

Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 1 of 42

FCC Test Report

Applicant : Chasing-Innovation Technology Co.,Ltd.

Room 3105, Building 6, Shenzhen International

Address : Innovation Valley, Xili, Nanshan District,

Shenzhen, Guangdong, 518000, China

Product Name : CHASING CF1

Report Date: Nov. 03, 2023

Shenzhen Anbotek Compliance Laboratory Limited







Contents

1. Gener	al Information	Anbore.	Γ		Olek Vi		
1.3.	Client Information	During Test.		<u></u>	400		, dog
2. Condu	ucted Emission at AC power	line		- Opolek	Auporg	bi	13
2.1. 2.2. 2.3.	EUT Operation Test Setup Test Data	nootek Honodou	Vipo ₁	Augusek	, pobořek Angoř	N AUDO	13 13 14
3. Duty 0	Cycle	Mpoter	Anb.	°,,	rek Ant	, , , , , , , , , , , , , , , , , , ,	16
3.1. 3.2. 3.3.	EUT Operation Test Setup Test Data	ker And	rek kupo,	oord A	Proposek Postek	Wastek Wastek	16 16
4. Maxim	num conducted output powe	Forek	upo.	n.	Pubote.	VU.	
4.1. 4.2. 4.3.	EUT Operation Test Setup Test Data	Ansotek Ansotek	Anbore Ansorek	Angarek Angarek	ek Aup	otek ko	18 18 18
5. Power	spectral density	W.pose.	Y Ans	na visto	0016"	No.	19
5.1. 5.2. 5.3.	EUT Operation Test Setup Test Data	o _{jek} v,	hough Aug	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Anostek Anostek	Anbotek Anbotek	20 20
6. Emiss	ion bandwidth and occupied	d bandwidth	Vupote.	Vun Vick	Motel	Anbo,	2 ²
6.1. 6.2. 6.3.		Vipotek Vipotek		Anbon	ogsk bi Nuor	opolek Nek Vul	22 23
	nel Move Time, Channel Clo	sing Transn	nission Tim			- Mopo _{ter} -	24
7.2.	EUT Operation Test Setup Test Data	o _{to} V	Pop _{olok} Po _{tok}	nb ^{ore}		kupo _{tek}	25 25
8. Non-C	Occupancy Period Test	Yun. Wek	, botek	Aupo,	kr	ie _k Vup	20
8.2.	EUT Operation Test Setup Test Data		ek Anbotek	nek Aupore	otek Ar	Pupotek Potek	27 27 27
9. DFS [Detection Thresholds	* Sk	5016 ^K	Upote. I	"un	W.potek	28
91	FUT Operation			"poise		hotel	28





Report No.: 18220WC30182402	FCC ID): 2AMOD-(CF1	Page 3 of	f 42
9.2. Test Setup	botek	Anbore	V. V.	Vupolek	28
9.2. Test Setup		k Mapoke	Anto		28
10. Band edge emissions (Radiated)	VUD.		otek Anbo		29
40 M FLIT Opportunition All M	er Aup,		potek Ar	pore Arr	31
10.1. EUT Operation	ostekb	upor P	vupolok '''	Vilpoter.	31 32
11. Undesirable emission limits (below 1GHz)	Anbore	Au Motek	Pupoter	Aupr	33
11.1. EUT Operation 11.2. Test Setup 11.3. Test Data	Anbore Antories	Anbore!	rek upo,	ek Popole	35
12. Undesirable emission limits (above 1GHz)	k Aupo		Josek An	ooren Aup	36 38
12.1. EUT Operation 12.2. Test Setup 12.3. Test Data	otek Pi	Polejr	<u> </u>	Mpose, b	40 40
12.3. Test Data	Yup. rek	. abotek	- Kopore	Ar. Polek	41
APPENDIX I TEST SETUP PHOTOGRAPH APPENDIX II EXTERNAL PHOTOGRAPH	- Vupo, rotek	Aupolek Aupolek	Kup Oter	ak Pun,	42 42
APPENDIX III INTERNAL PHOTOGRAPH	VUD	vo	iek Pupo,	by	W 42





Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 4 of 42

TEST REPORT

Applicant : Chasing-Innovation Technology Co.,Ltd.

Manufacturer : Chasing-Innovation Technology Ganzhou Co., LTD

Product Name : CHASING CF1

Test Model No. : CF1

Reference Model No. : N/A

Trade Mark : CHASING

Input: 5V-- 1.5A, 9V-- 1.5A, 12V-- 1.5A, 15V-- 1.5A, 20V-- 1.5A(with DC

Rating(s) : 10.8V, 3800mAh battery inside)

Output: 5V= 1A

Test Standard(s) : 47 CFR Part 15E

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with above listed standard(s) requirements. This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Receipt:	Aug. 28, 2023
Date of Test:	Aug. 28 ~ Oct. 24, 2023
Anbotek Anbotek Anbotek Anbotek Anbotek Prepared By:	Nian xiu Chen
Anbotek Anbotek Anbotek Anbot	(Nianxiu Chen)
otek Anbotek Anbotek Anbotek An	Idward pan
Approved & Authorized Signer:	And
	(Edward Pan)







Revision History

	Report Version	Description	Issued Date
	Anbore R00 potek Ant	Original Issue.	Nov. 03, 2023
¿e	Anbotek Anbotek	Anbotek Anbotek Anbotek	K Anbotek Anbotek Ant
(10	ore Ambotek Anbotek	Anbotek Anbotek Anbot	tek Anbotek Anbotek





Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 6 of 42

1. General Information

1.1. Client Information

ATT	- V -	
Applicant		Chasing-Innovation Technology Co.,Ltd.
Address	:	Room 3105,Building 6, Shenzhen International Innovation Valley, Xili, Nanshan District, Shenzhen, Guangdong, 518000, China
Manufacturer	:	Chasing-Innovation Technology Ganzhou Co., LTD
Address	:	Building 4, Huachang Science and Technology Park, Ganzhou Economic and Technological Development Zone, Ganzhou City, Jiangxi Province, China
Factory	:	Chasing-Innovation Technology Ganzhou Co., LTD
Address	:	Building 4, Huachang Science and Technology Park, Ganzhou Economic and Technological Development Zone, Ganzhou City, Jiangxi Province, China

1.2. Description of Device (EUT)

por Air		Poster Tupo, h Pupo, W. Poster
Product Name	:	CHASING CF1
Test Model No.	:	CF1 hotek Anbotek Anbotek Anbotek Anbotek
Reference Model No.	:	N/A Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek
Trade Mark	:	CHASING AND
Test Power Supply	:	AC 120V, 60Hz for adapter/ DC 10.8V battery inside
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Adapter	:	N/A hotek Anbotek Anbotek Anbotek
RF Specification		
Operation Frequency	:	802.11n(HT20)/ac(HT20): U-NII Band 2C: 5500MHz to 5700MHz; U-NII Band 3: 5745MHz to 5825MHz; 802.11n(HT40)/ac(HT40): U-NII Band 2C: 5510MHz to 5670MHz; U-NII Band 3: 5755MHz to 5795MHz; 802.11ac(HT80): U-NII Band 2C: 5530MHz to 5610MHz; U-NII Band 3: 5775MHz
Number of Channel	:	802.11n(HT20)/ac(HT20): U-NII Band 2C: 11; U-NII Band 3: 5; 802.11n(HT40)/ac(HT40): U-NII Band 2C: 5; U-NII Band 3: 2; 802.11ac(HT80): U-NII Band 2C: 2; U-NII Band 3: 1
Modulation Type	:	802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM); 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM);







Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 7 of 42

Antenna Type	:	FPC Antenna	Aupoto.	Annabotek	Aupotek	Aupo, Olek
Antenna Gain(Peak)	:	WiFi 5.6G: 5.2 dBi WiFi 5.8G: 4.8 dBi	Aupor	Aupotek Aupotek	Aupoten	Anbotek

Remark:

- (1) All of the RF specification are provided by customer.
- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

1.3. Auxiliary Equipment Used During Test

Title	Manufacturer	Model No.	Serial No.
Xiaomi 33W adapter	Xiaomi	MDY-11-EX	SA62212LA04358J
Master device (FCC ID: V7TRX9P)	SHENZHEN TENDA TECHNOLOGY CO.,LTD	RX9 Pro	Sotek Autotek Auto

1.4. Operation channel list

Ar. boiek	Anbore	Aug Of	ik and	U-NII-2C	. ek	potek	Aupote.	And
Mode	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
ek Aupo,	100	5500	104	5520	108	5540	112	otek 5560 Min
20MHz bandwidth	116	5580	120	5600	124	5620	128	5640
banawatii	132	5660	136	5680	140	5700	o'iek /	ing ick
40MHz	102	5510	110	5550 mb°	118	5590	126	5630
bandwidth	134	5670	1 Pin	hotek / Ar	poter!	AUG	nobjek	APON
80MHz bandwidth	106	5530	122	5610	Anbotek hotek	Anbotek	(hbote)	tek Janbore

10°	711.	Anbot	Sr. I	"Upp"	U-NII-3	ak Anb	070	Pu., Potek	Anb	oten p
Mode	Chann el	Frequen cy (MHz)	Chann el	Frequen cy (MHz)	Chann el	Frequen cy (MHz)	Chann el	Frequen cy (MHz)	Chann el	Frequen cy (MHz)
20MHz bandwidt h	149	5745	153	5765	157	5785	161	5805	165	5825
40MHz bandwidt h	151 x	5755 of	159	5795	Anbote.	k / Anbe	hotek /	Anbotek Anbotek	Anbor	iek V
80MHz bandwidt h	155	5775	'upolek	Anbotek Anbot	sk Vup	"upotek	Anbotek	Anbore Anb	otek Al	Aupolek Potek





Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 8 of 42

1.5. Description of Test Modes

Pretest Modes	Descriptions
Anbotek TM1 Anbotek Anbotek TM1 Anbotek	Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.
otek Anbotek Anbotek AnTM2 Anbotek	Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.
Andrew TM3 porek	Keep the EUT works in normal operating mode and connect to companion device

1.6. Measurement Uncertainty

Parameter	Uncertainty
Conducted emissions (AMN 150kHz~30MHz)	3.4dB
Conducted Output Power	0.76dB
Occupied Bandwidth	925Hz
Radiated spurious emissions (above 1GHz)	1G-6GHz: 4.78dB; 6G-18GHz: 4.88dB 18G-40GHz: 5.68dB
Radiated emissions (Below 30MHz)	3.53dB
Radiated spurious emissions (30MHz~1GHz)	Horizontal: 3.92dB; Vertical: 4.52dB

The measurement uncertainty and decision risk evaluated according to AB/WI-RF-F-032. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.





Page 9 of 42 FCC ID: 2AMOD-CF1 Report No.: 18220WC30182402

1.7. Test Summary

Test Items	Test Modes	Status
Conducted Emission at AC power line	Mode1,2	P
Duty Cycle	Mode1,2	P ^{Anb}
Maximum conducted output power	Mode1,2	P Pu
Power spectral density	Mode1,2	upot P
Emission bandwidth and occupied bandwidth	Mode1,2	Aupol P
Channel Move Time, Channel Closing Transmission Time	Mode3	AP OF
Non-Occupancy Period Test	Mode3	Panbo
DFS Detection Thresholds	Mode3	P Ant
Band edge emissions (Radiated)	Mode1,2	obole P
Undesirable emission limits (below 1GHz)	Mode1,2	Anbore P
Undesirable emission limits (above 1GHz)	Mode1,2	And a
Note: P: Pass N: N/A not applicable	k Wipolek Wipolek	tek Aupone





Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 10 of 42

1.8. Description of Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.:184111

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 184111.

ISED-Registration No.: 8058A

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A.

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.

1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.518128

1.9. Disclaimer

- The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
- 2. The test report is invalid if there is any evidence and/or falsification.
- 3. The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
- 4. This document may not be altered or revised in any way unless done so by Anbotek and all revisions are duly noted in the revisions section.
- 5. Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- 6. The authenticity of the information provided by the customer is the responsibility of the customer and the laboratory is not responsible for its authenticity.

The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.





FCC ID: 2AMOD-CF1 Report No.: 18220WC30182402 Page 11 of 42

1.10. Test Equipment List

Cond	ucted Emission at A	C power line	Anbore	k bus	Anboiek	Aup. Otek
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
. 1	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	2023-10-12	2024-10-11
2 2	Three Phase V- type Artificial Power Network	CYBERTEK	EM5040DT	E215040D T001	2023-07-05	2024-07-04
3	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	2023-10-12	2024-10-11
4 4	Software Name EZ-EMC	Farad Technology	ANB-03A	N/A	rek /Anbotek	k Aupor

Duty Cycle

Maximum conducted output power

Power spectral density

Emission bandwidth and occupied bandwidth

Channel Move Time, Channel Closing Transmission Time

Non-Occupancy Period Test

DFS Detection Thresholds

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	Power Meter	Agilent	N1914A	MY500011 02	2023-10-20	2024-10-19
2	DC Power Supply	IVYTECH	IV3605	1804D360 510	2023-10-20	2024-10-19
An3otel	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	101792	2023-05-26	2024-05-25
4.nb	MXA Spectrum Analysis	KEYSIGHT	N9020A	MY505318 23	2023-02-23	2024-02-22
5	Oscilloscope	Tektronix	MDO3012	C020298	2023-10-12	2024-10-11
6	MXG RF Vector Signal Generator	Agilent	N5182A	MY474206 47	2023-02-23	2024-10-22

Hotline N



Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 12 of 42

	edge emissions (Ra		Anborok	Auporg	Aurotek	Aupotek Ar
Unde	sirable emission limi	ts (above 1GHz)	borek	Aupo.	h. Hek	Cupole.
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1 00	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	2023-10-12	2024-10-11
2	EMI Preamplifier	SKET Electronic	LNPA- 0118G-45	SKET-PA- 002	2023-10-12	2024-10-11
3	Double Ridged Horn Antenna	SCHWARZBECK	BBHA 9120D	02555	2022-10-16	2025-10-15
7 ¹⁰ 4	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	Andotek	Aupolok
5	Horn Antenna	A-INFO	LB-180400- KF	J21106062 8	2023-10-12	2024-10-11
6	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	101792	2023-05-26	2024-05-25
e ^k 7	Amplifier	Talent Microwave	TLLA18G40 G-50-30	23022802	2023-05-25	2024-05-24

Unde	sirable emission limi	ts (below 1GHz)	Anbore.	Anshotek	Anbotek	Anbo
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	2023-10-12	2024-10-11
2	Pre-amplifier	SONOMA	310N	186860	2023-10-12	2024-10-11
34	Bilog Broadband Antenna	Schwarzbeck	VULB9163	345	2022-10-23	2025-10-22
Andorel	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	AU Jose	Andorek



Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 13 of 42

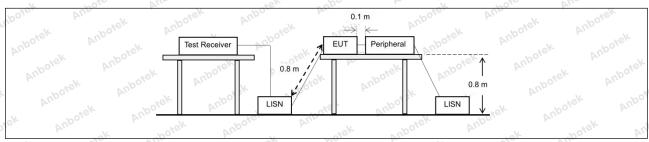
2. Conducted Emission at AC power line

Test Requirement:	47 CFR Part 15.207(a)	ok hotek Anbo	Yun Vick		
And sek abover	Frequency of emission (MHz)	Conducted limit (dBµV)	poten Anbe		
Anbo, Air	ek Anbores Anb	Quasi-peak	Average		
K hotek Anbo	0.15-0.5	66 to 56*	56 to 46*		
Test Limit:	0.5-5 AM	56°	46 300 ter		
otek Anbor Ar	5-30 And And	60 March Anbo	50		
otek Anbotek	*Decreases with the logarithm of th	ne frequency.	Anbo		
Test Method: Refer to ANSI C63.10-2013 section 6.2, standard test method for line conducted emissions from unlicensed wireless devices					

2.1. EUT Operation

Operating Envi	ronment; rek Anbore Anborek Anborek
Test mode:	1: 802.11n mode: Keep the EUT connect to AC power line and works in continuous transmitting mode with 802.11n modulation type. All bandwidth and data rates hat been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report. 2: 802.11ac mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Continuously transmitting mode with 802.11ac modulation type.

2.2. Test Setup



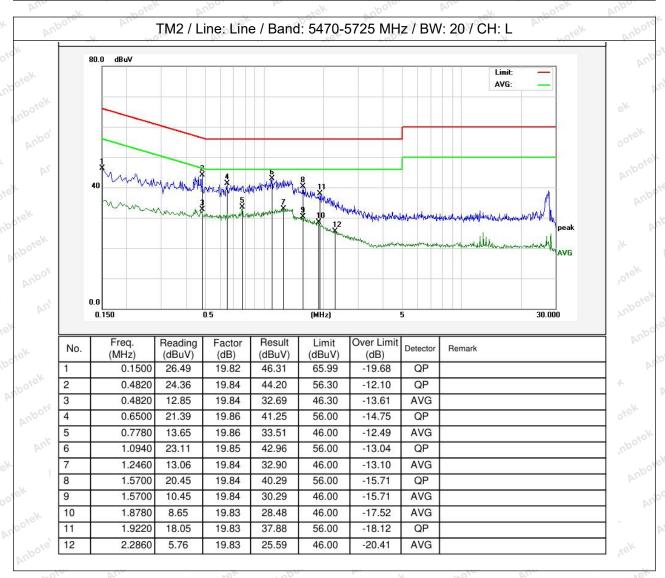




Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 14 of 42

2.3. Test Data

Temperature: 24.7 °C Humidity: 50 % Atmospheric Pressure: 101 kPa



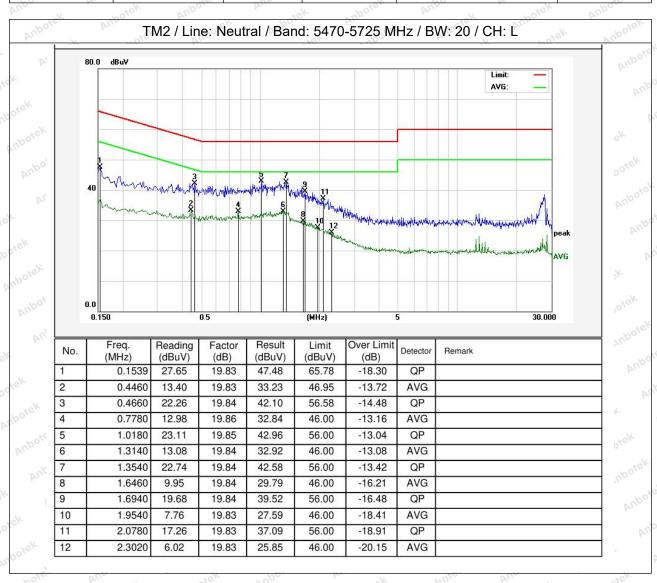






Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 15 of 42

Temperature: 24.7 °C Humidity: 50 % Atmospheric Pressure: 101 kPa



Note:Only record the worst data in the report.







Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 16 of 42

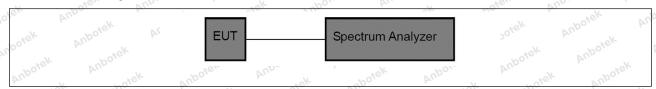
3. Duty Cycle

Test Requirement:	All measurements are to be performed with the EUT transmitting at 100% duty cycle at its maximum power control level; however, if 100% duty cycle cannot be achieved, measurements of duty cycle, x, and maximum-power transmission duration, T, are required for each tested mode of operation.
Test Limit:	No limits, only for report use.
Test Method:	ANSI C63.10-2013 section 12.2 (b)
Anbotek Anbotek Anbotek Anbotek Anbotek	 i) Set the center frequency of the instrument to the center frequency of the transmission. ii) Set RBW >= EBW if possible; otherwise, set RBW to the largest available value.
Procedure:	iii) Set VBW >= RBW. iv) Set detector = peak.
otek Aupotek Au	v) The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T, where T is defined in item a1) of 12.2, and the number of sweep points across duration T exceeds 100.

3.1. EUT Operation

Operating Envi	ronment: Andrew Andrew Andrew Andrew
Test mode:	1: 802.11n mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report. 2: 802.11ac mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

3.2. Test Setup



3.3. Test Data

Temperature:	26.4 °C	Humidity:	48.8 %	Atmospheric Pressure:	101 kPa

Please Refer to Appendix for Details.





Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 17 of 42

4. Maximum conducted output power

Test Requirement:	47 CFR Part 15.407(a)(2) 47 CFR Part 15.407(a)(3)(i)
Anbotek Anbotek Anbot	For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.
otek Anbotek	If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
	For the hand 5 705 5 050 CUL, the making up and upted autout news a sugar
	For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.
est Limit:	If transmitting antennas of directional gain greater than 6 dBi are used, the
Anbore An	maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
	However, fixed point-to-point U-NII devices operating in this band may
	employ transmitting antennas with directional gain greater than 6 dBi withou
aborek Anbore	any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems,
	omnidirectional applications, and multiple collocated transmitters transmittin
	the same information. The operator of the U-NII device, or if the equipment
	professionally installed, the installer, is responsible for ensuring that system
	employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
est Method:	ANSI C63.10-2013, section 12.3
ipo k	Method SA-1
	a) Set span to encompass the entire 26 dB EBW or 99% OBW of the signal.
	b) Set RBW = 1 MHz.
	c) Set VBW >= 3 MHz.
	d) Number of points in sweep >= [2 × span / RBW]. (This gives bin-to-bin
	spacing <= RBW / 2, so
	ino, a bi, and a
	that narrowband signals are not lost between frequency bins.)
	that narrowband signals are not lost between frequency bins.) e) Sweep time = auto.
Anbotek Anbotek	that narrowband signals are not lost between frequency bins.) e) Sweep time = auto. f) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
rocedure:	that narrowband signals are not lost between frequency bins.) e) Sweep time = auto. f) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode. g) If transmit duty cycle < 98%, use a video trigger with the trigger level set to enable triggering
rocedure:	that narrowband signals are not lost between frequency bins.) e) Sweep time = auto. f) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode. g) If transmit duty cycle < 98%, use a video trigger with the trigger level set to enable triggering only on full power pulses. The transmitter shall operate at maximum power control level for the
potek Anbotek rocedure: Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek	that narrowband signals are not lost between frequency bins.) e) Sweep time = auto. f) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode. g) If transmit duty cycle < 98%, use a video trigger with the trigger level set to enable triggering only on full power pulses. The transmitter shall operate at maximum power
rocedure: Anborek Anborek Anborek Anborek Anborek Anborek	that narrowband signals are not lost between frequency bins.) e) Sweep time = auto. f) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode. g) If transmit duty cycle < 98%, use a video trigger with the trigger level set to enable triggering only on full power pulses. The transmitter shall operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with
rocedure: Anborek	that narrowband signals are not lost between frequency bins.) e) Sweep time = auto. f) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode. g) If transmit duty cycle < 98%, use a video trigger with the trigger level set to enable triggering only on full power pulses. The transmitter shall operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no OFF intervals) or at duty cycle >= 98%, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run."
Procedure: Anborek Anborek Anborek Anborek Anborek Anborek Anborek	that narrowband signals are not lost between frequency bins.) e) Sweep time = auto. f) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode. g) If transmit duty cycle < 98%, use a video trigger with the trigger level set to enable triggering only on full power pulses. The transmitter shall operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no OFF intervals) or at duty cycle >= 98%, and if each transmission is entirely at the maximum power control level,









Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 18 of 42

Pose Aug		maker maps. W. tok maker but he maker
You	aboter	OBW of the signal
Aupor	"ek	using the instrument's band power measurement function, with band limits
botek	Aupor	set equal to the
VII.	abover	EBW or OBW band edges. If the instrument does not have a band power
Anbore	D11.	function, then sum the
ak abotel	Anbo	spectrum levels (in power units) at 1 MHz intervals extending across the 26
DI.	10. You	dB EBW or 99%
botek Anbo	b	OBW of the spectrum.

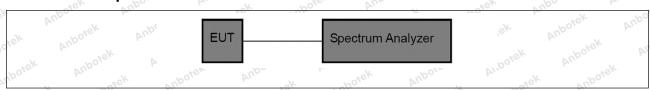
4.1. EUT Operation

Operating Environment: 1: 802.11n mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

Test mode:

2: 802.11ac mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

4.2. Test Setup



4.3. Test Data

Temperature:	26.4 °C	Anbo	Humidity:	48.8 %	Aupor	Atmospheric Pressure: 101 kPa
--------------	---------	------	-----------	--------	-------	-------------------------------

Please Refer to Appendix for Details.





Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 19 of 42

5. Power spectral density

Test Requirement:	47 CFR Part 15.407(a)(2)
hotek Anbore	47 CFR Part 15.407(a)(3)(i)
Anbotek Anbot	For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.
ek Anbotek An	If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
	For the band 5.725-5.850 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.
Test Limit:	If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in the position and the same direction.
Anbotek Anbotek Anbotek Anbotek Anbotek Anbote	in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
Test Method:	ANSI C63.10-2013, section 12.5
Aupotek Aupotek Vipotek Vipotek	a) Create an average power spectrum for the EUT operating mode being tested by following the instructions in 12.3.2 for measuring maximum conducted output power using a spectrum analyzer or EMI receiver; that is, select the appropriate test method (SA-1, SA-2, SA-3, or their
	respective alternatives) and apply it up to, but not including, the step labeled "Compute
	power" (This procedure is required even if the maximum conducted output power
Anbotek Anbote	measurement was performed using the power meter method PM.)
Procedure:	b) Use the peak search function on the instrument to find the peak of the spectrum.
	c) Make the following adjustments to the peak value of the spectrum, if applicable:
	1) If method SA-2 or SA-2A was used, then add [10 log (1 / D)], where D is the duty
	cycle, to the peak of the spectrum. 2) If method SA-3A was used and the linear mode was used in step h) of 12.3.2.7, add
	1 dB to the final result to compensate for the difference between linear averaging and
	power averaging.









Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 20 of 42

- d) The result is the PPSD.
- e) The procedure in item a) through item c) requires the use of 1 MHz resolution bandwidth to

satisfy the 1 MHz measurement bandwidth specified by some regulatory authorities. This

requirement also permits use of resolution bandwidths less than 1 MHz "provided that the

measured power is integrated to show the total power over the measurement bandwidth" (i.e.,

1 MHz). If measurements are performed using a reduced resolution bandwidth and integrated

over 1 MHz bandwidth, the following adjustments to the procedures apply:

- 1) Set RBW >= 1 / T, where T is defined in 12.2 a).
- 2) Set VBW >= [3 × RBW].
- 3) Care shall be taken such that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

5.1. EUT Operation

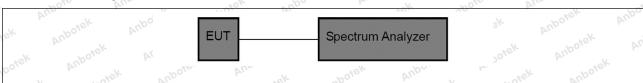
Operating Environment:

1: 802.11n mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

Test mode:

2: 802.11ac mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

5.2. Test Setup



5.3. Test Data

Temperature:	26.4 °C	Humidi	ty: 48.8 %	Atmospheric	Pressure: 101 kPa
--------------	---------	--------	------------	-------------	-------------------

Please Refer to Appendix for Details.







Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 21 of 42

6. Emission bandwidth and occupied bandwidth

botek Anbore	U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use.
Test Requirement:	
Anbore And	U-NII 3, U-NII 4: 47 CFR Part 15.407(e)
Anbotek Anbo	U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use.
Test Limit:	Anbor
ootek Anbotek	U-NII 3, U-NII 4: Within the 5.725-5.850 GHz and 5.850-5.895 GHz bands, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.
Test Method:	ANSI C63.10-2013, section 6.9.3 & 12.4 KDB 789033 D02, Clause C.2
Anbors Air	Emission bandwidth:
Anborer Anb	a) Set RBW = approximately 1% of the emission bandwidth.
ik botek Anb	b) Set the VBW > RBW.
And	c) Detector = peak.
lotek Yupo, K	d) Trace mode = max hold.
Anbotek Anboten	e) Measure the maximum width of the emission that is 26 dB down from the peak of the emission.
Anbotek Anbote	Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement
Anbores, And	as needed until the RBW/EBW ratio is approximately 1%.
K Aupon K	Occupied bandwidth:
piek Puposes, b	a) The instrument center frequency is set to the nominal EUT channel center frequency. The
nbotek Anbotek	frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
Procedure:	b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW,
Anboise Anbo	and VBW shall be approximately three times the RBW, unless otherwise specified by the
yek Ando	applicable requirement.
hotek Anbotes	c) Set the reference level of the instrument as required, keeping the signal from exceeding the
Anbotek Anbotek	maximum input mixer level for linear operation. In general, the peak of the spectral envelope
Anbotek Anbot	shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given
orek an	in 4.1.5.2.
otek Anbotek	d) Step a) through step c) might require iteration to adjust within the specified range.
upotek Vupotek	 e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode
P. Oler	shall be used. Otherwise, peak detection and max hold mode (until the trace
Anbotek Anbo	
Anbotek Anbote	stabilizes) shall be used.









Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 22 of 42

report the measured

bandwidth.

g) If the instrument does not have a 99% power bandwidth function, then the trace data points are

recovered and directly summed in linear power terms. The recovered amplitude data points,

beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached:

that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the

total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is

the difference between these two frequencies.

h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument

display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may

be reported in addition to the plot(s).

6 dB emission bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) ≥ 3 >= RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.1. EUT Operation

Operating Environment:

1: 802.11n mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

Test mode:

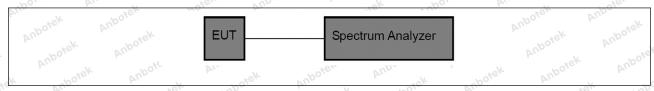
2: 802.11ac mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.





Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 23 of 42

6.2. Test Setup



6.3. Test Data

1	Temperature: ov	26.4 °C	Humidity:	48.8 %	Atmospheric Pressure:	101 kPa
	remperature.	20.4 6	Humidity:	40.0 %	Aunosphenc Flessure.	IUIKFa

Please Refer to Appendix for Details.





Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 24 of 42

7. Channel Move Time, Channel Closing Transmission Time

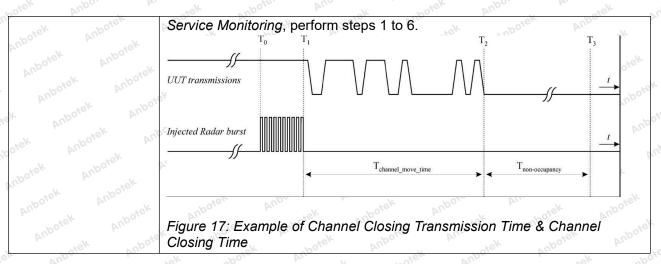
Test Requirement:	47 CFR Part 15.407(h)(2)(iii)
Anbotek Anbotek	Channel Move Time: within 10 seconds Channel Closing Transmission Time: 200 milliseconds + an aggregate of 60
botek Anbor	milliseconds over remaining 10 second period. (The Channel Closing
Test Limit:	Transmission Time is comprised of 200 milliseconds starting at the beginning
lest Lillit.	of the Channel Move Time plus any additional intermittent control signals
otek upotek	required to facilitate a Channel move (an aggregate of 60 milliseconds)
bo. k. kotek	during the remainder of the 10 second period. The aggregate duration of
Aupoter Aup	control signals will not count quiet periods in between transmissions.)
Test Method:	KDB 905462 D02, Clause 7.8.3
Anbote.	The steps below define the procedure to determine the above-mentioned
And	parameters when a radar <i>Burst</i> with a level equal to the <i>DFS Detection</i>
ak Anbore Ans	Threshold + 1dB is generated on the Operating Channel of the U-NII device (In- Service Monitoring).
iek spotek A	One frequency will be chosen from the <i>Operating Channels</i> of the UUT
or All	within the 5250-5350 MHz or 5470-5725 MHz bands. For 802.11 devices,
abosek Aupo,	the test frequency must contain control signals. This can be verified by
Arra abotek	disabling channel loading and monitoring the spectrum analyzer. If no control
Anbor Air	signals are detected, another frequency must be selected within the
abotek Anbo.	emission bandwidth where control signals are detected.
All.	2. In case the UUT is a U-NII device operating as a Client Device (with or
K Aupo, W.	without DFS), a U-NII device operating as a Master Device will be used to
ek spoiek Ar	allow the UUT (Client device) to Associate with the Master Device. In case
or Ar.	the UUT is a Master Device, a U-NII device operating as a Client Device will
spotek Wupo.	be used and it is assumed that the Client will Associate with the UUT
All aborek	(Master). In both cases for conducted tests, the <i>Radar Waveform</i> generator
Anbo, Ar otek	will be connected to the <i>Master Device</i> . For radiated tests, the emissions of
abotek Anbo	the Radar Waveform generator will be directed towards the Master Device. I
Procedure:	the <i>Master Device</i> has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.
Aupo. N.	3. Stream the channel loading test file from the <i>Master Device</i> to the <i>Client</i>
atek anboten An	Device on the test Channel for the entire period of the test.
, aiek	4. At time T0 the <i>Radar Waveform</i> generator sends a <i>Burst</i> of pulses for one
aporen Aupo	of the Radar Type 0 in Table 5 at levels defined in Table 3 , on the <i>Operating</i>
otek unbote.	Channel. An additional 1 dB is added to the radar test signal to ensure it is a
Anbo k kotek	or above the <i>DFS Detection Threshold</i> , accounting for equipment
Anbotel Anbo	variations/errors.
A. Anbore	5. Observe the transmissions of the UUT at the end of the radar Burst on the
Ande	Operating Channel for duration greater than 10 seconds. Measure and
tek upoter An	record the transmissions from the UUT during the observation time (Channe
k hotek	Move Time). Measure and record the Channel Move Time and Channel
iposer Aups	Closing Transmission Time if radar detection occurs. Figure 17 illustrates
work Anbote.	Channel Closing Transmission Time.
Anbo k kotek	6. When operating as a <i>Master Device</i> , monitor the UUT for more than 30
anboten Anbo	minutes following instant T2 to verify that the UUT does not resume any
A. Otek Anbote	transmissions on this <i>Channel</i> . Perform this test once and record the
74p2	measurement result.
L. Yr	7. In case the UUT is a U-NII device operating as a Client Device with In-







Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 25 of 42



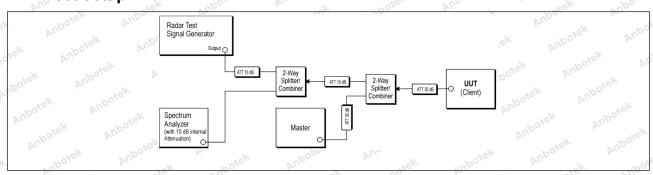
7.1. EUT Operation

Operating Environment:

Test mode:

3: Normal Operating: Keep the EUT works in normal operating mode and connect to companion device

7.2. Test Setup



7.3. Test Data

Temperature:	26.4 °C	Yo.	Humidity:	48.8 %	Atmospheric Pressure:	101 kPa	
V0			1 1 2 3 7 7 7 1 1 1		The state of the s	1 4 1 11/0	- 0

Please Refer to Appendix for Details.





Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 26 of 42

8. Non-Occupancy Period Test

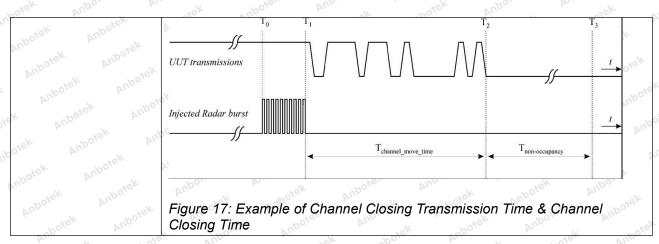
Test Requirement:	47 CFR Part 15.407(h)(2)(iv)
Test Limit:	A channel that has been flagged as containing a radar system, either by a channel availability check or in-service monitoring, is subject to a non-occupancy period of at least 30 minutes. The non-occupancy period starts at the time when the radar system is detected.
Test Method:	KDB 905462 D02, Clause 7.8.3
Anbotek Anbotek	The steps below define the procedure to determine the above-mentioned parameters when a radar <i>Burst</i> with a level equal to the <i>DFS Detection Threshold</i> + 1dB is generated on the <i>Operating Channel</i> of the U-NII device (<i>In- Service Monitoring</i>).
hotek Anbotek Anbotek	1. One frequency will be chosen from the <i>Operating Channels</i> of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands. For 802.11 devices, the test frequency must contain control signals. This can be verified by disabling channel loading and monitoring the spectrum analyzer. If no contro signals are detected, another frequency must be selected within the emission bandwidth where control signals are detected.
	2. In case the UUT is a U-NII device operating as a <i>Client Device</i> (with or without DFS), a U-NII device operating as a <i>Master Device</i> will be used to allow the UUT (Client device) to <i>Associate</i> with the <i>Master Device</i> . In case the UUT is a <i>Master Device</i> , a U-NII device operating as a <i>Client Device</i> will
	be used and it is assumed that the Client will Associate with the UUT (Master). In both cases for conducted tests, the Radar Waveform generator will be connected to the Master Device. For radiated tests, the emissions of the Radar Waveform generator will be directed towards the Master Device. If the Master Device has antenna gain, the main beam of the antenna will be
Procedure:	directed toward the radar emitter. Vertical polarization is used for testing. 3. Stream the channel loading test file from the <i>Master Device</i> to the <i>Client Device</i> on the test <i>Channel</i> for the entire period of the test.
	4. At time T0 the <i>Radar Waveform</i> generator sends a <i>Burst</i> of pulses for one of the Radar Type 0 in Table 5 at levels defined in Table 3 , on the <i>Operating Channel</i> . An additional 1 dB is added to the radar test signal to ensure it is a
	or above the <i>DFS Detection Threshold</i> , accounting for equipment variations/errors.
	5. Observe the transmissions of the UUT at the end of the radar <i>Burst</i> on the <i>Operating Channel</i> for duration greater than 10 seconds. Measure and record the transmissions from the UUT during the observation time (<i>Channel Move Time</i>). Measure and record the <i>Channel Move Time</i> and <i>Channel</i>
	Closing Transmission Time if radar detection occurs. Figure 17 illustrates Channel Closing Transmission Time.
otek Anbotek Anbotek	6. When operating as a <i>Master Device</i> , monitor the UUT for more than 30 minutes following instant T2 to verify that the UUT does not resume any transmissions on this <i>Channel</i> . Perform this test once and record the measurement result.
	7. In case the UUT is a U-NII device operating as a <i>Client Device</i> with <i>In- Service Monitoring</i> , perform steps 1 to 6.







Page 27 of 42 FCC ID: 2AMOD-CF1 Report No.: 18220WC30182402



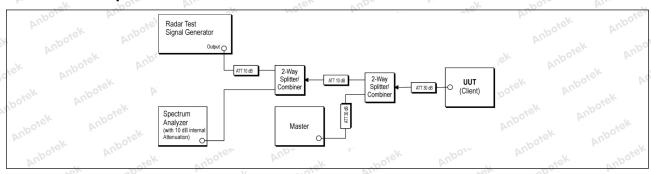
8.1. EUT Operation

Operating Environment:

Test mode:

3: Normal Operating: Keep the EUT works in normal operating mode and connect to companion device

8.2. Test Setup



8.3. Test Data

o'	Temperature:	26.4 °C	Humidity:	48.8 %	Atmospheric Pressure:	101 kPa	0
	10.7	- 700	1. //	1.00	71.	- 70°	- 1

Please Refer to Appendix for Details.



Hotline



Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 28 of 42

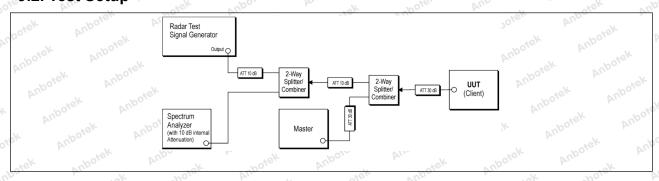
9. DFS Detection Thresholds

Test Requirement:	KDB 905462 D02, Clause 5.2 Table 3							
Anbotek Anboten	Table 3: DFS Detection Thresholds for Master I with Radar Detection							
Aupo, ek	Table 3: DFS Detection Thresholds for Master Devices and Client Devices with Radar Detection							
itek Aupois Air	Maximum Transmit Power	Value (See Notes 1, 2, and 3)						
tek anbore	EIRP ≥ 200 milliwatt	-64 dBm						
Test Limit:	EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm						
Anbor Ar. abotek	EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm						
Anbotek Anbotek Anbote	Note 1: This is the level at the input of the receiver assuming a 0 dl Note 2: Throughout these test procedures an additional 1 dB has be test transmission waveforms to account for variations in measurement the test signal is at or above the detection threshold level to trigger Note3: EIRP is based on the highest antenna gain. For MIMO device 662911 D01.	en added to the amplitude of the ent equipment. This will ensure that a DFS response.						
Test Method:	KDB 905462 D02, Clause 7.4.1.1	And stek anbotek						
Aupotek Aupo	Sporek Anbore Ans							
Anbotek Anbo.								
Procedure:								

9.1. EUT Operation

Operating Env	vironment:	Aupor	Die	hotek	Anbotek	AUD	*ek	upotek	Aupor
Test mode:	3: Norma	l Operating	: Keep	the EUT	works in	normal	operating	mode and	connect to
rest mode.	companio	on device							

9.2. Test Setup



9.3. Test Data

	Temperature:	26.4 °C	Humidity:	48.8 %	Atmospheric Pressure:	101 kPa
- 1	~O	V (~0)	DV.	1/8/		V

Please Refer to Appendix for Details.









Report No.: 18220WC30182402 FCC ID: 2AMOD-CF Page 29 of 4

10. Band edge emissions (Radiated)

- K	70'	_XO.	V Cla		VVO.
hotek Anbois	47 CFR Part 15.407(b)(3)	Aupo.	hotek.	Anbore	Aur
Test Requirement:	47 CFR Part 15.407(b)(4)				Aupo.
Anbore An.	47 CFR Part 15.407(b)(10)	botek			anboie
ick anboten Anbo	For transmitters operating in	n the 5.47-5.7	25 GHz band	: All emission	s outside

of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

For transmitters operating solely in the 5.725-5.850 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge

increasing linearly to a level of 27 dBm/MHz at the band edge.

MHz	MHz	MHz And	GHz work
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	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)
13.36-13.41	iek "Upote.	Ans	hotek An

Test Limit:

¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

²Above 38.6

The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in § 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in § 15.209shall be demonstrated using measurement instrumentation employing a CISPR guasi-peak detector. Above 1000 MHz, compliance with the emission limits in § 15.209shall be demonstrated based on the average value of the measured

Shenzhen Anbotek Compliance Laboratory Limited







Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 30 of 42

otek Anbotek 102	2000030162402	FCC ID. ZAIVIOD-CF I	Page 30 01 42
ek abotek	emissions. The provision	s in § 15.35apply to these mea	surements.
	anbotek Anbo		tek aboten
	Except as provided elsev	vhere in this subpart, the emiss	ions from an
		not exceed the field strength lev	
	following table:	k solek Anboi	Arrai sek
hotek Anb	Frequency (MHz)	Field strength	Measurement
	August dans dem (2)	(microvolts/meter)	distance
	Art Spotek Ar	Joseph Anbore	(meters)
-k hotek	0.009-0.490	2400/F(kHz)	300
poter, Vun	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
Ambo	30-88	100 **	3 otek Anbore
	88-216	150 **	3
	216-960	200 **	3 rupore Ann
	Above 960	500 Apole Andre	3 work
Test Method:	700	on 12.7.4, 12.7.5, 12.7.6	Alle
tek abotek	Above 1GHz:	Anbotel Anb	Jek Aupo,
	210.	EUT was placed on the top of a	rotating table 1.5
		l at a 3 meter fully-anechoic cha	
		etermine the position of the high	
		eters away from the interference	
	' V	ne top of a variable-height anter	
	130.	varied from one meter to four m	
		maximum value of the field stre	
		of the antenna are set to make	
	70x	nission, the EUT was arranged	
		s tuned to heights from 1 meter	
		0MHz, the antenna was tuned	
	and the rotatable table w	as turned from 0 degrees to 36	0 degrees to find the
	maximum reading.		
VII.	e. The test-receiver syste	em was set to Peak Detect Fund	ction and Specified
	Bandwidth with Maximum		A. Siek
Procedure:	f. If the emission level of	the EUT in peak mode was 10d	dB lower than the
		ng could be stopped and the pe	
	would be reported. Other	wise the emissions that did not	have 10dB margin
	would be re-tested one b	y one using peak or average m	ethod as specified
	and then reported in a da	ita sheet.	All.
potek Aupo.	g. Test the EUT in the lov	vest channel, the middle chann	el, the Highest
	channel.		shotek Anh
	h. The radiation measure	ments are performed in X, Y, Z	axis positioning for
-k hotek		ound the X axis positioning whi	
	case.	otek Anboter And	
	i. Repeat above procedu	res until all frequencies measur	ed was complete.
	Remark:	aboten Anbe	hotek Anboro
	100 m	able Loss+ Antenna Factor- Pro	eamn Factor work
	N		PO. 14.
	. 4	OGHz, the disturbance above 1	
		ove plots are the highest emiss ove points had been displayed.	
		the radiator which are attenuate	
tek Vupo. b	_ Spurious critissions from	THE TAGIATOR WITHOUT ALE ALLEHUAL	SG THOIG WAIT ZOUD









Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 31 of 42

below the limit need not be reported.

- 3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
- 4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

10.1. EUT Operation

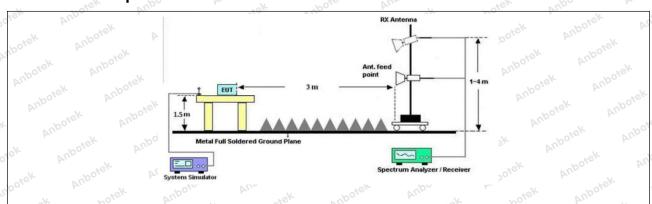
Operating Environment:

Test mode:

1: 802.11n mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

2: 802.11ac mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

10.2. Test Setup









FCC ID: 2AMOD-CF1 Report No.: 18220WC30182402 Page 32 of 42

10.3. Test Data

Temperature: 26.4 °C Humidity: 48.8 % Atmospheric Pressure: 101 kPa

10,0	Dir.	461	"Up"	No.	hoi	Dir.
		TM	2 / L			
Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
37.50	otel 16.37 And	53.87	74.00	-20.13	Lorek H	Peak Pri
37.59	16.37	53.96	74.00	-20.04	W. Chr.	Peak
37.42	16.70	54.12	68.20	-14.08	Hick	Peak
38.06	16.70	54.76	68.20	-13.44	AND STEK	Peak
28.10	16.37	44.47	54.00	-9.53°°	H ^{noo}	AVG
28.79	16.37	45.16 ¹⁰⁰⁰	54.00	18.84 AND	V Anbo	AVG
27.92 And	16.70	44.62	54.00	-9.38	hotek H An	AVG
28.46	16.70	45.16	54.00	-8.84	Aupotok	AVG
		TM	2 / H			
Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
38.24	17.21	55.45 100 T	68.20	-12.75	H Ando	Peak
39.10 M	17.21	56.31	68.20	-11.89	botek V Anh	Peak
28.09	17.21 AT	45.30	54.00	-8.70	_{∽o} te H	AVG
29.21	17.21	46.42	54.00	-7.58	Ans Vek	AVG
	(dBuV) 37.50 37.59 37.42 38.06 28.10 28.79 27.92 28.46 Reading (dBuV) 38.24 39.10 28.09	(dBuV) (dB/m) 37.50 16.37 37.59 16.37 37.42 16.70 38.06 16.70 28.10 16.37 28.79 16.37 27.92 16.70 28.46 16.70 Reading (dBuV) (dB/m) Factor (dB/m) 38.24 17.21 28.09 17.21	Reading (dBuV) Factor (dB/m) Result (dBuV/m) 37.50 16.37 53.87 37.59 16.37 53.96 37.42 16.70 54.12 38.06 16.70 54.76 28.10 16.37 45.16 27.92 16.70 44.62 28.46 16.70 45.16 TM2 Reading (dBuV) (dB/m) (dBuV/m) 38.24 17.21 55.45 39.10 17.21 56.31 28.09 17.21 45.30	(dBuV) (dB/m) (dBuV/m) (dBuV/m) 37.50 16.37 53.87 74.00 37.59 16.37 53.96 74.00 37.42 16.70 54.12 68.20 38.06 16.70 54.76 68.20 28.10 16.37 44.47 54.00 28.79 16.37 45.16 54.00 27.92 16.70 44.62 54.00 28.46 16.70 45.16 54.00 TM2 / H Reading (dBuV) (dB/m) Result (dBuV/m) (dBuV/m) (dBuV/m) 38.24 17.21 55.45 68.20 39.10 17.21 56.31 68.20 28.09 17.21 45.30 54.00	Reading (dBuV) Factor (dB/m) Result (dBuV/m) Limit (dBuV/m) Over limit (dB) 37.50 16.37 53.87 74.00 -20.13 37.59 16.37 53.96 74.00 -20.04 37.42 16.70 54.12 68.20 -14.08 38.06 16.70 54.76 68.20 -13.44 28.10 16.37 44.47 54.00 -9.53 28.79 16.37 45.16 54.00 -8.84 27.92 16.70 44.62 54.00 -9.38 28.46 16.70 45.16 54.00 -8.84 TM2 / H Reading (dBuV) (dB/m) (dB/m) (dB/m) (dBuV/m) (dB) Over limit (dBuV/m) (dB) 38.24 17.21 55.45 68.20 -12.75 39.10 17.21 56.31 68.20 -11.89 28.09 17.21 45.30 54.00 -8.70	Reading (dBuV) Factor (dB/m) Result (dBuV/m) Limit (dBuV/m) Over limit (dB) Antenna Pol. 37.50 16.37 53.87 74.00 -20.13 H 37.59 16.37 53.96 74.00 -20.04 V 37.42 16.70 54.12 68.20 -14.08 H 38.06 16.70 54.76 68.20 -13.44 V 28.10 16.37 44.47 54.00 -9.53 H 28.79 16.37 45.16 54.00 -8.84 V 27.92 16.70 44.62 54.00 -9.38 H 28.46 16.70 45.16 54.00 -8.84 V TM2 / H Reading (dBuV) Result (dBuV/m) (dBuV/m) Over limit (dBuV/m) Antenna Pol. 38.24 17.21 55.45 68.20 -12.75 H 39.10 17.21 56.31 68.20 -11.89 V 28.09 17.21 <t< td=""></t<>

Remark: 1. Result=Reading + Factor



Hotline



Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 33 of 42

11. Undesirable emission limits (below 1GHz)

Test Requirement:	47 CFR Part 15.407(b)(9) Anbi sek	Anbore An			
Anbotek Anbote	Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209.					
. Anbore. And	ick shotek Anbo					
tek Anbotek		where in this subpart, the em not exceed the field strength				
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)			
	0.009-0.490	2400/F(kHz)	300			
	0.490-1.705	24000/F(kHz)	30			
	1.705-30.0	30 Moores	30 More			
	30-88	100 **	DOL 3 PULL			
ak hotek	88-216	150 **	hote 3 Anbore			
	216-960	200 **	And abover			
	Above 960	500	Ant 3			
Test Method:	ANSI C63.10-2013, secti	ion 12.7.4, 12.7.5, 12.7.6	anbotek Anbor			
Aupoir Air.	Below 1GHz:	ek abotek Anbor	M. Polek Vul			
	a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8					
	a For helow 1GHz, the F	IIT was placed on the top o	of a rotating table 0.8			
	meters above the ground	l at a 3 meter semi-anechoid	c chamber. The table			
	meters above the ground was rotated 360 degrees	I at a 3 meter semi-anechoic to determine the position of	c chamber. The table f the highest radiation.			
	meters above the ground was rotated 360 degrees b. The EUT was set 3 or	at a 3 meter semi-anechoid to determine the position of 10 meters away from the in	c chamber. The table f the highest radiation. terference-receiving			
	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mou	I at a 3 meter semi-anechoic to determine the position of 10 meters away from the in- inted on the top of a variable	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower			
	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mou c. The antenna height is	I at a 3 meter semi-anechoic to determine the position of 10 meters away from the in- inted on the top of a variable varied from one meter to for	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the			
	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mou c. The antenna height is ground to determine the	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intended on the top of a variable varied from one meter to follows:	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the strength. Both horizon			
Anbotek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mou c. The antenna height is ground to determine the and vertical polarizations	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intended on the top of a variable varied from one meter to formaximum value of the field of the antenna are set to me	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the strength. Both horizon take the measurement			
Anbotek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mou c. The antenna height is ground to determine the and vertical polarizations d. For each suspected er	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intented on the top of a variable varied from one meter to follow maximum value of the field of the antenna are set to massion, the EUT was arranged.	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the strength. Both horizon take the measurement ged to its worst case			
Anbotek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mou c. The antenna height is ground to determine the and vertical polarizations d. For each suspected er and then the antenna wa	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intented on the top of a variable varied from one meter to formaximum value of the field of the antenna are set to mission, the EUT was arranges tuned to heights from 1 mission.	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the strength. Both horizon take the measurement ged to its worst case eter to 4 meters (for the			
Anbotek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mou c. The antenna height is ground to determine the and vertical polarizations d. For each suspected er and then the antenna was test frequency of below 3	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intented on the top of a variable varied from one meter to follow maximum value of the field of the antenna are set to massion, the EUT was arranged.	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the strength. Both horizontake the measurement ged to its worst case eter to 4 meters (for the discounting the discounting the strength.			
Anbotek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mou c. The antenna height is ground to determine the and vertical polarizations d. For each suspected er and then the antenna was test frequency of below 3	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intented on the top of a variable varied from one meter to formaximum value of the field of the antenna are set to maission, the EUT was arranged tuned to heights from 1 meters and 10 meters and 10 meters are set to maission, the antenna was tuned to heights from 1 meters are set to meters	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the strength. Both horizontake the measurement ged to its worst case eter to 4 meters (for the discounting the discounting the strength.			
Anborek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mou c. The antenna height is ground to determine the and vertical polarizations d. For each suspected er and then the antenna wa test frequency of below 3 and the rotatable table w maximum reading.	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intented on the top of a variable varied from one meter to formaximum value of the field of the antenna are set to mission, the EUT was arranges tuned to heights from 1 mission, the antenna was tuned to heights from 1 mission, the antenna was tuned to degrees to	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the strength. Both horizon take the measurement ged to its worst case eter to 4 meters (for the hed to heights 1 meter) a 360 degrees to find the			
Anbotek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mou c. The antenna height is ground to determine the and vertical polarizations d. For each suspected er and then the antenna wa test frequency of below 3 and the rotatable table w maximum reading.	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intented on the top of a variable varied from one meter to formaximum value of the field of the antenna are set to mission, the EUT was arranges tuned to heights from 1 meters as turned from 0 degrees to the em was set to Peak Detect Fem was set to Peak Detect Fe	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the strength. Both horizon take the measurement ged to its worst case eter to 4 meters (for the hed to heights 1 meter) a 360 degrees to find the			
Anborek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mout c. The antenna height is ground to determine the and vertical polarizations d. For each suspected erand then the antenna was test frequency of below 3 and the rotatable table with maximum reading. e. The test-receiver systems and the rotatable table with maximum reading.	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intented on the top of a variable varied from one meter to formaximum value of the field stof the antenna are set to maission, the EUT was arrangs tuned to heights from 1 mas turned from 0 degrees to the mass set to Peak Detect Fin Hold Mode.	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the strength. Both horizoniake the measurement ged to its worst case eter to 4 meters (for the do heights 1 meter) a 360 degrees to find the function and Specified			
Anborek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mout c. The antenna height is ground to determine the and vertical polarizations d. For each suspected erand then the antenna watest frequency of below 3 and the rotatable table with maximum reading. e. The test-receiver system and the emission level of	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intented on the top of a variable varied from one meter to formaximum value of the field stoof the antenna are set to maission, the EUT was arrangs tuned to heights from 1 mass turned from 0 degrees to the mass set to Peak Detect For Hold Mode. The EUT in peak mode was to the total desired to the set of the total mode.	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the strength. Both horizontake the measurement ged to its worst case eter to 4 meters (for the ned to heights 1 meter) a 360 degrees to find the function and Specified 10dB lower than the			
Anborek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mout c. The antenna height is ground to determine the and vertical polarizations d. For each suspected er and then the antenna was test frequency of below 3 and the rotatable table with maximum reading. e. The test-receiver system Bandwidth with Maximum f. If the emission level of limit specified, then testing the set of the	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intented on the top of a variable varied from one meter to formaximum value of the field stof the antenna are set to maission, the EUT was arrangs tuned to heights from 1 mas turned from 0 degrees to the mass set to Peak Detect Fin Hold Mode.	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the strength. Both horizon take the measurement ged to its worst case eter to 4 meters (for the ned to heights 1 meter) a 360 degrees to find the function and Specified 10dB lower than the e peak values of the EL			
Anborek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mou c. The antenna height is ground to determine the and vertical polarizations d. For each suspected er and then the antenna wa test frequency of below 3 and the rotatable table w maximum reading. e. The test-receiver syste Bandwidth with Maximum f. If the emission level of limit specified, then testir would be reported. Other	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intented on the top of a variable varied from one meter to formaximum value of the field stof the antenna are set to maission, the EUT was arrangs tuned to heights from 1 mass turned from 0 degrees to the mass set to Peak Detect For Hold Mode. The EUT in peak mode was and could be stopped and the	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the strength. Both horizon take the measurement ged to its worst case eter to 4 meters (for the detection and Specified 10dB lower than the e peak values of the EU not have 10dB margin			
Anbotek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mou c. The antenna height is ground to determine the and vertical polarizations d. For each suspected er and then the antenna wa test frequency of below 3 and the rotatable table w maximum reading. e. The test-receiver syste Bandwidth with Maximum f. If the emission level of limit specified, then testir would be reported. Other	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intented on the top of a variable varied from one meter to formaximum value of the field of the antenna are set to mission, the EUT was arranges tuned to heights from 1 mission, the antenna was tuned to heights from 1 mission, the antenna was tuned to heights from 1 mission, the antenna was tuned to heights from 1 mission, the antenna was tuned from 0 degrees to the EUT in peak mode was and could be stopped and the wise the emissions that did by one using quasi-peak meters.	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the strength. Both horizon take the measurement ged to its worst case eter to 4 meters (for the detection and Specified 10dB lower than the e peak values of the EU not have 10dB margin			
Anbotek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mout c. The antenna height is ground to determine the and vertical polarizations d. For each suspected er and then the antenna was test frequency of below 3 and the rotatable table with maximum reading. e. The test-receiver system Bandwidth with Maximum f. If the emission level of limit specified, then testir would be reported. Other would be re-tested one bethen reported in a data si	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intented on the top of a variable varied from one meter to formaximum value of the field of the antenna are set to mission, the EUT was arranges tuned to heights from 1 mission, the antenna was tuned to heights from 1 mission, the antenna was tuned to heights from 1 mission, the antenna was tuned to heights from 1 mission, the antenna was tuned from 0 degrees to the EUT in peak mode was and could be stopped and the wise the emissions that did by one using quasi-peak meters.	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the strength. Both horizontake the measurement ged to its worst case eter to 4 meters (for the deto heights 1 meter) a 360 degrees to find the function and Specified 10dB lower than the e peak values of the EU not have 10dB margin thod as specified and			
Anbotek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mout c. The antenna height is ground to determine the and vertical polarizations d. For each suspected er and then the antenna was test frequency of below 3 and the rotatable table with maximum reading. e. The test-receiver system Bandwidth with Maximum f. If the emission level of limit specified, then testir would be reported. Other would be re-tested one bethen reported in a data si	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the initiated on the top of a variable varied from one meter to formaximum value of the field of the antenna are set to maission, the EUT was arrangs tuned to heights from 1 massion, the antenna was tuned as turned from 0 degrees to the EUT in peak mode was an gould be stopped and the wise the emissions that did by one using quasi-peak metheet.	c chamber. The table f the highest radiation. terference-receiving e-height antenna tower ur meters above the strength. Both horizontake the measurement ged to its worst case eter to 4 meters (for the deto heights 1 meter) a 360 degrees to find the function and Specified 10dB lower than the e peak values of the EU not have 10dB margin thod as specified and			
Anbotek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mou c. The antenna height is ground to determine the and vertical polarizations d. For each suspected er and then the antenna wa test frequency of below 3 and the rotatable table w maximum reading. e. The test-receiver syste Bandwidth with Maximum f. If the emission level of limit specified, then testir would be reported. Other would be re-tested one be then reported in a data sing. Test the EUT in the low channel.	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intented on the top of a variable varied from one meter to formaximum value of the field of the antenna are set to mission, the EUT was arranges tuned to heights from 1 meters as turned from 0 degrees to the EUT in peak mode was and could be stopped and the wise the emissions that did by one using quasi-peak methods.	c chamber. The table of the highest radiation. Iterference-receiving e-height antenna tower our meters above the strength. Both horizontake the measurement ged to its worst case eter to 4 meters (for the did to heights 1 meter) of 360 degrees to find the function and Specified 10dB lower than the expeak values of the EU not have 10dB margin thod as specified and annel, the Highest			
Anbotek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mou c. The antenna height is ground to determine the and vertical polarizations d. For each suspected er and then the antenna wa test frequency of below 3 and the rotatable table w maximum reading. e. The test-receiver syste Bandwidth with Maximum f. If the emission level of limit specified, then testir would be reported. Other would be re-tested one be then reported in a data si g. Test the EUT in the low channel. h. The radiation measure	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the injunted on the top of a variable varied from one meter to formaximum value of the field so of the antenna are set to mission, the EUT was arranges tuned to heights from 1 mission, the antenna was tuneas turned from 0 degrees to 10 memory of the EUT in peak mode was any could be stopped and the wise the emissions that did by one using quasi-peak metheet. West channel, the middle chargements are performed in X, Nemerical positions of the top of the chargements are performed in X, Nemerical positions and the sements are performed in X, Nemerical positions of the chargements are performed in X, Nemerical positions of the chargements are performed in X, Nemerical positions of the chargements are performed in X, Nemerical positions of the chargements are performed in X, Nemerical positions of the chargements are performed in X, Nemerical positions of the chargements are performed in X, Nemerical positions of the chargement of th	c chamber. The table of the highest radiation. Iterference-receiving e-height antenna tower our meters above the strength. Both horizon hake the measurement ged to its worst case eter to 4 meters (for the distriction and Specified 10dB lower than the expeak values of the EU not have 10dB margin thod as specified and annel, the Highest Y, Z axis positioning for			
Anbotek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mou c. The antenna height is ground to determine the and vertical polarizations d. For each suspected er and then the antenna wa test frequency of below 3 and the rotatable table w maximum reading. e. The test-receiver syste Bandwidth with Maximum f. If the emission level of limit specified, then testir would be reported. Other would be re-tested one be then reported in a data si g. Test the EUT in the low channel. h. The radiation measure	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the intented on the top of a variable varied from one meter to formaximum value of the field of the antenna are set to mission, the EUT was arranges tuned to heights from 1 meters as turned from 0 degrees to the EUT in peak mode was and could be stopped and the wise the emissions that did by one using quasi-peak methods.	c chamber. The table of the highest radiation. Iterference-receiving e-height antenna tower our meters above the strength. Both horizon hake the measurement ged to its worst case eter to 4 meters (for the distriction and Specified 10dB lower than the expeak values of the EU not have 10dB margin thod as specified and annel, the Highest Y, Z axis positioning for			
Anbotek	meters above the ground was rotated 360 degrees b. The EUT was set 3 or antenna, which was mout c. The antenna height is ground to determine the and vertical polarizations d. For each suspected er and then the antenna was test frequency of below 3 and the rotatable table with maximum reading. e. The test-receiver system Bandwidth with Maximum f. If the emission level of limit specified, then testing would be reported. Other would be re-tested one between the reported in a data set g. Test the EUT in the low channel. h. The radiation measure Transmitting mode, and forces.	I at a 3 meter semi-anechoid to determine the position of 10 meters away from the injunted on the top of a variable varied from one meter to formaximum value of the field so of the antenna are set to mission, the EUT was arranges tuned to heights from 1 mission, the antenna was tuneas turned from 0 degrees to 10 memory of the EUT in peak mode was any could be stopped and the wise the emissions that did by one using quasi-peak metheet. West channel, the middle chargements are performed in X, Nemerical positions of the top of the chargements are performed in X, Nemerical positions and the sements are performed in X, Nemerical positions of the chargements are performed in X, Nemerical positions of the chargements are performed in X, Nemerical positions of the chargements are performed in X, Nemerical positions of the chargements are performed in X, Nemerical positions of the chargements are performed in X, Nemerical positions of the chargements are performed in X, Nemerical positions of the chargement of th	c chamber. The table of the highest radiation. Iterference-receiving e-height antenna tower our meters above the strength. Both horizontake the measurement ged to its worst case eter to 4 meters (for the ned to heights 1 meter) of 360 degrees to find the function and Specified 10dB lower than the expeak values of the EU not have 10dB margin thod as specified and annel, the Highest Y, Z axis positioning for which it is the worst			









Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 34 of 42

- 1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
- 2. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 3. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

Above 1GHz:

- a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.
 Remark:
- 1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
- 2. Scan from 18GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak









Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 35 of 42

measurement is shown in the report.

4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

11.1. EUT Operation

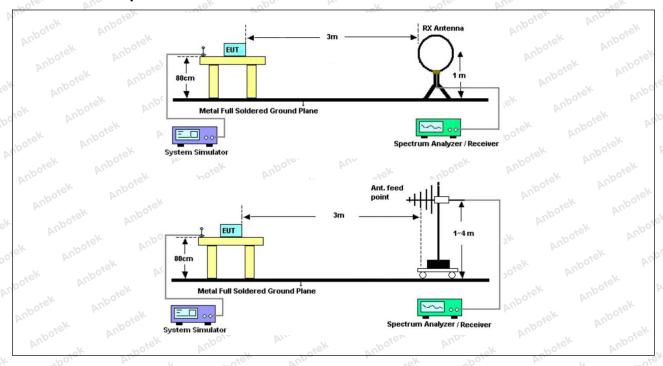
Operating Environment:

1: 802.11n mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

Test mode:

2: 802.11ac mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

11.2. Test Setup







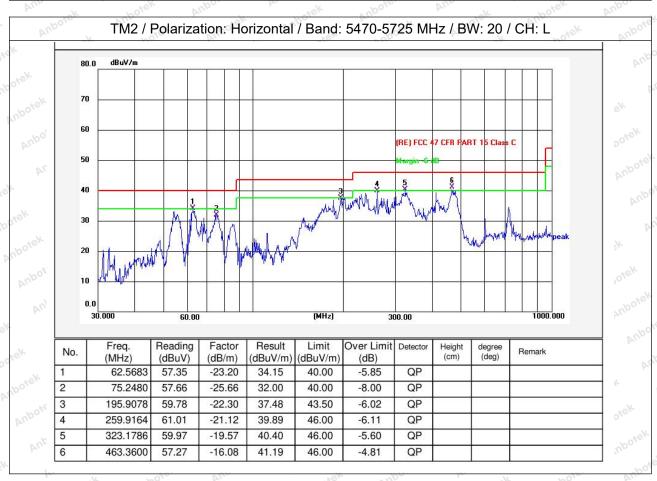
Hotline



Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 36 of 42

11.3. Test Data

Temperature: 24.8 °C Humidity: 53.9 % Atmospheric Pressure: 102 kPa

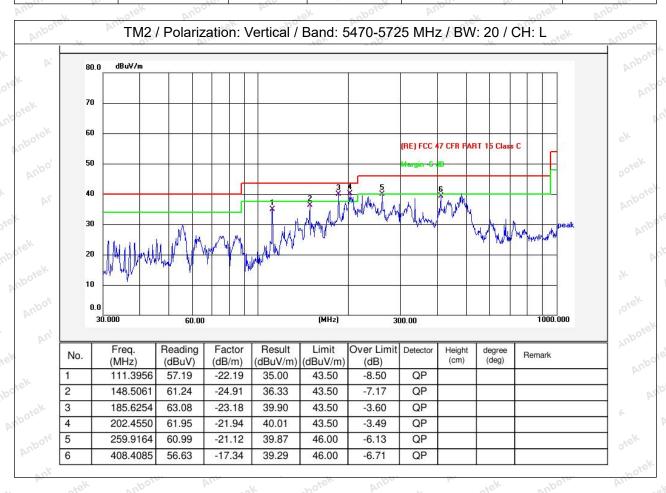






Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 37 of 42

Temperature: 24.8 °C Humidity: 53.9 % Atmospheric Pressure: 102 kPa



Note:Only record the worst data in the report.







Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 38 of 42

12. Undesirable emission limits (above 1GHz)

est Requirement:	47 CFR Part 15.407(b))(3) And		
actional clicities.	47 CFR Part 15.407(b)	(4) spotek		
abore And	47 CFR Part 15.407(b)		aboten A	
bi.	DZV.	46, 40	br.	Apoter A
	For transmitters operat			
	of the 5.47-5.725 GHz	band shall not excee	d an e.i.r.p. of −	27 aBm/MHz.
	aboten Anb			
ick Aupo.	For transmitters operate			
	All emissions shall be			
	above or below the ba			
	above or below the ba			
Arr.	edge increasing linearl			
	below the band edge,			
	increasing linearly to a	- AV	7 70,	L DN
	MHz	MHz	MHz	GHz
	0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
	10.495-0.505	16.69475- 16.69525	608-614	5.35-5.46
	2.1735-2.1905	16.80425-	960-1240	7.25-7.75
	4.125-4.128	16.80475	1200 1107	0.005.0.5
	_0\	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
st Limit:	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
			4-	23.6-24.0
	8.41425-8.41475	162.0125-167.17	3200-3207	ZJ.U-Z4.U
	8.41425-8.41475 12.29-12.293	162.0125-167.17 167.72-173.2	3260-3267 3332-3339	
	12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
		16 - AV		

using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §

15.209shall be demonstrated based on the average value of the measured

Shenzhen Anbotek Compliance Laboratory Limited







Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 39 of 42

Report No., 16220	DVVC30102402	FGC ID. ZAMOD-CF I	Page 39 01 42
ak abotek	emissions. The provisions	in § 15.35apply to these measu	urements.
Anbore Ans	abotek Anbo		rick apolek
botek Anbot	Except as provided elsewh	nere in this subpart, the emissio	ns from an
An abotek		ot exceed the field strength leve	
Aupora Air	following table:	k bolek Anbo	W. Jek Vupoje
k abotek Anbo	Frequency (MHz)	Field strength	Measurement
Ai.	oten And	(microvolts/meter)	distance
otek Aupo, K	anbore Ans	ok botek Anbo	(meters)
otek Anboten	0.009-0.490	2400/F(kHz)	300
Tupo. K. Wiek	0.490-1.705	24000/F(kHz)	30
anbotek Anbe	1.705-30.0	30 An	30
atek anbote	30-88	100 **	3 of And
Anbo K hote	88-216	150 **	3 hotek Anbore
k Anbores Anb	216-960 Above 060	200 **	3
- Projek And	Above 960	500 And	3 pore pri
Test Method:	ANSI C63.10-2013, section	n 12.7.4, 12.7.5, 12.7.6	k sporek A
hotek Anbor	Above 1GHz:	up. Vy Potek Vupo.	VI. Siek
wek abotek		JT was placed on the top of a re	
Anbore Air	meters above the ground a	at a 3 meter fully-anechoic char	nber. The table was
abotek Anbo	210	ermine the position of the higher	
Anbotek Anbote	Y	ers away from the interference- e top of a variable-height antenr	~
k hotek Anbi	c. The antenna height is va	aried from one meter to four me	ters above the
yer And	ground to determine the m	aximum value of the field stren	gth. Both horizontal
Sorek Anbore A	and vertical polarizations of	of the antenna are set to make t	he measurement.
no sk spojek		ission, the EUT was arranged to	
Anbore And		tuned to heights from 1 meter t	
potek Anbo.		MHz, the antenna was tuned to	
All tek abover		s turned from 0 degrees to 360	degrees to find the
Anbo, Ar.	maximum reading.	elius satte Dack Detact Funct	ion and Charling hoo
ek Anborek Anbo	Bandwidth with Maximum	n was set to Peak Detect Funct Hold Mode	ion and Specified
Procedure:	No. 5.	ne EUT in peak mode was 10dE	R lower than the
porte de la companya		could be stopped and the peal	
Lotek Ambore		rise the emissions that did not h	
And hotek		one using peak or average me	
Anbore And	and then reported in a data	a sheet. Alek Anbore A	"ek abotek
hotek Anbor	g. Test the EUT in the lowe	est channel, the middle channel	, the Highest
Ans sek abor	channel.		aboiek Anbo
ek Aupor Air		nents are performed in X, Y, Z a	
otek Anbotek An	.V. = 160'	und the X axis positioning whic	h it is the worst
or wotek	case.	nboten Anbo	ick Aupore
Aupore, Aur	5.0 ° 12.5 ° 1	s until all frequencies measure	a was complete.
hotek Anbore	Remark:	And ak wotek _ Ar	'po, Arr
And sek shortek	N	ble Loss+ Antenna Factor- Prea	WO. N.
Anbore And	D. C.	GHz, the disturbance above 18	.0.7
k spotek Aupon		ve plots are the highest emission	
Yu.		re points had been displayed. T	
otek Dupor VIII.	spurious erriissions from tr	ne radiator which are attenuated	i more man 200B









Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 40 of 42

below the limit need not be reported.

- 3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
- 4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

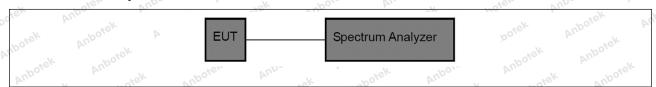
12.1. EUT Operation

Operating Environment:

Test mode:

- 1: 802.11n mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.
- 2: 802.11ac mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ac modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.

12.2. Test Setup









Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 41 of 42

12.3. Test Data

Temperature:	26.4 °C	Humidity:	48.8 %	Atmospheric Pressure:	101 kPa	
Tomporataro.	WZ0.1 0	Wirallianty-5	10.0 /0	7 tarricopriorio i roccaro.	TOTAL C	1/0

- X		Vi.	TM4 /	CH: L	1/2.	hore	bi.
_							
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
11000.00	27.08	24.15 M	51.23	68.20	-16.97 AND	V	Peak
16500.00	29.26	33.05	62.31	68.20	-5.89	Nupo, A	Peak
11000.00	28.91	24.15	53.06	68.20	-15.14	Anboth .	Peak
16500.00	29.23	33.05	62.28	68.20	-5.92	W.Hoter	Peak
11000.00	16.833	24.15	40.98	54.00	-13.02	V voick	AVG
16500.00	18.248	33.05	51.30	54.00	-2.70	V	AVG NO
11000.00	17.081	24.15	41.23	54.00	otel-12.77 And	H Prop	AVG
16500.00	16.849	33.05	49.90	54.00	-4.10	hotek H A	AVG
			TM1 /	CH: M			
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
11200.000	26.76	23.83	50.59	68.20	-17.61	Kupore	Peak
16800.000	27.43	32.16	59.59	68.20	-8.61	ek V nbo	Peak
11200.000	27.84	23.83	51.67	68.20	-16.53	Н	Peak M
16800.000	27.84	32.16	od 60.00 And	68.20	-8.20	H No	Peak
11200.000	17.083	23.83	40.91	54.00	-13.09	Anborev	AVG
16800.000	18.648	32.16	50.81	54.00	-3.19	NO ALEK	AVG
11200.000	17.581	23.83	41.41	54.00	-12.59	Hotek	AVG
16800.000	18.709	32.16	50.87	54.00	-3.13	H	AVG
			TM1 /	CH: H			
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
11400.000	25.85	23.51	49.36	68.20	-18.84	Augo A	Peak
17100.000	27.32	31.73	59.05	68.20	-9.15	Anbor	Peak
11400.000	26.74	23.51	50.25	68.20	-17.95	Hoore	Peak
17100.000	27.84	31.73	59.57	68.20	-8.63	ek Habote	Peak
11400.000	16.46	23.51	39.97	54.00	-14.03	V V	orek AVG And
17100.000	17.86	31.73	49.59	54.00	otek-4.41 M	Over Aug	AVG
11400.000	20.37 An	23.51	43.88	54.00	-10.12	Anbote H	AVG
17100.000	18.50	31.73	50.23	54.00	-3.77	NOTE:	AVG

Remark:

- 1. Result =Reading + Factor
- 2. During the test, pre-scan the all modulation, only the worst case is recorded in the report.









Report No.: 18220WC30182402 FCC ID: 2AMOD-CF1 Page 42 of 42

APPENDIX I -- TEST SETUP PHOTOGRAPH

Please refer to separated files Appendix I -- Test Setup Photograph_RF

APPENDIX II -- EXTERNAL PHOTOGRAPH

Please refer to separated files Appendix II -- External Photograph

APPENDIX III -- INTERNAL PHOTOGRAPH

Please refer to separated files Appendix III -- Internal Photograph

----- End of Report -----

