

TEST REPORT

Product Name : Small speakers
Trade mark : N/A
Model No. : P329.24X
Report Number : BLA-EMC-201910-A15-03
Date of sample receipt : October 12, 2019
Date of Test : October 12, 2019–October 22, 2019
Date of Issue : October 24, 2019
Test standard : EN62479:2010
Test result : PASS

Prepared for:

Prepared by:

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia

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Date: October 24, 2019



2 Version

Version No.	Date	Description
00	October 24, 2019	Original

BlueAsia

3 Contents

	Page
1 COVER PAGE.....	1
2 VERSION	2
3 CONTENTS	3
4 GENERAL INFORMATION.....	4
4.1 CLIENT INFORMATION	4
4.2 GENERAL DESCRIPTION OF E.U.T.	4
4.3 OPERATING MODES	5
4.4 DESCRIPTION OF SUPPORT UNITS.....	5
4.5 LABORATORY LOCATION	5
4.6 TEST INSTRUMENTS LIST.....	5
5 TECHNICAL REQUIREMENTS SPECIFICATION	6

4 General Information

4.1 Client Information

Applicant:	
Address of Applicant:	
Manufacturer:	
Address of Manufacturer:	
Factory:	
Adress:	

4.2 General Description of E.U.T.

Product Name:	Small speakers
Model No.:	P329.24X
Test Model No. :	P329.24X
Hardware version:	EPOT-M1
Software version:	5.0
Bluetooth Specification	
Operation Frequency :	2402MHz-2480MHz
Channel number :	79
Channel separation :	1MHz
Modulation	GFSK, $\pi/4$ DQPSK
Antenna Type :	PCB Antenna
Antenna gain :	-0.58dBi (declare by Applicant)

4.3 Operating Modes

Operating mode	Detail description
BT mode	Keep the EUT in continuously transmitting in BT mode

4.4 Description of Support Units

The EUT has been tested as an independent unit.

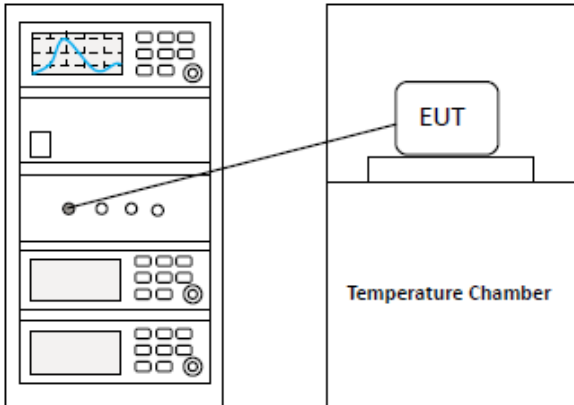
4.5 Laboratory Location

All tests were performed at:
BlueAsia of Technical Services(Shenzhen) Co., Ltd.
IOT Test Centre of BlueAsia
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China
Telephone: TEL: +86-755-28682673 FAX: +86-755-28682673
No tests were sub-contracted.

4.6 Test Instruments list

Conducted method:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
Spectrum Analyzer	Agilent	N9030A	MY50510123	05-24-2019	05-23-2020
Spectrum analyzer	Rohde & Schwarz	FSP40	100817	05-24-2019	05-23-2020
Vector Signal Generator	Agilent	E4438C	MY45092582	05-24-2019	05-23-2020
Signal Generator	Agilent	E8257D	MY44320250	05-24-2019	05-23-2020
Power Sensor	D.A.R.E	RPR3006W	17I00015SNO27	05-24-2019	05-23-2020
Power Sensor	D.A.R.E	RPR3006W	17I00015SNO28	05-24-2019	05-23-2020
DC Power Supply	LODESTAR	LP305DE	N/A	07-19-2019	07-18-2020
Temperature Humidity Chamber	Mingle	TH101B	N/A	07-19-2019	07-18-2020

5 Technical Requirements Specification

Teststandard:	EN 62479
Limit:	20mW
Test setup:	 The diagram illustrates the test setup. On the left is a power sensor unit with a display showing a waveform. A cable connects the sensor to a Temperature Chamber on the right. Inside the chamber, the Equipment Under Test (EUT) is positioned on a platform.
Test procedure:	1. Use a fast power sensor suitable for 2,4 GHz and capable of 1 MS/s. 2. Connect the power sensor to the transmit port, sample the transmit signal and store the raw data, every channel 25 bursts. Use these stored samples in all following steps. 3. Find the start and stop times of each burst in the stored measurement samples. 4. Between the start and stop times of each individual burst calculate the RMS power over the burst. Save these P_{burst} values, as well as the start and stop times for each burst. 5. The highest of all P_{burst} values (value "A" in dBm) will be used for maximum e.i.r.p. calculations. 6. Add the (stated) antenna assembly gain "G" in dBi of the individual antenna. The RF Output Power (P) shall be calculated using the formula below: $P = A + G$
Test Instruments:	See the section 4.6
Measurement Record:	Uncertainty: 1.5dB

Measurement Data

Maximum Emissions Level of Bluetooth				
Modulation	EIRP Level (dBm)	EIRP Level(mW)	Limit (mW)	Result
GFSK Mode	2.53	1.79	20	Pass
$\pi/4$ DQPSK Mode	3.25	2.11	20	Pass

*** End of Report ***

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