

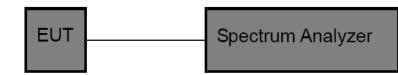
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6. 20DB Occupy Bandwidth Test

6.1. Test Standard

Test Standard	FCC Part15 C Section 15.247 (a)(1)	eK	, aboiek	Anboi	- pr.

6.2. Test Setup



6.3. Test Procedure

Using the following spectrum analyzer settings:

- 1. Span= approximately 2 to 3 times the 20dB bandwidth, centered on a hopping channel.
- 2. Set the RBW ≥1% of the 20 dB bandwidth.
- 3. Set the VBW ≥RBW
- 4. Sweep time = auto couple.
- 5. Detector function = peak.
- 6. Trace mode = max hold.
- 7. Allow trace to fully stabilize.

6.4. Test Data

Pass

Please refer to Appendix A of the Appendix Test Data.

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7. Carrier Frequency Separation Test

7.1. Test Standard and Limit

Test Standard	FCC Part15 C Section 15.247 (a)(1)	Anbo	-bot
Test Limit	2/3 of the 20dB bandwidth base on the transmission power is	less than 0.	125W.

7.2. Test Setup



7.3. Test Procedure

The EUT must have its hopping function enabled. Using the following spectrum analyzer settings:

- 1. Span= Wide enough to capture the peaks of two adjacent channels
- 2. Set the RBW =approximately 30% of the channel spacing.
- 3. Set the VBW \geq RBW.
- 4. Sweep time = auto couple.
- 5. Detector function = peak.
- 6. Trace mode = max hold.
- 7. Allow trace to fully stabilize.

7.4. Test Data

Pass

Please refer to Appendix D of the Appendix Test Data.

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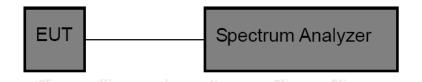
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8. Number of Hopping Channel Test

8.1. Test Standard and Limit

Test Standard	FCC Part15 C Section 15.247 (a)(1)(iii)	Anbotek	Anbo	hnbotek
Test Limit	>15 channels	Anboten	Anbu	p. anb ^o

8.2. Test Setup



8.3. Test Procedure

The EUT must have its hopping function enabled. Using the following spectrum analyzer setting:

- 1. Span= the frequency band of operation
- 2. Set the RBW = less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller.
- 3. Set the VBW ≥ RBW.
- 4. Sweep time = auto couple.
- 5. Detector function = peak.
- 6. Trace mode = max hold.
- 7. Allow trace to fully stabilize.

8.4. Test Data

Pass

Please refer to Appendix F of the Appendix Test Data.

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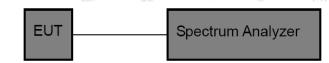
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9. Dwell Time Test

9.1. Test Standard and Limit

Test Standard	FCC F	Part15 C Sec	tion 15.247 (a	a)(1)(iii)	A. hobotek	Anbore	P.N	
Test Limit	0.4 s	Arr	Anboten	Anbo	h botek	Anbort	b	

9.2. Test Setup



9.3. Test Procedure

The EUT must have its hopping function enabled. Use the following spectrum analyzer settings:

- 1. Span= zero span, centered on a hopping channel
- 2. Set the RBW = 1 MHz.
- 3. Set the VBW \ge RBW.
- 4. Sweep time = as necessary to capture the entire dwell time per hopping channel.
- 5. Detector function = peak.
- 6. Trace mode = max hold.
- 7. Allow trace to fully stabilize.

9.4. Test Data

Pass

Please refer to Appendix E of the Appendix Test Data.

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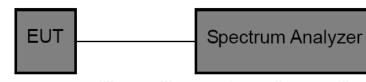
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10. 100kHz Bandwidth of Frequency Band Edge Requirement

10.1. Test Standard and Limit

Test Standard	FCC Part15 C Section 15.247 (d)
5	In any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is
Test Limit	produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the
	desired power, In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

10.2. Test Setup



10.3. Test Procedure

The EUT must have its hopping/Non-hopping function enabled. Using the following spectrum analyzer setting:

- 1. Set the RBW = 100kHz.
- 2. Set the VBW = 300kHz.
- 3. Sweep time = auto couple.
- 4. Detector function = peak.
- 5. Trace mode = max hold.
- 6. Allow trace to fully stabilize.

10.4. Test Data

Pass

Please refer to Appendix G & Appendix H of the Appendix Test Data.

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11. Antenna Requirement

11.1. Test Standard and Requirement

Test Standard	FCC Part15 Section 15.203 /247(c)
Requirement	 1) 15.203 requirement: 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, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. 2) 15.247(c) (1)(i) requirement: Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

11.2. Antenna Connected Construction

The antenna is PCB Antenna which permanently attached, and the best case gain of the antenna is -0.58dBi. It complies with the standard requirement.

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APPENDIX I -- TEST SETUP PHOTOGRAPH

Photo of Conducted Emission Measurement



Photo of Radiation Emission Test

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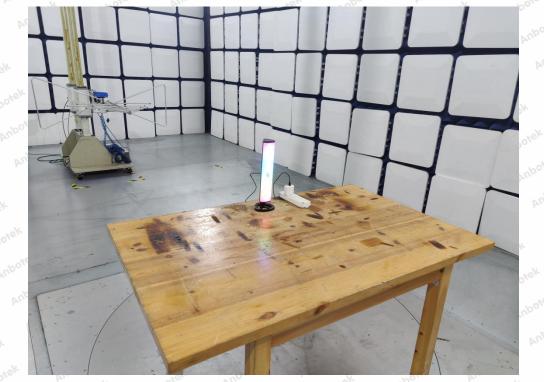
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APPENDIX II -- EXTERNAL PHOTOGRAPH

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APPENDIX III -- INTERNAL PHOTOGRAPH

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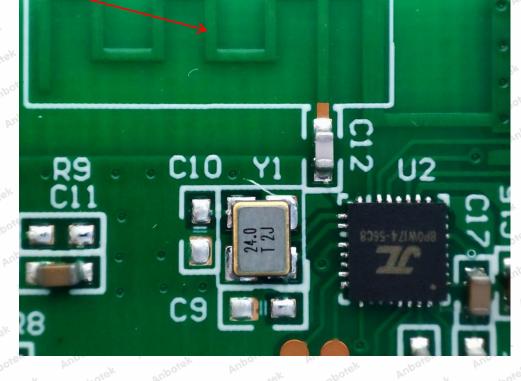
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Appendix Test Data

Report No.:	18220WC20232301	Test Sample No.:	1-2-2
Start Test Date:	2022.9.27	Finish Test Date:	2022.10.8
Test Engineer:	Jony. He	Auditor:	Edward. Pan
Temperature:	27.3 ℃	Relative Humidity:	47 %
Pressure:	1012 hPa	Anbotek Anbo	ootek Anbotek Ant

Appendix A: 20dB Emission Bandwidth

TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]
N	Anboter	2402	0.960	2401.553	2402.513
DH5	Ant1	2441	0.951	2440.565	2441.516
Aupor	k 200	2480	1.026	2479.505	2480.531
K Anbore	Pur	2402	1.329	2401.355	2402.684
2DH5	oter Ant1 🕅	2441	1.290	2440.394	2441.684
et r	botek	2480	1.293	2479.391	2480.684
upor P	~otek	2402	1.281	2401.373	2402.654
3DH5	Ant1	2441	1.308	2440.373	2441.681
Anbotek	Aupo.	2480	1.293	2479.388	2480.681

Test Result

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Test Graphs



DH5_Ant1_2480

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Anbo

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Code:AB-RF-05-b

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Report No.: 18220WC20232301 FCC ID: 2AXGMBL-FWD01 ALIGN OF #Avg Type: RMS Avg|Hold: 100/100 Center Freq 2.480000000 GHz

Ref Offset 1 dB Ref 30.00 dBm

Center 2.480000 GHz #Res BW 30 kHz

N 1 f N 1 f Δ1 1 f (Δ)

Trig: Free Run #Atten: 40 dB

#VBW 100 kHz

-26.729 dBm -5.697 dBm 0.707 dB

2.479 505 GHz 2.480 015 GHz 1.026 MHz (Δ)

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Frequency

Auto Tun

Center Freq 2.48000000 GHz

Start Fred 2.478500000 GH:

Stop Fred 2.481500000 GH:

CF Step 300.000 kH:

Freq Offset OН

Ma

Auto

1 2 3 4 5 6 M

1.026 MH 0.707 dl

Span 3.000 MHz Sweep 3.200 ms (1001 pts)

3∆1



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Report No.: 18220WC20232301 FCC ID: 2AXGMBL-FWD01 ALIGN OF #Avg Type: RMS Avg|Hold: 100/100

Trig: Free Run #Atten: 40 dB

#VBW 100 kHz

2.440 394 GHz 2.441 174 GHz 1.290 MHz (Δ)

-26.166 dBm -5.778 dBm -0.369 dB

Center Freq 2.441000000 GHz

Ref Offset 1 dB Ref 30.00 dBm

Center 2.441000 GHz #Res BW 30 kHz

N 1 f N 1 f Δ1 1 f (Δ)

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Frequency

Auto Tun

Center Freq 2.441000000 GHz

Start Fred 2.439500000 GH:

Stop Fred 2.442500000 GH:

CF Step 300.000 kH:

Freq Offset OН

Ma

Auto

1 2 3 4 5 6 M

1.290 MH -0.369 dl

3∆1

Span 3.000 MHz Sweep 3.200 ms (1001 pts)



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Code:AB-RF-05-b

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ALIGN OF #Avg Type: RMS Avg|Hold: 100/100 Center Freq 2.402000000 GHz Trig: Free Run #Atten: 40 dB Ref Offset 1 dB Ref 30.00 dBm

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Frequency

Auto Tun

Center Freq 2.402000000 GHz

Start Fred 2.400500000 GH:

Stop Fred 2.403500000 GH:

CF Step 300.000 kH:

Ma

Auto

1.281 MH 0.667 dl

Report No.: 18220WC20232301 FCC ID: 2AXGMBL-FWD01 3∆1 Span 3.000 MHz Sweep 3.200 ms (1001 pts) Center 2.402000 GHz #Res BW 30 kHz

#VBW 100 kHz





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Appendix B: Occupied Channel Bandwidth

Test Result

S		Pri Vi	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	DU.	-×6 ^k	
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	pr.
ek pupo	Due.	2402	0.86313	2401.5903	2402.4535	
DH5	Ant1	2441	0.86900	2440.5862	2441.4552	64
10° 10'	abotek	2480	0.88778	2479.5773	2480.4651	otek
Anbo	P	2402	1.1763	2401.4352	2402.6115	~ote
2DH5	Ant1	2441	1.1921	2440.4282	2441.6203	Aur
Anbotek	Pupo.	2480	1.2051	2479.4236	2480.6287	Put
× ,001	ek Anb	2402	1.2184	2401.4098	2402.6282	
3DH5	Ant1	2441	1.1990	2440.4219	2441.6209	*
poter An	_xek	2480	1.1985	2479.4208	2480.6193	.Yex

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Test Graphs



DH5_Ant1_2480

x dB

-26.00 dB

1.142 MHz

x dB Bandwidth

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2DH5_Ant1_2441

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3DH5_Ant1_2402

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Code:AB-RF-05-b

Center Free

CF Step 300.000 kHz

Freq Offset 0 Hz

M

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3DH5_Ant1_2480

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