

TEST REPORT

APPLICANT : Dongguan jiasheng lighting technology Co., Ltd

PRODUCT NAME : Bluetooth Internet of Things Module

MODEL NAME : BM83

TRADE NAME : BM83

BRAND NAME : BM83

STANDARD(S) : ANSI/IEEE Std 149-2008

RECEIPT DATE : 2022-12-22

TEST DATE : 2022-12-23

ISSUE DATE : 2022-12-28

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1. Technical Information

Note: Provide by manufacturer.

1.1. Applicant and Manufacturer Information

Applicant:	Dongguan jiasheng lighting technology Co., Ltd
Applicant Address:	Shutian Road, Shutian village, Shutian Industry Park, Humen Town ,Dongguan City
Manufacturer:	Dongguan jiasheng lighting technology Co., Ltd
Manufacturer:	Shutian Road, Shutian village, Shutian Industry Park, Humen Town ,Dongguan City

1.2. Equipment Under Test (EUT) Description

Wireless Type	N/A
Test frequency	2300MHz -2550MHz
IMEI	N/A
Sample number	1#

2. Test Results

2.1.Applied Reference Documents

Leading reference documents for testing:

No.	Identity Document	Title
1	ANSI/IEEE Std 149-2008	IEEE Standard Test Procedures for Antennas

2.2.Test Conditions

Test Environment Conditions:

Relative Humidity:	25 ... 75 %
Temperature:	+10 ° C to +30 ° C

2.3.Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO. When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% Confidence intervals.

Item	Measurement Uncertainty(dB)
Gain	± 0.5
VSWR	± 0.2
Measurement Uncertainty(95% Confidence Interval) K=2	

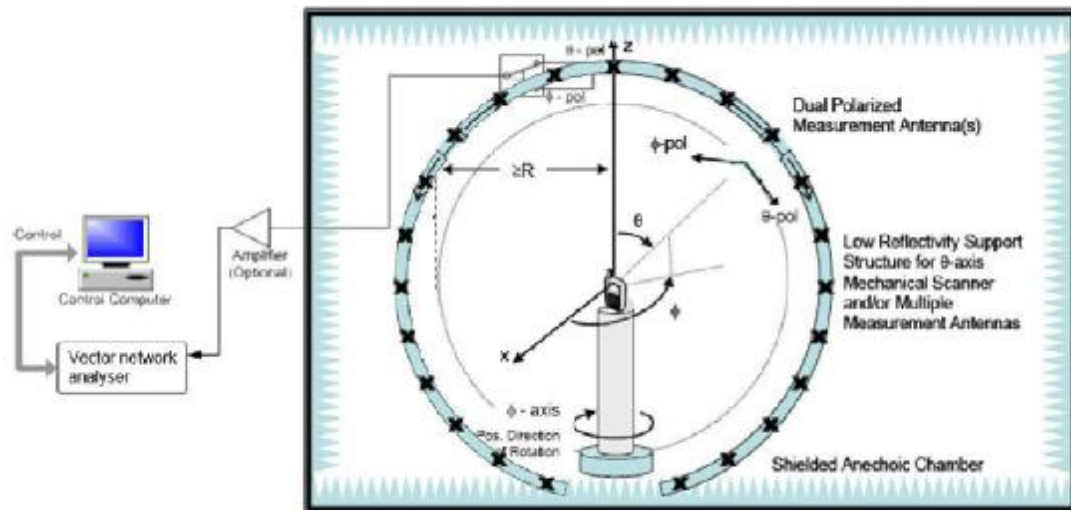
2.4.Test Results lists

2.4.1.Gain

Frequency	Efficiency (%)	Gain(dBi)
2300MHz	81.7	2.6383
2350MHz	79.47	2.4241
2400MHz	81.66	2.4297
2410MHz	81.88	2.4265
2420MHz	82.68	2.4387
2430MHz	83.64	2.4379
2440MHz	83.93	2.4389
2450MHz	82.83	2.4298
2460MHz	81.65	2.4264
2470MHz	80.27	2.1866
2480MHz	79.84	2.1466
2490MHz	78.65	2.0687
2500MHz	77.93	1.9572
2550MHz	72.96	1.8111

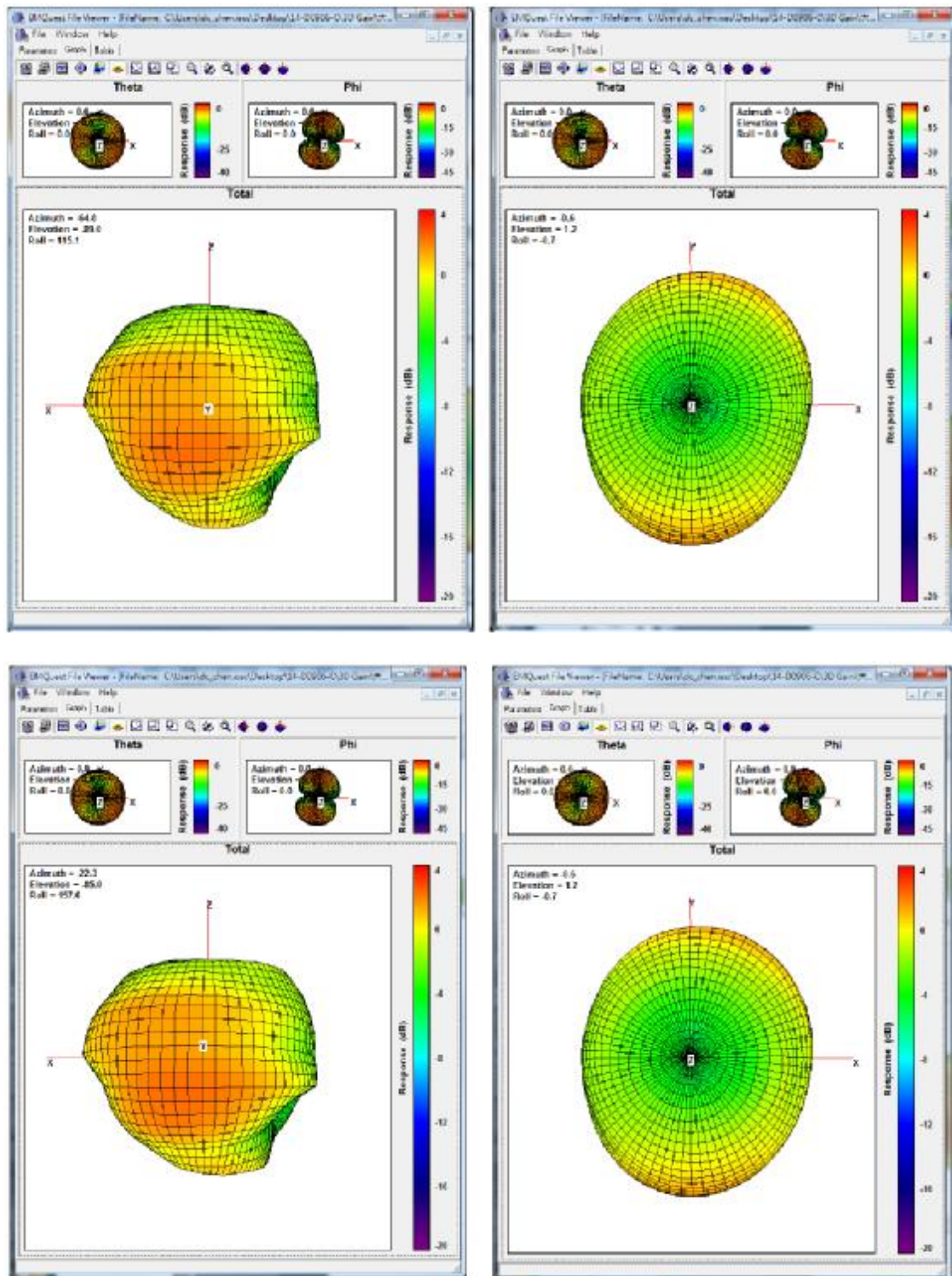
Annex A Photographs

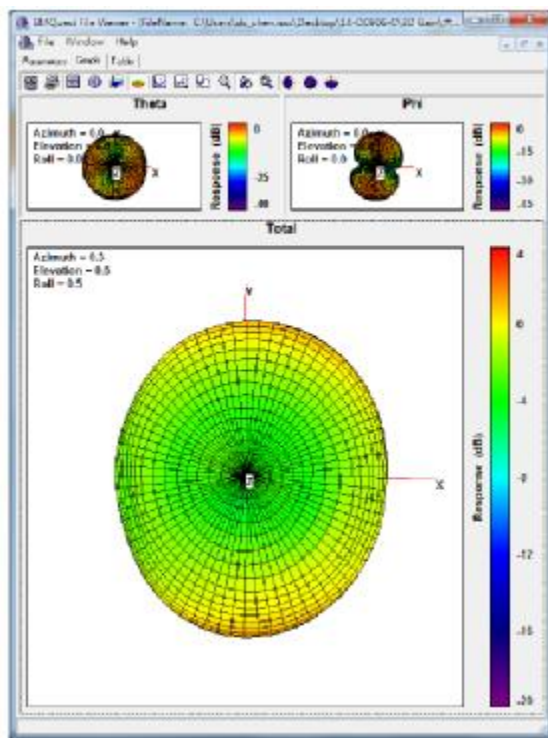
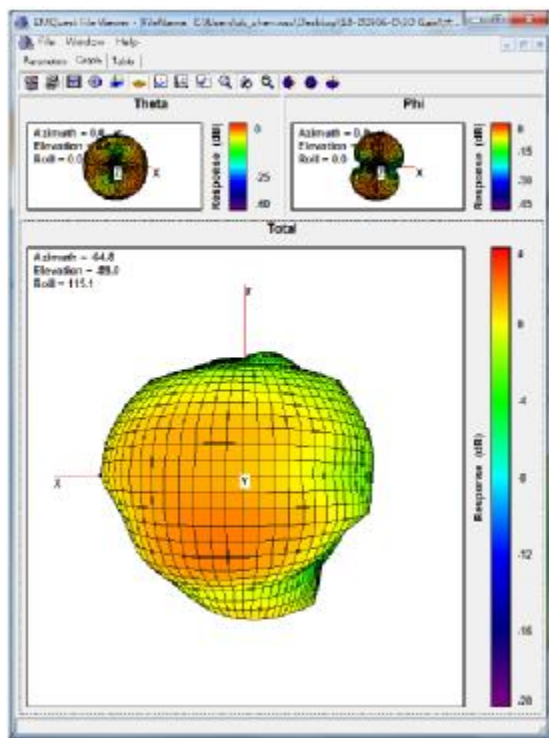
1. Test Setup



Annex B Figures

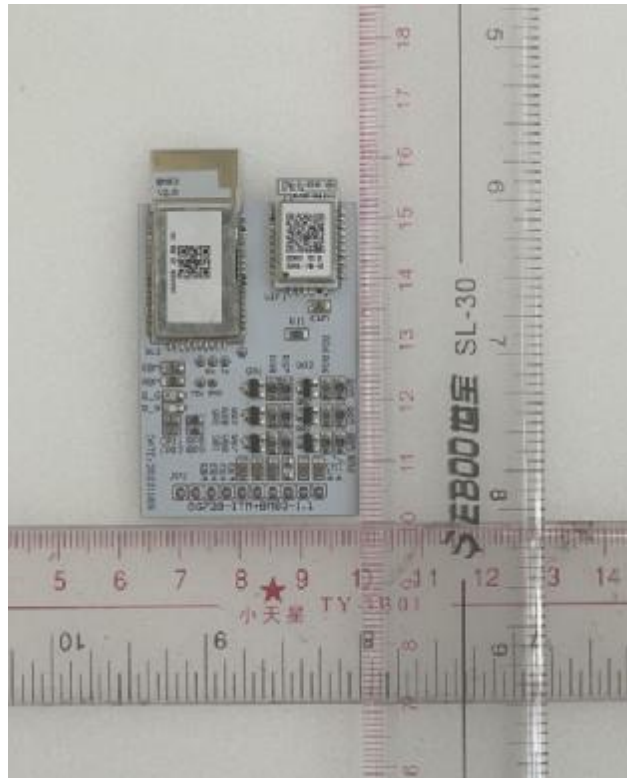
1. 3D Radiation Pattern





Annex C Photographs

EUT



Annex D General Information

1.1 Test Equipments Utilized

NO.	Equipment Name	Serial NO.	Type	Manufacturer	Cal.Date	Cal.Due Date
1	Vector Network Analyzer	MY46214666	E5071C	Agilent	2022.03.01	2023.02.28
2	OTA Chamber	N/A	SG24	Satimo	2021.01.12	2024.01.11
3	SatEnv	N/A	2.0.1.5 build 12	Satimo	N/A	N/A
4	SPM	N/A	1.11	Satimo	N/A	N/A