

ANTENNA PASSIVE TEST REPORT

Application No. ZEWM2208000916OA
Applicant Zhongshan Camry Electronic Co., Ltd.
Manufacturer Zhongshan Camry Electronic Co., Ltd.
Product Name Smart Body Fat Scale
Model No. iF1170C, iF1180C
Standards ANSI/IEEE Std 149-2008
Date Initial Sample(s) Received 2022.08.01
Testing Start Date 2022.08.08
Testing Finish Date 2022.08.08
Report Issue Date 2022.08.09

* In the configuration tested, the EUT detailed in this report complied with the standards specified above.

Prepared by

Reviewed By

Approved by



Revision Version

Report No.	Version	Date	Memo
ZEWM2208000916OA01	00	2022.08.09	Initial creation of report



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1 General Information

1.1 Testing Laboratory

Test Lab	SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
Address	No.1 Workshop, M-10, Middle section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057
Contact	Panta Sun
Tel.	+86 (0) 755 2601 2053
Fax	+86 (0) 755 2671 0594
E-mail	Panta.Sun@sgs.com

1.2 Details of Applicant

Applicant's Name	Zhongshan Camry Electronic Co., Ltd.
Applicant's Address	Baishawan Industrial Park, Qiwan Road East East District, Zhongshan Guangdong, China
Contact	xuchaoquan
Tel.	13924901296
Fax	N/A
E-mail	xucg@camry.com.cn

1.3 Details of Manufacturer

Manufacturer's Name	Zhongshan Camry Electronic Co., Ltd.
Manufacturer's Address	Baishawan Industrial Park, Qiwan Road East East District, Zhongshan Guangdong, China
Contact	xuchaoquan
Tel.	13924901296
Fax	N/A
E-mail	xucg@camry.com.cn



1.4 General Description of EUT

Device Description:	Smart Body Fat Scale
Device Manufacturer:	Zhongshan Camry Electronic Co., Ltd.
Device Model:	iF1170C, iF1180C
Hardware Version:	N/A
Software Version:	N/A

1.5 Test Procedure

Testing is performed according to the **ANSI/IEEE Std 149-2008**.



1.6 Test Specification

Identity	Document Title
ANSI/IEEE Std 149-2008	IEEE Standard Test Procedures for Antennas

1.7 Laboratory Environment

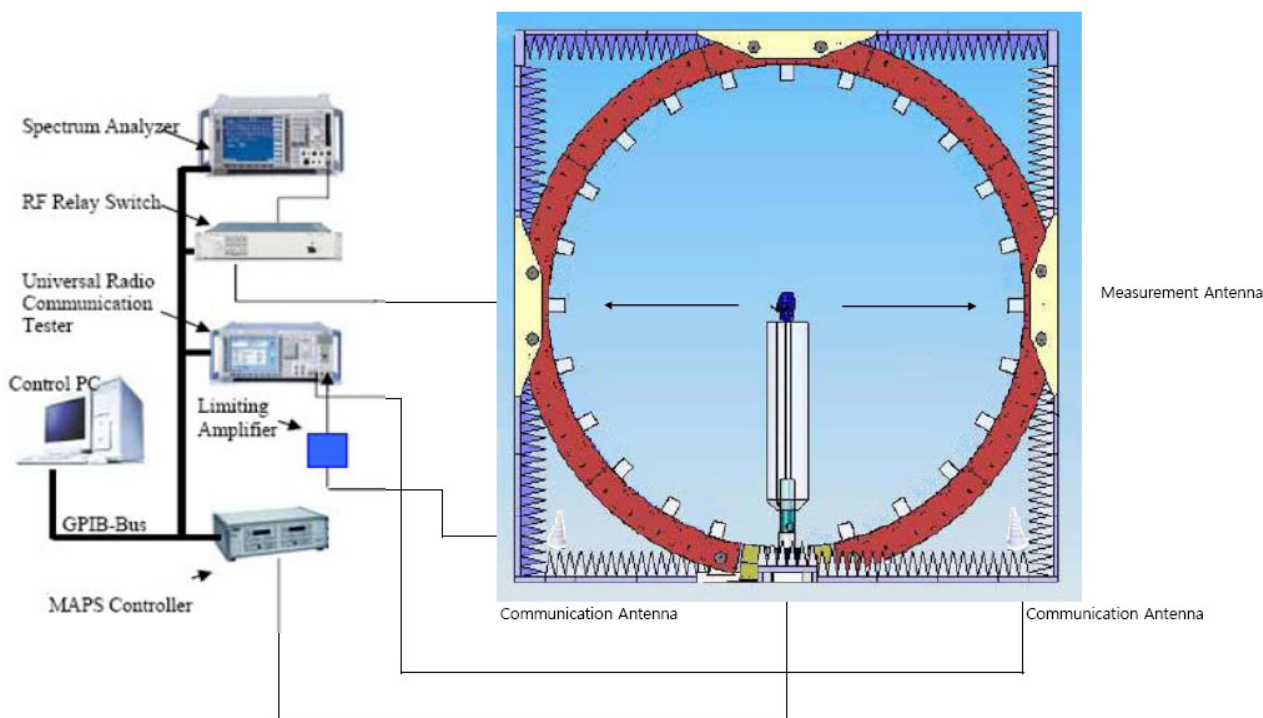
Temperature	Min. =19°C , Max. = 25°C	
Relative humidity	Min. =40% , Max. =72%	
Shield effect	0.7-6GHz	> 100dB
Ground resistance	<0.5Ω	



2 OTA Measurements System Configuration

2.1 Test Configuration

Great-Circle-Cut method is used to measure the antenna 3D GAIN of EUT in OTA qualified anechoic chamber. Equipment Under Test (EUT) geometry centre vertical projection at the centre of platform, the distance from EUT to measurement antenna is 5m



F-1. OTA Measurement System Configuration



3 Test Equipment List

Type of Equipment	Model Number	Manufacture	Calibration Date	Valid Period
Network Analyzer	E5071C S/N MY46523591	Keysight	2022/4/11	2023/4/10
Quad-Ridge Horn Antenna 700 MHz-10 GHz	EMCO 3164-08 S/N 161915	ETS-Lindgren L.P.	N/A	N/A
MAPS Controller	EMCENTER S/N 160485	ETS-Lindgren L.P.	N/A	N/A



4 Measurement Uncertainty

Item	2400-2500 MHz (dB)
Gain	0.88
Efficiency	0.88
Measurement Uncertainty (95% CONFIDENCE INTERVAL) K=2	



5 Test Results

Free Space			
Frequency (MHz)	Efficiency (dB)	Efficiency (%)	Gain (dBi)
2350	-7.42	18.12	-0.57
2355	-7.42	18.12	-0.67
2360	-7.27	18.76	-0.47
2365	-7.40	18.21	-0.69
2370	-7.46	17.95	-0.74
2375	-7.57	17.49	-0.93
2380	-7.59	17.40	-0.96
2385	-7.64	17.21	-0.98
2390	-7.68	17.05	-1.08
2395	-7.53	17.65	-0.90
2400	-7.58	17.47	-1.05
2402	-7.54	17.64	-0.95
2405	-7.46	17.97	-0.91
2410	-7.49	17.83	-0.97
2415	-7.56	17.53	-0.97
2420	-7.71	16.94	-1.13
2425	-7.72	16.90	-1.07
2430	-7.67	17.08	-1.00
2435	-7.56	17.55	-0.90
2440	-7.38	18.26	-0.77
2441	-7.37	18.31	-0.75
2445	-7.31	18.58	-0.69
2450	-7.22	18.98	-0.66
2455	-7.13	19.37	-0.53
2460	-7.08	19.58	-0.51
2465	-6.93	20.27	-0.27
2470	-6.94	20.21	-0.26
2475	-6.77	21.05	-0.07
2480	-6.80	20.92	-0.10
2482	-6.76	21.10	-0.16
2485	-6.68	21.48	-0.07
2490	-6.60	21.88	0.13
2495	-6.39	22.96	0.14
2500	-6.16	24.20	0.55

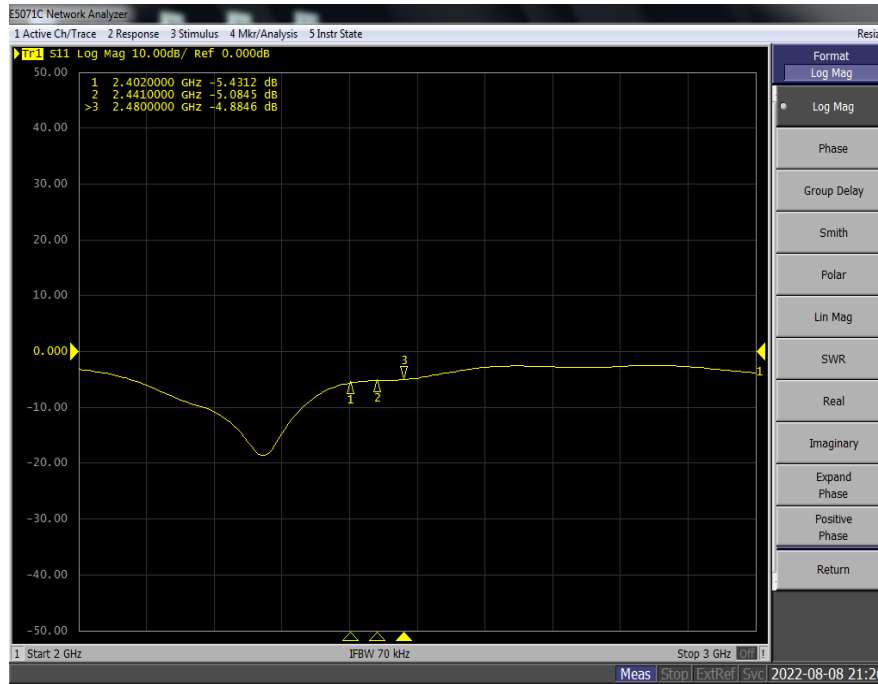


2505	-6.06	24.75	0.48
2510	-5.98	25.22	0.78
2515	-6.18	24.08	0.57
2520	-6.26	23.65	0.53
2525	-6.31	23.38	0.50
2530	-6.23	23.81	0.45
2535	-6.13	24.38	0.59
2540	-6.09	24.63	0.42
2545	-5.87	25.89	0.74
2550	-5.90	25.69	0.66
2555	-5.79	26.39	0.86
2560	-5.83	26.11	0.76
2565	-5.75	26.59	0.77
2570	-5.74	26.70	0.86
2575	-5.78	26.44	0.64
2580	-5.56	27.77	0.82

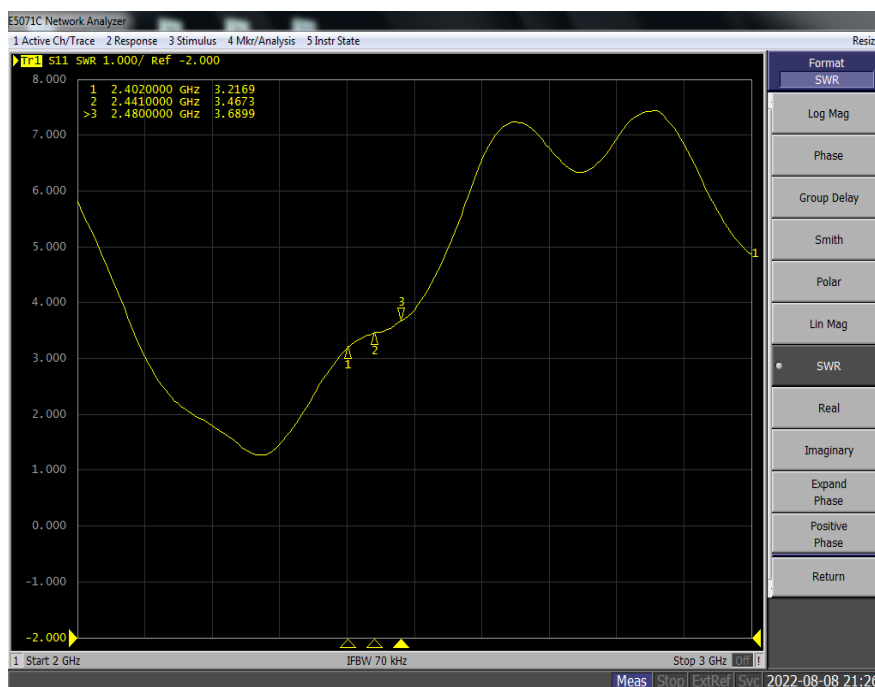


6 Pattern Plots

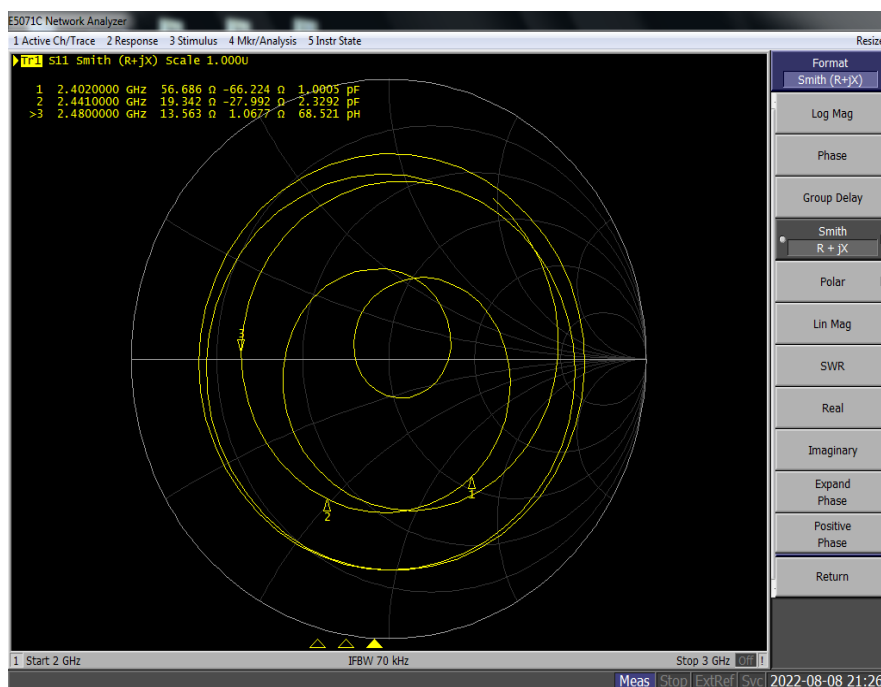
6.1 Return Loss



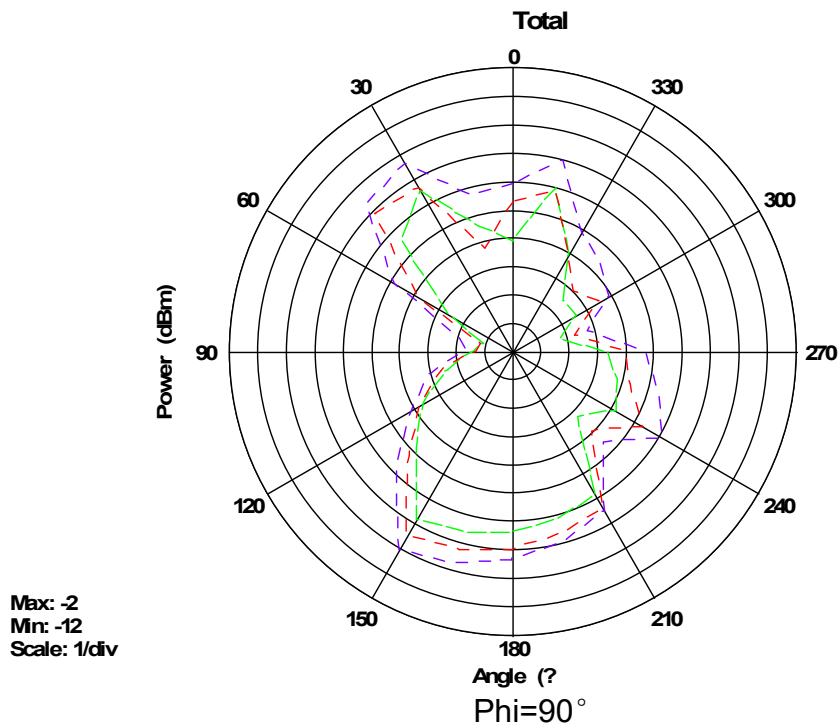
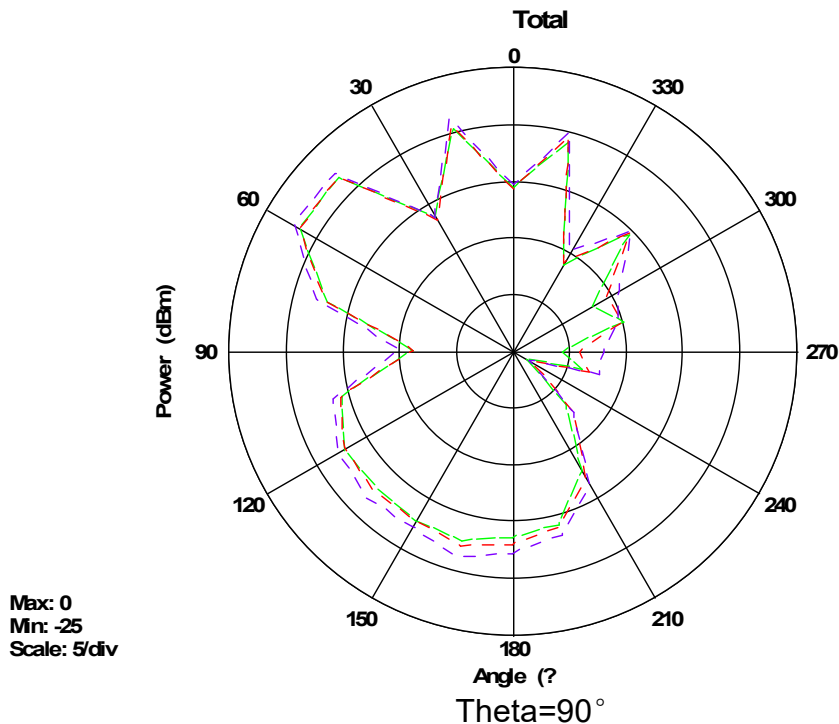
6.2 VSWR



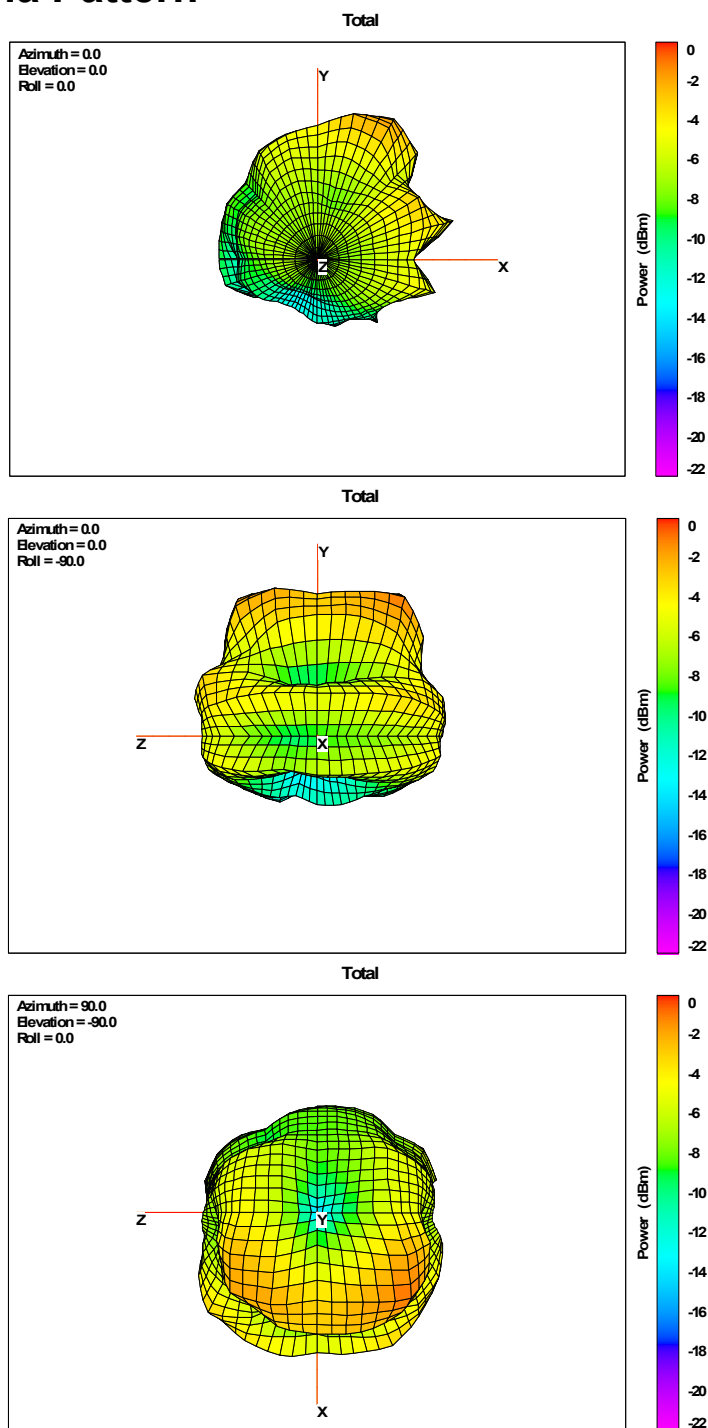
6.3 Stimulus



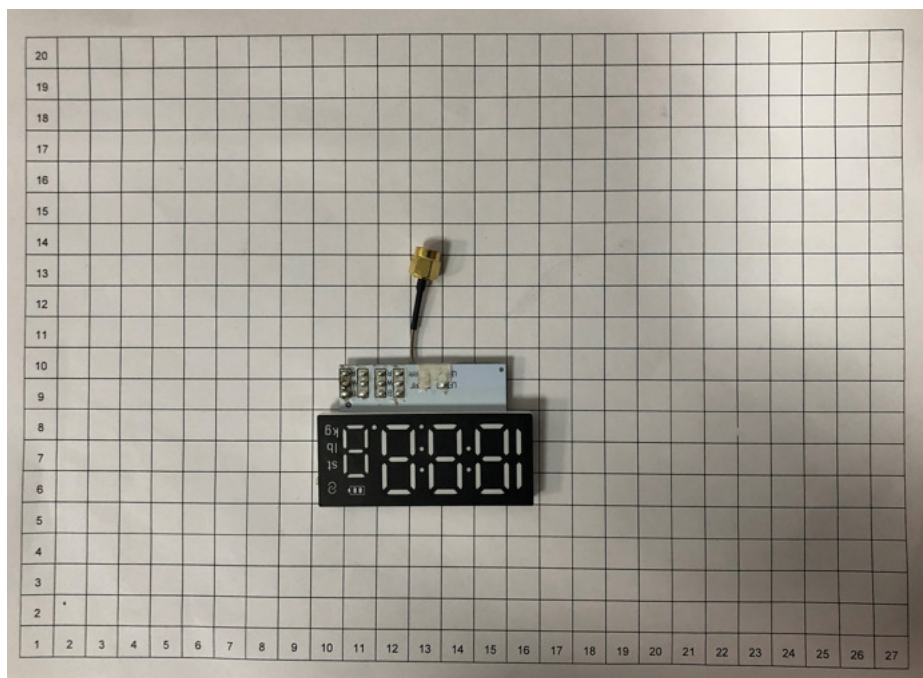
7 2-D Antenna Pattern



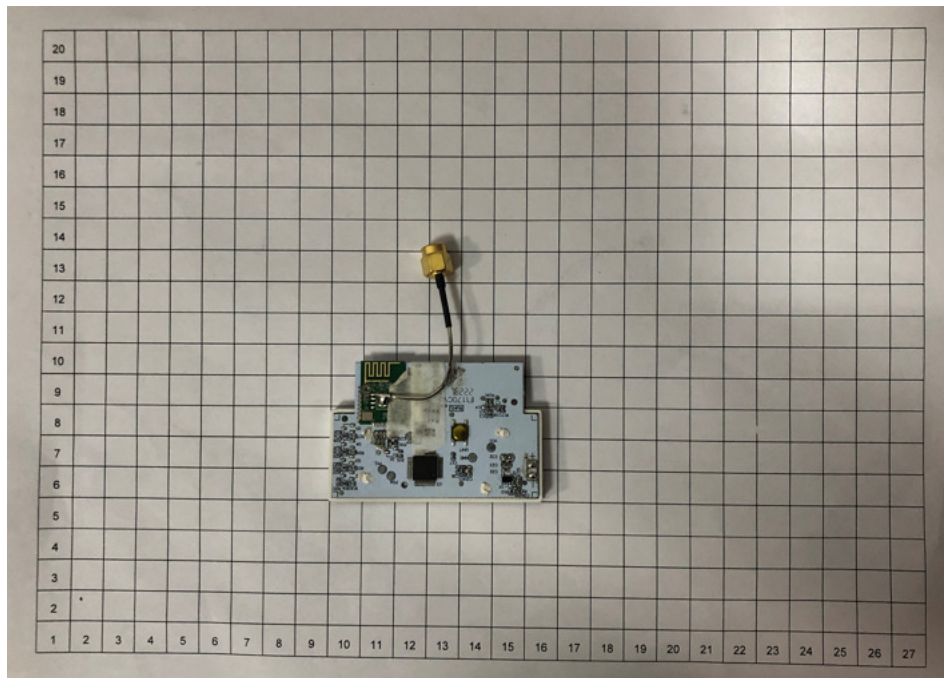
8 3-D Antenna Pattern



9 The EUT and Test Configuration

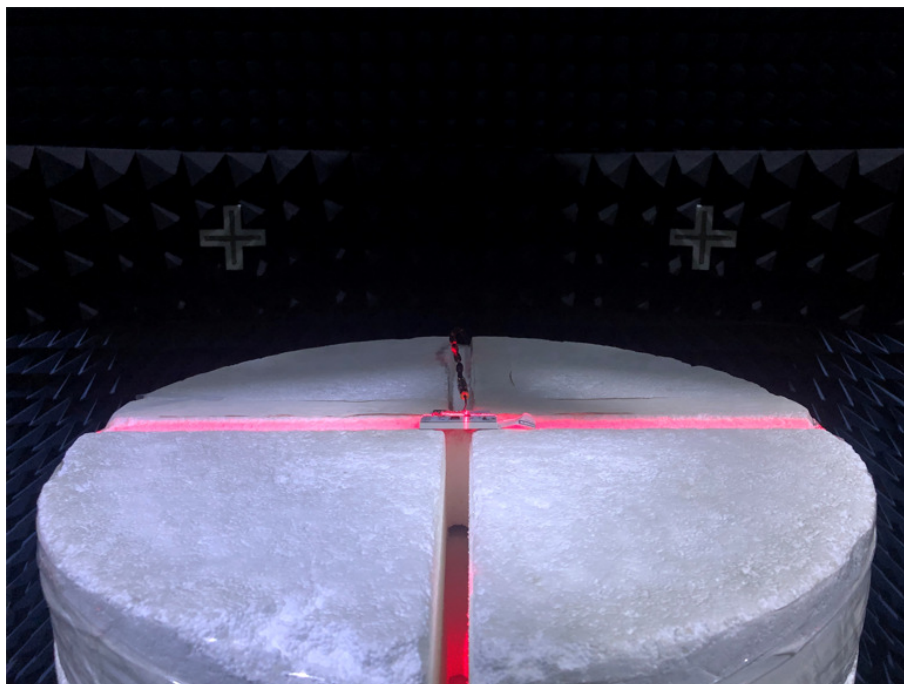


Front Side of EUT



Back side of EUT





Free Space View



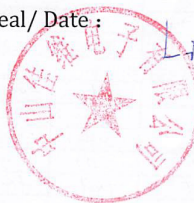
10 Appendix

Differentiation Declaration of Product Model

The Smart Body Fat Scale model iF1170C and model iF1180C are owned by our company (Zhongshan Camry Electronic Co.,Ltd).

For this two models, the differences between them are only model name, appearance and colors, but their circuit board, schematic diagram are the same. SGS Guangzhou Laboratory please issues the report according to the actual situation. Any legal liability arising from other differences between the two models shall be borne by our company.

Signature Statement/Company Seal/ Date:



Xiao Chen

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