018.05.16	2019.05.15
	Filter	MICRO TRONICS	BRM50702	G251	2017.08.30	2018.08.29
	Filter	MICRO TRONICS	BRM50716	G188	2017.08.30	2018.08.29
Х	EMI Test Receiver	R&S	ESR7	101602	2017.12.11	2018.12.10
Х	Spectrum Analyzer	R&S	FSV40	101148	2018.02.08	2019.02.07
Х	Coaxial Cable	SUHNER	SUCOFLEX 106	RF002	2018.05.25	2019.05.24
Х	Mircoflex Cable	HUBER SUHNER	SUCOFLEX 102	MY3381/2	2017.08.11	2018.08.10

Note:

1. Loop Antenna is calibrated every two year, the other equipments are calibrated every one year.

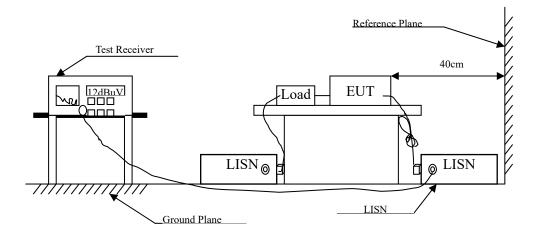
- 2. The test instruments marked with "X" are used to measure the final test results.
- 3. Test Software version : QuieTek EMI 2.0 V2.1.113

^{1.} All equipments are calibrated every one year.



2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBµV) Limit						
Frequency	Limits					
MHz	QP	AV				
0.15 - 0.50	66-56	56-46				
0.50-5.0	56	46				
5.0 - 30	60	50				

Remarks: In the above table, the tighter limit applies at the band edges.

2.3. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.4. Uncertainty

± 2.35 dB

2.5. Test Result of Conducted Emission

Product	:	ROG STRIX Fusion Wireless
Test Item	:	Conducted Emission Test
Power Line	:	Line 1
Test Date	:	2018/05/09
Test Mode	:	Mode 1: Transmit (2441.35MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV	dB	dBµV
Line 1					
Quasi-Peak					
0.150	9.611	34.821	44.432	-21.568	66.000
0.467	9.698	26.691	36.389	-20.554	56.943
1.401	9.730	19.339	29.069	-26.931	56.000
3.012	9.780	15.828	25.608	-30.392	56.000
4.884	9.829	14.085	23.914	-32.086	56.000
26.623	10.110	19.096	29.206	-30.794	60.000
Average					
0.150	9.611	19.087	28.698	-27.302	56.000
0.467	9.698	19.701	29.399	-17.544	46.943
1.401	9.730	14.153	23.883	-22.117	46.000
3.012	9.780	9.259	19.039	-26.961	46.000
4.884	9.829	8.985	18.814	-27.186	46.000
26.623	10.110	17.948	28.058	-21.942	50.000

Note:

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor



Product Test Item Power Line Test Date Test Mode	: : :	ROG STRIX Fusion Wireless Conducted Emission Test Line 2 2018/05/09 Mode 1: Transmit (2441.35MHz)								
Frequency		Correct		Reading	М	easurement		Margin	Limit	
		Factor		Level		Level				
MHz		dB		dBµV		dBµV		dB	dBµV	
Line 2										
Quasi-Peak										
0.150		10.994		33.654		44.648		-21.352	66.000	
0.454		9.982		26.689		36.671		-20.643	57.314	
2.454		9.887		12.604		22.492		-33.508	56.000	
4.994		9.870		11.761		21.631		-34.369	56.000	
13.745		10.037		15.647		25.684		-34.316	60.000	
17.401		10.109		14.744		24.853		-35.147	60.000	
Average										
0.150		10.994		16.507		27.501		-28.499	56.000	
0.454		9.982		20.580		30.562		-16.752	47.314	
2.454		9.887		6.868		16.756		-29.244	46.000	
4.994		9.870		6.079		15.949		-30.051	46.000	
13.745		10.037		10.629		20.666		-29.334	50.000	
17.401		10.109		8.522		18.631		-31.369	50.000	

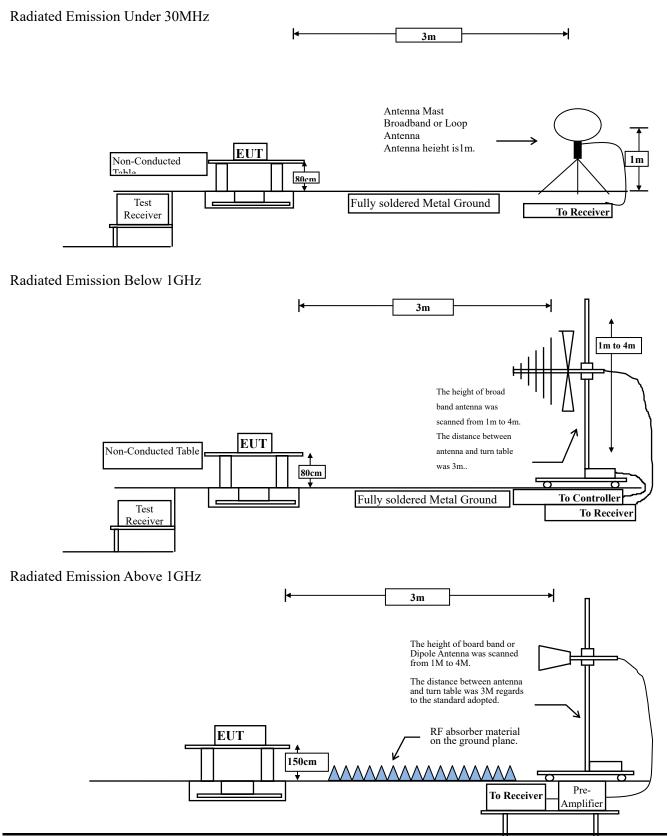
Note:

- All Reading Levels are Quasi-Peak and average value. 1.
- " " means the worst emission level. 2.
- Measurement Level = Reading Level + Correct Factor 3.



3. Radiated Emission

3.1. Test Setup



3.2. Limits

FCC Part 15 Subpart C Paragraph 15.249 Limits								
Frequency	Field Strength	of Fundamental	Field Strength of Harmonics					
MHz	(mV/m @3m) (dBµV/m @3		(uV/m @3m)	$(dB\mu V/m @3m)$				
902-928	50	50 94		54				
2400-2483.5	50	94	500	54				
5725-5875	50	94	500	54				

> Fundamental and Harmonics Emission Limits

Remarks : 1. RF Voltage $(dB\mu V/m) = 20 \log RF$ Voltage (uV/m)

2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

➤ General Radiated Emission Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits						
Frequency MHz	Field strength	Measurement distance				
	(microvolts/meter)	(meter)				
0.009-0.490	2400/F(kHz)	300				
0.490-1.705	24000/F(kHz)	30				
1.705-30	30	30				
30-88	100	3				
88-216	150	3				
216-960	200	3				
Above 960	500	3				

Remarks: E field strength $(dB\mu V/m) = 20 \log E$ field strength (uV/m)

3.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested compliance to FCC 47CFR 15.249 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground, when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 meter above ground.

The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters. The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:

2013 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna. The measurement frequency range form 9kHz - 10th Harmonic of fundamental was investigated.

3.4. Uncertainty

Horizontal : 30-300MHz: ±4.08dB ; 300M-1GHz: ±3.86dB ; 1-18GHz: ±3.77dB ; 18-40GHz: ±3.98dB ° Vertical : 30-300MHz: ±4.81dB ; 300M-1GHz: ±3.87dB ; 1-18GHz: ±3.83dB ; 18-40GHz: ±3.98dB °

3.5. Test Result of Radiated Emission

Product	:	ROG STRIX Fusion Wireless
Test Item	:	Fundamental Radiated Emission
Test Date	:	2018/05/08
Test Mode	:	Mode 1: Transmit (X-Axis)_Ant1

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
2405.350	-8.892	109.770	100.878	-13.122	114.000
2441.350	-8.759	109.580	100.822	-13.178	114.000
2477.350	-8.625	108.250	99.625	-14.375	114.000
Vertical					
Peak Detector:					
2405.350	-8.892	103.670	94.778	-19.222	114.000
2441.350	-8.759	99.350	90.592	-23.408	114.000
2477.350	-8.625	103.040	94.415	-19.585	114.000

Note:

1. Measurement Level = Reading Level + Correct Factor.

2. Correct Factor = Antenna Factor + Cable Loss – PreAMP.

Average Detector:

Frequency	Peak	Duty Cycle	Measurement	Margin	Limit
	Measurement	Correct Factor	Level		
MHz	$dB\mu V/m$	dB	dBµV/m	dB	dBµV/m
Horizontal					
Average Detector:					
2405.350	100.878	-26.303	74.575	-19.425	94.000
2441.350	100.822	-26.303	74.519	-19.481	94.000
2477.350	99.625	-26.303	73.322	-20.678	94.000
Vertical					
Average Detector:					
2405.350	94.778	-26.303	68.475	-25.525	94.000
2441.350	90.592	-26.303	64.289	-29.711	94.000
2477.350	94.415	-26.303	68.112	-25.888	94.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product Test Item Test Date Test Mode	: : :	Fundamer 2018/05/0	ROG STRIX Fusion Wireless Fundamental Radiated Emission 2018/05/08 Mode 1: Transmit (Y-Axis) _Ant1				
Frequency		Correct	Reading	Measurement	Margin	Limit	
		Factor	Level	Level	10		
MHz		dB	dBµV	dBµV/m	dB	dBµV/m	
Horizontal							
Peak Detector:							
2405.350		-8.892	107.170	98.278	-15.722	114.000	
2441.350		-8.759	106.500	97.742	-16.258	114.000	
2477.350		-8.625	104.950	96.325	-17.675	114.000	
Vertical							
Peak Detector:							
2405.350		-8.892	107.220	98.328	-15.672	114.000	
2441.350		-8.759	107.940	99.182	-14.818	114.000	
2477.350		-8.625	106.450	97.825	-16.175	114.000	

-

1. Measurement Level = Reading Level + Correct Factor.

2. Correct Factor = Antenna Factor + Cable Loss – PreAMP.

Average Detector:

Frequency	Peak Measurement	Duty Cycle Correct Factor	Measurement Level	Margin	Limit
MHz	dBµV/m	dB	dBµV/m	dB	dBµV/m
Horizontal Average Detector:			;		i
2405.350	98.278	-26.303	71.975	-22.025	94.000
2441.350	97.742	-26.303	71.439	-22.561	94.000
2477.350	96.325	-26.303	70.022	-23.978	94.000
Vertical Average Detector:					
2405.350	98.328	-26.303	72.025	-21.975	94.000
2441.350	99.182	-26.303	72.879	-21.121	94.000
2477.350	97.825	-26.303	71.522	-22.478	94.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product Test Item Test Date Test Mode	: : :	ROG STRIX Fusion Wireless Fundamental Radiated Emission 2018/05/08 Mode 1: Transmit (Z-Axis) _Ant1				
Frequency MHz		Correct Factor dB	Reading Level dBµV	Measurement Level dBµV/m	Margin dB	Limit dBµV/m
Horizontal						
Peak Detector:						
2405.350		-8.892	108.790	99.898	-14.102	114.000
2441.350		-8.759	109.690	100.932	-13.068	114.000
2477.350		-8.625	106.940	98.315	-15.685	114.000
Vertical						
Peak Detector:						
2405.350		-8.892	105.780	96.888	-17.112	114.000
2441.350		-8.759	104.820	96.062	-17.938	114.000
2477.350		-8.625	105.340	96.715	-17.285	114.000

1. Measurement Level = Reading Level + Correct Factor.

2. Correct Factor = Antenna Factor + Cable Loss – PreAMP.

Average Detector:

Frequency	Peak	Duty Cycle	Measurement	Margin	Limit
	Measurement	Correct Factor	Level	15	4
MHz	dBµV/m	dB	dBµV/m	dB	dBµV/m
Horizontal					
Average Detector:					
2405.350	99.898	-26.303	73.595	-20.405	94.000
2441.350	100.932	-26.303	74.629	-19.371	94.000
2477.350	98.315	-26.303	72.012	-21.988	94.000
Vertical					
Average Detector:					
2405.350	96.888	-26.303	70.585	-23.415	94.000
2441.350	96.062	-26.303	69.759	-24.241	94.000
2477.350	96.715	-26.303	70.412	-23.588	94.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product Test Item Test Date Test Mode	: : :	ROG STRIX Fusion Wireless Fundamental Radiated Emission 2018/05/07 Mode 1: Transmit (X-Axis)_Ant2				
Frequency		Correct Factor	Reading Level	Measurement Level	Margin	Limit
 MHz		dB	dBµV	dBµV/m	dB	dBµV/m
 Horizontal						
Peak Detector:						
2405.350		-8.892	104.940	96.048	-17.952	114.000
2441.350		-8.759	104.120	95.362	-18.638	114.000
2477.350		-8.625	104.730	96.105	-17.895	114.000
Vertical						
Peak Detector:						
2405.350		-8.892	107.280	98.388	-15.612	114.000
2441.350		-8.759	106.560	97.802	-16.198	114.000
2477.350		-8.625	106.960	98.335	-15.665	114.000

1. Measurement Level = Reading Level + Correct Factor.

2. Correct Factor = Antenna Factor + Cable Loss – PreAMP.

Average Detector:

Frequency	Peak	Duty Cycle	Measurement	Margin	Limit
	Measurement	Correct Factor	Level		
MHz	dBµV/m	dB	dBµV/m	dB	dBµV/m
Horizontal					
Average Detector:					
2405.350	96.048	-26.303	69.745	-24.255	94.000
2441.350	95.362	-26.303	69.059	-24.941	94.000
2477.350	96.105	-26.303	69.802	-24.198	94.000
Vertical					
Average Detector:					
2405.350	98.388	-26.303	72.085	-21.915	94.000
2441.350	97.802	-26.303	71.499	-22.501	94.000
2477.350	98.335	-26.303	72.032	-21.968	94.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product Test Item Test Date	: :		ROG STRIX Fusion Wireless Fundamental Radiated Emission			
Test Mode	:		ransmit (Y-Axis)	_Ant2		
Frequency		Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz		dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal						
Peak Detector:						
2405.350		-8.892	105.560	96.668	-17.332	114.000
2441.350		-8.759	107.150	98.392	-15.608	114.000
2477.350		-8.625	105.410	96.785	-17.215	114.000
Vertical						
Peak Detector:						
2405.350		-8.892	107.170	98.278	-15.722	114.000
2441.350		-8.759	106.820	98.062	-15.938	114.000
2477.350		-8.625	104.410	95.785	-18.215	114.000

1. Measurement Level = Reading Level + Correct Factor.

2. Correct Factor = Antenna Factor + Cable Loss – PreAMP.

Average Detector:

Frequency	Peak Measurement	Duty Cycle Correct Factor	Measurement Level	Margin	Limit
MHz	dBµV/m	dB	dBµV/m	dB	dBµV/m
Horizontal Average Detector:					
2405.350	96.668	-26.303	70.365	-23.635	94.000
2441.350	98.392	-26.303	72.089	-21.911	94.000
2477.350	96.785	-26.303	70.482	-23.518	94.000
Vertical Average Detector:					
2405.350	98.278	-26.303	71.975	-22.025	94.000
2441.350	98.062	-26.303	71.759	-22.241	94.000
2477.350	95.785	-26.303	69.482	-24.518	94.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product	:	ROG STRI	ROG STRIX Fusion Wireless				
Test Item	:	Fundament	tal Radiated Emis	ssion			
Test Date	:	2018/05/08	3				
Test Mode	:	Mode 1: Tr	cansmit (Z-Axis)	_Ant2			
Frequency		Correct	Reading	Measurement	Margin	Limit	
		Factor	Level	Level			
MHz		dB	dBµV	dBµV/m	dB	dBµV/m	
Horizontal							
Peak Detector:							
2405.350		-8.892	107.390	98.498	-15.502	114.000	
2441.350		-8.759	107.660	98.902	-15.098	114.000	
2477.350		-8.625	106.300	97.675	-16.325	114.000	
Vertical							
Peak Detector:							
2405.350		-8.892	105.550	96.658	-17.342	114.000	
2441.350		-8.759	106.030	97.272	-16.728	114.000	
2477.350		-8.625	103.770	95.145	-18.855	114.000	

1. Measurement Level = Reading Level + Correct Factor.

2. Correct Factor = Antenna Factor + Cable Loss – PreAMP.

Average Detector:

Frequency	Peak	Duty Cycle Correct Factor	Measurement	Margin	Limit
MHz	Measurement dBµV/m	dB	Level dBµV/m	dB	dBµV/m
	αΒμν/Π	uD	αΒμν/III	uD	uDμv/III
Horizontal Average Detector:					
2405.350	98.498	-26.303	72.195	-21.805	94.000
2441.350	98.902	-26.303	72.599	-21.401	94.000
2477.350	97.675	-26.303	71.372	-22.628	94.000
Vertical Average Detector:					
2405.350	96.658	-26.303	70.355	-23.645	94.000
2441.350	97.272	-26.303	70.969	-23.031	94.000
2477.350	95.145	-26.303	68.842	-25.158	94.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product	:	ROG STR	ROG STRIX Fusion Wireless				
Test Item	:	Harmonic	Radiated Emission	n Data			
Test Date	:	2018/05/0	8				
Test Mode	:	Mode 1: T	Fransmit (2405.35M	IHz)_Ant1			
Frequency		Correct Factor	Reading Level	Measurement Level	Margin	Limit	
MHz		dB	dBµV	$dB\mu V/m$	dB	dBµV/m	
Horizontal							
Peak Detector:							
4810.700		-6.116	52.120	46.004	-27.996	74.000	
7216.050		-3.103	47.780	44.678	-29.322	74.000	

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

1	Frequency	Peak	Duty Cycle	Measurement	Margin	Limit
		Measurement	Correct Factor	Level		
	MHz	dBµV/m	dB	dBµV/m	dB	dBµV/m
	Horizontal					
	Average Detector:					
	4810.700	46.004	-26.303	19.701	-34.299	54.000
	7216.050	44.678	-26.303	18.375	-35.625	54.000
	9621.400	47.561	-26.303	21.258	-32.742	54.000

Average Detector:

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product	: ROG STRIX Fusion Wireless						
Test Item	: Harmoni	c Radiated Emiss	sion Data				
Test Date	: 2018/05/						
Test Mode	: Mode 1: Transmit (2405.35MHz) _Ant1						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBμV	$dB\mu V/m$	dB	dBµV/m		
Vertical							
Peak Detector:							
4810.700	-6.116	49.910	43.794	-30.206	74.000		
7216.050	-3.103	48.950	45.848	-28.152	74.000		
9621.400	-0.699	49.800	49.101	-24.899	74.000		
Vertical Peak Detector: 4810.700 7216.050	-6.116 -3.103	49.910 48.950	43.794 45.848	-30.206 -28.152	74.000 74.000		

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

1	iverage Detector.					
	Frequency	Peak	Duty Cycle	Measurement	Margin	Limit
		Measurement	Correct Factor	Level		
	MHz	dBµV/m	dB	$dB\mu V/m$	dB	$dB\mu V/m$
	Vertical					
	Average Detector:					
	4810.700	43.794	-26.303	17.491	-36.509	54.000
	7216.050	45.848	-26.303	19.545	-34.455	54.000
	9621.400	49.101	-26.303	22.798	-31.202	54.000
_						

Average Detector:

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product	: ROG STRIX Fusion Wireless						
Test Item	: Harmoni						
Test Date	: 2018/05/08						
Test Mode	: Mode 1: Transmit (2441.35MHz) _Ant1						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m		
MHz Horizontal	dB	dBµV	dBµV/m	dB	dBµV/m		
	dB	dBμV	dBµV/m	dB	dBµV/m		
Horizontal	dB -6.067	dBμV 50.670	dBµV/m 44.603	dB -29.397	dBμV/m 74.000		
Horizontal Peak Detector:							

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

4	Werage Dettettor.					
	Frequency	Peak	Duty Cycle	Measurement	Margin	Limit
		Measurement	Correct Factor	Level		
	MHz	dBµV/m	dB	dBµV/m	dB	dBµV/m
	Horizontal					
	Average Detector:					
	4882.700	44.603	-26.303	18.300	-35.700	54.000
	7323.050	46.910	-26.303	20.607	-33.393	54.000
	9765.400	46.869	-26.303	20.566	-33.434	54.000
	-					

Average Detector:

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product	: ROG ST	RIX Fusion Wire	eless				
Test Item	: Harmoni	c Radiated Emiss	sion Data				
Test Date	: 2018/05/08						
Test Mode	: Mode 1: Transmit (2441.35MHz) _Ant1						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m		
Vertical							
Peak Detector:							
4882.700	-6.067	50.110	44.043	-29.957	74.000		
4882.700 7324.050	-6.067 -3.020	50.110 49.540	44.043 46.520	-29.957 -27.480	74.000 74.000		

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

4	Average Detector.					
	Frequency	Peak	Duty Cycle	Measurement	Margin	Limit
		Measurement	Correct Factor	Level		
	MHz	dBµV/m	dB	dBµV/m	dB	dBµV/m
	Vertical					
	Average Detector:					
	4882.700	44.043	-26.303	17.740	-36.260	54.000
	7323.050	46.520	-26.303	20.217	-33.783	54.000
	9765.400	47.639	-26.303	21.336	-32.664	54.000

Average Detector:

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product	: ROG STRIX Fusion Wireless						
Test Item	: Harmoni	: Harmonic Radiated Emission Data					
Test Date	: 2018/05/08						
Test Mode	: Mode 1: Transmit (2477.35MHz) _Ant1						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	dBµV/m	dB	dBµV/m		
MHz Horizontal	dB	dBµV	dBµV/m	dB	dBµV/m		
	dB	dBµV	dBµV/m	dB	dBµV/m		
Horizontal	dB -6.057	dBμV 50.410	dBμV/m 44.353	dB -29.647	dBμV/m 74.000		
Horizontal Peak Detector:					<u> </u>		

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

1	Frequency	Peak	Duty Cycle	Measurement	Margin	Limit
	1	Measurement	Correct Factor	Level	C	
	MHz	dBµV/m	dB	dBµV/m	dB	dBµV/m
	Horizontal					
	Average Detector:					
	4954.700	44.353	-26.303	18.050	-35.950	54.000
	7432.050	46.258	-26.303	19.955	-34.045	54.000
	9909.400	46.029	-26.303	19.726	-34.274	54.000
•	T .					

Average Detector:

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product	: ROG STRIX Fusion Wireless						
Test Item	: Harmoni	c Radiated Emiss	sion Data				
Test Date	: 2018/05/08						
Test Mode	: Mode 1: Transmit (2477.35MHz) _Ant1						
Frequency	Correct	Reading	Measurement	Margin	Limit		
	Factor	Level	Level				
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m		
Vertical							
Vertical Peak Detector:							
	-6.057	49.910	43.853	-30.147	74.000		
Peak Detector:	-6.057 -2.881	49.910 49.710	43.853 46.828	-30.147 -27.172	74.000 74.000		

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

Intrage Detector.					
Frequency	Peak	Duty Cycle	Measurement	Margin	Limit
	Measurement	Correct Factor	Level		
MHz	$dB\mu V/m$	dB	dBµV/m	dB	$dB\mu V/m$
Vertical					
Average Detector:					
4954.700	43.853	-26.303	17.550	-36.450	54.000
7432.050	46.828	-26.303	20.525	-33.475	54.000
9909.400	47.129	-26.303	20.826	-33.174	54.000

Average Detector:

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product Test Item Test Date Test Mode	: Harmonic : 2018/05/0	CIX Fusion Wirele Radiated Emissio 8 Fransmit (2405.35)	on Data			
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m	
Horizontal						
Peak Detector:						
4810.700	-6.116	53.870	47.754	-26.246	74.000	
7216.050	-3.103	50.920	47.818	-26.182	74.000	
9621.400	-0.699	53.530	52.831	-21.169	74.000	

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

1	Werage Detector.					
	Frequency	Peak	Duty Cycle	Measurement	Margin	Limit
		Measurement	Correct Factor	Level		
	MHz	$dB\mu V/m$	dB	dBµV/m	dB	dBµV/m
	Horizontal					
	Average Detector:					
	4810.700	47.754	-26.303	21.451	-32.549	54.000
	7216.050	47.818	-26.303	21.515	-32.485	54.000
	9621.400	52.831	-26.303	26.528	-27.472	54.000

Average Detector:

Note:

3. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

	Product	: ROG STRIX Fusion Wireless				
	Test Item	: Harmonic Radiated Emission Data				
	Test Date	: 2018/05/	: 2018/05/08			
	Test Mode	: Mode 1:	Transmit (2405.3	35MHz)_Ant2		
	Frequency	Correct	Reading	Measurement	Margin	Limit
		Factor	Level	Level		
_	MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
=	MHz Vertical	dB	dBµV	dBµV/m	dB	dBµV/m
=		dB	dBμV	dBµV/m	dB	dBµV/m
=	Vertical	dB -6.116	dBμV 53.190	<u>d</u> BμV/m 47.074	dB -26.926	<u>dBμV/m</u> 74.000
=	Vertical Peak Detector:					<u> </u>
=	Vertical Peak Detector: 4810.700	-6.116	53.190	47.074	-26.926	74.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

-	Therage Detector.					
	Frequency	Peak	Duty Cycle	Measurement	Margin	Limit
		Measurement	Correct Factor	Level		
	MHz	$dB\mu V/m$	dB	dBµV/m	dB	$dB\mu V/m$
	Vertical					
	Average Detector:					
	4810.700	47.074	-26.303	20.771	-33.229	54.000
	7216.050	47.438	-26.303	21.135	-32.865	54.000
	9621.400	51.151	-26.303	24.848	-29.152	54.000

Average Detector:

Note:

3. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product	: ROG STRIX Fusion Wireless					
Test Item	: Harmoni	: Harmonic Radiated Emission Data				
Test Date	: 2018/05/	2018/05/08				
Test Mode	: Mode 1:	Transmit (2441.3	35MHz)_Ant2			
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBµV	dBµV/m	dB	dBµV/m	
Horizontal						
Peak Detector:						
4882.700	-6.067	50.920	44.853	-29.147	74.000	
7324.050	-3.020	48.700	45.680	-28.320	74.000	
	5.020	101700				

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

1	Werage Detector.					
	Frequency	Peak	Duty Cycle	Measurement	Margin	Limit
		Measurement	Correct Factor	Level		
	MHz	$dB\mu V/m$	dB	dBµV/m	dB	dBµV/m
	Horizontal					
	Average Detector:					
	4882.700	44.853	-26.303	18.550	-35.450	54.000
	7323.050	45.680	-26.303	19.377	-34.623	54.000
	9765.400	48.789	-26.303	22.486	-31.514	54.000
_	_					

Average Detector:

Note:

3. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product	: ROG STRIX Fusion Wireless					
Test Item	: Harmoni	: Harmonic Radiated Emission Data				
Test Date	: 2018/05/	08				
Test Mode	: Mode 1:	Transmit (2441.3	35MHz)_Ant2			
Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit	
MII-				ط٢	1DV/	
MHz	dB	dBµV	dBµV/m	dB	dBµV/m	
Vertical						
Peak Detector:						
4882.700	-6.067	50.630	44.563	-29.437	74.000	
7324.050	-3.020	49.120	46.100	-27.900	74.000	
9765.400	-0.521	47.330	46.809	-27.191	74.000	

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

4	Average Detector.					
	Frequency	Peak	Duty Cycle	Measurement	Margin	Limit
		Measurement	Correct Factor	Level		
	MHz	dBµV/m	dB	dBµV/m	dB	$dB\mu V/m$
	Vertical					
	Average Detector:					
	4882.700	44.563	-26.303	18.260	-35.740	54.000
	7323.050	46.100	-26.303	19.797	-34.203	54.000
	9765.400	46.809	-26.303	20.506	-33.494	54.000
_	_					

Average Detector:

Note:

3. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product	: ROG STRIX Fusion Wireless					
Test Item	: Harmoni	: Harmonic Radiated Emission Data				
Test Date	: 2018/05/	2018/05/08				
Test Mode	: Mode 1:	Transmit (2477.3	35MHz)_Ant2			
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBµV	dBµV/m	dB	dBµV/m	
MHz Horizontal	dB	dBµV	dBµV/m	dB	dBµV/m	
	dB	dBµV	dBµV/m	dB	dBµV/m	
Horizontal	dB -6.057	dBμV 51.400	dBμV/m 45.343	dB -28.657	<u>dBμV/m</u> 74.000	
Horizontal Peak Detector:						

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

1	Frequency	Peak	Duty Cycle	Measurement	Margin	Limit
		Measurement	Correct Factor	Level		
_	MHz	$dB\mu V/m$	dB	$dB\mu V/m$	dB	dBµV/m
-	Horizontal					
	Average Detector:					
	4954.700	45.343	-26.303	19.040	-34.960	54.000
	7432.050	45.678	-26.303	19.375	-34.625	54.000
	9909.400	46.669	-26.303	20.366	-33.634	54.000
•	Τ. 4					

Average Detector:

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product	: ROG STRIX Fusion Wireless					
Test Item	: Harmoni	: Harmonic Radiated Emission Data				
Test Date	: 2018/05/	2018/05/08				
Test Mode	: Mode 1:	Transmit (2477.3	35MHz)_Ant2			
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBµV	dBµV/m	dB	dBµV/m	
Vertical						
Vertical Peak Detector:						
	-6.057	50.270	44.213	-29.787	74.000	
Peak Detector:	-6.057 -2.881	50.270 50.290	44.213 47.408	-29.787 -26.592	74.000 74.000	

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.

merage Detector.					
Frequency	Peak	Duty Cycle	Measurement	Margin	Limit
	Measurement	Correct Factor	Level		
MHz	dBµV/m	dB	dBµV/m	dB	$dB\mu V/m$
Vertical					
Average Detector:					
4954.700	44.213	-26.303	17.910	-36.090	54.000
7432.050	47.408	-26.303	21.105	-32.895	54.000
9909.400	46.039	-26.303	19.736	-34.264	54.000

Average Detector:

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor

Product	:	ROG STRIX Fusion Wireless
Test Item	:	General Radiated Emission Data
Test Date	:	2018/05/04
Test Mode	:	Mode 1: Transmit (2441.35MHz) _Ant1

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
194.478	-13.701	46.023	32.322	-11.178	43.500
336.464	-9.521	32.213	22.692	-23.308	46.000
457.362	-6.727	37.580	30.853	-15.147	46.000
613.406	-3.974	28.961	24.987	-21.013	46.000
755.391	-2.045	29.121	27.076	-18.924	46.000
897.377	-0.355	29.305	28.951	-17.049	46.000
Vertical					
184.638	-13.063	35.170	22.107	-21.393	43.500
312.565	-10.066	33.603	23.537	-22.463	46.000
454.551	-6.774	28.968	22.194	-23.806	46.000
617.623	-3.950	28.252	24.303	-21.697	46.000
787.725	-1.811	29.558	27.747	-18.253	46.000
901.594	-0.303	29.031	28.728	-17.272	46.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 7. No emission found between lowest internal used/generated frequency to 30MHz.

Product	:	ROG STRIX Fusion Wireless
Test Item	:	General Radiated Emission Data
Test Date	:	2018/05/04
Test Mode	:	Mode 1: Transmit (2441.35MHz)_Ant2

Correct	Reading	Measurement	Margin	Limit
Factor	Level	Level		
dB	dBµV	$dB\mu V/m$	dB	dBµV/m
-11.949	44.476	32.527	-13.473	46.000
-7.153	44.862	37.710	-8.290	46.000
-5.590	30.438	24.847	-21.153	46.000
-3.477	29.389	25.912	-20.088	46.000
-1.843	29.213	27.370	-18.630	46.000
-0.043	29.479	29.436	-16.564	46.000
-12.295	45.452	33.157	-12.843	46.000
-8.754	32.450	23.697	-22.303	46.000
-6.518	35.918	29.400	-16.600	46.000
-3.941	29.556	25.615	-20.385	46.000
-1.905	29.074	27.169	-18.831	46.000
-0.135	29.254	29.118	-16.882	46.000
	Factor dB -11.949 -7.153 -5.590 -3.477 -1.843 -0.043 -12.295 -8.754 -6.518 -3.941 -1.905	FactorLevel dB $dB\mu V$ -11.94944.476-7.15344.862-5.59030.438-3.47729.389-1.84329.213-0.04329.479-12.29545.452-8.75432.450-6.51835.918-3.94129.556-1.90529.074	FactorLevelLevel dB $dB\mu V$ $dB\mu V/m$ -11.94944.476 32.527 -7.15344.862 37.710 -5.590 30.438 24.847 -3.477 29.389 25.912 -1.843 29.213 27.370 -0.043 29.479 29.436 -12.295 45.452 33.157 -8.754 32.450 23.697 -6.518 35.918 29.400 -3.941 29.556 25.615 -1.905 29.074 27.169	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

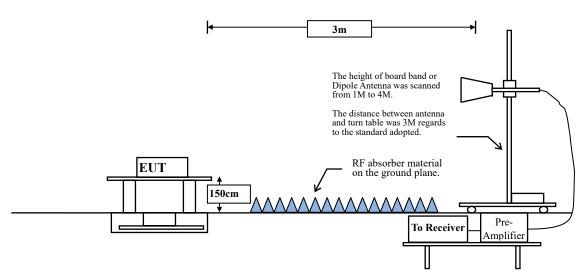
- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 5. The average measurement was not performed when the peak measured data under the limit of average detection.
- 6. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 7. No emission found between lowest internal used/generated frequency to 30MHz.



4. Band Edge

4.1. Test Setup

RF Radiated Measurement:



4.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits						
Frequency MHz	Field strength	Measurement distance				
	(microvolts/meter)	(meter)				
0.009-0.490	2400/F(kHz)	300				
0.490-1.705	24000/F(kHz)	30				
1.705-30	30	30				
30-88	100	3				
88-216	150	3				
216-960	200	3				
Above 960	500	3				

Remarks: E field strength $(dB\mu V / m) = 20 \log E$ field strength (uV/m)

4.3. Test Procedure

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

The bandwidth setting below 1GHz and above 1GHz on the field strength meter is 120 kHz and 1MHz, respectively.

4.4. Uncertainty

Horizontal polarization : 1-18GHz: ±3.77dB Vertical polarization : 1-18GHz : ±3.83dB



4.5. Test Result of Band Edge

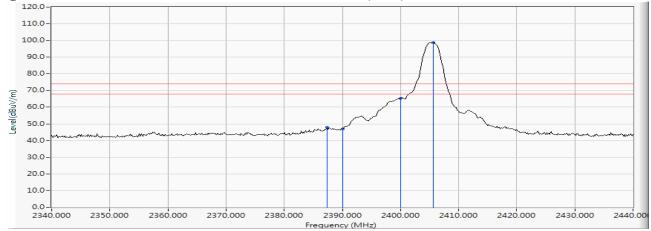
Product	:	ROG STRIX Fusion Wireless
Test Item	:	Band Edge Data
Test Date	:	2018/05/04
Test Mode	:	Mode 1: Transmit (2405.35MHz)_Ant1

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
01 (Peak)	2387.391	10.251	37.543	47.794	74.00	54.00	Pass
01 (Peak)	2390.000	10.262	36.695	46.957	74.00	54.00	Pass
01 (Peak)	2400.000	10.304	54.949	65.252	74.00	54.00	Pass
01 (Peak)	2405.652	10.326	88.372	98.698			

Figure Channel 1:

Horizontal (Peak)



Note:

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

	E	Peak	Duty Cycle	Average	Peak	Average Limit	
Channel No.	Frequency (MHz)	Measurement	Factor	Measurement	Limit	$(dB\mu V/m)$	Result
	(MHZ)	$(dB\mu V/m)$	(dB)	$(dB\mu V/m)$	$(dB\mu V/m)$		
01 (Average)	2387.391	47.794	-26.303	21.491	74.00	54.00	Pass
01 (Average)	2390.000	46.957	-26.303	20.654	74.00	54.00	Pass
01 (Average)	2400.000	65.252	-26.303	38.949	74.00	54.00	Pass
01 (Average)	2405.652	98.698	-26.303	72.395			

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 5.



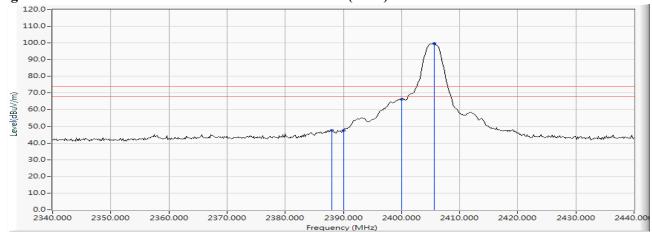
Product	:	ROG STRIX Fusion Wireless
Test Item	:	Band Edge Data
Test Date	:	2018/05/04
Test Mode	:	Mode 1: Transmit (2405.35MHz) _Ant1

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	D
	(MHz)	(dB)	(dBµV)	(dBµV/m)	(dBµV/m)	$(dB\mu V/m)$	Result
01 (Peak)	2387.971	10.253	37.374	47.628	74.00	54.00	Pass
01 (Peak)	2390.000	10.262	37.292	47.554	74.00	54.00	Pass
01 (Peak)	2400.000	10.304	55.838	66.141	74.00	54.00	Pass
01 (Peak)	2405.652	10.326	89.285	99.611			

Figure Channel 1:

Vertical (Peak)



Note:

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

	Eroquonou	Peak	Duty Cycle	Average	Peak	Average Limit	
Channel No.	Frequency (MHz)	Measurement	Factor	Measurement	Limit	$(dB\mu V/m)$	Result
	(MITZ)	$(dB\mu V/m)$	(dB)	$(dB\mu V/m)$	$(dB\mu V/m)$		
01 (Average)	2387.971	47.628	-26.303	21.325	74.00	54.00	Pass
01 (Average)	2390.000	47.554	-26.303	21.251	74.00	54.00	Pass
01 (Average)	2400.000	55.838	-26.303	29.535	74.00	54.00	Pass
01 (Average)	2405.652	99.611	-26.303	73.308			

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 5.



Product : ROG STRIX Fusion Wi	Vireless
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Test Item	:	Band Edge Data	
Test Date		2018/05/04	

Test Date : 2018/05/04

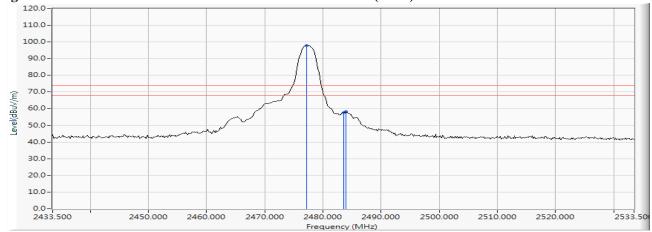
Test Mode : Mode 1: Transmit (2477.35MHz) _Ant1

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
37 (Peak)	2477.123	10.616	87.156	97.772			
37 (Peak)	2483.500	10.640	46.965	57.606	74.00	54.00	Pass
37 (Peak)	2483.935	10.644	47.482	58.125	74.00	54.00	Pass

Figure Channel 37:

Horizontal (Peak)



Note:

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Measurement	Duty Cycle Factor	Average Measurement	Peak Limit	Average Limit (dBµV/m)	Result
(IVIIIZ)	(11112)	$(dB\mu V/m)$	(dB)	$(dB\mu V/m)$	$(dB\mu V/m)$		
37 (Average)	2477.123	97.772	-26.303	71.469			
37 (Average)	2483.500	57.606	-26.303	31.303	74.00	54.00	Pass
37 (Average)	2483.935	58.125	-26.303	31.822	74.00	54.00	Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 5.



Product : ROG STRIX Fusion W	Vireless
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Test Item	:	Band Edge Data	
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Test Date :	2018/05/04
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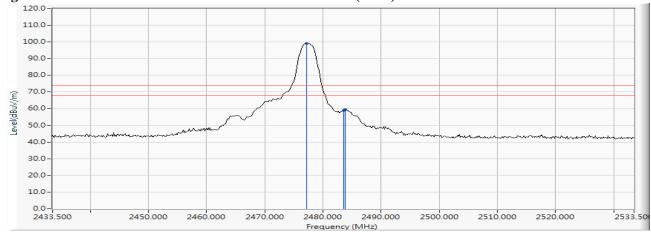
Test Mode : Mode 1: Transmit (2477.35MHz) _Ant1

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	(dBµV/m)	$(dB\mu V/m)$	Result
37 (Peak)	2477.123	10.616	88.473	99.089			
37 (Peak)	2483.500	10.640	48.280	58.921	74.00	54.00	Pass
37 (Peak)	2483.790	10.643	48.848	59.490	74.00	54.00	Pass

Figure Channel 37:

Vertical (Peak)



Note:

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Fraquanay	Peak	Duty Cycle	Average	Peak	Average Limit		
Channel No.	Frequency (MHz)	Measurement	Factor	Measurement	Limit	$(dB\mu V/m)$	Result
	(WIIIZ)	$(dB\mu V/m)$	(dB)	$(dB\mu V/m)$	$(dB\mu V/m)$		
37 (Average)	2477.123	99.089	-26.303	72.786			
37 (Average)	2483.500	58.921	-26.303	32.618	74.00	54.00	Pass
37 (Average)	2483.790	59.490	-26.303	33.187	74.00	54.00	Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 5.



Product :	ROG STRIX Fusion Wireless
	D 1D1 D

Test Item	:	Band Edge Data

Test Date : 2018/05/04

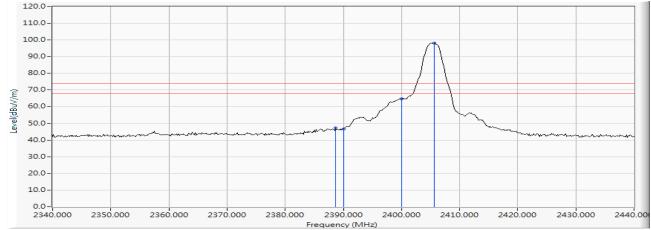
Test Mode : Mode 1: Transmit (2405.35MHz)_Ant2

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	(dBµV/m)	Result
01 (Peak)	2388.696	10.257	37.099	47.356	74.00	54.00	Pass
01 (Peak)	2390.000	10.262	36.525	46.787	74.00	54.00	Pass
01 (Peak)	2400.000	10.304	54.455	64.758	74.00	54.00	Pass
01 (Peak)	2405.652	10.326	87.814	98.140			

Figure Channel 1:

Horizontal (Peak)



Note:

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Fraguana	Fraguanau	Peak	Duty Cycle	Average	Peak	Average Limit	
Channel No.	Frequency (MHz)	Measurement	Factor	Measurement	Limit	$(dB\mu V/m)$	Result
	(WIIIZ)	$(dB\mu V/m)$	(dB)	$(dB\mu V/m)$	$(dB\mu V/m)$		
01 (Average)	2388.696	47.356	-26.303	21.053	74.00	54.00	Pass
01 (Average)	2390.000	46.787	-26.303	20.484	74.00	54.00	Pass
01 (Average)	2400.000	64.758	-26.303	38.455	74.00	54.00	Pass
01 (Average)	2405.625	98.140	-26.303	71.837			

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 5.



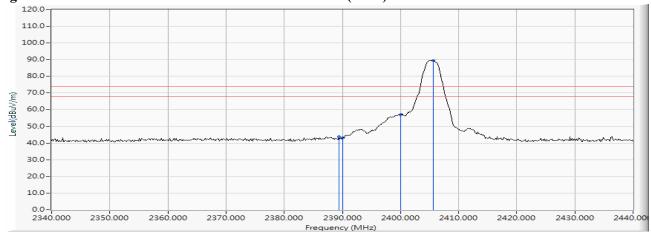
Product	:	ROG STRIX Fusion Wireless
Test Item	:	Band Edge Data
Test Date	:	2018/05/04
Test Mode	:	Mode 1: Transmit (2405.35MHz) _Ant2

RF Radiated Measurement (Vertical):

C1 1 1	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	D 1
Channel No	(MHz)	(dB)	(dBµV)	(dBµV/m)	(dBµV/m)	$(dB\mu V/m)$	Result
01 (Peak)	2389.420	10.260	33.459	43.719	74.00	54.00	Pass
01 (Peak)	2390.000	10.262	32.910	43.172	74.00	54.00	Pass
01 (Peak)	2400.000	10.304	46.747	57.050	74.00	54.00	Pass
01 (Peak)	2405.652	10.326	79.249	89.575			

Figure Channel 1:

Vertical (Peak)



Note:

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Eraguana	Peak	Duty Cycle	Average	Peak	Average Limit		
Channel No.	Frequency (MHz)	Measurement	Factor	Measurement	Limit	$(dB\mu V/m)$	Result
((MITZ)	$(dB\mu V/m)$	(dB)	$(dB\mu V/m)$	$(dB\mu V/m)$		
01 (Average)	2389.420	43.719	-26.303	17.416	74.00	54.00	Pass
01 (Average)	2390.000	43.172	-26.303	16.869	74.00	54.00	Pass
01 (Average)	2400.000	57.050	-26.303	30.747	74.00	54.00	Pass
01 (Average)	2405.652	89.575	-26.303	63.272			

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 5.



Product	:	ROG STRIX Fusion Wireless

Test Item	:	Band Edge Data	
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Test Date :	2018/05/04
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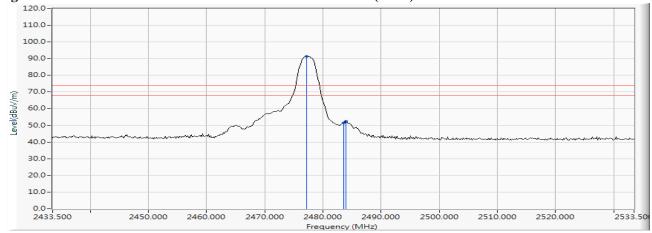
Test Mode : Mode 1: Transmit (2477.35MHz) _Ant2

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	(dBµV/m)	$(dB\mu V/m)$	Result
37 (Peak)	2477.123	10.616	80.814	91.430			
37 (Peak)	2483.500	10.640	40.980	51.621	74.00	54.00	Pass
37 (Peak)	2483.935	10.644	41.638	52.281	74.00	54.00	Pass

Figure Channel 37:

Horizontal (Peak)



Note:

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Measurement	Duty Cycle Factor	Average Measurement	Peak Limit	Average Limit (dBµV/m)	Result
	()	$(dB\mu V/m)$	(dB)	(dBµV/m)	$(dB\mu V/m)$		
37 (Average)	2477.123	91.430	-26.303	65.127			
37 (Average)	2483.500	51.621	-26.303	25.318	74.00	54.00	Pass
37 (Average)	2483.935	52.281	-26.303	25.978	74.00	54.00	Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 5.



Product :	ROG STRIX Fusion Wireless
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Test Item	:	Band Edge Data
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Test Date	:	2018/05/04

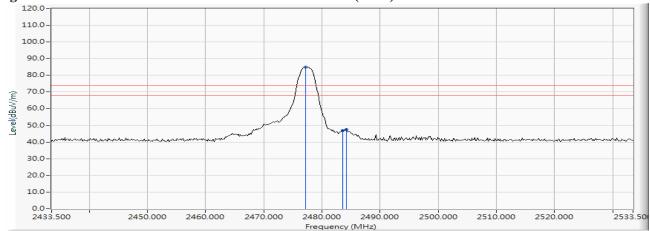
Test Mode : Mode 1: Transmit (2477.35MHz) _Ant2

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	(dBµV/m)	$(dB\mu V/m)$	Result
37 (Peak)	2477.123	10.616	74.311	84.927			
37 (Peak)	2483.500	10.640	36.228	46.869	74.00	54.00	Pass
37 (Peak)	2484.225	10.645	37.024	47.668	74.00	54.00	Pass

Figure Channel 37:

Vertical (Peak)



Note:

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

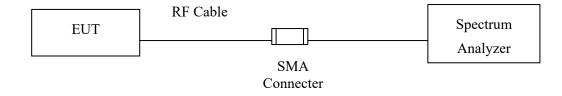
Frequency	Peak	Duty Cycle	Average	Peak	Average Limit		
Channel No.	(MHz)	Measurement	Factor	Measurement	Limit	$(dB\mu V/m)$	Result
	(IVITIZ)	$(dB\mu V/m)$	(dB)	$(dB\mu V/m)$	$(dB\mu V/m)$		
37 (Average)	2477.123	84.927	-26.303	58.624			
37 (Average)	2483.500	36.228	-26.303	9.925	74.00	54.00	Pass
37 (Average)	2484.225	47.668	-26.303	21.365	74.00	54.00	Pass

- 1. Average Measurement=Peak Measurement + Duty Cycle Factor
- 2. The Duty Cycle is refer to section 5.



5. Duty Cycle

5.1. Test Setup



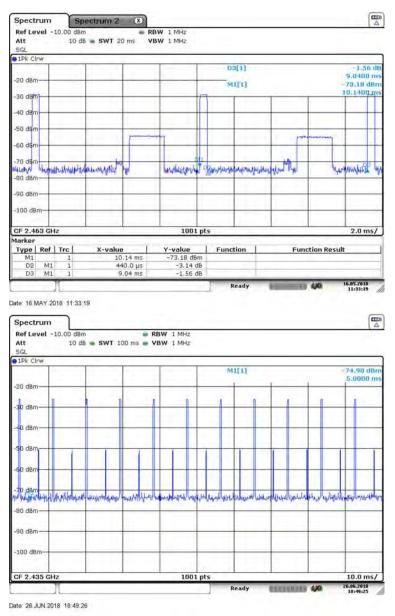
5.2. Uncertainty

± 2.31ms



5.3. Test Result of Duty Cycle

Product	:	ROG STRIX Fusion Wireless
Test Item	:	Duty Cycle Data
Test Mode	:	Mode 1: Transmit



Note: The signals which are under -50dBm are transmitted by the ancillaries.

Time on of 100ms= 440us*11= 4.84ms Duty Cycle= 4.84ms / 100ms= 0.0484 Duty Cycle correction factor= 20 LOG 0.0484= -26.303 dB

Duty Cycle correction factor -26.303 dB



6. EMI Reduction Method During Compliance Testing

No modification was made during testing.