

Anbotek

Address

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

FCC Test Report

Applicant : Tuqu (Huizhou) Technical Service Co., Ltd

401-A1 and 402-B1, Building 9, Phase I of

Intelligent Manufacturing Port, Huicheng Bay

Area, Liandong U Valley, Shuikou Street,

Huizhou City, China

Product Name : USB wireless adapter

Report Date : Sept. 11, 2024

Shenzhen Anbotek Compliance Laboratory Limited

Compliance Laboratory

Anbotek

Anbotek









Contents

General Information	VII.	aupoler Au		otek Aupo.
1. General Information	During Test	Amolek Kupolek Kupolek		
2.1. EUT Operation	ok Aupore	lek Vilosek	Yer Yunger	13 13 13
3. Duty Cycle	d bandwidth	Wilso lek	Wapalek Vipol	14 12 12 14
4.1. EUT Operation	obolek And	^{hupole} k Vipole,	Antolek Antokak	
5.1. EUT Operation	Aupolek	k Napoley Vinotek	Androise A	
6. Power spectral density	Augorek Vu	Kuparen Vu	notek Autores	20 21 2
7.1. EUT Operation 7.2. Test Setup 7.3. Test Data	,000 Kilboro	or Kupoles	ek Kupo _{lek}	22 24 24
8. Band edge emissions (Radiated). 8.1. EUT Operation	Pupole _k	Vipolek Vi	Allooles Villey	
9. Undesirable emission limits (below	w 1GHz)	Kupolek	Anborek Anborek	36





Aupolek

Anbotek

Anbolek

Anbolek

Anbotek

Aupolek

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Anbolek

Anbotek

Anbolek

Anbolek

Anbolek

Anboiek

Anbolek

Anbotek

Anbolek

Anbotek

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbolek

Aupolek

Anbolek

Anbotek

Anbotek

Anbolek

Anbolek

Anbotek

Anbolek

Anbolek

Anbotek

Anbolek

Anborek

Anbolek

Aupolek

Aupolek

Anbotek

Anbolek

Anbotek

Anbotek



Anbotek

'upolek

otek

Anbotek

potek

Anbolek

Anbolek

'upotek

otek

Anborek

otek

Anbolek

Anbolek

Anbotek

Aupolek

Anbotek

Anbolek

Anbolek

Anbotek

Aupotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anborek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Aupolek

Anbotek

Anbolek

Anbolek

Anbotek

Anbolek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anboiek

Anbotek

Anbotek

Anbolek

Anbolek

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Anbolek

Anbolek

Anbotek

Anbotek

Anbotek

Anbolek

Anboiek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

upotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Aupolek

Anbotek

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Anbolek

Aupolek

Aupolek

Aupolek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbotek

Anbolek

Anbolek

Aupotek

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbolek

Anbotek

Anbolek

Aupolek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Report No.:182512C400451104 Anbotek FCC ID: 2BKBF-MINIBOX

	Auporer, Aur Polek	Anbotek	Anbo	Aupolek	Anbore	"holek	Aupolek
otek	9.2. Test Setup	Puporek	Wupo, Tok		Aupore	VI. Polek	39 Anbo
spotek	9.3. Test Data	ek Anboiek	Pupo.	ek "potok	. Kupora	r votek	40
VIII	10. Undesirable emission li	tek "upo	Hz)	esk ap	OFE, VIGOLE	, Alle	44
VUL	10.1. EUT Operation 10.2. Test Setup		upotek Pi	, A	rapolek Vu	, dr. A	46 46
<i>i</i> .k-	10.3. Test Data	Vu.	_Anbolek	- Vupo	Aupolok.	Weporg - OK	47
*ek	APPENDIX I TEST SETU APPENDIX II EXTERNA	L PHOTOGRAF	H'			Wipolic	49
, o,	APPENDIX III INTERNA	L PHOTOGRAP	HAndotek	V _D	k Pupotek	Mopora	.49
Aupole	ak spotek Aupo	I'en Aug	rek Aupo	lok Vupor	rek wook	k Anbore	, ,

Anbotek

Anborek

Anbolek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anboiek

Anbotek

Anbolek

Aupolek

Anbotek

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Shenzhen Anbotek Compliance Laboratory Limited

Anbotek







TEST REPORT

Applicant : Tuqu (Huizhou) Technical Service Co., Ltd

Manufacturer : Tuqu (Huizhou) Technical Service Co., Ltd

Product Name : USB wireless adapter

Model No. : Mini SE

Trade Mark : CarlinKit, Loadkey

Rating(s) : Input: 5V-- 1A

47 CFR Part 15E ANSI C63.10-2020

Test Standard(s) KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

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:	Jul. 16, 2024
ek apotek Anbo	Aupono Am Joseph Antones Antones
Date of Test:	Jul. 17, 2024 to Aug. 29, 2024
Pour William Aupolek Vibolek Vibolek	Tu Tu Hong
Prepared By:	Tek Vipose
Anbotek Anbotek Anbotek	(TuTu Hong)
lek Anbotek Anbotek Anbotek	Idward pan
Approved & Authorized Signer:	Anbo Anbo
Note: And	(Edward Dan)

400-003-0500 www.anbotek.com



potek

Anborek

Anbolek

Anbolek

Anborek

Anbotek

Anbotek

Anbotek

Anbotek

Anbolek

Anbolek

Anbotek

Anbolek

Anbotek

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Anbolek

Anboiek

Anbolek

Anbotek

Anbolek

Aupolek

Anbotek



Anbotek

Anbolek

hotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbolek

Anbotek

Anbolek

Anbotek

Anbolek

Anbolek

Anbotek

Aupolek

Anbolek

Aupolek

Anbotek

Aupolek

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbotek

Anbolek

Anbolek

Anbolek

Anbolek

Report No.:182512C400451104 Anbotek FCC ID: 2BKBF-MINIBOX

Revision History

lpotek	Anbotek Anbotek	Revision History	Tek Aupotek Aupotek
Anbore	Report Version	Description	Issued Date
Anb	abotek AnROO Ando	Original Issue.	Sept. 11, 2024
tek	Aupotek Aupoter Vin	Potek Vupotek Vupo	Anbotek Anbote A
hotek	Augorek Vipos	Aupotek Aupote, Wir.	sk Aupolek Aupo

Aupolek

Anbotek

Anbolek

Anbolek

Aupolek

Anboiek

Anbolek

Anbotek

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek Anbolek Aupolek Anbotek Aupolek Anbotek Aupolek Anbotek Anbolek Anbotek Anbotek Anbotek Anboiek Anbolek Anbotek Anborek Anbolek Anbolek Anbotek Anbotek Anbotek Anbotek Anbolek Anboiek Anbolek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbolek Anbolek Aupotek Anbotek Anbolek Anbotek Anbotek Anbolek nbotek Anbotek Anbolek Anbolek Anbolek Anbotek Anbotek Anbotek Anbotek Anbolek Anbolek Anbotek Anbotek Anbolek Anbolek Anbotek Anbotek Anbotek Anbolek Anbolek Anbotek Anbolek Anbotek Anbotek Anbotek Anbotek Anbotek Anbolek Anbotek Anbolek Anbotek Anbotek Anbotek Anbotek Anbotek Anbolek Anbotek Anbolek Anbotek Anbotek Anbotek Anbotek Anbolek Anbolek Anbotek Anbolek Anbotek Anbotek Anbolek Anbolek Anbotek Anbotek Anbolek Anbotek Anbotek Anbolek Anbolek Anbotek Anbolek Anbolek Anbotek Anbolek Anbotek Anbotek Anbolek Anbotek Anborek Anbotek Anbolek Anbolek Anborek Anbolek Anbotek Anbolek Anbotek Anbotek Anbotek Aupolek Anbolek Anbolek Anboiek Aupolek Anbotek Anbolek Anbolek Anbolek Anbotek Anbotek Anbolek Anbolek Anbotek Anbolek Anbotek Anbotek Anbotek Anbolek Anbolek







1. General Information

1.1. Client Information

	- Mo.	- 1	
o ^s	Applicant	:	Tuqu (Huizhou) Technical Service Co., Ltd
-	Address	:	401-A1 and 402-B1, Building 9, Phase I of Intelligent Manufacturing Port, Huicheng Bay Area, Liandong U Valley, Shuikou Street, Huizhou City, China
	Manufacturer	:	Tuqu (Huizhou) Technical Service Co., Ltd
e	Address	:	401-A1 and 402-B1, Building 9, Phase I of Intelligent Manufacturing Port, Huicheng Bay Area, Liandong U Valley, Shuikou Street, Huizhou City, China
1/6	Factory	:	Tuqu (Huizhou) Technical Service Co., Ltd
	Address	:	401-A1 and 402-B1, Building 9, Phase I of Intelligent Manufacturing Port, Huicheng Bay Area, Liandong U Valley, Shuikou Street, Huizhou City, China

1.2. Description of Device (EUT)

1.2. Description of	VUP.	Serice (FOI)
Product Name	:	USB wireless adapter
Model No.	:	Mini SE And Lek Motek And
Trade Mark	:	CarlinKit, Loadkey
Test Power Supply	:	DC 5V Anbotek Anbotek Anbotek Anbotek
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Adapter	:	N/Ak Anbotek Anbotek Anbote Anbote
RF Specification		
Operation Frequency	:	802.11a/n(HT20)/ac(VHT20)/ax(HEW20): U-NII Band 1: 5180MHz to 5240MHz; U-NII Band 3: 5745MHz to 5825MHz; 802.11n(HT40)/ac(VHT40)/ax(HEW40): U-NII Band 1: 5190MHz to 5230MHz; U-NII Band 3: 5755MHz to 5795MHz;
Number of Channel	:	802.11a/n(HT20)/ac(VHT20)/ax(HEW20): U-NII Band 1: 4; U-NII Band 3: 5; 802.11n(HT40)/ac(VHT40)/ax(HEW40): U-NII Band 1: 2; U-NII Band 3: 2;
Modulation Type	:	802.11a: OFDM(BPSK, QPSK, 16QAM, 64QAM); 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM); 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM); 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)







Device Type	:	Client Devices	anbolek	Aupore b	hotek	Aupolek
DFS Type	:	Slave without radar d	etection	Aupole	All.	Aupolek
Antenna Type	:	PCB Antenna	, upolek	Auporo	Am	Anbol
Antenna Gain(Peak)	:	-4.21dBi	iek anbol	ek Aupore	Ver Pro	SK Pr

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.
Hyundai Mobis	HYUNDAI MOBIS CO.,Ltd	APB12F0CG Input: DC 12V, 5A	poter. And abotek

1.4. Operation channel list

Operation Band: U-NII Band 1

Bandwidth:	20MHz	Bandwidth:	40MHz	Bandwidth:	Novel 80MHz Moot
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36°K	5180	abolek 38 Anbo	5190	ek 42,00tek	5210
40 Andorek	5200	46	5230	otek / Aupotek	Nypo
tek 44 mbo	5220	Notek States	Aupoles Ar	otek / Anb	otek / Augo
48	5240 ¹⁰⁰	k All botek	Aup Sier	And	Aupotek / Aupo

Operation Band: U-NII Band 3

Bandwidth:	20MHz	Bandwidth:	40MHz	Bandwidth:	80MHz
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel (Note	Frequency (MHz)
hotek 149 Anbot	5745 polek	151	5755	Anbote 155 Ani	5775
Anbore 153 Ant	5765	159 no 159	5795	Aupolek	Aupo
157	5785	Sporek / Aupore	Vun Vich	Alpotek	Aupo 1
161 tek	5805	Motek An	oler Vup	rek / Aupotek	Muho.
165 nbotek	5825	Alexandre K	Anboren Anb	otek / Anbor	y Aupo







1.5. Description of Test Modes

Pretest Modes	Descriptions
Anbotek Anbotek Anbotek	Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.
Anbotek TM2 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.
Anbotek Anbotek Anbote	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.
Anbotek TM4 Anbotek	Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ax 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.
TM5	Keep the EUT works in normal operating mode and connect to companion device

Note: 80211ax mode only support full resource unit size.

1.6. Measurement Uncertainty

Parameter	Uncertainty
Conducted emissions (AMN 150kHz~30MHz)	3,8dB Anborek Anborek
Occupied Bandwidth	925Hz Anbotek Anbotek
Conducted Output Power	0.76dB tek Anbores Anbores Anbores
Power Spectral Density	0.76dB Andore Andore And
Conducted Spurious Emission	1,24dB Anbotek Anbotek
Radiated spurious emissions (above 1GHz)	1G-6GHz: 4.78dB; 6G-18GHz: 4.88dB 18G-40GHz: 5.68dB
Radiated emissions (Below 30MHz)	3.53dB Anbotek Anbotek
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.







1.7. Test Summary

Test Items	Test Modes	Status
Conducted Emission at AC power line	Mode1,2,3,4	Pupolek
Duty Cycle	Mode1,2,3,4	k P Anbo
Emission bandwidth and occupied bandwidth	Mode1,2,3,4	otek P
Maximum conducted output power	Mode1,2,3,4	P
Power spectral density	Mode1,2,3,4	Purek
Band edge emissions (Conducted)	Mode1,2,3,4	Pobole
Band edge emissions (Radiated)	Mode1,2,3,4	P
Undesirable emission limits (below 1GHz)	Mode1,2,3,4	P
Undesirable emission limits (above 1GHz)	Mode1,2,3,4	P
Note: P: Pass N: N/A, not applicable	Anbotek Anbotek	Aupolek

1.8. Description of Test Facility

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

FCC-Registration No.:434132

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. 434132.

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.

Sogood Industrial Zone Laboratory & 1/F. of Building D, Sogood Science and Technology Park, Sanwei Community, Hangcheng Subdistrict, Bao'an District, Shenzhen, Guangdong, China.







1.9. Disclaimer

- 1. 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.
 - 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.



AND

Anbolek



Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

1.10. Test Equipment List

Cond	ucted Emission at A	C power line	W. Upolek	Aupole	Y Votek	Anborek
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
nbolek	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	2024-01-18	2025-01-17
Anbo	Three Phase V- type Artificial Power Network	CYBERTEK	EM5040DT	E215040D T001	2024-01-17	2025-01-16
3	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	2024-01-17	2025-01-16
o ^{xe} 4	Artificial Mains Network	Schwarzbeck	PVDC 8301	8301- 00097	2024-01-17	2025-01-16
nistick	Artificial Power Network	Schwarzbeck	PVDC 8301	8301- 01021	2024-01-17	2025-01-16
60pc	Software Name EZ-EMC	Farad Technology	ANB-03A	N/A	Aupor	Aupore).

Power spectral density

Band edge emissions (Conducted)

Duty Cycle

Anbotek

Anbotek

Emission bandwidth and occupied bandwidth

Maximum conducted output power

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	Constant Temperature Humidity Chamber	ZHONGJIAN	ZJ- KHWS80B	N/A	2023-10-16	2024-10-15
2	DC Power Supply	IVYTECH	IV3605	1804D360 510	2023-10-20	2024-10-19
3	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102150	2024-05-06	2025-05-05
Anbo	MXA Spectrum Analysis	KEYSIGHT	N9020A	MY505318 23	2024-02-22	2025-02-21
5	Oscilloscope	Tektronix	MDO3012	C020298	2023-10-12	2024-10-11
6	MXG RF Vector Signal Generator	Agilent	N5182A	MY474206 47	2024-02-04	2025-02-03



Anbol

Anbolek

Aupolek

Anbolek

Anbotek



Anbotek

'upolek

Aupolek

Anbolek

Anbotek

Anbotek

Anbotek

Aupolek

Aupolek

Anbotek

Anbotek

Aupolek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbolek

Anbolek

Anboiek

Aupolek

Anboiek

Aupolek

Anbotek

Aupolek

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

Anbotek

Anbo	tek Aupolek	Aupotek Aup	upolek b	nbotek,	Augote, Votek	Anbotek A
	d edge emissions (Ra esirable emission limi		Aupolek	Aupoten	Vupofek Vup	Aupolek
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	2024-01-23	2025-01-22
Anbore	EMI Preamplifier	SKET Electronic	LNPA- 0118G-45	SKET-PA- 002	2024-01-17	2025-01-16
3	Double Ridged Horn Antenna	SCHWARZBECK	BBHA 9120D	02555	2022-10-16	2025-10-15
4	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	Wootek	Aupolek
0 te 5	Horn Antenna	A-INFO	LB-180400- KF	J21106062 8	2023-10-12	2024-10-11
Anb610	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102150	2024-05-06	2025-05-05
Zul	Amplifier	Talent Microwave	TLLA18G40 G-50-30	23022802	2024-05-07	2025-05-06

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal	Cal.Due Date
1,0	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	2024-01-23	2025-01-22
2	Pre-amplifier	SONOMA	310N A	186860	2024-01-17	2025-01-16
3 ^{Anb}	Bilog Broadband Antenna	Schwarzbeck	VULB9163	Anb 345	2022-10-23	2025-10-22
4	Loop Antenna (9K- 30M)	Schwarzbeck	FMZB1519 B	00053	2023-10-12	2024-10-11
5-	EMI Test Software EZ-EMC	SHURPLE	N/A ^{botest}	N/A	otek / Aupote	Anbo

Anbotek

Anbolek

Anbotek

Aupolek

Anbolek

Anbolek

Anbolek

nbotek

Anbotek

Anbolek

Anbotek

Anbotek



2. Conducted Emission at AC power line

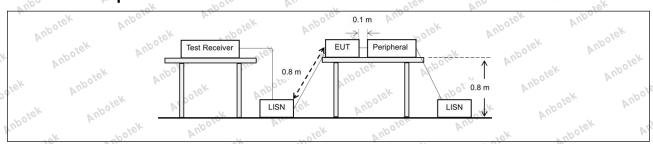
Test Requirement:	47 CFR Part 15.207(a)	Anbor	otek Aupore.
Olek Vupa	Frequency of emission (MHz)	Conducted limit (dBµV)	ick dool
iek upoter	And K holek Anbo	Quasi-peak	Average
Test Limit:	0.15-0.5	66 to 56*	56 to 46*
Test Limit:	0.5-5 tek habote P	56 November 1	46
Aug Prop	5-30 Ando	6000	50 aboles
Anbore	*Decreases with the logarithm of the	ne frequency.	k. Polek
Test Method:	ANSI C63.10-2020 section 6.2	A. Cotek Anboy	ier Yun

2.1. EUT Operation

, pote. 11. EO	Obergrion Polek Pube
Operating	Environment:
Anbotek Anbote Anbote	1: 802.11a mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report. 2: 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
Test mode	been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report. 3: 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
sek Vipop	the data of worst case is recorded in the report. 4: 802.11ax mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ax 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.

2.2. Test Setup

Anbotek



2.3. Test Data

Not applicable.

The EUT is powered by DC 5V battery inside, so there is no need to conduct this test.





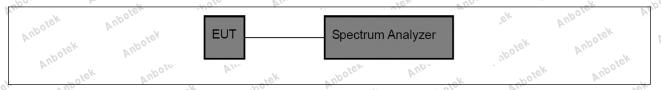
3. Duty Cycle

1/2	100 010 100 100 100 100 100 100 100 100
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 C63.10-2020 section 12.2 (b)
Procedure: Anbotek 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. iii) Set VBW >= RBW. iv) Set detector = peak. 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: And
Test mode:	1: 802.11a mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report. 2: 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. 3: 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
Anbotek Anbotek	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: 802.11ax mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ax 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

otek

Please Refer to Appendix for Details.







4. Emission bandwidth and occupied bandwidth

Aupore Air	TANIL 1 TANIL 2A TANIL 2C. No liveite, only for report use
Took Dominglek	U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use.
Test Requirement:	11 MH 2 11 MH 4, 47 CED Dort 45 407(a)
- rek and olev	U-NII 3, U-NII 4: 47 CFR Part 15.407(e)
Yupos W.	U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use.
Test Limit:	W. Viek Villops, Yun Ok Opotok Yung
rest Little.	U-NII 3, U-NII 4: Within the 5.725-5.850 GHz and 5.850-5.895 GHz bands,
VUPOFEL VUE	the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.
Test Method:	ANSI C63.10-2020, section 6.9 & 12.5 KDB 789033 D02, Clause C.2
Jek Vupoje,	Emission bandwidth:
do. Kek	a) Set RBW = approximately 1% of the emission bandwidth.
holek Anbo	b) Set the VBW > RBW.
VILL POLEK	c) Detector = peak.
Vupose. Vur	d) Trace mode = max hold.
w. " " upote	e) Measure the maximum width of the emission that is 26 dB down from the
Vupo. W.	peak of the emission.
L Lotek An	Compare this with the RBW setting of the instrument. Readjust RBW and
V. Vun	repeat measurement
rek aboler	as needed until the RBW/EBW ratio is approximately 1%.
pore Air	do nocaca antili the NEWYLERV ratio to approximately 170.
stek Anbore	Occupied bandwidth:
Ando	a) The instrument center frequency is set to the nominal EUT channel center
Polek Vupo	frequency. The
Ans ok	frequency span for the spectrum analyzer shall be between 1.5 times and
Augore. Aug	5.0 times the OBW.
k.	b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to
ick Vupo,	5% of the OBW,
Kotek	and VBW shall be approximately three times the RBW, unless otherwise
Poles Aug	specified by the
Procedure:	applicable requirement.
Aupolo A.	c) Set the reference level of the instrument as required, keeping the signal
otek Vupor	from exceeding the
And	maximum input mixer level for linear operation. In general, the peak of the
"poler Aug	
b.	spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific
Tek Vupor	anidance is given
, otek	guidance is given in 4.1.5.2.
aboter Ano	in 4.1.5.2. d) Step a) through step c) might require iteration to adjust within the
Y. rek "poter	specified range.
Anbor Air	e) Video averaging is not permitted. Where practical, a sample detection and
otek Anbore	single sweep mode
And	shall be used. Otherwise, peak detection and max hold mode (until the trace
Apolek And	
VII.	stabilizes) shall be used.
Crek Pupote	f) Use the 99% power bandwidth function of the instrument (if available) and
V/SK	report the measured
spotek Aupo	bandwidth.
Y	g) If the instrument does not have a 99% power bandwidth function, then the
Vupose. Vun	
w. k hope	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 mav

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.

4.1. EUT Operation

Operating Environment:

1: 802.11a mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.

2: 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:

- 3: 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: 802.11ax mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ax 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.







Anbotek

Anbolek

Aupolek

Aupolek

Anbotek

Aupolek

Anbotek

Anboiek

Anbotek

Anbotek

Anbotek

Anbotek

Anboiek

Anbotek

Anbotek

Anbolek

Report No.:182512C400451104 Anbotek FCC ID: 2BKBF-MINIBOX

Anborek Page 17 of 49

Anbolek

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Anbolek

Anbotek

Anbotek

Anbotek

Aupolek

Anbotek

Anboiek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbolek

Anbolek

Anbotek

Anboiek

Aupolek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

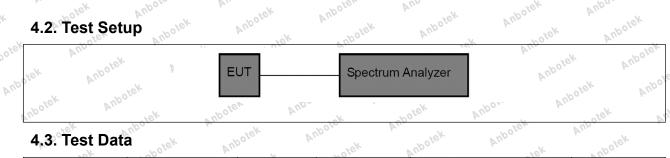
Anbolek

Anbolek

Anbotek

Anboiek

4.2. Test Setup



Aupolek

Anbotek

Aupolek

Anbotek

Anbotek

Anbolek

Anbolek

Anbolek

Anbotek

Anbotek

Anboiek

Anbotek

4.3. Test Data

4.3. Test Dat	a sporek	Aupolek	'upole	Aupolek	Aupolen	Anotok
Temperature:	22.8 °C	Humidity:	54%	Atmosphe	eric Pressure:	101 kPa

Anbolek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Please Refer to Appendix for Details.

Anbotek

Anboiek

Shenzhen Anbotek Compliance Laboratory Limited

Anbotek





Anb

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

5. Maximum conducted output power

- PO. L.	The same of the sa
Test Requirement:	47 CFR Part 15.407(a)(1)(iv) 47 CFR Part 15.407(a)(3)(i)
Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek	For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. 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.
otek Anbotek	For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used, the
Test Limit:	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 without any corresponding reduction in transmitter conducted power. Fixed, point-to-
potek ^{Aupotek} Au	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
Auporek Vuporek	employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
Test Method:	ANSI C63.10-2020, section 12.4
Procedure:	Refer to ANSI C63.10-2020 section 12.4
	W. A. C.

5.1. EUT Operation

,	Operating Envir	onment:	Ann	abolek An	00.	work And
7	Test mode:	1: 802.11a mode: Ke transmitting mode wir found the data rate @ recorded in the report 2: 802.11n mode: Ke transmitting mode with been tested and four worst case is recorded 3: 802.11ac mode: Ke continuously transmit data rates has been to the data of worst case 4: 802.11ax mode: Ke	th 802.11a modulate 60 6Mbps is the work f. ep the EUT connect th 802.11n modulate d the data rate @ led in the report. Heep the EUT connect in grand found the is recorded in the eep the EUT connect in the eep the europe in the eep the europe in the eep the europe in	cion type. All data st case. Only the ct to AC power line ion type. All ban MCS0 is the worker to AC power let to AC power let to AC power let data rate @ We report.	a rates has been a data of worst one and works in dwidth and data at case. Only the line and works in type. All band ICSO is the worst ine and works in the	continuously rates has e data of width and st case. Only
50	otek Anbotek	continuously transmit data rates has been t the data of worst cas	tested and found th	e data rate @ M		
Į		AS. VUA	You	-10 A.		DI







Anbotek

Anbolek

Aupolek

Aupolek

Anbotek

Aupolek

Anbotek

Anboiek

Anbotek

Anbotek

Anbotek

Anbotek

Anboiek

Anbotek

Anbotek

Anbolek

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

Anborel Page 19 of 49

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Anbolek

Anbotek

Anbotek

Anbotek

Aupolek

Anbotek

Anbolek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbolek

Anbolek

Anbotek

Anboiek

Anbotek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

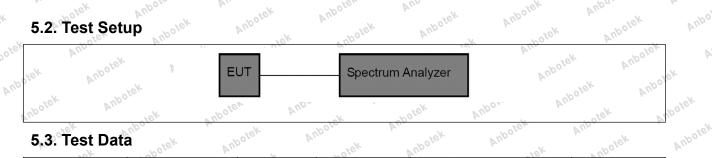
Anbotek

Anbolek

Anbolek

Aupolek

5.2. Test Setup



Aupolek

Anbotek

Aupolek

Aupolek

Anbotek

Anbolek

Anbolek

Anbolek

Anbotek

Anbotek

Anbotek

Anbotek

5.3. Test Data

5.3. Test Dat	a sporek	Anbotek P	'upote b	Anbotek	Aupoler	Ano upotek
Temperature:	22.8 °C	Humidity:	54%	Atmospheri	c Pressure:	101 kPa

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Please Refer to Appendix for Details.

Anbotek

Anboiek

Shenzhen Anbotek Compliance Laboratory Limited

Anbotek





Anb

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

6. Power spectral density

- 700	No Mills of the Control of the Contr
Test Requirement:	47 CFR Part 15.407(a)(1)(iv) 47 CFR Part 15.407(a)(3)(i)
Anbotek Anbotek Anbotek Anbotek	For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. 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.
Test Limit: Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek	For the band 5.725-5.850 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. 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 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
Vipotek Vipotek	that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
Test Method:	ANSI C63.10-2020, section 12.6
Procedure:	Refer to ANSI C63.10-2020, section 12.6

6.1. EUT Operation

Operating Envir	onment: And Andorek Andorek Andorek Andorek Andorek
Anbotek Anbotek Test mode:	1: 802.11a mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report. 2: 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.
Aupotek Aupotek Aupotek	3: 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: 802.11ax mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ax 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.







Anbotek

Anbolek

Aupolek

Aupolek

Anbotek

Aupolek

Anbotek

Anboiek

Anbotek

Anbotek

Anbotek

Anbotek

Anboiek

Anbotek

Anbotek

Anbolek

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

Anborel Page 21 of 49

Anbolek

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Anboiek

Anbotek

Anbotek

Anbotek

Aupolek

Anbotek

Anbolek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbolek

Anbolek

Anbotek

Anboiek

Aupolek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

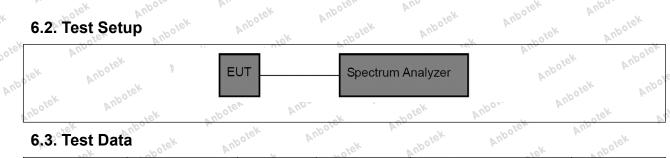
Anbolek

Anbolek

Anbotek

Anboiek

6.2. Test Setup



Aupolek

Anbotek

Aupolek

Aupolek

Anbotek

Anbolek

Anbolek

Anbolek

Anbotek

Anbotek

Anbotek

Anbotek

6.3. Test Data

6.3. Test Dat	a abotek	Aupotek .	Aupore Viek	Aupotek Aupotek	Anostek
Temperature:	22.8 °C	Humidity:	54%	Atmospheric Pressure:	101 kPa

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Anborek

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Please Refer to Appendix for Details.

Anbotek

Anboiek

Shenzhen Anbotek Compliance Laboratory Limited

Anbotek





7. Band edge emissions (Conducted)

0.	VII.	47 CFR Part 15.407(b)(1)	Anbore	A. Stek	Aupole.
	Test Requirement:	47 CFR Part 15.407(b)(4)	potek	Anbo	01
9	ok spokek	47 CFR Part 15.407(b)(10)	VII.	abotek	Anbo
0	Upole, VIII	For transmitters operating in the 5.15-	5.25 GHz band:	All emissions c	utside

of the 5.15-5.35 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 Noter	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- 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	p(2)
13.36-13.41	Clek	Vupo, V.	vek

Test Limit:

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 emissions. The provisions in § 15.35apply to these measurements.



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

² Above 38.6



	-07	- AV				
Except as provided elsewhere in this subpart, the emissions from an						
intentional radiator shall not	exceed the field strea	ngth levels specified in the				
following table:	abotek Anbo	r cotek Auport				
Frequency (MHz)	Field strength	Measurement				

Frequency (MHz)	Field strength	Measurement
Anbe	(microvolts/meter)	distance
Sporek Aug	Polek Vupo.	(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30 hotek
1.705-30.0	30 Kek Nipole.	30
30-88	100 **	re3 Ambore
88-216	150 ** Anb	3
216-960	200 **	31eh Anbe
Above 960	500 stek Anbore	3

^{**} Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.

In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

Test Method:

Procedure:

ANSI C63.10-2020, section 12.7.4, 12.7.6, 12.7.7

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 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.

7.1. EUT Operation

Operating Environment:

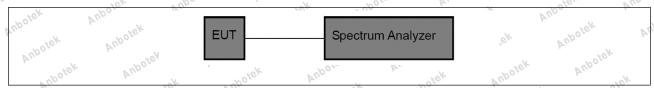
1: 802.11a mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.

2: 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:

- 3: 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: 802.11ax mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ax 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.

7.2. Test Setup



7.3. Test Data

	Temperature:	22.8 °C	1/2	Humidity:	54% Andoo	Atmospheric Pressure:	101 kPa	
200	0,,		100	V U123	V-2	. 700.	1.0	

Please Refer to Appendix for Details.







8. Band edge emissions (Radiated)

, O.	Test Requirement:	47 CFR Part 15.407(b)(1) 47 CFR Part 15.407(b)(4) 47 CFR Part 15.407(b)(10)
	Aupotek Aupotek	For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
	Anbotek Anbo	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
e)	Aupolek Aur	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.

	TEVEL OF ZT ADMITIVITIES		W01-
MHz	MHz	MHz Note 1	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-	608-614	5.35-5.46
olo VIII	16.69525	, v	tek Vupo.
2.1735-2.1905	16.80425-	960-1240	7.25-7.75
rupo Crek	16.80475	18k	upote, Aur
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-	9.3-9.5
"Olek V	upor V.	1646.5	Aur
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-	13.25-13.4
or br	"upofe, Vue	1722.2	otek Aupo
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-	2483.5-2500	17.7-21.4
b. Tek Vup.	156.52525	Spolek	Anbo
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) And
13.36-13.41	CIEK	Vupor	rek

Test Limit:

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 quasi-peak detector. Above 1000 MHz, compliance with the emission limits in § 15.209shall be demonstrated based on the average value of the measured emissions. The provisions in § 15.35apply to these measurements.



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

² Above 38.6



Except as provide	ed elsev	vhere in this	s subpart, tl	he emi	ssions from an	Spoler
intentional radiate	or shall ı	not exceed	the field str	ength	levels specified	in the
following table:	40.	polek	Anbo		rek	Aupor

11° 3	200	1. O. C.
Frequency (MHz)	Field strength	Measurement
Aup	(microvolts/meter)	distance
Spores Villa	Pupor	(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30 hotek
1.705-30.0	30 Kek Nupoles	30
30-88	100 **	e3 Anbore
88-216	150 **	3
216-960	200 **	31er Anb
Above 960	500 tek napote	3

^{**} Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.

In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

Test Method:

Procedure:

ANSI C63.10-2020, section 12.7.4, 12.7.6, 12.7.7

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 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.

8.1. EUT Operation

Operating Environment:

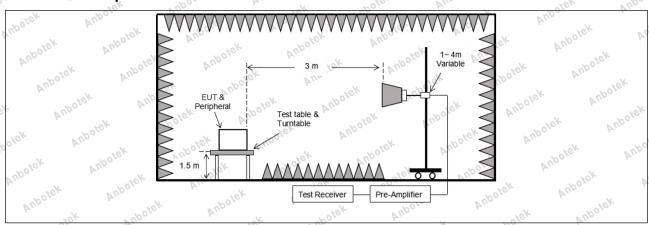
1: 802.11a mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.

2: 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:

- 3: 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: 802.11ax mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ax 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.

8.2. Test Setup









Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

8.3. Test Data

Temperature: 22.8 C Humidity: 54% Atmospheric Pressure: 101 kPa	Temperature: 22.8 °C	Humidity: 54%	Atmospheric Pressure:	101 kPa	
---	----------------------	---------------	-----------------------	---------	--

NO.	12.		760	VUD	40-	~00	F	
^{1/0} 0,			TM1 / B	and: 5150-52	250 MHz / BV	V: 20 / L		
P	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
	5150.00	36.86	15.99	52.85 mo ¹¹	68.20	-15.35	upotek H P	Peak
	5150.00	38.9 ₁ 10010	15.99	54.90	68.20	-13.30	Vodn	Peak
'ek	5150.00	otek 26.83 Ant	15.99 An	42.82	54.00	-11.18	Hotek	AVG
nbc	5150.00	28.85	15.99	44.84	54.00	-9.16	V votel	AVG
			TM1 / B	and: 5150-52	250 MHz / BV	V: 20 / H		
	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
.	5250.00	37.34	16.43	53.77	68.20	-14.43	Hr.	Peak
o'te	5250.00	40.21	16.43	56.64	68.20	-11.56	Vup∧ VK	Peak
	5250.00	⁰ 28.62	16.43	45.05	54.00	-8.95	Hoop	AVG
VUR	5250.00	29.56	16.43	45.99	54.00	-8.01	· V nbote	AVG

Remark: 1. Result=Reading + Factor

	Ac II			10			-0"
		TM2 / B	and: 5150-52	250 MHz / BV	V: 20 / L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5150.00	35.85	15.99	51.84	68.20	-16.36	H	Peak
5150.00	37.21	15.99	53.20	68.20	-15.00 _{nb} o ^v	k A Vupo,	Peak
5150.00	26.57	15.99	42.56	54.00	-11.44	polek H A	AVG
5150.00	27.57	15.99	43.56	otek 54.00 An	-10.44	Verode	AVG
		TM2 / B	and: 5150-52	250 MHz / BW	V: 20 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5250.00	37.65	16.43	54.08	68.20	-14.12	ek H Anbo	Peak And
5250.00	38.71	16.43	55.14	68.20 noot	-13.06	· · · V	nove Peak
5250.00	27.67	16.43	44.10	54.00	00.0 ¹ -9.90	H b	AVG
5250.00	29.09	16.43	01e 45.52 M	54.00	-8.48	Aupo Col	AVG

Remark: 1. Result=Reading + Factor

Aupolek







Anbolek

AND



AND

Anbotek

Anbotek

Anbotek

Anbo

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

by.	~ofe.	VII.		Tek An	0	You	20010
		TM2 / B	and: 5150-52	250 MHz / BV	V: 40 / L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5150.00	36.34	15.99	52.33	68.20	-15.87	H ^{no}	Peak No
5150.00	38.20	15.99	54.19	68.20	-14.01 ₀₀	ick A Vup.	Peak
5150.00	26.90	15.99	42.89 noot	54.00	11.11	upotek H P	AVG
5150.00	28.69	15.99	44.68	54.00	-9.32	Vodn	AVG
		TM2 / B	and: 5150-52	250 MHz / BV	V: 40 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5250.00	37.99	16.43	54.42	68.20	-13.78	Jek H And	Peak
5250.00	36.89	16.43	53.32	68.20 M	-14.88	\V	Peak
5250.00	28.15	16.43 nbol	44.58	54.00	9.42	Yupo, H	AVG
5250.00	29.33	16.43	45.76	54.00	-8.24	Aup of	AVG

Aupotek

Remark: 1. F	Result=Readi	ng + Factor	Aupolek	Aupoley	Aupolek	* upotek	Anbo
ole VI	-potek	Aupolen	Aug	Anboick	Aupo	k upoke	k Anbore
		TM3 / B	and: 5150-5	250 MHz / BV	V: 20 / L		0
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5150.00	36.79	15.99 knbc	52.78	68.20	-15.42	Hek	Peak
5150.00	38.52	15.99	54.51	68.20	-13.69	YUDA LOK	Peak
5150.00	26.48	15.99	42.47	54.00	-11.53	H ⁿ oo ,	AVG
5150.00	28.63	15.99	44.62	54.00	-9.38	A Vupo,	AVG
		TM3 / B	and: 5150-52	250 MHz / BV	V: 20 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5250.00	37.80	16.43	54.23	68.20	-13.97	PUL.	Peak
5250.00	38.06	16.43	54.49	68.20	-13.71	V upolek	Peak
5250.00	27.69	16.43	44.12	54.00	-9.88	H NO	cek AVG Anbo
5250.00	28.21	16.43	44.64	54.00	-9.36 Anbo	V	AVG

Remark: 1. Result=Reading + Factor





Anboiek

Anbotek



Anbolek

 Au_k

Anbotek

Anbol

Anbotek

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

~0 ^v	D.,	.97	8 02		- 1	100 L	
		TM3 / B	and: 5150-52	250 MHz / BV	V: 40 / L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5150.00	35.75	15.99	51.74	68.20	-16.46	Habotek	Peak
5150.00	36.24	15.99	52.23	68.20	-15.97	* A "PC	Peak 🗥
5150.00	25.88	15.99	41.87	54.00	-12.13 nb0	H	AVG
5150.00	26.67	15.99 ₀₀ 016	42.66	54.00	11.34	Upole A	AVG
		TM3 / B	and: 5150-52	250 MHz / BV	V: 40 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5250.00	37.92	16.43	54.35	68.20	-13.85	HATT	Peak N
5250.00	37.10	16.43	53.53	68.20	-14.67	otek A Vup	Peak
5250.00	27.41	16.43	43.84	54.00 M	-10.16	hotel H	AVG
5250.00	27.29	16.43 nb°	43.72	54.00	-10.28	YUR KK	AVG
Remark: 1. F	Result=Readi	ng + Factor	ipoter A	Aupolek	Vuposek.	Auporek	Aupotek

Remark: 1. Result=Reading + Factor

,	40.	1000	b.	Je.	Villa	V.C	ik apo
		TM4 / B	and: 5150-52	250 MHz / BV	N: 20 / L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5150.00	35.91	15.99	51.90 And	68.20	-16.30	Anbole H	Peak
5150.00	37.30	15.99	53.29	68.20	-14.91	Augh Fer	Peak
5150.00	26.63	15.99	42.62	54.00	-11.38	Hopiek	AVG
5150.00	27.62	15.99	43.61	54.00	-10.39	k V Mpol	AVG And
		TM4 / B	and: 5150-52	250 MHz / BV	V: 20 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5250.00	10 37.73 And	16.43	54.16	68.20	-14.04	Hick	Peak
5250.00	38.77	16.43	55.20	68.20	-13.00	N Orek	Peak
5250.00	27.76	16.43	44.19	54.00	-9.81	H _{upp}	AVG
5250.00	29.20	16.43	45.63	54.00	-8.37	ek V Aupo	AVG

Anbotek

Remark: 1. Result=Reading + Factor Anbe



Anbolek

Anbolek

Anbolek

Anbolek

Anbotek

 $\Delta n^{(b)}$

Anbotek



'upolek

Aupolek

potek

Anbolek

Anbotek

hotek

Anbolek

Anbolek

Anbolek

Aupolek

Aupolek

Aupolek

Anbotek

Anboiek

Anbotek

Anbotek

Anbotek

Aupolek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anboiek

Anbolek

Anbotek

Anbotek

Anbotek

Anbolek

Anbolek

Anbotek

Aupotek

Aupolek

Aupolek

Anbolek

Anbotek

Anbolek

Report No.:182512C400451104 Anbotek FCC ID: 2BKBF-MINIBOX

Aupolek

Aupole	10. 10.	John Yur		otek Vu	00, 4	ipotek b	, anbotek
ik.		TM4 / E	Band: 5150-5	250 MHz / BV	V: 40 / L		
Frequen (MHz)		•	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5150.0	36.45	15.99	52.44	68.20	-15.76	H	Peak N
5150.0	38.30	15.99	54.29	68.20	-13.91 _A nbo	V And	Peak
5150.0	27.01	15.99	43.00 100	54.00	11.00	upolen H	AVG
5150 O	28.73	15.99	44.72	54.00	-9.28	Aupo Ok	AVG
3130.0		TM4 / E	Band: 5150-52	250 MHz / BV	V: 40 / H		
Frequen (MHz)	•	•	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5250.0	38.06	16.43	54.49	68.20	-13.71	otek H Wuk	Peak
5250.0	36.93	16.43	53.36	68.20 M	-14.84	VyekV	Peak
5250.0	28.26	16.43	44.69	54.00	1001°-9.31	H.	AVG
5250.0	29.46	16.43	45.89	54.00	-8.11	Anbotek Anbotek	AVG

Anbotek

Anbolek

Anbolek

Anbotek

Anbolek

Anbolek

Anbolek

Aupolek

Anbolek

Anbolek

Anbolek

nbotek

Anboiek

Anbotek

Anbotek

Anbolek

Anbotek

Anbolek

Anbotek

Anbotek

Anbolek

Anbolek

Anbolek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Shenzhen Anbotek Compliance Laboratory Limited

Anbotek



abotek



Anbotek

Anbolek

Anbotek

Anbolek

Anbotek

Anbotek

Anborek

Anbolek

Aupolek

Anbotek

Anbolek

Anbolek

Anbolek

Anboiek

Anboiek

Anbolek

AND

Anbotek



Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbol

Anbotek

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

		TM1 / B	and: 5725-58	350 MHz / BV	V: 20 / L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5725.00	38.02	16.37	54.39	68.20	-13.81	Habotek	Peak
5725.00	39.34	16.37	55.71	68.20	-12.49	* A "pa	Peak N
5725.00	28.92	16.70	45.62	54.00 nbo	-8.38 Anbo	Н	AVG
5725.00	30.02	16.70	46.72	54.00	1001el-7.28	Upor A	AVG
Fraguenav		TM1 / B	and: 5725-58	50 MHz / BV	V: 20 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5850.00	38.93	17.21	56.14	68.20	-12.06	HAM	, Peak
5850.00	39.27	17.21	56.48	68.20	11.72 And	NEL A VUE	Peak
5850.00	28.95	17.21	46.16	54.00	-7.84	obote ^K H	AVG
5850.00	28.99	17.21	46.20	54.00	7.80	V	AVG

Remark: 1. Result=Reading + Factor

Remark: 1. I	Result=Readi	ng + Factor	upor A	Anbolek	Aupolek	AUD	nbotek
botek Ar	Pole, V	Polek	Anboiek	Vup. Olek	Anbotek	Anborek	k wore
		TM2 / B	and: 5725-58	350 MHz / BV	V: 20 / L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5725.00	37.98	17.05	55.03 knb	68.20	-13.17	Aupore H	Peak
5725.00	38.51 And	17.05	55.56	68.20	-12.64	AUP A. C.	Peak
5725.00	27.51	17.05	44.56	54.00	-9.44	Hipotek	AVG
5725.00	28.00	17.05	45.05	54.00	-8.95	k V nbol	AVG AND
		TM2 / B	and: 5725-58	350 MHz / BV	V: 20 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5850.00	rek 37.17 And	17.21	54.38	68.20	-13.82	Hiek	Peak
5850.00	37.83	17.21	55.04	68.20	-13.16	All V Nek	Peak
5850.00	27.40	17.21	44.61	54.00	-9.39	Hupo	AVG
5850.00	28.29	17.21	45.50	54.00	-8.50	iek V Aupo	AVG

Remark: 1. Result=Reading + Factor





Anbolek

AND



Anbotek

Anbotek

Anbotek

Anbotek

Anbo

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

(MHZ) (dBuV) (dB/m) (dBuV/m) (dBuV/m) (dB) Pol. 5725.00 37.56 17.05 54.61 68.20 -13.59 H Peak 5725.00 38.39 17.05 55.44 68.20 -12.76 V Peak 5725.00 26.92 17.05 43.97 54.00 -10.03 H AVG 5725.00 28.31 17.05 45.36 54.00 -8.64 V AVG TM2 / Band: 5725-5850 MHz / BW: 40 / H		h. /	~ole.	VIII		101 40	0,	Yar	~po,_
Frequency (dBuV) (dB/m) (dBuV/m) (dBuV/m) (dB)	,botek	TM2 / Band: 5725-5850 MHz / BW: 40 / L							
5725.00 38.39 17.05 55.44 68.20 -12.76 V Peak 5725.00 26.92 17.05 43.97 54.00 -10.03 H AVG TM2 / Band: 5725-5850 MHz / BW: 40 / H TM2 / Band: 5725-5850 MHz / BW: 40 / H Frequency (MHz) (dBuV) (dB/m) (dB/m) (dBuV/m) (dBuV/m) (dBuV/m) Over limit (dBuV/m) Antenna (dB) Pol. Detector 5850.00 37.92 17.21 55.13 68.20 -13.07 H Peak 5850.00 38.34 17.21 55.55 68.20 -12.65 V Peak 5850.00 28.07 17.21 45.28 54.00 -8.72 H AVG 5850.00 29.21 17.21 46.42 54.00 -7.58 V AVG		Frequency					_		Detector
5725.00 26.92 17.05 43.97 54.00 -10.03 H AVG 5725.00 28.31 17.05 45.36 54.00 -8.64 V AVG TM2 / Band: 5725-5850 MHz / BW: 40 / H Frequency (MHz) (dBuV) (dBuV) (dBm) (dBm) (dBm) (dBm) (dBmV/m) (dBmV/m) (dBmV/m) (dBmV/m) (dBmV/m) Over limit (dBmV/m) (dBmV/m) (dBmV/m) Antenna Pol. Detector 5850.00 37.92 17.21 55.13 68.20 -13.07 H Peak 5850.00 38.34 17.21 55.55 68.20 -12.65 V Peak 5850.00 28.07 17.21 45.28 54.00 -8.72 H AVG 5850.00 29.21 17.21 46.42 54.00 -7.58 V AVG		5725.00	37.56	17.05	54.61	68.20	-13.59	H	Peak
5725.00 28.31 17.05 45.36 54.00 -8.64 V AVG TM2 / Band: 5725-5850 MHz / BW: 40 / H Frequency (MHz) Reading (dBuV) Factor (dB/m) Result (dBuV/m) Limit (dBuV/m) Over limit (dB) Antenna Pol. Detector 5850.00 37.92 17.21 55.13 68.20 -13.07 H Peak 5850.00 38.34 17.21 55.55 68.20 -12.65 V Peak 5850.00 28.07 17.21 45.28 54.00 -8.72 H AVG 5850.00 29.21 17.21 46.42 54.00 -7.58 V AVG		5725.00	38.39	17.05	55.44	68.20	-12.76 nb	ick A Vup.	Peak
TM2 / Band: 5725-5850 MHz / BW: 40 / H Frequency (MHz) (dBuV) (dB/m) (dBuV/m) (dBuV/m) (dBuV/m) (dBuV/m) (dB) Pol. 5850.00 37.92 17.21 55.13 68.20 -13.07 H Peak 5850.00 38.34 17.21 55.55 68.20 -12.65 V Peak 5850.00 28.07 17.21 45.28 54.00 -8.72 H AVG	40	5725.00	26.92	17.05	43.97	54.00	-10.03	upotek H	AVG
Frequency (MHz) Reading (dBuV) Factor (dB/m) Result (dBuV/m) Limit (dBuV/m) Over limit (dB) Antenna Pol. Detector Pol. 5850.00 37.92 17.21 55.13 68.20 -13.07 H Peak 5850.00 38.34 17.21 55.55 68.20 -12.65 V Peak 5850.00 28.07 17.21 45.28 54.00 -8.72 H AVG 5850.00 29.21 17.21 46.42 54.00 -7.58 V AVG		5725.00	28.31	17.05	45.36	54.00	-8.64	Wody.	AVG
(MHz) (dBuV) (dB/m) (dBuV/m) (dBuV/m) (dB) Pol. Detector 5850.00 37.92 17.21 55.13 68.20 -13.07 H Peak 5850.00 38.34 17.21 55.55 68.20 -12.65 V Peak 5850.00 28.07 17.21 45.28 54.00 -8.72 H AVG 5850.00 29.21 17.21 46.42 54.00 -7.58 V AVG	'pole			TM2 / B	and: 5725-58	350 MHz / BV	V: 40 / H		
5850.00 38.34 17.21 55.55 68.20 -12.65 V Peak 5850.00 28.07 17.21 45.28 54.00 -8.72 H AVG 5850.00 29.21 17.21 46.42 54.00 -7.58 V AVG	VUp.								Detector
5850.00 28.07 17.21 45.28 54.00 -8.72 H AVG 5850.00 29.21 17.21 46.42 54.00 -7.58 V AVG		5850.00	37.92	17.21	55.13	68.20	-13.07	lek H Anh	Peak
5850.00 29.21 17.21 46.42 54.00 -7.58 V AVG		5850.00	38.34	17.21	55.55	68.20 M	-12.65	VekV	Peak
5850.00 29.21 17.21 46.42 54.00 -7.58 V AVG	rek	5850.00	28.07	4 17.21 nbol	45.28	54.00	-8.72	Nupo. H	AVG
Remark: 1. Result=Reading + Factor	re	5850.00	29.21	17.21	46.42	54.00	-7.58	Vup A	-40.
They have the state of the stat	Aupo	Remark: 1. F	Result=Readin	g + Factor	botek	Vupoles.	Yun Polek	Anborek	Anbo

Remark: 1. Result=Reading + Factor

Aupotek

Remark: 1. F	Result=Readi	ng + Factor	Aupolek	Aupole.	Aupolek	Anbotek	Anbo
or Vr.	Polek	Aupolen	Ann	Anbolek	Aupo	r upole	k Anbore
		TM3 / B	and: 5725-58	850 MHz / BV	V: 20 / L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5725.00	37.23	17.05 Anbo	54.28	68.20	-13.92	Hek	Peak
5725.00	37.45	17.05	54.50	68.20	-13.70	VupA Lek	Peak
5725.00	28.19	17.05	45.24	54.00	-8.76	H ⁿ oo ,	AVG NO
5725.00	28.93	17.05	45.98	54.00	-8.02 no M	A Vupo,	AVG
		TM3 / B	and: 5725-58	350 MHz / BV	V: 20 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5850.00	37.97	17.21	55.18	68.20	-13.02	PUL.	Peak
5850.00	38.88	17.21	56.09	68.20	-12.11	Vupolek	Peak
5850.00	27.87	17.21	45.08	54.00	-8.92	H NO	tek AVG Anbo
5850.00	28.89	17.21	46.10	54.00	-7.90 Anbo	V	AVG

Remark: 1. Result=Reading + Factor





Anboiek

Anboiek

AND

Anbotek



Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Aupolek

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

	Anbotek	Anbo	Anbotek	Aupora	Aupore	k Aupor	se And	upotek l
iek	- Cher	And	TM3 / B	and: 5725-58	•	- V	POCO V	
upotek	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
Aupo	5725.00	36.19	17.05	53.24	68.20	-14.96	Habotek	Peak
P	5725.00	37.75	17.05	54.80	68.20	-13.40	V V	Peak 🗥
	5725.00	27.47	17.05	44.52	54.00	-9.48 Anbo	Н	AVG
ek.	5725.00	28.17	17.05 ₀₀ 016	45.22	54.00	100 te - 8.78	Upole A	AVG
hotek			TM3 / B	and: 5725-58	50 MHz / BV	V: 40 / H		
Anb'	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
	5850.00	37.55	17.21	54.76	68.20	-13.44	HART	Peak N
	5850.00	38.33	17.21	55.54	68.20	-12.66	Jick A Wup	Peak
,	5850.00	27.54	17.21	44.75	54.00 Naba	-9.25	HYajo	AVG
otek	5850.00	27.12	17.21 nbo	44.33	54.00	10018-9.67	YUR K	AVG
Anbore	Remark: 1. F	Result=Readi	ng + Factor	"poier V	'upolek	Aupotek ok	Vupore,	Aupolek

Remark: 1. Result=Reading + Factor

	0000.00	K = 1 = "PO.	11.2	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0.01	401	10.40
Anbole	Remark: 1. F	Result=Readi	ng + Factor	ibotek A	anbotek no	Aupolek	Vupo polek	Aupolek
Ank	TM4 / Band: 5725-5850 MHz / BW: 20 / L							
	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
J.	5725.00	38.10	17.05	55.15	16k 68.20 M	-13.05	H	Peak
potek	5725.00	38.66	17.05 Anbo	55.71	68.20	-12.49	Anto Vek	Peak
Anbot	5725.00	27.57	17.05	44.62	54.00	-9.38	And H ISK	AVG
h.	5725.00	28.09	17.05	45.14	54.00	-8.86	N _{port}	AVG 00
b.			TM4 / B	and: 5725-58	350 MHz / BW	/: 20 / H		
ek-	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
hotek	5850.00	37.30	17.21 nb	o ^{tek} 54.51 Ani	68.20	-13.69	Aupor H	Peak
110	5850.00	37.93 And	17.21	55.14	68.20	-13.06	$^{VU}N_{V_{GL}}$	Peak
Aupo	5850.00	27.56	17.21	44.77	54.00	-9.23	Hotek	AVG
A	5850.00	28.41	17.21	45.62	54.00	-8.38	V	Lek AVG NOO

Remark: 1. Result=Reading + Factor



Anbolek

Anbotek

Anbolek

Anbolek

Anbotek

 $\Delta n^{(b)}$



'upolek

Anbolek

Anbolek

Anbotek

Anbotek

Anbotek

nbotek

Anbotek

Aupolek

Anbolek

Aupolek

Anbotek

Anbotek

Aupotek

Anbotek

Anbolek

Anbotek

Anbote

Anbotek

Anbote

 Δu_k

Anb

Report No.:182512C400451104 Anbotek FCC ID: 2BKBF-MINIBOX

Aupolek	Vupolek Vupolek	Anbore	Anbore	riek Aug	Dojek V	"polek V	upotek
787	* 40			350 MHz / BV	V: 40 / L	~(0	- K/1.
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5725.00	37.68	17.05	54.73	68.20	-13.47	H	rek Peak An
5725.00	38.54	17.05	55.59	68.20	-12.61 _{Anbo}	V And	Peak
5725.00	27.01	17.05	44.06 ^{hbo}	54.00	9.94	nbotek H	AVG
5725.00	28.37	17.05	ove 45.42 pc	54.00	-8.58	Aupo Ok	AVG
		TM4 / B	and: 5725-58	350 MHz / BV	V: 40 / H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
5850.00	38.04	17.21	55.25	68.20	-12.95	otek H Vup	Peak
5850.00	38.43	17.21	55.64	68.20 M	-12.56	~otekV	Peak
5850.00	28.20	17.21 ₄₇ 00	45.41	54.00	10018-8.59	Hr.	AVG
5850.00	29.31	17.21	46.52	54.00	-7.48	Aup Or	AVG
Remark: 1. R	esult=Readir	ng + Factor	Aupolek	Aupore	Aupolek	Auporer	y Aug

Anbolek

Anbotek

Anbolek

Anbotek

Anbolek

Aupolek

Anbotek

Anbolek

upotek

Anbolek

Anbolek

Anbolek

Anbotek

Anbotek

Anboiek

Anbolek

Anbotek

Aupolek

Aupotek

Aupolek

Aupolek

Aupolek

Anbotek

Anbotek

ipolek



Anbolek

Anbolek

Anbotek

Anbolek

Anbolek



9. Undesirable emission limits (below 1GHz)

Test Requirement:	47 CFR Part 15.407(b)(9)	upolek Aupor	Potek Vupote.
rek Aupolek	Unwanted emissions below strength limits set forth in §		the general field
"upor Y. Kek	Augores, Aug	abotek Anbo	i otek
polek Anbo.	Except as provided elsewh		
Ans Anborek Anbo	intentional radiator shall no following table:	ot exceed the field strength	levels specified in the
V.	Frequency (MHz)	Field strength	Measurement
Aupo Polek	Apolek Apole	(microvolts/meter)	distance (meters)
otek Vupo	0.009-0.490	2400/F(kHz)	300
rek upole.	0.490-1.705	24000/F(kHz)	30000
'upo, viel	1.705-30.0	4 30 abote And	30 novek
Polek Vupo.	30-88 NOTE AND ADDRESS OF THE PROPERTY OF THE	100 **	potok 3 And
Test Limit:	88-216	150 **	stell 3 Amboten
Vupole, Vur	216-960	200 **	Anbors 3 Alex
W. Siek	Above 960	500	1013 Antoli
Anbo	** Except as provided in pa	h	emissions from
rek abolek	intentional radiators opera		
ore VI.	frequency bands 54-72 MH		
rotek Vuporg	However, operation within		
Anbo	sections of this part, e.g., §		pormittod dridor otrior
Thotel And	In the emission table abov		at the band edges
Vi.	The emission limits shown		
Anbore	employing a CISPR quasi-		
k hotek	90 kHz, 110–490 kHz and		
YUR YUR	these three bands are bas		
Jiek Vuporer	detector.	Ando	Aupole 2 Air
Test Method:	ANSI C63.10-2020, section	n 12.7.4, 12.7.5	tek upolek b
Anbore Air	Below 1GHz:	ok hotek Anbo	J.ek
"Upolek Vupo,	a. For below 1GHz, the EU	IT was placed on the top o	of a rotating table 0.8
And	meters above the ground a		
"Upoler Vi	was rotated 360 degrees to		
W.	b. The EUT was set 3 or 1		
SK Whore	antenna, which was mount	V. 1.	
k hotek	c. The antenna height is va		
Poler Vup	ground to determine the m		
iek upojen	and vertical polarizations of		
Procedure:	d. For each suspected em	70.	
Aupotek Vupo	and then the antenna was		
And	test frequency of below 30		E. C.
"Upoler b	and the rotatable table was		
b.	maximum reading.	bolek Anti	" Olek Tupole
liek Aupor	e. The test-receiver system	n was set to Peak Detect F	unction and Specified
r work	Bandwidth with Maximum	- (c)	k spoken Au
164	. V		A ID I AII II
upo.	T. If the emission level of tr	ie Eu i in peak mode was	10dB lower than the
upor tek anbolek	f. If the emission level of the limit specified, then testing		







would be re-tested one by one using quasi-peak 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 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.
- 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 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.

9.1. EUT Operation

Operating Environment:

1: 802.11a mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.

2: 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:

- 3: 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: 802.11ax mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ax 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.





Anbolek

Anbotek

Anbolek

Anbolek

Anborek

Anbotek

Aupolek

Anbolek

Aupolek

Aupolek

Anbotek

Anboiek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anboiek

Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Anbolek

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

Anbolek

Anbotek

Anboiek

Anbotek

Anbotek

Page 39 of 49

Anbolek

Anbolek

Anbolek

Anbotek

Anbolek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbolek

Anbotek

Anbolek

Anbolek

Anbotek

Anboiek

Anbotek

Aupolek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbolek

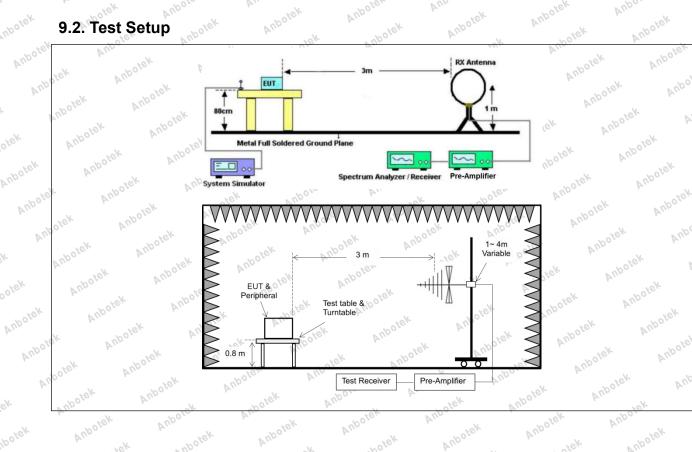
Anbolek

Anbolek

Anbolek

Anbolek

Anbolek 9.2. Test Setup



Anbolek

Anbolek

Anbolek

Anbolek

Anbolek

Anbolek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbolek

Anbolek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbotek



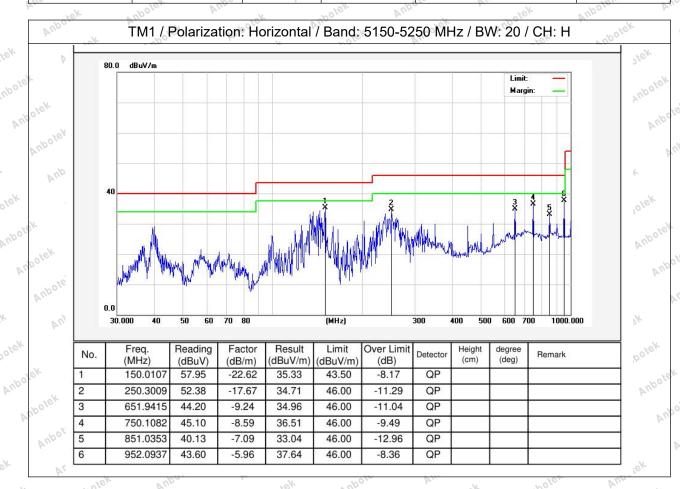




9.3. Test Data

The test results of 9kHz-30MHz was attenuated more than 20dB below the permissible limits, so the results don't record in the report.

Temperature: 20.3 °C Humidity: 46 % Atmospheric Pressure: 101 kPa





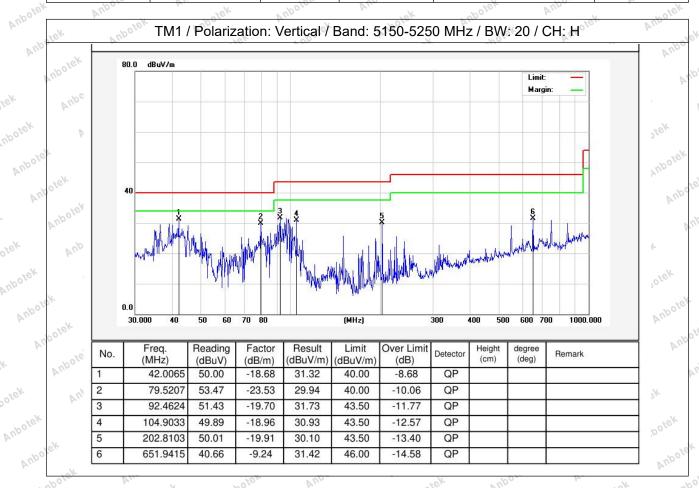


Anbolek

Anbolek

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

Temperature: 20.3 °C Humidity: 46 % Atmospheric Pressure: 101 kPa



Note: Only record the worst data in the report.



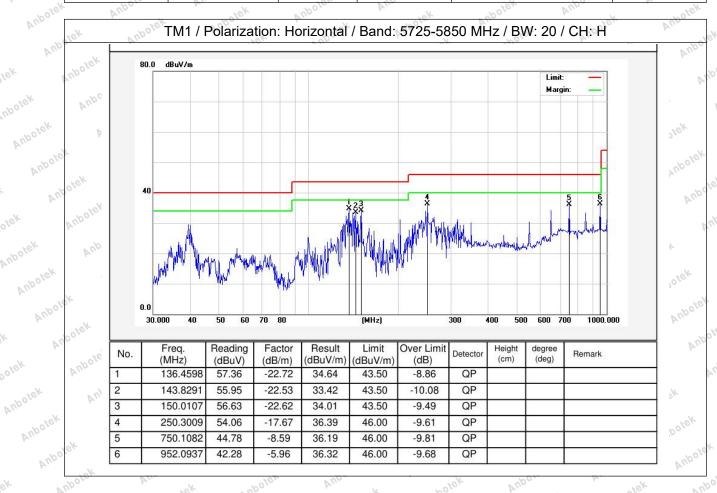




Aupolek

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

Temperature: 20.3 °C Humidity: 46 % Atmospheric Pressure: 101 kPa





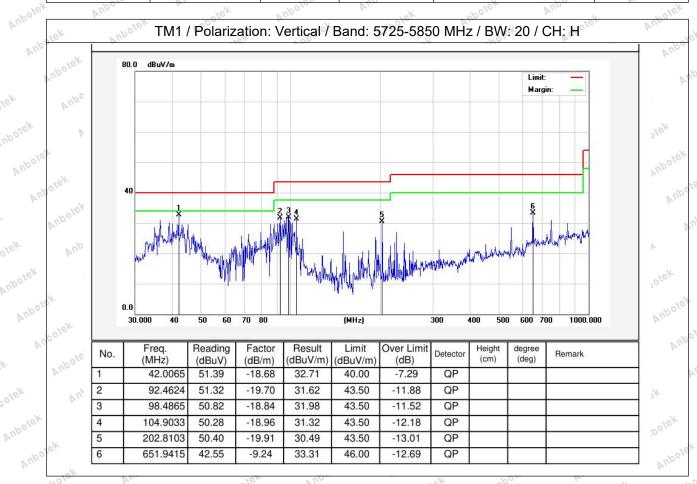


Anboick

Anbolek

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

Temperature: 20.3 °C Humidity: 46 % Atmospheric Pressure: 101 kPa



Note: Only record the worst data in the report.





10. Undesirable emission limits (above 1GHz)

All	47 CFR Part 15.407(b)(1) 36k N	100	Yo. Yo.
est Requirement:	47 CFR Part 15.407(b		Aupotek Au	pore. All.
ot rtoquironiont.	47 CFR Part 15.407(b		Aupo	"Olek
tor Vupo	For transmitters opera	, , p.,	CHz band: All or	niesions outsic
rotek Anbotek	of the 5.15-5.35 GHz b			
por Air	OF THE 3: 13-3:33 GF12.	dand Shall Hot CACCCC	an C.1.1.p. 01 2	7 dbill/lvii iz.
hoiek Anbo	For transmitters opera	ting solely in the 5.72	25-5.850 GHz ba	nd: Anbo
Ann	All emissions shall be			
Anbore	above or below the ba			
hotek	above or below the ba			
Anbore	edge increasing linear			
iek Aupore	below the band edge,			
Viek Vupotek	increasing linearly to a	107		- LOU-
abolek Anbo	V	MHz	MHz	GHz
"II.	0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
Aupor Air.	10.495-0.505	16.69475-	608-614	5.35-5.46
Polek	1420 N. H.	16.69525	1000	Lek Vupo
Ann	2.1735-2.1905	16.80425-	960-1240	7.25-7.75
Aupole	1 10 20% 100 000 tok	16.80475	100001100	upor A
	4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
okek Vuporer	4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
iek upole	4.20725-4.20775	73-74.6	1645.5-	9.3-9.5
Aupor	6.245.6.249	740.750	1646.5	10 6 10 70
Polek Vul	6.215-6.218 6.26775-6.26825	74.8-75.2 108-121.94	1660-1710	10.6-12.7 13.25-13.4
Aug	0.20773-0.20023	100-121.94	1718.8- 1722.2	13.25-13.4
st Limit:	6.31175-6.31225	123-138	2200-2300	14.47-14.5
k Aupolek	8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
	8.362-8.366	156.52475-	2483.5-2500	17.7-21.4
bolek Yupoles	0.002 0.000	156.52525	2400.0 2000	Anbota
DO. W.	8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
Thotek Aupo	8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
Al. Otok Ar	- C	167.72-173.2	3332-3339	31.2-31.8
Aupor A.	12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
-hotek	12.57675-12.57725	322-335.4	3600-4400	(2) And
Vu.	13.36-13.41	Lolek	Vupo, V	1ek
ek Aupolo	Profession of the Profession o	V. V.	Potek	Anbo
, olek	¹ Until February 1, 199	9, this restricted band	d shall be 0.490-	0.510 MHz.
Pup. Yup.	y bolek Ani	on. W.	Anbole.	VII.
iek "po	² Above 38.6	Polek Vupo,	rek	Anbore
Aupo	rek Vuporer	VIII.	iek Aupo	V - 019
bolek A	The field strength of e			
Vu.	not exceed the limits s			
Aupore.	1000 MHz, compliance			
, olek	using measurement in			
ier Vup	detector. Above 1000			
rek abolek	15.209shall be demon			
Anbotek Anbo	emissions. The provisi			

Shenzhen Anbotek Compliance Laboratory Limited



Anbore





Except as provided	d elsewhe	ere in this	s subpart, the	e emissions	from an	POICH
intentional radiator	shall not	exceed	the field stre	ngth levels	specified	in the
following table:	-V-	Polek	Anbo	. W.	rek	VUPOLE

11° 3	200	1. O. A. D	
Frequency (MHz)	Field strength	Measurement	
Aup	(microvolts/meter)	distance	
Spores Aug	Pupor	(meters)	
0.009-0.490	2400/F(kHz)	300	
0.490-1.705	24000/F(kHz)	30 hotek	
1.705-30.0	30 Kek Nupoles	30	
30-88	100 **	e3 Anbore	
88-216	150 **	3	
216-960	200 **	31er And	
Above 960	500 tek napote	3	

^{**} Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.

In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

Test Method:

Procedure:

ANSI C63.10-2020, section 12.7.4, 12.7.6, 12.7.7

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 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:

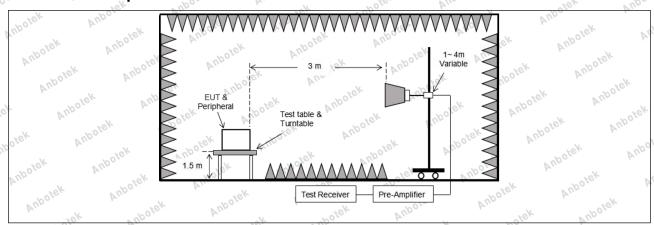
1: 802.11a mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.

2: 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:

- 3: 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: 802.11ax mode: Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ax 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







10.3. Test Data

Те	mperature:	23.9 °C	Humidity:	54.7 %	Atmospheric Pre	essure:	101 kPa	
Viek.	Aupo	,ek	" upolo	VIII	Polek	AUD		76

Itek Aupo	FEL. PUL	191	upotok .	Vupo.	hotek	Aupolo	Ali.
		TM1 / Ban	d: 5150-5250	0 MHz / BW:	20 / CH: L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
10360.00	31.40	23.81	55.21 _{nb} ol	68.20	-12.99	"polek \	Peak
15540.00	32.68	28.68	61.36	68.20	-6.84	. Kr	Peak
10360.00	31.71	ove* 23.81 And	55.52	68.20	-12.68	And H	Peak
15540.00	32.79	28.68	61.47	68.20	-6.73	pH ^{oto}	Peak
10360.00	20.729	23.81	44.54	54.00	-9.46	· V _{Anbole}	AVG
15540.00	21.754	28.68	50.43	54.00	-3.57	V V	otek AVG AN
10360.00	20.897	23.81	44.71	54.00	10 ^k -9.29 M	H	AVG
15540.00	21.504	28.68	50.18 _k	54.00	3.82	Anboren H	AVG
		TM1 / Ban	d: 5150-5250	MHz / BW:	20 / CH: M		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
10400.00	30.76	23.81	54.57	68.20	-13.63	k V Nuboli	Peak
15600.00	32.21	29.13	61.34	68.20	-6.86 ^{n/00}	V	ove ^V Peak ∧
10400.00	31.20	23.81	55.01	68.20	13.19 AN	H P	Peak
15600.00	32.31	29.13	61.44 And	68.20	-6.76	nbotek	Peak
10400.00	20.999	23.81	44.81	54.00	-9.19	Nek	AVG
15600.00	21.874	29.13	51.00	54.00	-3.00	VIII OFER	AVG
10400.00	20.887	23.81	44.70	54.00	-9.30	Hupo	AVG
15600.00	21.584	29.13	50.71	54.00	-3.29	SK H WUDO	AVG
		TM1 / Ban	d: 5150-5250	MHz / BW:	20 / CH: H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
10480.00	e⊬ 30.33 <u>~</u> ~b°	23.80	54.13	68.20	-14.07	Nick	Peak
15720.00	31.69	30.03	61.72	68.20	-6.48	AND FOR	Peak
10480.00	30.84	23.80	54.64	68.20	-13.56	H _{upo}	Peak
15720.00	31.22	30.03	61.25	68.20	-6.95	ick H And	Peak
10480.00	19.67	23.80	43.47	54.00	-10.53	-tek V	AVG
15720.00	20.63	30.03	50.66	54.00	3.34	Upor V	AVG
10480.00	20.10	23.80	otek 43.90 M	54.00	-10.10	Aupole	AVG
15720.00	16k 20.37 And	30.03	50.40	54.00	-3.60	Hotek	AVG

Remark:

- Result =Reading + Factor
- Only the worst case (802.11a) is recorded in the report.





Anboiek

Anbotek



Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

otek	Aupo	h.	hole	V. Ville		hoick P	'upo
		TM1 / Ban	d: 5725-5850	MHz / BW:	20 / CH: L		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
11490.000	28.56	23.36	51.92	68.20	-16.28	V	Peak
17235.000	29.93	31.97	61.90	68.20	-6.30	V	Peak N
11490.000	29.05	23.36	52.41	68.20	-15.79	tok H Aup	Peak
17235.000	30.14	31.97	62.11 60V	68.20	-6.09	hotek H	Peak
11490.000	17.88	23.36	41.24	54.00	-12.76	"Re	AVG
17235.000	18.67	10 31.97 NO	50.64	54.00	-3.36	Aup of	AVG
11490.000	18.08 Ani	23.36	41.44	54.00	-12.56	PHO.	AVG
17235.000	18.09	31.97	50.06	54.00	-3.94	. H _{ubote}	AVG
		TM1 / Ban	d: 5725-5850	MHz / BW:	20 / CH: M		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
11570.000	29.14	23.42	52.56	68.20	-15.64	Yun Nek	Peak
17355.000	29.81	32.18	61.99	68.20	-6.21	Aupo.	Peak
11570.000	29.25	23.42	52.67	68.20	-15.53	Hoose	Peak
17355.000	30.23	32.18	62.41	68.20	-5.79	k H nbok	Peak
11570.000	19.150	23.42	42.57	54.00	-11.43	V	ove ^Y AVG
17355.000	18.992	32.18	51.17	54.00	tek -2.83 An	ofer. A V	AVG
11570.000	19.071	23.42	42.49 M	54.00	-11.51	HaroteH	AVG
17355.000	18.468	32.18	50.65	54.00	-3.35	Hek	AVG
		TM1 / Ban	d: 5725-5850	MHz / BW:	20 / CH: H		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
11650.000	28.65	23.49	52.14	68.20	-16.06 ^{nbo}	Λ Λ	Peak
17475.000	30.05	32.39	62.44	68.20	5.76	pore. A	Peak
11650.000	28.99	23.49	52.48 AN	68.20 An	-15.72	Hioda.	Peak
17475.000	29.84	32.39	62.23	68.20	-5.97	Hick	Peak
11650.000	18.22	23.49	41.71	54.00	-12.29	AND LOK	AVG
17475.000	18.79	32.39	51.18	54.00	-2.82	Nupor	AVG
11650.000	18.25	23.49	41.74	54.00	-12.26	iek H And	AVG
17475.000	18.44	32.39	50.83	54.00	-3.17 And	Н	AVG

Remark:

Anbolek

- 1. Result =Reading + Factor
- 2. Only the worst case (802.11a) is recorded in the report.



Anbolek

Anbolek

Anbolek

Anboick

Anboick

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Anbolek

Anbotek

Anbolek

Anbotek

Anbotek

Anbotek

Anbotek

Anbotek

Anbolek

Anbotek

Anbolek

Anbolek

Anbotek

Anbotek

Anbolek

Anbolek



Anbolek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

Anbolek

Aupotek

Aupolek

Anbotek

Aupolek

Anbotek

Anbolek

Anbotek

Anbolek

Report No.:182512C400451104 FCC ID: 2BKBF-MINIBOX

APPENDIX I -- TEST SETUP PHOTOGRAPH

Anbotek

Anbotek

Anboiek

Please refer to separated files Appendix I -- Test Setup Photograph RF

Anbolek

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

Anbotek

Anbolek

Anbolek

Anbotek

And of Report -----

Anbolek

Anbolek

Anbotek

Anbolek

Anbolek

Aupolek

Aupolek

Anbotek

Anbotek

Anbolek

Anbotek

Anbotek

