

FCC PART 15C & RSS-247 TEST REPORT FOR CERTIFICATION On Behalf of

BLOCKSI LLC

Blocksi Parental Control Router

GEAC-200

FCC ID: 2ALT8GEAC200

IC: 23205-GEAC200

Prepared for: BLOCKSI LLC

228 Hamilton avenue 3rd floor, Palo Alto, CA, USA

Prepared By: AUDIX Technology Corp.

No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan

Report Number : EM-F170570

Date of Test : Aug.22~25, 2017

Date of Report : Sep.07, 2017



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TEST REPORT CERTIFICATION

Applicant : BLOCKSI LLC

Manufacturer : BLOCKSI LLC

Product : Blocksi Parental Control Router

FCC ID : 2ALT8GEAC200

IC : 23205-GEAC200

(A) Model No. : GEAC-200

(B) Serial No. : N/A

(C) Test Voltage : AC 120V/60Hz

Tested for comply with:

FCC CFR 47 Part 15 Subpart C RSS-247, ISSUE 2, Feb 2017

Test procedure used: ANSI C63.10: 2013 KDB 558074 D01v04 KDB 662911 D01v02r01

The device described above is tested by AUDIX Technology Corp. to confirm comply with all the FCC Part 15 Subpart C and RSS-247, ISSUE 2 requirements. The test results are contained in this test report and AUDIX Technology Corp. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and ISED requirements. This report contains data that are not covered by the NVLAP accreditation.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX Technology Corp.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test: Aug.22~25, 2017 Report of date: Sep.07, 2017

Reviewed by: /\(\text{MnU}\) (Annie Yu/Administrator)

Approved by: (Ben Cheng/Manager)



1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT has been tested according to the applicable standards as referenced below.

EMISSION					
Description of Test Item	Standard	Results			
	FCC Part 15: 15.207				
Power Line Conducted Emission	RSS-247, ISSUE 2	PASS			
	ANSI C63.10				
	FCC Part 15: 15.209				
Radiated Emission	RSS-247, ISSUE 2	PASS			
	ANSI C63.10				
	FCC Part 15: 15.247				
Band Edge Compliance	RSS-247, ISSUE 2	PASS			
	ANSI C63.10				
	FCC Part 15: 15.247				
Conducted spurious emissions	RSS-247, ISSUE 2	PASS			
	ANSI C63.10				
	FCC Part 15: 15.247				
6dB & 99% Bandwidth	RSS-247, ISSUE 2	PASS			
	ANSI C63.10				
	FCC Part 15: 15.247				
Peak Output Power	RSS-247, ISSUE 2	PASS			
	ANSI C63.10				
Equivalent Isotropic Radiated Power	RSS-247, ISSUE 2	DACC			
Test	ANSI C63.10	PASS			
	FCC Part 15: 15.247				
Power Spectral Density	RSS-247, ISSUE 2	PASS			
	ANSI C63.10				
Antenna requirement	FCC Part 15: 15.203	PASS			



2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product : Blocksi Parental Control Router

Model No. : GEAC-200

FCC ID : 2ALT8GEAC200

IC : 23205-GEAC200

Radio : IEEE802.11 a/b/g/n/ac

Operation : IEEE 802.11a:5180MHz—5240MHz

Frequency IEEE 802.11ac VHT20: 5180MHz—5240MHz

IEEE 802.11ac VHT40: 5190MHz—5230MHz

IEEE 802.11ac VHT80: 5210MHz IEEE 802.11b: 2412MHz—2462MHz IEEE 802.11g: 2412MHz—2462MHz

IEEE802.11nHT20: 2412MHz—2462MHz;5180MHz—5240MHz IEEE802.11nHT40: 2422MHz—2452MHz; 5190MHz—5230MHz

Modulation : IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK)

Technology IEEE 802.11a/g: OFDM(64QAM, 16QAM, QPSK, BPSK)

IEEE 802.11ac VHT20, VHT40, VHT80: OFDM(16QAM, 64QAM,

256QAM, QPSK, BPSK)

IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM,QPSK,BPSK)

Antenna Assembly: Antenna Type: Dipole

Gain WIFI 2.4GHz:4.42dBi

WIFI 5GHz: 5.08dBi

Applicant : BLOCKSI LLC

228 Hamilton avenue 3rd floor, Palo Alto, CA, USA

Manufacturer : BLOCKSLLLC

228 Hamilton avenue 3rd floor, Palo Alto, CA, USA

Factory : BLOCKSI LLC

228 Hamilton avenue 3rd floor, Palo Alto, CA, USA

Manufacturer: Shenzhen City Hong Ben Electronic Co., Ltd.

Power Adapter : M/N: HB40-120200SPA;

Cable: Unshielded, Detachable, 0.8m

LAN Cable : Unshielded, Detachable, 1.2m

Date of Test : Aug.22~25, 2017

Date of Receipt : Jun.30, 2017



2.2.Tested Supporting System Details

2.2.1. Support Peripheral Unit

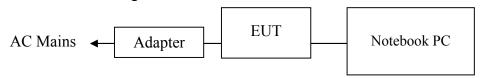
No.	Product	Brand	Model No.	Serial No.	FCC ID			
	For AC Conduction Test							
1.	Notebook PC	ASUS	X5502E	N/A	Contains FCC ID: PPD-AAR5B225			
2.	USB3.0 HDD	WD	WDBUZG5000 ABK-05	WX61A44S1219	By DoC			
	For Radiated Spurious Emission and RF Conducted Test							
1.	Notebook PC	ASUS	X5502E	N/A	Contains FCC ID: PPD-AAR5B225			

2.2.2. Cable Lists

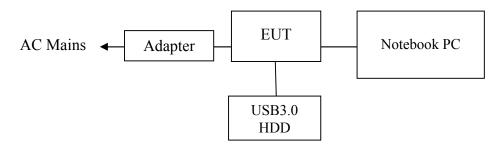
No.	Cable Description Of The Above Support Units					
	For AC Conduction Test					
	LAN Cable: Unshielded, Detachable, 1.0m					
1	Adapter: Enerironix, M/N EXA1208UH					
1.	DC Power Cord: Unshielded, Detachable, 1.8m, Bonded a ferrite core					
	AC Power Cord: Unshielded, Detachable, 1.8m					
2.	USB Cable: Shielded, Detachable, 0.5m					
	For Radiated Spurious Emission and RF Conducted Test					
	LAN Cable: Unshielded, Detachable, 1.0m					
1.	Adapter: Enerironix, M/N EXA1208UH					
1.	DC Power Cord: Unshielded, Detachable, 1.8m, Bonded a ferrite core					
	AC Power Cord: Unshielded, Detachable, 1.8m					

2.3.Block diagram of connection between the EUT and simulators

2.3.1. EUT Configuration for Radiated Emission & Conducted Test



2.3.2. EUT Configuration for Power Line Test



(EUT: Blocksi Parental Control Router)



2.4.Test Information

A special test software was used to control EUT work in Continuous TX mode (The duty cycle of the test signal is 100%), and select test channel, wireless mode and data rate.

Tested mode, channel, ar	Tested mode, channel, and data rate information							
Mode	data rate (Mbps)(see Note)	Channel	Frequency (MHz)					
	1	Low:CH1	2412					
IEEE 802.11b	1	Middle: CH6	2437					
	1	High: CH11	2462					
	6	Low:CH1	2412					
IEEE 802.11g	6	Middle: CH6	2437					
	6	High: CH11	2462					
	MCS0	Low:CH1	2412					
IEEE 802.11n HT20	MCS0	Middle: CH6	2437					
	MCS0	High: CH11	2462					
	MCS0	Low:CH3	2422					
IEEE 802.11n HT40	MCS0	Middle: CH6	2437					
	MCS0	High: CH9	2452					

Note 1: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.

Note 2: The output power of worst case is MIMO(ant0+ant1) so we test all in MIMO configuration



2.5.Test Facility

	Audix Technology Corporation / EMC Department No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan				
Name of Test Firm	Tel: +886-2-26092133 Fax: +886-2-26099303 Website: www.audixtech.com Contact e-mail: sales@audixtech.com				
	The laboratory is accredited by following organizations under ISO/IEC 17025:2005				
Accreditations	(1) NVLAP(USA) NVLAP Lab Code 200077-0				
Accreditations	(2) TAF(Taiwan) No. 1724				
	(3) FCC OET Designation No. TW1004 & TW1090 & TW1724				
	(1) No. 7 Shielding Room				
Test Facilities	(2) Semi-Anechoic Chamber (IC Test Site Registration No.: 5183B-1)				
	(3) Fully Anechoic Chamber (IC Test Site Registration No.: 5183B-4)				

2.6.Measurement Uncertainty

Test Item	Frequency Range	Uncertainty
Conduction Test	150kHz~30MHz	±3.50dB
D - 1:-4: T4	9kHz~30MHz	± 0.5dB
Radiation Test	30MHz~1000MHz	± 3.68dB
(Distance: 3m)	Above 1GHz	± 5.82dB

Remark : Uncertainty = $ku_c(y)$

Test Item	Uncertainty
6dB Bandwidth	± 0.05kHz
Maximum peak output power	± 0.33dB
Power spectral density	± 0.13dB
Conducted Emission Limitations	± 0.13dB



3. TEST EQUIPMENTS

3.1.Conducted Emission Measurement

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
1.	Test Receiver	R&S	ESCI	101276	2017. 03. 23	1 Year
2.	A.M.N.	R&S	ESH2-Z5	100366	2017. 07. 20	1 Year
3.	L.I.S.N.	Kyoritsu	KNW-407	8-881-13	2016. 12. 28	1 Year
4.	Pulse Limiter	R&S	ESH3-Z2	101495	2017. 01. 16	1 Year
5.	Test Software	Audix	e3	V.120619C	N.C.R.	N.C.R.

3.2. Radiated Emission Measurement

Item	Туре	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
1.	Spectrum Analyzer	Agilent	N9010A-526	MY53400071	2016. 09. 19	1 Year
2.	Spectrum Analyzer	Keysight	N9010B-544	MY55460198	2017. 04. 18	1 Year
3.	Test Receiver	R & S	ESCS30	100338	2017. 06. 19	1 Year
4.	Amplifier	HP	8447D	2944A06305	2017. 02. 16	1 Year
5.	Amplifier	Sonoma	310N	187161	2017. 06. 08	1 Year
6.	Bilog Antenna	CHASE	CBL6112D	33821	2017. 01. 21	1 Year
7.	Loop Antenna	R&S	HFH2-Z2	891847/27	2016. 12. 23	1 Year
8.	Double-Ridged Waveguide Horn	ETS-Lindgren	3117	00135902	2017. 03. 08	1 Year
9.	Horn Antenna	EMCO	3116	2653	2016. 10. 24	1 Year
10.	2.4GHz Notch Filter	K&L	7NSL10-244 1.5E130.5-0 0	1	2017. 07. 27	1 Year
11.	3GHz Notch Filter	Microwave	H3G018G1	484798	2017. 08. 24	1 Year
12.	Test Software	Audix	e3	V.6.110601	N.C.R.	N.C.R.
13.	Test Software	Audix	e3	V.6.1206197	N.C.R.	N.C.R.

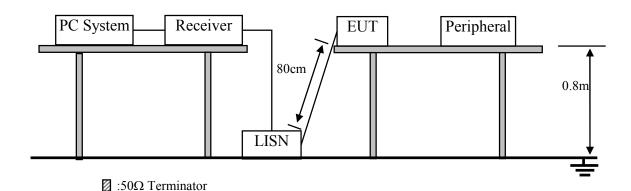
3.3.RF Conducted Measurement

Item	Туре	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
1.	Spectrum Analyzer	Agilent	N9010A-507	MY52220264	2017. 08. 10	1 Year



4. POWER LINE CONDUCTED EMISSION TEST

4.1.Block Diagram of Test Setup



4.2. Power Line Conducted Emission Test Limits

	Maximum RF Line Voltage					
Frequency	Quasi-Peak Level	Average Level				
	dB(µV)	dB(µV)				
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*				
500kHz ~ 5MHz	56	46				
5MHz ~ 30MHz	60	50				

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

4.3. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

4.3.1. Blocksi Parental Control Router (EUT)

Model No. : GEAC-200

Serial No. : N/A

4.3.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.

4.4. Operating Condition of EUT

- 4.4.1. Setup the EUT and simulator as shown as Section 4.1.
- 4.4.2. Turn on the power of all equipments.
- 4.4.3. PC run test software to control EUT work in Tx mode.



4.5. Test Procedure

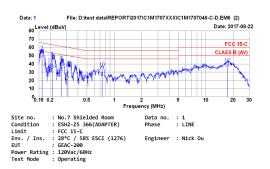
The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via PC connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESCI) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

4.6. Power Line Conducted Emission Test Results

PASS. (All emissions not reported below are too low against the prescribed limits.)



	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.162	0.17	0.03	9.86	33.45	43.51	55.34	11.83	Average
2	0.162	0.17	0.03	9.86	45.95	56.01	65.34	9.33	QP
3	0.211	0.16	0.04	9.86	23.15	33.21	53.18	19.97	Average
4	0.211	0.16	0.04	9.86	38.54	48.60	63.18	14.58	QP
5	0.266	0.17	0.04	9.86	20.29	30.36	51.25	20.89	Average
6	0.266	0.17	0.04	9.86	33.50	43.57	61.25	17.68	QP
7	0.312	0.17	0.04	9.86	8.63	18.70	49.93	31.23	Average
8	0.312	0.17	0.04	9.86	25.32	35.39	59.93	24.54	QP
9	0.735	0.20	0.05	9.86	13.65	23.76	46.00	22.24	Averag
10	0.735	0.20	0.05	9.86	25.34	35.45	56.00	20.55	QP
11	17.291	1.00	0.29	9.93	23.54	34.76	50.00	15.24	Averag
12	17.291	1.00	0.29	9.93	29.37	40.59	60.00	19.41	QP

mmarks: 1. Emission Level= AVN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

80 Level (dBuV)						Date:	2017-08-
70				-		F	CC 15-C
60 2				_			S B (AV)
50						CLAS	3 D (AV)
40	ii. 10						10
30 W					بالإلاال	AND WOODS	James Company
20	ALANAMA . At	$\bigcup_{i} I^{i} \cap 1 \bigcup_{i} f^{i}$	VVVV	distriction.	1		***
10	1. 1.11.	" "					
0.15 0.2	0.5	1	2	5		10	20 3
		Freq	uency (MHz)				
Site no. : No.	7 Shielded Ro	oom	Data no	. ::	2		
Condition : ESH	2-Z5 366(ADAF	TER)	Phase	: 1	NEUTRA	L	
.imit : FCC	15-C						
nv. / Ins. : 28*	C / 58% ESCI	(1276)	Enginee	r : t	Nick D	u	
EUT : GEA	C-200						
Power Rating : 120	Vac/60Hz						

		Arun	capie	Pulse		Em15510H			
	Freq.	Factor	Loss	Att.	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB)	(dB)	(dB)	(dBµV)	(dBµV)	(dBµV)	(dB)	
1	0.157	0.19	0.03	9.86	26.79	36.87	55.60	18.73	Average
2	0.157	0.19	0.03	9.86	43.28	53.36	65.60	12.24	QP
3	0.208	0.17	0.04	9.86	16.23	26.30	53.27	26.97	Average
4	0.208	0.17	0.04	9.86	31.55	41.62	63.27	21.65	QP
5	0.262	0.18	0.04	9.86	10.90	20.98	51.38	30.40	Average
6	0.262	0.18	0.04	9.86	30.17	40.25	61.38	21.13	QP
7	0.323	0.18	0.04	9.86	15.88	25.96	49.62	23.66	Average
8	0.323	0.18	0.04	9.86	28.05	38.13	59.62	21.49	QP
9	0.747	0.21	0.05	9.86	13.77	23.89	46.00	22.11	Average
10	0.747	0.21	0.05	9.86	24.96	35.08	56.00	20.92	QP
11	18.135	0.93	0.29	9.93	17.25	28.40	50.00	21.60	Average
12	18.135	0.93	0.29	9.93	23.98	35.13	60.00	24.87	QP

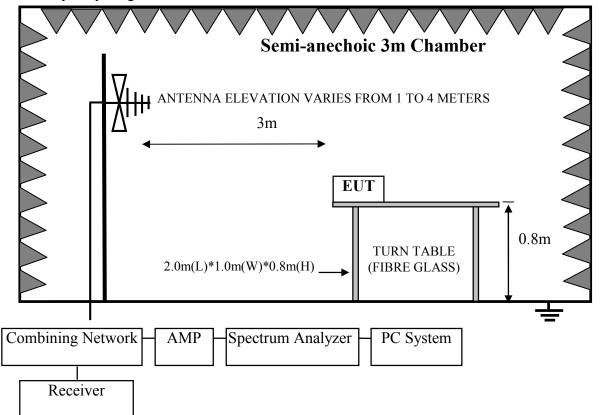
marks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



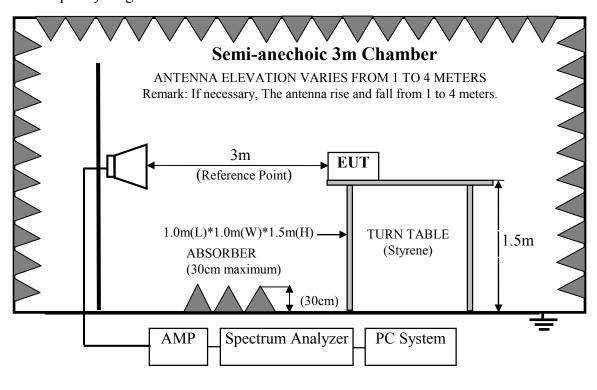
5. RADIATED EMISSION TEST

5.1.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz



For frequency range 1GHz-25GHz





5.2. Radiated Emission Limit

5.2.1.15.247&209&RSS-247 limits

FREQUENCY	DISTANCE	FIELD STRENGTHS LIMIT				
MHz	Meters	μV/m	dB(μV)/m			
30 ~ 88	3	100	40.0			
88 ~ 216	3	150	43.5			
216 ~ 960	3	200	46.0			
960 ~ 1000	3	500	54.0			
Above 1000	3	74.0 dB(μV)/m (Peak)				
		54.0 dB(μV	V)/m (Average)			

Remark : (1) Emission level $dB\mu V = 20 \log Emission level \mu V/m$

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

5.2.2. 15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

5.3.EUT Configuration on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

5.3.1. Blocksi Parental Control Router (EUT)

Model No. : GEAC-200 Serial No. : N/A

5.3.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.



5.4. Operating Condition of EUT

- 5.4.1. Setup the EUT and simulator as shown as Section 5.1.
- 5.4.2. Turn on the power of all equipments.
- 5.4.3. Let EUT work in Tx mode

5.5.Test Procedure

Frequency below 30MHz:

The EUT setup on the turn table which has 0.8 m height to the ground. The turn table rotated 360 degrees and antenna fixed to 1 m to find the maximum emission level. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10-2013 regulation.

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground for frequency 30MHz~1000MHz, 1.5 meter high above ground for frequency above 1GHz and put the absorbing with 2.4m(L)*2.4m(W)*0.3m(H) on the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it.EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna for frequency 30MHz~1000MHz, and the Horm antenna is used as receiving antenna for frequency above 1GHz. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the EMI test receiver (R&S ESCS30) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

The frequency range from 30MHz to 10th harmonic (25GHz) are checked, and no any emissions were found from 18GHz to 25GHz.

5.6.Radiated Emission Test Results

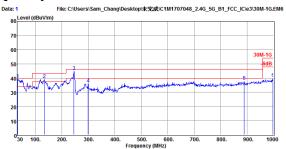
PASS.

All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

- Note 1: For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.
- Note 2: The emissions (9kHz~30MHz) not reported for there is no emission be found.
- Note 3: The duty cycle of the test signal is 100%.
- Note 4: The EUT were tested both EUT is Horizontal and EUT is Vertical, but the EUT is Horizontal is worse, and selected the worst case to issue report.

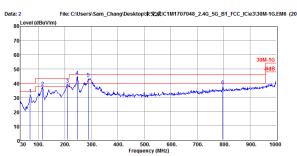


Frequency: 30MHz~1GHz



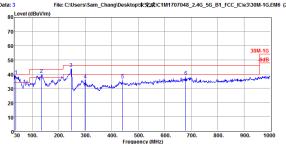
I 31.94 23.78 1.25 13.99 39.00 40.00 1.00 Peak 2 133.79 18.12 2.65 18.31 38.08 43.50 4.42 Peak 3 245.34 18.84 3.77 22.14 44.75 46.00 1.25 Peak 4 238.59 13.48 4.29 12.19 35.96 46.00 10.04 Peak 5 838.42 25.73 8.12 2.78 37.63 46.00 8.37 Peak		Freq.	Ant. Factor (dB/m)	Cable Loss (dB)		Emission Level (dB \mu V/m)	Limits (dBµV/m)	Margin (dB)	Remark	
6 999.03 27.83 8.83 3.32 39.98 54.00 14.02 Feak	3 4	133.79 245.34 298.69	18.12 18.84 19.48	2.65 3.77 4.29 8.12	18.31 22.14 12.19	39.08 44.75 35.96	43.50 46.00 46.00	4.42 1.25 10.04	Peak Peak Peak	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.



Site no. : AUDIX No.1 3m Chamber
Dis. / Ant. : 3m CBL6112D 33821(PAD)
Limit : 30m-1G
Env. / Ins. : 25=0 / 51% N9010A
EUT : GEAC-200
Power Rating : AC 12UV
Test Mode : Tx 2412WHz(802.11b) Data no. : 2 Ant. pol. : HORIZONTAL Engineer : Sam

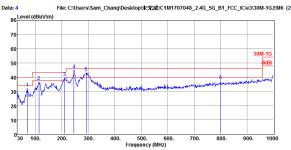
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading 2. The emissions not reported are 20 dB lower than the specified limit.



Site no. : AUDIX No.1 3m Chamber Data no. : 3
Dis. / Ant. : 3m CBL6112D 33821(PAD) Ant. pol. : VERTICAL
Limit : 30M-IG
Env. . Ins. : 25x-C / 51X N9010A Engineer : Sam
EUI GEAC-200
Power Rating : AC 120V
Tost Mode : Tx 2412WHz(802.11g)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dB μ V/m)	Limits	Margin (dB)	Remark	
1 2 3 4 5 6	36.79 132.82 246.31 298.69 440.31 679.90	21.33 18.16 18.89 19.48 22.53 24.83	2.84 3.77 4.29 5.93	16.33 19.00 21.46 12.25 7.55 6.46	39.00 39.80 44.12 36.02 36.01 38.31	40.00 43.50 46.00 48.00 46.00 46.00	1.00 3.70 1.88 9.98 9.99 7.69	Peak Peak Peak Peak Peak Peak	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading 2. The emissions not reported are 20 dB lower than the specified limit.



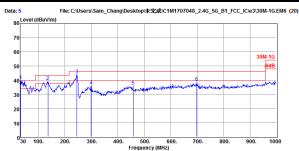
Site no. : AUDIX No.1 % Chamber | Data no. : 4
Disa / Ant. : 3m CBL6112D 33821(PAD) | Ant. pol. : HORIZONTAL
Limit | SOM-1G |
Env. / Ins. : 2584 / 518 N8010A | Engineer : Sam
UT | GEA/C-200 | Engineer : Sam
Power Rating : AC 120V |
Test Mode : Tx 2412WHz(802.11g)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dB μ V/m)	Limits	Margin (dB)	Remark
1 2 3 4 5 6	68.80 112.45 209.45 245.34 291.90 800.18	12.75 18.35 16.44 18.84 19.44 25.91	4.23	17.53 18.08 19.63 22.58 19.41 4.11	32.14 36.83 39.51 45.17 43.08 37.62	40.00 43.50 43.50 48.00 48.00 46.00	7.86 8.67 3.99 0.83 2.92 8.38	Peak Peak Peak Peak Peak Peak Peak



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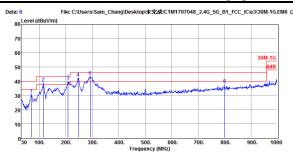




Site no. : AUDIX No.1 3m Chamber Data no. : 5
Dis. / Ant. : 3m CBL8112D 33821(PAD) Ant. pol. : VERTICAL
Limit/ Ins. : 25xc / 51X N9010A Engineer : Sam
EUI GEAC-200
Fower Ratins : AC 120V
Tost Mode : 1x 2412MHz(802.11n20)

| Ant. Cable | Enission | Enission | Cable |

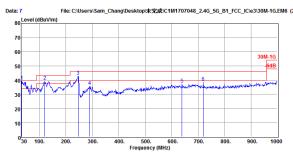
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading 2. The emissions not reported are 20 dB lower than the specified limit.



| Site no. | Carte | AUDIX No.1 % Chamber | Data no. | Carte |

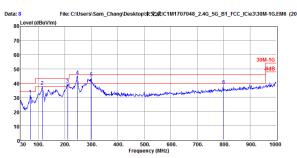
Ant. Cable Emission Freq. Factor Loss Reading Level Limits Margin Remark (MHz) (dB/m) (dB) (dB,2/V) (dB,2/V/m) (dB) (dB,2/V/m) (dB)

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading 2. The emissions not reported are 20 dB lower than the specified limit.



	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dB \mu V/m)	Limits	Margin (dB)	Remark
1 2 3 4 5	31.94 120.21 246.31 288.99 639.16 719.67	23.76 18.80 18.89 19.42 24.73 25.09	3.77 4.20 6.88	14.30 17.95 20.04 12.11 5.54 6.12	39.31 39.26 42.70 35.73 37.15 38.40	40.00 43.50 46.00 48.00 48.00 46.00	0.69 4.24 3.30 10.27 8.85 7.60	Peak Peak Peak Peak Peak Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading 2. The emissions not reported are 20 dB lower than the specified limit.



| Site no. | Company | Site no

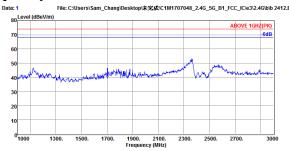
	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Enission Level (dBμV/m)	Limits	Margin (dB)	Remark
1	68.80	12.75	1.86	16.79	31.40	40.00	8.60	Peak
2	114.39	18.48	2.44	16.73	37.65	43.50	5.85	Peak
3	210.42	16.55	3.45	19.25	39.25	43.50	4.25	Peak
4	247.28	19.00	3.79	22.32	45.11	48.00	0.89	Peak
5	298.69	19.48	4.29	20.09	43.86	46.00	2.14	Peak
6	800.18	25.91	7.60	4.78	38.29	46.00	7.71	Peak



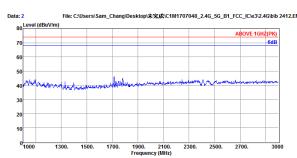




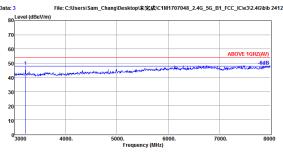
Frequency: 1GHz~25GHz



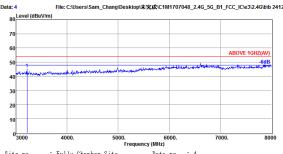
Site no. : Fully Chamber Site
Dis. / Ant. : 3m 3117(00135902)
Limit : 8BOVE IGHZ(PX)
Env. / Ins. : 22*C / 52*X M9010B
EUT : GRC-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11b) Data no. : 1 Ant. pol. : VERTICAL Engineer : Sam



Data no. : 2 Ant. pol. : HORIZONTAL Engineer : Sam



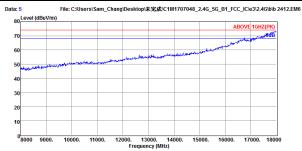
Site no. : Fully Chamber Site
Dis. / Ant. : 3m 3117(00135802)
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% M0010B
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11b) Data no. : 3 Ant. pol. : VERTICAL Engineer : Sam



Data no. : 4 Ant. pol. : HORIZONTAL Engineer : Sam

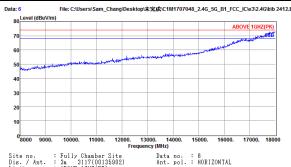


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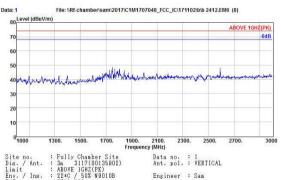
Site no. : Fully Chamber Site
Dis. / Ant. : 3m 3117(00135902)
Limit : 8MOVE IGHZ(PK)
Env. / Ins. : 22*C / 58*X M9010B
EUT : GRO-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11b)

Data no. : 5 Ant. pol. : VERTICAL Engineer : Sam

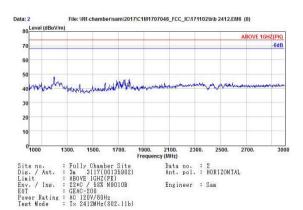


Site no. : Fully Chamber Site
Dis. / Ant. : 3m 3117(00135902)
Limit : 8BOVE IGHZ(PK)
Env. / Ins. : 22*C / 58% N9010B
EUT : CRO-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11b)

Engineer : Sam



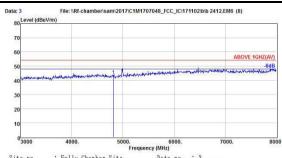
Site no. : Fully Chamber Site
Dis. / Ant. : 3m 3117(00135902)
Limit : ABOVE IGHZ(PK)
Env. / Ins. : 22*0 / 53% N9010B
EUT : GAC-200
Power Rating : AC 120V/60Hz
Test Mode : Tx 2412MHz(802.11b)







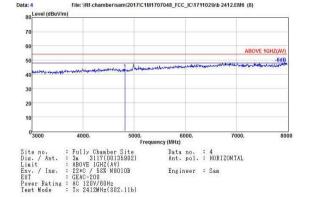
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Site no. : Fully Chamber Site
Dis. / Ant. : 3m 3117(00135902)
Limit : 3mbVE 1GHZ(AV)
Env. / Ins. : 22*C / 52% M8010B
EUT : GEAC-200
Power Rating : AC 120V/50Hz
Test Mode : Ix 2412MHz(802.11b)

Data no. : 3 Ant. pol. : VERTICAL Engineer : Sam

| Ant. Cable | Emission | Freq. Factor Loss Reading | Level | Limits | Margin | Remark | (MHz) | (dS/a) | (dS) | (dS/a) | (dS/a) | (dB/a) | (dB/a)



Ant. Cable Eniesion
Freq. Factor Loss Reading Level Limits Marzin Remark
(MHz (dB/m) (dBμ/γ) (dBμ/γ) (dBμ/γ) (dBμ/γ) (dB)
1 4820.00 34.23 9.54 -0.29 43.48 54.00 10.52 Peak

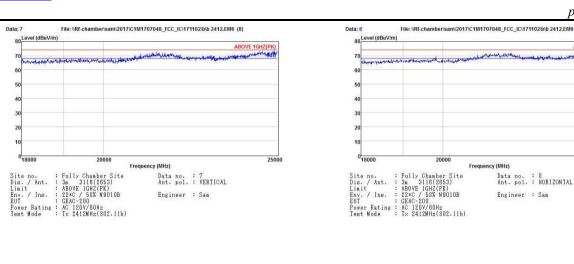


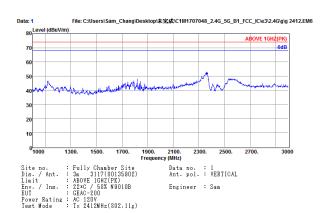


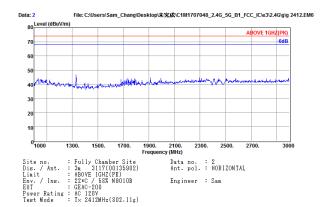




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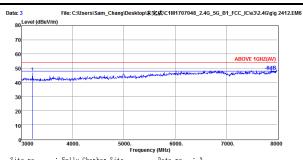






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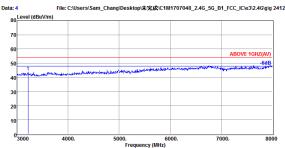
Site no. : Fully Chamber Site
Dis. / Ant. : 3m 3117(00135902)
Limit : ABOVE IGHZ(AV)
Env. / Ins. : 22*C / 52*K M9010B
EUT : GEAC-200
Power Rating : AC 120V
Test Wode : Tx 2412MHz(802.11g)

Engineer : Sam

Ant. Cable
Freq. Factor Loss Reading Level Limits Margin Remark
(WHz) (dB/m) (dB) (dB, W) (dB, W/m) (dB, W/m) (dB)

1 3215.00 32.88 7.78 8.08 48.88 54.00 7.32 Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading 2. The emissions not reported are 20 dB lower than the specified limit.

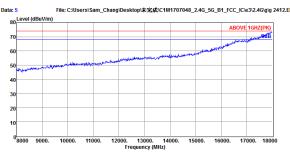


Site no. : Fully Chamber Site
Dis. / Ant. : 3m 3117(00135902)
Limit : 8BOVE IGHZ(AV)
Env. / Ins. : 22*C / 52*K N9010B
EUT : CRO-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11g) Data no. : 4 Ant. pol. : HORIZONTAL Engineer : Sam

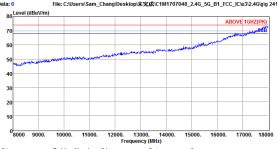
Ant. Cable Emission
Freq. Factor Loss Reading Level Limits Margin Remark
(MHz) (dB/m) (dB) (dBμV/m) (dBμV/m) (dBμV/m) (dB

1 3215.00 32.88 7.76 3.08 43.88 54.00 10.32 Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading 2. The emissions not reported are 20 dB lower than the specified limit.



Site no. : Fully Chamber Site
Dis. / Ant. : 3m 3117(00135902)
Limit : 8m0VE IGHZ(PX)
Env. / Ins. : 22*C / 58% N9010B
EUT : GEAC-200
Power Rating : AC 120V
Test Node : Tx 2412MHz(802.11g) Data no. : 5 Ant. pol. : VERTICAL Engineer : Sam



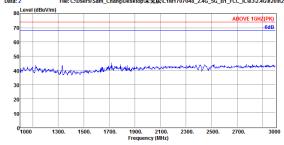
Site no. : Fully Chamber Site
Dis. / Ant. : 3m 3117(00135902)
Limit : 8MOVE IGHZ(PK)
Env. / Ins. : 22xC / 58X M9010B
EUT : GRAC-200
Power Rating : AC 120V
Test Mode : Ix 2412MHz(802.11g) Data no. : 6 Ant. pol. : HORIZONTAL Engineer : Sam



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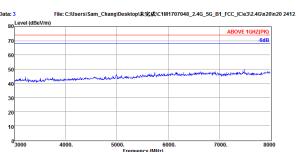
5-11 page

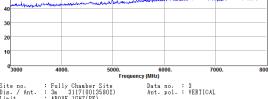




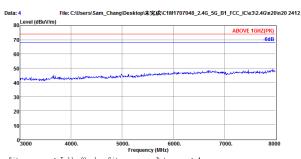






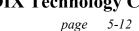


Site no. : Fully Chamber Site Dis. / Ant. : 3m 3117(00135902) Limit : ABOVE IGHZ(FX) Env. / Ins. : 22°C / 58% M8010B EUR / Env. / Ins. : GEA-O-20 Power Rating : AC 120V Test Mode : Tx 2412MHz(802.11n20) Engineer : Sam

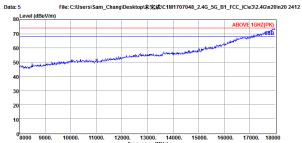


Site no. : Fully Chamber Site Dis. / Ant. : 3m 3117(00135902)
Limit : ABOVE IGHZ(FX)
Env. / Ins. : 2240 / 58% M0010B
EVER CHAMBER CHAM Data no. : 4 Ant. pol. : HORIZONTAL Engineer : Sam

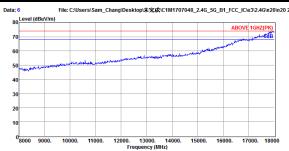




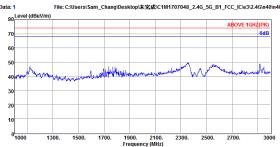




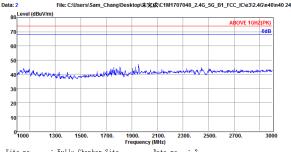
Site no. : Fully Chamber Site
Dis. / Ant. : 3m 3117(00135902)
Limit : ABOVE 1GHZ(FX)
Env. / Ins. : 22*C / 58% M8010B
EVER 1 : GEAG-20
Fower Rating : AC 120V
Test Mode : Tx 2412MHz(802.11n20) Data no. : 5 Ant. pol. : VERTICAL Engineer : Sam



Site no. : Fully Chamber Site Die. / Ant. : 3a 3117(00135902) Limit : ABOVE IGHZ(FK) Env. / Ins. : 22*C / 58% N9010B EUT : GEAC-020 Power Rating : AC 120V Test Mode : Tx 2412MHz(802.11n20) Data no. : 6 Ant. pol. : HORIZONTAL Engineer : Sam



Site no. : Fully Chamber Site Disc. / Ant. : 3m 3117(00135902) Limit : ABOVE IGHZ(FX) Env. / Insc. : 22*C / 56% N9010B EUT : GEAC-200 |
Power Rating : AC 120V |
Test Mode : Tx 2422MHz(802.11n40) Data no. : 1 Ant. pol. : VERTICAL Engineer : Sam

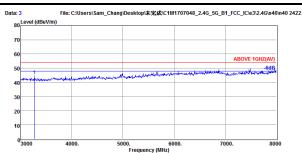


Site no. : Fully Chamber Site Dis. / Ant. : 3m 3117(00135902) Limit : ABOVE IGHZ(FX) Env. / Ins. : 22°C / 58% M010B EUR / GEAP-CUS / Data no. : 2 Ant. pol. : HORIZONTAL Engineer : Sam



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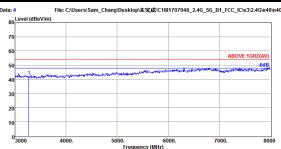
Site no. : Fully Chamber Site
Dis. / Ant. : 3m 31/7(00135902)
Limit : ABOVE LGHZ(AV)
Env. / Ins. : 22°C / 58% N9010B
EVER CHAMBER SITE CHAMBER SITE
FOWER Rating : AC 120V
Test Mode : Tx 2422WHz(802.11n40)

Ant. Cable
Freq. Factor Loss Reading Level Limits Margin Remark
(WHz) (dB/m) (dB) (dB \(\psi \) (dB)

1 3270.00 32.84 7.88 3.88 44.59 54.00 9.41 Peak

Engineer : Sam

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading 2. The emissions not reported are 20 dB lower than the specified limit.

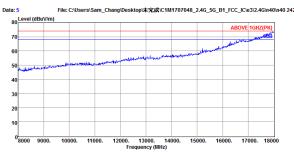


Site no. : Fully Chamber Site Die. / Ant. : 3m 3117(00135902)
Limit : ABOVE IGHC(AV)
Env. / Ins. : 2240 / 58% N8010B
EUUR Rating : AC 120V
Power Rating : AC 120V
Test Mode : Tx 2422MHz(802.11n40) Data no. : 4 Ant. pol. : HORIZONTAL Engineer : Sam

Ant. Cable Emission
Freq. Factor Loss Reading Level Limits Margin Remark
(MHz) (dB/m) (dB) (dBμV/m) (dBμV/m) (dBμV/m) (dB)

1 3270.00 32.84 7.86 1.60 42.30 54.00 11.70 Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading 2. The emissions not reported are 20 dB lower than the specified limit.

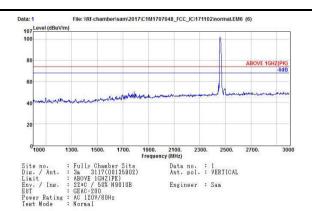


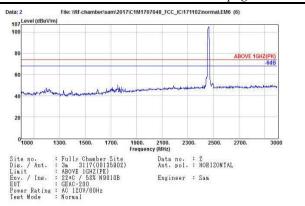
Site no. : Fully Chamber Site
Dis. / Ant. : 3m 3117(00135902)
Limit : ABOVE IGHZ(FX)
Env. / Ins. : 22*C / 58% M9010B
EVER Rating : AC 120V
Fower Rating : AC 120V
Test Mode : Tx 2422MHz(802.11n40) Data no. : 5 Ant. pol. : VERTICAL Engineer : Sam

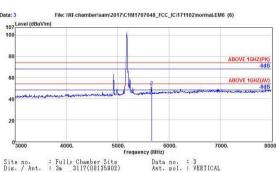
Site no. : Fully Chamber Site Dis. / Ant. : 3m 3117(00135902) Limit : ABOVE IGHZ(FX) Env. / Ins. : 224C / 58% N0010B EUU Power Rating: AC 120V Power Rating: AC 120V East Mode : Tx 2422MHz(802.11n40) Data no. : 6 Ant. pol. : HORIZONTAL Engineer : Sam



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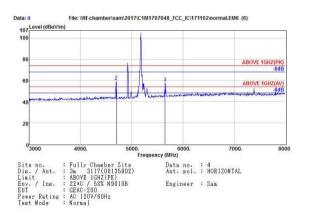






20						
03000	4000.	5000. Frequ	6000. ency (MHz)	_	7000.	
Site no. Dis. / Ant. Limit	: Fully Chaml : 3m 3117() : ABOVE 1GHZ	00135902)	Data no. Ant. pol.		3 VERTICAL	
Env. / Ins. EUT Power Rating	: ZZ*C / 58% : GEAC-200 : AC 120V/80	N9010B	Engineer		Sam	

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading	Emission Level (dB \(V/m)	Limits	Margin (dB)	Remark
1 2	5665.00 5665.00	34.99 34.99	10.47	-5.45 5.87	40.01 51.13	54.00 74.00	13.99	Average Peak

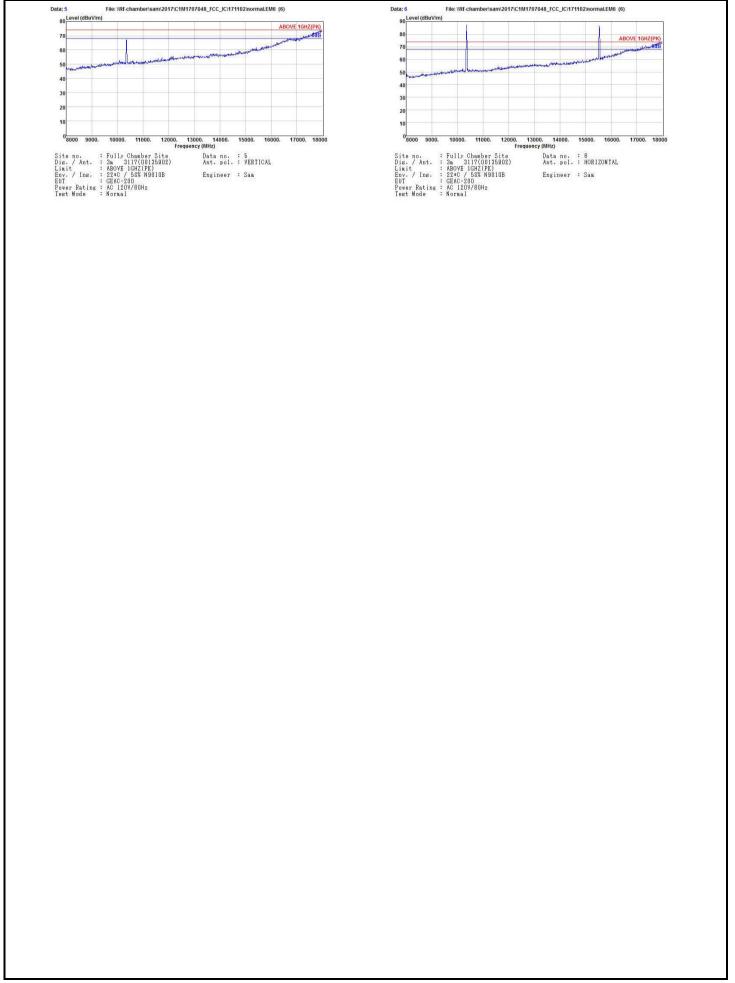


	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading	Emission Level (dB \(V/m)	Limits	Margin (dB)	Remark
1	4700.00	34.18	9.50	5.24	48.92	54.00	5.08	Average
2	4700.00		9.50	15.63	59.31	74.00	14.69	Peak
3	5855.00	34.99	10.47	12.06	57.52	74.00	18.48	Peak
4	5855.00	34.99	10.47	1.87	47.13	74.00	28.87	Peak



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6. CONDUCTED SPURIOUS EMISSIONS

6.1.Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

In addition, radiated emissions which fall in the restricted bands, as defined in RSS-GEN Clause 7.2.2, must also comply with the radiated emission limits specified in RSS-247.

6.2.Test Procedure

The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions with peak detector.

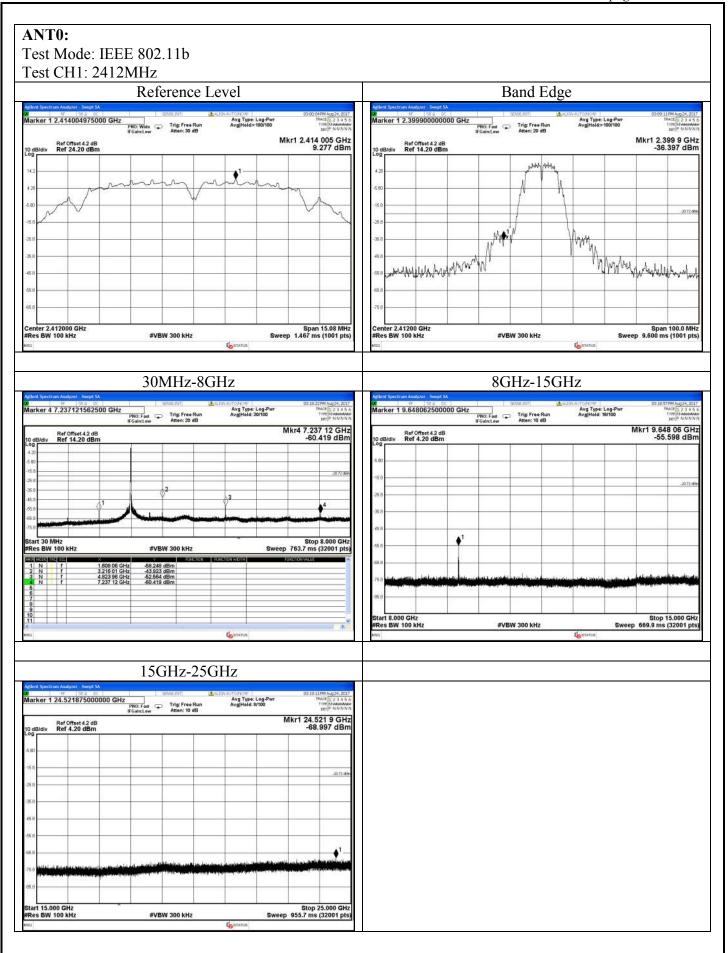
6.3. Test result

PASS (The testing data was attached in the next pages.)



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