

Customer : LG

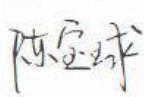
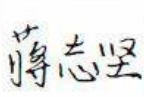
Approval No.		ISSUE	1.0
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Specifications for Approval

Product Name : 17Z90SP ANTENNA, ASSY
Vendor Model Name : LUXSHARE-ICT
Customer Part No. : EAA65985901
Vendor P/N : L1LRF016-CS-H

Condition : 1. _____
2. _____
3. _____
4. _____

The product above is approved.

LG MC Approval	Category	Checked	Reviewed	Agreed	Approved
	Name				
	Signature				
Vendor Approval	Category	Designed	Checked	Agreed	Approved
	Name	郭林	陈宝球	蒋志坚	李坤松
	Signature				

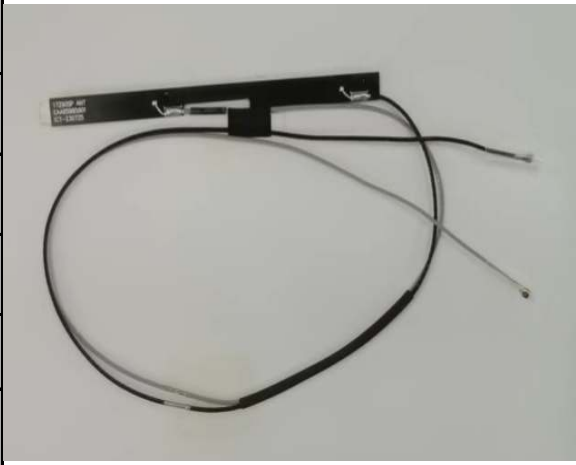
Vendor Name :LUXSHARE-ICT
Address :BaiYun Road, Industrial Park West Area, Ji
An City, JiangXi Province, 343100, China
XianMao Road, Economic Development Zone, Bo
zhou City, Anhui Province, 236800, China
Building A, West Sanyo New Industrial Zone,
oyster I, Shajing Street, Baoan District, S
henzhen, China



17Z90SP ANTENNA, ASSY

Product Feature and Image

PRODUCT NAME	17Z90SP ANTENNA, ASSY	
Customer P/N	EAA65985901	
Vendor P/N	L1LRF016- CS- H	
NET WEIGHT	1. 76g+/- - 10%	
SIZE	CABLE	L=277MM L=324MM
	PCB	L*W=75*5MM



P/N: L1LRF016-CS-H	SPECIFICATION MODEL NAME: 17Z90SP ANTENNA, ASSY	REV.NO:1.0
SPECIFICATION		
Test items		
1) Apperance and structure check		
Check item	Judgement	
Visual Inspection	The shape, structure, and color should be consistent with the limit sample and related specifications	
Standard	These defects should not be allowed such as damage, correosion, sink, scratches, etc.	
2) Dimension Check : Measuring improtant dimensions		
Dimensions should meet the requirements of the acknowledgment		
3) Mate / Unmating Force : mate connector with a suitable gauge at rate of 25±3 mm/min.		
measure force when gauge reaches surface of connector.		
mating Force	unmating Force	
30N (or 3000g) Max	5 ~ 20 N (or 500g ~ 2000g) 3 ~ 20 N (or 300g ~ 2000g) Final 30 Cycles	
4) Disintegration : Parts are allowed to be chiseled, not inserted, dirty etc.		
soldering state of PCB like cold welding, less welding, over welding are not allowed. The length of the parts should be suitable.		
and parts can not be touched each other.		
5) Tape adhesion : Double Sided tape should be not slipped		
should be satisfied standard specification.		
6) VSWR		
Test equipment : Network Analyzer equipment		
Frequency(unit MHz)	MAIN	AUX
VSWR	2.45~3.0GHZ<10 5.0~5.9GHZ<5 6.31~7.2GHZ<5	2.45~3.0GHZ<8 5.4~5.9GHZ<5 6.31~7GHZ<5

P/N: L1LRF016-CS-H	SPECIFICATION MODEL NAME: 17Z90SP ANTENNA, ASSY	REV.NO:1.0
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SPECIFICATION

Test items

7) Gain

Test equipment : Network Analyzer equipment

Frquency(MHZ)	Efficiency(%)
2400	>30
2450	>30
2500	>30
5150	>30

8) Thermal Shock

Condition	Temperature : 85°C (30min), -40°C (30min) 10 Cycles. Being Placed 2 Hours
Judgement	Product’s mechanism and VSWR should be OK.

9) High Temperature

Condition	Temperature : 80°C, 96H, Being Placed 2 Hours.
Judgement	Product’s mechanism and VSWR should be OK.

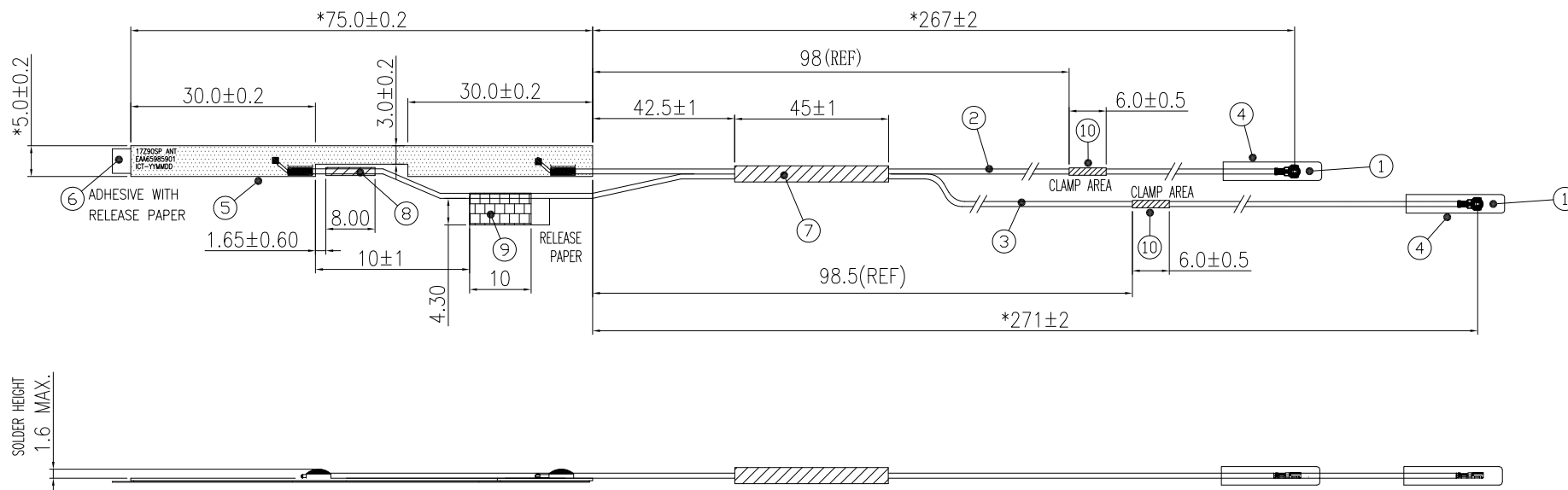
10) Low Temperature

Condition	Temperature : -20°C, 96H, Being Placed 2 Hours.
Judgement	Product’s mechanism and VSWR should be OK.

P/N: L1LRF016-CS-H	SPECIFICATION MODEL NAME: 17Z90SP ANTENNA, ASSY	REV.NO:1.0
SPECIFICATION		
Test items		
12) High Temperature and humidity test		
Condition	Temperature : 40°C, Humidity : 90 – 95% 96H, Being Placed 2 Hours.	
Judgement	Product’s mechanism and VSWR should be OK.	
13) Virbration Test		
Condition	Class V3 [0.27 Grms, 10-500Hz, 50min, Per 3 axes (X,Y,Z)]	
Judgement	Product’s mechanism and VSWR should be OK.	
14) Drop Test		
Condition	Height : 100cm to Iron Plate (Thickness : 5mm or more) one edge/Three corners/six faces are once total : 10 times	
Judgement	there should be no crack and or damage parts.	

RoHS + HF

REV	DESCRIPTION	DESIGN	DATE
X1	NEW DRAWING	JACK	2023.06.25
X2	UPDATED BOM	JACK	2023.07.12
X3	ADD TOLERANCE	JACK	2023.07.31



備註:

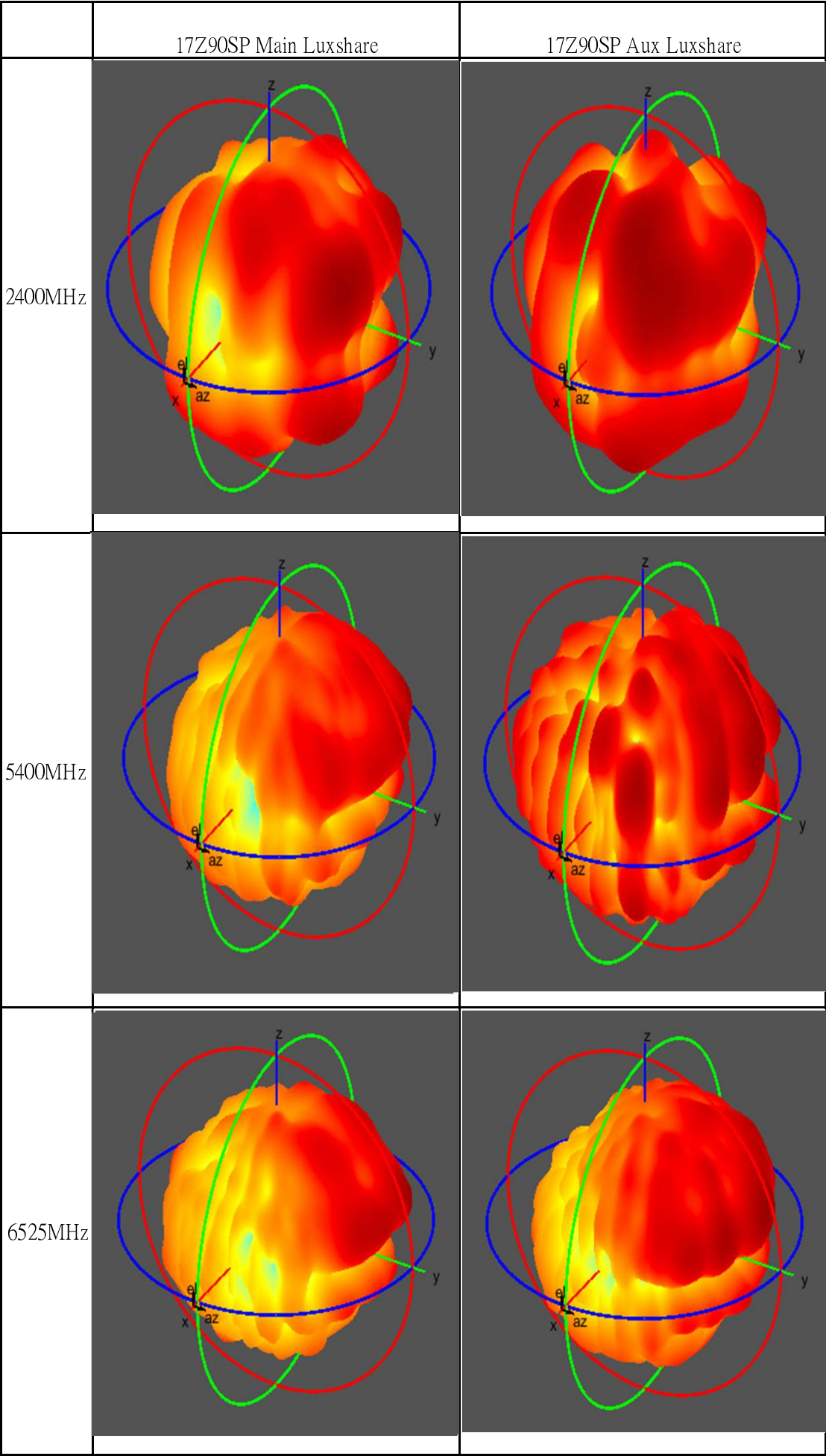
1. 電氣特性必須100%測試, 標註*的尺寸須做重點檢驗(SPC)
2. 所有焊接處焊錫不可超出PCB及塑件外
3. 焊接處焊錫不可超出PCB及塑件外
4. 線材焊接處焊錫不可超出鍍金區域範圍
5. 焊錫不可有虛焊, 假焊, 錫尖, 汙點等不良
6. 焊錫表面需均勻且光滑飽滿
7. 本產品使用原物料及製程必須符合立訊"QW-Q-043"環境管理物質相關規定
8. 此產品及其附屬包裝材料的均質成份須滿足無鹵管制要求:
BR<900PPM, CL<900PPM, BR+CL<1500PPM

10	058-20G1-0031	CABLE CLIP	COPPER ALLOY, GOLD FLASH, FOR 0.81 CABLE	2
9	---	ACETATE TAPE	L=10mm	1
8	---	HEAT-SHRINKING TUBE	L=8mm, COLOR : BLACK	1
7	---	HEAT-SHRINKING TUBE	L=45mm, COLOR : BLACK	1
6	---	ADHESIVE	3M 9888T T=0.15MM L74mm x W4mm	1
5	---	PCB	FR4 , L75 x W5 x T 0.4mm	1
4	---	TRANSPARENT TUBE	L=16MM	2
3	---	AUX CABLE	DIA. 0.81MM SINGLE ENDED COAXIAL LOW LOSS CABLE (COLOR:GRAY)	1
2	---	MAIN CABLE	DIA. 0.81MM SINGLE ENDED COAXIAL LOW LOSS CABLE (COLOR:BLACK)	1
1	---	CONNECTOR	I-Pex 20572 FOR CABLE DIA. 0.81MM PLUG CONNECTOR	2

ITEM	PART NO	NAME	DESCRIPTION	Q'TY
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TOLERANCE(UNLESS SPECIFIED)		CUSTOMER P/N: EA465985901	LUXSHARE-ICT
*X	±0.5		
*X.X	±0.25		
*X.XX	±0.10		
*X.XXX	±0.05	APPD: ANDERSON	TITLE: 17Z90SP ANTENNA, ASSY
UNITS:	mm		
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF LUXSHARE-ICT AND SHALL NOT BE REPRODUCED, COPIED OR CLUED IN ANY MANNER, WITHOUT THE PRIOR WRITTEN CONSENT OF LUXSHARE-ICT.		CHKD: JACK	PART NO: L1LRF016-CS-H
		DRAW: JACK	SCALE SHEET SIZE REV 1:1 1/1 A4 X3

	Main			Aux		
Frequency (MHz)	Peak gain (dBi)	Efficiency (dB)	Efficiency (%)	Peak gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	5.813	-3.215	47.695	5.132	-3.172	48.169
2450	3.347	-4.924	32.185	2.955	-4.825	32.923
2500	0.679	-6.498	22.397	0.944	-6.952	20.173
5150	2.506	-3.708	42.578	3.566	-4.245	37.623
5250	2.194	-3.512	44.547	4.988	-3.830	41.402
5350	3.567	-4.445	35.932	5.712	-4.546	35.104
5470	3.171	-5.787	26.380	3.754	-4.557	35.022
5600	3.047	-4.844	32.777	2.810	-4.794	33.160
5725	3.224	-5.117	30.785	0.502	-6.123	24.416
5785	3.558	-4.807	33.062	-0.056	-6.122	24.421
5800	3.783	-4.675	34.084	-0.409	-5.978	25.249
5850	4.741	-4.345	36.769	0.850	-5.544	27.898
5925	3.067	-3.930	40.457	1.324	-5.510	28.120
6025	3.313	-3.758	42.089	2.275	-7.036	19.790
6125	2.951	-4.352	36.712	2.380	-6.229	23.830
6225	4.728	-5.475	28.344	1.790	-6.694	21.410
6325	4.000	-5.747	26.623	1.277	-7.140	19.319
6425	3.299	-6.714	21.309	3.020	-5.960	25.351
6525	2.456	-7.718	16.913	0.810	-7.642	17.209
6625	1.446	-8.061	15.627	-0.314	-8.912	12.847
6725	1.770	-7.866	16.345	1.870	-7.860	16.370
6825	1.036	-8.564	13.918	1.129	-8.539	14.000
6925	1.097	-8.418	14.396	1.120	-8.284	14.845
7025	3.194	-7.052	19.716	1.471	-7.045	19.748
7125	2.120	-8.182	15.199	1.589	-8.359	14.591



16Z90SP&17Z90SP

2023/11/22

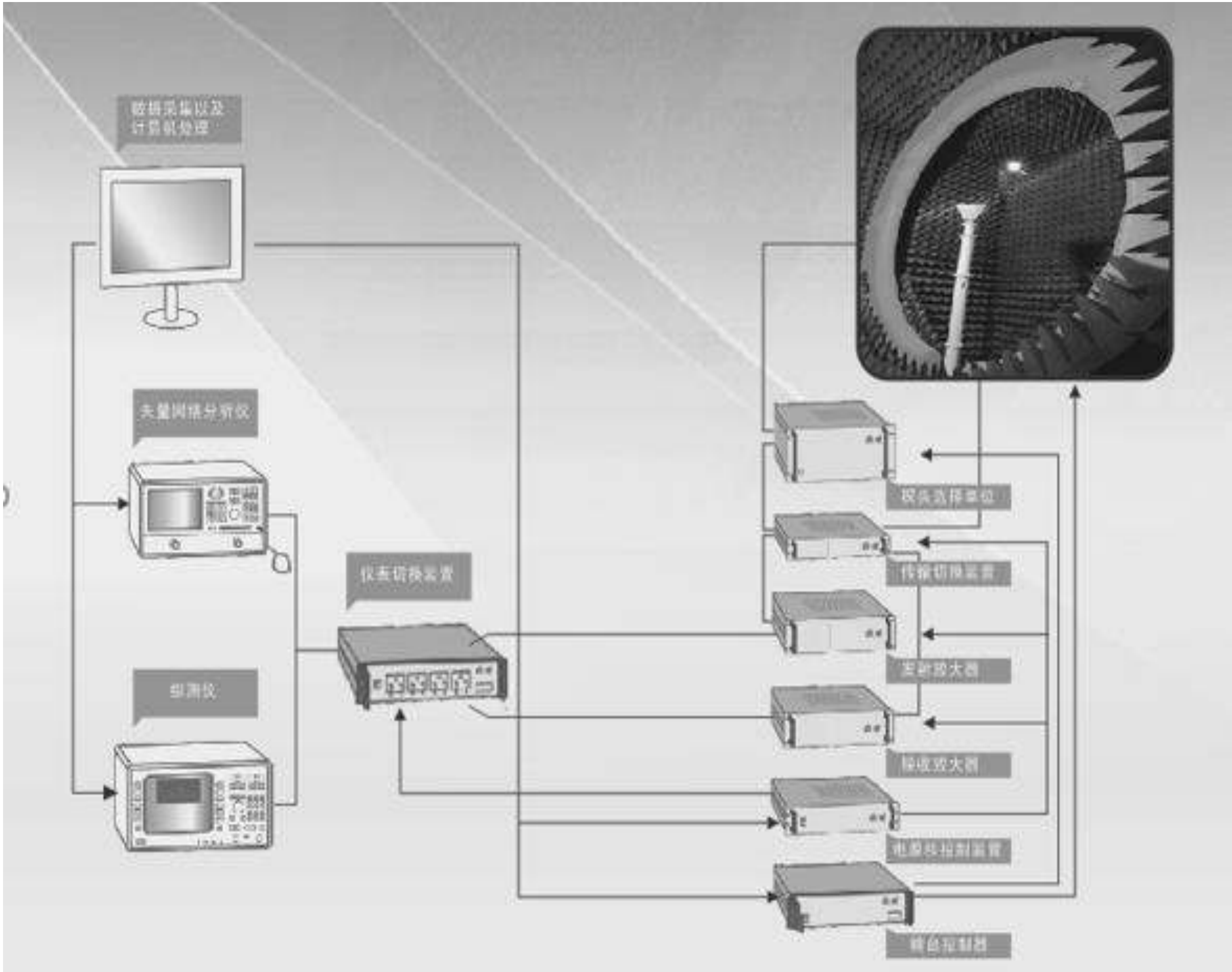
Presented by: Luxshare Antenna Team



LUXSHAREICT

A graphic element consisting of a network of interconnected nodes (circles and squares) in blue and yellow, positioned above the "ICT" part of the Luxshare logo.

测试环境 시험환경

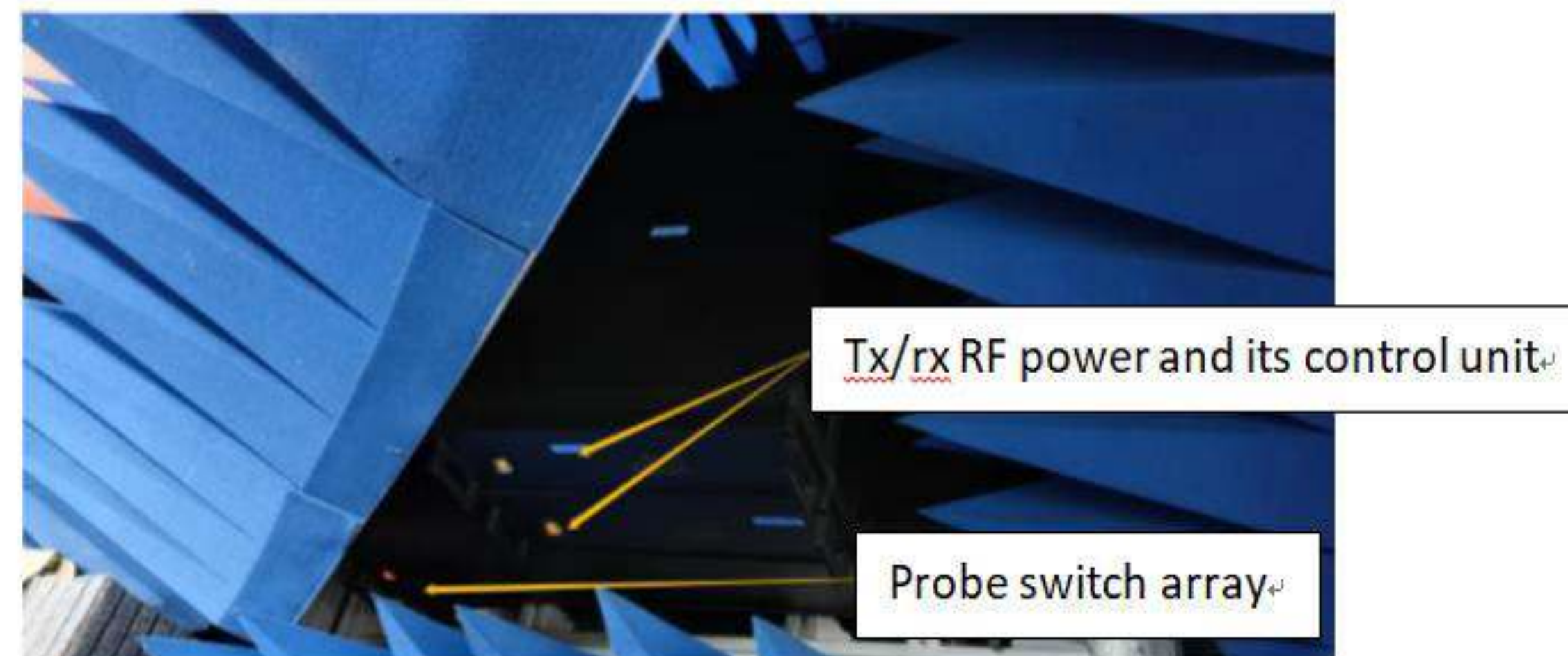
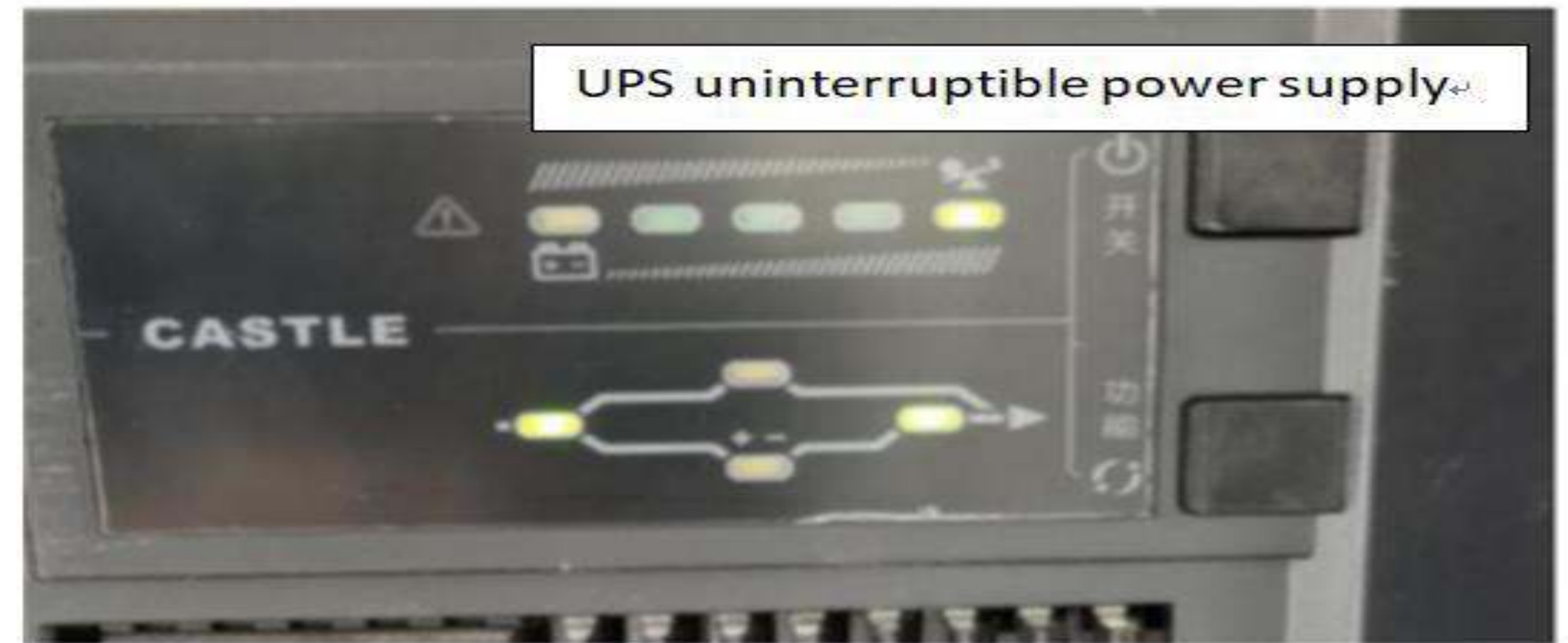
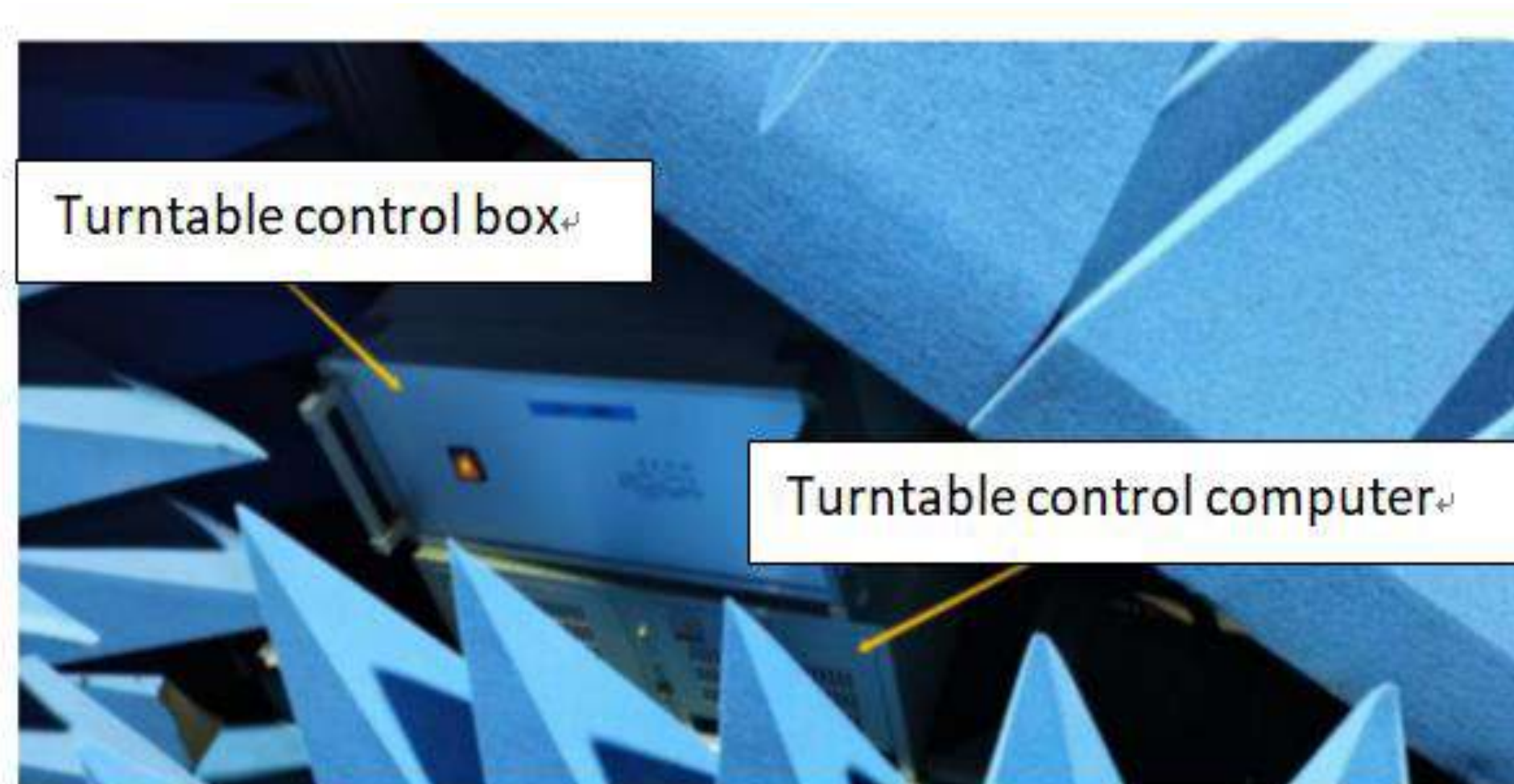


Test setup

Number	Device	Type/Model	Serial	Manufacturer	Cal.Date	Cal.Due Date
1	EMT24 Chamber	EM-testing	1603000653	EMT	2021/9/30	2023/12/31
2	Turntable control box	EM-testing	1603000653	EMT	2022/11/1	2023/11/1
3	Turntable control computer	EM-testing	1603000653	EMT	2022/11/1	2023/11/1
4	Tx/rx RF power and its control unit	EM-testing	1603000653	EMT	N/A	N/A
5	Tx/rx RF power and its control unit	EM-testing	1603000653	EMT	N/A	N/A
6	Test system host	EM-testing	1603000653	EMT	N/A	N/A
7	Network analyzer	E5071C	1603000653	EMT	2022/11/1	2023/11/1
8	RF line TX	EM-testing	1603000653	EMT	N/A	N/A
9	RF line RX	EM-testing	1603000653	EMT	N/A	N/A
10	UPS uninterruptible power supply	Castle	1603000653	EMT	N/A	N/A
11	24 Probe Antenna	EM-testing	1603000653	EMT	2022/11/1	2023/12/31
12	Cable 3m 400MHz~8.5GHz	EM-testing	1603000653	EMT	2021/9/30	2023/12/31

Equipment list

测试环境 시험환경

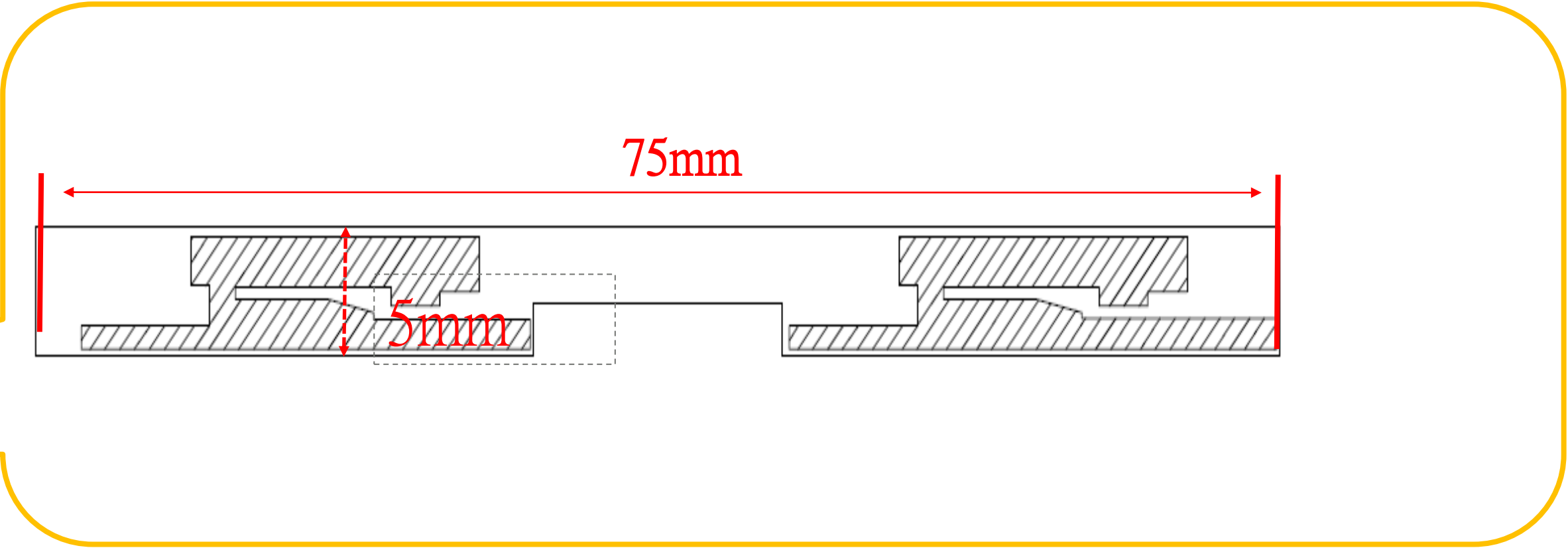


Setup photo

• 环境 환경



Item	Note	permittivity
PCB	75x 5 x0.4mm	
Cable	OD: 0.81 mm Length: 276.5mm	
Cable	OD: 0.81 mm Length: 276.5mm	





Thanks !

I hope you can select us as your preferred supplier!

