

Report No.: FCC ID: 2A36Q-VIBE Page 1 of 31 18220WC40097602

# **FCC Test Report**

**Applicant** Boompods EU Sp. z o.o

: ul. Barbary 16 Granica 05-806 Komorów Poland **Address** 

**Product Name True Wireless Earbuds** 

: May 25, 2024 **Report Date** 



ce Laboratory Limited







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## **TEST REPORT**

Applicant : Boompods EU Sp. z o.o

Manufacturer : Dongguan Linyar Technologg Co.,Ltd.

Product Name : True Wireless Earbuds

Test Model No. : VIBE

Reference Model No. : VIBSAN(VIBE-Sand color), VIBGRN(VIBE-green color), VIBBLU(VIBE-

blue color), VIBBLK(VIBE-black color), VIBWHT(VIBE-white color)

Trade Mark : BOOMPODS

Rating(s) Charging case: with DC 3.7V 300mAh Battery inside

Headset: with DC 3.7V 40mAh Battery inside

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:	May 13, 2024
Date of Test: May 13	, 2024 to May 24, 2024
ek Anbotek Anbotek Anbotek Anbotek	174 Hong
Prepared By:	mok ank Anbo
	(TuTu Hong)
Anborek Anborek Anborek Anborek Anborek	ward pan
Approved & Authorized Signer:	ter And boyek Ando
k oupons by	(Edward Pan)





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### **Revision History**

Report Version	Description	Issued Date
Anbore ROO potek An	Original Issue.	May 25, 2024
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ors Anbotek Anbotek	Anbotek Anbotek Anbot	tek Anbotek Anbotek





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#### 1. General Information

#### 1.1. Client Information

Applicant	:	Boompods EU Sp. z o.o
Address	:	ul. Barbary 16 Granica 05-806 Komorów Poland
Manufacturer	:	Dongguan Linyar Technologg Co.,Ltd.
Address	:	The third floor, building 2,No.4 Xitou East Road,Houjie Town,Dongguan, China
Factory	:	Dongguan Linyar Technologg Co.,Ltd.
Address	:	The third floor, building 2,No.4 Xitou East Road,Houjie Town,Dongguan, China

#### 1.2. Description of Device (EUT)

~K NO. h	27	A CANADA
Product Name	:	True Wireless Earbuds
Test Model No.	:	AVIBE Anbotek Anbotek Anbotek Anbotek
Reference Model No.	:	VIBSAN(VIBE-Sand color), VIBGRN(VIBE-green color), VIBBLU(VIBE-blue color), VIBBLK(VIBE-black color), VIBWHT(VIBE-white color) (Note: All samples are the same except the model number & appearance color, so we prepare "VIBE" for test only.)
Trade Mark	:	BOOMPODS
Test Power Supply	:	AC 120V/60Hz for adapter/DC 3.7V Battery inside
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Adapter	:	N/A otek Anbotek Anbotek Anbotek Anbotek Anbotek
RF Specification		
Operation Frequency	:	2402MHz to 2480MHz
Number of Channel	:	40 k Anbotek Anbotek Anbotek Anbotek
Modulation Type	:	GFSK Anborek Anborek Anborek
Antenna Type	:	Ceramics Antenna
Antenna Gain(Peak)	:	3.5 dBi (Provided by customer)
Domork:		W. V. V. V. V.

#### 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.
- (3) The EUT consists of two parts, the left and right earphone, both have been tested and only the test data of left earphone recorded in this report.







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## 1.3. Auxiliary Equipment Used During Test

Title Manufacturer		Model No.	Serial No.	
Xiaomi 33W adapter	Xiaomi	MDY-11-EX	SA62212LA04358J	





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#### 1.4. Operation channel list

#### Operation Band:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
v Onbote	2402	10 por	2422	20	2442 <sub>000</sub> 000	30	2462
otek 1 Anb	2404	11 m	ot <sup>el</sup> 2424 M <sup>oo</sup>	21	2444 M	31 And	2464
botek2 A	2406	12	2426	22	2446	nb <sup>018</sup> 32	2466
3/4	2408	13	2428	Anbo 23	2448	33	2468
4 tek	2410	And 14 rek	2430	24	2450	34	2470
5 botek	2412	15	2432	25	2452	35 botto	2472
6 gbo	2414 Dolle	16	2434 Andor	26 Andre	2454	iek 36 Anbi	2474
rek 7	2416 M	17 And	2436	otek 27 An	2456	otel 37	2476
8	2418	18	2438	28	2458	38	2478
Anbo 9 tek	2420	Anbot 19	2440	29	2460	39	2480

#### 1.5. Description of Test Modes

Pretest Modes	Descriptions
bořek AnbTM1 Anbor	Keep the EUT in continuously transmitting mode with GFSK modulation.

#### 1.6. Measurement Uncertainty

Parameter	Uncertainty
Conducted emissions (AMN 150kHz~30MHz)	3.4dB
Occupied Bandwidth	925Hz
Conducted Output Power	0.76dB
Power Spectral Density	0.76dB
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
Radiated spurious emissions (30MHz~1GHz)	Horizontal: 3.92dB; Vertical: 4.52dB
The manufacture ment up containty and decision risk o	···I · · · · · · · · · · · · · · · · ·

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

Test Items	Test Modes	Status
Antenna requirement	Anbotek / Anboter	And Pore
Conducted Emission at AC power line	Mode1	P
Occupied Bandwidth	Mode1	P P
Maximum Conducted Output Power	Mode1	P
Power Spectral Density	Mode1	nbot Pk
Emissions in non-restricted frequency bands	Mode1	Anb P rek
Band edge emissions (Radiated)	Mode1	P
Emissions in frequency bands (below 1GHz)	Mode1	Panis
Emissions in frequency bands (above 1GHz)	Mode1	P
Note: Anborek Anborek Anborek An	bo, by, spotek b	upoter.

P: Pass

N: N/A, not applicable





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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.

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

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







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#### 1.10. Test Equipment List

Cond	ucted Emission at A	C power line				
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
. 1	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	2024-01-18	2025-01-17
otek 2	Three Phase V- type Artificial Power Network	CYBERTEK	EM5040DT	E215040D T001	2024-01-17	2025-01-16
30t	Software Name EZ-EMC	Farad Technology	ANB-03A	N/A	Alootek	Auport Losek
4	EMI Test Receiver	Rohde & Schwarz	ESPI3	100926	2023-10-12	2024-10-11

Occupied Bandwidth

Maximum Conducted Output Power

Power Spectral Density
Emissions in non-restrict

Emissions in non-restricted frequency bands

Emis	sions in non-restricte	- Yek	700,0	- K	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date	
1 <sub>An</sub> l	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	101792	2023-05-26	2024-05-25	
An4ore	MXA Spectrum Analysis  KEYSIGHT		N9020A	MY505318 23	2024-02-22	2025-02-21	
5nb	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	

Hotline

www.anbotek.com.cn

400-003-0500



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	edge emissions (Ra sions in frequency ba		Aupotek	Anborek	Aupotek	Anborek
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1 0.0	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	2024-01-23	2025-01-22
2	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
nbole 4	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	Anbotek	Aupolek
5	Horn Antenna	A-INFO	LB-180400- KF	J21106062 8	2023-10-12	2024-10-11
6	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	101792	2023-05-26	2024-05-25
*e <sup>1</sup> 7	Amplifier	Talent Microwave	TLLA18G40 G-50-30	23022802	2023-05-25	2024-05-24

Emissions in frequency bands (below 1GHz)											
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date					
1 EMI Test Receiver Ro		Rohde & Schwarz	ESR26	101481	2024-01-23	2025-01-22					
2 Pre-amplifier		SONOMA	310N	186860	2024-01-17	2025-01-16					
34	Bilog Broadband Antenna	Schwarzbeck	VULB9163	345	2022-10-23	2025-10-22					
Antotel	Loop Antenna (9K- 30M)	Schwarzbeck	FMZB1519 B	00053	2023-10-12	2024-10-11					
5,00	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	y Aupon	k Anbotek					







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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 Ceramics Antenna which permanently attached, and the best case gain of the antenna is 3.5 dBi. It complies with the standard requirement.





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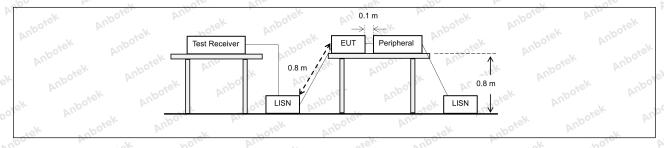
## 3. Conducted Emission at AC power line

Test Requirement:	Refer to 47 CFR 15.207(a), Except section, for an intentional radiator public utility (AC) power line, the result back onto the AC power line on are band 150 kHz to 30 MHz, shall no measured using a 50 µH/50 ohms (LISN).	that is designed to be con adio frequency voltage that my frequency or frequencient t exceed the limits in the f	nected to the at is conducted es, within the ollowing table, as		
spotek Anboy	Frequency of emission (MHz)	Conducted limit (dBµV)			
YII.	Anbore Anbore	Quasi-peak	Average		
Aupor Ar.	0.15-0.5	66 to 56*	56 to 46*		
Test Limit:	0.5-5	56. An	46		
VII.	5-30 And 5	60	50 PER AND		
k Aupor K Ai.	*Decreases with the logarithm of t	he frequency.			
Test Method:	ANSI C63.10-2020 section 6.2	Anbores.	Aug		
Procedure:	Refer to ANSI C63.10-2020 section line conducted emissions from un				

## 3.1. EUT Operation

Operating Envi	ronment:	Aupo.	, hotek	Aupole,	Anna	upotek	Aupo.
Test mode:	1: TX mod modulation	Pr.	EUT in contin	nuously trans	mitting mode	with GFSK	Anbo

#### 3.2. Test Setup



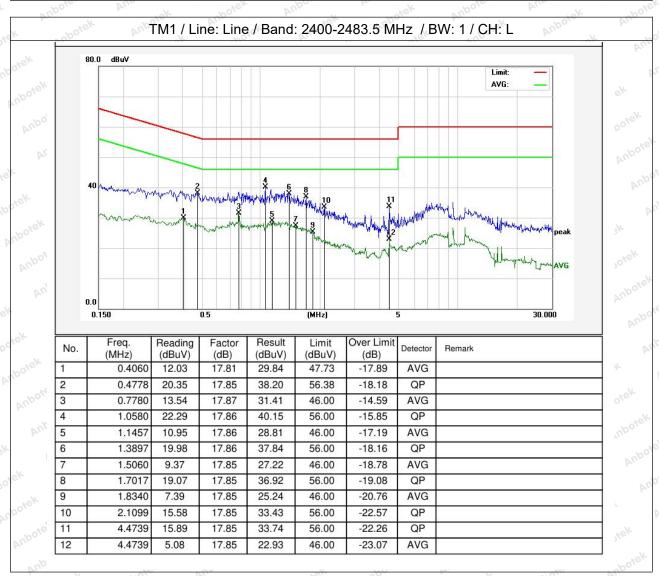




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#### 3.3. Test Data

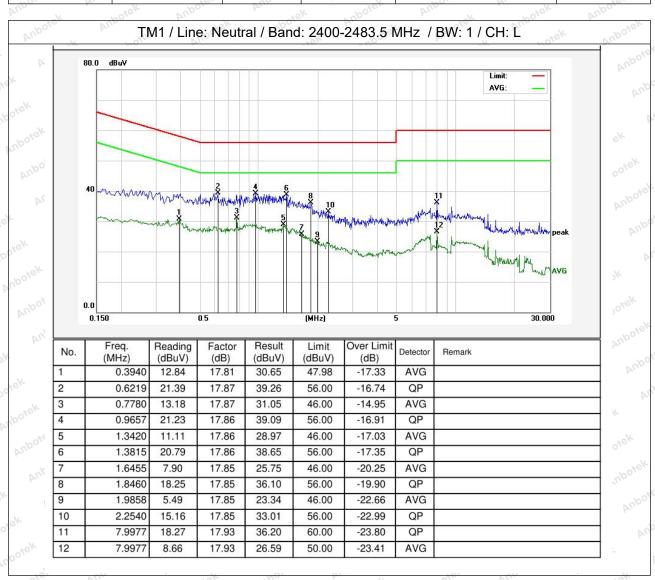
Temperature:	24.2 °C	Humidity:	51 %	Atmospheric Pressure:	101 kPa
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Temperature: 24.2 °C Humidity: 51 % Atmospheric Pressure: 101 kPa



Note: Only record the worst data in the report.







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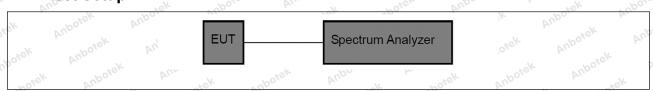
## 4. Occupied Bandwidth

Test Requirement:	47 CFR 15.247(a)(2)
Test Limit:	Refer to 47 CFR 15.247(a)(2), Systems using digital modulation techniques may operate in the 902-928 MHz, and 2400-2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.
Test Method:	ANSI C63.10-2020, section 11.8 KDB 558074 D01 15.247 Meas Guidance v05r02
nbotek Anbotek Anbotek Anbotek Anbotek	11.8.1 Option 1 The steps for the first option are as follows: a) Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz. b) Set the VBW ≥ [3 × RBW].
Anbotek Anb	c) Detector = peak. d) Trace mode = max-hold. e) Sweep = No faster than coupled (auto) time.
potek Anbotek	f) Allow the trace to stabilize. g) Measure the maximum width of the emission by placing two markers, one at the lowest frequency and the other at the highest frequency of the
Procedure:	envelope of the spectral display, such that each marker is at or slightly below the "-6 dB down amplitude". If a marker is below this "-6 dB down amplitude" value, then it shall be as close as possible to this value.
ek Anbotek Anbo	11.8.2 Option 2  The automatic bandwidth measurement capability of an instrument may be
Anbotek Anbotek	employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described in 11.8.1 (i.e., RBW = 100 kHz, VBW ≥ 3 × RBW, and peak detector with maximum hold) is implemented by the instrumentation function.
Anbotek Anbotek	When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.

## 4.1. EUT Operation

Operating Envi	ronment:	Ann	anbotek	Aupo	abotek	Anbore
Test mode:	1: TX mode: Kee modulation.	o the EUT in c	ontinuously t	transmitting mo	ode with GFSk	Anboter.

#### 4.2. Test Setup



## 4.3. Test Data

	Temperature:	25.3 °C	Humidity	48 %	Atmospheric Pressure:	101 kPa	e
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Please Refer to Appendix for Details.









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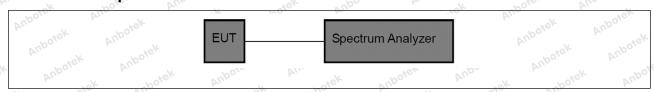
## 5. Maximum Conducted Output Power

Test Requirement:	47 CFR 15.247(b)(3)
Anbotek	Refer to 47 CFR 15.247(b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.
Test Method:	ANSI C63.10-2020 section 11.9.1 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2020, section 11.9.1 Maximum peak conducted output power

#### 5.1. EUT Operation

Operating Environment:		abotek	Anboro	Ŋ.	hotek	Aupoter	Aupa	rek	~ Upo
Test mode:	1: TX mode: modulation.	Keep the El	JT in continu	iously 1	transmitt	ing mode v	vith GFSh	Chotek	P.

#### 5.2. Test Setup



#### 5.3. Test Data

70	Temperature:	25.3 °C	Humidity:	48 %	Atmospheric Pressure:	101 kPa

Please Refer to Appendix for Details.





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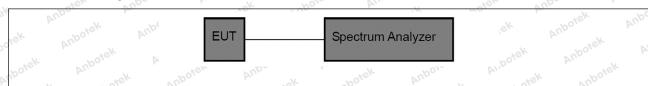
#### 6. Power Spectral Density

Test Requirement:	47 CFR 15.247(e)
Test Limit:	Refer to 47 CFR 15.247(e), For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.
Test Method:	ANSI C63.10-2020, section 11.10 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2020, section 11.10, Maximum power spectral density level in the fundamental emission

#### 6.1. EUT Operation

Operating Envi	ronment:	rek.	Anbotek	Anba	abotek	Anboro	. bojek
Test mode: 1: TX mode: Keep the EUT in continuously transmitting mode with GFSK							
rest mode.	modulation.					· · · · · ·	

#### 6.2. Test Setup



#### 6.3. Test Data

Temperature: 25.3 °C	Humidity:	48 %	Atmospheric Pressure: 101 kPa
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Please Refer to Appendix for Details.





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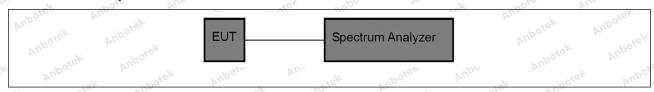
## 7. Emissions in non-restricted frequency bands

Test Requirement:	47 CFR 15.247(d), 15.209, 15.205
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 11.11 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2020 Section 11.11.1, Section 11.11.2, Section 11.11.3

#### 7.1. EUT Operation

Operating Envi	ronment:	aboiek	Vupoter K	Vur	otek	Anborek	Vupo.	*ek	200
Test mode:	1: TX mode:	Keep the El	JT in continu	ously tra	ansmitt	ing mode w	ith GFSK	ζο, ΄΄	24
rest mode.	modulation.								D.S

#### 7.2. Test Setup



#### 7.3. Test Data

Temperature: 25.3 °C Humidity: 48 % Atmospheric Pressure	101 kPa
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Please Refer to Appendix for Details.





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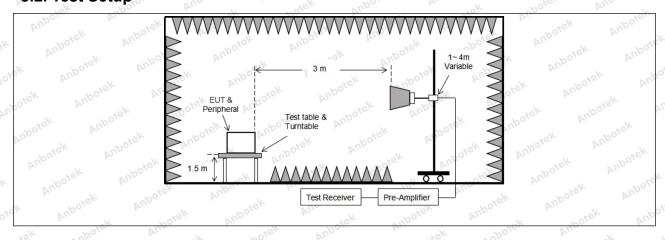
## 8. Band edge emissions (Radiated)

Test Requirement:	restricted bands, as define	, In addition, radiated emissions d in § 15.205(a), must also comp ecified in § 15.209(a)(see § 15.2	ly with the					
k Anbotek Anbot	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)					
	0.009-0.490	2400/F(kHz)	300 ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
abotek Anbo	0.490-1.705	24000/F(kHz)	30 MARKEN					
	1.705-30.0	30	30					
	30-88	100 **	3,ek note					
	88-216	150 **	3					
	216-960	200 **	3 botes And					
	Above 960	500 Marie Ando	3 cek					
	** 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.							
Pup.	16 10, by	C 10ck Sporter Pupp	r rotek					
Test Method:	ANSI C63.10-2020 section KDB 558074 D01 15.247 N		Ann Potek					
Procedure:	ANSI C63.10-2020 section	6.10.5.2	DO'S AIR					

## 8.1. EUT Operation

Operating Envi	onment:	upotek						200
Test mode:	1: TX mode: k	Gep the EUT	in continue	ously transm	itting mode	with GFSk	(Upp.	
lest mode:	modulation.	VUD	No.	yek anbo	Die Vie	*ek	poter	Ş

#### 8.2. Test Setup





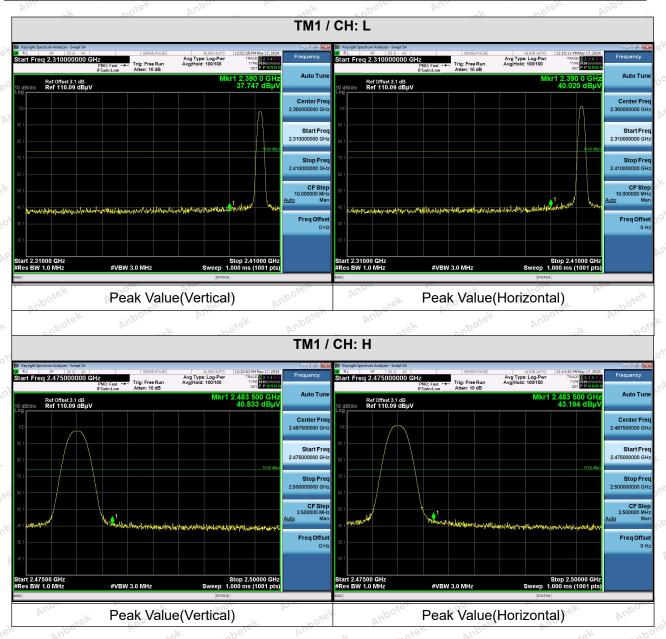




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#### 8.3. Test Data

Temperature: 25.3 °C Humidity: 48 % Atmospheric Pressure: 101 kPa



#### Remark

1. During the test, pre-scan all modes, the report only record the worse case mode.

Note: When the PK measure result value is less than the AVG limit value, the AV measure result values test not applicable.









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## 9. Emissions in frequency bands (below 1GHz)

AGV CSK	- 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10°		
Test Requirement:	restricted bands, as defined	, In addition, radiated emissions d in § 15.205(a), must also comp ecified in § 15.209(a)(see § 15.2	ly with the
k Aupotek Aupot	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
or bu	0.009-0.490	2400/F(kHz)	300 0000
shorek Anbo	0.490-1.705	24000/F(kHz)	30
*I'.	1.705-30.0	30	30
Anbor Ar stek	30-88	100 **	3,ek anbore
shotek Anbo	88-216	150 **	3
All sek abote	216-960	200 **	3 boten And
Anbo, A.	Above 960	500 And	3 rek onb
nbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek	frequency bands 54-72 MH However, operation within the sections of this part, e.g., § In the emission table above The emission limits shown employing a CISPR quasi-190 kHz, 110–490 kHz and a	ing under this section shall not be lz, 76-88 MHz, 174-216 MHz or these frequency bands is permitted in the tighter limit applies at the bein the above table are based on beak detector except for the frequency above 1000 MHz. Radiated emisted on measurements employing	470-806 MHz. sed under other cand edges. measurements uency bands 9– ssion limits in
Potek Pub.	- 18 K 140, by,	a a set abover Anbo	V ofek
Test Method:	ANSI C63.10-2020 section KDB 558074 D01 15.247 M	· Up.	se Yups
Procedure:	ANSI C63.10-2020 section	6.6.4 M	or All botek

## 9.1. EUT Operation

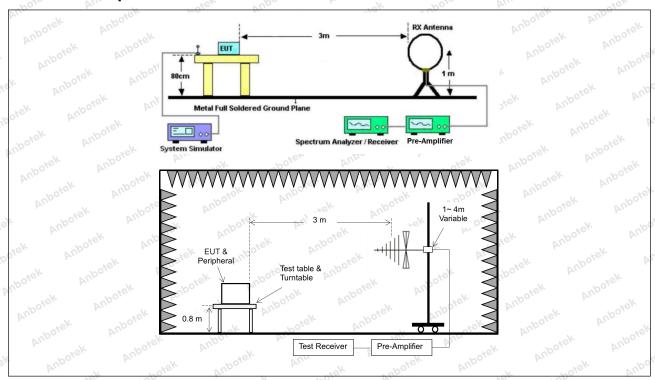
o¹	Operating Envir	onment:	anboten		o'. Y				20
	Toot made: 00101	1: TX mode: Ke	ep the EUT	in continu	ously tran	smitting m	node with (	GFSK	h.
20	Test mode:	modulation.	AUD	V	otek p	<sup>1</sup> upo,	DI.	k aboter	•





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#### 9.2. Test Setup





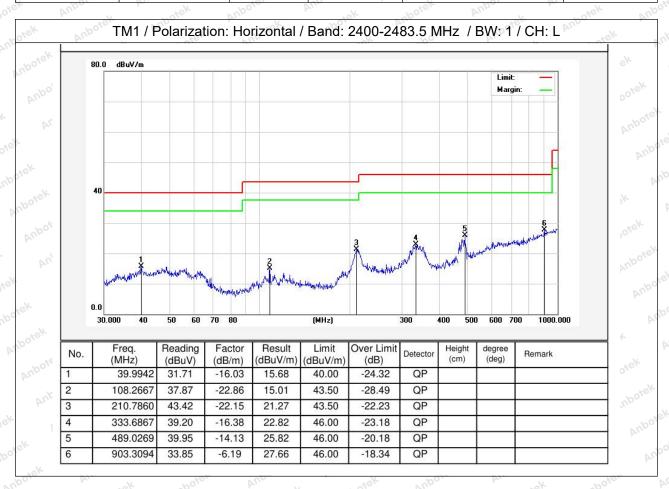


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#### 9.3. Test Data

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

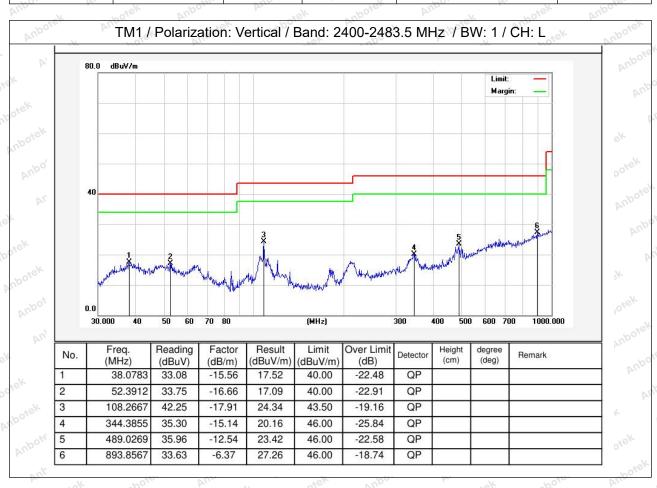
	Temperature:	25.3 °C	VUP	Humidity:	48%	Atmos	spheric Pressure:	101 kPa
--	--------------	---------	-----	-----------	-----	-------	-------------------	---------





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Temperature: 25.3 °C Humidity: 48 % Atmospheric Pressure: 101 kPa



Note: Only record the worst data in the report.









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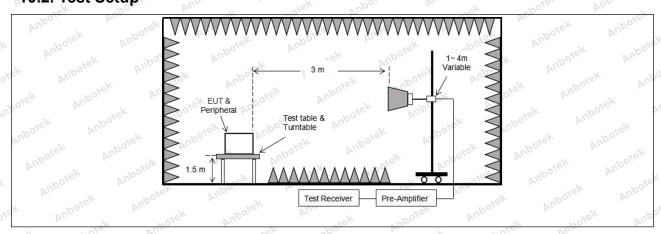
## 10. Emissions in frequency bands (above 1GHz)

Pup. Pk Polek	In addition, radiated amissi	and which fall in the restricted by	anda aa dafinad				
T-Spore And		ons which fall in the restricted ba					
Test Requirement:		omply with the radiated emission	n ilmits specified				
Aupo, V.	in § 15.209(a)(see § 15.20	o(c)).	ek obo				
k hotek Anbo	Frequency (MHz)	Field strength	Measurement				
And	dek Aupo, W.	(microvolts/meter)	distance				
rek upoter An	k hojek Anbe	A. Stek abote.	(meters)				
o. bi.	0.009-0.490	2400/F(kHz)	300				
aborek Anbo	0.490-1.705	24000/F(kHz)	30 Stek				
all apoten	1.705-30.0	30	30 400				
	30-88	100 **	3,ek note				
	88-216	150 **	3				
	216-960	200 **	3boten And				
Anbor	Above 960	500 horek Ambo	3 304				
Test Limit:	** Except as provided in pa	ragraph (g), fundamental emiss	ions from				
ore And		ing under this section shall not b					
		z, 76-88 MHz, 174-216 MHz or					
up, poick		hese frequency bands is permit					
	sections of this part, e.g., §	§ 15.231 and 15.241.					
	In the emission table above	e, the tighter limit applies at the b	oand edges.				
Anbe	The emission limits shown	in the above table are based on	measurements				
. Anboien Anb	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						
tek Aupo	these three bands are base	ed on measurements employing	an average				
ek abotek A	detector.	pore Arragek					
100 Principle	ANSI C63.10-2020 section	6.6.4	ek vupoter				
Test Method:	KDB 558074 D01 15.247 N						
Procedure:	ANSI C63.10-2020 section	6.6.4	oore And				
. NV	70, D.,	*8,, * Vh.					

## 10.1. EUT Operation

Operating Envir	ronment:	upotek	Anbo	An boiek	Anbores	AUR	otek vu
Test mode:	1: TX mode: k modulation.	(eep the EU	Γ in continuo	usly transmitti	ng mode wi	th GFSK	opotek h

#### 10.2. Test Setup









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#### 10.3. Test Data

Temperature: 25.3 °C	Humidity: 48 %	Atmospheric Pressure:	101 kPa
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Vu.	hotek Anb	, , , , , , , , , , , , , , , , , , ,	rick inbor	And	r hotek	Anbo.
			TM1 / CH: L			
Peak value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4804.00	27.80	15.27	43.07	74.00	-30.93	Vertical
7206.00	27.98	18.09	46.07	74.00	-27.93	Vertical
9608.00	28.61	23.76	52.37	74.00	-21.63	Vertical
12010.00	Aupoter* A	iek .	Spotek Aup	74.00	otek Anbote	Vertical
14412.00	"Upo*sk	Aupo	potek t	74.00	siek onk	Vertical
4804.00	27.53	15.27	42.80	74.00	-31.20	Horizontal
7206.00	28.26	18.09	46.35	74.00	-27.65	Horizontal
9608.00	27.83	23.76	51.59	74.00	-22.41	Horizontal
12010.00	otek * Aupo	- K 70	ick Aupote	74.00	, notek	Horizontal
14412.00	"oiek* "	Dose Vila	dek ab	74.00	ak hotel	Horizontal
Average value: Frequency	Reading	Factor	Result	Limit	Over Limit	
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	polarization
4804.00	16.07	15.27	31.34	54.00	-22.66	Vertical
7206.00	17.03	18.09	35.12	54.00	-18.88	Vertical
9608.00	18.08	23.76	41.84	54.00	-12.16	Vertical
12010.00	hotek.	Anboie. An	sek .	54.00	. Br.	Vertical
14412.00	And *	<sup>oupotek</sup>	Aupo.	54.00	ipole. Aug	Vertical
4804.00	15.86	15.27	31.13	54.00	-22.87	Horizontal
7206.00	17.29	18.09	35.38	54.00	-18.62	Horizontal
9608.00	17.34	23.76	41.10	54.00	-12.90	Horizontal
12010.00	sek *	otek Wupor	rk roj	54.00	Yup_	Horizontal
14412.00	4 ×	otek ant	Ote And	54.00	ek Aupo	Horizontal



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			ГМ1 / СН: М			
Peak value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4880.00	27.35	15.42	42.77	74.00	-31.23 no	Vertical
7320.00	27.95	18.02	45.97	74.00	-28.03	Vertical
9760.00	28.11	23.80	51.91	74.00	-22.09	Vertical
12200.00	ek * spotek	Anborr	h hotek	74.00	And	Vertical
14640.00	* * *	tek Aupore	Pup	74.00	Vupo,	Vertical
4880.00	27.34	15.42	42.76	74.00	-31.24	Horizontal
7320.00	28.13	18.02	46.15	74.00	-27.85	Horizontal
9760.00	27.55	23.80	51.35	74.00	-22.65	Horizontal
12200.00	* otek	Aupole	And	74.00	Yuporg Mr.	Horizontal
14640.00	M*	anbotek	Aupo	74.00	Anboron	Horizontal
Average value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	polarization
4880.00	16.16	15.42	31.58	54.00	-22.42	Vertical
7320.00	16.89	18.02	34.91	54.00	-19.09	Vertical
9760.00	17.93	23.80	41.73	54.00	-12.27	Vertical
12200.00	k *upor	Aug Siek	anbotek	54.00	boiek	Vertical
14640.00	otek * Anbot	Ando	ek abotek	54.00	Principle K	Vertical
4880.00	15.97	15.42	31.39	54.00	-22.61	Horizontal
7320.00	17.64	18.02	35.66	54.00	-18.34	Horizontal
9760.00	17.64	23.80	41.44	54.00	12.56 M	Horizontal
12200.00	anbotek	Aupo	abotek	54.00	in otek	Horizontal
14640.00	* week	Anbor	Z. rek	54.00	VUD.	Horizontal





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		aport			AUDO	
		-	TM1 / CH: H			0)
Peak value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4960.00	27.48	15.58	43.06	74.00	-30.94	Vertical
7440.00	28.11	17.93	46.04	74.00	-27.96	Vertical
9920.00	28.81	23.83	52.64	74.00	-21.36	Vertical
12400.00	* At Solek	anbotes	Anb. "ek	74.00	Aupor	Vertical
14880.00	* And	iek upotek	Aupo	74.00	Aupore.	Vertical
4960.00	27.48 M	15.58	43.06	74.00	-30.94	Horizonta
7440.00	28.34	17.93	46.27	74.00	-27.73	Horizonta
9920.00	27.93	23.83	51.76	74.00	-22.24	Horizonta
12400.00	Vup *	abotek	Aupo, k	74.00	Anbote, Ant	Horizonta
14880.00	Vispo,	hotek	Anborek	74.00	anbotek	Horizonta
Average value:						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	polarizatio
4960.00	17.28	15.58	32.86	54.00	-21.14	Vertical
7440.00	18.16	17.93	36.09	54.00		Vertical
9920.00	18.58	23.83	42.41	54.00	-11.59	Vertical
12400.00	K * Notek	Anbo.	hotek	54.00	Vus	Vertical
14880.00	* * *	ak Anboro	And	54.00	Vupo.	Vertical
4960.00	17.15	15.58	32.73	54.00	-21.27	Horizonta
7440.00	18.44 An	17.93	36.37 M	54.00	-17.63	Horizonta
9920.00	17.79	23.83	41.62	54.00	-12.38	Horizonta
12400.00	* tokek	Anbores	Aug Stek	54.00	100. br	Horizonta
14880.00	Aux * **	abotek	Anbo	54.00	anbore A	Horizonta

#### Remark:

- 1. Result =Reading + Factor
- 2. "\*" means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.







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#### APPENDIX I -- TEST SETUP PHOTOGRAPH

Please refer to separated files Appendix I -- Test Setup Photograph\_RF

#### APPENDIX II -- EXTERNAL PHOTOGRAPH

Please refer to separated files Appendix II -- External Photograph

#### APPENDIX III -- INTERNAL PHOTOGRAPH

Please refer to separated files Appendix III -- Internal Photograph

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

