

Anbotek

Address

Report No.:1819C40045812501 FCC ID:2AV7NDDP-200

FCC Test Report

GUANGZHOU RANTION TECHNOLOGY CO... **Applicant**

LTD:

Room 7002 and 7003, 7th Floor, Digital

Entertainment Industrial Park, Greater Bay Area,

No. 28, Huangpu Park West Road, Huangpu

District, Guangzhou, China.

Product Name DIGITAL PIANO

Report Date : Nov. 04, 2024

Shenzhen Anbotek Compliance Laboratory Limited

Compliance Laboratory

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TEST REPORT

Applicant : GUANGZHOU RANTION TECHNOLOGY CO., LTD.

Manufacturer : GUANGZHOU RANTION TECHNOLOGY CO., LTD.

Product Name : DIGITAL PIANO

Model No. : DDP-200PRO, DDP-80PLUS

Trade Mark : DONNER/MouKey

Rating(s) : Input: 18V=2A

47 CFR Part 15.247

Test Standard(s) : ANSI C63.10-2020

KDB 558074 D01 15.247 Meas Guidance v05r02

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:	Sept. 14, 2024
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Date of Test:	Sept. 14, 2024 to Oct. 12, 2024
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Prepared By:	Augos August August Aug
	(Nianxiu Chen)
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Un Volek Augosek Augo	(ingkong)in
Approved & Authorized Signer:	A Mary Mary apolesk
Vipole VI	(KingKong Jin)





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Revision History

Polek	Vuporek Vuporek Vup	Revision History	ar Aupotek Aupotek
in abotek	Report Version	Description	Issued Date
Anb.	Roo Anbotek	Original Issue.	Nov. 04, 2024
1	Kupotek Aupote Aupote	k Aupole Aupolek	Vupores Vuporek V
tek	Aupole Aupolek Auf	otek Andotek Anbotek	Auporek Auporek
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1. General Information

1.1. Client Information

Applicant	:	GUANGZHOU RANTION TECHNOLOGY CO., LTD.
Address	:	Room 7002 and 7003, 7th Floor, Digital Entertainment Industrial Park, Greater Bay Area, No. 28, Huangpu Park West Road, Huangpu District, Guangzhou, China.
Manufacturer	:	GUANGZHOU RANTION TECHNOLOGY CO., LTD.
Address	:	Room 7002 and 7003, 7th Floor, Digital Entertainment Industrial Park, Greater Bay Area, No. 28, Huangpu Park West Road, Huangpu District, Guangzhou, China.

1.2. Description of Device (EUT)

, see		And work about the core Air
Product Name	:	DIGITAL PIANO
Model No.	:	DDP-200PRO, DDP-80PLUS (Note: All samples are the same except the model name and appearance colour, so we prepare "DDP-200PRO" for test only.)
Trade Mark	:	DONNER/MouKey
Test Power Supply	:	AC 120V/60Hz for Adapter
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Adapter	:	Model:FJ-SW248G1802000N Input:100-240V~, 50/60Hz, 1.5A Max Output: 18V 2A 36W
RF Specification		
Operation Frequency	:	2402MHz to 2480MHz
Number of Channel	:	79,hotek Andotek Anbore An
Modulation Type	:	GFSK, π/4 DQPSK
Antenna Type	:	PCB Antenna
Antenna Gain(Peak)	:	1.9 dBi Anbotek Anbotek Anbotek Anbotek
- 187	0.0	The state of the s

Remark: 30000

- (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.







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1.3. Auxiliary Equipment Used During Test

Title		Manufacturer	Model No.	Serial No.
	rek anyotek An	born W. Sporek	Aupoter Aug	Aupotek / Aupo

1.4. Operation channel list

1.4. Opera	tion chann	el list	Vupolek.	Aupole.	Aupolek	Anbore	otek Aupor
Operation Ba	and:botek	Anbor	W. Polek	Anborek	Ans o	iek Ant	otek Anbe
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
O Anbotek	2402	20	1001e 2422 M	40	2442	60	2462
iek 1 no	o ^{tok} 2403 Anh	21	2423	Anbold 41	2443	61	2463
2	2404	Anboa22	2424	42	2444	62 _{Anb} ol ^e	2464
3 Not	2405	23	2425	43, nb a 18	2445	10× 63	2465 Any
Anbore 4	2406	24 10016	2426	ek 44 Ant	2446	64	2466
5 ⁿ	2407	25 Anbc	2427	1001e 45	2447	65	2467
6 Anbo	2408	otek 26	2428	46	2448	66 ₁₆	2468
rek 7 And	2409	27	2429	47 tek	2449	67	2469
nbote8	2410	28	2430	48	2450 nbote	68 Anbu	2470
Ant 9 tek	2411	29 000	2431	49	ote* 2451 Ant	o ^{tek} 69	2471
10 botek	2412	30	otek 2432 And	50 AT	2452	Anbolok	2472
. 11 _{nb} ot	2413 knbo	31	2433	nbole 51	2453	Aug 4.ek	2473
12	1001°2414	32	2434	52	2454	72,botek	2474
13	2415	мпр 33	2435	530010	2455	× 73 nb	2475 And
14 kgk	2416	34	2436	54 Anbol	2456	74 Tel	2476
15	2417	35Anbole	2437	otek 55 A	2457 AT	75	2477
16. ^{nb} ote	2418	rek 36 An	2438	56	2458	And 76	2478
17 Anbo	2419	,,,,,,te37	2439	57,ek	2459	177	2479
o ^{tel*} 18	2420	38	2440	58 Nek	2460	78	2480
19	2421	39 Nek	2441	59	2461 ,,,,,,,,,	ek - Vup	0. B.







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1.5. Description of Test Modes

Pretest Modes	Descriptions				
Nek AnboTM1 Anbone	Keep the EUT in continuously transmitting mode (non-hopping) with GFSK modulation.				
TM2	Keep the EUT in continuously transmitting mode (non-hopping) with π/4 DQPSK modulation.				
Auporek TM3	Keep the EUT in continuously transmitting mode (hopping) with GFSK modulation,.				
Anbotek TM4 Anbotek	Keep the EUT in continuously transmitting mode (hopping) with $\pi/4$ DQPSK modulation.				

1.6. Measurement Uncertainty

Parameter	Uncertainty
Conducted emissions (AMN 150kHz~30MHz)	3.8dB Andotek Andotek Ando
Occupied Bandwidth	925Hz Anborek Anborek
Conducted Output Power	0.76dB
Dwell Time	2% Anbotek Anbotek
Conducted Spurious Emission	1.24dB
Radiated spurious emissions (above 1GHz)	1G-6GHz: 4.78dB; 6G-18GHz: 4.88dB 18G-40GHz: 5.68dB
Radiated emissions (Below 30MHz)	3.53dB Andotek Andotek
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.







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1.7. Test Summary

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Test Items	Test Modes	Status
Antenna requirement	And Andorek	Anbo . I
Conducted Emission at AC power line	Mode1,2	Papo
Occupied Bandwidth	Mode1,2	P An
Maximum Conducted Output Power	Mode1,2	potek P
Channel Separation	Mode3,4	Anbotek
Number of Hopping Frequencies	Mode3,4	An Brek
Dwell Time Anbotek Anbotek	Mode3,4	Panbo
Emissions in non-restricted frequency bands	Mode1,2,3,4	P P
Band edge emissions (Radiated)	Mode1,2	notek P
Emissions in frequency bands (below 1GHz)	Mode1,2	, Pe
Emissions in frequency bands (above 1GHz)	Mode1,2	Ans Piek

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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

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

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



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1.10. Test Equipment List

Cond	ucted Emission at A	C power line	Aupolek	Aug Olek	ek Anbotek Anbos			
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date		
1ek	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	2024-01-18	2025-01-17		
,200h	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		
4	Artificial Mains Network	Schwarzbeck	PVDC 8301	8301- 00097	2024-01-17	2025-01-16		
5	Artificial Power Network	Schwarzbeck	PVDC 8301	8301- 01021	2024-01-17	2025-01-16		
6	Software Name EZ-EMC	Farad Technology	ANB-03A	N/A	nbotek/	upolek / Ani		

Maximum Conducted Output Power

Channel Separation

Number of Hopping Frequencies

Dwell Time

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Emissions in non-restricted frequency bands

Occupied Bandwidth

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
A ^{nb}	Constant Temperature Humidity Chamber	ZHONGJIAN	ZJ- KHWS80B	N/Aek	2023-10-16	2024-10-15
2	DC Power Supply	NYTECH IVYTECH	IV3605	1804D360 510	2023-10-20	2024-10-19
oler 3	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102150	2024-05-06	2025-05-05
Agbot.	MXA Spectrum Analysis	KEYSIGHT	N9020A	MY505318 23	2024-02-22	2025-02-21
5 An	Oscilloscope	Tektronix	MDO3012	C020298	2024-09-09	2025-09-08
6	MXG RF Vector Signal Generator	Agilent	N5182A	MY474206 47	2024-02-04	2025-02-03



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Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
ek1	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	2024-01-23	2025-01-22
nb 2ek	EMI Preamplifier	SKET Electronic	LNPA- 0118G-45	SKET-PA- 002	2024-01-17	2025-01-16
300	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	Vupole,	Aug Yek
5	Horn Antenna	A-INFO	LB-180400- KF	J21106062 8	2024-01-22	2027-01-21
6	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102150	2024-05-06	2025-05-05
7 7	Amplifier	Talent Microwave	TLLA18G40 G-50-30	23022802	2024-05-07	2025-05-06

AND	d. V.	Vupole, Vu	, ek	· upotok	Vup.	hotek
Emis	sions in frequency ba	ands (below 1GHz)	Vupor Tek	Anborek	Aupote	And abolek
ltem	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
to out	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	2024-01-23	2025-01-22
2,10	Pre-amplifier	SONOMA	310N	186860	2024-01-17	2025-01-16
3	Bilog Broadband Antenna	Schwarzbeck	VULB9163	345	2022-10-23	2025-10-22
4	Loop Antenna (9K- 30M)	Schwarzbeck	FMZB1519 B	00053	2024-09-12	2025-09-11
5	EMI Test Software EZ-EMC	SHURPLE	N/A Notek	N/A/potek	Aupor Off	k wholek

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2. Antenna requirement

Test Requirement:

Refer to 47 CFR Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

2.1. Conclusion

The antenna is a **PCB Antenna** which permanently attached, and the best case gain of the antenna is **1.9dBi**. It complies with the standard requirement.





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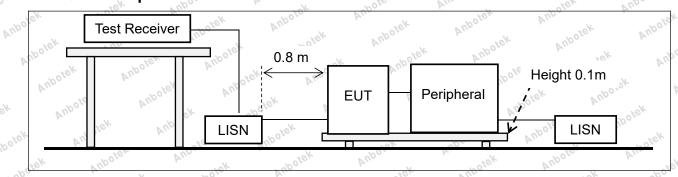
3. Conducted Emission at AC power line

NA.	40.	-10-							
Tek Vupotek Vup	Refer to 47 CFR 15.207(a), Except section, for an intentional radiator to public utility (AC) power line, the radiator to the section of the	hat is designed to be con	nected to the						
Test Requirement:		back onto the AC power line on any frequency or frequencies, within the							
abolek Anbe	band 150 kHz to 30 MHz, shall not								
Anbotek Anbotek	measured using a 50 μH/50 ohms (LISN).	line impedance stabilizati	on network						
"ofek Aupo.	Frequency of emission (MHz)	Conducted limit (dBµV)	Anb						
Ann	olek Vupoc	Quasi-peak	Average						
- Trypole, Au	0.15-0.5	66 to 56*	56 to 46*						
Test Limit:	0.5-5	56 And	46 Anbo						
otek Ando	5-30 × Anborr	60 Notes	50						
olek Vupolek	*Decreases with the logarithm of th	ne frequency.	Aupole. Au						
Test Method:	ANSI C63.10-2020 section 6.2	Yupoter, Yun	upoiek						
Procedure:	Refer to ANSI C63.10-2020 section line conducted emissions from unli		od for ac power-						
3.1. EUT Operation	poter. Aug.	Aupo K No	iek Auporg						
o. i. Loi Operation	iek uporg Vi	K hoter And							

3.1. EUT Operation

Operating En	vironment:	abotek	Anbors	VIII.	Aupoles	Aupo
Test mode:	1: TX-GFSK (Nor hopping) with GF 2: TX-π/4-DQPSI (non-hopping) with	SK modulation. K (Non-Hopping): Keep the El	ek Aupore	V.	10K
3.2. Test Se	etup And	upotek A	upo, k	Potek V	upole.	"Lek

3.2. Test Setup



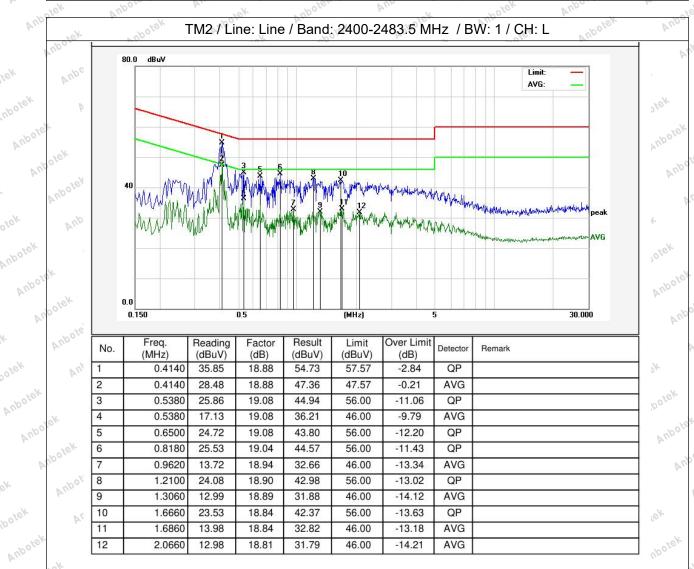






3.3. Test Data

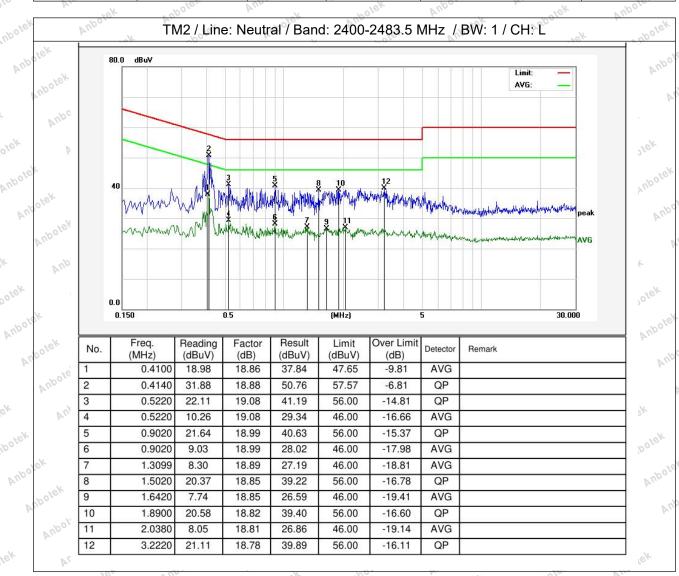
Temperature: 23.6 °C Humidity: 55 % Atmospheric Pressure: 101 kPa







Temperature: 23.6 °C Humidity: 55 % Atmospheric Pressure: 101 kPa



Note: Only record the worst data in the report.





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4. Occupied Bandwidth

Ant	tok Vulgo, to take Thouse My, token
Test Requirement:	47 CFR 15.247(a)(1)
Test Limit: Anbotek Anbotek Anbotek Anbotek	Refer to 47 CFR 15.215(c), intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.
Test Method:	ANSI C63.10-2020, section 7.8.6, For occupied bandwidth measurements, use the procedure in 6.9.3. Frequency hopping shall be disabled for this test. KDB 558074 D01 15.247 Meas Guidance v05r02
Aupotek Vipotek	The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth: a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between
potek Vupotek Vu	1.5 times and 5.0 times the OBW. b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be at least three times the RBW, unless otherwise specified by the applicable requirement.
Vupotek Vupotek	c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.6.2.
Procedure:	d) Step a) through step c) might require iteration to adjust within the specified range.
Vporek Vuporek	e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max-hold mode (until the trace stabilizes) shall be used. f) Use the 99% power bandwidth function of the instrument (if available) and report the management bandwidth.
Vek Vuporek Vupo	report the measured bandwidth. g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are
Vupotek Vupotek	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.
Aupotek Aupote	h) The occupied bandwidth shall be reported by providing spectral plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).
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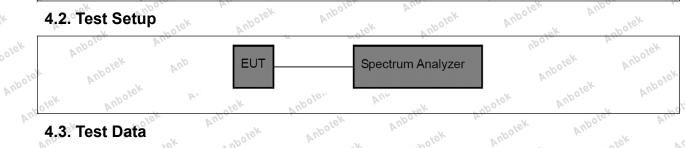
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4.1. EUT Operation

upo.	Operating Envir	onment:	V 20	ick Vupore,	And	tek or	potek Aupe	, ak
Anbore	Test mode:	hopping) v 2: TX-π/4-	vith GFSK model DQPSK (Nor	n-Hopping): Kee	ep the EUT in	aboten	Aup	~0Xe
	Tupo, K	(non-hopp	$\frac{1}{1}$ ing) with $\frac{\pi}{4}$	DQPSK modul	ation.	Anbo	"polek	124
tek	4.2. Test Setu	ip tek	Aupolek	Aupo	Spotek	Anbore	Y Potel	F

4.2. Test Setup



4.3. Test Data

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4.3. Test Dat	a vek	Anborek	Aupotek CK	Aupor	Anbotek.	Vupore.	Ame
Temperature:	24.2 °C	Hum	nidity: 51 %	Atmo	spheric Pressure:	101 kPa	

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Please Refer to Appendix for Details.

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5. Maximum Conducted Output Power

VILLE	rek upo k hora kr.
Test Requirement:	47 CFR 15.247(b)(1)
Test Limit:	Refer to 47 CFR 15.247(b)(1), For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.
Test Method:	ANSI C63.10-2020, section 7.8.5 KDB 558074 D01 15.247 Meas Guidance v05r02
Cotek Aupotek Aup	This is an RF-conducted test to evaluate maximum peak output power. Use a direct connection between the antenna port of the unlicensed wireless device and the spectrum analyzer, through suitable attenuation. Frequency hopping shall be disabled for this test. Use the following spectrum analyzer settings:
Aupotek Aupotek	 a) Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel. b) RBW > 20 dB bandwidth of the emission being measured. c) VBW ≥ RBW. d) Sweep: No faster than coupled (auto) time.
Procedure:	e) Detector function: Peak. f) Trace: Max-hold. g) Allow trace to stabilize. h) Use the marker-to-peak function to set the marker to the peak of the
Aupotek Aupotek	emission. i) The indicated level is the peak output power, after any corrections for external attenuators and cables. j) A spectral plot of the test results and setup description shall be included in the test report.
opotek Aupotek	the test report. NOTE—A peak responding power meter may be used, where the power meter and sensor system video bandwidth is greater than the occupied bandwidth of the unlicensed wireless device, rather than a spectrum analyzer.

5.1. EUT Operation

Y-	Operating Envir	onment:	abotek	Anboile	Air.	Aupolen	Aug.
000	Test mode:	hopping) with 2: TX-π/4-D0	(Non-Hopping) n GFSK modula QPSK (Non-Hop g) with π/4 DQF	ation. pping): Keep th	e EUT in contir	Ville	100%





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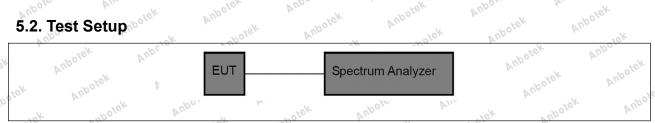
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5.2. Test Setup



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5.3. Test Data

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Temperature:	24.2 °C	Humidity:	51 %	Atmospheric Pressure:	101 kPa
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Please Refer to	o Appendix	for Details.	Vupor	W. Sk Spoker	ATIL

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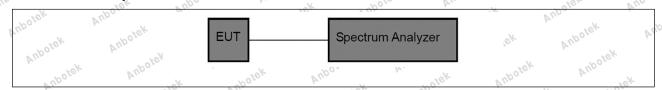
6. Channel Separation

An	rek nbo	Yo.	-polo	B.,	Vien.
Test Requirement:	47 CFR 15.247(a)(1)	Aupole	Viek	Anborek	Aup
Test Limit: Anbotek Anbotek Anbotek Anbotek	Refer to 47 CFR 15.24 hopping channel carrie the 20 dB bandwidth of Alternatively, frequence band may have hopping 25 kHz or two-thirds of whichever is greater, present than 125 mW.	er frequencies of the hopping of the hopping syst of channel car of the 20 dB bar	separated by a channel, which ems operating rier frequencie ndwidth of the	a minimum of 2 never is greate in the 2400-2 s that are sepa hopping chanr	25 kHz or r. 483.5 MHz arated by nel,
Test Method:	ANSI C63.10-2020, se KDB 558074 D01 15.2		ance v05r02	Aupolek	Anboiek
Aupotek Aupotek Aupotek Aupotek	The EUT shall have its spectrum analyzer set a) Span: Wide enough b) RBW: Start with the spacing; adjust as nec channel.	tings: n to capture the RBW set to aperior to best	e peaks of two pproximately 3 identify the ce	adjacent chan 0% of the cha	nels. nnel
Procedure:	c) Video (or average) d) Sweep: No faster the) Detector function: F f) Trace: Max-hold. g) Allow the trace to st	nan coupled (au Peak.		otek Anbotek	Tek Yupotek
ek Anbotek Anbot	Use the marker-delta peaks of the adjacent regulatory limit shall be included in the test rep	channels. Com e determined. <i>i</i>	npliance of an	EUT with the a	ppropriate

6.1. EUT Operation

	No.		2/0	17.	10.5		· V	
P	Operating Envir	onment:	Aupo	potek	Auporg	P. Potsk	Auporer	Vu
	Test mode:	with GFS 4: TX-π/4	SK modulation 4-DQPSK (Ho	n,. opping): Keep t	the EUT in cor	usly transmitting	Bur	ng)
N.	Pupo	(hopping) with $\pi/4$ DG	PSK modulation	on. 🔻	POPEL TUD		Yer

6.2. Test Setup



6.3. Test Data

Temperature:	24.2 °C	Humidity:	51 % Anbox	Atmospheric Pressure:	101 kPa
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Please Refer to Appendix for Details.





7. Number of Hopping Frequencies

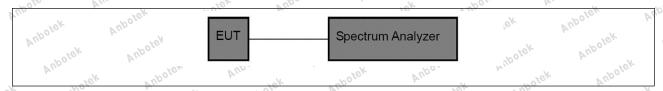
Test Limit:	Refer to 47 CFR 15.247(a)(1)(iii), Fequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of
Anbotek Anbotek	occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.
Test Method:	ANSI C63.10-2020, section 7.8.3 KDB 558074 D01 15.247 Meas Guidance v05r02
Anbotek Anbotek	The EUT shall have its hopping function enabled. Use the following spectrum analyzer settings: a) Span: The frequency band of operation. Depending on the number of channels the device supports, it could be necessary to divide the frequency range of operation across multiple spans, to allow the individual channels to be clearly seen. b) RBW: To identify clearly the individual channels, set the RBW to less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller. c) VBW ≥ RBW. d) Sweep: No faster than coupled (auto) time. e) Detector function: Peak. f) Trace: Max-hold. g) Allow the trace to stabilize. It might prove necessary to break the span up into subranges to show clearly all of the hopping frequencies. Compliance of an EUT with the appropriate regulatory limit shall be determined for the number of hopping channels. A spectral plot of the data shall be included in the test report.

7.1. EUT Operation

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	Operating Envir	onment:	Vupo,	nbotek	Aupole	Potek
×	Test mode:	3: TX-GFSK (Hopping with GFSK modulation 4: TX-π/4-DQPSK (Hopping) with π/4 DQ	n,. opping): Keep the	e EUT in contir	, ,	tek Aupole

7.2. Test Setup



7.3. Test Data

Temperature: 24.2 °C	Humidity: 51 %	Atmospheric Pressure:	101 kPa 🗥
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Please Refer to Appendix for Details.







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8. Dwell Time	Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek
Test Requirement:	47 CFR 15.247(a)(1)(iii)
Test Limit: Anborek Anborek Anborek	Refer to 47 CFR 15.247(a)(1)(iii), Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.
Test Method:	ANSI C63.10-2020, section 7.8.4 KDB 558074 D01 15.247 Meas Guidance v05r02
ootek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek	The dwell time per hop on a channel is the time from the start of the first transmission to the end of the last transmission for that hop. If the device has a single transmission per hop then the dwell time is the duration of that transmission. If the device has a multiple transmissions per hop then the dwell time is measured from the start of the first transmission to the end of the last transmission. The time of occupancy is the total time that the device dwells on a channel over an observation period specified in the regulatory requirement. To determine the time of occupancy the spectrum analyzer will be configured to measure both the dwell time per hop and the number of times the device transmits on a specific channel in a given period.
Anbotek Anbotek Anbotek Anbotek Procedure:	The EUT shall have its hopping function enabled. Compliance with the requirements shall be made with the minimum and with the maximum number of channels enabled. If the dwell time per channel does not vary with the number of channels than compliance with the requirements may be based on the minimum number of channels. If the device supports different dwell times per channel (example Bluetooth devices can dwell on a channel for 1, 3 or 5 time slots) then measurements can be limited to the longest dwell time with the minimum number of channels.
Aur Vipotek	Anbo ok Anborek Anbore An Anborek
Anbo	Use the following spectrum analyzer settings to determine the dwell time per hop:
upotek Vupotek Vupotek	 a) Span: Zero span, centered on a hopping channel. b) RBW shall be ≤ channel spacing and where possible RBW should be set >> 1 / T, where T is the expected transmission time per hop. c) Sweep time: Set so that the start of the first transmission and end of the last transmission for the hop are clearly captured. Setting the sweep time to
Otek Anbotek Anbotek	be slightly longer than the hopping period per channel (hopping period = 1/hopping rate) should achieve this. d) Use a video trigger, where possible with a trigger delay, so that the start of the transmission is clearly observed. The trigger level might need adjustment to reduce the chance of triggering when the system hops on an adjacent channel.
Aupolek Aupolek	e) Detector function: Peak. f) Trace: Clear-write, single sweep. g) Place markers at the start of the first transmission on the channel and at the end of the last transmission. The dwell time per hop is the time between







these two markers.

To determine the number of hops on a channel in the regulatory observation period repeat the measurement using a longer sweep time. When the device uses a single hopping sequence the period of measurement should be sufficient to capture at least 2 hops. When the device uses a dynamic hopping sequence, or the sequence varies, the period of measurement may need to capture multiple hops to better determine the average time of occupancy. Count the number of hops on the channel across the sweep time.

The average number of hops on the same channel within the regulatory observation period is calculated from the number of hops on the channel divided by the spectrum analyzer sweep time multiplied by the regulatory observation period. For example, if three hops are counted with an analyzer sweep time of 500 ms and the regulatory observation period is 10 s, then the number of hops in that ten seconds is $3 / 0.5 \times 10$, or 60 hops.

The average time of occupancy is calculated by multiplying the dwell time per hop by the number of hops in the observation period.

8.1. EUT Operation

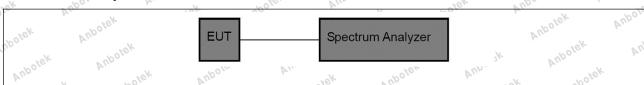
Operating Environment:

Test mode:

3: TX-GFSK (Hopping): Keep the EUT in continuously transmitting mode (hopping) with GFSK modulation..

4: TX- π /4-DQPSK (Hopping): Keep the EUT in continuously transmitting mode (hopping) with π /4 DQPSK modulation.

8.2. Test Setup



8.3. Test Data

Temperature:	24.2 °C	Humidity:	51 %	Atmospheric Pressure: 101 kPa
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Please Refer to Appendix for Details.









9. Emissions in non-restricted frequency bands

Test Requirement:	47 CFR 15.247(d), 15.209, 15.205
Test Limit: Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek	Refer to 47 CFR 15.247(d), In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required.
Test Method:	ANSI C63.10-2020 section 7.8.7 KDB 558074 D01 15.247 Meas Guidance v05r02
Viek Vij	7.8.7.1 General considerations To demonstrate compliance with the relative out-of-band emissions requirements conducted spurious emissions shall be measured for the
Pupolek Vupolek	transmit frequencies, per 5.5 and 5.6, and at the maximum transmit powers. Frequency hopping shall be disabled for this test with the exception of measurements at the allocated band-edges which shall be repeated with hopping enabled.
Aupotek Aupotek	Connect the primary antenna port through an attenuator to the spectrum analyzer input; in the results, account for all losses between the unlicensed wireless device output and the spectrum analyzer. The frequency range of
ek Aupotek Aupotek	testing shall span 30 MHz to 10 times the operating frequency and this may be done in a single sweep or, to aid resolution, across a number of sweeps. The resolution bandwidth shall be 100 kHz, video bandwidth 300 kHz, and a coupled sweep time with a peak detector.
Procedure: Anborek	The limit is based on the highest in-band level across all channels measured using the same instrument settings (resolution bandwidth of 100 kHz, video bandwidth of 300 kHz, and a coupled sweep time with a peak detector). To help clearly demonstrate compliance a display line may be set at the required offset (typically 20 dB) below the highest in-band level. Where the highest in-band level is not clearly identified in the out-of-band
^{Vupotek} Vupotek	measurements a separate spectral plot showing the in-band level shall be provided.
Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek	When conducted measurements cannot be made (for example a device with integrated, non-removable antenna) radiated measurements shall be used. The reference level for determining the limit shall be established by maximizing the field strength from the highest power channel and measuring using the resolution and video bandwidth settings and peak detector as described above. The field strength limit for spurious emissions outside of restricted-bands shall then be set at the required offset (typically 20 dB) below the highest in-band level. Radiated measurements will follow the standards measurement procedures described in Clause 6 with the exception that the resolution bandwidth shall be 100 kHz, video bandwidth







300 kHz, and a coupled sweep time with a peak detector. Note that use of wider measurement bandwidths are acceptable for measuring the spurious emissions provided that the peak detector is used and that the measured value of spurious emissions are compared to the highest in-band level measured with the 100 kHz / 300 kHz bandwidth settings to determine compliance.

7.8.7.2 Band-edges

Compliance with a relative limit at the band-edges (e.g., -20 dBc) shall be made on the lowest and on the highest channels with frequency hopping disabled and repeated with frequency hopping enabled. For the latter test the hopping sequence shall include the lowest and highest channels.

For measurements with the hopping disabled the analyzer screen shall clearly show compliance with the requirement within 10 MHz of the allocated band-edge.

For measurements with the hopping enabled the analyzer screen shall clearly show compliance with the requirement within 10 MHz of both of the allocated band-edges. This could require separate spectral plots for each band-edge.

9.1. EUT Operation

Operating Environment:

1: TX-GFSK (Non-Hopping): Keep the EUT in continuously transmitting mode (nonhopping) with GFSK modulation.

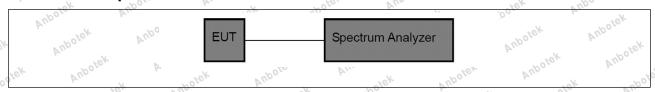
Test mode:

2: TX-π/4-DQPSK (Non-Hopping): Keep the EUT in continuously transmitting mode (non-hopping) with $\pi/4$ DQPSK modulation.

3: TX-GFSK (Hopping): Keep the EUT in continuously transmitting mode (hopping) with GFSK modulation,?

4: TX-π/4-DQPSK (Hopping): Keep the EUT in continuously transmitting mode (hopping) with $\pi/4$ DQPSK modulation.

9.2. Test Setup



9.3. Test Data

Temperature:	24.2 °C	Humidity: 51 %	D.	Atmospheric Pressure:	101 kPa
VII.	10%	700		10 p	- 76.

Please Refer to Appendix for Details.





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10. Band edge emissions (Radiated)

Test Requirement:	restricted bands, as defined	In addition, radiated emissions I in § 15.205(a), must also comp ecified in § 15.209(a)(see § 15.20	ly with the				
Vupopek Vupopek	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)				
Aupore Av.	0.009-0.490 0.490-1.705	2400/F(kHz)	300				
Anbore An	1.705-30.0	24000/F(kHz) 30	30				
k Aupole Au	30-88	100 ** And	3				
ok shotek	88-216	150**	3 rek Anbo				
ole. Yus	216-960	200 **	<u>,,3</u>				
Test Limit:	Above 960	_500 ragraph (g), fundamental emissi	3,000				
Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek	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:	ANSI C63.10-2020 section KDB 558074 D01 15.247 N		k Aupoles				
Procedure:	ANSI C63.10-2020 section	6.10.5.2	Ole. Vin				
10.1. EUT Operation	Napores Anbotek	Aupoten Aupotek	Aupotek Aupo				

10.1. EUT Operation

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b	Operating Envir	onment:	Vu.	Aupolek	Vup.	a upotek	Aupor	<i>b</i> .,
N.	Test mode:	hopping) 2: TX-π/4	with GFSK n 4-DQPSK (No	nodulation.	the EUT in cont Keep the EUT i dulation.	ek Vup	, , , , o'	iek 193



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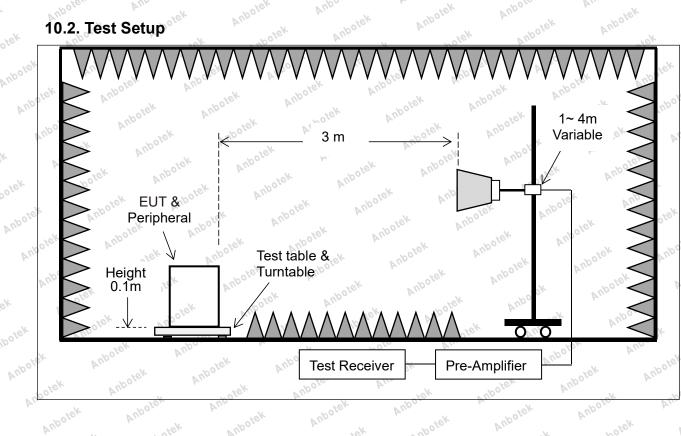
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10.2. Test Setup



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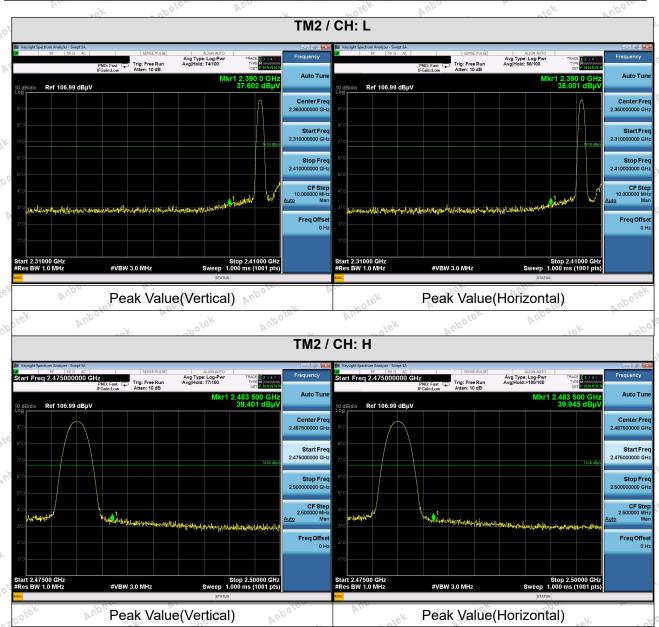


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10.3. Test Data

51 % Temperature: 24.2 °C Humidity: 101 kPa Atmospheric Pressure:



Remark:

Aupolek

- 1. During the test, pre-scan all modes, the report only record the worse case mode.
- 2. When the PK measure result value is less than the AVG limit value, the AV measure result values test not applicable.







11. Emissions in frequency bands (below 1GHz)

W.	top Pup	10K 100, K.	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
Test Requirement:	restricted bands, as defined	In addition, radiated emissions I in § 15.205(a), must also comp	ly with the
ick Vupo,	radiated emission limits spe	ecified in § 15.209(a)(see § 15.2	05(c)).`
Manager Aupotek	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
Aupor A.	0.009-0.490	2400/F(kHz)	300
Polek Aupor	0.490-1.705	24000/F(kHz)	30 And
And	1.705-30.0	30k Aupolis	30 nboles
k Anbores Ans	30-88	100 **	3
L. Viek	88-216	150 **	3tek Anbo
Otek Vupe	216-960	200 **	3
iek "upoler	Above 960	500,000	3 nbote
Test Limit:	** Except as provided in pa	ragraph (g), fundamental emissi	ons from
Spotek Aupo	intentional radiators operati	ng under this section shall not b	e located in the
Augotek Augote		z, 76-88 MHz, 174-216 MHz or hese frequency bands is permitt	
ek Anbotek An	sections of this part, e.g., § In the emission table above	§ 15.231 and 15.241. e, the tighter limit applies at the b	and edges.
polek Vupolek	V	in the above table are based on beak detector except for the freq	V 11
rek vuporer	90 kHz, 110-490 kHz and a	above 1000 MHz. Radiated emis	sion limits in
Aupo. W. Stek	these three bands are base	ed on measurements employing	an average
abotek Anbo	detector.	VI. Tek "upoter	And
Test Method:	ANSI C63.10-2020 section KDB 558074 D01 15.247 M		k Aupole,
Procedure:	ANSI C63.10-2020 section	6.6.4 Notes And	DOLE. VIII
A. //	1,01, by,	16 _L VU _D	- A - ADO -

11.1. EUT Operation

20	100	40.		A	1-0/0	Dr.	787	V U 11
Y	Operating Envir	onment:	VII.	Anbolen	Vup.	anbotek	Aupor	δ.
	Test mode:	hopping)	with GFSK m	nodulation.	your Yes	inuously transm	× ~ ~ ~ ~	3K
1/2	Anbolen			n-Hopping): k 1 DOPSK mod		n continuously t	ransmitting mo	de







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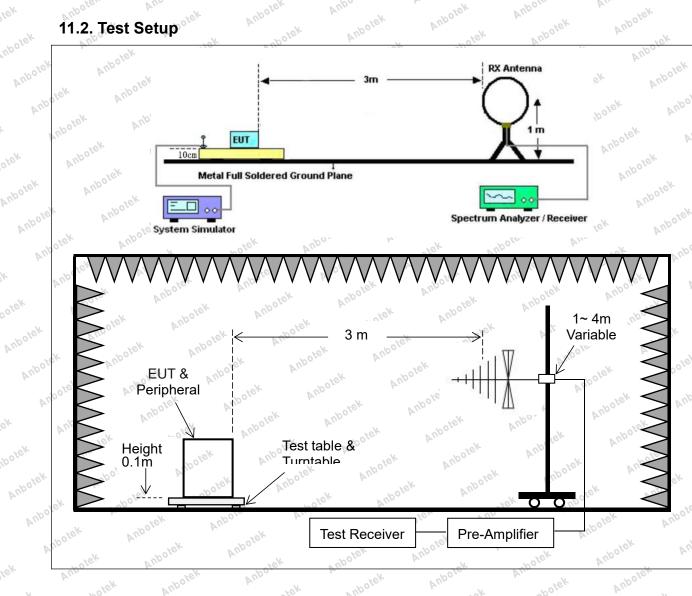
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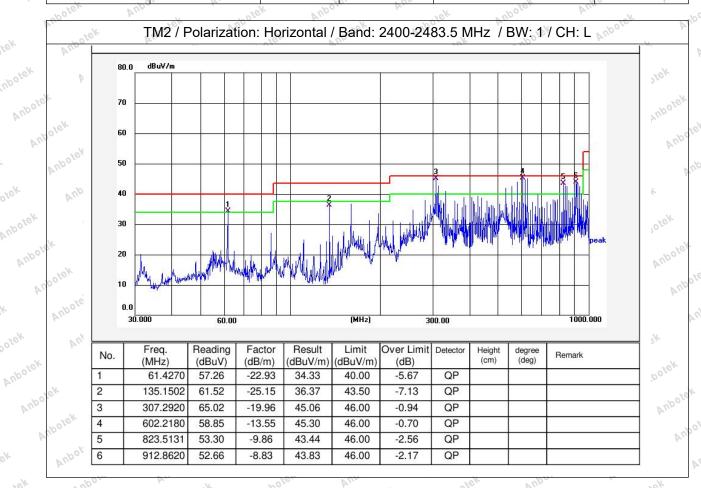
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11.3. Test Data

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

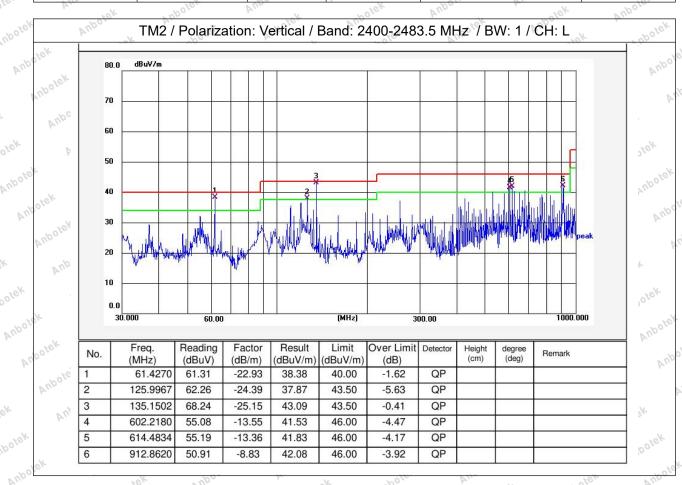
Temperature: 24.8 °C Humidity: 56 % Atmospheric Pressure: 101 kPa







Temperature: 24.8 °C Humidity: 56 % Atmospheric Pressure: 101 kPa





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12. Emissions in frequency bands (above 1GHz)

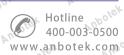
Test Requirement:	in § 15.205(a), must also in § 15.209(a)(see § 15.2	comply with the radiated emiss $05(c)$).	ion limits specifie
Upolek Vupolek	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
Anbo	0.009-0.490	2400/F(kHz)	300
Polek Wype	0.490-1.705	24000/F(kHz)	30 And
V.	1.705-30.0	30 Aupor	30 nbole
k Anbore A	30-88	100 **	nbo 3
, olek	88-216	150 **	3 rek An
otek Vup.	216-960	200 **	3
rek upoter	Above 960	500 no	3 note
Anbotek Anbotek Anbotek	intentional radiators opera frequency bands 54-72 M However, operation within sections of this part, e.g., In the emission table abo	paragraph (g), fundamental emi- ating under this section shall no IHz, 76-88 MHz, 174-216 MHz on these frequency bands is pern §§ 15.231 and 15.241. we, the tighter limit applies at the in in the above table are based on	t be located in the or 470-806 MHz. nitted under other e band edges.
Aupotek Aupotek	employing a CISPR quas 90 kHz, 110–490 kHz and	i-peak detector except for the fr d above 1000 MHz. Radiated er sed on measurements employin	equency bands 9 mission limits in
Test Method:	ANSI C63.10-2020 section KDB 558074 D01 15.247		otek Anboren
	10-		100

12.1. EUT Operation

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ly.	Operating Envir	onment:	VII.	Anbolek	Anb	rek	* upolek	Aupor	ok k
X	Test mode:	hopping) v 2: TX-π/4-	SK (Non-Hopp with GFSK mo DQPSK (Nor bing) with π/4	odulation. n-Hopping): K	(eep the E	Spoker	Anbo	_ ,	rotek





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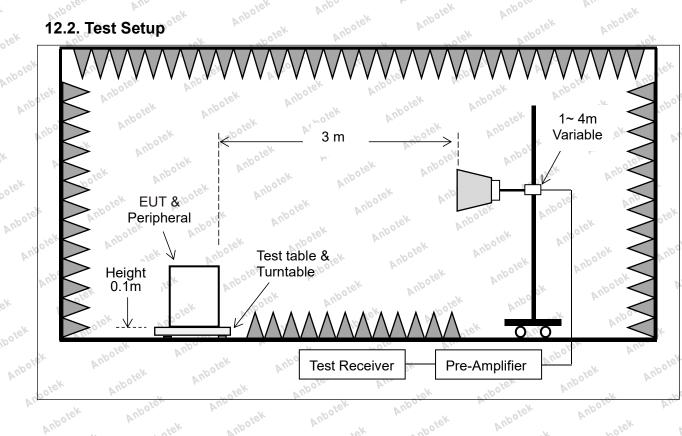
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12.2. Test Setup



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12.3. Test Data

Temperature:	22.1 °C	Humidity:	50 %	Atmospheric Pressure:	101 kPa
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W.	"pole.	VIII.	Polek	Anbe	, tek	Auporg
		7	ГМ2 / CH: L			
Peak value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4804.00	30.95	15.27	46.22	74.00	-27.78	Vertical
7206.00	31.46	18.09	49.55	74.00	-24.45	Vertical
9608.00	33.58	23.76	57.34	74.00	-16.66	Vertical
12010.00	* "pole"	Anbore	-K 2016	74.00	A.	Vertical V
14412.00	*	otek Anbo	te. Vue	74.00	olek Vupe	Vertical
4804.00	31.00 And	15.27	46.27	74.00	-27.73	Horizontal
7206.00	33.04	18.09	51.13	74.00	-22.87	Horizontal
9608.00	29.85	23.76	53.61	74.00	-20.39	Horizontal
12010.00	Ano*	abolek	Aupole	74.00	Aupoles	Horizontal
14412.00	Kupo g	v votek	Aupoles	74.00	k "Upolek	Horizontal
Average value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	polarization
4804.00	20.33	15.27	35.60	54.00	-18.40	Vertical
7206.00	20.49	18.09	38.58	54.00	-15.42	Vertical
9608.00	22.60	23.76	46.36	54.00	-7.64	Vertical
12010.00	* * You	sk Aupor	N	54.00 mo	e. And	Vertical
14412.00	*	otek Auk	oter, Vur	54.00	potek Aut	Vertical
4804.00	19.35	15.27	34.62	54.00	-19.38	Horizontal
7206.00	22.10	18.09	40.19	54.00	-13.81	Horizontal
9608.00	19.16	23.76	42.92	54.00	+11.08	Horizontal
12010.00	VUA.	abolek	Aupor	54.00	Anbore	Horizontal
14412.00	* Aupolo	W.	K Vupore,	54.00	ek abole	Horizontal

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Inpotek Au	otek Aupol	botek An	00. K.	i otek	nbotek An	otek Ar
		-	TM2 / CH: M	- WV		
Peak value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4882.00	30.97	15.42	46.39	74.00	-27.61 noot	Vertical
7323.00	otek 31.31 kupc	18.02	49.33	74.00	-24.67	Vertical
9764.00	32.59	23.80	56.39	74.00	-17.61	Vertical
12205.00	Yup *	abolek	Anbot	74.00	Aupolek	Vertical
14646.00	Anbota	V. Ofek	Aupolek	74.00	"Upotek	Vertical
4882.00	30.70	15.42	46.12	74.00	-27.88	Horizontal
7323.00	33.03	18.02	51.05	74.00	-22.95	Horizontal
9764.00	29.55	23.80	53.35	74.00	-20.65 knoo	Horizontal
12205.00	upolek * Aup	40.	spotek An	74.00	"Olek D	Horizontal
14646.00	"POIGH*	Aupolo P	otek.	74.00	Vup.	Horizontal
Average value:		V				
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	polarization
4882.00	20.06	15.42	35.48 ,,,,,,,,	54.00	-18.52	Vertical
7323.00	20.59	18.02 M	38.61	54.00	-15.39	Vertical
9764.00	22.46	23.80	46.26	54.00	7.74	Vertical
12205.00	Vupore*	Vun	v upo tek	54.00	spotek	Vertical
14646.00	* upotek	Aupole	potek	54.00	V. Jek	Vertical
4882.00	19.26	15.42	34.68	54.00	-19.32	Horizontal
7323.00	21.66	18.02	39.68	54.00	-14.32 ···	Horizontal
9764.00	19.67 19	23.80	otek 43.47 Anb	54.00	10.53 NA	Horizontal
12205.00	"Olek * Al	Pole. Vu.	16k	54.00	10 × 0/4	Horizontal
14646.00	Vu *	spotek	Aup	54.00	Anboro	Horizontal

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VUpo	40.	Por VI	V	roter V	Up	rek
			TM2 / CH: H			
Peak value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4960.00	31.24	15.58	46.82	74.00	-27.18 ₁₀₀ 1	Vertical
7440.00	31.32	17.93	49.25	otek 74.00 kno	-24.75	Vertical N
9920.00	33.14	23.83	56.97	74.00	17.03	Vertical
12400.00	Aupole * P	"I'EK	Aupolek	74.00	anbotek.	Vertical
14880.00	NUPO*EK	Aupo	abotek	74.00	rotek.	Vertical
4960.00	30.77	15.58	46.35	74.00	-27.65	Horizontal
7440.00	33.06	17.93	50.99	74.00	-23.01	Horizontal
9920.00	30.23	23.83	54.06	74.00	-19.94 m	Horizontal
12400.00	olek * Anb	or Am	Viek Vi	74.00 And	19.	Horizontal
14880.00	Nek*	Inpolek A	Up.	74.00	Aupor	Horizontal
Average value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	polarization
4960.00	21.18	15.58	36.76	54.00	-17.24	Vertical No
7440.00	21.60	17.93 M	39.53	54.00	o ^{tek} -14.47 And	Vertical
9920.00	23.01	23.83	46.84	54.00	7.16	Vertical
12400.00	abote*	Aupo	POTOK	54.00	Vun 16k	Vertical
14880.00	* tek	Anbolek	Vun.	54.00	Aupore	Vertical
4960.00	20.70	15.58	36.28	54.00	-17.72	Horizontal
7440.00	23.03	17.93	40.96	54.00	-13.04	Horizontal
9920.00	19.57 noot	23.83	43.40	54.00 km	-10.60	Horizontal
12400.00	*	potek Ant	, b.	54.00	Polo, Vu	Horizontal
14880.00	'uporg *	Clek.	Vuporer.	54.00	"upolek	Horizontal

Remark:

- 1. Result =Reading + Factor
- 2. Test frequency are from 1GHz to 25GHz, "*" means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.
- 3. Only the worst case is recorded in the report.





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APPENDIX I -- TEST SETUP PHOTOGRAPH

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

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APPENDIX II -- EXTERNAL PHOTOGRAPH

Please refer to separated files Appendix II -- External Photograph

APPENDIX III -- INTERNAL PHOTOGRAPH

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Please refer to separated files Appendix III -- Internal Photograph

------End of Report

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