

# JianYan Testing Group Shenzhen Co., Ltd.

Report No.: JYTSZ-R12-2301517

# FCC RF Test Report

**Report No.:** JYTSZ-R12-2301517

**Applicant:** Hangzhou Roombanker Technology Co., Ltd.

Address of Applicant: A#801 Wantong center, Hangzhou, China

**Equipment Under Test (EUT)** 

Product Name: AOA Tag

Model No.: DSBC-230, DSBC-230-X(X:1~29), DSBC-230-AOA, DSBC-

230-AOA-X(X:1~29)

Trade Mark: Roombanker

FCC ID: 2AUXBDSBC-230

**Applicable Standards:** FCC CFR Title 47 Part 15C (§15.247)

Date of Sample Receipt: 30 Oct., 2023

**Date of Test:** 31 Oct., 2023 to 19 Jan., 2024

Date of Report Issued: 22 Jan., 2024

Test Result: PASS

Project by: Date: 22 Jan., 2024

Reviewed by: \_\_\_\_\_ Date: \_\_\_\_ 22 Jan., 2024

Approved by: Date: 22 Jan., 2024

Manager

Senior Endine

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in above the application standard version. Test results reported herein relate only to the item(s) tested.

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# 1 Version

Version No.	Date	Description
00	22 Jan., 2024	Original



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# 3 General Information

## 3.1 Client Information

Applicant:	Hangzhou Roombanker Technology Co., Ltd.	
Address:	A#801 Wantong center, Hangzhou, China	
Manufacturer/ Factory: Zhejiang dusun electron co., ltd		
Address:	No.640 Feng Qing St, DeQing Zhejiang China	

3.2 General Description of E.U.T.

Product Name:	AOA Tag
Model No.:	DSBC-230, DSBC-230-X(X:1~29), DSBC-230-AOA, DSBC-230-AOA-X(X:1~29)
Operation Frequency:	2402 MHz - 2480 MHz
Channel Numbers:	40
Channel Separation:	2MHz
Modulation Technology:	GFSK
Data Speed:	1 Mbps (LE 1M PHY), 2 Mbps (LE 2M PHY), 125 kbps (LE Coded PHY, S=8), 500 kbps (LE Coded PHY, S=2)
Antenna Type:	Internal Antenna
Antenna Gain:	-3.8dBi (declare by applicant)
Antenna transmit mode:	SISO (1TX, 1RX)
Power Supply:	Rechargeable Li-ion Battery DC3.7V, 600mAh
Remark:	AOA Tag item No.: DSBC-230, DSBC-230-X(X:1~29), DSBC-230-AOA, DSBC-230-AOA-X(X:1~29) were identical inside, the electrical circuit design, layout, components used and internal wiring, with only difference being model name.
Test Sample Condition:	The test samples were provided in good working order with no visible defects.





## 3.3 Test Mode and Test Environment

Test Mode:		
Transmitting mode	Keep the EUT in continuous transmitting with modulation	
Remark:		

- 1. For AC power line conducted emission and radiated spurious emission (below 1GHz), pre-scan all data speed, found 1 Mbps (LE 1M PHY) was worse case mode. The report only reflects the test data of worst mode.
- 2. Channel Low, Mid and High for each type band with rated data rate were chosen for full testing. The field strength of spurious radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for these modes. Just the worst case position (H mode) shown in report.

Operating Environment:	
Temperature:	15℃ ~ 35℃
Humidity:	20 % ~ 75 % RH
Atmospheric Pressure:	1008 mbar
Voltage:	Nominal: 3.70Vdc, Extreme: Low 3.50Vdc, High 4.20Vdc
Test Engineer:	Logan (Conducted measurement)
rest Engineer.	Kiran (Radiated measurement)

## 3.4 Description of Test Auxiliary Equipment

The EUT has been tested as an independent unit.

## 3.5 Measurement Uncertainty

Parameter	Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))
Conducted Emission for LISN (9kHz ~ 150kHz)	3.57 dB
Conducted Emission for LISN (150kHz ~ 30MHz)	3.14 dB
Radiated Emission (30MHz ~ 200MHz) (10m SAC)	4.3 dB
Radiated Emission (200MHz ~ 1000MHz) (10m SAC)	4.3 dB
Radiated Emission (1GHz ~ 6GHz) (3m FAR)	4.95 dB
Radiated Emission (6GHz ~ 18GHz) (3m FAR)	5.23 dB
Radiated Emission (18GHz ~ 40GHz) (3m FAR)	5.32 dB

**Note:** All the measurement uncertainty value were shown with a coverage k=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

# 3.6 Additions to, Deviations, or Exclusions from the Method

No

# 3.7 Laboratory Facility

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

#### • FCC - Designation No.: CN1211

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

## • ISED - CAB identifier.: CN0021

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

## • CNAS - Registration No.: CNAS L15527

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

## A2LA - Registration No.: 4346.01

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <a href="https://portal.a2la.org/scopepdf/4346-01.pdf">https://portal.a2la.org/scopepdf/4346-01.pdf</a>

JianYan Testing Group Shenzhen Co., Ltd. Report Template No.: JYTSZ4b-148-C1 No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China. Tel: +86-755-23118282, Fax: +86-755-23116366



# 3.8 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.

Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community,

Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

Tel: +86-755-23118282, Fax: +86-755-23116366 Email: info-JYTee@lets.com, Website: http://jyt.lets.com

## 3.9 Test Instruments List

Radiated Emission(3m FAR):						
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date	Cal. Due date	
rest Equipment	Wanulacturer	wiodei No.	Manage No.	(mm-dd-yy)	(mm-dd-yy)	
3m FAR	YUNYI	9m*6m*6m	WXJ097	06-15-2023	06-14-2028	
BiConiLog Antenna	Schwarzbeck	VULB9163	WXJ097-2	07-13-2023	07-12-2024	
Biconical Antenna	Schwarzbeck	VUBA9117	WXJ002-1	07-02-2021	07-01-2024	
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ097-3	07-14-2023	07-13-2024	
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ002-3	01-09-2023	01-08-2024	
Hom Antenna	Scriwarzbeck	DDHA9120D	VV AJUUZ-3	12-28-2023	12-27-2024	
Horn Antenna	orn Antenna Schwarzbeck BBHA9170 WXJ002-5	WXJ002-5	01-09-2023	01-08-2024		
Hom Antenna	Scriwarzbeck	DDNA9170	VV AJUUZ-5	12-28-2023	12-27-2024	
Horn Antenna	Schwarzbeck	BBHA9170	WXJ002-6	01-09-2023	01-08-2024	
nom Antenna	Schwarzbeck	ррцаэ170	VV AJUU2-6	12-28-2023	12-27-2024	
Pre-amplifier (30MHz ~ 1GHz)	YUNYI	PAM-310N	WXJ097-5	05-14-2023	05-13-2024	
Pre-amplifier (1GHz ~ 18GHz)	YUNYI	PAM-118N	WXJ097-6	05-14-2023	05-13-2024	
Pre-amplifier				01-11-2023	01-10-2024	
(18GHz ~ 40GHz)	RF System	TRLA-180400G45B	WXJ002-7	12-27-2023	12-26-2024	
EMI Test Receiver	Rohde & Schwarz	ESCI3	WXJ003	01-10-2023	01-09-2024	
EIVII Test Neceivei				12-27-2023	12-26-2024	
Spectrum Analyzer	Rohde & Schwarz	FSP 30	WXJ004	01-10-2023	01-09-2024	
Opeciful Analyzer	Ronde & Schwarz	1 01 00	VV 7,500-4	12-27-2023	12-26-2024	
Spectrum Analyzer	KEYSIGHT	N9010B	WXJ081-1	06-13-2023	06-12-2024	
Coaxial Cable (30MHz ~ 1GHz)	JYTSZ	JYT3M-1G-NN-13M	WXG097-1	08-01-2023	07-31-2024	
Coaxial Cable (1GHz ~ 18GHz)	JYTSZ	JYT3M-18G-NN-8M	WXG097-2	08-01-2023	07-31-2024	
Coaxial Cable (18GHz ~ 40GHz)		JYT3M-40G-SS-8M	WXG097-3	08-01-2023	07-31-2024	
High Band Reject Filter Group	Tonscend	JS0806-F	WXJ089	N/A		
Low Band Reject Filter Group	Tonscend	JS0806-F	WXJ097-4	N/A		
Test Software	Tonscend	TS+		Version: 5.0.0		





Radiated Emission(10m SAC):							
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)		
10m SAC	ETS	RFSD-100-F/A	WXJ090	04-28-2021	04-27-2024		
DiCaril on Antonna	COLIMANDADECK	\/     D 0400	W/V 1000 4	01-17-2023	01-16-2024		
BiConiLog Antenna	SCHWARZBECK	VULB 9168	WXJ090-1	12-28-2023	12-27-2024		
DiCaril on Antonna	COLIMADZDECK	\/     D 0400	14/1/ 1000 0	01-10-2023	01-09-2024		
BiConiLog Antenna	SCHWARZBECK	VULB 9168	WXJ090-2	12-28-2023	12-27-2024		
EMI Took Doopiyan	R&S	ESR 3	WXJ090-3	01-10-2023	01-09-2024		
EMI Test Receiver				12-27-2023	12-26-2024		
EMI Took Doooiyan	R&S	ESR 3	WXJ090-4	01-11-2023	01-09-2024		
EMI Test Receiver				12-27-2023	12-26-2024		
Low Dro amplifier	Doot	LNA 0920N	WXJ090-6	01-10-2023	01-09-2024		
Low Pre-amplifier	Bost			12-27-2023	12-26-2024		
Low Dro amplifier	Doot	LNA OOGON	WV 1000 7	01-10-2023	01-09-2024		
Low Pre-amplifier	Bost	LNA 0920N	WXJ090-7	12-27-2023	12-26-2024		
Cable	Doot	IVT10M 1C NINI 10M	W/VC002 7	01-18-2023	01-17-2024		
Cable	Bost	JYT10M-1G-NN-10M	WXG002-7	01-17-2024	01-16-2025		
Coblo	Deat	D/T40M 40 NINI 40M	WXG002-8	01-18-2023	01-17-2024		
Cable	Bost	JYT10M-1G-NN-10M		01-17-2024	01-16-2025		
Test Software	R&S	EMC32	Version: 10.50.40				

Conducted Emission:							
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)		
EMI Test Receiver	Rohde & Schwarz	ESR3	WXJ003-2	07-05-2023	07-04-2024		
LIONI	Schwarzbeck	NSLK 8127	QCJ001-13	01-10-2023	01-09-2024		
LISN				12-27-2023	12-26-2024		
LISN	Rohde & Schwarz	ESH3-Z5	WXJ005-1	01-11-2023	01-10-2024		
LISIN				12-27-2023	12-26-2024		
LISN Coaxial Cable	IVTOZ	IVTOE 40 NINI OM	WVC000 4	01-18-2023	01-17-2024		
(9kHz ~ 30MHz)	JYTSZ	JYTCE-1G-NN-2M	WXG003-1	01-17-2024	01-16-2025		
RF Switch	TOP PRECISION	RSU0301	WXG003	N/A			
Test Software	AUDIX	E3	\	Version: 6.110919b			

Conducted Method:						
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)	
Spectrum Analyzer	Keysight	N9010B	WXJ004-3	11-01-2023	10-31-2024	
Temperature Humidity Chamber	ZHONG ZHI	CZ-A-80D	WXJ032-3	01-09-2023	01-08-2025	
Power Detector Box	MWRFTEST	MW100-PSB	WXJ007-4	09-25-2023	09-24-2024	
DC Power Supply	Keysight	E3642A	WXJ025-2	N/A		
RF Control Unit	MWRFTEST	MW100-RFCB	WXG006	N/A		
Test Software	MWRFTEST	MTS 8310		Version: 2.0.0.0		



# 4 Measurement Setup and Procedure

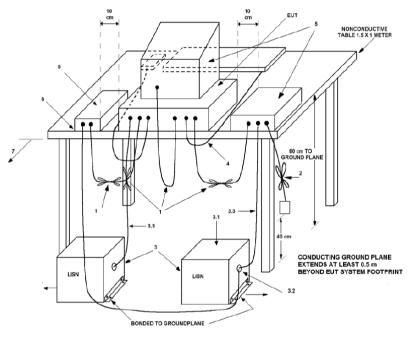
## 4.1 Test Channel

According to ANSI C63.10-2013 chapter 5.6.1 Table 4 requirement, select lowest channel, middle channel, and highest channel in the frequency range in which device operates for testing. The detailed frequency points are as follows:

Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
0	2402	20	2442	39	2480

## 4.2 Test Setup

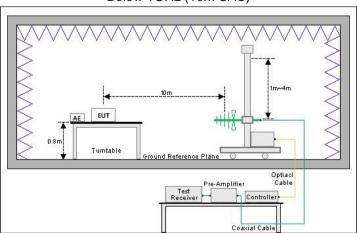
## 1) Conducted emission measurement:



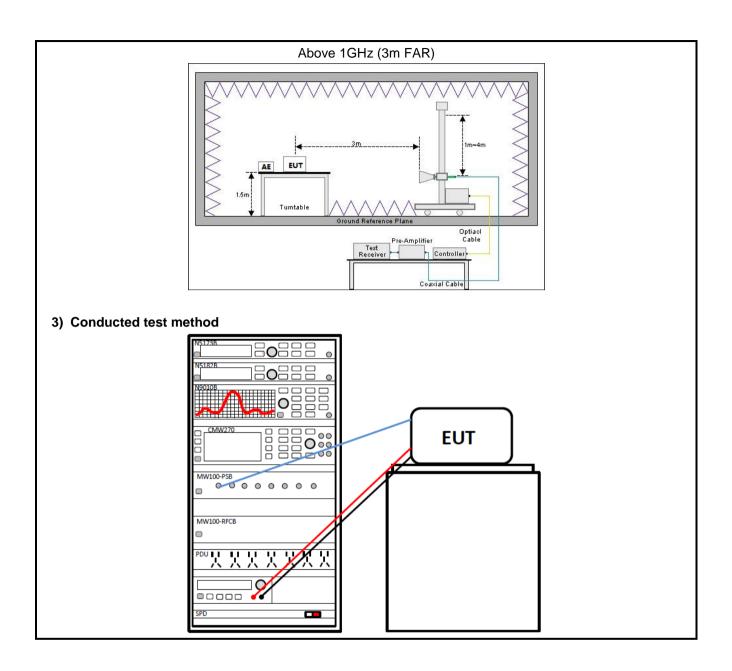
Note: The detailed descriptions please refer to Figure 8 of ANSI C63.4:2014.

## 2) Radiated emission measurement:

Below 1GHz (10m SAC)











## 4.3 Test Procedure

4.5 Test Flocedule	
Test method	Test step
Conducted emission	<ol> <li>The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.</li> </ol>
Radiated emission	For below 1GHz:
radiated emission	The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 10 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 10 m.
	2. EUT works in each mode of operation that needs to be tested, and having
	the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.  3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.
	·
	For above 1GHz:  1. The EUT was placed on the tabletop of a rotating table 1.5 m the ground at a 3 m fully anechoic room. The measurement distance from the EUT to the
	receiving antenna is 3 m.
	<ol> <li>EUT works in each mode of operation that needs to be tested, and having the EUT continuously working, respectively on 3 axis (X, Y &amp; Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.</li> <li>Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.</li> </ol>
Conducted test method	The BLE antenna port of EUT was connected to the test port of the test
	system through an RF cable.
	The EUT is keeping in continuous transmission mode and tested in all modulation modes.
	<ol> <li>Open the test software, prepare a test plan, and control the system through the software. After the test is completed, the test report is exported through the test software.</li> </ol>



## 5 Test Results

# 5.1 Summary

## 5.1.1 Clause and Data Summary

Test items	Standard clause	Test data	Result
Antenna Requirement	15.203 15.247 (b)(4)	See Section 5.2	Pass
AC Power Line Conducted Emission	15.207 See Section 5.3		Pass
Conducted Output Power	15.247 (b)(3)	Appendix A – BLE 1M PHY Appendix B – BLE 2M PHY Appendix C – BLE Coded PHY, S=2 Appendix D – BLE Coded PHY, S=8	Pass
6dB Emission Bandwidth 99% Occupied Bandwidth	15.247 (a)(2)	Appendix A – BLE 1M PHY Appendix B – BLE 2M PHY Appendix C – BLE Coded PHY, S=2 Appendix D – BLE Coded PHY, S=8	Pass
Power Spectral Density	15.247 (e)	Appendix A – BLE 1M PHY Appendix B – BLE 2M PHY Appendix C – BLE Coded PHY, S=2 Appendix D – BLE Coded PHY, S=8	Pass
Band-edge Emission Conduction Spurious Emission	15.247 (d)	Appendix A – BLE 1M PHY Appendix B – BLE 2M PHY Appendix C – BLE Coded PHY, S=2 Appendix D – BLE Coded PHY, S=8	Pass
Emissions in Restricted Frequency Bands	15.205 15.247 (d)	See Section 5.4	Pass
Emissions in Non-restricted Frequency Bands	15.209 15.247(d)	See Section 5.5	Pass

#### Remark:

- 1. Pass: The EUT complies with the essential requirements in the standard.
- 2. N/A: Not Applicable.
- 3. The cable insertion loss used by "RF Output Power" and other conduction measurement items is 0.5dB (provided by the customer).

Test Method: ANSI C63.10-2013

KDB 558074 D01 15.247 Meas Guidance v05r02



## 5.1.2 Test Limit

Test items	Limit						
		Frequency	Frequency Limit (dBµV)				
		(MHz)	Qua	si-Peak	Average		
AC Power Line Conducted		0.15 – 0.5	66 to	56 Note 1	56 to 46 Note 1		
Emission		0.5 – 5		56	46		
		5 – 30		60	50		
		Note 1: The limit level in dBµ Note 2: The more stringent lin		-	n of frequency.		
Conducted Output Power		systems using digital i 5725-5850 MHz band		the 902-928	MHz, 2400-2483.5 MHz,		
6dB Emission Bandwidth	The	e minimum 6 dB bandw	vidth shall be a	at least 500 k	Hz.		
99% Occupied Bandwidth	N/A	1					
Power Spectral Density	inte		antenna shall	not be greate	density conducted from the than 8 dBm in any 3 kH sion.		
Band-edge Emission  Conduction Spurious  Emission	fred dB high radi the pow per this limi whi	below that in the 100 k hest level of the desired iated measurement, pr peak conducted powe ver limits based on the mitted under paragraph paragraph shall be 30 ts specified in §15.209	oduced by the Hz bandwidth d power, base ovided the trainits. If the use of RMS and (b)(3) of this dB instead of (a) is not required.	e intentional rand within the based on either a sunsmitter demotransmitter converaging over section, the state of 20 dB. Attenuired. In additioned in §15.2	adiator shall be at least 2 and that contains the n RF conducted or a onstrates compliance with the conducted or a time interval, as attenuation required unduation below the genera on, radiated emissions 05(a), must also comply	th ed er	
		Frequency	Limit (d	dΒμV/m)	Detector		
		(MHz)	@ 3m	@ 10m	Detector		
		30 – 88	40.0	30.0	Quasi-peak		
			40.0		Quasi-peak		
Emissions in Restricted		88 – 216	43.5	33.5	Quasi-peak Quasi-peak		
Emissions in Restricted Frequency Bands		216 – 960	43.5 46.0	<u> </u>			
		216 – 960 960 – 1000	43.5 46.0 54.0	33.5 36.0 44.0	Quasi-peak		
Frequency Bands	-	216 – 960	43.5 46.0 54.0	33.5 36.0 44.0	Quasi-peak Quasi-peak		
Frequency Bands  Emissions in Non-restricted	-	216 – 960 960 – 1000 <b>Note:</b> The more stringent limit	43.5 46.0 54.0	33.5 36.0 44.0	Quasi-peak Quasi-peak Quasi-peak		
Frequency Bands		216 – 960 960 – 1000	43.5 46.0 54.0 applies at transition	33.5 36.0 44.0 on frequencies.	Quasi-peak Quasi-peak Quasi-peak		
Frequency Bands  Emissions in Non-restricted	-	216 – 960 960 – 1000 <b>Note:</b> The more stringent limit	43.5 46.0 54.0 applies at transition	33.5 36.0 44.0 on frequencies. <b>Limit (dBµV/</b> i	Quasi-peak Quasi-peak Quasi-peak		



Report No.: JYTSZ-R12-2301517

## 5.2 Antenna requirement

Standard requirement: FCC Part 15 C Section 15.203 /247(b)(4)

## 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.

## 15.247(b) (4) requirement:

(4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

## E.U.T Antenna:

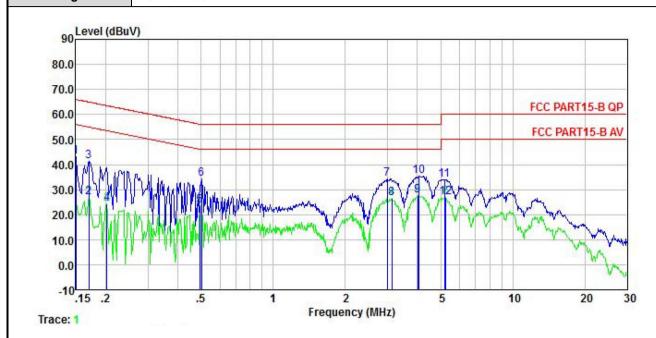
The BLE antenna is an Internal antenna which cannot replace by end-user, the best case gain of the antenna is -3.8 dBi. See product internal photos for details.





## 5.3 AC Power Line Conducted Emission

Product name:	AOA Tag	Product model:	DSBC-230
Test by:	Kiran	Test mode:	BLE Tx (LE 1M PHY)
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz		



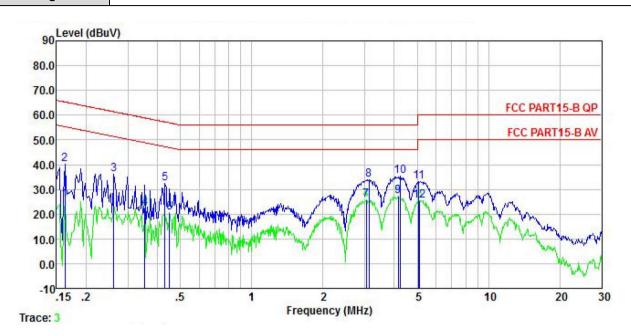
	Freq	Read Level	LISN Factor	Aux2 Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
-	MHz	dBu∜	dB	<u>dB</u>	dB	dBu∀	dBu∜	dB	
1	0.150 0.170	32.43 16.35	0.20 0.20	10.50 10.50	0.01 0.01	43.14 27.06		-22.86 -27.88	QP Average
3	0.170	30.73	0.20	10.50	0.01	41.44	64.94	-23.50	QP
5	0.202 0.494	13.63 12.91	0.20 0.20	10.50 10.50	0.04 0.03	24.37 23.64	46.10	-22.46	Average Average
6 7	0.502 2.993	23.42 23.49	0.20 0.20	10.50 10.50	0.03 0.07	34.15 34.26		-21.85 -21.74	1 10 To 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
1 2 3 4 5 6 7 8	3.123 4.006	15.65 17.00	0.20 0.20	10.50 10.50	0.07 0.08	26.42 27.78			Average Average
10 11	4.070 5.194	24.56 23.21	0.20 0.20	10.50 10.50	0.08 0.09	35.34 34.00	56.00	-20.66 -26.00	QP
12	5. 249	15.99	0.20	10.50	0.09	26.78			Average

## Remark:

1. Level = Read level + LISN Factor + Cable Loss.



Product name:	AOA Tag	Product model:	DSBC-230
Test by:	Kiran	Test mode:	BLE Tx (LE 1M PHY)
Test frequency:	150 kHz ~ 30 MHz	Phase:	Neutral
Test voltage:	AC 120 V/60 Hz		



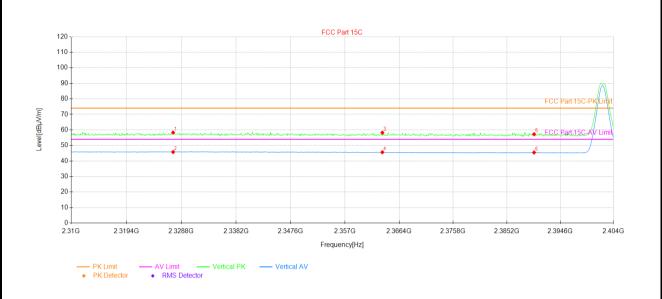
Marketini S	Freq	Read Level	LISN Factor		Cable Loss		Limit Line	Over Limit	Remark
	MHz	dBu∇	<u>ab</u>	<u>dB</u>	<u>ab</u>	dBu∇	dBu∀	<u>ab</u>	
2 0 3 0 4 0 5 0 6 0 7 3 8 3 9 4 10 4 11 5	. 162 . 162 . 262 . 354 . 431 . 449 . 041 . 123 . 158 . 247 . 085	15.08 29.66 25.49 11.78 21.74 10.07 14.77 23.17 16.37 24.35 22.36 14.58	0.20 0.20 0.20 0.20 0.20 0.30 0.30 0.30	10.50 10.50 10.50 10.50 10.50 10.50 10.50 10.50 10.50 10.50	0.01 0.01 0.01 0.02 0.03 0.03 0.07 0.07 0.08 0.08 0.09	25. 79 40. 37 36. 20 22. 50 32. 47 20. 80 25. 64 34. 04 27. 25 35. 23 33. 25 25. 47	65.34 61.38 48.87 57.24 46.89 46.00 56.00 56.00 60.00	-24.97 -25.18 -26.37 -24.77 -26.09 -20.36 -21.96 -18.75 -20.77 -26.75	QP Average QP Average Average QP Average QP

1. Level = Read level + LISN Factor + Cable Loss.



5.4 Emissions in Restricted Frequency Bands

Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE 1M PHY)
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz		



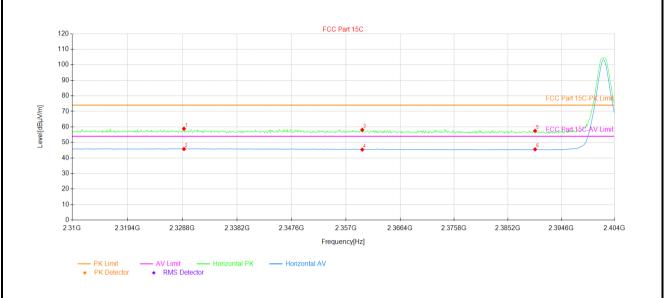
Susp	Suspected Data List										
NO.	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiat	Doloritu	
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polarity	
1	2327.39	24.09	34.19	58.28	74.00	15.72	175	PK	PASS	Vertical	
2	2327.39	11.59	34.19	45.78	54.00	8.22	71	AV	PASS	Vertical	
3	2363.49	24.05	34.19	58.24	74.00	15.76	224	PK	PASS	Vertical	
4	2363.49	11.45	34.19	45.64	54.00	8.36	71	AV	PASS	Vertical	
5	2390.00	23.09	34.13	57.22	74.00	16.78	157	PK	PASS	Vertical	
6	2390.00	11.35	34.13	45.48	54.00	8.52	125	AV	PASS	Vertical	

#### Remark

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE 1M PHY)
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz		

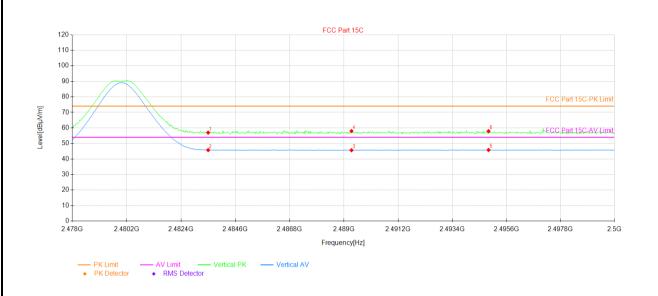


Susp	Suspected Data List										
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Mondiet	Delevity	
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polarity	
1	2329.08	24.62	34.21	58.83	74.00	15.17	106	PK	PASS	Horizontal	
2	2329.08	11.58	34.21	45.79	54.00	8.21	271	AV	PASS	Horizontal	
3	2359.82	23.92	34.20	58.12	74.00	15.88	168	PK	PASS	Horizontal	
4	2359.82	11.21	34.20	45.41	54.00	8.59	316	AV	PASS	Horizontal	
5	2390.00	23.31	34.13	57.44	74.00	16.56	258	PK	PASS	Horizontal	
6	2390.00	11.46	34.13	45.59	54.00	8.41	285	AV	PASS	Horizontal	

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).



Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE 1M PHY)
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz		

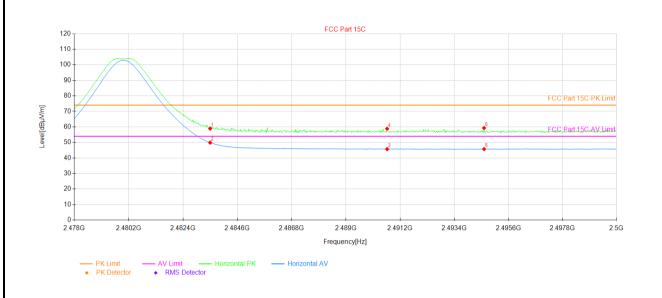


Susp	Suspected Data List										
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Mandiat Dalasita		
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polarity	
1	2483.50	22.47	34.51	56.98	74.00	17.02	195	PK	PASS	Vertical	
2	2483.50	11.23	34.51	45.74	54.00	8.26	67	AV	PASS	Vertical	
3	2489.31	11.11	34.51	45.62	54.00	8.38	186	AV	PASS	Vertical	
4	2489.31	23.47	34.51	57.98	74.00	16.02	22	PK	PASS	Vertical	
5	2494.87	11.30	34.52	45.82	54.00	8.18	17	AV	PASS	Vertical	
6	2494.87	23.38	34.52	57.90	74.00	16.10	254	PK	PASS	Vertical	

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE 1M PHY)
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz		

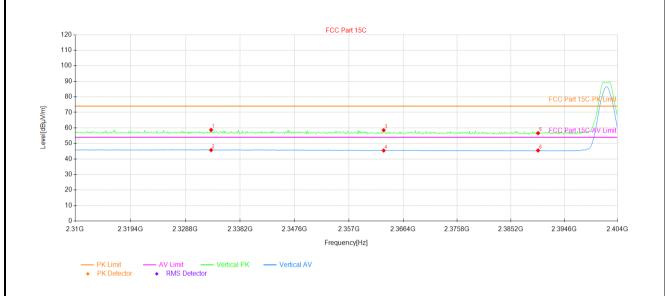


Susp	ected Data	List								
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiet	Polarity
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polatily
1	2483.50	24.41	34.51	58.92	74.00	15.08	314	PK	PASS	Horizontal
2	2483.50	15.38	34.51	49.89	54.00	4.11	305	AV	PASS	Horizontal
3	2490.67	11.20	34.52	45.72	54.00	8.28	201	AV	PASS	Horizontal
4	2490.67	24.32	34.52	58.84	74.00	15.16	36	PK	PASS	Horizontal
5	2494.61	11.22	34.52	45.74	54.00	8.26	329	AV	PASS	Horizontal
6	2494.61	24.77	34.52	59.29	74.00	14.71	108	PK	PASS	Horizontal

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE 2M PHY)
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz		

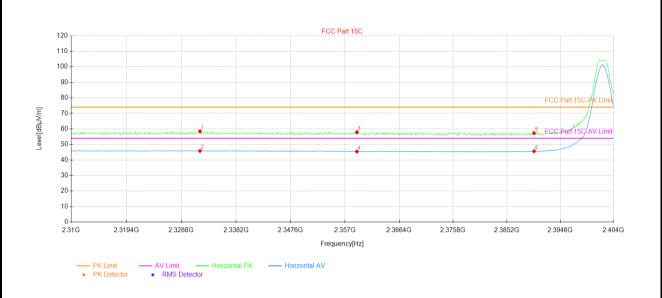


Susp	Suspected Data List										
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiet Delevit		
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polarity	
1	2333.22	24.49	34.22	58.71	74.00	15.29	273	PK	PASS	Vertical	
2	2333.22	11.50	34.22	45.72	54.00	8.28	197	AV	PASS	Vertical	
3	2363.02	24.35	34.19	58.54	74.00	15.46	332	PK	PASS	Vertical	
4	2363.02	11.25	34.19	45.44	54.00	8.56	183	AV	PASS	Vertical	
5	2390.00	22.51	34.13	56.64	74.00	17.36	282	PK	PASS	Vertical	
6	2390.00	11.34	34.13	45.47	54.00	8.53	111	AV	PASS	Vertical	

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).



Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE 2M PHY)
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz		

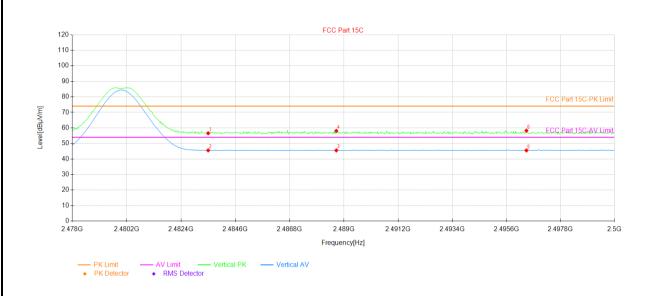


Suspected Data List											
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiat	Polarity	
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polatily	
1	2332.00	24.25	34.22	58.47	74.00	15.53	298	PK	PASS	Horizontal	
2	2332.00	11.61	34.22	45.83	54.00	8.17	330	AV	PASS	Horizontal	
3	2359.07	23.74	34.20	57.94	74.00	16.06	132	PK	PASS	Horizontal	
4	2359.07	11.26	34.20	45.46	54.00	8.54	325	AV	PASS	Horizontal	
5	2390.00	23.17	34.13	57.30	74.00	16.70	101	PK	PASS	Horizontal	
6	2390.00	11.51	34.13	45.64	54.00	8.36	218	AV	PASS	Horizontal	

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).



Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE 2M PHY)
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz		

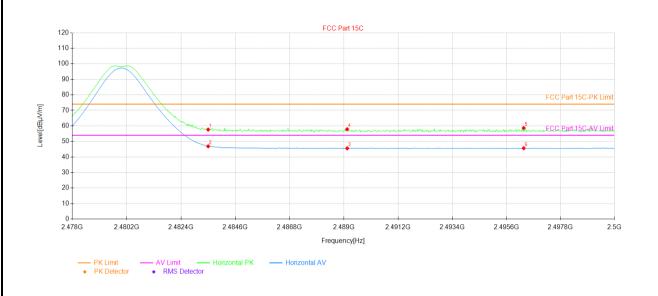


Susp	Suspected Data List											
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiat	Dolority		
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polarity		
1	2483.50	22.07	34.51	56.58	74.00	17.42	2	PK	PASS	Vertical		
2	2483.50	11.07	34.51	45.58	54.00	8.42	286	AV	PASS	Vertical		
3	2488.69	11.03	34.51	45.54	54.00	8.46	179	AV	PASS	Vertical		
4	2488.69	23.59	34.51	58.10	74.00	15.90	45	PK	PASS	Vertical		
5	2496.41	11.00	34.52	45.52	54.00	8.48	210	AV	PASS	Vertical		
6	2496.41	23.74	34.52	58.26	74.00	15.74	45	PK	PASS	Vertical		

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).



Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE 2M PHY)
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz		

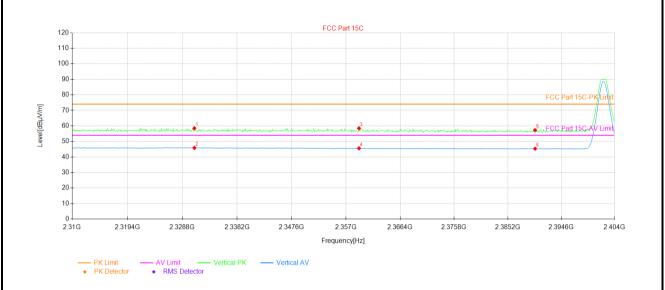


Susp	ected Data	List								
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiat	Dolority
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polarity
1	2483.50	23.13	34.51	57.64	74.00	16.36	213	PK	PASS	Horizontal
2	2483.50	12.36	34.51	46.87	54.00	7.13	298	AV	PASS	Horizontal
3	2489.13	11.08	34.51	45.59	54.00	8.41	208	AV	PASS	Horizontal
4	2489.13	23.38	34.51	57.89	74.00	16.11	0	PK	PASS	Horizontal
5	2496.30	24.13	34.52	58.65	74.00	15.35	347	PK	PASS	Horizontal
6	2496.30	11.14	34.52	45.66	54.00	8.34	235	AV	PASS	Horizontal

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE Coded PHY, S=2)
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz		

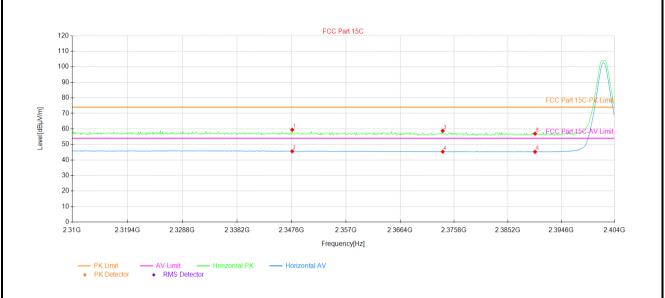


Susp	Suspected Data List										
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	D-44	\	Delevit.	
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polarity	
1	2330.87	24.27	34.22	58.49	74.00	15.51	120	PK	PASS	Vertical	
2	2330.87	11.65	34.22	45.87	54.00	8.13	360	AV	PASS	Vertical	
3	2359.26	24.24	34.20	58.44	74.00	15.56	125	PK	PASS	Vertical	
4	2359.26	11.37	34.20	45.57	54.00	8.43	316	AV	PASS	Vertical	
5	2390.00	23.16	34.13	57.29	74.00	16.71	106	PK	PASS	Vertical	
6	2390.00	11.22	34.13	45.35	54.00	8.65	17	AV	PASS	Vertical	

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE Coded PHY, S=2)
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz		

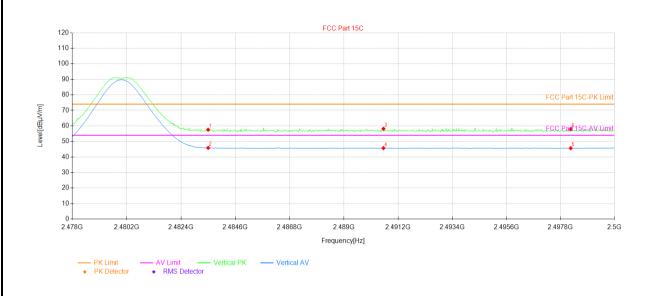


Susp	Suspected Data List											
NO.	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Dotoctor	Verdict	Polarity		
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	verdict			
1	2347.69	25.22	34.22	59.44	74.00	14.56	33	PK	PASS	Horizontal		
2	2347.69	11.37	34.22	45.59	54.00	8.41	150	AV	PASS	Horizontal		
3	2373.83	24.65	34.17	58.82	74.00	15.18	181	PK	PASS	Horizontal		
4	2373.83	11.20	34.17	45.37	54.00	8.63	136	AV	PASS	Horizontal		
5	2390.00	22.81	34.13	56.94	74.00	17.06	64	PK	PASS	Horizontal		
6	2390.00	11.15	34.13	45.28	54.00	8.72	254	AV	PASS	Horizontal		

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).



Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE Coded PHY, S=2)
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz		

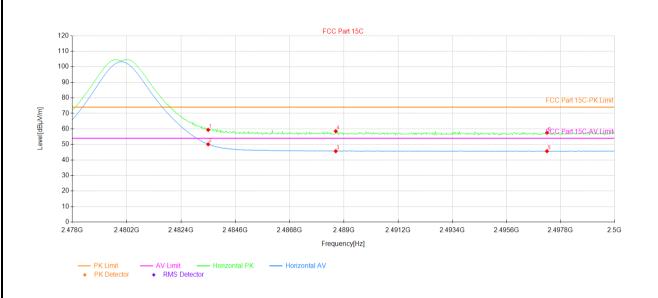


Susp	Suspected Data List										
NO.	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiet	Dolority	
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polarity	
1	2483.50	23.06	34.51	57.57	74.00	16.43	205	PK	PASS	Vertical	
2	2483.50	11.35	34.51	45.86	54.00	8.14	64	AV	PASS	Vertical	
3	2490.61	23.65	34.52	58.17	74.00	15.83	357	PK	PASS	Vertical	
4	2490.61	11.19	34.52	45.71	54.00	8.29	21	AV	PASS	Vertical	
5	2498.22	11.13	34.53	45.66	54.00	8.34	236	AV	PASS	Vertical	
6	2498.22	23.42	34.53	57.95	74.00	16.05	17	PK	PASS	Vertical	

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE Coded PHY, S=2)
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz		

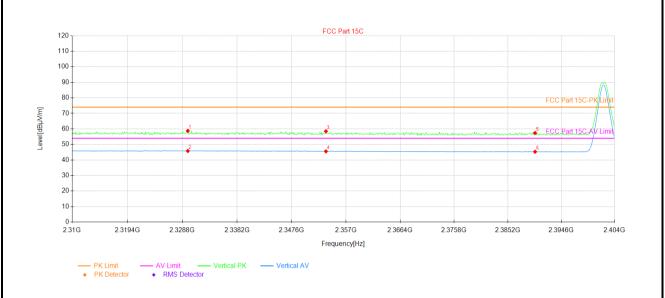


Susp	ected Data	List								
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiat	Polarity
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Folality
1	2483.50	24.88	34.51	59.39	74.00	14.61	293	PK	PASS	Horizontal
2	2483.50	15.60	34.51	50.11	54.00	3.89	302	AV	PASS	Horizontal
3	2488.67	11.16	34.51	45.67	54.00	8.33	270	AV	PASS	Horizontal
4	2488.67	24.02	34.51	58.53	74.00	15.47	166	PK	PASS	Horizontal
5	2497.25	11.16	34.53	45.69	54.00	8.31	234	AV	PASS	Horizontal
6	2497.25	23.00	34.53	57.53	74.00	16.47	85	PK	PASS	Horizontal

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE Coded PHY, S=8)
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz		

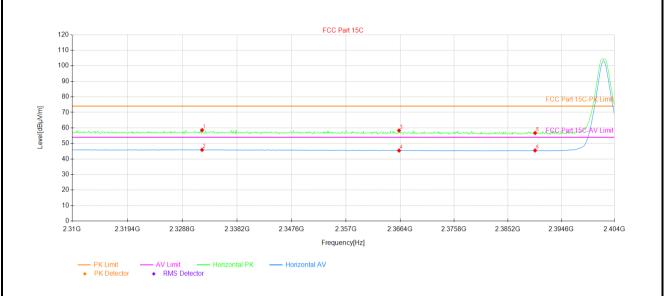


Susp	Suspected Data List											
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Datastas	\	Dalasific		
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polarity		
1	2329.74	24.51	34.22	58.73	74.00	15.27	188	PK	PASS	Vertical		
2	2329.74	11.60	34.22	45.82	54.00	8.18	153	AV	PASS	Vertical		
3	2353.52	24.26	34.21	58.47	74.00	15.53	238	PK	PASS	Vertical		
4	2353.52	11.36	34.21	45.57	54.00	8.43	220	AV	PASS	Vertical		
5	2390.00	23.27	34.13	57.40	74.00	16.60	17	PK	PASS	Vertical		
6	2390.00	11.19	34.13	45.32	54.00	8.68	44	AV	PASS	Vertical		

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).



Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE Coded PHY, S=8)
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz		

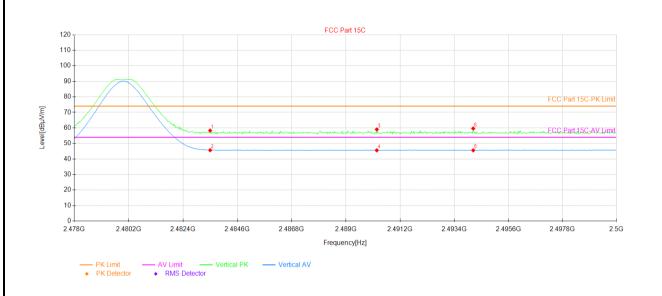


Susp	Suspected Data List											
NO	Freq.	req. Reading		Level	Limit	Margin	Angle	Detector	Vardiat	Polarity		
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polatity		
1	2332.18	24.36	34.22	58.58	74.00	15.42	225	PK	PASS	Horizontal		
2	2332.18	11.66	34.22	45.88	54.00	8.12	113	AV	PASS	Horizontal		
3	2366.21	24.15	34.18	58.33	74.00	15.67	19	PK	PASS	Horizontal		
4	2366.21	11.26	34.18	45.44	54.00	8.56	180	AV	PASS	Horizontal		
5	2390.00	22.59	34.13	56.72	74.00	17.28	180	PK	PASS	Horizontal		
6	2390.00	11.38	34.13	45.51	54.00	8.49	325	AV	PASS	Horizontal		

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).



Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE Coded PHY, S=8)
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz		

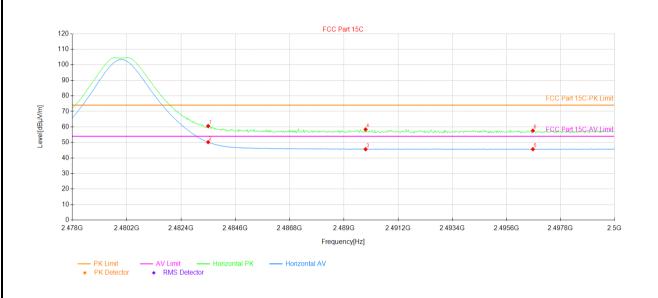


Susp	Suspected Data List													
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiat	Dolority				
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]		Verdict	Polarity				
1	2483.50	23.78	34.51	58.29	74.00	15.71	168	PK	PASS	Vertical				
2	2483.50	11.15	34.51	45.66	54.00	8.34	68	AV	PASS	Vertical				
3	2490.25	24.50	34.52	59.02	74.00	14.98	181	PK	PASS	Vertical				
4	2490.25	11.07	34.52	45.59	54.00	8.41	53	AV	PASS	Vertical				
5	2494.17	11.07	34.52	45.59	54.00	8.41	199	AV	PASS	Vertical				
6	2494.17	25.14	34.52	59.66	74.00	14.34	95	PK	PASS	Vertical				

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Robin	Test mode:	BLE Tx (LE Coded PHY, S=8)
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz		



Susp	Suspected Data List												
NO.	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Dotoctor	Verdict	Polarity			
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector					
1	2483.50	26.07	34.51	60.58	74.00	13.42	186	PK	PASS	Horizontal			
2	2483.50	15.69	34.51	50.20	54.00	3.80	302	AV	PASS	Horizontal			
3	2489.88	11.12	34.52	45.64	54.00	8.36	186	AV	PASS	Horizontal			
4	2489.88	23.86	34.52	58.38	74.00	15.62	262	PK	PASS	Horizontal			
5	2496.68	11.13	34.52	45.65	54.00	8.35	289	AV	PASS	Horizontal			
6	2496.68	23.08	34.52	57.60	74.00	16.40	88	PK	PASS	Horizontal			

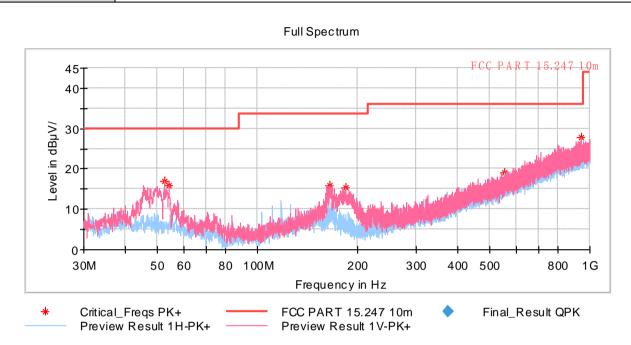
1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



# 5.5 Emissions in Non-restricted Frequency Bands

#### **Below 1GHz:**

Product Name:	AOA Tag	Product Model:	DSBC-230
Test By:	Kiran	Test mode:	BLE Tx (LE 1M PHY)
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical & Horizontal
Test Voltage:	AC 120/60Hz		



# Critical\_Freqs

Frequency	MaxPeak	Limit	Margin	Height	Pol	Azimuth	Corr.	Comment		
(MHz)	(dB µ V/m)	(dB µ V/m)	(dB)	(cm)		(deg)	(dB/m)			
52.455500	16.84	30.00	13.16	100.0	V	277.0	-16.4	16:52:05 - 2023/10/31		
54.153000	15.88	30.00	14.12	100.0	٧	260.0	-16.3	16:52:05 - 2023/10/31		
165.266500	15.85	33.50	17.65	100.0	٧	84.0	-14.9	16:52:05 - 2023/10/31		
183.745000	15.39	33.50	18.11	100.0	٧	192.0	-17.5	16:52:05 - 2023/10/31		
555.352000	19.02	36.00	16.98	100.0	Н	284.0	-8.0	16:52:05 - 2023/10/31		
944.516000	27.84	36.00	8.16	100.0	٧	342.0	0.0	16:53:15 - 2023/10/31		

## Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



## Above 1GHz:

		Test c	hannel: Lowest ch	nannel							
		Test channel: Lowest channel									
	Detector: Peak Value										
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization					
4804.00	50.74	-7.66	43.08	74.00	30.92	Vertical					
4804.00	50.54	-7.66	42.88	74.00	31.12	Horizontal					
		Det	ector: Average Va	lue							
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization					
4804.00	42.63	-7.66	34.97	54.00	19.03	Vertical					
4804.00	43.53	-7.66	35.87	54.00	18.13	Horizontal					
			channel: Middle ch								
		D	etector: Peak Valu	ıe							
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization					
4884.00	51.24	-7.77	43.47	74.00	30.53	Vertical					
4884.00	49.76	-7.77	41.99	74.00	32.01	Horizontal					
		Det	ector: Average Va	lue							
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization					
4884.00	42.00	-7.77	34.23	54.00	19.77	Vertical					
4884.00	42.63	-7.77	34.86	54.00	19.14	Horizontal					

	Test channel: Highest channel										
	Detector: Peak Value										
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization					
4960.00	50.63	-7.82	42.81	74.00	31.19	Vertical					
4960.00	49.46	-7.82	41.64	74.00	32.36	Horizontal					
		Det	tector: Average V	alue							
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization					
4960.00	43.28	-7.82	35.46	54.00	18.54	Vertical					
4960.00	44.16	-7.82	36.34	54.00	17.66	Horizontal					

#### Remark:

<sup>1.</sup> Level = Reading + Factor.

Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.



		В	LE Tx (LE 2M PH	IY)		
		Test o	hannel: Lowest cl	hannel		
		D	etector: Peak Valu	ue		
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization
4804.00	51.60	-7.66	43.94	74.00	30.06	Vertical
4804.00	51.08	-7.66	43.42	74.00	30.58	Horizontal
100 1100	01.00		ector: Average Va		00.00	Tionzontai
Frequency	Read Level	Factor	Level	Limit	Margin	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Polarization
4804.00	42.73	-7.66	35.07	54.00	18.93	Vertical
4804.00	44.08	-7.66	36.42	54.00	17.58	Horizontal
					l	
		Test o	channel: Middle ch	nannel		
		D	etector: Peak Val	ue		
Frequency	Read Level	Factor	Level	Limit	Margin	Delevization
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Polarization
4884.00	49.88	-7.77	42.11	74.00	31.89	Vertical
4884.00	49.60	-7.77	41.83	74.00	32.17	Horizontal
		Det	ector: Average Va	alue		
Frequency	Read Level	Factor	Level	Limit	Margin	Polarization
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Folalization
4884.00	42.32	-7.77	34.55	54.00	19.45	Vertical
4884.00	44.29	-7.77	36.52	54.00	17.48	Horizontal
		Test c	hannel: Highest c	hannel		
		D	etector: Peak Val	ue	T	•
Frequency	Read Level	Factor	Level	Limit	Margin	Polarization
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	1 oldiledion
4960.00	51.83	-7.82	44.01	74.00	29.99	Vertical
4960.00	50.94	-7.82	43.12	74.00	30.88	Horizontal
		Det	ector: Average Va	alue	I	
Frequency	Read Level	Factor	Level	Limit	Margin	Polarization
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	i Sidiizadoli

(MHz)

4960.00

4960.00

(dBµV)

41.47

42.72

(dBµV/m)

33.65

34.90

 $(dB\mu V/m)$ 

54.00

54.00

(dB)

20.35

19.10

(dB)

-7.82

-7.82

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Vertical

Horizontal

<sup>1.</sup> Level = Reading + Factor.

<sup>2.</sup> Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.



		BEL T	x (LE Coded PH)	Y, S=2)		
		Test c	channel: Lowest cl	nannel		
		D	etector: Peak Val	ue		
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization
4804.00	49.55	-7.66	41.89	74.00	32.11	Vertical
4804.00	51.73	-7.66	44.07	74.00	29.93	Horizontal
		Det	tector: Average Va	alue		
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization
4804.00	41.39	-7.66	33.73	54.00	20.27	Vertical
4804.00	44.17	-7.66	36.51	54.00	17.49	Horizontal
		Test o	channel: Middle ch	nannel		
			etector: Peak Val			
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization
4884.00	51.75	-7.77	43.98	74.00	30.02	Vertical
4884.00	49.83	-7.77	42.06	74.00	31.94	Horizontal
		Det	tector: Average Va	alue		
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization
4884.00	43.26	-7.77	35.49	54.00	18.51	Vertical
4884.00	43.13	-7.77	35.36	54.00	18.64	Horizontal
			hannel: Highest c			
Frequency	Read Level	Factor	etector: Peak Val	Limit	Margin	Polarization
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	
4960.00	51.32	-7.82	43.50	74.00	30.50	Vertical
4960.00	50.67	-7.82	42.85	74.00	31.15	Horizontal
			tector: Average Va		1	1
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization
4960.00	42.30	-7.82	34.48	54.00	19.52	Vertical
4960.00	42.39	-7.82	34.57	54.00	19.43	Horizontal

<sup>1.</sup> Level = Reading + Factor.

<sup>2.</sup> Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.



		BEL T	x (LE Coded PH	Y, S=8)					
		Test o	channel: Lowest cl	nannel					
Detector: Peak Value									
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization			
4804.00	51.55	-7.66	43.89	74.00	30.11	Vertical			
4804.00	50.65	-7.66	42.99	74.00	31.01	Horizontal			
		Det	tector: Average Va	alue					
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization			
4804.00	41.60	-7.66	33.94	54.00	20.06	Vertical			
4804.00	42.38	-7.66	34.72	54.00	19.28	Horizontal			
		Test	channel: Middle ch	pannel					
			etector: Peak Val						
Frequency	Read Level	Factor	Level	Limit	Margin				
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Polarization			
4884.00	51.54	-7.77	43.77	74.00	30.23	Vertical			
4884.00	51.60	-7.77	43.83	74.00	30.17	Horizontal			
.0000	5.1.55		tector: Average Va		33				
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization			
4884.00	42.47	-7.77	34.70	54.00	19.30	Vertical			
4884.00	43.66	-7.77	35.89	54.00	18.11	Horizontal			
		Tanka	h						
			hannel: Highest c						
	I 5		etector: Peak Val		T				
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization			
4960.00	50.99	-7.82	43.17	74.00	30.83	Vertical			
4960.00	50.54	-7.82	42.72	74.00	31.28	Horizontal			
		Det	ector: Average Va	alue					
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization			
4960.00	43.56	-7.82	35.74	54.00	18.26	Vertical			
	1				1	1 -			

4960.00

44.26

36.44

54.00

17.56

-----End of report-----

-7.82

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Horizontal

<sup>1.</sup> Level = Reading + Factor.

Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.